

**Table 7 - likelihood of execution information to be published as referred to in Article 7(1)**

Date	Symbol	Hour	Best Bid Price	Best Offer Price	Bid Size at Best Bid Price	Offer Size at Best Offer Price	Book depth within 3 price increments
4/2/2019	#AA	9:30:00 AM					N/A
4/2/2019	#AA	11:30:00 AM					N/A
4/2/2019	#AA	1:30:00 PM					N/A
4/2/2019	#AA	3:30:00 PM					N/A
4/2/2019	#AABA	9:30:00 AM					N/A
4/2/2019	#AABA	11:30:00 AM					N/A
4/2/2019	#AABA	1:30:00 PM					N/A
4/2/2019	#AABA	3:30:00 PM					N/A
4/2/2019	#AAL	9:30:00 AM					N/A
4/2/2019	#AAL	11:30:00 AM					N/A
4/2/2019	#AAL	1:30:00 PM					N/A
4/2/2019	#AAL	3:30:00 PM					N/A
4/2/2019	#AAPL	9:30:00 AM					N/A
4/2/2019	#AAPL	11:30:00 AM					N/A
4/2/2019	#AAPL	1:30:00 PM					N/A
4/2/2019	#AAPL	3:30:00 PM					N/A
4/2/2019	#ADBE	9:30:00 AM					N/A
4/2/2019	#ADBE	11:30:00 AM					N/A
4/2/2019	#ADBE	1:30:00 PM					N/A
4/2/2019	#ADBE	3:30:00 PM					N/A
4/2/2019	#AIG	9:30:00 AM					N/A
4/2/2019	#AIG	11:30:00 AM					N/A
4/2/2019	#AIG	1:30:00 PM					N/A
4/2/2019	#AIG	3:30:00 PM					N/A
4/2/2019	#AMD	9:30:00 AM					N/A
4/2/2019	#AMD	11:30:00 AM					N/A
4/2/2019	#AMD	1:30:00 PM					N/A
4/2/2019	#AMD	3:30:00 PM					N/A
4/2/2019	#AMZN	9:30:00 AM					N/A
4/2/2019	#AMZN	11:30:00 AM					N/A

4/2/2019	#AMZN	1:30:00 PM					N/A
4/2/2019	#AMZN	3:30:00 PM					N/A
4/2/2019	#AXP	9:30:00 AM					N/A
4/2/2019	#AXP	11:30:00 AM					N/A
4/2/2019	#AXP	1:30:00 PM					N/A
4/2/2019	#AXP	3:30:00 PM					N/A
4/2/2019	#BA	9:30:00 AM					N/A
4/2/2019	#BA	11:30:00 AM					N/A
4/2/2019	#BA	1:30:00 PM					N/A
4/2/2019	#BA	3:30:00 PM					N/A
4/2/2019	#BABA	9:30:00 AM					N/A
4/2/2019	#BABA	11:30:00 AM					N/A
4/2/2019	#BABA	1:30:00 PM					N/A
4/2/2019	#BABA	3:30:00 PM					N/A
4/2/2019	#BAC	9:30:00 AM					N/A
4/2/2019	#BAC	11:30:00 AM					N/A
4/2/2019	#BAC	1:30:00 PM					N/A
4/2/2019	#BAC	3:30:00 PM					N/A
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4/2/2019	#BARC	11:30:00 AM					N/A
4/2/2019	#BARC	1:30:00 PM					N/A
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4/2/2019	#BHP	1:30:00 PM					N/A
4/2/2019	#BHP	3:30:00 PM					N/A
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4/2/2019	#BIDU	3:30:00 PM					N/A
4/2/2019	#Bitcoin	9:30:00 AM	4729.86	4777.86			N/A
4/2/2019	#Bitcoin	11:30:00 AM	4737.86	4807.61			N/A
4/2/2019	#Bitcoin	1:30:00 PM	4807.16	4873.76			N/A
4/2/2019	#Bitcoin	3:30:00 PM	4832.76	4899.41			N/A

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4/2/2019	#BK	11:30:00 AM					N/A
4/2/2019	#BK	1:30:00 PM					N/A
4/2/2019	#BK	3:30:00 PM					N/A
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4/2/2019	#BP	11:30:00 AM					N/A
4/2/2019	#BP	1:30:00 PM					N/A
4/2/2019	#BP	3:30:00 PM					N/A
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4/2/2019	#BTA	1:30:00 PM					N/A
4/2/2019	#BTA	3:30:00 PM					N/A
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4/2/2019	#C	11:30:00 AM					N/A
4/2/2019	#C	1:30:00 PM					N/A
4/2/2019	#C	3:30:00 PM					N/A
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4/2/2019	#CAT	3:30:00 PM					N/A
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4/2/2019	#CL.f	11:30:00 AM	61.77	61.769			N/A
4/2/2019	#CL.f	1:30:00 PM	62.158	62.201			N/A
4/2/2019	#CL.f	3:30:00 PM	61.881	61.77			N/A
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4/2/2019	#CMCSA	11:30:00 AM					N/A

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4/2/2019	#PEP	11:30:00 AM					N/A
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4/2/2019	#PEP	3:30:00 PM					N/A
4/2/2019	#PFE	9:30:00 AM					N/A
4/2/2019	#PFE	11:30:00 AM					N/A
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4/2/2019	#Ripple	11:30:00 AM	0.3337	0.3434			N/A
4/2/2019	#Ripple	1:30:00 PM	0.3338	0.3437			N/A
4/2/2019	#Ripple	3:30:00 PM	0.3344	0.3437			N/A
4/2/2019	#S	9:30:00 AM					N/A
4/2/2019	#S	11:30:00 AM					N/A
4/2/2019	#S	1:30:00 PM					N/A
4/2/2019	#S	3:30:00 PM					N/A
4/2/2019	#SBUX	9:30:00 AM					N/A
4/2/2019	#SBUX	11:30:00 AM					N/A
4/2/2019	#SBUX	1:30:00 PM					N/A
4/2/2019	#SBUX	3:30:00 PM					N/A
4/2/2019	#SNE	9:30:00 AM					N/A
4/2/2019	#SNE	11:30:00 AM					N/A
4/2/2019	#SNE	1:30:00 PM					N/A
4/2/2019	#SNE	3:30:00 PM					N/A
4/2/2019	#SPY	9:30:00 AM					N/A
4/2/2019	#SPY	11:30:00 AM					N/A
4/2/2019	#SPY	1:30:00 PM					N/A
4/2/2019	#SPY	3:30:00 PM					N/A
4/2/2019	#T	9:30:00 AM					N/A
4/2/2019	#T	11:30:00 AM					N/A
4/2/2019	#T	1:30:00 PM					N/A
4/2/2019	#T	3:30:00 PM					N/A
4/2/2019	#TEVA	9:30:00 AM					N/A
4/2/2019	#TEVA	11:30:00 AM					N/A

4/2/2019	#TEVA	1:30:00 PM					N/A
4/2/2019	#TEVA	3:30:00 PM					N/A
4/2/2019	#TRI	9:30:00 AM					N/A
4/2/2019	#TRI	11:30:00 AM					N/A
4/2/2019	#TRI	1:30:00 PM					N/A
4/2/2019	#TRI	3:30:00 PM					N/A
4/2/2019	#TRV	9:30:00 AM					N/A
4/2/2019	#TRV	11:30:00 AM					N/A
4/2/2019	#TRV	1:30:00 PM					N/A
4/2/2019	#TRV	3:30:00 PM					N/A
4/2/2019	#TSCO	9:30:00 AM					N/A
4/2/2019	#TSCO	11:30:00 AM					N/A
4/2/2019	#TSCO	1:30:00 PM					N/A
4/2/2019	#TSCO	3:30:00 PM					N/A
4/2/2019	#TSLA	9:30:00 AM					N/A
4/2/2019	#TSLA	11:30:00 AM					N/A
4/2/2019	#TSLA	1:30:00 PM					N/A
4/2/2019	#TSLA	3:30:00 PM					N/A
4/2/2019	#TWTR	9:30:00 AM					N/A
4/2/2019	#TWTR	11:30:00 AM					N/A
4/2/2019	#TWTR	1:30:00 PM					N/A
4/2/2019	#TWTR	3:30:00 PM					N/A
4/2/2019	#UBS	9:30:00 AM					N/A
4/2/2019	#UBS	11:30:00 AM					N/A
4/2/2019	#UBS	1:30:00 PM					N/A
4/2/2019	#UBS	3:30:00 PM					N/A
4/2/2019	#UL	9:30:00 AM					N/A
4/2/2019	#UL	11:30:00 AM					N/A
4/2/2019	#UL	1:30:00 PM					N/A
4/2/2019	#UL	3:30:00 PM					N/A
4/2/2019	#UPS	9:30:00 AM					N/A
4/2/2019	#UPS	11:30:00 AM					N/A
4/2/2019	#UPS	1:30:00 PM					N/A
4/2/2019	#UPS	3:30:00 PM					N/A

4/2/2019	#UTX	9:30:00 AM					N/A
4/2/2019	#UTX	11:30:00 AM					N/A
4/2/2019	#UTX	1:30:00 PM					N/A
4/2/2019	#UTX	3:30:00 PM					N/A
4/2/2019	#V	9:30:00 AM					N/A
4/2/2019	#V	11:30:00 AM					N/A
4/2/2019	#V	1:30:00 PM					N/A
4/2/2019	#V	3:30:00 PM					N/A
4/2/2019	#VOD	9:30:00 AM					N/A
4/2/2019	#VOD	11:30:00 AM					N/A
4/2/2019	#VOD	1:30:00 PM					N/A
4/2/2019	#VOD	3:30:00 PM					N/A
4/2/2019	#VZ	9:30:00 AM					N/A
4/2/2019	#VZ	11:30:00 AM					N/A
4/2/2019	#VZ	1:30:00 PM					N/A
4/2/2019	#VZ	3:30:00 PM					N/A
4/2/2019	#WDC	9:30:00 AM					N/A
4/2/2019	#WDC	11:30:00 AM					N/A
4/2/2019	#WDC	1:30:00 PM					N/A
4/2/2019	#WDC	3:30:00 PM					N/A
4/2/2019	#WFC	9:30:00 AM					N/A
4/2/2019	#WFC	11:30:00 AM					N/A
4/2/2019	#WFC	1:30:00 PM					N/A
4/2/2019	#WFC	3:30:00 PM					N/A
4/2/2019	#WMT	9:30:00 AM					N/A
4/2/2019	#WMT	11:30:00 AM					N/A
4/2/2019	#WMT	1:30:00 PM					N/A
4/2/2019	#WMT	3:30:00 PM					N/A
4/2/2019	#XOM	9:30:00 AM					N/A
4/2/2019	#XOM	11:30:00 AM					N/A
4/2/2019	#XOM	1:30:00 PM					N/A
4/2/2019	#XOM	3:30:00 PM					N/A
4/2/2019	#YHOO	9:30:00 AM					N/A
4/2/2019	#YHOO	11:30:00 AM					N/A

4/2/2019	#YHOO	1:30:00 PM					N/A
4/2/2019	#YHOO	3:30:00 PM					N/A
4/2/2019	#ZNGA	9:30:00 AM					N/A
4/2/2019	#ZNGA	11:30:00 AM					N/A
4/2/2019	#ZNGA	1:30:00 PM					N/A
4/2/2019	#ZNGA	3:30:00 PM					N/A
4/2/2019	AUDCAD	9:30:00 AM	0.9424	0.94312			N/A
4/2/2019	AUDCAD	11:30:00 AM	0.94267	0.94337			N/A
4/2/2019	AUDCAD	1:30:00 PM	0.9426	0.94329			N/A
4/2/2019	AUDCAD	3:30:00 PM	0.94254	0.94314			N/A
4/2/2019	AUDCAD.fx	9:30:00 AM	0.94272	0.94277			N/A
4/2/2019	AUDCAD.fx	11:30:00 AM	0.94301	0.94303			N/A
4/2/2019	AUDCAD.fx	1:30:00 PM	0.94292	0.94296			N/A
4/2/2019	AUDCAD.fx	3:30:00 PM	0.94284	0.94279			N/A
4/2/2019	AUDCHF	9:30:00 AM	0.70696	0.70764			N/A
4/2/2019	AUDCHF	11:30:00 AM	0.70668	0.70739			N/A
4/2/2019	AUDCHF	1:30:00 PM	0.70711	0.70771			N/A
4/2/2019	AUDCHF	3:30:00 PM	0.70688	0.70749			N/A
4/2/2019	AUDCHF.fx	9:30:00 AM	0.70729	0.7073			N/A
4/2/2019	AUDCHF.fx	11:30:00 AM	0.70703	0.70705			N/A
4/2/2019	AUDCHF.fx	1:30:00 PM	0.70745	0.70737			N/A
4/2/2019	AUDCHF.fx	3:30:00 PM	0.70719	0.70715			N/A
4/2/2019	AUDCZK	9:30:00 AM	16.267	16.283			N/A
4/2/2019	AUDCZK	11:30:00 AM	16.24	16.254			N/A
4/2/2019	AUDCZK	1:30:00 PM	16.242	16.254			N/A
4/2/2019	AUDCZK	3:30:00 PM	16.24	16.248			N/A
4/2/2019	AUDDKK	9:30:00 AM	4.715	4.7197			N/A
4/2/2019	AUDDKK	11:30:00 AM	4.7124	4.7171			N/A
4/2/2019	AUDDKK	1:30:00 PM	4.714	4.7183			N/A
4/2/2019	AUDDKK	3:30:00 PM	4.7124	4.7162			N/A
4/2/2019	AUDHKD	9:30:00 AM	5.5537	5.5577			N/A
4/2/2019	AUDHKD	11:30:00 AM	5.5496	5.5533			N/A
4/2/2019	AUDHKD	1:30:00 PM	5.5519	5.5548			N/A
4/2/2019	AUDHKD	3:30:00 PM	5.5532	5.5568			N/A

4/2/2019	AUDHUF	9:30:00 AM	203.13	203.27			N/A
4/2/2019	AUDHUF	11:30:00 AM	203.26	203.4			N/A
4/2/2019	AUDHUF	1:30:00 PM	203.12	203.33			N/A
4/2/2019	AUDHUF	3:30:00 PM	202.93	203.05			N/A
4/2/2019	AUDJPY	9:30:00 AM	78.795	78.856			N/A
4/2/2019	AUDJPY	11:30:00 AM	78.758	78.82			N/A
4/2/2019	AUDJPY	1:30:00 PM	78.751	78.813			N/A
4/2/2019	AUDJPY	3:30:00 PM	78.797	78.843			N/A
4/2/2019	AUDJPY.fx	9:30:00 AM	78.828	78.821			N/A
4/2/2019	AUDJPY.fx	11:30:00 AM	78.792	78.784			N/A
4/2/2019	AUDJPY.fx	1:30:00 PM	78.788	78.778			N/A
4/2/2019	AUDJPY.fx	3:30:00 PM	78.829	78.808			N/A
4/2/2019	AUDMXN	9:30:00 AM	13.5754	13.5855			N/A
4/2/2019	AUDMXN	11:30:00 AM	13.5672	13.5684			N/A
4/2/2019	AUDMXN	1:30:00 PM	13.5467	13.5492			N/A
4/2/2019	AUDMXN	3:30:00 PM	13.5149	13.5169			N/A
4/2/2019	AUDNOK	9:30:00 AM	6.0855	6.0908			N/A
4/2/2019	AUDNOK	11:30:00 AM	6.0858	6.0912			N/A
4/2/2019	AUDNOK	1:30:00 PM	6.0894	6.0945			N/A
4/2/2019	AUDNOK	3:30:00 PM	6.0905	6.0955			N/A
4/2/2019	AUDNOK.fx	9:30:00 AM	6.0869	6.0893			N/A
4/2/2019	AUDNOK.fx	11:30:00 AM	6.0873	6.0895			N/A
4/2/2019	AUDNOK.fx	1:30:00 PM	6.0909	6.0928			N/A
4/2/2019	AUDNOK.fx	3:30:00 PM	6.0917	6.0939			N/A
4/2/2019	AUDNZD	9:30:00 AM	1.04392	1.04484			N/A
4/2/2019	AUDNZD	11:30:00 AM	1.04466	1.0455			N/A
4/2/2019	AUDNZD	1:30:00 PM	1.04529	1.046			N/A
4/2/2019	AUDNZD	3:30:00 PM	1.04571	1.04641			N/A
4/2/2019	AUDNZD.fx	9:30:00 AM	1.04433	1.04442			N/A
4/2/2019	AUDNZD.fx	11:30:00 AM	1.04508	1.04506			N/A
4/2/2019	AUDNZD.fx	1:30:00 PM	1.0457	1.04557			N/A
4/2/2019	AUDNZD.fx	3:30:00 PM	1.04614	1.04597			N/A
4/2/2019	AUDPLN	9:30:00 AM	2.7146	2.7178			N/A
4/2/2019	AUDPLN	11:30:00 AM	2.7148	2.718			N/A

4/2/2019	AUDPLN	1:30:00 PM	2.7149	2.7178			N/A
4/2/2019	AUDPLN	3:30:00 PM	2.7121	2.7135			N/A
4/2/2019	AUDSEK	9:30:00 AM	6.5816	6.5847			N/A
4/2/2019	AUDSEK	11:30:00 AM	6.583	6.586			N/A
4/2/2019	AUDSEK	1:30:00 PM	6.5948	6.5976			N/A
4/2/2019	AUDSEK	3:30:00 PM	6.5926	6.5952			N/A
4/2/2019	AUDSEK.fx	9:30:00 AM	6.5768	6.5892			N/A
4/2/2019	AUDSEK.fx	11:30:00 AM	6.5782	6.5903			N/A
4/2/2019	AUDSEK.fx	1:30:00 PM	6.5902	6.6021			N/A
4/2/2019	AUDSEK.fx	3:30:00 PM	6.5875	6.5997			N/A
4/2/2019	AUDSGD	9:30:00 AM	0.9596	0.9597			N/A
4/2/2019	AUDSGD	11:30:00 AM	0.9591	0.9594			N/A
4/2/2019	AUDSGD	1:30:00 PM	0.9592	0.9593			N/A
4/2/2019	AUDSGD	3:30:00 PM	0.9592	0.9594			N/A
4/2/2019	AUDSGD.fx	9:30:00 AM	0.95971	0.95979			N/A
4/2/2019	AUDSGD.fx	11:30:00 AM	0.9592	0.95927			N/A
4/2/2019	AUDSGD.fx	1:30:00 PM	0.95922	0.95926			N/A
4/2/2019	AUDSGD.fx	3:30:00 PM	0.95925	0.95936			N/A
4/2/2019	AUDUSD	9:30:00 AM	0.7079	0.70797			N/A
4/2/2019	AUDUSD	11:30:00 AM	0.7074	0.70752			N/A
4/2/2019	AUDUSD	1:30:00 PM	0.70762	0.70765			N/A
4/2/2019	AUDUSD	3:30:00 PM	0.70783	0.70782			N/A
4/2/2019	AUDUSD.fx	9:30:00 AM	0.70794	0.70791			N/A
4/2/2019	AUDUSD.fx	11:30:00 AM	0.70746	0.70746			N/A
4/2/2019	AUDUSD.fx	1:30:00 PM	0.70766	0.7076			N/A
4/2/2019	AUDUSD.fx	3:30:00 PM	0.70786	0.70776			N/A
4/2/2019	AUDZAR	9:30:00 AM	10.0559	10.0679			N/A
4/2/2019	AUDZAR	11:30:00 AM	10.0427	10.0527			N/A
4/2/2019	AUDZAR	1:30:00 PM	10.0204	10.0351			N/A
4/2/2019	AUDZAR	3:30:00 PM	9.9871	9.9939			N/A
4/2/2019	AUS200.i	9:30:00 AM	6256.46	6259.66			N/A
4/2/2019	AUS200.i	11:30:00 AM	6260.26	6263.46			N/A
4/2/2019	AUS200.i	1:30:00 PM	6263.96	6266.66			N/A
4/2/2019	AUS200.i	3:30:00 PM	6263.46	6267.06			N/A



4/2/2019	BCHUSD	9:30:00 AM	178.47	189.59			N/A
4/2/2019	BCHUSD	11:30:00 AM	180.6	192.07			N/A
4/2/2019	BCHUSD	1:30:00 PM	181.22	192.95			N/A
4/2/2019	BCHUSD	3:30:00 PM	186	196.31			N/A
4/2/2019	CADCHF	9:30:00 AM	0.74989	0.75062			N/A
4/2/2019	CADCHF	11:30:00 AM	0.74939	0.75009			N/A
4/2/2019	CADCHF	1:30:00 PM	0.74992	0.75053			N/A
4/2/2019	CADCHF	3:30:00 PM	0.74972	0.75039			N/A
4/2/2019	CADCHF.fx	9:30:00 AM	0.75022	0.75028			N/A
4/2/2019	CADCHF.fx	11:30:00 AM	0.74974	0.74973			N/A
4/2/2019	CADCHF.fx	1:30:00 PM	0.75025	0.75018			N/A
4/2/2019	CADCHF.fx	3:30:00 PM	0.75002	0.75004			N/A
4/2/2019	CADCZK	9:30:00 AM	17.259	17.274			N/A
4/2/2019	CADCZK	11:30:00 AM	17.224	17.239			N/A
4/2/2019	CADCZK	1:30:00 PM	17.228	17.24			N/A
4/2/2019	CADCZK	3:30:00 PM	17.228	17.235			N/A
4/2/2019	CADDDKK	9:30:00 AM	5.002	5.006			N/A
4/2/2019	CADDDKK	11:30:00 AM	4.998	5.002			N/A
4/2/2019	CADDDKK	1:30:00 PM	5.001	5.005			N/A
4/2/2019	CADDDKK	3:30:00 PM	4.998	5.001			N/A
4/2/2019	CADHKD	9:30:00 AM	5.8923	5.8963			N/A
4/2/2019	CADHKD	11:30:00 AM	5.8862	5.89			N/A
4/2/2019	CADHKD	1:30:00 PM	5.8887	5.8918			N/A
4/2/2019	CADHKD	3:30:00 PM	5.8911	5.8949			N/A
4/2/2019	CADHUF	9:30:00 AM	215.54	215.61			N/A
4/2/2019	CADHUF	11:30:00 AM	215.6	215.65			N/A
4/2/2019	CADHUF	1:30:00 PM	215.48	215.62			N/A
4/2/2019	CADHUF	3:30:00 PM	215.32	215.35			N/A
4/2/2019	CADJPY	9:30:00 AM	83.581	83.646			N/A
4/2/2019	CADJPY	11:30:00 AM	83.521	83.579			N/A
4/2/2019	CADJPY	1:30:00 PM	83.521	83.583			N/A
4/2/2019	CADJPY	3:30:00 PM	83.57	83.628			N/A
4/2/2019	CADJPY.fx	9:30:00 AM	83.615	83.611			N/A
4/2/2019	CADJPY.fx	11:30:00 AM	83.553	83.545			N/A

4/2/2019	CADJPY.fx	1:30:00 PM	83.554	83.548			N/A
4/2/2019	CADJPY.fx	3:30:00 PM	83.6	83.593			N/A
4/2/2019	CADMXN	9:30:00 AM	14.4014	14.4142			N/A
4/2/2019	CADMXN	11:30:00 AM	14.3883	14.3917			N/A
4/2/2019	CADMXN	1:30:00 PM	14.3679	14.3726			N/A
4/2/2019	CADMXN	3:30:00 PM	14.336	14.3398			N/A
4/2/2019	CADNOK	9:30:00 AM	6.454	6.4565			N/A
4/2/2019	CADNOK	11:30:00 AM	6.4526	6.4557			N/A
4/2/2019	CADNOK	1:30:00 PM	6.4578	6.4618			N/A
4/2/2019	CADNOK	3:30:00 PM	6.4593	6.4614			N/A
4/2/2019	CADPLN	9:30:00 AM	2.88	2.8818			N/A
4/2/2019	CADPLN	11:30:00 AM	2.8793	2.8812			N/A
4/2/2019	CADPLN	1:30:00 PM	2.8798	2.8812			N/A
4/2/2019	CADPLN	3:30:00 PM	2.877	2.8771			N/A
4/2/2019	CADSEK	9:30:00 AM	6.9797	6.9828			N/A
4/2/2019	CADSEK	11:30:00 AM	6.9795	6.9831			N/A
4/2/2019	CADSEK	1:30:00 PM	6.9931	6.9955			N/A
4/2/2019	CADSEK	3:30:00 PM	6.9908	6.994			N/A
4/2/2019	CADSGD	9:30:00 AM	1.0173	1.0176			N/A
4/2/2019	CADSGD	11:30:00 AM	1.0165	1.0168			N/A
4/2/2019	CADSGD	1:30:00 PM	1.0166	1.0168			N/A
4/2/2019	CADSGD	3:30:00 PM	1.0168	1.0172			N/A
4/2/2019	CADZAR	9:30:00 AM	10.6687	10.6817			N/A
4/2/2019	CADZAR	11:30:00 AM	10.6504	10.6633			N/A
4/2/2019	CADZAR	1:30:00 PM	10.6277	10.6444			N/A
4/2/2019	CADZAR	3:30:00 PM	10.5937	10.6022			N/A
4/2/2019	CHFCZK	9:30:00 AM	23.009	23.022			N/A
4/2/2019	CHFCZK	11:30:00 AM	22.977	22.992			N/A
4/2/2019	CHFCZK	1:30:00 PM	22.968	22.98			N/A
4/2/2019	CHFCZK	3:30:00 PM	22.973	22.978			N/A
4/2/2019	CHFDKK	9:30:00 AM	6.668	6.668			N/A
4/2/2019	CHFDKK	11:30:00 AM	6.667	6.669			N/A
4/2/2019	CHFDKK	1:30:00 PM	6.665	6.668			N/A
4/2/2019	CHFDKK	3:30:00 PM	6.665	6.667			N/A

4/2/2019	CHFDKK.fx	9:30:00 AM	6.6663	6.6723			N/A
4/2/2019	CHFDKK.fx	11:30:00 AM	6.6653	6.6713			N/A
4/2/2019	CHFDKK.fx	1:30:00 PM	6.6637	6.6693			N/A
4/2/2019	CHFDKK.fx	3:30:00 PM	6.663	6.6691			N/A
4/2/2019	CHFHKD	9:30:00 AM	7.8545	7.8585			N/A
4/2/2019	CHFHKD	11:30:00 AM	7.852	7.8559			N/A
4/2/2019	CHFHKD	1:30:00 PM	7.8502	7.8534			N/A
4/2/2019	CHFHKD	3:30:00 PM	7.8549	7.8588			N/A
4/2/2019	CHFHUF	9:30:00 AM	287.24	287.48			N/A
4/2/2019	CHFHUF	11:30:00 AM	287.5	287.73			N/A
4/2/2019	CHFHUF	1:30:00 PM	287.18	287.52			N/A
4/2/2019	CHFHUF	3:30:00 PM	287.03	287.22			N/A
4/2/2019	CHFJPY	9:30:00 AM	111.414	111.482			N/A
4/2/2019	CHFJPY	11:30:00 AM	111.406	111.466			N/A
4/2/2019	CHFJPY	1:30:00 PM	111.337	111.401			N/A
4/2/2019	CHFJPY	3:30:00 PM	111.429	111.48			N/A
4/2/2019	CHFJPY.fx	9:30:00 AM	111.447	111.45			N/A
4/2/2019	CHFJPY.fx	11:30:00 AM	111.438	111.432			N/A
4/2/2019	CHFJPY.fx	1:30:00 PM	111.369	111.366			N/A
4/2/2019	CHFJPY.fx	3:30:00 PM	111.457	111.45			N/A
4/2/2019	CHFMXN	9:30:00 AM	19.1961	19.2123			N/A
4/2/2019	CHFMXN	11:30:00 AM	19.1927	19.1964			N/A
4/2/2019	CHFMXN	1:30:00 PM	19.1536	19.1596			N/A
4/2/2019	CHFMXN	3:30:00 PM	19.1166	19.1197			N/A
4/2/2019	CHFNOK	9:30:00 AM	8.6036	8.611			N/A
4/2/2019	CHFNOK	11:30:00 AM	8.6073	8.6152			N/A
4/2/2019	CHFNOK	1:30:00 PM	8.6077	8.6151			N/A
4/2/2019	CHFNOK	3:30:00 PM	8.6128	8.619			N/A
4/2/2019	CHFNOK.fx	9:30:00 AM	8.60678	8.60803			N/A
4/2/2019	CHFNOK.fx	11:30:00 AM	8.61061	8.61188			N/A
4/2/2019	CHFNOK.fx	1:30:00 PM	8.61107	8.61164			N/A
4/2/2019	CHFNOK.fx	3:30:00 PM	8.61599	8.61625			N/A
4/2/2019	CHFPLN	9:30:00 AM	3.8386	3.8416			N/A
4/2/2019	CHFPLN	11:30:00 AM	3.8404	3.8434			N/A

4/2/2019	CHFPLN	1:30:00 PM	3.8386	3.8408			N/A
4/2/2019	CHFPLN	3:30:00 PM	3.8354	3.8365			N/A
4/2/2019	CHFPLN.fx	9:30:00 AM	3.83593	3.84419			N/A
4/2/2019	CHFPLN.fx	11:30:00 AM	3.83808	3.84585			N/A
4/2/2019	CHFPLN.fx	1:30:00 PM	3.83615	3.84321			N/A
4/2/2019	CHFPLN.fx	3:30:00 PM	3.83226	3.8388			N/A
4/2/2019	CHFSEK	9:30:00 AM	9.3043	9.3072			N/A
4/2/2019	CHFSEK	11:30:00 AM	9.3099	9.3141			N/A
4/2/2019	CHFSEK	1:30:00 PM	9.322	9.3242			N/A
4/2/2019	CHFSEK	3:30:00 PM	9.3215	9.3251			N/A
4/2/2019	CHFSGD	9:30:00 AM	1.3567	1.3571			N/A
4/2/2019	CHFSGD	11:30:00 AM	1.3564	1.3569			N/A
4/2/2019	CHFSGD	1:30:00 PM	1.3558	1.3562			N/A
4/2/2019	CHFSGD	3:30:00 PM	1.3564	1.3568			N/A
4/2/2019	CHFSGD.fx	9:30:00 AM	1.35684	1.35698			N/A
4/2/2019	CHFSGD.fx	11:30:00 AM	1.35666	1.35676			N/A
4/2/2019	CHFSGD.fx	1:30:00 PM	1.3559	1.356			N/A
4/2/2019	CHFSGD.fx	3:30:00 PM	1.35653	1.35666			N/A
4/2/2019	CHFZAR	9:30:00 AM	14.2238	14.2345			N/A
4/2/2019	CHFZAR	11:30:00 AM	14.2111	14.2182			N/A
4/2/2019	CHFZAR	1:30:00 PM	14.1715	14.1843			N/A
4/2/2019	CHFZAR	3:30:00 PM	14.1306	14.1325			N/A
4/2/2019	CZKJPY	9:30:00 AM	4.843	4.845			N/A
4/2/2019	CZKJPY	11:30:00 AM					N/A
4/2/2019	CZKJPY	1:30:00 PM	4.847	4.85			N/A
4/2/2019	CZKJPY	3:30:00 PM	4.852	4.854			N/A
4/2/2019	DAX30.i	9:30:00 AM	11685.33	11684.58			N/A
4/2/2019	DAX30.i	11:30:00 AM	11704.83	11694.33			N/A
4/2/2019	DAX30.i	1:30:00 PM	11727.83	11719.58			N/A
4/2/2019	DAX30.i	3:30:00 PM	11752.08	11751.58			N/A
4/2/2019	DJ30.i	9:30:00 AM					N/A
4/2/2019	DJ30.i	11:30:00 AM					N/A
4/2/2019	DJ30.i	1:30:00 PM					N/A
4/2/2019	DJ30.i	3:30:00 PM					N/A

4/2/2019	DKKJPY	9:30:00 AM	16.71	16.73			N/A
4/2/2019	DKKJPY	11:30:00 AM	16.71	16.73			N/A
4/2/2019	DKKJPY	1:30:00 PM	16.71	16.72			N/A
4/2/2019	DKKJPY	3:30:00 PM	16.73	16.74			N/A
4/2/2019	EURAUD	9:30:00 AM	1.58152	1.58198			N/A
4/2/2019	EURAUD	11:30:00 AM	1.58247	1.58291			N/A
4/2/2019	EURAUD	1:30:00 PM	1.58204	1.5824			N/A
4/2/2019	EURAUD	3:30:00 PM	1.58277	1.58292			N/A
4/2/2019	EURAUD.fx	9:30:00 AM	1.58171	1.58178			N/A
4/2/2019	EURAUD.fx	11:30:00 AM	1.58266	1.5827			N/A
4/2/2019	EURAUD.fx	1:30:00 PM	1.58223	1.58218			N/A
4/2/2019	EURAUD.fx	3:30:00 PM	1.58295	1.58273			N/A
4/2/2019	EURCAD	9:30:00 AM	1.49136	1.49218			N/A
4/2/2019	EURCAD	11:30:00 AM	1.49266	1.49353			N/A
4/2/2019	EURCAD	1:30:00 PM	1.49214	1.49286			N/A
4/2/2019	EURCAD	3:30:00 PM	1.49264	1.49331			N/A
4/2/2019	EURCAD.fx	9:30:00 AM	1.49177	1.49177			N/A
4/2/2019	EURCAD.fx	11:30:00 AM	1.49308	1.4931			N/A
4/2/2019	EURCAD.fx	1:30:00 PM	1.49255	1.49245			N/A
4/2/2019	EURCAD.fx	3:30:00 PM	1.49304	1.49293			N/A
4/2/2019	EURCHF	9:30:00 AM	1.1192	1.11922			N/A
4/2/2019	EURCHF	11:30:00 AM	1.1194	1.11947			N/A
4/2/2019	EURCHF	1:30:00 PM	1.11974	1.11972			N/A
4/2/2019	EURCHF	3:30:00 PM	1.1198	1.11981			N/A
4/2/2019	EURCHF.fx	9:30:00 AM	1.11925	1.11918			N/A
4/2/2019	EURCHF.fx	11:30:00 AM	1.11945	1.11942			N/A
4/2/2019	EURCHF.fx	1:30:00 PM	1.11978	1.11968			N/A
4/2/2019	EURCHF.fx	3:30:00 PM	1.11983	1.11975			N/A
4/2/2019	EURCZK	9:30:00 AM	25.737	25.774			N/A
4/2/2019	EURCZK	11:30:00 AM	25.707	25.744			N/A
4/2/2019	EURCZK	1:30:00 PM	25.703	25.737			N/A
4/2/2019	EURCZK	3:30:00 PM	25.705	25.737			N/A
4/2/2019	EURDKK	9:30:00 AM	7.4606	7.4619			N/A
4/2/2019	EURDKK	11:30:00 AM	7.4641	7.464			N/A

4/2/2019	EURDKK	1:30:00 PM	7.4641	7.4642			N/A
4/2/2019	EURDKK	3:30:00 PM	7.4637	7.4649			N/A
4/2/2019	EURGBP	9:30:00 AM	0.85816	0.85812			N/A
4/2/2019	EURGBP	11:30:00 AM	0.85781	0.85754			N/A
4/2/2019	EURGBP	1:30:00 PM	0.85826	0.85814			N/A
4/2/2019	EURGBP	3:30:00 PM	0.86017	0.86002			N/A
4/2/2019	EURGBP.fx	9:30:00 AM	0.85818	0.85809			N/A
4/2/2019	EURGBP.fx	11:30:00 AM	0.85776	0.85752			N/A
4/2/2019	EURGBP.fx	1:30:00 PM	0.85827	0.8581			N/A
4/2/2019	EURGBP.fx	3:30:00 PM	0.86019	0.86004			N/A
4/2/2019	EURHKD	9:30:00 AM	8.7914	8.7956			N/A
4/2/2019	EURHKD	11:30:00 AM	8.7902	8.795			N/A
4/2/2019	EURHKD	1:30:00 PM	8.7899	8.7945			N/A
4/2/2019	EURHKD	3:30:00 PM	8.7963	8.8002			N/A
4/2/2019	EURHKD.fx	9:30:00 AM	8.79391	8.79297			N/A
4/2/2019	EURHKD.fx	11:30:00 AM	8.79278	8.79249			N/A
4/2/2019	EURHKD.fx	1:30:00 PM	8.79251	8.79196			N/A
4/2/2019	EURHKD.fx	3:30:00 PM	8.79887	8.79771			N/A
4/2/2019	EURHUF	9:30:00 AM	321.44	322.13			N/A
4/2/2019	EURHUF	11:30:00 AM	321.79	322.5			N/A
4/2/2019	EURHUF	1:30:00 PM	321.45	322.18			N/A
4/2/2019	EURHUF	3:30:00 PM	321.33	322.04			N/A
4/2/2019	EURHUF.fx	9:30:00 AM	321.692	321.858			N/A
4/2/2019	EURHUF.fx	11:30:00 AM	322.065	322.226			N/A
4/2/2019	EURHUF.fx	1:30:00 PM	321.713	321.916			N/A
4/2/2019	EURHUF.fx	3:30:00 PM	321.6	321.795			N/A
4/2/2019	EURJPY	9:30:00 AM	124.737	124.728			N/A
4/2/2019	EURJPY	11:30:00 AM	124.749	124.741			N/A
4/2/2019	EURJPY	1:30:00 PM	124.707	124.699			N/A
4/2/2019	EURJPY	3:30:00 PM	124.811	124.792			N/A
4/2/2019	EURJPY.fx	9:30:00 AM	124.739	124.725			N/A
4/2/2019	EURJPY.fx	11:30:00 AM	124.751	124.737			N/A
4/2/2019	EURJPY.fx	1:30:00 PM	124.708	124.696			N/A
4/2/2019	EURJPY.fx	3:30:00 PM	124.811	124.794			N/A

4/2/2019	EURMXN	9:30:00 AM	21.4882	21.5056			N/A
4/2/2019	EURMXN	11:30:00 AM	21.4853	21.4931			N/A
4/2/2019	EURMXN	1:30:00 PM	21.448	21.4549			N/A
4/2/2019	EURMXN	3:30:00 PM	21.4066	21.4141			N/A
4/2/2019	EURMXN.fx	9:30:00 AM	21.4959	21.4974			N/A
4/2/2019	EURMXN.fx	11:30:00 AM	21.4937	21.4845			N/A
4/2/2019	EURMXN.fx	1:30:00 PM	21.4553	21.4472			N/A
4/2/2019	EURMXN.fx	3:30:00 PM	21.415	21.4059			N/A
4/2/2019	EURNOK	9:30:00 AM	9.6272	9.6397			N/A
4/2/2019	EURNOK	11:30:00 AM	9.6334	9.646			N/A
4/2/2019	EURNOK	1:30:00 PM	9.636	9.6485			N/A
4/2/2019	EURNOK	3:30:00 PM	9.6422	9.6534			N/A
4/2/2019	EURNOK.fx	9:30:00 AM	9.63258	9.63428			N/A
4/2/2019	EURNOK.fx	11:30:00 AM	9.63876	9.64056			N/A
4/2/2019	EURNOK.fx	1:30:00 PM	9.64141	9.64306			N/A
4/2/2019	EURNOK.fx	3:30:00 PM	9.64757	9.64824			N/A
4/2/2019	EURNZD	9:30:00 AM	1.65219	1.65294			N/A
4/2/2019	EURNZD	11:30:00 AM	1.65436	1.65503			N/A
4/2/2019	EURNZD	1:30:00 PM	1.65471	1.6554			N/A
4/2/2019	EURNZD	3:30:00 PM	1.65619	1.65646			N/A
4/2/2019	EURNZD.fx	9:30:00 AM	1.6526	1.65253			N/A
4/2/2019	EURNZD.fx	11:30:00 AM	1.65475	1.6546			N/A
4/2/2019	EURNZD.fx	1:30:00 PM	1.65512	1.65496			N/A
4/2/2019	EURNZD.fx	3:30:00 PM	1.6566	1.65616			N/A
4/2/2019	EURPLN	9:30:00 AM	4.2968	4.2994			N/A
4/2/2019	EURPLN	11:30:00 AM	4.2991	4.3014			N/A
4/2/2019	EURPLN	1:30:00 PM	4.2982	4.3008			N/A
4/2/2019	EURPLN	3:30:00 PM	4.295	4.2963			N/A
4/2/2019	EURPLN.fx	9:30:00 AM	4.29571	4.30032			N/A
4/2/2019	EURPLN.fx	11:30:00 AM	4.29847	4.30312			N/A
4/2/2019	EURPLN.fx	1:30:00 PM	4.29767	4.30132			N/A
4/2/2019	EURPLN.fx	3:30:00 PM	4.29375	4.29692			N/A
4/2/2019	EURRUB	9:30:00 AM					N/A
4/2/2019	EURRUB	11:30:00 AM	73.005	73.43			N/A

4/2/2019	EURRUB	1:30:00 PM	72.939	73.376			N/A
4/2/2019	EURRUB	3:30:00 PM	72.966	73.389			N/A
4/2/2019	EURSEK	9:30:00 AM	10.4146	10.4188			N/A
4/2/2019	EURSEK	11:30:00 AM	10.4227	10.4267			N/A
4/2/2019	EURSEK	1:30:00 PM	10.4381	10.443			N/A
4/2/2019	EURSEK	3:30:00 PM	10.4386	10.443			N/A
4/2/2019	EURSEK.fx	9:30:00 AM	10.41633	10.41695			N/A
4/2/2019	EURSEK.fx	11:30:00 AM	10.42433	10.4248			N/A
4/2/2019	EURSEK.fx	1:30:00 PM	10.43978	10.44065			N/A
4/2/2019	EURSEK.fx	3:30:00 PM	10.44026	10.44145			N/A
4/2/2019	EURSGD	9:30:00 AM	1.5185	1.519			N/A
4/2/2019	EURSGD	11:30:00 AM	1.5184	1.5191			N/A
4/2/2019	EURSGD	1:30:00 PM	1.518	1.5187			N/A
4/2/2019	EURSGD	3:30:00 PM	1.5188	1.5195			N/A
4/2/2019	EURSGD.fx	9:30:00 AM	1.51874	1.5186			N/A
4/2/2019	EURSGD.fx	11:30:00 AM	1.51877	1.51871			N/A
4/2/2019	EURSGD.fx	1:30:00 PM	1.51829	1.51834			N/A
4/2/2019	EURSGD.fx	3:30:00 PM	1.51907	1.51911			N/A
4/2/2019	EURUSD	9:30:00 AM	1.12009	1.12005			N/A
4/2/2019	EURUSD	11:30:00 AM	1.11993	1.11996			N/A
4/2/2019	EURUSD	1:30:00 PM	1.11989	1.11992			N/A
4/2/2019	EURUSD	3:30:00 PM	1.1207	1.12063			N/A
4/2/2019	EURUSD.fx	9:30:00 AM	1.12029	1.12014			N/A
4/2/2019	EURUSD.fx	11:30:00 AM	1.12013	1.12007			N/A
4/2/2019	EURUSD.fx	1:30:00 PM	1.12009	1.12001			N/A
4/2/2019	EURUSD.fx	3:30:00 PM	1.12088	1.12073			N/A
4/2/2019	EURZAR	9:30:00 AM	15.9284	15.9366			N/A
4/2/2019	EURZAR	11:30:00 AM	15.9113	15.9278			N/A
4/2/2019	EURZAR	1:30:00 PM	15.8703	15.8877			N/A
4/2/2019	EURZAR	3:30:00 PM	15.8259	15.8359			N/A
4/2/2019	EURZAR.fx	9:30:00 AM	15.92818	15.93624			N/A
4/2/2019	EURZAR.fx	11:30:00 AM	15.91073	15.92847			N/A
4/2/2019	EURZAR.fx	1:30:00 PM	15.86973	15.88829			N/A
4/2/2019	EURZAR.fx	3:30:00 PM	15.82474	15.83701			N/A



4/2/2019	GBPAUD	9:30:00 AM	1.84374	1.84421			N/A
4/2/2019	GBPAUD	11:30:00 AM	1.84595	1.84603			N/A
4/2/2019	GBPAUD	1:30:00 PM	1.84433	1.84455			N/A
4/2/2019	GBPAUD	3:30:00 PM	1.84076	1.84127			N/A
4/2/2019	GBPAUD.fx	9:30:00 AM	1.84411	1.8438			N/A
4/2/2019	GBPAUD.fx	11:30:00 AM	1.8463	1.84579			N/A
4/2/2019	GBPAUD.fx	1:30:00 PM	1.84471	1.84418			N/A
4/2/2019	GBPAUD.fx	3:30:00 PM	1.84105	1.84092			N/A
4/2/2019	GBPCAD	9:30:00 AM	1.73816	1.73868			N/A
4/2/2019	GBPCAD	11:30:00 AM	1.74083	1.74081			N/A
4/2/2019	GBPCAD	1:30:00 PM	1.73892	1.73937			N/A
4/2/2019	GBPCAD	3:30:00 PM	1.73554	1.73604			N/A
4/2/2019	GBPCAD.fx	9:30:00 AM	1.73854	1.7383			N/A
4/2/2019	GBPCAD.fx	11:30:00 AM	1.74121	1.74053			N/A
4/2/2019	GBPCAD.fx	1:30:00 PM	1.73931	1.73901			N/A
4/2/2019	GBPCAD.fx	3:30:00 PM	1.73588	1.73565			N/A
4/2/2019	GBPCHF	9:30:00 AM	1.30413	1.30441			N/A
4/2/2019	GBPCHF	11:30:00 AM	1.30526	1.30513			N/A
4/2/2019	GBPCHF	1:30:00 PM	1.30474	1.3048			N/A
4/2/2019	GBPCHF	3:30:00 PM	1.30192	1.30198			N/A
4/2/2019	GBPCHF.fx	9:30:00 AM	1.30429	1.30422			N/A
4/2/2019	GBPCHF.fx	11:30:00 AM	1.30543	1.305			N/A
4/2/2019	GBPCHF.fx	1:30:00 PM	1.30491	1.30462			N/A
4/2/2019	GBPCHF.fx	3:30:00 PM	1.30197	1.30182			N/A
4/2/2019	GBPCZK	9:30:00 AM	30.005	30.018			N/A
4/2/2019	GBPCZK	11:30:00 AM	29.989	29.998			N/A
4/2/2019	GBPCZK	1:30:00 PM	29.963	29.973			N/A
4/2/2019	GBPCZK	3:30:00 PM	29.905	29.913			N/A
4/2/2019	GBPDKK	9:30:00 AM	8.694	8.704			N/A
4/2/2019	GBPDKK	11:30:00 AM	8.7	8.709			N/A
4/2/2019	GBPDKK	1:30:00 PM	8.695	8.703			N/A
4/2/2019	GBPDKK	3:30:00 PM	8.676	8.684			N/A
4/2/2019	GBPDKK.fx	9:30:00 AM	8.6923	8.7047			N/A
4/2/2019	GBPDKK.fx	11:30:00 AM	8.6986	8.7087			N/A

4/2/2019	GBPDKK.fx	1:30:00 PM	8.6927	8.7037			N/A
4/2/2019	GBPDKK.fx	3:30:00 PM	8.6733	8.6844			N/A
4/2/2019	GBPHKD	9:30:00 AM	10.2431	10.2472			N/A
4/2/2019	GBPHKD	11:30:00 AM	10.2489	10.2498			N/A
4/2/2019	GBPHKD	1:30:00 PM	10.2416	10.2438			N/A
4/2/2019	GBPHKD	3:30:00 PM	10.2252	10.2283			N/A
4/2/2019	GBPHUF	9:30:00 AM	374.6	374.8			N/A
4/2/2019	GBPHUF	11:30:00 AM	375.26	375.37			N/A
4/2/2019	GBPHUF	1:30:00 PM	374.64	375.01			N/A
4/2/2019	GBPHUF	3:30:00 PM	373.56	373.82			N/A
4/2/2019	GBPJPY	9:30:00 AM	145.353	145.374	100	3100	N/A
4/2/2019	GBPJPY	11:30:00 AM	145.46	145.447			N/A
4/2/2019	GBPJPY	1:30:00 PM	145.308	145.309			N/A
4/2/2019	GBPJPY	3:30:00 PM	145.117	145.097			N/A
4/2/2019	GBPJPY.fx	9:30:00 AM	145.371	145.355			N/A
4/2/2019	GBPJPY.fx	11:30:00 AM	145.475	145.436			N/A
4/2/2019	GBPJPY.fx	1:30:00 PM	145.325	145.291			N/A
4/2/2019	GBPJPY.fx	3:30:00 PM	145.127	145.082			N/A
4/2/2019	GBPMXN	9:30:00 AM	25.0371	25.0477			N/A
4/2/2019	GBPMXN	11:30:00 AM	25.0518	25.042			N/A
4/2/2019	GBPMXN	1:30:00 PM	24.9848	24.9875			N/A
4/2/2019	GBPMXN	3:30:00 PM	24.8819	24.8814			N/A
4/2/2019	GBPNOK	9:30:00 AM	11.2213	11.2308			N/A
4/2/2019	GBPNOK	11:30:00 AM	11.236	11.2426			N/A
4/2/2019	GBPNOK	1:30:00 PM	11.2314	11.2403			N/A
4/2/2019	GBPNOK	3:30:00 PM	11.2145	11.2219			N/A
4/2/2019	GBPNOK.fx	9:30:00 AM	11.22592	11.22672			N/A
4/2/2019	GBPNOK.fx	11:30:00 AM	11.2401	11.23926			N/A
4/2/2019	GBPNOK.fx	1:30:00 PM	11.23602	11.23565			N/A
4/2/2019	GBPNOK.fx	3:30:00 PM	11.21597	11.21736			N/A
4/2/2019	GBPNZD	9:30:00 AM	1.92562	1.92592			N/A
4/2/2019	GBPNZD	11:30:00 AM	1.92927	1.92934			N/A
4/2/2019	GBPNZD	1:30:00 PM	1.92858	1.92864			N/A
4/2/2019	GBPNZD	3:30:00 PM	1.92545	1.92588			N/A

4/2/2019	GBPNZD.fx	9:30:00 AM	1.92597	1.9256			N/A
4/2/2019	GBPNZD.fx	11:30:00 AM	1.92961	1.92909			N/A
4/2/2019	GBPNZD.fx	1:30:00 PM	1.92895	1.92825			N/A
4/2/2019	GBPNZD.fx	3:30:00 PM	1.92581	1.92555			N/A
4/2/2019	GBPPLN	9:30:00 AM	5.0079	5.0093			N/A
4/2/2019	GBPPLN	11:30:00 AM	5.0144	5.0141			N/A
4/2/2019	GBPPLN	1:30:00 PM	5.0096	5.0102			N/A
4/2/2019	GBPPLN	3:30:00 PM	4.9954	4.9933			N/A
4/2/2019	GBPPLN.fx	9:30:00 AM	5.00527	5.01204			N/A
4/2/2019	GBPPLN.fx	11:30:00 AM	5.01197	5.01661			N/A
4/2/2019	GBPPLN.fx	1:30:00 PM	5.00725	5.01246			N/A
4/2/2019	GBPPLN.fx	3:30:00 PM	4.99213	4.9958			N/A
4/2/2019	GBPSEK	9:30:00 AM	12.1351	12.143			N/A
4/2/2019	GBPSEK	11:30:00 AM	12.1532	12.1571			N/A
4/2/2019	GBPSEK	1:30:00 PM	12.163	12.1689			N/A
4/2/2019	GBPSEK	3:30:00 PM	12.136	12.1422			N/A
4/2/2019	GBPSEK.fx	9:30:00 AM	12.13142	12.14697			N/A
4/2/2019	GBPSEK.fx	11:30:00 AM	12.14865	12.16229			N/A
4/2/2019	GBPSEK.fx	1:30:00 PM	12.15894	12.17268			N/A
4/2/2019	GBPSEK.fx	3:30:00 PM	12.13028	12.14634			N/A
4/2/2019	GBPSGD	9:30:00 AM	1.7696	1.7701			N/A
4/2/2019	GBPSGD	11:30:00 AM	1.7708	1.7709			N/A
4/2/2019	GBPSGD	1:30:00 PM	1.7692	1.7694			N/A
4/2/2019	GBPSGD	3:30:00 PM	1.766	1.7664			N/A
4/2/2019	GBPSGD.fx	9:30:00 AM	1.76769	1.77191			N/A
4/2/2019	GBPSGD.fx	11:30:00 AM	1.76891	1.77284			N/A
4/2/2019	GBPSGD.fx	1:30:00 PM	1.76729	1.77121			N/A
4/2/2019	GBPSGD.fx	3:30:00 PM	1.76395	1.76822			N/A
4/2/2019	GBPUSD	9:30:00 AM	1.30555	1.30541			N/A
4/2/2019	GBPUSD	11:30:00 AM	1.30627	1.30577			N/A
4/2/2019	GBPUSD	1:30:00 PM	1.30533	1.30502			N/A
4/2/2019	GBPUSD	3:30:00 PM	1.30331	1.30292			N/A
4/2/2019	GBPUSD.fx	9:30:00 AM	1.30558	1.30535			N/A
4/2/2019	GBPUSD.fx	11:30:00 AM	1.30629	1.30581			N/A

4/2/2019	GBPUSD.fx	1:30:00 PM	1.30538	1.30498			N/A
4/2/2019	GBPUSD.fx	3:30:00 PM	1.30331	1.30288			N/A
4/2/2019	GBPZAR	9:30:00 AM	18.5589	18.5765			N/A
4/2/2019	GBPZAR	11:30:00 AM	18.5522	18.5719			N/A
4/2/2019	GBPZAR	1:30:00 PM	18.491	18.5162			N/A
4/2/2019	GBPZAR	3:30:00 PM	18.3964	18.412			N/A
4/2/2019	GBPZAR.fx	9:30:00 AM	18.566	18.5694			N/A
4/2/2019	GBPZAR.fx	11:30:00 AM	18.5598	18.566			N/A
4/2/2019	GBPZAR.fx	1:30:00 PM	18.4975	18.5097			N/A
4/2/2019	GBPZAR.fx	3:30:00 PM	18.4017	18.4053			N/A
4/2/2019	GOLD	9:30:00 AM	1288.11	1288.28			N/A
4/2/2019	GOLD	11:30:00 AM	1286.78	1287.08			N/A
4/2/2019	GOLD	1:30:00 PM	1287.66	1288.04			N/A
4/2/2019	GOLD	3:30:00 PM	1289.71	1289.05			N/A
4/2/2019	HKDJPY	9:30:00 AM	14.18	14.19			N/A
4/2/2019	HKDJPY	11:30:00 AM	14.19	14.2			N/A
4/2/2019	HKDJPY	1:30:00 PM	14.18	14.19			N/A
4/2/2019	HKDJPY	3:30:00 PM	14.19	14.19			N/A
4/2/2019	HKDJPY.fx	9:30:00 AM	14.18	14.187			N/A
4/2/2019	HKDJPY.fx	11:30:00 AM	14.183	14.19			N/A
4/2/2019	HKDJPY.fx	1:30:00 PM	14.179	14.186			N/A
4/2/2019	HKDJPY.fx	3:30:00 PM	14.181	14.187			N/A
4/2/2019	HUFJPY	9:30:00 AM	0.388	0.3883			N/A
4/2/2019	HUFJPY	11:30:00 AM	0.3875	0.3878			N/A
4/2/2019	HUFJPY	1:30:00 PM	0.3877	0.388			N/A
4/2/2019	HUFJPY	3:30:00 PM	0.3882	0.3884			N/A
4/2/2019	JP225.i	9:30:00 AM	21485.15	21500.15			N/A
4/2/2019	JP225.i	11:30:00 AM	21510.15	21520.15			N/A
4/2/2019	JP225.i	1:30:00 PM	21520.15	21530.15			N/A
4/2/2019	JP225.i	3:30:00 PM	21535.15	21549.32			N/A
4/2/2019	MXNJPY	9:30:00 AM					N/A
4/2/2019	MXNJPY	11:30:00 AM	5.81	5.81			N/A
4/2/2019	MXNJPY	1:30:00 PM	5.82	5.82			N/A
4/2/2019	MXNJPY	3:30:00 PM	5.83	5.84			N/A

4/2/2019	NASDAQ.i	9:30:00 AM					N/A
4/2/2019	NASDAQ.i	11:30:00 AM					N/A
4/2/2019	NASDAQ.i	1:30:00 PM					N/A
4/2/2019	NASDAQ.i	3:30:00 PM					N/A
4/2/2019	NOKJPY	9:30:00 AM	12.94	12.97			N/A
4/2/2019	NOKJPY	11:30:00 AM	12.92	12.96			N/A
4/2/2019	NOKJPY	1:30:00 PM	12.91	12.95			N/A
4/2/2019	NOKJPY	3:30:00 PM	12.93	12.95			N/A
4/2/2019	NOKJPY.fx	9:30:00 AM	12.945	12.952			N/A
4/2/2019	NOKJPY.fx	11:30:00 AM	12.936	12.945			N/A
4/2/2019	NOKJPY.fx	1:30:00 PM	12.93	12.937			N/A
4/2/2019	NOKJPY.fx	3:30:00 PM	12.933	12.939			N/A
4/2/2019	NZDCAD	9:30:00 AM	0.90234	0.90306			N/A
4/2/2019	NZDCAD	11:30:00 AM	0.90203	0.90269			N/A
4/2/2019	NZDCAD	1:30:00 PM	0.90154	0.90208			N/A
4/2/2019	NZDCAD	3:30:00 PM	0.90114	0.90156			N/A
4/2/2019	NZDCAD.fx	9:30:00 AM	0.90266	0.90273			N/A
4/2/2019	NZDCAD.fx	11:30:00 AM	0.90237	0.90236			N/A
4/2/2019	NZDCAD.fx	1:30:00 PM	0.90187	0.90176			N/A
4/2/2019	NZDCAD.fx	3:30:00 PM	0.9014	0.90122			N/A
4/2/2019	NZDCHF	9:30:00 AM	0.67692	0.67761			N/A
4/2/2019	NZDCHF	11:30:00 AM	0.6762	0.67684			N/A
4/2/2019	NZDCHF	1:30:00 PM	0.67627	0.67689			N/A
4/2/2019	NZDCHF	3:30:00 PM	0.67578	0.67627			N/A
4/2/2019	NZDCHF.fx	9:30:00 AM	0.67724	0.67728			N/A
4/2/2019	NZDCHF.fx	11:30:00 AM	0.67653	0.67649			N/A
4/2/2019	NZDCHF.fx	1:30:00 PM	0.67662	0.67655			N/A
4/2/2019	NZDCHF.fx	3:30:00 PM	0.67606	0.67592			N/A
4/2/2019	NZDCZK	9:30:00 AM	15.579	15.59			N/A
4/2/2019	NZDCZK	11:30:00 AM	15.541	15.551			N/A
4/2/2019	NZDCZK	1:30:00 PM	15.536	15.544			N/A
4/2/2019	NZDCZK	3:30:00 PM	15.528	15.533			N/A
4/2/2019	NZDDKK	9:30:00 AM	4.514	4.518			N/A
4/2/2019	NZDDKK	11:30:00 AM	4.509	4.512			N/A

4/2/2019	NZDDKK	1:30:00 PM					N/A
4/2/2019	NZDDKK	3:30:00 PM	4.504	4.508			N/A
4/2/2019	NZDHKD	9:30:00 AM	5.318	5.3208			N/A
4/2/2019	NZDHKD	11:30:00 AM	5.3104	5.3125			N/A
4/2/2019	NZDHKD	1:30:00 PM	5.3099	5.312			N/A
4/2/2019	NZDHKD	3:30:00 PM	5.3087	5.3112			N/A
4/2/2019	NZDHUF	9:30:00 AM	194.46	194.66			N/A
4/2/2019	NZDHUF	11:30:00 AM	194.45	194.63			N/A
4/2/2019	NZDHUF	1:30:00 PM	194.22	194.49			N/A
4/2/2019	NZDHUF	3:30:00 PM	193.97	194.16			N/A
4/2/2019	NZDJPY	9:30:00 AM	75.446	75.51			N/A
4/2/2019	NZDJPY	11:30:00 AM	75.358	75.416			N/A
4/2/2019	NZDJPY	1:30:00 PM	75.322	75.381			N/A
4/2/2019	NZDJPY	3:30:00 PM	75.327	75.366			N/A
4/2/2019	NZDJPY.fx	9:30:00 AM	75.477	75.479			N/A
4/2/2019	NZDJPY.fx	11:30:00 AM	75.389	75.384			N/A
4/2/2019	NZDJPY.fx	1:30:00 PM	75.351	75.349			N/A
4/2/2019	NZDJPY.fx	3:30:00 PM	75.355	75.334			N/A
4/2/2019	NZDMXN	9:30:00 AM	13	13.006			N/A
4/2/2019	NZDMXN	11:30:00 AM	12.9821	12.9804			N/A
4/2/2019	NZDMXN	1:30:00 PM	12.9575	12.9566			N/A
4/2/2019	NZDMXN	3:30:00 PM	12.9202	12.9201			N/A
4/2/2019	NZDNOK	9:30:00 AM	5.8251	5.8262			N/A
4/2/2019	NZDNOK	11:30:00 AM	5.8218	5.8225			N/A
4/2/2019	NZDNOK	1:30:00 PM	5.8226	5.826			N/A
4/2/2019	NZDNOK	3:30:00 PM	5.8206	5.8228			N/A
4/2/2019	NZDPLN	9:30:00 AM	2.5992	2.6006			N/A
4/2/2019	NZDPLN	11:30:00 AM	2.5974	2.5987			N/A
4/2/2019	NZDPLN	1:30:00 PM	2.5965	2.5976			N/A
4/2/2019	NZDPLN	3:30:00 PM	2.5927	2.5927			N/A
4/2/2019	NZDSEK	9:30:00 AM	6.2975	6.3032			N/A
4/2/2019	NZDSEK	11:30:00 AM	6.2949	6.3008			N/A
4/2/2019	NZDSEK	1:30:00 PM	6.3031	6.3092			N/A
4/2/2019	NZDSEK	3:30:00 PM	6.2986	6.3044			N/A

4/2/2019	NZDSGD	9:30:00 AM	0.9188	0.9193			N/A
4/2/2019	NZDSGD	11:30:00 AM	0.9176	0.9181			N/A
4/2/2019	NZDSGD	1:30:00 PM	0.9172	0.9177			N/A
4/2/2019	NZDSGD	3:30:00 PM	0.917	0.9174			N/A
4/2/2019	NZDSGD.fx	9:30:00 AM	0.91873	0.91928			N/A
4/2/2019	NZDSGD.fx	11:30:00 AM	0.91758	0.91804			N/A
4/2/2019	NZDSGD.fx	1:30:00 PM	0.91717	0.91766			N/A
4/2/2019	NZDSGD.fx	3:30:00 PM	0.91686	0.91721			N/A
4/2/2019	NZDUSD	9:30:00 AM	0.67778	0.67786			N/A
4/2/2019	NZDUSD	11:30:00 AM	0.67685	0.67689			N/A
4/2/2019	NZDUSD	1:30:00 PM	0.67668	0.67676			N/A
4/2/2019	NZDUSD	3:30:00 PM	0.67669	0.67652			N/A
4/2/2019	NZDUSD.fx	9:30:00 AM	0.67784	0.67789			N/A
4/2/2019	NZDUSD.fx	11:30:00 AM	0.67692	0.67691			N/A
4/2/2019	NZDUSD.fx	1:30:00 PM	0.67676	0.67679			N/A
4/2/2019	NZDUSD.fx	3:30:00 PM	0.67674	0.67653			N/A
4/2/2019	NZDZAR	9:30:00 AM	9.6271	9.641			N/A
4/2/2019	NZDZAR	11:30:00 AM	9.6069	9.6199			N/A
4/2/2019	NZDZAR	1:30:00 PM	9.5821	9.5982			N/A
4/2/2019	NZDZAR	3:30:00 PM	9.5461	9.5551			N/A
4/2/2019	SEKJPY	9:30:00 AM	11.98	11.98			N/A
4/2/2019	SEKJPY	11:30:00 AM	11.97	11.97			N/A
4/2/2019	SEKJPY	1:30:00 PM	11.95	11.95			N/A
4/2/2019	SEKJPY	3:30:00 PM	11.95	11.96			N/A
4/2/2019	SEKJPY.fx	9:30:00 AM	11.965	11.983			N/A
4/2/2019	SEKJPY.fx	11:30:00 AM	11.956	11.974			N/A
4/2/2019	SEKJPY.fx	1:30:00 PM	11.935	11.953			N/A
4/2/2019	SEKJPY.fx	3:30:00 PM	11.943	11.962			N/A
4/2/2019	SGDJPY	9:30:00 AM	82.14	82.14			N/A
4/2/2019	SGDJPY	11:30:00 AM	82.11	82.14			N/A
4/2/2019	SGDJPY	1:30:00 PM	82.13	82.13			N/A
4/2/2019	SGDJPY	3:30:00 PM	82.13	82.15			N/A
4/2/2019	SILVER	9:30:00 AM	14.88	15.26			N/A
4/2/2019	SILVER	11:30:00 AM	14.84	15.22			N/A

4/2/2019	SILVER	1:30:00 PM	14.85	15.23			N/A
4/2/2019	SILVER	3:30:00 PM	14.81	15.17			N/A
4/2/2019	SPX500.i	9:30:00 AM	2863.07	2864.08			N/A
4/2/2019	SPX500.i	11:30:00 AM	2864.43	2865.06			N/A
4/2/2019	SPX500.i	1:30:00 PM	2867.28	2867.83			N/A
4/2/2019	SPX500.i	3:30:00 PM	2869.28	2870.08			N/A
4/2/2019	UK100.i	9:30:00 AM	7345.78	7347.44			N/A
4/2/2019	UK100.i	11:30:00 AM	7358.44	7358.03			N/A
4/2/2019	UK100.i	1:30:00 PM	7379.94	7380.69			N/A
4/2/2019	UK100.i	3:30:00 PM	7403.69	7401.86			N/A
4/2/2019	USDCAD	9:30:00 AM	1.33171	1.33172			N/A
4/2/2019	USDCAD	11:30:00 AM	1.33302	1.33301			N/A
4/2/2019	USDCAD	1:30:00 PM	1.33261	1.33251			N/A
4/2/2019	USDCAD	3:30:00 PM	1.33211	1.33201			N/A
4/2/2019	USDCAD.fx	9:30:00 AM	1.33173	1.33168			N/A
4/2/2019	USDCAD.fx	11:30:00 AM	1.33304	1.33298			N/A
4/2/2019	USDCAD.fx	1:30:00 PM	1.33264	1.33248			N/A
4/2/2019	USDCAD.fx	3:30:00 PM	1.33214	1.33203			N/A
4/2/2019	USDCHF	9:30:00 AM	0.99906	0.99915			N/A
4/2/2019	USDCHF	11:30:00 AM	0.99937	0.99948			N/A
4/2/2019	USDCHF	1:30:00 PM	0.99967	0.99977			N/A
4/2/2019	USDCHF	3:30:00 PM	0.99906	0.9991			N/A
4/2/2019	USDCHF.fx	9:30:00 AM	0.99909	0.99911			N/A
4/2/2019	USDCHF.fx	11:30:00 AM	0.99941	0.99942			N/A
4/2/2019	USDCHF.fx	1:30:00 PM	0.9997	0.99971			N/A
4/2/2019	USDCHF.fx	3:30:00 PM	0.99909	0.99906			N/A
4/2/2019	USDCZK	9:30:00 AM	23.002	23.021			N/A
4/2/2019	USDCZK	11:30:00 AM	22.976	22.998			N/A
4/2/2019	USDCZK	1:30:00 PM	22.973	22.993			N/A
4/2/2019	USDCZK	3:30:00 PM	22.964	22.975			N/A
4/2/2019	USDCZK.fx	9:30:00 AM	23.0093	23.0135			N/A
4/2/2019	USDCZK.fx	11:30:00 AM	22.9851	22.9898			N/A
4/2/2019	USDCZK.fx	1:30:00 PM	22.9808	22.9847			N/A
4/2/2019	USDCZK.fx	3:30:00 PM	22.9718	22.9672			N/A



4/2/2019	USDDKK	9:30:00 AM	6.6626	6.6657			N/A
4/2/2019	USDDKK	11:30:00 AM	6.664	6.6669			N/A
4/2/2019	USDDKK	1:30:00 PM	6.6641	6.6672			N/A
4/2/2019	USDDKK	3:30:00 PM	6.6593	6.6624			N/A
4/2/2019	USDDKK.fx	9:30:00 AM	6.66303	6.66374			N/A
4/2/2019	USDDKK.fx	11:30:00 AM	6.66371	6.66487			N/A
4/2/2019	USDDKK.fx	1:30:00 PM	6.66408	6.66512			N/A
4/2/2019	USDDKK.fx	3:30:00 PM	6.65986	6.66032			N/A
4/2/2019	USDHKD	9:30:00 AM	7.8495	7.8493			N/A
4/2/2019	USDHKD	11:30:00 AM	7.8494	7.8494			N/A
4/2/2019	USDHKD	1:30:00 PM	7.8495	7.8498			N/A
4/2/2019	USDHKD	3:30:00 PM	7.8497	7.85			N/A
4/2/2019	USDHKD.fx	9:30:00 AM	7.84951	7.85			N/A
4/2/2019	USDHKD.fx	11:30:00 AM					N/A
4/2/2019	USDHKD.fx	1:30:00 PM					N/A
4/2/2019	USDHKD.fx	3:30:00 PM	7.84966	7.85016			N/A
4/2/2019	USDHUF	9:30:00 AM	287.03	287.45			N/A
4/2/2019	USDHUF	11:30:00 AM	287.38	287.82			N/A
4/2/2019	USDHUF	1:30:00 PM	287.1	287.54			N/A
4/2/2019	USDHUF	3:30:00 PM	286.81	287.21			N/A
4/2/2019	USDHUF.fx	9:30:00 AM	287.223	287.256			N/A
4/2/2019	USDHUF.fx	11:30:00 AM	287.584	287.619			N/A
4/2/2019	USDHUF.fx	1:30:00 PM	287.294	287.356			N/A
4/2/2019	USDHUF.fx	3:30:00 PM	286.995	287.034			N/A
4/2/2019	USDINR	9:30:00 AM	64.14	74.11			N/A
4/2/2019	USDINR	11:30:00 AM	64.09	74.08			N/A
4/2/2019	USDINR	1:30:00 PM					N/A
4/2/2019	USDINR	3:30:00 PM					N/A
4/2/2019	USDJPY	9:30:00 AM	111.339	111.353			N/A
4/2/2019	USDJPY	11:30:00 AM	111.367	111.374			N/A
4/2/2019	USDJPY	1:30:00 PM	111.327	111.342			N/A
4/2/2019	USDJPY	3:30:00 PM	111.352	111.338			N/A
4/2/2019	USDJPY.fx	9:30:00 AM	111.345	111.347			N/A
4/2/2019	USDJPY.fx	11:30:00 AM	111.373	111.367			N/A

4/2/2019	USDJPY.fx	1:30:00 PM	111.336	111.335			N/A
4/2/2019	USDJPY.fx	3:30:00 PM	111.355	111.335			N/A
4/2/2019	USDMXN	9:30:00 AM	19.186	19.194			N/A
4/2/2019	USDMXN	11:30:00 AM	19.188	19.183			N/A
4/2/2019	USDMXN	1:30:00 PM	19.152	19.152			N/A
4/2/2019	USDMXN	3:30:00 PM	19.106	19.101			N/A
4/2/2019	USDMXN.fx	9:30:00 AM	19.1887	19.1904			N/A
4/2/2019	USDMXN.fx	11:30:00 AM	19.1908	19.1795			N/A
4/2/2019	USDMXN.fx	1:30:00 PM	19.1555	19.149			N/A
4/2/2019	USDMXN.fx	3:30:00 PM	19.1094	19.0981			N/A
4/2/2019	USDNOK	9:30:00 AM	8.596	8.6035			N/A
4/2/2019	USDNOK	11:30:00 AM	8.6024	8.6107			N/A
4/2/2019	USDNOK	1:30:00 PM	8.6051	8.6134			N/A
4/2/2019	USDNOK	3:30:00 PM	8.6055	8.6116			N/A
4/2/2019	USDNOK.fx	9:30:00 AM	8.59985	8.59912			N/A
4/2/2019	USDNOK.fx	11:30:00 AM	8.60618	8.6063			N/A
4/2/2019	USDNOK.fx	1:30:00 PM	8.60906	8.60878			N/A
4/2/2019	USDNOK.fx	3:30:00 PM	8.60901	8.60739			N/A
4/2/2019	USDPLN	9:30:00 AM	3.836	3.8372			N/A
4/2/2019	USDPLN	11:30:00 AM	3.8389	3.8403			N/A
4/2/2019	USDPLN	1:30:00 PM	3.8381	3.8391			N/A
4/2/2019	USDPLN	3:30:00 PM	3.8326	3.8325			N/A
4/2/2019	USDPLN.fx	9:30:00 AM	3.83492	3.83816			N/A
4/2/2019	USDPLN.fx	11:30:00 AM	3.83801	3.84106			N/A
4/2/2019	USDPLN.fx	1:30:00 PM	3.83723	3.83991			N/A
4/2/2019	USDPLN.fx	3:30:00 PM	3.83143	3.83325			N/A
4/2/2019	USDRUB	9:30:00 AM					N/A
4/2/2019	USDRUB	11:30:00 AM	65.277	65.662			N/A
4/2/2019	USDRUB	1:30:00 PM	65.225	65.611			N/A
4/2/2019	USDRUB	3:30:00 PM	65.209	65.572			N/A
4/2/2019	USDSEK	9:30:00 AM	9.2968	9.2999			N/A
4/2/2019	USDSEK	11:30:00 AM	9.3052	9.3083			N/A
4/2/2019	USDSEK	1:30:00 PM	9.3194	9.3218			N/A
4/2/2019	USDSEK	3:30:00 PM	9.314	9.3166			N/A

4/2/2019	USDSEK.fx	9:30:00 AM	9.29934	9.29845			N/A
4/2/2019	USDSEK.fx	11:30:00 AM	9.30761	9.30732			N/A
4/2/2019	USDSEK.fx	1:30:00 PM	9.32171	9.32049			N/A
4/2/2019	USDSEK.fx	3:30:00 PM	9.3164	9.31535			N/A
4/2/2019	USDSGD	9:30:00 AM	1.3556	1.3559			N/A
4/2/2019	USDSGD	11:30:00 AM	1.3557	1.3559			N/A
4/2/2019	USDSGD	1:30:00 PM	1.3554	1.3558			N/A
4/2/2019	USDSGD	3:30:00 PM	1.3552	1.3555			N/A
4/2/2019	USDSGD.fx	9:30:00 AM	1.35547	1.35593			N/A
4/2/2019	USDSGD.fx	11:30:00 AM	1.35564	1.35613			N/A
4/2/2019	USDSGD.fx	1:30:00 PM	1.35533	1.3558			N/A
4/2/2019	USDSGD.fx	3:30:00 PM	1.35518	1.35553			N/A
4/2/2019	USDZAR	9:30:00 AM	14.2172	14.2281			N/A
4/2/2019	USDZAR	11:30:00 AM	14.2064	14.2203			N/A
4/2/2019	USDZAR	1:30:00 PM	14.1687	14.1844			N/A
4/2/2019	USDZAR	3:30:00 PM	14.1214	14.1287			N/A
4/2/2019	USDZAR.fx	9:30:00 AM	14.22337	14.22215			N/A
4/2/2019	USDZAR.fx	11:30:00 AM	14.21307	14.2143			N/A
4/2/2019	USDZAR.fx	1:30:00 PM	14.17442	14.17934			N/A
4/2/2019	USDZAR.fx	3:30:00 PM	14.12695	14.12343			N/A
4/2/2019	XAUUSD	9:30:00 AM	1288.1	1288.2			N/A
4/2/2019	XAUUSD	11:30:00 AM	1286.79	1287.01			N/A
4/2/2019	XAUUSD	1:30:00 PM	1287.65	1287.93			N/A
4/2/2019	XAUUSD	3:30:00 PM	1289.69	1288.96			N/A
4/2/2019	ZARJPY	9:30:00 AM	7.81	7.83			N/A
4/2/2019	ZARJPY	11:30:00 AM	7.81	7.84			N/A
4/2/2019	ZARJPY	1:30:00 PM	7.84	7.85			N/A
4/2/2019	ZARJPY	3:30:00 PM	7.87	7.88			N/A
4/2/2019	ZARJPY.fx	9:30:00 AM	7.828	7.83			N/A
4/2/2019	ZARJPY.fx	11:30:00 AM	7.834	7.836			N/A
4/2/2019	ZARJPY.fx	1:30:00 PM	7.851	7.856			N/A
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4/3/2019	#Litecoin	11:30:00 AM	80.15	82.08			N/A
4/3/2019	#Litecoin	1:30:00 PM	81.58	83.3			N/A
4/3/2019	#Litecoin	3:30:00 PM	83.58	84.68			N/A
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4/3/2019	#LLOY	1:30:00 PM					N/A
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4/3/2019	#LNKD	11:30:00 AM					N/A
4/3/2019	#LNKD	1:30:00 PM					N/A
4/3/2019	#LNKD	3:30:00 PM					N/A

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4/3/2019	#NG.f	11:30:00 AM	2.671	2.687			N/A
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4/3/2019	#NG.f	3:30:00 PM	2.663	2.681			N/A
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4/3/2019	#Ripple	11:30:00 AM	0.347	0.3557			N/A
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4/3/2019	#SBUX	3:30:00 PM					N/A
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4/3/2019	#SPY	1:30:00 PM					N/A
4/3/2019	#SPY	3:30:00 PM					N/A
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4/3/2019	#TWTR	3:30:00 PM					N/A
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4/3/2019	#UBS	11:30:00 AM					N/A
4/3/2019	#UBS	1:30:00 PM					N/A
4/3/2019	#UBS	3:30:00 PM					N/A
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4/3/2019	#UPS	1:30:00 PM					N/A
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4/3/2019	#UTX	3:30:00 PM					N/A
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4/3/2019	#YHOO	3:30:00 PM					N/A
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4/3/2019	#ZNGA	11:30:00 AM					N/A
4/3/2019	#ZNGA	1:30:00 PM					N/A
4/3/2019	#ZNGA	3:30:00 PM					N/A



4/3/2019	AUDCAD	9:30:00 AM	0.94635	0.94691			N/A
4/3/2019	AUDCAD	11:30:00 AM	0.94674	0.94731			N/A
4/3/2019	AUDCAD	1:30:00 PM	0.94729	0.94783			N/A
4/3/2019	AUDCAD	3:30:00 PM	0.94771	0.94842			N/A
4/3/2019	AUDCAD.fx	9:30:00 AM	0.94668	0.94661			N/A
4/3/2019	AUDCAD.fx	11:30:00 AM	0.94707	0.94696			N/A
4/3/2019	AUDCAD.fx	1:30:00 PM	0.94761	0.94748			N/A
4/3/2019	AUDCAD.fx	3:30:00 PM	0.94804	0.94807			N/A
4/3/2019	AUDCHF	9:30:00 AM	0.70978	0.71037			N/A
4/3/2019	AUDCHF	11:30:00 AM	0.70928	0.70985			N/A
4/3/2019	AUDCHF	1:30:00 PM	0.70944	0.71005			N/A
4/3/2019	AUDCHF	3:30:00 PM	0.70938	0.71007			N/A
4/3/2019	AUDCHF.fx	9:30:00 AM	0.71011	0.71003			N/A
4/3/2019	AUDCHF.fx	11:30:00 AM	0.70962	0.7095			N/A
4/3/2019	AUDCHF.fx	1:30:00 PM	0.70978	0.70971			N/A
4/3/2019	AUDCHF.fx	3:30:00 PM	0.70972	0.70972			N/A
4/3/2019	AUDCZK	9:30:00 AM	16.288	16.3			N/A
4/3/2019	AUDCZK	11:30:00 AM	16.258	16.273			N/A
4/3/2019	AUDCZK	1:30:00 PM	16.247	16.261			N/A
4/3/2019	AUDCZK	3:30:00 PM	16.269	16.286			N/A
4/3/2019	AUDDKK	9:30:00 AM	4.7292	4.7335			N/A
4/3/2019	AUDDKK	11:30:00 AM	4.7259	4.7298			N/A
4/3/2019	AUDDKK	1:30:00 PM	4.7242	4.7283			N/A
4/3/2019	AUDDKK	3:30:00 PM	4.727	4.7314			N/A
4/3/2019	AUDHKD	9:30:00 AM	5.5801	5.584			N/A
4/3/2019	AUDHKD	11:30:00 AM	5.5831	5.5859			N/A
4/3/2019	AUDHKD	1:30:00 PM	5.5871	5.5902			N/A
4/3/2019	AUDHKD	3:30:00 PM	5.5865	5.5905			N/A
4/3/2019	AUDHUF	9:30:00 AM	203.3	203.41			N/A
4/3/2019	AUDHUF	11:30:00 AM	202.52	202.75			N/A
4/3/2019	AUDHUF	1:30:00 PM	202.24	202.45			N/A
4/3/2019	AUDHUF	3:30:00 PM	202.66	202.81			N/A
4/3/2019	AUDJPY	9:30:00 AM	79.285	79.327			N/A
4/3/2019	AUDJPY	11:30:00 AM	79.346	79.393			N/A

4/3/2019	AUDJPY	1:30:00 PM	79.342	79.397			N/A
4/3/2019	AUDJPY	3:30:00 PM	79.351	79.417			N/A
4/3/2019	AUDJPY.fx	9:30:00 AM	79.318	79.293			N/A
4/3/2019	AUDJPY.fx	11:30:00 AM	79.38	79.358			N/A
4/3/2019	AUDJPY.fx	1:30:00 PM	79.375	79.361			N/A
4/3/2019	AUDJPY.fx	3:30:00 PM	79.385	79.383			N/A
4/3/2019	AUDMXN	9:30:00 AM	13.6096	13.6182			N/A
4/3/2019	AUDMXN	11:30:00 AM	13.6235	13.6283			N/A
4/3/2019	AUDMXN	1:30:00 PM	13.6302	13.6368			N/A
4/3/2019	AUDMXN	3:30:00 PM	13.659	13.6588			N/A
4/3/2019	AUDNOK	9:30:00 AM	6.0929	6.0967			N/A
4/3/2019	AUDNOK	11:30:00 AM	6.0848	6.0897			N/A
4/3/2019	AUDNOK	1:30:00 PM	6.0901	6.0942			N/A
4/3/2019	AUDNOK	3:30:00 PM	6.0922	6.0971			N/A
4/3/2019	AUDNOK.fx	9:30:00 AM	6.0942	6.0951			N/A
4/3/2019	AUDNOK.fx	11:30:00 AM	6.0865	6.0881			N/A
4/3/2019	AUDNOK.fx	1:30:00 PM	6.0916	6.0925			N/A
4/3/2019	AUDNOK.fx	3:30:00 PM	6.0938	6.0954			N/A
4/3/2019	AUDNZD	9:30:00 AM	1.04809	1.0489			N/A
4/3/2019	AUDNZD	11:30:00 AM	1.04806	1.04893			N/A
4/3/2019	AUDNZD	1:30:00 PM	1.04704	1.04792			N/A
4/3/2019	AUDNZD	3:30:00 PM	1.04748	1.04842			N/A
4/3/2019	AUDNZD.fx	9:30:00 AM	1.04852	1.04847			N/A
4/3/2019	AUDNZD.fx	11:30:00 AM	1.04848	1.0485			N/A
4/3/2019	AUDNZD.fx	1:30:00 PM	1.04746	1.0475			N/A
4/3/2019	AUDNZD.fx	3:30:00 PM	1.0479	1.048			N/A
4/3/2019	AUDPLN	9:30:00 AM	2.7221	2.7247			N/A
4/3/2019	AUDPLN	11:30:00 AM	2.7172	2.7198			N/A
4/3/2019	AUDPLN	1:30:00 PM	2.7168	2.7197			N/A
4/3/2019	AUDPLN	3:30:00 PM	2.7179	2.7207			N/A
4/3/2019	AUDSEK	9:30:00 AM	6.6118	6.6123			N/A
4/3/2019	AUDSEK	11:30:00 AM	6.5964	6.5985			N/A
4/3/2019	AUDSEK	1:30:00 PM	6.5981	6.6004			N/A
4/3/2019	AUDSEK	3:30:00 PM	6.6067	6.6091			N/A

4/3/2019	AUDSEK.fx	9:30:00 AM	6.6068	6.617			N/A
4/3/2019	AUDSEK.fx	11:30:00 AM	6.5917	6.603			N/A
4/3/2019	AUDSEK.fx	1:30:00 PM	6.5935	6.605			N/A
4/3/2019	AUDSEK.fx	3:30:00 PM	6.602	6.6134			N/A
4/3/2019	AUDSGD	9:30:00 AM	0.9625	0.9628			N/A
4/3/2019	AUDSGD	11:30:00 AM	0.9625	0.9627			N/A
4/3/2019	AUDSGD	1:30:00 PM	0.963	0.9631			N/A
4/3/2019	AUDSGD	3:30:00 PM	0.9633	0.9632			N/A
4/3/2019	AUDSGD.fx	9:30:00 AM	0.96258	0.96268			N/A
4/3/2019	AUDSGD.fx	11:30:00 AM	0.96264	0.96258			N/A
4/3/2019	AUDSGD.fx	1:30:00 PM	0.96305	0.96303			N/A
4/3/2019	AUDSGD.fx	3:30:00 PM	0.96337	0.96347			N/A
4/3/2019	AUDUSD	9:30:00 AM	0.71122	0.7113			N/A
4/3/2019	AUDUSD	11:30:00 AM	0.71156	0.71155			N/A
4/3/2019	AUDUSD	1:30:00 PM	0.71215	0.71216			N/A
4/3/2019	AUDUSD	3:30:00 PM	0.71223	0.71234			N/A
4/3/2019	AUDUSD.fx	9:30:00 AM	0.71126	0.71125			N/A
4/3/2019	AUDUSD.fx	11:30:00 AM	0.71161	0.7115			N/A
4/3/2019	AUDUSD.fx	1:30:00 PM	0.7122	0.7121			N/A
4/3/2019	AUDUSD.fx	3:30:00 PM	0.71227	0.71227			N/A
4/3/2019	AUDZAR	9:30:00 AM	10.0501	10.0618			N/A
4/3/2019	AUDZAR	11:30:00 AM	10.0498	10.0636			N/A
4/3/2019	AUDZAR	1:30:00 PM	10.0675	10.082			N/A
4/3/2019	AUDZAR	3:30:00 PM	10.0837	10.0952			N/A
4/3/2019	AUS200.i	9:30:00 AM	6288.1	6291.9			N/A
4/3/2019	AUS200.i	11:30:00 AM	6288.1	6291.6			N/A
4/3/2019	AUS200.i	1:30:00 PM	6279.1	6282.1			N/A
4/3/2019	AUS200.i	3:30:00 PM	6280.1	6282.6			N/A
4/3/2019	BCHUSD	9:30:00 AM	259.33	270.65			N/A
4/3/2019	BCHUSD	11:30:00 AM	255.34	266.84			N/A
4/3/2019	BCHUSD	1:30:00 PM	260.42	271.82			N/A
4/3/2019	BCHUSD	3:30:00 PM	289.46	296.18			N/A
4/3/2019	CADCHF	9:30:00 AM	0.7498	0.75046			N/A
4/3/2019	CADCHF	11:30:00 AM	0.74895	0.74945			N/A

4/3/2019	CADCHF	1:30:00 PM	0.74868	0.74935			N/A
4/3/2019	CADCHF	3:30:00 PM	0.74823	0.74896			N/A
4/3/2019	CADCHF.fx	9:30:00 AM	0.75014	0.75012			N/A
4/3/2019	CADCHF.fx	11:30:00 AM	0.74928	0.74911			N/A
4/3/2019	CADCHF.fx	1:30:00 PM	0.74901	0.749			N/A
4/3/2019	CADCHF.fx	3:30:00 PM	0.74857	0.74861			N/A
4/3/2019	CADCZK	9:30:00 AM	17.21	17.223			N/A
4/3/2019	CADCZK	11:30:00 AM	17.171	17.183			N/A
4/3/2019	CADCZK	1:30:00 PM	17.148	17.163			N/A
4/3/2019	CADCZK	3:30:00 PM	17.164	17.182			N/A
4/3/2019	CADDKK	9:30:00 AM	4.996	4.999			N/A
4/3/2019	CADDKK	11:30:00 AM					N/A
4/3/2019	CADDKK	1:30:00 PM	4.987	4.99			N/A
4/3/2019	CADDKK	3:30:00 PM	4.987	4.99			N/A
4/3/2019	CADHKD	9:30:00 AM	5.8956	5.8995			N/A
4/3/2019	CADHKD	11:30:00 AM	5.896	5.8989			N/A
4/3/2019	CADHKD	1:30:00 PM	5.8969	5.9001			N/A
4/3/2019	CADHKD	3:30:00 PM	5.8939	5.8977			N/A
4/3/2019	CADHUF	9:30:00 AM	214.85	214.89			N/A
4/3/2019	CADHUF	11:30:00 AM	213.93	214.06			N/A
4/3/2019	CADHUF	1:30:00 PM	213.48	213.63			N/A
4/3/2019	CADHUF	3:30:00 PM	213.83	213.92			N/A
4/3/2019	CADJPY	9:30:00 AM	83.766	83.798			N/A
4/3/2019	CADJPY	11:30:00 AM	83.78	83.824			N/A
4/3/2019	CADJPY	1:30:00 PM	83.731	83.793			N/A
4/3/2019	CADJPY	3:30:00 PM	83.698	83.764			N/A
4/3/2019	CADJPY.fx	9:30:00 AM	83.796	83.763			N/A
4/3/2019	CADJPY.fx	11:30:00 AM	83.814	83.789			N/A
4/3/2019	CADJPY.fx	1:30:00 PM	83.764	83.759			N/A
4/3/2019	CADJPY.fx	3:30:00 PM	83.731	83.731			N/A
4/3/2019	CADMXN	9:30:00 AM	14.3784	14.3882			N/A
4/3/2019	CADMXN	11:30:00 AM	14.3883	14.3912			N/A
4/3/2019	CADMXN	1:30:00 PM	14.3847	14.3948			N/A
4/3/2019	CADMXN	3:30:00 PM	14.4083	14.4112			N/A

4/3/2019	CADNOK	9:30:00 AM	6.4355	6.4376			N/A
4/3/2019	CADNOK	11:30:00 AM	6.4243	6.429			N/A
4/3/2019	CADNOK	1:30:00 PM	6.4266	6.4302			N/A
4/3/2019	CADNOK	3:30:00 PM	6.4247	6.4275			N/A
4/3/2019	CADPLN	9:30:00 AM	2.8756	2.8776			N/A
4/3/2019	CADPLN	11:30:00 AM	2.8692	2.8712			N/A
4/3/2019	CADPLN	1:30:00 PM	2.8675	2.869			N/A
4/3/2019	CADPLN	3:30:00 PM	2.867	2.8689			N/A
4/3/2019	CADSEK	9:30:00 AM	6.9832	6.9844			N/A
4/3/2019	CADSEK	11:30:00 AM	6.9639	6.967			N/A
4/3/2019	CADSEK	1:30:00 PM	6.9622	6.965			N/A
4/3/2019	CADSEK	3:30:00 PM	6.9664	6.9703			N/A
4/3/2019	CADSGD	9:30:00 AM	1.0162	1.0165			N/A
4/3/2019	CADSGD	11:30:00 AM	1.0158	1.0161			N/A
4/3/2019	CADSGD	1:30:00 PM	1.0156	1.0159			N/A
4/3/2019	CADSGD	3:30:00 PM	1.0153	1.0156			N/A
4/3/2019	CADZAR	9:30:00 AM	10.6178	10.6323			N/A
4/3/2019	CADZAR	11:30:00 AM	10.6124	10.6281			N/A
4/3/2019	CADZAR	1:30:00 PM	10.6251	10.6416			N/A
4/3/2019	CADZAR	3:30:00 PM	10.6376	10.6505			N/A
4/3/2019	CHFCZK	9:30:00 AM	22.947	22.959			N/A
4/3/2019	CHFCZK	11:30:00 AM	22.921	22.935			N/A
4/3/2019	CHFCZK	1:30:00 PM	22.896	22.913			N/A
4/3/2019	CHFCZK	3:30:00 PM	22.932	22.948			N/A
4/3/2019	CHFDKK	9:30:00 AM	6.662	6.665			N/A
4/3/2019	CHFDKK	11:30:00 AM	6.662	6.665			N/A
4/3/2019	CHFDKK	1:30:00 PM					N/A
4/3/2019	CHFDKK	3:30:00 PM	6.662	6.665			N/A
4/3/2019	CHFDKK.fx	9:30:00 AM	6.6601	6.6661			N/A
4/3/2019	CHFDKK.fx	11:30:00 AM	6.6602	6.6661			N/A
4/3/2019	CHFDKK.fx	1:30:00 PM	6.6558	6.6622			N/A
4/3/2019	CHFDKK.fx	3:30:00 PM	6.6608	6.6668			N/A
4/3/2019	CHFHKD	9:30:00 AM	7.8609	7.8643			N/A
4/3/2019	CHFHKD	11:30:00 AM	7.8697	7.8736			N/A

4/3/2019	CHFHKD	1:30:00 PM	7.8736	7.8774			N/A
4/3/2019	CHFHKD	3:30:00 PM	7.8748	7.8787			N/A
4/3/2019	CHFHUF	9:30:00 AM	286.34	286.57			N/A
4/3/2019	CHFHUF	11:30:00 AM	285.47	285.83			N/A
4/3/2019	CHFHUF	1:30:00 PM	284.95	285.33			N/A
4/3/2019	CHFHUF	3:30:00 PM	285.6	285.84			N/A
4/3/2019	CHFJPY	9:30:00 AM	111.682	111.696			N/A
4/3/2019	CHFJPY	11:30:00 AM	111.833	111.889			N/A
4/3/2019	CHFJPY	1:30:00 PM	111.794	111.865			N/A
4/3/2019	CHFJPY	3:30:00 PM	111.82	111.88			N/A
4/3/2019	CHFJPY.fx	9:30:00 AM	111.714	111.663			N/A
4/3/2019	CHFJPY.fx	11:30:00 AM	111.865	111.854			N/A
4/3/2019	CHFJPY.fx	1:30:00 PM	111.827	111.831			N/A
4/3/2019	CHFJPY.fx	3:30:00 PM	111.853	111.847			N/A
4/3/2019	CHFMXN	9:30:00 AM	19.1699	19.1832			N/A
4/3/2019	CHFMXN	11:30:00 AM	19.2066	19.2089			N/A
4/3/2019	CHFMXN	1:30:00 PM	19.2065	19.2198			N/A
4/3/2019	CHFMXN	3:30:00 PM	19.249	19.2511			N/A
4/3/2019	CHFNOK	9:30:00 AM	8.5794	8.5863			N/A
4/3/2019	CHFNOK	11:30:00 AM	8.5758	8.582			N/A
4/3/2019	CHFNOK	1:30:00 PM	8.5793	8.5873			N/A
4/3/2019	CHFNOK	3:30:00 PM	8.5836	8.5913			N/A
4/3/2019	CHFNOK.fx	9:30:00 AM	8.58255	8.58301			N/A
4/3/2019	CHFNOK.fx	11:30:00 AM	8.57902	8.57862			N/A
4/3/2019	CHFNOK.fx	1:30:00 PM	8.58259	8.58389			N/A
4/3/2019	CHFNOK.fx	3:30:00 PM	8.58686	8.58801			N/A
4/3/2019	CHFPLN	9:30:00 AM	3.8341	3.8366			N/A
4/3/2019	CHFPLN	11:30:00 AM	3.83	3.8329			N/A
4/3/2019	CHFPLN	1:30:00 PM	3.8282	3.8314			N/A
4/3/2019	CHFPLN	3:30:00 PM	3.8302	3.8328			N/A
4/3/2019	CHFPLN.fx	9:30:00 AM	3.8315	3.83919			N/A
4/3/2019	CHFPLN.fx	11:30:00 AM	3.82742	3.83524			N/A
4/3/2019	CHFPLN.fx	1:30:00 PM	3.82571	3.83375			N/A
4/3/2019	CHFPLN.fx	3:30:00 PM	3.82777	3.83504			N/A

4/3/2019	CHFSEK	9:30:00 AM	9.3101	9.3114			N/A
4/3/2019	CHFSEK	11:30:00 AM	9.2959	9.3			N/A
4/3/2019	CHFSEK	1:30:00 PM	9.2953	9.2996			N/A
4/3/2019	CHFSEK	3:30:00 PM	9.3069	9.3112			N/A
4/3/2019	CHFSGD	9:30:00 AM	1.3556	1.3559			N/A
4/3/2019	CHFSGD	11:30:00 AM	1.3565	1.3569			N/A
4/3/2019	CHFSGD	1:30:00 PM	1.3567	1.3572			N/A
4/3/2019	CHFSGD	3:30:00 PM	1.3573	1.3577			N/A
4/3/2019	CHFSGD.fx	9:30:00 AM	1.35571	1.35574			N/A
4/3/2019	CHFSGD.fx	11:30:00 AM	1.35661	1.35668			N/A
4/3/2019	CHFSGD.fx	1:30:00 PM	1.35678	1.35698			N/A
4/3/2019	CHFSGD.fx	3:30:00 PM	1.35739	1.35754			N/A
4/3/2019	CHFZAR	9:30:00 AM	14.1591	14.1715			N/A
4/3/2019	CHFZAR	11:30:00 AM	14.1686	14.1829			N/A
4/3/2019	CHFZAR	1:30:00 PM	14.1894	14.2038			N/A
4/3/2019	CHFZAR	3:30:00 PM	14.2146	14.224			N/A
4/3/2019	CZKJPY	9:30:00 AM	4.867	4.868			N/A
4/3/2019	CZKJPY	11:30:00 AM	4.878	4.882			N/A
4/3/2019	CZKJPY	1:30:00 PM	4.882	4.885			N/A
4/3/2019	CZKJPY	3:30:00 PM					N/A
4/3/2019	DAX30.i	9:30:00 AM	11852.52	11852.02			N/A
4/3/2019	DAX30.i	11:30:00 AM	11915.77	11906.77			N/A
4/3/2019	DAX30.i	1:30:00 PM	11894.52	11888.27			N/A
4/3/2019	DAX30.i	3:30:00 PM	11912.52	11909.27			N/A
4/3/2019	DJ30.i	9:30:00 AM					N/A
4/3/2019	DJ30.i	11:30:00 AM					N/A
4/3/2019	DJ30.i	1:30:00 PM					N/A
4/3/2019	DJ30.i	3:30:00 PM					N/A
4/3/2019	DKKJPY	9:30:00 AM	16.77	16.79			N/A
4/3/2019	DKKJPY	11:30:00 AM					N/A
4/3/2019	DKKJPY	1:30:00 PM					N/A
4/3/2019	DKKJPY	3:30:00 PM					N/A
4/3/2019	EURAUD	9:30:00 AM	1.57707	1.5772			N/A
4/3/2019	EURAUD	11:30:00 AM	1.5781	1.57822			N/A

4/3/2019	EURAUD	1:30:00 PM	1.57858	1.57874			N/A
4/3/2019	EURAUD	3:30:00 PM	1.57749	1.57783			N/A
4/3/2019	EURAUD.fx	9:30:00 AM	1.57727	1.57699			N/A
4/3/2019	EURAUD.fx	11:30:00 AM	1.5783	1.57801			N/A
4/3/2019	EURAUD.fx	1:30:00 PM	1.57879	1.57853			N/A
4/3/2019	EURAUD.fx	3:30:00 PM	1.57769	1.57762			N/A
4/3/2019	EURCAD	9:30:00 AM	1.49312	1.49376			N/A
4/3/2019	EURCAD	11:30:00 AM	1.49503	1.49539			N/A
4/3/2019	EURCAD	1:30:00 PM	1.49614	1.49683			N/A
4/3/2019	EURCAD	3:30:00 PM	1.49592	1.49669			N/A
4/3/2019	EURCAD.fx	9:30:00 AM	1.49351	1.49335			N/A
4/3/2019	EURCAD.fx	11:30:00 AM	1.49545	1.49501			N/A
4/3/2019	EURCAD.fx	1:30:00 PM	1.49655	1.49641			N/A
4/3/2019	EURCAD.fx	3:30:00 PM	1.49635	1.49628			N/A
4/3/2019	EURCHF	9:30:00 AM	1.12028	1.12029			N/A
4/3/2019	EURCHF	11:30:00 AM	1.12018	1.12023			N/A
4/3/2019	EURCHF	1:30:00 PM	1.12085	1.12096			N/A
4/3/2019	EURCHF	3:30:00 PM	1.12009	1.12016			N/A
4/3/2019	EURCHF.fx	9:30:00 AM	1.12033	1.12025			N/A
4/3/2019	EURCHF.fx	11:30:00 AM	1.12025	1.12018			N/A
4/3/2019	EURCHF.fx	1:30:00 PM	1.12091	1.1209			N/A
4/3/2019	EURCHF.fx	3:30:00 PM	1.12015	1.1201			N/A
4/3/2019	EURCZK	9:30:00 AM	25.694	25.728			N/A
4/3/2019	EURCZK	11:30:00 AM	25.662	25.701			N/A
4/3/2019	EURCZK	1:30:00 PM	25.651	25.69			N/A
4/3/2019	EURCZK	3:30:00 PM	25.675	25.713			N/A
4/3/2019	EURDKK	9:30:00 AM	7.4632	7.4627			N/A
4/3/2019	EURDKK	11:30:00 AM	7.4632	7.4645			N/A
4/3/2019	EURDKK	1:30:00 PM	7.4632	7.4636			N/A
4/3/2019	EURDKK	3:30:00 PM	7.4634	7.4642			N/A
4/3/2019	EURGBP	9:30:00 AM	0.85381	0.85225	340	340	N/A
4/3/2019	EURGBP	11:30:00 AM	0.85445	0.85315			N/A
4/3/2019	EURGBP	1:30:00 PM	0.85341	0.85341			N/A
4/3/2019	EURGBP	3:30:00 PM	0.85306	0.85305			N/A



4/3/2019	EURGBP.fx	9:30:00 AM	0.85382	0.85222			N/A
4/3/2019	EURGBP.fx	11:30:00 AM	0.8544	0.85317			N/A
4/3/2019	EURGBP.fx	1:30:00 PM	0.85342	0.85336			N/A
4/3/2019	EURGBP.fx	3:30:00 PM	0.85308	0.85299			N/A
4/3/2019	EURHKD	9:30:00 AM	8.8095	8.8125			N/A
4/3/2019	EURHKD	11:30:00 AM	8.818	8.8223			N/A
4/3/2019	EURHKD	1:30:00 PM	8.8274	8.8327			N/A
4/3/2019	EURHKD	3:30:00 PM	8.8232	8.8277			N/A
4/3/2019	EURHKD.fx	9:30:00 AM	8.812	8.80993			N/A
4/3/2019	EURHKD.fx	11:30:00 AM	8.82089	8.81978			N/A
4/3/2019	EURHKD.fx	1:30:00 PM	8.82995	8.8302			N/A
4/3/2019	EURHKD.fx	3:30:00 PM	8.82571	8.82511			N/A
4/3/2019	EURHUF	9:30:00 AM	320.75	321.33			N/A
4/3/2019	EURHUF	11:30:00 AM	319.7	320.42			N/A
4/3/2019	EURHUF	1:30:00 PM	319.33	320.07			N/A
4/3/2019	EURHUF	3:30:00 PM	319.85	320.55			N/A
4/3/2019	EURHUF.fx	9:30:00 AM	321.015	321.093			N/A
4/3/2019	EURHUF.fx	11:30:00 AM	319.966	320.148			N/A
4/3/2019	EURHUF.fx	1:30:00 PM	319.611	319.798			N/A
4/3/2019	EURHUF.fx	3:30:00 PM	320.114	320.282			N/A
4/3/2019	EURJPY	9:30:00 AM	125.156	125.092			N/A
4/3/2019	EURJPY	11:30:00 AM	125.317	125.297			N/A
4/3/2019	EURJPY	1:30:00 PM	125.34	125.351			N/A
4/3/2019	EURJPY	3:30:00 PM	125.291	125.28			N/A
4/3/2019	EURJPY.fx	9:30:00 AM	125.158	125.089			N/A
4/3/2019	EURJPY.fx	11:30:00 AM	125.323	125.293			N/A
4/3/2019	EURJPY.fx	1:30:00 PM	125.342	125.348			N/A
4/3/2019	EURJPY.fx	3:30:00 PM	125.293	125.278			N/A
4/3/2019	EURMXN	9:30:00 AM	21.4807	21.4928			N/A
4/3/2019	EURMXN	11:30:00 AM	21.5173	21.5229			N/A
4/3/2019	EURMXN	1:30:00 PM	21.5295	21.5464			N/A
4/3/2019	EURMXN	3:30:00 PM	21.5635	21.5678			N/A
4/3/2019	EURMXN.f	9:30:00 AM	21.4896	21.4862			N/A
4/3/2019	EURMXN.f	11:30:00 AM	21.5257	21.5155			N/A

4/3/2019	EURMXN.f	1:30:00 PM	21.5376	21.5381			N/A
4/3/2019	EURMXN.f	3:30:00 PM	21.5716	21.5595			N/A
4/3/2019	EURNOK	9:30:00 AM	9.6102	9.6209			N/A
4/3/2019	EURNOK	11:30:00 AM	9.605	9.6155			N/A
4/3/2019	EURNOK	1:30:00 PM	9.6151	9.6271			N/A
4/3/2019	EURNOK	3:30:00 PM	9.6125	9.625			N/A
4/3/2019	EURNOK.fx	9:30:00 AM	9.61545	9.61518			N/A
4/3/2019	EURNOK.fx	11:30:00 AM	9.61063	9.60984			N/A
4/3/2019	EURNOK.fx	1:30:00 PM	9.62042	9.6217			N/A
4/3/2019	EURNOK.fx	3:30:00 PM	9.61792	9.61947			N/A
4/3/2019	EURNZD	9:30:00 AM	1.65411	1.65439			N/A
4/3/2019	EURNZD	11:30:00 AM	1.65514	1.65563			N/A
4/3/2019	EURNZD	1:30:00 PM	1.65398	1.65448			N/A
4/3/2019	EURNZD	3:30:00 PM	1.65361	1.65432			N/A
4/3/2019	EURNZD.fx	9:30:00 AM	1.65451	1.65398			N/A
4/3/2019	EURNZD.fx	11:30:00 AM	1.65555	1.65521			N/A
4/3/2019	EURNZD.fx	1:30:00 PM	1.65439	1.65405			N/A
4/3/2019	EURNZD.fx	3:30:00 PM	1.65402	1.65389			N/A
4/3/2019	EURPLN	9:30:00 AM	4.2952	4.2982			N/A
4/3/2019	EURPLN	11:30:00 AM	4.2903	4.2934			N/A
4/3/2019	EURPLN	1:30:00 PM	4.2912	4.2945			N/A
4/3/2019	EURPLN	3:30:00 PM	4.2903	4.2931			N/A
4/3/2019	EURPLN.fx	9:30:00 AM	4.29427	4.29892			N/A
4/3/2019	EURPLN.fx	11:30:00 AM	4.28937	4.29406			N/A
4/3/2019	EURPLN.fx	1:30:00 PM	4.29057	4.29517			N/A
4/3/2019	EURPLN.fx	3:30:00 PM	4.28958	4.29372			N/A
4/3/2019	EURRUB	9:30:00 AM					N/A
4/3/2019	EURRUB	11:30:00 AM	72.905	73.346			N/A
4/3/2019	EURRUB	1:30:00 PM	73.037	73.471			N/A
4/3/2019	EURRUB	3:30:00 PM	73.012	73.439			N/A
4/3/2019	EURSEK	9:30:00 AM	10.4314	10.4327			N/A
4/3/2019	EURSEK	11:30:00 AM	10.4139	10.4182			N/A
4/3/2019	EURSEK	1:30:00 PM	10.4196	10.4244			N/A
4/3/2019	EURSEK	3:30:00 PM	10.427	10.4309			N/A

4/3/2019	EURSEK.fx	9:30:00 AM	10.43275	10.43121			N/A
4/3/2019	EURSEK.fx	11:30:00 AM	10.41561	10.41646			N/A
4/3/2019	EURSEK.fx	1:30:00 PM	10.42131	10.4227			N/A
4/3/2019	EURSEK.fx	3:30:00 PM	10.42854	10.42936			N/A
4/3/2019	EURSGD	9:30:00 AM	1.5185	1.5191			N/A
4/3/2019	EURSGD	11:30:00 AM	1.5194	1.5201			N/A
4/3/2019	EURSGD	1:30:00 PM	1.5206	1.5214			N/A
4/3/2019	EURSGD	3:30:00 PM	1.5202	1.5209			N/A
4/3/2019	EURSGD.fx	9:30:00 AM	1.51883	1.51868			N/A
4/3/2019	EURSGD.fx	11:30:00 AM	1.51984	1.51968			N/A
4/3/2019	EURSGD.fx	1:30:00 PM	1.52085	1.52098			N/A
4/3/2019	EURSGD.fx	3:30:00 PM	1.52051	1.52052			N/A
4/3/2019	EURUSD	9:30:00 AM	1.12214	1.12192			N/A
4/3/2019	EURUSD	11:30:00 AM	1.12321	1.12318			N/A
4/3/2019	EURUSD	1:30:00 PM	1.12447	1.12459			N/A
4/3/2019	EURUSD	3:30:00 PM	1.12398	1.12398			N/A
4/3/2019	EURUSD.fx	9:30:00 AM	1.1223	1.12201			N/A
4/3/2019	EURUSD.fx	11:30:00 AM	1.12344	1.12328			N/A
4/3/2019	EURUSD.fx	1:30:00 PM	1.12468	1.12468			N/A
4/3/2019	EURUSD.fx	3:30:00 PM	1.12417	1.12408			N/A
4/3/2019	EURZAR	9:30:00 AM	15.869	15.884			N/A
4/3/2019	EURZAR	11:30:00 AM	15.8744	15.8928			N/A
4/3/2019	EURZAR	1:30:00 PM	15.9067	15.9271			N/A
4/3/2019	EURZAR	3:30:00 PM	15.9253	15.944			N/A
4/3/2019	EURZAR.fx	9:30:00 AM	15.86928	15.88493			N/A
4/3/2019	EURZAR.fx	11:30:00 AM	15.87419	15.89269			N/A
4/3/2019	EURZAR.fx	1:30:00 PM	15.90633	15.92743			N/A
4/3/2019	EURZAR.fx	3:30:00 PM	15.92471	15.9443			N/A
4/3/2019	GBPAUD	9:30:00 AM	1.85114	1.848			N/A
4/3/2019	GBPAUD	11:30:00 AM	1.85033	1.84776			N/A
4/3/2019	GBPAUD	1:30:00 PM	1.85022	1.85082			N/A
4/3/2019	GBPAUD	3:30:00 PM	1.84989	1.85044			N/A
4/3/2019	GBPAUD.fx	9:30:00 AM	1.85141	1.8476			N/A
4/3/2019	GBPAUD.fx	11:30:00 AM	1.85066	1.84753			N/A

4/3/2019	GBPAUD.fx	1:30:00 PM	1.85061	1.85044			N/A
4/3/2019	GBPAUD.fx	3:30:00 PM	1.85027	1.85006			N/A
4/3/2019	GBPCAD	9:30:00 AM	1.7522	1.74945			N/A
4/3/2019	GBPCAD	11:30:00 AM	1.75232	1.75004			N/A
4/3/2019	GBPCAD	1:30:00 PM	1.75324	1.75384			N/A
4/3/2019	GBPCAD	3:30:00 PM	1.75383	1.75443			N/A
4/3/2019	GBPCAD.fx	9:30:00 AM	1.75249	1.74904			N/A
4/3/2019	GBPCAD.fx	11:30:00 AM	1.75262	1.74972			N/A
4/3/2019	GBPCAD.fx	1:30:00 PM	1.7536	1.75348			N/A
4/3/2019	GBPCAD.fx	3:30:00 PM	1.75421	1.75405			N/A
4/3/2019	GBPCHF	9:30:00 AM	1.31433	1.31231			N/A
4/3/2019	GBPCHF	11:30:00 AM	1.3127	1.31114			N/A
4/3/2019	GBPCHF	1:30:00 PM	1.31333	1.31359			N/A
4/3/2019	GBPCHF	3:30:00 PM	1.31296	1.3133			N/A
4/3/2019	GBPCHF.fx	9:30:00 AM	1.31447	1.31211			N/A
4/3/2019	GBPCHF.fx	11:30:00 AM	1.31291	1.311			N/A
4/3/2019	GBPCHF.fx	1:30:00 PM	1.31352	1.31339			N/A
4/3/2019	GBPCHF.fx	3:30:00 PM	1.31315	1.3131			N/A
4/3/2019	GBPCZK	9:30:00 AM	30.156	30.119			N/A
4/3/2019	GBPCZK	11:30:00 AM	30.091	30.058			N/A
4/3/2019	GBPCZK	1:30:00 PM	30.072	30.089			N/A
4/3/2019	GBPCZK	3:30:00 PM	30.11	30.128			N/A
4/3/2019	GBPDKK	9:30:00 AM	8.754	8.749			N/A
4/3/2019	GBPDKK	11:30:00 AM	8.744	8.742			N/A
4/3/2019	GBPDKK	1:30:00 PM	8.742	8.752			N/A
4/3/2019	GBPDKK	3:30:00 PM	8.746	8.756			N/A
4/3/2019	GBPDKK.fx	9:30:00 AM	8.7518	8.7492			N/A
4/3/2019	GBPDKK.fx	11:30:00 AM	8.7424	8.7433			N/A
4/3/2019	GBPDKK.fx	1:30:00 PM	8.7406	8.7525			N/A
4/3/2019	GBPDKK.fx	3:30:00 PM	8.7442	8.7562			N/A
4/3/2019	GBPHKD	9:30:00 AM	10.3323	10.3161			N/A
4/3/2019	GBPHKD	11:30:00 AM	10.3308	10.3184			N/A
4/3/2019	GBPHKD	1:30:00 PM	10.3404	10.3443			N/A
4/3/2019	GBPHKD	3:30:00 PM	10.3386	10.3432			N/A

4/3/2019	GBPHUF	9:30:00 AM	376.2	375.95			N/A
4/3/2019	GBPHUF	11:30:00 AM	374.78	374.58			N/A
4/3/2019	GBPHUF	1:30:00 PM	374.23	374.67			N/A
4/3/2019	GBPHUF	3:30:00 PM	374.97	375.24			N/A
4/3/2019	GBPJPY	9:30:00 AM	146.825	146.528			N/A
4/3/2019	GBPJPY	11:30:00 AM	146.837	146.674			N/A
4/3/2019	GBPJPY	1:30:00 PM	146.874	146.89			N/A
4/3/2019	GBPJPY	3:30:00 PM	146.868	146.88			N/A
4/3/2019	GBPJPY.fx	9:30:00 AM	146.839	146.51			N/A
4/3/2019	GBPJPY.fx	11:30:00 AM	146.857	146.661			N/A
4/3/2019	GBPJPY.fx	1:30:00 PM	146.892	146.872			N/A
4/3/2019	GBPJPY.fx	3:30:00 PM	146.887	146.861			N/A
4/3/2019	GBPMXN	9:30:00 AM	25.1979	25.1611			N/A
4/3/2019	GBPMXN	11:30:00 AM	25.2169	25.173			N/A
4/3/2019	GBPMXN	1:30:00 PM	25.2235	25.235			N/A
4/3/2019	GBPMXN	3:30:00 PM	25.2767	25.2699			N/A
4/3/2019	GBPNOK	9:30:00 AM	11.278	11.2676			N/A
4/3/2019	GBPNOK	11:30:00 AM	11.26	11.2506			N/A
4/3/2019	GBPNOK	1:30:00 PM	11.2688	11.2785			N/A
4/3/2019	GBPNOK	3:30:00 PM	11.2712	11.2811			N/A
4/3/2019	GBPNOK.fx	9:30:00 AM	11.28123	11.26317			N/A
4/3/2019	GBPNOK.fx	11:30:00 AM	11.26472	11.24827			N/A
4/3/2019	GBPNOK.fx	1:30:00 PM	11.27358	11.27348			N/A
4/3/2019	GBPNOK.fx	3:30:00 PM	11.27581	11.27621			N/A
4/3/2019	GBPNZD	9:30:00 AM	1.94091	1.93749			N/A
4/3/2019	GBPNZD	11:30:00 AM	1.94003	1.93735			N/A
4/3/2019	GBPNZD	1:30:00 PM	1.93812	1.93873			N/A
4/3/2019	GBPNZD	3:30:00 PM	1.93868	1.93918			N/A
4/3/2019	GBPNZD.fx	9:30:00 AM	1.94108	1.93713			N/A
4/3/2019	GBPNZD.fx	11:30:00 AM	1.94032	1.93721			N/A
4/3/2019	GBPNZD.fx	1:30:00 PM	1.93851	1.93834			N/A
4/3/2019	GBPNZD.fx	3:30:00 PM	1.93902	1.9388			N/A
4/3/2019	GBPPLN	9:30:00 AM	5.0411	5.0331			N/A
4/3/2019	GBPPLN	11:30:00 AM	5.0298	5.0234			N/A

4/3/2019	GBPPLN	1:30:00 PM	5.0295	5.0308			N/A
4/3/2019	GBPPLN	3:30:00 PM	5.0307	5.0314			N/A
4/3/2019	GBPPLN.fx	9:30:00 AM	5.03852	5.03547			N/A
4/3/2019	GBPPLN.fx	11:30:00 AM	5.02715	5.02635			N/A
4/3/2019	GBPPLN.fx	1:30:00 PM	5.02734	5.03309			N/A
4/3/2019	GBPPLN.fx	3:30:00 PM	5.02826	5.03354			N/A
4/3/2019	GBPSEK	9:30:00 AM	12.2384	12.2195			N/A
4/3/2019	GBPSEK	11:30:00 AM	12.2053	12.1926			N/A
4/3/2019	GBPSEK	1:30:00 PM	12.2083	12.2161			N/A
4/3/2019	GBPSEK	3:30:00 PM	12.2231	12.2292			N/A
4/3/2019	GBPSEK.fx	9:30:00 AM	12.23282	12.22387			N/A
4/3/2019	GBPSEK.fx	11:30:00 AM	12.20074	12.20121			N/A
4/3/2019	GBPSEK.fx	1:30:00 PM	12.20466	12.22006			N/A
4/3/2019	GBPSEK.fx	3:30:00 PM	12.21921	12.23263			N/A
4/3/2019	GBPSGD	9:30:00 AM	1.7821	1.779			N/A
4/3/2019	GBPSGD	11:30:00 AM	1.7809	1.779			N/A
4/3/2019	GBPSGD	1:30:00 PM	1.782	1.7825			N/A
4/3/2019	GBPSGD	3:30:00 PM	1.7823	1.7828			N/A
4/3/2019	GBPSGD.fx	9:30:00 AM	1.78003	1.78086			N/A
4/3/2019	GBPSGD.fx	11:30:00 AM	1.77898	1.78098			N/A
4/3/2019	GBPSGD.fx	1:30:00 PM	1.7801	1.78426			N/A
4/3/2019	GBPSGD.fx	3:30:00 PM	1.78042	1.78458			N/A
4/3/2019	GBPUSD	9:30:00 AM	1.31701	1.31416	10	100	N/A
4/3/2019	GBPUSD	11:30:00 AM	1.3167	1.31468			N/A
4/3/2019	GBPUSD	1:30:00 PM	1.31796	1.31782			N/A
4/3/2019	GBPUSD	3:30:00 PM	1.31791	1.31772			N/A
4/3/2019	GBPUSD.fx	9:30:00 AM	1.31698	1.31412			N/A
4/3/2019	GBPUSD.fx	11:30:00 AM	1.31668	1.31473			N/A
4/3/2019	GBPUSD.fx	1:30:00 PM	1.318	1.31777			N/A
4/3/2019	GBPUSD.fx	3:30:00 PM	1.31794	1.31767			N/A
4/3/2019	GBPZAR	9:30:00 AM	18.6166	18.6075			N/A
4/3/2019	GBPZAR	11:30:00 AM	18.6032	18.6042			N/A
4/3/2019	GBPZAR	1:30:00 PM	18.6376	18.6653			N/A
4/3/2019	GBPZAR	3:30:00 PM	18.6664	18.6926			N/A

4/3/2019	GBPZAR.fx	9:30:00 AM	18.6219	18.6003			N/A
4/3/2019	GBPZAR.fx	11:30:00 AM	18.6082	18.5993			N/A
4/3/2019	GBPZAR.fx	1:30:00 PM	18.6448	18.6584			N/A
4/3/2019	GBPZAR.fx	3:30:00 PM	18.6727	18.6856			N/A
4/3/2019	GOLD	9:30:00 AM	1292.46	1292.73			N/A
4/3/2019	GOLD	11:30:00 AM	1291.54	1291.57			N/A
4/3/2019	GOLD	1:30:00 PM	1292.84	1293.13			N/A
4/3/2019	GOLD	3:30:00 PM	1292.97	1292.93			N/A
4/3/2019	HKDJPY	9:30:00 AM	14.2	14.21			N/A
4/3/2019	HKDJPY	11:30:00 AM	14.21	14.22			N/A
4/3/2019	HKDJPY	1:30:00 PM	14.2	14.21			N/A
4/3/2019	HKDJPY	3:30:00 PM	14.2	14.21			N/A
4/3/2019	HKDJPY.fx	9:30:00 AM	14.199	14.202			N/A
4/3/2019	HKDJPY.fx	11:30:00 AM	14.202	14.209			N/A
4/3/2019	HKDJPY.fx	1:30:00 PM	14.192	14.199			N/A
4/3/2019	HKDJPY.fx	3:30:00 PM	14.193	14.198			N/A
4/3/2019	HUFJPY	9:30:00 AM	0.39	0.3903			N/A
4/3/2019	HUFJPY	11:30:00 AM	0.3919	0.3922			N/A
4/3/2019	HUFJPY	1:30:00 PM	0.3923	0.3926			N/A
4/3/2019	HUFJPY	3:30:00 PM	0.3917	0.392			N/A
4/3/2019	JP225.i	9:30:00 AM	21725.15	21735.15			N/A
4/3/2019	JP225.i	11:30:00 AM	21780.15	21795.15			N/A
4/3/2019	JP225.i	1:30:00 PM	21778.7	21795.15			N/A
4/3/2019	JP225.i	3:30:00 PM	21815.15	21825.15			N/A
4/3/2019	MXNJPY	9:30:00 AM	5.83	5.83			N/A
4/3/2019	MXNJPY	11:30:00 AM	5.82	5.83			N/A
4/3/2019	MXNJPY	1:30:00 PM	5.82	5.83			N/A
4/3/2019	MXNJPY	3:30:00 PM	5.81	5.82			N/A
4/3/2019	NASDAQ.i	9:30:00 AM					N/A
4/3/2019	NASDAQ.i	11:30:00 AM					N/A
4/3/2019	NASDAQ.i	1:30:00 PM					N/A
4/3/2019	NASDAQ.i	3:30:00 PM					N/A
4/3/2019	NOKJPY	9:30:00 AM	13	13.03			N/A
4/3/2019	NOKJPY	11:30:00 AM	13.03	13.06			N/A

4/3/2019	NOKJPY	1:30:00 PM	13.02	13.05			N/A
4/3/2019	NOKJPY	3:30:00 PM	13.01	13.04			N/A
4/3/2019	NOKJPY.fx	9:30:00 AM	13.011	13.014			N/A
4/3/2019	NOKJPY.fx	11:30:00 AM	13.037	13.041			N/A
4/3/2019	NOKJPY.fx	1:30:00 PM	13.025	13.033			N/A
4/3/2019	NOKJPY.fx	3:30:00 PM	13.022	13.028			N/A
4/3/2019	NZDCAD	9:30:00 AM	0.90258	0.90305			N/A
4/3/2019	NZDCAD	11:30:00 AM	0.9029	0.90355			N/A
4/3/2019	NZDCAD	1:30:00 PM	0.90434	0.90492			N/A
4/3/2019	NZDCAD	3:30:00 PM	0.90433	0.90504			N/A
4/3/2019	NZDCAD.fx	9:30:00 AM	0.90292	0.90274			N/A
4/3/2019	NZDCAD.fx	11:30:00 AM	0.90324	0.90323			N/A
4/3/2019	NZDCAD.fx	1:30:00 PM	0.90467	0.90459			N/A
4/3/2019	NZDCAD.fx	3:30:00 PM	0.90466	0.90471			N/A
4/3/2019	NZDCHF	9:30:00 AM	0.67698	0.67752			N/A
4/3/2019	NZDCHF	11:30:00 AM	0.67642	0.677			N/A
4/3/2019	NZDCHF	1:30:00 PM	0.67729	0.67791			N/A
4/3/2019	NZDCHF	3:30:00 PM	0.6769	0.67759			N/A
4/3/2019	NZDCHF.fx	9:30:00 AM	0.67731	0.67718			N/A
4/3/2019	NZDCHF.fx	11:30:00 AM	0.67675	0.67664			N/A
4/3/2019	NZDCHF.fx	1:30:00 PM	0.67764	0.67755			N/A
4/3/2019	NZDCHF.fx	3:30:00 PM	0.67724	0.67724			N/A
4/3/2019	NZDCZK	9:30:00 AM	15.536	15.544			N/A
4/3/2019	NZDCZK	11:30:00 AM	15.508	15.518			N/A
4/3/2019	NZDCZK	1:30:00 PM	15.513	15.522			N/A
4/3/2019	NZDCZK	3:30:00 PM	15.528	15.539			N/A
4/3/2019	NZDDKK	9:30:00 AM	4.511	4.512			N/A
4/3/2019	NZDDKK	11:30:00 AM					N/A
4/3/2019	NZDDKK	1:30:00 PM	4.51	4.514			N/A
4/3/2019	NZDDKK	3:30:00 PM	4.51	4.514			N/A
4/3/2019	NZDHKD	9:30:00 AM	5.3228	5.3251			N/A
4/3/2019	NZDHKD	11:30:00 AM	5.3249	5.3264			N/A
4/3/2019	NZDHKD	1:30:00 PM	5.334	5.3359			N/A
4/3/2019	NZDHKD	3:30:00 PM	5.3317	5.3345			N/A



4/3/2019	NZDHUF	9:30:00 AM	193.86	194.02			N/A
4/3/2019	NZDHUF	11:30:00 AM	193.13	193.39			N/A
4/3/2019	NZDHUF	1:30:00 PM	193.01	193.29			N/A
4/3/2019	NZDHUF	3:30:00 PM	193.35	193.55			N/A
4/3/2019	NZDJPY	9:30:00 AM	75.611	75.66			N/A
4/3/2019	NZDJPY	11:30:00 AM	75.672	75.719			N/A
4/3/2019	NZDJPY	1:30:00 PM	75.746	75.802			N/A
4/3/2019	NZDJPY	3:30:00 PM	75.72	75.786			N/A
4/3/2019	NZDJPY.fx	9:30:00 AM	75.642	75.629			N/A
4/3/2019	NZDJPY.fx	11:30:00 AM	75.704	75.687			N/A
4/3/2019	NZDJPY.fx	1:30:00 PM	75.779	75.77			N/A
4/3/2019	NZDJPY.fx	3:30:00 PM	75.751	75.753			N/A
4/3/2019	NZDMXN	9:30:00 AM	12.9805	12.9858			N/A
4/3/2019	NZDMXN	11:30:00 AM	12.9946	12.9948			N/A
4/3/2019	NZDMXN	1:30:00 PM	13.0131	13.0159			N/A
4/3/2019	NZDMXN	3:30:00 PM	13.035	13.0316			N/A
4/3/2019	NZDNOK	9:30:00 AM	5.8105	5.8102			N/A
4/3/2019	NZDNOK	11:30:00 AM	5.8016	5.8055			N/A
4/3/2019	NZDNOK	1:30:00 PM	5.8129	5.8155			N/A
4/3/2019	NZDNOK	3:30:00 PM	5.811	5.8136			N/A
4/3/2019	NZDPLN	9:30:00 AM	2.5961	2.5976			N/A
4/3/2019	NZDPLN	11:30:00 AM	2.5914	2.5926			N/A
4/3/2019	NZDPLN	1:30:00 PM	2.5938	2.5947			N/A
4/3/2019	NZDPLN	3:30:00 PM	2.5936	2.5949			N/A
4/3/2019	NZDSEK	9:30:00 AM	6.3015	6.3053			N/A
4/3/2019	NZDSEK	11:30:00 AM	6.2869	6.2937			N/A
4/3/2019	NZDSEK	1:30:00 PM	6.2955	6.3011			N/A
4/3/2019	NZDSEK	3:30:00 PM	6.2993	6.3061			N/A
4/3/2019	NZDSGD	9:30:00 AM	0.918	0.9184			N/A
4/3/2019	NZDSGD	11:30:00 AM	0.9179	0.9183			N/A
4/3/2019	NZDSGD	1:30:00 PM	0.9192	0.9197			N/A
4/3/2019	NZDSGD	3:30:00 PM	0.9192	0.9197			N/A
4/3/2019	NZDSGD.fx	9:30:00 AM	0.9179	0.91835			N/A
4/3/2019	NZDSGD.fx	11:30:00 AM	0.91783	0.91827			N/A

4/3/2019	NZDSGD.fx	1:30:00 PM	0.91919	0.91961			N/A
4/3/2019	NZDSGD.fx	3:30:00 PM	0.91907	0.91962			N/A
4/3/2019	NZDUSD	9:30:00 AM	0.67828	0.67834			N/A
4/3/2019	NZDUSD	11:30:00 AM	0.67856	0.67856			N/A
4/3/2019	NZDUSD	1:30:00 PM	0.67984	0.67982			N/A
4/3/2019	NZDUSD	3:30:00 PM	0.67957	0.67968			N/A
4/3/2019	NZDUSD.fx	9:30:00 AM	0.67836	0.67836			N/A
4/3/2019	NZDUSD.fx	11:30:00 AM	0.67862	0.67858			N/A
4/3/2019	NZDUSD.fx	1:30:00 PM	0.67991	0.67985			N/A
4/3/2019	NZDUSD.fx	3:30:00 PM	0.67964	0.67971			N/A
4/3/2019	NZDZAR	9:30:00 AM	9.584	9.5974			N/A
4/3/2019	NZDZAR	11:30:00 AM	9.583	9.5981			N/A
4/3/2019	NZDZAR	1:30:00 PM	9.6092	9.6255			N/A
4/3/2019	NZDZAR	3:30:00 PM	9.6202	9.6346			N/A
4/3/2019	SEKJPY	9:30:00 AM	12	12			N/A
4/3/2019	SEKJPY	11:30:00 AM	12.03	12.04			N/A
4/3/2019	SEKJPY	1:30:00 PM	12.03	12.04			N/A
4/3/2019	SEKJPY	3:30:00 PM	12.02	12.02			N/A
4/3/2019	SEKJPY.fx	9:30:00 AM	11.989	12			N/A
4/3/2019	SEKJPY.fx	11:30:00 AM	12.021	12.038			N/A
4/3/2019	SEKJPY.fx	1:30:00 PM	12.017	12.036			N/A
4/3/2019	SEKJPY.fx	3:30:00 PM	12.005	12.022			N/A
4/3/2019	SGDJPY	9:30:00 AM	82.36	82.38			N/A
4/3/2019	SGDJPY	11:30:00 AM	82.43	82.45			N/A
4/3/2019	SGDJPY	1:30:00 PM	82.38	82.41			N/A
4/3/2019	SGDJPY	3:30:00 PM	82.4	82.39			N/A
4/3/2019	SILVER	9:30:00 AM	14.98	15.37			N/A
4/3/2019	SILVER	11:30:00 AM	14.99	15.36			N/A
4/3/2019	SILVER	1:30:00 PM	14.97	15.36			N/A
4/3/2019	SILVER	3:30:00 PM	14.91	15.29			N/A
4/3/2019	SPX500.i	9:30:00 AM	2878	2878.55			N/A
4/3/2019	SPX500.i	11:30:00 AM	2879	2879.55			N/A
4/3/2019	SPX500.i	1:30:00 PM	2877.5	2878.3			N/A
4/3/2019	SPX500.i	3:30:00 PM	2881.25	2881.3			N/A

4/3/2019	UK100.i	9:30:00 AM	7410.96	7407.46			N/A
4/3/2019	UK100.i	11:30:00 AM	7402.71	7401.88			N/A
4/3/2019	UK100.i	1:30:00 PM	7401.21	7400.71			N/A
4/3/2019	UK100.i	3:30:00 PM	7407.71	7407.21			N/A
4/3/2019	USDCAD	9:30:00 AM	1.33098	1.33087			N/A
4/3/2019	USDCAD	11:30:00 AM	1.33118	1.33091			N/A
4/3/2019	USDCAD	1:30:00 PM	1.33062	1.33062			N/A
4/3/2019	USDCAD	3:30:00 PM	1.33107	1.33115	300	300	N/A
4/3/2019	USDCAD.fx	9:30:00 AM	1.33101	1.33086			N/A
4/3/2019	USDCAD.fx	11:30:00 AM	1.3312	1.3309			N/A
4/3/2019	USDCAD.fx	1:30:00 PM	1.33064	1.33058			N/A
4/3/2019	USDCAD.fx	3:30:00 PM	1.3311	1.33111			N/A
4/3/2019	USDCHF	9:30:00 AM	0.99834	0.99825			N/A
4/3/2019	USDCHF	11:30:00 AM	0.99716	0.99724			N/A
4/3/2019	USDCHF	1:30:00 PM	0.99654	0.9967			N/A
4/3/2019	USDCHF	3:30:00 PM	0.99638	0.99649			N/A
4/3/2019	USDCHF.fx	9:30:00 AM	0.99839	0.9982			N/A
4/3/2019	USDCHF.fx	11:30:00 AM	0.9972	0.99719			N/A
4/3/2019	USDCHF.fx	1:30:00 PM	0.99659	0.99663			N/A
4/3/2019	USDCHF.fx	3:30:00 PM	0.99643	0.99641			N/A
4/3/2019	USDCZK	9:30:00 AM	22.921	22.938			N/A
4/3/2019	USDCZK	11:30:00 AM	22.869	22.89			N/A
4/3/2019	USDCZK	1:30:00 PM	22.832	22.855			N/A
4/3/2019	USDCZK	3:30:00 PM	22.865	22.886			N/A
4/3/2019	USDCZK.fx	9:30:00 AM	22.9304	22.9305			N/A
4/3/2019	USDCZK.fx	11:30:00 AM	22.8778	22.8809			N/A
4/3/2019	USDCZK.fx	1:30:00 PM	22.8407	22.8473			N/A
4/3/2019	USDCZK.fx	3:30:00 PM	22.873	22.8771			N/A
4/3/2019	USDDKK	9:30:00 AM	6.6516	6.654			N/A
4/3/2019	USDDKK	11:30:00 AM	6.6437	6.6471			N/A
4/3/2019	USDDKK	1:30:00 PM	6.6355	6.6395			N/A
4/3/2019	USDDKK	3:30:00 PM	6.6389	6.6425			N/A
4/3/2019	USDDKK.fx	9:30:00 AM	6.65203	6.65204			N/A
4/3/2019	USDDKK.fx	11:30:00 AM	6.64418	6.64473			N/A

4/3/2019	USDDKK.fx	1:30:00 PM	6.63597	6.63745			N/A
4/3/2019	USDDKK.fx	3:30:00 PM	6.63958	6.64058			N/A
4/3/2019	USDHKD	9:30:00 AM	7.8495	7.8497			N/A
4/3/2019	USDHKD	11:30:00 AM	7.8495	7.8499			N/A
4/3/2019	USDHKD	1:30:00 PM	7.8488	7.8492			N/A
4/3/2019	USDHKD	3:30:00 PM	7.8487	7.8489			N/A
4/3/2019	USDHKD.fx	9:30:00 AM	7.8495	7.85005			N/A
4/3/2019	USDHKD.fx	11:30:00 AM	7.84947	7.84993			N/A
4/3/2019	USDHKD.fx	1:30:00 PM					N/A
4/3/2019	USDHKD.fx	3:30:00 PM	7.84865	7.84918			N/A
4/3/2019	USDHUF	9:30:00 AM	285.93	286.31			N/A
4/3/2019	USDHUF	11:30:00 AM	284.7	285.15			N/A
4/3/2019	USDHUF	1:30:00 PM	284.03	284.5			N/A
4/3/2019	USDHUF	3:30:00 PM	284.62	285.06			N/A
4/3/2019	USDHUF.fx	9:30:00 AM	286.12	286.108			N/A
4/3/2019	USDHUF.fx	11:30:00 AM	284.887	284.942			N/A
4/3/2019	USDHUF.fx	1:30:00 PM	284.223	284.296			N/A
4/3/2019	USDHUF.fx	3:30:00 PM	284.814	284.87			N/A
4/3/2019	USDINR	9:30:00 AM	63.45	73.44			N/A
4/3/2019	USDINR	11:30:00 AM	63.49	73.47			N/A
4/3/2019	USDINR	1:30:00 PM					N/A
4/3/2019	USDINR	3:30:00 PM					N/A
4/3/2019	USDJPY	9:30:00 AM	111.512	111.489	100	100	N/A
4/3/2019	USDJPY	11:30:00 AM	111.543	111.544			N/A
4/3/2019	USDJPY	1:30:00 PM	111.446	111.458			N/A
4/3/2019	USDJPY	3:30:00 PM	111.454	111.452			N/A
4/3/2019	USDJPY.fx	9:30:00 AM	111.518	111.482			N/A
4/3/2019	USDJPY.fx	11:30:00 AM	111.551	111.537			N/A
4/3/2019	USDJPY.fx	1:30:00 PM	111.452	111.451			N/A
4/3/2019	USDJPY.fx	3:30:00 PM	111.459	111.446			N/A
4/3/2019	USDMXN	9:30:00 AM	19.145	19.151			N/A
4/3/2019	USDMXN	11:30:00 AM	19.159	19.154			N/A
4/3/2019	USDMXN	1:30:00 PM	19.147	19.153			N/A
4/3/2019	USDMXN	3:30:00 PM	19.187	19.183			N/A

4/3/2019	USDMXN.f	9:30:00 AM	19.1482	19.1483			N/A
4/3/2019	USDMXN.f	11:30:00 AM	19.1629	19.1496			N/A
4/3/2019	USDMXN.f	1:30:00 PM	19.1501	19.1499			N/A
4/3/2019	USDMXN.f	3:30:00 PM	19.1903	19.1785			N/A
4/3/2019	USDNOK	9:30:00 AM	8.5656	8.5725			N/A
4/3/2019	USDNOK	11:30:00 AM	8.552	8.5588			N/A
4/3/2019	USDNOK	1:30:00 PM	8.5501	8.5589			N/A
4/3/2019	USDNOK	3:30:00 PM	8.5531	8.561			N/A
4/3/2019	USDNOK.fx	9:30:00 AM	8.56926	8.56834			N/A
4/3/2019	USDNOK.fx	11:30:00 AM	8.55584	8.5544			N/A
4/3/2019	USDNOK.fx	1:30:00 PM	8.55402	8.55449			N/A
4/3/2019	USDNOK.fx	3:30:00 PM	8.55687	8.55664			N/A
4/3/2019	USDPLN	9:30:00 AM	3.8288	3.8293			N/A
4/3/2019	USDPLN	11:30:00 AM	3.82	3.8213			N/A
4/3/2019	USDPLN	1:30:00 PM	3.8162	3.8177			N/A
4/3/2019	USDPLN	3:30:00 PM	3.8173	3.8185			N/A
4/3/2019	USDPLN.fx	9:30:00 AM	3.82777	3.83011			N/A
4/3/2019	USDPLN.fx	11:30:00 AM	3.81918	3.8221			N/A
4/3/2019	USDPLN.fx	1:30:00 PM	3.81543	3.81855			N/A
4/3/2019	USDPLN.fx	3:30:00 PM	3.81637	3.81935			N/A
4/3/2019	USDRUB	9:30:00 AM					N/A
4/3/2019	USDRUB	11:30:00 AM	65.001	65.393			N/A
4/3/2019	USDRUB	1:30:00 PM	65.054	65.436			N/A
4/3/2019	USDRUB	3:30:00 PM	65.053	65.435			N/A
4/3/2019	USDSEK	9:30:00 AM	9.2959	9.2951			N/A
4/3/2019	USDSEK	11:30:00 AM	9.2704	9.2731			N/A
4/3/2019	USDSEK	1:30:00 PM	9.2642	9.2684			N/A
4/3/2019	USDSEK	3:30:00 PM	9.2749	9.2782			N/A
4/3/2019	USDSEK.fx	9:30:00 AM	9.29811	9.29418			N/A
4/3/2019	USDSEK.fx	11:30:00 AM	9.27304	9.27179			N/A
4/3/2019	USDSEK.fx	1:30:00 PM	9.26666	9.26681			N/A
4/3/2019	USDSEK.fx	3:30:00 PM	9.27745	9.2767			N/A
4/3/2019	USDSGD	9:30:00 AM	1.3533	1.3536			N/A
4/3/2019	USDSGD	11:30:00 AM	1.3527	1.3531			N/A

4/3/2019	USDSGD	1:30:00 PM	1.3521	1.3525			N/A
4/3/2019	USDSGD	3:30:00 PM	1.3524	1.3527			N/A
4/3/2019	USDSGD.fx	9:30:00 AM	1.35322	1.35359			N/A
4/3/2019	USDSGD.fx	11:30:00 AM	1.35263	1.35309			N/A
4/3/2019	USDSGD.fx	1:30:00 PM	1.35204	1.35254			N/A
4/3/2019	USDSGD.fx	3:30:00 PM	1.35234	1.35285			N/A
4/3/2019	USDZAR	9:30:00 AM	14.139	14.1552			N/A
4/3/2019	USDZAR	11:30:00 AM	14.1311	14.1482			N/A
4/3/2019	USDZAR	1:30:00 PM	14.1431	14.1602			N/A
4/3/2019	USDZAR	3:30:00 PM	14.1667	14.1837			N/A
4/3/2019	USDZAR.fx	9:30:00 AM	14.14497	14.14929			N/A
4/3/2019	USDZAR.fx	11:30:00 AM	14.13707	14.14272			N/A
4/3/2019	USDZAR.fx	1:30:00 PM	14.14957	14.15462			N/A
4/3/2019	USDZAR.fx	3:30:00 PM	14.1722	14.17752			N/A
4/3/2019	XAUUSD	9:30:00 AM	1292.43	1292.69			N/A
4/3/2019	XAUUSD	11:30:00 AM	1291.52	1291.54			N/A
4/3/2019	XAUUSD	1:30:00 PM	1292.84	1293.12			N/A
4/3/2019	XAUUSD	3:30:00 PM	1292.96	1292.91			N/A
4/3/2019	ZARJPY	9:30:00 AM	7.86	7.88			N/A
4/3/2019	ZARJPY	11:30:00 AM	7.86	7.89			N/A
4/3/2019	ZARJPY	1:30:00 PM	7.86	7.88			N/A
4/3/2019	ZARJPY	3:30:00 PM	7.85	7.86			N/A
4/3/2019	ZARJPY.fx	9:30:00 AM	7.879	7.882			N/A
4/3/2019	ZARJPY.fx	11:30:00 AM	7.886	7.89			N/A
4/3/2019	ZARJPY.fx	1:30:00 PM	7.872	7.877			N/A
4/3/2019	ZARJPY.fx	3:30:00 PM	7.861	7.864			N/A
4/4/2019	#AA	9:30:00 AM					N/A
4/4/2019	#AA	11:30:00 AM					N/A
4/4/2019	#AA	1:30:00 PM					N/A
4/4/2019	#AA	3:30:00 PM					N/A
4/4/2019	#AABA	9:30:00 AM					N/A
4/4/2019	#AABA	11:30:00 AM					N/A
4/4/2019	#AABA	1:30:00 PM					N/A
4/4/2019	#AABA	3:30:00 PM					N/A

4/4/2019	#AAL	9:30:00 AM					N/A
4/4/2019	#AAL	11:30:00 AM					N/A
4/4/2019	#AAL	1:30:00 PM					N/A
4/4/2019	#AAL	3:30:00 PM					N/A
4/4/2019	#AAPL	9:30:00 AM					N/A
4/4/2019	#AAPL	11:30:00 AM					N/A
4/4/2019	#AAPL	1:30:00 PM					N/A
4/4/2019	#AAPL	3:30:00 PM					N/A
4/4/2019	#ADBE	9:30:00 AM					N/A
4/4/2019	#ADBE	11:30:00 AM					N/A
4/4/2019	#ADBE	1:30:00 PM					N/A
4/4/2019	#ADBE	3:30:00 PM					N/A
4/4/2019	#AIG	9:30:00 AM					N/A
4/4/2019	#AIG	11:30:00 AM					N/A
4/4/2019	#AIG	1:30:00 PM					N/A
4/4/2019	#AIG	3:30:00 PM					N/A
4/4/2019	#AMD	9:30:00 AM					N/A
4/4/2019	#AMD	11:30:00 AM					N/A
4/4/2019	#AMD	1:30:00 PM					N/A
4/4/2019	#AMD	3:30:00 PM					N/A
4/4/2019	#AMZN	9:30:00 AM					N/A
4/4/2019	#AMZN	11:30:00 AM					N/A
4/4/2019	#AMZN	1:30:00 PM					N/A
4/4/2019	#AMZN	3:30:00 PM					N/A
4/4/2019	#AXP	9:30:00 AM					N/A
4/4/2019	#AXP	11:30:00 AM					N/A
4/4/2019	#AXP	1:30:00 PM					N/A
4/4/2019	#AXP	3:30:00 PM					N/A
4/4/2019	#BA	9:30:00 AM					N/A
4/4/2019	#BA	11:30:00 AM					N/A
4/4/2019	#BA	1:30:00 PM					N/A
4/4/2019	#BA	3:30:00 PM					N/A
4/4/2019	#BABA	9:30:00 AM					N/A
4/4/2019	#BABA	11:30:00 AM					N/A

4/4/2019	#BABA	1:30:00 PM					N/A
4/4/2019	#BABA	3:30:00 PM					N/A
4/4/2019	#BAC	9:30:00 AM					N/A
4/4/2019	#BAC	11:30:00 AM					N/A
4/4/2019	#BAC	1:30:00 PM					N/A
4/4/2019	#BAC	3:30:00 PM					N/A
4/4/2019	#BARC	9:30:00 AM					N/A
4/4/2019	#BARC	11:30:00 AM					N/A
4/4/2019	#BARC	1:30:00 PM					N/A
4/4/2019	#BARC	3:30:00 PM					N/A
4/4/2019	#BHP	9:30:00 AM					N/A
4/4/2019	#BHP	11:30:00 AM					N/A
4/4/2019	#BHP	1:30:00 PM					N/A
4/4/2019	#BHP	3:30:00 PM					N/A
4/4/2019	#BIDU	9:30:00 AM					N/A
4/4/2019	#BIDU	11:30:00 AM					N/A
4/4/2019	#BIDU	1:30:00 PM					N/A
4/4/2019	#BIDU	3:30:00 PM					N/A
4/4/2019	#Bitcoin	9:30:00 AM	5054.46	5119.36			N/A
4/4/2019	#Bitcoin	11:30:00 AM	5043.96	5118.56			N/A
4/4/2019	#Bitcoin	1:30:00 PM	4996.21	5060.01			N/A
4/4/2019	#Bitcoin	3:30:00 PM	4999.26	5071.96			N/A
4/4/2019	#BK	9:30:00 AM					N/A
4/4/2019	#BK	11:30:00 AM					N/A
4/4/2019	#BK	1:30:00 PM					N/A
4/4/2019	#BK	3:30:00 PM					N/A
4/4/2019	#BLT	9:30:00 AM					N/A
4/4/2019	#BLT	11:30:00 AM					N/A
4/4/2019	#BLT	1:30:00 PM					N/A
4/4/2019	#BLT	3:30:00 PM					N/A
4/4/2019	#BP	9:30:00 AM					N/A
4/4/2019	#BP	11:30:00 AM					N/A
4/4/2019	#BP	1:30:00 PM					N/A
4/4/2019	#BP	3:30:00 PM					N/A



4/4/2019	#BTA	9:30:00 AM					N/A
4/4/2019	#BTA	11:30:00 AM					N/A
4/4/2019	#BTA	1:30:00 PM					N/A
4/4/2019	#BTA	3:30:00 PM					N/A
4/4/2019	#C	9:30:00 AM					N/A
4/4/2019	#C	11:30:00 AM					N/A
4/4/2019	#C	1:30:00 PM					N/A
4/4/2019	#C	3:30:00 PM					N/A
4/4/2019	#CAT	9:30:00 AM					N/A
4/4/2019	#CAT	11:30:00 AM					N/A
4/4/2019	#CAT	1:30:00 PM					N/A
4/4/2019	#CAT	3:30:00 PM					N/A
4/4/2019	#CHL	9:30:00 AM					N/A
4/4/2019	#CHL	11:30:00 AM					N/A
4/4/2019	#CHL	1:30:00 PM					N/A
4/4/2019	#CHL	3:30:00 PM					N/A
4/4/2019	#CL.f	9:30:00 AM	62.437	62.484			N/A
4/4/2019	#CL.f	11:30:00 AM	62.197	62.221			N/A
4/4/2019	#CL.f	1:30:00 PM	62.488	62.517			N/A
4/4/2019	#CL.f	3:30:00 PM	62.67	62.686			N/A
4/4/2019	#CMCSA	9:30:00 AM					N/A
4/4/2019	#CMCSA	11:30:00 AM					N/A
4/4/2019	#CMCSA	1:30:00 PM					N/A
4/4/2019	#CMCSA	3:30:00 PM					N/A
4/4/2019	#CSCO	9:30:00 AM					N/A
4/4/2019	#CSCO	11:30:00 AM					N/A
4/4/2019	#CSCO	1:30:00 PM					N/A
4/4/2019	#CSCO	3:30:00 PM					N/A
4/4/2019	#CVX	9:30:00 AM					N/A
4/4/2019	#CVX	11:30:00 AM					N/A
4/4/2019	#CVX	1:30:00 PM					N/A
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4/4/2019	AUDCHF	9:30:00 AM	0.70979	0.71031			N/A
4/4/2019	AUDCHF	11:30:00 AM	0.70957	0.71024			N/A
4/4/2019	AUDCHF	1:30:00 PM	0.70972	0.71033			N/A
4/4/2019	AUDCHF	3:30:00 PM	0.70983	0.71027			N/A
4/4/2019	AUDCHF.fx	9:30:00 AM	0.71013	0.70997			N/A
4/4/2019	AUDCHF.fx	11:30:00 AM	0.70991	0.70989			N/A
4/4/2019	AUDCHF.fx	1:30:00 PM	0.71006	0.70999			N/A
4/4/2019	AUDCHF.fx	3:30:00 PM	0.71016	0.70992			N/A
4/4/2019	AUDCZK	9:30:00 AM	16.27	16.285			N/A
4/4/2019	AUDCZK	11:30:00 AM	16.243	16.26			N/A
4/4/2019	AUDCZK	1:30:00 PM	16.248	16.262			N/A
4/4/2019	AUDCZK	3:30:00 PM	16.252	16.265			N/A
4/4/2019	AUDDKK	9:30:00 AM	4.7234	4.7275			N/A
4/4/2019	AUDDKK	11:30:00 AM	4.7217	4.7264			N/A
4/4/2019	AUDDKK	1:30:00 PM	4.7253	4.7295			N/A
4/4/2019	AUDDKK	3:30:00 PM	4.7259	4.7291			N/A
4/4/2019	AUDHKD	9:30:00 AM	5.5822	5.5849			N/A
4/4/2019	AUDHKD	11:30:00 AM	5.5784	5.5822			N/A
4/4/2019	AUDHKD	1:30:00 PM	5.5798	5.5833			N/A
4/4/2019	AUDHKD	3:30:00 PM	5.5749	5.5764			N/A
4/4/2019	AUDHUF	9:30:00 AM	202.51	202.44			N/A
4/4/2019	AUDHUF	11:30:00 AM					N/A
4/4/2019	AUDHUF	1:30:00 PM	202.33	202.54			N/A
4/4/2019	AUDHUF	3:30:00 PM	202.35	202.48			N/A
4/4/2019	AUDJPY	9:30:00 AM	79.263	79.316			N/A
4/4/2019	AUDJPY	11:30:00 AM	79.182	79.257			N/A
4/4/2019	AUDJPY	1:30:00 PM	79.22	79.276			N/A
4/4/2019	AUDJPY	3:30:00 PM	79.186	79.219			N/A
4/4/2019	AUDJPY.fx	9:30:00 AM	79.296	79.282			N/A
4/4/2019	AUDJPY.fx	11:30:00 AM	79.215	79.221			N/A
4/4/2019	AUDJPY.fx	1:30:00 PM	79.253	79.24			N/A
4/4/2019	AUDJPY.fx	3:30:00 PM	79.219	79.185			N/A

4/4/2019	AUDMXN	9:30:00 AM	13.69	13.6967			N/A
4/4/2019	AUDMXN	11:30:00 AM	13.6899	13.6987			N/A
4/4/2019	AUDMXN	1:30:00 PM	13.6838	13.6933			N/A
4/4/2019	AUDMXN	3:30:00 PM	13.6532	13.6585			N/A
4/4/2019	AUDNOK	9:30:00 AM	6.1012	6.1045			N/A
4/4/2019	AUDNOK	11:30:00 AM	6.1014	6.1066			N/A
4/4/2019	AUDNOK	1:30:00 PM	6.1058	6.1107			N/A
4/4/2019	AUDNOK	3:30:00 PM	6.0996	6.1024			N/A
4/4/2019	AUDNOK.fx	9:30:00 AM	6.1026	6.1029			N/A
4/4/2019	AUDNOK.fx	11:30:00 AM	6.1029	6.105			N/A
4/4/2019	AUDNOK.fx	1:30:00 PM	6.1073	6.1091			N/A
4/4/2019	AUDNOK.fx	3:30:00 PM	6.101	6.1009			N/A
4/4/2019	AUDNZD	9:30:00 AM	1.04804	1.04887			N/A
4/4/2019	AUDNZD	11:30:00 AM	1.04793	1.04888			N/A
4/4/2019	AUDNZD	1:30:00 PM	1.04897	1.04986			N/A
4/4/2019	AUDNZD	3:30:00 PM	1.05123	1.05177			N/A
4/4/2019	AUDNZD.fx	9:30:00 AM	1.04846	1.04844			N/A
4/4/2019	AUDNZD.fx	11:30:00 AM	1.04836	1.04844			N/A
4/4/2019	AUDNZD.fx	1:30:00 PM	1.04939	1.04943			N/A
4/4/2019	AUDNZD.fx	3:30:00 PM	1.05162	1.05133			N/A
4/4/2019	AUDPLN	9:30:00 AM	2.7161	2.7188			N/A
4/4/2019	AUDPLN	11:30:00 AM	2.7168	2.7192			N/A
4/4/2019	AUDPLN	1:30:00 PM	2.7168	2.7196			N/A
4/4/2019	AUDPLN	3:30:00 PM	2.7158	2.7182			N/A
4/4/2019	AUDSEK	9:30:00 AM	6.5966	6.5998			N/A
4/4/2019	AUDSEK	11:30:00 AM	6.5893	6.5923			N/A
4/4/2019	AUDSEK	1:30:00 PM	6.5961	6.599			N/A
4/4/2019	AUDSEK	3:30:00 PM	6.594	6.5939			N/A
4/4/2019	AUDSEK.fx	9:30:00 AM	6.5918	6.6043			N/A
4/4/2019	AUDSEK.fx	11:30:00 AM	6.5848	6.5968			N/A
4/4/2019	AUDSEK.fx	1:30:00 PM	6.5915	6.6035			N/A
4/4/2019	AUDSEK.fx	3:30:00 PM	6.5891	6.5981			N/A
4/4/2019	AUDSGD	9:30:00 AM	0.9627	0.9629			N/A
4/4/2019	AUDSGD	11:30:00 AM	0.9626	0.9628			N/A

4/4/2019	AUDSGD	1:30:00 PM	0.9627	0.9629			N/A
4/4/2019	AUDSGD	3:30:00 PM	0.9621	0.962			N/A
4/4/2019	AUDSGD.fx	9:30:00 AM	0.96281	0.96284			N/A
4/4/2019	AUDSGD.fx	11:30:00 AM	0.96271	0.96287			N/A
4/4/2019	AUDSGD.fx	1:30:00 PM	0.96279	0.96281			N/A
4/4/2019	AUDSGD.fx	3:30:00 PM	0.96227	0.96186			N/A
4/4/2019	AUDUSD	9:30:00 AM	0.71163	0.71159			N/A
4/4/2019	AUDUSD	11:30:00 AM	0.71114	0.71131			N/A
4/4/2019	AUDUSD	1:30:00 PM	0.71113	0.71132			N/A
4/4/2019	AUDUSD	3:30:00 PM	0.71067	0.71035			N/A
4/4/2019	AUDUSD.fx	9:30:00 AM	0.71168	0.71154			N/A
4/4/2019	AUDUSD.fx	11:30:00 AM	0.71118	0.71126			N/A
4/4/2019	AUDUSD.fx	1:30:00 PM	0.71134	0.71126			N/A
4/4/2019	AUDUSD.fx	3:30:00 PM	0.71078	0.71029			N/A
4/4/2019	AUDZAR	9:30:00 AM	10.0882	10.0946			N/A
4/4/2019	AUDZAR	11:30:00 AM	10.0795	10.0953			N/A
4/4/2019	AUDZAR	1:30:00 PM	10.0683	10.0794			N/A
4/4/2019	AUDZAR	3:30:00 PM	10.0434	10.057			N/A
4/4/2019	AUS200.i	9:30:00 AM	6232.95	6234.35			N/A
4/4/2019	AUS200.i	11:30:00 AM	6227.95	6231.85			N/A
4/4/2019	AUS200.i	1:30:00 PM	6225.95	6228.45			N/A
4/4/2019	AUS200.i	3:30:00 PM	6225.95	6229.45			N/A
4/4/2019	BCHUSD	9:30:00 AM	315.09	325.69			N/A
4/4/2019	BCHUSD	11:30:00 AM	311.19	321.61			N/A
4/4/2019	BCHUSD	1:30:00 PM	301.29	311.19			N/A
4/4/2019	BCHUSD	3:30:00 PM	304.58	315.25			N/A
4/4/2019	CADCHF	9:30:00 AM	0.74684	0.74744			N/A
4/4/2019	CADCHF	11:30:00 AM	0.74708	0.74776			N/A
4/4/2019	CADCHF	1:30:00 PM	0.74708	0.74777			N/A
4/4/2019	CADCHF	3:30:00 PM	0.74754	0.74807			N/A
4/4/2019	CADCHF.fx	9:30:00 AM	0.74718	0.74711			N/A
4/4/2019	CADCHF.fx	11:30:00 AM	0.74742	0.74741			N/A
4/4/2019	CADCHF.fx	1:30:00 PM	0.74742	0.74742			N/A
4/4/2019	CADCHF.fx	3:30:00 PM	0.74786	0.74775			N/A

4/4/2019	CADCZK	9:30:00 AM	17.123	17.138			N/A
4/4/2019	CADCZK	11:30:00 AM	17.104	17.121			N/A
4/4/2019	CADCZK	1:30:00 PM	17.106	17.121			N/A
4/4/2019	CADCZK	3:30:00 PM	17.122	17.132			N/A
4/4/2019	CADDDKK	9:30:00 AM	4.971	4.975			N/A
4/4/2019	CADDDKK	11:30:00 AM					N/A
4/4/2019	CADDDKK	1:30:00 PM					N/A
4/4/2019	CADDDKK	3:30:00 PM	4.978	4.98			N/A
4/4/2019	CADHKD	9:30:00 AM	5.8741	5.8773			N/A
4/4/2019	CADHKD	11:30:00 AM	5.8745	5.8784			N/A
4/4/2019	CADHKD	1:30:00 PM	5.8746	5.8782			N/A
4/4/2019	CADHKD	3:30:00 PM	5.8718	5.8748			N/A
4/4/2019	CADHUF	9:30:00 AM	213.17	212.98			N/A
4/4/2019	CADHUF	11:30:00 AM	213.08	213.26			N/A
4/4/2019	CADHUF	1:30:00 PM	213.03	213.19			N/A
4/4/2019	CADHUF	3:30:00 PM	213.22	213.22			N/A
4/4/2019	CADJPY	9:30:00 AM	83.401	83.462			N/A
4/4/2019	CADJPY	11:30:00 AM	83.369	83.443			N/A
4/4/2019	CADJPY	1:30:00 PM	83.39	83.451			N/A
4/4/2019	CADJPY	3:30:00 PM	83.387	83.449			N/A
4/4/2019	CADJPY.fx	9:30:00 AM	83.434	83.429			N/A
4/4/2019	CADJPY.fx	11:30:00 AM	83.403	83.409			N/A
4/4/2019	CADJPY.fx	1:30:00 PM	83.422	83.416			N/A
4/4/2019	CADJPY.fx	3:30:00 PM	83.42	83.416			N/A
4/4/2019	CADMXN	9:30:00 AM	14.4071	14.415			N/A
4/4/2019	CADMXN	11:30:00 AM	14.4143	14.4259			N/A
4/4/2019	CADMXN	1:30:00 PM	14.4057	14.4172			N/A
4/4/2019	CADMXN	3:30:00 PM	14.3799	14.3881			N/A
4/4/2019	CADNOK	9:30:00 AM	6.4189	6.4219			N/A
4/4/2019	CADNOK	11:30:00 AM	6.4234	6.4283			N/A
4/4/2019	CADNOK	1:30:00 PM	6.427	6.4316			N/A
4/4/2019	CADNOK	3:30:00 PM	6.4228	6.4231			N/A
4/4/2019	CADPLN	9:30:00 AM	2.8585	2.8603			N/A
4/4/2019	CADPLN	11:30:00 AM	2.8608	2.8627			N/A

4/4/2019	CADPLN	1:30:00 PM	2.86	2.8618			N/A
4/4/2019	CADPLN	3:30:00 PM	2.8607	2.8617			N/A
4/4/2019	CADSEK	9:30:00 AM	6.9402	6.9435			N/A
4/4/2019	CADSEK	11:30:00 AM	6.936	6.9399			N/A
4/4/2019	CADSEK	1:30:00 PM	6.9426	6.9459			N/A
4/4/2019	CADSEK	3:30:00 PM	6.9408	6.9445			N/A
4/4/2019	CADSGD	9:30:00 AM	1.0123	1.0127			N/A
4/4/2019	CADSGD	11:30:00 AM	1.0128	1.0131			N/A
4/4/2019	CADSGD	1:30:00 PM	1.0128	1.0131			N/A
4/4/2019	CADSGD	3:30:00 PM	1.0127	1.0129			N/A
4/4/2019	CADZAR	9:30:00 AM	10.6158	10.6226			N/A
4/4/2019	CADZAR	11:30:00 AM	10.6133	10.6312			N/A
4/4/2019	CADZAR	1:30:00 PM	10.599	10.6129			N/A
4/4/2019	CADZAR	3:30:00 PM	10.5807	10.5912			N/A
4/4/2019	CHFCZK	9:30:00 AM	22.922	22.935			N/A
4/4/2019	CHFCZK	11:30:00 AM	22.891	22.907			N/A
4/4/2019	CHFCZK	1:30:00 PM	22.893	22.906			N/A
4/4/2019	CHFCZK	3:30:00 PM	22.899	22.909			N/A
4/4/2019	CHFDKK	9:30:00 AM	6.654	6.657			N/A
4/4/2019	CHFDKK	11:30:00 AM	6.653	6.656			N/A
4/4/2019	CHFDKK	1:30:00 PM	6.657	6.66			N/A
4/4/2019	CHFDKK	3:30:00 PM	6.657	6.659			N/A
4/4/2019	CHFDKK.fx	9:30:00 AM	6.6523	6.6582			N/A
4/4/2019	CHFDKK.fx	11:30:00 AM	6.6515	6.6572			N/A
4/4/2019	CHFDKK.fx	1:30:00 PM	6.6554	6.6615			N/A
4/4/2019	CHFDKK.fx	3:30:00 PM	6.6554	6.6601			N/A
4/4/2019	CHFHKD	9:30:00 AM	7.8634	7.8673			N/A
4/4/2019	CHFHKD	11:30:00 AM	7.8615	7.8649			N/A
4/4/2019	CHFHKD	1:30:00 PM	7.8615	7.8649			N/A
4/4/2019	CHFHKD	3:30:00 PM	7.8536	7.8548			N/A
4/4/2019	CHFHUF	9:30:00 AM	285.3	285.17			N/A
4/4/2019	CHFHUF	11:30:00 AM	285.05	285.42			N/A
4/4/2019	CHFHUF	1:30:00 PM	284.99	285.36			N/A
4/4/2019	CHFHUF	3:30:00 PM	285.04	285.24			N/A



4/4/2019	CHFJPY	9:30:00 AM	111.635	111.703			N/A
4/4/2019	CHFJPY	11:30:00 AM	111.562	111.623			N/A
4/4/2019	CHFJPY	1:30:00 PM	111.577	111.645			N/A
4/4/2019	CHFJPY	3:30:00 PM	111.527	111.573			N/A
4/4/2019	CHFJPY.fx	9:30:00 AM	111.668	111.67			N/A
4/4/2019	CHFJPY.fx	11:30:00 AM	111.594	111.589			N/A
4/4/2019	CHFJPY.fx	1:30:00 PM	111.61	111.611			N/A
4/4/2019	CHFJPY.fx	3:30:00 PM	111.557	111.541			N/A
4/4/2019	CHFMXN	9:30:00 AM	19.2871	19.2936			N/A
4/4/2019	CHFMXN	11:30:00 AM	19.2889	19.3017			N/A
4/4/2019	CHFMXN	1:30:00 PM	19.2765	19.2911			N/A
4/4/2019	CHFMXN	3:30:00 PM	19.233	19.2414			N/A
4/4/2019	CHFNOK	9:30:00 AM	8.5929	8.5966			N/A
4/4/2019	CHFNOK	11:30:00 AM	8.5946	8.6022			N/A
4/4/2019	CHFNOK	1:30:00 PM	8.5996	8.6065			N/A
4/4/2019	CHFNOK	3:30:00 PM	8.5891	8.5957			N/A
4/4/2019	CHFNOK.fx	9:30:00 AM	8.59627	8.59335			N/A
4/4/2019	CHFNOK.fx	11:30:00 AM	8.59788	8.59887			N/A
4/4/2019	CHFNOK.fx	1:30:00 PM	8.60298	8.60304			N/A
4/4/2019	CHFNOK.fx	3:30:00 PM	8.59217	8.59234			N/A
4/4/2019	CHFPLN	9:30:00 AM	3.8263	3.8278			N/A
4/4/2019	CHFPLN	11:30:00 AM	3.8277	3.8299			N/A
4/4/2019	CHFPLN	1:30:00 PM	3.8268	3.8299			N/A
4/4/2019	CHFPLN	3:30:00 PM	3.8254	3.8278			N/A
4/4/2019	CHFPLN.fx	9:30:00 AM	3.82376	3.83018			N/A
4/4/2019	CHFPLN.fx	11:30:00 AM	3.82541	3.83231			N/A
4/4/2019	CHFPLN.fx	1:30:00 PM	3.82434	3.83223			N/A
4/4/2019	CHFPLN.fx	3:30:00 PM	3.82289	3.83028			N/A
4/4/2019	CHFSEK	9:30:00 AM	9.2904	9.2936			N/A
4/4/2019	CHFSEK	11:30:00 AM	9.2811	9.2854			N/A
4/4/2019	CHFSEK	1:30:00 PM	9.29	9.2943			N/A
4/4/2019	CHFSEK	3:30:00 PM	9.2837	9.2866			N/A
4/4/2019	CHFSGD	9:30:00 AM	1.3558	1.3562			N/A
4/4/2019	CHFSGD	11:30:00 AM	1.3561	1.3564			N/A

4/4/2019	CHFSGD	1:30:00 PM	1.3559	1.3563			N/A
4/4/2019	CHFSGD	3:30:00 PM	1.3549	1.355			N/A
4/4/2019	CHFSGD.fx	9:30:00 AM	1.35605	1.35602			N/A
4/4/2019	CHFSGD.fx	11:30:00 AM	1.35627	1.35627			N/A
4/4/2019	CHFSGD.fx	1:30:00 PM	1.356	1.35614			N/A
4/4/2019	CHFSGD.fx	3:30:00 PM	1.35504	1.3548			N/A
4/4/2019	CHFZAR	9:30:00 AM	14.2163	14.2146			N/A
4/4/2019	CHFZAR	11:30:00 AM	14.2064	14.2202			N/A
4/4/2019	CHFZAR	1:30:00 PM	14.1855	14.1974			N/A
4/4/2019	CHFZAR	3:30:00 PM	14.1537	14.1622			N/A
4/4/2019	CZKJPY	9:30:00 AM					N/A
4/4/2019	CZKJPY	11:30:00 AM					N/A
4/4/2019	CZKJPY	1:30:00 PM	4.874	4.877			N/A
4/4/2019	CZKJPY	3:30:00 PM	4.871	4.873			N/A
4/4/2019	DAX30.i	9:30:00 AM	11926.35	11927.1			N/A
4/4/2019	DAX30.i	11:30:00 AM	11944.85	11944.35			N/A
4/4/2019	DAX30.i	1:30:00 PM	11970.85	11968.6			N/A
4/4/2019	DAX30.i	3:30:00 PM	11983.85	11983.35			N/A
4/4/2019	DJ30.i	9:30:00 AM					N/A
4/4/2019	DJ30.i	11:30:00 AM					N/A
4/4/2019	DJ30.i	1:30:00 PM					N/A
4/4/2019	DJ30.i	3:30:00 PM					N/A
4/4/2019	DKKJPY	9:30:00 AM					N/A
4/4/2019	DKKJPY	11:30:00 AM					N/A
4/4/2019	DKKJPY	1:30:00 PM					N/A
4/4/2019	DKKJPY	3:30:00 PM	16.75	16.77			N/A
4/4/2019	EURAUD	9:30:00 AM	1.57891	1.5791			N/A
4/4/2019	EURAUD	11:30:00 AM	1.57934	1.57972			N/A
4/4/2019	EURAUD	1:30:00 PM	1.57814	1.5784			N/A
4/4/2019	EURAUD	3:30:00 PM	1.57834	1.57822			N/A
4/4/2019	EURAUD.fx	9:30:00 AM	1.57911	1.57887			N/A
4/4/2019	EURAUD.fx	11:30:00 AM	1.57955	1.57951			N/A
4/4/2019	EURAUD.fx	1:30:00 PM	1.57835	1.57819			N/A
4/4/2019	EURAUD.fx	3:30:00 PM	1.57854	1.57804			N/A

4/4/2019	EURCAD	9:30:00 AM	1.50078	1.5015			N/A
4/4/2019	EURCAD	11:30:00 AM	1.50038	1.50121			N/A
4/4/2019	EURCAD	1:30:00 PM	1.49948	1.50025			N/A
4/4/2019	EURCAD	3:30:00 PM	1.49888	1.49919			N/A
4/4/2019	EURCAD.fx	9:30:00 AM	1.50118	1.50108			N/A
4/4/2019	EURCAD.fx	11:30:00 AM	1.5008	1.50079			N/A
4/4/2019	EURCAD.fx	1:30:00 PM	1.49989	1.49983			N/A
4/4/2019	EURCAD.fx	3:30:00 PM	1.49926	1.49879			N/A
4/4/2019	EURCHF	9:30:00 AM	1.12154	1.12163			N/A
4/4/2019	EURCHF	11:30:00 AM	1.12171	1.12171			N/A
4/4/2019	EURCHF	1:30:00 PM	1.12098	1.12109			N/A
4/4/2019	EURCHF	3:30:00 PM	1.12111	1.12099			N/A
4/4/2019	EURCHF.fx	9:30:00 AM	1.12158	1.12158			N/A
4/4/2019	EURCHF.fx	11:30:00 AM	1.12176	1.12168			N/A
4/4/2019	EURCHF.fx	1:30:00 PM	1.12104	1.12102			N/A
4/4/2019	EURCHF.fx	3:30:00 PM	1.12117	1.12093			N/A
4/4/2019	EURCZK	9:30:00 AM	25.694	25.731			N/A
4/4/2019	EURCZK	11:30:00 AM	25.662	25.702			N/A
4/4/2019	EURCZK	1:30:00 PM	25.65	25.685			N/A
4/4/2019	EURCZK	3:30:00 PM	25.654	25.692			N/A
4/4/2019	EURDKK	9:30:00 AM	7.4636	7.4649			N/A
4/4/2019	EURDKK	11:30:00 AM	7.4637	7.4641			N/A
4/4/2019	EURDKK	1:30:00 PM	7.4626	7.4638			N/A
4/4/2019	EURDKK	3:30:00 PM	7.4632	7.4644			N/A
4/4/2019	EURGBP	9:30:00 AM	0.85293	0.85284			N/A
4/4/2019	EURGBP	11:30:00 AM	0.85309	0.85308			N/A
4/4/2019	EURGBP	1:30:00 PM	0.85385	0.8538			N/A
4/4/2019	EURGBP	3:30:00 PM	0.85434	0.85414			N/A
4/4/2019	EURGBP.fx	9:30:00 AM	0.85294	0.8528			N/A
4/4/2019	EURGBP.fx	11:30:00 AM	0.85311	0.85303			N/A
4/4/2019	EURGBP.fx	1:30:00 PM	0.85388	0.85378			N/A
4/4/2019	EURGBP.fx	3:30:00 PM	0.85434	0.85409			N/A
4/4/2019	EURHKD	9:30:00 AM	8.8206	8.8252			N/A
4/4/2019	EURHKD	11:30:00 AM	8.8193	8.824			N/A

4/4/2019	EURHKD	1:30:00 PM	8.8134	8.8189			N/A
4/4/2019	EURHKD	3:30:00 PM	8.8056	8.8058			N/A
4/4/2019	EURHKD.fx	9:30:00 AM	8.82316	8.82266			N/A
4/4/2019	EURHKD.fx	11:30:00 AM	8.82179	8.82141			N/A
4/4/2019	EURHKD.fx	1:30:00 PM	8.81592	8.8163			N/A
4/4/2019	EURHKD.fx	3:30:00 PM	8.80822	8.80327			N/A
4/4/2019	EURHUF	9:30:00 AM	319.93	320.08			N/A
4/4/2019	EURHUF	11:30:00 AM	319.67	320.28			N/A
4/4/2019	EURHUF	1:30:00 PM	319.36	320.01			N/A
4/4/2019	EURHUF	3:30:00 PM	319.45	320.16			N/A
4/4/2019	EURHUF.fx	9:30:00 AM	320.201	319.815			N/A
4/4/2019	EURHUF.fx	11:30:00 AM	319.931	320.088			N/A
4/4/2019	EURHUF.fx	1:30:00 PM					N/A
4/4/2019	EURHUF.fx	3:30:00 PM	319.706	319.862			N/A
4/4/2019	EURJPY	9:30:00 AM	125.242	125.242			N/A
4/4/2019	EURJPY	11:30:00 AM	125.174	125.177			N/A
4/4/2019	EURJPY	1:30:00 PM	125.119	125.123			N/A
4/4/2019	EURJPY	3:30:00 PM	125.065	125.03			N/A
4/4/2019	EURJPY.fx	9:30:00 AM	125.244	125.239			N/A
4/4/2019	EURJPY.fx	11:30:00 AM	125.176	125.174			N/A
4/4/2019	EURJPY.fx	1:30:00 PM	125.12	125.118			N/A
4/4/2019	EURJPY.fx	3:30:00 PM	125.067	125.027			N/A
4/4/2019	EURMXN	9:30:00 AM	21.6319	21.6421			N/A
4/4/2019	EURMXN	11:30:00 AM	21.6383	21.6543			N/A
4/4/2019	EURMXN	1:30:00 PM	21.6107	21.6284			N/A
4/4/2019	EURMXN	3:30:00 PM	21.565	21.5736			N/A
4/4/2019	EURMXN.f	9:30:00 AM	21.6407	21.6338			N/A
4/4/2019	EURMXN.f	11:30:00 AM	21.6464	21.646			N/A
4/4/2019	EURMXN.f	1:30:00 PM	21.6187	21.6202			N/A
4/4/2019	EURMXN.f	3:30:00 PM	21.5734	21.565			N/A
4/4/2019	EURNOK	9:30:00 AM	9.636	9.6434			N/A
4/4/2019	EURNOK	11:30:00 AM	9.6385	9.6511			N/A
4/4/2019	EURNOK	1:30:00 PM	9.6388	9.6497			N/A
4/4/2019	EURNOK	3:30:00 PM	9.6268	9.6376			N/A

4/4/2019	EURNOK.fx	9:30:00 AM	9.641	9.6379			N/A
4/4/2019	EURNOK.fx	11:30:00 AM	9.64375	9.64567			N/A
4/4/2019	EURNOK.fx	1:30:00 PM	9.64429	9.64433			N/A
4/4/2019	EURNOK.fx	3:30:00 PM	9.63244	9.63207			N/A
4/4/2019	EURNZD	9:30:00 AM	1.65578	1.65647			N/A
4/4/2019	EURNZD	11:30:00 AM	1.6562	1.65703			N/A
4/4/2019	EURNZD	1:30:00 PM	1.65656	1.65725			N/A
4/4/2019	EURNZD	3:30:00 PM	1.65973	1.66017			N/A
4/4/2019	EURNZD.fx	9:30:00 AM	1.65618	1.65605			N/A
4/4/2019	EURNZD.fx	11:30:00 AM	1.65663	1.6566			N/A
4/4/2019	EURNZD.fx	1:30:00 PM	1.65696	1.65683			N/A
4/4/2019	EURNZD.fx	3:30:00 PM	1.66012	1.65975			N/A
4/4/2019	EURPLN	9:30:00 AM	4.2914	4.2933			N/A
4/4/2019	EURPLN	11:30:00 AM	4.2937	4.2956			N/A
4/4/2019	EURPLN	1:30:00 PM	4.2901	4.2932			N/A
4/4/2019	EURPLN	3:30:00 PM	4.2883	4.2915			N/A
4/4/2019	EURPLN.fx	9:30:00 AM	4.29047	4.29392			N/A
4/4/2019	EURPLN.fx	11:30:00 AM	4.29217	4.29632			N/A
4/4/2019	EURPLN.fx	1:30:00 PM	4.2894	4.29382			N/A
4/4/2019	EURPLN.fx	3:30:00 PM	4.2875	4.29215			N/A
4/4/2019	EURRUB	9:30:00 AM					N/A
4/4/2019	EURRUB	11:30:00 AM	73.129	73.563			N/A
4/4/2019	EURRUB	1:30:00 PM	73.112	73.548			N/A
4/4/2019	EURRUB	3:30:00 PM	72.979	73.396			N/A
4/4/2019	EURSEK	9:30:00 AM	10.4209	10.4237			N/A
4/4/2019	EURSEK	11:30:00 AM	10.4117	10.4168			N/A
4/4/2019	EURSEK	1:30:00 PM	10.4151	10.4187			N/A
4/4/2019	EURSEK	3:30:00 PM	10.4095	10.4103			N/A
4/4/2019	EURSEK.fx	9:30:00 AM	10.42247	10.42184			N/A
4/4/2019	EURSEK.fx	11:30:00 AM	10.41351	10.41492			N/A
4/4/2019	EURSEK.fx	1:30:00 PM	10.41678	10.41689			N/A
4/4/2019	EURSEK.fx	3:30:00 PM	10.41096	10.40846			N/A
4/4/2019	EURSGD	9:30:00 AM	1.5205	1.5213			N/A
4/4/2019	EURSGD	11:30:00 AM	1.521	1.5217			N/A

4/4/2019	EURSGD	1:30:00 PM	1.5198	1.5206			N/A
4/4/2019	EURSGD	3:30:00 PM	1.5188	1.519			N/A
4/4/2019	EURSGD.fx	9:30:00 AM	1.52092	1.52087			N/A
4/4/2019	EURSGD.fx	11:30:00 AM	1.52137	1.52132			N/A
4/4/2019	EURSGD.fx	1:30:00 PM	1.52013	1.5202			N/A
4/4/2019	EURSGD.fx	3:30:00 PM	1.51908	1.51863			N/A
4/4/2019	EURUSD	9:30:00 AM	1.12386	1.12389			N/A
4/4/2019	EURUSD	11:30:00 AM	1.12366	1.1237			N/A
4/4/2019	EURUSD	1:30:00 PM	1.12285	1.12297			N/A
4/4/2019	EURUSD	3:30:00 PM	1.12187	1.12133			N/A
4/4/2019	EURUSD.fx	9:30:00 AM	1.12406	1.12399			N/A
4/4/2019	EURUSD.fx	11:30:00 AM	1.12387	1.12379			N/A
4/4/2019	EURUSD.fx	1:30:00 PM	1.12305	1.12308			N/A
4/4/2019	EURUSD.fx	3:30:00 PM	1.12207	1.12143			N/A
4/4/2019	EURZAR	9:30:00 AM	15.9472	15.9472			N/A
4/4/2019	EURZAR	11:30:00 AM	15.938	15.9564			N/A
4/4/2019	EURZAR	1:30:00 PM	15.9057	15.9207			N/A
4/4/2019	EURZAR	3:30:00 PM	15.8694	15.8872			N/A
4/4/2019	EURZAR.fx	9:30:00 AM	15.94652	15.94909			N/A
4/4/2019	EURZAR.fx	11:30:00 AM	15.93821	15.95734			N/A
4/4/2019	EURZAR.fx	1:30:00 PM	15.90505	15.92071			N/A
4/4/2019	EURZAR.fx	3:30:00 PM	15.86835	15.88797			N/A
4/4/2019	GBPAUD	9:30:00 AM	1.85177	1.85224			N/A
4/4/2019	GBPAUD	11:30:00 AM	1.85188	1.85263			N/A
4/4/2019	GBPAUD	1:30:00 PM	1.84907	1.84952			N/A
4/4/2019	GBPAUD	3:30:00 PM	1.8483	1.84808			N/A
4/4/2019	GBPAUD.fx	9:30:00 AM	1.85217	1.85184			N/A
4/4/2019	GBPAUD.fx	11:30:00 AM	1.85224	1.85225			N/A
4/4/2019	GBPAUD.fx	1:30:00 PM	1.84945	1.84912			N/A
4/4/2019	GBPAUD.fx	3:30:00 PM	1.84869	1.84772			N/A
4/4/2019	GBPCAD	9:30:00 AM	1.7598	1.76041			N/A
4/4/2019	GBPCAD	11:30:00 AM	1.7589	1.75963			N/A
4/4/2019	GBPCAD	1:30:00 PM	1.75646	1.75695			N/A
4/4/2019	GBPCAD	3:30:00 PM	1.75448	1.7552			N/A

4/4/2019	GBPCAD.fx	9:30:00 AM	1.76018	1.75997			N/A
4/4/2019	GBPCAD.fx	11:30:00 AM	1.75928	1.75922			N/A
4/4/2019	GBPCAD.fx	1:30:00 PM	1.75682	1.75661			N/A
4/4/2019	GBPCAD.fx	3:30:00 PM	1.75483	1.75482			N/A
4/4/2019	GBPCHF	9:30:00 AM	1.31499	1.31511			N/A
4/4/2019	GBPCHF	11:30:00 AM	1.3148	1.31508			N/A
4/4/2019	GBPCHF	1:30:00 PM	1.31286	1.31303			N/A
4/4/2019	GBPCHF	3:30:00 PM	1.31226	1.31236			N/A
4/4/2019	GBPCHF.fx	9:30:00 AM	1.31517	1.3149			N/A
4/4/2019	GBPCHF.fx	11:30:00 AM	1.31498	1.31488			N/A
4/4/2019	GBPCHF.fx	1:30:00 PM	1.31303	1.31285			N/A
4/4/2019	GBPCHF.fx	3:30:00 PM	1.31242	1.31221			N/A
4/4/2019	GBPCZK	9:30:00 AM	30.142	30.156			N/A
4/4/2019	GBPCZK	11:30:00 AM	30.094	30.114			N/A
4/4/2019	GBPCZK	1:30:00 PM	30.053	30.067			N/A
4/4/2019	GBPCZK	3:30:00 PM	30.049	30.056			N/A
4/4/2019	GBPDKK	9:30:00 AM	8.749	8.758			N/A
4/4/2019	GBPDKK	11:30:00 AM	8.746	8.756			N/A
4/4/2019	GBPDKK	1:30:00 PM	8.738	8.748			N/A
4/4/2019	GBPDKK	3:30:00 PM	8.734	8.742			N/A
4/4/2019	GBPDKK.fx	9:30:00 AM	8.7467	8.7576			N/A
4/4/2019	GBPDKK.fx	11:30:00 AM	8.7441	8.7558			N/A
4/4/2019	GBPDKK.fx	1:30:00 PM	8.7363	8.7481			N/A
4/4/2019	GBPDKK.fx	3:30:00 PM	8.7326	8.7428			N/A
4/4/2019	GBPHKD	9:30:00 AM	10.3401	10.3425			N/A
4/4/2019	GBPHKD	11:30:00 AM	10.3354	10.3401			N/A
4/4/2019	GBPHKD	1:30:00 PM	10.3207	10.3236			N/A
4/4/2019	GBPHKD	3:30:00 PM	10.3026	10.3078			N/A
4/4/2019	GBPHUF	9:30:00 AM	375.11	374.94			N/A
4/4/2019	GBPHUF	11:30:00 AM	374.77	375.22			N/A
4/4/2019	GBPHUF	1:30:00 PM	374.15	374.56			N/A
4/4/2019	GBPHUF	3:30:00 PM	374.05	374.24			N/A
4/4/2019	GBPJPY	9:30:00 AM	146.847	146.856			N/A
4/4/2019	GBPJPY	11:30:00 AM	146.718	146.748			N/A

4/4/2019	GBPJPY	1:30:00 PM	146.528	146.546			N/A
4/4/2019	GBPJPY	3:30:00 PM	146.365	146.399			N/A
4/4/2019	GBPJPY.fx	9:30:00 AM	146.867	146.837			N/A
4/4/2019	GBPJPY.fx	11:30:00 AM	146.737	146.729			N/A
4/4/2019	GBPJPY.fx	1:30:00 PM	146.546	146.528			N/A
4/4/2019	GBPJPY.fx	3:30:00 PM	146.382	146.382			N/A
4/4/2019	GBPMXN	9:30:00 AM	25.3594	25.3643			N/A
4/4/2019	GBPMXN	11:30:00 AM	25.3611	25.3739			N/A
4/4/2019	GBPMXN	1:30:00 PM	25.31	25.3188			N/A
4/4/2019	GBPMXN	3:30:00 PM	25.2341	25.2439			N/A
4/4/2019	GBPNOK	9:30:00 AM	11.2996	11.3051			N/A
4/4/2019	GBPNOK	11:30:00 AM	11.301	11.3112			N/A
4/4/2019	GBPNOK	1:30:00 PM	11.2911	11.301			N/A
4/4/2019	GBPNOK	3:30:00 PM	11.2718	11.2806			N/A
4/4/2019	GBPNOK.fx	9:30:00 AM	11.30441	11.30025			N/A
4/4/2019	GBPNOK.fx	11:30:00 AM	11.30596	11.30637			N/A
4/4/2019	GBPNOK.fx	1:30:00 PM	11.29616	11.29581			N/A
4/4/2019	GBPNOK.fx	3:30:00 PM	11.27631	11.27621			N/A
4/4/2019	GBPNZD	9:30:00 AM	1.94158	1.94213			N/A
4/4/2019	GBPNZD	11:30:00 AM	1.94158	1.94226			N/A
4/4/2019	GBPNZD	1:30:00 PM	1.94044	1.94089			N/A
4/4/2019	GBPNZD	3:30:00 PM	1.94305	1.94333			N/A
4/4/2019	GBPNZD.fx	9:30:00 AM	1.94197	1.94175			N/A
4/4/2019	GBPNZD.fx	11:30:00 AM	1.94193	1.94188			N/A
4/4/2019	GBPNZD.fx	1:30:00 PM	1.94077	1.94052			N/A
4/4/2019	GBPNZD.fx	3:30:00 PM	1.94339	1.94302			N/A
4/4/2019	GBPPLN	9:30:00 AM	5.0325	5.0328			N/A
4/4/2019	GBPPLN	11:30:00 AM	5.0346	5.0348			N/A
4/4/2019	GBPPLN	1:30:00 PM	5.0259	5.0266			N/A
4/4/2019	GBPPLN	3:30:00 PM	5.0221	5.0218			N/A
4/4/2019	GBPPLN.fx	9:30:00 AM	5.03024	5.03494			N/A
4/4/2019	GBPPLN.fx	11:30:00 AM	5.03246	5.03704			N/A
4/4/2019	GBPPLN.fx	1:30:00 PM	5.02358	5.02874			N/A
4/4/2019	GBPPLN.fx	3:30:00 PM	5.0195	5.02393			N/A



4/4/2019	GBPSEK	9:30:00 AM	12.216	12.2234			N/A
4/4/2019	GBPSEK	11:30:00 AM	12.2036	12.2116			N/A
4/4/2019	GBPSEK	1:30:00 PM	12.1971	12.2043			N/A
4/4/2019	GBPSEK	3:30:00 PM	12.1818	12.1911			N/A
4/4/2019	GBPSEK.fx	9:30:00 AM	12.21196	12.22713			N/A
4/4/2019	GBPSEK.fx	11:30:00 AM	12.20005	12.2154			N/A
4/4/2019	GBPSEK.fx	1:30:00 PM	12.19291	12.20781			N/A
4/4/2019	GBPSEK.fx	3:30:00 PM	12.17802	12.19502			N/A
4/4/2019	GBPSGD	9:30:00 AM	1.7831	1.7835			N/A
4/4/2019	GBPSGD	11:30:00 AM	1.7831	1.7837			N/A
4/4/2019	GBPSGD	1:30:00 PM	1.7802	1.7807			N/A
4/4/2019	GBPSGD	3:30:00 PM	1.7777	1.7784			N/A
4/4/2019	GBPSGD.fx	9:30:00 AM	1.78115	1.78531			N/A
4/4/2019	GBPSGD.fx	11:30:00 AM	1.78117	1.78549			N/A
4/4/2019	GBPSGD.fx	1:30:00 PM	1.77841	1.78251			N/A
4/4/2019	GBPSGD.fx	3:30:00 PM	1.77585	1.78024			N/A
4/4/2019	GBPUSD	9:30:00 AM	1.31803	1.3178			N/A
4/4/2019	GBPUSD	11:30:00 AM	1.31735	1.31734			N/A
4/4/2019	GBPUSD	1:30:00 PM	1.31541	1.31523			N/A
4/4/2019	GBPUSD	3:30:00 PM	1.31324	1.31315			N/A
4/4/2019	GBPUSD.fx	9:30:00 AM	1.31808	1.31774			N/A
4/4/2019	GBPUSD.fx	11:30:00 AM	1.31739	1.31729			N/A
4/4/2019	GBPUSD.fx	1:30:00 PM	1.31545	1.31518			N/A
4/4/2019	GBPUSD.fx	3:30:00 PM	1.31326	1.31311			N/A
4/4/2019	GBPZAR	9:30:00 AM	18.6934	18.7			N/A
4/4/2019	GBPZAR	11:30:00 AM	18.6801	18.7075			N/A
4/4/2019	GBPZAR	1:30:00 PM	18.6266	18.6481			N/A
4/4/2019	GBPZAR	3:30:00 PM	18.5753	18.6001			N/A
4/4/2019	GBPZAR.fx	9:30:00 AM	18.6988	18.6941			N/A
4/4/2019	GBPZAR.fx	11:30:00 AM	18.6869	18.7002			N/A
4/4/2019	GBPZAR.fx	1:30:00 PM	18.6339	18.6409			N/A
4/4/2019	GBPZAR.fx	3:30:00 PM	18.5819	18.595			N/A
4/4/2019	GOLD	9:30:00 AM	1292.86	1293.11			N/A
4/4/2019	GOLD	11:30:00 AM	1292.03	1292.22			N/A

4/4/2019	GOLD	1:30:00 PM	1291.31	1291.34			N/A
4/4/2019	GOLD	3:30:00 PM	1286.72	1284.61	2	2	N/A
4/4/2019	HKDJPY	9:30:00 AM	14.2	14.21			N/A
4/4/2019	HKDJPY	11:30:00 AM	14.19	14.2			N/A
4/4/2019	HKDJPY	1:30:00 PM	14.2	14.2			N/A
4/4/2019	HKDJPY	3:30:00 PM	14.2	14.21			N/A
4/4/2019	HKDJPY.fx	9:30:00 AM	14.191	14.198			N/A
4/4/2019	HKDJPY.fx	11:30:00 AM	14.185	14.193			N/A
4/4/2019	HKDJPY.fx	1:30:00 PM	14.188	14.194			N/A
4/4/2019	HKDJPY.fx	3:30:00 PM	14.197	14.201			N/A
4/4/2019	HUFJPY	9:30:00 AM	0.3914	0.3916			N/A
4/4/2019	HUFJPY	11:30:00 AM	0.3915	0.3918			N/A
4/4/2019	HUFJPY	1:30:00 PM	0.3915	0.3918			N/A
4/4/2019	HUFJPY	3:30:00 PM	0.3913	0.3915			N/A
4/4/2019	JP225.i	9:30:00 AM	21680.1	21696.55			N/A
4/4/2019	JP225.i	11:30:00 AM	21685.1	21705.1			N/A
4/4/2019	JP225.i	1:30:00 PM	21715.1	21730.1			N/A
4/4/2019	JP225.i	3:30:00 PM	21710.1	21730.1			N/A
4/4/2019	MXNJPY	9:30:00 AM	5.79	5.8			N/A
4/4/2019	MXNJPY	11:30:00 AM					N/A
4/4/2019	MXNJPY	1:30:00 PM	5.79	5.8			N/A
4/4/2019	MXNJPY	3:30:00 PM	5.8	5.81			N/A
4/4/2019	NASDAQ.i	9:30:00 AM					N/A
4/4/2019	NASDAQ.i	11:30:00 AM					N/A
4/4/2019	NASDAQ.i	1:30:00 PM					N/A
4/4/2019	NASDAQ.i	3:30:00 PM					N/A
4/4/2019	NOKJPY	9:30:00 AM	12.98	13.01			N/A
4/4/2019	NOKJPY	11:30:00 AM	12.97	13.01			N/A
4/4/2019	NOKJPY	1:30:00 PM	12.96	12.99			N/A
4/4/2019	NOKJPY	3:30:00 PM	12.97	13			N/A
4/4/2019	NOKJPY.fx	9:30:00 AM	12.992	12.993			N/A
4/4/2019	NOKJPY.fx	11:30:00 AM	12.974	12.982			N/A
4/4/2019	NOKJPY.fx	1:30:00 PM	12.97	12.976			N/A
4/4/2019	NOKJPY.fx	3:30:00 PM	12.979	12.985			N/A

4/4/2019	NZDCAD	9:30:00 AM	0.90606	0.90678			N/A
4/4/2019	NZDCAD	11:30:00 AM	0.90556	0.90629			N/A
4/4/2019	NZDCAD	1:30:00 PM	0.90487	0.90557			N/A
4/4/2019	NZDCAD	3:30:00 PM	0.90285	0.90331			N/A
4/4/2019	NZDCAD.fx	9:30:00 AM	0.90638	0.90645			N/A
4/4/2019	NZDCAD.fx	11:30:00 AM	0.90587	0.90595			N/A
4/4/2019	NZDCAD.fx	1:30:00 PM	0.9052	0.90525			N/A
4/4/2019	NZDCAD.fx	3:30:00 PM	0.90315	0.903			N/A
4/4/2019	NZDCHF	9:30:00 AM	0.6769	0.67754			N/A
4/4/2019	NZDCHF	11:30:00 AM	0.67678	0.67744			N/A
4/4/2019	NZDCHF	1:30:00 PM	0.67626	0.67693			N/A
4/4/2019	NZDCHF	3:30:00 PM	0.67502	0.67563			N/A
4/4/2019	NZDCHF.fx	9:30:00 AM	0.67723	0.67719			N/A
4/4/2019	NZDCHF.fx	11:30:00 AM	0.67712	0.6771			N/A
4/4/2019	NZDCHF.fx	1:30:00 PM	0.67659	0.67658			N/A
4/4/2019	NZDCHF.fx	3:30:00 PM	0.67536	0.6753			N/A
4/4/2019	NZDCZK	9:30:00 AM	15.52	15.531			N/A
4/4/2019	NZDCZK	11:30:00 AM	15.495	15.507			N/A
4/4/2019	NZDCZK	1:30:00 PM	15.484	15.495			N/A
4/4/2019	NZDCZK	3:30:00 PM	15.461	15.468			N/A
4/4/2019	NZDDKK	9:30:00 AM					N/A
4/4/2019	NZDDKK	11:30:00 AM					N/A
4/4/2019	NZDDKK	1:30:00 PM	4.503	4.506			N/A
4/4/2019	NZDDKK	3:30:00 PM	4.494	4.496			N/A
4/4/2019	NZDHKD	9:30:00 AM	5.3234	5.3262			N/A
4/4/2019	NZDHKD	11:30:00 AM	5.3211	5.324			N/A
4/4/2019	NZDHKD	1:30:00 PM	5.317	5.3196			N/A
4/4/2019	NZDHKD	3:30:00 PM	5.301	5.3039			N/A
4/4/2019	NZDHUF	9:30:00 AM	193.13	193.1			N/A
4/4/2019	NZDHUF	11:30:00 AM					N/A
4/4/2019	NZDHUF	1:30:00 PM	192.75	193.03			N/A
4/4/2019	NZDHUF	3:30:00 PM	192.43	192.6			N/A
4/4/2019	NZDJPY	9:30:00 AM	75.593	75.658			N/A
4/4/2019	NZDJPY	11:30:00 AM	75.524	75.6			N/A

4/4/2019	NZDJPY	1:30:00 PM	75.484	75.547			N/A
4/4/2019	NZDJPY	3:30:00 PM	75.305	75.359			N/A
4/4/2019	NZDJPY.fx	9:30:00 AM	75.625	75.625			N/A
4/4/2019	NZDJPY.fx	11:30:00 AM	75.556	75.567			N/A
4/4/2019	NZDJPY.fx	1:30:00 PM	75.515	75.513			N/A
4/4/2019	NZDJPY.fx	3:30:00 PM	75.337	75.328			N/A
4/4/2019	NZDMXN	9:30:00 AM	13.0594	13.0606			N/A
4/4/2019	NZDMXN	11:30:00 AM	13.0583	13.0632			N/A
4/4/2019	NZDMXN	1:30:00 PM	13.0403	13.0461			N/A
4/4/2019	NZDMXN	3:30:00 PM	12.9871	12.9893			N/A
4/4/2019	NZDNOK	9:30:00 AM	5.8176	5.8195			N/A
4/4/2019	NZDNOK	11:30:00 AM	5.818	5.8219			N/A
4/4/2019	NZDNOK	1:30:00 PM	5.817	5.8205			N/A
4/4/2019	NZDNOK	3:30:00 PM	5.7984	5.8001			N/A
4/4/2019	NZDPLN	9:30:00 AM	2.5909	2.5921			N/A
4/4/2019	NZDPLN	11:30:00 AM	2.5913	2.5926			N/A
4/4/2019	NZDPLN	1:30:00 PM	2.5886	2.5898			N/A
4/4/2019	NZDPLN	3:30:00 PM	2.5825	2.5838			N/A
4/4/2019	NZDSEK	9:30:00 AM	6.2883	6.2942			N/A
4/4/2019	NZDSEK	11:30:00 AM	6.2805	6.2874			N/A
4/4/2019	NZDSEK	1:30:00 PM	6.2817	6.2881			N/A
4/4/2019	NZDSEK	3:30:00 PM	6.2654	6.2713			N/A
4/4/2019	NZDSGD	9:30:00 AM	0.9181	0.9187			N/A
4/4/2019	NZDSGD	11:30:00 AM	0.9181	0.9185			N/A
4/4/2019	NZDSGD	1:30:00 PM	0.9173	0.9178			N/A
4/4/2019	NZDSGD	3:30:00 PM	0.9149	0.9153			N/A
4/4/2019	NZDSGD.fx	9:30:00 AM	0.91801	0.91861			N/A
4/4/2019	NZDSGD.fx	11:30:00 AM	0.91801	0.91867			N/A
4/4/2019	NZDSGD.fx	1:30:00 PM	0.91718	0.91771			N/A
4/4/2019	NZDSGD.fx	3:30:00 PM	0.91481	0.91521			N/A
4/4/2019	NZDUSD	9:30:00 AM	0.67864	0.6787			N/A
4/4/2019	NZDUSD	11:30:00 AM	0.67825	0.67843			N/A
4/4/2019	NZDUSD	1:30:00 PM	0.67772	0.67779			N/A
4/4/2019	NZDUSD	3:30:00 PM	0.67574	0.67566			N/A

4/4/2019	NZDUSD.fx	9:30:00 AM	0.67871	0.67872			N/A
4/4/2019	NZDUSD.fx	11:30:00 AM	0.67833	0.67845			N/A
4/4/2019	NZDUSD.fx	1:30:00 PM	0.67779	0.6778			N/A
4/4/2019	NZDUSD.fx	3:30:00 PM	0.67581	0.67568			N/A
4/4/2019	NZDZAR	9:30:00 AM	9.6204	9.6273			N/A
4/4/2019	NZDZAR	11:30:00 AM	9.6123	9.6302			N/A
4/4/2019	NZDZAR	1:30:00 PM	9.5916	9.6061			N/A
4/4/2019	NZDZAR	3:30:00 PM	9.5517	9.5638			N/A
4/4/2019	SEKJPY	9:30:00 AM	12.02	12.03			N/A
4/4/2019	SEKJPY	11:30:00 AM	12.02	12.03			N/A
4/4/2019	SEKJPY	1:30:00 PM					N/A
4/4/2019	SEKJPY	3:30:00 PM	12.02	12.02			N/A
4/4/2019	SEKJPY.fx	9:30:00 AM	12.008	12.025			N/A
4/4/2019	SEKJPY.fx	11:30:00 AM	12.01	12.029			N/A
4/4/2019	SEKJPY.fx	1:30:00 PM	12.002	12.02			N/A
4/4/2019	SEKJPY.fx	3:30:00 PM	12.003	12.02			N/A
4/4/2019	SGDJPY	9:30:00 AM	82.35	82.35			N/A
4/4/2019	SGDJPY	11:30:00 AM	82.26	82.28			N/A
4/4/2019	SGDJPY	1:30:00 PM	82.31	82.3			N/A
4/4/2019	SGDJPY	3:30:00 PM	82.3	82.32			N/A
4/4/2019	SILVER	9:30:00 AM	14.95	15.35			N/A
4/4/2019	SILVER	11:30:00 AM	14.91	15.29			N/A
4/4/2019	SILVER	1:30:00 PM	14.89	15.27			N/A
4/4/2019	SILVER	3:30:00 PM	14.78	15.14			N/A
4/4/2019	SPX500.i	9:30:00 AM	2872.55	2873.6			N/A
4/4/2019	SPX500.i	11:30:00 AM	2872.55	2873.35			N/A
4/4/2019	SPX500.i	1:30:00 PM	2874.55	2875.1			N/A
4/4/2019	SPX500.i	3:30:00 PM	2875.05	2875.85			N/A
4/4/2019	UK100.i	9:30:00 AM	7386.05	7388.13			N/A
4/4/2019	UK100.i	11:30:00 AM	7381.63	7382.63			N/A
4/4/2019	UK100.i	1:30:00 PM	7387.55	7388.63			N/A
4/4/2019	UK100.i	3:30:00 PM	7390.38	7391.38			N/A
4/4/2019	USDCAD	9:30:00 AM	1.33565	1.33555			N/A
4/4/2019	USDCAD	11:30:00 AM	1.33548	1.33555			N/A

4/4/2019	USDCAD	1:30:00 PM	1.33559	1.33559			N/A
4/4/2019	USDCAD	3:30:00 PM	1.33646	1.33639			N/A
4/4/2019	USDCAD.fx	9:30:00 AM	1.33567	1.33551			N/A
4/4/2019	USDCAD.fx	11:30:00 AM	1.3355	1.33552			N/A
4/4/2019	USDCAD.fx	1:30:00 PM	1.33562	1.33555			N/A
4/4/2019	USDCAD.fx	3:30:00 PM	1.33648	1.33637			N/A
4/4/2019	USDCHF	9:30:00 AM	0.99776	0.99786			N/A
4/4/2019	USDCHF	11:30:00 AM	0.99813	0.99812			N/A
4/4/2019	USDCHF	1:30:00 PM	0.99815	0.99828			N/A
4/4/2019	USDCHF	3:30:00 PM	0.99949	0.99913			N/A
4/4/2019	USDCHF.fx	9:30:00 AM	0.9978	0.9978			N/A
4/4/2019	USDCHF.fx	11:30:00 AM	0.99817	0.99807			N/A
4/4/2019	USDCHF.fx	1:30:00 PM	0.99819	0.99822			N/A
4/4/2019	USDCHF.fx	3:30:00 PM	0.99953	0.9991			N/A
4/4/2019	USDCZK	9:30:00 AM	22.885	22.903			N/A
4/4/2019	USDCZK	11:30:00 AM	22.861	22.882			N/A
4/4/2019	USDCZK	1:30:00 PM	22.861	22.883			N/A
4/4/2019	USDCZK	3:30:00 PM	22.901	22.911			N/A
4/4/2019	USDCZK.fx	9:30:00 AM	22.8928	22.8935			N/A
4/4/2019	USDCZK.fx	11:30:00 AM	22.8684	22.8749			N/A
4/4/2019	USDCZK.fx	1:30:00 PM	22.8688	22.8751			N/A
4/4/2019	USDCZK.fx	3:30:00 PM	22.9086	22.9007			N/A
4/4/2019	USDDKK	9:30:00 AM	6.6401	6.6433			N/A
4/4/2019	USDDKK	11:30:00 AM	6.641	6.6445			N/A
4/4/2019	USDDKK	1:30:00 PM	6.6452	6.6492			N/A
4/4/2019	USDDKK	3:30:00 PM	6.6555	6.6549			N/A
4/4/2019	USDDKK.fx	9:30:00 AM	6.64031	6.64132			N/A
4/4/2019	USDDKK.fx	11:30:00 AM	6.64147	6.64246			N/A
4/4/2019	USDDKK.fx	1:30:00 PM	6.6456	6.64722			N/A
4/4/2019	USDDKK.fx	3:30:00 PM	6.65481	6.65254			N/A
4/4/2019	USDHKD	9:30:00 AM	7.8486	7.8487			N/A
4/4/2019	USDHKD	11:30:00 AM					N/A
4/4/2019	USDHKD	1:30:00 PM	7.8491	7.8494			N/A
4/4/2019	USDHKD	3:30:00 PM	7.849	7.8492			N/A

4/4/2019	USDHKD.fx	9:30:00 AM	7.84851	7.84902			N/A
4/4/2019	USDHKD.fx	11:30:00 AM					N/A
4/4/2019	USDHKD.fx	1:30:00 PM	7.84916	7.84973			N/A
4/4/2019	USDHKD.fx	3:30:00 PM	7.84901	7.84953			N/A
4/4/2019	USDHUF	9:30:00 AM	284.73	284.67			N/A
4/4/2019	USDHUF	11:30:00 AM	284.54	285			N/A
4/4/2019	USDHUF	1:30:00 PM	284.5	284.97			N/A
4/4/2019	USDHUF	3:30:00 PM	284.94	285.27			N/A
4/4/2019	USDHUF.fx	9:30:00 AM	284.924	284.492			N/A
4/4/2019	USDHUF.fx	11:30:00 AM	284.733	284.795			N/A
4/4/2019	USDHUF.fx	1:30:00 PM	284.697	284.777			N/A
4/4/2019	USDHUF.fx	3:30:00 PM	285.133	285.062			N/A
4/4/2019	USDINR	9:30:00 AM	63.86	73.81			N/A
4/4/2019	USDINR	11:30:00 AM	64.09	74.07			N/A
4/4/2019	USDINR	1:30:00 PM					N/A
4/4/2019	USDINR	3:30:00 PM					N/A
4/4/2019	USDJPY	9:30:00 AM	111.419	111.432			N/A
4/4/2019	USDJPY	11:30:00 AM	111.377	111.391			N/A
4/4/2019	USDJPY	1:30:00 PM	111.403	111.41			N/A
4/4/2019	USDJPY	3:30:00 PM	111.477	111.46			N/A
4/4/2019	USDJPY.fx	9:30:00 AM	111.424	111.426			N/A
4/4/2019	USDJPY.fx	11:30:00 AM	111.383	111.383			N/A
4/4/2019	USDJPY.fx	1:30:00 PM	111.409	111.404			N/A
4/4/2019	USDJPY.fx	3:30:00 PM	111.483	111.454			N/A
4/4/2019	USDMXN	9:30:00 AM	19.251	19.248			N/A
4/4/2019	USDMXN	11:30:00 AM	19.258	19.264			N/A
4/4/2019	USDMXN	1:30:00 PM	19.247	19.254			N/A
4/4/2019	USDMXN	3:30:00 PM	19.227	19.228			N/A
4/4/2019	USDMXN.f	9:30:00 AM	19.2538	19.2441			N/A
4/4/2019	USDMXN.f	11:30:00 AM	19.261	19.2614			N/A
4/4/2019	USDMXN.f	1:30:00 PM	19.2501	19.2512			N/A
4/4/2019	USDMXN.f	3:30:00 PM	19.2303	19.225			N/A
4/4/2019	USDNOK	9:30:00 AM	8.5743	8.5782			N/A
4/4/2019	USDNOK	11:30:00 AM	8.5783	8.5866			N/A

4/4/2019	USDNOK	1:30:00 PM	8.584	8.5915			N/A
4/4/2019	USDNOK	3:30:00 PM	8.585	8.5901			N/A
4/4/2019	USDNOK.fx	9:30:00 AM	8.57805	8.57356			N/A
4/4/2019	USDNOK.fx	11:30:00 AM	8.58219	8.58222			N/A
4/4/2019	USDNOK.fx	1:30:00 PM	8.588	8.58714			N/A
4/4/2019	USDNOK.fx	3:30:00 PM	8.58833	8.58566			N/A
4/4/2019	USDPLN	9:30:00 AM	3.8186	3.8188			N/A
4/4/2019	USDPLN	11:30:00 AM	3.8215	3.8218			N/A
4/4/2019	USDPLN	1:30:00 PM	3.8205	3.8221			N/A
4/4/2019	USDPLN	3:30:00 PM	3.8245	3.8239			N/A
4/4/2019	USDPLN.fx	9:30:00 AM	3.81775	3.81952			N/A
4/4/2019	USDPLN.fx	11:30:00 AM	3.82073	3.82265			N/A
4/4/2019	USDPLN.fx	1:30:00 PM	3.81964	3.82302			N/A
4/4/2019	USDPLN.fx	3:30:00 PM	3.8235	3.82467			N/A
4/4/2019	USDRUB	9:30:00 AM					N/A
4/4/2019	USDRUB	11:30:00 AM	65.188	65.57			N/A
4/4/2019	USDRUB	1:30:00 PM	65.218	65.606			N/A
4/4/2019	USDRUB	3:30:00 PM	65.167	65.555			N/A
4/4/2019	USDSEK	9:30:00 AM	9.2706	9.2724			N/A
4/4/2019	USDSEK	11:30:00 AM	9.2644	9.2683			N/A
4/4/2019	USDSEK	1:30:00 PM	9.2734	9.277			N/A
4/4/2019	USDSEK	3:30:00 PM	9.2782	9.2817			N/A
4/4/2019	USDSEK.fx	9:30:00 AM	9.27309	9.27104			N/A
4/4/2019	USDSEK.fx	11:30:00 AM	9.26676	9.26661			N/A
4/4/2019	USDSEK.fx	1:30:00 PM	9.27582	9.27501			N/A
4/4/2019	USDSEK.fx	3:30:00 PM	9.28072	9.27972			N/A
4/4/2019	USDSGD	9:30:00 AM	1.3528	1.3532			N/A
4/4/2019	USDSGD	11:30:00 AM	1.3535	1.3539			N/A
4/4/2019	USDSGD	1:30:00 PM	1.3534	1.3537			N/A
4/4/2019	USDSGD	3:30:00 PM	1.354	1.3542			N/A
4/4/2019	USDSGD.fx	9:30:00 AM	1.35286	1.35322			N/A
4/4/2019	USDSGD.fx	11:30:00 AM	1.35345	1.35395			N/A
4/4/2019	USDSGD.fx	1:30:00 PM	1.35336	1.35378			N/A
4/4/2019	USDSGD.fx	3:30:00 PM	1.35386	1.35418			N/A



4/4/2019	USDZAR	9:30:00 AM	14.1877	14.187			N/A
4/4/2019	USDZAR	11:30:00 AM	14.1819	14.1991			N/A
4/4/2019	USDZAR	1:30:00 PM	14.1624	14.177			N/A
4/4/2019	USDZAR	3:30:00 PM	14.1481	14.1611			N/A
4/4/2019	USDZAR.fx	9:30:00 AM	14.19307	14.18201			N/A
4/4/2019	USDZAR.fx	11:30:00 AM	14.18714	14.19372			N/A
4/4/2019	USDZAR.fx	1:30:00 PM	14.16817	14.17172			N/A
4/4/2019	USDZAR.fx	3:30:00 PM	14.15417	14.15682			N/A
4/4/2019	XAUUSD	9:30:00 AM	1292.86	1293.03			N/A
4/4/2019	XAUUSD	11:30:00 AM	1291.98	1292.11			N/A
4/4/2019	XAUUSD	1:30:00 PM	1291.3	1291.19			N/A
4/4/2019	XAUUSD	3:30:00 PM	1286.69	1284.53			N/A
4/4/2019	ZARJPY	9:30:00 AM	7.84	7.85			N/A
4/4/2019	ZARJPY	11:30:00 AM	7.83	7.85			N/A
4/4/2019	ZARJPY	1:30:00 PM	7.84	7.86			N/A
4/4/2019	ZARJPY	3:30:00 PM	7.86	7.88			N/A
4/4/2019	ZARJPY.fx	9:30:00 AM	7.856	7.851			N/A
4/4/2019	ZARJPY.fx	11:30:00 AM	7.846	7.851			N/A
4/4/2019	ZARJPY.fx	1:30:00 PM	7.86	7.864			N/A
4/4/2019	ZARJPY.fx	3:30:00 PM	7.873	7.877			N/A
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4/5/2019	#QQQ	1:30:00 PM					N/A
4/5/2019	#QQQ	3:30:00 PM					N/A
4/5/2019	#Ripple	9:30:00 AM	0.3692	0.3783			N/A
4/5/2019	#Ripple	11:30:00 AM	0.366	0.3754			N/A
4/5/2019	#Ripple	1:30:00 PM	0.3666	0.3762			N/A
4/5/2019	#Ripple	3:30:00 PM	0.362	0.3706			N/A
4/5/2019	#S	9:30:00 AM					N/A
4/5/2019	#S	11:30:00 AM					N/A
4/5/2019	#S	1:30:00 PM					N/A
4/5/2019	#S	3:30:00 PM					N/A
4/5/2019	#SBUX	9:30:00 AM					N/A
4/5/2019	#SBUX	11:30:00 AM					N/A

4/5/2019	#SBUX	1:30:00 PM					N/A
4/5/2019	#SBUX	3:30:00 PM					N/A
4/5/2019	#SNE	9:30:00 AM					N/A
4/5/2019	#SNE	11:30:00 AM					N/A
4/5/2019	#SNE	1:30:00 PM					N/A
4/5/2019	#SNE	3:30:00 PM					N/A
4/5/2019	#SPY	9:30:00 AM					N/A
4/5/2019	#SPY	11:30:00 AM					N/A
4/5/2019	#SPY	1:30:00 PM					N/A
4/5/2019	#SPY	3:30:00 PM					N/A
4/5/2019	#T	9:30:00 AM					N/A
4/5/2019	#T	11:30:00 AM					N/A
4/5/2019	#T	1:30:00 PM					N/A
4/5/2019	#T	3:30:00 PM					N/A
4/5/2019	#TEVA	9:30:00 AM					N/A
4/5/2019	#TEVA	11:30:00 AM					N/A
4/5/2019	#TEVA	1:30:00 PM					N/A
4/5/2019	#TEVA	3:30:00 PM					N/A
4/5/2019	#TRI	9:30:00 AM					N/A
4/5/2019	#TRI	11:30:00 AM					N/A
4/5/2019	#TRI	1:30:00 PM					N/A
4/5/2019	#TRI	3:30:00 PM					N/A
4/5/2019	#TRV	9:30:00 AM					N/A
4/5/2019	#TRV	11:30:00 AM					N/A
4/5/2019	#TRV	1:30:00 PM					N/A
4/5/2019	#TRV	3:30:00 PM					N/A
4/5/2019	#TSCO	9:30:00 AM					N/A
4/5/2019	#TSCO	11:30:00 AM					N/A
4/5/2019	#TSCO	1:30:00 PM					N/A
4/5/2019	#TSCO	3:30:00 PM					N/A
4/5/2019	#TSLA	9:30:00 AM					N/A
4/5/2019	#TSLA	11:30:00 AM					N/A
4/5/2019	#TSLA	1:30:00 PM					N/A
4/5/2019	#TSLA	3:30:00 PM					N/A

4/5/2019	#TWTR	9:30:00 AM					N/A
4/5/2019	#TWTR	11:30:00 AM					N/A
4/5/2019	#TWTR	1:30:00 PM					N/A
4/5/2019	#TWTR	3:30:00 PM					N/A
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4/5/2019	#UBS	11:30:00 AM					N/A
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4/5/2019	#UBS	3:30:00 PM					N/A
4/5/2019	#UL	9:30:00 AM					N/A
4/5/2019	#UL	11:30:00 AM					N/A
4/5/2019	#UL	1:30:00 PM					N/A
4/5/2019	#UL	3:30:00 PM					N/A
4/5/2019	#UPS	9:30:00 AM					N/A
4/5/2019	#UPS	11:30:00 AM					N/A
4/5/2019	#UPS	1:30:00 PM					N/A
4/5/2019	#UPS	3:30:00 PM					N/A
4/5/2019	#UTX	9:30:00 AM					N/A
4/5/2019	#UTX	11:30:00 AM					N/A
4/5/2019	#UTX	1:30:00 PM					N/A
4/5/2019	#UTX	3:30:00 PM					N/A
4/5/2019	#V	9:30:00 AM					N/A
4/5/2019	#V	11:30:00 AM					N/A
4/5/2019	#V	1:30:00 PM					N/A
4/5/2019	#V	3:30:00 PM					N/A
4/5/2019	#VOD	9:30:00 AM					N/A
4/5/2019	#VOD	11:30:00 AM					N/A
4/5/2019	#VOD	1:30:00 PM					N/A
4/5/2019	#VOD	3:30:00 PM					N/A
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4/5/2019	#VZ	11:30:00 AM					N/A
4/5/2019	#VZ	1:30:00 PM					N/A
4/5/2019	#VZ	3:30:00 PM					N/A
4/5/2019	#WDC	9:30:00 AM					N/A
4/5/2019	#WDC	11:30:00 AM					N/A

4/5/2019	#WDC	1:30:00 PM					N/A
4/5/2019	#WDC	3:30:00 PM					N/A
4/5/2019	#WFC	9:30:00 AM					N/A
4/5/2019	#WFC	11:30:00 AM					N/A
4/5/2019	#WFC	1:30:00 PM					N/A
4/5/2019	#WFC	3:30:00 PM					N/A
4/5/2019	#WMT	9:30:00 AM					N/A
4/5/2019	#WMT	11:30:00 AM					N/A
4/5/2019	#WMT	1:30:00 PM					N/A
4/5/2019	#WMT	3:30:00 PM					N/A
4/5/2019	#XOM	9:30:00 AM					N/A
4/5/2019	#XOM	11:30:00 AM					N/A
4/5/2019	#XOM	1:30:00 PM					N/A
4/5/2019	#XOM	3:30:00 PM					N/A
4/5/2019	#YHOO	9:30:00 AM					N/A
4/5/2019	#YHOO	11:30:00 AM					N/A
4/5/2019	#YHOO	1:30:00 PM					N/A
4/5/2019	#YHOO	3:30:00 PM					N/A
4/5/2019	#ZNGA	9:30:00 AM					N/A
4/5/2019	#ZNGA	11:30:00 AM					N/A
4/5/2019	#ZNGA	1:30:00 PM					N/A
4/5/2019	#ZNGA	3:30:00 PM					N/A
4/5/2019	AUDCAD	9:30:00 AM	0.95119	0.95187			N/A
4/5/2019	AUDCAD	11:30:00 AM	0.95104	0.95168			N/A
4/5/2019	AUDCAD	1:30:00 PM	0.9512	0.9518			N/A
4/5/2019	AUDCAD	3:30:00 PM	0.95393	0.95222			N/A
4/5/2019	AUDCAD.fx	9:30:00 AM	0.95151	0.95154			N/A
4/5/2019	AUDCAD.fx	11:30:00 AM	0.95136	0.95133			N/A
4/5/2019	AUDCAD.fx	1:30:00 PM	0.95152	0.95147			N/A
4/5/2019	AUDCAD.fx	3:30:00 PM	0.9542	0.9522			N/A
4/5/2019	AUDCHF	9:30:00 AM	0.71229	0.71295			N/A
4/5/2019	AUDCHF	11:30:00 AM	0.71199	0.71263			N/A
4/5/2019	AUDCHF	1:30:00 PM	0.71171	0.71239			N/A
4/5/2019	AUDCHF	3:30:00 PM	0.71231	0.71208			N/A

4/5/2019	AUDCHF.fx	9:30:00 AM	0.71263	0.71261			N/A
4/5/2019	AUDCHF.fx	11:30:00 AM	0.71233	0.71227			N/A
4/5/2019	AUDCHF.fx	1:30:00 PM	0.71205	0.71206			N/A
4/5/2019	AUDCHF.fx	3:30:00 PM	0.71266	0.71199			N/A
4/5/2019	AUDCZK	9:30:00 AM	16.263	16.277			N/A
4/5/2019	AUDCZK	11:30:00 AM	16.252	16.269			N/A
4/5/2019	AUDCZK	1:30:00 PM	16.227	16.239			N/A
4/5/2019	AUDCZK	3:30:00 PM	16.216	16.22			N/A
4/5/2019	AUDDKK	9:30:00 AM	4.7335	4.7381			N/A
4/5/2019	AUDDKK	11:30:00 AM	4.7336	4.7381			N/A
4/5/2019	AUDDKK	1:30:00 PM	4.73	4.7344			N/A
4/5/2019	AUDDKK	3:30:00 PM	4.731	4.7318			N/A
4/5/2019	AUDHKD	9:30:00 AM	5.5914	5.5952			N/A
4/5/2019	AUDHKD	11:30:00 AM	5.5874	5.5912			N/A
4/5/2019	AUDHKD	1:30:00 PM	5.5842	5.5873			N/A
4/5/2019	AUDHKD	3:30:00 PM	5.5888	5.585			N/A
4/5/2019	AUDHUF	9:30:00 AM	202.88	203.09			N/A
4/5/2019	AUDHUF	11:30:00 AM	203.3	203.52			N/A
4/5/2019	AUDHUF	1:30:00 PM	203.19	203.41			N/A
4/5/2019	AUDHUF	3:30:00 PM	202.99	203.1			N/A
4/5/2019	AUDJPY	9:30:00 AM	79.58	79.642			N/A
4/5/2019	AUDJPY	11:30:00 AM	79.542	79.597			N/A
4/5/2019	AUDJPY	1:30:00 PM	79.477	79.545			N/A
4/5/2019	AUDJPY	3:30:00 PM	79.52	79.471			N/A
4/5/2019	AUDJPY.fx	9:30:00 AM	79.613	79.607			N/A
4/5/2019	AUDJPY.fx	11:30:00 AM	79.576	79.562			N/A
4/5/2019	AUDJPY.fx	1:30:00 PM	79.511	79.51			N/A
4/5/2019	AUDJPY.fx	3:30:00 PM	79.556	79.469			N/A
4/5/2019	AUDMXN	9:30:00 AM	13.6234	13.6335			N/A
4/5/2019	AUDMXN	11:30:00 AM	13.6161	13.6259			N/A
4/5/2019	AUDMXN	1:30:00 PM	13.6111	13.6183			N/A
4/5/2019	AUDMXN	3:30:00 PM	13.6107	13.6094			N/A
4/5/2019	AUDNOK	9:30:00 AM	6.1227	6.1265			N/A
4/5/2019	AUDNOK	11:30:00 AM	6.124	6.1288			N/A

4/5/2019	AUDNOK	1:30:00 PM	6.1192	6.124			N/A
4/5/2019	AUDNOK	3:30:00 PM	6.1243	6.1215			N/A
4/5/2019	AUDNOK.fx	9:30:00 AM	6.1243	6.1249			N/A
4/5/2019	AUDNOK.fx	11:30:00 AM	6.1256	6.1273			N/A
4/5/2019	AUDNOK.fx	1:30:00 PM	6.1207	6.1225			N/A
4/5/2019	AUDNOK.fx	3:30:00 PM	6.1259	6.1241			N/A
4/5/2019	AUDNZD	9:30:00 AM	1.05379	1.05462			N/A
4/5/2019	AUDNZD	11:30:00 AM	1.05623	1.05703			N/A
4/5/2019	AUDNZD	1:30:00 PM	1.0558	1.05663			N/A
4/5/2019	AUDNZD	3:30:00 PM	1.05574	1.05588			N/A
4/5/2019	AUDNZD.fx	9:30:00 AM	1.05422	1.05419			N/A
4/5/2019	AUDNZD.fx	11:30:00 AM	1.05665	1.0566			N/A
4/5/2019	AUDNZD.fx	1:30:00 PM	1.05623	1.05619			N/A
4/5/2019	AUDNZD.fx	3:30:00 PM	1.0561	1.05571			N/A
4/5/2019	AUDPLN	9:30:00 AM	2.7202	2.7233			N/A
4/5/2019	AUDPLN	11:30:00 AM	2.7222	2.7253			N/A
4/5/2019	AUDPLN	1:30:00 PM	2.7184	2.7214			N/A
4/5/2019	AUDPLN	3:30:00 PM	2.7185	2.7192			N/A
4/5/2019	AUDSEK	9:30:00 AM	6.6021	6.6041			N/A
4/5/2019	AUDSEK	11:30:00 AM	6.6109	6.6136			N/A
4/5/2019	AUDSEK	1:30:00 PM	6.6055	6.6084			N/A
4/5/2019	AUDSEK	3:30:00 PM	6.6091	6.6045			N/A
4/5/2019	AUDSEK.fx	9:30:00 AM	6.5973	6.6087			N/A
4/5/2019	AUDSEK.fx	11:30:00 AM	6.6061	6.618			N/A
4/5/2019	AUDSEK.fx	1:30:00 PM	6.6009	6.613			N/A
4/5/2019	AUDSEK.fx	3:30:00 PM	6.6043	6.6132			N/A
4/5/2019	AUDSGD	9:30:00 AM	0.9646	0.9648			N/A
4/5/2019	AUDSGD	11:30:00 AM	0.9647	0.9648			N/A
4/5/2019	AUDSGD	1:30:00 PM	0.9638	0.9641			N/A
4/5/2019	AUDSGD	3:30:00 PM	0.9647	0.9641			N/A
4/5/2019	AUDSGD.fx	9:30:00 AM	0.96466	0.96479			N/A
4/5/2019	AUDSGD.fx	11:30:00 AM	0.96476	0.96476			N/A
4/5/2019	AUDSGD.fx	1:30:00 PM	0.96392	0.96399			N/A
4/5/2019	AUDSGD.fx	3:30:00 PM	0.96472	0.96411			N/A



4/5/2019	AUDUSD	9:30:00 AM	0.71269	0.71274			N/A
4/5/2019	AUDUSD	11:30:00 AM	0.71226	0.71233			N/A
4/5/2019	AUDUSD	1:30:00 PM	0.71176	0.71184			N/A
4/5/2019	AUDUSD	3:30:00 PM	0.71246	0.71174			N/A
4/5/2019	AUDUSD.fx	9:30:00 AM	0.71275	0.7127			N/A
4/5/2019	AUDUSD.fx	11:30:00 AM	0.71231	0.71228			N/A
4/5/2019	AUDUSD.fx	1:30:00 PM	0.71183	0.71178			N/A
4/5/2019	AUDUSD.fx	3:30:00 PM	0.71251	0.71184			N/A
4/5/2019	AUDZAR	9:30:00 AM	10.0271	10.0413			N/A
4/5/2019	AUDZAR	11:30:00 AM	10.0335	10.0488			N/A
4/5/2019	AUDZAR	1:30:00 PM	10.0215	10.0358			N/A
4/5/2019	AUDZAR	3:30:00 PM	10.0022	9.9985			N/A
4/5/2019	AUS200.i	9:30:00 AM	6183.74	6188.24			N/A
4/5/2019	AUS200.i	11:30:00 AM	6185.74	6189.74			N/A
4/5/2019	AUS200.i	1:30:00 PM	6190.74	6194.24			N/A
4/5/2019	AUS200.i	3:30:00 PM	6195.24	6192.14			N/A
4/5/2019	BCHUSD	9:30:00 AM	290.93	302.51			N/A
4/5/2019	BCHUSD	11:30:00 AM	292.03	302.2			N/A
4/5/2019	BCHUSD	1:30:00 PM	290.44	301.81			N/A
4/5/2019	BCHUSD	3:30:00 PM	295.05	305.31			N/A
4/5/2019	CADCHF	9:30:00 AM	0.74855	0.74928			N/A
4/5/2019	CADCHF	11:30:00 AM	0.74837	0.74905			N/A
4/5/2019	CADCHF	1:30:00 PM	0.74797	0.74867			N/A
4/5/2019	CADCHF	3:30:00 PM	0.74776	0.74674			N/A
4/5/2019	CADCHF.fx	9:30:00 AM	0.7489	0.74893			N/A
4/5/2019	CADCHF.fx	11:30:00 AM	0.74871	0.7487			N/A
4/5/2019	CADCHF.fx	1:30:00 PM	0.74831	0.74831			N/A
4/5/2019	CADCHF.fx	3:30:00 PM	0.74782	0.74643			N/A
4/5/2019	CADCZK	9:30:00 AM	17.093	17.11			N/A
4/5/2019	CADCZK	11:30:00 AM	17.087	17.105			N/A
4/5/2019	CADCZK	1:30:00 PM	17.056	17.069			N/A
4/5/2019	CADCZK	3:30:00 PM	17.04	17.029			N/A
4/5/2019	CADDDKK	9:30:00 AM	4.976	4.98			N/A
4/5/2019	CADDDKK	11:30:00 AM	4.977	4.981			N/A

4/5/2019	CADDDKK	1:30:00 PM	4.972	4.975			N/A
4/5/2019	CADDDKK	3:30:00 PM	4.968	4.965			N/A
4/5/2019	CADHKD	9:30:00 AM	5.8767	5.8806			N/A
4/5/2019	CADHKD	11:30:00 AM	5.874	5.8778			N/A
4/5/2019	CADHKD	1:30:00 PM	5.8695	5.8732			N/A
4/5/2019	CADHKD	3:30:00 PM	5.8728	5.8676			N/A
4/5/2019	CADHUF	9:30:00 AM	213.28	213.42			N/A
4/5/2019	CADHUF	11:30:00 AM	213.77	213.93			N/A
4/5/2019	CADHUF	1:30:00 PM	213.6	213.78			N/A
4/5/2019	CADHUF	3:30:00 PM	213.33	213.21			N/A
4/5/2019	CADJPY	9:30:00 AM	83.628	83.698			N/A
4/5/2019	CADJPY	11:30:00 AM	83.604	83.67			N/A
4/5/2019	CADJPY	1:30:00 PM	83.528	83.593	100	100	N/A
4/5/2019	CADJPY	3:30:00 PM	83.502	83.337			N/A
4/5/2019	CADJPY.fx	9:30:00 AM	83.662	83.664			N/A
4/5/2019	CADJPY.fx	11:30:00 AM	83.637	83.635			N/A
4/5/2019	CADJPY.fx	1:30:00 PM	83.561	83.559			N/A
4/5/2019	CADJPY.fx	3:30:00 PM	83.511	83.307			N/A
4/5/2019	CADMXN	9:30:00 AM	14.3186	14.3308			N/A
4/5/2019	CADMXN	11:30:00 AM	14.3143	14.3259			N/A
4/5/2019	CADMXN	1:30:00 PM	14.3055	14.3164			N/A
4/5/2019	CADMXN	3:30:00 PM	14.2992	14.2849			N/A
4/5/2019	CADNOK	9:30:00 AM	6.4332	6.4372			N/A
4/5/2019	CADNOK	11:30:00 AM	6.4363	6.4412			N/A
4/5/2019	CADNOK	1:30:00 PM	6.4306	6.4349			N/A
4/5/2019	CADNOK	3:30:00 PM	6.4278	6.4235			N/A
4/5/2019	CADPLN	9:30:00 AM	2.859	2.8609			N/A
4/5/2019	CADPLN	11:30:00 AM	2.8617	2.8636			N/A
4/5/2019	CADPLN	1:30:00 PM	2.8575	2.859			N/A
4/5/2019	CADPLN	3:30:00 PM	2.8535	2.8524			N/A
4/5/2019	CADSEK	9:30:00 AM	6.9374	6.9401			N/A
4/5/2019	CADSEK	11:30:00 AM	6.9473	6.951			N/A
4/5/2019	CADSEK	1:30:00 PM	6.9413	6.9442			N/A
4/5/2019	CADSEK	3:30:00 PM	6.9385	6.9328			N/A

4/5/2019	CADSGD	9:30:00 AM	1.0131	1.0134			N/A
4/5/2019	CADSGD	11:30:00 AM	1.0134	1.0137			N/A
4/5/2019	CADSGD	1:30:00 PM	1.0124	1.0126			N/A
4/5/2019	CADSGD	3:30:00 PM	1.0123	1.0119			N/A
4/5/2019	CADZAR	9:30:00 AM	10.5384	10.5541			N/A
4/5/2019	CADZAR	11:30:00 AM	10.5479	10.5653			N/A
4/5/2019	CADZAR	1:30:00 PM	10.5336	10.5503			N/A
4/5/2019	CADZAR	3:30:00 PM	10.5099	10.4949			N/A
4/5/2019	CHFCZK	9:30:00 AM	22.828	22.844			N/A
4/5/2019	CHFCZK	11:30:00 AM	22.825	22.842			N/A
4/5/2019	CHFCZK	1:30:00 PM	22.797	22.806			N/A
4/5/2019	CHFCZK	3:30:00 PM	22.785	22.782			N/A
4/5/2019	CHFDKK	9:30:00 AM	6.644	6.648			N/A
4/5/2019	CHFDKK	11:30:00 AM	6.647	6.65			N/A
4/5/2019	CHFDKK	1:30:00 PM	6.644	6.647			N/A
4/5/2019	CHFDKK	3:30:00 PM	6.644	6.643			N/A
4/5/2019	CHFDKK.fx	9:30:00 AM	6.6426	6.6484			N/A
4/5/2019	CHFDKK.fx	11:30:00 AM	6.6454	6.6515			N/A
4/5/2019	CHFDKK.fx	1:30:00 PM	6.6426	6.6486			N/A
4/5/2019	CHFDKK.fx	3:30:00 PM	6.6401	6.6446			N/A
4/5/2019	CHFHKD	9:30:00 AM	7.8481	7.8521			N/A
4/5/2019	CHFHKD	11:30:00 AM	7.8474	7.8513			N/A
4/5/2019	CHFHKD	1:30:00 PM	7.8448	7.8481			N/A
4/5/2019	CHFHKD	3:30:00 PM	7.8544	7.8481			N/A
4/5/2019	CHFHUF	9:30:00 AM	284.73	285.06			N/A
4/5/2019	CHFHUF	11:30:00 AM	285.43	285.83			N/A
4/5/2019	CHFHUF	1:30:00 PM	285.39	285.76			N/A
4/5/2019	CHFHUF	3:30:00 PM	285.15	285.37			N/A
4/5/2019	CHFJPY	9:30:00 AM	111.677	111.748			N/A
4/5/2019	CHFJPY	11:30:00 AM	111.672	111.745			N/A
4/5/2019	CHFJPY	1:30:00 PM	111.63	111.699			N/A
4/5/2019	CHFJPY	3:30:00 PM	111.632	111.635			N/A
4/5/2019	CHFJPY.fx	9:30:00 AM	111.71	111.714			N/A
4/5/2019	CHFJPY.fx	11:30:00 AM	111.704	111.712			N/A

4/5/2019	CHFJPY.fx	1:30:00 PM	111.662	111.666			N/A
4/5/2019	CHFJPY.fx	3:30:00 PM	111.651	111.606			N/A
4/5/2019	CHFMXN	9:30:00 AM	19.1206	19.1359			N/A
4/5/2019	CHFMXN	11:30:00 AM	19.1196	19.1349			N/A
4/5/2019	CHFMXN	1:30:00 PM	19.1187	19.1317			N/A
4/5/2019	CHFMXN	3:30:00 PM	19.1238	19.1118			N/A
4/5/2019	CHFNOK	9:30:00 AM	8.5913	8.5976			N/A
4/5/2019	CHFNOK	11:30:00 AM	8.5969	8.6048			N/A
4/5/2019	CHFNOK	1:30:00 PM	8.5934	8.6012			N/A
4/5/2019	CHFNOK	3:30:00 PM	8.5956	8.6007			N/A
4/5/2019	CHFNOK.fx	9:30:00 AM	8.59466	8.59427			N/A
4/5/2019	CHFNOK.fx	11:30:00 AM	8.60021	8.60152			N/A
4/5/2019	CHFNOK.fx	1:30:00 PM	8.59666	8.59778			N/A
4/5/2019	CHFNOK.fx	3:30:00 PM	8.59886	8.59734			N/A
4/5/2019	CHFPLN	9:30:00 AM	3.8179	3.8207			N/A
4/5/2019	CHFPLN	11:30:00 AM	3.8223	3.8254			N/A
4/5/2019	CHFPLN	1:30:00 PM	3.8184	3.8214			N/A
4/5/2019	CHFPLN	3:30:00 PM	3.8169	3.818			N/A
4/5/2019	CHFPLN.fx	9:30:00 AM	3.81543	3.82319			N/A
4/5/2019	CHFPLN.fx	11:30:00 AM	3.8199	3.82776			N/A
4/5/2019	CHFPLN.fx	1:30:00 PM	3.81602	3.82368			N/A
4/5/2019	CHFPLN.fx	3:30:00 PM	3.81334	3.82093			N/A
4/5/2019	CHFSEK	9:30:00 AM	9.2632	9.2668			N/A
4/5/2019	CHFSEK	11:30:00 AM	9.2798	9.2847			N/A
4/5/2019	CHFSEK	1:30:00 PM	9.2762	9.2804			N/A
4/5/2019	CHFSEK	3:30:00 PM	9.2767	9.2764			N/A
4/5/2019	CHFSGD	9:30:00 AM	1.3536	1.354			N/A
4/5/2019	CHFSGD	11:30:00 AM	1.3543	1.3547			N/A
4/5/2019	CHFSGD	1:30:00 PM	1.3536	1.354			N/A
4/5/2019	CHFSGD	3:30:00 PM	1.355	1.3537			N/A
4/5/2019	CHFSGD.fx	9:30:00 AM	1.3537	1.35382			N/A
4/5/2019	CHFSGD.fx	11:30:00 AM	1.35435	1.35451			N/A
4/5/2019	CHFSGD.fx	1:30:00 PM	1.35373	1.35386			N/A
4/5/2019	CHFSGD.fx	3:30:00 PM	1.35463	1.35356			N/A

4/5/2019	CHFZAR	9:30:00 AM	14.077	14.089			N/A
4/5/2019	CHFZAR	11:30:00 AM	14.0932	14.1072			N/A
4/5/2019	CHFZAR	1:30:00 PM	14.0808	14.0946			N/A
4/5/2019	CHFZAR	3:30:00 PM	14.0577	14.0359			N/A
4/5/2019	CZKJPY	9:30:00 AM					N/A
4/5/2019	CZKJPY	11:30:00 AM	4.892	4.895			N/A
4/5/2019	CZKJPY	1:30:00 PM	4.897	4.9			N/A
4/5/2019	CZKJPY	3:30:00 PM	4.902	4.901			N/A
4/5/2019	DAX30.i	9:30:00 AM	12012.51	12011.26			N/A
4/5/2019	DAX30.i	11:30:00 AM	11986.26	11985.26			N/A
4/5/2019	DAX30.i	1:30:00 PM	11991.51	11991.01			N/A
4/5/2019	DAX30.i	3:30:00 PM	12010.26	11998.51			N/A
4/5/2019	DJ30.i	9:30:00 AM					N/A
4/5/2019	DJ30.i	11:30:00 AM					N/A
4/5/2019	DJ30.i	1:30:00 PM					N/A
4/5/2019	DJ30.i	3:30:00 PM					N/A
4/5/2019	DKKJPY	9:30:00 AM					N/A
4/5/2019	DKKJPY	11:30:00 AM					N/A
4/5/2019	DKKJPY	1:30:00 PM					N/A
4/5/2019	DKKJPY	3:30:00 PM	16.82	16.83			N/A
4/5/2019	EURAUD	9:30:00 AM	1.57542	1.57582			N/A
4/5/2019	EURAUD	11:30:00 AM	1.57546	1.57571			N/A
4/5/2019	EURAUD	1:30:00 PM	1.5767	1.57711			N/A
4/5/2019	EURAUD	3:30:00 PM	1.57841	1.57661			N/A
4/5/2019	EURAUD.fx	9:30:00 AM	1.57561	1.57561			N/A
4/5/2019	EURAUD.fx	11:30:00 AM	1.57565	1.57551			N/A
4/5/2019	EURAUD.fx	1:30:00 PM	1.57688	1.57689			N/A
4/5/2019	EURAUD.fx	3:30:00 PM	1.57793	1.57645			N/A
4/5/2019	EURCAD	9:30:00 AM	1.49943	1.50024			N/A
4/5/2019	EURCAD	11:30:00 AM	1.49911	1.4999			N/A
4/5/2019	EURCAD	1:30:00 PM	1.50062	1.50137			N/A
4/5/2019	EURCAD	3:30:00 PM	1.5052	1.50209			N/A
4/5/2019	EURCAD.fx	9:30:00 AM	1.49985	1.49982			N/A
4/5/2019	EURCAD.fx	11:30:00 AM	1.49951	1.49949			N/A

4/5/2019	EURCAD.fx	1:30:00 PM	1.50102	1.50096			N/A
4/5/2019	EURCAD.fx	3:30:00 PM	1.50557	1.50198			N/A
4/5/2019	EURCHF	9:30:00 AM	1.1232	1.12323			N/A
4/5/2019	EURCHF	11:30:00 AM	1.12267	1.12276			N/A
4/5/2019	EURCHF	1:30:00 PM	1.12319	1.1233			N/A
4/5/2019	EURCHF	3:30:00 PM	1.1239	1.12347	100		N/A
4/5/2019	EURCHF.fx	9:30:00 AM	1.12326	1.12319			N/A
4/5/2019	EURCHF.fx	11:30:00 AM	1.12271	1.12269			N/A
4/5/2019	EURCHF.fx	1:30:00 PM	1.12323	1.12324			N/A
4/5/2019	EURCHF.fx	3:30:00 PM	1.12393	1.12353			N/A
4/5/2019	EURCZK	9:30:00 AM	25.628	25.666			N/A
4/5/2019	EURCZK	11:30:00 AM	25.612	25.652			N/A
4/5/2019	EURCZK	1:30:00 PM	25.593	25.625			N/A
4/5/2019	EURCZK	3:30:00 PM	25.582	25.61			N/A
4/5/2019	EURDKK	9:30:00 AM	7.4637	7.4646			N/A
4/5/2019	EURDKK	11:30:00 AM	7.4629	7.4639			N/A
4/5/2019	EURDKK	1:30:00 PM	7.4628	7.464			N/A
4/5/2019	EURDKK	3:30:00 PM	7.4602	7.4614			N/A
4/5/2019	EURGBP	9:30:00 AM	0.85677	0.85666			N/A
4/5/2019	EURGBP	11:30:00 AM	0.8575	0.85743			N/A
4/5/2019	EURGBP	1:30:00 PM	0.85838	0.85834			N/A
4/5/2019	EURGBP	3:30:00 PM	0.85993	0.85922			N/A
4/5/2019	EURGBP.fx	9:30:00 AM	0.8568	0.85662			N/A
4/5/2019	EURGBP.fx	11:30:00 AM	0.85752	0.85739			N/A
4/5/2019	EURGBP.fx	1:30:00 PM	0.85841	0.85829			N/A
4/5/2019	EURGBP.fx	3:30:00 PM	0.85988	0.85932			N/A
4/5/2019	EURHKD	9:30:00 AM	8.815	8.8195			N/A
4/5/2019	EURHKD	11:30:00 AM	8.8097	8.8154			N/A
4/5/2019	EURHKD	1:30:00 PM	8.8111	8.8163			N/A
4/5/2019	EURHKD	3:30:00 PM	8.8236	8.8175			N/A
4/5/2019	EURHKD.fx	9:30:00 AM	8.81775	8.81705			N/A
4/5/2019	EURHKD.fx	11:30:00 AM	8.8123	8.8129			N/A
4/5/2019	EURHKD.fx	1:30:00 PM	8.81361	8.81372			N/A
4/5/2019	EURHKD.fx	3:30:00 PM	8.82562	8.81492			N/A

4/5/2019	EURHUF	9:30:00 AM	319.78	320.44			N/A
4/5/2019	EURHUF	11:30:00 AM	320.4	321.02			N/A
4/5/2019	EURHUF	1:30:00 PM	320.5	321.09			N/A
4/5/2019	EURHUF	3:30:00 PM	320.42	321.13			N/A
4/5/2019	EURHUF.fx	9:30:00 AM	320.038	320.174			N/A
4/5/2019	EURHUF.fx	11:30:00 AM	320.677	320.861			N/A
4/5/2019	EURHUF.fx	1:30:00 PM	320.795	320.966			N/A
4/5/2019	EURHUF.fx	3:30:00 PM	320.673	320.885			N/A
4/5/2019	EURJPY	9:30:00 AM	125.481	125.477			N/A
4/5/2019	EURJPY	11:30:00 AM	125.413	125.42			N/A
4/5/2019	EURJPY	1:30:00 PM	125.423	125.43			N/A
4/5/2019	EURJPY	3:30:00 PM	125.481	125.412			N/A
4/5/2019	EURJPY.fx	9:30:00 AM	125.484	125.473			N/A
4/5/2019	EURJPY.fx	11:30:00 AM	125.414	125.417			N/A
4/5/2019	EURJPY.fx	1:30:00 PM	125.425	125.426			N/A
4/5/2019	EURJPY.fx	3:30:00 PM	125.475	125.413			N/A
4/5/2019	EURMXN	9:30:00 AM	21.4783	21.498			N/A
4/5/2019	EURMXN	11:30:00 AM	21.4667	21.4856			N/A
4/5/2019	EURMXN	1:30:00 PM	21.4771	21.4923			N/A
4/5/2019	EURMXN	3:30:00 PM	21.4927	21.4742			N/A
4/5/2019	EURMXN.fx	9:30:00 AM	21.4861	21.49			N/A
4/5/2019	EURMXN.fx	11:30:00 AM	21.4751	21.4772			N/A
4/5/2019	EURMXN.fx	1:30:00 PM	21.4856	21.4844			N/A
4/5/2019	EURMXN.fx	3:30:00 PM	21.4886	21.4656			N/A
4/5/2019	EURNOK	9:30:00 AM	9.6485	9.6587			N/A
4/5/2019	EURNOK	11:30:00 AM	9.65	9.6624			N/A
4/5/2019	EURNOK	1:30:00 PM	9.6507	9.6631			N/A
4/5/2019	EURNOK	3:30:00 PM	9.6571	9.6672			N/A
4/5/2019	EURNOK.fx	9:30:00 AM	9.65391	9.65331			N/A
4/5/2019	EURNOK.fx	11:30:00 AM	9.65558	9.65674			N/A
4/5/2019	EURNOK.fx	1:30:00 PM	9.65601	9.65739			N/A
4/5/2019	EURNOK.fx	3:30:00 PM	9.66272	9.6623			N/A
4/5/2019	EURNZD	9:30:00 AM	1.66131	1.66203			N/A
4/5/2019	EURNZD	11:30:00 AM	1.66512	1.66573			N/A

4/5/2019	EURNZD	1:30:00 PM	1.66577	1.66653			N/A
4/5/2019	EURNZD	3:30:00 PM	1.6668	1.66571			N/A
4/5/2019	EURNZD.fx	9:30:00 AM	1.66172	1.6616			N/A
4/5/2019	EURNZD.fx	11:30:00 AM	1.66555	1.6653			N/A
4/5/2019	EURNZD.fx	1:30:00 PM	1.66621	1.66612			N/A
4/5/2019	EURNZD.fx	3:30:00 PM	1.6665	1.6657			N/A
4/5/2019	EURPLN	9:30:00 AM	4.2883	4.2915			N/A
4/5/2019	EURPLN	11:30:00 AM	4.2915	4.2947			N/A
4/5/2019	EURPLN	1:30:00 PM	4.2891	4.2923			N/A
4/5/2019	EURPLN	3:30:00 PM	4.2885	4.2909			N/A
4/5/2019	EURPLN.fx	9:30:00 AM	4.28767	4.29232			N/A
4/5/2019	EURPLN.fx	11:30:00 AM	4.29077	4.29542			N/A
4/5/2019	EURPLN.fx	1:30:00 PM	4.28817	4.29292			N/A
4/5/2019	EURPLN.fx	3:30:00 PM	4.28782	4.29183			N/A
4/5/2019	EURRUB	9:30:00 AM					N/A
4/5/2019	EURRUB	11:30:00 AM	73.112	73.554			N/A
4/5/2019	EURRUB	1:30:00 PM	73.09	73.52			N/A
4/5/2019	EURRUB	3:30:00 PM	72.955	73.319			N/A
4/5/2019	EURSEK	9:30:00 AM	10.4061	10.409			N/A
4/5/2019	EURSEK	11:30:00 AM	10.4197	10.4241			N/A
4/5/2019	EURSEK	1:30:00 PM	10.4199	10.4249			N/A
4/5/2019	EURSEK	3:30:00 PM	10.4228	10.4274			N/A
4/5/2019	EURSEK.fx	9:30:00 AM	10.40788	10.40742			N/A
4/5/2019	EURSEK.fx	11:30:00 AM	10.42124	10.42221			N/A
4/5/2019	EURSEK.fx	1:30:00 PM	10.42156	10.42309			N/A
4/5/2019	EURSEK.fx	3:30:00 PM	10.42435	10.42551			N/A
4/5/2019	EURSGD	9:30:00 AM	1.5202	1.521			N/A
4/5/2019	EURSGD	11:30:00 AM	1.5203	1.5211			N/A
4/5/2019	EURSGD	1:30:00 PM	1.5203	1.5211			N/A
4/5/2019	EURSGD	3:30:00 PM	1.5223	1.5213			N/A
4/5/2019	EURSGD.fx	9:30:00 AM	1.52057	1.52063			N/A
4/5/2019	EURSGD.fx	11:30:00 AM	1.52059	1.52069			N/A
4/5/2019	EURSGD.fx	1:30:00 PM	1.52061	1.52067			N/A
4/5/2019	EURSGD.fx	3:30:00 PM	1.52222	1.52095			N/A



4/5/2019	EURUSD	9:30:00 AM	1.12319	1.12322			N/A
4/5/2019	EURUSD	11:30:00 AM	1.12249	1.12265			N/A
4/5/2019	EURUSD	1:30:00 PM	1.12265	1.12274			N/A
4/5/2019	EURUSD	3:30:00 PM	1.12441	1.12288	10	10	N/A
4/5/2019	EURUSD.fx	9:30:00 AM	1.12339	1.12331			N/A
4/5/2019	EURUSD.fx	11:30:00 AM	1.12269	1.12274			N/A
4/5/2019	EURUSD.fx	1:30:00 PM	1.12285	1.12284			N/A
4/5/2019	EURUSD.fx	3:30:00 PM	1.12441	1.12299			N/A
4/5/2019	EURZAR	9:30:00 AM	15.8156	15.8318			N/A
4/5/2019	EURZAR	11:30:00 AM	15.8242	15.8436			N/A
4/5/2019	EURZAR	1:30:00 PM	15.8187	15.8383			N/A
4/5/2019	EURZAR	3:30:00 PM	15.8024	15.7761			N/A
4/5/2019	EURZAR.fx	9:30:00 AM	15.81479	15.83314			N/A
4/5/2019	EURZAR.fx	11:30:00 AM	15.82422	15.84405			N/A
4/5/2019	EURZAR.fx	1:30:00 PM	15.81872	15.83928			N/A
4/5/2019	EURZAR.fx	3:30:00 PM	15.79904	15.77815			N/A
4/5/2019	GBPAUD	9:30:00 AM	1.83972	1.83996			N/A
4/5/2019	GBPAUD	11:30:00 AM	1.83812	1.83831			N/A
4/5/2019	GBPAUD	1:30:00 PM	1.8377	1.83796			N/A
4/5/2019	GBPAUD	3:30:00 PM	1.83648	1.83466			N/A
4/5/2019	GBPAUD.fx	9:30:00 AM	1.84009	1.83966			N/A
4/5/2019	GBPAUD.fx	11:30:00 AM	1.83853	1.83795			N/A
4/5/2019	GBPAUD.fx	1:30:00 PM	1.83807	1.83757			N/A
4/5/2019	GBPAUD.fx	3:30:00 PM	1.83568	1.83438			N/A
4/5/2019	GBPCAD	9:30:00 AM	1.75045	1.75088			N/A
4/5/2019	GBPCAD	11:30:00 AM	1.74865	1.74902			N/A
4/5/2019	GBPCAD	1:30:00 PM	1.7484	1.749			N/A
4/5/2019	GBPCAD	3:30:00 PM	1.75131	1.74799			N/A
4/5/2019	GBPCAD.fx	9:30:00 AM	1.75079	1.75053			N/A
4/5/2019	GBPCAD.fx	11:30:00 AM	1.74901	1.74867			N/A
4/5/2019	GBPCAD.fx	1:30:00 PM	1.74875	1.74861			N/A
4/5/2019	GBPCAD.fx	3:30:00 PM	1.75163	1.74829			N/A
4/5/2019	GBPCHF	9:30:00 AM	1.31104	1.31123			N/A
4/5/2019	GBPCHF	11:30:00 AM	1.30922	1.30944			N/A

4/5/2019	GBPCHF	1:30:00 PM	1.30849	1.30872			N/A
4/5/2019	GBPCHF	3:30:00 PM	1.3073	1.30694			N/A
4/5/2019	GBPCHF.fx	9:30:00 AM	1.31121	1.31105			N/A
4/5/2019	GBPCHF.fx	11:30:00 AM	1.3094	1.30925			N/A
4/5/2019	GBPCHF.fx	1:30:00 PM	1.30867	1.30853			N/A
4/5/2019	GBPCHF.fx	3:30:00 PM	1.30742	1.30685			N/A
4/5/2019	GBPCZK	9:30:00 AM	29.927	29.942			N/A
4/5/2019	GBPCZK	11:30:00 AM	29.885	29.9			N/A
4/5/2019	GBPCZK	1:30:00 PM	29.828	29.838			N/A
4/5/2019	GBPCZK	3:30:00 PM	29.779	29.767			N/A
4/5/2019	GBPDKK	9:30:00 AM	8.709	8.718			N/A
4/5/2019	GBPDKK	11:30:00 AM	8.702	8.711			N/A
4/5/2019	GBPDKK	1:30:00 PM	8.693	8.702			N/A
4/5/2019	GBPDKK	3:30:00 PM	8.683	8.686			N/A
4/5/2019	GBPDKK.fx	9:30:00 AM	8.7075	8.7185			N/A
4/5/2019	GBPDKK.fx	11:30:00 AM	8.6996	8.711			N/A
4/5/2019	GBPDKK.fx	1:30:00 PM	8.6907	8.7023			N/A
4/5/2019	GBPDKK.fx	3:30:00 PM	8.6798	8.6877			N/A
4/5/2019	GBPHKD	9:30:00 AM	10.2882	10.2921			N/A
4/5/2019	GBPHKD	11:30:00 AM	10.2734	10.277			N/A
4/5/2019	GBPHKD	1:30:00 PM	10.2641	10.2679			N/A
4/5/2019	GBPHKD	3:30:00 PM	10.2611	10.2556			N/A
4/5/2019	GBPHUF	9:30:00 AM	373.29	373.61			N/A
4/5/2019	GBPHUF	11:30:00 AM	373.72	374.13			N/A
4/5/2019	GBPHUF	1:30:00 PM	373.44	373.85			N/A
4/5/2019	GBPHUF	3:30:00 PM	372.73	372.84			N/A
4/5/2019	GBPJPY	9:30:00 AM	146.463	146.473			N/A
4/5/2019	GBPJPY	11:30:00 AM	146.254	146.272			N/A
4/5/2019	GBPJPY	1:30:00 PM	146.117	146.132			N/A
4/5/2019	GBPJPY	3:30:00 PM	145.956	145.921			N/A
4/5/2019	GBPJPY.fx	9:30:00 AM	146.482	146.458			N/A
4/5/2019	GBPJPY.fx	11:30:00 AM	146.274	146.254			N/A
4/5/2019	GBPJPY.fx	1:30:00 PM	146.136	146.115			N/A
4/5/2019	GBPJPY.fx	3:30:00 PM	145.948	145.91			N/A

4/5/2019	GBPMXN	9:30:00 AM	25.0698	25.0784			N/A
4/5/2019	GBPMXN	11:30:00 AM	25.035	25.0443			N/A
4/5/2019	GBPMXN	1:30:00 PM	25.0175	25.0267			N/A
4/5/2019	GBPMXN	3:30:00 PM	25.0004	24.9709			N/A
4/5/2019	GBPNOK	9:30:00 AM	11.2635	11.2713			N/A
4/5/2019	GBPNOK	11:30:00 AM	11.2567	11.266			N/A
4/5/2019	GBPNOK	1:30:00 PM	11.2454	11.2553			N/A
4/5/2019	GBPNOK	3:30:00 PM	11.2392	11.2405			N/A
4/5/2019	GBPNOK.fx	9:30:00 AM	11.26834	11.26646			N/A
4/5/2019	GBPNOK.fx	11:30:00 AM	11.26174	11.26136			N/A
4/5/2019	GBPNOK.fx	1:30:00 PM	11.25023	11.25046			N/A
4/5/2019	GBPNOK.fx	3:30:00 PM	11.24154	11.23861			N/A
4/5/2019	GBPNZD	9:30:00 AM	1.93943	1.93968			N/A
4/5/2019	GBPNZD	11:30:00 AM	1.94229	1.94245			N/A
4/5/2019	GBPNZD	1:30:00 PM	1.94087	1.94129			N/A
4/5/2019	GBPNZD	3:30:00 PM	1.93843	1.93743			N/A
4/5/2019	GBPNZD.fx	9:30:00 AM	1.93974	1.93935			N/A
4/5/2019	GBPNZD.fx	11:30:00 AM	1.94264	1.94208			N/A
4/5/2019	GBPNZD.fx	1:30:00 PM	1.94121	1.94095			N/A
4/5/2019	GBPNZD.fx	3:30:00 PM	1.93865	1.93713			N/A
4/5/2019	GBPPLN	9:30:00 AM	5.0073	5.0079			N/A
4/5/2019	GBPPLN	11:30:00 AM	5.0064	5.0072			N/A
4/5/2019	GBPPLN	1:30:00 PM	4.9981	4.9993			N/A
4/5/2019	GBPPLN	3:30:00 PM	4.9913	4.9891			N/A
4/5/2019	GBPPLN.fx	9:30:00 AM	5.00475	5.01004			N/A
4/5/2019	GBPPLN.fx	11:30:00 AM	5.00413	5.0094			N/A
4/5/2019	GBPPLN.fx	1:30:00 PM	4.99591	5.0013			N/A
4/5/2019	GBPPLN.fx	3:30:00 PM	4.98773	4.99289			N/A
4/5/2019	GBPSEK	9:30:00 AM	12.1441	12.1509			N/A
4/5/2019	GBPSEK	11:30:00 AM	12.1507	12.158			N/A
4/5/2019	GBPSEK	1:30:00 PM	12.1389	12.1463			N/A
4/5/2019	GBPSEK	3:30:00 PM	12.1294	12.1271			N/A
4/5/2019	GBPSEK.fx	9:30:00 AM	12.14024	12.15464			N/A
4/5/2019	GBPSEK.fx	11:30:00 AM	12.14716	12.16213			N/A

4/5/2019	GBPSEK.fx	1:30:00 PM	12.13506	12.14979			N/A
4/5/2019	GBPSEK.fx	3:30:00 PM	12.12062	12.13359			N/A
4/5/2019	GBPSGD	9:30:00 AM	1.7748	1.7752			N/A
4/5/2019	GBPSGD	11:30:00 AM	1.7733	1.7737			N/A
4/5/2019	GBPSGD	1:30:00 PM	1.7714	1.7719			N/A
4/5/2019	GBPSGD	3:30:00 PM	1.7706	1.7697			N/A
4/5/2019	GBPSGD.fx	9:30:00 AM	1.77288	1.777			N/A
4/5/2019	GBPSGD.fx	11:30:00 AM	1.77144	1.77551			N/A
4/5/2019	GBPSGD.fx	1:30:00 PM	1.76953	1.77365			N/A
4/5/2019	GBPSGD.fx	3:30:00 PM	1.76821	1.77159			N/A
4/5/2019	GBPUSD	9:30:00 AM	1.31137	1.31117			N/A
4/5/2019	GBPUSD	11:30:00 AM	1.30946	1.30925			N/A
4/5/2019	GBPUSD	1:30:00 PM	1.30825	1.30811			N/A
4/5/2019	GBPUSD	3:30:00 PM	1.30799	1.30641			N/A
4/5/2019	GBPUSD.fx	9:30:00 AM	1.31141	1.31113			N/A
4/5/2019	GBPUSD.fx	11:30:00 AM	1.30951	1.30921			N/A
4/5/2019	GBPUSD.fx	1:30:00 PM	1.30828	1.30806			N/A
4/5/2019	GBPUSD.fx	3:30:00 PM	1.30786	1.3064			N/A
4/5/2019	GBPZAR	9:30:00 AM	18.4578	18.4807			N/A
4/5/2019	GBPZAR	11:30:00 AM	18.4538	18.4779			N/A
4/5/2019	GBPZAR	1:30:00 PM	18.4268	18.4541			N/A
4/5/2019	GBPZAR	3:30:00 PM	18.3773	18.3582			N/A
4/5/2019	GBPZAR.fx	9:30:00 AM	18.4643	18.4745			N/A
4/5/2019	GBPZAR.fx	11:30:00 AM	18.4611	18.4715			N/A
4/5/2019	GBPZAR.fx	1:30:00 PM	18.4339	18.4472			N/A
4/5/2019	GBPZAR.fx	3:30:00 PM	18.3722	18.3531			N/A
4/5/2019	GOLD	9:30:00 AM	1287.71	1287.69			N/A
4/5/2019	GOLD	11:30:00 AM	1289.06	1289.45			N/A
4/5/2019	GOLD	1:30:00 PM	1289.96	1290.12			N/A
4/5/2019	GOLD	3:30:00 PM	1291.3	1288.65			N/A
4/5/2019	HKDJPY	9:30:00 AM					N/A
4/5/2019	HKDJPY	11:30:00 AM					N/A
4/5/2019	HKDJPY	1:30:00 PM					N/A
4/5/2019	HKDJPY	3:30:00 PM	14.22	14.22			N/A

4/5/2019	HKDJPY.fx	9:30:00 AM	14.226	14.234			N/A
4/5/2019	HKDJPY.fx	11:30:00 AM	14.227	14.234			N/A
4/5/2019	HKDJPY.fx	1:30:00 PM	14.226	14.233			N/A
4/5/2019	HKDJPY.fx	3:30:00 PM	14.224	14.218			N/A
4/5/2019	HUFJPY	9:30:00 AM	0.3922	0.3925			N/A
4/5/2019	HUFJPY	11:30:00 AM	0.3913	0.3916			N/A
4/5/2019	HUFJPY	1:30:00 PM	0.3911	0.3914			N/A
4/5/2019	HUFJPY	3:30:00 PM	0.3914	0.3917			N/A
4/5/2019	JP225.i	9:30:00 AM					N/A
4/5/2019	JP225.i	11:30:00 AM	21772.55	21790.05			N/A
4/5/2019	JP225.i	1:30:00 PM					N/A
4/5/2019	JP225.i	3:30:00 PM	21835.05	21809.22			N/A
4/5/2019	MXNJPY	9:30:00 AM	5.84	5.85			N/A
4/5/2019	MXNJPY	11:30:00 AM	5.84	5.85			N/A
4/5/2019	MXNJPY	1:30:00 PM	5.84	5.85			N/A
4/5/2019	MXNJPY	3:30:00 PM	5.84	5.84			N/A
4/5/2019	NASDAQ.i	9:30:00 AM					N/A
4/5/2019	NASDAQ.i	11:30:00 AM					N/A
4/5/2019	NASDAQ.i	1:30:00 PM					N/A
4/5/2019	NASDAQ.i	3:30:00 PM					N/A
4/5/2019	NOKJPY	9:30:00 AM	12.99	13.02			N/A
4/5/2019	NOKJPY	11:30:00 AM	12.98	13.01			N/A
4/5/2019	NOKJPY	1:30:00 PM	12.98	13.01			N/A
4/5/2019	NOKJPY	3:30:00 PM	12.97	13			N/A
4/5/2019	NOKJPY.fx	9:30:00 AM	12.996	13.002			N/A
4/5/2019	NOKJPY.fx	11:30:00 AM	12.984	12.992			N/A
4/5/2019	NOKJPY.fx	1:30:00 PM	12.985	12.993			N/A
4/5/2019	NOKJPY.fx	3:30:00 PM	12.981	12.983			N/A
4/5/2019	NZDCAD	9:30:00 AM	0.90226	0.90297			N/A
4/5/2019	NZDCAD	11:30:00 AM	0.90007	0.90069			N/A
4/5/2019	NZDCAD	1:30:00 PM	0.90055	0.90123			N/A
4/5/2019	NZDCAD	3:30:00 PM	0.90327	0.90207			N/A
4/5/2019	NZDCAD.fx	9:30:00 AM	0.90259	0.90264			N/A
4/5/2019	NZDCAD.fx	11:30:00 AM	0.9004	0.90036			N/A

4/5/2019	NZDCAD.fx	1:30:00 PM	0.90086	0.9009			N/A
4/5/2019	NZDCAD.fx	3:30:00 PM	0.90354	0.90213			N/A
4/5/2019	NZDCHF	9:30:00 AM	0.67564	0.67632			N/A
4/5/2019	NZDCHF	11:30:00 AM	0.67378	0.67443			N/A
4/5/2019	NZDCHF	1:30:00 PM	0.67381	0.67449			N/A
4/5/2019	NZDCHF	3:30:00 PM	0.67441	0.67461			N/A
4/5/2019	NZDCHF.fx	9:30:00 AM	0.67598	0.67597			N/A
4/5/2019	NZDCHF.fx	11:30:00 AM	0.67413	0.67407			N/A
4/5/2019	NZDCHF.fx	1:30:00 PM	0.67415	0.67414			N/A
4/5/2019	NZDCHF.fx	3:30:00 PM	0.67474	0.67436			N/A
4/5/2019	NZDCZK	9:30:00 AM	15.428	15.439			N/A
4/5/2019	NZDCZK	11:30:00 AM	15.384	15.395			N/A
4/5/2019	NZDCZK	1:30:00 PM	15.365	15.374			N/A
4/5/2019	NZDCZK	3:30:00 PM	15.365	15.363			N/A
4/5/2019	NZDDKK	9:30:00 AM					N/A
4/5/2019	NZDDKK	11:30:00 AM					N/A
4/5/2019	NZDDKK	1:30:00 PM	4.478	4.481			N/A
4/5/2019	NZDDKK	3:30:00 PM	4.479	4.479			N/A
4/5/2019	NZDHKD	9:30:00 AM	5.3031	5.3059			N/A
4/5/2019	NZDHKD	11:30:00 AM	5.2886	5.2914			N/A
4/5/2019	NZDHKD	1:30:00 PM	5.287	5.2894			N/A
4/5/2019	NZDHKD	3:30:00 PM	5.2958	5.2891			N/A
4/5/2019	NZDHUF	9:30:00 AM	192.4	192.67			N/A
4/5/2019	NZDHUF	11:30:00 AM	192.37	192.65			N/A
4/5/2019	NZDHUF	1:30:00 PM	192.34	192.61			N/A
4/5/2019	NZDHUF	3:30:00 PM	192.29	192.42			N/A
4/5/2019	NZDJPY	9:30:00 AM	75.483	75.55			N/A
4/5/2019	NZDJPY	11:30:00 AM	75.273	75.333			N/A
4/5/2019	NZDJPY	1:30:00 PM	75.245	75.312			N/A
4/5/2019	NZDJPY	3:30:00 PM	75.305	75.296			N/A
4/5/2019	NZDJPY.fx	9:30:00 AM	75.514	75.517			N/A
4/5/2019	NZDJPY.fx	11:30:00 AM	75.304	75.301			N/A
4/5/2019	NZDJPY.fx	1:30:00 PM	75.276	75.279			N/A
4/5/2019	NZDJPY.fx	3:30:00 PM	75.324	75.268			N/A

4/5/2019	NZDMXN	9:30:00 AM	12.924	12.929			N/A
4/5/2019	NZDMXN	11:30:00 AM	12.8876	12.8934			N/A
4/5/2019	NZDMXN	1:30:00 PM	12.8866	12.8916			N/A
4/5/2019	NZDMXN	3:30:00 PM	12.8974	12.8843			N/A
4/5/2019	NZDNOK	9:30:00 AM	5.806	5.8077			N/A
4/5/2019	NZDNOK	11:30:00 AM	5.7944	5.7979			N/A
4/5/2019	NZDNOK	1:30:00 PM	5.7921	5.7955			N/A
4/5/2019	NZDNOK	3:30:00 PM	5.7955	5.7951			N/A
4/5/2019	NZDPLN	9:30:00 AM	2.5801	2.5815			N/A
4/5/2019	NZDPLN	11:30:00 AM	2.5767	2.578			N/A
4/5/2019	NZDPLN	1:30:00 PM	2.5738	2.5749			N/A
4/5/2019	NZDPLN	3:30:00 PM	2.573	2.5724			N/A
4/5/2019	NZDSEK	9:30:00 AM	6.2577	6.264			N/A
4/5/2019	NZDSEK	11:30:00 AM	6.2522	6.2589			N/A
4/5/2019	NZDSEK	1:30:00 PM	6.2501	6.256			N/A
4/5/2019	NZDSEK	3:30:00 PM	6.2538	6.2556			N/A
4/5/2019	NZDSGD	9:30:00 AM	0.9149	0.9155			N/A
4/5/2019	NZDSGD	11:30:00 AM	0.9129	0.9133			N/A
4/5/2019	NZDSGD	1:30:00 PM	0.9124	0.913			N/A
4/5/2019	NZDSGD	3:30:00 PM	0.9138	0.9131			N/A
4/5/2019	NZDSGD.fx	9:30:00 AM	0.91482	0.9154			N/A
4/5/2019	NZDSGD.fx	11:30:00 AM	0.91288	0.91329			N/A
4/5/2019	NZDSGD.fx	1:30:00 PM	0.91238	0.91293			N/A
4/5/2019	NZDSGD.fx	3:30:00 PM	0.91361	0.91309			N/A
4/5/2019	NZDUSD	9:30:00 AM	0.67597	0.67606			N/A
4/5/2019	NZDUSD	11:30:00 AM	0.67404	0.67408			N/A
4/5/2019	NZDUSD	1:30:00 PM	0.67384	0.67393			N/A
4/5/2019	NZDUSD	3:30:00 PM	0.67499	0.67397			N/A
4/5/2019	NZDUSD.fx	9:30:00 AM	0.67605	0.67608			N/A
4/5/2019	NZDUSD.fx	11:30:00 AM	0.67412	0.67409			N/A
4/5/2019	NZDUSD.fx	1:30:00 PM	0.67391	0.67395			N/A
4/5/2019	NZDUSD.fx	3:30:00 PM	0.675	0.67398			N/A
4/5/2019	NZDZAR	9:30:00 AM	9.5092	9.5248			N/A
4/5/2019	NZDZAR	11:30:00 AM	9.4941	9.5107			N/A

4/5/2019	NZDZAR	1:30:00 PM	9.4862	9.503			N/A
4/5/2019	NZDZAR	3:30:00 PM	9.4749	9.4677			N/A
4/5/2019	SEKJPY	9:30:00 AM	12.06	12.07			N/A
4/5/2019	SEKJPY	11:30:00 AM	12.03	12.04			N/A
4/5/2019	SEKJPY	1:30:00 PM	12.04	12.04			N/A
4/5/2019	SEKJPY	3:30:00 PM	12.03	12.04			N/A
4/5/2019	SEKJPY.fx	9:30:00 AM	12.048	12.066			N/A
4/5/2019	SEKJPY.fx	11:30:00 AM	12.024	12.043			N/A
4/5/2019	SEKJPY.fx	1:30:00 PM	12.025	12.043			N/A
4/5/2019	SEKJPY.fx	3:30:00 PM	12.026	12.039			N/A
4/5/2019	SGDJPY	9:30:00 AM	82.49	82.52			N/A
4/5/2019	SGDJPY	11:30:00 AM	82.46	82.47			N/A
4/5/2019	SGDJPY	1:30:00 PM	82.49	82.48			N/A
4/5/2019	SGDJPY	3:30:00 PM	82.44	82.4			N/A
4/5/2019	SILVER	9:30:00 AM	14.93	15.31			N/A
4/5/2019	SILVER	11:30:00 AM	14.96	15.35			N/A
4/5/2019	SILVER	1:30:00 PM	15	15.38			N/A
4/5/2019	SILVER	3:30:00 PM	14.96	15.32			N/A
4/5/2019	SPX500.i	9:30:00 AM	2884.25	2885.3			N/A
4/5/2019	SPX500.i	11:30:00 AM	2883.5	2884.55			N/A
4/5/2019	SPX500.i	1:30:00 PM	2883.5	2884.55			N/A
4/5/2019	SPX500.i	3:30:00 PM	2889.23	2883.6			N/A
4/5/2019	UK100.i	9:30:00 AM	7412.56	7413.98			N/A
4/5/2019	UK100.i	11:30:00 AM	7413.31	7413.39			N/A
4/5/2019	UK100.i	1:30:00 PM	7421.48	7422.64			N/A
4/5/2019	UK100.i	3:30:00 PM	7432.14	7425.06			N/A
4/5/2019	USDCAD	9:30:00 AM	1.33511	1.33517			N/A
4/5/2019	USDCAD	11:30:00 AM	1.33565	1.33564			N/A
4/5/2019	USDCAD	1:30:00 PM	1.33677	1.33686			N/A
4/5/2019	USDCAD	3:30:00 PM	1.34021	1.33608			N/A
4/5/2019	USDCAD.fx	9:30:00 AM	1.33512	1.33514			N/A
4/5/2019	USDCAD.fx	11:30:00 AM	1.33566	1.33562			N/A
4/5/2019	USDCAD.fx	1:30:00 PM	1.3368	1.33683			N/A
4/5/2019	USDCAD.fx	3:30:00 PM	1.3402	1.33617			N/A



4/5/2019	USDCHF	9:30:00 AM	0.99982	0.99996			N/A
4/5/2019	USDCHF	11:30:00 AM	0.99997	1.00007			N/A
4/5/2019	USDCHF	1:30:00 PM	1.00028	1.00038			N/A
4/5/2019	USDCHF	3:30:00 PM	1.00054	0.99938			N/A
4/5/2019	USDCHF.fx	9:30:00 AM	0.99986	0.9999			N/A
4/5/2019	USDCHF.fx	11:30:00 AM	0.99999	1			N/A
4/5/2019	USDCHF.fx	1:30:00 PM	1.00032	1.00032			N/A
4/5/2019	USDCHF.fx	3:30:00 PM	1.00057	0.99935			N/A
4/5/2019	USDCZK	9:30:00 AM	22.838	22.86			N/A
4/5/2019	USDCZK	11:30:00 AM	22.838	22.861			N/A
4/5/2019	USDCZK	1:30:00 PM	22.816	22.833			N/A
4/5/2019	USDCZK	3:30:00 PM	22.802	22.797			N/A
4/5/2019	USDCZK.fx	9:30:00 AM	22.8453	22.8529			N/A
4/5/2019	USDCZK.fx	11:30:00 AM	22.8465	22.8515			N/A
4/5/2019	USDCZK.fx	1:30:00 PM	22.8246	22.8246			N/A
4/5/2019	USDCZK.fx	3:30:00 PM	22.8067	22.7994			N/A
4/5/2019	USDDKK	9:30:00 AM	6.6441	6.6473			N/A
4/5/2019	USDDKK	11:30:00 AM	6.6471	6.6514			N/A
4/5/2019	USDDKK	1:30:00 PM	6.6469	6.6507			N/A
4/5/2019	USDDKK	3:30:00 PM	6.6465	6.6424			N/A
4/5/2019	USDDKK.fx	9:30:00 AM	6.64434	6.64531			N/A
4/5/2019	USDDKK.fx	11:30:00 AM	6.64768	6.64929			N/A
4/5/2019	USDDKK.fx	1:30:00 PM	6.64735	6.64866			N/A
4/5/2019	USDDKK.fx	3:30:00 PM	6.64664	6.64026			N/A
4/5/2019	USDHKD	9:30:00 AM	7.8488	7.8492			N/A
4/5/2019	USDHKD	11:30:00 AM	7.8486	7.8487			N/A
4/5/2019	USDHKD	1:30:00 PM					N/A
4/5/2019	USDHKD	3:30:00 PM	7.8494	7.8498			N/A
4/5/2019	USDHKD.fx	9:30:00 AM	7.84883	7.8494			N/A
4/5/2019	USDHKD.fx	11:30:00 AM	7.84905	7.8496			N/A
4/5/2019	USDHKD.fx	1:30:00 PM					N/A
4/5/2019	USDHKD.fx	3:30:00 PM	7.84927	7.84984			N/A
4/5/2019	USDHUF	9:30:00 AM	284.75	285.15			N/A
4/5/2019	USDHUF	11:30:00 AM	285.46	285.94			N/A

4/5/2019	USDHUF	1:30:00 PM	285.52	285.99			N/A
4/5/2019	USDHUF	3:30:00 PM	285.4	285.49			N/A
4/5/2019	USDHUF.fx	9:30:00 AM	284.928	284.956			N/A
4/5/2019	USDHUF.fx	11:30:00 AM	285.666	285.727			N/A
4/5/2019	USDHUF.fx	1:30:00 PM	285.731	285.797			N/A
4/5/2019	USDHUF.fx	3:30:00 PM	285.584	285.329			N/A
4/5/2019	USDINR	9:30:00 AM	64.17	74.14			N/A
4/5/2019	USDINR	11:30:00 AM	64.32	74.23			N/A
4/5/2019	USDINR	1:30:00 PM					N/A
4/5/2019	USDINR	3:30:00 PM					N/A
4/5/2019	USDJPY	9:30:00 AM	111.693	111.708			N/A
4/5/2019	USDJPY	11:30:00 AM	111.705	111.714			N/A
4/5/2019	USDJPY	1:30:00 PM	111.698	111.706			N/A
4/5/2019	USDJPY	3:30:00 PM	111.68	111.581	10000	10000	N/A
4/5/2019	USDJPY.fx	9:30:00 AM	111.698	111.702			N/A
4/5/2019	USDJPY.fx	11:30:00 AM	111.71	111.707			N/A
4/5/2019	USDJPY.fx	1:30:00 PM	111.703	111.7			N/A
4/5/2019	USDJPY.fx	3:30:00 PM	111.684	111.58			N/A
4/5/2019	USDMXN	9:30:00 AM	19.125	19.131			N/A
4/5/2019	USDMXN	11:30:00 AM	19.126	19.133			N/A
4/5/2019	USDMXN	1:30:00 PM	19.131	19.137			N/A
4/5/2019	USDMXN	3:30:00 PM	19.133	19.108			N/A
4/5/2019	USDMXN.f	9:30:00 AM	19.128	19.1285			N/A
4/5/2019	USDMXN.f	11:30:00 AM	19.1297	19.129			N/A
4/5/2019	USDMXN.f	1:30:00 PM	19.1344	19.1334			N/A
4/5/2019	USDMXN.f	3:30:00 PM	19.1344	19.1055			N/A
4/5/2019	USDNOK	9:30:00 AM	8.5904	8.597			N/A
4/5/2019	USDNOK	11:30:00 AM	8.5967	8.6055			N/A
4/5/2019	USDNOK	1:30:00 PM	8.5962	8.6049			N/A
4/5/2019	USDNOK	3:30:00 PM	8.6007	8.5972			N/A
4/5/2019	USDNOK.fx	9:30:00 AM	8.59412	8.59248			N/A
4/5/2019	USDNOK.fx	11:30:00 AM	8.6004	8.60111			N/A
4/5/2019	USDNOK.fx	1:30:00 PM	8.59983	8.60051			N/A
4/5/2019	USDNOK.fx	3:30:00 PM	8.60454	8.59435			N/A

4/5/2019	USDPLN	9:30:00 AM	3.8183	3.8194			N/A
4/5/2019	USDPLN	11:30:00 AM	3.8229	3.8247			N/A
4/5/2019	USDPLN	1:30:00 PM	3.8204	3.8218			N/A
4/5/2019	USDPLN	3:30:00 PM	3.8193	3.8151			N/A
4/5/2019	USDPLN.fx	9:30:00 AM	3.8174	3.82016			N/A
4/5/2019	USDPLN.fx	11:30:00 AM	3.82214	3.82551			N/A
4/5/2019	USDPLN.fx	1:30:00 PM	3.81954	3.82266			N/A
4/5/2019	USDPLN.fx	3:30:00 PM	3.8184	3.81728			N/A
4/5/2019	USDRUB	9:30:00 AM					N/A
4/5/2019	USDRUB	11:30:00 AM	65.234	65.627			N/A
4/5/2019	USDRUB	1:30:00 PM	65.207	65.592			N/A
4/5/2019	USDRUB	3:30:00 PM	65.09	65.379			N/A
4/5/2019	USDSEK	9:30:00 AM	9.2623	9.266			N/A
4/5/2019	USDSEK	11:30:00 AM	9.2801	9.2845			N/A
4/5/2019	USDSEK	1:30:00 PM	9.2796	9.284			N/A
4/5/2019	USDSEK	3:30:00 PM	9.2808	9.2721			N/A
4/5/2019	USDSEK.fx	9:30:00 AM	9.26466	9.26439			N/A
4/5/2019	USDSEK.fx	11:30:00 AM	9.2826	9.28293			N/A
4/5/2019	USDSEK.fx	1:30:00 PM	9.2821	9.28223			N/A
4/5/2019	USDSEK.fx	3:30:00 PM	9.28329	9.27287			N/A
4/5/2019	USDSGD	9:30:00 AM	1.3534	1.3538			N/A
4/5/2019	USDSGD	11:30:00 AM	1.3543	1.3547			N/A
4/5/2019	USDSGD	1:30:00 PM	1.3541	1.3545			N/A
4/5/2019	USDSGD	3:30:00 PM	1.3542	1.3542			N/A
4/5/2019	USDSGD.fx	9:30:00 AM	1.35341	1.3538			N/A
4/5/2019	USDSGD.fx	11:30:00 AM	1.35417	1.35469			N/A
4/5/2019	USDSGD.fx	1:30:00 PM	1.354	1.3545			N/A
4/5/2019	USDSGD.fx	3:30:00 PM	1.35414	1.35422			N/A
4/5/2019	USDZAR	9:30:00 AM	14.0782	14.0941			N/A
4/5/2019	USDZAR	11:30:00 AM	14.0943	14.112			N/A
4/5/2019	USDZAR	1:30:00 PM	14.0873	14.1055			N/A
4/5/2019	USDZAR	3:30:00 PM	14.0532	14.0439			N/A
4/5/2019	USDZAR.fx	9:30:00 AM	14.08327	14.08886			N/A
4/5/2019	USDZAR.fx	11:30:00 AM	14.10027	14.10642			N/A

4/5/2019	USDZAR.fx	1:30:00 PM	14.09306	14.09962			N/A
4/5/2019	USDZAR.fx	3:30:00 PM	14.05096	14.0393			N/A
4/5/2019	XAUUSD	9:30:00 AM	1287.7	1287.68			N/A
4/5/2019	XAUUSD	11:30:00 AM	1289.05	1289.37			N/A
4/5/2019	XAUUSD	1:30:00 PM	1289.95	1290.07			N/A
4/5/2019	XAUUSD	3:30:00 PM	1291.09	1288.56			N/A
4/5/2019	ZARJPY	9:30:00 AM					N/A
4/5/2019	ZARJPY	11:30:00 AM					N/A
4/5/2019	ZARJPY	1:30:00 PM	7.91	7.93			N/A
4/5/2019	ZARJPY	3:30:00 PM	7.94	7.95			N/A
4/5/2019	ZARJPY.fx	9:30:00 AM	7.929	7.932			N/A
4/5/2019	ZARJPY.fx	11:30:00 AM	7.918	7.922			N/A
4/5/2019	ZARJPY.fx	1:30:00 PM	7.922	7.926			N/A
4/5/2019	ZARJPY.fx	3:30:00 PM	7.952	7.943			N/A
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4/8/2019	#Bitcoin	11:30:00 AM	5218.86	5271.21			N/A
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4/8/2019	#CL.f	11:30:00 AM	63.472	63.474			N/A
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4/8/2019	#KO	1:30:00 PM					N/A
4/8/2019	#KO	3:30:00 PM					N/A
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4/8/2019	#Litecoin	1:30:00 PM	88.63	90.43			N/A
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4/8/2019	#NG.f	11:30:00 AM	2.674	2.694			N/A
4/8/2019	#NG.f	1:30:00 PM	2.668	2.687			N/A
4/8/2019	#NG.f	3:30:00 PM	2.666	2.683			N/A
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4/8/2019	#ORCL	1:30:00 PM					N/A
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4/8/2019	#PEP	3:30:00 PM					N/A
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4/8/2019	#T	3:30:00 PM					N/A
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4/8/2019	#TEVA	3:30:00 PM					N/A
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4/8/2019	#TRI	3:30:00 PM					N/A
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4/8/2019	#TSCO	11:30:00 AM					N/A
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4/8/2019	#TSCO	3:30:00 PM					N/A
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4/8/2019	#TWTR	3:30:00 PM					N/A
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4/8/2019	#WFC	1:30:00 PM					N/A
4/8/2019	#WFC	3:30:00 PM					N/A



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4/8/2019	#YHOO	1:30:00 PM					N/A
4/8/2019	#YHOO	3:30:00 PM					N/A
4/8/2019	#ZNGA	9:30:00 AM					N/A
4/8/2019	#ZNGA	11:30:00 AM					N/A
4/8/2019	#ZNGA	1:30:00 PM					N/A
4/8/2019	#ZNGA	3:30:00 PM					N/A
4/8/2019	AUDCAD	9:30:00 AM	0.94934	0.94989			N/A
4/8/2019	AUDCAD	11:30:00 AM	0.95017	0.95087			N/A
4/8/2019	AUDCAD	1:30:00 PM	0.94944	0.95021			N/A
4/8/2019	AUDCAD	3:30:00 PM	0.94977	0.95028			N/A
4/8/2019	AUDCAD.fx	9:30:00 AM	0.94968	0.94955			N/A
4/8/2019	AUDCAD.fx	11:30:00 AM	0.95052	0.95053			N/A
4/8/2019	AUDCAD.fx	1:30:00 PM	0.94976	0.94987			N/A
4/8/2019	AUDCAD.fx	3:30:00 PM	0.95008	0.94994			N/A
4/8/2019	AUDCHF	9:30:00 AM	0.70853	0.70919			N/A
4/8/2019	AUDCHF	11:30:00 AM	0.70961	0.71027			N/A
4/8/2019	AUDCHF	1:30:00 PM	0.7096	0.71032			N/A
4/8/2019	AUDCHF	3:30:00 PM	0.71025	0.71087			N/A
4/8/2019	AUDCHF.fx	9:30:00 AM	0.70887	0.70884			N/A
4/8/2019	AUDCHF.fx	11:30:00 AM	0.70996	0.70992			N/A
4/8/2019	AUDCHF.fx	1:30:00 PM	0.70994	0.70997			N/A
4/8/2019	AUDCHF.fx	3:30:00 PM	0.71059	0.71053			N/A
4/8/2019	AUDCZK	9:30:00 AM	16.186	16.2			N/A
4/8/2019	AUDCZK	11:30:00 AM	16.192	16.208			N/A

4/8/2019	AUDCZK	1:30:00 PM	16.178	16.194			N/A
4/8/2019	AUDCZK	3:30:00 PM	16.173	16.191			N/A
4/8/2019	AUDDKK	9:30:00 AM	4.7156	4.7198			N/A
4/8/2019	AUDDKK	11:30:00 AM	4.719	4.7233			N/A
4/8/2019	AUDDKK	1:30:00 PM	4.7138	4.7186			N/A
4/8/2019	AUDDKK	3:30:00 PM	4.7153	4.7197			N/A
4/8/2019	AUDHKD	9:30:00 AM	5.5654	5.5693			N/A
4/8/2019	AUDHKD	11:30:00 AM	5.5734	5.5767			N/A
4/8/2019	AUDHKD	1:30:00 PM	5.5689	5.5726			N/A
4/8/2019	AUDHKD	3:30:00 PM	5.5727	5.5759			N/A
4/8/2019	AUDHUF	9:30:00 AM	202.75	202.98			N/A
4/8/2019	AUDHUF	11:30:00 AM	203.23	203.44			N/A
4/8/2019	AUDHUF	1:30:00 PM	202.94	203.14			N/A
4/8/2019	AUDHUF	3:30:00 PM	203	203.24			N/A
4/8/2019	AUDJPY	9:30:00 AM	79.026	79.087			N/A
4/8/2019	AUDJPY	11:30:00 AM	79.168	79.225			N/A
4/8/2019	AUDJPY	1:30:00 PM	79.116	79.185			N/A
4/8/2019	AUDJPY	3:30:00 PM	79.162	79.222			N/A
4/8/2019	AUDJPY.fx	9:30:00 AM	79.059	79.052			N/A
4/8/2019	AUDJPY.fx	11:30:00 AM	79.201	79.19			N/A
4/8/2019	AUDJPY.fx	1:30:00 PM	79.15	79.15			N/A
4/8/2019	AUDJPY.fx	3:30:00 PM	79.196	79.187			N/A
4/8/2019	AUDMXN	9:30:00 AM	13.5424	13.5516			N/A
4/8/2019	AUDMXN	11:30:00 AM	13.5593	13.5663			N/A
4/8/2019	AUDMXN	1:30:00 PM	13.5463	13.5567			N/A
4/8/2019	AUDMXN	3:30:00 PM	13.5312	13.5395			N/A
4/8/2019	AUDNOK	9:30:00 AM	6.1028	6.1073			N/A
4/8/2019	AUDNOK	11:30:00 AM	6.0923	6.0965			N/A
4/8/2019	AUDNOK	1:30:00 PM	6.0893	6.0947			N/A
4/8/2019	AUDNOK	3:30:00 PM	6.0814	6.0856			N/A
4/8/2019	AUDNOK.fx	9:30:00 AM	6.1041	6.1059			N/A
4/8/2019	AUDNOK.fx	11:30:00 AM	6.0936	6.0949			N/A
4/8/2019	AUDNOK.fx	1:30:00 PM	6.0908	6.0931			N/A
4/8/2019	AUDNOK.fx	3:30:00 PM	6.083	6.084			N/A

4/8/2019	AUDNZD	9:30:00 AM	1.05366	1.05448			N/A
4/8/2019	AUDNZD	11:30:00 AM	1.05443	1.05526			N/A
4/8/2019	AUDNZD	1:30:00 PM	1.05392	1.05486			N/A
4/8/2019	AUDNZD	3:30:00 PM	1.05496	1.05569			N/A
4/8/2019	AUDNZD.fx	9:30:00 AM	1.05408	1.05404			N/A
4/8/2019	AUDNZD.fx	11:30:00 AM	1.05485	1.05484			N/A
4/8/2019	AUDNZD.fx	1:30:00 PM	1.05434	1.05442			N/A
4/8/2019	AUDNZD.fx	3:30:00 PM	1.05539	1.05525			N/A
4/8/2019	AUDPLN	9:30:00 AM	2.7112	2.7137			N/A
4/8/2019	AUDPLN	11:30:00 AM	2.7122	2.715			N/A
4/8/2019	AUDPLN	1:30:00 PM	2.7073	2.7102			N/A
4/8/2019	AUDPLN	3:30:00 PM	2.7083	2.7114			N/A
4/8/2019	AUDSEK	9:30:00 AM	6.5955	6.5968			N/A
4/8/2019	AUDSEK	11:30:00 AM	6.594	6.5962			N/A
4/8/2019	AUDSEK	1:30:00 PM	6.5953	6.5985			N/A
4/8/2019	AUDSEK	3:30:00 PM	6.5877	6.5907			N/A
4/8/2019	AUDSEK.fx	9:30:00 AM	6.5907	6.6015			N/A
4/8/2019	AUDSEK.fx	11:30:00 AM	6.5895	6.6006			N/A
4/8/2019	AUDSEK.fx	1:30:00 PM	6.5905	6.6029			N/A
4/8/2019	AUDSEK.fx	3:30:00 PM	6.583	6.595			N/A
4/8/2019	AUDSGD	9:30:00 AM	0.9621	0.9624			N/A
4/8/2019	AUDSGD	11:30:00 AM	0.9634	0.9635			N/A
4/8/2019	AUDSGD	1:30:00 PM	0.9626	0.9629			N/A
4/8/2019	AUDSGD	3:30:00 PM	0.9629	0.9631			N/A
4/8/2019	AUDSGD.fx	9:30:00 AM	0.96224	0.96227			N/A
4/8/2019	AUDSGD.fx	11:30:00 AM	0.96349	0.96344			N/A
4/8/2019	AUDSGD.fx	1:30:00 PM	0.96267	0.96285			N/A
4/8/2019	AUDSGD.fx	3:30:00 PM	0.96298	0.96297			N/A
4/8/2019	AUDUSD	9:30:00 AM	0.70947	0.70947			N/A
4/8/2019	AUDUSD	11:30:00 AM	0.71046	0.71045			N/A
4/8/2019	AUDUSD	1:30:00 PM	0.71001	0.71018			N/A
4/8/2019	AUDUSD	3:30:00 PM	0.71049	0.71055			N/A
4/8/2019	AUDUSD.fx	9:30:00 AM	0.70952	0.70941			N/A
4/8/2019	AUDUSD.fx	11:30:00 AM	0.71051	0.7104			N/A

4/8/2019	AUDUSD.fx	1:30:00 PM	0.71006	0.71012			N/A
4/8/2019	AUDUSD.fx	3:30:00 PM	0.71054	0.71049			N/A
4/8/2019	AUDZAR	9:30:00 AM	10.0238	10.0375			N/A
4/8/2019	AUDZAR	11:30:00 AM	10.0321	10.0404			N/A
4/8/2019	AUDZAR	1:30:00 PM	10.0258	10.0378			N/A
4/8/2019	AUDZAR	3:30:00 PM	10.0041	10.0186			N/A
4/8/2019	AUS200.i	9:30:00 AM					N/A
4/8/2019	AUS200.i	11:30:00 AM	6216.97	6220.67			N/A
4/8/2019	AUS200.i	1:30:00 PM	6223.27	6226.47			N/A
4/8/2019	AUS200.i	3:30:00 PM	6226.97	6230.47			N/A
4/8/2019	BCHUSD	9:30:00 AM	308.12	320.12			N/A
4/8/2019	BCHUSD	11:30:00 AM	309.63	321.15			N/A
4/8/2019	BCHUSD	1:30:00 PM	306.1	317.17			N/A
4/8/2019	BCHUSD	3:30:00 PM	302.33	313.48			N/A
4/8/2019	CADCHF	9:30:00 AM	0.74611	0.74679			N/A
4/8/2019	CADCHF	11:30:00 AM	0.74656	0.74723			N/A
4/8/2019	CADCHF	1:30:00 PM	0.74711	0.74782			N/A
4/8/2019	CADCHF	3:30:00 PM	0.74769	0.7483			N/A
4/8/2019	CADCHF.fx	9:30:00 AM	0.74645	0.74644			N/A
4/8/2019	CADCHF.fx	11:30:00 AM	0.74689	0.7469			N/A
4/8/2019	CADCHF.fx	1:30:00 PM	0.74745	0.74747			N/A
4/8/2019	CADCHF.fx	3:30:00 PM	0.74803	0.74796			N/A
4/8/2019	CADCZK	9:30:00 AM	17.047	17.064			N/A
4/8/2019	CADCZK	11:30:00 AM	17.038	17.054			N/A
4/8/2019	CADCZK	1:30:00 PM	17.036	17.052			N/A
4/8/2019	CADCZK	3:30:00 PM	17.029	17.044			N/A
4/8/2019	CADDKK	9:30:00 AM					N/A
4/8/2019	CADDKK	11:30:00 AM	4.966	4.97			N/A
4/8/2019	CADDKK	1:30:00 PM					N/A
4/8/2019	CADDKK	3:30:00 PM					N/A
4/8/2019	CADHKD	9:30:00 AM	5.8626	5.8663			N/A
4/8/2019	CADHKD	11:30:00 AM	5.8645	5.8685			N/A
4/8/2019	CADHKD	1:30:00 PM	5.8641	5.8679			N/A
4/8/2019	CADHKD	3:30:00 PM	5.8669	5.8702			N/A

4/8/2019	CADHUF	9:30:00 AM	213.57	213.74			N/A
4/8/2019	CADHUF	11:30:00 AM	213.88	214.03			N/A
4/8/2019	CADHUF	1:30:00 PM	213.73	213.86			N/A
4/8/2019	CADHUF	3:30:00 PM	213.78	213.93			N/A
4/8/2019	CADJPY	9:30:00 AM	83.219	83.287			N/A
4/8/2019	CADJPY	11:30:00 AM	83.289	83.35			N/A
4/8/2019	CADJPY	1:30:00 PM	83.297	83.366			N/A
4/8/2019	CADJPY	3:30:00 PM	83.336	83.393			N/A
4/8/2019	CADJPY.fx	9:30:00 AM	83.25	83.253			N/A
4/8/2019	CADJPY.fx	11:30:00 AM	83.322	83.316			N/A
4/8/2019	CADJPY.fx	1:30:00 PM	83.33	83.331			N/A
4/8/2019	CADJPY.fx	3:30:00 PM	83.369	83.359			N/A
4/8/2019	CADMXN	9:30:00 AM	14.2618	14.2733			N/A
4/8/2019	CADMXN	11:30:00 AM	14.2671	14.2758			N/A
4/8/2019	CADMXN	1:30:00 PM	14.2636	14.2761			N/A
4/8/2019	CADMXN	3:30:00 PM	14.2445	14.2547			N/A
4/8/2019	CADNOK	9:30:00 AM	6.4265	6.4298			N/A
4/8/2019	CADNOK	11:30:00 AM	6.4093	6.4132			N/A
4/8/2019	CADNOK	1:30:00 PM	6.4107	6.4154			N/A
4/8/2019	CADNOK	3:30:00 PM	6.4012	6.4058			N/A
4/8/2019	CADPLN	9:30:00 AM	2.855	2.8569			N/A
4/8/2019	CADPLN	11:30:00 AM	2.8539	2.8558			N/A
4/8/2019	CADPLN	1:30:00 PM	2.8508	2.8523			N/A
4/8/2019	CADPLN	3:30:00 PM	2.8516	2.8535			N/A
4/8/2019	CADSEK	9:30:00 AM	6.9436	6.9469			N/A
4/8/2019	CADSEK	11:30:00 AM	6.9365	6.9383			N/A
4/8/2019	CADSEK	1:30:00 PM	6.9425	6.9461			N/A
4/8/2019	CADSEK	3:30:00 PM	6.9337	6.9369			N/A
4/8/2019	CADSGD	9:30:00 AM	1.0128	1.0131			N/A
4/8/2019	CADSGD	11:30:00 AM	1.013	1.0133			N/A
4/8/2019	CADSGD	1:30:00 PM	1.0129	1.0132			N/A
4/8/2019	CADSGD	3:30:00 PM	1.013	1.0133			N/A
4/8/2019	CADZAR	9:30:00 AM	10.5566	10.5718			N/A
4/8/2019	CADZAR	11:30:00 AM	10.5554	10.5649			N/A

4/8/2019	CADZAR	1:30:00 PM	10.5567	10.5703			N/A
4/8/2019	CADZAR	3:30:00 PM	10.532	10.5472			N/A
4/8/2019	CHFCZK	9:30:00 AM	22.841	22.856			N/A
4/8/2019	CHFCZK	11:30:00 AM	22.815	22.832			N/A
4/8/2019	CHFCZK	1:30:00 PM	22.795	22.811			N/A
4/8/2019	CHFCZK	3:30:00 PM	22.77	22.787			N/A
4/8/2019	CHFDKK	9:30:00 AM	6.654	6.657			N/A
4/8/2019	CHFDKK	11:30:00 AM	6.649	6.652			N/A
4/8/2019	CHFDKK	1:30:00 PM	6.641	6.644			N/A
4/8/2019	CHFDKK	3:30:00 PM					N/A
4/8/2019	CHFDKK.fx	9:30:00 AM	6.652	6.6584			N/A
4/8/2019	CHFDKK.fx	11:30:00 AM	6.6471	6.6532			N/A
4/8/2019	CHFDKK.fx	1:30:00 PM	6.6395	6.6458			N/A
4/8/2019	CHFDKK.fx	3:30:00 PM	6.6358	6.6418			N/A
4/8/2019	CHFHKD	9:30:00 AM	7.8541	7.858			N/A
4/8/2019	CHFHKD	11:30:00 AM	7.8527	7.8559			N/A
4/8/2019	CHFHKD	1:30:00 PM	7.8466	7.8498			N/A
4/8/2019	CHFHKD	3:30:00 PM	7.8443	7.8482			N/A
4/8/2019	CHFHUF	9:30:00 AM	286.04	286.44			N/A
4/8/2019	CHFHUF	11:30:00 AM	286.28	286.66			N/A
4/8/2019	CHFHUF	1:30:00 PM	285.88	286.21			N/A
4/8/2019	CHFHUF	3:30:00 PM	285.72	286.12			N/A
4/8/2019	CHFJPY	9:30:00 AM	111.496	111.563			N/A
4/8/2019	CHFJPY	11:30:00 AM	111.523	111.586			N/A
4/8/2019	CHFJPY	1:30:00 PM	111.457	111.522			N/A
4/8/2019	CHFJPY	3:30:00 PM	111.417	111.487			N/A
4/8/2019	CHFJPY.fx	9:30:00 AM	111.528	111.529			N/A
4/8/2019	CHFJPY.fx	11:30:00 AM	111.556	111.551			N/A
4/8/2019	CHFJPY.fx	1:30:00 PM	111.491	111.488			N/A
4/8/2019	CHFJPY.fx	3:30:00 PM	111.449	111.453			N/A
4/8/2019	CHFMXN	9:30:00 AM	19.106	19.1225			N/A
4/8/2019	CHFMXN	11:30:00 AM	19.1026	19.1134			N/A
4/8/2019	CHFMXN	1:30:00 PM	19.0837	19.0996			N/A
4/8/2019	CHFMXN	3:30:00 PM	19.0446	19.0599			N/A

4/8/2019	CHFNOK	9:30:00 AM	8.609	8.6152			N/A
4/8/2019	CHFNOK	11:30:00 AM	8.5817	8.5872			N/A
4/8/2019	CHFNOK	1:30:00 PM	8.5767	8.5847			N/A
4/8/2019	CHFNOK	3:30:00 PM	8.5578	8.5657			N/A
4/8/2019	CHFNOK.fx	9:30:00 AM	8.61216	8.61216			N/A
4/8/2019	CHFNOK.fx	11:30:00 AM	8.585	8.58383			N/A
4/8/2019	CHFNOK.fx	1:30:00 PM	8.58005	8.58136			N/A
4/8/2019	CHFNOK.fx	3:30:00 PM	8.56114	8.56232			N/A
4/8/2019	CHFPLN	9:30:00 AM	3.8251	3.8278			N/A
4/8/2019	CHFPLN	11:30:00 AM	3.821	3.8237			N/A
4/8/2019	CHFPLN	1:30:00 PM	3.8139	3.8166			N/A
4/8/2019	CHFPLN	3:30:00 PM	3.8121	3.8152			N/A
4/8/2019	CHFPLN.fx	9:30:00 AM	3.82261	3.83035			N/A
4/8/2019	CHFPLN.fx	11:30:00 AM	3.81856	3.82598			N/A
4/8/2019	CHFPLN.fx	1:30:00 PM	3.8115	3.81898			N/A
4/8/2019	CHFPLN.fx	3:30:00 PM	3.8097	3.81755			N/A
4/8/2019	CHFSEK	9:30:00 AM	9.3032	9.3058			N/A
4/8/2019	CHFSEK	11:30:00 AM	9.2878	9.2899			N/A
4/8/2019	CHFSEK	1:30:00 PM	9.2888	9.2929			N/A
4/8/2019	CHFSEK	3:30:00 PM	9.2698	9.2747			N/A
4/8/2019	CHFSGD	9:30:00 AM	1.3573	1.3577			N/A
4/8/2019	CHFSGD	11:30:00 AM	1.3569	1.3573			N/A
4/8/2019	CHFSGD	1:30:00 PM	1.3559	1.3564			N/A
4/8/2019	CHFSGD	3:30:00 PM	1.355	1.3555			N/A
4/8/2019	CHFSGD.fx	9:30:00 AM	1.35746	1.35753			N/A
4/8/2019	CHFSGD.fx	11:30:00 AM	1.35708	1.35712			N/A
4/8/2019	CHFSGD.fx	1:30:00 PM	1.35602	1.35618			N/A
4/8/2019	CHFSGD.fx	3:30:00 PM	1.35514	1.3553			N/A
4/8/2019	CHFZAR	9:30:00 AM	14.148	14.1594			N/A
4/8/2019	CHFZAR	11:30:00 AM	14.1375	14.1406			N/A
4/8/2019	CHFZAR	1:30:00 PM	14.1274	14.1378			N/A
4/8/2019	CHFZAR	3:30:00 PM	14.0862	14.098			N/A
4/8/2019	CZKJPY	9:30:00 AM					N/A
4/8/2019	CZKJPY	11:30:00 AM	4.887	4.891			N/A

4/8/2019	CZKJPY	1:30:00 PM	4.889	4.892			N/A
4/8/2019	CZKJPY	3:30:00 PM					N/A
4/8/2019	DAX30.i	9:30:00 AM	11961	11960.25			N/A
4/8/2019	DAX30.i	11:30:00 AM	11978.77	11978.02			N/A
4/8/2019	DAX30.i	1:30:00 PM	11985.77	11983.52			N/A
4/8/2019	DAX30.i	3:30:00 PM	11994.77	11993.52			N/A
4/8/2019	DJ30.i	9:30:00 AM					N/A
4/8/2019	DJ30.i	11:30:00 AM					N/A
4/8/2019	DJ30.i	1:30:00 PM					N/A
4/8/2019	DJ30.i	3:30:00 PM					N/A
4/8/2019	DKKJPY	9:30:00 AM					N/A
4/8/2019	DKKJPY	11:30:00 AM	16.78	16.8			N/A
4/8/2019	DKKJPY	1:30:00 PM	16.79	16.8			N/A
4/8/2019	DKKJPY	3:30:00 PM					N/A
4/8/2019	EURAUD	9:30:00 AM	1.58166	1.58191			N/A
4/8/2019	EURAUD	11:30:00 AM	1.58049	1.58081			N/A
4/8/2019	EURAUD	1:30:00 PM	1.58205	1.58252			N/A
4/8/2019	EURAUD	3:30:00 PM	1.58173	1.58201			N/A
4/8/2019	EURAUD.fx	9:30:00 AM	1.58186	1.58169			N/A
4/8/2019	EURAUD.fx	11:30:00 AM	1.58067	1.58059			N/A
4/8/2019	EURAUD.fx	1:30:00 PM	1.58225	1.58231			N/A
4/8/2019	EURAUD.fx	3:30:00 PM	1.58193	1.5818			N/A
4/8/2019	EURCAD	9:30:00 AM	1.50232	1.5031			N/A
4/8/2019	EURCAD	11:30:00 AM	1.5026	1.50338			N/A
4/8/2019	EURCAD	1:30:00 PM	1.50303	1.5039			N/A
4/8/2019	EURCAD	3:30:00 PM	1.50299	1.50361			N/A
4/8/2019	EURCAD.fx	9:30:00 AM	1.50272	1.50268			N/A
4/8/2019	EURCAD.fx	11:30:00 AM	1.503	1.50296			N/A
4/8/2019	EURCAD.fx	1:30:00 PM	1.50345	1.50348			N/A
4/8/2019	EURCAD.fx	3:30:00 PM	1.50339	1.50319			N/A
4/8/2019	EURCHF	9:30:00 AM	1.12163	1.12176			N/A
4/8/2019	EURCHF	11:30:00 AM	1.12249	1.12264			N/A
4/8/2019	EURCHF	1:30:00 PM	1.12371	1.12384			N/A
4/8/2019	EURCHF	3:30:00 PM	1.12439	1.12447			N/A



4/8/2019	EURCHF.fx	9:30:00 AM	1.12167	1.12171			N/A
4/8/2019	EURCHF.fx	11:30:00 AM	1.12255	1.12258			N/A
4/8/2019	EURCHF.fx	1:30:00 PM	1.12377	1.12379			N/A
4/8/2019	EURCHF.fx	3:30:00 PM	1.12444	1.12441			N/A
4/8/2019	EURCZK	9:30:00 AM	25.607	25.644			N/A
4/8/2019	EURCZK	11:30:00 AM	25.599	25.638			N/A
4/8/2019	EURCZK	1:30:00 PM	25.605	25.642			N/A
4/8/2019	EURCZK	3:30:00 PM	25.59	25.63			N/A
4/8/2019	EURDKK	9:30:00 AM	7.4647	7.4656			N/A
4/8/2019	EURDKK	11:30:00 AM	7.4647	7.4658			N/A
4/8/2019	EURDKK	1:30:00 PM	7.4644	7.4654			N/A
4/8/2019	EURDKK	3:30:00 PM	7.4644	7.4655			N/A
4/8/2019	EURGBP	9:30:00 AM	0.8599	0.85988			N/A
4/8/2019	EURGBP	11:30:00 AM	0.85998	0.85993			N/A
4/8/2019	EURGBP	1:30:00 PM	0.86165	0.86154			N/A
4/8/2019	EURGBP	3:30:00 PM	0.86199	0.86211			N/A
4/8/2019	EURGBP.fx	9:30:00 AM	0.85992	0.85984			N/A
4/8/2019	EURGBP.fx	11:30:00 AM	0.86	0.8599			N/A
4/8/2019	EURGBP.fx	1:30:00 PM	0.86169	0.8615			N/A
4/8/2019	EURGBP.fx	3:30:00 PM	0.86201	0.86206			N/A
4/8/2019	EURHKD	9:30:00 AM	8.8099	8.8151			N/A
4/8/2019	EURHKD	11:30:00 AM	8.8155	8.82			N/A
4/8/2019	EURHKD	1:30:00 PM	8.8174	8.8228			N/A
4/8/2019	EURHKD	3:30:00 PM	8.82	8.8252			N/A
4/8/2019	EURHKD.fx	9:30:00 AM	8.81242	8.81251			N/A
4/8/2019	EURHKD.fx	11:30:00 AM	8.81806	8.81741			N/A
4/8/2019	EURHKD.fx	1:30:00 PM	8.81993	8.82023			N/A
4/8/2019	EURHKD.fx	3:30:00 PM	8.82253	8.82267			N/A
4/8/2019	EURHUF	9:30:00 AM	320.79	321.41			N/A
4/8/2019	EURHUF	11:30:00 AM	321.33	321.98			N/A
4/8/2019	EURHUF	1:30:00 PM	321.18	321.84			N/A
4/8/2019	EURHUF	3:30:00 PM	321.22	321.92			N/A
4/8/2019	EURHUF.fx	9:30:00 AM	321.064	321.264			N/A
4/8/2019	EURHUF.fx	11:30:00 AM	321.607	321.773			N/A

4/8/2019	EURHUF.fx	1:30:00 PM	321.458	321.567			N/A
4/8/2019	EURHUF.fx	3:30:00 PM	321.501	321.68			N/A
4/8/2019	EURJPY	9:30:00 AM	125.101	125.103			N/A
4/8/2019	EURJPY	11:30:00 AM	125.23	125.227		10	N/A
4/8/2019	EURJPY	1:30:00 PM	125.287	125.287			N/A
4/8/2019	EURJPY	3:30:00 PM	125.319	125.322			N/A
4/8/2019	EURJPY.fx	9:30:00 AM	125.104	125.099			N/A
4/8/2019	EURJPY.fx	11:30:00 AM	125.233	125.224			N/A
4/8/2019	EURJPY.fx	1:30:00 PM	125.29	125.284			N/A
4/8/2019	EURJPY.fx	3:30:00 PM	125.321	125.318			N/A
4/8/2019	EURMXN	9:30:00 AM	21.4335	21.4521			N/A
4/8/2019	EURMXN	11:30:00 AM	21.4457	21.4593			N/A
4/8/2019	EURMXN	1:30:00 PM	21.4474	21.4677			N/A
4/8/2019	EURMXN	3:30:00 PM	21.4167	21.4342			N/A
4/8/2019	EURMXN.fx	9:30:00 AM	21.442	21.4439			N/A
4/8/2019	EURMXN.fx	11:30:00 AM	21.4537	21.4513			N/A
4/8/2019	EURMXN.fx	1:30:00 PM	21.4555	21.4596			N/A
4/8/2019	EURMXN.fx	3:30:00 PM	21.4252	21.4257			N/A
4/8/2019	EURNOK	9:30:00 AM	9.6551	9.665			N/A
4/8/2019	EURNOK	11:30:00 AM	9.6319	9.6412			N/A
4/8/2019	EURNOK	1:30:00 PM	9.6369	9.649			N/A
4/8/2019	EURNOK	3:30:00 PM	9.6211	9.6329			N/A
4/8/2019	EURNOK.fx	9:30:00 AM	9.66045	9.65965			N/A
4/8/2019	EURNOK.fx	11:30:00 AM	9.63729	9.63565			N/A
4/8/2019	EURNOK.fx	1:30:00 PM	9.64214	9.6436			N/A
4/8/2019	EURNOK.fx	3:30:00 PM	9.62669	9.62738			N/A
4/8/2019	EURNZD	9:30:00 AM	1.66753	1.66832			N/A
4/8/2019	EURNZD	11:30:00 AM	1.66754	1.66838			N/A
4/8/2019	EURNZD	1:30:00 PM	1.66852	1.66942			N/A
4/8/2019	EURNZD	3:30:00 PM	1.66984	1.67026			N/A
4/8/2019	EURNZD.fx	9:30:00 AM	1.66796	1.66792			N/A
4/8/2019	EURNZD.fx	11:30:00 AM	1.66795	1.66796			N/A
4/8/2019	EURNZD.fx	1:30:00 PM	1.66893	1.669			N/A
4/8/2019	EURNZD.fx	3:30:00 PM	1.67024	1.66983			N/A

4/8/2019	EURPLN	9:30:00 AM	4.2907	4.2934			N/A
4/8/2019	EURPLN	11:30:00 AM	4.2893	4.2923			N/A
4/8/2019	EURPLN	1:30:00 PM	4.2858	4.2887			N/A
4/8/2019	EURPLN	3:30:00 PM	4.2866	4.2899			N/A
4/8/2019	EURPLN.fx	9:30:00 AM	4.28967	4.29446			N/A
4/8/2019	EURPLN.fx	11:30:00 AM	4.28868	4.29302			N/A
4/8/2019	EURPLN.fx	1:30:00 PM	4.28511	4.28989			N/A
4/8/2019	EURPLN.fx	3:30:00 PM	4.28587	4.29052			N/A
4/8/2019	EURRUB	9:30:00 AM					N/A
4/8/2019	EURRUB	11:30:00 AM	73.096	73.529			N/A
4/8/2019	EURRUB	1:30:00 PM	73.058	73.469			N/A
4/8/2019	EURRUB	3:30:00 PM	72.946	73.385			N/A
4/8/2019	EURSEK	9:30:00 AM	10.4365	10.4392			N/A
4/8/2019	EURSEK	11:30:00 AM	10.4275	10.4288			N/A
4/8/2019	EURSEK	1:30:00 PM	10.4397	10.4444			N/A
4/8/2019	EURSEK	3:30:00 PM	10.4247	10.4293			N/A
4/8/2019	EURSEK.fx	9:30:00 AM	10.43792	10.43786			N/A
4/8/2019	EURSEK.fx	11:30:00 AM	10.42926	10.42727			N/A
4/8/2019	EURSEK.fx	1:30:00 PM	10.44138	10.44277			N/A
4/8/2019	EURSEK.fx	3:30:00 PM	10.4267	10.42754			N/A
4/8/2019	EURSGD	9:30:00 AM	1.5223	1.523			N/A
4/8/2019	EURSGD	11:30:00 AM	1.5231	1.5238			N/A
4/8/2019	EURSGD	1:30:00 PM	1.5236	1.5244			N/A
4/8/2019	EURSGD	3:30:00 PM	1.5235	1.5243			N/A
4/8/2019	EURSGD.fx	9:30:00 AM	1.52268	1.52263			N/A
4/8/2019	EURSGD.fx	11:30:00 AM	1.52346	1.52339			N/A
4/8/2019	EURSGD.fx	1:30:00 PM	1.5239	1.52402			N/A
4/8/2019	EURSGD.fx	3:30:00 PM	1.52383	1.52391			N/A
4/8/2019	EURUSD	9:30:00 AM	1.12247	1.12256			N/A
4/8/2019	EURUSD	11:30:00 AM	1.12323	1.12326	10	10	N/A
4/8/2019	EURUSD	1:30:00 PM	1.12378	1.1239			N/A
4/8/2019	EURUSD	3:30:00 PM	1.12415	1.12426			N/A
4/8/2019	EURUSD.fx	9:30:00 AM	1.12266	1.12266			N/A
4/8/2019	EURUSD.fx	11:30:00 AM	1.12343	1.12334			N/A

4/8/2019	EURUSD.fx	1:30:00 PM	1.12398	1.12399			N/A
4/8/2019	EURUSD.fx	3:30:00 PM	1.12436	1.12436			N/A
4/8/2019	EURZAR	9:30:00 AM	15.8724	15.8865			N/A
4/8/2019	EURZAR	11:30:00 AM	15.8743	15.88			N/A
4/8/2019	EURZAR	1:30:00 PM	15.8801	15.8938			N/A
4/8/2019	EURZAR	3:30:00 PM	15.8413	15.8582			N/A
4/8/2019	EURZAR.fx	9:30:00 AM					N/A
4/8/2019	EURZAR.fx	11:30:00 AM	15.87328	15.88098			N/A
4/8/2019	EURZAR.fx	1:30:00 PM	15.87958	15.89491			N/A
4/8/2019	EURZAR.fx	3:30:00 PM	15.84081	15.85875			N/A
4/8/2019	GBPAUD	9:30:00 AM	1.83993	1.84036			N/A
4/8/2019	GBPAUD	11:30:00 AM	1.83861	1.83883			N/A
4/8/2019	GBPAUD	1:30:00 PM	1.83699	1.83734			N/A
4/8/2019	GBPAUD	3:30:00 PM	1.83538	1.83607			N/A
4/8/2019	GBPAUD.fx	9:30:00 AM	1.84031	1.83995			N/A
4/8/2019	GBPAUD.fx	11:30:00 AM	1.83898	1.83846			N/A
4/8/2019	GBPAUD.fx	1:30:00 PM	1.83735	1.83695			N/A
4/8/2019	GBPAUD.fx	3:30:00 PM	1.83578	1.83569			N/A
4/8/2019	GBPCAD	9:30:00 AM	1.74726	1.74775			N/A
4/8/2019	GBPCAD	11:30:00 AM	1.74757	1.74793			N/A
4/8/2019	GBPCAD	1:30:00 PM	1.74482	1.74518			N/A
4/8/2019	GBPCAD	3:30:00 PM	1.74362	1.74426			N/A
4/8/2019	GBPCAD.fx	9:30:00 AM	1.74762	1.74738			N/A
4/8/2019	GBPCAD.fx	11:30:00 AM	1.74791	1.74755			N/A
4/8/2019	GBPCAD.fx	1:30:00 PM	1.74522	1.74479			N/A
4/8/2019	GBPCAD.fx	3:30:00 PM	1.744	1.7439			N/A
4/8/2019	GBPCHF	9:30:00 AM	1.30431	1.30461			N/A
4/8/2019	GBPCHF	11:30:00 AM	1.30528	1.30554			N/A
4/8/2019	GBPCHF	1:30:00 PM	1.30423	1.30434			N/A
4/8/2019	GBPCHF	3:30:00 PM	1.3042	1.3046			N/A
4/8/2019	GBPCHF.fx	9:30:00 AM	1.30448	1.30441			N/A
4/8/2019	GBPCHF.fx	11:30:00 AM	1.30545	1.30536			N/A
4/8/2019	GBPCHF.fx	1:30:00 PM	1.30441	1.30414			N/A
4/8/2019	GBPCHF.fx	3:30:00 PM	1.30437	1.3044			N/A

4/8/2019	GBPCZK	9:30:00 AM	29.792	29.807			N/A
4/8/2019	GBPCZK	11:30:00 AM	29.781	29.798			N/A
4/8/2019	GBPCZK	1:30:00 PM	29.732	29.746			N/A
4/8/2019	GBPCZK	3:30:00 PM	29.695	29.72			N/A
4/8/2019	GBPDKK	9:30:00 AM	8.677	8.687			N/A
4/8/2019	GBPDKK	11:30:00 AM	8.676	8.687			N/A
4/8/2019	GBPDKK	1:30:00 PM	8.66	8.669			N/A
4/8/2019	GBPDKK	3:30:00 PM	8.655	8.666			N/A
4/8/2019	GBPDKK.fx	9:30:00 AM	8.6755	8.6873			N/A
4/8/2019	GBPDKK.fx	11:30:00 AM	8.6752	8.6871			N/A
4/8/2019	GBPDKK.fx	1:30:00 PM	8.6584	8.6696			N/A
4/8/2019	GBPDKK.fx	3:30:00 PM	8.6531	8.6663			N/A
4/8/2019	GBPHKD	9:30:00 AM	10.2439	10.2484			N/A
4/8/2019	GBPHKD	11:30:00 AM	10.2493	10.2544			N/A
4/8/2019	GBPHKD	1:30:00 PM	10.2337	10.2365			N/A
4/8/2019	GBPHKD	3:30:00 PM	10.2298	10.2354			N/A
4/8/2019	GBPHUF	9:30:00 AM	373.12	373.55			N/A
4/8/2019	GBPHUF	11:30:00 AM	373.69	374.11			N/A
4/8/2019	GBPHUF	1:30:00 PM	372.88	373.15			N/A
4/8/2019	GBPHUF	3:30:00 PM	372.64	373.13			N/A
4/8/2019	GBPJPY	9:30:00 AM	145.469	145.497			N/A
4/8/2019	GBPJPY	11:30:00 AM	145.609	145.63			N/A
4/8/2019	GBPJPY	1:30:00 PM	145.416	145.411			N/A
4/8/2019	GBPJPY	3:30:00 PM	145.361	145.391			N/A
4/8/2019	GBPJPY.fx	9:30:00 AM	145.487	145.478			N/A
4/8/2019	GBPJPY.fx	11:30:00 AM	145.627	145.612			N/A
4/8/2019	GBPJPY.fx	1:30:00 PM	145.434	145.393			N/A
4/8/2019	GBPJPY.fx	3:30:00 PM	145.379	145.372			N/A
4/8/2019	GBPMXN	9:30:00 AM	24.9233	24.9364			N/A
4/8/2019	GBPMXN	11:30:00 AM	24.9363	24.9413			N/A
4/8/2019	GBPMXN	1:30:00 PM	24.8933	24.9025			N/A
4/8/2019	GBPMXN	3:30:00 PM	24.8411	24.8542			N/A
4/8/2019	GBPNOK	9:30:00 AM	11.2304	11.2381			N/A
4/8/2019	GBPNOK	11:30:00 AM	11.2031	11.2089			N/A

4/8/2019	GBPNOK	1:30:00 PM	11.1879	11.1963			N/A
4/8/2019	GBPNOK	3:30:00 PM	11.1621	11.1734			N/A
4/8/2019	GBPNOK.fx	9:30:00 AM	11.23522	11.2334			N/A
4/8/2019	GBPNOK.fx	11:30:00 AM	11.20798	11.20404			N/A
4/8/2019	GBPNOK.fx	1:30:00 PM	11.19283	11.19143			N/A
4/8/2019	GBPNOK.fx	3:30:00 PM	11.16706	11.16837			N/A
4/8/2019	GBPNZD	9:30:00 AM	1.93945	1.93999			N/A
4/8/2019	GBPNZD	11:30:00 AM	1.93939	1.93979			N/A
4/8/2019	GBPNZD	1:30:00 PM	1.93694	1.93726			N/A
4/8/2019	GBPNZD	3:30:00 PM	1.93707	1.9375			N/A
4/8/2019	GBPNZD.fx	9:30:00 AM	1.93981	1.93966			N/A
4/8/2019	GBPNZD.fx	11:30:00 AM	1.9397	1.93942			N/A
4/8/2019	GBPNZD.fx	1:30:00 PM	1.93727	1.93691			N/A
4/8/2019	GBPNZD.fx	3:30:00 PM	1.93741	1.93715			N/A
4/8/2019	GBPPLN	9:30:00 AM	4.9912	4.992			N/A
4/8/2019	GBPPLN	11:30:00 AM	4.9893	4.99			N/A
4/8/2019	GBPPLN	1:30:00 PM	4.9763	4.9761			N/A
4/8/2019	GBPPLN	3:30:00 PM	4.9736	4.9756			N/A
4/8/2019	GBPPLN.fx	9:30:00 AM	4.98881	4.99453			N/A
4/8/2019	GBPPLN.fx	11:30:00 AM	4.98714	4.99224			N/A
4/8/2019	GBPPLN.fx	1:30:00 PM	4.97405	4.97832			N/A
4/8/2019	GBPPLN.fx	3:30:00 PM	4.97146	4.97772			N/A
4/8/2019	GBPSEK	9:30:00 AM	12.136	12.142			N/A
4/8/2019	GBPSEK	11:30:00 AM	12.1248	12.1283			N/A
4/8/2019	GBPSEK	1:30:00 PM	12.116	12.1232			N/A
4/8/2019	GBPSEK	3:30:00 PM	12.0908	12.1008			N/A
4/8/2019	GBPSEK.fx	9:30:00 AM	12.13198	12.14646			N/A
4/8/2019	GBPSEK.fx	11:30:00 AM	12.12112	12.13233			N/A
4/8/2019	GBPSEK.fx	1:30:00 PM	12.11227	12.1268			N/A
4/8/2019	GBPSEK.fx	3:30:00 PM	12.08713	12.10441			N/A
4/8/2019	GBPSGD	9:30:00 AM	1.7705	1.771			N/A
4/8/2019	GBPSGD	11:30:00 AM	1.7713	1.7719			N/A
4/8/2019	GBPSGD	1:30:00 PM	1.7686	1.769			N/A
4/8/2019	GBPSGD	3:30:00 PM	1.7674	1.7682			N/A

4/8/2019	GBPSGD.fx	9:30:00 AM	1.76869	1.77278			N/A
4/8/2019	GBPSGD.fx	11:30:00 AM	1.76944	1.77371			N/A
4/8/2019	GBPSGD.fx	1:30:00 PM	1.76676	1.77075			N/A
4/8/2019	GBPSGD.fx	3:30:00 PM	1.76555	1.76995			N/A
4/8/2019	GBPUSD	9:30:00 AM	1.30567	1.3055			N/A
4/8/2019	GBPUSD	11:30:00 AM	1.30637	1.30633			N/A
4/8/2019	GBPUSD	1:30:00 PM	1.3047	1.30442			N/A
4/8/2019	GBPUSD	3:30:00 PM	1.30431	1.30435			N/A
4/8/2019	GBPUSD.fx	9:30:00 AM	1.30571	1.30546			N/A
4/8/2019	GBPUSD.fx	11:30:00 AM	1.3064	1.30628			N/A
4/8/2019	GBPUSD.fx	1:30:00 PM	1.30474	1.30437			N/A
4/8/2019	GBPUSD.fx	3:30:00 PM	1.30435	1.3043			N/A
4/8/2019	GBPZAR	9:30:00 AM	18.4567	18.4772			N/A
4/8/2019	GBPZAR	11:30:00 AM	18.4582	18.4674			N/A
4/8/2019	GBPZAR	1:30:00 PM	18.4265	18.448			N/A
4/8/2019	GBPZAR	3:30:00 PM	18.3737	18.4004			N/A
4/8/2019	GBPZAR.fx	9:30:00 AM	18.4643	18.4709			N/A
4/8/2019	GBPZAR.fx	11:30:00 AM	18.4654	18.4607			N/A
4/8/2019	GBPZAR.fx	1:30:00 PM	18.4334	18.441			N/A
4/8/2019	GBPZAR.fx	3:30:00 PM	18.3808	18.3934			N/A
4/8/2019	GOLD	9:30:00 AM					N/A
4/8/2019	GOLD	11:30:00 AM	1297.02	1297.32			N/A
4/8/2019	GOLD	1:30:00 PM	1297.35	1297.62			N/A
4/8/2019	GOLD	3:30:00 PM	1299.5	1299.66			N/A
4/8/2019	HKDJPY	9:30:00 AM	14.2	14.21			N/A
4/8/2019	HKDJPY	11:30:00 AM					N/A
4/8/2019	HKDJPY	1:30:00 PM	14.21	14.21			N/A
4/8/2019	HKDJPY	3:30:00 PM	14.21	14.21			N/A
4/8/2019	HKDJPY.fx	9:30:00 AM	14.192	14.198			N/A
4/8/2019	HKDJPY.fx	11:30:00 AM	14.197	14.204			N/A
4/8/2019	HKDJPY.fx	1:30:00 PM	14.2	14.207			N/A
4/8/2019	HKDJPY.fx	3:30:00 PM	14.2	14.207			N/A
4/8/2019	HUFJPY	9:30:00 AM	0.3899	0.3902			N/A
4/8/2019	HUFJPY	11:30:00 AM	0.3894	0.3897			N/A

4/8/2019	HUFJPY	1:30:00 PM	0.3898	0.3901			N/A
4/8/2019	HUFJPY	3:30:00 PM	0.3899	0.3902			N/A
4/8/2019	JP225.i	9:30:00 AM	21766.5	21786.5			N/A
4/8/2019	JP225.i	11:30:00 AM	21767.45	21784.95			N/A
4/8/2019	JP225.i	1:30:00 PM	21769.12	21784.95			N/A
4/8/2019	JP225.i	3:30:00 PM	21769.95	21789.95			N/A
4/8/2019	MXNJPY	9:30:00 AM	5.83	5.84			N/A
4/8/2019	MXNJPY	11:30:00 AM	5.83	5.85			N/A
4/8/2019	MXNJPY	1:30:00 PM	5.84	5.85			N/A
4/8/2019	MXNJPY	3:30:00 PM	5.85	5.86			N/A
4/8/2019	NASDAQ.i	9:30:00 AM					N/A
4/8/2019	NASDAQ.i	11:30:00 AM					N/A
4/8/2019	NASDAQ.i	1:30:00 PM					N/A
4/8/2019	NASDAQ.i	3:30:00 PM					N/A
4/8/2019	NOKJPY	9:30:00 AM	12.94	12.97			N/A
4/8/2019	NOKJPY	11:30:00 AM	12.98	13.02			N/A
4/8/2019	NOKJPY	1:30:00 PM	12.98	13.01			N/A
4/8/2019	NOKJPY	3:30:00 PM	13.01	13.04			N/A
4/8/2019	NOKJPY.fx	9:30:00 AM	12.946	12.953			N/A
4/8/2019	NOKJPY.fx	11:30:00 AM	12.993	12.997			N/A
4/8/2019	NOKJPY.fx	1:30:00 PM	12.989	12.997			N/A
4/8/2019	NOKJPY.fx	3:30:00 PM	13.014	13.021			N/A
4/8/2019	NZDCAD	9:30:00 AM	0.90062	0.90121			N/A
4/8/2019	NZDCAD	11:30:00 AM	0.90078	0.90145			N/A
4/8/2019	NZDCAD	1:30:00 PM	0.90045	0.90121			N/A
4/8/2019	NZDCAD	3:30:00 PM	0.89999	0.90041			N/A
4/8/2019	NZDCAD.fx	9:30:00 AM	0.90094	0.90088			N/A
4/8/2019	NZDCAD.fx	11:30:00 AM	0.90109	0.90112			N/A
4/8/2019	NZDCAD.fx	1:30:00 PM	0.90077	0.90087			N/A
4/8/2019	NZDCAD.fx	3:30:00 PM	0.90031	0.90008			N/A
4/8/2019	NZDCHF	9:30:00 AM	0.67217	0.67285			N/A
4/8/2019	NZDCHF	11:30:00 AM	0.67266	0.67338			N/A
4/8/2019	NZDCHF	1:30:00 PM	0.67297	0.6737			N/A
4/8/2019	NZDCHF	3:30:00 PM	0.67302	0.67358			N/A



4/8/2019	NZDCHF.fx	9:30:00 AM	0.6725	0.6725			N/A
4/8/2019	NZDCHF.fx	11:30:00 AM	0.673	0.67303			N/A
4/8/2019	NZDCHF.fx	1:30:00 PM	0.67331	0.67335			N/A
4/8/2019	NZDCHF.fx	3:30:00 PM	0.67336	0.67323			N/A
4/8/2019	NZDCZK	9:30:00 AM	15.357	15.367			N/A
4/8/2019	NZDCZK	11:30:00 AM	15.352	15.364			N/A
4/8/2019	NZDCZK	1:30:00 PM	15.346	15.357			N/A
4/8/2019	NZDCZK	3:30:00 PM	15.328	15.339			N/A
4/8/2019	NZDDKK	9:30:00 AM	4.473	4.477			N/A
4/8/2019	NZDDKK	11:30:00 AM					N/A
4/8/2019	NZDDKK	1:30:00 PM	4.471	4.474			N/A
4/8/2019	NZDDKK	3:30:00 PM	4.469	4.472			N/A
4/8/2019	NZDHKD	9:30:00 AM	5.2801	5.2829			N/A
4/8/2019	NZDHKD	11:30:00 AM	5.2831	5.2861			N/A
4/8/2019	NZDHKD	1:30:00 PM	5.2817	5.2844			N/A
4/8/2019	NZDHKD	3:30:00 PM	5.2808	5.2826			N/A
4/8/2019	NZDHUF	9:30:00 AM	192.31	192.58			N/A
4/8/2019	NZDHUF	11:30:00 AM	192.6	192.9			N/A
4/8/2019	NZDHUF	1:30:00 PM	192.43	192.69			N/A
4/8/2019	NZDHUF	3:30:00 PM	192.33	192.6			N/A
4/8/2019	NZDJPY	9:30:00 AM	74.967	75.034			N/A
4/8/2019	NZDJPY	11:30:00 AM	75.044	75.113			N/A
4/8/2019	NZDJPY	1:30:00 PM	75.032	75.102			N/A
4/8/2019	NZDJPY	3:30:00 PM	75.015	75.067			N/A
4/8/2019	NZDJPY.fx	9:30:00 AM	74.998	75.002			N/A
4/8/2019	NZDJPY.fx	11:30:00 AM	75.074	75.082			N/A
4/8/2019	NZDJPY.fx	1:30:00 PM	75.063	75.071			N/A
4/8/2019	NZDJPY.fx	3:30:00 PM	75.046	75.033			N/A
4/8/2019	NZDMXN	9:30:00 AM	12.8473	12.854			N/A
4/8/2019	NZDMXN	11:30:00 AM	12.8552	12.8579			N/A
4/8/2019	NZDMXN	1:30:00 PM	12.8487	12.8548			N/A
4/8/2019	NZDMXN	3:30:00 PM	12.8235	12.8255			N/A
4/8/2019	NZDNOK	9:30:00 AM	5.7881	5.7914			N/A
4/8/2019	NZDNOK	11:30:00 AM	5.7746	5.7768			N/A

4/8/2019	NZDNOK	1:30:00 PM	5.774	5.7775			N/A
4/8/2019	NZDNOK	3:30:00 PM	5.7623	5.7639			N/A
4/8/2019	NZDPLN	9:30:00 AM	2.5714	2.5728			N/A
4/8/2019	NZDPLN	11:30:00 AM	2.5716	2.5727			N/A
4/8/2019	NZDPLN	1:30:00 PM	2.5677	2.5686			N/A
4/8/2019	NZDPLN	3:30:00 PM	2.5671	2.5681			N/A
4/8/2019	NZDSEK	9:30:00 AM	6.2527	6.2582			N/A
4/8/2019	NZDSEK	11:30:00 AM	6.2475	6.2524			N/A
4/8/2019	NZDSEK	1:30:00 PM	6.2509	6.2573			N/A
4/8/2019	NZDSEK	3:30:00 PM	6.2388	6.2442			N/A
4/8/2019	NZDSGD	9:30:00 AM	0.9127	0.9133			N/A
4/8/2019	NZDSGD	11:30:00 AM	0.9131	0.9137			N/A
4/8/2019	NZDSGD	1:30:00 PM	0.9128	0.9135			N/A
4/8/2019	NZDSGD	3:30:00 PM	0.9123	0.9127			N/A
4/8/2019	NZDSGD.fx	9:30:00 AM	0.91263	0.91317			N/A
4/8/2019	NZDSGD.fx	11:30:00 AM	0.9131	0.91361			N/A
4/8/2019	NZDSGD.fx	1:30:00 PM	0.91278	0.91341			N/A
4/8/2019	NZDSGD.fx	3:30:00 PM	0.91228	0.91268			N/A
4/8/2019	NZDUSD	9:30:00 AM	0.673	0.67305			N/A
4/8/2019	NZDUSD	11:30:00 AM	0.67342	0.67352			N/A
4/8/2019	NZDUSD	1:30:00 PM	0.67334	0.67351			N/A
4/8/2019	NZDUSD	3:30:00 PM	0.67321	0.6732			N/A
4/8/2019	NZDUSD.fx	9:30:00 AM	0.67306	0.67308			N/A
4/8/2019	NZDUSD.fx	11:30:00 AM	0.67349	0.67354			N/A
4/8/2019	NZDUSD.fx	1:30:00 PM	0.67342	0.67353			N/A
4/8/2019	NZDUSD.fx	3:30:00 PM	0.67328	0.67322			N/A
4/8/2019	NZDZAR	9:30:00 AM	9.5061	9.5229			N/A
4/8/2019	NZDZAR	11:30:00 AM	9.5085	9.5181			N/A
4/8/2019	NZDZAR	1:30:00 PM	9.5066	9.5205			N/A
4/8/2019	NZDZAR	3:30:00 PM	9.4779	9.4952			N/A
4/8/2019	SEKJPY	9:30:00 AM	11.99	11.99			N/A
4/8/2019	SEKJPY	11:30:00 AM	12.01	12.02			N/A
4/8/2019	SEKJPY	1:30:00 PM	12	12.01			N/A
4/8/2019	SEKJPY	3:30:00 PM	12.02	12.03			N/A

4/8/2019	SEKJPY.fx	9:30:00 AM	11.975	11.993			N/A
4/8/2019	SEKJPY.fx	11:30:00 AM	12.001	12.016			N/A
4/8/2019	SEKJPY.fx	1:30:00 PM	11.989	12.007			N/A
4/8/2019	SEKJPY.fx	3:30:00 PM	12.009	12.028			N/A
4/8/2019	SGDJPY	9:30:00 AM	82.16	82.16			N/A
4/8/2019	SGDJPY	11:30:00 AM	82.22	82.2			N/A
4/8/2019	SGDJPY	1:30:00 PM	82.19	82.21			N/A
4/8/2019	SGDJPY	3:30:00 PM	82.26	82.24			N/A
4/8/2019	SILVER	9:30:00 AM	14.94	15.32			N/A
4/8/2019	SILVER	11:30:00 AM	14.96	15.33			N/A
4/8/2019	SILVER	1:30:00 PM	14.95	15.34			N/A
4/8/2019	SILVER	3:30:00 PM	15.05	15.41			N/A
4/8/2019	SPX500.i	9:30:00 AM	2886.85	2888.15			N/A
4/8/2019	SPX500.i	11:30:00 AM	2888.06	2889.02			N/A
4/8/2019	SPX500.i	1:30:00 PM	2890.47	2891.02			N/A
4/8/2019	SPX500.i	3:30:00 PM	2889.47	2890.27			N/A
4/8/2019	UK100.i	9:30:00 AM	7434.75	7436.75			N/A
4/8/2019	UK100.i	11:30:00 AM	7433.66	7433.91			N/A
4/8/2019	UK100.i	1:30:00 PM	7461.91	7463.83			N/A
4/8/2019	UK100.i	3:30:00 PM	7458.99	7460.41			N/A
4/8/2019	USDCAD	9:30:00 AM	1.33851	1.33856			N/A
4/8/2019	USDCAD	11:30:00 AM	1.33799	1.33789			N/A
4/8/2019	USDCAD	1:30:00 PM	1.33756	1.33772			N/A
4/8/2019	USDCAD	3:30:00 PM	1.33711	1.33696			N/A
4/8/2019	USDCAD.fx	9:30:00 AM	1.33853	1.33853			N/A
4/8/2019	USDCAD.fx	11:30:00 AM	1.33801	1.33786			N/A
4/8/2019	USDCAD.fx	1:30:00 PM	1.33758	1.33769			N/A
4/8/2019	USDCAD.fx	3:30:00 PM	1.33713	1.33694			N/A
4/8/2019	USDCHF	9:30:00 AM	0.99908	0.99918			N/A
4/8/2019	USDCHF	11:30:00 AM	0.99926	0.99933			N/A
4/8/2019	USDCHF	1:30:00 PM	0.99978	0.99987			N/A
4/8/2019	USDCHF	3:30:00 PM	1	1.00012			N/A
4/8/2019	USDCHF.fx	9:30:00 AM	0.99911	0.99914			N/A
4/8/2019	USDCHF.fx	11:30:00 AM	0.99931	0.99927			N/A

4/8/2019	USDCHF.fx	1:30:00 PM	0.99983	0.9998			N/A
4/8/2019	USDCHF.fx	3:30:00 PM	1.00005	1.00006			N/A
4/8/2019	USDCZK	9:30:00 AM	22.832	22.854			N/A
4/8/2019	USDCZK	11:30:00 AM	22.811	22.833			N/A
4/8/2019	USDCZK	1:30:00 PM	22.802	22.825			N/A
4/8/2019	USDCZK	3:30:00 PM	22.784	22.806			N/A
4/8/2019	USDCZK.fx	9:30:00 AM	22.8406	22.8456			N/A
4/8/2019	USDCZK.fx	11:30:00 AM	22.8194	22.8251			N/A
4/8/2019	USDCZK.fx	1:30:00 PM	22.8112	22.8164			N/A
4/8/2019	USDCZK.fx	3:30:00 PM	22.7926	22.7988			N/A
4/8/2019	USDDKK	9:30:00 AM	6.6481	6.6523			N/A
4/8/2019	USDDKK	11:30:00 AM	6.6444	6.648			N/A
4/8/2019	USDDKK	1:30:00 PM	6.6402	6.6443			N/A
4/8/2019	USDDKK	3:30:00 PM	6.6382	6.6421			N/A
4/8/2019	USDDKK.fx	9:30:00 AM	6.6489	6.65038			N/A
4/8/2019	USDDKK.fx	11:30:00 AM	6.6451	6.646			N/A
4/8/2019	USDDKK.fx	1:30:00 PM	6.6407	6.6422			N/A
4/8/2019	USDDKK.fx	3:30:00 PM	6.63864	6.64012			N/A
4/8/2019	USDHKD	9:30:00 AM	7.8494	7.8496			N/A
4/8/2019	USDHKD	11:30:00 AM	7.849	7.8495			N/A
4/8/2019	USDHKD	1:30:00 PM	7.847	7.8473			N/A
4/8/2019	USDHKD	3:30:00 PM	7.8458	7.8463			N/A
4/8/2019	USDHKD.fx	9:30:00 AM					N/A
4/8/2019	USDHKD.fx	11:30:00 AM	7.84915	7.84966			N/A
4/8/2019	USDHKD.fx	1:30:00 PM	7.84688	7.84742			N/A
4/8/2019	USDHKD.fx	3:30:00 PM	7.8465	7.8471			N/A
4/8/2019	USDHUF	9:30:00 AM	285.84	286.32			N/A
4/8/2019	USDHUF	11:30:00 AM	286.11	286.57			N/A
4/8/2019	USDHUF	1:30:00 PM	285.85	286.26			N/A
4/8/2019	USDHUF	3:30:00 PM	285.79	286.24			N/A
4/8/2019	USDHUF.fx	9:30:00 AM	286.036	286.13			N/A
4/8/2019	USDHUF.fx	11:30:00 AM	286.303	286.365			N/A
4/8/2019	USDHUF.fx	1:30:00 PM	286.045	286.055			N/A
4/8/2019	USDHUF.fx	3:30:00 PM	285.985	286.057			N/A

4/8/2019	USDINR	9:30:00 AM	64.53	74.52			N/A
4/8/2019	USDINR	11:30:00 AM	64.68	74.66			N/A
4/8/2019	USDINR	1:30:00 PM					N/A
4/8/2019	USDINR	3:30:00 PM					N/A
4/8/2019	USDJPY	9:30:00 AM	111.43	111.435			N/A
4/8/2019	USDJPY	11:30:00 AM	111.468	111.477			N/A
4/8/2019	USDJPY	1:30:00 PM	111.462	111.468			N/A
4/8/2019	USDJPY	3:30:00 PM	111.455	111.462			N/A
4/8/2019	USDJPY.fx	9:30:00 AM	111.435	111.428			N/A
4/8/2019	USDJPY.fx	11:30:00 AM	111.473	111.47			N/A
4/8/2019	USDJPY.fx	1:30:00 PM	111.468	111.462			N/A
4/8/2019	USDJPY.fx	3:30:00 PM	111.461	111.454			N/A
4/8/2019	USDMXN	9:30:00 AM	19.097	19.103			N/A
4/8/2019	USDMXN	11:30:00 AM	19.095	19.096			N/A
4/8/2019	USDMXN	1:30:00 PM	19.086	19.095			N/A
4/8/2019	USDMXN	3:30:00 PM	19.053	19.059			N/A
4/8/2019	USDMXN.f	9:30:00 AM	19.1007	19.0994			N/A
4/8/2019	USDMXN.f	11:30:00 AM	19.0981	19.0925			N/A
4/8/2019	USDMXN.f	1:30:00 PM	19.0894	19.0917			N/A
4/8/2019	USDMXN.f	3:30:00 PM	19.0566	19.0553			N/A
4/8/2019	USDNOK	9:30:00 AM	8.6015	8.6084			N/A
4/8/2019	USDNOK	11:30:00 AM	8.5755	8.5811			N/A
4/8/2019	USDNOK	1:30:00 PM	8.575	8.5839			N/A
4/8/2019	USDNOK	3:30:00 PM	8.5581	8.5666			N/A
4/8/2019	USDNOK.fx	9:30:00 AM	8.60532	8.60388			N/A
4/8/2019	USDNOK.fx	11:30:00 AM	8.57965	8.57668			N/A
4/8/2019	USDNOK.fx	1:30:00 PM	8.57876	8.57955			N/A
4/8/2019	USDNOK.fx	3:30:00 PM	8.562	8.56225			N/A
4/8/2019	USDPLN	9:30:00 AM	3.8223	3.824			N/A
4/8/2019	USDPLN	11:30:00 AM	3.8192	3.8201			N/A
4/8/2019	USDPLN	1:30:00 PM	3.8139	3.8151			N/A
4/8/2019	USDPLN	3:30:00 PM	3.8131	3.8148			N/A
4/8/2019	USDPLN.fx	9:30:00 AM	3.82144	3.82491			N/A
4/8/2019	USDPLN.fx	11:30:00 AM	3.8183	3.82086			N/A

4/8/2019	USDPLN.fx	1:30:00 PM	3.81301	3.81593			N/A
4/8/2019	USDPLN.fx	3:30:00 PM	3.81228	3.81561			N/A
4/8/2019	USDRUB	9:30:00 AM					N/A
4/8/2019	USDRUB	11:30:00 AM	65.187	65.568			N/A
4/8/2019	USDRUB	1:30:00 PM	65.116	65.48			N/A
4/8/2019	USDRUB	3:30:00 PM	64.987	65.377			N/A
4/8/2019	USDSEK	9:30:00 AM	9.2956	9.2986			N/A
4/8/2019	USDSEK	11:30:00 AM	9.2819	9.2825			N/A
4/8/2019	USDSEK	1:30:00 PM	9.2876	9.2919			N/A
4/8/2019	USDSEK	3:30:00 PM	9.2713	9.2755			N/A
4/8/2019	USDSEK.fx	9:30:00 AM	9.29793	9.29706			N/A
4/8/2019	USDSEK.fx	11:30:00 AM	9.28432	9.28083			N/A
4/8/2019	USDSEK.fx	1:30:00 PM	9.28987	9.29017			N/A
4/8/2019	USDSEK.fx	3:30:00 PM	9.27389	9.27373			N/A
4/8/2019	USDSGD	9:30:00 AM	1.3562	1.3564			N/A
4/8/2019	USDSGD	11:30:00 AM	1.3559	1.3563			N/A
4/8/2019	USDSGD	1:30:00 PM	1.3557	1.3561			N/A
4/8/2019	USDSGD	3:30:00 PM	1.3552	1.3556			N/A
4/8/2019	USDSGD.fx	9:30:00 AM	1.35609	1.35643			N/A
4/8/2019	USDSGD.fx	11:30:00 AM	1.35587	1.35637			N/A
4/8/2019	USDSGD.fx	1:30:00 PM	1.35558	1.35609			N/A
4/8/2019	USDSGD.fx	3:30:00 PM	1.35506	1.35556			N/A
4/8/2019	USDZAR	9:30:00 AM	14.1384	14.1503			N/A
4/8/2019	USDZAR	11:30:00 AM	14.1313	14.1352			N/A
4/8/2019	USDZAR	1:30:00 PM	14.1278	14.1409			N/A
4/8/2019	USDZAR	3:30:00 PM	14.0887	14.1046			N/A
4/8/2019	USDZAR.fx	9:30:00 AM	14.14337	14.14562			N/A
4/8/2019	USDZAR.fx	11:30:00 AM	14.13762	14.13022			N/A
4/8/2019	USDZAR.fx	1:30:00 PM	14.13317	14.13517			N/A
4/8/2019	USDZAR.fx	3:30:00 PM	14.09497	14.09806			N/A
4/8/2019	XAUUSD	9:30:00 AM	1296.32	1296.08			N/A
4/8/2019	XAUUSD	11:30:00 AM	1296.99	1297.24			N/A
4/8/2019	XAUUSD	1:30:00 PM	1297.35	1297.62			N/A
4/8/2019	XAUUSD	3:30:00 PM	1299.51	1299.66			N/A

4/8/2019	ZARJPY	9:30:00 AM	7.86	7.88			N/A
4/8/2019	ZARJPY	11:30:00 AM	7.87	7.89			N/A
4/8/2019	ZARJPY	1:30:00 PM	7.87	7.89			N/A
4/8/2019	ZARJPY	3:30:00 PM	7.89	7.91			N/A
4/8/2019	ZARJPY.fx	9:30:00 AM	7.876	7.878			N/A
4/8/2019	ZARJPY.fx	11:30:00 AM	7.888	7.886			N/A
4/8/2019	ZARJPY.fx	1:30:00 PM	7.885	7.887			N/A
4/8/2019	ZARJPY.fx	3:30:00 PM	7.905	7.908			N/A
4/9/2019	#AA	9:30:00 AM					N/A
4/9/2019	#AA	11:30:00 AM					N/A
4/9/2019	#AA	1:30:00 PM					N/A
4/9/2019	#AA	3:30:00 PM					N/A
4/9/2019	#AABA	9:30:00 AM					N/A
4/9/2019	#AABA	11:30:00 AM					N/A
4/9/2019	#AABA	1:30:00 PM					N/A
4/9/2019	#AABA	3:30:00 PM					N/A
4/9/2019	#AAL	9:30:00 AM					N/A
4/9/2019	#AAL	11:30:00 AM					N/A
4/9/2019	#AAL	1:30:00 PM					N/A
4/9/2019	#AAL	3:30:00 PM					N/A
4/9/2019	#AAPL	9:30:00 AM					N/A
4/9/2019	#AAPL	11:30:00 AM					N/A
4/9/2019	#AAPL	1:30:00 PM					N/A
4/9/2019	#AAPL	3:30:00 PM					N/A
4/9/2019	#ADBE	9:30:00 AM					N/A
4/9/2019	#ADBE	11:30:00 AM					N/A
4/9/2019	#ADBE	1:30:00 PM					N/A
4/9/2019	#ADBE	3:30:00 PM					N/A
4/9/2019	#AIG	9:30:00 AM					N/A
4/9/2019	#AIG	11:30:00 AM					N/A
4/9/2019	#AIG	1:30:00 PM					N/A
4/9/2019	#AIG	3:30:00 PM					N/A
4/9/2019	#AMD	9:30:00 AM					N/A
4/9/2019	#AMD	11:30:00 AM					N/A

4/9/2019	#AMD	1:30:00 PM					N/A
4/9/2019	#AMD	3:30:00 PM					N/A
4/9/2019	#AMZN	9:30:00 AM					N/A
4/9/2019	#AMZN	11:30:00 AM					N/A
4/9/2019	#AMZN	1:30:00 PM					N/A
4/9/2019	#AMZN	3:30:00 PM					N/A
4/9/2019	#AXP	9:30:00 AM					N/A
4/9/2019	#AXP	11:30:00 AM					N/A
4/9/2019	#AXP	1:30:00 PM					N/A
4/9/2019	#AXP	3:30:00 PM					N/A
4/9/2019	#BA	9:30:00 AM					N/A
4/9/2019	#BA	11:30:00 AM					N/A
4/9/2019	#BA	1:30:00 PM					N/A
4/9/2019	#BA	3:30:00 PM					N/A
4/9/2019	#BABA	9:30:00 AM					N/A
4/9/2019	#BABA	11:30:00 AM					N/A
4/9/2019	#BABA	1:30:00 PM					N/A
4/9/2019	#BABA	3:30:00 PM					N/A
4/9/2019	#BAC	9:30:00 AM					N/A
4/9/2019	#BAC	11:30:00 AM					N/A
4/9/2019	#BAC	1:30:00 PM					N/A
4/9/2019	#BAC	3:30:00 PM					N/A
4/9/2019	#BARC	9:30:00 AM					N/A
4/9/2019	#BARC	11:30:00 AM					N/A
4/9/2019	#BARC	1:30:00 PM					N/A
4/9/2019	#BARC	3:30:00 PM					N/A
4/9/2019	#BHP	9:30:00 AM					N/A
4/9/2019	#BHP	11:30:00 AM					N/A
4/9/2019	#BHP	1:30:00 PM					N/A
4/9/2019	#BHP	3:30:00 PM					N/A
4/9/2019	#BIDU	9:30:00 AM					N/A
4/9/2019	#BIDU	11:30:00 AM					N/A
4/9/2019	#BIDU	1:30:00 PM					N/A
4/9/2019	#BIDU	3:30:00 PM					N/A



4/9/2019	#Bitcoin	9:30:00 AM	5219.26	5294.26			N/A
4/9/2019	#Bitcoin	11:30:00 AM	5199.81	5271.46			N/A
4/9/2019	#Bitcoin	1:30:00 PM	5169.26	5242.86			N/A
4/9/2019	#Bitcoin	3:30:00 PM					N/A
4/9/2019	#BK	9:30:00 AM					N/A
4/9/2019	#BK	11:30:00 AM					N/A
4/9/2019	#BK	1:30:00 PM					N/A
4/9/2019	#BK	3:30:00 PM					N/A
4/9/2019	#BLT	9:30:00 AM					N/A
4/9/2019	#BLT	11:30:00 AM					N/A
4/9/2019	#BLT	1:30:00 PM					N/A
4/9/2019	#BLT	3:30:00 PM					N/A
4/9/2019	#BP	9:30:00 AM					N/A
4/9/2019	#BP	11:30:00 AM					N/A
4/9/2019	#BP	1:30:00 PM					N/A
4/9/2019	#BP	3:30:00 PM					N/A
4/9/2019	#BTA	9:30:00 AM					N/A
4/9/2019	#BTA	11:30:00 AM					N/A
4/9/2019	#BTA	1:30:00 PM					N/A
4/9/2019	#BTA	3:30:00 PM					N/A
4/9/2019	#C	9:30:00 AM					N/A
4/9/2019	#C	11:30:00 AM					N/A
4/9/2019	#C	1:30:00 PM					N/A
4/9/2019	#C	3:30:00 PM					N/A
4/9/2019	#CAT	9:30:00 AM					N/A
4/9/2019	#CAT	11:30:00 AM					N/A
4/9/2019	#CAT	1:30:00 PM					N/A
4/9/2019	#CAT	3:30:00 PM					N/A
4/9/2019	#CHL	9:30:00 AM					N/A
4/9/2019	#CHL	11:30:00 AM					N/A
4/9/2019	#CHL	1:30:00 PM					N/A
4/9/2019	#CHL	3:30:00 PM					N/A
4/9/2019	#CL.f	9:30:00 AM	64.325	64.365			N/A
4/9/2019	#CL.f	11:30:00 AM	64.528	64.556			N/A

4/9/2019	#CL.f	1:30:00 PM	64.389	64.42			N/A
4/9/2019	#CL.f	3:30:00 PM	64.19	64.201			N/A
4/9/2019	#CMCSA	9:30:00 AM					N/A
4/9/2019	#CMCSA	11:30:00 AM					N/A
4/9/2019	#CMCSA	1:30:00 PM					N/A
4/9/2019	#CMCSA	3:30:00 PM					N/A
4/9/2019	#CSCO	9:30:00 AM					N/A
4/9/2019	#CSCO	11:30:00 AM					N/A
4/9/2019	#CSCO	1:30:00 PM					N/A
4/9/2019	#CSCO	3:30:00 PM					N/A
4/9/2019	#CVX	9:30:00 AM					N/A
4/9/2019	#CVX	11:30:00 AM					N/A
4/9/2019	#CVX	1:30:00 PM					N/A
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4/9/2019	AUDCHF	9:30:00 AM	0.71289	0.71349			N/A
4/9/2019	AUDCHF	11:30:00 AM	0.71351	0.71417			N/A
4/9/2019	AUDCHF	1:30:00 PM	0.71404	0.71461			N/A
4/9/2019	AUDCHF	3:30:00 PM	0.71412	0.71461			N/A
4/9/2019	AUDCHF.fx	9:30:00 AM	0.71323	0.71314			N/A
4/9/2019	AUDCHF.fx	11:30:00 AM	0.71385	0.71383			N/A
4/9/2019	AUDCHF.fx	1:30:00 PM	0.71438	0.71426			N/A
4/9/2019	AUDCHF.fx	3:30:00 PM	0.71446	0.71426			N/A
4/9/2019	AUDCZK	9:30:00 AM	16.219	16.235			N/A
4/9/2019	AUDCZK	11:30:00 AM	16.222	16.239			N/A
4/9/2019	AUDCZK	1:30:00 PM	16.218	16.234			N/A
4/9/2019	AUDCZK	3:30:00 PM	16.22	16.234			N/A
4/9/2019	AUDDKK	9:30:00 AM	4.7307	4.7347			N/A
4/9/2019	AUDDKK	11:30:00 AM	4.7314	4.7358			N/A
4/9/2019	AUDDKK	1:30:00 PM	4.731	4.7355			N/A
4/9/2019	AUDDKK	3:30:00 PM	4.7296	4.7336			N/A

4/9/2019	AUDHKD	9:30:00 AM	5.597	5.5995			N/A
4/9/2019	AUDHKD	11:30:00 AM	5.6023	5.6062			N/A
4/9/2019	AUDHKD	1:30:00 PM	5.604	5.6075			N/A
4/9/2019	AUDHKD	3:30:00 PM	5.6025	5.6058			N/A
4/9/2019	AUDHUF	9:30:00 AM	203.39	203.59			N/A
4/9/2019	AUDHUF	11:30:00 AM	203.41	203.57			N/A
4/9/2019	AUDHUF	1:30:00 PM	203.86	204.06			N/A
4/9/2019	AUDHUF	3:30:00 PM	203.66	203.89			N/A
4/9/2019	AUDJPY	9:30:00 AM	79.477	79.533			N/A
4/9/2019	AUDJPY	11:30:00 AM	79.485	79.551			N/A
4/9/2019	AUDJPY	1:30:00 PM	79.538	79.604			N/A
4/9/2019	AUDJPY	3:30:00 PM	79.475	79.529			N/A
4/9/2019	AUDJPY.fx	9:30:00 AM	79.511	79.498			N/A
4/9/2019	AUDJPY.fx	11:30:00 AM	79.519	79.516			N/A
4/9/2019	AUDJPY.fx	1:30:00 PM	79.571	79.569			N/A
4/9/2019	AUDJPY.fx	3:30:00 PM	79.508	79.495			N/A
4/9/2019	AUDMXN	9:30:00 AM	13.5163	13.5212			N/A
4/9/2019	AUDMXN	11:30:00 AM	13.5312	13.5407			N/A
4/9/2019	AUDMXN	1:30:00 PM	13.5284	13.5363			N/A
4/9/2019	AUDMXN	3:30:00 PM	13.5124	13.5185			N/A
4/9/2019	AUDNOK	9:30:00 AM	6.1064	6.1091			N/A
4/9/2019	AUDNOK	11:30:00 AM	6.1003	6.105			N/A
4/9/2019	AUDNOK	1:30:00 PM	6.0965	6.1012			N/A
4/9/2019	AUDNOK	3:30:00 PM	6.0945	6.0986			N/A
4/9/2019	AUDNOK.fx	9:30:00 AM	6.1079	6.1076			N/A
4/9/2019	AUDNOK.fx	11:30:00 AM	6.1018	6.1034			N/A
4/9/2019	AUDNOK.fx	1:30:00 PM	6.0982	6.0996			N/A
4/9/2019	AUDNOK.fx	3:30:00 PM	6.0961	6.0969			N/A
4/9/2019	AUDNZD	9:30:00 AM	1.05801	1.0589			N/A
4/9/2019	AUDNZD	11:30:00 AM	1.05772	1.05859			N/A
4/9/2019	AUDNZD	1:30:00 PM	1.05851	1.0594			N/A
4/9/2019	AUDNZD	3:30:00 PM	1.05908	1.05994			N/A
4/9/2019	AUDNZD.fx	9:30:00 AM	1.05844	1.05846			N/A
4/9/2019	AUDNZD.fx	11:30:00 AM	1.05815	1.05815			N/A

4/9/2019	AUDNZD.fx	1:30:00 PM	1.05894	1.05896			N/A
4/9/2019	AUDNZD.fx	3:30:00 PM	1.05951	1.0595			N/A
4/9/2019	AUDPLN	9:30:00 AM	2.7165	2.7196			N/A
4/9/2019	AUDPLN	11:30:00 AM	2.7165	2.7195			N/A
4/9/2019	AUDPLN	1:30:00 PM	2.7175	2.7204			N/A
4/9/2019	AUDPLN	3:30:00 PM	2.7162	2.7189			N/A
4/9/2019	AUDSEK	9:30:00 AM	6.6125	6.6148			N/A
4/9/2019	AUDSEK	11:30:00 AM	6.6076	6.6104			N/A
4/9/2019	AUDSEK	1:30:00 PM	6.6027	6.6053			N/A
4/9/2019	AUDSEK	3:30:00 PM	6.6042	6.6042			N/A
4/9/2019	AUDSEK.fx	9:30:00 AM	6.6077	6.6192			N/A
4/9/2019	AUDSEK.fx	11:30:00 AM	6.6028	6.615			N/A
4/9/2019	AUDSEK.fx	1:30:00 PM	6.598	6.6098			N/A
4/9/2019	AUDSEK.fx	3:30:00 PM	6.5996	6.6085			N/A
4/9/2019	AUDSGD	9:30:00 AM	0.9668	0.9669			N/A
4/9/2019	AUDSGD	11:30:00 AM	0.9671	0.9674			N/A
4/9/2019	AUDSGD	1:30:00 PM	0.9667	0.9669			N/A
4/9/2019	AUDSGD	3:30:00 PM	0.9667	0.9668			N/A
4/9/2019	AUDSGD.fx	9:30:00 AM	0.9669	0.96687			N/A
4/9/2019	AUDSGD.fx	11:30:00 AM	0.96721	0.96728			N/A
4/9/2019	AUDSGD.fx	1:30:00 PM	0.96683	0.96689			N/A
4/9/2019	AUDSGD.fx	3:30:00 PM	0.96674	0.96671			N/A
4/9/2019	AUDUSD	9:30:00 AM	0.71407	0.71405			N/A
4/9/2019	AUDUSD	11:30:00 AM	0.71469	0.71476			N/A
4/9/2019	AUDUSD	1:30:00 PM	0.71487	0.71501			N/A
4/9/2019	AUDUSD	3:30:00 PM	0.71479	0.71478			N/A
4/9/2019	AUDUSD.fx	9:30:00 AM	0.71412	0.71399			N/A
4/9/2019	AUDUSD.fx	11:30:00 AM	0.71474	0.7147			N/A
4/9/2019	AUDUSD.fx	1:30:00 PM	0.71492	0.71495			N/A
4/9/2019	AUDUSD.fx	3:30:00 PM	0.71484	0.71472			N/A
4/9/2019	AUDZAR	9:30:00 AM	10.0682	10.0758			N/A
4/9/2019	AUDZAR	11:30:00 AM	10.0379	10.0501			N/A
4/9/2019	AUDZAR	1:30:00 PM	10.0161	10.0308			N/A
4/9/2019	AUDZAR	3:30:00 PM	10.0179	10.0326			N/A

4/9/2019	AUS200.i	9:30:00 AM					N/A
4/9/2019	AUS200.i	11:30:00 AM	6216.83	6220.13			N/A
4/9/2019	AUS200.i	1:30:00 PM	6214.13	6218.63			N/A
4/9/2019	AUS200.i	3:30:00 PM	6202.13	6204.73			N/A
4/9/2019	BCHUSD	9:30:00 AM	300.56	311.75			N/A
4/9/2019	BCHUSD	11:30:00 AM	298.45	309.78			N/A
4/9/2019	BCHUSD	1:30:00 PM	296.89	308.15			N/A
4/9/2019	BCHUSD	3:30:00 PM	303.49	314.15			N/A
4/9/2019	CADCHF	9:30:00 AM	0.75018	0.75081			N/A
4/9/2019	CADCHF	11:30:00 AM	0.75057	0.75115			N/A
4/9/2019	CADCHF	1:30:00 PM	0.75099	0.75155			N/A
4/9/2019	CADCHF	3:30:00 PM	0.75186	0.75229			N/A
4/9/2019	CADCHF.fx	9:30:00 AM	0.75051	0.75043			N/A
4/9/2019	CADCHF.fx	11:30:00 AM	0.75091	0.7508			N/A
4/9/2019	CADCHF.fx	1:30:00 PM	0.75134	0.75119			N/A
4/9/2019	CADCHF.fx	3:30:00 PM	0.7522	0.75193			N/A
4/9/2019	CADCZK	9:30:00 AM	17.07	17.085			N/A
4/9/2019	CADCZK	11:30:00 AM	17.067	17.083			N/A
4/9/2019	CADCZK	1:30:00 PM	17.059	17.076			N/A
4/9/2019	CADCZK	3:30:00 PM	17.08	17.093			N/A
4/9/2019	CADDKK	9:30:00 AM	4.979	4.983			N/A
4/9/2019	CADDKK	11:30:00 AM					N/A
4/9/2019	CADDKK	1:30:00 PM					N/A
4/9/2019	CADDKK	3:30:00 PM	4.98	4.984			N/A
4/9/2019	CADHKD	9:30:00 AM	5.8906	5.8934			N/A
4/9/2019	CADHKD	11:30:00 AM	5.894	5.8976			N/A
4/9/2019	CADHKD	1:30:00 PM	5.8948	5.8985			N/A
4/9/2019	CADHKD	3:30:00 PM	5.8991	5.9024			N/A
4/9/2019	CADHUF	9:30:00 AM	214.09	214.24			N/A
4/9/2019	CADHUF	11:30:00 AM	214.01	214.13			N/A
4/9/2019	CADHUF	1:30:00 PM	214.48	214.6			N/A
4/9/2019	CADHUF	3:30:00 PM	214.5	214.63			N/A
4/9/2019	CADJPY	9:30:00 AM	83.635	83.69			N/A
4/9/2019	CADJPY	11:30:00 AM	83.61	83.676			N/A

4/9/2019	CADJPY	1:30:00 PM	83.652	83.718			N/A
4/9/2019	CADJPY	3:30:00 PM	83.672	83.721			N/A
4/9/2019	CADJPY.fx	9:30:00 AM	83.667	83.655			N/A
4/9/2019	CADJPY.fx	11:30:00 AM	83.643	83.642			N/A
4/9/2019	CADJPY.fx	1:30:00 PM	83.686	83.683			N/A
4/9/2019	CADJPY.fx	3:30:00 PM	83.708	83.686			N/A
4/9/2019	CADMXN	9:30:00 AM	14.2236	14.232			N/A
4/9/2019	CADMXN	11:30:00 AM	14.2345	14.2462			N/A
4/9/2019	CADMXN	1:30:00 PM	14.23	14.2399			N/A
4/9/2019	CADMXN	3:30:00 PM	14.2269	14.2355			N/A
4/9/2019	CADNOK	9:30:00 AM	6.4254	6.4281			N/A
4/9/2019	CADNOK	11:30:00 AM	6.4161	6.4204			N/A
4/9/2019	CADNOK	1:30:00 PM	6.4116	6.416			N/A
4/9/2019	CADNOK	3:30:00 PM	6.4167	6.4189			N/A
4/9/2019	CADPLN	9:30:00 AM	2.8586	2.8605			N/A
4/9/2019	CADPLN	11:30:00 AM	2.8578	2.8597			N/A
4/9/2019	CADPLN	1:30:00 PM	2.8585	2.8601			N/A
4/9/2019	CADPLN	3:30:00 PM	2.8603	2.8622			N/A
4/9/2019	CADSEK	9:30:00 AM	6.9568	6.9606			N/A
4/9/2019	CADSEK	11:30:00 AM	6.9496	6.9522			N/A
4/9/2019	CADSEK	1:30:00 PM	6.9434	6.9467			N/A
4/9/2019	CADSEK	3:30:00 PM	6.9523	6.9518			N/A
4/9/2019	CADSGD	9:30:00 AM	1.0166	1.0169			N/A
4/9/2019	CADSGD	11:30:00 AM	1.0168	1.0171			N/A
4/9/2019	CADSGD	1:30:00 PM	1.0162	1.0165			N/A
4/9/2019	CADSGD	3:30:00 PM	1.0172	1.0175			N/A
4/9/2019	CADZAR	9:30:00 AM	10.5962	10.605			N/A
4/9/2019	CADZAR	11:30:00 AM	10.56	10.5743			N/A
4/9/2019	CADZAR	1:30:00 PM	10.5351	10.5525			N/A
4/9/2019	CADZAR	3:30:00 PM	10.5488	10.564			N/A
4/9/2019	CHFCZK	9:30:00 AM	22.747	22.765			N/A
4/9/2019	CHFCZK	11:30:00 AM	22.736	22.75			N/A
4/9/2019	CHFCZK	1:30:00 PM	22.713	22.724			N/A
4/9/2019	CHFCZK	3:30:00 PM	22.715	22.726			N/A



4/9/2019	CHFDKK	9:30:00 AM					N/A
4/9/2019	CHFDKK	11:30:00 AM	6.629	6.633			N/A
4/9/2019	CHFDKK	1:30:00 PM	6.626	6.627			N/A
4/9/2019	CHFDKK	3:30:00 PM	6.622	6.625			N/A
4/9/2019	CHFDKK.fx	9:30:00 AM	6.6327	6.6391			N/A
4/9/2019	CHFDKK.fx	11:30:00 AM	6.6286	6.6338			N/A
4/9/2019	CHFDKK.fx	1:30:00 PM	6.6242	6.6283			N/A
4/9/2019	CHFDKK.fx	3:30:00 PM	6.6206	6.6261			N/A
4/9/2019	CHFHKD	9:30:00 AM	7.8496	7.8535			N/A
4/9/2019	CHFHKD	11:30:00 AM	7.8517	7.8551			N/A
4/9/2019	CHFHKD	1:30:00 PM	7.8481	7.8508			N/A
4/9/2019	CHFHKD	3:30:00 PM	7.8458	7.8473			N/A
4/9/2019	CHFHUF	9:30:00 AM	285.18	285.57			N/A
4/9/2019	CHFHUF	11:30:00 AM	285.01	285.23			N/A
4/9/2019	CHFHUF	1:30:00 PM	285.44	285.72			N/A
4/9/2019	CHFHUF	3:30:00 PM	285.15	285.46			N/A
4/9/2019	CHFJPY	9:30:00 AM	111.442	111.514			N/A
4/9/2019	CHFJPY	11:30:00 AM	111.371	111.428			N/A
4/9/2019	CHFJPY	1:30:00 PM	111.363	111.422			N/A
4/9/2019	CHFJPY	3:30:00 PM	111.262	111.319			N/A
4/9/2019	CHFJPY.fx	9:30:00 AM	111.475	111.479			N/A
4/9/2019	CHFJPY.fx	11:30:00 AM	111.405	111.393			N/A
4/9/2019	CHFJPY.fx	1:30:00 PM	111.396	111.387			N/A
4/9/2019	CHFJPY.fx	3:30:00 PM	111.294	111.285			N/A
4/9/2019	CHFMXN	9:30:00 AM	18.954	18.9647			N/A
4/9/2019	CHFMXN	11:30:00 AM	18.9597	18.9732			N/A
4/9/2019	CHFMXN	1:30:00 PM	18.9428	18.953			N/A
4/9/2019	CHFMXN	3:30:00 PM	18.9193	18.9254			N/A
4/9/2019	CHFNOK	9:30:00 AM	8.5622	8.5665			N/A
4/9/2019	CHFNOK	11:30:00 AM	8.5458	8.5524			N/A
4/9/2019	CHFNOK	1:30:00 PM	8.5354	8.5407			N/A
4/9/2019	CHFNOK	3:30:00 PM	8.5305	8.5377			N/A
4/9/2019	CHFNOK.fx	9:30:00 AM	8.56626	8.56318			N/A
4/9/2019	CHFNOK.fx	11:30:00 AM	8.54914	8.54906			N/A

4/9/2019	CHFNOK.fx	1:30:00 PM	8.53872	8.53731			N/A
4/9/2019	CHFNOK.fx	3:30:00 PM	8.53389	8.53432			N/A
4/9/2019	CHFPLN	9:30:00 AM	3.8094	3.8125			N/A
4/9/2019	CHFPLN	11:30:00 AM	3.8063	3.8089			N/A
4/9/2019	CHFPLN	1:30:00 PM	3.8051	3.8071			N/A
4/9/2019	CHFPLN	3:30:00 PM	3.8028	3.8057			N/A
4/9/2019	CHFPLN.fx	9:30:00 AM	3.80686	3.81495			N/A
4/9/2019	CHFPLN.fx	11:30:00 AM	3.80404	3.81125			N/A
4/9/2019	CHFPLN.fx	1:30:00 PM	3.8027	3.80933			N/A
4/9/2019	CHFPLN.fx	3:30:00 PM	3.80036	3.80801			N/A
4/9/2019	CHFSEK	9:30:00 AM	9.271	9.274			N/A
4/9/2019	CHFSEK	11:30:00 AM	9.2565	9.2595			N/A
4/9/2019	CHFSEK	1:30:00 PM	9.2435	9.2456			N/A
4/9/2019	CHFSEK	3:30:00 PM	9.2432	9.2448			N/A
4/9/2019	CHFSGD	9:30:00 AM	1.3555	1.356			N/A
4/9/2019	CHFSGD	11:30:00 AM	1.3549	1.3552			N/A
4/9/2019	CHFSGD	1:30:00 PM	1.3535	1.3536			N/A
4/9/2019	CHFSGD	3:30:00 PM	1.3533	1.3535			N/A
4/9/2019	CHFSGD.fx	9:30:00 AM	1.35565	1.3558			N/A
4/9/2019	CHFSGD.fx	11:30:00 AM	1.35503	1.35503			N/A
4/9/2019	CHFSGD.fx	1:30:00 PM	1.35366	1.35343			N/A
4/9/2019	CHFSGD.fx	3:30:00 PM	1.35338	1.35325			N/A
4/9/2019	CHFZAR	9:30:00 AM	14.1253	14.127			N/A
4/9/2019	CHFZAR	11:30:00 AM	14.0694	14.0776			N/A
4/9/2019	CHFZAR	1:30:00 PM	14.029	14.0402			N/A
4/9/2019	CHFZAR	3:30:00 PM	14.0304	14.0422			N/A
4/9/2019	CZKJPY	9:30:00 AM					N/A
4/9/2019	CZKJPY	11:30:00 AM	4.898	4.902			N/A
4/9/2019	CZKJPY	1:30:00 PM					N/A
4/9/2019	CZKJPY	3:30:00 PM	4.897	4.901			N/A
4/9/2019	DAX30.i	9:30:00 AM	11930.66	11927.91			N/A
4/9/2019	DAX30.i	11:30:00 AM	11963.91	11962.41			N/A
4/9/2019	DAX30.i	1:30:00 PM	11983.16	11980.41			N/A
4/9/2019	DAX30.i	3:30:00 PM	11928.41	11906.41			N/A

4/9/2019	DJ30.i	9:30:00 AM					N/A
4/9/2019	DJ30.i	11:30:00 AM					N/A
4/9/2019	DJ30.i	1:30:00 PM					N/A
4/9/2019	DJ30.i	3:30:00 PM					N/A
4/9/2019	DKKJPY	9:30:00 AM					N/A
4/9/2019	DKKJPY	11:30:00 AM					N/A
4/9/2019	DKKJPY	1:30:00 PM					N/A
4/9/2019	DKKJPY	3:30:00 PM					N/A
4/9/2019	EURAUD	9:30:00 AM	1.57677	1.57694			N/A
4/9/2019	EURAUD	11:30:00 AM	1.57629	1.57659			N/A
4/9/2019	EURAUD	1:30:00 PM	1.57638	1.57672			N/A
4/9/2019	EURAUD	3:30:00 PM	1.57706	1.57723			N/A
4/9/2019	EURAUD.fx	9:30:00 AM	1.57696	1.57671			N/A
4/9/2019	EURAUD.fx	11:30:00 AM	1.57649	1.57638			N/A
4/9/2019	EURAUD.fx	1:30:00 PM	1.57656	1.5765			N/A
4/9/2019	EURAUD.fx	3:30:00 PM	1.57726	1.577			N/A
4/9/2019	EURCAD	9:30:00 AM	1.49874	1.49938			N/A
4/9/2019	EURCAD	11:30:00 AM	1.49903	1.49963			N/A
4/9/2019	EURCAD	1:30:00 PM	1.49913	1.49998			N/A
4/9/2019	EURCAD	3:30:00 PM	1.4984	1.49885			N/A
4/9/2019	EURCAD.fx	9:30:00 AM	1.49915	1.49896			N/A
4/9/2019	EURCAD.fx	11:30:00 AM	1.49945	1.4992			N/A
4/9/2019	EURCAD.fx	1:30:00 PM	1.49954	1.49957			N/A
4/9/2019	EURCAD.fx	3:30:00 PM	1.49881	1.49843			N/A
4/9/2019	EURCHF	9:30:00 AM	1.12491	1.12504			N/A
4/9/2019	EURCHF	11:30:00 AM	1.12575	1.12567			N/A
4/9/2019	EURCHF	1:30:00 PM	1.12669	1.12649			N/A
4/9/2019	EURCHF	3:30:00 PM	1.12707	1.12705			N/A
4/9/2019	EURCHF.fx	9:30:00 AM	1.12497	1.12499			N/A
4/9/2019	EURCHF.fx	11:30:00 AM	1.12579	1.12561			N/A
4/9/2019	EURCHF.fx	1:30:00 PM	1.12674	1.12642			N/A
4/9/2019	EURCHF.fx	3:30:00 PM	1.12712	1.12699			N/A
4/9/2019	EURCZK	9:30:00 AM	25.578	25.618			N/A
4/9/2019	EURCZK	11:30:00 AM					N/A

4/9/2019	EURCZK	1:30:00 PM	25.572	25.61			N/A
4/9/2019	EURCZK	3:30:00 PM	25.587	25.623			N/A
4/9/2019	EURDKK	9:30:00 AM	7.4648	7.465			N/A
4/9/2019	EURDKK	11:30:00 AM	7.4642	7.4653			N/A
4/9/2019	EURDKK	1:30:00 PM	7.4644	7.4645			N/A
4/9/2019	EURDKK	3:30:00 PM	7.4644	7.4654			N/A
4/9/2019	EURGBP	9:30:00 AM	0.86155	0.86159			N/A
4/9/2019	EURGBP	11:30:00 AM	0.86218	0.86203			N/A
4/9/2019	EURGBP	1:30:00 PM	0.86192	0.86195			N/A
4/9/2019	EURGBP	3:30:00 PM	0.86282	0.86284			N/A
4/9/2019	EURGBP.fx	9:30:00 AM	0.86159	0.86155			N/A
4/9/2019	EURGBP.fx	11:30:00 AM	0.8622	0.86199			N/A
4/9/2019	EURGBP.fx	1:30:00 PM	0.86195	0.86191			N/A
4/9/2019	EURGBP.fx	3:30:00 PM	0.86287	0.86279			N/A
4/9/2019	EURHKD	9:30:00 AM	8.8313	8.8365			N/A
4/9/2019	EURHKD	11:30:00 AM	8.8398	8.8432			N/A
4/9/2019	EURHKD	1:30:00 PM	8.8409	8.8459			N/A
4/9/2019	EURHKD	3:30:00 PM	8.8426	8.8464			N/A
4/9/2019	EURHKD.fx	9:30:00 AM	8.83381	8.83391			N/A
4/9/2019	EURHKD.fx	11:30:00 AM	8.84231	8.84069			N/A
4/9/2019	EURHKD.fx	1:30:00 PM	8.84338	8.8434			N/A
4/9/2019	EURHKD.fx	3:30:00 PM	8.84513	8.84378			N/A
4/9/2019	EURHUF	9:30:00 AM	320.77	321.5			N/A
4/9/2019	EURHUF	11:30:00 AM	320.79	321.34			N/A
4/9/2019	EURHUF	1:30:00 PM	321.47	322.05			N/A
4/9/2019	EURHUF	3:30:00 PM	321.27	322			N/A
4/9/2019	EURHUF.fx	9:30:00 AM	321.024	321.247			N/A
4/9/2019	EURHUF.fx	11:30:00 AM	321.064	321.074			N/A
4/9/2019	EURHUF.fx	1:30:00 PM	321.751	321.88			N/A
4/9/2019	EURHUF.fx	3:30:00 PM	321.56	321.718			N/A
4/9/2019	EURJPY	9:30:00 AM	125.408	125.417			N/A
4/9/2019	EURJPY	11:30:00 AM	125.413	125.408			N/A
4/9/2019	EURJPY	1:30:00 PM	125.496	125.489			N/A
4/9/2019	EURJPY	3:30:00 PM	125.427	125.428			N/A

4/9/2019	EURJPY.fx	9:30:00 AM	125.41	125.413			N/A
4/9/2019	EURJPY.fx	11:30:00 AM	125.416	125.403			N/A
4/9/2019	EURJPY.fx	1:30:00 PM	125.497	125.486			N/A
4/9/2019	EURJPY.fx	3:30:00 PM	125.429	125.424			N/A
4/9/2019	EURMXN	9:30:00 AM	21.3245	21.3375			N/A
4/9/2019	EURMXN	11:30:00 AM	21.3465	21.3621			N/A
4/9/2019	EURMXN	1:30:00 PM	21.34	21.3562			N/A
4/9/2019	EURMXN	3:30:00 PM	21.324	21.3331			N/A
4/9/2019	EURMXN.fx	9:30:00 AM	21.3325	21.3292			N/A
4/9/2019	EURMXN.fx	11:30:00 AM	21.3548	21.3537			N/A
4/9/2019	EURMXN.fx	1:30:00 PM	21.3482	21.3482			N/A
4/9/2019	EURMXN.fx	3:30:00 PM	21.3325	21.3246			N/A
4/9/2019	EURNOK	9:30:00 AM	9.6311	9.6387			N/A
4/9/2019	EURNOK	11:30:00 AM	9.6176	9.6299			N/A
4/9/2019	EURNOK	1:30:00 PM	9.6126	9.6241			N/A
4/9/2019	EURNOK	3:30:00 PM	9.6129	9.6239			N/A
4/9/2019	EURNOK.fx	9:30:00 AM	9.63699	9.63342			N/A
4/9/2019	EURNOK.fx	11:30:00 AM	9.62308	9.6244			N/A
4/9/2019	EURNOK.fx	1:30:00 PM	9.61809	9.61852			N/A
4/9/2019	EURNOK.fx	3:30:00 PM	9.61821	9.61849			N/A
4/9/2019	EURNZD	9:30:00 AM	1.66936	1.66998			N/A
4/9/2019	EURNZD	11:30:00 AM	1.66849	1.66904			N/A
4/9/2019	EURNZD	1:30:00 PM	1.66973	1.67054			N/A
4/9/2019	EURNZD	3:30:00 PM	1.67136	1.67197			N/A
4/9/2019	EURNZD.fx	9:30:00 AM	1.66978	1.66954			N/A
4/9/2019	EURNZD.fx	11:30:00 AM	1.66891	1.6686			N/A
4/9/2019	EURNZD.fx	1:30:00 PM	1.67015	1.67011			N/A
4/9/2019	EURNZD.fx	3:30:00 PM	1.67177	1.67154			N/A
4/9/2019	EURPLN	9:30:00 AM	4.2857	4.2889			N/A
4/9/2019	EURPLN	11:30:00 AM	4.2847	4.2881			N/A
4/9/2019	EURPLN	1:30:00 PM	4.2866	4.2895			N/A
4/9/2019	EURPLN	3:30:00 PM	4.2857	4.289			N/A
4/9/2019	EURPLN.fx	9:30:00 AM	4.28497	4.28971			N/A
4/9/2019	EURPLN.fx	11:30:00 AM	4.28397	4.28872			N/A

4/9/2019	EURPLN.fx	1:30:00 PM	4.28587	4.29022			N/A
4/9/2019	EURPLN.fx	3:30:00 PM	4.2851	4.28952			N/A
4/9/2019	EURRUB	9:30:00 AM					N/A
4/9/2019	EURRUB	11:30:00 AM	72.634	73.068			N/A
4/9/2019	EURRUB	1:30:00 PM	72.601	73.039			N/A
4/9/2019	EURRUB	3:30:00 PM	72.679	73.097			N/A
4/9/2019	EURSEK	9:30:00 AM	10.4305	10.434			N/A
4/9/2019	EURSEK	11:30:00 AM	10.4204	10.4251			N/A
4/9/2019	EURSEK	1:30:00 PM	10.4132	10.4173			N/A
4/9/2019	EURSEK	3:30:00 PM	10.4188	10.4191			N/A
4/9/2019	EURSEK.fx	9:30:00 AM	10.43195	10.43227			N/A
4/9/2019	EURSEK.fx	11:30:00 AM	10.42204	10.42344			N/A
4/9/2019	EURSEK.fx	1:30:00 PM	10.41471	10.41561			N/A
4/9/2019	EURSEK.fx	3:30:00 PM	10.4203	10.41757			N/A
4/9/2019	EURSGD	9:30:00 AM	1.5248	1.5256			N/A
4/9/2019	EURSGD	11:30:00 AM	1.5251	1.5258			N/A
4/9/2019	EURSGD	1:30:00 PM	1.5245	1.5253			N/A
4/9/2019	EURSGD	3:30:00 PM	1.525	1.5257			N/A
4/9/2019	EURSGD.fx	9:30:00 AM	1.52515	1.52522			N/A
4/9/2019	EURSGD.fx	11:30:00 AM	1.52554	1.52539			N/A
4/9/2019	EURSGD.fx	1:30:00 PM	1.52487	1.52488			N/A
4/9/2019	EURSGD.fx	3:30:00 PM	1.52533	1.52526			N/A
4/9/2019	EURUSD	9:30:00 AM	1.12618	1.12629			N/A
4/9/2019	EURUSD	11:30:00 AM	1.1271	1.12699	10	1000	N/A
4/9/2019	EURUSD	1:30:00 PM	1.12737	1.12746			N/A
4/9/2019	EURUSD	3:30:00 PM	1.12767	1.12758			N/A
4/9/2019	EURUSD.fx	9:30:00 AM	1.12638	1.12639			N/A
4/9/2019	EURUSD.fx	11:30:00 AM	1.1273	1.12709			N/A
4/9/2019	EURUSD.fx	1:30:00 PM	1.12758	1.12756			N/A
4/9/2019	EURUSD.fx	3:30:00 PM	1.12787	1.12768			N/A
4/9/2019	EURZAR	9:30:00 AM	15.8931	15.8972			N/A
4/9/2019	EURZAR	11:30:00 AM	15.8393	15.8556			N/A
4/9/2019	EURZAR	1:30:00 PM	15.8056	15.825			N/A
4/9/2019	EURZAR	3:30:00 PM	15.816	15.8335			N/A

4/9/2019	EURZAR.fx	9:30:00 AM	15.89274	15.89749			N/A
4/9/2019	EURZAR.fx	11:30:00 AM	15.83919	15.85627			N/A
4/9/2019	EURZAR.fx	1:30:00 PM	15.80523	15.82463			N/A
4/9/2019	EURZAR.fx	3:30:00 PM	15.81562	15.83364			N/A
4/9/2019	GBPAUD	9:30:00 AM	1.83074	1.83106			N/A
4/9/2019	GBPAUD	11:30:00 AM	1.82917	1.82952			N/A
4/9/2019	GBPAUD	1:30:00 PM	1.82944	1.82998			N/A
4/9/2019	GBPAUD	3:30:00 PM	1.82837	1.82871			N/A
4/9/2019	GBPAUD.fx	9:30:00 AM	1.83113	1.83065			N/A
4/9/2019	GBPAUD.fx	11:30:00 AM	1.82954	1.82913			N/A
4/9/2019	GBPAUD.fx	1:30:00 PM	1.82982	1.8296			N/A
4/9/2019	GBPAUD.fx	3:30:00 PM	1.82874	1.82831			N/A
4/9/2019	GBPCAD	9:30:00 AM	1.73972	1.74008			N/A
4/9/2019	GBPCAD	11:30:00 AM	1.73894	1.73943			N/A
4/9/2019	GBPCAD	1:30:00 PM	1.73948	1.74006			N/A
4/9/2019	GBPCAD	3:30:00 PM	1.73676	1.73699			N/A
4/9/2019	GBPCAD.fx	9:30:00 AM	1.74009	1.73971			N/A
4/9/2019	GBPCAD.fx	11:30:00 AM	1.73932	1.73906			N/A
4/9/2019	GBPCAD.fx	1:30:00 PM	1.73985	1.73969			N/A
4/9/2019	GBPCAD.fx	3:30:00 PM	1.73714	1.73661			N/A
4/9/2019	GBPCHF	9:30:00 AM	1.30559	1.30594			N/A
4/9/2019	GBPCHF	11:30:00 AM	1.30581	1.30589			N/A
4/9/2019	GBPCHF	1:30:00 PM	1.30703	1.30701			N/A
4/9/2019	GBPCHF	3:30:00 PM	1.30617	1.30636			N/A
4/9/2019	GBPCHF.fx	9:30:00 AM	1.30577	1.30575			N/A
4/9/2019	GBPCHF.fx	11:30:00 AM	1.306	1.30569			N/A
4/9/2019	GBPCHF.fx	1:30:00 PM	1.3072	1.30683			N/A
4/9/2019	GBPCHF.fx	3:30:00 PM	1.30635	1.30617			N/A
4/9/2019	GBPCZK	9:30:00 AM	29.7	29.72			N/A
4/9/2019	GBPCZK	11:30:00 AM	29.687	29.701			N/A
4/9/2019	GBPCZK	1:30:00 PM	29.681	29.699			N/A
4/9/2019	GBPCZK	3:30:00 PM	29.664	29.683			N/A
4/9/2019	GBPKKK	9:30:00 AM	8.66	8.671			N/A
4/9/2019	GBPKKK	11:30:00 AM	8.656	8.664			N/A

4/9/2019	GBPDKK	1:30:00 PM	8.656	8.667			N/A
4/9/2019	GBPDKK	3:30:00 PM	8.647	8.657			N/A
4/9/2019	GBPDKK.fx	9:30:00 AM	8.6586	8.6712			N/A
4/9/2019	GBPDKK.fx	11:30:00 AM	8.6539	8.6641			N/A
4/9/2019	GBPDKK.fx	1:30:00 PM	8.6546	8.667			N/A
4/9/2019	GBPDKK.fx	3:30:00 PM	8.6455	8.658			N/A
4/9/2019	GBPHKD	9:30:00 AM	10.2484	10.2532			N/A
4/9/2019	GBPHKD	11:30:00 AM	10.2526	10.2556			N/A
4/9/2019	GBPHKD	1:30:00 PM	10.2558	10.2591			N/A
4/9/2019	GBPHKD	3:30:00 PM	10.2465	10.2503			N/A
4/9/2019	GBPHUF	9:30:00 AM	372.35	372.81			N/A
4/9/2019	GBPHUF	11:30:00 AM	372.04	372.42			N/A
4/9/2019	GBPHUF	1:30:00 PM	373.03	373.37			N/A
4/9/2019	GBPHUF	3:30:00 PM	372.41	372.85			N/A
4/9/2019	GBPJPY	9:30:00 AM	145.551	145.577			N/A
4/9/2019	GBPJPY	11:30:00 AM	145.467	145.47			N/A
4/9/2019	GBPJPY	1:30:00 PM	145.584	145.594			N/A
4/9/2019	GBPJPY	3:30:00 PM	145.358	145.375			N/A
4/9/2019	GBPJPY.fx	9:30:00 AM	145.568	145.558			N/A
4/9/2019	GBPJPY.fx	11:30:00 AM	145.485	145.449			N/A
4/9/2019	GBPJPY.fx	1:30:00 PM	145.6	145.576			N/A
4/9/2019	GBPJPY.fx	3:30:00 PM	145.375	145.356			N/A
4/9/2019	GBPMXN	9:30:00 AM	24.7492	24.7572			N/A
4/9/2019	GBPMXN	11:30:00 AM	24.7572	24.7691			N/A
4/9/2019	GBPMXN	1:30:00 PM	24.7572	24.7661			N/A
4/9/2019	GBPMXN	3:30:00 PM	24.7107	24.7143			N/A
4/9/2019	GBPNOK	9:30:00 AM	11.181	11.1856			N/A
4/9/2019	GBPNOK	11:30:00 AM	11.1599	11.1676			N/A
4/9/2019	GBPNOK	1:30:00 PM	11.1545	11.1645			N/A
4/9/2019	GBPNOK	3:30:00 PM	11.1428	11.1523			N/A
4/9/2019	GBPNOK.fx	9:30:00 AM	11.18567	11.18062			N/A
4/9/2019	GBPNOK.fx	11:30:00 AM	11.16482	11.16268			N/A
4/9/2019	GBPNOK.fx	1:30:00 PM	11.15941	11.15949			N/A
4/9/2019	GBPNOK.fx	3:30:00 PM	11.14751	11.14748			N/A



4/9/2019	GBPNZD	9:30:00 AM	1.93778	1.93814			N/A
4/9/2019	GBPNZD	11:30:00 AM	1.93556	1.93597			N/A
4/9/2019	GBPNZD	1:30:00 PM	1.93731	1.93786			N/A
4/9/2019	GBPNZD	3:30:00 PM	1.93717	1.93754			N/A
4/9/2019	GBPNZD.fx	9:30:00 AM	1.93815	1.93777			N/A
4/9/2019	GBPNZD.fx	11:30:00 AM	1.93595	1.93561			N/A
4/9/2019	GBPNZD.fx	1:30:00 PM	1.93763	1.93749			N/A
4/9/2019	GBPNZD.fx	3:30:00 PM	1.93751	1.93713			N/A
4/9/2019	GBPPLN	9:30:00 AM	4.9756	4.9768			N/A
4/9/2019	GBPPLN	11:30:00 AM	4.9719	4.9722			N/A
4/9/2019	GBPPLN	1:30:00 PM	4.9742	4.9755			N/A
4/9/2019	GBPPLN	3:30:00 PM	4.9683	4.9699			N/A
4/9/2019	GBPPLN.fx	9:30:00 AM	4.97338	4.97912			N/A
4/9/2019	GBPPLN.fx	11:30:00 AM	4.96973	4.97433			N/A
4/9/2019	GBPPLN.fx	1:30:00 PM	4.97202	4.97775			N/A
4/9/2019	GBPPLN.fx	3:30:00 PM	4.96619	4.97199			N/A
4/9/2019	GBPSEK	9:30:00 AM	12.1051	12.1112			N/A
4/9/2019	GBPSEK	11:30:00 AM	12.0872	12.0926			N/A
4/9/2019	GBPSEK	1:30:00 PM	12.0804	12.0879			N/A
4/9/2019	GBPSEK	3:30:00 PM	12.0733	12.0781			N/A
4/9/2019	GBPSEK.fx	9:30:00 AM	12.10136	12.11534			N/A
4/9/2019	GBPSEK.fx	11:30:00 AM	12.08335	12.09662			N/A
4/9/2019	GBPSEK.fx	1:30:00 PM	12.07648	12.09189			N/A
4/9/2019	GBPSEK.fx	3:30:00 PM	12.06976	12.08209			N/A
4/9/2019	GBPSGD	9:30:00 AM	1.77	1.7706			N/A
4/9/2019	GBPSGD	11:30:00 AM	1.7692	1.7697			N/A
4/9/2019	GBPSGD	1:30:00 PM	1.7689	1.7695			N/A
4/9/2019	GBPSGD	3:30:00 PM	1.7676	1.768			N/A
4/9/2019	GBPSGD.fx	9:30:00 AM	1.76811	1.77238			N/A
4/9/2019	GBPSGD.fx	11:30:00 AM	1.76744	1.7715			N/A
4/9/2019	GBPSGD.fx	1:30:00 PM	1.7671	1.77124			N/A
4/9/2019	GBPSGD.fx	3:30:00 PM	1.76576	1.76978			N/A
4/9/2019	GBPUSD	9:30:00 AM	1.30739	1.30732			N/A
4/9/2019	GBPUSD	11:30:00 AM	1.30759	1.30743			N/A

4/9/2019	GBPUSD	1:30:00 PM	1.30819	1.30808			N/A
4/9/2019	GBPUSD	3:30:00 PM	1.30721	1.30691			N/A
4/9/2019	GBPUSD.fx	9:30:00 AM	1.30744	1.30725			N/A
4/9/2019	GBPUSD.fx	11:30:00 AM	1.30762	1.30738			N/A
4/9/2019	GBPUSD.fx	1:30:00 PM	1.30824	1.30803			N/A
4/9/2019	GBPUSD.fx	3:30:00 PM	1.30724	1.30686			N/A
4/9/2019	GBPZAR	9:30:00 AM	18.4458	18.4549			N/A
4/9/2019	GBPZAR	11:30:00 AM	18.3738	18.3932			N/A
4/9/2019	GBPZAR	1:30:00 PM	18.3359	18.3628			N/A
4/9/2019	GBPZAR	3:30:00 PM	18.3281	18.3537			N/A
4/9/2019	GBPZAR.fx	9:30:00 AM	18.4529	18.4477			N/A
4/9/2019	GBPZAR.fx	11:30:00 AM	18.382	18.3858			N/A
4/9/2019	GBPZAR.fx	1:30:00 PM	18.3434	18.354			N/A
4/9/2019	GBPZAR.fx	3:30:00 PM	18.3346	18.3468			N/A
4/9/2019	GOLD	9:30:00 AM	1298.27	1298.52			N/A
4/9/2019	GOLD	11:30:00 AM	1301.63	1301.92			N/A
4/9/2019	GOLD	1:30:00 PM	1301.94	1302.24			N/A
4/9/2019	GOLD	3:30:00 PM	1305.15	1304.91			N/A
4/9/2019	HKDJPY	9:30:00 AM	14.2	14.21			N/A
4/9/2019	HKDJPY	11:30:00 AM	14.18	14.19			N/A
4/9/2019	HKDJPY	1:30:00 PM	14.18	14.2			N/A
4/9/2019	HKDJPY	3:30:00 PM	14.18	14.19			N/A
4/9/2019	HKDJPY.fx	9:30:00 AM	14.192	14.199			N/A
4/9/2019	HKDJPY.fx	11:30:00 AM	14.18	14.186			N/A
4/9/2019	HKDJPY.fx	1:30:00 PM	14.186	14.193			N/A
4/9/2019	HKDJPY.fx	3:30:00 PM	14.179	14.182			N/A
4/9/2019	HUFJPY	9:30:00 AM	0.3909	0.3912			N/A
4/9/2019	HUFJPY	11:30:00 AM	0.3909	0.3912			N/A
4/9/2019	HUFJPY	1:30:00 PM	0.3901	0.3904			N/A
4/9/2019	HUFJPY	3:30:00 PM	0.3904	0.3907			N/A
4/9/2019	JP225.i	9:30:00 AM	21739.9	21759.9			N/A
4/9/2019	JP225.i	11:30:00 AM	21729.9	21744.9			N/A
4/9/2019	JP225.i	1:30:00 PM	21749.9	21769.07			N/A
4/9/2019	JP225.i	3:30:00 PM	21719.9	21729.9			N/A

4/9/2019	MXNJPY	9:30:00 AM	5.88	5.89			N/A
4/9/2019	MXNJPY	11:30:00 AM					N/A
4/9/2019	MXNJPY	1:30:00 PM	5.88	5.89			N/A
4/9/2019	MXNJPY	3:30:00 PM	5.88	5.89			N/A
4/9/2019	NASDAQ.i	9:30:00 AM					N/A
4/9/2019	NASDAQ.i	11:30:00 AM					N/A
4/9/2019	NASDAQ.i	1:30:00 PM					N/A
4/9/2019	NASDAQ.i	3:30:00 PM					N/A
4/9/2019	NOKJPY	9:30:00 AM	13.01	13.03			N/A
4/9/2019	NOKJPY	11:30:00 AM					N/A
4/9/2019	NOKJPY	1:30:00 PM	13.03	13.07			N/A
4/9/2019	NOKJPY	3:30:00 PM	13.03	13.06			N/A
4/9/2019	NOKJPY.fx	9:30:00 AM	13.016	13.018			N/A
4/9/2019	NOKJPY.fx	11:30:00 AM	13.028	13.034			N/A
4/9/2019	NOKJPY.fx	1:30:00 PM	13.044	13.049			N/A
4/9/2019	NOKJPY.fx	3:30:00 PM	13.037	13.044			N/A
4/9/2019	NZDCAD	9:30:00 AM	0.8975	0.89813			N/A
4/9/2019	NZDCAD	11:30:00 AM	0.89813	0.89875			N/A
4/9/2019	NZDCAD	1:30:00 PM	0.89752	0.89821			N/A
4/9/2019	NZDCAD	3:30:00 PM	0.89622	0.89679			N/A
4/9/2019	NZDCAD.fx	9:30:00 AM	0.89782	0.8978			N/A
4/9/2019	NZDCAD.fx	11:30:00 AM	0.89847	0.89842			N/A
4/9/2019	NZDCAD.fx	1:30:00 PM	0.89787	0.89786			N/A
4/9/2019	NZDCAD.fx	3:30:00 PM	0.89654	0.89644			N/A
4/9/2019	NZDCHF	9:30:00 AM	0.67347	0.67412			N/A
4/9/2019	NZDCHF	11:30:00 AM	0.67429	0.67492			N/A
4/9/2019	NZDCHF	1:30:00 PM	0.67426	0.67486			N/A
4/9/2019	NZDCHF	3:30:00 PM	0.67396	0.6745			N/A
4/9/2019	NZDCHF.fx	9:30:00 AM	0.6738	0.67377			N/A
4/9/2019	NZDCHF.fx	11:30:00 AM	0.67463	0.67457			N/A
4/9/2019	NZDCHF.fx	1:30:00 PM	0.67459	0.67451			N/A
4/9/2019	NZDCHF.fx	3:30:00 PM	0.67429	0.67415			N/A
4/9/2019	NZDCZK	9:30:00 AM	15.325	15.336			N/A
4/9/2019	NZDCZK	11:30:00 AM	15.335	15.344			N/A

4/9/2019	NZDCZK	1:30:00 PM	15.317	15.328			N/A
4/9/2019	NZDCZK	3:30:00 PM	15.31	15.321			N/A
4/9/2019	NZDDKK	9:30:00 AM					N/A
4/9/2019	NZDDKK	11:30:00 AM					N/A
4/9/2019	NZDDKK	1:30:00 PM	4.468	4.471			N/A
4/9/2019	NZDDKK	3:30:00 PM					N/A
4/9/2019	NZDHKD	9:30:00 AM	5.2876	5.2898			N/A
4/9/2019	NZDHKD	11:30:00 AM	5.2948	5.2977			N/A
4/9/2019	NZDHKD	1:30:00 PM	5.292	5.2944			N/A
4/9/2019	NZDHKD	3:30:00 PM	5.2874	5.2901			N/A
4/9/2019	NZDHUF	9:30:00 AM	192.11	192.38			N/A
4/9/2019	NZDHUF	11:30:00 AM	192.18	192.4			N/A
4/9/2019	NZDHUF	1:30:00 PM	192.48	192.71			N/A
4/9/2019	NZDHUF	3:30:00 PM	192.16	192.46			N/A
4/9/2019	NZDJPY	9:30:00 AM	75.083	75.143			N/A
4/9/2019	NZDJPY	11:30:00 AM	75.118	75.182			N/A
4/9/2019	NZDJPY	1:30:00 PM	75.105	75.174			N/A
4/9/2019	NZDJPY	3:30:00 PM	75.005	75.065			N/A
4/9/2019	NZDJPY.fx	9:30:00 AM	75.114	75.11			N/A
4/9/2019	NZDJPY.fx	11:30:00 AM	75.149	75.149			N/A
4/9/2019	NZDJPY.fx	1:30:00 PM	75.136	75.141			N/A
4/9/2019	NZDJPY.fx	3:30:00 PM	75.037	75.032			N/A
4/9/2019	NZDMXN	9:30:00 AM	12.7707	12.7724			N/A
4/9/2019	NZDMXN	11:30:00 AM	12.7878	12.7945			N/A
4/9/2019	NZDMXN	1:30:00 PM	12.776	12.7797			N/A
4/9/2019	NZDMXN	3:30:00 PM	12.7538	12.7562			N/A
4/9/2019	NZDNOK	9:30:00 AM	5.7681	5.7695			N/A
4/9/2019	NZDNOK	11:30:00 AM	5.7634	5.7671			N/A
4/9/2019	NZDNOK	1:30:00 PM	5.7559	5.7591			N/A
4/9/2019	NZDNOK	3:30:00 PM	5.7503	5.7538			N/A
4/9/2019	NZDPLN	9:30:00 AM	2.5659	2.5672			N/A
4/9/2019	NZDPLN	11:30:00 AM	2.567	2.5684			N/A
4/9/2019	NZDPLN	1:30:00 PM	2.5661	2.5673			N/A
4/9/2019	NZDPLN	3:30:00 PM	2.5633	2.5647			N/A

4/9/2019	NZDSEK	9:30:00 AM	6.2428	6.2496			N/A
4/9/2019	NZDSEK	11:30:00 AM	6.2407	6.2468			N/A
4/9/2019	NZDSEK	1:30:00 PM	6.2313	6.2373			N/A
4/9/2019	NZDSEK	3:30:00 PM	6.2289	6.2331			N/A
4/9/2019	NZDSGD	9:30:00 AM	0.9132	0.9138			N/A
4/9/2019	NZDSGD	11:30:00 AM	0.9138	0.9145			N/A
4/9/2019	NZDSGD	1:30:00 PM	0.9128	0.9134			N/A
4/9/2019	NZDSGD	3:30:00 PM	0.9122	0.9127			N/A
4/9/2019	NZDSGD.fx	9:30:00 AM	0.91322	0.91377			N/A
4/9/2019	NZDSGD.fx	11:30:00 AM	0.91384	0.91439			N/A
4/9/2019	NZDSGD.fx	1:30:00 PM	0.91278	0.91331			N/A
4/9/2019	NZDSGD.fx	3:30:00 PM	0.91222	0.91268			N/A
4/9/2019	NZDUSD	9:30:00 AM	0.67455	0.67466			N/A
4/9/2019	NZDUSD	11:30:00 AM	0.67534	0.67545			N/A
4/9/2019	NZDUSD	1:30:00 PM	0.67501	0.67514			N/A
4/9/2019	NZDUSD	3:30:00 PM	0.6746	0.6746			N/A
4/9/2019	NZDUSD.fx	9:30:00 AM	0.67462	0.6746			N/A
4/9/2019	NZDUSD.fx	11:30:00 AM	0.67541	0.67547			N/A
4/9/2019	NZDUSD.fx	1:30:00 PM	0.67509	0.67515			N/A
4/9/2019	NZDUSD.fx	3:30:00 PM	0.67467	0.67461			N/A
4/9/2019	NZDZAR	9:30:00 AM	9.5099	9.5195			N/A
4/9/2019	NZDZAR	11:30:00 AM	9.4843	9.4984			N/A
4/9/2019	NZDZAR	1:30:00 PM	9.4564	9.4727			N/A
4/9/2019	NZDZAR	3:30:00 PM	9.4526	9.4701			N/A
4/9/2019	SEKJPY	9:30:00 AM					N/A
4/9/2019	SEKJPY	11:30:00 AM	12.03	12.05			N/A
4/9/2019	SEKJPY	1:30:00 PM	12.05	12.06			N/A
4/9/2019	SEKJPY	3:30:00 PM	12.04	12.05			N/A
4/9/2019	SEKJPY.fx	9:30:00 AM	12.012	12.031			N/A
4/9/2019	SEKJPY.fx	11:30:00 AM	12.023	12.041			N/A
4/9/2019	SEKJPY.fx	1:30:00 PM	12.04	12.057			N/A
4/9/2019	SEKJPY.fx	3:30:00 PM	12.03	12.046			N/A
4/9/2019	SGDJPY	9:30:00 AM	82.22	82.23			N/A
4/9/2019	SGDJPY	11:30:00 AM	82.21	82.21			N/A

4/9/2019	SGDJPY	1:30:00 PM	82.31	82.29			N/A
4/9/2019	SGDJPY	3:30:00 PM	82.21	82.22			N/A
4/9/2019	SILVER	9:30:00 AM	15.03	15.41			N/A
4/9/2019	SILVER	11:30:00 AM	15.08	15.46			N/A
4/9/2019	SILVER	1:30:00 PM	15.1	15.48			N/A
4/9/2019	SILVER	3:30:00 PM	15.13	15.5			N/A
4/9/2019	SPX500.i	9:30:00 AM	2890.84	2891.64			N/A
4/9/2019	SPX500.i	11:30:00 AM	2891.59	2892.39			N/A
4/9/2019	SPX500.i	1:30:00 PM	2892.34	2893.64			N/A
4/9/2019	SPX500.i	3:30:00 PM	2887.84	2888.89			N/A
4/9/2019	UK100.i	9:30:00 AM	7443.24	7443.16			N/A
4/9/2019	UK100.i	11:30:00 AM	7457.49	7456.57			N/A
4/9/2019	UK100.i	1:30:00 PM	7473.07	7474.99			N/A
4/9/2019	UK100.i	3:30:00 PM	7449.07	7447.16			N/A
4/9/2019	USDCAD	9:30:00 AM	1.33098	1.33082			N/A
4/9/2019	USDCAD	11:30:00 AM	1.33012	1.33021			N/A
4/9/2019	USDCAD	1:30:00 PM	1.32991	1.33002			N/A
4/9/2019	USDCAD	3:30:00 PM	1.32908	1.32888			N/A
4/9/2019	USDCAD.fx	9:30:00 AM	1.331	1.3308			N/A
4/9/2019	USDCAD.fx	11:30:00 AM	1.33016	1.33019			N/A
4/9/2019	USDCAD.fx	1:30:00 PM	1.32993	1.32999			N/A
4/9/2019	USDCAD.fx	3:30:00 PM	1.32912	1.32885			N/A
4/9/2019	USDCHF	9:30:00 AM	0.99871	0.99882			N/A
4/9/2019	USDCHF	11:30:00 AM	0.99877	0.99871			N/A
4/9/2019	USDCHF	1:30:00 PM	0.99919	0.99911			N/A
4/9/2019	USDCHF	3:30:00 PM	0.99947	0.99931			N/A
4/9/2019	USDCHF.fx	9:30:00 AM	0.99876	0.99874			N/A
4/9/2019	USDCHF.fx	11:30:00 AM	0.99881	0.99865			N/A
4/9/2019	USDCHF.fx	1:30:00 PM	0.99924	0.99905			N/A
4/9/2019	USDCHF.fx	3:30:00 PM	0.99951	0.99925			N/A
4/9/2019	USDCZK	9:30:00 AM	22.734	22.758			N/A
4/9/2019	USDCZK	11:30:00 AM	22.72	22.738			N/A
4/9/2019	USDCZK	1:30:00 PM	22.703	22.726			N/A
4/9/2019	USDCZK	3:30:00 PM	22.713	22.731			N/A

4/9/2019	USDCZK.fx	9:30:00 AM	22.7428	22.749			N/A
4/9/2019	USDCZK.fx	11:30:00 AM	22.728	22.7292			N/A
4/9/2019	USDCZK.fx	1:30:00 PM	22.7113	22.7176			N/A
4/9/2019	USDCZK.fx	3:30:00 PM	22.7223	22.7227			N/A
4/9/2019	USDDKK	9:30:00 AM	6.6265	6.6306			N/A
4/9/2019	USDDKK	11:30:00 AM	6.6221	6.6249			N/A
4/9/2019	USDDKK	1:30:00 PM	6.6194	6.6233			N/A
4/9/2019	USDDKK	3:30:00 PM	6.6185	6.6214			N/A
4/9/2019	USDDKK.fx	9:30:00 AM	6.62699	6.62844			N/A
4/9/2019	USDDKK.fx	11:30:00 AM	6.62244	6.62262			N/A
4/9/2019	USDDKK.fx	1:30:00 PM	6.61988	6.62116			N/A
4/9/2019	USDDKK.fx	3:30:00 PM	6.61913	6.61942			N/A
4/9/2019	USDHKD	9:30:00 AM	7.8427	7.8429			N/A
4/9/2019	USDHKD	11:30:00 AM	7.8436	7.8439			N/A
4/9/2019	USDHKD	1:30:00 PM	7.8424	7.8427			N/A
4/9/2019	USDHKD	3:30:00 PM	7.8411	7.8416			N/A
4/9/2019	USDHKD.fx	9:30:00 AM	7.84259	7.84286			N/A
4/9/2019	USDHKD.fx	11:30:00 AM	7.84354	7.84404			N/A
4/9/2019	USDHKD.fx	1:30:00 PM					N/A
4/9/2019	USDHKD.fx	3:30:00 PM					N/A
4/9/2019	USDHUF	9:30:00 AM	284.87	285.33			N/A
4/9/2019	USDHUF	11:30:00 AM	284.63	285.02			N/A
4/9/2019	USDHUF	1:30:00 PM	285.2	285.63			N/A
4/9/2019	USDHUF	3:30:00 PM	284.99	285.42			N/A
4/9/2019	USDHUF.fx	9:30:00 AM	285.057	285.145			N/A
4/9/2019	USDHUF.fx	11:30:00 AM	284.846	284.825			N/A
4/9/2019	USDHUF.fx	1:30:00 PM	285.408	285.427			N/A
4/9/2019	USDHUF.fx	3:30:00 PM	285.205	285.205			N/A
4/9/2019	USDINR	9:30:00 AM	64.53	74.51			N/A
4/9/2019	USDINR	11:30:00 AM	64.59	74.57			N/A
4/9/2019	USDINR	1:30:00 PM					N/A
4/9/2019	USDINR	3:30:00 PM					N/A
4/9/2019	USDJPY	9:30:00 AM	111.334	111.346			N/A
4/9/2019	USDJPY	11:30:00 AM	111.256	111.257	1000	1000	N/A

4/9/2019	USDJPY	1:30:00 PM	111.292	111.299			N/A
4/9/2019	USDJPY	3:30:00 PM	111.227	111.207			N/A
4/9/2019	USDJPY.fx	9:30:00 AM	111.34	111.339			N/A
4/9/2019	USDJPY.fx	11:30:00 AM	111.262	111.25			N/A
4/9/2019	USDJPY.fx	1:30:00 PM	111.298	111.291			N/A
4/9/2019	USDJPY.fx	3:30:00 PM	111.233	111.199			N/A
4/9/2019	USDMXN	9:30:00 AM	18.938	18.939			N/A
4/9/2019	USDMXN	11:30:00 AM	18.941	18.949			N/A
4/9/2019	USDMXN	1:30:00 PM	18.931	18.937			N/A
4/9/2019	USDMXN	3:30:00 PM	18.912	18.914			N/A
4/9/2019	USDMXN.f	9:30:00 AM	18.9409	18.9348			N/A
4/9/2019	USDMXN.f	11:30:00 AM	18.9445	18.9451			N/A
4/9/2019	USDMXN.f	1:30:00 PM	18.9346	18.9332			N/A
4/9/2019	USDMXN.f	3:30:00 PM	18.9157	18.9102			N/A
4/9/2019	USDNOK	9:30:00 AM	8.5524	8.5565			N/A
4/9/2019	USDNOK	11:30:00 AM	8.5349	8.542			N/A
4/9/2019	USDNOK	1:30:00 PM	8.5267	8.5349			N/A
4/9/2019	USDNOK	3:30:00 PM	8.5258	8.5319			N/A
4/9/2019	USDNOK.fx	9:30:00 AM	8.5561	8.55202			N/A
4/9/2019	USDNOK.fx	11:30:00 AM	8.53876	8.53755			N/A
4/9/2019	USDNOK.fx	1:30:00 PM	8.53066	8.53047			N/A
4/9/2019	USDNOK.fx	3:30:00 PM	8.52965	8.52756			N/A
4/9/2019	USDPLN	9:30:00 AM	3.8055	3.8071			N/A
4/9/2019	USDPLN	11:30:00 AM	3.8022	3.8032			N/A
4/9/2019	USDPLN	1:30:00 PM	3.8024	3.8036			N/A
4/9/2019	USDPLN	3:30:00 PM	3.8012	3.8022			N/A
4/9/2019	USDPLN.fx	9:30:00 AM	3.80461	3.80803			N/A
4/9/2019	USDPLN.fx	11:30:00 AM	3.80136	3.80403			N/A
4/9/2019	USDPLN.fx	1:30:00 PM	3.80155	3.80447			N/A
4/9/2019	USDPLN.fx	3:30:00 PM	3.80039	3.80301			N/A
4/9/2019	USDRUB	9:30:00 AM					N/A
4/9/2019	USDRUB	11:30:00 AM	64.549	64.942			N/A
4/9/2019	USDRUB	1:30:00 PM	64.503	64.887			N/A
4/9/2019	USDRUB	3:30:00 PM	64.552	64.936			N/A



4/9/2019	USDSEK	9:30:00 AM	9.2595	9.2631			N/A
4/9/2019	USDSEK	11:30:00 AM	9.2447	9.2477			N/A
4/9/2019	USDSEK	1:30:00 PM	9.2349	9.2384			N/A
4/9/2019	USDSEK	3:30:00 PM	9.2391	9.238			N/A
4/9/2019	USDSEK.fx	9:30:00 AM	9.26218	9.26136			N/A
4/9/2019	USDSEK.fx	11:30:00 AM	9.24713	9.24587			N/A
4/9/2019	USDSEK.fx	1:30:00 PM	9.23739	9.23669			N/A
4/9/2019	USDSEK.fx	3:30:00 PM	9.24143	9.23625			N/A
4/9/2019	USDSGD	9:30:00 AM	1.3539	1.3543			N/A
4/9/2019	USDSGD	11:30:00 AM	1.3532	1.3535			N/A
4/9/2019	USDSGD	1:30:00 PM	1.3523	1.3526			N/A
4/9/2019	USDSGD	3:30:00 PM	1.3523	1.3526			N/A
4/9/2019	USDSGD.fx	9:30:00 AM	1.35384	1.35429			N/A
4/9/2019	USDSGD.fx	11:30:00 AM	1.3531	1.35354			N/A
4/9/2019	USDSGD.fx	1:30:00 PM	1.35218	1.3526			N/A
4/9/2019	USDSGD.fx	3:30:00 PM	1.35224	1.35272			N/A
4/9/2019	USDZAR	9:30:00 AM	14.1101	14.1148			N/A
4/9/2019	USDZAR	11:30:00 AM	14.0534	14.0666			N/A
4/9/2019	USDZAR	1:30:00 PM	14.0176	14.0348			N/A
4/9/2019	USDZAR	3:30:00 PM	14.0228	14.0416			N/A
4/9/2019	USDZAR.fx	9:30:00 AM					N/A
4/9/2019	USDZAR.fx	11:30:00 AM					N/A
4/9/2019	USDZAR.fx	1:30:00 PM					N/A
4/9/2019	USDZAR.fx	3:30:00 PM					N/A
4/9/2019	XAUUSD	9:30:00 AM	1298.27	1298.52			N/A
4/9/2019	XAUUSD	11:30:00 AM	1301.64	1301.92			N/A
4/9/2019	XAUUSD	1:30:00 PM	1301.94	1302.24			N/A
4/9/2019	XAUUSD	3:30:00 PM	1305.14	1304.91			N/A
4/9/2019	ZARJPY	9:30:00 AM	7.88	7.89			N/A
4/9/2019	ZARJPY	11:30:00 AM	7.89	7.92			N/A
4/9/2019	ZARJPY	1:30:00 PM	7.92	7.93			N/A
4/9/2019	ZARJPY	3:30:00 PM	7.9	7.93			N/A
4/9/2019	ZARJPY.fx	9:30:00 AM	7.891	7.888			N/A
4/9/2019	ZARJPY.fx	11:30:00 AM	7.91	7.914			N/A

4/9/2019	ZARJPY.fx	1:30:00 PM	7.933	7.936			N/A
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4/10/2019	#Ripple	11:30:00 AM	0.3543	0.3638			N/A
4/10/2019	#Ripple	1:30:00 PM					N/A
4/10/2019	#Ripple	3:30:00 PM	0.3538	0.3637			N/A
4/10/2019	#S	9:30:00 AM					N/A
4/10/2019	#S	11:30:00 AM					N/A
4/10/2019	#S	1:30:00 PM					N/A
4/10/2019	#S	3:30:00 PM					N/A
4/10/2019	#SBUX	9:30:00 AM					N/A
4/10/2019	#SBUX	11:30:00 AM					N/A
4/10/2019	#SBUX	1:30:00 PM					N/A
4/10/2019	#SBUX	3:30:00 PM					N/A
4/10/2019	#SNE	9:30:00 AM					N/A
4/10/2019	#SNE	11:30:00 AM					N/A
4/10/2019	#SNE	1:30:00 PM					N/A
4/10/2019	#SNE	3:30:00 PM					N/A
4/10/2019	#SPY	9:30:00 AM					N/A
4/10/2019	#SPY	11:30:00 AM					N/A
4/10/2019	#SPY	1:30:00 PM					N/A
4/10/2019	#SPY	3:30:00 PM					N/A
4/10/2019	#T	9:30:00 AM					N/A
4/10/2019	#T	11:30:00 AM					N/A
4/10/2019	#T	1:30:00 PM					N/A
4/10/2019	#T	3:30:00 PM					N/A
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4/10/2019	#TEVA	11:30:00 AM					N/A
4/10/2019	#TEVA	1:30:00 PM					N/A
4/10/2019	#TEVA	3:30:00 PM					N/A

4/10/2019	#TRI	9:30:00 AM					N/A
4/10/2019	#TRI	11:30:00 AM					N/A
4/10/2019	#TRI	1:30:00 PM					N/A
4/10/2019	#TRI	3:30:00 PM					N/A
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4/10/2019	#TRV	11:30:00 AM					N/A
4/10/2019	#TRV	1:30:00 PM					N/A
4/10/2019	#TRV	3:30:00 PM					N/A
4/10/2019	#TSCO	9:30:00 AM					N/A
4/10/2019	#TSCO	11:30:00 AM					N/A
4/10/2019	#TSCO	1:30:00 PM					N/A
4/10/2019	#TSCO	3:30:00 PM					N/A
4/10/2019	#TSLA	9:30:00 AM					N/A
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4/10/2019	#TSLA	3:30:00 PM					N/A
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4/10/2019	#TWTR	11:30:00 AM					N/A
4/10/2019	#TWTR	1:30:00 PM					N/A
4/10/2019	#TWTR	3:30:00 PM					N/A
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4/10/2019	#UBS	11:30:00 AM					N/A
4/10/2019	#UBS	1:30:00 PM					N/A
4/10/2019	#UBS	3:30:00 PM					N/A
4/10/2019	#UL	9:30:00 AM					N/A
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4/10/2019	#UL	1:30:00 PM					N/A
4/10/2019	#UL	3:30:00 PM					N/A
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4/10/2019	#UPS	1:30:00 PM					N/A
4/10/2019	#UPS	3:30:00 PM					N/A
4/10/2019	#UTX	9:30:00 AM					N/A
4/10/2019	#UTX	11:30:00 AM					N/A

4/10/2019	#UTX	1:30:00 PM					N/A
4/10/2019	#UTX	3:30:00 PM					N/A
4/10/2019	#V	9:30:00 AM					N/A
4/10/2019	#V	11:30:00 AM					N/A
4/10/2019	#V	1:30:00 PM					N/A
4/10/2019	#V	3:30:00 PM					N/A
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4/10/2019	#VOD	11:30:00 AM					N/A
4/10/2019	#VOD	1:30:00 PM					N/A
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4/10/2019	#WDC	3:30:00 PM					N/A
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4/10/2019	#WFC	11:30:00 AM					N/A
4/10/2019	#WFC	1:30:00 PM					N/A
4/10/2019	#WFC	3:30:00 PM					N/A
4/10/2019	#WMT	9:30:00 AM					N/A
4/10/2019	#WMT	11:30:00 AM					N/A
4/10/2019	#WMT	1:30:00 PM					N/A
4/10/2019	#WMT	3:30:00 PM					N/A
4/10/2019	#XOM	9:30:00 AM					N/A
4/10/2019	#XOM	11:30:00 AM					N/A
4/10/2019	#XOM	1:30:00 PM					N/A
4/10/2019	#XOM	3:30:00 PM					N/A
4/10/2019	#YHOO	9:30:00 AM					N/A
4/10/2019	#YHOO	11:30:00 AM					N/A
4/10/2019	#YHOO	1:30:00 PM					N/A
4/10/2019	#YHOO	3:30:00 PM					N/A

4/10/2019	#ZNGA	9:30:00 AM					N/A
4/10/2019	#ZNGA	11:30:00 AM					N/A
4/10/2019	#ZNGA	1:30:00 PM					N/A
4/10/2019	#ZNGA	3:30:00 PM					N/A
4/10/2019	AUDCAD	9:30:00 AM	0.95217	0.95275			N/A
4/10/2019	AUDCAD	11:30:00 AM	0.95212	0.95283			N/A
4/10/2019	AUDCAD	1:30:00 PM	0.95237	0.95295			N/A
4/10/2019	AUDCAD	3:30:00 PM	0.95227	0.95244			N/A
4/10/2019	AUDCAD.fx	9:30:00 AM	0.9525	0.95241			N/A
4/10/2019	AUDCAD.fx	11:30:00 AM	0.95244	0.9525			N/A
4/10/2019	AUDCAD.fx	1:30:00 PM	0.95272	0.95261			N/A
4/10/2019	AUDCAD.fx	3:30:00 PM	0.95257	0.95227			N/A
4/10/2019	AUDCHF	9:30:00 AM	0.71464	0.71527			N/A
4/10/2019	AUDCHF	11:30:00 AM	0.71497	0.71566			N/A
4/10/2019	AUDCHF	1:30:00 PM	0.71475	0.71546			N/A
4/10/2019	AUDCHF	3:30:00 PM	0.71398	0.7144			N/A
4/10/2019	AUDCHF.fx	9:30:00 AM	0.71499	0.71492			N/A
4/10/2019	AUDCHF.fx	11:30:00 AM	0.7153	0.71532			N/A
4/10/2019	AUDCHF.fx	1:30:00 PM	0.7151	0.71511			N/A
4/10/2019	AUDCHF.fx	3:30:00 PM	0.71429	0.71417			N/A
4/10/2019	AUDCZK	9:30:00 AM	16.235	16.25			N/A
4/10/2019	AUDCZK	11:30:00 AM	16.229	16.245			N/A
4/10/2019	AUDCZK	1:30:00 PM	16.213	16.23			N/A
4/10/2019	AUDCZK	3:30:00 PM	16.189	16.201			N/A
4/10/2019	AUDDKK	9:30:00 AM	4.7341	4.7382			N/A
4/10/2019	AUDDKK	11:30:00 AM	4.7331	4.7372			N/A
4/10/2019	AUDDKK	1:30:00 PM	4.7305	4.7352			N/A
4/10/2019	AUDDKK	3:30:00 PM	4.7251	4.7286			N/A
4/10/2019	AUDHKD	9:30:00 AM	5.5959	5.5997			N/A
4/10/2019	AUDHKD	11:30:00 AM	5.6	5.6039			N/A
4/10/2019	AUDHKD	1:30:00 PM	5.5994	5.603			N/A
4/10/2019	AUDHKD	3:30:00 PM	5.5972	5.5948			N/A
4/10/2019	AUDHUF	9:30:00 AM	204.25	204.48			N/A
4/10/2019	AUDHUF	11:30:00 AM	203.95	204.08			N/A

4/10/2019	AUDHUF	1:30:00 PM	203.79	204.03			N/A
4/10/2019	AUDHUF	3:30:00 PM	203.53	203.59			N/A
4/10/2019	AUDJPY	9:30:00 AM	79.422	79.479			N/A
4/10/2019	AUDJPY	11:30:00 AM	79.416	79.482			N/A
4/10/2019	AUDJPY	1:30:00 PM	79.44	79.507			N/A
4/10/2019	AUDJPY	3:30:00 PM	79.391	79.407			N/A
4/10/2019	AUDJPY.fx	9:30:00 AM	79.456	79.444			N/A
4/10/2019	AUDJPY.fx	11:30:00 AM	79.448	79.448			N/A
4/10/2019	AUDJPY.fx	1:30:00 PM	79.473	79.472			N/A
4/10/2019	AUDJPY.fx	3:30:00 PM	79.423	79.393			N/A
4/10/2019	AUDMXN	9:30:00 AM	13.4927	13.5028			N/A
4/10/2019	AUDMXN	11:30:00 AM	13.4794	13.4874			N/A
4/10/2019	AUDMXN	1:30:00 PM	13.47	13.48			N/A
4/10/2019	AUDMXN	3:30:00 PM	13.4629	13.4648			N/A
4/10/2019	AUDNOK	9:30:00 AM	6.0822	6.0865			N/A
4/10/2019	AUDNOK	11:30:00 AM	6.0875	6.0924			N/A
4/10/2019	AUDNOK	1:30:00 PM	6.0823	6.0876			N/A
4/10/2019	AUDNOK	3:30:00 PM	6.0725	6.0747			N/A
4/10/2019	AUDNOK.fx	9:30:00 AM	6.0837	6.085			N/A
4/10/2019	AUDNOK.fx	11:30:00 AM	6.089	6.0908			N/A
4/10/2019	AUDNOK.fx	1:30:00 PM	6.0838	6.0858			N/A
4/10/2019	AUDNOK.fx	3:30:00 PM	6.0739	6.0736			N/A
4/10/2019	AUDNZD	9:30:00 AM	1.05805	1.05887			N/A
4/10/2019	AUDNZD	11:30:00 AM	1.05853	1.0594			N/A
4/10/2019	AUDNZD	1:30:00 PM	1.0577	1.0586			N/A
4/10/2019	AUDNZD	3:30:00 PM	1.05762	1.05823			N/A
4/10/2019	AUDNZD.fx	9:30:00 AM	1.05847	1.05843			N/A
4/10/2019	AUDNZD.fx	11:30:00 AM	1.05896	1.05896			N/A
4/10/2019	AUDNZD.fx	1:30:00 PM	1.05813	1.05816			N/A
4/10/2019	AUDNZD.fx	3:30:00 PM	1.05802	1.05794			N/A
4/10/2019	AUDPLN	9:30:00 AM	2.7167	2.7196			N/A
4/10/2019	AUDPLN	11:30:00 AM	2.7161	2.7192			N/A
4/10/2019	AUDPLN	1:30:00 PM	2.7133	2.7166			N/A
4/10/2019	AUDPLN	3:30:00 PM	2.7103	2.7125			N/A



4/10/2019	AUDSEK	9:30:00 AM	6.6052	6.6073			N/A
4/10/2019	AUDSEK	11:30:00 AM	6.6191	6.6221			N/A
4/10/2019	AUDSEK	1:30:00 PM	6.6161	6.6184			N/A
4/10/2019	AUDSEK	3:30:00 PM	6.6139	6.6133			N/A
4/10/2019	AUDSEK.fx	9:30:00 AM	6.6003	6.612			N/A
4/10/2019	AUDSEK.fx	11:30:00 AM	6.6143	6.6267			N/A
4/10/2019	AUDSEK.fx	1:30:00 PM	6.6114	6.623			N/A
4/10/2019	AUDSEK.fx	3:30:00 PM	6.6095	6.6189			N/A
4/10/2019	AUDSGD	9:30:00 AM	0.9671	0.9672			N/A
4/10/2019	AUDSGD	11:30:00 AM	0.967	0.9673			N/A
4/10/2019	AUDSGD	1:30:00 PM	0.967	0.9673			N/A
4/10/2019	AUDSGD	3:30:00 PM	0.9667	0.9661			N/A
4/10/2019	AUDSGD.fx	9:30:00 AM	0.96722	0.96711			N/A
4/10/2019	AUDSGD.fx	11:30:00 AM	0.9671	0.96717			N/A
4/10/2019	AUDSGD.fx	1:30:00 PM	0.96707	0.96717			N/A
4/10/2019	AUDSGD.fx	3:30:00 PM	0.9667	0.96623			N/A
4/10/2019	AUDUSD	9:30:00 AM	0.7148	0.71482			N/A
4/10/2019	AUDUSD	11:30:00 AM	0.71475	0.71483			N/A
4/10/2019	AUDUSD	1:30:00 PM	0.71476	0.71486			N/A
4/10/2019	AUDUSD	3:30:00 PM	0.71464	0.71403			N/A
4/10/2019	AUDUSD.fx	9:30:00 AM	0.71485	0.71477			N/A
4/10/2019	AUDUSD.fx	11:30:00 AM	0.71479	0.71479			N/A
4/10/2019	AUDUSD.fx	1:30:00 PM	0.71481	0.71481			N/A
4/10/2019	AUDUSD.fx	3:30:00 PM	0.7146	0.71417			N/A
4/10/2019	AUDZAR	9:30:00 AM	10.0226	10.0321			N/A
4/10/2019	AUDZAR	11:30:00 AM	10.0126	10.0257			N/A
4/10/2019	AUDZAR	1:30:00 PM	9.9929	10.0081			N/A
4/10/2019	AUDZAR	3:30:00 PM	9.962	9.9677			N/A
4/10/2019	AUS200.i	9:30:00 AM					N/A
4/10/2019	AUS200.i	11:30:00 AM	6215.5	6219			N/A
4/10/2019	AUS200.i	1:30:00 PM	6210.5	6214.45			N/A
4/10/2019	AUS200.i	3:30:00 PM	6216	6215.8			N/A
4/10/2019	BCHUSD	9:30:00 AM	305.48	315.95			N/A
4/10/2019	BCHUSD	11:30:00 AM	302.81	314.3			N/A

4/10/2019	BCHUSD	1:30:00 PM	300.64	312.13			N/A
4/10/2019	BCHUSD	3:30:00 PM	305.66	316.92			N/A
4/10/2019	CADCHF	9:30:00 AM	0.75024	0.75102			N/A
4/10/2019	CADCHF	11:30:00 AM	0.75067	0.75135			N/A
4/10/2019	CADCHF	1:30:00 PM	0.75032	0.75096			N/A
4/10/2019	CADCHF	3:30:00 PM	0.74958	0.75011			N/A
4/10/2019	CADCHF.fx	9:30:00 AM	0.75057	0.75065			N/A
4/10/2019	CADCHF.fx	11:30:00 AM	0.75099	0.75101			N/A
4/10/2019	CADCHF.fx	1:30:00 PM	0.75067	0.75058			N/A
4/10/2019	CADCHF.fx	3:30:00 PM	0.7499	0.74985			N/A
4/10/2019	CADCZK	9:30:00 AM	17.048	17.062			N/A
4/10/2019	CADCZK	11:30:00 AM	17.044	17.058			N/A
4/10/2019	CADCZK	1:30:00 PM	17.023	17.038			N/A
4/10/2019	CADCZK	3:30:00 PM	17.003	17.014			N/A
4/10/2019	CADDDKK	9:30:00 AM					N/A
4/10/2019	CADDDKK	11:30:00 AM	4.97	4.974			N/A
4/10/2019	CADDDKK	1:30:00 PM	4.967	4.97			N/A
4/10/2019	CADDDKK	3:30:00 PM	4.961	4.963			N/A
4/10/2019	CADHKD	9:30:00 AM	5.8757	5.8796			N/A
4/10/2019	CADHKD	11:30:00 AM	5.8806	5.8845			N/A
4/10/2019	CADHKD	1:30:00 PM	5.8792	5.8824			N/A
4/10/2019	CADHKD	3:30:00 PM	5.8774	5.8797			N/A
4/10/2019	CADHUF	9:30:00 AM	214.49	214.66			N/A
4/10/2019	CADHUF	11:30:00 AM	214.19	214.26			N/A
4/10/2019	CADHUF	1:30:00 PM	214.01	214.15			N/A
4/10/2019	CADHUF	3:30:00 PM	213.76	213.8			N/A
4/10/2019	CADJPY	9:30:00 AM	83.381	83.453			N/A
4/10/2019	CADJPY	11:30:00 AM	83.375	83.445			N/A
4/10/2019	CADJPY	1:30:00 PM	83.389	83.457			N/A
4/10/2019	CADJPY	3:30:00 PM	83.362	83.405			N/A
4/10/2019	CADJPY.fx	9:30:00 AM	83.414	83.419			N/A
4/10/2019	CADJPY.fx	11:30:00 AM	83.408	83.412			N/A
4/10/2019	CADJPY.fx	1:30:00 PM	83.422	83.423			N/A
4/10/2019	CADJPY.fx	3:30:00 PM	83.388	83.371			N/A

4/10/2019	CADMXN	9:30:00 AM	14.1684	14.178			N/A
4/10/2019	CADMXN	11:30:00 AM	14.1528	14.1651			N/A
4/10/2019	CADMXN	1:30:00 PM	14.1422	14.1533			N/A
4/10/2019	CADMXN	3:30:00 PM	14.1373	14.1422			N/A
4/10/2019	CADNOK	9:30:00 AM	6.3846	6.3894			N/A
4/10/2019	CADNOK	11:30:00 AM	6.3906	6.3929			N/A
4/10/2019	CADNOK	1:30:00 PM	6.3845	6.3885			N/A
4/10/2019	CADNOK	3:30:00 PM	6.3743	6.3743			N/A
4/10/2019	CADPLN	9:30:00 AM	2.8525	2.8544			N/A
4/10/2019	CADPLN	11:30:00 AM	2.8513	2.8529			N/A
4/10/2019	CADPLN	1:30:00 PM	2.849	2.8505			N/A
4/10/2019	CADPLN	3:30:00 PM	2.8452	2.8459			N/A
4/10/2019	CADSEK	9:30:00 AM	6.9337	6.936			N/A
4/10/2019	CADSEK	11:30:00 AM	6.9474	6.951			N/A
4/10/2019	CADSEK	1:30:00 PM	6.9431	6.9459			N/A
4/10/2019	CADSEK	3:30:00 PM	6.9414	6.9368			N/A
4/10/2019	CADSGD	9:30:00 AM	1.0147	1.015			N/A
4/10/2019	CADSGD	11:30:00 AM	1.0147	1.015			N/A
4/10/2019	CADSGD	1:30:00 PM	1.0146	1.0148			N/A
4/10/2019	CADSGD	3:30:00 PM	1.0141	1.0144			N/A
4/10/2019	CADZAR	9:30:00 AM	10.5233	10.5354			N/A
4/10/2019	CADZAR	11:30:00 AM	10.5132	10.5288			N/A
4/10/2019	CADZAR	1:30:00 PM	10.4918	10.5076			N/A
4/10/2019	CADZAR	3:30:00 PM	10.4599	10.4723			N/A
4/10/2019	CHFCZK	9:30:00 AM	22.716	22.728			N/A
4/10/2019	CHFCZK	11:30:00 AM	22.699	22.713			N/A
4/10/2019	CHFCZK	1:30:00 PM	22.68	22.697			N/A
4/10/2019	CHFCZK	3:30:00 PM	22.681	22.689			N/A
4/10/2019	CHFDKK	9:30:00 AM	6.623	6.626			N/A
4/10/2019	CHFDKK	11:30:00 AM	6.618	6.621			N/A
4/10/2019	CHFDKK	1:30:00 PM					N/A
4/10/2019	CHFDKK	3:30:00 PM	6.617	6.619			N/A
4/10/2019	CHFDKK.fx	9:30:00 AM	6.621	6.6274			N/A
4/10/2019	CHFDKK.fx	11:30:00 AM	6.617	6.6223			N/A

4/10/2019	CHFDKK.fx	1:30:00 PM	6.6151	6.6211			N/A
4/10/2019	CHFDKK.fx	3:30:00 PM	6.6156	6.6208			N/A
4/10/2019	CHFHKD	9:30:00 AM	7.8284	7.8324			N/A
4/10/2019	CHFHKD	11:30:00 AM	7.832	7.8352			N/A
4/10/2019	CHFHKD	1:30:00 PM	7.8323	7.8362			N/A
4/10/2019	CHFHKD	3:30:00 PM	7.8416	7.8377			N/A
4/10/2019	CHFHUF	9:30:00 AM	285.7	286.07			N/A
4/10/2019	CHFHUF	11:30:00 AM	285.17	285.4			N/A
4/10/2019	CHFHUF	1:30:00 PM	285	285.4			N/A
4/10/2019	CHFHUF	3:30:00 PM	284.98	285.23			N/A
4/10/2019	CHFJPY	9:30:00 AM	111.094	111.165			N/A
4/10/2019	CHFJPY	11:30:00 AM	111.038	111.095			N/A
4/10/2019	CHFJPY	1:30:00 PM	111.104	111.163			N/A
4/10/2019	CHFJPY	3:30:00 PM	111.182	111.191			N/A
4/10/2019	CHFJPY.fx	9:30:00 AM	111.127	111.131			N/A
4/10/2019	CHFJPY.fx	11:30:00 AM	111.069	111.06			N/A
4/10/2019	CHFJPY.fx	1:30:00 PM	111.138	111.128			N/A
4/10/2019	CHFJPY.fx	3:30:00 PM	111.21	111.168			N/A
4/10/2019	CHFMXN	9:30:00 AM	18.8759	18.8893			N/A
4/10/2019	CHFMXN	11:30:00 AM	18.848	18.8619			N/A
4/10/2019	CHFMXN	1:30:00 PM	18.8386	18.8561			N/A
4/10/2019	CHFMXN	3:30:00 PM	18.8589	18.8614			N/A
4/10/2019	CHFNOK	9:30:00 AM	8.5064	8.5139			N/A
4/10/2019	CHFNOK	11:30:00 AM	8.51	8.5172			N/A
4/10/2019	CHFNOK	1:30:00 PM	8.505	8.513			N/A
4/10/2019	CHFNOK	3:30:00 PM	8.5013	8.5065			N/A
4/10/2019	CHFNOK.fx	9:30:00 AM	8.50985	8.51054			N/A
4/10/2019	CHFNOK.fx	11:30:00 AM	8.51342	8.51386			N/A
4/10/2019	CHFNOK.fx	1:30:00 PM	8.50835	8.50962			N/A
4/10/2019	CHFNOK.fx	3:30:00 PM	8.50463	8.50308			N/A
4/10/2019	CHFPLN	9:30:00 AM	3.8005	3.8035			N/A
4/10/2019	CHFPLN	11:30:00 AM	3.7977	3.8005			N/A
4/10/2019	CHFPLN	1:30:00 PM	3.795	3.7982			N/A
4/10/2019	CHFPLN	3:30:00 PM	3.7952	3.7975			N/A

4/10/2019	CHFPLN.fx	9:30:00 AM	3.79814	3.80583			N/A
4/10/2019	CHFPLN.fx	11:30:00 AM	3.79526	3.80293			N/A
4/10/2019	CHFPLN.fx	1:30:00 PM	3.79274	3.80044			N/A
4/10/2019	CHFPLN.fx	3:30:00 PM	3.79248	3.80023			N/A
4/10/2019	CHFSEK	9:30:00 AM	9.238	9.2403			N/A
4/10/2019	CHFSEK	11:30:00 AM	9.2524	9.2564			N/A
4/10/2019	CHFSEK	1:30:00 PM	9.2506	9.2533			N/A
4/10/2019	CHFSEK	3:30:00 PM	9.2582	9.2507			N/A
4/10/2019	CHFSGD	9:30:00 AM	1.3526	1.3531			N/A
4/10/2019	CHFSGD	11:30:00 AM	1.3519	1.3523			N/A
4/10/2019	CHFSGD	1:30:00 PM	1.3523	1.3524			N/A
4/10/2019	CHFSGD	3:30:00 PM	1.3536	1.3531			N/A
4/10/2019	CHFSGD.fx	9:30:00 AM	1.35269	1.3529			N/A
4/10/2019	CHFSGD.fx	11:30:00 AM	1.35211	1.35211			N/A
4/10/2019	CHFSGD.fx	1:30:00 PM	1.3524	1.35254			N/A
4/10/2019	CHFSGD.fx	3:30:00 PM	1.35352	1.35294			N/A
4/10/2019	CHFZAR	9:30:00 AM	14.024	14.032			N/A
4/10/2019	CHFZAR	11:30:00 AM	14.0047	14.016			N/A
4/10/2019	CHFZAR	1:30:00 PM	13.9797	13.9955			N/A
4/10/2019	CHFZAR	3:30:00 PM	13.9544	13.9604			N/A
4/10/2019	CZKJPY	9:30:00 AM	4.89	4.893			N/A
4/10/2019	CZKJPY	11:30:00 AM	4.891	4.894			N/A
4/10/2019	CZKJPY	1:30:00 PM	4.898	4.901			N/A
4/10/2019	CZKJPY	3:30:00 PM	4.902	4.904			N/A
4/10/2019	DAX30.i	9:30:00 AM	11888.01	11887.51			N/A
4/10/2019	DAX30.i	11:30:00 AM	11921.51	11921.01			N/A
4/10/2019	DAX30.i	1:30:00 PM	11913.51	11913.51			N/A
4/10/2019	DAX30.i	3:30:00 PM	11930.39	11918.26			N/A
4/10/2019	DJ30.i	9:30:00 AM					N/A
4/10/2019	DJ30.i	11:30:00 AM					N/A
4/10/2019	DJ30.i	1:30:00 PM					N/A
4/10/2019	DJ30.i	3:30:00 PM					N/A
4/10/2019	DKKJPY	9:30:00 AM					N/A
4/10/2019	DKKJPY	11:30:00 AM	16.79	16.8			N/A

4/10/2019	DKKJPY	1:30:00 PM					N/A
4/10/2019	DKKJPY	3:30:00 PM	16.81	16.82			N/A
4/10/2019	EURAUD	9:30:00 AM	1.57555	1.57576			N/A
4/10/2019	EURAUD	11:30:00 AM	1.57574	1.57605			N/A
4/10/2019	EURAUD	1:30:00 PM	1.57651	1.577			N/A
4/10/2019	EURAUD	3:30:00 PM	1.57899	1.57873			N/A
4/10/2019	EURAUD.fx	9:30:00 AM	1.57576	1.57556			N/A
4/10/2019	EURAUD.fx	11:30:00 AM	1.57594	1.57582			N/A
4/10/2019	EURAUD.fx	1:30:00 PM	1.57671	1.57679			N/A
4/10/2019	EURAUD.fx	3:30:00 PM	1.57893	1.57854			N/A
4/10/2019	EURCAD	9:30:00 AM	1.50091	1.50178			N/A
4/10/2019	EURCAD	11:30:00 AM	1.50122	1.50193			N/A
4/10/2019	EURCAD	1:30:00 PM	1.50236	1.50306			N/A
4/10/2019	EURCAD	3:30:00 PM	1.50408	1.50442			N/A
4/10/2019	EURCAD.fx	9:30:00 AM	1.50131	1.50137			N/A
4/10/2019	EURCAD.fx	11:30:00 AM	1.50162	1.50152			N/A
4/10/2019	EURCAD.fx	1:30:00 PM	1.50276	1.50258			N/A
4/10/2019	EURCAD.fx	3:30:00 PM	1.50445	1.50409			N/A
4/10/2019	EURCHF	9:30:00 AM	1.12688	1.12702			N/A
4/10/2019	EURCHF	11:30:00 AM	1.1277	1.12766			N/A
4/10/2019	EURCHF	1:30:00 PM	1.12794	1.12806			N/A
4/10/2019	EURCHF	3:30:00 PM	1.12802	1.1278			N/A
4/10/2019	EURCHF.fx	9:30:00 AM	1.12694	1.12696			N/A
4/10/2019	EURCHF.fx	11:30:00 AM	1.12774	1.1276			N/A
4/10/2019	EURCHF.fx	1:30:00 PM	1.128	1.12799			N/A
4/10/2019	EURCHF.fx	3:30:00 PM	1.12807	1.12787			N/A
4/10/2019	EURCZK	9:30:00 AM	25.586	25.621			N/A
4/10/2019	EURCZK	11:30:00 AM	25.582	25.62			N/A
4/10/2019	EURCZK	1:30:00 PM					N/A
4/10/2019	EURCZK	3:30:00 PM	25.567	25.6			N/A
4/10/2019	EURDKK	9:30:00 AM	7.4639	7.4652			N/A
4/10/2019	EURDKK	11:30:00 AM	7.4645	7.4656			N/A
4/10/2019	EURDKK	1:30:00 PM	7.4645	7.4649			N/A
4/10/2019	EURDKK	3:30:00 PM	7.4643	7.4645			N/A

4/10/2019	EURGBP	9:30:00 AM	0.86204	0.86204			N/A
4/10/2019	EURGBP	11:30:00 AM	0.86187	0.8613			N/A
4/10/2019	EURGBP	1:30:00 PM	0.86238	0.86235			N/A
4/10/2019	EURGBP	3:30:00 PM	0.86173	0.86168			N/A
4/10/2019	EURGBP.fx	9:30:00 AM	0.86207	0.862			N/A
4/10/2019	EURGBP.fx	11:30:00 AM	0.86177	0.86131			N/A
4/10/2019	EURGBP.fx	1:30:00 PM	0.86241	0.86231			N/A
4/10/2019	EURGBP.fx	3:30:00 PM	0.86169	0.8617			N/A
4/10/2019	EURHKD	9:30:00 AM	8.8224	8.8278			N/A
4/10/2019	EURHKD	11:30:00 AM	8.8329	8.8364			N/A
4/10/2019	EURHKD	1:30:00 PM	8.8348	8.8401			N/A
4/10/2019	EURHKD	3:30:00 PM	8.844	8.8432			N/A
4/10/2019	EURHKD.fx	9:30:00 AM	8.82493	8.82521			N/A
4/10/2019	EURHKD.fx	11:30:00 AM	8.83538	8.83355			N/A
4/10/2019	EURHKD.fx	1:30:00 PM	8.83738	8.83758			N/A
4/10/2019	EURHKD.fx	3:30:00 PM	8.84586	8.83993			N/A
4/10/2019	EURHUF	9:30:00 AM	321.9	322.63			N/A
4/10/2019	EURHUF	11:30:00 AM	321.53	321.97			N/A
4/10/2019	EURHUF	1:30:00 PM	321.41	322.13			N/A
4/10/2019	EURHUF	3:30:00 PM	321.44	322.14			N/A
4/10/2019	EURHUF.fx	9:30:00 AM	322.161	322.366			N/A
4/10/2019	EURHUF.fx	11:30:00 AM	321.798	321.919			N/A
4/10/2019	EURHUF.fx	1:30:00 PM	321.686	321.88			N/A
4/10/2019	EURHUF.fx	3:30:00 PM	321.693	321.891			N/A
4/10/2019	EURJPY	9:30:00 AM	125.232	125.239			N/A
4/10/2019	EURJPY	11:30:00 AM	125.255	125.242			N/A
4/10/2019	EURJPY	1:30:00 PM	125.355	125.36			N/A
4/10/2019	EURJPY	3:30:00 PM	125.444	125.371			N/A
4/10/2019	EURJPY.fx	9:30:00 AM	125.234	125.235			N/A
4/10/2019	EURJPY.fx	11:30:00 AM	125.255	125.239			N/A
4/10/2019	EURJPY.fx	1:30:00 PM	125.357	125.356			N/A
4/10/2019	EURJPY.fx	3:30:00 PM	125.443	125.385			N/A
4/10/2019	EURMXN	9:30:00 AM	21.2746	21.2923			N/A
4/10/2019	EURMXN	11:30:00 AM	21.2569	21.2736			N/A

4/10/2019	EURMXN	1:30:00 PM	21.2513	21.2716			N/A
4/10/2019	EURMXN	3:30:00 PM	21.271	21.2791			N/A
4/10/2019	EURMXN.fx	9:30:00 AM	21.2828	21.2839			N/A
4/10/2019	EURMXN.fx	11:30:00 AM	21.2652	21.2654			N/A
4/10/2019	EURMXN.fx	1:30:00 PM	21.2595	21.2635			N/A
4/10/2019	EURMXN.fx	3:30:00 PM	21.2768	21.2706			N/A
4/10/2019	EURNOK	9:30:00 AM	9.5846	9.5964			N/A
4/10/2019	EURNOK	11:30:00 AM	9.5944	9.6072			N/A
4/10/2019	EURNOK	1:30:00 PM	9.5918	9.6044			N/A
4/10/2019	EURNOK	3:30:00 PM	9.587	9.5978			N/A
4/10/2019	EURNOK.fx	9:30:00 AM	9.59019	9.59085			N/A
4/10/2019	EURNOK.fx	11:30:00 AM	9.59981	9.60171			N/A
4/10/2019	EURNOK.fx	1:30:00 PM	9.59722	9.59886			N/A
4/10/2019	EURNOK.fx	3:30:00 PM	9.5923	9.59246			N/A
4/10/2019	EURNZD	9:30:00 AM	1.66798	1.66879			N/A
4/10/2019	EURNZD	11:30:00 AM	1.66909	1.66968			N/A
4/10/2019	EURNZD	1:30:00 PM	1.66869	1.66952			N/A
4/10/2019	EURNZD	3:30:00 PM	1.67109	1.67099			N/A
4/10/2019	EURNZD.fx	9:30:00 AM	1.66839	1.66834			N/A
4/10/2019	EURNZD.fx	11:30:00 AM	1.66952	1.66925			N/A
4/10/2019	EURNZD.fx	1:30:00 PM	1.66911	1.66909			N/A
4/10/2019	EURNZD.fx	3:30:00 PM	1.67135	1.67071			N/A
4/10/2019	EURPLN	9:30:00 AM	4.283	4.2861			N/A
4/10/2019	EURPLN	11:30:00 AM	4.2825	4.2856			N/A
4/10/2019	EURPLN	1:30:00 PM	4.2808	4.2841			N/A
4/10/2019	EURPLN	3:30:00 PM	4.2807	4.2837			N/A
4/10/2019	EURPLN.fx	9:30:00 AM	4.28227	4.28672			N/A
4/10/2019	EURPLN.fx	11:30:00 AM	4.28206	4.28613			N/A
4/10/2019	EURPLN.fx	1:30:00 PM	4.28007	4.28471			N/A
4/10/2019	EURPLN.fx	3:30:00 PM	4.27966	4.28423			N/A
4/10/2019	EURRUB	9:30:00 AM					N/A
4/10/2019	EURRUB	11:30:00 AM	72.64	73.068			N/A
4/10/2019	EURRUB	1:30:00 PM	72.582	73.028			N/A
4/10/2019	EURRUB	3:30:00 PM	72.479	72.83			N/A



4/10/2019	EURSEK	9:30:00 AM	10.4118	10.4135			N/A
4/10/2019	EURSEK	11:30:00 AM	10.4355	10.4392			N/A
4/10/2019	EURSEK	1:30:00 PM	10.436	10.4392			N/A
4/10/2019	EURSEK	3:30:00 PM	10.4443	10.4458			N/A
4/10/2019	EURSEK.fx	9:30:00 AM	10.41356	10.41204			N/A
4/10/2019	EURSEK.fx	11:30:00 AM	10.43699	10.43764			N/A
4/10/2019	EURSEK.fx	1:30:00 PM	10.43742	10.43762			N/A
4/10/2019	EURSEK.fx	3:30:00 PM	10.44602	10.44426			N/A
4/10/2019	EURSGD	9:30:00 AM	1.5241	1.525			N/A
4/10/2019	EURSGD	11:30:00 AM	1.5244	1.5251			N/A
4/10/2019	EURSGD	1:30:00 PM	1.5251	1.5256			N/A
4/10/2019	EURSGD	3:30:00 PM	1.5264	1.5264			N/A
4/10/2019	EURSGD.fx	9:30:00 AM	1.5245	1.52456			N/A
4/10/2019	EURSGD.fx	11:30:00 AM	1.52482	1.52458			N/A
4/10/2019	EURSGD.fx	1:30:00 PM	1.52548	1.52556			N/A
4/10/2019	EURSGD.fx	3:30:00 PM	1.52671	1.52597			N/A
4/10/2019	EURUSD	9:30:00 AM	1.12653	1.12666			N/A
4/10/2019	EURUSD	11:30:00 AM	1.12681	1.12665	10	10	N/A
4/10/2019	EURUSD	1:30:00 PM	1.1273	1.12742			N/A
4/10/2019	EURUSD	3:30:00 PM	1.1285	1.12775	2400	1000	N/A
4/10/2019	EURUSD.fx	9:30:00 AM	1.12673	1.12675			N/A
4/10/2019	EURUSD.fx	11:30:00 AM	1.127	1.12675			N/A
4/10/2019	EURUSD.fx	1:30:00 PM	1.1275	1.12751			N/A
4/10/2019	EURUSD.fx	3:30:00 PM	1.12862	1.12787			N/A
4/10/2019	EURZAR	9:30:00 AM	15.8082	15.8185			N/A
4/10/2019	EURZAR	11:30:00 AM	15.7985	15.8125			N/A
4/10/2019	EURZAR	1:30:00 PM	15.7714	15.7917			N/A
4/10/2019	EURZAR	3:30:00 PM	15.7462	15.7569			N/A
4/10/2019	EURZAR.fx	9:30:00 AM	15.8062	15.8196			N/A
4/10/2019	EURZAR.fx	11:30:00 AM	15.79742	15.81304			N/A
4/10/2019	EURZAR.fx	1:30:00 PM	15.77057	15.79259			N/A
4/10/2019	EURZAR.fx	3:30:00 PM	15.74529	15.76091			N/A
4/10/2019	GBPAUD	9:30:00 AM	1.82816	1.82869			N/A
4/10/2019	GBPAUD	11:30:00 AM	1.83005	1.82964			N/A

4/10/2019	GBPAUD	1:30:00 PM	1.82893	1.82943			N/A
4/10/2019	GBPAUD	3:30:00 PM	1.83298	1.83293			N/A
4/10/2019	GBPAUD.fx	9:30:00 AM	1.82855	1.82831			N/A
4/10/2019	GBPAUD.fx	11:30:00 AM	1.83034	1.82942			N/A
4/10/2019	GBPAUD.fx	1:30:00 PM	1.82933	1.82904			N/A
4/10/2019	GBPAUD.fx	3:30:00 PM	1.83308	1.83264			N/A
4/10/2019	GBPCAD	9:30:00 AM	1.74131	1.74187			N/A
4/10/2019	GBPCAD	11:30:00 AM	1.7431	1.74263			N/A
4/10/2019	GBPCAD	1:30:00 PM	1.74235	1.7426			N/A
4/10/2019	GBPCAD	3:30:00 PM	1.74554	1.74588			N/A
4/10/2019	GBPCAD.fx	9:30:00 AM	1.74168	1.74149			N/A
4/10/2019	GBPCAD.fx	11:30:00 AM	1.74341	1.74238			N/A
4/10/2019	GBPCAD.fx	1:30:00 PM	1.74272	1.74222			N/A
4/10/2019	GBPCAD.fx	3:30:00 PM	1.74577	1.74562			N/A
4/10/2019	GBPCHF	9:30:00 AM	1.30717	1.30745			N/A
4/10/2019	GBPCHF	11:30:00 AM	1.30913	1.30852			N/A
4/10/2019	GBPCHF	1:30:00 PM	1.30795	1.3082			N/A
4/10/2019	GBPCHF	3:30:00 PM	1.30892	1.30914			N/A
4/10/2019	GBPCHF.fx	9:30:00 AM	1.30734	1.30726			N/A
4/10/2019	GBPCHF.fx	11:30:00 AM	1.30926	1.30853			N/A
4/10/2019	GBPCHF.fx	1:30:00 PM	1.30813	1.30799			N/A
4/10/2019	GBPCHF.fx	3:30:00 PM	1.30906	1.30901			N/A
4/10/2019	GBPCZK	9:30:00 AM	29.69	29.708			N/A
4/10/2019	GBPCZK	11:30:00 AM	29.714	29.713			N/A
4/10/2019	GBPCZK	1:30:00 PM	29.664	29.682			N/A
4/10/2019	GBPCZK	3:30:00 PM	29.682	29.695			N/A
4/10/2019	GBPDKK	9:30:00 AM	8.656	8.666			N/A
4/10/2019	GBPDKK	11:30:00 AM	8.663	8.668			N/A
4/10/2019	GBPDKK	1:30:00 PM	8.653	8.663			N/A
4/10/2019	GBPDKK	3:30:00 PM	8.66	8.669			N/A
4/10/2019	GBPDKK.fx	9:30:00 AM	8.6538	8.6662			N/A
4/10/2019	GBPDKK.fx	11:30:00 AM	8.6608	8.6691			N/A
4/10/2019	GBPDKK.fx	1:30:00 PM	8.6511	8.6629			N/A
4/10/2019	GBPDKK.fx	3:30:00 PM	8.6574	8.6702			N/A

4/10/2019	GBPHKD	9:30:00 AM	10.2325	10.2375			N/A
4/10/2019	GBPHKD	11:30:00 AM	10.252	10.2476			N/A
4/10/2019	GBPHKD	1:30:00 PM	10.244	10.2477			N/A
4/10/2019	GBPHKD	3:30:00 PM	10.2614	10.2583			N/A
4/10/2019	GBPHUF	9:30:00 AM	373.46	373.9			N/A
4/10/2019	GBPHUF	11:30:00 AM	373.21	373.31			N/A
4/10/2019	GBPHUF	1:30:00 PM	372.79	373.21			N/A
4/10/2019	GBPHUF	3:30:00 PM	372.98	373.28			N/A
4/10/2019	GBPJPY	9:30:00 AM	145.269	145.289			N/A
4/10/2019	GBPJPY	11:30:00 AM	145.412	145.349	2000	2000	N/A
4/10/2019	GBPJPY	1:30:00 PM	145.361	145.371			N/A
4/10/2019	GBPJPY	3:30:00 PM	145.561	145.532			N/A
4/10/2019	GBPJPY.fx	9:30:00 AM	145.287	145.27			N/A
4/10/2019	GBPJPY.fx	11:30:00 AM	145.424	145.343			N/A
4/10/2019	GBPJPY.fx	1:30:00 PM	145.382	145.351			N/A
4/10/2019	GBPJPY.fx	3:30:00 PM	145.563	145.525			N/A
4/10/2019	GBPMXN	9:30:00 AM	24.6747	24.6877			N/A
4/10/2019	GBPMXN	11:30:00 AM	24.6738	24.667			N/A
4/10/2019	GBPMXN	1:30:00 PM	24.6435	24.6553			N/A
4/10/2019	GBPMXN	3:30:00 PM	24.683	24.68			N/A
4/10/2019	GBPNOK	9:30:00 AM	11.1199	11.1303			N/A
4/10/2019	GBPNOK	11:30:00 AM	11.1413	11.1458			N/A
4/10/2019	GBPNOK	1:30:00 PM	11.125	11.1346			N/A
4/10/2019	GBPNOK	3:30:00 PM	11.1278	11.1359			N/A
4/10/2019	GBPNOK.fx	9:30:00 AM	11.12499	11.12541			N/A
4/10/2019	GBPNOK.fx	11:30:00 AM	11.14593	11.14146			N/A
4/10/2019	GBPNOK.fx	1:30:00 PM	11.1301	11.12945			N/A
4/10/2019	GBPNOK.fx	3:30:00 PM	11.13269	11.1315			N/A
4/10/2019	GBPNZD	9:30:00 AM	1.93514	1.93564			N/A
4/10/2019	GBPNZD	11:30:00 AM	1.938	1.93725			N/A
4/10/2019	GBPNZD	1:30:00 PM	1.93535	1.93582			N/A
4/10/2019	GBPNZD	3:30:00 PM	1.93932	1.93912			N/A
4/10/2019	GBPNZD.fx	9:30:00 AM	1.9355	1.93526			N/A
4/10/2019	GBPNZD.fx	11:30:00 AM	1.93828	1.93727			N/A

4/10/2019	GBPNZD.fx	1:30:00 PM	1.9357	1.93547			N/A
4/10/2019	GBPNZD.fx	3:30:00 PM	1.93957	1.93897			N/A
4/10/2019	GBPPLN	9:30:00 AM	4.9694	4.971			N/A
4/10/2019	GBPPLN	11:30:00 AM	4.973	4.9721			N/A
4/10/2019	GBPPLN	1:30:00 PM	4.9653	4.9666			N/A
4/10/2019	GBPPLN	3:30:00 PM	4.9687	4.9697			N/A
4/10/2019	GBPPLN.fx	9:30:00 AM	4.96724	4.97299			N/A
4/10/2019	GBPPLN.fx	11:30:00 AM	4.97083	4.9742			N/A
4/10/2019	GBPPLN.fx	1:30:00 PM	4.96316	4.96869			N/A
4/10/2019	GBPPLN.fx	3:30:00 PM	4.96627	4.97259			N/A
4/10/2019	GBPSEK	9:30:00 AM	12.0757	12.0826			N/A
4/10/2019	GBPSEK	11:30:00 AM	12.1132	12.1148			N/A
4/10/2019	GBPSEK	1:30:00 PM	12.1006	12.1061			N/A
4/10/2019	GBPSEK	3:30:00 PM	12.1185	12.1236			N/A
4/10/2019	GBPSEK.fx	9:30:00 AM	12.07188	12.08647			N/A
4/10/2019	GBPSEK.fx	11:30:00 AM	12.1095	12.11862			N/A
4/10/2019	GBPSEK.fx	1:30:00 PM	12.09717	12.10953			N/A
4/10/2019	GBPSEK.fx	3:30:00 PM	12.11513	12.12862			N/A
4/10/2019	GBPSGD	9:30:00 AM	1.7683	1.7688			N/A
4/10/2019	GBPSGD	11:30:00 AM	1.77	1.7694			N/A
4/10/2019	GBPSGD	1:30:00 PM	1.7689	1.7694			N/A
4/10/2019	GBPSGD	3:30:00 PM	1.7718	1.7715			N/A
4/10/2019	GBPSGD.fx	9:30:00 AM	1.76644	1.77056			N/A
4/10/2019	GBPSGD.fx	11:30:00 AM	1.76805	1.7715			N/A
4/10/2019	GBPSGD.fx	1:30:00 PM	1.76702	1.77115			N/A
4/10/2019	GBPSGD.fx	3:30:00 PM	1.76941	1.77333			N/A
4/10/2019	GBPUSD	9:30:00 AM	1.3071	1.30699			N/A
4/10/2019	GBPUSD	11:30:00 AM	1.30843	1.30753		39000	N/A
4/10/2019	GBPUSD	1:30:00 PM	1.30759	1.30743			N/A
4/10/2019	GBPUSD	3:30:00 PM	1.30993	1.30914			N/A
4/10/2019	GBPUSD.fx	9:30:00 AM	1.30713	1.30695			N/A
4/10/2019	GBPUSD.fx	11:30:00 AM	1.30844	1.30768			N/A
4/10/2019	GBPUSD.fx	1:30:00 PM	1.30764	1.30739			N/A
4/10/2019	GBPUSD.fx	3:30:00 PM	1.30976	1.30912			N/A

4/10/2019	GBPZAR	9:30:00 AM	18.336	18.3526			N/A
4/10/2019	GBPZAR	11:30:00 AM	18.3406	18.3517			N/A
4/10/2019	GBPZAR	1:30:00 PM	18.2883	18.3154			N/A
4/10/2019	GBPZAR	3:30:00 PM	18.2718	18.2903			N/A
4/10/2019	GBPZAR.fx	9:30:00 AM	18.3432	18.3463			N/A
4/10/2019	GBPZAR.fx	11:30:00 AM	18.3472	18.3447			N/A
4/10/2019	GBPZAR.fx	1:30:00 PM	18.2955	18.3086			N/A
4/10/2019	GBPZAR.fx	3:30:00 PM	18.2774	18.2867			N/A
4/10/2019	GOLD	9:30:00 AM	1304.35	1304.43			N/A
4/10/2019	GOLD	11:30:00 AM	1304.22	1304.53			N/A
4/10/2019	GOLD	1:30:00 PM	1303.99	1304.24			N/A
4/10/2019	GOLD	3:30:00 PM	1304.71	1303.64			N/A
4/10/2019	HKDJPY	9:30:00 AM					N/A
4/10/2019	HKDJPY	11:30:00 AM	14.18	14.19			N/A
4/10/2019	HKDJPY	1:30:00 PM	14.19	14.19			N/A
4/10/2019	HKDJPY	3:30:00 PM	14.18	14.2			N/A
4/10/2019	HKDJPY.fx	9:30:00 AM	14.187	14.194			N/A
4/10/2019	HKDJPY.fx	11:30:00 AM	14.172	14.18			N/A
4/10/2019	HKDJPY.fx	1:30:00 PM	14.18	14.188			N/A
4/10/2019	HKDJPY.fx	3:30:00 PM	14.179	14.182			N/A
4/10/2019	HUFJPY	9:30:00 AM					N/A
4/10/2019	HUFJPY	11:30:00 AM	0.3894	0.3897			N/A
4/10/2019	HUFJPY	1:30:00 PM	0.3898	0.3901			N/A
4/10/2019	HUFJPY	3:30:00 PM	0.39	0.3903			N/A
4/10/2019	JP225.i	9:30:00 AM	21679.9	21694.9			N/A
4/10/2019	JP225.i	11:30:00 AM	21689.9	21709.9			N/A
4/10/2019	JP225.i	1:30:00 PM	21689.9	21704.9			N/A
4/10/2019	JP225.i	3:30:00 PM	21719.07	21714.9			N/A
4/10/2019	MXNJPY	9:30:00 AM	5.88	5.89			N/A
4/10/2019	MXNJPY	11:30:00 AM	5.89	5.9			N/A
4/10/2019	MXNJPY	1:30:00 PM	5.9	5.91			N/A
4/10/2019	MXNJPY	3:30:00 PM	5.9	5.9			N/A
4/10/2019	NASDAQ.i	9:30:00 AM					N/A
4/10/2019	NASDAQ.i	11:30:00 AM					N/A

4/10/2019	NASDAQ.i	1:30:00 PM					N/A
4/10/2019	NASDAQ.i	3:30:00 PM					N/A
4/10/2019	NOKJPY	9:30:00 AM	13.05	13.08			N/A
4/10/2019	NOKJPY	11:30:00 AM	13.04	13.07			N/A
4/10/2019	NOKJPY	1:30:00 PM					N/A
4/10/2019	NOKJPY	3:30:00 PM	13.07	13.09			N/A
4/10/2019	NOKJPY.fx	9:30:00 AM	13.054	13.062			N/A
4/10/2019	NOKJPY.fx	11:30:00 AM	13.043	13.049			N/A
4/10/2019	NOKJPY.fx	1:30:00 PM	13.057	13.065			N/A
4/10/2019	NOKJPY.fx	3:30:00 PM	13.074	13.075			N/A
4/10/2019	NZDCAD	9:30:00 AM	0.8995	0.90022			N/A
4/10/2019	NZDCAD	11:30:00 AM	0.89911	0.89981			N/A
4/10/2019	NZDCAD	1:30:00 PM	0.89997	0.90055			N/A
4/10/2019	NZDCAD	3:30:00 PM	0.9001	0.90034			N/A
4/10/2019	NZDCAD.fx	9:30:00 AM	0.89983	0.89989			N/A
4/10/2019	NZDCAD.fx	11:30:00 AM	0.89945	0.89948			N/A
4/10/2019	NZDCAD.fx	1:30:00 PM	0.9003	0.90023			N/A
4/10/2019	NZDCAD.fx	3:30:00 PM	0.90037	0.9001			N/A
4/10/2019	NZDCHF	9:30:00 AM	0.67511	0.67584			N/A
4/10/2019	NZDCHF	11:30:00 AM	0.67514	0.67585			N/A
4/10/2019	NZDCHF	1:30:00 PM	0.67544	0.67615			N/A
4/10/2019	NZDCHF	3:30:00 PM	0.67483	0.6752			N/A
4/10/2019	NZDCHF.fx	9:30:00 AM	0.67545	0.67549			N/A
4/10/2019	NZDCHF.fx	11:30:00 AM	0.67547	0.67551			N/A
4/10/2019	NZDCHF.fx	1:30:00 PM	0.67579	0.6758			N/A
4/10/2019	NZDCHF.fx	3:30:00 PM	0.67508	0.67502			N/A
4/10/2019	NZDCZK	9:30:00 AM	15.34	15.35			N/A
4/10/2019	NZDCZK	11:30:00 AM	15.329	15.339			N/A
4/10/2019	NZDCZK	1:30:00 PM	15.324	15.336			N/A
4/10/2019	NZDCZK	3:30:00 PM	15.304	15.312			N/A
4/10/2019	NZDDKK	9:30:00 AM	4.473	4.476			N/A
4/10/2019	NZDDKK	11:30:00 AM	4.469	4.472			N/A
4/10/2019	NZDDKK	1:30:00 PM					N/A
4/10/2019	NZDDKK	3:30:00 PM	4.466	4.467			N/A

4/10/2019	NZDHKD	9:30:00 AM	5.287	5.2897			N/A
4/10/2019	NZDHKD	11:30:00 AM	5.2887	5.2915			N/A
4/10/2019	NZDHKD	1:30:00 PM	5.2916	5.2941			N/A
4/10/2019	NZDHKD	3:30:00 PM	5.291	5.2891			N/A
4/10/2019	NZDHUF	9:30:00 AM	192.92	193.21			N/A
4/10/2019	NZDHUF	11:30:00 AM	192.55	192.75			N/A
4/10/2019	NZDHUF	1:30:00 PM	192.55	192.83			N/A
4/10/2019	NZDHUF	3:30:00 PM	192.32	192.49			N/A
4/10/2019	NZDJPY	9:30:00 AM	75.029	75.098			N/A
4/10/2019	NZDJPY	11:30:00 AM	74.99	75.06			N/A
4/10/2019	NZDJPY	1:30:00 PM	75.07	75.14			N/A
4/10/2019	NZDJPY	3:30:00 PM	75.052	75.069			N/A
4/10/2019	NZDJPY.fx	9:30:00 AM	75.06	75.066			N/A
4/10/2019	NZDJPY.fx	11:30:00 AM	75.021	75.028			N/A
4/10/2019	NZDJPY.fx	1:30:00 PM	75.101	75.107			N/A
4/10/2019	NZDJPY.fx	3:30:00 PM	75.077	75.047			N/A
4/10/2019	NZDMXN	9:30:00 AM	12.749	12.7545			N/A
4/10/2019	NZDMXN	11:30:00 AM	12.7298	12.735			N/A
4/10/2019	NZDMXN	1:30:00 PM	12.7304	12.7364			N/A
4/10/2019	NZDMXN	3:30:00 PM	12.7273	12.7248			N/A
4/10/2019	NZDNOK	9:30:00 AM	5.7443	5.7482			N/A
4/10/2019	NZDNOK	11:30:00 AM	5.7465	5.7485			N/A
4/10/2019	NZDNOK	1:30:00 PM	5.7464	5.7497			N/A
4/10/2019	NZDNOK	3:30:00 PM	5.7371	5.7364			N/A
4/10/2019	NZDPLN	9:30:00 AM	2.5667	2.5681			N/A
4/10/2019	NZDPLN	11:30:00 AM	2.5639	2.5652			N/A
4/10/2019	NZDPLN	1:30:00 PM	2.5642	2.5654			N/A
4/10/2019	NZDPLN	3:30:00 PM	2.561	2.5612			N/A
4/10/2019	NZDSEK	9:30:00 AM	6.2363	6.2416			N/A
4/10/2019	NZDSEK	11:30:00 AM	6.2456	6.2524			N/A
4/10/2019	NZDSEK	1:30:00 PM	6.2476	6.2532			N/A
4/10/2019	NZDSEK	3:30:00 PM	6.2462	6.2437			N/A
4/10/2019	NZDSGD	9:30:00 AM	0.9135	0.9141			N/A
4/10/2019	NZDSGD	11:30:00 AM	0.913	0.9137			N/A

4/10/2019	NZDSGD	1:30:00 PM	0.9137	0.9143			N/A
4/10/2019	NZDSGD	3:30:00 PM	0.9137	0.9135			N/A
4/10/2019	NZDSGD.fx	9:30:00 AM	0.91348	0.91403			N/A
4/10/2019	NZDSGD.fx	11:30:00 AM	0.91302	0.9136			N/A
4/10/2019	NZDSGD.fx	1:30:00 PM	0.91368	0.91421			N/A
4/10/2019	NZDSGD.fx	3:30:00 PM	0.91353	0.91349			N/A
4/10/2019	NZDUSD	9:30:00 AM	0.67523	0.67537			N/A
4/10/2019	NZDUSD	11:30:00 AM	0.6749	0.67502			N/A
4/10/2019	NZDUSD	1:30:00 PM	0.67541	0.67552			N/A
4/10/2019	NZDUSD	3:30:00 PM	0.67557	0.67499			N/A
4/10/2019	NZDUSD.fx	9:30:00 AM	0.6753	0.67538			N/A
4/10/2019	NZDUSD.fx	11:30:00 AM	0.67498	0.67504			N/A
4/10/2019	NZDUSD.fx	1:30:00 PM	0.67547	0.67553			N/A
4/10/2019	NZDUSD.fx	3:30:00 PM	0.67557	0.67503			N/A
4/10/2019	NZDZAR	9:30:00 AM	9.4664	9.4789			N/A
4/10/2019	NZDZAR	11:30:00 AM	9.4535	9.4686			N/A
4/10/2019	NZDZAR	1:30:00 PM	9.4414	9.4584			N/A
4/10/2019	NZDZAR	3:30:00 PM	9.4143	9.4246			N/A
4/10/2019	SEKJPY	9:30:00 AM	12.03	12.03			N/A
4/10/2019	SEKJPY	11:30:00 AM	12	12.01			N/A
4/10/2019	SEKJPY	1:30:00 PM	12.01	12.02			N/A
4/10/2019	SEKJPY	3:30:00 PM	12.01	12.01			N/A
4/10/2019	SEKJPY.fx	9:30:00 AM	12.019	12.034			N/A
4/10/2019	SEKJPY.fx	11:30:00 AM	11.991	12.009			N/A
4/10/2019	SEKJPY.fx	1:30:00 PM	12.001	12.019			N/A
4/10/2019	SEKJPY.fx	3:30:00 PM	12	12.012			N/A
4/10/2019	SGDJPY	9:30:00 AM	82.17	82.15			N/A
4/10/2019	SGDJPY	11:30:00 AM	82.11	82.14			N/A
4/10/2019	SGDJPY	1:30:00 PM	82.14	82.17			N/A
4/10/2019	SGDJPY	3:30:00 PM	82.17	82.16			N/A
4/10/2019	SILVER	9:30:00 AM	15.03	15.42			N/A
4/10/2019	SILVER	11:30:00 AM	15.04	15.41			N/A
4/10/2019	SILVER	1:30:00 PM	15.05	15.43			N/A
4/10/2019	SILVER	3:30:00 PM	15.06	15.43			N/A



4/10/2019	SPX500.i	9:30:00 AM	2882.91	2883.96			N/A
4/10/2019	SPX500.i	11:30:00 AM	2884.16	2885.01			N/A
4/10/2019	SPX500.i	1:30:00 PM	2883.91	2884.96			N/A
4/10/2019	SPX500.i	3:30:00 PM	2886.91	2884.46			N/A
4/10/2019	UK100.i	9:30:00 AM	7437.4	7439.4			N/A
4/10/2019	UK100.i	11:30:00 AM	7430.4	7429.4			N/A
4/10/2019	UK100.i	1:30:00 PM	7441.82	7441.15			N/A
4/10/2019	UK100.i	3:30:00 PM	7430.98	7425.9			N/A
4/10/2019	USDCAD	9:30:00 AM	1.33243	1.33257			N/A
4/10/2019	USDCAD	11:30:00 AM	1.3325	1.33253			N/A
4/10/2019	USDCAD	1:30:00 PM	1.33275	1.33269			N/A
4/10/2019	USDCAD	3:30:00 PM	1.33343	1.33285			N/A
4/10/2019	USDCAD.fx	9:30:00 AM	1.33246	1.33253			N/A
4/10/2019	USDCAD.fx	11:30:00 AM	1.33252	1.33251			N/A
4/10/2019	USDCAD.fx	1:30:00 PM	1.3328	1.33266			N/A
4/10/2019	USDCAD.fx	3:30:00 PM	1.33344	1.33292			N/A
4/10/2019	USDCHF	9:30:00 AM	1.0001	1.00027			N/A
4/10/2019	USDCHF	11:30:00 AM	1.00066	1.00069			N/A
4/10/2019	USDCHF	1:30:00 PM	1.00035	1.00046			N/A
4/10/2019	USDCHF	3:30:00 PM	0.99994	0.99926			N/A
4/10/2019	USDCHF.fx	9:30:00 AM	1.00015	1.00022			N/A
4/10/2019	USDCHF.fx	11:30:00 AM	1.0007	1.00065			N/A
4/10/2019	USDCHF.fx	1:30:00 PM	1.0004	1.00039			N/A
4/10/2019	USDCHF.fx	3:30:00 PM	0.99998	0.99933			N/A
4/10/2019	USDCZK	9:30:00 AM	22.731	22.752			N/A
4/10/2019	USDCZK	11:30:00 AM	22.729	22.747			N/A
4/10/2019	USDCZK	1:30:00 PM	22.702	22.724			N/A
4/10/2019	USDCZK	3:30:00 PM	22.694	22.697			N/A
4/10/2019	USDCZK.fx	9:30:00 AM	22.7392	22.7443			N/A
4/10/2019	USDCZK.fx	11:30:00 AM	22.7373	22.7391			N/A
4/10/2019	USDCZK.fx	1:30:00 PM	22.71	22.716			N/A
4/10/2019	USDCZK.fx	3:30:00 PM	22.6995	22.6907			N/A
4/10/2019	USDDKK	9:30:00 AM	6.6242	6.6284			N/A
4/10/2019	USDDKK	11:30:00 AM	6.6235	6.6265			N/A

4/10/2019	USDDKK	1:30:00 PM	6.6197	6.6237			N/A
4/10/2019	USDDKK	3:30:00 PM	6.6168	6.6166			N/A
4/10/2019	USDDKK.fx	9:30:00 AM	6.62467	6.62639			N/A
4/10/2019	USDDKK.fx	11:30:00 AM	6.6246	6.62451			N/A
4/10/2019	USDDKK.fx	1:30:00 PM	6.62021	6.62171			N/A
4/10/2019	USDDKK.fx	3:30:00 PM	6.61824	6.61543			N/A
4/10/2019	USDHKD	9:30:00 AM	7.8323	7.8324			N/A
4/10/2019	USDHKD	11:30:00 AM	7.8395	7.8397			N/A
4/10/2019	USDHKD	1:30:00 PM	7.8379	7.8384			N/A
4/10/2019	USDHKD	3:30:00 PM	7.8378	7.8376			N/A
4/10/2019	USDHKD.fx	9:30:00 AM	7.83216	7.83261			N/A
4/10/2019	USDHKD.fx	11:30:00 AM	7.83963	7.8397			N/A
4/10/2019	USDHKD.fx	1:30:00 PM	7.83783	7.83832			N/A
4/10/2019	USDHKD.fx	3:30:00 PM	7.83769	7.8382			N/A
4/10/2019	USDHUF	9:30:00 AM	285.78	286.25			N/A
4/10/2019	USDHUF	11:30:00 AM	285.42	285.82			N/A
4/10/2019	USDHUF	1:30:00 PM	285.16	285.62			N/A
4/10/2019	USDHUF	3:30:00 PM	285.05	285.33			N/A
4/10/2019	USDHUF.fx	9:30:00 AM	285.965	286.063			N/A
4/10/2019	USDHUF.fx	11:30:00 AM	285.604	285.623			N/A
4/10/2019	USDHUF.fx	1:30:00 PM	285.355	285.434			N/A
4/10/2019	USDHUF.fx	3:30:00 PM	285.244	285.184			N/A
4/10/2019	USDINR	9:30:00 AM	64.17	74.15			N/A
4/10/2019	USDINR	11:30:00 AM	64.18	74.16			N/A
4/10/2019	USDINR	1:30:00 PM					N/A
4/10/2019	USDINR	3:30:00 PM					N/A
4/10/2019	USDJPY	9:30:00 AM	111.144	111.155			N/A
4/10/2019	USDJPY	11:30:00 AM	111.142	111.148			N/A
4/10/2019	USDJPY	1:30:00 PM	111.174	111.183			N/A
4/10/2019	USDJPY	3:30:00 PM	111.166	111.127			N/A
4/10/2019	USDJPY.fx	9:30:00 AM	111.149	111.148			N/A
4/10/2019	USDJPY.fx	11:30:00 AM	111.147	111.141			N/A
4/10/2019	USDJPY.fx	1:30:00 PM	111.181	111.176			N/A
4/10/2019	USDJPY.fx	3:30:00 PM	111.17	111.129			N/A

4/10/2019	USDMXN	9:30:00 AM	18.886	18.893			N/A
4/10/2019	USDMXN	11:30:00 AM	18.868	18.873			N/A
4/10/2019	USDMXN	1:30:00 PM	18.853	18.861			N/A
4/10/2019	USDMXN	3:30:00 PM	18.855	18.854			N/A
4/10/2019	USDMXN.fx	9:30:00 AM	18.8893	18.8891			N/A
4/10/2019	USDMXN.fx	11:30:00 AM	18.8715	18.8702			N/A
4/10/2019	USDMXN.fx	1:30:00 PM	18.8553	18.8589			N/A
4/10/2019	USDMXN.fx	3:30:00 PM	18.8615	18.8507			N/A
4/10/2019	USDNOK	9:30:00 AM	8.5079	8.5162			N/A
4/10/2019	USDNOK	11:30:00 AM	8.5161	8.5237			N/A
4/10/2019	USDNOK	1:30:00 PM	8.5083	8.5172			N/A
4/10/2019	USDNOK	3:30:00 PM	8.5011	8.5029			N/A
4/10/2019	USDNOK.fx	9:30:00 AM	8.51184	8.51177			N/A
4/10/2019	USDNOK.fx	11:30:00 AM	8.52052	8.51919			N/A
4/10/2019	USDNOK.fx	1:30:00 PM	8.51229	8.51281			N/A
4/10/2019	USDNOK.fx	3:30:00 PM	8.50443	8.49903			N/A
4/10/2019	USDPLN	9:30:00 AM	3.8019	3.8034			N/A
4/10/2019	USDPLN	11:30:00 AM	3.8013	3.8022			N/A
4/10/2019	USDPLN	1:30:00 PM	3.7973	3.799			N/A
4/10/2019	USDPLN	3:30:00 PM	3.7955	3.7946			N/A
4/10/2019	USDPLN.fx	9:30:00 AM	3.80108	3.80414			N/A
4/10/2019	USDPLN.fx	11:30:00 AM	3.80052	3.80297			N/A
4/10/2019	USDPLN.fx	1:30:00 PM	3.79648	3.79982			N/A
4/10/2019	USDPLN.fx	3:30:00 PM	3.79451	3.79577			N/A
4/10/2019	USDRUB	9:30:00 AM					N/A
4/10/2019	USDRUB	11:30:00 AM	64.568	64.963			N/A
4/10/2019	USDRUB	1:30:00 PM	64.484	64.883			N/A
4/10/2019	USDRUB	3:30:00 PM	64.377	64.74			N/A
4/10/2019	USDSEK	9:30:00 AM	9.2402	9.2421			N/A
4/10/2019	USDSEK	11:30:00 AM	9.2599	9.2631			N/A
4/10/2019	USDSEK	1:30:00 PM	9.255	9.2581			N/A
4/10/2019	USDSEK	3:30:00 PM	9.2583	9.2563			N/A
4/10/2019	USDSEK.fx	9:30:00 AM	9.24265	9.24044			N/A
4/10/2019	USDSEK.fx	11:30:00 AM	9.26233	9.26138			N/A

4/10/2019	USDSEK.fx	1:30:00 PM	9.25757	9.2564			N/A
4/10/2019	USDSEK.fx	3:30:00 PM	9.26099	9.25439			N/A
4/10/2019	USDSGD	9:30:00 AM	1.3529	1.3533			N/A
4/10/2019	USDSGD	11:30:00 AM	1.3528	1.3532			N/A
4/10/2019	USDSGD	1:30:00 PM	1.3528	1.3529			N/A
4/10/2019	USDSGD	3:30:00 PM	1.3527	1.3529			N/A
4/10/2019	USDSGD.fx	9:30:00 AM	1.35281	1.35328			N/A
4/10/2019	USDSGD.fx	11:30:00 AM	1.35276	1.35322			N/A
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4/10/2019	USDSGD.fx	3:30:00 PM	1.35254	1.35306			N/A
4/10/2019	USDZAR	9:30:00 AM	14.0293	14.0395			N/A
4/10/2019	USDZAR	11:30:00 AM	14.0187	14.0317			N/A
4/10/2019	USDZAR	1:30:00 PM	13.9873	14.0057			N/A
4/10/2019	USDZAR	3:30:00 PM	13.9584	13.964			N/A
4/10/2019	USDZAR.fx	9:30:00 AM					N/A
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4/10/2019	XAUUSD	9:30:00 AM	1304.34	1304.43			N/A
4/10/2019	XAUUSD	11:30:00 AM	1304.23	1304.53			N/A
4/10/2019	XAUUSD	1:30:00 PM	1303.99	1304.24			N/A
4/10/2019	XAUUSD	3:30:00 PM	1304.67	1303.37			N/A
4/10/2019	ZARJPY	9:30:00 AM	7.9	7.92			N/A
4/10/2019	ZARJPY	11:30:00 AM	7.91	7.92			N/A
4/10/2019	ZARJPY	1:30:00 PM	7.93	7.93			N/A
4/10/2019	ZARJPY	3:30:00 PM	7.95	7.96			N/A
4/10/2019	ZARJPY.fx	9:30:00 AM	7.918	7.92			N/A
4/10/2019	ZARJPY.fx	11:30:00 AM	7.923	7.926			N/A
4/10/2019	ZARJPY.fx	1:30:00 PM	7.941	7.946			N/A
4/10/2019	ZARJPY.fx	3:30:00 PM	7.962	7.962			N/A
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4/11/2019	#Litecoin	3:30:00 PM	77.63	79.3			N/A
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4/11/2019	#NG.f	9:30:00 AM	2.693	2.711			N/A
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4/11/2019	#NG.f	3:30:00 PM	2.682	2.699			N/A
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4/11/2019	#ZNGA	1:30:00 PM					N/A
4/11/2019	#ZNGA	3:30:00 PM					N/A
4/11/2019	AUDCAD	9:30:00 AM	0.95491	0.95551			N/A
4/11/2019	AUDCAD	11:30:00 AM	0.95489	0.95549			N/A

4/11/2019	AUDCAD	1:30:00 PM	0.95575	0.95639			N/A
4/11/2019	AUDCAD	3:30:00 PM	0.95549	0.95583			N/A
4/11/2019	AUDCAD.fx	9:30:00 AM	0.95525	0.95515			N/A
4/11/2019	AUDCAD.fx	11:30:00 AM	0.95524	0.95515			N/A
4/11/2019	AUDCAD.fx	1:30:00 PM	0.95609	0.95606			N/A
4/11/2019	AUDCAD.fx	3:30:00 PM	0.95577	0.95551			N/A
4/11/2019	AUDCHF	9:30:00 AM	0.71716	0.71778			N/A
4/11/2019	AUDCHF	11:30:00 AM	0.71611	0.71677			N/A
4/11/2019	AUDCHF	1:30:00 PM	0.71686	0.7175			N/A
4/11/2019	AUDCHF	3:30:00 PM	0.71697	0.71746			N/A
4/11/2019	AUDCHF.fx	9:30:00 AM	0.7175	0.71743			N/A
4/11/2019	AUDCHF.fx	11:30:00 AM	0.71645	0.71641			N/A
4/11/2019	AUDCHF.fx	1:30:00 PM	0.7172	0.71715			N/A
4/11/2019	AUDCHF.fx	3:30:00 PM	0.71727	0.71714			N/A
4/11/2019	AUDCZK	9:30:00 AM	16.225	16.24			N/A
4/11/2019	AUDCZK	11:30:00 AM	16.213	16.229			N/A
4/11/2019	AUDCZK	1:30:00 PM	16.229	16.244			N/A
4/11/2019	AUDCZK	3:30:00 PM	16.235	16.236			N/A
4/11/2019	AUDDKK	9:30:00 AM	4.7373	4.7413			N/A
4/11/2019	AUDDKK	11:30:00 AM	4.7333	4.7375			N/A
4/11/2019	AUDDKK	1:30:00 PM	4.7367	4.7407			N/A
4/11/2019	AUDDKK	3:30:00 PM	4.734	4.7374			N/A
4/11/2019	AUDHKD	9:30:00 AM	5.6111	5.6146			N/A
4/11/2019	AUDHKD	11:30:00 AM	5.6082	5.6114			N/A
4/11/2019	AUDHKD	1:30:00 PM	5.6116	5.6148			N/A
4/11/2019	AUDHKD	3:30:00 PM	5.6003	5.6014			N/A
4/11/2019	AUDHUF	9:30:00 AM	203.89	203.96			N/A
4/11/2019	AUDHUF	11:30:00 AM	203.74	203.98			N/A
4/11/2019	AUDHUF	1:30:00 PM	203.74	203.96			N/A
4/11/2019	AUDHUF	3:30:00 PM	203.91	203.97			N/A
4/11/2019	AUDJPY	9:30:00 AM	79.516	79.576			N/A
4/11/2019	AUDJPY	11:30:00 AM	79.483	79.55			N/A
4/11/2019	AUDJPY	1:30:00 PM	79.507	79.574			N/A
4/11/2019	AUDJPY	3:30:00 PM	79.482	79.529			N/A

4/11/2019	AUDJPY.fx	9:30:00 AM	79.55	79.541			N/A
4/11/2019	AUDJPY.fx	11:30:00 AM	79.516	79.515			N/A
4/11/2019	AUDJPY.fx	1:30:00 PM	79.54	79.539			N/A
4/11/2019	AUDJPY.fx	3:30:00 PM	79.513	79.496			N/A
4/11/2019	AUDMXN	9:30:00 AM	13.4773	13.4861			N/A
4/11/2019	AUDMXN	11:30:00 AM	13.4713	13.4822			N/A
4/11/2019	AUDMXN	1:30:00 PM	13.4843	13.4928			N/A
4/11/2019	AUDMXN	3:30:00 PM	13.4887	13.4894			N/A
4/11/2019	AUDNOK	9:30:00 AM	6.0813	6.0856			N/A
4/11/2019	AUDNOK	11:30:00 AM	6.0843	6.0882			N/A
4/11/2019	AUDNOK	1:30:00 PM	6.0838	6.0886			N/A
4/11/2019	AUDNOK	3:30:00 PM	6.0851	6.0877			N/A
4/11/2019	AUDNOK.fx	9:30:00 AM	6.0827	6.084			N/A
4/11/2019	AUDNOK.fx	11:30:00 AM	6.0859	6.0865			N/A
4/11/2019	AUDNOK.fx	1:30:00 PM	6.0854	6.0869			N/A
4/11/2019	AUDNOK.fx	3:30:00 PM	6.0862	6.0862			N/A
4/11/2019	AUDNZD	9:30:00 AM	1.05899	1.05972			N/A
4/11/2019	AUDNZD	11:30:00 AM	1.05867	1.05953			N/A
4/11/2019	AUDNZD	1:30:00 PM	1.05886	1.05972			N/A
4/11/2019	AUDNZD	3:30:00 PM	1.05987	1.06041			N/A
4/11/2019	AUDNZD.fx	9:30:00 AM	1.05943	1.05928			N/A
4/11/2019	AUDNZD.fx	11:30:00 AM	1.05909	1.05909			N/A
4/11/2019	AUDNZD.fx	1:30:00 PM	1.05927	1.05928			N/A
4/11/2019	AUDNZD.fx	3:30:00 PM	1.06028	1.06001			N/A
4/11/2019	AUDPLN	9:30:00 AM	2.7155	2.7182			N/A
4/11/2019	AUDPLN	11:30:00 AM	2.715	2.718			N/A
4/11/2019	AUDPLN	1:30:00 PM	2.7166	2.7196			N/A
4/11/2019	AUDPLN	3:30:00 PM	2.7163	2.7188			N/A
4/11/2019	AUDSEK	9:30:00 AM	6.633	6.6347			N/A
4/11/2019	AUDSEK	11:30:00 AM	6.6301	6.633			N/A
4/11/2019	AUDSEK	1:30:00 PM	6.6319	6.6344			N/A
4/11/2019	AUDSEK	3:30:00 PM	6.6238	6.625			N/A
4/11/2019	AUDSEK.fx	9:30:00 AM	6.6282	6.6391			N/A
4/11/2019	AUDSEK.fx	11:30:00 AM	6.6256	6.6374			N/A

4/11/2019	AUDSEK.fx	1:30:00 PM	6.6273	6.6389			N/A
4/11/2019	AUDSEK.fx	3:30:00 PM	6.6189	6.6297			N/A
4/11/2019	AUDSGD	9:30:00 AM	0.9687	0.9689			N/A
4/11/2019	AUDSGD	11:30:00 AM	0.9683	0.9687			N/A
4/11/2019	AUDSGD	1:30:00 PM	0.9686	0.9688			N/A
4/11/2019	AUDSGD	3:30:00 PM	0.9677	0.9676			N/A
4/11/2019	AUDSGD.fx	9:30:00 AM	0.96879	0.96877			N/A
4/11/2019	AUDSGD.fx	11:30:00 AM	0.96838	0.96845			N/A
4/11/2019	AUDSGD.fx	1:30:00 PM	0.96866	0.96868			N/A
4/11/2019	AUDSGD.fx	3:30:00 PM	0.96768	0.96756			N/A
4/11/2019	AUDUSD	9:30:00 AM	0.71587	0.71589			N/A
4/11/2019	AUDUSD	11:30:00 AM	0.71543	0.71548			N/A
4/11/2019	AUDUSD	1:30:00 PM	0.71578	0.71582			N/A
4/11/2019	AUDUSD	3:30:00 PM	0.71448	0.71424			N/A
4/11/2019	AUDUSD.fx	9:30:00 AM	0.71592	0.71582			N/A
4/11/2019	AUDUSD.fx	11:30:00 AM	0.71548	0.71542			N/A
4/11/2019	AUDUSD.fx	1:30:00 PM	0.71583	0.71576			N/A
4/11/2019	AUDUSD.fx	3:30:00 PM	0.71449	0.7142			N/A
4/11/2019	AUDZAR	9:30:00 AM	9.9603	9.9725			N/A
4/11/2019	AUDZAR	11:30:00 AM	9.9488	9.9611			N/A
4/11/2019	AUDZAR	1:30:00 PM	9.97	9.9839			N/A
4/11/2019	AUDZAR	3:30:00 PM	10.0172	10.021			N/A
4/11/2019	AUS200.i	9:30:00 AM					N/A
4/11/2019	AUS200.i	11:30:00 AM	6201.72	6204.22			N/A
4/11/2019	AUS200.i	1:30:00 PM	6212.92	6216.92			N/A
4/11/2019	AUS200.i	3:30:00 PM	6217.42	6220.52			N/A
4/11/2019	BCHUSD	9:30:00 AM	285.46	296.9			N/A
4/11/2019	BCHUSD	11:30:00 AM	280.15	291.52			N/A
4/11/2019	BCHUSD	1:30:00 PM	276.3	287.28			N/A
4/11/2019	BCHUSD	3:30:00 PM	263.82	274.69			N/A
4/11/2019	CADCHF	9:30:00 AM	0.75078	0.75147			N/A
4/11/2019	CADCHF	11:30:00 AM	0.74966	0.75041			N/A
4/11/2019	CADCHF	1:30:00 PM	0.74979	0.75048			N/A
4/11/2019	CADCHF	3:30:00 PM	0.75021	0.75076			N/A

4/11/2019	CADCHF.fx	9:30:00 AM	0.75111	0.75111			N/A
4/11/2019	CADCHF.fx	11:30:00 AM	0.75	0.75006			N/A
4/11/2019	CADCHF.fx	1:30:00 PM	0.75013	0.75013			N/A
4/11/2019	CADCHF.fx	3:30:00 PM	0.75054	0.75051			N/A
4/11/2019	CADCZK	9:30:00 AM	16.987	17.003			N/A
4/11/2019	CADCZK	11:30:00 AM	16.976	16.992			N/A
4/11/2019	CADCZK	1:30:00 PM	16.978	16.993			N/A
4/11/2019	CADCZK	3:30:00 PM	16.991	16.996			N/A
4/11/2019	CADDDKK	9:30:00 AM					N/A
4/11/2019	CADDDKK	11:30:00 AM					N/A
4/11/2019	CADDDKK	1:30:00 PM					N/A
4/11/2019	CADDDKK	3:30:00 PM	4.954	4.956			N/A
4/11/2019	CADHKD	9:30:00 AM	5.8748	5.8788			N/A
4/11/2019	CADHKD	11:30:00 AM	5.8715	5.8752			N/A
4/11/2019	CADHKD	1:30:00 PM	5.8702	5.8738			N/A
4/11/2019	CADHKD	3:30:00 PM	5.8598	5.8637			N/A
4/11/2019	CADHUF	9:30:00 AM	213.51	213.52			N/A
4/11/2019	CADHUF	11:30:00 AM	213.36	213.53			N/A
4/11/2019	CADHUF	1:30:00 PM	213.16	213.33			N/A
4/11/2019	CADHUF	3:30:00 PM	213.44	213.45			N/A
4/11/2019	CADJPY	9:30:00 AM	83.241	83.307			N/A
4/11/2019	CADJPY	11:30:00 AM	83.213	83.28			N/A
4/11/2019	CADJPY	1:30:00 PM	83.16	83.232			N/A
4/11/2019	CADJPY	3:30:00 PM	83.169	83.2			N/A
4/11/2019	CADJPY.fx	9:30:00 AM	83.274	83.272			N/A
4/11/2019	CADJPY.fx	11:30:00 AM	83.246	83.244			N/A
4/11/2019	CADJPY.fx	1:30:00 PM	83.193	83.197			N/A
4/11/2019	CADJPY.fx	3:30:00 PM	83.2	83.175			N/A
4/11/2019	CADMXN	9:30:00 AM	14.1096	14.1217			N/A
4/11/2019	CADMXN	11:30:00 AM	14.105	14.1163			N/A
4/11/2019	CADMXN	1:30:00 PM	14.1051	14.1164			N/A
4/11/2019	CADMXN	3:30:00 PM	14.1165	14.1197			N/A
4/11/2019	CADNOK	9:30:00 AM	6.3648	6.3696			N/A
4/11/2019	CADNOK	11:30:00 AM	6.3691	6.3727			N/A

4/11/2019	CADNOK	1:30:00 PM	6.3624	6.367			N/A
4/11/2019	CADNOK	3:30:00 PM	6.3647	6.3638			N/A
4/11/2019	CADPLN	9:30:00 AM	2.8432	2.8451			N/A
4/11/2019	CADPLN	11:30:00 AM	2.8428	2.8447			N/A
4/11/2019	CADPLN	1:30:00 PM	2.8419	2.8438			N/A
4/11/2019	CADPLN	3:30:00 PM	2.8421	2.8422			N/A
4/11/2019	CADSEK	9:30:00 AM	6.9417	6.9449			N/A
4/11/2019	CADSEK	11:30:00 AM	6.9403	6.9431			N/A
4/11/2019	CADSEK	1:30:00 PM	6.935	6.9384			N/A
4/11/2019	CADSEK	3:30:00 PM	6.9279	6.9303			N/A
4/11/2019	CADSGD	9:30:00 AM	1.0136	1.0139			N/A
4/11/2019	CADSGD	11:30:00 AM	1.013	1.0133			N/A
4/11/2019	CADSGD	1:30:00 PM	1.0125	1.0128			N/A
4/11/2019	CADSGD	3:30:00 PM	1.0117	1.012			N/A
4/11/2019	CADZAR	9:30:00 AM	10.4269	10.4433			N/A
4/11/2019	CADZAR	11:30:00 AM	10.4169	10.4301			N/A
4/11/2019	CADZAR	1:30:00 PM	10.428	10.4453			N/A
4/11/2019	CADZAR	3:30:00 PM	10.4827	10.4914			N/A
4/11/2019	CHFCZK	9:30:00 AM	22.621	22.637			N/A
4/11/2019	CHFCZK	11:30:00 AM	22.638	22.654			N/A
4/11/2019	CHFCZK	1:30:00 PM	22.636	22.653			N/A
4/11/2019	CHFCZK	3:30:00 PM	22.644	22.644			N/A
4/11/2019	CHFDKK	9:30:00 AM	6.604	6.608			N/A
4/11/2019	CHFDKK	11:30:00 AM	6.608	6.611			N/A
4/11/2019	CHFDKK	1:30:00 PM					N/A
4/11/2019	CHFDKK	3:30:00 PM	6.602	6.604			N/A
4/11/2019	CHFDKK.fx	9:30:00 AM	6.6025	6.6085			N/A
4/11/2019	CHFDKK.fx	11:30:00 AM	6.6067	6.6125			N/A
4/11/2019	CHFDKK.fx	1:30:00 PM	6.6039	6.6104			N/A
4/11/2019	CHFDKK.fx	3:30:00 PM	6.6001	6.6053			N/A
4/11/2019	CHFHKD	9:30:00 AM	7.8226	7.8265			N/A
4/11/2019	CHFHKD	11:30:00 AM	7.8298	7.8337			N/A
4/11/2019	CHFHKD	1:30:00 PM	7.8266	7.83			N/A
4/11/2019	CHFHKD	3:30:00 PM	7.8112	7.8127			N/A

4/11/2019	CHFHUF	9:30:00 AM	284.18	284.41			N/A
4/11/2019	CHFHUF	11:30:00 AM	284.43	284.8			N/A
4/11/2019	CHFHUF	1:30:00 PM	284.09	284.49			N/A
4/11/2019	CHFHUF	3:30:00 PM	284.32	284.54			N/A
4/11/2019	CHFJPY	9:30:00 AM	110.834	110.905			N/A
4/11/2019	CHFJPY	11:30:00 AM	110.957	111.02			N/A
4/11/2019	CHFJPY	1:30:00 PM	110.877	110.938			N/A
4/11/2019	CHFJPY	3:30:00 PM	110.826	110.864			N/A
4/11/2019	CHFJPY.fx	9:30:00 AM	110.868	110.87			N/A
4/11/2019	CHFJPY.fx	11:30:00 AM	110.991	110.986			N/A
4/11/2019	CHFJPY.fx	1:30:00 PM	110.911	110.902			N/A
4/11/2019	CHFJPY.fx	3:30:00 PM	110.856	110.831			N/A
4/11/2019	CHFMXN	9:30:00 AM	18.7865	18.8019			N/A
4/11/2019	CHFMXN	11:30:00 AM	18.8071	18.8225			N/A
4/11/2019	CHFMXN	1:30:00 PM	18.8041	18.8198			N/A
4/11/2019	CHFMXN	3:30:00 PM	18.8092	18.8148			N/A
4/11/2019	CHFNOK	9:30:00 AM	8.475	8.4823			N/A
4/11/2019	CHFNOK	11:30:00 AM	8.4916	8.4987			N/A
4/11/2019	CHFNOK	1:30:00 PM	8.4821	8.4903			N/A
4/11/2019	CHFNOK	3:30:00 PM	8.4833	8.4884			N/A
4/11/2019	CHFNOK.fx	9:30:00 AM	8.47833	8.47896			N/A
4/11/2019	CHFNOK.fx	11:30:00 AM	8.49496	8.49527			N/A
4/11/2019	CHFNOK.fx	1:30:00 PM	8.48547	8.48696			N/A
4/11/2019	CHFNOK.fx	3:30:00 PM	8.48665	8.4854			N/A
4/11/2019	CHFPLN	9:30:00 AM	3.7854	3.7884			N/A
4/11/2019	CHFPLN	11:30:00 AM	3.7902	3.7932			N/A
4/11/2019	CHFPLN	1:30:00 PM	3.7884	3.7916			N/A
4/11/2019	CHFPLN	3:30:00 PM	3.7878	3.7903			N/A
4/11/2019	CHFPLN.fx	9:30:00 AM	3.78306	3.79075			N/A
4/11/2019	CHFPLN.fx	11:30:00 AM	3.78786	3.79555			N/A
4/11/2019	CHFPLN.fx	1:30:00 PM	3.78606	3.79385			N/A
4/11/2019	CHFPLN.fx	3:30:00 PM	3.78518	3.79273			N/A
4/11/2019	CHFSEK	9:30:00 AM	9.2431	9.2465			N/A
4/11/2019	CHFSEK	11:30:00 AM	9.2545	9.257			N/A

4/11/2019	CHFSEK	1:30:00 PM	9.2457	9.25			N/A
4/11/2019	CHFSEK	3:30:00 PM	9.2324	9.2364			N/A
4/11/2019	CHFSGD	9:30:00 AM	1.35	1.3505			N/A
4/11/2019	CHFSGD	11:30:00 AM	1.3515	1.352			N/A
4/11/2019	CHFSGD	1:30:00 PM	1.3505	1.3509			N/A
4/11/2019	CHFSGD	3:30:00 PM	1.3493	1.3493			N/A
4/11/2019	CHFSGD.fx	9:30:00 AM	1.3502	1.35033			N/A
4/11/2019	CHFSGD.fx	11:30:00 AM	1.35169	1.35179			N/A
4/11/2019	CHFSGD.fx	1:30:00 PM	1.3506	1.35077			N/A
4/11/2019	CHFSGD.fx	3:30:00 PM	1.3492	1.34913			N/A
4/11/2019	CHFZAR	9:30:00 AM	13.8878	13.8994			N/A
4/11/2019	CHFZAR	11:30:00 AM	13.8928	13.9035			N/A
4/11/2019	CHFZAR	1:30:00 PM	13.906	13.9216			N/A
4/11/2019	CHFZAR	3:30:00 PM	13.9708	13.9754			N/A
4/11/2019	CZKJPY	9:30:00 AM					N/A
4/11/2019	CZKJPY	11:30:00 AM					N/A
4/11/2019	CZKJPY	1:30:00 PM					N/A
4/11/2019	CZKJPY	3:30:00 PM	4.897	4.896			N/A
4/11/2019	DAX30.i	9:30:00 AM	11918.06	11916.71			N/A
4/11/2019	DAX30.i	11:30:00 AM	11877.46	11875.71			N/A
4/11/2019	DAX30.i	1:30:00 PM	11944.71	11943.21			N/A
4/11/2019	DAX30.i	3:30:00 PM	11954.46	11949.96			N/A
4/11/2019	DJ30.i	9:30:00 AM					N/A
4/11/2019	DJ30.i	11:30:00 AM					N/A
4/11/2019	DJ30.i	1:30:00 PM					N/A
4/11/2019	DJ30.i	3:30:00 PM					N/A
4/11/2019	DKKJPY	9:30:00 AM	16.78	16.8			N/A
4/11/2019	DKKJPY	11:30:00 AM					N/A
4/11/2019	DKKJPY	1:30:00 PM					N/A
4/11/2019	DKKJPY	3:30:00 PM	16.8	16.81			N/A
4/11/2019	EURAUD	9:30:00 AM	1.57454	1.57466			N/A
4/11/2019	EURAUD	11:30:00 AM	1.57568	1.57597			N/A
4/11/2019	EURAUD	1:30:00 PM	1.57459	1.57482			N/A
4/11/2019	EURAUD	3:30:00 PM	1.57565	1.57563			N/A



4/11/2019	EURAUD.fx	9:30:00 AM	1.57474	1.57445			N/A
4/11/2019	EURAUD.fx	11:30:00 AM	1.57589	1.57574			N/A
4/11/2019	EURAUD.fx	1:30:00 PM	1.5748	1.57459			N/A
4/11/2019	EURAUD.fx	3:30:00 PM	1.57583	1.57551			N/A
4/11/2019	EURCAD	9:30:00 AM	1.50421	1.50503			N/A
4/11/2019	EURCAD	11:30:00 AM	1.50537	1.50614			N/A
4/11/2019	EURCAD	1:30:00 PM	1.50575	1.50653			N/A
4/11/2019	EURCAD	3:30:00 PM	1.50608	1.50666			N/A
4/11/2019	EURCAD.fx	9:30:00 AM	1.50461	1.50462			N/A
4/11/2019	EURCAD.fx	11:30:00 AM	1.5058	1.50572			N/A
4/11/2019	EURCAD.fx	1:30:00 PM	1.50616	1.5061			N/A
4/11/2019	EURCAD.fx	3:30:00 PM	1.50647	1.50627			N/A
4/11/2019	EURCHF	9:30:00 AM	1.1301	1.13018			N/A
4/11/2019	EURCHF	11:30:00 AM	1.12935	1.12939			N/A
4/11/2019	EURCHF	1:30:00 PM	1.1297	1.12987			N/A
4/11/2019	EURCHF	3:30:00 PM	1.13057	1.13052			N/A
4/11/2019	EURCHF.fx	9:30:00 AM	1.13016	1.13014			N/A
4/11/2019	EURCHF.fx	11:30:00 AM	1.1294	1.12933			N/A
4/11/2019	EURCHF.fx	1:30:00 PM	1.12976	1.1298			N/A
4/11/2019	EURCHF.fx	3:30:00 PM	1.13061	1.13049			N/A
4/11/2019	EURCZK	9:30:00 AM	25.551	25.59			N/A
4/11/2019	EURCZK	11:30:00 AM					N/A
4/11/2019	EURCZK	1:30:00 PM	25.561	25.6			N/A
4/11/2019	EURCZK	3:30:00 PM	25.583	25.604			N/A
4/11/2019	EURDKK	9:30:00 AM					N/A
4/11/2019	EURDKK	11:30:00 AM	7.4639	7.4646			N/A
4/11/2019	EURDKK	1:30:00 PM	7.464	7.4644			N/A
4/11/2019	EURDKK	3:30:00 PM	7.4642	7.4653			N/A
4/11/2019	EURGBP	9:30:00 AM	0.86174	0.8617			N/A
4/11/2019	EURGBP	11:30:00 AM	0.86267	0.86253			N/A
4/11/2019	EURGBP	1:30:00 PM	0.86153	0.86158			N/A
4/11/2019	EURGBP	3:30:00 PM	0.8612	0.86101			N/A
4/11/2019	EURGBP.fx	9:30:00 AM	0.86176	0.86168			N/A
4/11/2019	EURGBP.fx	11:30:00 AM	0.8627	0.86249			N/A

4/11/2019	EURGBP.fx	1:30:00 PM	0.86156	0.86154			N/A
4/11/2019	EURGBP.fx	3:30:00 PM	0.86121	0.86103			N/A
4/11/2019	EURHKD	9:30:00 AM	8.841	8.8463			N/A
4/11/2019	EURHKD	11:30:00 AM	8.8434	8.8476			N/A
4/11/2019	EURHKD	1:30:00 PM	8.8422	8.8476			N/A
4/11/2019	EURHKD	3:30:00 PM	8.831	8.8329			N/A
4/11/2019	EURHKD.fx	9:30:00 AM	8.84352	8.84373			N/A
4/11/2019	EURHKD.fx	11:30:00 AM	8.84589	8.84505			N/A
4/11/2019	EURHKD.fx	1:30:00 PM	8.84477	8.84493			N/A
4/11/2019	EURHKD.fx	3:30:00 PM	8.83333	8.83036			N/A
4/11/2019	EURHUF	9:30:00 AM	321.12	321.64			N/A
4/11/2019	EURHUF	11:30:00 AM	321.15	321.88			N/A
4/11/2019	EURHUF	1:30:00 PM	320.92	321.52			N/A
4/11/2019	EURHUF	3:30:00 PM	321.41	322.09			N/A
4/11/2019	EURHUF.fx	9:30:00 AM	321.397	321.378			N/A
4/11/2019	EURHUF.fx	11:30:00 AM	321.431	321.58			N/A
4/11/2019	EURHUF.fx	1:30:00 PM	321.19	321.378			N/A
4/11/2019	EURHUF.fx	3:30:00 PM	321.69	321.82			N/A
4/11/2019	EURJPY	9:30:00 AM	125.298	125.298			N/A
4/11/2019	EURJPY	11:30:00 AM	125.349	125.348			N/A
4/11/2019	EURJPY	1:30:00 PM	125.301	125.302			N/A
4/11/2019	EURJPY	3:30:00 PM	125.326	125.297			N/A
4/11/2019	EURJPY.fx	9:30:00 AM	125.3	125.295			N/A
4/11/2019	EURJPY.fx	11:30:00 AM	125.351	125.345			N/A
4/11/2019	EURJPY.fx	1:30:00 PM	125.304	125.298			N/A
4/11/2019	EURJPY.fx	3:30:00 PM	125.326	125.296			N/A
4/11/2019	EURMXN	9:30:00 AM	21.2334	21.2507			N/A
4/11/2019	EURMXN	11:30:00 AM	21.2429	21.2617			N/A
4/11/2019	EURMXN	1:30:00 PM	21.2474	21.2667			N/A
4/11/2019	EURMXN	3:30:00 PM	21.2677	21.2754			N/A
4/11/2019	EURMXN.fx	9:30:00 AM	21.2419	21.2422			N/A
4/11/2019	EURMXN.fx	11:30:00 AM	21.2514	21.2532			N/A
4/11/2019	EURMXN.fx	1:30:00 PM	21.2557	21.2582			N/A
4/11/2019	EURMXN.fx	3:30:00 PM	21.2762	21.2669			N/A

4/11/2019	EURNOK	9:30:00 AM	9.5763	9.5881			N/A
4/11/2019	EURNOK	11:30:00 AM	9.5887	9.6001			N/A
4/11/2019	EURNOK	1:30:00 PM	9.5814	9.5936			N/A
4/11/2019	EURNOK	3:30:00 PM	9.5893	9.5989			N/A
4/11/2019	EURNOK.fx	9:30:00 AM	9.58151	9.58268			N/A
4/11/2019	EURNOK.fx	11:30:00 AM	9.59411	9.59467			N/A
4/11/2019	EURNOK.fx	1:30:00 PM	9.58681	9.5881			N/A
4/11/2019	EURNOK.fx	3:30:00 PM	9.5947	9.59349			N/A
4/11/2019	EURNZD	9:30:00 AM	1.66825	1.66895			N/A
4/11/2019	EURNZD	11:30:00 AM	1.66916	1.66987			N/A
4/11/2019	EURNZD	1:30:00 PM	1.66843	1.66907			N/A
4/11/2019	EURNZD	3:30:00 PM	1.67134	1.67093			N/A
4/11/2019	EURNZD.fx	9:30:00 AM	1.66867	1.66852			N/A
4/11/2019	EURNZD.fx	11:30:00 AM	1.66957	1.66944			N/A
4/11/2019	EURNZD.fx	1:30:00 PM	1.66886	1.66864			N/A
4/11/2019	EURNZD.fx	3:30:00 PM	1.67173	1.67055			N/A
4/11/2019	EURPLN	9:30:00 AM	4.2782	4.2814			N/A
4/11/2019	EURPLN	11:30:00 AM	4.2807	4.2839			N/A
4/11/2019	EURPLN	1:30:00 PM	4.2803	4.2836			N/A
4/11/2019	EURPLN	3:30:00 PM	4.2824	4.2853			N/A
4/11/2019	EURPLN.fx	9:30:00 AM	4.27747	4.28202			N/A
4/11/2019	EURPLN.fx	11:30:00 AM	4.27987	4.28452			N/A
4/11/2019	EURPLN.fx	1:30:00 PM	4.27967	4.28422			N/A
4/11/2019	EURPLN.fx	3:30:00 PM	4.28156	4.28601			N/A
4/11/2019	EURRUB	9:30:00 AM					N/A
4/11/2019	EURRUB	11:30:00 AM	72.242	72.669			N/A
4/11/2019	EURRUB	1:30:00 PM	72.258	72.684			N/A
4/11/2019	EURRUB	3:30:00 PM	72.307	72.732			N/A
4/11/2019	EURSEK	9:30:00 AM	10.4472	10.4501			N/A
4/11/2019	EURSEK	11:30:00 AM	10.4516	10.4552			N/A
4/11/2019	EURSEK	1:30:00 PM	10.4473	10.4516			N/A
4/11/2019	EURSEK	3:30:00 PM	10.44	10.444			N/A
4/11/2019	EURSEK.fx	9:30:00 AM	10.44885	10.44824			N/A
4/11/2019	EURSEK.fx	11:30:00 AM	10.45328	10.45334			N/A

4/11/2019	EURSEK.fx	1:30:00 PM	10.44884	10.45006			N/A
4/11/2019	EURSEK.fx	3:30:00 PM	10.44135	10.44233			N/A
4/11/2019	EURSGD	9:30:00 AM	1.5256	1.5264			N/A
4/11/2019	EURSGD	11:30:00 AM	1.5262	1.527			N/A
4/11/2019	EURSGD	1:30:00 PM	1.5256	1.5261			N/A
4/11/2019	EURSGD	3:30:00 PM	1.525	1.5256			N/A
4/11/2019	EURSGD.fx	9:30:00 AM	1.52598	1.52602			N/A
4/11/2019	EURSGD.fx	11:30:00 AM	1.5266	1.52657			N/A
4/11/2019	EURSGD.fx	1:30:00 PM	1.52596	1.52603			N/A
4/11/2019	EURSGD.fx	3:30:00 PM	1.52539	1.52519			N/A
4/11/2019	EURUSD	9:30:00 AM	1.12741	1.12751			N/A
4/11/2019	EURUSD	11:30:00 AM	1.12765	1.12763			N/A
4/11/2019	EURUSD	1:30:00 PM	1.12744	1.12754			N/A
4/11/2019	EURUSD	3:30:00 PM	1.12605	1.12571			N/A
4/11/2019	EURUSD.fx	9:30:00 AM	1.12761	1.1276			N/A
4/11/2019	EURUSD.fx	11:30:00 AM	1.12785	1.12772			N/A
4/11/2019	EURUSD.fx	1:30:00 PM	1.12765	1.12763			N/A
4/11/2019	EURUSD.fx	3:30:00 PM	1.12623	1.12582			N/A
4/11/2019	EURZAR	9:30:00 AM	15.6991	15.7156			N/A
4/11/2019	EURZAR	11:30:00 AM	15.6927	15.7077			N/A
4/11/2019	EURZAR	1:30:00 PM	15.7136	15.7346			N/A
4/11/2019	EURZAR	3:30:00 PM	15.799	15.8084			N/A
4/11/2019	EURZAR.fx	9:30:00 AM	15.6981	15.71662			N/A
4/11/2019	EURZAR.fx	11:30:00 AM	15.69184	15.70877			N/A
4/11/2019	EURZAR.fx	1:30:00 PM	15.71236	15.73542			N/A
4/11/2019	EURZAR.fx	3:30:00 PM	15.79821	15.80943			N/A
4/11/2019	GBPAUD	9:30:00 AM	1.82757	1.8282			N/A
4/11/2019	GBPAUD	11:30:00 AM	1.8274	1.82755			N/A
4/11/2019	GBPAUD	1:30:00 PM	1.82811	1.82871			N/A
4/11/2019	GBPAUD	3:30:00 PM	1.83039	1.83069			N/A
4/11/2019	GBPAUD.fx	9:30:00 AM	1.82794	1.82782			N/A
4/11/2019	GBPAUD.fx	11:30:00 AM	1.82781	1.82716			N/A
4/11/2019	GBPAUD.fx	1:30:00 PM	1.82851	1.82834			N/A
4/11/2019	GBPAUD.fx	3:30:00 PM	1.83071	1.83034			N/A

4/11/2019	GBPCAD	9:30:00 AM	1.74576	1.7463			N/A
4/11/2019	GBPCAD	11:30:00 AM	1.74536	1.74584			N/A
4/11/2019	GBPCAD	1:30:00 PM	1.74777	1.74848			N/A
4/11/2019	GBPCAD	3:30:00 PM	1.74936	1.74955			N/A
4/11/2019	GBPCAD.fx	9:30:00 AM	1.74611	1.74592			N/A
4/11/2019	GBPCAD.fx	11:30:00 AM	1.74573	1.74548			N/A
4/11/2019	GBPCAD.fx	1:30:00 PM	1.74815	1.74812			N/A
4/11/2019	GBPCAD.fx	3:30:00 PM	1.74959	1.74917			N/A
4/11/2019	GBPCHF	9:30:00 AM	1.31134	1.31166			N/A
4/11/2019	GBPCHF	11:30:00 AM	1.30917	1.30939			N/A
4/11/2019	GBPCHF	1:30:00 PM	1.31108	1.31154			N/A
4/11/2019	GBPCHF	3:30:00 PM	1.31287	1.31303			N/A
4/11/2019	GBPCHF.fx	9:30:00 AM	1.31151	1.31145			N/A
4/11/2019	GBPCHF.fx	11:30:00 AM	1.30936	1.30917			N/A
4/11/2019	GBPCHF.fx	1:30:00 PM	1.31133	1.31134			N/A
4/11/2019	GBPCHF.fx	3:30:00 PM	1.31301	1.31287			N/A
4/11/2019	GBPCZK	9:30:00 AM	29.664	29.68			N/A
4/11/2019	GBPCZK	11:30:00 AM	29.638	29.653			N/A
4/11/2019	GBPCZK	1:30:00 PM	29.68	29.701			N/A
4/11/2019	GBPCZK	3:30:00 PM	29.725	29.722			N/A
4/11/2019	GBPDKK	9:30:00 AM	8.659	8.669			N/A
4/11/2019	GBPDKK	11:30:00 AM	8.65	8.659			N/A
4/11/2019	GBPDKK	1:30:00 PM	8.659	8.67			N/A
4/11/2019	GBPDKK	3:30:00 PM	8.665	8.674			N/A
4/11/2019	GBPDKK.fx	9:30:00 AM	8.6574	8.6691			N/A
4/11/2019	GBPDKK.fx	11:30:00 AM	8.6486	8.6591			N/A
4/11/2019	GBPDKK.fx	1:30:00 PM	8.6574	8.6708			N/A
4/11/2019	GBPDKK.fx	3:30:00 PM	8.6636	8.6741			N/A
4/11/2019	GBPHKD	9:30:00 AM	10.2586	10.2626			N/A
4/11/2019	GBPHKD	11:30:00 AM	10.2499	10.2544			N/A
4/11/2019	GBPHKD	1:30:00 PM	10.2612	10.266			N/A
4/11/2019	GBPHKD	3:30:00 PM	10.2525	10.2541			N/A
4/11/2019	GBPHUF	9:30:00 AM	372.66	372.87			N/A
4/11/2019	GBPHUF	11:30:00 AM	372.39	372.75			N/A

4/11/2019	GBPHUF	1:30:00 PM	372.51	372.96			N/A
4/11/2019	GBPHUF	3:30:00 PM	373.25	373.47			N/A
4/11/2019	GBPJPY	9:30:00 AM	145.393	145.42			N/A
4/11/2019	GBPJPY	11:30:00 AM	145.314	145.312			N/A
4/11/2019	GBPJPY	1:30:00 PM	145.416	145.448			N/A
4/11/2019	GBPJPY	3:30:00 PM	145.531	145.514			N/A
4/11/2019	GBPJPY.fx	9:30:00 AM	145.411	145.401			N/A
4/11/2019	GBPJPY.fx	11:30:00 AM	145.33	145.294			N/A
4/11/2019	GBPJPY.fx	1:30:00 PM	145.434	145.429			N/A
4/11/2019	GBPJPY.fx	3:30:00 PM	145.546	145.495			N/A
4/11/2019	GBPMXN	9:30:00 AM	24.6375	24.6497			N/A
4/11/2019	GBPMXN	11:30:00 AM	24.6254	24.6331			N/A
4/11/2019	GBPMXN	1:30:00 PM	24.6569	24.6716			N/A
4/11/2019	GBPMXN	3:30:00 PM	24.6952	24.6935			N/A
4/11/2019	GBPNOK	9:30:00 AM	11.1146	11.1242			N/A
4/11/2019	GBPNOK	11:30:00 AM	11.1185	11.1264			N/A
4/11/2019	GBPNOK	1:30:00 PM	11.1225	11.134			N/A
4/11/2019	GBPNOK	3:30:00 PM	11.1397	11.1447			N/A
4/11/2019	GBPNOK.fx	9:30:00 AM	11.11927	11.11949			N/A
4/11/2019	GBPNOK.fx	11:30:00 AM	11.1234	11.12144			N/A
4/11/2019	GBPNOK.fx	1:30:00 PM	11.12754	11.1291			N/A
4/11/2019	GBPNOK.fx	3:30:00 PM	11.14223	11.13987			N/A
4/11/2019	GBPNZD	9:30:00 AM	1.93621	1.93663			N/A
4/11/2019	GBPNZD	11:30:00 AM	1.93532	1.93555			N/A
4/11/2019	GBPNZD	1:30:00 PM	1.93653	1.93722			N/A
4/11/2019	GBPNZD	3:30:00 PM	1.94112	1.94066			N/A
4/11/2019	GBPNZD.fx	9:30:00 AM	1.93659	1.93628			N/A
4/11/2019	GBPNZD.fx	11:30:00 AM	1.93568	1.93518			N/A
4/11/2019	GBPNZD.fx	1:30:00 PM	1.93691	1.93685			N/A
4/11/2019	GBPNZD.fx	3:30:00 PM	1.94142	1.94039			N/A
4/11/2019	GBPPLN	9:30:00 AM	4.9659	4.967			N/A
4/11/2019	GBPPLN	11:30:00 AM	4.9639	4.9647			N/A
4/11/2019	GBPPLN	1:30:00 PM	4.9692	4.9708			N/A
4/11/2019	GBPPLN	3:30:00 PM	4.9743	4.9751			N/A

4/11/2019	GBPPLN.fx	9:30:00 AM	4.96358	4.96907			N/A
4/11/2019	GBPPLN.fx	11:30:00 AM	4.96196	4.96685			N/A
4/11/2019	GBPPLN.fx	1:30:00 PM	4.96696	4.97306			N/A
4/11/2019	GBPPLN.fx	3:30:00 PM	4.97162	4.97734			N/A
4/11/2019	GBPSEK	9:30:00 AM	12.1219	12.1288			N/A
4/11/2019	GBPSEK	11:30:00 AM	12.1164	12.1206			N/A
4/11/2019	GBPSEK	1:30:00 PM	12.124	12.1327			N/A
4/11/2019	GBPSEK	3:30:00 PM	12.1237	12.1285			N/A
4/11/2019	GBPSEK.fx	9:30:00 AM	12.11825	12.13247			N/A
4/11/2019	GBPSEK.fx	11:30:00 AM	12.11242	12.12437			N/A
4/11/2019	GBPSEK.fx	1:30:00 PM	12.12033	12.1364			N/A
4/11/2019	GBPSEK.fx	3:30:00 PM	12.11912	12.13228			N/A
4/11/2019	GBPSGD	9:30:00 AM	1.7706	1.7712			N/A
4/11/2019	GBPSGD	11:30:00 AM	1.7696	1.77			N/A
4/11/2019	GBPSGD	1:30:00 PM	1.7708	1.7715			N/A
4/11/2019	GBPSGD	3:30:00 PM	1.7713	1.7716			N/A
4/11/2019	GBPSGD.fx	9:30:00 AM	1.76881	1.77301			N/A
4/11/2019	GBPSGD.fx	11:30:00 AM	1.76778	1.77175			N/A
4/11/2019	GBPSGD.fx	1:30:00 PM	1.76896	1.77334			N/A
4/11/2019	GBPSGD.fx	3:30:00 PM	1.76934	1.77336			N/A
4/11/2019	GBPUSD	9:30:00 AM	1.30862	1.30851			N/A
4/11/2019	GBPUSD	11:30:00 AM	1.30756	1.30738			N/A
4/11/2019	GBPUSD	1:30:00 PM	1.30875	1.30882			N/A
4/11/2019	GBPUSD	3:30:00 PM	1.308	1.30742			N/A
4/11/2019	GBPUSD.fx	9:30:00 AM	1.30867	1.30845			N/A
4/11/2019	GBPUSD.fx	11:30:00 AM	1.30759	1.30732			N/A
4/11/2019	GBPUSD.fx	1:30:00 PM	1.30882	1.30878			N/A
4/11/2019	GBPUSD.fx	3:30:00 PM	1.30794	1.3074			N/A
4/11/2019	GBPZAR	9:30:00 AM	18.2147	18.2387			N/A
4/11/2019	GBPZAR	11:30:00 AM	18.1915	18.2111			N/A
4/11/2019	GBPZAR	1:30:00 PM	18.2355	18.2651			N/A
4/11/2019	GBPZAR	3:30:00 PM	18.3441	18.3615			N/A
4/11/2019	GBPZAR.fx	9:30:00 AM	18.2211	18.2318			N/A
4/11/2019	GBPZAR.fx	11:30:00 AM	18.1988	18.204			N/A

4/11/2019	GBPZAR.fx	1:30:00 PM	18.2429	18.2575			N/A
4/11/2019	GBPZAR.fx	3:30:00 PM	18.3508	18.3541			N/A
4/11/2019	GOLD	9:30:00 AM	1306.93	1307.19			N/A
4/11/2019	GOLD	11:30:00 AM	1303.95	1304.04			N/A
4/11/2019	GOLD	1:30:00 PM	1304.05	1304.17			N/A
4/11/2019	GOLD	3:30:00 PM	1298.91	1298.22			N/A
4/11/2019	HKDJPY	9:30:00 AM	14.17	14.18			N/A
4/11/2019	HKDJPY	11:30:00 AM	14.17	14.19			N/A
4/11/2019	HKDJPY	1:30:00 PM	14.17	14.18			N/A
4/11/2019	HKDJPY	3:30:00 PM	14.18	14.2			N/A
4/11/2019	HKDJPY.fx	9:30:00 AM	14.164	14.17			N/A
4/11/2019	HKDJPY.fx	11:30:00 AM	14.166	14.173			N/A
4/11/2019	HKDJPY.fx	1:30:00 PM	14.162	14.169			N/A
4/11/2019	HKDJPY.fx	3:30:00 PM	14.188	14.189			N/A
4/11/2019	HUFJPY	9:30:00 AM	0.3902	0.3905			N/A
4/11/2019	HUFJPY	11:30:00 AM	0.3901	0.3904			N/A
4/11/2019	HUFJPY	1:30:00 PM	0.3902	0.3905			N/A
4/11/2019	HUFJPY	3:30:00 PM	0.3898	0.3901			N/A
4/11/2019	JP225.i	9:30:00 AM	21667.37	21687.37			N/A
4/11/2019	JP225.i	11:30:00 AM	21632.37	21649.04			N/A
4/11/2019	JP225.i	1:30:00 PM					N/A
4/11/2019	JP225.i	3:30:00 PM	21682.37	21694.87			N/A
4/11/2019	MXNJPY	9:30:00 AM	5.9	5.91			N/A
4/11/2019	MXNJPY	11:30:00 AM	5.9	5.91			N/A
4/11/2019	MXNJPY	1:30:00 PM	5.9	5.9			N/A
4/11/2019	MXNJPY	3:30:00 PM	5.89	5.9			N/A
4/11/2019	NASDAQ.i	9:30:00 AM					N/A
4/11/2019	NASDAQ.i	11:30:00 AM					N/A
4/11/2019	NASDAQ.i	1:30:00 PM					N/A
4/11/2019	NASDAQ.i	3:30:00 PM					N/A
4/11/2019	NOKJPY	9:30:00 AM	13.07	13.1			N/A
4/11/2019	NOKJPY	11:30:00 AM	13.06	13.08			N/A
4/11/2019	NOKJPY	1:30:00 PM	13.06	13.09			N/A
4/11/2019	NOKJPY	3:30:00 PM	13.05	13.08			N/A



4/11/2019	NOKJPY.fx	9:30:00 AM	13.073	13.08			N/A
4/11/2019	NOKJPY.fx	11:30:00 AM	13.062	13.068			N/A
4/11/2019	NOKJPY.fx	1:30:00 PM	13.065	13.073			N/A
4/11/2019	NOKJPY.fx	3:30:00 PM	13.06	13.064			N/A
4/11/2019	NZDCAD	9:30:00 AM	0.90141	0.902			N/A
4/11/2019	NZDCAD	11:30:00 AM	0.90159	0.90226			N/A
4/11/2019	NZDCAD	1:30:00 PM	0.90219	0.90289			N/A
4/11/2019	NZDCAD	3:30:00 PM	0.90135	0.90133			N/A
4/11/2019	NZDCAD.fx	9:30:00 AM	0.90173	0.90168			N/A
4/11/2019	NZDCAD.fx	11:30:00 AM	0.90193	0.90193			N/A
4/11/2019	NZDCAD.fx	1:30:00 PM	0.90252	0.90256			N/A
4/11/2019	NZDCAD.fx	3:30:00 PM	0.90157	0.90101			N/A
4/11/2019	NZDCHF	9:30:00 AM	0.67696	0.67762			N/A
4/11/2019	NZDCHF	11:30:00 AM	0.67613	0.67682			N/A
4/11/2019	NZDCHF	1:30:00 PM	0.67666	0.67738			N/A
4/11/2019	NZDCHF	3:30:00 PM	0.67634	0.67668			N/A
4/11/2019	NZDCHF.fx	9:30:00 AM	0.6773	0.67727			N/A
4/11/2019	NZDCHF.fx	11:30:00 AM	0.67646	0.67647			N/A
4/11/2019	NZDCHF.fx	1:30:00 PM	0.67702	0.67702			N/A
4/11/2019	NZDCHF.fx	3:30:00 PM	0.67664	0.67624			N/A
4/11/2019	NZDCZK	9:30:00 AM	15.318	15.328			N/A
4/11/2019	NZDCZK	11:30:00 AM	15.31	15.322			N/A
4/11/2019	NZDCZK	1:30:00 PM	15.323	15.334			N/A
4/11/2019	NZDCZK	3:30:00 PM	15.318	15.309			N/A
4/11/2019	NZDDKK	9:30:00 AM					N/A
4/11/2019	NZDDKK	11:30:00 AM					N/A
4/11/2019	NZDDKK	1:30:00 PM					N/A
4/11/2019	NZDDKK	3:30:00 PM	4.464	4.465			N/A
4/11/2019	NZDHKD	9:30:00 AM	5.2972	5.3001			N/A
4/11/2019	NZDHKD	11:30:00 AM	5.295	5.297			N/A
4/11/2019	NZDHKD	1:30:00 PM	5.2972	5.2999			N/A
4/11/2019	NZDHKD	3:30:00 PM	5.2841	5.2816			N/A
4/11/2019	NZDHUF	9:30:00 AM	192.42	192.61			N/A
4/11/2019	NZDHUF	11:30:00 AM	192.33	192.63			N/A

4/11/2019	NZDHUF	1:30:00 PM	192.3	192.57			N/A
4/11/2019	NZDHUF	3:30:00 PM	192.28	192.39			N/A
4/11/2019	NZDJPY	9:30:00 AM	75.058	75.122			N/A
4/11/2019	NZDJPY	11:30:00 AM	75.044	75.116			N/A
4/11/2019	NZDJPY	1:30:00 PM	75.05	75.121			N/A
4/11/2019	NZDJPY	3:30:00 PM	74.978	75.009			N/A
4/11/2019	NZDJPY.fx	9:30:00 AM	75.089	75.09			N/A
4/11/2019	NZDJPY.fx	11:30:00 AM	75.077	75.082			N/A
4/11/2019	NZDJPY.fx	1:30:00 PM	75.082	75.088			N/A
4/11/2019	NZDJPY.fx	3:30:00 PM	75.007	74.978			N/A
4/11/2019	NZDMXN	9:30:00 AM	12.7232	12.7286			N/A
4/11/2019	NZDMXN	11:30:00 AM	12.721	12.727			N/A
4/11/2019	NZDMXN	1:30:00 PM	12.7301	12.7354			N/A
4/11/2019	NZDMXN	3:30:00 PM	12.7233	12.718			N/A
4/11/2019	NZDNOK	9:30:00 AM	5.7384	5.7422			N/A
4/11/2019	NZDNOK	11:30:00 AM	5.744	5.7465			N/A
4/11/2019	NZDNOK	1:30:00 PM	5.7414	5.745			N/A
4/11/2019	NZDNOK	3:30:00 PM	5.7365	5.7357			N/A
4/11/2019	NZDPLN	9:30:00 AM	2.5635	2.5649			N/A
4/11/2019	NZDPLN	11:30:00 AM	2.5635	2.5649			N/A
4/11/2019	NZDPLN	1:30:00 PM	2.5646	2.5658			N/A
4/11/2019	NZDPLN	3:30:00 PM	2.561	2.561			N/A
4/11/2019	NZDSEK	9:30:00 AM	6.2565	6.2632			N/A
4/11/2019	NZDSEK	11:30:00 AM	6.2561	6.2628			N/A
4/11/2019	NZDSEK	1:30:00 PM	6.2562	6.2627			N/A
4/11/2019	NZDSEK	3:30:00 PM	6.2431	6.2459			N/A
4/11/2019	NZDSGD	9:30:00 AM	0.9143	0.9148			N/A
4/11/2019	NZDSGD	11:30:00 AM	0.9141	0.9148			N/A
4/11/2019	NZDSGD	1:30:00 PM	0.9142	0.9148			N/A
4/11/2019	NZDSGD	3:30:00 PM	0.9127	0.9127			N/A
4/11/2019	NZDSGD.fx	9:30:00 AM	0.91428	0.91476			N/A
4/11/2019	NZDSGD.fx	11:30:00 AM	0.91409	0.91468			N/A
4/11/2019	NZDSGD.fx	1:30:00 PM	0.91415	0.91468			N/A
4/11/2019	NZDSGD.fx	3:30:00 PM	0.9127	0.91258			N/A

4/11/2019	NZDUSD	9:30:00 AM	0.67568	0.67577			N/A
4/11/2019	NZDUSD	11:30:00 AM	0.67545	0.67557			N/A
4/11/2019	NZDUSD	1:30:00 PM	0.67561	0.67572			N/A
4/11/2019	NZDUSD	3:30:00 PM	0.67396	0.67339			N/A
4/11/2019	NZDUSD.fx	9:30:00 AM	0.67575	0.67579			N/A
4/11/2019	NZDUSD.fx	11:30:00 AM	0.67552	0.67557			N/A
4/11/2019	NZDUSD.fx	1:30:00 PM	0.6757	0.67572			N/A
4/11/2019	NZDUSD.fx	3:30:00 PM	0.67404	0.67342			N/A
4/11/2019	NZDZAR	9:30:00 AM	9.3999	9.4157			N/A
4/11/2019	NZDZAR	11:30:00 AM	9.3919	9.4061			N/A
4/11/2019	NZDZAR	1:30:00 PM	9.4091	9.4262			N/A
4/11/2019	NZDZAR	3:30:00 PM	9.4457	9.4503			N/A
4/11/2019	SEKJPY	9:30:00 AM	11.99	12			N/A
4/11/2019	SEKJPY	11:30:00 AM	11.99	12			N/A
4/11/2019	SEKJPY	1:30:00 PM					N/A
4/11/2019	SEKJPY	3:30:00 PM	12	12.01			N/A
4/11/2019	SEKJPY.fx	9:30:00 AM	11.982	11.999			N/A
4/11/2019	SEKJPY.fx	11:30:00 AM	11.981	12			N/A
4/11/2019	SEKJPY.fx	1:30:00 PM	11.981	12			N/A
4/11/2019	SEKJPY.fx	3:30:00 PM	11.993	12.009			N/A
4/11/2019	SGDJPY	9:30:00 AM	82.08	82.11			N/A
4/11/2019	SGDJPY	11:30:00 AM	82.11	82.11			N/A
4/11/2019	SGDJPY	1:30:00 PM	82.1	82.11			N/A
4/11/2019	SGDJPY	3:30:00 PM	82.14	82.14			N/A
4/11/2019	SILVER	9:30:00 AM	15.04	15.42			N/A
4/11/2019	SILVER	11:30:00 AM	14.96	15.34			N/A
4/11/2019	SILVER	1:30:00 PM	14.95	15.34			N/A
4/11/2019	SILVER	3:30:00 PM	14.86	15.24			N/A
4/11/2019	SPX500.i	9:30:00 AM	2891.65	2892.45			N/A
4/11/2019	SPX500.i	11:30:00 AM	2887.9	2888.95			N/A
4/11/2019	SPX500.i	1:30:00 PM	2893.74	2894.7			N/A
4/11/2019	SPX500.i	3:30:00 PM	2892.9	2893.45			N/A
4/11/2019	UK100.i	9:30:00 AM	7419.65	7421.48			N/A
4/11/2019	UK100.i	11:30:00 AM	7416.4	7414.9			N/A

4/11/2019	UK100.i	1:30:00 PM	7433.4	7433.4			N/A
4/11/2019	UK100.i	3:30:00 PM	7432.4	7432.65			N/A
4/11/2019	USDCAD	9:30:00 AM	1.3344	1.33447			N/A
4/11/2019	USDCAD	11:30:00 AM	1.33517	1.33525			N/A
4/11/2019	USDCAD	1:30:00 PM	1.33572	1.33574			N/A
4/11/2019	USDCAD	3:30:00 PM	1.33794	1.33776			N/A
4/11/2019	USDCAD.fx	9:30:00 AM	1.33443	1.33442			N/A
4/11/2019	USDCAD.fx	11:30:00 AM	1.33519	1.33521			N/A
4/11/2019	USDCAD.fx	1:30:00 PM	1.33574	1.33571			N/A
4/11/2019	USDCAD.fx	3:30:00 PM	1.33795	1.33783			N/A
4/11/2019	USDCHF	9:30:00 AM	1.00221	1.00231			N/A
4/11/2019	USDCHF	11:30:00 AM	1.00133	1.00146			N/A
4/11/2019	USDCHF	1:30:00 PM	1.00186	1.00197			N/A
4/11/2019	USDCHF	3:30:00 PM	1.00407	1.00378			N/A
4/11/2019	USDCHF.fx	9:30:00 AM	1.00226	1.00225			N/A
4/11/2019	USDCHF.fx	11:30:00 AM	1.00138	1.00141			N/A
4/11/2019	USDCHF.fx	1:30:00 PM	1.00191	1.00191			N/A
4/11/2019	USDCHF.fx	3:30:00 PM	1.00411	1.00377			N/A
4/11/2019	USDCZK	9:30:00 AM	22.684	22.706			N/A
4/11/2019	USDCZK	11:30:00 AM	22.682	22.704			N/A
4/11/2019	USDCZK	1:30:00 PM	22.692	22.716			N/A
4/11/2019	USDCZK	3:30:00 PM	22.749	22.762			N/A
4/11/2019	USDCZK.fx	9:30:00 AM	22.6921	22.6976			N/A
4/11/2019	USDCZK.fx	11:30:00 AM	22.6921	22.6955			N/A
4/11/2019	USDCZK.fx	1:30:00 PM	22.7008	22.7076			N/A
4/11/2019	USDCZK.fx	3:30:00 PM	22.7568	22.7537			N/A
4/11/2019	USDDKK	9:30:00 AM	6.6191	6.6232			N/A
4/11/2019	USDDKK	11:30:00 AM	6.6177	6.6212			N/A
4/11/2019	USDDKK	1:30:00 PM	6.6185	6.6226			N/A
4/11/2019	USDDKK	3:30:00 PM	6.6294	6.6312			N/A
4/11/2019	USDDKK.fx	9:30:00 AM	6.61964	6.62109			N/A
4/11/2019	USDDKK.fx	11:30:00 AM	6.6185	6.61922			N/A
4/11/2019	USDDKK.fx	1:30:00 PM	6.61914	6.62056			N/A
4/11/2019	USDDKK.fx	3:30:00 PM	6.62983	6.62914			N/A

4/11/2019	USDHKD	9:30:00 AM	7.8426	7.8431			N/A
4/11/2019	USDHKD	11:30:00 AM	7.843	7.8433			N/A
4/11/2019	USDHKD	1:30:00 PM	7.8435	7.8437			N/A
4/11/2019	USDHKD	3:30:00 PM	7.8432	7.8435			N/A
4/11/2019	USDHKD.fx	9:30:00 AM	7.84257	7.84303			N/A
4/11/2019	USDHKD.fx	11:30:00 AM	7.84293	7.84351			N/A
4/11/2019	USDHKD.fx	1:30:00 PM	7.84339	7.84395			N/A
4/11/2019	USDHKD.fx	3:30:00 PM	7.84317	7.8436			N/A
4/11/2019	USDHUF	9:30:00 AM	284.87	285.17			N/A
4/11/2019	USDHUF	11:30:00 AM	284.85	285.31			N/A
4/11/2019	USDHUF	1:30:00 PM	284.69	285.16			N/A
4/11/2019	USDHUF	3:30:00 PM	285.53	285.88			N/A
4/11/2019	USDHUF.fx	9:30:00 AM	285.078	284.953			N/A
4/11/2019	USDHUF.fx	11:30:00 AM	285.073	285.097			N/A
4/11/2019	USDHUF.fx	1:30:00 PM	284.883	284.965			N/A
4/11/2019	USDHUF.fx	3:30:00 PM	285.735	285.676			N/A
4/11/2019	USDINR	9:30:00 AM	64	73.98			N/A
4/11/2019	USDINR	11:30:00 AM	63.92	73.9			N/A
4/11/2019	USDINR	1:30:00 PM					N/A
4/11/2019	USDINR	3:30:00 PM					N/A
4/11/2019	USDJPY	9:30:00 AM	111.112	111.122			N/A
4/11/2019	USDJPY	11:30:00 AM	111.139	111.143			N/A
4/11/2019	USDJPY	1:30:00 PM	111.115	111.124			N/A
4/11/2019	USDJPY	3:30:00 PM	111.315	111.249			N/A
4/11/2019	USDJPY.fx	9:30:00 AM	111.119	111.114			N/A
4/11/2019	USDJPY.fx	11:30:00 AM	111.145	111.136			N/A
4/11/2019	USDJPY.fx	1:30:00 PM	111.12	111.117			N/A
4/11/2019	USDJPY.fx	3:30:00 PM	111.32	111.245			N/A
4/11/2019	USDMXN	9:30:00 AM	18.835	18.841			N/A
4/11/2019	USDMXN	11:30:00 AM	18.84	18.846			N/A
4/11/2019	USDMXN	1:30:00 PM	18.846	18.854			N/A
4/11/2019	USDMXN	3:30:00 PM	18.893	18.891			N/A
4/11/2019	USDMXN.f	9:30:00 AM	18.8378	18.8373			N/A
4/11/2019	USDMXN.f	11:30:00 AM	18.8436	18.8422			N/A

4/11/2019	USDMXN.f	1:30:00 PM	18.8497	18.8503			N/A
4/11/2019	USDMXN.f	3:30:00 PM	18.8966	18.8868			N/A
4/11/2019	USDNOK	9:30:00 AM	8.4938	8.502			N/A
4/11/2019	USDNOK	11:30:00 AM	8.5035	8.511			N/A
4/11/2019	USDNOK	1:30:00 PM	8.4983	8.5071			N/A
4/11/2019	USDNOK	3:30:00 PM	8.5182	8.5229			N/A
4/11/2019	USDNOK.fx	9:30:00 AM	8.4978	8.49769			N/A
4/11/2019	USDNOK.fx	11:30:00 AM	8.50764	8.50658			N/A
4/11/2019	USDNOK.fx	1:30:00 PM	8.50216	8.50277			N/A
4/11/2019	USDNOK.fx	3:30:00 PM	8.52205	8.5187			N/A
4/11/2019	USDPLN	9:30:00 AM	3.7946	3.7962			N/A
4/11/2019	USDPLN	11:30:00 AM	3.7964	3.7976			N/A
4/11/2019	USDPLN	1:30:00 PM	3.7965	3.7982			N/A
4/11/2019	USDPLN	3:30:00 PM	3.8041	3.8043			N/A
4/11/2019	USDPLN.fx	9:30:00 AM	3.79385	3.79693			N/A
4/11/2019	USDPLN.fx	11:30:00 AM	3.79548	3.79841			N/A
4/11/2019	USDPLN.fx	1:30:00 PM	3.79566	3.79893			N/A
4/11/2019	USDPLN.fx	3:30:00 PM	3.80307	3.80521			N/A
4/11/2019	USDRUB	9:30:00 AM					N/A
4/11/2019	USDRUB	11:30:00 AM	64.179	64.556			N/A
4/11/2019	USDRUB	1:30:00 PM	64.201	64.582			N/A
4/11/2019	USDRUB	3:30:00 PM	64.34	64.718			N/A
4/11/2019	USDSEK	9:30:00 AM	9.2646	9.2675			N/A
4/11/2019	USDSEK	11:30:00 AM	9.2674	9.2699			N/A
4/11/2019	USDSEK	1:30:00 PM	9.2643	9.2685			N/A
4/11/2019	USDSEK	3:30:00 PM	9.272	9.2735			N/A
4/11/2019	USDSEK.fx	9:30:00 AM	9.26706	9.26575			N/A
4/11/2019	USDSEK.fx	11:30:00 AM	9.26986	9.26805			N/A
4/11/2019	USDSEK.fx	1:30:00 PM	9.26686	9.26669			N/A
4/11/2019	USDSEK.fx	3:30:00 PM	9.27448	9.27161			N/A
4/11/2019	USDSGD	9:30:00 AM	1.3531	1.3535			N/A
4/11/2019	USDSGD	11:30:00 AM	1.3534	1.3537			N/A
4/11/2019	USDSGD	1:30:00 PM	1.3531	1.3534			N/A
4/11/2019	USDSGD	3:30:00 PM	1.3545	1.3547			N/A

4/11/2019	USDSGD.fx	9:30:00 AM	1.35306	1.35355			N/A
4/11/2019	USDSGD.fx	11:30:00 AM	1.35336	1.35379			N/A
4/11/2019	USDSGD.fx	1:30:00 PM	1.35301	1.35354			N/A
4/11/2019	USDSGD.fx	3:30:00 PM	1.35442	1.35479			N/A
4/11/2019	USDZAR	9:30:00 AM	13.9218	13.9377			N/A
4/11/2019	USDZAR	11:30:00 AM	13.9147	13.9269			N/A
4/11/2019	USDZAR	1:30:00 PM	13.9349	13.954			N/A
4/11/2019	USDZAR	3:30:00 PM	14.0317	14.0417			N/A
4/11/2019	USDZAR.fx	9:30:00 AM					N/A
4/11/2019	USDZAR.fx	11:30:00 AM					N/A
4/11/2019	USDZAR.fx	1:30:00 PM					N/A
4/11/2019	USDZAR.fx	3:30:00 PM					N/A
4/11/2019	XAUUSD	9:30:00 AM	1306.92	1307.19			N/A
4/11/2019	XAUUSD	11:30:00 AM	1303.96	1304.04			N/A
4/11/2019	XAUUSD	1:30:00 PM	1304.05	1304.17			N/A
4/11/2019	XAUUSD	3:30:00 PM	1298.91	1298.24			N/A
4/11/2019	ZARJPY	9:30:00 AM	7.96	7.98			N/A
4/11/2019	ZARJPY	11:30:00 AM	7.97	7.98			N/A
4/11/2019	ZARJPY	1:30:00 PM	7.94	7.97			N/A
4/11/2019	ZARJPY	3:30:00 PM	7.91	7.93			N/A
4/11/2019	ZARJPY.fx	9:30:00 AM	7.975	7.979			N/A
4/11/2019	ZARJPY.fx	11:30:00 AM	7.982	7.985			N/A
4/11/2019	ZARJPY.fx	1:30:00 PM	7.966	7.972			N/A
4/11/2019	ZARJPY.fx	3:30:00 PM	7.929	7.928			N/A
4/12/2019	#AA	9:30:00 AM					N/A
4/12/2019	#AA	11:30:00 AM					N/A
4/12/2019	#AA	1:30:00 PM					N/A
4/12/2019	#AA	3:30:00 PM					N/A
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4/12/2019	#AABA	3:30:00 PM					N/A
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4/12/2019	#AAPL	11:30:00 AM					N/A
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4/12/2019	#BIDU	1:30:00 PM					N/A
4/12/2019	#BIDU	3:30:00 PM					N/A
4/12/2019	#Bitcoin	9:30:00 AM	5013.61	5088.36			N/A
4/12/2019	#Bitcoin	11:30:00 AM	5009.96	5084.71			N/A
4/12/2019	#Bitcoin	1:30:00 PM					N/A
4/12/2019	#Bitcoin	3:30:00 PM	5070.06	5139.96			N/A
4/12/2019	#BK	9:30:00 AM					N/A
4/12/2019	#BK	11:30:00 AM					N/A
4/12/2019	#BK	1:30:00 PM					N/A
4/12/2019	#BK	3:30:00 PM					N/A
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4/12/2019	#BLT	11:30:00 AM					N/A
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4/12/2019	#BLT	3:30:00 PM					N/A
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4/12/2019	#BP	3:30:00 PM					N/A
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4/12/2019	#BTA	3:30:00 PM					N/A
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4/12/2019	#C	11:30:00 AM					N/A
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4/12/2019	#C	3:30:00 PM					N/A
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4/12/2019	#CAT	11:30:00 AM					N/A
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4/12/2019	#CAT	3:30:00 PM					N/A
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4/12/2019	#CHL	1:30:00 PM					N/A
4/12/2019	#CHL	3:30:00 PM					N/A
4/12/2019	#CL.f	9:30:00 AM	63.904	63.938			N/A
4/12/2019	#CL.f	11:30:00 AM	64.245	64.279			N/A
4/12/2019	#CL.f	1:30:00 PM	64.56	64.598			N/A
4/12/2019	#CL.f	3:30:00 PM	64.555	64.573			N/A
4/12/2019	#CMCSA	9:30:00 AM					N/A
4/12/2019	#CMCSA	11:30:00 AM					N/A
4/12/2019	#CMCSA	1:30:00 PM					N/A
4/12/2019	#CMCSA	3:30:00 PM					N/A
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4/12/2019	#CSCO	3:30:00 PM					N/A
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4/12/2019	#CVX	11:30:00 AM					N/A
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4/12/2019	#DD	11:30:00 AM					N/A
4/12/2019	#DD	1:30:00 PM					N/A
4/12/2019	#DD	3:30:00 PM					N/A

4/12/2019	#DIS	9:30:00 AM					N/A
4/12/2019	#DIS	11:30:00 AM					N/A
4/12/2019	#DIS	1:30:00 PM					N/A
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4/12/2019	AUDCHF.fx	11:30:00 AM	0.71553	0.71547			N/A
4/12/2019	AUDCHF.fx	1:30:00 PM	0.71738	0.71738			N/A
4/12/2019	AUDCHF.fx	3:30:00 PM	0.71809	0.71808			N/A
4/12/2019	AUDCZK	9:30:00 AM	16.172	16.172			N/A
4/12/2019	AUDCZK	11:30:00 AM	16.171	16.186			N/A
4/12/2019	AUDCZK	1:30:00 PM	16.215	16.232			N/A
4/12/2019	AUDCZK	3:30:00 PM	16.224	16.239			N/A
4/12/2019	AUDDKK	9:30:00 AM	4.7166	4.7168			N/A
4/12/2019	AUDDKK	11:30:00 AM	4.7161	4.7205			N/A
4/12/2019	AUDDKK	1:30:00 PM	4.7273	4.732			N/A
4/12/2019	AUDDKK	3:30:00 PM	4.7316	4.7358			N/A
4/12/2019	AUDHKD	9:30:00 AM	5.5917	5.5895			N/A
4/12/2019	AUDHKD	11:30:00 AM	5.5989	5.6013			N/A
4/12/2019	AUDHKD	1:30:00 PM	5.6191	5.6225			N/A
4/12/2019	AUDHKD	3:30:00 PM	5.6261	5.6284			N/A
4/12/2019	AUDHUF	9:30:00 AM	203.49	203.5			N/A
4/12/2019	AUDHUF	11:30:00 AM	203.51	203.74			N/A
4/12/2019	AUDHUF	1:30:00 PM	203.98	204.21			N/A
4/12/2019	AUDHUF	3:30:00 PM	203.83	204.05			N/A
4/12/2019	AUDJPY	9:30:00 AM	79.762	79.735			N/A
4/12/2019	AUDJPY	11:30:00 AM	79.915	79.975			N/A
4/12/2019	AUDJPY	1:30:00 PM	80.191	80.247			N/A
4/12/2019	AUDJPY	3:30:00 PM	80.32	80.376			N/A
4/12/2019	AUDJPY.fx	9:30:00 AM	79.796	79.699			N/A
4/12/2019	AUDJPY.fx	11:30:00 AM	79.949	79.94			N/A
4/12/2019	AUDJPY.fx	1:30:00 PM	80.225	80.212			N/A
4/12/2019	AUDJPY.fx	3:30:00 PM	80.354	80.341			N/A
4/12/2019	AUDMXN	9:30:00 AM	13.4292	13.4265			N/A
4/12/2019	AUDMXN	11:30:00 AM	13.4168	13.4244			N/A

4/12/2019	AUDMXN	1:30:00 PM	13.4538	13.4631			N/A
4/12/2019	AUDMXN	3:30:00 PM	13.4595	13.468			N/A
4/12/2019	AUDNOK	9:30:00 AM	6.0766	6.0765			N/A
4/12/2019	AUDNOK	11:30:00 AM	6.0776	6.082			N/A
4/12/2019	AUDNOK	1:30:00 PM	6.0882	6.093			N/A
4/12/2019	AUDNOK	3:30:00 PM	6.0874	6.0916			N/A
4/12/2019	AUDNOK.fx	9:30:00 AM	6.0779	6.075			N/A
4/12/2019	AUDNOK.fx	11:30:00 AM	6.0792	6.0803			N/A
4/12/2019	AUDNOK.fx	1:30:00 PM	6.0897	6.0913			N/A
4/12/2019	AUDNOK.fx	3:30:00 PM	6.0889	6.0899			N/A
4/12/2019	AUDNZD	9:30:00 AM	1.05902	1.05945			N/A
4/12/2019	AUDNZD	11:30:00 AM	1.06009	1.06096			N/A
4/12/2019	AUDNZD	1:30:00 PM	1.06153	1.06236			N/A
4/12/2019	AUDNZD	3:30:00 PM	1.06171	1.06242			N/A
4/12/2019	AUDNZD.fx	9:30:00 AM	1.05944	1.05901			N/A
4/12/2019	AUDNZD.fx	11:30:00 AM	1.06053	1.06052			N/A
4/12/2019	AUDNZD.fx	1:30:00 PM	1.06196	1.06192			N/A
4/12/2019	AUDNZD.fx	3:30:00 PM	1.06214	1.06199			N/A
4/12/2019	AUDPLN	9:30:00 AM	2.7061	2.7069			N/A
4/12/2019	AUDPLN	11:30:00 AM	2.706	2.709			N/A
4/12/2019	AUDPLN	1:30:00 PM	2.7131	2.7163			N/A
4/12/2019	AUDPLN	3:30:00 PM	2.7129	2.7156			N/A
4/12/2019	AUDSEK	9:30:00 AM	6.6142	6.6121			N/A
4/12/2019	AUDSEK	11:30:00 AM	6.6199	6.6212			N/A
4/12/2019	AUDSEK	1:30:00 PM	6.6429	6.6457			N/A
4/12/2019	AUDSEK	3:30:00 PM	6.6434	6.6456			N/A
4/12/2019	AUDSEK.fx	9:30:00 AM	6.6098	6.6166			N/A
4/12/2019	AUDSEK.fx	11:30:00 AM	6.6152	6.6258			N/A
4/12/2019	AUDSEK.fx	1:30:00 PM	6.6382	6.6502			N/A
4/12/2019	AUDSEK.fx	3:30:00 PM	6.6385	6.6502			N/A
4/12/2019	AUDSGD	9:30:00 AM	0.9675	0.9671			N/A
4/12/2019	AUDSGD	11:30:00 AM	0.9682	0.9684			N/A
4/12/2019	AUDSGD	1:30:00 PM	0.9704	0.9707			N/A
4/12/2019	AUDSGD	3:30:00 PM	0.9712	0.9714			N/A

4/12/2019	AUDSGD.fx	9:30:00 AM	0.96754	0.96697			N/A
4/12/2019	AUDSGD.fx	11:30:00 AM	0.96829	0.96832			N/A
4/12/2019	AUDSGD.fx	1:30:00 PM	0.97047	0.97054			N/A
4/12/2019	AUDSGD.fx	3:30:00 PM	0.97129	0.9713			N/A
4/12/2019	AUDUSD	9:30:00 AM	0.71342	0.71276			N/A
4/12/2019	AUDUSD	11:30:00 AM	0.71428	0.71426			N/A
4/12/2019	AUDUSD	1:30:00 PM	0.71673	0.71681			N/A
4/12/2019	AUDUSD	3:30:00 PM	0.71775	0.71773			N/A
4/12/2019	AUDUSD.fx	9:30:00 AM	0.71349	0.7127			N/A
4/12/2019	AUDUSD.fx	11:30:00 AM	0.71433	0.71421			N/A
4/12/2019	AUDUSD.fx	1:30:00 PM	0.71678	0.71676			N/A
4/12/2019	AUDUSD.fx	3:30:00 PM	0.7178	0.71767			N/A
4/12/2019	AUDZAR	9:30:00 AM	9.9954	10.0006			N/A
4/12/2019	AUDZAR	11:30:00 AM	9.9688	9.9686			N/A
4/12/2019	AUDZAR	1:30:00 PM	10.0037	10.0163			N/A
4/12/2019	AUDZAR	3:30:00 PM	9.9863	9.9981			N/A
4/12/2019	AUS200.i	9:30:00 AM					N/A
4/12/2019	AUS200.i	11:30:00 AM	6256.67	6259.97			N/A
4/12/2019	AUS200.i	1:30:00 PM	6260.57	6263.97			N/A
4/12/2019	AUS200.i	3:30:00 PM	6262.17	6265.27			N/A
4/12/2019	BCHUSD	9:30:00 AM	267.83	279.17			N/A
4/12/2019	BCHUSD	11:30:00 AM	266.02	277.85			N/A
4/12/2019	BCHUSD	1:30:00 PM	271.33	282.79			N/A
4/12/2019	BCHUSD	3:30:00 PM	284.77	296.27			N/A
4/12/2019	CADCHF	9:30:00 AM	0.74963	0.75024			N/A
4/12/2019	CADCHF	11:30:00 AM	0.75014	0.75068			N/A
4/12/2019	CADCHF	1:30:00 PM	0.75067	0.75135			N/A
4/12/2019	CADCHF	3:30:00 PM	0.75044	0.75099			N/A
4/12/2019	CADCHF.fx	9:30:00 AM	0.74997	0.74988			N/A
4/12/2019	CADCHF.fx	11:30:00 AM	0.75047	0.75033			N/A
4/12/2019	CADCHF.fx	1:30:00 PM	0.75101	0.751			N/A
4/12/2019	CADCHF.fx	3:30:00 PM	0.75078	0.75063			N/A
4/12/2019	CADCZK	9:30:00 AM	16.96	16.975			N/A
4/12/2019	CADCZK	11:30:00 AM	16.964	16.979			N/A

4/12/2019	CADCZK	1:30:00 PM	16.979	16.995			N/A
4/12/2019	CADCZK	3:30:00 PM	16.967	16.98			N/A
4/12/2019	CADDKK	9:30:00 AM					N/A
4/12/2019	CADDKK	11:30:00 AM	4.948	4.952			N/A
4/12/2019	CADDKK	1:30:00 PM					N/A
4/12/2019	CADDKK	3:30:00 PM	4.946	4.949			N/A
4/12/2019	CADHKD	9:30:00 AM	5.8645	5.867			N/A
4/12/2019	CADHKD	11:30:00 AM	5.8733	5.8771			N/A
4/12/2019	CADHKD	1:30:00 PM	5.8838	5.8872			N/A
4/12/2019	CADHKD	3:30:00 PM	5.8832	5.885			N/A
4/12/2019	CADHUF	9:30:00 AM	213.45	213.57			N/A
4/12/2019	CADHUF	11:30:00 AM	213.51	213.66			N/A
4/12/2019	CADHUF	1:30:00 PM	213.62	213.77			N/A
4/12/2019	CADHUF	3:30:00 PM	213.2	213.32			N/A
4/12/2019	CADJPY	9:30:00 AM	83.652	83.679			N/A
4/12/2019	CADJPY	11:30:00 AM	83.815	83.873			N/A
4/12/2019	CADJPY	1:30:00 PM	83.953	84.01			N/A
4/12/2019	CADJPY	3:30:00 PM	83.97	84.024			N/A
4/12/2019	CADJPY.fx	9:30:00 AM	83.685	83.645			N/A
4/12/2019	CADJPY.fx	11:30:00 AM	83.848	83.839			N/A
4/12/2019	CADJPY.fx	1:30:00 PM	83.987	83.974			N/A
4/12/2019	CADJPY.fx	3:30:00 PM	84.004	83.988			N/A
4/12/2019	CADMXN	9:30:00 AM	14.0861	14.0917			N/A
4/12/2019	CADMXN	11:30:00 AM	14.0741	14.0823			N/A
4/12/2019	CADMXN	1:30:00 PM	14.0863	14.0977			N/A
4/12/2019	CADMXN	3:30:00 PM	14.0746	14.0849			N/A
4/12/2019	CADNOK	9:30:00 AM	6.3712	6.376			N/A
4/12/2019	CADNOK	11:30:00 AM	6.3737	6.378			N/A
4/12/2019	CADNOK	1:30:00 PM	6.3728	6.3772			N/A
4/12/2019	CADNOK	3:30:00 PM	6.3613	6.3643			N/A
4/12/2019	CADPLN	9:30:00 AM	2.8381	2.84			N/A
4/12/2019	CADPLN	11:30:00 AM	2.8395	2.8413			N/A
4/12/2019	CADPLN	1:30:00 PM	2.8408	2.8426			N/A
4/12/2019	CADPLN	3:30:00 PM	2.8357	2.8368			N/A



4/12/2019	CADSEK	9:30:00 AM	6.9346	6.9385			N/A
4/12/2019	CADSEK	11:30:00 AM	6.9424	6.9441			N/A
4/12/2019	CADSEK	1:30:00 PM	6.9531	6.9561			N/A
4/12/2019	CADSEK	3:30:00 PM	6.9445	6.946			N/A
4/12/2019	CADSGD	9:30:00 AM	1.0142	1.0145			N/A
4/12/2019	CADSGD	11:30:00 AM	1.0151	1.0154			N/A
4/12/2019	CADSGD	1:30:00 PM	1.0154	1.0156			N/A
4/12/2019	CADSGD	3:30:00 PM	1.0149	1.0152			N/A
4/12/2019	CADZAR	9:30:00 AM	10.483	10.4924			N/A
4/12/2019	CADZAR	11:30:00 AM	10.4584	10.4574			N/A
4/12/2019	CADZAR	1:30:00 PM	10.4751	10.4886			N/A
4/12/2019	CADZAR	3:30:00 PM	10.4416	10.4569			N/A
4/12/2019	CHFCZK	9:30:00 AM	22.62	22.631			N/A
4/12/2019	CHFCZK	11:30:00 AM	22.61	22.624			N/A
4/12/2019	CHFCZK	1:30:00 PM	22.612	22.627			N/A
4/12/2019	CHFCZK	3:30:00 PM	22.604	22.62			N/A
4/12/2019	CHFDKK	9:30:00 AM	6.596	6.599			N/A
4/12/2019	CHFDKK	11:30:00 AM	6.593	6.596			N/A
4/12/2019	CHFDKK	1:30:00 PM	6.592	6.594			N/A
4/12/2019	CHFDKK	3:30:00 PM	6.591	6.594			N/A
4/12/2019	CHFDKK.fx	9:30:00 AM	6.5954	6.6001			N/A
4/12/2019	CHFDKK.fx	11:30:00 AM	6.5919	6.5973			N/A
4/12/2019	CHFDKK.fx	1:30:00 PM	6.5903	6.5958			N/A
4/12/2019	CHFDKK.fx	3:30:00 PM	6.5892	6.5952			N/A
4/12/2019	CHFHKD	9:30:00 AM	7.8208	7.8238			N/A
4/12/2019	CHFHKD	11:30:00 AM	7.8282	7.8301			N/A
4/12/2019	CHFHKD	1:30:00 PM	7.835	7.8387			N/A
4/12/2019	CHFHKD	3:30:00 PM	7.8374	7.8397			N/A
4/12/2019	CHFHUF	9:30:00 AM	284.54	284.87			N/A
4/12/2019	CHFHUF	11:30:00 AM	284.46	284.82			N/A
4/12/2019	CHFHUF	1:30:00 PM	284.36	284.73			N/A
4/12/2019	CHFHUF	3:30:00 PM	283.9	284.27			N/A
4/12/2019	CHFJPY	9:30:00 AM	111.549	111.581			N/A
4/12/2019	CHFJPY	11:30:00 AM	111.706	111.758			N/A

4/12/2019	CHFJPY	1:30:00 PM	111.792	111.85			N/A
4/12/2019	CHFJPY	3:30:00 PM	111.873	111.92			N/A
4/12/2019	CHFJPY.fx	9:30:00 AM	111.582	111.547			N/A
4/12/2019	CHFJPY.fx	11:30:00 AM	111.738	111.723			N/A
4/12/2019	CHFJPY.fx	1:30:00 PM	111.826	111.815			N/A
4/12/2019	CHFJPY.fx	3:30:00 PM	111.906	111.886			N/A
4/12/2019	CHFMXN	9:30:00 AM	18.7862	18.7893			N/A
4/12/2019	CHFMXN	11:30:00 AM	18.7542	18.7663			N/A
4/12/2019	CHFMXN	1:30:00 PM	18.7561	18.7714			N/A
4/12/2019	CHFMXN	3:30:00 PM	18.7483	18.7614			N/A
4/12/2019	CHFNOK	9:30:00 AM	8.4963	8.5034			N/A
4/12/2019	CHFNOK	11:30:00 AM	8.4938	8.5002			N/A
4/12/2019	CHFNOK	1:30:00 PM	8.4866	8.4933			N/A
4/12/2019	CHFNOK	3:30:00 PM	8.4767	8.4837			N/A
4/12/2019	CHFNOK.fx	9:30:00 AM	8.49962	8.50023			N/A
4/12/2019	CHFNOK.fx	11:30:00 AM	8.49717	8.49677			N/A
4/12/2019	CHFNOK.fx	1:30:00 PM	8.48993	8.48987			N/A
4/12/2019	CHFNOK.fx	3:30:00 PM	8.48004	8.48029			N/A
4/12/2019	CHFPLN	9:30:00 AM	3.7843	3.7867			N/A
4/12/2019	CHFPLN	11:30:00 AM	3.7831	3.7858			N/A
4/12/2019	CHFPLN	1:30:00 PM	3.7826	3.7855			N/A
4/12/2019	CHFPLN	3:30:00 PM	3.7783	3.7813			N/A
4/12/2019	CHFPLN.fx	9:30:00 AM	3.78186	3.78923			N/A
4/12/2019	CHFPLN.fx	11:30:00 AM	3.78074	3.78805			N/A
4/12/2019	CHFPLN.fx	1:30:00 PM	3.78024	3.78775			N/A
4/12/2019	CHFPLN.fx	3:30:00 PM	3.77596	3.78357			N/A
4/12/2019	CHFSEK	9:30:00 AM	9.2479	9.2507			N/A
4/12/2019	CHFSEK	11:30:00 AM	9.251	9.253			N/A
4/12/2019	CHFSEK	1:30:00 PM	9.2592	9.2622			N/A
4/12/2019	CHFSEK	3:30:00 PM	9.2495	9.2537			N/A
4/12/2019	CHFSGD	9:30:00 AM	1.353	1.3531			N/A
4/12/2019	CHFSGD	11:30:00 AM	1.3532	1.3535			N/A
4/12/2019	CHFSGD	1:30:00 PM	1.3526	1.3531			N/A
4/12/2019	CHFSGD	3:30:00 PM	1.3524	1.3529			N/A

4/12/2019	CHFSGD.fx	9:30:00 AM	1.35313	1.35296			N/A
4/12/2019	CHFSGD.fx	11:30:00 AM	1.35333	1.35336			N/A
4/12/2019	CHFSGD.fx	1:30:00 PM	1.35274	1.35292			N/A
4/12/2019	CHFSGD.fx	3:30:00 PM	1.35257	1.35269			N/A
4/12/2019	CHFZAR	9:30:00 AM	13.984	13.9866			N/A
4/12/2019	CHFZAR	11:30:00 AM	13.9395	13.9313			N/A
4/12/2019	CHFZAR	1:30:00 PM	13.9519	13.9624			N/A
4/12/2019	CHFZAR	3:30:00 PM	13.9147	13.9229			N/A
4/12/2019	CZKJPY	9:30:00 AM	4.932	4.934			N/A
4/12/2019	CZKJPY	11:30:00 AM	4.94	4.943			N/A
4/12/2019	CZKJPY	1:30:00 PM	4.944	4.947			N/A
4/12/2019	CZKJPY	3:30:00 PM	4.948	4.952			N/A
4/12/2019	DAX30.i	9:30:00 AM	11947.39	11944.64			N/A
4/12/2019	DAX30.i	11:30:00 AM	11971.14	11966.64			N/A
4/12/2019	DAX30.i	1:30:00 PM	12020.14	12017.39			N/A
4/12/2019	DAX30.i	3:30:00 PM	12032.89	12031.89			N/A
4/12/2019	DJ30.i	9:30:00 AM					N/A
4/12/2019	DJ30.i	11:30:00 AM					N/A
4/12/2019	DJ30.i	1:30:00 PM					N/A
4/12/2019	DJ30.i	3:30:00 PM					N/A
4/12/2019	DKKJPY	9:30:00 AM	16.92	16.92			N/A
4/12/2019	DKKJPY	11:30:00 AM	16.95	16.96			N/A
4/12/2019	DKKJPY	1:30:00 PM	16.96	16.98			N/A
4/12/2019	DKKJPY	3:30:00 PM					N/A
4/12/2019	EURAUD	9:30:00 AM	1.58238	1.58139			N/A
4/12/2019	EURAUD	11:30:00 AM	1.58121	1.5815			N/A
4/12/2019	EURAUD	1:30:00 PM	1.57738	1.57777			N/A
4/12/2019	EURAUD	3:30:00 PM	1.57618	1.57635			N/A
4/12/2019	EURAUD.fx	9:30:00 AM	1.58263	1.58116			N/A
4/12/2019	EURAUD.fx	11:30:00 AM	1.58139	1.58129			N/A
4/12/2019	EURAUD.fx	1:30:00 PM	1.57757	1.57755			N/A
4/12/2019	EURAUD.fx	3:30:00 PM	1.57638	1.57615			N/A
4/12/2019	EURCAD	9:30:00 AM	1.50827	1.50891			N/A
4/12/2019	EURCAD	11:30:00 AM	1.50795	1.50861			N/A

4/12/2019	EURCAD	1:30:00 PM	1.50709	1.50787			N/A
4/12/2019	EURCAD	3:30:00 PM	1.50809	1.50851			N/A
4/12/2019	EURCAD.fx	9:30:00 AM	1.50865	1.5085			N/A
4/12/2019	EURCAD.fx	11:30:00 AM	1.50836	1.50819			N/A
4/12/2019	EURCAD.fx	1:30:00 PM	1.5075	1.50746			N/A
4/12/2019	EURCAD.fx	3:30:00 PM	1.5085	1.50809			N/A
4/12/2019	EURCHF	9:30:00 AM	1.13147	1.13133			N/A
4/12/2019	EURCHF	11:30:00 AM	1.13186	1.13185			N/A
4/12/2019	EURCHF	1:30:00 PM	1.13217	1.13218			N/A
4/12/2019	EURCHF	3:30:00 PM	1.13226	1.13232			N/A
4/12/2019	EURCHF.fx	9:30:00 AM	1.13153	1.13127			N/A
4/12/2019	EURCHF.fx	11:30:00 AM	1.13191	1.1318			N/A
4/12/2019	EURCHF.fx	1:30:00 PM	1.13223	1.13212			N/A
4/12/2019	EURCHF.fx	3:30:00 PM	1.13232	1.13226			N/A
4/12/2019	EURCZK	9:30:00 AM	25.576	25.615			N/A
4/12/2019	EURCZK	11:30:00 AM	25.576	25.615			N/A
4/12/2019	EURCZK	1:30:00 PM	25.587	25.625			N/A
4/12/2019	EURCZK	3:30:00 PM					N/A
4/12/2019	EURDKK	9:30:00 AM	7.4641	7.4653			N/A
4/12/2019	EURDKK	11:30:00 AM	7.4637	7.4644			N/A
4/12/2019	EURDKK	1:30:00 PM	7.4626	7.4638			N/A
4/12/2019	EURDKK	3:30:00 PM	7.4603	7.4616			N/A
4/12/2019	EURGBP	9:30:00 AM	0.86377	0.8637			N/A
4/12/2019	EURGBP	11:30:00 AM	0.8649	0.86474			N/A
4/12/2019	EURGBP	1:30:00 PM	0.86479	0.86483			N/A
4/12/2019	EURGBP	3:30:00 PM	0.86323	0.86323			N/A
4/12/2019	EURGBP.fx	9:30:00 AM	0.8638	0.86367			N/A
4/12/2019	EURGBP.fx	11:30:00 AM	0.86493	0.86471			N/A
4/12/2019	EURGBP.fx	1:30:00 PM	0.86483	0.86478			N/A
4/12/2019	EURGBP.fx	3:30:00 PM	0.86326	0.86318			N/A
4/12/2019	EURHKD	9:30:00 AM	8.8497	8.8512			N/A
4/12/2019	EURHKD	11:30:00 AM	8.8605	8.8642			N/A
4/12/2019	EURHKD	1:30:00 PM	8.8707	8.8752			N/A
4/12/2019	EURHKD	3:30:00 PM	8.8736	8.8777			N/A

4/12/2019	EURHKD.fx	9:30:00 AM	8.85235	8.84865			N/A
4/12/2019	EURHKD.fx	11:30:00 AM	8.86305	8.86165			N/A
4/12/2019	EURHKD.fx	1:30:00 PM	8.87327	8.87262			N/A
4/12/2019	EURHKD.fx	3:30:00 PM	8.87616	8.8751			N/A
4/12/2019	EURHUF	9:30:00 AM	321.85	322.51			N/A
4/12/2019	EURHUF	11:30:00 AM	321.88	322.52			N/A
4/12/2019	EURHUF	1:30:00 PM	321.82	322.49			N/A
4/12/2019	EURHUF	3:30:00 PM	321.55	322.29			N/A
4/12/2019	EURHUF.fx	9:30:00 AM	322.109	322.328			N/A
4/12/2019	EURHUF.fx	11:30:00 AM	322.153	322.33			N/A
4/12/2019	EURHUF.fx	1:30:00 PM	322.133	322.348			N/A
4/12/2019	EURHUF.fx	3:30:00 PM	321.825	322.023			N/A
4/12/2019	EURJPY	9:30:00 AM	126.255	126.189			N/A
4/12/2019	EURJPY	11:30:00 AM	126.471	126.463			N/A
4/12/2019	EURJPY	1:30:00 PM	126.613	126.594			N/A
4/12/2019	EURJPY	3:30:00 PM	126.713	126.684			N/A
4/12/2019	EURJPY.fx	9:30:00 AM	126.257	126.185			N/A
4/12/2019	EURJPY.fx	11:30:00 AM	126.474	126.459			N/A
4/12/2019	EURJPY.fx	1:30:00 PM	126.615	126.59			N/A
4/12/2019	EURJPY.fx	3:30:00 PM	126.715	126.679			N/A
4/12/2019	EURMXN	9:30:00 AM	21.2545	21.2633			N/A
4/12/2019	EURMXN	11:30:00 AM	21.2291	21.2444			N/A
4/12/2019	EURMXN	1:30:00 PM	21.2379	21.2563			N/A
4/12/2019	EURMXN	3:30:00 PM	21.234	21.2482			N/A
4/12/2019	EURMXN.fx	9:30:00 AM	21.2629	21.255			N/A
4/12/2019	EURMXN.fx	11:30:00 AM	21.2376	21.236			N/A
4/12/2019	EURMXN.fx	1:30:00 PM	21.2462	21.2478			N/A
4/12/2019	EURMXN.fx	3:30:00 PM	21.2424	21.2398			N/A
4/12/2019	EURNOK	9:30:00 AM	9.6107	9.6224			N/A
4/12/2019	EURNOK	11:30:00 AM	9.6118	9.6228			N/A
4/12/2019	EURNOK	1:30:00 PM	9.6064	9.6177			N/A
4/12/2019	EURNOK	3:30:00 PM	9.5962	9.6079			N/A
4/12/2019	EURNOK.fx	9:30:00 AM	9.61616	9.61692			N/A
4/12/2019	EURNOK.fx	11:30:00 AM	9.61724	9.61732			N/A

4/12/2019	EURNOK.fx	1:30:00 PM	9.61181	9.61212			N/A
4/12/2019	EURNOK.fx	3:30:00 PM	9.60191	9.60227			N/A
4/12/2019	EURNZD	9:30:00 AM	1.67621	1.67629			N/A
4/12/2019	EURNZD	11:30:00 AM	1.6773	1.67802			N/A
4/12/2019	EURNZD	1:30:00 PM	1.67562	1.67633			N/A
4/12/2019	EURNZD	3:30:00 PM	1.67455	1.67486			N/A
4/12/2019	EURNZD.fx	9:30:00 AM	1.67662	1.67587			N/A
4/12/2019	EURNZD.fx	11:30:00 AM	1.6777	1.67759			N/A
4/12/2019	EURNZD.fx	1:30:00 PM	1.67605	1.6759			N/A
4/12/2019	EURNZD.fx	3:30:00 PM	1.67497	1.67444			N/A
4/12/2019	EURPLN	9:30:00 AM	4.2816	4.2846			N/A
4/12/2019	EURPLN	11:30:00 AM	4.2818	4.285			N/A
4/12/2019	EURPLN	1:30:00 PM	4.2825	4.2849			N/A
4/12/2019	EURPLN	3:30:00 PM	4.2782	4.2816			N/A
4/12/2019	EURPLN.fx	9:30:00 AM	4.28087	4.28532			N/A
4/12/2019	EURPLN.fx	11:30:00 AM	4.2812	4.28551			N/A
4/12/2019	EURPLN.fx	1:30:00 PM					N/A
4/12/2019	EURPLN.fx	3:30:00 PM	4.27757	4.28212			N/A
4/12/2019	EURRUB	9:30:00 AM					N/A
4/12/2019	EURRUB	11:30:00 AM	72.443	72.873			N/A
4/12/2019	EURRUB	1:30:00 PM	72.361	72.789			N/A
4/12/2019	EURRUB	3:30:00 PM	72.334	72.759			N/A
4/12/2019	EURSEK	9:30:00 AM	10.4641	10.4675			N/A
4/12/2019	EURSEK	11:30:00 AM	10.473	10.4738			N/A
4/12/2019	EURSEK	1:30:00 PM	10.4837	10.4879			N/A
4/12/2019	EURSEK	3:30:00 PM	10.475	10.4794			N/A
4/12/2019	EURSEK.fx	9:30:00 AM	10.46567	10.46576			N/A
4/12/2019	EURSEK.fx	11:30:00 AM	10.47461	10.47214			N/A
4/12/2019	EURSEK.fx	1:30:00 PM	10.48532	10.48632			N/A
4/12/2019	EURSEK.fx	3:30:00 PM	10.47671	10.47778			N/A
4/12/2019	EURSGD	9:30:00 AM	1.5305	1.531			N/A
4/12/2019	EURSGD	11:30:00 AM	1.5315	1.5322			N/A
4/12/2019	EURSGD	1:30:00 PM	1.5313	1.532			N/A
4/12/2019	EURSGD	3:30:00 PM	1.5312	1.532			N/A

4/12/2019	EURSGD.fx	9:30:00 AM	1.53091	1.53062			N/A
4/12/2019	EURSGD.fx	11:30:00 AM	1.53179	1.53176			N/A
4/12/2019	EURSGD.fx	1:30:00 PM	1.53168	1.5316			N/A
4/12/2019	EURSGD.fx	3:30:00 PM	1.53153	1.53157			N/A
4/12/2019	EURUSD	9:30:00 AM	1.12862	1.12828			N/A
4/12/2019	EURUSD	11:30:00 AM	1.12982	1.12973	100	100	N/A
4/12/2019	EURUSD	1:30:00 PM	1.13105	1.13104			N/A
4/12/2019	EURUSD	3:30:00 PM	1.13158	1.13152			N/A
4/12/2019	EURUSD.fx	9:30:00 AM	1.12882	1.12837			N/A
4/12/2019	EURUSD.fx	11:30:00 AM	1.13002	1.12982			N/A
4/12/2019	EURUSD.fx	1:30:00 PM	1.13126	1.13113			N/A
4/12/2019	EURUSD.fx	3:30:00 PM	1.13178	1.13161			N/A
4/12/2019	EURZAR	9:30:00 AM	15.8232	15.8275			N/A
4/12/2019	EURZAR	11:30:00 AM	15.777	15.7749			N/A
4/12/2019	EURZAR	1:30:00 PM	15.7983	15.8131			N/A
4/12/2019	EURZAR	3:30:00 PM	15.7645	15.7755			N/A
4/12/2019	EURZAR.fx	9:30:00 AM	15.82237	15.82848			N/A
4/12/2019	EURZAR.fx	11:30:00 AM	15.77692	15.77463			N/A
4/12/2019	EURZAR.fx	1:30:00 PM	15.79744	15.81423			N/A
4/12/2019	EURZAR.fx	3:30:00 PM	15.76366	15.77627			N/A
4/12/2019	GBPAUD	9:30:00 AM	1.83274	1.83182			N/A
4/12/2019	GBPAUD	11:30:00 AM	1.82911	1.82945			N/A
4/12/2019	GBPAUD	1:30:00 PM	1.8246	1.82526			N/A
4/12/2019	GBPAUD	3:30:00 PM	1.82646	1.82682			N/A
4/12/2019	GBPAUD.fx	9:30:00 AM	1.83313	1.83145			N/A
4/12/2019	GBPAUD.fx	11:30:00 AM	1.82949	1.82908			N/A
4/12/2019	GBPAUD.fx	1:30:00 PM	1.82498	1.82487			N/A
4/12/2019	GBPAUD.fx	3:30:00 PM	1.82684	1.82644			N/A
4/12/2019	GBPCAD	9:30:00 AM	1.74634	1.74699			N/A
4/12/2019	GBPCAD	11:30:00 AM	1.74404	1.74409			N/A
4/12/2019	GBPCAD	1:30:00 PM	1.74286	1.7434			N/A
4/12/2019	GBPCAD	3:30:00 PM	1.74715	1.74734			N/A
4/12/2019	GBPCAD.fx	9:30:00 AM	1.74671	1.74661			N/A
4/12/2019	GBPCAD.fx	11:30:00 AM	1.74441	1.74368			N/A

4/12/2019	GBPCAD.fx	1:30:00 PM	1.74324	1.743			N/A
4/12/2019	GBPCAD.fx	3:30:00 PM	1.74751	1.74697			N/A
4/12/2019	GBPCHF	9:30:00 AM	1.30967	1.30993			N/A
4/12/2019	GBPCHF	11:30:00 AM	1.3088	1.30887			N/A
4/12/2019	GBPCHF	1:30:00 PM	1.30908	1.30928			N/A
4/12/2019	GBPCHF	3:30:00 PM	1.31154	1.31186			N/A
4/12/2019	GBPCHF.fx	9:30:00 AM	1.30985	1.30972			N/A
4/12/2019	GBPCHF.fx	11:30:00 AM	1.30898	1.30868			N/A
4/12/2019	GBPCHF.fx	1:30:00 PM	1.30926	1.30908			N/A
4/12/2019	GBPCHF.fx	3:30:00 PM	1.31172	1.31166			N/A
4/12/2019	GBPCZK	9:30:00 AM	29.624	29.641			N/A
4/12/2019	GBPCZK	11:30:00 AM	29.589	29.602			N/A
4/12/2019	GBPCZK	1:30:00 PM	29.599	29.619			N/A
4/12/2019	GBPCZK	3:30:00 PM	29.645	29.665			N/A
4/12/2019	GBPDKK	9:30:00 AM	8.639	8.648			N/A
4/12/2019	GBPDKK	11:30:00 AM	8.627	8.636			N/A
4/12/2019	GBPDKK	1:30:00 PM	8.627	8.637			N/A
4/12/2019	GBPDKK	3:30:00 PM	8.643	8.653			N/A
4/12/2019	GBPDKK.fx	9:30:00 AM	8.6369	8.6482			N/A
4/12/2019	GBPDKK.fx	11:30:00 AM	8.6256	8.6359			N/A
4/12/2019	GBPDKK.fx	1:30:00 PM	8.6253	8.6376			N/A
4/12/2019	GBPDKK.fx	3:30:00 PM	8.641	8.653			N/A
4/12/2019	GBPHKD	9:30:00 AM	10.2421	10.2458			N/A
4/12/2019	GBPHKD	11:30:00 AM	10.2439	10.2455			N/A
4/12/2019	GBPHKD	1:30:00 PM	10.2567	10.2602			N/A
4/12/2019	GBPHKD	3:30:00 PM	10.2761	10.2818			N/A
4/12/2019	GBPHUF	9:30:00 AM	372.67	373.08			N/A
4/12/2019	GBPHUF	11:30:00 AM	372.28	372.64			N/A
4/12/2019	GBPHUF	1:30:00 PM	372.24	372.69			N/A
4/12/2019	GBPHUF	3:30:00 PM	372.34	372.77			N/A
4/12/2019	GBPJPY	9:30:00 AM	146.138	146.111			N/A
4/12/2019	GBPJPY	11:30:00 AM	146.238	146.228			N/A
4/12/2019	GBPJPY	1:30:00 PM	146.397	146.39			N/A
4/12/2019	GBPJPY	3:30:00 PM	146.773	146.773			N/A



4/12/2019	GBPJPY.fx	9:30:00 AM	146.156	146.092			N/A
4/12/2019	GBPJPY.fx	11:30:00 AM	146.256	146.21			N/A
4/12/2019	GBPJPY.fx	1:30:00 PM	146.417	146.37			N/A
4/12/2019	GBPJPY.fx	3:30:00 PM	146.791	146.753			N/A
4/12/2019	GBPMXN	9:30:00 AM	24.6061	24.6059			N/A
4/12/2019	GBPMXN	11:30:00 AM	24.5472	24.5562			N/A
4/12/2019	GBPMXN	1:30:00 PM	24.5568	24.5684			N/A
4/12/2019	GBPMXN	3:30:00 PM	24.5907	24.5982			N/A
4/12/2019	GBPNOK	9:30:00 AM	11.1288	11.1389			N/A
4/12/2019	GBPNOK	11:30:00 AM	11.1168	11.1249			N/A
4/12/2019	GBPNOK	1:30:00 PM	11.1091	11.1194			N/A
4/12/2019	GBPNOK	3:30:00 PM	11.1186	11.1286			N/A
4/12/2019	GBPNOK.fx	9:30:00 AM	11.13359	11.13408			N/A
4/12/2019	GBPNOK.fx	11:30:00 AM	11.12162	11.12012			N/A
4/12/2019	GBPNOK.fx	1:30:00 PM	11.11402	11.11427			N/A
4/12/2019	GBPNOK.fx	3:30:00 PM	11.12368	11.12355			N/A
4/12/2019	GBPNZD	9:30:00 AM	1.94091	1.94081			N/A
4/12/2019	GBPNZD	11:30:00 AM	1.93983	1.94006			N/A
4/12/2019	GBPNZD	1:30:00 PM	1.93779	1.9382			N/A
4/12/2019	GBPNZD	3:30:00 PM	1.93998	1.94001			N/A
4/12/2019	GBPNZD.fx	9:30:00 AM	1.94124	1.94045			N/A
4/12/2019	GBPNZD.fx	11:30:00 AM	1.94017	1.93969			N/A
4/12/2019	GBPNZD.fx	1:30:00 PM	1.93815	1.93783			N/A
4/12/2019	GBPNZD.fx	3:30:00 PM	1.94033	1.93966			N/A
4/12/2019	GBPPLN	9:30:00 AM	4.9583	4.9593			N/A
4/12/2019	GBPPLN	11:30:00 AM	4.9528	4.9531			N/A
4/12/2019	GBPPLN	1:30:00 PM	4.9531	4.9548			N/A
4/12/2019	GBPPLN	3:30:00 PM	4.9573	4.9586			N/A
4/12/2019	GBPPLN.fx	9:30:00 AM	4.95597	4.96149			N/A
4/12/2019	GBPPLN.fx	11:30:00 AM	4.95058	4.95533			N/A
4/12/2019	GBPPLN.fx	1:30:00 PM	4.9511	4.95686			N/A
4/12/2019	GBPPLN.fx	3:30:00 PM	4.95516	4.96076			N/A
4/12/2019	GBPSEK	9:30:00 AM	12.1141	12.1202			N/A
4/12/2019	GBPSEK	11:30:00 AM	12.1084	12.1126			N/A

4/12/2019	GBPSEK	1:30:00 PM	12.1218	12.1295			N/A
4/12/2019	GBPSEK	3:30:00 PM	12.1332	12.141			N/A
4/12/2019	GBPSEK.fx	9:30:00 AM	12.1102	12.12386			N/A
4/12/2019	GBPSEK.fx	11:30:00 AM	12.10465	12.11662			N/A
4/12/2019	GBPSEK.fx	1:30:00 PM	12.11764	12.13308			N/A
4/12/2019	GBPSEK.fx	3:30:00 PM	12.1295	12.14461			N/A
4/12/2019	GBPSGD	9:30:00 AM	1.7722	1.7726			N/A
4/12/2019	GBPSGD	11:30:00 AM	1.7712	1.7714			N/A
4/12/2019	GBPSGD	1:30:00 PM	1.7709	1.7714			N/A
4/12/2019	GBPSGD	3:30:00 PM	1.7739	1.7746			N/A
4/12/2019	GBPSGD.fx	9:30:00 AM	1.77028	1.77443			N/A
4/12/2019	GBPSGD.fx	11:30:00 AM	1.76933	1.77318			N/A
4/12/2019	GBPSGD.fx	1:30:00 PM	1.76909	1.77316			N/A
4/12/2019	GBPSGD.fx	3:30:00 PM	1.77208	1.77636			N/A
4/12/2019	GBPUSD	9:30:00 AM	1.30669	1.30639			N/A
4/12/2019	GBPUSD	11:30:00 AM	1.30677	1.30627			N/A
4/12/2019	GBPUSD	1:30:00 PM	1.30816	1.30796			N/A
4/12/2019	GBPUSD	3:30:00 PM	1.31105	1.31102			N/A
4/12/2019	GBPUSD.fx	9:30:00 AM	1.30674	1.30633			N/A
4/12/2019	GBPUSD.fx	11:30:00 AM	1.30681	1.30622			N/A
4/12/2019	GBPUSD.fx	1:30:00 PM	1.30821	1.3079			N/A
4/12/2019	GBPUSD.fx	3:30:00 PM	1.3111	1.31096			N/A
4/12/2019	GBPZAR	9:30:00 AM	18.3186	18.3294			N/A
4/12/2019	GBPZAR	11:30:00 AM	18.239	18.2451			N/A
4/12/2019	GBPZAR	1:30:00 PM	18.2648	18.289			N/A
4/12/2019	GBPZAR	3:30:00 PM	18.2596	18.2776			N/A
4/12/2019	GBPZAR.fx	9:30:00 AM	18.325	18.3226			N/A
4/12/2019	GBPZAR.fx	11:30:00 AM	18.2458	18.2376			N/A
4/12/2019	GBPZAR.fx	1:30:00 PM	18.2708	18.2822			N/A
4/12/2019	GBPZAR.fx	3:30:00 PM	18.2661	18.2703			N/A
4/12/2019	GOLD	9:30:00 AM	1294.17	1294.28			N/A
4/12/2019	GOLD	11:30:00 AM	1293.02	1293.29			N/A
4/12/2019	GOLD	1:30:00 PM	1294.19	1294.31			N/A
4/12/2019	GOLD	3:30:00 PM	1293.62	1292.33			N/A

4/12/2019	HKDJPY	9:30:00 AM	14.26	14.27			N/A
4/12/2019	HKDJPY	11:30:00 AM	14.27	14.28			N/A
4/12/2019	HKDJPY	1:30:00 PM	14.27	14.28			N/A
4/12/2019	HKDJPY	3:30:00 PM	14.27	14.28			N/A
4/12/2019	HKDJPY.fx	9:30:00 AM	14.259	14.264			N/A
4/12/2019	HKDJPY.fx	11:30:00 AM	14.265	14.273			N/A
4/12/2019	HKDJPY.fx	1:30:00 PM	14.264	14.27			N/A
4/12/2019	HKDJPY.fx	3:30:00 PM	14.272	14.275			N/A
4/12/2019	HUFJPY	9:30:00 AM	0.3919	0.3922			N/A
4/12/2019	HUFJPY	11:30:00 AM	0.3925	0.3928			N/A
4/12/2019	HUFJPY	1:30:00 PM	0.3931	0.3935			N/A
4/12/2019	HUFJPY	3:30:00 PM	0.3939	0.3942			N/A
4/12/2019	JP225.i	9:30:00 AM	21844.81	21854.81			N/A
4/12/2019	JP225.i	11:30:00 AM	21913.14	21924.81			N/A
4/12/2019	JP225.i	1:30:00 PM	22013.14	22029.81			N/A
4/12/2019	JP225.i	3:30:00 PM	22039.81	22054.81			N/A
4/12/2019	MXNJPY	9:30:00 AM	5.94	5.95			N/A
4/12/2019	MXNJPY	11:30:00 AM	5.96	5.96			N/A
4/12/2019	MXNJPY	1:30:00 PM	5.96	5.97			N/A
4/12/2019	MXNJPY	3:30:00 PM	5.97	5.97			N/A
4/12/2019	NASDAQ.i	9:30:00 AM					N/A
4/12/2019	NASDAQ.i	11:30:00 AM					N/A
4/12/2019	NASDAQ.i	1:30:00 PM					N/A
4/12/2019	NASDAQ.i	3:30:00 PM					N/A
4/12/2019	NOKJPY	9:30:00 AM	13.12	13.15			N/A
4/12/2019	NOKJPY	11:30:00 AM	13.14	13.17			N/A
4/12/2019	NOKJPY	1:30:00 PM	13.16	13.19			N/A
4/12/2019	NOKJPY	3:30:00 PM	13.18	13.21			N/A
4/12/2019	NOKJPY.fx	9:30:00 AM	13.124	13.127			N/A
4/12/2019	NOKJPY.fx	11:30:00 AM	13.147	13.152			N/A
4/12/2019	NOKJPY.fx	1:30:00 PM	13.169	13.173			N/A
4/12/2019	NOKJPY.fx	3:30:00 PM	13.194	13.196			N/A
4/12/2019	NZDCAD	9:30:00 AM	0.89973	0.90018			N/A
4/12/2019	NZDCAD	11:30:00 AM	0.89876	0.89931			N/A

4/12/2019	NZDCAD	1:30:00 PM	0.89915	0.89981			N/A
4/12/2019	NZDCAD	3:30:00 PM	0.90032	0.90094			N/A
4/12/2019	NZDCAD.fx	9:30:00 AM	0.90006	0.89984			N/A
4/12/2019	NZDCAD.fx	11:30:00 AM	0.8991	0.89898			N/A
4/12/2019	NZDCAD.fx	1:30:00 PM	0.89948	0.89947			N/A
4/12/2019	NZDCAD.fx	3:30:00 PM	0.90065	0.90061			N/A
4/12/2019	NZDCHF	9:30:00 AM	0.67472	0.67511			N/A
4/12/2019	NZDCHF	11:30:00 AM	0.67436	0.67498			N/A
4/12/2019	NZDCHF	1:30:00 PM	0.67523	0.67588			N/A
4/12/2019	NZDCHF	3:30:00 PM	0.67585	0.6764			N/A
4/12/2019	NZDCHF.fx	9:30:00 AM	0.67505	0.67476			N/A
4/12/2019	NZDCHF.fx	11:30:00 AM	0.6747	0.67463			N/A
4/12/2019	NZDCHF.fx	1:30:00 PM	0.67558	0.67553			N/A
4/12/2019	NZDCHF.fx	3:30:00 PM	0.67619	0.67605			N/A
4/12/2019	NZDCZK	9:30:00 AM	15.266	15.27			N/A
4/12/2019	NZDCZK	11:30:00 AM	15.25	15.261			N/A
4/12/2019	NZDCZK	1:30:00 PM	15.272	15.283			N/A
4/12/2019	NZDCZK	3:30:00 PM	15.281	15.288			N/A
4/12/2019	NZDDKK	9:30:00 AM	4.452	4.454			N/A
4/12/2019	NZDDKK	11:30:00 AM					N/A
4/12/2019	NZDDKK	1:30:00 PM	4.452	4.455			N/A
4/12/2019	NZDDKK	3:30:00 PM	4.453	4.457			N/A
4/12/2019	NZDHKD	9:30:00 AM	5.2776	5.2772			N/A
4/12/2019	NZDHKD	11:30:00 AM	5.2794	5.2811			N/A
4/12/2019	NZDHKD	1:30:00 PM	5.2918	5.2935			N/A
4/12/2019	NZDHKD	3:30:00 PM	5.298	5.2984			N/A
4/12/2019	NZDHUF	9:30:00 AM	192.01	192.19			N/A
4/12/2019	NZDHUF	11:30:00 AM	191.85	192.13			N/A
4/12/2019	NZDHUF	1:30:00 PM	192.04	192.31			N/A
4/12/2019	NZDHUF	3:30:00 PM	191.9	192.14			N/A
4/12/2019	NZDJPY	9:30:00 AM	75.282	75.294			N/A
4/12/2019	NZDJPY	11:30:00 AM	75.35	75.416			N/A
4/12/2019	NZDJPY	1:30:00 PM	75.517	75.571			N/A
4/12/2019	NZDJPY	3:30:00 PM	75.623	75.683			N/A

4/12/2019	NZDJPY.fx	9:30:00 AM	75.313	75.262			N/A
4/12/2019	NZDJPY.fx	11:30:00 AM	75.382	75.384			N/A
4/12/2019	NZDJPY.fx	1:30:00 PM	75.549	75.539			N/A
4/12/2019	NZDJPY.fx	3:30:00 PM	75.653	75.651			N/A
4/12/2019	NZDMXN	9:30:00 AM	12.6756	12.6748			N/A
4/12/2019	NZDMXN	11:30:00 AM	12.6518	12.6556			N/A
4/12/2019	NZDMXN	1:30:00 PM	12.6708	12.675			N/A
4/12/2019	NZDMXN	3:30:00 PM	12.6749	12.6787			N/A
4/12/2019	NZDNOK	9:30:00 AM	5.7333	5.7345			N/A
4/12/2019	NZDNOK	11:30:00 AM	5.7283	5.7316			N/A
4/12/2019	NZDNOK	1:30:00 PM	5.7311	5.7343			N/A
4/12/2019	NZDNOK	3:30:00 PM	5.7282	5.7301			N/A
4/12/2019	NZDPLN	9:30:00 AM	2.5537	2.5544			N/A
4/12/2019	NZDPLN	11:30:00 AM	2.5517	2.5531			N/A
4/12/2019	NZDPLN	1:30:00 PM	2.5548	2.5559			N/A
4/12/2019	NZDPLN	3:30:00 PM	2.5537	2.5539			N/A
4/12/2019	NZDSEK	9:30:00 AM	6.2385	6.2429			N/A
4/12/2019	NZDSEK	11:30:00 AM	6.2377	6.2425			N/A
4/12/2019	NZDSEK	1:30:00 PM	6.251	6.2573			N/A
4/12/2019	NZDSEK	3:30:00 PM	6.2507	6.2553			N/A
4/12/2019	NZDSGD	9:30:00 AM	0.913	0.9134			N/A
4/12/2019	NZDSGD	11:30:00 AM	0.9128	0.9134			N/A
4/12/2019	NZDSGD	1:30:00 PM	0.9136	0.9142			N/A
4/12/2019	NZDSGD	3:30:00 PM	0.9144	0.9148			N/A
4/12/2019	NZDSGD.fx	9:30:00 AM	0.91299	0.91337			N/A
4/12/2019	NZDSGD.fx	11:30:00 AM	0.91278	0.91333			N/A
4/12/2019	NZDSGD.fx	1:30:00 PM	0.91368	0.91411			N/A
4/12/2019	NZDSGD.fx	3:30:00 PM	0.91438	0.9147			N/A
4/12/2019	NZDUSD	9:30:00 AM	0.67332	0.67302			N/A
4/12/2019	NZDUSD	11:30:00 AM	0.67344	0.67346			N/A
4/12/2019	NZDUSD	1:30:00 PM	0.67491	0.67495			N/A
4/12/2019	NZDUSD	3:30:00 PM	0.67583	0.67568			N/A
4/12/2019	NZDUSD.fx	9:30:00 AM	0.67338	0.67304			N/A
4/12/2019	NZDUSD.fx	11:30:00 AM	0.6735	0.67348			N/A

4/12/2019	NZDUSD.fx	1:30:00 PM	0.67498	0.67494			N/A
4/12/2019	NZDUSD.fx	3:30:00 PM	0.67589	0.67571			N/A
4/12/2019	NZDZAR	9:30:00 AM	9.4321	9.4419			N/A
4/12/2019	NZDZAR	11:30:00 AM	9.3971	9.4008			N/A
4/12/2019	NZDZAR	1:30:00 PM	9.4182	9.432			N/A
4/12/2019	NZDZAR	3:30:00 PM	9.4007	9.4158			N/A
4/12/2019	SEKJPY	9:30:00 AM	12.06	12.07			N/A
4/12/2019	SEKJPY	11:30:00 AM	12.08	12.08			N/A
4/12/2019	SEKJPY	1:30:00 PM	12.08	12.08			N/A
4/12/2019	SEKJPY	3:30:00 PM	12.09	12.1			N/A
4/12/2019	SEKJPY.fx	9:30:00 AM	12.054	12.066			N/A
4/12/2019	SEKJPY.fx	11:30:00 AM	12.068	12.082			N/A
4/12/2019	SEKJPY.fx	1:30:00 PM	12.066	12.081			N/A
4/12/2019	SEKJPY.fx	3:30:00 PM	12.085	12.101			N/A
4/12/2019	SGDJPY	9:30:00 AM	82.44	82.44			N/A
4/12/2019	SGDJPY	11:30:00 AM	82.53	82.55			N/A
4/12/2019	SGDJPY	1:30:00 PM	82.65	82.65			N/A
4/12/2019	SGDJPY	3:30:00 PM	82.7	82.71			N/A
4/12/2019	SILVER	9:30:00 AM	14.81	15.19			N/A
4/12/2019	SILVER	11:30:00 AM	14.82	15.21			N/A
4/12/2019	SILVER	1:30:00 PM	14.88	15.26			N/A
4/12/2019	SILVER	3:30:00 PM	14.86	15.22			N/A
4/12/2019	SPX500.i	9:30:00 AM	2891.93	2892.41			N/A
4/12/2019	SPX500.i	11:30:00 AM	2897.11	2897.66			N/A
4/12/2019	SPX500.i	1:30:00 PM	2901.11	2901.89			N/A
4/12/2019	SPX500.i	3:30:00 PM	2906.61	2907.41			N/A
4/12/2019	UK100.i	9:30:00 AM	7437.23	7436.98			N/A
4/12/2019	UK100.i	11:30:00 AM	7447.48	7447.73			N/A
4/12/2019	UK100.i	1:30:00 PM	7458.98	7459.73			N/A
4/12/2019	UK100.i	3:30:00 PM	7446.48	7445.48			N/A
4/12/2019	USDCAD	9:30:00 AM	1.33697	1.33661			N/A
4/12/2019	USDCAD	11:30:00 AM	1.33499	1.33488			N/A
4/12/2019	USDCAD	1:30:00 PM	1.3327	1.33269			N/A
4/12/2019	USDCAD	3:30:00 PM	1.33296	1.33254			N/A

4/12/2019	USDCAD.fx	9:30:00 AM	1.337	1.33658			N/A
4/12/2019	USDCAD.fx	11:30:00 AM	1.33501	1.33485			N/A
4/12/2019	USDCAD.fx	1:30:00 PM	1.33273	1.33266			N/A
4/12/2019	USDCAD.fx	3:30:00 PM	1.33299	1.33251			N/A
4/12/2019	USDCHF	9:30:00 AM	1.00248	1.00245			N/A
4/12/2019	USDCHF	11:30:00 AM	1.00178	1.00167			N/A
4/12/2019	USDCHF	1:30:00 PM	1.00081	1.00094			N/A
4/12/2019	USDCHF	3:30:00 PM	1.00049	1.00051			N/A
4/12/2019	USDCHF.fx	9:30:00 AM	1.00252	1.0024			N/A
4/12/2019	USDCHF.fx	11:30:00 AM	1.00183	1.00161			N/A
4/12/2019	USDCHF.fx	1:30:00 PM	1.00083	1.00088			N/A
4/12/2019	USDCHF.fx	3:30:00 PM	1.00053	1.00046			N/A
4/12/2019	USDCZK	9:30:00 AM	22.69	22.703			N/A
4/12/2019	USDCZK	11:30:00 AM	22.661	22.68			N/A
4/12/2019	USDCZK	1:30:00 PM	22.644	22.664			N/A
4/12/2019	USDCZK	3:30:00 PM	22.631	22.65			N/A
4/12/2019	USDCZK.fx	9:30:00 AM	22.6979	22.6943			N/A
4/12/2019	USDCZK.fx	11:30:00 AM	22.6697	22.6712			N/A
4/12/2019	USDCZK.fx	1:30:00 PM	22.6524	22.6552			N/A
4/12/2019	USDCZK.fx	3:30:00 PM	22.6391	22.641			N/A
4/12/2019	USDDKK	9:30:00 AM	6.6142	6.6156			N/A
4/12/2019	USDDKK	11:30:00 AM	6.6057	6.6085			N/A
4/12/2019	USDDKK	1:30:00 PM	6.5979	6.6011			N/A
4/12/2019	USDDKK	3:30:00 PM	6.5949	6.5979			N/A
4/12/2019	USDDKK.fx	9:30:00 AM	6.61472	6.61359			N/A
4/12/2019	USDDKK.fx	11:30:00 AM	6.60589	6.60617			N/A
4/12/2019	USDDKK.fx	1:30:00 PM	6.59837	6.59909			N/A
4/12/2019	USDDKK.fx	3:30:00 PM	6.5954	6.59593			N/A
4/12/2019	USDHKD	9:30:00 AM	7.8421	7.8419			N/A
4/12/2019	USDHKD	11:30:00 AM	7.8431	7.8435			N/A
4/12/2019	USDHKD	1:30:00 PM	7.8438	7.8442			N/A
4/12/2019	USDHKD	3:30:00 PM	7.8423	7.8424			N/A
4/12/2019	USDHKD.fx	9:30:00 AM	7.842	7.84211			N/A
4/12/2019	USDHKD.fx	11:30:00 AM	7.84304	7.84358			N/A

4/12/2019	USDHKD.fx	1:30:00 PM	7.8437	7.84426			N/A
4/12/2019	USDHKD.fx	3:30:00 PM	7.84239	7.843			N/A
4/12/2019	USDHUF	9:30:00 AM	285.32	285.68			N/A
4/12/2019	USDHUF	11:30:00 AM	284.98	285.41			N/A
4/12/2019	USDHUF	1:30:00 PM	284.64	285.1			N/A
4/12/2019	USDHUF	3:30:00 PM	284.24	284.67			N/A
4/12/2019	USDHUF.fx	9:30:00 AM	285.511	285.475			N/A
4/12/2019	USDHUF.fx	11:30:00 AM	285.178	285.205			N/A
4/12/2019	USDHUF.fx	1:30:00 PM	284.839	284.885			N/A
4/12/2019	USDHUF.fx	3:30:00 PM	284.435	284.475			N/A
4/12/2019	USDINR	9:30:00 AM	64.3	74.29			N/A
4/12/2019	USDINR	11:30:00 AM	64.2	74.18			N/A
4/12/2019	USDINR	1:30:00 PM					N/A
4/12/2019	USDINR	3:30:00 PM					N/A
4/12/2019	USDJPY	9:30:00 AM	111.848	111.839			N/A
4/12/2019	USDJPY	11:30:00 AM	111.925	111.929			N/A
4/12/2019	USDJPY	1:30:00 PM	111.918	111.918			N/A
4/12/2019	USDJPY	3:30:00 PM	111.964	111.939			N/A
4/12/2019	USDJPY.fx	9:30:00 AM	111.854	111.832			N/A
4/12/2019	USDJPY.fx	11:30:00 AM	111.931	111.922			N/A
4/12/2019	USDJPY.fx	1:30:00 PM	111.924	111.911			N/A
4/12/2019	USDJPY.fx	3:30:00 PM	111.97	111.932			N/A
4/12/2019	USDMXN	9:30:00 AM	18.841	18.832			N/A
4/12/2019	USDMXN	11:30:00 AM	18.793	18.796			N/A
4/12/2019	USDMXN	1:30:00 PM	18.779	18.785			N/A
4/12/2019	USDMXN	3:30:00 PM	18.768	18.769			N/A
4/12/2019	USDMXN.f	9:30:00 AM	18.8448	18.8287			N/A
4/12/2019	USDMXN.f	11:30:00 AM	18.7971	18.7926			N/A
4/12/2019	USDMXN.f	1:30:00 PM	18.7824	18.7813			N/A
4/12/2019	USDMXN.f	3:30:00 PM	18.7718	18.7656			N/A
4/12/2019	USDNOK	9:30:00 AM	8.5184	8.5241			N/A
4/12/2019	USDNOK	11:30:00 AM	8.5083	8.5151			N/A
4/12/2019	USDNOK	1:30:00 PM	8.4939	8.501			N/A
4/12/2019	USDNOK	3:30:00 PM	8.4813	8.4886			N/A



4/12/2019	USDNOK.fx	9:30:00 AM	8.52199	8.51977			N/A
4/12/2019	USDNOK.fx	11:30:00 AM	8.51237	8.51081			N/A
4/12/2019	USDNOK.fx	1:30:00 PM	8.49777	8.49671			N/A
4/12/2019	USDNOK.fx	3:30:00 PM	8.48531	8.48421			N/A
4/12/2019	USDPLN	9:30:00 AM	3.7949	3.7951			N/A
4/12/2019	USDPLN	11:30:00 AM	3.7904	3.7913			N/A
4/12/2019	USDPLN	1:30:00 PM	3.7866	3.7878			N/A
4/12/2019	USDPLN	3:30:00 PM	3.7813	3.7824			N/A
4/12/2019	USDPLN.fx	9:30:00 AM	3.79387	3.79603			N/A
4/12/2019	USDPLN.fx	11:30:00 AM	3.78962	3.79206			N/A
4/12/2019	USDPLN.fx	1:30:00 PM	3.78576	3.78861			N/A
4/12/2019	USDPLN.fx	3:30:00 PM	3.78048	3.78314			N/A
4/12/2019	USDRUB	9:30:00 AM					N/A
4/12/2019	USDRUB	11:30:00 AM	64.226	64.607			N/A
4/12/2019	USDRUB	1:30:00 PM	64.083	64.467			N/A
4/12/2019	USDRUB	3:30:00 PM	64.028	64.401			N/A
4/12/2019	USDSEK	9:30:00 AM	9.2726	9.2732			N/A
4/12/2019	USDSEK	11:30:00 AM	9.2691	9.2689			N/A
4/12/2019	USDSEK	1:30:00 PM	9.2681	9.2707			N/A
4/12/2019	USDSEK	3:30:00 PM	9.2561	9.2588			N/A
4/12/2019	USDSEK.fx	9:30:00 AM	9.27493	9.27158			N/A
4/12/2019	USDSEK.fx	11:30:00 AM	9.27142	9.26689			N/A
4/12/2019	USDSEK.fx	1:30:00 PM	9.27045	9.26899			N/A
4/12/2019	USDSEK.fx	3:30:00 PM	9.25844	9.25708			N/A
4/12/2019	USDSGD	9:30:00 AM	1.3565	1.3564			N/A
4/12/2019	USDSGD	11:30:00 AM	1.3556	1.3558			N/A
4/12/2019	USDSGD	1:30:00 PM	1.3538	1.3539			N/A
4/12/2019	USDSGD	3:30:00 PM	1.3532	1.3535			N/A
4/12/2019	USDSGD.fx	9:30:00 AM	1.35644	1.3564			N/A
4/12/2019	USDSGD.fx	11:30:00 AM	1.35551	1.35583			N/A
4/12/2019	USDSGD.fx	1:30:00 PM	1.35375	1.35425			N/A
4/12/2019	USDSGD.fx	3:30:00 PM	1.35311	1.35347			N/A
4/12/2019	USDZAR	9:30:00 AM	14.0222	14.0244			N/A
4/12/2019	USDZAR	11:30:00 AM	13.9647	13.9591			N/A

4/12/2019	USDZAR	1:30:00 PM	13.9663	13.9802			N/A
4/12/2019	USDZAR	3:30:00 PM	13.9294	13.9391			N/A
4/12/2019	USDZAR.fx	9:30:00 AM					N/A
4/12/2019	USDZAR.fx	11:30:00 AM					N/A
4/12/2019	USDZAR.fx	1:30:00 PM					N/A
4/12/2019	USDZAR.fx	3:30:00 PM					N/A
4/12/2019	XAUUSD	9:30:00 AM	1294.18	1294.28			N/A
4/12/2019	XAUUSD	11:30:00 AM	1293.02	1293.3			N/A
4/12/2019	XAUUSD	1:30:00 PM	1294.19	1294.3			N/A
4/12/2019	XAUUSD	3:30:00 PM	1293.62	1292.33			N/A
4/12/2019	ZARJPY	9:30:00 AM	7.96	7.97			N/A
4/12/2019	ZARJPY	11:30:00 AM	8	8.01			N/A
4/12/2019	ZARJPY	1:30:00 PM	7.98	8.01			N/A
4/12/2019	ZARJPY	3:30:00 PM	8.02	8.03			N/A
4/12/2019	ZARJPY.fx	9:30:00 AM	7.977	7.972			N/A
4/12/2019	ZARJPY.fx	11:30:00 AM	8.019	8.013			N/A
4/12/2019	ZARJPY.fx	1:30:00 PM	8.009	8.01			N/A
4/12/2019	ZARJPY.fx	3:30:00 PM	8.032	8.034			N/A
4/15/2019	#AA	9:30:00 AM					N/A
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4/15/2019	#Ripple	1:30:00 PM	0.3242	0.3336			N/A
4/15/2019	#Ripple	3:30:00 PM	0.323	0.3326			N/A
4/15/2019	#S	9:30:00 AM					N/A
4/15/2019	#S	11:30:00 AM					N/A
4/15/2019	#S	1:30:00 PM					N/A
4/15/2019	#S	3:30:00 PM					N/A
4/15/2019	#SBUX	9:30:00 AM					N/A
4/15/2019	#SBUX	11:30:00 AM					N/A
4/15/2019	#SBUX	1:30:00 PM					N/A
4/15/2019	#SBUX	3:30:00 PM					N/A

4/15/2019	#SNE	9:30:00 AM					N/A
4/15/2019	#SNE	11:30:00 AM					N/A
4/15/2019	#SNE	1:30:00 PM					N/A
4/15/2019	#SNE	3:30:00 PM					N/A
4/15/2019	#SPY	9:30:00 AM					N/A
4/15/2019	#SPY	11:30:00 AM					N/A
4/15/2019	#SPY	1:30:00 PM					N/A
4/15/2019	#SPY	3:30:00 PM					N/A
4/15/2019	#T	9:30:00 AM					N/A
4/15/2019	#T	11:30:00 AM					N/A
4/15/2019	#T	1:30:00 PM					N/A
4/15/2019	#T	3:30:00 PM					N/A
4/15/2019	#TEVA	9:30:00 AM					N/A
4/15/2019	#TEVA	11:30:00 AM					N/A
4/15/2019	#TEVA	1:30:00 PM					N/A
4/15/2019	#TEVA	3:30:00 PM					N/A
4/15/2019	#TRI	9:30:00 AM					N/A
4/15/2019	#TRI	11:30:00 AM					N/A
4/15/2019	#TRI	1:30:00 PM					N/A
4/15/2019	#TRI	3:30:00 PM					N/A
4/15/2019	#TRV	9:30:00 AM					N/A
4/15/2019	#TRV	11:30:00 AM					N/A
4/15/2019	#TRV	1:30:00 PM					N/A
4/15/2019	#TRV	3:30:00 PM					N/A
4/15/2019	#TSCO	9:30:00 AM					N/A
4/15/2019	#TSCO	11:30:00 AM					N/A
4/15/2019	#TSCO	1:30:00 PM					N/A
4/15/2019	#TSCO	3:30:00 PM					N/A
4/15/2019	#TSLA	9:30:00 AM					N/A
4/15/2019	#TSLA	11:30:00 AM					N/A
4/15/2019	#TSLA	1:30:00 PM					N/A
4/15/2019	#TSLA	3:30:00 PM					N/A
4/15/2019	#TWTR	9:30:00 AM					N/A
4/15/2019	#TWTR	11:30:00 AM					N/A

4/15/2019	#TWTR	1:30:00 PM					N/A
4/15/2019	#TWTR	3:30:00 PM					N/A
4/15/2019	#UBS	9:30:00 AM					N/A
4/15/2019	#UBS	11:30:00 AM					N/A
4/15/2019	#UBS	1:30:00 PM					N/A
4/15/2019	#UBS	3:30:00 PM					N/A
4/15/2019	#UL	9:30:00 AM					N/A
4/15/2019	#UL	11:30:00 AM					N/A
4/15/2019	#UL	1:30:00 PM					N/A
4/15/2019	#UL	3:30:00 PM					N/A
4/15/2019	#UPS	9:30:00 AM					N/A
4/15/2019	#UPS	11:30:00 AM					N/A
4/15/2019	#UPS	1:30:00 PM					N/A
4/15/2019	#UPS	3:30:00 PM					N/A
4/15/2019	#UTX	9:30:00 AM					N/A
4/15/2019	#UTX	11:30:00 AM					N/A
4/15/2019	#UTX	1:30:00 PM					N/A
4/15/2019	#UTX	3:30:00 PM					N/A
4/15/2019	#V	9:30:00 AM					N/A
4/15/2019	#V	11:30:00 AM					N/A
4/15/2019	#V	1:30:00 PM					N/A
4/15/2019	#V	3:30:00 PM					N/A
4/15/2019	#VOD	9:30:00 AM					N/A
4/15/2019	#VOD	11:30:00 AM					N/A
4/15/2019	#VOD	1:30:00 PM					N/A
4/15/2019	#VOD	3:30:00 PM					N/A
4/15/2019	#VZ	9:30:00 AM					N/A
4/15/2019	#VZ	11:30:00 AM					N/A
4/15/2019	#VZ	1:30:00 PM					N/A
4/15/2019	#VZ	3:30:00 PM					N/A
4/15/2019	#WDC	9:30:00 AM					N/A
4/15/2019	#WDC	11:30:00 AM					N/A
4/15/2019	#WDC	1:30:00 PM					N/A
4/15/2019	#WDC	3:30:00 PM					N/A

4/15/2019	#WFC	9:30:00 AM					N/A
4/15/2019	#WFC	11:30:00 AM					N/A
4/15/2019	#WFC	1:30:00 PM					N/A
4/15/2019	#WFC	3:30:00 PM					N/A
4/15/2019	#WMT	9:30:00 AM					N/A
4/15/2019	#WMT	11:30:00 AM					N/A
4/15/2019	#WMT	1:30:00 PM					N/A
4/15/2019	#WMT	3:30:00 PM					N/A
4/15/2019	#XOM	9:30:00 AM					N/A
4/15/2019	#XOM	11:30:00 AM					N/A
4/15/2019	#XOM	1:30:00 PM					N/A
4/15/2019	#XOM	3:30:00 PM					N/A
4/15/2019	#YHOO	9:30:00 AM					N/A
4/15/2019	#YHOO	11:30:00 AM					N/A
4/15/2019	#YHOO	1:30:00 PM					N/A
4/15/2019	#YHOO	3:30:00 PM					N/A
4/15/2019	#ZNGA	9:30:00 AM					N/A
4/15/2019	#ZNGA	11:30:00 AM					N/A
4/15/2019	#ZNGA	1:30:00 PM					N/A
4/15/2019	#ZNGA	3:30:00 PM					N/A
4/15/2019	AUDCAD	9:30:00 AM	0.95582	0.95653			N/A
4/15/2019	AUDCAD	11:30:00 AM	0.95575	0.95633			N/A
4/15/2019	AUDCAD	1:30:00 PM	0.95619	0.95685			N/A
4/15/2019	AUDCAD	3:30:00 PM	0.95449	0.95484			N/A
4/15/2019	AUDCAD.fx	9:30:00 AM	0.95615	0.95618			N/A
4/15/2019	AUDCAD.fx	11:30:00 AM	0.95608	0.95597			N/A
4/15/2019	AUDCAD.fx	1:30:00 PM	0.95653	0.9565			N/A
4/15/2019	AUDCAD.fx	3:30:00 PM	0.95479	0.95449			N/A
4/15/2019	AUDCHF	9:30:00 AM	0.71763	0.71833			N/A
4/15/2019	AUDCHF	11:30:00 AM	0.71811	0.71873			N/A
4/15/2019	AUDCHF	1:30:00 PM	0.71917	0.71987			N/A
4/15/2019	AUDCHF	3:30:00 PM	0.71931	0.71975			N/A
4/15/2019	AUDCHF.fx	9:30:00 AM	0.71796	0.71799			N/A
4/15/2019	AUDCHF.fx	11:30:00 AM	0.71845	0.71838			N/A

4/15/2019	AUDCHF.fx	1:30:00 PM	0.71951	0.71952			N/A
4/15/2019	AUDCHF.fx	3:30:00 PM	0.71961	0.71939			N/A
4/15/2019	AUDCZK	9:30:00 AM	16.208	16.222			N/A
4/15/2019	AUDCZK	11:30:00 AM	16.21	16.227			N/A
4/15/2019	AUDCZK	1:30:00 PM	16.233	16.248			N/A
4/15/2019	AUDCZK	3:30:00 PM	16.234	16.247			N/A
4/15/2019	AUDDKK	9:30:00 AM	4.7286	4.7335			N/A
4/15/2019	AUDDKK	11:30:00 AM	4.726	4.7304			N/A
4/15/2019	AUDDKK	1:30:00 PM	4.7324	4.7368			N/A
4/15/2019	AUDDKK	3:30:00 PM	4.7328	4.7363			N/A
4/15/2019	AUDHKD	9:30:00 AM	5.6167	5.6205			N/A
4/15/2019	AUDHKD	11:30:00 AM	5.618	5.6219			N/A
4/15/2019	AUDHKD	1:30:00 PM	5.6209	5.6244			N/A
4/15/2019	AUDHKD	3:30:00 PM	5.623	5.6256			N/A
4/15/2019	AUDHUF	9:30:00 AM	203.57	203.72			N/A
4/15/2019	AUDHUF	11:30:00 AM	203.31	203.55			N/A
4/15/2019	AUDHUF	1:30:00 PM	203.2	203.43			N/A
4/15/2019	AUDHUF	3:30:00 PM	203	203.22			N/A
4/15/2019	AUDJPY	9:30:00 AM	80.232	80.29			N/A
4/15/2019	AUDJPY	11:30:00 AM	80.214	80.278			N/A
4/15/2019	AUDJPY	1:30:00 PM	80.269	80.336			N/A
4/15/2019	AUDJPY	3:30:00 PM	80.339	80.39			N/A
4/15/2019	AUDJPY.fx	9:30:00 AM	80.266	80.256			N/A
4/15/2019	AUDJPY.fx	11:30:00 AM	80.247	80.243			N/A
4/15/2019	AUDJPY.fx	1:30:00 PM	80.302	80.301			N/A
4/15/2019	AUDJPY.fx	3:30:00 PM	80.374	80.354			N/A
4/15/2019	AUDMXN	9:30:00 AM	13.4548	13.4625			N/A
4/15/2019	AUDMXN	11:30:00 AM	13.4452	13.4559			N/A
4/15/2019	AUDMXN	1:30:00 PM	13.4597	13.4688			N/A
4/15/2019	AUDMXN	3:30:00 PM	13.4697	13.4747			N/A
4/15/2019	AUDNOK	9:30:00 AM	6.0863	6.091			N/A
4/15/2019	AUDNOK	11:30:00 AM	6.0852	6.0896			N/A
4/15/2019	AUDNOK	1:30:00 PM	6.0956	6.1005			N/A
4/15/2019	AUDNOK	3:30:00 PM	6.0905	6.0944			N/A



4/15/2019	AUDNOK.f	9:30:00 AM	6.0874	6.0894			N/A
4/15/2019	AUDNOK.f	11:30:00 AM	6.0867	6.0878			N/A
4/15/2019	AUDNOK.f	1:30:00 PM	6.0972	6.0987			N/A
4/15/2019	AUDNOK.f	3:30:00 PM	6.0917	6.0926			N/A
4/15/2019	AUDNZD	9:30:00 AM	1.05834	1.05917			N/A
4/15/2019	AUDNZD	11:30:00 AM	1.05935	1.06025			N/A
4/15/2019	AUDNZD	1:30:00 PM	1.06036	1.06126			N/A
4/15/2019	AUDNZD	3:30:00 PM	1.06066	1.0615			N/A
4/15/2019	AUDNZD.f	9:30:00 AM	1.05877	1.05873			N/A
4/15/2019	AUDNZD.f	11:30:00 AM	1.05978	1.05981			N/A
4/15/2019	AUDNZD.f	1:30:00 PM	1.06078	1.06082			N/A
4/15/2019	AUDNZD.f	3:30:00 PM	1.06109	1.06106			N/A
4/15/2019	AUDPLN	9:30:00 AM	2.7111	2.714			N/A
4/15/2019	AUDPLN	11:30:00 AM	2.7096	2.7127			N/A
4/15/2019	AUDPLN	1:30:00 PM	2.7097	2.7126			N/A
4/15/2019	AUDPLN	3:30:00 PM	2.7097	2.7125			N/A
4/15/2019	AUDSEK	9:30:00 AM	6.6383	6.6378			N/A
4/15/2019	AUDSEK	11:30:00 AM	6.6323	6.635			N/A
4/15/2019	AUDSEK	1:30:00 PM	6.6362	6.6386			N/A
4/15/2019	AUDSEK	3:30:00 PM	6.6362	6.638			N/A
4/15/2019	AUDSEK.f	9:30:00 AM	6.6337	6.6425			N/A
4/15/2019	AUDSEK.f	11:30:00 AM	6.6277	6.6396			N/A
4/15/2019	AUDSEK.f	1:30:00 PM	6.6316	6.6431			N/A
4/15/2019	AUDSEK.f	3:30:00 PM	6.6311	6.6423			N/A
4/15/2019	AUDSGD	9:30:00 AM	0.9695	0.9698			N/A
4/15/2019	AUDSGD	11:30:00 AM	0.9695	0.9697			N/A
4/15/2019	AUDSGD	1:30:00 PM	0.97	0.9703			N/A
4/15/2019	AUDSGD	3:30:00 PM	0.9705	0.9705			N/A
4/15/2019	AUDSGD.f	9:30:00 AM	0.96956	0.96964			N/A
4/15/2019	AUDSGD.f	11:30:00 AM	0.96958	0.96959			N/A
4/15/2019	AUDSGD.f	1:30:00 PM	0.97008	0.97016			N/A
4/15/2019	AUDSGD.f	3:30:00 PM	0.97054	0.97044			N/A
4/15/2019	AUDUSD	9:30:00 AM	0.71689	0.71703			N/A
4/15/2019	AUDUSD	11:30:00 AM	0.71692	0.71699			N/A

4/15/2019	AUDUSD	1:30:00 PM	0.71734	0.71744			N/A
4/15/2019	AUDUSD	3:30:00 PM	0.71766	0.71754			N/A
4/15/2019	AUDUSD.fx	9:30:00 AM	0.71694	0.71697			N/A
4/15/2019	AUDUSD.fx	11:30:00 AM	0.71697	0.71694			N/A
4/15/2019	AUDUSD.fx	1:30:00 PM	0.71739	0.71738			N/A
4/15/2019	AUDUSD.fx	3:30:00 PM	0.7177	0.71748			N/A
4/15/2019	AUDZAR	9:30:00 AM	10.0149	10.0227			N/A
4/15/2019	AUDZAR	11:30:00 AM	9.9826	9.9952			N/A
4/15/2019	AUDZAR	1:30:00 PM	10.0139	10.0263			N/A
4/15/2019	AUDZAR	3:30:00 PM	10.0231	10.0375			N/A
4/15/2019	AUS200.i	9:30:00 AM					N/A
4/15/2019	AUS200.i	11:30:00 AM	6250.68	6254.48			N/A
4/15/2019	AUS200.i	1:30:00 PM	6255.18	6258.18			N/A
4/15/2019	AUS200.i	3:30:00 PM	6251.68	6254.98			N/A
4/15/2019	BCHUSD	9:30:00 AM	302.28	313.93			N/A
4/15/2019	BCHUSD	11:30:00 AM	301.73	312.91			N/A
4/15/2019	BCHUSD	1:30:00 PM	300.62	311.74			N/A
4/15/2019	BCHUSD	3:30:00 PM	297.2	308.85			N/A
4/15/2019	CADCHF	9:30:00 AM	0.75054	0.75123			N/A
4/15/2019	CADCHF	11:30:00 AM	0.7512	0.75178			N/A
4/15/2019	CADCHF	1:30:00 PM	0.75187	0.75257			N/A
4/15/2019	CADCHF	3:30:00 PM	0.75338	0.75408			N/A
4/15/2019	CADCHF.fx	9:30:00 AM	0.75088	0.75088			N/A
4/15/2019	CADCHF.fx	11:30:00 AM	0.75155	0.75143			N/A
4/15/2019	CADCHF.fx	1:30:00 PM	0.75221	0.75221			N/A
4/15/2019	CADCHF.fx	3:30:00 PM	0.75371	0.75374			N/A
4/15/2019	CADCZK	9:30:00 AM	16.955	16.97			N/A
4/15/2019	CADCZK	11:30:00 AM	16.96	16.974			N/A
4/15/2019	CADCZK	1:30:00 PM	16.973	16.989			N/A
4/15/2019	CADCZK	3:30:00 PM	17.007	17.022			N/A
4/15/2019	CADDDKK	9:30:00 AM	4.946	4.95			N/A
4/15/2019	CADDDKK	11:30:00 AM	4.945	4.949			N/A
4/15/2019	CADDDKK	1:30:00 PM	4.949	4.952			N/A
4/15/2019	CADDDKK	3:30:00 PM	4.959	4.963			N/A

4/15/2019	CADHKD	9:30:00 AM	5.8757	5.8794			N/A
4/15/2019	CADHKD	11:30:00 AM	5.8771	5.881			N/A
4/15/2019	CADHKD	1:30:00 PM	5.8773	5.8808			N/A
4/15/2019	CADHKD	3:30:00 PM	5.8905	5.8943			N/A
4/15/2019	CADHUF	9:30:00 AM	212.99	213.07			N/A
4/15/2019	CADHUF	11:30:00 AM	212.75	212.87			N/A
4/15/2019	CADHUF	1:30:00 PM	212.52	212.67			N/A
4/15/2019	CADHUF	3:30:00 PM	212.72	212.88			N/A
4/15/2019	CADJPY	9:30:00 AM	83.917	83.972			N/A
4/15/2019	CADJPY	11:30:00 AM	83.908	83.962			N/A
4/15/2019	CADJPY	1:30:00 PM	83.921	83.981			N/A
4/15/2019	CADJPY	3:30:00 PM	84.154	84.205			N/A
4/15/2019	CADJPY.fx	9:30:00 AM	83.949	83.937			N/A
4/15/2019	CADJPY.fx	11:30:00 AM	83.941	83.927			N/A
4/15/2019	CADJPY.fx	1:30:00 PM	83.955	83.946			N/A
4/15/2019	CADJPY.fx	3:30:00 PM	84.189	84.171			N/A
4/15/2019	CADMXN	9:30:00 AM	14.0731	14.0844			N/A
4/15/2019	CADMXN	11:30:00 AM	14.0652	14.0769			N/A
4/15/2019	CADMXN	1:30:00 PM	14.0727	14.0836			N/A
4/15/2019	CADMXN	3:30:00 PM	14.1095	14.1201			N/A
4/15/2019	CADNOK	9:30:00 AM	6.3642	6.3667			N/A
4/15/2019	CADNOK	11:30:00 AM	6.3637	6.3683			N/A
4/15/2019	CADNOK	1:30:00 PM	6.3719	6.3761			N/A
4/15/2019	CADNOK	3:30:00 PM	6.3786	6.3831			N/A
4/15/2019	CADPLN	9:30:00 AM	2.8348	2.8367			N/A
4/15/2019	CADPLN	11:30:00 AM	2.8345	2.8364			N/A
4/15/2019	CADPLN	1:30:00 PM	2.8331	2.8347			N/A
4/15/2019	CADPLN	3:30:00 PM	2.8386	2.8404			N/A
4/15/2019	CADSEK	9:30:00 AM	6.9409	6.941			N/A
4/15/2019	CADSEK	11:30:00 AM	6.9359	6.9389			N/A
4/15/2019	CADSEK	1:30:00 PM	6.9365	6.9395			N/A
4/15/2019	CADSEK	3:30:00 PM	6.9494	6.9532			N/A
4/15/2019	CADSGD	9:30:00 AM					N/A
4/15/2019	CADSGD	11:30:00 AM	1.0135	1.0138			N/A

4/15/2019	CADSGD	1:30:00 PM	1.0135	1.0138			N/A
4/15/2019	CADSGD	3:30:00 PM	1.0157	1.0159			N/A
4/15/2019	CADZAR	9:30:00 AM	10.4748	10.4846			N/A
4/15/2019	CADZAR	11:30:00 AM	10.4415	10.4573			N/A
4/15/2019	CADZAR	1:30:00 PM	10.4699	10.4839			N/A
4/15/2019	CADZAR	3:30:00 PM	10.5019	10.5167			N/A
4/15/2019	CHFCZK	9:30:00 AM	22.584	22.596			N/A
4/15/2019	CHFCZK	11:30:00 AM	22.572	22.587			N/A
4/15/2019	CHFCZK	1:30:00 PM	22.568	22.584			N/A
4/15/2019	CHFCZK	3:30:00 PM	22.568	22.583			N/A
4/15/2019	CHFDKK	9:30:00 AM	6.588	6.59			N/A
4/15/2019	CHFDKK	11:30:00 AM	6.58	6.582			N/A
4/15/2019	CHFDKK	1:30:00 PM	6.579	6.582			N/A
4/15/2019	CHFDKK	3:30:00 PM	6.579	6.582			N/A
4/15/2019	CHFDKK.fx	9:30:00 AM	6.5863	6.5923			N/A
4/15/2019	CHFDKK.fx	11:30:00 AM	6.5787	6.5837			N/A
4/15/2019	CHFDKK.fx	1:30:00 PM	6.5771	6.5831			N/A
4/15/2019	CHFDKK.fx	3:30:00 PM	6.5774	6.583			N/A
4/15/2019	CHFHKD	9:30:00 AM	7.8251	7.8288			N/A
4/15/2019	CHFHKD	11:30:00 AM	7.823	7.8263			N/A
4/15/2019	CHFHKD	1:30:00 PM	7.8142	7.8179			N/A
4/15/2019	CHFHKD	3:30:00 PM	7.8168	7.8206			N/A
4/15/2019	CHFHUF	9:30:00 AM	283.56	283.84			N/A
4/15/2019	CHFHUF	11:30:00 AM	283.04	283.39			N/A
4/15/2019	CHFHUF	1:30:00 PM	282.44	282.82			N/A
4/15/2019	CHFHUF	3:30:00 PM	282.16	282.53			N/A
4/15/2019	CHFJPY	9:30:00 AM	111.761	111.818			N/A
4/15/2019	CHFJPY	11:30:00 AM	111.662	111.73			N/A
4/15/2019	CHFJPY	1:30:00 PM	111.575	111.638			N/A
4/15/2019	CHFJPY	3:30:00 PM	111.659	111.708			N/A
4/15/2019	CHFJPY.fx	9:30:00 AM	111.793	111.783			N/A
4/15/2019	CHFJPY.fx	11:30:00 AM	111.695	111.695			N/A
4/15/2019	CHFJPY.fx	1:30:00 PM	111.61	111.603			N/A
4/15/2019	CHFJPY.fx	3:30:00 PM	111.692	111.678			N/A

4/15/2019	CHF MXN	9:30:00 AM	18.7426	18.7572			N/A
4/15/2019	CHF MXN	11:30:00 AM	18.7187	18.7327			N/A
4/15/2019	CHF MXN	1:30:00 PM	18.7086	18.7247			N/A
4/15/2019	CHF MXN	3:30:00 PM	18.7206	18.7338			N/A
4/15/2019	CHF NOK	9:30:00 AM	8.4766	8.4838			N/A
4/15/2019	CHF NOK	11:30:00 AM	8.4702	8.4757			N/A
4/15/2019	CHF NOK	1:30:00 PM	8.4712	8.4788			N/A
4/15/2019	CHF NOK	3:30:00 PM	8.4637	8.4704			N/A
4/15/2019	CHF NOK.fx	9:30:00 AM	8.47988	8.4806			N/A
4/15/2019	CHF NOK.fx	11:30:00 AM	8.47352	8.47229			N/A
4/15/2019	CHF NOK.fx	1:30:00 PM	8.47456	8.47542			N/A
4/15/2019	CHF NOK.fx	3:30:00 PM	8.46701	8.46722			N/A
4/15/2019	CHF PLN	9:30:00 AM	3.7767	3.7794			N/A
4/15/2019	CHF PLN	11:30:00 AM	3.7725	3.775			N/A
4/15/2019	CHF PLN	1:30:00 PM	3.7667	3.7693			N/A
4/15/2019	CHF PLN	3:30:00 PM	3.7666	3.7691			N/A
4/15/2019	CHF PLN.fx	9:30:00 AM	3.77416	3.78176			N/A
4/15/2019	CHF PLN.fx	11:30:00 AM	3.77014	3.77733			N/A
4/15/2019	CHF PLN.fx	1:30:00 PM	3.76434	3.77154			N/A
4/15/2019	CHF PLN.fx	3:30:00 PM	3.76416	3.77187			N/A
4/15/2019	CHF SEK	9:30:00 AM	9.2443	9.2433			N/A
4/15/2019	CHF SEK	11:30:00 AM	9.2307	9.2348			N/A
4/15/2019	CHF SEK	1:30:00 PM	9.2222	9.2257			N/A
4/15/2019	CHF SEK	3:30:00 PM	9.2208	9.2255			N/A
4/15/2019	CHF SGD	9:30:00 AM	1.3503	1.3507			N/A
4/15/2019	CHF SGD	11:30:00 AM	1.3495	1.3498			N/A
4/15/2019	CHF SGD	1:30:00 PM	1.348	1.3486			N/A
4/15/2019	CHF SGD	3:30:00 PM	1.3487	1.349			N/A
4/15/2019	CHF SGD.fx	9:30:00 AM	1.35044	1.35051			N/A
4/15/2019	CHF SGD.fx	11:30:00 AM	1.34958	1.34959			N/A
4/15/2019	CHF SGD.fx	1:30:00 PM	1.34821	1.34836			N/A
4/15/2019	CHF SGD.fx	3:30:00 PM	1.34891	1.34883			N/A
4/15/2019	CHF ZAR	9:30:00 AM	13.9543	13.9599			N/A
4/15/2019	CHF ZAR	11:30:00 AM	13.9009	13.9109			N/A

4/15/2019	CHFZAR	1:30:00 PM	13.9237	13.934			N/A
4/15/2019	CHFZAR	3:30:00 PM	13.9384	13.9503			N/A
4/15/2019	CZKJPY	9:30:00 AM	4.948	4.951			N/A
4/15/2019	CZKJPY	11:30:00 AM					N/A
4/15/2019	CZKJPY	1:30:00 PM	4.943	4.947			N/A
4/15/2019	CZKJPY	3:30:00 PM	4.947	4.951			N/A
4/15/2019	DAX30.i	9:30:00 AM	12027.18	12025.18			N/A
4/15/2019	DAX30.i	11:30:00 AM	12014.93	12014.18			N/A
4/15/2019	DAX30.i	1:30:00 PM	12041.43	12035.18			N/A
4/15/2019	DAX30.i	3:30:00 PM	12030.93	12028.78			N/A
4/15/2019	DJ30.i	9:30:00 AM					N/A
4/15/2019	DJ30.i	11:30:00 AM					N/A
4/15/2019	DJ30.i	1:30:00 PM					N/A
4/15/2019	DJ30.i	3:30:00 PM					N/A
4/15/2019	DKKJPY	9:30:00 AM	16.97	16.99			N/A
4/15/2019	DKKJPY	11:30:00 AM					N/A
4/15/2019	DKKJPY	1:30:00 PM					N/A
4/15/2019	DKKJPY	3:30:00 PM	16.98	16.99			N/A
4/15/2019	EURAUD	9:30:00 AM	1.5768	1.57726			N/A
4/15/2019	EURAUD	11:30:00 AM	1.57773	1.57803			N/A
4/15/2019	EURAUD	1:30:00 PM	1.57559	1.57597			N/A
4/15/2019	EURAUD	3:30:00 PM	1.57578	1.57584			N/A
4/15/2019	EURAUD.fx	9:30:00 AM	1.577	1.57706			N/A
4/15/2019	EURAUD.fx	11:30:00 AM	1.57794	1.57782			N/A
4/15/2019	EURAUD.fx	1:30:00 PM	1.57579	1.57576			N/A
4/15/2019	EURAUD.fx	3:30:00 PM	1.57598	1.57567			N/A
4/15/2019	EURCAD	9:30:00 AM	1.50809	1.50894			N/A
4/15/2019	EURCAD	11:30:00 AM	1.50886	1.5094			N/A
4/15/2019	EURCAD	1:30:00 PM	1.50749	1.50827			N/A
4/15/2019	EURCAD	3:30:00 PM	1.50455	1.50527			N/A
4/15/2019	EURCAD.fx	9:30:00 AM	1.5085	1.50852			N/A
4/15/2019	EURCAD.fx	11:30:00 AM	1.50927	1.50899			N/A
4/15/2019	EURCAD.fx	1:30:00 PM	1.50791	1.50785			N/A
4/15/2019	EURCAD.fx	3:30:00 PM	1.50496	1.50482			N/A

4/15/2019	EURCHF	9:30:00 AM	1.13266	1.13273			N/A
4/15/2019	EURCHF	11:30:00 AM	1.13409	1.13401			N/A
4/15/2019	EURCHF	1:30:00 PM	1.1342	1.13432			N/A
4/15/2019	EURCHF	3:30:00 PM	1.1343	1.1343			N/A
4/15/2019	EURCHF.fx	9:30:00 AM	1.13271	1.13267			N/A
4/15/2019	EURCHF.fx	11:30:00 AM	1.13416	1.13395			N/A
4/15/2019	EURCHF.fx	1:30:00 PM	1.13425	1.13426			N/A
4/15/2019	EURCHF.fx	3:30:00 PM	1.13433	1.13424			N/A
4/15/2019	EURCZK	9:30:00 AM	25.568	25.602			N/A
4/15/2019	EURCZK	11:30:00 AM					N/A
4/15/2019	EURCZK	1:30:00 PM	25.584	25.623			N/A
4/15/2019	EURCZK	3:30:00 PM	25.584	25.623			N/A
4/15/2019	EURDKK	9:30:00 AM	7.4631	7.4641			N/A
4/15/2019	EURDKK	11:30:00 AM	7.4625	7.4634			N/A
4/15/2019	EURDKK	1:30:00 PM	7.462	7.4628			N/A
4/15/2019	EURDKK	3:30:00 PM	7.4631	7.4642			N/A
4/15/2019	EURGBP	9:30:00 AM	0.86405	0.86402			N/A
4/15/2019	EURGBP	11:30:00 AM	0.86361	0.86365			N/A
4/15/2019	EURGBP	1:30:00 PM	0.86312	0.86324			N/A
4/15/2019	EURGBP	3:30:00 PM	0.8628	0.86277			N/A
4/15/2019	EURGBP.fx	9:30:00 AM	0.86408	0.86397			N/A
4/15/2019	EURGBP.fx	11:30:00 AM	0.86364	0.8636			N/A
4/15/2019	EURGBP.fx	1:30:00 PM	0.86316	0.86319			N/A
4/15/2019	EURGBP.fx	3:30:00 PM	0.86283	0.86273			N/A
4/15/2019	EURHKD	9:30:00 AM	8.8639	8.869			N/A
4/15/2019	EURHKD	11:30:00 AM	8.8712	8.8757			N/A
4/15/2019	EURHKD	1:30:00 PM	8.8631	8.8684			N/A
4/15/2019	EURHKD	3:30:00 PM	8.8664	8.8708			N/A
4/15/2019	EURHKD.fx	9:30:00 AM	8.86644	8.8665			N/A
4/15/2019	EURHKD.fx	11:30:00 AM	8.87382	8.87312			N/A
4/15/2019	EURHKD.fx	1:30:00 PM	8.86567	8.86583			N/A
4/15/2019	EURHKD.fx	3:30:00 PM	8.86897	8.86826			N/A
4/15/2019	EURHUF	9:30:00 AM	321.33	321.86			N/A
4/15/2019	EURHUF	11:30:00 AM	320.88	321.61			N/A

4/15/2019	EURHUF	1:30:00 PM	320.3	321.03			N/A
4/15/2019	EURHUF	3:30:00 PM	319.95	320.6			N/A
4/15/2019	EURHUF.fx	9:30:00 AM	321.561	321.585			N/A
4/15/2019	EURHUF.fx	11:30:00 AM	321.161	321.348			N/A
4/15/2019	EURHUF.fx	1:30:00 PM	320.571	320.75			N/A
4/15/2019	EURHUF.fx	3:30:00 PM	320.241	320.428			N/A
4/15/2019	EURJPY	9:30:00 AM	126.634	126.616			N/A
4/15/2019	EURJPY	11:30:00 AM	126.67	126.669			N/A
4/15/2019	EURJPY	1:30:00 PM	126.587	126.593			N/A
4/15/2019	EURJPY	3:30:00 PM	126.692	126.676			N/A
4/15/2019	EURJPY.fx	9:30:00 AM	126.636	126.613			N/A
4/15/2019	EURJPY.fx	11:30:00 AM	126.672	126.666			N/A
4/15/2019	EURJPY.fx	1:30:00 PM	126.589	126.589			N/A
4/15/2019	EURJPY.fx	3:30:00 PM	126.694	126.679			N/A
4/15/2019	EURMXN	9:30:00 AM	21.2319	21.2496			N/A
4/15/2019	EURMXN	11:30:00 AM	21.2292	21.2469			N/A
4/15/2019	EURMXN	1:30:00 PM	21.2216	21.2412			N/A
4/15/2019	EURMXN	3:30:00 PM	21.2362	21.2509			N/A
4/15/2019	EURMXN.f	9:30:00 AM	21.2404	21.2411			N/A
4/15/2019	EURMXN.f	11:30:00 AM	21.2376	21.2386			N/A
4/15/2019	EURMXN.f	1:30:00 PM	21.23	21.2327			N/A
4/15/2019	EURMXN.f	3:30:00 PM	21.2446	21.2425			N/A
4/15/2019	EURNOK	9:30:00 AM	9.5998	9.6111			N/A
4/15/2019	EURNOK	11:30:00 AM	9.6029	9.6146			N/A
4/15/2019	EURNOK	1:30:00 PM	9.6071	9.6189			N/A
4/15/2019	EURNOK	3:30:00 PM	9.598	9.6101			N/A
4/15/2019	EURNOK.fx	9:30:00 AM	9.60525	9.60575			N/A
4/15/2019	EURNOK.fx	11:30:00 AM	9.60823	9.60911			N/A
4/15/2019	EURNOK.fx	1:30:00 PM	9.61252	9.61347			N/A
4/15/2019	EURNOK.fx	3:30:00 PM	9.60333	9.60486			N/A
4/15/2019	EURNZD	9:30:00 AM	1.66993	1.67073			N/A
4/15/2019	EURNZD	11:30:00 AM	1.67257	1.67318			N/A
4/15/2019	EURNZD	1:30:00 PM	1.67186	1.67268			N/A
4/15/2019	EURNZD	3:30:00 PM	1.67244	1.67282			N/A



4/15/2019	EURNZD.fx	9:30:00 AM	1.67034	1.67032			N/A
4/15/2019	EURNZD.fx	11:30:00 AM	1.67299	1.67276			N/A
4/15/2019	EURNZD.fx	1:30:00 PM	1.67226	1.67225			N/A
4/15/2019	EURNZD.fx	3:30:00 PM	1.67285	1.67246			N/A
4/15/2019	EURPLN	9:30:00 AM	4.2781	4.2808			N/A
4/15/2019	EURPLN	11:30:00 AM	4.278	4.2814			N/A
4/15/2019	EURPLN	1:30:00 PM	4.2725	4.2751			N/A
4/15/2019	EURPLN	3:30:00 PM	4.2724	4.2755			N/A
4/15/2019	EURPLN.fx	9:30:00 AM	4.27717	4.28142			N/A
4/15/2019	EURPLN.fx	11:30:00 AM	4.27737	4.28192			N/A
4/15/2019	EURPLN.fx	1:30:00 PM	4.27187	4.27572			N/A
4/15/2019	EURPLN.fx	3:30:00 PM	4.27167	4.27612			N/A
4/15/2019	EURRUB	9:30:00 AM					N/A
4/15/2019	EURRUB	11:30:00 AM	72.364	72.793			N/A
4/15/2019	EURRUB	1:30:00 PM	72.314	72.755			N/A
4/15/2019	EURRUB	3:30:00 PM	72.364	72.804			N/A
4/15/2019	EURSEK	9:30:00 AM	10.473	10.4717			N/A
4/15/2019	EURSEK	11:30:00 AM	10.4696	10.4738			N/A
4/15/2019	EURSEK	1:30:00 PM	10.462	10.4651			N/A
4/15/2019	EURSEK	3:30:00 PM	10.4602	10.464			N/A
4/15/2019	EURSEK.fx	9:30:00 AM	10.47502	10.47			N/A
4/15/2019	EURSEK.fx	11:30:00 AM	10.47102	10.47212			N/A
4/15/2019	EURSEK.fx	1:30:00 PM	10.46368	10.46329			N/A
4/15/2019	EURSEK.fx	3:30:00 PM	10.46163	10.46242			N/A
4/15/2019	EURSGD	9:30:00 AM	1.5293	1.5301			N/A
4/15/2019	EURSGD	11:30:00 AM	1.5301	1.5309			N/A
4/15/2019	EURSGD	1:30:00 PM	1.5289	1.5298			N/A
4/15/2019	EURSGD	3:30:00 PM	1.5296	1.5304			N/A
4/15/2019	EURSGD.fx	9:30:00 AM	1.5297	1.52971			N/A
4/15/2019	EURSGD.fx	11:30:00 AM	1.53054	1.53047			N/A
4/15/2019	EURSGD.fx	1:30:00 PM	1.52927	1.52934			N/A
4/15/2019	EURSGD.fx	3:30:00 PM	1.52998	1.52999			N/A
4/15/2019	EURUSD	9:30:00 AM	1.13092	1.13099			N/A
4/15/2019	EURUSD	11:30:00 AM	1.13159	1.13159			N/A

4/15/2019	EURUSD	1:30:00 PM	1.13068	1.13077	500	500	N/A
4/15/2019	EURUSD	3:30:00 PM	1.13113	1.13111			N/A
4/15/2019	EURUSD.fx	9:30:00 AM	1.13112	1.13109			N/A
4/15/2019	EURUSD.fx	11:30:00 AM	1.13179	1.13169			N/A
4/15/2019	EURUSD.fx	1:30:00 PM	1.13088	1.13087			N/A
4/15/2019	EURUSD.fx	3:30:00 PM	1.13133	1.13119			N/A
4/15/2019	EURZAR	9:30:00 AM	15.81	15.8184			N/A
4/15/2019	EURZAR	11:30:00 AM	15.7659	15.7807			N/A
4/15/2019	EURZAR	1:30:00 PM	15.7956	15.8107			N/A
4/15/2019	EURZAR	3:30:00 PM	15.8118	15.8283			N/A
4/15/2019	EURZAR.fx	9:30:00 AM	15.80932	15.81872			N/A
4/15/2019	EURZAR.fx	11:30:00 AM	15.76525	15.78114			N/A
4/15/2019	EURZAR.fx	1:30:00 PM	15.79506	15.8116			N/A
4/15/2019	EURZAR.fx	3:30:00 PM	15.81135	15.82826			N/A
4/15/2019	GBPAUD	9:30:00 AM	1.82563	1.82612			N/A
4/15/2019	GBPAUD	11:30:00 AM	1.82743	1.82811			N/A
4/15/2019	GBPAUD	1:30:00 PM	1.82596	1.82663			N/A
4/15/2019	GBPAUD	3:30:00 PM	1.82693	1.82722			N/A
4/15/2019	GBPAUD.fx	9:30:00 AM	1.82602	1.82573			N/A
4/15/2019	GBPAUD.fx	11:30:00 AM	1.82782	1.82771			N/A
4/15/2019	GBPAUD.fx	1:30:00 PM	1.82635	1.82622			N/A
4/15/2019	GBPAUD.fx	3:30:00 PM	1.82732	1.82681			N/A
4/15/2019	GBPCAD	9:30:00 AM	1.74565	1.74613			N/A
4/15/2019	GBPCAD	11:30:00 AM	1.74708	1.74771			N/A
4/15/2019	GBPCAD	1:30:00 PM	1.74648	1.74729			N/A
4/15/2019	GBPCAD	3:30:00 PM	1.74385	1.74445			N/A
4/15/2019	GBPCAD.fx	9:30:00 AM	1.74605	1.74574			N/A
4/15/2019	GBPCAD.fx	11:30:00 AM	1.74746	1.74733			N/A
4/15/2019	GBPCAD.fx	1:30:00 PM	1.74686	1.7469			N/A
4/15/2019	GBPCAD.fx	3:30:00 PM	1.74422	1.74404			N/A
4/15/2019	GBPCHF	9:30:00 AM	1.31079	1.31105			N/A
4/15/2019	GBPCHF	11:30:00 AM	1.31293	1.3133			N/A
4/15/2019	GBPCHF	1:30:00 PM	1.31381	1.31429			N/A
4/15/2019	GBPCHF	3:30:00 PM	1.31451	1.31485			N/A

4/15/2019	GBPCHF.fx	9:30:00 AM	1.31097	1.31086			N/A
4/15/2019	GBPCHF.fx	11:30:00 AM	1.31312	1.3131			N/A
4/15/2019	GBPCHF.fx	1:30:00 PM	1.314	1.31407			N/A
4/15/2019	GBPCHF.fx	3:30:00 PM	1.31469	1.31464			N/A
4/15/2019	GBPCZK	9:30:00 AM	29.602	29.615			N/A
4/15/2019	GBPCZK	11:30:00 AM	29.635	29.655			N/A
4/15/2019	GBPCZK	1:30:00 PM	29.651	29.672			N/A
4/15/2019	GBPCZK	3:30:00 PM	29.666	29.683			N/A
4/15/2019	GBPDKK	9:30:00 AM	8.634	8.644			N/A
4/15/2019	GBPDKK	11:30:00 AM	8.637	8.648			N/A
4/15/2019	GBPDKK	1:30:00 PM	8.642	8.653			N/A
4/15/2019	GBPDKK	3:30:00 PM	8.646	8.656			N/A
4/15/2019	GBPDKK.fx	9:30:00 AM	8.6325	8.6442			N/A
4/15/2019	GBPDKK.fx	11:30:00 AM	8.6358	8.6482			N/A
4/15/2019	GBPDKK.fx	1:30:00 PM	8.6401	8.6531			N/A
4/15/2019	GBPDKK.fx	3:30:00 PM	8.6449	8.6566			N/A
4/15/2019	GBPHKD	9:30:00 AM	10.2575	10.2607			N/A
4/15/2019	GBPHKD	11:30:00 AM	10.2694	10.2752			N/A
4/15/2019	GBPHKD	1:30:00 PM	10.266	10.2714			N/A
4/15/2019	GBPHKD	3:30:00 PM	10.2745	10.2789			N/A
4/15/2019	GBPHUF	9:30:00 AM	371.68	371.98			N/A
4/15/2019	GBPHUF	11:30:00 AM	371.6	372.04			N/A
4/15/2019	GBPHUF	1:30:00 PM	371.09	371.56			N/A
4/15/2019	GBPHUF	3:30:00 PM	370.9	371.34			N/A
4/15/2019	GBPJPY	9:30:00 AM	146.542	146.557			N/A
4/15/2019	GBPJPY	11:30:00 AM	146.654	146.681			N/A
4/15/2019	GBPJPY	1:30:00 PM	146.637	146.672			N/A
4/15/2019	GBPJPY	3:30:00 PM	146.83	146.839	1000	1000	N/A
4/15/2019	GBPJPY.fx	9:30:00 AM	146.561	146.539			N/A
4/15/2019	GBPJPY.fx	11:30:00 AM	146.672	146.661			N/A
4/15/2019	GBPJPY.fx	1:30:00 PM	146.656	146.653			N/A
4/15/2019	GBPJPY.fx	3:30:00 PM	146.849	146.824			N/A
4/15/2019	GBPMXN	9:30:00 AM	24.5711	24.5792			N/A
4/15/2019	GBPMXN	11:30:00 AM	24.5775	24.5923			N/A

4/15/2019	GBPMXN	1:30:00 PM	24.5818	24.5977			N/A
4/15/2019	GBPMXN	3:30:00 PM	24.6103	24.6223			N/A
4/15/2019	GBPNOK	9:30:00 AM	11.1117	11.1216			N/A
4/15/2019	GBPNOK	11:30:00 AM	11.1212	11.131			N/A
4/15/2019	GBPNOK	1:30:00 PM	11.1307	11.1422			N/A
4/15/2019	GBPNOK	3:30:00 PM	11.1265	11.136			N/A
4/15/2019	GBPNOK.fx	9:30:00 AM	11.11646	11.11678			N/A
4/15/2019	GBPNOK.fx	11:30:00 AM	11.12603	11.12586			N/A
4/15/2019	GBPNOK.fx	1:30:00 PM	11.13571	11.1372			N/A
4/15/2019	GBPNOK.fx	3:30:00 PM	11.13139	11.1311			N/A
4/15/2019	GBPNZD	9:30:00 AM	1.93292	1.93331			N/A
4/15/2019	GBPNZD	11:30:00 AM	1.93676	1.9374			N/A
4/15/2019	GBPNZD	1:30:00 PM	1.93696	1.93774			N/A
4/15/2019	GBPNZD	3:30:00 PM	1.93866	1.93869			N/A
4/15/2019	GBPNZD.fx	9:30:00 AM	1.93328	1.93294			N/A
4/15/2019	GBPNZD.fx	11:30:00 AM	1.93711	1.93704			N/A
4/15/2019	GBPNZD.fx	1:30:00 PM	1.93731	1.93736			N/A
4/15/2019	GBPNZD.fx	3:30:00 PM	1.93904	1.93843			N/A
4/15/2019	GBPPLN	9:30:00 AM	4.9521	4.9533			N/A
4/15/2019	GBPPLN	11:30:00 AM	4.9546	4.9562			N/A
4/15/2019	GBPPLN	1:30:00 PM	4.9507	4.9518			N/A
4/15/2019	GBPPLN	3:30:00 PM	4.953	4.9543			N/A
4/15/2019	GBPPLN.fx	9:30:00 AM	4.94998	4.95547			N/A
4/15/2019	GBPPLN.fx	11:30:00 AM	4.95246	4.95838			N/A
4/15/2019	GBPPLN.fx	1:30:00 PM	4.94851	4.95401			N/A
4/15/2019	GBPPLN.fx	3:30:00 PM	4.95096	4.95654			N/A
4/15/2019	GBPSEK	9:30:00 AM	12.1189	12.1206			N/A
4/15/2019	GBPSEK	11:30:00 AM	12.1202	12.1292			N/A
4/15/2019	GBPSEK	1:30:00 PM	12.1179	12.1262			N/A
4/15/2019	GBPSEK	3:30:00 PM	12.1227	12.1303			N/A
4/15/2019	GBPSEK.fx	9:30:00 AM	12.11553	12.12434			N/A
4/15/2019	GBPSEK.fx	11:30:00 AM	12.11666	12.13285			N/A
4/15/2019	GBPSEK.fx	1:30:00 PM	12.11431	12.13009			N/A
4/15/2019	GBPSEK.fx	3:30:00 PM	12.11908	12.13414			N/A

4/15/2019	GBPSGD	9:30:00 AM	1.7702	1.7707			N/A
4/15/2019	GBPSGD	11:30:00 AM	1.7718	1.7726			N/A
4/15/2019	GBPSGD	1:30:00 PM	1.7713	1.7722			N/A
4/15/2019	GBPSGD	3:30:00 PM	1.7731	1.7736			N/A
4/15/2019	GBPSGD.fx	9:30:00 AM	1.76841	1.77246			N/A
4/15/2019	GBPSGD.fx	11:30:00 AM	1.76996	1.77435			N/A
4/15/2019	GBPSGD.fx	1:30:00 PM	1.76951	1.77394			N/A
4/15/2019	GBPSGD.fx	3:30:00 PM	1.7713	1.77536			N/A
4/15/2019	GBPUSD	9:30:00 AM	1.3092	1.30901			N/A
4/15/2019	GBPUSD	11:30:00 AM	1.3104	1.31041			N/A
4/15/2019	GBPUSD	1:30:00 PM	1.31011	1.31017			N/A
4/15/2019	GBPUSD	3:30:00 PM	1.31125	1.31112			N/A
4/15/2019	GBPUSD.fx	9:30:00 AM	1.30925	1.30895			N/A
4/15/2019	GBPUSD.fx	11:30:00 AM	1.31045	1.31037			N/A
4/15/2019	GBPUSD.fx	1:30:00 PM	1.31016	1.31012			N/A
4/15/2019	GBPUSD.fx	3:30:00 PM	1.3113	1.31107			N/A
4/15/2019	GBPZAR	9:30:00 AM	18.2938	18.3097			N/A
4/15/2019	GBPZAR	11:30:00 AM	18.2508	18.274			N/A
4/15/2019	GBPZAR	1:30:00 PM	18.2954	18.3204			N/A
4/15/2019	GBPZAR	3:30:00 PM	18.3231	18.3481			N/A
4/15/2019	GBPZAR.fx	9:30:00 AM	18.301	18.3023			N/A
4/15/2019	GBPZAR.fx	11:30:00 AM	18.2581	18.2667			N/A
4/15/2019	GBPZAR.fx	1:30:00 PM	18.3027	18.313			N/A
4/15/2019	GBPZAR.fx	3:30:00 PM	18.3303	18.3411			N/A
4/15/2019	GOLD	9:30:00 AM	1287.66	1287.7			N/A
4/15/2019	GOLD	11:30:00 AM	1286.92	1287.18			N/A
4/15/2019	GOLD	1:30:00 PM	1285.77	1285.97			N/A
4/15/2019	GOLD	3:30:00 PM	1285.02	1285.05			N/A
4/15/2019	HKDJPY	9:30:00 AM	14.28	14.29			N/A
4/15/2019	HKDJPY	11:30:00 AM	14.28	14.29			N/A
4/15/2019	HKDJPY	1:30:00 PM	14.28	14.29			N/A
4/15/2019	HKDJPY	3:30:00 PM	14.28	14.29			N/A
4/15/2019	HKDJPY.fx	9:30:00 AM	14.278	14.283			N/A
4/15/2019	HKDJPY.fx	11:30:00 AM	14.271	14.277			N/A

4/15/2019	HKDJPY.fx	1:30:00 PM	14.274	14.281			N/A
4/15/2019	HKDJPY.fx	3:30:00 PM	14.281	14.288			N/A
4/15/2019	HUFJPY	9:30:00 AM	0.3941	0.3944			N/A
4/15/2019	HUFJPY	11:30:00 AM	0.3945	0.3948			N/A
4/15/2019	HUFJPY	1:30:00 PM	0.395	0.3953			N/A
4/15/2019	HUFJPY	3:30:00 PM	0.3956	0.3959			N/A
4/15/2019	JP225.i	9:30:00 AM	22164.74	22183.91			N/A
4/15/2019	JP225.i	11:30:00 AM					N/A
4/15/2019	JP225.i	1:30:00 PM	22159.74	22174.74			N/A
4/15/2019	JP225.i	3:30:00 PM	22140.58	22154.74			N/A
4/15/2019	MXNJPY	9:30:00 AM					N/A
4/15/2019	MXNJPY	11:30:00 AM	5.96	5.97			N/A
4/15/2019	MXNJPY	1:30:00 PM					N/A
4/15/2019	MXNJPY	3:30:00 PM	5.97	5.97			N/A
4/15/2019	NASDAQ.i	9:30:00 AM					N/A
4/15/2019	NASDAQ.i	11:30:00 AM					N/A
4/15/2019	NASDAQ.i	1:30:00 PM					N/A
4/15/2019	NASDAQ.i	3:30:00 PM					N/A
4/15/2019	NOKJPY	9:30:00 AM	13.17	13.2			N/A
4/15/2019	NOKJPY	11:30:00 AM	13.17	13.21			N/A
4/15/2019	NOKJPY	1:30:00 PM	13.16	13.19			N/A
4/15/2019	NOKJPY	3:30:00 PM					N/A
4/15/2019	NOKJPY.fx	9:30:00 AM	13.179	13.185			N/A
4/15/2019	NOKJPY.fx	11:30:00 AM	13.181	13.186			N/A
4/15/2019	NOKJPY.fx	1:30:00 PM	13.165	13.172			N/A
4/15/2019	NOKJPY.fx	3:30:00 PM	13.188	13.195			N/A
4/15/2019	NZDCAD	9:30:00 AM	0.90276	0.90344			N/A
4/15/2019	NZDCAD	11:30:00 AM	0.90179	0.90244			N/A
4/15/2019	NZDCAD	1:30:00 PM	0.90138	0.90207			N/A
4/15/2019	NZDCAD	3:30:00 PM	0.89958	0.89991			N/A
4/15/2019	NZDCAD.fx	9:30:00 AM	0.90309	0.90311			N/A
4/15/2019	NZDCAD.fx	11:30:00 AM	0.90213	0.90211			N/A
4/15/2019	NZDCAD.fx	1:30:00 PM	0.9017	0.90171			N/A
4/15/2019	NZDCAD.fx	3:30:00 PM	0.89989	0.89958			N/A

4/15/2019	NZDCHF	9:30:00 AM	0.67781	0.6785			N/A
4/15/2019	NZDCHF	11:30:00 AM	0.67758	0.67821			N/A
4/15/2019	NZDCHF	1:30:00 PM	0.67793	0.67864			N/A
4/15/2019	NZDCHF	3:30:00 PM	0.67792	0.67837			N/A
4/15/2019	NZDCHF.fx	9:30:00 AM	0.67814	0.67815			N/A
4/15/2019	NZDCHF.fx	11:30:00 AM	0.67792	0.67786			N/A
4/15/2019	NZDCHF.fx	1:30:00 PM	0.67826	0.67829			N/A
4/15/2019	NZDCHF.fx	3:30:00 PM	0.67823	0.67802			N/A
4/15/2019	NZDCZK	9:30:00 AM	15.312	15.321			N/A
4/15/2019	NZDCZK	11:30:00 AM	15.299	15.309			N/A
4/15/2019	NZDCZK	1:30:00 PM	15.304	15.315			N/A
4/15/2019	NZDCZK	3:30:00 PM	15.303	15.311			N/A
4/15/2019	NZDDKK	9:30:00 AM	4.466	4.47			N/A
4/15/2019	NZDDKK	11:30:00 AM					N/A
4/15/2019	NZDDKK	1:30:00 PM	4.461	4.464			N/A
4/15/2019	NZDDKK	3:30:00 PM	4.459	4.463			N/A
4/15/2019	NZDHKD	9:30:00 AM	5.3053	5.3082			N/A
4/15/2019	NZDHKD	11:30:00 AM	5.3012	5.3042			N/A
4/15/2019	NZDHKD	1:30:00 PM	5.2987	5.301			N/A
4/15/2019	NZDHKD	3:30:00 PM	5.2998	5.3011			N/A
4/15/2019	NZDHUF	9:30:00 AM	192.25	192.44			N/A
4/15/2019	NZDHUF	11:30:00 AM	191.8	192.07			N/A
4/15/2019	NZDHUF	1:30:00 PM	191.52	191.79			N/A
4/15/2019	NZDHUF	3:30:00 PM	191.3	191.54			N/A
4/15/2019	NZDJPY	9:30:00 AM	75.781	75.841			N/A
4/15/2019	NZDJPY	11:30:00 AM	75.688	75.751			N/A
4/15/2019	NZDJPY	1:30:00 PM	75.666	75.733			N/A
4/15/2019	NZDJPY	3:30:00 PM	75.712	75.767			N/A
4/15/2019	NZDJPY.fx	9:30:00 AM	75.816	75.808			N/A
4/15/2019	NZDJPY.fx	11:30:00 AM	75.72	75.718			N/A
4/15/2019	NZDJPY.fx	1:30:00 PM	75.698	75.7			N/A
4/15/2019	NZDJPY.fx	3:30:00 PM	75.744	75.734			N/A
4/15/2019	NZDMXN	9:30:00 AM	12.7085	12.7136			N/A
4/15/2019	NZDMXN	11:30:00 AM	12.688	12.6942			N/A

4/15/2019	NZDMXN	1:30:00 PM	12.6886	12.694			N/A
4/15/2019	NZDMXN	3:30:00 PM	12.6962	12.6969			N/A
4/15/2019	NZDNOK	9:30:00 AM	5.7463	5.7479			N/A
4/15/2019	NZDNOK	11:30:00 AM	5.7397	5.7436			N/A
4/15/2019	NZDNOK	1:30:00 PM	5.7445	5.7479			N/A
4/15/2019	NZDNOK	3:30:00 PM	5.7386	5.7413			N/A
4/15/2019	NZDPLN	9:30:00 AM	2.5598	2.5611			N/A
4/15/2019	NZDPLN	11:30:00 AM	2.5566	2.558			N/A
4/15/2019	NZDPLN	1:30:00 PM	2.5542	2.5553			N/A
4/15/2019	NZDPLN	3:30:00 PM	2.5541	2.5552			N/A
4/15/2019	NZDSEK	9:30:00 AM	6.2655	6.2684			N/A
4/15/2019	NZDSEK	11:30:00 AM	6.2538	6.2603			N/A
4/15/2019	NZDSEK	1:30:00 PM	6.2518	6.2575			N/A
4/15/2019	NZDSEK	3:30:00 PM	6.2506	6.2557			N/A
4/15/2019	NZDSGD	9:30:00 AM	0.9155	0.9161			N/A
4/15/2019	NZDSGD	11:30:00 AM	0.9146	0.9152			N/A
4/15/2019	NZDSGD	1:30:00 PM	0.9142	0.9149			N/A
4/15/2019	NZDSGD	3:30:00 PM	0.9144	0.9149			N/A
4/15/2019	NZDSGD.fx	9:30:00 AM	0.91554	0.91607			N/A
4/15/2019	NZDSGD.fx	11:30:00 AM	0.91459	0.91513			N/A
4/15/2019	NZDSGD.fx	1:30:00 PM	0.91421	0.9148			N/A
4/15/2019	NZDSGD.fx	3:30:00 PM	0.91445	0.91488			N/A
4/15/2019	NZDUSD	9:30:00 AM	0.67706	0.67717			N/A
4/15/2019	NZDUSD	11:30:00 AM	0.6764	0.67649			N/A
4/15/2019	NZDUSD	1:30:00 PM	0.67614	0.67626			N/A
4/15/2019	NZDUSD	3:30:00 PM	0.67636	0.6762			N/A
4/15/2019	NZDUSD.fx	9:30:00 AM	0.67713	0.67719			N/A
4/15/2019	NZDUSD.fx	11:30:00 AM	0.67648	0.67651			N/A
4/15/2019	NZDUSD.fx	1:30:00 PM	0.67621	0.67627			N/A
4/15/2019	NZDUSD.fx	3:30:00 PM	0.6764	0.67622			N/A
4/15/2019	NZDZAR	9:30:00 AM	9.457	9.4673			N/A
4/15/2019	NZDZAR	11:30:00 AM	9.4169	9.4316			N/A
4/15/2019	NZDZAR	1:30:00 PM	9.4377	9.4522			N/A
4/15/2019	NZDZAR	3:30:00 PM	9.4448	9.4598			N/A



4/15/2019	SEKJPY	9:30:00 AM	12.1	12.1			N/A
4/15/2019	SEKJPY	11:30:00 AM	12.1	12.11			N/A
4/15/2019	SEKJPY	1:30:00 PM	12.1	12.11			N/A
4/15/2019	SEKJPY	3:30:00 PM	12.11	12.12			N/A
4/15/2019	SEKJPY.fx	9:30:00 AM	12.085	12.096			N/A
4/15/2019	SEKJPY.fx	11:30:00 AM	12.088	12.105			N/A
4/15/2019	SEKJPY.fx	1:30:00 PM	12.09	12.106			N/A
4/15/2019	SEKJPY.fx	3:30:00 PM	12.1	12.117			N/A
4/15/2019	SGDJPY	9:30:00 AM	82.77	82.77			N/A
4/15/2019	SGDJPY	11:30:00 AM	82.76	82.76			N/A
4/15/2019	SGDJPY	1:30:00 PM	82.77	82.77			N/A
4/15/2019	SGDJPY	3:30:00 PM	82.77	82.8			N/A
4/15/2019	SILVER	9:30:00 AM	14.74	15.12			N/A
4/15/2019	SILVER	11:30:00 AM	14.74	15.12			N/A
4/15/2019	SILVER	1:30:00 PM	14.74	15.13			N/A
4/15/2019	SILVER	3:30:00 PM	14.71	15.09			N/A
4/15/2019	SPX500.i	9:30:00 AM	2908.06	2909.36			N/A
4/15/2019	SPX500.i	11:30:00 AM	2907.31	2908.61			N/A
4/15/2019	SPX500.i	1:30:00 PM	2910.31	2911.11			N/A
4/15/2019	SPX500.i	3:30:00 PM	2908.81	2909.11			N/A
4/15/2019	UK100.i	9:30:00 AM	7450.54	7451.79			N/A
4/15/2019	UK100.i	11:30:00 AM	7435.45	7434.04			N/A
4/15/2019	UK100.i	1:30:00 PM	7453.95	7454.12			N/A
4/15/2019	UK100.i	3:30:00 PM	7442.12	7442.45			N/A
4/15/2019	USDCAD	9:30:00 AM	1.3336	1.33376			N/A
4/15/2019	USDCAD	11:30:00 AM	1.33351	1.33346			N/A
4/15/2019	USDCAD	1:30:00 PM	1.3334	1.33346			N/A
4/15/2019	USDCAD	3:30:00 PM	1.33029	1.3303			N/A
4/15/2019	USDCAD.fx	9:30:00 AM	1.33363	1.33373			N/A
4/15/2019	USDCAD.fx	11:30:00 AM	1.33353	1.33342			N/A
4/15/2019	USDCAD.fx	1:30:00 PM	1.33342	1.33342			N/A
4/15/2019	USDCAD.fx	3:30:00 PM	1.33033	1.33025			N/A
4/15/2019	USDCHF	9:30:00 AM	1.00139	1.00144			N/A
4/15/2019	USDCHF	11:30:00 AM	1.00203	1.0021			N/A

4/15/2019	USDCHF	1:30:00 PM	1.00294	1.00306			N/A
4/15/2019	USDCHF	3:30:00 PM	1.00262	1.00266			N/A
4/15/2019	USDCHF.fx	9:30:00 AM	1.00143	1.00139			N/A
4/15/2019	USDCHF.fx	11:30:00 AM	1.00208	1.00203			N/A
4/15/2019	USDCHF.fx	1:30:00 PM	1.00299	1.003			N/A
4/15/2019	USDCHF.fx	3:30:00 PM	1.00265	1.0026			N/A
4/15/2019	USDCZK	9:30:00 AM	22.63	22.649			N/A
4/15/2019	USDCZK	11:30:00 AM	22.629	22.651			N/A
4/15/2019	USDCZK	1:30:00 PM	22.648	22.671			N/A
4/15/2019	USDCZK	3:30:00 PM	22.642	22.663			N/A
4/15/2019	USDCZK.fx	9:30:00 AM	22.6364	22.6435			N/A
4/15/2019	USDCZK.fx	11:30:00 AM	22.638	22.6418			N/A
4/15/2019	USDCZK.fx	1:30:00 PM	22.6566	22.6619			N/A
4/15/2019	USDCZK.fx	3:30:00 PM	22.6509	22.6541			N/A
4/15/2019	USDDKK	9:30:00 AM	6.5974	6.6013			N/A
4/15/2019	USDDKK	11:30:00 AM	6.5938	6.5973			N/A
4/15/2019	USDDKK	1:30:00 PM	6.5985	6.6025			N/A
4/15/2019	USDDKK	3:30:00 PM	6.5968	6.6001			N/A
4/15/2019	USDDKK.fx	9:30:00 AM	6.59797	6.59932			N/A
4/15/2019	USDDKK.fx	11:30:00 AM	6.59427	6.59518			N/A
4/15/2019	USDDKK.fx	1:30:00 PM	6.59904	6.60052			N/A
4/15/2019	USDDKK.fx	3:30:00 PM	6.59739	6.59807			N/A
4/15/2019	USDHKD	9:30:00 AM	7.8385	7.8386			N/A
4/15/2019	USDHKD	11:30:00 AM	7.8402	7.8403			N/A
4/15/2019	USDHKD	1:30:00 PM	7.8395	7.8394			N/A
4/15/2019	USDHKD	3:30:00 PM	7.8396	7.8397			N/A
4/15/2019	USDHKD.fx	9:30:00 AM	7.83849	7.83898			N/A
4/15/2019	USDHKD.fx	11:30:00 AM	7.84022	7.84072			N/A
4/15/2019	USDHKD.fx	1:30:00 PM	7.83943	7.84			N/A
4/15/2019	USDHKD.fx	3:30:00 PM	7.83948	7.83977			N/A
4/15/2019	USDHUF	9:30:00 AM	284.16	284.45			N/A
4/15/2019	USDHUF	11:30:00 AM	283.64	284.09			N/A
4/15/2019	USDHUF	1:30:00 PM	283.31	283.78			N/A
4/15/2019	USDHUF	3:30:00 PM	282.95	283.4			N/A

4/15/2019	USDHUF.fx	9:30:00 AM	284.317	284.258			N/A
4/15/2019	USDHUF.fx	11:30:00 AM	283.842	283.89			N/A
4/15/2019	USDHUF.fx	1:30:00 PM	283.514	283.585			N/A
4/15/2019	USDHUF.fx	3:30:00 PM	283.153	283.196			N/A
4/15/2019	USDINR	9:30:00 AM	64.23	74.2			N/A
4/15/2019	USDINR	11:30:00 AM	64.28	74.27			N/A
4/15/2019	USDINR	1:30:00 PM					N/A
4/15/2019	USDINR	3:30:00 PM					N/A
4/15/2019	USDJPY	9:30:00 AM	111.952	111.946			N/A
4/15/2019	USDJPY	11:30:00 AM	111.92	111.922			N/A
4/15/2019	USDJPY	1:30:00 PM	111.936	111.942			N/A
4/15/2019	USDJPY	3:30:00 PM	111.987	111.975			N/A
4/15/2019	USDJPY.fx	9:30:00 AM	111.958	111.939			N/A
4/15/2019	USDJPY.fx	11:30:00 AM	111.926	111.914			N/A
4/15/2019	USDJPY.fx	1:30:00 PM	111.943	111.935			N/A
4/15/2019	USDJPY.fx	3:30:00 PM	111.993	111.969			N/A
4/15/2019	USDMXN	9:30:00 AM	18.776	18.782			N/A
4/15/2019	USDMXN	11:30:00 AM	18.762	18.769			N/A
4/15/2019	USDMXN	1:30:00 PM	18.771	18.779			N/A
4/15/2019	USDMXN	3:30:00 PM	18.775	18.78			N/A
4/15/2019	USDMXN.fx	9:30:00 AM	18.7791	18.7783			N/A
4/15/2019	USDMXN.fx	11:30:00 AM	18.7645	18.7656			N/A
4/15/2019	USDMXN.fx	1:30:00 PM	18.7742	18.7749			N/A
4/15/2019	USDMXN.fx	3:30:00 PM	18.7796	18.7765			N/A
4/15/2019	USDNOK	9:30:00 AM	8.4884	8.4963			N/A
4/15/2019	USDNOK	11:30:00 AM	8.4869	8.4942			N/A
4/15/2019	USDNOK	1:30:00 PM	8.4965	8.5047			N/A
4/15/2019	USDNOK	3:30:00 PM	8.4862	8.4937			N/A
4/15/2019	USDNOK.fx	9:30:00 AM	8.49256	8.49189			N/A
4/15/2019	USDNOK.fx	11:30:00 AM	8.49088	8.48982			N/A
4/15/2019	USDNOK.fx	1:30:00 PM	8.50033	8.50023			N/A
4/15/2019	USDNOK.fx	3:30:00 PM	8.49008	8.48914			N/A
4/15/2019	USDPLN	9:30:00 AM	3.7829	3.7839			N/A
4/15/2019	USDPLN	11:30:00 AM	3.7809	3.7822			N/A

4/15/2019	USDPLN	1:30:00 PM	3.7788	3.7797			N/A
4/15/2019	USDPLN	3:30:00 PM	3.7775	3.7786			N/A
4/15/2019	USDPLN.fx	9:30:00 AM	3.78196	3.78466			N/A
4/15/2019	USDPLN.fx	11:30:00 AM	3.78006	3.78298			N/A
4/15/2019	USDPLN.fx	1:30:00 PM	3.77798	3.78051			N/A
4/15/2019	USDPLN.fx	3:30:00 PM	3.77658	3.77959			N/A
4/15/2019	USDRUB	9:30:00 AM					N/A
4/15/2019	USDRUB	11:30:00 AM	64.048	64.435			N/A
4/15/2019	USDRUB	1:30:00 PM	64.055	64.451			N/A
4/15/2019	USDRUB	3:30:00 PM	64.082	64.469			N/A
4/15/2019	USDSEK	9:30:00 AM	9.2587	9.2576			N/A
4/15/2019	USDSEK	11:30:00 AM	9.25	9.254			N/A
4/15/2019	USDSEK	1:30:00 PM	9.2506	9.2539			N/A
4/15/2019	USDSEK	3:30:00 PM	9.2466	9.2493			N/A
4/15/2019	USDSEK.fx	9:30:00 AM	9.26151	9.25581			N/A
4/15/2019	USDSEK.fx	11:30:00 AM	9.25253	9.25229			N/A
4/15/2019	USDSEK.fx	1:30:00 PM	9.25308	9.25194			N/A
4/15/2019	USDSEK.fx	3:30:00 PM	9.24903	9.2476			N/A
4/15/2019	USDSGD	9:30:00 AM	1.3523	1.3526			N/A
4/15/2019	USDSGD	11:30:00 AM	1.3522	1.3526			N/A
4/15/2019	USDSGD	1:30:00 PM	1.3521	1.3524			N/A
4/15/2019	USDSGD	3:30:00 PM	1.3523	1.3525			N/A
4/15/2019	USDSGD.fx	9:30:00 AM	1.35218	1.35261			N/A
4/15/2019	USDSGD.fx	11:30:00 AM	1.3521	1.35257			N/A
4/15/2019	USDSGD.fx	1:30:00 PM	1.35206	1.35257			N/A
4/15/2019	USDSGD.fx	3:30:00 PM	1.35225	1.35258			N/A
4/15/2019	USDZAR	9:30:00 AM	13.9774	13.9847			N/A
4/15/2019	USDZAR	11:30:00 AM	13.9293	13.943			N/A
4/15/2019	USDZAR	1:30:00 PM	13.9667	13.981			N/A
4/15/2019	USDZAR	3:30:00 PM	13.9779	13.9917			N/A
4/15/2019	USDZAR.fx	9:30:00 AM					N/A
4/15/2019	USDZAR.fx	11:30:00 AM					N/A
4/15/2019	USDZAR.fx	1:30:00 PM					N/A
4/15/2019	USDZAR.fx	3:30:00 PM					N/A

4/15/2019	XAUUSD	9:30:00 AM	1287.66	1287.7			N/A
4/15/2019	XAUUSD	11:30:00 AM	1286.91	1287.18			N/A
4/15/2019	XAUUSD	1:30:00 PM	1285.79	1285.97			N/A
4/15/2019	XAUUSD	3:30:00 PM	1285.02	1285.06			N/A
4/15/2019	ZARJPY	9:30:00 AM	7.99	8.01			N/A
4/15/2019	ZARJPY	11:30:00 AM	8.01	8.03			N/A
4/15/2019	ZARJPY	1:30:00 PM					N/A
4/15/2019	ZARJPY	3:30:00 PM	7.99	8.01			N/A
4/15/2019	ZARJPY.fx	9:30:00 AM	8.007	8.006			N/A
4/15/2019	ZARJPY.fx	11:30:00 AM	8.03	8.031			N/A
4/15/2019	ZARJPY.fx	1:30:00 PM	8.008	8.012			N/A
4/15/2019	ZARJPY.fx	3:30:00 PM	8.006	8.009			N/A
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4/16/2019	#Bitcoin	11:30:00 AM	5056.36	5131.21			N/A
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4/16/2019	AUDCAD	9:30:00 AM	0.95695	0.95764			N/A
4/16/2019	AUDCAD	11:30:00 AM	0.95649	0.9571			N/A
4/16/2019	AUDCAD	1:30:00 PM	0.95578	0.95637			N/A
4/16/2019	AUDCAD	3:30:00 PM	0.9583	0.95861			N/A
4/16/2019	AUDCAD.fx	9:30:00 AM	0.95727	0.9573			N/A
4/16/2019	AUDCAD.fx	11:30:00 AM	0.9568	0.95676			N/A
4/16/2019	AUDCAD.fx	1:30:00 PM	0.95612	0.95601			N/A
4/16/2019	AUDCAD.fx	3:30:00 PM	0.95863	0.95826			N/A
4/16/2019	AUDCHF	9:30:00 AM	0.71712	0.71782			N/A
4/16/2019	AUDCHF	11:30:00 AM	0.71657	0.71733			N/A
4/16/2019	AUDCHF	1:30:00 PM	0.71798	0.7187			N/A
4/16/2019	AUDCHF	3:30:00 PM	0.72083	0.72144			N/A
4/16/2019	AUDCHF.fx	9:30:00 AM	0.71746	0.71747			N/A
4/16/2019	AUDCHF.fx	11:30:00 AM	0.71696	0.71699			N/A
4/16/2019	AUDCHF.fx	1:30:00 PM	0.71833	0.71835			N/A
4/16/2019	AUDCHF.fx	3:30:00 PM	0.72117	0.72109			N/A
4/16/2019	AUDCZK	9:30:00 AM	16.187	16.205			N/A
4/16/2019	AUDCZK	11:30:00 AM	16.179	16.193			N/A
4/16/2019	AUDCZK	1:30:00 PM	16.197	16.213			N/A
4/16/2019	AUDCZK	3:30:00 PM	16.252	16.269			N/A

4/16/2019	AUDDKK	9:30:00 AM	4.7146	4.7193			N/A
4/16/2019	AUDDKK	11:30:00 AM	4.7112	4.7157			N/A
4/16/2019	AUDDKK	1:30:00 PM	4.7142	4.719			N/A
4/16/2019	AUDDKK	3:30:00 PM	4.7294	4.7338			N/A
4/16/2019	AUDHKD	9:30:00 AM	5.5992	5.6031			N/A
4/16/2019	AUDHKD	11:30:00 AM	5.5978	5.6018			N/A
4/16/2019	AUDHKD	1:30:00 PM	5.597	5.6004			N/A
4/16/2019	AUDHKD	3:30:00 PM	5.6178	5.6204			N/A
4/16/2019	AUDHUF	9:30:00 AM	202.13	202.37			N/A
4/16/2019	AUDHUF	11:30:00 AM	201.78	201.96			N/A
4/16/2019	AUDHUF	1:30:00 PM	202	202.24			N/A
4/16/2019	AUDHUF	3:30:00 PM	202.65	202.71			N/A
4/16/2019	AUDJPY	9:30:00 AM	79.968	80.027			N/A
4/16/2019	AUDJPY	11:30:00 AM	79.925	79.996			N/A
4/16/2019	AUDJPY	1:30:00 PM	79.877	79.943			N/A
4/16/2019	AUDJPY	3:30:00 PM	80.248	80.284			N/A
4/16/2019	AUDJPY.fx	9:30:00 AM	80.001	79.992			N/A
4/16/2019	AUDJPY.fx	11:30:00 AM	79.962	79.962			N/A
4/16/2019	AUDJPY.fx	1:30:00 PM	79.91	79.907			N/A
4/16/2019	AUDJPY.fx	3:30:00 PM	80.282	80.25			N/A
4/16/2019	AUDMXN	9:30:00 AM	13.4958	13.5052			N/A
4/16/2019	AUDMXN	11:30:00 AM	13.4775	13.4869			N/A
4/16/2019	AUDMXN	1:30:00 PM	13.4954	13.503			N/A
4/16/2019	AUDMXN	3:30:00 PM	13.5334	13.5377			N/A
4/16/2019	AUDNOK	9:30:00 AM	6.0668	6.0719			N/A
4/16/2019	AUDNOK	11:30:00 AM	6.0607	6.0662			N/A
4/16/2019	AUDNOK	1:30:00 PM	6.0654	6.0701			N/A
4/16/2019	AUDNOK	3:30:00 PM	6.0792	6.084			N/A
4/16/2019	AUDNOK.f	9:30:00 AM	6.0682	6.0703			N/A
4/16/2019	AUDNOK.f	11:30:00 AM	6.0623	6.0644			N/A
4/16/2019	AUDNOK.f	1:30:00 PM	6.067	6.0683			N/A
4/16/2019	AUDNOK.f	3:30:00 PM	6.0808	6.0825			N/A
4/16/2019	AUDNZD	9:30:00 AM	1.0572	1.05807			N/A
4/16/2019	AUDNZD	11:30:00 AM	1.0576	1.0585			N/A

4/16/2019	AUDNZD	1:30:00 PM	1.05769	1.05856			N/A
4/16/2019	AUDNZD	3:30:00 PM	1.06002	1.06081			N/A
4/16/2019	AUDNZD.fx	9:30:00 AM	1.05763	1.05763			N/A
4/16/2019	AUDNZD.fx	11:30:00 AM	1.05808	1.05806			N/A
4/16/2019	AUDNZD.fx	1:30:00 PM	1.05811	1.05812			N/A
4/16/2019	AUDNZD.fx	3:30:00 PM	1.06045	1.06038			N/A
4/16/2019	AUDPLN	9:30:00 AM	2.7007	2.7037			N/A
4/16/2019	AUDPLN	11:30:00 AM	2.6987	2.7018			N/A
4/16/2019	AUDPLN	1:30:00 PM	2.7003	2.7033			N/A
4/16/2019	AUDPLN	3:30:00 PM	2.7119	2.7143			N/A
4/16/2019	AUDSEK	9:30:00 AM	6.6222	6.6248			N/A
4/16/2019	AUDSEK	11:30:00 AM	6.6105	6.6139			N/A
4/16/2019	AUDSEK	1:30:00 PM	6.6157	6.619			N/A
4/16/2019	AUDSEK	3:30:00 PM	6.6344	6.6369			N/A
4/16/2019	AUDSEK.fx	9:30:00 AM	6.6176	6.6293			N/A
4/16/2019	AUDSEK.fx	11:30:00 AM	6.6064	6.6183			N/A
4/16/2019	AUDSEK.fx	1:30:00 PM	6.6111	6.6233			N/A
4/16/2019	AUDSEK.fx	3:30:00 PM	6.6298	6.6413			N/A
4/16/2019	AUDSGD	9:30:00 AM	0.967	0.9672			N/A
4/16/2019	AUDSGD	11:30:00 AM	0.9672	0.9674			N/A
4/16/2019	AUDSGD	1:30:00 PM	0.9673	0.9674			N/A
4/16/2019	AUDSGD	3:30:00 PM	0.9703	0.9704			N/A
4/16/2019	AUDSGD.fx	9:30:00 AM	0.96704	0.9671			N/A
4/16/2019	AUDSGD.fx	11:30:00 AM	0.96731	0.96739			N/A
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4/16/2019	AUDSGD.fx	3:30:00 PM	0.97039	0.97032			N/A
4/16/2019	AUDUSD	9:30:00 AM	0.71465	0.71477			N/A
4/16/2019	AUDUSD	11:30:00 AM	0.71438	0.71448	600	600	N/A
4/16/2019	AUDUSD	1:30:00 PM	0.7141	0.71417			N/A
4/16/2019	AUDUSD	3:30:00 PM	0.71671	0.71662			N/A
4/16/2019	AUDUSD.fx	9:30:00 AM	0.71471	0.71472			N/A
4/16/2019	AUDUSD.fx	11:30:00 AM	0.71442	0.71443			N/A
4/16/2019	AUDUSD.fx	1:30:00 PM	0.71416	0.71411			N/A
4/16/2019	AUDUSD.fx	3:30:00 PM	0.71676	0.71656			N/A

4/16/2019	AUDZAR	9:30:00 AM	10.0346	10.0476			N/A
4/16/2019	AUDZAR	11:30:00 AM	10.0181	10.0318			N/A
4/16/2019	AUDZAR	1:30:00 PM	10.0438	10.0528			N/A
4/16/2019	AUDZAR	3:30:00 PM	10.0673	10.0757			N/A
4/16/2019	AUS200.i	9:30:00 AM					N/A
4/16/2019	AUS200.i	11:30:00 AM	6292.47	6296.97			N/A
4/16/2019	AUS200.i	1:30:00 PM	6291.07	6294.97			N/A
4/16/2019	AUS200.i	3:30:00 PM	6293.37	6294.97			N/A
4/16/2019	BCHUSD	9:30:00 AM	315.17	326.88			N/A
4/16/2019	BCHUSD	11:30:00 AM	320.66	331.96			N/A
4/16/2019	BCHUSD	1:30:00 PM	318.72	329.19			N/A
4/16/2019	BCHUSD	3:30:00 PM	316.96	327.08			N/A
4/16/2019	CADCHF	9:30:00 AM	0.74912	0.74983			N/A
4/16/2019	CADCHF	11:30:00 AM	0.74898	0.74974			N/A
4/16/2019	CADCHF	1:30:00 PM	0.751	0.75164			N/A
4/16/2019	CADCHF	3:30:00 PM	0.75226	0.7526			N/A
4/16/2019	CADCHF.fx	9:30:00 AM	0.74946	0.74947			N/A
4/16/2019	CADCHF.fx	11:30:00 AM	0.74932	0.74939			N/A
4/16/2019	CADCHF.fx	1:30:00 PM	0.75133	0.75129			N/A
4/16/2019	CADCHF.fx	3:30:00 PM	0.75259	0.75225			N/A
4/16/2019	CADCZK	9:30:00 AM	16.913	16.929			N/A
4/16/2019	CADCZK	11:30:00 AM	16.914	16.93			N/A
4/16/2019	CADCZK	1:30:00 PM	16.946	16.961			N/A
4/16/2019	CADCZK	3:30:00 PM	16.962	16.973			N/A
4/16/2019	CADDDKK	9:30:00 AM					N/A
4/16/2019	CADDDKK	11:30:00 AM	4.924	4.928			N/A
4/16/2019	CADDDKK	1:30:00 PM	4.932	4.935			N/A
4/16/2019	CADDDKK	3:30:00 PM	4.935	4.937			N/A
4/16/2019	CADHKD	9:30:00 AM	5.8498	5.8537			N/A
4/16/2019	CADHKD	11:30:00 AM	5.8516	5.8554			N/A
4/16/2019	CADHKD	1:30:00 PM	5.8555	5.8584			N/A
4/16/2019	CADHKD	3:30:00 PM	5.8636	5.8639			N/A
4/16/2019	CADHUF	9:30:00 AM	211.21	211.37			N/A
4/16/2019	CADHUF	11:30:00 AM	210.97	211.09			N/A

4/16/2019	CADHUF	1:30:00 PM	211.37	211.51			N/A
4/16/2019	CADHUF	3:30:00 PM	211.53	211.47			N/A
4/16/2019	CADJPY	9:30:00 AM	83.535	83.595			N/A
4/16/2019	CADJPY	11:30:00 AM	83.543	83.61			N/A
4/16/2019	CADJPY	1:30:00 PM	83.551	83.605			N/A
4/16/2019	CADJPY	3:30:00 PM	83.748	83.759			N/A
4/16/2019	CADJPY.fx	9:30:00 AM	83.568	83.561			N/A
4/16/2019	CADJPY.fx	11:30:00 AM	83.576	83.576			N/A
4/16/2019	CADJPY.fx	1:30:00 PM	83.586	83.571			N/A
4/16/2019	CADJPY.fx	3:30:00 PM	83.78	83.725			N/A
4/16/2019	CADMXN	9:30:00 AM	14.0993	14.1098			N/A
4/16/2019	CADMXN	11:30:00 AM	14.0885	14.1004			N/A
4/16/2019	CADMXN	1:30:00 PM	14.1168	14.1266			N/A
4/16/2019	CADMXN	3:30:00 PM	14.1228	14.1266			N/A
4/16/2019	CADNOK	9:30:00 AM	6.3364	6.3409			N/A
4/16/2019	CADNOK	11:30:00 AM	6.3322	6.3353			N/A
4/16/2019	CADNOK	1:30:00 PM	6.3424	6.3465			N/A
4/16/2019	CADNOK	3:30:00 PM	6.341	6.3423			N/A
4/16/2019	CADPLN	9:30:00 AM	2.8221	2.8239			N/A
4/16/2019	CADPLN	11:30:00 AM	2.8205	2.8218			N/A
4/16/2019	CADPLN	1:30:00 PM	2.8246	2.8262			N/A
4/16/2019	CADPLN	3:30:00 PM	2.8287	2.8295			N/A
4/16/2019	CADSEK	9:30:00 AM	6.9158	6.9195			N/A
4/16/2019	CADSEK	11:30:00 AM	6.9071	6.9111			N/A
4/16/2019	CADSEK	1:30:00 PM	6.9188	6.9217			N/A
4/16/2019	CADSEK	3:30:00 PM	6.9205	6.9221			N/A
4/16/2019	CADSGD	9:30:00 AM	1.0099	1.01			N/A
4/16/2019	CADSGD	11:30:00 AM	1.0105	1.0108			N/A
4/16/2019	CADSGD	1:30:00 PM	1.0111	1.0114			N/A
4/16/2019	CADSGD	3:30:00 PM	1.012	1.0124			N/A
4/16/2019	CADZAR	9:30:00 AM	10.4832	10.498			N/A
4/16/2019	CADZAR	11:30:00 AM	10.472	10.4884			N/A
4/16/2019	CADZAR	1:30:00 PM	10.506	10.5165			N/A
4/16/2019	CADZAR	3:30:00 PM	10.5059	10.514			N/A

4/16/2019	CHFCZK	9:30:00 AM	22.57	22.585			N/A
4/16/2019	CHFCZK	11:30:00 AM	22.575	22.59			N/A
4/16/2019	CHFCZK	1:30:00 PM	22.557	22.573			N/A
4/16/2019	CHFCZK	3:30:00 PM	22.548	22.561			N/A
4/16/2019	CHFDKK	9:30:00 AM	6.576	6.579			N/A
4/16/2019	CHFDKK	11:30:00 AM	6.575	6.574			N/A
4/16/2019	CHFDKK	1:30:00 PM	6.566	6.569			N/A
4/16/2019	CHFDKK	3:30:00 PM	6.564	6.567			N/A
4/16/2019	CHFDKK.fx	9:30:00 AM	6.5743	6.5806			N/A
4/16/2019	CHFDKK.fx	11:30:00 AM	6.5738	6.5802			N/A
4/16/2019	CHFDKK.fx	1:30:00 PM	6.5657	6.5719			N/A
4/16/2019	CHFDKK.fx	3:30:00 PM	6.5622	6.5672			N/A
4/16/2019	CHFHKD	9:30:00 AM	7.8063	7.8099			N/A
4/16/2019	CHFHKD	11:30:00 AM	7.8099	7.8134			N/A
4/16/2019	CHFHKD	1:30:00 PM	7.7938	7.7972			N/A
4/16/2019	CHFHKD	3:30:00 PM	7.7925	7.7954			N/A
4/16/2019	CHFHUF	9:30:00 AM	281.74	282.12			N/A
4/16/2019	CHFHUF	11:30:00 AM	281.47	281.79			N/A
4/16/2019	CHFHUF	1:30:00 PM	281.24	281.63			N/A
4/16/2019	CHFHUF	3:30:00 PM	281.07	281.19			N/A
4/16/2019	CHFJPY	9:30:00 AM	111.472	111.524			N/A
4/16/2019	CHFJPY	11:30:00 AM	111.497	111.566			N/A
4/16/2019	CHFJPY	1:30:00 PM	111.211	111.272			N/A
4/16/2019	CHFJPY	3:30:00 PM	111.283	111.324			N/A
4/16/2019	CHFJPY.fx	9:30:00 AM	111.506	111.49			N/A
4/16/2019	CHFJPY.fx	11:30:00 AM	111.53	111.532			N/A
4/16/2019	CHFJPY.fx	1:30:00 PM	111.243	111.237			N/A
4/16/2019	CHFJPY.fx	3:30:00 PM	111.316	111.289			N/A
4/16/2019	CHFMXN	9:30:00 AM	18.8126	18.828			N/A
4/16/2019	CHFMXN	11:30:00 AM	18.8022	18.8183			N/A
4/16/2019	CHFMXN	1:30:00 PM	18.7912	18.8037			N/A
4/16/2019	CHFMXN	3:30:00 PM	18.7707	18.7784			N/A
4/16/2019	CHFNOK	9:30:00 AM	8.4586	8.4663			N/A
4/16/2019	CHFNOK	11:30:00 AM	8.4563	8.4598			N/A

4/16/2019	CHFNOK	1:30:00 PM	8.4465	8.454			N/A
4/16/2019	CHFNOK	3:30:00 PM	8.4329	8.4397			N/A
4/16/2019	CHFNOK.fx	9:30:00 AM	8.46192	8.46296			N/A
4/16/2019	CHFNOK.fx	11:30:00 AM	8.45964	8.46118			N/A
4/16/2019	CHFNOK.fx	1:30:00 PM	8.44985	8.45047			N/A
4/16/2019	CHFNOK.fx	3:30:00 PM	8.4363	8.43636			N/A
4/16/2019	CHFPLN	9:30:00 AM	3.765	3.7678			N/A
4/16/2019	CHFPLN	11:30:00 AM	3.7646	3.7678			N/A
4/16/2019	CHFPLN	1:30:00 PM	3.7599	3.7625			N/A
4/16/2019	CHFPLN	3:30:00 PM	3.7614	3.7628			N/A
4/16/2019	CHFPLN.fx	9:30:00 AM	3.76265	3.77023			N/A
4/16/2019	CHFPLN.fx	11:30:00 AM	3.76199	3.77015			N/A
4/16/2019	CHFPLN.fx	1:30:00 PM	3.75756	3.76483			N/A
4/16/2019	CHFPLN.fx	3:30:00 PM	3.75896	3.76505			N/A
4/16/2019	CHFSEK	9:30:00 AM	9.2282	9.2323			N/A
4/16/2019	CHFSEK	11:30:00 AM	9.2181	9.2227			N/A
4/16/2019	CHFSEK	1:30:00 PM	9.2087	9.2132			N/A
4/16/2019	CHFSEK	3:30:00 PM	9.1979	9.2014			N/A
4/16/2019	CHFSGD	9:30:00 AM	1.3477	1.3481			N/A
4/16/2019	CHFSGD	11:30:00 AM	1.349	1.3495			N/A
4/16/2019	CHFSGD	1:30:00 PM	1.3465	1.3468			N/A
4/16/2019	CHFSGD	3:30:00 PM	1.3454	1.3458			N/A
4/16/2019	CHFSGD.fx	9:30:00 AM	1.34781	1.34795			N/A
4/16/2019	CHFSGD.fx	11:30:00 AM	1.34921	1.34932			N/A
4/16/2019	CHFSGD.fx	1:30:00 PM	1.34671	1.3468			N/A
4/16/2019	CHFSGD.fx	3:30:00 PM	1.34555	1.34561			N/A
4/16/2019	CHFZAR	9:30:00 AM	13.992	14.0039			N/A
4/16/2019	CHFZAR	11:30:00 AM	13.9803	13.9937			N/A
4/16/2019	CHFZAR	1:30:00 PM	13.9903	13.9944			N/A
4/16/2019	CHFZAR	3:30:00 PM	13.9678	13.971			N/A
4/16/2019	CZKJPY	9:30:00 AM					N/A
4/16/2019	CZKJPY	11:30:00 AM	4.939	4.942			N/A
4/16/2019	CZKJPY	1:30:00 PM	4.93	4.933			N/A
4/16/2019	CZKJPY	3:30:00 PM	4.934	4.937			N/A



4/16/2019	DAX30.i	9:30:00 AM	12054.86	12049.86			N/A
4/16/2019	DAX30.i	11:30:00 AM	12121.61	12120.36			N/A
4/16/2019	DAX30.i	1:30:00 PM	12108.61	12107.11			N/A
4/16/2019	DAX30.i	3:30:00 PM	12118.11	12116.11			N/A
4/16/2019	DJ30.i	9:30:00 AM					N/A
4/16/2019	DJ30.i	11:30:00 AM					N/A
4/16/2019	DJ30.i	1:30:00 PM					N/A
4/16/2019	DJ30.i	3:30:00 PM					N/A
4/16/2019	DKKJPY	9:30:00 AM					N/A
4/16/2019	DKKJPY	11:30:00 AM					N/A
4/16/2019	DKKJPY	1:30:00 PM	16.95	16.96			N/A
4/16/2019	DKKJPY	3:30:00 PM	16.97	16.98			N/A
4/16/2019	EURAUD	9:30:00 AM	1.58101	1.58135	1000	1000	N/A
4/16/2019	EURAUD	11:30:00 AM	1.58222	1.58259			N/A
4/16/2019	EURAUD	1:30:00 PM	1.58114	1.58157			N/A
4/16/2019	EURAUD	3:30:00 PM	1.57603	1.57636			N/A
4/16/2019	EURAUD.fx	9:30:00 AM	1.58121	1.58112			N/A
4/16/2019	EURAUD.fx	11:30:00 AM	1.58241	1.58238			N/A
4/16/2019	EURAUD.fx	1:30:00 PM	1.58135	1.58135			N/A
4/16/2019	EURAUD.fx	3:30:00 PM	1.57625	1.57615			N/A
4/16/2019	EURCAD	9:30:00 AM	1.51383	1.51463			N/A
4/16/2019	EURCAD	11:30:00 AM	1.51414	1.51501			N/A
4/16/2019	EURCAD	1:30:00 PM	1.51217	1.51284			N/A
4/16/2019	EURCAD	3:30:00 PM	1.5112	1.51145			N/A
4/16/2019	EURCAD.fx	9:30:00 AM	1.51424	1.51421			N/A
4/16/2019	EURCAD.fx	11:30:00 AM	1.51454	1.5146			N/A
4/16/2019	EURCAD.fx	1:30:00 PM	1.51257	1.51243			N/A
4/16/2019	EURCAD.fx	3:30:00 PM	1.51161	1.51104			N/A
4/16/2019	EURCHF	9:30:00 AM	1.13482	1.13497			N/A
4/16/2019	EURCHF	11:30:00 AM	1.13488	1.13505			N/A
4/16/2019	EURCHF	1:30:00 PM	1.1363	1.13641			N/A
4/16/2019	EURCHF	3:30:00 PM	1.13715	1.13709			N/A
4/16/2019	EURCHF.fx	9:30:00 AM	1.13487	1.13491			N/A
4/16/2019	EURCHF.fx	11:30:00 AM	1.13492	1.135			N/A

4/16/2019	EURCHF.fx	1:30:00 PM	1.13637	1.13634			N/A
4/16/2019	EURCHF.fx	3:30:00 PM	1.1372	1.13703			N/A
4/16/2019	EURCZK	9:30:00 AM	25.601	25.64			N/A
4/16/2019	EURCZK	11:30:00 AM	25.609	25.645			N/A
4/16/2019	EURCZK	1:30:00 PM	25.62	25.659			N/A
4/16/2019	EURCZK	3:30:00 PM	25.624	25.661			N/A
4/16/2019	EURDKK	9:30:00 AM	7.4594	7.4607			N/A
4/16/2019	EURDKK	11:30:00 AM	7.4626	7.4639			N/A
4/16/2019	EURDKK	1:30:00 PM	7.4591	7.4603			N/A
4/16/2019	EURDKK	3:30:00 PM	7.4631	7.4644			N/A
4/16/2019	EURGBP	9:30:00 AM	0.86354	0.86359			N/A
4/16/2019	EURGBP	11:30:00 AM	0.86419	0.8641			N/A
4/16/2019	EURGBP	1:30:00 PM	0.86356	0.86366			N/A
4/16/2019	EURGBP	3:30:00 PM	0.86436	0.8642			N/A
4/16/2019	EURGBP.fx	9:30:00 AM	0.86356	0.86354			N/A
4/16/2019	EURGBP.fx	11:30:00 AM	0.86422	0.86407			N/A
4/16/2019	EURGBP.fx	1:30:00 PM	0.86359	0.86363			N/A
4/16/2019	EURGBP.fx	3:30:00 PM	0.8644	0.86415			N/A
4/16/2019	EURHKD	9:30:00 AM	8.8598	8.8646			N/A
4/16/2019	EURHKD	11:30:00 AM	8.8644	8.8699			N/A
4/16/2019	EURHKD	1:30:00 PM	8.8566	8.861			N/A
4/16/2019	EURHKD	3:30:00 PM	8.8619	8.864			N/A
4/16/2019	EURHKD.fx	9:30:00 AM	8.86236	8.86202			N/A
4/16/2019	EURHKD.fx	11:30:00 AM	8.8669	8.86735			N/A
4/16/2019	EURHKD.fx	1:30:00 PM	8.85911	8.85844			N/A
4/16/2019	EURHKD.fx	3:30:00 PM	8.86447	8.86159			N/A
4/16/2019	EURHUF	9:30:00 AM	319.68	320.4			N/A
4/16/2019	EURHUF	11:30:00 AM	319.46	320.16			N/A
4/16/2019	EURHUF	1:30:00 PM	319.53	320.19			N/A
4/16/2019	EURHUF	3:30:00 PM	319.55	320.15			N/A
4/16/2019	EURHUF.fx	9:30:00 AM	319.941	320.13			N/A
4/16/2019	EURHUF.fx	11:30:00 AM	319.728	319.881			N/A
4/16/2019	EURHUF.fx	1:30:00 PM	319.801	320			N/A
4/16/2019	EURHUF.fx	3:30:00 PM	319.831	319.856			N/A

4/16/2019	EURJPY	9:30:00 AM	126.547	126.534			N/A
4/16/2019	EURJPY	11:30:00 AM	126.58	126.586	1000	1000	N/A
4/16/2019	EURJPY	1:30:00 PM	126.415	126.409			N/A
4/16/2019	EURJPY	3:30:00 PM	126.591	126.546			N/A
4/16/2019	EURJPY.fx	9:30:00 AM	126.547	126.529			N/A
4/16/2019	EURJPY.fx	11:30:00 AM	126.582	126.583			N/A
4/16/2019	EURJPY.fx	1:30:00 PM	126.417	126.404			N/A
4/16/2019	EURJPY.fx	3:30:00 PM	126.593	126.543			N/A
4/16/2019	EURMXN	9:30:00 AM	21.3651	21.3817			N/A
4/16/2019	EURMXN	11:30:00 AM	21.3534	21.3738			N/A
4/16/2019	EURMXN	1:30:00 PM	21.3665	21.3816			N/A
4/16/2019	EURMXN	3:30:00 PM	21.3567	21.3687			N/A
4/16/2019	EURMXN.fx	9:30:00 AM	21.3735	21.3732			N/A
4/16/2019	EURMXN.fx	11:30:00 AM	21.3619	21.3653			N/A
4/16/2019	EURMXN.fx	1:30:00 PM	21.3749	21.3732			N/A
4/16/2019	EURMXN.fx	3:30:00 PM	21.3652	21.3602			N/A
4/16/2019	EURNOK	9:30:00 AM	9.5974	9.6091			N/A
4/16/2019	EURNOK	11:30:00 AM	9.5955	9.6081			N/A
4/16/2019	EURNOK	1:30:00 PM	9.5961	9.6078			N/A
4/16/2019	EURNOK	3:30:00 PM	9.5869	9.5989			N/A
4/16/2019	EURNOK.fx	9:30:00 AM	9.60281	9.60368			N/A
4/16/2019	EURNOK.fx	11:30:00 AM	9.60092	9.6026			N/A
4/16/2019	EURNOK.fx	1:30:00 PM	9.60149	9.60248			N/A
4/16/2019	EURNOK.fx	3:30:00 PM	9.59228	9.59356			N/A
4/16/2019	EURNZD	9:30:00 AM	1.67262	1.67328			N/A
4/16/2019	EURNZD	11:30:00 AM	1.6745	1.67539			N/A
4/16/2019	EURNZD	1:30:00 PM	1.67352	1.67432			N/A
4/16/2019	EURNZD	3:30:00 PM	1.67183	1.67241			N/A
4/16/2019	EURNZD.fx	9:30:00 AM	1.67303	1.67287			N/A
4/16/2019	EURNZD.fx	11:30:00 AM	1.67493	1.67496			N/A
4/16/2019	EURNZD.fx	1:30:00 PM	1.67394	1.67388			N/A
4/16/2019	EURNZD.fx	3:30:00 PM	1.67225	1.67198			N/A
4/16/2019	EURPLN	9:30:00 AM	4.2729	4.2758			N/A
4/16/2019	EURPLN	11:30:00 AM	4.2728	4.276			N/A

4/16/2019	EURPLN	1:30:00 PM	4.2726	4.2755			N/A
4/16/2019	EURPLN	3:30:00 PM	4.277	4.279			N/A
4/16/2019	EURPLN.fx	9:30:00 AM	4.27207	4.27666			N/A
4/16/2019	EURPLN.fx	11:30:00 AM	4.27198	4.27682			N/A
4/16/2019	EURPLN.fx	1:30:00 PM	4.27187	4.27612			N/A
4/16/2019	EURPLN.fx	3:30:00 PM	4.27608	4.27952			N/A
4/16/2019	EURRUB	9:30:00 AM					N/A
4/16/2019	EURRUB	11:30:00 AM	72.314	72.754			N/A
4/16/2019	EURRUB	1:30:00 PM	72.374	72.787			N/A
4/16/2019	EURRUB	3:30:00 PM	72.369	72.803			N/A
4/16/2019	EURSEK	9:30:00 AM	10.4748	10.4788			N/A
4/16/2019	EURSEK	11:30:00 AM	10.4648	10.4699			N/A
4/16/2019	EURSEK	1:30:00 PM	10.4658	10.4707			N/A
4/16/2019	EURSEK	3:30:00 PM	10.4609	10.4654			N/A
4/16/2019	EURSEK.fx	9:30:00 AM	10.47647	10.47721			N/A
4/16/2019	EURSEK.fx	11:30:00 AM	10.46642	10.46818			N/A
4/16/2019	EURSEK.fx	1:30:00 PM	10.46747	10.46898			N/A
4/16/2019	EURSEK.fx	3:30:00 PM	10.4627	10.46345			N/A
4/16/2019	EURSGD	9:30:00 AM	1.5293	1.5301			N/A
4/16/2019	EURSGD	11:30:00 AM	1.531	1.5311			N/A
4/16/2019	EURSGD	1:30:00 PM	1.5301	1.5308			N/A
4/16/2019	EURSGD	3:30:00 PM	1.5299	1.5304			N/A
4/16/2019	EURSGD.fx	9:30:00 AM	1.52974	1.52969			N/A
4/16/2019	EURSGD.fx	11:30:00 AM	1.53135	1.53139			N/A
4/16/2019	EURSGD.fx	1:30:00 PM	1.53043	1.53036			N/A
4/16/2019	EURSGD.fx	3:30:00 PM	1.53021	1.52998			N/A
4/16/2019	EURUSD	9:30:00 AM	1.13033	1.13039			N/A
4/16/2019	EURUSD	11:30:00 AM	1.13071	1.13086			N/A
4/16/2019	EURUSD	1:30:00 PM	1.12954	1.12954			N/A
4/16/2019	EURUSD	3:30:00 PM	1.13008	1.1298			N/A
4/16/2019	EURUSD.fx	9:30:00 AM	1.13054	1.13048			N/A
4/16/2019	EURUSD.fx	11:30:00 AM	1.13091	1.13096			N/A
4/16/2019	EURUSD.fx	1:30:00 PM	1.12974	1.12963			N/A
4/16/2019	EURUSD.fx	3:30:00 PM	1.13028	1.1299			N/A

4/16/2019	EURZAR	9:30:00 AM	15.883	15.8991			N/A
4/16/2019	EURZAR	11:30:00 AM	15.8726	15.8917			N/A
4/16/2019	EURZAR	1:30:00 PM	15.9013	15.9086			N/A
4/16/2019	EURZAR	3:30:00 PM	15.8853	15.8982			N/A
4/16/2019	EURZAR.fx	9:30:00 AM	15.88228	15.89934			N/A
4/16/2019	EURZAR.fx	11:30:00 AM	15.87176	15.89191			N/A
4/16/2019	EURZAR.fx	1:30:00 PM	15.90051	15.90915			N/A
4/16/2019	EURZAR.fx	3:30:00 PM	15.88458	15.8989			N/A
4/16/2019	GBPAUD	9:30:00 AM	1.8314	1.83201			N/A
4/16/2019	GBPAUD	11:30:00 AM	1.83176	1.83216			N/A
4/16/2019	GBPAUD	1:30:00 PM	1.83143	1.83214			N/A
4/16/2019	GBPAUD	3:30:00 PM	1.82429	1.82461			N/A
4/16/2019	GBPAUD.fx	9:30:00 AM	1.83178	1.83161			N/A
4/16/2019	GBPAUD.fx	11:30:00 AM	1.83212	1.83181			N/A
4/16/2019	GBPAUD.fx	1:30:00 PM	1.83181	1.83175			N/A
4/16/2019	GBPAUD.fx	3:30:00 PM	1.82467	1.82422			N/A
4/16/2019	GBPCAD	9:30:00 AM	1.75317	1.75385			N/A
4/16/2019	GBPCAD	11:30:00 AM	1.75253	1.75287			N/A
4/16/2019	GBPCAD	1:30:00 PM	1.75108	1.75165			N/A
4/16/2019	GBPCAD	3:30:00 PM	1.74871	1.74846			N/A
4/16/2019	GBPCAD.fx	9:30:00 AM	1.75356	1.75349			N/A
4/16/2019	GBPCAD.fx	11:30:00 AM	1.75288	1.75251			N/A
4/16/2019	GBPCAD.fx	1:30:00 PM	1.75144	1.7513			N/A
4/16/2019	GBPCAD.fx	3:30:00 PM	1.74908	1.74809			N/A
4/16/2019	GBPCHF	9:30:00 AM	1.31403	1.31441			N/A
4/16/2019	GBPCHF	11:30:00 AM	1.31333	1.31349			N/A
4/16/2019	GBPCHF	1:30:00 PM	1.31562	1.31606			N/A
4/16/2019	GBPCHF	3:30:00 PM	1.31556	1.31582			N/A
4/16/2019	GBPCHF.fx	9:30:00 AM	1.3142	1.31421			N/A
4/16/2019	GBPCHF.fx	11:30:00 AM	1.31349	1.31331			N/A
4/16/2019	GBPCHF.fx	1:30:00 PM	1.3158	1.31585			N/A
4/16/2019	GBPCHF.fx	3:30:00 PM	1.31575	1.31562			N/A
4/16/2019	GBPCZK	9:30:00 AM	29.658	29.676			N/A
4/16/2019	GBPCZK	11:30:00 AM	29.644	29.661			N/A

4/16/2019	GBPCZK	1:30:00 PM	29.676	29.698			N/A
4/16/2019	GBPCZK	3:30:00 PM	29.662	29.673			N/A
4/16/2019	GBPDKK	9:30:00 AM	8.638	8.649			N/A
4/16/2019	GBPDKK	11:30:00 AM	8.632	8.642			N/A
4/16/2019	GBPDKK	1:30:00 PM	8.637	8.648			N/A
4/16/2019	GBPDKK	3:30:00 PM	8.631	8.64			N/A
4/16/2019	GBPDKK.fx	9:30:00 AM	8.6362	8.6487			N/A
4/16/2019	GBPDKK.fx	11:30:00 AM	8.6308	8.6419			N/A
4/16/2019	GBPDKK.fx	1:30:00 PM	8.6351	8.6481			N/A
4/16/2019	GBPDKK.fx	3:30:00 PM	8.6302	8.6404			N/A
4/16/2019	GBPHKD	9:30:00 AM	10.2583	10.2625			N/A
4/16/2019	GBPHKD	11:30:00 AM	10.2562	10.2605			N/A
4/16/2019	GBPHKD	1:30:00 PM	10.2538	10.2579			N/A
4/16/2019	GBPHKD	3:30:00 PM	10.2488	10.2542			N/A
4/16/2019	GBPHUF	9:30:00 AM	370.23	370.68			N/A
4/16/2019	GBPHUF	11:30:00 AM	369.59	369.98			N/A
4/16/2019	GBPHUF	1:30:00 PM	370.02	370.5			N/A
4/16/2019	GBPHUF	3:30:00 PM	369.77	369.85			N/A
4/16/2019	GBPJPY	9:30:00 AM	146.531	146.549			N/A
4/16/2019	GBPJPY	11:30:00 AM	146.478	146.489			N/A
4/16/2019	GBPJPY	1:30:00 PM	146.363	146.386			N/A
4/16/2019	GBPJPY	3:30:00 PM	146.431	146.451			N/A
4/16/2019	GBPJPY.fx	9:30:00 AM	146.546	146.529			N/A
4/16/2019	GBPJPY.fx	11:30:00 AM	146.496	146.473			N/A
4/16/2019	GBPJPY.fx	1:30:00 PM	146.381	146.368			N/A
4/16/2019	GBPJPY.fx	3:30:00 PM	146.449	146.431			N/A
4/16/2019	GBPMXN	9:30:00 AM	24.7253	24.7352			N/A
4/16/2019	GBPMXN	11:30:00 AM	24.6933	24.7071			N/A
4/16/2019	GBPMXN	1:30:00 PM	24.7239	24.7346			N/A
4/16/2019	GBPMXN	3:30:00 PM	24.6959	24.6984			N/A
4/16/2019	GBPNOK	9:30:00 AM	11.1134	11.1247			N/A
4/16/2019	GBPNOK	11:30:00 AM	11.1052	11.1141			N/A
4/16/2019	GBPNOK	1:30:00 PM	11.1112	11.1219			N/A
4/16/2019	GBPNOK	3:30:00 PM	11.0932	11.1014			N/A

4/16/2019	GBPNOK.fx	9:30:00 AM	11.11809	11.12001			N/A
4/16/2019	GBPNOK.fx	11:30:00 AM	11.11002	11.10945			N/A
4/16/2019	GBPNOK.fx	1:30:00 PM	11.11591	11.11705			N/A
4/16/2019	GBPNOK.fx	3:30:00 PM	11.09798	11.09661			N/A
4/16/2019	GBPNZD	9:30:00 AM	1.93701	1.93762			N/A
4/16/2019	GBPNZD	11:30:00 AM	1.93809	1.93843			N/A
4/16/2019	GBPNZD	1:30:00 PM	1.93798	1.93864			N/A
4/16/2019	GBPNZD	3:30:00 PM	1.93455	1.93494			N/A
4/16/2019	GBPNZD.fx	9:30:00 AM	1.93737	1.93724			N/A
4/16/2019	GBPNZD.fx	11:30:00 AM	1.93844	1.93805			N/A
4/16/2019	GBPNZD.fx	1:30:00 PM	1.93833	1.93825			N/A
4/16/2019	GBPNZD.fx	3:30:00 PM	1.93497	1.93455			N/A
4/16/2019	GBPPLN	9:30:00 AM	4.9492	4.9508			N/A
4/16/2019	GBPPLN	11:30:00 AM	4.946	4.9467			N/A
4/16/2019	GBPPLN	1:30:00 PM	4.9484	4.9496			N/A
4/16/2019	GBPPLN	3:30:00 PM	4.9502	4.9491			N/A
4/16/2019	GBPPLN.fx	9:30:00 AM	4.94694	4.95309			N/A
4/16/2019	GBPPLN.fx	11:30:00 AM	4.94369	4.94895			N/A
4/16/2019	GBPPLN.fx	1:30:00 PM	4.94618	4.95182			N/A
4/16/2019	GBPPLN.fx	3:30:00 PM	4.94796	4.95124			N/A
4/16/2019	GBPSEK	9:30:00 AM	12.1279	12.1359			N/A
4/16/2019	GBPSEK	11:30:00 AM	12.1095	12.116			N/A
4/16/2019	GBPSEK	1:30:00 PM	12.1169	12.1263			N/A
4/16/2019	GBPSEK	3:30:00 PM	12.103	12.1086			N/A
4/16/2019	GBPSEK.fx	9:30:00 AM	12.12438	12.13986			N/A
4/16/2019	GBPSEK.fx	11:30:00 AM	12.10574	12.11959			N/A
4/16/2019	GBPSEK.fx	1:30:00 PM	12.11329	12.13006			N/A
4/16/2019	GBPSEK.fx	3:30:00 PM	12.09954	12.1118			N/A
4/16/2019	GBPSGD	9:30:00 AM	1.7712	1.7719			N/A
4/16/2019	GBPSGD	11:30:00 AM	1.772	1.7723			N/A
4/16/2019	GBPSGD	1:30:00 PM	1.7719	1.7724			N/A
4/16/2019	GBPSGD	3:30:00 PM	1.7701	1.7707			N/A
4/16/2019	GBPSGD.fx	9:30:00 AM	1.76944	1.77355			N/A
4/16/2019	GBPSGD.fx	11:30:00 AM	1.77013	1.77412			N/A

4/16/2019	GBPSGD.fx	1:30:00 PM	1.77	1.77422			N/A
4/16/2019	GBPSGD.fx	3:30:00 PM	1.76825	1.77253			N/A
4/16/2019	GBPUSD	9:30:00 AM	1.30924	1.30903			N/A
4/16/2019	GBPUSD	11:30:00 AM	1.30885	1.30862			N/A
4/16/2019	GBPUSD	1:30:00 PM	1.30816	1.30806			N/A
4/16/2019	GBPUSD	3:30:00 PM	1.30755	1.30754			N/A
4/16/2019	GBPUSD.fx	9:30:00 AM	1.30928	1.30898			N/A
4/16/2019	GBPUSD.fx	11:30:00 AM	1.30889	1.30859			N/A
4/16/2019	GBPUSD.fx	1:30:00 PM	1.30821	1.30802			N/A
4/16/2019	GBPUSD.fx	3:30:00 PM	1.3076	1.30749			N/A
4/16/2019	GBPZAR	9:30:00 AM	18.3899	18.4145			N/A
4/16/2019	GBPZAR	11:30:00 AM	18.3671	18.3917			N/A
4/16/2019	GBPZAR	1:30:00 PM	18.4097	18.4248			N/A
4/16/2019	GBPZAR	3:30:00 PM	18.3785	18.3953			N/A
4/16/2019	GBPZAR.fx	9:30:00 AM	18.3967	18.4071			N/A
4/16/2019	GBPZAR.fx	11:30:00 AM	18.3741	18.3844			N/A
4/16/2019	GBPZAR.fx	1:30:00 PM	18.4177	18.4178			N/A
4/16/2019	GBPZAR.fx	3:30:00 PM	18.3857	18.3886			N/A
4/16/2019	GOLD	9:30:00 AM	1285.25	1285.38			N/A
4/16/2019	GOLD	11:30:00 AM	1284.51	1284.77			N/A
4/16/2019	GOLD	1:30:00 PM	1283.08	1283.43			N/A
4/16/2019	GOLD	3:30:00 PM	1281.14	1280.02		2	N/A
4/16/2019	HKDJPY	9:30:00 AM	14.28	14.29			N/A
4/16/2019	HKDJPY	11:30:00 AM	14.28	14.28			N/A
4/16/2019	HKDJPY	1:30:00 PM	14.27	14.28			N/A
4/16/2019	HKDJPY	3:30:00 PM	14.28	14.3			N/A
4/16/2019	HKDJPY.fx	9:30:00 AM	14.275	14.279			N/A
4/16/2019	HKDJPY.fx	11:30:00 AM	14.271	14.278			N/A
4/16/2019	HKDJPY.fx	1:30:00 PM	14.265	14.272			N/A
4/16/2019	HKDJPY.fx	3:30:00 PM	14.276	14.283			N/A
4/16/2019	HUFJPY	9:30:00 AM	0.3955	0.3958			N/A
4/16/2019	HUFJPY	11:30:00 AM	0.3962	0.3965			N/A
4/16/2019	HUFJPY	1:30:00 PM	0.3954	0.3957			N/A
4/16/2019	HUFJPY	3:30:00 PM	0.3962	0.3965			N/A



4/16/2019	JP225.i	9:30:00 AM	22199.76	22214.76			N/A
4/16/2019	JP225.i	11:30:00 AM					N/A
4/16/2019	JP225.i	1:30:00 PM	22244.76	22259.76			N/A
4/16/2019	JP225.i	3:30:00 PM	22306.43	22317.26			N/A
4/16/2019	MXNJPY	9:30:00 AM	5.92	5.93			N/A
4/16/2019	MXNJPY	11:30:00 AM					N/A
4/16/2019	MXNJPY	1:30:00 PM	5.92	5.93			N/A
4/16/2019	MXNJPY	3:30:00 PM	5.93	5.93			N/A
4/16/2019	NASDAQ.i	9:30:00 AM					N/A
4/16/2019	NASDAQ.i	11:30:00 AM					N/A
4/16/2019	NASDAQ.i	1:30:00 PM					N/A
4/16/2019	NASDAQ.i	3:30:00 PM					N/A
4/16/2019	NOKJPY	9:30:00 AM	13.17	13.2			N/A
4/16/2019	NOKJPY	11:30:00 AM	13.17	13.2			N/A
4/16/2019	NOKJPY	1:30:00 PM	13.17	13.19			N/A
4/16/2019	NOKJPY	3:30:00 PM	13.19	13.21			N/A
4/16/2019	NOKJPY.fx	9:30:00 AM	13.174	13.18			N/A
4/16/2019	NOKJPY.fx	11:30:00 AM	13.18	13.188			N/A
4/16/2019	NOKJPY.fx	1:30:00 PM	13.163	13.169			N/A
4/16/2019	NOKJPY.fx	3:30:00 PM	13.194	13.197			N/A
4/16/2019	NZDCAD	9:30:00 AM	0.90481	0.90548			N/A
4/16/2019	NZDCAD	11:30:00 AM	0.9039	0.90464			N/A
4/16/2019	NZDCAD	1:30:00 PM	0.9033	0.90386			N/A
4/16/2019	NZDCAD	3:30:00 PM	0.90367	0.90392			N/A
4/16/2019	NZDCAD.fx	9:30:00 AM	0.90515	0.90514			N/A
4/16/2019	NZDCAD.fx	11:30:00 AM	0.90423	0.90429			N/A
4/16/2019	NZDCAD.fx	1:30:00 PM	0.90363	0.90352			N/A
4/16/2019	NZDCAD.fx	3:30:00 PM	0.90401	0.9036			N/A
4/16/2019	NZDCHF	9:30:00 AM	0.67805	0.67874			N/A
4/16/2019	NZDCHF	11:30:00 AM	0.67723	0.678			N/A
4/16/2019	NZDCHF	1:30:00 PM	0.67853	0.67925			N/A
4/16/2019	NZDCHF	3:30:00 PM	0.67972	0.68035			N/A
4/16/2019	NZDCHF.fx	9:30:00 AM	0.67839	0.67839			N/A
4/16/2019	NZDCHF.fx	11:30:00 AM	0.67756	0.67766			N/A

4/16/2019	NZDCHF.fx	1:30:00 PM	0.67886	0.6789			N/A
4/16/2019	NZDCHF.fx	3:30:00 PM	0.68006	0.67997			N/A
4/16/2019	NZDCZK	9:30:00 AM	15.308	15.32			N/A
4/16/2019	NZDCZK	11:30:00 AM	15.294	15.305			N/A
4/16/2019	NZDCZK	1:30:00 PM	15.31	15.321			N/A
4/16/2019	NZDCZK	3:30:00 PM	15.329	15.34			N/A
4/16/2019	NZDDKK	9:30:00 AM					N/A
4/16/2019	NZDDKK	11:30:00 AM	4.452	4.456			N/A
4/16/2019	NZDDKK	1:30:00 PM					N/A
4/16/2019	NZDDKK	3:30:00 PM	4.459	4.463			N/A
4/16/2019	NZDHKD	9:30:00 AM	5.2939	5.2968			N/A
4/16/2019	NZDHKD	11:30:00 AM	5.2902	5.2931			N/A
4/16/2019	NZDHKD	1:30:00 PM	5.2893	5.2921			N/A
4/16/2019	NZDHKD	3:30:00 PM	5.2978	5.2996			N/A
4/16/2019	NZDHUF	9:30:00 AM	191.08	191.35			N/A
4/16/2019	NZDHUF	11:30:00 AM	190.66	190.91			N/A
4/16/2019	NZDHUF	1:30:00 PM	190.87	191.15			N/A
4/16/2019	NZDHUF	3:30:00 PM	191.05	191.2			N/A
4/16/2019	NZDJPY	9:30:00 AM	75.607	75.666			N/A
4/16/2019	NZDJPY	11:30:00 AM	75.539	75.611			N/A
4/16/2019	NZDJPY	1:30:00 PM	75.484	75.553			N/A
4/16/2019	NZDJPY	3:30:00 PM	75.669	75.709			N/A
4/16/2019	NZDJPY.fx	9:30:00 AM	75.639	75.634			N/A
4/16/2019	NZDJPY.fx	11:30:00 AM	75.571	75.579			N/A
4/16/2019	NZDJPY.fx	1:30:00 PM	75.516	75.52			N/A
4/16/2019	NZDJPY.fx	3:30:00 PM	75.701	75.675			N/A
4/16/2019	NZDMXN	9:30:00 AM	12.761	12.7656			N/A
4/16/2019	NZDMXN	11:30:00 AM	12.7389	12.7444			N/A
4/16/2019	NZDMXN	1:30:00 PM	12.7553	12.7585			N/A
4/16/2019	NZDMXN	3:30:00 PM	12.7627	12.7645			N/A
4/16/2019	NZDNOK	9:30:00 AM	5.734	5.7378			N/A
4/16/2019	NZDNOK	11:30:00 AM	5.7243	5.727			N/A
4/16/2019	NZDNOK	1:30:00 PM	5.73	5.7329			N/A
4/16/2019	NZDNOK	3:30:00 PM	5.7296	5.7313			N/A

4/16/2019	NZDPLN	9:30:00 AM	2.5537	2.5551			N/A
4/16/2019	NZDPLN	11:30:00 AM	2.5495	2.5509			N/A
4/16/2019	NZDPLN	1:30:00 PM	2.5517	2.5529			N/A
4/16/2019	NZDPLN	3:30:00 PM	2.5567	2.5564			N/A
4/16/2019	NZDSEK	9:30:00 AM	6.2565	6.2631			N/A
4/16/2019	NZDSEK	11:30:00 AM	6.2427	6.2496			N/A
4/16/2019	NZDSEK	1:30:00 PM	6.248	6.2545			N/A
4/16/2019	NZDSEK	3:30:00 PM	6.251	6.2572			N/A
4/16/2019	NZDSGD	9:30:00 AM	0.9141	0.9147			N/A
4/16/2019	NZDSGD	11:30:00 AM	0.9139	0.9144			N/A
4/16/2019	NZDSGD	1:30:00 PM	0.914	0.9146			N/A
4/16/2019	NZDSGD	3:30:00 PM	0.9149	0.9153			N/A
4/16/2019	NZDSGD.fx	9:30:00 AM	0.91409	0.91462			N/A
4/16/2019	NZDSGD.fx	11:30:00 AM	0.91398	0.91457			N/A
4/16/2019	NZDSGD.fx	1:30:00 PM	0.91397	0.91457			N/A
4/16/2019	NZDSGD.fx	3:30:00 PM	0.91485	0.91521			N/A
4/16/2019	NZDUSD	9:30:00 AM	0.67566	0.67575			N/A
4/16/2019	NZDUSD	11:30:00 AM	0.67507	0.67526			N/A
4/16/2019	NZDUSD	1:30:00 PM	0.67477	0.6749			N/A
4/16/2019	NZDUSD	3:30:00 PM	0.67579	0.6757			N/A
4/16/2019	NZDUSD.fx	9:30:00 AM	0.67573	0.67577			N/A
4/16/2019	NZDUSD.fx	11:30:00 AM	0.67514	0.67526			N/A
4/16/2019	NZDUSD.fx	1:30:00 PM	0.67484	0.67491			N/A
4/16/2019	NZDUSD.fx	3:30:00 PM	0.67587	0.67571			N/A
4/16/2019	NZDZAR	9:30:00 AM	9.4861	9.5008			N/A
4/16/2019	NZDZAR	11:30:00 AM	9.4661	9.4821			N/A
4/16/2019	NZDZAR	1:30:00 PM	9.4908	9.5013			N/A
4/16/2019	NZDZAR	3:30:00 PM	9.4912	9.5016			N/A
4/16/2019	SEKJPY	9:30:00 AM	12.08	12.09			N/A
4/16/2019	SEKJPY	11:30:00 AM	12.09	12.1			N/A
4/16/2019	SEKJPY	1:30:00 PM	12.08	12.09			N/A
4/16/2019	SEKJPY	3:30:00 PM	12.1	12.1			N/A
4/16/2019	SEKJPY.fx	9:30:00 AM	12.069	12.085			N/A
4/16/2019	SEKJPY.fx	11:30:00 AM	12.083	12.102			N/A

4/16/2019	SEKJPY.fx	1:30:00 PM	12.066	12.084			N/A
4/16/2019	SEKJPY.fx	3:30:00 PM	12.09	12.104			N/A
4/16/2019	SGDJPY	9:30:00 AM	82.75	82.71			N/A
4/16/2019	SGDJPY	11:30:00 AM	82.64	82.67			N/A
4/16/2019	SGDJPY	1:30:00 PM	82.63	82.6			N/A
4/16/2019	SGDJPY	3:30:00 PM	82.69	82.71			N/A
4/16/2019	SILVER	9:30:00 AM	14.79	15.17			N/A
4/16/2019	SILVER	11:30:00 AM	14.75	15.14			N/A
4/16/2019	SILVER	1:30:00 PM	14.75	15.13			N/A
4/16/2019	SILVER	3:30:00 PM	14.73	15.1			N/A
4/16/2019	SPX500.i	9:30:00 AM	2911.79	2912.84			N/A
4/16/2019	SPX500.i	11:30:00 AM	2915.54	2916.59			N/A
4/16/2019	SPX500.i	1:30:00 PM	2915.29	2916.34			N/A
4/16/2019	SPX500.i	3:30:00 PM	2917.29	2917.34			N/A
4/16/2019	UK100.i	9:30:00 AM	7460.76	7459.59			N/A
4/16/2019	UK100.i	11:30:00 AM	7475.76	7476.26			N/A
4/16/2019	UK100.i	1:30:00 PM	7473.76	7474.76			N/A
4/16/2019	UK100.i	3:30:00 PM	7484.41	7485.76			N/A
4/16/2019	USDCAD	9:30:00 AM	1.33943	1.3395			N/A
4/16/2019	USDCAD	11:30:00 AM	1.33923	1.33931			N/A
4/16/2019	USDCAD	1:30:00 PM	1.33897	1.33877			N/A
4/16/2019	USDCAD	3:30:00 PM	1.33773	1.3369			N/A
4/16/2019	USDCAD.fx	9:30:00 AM	1.33945	1.33948			N/A
4/16/2019	USDCAD.fx	11:30:00 AM	1.33925	1.33927			N/A
4/16/2019	USDCAD.fx	1:30:00 PM	1.33901	1.33873			N/A
4/16/2019	USDCAD.fx	3:30:00 PM	1.33776	1.33687			N/A
4/16/2019	USDCHF	9:30:00 AM	1.00386	1.00394			N/A
4/16/2019	USDCHF	11:30:00 AM	1.00348	1.00366			N/A
4/16/2019	USDCHF	1:30:00 PM	1.00588	1.00596			N/A
4/16/2019	USDCHF	3:30:00 PM	1.00627	1.00622			N/A
4/16/2019	USDCHF.fx	9:30:00 AM	1.0039	1.00387			N/A
4/16/2019	USDCHF.fx	11:30:00 AM	1.00351	1.00361			N/A
4/16/2019	USDCHF.fx	1:30:00 PM	1.00593	1.0059			N/A
4/16/2019	USDCHF.fx	3:30:00 PM	1.00632	1.00616			N/A

4/16/2019	USDCZK	9:30:00 AM	22.67	22.691			N/A
4/16/2019	USDCZK	11:30:00 AM	22.668	22.69			N/A
4/16/2019	USDCZK	1:30:00 PM	22.703	22.724			N/A
4/16/2019	USDCZK	3:30:00 PM	22.704	22.719			N/A
4/16/2019	USDCZK.fx	9:30:00 AM	22.6782	22.6838			N/A
4/16/2019	USDCZK.fx	11:30:00 AM	22.6768	22.6813			N/A
4/16/2019	USDCZK.fx	1:30:00 PM	22.7115	22.7148			N/A
4/16/2019	USDCZK.fx	3:30:00 PM	22.7125	22.7095			N/A
4/16/2019	USDDKK	9:30:00 AM	6.5985	6.6024			N/A
4/16/2019	USDDKK	11:30:00 AM	6.5958	6.6001			N/A
4/16/2019	USDDKK	1:30:00 PM	6.6036	6.6069			N/A
4/16/2019	USDDKK	3:30:00 PM	6.6021	6.6038			N/A
4/16/2019	USDDKK.fx	9:30:00 AM	6.5992	6.60033			N/A
4/16/2019	USDDKK.fx	11:30:00 AM	6.59642	6.59812			N/A
4/16/2019	USDDKK.fx	1:30:00 PM	6.60401	6.60493			N/A
4/16/2019	USDDKK.fx	3:30:00 PM	6.60261	6.60184			N/A
4/16/2019	USDHKD	9:30:00 AM	7.8392	7.8395			N/A
4/16/2019	USDHKD	11:30:00 AM	7.8404	7.8408			N/A
4/16/2019	USDHKD	1:30:00 PM	7.8415	7.8419			N/A
4/16/2019	USDHKD	3:30:00 PM	7.8425	7.8427			N/A
4/16/2019	USDHKD.fx	9:30:00 AM	7.83918	7.8394			N/A
4/16/2019	USDHKD.fx	11:30:00 AM	7.84035	7.84083			N/A
4/16/2019	USDHKD.fx	1:30:00 PM	7.84148	7.84204			N/A
4/16/2019	USDHKD.fx	3:30:00 PM	7.84248	7.84301			N/A
4/16/2019	USDHUF	9:30:00 AM	282.87	283.32			N/A
4/16/2019	USDHUF	11:30:00 AM	282.55	283			N/A
4/16/2019	USDHUF	1:30:00 PM	282.95	283.39			N/A
4/16/2019	USDHUF	3:30:00 PM	282.89	283.22			N/A
4/16/2019	USDHUF.fx	9:30:00 AM	283.077	283.113			N/A
4/16/2019	USDHUF.fx	11:30:00 AM	282.757	282.805			N/A
4/16/2019	USDHUF.fx	1:30:00 PM	283.143	283.185			N/A
4/16/2019	USDHUF.fx	3:30:00 PM	283.085	283.005			N/A
4/16/2019	USDINR	9:30:00 AM	64.58	74.57			N/A
4/16/2019	USDINR	11:30:00 AM	64.6	74.59			N/A

4/16/2019	USDINR	1:30:00 PM					N/A
4/16/2019	USDINR	3:30:00 PM					N/A
4/16/2019	USDJPY	9:30:00 AM	111.932	111.923	1000	1000	N/A
4/16/2019	USDJPY	11:30:00 AM	111.924	111.933			N/A
4/16/2019	USDJPY	1:30:00 PM	111.892	111.904			N/A
4/16/2019	USDJPY	3:30:00 PM	111.997	112.001			N/A
4/16/2019	USDJPY.fx	9:30:00 AM	111.94	111.915			N/A
4/16/2019	USDJPY.fx	11:30:00 AM	111.929	111.927			N/A
4/16/2019	USDJPY.fx	1:30:00 PM	111.898	111.897			N/A
4/16/2019	USDJPY.fx	3:30:00 PM	112.003	111.994			N/A
4/16/2019	USDMXN	9:30:00 AM	18.893	18.899			N/A
4/16/2019	USDMXN	11:30:00 AM	18.876	18.884			N/A
4/16/2019	USDMXN	1:30:00 PM	18.909	18.912			N/A
4/16/2019	USDMXN	3:30:00 PM	18.898	18.895			N/A
4/16/2019	USDMXN.fx	9:30:00 AM	18.8958	18.8957			N/A
4/16/2019	USDMXN.fx	11:30:00 AM	18.8791	18.8819			N/A
4/16/2019	USDMXN.fx	1:30:00 PM	18.9126	18.9081			N/A
4/16/2019	USDMXN.fx	3:30:00 PM	18.9016	18.8913			N/A
4/16/2019	USDNOK	9:30:00 AM	8.4872	8.4955			N/A
4/16/2019	USDNOK	11:30:00 AM	8.4823	8.4911			N/A
4/16/2019	USDNOK	1:30:00 PM	8.4925	8.4999			N/A
4/16/2019	USDNOK	3:30:00 PM	8.4819	8.4878			N/A
4/16/2019	USDNOK.fx	9:30:00 AM	8.49134	8.4912			N/A
4/16/2019	USDNOK.fx	11:30:00 AM	8.48611	8.48675			N/A
4/16/2019	USDNOK.fx	1:30:00 PM	8.49646	8.49549			N/A
4/16/2019	USDNOK.fx	3:30:00 PM	8.48576	8.48346			N/A
4/16/2019	USDPLN	9:30:00 AM	3.7803	3.7816			N/A
4/16/2019	USDPLN	11:30:00 AM	3.7788	3.7804			N/A
4/16/2019	USDPLN	1:30:00 PM	3.783	3.7837			N/A
4/16/2019	USDPLN	3:30:00 PM	3.7858	3.785			N/A
4/16/2019	USDPLN.fx	9:30:00 AM	3.77958	3.78259			N/A
4/16/2019	USDPLN.fx	11:30:00 AM	3.77787	3.78123			N/A
4/16/2019	USDPLN.fx	1:30:00 PM	3.78208	3.78453			N/A
4/16/2019	USDPLN.fx	3:30:00 PM	3.7849	3.78573			N/A

4/16/2019	USDRUB	9:30:00 AM					N/A
4/16/2019	USDRUB	11:30:00 AM	64.053	64.447			N/A
4/16/2019	USDRUB	1:30:00 PM	64.183	64.545			N/A
4/16/2019	USDRUB	3:30:00 PM	64.158	64.536			N/A
4/16/2019	USDSEK	9:30:00 AM	9.2648	9.2683			N/A
4/16/2019	USDSEK	11:30:00 AM	9.2527	9.2575			N/A
4/16/2019	USDSEK	1:30:00 PM	9.2644	9.2679			N/A
4/16/2019	USDSEK	3:30:00 PM	9.257	9.2586			N/A
4/16/2019	USDSEK.fx	9:30:00 AM	9.26751	9.26656			N/A
4/16/2019	USDSEK.fx	11:30:00 AM	9.25519	9.25577			N/A
4/16/2019	USDSEK.fx	1:30:00 PM	9.26695	9.26613			N/A
4/16/2019	USDSEK.fx	3:30:00 PM	9.2596	9.25689			N/A
4/16/2019	USDSGD	9:30:00 AM	1.3529	1.3533			N/A
4/16/2019	USDSGD	11:30:00 AM	1.3539	1.3542			N/A
4/16/2019	USDSGD	1:30:00 PM	1.3545	1.3548			N/A
4/16/2019	USDSGD	3:30:00 PM	1.3539	1.3541			N/A
4/16/2019	USDSGD.fx	9:30:00 AM	1.35291	1.35331			N/A
4/16/2019	USDSGD.fx	11:30:00 AM	1.35383	1.35428			N/A
4/16/2019	USDSGD.fx	1:30:00 PM	1.35445	1.35496			N/A
4/16/2019	USDSGD.fx	3:30:00 PM	1.35385	1.35413			N/A
4/16/2019	USDZAR	9:30:00 AM	14.0492	14.0636			N/A
4/16/2019	USDZAR	11:30:00 AM	14.0343	14.0523			N/A
4/16/2019	USDZAR	1:30:00 PM	14.0763	14.0821			N/A
4/16/2019	USDZAR	3:30:00 PM	14.0591	14.0662			N/A
4/16/2019	USDZAR.fx	9:30:00 AM					N/A
4/16/2019	USDZAR.fx	11:30:00 AM					N/A
4/16/2019	USDZAR.fx	1:30:00 PM					N/A
4/16/2019	USDZAR.fx	3:30:00 PM					N/A
4/16/2019	XAUUSD	9:30:00 AM	1285.26	1285.37			N/A
4/16/2019	XAUUSD	11:30:00 AM	1284.5	1284.77			N/A
4/16/2019	XAUUSD	1:30:00 PM	1283.09	1283.43			N/A
4/16/2019	XAUUSD	3:30:00 PM	1281.17	1280.01			N/A
4/16/2019	ZARJPY	9:30:00 AM	7.95	7.97			N/A
4/16/2019	ZARJPY	11:30:00 AM	7.95	7.97			N/A

4/16/2019	ZARJPY	1:30:00 PM	7.93	7.96			N/A
4/16/2019	ZARJPY	3:30:00 PM	7.95	7.96			N/A
4/16/2019	ZARJPY.fx	9:30:00 AM	7.962	7.964			N/A
4/16/2019	ZARJPY.fx	11:30:00 AM	7.967	7.972			N/A
4/16/2019	ZARJPY.fx	1:30:00 PM	7.948	7.946			N/A
4/16/2019	ZARJPY.fx	3:30:00 PM	7.964	7.963			N/A
4/17/2019	#AA	9:30:00 AM					N/A
4/17/2019	#AA	11:30:00 AM					N/A
4/17/2019	#AA	1:30:00 PM					N/A
4/17/2019	#AA	3:30:00 PM					N/A
4/17/2019	#AABA	9:30:00 AM					N/A
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4/17/2019	#AABA	3:30:00 PM					N/A
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4/17/2019	#AAL	11:30:00 AM					N/A
4/17/2019	#AAL	1:30:00 PM					N/A
4/17/2019	#AAL	3:30:00 PM					N/A
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4/17/2019	#AMD	11:30:00 AM					N/A
4/17/2019	#AMD	1:30:00 PM					N/A
4/17/2019	#AMD	3:30:00 PM					N/A



4/17/2019	#AMZN	9:30:00 AM					N/A
4/17/2019	#AMZN	11:30:00 AM					N/A
4/17/2019	#AMZN	1:30:00 PM					N/A
4/17/2019	#AMZN	3:30:00 PM					N/A
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4/17/2019	#AXP	3:30:00 PM					N/A
4/17/2019	#BA	9:30:00 AM					N/A
4/17/2019	#BA	11:30:00 AM					N/A
4/17/2019	#BA	1:30:00 PM					N/A
4/17/2019	#BA	3:30:00 PM					N/A
4/17/2019	#BABA	9:30:00 AM					N/A
4/17/2019	#BABA	11:30:00 AM					N/A
4/17/2019	#BABA	1:30:00 PM					N/A
4/17/2019	#BABA	3:30:00 PM					N/A
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4/17/2019	#BAC	11:30:00 AM					N/A
4/17/2019	#BAC	1:30:00 PM					N/A
4/17/2019	#BAC	3:30:00 PM					N/A
4/17/2019	#BARC	9:30:00 AM					N/A
4/17/2019	#BARC	11:30:00 AM					N/A
4/17/2019	#BARC	1:30:00 PM					N/A
4/17/2019	#BARC	3:30:00 PM					N/A
4/17/2019	#BHP	9:30:00 AM					N/A
4/17/2019	#BHP	11:30:00 AM					N/A
4/17/2019	#BHP	1:30:00 PM					N/A
4/17/2019	#BHP	3:30:00 PM					N/A
4/17/2019	#BIDU	9:30:00 AM					N/A
4/17/2019	#BIDU	11:30:00 AM					N/A
4/17/2019	#BIDU	1:30:00 PM					N/A
4/17/2019	#BIDU	3:30:00 PM					N/A
4/17/2019	#Bitcoin	9:30:00 AM	5219.46	5293.71			N/A
4/17/2019	#Bitcoin	11:30:00 AM	5213.46	5287.56			N/A

4/17/2019	#Bitcoin	1:30:00 PM	5199.26	5272.66			N/A
4/17/2019	#Bitcoin	3:30:00 PM	5202.76	5271.76			N/A
4/17/2019	#BK	9:30:00 AM					N/A
4/17/2019	#BK	11:30:00 AM					N/A
4/17/2019	#BK	1:30:00 PM					N/A
4/17/2019	#BK	3:30:00 PM					N/A
4/17/2019	#BLT	9:30:00 AM					N/A
4/17/2019	#BLT	11:30:00 AM					N/A
4/17/2019	#BLT	1:30:00 PM					N/A
4/17/2019	#BLT	3:30:00 PM					N/A
4/17/2019	#BP	9:30:00 AM					N/A
4/17/2019	#BP	11:30:00 AM					N/A
4/17/2019	#BP	1:30:00 PM					N/A
4/17/2019	#BP	3:30:00 PM					N/A
4/17/2019	#BTA	9:30:00 AM					N/A
4/17/2019	#BTA	11:30:00 AM					N/A
4/17/2019	#BTA	1:30:00 PM					N/A
4/17/2019	#BTA	3:30:00 PM					N/A
4/17/2019	#C	9:30:00 AM					N/A
4/17/2019	#C	11:30:00 AM					N/A
4/17/2019	#C	1:30:00 PM					N/A
4/17/2019	#C	3:30:00 PM					N/A
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4/17/2019	#CAT	11:30:00 AM					N/A
4/17/2019	#CAT	1:30:00 PM					N/A
4/17/2019	#CAT	3:30:00 PM					N/A
4/17/2019	#CHL	9:30:00 AM					N/A
4/17/2019	#CHL	11:30:00 AM					N/A
4/17/2019	#CHL	1:30:00 PM					N/A
4/17/2019	#CHL	3:30:00 PM					N/A
4/17/2019	#CL.f	9:30:00 AM	64.573	64.616			N/A
4/17/2019	#CL.f	11:30:00 AM	64.594	64.627			N/A
4/17/2019	#CL.f	1:30:00 PM	64.567	64.607			N/A
4/17/2019	#CL.f	3:30:00 PM	64.507	64.566			N/A

4/17/2019	#CMCSA	9:30:00 AM					N/A
4/17/2019	#CMCSA	11:30:00 AM					N/A
4/17/2019	#CMCSA	1:30:00 PM					N/A
4/17/2019	#CMCSA	3:30:00 PM					N/A
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4/17/2019	#CSCO	11:30:00 AM					N/A
4/17/2019	#CSCO	1:30:00 PM					N/A
4/17/2019	#CSCO	3:30:00 PM					N/A
4/17/2019	#CVX	9:30:00 AM					N/A
4/17/2019	#CVX	11:30:00 AM					N/A
4/17/2019	#CVX	1:30:00 PM					N/A
4/17/2019	#CVX	3:30:00 PM					N/A
4/17/2019	#DD	9:30:00 AM					N/A
4/17/2019	#DD	11:30:00 AM					N/A
4/17/2019	#DD	1:30:00 PM					N/A
4/17/2019	#DD	3:30:00 PM					N/A
4/17/2019	#DIS	9:30:00 AM					N/A
4/17/2019	#DIS	11:30:00 AM					N/A
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4/17/2019	#DIS	3:30:00 PM					N/A
4/17/2019	#DWDP	9:30:00 AM					N/A
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4/17/2019	AUDCHF.fx	1:30:00 PM	0.72581	0.72584			N/A
4/17/2019	AUDCHF.fx	3:30:00 PM	0.72527	0.72519			N/A
4/17/2019	AUDCZK	9:30:00 AM	16.316	16.328			N/A
4/17/2019	AUDCZK	11:30:00 AM	16.308	16.325			N/A
4/17/2019	AUDCZK	1:30:00 PM	16.306	16.323			N/A
4/17/2019	AUDCZK	3:30:00 PM	16.303	16.317			N/A
4/17/2019	AUDDKK	9:30:00 AM	4.7483	4.7516			N/A
4/17/2019	AUDDKK	11:30:00 AM	4.748	4.7524			N/A
4/17/2019	AUDDKK	1:30:00 PM	4.7481	4.7529			N/A
4/17/2019	AUDDKK	3:30:00 PM	4.7486	4.7525			N/A
4/17/2019	AUDHKD	9:30:00 AM	5.6426	5.6443			N/A
4/17/2019	AUDHKD	11:30:00 AM	5.6475	5.6512			N/A

4/17/2019	AUDHKD	1:30:00 PM	5.6439	5.6476			N/A
4/17/2019	AUDHKD	3:30:00 PM	5.6393	5.6426			N/A
4/17/2019	AUDHUF	9:30:00 AM	203.32	203.52			N/A
4/17/2019	AUDHUF	11:30:00 AM	202.87	203.01			N/A
4/17/2019	AUDHUF	1:30:00 PM	203.04	203.28			N/A
4/17/2019	AUDHUF	3:30:00 PM	203.13	203.35			N/A
4/17/2019	AUDJPY	9:30:00 AM	80.553	80.595			N/A
4/17/2019	AUDJPY	11:30:00 AM	80.641	80.694			N/A
4/17/2019	AUDJPY	1:30:00 PM	80.574	80.645			N/A
4/17/2019	AUDJPY	3:30:00 PM	80.516	80.567			N/A
4/17/2019	AUDJPY.fx	9:30:00 AM	80.587	80.56			N/A
4/17/2019	AUDJPY.fx	11:30:00 AM	80.675	80.659			N/A
4/17/2019	AUDJPY.fx	1:30:00 PM	80.608	80.611			N/A
4/17/2019	AUDJPY.fx	3:30:00 PM	80.549	80.534			N/A
4/17/2019	AUDMXN	9:30:00 AM	13.5495	13.5547			N/A
4/17/2019	AUDMXN	11:30:00 AM	13.5349	13.5412			N/A
4/17/2019	AUDMXN	1:30:00 PM	13.5368	13.5469			N/A
4/17/2019	AUDMXN	3:30:00 PM	13.5246	13.5299			N/A
4/17/2019	AUDNOK	9:30:00 AM	6.0979	6.1019			N/A
4/17/2019	AUDNOK	11:30:00 AM	6.0946	6.0993			N/A
4/17/2019	AUDNOK	1:30:00 PM	6.0971	6.1026			N/A
4/17/2019	AUDNOK	3:30:00 PM	6.0926	6.0958			N/A
4/17/2019	AUDNOK.fx	9:30:00 AM	6.0995	6.1003			N/A
4/17/2019	AUDNOK.fx	11:30:00 AM	6.0963	6.0976			N/A
4/17/2019	AUDNOK.fx	1:30:00 PM	6.0988	6.1009			N/A
4/17/2019	AUDNOK.fx	3:30:00 PM	6.0942	6.0943			N/A
4/17/2019	AUDNZD	9:30:00 AM	1.06706	1.06792			N/A
4/17/2019	AUDNZD	11:30:00 AM	1.06844	1.06911			N/A
4/17/2019	AUDNZD	1:30:00 PM	1.06782	1.0687			N/A
4/17/2019	AUDNZD	3:30:00 PM	1.06826	1.06894			N/A
4/17/2019	AUDNZD.fx	9:30:00 AM	1.06749	1.06748			N/A
4/17/2019	AUDNZD.fx	11:30:00 AM	1.06887	1.06867			N/A
4/17/2019	AUDNZD.fx	1:30:00 PM	1.06825	1.06826			N/A
4/17/2019	AUDNZD.fx	3:30:00 PM	1.06866	1.0685			N/A

4/17/2019	AUDPLN	9:30:00 AM	2.7202	2.723			N/A
4/17/2019	AUDPLN	11:30:00 AM	2.7177	2.7207			N/A
4/17/2019	AUDPLN	1:30:00 PM	2.717	2.7202			N/A
4/17/2019	AUDPLN	3:30:00 PM	2.717	2.72			N/A
4/17/2019	AUDSEK	9:30:00 AM	6.6488	6.6503			N/A
4/17/2019	AUDSEK	11:30:00 AM	6.6456	6.6471			N/A
4/17/2019	AUDSEK	1:30:00 PM	6.6416	6.6438			N/A
4/17/2019	AUDSEK	3:30:00 PM	6.6414	6.6437			N/A
4/17/2019	AUDSEK.fx	9:30:00 AM	6.6442	6.6548			N/A
4/17/2019	AUDSEK.fx	11:30:00 AM	6.6409	6.6514			N/A
4/17/2019	AUDSEK.fx	1:30:00 PM	6.6372	6.6483			N/A
4/17/2019	AUDSEK.fx	3:30:00 PM	6.6368	6.6482			N/A
4/17/2019	AUDSGD	9:30:00 AM	0.9738	0.9739			N/A
4/17/2019	AUDSGD	11:30:00 AM	0.974	0.9742			N/A
4/17/2019	AUDSGD	1:30:00 PM	0.9733	0.9736			N/A
4/17/2019	AUDSGD	3:30:00 PM	0.973	0.9731			N/A
4/17/2019	AUDSGD.fx	9:30:00 AM	0.97393	0.9738			N/A
4/17/2019	AUDSGD.fx	11:30:00 AM	0.9741	0.97408			N/A
4/17/2019	AUDSGD.fx	1:30:00 PM	0.97341	0.97353			N/A
4/17/2019	AUDSGD.fx	3:30:00 PM	0.97303	0.97299			N/A
4/17/2019	AUDUSD	9:30:00 AM	0.71981	0.71969			N/A
4/17/2019	AUDUSD	11:30:00 AM	0.72037	0.72038			N/A
4/17/2019	AUDUSD	1:30:00 PM	0.71978	0.7199			N/A
4/17/2019	AUDUSD	3:30:00 PM	0.71938	0.71934			N/A
4/17/2019	AUDUSD.fx	9:30:00 AM	0.71986	0.71964			N/A
4/17/2019	AUDUSD.fx	11:30:00 AM	0.72041	0.72033			N/A
4/17/2019	AUDUSD.fx	1:30:00 PM	0.71982	0.71984			N/A
4/17/2019	AUDUSD.fx	3:30:00 PM	0.71942	0.7193			N/A
4/17/2019	AUDZAR	9:30:00 AM	10.0489	10.0624			N/A
4/17/2019	AUDZAR	11:30:00 AM	10.0298	10.0437			N/A
4/17/2019	AUDZAR	1:30:00 PM	10.0204	10.0332			N/A
4/17/2019	AUDZAR	3:30:00 PM	10.032	10.0443			N/A
4/17/2019	AUS200.i	9:30:00 AM	6257.32	6261.82			N/A
4/17/2019	AUS200.i	11:30:00 AM	6257.72	6259.52			N/A

4/17/2019	AUS200.i	1:30:00 PM	6263.02	6266.52			N/A
4/17/2019	AUS200.i	3:30:00 PM	6268.42	6270.02			N/A
4/17/2019	BCHUSD	9:30:00 AM	313.1	325.1			N/A
4/17/2019	BCHUSD	11:30:00 AM	312.7	324.24			N/A
4/17/2019	BCHUSD	1:30:00 PM	311.43	323.18			N/A
4/17/2019	BCHUSD	3:30:00 PM	312.28	323.51			N/A
4/17/2019	CADCHF	9:30:00 AM	0.75534	0.75582			N/A
4/17/2019	CADCHF	11:30:00 AM	0.75674	0.75741			N/A
4/17/2019	CADCHF	1:30:00 PM	0.75658	0.75734			N/A
4/17/2019	CADCHF	3:30:00 PM	0.75806	0.757			N/A
4/17/2019	CADCHF.fx	9:30:00 AM	0.75568	0.75546			N/A
4/17/2019	CADCHF.fx	11:30:00 AM	0.75707	0.75707			N/A
4/17/2019	CADCHF.fx	1:30:00 PM	0.75692	0.75696			N/A
4/17/2019	CADCHF.fx	3:30:00 PM	0.7584	0.75675			N/A
4/17/2019	CADCZK	9:30:00 AM	17.006	17.021			N/A
4/17/2019	CADCZK	11:30:00 AM	17.008	17.023			N/A
4/17/2019	CADCZK	1:30:00 PM	17.008	17.024			N/A
4/17/2019	CADCZK	3:30:00 PM	17.052	17.028			N/A
4/17/2019	CADDDKK	9:30:00 AM	4.949	4.952			N/A
4/17/2019	CADDDKK	11:30:00 AM	4.95	4.953			N/A
4/17/2019	CADDDKK	1:30:00 PM					N/A
4/17/2019	CADDDKK	3:30:00 PM	4.964	4.956			N/A
4/17/2019	CADHKD	9:30:00 AM	5.8805	5.8845			N/A
4/17/2019	CADHKD	11:30:00 AM	5.8901	5.8938			N/A
4/17/2019	CADHKD	1:30:00 PM	5.8867	5.8905			N/A
4/17/2019	CADHKD	3:30:00 PM	5.8982	5.8876			N/A
4/17/2019	CADHUF	9:30:00 AM	211.95	212.1			N/A
4/17/2019	CADHUF	11:30:00 AM	211.58	211.67			N/A
4/17/2019	CADHUF	1:30:00 PM	211.81	211.98			N/A
4/17/2019	CADHUF	3:30:00 PM	212.49	212.15			N/A
4/17/2019	CADJPY	9:30:00 AM	83.955	84.009			N/A
4/17/2019	CADJPY	11:30:00 AM	84.085	84.145			N/A
4/17/2019	CADJPY	1:30:00 PM	84.038	84.111			N/A
4/17/2019	CADJPY	3:30:00 PM	84.206	84.066			N/A



4/17/2019	CADJPY.fx	9:30:00 AM	83.988	83.974			N/A
4/17/2019	CADJPY.fx	11:30:00 AM	84.117	84.111			N/A
4/17/2019	CADJPY.fx	1:30:00 PM	84.072	84.077			N/A
4/17/2019	CADJPY.fx	3:30:00 PM	84.239	84.045			N/A
4/17/2019	CADMXN	9:30:00 AM	14.1228	14.128			N/A
4/17/2019	CADMXN	11:30:00 AM	14.1142	14.1231			N/A
4/17/2019	CADMXN	1:30:00 PM	14.1185	14.1302			N/A
4/17/2019	CADMXN	3:30:00 PM	14.1449	14.1214			N/A
4/17/2019	CADNOK	9:30:00 AM	6.3533	6.3573			N/A
4/17/2019	CADNOK	11:30:00 AM	6.352	6.3553			N/A
4/17/2019	CADNOK	1:30:00 PM	6.3578	6.3623			N/A
4/17/2019	CADNOK	3:30:00 PM	6.3674	6.3557			N/A
4/17/2019	CADPLN	9:30:00 AM	2.8354	2.8373			N/A
4/17/2019	CADPLN	11:30:00 AM	2.8332	2.8347			N/A
4/17/2019	CADPLN	1:30:00 PM	2.8341	2.8359			N/A
4/17/2019	CADPLN	3:30:00 PM	2.841	2.8345			N/A
4/17/2019	CADSEK	9:30:00 AM	6.9269	6.9296			N/A
4/17/2019	CADSEK	11:30:00 AM	6.9262	6.9293			N/A
4/17/2019	CADSEK	1:30:00 PM	6.9245	6.9273			N/A
4/17/2019	CADSEK	3:30:00 PM	6.9428	6.9301			N/A
4/17/2019	CADSGD	9:30:00 AM	1.0143	1.0146			N/A
4/17/2019	CADSGD	11:30:00 AM	1.0151	1.0155			N/A
4/17/2019	CADSGD	1:30:00 PM	1.0144	1.0147			N/A
4/17/2019	CADSGD	3:30:00 PM	1.0163	1.0141			N/A
4/17/2019	CADZAR	9:30:00 AM	10.4742	10.4878			N/A
4/17/2019	CADZAR	11:30:00 AM	10.4586	10.4748			N/A
4/17/2019	CADZAR	1:30:00 PM	10.4509	10.4653			N/A
4/17/2019	CADZAR	3:30:00 PM	10.4919	10.4834			N/A
4/17/2019	CHFCZK	9:30:00 AM	22.513	22.527			N/A
4/17/2019	CHFCZK	11:30:00 AM	22.47	22.486			N/A
4/17/2019	CHFCZK	1:30:00 PM	22.475	22.491			N/A
4/17/2019	CHFCZK	3:30:00 PM	22.49	22.505			N/A
4/17/2019	CHFDKK	9:30:00 AM	6.551	6.554			N/A
4/17/2019	CHFDKK	11:30:00 AM	6.541	6.543			N/A

4/17/2019	CHFDKK	1:30:00 PM	6.544	6.547			N/A
4/17/2019	CHFDKK	3:30:00 PM	6.55	6.553			N/A
4/17/2019	CHFDKK.fx	9:30:00 AM	6.5498	6.5556			N/A
4/17/2019	CHFDKK.fx	11:30:00 AM	6.5394	6.5457			N/A
4/17/2019	CHFDKK.fx	1:30:00 PM	6.5427	6.5489			N/A
4/17/2019	CHFDKK.fx	3:30:00 PM	6.5484	6.5539			N/A
4/17/2019	CHFHKD	9:30:00 AM	7.7859	7.7888			N/A
4/17/2019	CHFHKD	11:30:00 AM	7.781	7.7848			N/A
4/17/2019	CHFHKD	1:30:00 PM	7.7783	7.7822			N/A
4/17/2019	CHFHKD	3:30:00 PM	7.7791	7.783			N/A
4/17/2019	CHFHUF	9:30:00 AM	280.49	280.8			N/A
4/17/2019	CHFHUF	11:30:00 AM	279.45	279.69			N/A
4/17/2019	CHFHUF	1:30:00 PM	279.78	280.16			N/A
4/17/2019	CHFHUF	3:30:00 PM	280.14	280.53			N/A
4/17/2019	CHFJPY	9:30:00 AM	111.115	111.175			N/A
4/17/2019	CHFJPY	11:30:00 AM	111.067	111.129			N/A
4/17/2019	CHFJPY	1:30:00 PM	111.029	111.095			N/A
4/17/2019	CHFJPY	3:30:00 PM	111.041	111.09			N/A
4/17/2019	CHFJPY.fx	9:30:00 AM	111.148	111.14			N/A
4/17/2019	CHFJPY.fx	11:30:00 AM	111.1	111.096			N/A
4/17/2019	CHFJPY.fx	1:30:00 PM	111.062	111.06			N/A
4/17/2019	CHFJPY.fx	3:30:00 PM	111.073	111.057			N/A
4/17/2019	CHFMXN	9:30:00 AM	18.6978	18.6988			N/A
4/17/2019	CHFMXN	11:30:00 AM	18.6445	18.6567			N/A
4/17/2019	CHFMXN	1:30:00 PM	18.6532	18.6696			N/A
4/17/2019	CHFMXN	3:30:00 PM	18.6533	18.6662			N/A
4/17/2019	CHFNOK	9:30:00 AM	8.4116	8.4183			N/A
4/17/2019	CHFNOK	11:30:00 AM	8.3932	8.4016			N/A
4/17/2019	CHFNOK	1:30:00 PM	8.4005	8.4088			N/A
4/17/2019	CHFNOK	3:30:00 PM	8.4009	8.4068			N/A
4/17/2019	CHFNOK.fx	9:30:00 AM	8.41504	8.41487			N/A
4/17/2019	CHFNOK.fx	11:30:00 AM	8.39663	8.39815			N/A
4/17/2019	CHFNOK.fx	1:30:00 PM	8.40391	8.4054			N/A
4/17/2019	CHFNOK.fx	3:30:00 PM	8.40422	8.40334			N/A

4/17/2019	CHFPLN	9:30:00 AM	3.7532	3.755			N/A
4/17/2019	CHFPLN	11:30:00 AM	3.7432	3.7465			N/A
4/17/2019	CHFPLN	1:30:00 PM	3.744	3.7472			N/A
4/17/2019	CHFPLN	3:30:00 PM	3.7467	3.7494			N/A
4/17/2019	CHFPLN.fx	9:30:00 AM	3.75076	3.75735			N/A
4/17/2019	CHFPLN.fx	11:30:00 AM	3.74066	3.74895			N/A
4/17/2019	CHFPLN.fx	1:30:00 PM	3.74164	3.74936			N/A
4/17/2019	CHFPLN.fx	3:30:00 PM	3.74436	3.75185			N/A
4/17/2019	CHFSEK	9:30:00 AM	9.1687	9.1735			N/A
4/17/2019	CHFSEK	11:30:00 AM	9.15	9.154			N/A
4/17/2019	CHFSEK	1:30:00 PM	9.1495	9.1526			N/A
4/17/2019	CHFSEK	3:30:00 PM	9.1559	9.1598			N/A
4/17/2019	CHFSGD	9:30:00 AM	1.3432	1.3436			N/A
4/17/2019	CHFSGD	11:30:00 AM	1.3414	1.3418			N/A
4/17/2019	CHFSGD	1:30:00 PM	1.341	1.3414			N/A
4/17/2019	CHFSGD	3:30:00 PM	1.3416	1.3419			N/A
4/17/2019	CHFSGD.fx	9:30:00 AM	1.34335	1.3433			N/A
4/17/2019	CHFSGD.fx	11:30:00 AM	1.34152	1.34158			N/A
4/17/2019	CHFSGD.fx	1:30:00 PM	1.34119	1.34124			N/A
4/17/2019	CHFSGD.fx	3:30:00 PM	1.34177	1.34173			N/A
4/17/2019	CHFZAR	9:30:00 AM	13.8705	13.8787			N/A
4/17/2019	CHFZAR	11:30:00 AM	13.8208	13.8342			N/A
4/17/2019	CHFZAR	1:30:00 PM	13.8118	13.8238			N/A
4/17/2019	CHFZAR	3:30:00 PM	13.8407	13.8532			N/A
4/17/2019	CZKJPY	9:30:00 AM					N/A
4/17/2019	CZKJPY	11:30:00 AM	4.943	4.947			N/A
4/17/2019	CZKJPY	1:30:00 PM	4.941	4.945			N/A
4/17/2019	CZKJPY	3:30:00 PM					N/A
4/17/2019	DAX30.i	9:30:00 AM	12125.57	12123.07			N/A
4/17/2019	DAX30.i	11:30:00 AM	12118.82	12116.82			N/A
4/17/2019	DAX30.i	1:30:00 PM	12139.82	12139.07			N/A
4/17/2019	DAX30.i	3:30:00 PM	12163.32	12163.07			N/A
4/17/2019	DJ30.i	9:30:00 AM					N/A
4/17/2019	DJ30.i	11:30:00 AM					N/A

4/17/2019	DJ30.i	1:30:00 PM					N/A
4/17/2019	DJ30.i	3:30:00 PM					N/A
4/17/2019	DKKJPY	9:30:00 AM					N/A
4/17/2019	DKKJPY	11:30:00 AM	16.99	17.01			N/A
4/17/2019	DKKJPY	1:30:00 PM	16.98	16.99			N/A
4/17/2019	DKKJPY	3:30:00 PM					N/A
4/17/2019	EURAUD	9:30:00 AM	1.57083	1.57079			N/A
4/17/2019	EURAUD	11:30:00 AM	1.57065	1.5709			N/A
4/17/2019	EURAUD	1:30:00 PM	1.57046	1.57095			N/A
4/17/2019	EURAUD	3:30:00 PM	1.57067	1.57085			N/A
4/17/2019	EURAUD.fx	9:30:00 AM	1.57105	1.57057			N/A
4/17/2019	EURAUD.fx	11:30:00 AM	1.57084	1.57069			N/A
4/17/2019	EURAUD.fx	1:30:00 PM	1.57067	1.57074			N/A
4/17/2019	EURAUD.fx	3:30:00 PM	1.57086	1.57062			N/A
4/17/2019	EURCAD	9:30:00 AM	1.50739	1.50799			N/A
4/17/2019	EURCAD	11:30:00 AM	1.50671	1.50744			N/A
4/17/2019	EURCAD	1:30:00 PM	1.50622	1.50709			N/A
4/17/2019	EURCAD	3:30:00 PM	1.50572	1.50287			N/A
4/17/2019	EURCAD.fx	9:30:00 AM	1.50781	1.50757			N/A
4/17/2019	EURCAD.fx	11:30:00 AM	1.50712	1.50701			N/A
4/17/2019	EURCAD.fx	1:30:00 PM	1.50663	1.50667			N/A
4/17/2019	EURCAD.fx	3:30:00 PM	1.50596	1.50247			N/A
4/17/2019	EURCHF	9:30:00 AM	1.13918	1.13917			N/A
4/17/2019	EURCHF	11:30:00 AM	1.14088	1.14104			N/A
4/17/2019	EURCHF	1:30:00 PM	1.14041	1.14052			N/A
4/17/2019	EURCHF	3:30:00 PM	1.13953	1.13956			N/A
4/17/2019	EURCHF.fx	9:30:00 AM	1.13923	1.13912			N/A
4/17/2019	EURCHF.fx	11:30:00 AM	1.14093	1.14099			N/A
4/17/2019	EURCHF.fx	1:30:00 PM	1.14047	1.14045			N/A
4/17/2019	EURCHF.fx	3:30:00 PM	1.13958	1.1395			N/A
4/17/2019	EURCZK	9:30:00 AM	25.632	25.671			N/A
4/17/2019	EURCZK	11:30:00 AM	25.625	25.662			N/A
4/17/2019	EURCZK	1:30:00 PM	25.619	25.657			N/A
4/17/2019	EURCZK	3:30:00 PM					N/A

4/17/2019	EURDKK	9:30:00 AM	7.4637	7.4638			N/A
4/17/2019	EURDKK	11:30:00 AM	7.4627	7.464			N/A
4/17/2019	EURDKK	1:30:00 PM	7.4628	7.464			N/A
4/17/2019	EURDKK	3:30:00 PM					N/A
4/17/2019	EURGBP	9:30:00 AM	0.8659	0.86586			N/A
4/17/2019	EURGBP	11:30:00 AM	0.86792	0.86742		3000	N/A
4/17/2019	EURGBP	1:30:00 PM	0.86667	0.86675			N/A
4/17/2019	EURGBP	3:30:00 PM	0.86599	0.86605			N/A
4/17/2019	EURGBP.fx	9:30:00 AM	0.86592	0.8658			N/A
4/17/2019	EURGBP.fx	11:30:00 AM	0.86793	0.86741			N/A
4/17/2019	EURGBP.fx	1:30:00 PM	0.8667	0.86671			N/A
4/17/2019	EURGBP.fx	3:30:00 PM	0.86602	0.866			N/A
4/17/2019	EURHKD	9:30:00 AM	8.8688	8.8734			N/A
4/17/2019	EURHKD	11:30:00 AM	8.8783	8.8829			N/A
4/17/2019	EURHKD	1:30:00 PM	8.8711	8.8756			N/A
4/17/2019	EURHKD	3:30:00 PM	8.8656	8.8702			N/A
4/17/2019	EURHKD.fx	9:30:00 AM	8.8713	8.87083			N/A
4/17/2019	EURHKD.fx	11:30:00 AM	8.88085	8.88035			N/A
4/17/2019	EURHKD.fx	1:30:00 PM	8.87365	8.87307			N/A
4/17/2019	EURHKD.fx	3:30:00 PM	8.86816	8.86766			N/A
4/17/2019	EURHUF	9:30:00 AM	319.46	320.14			N/A
4/17/2019	EURHUF	11:30:00 AM	318.79	319.48			N/A
4/17/2019	EURHUF	1:30:00 PM	319.01	319.71			N/A
4/17/2019	EURHUF	3:30:00 PM	319.33	319.78			N/A
4/17/2019	EURHUF.fx	9:30:00 AM	319.714	319.881			N/A
4/17/2019	EURHUF.fx	11:30:00 AM	319.058	319.221			N/A
4/17/2019	EURHUF.fx	1:30:00 PM	319.291	319.481			N/A
4/17/2019	EURHUF.fx	3:30:00 PM	319.601	319.79			N/A
4/17/2019	EURJPY	9:30:00 AM	126.616	126.616			N/A
4/17/2019	EURJPY	11:30:00 AM	126.762	126.758			N/A
4/17/2019	EURJPY	1:30:00 PM	126.661	126.665			N/A
4/17/2019	EURJPY	3:30:00 PM	126.563	126.558			N/A
4/17/2019	EURJPY.fx	9:30:00 AM	126.617	126.612			N/A
4/17/2019	EURJPY.fx	11:30:00 AM	126.763	126.754			N/A

4/17/2019	EURJPY.fx	1:30:00 PM	126.663	126.662			N/A
4/17/2019	EURJPY.fx	3:30:00 PM	126.566	126.556			N/A
4/17/2019	EURMXN	9:30:00 AM	21.3001	21.3061			N/A
4/17/2019	EURMXN	11:30:00 AM	21.277	21.2913			N/A
4/17/2019	EURMXN	1:30:00 PM	21.2771	21.2948			N/A
4/17/2019	EURMXN	3:30:00 PM	21.2606	21.2772			N/A
4/17/2019	EURMXN.fx	9:30:00 AM	21.3085	21.2976			N/A
4/17/2019	EURMXN.fx	11:30:00 AM	21.2852	21.2832			N/A
4/17/2019	EURMXN.fx	1:30:00 PM	21.285	21.2869			N/A
4/17/2019	EURMXN.fx	3:30:00 PM	21.2691	21.2687			N/A
4/17/2019	EURNOK	9:30:00 AM	9.5798	9.5917			N/A
4/17/2019	EURNOK	11:30:00 AM	9.5748	9.5814			N/A
4/17/2019	EURNOK	1:30:00 PM	9.5789	9.5892			N/A
4/17/2019	EURNOK	3:30:00 PM	9.5712	9.5819			N/A
4/17/2019	EURNOK.fx	9:30:00 AM	9.58509	9.58633			N/A
4/17/2019	EURNOK.fx	11:30:00 AM	9.5802	9.58191			N/A
4/17/2019	EURNOK.fx	1:30:00 PM	9.58439	9.58628			N/A
4/17/2019	EURNOK.fx	3:30:00 PM	9.57643	9.57655			N/A
4/17/2019	EURNZD	9:30:00 AM	1.67736	1.67765			N/A
4/17/2019	EURNZD	11:30:00 AM	1.67909	1.6798			N/A
4/17/2019	EURNZD	1:30:00 PM	1.67814	1.67894			N/A
4/17/2019	EURNZD	3:30:00 PM	1.6791	1.67927			N/A
4/17/2019	EURNZD.fx	9:30:00 AM	1.67777	1.67722			N/A
4/17/2019	EURNZD.fx	11:30:00 AM	1.6795	1.67937			N/A
4/17/2019	EURNZD.fx	1:30:00 PM	1.67857	1.67852			N/A
4/17/2019	EURNZD.fx	3:30:00 PM	1.67948	1.67883			N/A
4/17/2019	EURPLN	9:30:00 AM	4.2754	4.2775			N/A
4/17/2019	EURPLN	11:30:00 AM	4.271	4.2714			N/A
4/17/2019	EURPLN	1:30:00 PM	4.2699	4.2733			N/A
4/17/2019	EURPLN	3:30:00 PM	4.2698	4.2726			N/A
4/17/2019	EURPLN.fx	9:30:00 AM	4.27462	4.27832			N/A
4/17/2019	EURPLN.fx	11:30:00 AM	4.2702	4.27513			N/A
4/17/2019	EURPLN.fx	1:30:00 PM	4.2693	4.27382			N/A
4/17/2019	EURPLN.fx	3:30:00 PM	4.26924	4.27323			N/A

4/17/2019	EURRUB	9:30:00 AM					N/A
4/17/2019	EURRUB	11:30:00 AM	71.93	72.359			N/A
4/17/2019	EURRUB	1:30:00 PM	71.899	72.328			N/A
4/17/2019	EURRUB	3:30:00 PM	71.838	72.262			N/A
4/17/2019	EURSEK	9:30:00 AM	10.4468	10.4516			N/A
4/17/2019	EURSEK	11:30:00 AM	10.4418	10.4456			N/A
4/17/2019	EURSEK	1:30:00 PM	10.4364	10.4394			N/A
4/17/2019	EURSEK	3:30:00 PM	10.4356	10.4396			N/A
4/17/2019	EURSEK.fx	9:30:00 AM	10.44846	10.4499			N/A
4/17/2019	EURSEK.fx	11:30:00 AM	10.44337	10.44399			N/A
4/17/2019	EURSEK.fx	1:30:00 PM	10.43802	10.43771			N/A
4/17/2019	EURSEK.fx	3:30:00 PM	10.43717	10.43801			N/A
4/17/2019	EURSGD	9:30:00 AM	1.53	1.5307			N/A
4/17/2019	EURSGD	11:30:00 AM	1.5303	1.531			N/A
4/17/2019	EURSGD	1:30:00 PM	1.5292	1.5301			N/A
4/17/2019	EURSGD	3:30:00 PM	1.5285	1.5294			N/A
4/17/2019	EURSGD.fx	9:30:00 AM	1.53032	1.53031			N/A
4/17/2019	EURSGD.fx	11:30:00 AM	1.53063	1.53067			N/A
4/17/2019	EURSGD.fx	1:30:00 PM	1.52961	1.52962			N/A
4/17/2019	EURSGD.fx	3:30:00 PM	1.52895	1.52897			N/A
4/17/2019	EURUSD	9:30:00 AM	1.13085	1.13085			N/A
4/17/2019	EURUSD	11:30:00 AM	1.13178	1.13182			N/A
4/17/2019	EURUSD	1:30:00 PM	1.13092	1.13097			N/A
4/17/2019	EURUSD	3:30:00 PM	1.13025	1.13026			N/A
4/17/2019	EURUSD.fx	9:30:00 AM	1.13105	1.13094			N/A
4/17/2019	EURUSD.fx	11:30:00 AM	1.13197	1.13192			N/A
4/17/2019	EURUSD.fx	1:30:00 PM	1.13112	1.13106			N/A
4/17/2019	EURUSD.fx	3:30:00 PM	1.13044	1.13038			N/A
4/17/2019	EURZAR	9:30:00 AM	15.8033	15.8171			N/A
4/17/2019	EURZAR	11:30:00 AM	15.7765	15.7893			N/A
4/17/2019	EURZAR	1:30:00 PM	15.7553	15.7707			N/A
4/17/2019	EURZAR	3:30:00 PM	15.7795	15.797			N/A
4/17/2019	EURZAR.fx	9:30:00 AM	15.80298	15.81734			N/A
4/17/2019	EURZAR.fx	11:30:00 AM	15.77606	15.78951			N/A

4/17/2019	EURZAR.fx	1:30:00 PM	15.75488	15.77089			N/A
4/17/2019	EURZAR.fx	3:30:00 PM	15.7789	15.79783			N/A
4/17/2019	GBPAUD	9:30:00 AM	1.8146	1.815			N/A
4/17/2019	GBPAUD	11:30:00 AM	1.81113	1.81044			N/A
4/17/2019	GBPAUD	1:30:00 PM	1.81258	1.81338			N/A
4/17/2019	GBPAUD	3:30:00 PM	1.81418	1.81466			N/A
4/17/2019	GBPAUD.fx	9:30:00 AM	1.815	1.8146			N/A
4/17/2019	GBPAUD.fx	11:30:00 AM	1.81143	1.81032			N/A
4/17/2019	GBPAUD.fx	1:30:00 PM	1.81296	1.81298			N/A
4/17/2019	GBPAUD.fx	3:30:00 PM	1.81454	1.81426			N/A
4/17/2019	GBPCAD	9:30:00 AM	1.74095	1.74148			N/A
4/17/2019	GBPCAD	11:30:00 AM	1.737	1.73658			N/A
4/17/2019	GBPCAD	1:30:00 PM	1.73796	1.73874			N/A
4/17/2019	GBPCAD	3:30:00 PM	1.73878	1.73547			N/A
4/17/2019	GBPCAD.fx	9:30:00 AM	1.74132	1.74111			N/A
4/17/2019	GBPCAD.fx	11:30:00 AM	1.73732	1.7363			N/A
4/17/2019	GBPCAD.fx	1:30:00 PM	1.73834	1.73836			N/A
4/17/2019	GBPCAD.fx	3:30:00 PM	1.73887	1.73509			N/A
4/17/2019	GBPCHF	9:30:00 AM	1.31558	1.31572			N/A
4/17/2019	GBPCHF	11:30:00 AM	1.31519	1.31477			N/A
4/17/2019	GBPCHF	1:30:00 PM	1.31567	1.31607			N/A
4/17/2019	GBPCHF	3:30:00 PM	1.31563	1.31602			N/A
4/17/2019	GBPCHF.fx	9:30:00 AM	1.31576	1.31553			N/A
4/17/2019	GBPCHF.fx	11:30:00 AM	1.31533	1.31459			N/A
4/17/2019	GBPCHF.fx	1:30:00 PM	1.31587	1.31587			N/A
4/17/2019	GBPCHF.fx	3:30:00 PM	1.31581	1.31581			N/A
4/17/2019	GBPCZK	9:30:00 AM	29.615	29.633			N/A
4/17/2019	GBPCZK	11:30:00 AM	29.55	29.553			N/A
4/17/2019	GBPCZK	1:30:00 PM	29.569	29.59			N/A
4/17/2019	GBPCZK	3:30:00 PM	29.588	29.609			N/A
4/17/2019	GBPDKK	9:30:00 AM	8.616	8.626			N/A
4/17/2019	GBPDKK	11:30:00 AM	8.601	8.605			N/A
4/17/2019	GBPDKK	1:30:00 PM	8.608	8.619			N/A
4/17/2019	GBPDKK	3:30:00 PM	8.615	8.626			N/A



4/17/2019	GBPDKK.fx	9:30:00 AM	8.6149	8.6265			N/A
4/17/2019	GBPDKK.fx	11:30:00 AM	8.599	8.6063			N/A
4/17/2019	GBPDKK.fx	1:30:00 PM	8.6068	8.6195			N/A
4/17/2019	GBPDKK.fx	3:30:00 PM	8.6138	8.6263			N/A
4/17/2019	GBPHKD	9:30:00 AM	10.2403	10.2455			N/A
4/17/2019	GBPHKD	11:30:00 AM	10.2327	10.2294			N/A
4/17/2019	GBPHKD	1:30:00 PM	10.2335	10.2386			N/A
4/17/2019	GBPHKD	3:30:00 PM	10.2336	10.2394			N/A
4/17/2019	GBPHUF	9:30:00 AM	368.95	369.38			N/A
4/17/2019	GBPHUF	11:30:00 AM	367.34	367.51			N/A
4/17/2019	GBPHUF	1:30:00 PM	368.1	368.57			N/A
4/17/2019	GBPHUF	3:30:00 PM	368.57	369.03			N/A
4/17/2019	GBPJPY	9:30:00 AM	146.211	146.238			N/A
4/17/2019	GBPJPY	11:30:00 AM	146.128	146.061			N/A
4/17/2019	GBPJPY	1:30:00 PM	146.123	146.164			N/A
4/17/2019	GBPJPY	3:30:00 PM	146.129	146.159			N/A
4/17/2019	GBPJPY.fx	9:30:00 AM	146.23	146.219			N/A
4/17/2019	GBPJPY.fx	11:30:00 AM	146.142	146.047			N/A
4/17/2019	GBPJPY.fx	1:30:00 PM	146.14	146.146			N/A
4/17/2019	GBPJPY.fx	3:30:00 PM	146.148	146.141			N/A
4/17/2019	GBPMXN	9:30:00 AM	24.5935	24.5961			N/A
4/17/2019	GBPMXN	11:30:00 AM	24.5224	24.5159			N/A
4/17/2019	GBPMXN	1:30:00 PM	24.5462	24.5596			N/A
4/17/2019	GBPMXN	3:30:00 PM	24.5434	24.5545			N/A
4/17/2019	GBPNOK	9:30:00 AM	11.0651	11.0752			N/A
4/17/2019	GBPNOK	11:30:00 AM	11.0399	11.0425			N/A
4/17/2019	GBPNOK	1:30:00 PM	11.0535	11.0646			N/A
4/17/2019	GBPNOK	3:30:00 PM	11.0536	11.0622			N/A
4/17/2019	GBPNOK.fx	9:30:00 AM	11.06967	11.07053			N/A
4/17/2019	GBPNOK.fx	11:30:00 AM	11.04462	11.03826			N/A
4/17/2019	GBPNOK.fx	1:30:00 PM	11.05825	11.05982			N/A
4/17/2019	GBPNOK.fx	3:30:00 PM	11.05826	11.05757			N/A
4/17/2019	GBPNZD	9:30:00 AM	1.93717	1.93743			N/A
4/17/2019	GBPNZD	11:30:00 AM	1.93596	1.93518			N/A

4/17/2019	GBPNZD	1:30:00 PM	1.93638	1.93705			N/A
4/17/2019	GBPNZD	3:30:00 PM	1.93899	1.93897			N/A
4/17/2019	GBPNZD.fx	9:30:00 AM	1.93754	1.93708			N/A
4/17/2019	GBPNZD.fx	11:30:00 AM	1.93624	1.93497			N/A
4/17/2019	GBPNZD.fx	1:30:00 PM	1.93673	1.93668			N/A
4/17/2019	GBPNZD.fx	3:30:00 PM	1.93933	1.93858			N/A
4/17/2019	GBPPLN	9:30:00 AM	4.9382	4.9391			N/A
4/17/2019	GBPPLN	11:30:00 AM	4.9251	4.9236			N/A
4/17/2019	GBPPLN	1:30:00 PM	4.9278	4.9293			N/A
4/17/2019	GBPPLN	3:30:00 PM	4.9313	4.9325			N/A
4/17/2019	GBPPLN.fx	9:30:00 AM	4.93595	4.94128			N/A
4/17/2019	GBPPLN.fx	11:30:00 AM	4.92282	4.92597			N/A
4/17/2019	GBPPLN.fx	1:30:00 PM	4.92561	4.93154			N/A
4/17/2019	GBPPLN.fx	3:30:00 PM	4.92915	4.93471			N/A
4/17/2019	GBPSEK	9:30:00 AM	12.0639	12.0714			N/A
4/17/2019	GBPSEK	11:30:00 AM	12.0371	12.0364			N/A
4/17/2019	GBPSEK	1:30:00 PM	12.0396	12.0464			N/A
4/17/2019	GBPSEK	3:30:00 PM	12.0482	12.0566			N/A
4/17/2019	GBPSEK.fx	9:30:00 AM	12.06023	12.07497			N/A
4/17/2019	GBPSEK.fx	11:30:00 AM	12.03304	12.04043			N/A
4/17/2019	GBPSEK.fx	1:30:00 PM	12.03588	12.04984			N/A
4/17/2019	GBPSEK.fx	3:30:00 PM	12.04448	12.06033			N/A
4/17/2019	GBPSGD	9:30:00 AM	1.767	1.7677			N/A
4/17/2019	GBPSGD	11:30:00 AM	1.7643	1.7637			N/A
4/17/2019	GBPSGD	1:30:00 PM	1.7645	1.7653			N/A
4/17/2019	GBPSGD	3:30:00 PM	1.7652	1.7659			N/A
4/17/2019	GBPSGD.fx	9:30:00 AM	1.76516	1.76954			N/A
4/17/2019	GBPSGD.fx	11:30:00 AM	1.76244	1.76567			N/A
4/17/2019	GBPSGD.fx	1:30:00 PM	1.76264	1.76713			N/A
4/17/2019	GBPSGD.fx	3:30:00 PM	1.76333	1.76777			N/A
4/17/2019	GBPUSD	9:30:00 AM	1.3062	1.30617			N/A
4/17/2019	GBPUSD	11:30:00 AM	1.30504	1.30413			N/A
4/17/2019	GBPUSD	1:30:00 PM	1.30503	1.30507			N/A
4/17/2019	GBPUSD	3:30:00 PM	1.30529	1.3053			N/A

4/17/2019	GBPUSD.fx	9:30:00 AM	1.30625	1.30612			N/A
4/17/2019	GBPUSD.fx	11:30:00 AM	1.30505	1.30407			N/A
4/17/2019	GBPUSD.fx	1:30:00 PM	1.30507	1.30501			N/A
4/17/2019	GBPUSD.fx	3:30:00 PM	1.30534	1.30527			N/A
4/17/2019	GBPZAR	9:30:00 AM	18.2476	18.2691			N/A
4/17/2019	GBPZAR	11:30:00 AM	18.1858	18.1955			N/A
4/17/2019	GBPZAR	1:30:00 PM	18.1736	18.1983			N/A
4/17/2019	GBPZAR	3:30:00 PM	18.2177	18.2439			N/A
4/17/2019	GBPZAR.fx	9:30:00 AM	18.255	18.2605			N/A
4/17/2019	GBPZAR.fx	11:30:00 AM	18.1917	18.1888			N/A
4/17/2019	GBPZAR.fx	1:30:00 PM	18.1809	18.1911			N/A
4/17/2019	GBPZAR.fx	3:30:00 PM	18.2248	18.237			N/A
4/17/2019	GOLD	9:30:00 AM	1279.21	1279.46			N/A
4/17/2019	GOLD	11:30:00 AM	1278.28	1278.54			N/A
4/17/2019	GOLD	1:30:00 PM	1276.55	1276.77			N/A
4/17/2019	GOLD	3:30:00 PM	1276.29	1276.06			N/A
4/17/2019	HKDJPY	9:30:00 AM	14.28	14.28			N/A
4/17/2019	HKDJPY	11:30:00 AM	14.27	14.28			N/A
4/17/2019	HKDJPY	1:30:00 PM	14.28	14.29			N/A
4/17/2019	HKDJPY	3:30:00 PM	14.27	14.28			N/A
4/17/2019	HKDJPY.fx	9:30:00 AM	14.269	14.275			N/A
4/17/2019	HKDJPY.fx	11:30:00 AM	14.27	14.276			N/A
4/17/2019	HKDJPY.fx	1:30:00 PM	14.27	14.278			N/A
4/17/2019	HKDJPY.fx	3:30:00 PM	14.267	14.275			N/A
4/17/2019	HUFJPY	9:30:00 AM	0.3964	0.3967			N/A
4/17/2019	HUFJPY	11:30:00 AM	0.3976	0.3979			N/A
4/17/2019	HUFJPY	1:30:00 PM	0.397	0.3973			N/A
4/17/2019	HUFJPY	3:30:00 PM	0.3962	0.3965			N/A
4/17/2019	JP225.i	9:30:00 AM	22259.65	22274.65			N/A
4/17/2019	JP225.i	11:30:00 AM	22265.48	22285.48			N/A
4/17/2019	JP225.i	1:30:00 PM	22309.65	22324.65			N/A
4/17/2019	JP225.i	3:30:00 PM	22317.15	22332.98			N/A
4/17/2019	MXNJPY	9:30:00 AM	5.94	5.95			N/A
4/17/2019	MXNJPY	11:30:00 AM	5.96	5.97			N/A

4/17/2019	MXNJPY	1:30:00 PM	5.95	5.97			N/A
4/17/2019	MXNJPY	3:30:00 PM					N/A
4/17/2019	NASDAQ.i	9:30:00 AM					N/A
4/17/2019	NASDAQ.i	11:30:00 AM					N/A
4/17/2019	NASDAQ.i	1:30:00 PM					N/A
4/17/2019	NASDAQ.i	3:30:00 PM					N/A
4/17/2019	NOKJPY	9:30:00 AM	13.2	13.23			N/A
4/17/2019	NOKJPY	11:30:00 AM	13.22	13.25			N/A
4/17/2019	NOKJPY	1:30:00 PM	13.21	13.23			N/A
4/17/2019	NOKJPY	3:30:00 PM	13.21	13.24			N/A
4/17/2019	NOKJPY.fx	9:30:00 AM	13.206	13.213			N/A
4/17/2019	NOKJPY.fx	11:30:00 AM	13.228	13.234			N/A
4/17/2019	NOKJPY.fx	1:30:00 PM	13.211	13.219			N/A
4/17/2019	NOKJPY.fx	3:30:00 PM	13.213	13.219			N/A
4/17/2019	NZDCAD	9:30:00 AM	0.89854	0.89917			N/A
4/17/2019	NZDCAD	11:30:00 AM	0.89706	0.89767			N/A
4/17/2019	NZDCAD	1:30:00 PM	0.89724	0.89793			N/A
4/17/2019	NZDCAD	3:30:00 PM	0.89654	0.89528			N/A
4/17/2019	NZDCAD.fx	9:30:00 AM	0.89886	0.89883			N/A
4/17/2019	NZDCAD.fx	11:30:00 AM	0.8974	0.89733			N/A
4/17/2019	NZDCAD.fx	1:30:00 PM	0.89757	0.8976			N/A
4/17/2019	NZDCAD.fx	3:30:00 PM	0.89666	0.89495			N/A
4/17/2019	NZDCHF	9:30:00 AM	0.6789	0.67929			N/A
4/17/2019	NZDCHF	11:30:00 AM	0.67903	0.67973			N/A
4/17/2019	NZDCHF	1:30:00 PM	0.67908	0.67983			N/A
4/17/2019	NZDCHF	3:30:00 PM	0.6784	0.67886			N/A
4/17/2019	NZDCHF.fx	9:30:00 AM	0.67923	0.67893			N/A
4/17/2019	NZDCHF.fx	11:30:00 AM	0.67936	0.67938			N/A
4/17/2019	NZDCHF.fx	1:30:00 PM	0.67942	0.67947			N/A
4/17/2019	NZDCHF.fx	3:30:00 PM	0.67873	0.67853			N/A
4/17/2019	NZDCZK	9:30:00 AM	15.286	15.294			N/A
4/17/2019	NZDCZK	11:30:00 AM	15.263	15.273			N/A
4/17/2019	NZDCZK	1:30:00 PM	15.267	15.278			N/A
4/17/2019	NZDCZK	3:30:00 PM	15.261	15.267			N/A

4/17/2019	NZDDKK	9:30:00 AM	4.448	4.45			N/A
4/17/2019	NZDDKK	11:30:00 AM	4.442	4.444			N/A
4/17/2019	NZDDKK	1:30:00 PM					N/A
4/17/2019	NZDDKK	3:30:00 PM	4.442	4.446			N/A
4/17/2019	NZDHKD	9:30:00 AM	5.2857	5.2872			N/A
4/17/2019	NZDHKD	11:30:00 AM	5.2844	5.2872			N/A
4/17/2019	NZDHKD	1:30:00 PM	5.2836	5.2862			N/A
4/17/2019	NZDHKD	3:30:00 PM	5.2782	5.2792			N/A
4/17/2019	NZDHUF	9:30:00 AM	190.43	190.68			N/A
4/17/2019	NZDHUF	11:30:00 AM	189.79	189.97			N/A
4/17/2019	NZDHUF	1:30:00 PM	190.03	190.31			N/A
4/17/2019	NZDHUF	3:30:00 PM	190.08	190.3			N/A
4/17/2019	NZDJPY	9:30:00 AM	75.459	75.5			N/A
4/17/2019	NZDJPY	11:30:00 AM	75.444	75.516			N/A
4/17/2019	NZDJPY	1:30:00 PM	75.426	75.493			N/A
4/17/2019	NZDJPY	3:30:00 PM	75.35	75.386			N/A
4/17/2019	NZDJPY.fx	9:30:00 AM	75.49	75.466			N/A
4/17/2019	NZDJPY.fx	11:30:00 AM	75.474	75.483			N/A
4/17/2019	NZDJPY.fx	1:30:00 PM	75.457	75.46			N/A
4/17/2019	NZDJPY.fx	3:30:00 PM	75.38	75.355			N/A
4/17/2019	NZDMXN	9:30:00 AM	12.6931	12.695			N/A
4/17/2019	NZDMXN	11:30:00 AM	12.6652	12.6679			N/A
4/17/2019	NZDMXN	1:30:00 PM	12.6731	12.6787			N/A
4/17/2019	NZDMXN	3:30:00 PM	12.6589	12.6591			N/A
4/17/2019	NZDNOK	9:30:00 AM	5.7099	5.7125			N/A
4/17/2019	NZDNOK	11:30:00 AM	5.6998	5.7015			N/A
4/17/2019	NZDNOK	1:30:00 PM	5.7062	5.7098			N/A
4/17/2019	NZDNOK	3:30:00 PM	5.6976	5.6981			N/A
4/17/2019	NZDPLN	9:30:00 AM	2.548	2.5493			N/A
4/17/2019	NZDPLN	11:30:00 AM	2.5424	2.5428			N/A
4/17/2019	NZDPLN	1:30:00 PM	2.5437	2.545			N/A
4/17/2019	NZDPLN	3:30:00 PM	2.542	2.5421			N/A
4/17/2019	NZDSEK	9:30:00 AM	6.2238	6.2286			N/A
4/17/2019	NZDSEK	11:30:00 AM	6.2123	6.2189			N/A

4/17/2019	NZDSEK	1:30:00 PM	6.213	6.2188			N/A
4/17/2019	NZDSEK	3:30:00 PM	6.2106	6.2153			N/A
4/17/2019	NZDSGD	9:30:00 AM	0.9121	0.9125			N/A
4/17/2019	NZDSGD	11:30:00 AM	0.9112	0.9118			N/A
4/17/2019	NZDSGD	1:30:00 PM	0.911	0.9116			N/A
4/17/2019	NZDSGD	3:30:00 PM	0.9104	0.9107			N/A
4/17/2019	NZDSGD.fx	9:30:00 AM	0.9121	0.91241			N/A
4/17/2019	NZDSGD.fx	11:30:00 AM	0.91117	0.91171			N/A
4/17/2019	NZDSGD.fx	1:30:00 PM	0.91098	0.91154			N/A
4/17/2019	NZDSGD.fx	3:30:00 PM	0.9104	0.9107			N/A
4/17/2019	NZDUSD	9:30:00 AM	0.67424	0.6742			N/A
4/17/2019	NZDUSD	11:30:00 AM	0.67391	0.67404			N/A
4/17/2019	NZDUSD	1:30:00 PM	0.67374	0.67383			N/A
4/17/2019	NZDUSD	3:30:00 PM	0.67319	0.67304			N/A
4/17/2019	NZDUSD.fx	9:30:00 AM	0.67431	0.67414			N/A
4/17/2019	NZDUSD.fx	11:30:00 AM	0.67398	0.67405			N/A
4/17/2019	NZDUSD.fx	1:30:00 PM	0.67381	0.67385			N/A
4/17/2019	NZDUSD.fx	3:30:00 PM	0.67325	0.67305			N/A
4/17/2019	NZDZAR	9:30:00 AM	9.4117	9.4267			N/A
4/17/2019	NZDZAR	11:30:00 AM	9.3827	9.399			N/A
4/17/2019	NZDZAR	1:30:00 PM	9.3787	9.3934			N/A
4/17/2019	NZDZAR	3:30:00 PM	9.3871	9.4003			N/A
4/17/2019	SEKJPY	9:30:00 AM	12.12	12.13			N/A
4/17/2019	SEKJPY	11:30:00 AM	12.14	12.15			N/A
4/17/2019	SEKJPY	1:30:00 PM	12.14	12.14			N/A
4/17/2019	SEKJPY	3:30:00 PM	12.13	12.13			N/A
4/17/2019	SEKJPY.fx	9:30:00 AM	12.108	12.126			N/A
4/17/2019	SEKJPY.fx	11:30:00 AM	12.128	12.147			N/A
4/17/2019	SEKJPY.fx	1:30:00 PM	12.126	12.143			N/A
4/17/2019	SEKJPY.fx	3:30:00 PM	12.116	12.134			N/A
4/17/2019	SGDJPY	9:30:00 AM	82.76	82.74			N/A
4/17/2019	SGDJPY	11:30:00 AM	82.81	82.82			N/A
4/17/2019	SGDJPY	1:30:00 PM	82.83	82.82			N/A
4/17/2019	SGDJPY	3:30:00 PM	82.81	82.78			N/A

4/17/2019	SILVER	9:30:00 AM	14.87	15.25			N/A
4/17/2019	SILVER	11:30:00 AM	14.89	15.28			N/A
4/17/2019	SILVER	1:30:00 PM	14.83	15.2			N/A
4/17/2019	SILVER	3:30:00 PM	14.85	15.21			N/A
4/17/2019	SPX500.i	9:30:00 AM	2911.89	2912.69			N/A
4/17/2019	SPX500.i	11:30:00 AM	2912.89	2913.94			N/A
4/17/2019	SPX500.i	1:30:00 PM	2913.39	2914.69			N/A
4/17/2019	SPX500.i	3:30:00 PM	2915.64	2916.69			N/A
4/17/2019	UK100.i	9:30:00 AM	7472.85	7474.35			N/A
4/17/2019	UK100.i	11:30:00 AM	7463.18	7462.6			N/A
4/17/2019	UK100.i	1:30:00 PM	7472.6	7474.35			N/A
4/17/2019	UK100.i	3:30:00 PM	7471.85	7472.35			N/A
4/17/2019	USDCAD	9:30:00 AM	1.33328	1.33321	500	500	N/A
4/17/2019	USDCAD	11:30:00 AM	1.33152	1.33152			N/A
4/17/2019	USDCAD	1:30:00 PM	1.33214	1.33224			N/A
4/17/2019	USDCAD	3:30:00 PM	1.3325	1.32936	10000	30000	N/A
4/17/2019	USDCAD.fx	9:30:00 AM	1.33331	1.33317			N/A
4/17/2019	USDCAD.fx	11:30:00 AM	1.33154	1.33149			N/A
4/17/2019	USDCAD.fx	1:30:00 PM	1.33216	1.3322			N/A
4/17/2019	USDCAD.fx	3:30:00 PM	1.33233	1.32933			N/A
4/17/2019	USDCHF	9:30:00 AM	1.00728	1.00723			N/A
4/17/2019	USDCHF	11:30:00 AM	1.00793	1.008			N/A
4/17/2019	USDCHF	1:30:00 PM	1.00827	1.00833			N/A
4/17/2019	USDCHF	3:30:00 PM	1.00808	1.00808			N/A
4/17/2019	USDCHF.fx	9:30:00 AM	1.00732	1.00717			N/A
4/17/2019	USDCHF.fx	11:30:00 AM	1.00796	1.00795			N/A
4/17/2019	USDCHF.fx	1:30:00 PM	1.00832	1.00827			N/A
4/17/2019	USDCHF.fx	3:30:00 PM	1.00813	1.00802			N/A
4/17/2019	USDCZK	9:30:00 AM	22.688	22.708			N/A
4/17/2019	USDCZK	11:30:00 AM	22.664	22.683			N/A
4/17/2019	USDCZK	1:30:00 PM	22.673	22.695			N/A
4/17/2019	USDCZK	3:30:00 PM	22.687	22.708			N/A
4/17/2019	USDCZK.fx	9:30:00 AM	22.6957	22.7001			N/A
4/17/2019	USDCZK.fx	11:30:00 AM	22.6728	22.674			N/A

4/17/2019	USDCZK.fx	1:30:00 PM	22.6824	22.6862			N/A
4/17/2019	USDCZK.fx	3:30:00 PM	22.6953	22.6991			N/A
4/17/2019	USDDKK	9:30:00 AM	6.5986	6.602			N/A
4/17/2019	USDDKK	11:30:00 AM	6.5931	6.5967			N/A
4/17/2019	USDDKK	1:30:00 PM	6.5983	6.602			N/A
4/17/2019	USDDKK	3:30:00 PM	6.6024	6.606			N/A
4/17/2019	USDDKK.fx	9:30:00 AM	6.59911	6.59997			N/A
4/17/2019	USDDKK.fx	11:30:00 AM	6.59354	6.5947			N/A
4/17/2019	USDDKK.fx	1:30:00 PM	6.59886	6.60007			N/A
4/17/2019	USDDKK.fx	3:30:00 PM	6.60301	6.60401			N/A
4/17/2019	USDHKD	9:30:00 AM	7.8434	7.8428			N/A
4/17/2019	USDHKD	11:30:00 AM	7.8452	7.8456			N/A
4/17/2019	USDHKD	1:30:00 PM	7.8449	7.845			N/A
4/17/2019	USDHKD	3:30:00 PM	7.8447	7.8447			N/A
4/17/2019	USDHKD.fx	9:30:00 AM	7.84335	7.84381			N/A
4/17/2019	USDHKD.fx	11:30:00 AM	7.84515	7.84569			N/A
4/17/2019	USDHKD.fx	1:30:00 PM	7.84479	7.84504			N/A
4/17/2019	USDHKD.fx	3:30:00 PM	7.8446	7.84522			N/A
4/17/2019	USDHUF	9:30:00 AM	282.54	282.95			N/A
4/17/2019	USDHUF	11:30:00 AM	281.73	282.16			N/A
4/17/2019	USDHUF	1:30:00 PM	282.13	282.58			N/A
4/17/2019	USDHUF	3:30:00 PM	282.58	283.04			N/A
4/17/2019	USDHUF.fx	9:30:00 AM	282.726	282.76			N/A
4/17/2019	USDHUF.fx	11:30:00 AM	281.924	281.966			N/A
4/17/2019	USDHUF.fx	1:30:00 PM	282.333	282.395			N/A
4/17/2019	USDHUF.fx	3:30:00 PM	282.774	282.829			N/A
4/17/2019	USDINR	9:30:00 AM					N/A
4/17/2019	USDINR	11:30:00 AM					N/A
4/17/2019	USDINR	1:30:00 PM					N/A
4/17/2019	USDINR	3:30:00 PM					N/A
4/17/2019	USDJPY	9:30:00 AM	111.98	111.984			N/A
4/17/2019	USDJPY	11:30:00 AM	112.012	112.018	2000	2000	N/A
4/17/2019	USDJPY	1:30:00 PM	112.012	112.025			N/A
4/17/2019	USDJPY	3:30:00 PM	111.989	112.001			N/A



4/17/2019	USDJPY.fx	9:30:00 AM	111.986	111.977			N/A
4/17/2019	USDJPY.fx	11:30:00 AM	112.017	112.012			N/A
4/17/2019	USDJPY.fx	1:30:00 PM	112.018	112.018			N/A
4/17/2019	USDJPY.fx	3:30:00 PM	111.995	111.994			N/A
4/17/2019	USDMXN	9:30:00 AM	18.837	18.833			N/A
4/17/2019	USDMXN	11:30:00 AM	18.799	18.805			N/A
4/17/2019	USDMXN	1:30:00 PM	18.817	18.822			N/A
4/17/2019	USDMXN	3:30:00 PM	18.812	18.818			N/A
4/17/2019	USDMXN.f	9:30:00 AM	18.8414	18.8286			N/A
4/17/2019	USDMXN.f	11:30:00 AM	18.8046	18.8016			N/A
4/17/2019	USDMXN.f	1:30:00 PM	18.8199	18.8196			N/A
4/17/2019	USDMXN.f	3:30:00 PM	18.815	18.8148			N/A
4/17/2019	USDNOK	9:30:00 AM	8.4709	8.4788			N/A
4/17/2019	USDNOK	11:30:00 AM	8.4597	8.4679			N/A
4/17/2019	USDNOK	1:30:00 PM	8.4697	8.4781			N/A
4/17/2019	USDNOK	3:30:00 PM	8.4678	8.4748			N/A
4/17/2019	USDNOK.f	9:30:00 AM	8.47466	8.47436			N/A
4/17/2019	USDNOK.f	11:30:00 AM	8.46358	8.46345			N/A
4/17/2019	USDNOK.f	1:30:00 PM	8.47369	8.47365			N/A
4/17/2019	USDNOK.f	3:30:00 PM	8.47156	8.47049			N/A
4/17/2019	USDPLN	9:30:00 AM	3.781	3.7817			N/A
4/17/2019	USDPLN	11:30:00 AM	3.7741	3.7755			N/A
4/17/2019	USDPLN	1:30:00 PM	3.7762	3.7776			N/A
4/17/2019	USDPLN	3:30:00 PM	3.7782	3.7792			N/A
4/17/2019	USDPLN.f	9:30:00 AM	3.7801	3.78263			N/A
4/17/2019	USDPLN.f	11:30:00 AM	3.77327	3.77637			N/A
4/17/2019	USDPLN.f	1:30:00 PM	3.77548	3.77827			N/A
4/17/2019	USDPLN.f	3:30:00 PM	3.77727	3.78			N/A
4/17/2019	USDRUB	9:30:00 AM					N/A
4/17/2019	USDRUB	11:30:00 AM	63.677	64.058			N/A
4/17/2019	USDRUB	1:30:00 PM	63.704	64.08			N/A
4/17/2019	USDRUB	3:30:00 PM	63.687	64.061			N/A
4/17/2019	USDSEK	9:30:00 AM	9.2365	9.2404			N/A
4/17/2019	USDSEK	11:30:00 AM	9.2236	9.2277			N/A

4/17/2019	USDSEK	1:30:00 PM	9.2266	9.2288			N/A
4/17/2019	USDSEK	3:30:00 PM	9.2317	9.2348			N/A
4/17/2019	USDSEK.fx	9:30:00 AM	9.239	9.2386			N/A
4/17/2019	USDSEK.fx	11:30:00 AM	9.22603	9.22584			N/A
4/17/2019	USDSEK.fx	1:30:00 PM	9.22929	9.22701			N/A
4/17/2019	USDSEK.fx	3:30:00 PM	9.23392	9.2331			N/A
4/17/2019	USDSGD	9:30:00 AM	1.3529	1.3533			N/A
4/17/2019	USDSGD	11:30:00 AM	1.3521	1.3525			N/A
4/17/2019	USDSGD	1:30:00 PM	1.3522	1.3526			N/A
4/17/2019	USDSGD	3:30:00 PM	1.3523	1.3525			N/A
4/17/2019	USDSGD.fx	9:30:00 AM	1.35285	1.35331			N/A
4/17/2019	USDSGD.fx	11:30:00 AM	1.352	1.35251			N/A
4/17/2019	USDSGD.fx	1:30:00 PM	1.35212	1.3526			N/A
4/17/2019	USDSGD.fx	3:30:00 PM	1.35236	1.35285			N/A
4/17/2019	USDZAR	9:30:00 AM	13.9715	13.9847			N/A
4/17/2019	USDZAR	11:30:00 AM	13.9365	13.9494			N/A
4/17/2019	USDZAR	1:30:00 PM	13.9283	13.9434			N/A
4/17/2019	USDZAR	3:30:00 PM	13.9584	13.9748			N/A
4/17/2019	USDZAR.fx	9:30:00 AM					N/A
4/17/2019	USDZAR.fx	11:30:00 AM					N/A
4/17/2019	USDZAR.fx	1:30:00 PM					N/A
4/17/2019	USDZAR.fx	3:30:00 PM					N/A
4/17/2019	XAUUSD	9:30:00 AM	1279.2	1279.46			N/A
4/17/2019	XAUUSD	11:30:00 AM	1278.28	1278.54			N/A
4/17/2019	XAUUSD	1:30:00 PM	1276.58	1276.77			N/A
4/17/2019	XAUUSD	3:30:00 PM	1276.28	1276.06			N/A
4/17/2019	ZARJPY	9:30:00 AM	7.99	8.01			N/A
4/17/2019	ZARJPY	11:30:00 AM	8.01	8.03			N/A
4/17/2019	ZARJPY	1:30:00 PM	8.01	8.04			N/A
4/17/2019	ZARJPY	3:30:00 PM	8	8.02			N/A
4/17/2019	ZARJPY.fx	9:30:00 AM	8.007	8.009			N/A
4/17/2019	ZARJPY.fx	11:30:00 AM	8.03	8.033			N/A
4/17/2019	ZARJPY.fx	1:30:00 PM	8.034	8.037			N/A
4/17/2019	ZARJPY.fx	3:30:00 PM	8.014	8.018			N/A

4/18/2019	#AA	9:30:00 AM					N/A
4/18/2019	#AA	11:30:00 AM					N/A
4/18/2019	#AA	1:30:00 PM					N/A
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4/18/2019	#S	3:30:00 PM					N/A
4/18/2019	#SBUX	9:30:00 AM					N/A
4/18/2019	#SBUX	11:30:00 AM					N/A
4/18/2019	#SBUX	1:30:00 PM					N/A
4/18/2019	#SBUX	3:30:00 PM					N/A
4/18/2019	#SNE	9:30:00 AM					N/A
4/18/2019	#SNE	11:30:00 AM					N/A
4/18/2019	#SNE	1:30:00 PM					N/A
4/18/2019	#SNE	3:30:00 PM					N/A
4/18/2019	#SPY	9:30:00 AM					N/A
4/18/2019	#SPY	11:30:00 AM					N/A
4/18/2019	#SPY	1:30:00 PM					N/A
4/18/2019	#SPY	3:30:00 PM					N/A
4/18/2019	#T	9:30:00 AM					N/A
4/18/2019	#T	11:30:00 AM					N/A
4/18/2019	#T	1:30:00 PM					N/A
4/18/2019	#T	3:30:00 PM					N/A
4/18/2019	#TEVA	9:30:00 AM					N/A
4/18/2019	#TEVA	11:30:00 AM					N/A
4/18/2019	#TEVA	1:30:00 PM					N/A
4/18/2019	#TEVA	3:30:00 PM					N/A
4/18/2019	#TRI	9:30:00 AM					N/A
4/18/2019	#TRI	11:30:00 AM					N/A

4/18/2019	#TRI	1:30:00 PM					N/A
4/18/2019	#TRI	3:30:00 PM					N/A
4/18/2019	#TRV	9:30:00 AM					N/A
4/18/2019	#TRV	11:30:00 AM					N/A
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4/18/2019	#TRV	3:30:00 PM					N/A
4/18/2019	#TSCO	9:30:00 AM					N/A
4/18/2019	#TSCO	11:30:00 AM					N/A
4/18/2019	#TSCO	1:30:00 PM					N/A
4/18/2019	#TSCO	3:30:00 PM					N/A
4/18/2019	#TSLA	9:30:00 AM					N/A
4/18/2019	#TSLA	11:30:00 AM					N/A
4/18/2019	#TSLA	1:30:00 PM					N/A
4/18/2019	#TSLA	3:30:00 PM					N/A
4/18/2019	#TWTR	9:30:00 AM					N/A
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4/18/2019	#TWTR	1:30:00 PM					N/A
4/18/2019	#TWTR	3:30:00 PM					N/A
4/18/2019	#UBS	9:30:00 AM					N/A
4/18/2019	#UBS	11:30:00 AM					N/A
4/18/2019	#UBS	1:30:00 PM					N/A
4/18/2019	#UBS	3:30:00 PM					N/A
4/18/2019	#UL	9:30:00 AM					N/A
4/18/2019	#UL	11:30:00 AM					N/A
4/18/2019	#UL	1:30:00 PM					N/A
4/18/2019	#UL	3:30:00 PM					N/A
4/18/2019	#UPS	9:30:00 AM					N/A
4/18/2019	#UPS	11:30:00 AM					N/A
4/18/2019	#UPS	1:30:00 PM					N/A
4/18/2019	#UPS	3:30:00 PM					N/A
4/18/2019	#UTX	9:30:00 AM					N/A
4/18/2019	#UTX	11:30:00 AM					N/A
4/18/2019	#UTX	1:30:00 PM					N/A
4/18/2019	#UTX	3:30:00 PM					N/A

4/18/2019	#V	9:30:00 AM					N/A
4/18/2019	#V	11:30:00 AM					N/A
4/18/2019	#V	1:30:00 PM					N/A
4/18/2019	#V	3:30:00 PM					N/A
4/18/2019	#VOD	9:30:00 AM					N/A
4/18/2019	#VOD	11:30:00 AM					N/A
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4/18/2019	#VOD	3:30:00 PM					N/A
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4/18/2019	#VZ	1:30:00 PM					N/A
4/18/2019	#VZ	3:30:00 PM					N/A
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4/18/2019	#WDC	3:30:00 PM					N/A
4/18/2019	#WFC	9:30:00 AM					N/A
4/18/2019	#WFC	11:30:00 AM					N/A
4/18/2019	#WFC	1:30:00 PM					N/A
4/18/2019	#WFC	3:30:00 PM					N/A
4/18/2019	#WMT	9:30:00 AM					N/A
4/18/2019	#WMT	11:30:00 AM					N/A
4/18/2019	#WMT	1:30:00 PM					N/A
4/18/2019	#WMT	3:30:00 PM					N/A
4/18/2019	#XOM	9:30:00 AM					N/A
4/18/2019	#XOM	11:30:00 AM					N/A
4/18/2019	#XOM	1:30:00 PM					N/A
4/18/2019	#XOM	3:30:00 PM					N/A
4/18/2019	#YHOO	9:30:00 AM					N/A
4/18/2019	#YHOO	11:30:00 AM					N/A
4/18/2019	#YHOO	1:30:00 PM					N/A
4/18/2019	#YHOO	3:30:00 PM					N/A
4/18/2019	#ZNGA	9:30:00 AM					N/A
4/18/2019	#ZNGA	11:30:00 AM					N/A

4/18/2019	#ZNGA	1:30:00 PM					N/A
4/18/2019	#ZNGA	3:30:00 PM					N/A
4/18/2019	AUDCAD	9:30:00 AM	0.95943	0.96016			N/A
4/18/2019	AUDCAD	11:30:00 AM	0.95677	0.95746			N/A
4/18/2019	AUDCAD	1:30:00 PM	0.95693	0.9574			N/A
4/18/2019	AUDCAD	3:30:00 PM	0.95791	0.95742			N/A
4/18/2019	AUDCAD.fx	9:30:00 AM	0.95977	0.95981			N/A
4/18/2019	AUDCAD.fx	11:30:00 AM	0.95709	0.95711			N/A
4/18/2019	AUDCAD.fx	1:30:00 PM	0.95729	0.95703			N/A
4/18/2019	AUDCAD.fx	3:30:00 PM	0.95804	0.95727			N/A
4/18/2019	AUDCHF	9:30:00 AM	0.72529	0.72597			N/A
4/18/2019	AUDCHF	11:30:00 AM	0.72343	0.72399			N/A
4/18/2019	AUDCHF	1:30:00 PM	0.72354	0.72403			N/A
4/18/2019	AUDCHF	3:30:00 PM	0.72468	0.72464			N/A
4/18/2019	AUDCHF.fx	9:30:00 AM	0.72563	0.72561			N/A
4/18/2019	AUDCHF.fx	11:30:00 AM	0.72376	0.72366			N/A
4/18/2019	AUDCHF.fx	1:30:00 PM	0.72389	0.72368			N/A
4/18/2019	AUDCHF.fx	3:30:00 PM	0.72498	0.72429			N/A
4/18/2019	AUDCZK	9:30:00 AM	16.293	16.305			N/A
4/18/2019	AUDCZK	11:30:00 AM	16.325	16.338			N/A
4/18/2019	AUDCZK	1:30:00 PM	16.32	16.331			N/A
4/18/2019	AUDCZK	3:30:00 PM	16.327	16.332			N/A
4/18/2019	AUDDKK	9:30:00 AM	4.7447	4.7496			N/A
4/18/2019	AUDDKK	11:30:00 AM	4.7492	4.7537			N/A
4/18/2019	AUDDKK	1:30:00 PM	4.748	4.7517			N/A
4/18/2019	AUDDKK	3:30:00 PM	4.7515	4.753			N/A
4/18/2019	AUDHKD	9:30:00 AM	5.6338	5.6376			N/A
4/18/2019	AUDHKD	11:30:00 AM	5.6156	5.6187			N/A
4/18/2019	AUDHKD	1:30:00 PM	5.6139	5.6157			N/A
4/18/2019	AUDHKD	3:30:00 PM	5.6102	5.6141			N/A
4/18/2019	AUDHUF	9:30:00 AM					N/A
4/18/2019	AUDHUF	11:30:00 AM	203.46	203.61			N/A
4/18/2019	AUDHUF	1:30:00 PM	203.5	203.66			N/A
4/18/2019	AUDHUF	3:30:00 PM	203.55	203.61			N/A



4/18/2019	AUDJPY	9:30:00 AM	80.361	80.431			N/A
4/18/2019	AUDJPY	11:30:00 AM	80.077	80.147			N/A
4/18/2019	AUDJPY	1:30:00 PM	80.09	80.134			N/A
4/18/2019	AUDJPY	3:30:00 PM	80.104	80.119			N/A
4/18/2019	AUDJPY.fx	9:30:00 AM	80.396	80.396			N/A
4/18/2019	AUDJPY.fx	11:30:00 AM	80.11	80.107			N/A
4/18/2019	AUDJPY.fx	1:30:00 PM	80.123	80.098			N/A
4/18/2019	AUDJPY.fx	3:30:00 PM	80.128	80.084			N/A
4/18/2019	AUDMXN	9:30:00 AM					N/A
4/18/2019	AUDMXN	11:30:00 AM	13.5215	13.5295			N/A
4/18/2019	AUDMXN	1:30:00 PM	13.5013	13.5088			N/A
4/18/2019	AUDMXN	3:30:00 PM	13.4828	13.4901			N/A
4/18/2019	AUDNOK	9:30:00 AM	6.0986	6.1037			N/A
4/18/2019	AUDNOK	11:30:00 AM	6.1274	6.1291			N/A
4/18/2019	AUDNOK	1:30:00 PM	6.1089	6.1125			N/A
4/18/2019	AUDNOK	3:30:00 PM	6.1076	6.1084			N/A
4/18/2019	AUDNOK.fx	9:30:00 AM	6.1001	6.102			N/A
4/18/2019	AUDNOK.fx	11:30:00 AM	6.1293	6.1274			N/A
4/18/2019	AUDNOK.fx	1:30:00 PM	6.1105	6.1108			N/A
4/18/2019	AUDNOK.fx	3:30:00 PM	6.109	6.1077			N/A
4/18/2019	AUDNZD	9:30:00 AM	1.06873	1.06951			N/A
4/18/2019	AUDNZD	11:30:00 AM	1.06758	1.06845			N/A
4/18/2019	AUDNZD	1:30:00 PM	1.069	1.06971			N/A
4/18/2019	AUDNZD	3:30:00 PM	1.07018	1.0705			N/A
4/18/2019	AUDNZD.fx	9:30:00 AM	1.06916	1.06907			N/A
4/18/2019	AUDNZD.fx	11:30:00 AM	1.06801	1.06801			N/A
4/18/2019	AUDNZD.fx	1:30:00 PM	1.06944	1.06925			N/A
4/18/2019	AUDNZD.fx	3:30:00 PM	1.07058	1.07016			N/A
4/18/2019	AUDPLN	9:30:00 AM	2.7137	2.717			N/A
4/18/2019	AUDPLN	11:30:00 AM	2.7212	2.724			N/A
4/18/2019	AUDPLN	1:30:00 PM	2.722	2.7245			N/A
4/18/2019	AUDPLN	3:30:00 PM	2.7226	2.7245			N/A
4/18/2019	AUDSEK	9:30:00 AM	6.6396	6.6424			N/A
4/18/2019	AUDSEK	11:30:00 AM	6.6822	6.678			N/A

4/18/2019	AUDSEK	1:30:00 PM	6.6681	6.6694			N/A
4/18/2019	AUDSEK	3:30:00 PM	6.6704	6.6705			N/A
4/18/2019	AUDSEK.fx	9:30:00 AM	6.635	6.6469			N/A
4/18/2019	AUDSEK.fx	11:30:00 AM	6.6774	6.6823			N/A
4/18/2019	AUDSEK.fx	1:30:00 PM	6.6635	6.6738			N/A
4/18/2019	AUDSEK.fx	3:30:00 PM	6.6653	6.6749			N/A
4/18/2019	AUDSGD	9:30:00 AM	0.9723	0.9725			N/A
4/18/2019	AUDSGD	11:30:00 AM	0.9706	0.9709			N/A
4/18/2019	AUDSGD	1:30:00 PM	0.9702	0.9702			N/A
4/18/2019	AUDSGD	3:30:00 PM	0.97	0.97			N/A
4/18/2019	AUDSGD.fx	9:30:00 AM	0.97241	0.97253			N/A
4/18/2019	AUDSGD.fx	11:30:00 AM	0.97068	0.97071			N/A
4/18/2019	AUDSGD.fx	1:30:00 PM	0.97026	0.97012			N/A
4/18/2019	AUDSGD.fx	3:30:00 PM	0.97007	0.96991			N/A
4/18/2019	AUDUSD	9:30:00 AM	0.71852	0.71863			N/A
4/18/2019	AUDUSD	11:30:00 AM	0.71622	0.71629			N/A
4/18/2019	AUDUSD	1:30:00 PM	0.71588	0.7158			N/A
4/18/2019	AUDUSD	3:30:00 PM	0.71559	0.71539			N/A
4/18/2019	AUDUSD.fx	9:30:00 AM	0.71857	0.71859			N/A
4/18/2019	AUDUSD.fx	11:30:00 AM	0.71627	0.71624			N/A
4/18/2019	AUDUSD.fx	1:30:00 PM	0.71593	0.71574			N/A
4/18/2019	AUDUSD.fx	3:30:00 PM	0.71561	0.71534			N/A
4/18/2019	AUDZAR	9:30:00 AM	10.0692	10.0801			N/A
4/18/2019	AUDZAR	11:30:00 AM	10.073	10.0861			N/A
4/18/2019	AUDZAR	1:30:00 PM	10.0854	10.0975			N/A
4/18/2019	AUDZAR	3:30:00 PM	10.0637	10.0766			N/A
4/18/2019	AUS200.i	9:30:00 AM	6263.23	6267.53			N/A
4/18/2019	AUS200.i	11:30:00 AM	6260.83	6262.23			N/A
4/18/2019	AUS200.i	1:30:00 PM	6281.13	6283.83			N/A
4/18/2019	AUS200.i	3:30:00 PM	6289.33	6286.83			N/A
4/18/2019	BCHUSD	9:30:00 AM	313.12	324.57			N/A
4/18/2019	BCHUSD	11:30:00 AM	310.82	322.08			N/A
4/18/2019	BCHUSD	1:30:00 PM	309.55	321.32			N/A
4/18/2019	BCHUSD	3:30:00 PM	309.39	320.99			N/A

4/18/2019	CADCHF	9:30:00 AM	0.75568	0.75636			N/A
4/18/2019	CADCHF	11:30:00 AM	0.75586	0.75637			N/A
4/18/2019	CADCHF	1:30:00 PM	0.75584	0.75654			N/A
4/18/2019	CADCHF	3:30:00 PM	0.75673	0.75617			N/A
4/18/2019	CADCHF.fx	9:30:00 AM	0.75602	0.756			N/A
4/18/2019	CADCHF.fx	11:30:00 AM	0.75619	0.75603			N/A
4/18/2019	CADCHF.fx	1:30:00 PM	0.75618	0.75618			N/A
4/18/2019	CADCHF.fx	3:30:00 PM	0.75689	0.75606			N/A
4/18/2019	CADCZK	9:30:00 AM	16.978	16.99			N/A
4/18/2019	CADCZK	11:30:00 AM	17.059	17.074			N/A
4/18/2019	CADCZK	1:30:00 PM	17.051	17.067			N/A
4/18/2019	CADCZK	3:30:00 PM	17.062	17.046			N/A
4/18/2019	CADDDKK	9:30:00 AM					N/A
4/18/2019	CADDDKK	11:30:00 AM	4.962	4.965			N/A
4/18/2019	CADDDKK	1:30:00 PM					N/A
4/18/2019	CADDDKK	3:30:00 PM	4.964	4.958			N/A
4/18/2019	CADHKD	9:30:00 AM	5.8705	5.8744			N/A
4/18/2019	CADHKD	11:30:00 AM	5.8678	5.8717			N/A
4/18/2019	CADHKD	1:30:00 PM	5.8651	5.8686			N/A
4/18/2019	CADHKD	3:30:00 PM	5.8634	5.8596			N/A
4/18/2019	CADHUF	9:30:00 AM	211.44	211.61			N/A
4/18/2019	CADHUF	11:30:00 AM	212.65	212.73			N/A
4/18/2019	CADHUF	1:30:00 PM	212.63	212.79			N/A
4/18/2019	CADHUF	3:30:00 PM	212.67	212.49			N/A
4/18/2019	CADJPY	9:30:00 AM	83.739	83.808			N/A
4/18/2019	CADJPY	11:30:00 AM	83.678	83.741			N/A
4/18/2019	CADJPY	1:30:00 PM	83.676	83.739			N/A
4/18/2019	CADJPY	3:30:00 PM	83.699	83.593			N/A
4/18/2019	CADJPY.fx	9:30:00 AM	83.773	83.774			N/A
4/18/2019	CADJPY.fx	11:30:00 AM	83.711	83.707			N/A
4/18/2019	CADJPY.fx	1:30:00 PM	83.71	83.705			N/A
4/18/2019	CADJPY.fx	3:30:00 PM	83.716	83.572			N/A
4/18/2019	CADMXN	9:30:00 AM	14.1066	14.1196			N/A
4/18/2019	CADMXN	11:30:00 AM	14.1283	14.1406			N/A

4/18/2019	CADMXN	1:30:00 PM	14.1059	14.1174			N/A
4/18/2019	CADMXN	3:30:00 PM	14.0883	14.0827			N/A
4/18/2019	CADNOK	9:30:00 AM	6.3532	6.3581			N/A
4/18/2019	CADNOK	11:30:00 AM	6.3984	6.4009			N/A
4/18/2019	CADNOK	1:30:00 PM	6.3807	6.3851			N/A
4/18/2019	CADNOK	3:30:00 PM	6.3766	6.3699			N/A
4/18/2019	CADPLN	9:30:00 AM	2.828	2.8299			N/A
4/18/2019	CADPLN	11:30:00 AM	2.8423	2.8442			N/A
4/18/2019	CADPLN	1:30:00 PM	2.844	2.8457			N/A
4/18/2019	CADPLN	3:30:00 PM	2.8429	2.8407			N/A
4/18/2019	CADSEK	9:30:00 AM	6.9159	6.9198			N/A
4/18/2019	CADSEK	11:30:00 AM	6.9797	6.9764			N/A
4/18/2019	CADSEK	1:30:00 PM	6.9644	6.9675			N/A
4/18/2019	CADSEK	3:30:00 PM	6.9677	6.9595			N/A
4/18/2019	CADSGD	9:30:00 AM	1.0126	1.0129			N/A
4/18/2019	CADSGD	11:30:00 AM	1.0134	1.0137			N/A
4/18/2019	CADSGD	1:30:00 PM	1.0129	1.0132			N/A
4/18/2019	CADSGD	3:30:00 PM	1.0125	1.0121			N/A
4/18/2019	CADZAR	9:30:00 AM	10.4919	10.5048			N/A
4/18/2019	CADZAR	11:30:00 AM	10.5246	10.5409			N/A
4/18/2019	CADZAR	1:30:00 PM	10.5367	10.5532			N/A
4/18/2019	CADZAR	3:30:00 PM	10.5132	10.5193			N/A
4/18/2019	CHFCZK	9:30:00 AM	22.462	22.472			N/A
4/18/2019	CHFCZK	11:30:00 AM	22.568	22.578			N/A
4/18/2019	CHFCZK	1:30:00 PM	22.552	22.568			N/A
4/18/2019	CHFCZK	3:30:00 PM	22.54	22.545			N/A
4/18/2019	CHFDKK	9:30:00 AM					N/A
4/18/2019	CHFDKK	11:30:00 AM	6.564	6.566			N/A
4/18/2019	CHFDKK	1:30:00 PM	6.561	6.564			N/A
4/18/2019	CHFDKK	3:30:00 PM	6.56	6.558			N/A
4/18/2019	CHFDKK.fx	9:30:00 AM	6.539	6.5452			N/A
4/18/2019	CHFDKK.fx	11:30:00 AM	6.5633	6.5679			N/A
4/18/2019	CHFDKK.fx	1:30:00 PM	6.5591	6.5652			N/A
4/18/2019	CHFDKK.fx	3:30:00 PM	6.5577	6.5601			N/A

4/18/2019	CHFHKD	9:30:00 AM	7.766	7.7699			N/A
4/18/2019	CHFHKD	11:30:00 AM	7.7624	7.7655			N/A
4/18/2019	CHFHKD	1:30:00 PM	7.7572	7.7611			N/A
4/18/2019	CHFHKD	3:30:00 PM	7.7498	7.7444			N/A
4/18/2019	CHFHUF	9:30:00 AM	279.61	280			N/A
4/18/2019	CHFHUF	11:30:00 AM	281.17	281.42			N/A
4/18/2019	CHFHUF	1:30:00 PM	281.12	281.5			N/A
4/18/2019	CHFHUF	3:30:00 PM	280.89	281.11			N/A
4/18/2019	CHFJPY	9:30:00 AM	110.764	110.825			N/A
4/18/2019	CHFJPY	11:30:00 AM	110.67	110.718			N/A
4/18/2019	CHFJPY	1:30:00 PM	110.649	110.719			N/A
4/18/2019	CHFJPY	3:30:00 PM	110.569	110.542			N/A
4/18/2019	CHFJPY.fx	9:30:00 AM	110.799	110.791			N/A
4/18/2019	CHFJPY.fx	11:30:00 AM	110.7	110.685			N/A
4/18/2019	CHFJPY.fx	1:30:00 PM	110.682	110.685			N/A
4/18/2019	CHFJPY.fx	3:30:00 PM	110.602	110.516			N/A
4/18/2019	CHFMXN	9:30:00 AM	18.6613	18.6758			N/A
4/18/2019	CHFMXN	11:30:00 AM	18.6889	18.7			N/A
4/18/2019	CHFMXN	1:30:00 PM	18.6555	18.6704			N/A
4/18/2019	CHFMXN	3:30:00 PM	18.6188	18.6161			N/A
4/18/2019	CHFNOK	9:30:00 AM	8.404	8.4119			N/A
4/18/2019	CHFNOK	11:30:00 AM	8.4679	8.4695			N/A
4/18/2019	CHFNOK	1:30:00 PM	8.4386	8.4454			N/A
4/18/2019	CHFNOK	3:30:00 PM	8.4286	8.4309			N/A
4/18/2019	CHFNOK.fx	9:30:00 AM	8.40738	8.40849			N/A
4/18/2019	CHFNOK.fx	11:30:00 AM	8.4713	8.46618			N/A
4/18/2019	CHFNOK.fx	1:30:00 PM	8.44209	8.44176			N/A
4/18/2019	CHFNOK.fx	3:30:00 PM	8.43205	8.42813			N/A
4/18/2019	CHFPLN	9:30:00 AM	3.7406	3.7437			N/A
4/18/2019	CHFPLN	11:30:00 AM	3.7611	3.7634			N/A
4/18/2019	CHFPLN	1:30:00 PM	3.7608	3.7634			N/A
4/18/2019	CHFPLN	3:30:00 PM	3.7581	3.7589			N/A
4/18/2019	CHFPLN.fx	9:30:00 AM	3.73829	3.74605			N/A
4/18/2019	CHFPLN.fx	11:30:00 AM	3.75846	3.76603			N/A

4/18/2019	CHFPLN.fx	1:30:00 PM	3.75844	3.76573			N/A
4/18/2019	CHFPLN.fx	3:30:00 PM	3.75548	3.76185			N/A
4/18/2019	CHFSEK	9:30:00 AM	9.1493	9.1533			N/A
4/18/2019	CHFSEK	11:30:00 AM	9.2327	9.2263			N/A
4/18/2019	CHFSEK	1:30:00 PM	9.2104	9.2148			N/A
4/18/2019	CHFSEK	3:30:00 PM	9.2046	9.203			N/A
4/18/2019	CHFSGD	9:30:00 AM	1.3401	1.3404			N/A
4/18/2019	CHFSGD	11:30:00 AM	1.3412	1.3414			N/A
4/18/2019	CHFSGD	1:30:00 PM	1.3403	1.3404			N/A
4/18/2019	CHFSGD	3:30:00 PM	1.339	1.3382			N/A
4/18/2019	CHFSGD.fx	9:30:00 AM	1.34018	1.34019			N/A
4/18/2019	CHFSGD.fx	11:30:00 AM	1.34132	1.34126			N/A
4/18/2019	CHFSGD.fx	1:30:00 PM	1.34043	1.34047			N/A
4/18/2019	CHFSGD.fx	3:30:00 PM	1.33919	1.33809			N/A
4/18/2019	CHFZAR	9:30:00 AM	13.8832	13.8912			N/A
4/18/2019	CHFZAR	11:30:00 AM	13.9264	13.9351			N/A
4/18/2019	CHFZAR	1:30:00 PM	13.9398	13.9533			N/A
4/18/2019	CHFZAR	3:30:00 PM	13.9006	13.9017			N/A
4/18/2019	CZKJPY	9:30:00 AM	4.932	4.936			N/A
4/18/2019	CZKJPY	11:30:00 AM	4.904	4.908			N/A
4/18/2019	CZKJPY	1:30:00 PM					N/A
4/18/2019	CZKJPY	3:30:00 PM	4.905	4.908			N/A
4/18/2019	DAX30.i	9:30:00 AM	12141.01	12139.51			N/A
4/18/2019	DAX30.i	11:30:00 AM	12150.76	12146.26			N/A
4/18/2019	DAX30.i	1:30:00 PM	12232.26	12230.01			N/A
4/18/2019	DAX30.i	3:30:00 PM	12221.76	12207.51			N/A
4/18/2019	DJ30.i	9:30:00 AM					N/A
4/18/2019	DJ30.i	11:30:00 AM					N/A
4/18/2019	DJ30.i	1:30:00 PM					N/A
4/18/2019	DJ30.i	3:30:00 PM					N/A
4/18/2019	DKKJPY	9:30:00 AM					N/A
4/18/2019	DKKJPY	11:30:00 AM					N/A
4/18/2019	DKKJPY	1:30:00 PM					N/A
4/18/2019	DKKJPY	3:30:00 PM	16.87	16.88			N/A

4/18/2019	EURAUD	9:30:00 AM	1.57197	1.57242			N/A
4/18/2019	EURAUD	11:30:00 AM	1.57035	1.57069			N/A
4/18/2019	EURAUD	1:30:00 PM	1.57129	1.57122			N/A
4/18/2019	EURAUD	3:30:00 PM	1.57073	1.57027			N/A
4/18/2019	EURAUD.fx	9:30:00 AM	1.57218	1.57221			N/A
4/18/2019	EURAUD.fx	11:30:00 AM	1.57056	1.57046			N/A
4/18/2019	EURAUD.fx	1:30:00 PM	1.57151	1.57099			N/A
4/18/2019	EURAUD.fx	3:30:00 PM	1.5708	1.57011			N/A
4/18/2019	EURCAD	9:30:00 AM	1.50916	1.50999			N/A
4/18/2019	EURCAD	11:30:00 AM	1.50338	1.50403			N/A
4/18/2019	EURCAD	1:30:00 PM	1.5041	1.50495			N/A
4/18/2019	EURCAD	3:30:00 PM	1.50552	1.50389			N/A
4/18/2019	EURCAD.fx	9:30:00 AM	1.50957	1.50958			N/A
4/18/2019	EURCAD.fx	11:30:00 AM	1.50378	1.50362			N/A
4/18/2019	EURCAD.fx	1:30:00 PM	1.50451	1.50451			N/A
4/18/2019	EURCAD.fx	3:30:00 PM	1.50572	1.50371			N/A
4/18/2019	EURCHF	9:30:00 AM	1.14122	1.14133			N/A
4/18/2019	EURCHF	11:30:00 AM	1.13707	1.13689			N/A
4/18/2019	EURCHF	1:30:00 PM	1.13767	1.13775			N/A
4/18/2019	EURCHF	3:30:00 PM	1.13867	1.13809			N/A
4/18/2019	EURCHF.fx	9:30:00 AM	1.14127	1.14127			N/A
4/18/2019	EURCHF.fx	11:30:00 AM	1.13711	1.13684			N/A
4/18/2019	EURCHF.fx	1:30:00 PM	1.13772	1.13769			N/A
4/18/2019	EURCHF.fx	3:30:00 PM	1.13871	1.13805			N/A
4/18/2019	EURCZK	9:30:00 AM	25.623	25.654			N/A
4/18/2019	EURCZK	11:30:00 AM	25.646	25.681			N/A
4/18/2019	EURCZK	1:30:00 PM	25.644	25.683			N/A
4/18/2019	EURCZK	3:30:00 PM	25.64	25.673			N/A
4/18/2019	EURDKK	9:30:00 AM	7.4647	7.4658			N/A
4/18/2019	EURDKK	11:30:00 AM	7.4639	7.4642			N/A
4/18/2019	EURDKK	1:30:00 PM	7.464	7.4652			N/A
4/18/2019	EURDKK	3:30:00 PM	7.4619	7.4625			N/A
4/18/2019	EURGBP	9:30:00 AM	0.86623	0.86628			N/A
4/18/2019	EURGBP	11:30:00 AM	0.86412	0.86374			N/A

4/18/2019	EURGBP	1:30:00 PM	0.86515	0.86525			N/A
4/18/2019	EURGBP	3:30:00 PM	0.8648	0.86439			N/A
4/18/2019	EURGBP.fx	9:30:00 AM	0.86626	0.86624			N/A
4/18/2019	EURGBP.fx	11:30:00 AM	0.86413	0.86378			N/A
4/18/2019	EURGBP.fx	1:30:00 PM	0.86518	0.8652			N/A
4/18/2019	EURGBP.fx	3:30:00 PM	0.86483	0.86435			N/A
4/18/2019	EURHKD	9:30:00 AM	8.8631	8.8681			N/A
4/18/2019	EURHKD	11:30:00 AM	8.8264	8.8297			N/A
4/18/2019	EURHKD	1:30:00 PM	8.8256	8.8306			N/A
4/18/2019	EURHKD	3:30:00 PM	8.8209	8.8206			N/A
4/18/2019	EURHKD.fx	9:30:00 AM	8.8657	8.86556			N/A
4/18/2019	EURHKD.fx	11:30:00 AM	8.8289	8.8272			N/A
4/18/2019	EURHKD.fx	1:30:00 PM	8.82839	8.82775			N/A
4/18/2019	EURHKD.fx	3:30:00 PM	8.82271	8.81785			N/A
4/18/2019	EURHUF	9:30:00 AM	319.08	319.67			N/A
4/18/2019	EURHUF	11:30:00 AM	319.68	320.22			N/A
4/18/2019	EURHUF	1:30:00 PM	319.69	320.37			N/A
4/18/2019	EURHUF	3:30:00 PM	319.86	320.49			N/A
4/18/2019	EURHUF.fx	9:30:00 AM	319.323	319.558			N/A
4/18/2019	EURHUF.fx	11:30:00 AM	319.952	320.139			N/A
4/18/2019	EURHUF.fx	1:30:00 PM					N/A
4/18/2019	EURHUF.fx	3:30:00 PM	320.13	320.306			N/A
4/18/2019	EURJPY	9:30:00 AM	126.447	126.448			N/A
4/18/2019	EURJPY	11:30:00 AM	125.865	125.857			N/A
4/18/2019	EURJPY	1:30:00 PM	125.928	125.925			N/A
4/18/2019	EURJPY	3:30:00 PM	125.877	125.823			N/A
4/18/2019	EURJPY.fx	9:30:00 AM	126.448	126.444			N/A
4/18/2019	EURJPY.fx	11:30:00 AM	125.868	125.86			N/A
4/18/2019	EURJPY.fx	1:30:00 PM	125.93	125.921			N/A
4/18/2019	EURJPY.fx	3:30:00 PM	125.878	125.847			N/A
4/18/2019	EURMXN	9:30:00 AM	21.3007	21.3189			N/A
4/18/2019	EURMXN	11:30:00 AM	21.2543	21.2704			N/A
4/18/2019	EURMXN	1:30:00 PM	21.2281	21.2457			N/A
4/18/2019	EURMXN	3:30:00 PM	21.1928	21.2009			N/A



4/18/2019	EURMXN.fx	9:30:00 AM	21.3092	21.3104			N/A
4/18/2019	EURMXN.fx	11:30:00 AM	21.2627	21.2621			N/A
4/18/2019	EURMXN.fx	1:30:00 PM	21.2381	21.2357			N/A
4/18/2019	EURMXN.fx	3:30:00 PM	21.2026	21.1909			N/A
4/18/2019	EURNOK	9:30:00 AM	9.5896	9.6019			N/A
4/18/2019	EURNOK	11:30:00 AM	9.6251	9.6318			N/A
4/18/2019	EURNOK	1:30:00 PM	9.5989	9.6098			N/A
4/18/2019	EURNOK	3:30:00 PM	9.5906	9.601			N/A
4/18/2019	EURNOK.fx	9:30:00 AM	9.59514	9.59658			N/A
4/18/2019	EURNOK.fx	11:30:00 AM	9.63042	9.62653			N/A
4/18/2019	EURNOK.fx	1:30:00 PM	9.6043	9.60435			N/A
4/18/2019	EURNOK.fx	3:30:00 PM	9.59583	9.59725			N/A
4/18/2019	EURNZD	9:30:00 AM	1.68121	1.68188			N/A
4/18/2019	EURNZD	11:30:00 AM	1.67764	1.67829			N/A
4/18/2019	EURNZD	1:30:00 PM	1.68056	1.68122			N/A
4/18/2019	EURNZD	3:30:00 PM	1.68153	1.68132			N/A
4/18/2019	EURNZD.fx	9:30:00 AM	1.68163	1.68145			N/A
4/18/2019	EURNZD.fx	11:30:00 AM	1.67804	1.67789			N/A
4/18/2019	EURNZD.fx	1:30:00 PM	1.68097	1.68079			N/A
4/18/2019	EURNZD.fx	3:30:00 PM	1.68191	1.6811			N/A
4/18/2019	EURPLN	9:30:00 AM	4.2691	4.2725			N/A
4/18/2019	EURPLN	11:30:00 AM	4.2761	4.2792			N/A
4/18/2019	EURPLN	1:30:00 PM	4.2788	4.2815			N/A
4/18/2019	EURPLN	3:30:00 PM	4.2772	4.2799			N/A
4/18/2019	EURPLN.fx	9:30:00 AM	4.26837	4.27312			N/A
4/18/2019	EURPLN.fx	11:30:00 AM	4.27546	4.27989			N/A
4/18/2019	EURPLN.fx	1:30:00 PM	4.27817	4.28222			N/A
4/18/2019	EURPLN.fx	3:30:00 PM	4.27647	4.28093			N/A
4/18/2019	EURRUB	9:30:00 AM					N/A
4/18/2019	EURRUB	11:30:00 AM	71.805	72.242			N/A
4/18/2019	EURRUB	1:30:00 PM	71.729	72.171			N/A
4/18/2019	EURRUB	3:30:00 PM	71.645	71.98			N/A
4/18/2019	EURSEK	9:30:00 AM	10.4428	10.4471			N/A
4/18/2019	EURSEK	11:30:00 AM	10.4987	10.4921			N/A

4/18/2019	EURSEK	1:30:00 PM	10.4804	10.4846			N/A
4/18/2019	EURSEK	3:30:00 PM	10.4772	10.4811			N/A
4/18/2019	EURSEK.fx	9:30:00 AM	10.44446	10.44547			N/A
4/18/2019	EURSEK.fx	11:30:00 AM	10.50021	10.49058			N/A
4/18/2019	EURSEK.fx	1:30:00 PM	10.48196	10.48299			N/A
4/18/2019	EURSEK.fx	3:30:00 PM	10.47871	10.47981			N/A
4/18/2019	EURSGD	9:30:00 AM	1.5292	1.5299			N/A
4/18/2019	EURSGD	11:30:00 AM	1.5248	1.5254			N/A
4/18/2019	EURSGD	1:30:00 PM	1.5246	1.5254			N/A
4/18/2019	EURSGD	3:30:00 PM	1.5238	1.524			N/A
4/18/2019	EURSGD.fx	9:30:00 AM	1.5295	1.52953			N/A
4/18/2019	EURSGD.fx	11:30:00 AM	1.52518	1.52488			N/A
4/18/2019	EURSGD.fx	1:30:00 PM	1.525	1.52502			N/A
4/18/2019	EURSGD.fx	3:30:00 PM	1.52416	1.52374			N/A
4/18/2019	EURUSD	9:30:00 AM	1.13001	1.13011			N/A
4/18/2019	EURUSD	11:30:00 AM	1.12521	1.12509			N/A
4/18/2019	EURUSD	1:30:00 PM	1.12504	1.12512			N/A
4/18/2019	EURUSD	3:30:00 PM	1.12445	1.12381	10	10	N/A
4/18/2019	EURUSD.fx	9:30:00 AM	1.13021	1.1302			N/A
4/18/2019	EURUSD.fx	11:30:00 AM	1.12539	1.12519			N/A
4/18/2019	EURUSD.fx	1:30:00 PM	1.12525	1.12522			N/A
4/18/2019	EURUSD.fx	3:30:00 PM	1.12455	1.12392			N/A
4/18/2019	EURZAR	9:30:00 AM	15.8463	15.8603			N/A
4/18/2019	EURZAR	11:30:00 AM	15.8408	15.8566			N/A
4/18/2019	EURZAR	1:30:00 PM	15.861	15.8802			N/A
4/18/2019	EURZAR	3:30:00 PM	15.828	15.8394			N/A
4/18/2019	EURZAR.fx	9:30:00 AM	15.84627	15.86092			N/A
4/18/2019	EURZAR.fx	11:30:00 AM	15.8401	15.85719			N/A
4/18/2019	EURZAR.fx	1:30:00 PM	15.86125	15.88081			N/A
4/18/2019	EURZAR.fx	3:30:00 PM	15.82711	15.84388			N/A
4/18/2019	GBPAUD	9:30:00 AM	1.81533	1.81601			N/A
4/18/2019	GBPAUD	11:30:00 AM	1.81875	1.81771			N/A
4/18/2019	GBPAUD	1:30:00 PM	1.81659	1.81693			N/A
4/18/2019	GBPAUD	3:30:00 PM	1.8172	1.8173			N/A

4/18/2019	GBPAUD.fx	9:30:00 AM	1.81572	1.81561			N/A
4/18/2019	GBPAUD.fx	11:30:00 AM	1.8189	1.8175			N/A
4/18/2019	GBPAUD.fx	1:30:00 PM	1.81699	1.81652			N/A
4/18/2019	GBPAUD.fx	3:30:00 PM	1.81758	1.81694			N/A
4/18/2019	GBPCAD	9:30:00 AM	1.74229	1.74301			N/A
4/18/2019	GBPCAD	11:30:00 AM	1.74082	1.74054			N/A
4/18/2019	GBPCAD	1:30:00 PM	1.73858	1.73939			N/A
4/18/2019	GBPCAD	3:30:00 PM	1.74043	1.73944			N/A
4/18/2019	GBPCAD.fx	9:30:00 AM	1.74267	1.74263			N/A
4/18/2019	GBPCAD.fx	11:30:00 AM	1.741	1.73953			N/A
4/18/2019	GBPCAD.fx	1:30:00 PM	1.73895	1.739			N/A
4/18/2019	GBPCAD.fx	3:30:00 PM	1.74074	1.73955			N/A
4/18/2019	GBPCHF	9:30:00 AM	1.31735	1.31763			N/A
4/18/2019	GBPCHF	11:30:00 AM	1.31606	1.31538			N/A
4/18/2019	GBPCHF	1:30:00 PM	1.31483	1.31518			N/A
4/18/2019	GBPCHF	3:30:00 PM	1.31734	1.31636			N/A
4/18/2019	GBPCHF.fx	9:30:00 AM	1.31753	1.3174			N/A
4/18/2019	GBPCHF.fx	11:30:00 AM	1.31614	1.3153			N/A
4/18/2019	GBPCHF.fx	1:30:00 PM	1.315	1.31498			N/A
4/18/2019	GBPCHF.fx	3:30:00 PM	1.31745	1.31616			N/A
4/18/2019	GBPCZK	9:30:00 AM	29.589	29.601			N/A
4/18/2019	GBPCZK	11:30:00 AM	29.701	29.706			N/A
4/18/2019	GBPCZK	1:30:00 PM	29.651	29.672			N/A
4/18/2019	GBPCZK	3:30:00 PM	29.676	29.685			N/A
4/18/2019	GBPDKK	9:30:00 AM	8.614	8.625			N/A
4/18/2019	GBPDKK	11:30:00 AM	8.639	8.645			N/A
4/18/2019	GBPDKK	1:30:00 PM	8.625	8.635			N/A
4/18/2019	GBPDKK	3:30:00 PM	8.634	8.639			N/A
4/18/2019	GBPDKK.fx	9:30:00 AM	8.6128	8.6254			N/A
4/18/2019	GBPDKK.fx	11:30:00 AM	8.6364	8.6451			N/A
4/18/2019	GBPDKK.fx	1:30:00 PM	8.6228	8.6355			N/A
4/18/2019	GBPDKK.fx	3:30:00 PM	8.6315	8.6397			N/A
4/18/2019	GBPHKD	9:30:00 AM	10.2296	10.2347			N/A
4/18/2019	GBPHKD	11:30:00 AM	10.2164	10.2126			N/A

4/18/2019	GBPHKD	1:30:00 PM	10.1989	10.2036			N/A
4/18/2019	GBPHKD	3:30:00 PM	10.2	10.2019			N/A
4/18/2019	GBPHUF	9:30:00 AM	368.34	368.81			N/A
4/18/2019	GBPHUF	11:30:00 AM	369.99	370.19			N/A
4/18/2019	GBPHUF	1:30:00 PM	369.63	370.08			N/A
4/18/2019	GBPHUF	3:30:00 PM	369.89	370.18			N/A
4/18/2019	GBPJPY	9:30:00 AM	145.956	145.992			N/A
4/18/2019	GBPJPY	11:30:00 AM	145.721	145.679			N/A
4/18/2019	GBPJPY	1:30:00 PM	145.537	145.561			N/A
4/18/2019	GBPJPY	3:30:00 PM	145.583	145.55			N/A
4/18/2019	GBPJPY.fx	9:30:00 AM	145.973	145.973			N/A
4/18/2019	GBPJPY.fx	11:30:00 AM	145.71	145.662			N/A
4/18/2019	GBPJPY.fx	1:30:00 PM	145.555	145.542			N/A
4/18/2019	GBPJPY.fx	3:30:00 PM	145.599	145.533			N/A
4/18/2019	GBPMXN	9:30:00 AM	24.5844	24.5995			N/A
4/18/2019	GBPMXN	11:30:00 AM	24.601	24.5882			N/A
4/18/2019	GBPMXN	1:30:00 PM	24.5305	24.5445			N/A
4/18/2019	GBPMXN	3:30:00 PM	24.509	24.5178			N/A
4/18/2019	GBPNOK	9:30:00 AM	11.0719	11.0829			N/A
4/18/2019	GBPNOK	11:30:00 AM	11.146	11.1452			N/A
4/18/2019	GBPNOK	1:30:00 PM	11.0958	11.1065			N/A
4/18/2019	GBPNOK	3:30:00 PM	11.0975	11.1013			N/A
4/18/2019	GBPNOK.fx	9:30:00 AM	11.07684	11.07815			N/A
4/18/2019	GBPNOK.fx	11:30:00 AM	11.14985	11.14055			N/A
4/18/2019	GBPNOK.fx	1:30:00 PM	11.10087	11.10121			N/A
4/18/2019	GBPNOK.fx	3:30:00 PM	11.1019	11.09632			N/A
4/18/2019	GBPNZD	9:30:00 AM	1.94093	1.94147			N/A
4/18/2019	GBPNZD	11:30:00 AM	1.94254	1.94209			N/A
4/18/2019	GBPNZD	1:30:00 PM	1.94246	1.94316			N/A
4/18/2019	GBPNZD	3:30:00 PM	1.94505	1.94507			N/A
4/18/2019	GBPNZD.fx	9:30:00 AM	1.94128	1.9411			N/A
4/18/2019	GBPNZD.fx	11:30:00 AM	1.94259	1.94173			N/A
4/18/2019	GBPNZD.fx	1:30:00 PM	1.94283	1.94278			N/A
4/18/2019	GBPNZD.fx	3:30:00 PM	1.94538	1.94475			N/A

4/18/2019	GBPPLN	9:30:00 AM	4.9292	4.9309			N/A
4/18/2019	GBPPLN	11:30:00 AM	4.9521	4.9512			N/A
4/18/2019	GBPPLN	1:30:00 PM	4.9464	4.948			N/A
4/18/2019	GBPPLN	3:30:00 PM	4.9494	4.9484			N/A
4/18/2019	GBPPLN.fx	9:30:00 AM	4.92702	4.93308			N/A
4/18/2019	GBPPLN.fx	11:30:00 AM	4.94888	4.95335			N/A
4/18/2019	GBPPLN.fx	1:30:00 PM	4.94426	4.95017			N/A
4/18/2019	GBPPLN.fx	3:30:00 PM	4.9468	4.95066			N/A
4/18/2019	GBPSEK	9:30:00 AM	12.0538	12.0621			N/A
4/18/2019	GBPSEK	11:30:00 AM	12.1533	12.1433			N/A
4/18/2019	GBPSEK	1:30:00 PM	12.1113	12.1204			N/A
4/18/2019	GBPSEK	3:30:00 PM	12.1195	12.1214			N/A
4/18/2019	GBPSEK.fx	9:30:00 AM	12.04998	12.06569			N/A
4/18/2019	GBPSEK.fx	11:30:00 AM	12.14828	12.14748			N/A
4/18/2019	GBPSEK.fx	1:30:00 PM	12.10782	12.12407			N/A
4/18/2019	GBPSEK.fx	3:30:00 PM	12.11465	12.1248			N/A
4/18/2019	GBPSGD	9:30:00 AM	1.7654	1.7661			N/A
4/18/2019	GBPSGD	11:30:00 AM	1.7655	1.7651			N/A
4/18/2019	GBPSGD	1:30:00 PM	1.7623	1.7631			N/A
4/18/2019	GBPSGD	3:30:00 PM	1.7627	1.7628			N/A
4/18/2019	GBPSGD.fx	9:30:00 AM	1.76353	1.76788			N/A
4/18/2019	GBPSGD.fx	11:30:00 AM	1.76329	1.76722			N/A
4/18/2019	GBPSGD.fx	1:30:00 PM	1.76045	1.76492			N/A
4/18/2019	GBPSGD.fx	3:30:00 PM	1.76082	1.76456			N/A
4/18/2019	GBPUSD	9:30:00 AM	1.30473	1.30469			N/A
4/18/2019	GBPUSD	11:30:00 AM	1.303	1.3021			N/A
4/18/2019	GBPUSD	1:30:00 PM	1.30057	1.30057			N/A
4/18/2019	GBPUSD	3:30:00 PM	1.30051	1.29989			N/A
4/18/2019	GBPUSD.fx	9:30:00 AM	1.30477	1.30465			N/A
4/18/2019	GBPUSD.fx	11:30:00 AM	1.30288	1.30214			N/A
4/18/2019	GBPUSD.fx	1:30:00 PM	1.30062	1.30052			N/A
4/18/2019	GBPUSD.fx	3:30:00 PM	1.30051	1.29984			N/A
4/18/2019	GBPZAR	9:30:00 AM	18.2891	18.3126			N/A
4/18/2019	GBPZAR	11:30:00 AM	18.3384	18.3499			N/A

4/18/2019	GBPZAR	1:30:00 PM	18.3292	18.3581			N/A
4/18/2019	GBPZAR	3:30:00 PM	18.3067	18.3265			N/A
4/18/2019	GBPZAR.fx	9:30:00 AM	18.2963	18.3052			N/A
4/18/2019	GBPZAR.fx	11:30:00 AM	18.3454	18.3462			N/A
4/18/2019	GBPZAR.fx	1:30:00 PM	18.3366	18.3509			N/A
4/18/2019	GBPZAR.fx	3:30:00 PM	18.3136	18.3198			N/A
4/18/2019	GOLD	9:30:00 AM	1271.93	1272.18			N/A
4/18/2019	GOLD	11:30:00 AM	1274.72	1275.02			N/A
4/18/2019	GOLD	1:30:00 PM	1275.5	1275.83			N/A
4/18/2019	GOLD	3:30:00 PM	1275.61	1273.63			N/A
4/18/2019	HKDJPY	9:30:00 AM	14.26	14.28			N/A
4/18/2019	HKDJPY	11:30:00 AM	14.26	14.27			N/A
4/18/2019	HKDJPY	1:30:00 PM	14.27	14.27			N/A
4/18/2019	HKDJPY	3:30:00 PM	14.27	14.28			N/A
4/18/2019	HKDJPY.fx	9:30:00 AM	14.258	14.266			N/A
4/18/2019	HKDJPY.fx	11:30:00 AM	14.252	14.259			N/A
4/18/2019	HKDJPY.fx	1:30:00 PM	14.26	14.267			N/A
4/18/2019	HKDJPY.fx	3:30:00 PM	14.267	14.264			N/A
4/18/2019	HUFJPY	9:30:00 AM	0.3961	0.3963			N/A
4/18/2019	HUFJPY	11:30:00 AM	0.3936	0.3938			N/A
4/18/2019	HUFJPY	1:30:00 PM	0.3936	0.3939			N/A
4/18/2019	HUFJPY	3:30:00 PM	0.3934	0.3937			N/A
4/18/2019	JP225.i	9:30:00 AM					N/A
4/18/2019	JP225.i	11:30:00 AM	22089.65	22099.65			N/A
4/18/2019	JP225.i	1:30:00 PM	22154.65	22164.65			N/A
4/18/2019	JP225.i	3:30:00 PM	22224.65	22207.15			N/A
4/18/2019	MXNJPY	9:30:00 AM	5.93	5.94			N/A
4/18/2019	MXNJPY	11:30:00 AM	5.92	5.93			N/A
4/18/2019	MXNJPY	1:30:00 PM	5.93	5.94			N/A
4/18/2019	MXNJPY	3:30:00 PM	5.94	5.95			N/A
4/18/2019	NASDAQ.i	9:30:00 AM					N/A
4/18/2019	NASDAQ.i	11:30:00 AM					N/A
4/18/2019	NASDAQ.i	1:30:00 PM					N/A
4/18/2019	NASDAQ.i	3:30:00 PM					N/A

4/18/2019	NOKJPY	9:30:00 AM	13.17	13.2			N/A
4/18/2019	NOKJPY	11:30:00 AM	13.07	13.09			N/A
4/18/2019	NOKJPY	1:30:00 PM	13.1	13.13			N/A
4/18/2019	NOKJPY	3:30:00 PM	13.1	13.13			N/A
4/18/2019	NOKJPY.fx	9:30:00 AM	13.174	13.181			N/A
4/18/2019	NOKJPY.fx	11:30:00 AM	13.072	13.072			N/A
4/18/2019	NOKJPY.fx	1:30:00 PM	13.109	13.113			N/A
4/18/2019	NOKJPY.fx	3:30:00 PM	13.114	13.118			N/A
4/18/2019	NZDCAD	9:30:00 AM	0.89741	0.89805			N/A
4/18/2019	NZDCAD	11:30:00 AM	0.89584	0.89646			N/A
4/18/2019	NZDCAD	1:30:00 PM	0.89472	0.8954			N/A
4/18/2019	NZDCAD	3:30:00 PM	0.8953	0.89469			N/A
4/18/2019	NZDCAD.fx	9:30:00 AM	0.89775	0.8977			N/A
4/18/2019	NZDCAD.fx	11:30:00 AM	0.89616	0.89614			N/A
4/18/2019	NZDCAD.fx	1:30:00 PM	0.89506	0.89506			N/A
4/18/2019	NZDCAD.fx	3:30:00 PM	0.89537	0.89453			N/A
4/18/2019	NZDCHF	9:30:00 AM	0.67839	0.67906			N/A
4/18/2019	NZDCHF	11:30:00 AM	0.67735	0.67789			N/A
4/18/2019	NZDCHF	1:30:00 PM	0.67649	0.67717			N/A
4/18/2019	NZDCHF	3:30:00 PM	0.67701	0.67705			N/A
4/18/2019	NZDCHF.fx	9:30:00 AM	0.67873	0.67871			N/A
4/18/2019	NZDCHF.fx	11:30:00 AM	0.67768	0.67754			N/A
4/18/2019	NZDCHF.fx	1:30:00 PM	0.67684	0.67681			N/A
4/18/2019	NZDCHF.fx	3:30:00 PM	0.67731	0.6767			N/A
4/18/2019	NZDCZK	9:30:00 AM	15.243	15.25			N/A
4/18/2019	NZDCZK	11:30:00 AM	15.288	15.297			N/A
4/18/2019	NZDCZK	1:30:00 PM	15.262	15.272			N/A
4/18/2019	NZDCZK	3:30:00 PM	15.256	15.261			N/A
4/18/2019	NZDDKK	9:30:00 AM	4.438	4.442			N/A
4/18/2019	NZDDKK	11:30:00 AM	4.446	4.449			N/A
4/18/2019	NZDDKK	1:30:00 PM	4.44	4.443			N/A
4/18/2019	NZDDKK	3:30:00 PM	4.437	4.44			N/A
4/18/2019	NZDHKD	9:30:00 AM	5.2697	5.2723			N/A
4/18/2019	NZDHKD	11:30:00 AM	5.2583	5.2605			N/A

4/18/2019	NZDHKD	1:30:00 PM	5.2491	5.2512			N/A
4/18/2019	NZDHKD	3:30:00 PM	5.243	5.2439			N/A
4/18/2019	NZDHUF	9:30:00 AM	189.72	190.01			N/A
4/18/2019	NZDHUF	11:30:00 AM	190.48	190.67			N/A
4/18/2019	NZDHUF	1:30:00 PM	190.22	190.49			N/A
4/18/2019	NZDHUF	3:30:00 PM	190.12	190.32			N/A
4/18/2019	NZDJPY	9:30:00 AM	75.163	75.232			N/A
4/18/2019	NZDJPY	11:30:00 AM	74.977	75.041			N/A
4/18/2019	NZDJPY	1:30:00 PM	74.882	74.947			N/A
4/18/2019	NZDJPY	3:30:00 PM	74.834	74.866			N/A
4/18/2019	NZDJPY.fx	9:30:00 AM	75.195	75.2			N/A
4/18/2019	NZDJPY.fx	11:30:00 AM	75.007	75.009			N/A
4/18/2019	NZDJPY.fx	1:30:00 PM	74.914	74.913			N/A
4/18/2019	NZDJPY.fx	3:30:00 PM	74.847	74.835			N/A
4/18/2019	NZDMXN	9:30:00 AM	12.6646	12.6697			N/A
4/18/2019	NZDMXN	11:30:00 AM	12.6619	12.666			N/A
4/18/2019	NZDMXN	1:30:00 PM	12.6255	12.6311			N/A
4/18/2019	NZDMXN	3:30:00 PM	12.6005	12.6007			N/A
4/18/2019	NZDNOK	9:30:00 AM	5.7028	5.7059			N/A
4/18/2019	NZDNOK	11:30:00 AM	5.7328	5.7343			N/A
4/18/2019	NZDNOK	1:30:00 PM	5.7102	5.7133			N/A
4/18/2019	NZDNOK	3:30:00 PM	5.7011	5.7015			N/A
4/18/2019	NZDPLN	9:30:00 AM	2.5388	2.5399			N/A
4/18/2019	NZDPLN	11:30:00 AM	2.5468	2.5481			N/A
4/18/2019	NZDPLN	1:30:00 PM	2.5452	2.5462			N/A
4/18/2019	NZDPLN	3:30:00 PM	2.5416	2.543			N/A
4/18/2019	NZDSEK	9:30:00 AM	6.2061	6.2122			N/A
4/18/2019	NZDSEK	11:30:00 AM	6.2515	6.2522			N/A
4/18/2019	NZDSEK	1:30:00 PM	6.2308	6.2365			N/A
4/18/2019	NZDSEK	3:30:00 PM	6.2275	6.2319			N/A
4/18/2019	NZDSGD	9:30:00 AM	0.9093	0.9099			N/A
4/18/2019	NZDSGD	11:30:00 AM	0.9087	0.9092			N/A
4/18/2019	NZDSGD	1:30:00 PM	0.907	0.9076			N/A
4/18/2019	NZDSGD	3:30:00 PM	0.9062	0.9066			N/A



4/18/2019	NZDSGD.fx	9:30:00 AM	0.9093	0.90987			N/A
4/18/2019	NZDSGD.fx	11:30:00 AM	0.90867	0.90912			N/A
4/18/2019	NZDSGD.fx	1:30:00 PM	0.90698	0.90755			N/A
4/18/2019	NZDSGD.fx	3:30:00 PM	0.90594	0.90652			N/A
4/18/2019	NZDUSD	9:30:00 AM	0.67201	0.67211			N/A
4/18/2019	NZDUSD	11:30:00 AM	0.67057	0.67065			N/A
4/18/2019	NZDUSD	1:30:00 PM	0.66932	0.66939			N/A
4/18/2019	NZDUSD	3:30:00 PM	0.66867	0.66842			N/A
4/18/2019	NZDUSD.fx	9:30:00 AM	0.67208	0.67213			N/A
4/18/2019	NZDUSD.fx	11:30:00 AM	0.67063	0.67066			N/A
4/18/2019	NZDUSD.fx	1:30:00 PM	0.66939	0.6694			N/A
4/18/2019	NZDUSD.fx	3:30:00 PM	0.66869	0.66844			N/A
4/18/2019	NZDZAR	9:30:00 AM	9.4164	9.429			N/A
4/18/2019	NZDZAR	11:30:00 AM	9.4294	9.445			N/A
4/18/2019	NZDZAR	1:30:00 PM	9.4281	9.4443			N/A
4/18/2019	NZDZAR	3:30:00 PM	9.4017	9.415			N/A
4/18/2019	SEKJPY	9:30:00 AM	12.1	12.12			N/A
4/18/2019	SEKJPY	11:30:00 AM	12	12			N/A
4/18/2019	SEKJPY	1:30:00 PM	12.01	12.02			N/A
4/18/2019	SEKJPY	3:30:00 PM	12.01	12.02			N/A
4/18/2019	SEKJPY.fx	9:30:00 AM	12.097	12.115			N/A
4/18/2019	SEKJPY.fx	11:30:00 AM	11.989	11.995			N/A
4/18/2019	SEKJPY.fx	1:30:00 PM	12.003	12.022			N/A
4/18/2019	SEKJPY.fx	3:30:00 PM	12.002	12.019			N/A
4/18/2019	SGDJPY	9:30:00 AM	82.68	82.68			N/A
4/18/2019	SGDJPY	11:30:00 AM	82.56	82.53			N/A
4/18/2019	SGDJPY	1:30:00 PM	82.56	82.57			N/A
4/18/2019	SGDJPY	3:30:00 PM	82.57	82.55			N/A
4/18/2019	SILVER	9:30:00 AM	14.76	15.15			N/A
4/18/2019	SILVER	11:30:00 AM	14.8	15.19			N/A
4/18/2019	SILVER	1:30:00 PM	14.78	15.16			N/A
4/18/2019	SILVER	3:30:00 PM	14.8	15.16			N/A
4/18/2019	SPX500.i	9:30:00 AM	2892.6	2893.65			N/A
4/18/2019	SPX500.i	11:30:00 AM	2891.35	2891.9			N/A

4/18/2019	SPX500.i	1:30:00 PM	2897.1	2897.4			N/A
4/18/2019	SPX500.i	3:30:00 PM	2904.6	2902.4			N/A
4/18/2019	UK100.i	9:30:00 AM	7465.28	7466.69			N/A
4/18/2019	UK100.i	11:30:00 AM	7462.11	7460.19			N/A
4/18/2019	UK100.i	1:30:00 PM	7469.53	7467.94			N/A
4/18/2019	UK100.i	3:30:00 PM	7479.94	7476.78			N/A
4/18/2019	USDCAD	9:30:00 AM	1.33571	1.33577			N/A
4/18/2019	USDCAD	11:30:00 AM	1.33633	1.33632			N/A
4/18/2019	USDCAD	1:30:00 PM	1.33713	1.33717			N/A
4/18/2019	USDCAD	3:30:00 PM	1.33883	1.33747			N/A
4/18/2019	USDCAD.fx	9:30:00 AM	1.33573	1.33574			N/A
4/18/2019	USDCAD.fx	11:30:00 AM	1.33634	1.3363			N/A
4/18/2019	USDCAD.fx	1:30:00 PM	1.33716	1.33713			N/A
4/18/2019	USDCAD.fx	3:30:00 PM	1.33881	1.33757			N/A
4/18/2019	USDCHF	9:30:00 AM	1.00977	1.00984			N/A
4/18/2019	USDCHF	11:30:00 AM	1.01045	1.01034			N/A
4/18/2019	USDCHF	1:30:00 PM	1.01101	1.01119			N/A
4/18/2019	USDCHF	3:30:00 PM	1.0132	1.01238			N/A
4/18/2019	USDCHF.fx	9:30:00 AM	1.00981	1.00977			N/A
4/18/2019	USDCHF.fx	11:30:00 AM	1.01049	1.01029			N/A
4/18/2019	USDCHF.fx	1:30:00 PM	1.01105	1.01113			N/A
4/18/2019	USDCHF.fx	3:30:00 PM	1.01318	1.01216			N/A
4/18/2019	USDCZK	9:30:00 AM	22.697	22.709			N/A
4/18/2019	USDCZK	11:30:00 AM	22.813	22.832			N/A
4/18/2019	USDCZK	1:30:00 PM	22.815	22.837			N/A
4/18/2019	USDCZK	3:30:00 PM	22.84	22.854			N/A
4/18/2019	USDCZK.fx	9:30:00 AM	22.7035	22.7024			N/A
4/18/2019	USDCZK.fx	11:30:00 AM	22.8232	22.8241			N/A
4/18/2019	USDCZK.fx	1:30:00 PM	22.823	22.8282			N/A
4/18/2019	USDCZK.fx	3:30:00 PM	22.8463	22.8482			N/A
4/18/2019	USDDKK	9:30:00 AM	6.605	6.6088			N/A
4/18/2019	USDDKK	11:30:00 AM	6.633	6.636			N/A
4/18/2019	USDDKK	1:30:00 PM	6.634	6.6377			N/A
4/18/2019	USDDKK	3:30:00 PM	6.6423	6.6419			N/A

4/18/2019	USDDKK.fx	9:30:00 AM	6.60537	6.60682			N/A
4/18/2019	USDDKK.fx	11:30:00 AM	6.63377	6.63407			N/A
4/18/2019	USDDKK.fx	1:30:00 PM	6.63436	6.63563			N/A
4/18/2019	USDDKK.fx	3:30:00 PM	6.64253	6.6405			N/A
4/18/2019	USDHKD	9:30:00 AM	7.8441	7.8444			N/A
4/18/2019	USDHKD	11:30:00 AM	7.8451	7.8451			N/A
4/18/2019	USDHKD	1:30:00 PM	7.8453	7.8455			N/A
4/18/2019	USDHKD	3:30:00 PM	7.8457	7.8457			N/A
4/18/2019	USDHKD.fx	9:30:00 AM	7.84406	7.84443			N/A
4/18/2019	USDHKD.fx	11:30:00 AM	7.84498	7.84541			N/A
4/18/2019	USDHKD.fx	1:30:00 PM	7.84535	7.84582			N/A
4/18/2019	USDHKD.fx	3:30:00 PM	7.84568	7.84603			N/A
4/18/2019	USDHUF	9:30:00 AM	282.41	282.88			N/A
4/18/2019	USDHUF	11:30:00 AM	284.19	284.63			N/A
4/18/2019	USDHUF	1:30:00 PM	284.28	284.75			N/A
4/18/2019	USDHUF	3:30:00 PM	284.68	284.96			N/A
4/18/2019	USDHUF.fx	9:30:00 AM	282.602	282.692			N/A
4/18/2019	USDHUF.fx	11:30:00 AM	284.424	284.428			N/A
4/18/2019	USDHUF.fx	1:30:00 PM	284.475	284.556			N/A
4/18/2019	USDHUF.fx	3:30:00 PM	284.85	284.872			N/A
4/18/2019	USDINR	9:30:00 AM	64.42	74.4			N/A
4/18/2019	USDINR	11:30:00 AM	64.52	74.5			N/A
4/18/2019	USDINR	1:30:00 PM					N/A
4/18/2019	USDINR	3:30:00 PM					N/A
4/18/2019	USDJPY	9:30:00 AM	111.892	111.905			N/A
4/18/2019	USDJPY	11:30:00 AM	111.856	111.867			N/A
4/18/2019	USDJPY	1:30:00 PM	111.924	111.934			N/A
4/18/2019	USDJPY	3:30:00 PM	111.986	111.923			N/A
4/18/2019	USDJPY.fx	9:30:00 AM	111.898	111.898			N/A
4/18/2019	USDJPY.fx	11:30:00 AM	111.861	111.861			N/A
4/18/2019	USDJPY.fx	1:30:00 PM	111.93	111.927			N/A
4/18/2019	USDJPY.fx	3:30:00 PM	111.99	111.92			N/A
4/18/2019	USDMXN	9:30:00 AM	18.85	18.857			N/A
4/18/2019	USDMXN	11:30:00 AM	18.889	18.894			N/A

4/18/2019	USDMXN	1:30:00 PM	18.869	18.876			N/A
4/18/2019	USDMXN	3:30:00 PM	18.855	18.855			N/A
4/18/2019	USDMXN.fx	9:30:00 AM	18.8539	18.8533			N/A
4/18/2019	USDMXN.fx	11:30:00 AM	18.8933	18.8905			N/A
4/18/2019	USDMXN.fx	1:30:00 PM	18.8719	18.8725			N/A
4/18/2019	USDMXN.fx	3:30:00 PM	18.8577	18.8505			N/A
4/18/2019	USDNOK	9:30:00 AM	8.4863	8.4949			N/A
4/18/2019	USDNOK	11:30:00 AM	8.5551	8.558			N/A
4/18/2019	USDNOK	1:30:00 PM	8.5323	8.5395			N/A
4/18/2019	USDNOK	3:30:00 PM	8.5344	8.5382			N/A
4/18/2019	USDNOK.fx	9:30:00 AM	8.4901	8.49041			N/A
4/18/2019	USDNOK.fx	11:30:00 AM	8.55924	8.55335			N/A
4/18/2019	USDNOK.fx	1:30:00 PM	8.53626	8.53501			N/A
4/18/2019	USDNOK.fx	3:30:00 PM	8.53808	8.53636			N/A
4/18/2019	USDPLN	9:30:00 AM	3.7781	3.7797			N/A
4/18/2019	USDPLN	11:30:00 AM	3.8007	3.8019			N/A
4/18/2019	USDPLN	1:30:00 PM	3.8034	3.8044			N/A
4/18/2019	USDPLN	3:30:00 PM	3.806	3.8068			N/A
4/18/2019	USDPLN.fx	9:30:00 AM	3.77718	3.78053			N/A
4/18/2019	USDPLN.fx	11:30:00 AM	3.80009	3.80273			N/A
4/18/2019	USDPLN.fx	1:30:00 PM	3.80257	3.80526			N/A
4/18/2019	USDPLN.fx	3:30:00 PM	3.80505	3.80788			N/A
4/18/2019	USDRUB	9:30:00 AM					N/A
4/18/2019	USDRUB	11:30:00 AM	63.88	64.276			N/A
4/18/2019	USDRUB	1:30:00 PM	63.82	64.216			N/A
4/18/2019	USDRUB	3:30:00 PM	63.806	64.135			N/A
4/18/2019	USDSEK	9:30:00 AM	9.2394	9.2433			N/A
4/18/2019	USDSEK	11:30:00 AM	9.3287	9.3227			N/A
4/18/2019	USDSEK	1:30:00 PM	9.3133	9.3177			N/A
4/18/2019	USDSEK	3:30:00 PM	9.3203	9.3232	300	300	N/A
4/18/2019	USDSEK.fx	9:30:00 AM	9.24191	9.24144			N/A
4/18/2019	USDSEK.fx	11:30:00 AM	9.33127	9.32101			N/A
4/18/2019	USDSEK.fx	1:30:00 PM	9.31584	9.31595			N/A
4/18/2019	USDSEK.fx	3:30:00 PM	9.32272	9.3214			N/A

4/18/2019	USDSGD	9:30:00 AM	1.3532	1.3534			N/A
4/18/2019	USDSGD	11:30:00 AM	1.3551	1.3554			N/A
4/18/2019	USDSGD	1:30:00 PM	1.3552	1.3555			N/A
4/18/2019	USDSGD	3:30:00 PM	1.3557	1.3559			N/A
4/18/2019	USDSGD.fx	9:30:00 AM	1.3531	1.3536			N/A
4/18/2019	USDSGD.fx	11:30:00 AM	1.35501	1.35544			N/A
4/18/2019	USDSGD.fx	1:30:00 PM	1.35511	1.35555			N/A
4/18/2019	USDSGD.fx	3:30:00 PM	1.35557	1.35588			N/A
4/18/2019	USDZAR	9:30:00 AM	14.0207	14.0333			N/A
4/18/2019	USDZAR	11:30:00 AM	14.0762	14.0912			N/A
4/18/2019	USDZAR	1:30:00 PM	14.0962	14.1135			N/A
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4/18/2019	USDZAR.fx	11:30:00 AM					N/A
4/18/2019	USDZAR.fx	1:30:00 PM					N/A
4/18/2019	USDZAR.fx	3:30:00 PM					N/A
4/18/2019	XAUUSD	9:30:00 AM	1271.94	1272.18			N/A
4/18/2019	XAUUSD	11:30:00 AM	1274.71	1275.02			N/A
4/18/2019	XAUUSD	1:30:00 PM	1275.5	1275.83			N/A
4/18/2019	XAUUSD	3:30:00 PM	1275.49	1273.64			N/A
4/18/2019	ZARJPY	9:30:00 AM	7.96	7.98			N/A
4/18/2019	ZARJPY	11:30:00 AM	7.92	7.95			N/A
4/18/2019	ZARJPY	1:30:00 PM	7.92	7.94			N/A
4/18/2019	ZARJPY	3:30:00 PM	7.93	7.95			N/A
4/18/2019	ZARJPY.fx	9:30:00 AM	7.974	7.977			N/A
4/18/2019	ZARJPY.fx	11:30:00 AM	7.939	7.942			N/A
4/18/2019	ZARJPY.fx	1:30:00 PM	7.932	7.936			N/A
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4/19/2019	#ZNGA	1:30:00 PM					N/A
4/19/2019	#ZNGA	3:30:00 PM					N/A
4/19/2019	AUDCAD	9:30:00 AM	0.95612	0.95676			N/A
4/19/2019	AUDCAD	11:30:00 AM	0.95637	0.95713			N/A
4/19/2019	AUDCAD	1:30:00 PM	0.95602	0.9568			N/A
4/19/2019	AUDCAD	3:30:00 PM	0.95618	0.9568			N/A

4/19/2019	AUDCAD.fx	9:30:00 AM	0.95635	0.9565			N/A
4/19/2019	AUDCAD.fx	11:30:00 AM	0.95661	0.95688			N/A
4/19/2019	AUDCAD.fx	1:30:00 PM	0.95629	0.95653			N/A
4/19/2019	AUDCAD.fx	3:30:00 PM	0.95653	0.9565			N/A
4/19/2019	AUDCHF	9:30:00 AM	0.7255	0.72617			N/A
4/19/2019	AUDCHF	11:30:00 AM	0.72466	0.72536			N/A
4/19/2019	AUDCHF	1:30:00 PM	0.72462	0.72538			N/A
4/19/2019	AUDCHF	3:30:00 PM	0.72463	0.72538			N/A
4/19/2019	AUDCHF.fx	9:30:00 AM	0.72574	0.7259			N/A
4/19/2019	AUDCHF.fx	11:30:00 AM	0.72495	0.72509			N/A
4/19/2019	AUDCHF.fx	1:30:00 PM	0.72488	0.72512			N/A
4/19/2019	AUDCHF.fx	3:30:00 PM	0.72494	0.72506			N/A
4/19/2019	AUDCZK	9:30:00 AM	16.326	16.342			N/A
4/19/2019	AUDCZK	11:30:00 AM					N/A
4/19/2019	AUDCZK	1:30:00 PM	16.316	16.333			N/A
4/19/2019	AUDCZK	3:30:00 PM	16.32	16.332			N/A
4/19/2019	AUDDKK	9:30:00 AM	4.7477	4.7524			N/A
4/19/2019	AUDDKK	11:30:00 AM	4.747	4.7517			N/A
4/19/2019	AUDDKK	1:30:00 PM	4.7459	4.7507			N/A
4/19/2019	AUDDKK	3:30:00 PM	4.7469	4.7515			N/A
4/19/2019	AUDHKD	9:30:00 AM	5.6092	5.6125			N/A
4/19/2019	AUDHKD	11:30:00 AM	5.6089	5.6129			N/A
4/19/2019	AUDHKD	1:30:00 PM	5.6069	5.6106			N/A
4/19/2019	AUDHKD	3:30:00 PM	5.607	5.6109			N/A
4/19/2019	AUDHUF	9:30:00 AM	203.46	203.68			N/A
4/19/2019	AUDHUF	11:30:00 AM	203.33	203.58			N/A
4/19/2019	AUDHUF	1:30:00 PM	203.2	203.45			N/A
4/19/2019	AUDHUF	3:30:00 PM	203.44	203.61			N/A
4/19/2019	AUDJPY	9:30:00 AM	80.037	80.098			N/A
4/19/2019	AUDJPY	11:30:00 AM	80.035	80.112			N/A
4/19/2019	AUDJPY	1:30:00 PM	80.001	80.076			N/A
4/19/2019	AUDJPY	3:30:00 PM	80.014	80.085			N/A
4/19/2019	AUDJPY.fx	9:30:00 AM	80.066	80.065			N/A
4/19/2019	AUDJPY.fx	11:30:00 AM	80.064	80.079			N/A

4/19/2019	AUDJPY.fx	1:30:00 PM	80.03	80.045			N/A
4/19/2019	AUDJPY.fx	3:30:00 PM	80.043	80.053			N/A
4/19/2019	AUDMXN	9:30:00 AM	13.437	13.4443			N/A
4/19/2019	AUDMXN	11:30:00 AM	13.4373	13.4479			N/A
4/19/2019	AUDMXN	1:30:00 PM	13.436	13.4463			N/A
4/19/2019	AUDMXN	3:30:00 PM	13.4484	13.4591			N/A
4/19/2019	AUDNOK	9:30:00 AM	6.0843	6.0885			N/A
4/19/2019	AUDNOK	11:30:00 AM	6.0796	6.0845			N/A
4/19/2019	AUDNOK	1:30:00 PM	6.0801	6.0823			N/A
4/19/2019	AUDNOK	3:30:00 PM	6.0814	6.0862			N/A
4/19/2019	AUDNOK.fx	9:30:00 AM	6.0852	6.0877			N/A
4/19/2019	AUDNOK.fx	11:30:00 AM	6.0806	6.0841			N/A
4/19/2019	AUDNOK.fx	1:30:00 PM	6.0804	6.0855			N/A
4/19/2019	AUDNOK.fx	3:30:00 PM	6.0823	6.0851			N/A
4/19/2019	AUDNZD	9:30:00 AM	1.06909	1.06983			N/A
4/19/2019	AUDNZD	11:30:00 AM	1.06874	1.0697			N/A
4/19/2019	AUDNZD	1:30:00 PM	1.06876	1.06973			N/A
4/19/2019	AUDNZD	3:30:00 PM	1.06925	1.07019			N/A
4/19/2019	AUDNZD.fx	9:30:00 AM	1.06948	1.06945			N/A
4/19/2019	AUDNZD.fx	11:30:00 AM	1.06909	1.06934			N/A
4/19/2019	AUDNZD.fx	1:30:00 PM	1.06909	1.06939			N/A
4/19/2019	AUDNZD.fx	3:30:00 PM	1.06961	1.06983			N/A
4/19/2019	AUDPLN	9:30:00 AM	2.7211	2.724			N/A
4/19/2019	AUDPLN	11:30:00 AM	2.7197	2.722			N/A
4/19/2019	AUDPLN	1:30:00 PM	2.7207	2.724			N/A
4/19/2019	AUDPLN	3:30:00 PM	2.7207	2.7238			N/A
4/19/2019	AUDSEK	9:30:00 AM	6.6536	6.6562			N/A
4/19/2019	AUDSEK	11:30:00 AM	6.6471	6.6507			N/A
4/19/2019	AUDSEK	1:30:00 PM	6.6461	6.6481			N/A
4/19/2019	AUDSEK	3:30:00 PM	6.6514	6.6539			N/A
4/19/2019	AUDSEK.fx	9:30:00 AM	6.6483	6.6616			N/A
4/19/2019	AUDSEK.fx	11:30:00 AM	6.6423	6.6555			N/A
4/19/2019	AUDSEK.fx	1:30:00 PM	6.641	6.6557			N/A
4/19/2019	AUDSEK.fx	3:30:00 PM	6.645	6.6599			N/A

4/19/2019	AUDSGD	9:30:00 AM	0.9694	0.9696			N/A
4/19/2019	AUDSGD	11:30:00 AM	0.9691	0.9693			N/A
4/19/2019	AUDSGD	1:30:00 PM	0.9691	0.9693			N/A
4/19/2019	AUDSGD	3:30:00 PM	0.9692	0.9692			N/A
4/19/2019	AUDSGD.fx	9:30:00 AM	0.96944	0.96952			N/A
4/19/2019	AUDSGD.fx	11:30:00 AM	0.96946	0.96973			N/A
4/19/2019	AUDSGD.fx	1:30:00 PM	0.96915	0.96943			N/A
4/19/2019	AUDSGD.fx	3:30:00 PM	0.96929	0.96953			N/A
4/19/2019	AUDUSD	9:30:00 AM	0.71546	0.71551			N/A
4/19/2019	AUDUSD	11:30:00 AM	0.71543	0.71562			N/A
4/19/2019	AUDUSD	1:30:00 PM	0.71513	0.71532			N/A
4/19/2019	AUDUSD	3:30:00 PM	0.71515	0.71532			N/A
4/19/2019	AUDUSD.fx	9:30:00 AM	0.71547	0.7155			N/A
4/19/2019	AUDUSD.fx	11:30:00 AM	0.71547	0.71557			N/A
4/19/2019	AUDUSD.fx	1:30:00 PM	0.71514	0.71529			N/A
4/19/2019	AUDUSD.fx	3:30:00 PM	0.71518	0.71528			N/A
4/19/2019	AUDZAR	9:30:00 AM	10.0408	10.0557			N/A
4/19/2019	AUDZAR	11:30:00 AM	10.055	10.066			N/A
4/19/2019	AUDZAR	1:30:00 PM	10.0382	10.0522			N/A
4/19/2019	AUDZAR	3:30:00 PM	10.0517	10.0676			N/A
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4/19/2019	AUS200.i	11:30:00 AM					N/A
4/19/2019	AUS200.i	1:30:00 PM					N/A
4/19/2019	AUS200.i	3:30:00 PM					N/A
4/19/2019	BCHUSD	9:30:00 AM	299.39	310.9			N/A
4/19/2019	BCHUSD	11:30:00 AM	299.48	311.16			N/A
4/19/2019	BCHUSD	1:30:00 PM	299.92	311.3			N/A
4/19/2019	BCHUSD	3:30:00 PM	299.96	311.82			N/A
4/19/2019	CADCHF	9:30:00 AM	0.75855	0.75925			N/A
4/19/2019	CADCHF	11:30:00 AM	0.7574	0.75811			N/A
4/19/2019	CADCHF	1:30:00 PM	0.75765	0.75841			N/A
4/19/2019	CADCHF	3:30:00 PM	0.75766	0.75836			N/A
4/19/2019	CADCHF.fx	9:30:00 AM	0.75881	0.75888			N/A
4/19/2019	CADCHF.fx	11:30:00 AM	0.7577	0.75781			N/A

4/19/2019	CADCHF.fx	1:30:00 PM	0.75791	0.75813			N/A
4/19/2019	CADCHF.fx	3:30:00 PM	0.75797	0.75798			N/A
4/19/2019	CADCZK	9:30:00 AM	17.073	17.09			N/A
4/19/2019	CADCZK	11:30:00 AM					N/A
4/19/2019	CADCZK	1:30:00 PM	17.064	17.082			N/A
4/19/2019	CADCZK	3:30:00 PM	17.066	17.08			N/A
4/19/2019	CADDDKK	9:30:00 AM					N/A
4/19/2019	CADDDKK	11:30:00 AM					N/A
4/19/2019	CADDDKK	1:30:00 PM	4.964	4.967			N/A
4/19/2019	CADDDKK	3:30:00 PM					N/A
4/19/2019	CADHKD	9:30:00 AM	5.8661	5.8701			N/A
4/19/2019	CADHKD	11:30:00 AM	5.8641	5.868			N/A
4/19/2019	CADHKD	1:30:00 PM	5.864	5.8679			N/A
4/19/2019	CADHKD	3:30:00 PM	5.8633	5.8672			N/A
4/19/2019	CADHUF	9:30:00 AM	212.8	212.94			N/A
4/19/2019	CADHUF	11:30:00 AM	212.62	212.79			N/A
4/19/2019	CADHUF	1:30:00 PM	212.55	212.72			N/A
4/19/2019	CADHUF	3:30:00 PM	212.78	212.84			N/A
4/19/2019	CADJPY	9:30:00 AM	83.681	83.758			N/A
4/19/2019	CADJPY	11:30:00 AM	83.658	83.735			N/A
4/19/2019	CADJPY	1:30:00 PM	83.655	83.73			N/A
4/19/2019	CADJPY	3:30:00 PM	83.665	83.734			N/A
4/19/2019	CADJPY.fx	9:30:00 AM	83.713	83.723			N/A
4/19/2019	CADJPY.fx	11:30:00 AM	83.685	83.706			N/A
4/19/2019	CADJPY.fx	1:30:00 PM	83.687	83.698			N/A
4/19/2019	CADJPY.fx	3:30:00 PM	83.694	83.697			N/A
4/19/2019	CADMXN	9:30:00 AM	14.0504	14.0607			N/A
4/19/2019	CADMXN	11:30:00 AM	14.0479	14.0604			N/A
4/19/2019	CADMXN	1:30:00 PM	14.0514	14.0638			N/A
4/19/2019	CADMXN	3:30:00 PM	14.0618	14.0746			N/A
4/19/2019	CADNOK	9:30:00 AM	6.3591	6.3638			N/A
4/19/2019	CADNOK	11:30:00 AM	6.3536	6.3585			N/A
4/19/2019	CADNOK	1:30:00 PM	6.3555	6.3604			N/A
4/19/2019	CADNOK	3:30:00 PM	6.356	6.3605			N/A

4/19/2019	CADPLN	9:30:00 AM	2.8456	2.8475			N/A
4/19/2019	CADPLN	11:30:00 AM	2.8423	2.8442			N/A
4/19/2019	CADPLN	1:30:00 PM	2.8451	2.847			N/A
4/19/2019	CADPLN	3:30:00 PM	2.8448	2.8467			N/A
4/19/2019	CADSEK	9:30:00 AM	6.953	6.9565			N/A
4/19/2019	CADSEK	11:30:00 AM	6.9458	6.9497			N/A
4/19/2019	CADSEK	1:30:00 PM	6.947	6.9508			N/A
4/19/2019	CADSEK	3:30:00 PM	6.9503	6.953			N/A
4/19/2019	CADSGD	9:30:00 AM	1.013	1.0133			N/A
4/19/2019	CADSGD	11:30:00 AM	1.0128	1.0131			N/A
4/19/2019	CADSGD	1:30:00 PM	1.0127	1.013			N/A
4/19/2019	CADSGD	3:30:00 PM	1.0128	1.0132			N/A
4/19/2019	CADZAR	9:30:00 AM	10.4996	10.5175			N/A
4/19/2019	CADZAR	11:30:00 AM	10.5114	10.5238			N/A
4/19/2019	CADZAR	1:30:00 PM	10.4981	10.5136			N/A
4/19/2019	CADZAR	3:30:00 PM	10.5108	10.5285			N/A
4/19/2019	CHFCZK	9:30:00 AM	22.507	22.519			N/A
4/19/2019	CHFCZK	11:30:00 AM					N/A
4/19/2019	CHFCZK	1:30:00 PM	22.516	22.534			N/A
4/19/2019	CHFCZK	3:30:00 PM	22.52	22.53			N/A
4/19/2019	CHFDKK	9:30:00 AM	6.546	6.548			N/A
4/19/2019	CHFDKK	11:30:00 AM	6.55	6.553			N/A
4/19/2019	CHFDKK	1:30:00 PM	6.548	6.551			N/A
4/19/2019	CHFDKK	3:30:00 PM	6.55	6.552			N/A
4/19/2019	CHFDKK.fx	9:30:00 AM	6.5437	6.5502			N/A
4/19/2019	CHFDKK.fx	11:30:00 AM	6.5476	6.555			N/A
4/19/2019	CHFDKK.fx	1:30:00 PM	6.5448	6.5531			N/A
4/19/2019	CHFDKK.fx	3:30:00 PM	6.5475	6.5541			N/A
4/19/2019	CHFHKD	9:30:00 AM	7.7323	7.7354			N/A
4/19/2019	CHFHKD	11:30:00 AM	7.7402	7.744			N/A
4/19/2019	CHFHKD	1:30:00 PM	7.7371	7.741			N/A
4/19/2019	CHFHKD	3:30:00 PM	7.7367	7.7406			N/A
4/19/2019	CHFHUF	9:30:00 AM	280.4	280.74			N/A
4/19/2019	CHFHUF	11:30:00 AM	280.53	280.93			N/A

4/19/2019	CHFHUF	1:30:00 PM	280.34	280.73			N/A
4/19/2019	CHFHUF	3:30:00 PM	280.65	280.9			N/A
4/19/2019	CHFJPY	9:30:00 AM	110.296	110.341			N/A
4/19/2019	CHFJPY	11:30:00 AM	110.405	110.476			N/A
4/19/2019	CHFJPY	1:30:00 PM	110.359	110.435			N/A
4/19/2019	CHFJPY	3:30:00 PM	110.38	110.452			N/A
4/19/2019	CHFJPY.fx	9:30:00 AM	110.322	110.316			N/A
4/19/2019	CHFJPY.fx	11:30:00 AM	110.43	110.45			N/A
4/19/2019	CHFJPY.fx	1:30:00 PM	110.386	110.404			N/A
4/19/2019	CHFJPY.fx	3:30:00 PM	110.405	110.425			N/A
4/19/2019	CHFMXN	9:30:00 AM	18.5201	18.5287			N/A
4/19/2019	CHFMXN	11:30:00 AM	18.5403	18.5566			N/A
4/19/2019	CHFMXN	1:30:00 PM	18.5378	18.5546			N/A
4/19/2019	CHFMXN	3:30:00 PM	18.5528	18.5705			N/A
4/19/2019	CHFNOK	9:30:00 AM	8.3823	8.3893			N/A
4/19/2019	CHFNOK	11:30:00 AM	8.3855	8.3938			N/A
4/19/2019	CHFNOK	1:30:00 PM	8.3854	8.3942			N/A
4/19/2019	CHFNOK	3:30:00 PM	8.3877	8.3947			N/A
4/19/2019	CHFNOK.fx	9:30:00 AM	8.38488	8.3874			N/A
4/19/2019	CHFNOK.fx	11:30:00 AM	8.38846	8.39083			N/A
4/19/2019	CHFNOK.fx	1:30:00 PM	8.38733	8.39212			N/A
4/19/2019	CHFNOK.fx	3:30:00 PM	8.39039	8.39241			N/A
4/19/2019	CHFPLN	9:30:00 AM	3.7504	3.7527			N/A
4/19/2019	CHFPLN	11:30:00 AM	3.7515	3.7535			N/A
4/19/2019	CHFPLN	1:30:00 PM	3.7531	3.7563			N/A
4/19/2019	CHFPLN	3:30:00 PM	3.7534	3.7561			N/A
4/19/2019	CHFPLN.fx	9:30:00 AM	3.74741	3.75573			N/A
4/19/2019	CHFPLN.fx	11:30:00 AM	3.74868	3.75625			N/A
4/19/2019	CHFPLN.fx	1:30:00 PM	3.75004	3.75923			N/A
4/19/2019	CHFPLN.fx	3:30:00 PM	3.7505	3.75894			N/A
4/19/2019	CHFSEK	9:30:00 AM	9.165	9.1677			N/A
4/19/2019	CHFSEK	11:30:00 AM	9.1674	9.1723			N/A
4/19/2019	CHFSEK	1:30:00 PM	9.1653	9.1702			N/A
4/19/2019	CHFSEK	3:30:00 PM	9.1702	9.173			N/A



4/19/2019	CHFSGD	9:30:00 AM	1.3357	1.336			N/A
4/19/2019	CHFSGD	11:30:00 AM	1.3371	1.3376			N/A
4/19/2019	CHFSGD	1:30:00 PM	1.3366	1.3371			N/A
4/19/2019	CHFSGD	3:30:00 PM	1.3369	1.3371			N/A
4/19/2019	CHFSGD.fx	9:30:00 AM	1.33592	1.33589			N/A
4/19/2019	CHFSGD.fx	11:30:00 AM	1.33716	1.3375			N/A
4/19/2019	CHFSGD.fx	1:30:00 PM	1.33674	1.33708			N/A
4/19/2019	CHFSGD.fx	3:30:00 PM	1.33703	1.33729			N/A
4/19/2019	CHFZAR	9:30:00 AM	13.8428	13.8568			N/A
4/19/2019	CHFZAR	11:30:00 AM	13.8776	13.8847			N/A
4/19/2019	CHFZAR	1:30:00 PM	13.8543	13.867			N/A
4/19/2019	CHFZAR	3:30:00 PM	13.8712	13.887			N/A
4/19/2019	CZKJPY	9:30:00 AM					N/A
4/19/2019	CZKJPY	11:30:00 AM					N/A
4/19/2019	CZKJPY	1:30:00 PM					N/A
4/19/2019	CZKJPY	3:30:00 PM	4.902	4.905			N/A
4/19/2019	DAX30.i	9:30:00 AM					N/A
4/19/2019	DAX30.i	11:30:00 AM					N/A
4/19/2019	DAX30.i	1:30:00 PM					N/A
4/19/2019	DAX30.i	3:30:00 PM					N/A
4/19/2019	DJ30.i	9:30:00 AM					N/A
4/19/2019	DJ30.i	11:30:00 AM					N/A
4/19/2019	DJ30.i	1:30:00 PM					N/A
4/19/2019	DJ30.i	3:30:00 PM					N/A
4/19/2019	DKKJPY	9:30:00 AM					N/A
4/19/2019	DKKJPY	11:30:00 AM					N/A
4/19/2019	DKKJPY	1:30:00 PM					N/A
4/19/2019	DKKJPY	3:30:00 PM					N/A
4/19/2019	EURAUD	9:30:00 AM	1.5706	1.57093			N/A
4/19/2019	EURAUD	11:30:00 AM	1.57092	1.57148			N/A
4/19/2019	EURAUD	1:30:00 PM	1.5714	1.57198			N/A
4/19/2019	EURAUD	3:30:00 PM	1.57137	1.57167			N/A
4/19/2019	EURAUD.fx	9:30:00 AM	1.5707	1.57081			N/A
4/19/2019	EURAUD.fx	11:30:00 AM	1.57114	1.57128			N/A

4/19/2019	EURAUD.fx	1:30:00 PM	1.57155	1.57182			N/A
4/19/2019	EURAUD.fx	3:30:00 PM	1.57149	1.57148			N/A
4/19/2019	EURCAD	9:30:00 AM	1.50247	1.50337			N/A
4/19/2019	EURCAD	11:30:00 AM	1.50344	1.50437			N/A
4/19/2019	EURCAD	1:30:00 PM	1.50329	1.5042			N/A
4/19/2019	EURCAD	3:30:00 PM	1.50328	1.50403			N/A
4/19/2019	EURCAD.fx	9:30:00 AM	1.5029	1.50297			N/A
4/19/2019	EURCAD.fx	11:30:00 AM	1.50379	1.50398			N/A
4/19/2019	EURCAD.fx	1:30:00 PM	1.50366	1.50381			N/A
4/19/2019	EURCAD.fx	3:30:00 PM	1.5036	1.50367			N/A
4/19/2019	EURCHF	9:30:00 AM	1.14053	1.14034			N/A
4/19/2019	EURCHF	11:30:00 AM	1.13959	1.1397			N/A
4/19/2019	EURCHF	1:30:00 PM	1.13986	1.14001			N/A
4/19/2019	EURCHF	3:30:00 PM	1.13979	1.1398			N/A
4/19/2019	EURCHF.fx	9:30:00 AM	1.14049	1.14036			N/A
4/19/2019	EURCHF.fx	11:30:00 AM	1.13962	1.13969			N/A
4/19/2019	EURCHF.fx	1:30:00 PM	1.13988	1.14			N/A
4/19/2019	EURCHF.fx	3:30:00 PM	1.13978	1.13979			N/A
4/19/2019	EURCZK	9:30:00 AM	25.65	25.69			N/A
4/19/2019	EURCZK	11:30:00 AM					N/A
4/19/2019	EURCZK	1:30:00 PM					N/A
4/19/2019	EURCZK	3:30:00 PM	25.653	25.685			N/A
4/19/2019	EURDKK	9:30:00 AM	7.4658	7.467			N/A
4/19/2019	EURDKK	11:30:00 AM					N/A
4/19/2019	EURDKK	1:30:00 PM	7.4639	7.4652			N/A
4/19/2019	EURDKK	3:30:00 PM	7.4649	7.4661			N/A
4/19/2019	EURGBP	9:30:00 AM	0.86515	0.86505			N/A
4/19/2019	EURGBP	11:30:00 AM	0.86516	0.86532			N/A
4/19/2019	EURGBP	1:30:00 PM	0.8648	0.86496			N/A
4/19/2019	EURGBP	3:30:00 PM	0.86486	0.86488			N/A
4/19/2019	EURGBP.fx	9:30:00 AM	0.86518	0.86502			N/A
4/19/2019	EURGBP.fx	11:30:00 AM	0.86516	0.8653			N/A
4/19/2019	EURGBP.fx	1:30:00 PM	0.86479	0.86496			N/A
4/19/2019	EURGBP.fx	3:30:00 PM	0.86485	0.86488			N/A

4/19/2019	EURHKD	9:30:00 AM	8.8174	8.823			N/A
4/19/2019	EURHKD	11:30:00 AM	8.8198	8.8255			N/A
4/19/2019	EURHKD	1:30:00 PM	8.8189	8.8247			N/A
4/19/2019	EURHKD	3:30:00 PM	8.8181	8.8228			N/A
4/19/2019	EURHKD.fx	9:30:00 AM	8.82015	8.82013			N/A
4/19/2019	EURHKD.fx	11:30:00 AM	8.82249	8.82286			N/A
4/19/2019	EURHKD.fx	1:30:00 PM	8.8216	8.82209			N/A
4/19/2019	EURHKD.fx	3:30:00 PM	8.82057	8.82021			N/A
4/19/2019	EURHUF	9:30:00 AM	319.73	320.43			N/A
4/19/2019	EURHUF	11:30:00 AM	319.63	320.29			N/A
4/19/2019	EURHUF	1:30:00 PM	319.46	320.11			N/A
4/19/2019	EURHUF	3:30:00 PM	319.81	320.41			N/A
4/19/2019	EURHUF.fx	9:30:00 AM	319.941	320.185			N/A
4/19/2019	EURHUF.fx	11:30:00 AM	319.879	320.198			N/A
4/19/2019	EURHUF.fx	1:30:00 PM	319.762	319.945			N/A
4/19/2019	EURHUF.fx	3:30:00 PM	320.059	320.22			N/A
4/19/2019	EURJPY	9:30:00 AM	125.807	125.822			N/A
4/19/2019	EURJPY	11:30:00 AM	125.85	125.868			N/A
4/19/2019	EURJPY	1:30:00 PM	125.835	125.851			N/A
4/19/2019	EURJPY	3:30:00 PM	125.848	125.84			N/A
4/19/2019	EURJPY.fx	9:30:00 AM	125.809	125.818			N/A
4/19/2019	EURJPY.fx	11:30:00 AM	125.85	125.866			N/A
4/19/2019	EURJPY.fx	1:30:00 PM	125.836	125.85			N/A
4/19/2019	EURJPY.fx	3:30:00 PM	125.847	125.84			N/A
4/19/2019	EURMXN	9:30:00 AM	21.128	21.1327			N/A
4/19/2019	EURMXN	11:30:00 AM	21.1324	21.1527			N/A
4/19/2019	EURMXN	1:30:00 PM	21.1394	21.1592			N/A
4/19/2019	EURMXN	3:30:00 PM	21.1562	21.1712			N/A
4/19/2019	EURMXN.f	9:30:00 AM	21.1276	21.1439			N/A
4/19/2019	EURMXN.f	11:30:00 AM	21.1349	21.1502			N/A
4/19/2019	EURMXN.f	1:30:00 PM	21.1417	21.1577			N/A
4/19/2019	EURMXN.f	3:30:00 PM	21.1586	21.1681			N/A
4/19/2019	EURNOK	9:30:00 AM	9.5586	9.5706			N/A
4/19/2019	EURNOK	11:30:00 AM	9.5544	9.5664			N/A

4/19/2019	EURNOK	1:30:00 PM	9.5579	9.5708			N/A
4/19/2019	EURNOK	3:30:00 PM	9.5576	9.5702			N/A
4/19/2019	EURNOK.fx	9:30:00 AM	9.56331	9.56501			N/A
4/19/2019	EURNOK.fx	11:30:00 AM	9.56014	9.56246			N/A
4/19/2019	EURNOK.fx	1:30:00 PM	9.56254	9.56605			N/A
4/19/2019	EURNOK.fx	3:30:00 PM	9.56255	9.56559			N/A
4/19/2019	EURNZD	9:30:00 AM	1.6801	1.68103			N/A
4/19/2019	EURNZD	11:30:00 AM	1.68018	1.68113			N/A
4/19/2019	EURNZD	1:30:00 PM	1.68068	1.68167			N/A
4/19/2019	EURNZD	3:30:00 PM	1.68132	1.68205			N/A
4/19/2019	EURNZD.fx	9:30:00 AM	1.68045	1.68059			N/A
4/19/2019	EURNZD.fx	11:30:00 AM	1.68052	1.68074			N/A
4/19/2019	EURNZD.fx	1:30:00 PM	1.68103	1.68134			N/A
4/19/2019	EURNZD.fx	3:30:00 PM	1.6816	1.68175			N/A
4/19/2019	EURPLN	9:30:00 AM	4.2769	4.2804			N/A
4/19/2019	EURPLN	11:30:00 AM	4.2755	4.2774			N/A
4/19/2019	EURPLN	1:30:00 PM	4.2785	4.2818			N/A
4/19/2019	EURPLN	3:30:00 PM	4.2782	4.2813			N/A
4/19/2019	EURPLN.fx	9:30:00 AM					N/A
4/19/2019	EURPLN.fx	11:30:00 AM	4.27461	4.27822			N/A
4/19/2019	EURPLN.fx	1:30:00 PM	4.27758	4.28275			N/A
4/19/2019	EURPLN.fx	3:30:00 PM	4.27727	4.2823			N/A
4/19/2019	EURRUB	9:30:00 AM					N/A
4/19/2019	EURRUB	11:30:00 AM	71.55	71.994			N/A
4/19/2019	EURRUB	1:30:00 PM	71.571	72.018			N/A
4/19/2019	EURRUB	3:30:00 PM	71.569	72.004			N/A
4/19/2019	EURSEK	9:30:00 AM	10.4554	10.4594			N/A
4/19/2019	EURSEK	11:30:00 AM	10.4488	10.4542			N/A
4/19/2019	EURSEK	1:30:00 PM	10.4501	10.4522			N/A
4/19/2019	EURSEK	3:30:00 PM	10.4568	10.46			N/A
4/19/2019	EURSEK.fx	9:30:00 AM	10.45608	10.45791			N/A
4/19/2019	EURSEK.fx	11:30:00 AM	10.45036	10.45272			N/A
4/19/2019	EURSEK.fx	1:30:00 PM	10.45109	10.45472			N/A
4/19/2019	EURSEK.fx	3:30:00 PM	10.45582	10.4603			N/A

4/19/2019	EURSGD	9:30:00 AM	1.523	1.5231			N/A
4/19/2019	EURSGD	11:30:00 AM	1.5235	1.5235			N/A
4/19/2019	EURSGD	1:30:00 PM	1.5231	1.5241			N/A
4/19/2019	EURSGD	3:30:00 PM	1.5237	1.5244			N/A
4/19/2019	EURSGD.fx	9:30:00 AM	1.52338	1.52353			N/A
4/19/2019	EURSGD.fx	11:30:00 AM	1.5239	1.52408			N/A
4/19/2019	EURSGD.fx	1:30:00 PM					N/A
4/19/2019	EURSGD.fx	3:30:00 PM	1.52397	1.52402			N/A
4/19/2019	EURUSD	9:30:00 AM	1.12408	1.12421			N/A
4/19/2019	EURUSD	11:30:00 AM	1.12445	1.12463			N/A
4/19/2019	EURUSD	1:30:00 PM	1.12429	1.12447			N/A
4/19/2019	EURUSD	3:30:00 PM	1.12427	1.12427			N/A
4/19/2019	EURUSD.fx	9:30:00 AM	1.12427	1.1243			N/A
4/19/2019	EURUSD.fx	11:30:00 AM	1.12465	1.12474			N/A
4/19/2019	EURUSD.fx	1:30:00 PM	1.12449	1.12457			N/A
4/19/2019	EURUSD.fx	3:30:00 PM	1.12445	1.12439			N/A
4/19/2019	EURZAR	9:30:00 AM	15.7893	15.8104			N/A
4/19/2019	EURZAR	11:30:00 AM	15.8179	15.8283			N/A
4/19/2019	EURZAR	1:30:00 PM	15.7961	15.8128			N/A
4/19/2019	EURZAR	3:30:00 PM	15.8147	15.8336			N/A
4/19/2019	EURZAR.fx	9:30:00 AM	15.78717	15.81231			N/A
4/19/2019	EURZAR.fx	11:30:00 AM	15.81558	15.8298			N/A
4/19/2019	EURZAR.fx	1:30:00 PM	15.79356	15.81405			N/A
4/19/2019	EURZAR.fx	3:30:00 PM	15.81323	15.83507			N/A
4/19/2019	GBPAUD	9:30:00 AM	1.81615	1.81664			N/A
4/19/2019	GBPAUD	11:30:00 AM	1.81611	1.817			N/A
4/19/2019	GBPAUD	1:30:00 PM	1.81737	1.81833			N/A
4/19/2019	GBPAUD	3:30:00 PM	1.81732	1.81808			N/A
4/19/2019	GBPAUD.fx	9:30:00 AM	1.81645	1.81636			N/A
4/19/2019	GBPAUD.fx	11:30:00 AM	1.81653	1.8166			N/A
4/19/2019	GBPAUD.fx	1:30:00 PM	1.81758	1.81813			N/A
4/19/2019	GBPAUD.fx	3:30:00 PM	1.81759	1.81776			N/A
4/19/2019	GBPCAD	9:30:00 AM	1.73698	1.73742			N/A
4/19/2019	GBPCAD	11:30:00 AM	1.7376	1.73846			N/A

4/19/2019	GBPCAD	1:30:00 PM	1.73822	1.73915			N/A
4/19/2019	GBPCAD	3:30:00 PM	1.73811	1.73899			N/A
4/19/2019	GBPCAD.fx	9:30:00 AM	1.73732	1.73708			N/A
4/19/2019	GBPCAD.fx	11:30:00 AM	1.73791	1.7381			N/A
4/19/2019	GBPCAD.fx	1:30:00 PM	1.73845	1.73896			N/A
4/19/2019	GBPCAD.fx	3:30:00 PM	1.73843	1.7387			N/A
4/19/2019	GBPCHF	9:30:00 AM	1.31826	1.3184			N/A
4/19/2019	GBPCHF	11:30:00 AM	1.31691	1.31738			N/A
4/19/2019	GBPCHF	1:30:00 PM	1.31775	1.31829			N/A
4/19/2019	GBPCHF	3:30:00 PM	1.31763	1.31812			N/A
4/19/2019	GBPCHF.fx	9:30:00 AM	1.31826	1.31821			N/A
4/19/2019	GBPCHF.fx	11:30:00 AM	1.317	1.31727			N/A
4/19/2019	GBPCHF.fx	1:30:00 PM	1.31779	1.31818			N/A
4/19/2019	GBPCHF.fx	3:30:00 PM	1.31773	1.31802			N/A
4/19/2019	GBPCZK	9:30:00 AM	29.663	29.682			N/A
4/19/2019	GBPCZK	11:30:00 AM	29.652	29.676			N/A
4/19/2019	GBPCZK	1:30:00 PM	29.668	29.692			N/A
4/19/2019	GBPCZK	3:30:00 PM	29.672	29.685			N/A
4/19/2019	GBPDKK	9:30:00 AM	8.627	8.636			N/A
4/19/2019	GBPDKK	11:30:00 AM	8.623	8.635			N/A
4/19/2019	GBPDKK	1:30:00 PM	8.627	8.638			N/A
4/19/2019	GBPDKK	3:30:00 PM	8.629	8.639			N/A
4/19/2019	GBPDKK.fx	9:30:00 AM	8.6236	8.6371			N/A
4/19/2019	GBPDKK.fx	11:30:00 AM	8.6211	8.6363			N/A
4/19/2019	GBPDKK.fx	1:30:00 PM	8.6247	8.6396			N/A
4/19/2019	GBPDKK.fx	3:30:00 PM	8.6261	8.6402			N/A
4/19/2019	GBPHKD	9:30:00 AM	10.1905	10.195			N/A
4/19/2019	GBPHKD	11:30:00 AM	10.1912	10.1971			N/A
4/19/2019	GBPHKD	1:30:00 PM	10.1942	10.1999			N/A
4/19/2019	GBPHKD	3:30:00 PM	10.1929	10.1986			N/A
4/19/2019	GBPHUF	9:30:00 AM	369.58	369.95			N/A
4/19/2019	GBPHUF	11:30:00 AM	369.39	369.89			N/A
4/19/2019	GBPHUF	1:30:00 PM	369.4	369.87			N/A
4/19/2019	GBPHUF	3:30:00 PM	369.8	370.08			N/A

4/19/2019	GBPJPY	9:30:00 AM	145.425	145.44			N/A
4/19/2019	GBPJPY	11:30:00 AM	145.435	145.488			N/A
4/19/2019	GBPJPY	1:30:00 PM	145.476	145.528			N/A
4/19/2019	GBPJPY	3:30:00 PM	145.486	145.531			N/A
4/19/2019	GBPJPY.fx	9:30:00 AM	145.441	145.42			N/A
4/19/2019	GBPJPY.fx	11:30:00 AM	145.454	145.47			N/A
4/19/2019	GBPJPY.fx	1:30:00 PM	145.486	145.521			N/A
4/19/2019	GBPJPY.fx	3:30:00 PM	145.499	145.52			N/A
4/19/2019	GBPMXN	9:30:00 AM	24.4117	24.4186			N/A
4/19/2019	GBPMXN	11:30:00 AM	24.4143	24.4314			N/A
4/19/2019	GBPMXN	1:30:00 PM	24.4288	24.4447			N/A
4/19/2019	GBPMXN	3:30:00 PM	24.448	24.4635			N/A
4/19/2019	GBPNOK	9:30:00 AM	11.0515	11.0605			N/A
4/19/2019	GBPNOK	11:30:00 AM	11.0441	11.0568			N/A
4/19/2019	GBPNOK	1:30:00 PM	11.0521	11.0642			N/A
4/19/2019	GBPNOK	3:30:00 PM	11.0535	11.0637			N/A
4/19/2019	GBPNOK.fx	9:30:00 AM	11.05549	11.05634			N/A
4/19/2019	GBPNOK.fx	11:30:00 AM	11.048	11.05291			N/A
4/19/2019	GBPNOK.fx	1:30:00 PM	11.05487	11.06142			N/A
4/19/2019	GBPNOK.fx	3:30:00 PM	11.05687	11.06049			N/A
4/19/2019	GBPNZD	9:30:00 AM	1.94239	1.94275			N/A
4/19/2019	GBPNZD	11:30:00 AM	1.94201	1.94285			N/A
4/19/2019	GBPNZD	1:30:00 PM	1.94335	1.94425			N/A
4/19/2019	GBPNZD	3:30:00 PM	1.94403	1.94489			N/A
4/19/2019	GBPNZD.fx	9:30:00 AM	1.94259	1.9425			N/A
4/19/2019	GBPNZD.fx	11:30:00 AM	1.94223	1.94258			N/A
4/19/2019	GBPNZD.fx	1:30:00 PM	1.94339	1.94417			N/A
4/19/2019	GBPNZD.fx	3:30:00 PM	1.94419	1.94476			N/A
4/19/2019	GBPPLN	9:30:00 AM	4.9454	4.9462			N/A
4/19/2019	GBPPLN	11:30:00 AM	4.9418	4.9427			N/A
4/19/2019	GBPPLN	1:30:00 PM	4.9478	4.9497			N/A
4/19/2019	GBPPLN	3:30:00 PM	4.9478	4.9491			N/A
4/19/2019	GBPPLN.fx	9:30:00 AM	4.94246	4.94904			N/A
4/19/2019	GBPPLN.fx	11:30:00 AM	4.93921	4.94542			N/A

4/19/2019	GBPPLN.fx	1:30:00 PM	4.94434	4.95341			N/A
4/19/2019	GBPPLN.fx	3:30:00 PM	4.9444	4.95237			N/A
4/19/2019	GBPSEK	9:30:00 AM	12.0846	12.0909			N/A
4/19/2019	GBPSEK	11:30:00 AM	12.075	12.0845			N/A
4/19/2019	GBPSEK	1:30:00 PM	12.0811	12.0913			N/A
4/19/2019	GBPSEK	3:30:00 PM	12.0889	12.096			N/A
4/19/2019	GBPSEK.fx	9:30:00 AM	12.07949	12.09628			N/A
4/19/2019	GBPSEK.fx	11:30:00 AM	12.06994	12.08914			N/A
4/19/2019	GBPSEK.fx	1:30:00 PM	12.07544	12.09646			N/A
4/19/2019	GBPSEK.fx	3:30:00 PM	12.07976	12.10377			N/A
4/19/2019	GBPSGD	9:30:00 AM	1.7608	1.7612			N/A
4/19/2019	GBPSGD	11:30:00 AM	1.761	1.7619			N/A
4/19/2019	GBPSGD	1:30:00 PM	1.7618	1.7626			N/A
4/19/2019	GBPSGD	3:30:00 PM	1.7618	1.7626			N/A
4/19/2019	GBPSGD.fx	9:30:00 AM	1.75884	1.76312			N/A
4/19/2019	GBPSGD.fx	11:30:00 AM	1.75906	1.76381			N/A
4/19/2019	GBPSGD.fx	1:30:00 PM	1.75982	1.76451			N/A
4/19/2019	GBPSGD.fx	3:30:00 PM	1.75978	1.76446			N/A
4/19/2019	GBPUSD	9:30:00 AM	1.29969	1.29945			N/A
4/19/2019	GBPUSD	11:30:00 AM	1.29975	1.29988			N/A
4/19/2019	GBPUSD	1:30:00 PM	1.30016	1.30028			N/A
4/19/2019	GBPUSD	3:30:00 PM	1.30005	1.30014			N/A
4/19/2019	GBPUSD.fx	9:30:00 AM	1.29972	1.29943			N/A
4/19/2019	GBPUSD.fx	11:30:00 AM	1.29978	1.29984			N/A
4/19/2019	GBPUSD.fx	1:30:00 PM	1.3001	1.30033			N/A
4/19/2019	GBPUSD.fx	3:30:00 PM	1.30007	1.30014			N/A
4/19/2019	GBPZAR	9:30:00 AM	18.2504	18.2775			N/A
4/19/2019	GBPZAR	11:30:00 AM	18.2778	18.2966			N/A
4/19/2019	GBPZAR	1:30:00 PM	18.2606	18.2873			N/A
4/19/2019	GBPZAR	3:30:00 PM	18.281	18.3114			N/A
4/19/2019	GBPZAR.fx	9:30:00 AM	18.2543	18.2725			N/A
4/19/2019	GBPZAR.fx	11:30:00 AM	18.2813	18.2924			N/A
4/19/2019	GBPZAR.fx	1:30:00 PM	18.2628	18.2835			N/A
4/19/2019	GBPZAR.fx	3:30:00 PM	18.2859	18.3067			N/A



4/19/2019	GOLD	9:30:00 AM					N/A
4/19/2019	GOLD	11:30:00 AM					N/A
4/19/2019	GOLD	1:30:00 PM					N/A
4/19/2019	GOLD	3:30:00 PM					N/A
4/19/2019	HKDJPY	9:30:00 AM	14.26	14.27			N/A
4/19/2019	HKDJPY	11:30:00 AM	14.27	14.28			N/A
4/19/2019	HKDJPY	1:30:00 PM	14.27	14.27			N/A
4/19/2019	HKDJPY	3:30:00 PM	14.26	14.28			N/A
4/19/2019	HKDJPY.fx	9:30:00 AM	14.26	14.268			N/A
4/19/2019	HKDJPY.fx	11:30:00 AM	14.26	14.269			N/A
4/19/2019	HKDJPY.fx	1:30:00 PM	14.259	14.268			N/A
4/19/2019	HKDJPY.fx	3:30:00 PM	14.263	14.271			N/A
4/19/2019	HUFJPY	9:30:00 AM	0.3934	0.3937			N/A
4/19/2019	HUFJPY	11:30:00 AM	0.3935	0.3938			N/A
4/19/2019	HUFJPY	1:30:00 PM	0.3937	0.394			N/A
4/19/2019	HUFJPY	3:30:00 PM	0.3936	0.3939			N/A
4/19/2019	JP225.i	9:30:00 AM					N/A
4/19/2019	JP225.i	11:30:00 AM					N/A
4/19/2019	JP225.i	1:30:00 PM					N/A
4/19/2019	JP225.i	3:30:00 PM					N/A
4/19/2019	MXNJPY	9:30:00 AM	5.95	5.97			N/A
4/19/2019	MXNJPY	11:30:00 AM	5.95	5.96			N/A
4/19/2019	MXNJPY	1:30:00 PM					N/A
4/19/2019	MXNJPY	3:30:00 PM	5.95	5.96			N/A
4/19/2019	NASDAQ.i	9:30:00 AM					N/A
4/19/2019	NASDAQ.i	11:30:00 AM					N/A
4/19/2019	NASDAQ.i	1:30:00 PM					N/A
4/19/2019	NASDAQ.i	3:30:00 PM					N/A
4/19/2019	NOKJPY	9:30:00 AM	13.15	13.17			N/A
4/19/2019	NOKJPY	11:30:00 AM					N/A
4/19/2019	NOKJPY	1:30:00 PM	13.14	13.18			N/A
4/19/2019	NOKJPY	3:30:00 PM	13.15	13.18			N/A
4/19/2019	NOKJPY.fx	9:30:00 AM	13.15	13.16			N/A
4/19/2019	NOKJPY.fx	11:30:00 AM					N/A

4/19/2019	NOKJPY.fx	1:30:00 PM	13.152	13.163			N/A
4/19/2019	NOKJPY.fx	3:30:00 PM	13.154	13.163			N/A
4/19/2019	NZDCAD	9:30:00 AM	0.89398	0.8947			N/A
4/19/2019	NZDCAD	11:30:00 AM	0.89448	0.89523			N/A
4/19/2019	NZDCAD	1:30:00 PM	0.89409	0.89481			N/A
4/19/2019	NZDCAD	3:30:00 PM	0.89377	0.8945			N/A
4/19/2019	NZDCAD.fx	9:30:00 AM	0.89423	0.89443			N/A
4/19/2019	NZDCAD.fx	11:30:00 AM	0.89473	0.89498			N/A
4/19/2019	NZDCAD.fx	1:30:00 PM	0.89436	0.89453			N/A
4/19/2019	NZDCAD.fx	3:30:00 PM	0.89402	0.89424			N/A
4/19/2019	NZDCHF	9:30:00 AM	0.67837	0.67897			N/A
4/19/2019	NZDCHF	11:30:00 AM	0.67771	0.67844			N/A
4/19/2019	NZDCHF	1:30:00 PM	0.67768	0.67846			N/A
4/19/2019	NZDCHF	3:30:00 PM	0.67738	0.67812			N/A
4/19/2019	NZDCHF.fx	9:30:00 AM	0.67864	0.67868			N/A
4/19/2019	NZDCHF.fx	11:30:00 AM	0.67799	0.67815			N/A
4/19/2019	NZDCHF.fx	1:30:00 PM	0.67797	0.67816			N/A
4/19/2019	NZDCHF.fx	3:30:00 PM	0.67768	0.6778			N/A
4/19/2019	NZDCZK	9:30:00 AM	15.267	15.28			N/A
4/19/2019	NZDCZK	11:30:00 AM					N/A
4/19/2019	NZDCZK	1:30:00 PM					N/A
4/19/2019	NZDCZK	3:30:00 PM	15.258	15.266			N/A
4/19/2019	NZDDKK	9:30:00 AM					N/A
4/19/2019	NZDDKK	11:30:00 AM					N/A
4/19/2019	NZDDKK	1:30:00 PM					N/A
4/19/2019	NZDDKK	3:30:00 PM	4.438	4.441			N/A
4/19/2019	NZDHKD	9:30:00 AM	5.2451	5.248			N/A
4/19/2019	NZDHKD	11:30:00 AM	5.2463	5.2492			N/A
4/19/2019	NZDHKD	1:30:00 PM	5.2435	5.2464			N/A
4/19/2019	NZDHKD	3:30:00 PM	5.242	5.2448			N/A
4/19/2019	NZDHUF	9:30:00 AM	190.22	190.46			N/A
4/19/2019	NZDHUF	11:30:00 AM					N/A
4/19/2019	NZDHUF	1:30:00 PM	190.01	190.3			N/A
4/19/2019	NZDHUF	3:30:00 PM	190.14	190.35			N/A

4/19/2019	NZDJPY	9:30:00 AM	74.828	74.901			N/A
4/19/2019	NZDJPY	11:30:00 AM	74.85	74.929			N/A
4/19/2019	NZDJPY	1:30:00 PM	74.817	74.894			N/A
4/19/2019	NZDJPY	3:30:00 PM	74.797	74.869			N/A
4/19/2019	NZDJPY.fx	9:30:00 AM	74.859	74.87			N/A
4/19/2019	NZDJPY.fx	11:30:00 AM	74.876	74.901			N/A
4/19/2019	NZDJPY.fx	1:30:00 PM	74.843	74.866			N/A
4/19/2019	NZDJPY.fx	3:30:00 PM	74.824	74.842			N/A
4/19/2019	NZDMXN	9:30:00 AM	12.565	12.5695			N/A
4/19/2019	NZDMXN	11:30:00 AM	12.5693	12.5758			N/A
4/19/2019	NZDMXN	1:30:00 PM	12.5671	12.5736			N/A
4/19/2019	NZDMXN	3:30:00 PM	12.5729	12.5796			N/A
4/19/2019	NZDNOK	9:30:00 AM	5.6858	5.6897			N/A
4/19/2019	NZDNOK	11:30:00 AM	5.6842	5.6881			N/A
4/19/2019	NZDNOK	1:30:00 PM	5.6834	5.6872			N/A
4/19/2019	NZDNOK	3:30:00 PM	5.6819	5.6853			N/A
4/19/2019	NZDPLN	9:30:00 AM	2.5442	2.5456			N/A
4/19/2019	NZDPLN	11:30:00 AM	2.5429	2.5442			N/A
4/19/2019	NZDPLN	1:30:00 PM	2.5442	2.5456			N/A
4/19/2019	NZDPLN	3:30:00 PM	2.5438	2.545			N/A
4/19/2019	NZDSEK	9:30:00 AM	6.2149	6.2217			N/A
4/19/2019	NZDSEK	11:30:00 AM	6.212	6.2186			N/A
4/19/2019	NZDSEK	1:30:00 PM	6.2103	6.2172			N/A
4/19/2019	NZDSEK	3:30:00 PM	6.2106	6.2168			N/A
4/19/2019	NZDSGD	9:30:00 AM	0.9062	0.9069			N/A
4/19/2019	NZDSGD	11:30:00 AM	0.9064	0.907			N/A
4/19/2019	NZDSGD	1:30:00 PM	0.9062	0.9069			N/A
4/19/2019	NZDSGD	3:30:00 PM	0.906	0.9066			N/A
4/19/2019	NZDSGD.fx	9:30:00 AM	0.90618	0.90688			N/A
4/19/2019	NZDSGD.fx	11:30:00 AM	0.9064	0.90722			N/A
4/19/2019	NZDSGD.fx	1:30:00 PM	0.90612	0.90696			N/A
4/19/2019	NZDSGD.fx	3:30:00 PM	0.90584	0.90662			N/A
4/19/2019	NZDUSD	9:30:00 AM	0.66886	0.66903			N/A
4/19/2019	NZDUSD	11:30:00 AM	0.66903	0.66923			N/A

4/19/2019	NZDUSD	1:30:00 PM	0.66874	0.66893			N/A
4/19/2019	NZDUSD	3:30:00 PM	0.66848	0.66865			N/A
4/19/2019	NZDUSD.fx	9:30:00 AM	0.66893	0.66907			N/A
4/19/2019	NZDUSD.fx	11:30:00 AM	0.66907	0.66928			N/A
4/19/2019	NZDUSD.fx	1:30:00 PM	0.66878	0.66898			N/A
4/19/2019	NZDUSD.fx	3:30:00 PM	0.66851	0.6687			N/A
4/19/2019	NZDZAR	9:30:00 AM	9.3867	9.4047			N/A
4/19/2019	NZDZAR	11:30:00 AM	9.4025	9.4149			N/A
4/19/2019	NZDZAR	1:30:00 PM	9.3858	9.402			N/A
4/19/2019	NZDZAR	3:30:00 PM	9.3952	9.4129			N/A
4/19/2019	SEKJPY	9:30:00 AM	12.03	12.04			N/A
4/19/2019	SEKJPY	11:30:00 AM	12.05	12.06			N/A
4/19/2019	SEKJPY	1:30:00 PM	12.04	12.05			N/A
4/19/2019	SEKJPY	3:30:00 PM	12.03	12.04			N/A
4/19/2019	SEKJPY.fx	9:30:00 AM	12.021	12.042			N/A
4/19/2019	SEKJPY.fx	11:30:00 AM	12.031	12.052			N/A
4/19/2019	SEKJPY.fx	1:30:00 PM	12.028	12.05			N/A
4/19/2019	SEKJPY.fx	3:30:00 PM	12.021	12.044			N/A
4/19/2019	SGDJPY	9:30:00 AM	82.6	82.59			N/A
4/19/2019	SGDJPY	11:30:00 AM	82.58	82.59			N/A
4/19/2019	SGDJPY	1:30:00 PM	82.55	82.58			N/A
4/19/2019	SGDJPY	3:30:00 PM	82.55	82.58			N/A
4/19/2019	SILVER	9:30:00 AM					N/A
4/19/2019	SILVER	11:30:00 AM					N/A
4/19/2019	SILVER	1:30:00 PM					N/A
4/19/2019	SILVER	3:30:00 PM					N/A
4/19/2019	SPX500.i	9:30:00 AM					N/A
4/19/2019	SPX500.i	11:30:00 AM					N/A
4/19/2019	SPX500.i	1:30:00 PM					N/A
4/19/2019	SPX500.i	3:30:00 PM					N/A
4/19/2019	UK100.i	9:30:00 AM					N/A
4/19/2019	UK100.i	11:30:00 AM					N/A
4/19/2019	UK100.i	1:30:00 PM					N/A
4/19/2019	UK100.i	3:30:00 PM					N/A

4/19/2019	USDCAD	9:30:00 AM	1.33675	1.33693			N/A
4/19/2019	USDCAD	11:30:00 AM	1.33718	1.33734			N/A
4/19/2019	USDCAD	1:30:00 PM	1.33723	1.33739			N/A
4/19/2019	USDCAD	3:30:00 PM	1.3373	1.33739			N/A
4/19/2019	USDCAD.fx	9:30:00 AM	1.33678	1.3369			N/A
4/19/2019	USDCAD.fx	11:30:00 AM	1.33714	1.33738			N/A
4/19/2019	USDCAD.fx	1:30:00 PM	1.33721	1.3374			N/A
4/19/2019	USDCAD.fx	3:30:00 PM	1.33725	1.33742			N/A
4/19/2019	USDCHF	9:30:00 AM	1.01446	1.01435			N/A
4/19/2019	USDCHF	11:30:00 AM	1.01324	1.01334			N/A
4/19/2019	USDCHF	1:30:00 PM	1.01362	1.01378			N/A
4/19/2019	USDCHF	3:30:00 PM	1.01358	1.01374			N/A
4/19/2019	USDCHF.fx	9:30:00 AM	1.01442	1.01434			N/A
4/19/2019	USDCHF.fx	11:30:00 AM	1.01325	1.01334			N/A
4/19/2019	USDCHF.fx	1:30:00 PM	1.01359	1.01381			N/A
4/19/2019	USDCHF.fx	3:30:00 PM	1.01359	1.01372			N/A
4/19/2019	USDCZK	9:30:00 AM	22.84	22.863			N/A
4/19/2019	USDCZK	11:30:00 AM	22.83	22.854			N/A
4/19/2019	USDCZK	1:30:00 PM					N/A
4/19/2019	USDCZK	3:30:00 PM	22.841	22.856			N/A
4/19/2019	USDCZK.fx	9:30:00 AM	22.8481	22.8568			N/A
4/19/2019	USDCZK.fx	11:30:00 AM	22.8364	22.8468			N/A
4/19/2019	USDCZK.fx	1:30:00 PM					N/A
4/19/2019	USDCZK.fx	3:30:00 PM	22.8487	22.8493			N/A
4/19/2019	USDDKK	9:30:00 AM	6.64	6.644			N/A
4/19/2019	USDDKK	11:30:00 AM	6.6369	6.6414			N/A
4/19/2019	USDDKK	1:30:00 PM					N/A
4/19/2019	USDDKK	3:30:00 PM	6.6392	6.6428			N/A
4/19/2019	USDDKK.fx	9:30:00 AM	6.64047	6.642			N/A
4/19/2019	USDDKK.fx	11:30:00 AM	6.63699	6.63961			N/A
4/19/2019	USDDKK.fx	1:30:00 PM					N/A
4/19/2019	USDDKK.fx	3:30:00 PM	6.63944	6.64102			N/A
4/19/2019	USDHKD	9:30:00 AM	7.8449	7.8452			N/A
4/19/2019	USDHKD	11:30:00 AM	7.8444	7.8447			N/A

4/19/2019	USDHKD	1:30:00 PM					N/A
4/19/2019	USDHKD	3:30:00 PM	7.8442	7.8446			N/A
4/19/2019	USDHKD.fx	9:30:00 AM	7.84482	7.84538			N/A
4/19/2019	USDHKD.fx	11:30:00 AM	7.84427	7.84479			N/A
4/19/2019	USDHKD.fx	1:30:00 PM					N/A
4/19/2019	USDHKD.fx	3:30:00 PM					N/A
4/19/2019	USDHUF	9:30:00 AM	284.43	284.9			N/A
4/19/2019	USDHUF	11:30:00 AM	284.31	284.8			N/A
4/19/2019	USDHUF	1:30:00 PM	284.19	284.69			N/A
4/19/2019	USDHUF	3:30:00 PM	284.5	284.89			N/A
4/19/2019	USDHUF.fx	9:30:00 AM	284.626	284.7			N/A
4/19/2019	USDHUF.fx	11:30:00 AM	284.455	284.637			N/A
4/19/2019	USDHUF.fx	1:30:00 PM	284.405	284.472			N/A
4/19/2019	USDHUF.fx	3:30:00 PM	284.716	284.735			N/A
4/19/2019	USDINR	9:30:00 AM					N/A
4/19/2019	USDINR	11:30:00 AM					N/A
4/19/2019	USDINR	1:30:00 PM					N/A
4/19/2019	USDINR	3:30:00 PM					N/A
4/19/2019	USDJPY	9:30:00 AM	111.909	111.925			N/A
4/19/2019	USDJPY	11:30:00 AM	111.909	111.926			N/A
4/19/2019	USDJPY	1:30:00 PM	111.911	111.926			N/A
4/19/2019	USDJPY	3:30:00 PM	111.926	111.937			N/A
4/19/2019	USDJPY.fx	9:30:00 AM	111.915	111.918			N/A
4/19/2019	USDJPY.fx	11:30:00 AM	111.912	111.921			N/A
4/19/2019	USDJPY.fx	1:30:00 PM	111.915	111.92			N/A
4/19/2019	USDJPY.fx	3:30:00 PM	111.93	111.931			N/A
4/19/2019	USDMXN	9:30:00 AM	18.795	18.798			N/A
4/19/2019	USDMXN	11:30:00 AM	18.793	18.802			N/A
4/19/2019	USDMXN	1:30:00 PM	18.802	18.81			N/A
4/19/2019	USDMXN	3:30:00 PM	18.816	18.822			N/A
4/19/2019	USDMXN.fx	9:30:00 AM	18.7851	18.8033			N/A
4/19/2019	USDMXN.fx	11:30:00 AM	18.7918	18.8034			N/A
4/19/2019	USDMXN.fx	1:30:00 PM	18.7989	18.8136			N/A
4/19/2019	USDMXN.fx	3:30:00 PM	18.8152	18.8259			N/A

4/19/2019	USDNOK	9:30:00 AM	8.5029	8.5118			N/A
4/19/2019	USDNOK	11:30:00 AM	8.4969	8.5061			N/A
4/19/2019	USDNOK	1:30:00 PM	8.5006	8.51			N/A
4/19/2019	USDNOK	3:30:00 PM	8.5022	8.5105			N/A
4/19/2019	USDNOK.fx	9:30:00 AM	8.50648	8.50732			N/A
4/19/2019	USDNOK.fx	11:30:00 AM	8.50077	8.5019			N/A
4/19/2019	USDNOK.fx	1:30:00 PM	8.50366	8.50648			N/A
4/19/2019	USDNOK.fx	3:30:00 PM	8.50545	8.50636			N/A
4/19/2019	USDPLN	9:30:00 AM	3.8047	3.8065			N/A
4/19/2019	USDPLN	11:30:00 AM	3.8022	3.8026			N/A
4/19/2019	USDPLN	1:30:00 PM	3.8053	3.8071			N/A
4/19/2019	USDPLN	3:30:00 PM	3.8055	3.8066			N/A
4/19/2019	USDPLN.fx	9:30:00 AM	3.80368	3.80742			N/A
4/19/2019	USDPLN.fx	11:30:00 AM	3.80109	3.80363			N/A
4/19/2019	USDPLN.fx	1:30:00 PM	3.80419	3.80825			N/A
4/19/2019	USDPLN.fx	3:30:00 PM	3.80432	3.80779			N/A
4/19/2019	USDRUB	9:30:00 AM					N/A
4/19/2019	USDRUB	11:30:00 AM	63.728	64.117			N/A
4/19/2019	USDRUB	1:30:00 PM	63.753	64.148			N/A
4/19/2019	USDRUB	3:30:00 PM	63.752	64.148			N/A
4/19/2019	USDSEK	9:30:00 AM	9.2987	9.3029			N/A
4/19/2019	USDSEK	11:30:00 AM	9.2901	9.295			N/A
4/19/2019	USDSEK	1:30:00 PM	9.2924	9.2975			N/A
4/19/2019	USDSEK	3:30:00 PM	9.2992	9.3022			N/A
4/19/2019	USDSEK.fx	9:30:00 AM	9.30043	9.30118			N/A
4/19/2019	USDSEK.fx	11:30:00 AM	9.29224	9.29362			N/A
4/19/2019	USDSEK.fx	1:30:00 PM	9.29426	9.29628			N/A
4/19/2019	USDSEK.fx	3:30:00 PM	9.30004	9.30237			N/A
4/19/2019	USDSGD	9:30:00 AM	1.3549	1.3554			N/A
4/19/2019	USDSGD	11:30:00 AM	1.3548	1.3553			N/A
4/19/2019	USDSGD	1:30:00 PM	1.3551	1.3555			N/A
4/19/2019	USDSGD	3:30:00 PM	1.3552	1.3557			N/A
4/19/2019	USDSGD.fx	9:30:00 AM	1.35481	1.35535			N/A
4/19/2019	USDSGD.fx	11:30:00 AM	1.35481	1.35537			N/A

4/19/2019	USDSGD.fx	1:30:00 PM	1.35497	1.35554			N/A
4/19/2019	USDSGD.fx	3:30:00 PM	1.35511	1.35569			N/A
4/19/2019	USDZAR	9:30:00 AM	14.0439	14.0637			N/A
4/19/2019	USDZAR	11:30:00 AM	14.0643	14.0745			N/A
4/19/2019	USDZAR	1:30:00 PM	14.0455	14.0618			N/A
4/19/2019	USDZAR	3:30:00 PM	14.0641	14.0838			N/A
4/19/2019	USDZAR.fx	9:30:00 AM					N/A
4/19/2019	USDZAR.fx	11:30:00 AM					N/A
4/19/2019	USDZAR.fx	1:30:00 PM					N/A
4/19/2019	USDZAR.fx	3:30:00 PM					N/A
4/19/2019	XAUUSD	9:30:00 AM					N/A
4/19/2019	XAUUSD	11:30:00 AM					N/A
4/19/2019	XAUUSD	1:30:00 PM					N/A
4/19/2019	XAUUSD	3:30:00 PM					N/A
4/19/2019	ZARJPY	9:30:00 AM					N/A
4/19/2019	ZARJPY	11:30:00 AM	7.93	7.97			N/A
4/19/2019	ZARJPY	1:30:00 PM	7.94	7.97			N/A
4/19/2019	ZARJPY	3:30:00 PM	7.93	7.96			N/A
4/19/2019	ZARJPY.fx	9:30:00 AM	7.959	7.966			N/A
4/19/2019	ZARJPY.fx	11:30:00 AM	7.952	7.955			N/A
4/19/2019	ZARJPY.fx	1:30:00 PM	7.959	7.964			N/A
4/19/2019	ZARJPY.fx	3:30:00 PM	7.949	7.956			N/A
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4/22/2019	#AA	3:30:00 PM					N/A
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4/22/2019	#AAL	11:30:00 AM					N/A
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4/22/2019	#AAPL	11:30:00 AM					N/A
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4/22/2019	#AAPL	3:30:00 PM					N/A
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4/22/2019	#ADBE	11:30:00 AM					N/A
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4/22/2019	#BIDU	3:30:00 PM					N/A
4/22/2019	#Bitcoin	9:30:00 AM	5258.06	5329.31			N/A
4/22/2019	#Bitcoin	11:30:00 AM					N/A
4/22/2019	#Bitcoin	1:30:00 PM	5293.11	5360.26			N/A
4/22/2019	#Bitcoin	3:30:00 PM	5302.96	5375.36			N/A
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4/22/2019	#BK	1:30:00 PM					N/A
4/22/2019	#BK	3:30:00 PM					N/A
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4/22/2019	#C	9:30:00 AM					N/A
4/22/2019	#C	11:30:00 AM					N/A
4/22/2019	#C	1:30:00 PM					N/A
4/22/2019	#C	3:30:00 PM					N/A
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4/22/2019	#CAT	3:30:00 PM					N/A
4/22/2019	#CHL	9:30:00 AM					N/A
4/22/2019	#CHL	11:30:00 AM					N/A
4/22/2019	#CHL	1:30:00 PM					N/A
4/22/2019	#CHL	3:30:00 PM					N/A
4/22/2019	#CL.f	9:30:00 AM	65.49	65.518			N/A
4/22/2019	#CL.f	11:30:00 AM	65.538	65.561			N/A
4/22/2019	#CL.f	1:30:00 PM	65.527	65.569			N/A
4/22/2019	#CL.f	3:30:00 PM	65.675	65.619			N/A
4/22/2019	#CMCSA	9:30:00 AM					N/A
4/22/2019	#CMCSA	11:30:00 AM					N/A
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4/22/2019	#Ethereum	9:30:00 AM	166.63	174.51			N/A
4/22/2019	#Ethereum	11:30:00 AM	167.28	175.15			N/A
4/22/2019	#Ethereum	1:30:00 PM	168.2	176.08			N/A
4/22/2019	#Ethereum	3:30:00 PM	168.2	176.17			N/A
4/22/2019	#F	9:30:00 AM					N/A
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4/22/2019	#FB	1:30:00 PM					N/A
4/22/2019	#FB	3:30:00 PM					N/A
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4/22/2019	AUDJPY.fx	9:30:00 AM	79.915	79.91			N/A
4/22/2019	AUDJPY.fx	11:30:00 AM	79.872	79.878			N/A
4/22/2019	AUDJPY.fx	1:30:00 PM	79.892	79.899			N/A
4/22/2019	AUDJPY.fx	3:30:00 PM	79.823	79.819			N/A
4/22/2019	AUDMXN	9:30:00 AM	13.4106	13.4215			N/A
4/22/2019	AUDMXN	11:30:00 AM	13.4072	13.4181			N/A
4/22/2019	AUDMXN	1:30:00 PM	13.4017	13.4121			N/A
4/22/2019	AUDMXN	3:30:00 PM	13.4036	13.4125			N/A

4/22/2019	AUDNOK	9:30:00 AM	6.0682	6.0732			N/A
4/22/2019	AUDNOK	11:30:00 AM	6.0661	6.0718			N/A
4/22/2019	AUDNOK	1:30:00 PM	6.0653	6.0703			N/A
4/22/2019	AUDNOK	3:30:00 PM	6.0621	6.067			N/A
4/22/2019	AUDNOK.fx	9:30:00 AM	6.0697	6.0716			N/A
4/22/2019	AUDNOK.fx	11:30:00 AM	6.0677	6.0701			N/A
4/22/2019	AUDNOK.fx	1:30:00 PM	6.0668	6.0693			N/A
4/22/2019	AUDNOK.fx	3:30:00 PM	6.0636	6.0653			N/A
4/22/2019	AUDNZD	9:30:00 AM	1.06912	1.06998			N/A
4/22/2019	AUDNZD	11:30:00 AM	1.0681	1.06909			N/A
4/22/2019	AUDNZD	1:30:00 PM	1.06807	1.06901			N/A
4/22/2019	AUDNZD	3:30:00 PM	1.06827	1.06915			N/A
4/22/2019	AUDNZD.fx	9:30:00 AM	1.06955	1.06953			N/A
4/22/2019	AUDNZD.fx	11:30:00 AM	1.06853	1.06862			N/A
4/22/2019	AUDNZD.fx	1:30:00 PM	1.0685	1.06856			N/A
4/22/2019	AUDNZD.fx	3:30:00 PM	1.0687	1.06871			N/A
4/22/2019	AUDPLN	9:30:00 AM	2.7184	2.7215			N/A
4/22/2019	AUDPLN	11:30:00 AM	2.7149	2.7182			N/A
4/22/2019	AUDPLN	1:30:00 PM	2.7138	2.7172			N/A
4/22/2019	AUDPLN	3:30:00 PM	2.7111	2.7141			N/A
4/22/2019	AUDSEK	9:30:00 AM	6.6394	6.6426			N/A
4/22/2019	AUDSEK	11:30:00 AM	6.6421	6.6457			N/A
4/22/2019	AUDSEK	1:30:00 PM	6.6389	6.6428			N/A
4/22/2019	AUDSEK	3:30:00 PM	6.6383	6.6404			N/A
4/22/2019	AUDSEK.fx	9:30:00 AM	6.6348	6.647			N/A
4/22/2019	AUDSEK.fx	11:30:00 AM	6.6376	6.6505			N/A
4/22/2019	AUDSEK.fx	1:30:00 PM	6.6343	6.6474			N/A
4/22/2019	AUDSEK.fx	3:30:00 PM	6.6337	6.6448			N/A
4/22/2019	AUDSGD	9:30:00 AM	0.9687	0.9689			N/A
4/22/2019	AUDSGD	11:30:00 AM	0.9682	0.9684			N/A
4/22/2019	AUDSGD	1:30:00 PM	0.968	0.9682			N/A
4/22/2019	AUDSGD	3:30:00 PM	0.9675	0.9678			N/A
4/22/2019	AUDSGD.fx	9:30:00 AM	0.96877	0.96882			N/A
4/22/2019	AUDSGD.fx	11:30:00 AM	0.96831	0.96847			N/A

4/22/2019	AUDSGD.fx	1:30:00 PM	0.96804	0.96823			N/A
4/22/2019	AUDSGD.fx	3:30:00 PM	0.96761	0.96767			N/A
4/22/2019	AUDUSD	9:30:00 AM	0.71404	0.71412			N/A
4/22/2019	AUDUSD	11:30:00 AM	0.71363	0.7138			N/A
4/22/2019	AUDUSD	1:30:00 PM	0.71373	0.71391			N/A
4/22/2019	AUDUSD	3:30:00 PM	0.71314	0.71323			N/A
4/22/2019	AUDUSD.fx	9:30:00 AM	0.71409	0.71405			N/A
4/22/2019	AUDUSD.fx	11:30:00 AM	0.71368	0.71373			N/A
4/22/2019	AUDUSD.fx	1:30:00 PM	0.71378	0.71385			N/A
4/22/2019	AUDUSD.fx	3:30:00 PM	0.7132	0.71318			N/A
4/22/2019	AUDZAR	9:30:00 AM	10.0552	10.0707			N/A
4/22/2019	AUDZAR	11:30:00 AM	10.0536	10.0695			N/A
4/22/2019	AUDZAR	1:30:00 PM	10.0611	10.0771			N/A
4/22/2019	AUDZAR	3:30:00 PM	10.0554	10.0684			N/A
4/22/2019	AUS200.i	9:30:00 AM					N/A
4/22/2019	AUS200.i	11:30:00 AM					N/A
4/22/2019	AUS200.i	1:30:00 PM					N/A
4/22/2019	AUS200.i	3:30:00 PM					N/A
4/22/2019	BCHUSD	9:30:00 AM	288.35	300.08			N/A
4/22/2019	BCHUSD	11:30:00 AM	292.33	302.68			N/A
4/22/2019	BCHUSD	1:30:00 PM	295.06	306.41			N/A
4/22/2019	BCHUSD	3:30:00 PM	294.96	306.49			N/A
4/22/2019	CADCHF	9:30:00 AM	0.75868	0.75941			N/A
4/22/2019	CADCHF	11:30:00 AM	0.75918	0.75993			N/A
4/22/2019	CADCHF	1:30:00 PM	0.75937	0.76013			N/A
4/22/2019	CADCHF	3:30:00 PM	0.75879	0.75943			N/A
4/22/2019	CADCHF.fx	9:30:00 AM	0.75901	0.75907			N/A
4/22/2019	CADCHF.fx	11:30:00 AM	0.75952	0.75958			N/A
4/22/2019	CADCHF.fx	1:30:00 PM	0.75971	0.75978			N/A
4/22/2019	CADCHF.fx	3:30:00 PM	0.75914	0.75908			N/A
4/22/2019	CADCZK	9:30:00 AM	17.077	17.092			N/A
4/22/2019	CADCZK	11:30:00 AM					N/A
4/22/2019	CADCZK	1:30:00 PM	17.081	17.098			N/A
4/22/2019	CADCZK	3:30:00 PM	17.064	17.077			N/A



4/22/2019	CADDDKK	9:30:00 AM	4.967	4.971			N/A
4/22/2019	CADDDKK	11:30:00 AM					N/A
4/22/2019	CADDDKK	1:30:00 PM					N/A
4/22/2019	CADDDKK	3:30:00 PM	4.962	4.965			N/A
4/22/2019	CADHKD	9:30:00 AM	5.8666	5.8704			N/A
4/22/2019	CADHKD	11:30:00 AM					N/A
4/22/2019	CADHKD	1:30:00 PM	5.8708	5.8748			N/A
4/22/2019	CADHKD	3:30:00 PM	5.8655	5.8692			N/A
4/22/2019	CADHUF	9:30:00 AM	213.02	213.17			N/A
4/22/2019	CADHUF	11:30:00 AM					N/A
4/22/2019	CADHUF	1:30:00 PM					N/A
4/22/2019	CADHUF	3:30:00 PM	212.58	212.54			N/A
4/22/2019	CADJPY	9:30:00 AM	83.689	83.759			N/A
4/22/2019	CADJPY	11:30:00 AM	83.715	83.79			N/A
4/22/2019	CADJPY	1:30:00 PM	83.764	83.842			N/A
4/22/2019	CADJPY	3:30:00 PM	83.692	83.752			N/A
4/22/2019	CADJPY.fx	9:30:00 AM	83.724	83.723			N/A
4/22/2019	CADJPY.fx	11:30:00 AM	83.748	83.756			N/A
4/22/2019	CADJPY.fx	1:30:00 PM	83.796	83.807			N/A
4/22/2019	CADJPY.fx	3:30:00 PM	83.725	83.718			N/A
4/22/2019	CADMXN	9:30:00 AM	14.051	14.0638			N/A
4/22/2019	CADMXN	11:30:00 AM	14.0601	14.073			N/A
4/22/2019	CADMXN	1:30:00 PM	14.0586	14.0713			N/A
4/22/2019	CADMXN	3:30:00 PM	14.0604	14.0687			N/A
4/22/2019	CADNOK	9:30:00 AM	6.3564	6.3614			N/A
4/22/2019	CADNOK	11:30:00 AM	6.3601	6.365			N/A
4/22/2019	CADNOK	1:30:00 PM	6.3612	6.3662			N/A
4/22/2019	CADNOK	3:30:00 PM	6.3572	6.3592			N/A
4/22/2019	CADPLN	9:30:00 AM	2.8484	2.8503			N/A
4/22/2019	CADPLN	11:30:00 AM	2.8473	2.8492			N/A
4/22/2019	CADPLN	1:30:00 PM	2.8471	2.8491			N/A
4/22/2019	CADPLN	3:30:00 PM	2.8437	2.8456			N/A
4/22/2019	CADSEK	9:30:00 AM	6.9543	6.9582			N/A
4/22/2019	CADSEK	11:30:00 AM	6.9638	6.9677			N/A

4/22/2019	CADSEK	1:30:00 PM	6.9625	6.9664			N/A
4/22/2019	CADSEK	3:30:00 PM	6.9606	6.9635			N/A
4/22/2019	CADSGD	9:30:00 AM	1.0144	1.0147			N/A
4/22/2019	CADSGD	11:30:00 AM	1.0148	1.0151			N/A
4/22/2019	CADSGD	1:30:00 PM	1.0146	1.015			N/A
4/22/2019	CADSGD	3:30:00 PM	1.0143	1.0146			N/A
4/22/2019	CADZAR	9:30:00 AM	10.5356	10.5525			N/A
4/22/2019	CADZAR	11:30:00 AM	10.5431	10.5609			N/A
4/22/2019	CADZAR	1:30:00 PM	10.5544	10.5723			N/A
4/22/2019	CADZAR	3:30:00 PM	10.5478	10.5624			N/A
4/22/2019	CHFCZK	9:30:00 AM					N/A
4/22/2019	CHFCZK	11:30:00 AM	22.493	22.511			N/A
4/22/2019	CHFCZK	1:30:00 PM					N/A
4/22/2019	CHFCZK	3:30:00 PM	22.481	22.498			N/A
4/22/2019	CHFDKK	9:30:00 AM	6.545	6.548			N/A
4/22/2019	CHFDKK	11:30:00 AM	6.541	6.544			N/A
4/22/2019	CHFDKK	1:30:00 PM					N/A
4/22/2019	CHFDKK	3:30:00 PM	6.537	6.54			N/A
4/22/2019	CHFDKK.fx	9:30:00 AM	6.5431	6.549			N/A
4/22/2019	CHFDKK.fx	11:30:00 AM	6.539	6.5452			N/A
4/22/2019	CHFDKK.fx	1:30:00 PM	6.5366	6.5432			N/A
4/22/2019	CHFDKK.fx	3:30:00 PM	6.535	6.5413			N/A
4/22/2019	CHFHKD	9:30:00 AM	7.7298	7.7338			N/A
4/22/2019	CHFHKD	11:30:00 AM	7.7273	7.7312			N/A
4/22/2019	CHFHKD	1:30:00 PM	7.7283	7.7323			N/A
4/22/2019	CHFHKD	3:30:00 PM	7.7279	7.7319			N/A
4/22/2019	CHFHUF	9:30:00 AM	280.57	280.94			N/A
4/22/2019	CHFHUF	11:30:00 AM	280.36	280.76			N/A
4/22/2019	CHFHUF	1:30:00 PM					N/A
4/22/2019	CHFHUF	3:30:00 PM	279.94	280.13			N/A
4/22/2019	CHFJPY	9:30:00 AM	110.268	110.338			N/A
4/22/2019	CHFJPY	11:30:00 AM	110.232	110.303			N/A
4/22/2019	CHFJPY	1:30:00 PM	110.266	110.341			N/A
4/22/2019	CHFJPY	3:30:00 PM	110.255	110.322			N/A

4/22/2019	CHFJPY.fx	9:30:00 AM	110.301	110.303			N/A
4/22/2019	CHFJPY.fx	11:30:00 AM	110.265	110.268			N/A
4/22/2019	CHFJPY.fx	1:30:00 PM	110.3	110.306			N/A
4/22/2019	CHFJPY.fx	3:30:00 PM	110.287	110.288			N/A
4/22/2019	CHFMXN	9:30:00 AM	18.5125	18.5294			N/A
4/22/2019	CHFMXN	11:30:00 AM	18.5121	18.5293			N/A
4/22/2019	CHFMXN	1:30:00 PM	18.5048	18.522			N/A
4/22/2019	CHFMXN	3:30:00 PM	18.5226	18.5368			N/A
4/22/2019	CHFNOK	9:30:00 AM	8.3751	8.3828			N/A
4/22/2019	CHFNOK	11:30:00 AM	8.3741	8.3824			N/A
4/22/2019	CHFNOK	1:30:00 PM	8.3731	8.3817			N/A
4/22/2019	CHFNOK	3:30:00 PM	8.3748	8.383			N/A
4/22/2019	CHFNOK.fx	9:30:00 AM	8.37861	8.37945			N/A
4/22/2019	CHFNOK.fx	11:30:00 AM	8.3776	8.37889			N/A
4/22/2019	CHFNOK.fx	1:30:00 PM	8.37655	8.37822			N/A
4/22/2019	CHFNOK.fx	3:30:00 PM	8.37837	8.37965			N/A
4/22/2019	CHFPLN	9:30:00 AM	3.7526	3.7552			N/A
4/22/2019	CHFPLN	11:30:00 AM	3.7486	3.752			N/A
4/22/2019	CHFPLN	1:30:00 PM	3.7474	3.7507			N/A
4/22/2019	CHFPLN	3:30:00 PM	3.7463	3.7496			N/A
4/22/2019	CHFPLN.fx	9:30:00 AM	3.75006	3.75755			N/A
4/22/2019	CHFPLN.fx	11:30:00 AM	3.74604	3.75448			N/A
4/22/2019	CHFPLN.fx	1:30:00 PM	3.74484	3.75313			N/A
4/22/2019	CHFPLN.fx	3:30:00 PM	3.74376	3.75205			N/A
4/22/2019	CHFSEK	9:30:00 AM	9.1623	9.1672			N/A
4/22/2019	CHFSEK	11:30:00 AM	9.1685	9.1735			N/A
4/22/2019	CHFSEK	1:30:00 PM	9.1649	9.1695			N/A
4/22/2019	CHFSEK	3:30:00 PM	9.1694	9.1735			N/A
4/22/2019	CHFSGD	9:30:00 AM	1.3369	1.3372			N/A
4/22/2019	CHFSGD	11:30:00 AM	1.3366	1.3371			N/A
4/22/2019	CHFSGD	1:30:00 PM	1.3364	1.3368			N/A
4/22/2019	CHFSGD	3:30:00 PM	1.3367	1.3372			N/A
4/22/2019	CHFSGD.fx	9:30:00 AM	1.33713	1.33727			N/A
4/22/2019	CHFSGD.fx	11:30:00 AM	1.33683	1.3369			N/A

4/22/2019	CHFSGD.fx	1:30:00 PM	1.33653	1.3367			N/A
4/22/2019	CHFSGD.fx	3:30:00 PM	1.33685	1.33701			N/A
4/22/2019	CHFZAR	9:30:00 AM	13.8849	13.8996			N/A
4/22/2019	CHFZAR	11:30:00 AM	13.8852	13.9007			N/A
4/22/2019	CHFZAR	1:30:00 PM	13.8965	13.9124			N/A
4/22/2019	CHFZAR	3:30:00 PM	13.8988	13.9119			N/A
4/22/2019	CZKJPY	9:30:00 AM					N/A
4/22/2019	CZKJPY	11:30:00 AM					N/A
4/22/2019	CZKJPY	1:30:00 PM					N/A
4/22/2019	CZKJPY	3:30:00 PM	4.903	4.907			N/A
4/22/2019	DAX30.i	9:30:00 AM					N/A
4/22/2019	DAX30.i	11:30:00 AM					N/A
4/22/2019	DAX30.i	1:30:00 PM					N/A
4/22/2019	DAX30.i	3:30:00 PM					N/A
4/22/2019	DJ30.i	9:30:00 AM					N/A
4/22/2019	DJ30.i	11:30:00 AM					N/A
4/22/2019	DJ30.i	1:30:00 PM					N/A
4/22/2019	DJ30.i	3:30:00 PM					N/A
4/22/2019	DKKJPY	9:30:00 AM					N/A
4/22/2019	DKKJPY	11:30:00 AM					N/A
4/22/2019	DKKJPY	1:30:00 PM					N/A
4/22/2019	DKKJPY	3:30:00 PM	16.87	16.89			N/A
4/22/2019	EURAUD	9:30:00 AM	1.57347	1.57388			N/A
4/22/2019	EURAUD	11:30:00 AM	1.57465	1.57517			N/A
4/22/2019	EURAUD	1:30:00 PM	1.57524	1.57578			N/A
4/22/2019	EURAUD	3:30:00 PM	1.57703	1.57738			N/A
4/22/2019	EURAUD.fx	9:30:00 AM	1.57368	1.57366			N/A
4/22/2019	EURAUD.fx	11:30:00 AM	1.57485	1.57495			N/A
4/22/2019	EURAUD.fx	1:30:00 PM	1.57545	1.57556			N/A
4/22/2019	EURAUD.fx	3:30:00 PM	1.57724	1.57716			N/A
4/22/2019	EURCAD	9:30:00 AM	1.50235	1.50305			N/A
4/22/2019	EURCAD	11:30:00 AM	1.50207	1.50302			N/A
4/22/2019	EURCAD	1:30:00 PM	1.50215	1.50309			N/A
4/22/2019	EURCAD	3:30:00 PM	1.504	1.50464			N/A

4/22/2019	EURCAD.fx	9:30:00 AM	1.50277	1.50263			N/A
4/22/2019	EURCAD.fx	11:30:00 AM	1.50248	1.50261			N/A
4/22/2019	EURCAD.fx	1:30:00 PM	1.50256	1.50268			N/A
4/22/2019	EURCAD.fx	3:30:00 PM	1.50441	1.50422			N/A
4/22/2019	EURCHF	9:30:00 AM	1.14056	1.14062			N/A
4/22/2019	EURCHF	11:30:00 AM	1.1412	1.14131			N/A
4/22/2019	EURCHF	1:30:00 PM	1.14154	1.14171			N/A
4/22/2019	EURCHF	3:30:00 PM	1.14188	1.142			N/A
4/22/2019	EURCHF.fx	9:30:00 AM	1.14061	1.14055			N/A
4/22/2019	EURCHF.fx	11:30:00 AM	1.14126	1.14126			N/A
4/22/2019	EURCHF.fx	1:30:00 PM	1.14158	1.14165			N/A
4/22/2019	EURCHF.fx	3:30:00 PM	1.14193	1.14195			N/A
4/22/2019	EURCZK	9:30:00 AM					N/A
4/22/2019	EURCZK	11:30:00 AM					N/A
4/22/2019	EURCZK	1:30:00 PM					N/A
4/22/2019	EURCZK	3:30:00 PM	25.659	25.698			N/A
4/22/2019	EURDKK	9:30:00 AM	7.4648	7.4657			N/A
4/22/2019	EURDKK	11:30:00 AM	7.4645	7.4658			N/A
4/22/2019	EURDKK	1:30:00 PM	7.4652	7.4664			N/A
4/22/2019	EURDKK	3:30:00 PM	7.4626	7.4635			N/A
4/22/2019	EURGBP	9:30:00 AM	0.86502	0.8651			N/A
4/22/2019	EURGBP	11:30:00 AM	0.86524	0.8654			N/A
4/22/2019	EURGBP	1:30:00 PM	0.86605	0.86622			N/A
4/22/2019	EURGBP	3:30:00 PM	0.8666	0.86666			N/A
4/22/2019	EURGBP.fx	9:30:00 AM	0.86504	0.86506			N/A
4/22/2019	EURGBP.fx	11:30:00 AM	0.86527	0.86536			N/A
4/22/2019	EURGBP.fx	1:30:00 PM	0.86608	0.86616			N/A
4/22/2019	EURGBP.fx	3:30:00 PM	0.86664	0.86661			N/A
4/22/2019	EURHKD	9:30:00 AM	8.8169	8.8217			N/A
4/22/2019	EURHKD	11:30:00 AM	8.8186	8.8244			N/A
4/22/2019	EURHKD	1:30:00 PM	8.8226	8.8284			N/A
4/22/2019	EURHKD	3:30:00 PM	8.8249	8.8299			N/A
4/22/2019	EURHKD.fx	9:30:00 AM	8.81969	8.81879			N/A
4/22/2019	EURHKD.fx	11:30:00 AM	8.82141	8.82156			N/A

4/22/2019	EURHKD.fx	1:30:00 PM	8.82539	8.82565			N/A
4/22/2019	EURHKD.fx	3:30:00 PM	8.82762	8.82709			N/A
4/22/2019	EURHUF	9:30:00 AM	319.96	320.69			N/A
4/22/2019	EURHUF	11:30:00 AM	319.94	320.53			N/A
4/22/2019	EURHUF	1:30:00 PM	319.69	320.4			N/A
4/22/2019	EURHUF	3:30:00 PM	319.7	320.21			N/A
4/22/2019	EURHUF.fx	9:30:00 AM	320.213	320.434			N/A
4/22/2019	EURHUF.fx	11:30:00 AM	320.221	320.416			N/A
4/22/2019	EURHUF.fx	1:30:00 PM	319.951	320.166			N/A
4/22/2019	EURHUF.fx	3:30:00 PM	319.948	320.035			N/A
4/22/2019	EURJPY	9:30:00 AM	125.805	125.809			N/A
4/22/2019	EURJPY	11:30:00 AM	125.835	125.849			N/A
4/22/2019	EURJPY	1:30:00 PM	125.915	125.931			N/A
4/22/2019	EURJPY	3:30:00 PM	125.942	125.948			N/A
4/22/2019	EURJPY.fx	9:30:00 AM	125.808	125.806			N/A
4/22/2019	EURJPY.fx	11:30:00 AM	125.837	125.845			N/A
4/22/2019	EURJPY.fx	1:30:00 PM	125.917	125.928			N/A
4/22/2019	EURJPY.fx	3:30:00 PM	125.944	125.943			N/A
4/22/2019	EURMXN	9:30:00 AM	21.1176	21.1376			N/A
4/22/2019	EURMXN	11:30:00 AM	21.1281	21.1475			N/A
4/22/2019	EURMXN	1:30:00 PM	21.1269	21.1485			N/A
4/22/2019	EURMXN	3:30:00 PM	21.154	21.1707			N/A
4/22/2019	EURMXN.fx	9:30:00 AM	21.1252	21.13			N/A
4/22/2019	EURMXN.fx	11:30:00 AM	21.1358	21.1417			N/A
4/22/2019	EURMXN.fx	1:30:00 PM	21.1347	21.1409			N/A
4/22/2019	EURMXN.fx	3:30:00 PM	21.163	21.162			N/A
4/22/2019	EURNOK	9:30:00 AM	9.5507	9.5631			N/A
4/22/2019	EURNOK	11:30:00 AM	9.5554	9.568			N/A
4/22/2019	EURNOK	1:30:00 PM	9.555	9.5675			N/A
4/22/2019	EURNOK	3:30:00 PM	9.5619	9.5748			N/A
4/22/2019	EURNOK.fx	9:30:00 AM	9.55611	9.55774			N/A
4/22/2019	EURNOK.fx	11:30:00 AM	9.56069	9.56276			N/A
4/22/2019	EURNOK.fx	1:30:00 PM	9.5625	9.56508			N/A
4/22/2019	EURNOK.fx	3:30:00 PM	9.56715	9.56957			N/A

4/22/2019	EURNZD	9:30:00 AM	1.68339	1.68422			N/A
4/22/2019	EURNZD	11:30:00 AM	1.68308	1.68404			N/A
4/22/2019	EURNZD	1:30:00 PM	1.68367	1.68453			N/A
4/22/2019	EURNZD	3:30:00 PM	1.68576	1.68661			N/A
4/22/2019	EURNZD.fx	9:30:00 AM	1.68379	1.68382			N/A
4/22/2019	EURNZD.fx	11:30:00 AM	1.68351	1.68361			N/A
4/22/2019	EURNZD.fx	1:30:00 PM	1.68407	1.68412			N/A
4/22/2019	EURNZD.fx	3:30:00 PM	1.68617	1.6862			N/A
4/22/2019	EURPLN	9:30:00 AM	4.2802	4.283			N/A
4/22/2019	EURPLN	11:30:00 AM	4.2783	4.2805			N/A
4/22/2019	EURPLN	1:30:00 PM	4.2783	4.2806			N/A
4/22/2019	EURPLN	3:30:00 PM	4.2783	4.2816			N/A
4/22/2019	EURPLN.fx	9:30:00 AM	4.2793	4.28377			N/A
4/22/2019	EURPLN.fx	11:30:00 AM	4.27751	4.28266			N/A
4/22/2019	EURPLN.fx	1:30:00 PM					N/A
4/22/2019	EURPLN.fx	3:30:00 PM	4.27729	4.28244			N/A
4/22/2019	EURRUB	9:30:00 AM					N/A
4/22/2019	EURRUB	11:30:00 AM	71.353	71.793			N/A
4/22/2019	EURRUB	1:30:00 PM	71.421	71.863			N/A
4/22/2019	EURRUB	3:30:00 PM	71.423	71.809			N/A
4/22/2019	EURSEK	9:30:00 AM	10.4523	10.4575			N/A
4/22/2019	EURSEK	11:30:00 AM	10.4651	10.4704			N/A
4/22/2019	EURSEK	1:30:00 PM	10.4639	10.4685			N/A
4/22/2019	EURSEK	3:30:00 PM	10.4734	10.477			N/A
4/22/2019	EURSEK.fx	9:30:00 AM	10.45354	10.45614			N/A
4/22/2019	EURSEK.fx	11:30:00 AM	10.46664	10.46891			N/A
4/22/2019	EURSEK.fx	1:30:00 PM	10.46541	10.46783			N/A
4/22/2019	EURSEK.fx	3:30:00 PM	10.47494	10.47567			N/A
4/22/2019	EURSGD	9:30:00 AM	1.5248	1.5252			N/A
4/22/2019	EURSGD	11:30:00 AM	1.5252	1.5259			N/A
4/22/2019	EURSGD	1:30:00 PM	1.5254	1.5259			N/A
4/22/2019	EURSGD	3:30:00 PM	1.5263	1.5272			N/A
4/22/2019	EURSGD.fx	9:30:00 AM	1.52517	1.52518			N/A
4/22/2019	EURSGD.fx	11:30:00 AM	1.52562	1.52577			N/A

4/22/2019	EURSGD.fx	1:30:00 PM	1.52582	1.52597			N/A
4/22/2019	EURSGD.fx	3:30:00 PM	1.52668	1.52677			N/A
4/22/2019	EURUSD	9:30:00 AM	1.12401	1.12404			N/A
4/22/2019	EURUSD	11:30:00 AM	1.12422	1.12439			N/A
4/22/2019	EURUSD	1:30:00 PM	1.12481	1.12499			N/A
4/22/2019	EURUSD	3:30:00 PM	1.12509	1.12516			N/A
4/22/2019	EURUSD.fx	9:30:00 AM	1.12421	1.12413			N/A
4/22/2019	EURUSD.fx	11:30:00 AM	1.12442	1.12448			N/A
4/22/2019	EURUSD.fx	1:30:00 PM	1.12501	1.12508			N/A
4/22/2019	EURUSD.fx	3:30:00 PM	1.12529	1.12525			N/A
4/22/2019	EURZAR	9:30:00 AM	15.8408	15.8605			N/A
4/22/2019	EURZAR	11:30:00 AM	15.8499	15.868			N/A
4/22/2019	EURZAR	1:30:00 PM	15.8676	15.8893			N/A
4/22/2019	EURZAR	3:30:00 PM	15.8765	15.8964			N/A
4/22/2019	EURZAR.fx	9:30:00 AM	15.84006	15.8614			N/A
4/22/2019	EURZAR.fx	11:30:00 AM	15.84924	15.86894			N/A
4/22/2019	EURZAR.fx	1:30:00 PM	15.86663	15.89019			N/A
4/22/2019	EURZAR.fx	3:30:00 PM	15.87533	15.8978			N/A
4/22/2019	GBPAUD	9:30:00 AM	1.81954	1.82021			N/A
4/22/2019	GBPAUD	11:30:00 AM	1.82027	1.82117			N/A
4/22/2019	GBPAUD	1:30:00 PM	1.81929	1.82018			N/A
4/22/2019	GBPAUD	3:30:00 PM	1.82036	1.8209			N/A
4/22/2019	GBPAUD.fx	9:30:00 AM	1.81993	1.81982			N/A
4/22/2019	GBPAUD.fx	11:30:00 AM	1.82067	1.82077			N/A
4/22/2019	GBPAUD.fx	1:30:00 PM	1.81971	1.81976			N/A
4/22/2019	GBPAUD.fx	3:30:00 PM	1.82075	1.8205			N/A
4/22/2019	GBPCAD	9:30:00 AM	1.73672	1.73747			N/A
4/22/2019	GBPCAD	11:30:00 AM	1.73598	1.73685			N/A
4/22/2019	GBPCAD	1:30:00 PM	1.73444	1.73537			N/A
4/22/2019	GBPCAD	3:30:00 PM	1.73554	1.73611			N/A
4/22/2019	GBPCAD.fx	9:30:00 AM	1.7371	1.73711			N/A
4/22/2019	GBPCAD.fx	11:30:00 AM	1.73635	1.73648			N/A
4/22/2019	GBPCAD.fx	1:30:00 PM	1.73482	1.73497			N/A
4/22/2019	GBPCAD.fx	3:30:00 PM	1.7359	1.73571			N/A



4/22/2019	GBPCHF	9:30:00 AM	1.31827	1.3188			N/A
4/22/2019	GBPCHF	11:30:00 AM	1.31863	1.3191			N/A
4/22/2019	GBPCHF	1:30:00 PM	1.31782	1.31833			N/A
4/22/2019	GBPCHF	3:30:00 PM	1.3175	1.31791			N/A
4/22/2019	GBPCHF.fx	9:30:00 AM	1.31846	1.31861			N/A
4/22/2019	GBPCHF.fx	11:30:00 AM	1.31881	1.3189			N/A
4/22/2019	GBPCHF.fx	1:30:00 PM	1.31803	1.3181			N/A
4/22/2019	GBPCHF.fx	3:30:00 PM	1.31768	1.31772			N/A
4/22/2019	GBPCZK	9:30:00 AM	29.664	29.687			N/A
4/22/2019	GBPCZK	11:30:00 AM	29.661	29.685			N/A
4/22/2019	GBPCZK	1:30:00 PM	29.634	29.658			N/A
4/22/2019	GBPCZK	3:30:00 PM	29.618	29.639			N/A
4/22/2019	GBPDKK	9:30:00 AM	8.626	8.637			N/A
4/22/2019	GBPDKK	11:30:00 AM	8.622	8.635			N/A
4/22/2019	GBPDKK	1:30:00 PM	8.615	8.627			N/A
4/22/2019	GBPDKK	3:30:00 PM	8.611	8.621			N/A
4/22/2019	GBPDKK.fx	9:30:00 AM	8.6244	8.6378			N/A
4/22/2019	GBPDKK.fx	11:30:00 AM	8.6214	8.6354			N/A
4/22/2019	GBPDKK.fx	1:30:00 PM	8.6133	8.6271			N/A
4/22/2019	GBPDKK.fx	3:30:00 PM	8.609	8.6217			N/A
4/22/2019	GBPHKD	9:30:00 AM	10.1901	10.196			N/A
4/22/2019	GBPHKD	11:30:00 AM	10.1892	10.1951			N/A
4/22/2019	GBPHKD	1:30:00 PM	10.1845	10.1903			N/A
4/22/2019	GBPHKD	3:30:00 PM	10.1803	10.1861			N/A
4/22/2019	GBPHUF	9:30:00 AM	369.89	370.36			N/A
4/22/2019	GBPHUF	11:30:00 AM	369.71	370.2			N/A
4/22/2019	GBPHUF	1:30:00 PM	369.08	369.58			N/A
4/22/2019	GBPHUF	3:30:00 PM	368.85	369.02			N/A
4/22/2019	GBPJPY	9:30:00 AM	145.417	145.461			N/A
4/22/2019	GBPJPY	11:30:00 AM	145.402	145.454			N/A
4/22/2019	GBPJPY	1:30:00 PM	145.361	145.416			N/A
4/22/2019	GBPJPY	3:30:00 PM	145.306	145.347			N/A
4/22/2019	GBPJPY.fx	9:30:00 AM	145.434	145.443			N/A
4/22/2019	GBPJPY.fx	11:30:00 AM	145.421	145.436			N/A

4/22/2019	GBPJPY.fx	1:30:00 PM	145.38	145.397			N/A
4/22/2019	GBPJPY.fx	3:30:00 PM	145.324	145.328			N/A
4/22/2019	GBPMXN	9:30:00 AM	24.4079	24.4245			N/A
4/22/2019	GBPMXN	11:30:00 AM	24.4132	24.4311			N/A
4/22/2019	GBPMXN	1:30:00 PM	24.3893	24.4065			N/A
4/22/2019	GBPMXN	3:30:00 PM	24.4062	24.417			N/A
4/22/2019	GBPNOK	9:30:00 AM	11.0422	11.0535			N/A
4/22/2019	GBPNOK	11:30:00 AM	11.0437	11.0558			N/A
4/22/2019	GBPNOK	1:30:00 PM	11.0357	11.0481			N/A
4/22/2019	GBPNOK	3:30:00 PM	11.0353	11.0465			N/A
4/22/2019	GBPNOK.fx	9:30:00 AM	11.04707	11.04866			N/A
4/22/2019	GBPNOK.fx	11:30:00 AM	11.04851	11.05104			N/A
4/22/2019	GBPNOK.fx	1:30:00 PM	11.04053	11.04315			N/A
4/22/2019	GBPNOK.fx	3:30:00 PM	11.04017	11.04165			N/A
4/22/2019	GBPNZD	9:30:00 AM	1.94612	1.94688			N/A
4/22/2019	GBPNZD	11:30:00 AM	1.94516	1.94603			N/A
4/22/2019	GBPNZD	1:30:00 PM	1.94401	1.94481			N/A
4/22/2019	GBPNZD	3:30:00 PM	1.94537	1.94606			N/A
4/22/2019	GBPNZD.fx	9:30:00 AM	1.94647	1.94654			N/A
4/22/2019	GBPNZD.fx	11:30:00 AM	1.94551	1.94566			N/A
4/22/2019	GBPNZD.fx	1:30:00 PM	1.94435	1.94445			N/A
4/22/2019	GBPNZD.fx	3:30:00 PM	1.94572	1.94569			N/A
4/22/2019	GBPPLN	9:30:00 AM	4.9489	4.9501			N/A
4/22/2019	GBPPLN	11:30:00 AM	4.9452	4.9473			N/A
4/22/2019	GBPPLN	1:30:00 PM	4.9403	4.9426			N/A
4/22/2019	GBPPLN	3:30:00 PM	4.9378	4.9395			N/A
4/22/2019	GBPPLN.fx	9:30:00 AM	4.94646	4.95245			N/A
4/22/2019	GBPPLN.fx	11:30:00 AM	4.9428	4.9497			N/A
4/22/2019	GBPPLN.fx	1:30:00 PM	4.93786	4.94498			N/A
4/22/2019	GBPPLN.fx	3:30:00 PM	4.93522	4.94186			N/A
4/22/2019	GBPSEK	9:30:00 AM	12.0811	12.0908			N/A
4/22/2019	GBPSEK	11:30:00 AM	12.0922	12.1024			N/A
4/22/2019	GBPSEK	1:30:00 PM	12.0792	12.0896			N/A
4/22/2019	GBPSEK	3:30:00 PM	12.0832	12.0909			N/A

4/22/2019	GBPSEK.fx	9:30:00 AM	12.07705	12.09488			N/A
4/22/2019	GBPSEK.fx	11:30:00 AM	12.08792	12.10661			N/A
4/22/2019	GBPSEK.fx	1:30:00 PM	12.07527	12.09338			N/A
4/22/2019	GBPSEK.fx	3:30:00 PM	12.07902	12.09496			N/A
4/22/2019	GBPSGD	9:30:00 AM	1.7627	1.7636			N/A
4/22/2019	GBPSGD	11:30:00 AM	1.7628	1.7636			N/A
4/22/2019	GBPSGD	1:30:00 PM	1.7613	1.7622			N/A
4/22/2019	GBPSGD	3:30:00 PM	1.7614	1.7621			N/A
4/22/2019	GBPSGD.fx	9:30:00 AM	1.76087	1.76536			N/A
4/22/2019	GBPSGD.fx	11:30:00 AM	1.7609	1.76542			N/A
4/22/2019	GBPSGD.fx	1:30:00 PM	1.75945	1.76404			N/A
4/22/2019	GBPSGD.fx	3:30:00 PM	1.7595	1.76387			N/A
4/22/2019	GBPUSD	9:30:00 AM	1.29947	1.29961			N/A
4/22/2019	GBPUSD	11:30:00 AM	1.29941	1.29951			N/A
4/22/2019	GBPUSD	1:30:00 PM	1.29887	1.29902			N/A
4/22/2019	GBPUSD	3:30:00 PM	1.29842	1.29845			N/A
4/22/2019	GBPUSD.fx	9:30:00 AM	1.29953	1.29957			N/A
4/22/2019	GBPUSD.fx	11:30:00 AM	1.29944	1.29947			N/A
4/22/2019	GBPUSD.fx	1:30:00 PM	1.29892	1.29899			N/A
4/22/2019	GBPUSD.fx	3:30:00 PM	1.29847	1.29839			N/A
4/22/2019	GBPZAR	9:30:00 AM	18.3098	18.3371			N/A
4/22/2019	GBPZAR	11:30:00 AM	18.3142	18.3418			N/A
4/22/2019	GBPZAR	1:30:00 PM	18.3164	18.3479			N/A
4/22/2019	GBPZAR	3:30:00 PM	18.3169	18.3459			N/A
4/22/2019	GBPZAR.fx	9:30:00 AM	18.3164	18.3295			N/A
4/22/2019	GBPZAR.fx	11:30:00 AM	18.3212	18.3343			N/A
4/22/2019	GBPZAR.fx	1:30:00 PM	18.3227	18.3417			N/A
4/22/2019	GBPZAR.fx	3:30:00 PM	18.3222	18.3409			N/A
4/22/2019	GOLD	9:30:00 AM	1278.28	1278.67			N/A
4/22/2019	GOLD	11:30:00 AM	1278.22	1278.58			N/A
4/22/2019	GOLD	1:30:00 PM	1279.15	1279.57			N/A
4/22/2019	GOLD	3:30:00 PM	1277.56	1277.48			N/A
4/22/2019	HKDJPY	9:30:00 AM	14.27	14.28			N/A
4/22/2019	HKDJPY	11:30:00 AM	14.27	14.28			N/A

4/22/2019	HKDJPY	1:30:00 PM					N/A
4/22/2019	HKDJPY	3:30:00 PM	14.27	14.28			N/A
4/22/2019	HKDJPY.fx	9:30:00 AM	14.26	14.268			N/A
4/22/2019	HKDJPY.fx	11:30:00 AM	14.261	14.268			N/A
4/22/2019	HKDJPY.fx	1:30:00 PM	14.263	14.271			N/A
4/22/2019	HKDJPY.fx	3:30:00 PM	14.263	14.27			N/A
4/22/2019	HUFJPY	9:30:00 AM	0.3931	0.3934			N/A
4/22/2019	HUFJPY	11:30:00 AM	0.3931	0.3934			N/A
4/22/2019	HUFJPY	1:30:00 PM	0.3937	0.3941			N/A
4/22/2019	HUFJPY	3:30:00 PM	0.394	0.3943			N/A
4/22/2019	JP225.i	9:30:00 AM	22209.74	22227.24			N/A
4/22/2019	JP225.i	11:30:00 AM	22202.24	22219.74			N/A
4/22/2019	JP225.i	1:30:00 PM					N/A
4/22/2019	JP225.i	3:30:00 PM	22198.08	22212.24			N/A
4/22/2019	MXNJPY	9:30:00 AM	5.96	5.96			N/A
4/22/2019	MXNJPY	11:30:00 AM					N/A
4/22/2019	MXNJPY	1:30:00 PM					N/A
4/22/2019	MXNJPY	3:30:00 PM					N/A
4/22/2019	NASDAQ.i	9:30:00 AM					N/A
4/22/2019	NASDAQ.i	11:30:00 AM					N/A
4/22/2019	NASDAQ.i	1:30:00 PM					N/A
4/22/2019	NASDAQ.i	3:30:00 PM					N/A
4/22/2019	NOKJPY	9:30:00 AM	13.15	13.18			N/A
4/22/2019	NOKJPY	11:30:00 AM					N/A
4/22/2019	NOKJPY	1:30:00 PM					N/A
4/22/2019	NOKJPY	3:30:00 PM	13.15	13.18			N/A
4/22/2019	NOKJPY.fx	9:30:00 AM	13.16	13.167			N/A
4/22/2019	NOKJPY.fx	11:30:00 AM	13.157	13.165			N/A
4/22/2019	NOKJPY.fx	1:30:00 PM	13.162	13.171			N/A
4/22/2019	NOKJPY.fx	3:30:00 PM	13.159	13.167			N/A
4/22/2019	NZDCAD	9:30:00 AM	0.89207	0.89274			N/A
4/22/2019	NZDCAD	11:30:00 AM	0.89209	0.89287			N/A
4/22/2019	NZDCAD	1:30:00 PM	0.89189	0.89262			N/A
4/22/2019	NZDCAD	3:30:00 PM	0.89182	0.89243			N/A

4/22/2019	NZDCAD.fx	9:30:00 AM	0.89242	0.8924			N/A
4/22/2019	NZDCAD.fx	11:30:00 AM	0.89241	0.89255			N/A
4/22/2019	NZDCAD.fx	1:30:00 PM	0.89221	0.89229			N/A
4/22/2019	NZDCAD.fx	3:30:00 PM	0.89214	0.8921			N/A
4/22/2019	NZDCHF	9:30:00 AM	0.67702	0.67773			N/A
4/22/2019	NZDCHF	11:30:00 AM	0.67752	0.67829			N/A
4/22/2019	NZDCHF	1:30:00 PM	0.67751	0.67826			N/A
4/22/2019	NZDCHF	3:30:00 PM	0.67687	0.67759			N/A
4/22/2019	NZDCHF.fx	9:30:00 AM	0.67735	0.67737			N/A
4/22/2019	NZDCHF.fx	11:30:00 AM	0.67785	0.67794			N/A
4/22/2019	NZDCHF.fx	1:30:00 PM	0.67784	0.67791			N/A
4/22/2019	NZDCHF.fx	3:30:00 PM	0.6772	0.67724			N/A
4/22/2019	NZDCZK	9:30:00 AM					N/A
4/22/2019	NZDCZK	11:30:00 AM					N/A
4/22/2019	NZDCZK	1:30:00 PM	15.24	15.252			N/A
4/22/2019	NZDCZK	3:30:00 PM	15.222	15.232			N/A
4/22/2019	NZDDKK	9:30:00 AM					N/A
4/22/2019	NZDDKK	11:30:00 AM	4.433	4.436			N/A
4/22/2019	NZDDKK	1:30:00 PM					N/A
4/22/2019	NZDDKK	3:30:00 PM	4.425	4.429			N/A
4/22/2019	NZDHKD	9:30:00 AM	5.2343	5.2372			N/A
4/22/2019	NZDHKD	11:30:00 AM	5.2364	5.2393			N/A
4/22/2019	NZDHKD	1:30:00 PM	5.2374	5.2402			N/A
4/22/2019	NZDHKD	3:30:00 PM	5.232	5.2346			N/A
4/22/2019	NZDHUF	9:30:00 AM	189.99	190.29			N/A
4/22/2019	NZDHUF	11:30:00 AM	189.99	190.29			N/A
4/22/2019	NZDHUF	1:30:00 PM	189.79	190.09			N/A
4/22/2019	NZDHUF	3:30:00 PM	189.52	189.68			N/A
4/22/2019	NZDJPY	9:30:00 AM	74.681	74.754			N/A
4/22/2019	NZDJPY	11:30:00 AM	74.71	74.786			N/A
4/22/2019	NZDJPY	1:30:00 PM	74.736	74.809			N/A
4/22/2019	NZDJPY	3:30:00 PM	74.654	74.727			N/A
4/22/2019	NZDJPY.fx	9:30:00 AM	74.711	74.722			N/A
4/22/2019	NZDJPY.fx	11:30:00 AM	74.742	74.753			N/A

4/22/2019	NZDJPY.fx	1:30:00 PM	74.767	74.777			N/A
4/22/2019	NZDJPY.fx	3:30:00 PM	74.685	74.695			N/A
4/22/2019	NZDMXN	9:30:00 AM	12.5389	12.5452			N/A
4/22/2019	NZDMXN	11:30:00 AM	12.5475	12.5544			N/A
4/22/2019	NZDMXN	1:30:00 PM	12.5435	12.5498			N/A
4/22/2019	NZDMXN	3:30:00 PM	12.5426	12.5463			N/A
4/22/2019	NZDNOK	9:30:00 AM	5.6714	5.6752			N/A
4/22/2019	NZDNOK	11:30:00 AM	5.6751	5.6789			N/A
4/22/2019	NZDNOK	1:30:00 PM	5.6746	5.6786			N/A
4/22/2019	NZDNOK	3:30:00 PM	5.6699	5.6723			N/A
4/22/2019	NZDPLN	9:30:00 AM	2.5414	2.5428			N/A
4/22/2019	NZDPLN	11:30:00 AM	2.5407	2.5421			N/A
4/22/2019	NZDPLN	1:30:00 PM	2.5399	2.5413			N/A
4/22/2019	NZDPLN	3:30:00 PM	2.5365	2.538			N/A
4/22/2019	NZDSEK	9:30:00 AM	6.2027	6.2096			N/A
4/22/2019	NZDSEK	11:30:00 AM	6.2111	6.2181			N/A
4/22/2019	NZDSEK	1:30:00 PM	6.2091	6.216			N/A
4/22/2019	NZDSEK	3:30:00 PM	6.2056	6.2122			N/A
4/22/2019	NZDSGD	9:30:00 AM	0.9055	0.9061			N/A
4/22/2019	NZDSGD	11:30:00 AM	0.9058	0.9063			N/A
4/22/2019	NZDSGD	1:30:00 PM	0.9058	0.9064			N/A
4/22/2019	NZDSGD	3:30:00 PM	0.9052	0.9058			N/A
4/22/2019	NZDSGD.fx	9:30:00 AM	0.90548	0.90605			N/A
4/22/2019	NZDSGD.fx	11:30:00 AM	0.90589	0.90655			N/A
4/22/2019	NZDSGD.fx	1:30:00 PM	0.90578	0.90637			N/A
4/22/2019	NZDSGD.fx	3:30:00 PM	0.9051	0.90571			N/A
4/22/2019	NZDUSD	9:30:00 AM	0.66752	0.66764			N/A
4/22/2019	NZDUSD	11:30:00 AM	0.66776	0.66796			N/A
4/22/2019	NZDUSD	1:30:00 PM	0.66792	0.66808			N/A
4/22/2019	NZDUSD	3:30:00 PM	0.66722	0.66737			N/A
4/22/2019	NZDUSD.fx	9:30:00 AM	0.66758	0.66768			N/A
4/22/2019	NZDUSD.fx	11:30:00 AM	0.66783	0.66796			N/A
4/22/2019	NZDUSD.fx	1:30:00 PM	0.66799	0.6681			N/A
4/22/2019	NZDUSD.fx	3:30:00 PM	0.66728	0.66739			N/A

4/22/2019	NZDZAR	9:30:00 AM	9.399	9.4163			N/A
4/22/2019	NZDZAR	11:30:00 AM	9.4058	9.4235			N/A
4/22/2019	NZDZAR	1:30:00 PM	9.4141	9.4319			N/A
4/22/2019	NZDZAR	3:30:00 PM	9.4064	9.4224			N/A
4/22/2019	SEKJPY	9:30:00 AM	12.03	12.04			N/A
4/22/2019	SEKJPY	11:30:00 AM					N/A
4/22/2019	SEKJPY	1:30:00 PM					N/A
4/22/2019	SEKJPY	3:30:00 PM	12.02	12.03			N/A
4/22/2019	SEKJPY.fx	9:30:00 AM	12.023	12.042			N/A
4/22/2019	SEKJPY.fx	11:30:00 AM	12.011	12.031			N/A
4/22/2019	SEKJPY.fx	1:30:00 PM	12.02	12.041			N/A
4/22/2019	SEKJPY.fx	3:30:00 PM	12.014	12.032			N/A
4/22/2019	SGDJPY	9:30:00 AM	82.47	82.49			N/A
4/22/2019	SGDJPY	11:30:00 AM	82.47	82.49			N/A
4/22/2019	SGDJPY	1:30:00 PM	82.53	82.55			N/A
4/22/2019	SGDJPY	3:30:00 PM	82.48	82.49			N/A
4/22/2019	SILVER	9:30:00 AM	14.86	15.25			N/A
4/22/2019	SILVER	11:30:00 AM	14.83	15.22			N/A
4/22/2019	SILVER	1:30:00 PM	14.85	15.23			N/A
4/22/2019	SILVER	3:30:00 PM	14.83	15.2			N/A
4/22/2019	SPX500.i	9:30:00 AM	2901.89	2902.94			N/A
4/22/2019	SPX500.i	11:30:00 AM					N/A
4/22/2019	SPX500.i	1:30:00 PM					N/A
4/22/2019	SPX500.i	3:30:00 PM	2898.89	2899.19			N/A
4/22/2019	UK100.i	9:30:00 AM					N/A
4/22/2019	UK100.i	11:30:00 AM					N/A
4/22/2019	UK100.i	1:30:00 PM					N/A
4/22/2019	UK100.i	3:30:00 PM					N/A
4/22/2019	USDCAD	9:30:00 AM	1.33669	1.33677			N/A
4/22/2019	USDCAD	11:30:00 AM	1.3362	1.33637			N/A
4/22/2019	USDCAD	1:30:00 PM	1.33557	1.33572			N/A
4/22/2019	USDCAD	3:30:00 PM	1.3369	1.33686			N/A
4/22/2019	USDCAD.fx	9:30:00 AM	1.33672	1.33675			N/A
4/22/2019	USDCAD.fx	11:30:00 AM	1.33623	1.33634			N/A

4/22/2019	USDCAD.fx	1:30:00 PM	1.3356	1.3357			N/A
4/22/2019	USDCAD.fx	3:30:00 PM	1.33693	1.33684			N/A
4/22/2019	USDCHF	9:30:00 AM	1.01453	1.0147			N/A
4/22/2019	USDCHF	11:30:00 AM	1.0149	1.01503			N/A
4/22/2019	USDCHF	1:30:00 PM	1.01466	1.01481			N/A
4/22/2019	USDCHF	3:30:00 PM	1.01476	1.01488			N/A
4/22/2019	USDCHF.fx	9:30:00 AM	1.01457	1.01464			N/A
4/22/2019	USDCHF.fx	11:30:00 AM	1.01496	1.01496			N/A
4/22/2019	USDCHF.fx	1:30:00 PM	1.0147	1.01474			N/A
4/22/2019	USDCHF.fx	3:30:00 PM	1.0148	1.01483			N/A
4/22/2019	USDCZK	9:30:00 AM	22.844	22.866			N/A
4/22/2019	USDCZK	11:30:00 AM	22.842	22.865			N/A
4/22/2019	USDCZK	1:30:00 PM					N/A
4/22/2019	USDCZK	3:30:00 PM	22.827	22.849			N/A
4/22/2019	USDCZK.fx	9:30:00 AM	22.8507	22.858			N/A
4/22/2019	USDCZK.fx	11:30:00 AM	22.8492	22.8571			N/A
4/22/2019	USDCZK.fx	1:30:00 PM	22.8379	22.845			N/A
4/22/2019	USDCZK.fx	3:30:00 PM	22.8343	22.8419			N/A
4/22/2019	USDDKK	9:30:00 AM	6.6406	6.6444			N/A
4/22/2019	USDDKK	11:30:00 AM	6.6386	6.6429			N/A
4/22/2019	USDDKK	1:30:00 PM	6.6348	6.6392			N/A
4/22/2019	USDDKK	3:30:00 PM	6.6342	6.6378			N/A
4/22/2019	USDDKK.fx	9:30:00 AM	6.641	6.6422			N/A
4/22/2019	USDDKK.fx	11:30:00 AM	6.63903	6.64091			N/A
4/22/2019	USDDKK.fx	1:30:00 PM	6.6353	6.63725			N/A
4/22/2019	USDDKK.fx	3:30:00 PM	6.63444	6.63586			N/A
4/22/2019	USDHKD	9:30:00 AM	7.8439	7.8444			N/A
4/22/2019	USDHKD	11:30:00 AM	7.8449	7.8453			N/A
4/22/2019	USDHKD	1:30:00 PM					N/A
4/22/2019	USDHKD	3:30:00 PM	7.8444	7.8447			N/A
4/22/2019	USDHKD.fx	9:30:00 AM					N/A
4/22/2019	USDHKD.fx	11:30:00 AM	7.84487	7.84546			N/A
4/22/2019	USDHKD.fx	1:30:00 PM					N/A
4/22/2019	USDHKD.fx	3:30:00 PM	7.84431	7.84493			N/A



4/22/2019	USDHUF	9:30:00 AM	284.71	285.16			N/A
4/22/2019	USDHUF	11:30:00 AM	284.61	285.08			N/A
4/22/2019	USDHUF	1:30:00 PM	284.23	284.69			N/A
4/22/2019	USDHUF	3:30:00 PM	284.2	284.55			N/A
4/22/2019	USDHUF.fx	9:30:00 AM	284.91	284.975			N/A
4/22/2019	USDHUF.fx	11:30:00 AM	284.807	284.903			N/A
4/22/2019	USDHUF.fx	1:30:00 PM	284.425	284.525			N/A
4/22/2019	USDHUF.fx	3:30:00 PM	284.369	284.352			N/A
4/22/2019	USDINR	9:30:00 AM	64.69	74.68			N/A
4/22/2019	USDINR	11:30:00 AM	64.51	74.5			N/A
4/22/2019	USDINR	1:30:00 PM					N/A
4/22/2019	USDINR	3:30:00 PM					N/A
4/22/2019	USDJPY	9:30:00 AM	111.908	111.92			N/A
4/22/2019	USDJPY	11:30:00 AM	111.908	111.922			N/A
4/22/2019	USDJPY	1:30:00 PM	111.918	111.937			N/A
4/22/2019	USDJPY	3:30:00 PM	111.915	111.93			N/A
4/22/2019	USDJPY.fx	9:30:00 AM	111.914	111.913			N/A
4/22/2019	USDJPY.fx	11:30:00 AM	111.914	111.915			N/A
4/22/2019	USDJPY.fx	1:30:00 PM	111.923	111.93			N/A
4/22/2019	USDJPY.fx	3:30:00 PM	111.921	111.922			N/A
4/22/2019	USDMXN	9:30:00 AM	18.79	18.798			N/A
4/22/2019	USDMXN	11:30:00 AM	18.795	18.802			N/A
4/22/2019	USDMXN	1:30:00 PM	18.784	18.793			N/A
4/22/2019	USDMXN	3:30:00 PM	18.804	18.809			N/A
4/22/2019	USDMXN.f	9:30:00 AM	18.7936	18.795			N/A
4/22/2019	USDMXN.f	11:30:00 AM	18.7992	18.8013			N/A
4/22/2019	USDMXN.f	1:30:00 PM	18.7867	18.7905			N/A
4/22/2019	USDMXN.f	3:30:00 PM	18.8074	18.8058			N/A
4/22/2019	USDNOK	9:30:00 AM	8.4977	8.5057			N/A
4/22/2019	USDNOK	11:30:00 AM	8.4991	8.5081			N/A
4/22/2019	USDNOK	1:30:00 PM	8.4965	8.5055			N/A
4/22/2019	USDNOK	3:30:00 PM	8.4991	8.5077			N/A
4/22/2019	USDNOK.fx	9:30:00 AM	8.50157	8.50142			N/A
4/22/2019	USDNOK.fx	11:30:00 AM	8.50298	8.50374			N/A

4/22/2019	USDNOK.fx	1:30:00 PM	8.50013	8.50096			N/A
4/22/2019	USDNOK.fx	3:30:00 PM	8.50287	8.5034			N/A
4/22/2019	USDPLN	9:30:00 AM	3.8082	3.8092			N/A
4/22/2019	USDPLN	11:30:00 AM	3.8054	3.8069			N/A
4/22/2019	USDPLN	1:30:00 PM	3.8033	3.8049			N/A
4/22/2019	USDPLN	3:30:00 PM	3.8027	3.8042			N/A
4/22/2019	USDPLN.fx	9:30:00 AM	3.80715	3.81008			N/A
4/22/2019	USDPLN.fx	11:30:00 AM	3.80437	3.80838			N/A
4/22/2019	USDPLN.fx	1:30:00 PM	3.80234	3.80622			N/A
4/22/2019	USDPLN.fx	3:30:00 PM	3.80168	3.80524			N/A
4/22/2019	USDRUB	9:30:00 AM					N/A
4/22/2019	USDRUB	11:30:00 AM	63.571	63.961			N/A
4/22/2019	USDRUB	1:30:00 PM	63.598	63.991			N/A
4/22/2019	USDRUB	3:30:00 PM	63.581	63.979			N/A
4/22/2019	USDSEK	9:30:00 AM	9.2976	9.3017			N/A
4/22/2019	USDSEK	11:30:00 AM	9.3064	9.3114			N/A
4/22/2019	USDSEK	1:30:00 PM	9.3005	9.3056			N/A
4/22/2019	USDSEK	3:30:00 PM	9.3069	9.3101			N/A
4/22/2019	USDSEK.fx	9:30:00 AM	9.2999	9.30013			N/A
4/22/2019	USDSEK.fx	11:30:00 AM	9.30887	9.3098			N/A
4/22/2019	USDSEK.fx	1:30:00 PM	9.30284	9.30384			N/A
4/22/2019	USDSEK.fx	3:30:00 PM	9.30935	9.30842			N/A
4/22/2019	USDSGD	9:30:00 AM	1.3566	1.3569			N/A
4/22/2019	USDSGD	11:30:00 AM					N/A
4/22/2019	USDSGD	1:30:00 PM	1.3561	1.3564			N/A
4/22/2019	USDSGD	3:30:00 PM	1.3566	1.3569			N/A
4/22/2019	USDSGD.fx	9:30:00 AM	1.35646	1.35697			N/A
4/22/2019	USDSGD.fx	11:30:00 AM	1.35656	1.35709			N/A
4/22/2019	USDSGD.fx	1:30:00 PM	1.35601	1.35658			N/A
4/22/2019	USDSGD.fx	3:30:00 PM	1.35651	1.35704			N/A
4/22/2019	USDZAR	9:30:00 AM	14.0915	14.1065			N/A
4/22/2019	USDZAR	11:30:00 AM	14.0955	14.1137			N/A
4/22/2019	USDZAR	1:30:00 PM	14.1038	14.1237			N/A
4/22/2019	USDZAR	3:30:00 PM	14.1098	14.128			N/A

4/22/2019	USDZAR.fx	9:30:00 AM	14.09657	14.10301			N/A
4/22/2019	USDZAR.fx	11:30:00 AM	14.10107	14.10812			N/A
4/22/2019	USDZAR.fx	1:30:00 PM	14.1095	14.11791			N/A
4/22/2019	USDZAR.fx	3:30:00 PM	14.11617	14.12268			N/A
4/22/2019	XAUUSD	9:30:00 AM	1278.27	1278.67			N/A
4/22/2019	XAUUSD	11:30:00 AM	1278.22	1278.57			N/A
4/22/2019	XAUUSD	1:30:00 PM	1279.19	1279.57			N/A
4/22/2019	XAUUSD	3:30:00 PM	1277.56	1277.48			N/A
4/22/2019	ZARJPY	9:30:00 AM	7.92	7.94			N/A
4/22/2019	ZARJPY	11:30:00 AM	7.92	7.93			N/A
4/22/2019	ZARJPY	1:30:00 PM					N/A
4/22/2019	ZARJPY	3:30:00 PM	7.9	7.94			N/A
4/22/2019	ZARJPY.fx	9:30:00 AM	7.934	7.939			N/A
4/22/2019	ZARJPY.fx	11:30:00 AM	7.932	7.937			N/A
4/22/2019	ZARJPY.fx	1:30:00 PM	7.928	7.934			N/A
4/22/2019	ZARJPY.fx	3:30:00 PM	7.924	7.929			N/A
4/23/2019	#AA	9:30:00 AM					N/A
4/23/2019	#AA	11:30:00 AM					N/A
4/23/2019	#AA	1:30:00 PM					N/A
4/23/2019	#AA	3:30:00 PM					N/A
4/23/2019	#AABA	9:30:00 AM					N/A
4/23/2019	#AABA	11:30:00 AM					N/A
4/23/2019	#AABA	1:30:00 PM					N/A
4/23/2019	#AABA	3:30:00 PM					N/A
4/23/2019	#AAL	9:30:00 AM					N/A
4/23/2019	#AAL	11:30:00 AM					N/A
4/23/2019	#AAL	1:30:00 PM					N/A
4/23/2019	#AAL	3:30:00 PM					N/A
4/23/2019	#AAPL	9:30:00 AM					N/A
4/23/2019	#AAPL	11:30:00 AM					N/A
4/23/2019	#AAPL	1:30:00 PM					N/A
4/23/2019	#AAPL	3:30:00 PM					N/A
4/23/2019	#ADBE	9:30:00 AM					N/A
4/23/2019	#ADBE	11:30:00 AM					N/A

4/23/2019	#ADBE	1:30:00 PM					N/A
4/23/2019	#ADBE	3:30:00 PM					N/A
4/23/2019	#AIG	9:30:00 AM					N/A
4/23/2019	#AIG	11:30:00 AM					N/A
4/23/2019	#AIG	1:30:00 PM					N/A
4/23/2019	#AIG	3:30:00 PM					N/A
4/23/2019	#AMD	9:30:00 AM					N/A
4/23/2019	#AMD	11:30:00 AM					N/A
4/23/2019	#AMD	1:30:00 PM					N/A
4/23/2019	#AMD	3:30:00 PM					N/A
4/23/2019	#AMZN	9:30:00 AM					N/A
4/23/2019	#AMZN	11:30:00 AM					N/A
4/23/2019	#AMZN	1:30:00 PM					N/A
4/23/2019	#AMZN	3:30:00 PM					N/A
4/23/2019	#AXP	9:30:00 AM					N/A
4/23/2019	#AXP	11:30:00 AM					N/A
4/23/2019	#AXP	1:30:00 PM					N/A
4/23/2019	#AXP	3:30:00 PM					N/A
4/23/2019	#BA	9:30:00 AM					N/A
4/23/2019	#BA	11:30:00 AM					N/A
4/23/2019	#BA	1:30:00 PM					N/A
4/23/2019	#BA	3:30:00 PM					N/A
4/23/2019	#BABA	9:30:00 AM					N/A
4/23/2019	#BABA	11:30:00 AM					N/A
4/23/2019	#BABA	1:30:00 PM					N/A
4/23/2019	#BABA	3:30:00 PM					N/A
4/23/2019	#BAC	9:30:00 AM					N/A
4/23/2019	#BAC	11:30:00 AM					N/A
4/23/2019	#BAC	1:30:00 PM					N/A
4/23/2019	#BAC	3:30:00 PM					N/A
4/23/2019	#BARC	9:30:00 AM					N/A
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4/23/2019	#UBS	3:30:00 PM					N/A
4/23/2019	#UL	9:30:00 AM					N/A
4/23/2019	#UL	11:30:00 AM					N/A
4/23/2019	#UL	1:30:00 PM					N/A
4/23/2019	#UL	3:30:00 PM					N/A
4/23/2019	#UPS	9:30:00 AM					N/A
4/23/2019	#UPS	11:30:00 AM					N/A
4/23/2019	#UPS	1:30:00 PM					N/A
4/23/2019	#UPS	3:30:00 PM					N/A
4/23/2019	#UTX	9:30:00 AM					N/A
4/23/2019	#UTX	11:30:00 AM					N/A
4/23/2019	#UTX	1:30:00 PM					N/A
4/23/2019	#UTX	3:30:00 PM					N/A
4/23/2019	#V	9:30:00 AM					N/A
4/23/2019	#V	11:30:00 AM					N/A
4/23/2019	#V	1:30:00 PM					N/A
4/23/2019	#V	3:30:00 PM					N/A
4/23/2019	#VOD	9:30:00 AM					N/A
4/23/2019	#VOD	11:30:00 AM					N/A
4/23/2019	#VOD	1:30:00 PM					N/A
4/23/2019	#VOD	3:30:00 PM					N/A
4/23/2019	#VZ	9:30:00 AM					N/A
4/23/2019	#VZ	11:30:00 AM					N/A
4/23/2019	#VZ	1:30:00 PM					N/A
4/23/2019	#VZ	3:30:00 PM					N/A
4/23/2019	#WDC	9:30:00 AM					N/A
4/23/2019	#WDC	11:30:00 AM					N/A
4/23/2019	#WDC	1:30:00 PM					N/A
4/23/2019	#WDC	3:30:00 PM					N/A
4/23/2019	#WFC	9:30:00 AM					N/A
4/23/2019	#WFC	11:30:00 AM					N/A

4/23/2019	#WFC	1:30:00 PM					N/A
4/23/2019	#WFC	3:30:00 PM					N/A
4/23/2019	#WMT	9:30:00 AM					N/A
4/23/2019	#WMT	11:30:00 AM					N/A
4/23/2019	#WMT	1:30:00 PM					N/A
4/23/2019	#WMT	3:30:00 PM					N/A
4/23/2019	#XOM	9:30:00 AM					N/A
4/23/2019	#XOM	11:30:00 AM					N/A
4/23/2019	#XOM	1:30:00 PM					N/A
4/23/2019	#XOM	3:30:00 PM					N/A
4/23/2019	#YHOO	9:30:00 AM					N/A
4/23/2019	#YHOO	11:30:00 AM					N/A
4/23/2019	#YHOO	1:30:00 PM					N/A
4/23/2019	#YHOO	3:30:00 PM					N/A
4/23/2019	#ZNGA	9:30:00 AM					N/A
4/23/2019	#ZNGA	11:30:00 AM					N/A
4/23/2019	#ZNGA	1:30:00 PM					N/A
4/23/2019	#ZNGA	3:30:00 PM					N/A
4/23/2019	AUDCAD	9:30:00 AM	0.95126	0.95192			N/A
4/23/2019	AUDCAD	11:30:00 AM	0.9506	0.95106			N/A
4/23/2019	AUDCAD	1:30:00 PM	0.95057	0.95129			N/A
4/23/2019	AUDCAD	3:30:00 PM	0.95207	0.95276			N/A
4/23/2019	AUDCAD.fx	9:30:00 AM	0.95158	0.95158			N/A
4/23/2019	AUDCAD.fx	11:30:00 AM	0.95092	0.95071			N/A
4/23/2019	AUDCAD.fx	1:30:00 PM	0.95092	0.95094			N/A
4/23/2019	AUDCAD.fx	3:30:00 PM	0.9524	0.9524			N/A
4/23/2019	AUDCHF	9:30:00 AM	0.72323	0.72389			N/A
4/23/2019	AUDCHF	11:30:00 AM	0.72408	0.7246			N/A
4/23/2019	AUDCHF	1:30:00 PM	0.72418	0.72483			N/A
4/23/2019	AUDCHF	3:30:00 PM	0.72488	0.72555			N/A
4/23/2019	AUDCHF.fx	9:30:00 AM	0.72357	0.72355			N/A
4/23/2019	AUDCHF.fx	11:30:00 AM	0.72441	0.72425			N/A
4/23/2019	AUDCHF.fx	1:30:00 PM	0.72452	0.72449			N/A
4/23/2019	AUDCHF.fx	3:30:00 PM	0.72523	0.7252			N/A



4/23/2019	AUDCZK	9:30:00 AM	16.254	16.272			N/A
4/23/2019	AUDCZK	11:30:00 AM	16.241	16.255			N/A
4/23/2019	AUDCZK	1:30:00 PM	16.248	16.265			N/A
4/23/2019	AUDCZK	3:30:00 PM	16.254	16.271			N/A
4/23/2019	AUDDKK	9:30:00 AM	4.7231	4.728			N/A
4/23/2019	AUDDKK	11:30:00 AM	4.7189	4.7226			N/A
4/23/2019	AUDDKK	1:30:00 PM	4.7169	4.7215			N/A
4/23/2019	AUDDKK	3:30:00 PM	4.719	4.7234			N/A
4/23/2019	AUDHKD	9:30:00 AM	5.5817	5.5855			N/A
4/23/2019	AUDHKD	11:30:00 AM	5.5774	5.5814			N/A
4/23/2019	AUDHKD	1:30:00 PM	5.5747	5.5785			N/A
4/23/2019	AUDHKD	3:30:00 PM	5.5753	5.5792			N/A
4/23/2019	AUDHUF	9:30:00 AM	202.51	202.75			N/A
4/23/2019	AUDHUF	11:30:00 AM	202.62	202.83			N/A
4/23/2019	AUDHUF	1:30:00 PM	202.72	202.96			N/A
4/23/2019	AUDHUF	3:30:00 PM	202.62	202.85			N/A
4/23/2019	AUDJPY	9:30:00 AM	79.626	79.688			N/A
4/23/2019	AUDJPY	11:30:00 AM	79.548	79.594			N/A
4/23/2019	AUDJPY	1:30:00 PM	79.513	79.581			N/A
4/23/2019	AUDJPY	3:30:00 PM	79.52	79.587			N/A
4/23/2019	AUDJPY.fx	9:30:00 AM	79.66	79.653			N/A
4/23/2019	AUDJPY.fx	11:30:00 AM	79.581	79.559			N/A
4/23/2019	AUDJPY.fx	1:30:00 PM	79.547	79.546			N/A
4/23/2019	AUDJPY.fx	3:30:00 PM	79.554	79.552			N/A
4/23/2019	AUDMXN	9:30:00 AM	13.4103	13.4195			N/A
4/23/2019	AUDMXN	11:30:00 AM	13.4295	13.4368			N/A
4/23/2019	AUDMXN	1:30:00 PM	13.4245	13.4327			N/A
4/23/2019	AUDMXN	3:30:00 PM	13.4153	13.4244			N/A
4/23/2019	AUDNOK	9:30:00 AM	6.0532	6.057			N/A
4/23/2019	AUDNOK	11:30:00 AM	6.0608	6.0655			N/A
4/23/2019	AUDNOK	1:30:00 PM	6.0576	6.0629			N/A
4/23/2019	AUDNOK	3:30:00 PM	6.0684	6.0731			N/A
4/23/2019	AUDNOK.f	9:30:00 AM	6.0548	6.0553			N/A
4/23/2019	AUDNOK.f	11:30:00 AM	6.0624	6.0637			N/A

4/23/2019	AUDNOK.f	1:30:00 PM	6.0592	6.061			N/A
4/23/2019	AUDNOK.f	3:30:00 PM	6.0701	6.0712			N/A
4/23/2019	AUDNZD	9:30:00 AM	1.06795	1.06878			N/A
4/23/2019	AUDNZD	11:30:00 AM	1.06765	1.06846			N/A
4/23/2019	AUDNZD	1:30:00 PM	1.06702	1.06793			N/A
4/23/2019	AUDNZD	3:30:00 PM	1.06776	1.06868			N/A
4/23/2019	AUDNZD.fx	9:30:00 AM	1.06837	1.06831			N/A
4/23/2019	AUDNZD.fx	11:30:00 AM	1.0681	1.068			N/A
4/23/2019	AUDNZD.fx	1:30:00 PM	1.06747	1.06747			N/A
4/23/2019	AUDNZD.fx	3:30:00 PM	1.0682	1.06823			N/A
4/23/2019	AUDPLN	9:30:00 AM	2.71	2.7131			N/A
4/23/2019	AUDPLN	11:30:00 AM	2.7105	2.713			N/A
4/23/2019	AUDPLN	1:30:00 PM	2.71	2.713			N/A
4/23/2019	AUDPLN	3:30:00 PM	2.7097	2.7129			N/A
4/23/2019	AUDSEK	9:30:00 AM	6.6366	6.6399			N/A
4/23/2019	AUDSEK	11:30:00 AM	6.6385	6.6409			N/A
4/23/2019	AUDSEK	1:30:00 PM	6.6369	6.6393			N/A
4/23/2019	AUDSEK	3:30:00 PM	6.6441	6.6469			N/A
4/23/2019	AUDSEK.fx	9:30:00 AM	6.632	6.6442			N/A
4/23/2019	AUDSEK.fx	11:30:00 AM	6.6339	6.6454			N/A
4/23/2019	AUDSEK.fx	1:30:00 PM	6.6323	6.6445			N/A
4/23/2019	AUDSEK.fx	3:30:00 PM	6.6396	6.6514			N/A
4/23/2019	AUDSGD	9:30:00 AM	0.9656	0.9659			N/A
4/23/2019	AUDSGD	11:30:00 AM	0.9656	0.9657			N/A
4/23/2019	AUDSGD	1:30:00 PM	0.9647	0.9647			N/A
4/23/2019	AUDSGD	3:30:00 PM	0.9649	0.9651			N/A
4/23/2019	AUDSGD.fx	9:30:00 AM	0.96567	0.96578			N/A
4/23/2019	AUDSGD.fx	11:30:00 AM	0.96563	0.9655			N/A
4/23/2019	AUDSGD.fx	1:30:00 PM	0.96479	0.96487			N/A
4/23/2019	AUDSGD.fx	3:30:00 PM	0.96494	0.96503			N/A
4/23/2019	AUDUSD	9:30:00 AM	0.71188	0.71195			N/A
4/23/2019	AUDUSD	11:30:00 AM	0.7115	0.71145			N/A
4/23/2019	AUDUSD	1:30:00 PM	0.71109	0.71121			N/A
4/23/2019	AUDUSD	3:30:00 PM	0.71111	0.71118			N/A

4/23/2019	AUDUSD.fx	9:30:00 AM	0.71193	0.7119			N/A
4/23/2019	AUDUSD.fx	11:30:00 AM	0.71155	0.71139			N/A
4/23/2019	AUDUSD.fx	1:30:00 PM	0.71115	0.71114			N/A
4/23/2019	AUDUSD.fx	3:30:00 PM	0.71116	0.71112			N/A
4/23/2019	AUDZAR	9:30:00 AM	10.0631	10.0776			N/A
4/23/2019	AUDZAR	11:30:00 AM	10.1051	10.1186			N/A
4/23/2019	AUDZAR	1:30:00 PM	10.0936	10.1032			N/A
4/23/2019	AUDZAR	3:30:00 PM	10.0928	10.1079			N/A
4/23/2019	AUS200.i	9:30:00 AM					N/A
4/23/2019	AUS200.i	11:30:00 AM	6325.56	6329.56			N/A
4/23/2019	AUS200.i	1:30:00 PM					N/A
4/23/2019	AUS200.i	3:30:00 PM	6337.56	6341.26			N/A
4/23/2019	BCHUSD	9:30:00 AM	309.14	310.63			N/A
4/23/2019	BCHUSD	11:30:00 AM	313.48	314.87			N/A
4/23/2019	BCHUSD	1:30:00 PM	310.17	312.07			N/A
4/23/2019	BCHUSD	3:30:00 PM	307.91	309.56			N/A
4/23/2019	CADCHF	9:30:00 AM	0.76014	0.76075			N/A
4/23/2019	CADCHF	11:30:00 AM	0.76156	0.76218			N/A
4/23/2019	CADCHF	1:30:00 PM	0.7616	0.76229			N/A
4/23/2019	CADCHF	3:30:00 PM	0.76118	0.76185			N/A
4/23/2019	CADCHF.fx	9:30:00 AM	0.76048	0.76039			N/A
4/23/2019	CADCHF.fx	11:30:00 AM	0.76191	0.76183			N/A
4/23/2019	CADCHF.fx	1:30:00 PM	0.76194	0.76191			N/A
4/23/2019	CADCHF.fx	3:30:00 PM	0.76152	0.76149			N/A
4/23/2019	CADCZK	9:30:00 AM	17.084	17.1			N/A
4/23/2019	CADCZK	11:30:00 AM	17.081	17.098			N/A
4/23/2019	CADCZK	1:30:00 PM	17.09	17.106			N/A
4/23/2019	CADCZK	3:30:00 PM	17.07	17.085			N/A
4/23/2019	CADDDKK	9:30:00 AM	4.965	4.969			N/A
4/23/2019	CADDDKK	11:30:00 AM					N/A
4/23/2019	CADDDKK	1:30:00 PM					N/A
4/23/2019	CADDDKK	3:30:00 PM					N/A
4/23/2019	CADHKD	9:30:00 AM	5.8664	5.8695			N/A
4/23/2019	CADHKD	11:30:00 AM	5.8677	5.8715			N/A

4/23/2019	CADHKD	1:30:00 PM	5.8633	5.8672			N/A
4/23/2019	CADHKD	3:30:00 PM	5.8548	5.8586			N/A
4/23/2019	CADHUF	9:30:00 AM	212.88	213.03			N/A
4/23/2019	CADHUF	11:30:00 AM	213.16	213.32			N/A
4/23/2019	CADHUF	1:30:00 PM	213.24	213.41			N/A
4/23/2019	CADHUF	3:30:00 PM	212.82	212.95			N/A
4/23/2019	CADJPY	9:30:00 AM	83.684	83.746			N/A
4/23/2019	CADJPY	11:30:00 AM	83.654	83.721			N/A
4/23/2019	CADJPY	1:30:00 PM	83.62	83.692			N/A
4/23/2019	CADJPY	3:30:00 PM	83.504	83.567			N/A
4/23/2019	CADJPY.fx	9:30:00 AM	83.717	83.71			N/A
4/23/2019	CADJPY.fx	11:30:00 AM	83.687	83.687			N/A
4/23/2019	CADJPY.fx	1:30:00 PM	83.653	83.657			N/A
4/23/2019	CADJPY.fx	3:30:00 PM	83.537	83.532			N/A
4/23/2019	CADMXN	9:30:00 AM	14.0939	14.1061			N/A
4/23/2019	CADMXN	11:30:00 AM	14.1238	14.1357			N/A
4/23/2019	CADMXN	1:30:00 PM	14.1183	14.1284			N/A
4/23/2019	CADMXN	3:30:00 PM	14.087	14.0967			N/A
4/23/2019	CADNOK	9:30:00 AM	6.3601	6.3642			N/A
4/23/2019	CADNOK	11:30:00 AM	6.374	6.378			N/A
4/23/2019	CADNOK	1:30:00 PM	6.3698	6.3745			N/A
4/23/2019	CADNOK	3:30:00 PM	6.3705	6.3754			N/A
4/23/2019	CADPLN	9:30:00 AM	2.8479	2.8498			N/A
4/23/2019	CADPLN	11:30:00 AM	2.8509	2.8528			N/A
4/23/2019	CADPLN	1:30:00 PM	2.8501	2.8518			N/A
4/23/2019	CADPLN	3:30:00 PM	2.8453	2.8472			N/A
4/23/2019	CADSEK	9:30:00 AM	6.9728	6.9767			N/A
4/23/2019	CADSEK	11:30:00 AM	6.9814	6.9843			N/A
4/23/2019	CADSEK	1:30:00 PM	6.979	6.9823			N/A
4/23/2019	CADSEK	3:30:00 PM	6.9755	6.9782			N/A
4/23/2019	CADSGD	9:30:00 AM	1.014	1.0143			N/A
4/23/2019	CADSGD	11:30:00 AM	1.0148	1.0151			N/A
4/23/2019	CADSGD	1:30:00 PM	1.0139	1.0142			N/A
4/23/2019	CADSGD	3:30:00 PM	1.0127	1.0129			N/A

4/23/2019	CADZAR	9:30:00 AM	10.5752	10.5924			N/A
4/23/2019	CADZAR	11:30:00 AM	10.6271	10.6442			N/A
4/23/2019	CADZAR	1:30:00 PM	10.6162	10.6265			N/A
4/23/2019	CADZAR	3:30:00 PM	10.5979	10.6148			N/A
4/23/2019	CHFCZK	9:30:00 AM	22.47	22.485			N/A
4/23/2019	CHFCZK	11:30:00 AM	22.424	22.441			N/A
4/23/2019	CHFCZK	1:30:00 PM	22.434	22.449			N/A
4/23/2019	CHFCZK	3:30:00 PM	22.42	22.434			N/A
4/23/2019	CHFDKK	9:30:00 AM	6.529	6.531			N/A
4/23/2019	CHFDKK	11:30:00 AM	6.515	6.518			N/A
4/23/2019	CHFDKK	1:30:00 PM	6.512	6.515			N/A
4/23/2019	CHFDKK	3:30:00 PM	6.508	6.511			N/A
4/23/2019	CHFDKK.fx	9:30:00 AM	6.5271	6.5327			N/A
4/23/2019	CHFDKK.fx	11:30:00 AM	6.5134	6.5192			N/A
4/23/2019	CHFDKK.fx	1:30:00 PM	6.5101	6.5159			N/A
4/23/2019	CHFDKK.fx	3:30:00 PM	6.5063	6.5123			N/A
4/23/2019	CHFHKD	9:30:00 AM	7.7154	7.7193			N/A
4/23/2019	CHFHKD	11:30:00 AM	7.7034	7.7058			N/A
4/23/2019	CHFHKD	1:30:00 PM	7.6966	7.6996			N/A
4/23/2019	CHFHKD	3:30:00 PM	7.6893	7.6928			N/A
4/23/2019	CHFHUF	9:30:00 AM	279.88	280.25			N/A
4/23/2019	CHFHUF	11:30:00 AM	279.72	280.09			N/A
4/23/2019	CHFHUF	1:30:00 PM	279.81	280.18			N/A
4/23/2019	CHFHUF	3:30:00 PM	279.4	279.74			N/A
4/23/2019	CHFJPY	9:30:00 AM	110.055	110.122			N/A
4/23/2019	CHFJPY	11:30:00 AM	109.814	109.872			N/A
4/23/2019	CHFJPY	1:30:00 PM	109.764	109.819			N/A
4/23/2019	CHFJPY	3:30:00 PM	109.662	109.732			N/A
4/23/2019	CHFJPY.fx	9:30:00 AM	110.087	110.088			N/A
4/23/2019	CHFJPY.fx	11:30:00 AM	109.847	109.835			N/A
4/23/2019	CHFJPY.fx	1:30:00 PM	109.797	109.785			N/A
4/23/2019	CHFJPY.fx	3:30:00 PM	109.696	109.696			N/A
4/23/2019	CHFMXN	9:30:00 AM	18.5358	18.548			N/A
4/23/2019	CHFMXN	11:30:00 AM	18.5392	18.5537			N/A

4/23/2019	CHF MXN	1:30:00 PM	18.5319	18.5432			N/A
4/23/2019	CHF MXN	3:30:00 PM	18.4991	18.5129			N/A
4/23/2019	CHF NOK	9:30:00 AM	8.3645	8.3709			N/A
4/23/2019	CHF NOK	11:30:00 AM	8.3665	8.373			N/A
4/23/2019	CHF NOK	1:30:00 PM	8.3604	8.3682			N/A
4/23/2019	CHF NOK	3:30:00 PM	8.3663	8.3741			N/A
4/23/2019	CHF NOK.fx	9:30:00 AM	8.36801	8.36741			N/A
4/23/2019	CHF NOK.fx	11:30:00 AM	8.37006	8.3694			N/A
4/23/2019	CHF NOK.fx	1:30:00 PM	8.36395	8.3647			N/A
4/23/2019	CHF NOK.fx	3:30:00 PM	8.37014	8.37029			N/A
4/23/2019	CHF PLN	9:30:00 AM	3.7456	3.7485			N/A
4/23/2019	CHF PLN	11:30:00 AM	3.742	3.745			N/A
4/23/2019	CHF PLN	1:30:00 PM	3.7409	3.7436			N/A
4/23/2019	CHF PLN	3:30:00 PM	3.7371	3.7398			N/A
4/23/2019	CHF PLN.fx	9:30:00 AM	3.74326	3.75076			N/A
4/23/2019	CHF PLN.fx	11:30:00 AM	3.73954	3.74725			N/A
4/23/2019	CHF PLN.fx	1:30:00 PM	3.73854	3.74578			N/A
4/23/2019	CHF PLN.fx	3:30:00 PM	3.73474	3.74193			N/A
4/23/2019	CHF SEK	9:30:00 AM	9.1705	9.1747			N/A
4/23/2019	CHF SEK	11:30:00 AM	9.1647	9.1669			N/A
4/23/2019	CHF SEK	1:30:00 PM	9.1603	9.1641			N/A
4/23/2019	CHF SEK	3:30:00 PM	9.1607	9.164			N/A
4/23/2019	CHF SGD	9:30:00 AM	1.3344	1.3347			N/A
4/23/2019	CHF SGD	11:30:00 AM	1.3327	1.3331			N/A
4/23/2019	CHF SGD	1:30:00 PM	1.3317	1.3318			N/A
4/23/2019	CHF SGD	3:30:00 PM	1.3304	1.3307			N/A
4/23/2019	CHF SGD.fx	9:30:00 AM	1.33453	1.33457			N/A
4/23/2019	CHF SGD.fx	11:30:00 AM	1.33288	1.33287			N/A
4/23/2019	CHF SGD.fx	1:30:00 PM	1.33169	1.33157			N/A
4/23/2019	CHF SGD.fx	3:30:00 PM	1.33052	1.33047			N/A
4/23/2019	CHF ZAR	9:30:00 AM	13.9123	13.9241			N/A
4/23/2019	CHF ZAR	11:30:00 AM	13.9536	13.9673			N/A
4/23/2019	CHF ZAR	1:30:00 PM	13.9391	13.9429			N/A
4/23/2019	CHF ZAR	3:30:00 PM	13.9219	13.936			N/A

4/23/2019	CZKJPY	9:30:00 AM					N/A
4/23/2019	CZKJPY	11:30:00 AM	4.896	4.9			N/A
4/23/2019	CZKJPY	1:30:00 PM					N/A
4/23/2019	CZKJPY	3:30:00 PM	4.89	4.894			N/A
4/23/2019	DAX30.i	9:30:00 AM	12263.9	12258.9			N/A
4/23/2019	DAX30.i	11:30:00 AM	12224.65	12222.55			N/A
4/23/2019	DAX30.i	1:30:00 PM	12216.9	12215.4			N/A
4/23/2019	DAX30.i	3:30:00 PM	12223.65	12219.65			N/A
4/23/2019	DJ30.i	9:30:00 AM					N/A
4/23/2019	DJ30.i	11:30:00 AM					N/A
4/23/2019	DJ30.i	1:30:00 PM					N/A
4/23/2019	DJ30.i	3:30:00 PM					N/A
4/23/2019	DKKJPY	9:30:00 AM					N/A
4/23/2019	DKKJPY	11:30:00 AM					N/A
4/23/2019	DKKJPY	1:30:00 PM					N/A
4/23/2019	DKKJPY	3:30:00 PM					N/A
4/23/2019	EURAUD	9:30:00 AM	1.57918	1.57961			N/A
4/23/2019	EURAUD	11:30:00 AM	1.58102	1.58106			N/A
4/23/2019	EURAUD	1:30:00 PM	1.58142	1.58183			N/A
4/23/2019	EURAUD	3:30:00 PM	1.58073	1.58111			N/A
4/23/2019	EURAUD.fx	9:30:00 AM	1.57938	1.5794			N/A
4/23/2019	EURAUD.fx	11:30:00 AM	1.58122	1.58086			N/A
4/23/2019	EURAUD.fx	1:30:00 PM	1.58162	1.58162			N/A
4/23/2019	EURAUD.fx	3:30:00 PM	1.58093	1.5809			N/A
4/23/2019	EURCAD	9:30:00 AM	1.50301	1.50382			N/A
4/23/2019	EURCAD	11:30:00 AM	1.50338	1.50414			N/A
4/23/2019	EURCAD	1:30:00 PM	1.50409	1.50493			N/A
4/23/2019	EURCAD	3:30:00 PM	1.50577	1.50653			N/A
4/23/2019	EURCAD.fx	9:30:00 AM	1.50343	1.5034			N/A
4/23/2019	EURCAD.fx	11:30:00 AM	1.5038	1.50372			N/A
4/23/2019	EURCAD.fx	1:30:00 PM	1.5045	1.50451			N/A
4/23/2019	EURCAD.fx	3:30:00 PM	1.50619	1.50612			N/A
4/23/2019	EURCHF	9:30:00 AM	1.14327	1.14328			N/A
4/23/2019	EURCHF	11:30:00 AM	1.14562	1.1457			N/A

4/23/2019	EURCHF	1:30:00 PM	1.1463	1.14633			N/A
4/23/2019	EURCHF	3:30:00 PM	1.14689	1.147			N/A
4/23/2019	EURCHF.fx	9:30:00 AM	1.14333	1.14323			N/A
4/23/2019	EURCHF.fx	11:30:00 AM	1.14569	1.14564			N/A
4/23/2019	EURCHF.fx	1:30:00 PM	1.14635	1.14627			N/A
4/23/2019	EURCHF.fx	3:30:00 PM	1.14696	1.14694			N/A
4/23/2019	EURCZK	9:30:00 AM	25.676	25.715			N/A
4/23/2019	EURCZK	11:30:00 AM					N/A
4/23/2019	EURCZK	1:30:00 PM	25.702	25.741			N/A
4/23/2019	EURCZK	3:30:00 PM	25.701	25.739			N/A
4/23/2019	EURDKK	9:30:00 AM	7.4651	7.4663			N/A
4/23/2019	EURDKK	11:30:00 AM	7.4648	7.4658			N/A
4/23/2019	EURDKK	1:30:00 PM	7.4646	7.4652			N/A
4/23/2019	EURDKK	3:30:00 PM	7.4652	7.4663			N/A
4/23/2019	EURGBP	9:30:00 AM	0.86638	0.86635			N/A
4/23/2019	EURGBP	11:30:00 AM	0.86577	0.86584			N/A
4/23/2019	EURGBP	1:30:00 PM	0.86473	0.86473			N/A
4/23/2019	EURGBP	3:30:00 PM	0.86438	0.86442			N/A
4/23/2019	EURGBP.fx	9:30:00 AM	0.86641	0.8663			N/A
4/23/2019	EURGBP.fx	11:30:00 AM	0.86581	0.86579			N/A
4/23/2019	EURGBP.fx	1:30:00 PM	0.86476	0.86469			N/A
4/23/2019	EURGBP.fx	3:30:00 PM	0.86442	0.86437			N/A
4/23/2019	EURHKD	9:30:00 AM	8.8209	8.8258			N/A
4/23/2019	EURHKD	11:30:00 AM	8.8242	8.8292			N/A
4/23/2019	EURHKD	1:30:00 PM	8.8227	8.8276			N/A
4/23/2019	EURHKD	3:30:00 PM	8.8189	8.8238			N/A
4/23/2019	EURHKD.fx	9:30:00 AM	8.82373	8.82299			N/A
4/23/2019	EURHKD.fx	11:30:00 AM	8.82701	8.82634			N/A
4/23/2019	EURHKD.fx	1:30:00 PM	8.82551	8.82478			N/A
4/23/2019	EURHKD.fx	3:30:00 PM	8.82184	8.82094			N/A
4/23/2019	EURHUF	9:30:00 AM	319.9	320.62			N/A
4/23/2019	EURHUF	11:30:00 AM	320.4	321.02			N/A
4/23/2019	EURHUF	1:30:00 PM	320.67	321.39			N/A
4/23/2019	EURHUF	3:30:00 PM	320.42	321.06			N/A



4/23/2019	EURHUF.fx	9:30:00 AM	320.151	320.34			N/A
4/23/2019	EURHUF.fx	11:30:00 AM	320.685	320.868			N/A
4/23/2019	EURHUF.fx	1:30:00 PM					N/A
4/23/2019	EURHUF.fx	3:30:00 PM	320.685	320.824			N/A
4/23/2019	EURJPY	9:30:00 AM	125.859	125.86			N/A
4/23/2019	EURJPY	11:30:00 AM	125.849	125.848			N/A
4/23/2019	EURJPY	1:30:00 PM	125.856	125.858			N/A
4/23/2019	EURJPY	3:30:00 PM	125.811	125.816			N/A
4/23/2019	EURJPY.fx	9:30:00 AM	125.862	125.855			N/A
4/23/2019	EURJPY.fx	11:30:00 AM	125.851	125.843			N/A
4/23/2019	EURJPY.fx	1:30:00 PM	125.858	125.855			N/A
4/23/2019	EURJPY.fx	3:30:00 PM	125.814	125.811			N/A
4/23/2019	EURMXN	9:30:00 AM	21.1913	21.2092			N/A
4/23/2019	EURMXN	11:30:00 AM	21.2407	21.26			N/A
4/23/2019	EURMXN	1:30:00 PM	21.2439	21.2603			N/A
4/23/2019	EURMXN	3:30:00 PM	21.22	21.236			N/A
4/23/2019	EURMXN.f	9:30:00 AM	21.1998	21.2009			N/A
4/23/2019	EURMXN.f	11:30:00 AM	21.2491	21.2517			N/A
4/23/2019	EURMXN.f	1:30:00 PM	21.2524	21.2519			N/A
4/23/2019	EURMXN.f	3:30:00 PM	21.2293	21.2269			N/A
4/23/2019	EURNOK	9:30:00 AM	9.5618	9.5713			N/A
4/23/2019	EURNOK	11:30:00 AM	9.5827	9.5947			N/A
4/23/2019	EURNOK	1:30:00 PM	9.5817	9.5945			N/A
4/23/2019	EURNOK	3:30:00 PM	9.5941	9.6059			N/A
4/23/2019	EURNOK.fx	9:30:00 AM	9.56749	9.56572			N/A
4/23/2019	EURNOK.fx	11:30:00 AM	9.58816	9.58926			N/A
4/23/2019	EURNOK.fx	1:30:00 PM	9.58705	9.58905			N/A
4/23/2019	EURNOK.fx	3:30:00 PM	9.59971	9.60028			N/A
4/23/2019	EURNZD	9:30:00 AM	1.68761	1.68844			N/A
4/23/2019	EURNZD	11:30:00 AM	1.6889	1.68954			N/A
4/23/2019	EURNZD	1:30:00 PM	1.68855	1.68935			N/A
4/23/2019	EURNZD	3:30:00 PM	1.68902	1.68976	10	10	N/A
4/23/2019	EURNZD.fx	9:30:00 AM	1.68802	1.68802			N/A
4/23/2019	EURNZD.fx	11:30:00 AM	1.68931	1.68911			N/A

4/23/2019	EURNZD.fx	1:30:00 PM	1.68895	1.68893			N/A
4/23/2019	EURNZD.fx	3:30:00 PM	1.68943	1.68934			N/A
4/23/2019	EURPLN	9:30:00 AM	4.2825	4.2856			N/A
4/23/2019	EURPLN	11:30:00 AM	4.2871	4.2903			N/A
4/23/2019	EURPLN	1:30:00 PM	4.2885	4.2904			N/A
4/23/2019	EURPLN	3:30:00 PM	4.2862	4.2891			N/A
4/23/2019	EURPLN.fx	9:30:00 AM	4.28197	4.28612			N/A
4/23/2019	EURPLN.fx	11:30:00 AM	4.28647	4.29092			N/A
4/23/2019	EURPLN.fx	1:30:00 PM	4.2879	4.29152			N/A
4/23/2019	EURPLN.fx	3:30:00 PM	4.28547	4.28972			N/A
4/23/2019	EURRUB	9:30:00 AM					N/A
4/23/2019	EURRUB	11:30:00 AM	71.409	71.851			N/A
4/23/2019	EURRUB	1:30:00 PM	71.341	71.77			N/A
4/23/2019	EURRUB	3:30:00 PM	71.365	71.802			N/A
4/23/2019	EURSEK	9:30:00 AM	10.4856	10.4904			N/A
4/23/2019	EURSEK	11:30:00 AM	10.4992	10.5023			N/A
4/23/2019	EURSEK	1:30:00 PM	10.5009	10.506			N/A
4/23/2019	EURSEK	3:30:00 PM	10.5085	10.5114			N/A
4/23/2019	EURSEK.fx	9:30:00 AM	10.48724	10.48872			N/A
4/23/2019	EURSEK.fx	11:30:00 AM	10.50081	10.50204			N/A
4/23/2019	EURSEK.fx	1:30:00 PM	10.50263	10.50437			N/A
4/23/2019	EURSEK.fx	3:30:00 PM	10.5101	10.50971			N/A
4/23/2019	EURSGD	9:30:00 AM	1.5254	1.5262			N/A
4/23/2019	EURSGD	11:30:00 AM	1.5267	1.5275			N/A
4/23/2019	EURSGD	1:30:00 PM	1.526	1.5269			N/A
4/23/2019	EURSGD	3:30:00 PM	1.5256	1.5265			N/A
4/23/2019	EURSGD.fx	9:30:00 AM	1.52573	1.52574			N/A
4/23/2019	EURSGD.fx	11:30:00 AM	1.52703	1.52711			N/A
4/23/2019	EURSGD.fx	1:30:00 PM	1.5265	1.52649			N/A
4/23/2019	EURSGD.fx	3:30:00 PM	1.52598	1.52605			N/A
4/23/2019	EURUSD	9:30:00 AM	1.12458	1.12462			N/A
4/23/2019	EURUSD	11:30:00 AM	1.12497	1.12504			N/A
4/23/2019	EURUSD	1:30:00 PM	1.12488	1.12496			N/A
4/23/2019	EURUSD	3:30:00 PM	1.12439	1.12443			N/A

4/23/2019	EURUSD.fx	9:30:00 AM	1.12478	1.12471			N/A
4/23/2019	EURUSD.fx	11:30:00 AM	1.12517	1.12513			N/A
4/23/2019	EURUSD.fx	1:30:00 PM	1.12509	1.12505			N/A
4/23/2019	EURUSD.fx	3:30:00 PM	1.12459	1.12452			N/A
4/23/2019	EURZAR	9:30:00 AM	15.9083	15.9265			N/A
4/23/2019	EURZAR	11:30:00 AM	15.9892	16.0074			N/A
4/23/2019	EURZAR	1:30:00 PM	15.9801	15.9895			N/A
4/23/2019	EURZAR	3:30:00 PM	15.9707	15.9889			N/A
4/23/2019	EURZAR.fx	9:30:00 AM	15.90771	15.92743			N/A
4/23/2019	EURZAR.fx	11:30:00 AM	15.98895	16.00807			N/A
4/23/2019	EURZAR.fx	1:30:00 PM	15.97965	15.9901			N/A
4/23/2019	EURZAR.fx	3:30:00 PM	15.96991	15.98897			N/A
4/23/2019	GBPAUD	9:30:00 AM	1.82342	1.82387			N/A
4/23/2019	GBPAUD	11:30:00 AM	1.82658	1.82692			N/A
4/23/2019	GBPAUD	1:30:00 PM	1.82932	1.83004			N/A
4/23/2019	GBPAUD	3:30:00 PM	1.82927	1.82993			N/A
4/23/2019	GBPAUD.fx	9:30:00 AM	1.82379	1.82348			N/A
4/23/2019	GBPAUD.fx	11:30:00 AM	1.82696	1.82653			N/A
4/23/2019	GBPAUD.fx	1:30:00 PM	1.82973	1.82964			N/A
4/23/2019	GBPAUD.fx	3:30:00 PM	1.82964	1.82953			N/A
4/23/2019	GBPCAD	9:30:00 AM	1.73499	1.73561			N/A
4/23/2019	GBPCAD	11:30:00 AM	1.73659	1.7371			N/A
4/23/2019	GBPCAD	1:30:00 PM	1.73954	1.74018			N/A
4/23/2019	GBPCAD	3:30:00 PM	1.74213	1.74275			N/A
4/23/2019	GBPCAD.fx	9:30:00 AM	1.73536	1.73523			N/A
4/23/2019	GBPCAD.fx	11:30:00 AM	1.73695	1.7367			N/A
4/23/2019	GBPCAD.fx	1:30:00 PM	1.73992	1.73979			N/A
4/23/2019	GBPCAD.fx	3:30:00 PM	1.74251	1.7424			N/A
4/23/2019	GBPCHF	9:30:00 AM	1.31959	1.31972			N/A
4/23/2019	GBPCHF	11:30:00 AM	1.32302	1.32337			N/A
4/23/2019	GBPCHF	1:30:00 PM	1.32556	1.32571			N/A
4/23/2019	GBPCHF	3:30:00 PM	1.32666	1.3271			N/A
4/23/2019	GBPCHF.fx	9:30:00 AM	1.31978	1.31952			N/A
4/23/2019	GBPCHF.fx	11:30:00 AM	1.3232	1.32317			N/A

4/23/2019	GBPCHF.fx	1:30:00 PM	1.32574	1.32552			N/A
4/23/2019	GBPCHF.fx	3:30:00 PM	1.32685	1.3269			N/A
4/23/2019	GBPCZK	9:30:00 AM	29.649	29.666			N/A
4/23/2019	GBPCZK	11:30:00 AM	29.667	29.69			N/A
4/23/2019	GBPCZK	1:30:00 PM	29.736	29.754			N/A
4/23/2019	GBPCZK	3:30:00 PM	29.745	29.764			N/A
4/23/2019	GBPDKK	9:30:00 AM	8.613	8.623			N/A
4/23/2019	GBPDKK	11:30:00 AM	8.618	8.629			N/A
4/23/2019	GBPDKK	1:30:00 PM	8.629	8.64			N/A
4/23/2019	GBPDKK	3:30:00 PM	8.633	8.643			N/A
4/23/2019	GBPDKK.fx	9:30:00 AM	8.6114	8.6232			N/A
4/23/2019	GBPDKK.fx	11:30:00 AM	8.6165	8.629			N/A
4/23/2019	GBPDKK.fx	1:30:00 PM	8.6279	8.6399			N/A
4/23/2019	GBPDKK.fx	3:30:00 PM	8.631	8.6433			N/A
4/23/2019	GBPHKD	9:30:00 AM	10.1801	10.1843			N/A
4/23/2019	GBPHKD	11:30:00 AM	10.1904	10.1947			N/A
4/23/2019	GBPHKD	1:30:00 PM	10.201	10.2055			N/A
4/23/2019	GBPHKD	3:30:00 PM	10.2002	10.206			N/A
4/23/2019	GBPHUF	9:30:00 AM	369.29	369.72			N/A
4/23/2019	GBPHUF	11:30:00 AM	370.09	370.53			N/A
4/23/2019	GBPHUF	1:30:00 PM	370.9	371.34			N/A
4/23/2019	GBPHUF	3:30:00 PM	370.7	371.11			N/A
4/23/2019	GBPJPY	9:30:00 AM	145.269	145.285			N/A
4/23/2019	GBPJPY	11:30:00 AM	145.34	145.361			N/A
4/23/2019	GBPJPY	1:30:00 PM	145.529	145.565			N/A
4/23/2019	GBPJPY	3:30:00 PM	145.533	145.57			N/A
4/23/2019	GBPJPY.fx	9:30:00 AM	145.288	145.265			N/A
4/23/2019	GBPJPY.fx	11:30:00 AM	145.358	145.342			N/A
4/23/2019	GBPJPY.fx	1:30:00 PM	145.549	145.545			N/A
4/23/2019	GBPJPY.fx	3:30:00 PM	145.552	145.551			N/A
4/23/2019	GBPMXN	9:30:00 AM	24.4558	24.4699			N/A
4/23/2019	GBPMXN	11:30:00 AM	24.53	24.544			N/A
4/23/2019	GBPMXN	1:30:00 PM	24.5627	24.5763			N/A
4/23/2019	GBPMXN	3:30:00 PM	24.5469	24.5578			N/A

4/23/2019	GBPNOK	9:30:00 AM	11.0393	11.0457			N/A
4/23/2019	GBPNOK	11:30:00 AM	11.0705	11.0801			N/A
4/23/2019	GBPNOK	1:30:00 PM	11.0828	11.0934			N/A
4/23/2019	GBPNOK	3:30:00 PM	11.1011	11.1118			N/A
4/23/2019	GBPNOK.fx	9:30:00 AM	11.04426	11.04074			N/A
4/23/2019	GBPNOK.fx	11:30:00 AM	11.07545	11.07501			N/A
4/23/2019	GBPNOK.fx	1:30:00 PM	11.08777	11.08839			N/A
4/23/2019	GBPNOK.fx	3:30:00 PM	11.10634	11.1066			N/A
4/23/2019	GBPNZD	9:30:00 AM	1.94809	1.94867			N/A
4/23/2019	GBPNZD	11:30:00 AM	1.95081	1.95108			N/A
4/23/2019	GBPNZD	1:30:00 PM	1.95278	1.95342			N/A
4/23/2019	GBPNZD	3:30:00 PM	1.95404	1.95472			N/A
4/23/2019	GBPNZD.fx	9:30:00 AM	1.94841	1.94831			N/A
4/23/2019	GBPNZD.fx	11:30:00 AM	1.95113	1.95072			N/A
4/23/2019	GBPNZD.fx	1:30:00 PM	1.95311	1.95307			N/A
4/23/2019	GBPNZD.fx	3:30:00 PM	1.95439	1.95438			N/A
4/23/2019	GBPPLN	9:30:00 AM	4.9442	4.9455			N/A
4/23/2019	GBPPLN	11:30:00 AM	4.9525	4.9544			N/A
4/23/2019	GBPPLN	1:30:00 PM	4.9605	4.9615			N/A
4/23/2019	GBPPLN	3:30:00 PM	4.9598	4.961			N/A
4/23/2019	GBPPLN.fx	9:30:00 AM	4.94205	4.94758			N/A
4/23/2019	GBPPLN.fx	11:30:00 AM	4.9504	4.95654			N/A
4/23/2019	GBPPLN.fx	1:30:00 PM	4.95836	4.96353			N/A
4/23/2019	GBPPLN.fx	3:30:00 PM	4.95764	4.96304			N/A
4/23/2019	GBPSEK	9:30:00 AM	12.1022	12.1099			N/A
4/23/2019	GBPSEK	11:30:00 AM	12.1253	12.1333			N/A
4/23/2019	GBPSEK	1:30:00 PM	12.1424	12.1505			N/A
4/23/2019	GBPSEK	3:30:00 PM	12.1552	12.1628			N/A
4/23/2019	GBPSEK.fx	9:30:00 AM	12.09856	12.1135			N/A
4/23/2019	GBPSEK.fx	11:30:00 AM	12.12148	12.13692			N/A
4/23/2019	GBPSEK.fx	1:30:00 PM	12.13878	12.15407			N/A
4/23/2019	GBPSEK.fx	3:30:00 PM	12.15165	12.16628			N/A
4/23/2019	GBPSGD	9:30:00 AM	1.7609	1.7613			N/A
4/23/2019	GBPSGD	11:30:00 AM	1.7634	1.7641			N/A

4/23/2019	GBPSGD	1:30:00 PM	1.765	1.7657			N/A
4/23/2019	GBPSGD	3:30:00 PM	1.7651	1.7657			N/A
4/23/2019	GBPSGD.fx	9:30:00 AM	1.75906	1.76308			N/A
4/23/2019	GBPSGD.fx	11:30:00 AM	1.76161	1.76586			N/A
4/23/2019	GBPSGD.fx	1:30:00 PM	1.76316	1.76752			N/A
4/23/2019	GBPSGD.fx	3:30:00 PM	1.76324	1.76753			N/A
4/23/2019	GBPUSD	9:30:00 AM	1.29835	1.29817			N/A
4/23/2019	GBPUSD	11:30:00 AM	1.29956	1.29948			N/A
4/23/2019	GBPUSD	1:30:00 PM	1.30111	1.30105			N/A
4/23/2019	GBPUSD	3:30:00 PM	1.30096	1.30095			N/A
4/23/2019	GBPUSD.fx	9:30:00 AM	1.2984	1.29812			N/A
4/23/2019	GBPUSD.fx	11:30:00 AM	1.29961	1.29942			N/A
4/23/2019	GBPUSD.fx	1:30:00 PM	1.30116	1.30099			N/A
4/23/2019	GBPUSD.fx	3:30:00 PM	1.30102	1.3009			N/A
4/23/2019	GBPZAR	9:30:00 AM	18.3589	18.3876			N/A
4/23/2019	GBPZAR	11:30:00 AM	18.4638	18.4903			N/A
4/23/2019	GBPZAR	1:30:00 PM	18.4743	18.4939			N/A
4/23/2019	GBPZAR	3:30:00 PM	18.4741	18.4995			N/A
4/23/2019	GBPZAR.fx	9:30:00 AM	18.3657	18.3803			N/A
4/23/2019	GBPZAR.fx	11:30:00 AM	18.4712	18.4832			N/A
4/23/2019	GBPZAR.fx	1:30:00 PM	18.4818	18.4859			N/A
4/23/2019	GBPZAR.fx	3:30:00 PM	18.4812	18.4923			N/A
4/23/2019	GOLD	9:30:00 AM	1272.78	1272.87			N/A
4/23/2019	GOLD	11:30:00 AM	1273.66	1273.96			N/A
4/23/2019	GOLD	1:30:00 PM	1272.68	1273.04			N/A
4/23/2019	GOLD	3:30:00 PM	1273	1272.78			N/A
4/23/2019	HKDJPY	9:30:00 AM	14.26	14.27			N/A
4/23/2019	HKDJPY	11:30:00 AM	14.26	14.27			N/A
4/23/2019	HKDJPY	1:30:00 PM					N/A
4/23/2019	HKDJPY	3:30:00 PM					N/A
4/23/2019	HKDJPY.fx	9:30:00 AM	14.26	14.267			N/A
4/23/2019	HKDJPY.fx	11:30:00 AM	14.253	14.26			N/A
4/23/2019	HKDJPY.fx	1:30:00 PM	14.256	14.264			N/A
4/23/2019	HKDJPY.fx	3:30:00 PM	14.258	14.265			N/A

4/23/2019	HUFJPY	9:30:00 AM	0.3932	0.3935			N/A
4/23/2019	HUFJPY	11:30:00 AM	0.3927	0.393			N/A
4/23/2019	HUFJPY	1:30:00 PM	0.3923	0.3926			N/A
4/23/2019	HUFJPY	3:30:00 PM	0.3924	0.3927			N/A
4/23/2019	JP225.i	9:30:00 AM	22249.7	22267.2			N/A
4/23/2019	JP225.i	11:30:00 AM	22229.7	22244.7			N/A
4/23/2019	JP225.i	1:30:00 PM	22214.7	22234.7			N/A
4/23/2019	JP225.i	3:30:00 PM	22264.7	22279.7			N/A
4/23/2019	MXNJPY	9:30:00 AM	5.94	5.95			N/A
4/23/2019	MXNJPY	11:30:00 AM					N/A
4/23/2019	MXNJPY	1:30:00 PM					N/A
4/23/2019	MXNJPY	3:30:00 PM	5.92	5.94			N/A
4/23/2019	NASDAQ.i	9:30:00 AM					N/A
4/23/2019	NASDAQ.i	11:30:00 AM					N/A
4/23/2019	NASDAQ.i	1:30:00 PM					N/A
4/23/2019	NASDAQ.i	3:30:00 PM					N/A
4/23/2019	NOKJPY	9:30:00 AM	13.14	13.17			N/A
4/23/2019	NOKJPY	11:30:00 AM	13.12	13.14			N/A
4/23/2019	NOKJPY	1:30:00 PM	13.11	13.15			N/A
4/23/2019	NOKJPY	3:30:00 PM	13.09	13.12			N/A
4/23/2019	NOKJPY.fx	9:30:00 AM	13.154	13.159			N/A
4/23/2019	NOKJPY.fx	11:30:00 AM	13.122	13.127			N/A
4/23/2019	NOKJPY.fx	1:30:00 PM	13.123	13.13			N/A
4/23/2019	NOKJPY.fx	3:30:00 PM	13.102	13.108			N/A
4/23/2019	NZDCAD	9:30:00 AM	0.89034	0.89105			N/A
4/23/2019	NZDCAD	11:30:00 AM	0.88995	0.89056			N/A
4/23/2019	NZDCAD	1:30:00 PM	0.89046	0.89121			N/A
4/23/2019	NZDCAD	3:30:00 PM	0.89126	0.89192			N/A
4/23/2019	NZDCAD.fx	9:30:00 AM	0.89066	0.89072			N/A
4/23/2019	NZDCAD.fx	11:30:00 AM	0.89029	0.89023			N/A
4/23/2019	NZDCAD.fx	1:30:00 PM	0.89078	0.89087			N/A
4/23/2019	NZDCAD.fx	3:30:00 PM	0.89158	0.89159			N/A
4/23/2019	NZDCHF	9:30:00 AM	0.67696	0.6776			N/A
4/23/2019	NZDCHF	11:30:00 AM	0.67795	0.67854			N/A

4/23/2019	NZDCHF	1:30:00 PM	0.67839	0.67908			N/A
4/23/2019	NZDCHF	3:30:00 PM	0.67857	0.67926			N/A
4/23/2019	NZDCHF.fx	9:30:00 AM	0.67729	0.67725			N/A
4/23/2019	NZDCHF.fx	11:30:00 AM	0.67829	0.67818			N/A
4/23/2019	NZDCHF.fx	1:30:00 PM	0.67873	0.67872			N/A
4/23/2019	NZDCHF.fx	3:30:00 PM	0.67891	0.6789			N/A
4/23/2019	NZDCZK	9:30:00 AM	15.216	15.229			N/A
4/23/2019	NZDCZK	11:30:00 AM	15.207	15.218			N/A
4/23/2019	NZDCZK	1:30:00 PM	15.224	15.236			N/A
4/23/2019	NZDCZK	3:30:00 PM	15.219	15.23			N/A
4/23/2019	NZDDKK	9:30:00 AM					N/A
4/23/2019	NZDDKK	11:30:00 AM	4.418	4.422			N/A
4/23/2019	NZDDKK	1:30:00 PM	4.419	4.422			N/A
4/23/2019	NZDDKK	3:30:00 PM	4.417	4.421			N/A
4/23/2019	NZDHKD	9:30:00 AM	5.2243	5.2272			N/A
4/23/2019	NZDHKD	11:30:00 AM	5.2229	5.2258			N/A
4/23/2019	NZDHKD	1:30:00 PM	5.2224	5.2253			N/A
4/23/2019	NZDHKD	3:30:00 PM	5.2195	5.2223			N/A
4/23/2019	NZDHUF	9:30:00 AM	189.5	189.79			N/A
4/23/2019	NZDHUF	11:30:00 AM	189.66	189.96			N/A
4/23/2019	NZDHUF	1:30:00 PM	189.87	190.15			N/A
4/23/2019	NZDHUF	3:30:00 PM	189.64	189.92			N/A
4/23/2019	NZDJPY	9:30:00 AM	74.527	74.592			N/A
4/23/2019	NZDJPY	11:30:00 AM	74.472	74.533			N/A
4/23/2019	NZDJPY	1:30:00 PM	74.481	74.558			N/A
4/23/2019	NZDJPY	3:30:00 PM	74.441	74.51			N/A
4/23/2019	NZDJPY.fx	9:30:00 AM	74.558	74.56			N/A
4/23/2019	NZDJPY.fx	11:30:00 AM	74.503	74.5			N/A
4/23/2019	NZDJPY.fx	1:30:00 PM	74.513	74.526			N/A
4/23/2019	NZDJPY.fx	3:30:00 PM	74.474	74.478			N/A
4/23/2019	NZDMXN	9:30:00 AM	12.5526	12.5587			N/A
4/23/2019	NZDMXN	11:30:00 AM	12.5738	12.5792			N/A
4/23/2019	NZDMXN	1:30:00 PM	12.577	12.5814			N/A
4/23/2019	NZDMXN	3:30:00 PM	12.5596	12.564			N/A



4/23/2019	NZDNOK	9:30:00 AM	5.6643	5.6669			N/A
4/23/2019	NZDNOK	11:30:00 AM	5.6735	5.6768			N/A
4/23/2019	NZDNOK	1:30:00 PM	5.6736	5.677			N/A
4/23/2019	NZDNOK	3:30:00 PM	5.6792	5.6831			N/A
4/23/2019	NZDPLN	9:30:00 AM	2.5367	2.538			N/A
4/23/2019	NZDPLN	11:30:00 AM	2.5375	2.5388			N/A
4/23/2019	NZDPLN	1:30:00 PM	2.5387	2.5398			N/A
4/23/2019	NZDPLN	3:30:00 PM	2.5365	2.5379			N/A
4/23/2019	NZDSEK	9:30:00 AM	6.2077	6.2147			N/A
4/23/2019	NZDSEK	11:30:00 AM	6.2118	6.2184			N/A
4/23/2019	NZDSEK	1:30:00 PM	6.2142	6.2205			N/A
4/23/2019	NZDSEK	3:30:00 PM	6.2162	6.2221			N/A
4/23/2019	NZDSGD	9:30:00 AM	0.9036	0.9043			N/A
4/23/2019	NZDSGD	11:30:00 AM	0.9039	0.9044			N/A
4/23/2019	NZDSGD	1:30:00 PM	0.9036	0.9043			N/A
4/23/2019	NZDSGD	3:30:00 PM	0.9031	0.9037			N/A
4/23/2019	NZDSGD.fx	9:30:00 AM	0.90362	0.90421			N/A
4/23/2019	NZDSGD.fx	11:30:00 AM	0.90378	0.90431			N/A
4/23/2019	NZDSGD.fx	1:30:00 PM	0.90358	0.90411			N/A
4/23/2019	NZDSGD.fx	3:30:00 PM	0.90308	0.90361			N/A
4/23/2019	NZDUSD	9:30:00 AM	0.66628	0.66635			N/A
4/23/2019	NZDUSD	11:30:00 AM	0.66607	0.66614			N/A
4/23/2019	NZDUSD	1:30:00 PM	0.66606	0.66624			N/A
4/23/2019	NZDUSD	3:30:00 PM	0.66563	0.66573			N/A
4/23/2019	NZDUSD.fx	9:30:00 AM	0.66635	0.66637			N/A
4/23/2019	NZDUSD.fx	11:30:00 AM	0.66614	0.66615			N/A
4/23/2019	NZDUSD.fx	1:30:00 PM	0.66613	0.66626			N/A
4/23/2019	NZDUSD.fx	3:30:00 PM	0.66572	0.66575			N/A
4/23/2019	NZDZAR	9:30:00 AM	9.4164	9.4332			N/A
4/23/2019	NZDZAR	11:30:00 AM	9.4585	9.4744			N/A
4/23/2019	NZDZAR	1:30:00 PM	9.4543	9.4654			N/A
4/23/2019	NZDZAR	3:30:00 PM	9.4462	9.463			N/A
4/23/2019	SEKJPY	9:30:00 AM	12	12.01			N/A
4/23/2019	SEKJPY	11:30:00 AM	11.99	11.99			N/A

4/23/2019	SEKJPY	1:30:00 PM					N/A
4/23/2019	SEKJPY	3:30:00 PM					N/A
4/23/2019	SEKJPY.fx	9:30:00 AM	11.991	12.009			N/A
4/23/2019	SEKJPY.fx	11:30:00 AM	11.974	11.993			N/A
4/23/2019	SEKJPY.fx	1:30:00 PM	11.973	11.992			N/A
4/23/2019	SEKJPY.fx	3:30:00 PM	11.962	11.979			N/A
4/23/2019	SGDJPY	9:30:00 AM	82.48	82.49			N/A
4/23/2019	SGDJPY	11:30:00 AM	82.39	82.41			N/A
4/23/2019	SGDJPY	1:30:00 PM	82.45	82.45			N/A
4/23/2019	SGDJPY	3:30:00 PM	82.42	82.44			N/A
4/23/2019	SILVER	9:30:00 AM	14.77	15.14			N/A
4/23/2019	SILVER	11:30:00 AM	14.77	15.16			N/A
4/23/2019	SILVER	1:30:00 PM	14.78	15.15			N/A
4/23/2019	SILVER	3:30:00 PM	14.73	15.1			N/A
4/23/2019	SPX500.i	9:30:00 AM	2912.19	2912.99			N/A
4/23/2019	SPX500.i	11:30:00 AM	2909.69	2910.99			N/A
4/23/2019	SPX500.i	1:30:00 PM	2907.69	2908.89			N/A
4/23/2019	SPX500.i	3:30:00 PM	2913.94	2914.99			N/A
4/23/2019	UK100.i	9:30:00 AM	7499.95	7501.7			N/A
4/23/2019	UK100.i	11:30:00 AM	7495.95	7496.2			N/A
4/23/2019	UK100.i	1:30:00 PM	7489.95	7490.45			N/A
4/23/2019	UK100.i	3:30:00 PM	7502.37	7503.29			N/A
4/23/2019	USDCAD	9:30:00 AM	1.33676	1.33669			N/A
4/23/2019	USDCAD	11:30:00 AM	1.33651	1.33651			N/A
4/23/2019	USDCAD	1:30:00 PM	1.33721	1.3373			N/A
4/23/2019	USDCAD	3:30:00 PM	1.33939	1.33931			N/A
4/23/2019	USDCAD.fx	9:30:00 AM	1.33679	1.33666			N/A
4/23/2019	USDCAD.fx	11:30:00 AM	1.33653	1.33648			N/A
4/23/2019	USDCAD.fx	1:30:00 PM	1.33724	1.33726			N/A
4/23/2019	USDCAD.fx	3:30:00 PM	1.33942	1.33929			N/A
4/23/2019	USDCHF	9:30:00 AM	1.01642	1.01653			N/A
4/23/2019	USDCHF	11:30:00 AM	1.01827	1.01827			N/A
4/23/2019	USDCHF	1:30:00 PM	1.01891	1.01891			N/A
4/23/2019	USDCHF	3:30:00 PM	1.01987	1.01997			N/A

4/23/2019	USDCHF.fx	9:30:00 AM	1.01647	1.01646			N/A
4/23/2019	USDCHF.fx	11:30:00 AM	1.01832	1.01821			N/A
4/23/2019	USDCHF.fx	1:30:00 PM	1.01895	1.01886			N/A
4/23/2019	USDCHF.fx	3:30:00 PM	1.01992	1.0199			N/A
4/23/2019	USDCZK	9:30:00 AM	22.852	22.874			N/A
4/23/2019	USDCZK	11:30:00 AM	22.846	22.869			N/A
4/23/2019	USDCZK	1:30:00 PM	22.87	22.892			N/A
4/23/2019	USDCZK	3:30:00 PM	22.88	22.9			N/A
4/23/2019	USDCZK.fx	9:30:00 AM	22.8601	22.866			N/A
4/23/2019	USDCZK.fx	11:30:00 AM	22.8541	22.8603			N/A
4/23/2019	USDCZK.fx	1:30:00 PM	22.878	22.883			N/A
4/23/2019	USDCZK.fx	3:30:00 PM	22.8877	22.8911			N/A
4/23/2019	USDDKK	9:30:00 AM	6.6364	6.6402			N/A
4/23/2019	USDDKK	11:30:00 AM	6.6339	6.6378			N/A
4/23/2019	USDDKK	1:30:00 PM	6.6348	6.6388			N/A
4/23/2019	USDDKK	3:30:00 PM	6.6379	6.6415			N/A
4/23/2019	USDDKK.fx	9:30:00 AM	6.637	6.63815			N/A
4/23/2019	USDDKK.fx	11:30:00 AM	6.63457	6.6358			N/A
4/23/2019	USDDKK.fx	1:30:00 PM	6.63536	6.63654			N/A
4/23/2019	USDDKK.fx	3:30:00 PM	6.63841	6.63949			N/A
4/23/2019	USDHKD	9:30:00 AM	7.8444	7.8449			N/A
4/23/2019	USDHKD	11:30:00 AM	7.8445	7.845			N/A
4/23/2019	USDHKD	1:30:00 PM	7.8438	7.8443			N/A
4/23/2019	USDHKD	3:30:00 PM	7.8433	7.8437			N/A
4/23/2019	USDHKD.fx	9:30:00 AM	7.84444	7.84488			N/A
4/23/2019	USDHKD.fx	11:30:00 AM	7.84455	7.84509			N/A
4/23/2019	USDHKD.fx	1:30:00 PM	7.84375	7.84435			N/A
4/23/2019	USDHKD.fx	3:30:00 PM	7.84395	7.8445			N/A
4/23/2019	USDHUF	9:30:00 AM	284.51	284.97			N/A
4/23/2019	USDHUF	11:30:00 AM	284.86	285.32			N/A
4/23/2019	USDHUF	1:30:00 PM	285.13	285.59			N/A
4/23/2019	USDHUF	3:30:00 PM	285.01	285.44			N/A
4/23/2019	USDHUF.fx	9:30:00 AM	284.704	284.775			N/A
4/23/2019	USDHUF.fx	11:30:00 AM	285.065	285.123			N/A

4/23/2019	USDHUF.fx	1:30:00 PM	285.335	285.39			N/A
4/23/2019	USDHUF.fx	3:30:00 PM	285.215	285.231			N/A
4/23/2019	USDINR	9:30:00 AM	64.75	74.74			N/A
4/23/2019	USDINR	11:30:00 AM	64.7	74.69			N/A
4/23/2019	USDINR	1:30:00 PM					N/A
4/23/2019	USDINR	3:30:00 PM					N/A
4/23/2019	USDJPY	9:30:00 AM	111.893	111.907			N/A
4/23/2019	USDJPY	11:30:00 AM	111.844	111.855			N/A
4/23/2019	USDJPY	1:30:00 PM	111.86	111.875			N/A
4/23/2019	USDJPY	3:30:00 PM	111.873	111.884			N/A
4/23/2019	USDJPY.fx	9:30:00 AM	111.898	111.9			N/A
4/23/2019	USDJPY.fx	11:30:00 AM	111.85	111.848			N/A
4/23/2019	USDJPY.fx	1:30:00 PM	111.866	111.867			N/A
4/23/2019	USDJPY.fx	3:30:00 PM	111.879	111.877			N/A
4/23/2019	USDMXN	9:30:00 AM	18.847	18.852			N/A
4/23/2019	USDMXN	11:30:00 AM	18.882	18.891			N/A
4/23/2019	USDMXN	1:30:00 PM	18.886	18.892			N/A
4/23/2019	USDMXN	3:30:00 PM	18.875	18.878			N/A
4/23/2019	USDMXN.f	9:30:00 AM	18.8503	18.8488			N/A
4/23/2019	USDMXN.f	11:30:00 AM	18.8854	18.8871			N/A
4/23/2019	USDMXN.f	1:30:00 PM	18.8908	18.8885			N/A
4/23/2019	USDMXN.f	3:30:00 PM	18.8786	18.8743			N/A
4/23/2019	USDNOK	9:30:00 AM	8.5025	8.5091			N/A
4/23/2019	USDNOK	11:30:00 AM	8.5185	8.5264			N/A
4/23/2019	USDNOK	1:30:00 PM	8.5181	8.5267			N/A
4/23/2019	USDNOK	3:30:00 PM	8.5331	8.5413			N/A
4/23/2019	USDNOK.fx	9:30:00 AM	8.50655	8.50433			N/A
4/23/2019	USDNOK.fx	11:30:00 AM	8.52242	8.52194			N/A
4/23/2019	USDNOK.fx	1:30:00 PM	8.52209	8.52229			N/A
4/23/2019	USDNOK.fx	3:30:00 PM	8.53715	8.53656			N/A
4/23/2019	USDPLN	9:30:00 AM	3.8081	3.8097			N/A
4/23/2019	USDPLN	11:30:00 AM	3.811	3.8124			N/A
4/23/2019	USDPLN	1:30:00 PM	3.8125	3.8136			N/A
4/23/2019	USDPLN	3:30:00 PM	3.8122	3.8132			N/A

4/23/2019	USDPLN.fx	9:30:00 AM	3.80738	3.81031			N/A
4/23/2019	USDPLN.fx	11:30:00 AM	3.81018	3.81321			N/A
4/23/2019	USDPLN.fx	1:30:00 PM	3.81163	3.81441			N/A
4/23/2019	USDPLN.fx	3:30:00 PM	3.81136	3.81383			N/A
4/23/2019	USDRUB	9:30:00 AM					N/A
4/23/2019	USDRUB	11:30:00 AM	63.578	63.976			N/A
4/23/2019	USDRUB	1:30:00 PM	63.525	63.905			N/A
4/23/2019	USDRUB	3:30:00 PM	63.576	63.961			N/A
4/23/2019	USDSEK	9:30:00 AM	9.3225	9.3264			N/A
4/23/2019	USDSEK	11:30:00 AM	9.3306	9.3347			N/A
4/23/2019	USDSEK	1:30:00 PM	9.3335	9.3374			N/A
4/23/2019	USDSEK	3:30:00 PM	9.3439	9.3462			N/A
4/23/2019	USDSEK.fx	9:30:00 AM	9.32494	9.32465			N/A
4/23/2019	USDSEK.fx	11:30:00 AM	9.33315	9.33301			N/A
4/23/2019	USDSEK.fx	1:30:00 PM	9.33599	9.33565			N/A
4/23/2019	USDSEK.fx	3:30:00 PM	9.34659	9.34447			N/A
4/23/2019	USDSGD	9:30:00 AM	1.3564	1.3567			N/A
4/23/2019	USDSGD	11:30:00 AM	1.357	1.3573			N/A
4/23/2019	USDSGD	1:30:00 PM	1.3567	1.3569			N/A
4/23/2019	USDSGD	3:30:00 PM	1.3568	1.3571			N/A
4/23/2019	USDSGD.fx	9:30:00 AM	1.3563	1.3567			N/A
4/23/2019	USDSGD.fx	11:30:00 AM	1.35697	1.35744			N/A
4/23/2019	USDSGD.fx	1:30:00 PM	1.35661	1.35691			N/A
4/23/2019	USDSGD.fx	3:30:00 PM	1.35674	1.35722			N/A
4/23/2019	USDZAR	9:30:00 AM	14.1437	14.1595			N/A
4/23/2019	USDZAR	11:30:00 AM	14.2101	14.2276			N/A
4/23/2019	USDZAR	1:30:00 PM	14.2029	14.212			N/A
4/23/2019	USDZAR	3:30:00 PM	14.2024	14.2182			N/A
4/23/2019	USDZAR.fx	9:30:00 AM	14.14948	14.1535			N/A
4/23/2019	USDZAR.fx	11:30:00 AM	14.21607	14.22152			N/A
4/23/2019	USDZAR.fx	1:30:00 PM	14.20888	14.20612			N/A
4/23/2019	USDZAR.fx	3:30:00 PM	14.20822	14.21185			N/A
4/23/2019	XAUUSD	9:30:00 AM	1272.79	1272.88			N/A
4/23/2019	XAUUSD	11:30:00 AM	1273.67	1273.96			N/A

4/23/2019	XAUUSD	1:30:00 PM	1272.68	1273.04			N/A
4/23/2019	XAUUSD	3:30:00 PM	1273.02	1272.79			N/A
4/23/2019	ZARJPY	9:30:00 AM	7.89	7.91			N/A
4/23/2019	ZARJPY	11:30:00 AM	7.85	7.87			N/A
4/23/2019	ZARJPY	1:30:00 PM	7.86	7.88			N/A
4/23/2019	ZARJPY	3:30:00 PM	7.85	7.87			N/A
4/23/2019	ZARJPY.fx	9:30:00 AM	7.905	7.908			N/A
4/23/2019	ZARJPY.fx	11:30:00 AM	7.863	7.869			N/A
4/23/2019	ZARJPY.fx	1:30:00 PM	7.873	7.873			N/A
4/23/2019	ZARJPY.fx	3:30:00 PM	7.871	7.875			N/A
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4/24/2019	#NG.f	11:30:00 AM	2.459	2.478			N/A
4/24/2019	#NG.f	1:30:00 PM	2.464	2.484			N/A
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4/24/2019	#ZNGA	1:30:00 PM					N/A
4/24/2019	#ZNGA	3:30:00 PM					N/A
4/24/2019	AUDCAD	9:30:00 AM	0.94598	0.94664			N/A
4/24/2019	AUDCAD	11:30:00 AM	0.94734	0.94802			N/A
4/24/2019	AUDCAD	1:30:00 PM	0.94615	0.94672			N/A
4/24/2019	AUDCAD	3:30:00 PM	0.946	0.94659			N/A
4/24/2019	AUDCAD.fx	9:30:00 AM	0.94632	0.9463			N/A
4/24/2019	AUDCAD.fx	11:30:00 AM	0.94768	0.94767			N/A
4/24/2019	AUDCAD.fx	1:30:00 PM	0.94647	0.94637			N/A
4/24/2019	AUDCAD.fx	3:30:00 PM	0.94635	0.94625			N/A
4/24/2019	AUDCHF	9:30:00 AM	0.71702	0.71772			N/A
4/24/2019	AUDCHF	11:30:00 AM	0.71704	0.71771			N/A
4/24/2019	AUDCHF	1:30:00 PM	0.7162	0.71688			N/A
4/24/2019	AUDCHF	3:30:00 PM	0.71624	0.71682			N/A
4/24/2019	AUDCHF.fx	9:30:00 AM	0.71737	0.71737			N/A
4/24/2019	AUDCHF.fx	11:30:00 AM	0.71738	0.71737			N/A
4/24/2019	AUDCHF.fx	1:30:00 PM	0.71654	0.71654			N/A
4/24/2019	AUDCHF.fx	3:30:00 PM	0.71659	0.71647			N/A
4/24/2019	AUDCZK	9:30:00 AM	16.134	16.15			N/A
4/24/2019	AUDCZK	11:30:00 AM	16.148	16.164			N/A
4/24/2019	AUDCZK	1:30:00 PM	16.131	16.147			N/A
4/24/2019	AUDCZK	3:30:00 PM	16.138	16.155			N/A
4/24/2019	AUDDKK	9:30:00 AM	4.6841	4.6882			N/A
4/24/2019	AUDDKK	11:30:00 AM	4.6856	4.6899			N/A

4/24/2019	AUDDKK	1:30:00 PM	4.6832	4.6877			N/A
4/24/2019	AUDDKK	3:30:00 PM	4.6855	4.6901			N/A
4/24/2019	AUDHKD	9:30:00 AM	5.5116	5.5155			N/A
4/24/2019	AUDHKD	11:30:00 AM	5.5207	5.5246			N/A
4/24/2019	AUDHKD	1:30:00 PM	5.5149	5.5181			N/A
4/24/2019	AUDHKD	3:30:00 PM	5.5154	5.5192			N/A
4/24/2019	AUDHUF	9:30:00 AM	201.33	201.56			N/A
4/24/2019	AUDHUF	11:30:00 AM	201.54	201.77			N/A
4/24/2019	AUDHUF	1:30:00 PM	201.23	201.46			N/A
4/24/2019	AUDHUF	3:30:00 PM	201.36	201.6			N/A
4/24/2019	AUDJPY	9:30:00 AM	78.526	78.588			N/A
4/24/2019	AUDJPY	11:30:00 AM	78.669	78.731			N/A
4/24/2019	AUDJPY	1:30:00 PM	78.621	78.688			N/A
4/24/2019	AUDJPY	3:30:00 PM	78.604	78.661			N/A
4/24/2019	AUDJPY.fx	9:30:00 AM	78.56	78.553			N/A
4/24/2019	AUDJPY.fx	11:30:00 AM	78.703	78.696			N/A
4/24/2019	AUDJPY.fx	1:30:00 PM	78.654	78.653			N/A
4/24/2019	AUDJPY.fx	3:30:00 PM	78.639	78.626			N/A
4/24/2019	AUDMXN	9:30:00 AM	13.3465	13.3531			N/A
4/24/2019	AUDMXN	11:30:00 AM	13.3498	13.357			N/A
4/24/2019	AUDMXN	1:30:00 PM	13.3281	13.3364			N/A
4/24/2019	AUDMXN	3:30:00 PM	13.3342	13.3414			N/A
4/24/2019	AUDNOK	9:30:00 AM	6.0317	6.0356			N/A
4/24/2019	AUDNOK	11:30:00 AM	6.0359	6.0405			N/A
4/24/2019	AUDNOK	1:30:00 PM	6.0324	6.037			N/A
4/24/2019	AUDNOK	3:30:00 PM	6.0319	6.0352			N/A
4/24/2019	AUDNOK.f	9:30:00 AM	6.0333	6.0339			N/A
4/24/2019	AUDNOK.f	11:30:00 AM	6.0375	6.0386			N/A
4/24/2019	AUDNOK.f	1:30:00 PM	6.034	6.0353			N/A
4/24/2019	AUDNOK.f	3:30:00 PM	6.0337	6.0335			N/A
4/24/2019	AUDNZD	9:30:00 AM	1.06205	1.06294			N/A
4/24/2019	AUDNZD	11:30:00 AM	1.0631	1.06385			N/A
4/24/2019	AUDNZD	1:30:00 PM	1.06252	1.06332			N/A
4/24/2019	AUDNZD	3:30:00 PM	1.06282	1.06353			N/A

4/24/2019	AUDNZD.fx	9:30:00 AM	1.06249	1.06248			N/A
4/24/2019	AUDNZD.fx	11:30:00 AM	1.06355	1.06341			N/A
4/24/2019	AUDNZD.fx	1:30:00 PM	1.06298	1.06286			N/A
4/24/2019	AUDNZD.fx	3:30:00 PM	1.06327	1.06307			N/A
4/24/2019	AUDPLN	9:30:00 AM	2.6897	2.6926			N/A
4/24/2019	AUDPLN	11:30:00 AM	2.6917	2.6948			N/A
4/24/2019	AUDPLN	1:30:00 PM	2.6909	2.6941			N/A
4/24/2019	AUDPLN	3:30:00 PM	2.6921	2.6953			N/A
4/24/2019	AUDSEK	9:30:00 AM	6.5951	6.5973			N/A
4/24/2019	AUDSEK	11:30:00 AM	6.5938	6.5961			N/A
4/24/2019	AUDSEK	1:30:00 PM	6.5886	6.5906			N/A
4/24/2019	AUDSEK	3:30:00 PM	6.5942	6.5958			N/A
4/24/2019	AUDSEK.fx	9:30:00 AM	6.5904	6.6015			N/A
4/24/2019	AUDSEK.fx	11:30:00 AM	6.5891	6.6006			N/A
4/24/2019	AUDSEK.fx	1:30:00 PM	6.584	6.5949			N/A
4/24/2019	AUDSEK.fx	3:30:00 PM	6.59	6.6003			N/A
4/24/2019	AUDSGD	9:30:00 AM	0.9562	0.9564			N/A
4/24/2019	AUDSGD	11:30:00 AM	0.9569	0.9571			N/A
4/24/2019	AUDSGD	1:30:00 PM	0.9564	0.9565			N/A
4/24/2019	AUDSGD	3:30:00 PM	0.9565	0.9567			N/A
4/24/2019	AUDSGD.fx	9:30:00 AM	0.95626	0.95638			N/A
4/24/2019	AUDSGD.fx	11:30:00 AM	0.95701	0.95702			N/A
4/24/2019	AUDSGD.fx	1:30:00 PM	0.95642	0.95643			N/A
4/24/2019	AUDSGD.fx	3:30:00 PM	0.95661	0.95656			N/A
4/24/2019	AUDUSD	9:30:00 AM	0.70333	0.70348			N/A
4/24/2019	AUDUSD	11:30:00 AM	0.70431	0.70436			N/A
4/24/2019	AUDUSD	1:30:00 PM	0.70369	0.70371			N/A
4/24/2019	AUDUSD	3:30:00 PM	0.70368	0.70368			N/A
4/24/2019	AUDUSD.fx	9:30:00 AM	0.70338	0.70342			N/A
4/24/2019	AUDUSD.fx	11:30:00 AM	0.70436	0.7043			N/A
4/24/2019	AUDUSD.fx	1:30:00 PM	0.70374	0.70365			N/A
4/24/2019	AUDUSD.fx	3:30:00 PM	0.70375	0.70363			N/A
4/24/2019	AUDZAR	9:30:00 AM	10.0981	10.1139			N/A
4/24/2019	AUDZAR	11:30:00 AM	10.0937	10.1045			N/A

4/24/2019	AUDZAR	1:30:00 PM	10.0844	10.0984			N/A
4/24/2019	AUDZAR	3:30:00 PM	10.1046	10.1158			N/A
4/24/2019	AUS200.i	9:30:00 AM	6389.8	6394.3			N/A
4/24/2019	AUS200.i	11:30:00 AM	6381.2	6385.2			N/A
4/24/2019	AUS200.i	1:30:00 PM	6402.7	6405.7			N/A
4/24/2019	AUS200.i	3:30:00 PM	6394.2	6397.7			N/A
4/24/2019	BCHUSD	9:30:00 AM	293.27	295.17			N/A
4/24/2019	BCHUSD	11:30:00 AM	283.66	284.65			N/A
4/24/2019	BCHUSD	1:30:00 PM	279.02	280.74			N/A
4/24/2019	BCHUSD	3:30:00 PM	282.94	284.28			N/A
4/24/2019	CADCHF	9:30:00 AM	0.75793	0.7586			N/A
4/24/2019	CADCHF	11:30:00 AM	0.75678	0.7575			N/A
4/24/2019	CADCHF	1:30:00 PM	0.75696	0.75759			N/A
4/24/2019	CADCHF	3:30:00 PM	0.75697	0.75766			N/A
4/24/2019	CADCHF.fx	9:30:00 AM	0.75827	0.75824			N/A
4/24/2019	CADCHF.fx	11:30:00 AM	0.75711	0.75715			N/A
4/24/2019	CADCHF.fx	1:30:00 PM	0.7573	0.75722			N/A
4/24/2019	CADCHF.fx	3:30:00 PM	0.75731	0.7573			N/A
4/24/2019	CADCZK	9:30:00 AM	17.052	17.068			N/A
4/24/2019	CADCZK	11:30:00 AM	17.041	17.058			N/A
4/24/2019	CADCZK	1:30:00 PM	17.047	17.061			N/A
4/24/2019	CADCZK	3:30:00 PM	17.054	17.071			N/A
4/24/2019	CADDDKK	9:30:00 AM					N/A
4/24/2019	CADDDKK	11:30:00 AM					N/A
4/24/2019	CADDDKK	1:30:00 PM	4.95	4.953			N/A
4/24/2019	CADDDKK	3:30:00 PM					N/A
4/24/2019	CADHKD	9:30:00 AM	5.8248	5.8287			N/A
4/24/2019	CADHKD	11:30:00 AM	5.8258	5.8297			N/A
4/24/2019	CADHKD	1:30:00 PM	5.8278	5.8313			N/A
4/24/2019	CADHKD	3:30:00 PM	5.829	5.833			N/A
4/24/2019	CADHUF	9:30:00 AM	212.81	212.98			N/A
4/24/2019	CADHUF	11:30:00 AM	212.72	212.88			N/A
4/24/2019	CADHUF	1:30:00 PM	212.69	212.83			N/A
4/24/2019	CADHUF	3:30:00 PM	212.84	213			N/A

4/24/2019	CADJPY	9:30:00 AM	83.045	83.099			N/A
4/24/2019	CADJPY	11:30:00 AM	83.066	83.138			N/A
4/24/2019	CADJPY	1:30:00 PM	83.13	83.197			N/A
4/24/2019	CADJPY	3:30:00 PM	83.111	83.177			N/A
4/24/2019	CADJPY.fx	9:30:00 AM	83.078	83.065			N/A
4/24/2019	CADJPY.fx	11:30:00 AM	83.1	83.103			N/A
4/24/2019	CADJPY.fx	1:30:00 PM	83.165	83.162			N/A
4/24/2019	CADJPY.fx	3:30:00 PM	83.145	83.143			N/A
4/24/2019	CADMXN	9:30:00 AM	14.1035	14.1136			N/A
4/24/2019	CADMXN	11:30:00 AM	14.0866	14.0966			N/A
4/24/2019	CADMXN	1:30:00 PM	14.0825	14.0938			N/A
4/24/2019	CADMXN	3:30:00 PM	14.0922	14.1007			N/A
4/24/2019	CADNOK	9:30:00 AM	6.3727	6.3776			N/A
4/24/2019	CADNOK	11:30:00 AM	6.3686	6.3734			N/A
4/24/2019	CADNOK	1:30:00 PM	6.3738	6.3781			N/A
4/24/2019	CADNOK	3:30:00 PM	6.3725	6.3773			N/A
4/24/2019	CADPLN	9:30:00 AM	2.8425	2.8444			N/A
4/24/2019	CADPLN	11:30:00 AM	2.841	2.8429			N/A
4/24/2019	CADPLN	1:30:00 PM	2.8438	2.8456			N/A
4/24/2019	CADPLN	3:30:00 PM	2.8455	2.8474			N/A
4/24/2019	CADSEK	9:30:00 AM	6.9689	6.9718			N/A
4/24/2019	CADSEK	11:30:00 AM	6.9583	6.9608			N/A
4/24/2019	CADSEK	1:30:00 PM	6.9608	6.9632			N/A
4/24/2019	CADSEK	3:30:00 PM	6.9676	6.9704			N/A
4/24/2019	CADSGD	9:30:00 AM	1.0098	1.0101			N/A
4/24/2019	CADSGD	11:30:00 AM	1.0093	1.0096			N/A
4/24/2019	CADSGD	1:30:00 PM	1.0098	1.0101			N/A
4/24/2019	CADSGD	3:30:00 PM	1.01	1.0103			N/A
4/24/2019	CADZAR	9:30:00 AM	10.6717	10.6886			N/A
4/24/2019	CADZAR	11:30:00 AM	10.6507	10.6637			N/A
4/24/2019	CADZAR	1:30:00 PM	10.6558	10.6716			N/A
4/24/2019	CADZAR	3:30:00 PM	10.6779	10.6925			N/A
4/24/2019	CHFCZK	9:30:00 AM	22.493	22.506			N/A
4/24/2019	CHFCZK	11:30:00 AM	22.513	22.528			N/A

4/24/2019	CHFCZK	1:30:00 PM	22.515	22.53			N/A
4/24/2019	CHFCZK	3:30:00 PM	22.522	22.54			N/A
4/24/2019	CHFDKK	9:30:00 AM	6.529	6.532			N/A
4/24/2019	CHFDKK	11:30:00 AM	6.533	6.536			N/A
4/24/2019	CHFDKK	1:30:00 PM	6.537	6.54			N/A
4/24/2019	CHFDKK	3:30:00 PM	6.54	6.543			N/A
4/24/2019	CHFDKK.fx	9:30:00 AM	6.5275	6.5334			N/A
4/24/2019	CHFDKK.fx	11:30:00 AM	6.5313	6.537			N/A
4/24/2019	CHFDKK.fx	1:30:00 PM	6.5352	6.5413			N/A
4/24/2019	CHFDKK.fx	3:30:00 PM	6.5388	6.5446			N/A
4/24/2019	CHFHKD	9:30:00 AM	7.6834	7.6866			N/A
4/24/2019	CHFHKD	11:30:00 AM	7.6962	7.6998			N/A
4/24/2019	CHFHKD	1:30:00 PM	7.6962	7.6999			N/A
4/24/2019	CHFHKD	3:30:00 PM	7.6976	7.7015			N/A
4/24/2019	CHFHUF	9:30:00 AM	280.58	280.97			N/A
4/24/2019	CHFHUF	11:30:00 AM	280.9	281.27			N/A
4/24/2019	CHFHUF	1:30:00 PM	280.78	281.16			N/A
4/24/2019	CHFHUF	3:30:00 PM	280.98	281.36			N/A
4/24/2019	CHFJPY	9:30:00 AM	109.538	109.586			N/A
4/24/2019	CHFJPY	11:30:00 AM	109.726	109.795			N/A
4/24/2019	CHFJPY	1:30:00 PM	109.786	109.854			N/A
4/24/2019	CHFJPY	3:30:00 PM	109.751	109.826			N/A
4/24/2019	CHFJPY.fx	9:30:00 AM	109.571	109.552			N/A
4/24/2019	CHFJPY.fx	11:30:00 AM	109.759	109.76			N/A
4/24/2019	CHFJPY.fx	1:30:00 PM	109.82	109.82			N/A
4/24/2019	CHFJPY.fx	3:30:00 PM	109.784	109.79			N/A
4/24/2019	CHFMXN	9:30:00 AM	18.6015	18.614			N/A
4/24/2019	CHFMXN	11:30:00 AM	18.6057	18.6201			N/A
4/24/2019	CHFMXN	1:30:00 PM	18.5975	18.6122			N/A
4/24/2019	CHFMXN	3:30:00 PM	18.6078	18.6188			N/A
4/24/2019	CHFNOK	9:30:00 AM	8.406	8.4128			N/A
4/24/2019	CHFNOK	11:30:00 AM	8.412	8.4196			N/A
4/24/2019	CHFNOK	1:30:00 PM	8.4173	8.4243			N/A
4/24/2019	CHFNOK	3:30:00 PM	8.4157	8.4226			N/A



4/24/2019	CHFNOK.fx	9:30:00 AM	8.40942	8.40921			N/A
4/24/2019	CHFNOK.fx	11:30:00 AM	8.41558	8.41601			N/A
4/24/2019	CHFNOK.fx	1:30:00 PM	8.42095	8.42075			N/A
4/24/2019	CHFNOK.fx	3:30:00 PM	8.41931	8.41892			N/A
4/24/2019	CHFPLN	9:30:00 AM	3.7492	3.7521			N/A
4/24/2019	CHFPLN	11:30:00 AM	3.7521	3.7548			N/A
4/24/2019	CHFPLN	1:30:00 PM	3.7553	3.7582			N/A
4/24/2019	CHFPLN	3:30:00 PM	3.7572	3.7598			N/A
4/24/2019	CHFPLN.fx	9:30:00 AM	3.74696	3.75425			N/A
4/24/2019	CHFPLN.fx	11:30:00 AM	3.74974	3.75711			N/A
4/24/2019	CHFPLN.fx	1:30:00 PM	3.75296	3.76053			N/A
4/24/2019	CHFPLN.fx	3:30:00 PM	3.75484	3.76213			N/A
4/24/2019	CHFSEK	9:30:00 AM	9.1912	9.1951			N/A
4/24/2019	CHFSEK	11:30:00 AM	9.1906	9.1939			N/A
4/24/2019	CHFSEK	1:30:00 PM	9.1925	9.1954			N/A
4/24/2019	CHFSEK	3:30:00 PM	9.2009	9.2039			N/A
4/24/2019	CHFSGD	9:30:00 AM	1.3326	1.333			N/A
4/24/2019	CHFSGD	11:30:00 AM	1.3336	1.334			N/A
4/24/2019	CHFSGD	1:30:00 PM	1.3342	1.3346			N/A
4/24/2019	CHFSGD	3:30:00 PM	1.3345	1.335			N/A
4/24/2019	CHFSGD.fx	9:30:00 AM	1.33274	1.33277			N/A
4/24/2019	CHFSGD.fx	11:30:00 AM	1.33373	1.33379			N/A
4/24/2019	CHFSGD.fx	1:30:00 PM	1.33443	1.33445			N/A
4/24/2019	CHFSGD.fx	3:30:00 PM	1.33463	1.33477			N/A
4/24/2019	CHFZAR	9:30:00 AM	14.0791	14.0938			N/A
4/24/2019	CHFZAR	11:30:00 AM	14.073	14.0813			N/A
4/24/2019	CHFZAR	1:30:00 PM	14.0748	14.0891			N/A
4/24/2019	CHFZAR	3:30:00 PM	14.1037	14.1153			N/A
4/24/2019	CZKJPY	9:30:00 AM	4.869	4.873			N/A
4/24/2019	CZKJPY	11:30:00 AM					N/A
4/24/2019	CZKJPY	1:30:00 PM	4.876	4.879			N/A
4/24/2019	CZKJPY	3:30:00 PM					N/A
4/24/2019	DAX30.i	9:30:00 AM	12235.57	12235.57			N/A
4/24/2019	DAX30.i	11:30:00 AM	12259.82	12258.57			N/A

4/24/2019	DAX30.i	1:30:00 PM	12367.32	12364.57			N/A
4/24/2019	DAX30.i	3:30:00 PM	12329.82	12327.32			N/A
4/24/2019	DJ30.i	9:30:00 AM					N/A
4/24/2019	DJ30.i	11:30:00 AM					N/A
4/24/2019	DJ30.i	1:30:00 PM					N/A
4/24/2019	DJ30.i	3:30:00 PM					N/A
4/24/2019	DKKJPY	9:30:00 AM					N/A
4/24/2019	DKKJPY	11:30:00 AM					N/A
4/24/2019	DKKJPY	1:30:00 PM					N/A
4/24/2019	DKKJPY	3:30:00 PM					N/A
4/24/2019	EURAUD	9:30:00 AM	1.59289	1.59313			N/A
4/24/2019	EURAUD	11:30:00 AM	1.59197	1.59231			N/A
4/24/2019	EURAUD	1:30:00 PM	1.59286	1.59329			N/A
4/24/2019	EURAUD	3:30:00 PM	1.59218	1.59245			N/A
4/24/2019	EURAUD.fx	9:30:00 AM	1.59308	1.59291			N/A
4/24/2019	EURAUD.fx	11:30:00 AM	1.59218	1.59209			N/A
4/24/2019	EURAUD.fx	1:30:00 PM	1.59306	1.59308			N/A
4/24/2019	EURAUD.fx	3:30:00 PM	1.59238	1.5922			N/A
4/24/2019	EURCAD	9:30:00 AM	1.50736	1.50806			N/A
4/24/2019	EURCAD	11:30:00 AM	1.50877	1.50954			N/A
4/24/2019	EURCAD	1:30:00 PM	1.50764	1.50831			N/A
4/24/2019	EURCAD	3:30:00 PM	1.50672	1.50748			N/A
4/24/2019	EURCAD.fx	9:30:00 AM	1.50777	1.50764			N/A
4/24/2019	EURCAD.fx	11:30:00 AM	1.50918	1.50912			N/A
4/24/2019	EURCAD.fx	1:30:00 PM	1.50806	1.5079			N/A
4/24/2019	EURCAD.fx	3:30:00 PM	1.50715	1.50705			N/A
4/24/2019	EURCHF	9:30:00 AM	1.14317	1.14326			N/A
4/24/2019	EURCHF	11:30:00 AM	1.14258	1.14264			N/A
4/24/2019	EURCHF	1:30:00 PM	1.14189	1.142			N/A
4/24/2019	EURCHF	3:30:00 PM	1.14133	1.1414			N/A
4/24/2019	EURCHF.fx	9:30:00 AM	1.14324	1.14321			N/A
4/24/2019	EURCHF.fx	11:30:00 AM	1.14263	1.14258			N/A
4/24/2019	EURCHF.fx	1:30:00 PM	1.14195	1.14194			N/A
4/24/2019	EURCHF.fx	3:30:00 PM	1.1414	1.14133			N/A

4/24/2019	EURCZK	9:30:00 AM	25.7	25.738			N/A
4/24/2019	EURCZK	11:30:00 AM					N/A
4/24/2019	EURCZK	1:30:00 PM	25.697	25.735			N/A
4/24/2019	EURCZK	3:30:00 PM					N/A
4/24/2019	EURDKK	9:30:00 AM	7.4651	7.4663			N/A
4/24/2019	EURDKK	11:30:00 AM	7.465	7.4661			N/A
4/24/2019	EURDKK	1:30:00 PM	7.4659	7.4671			N/A
4/24/2019	EURDKK	3:30:00 PM	7.4652	7.4663			N/A
4/24/2019	EURGBP	9:30:00 AM	0.86695	0.86696			N/A
4/24/2019	EURGBP	11:30:00 AM	0.86764	0.86773			N/A
4/24/2019	EURGBP	1:30:00 PM	0.86608	0.86615			N/A
4/24/2019	EURGBP	3:30:00 PM	0.86535	0.86539			N/A
4/24/2019	EURGBP.fx	9:30:00 AM	0.86699	0.8669			N/A
4/24/2019	EURGBP.fx	11:30:00 AM	0.86767	0.86768			N/A
4/24/2019	EURGBP.fx	1:30:00 PM	0.86612	0.86609			N/A
4/24/2019	EURGBP.fx	3:30:00 PM	0.86538	0.86532			N/A
4/24/2019	EURHKD	9:30:00 AM	8.7848	8.7887			N/A
4/24/2019	EURHKD	11:30:00 AM	8.7935	8.7981			N/A
4/24/2019	EURHKD	1:30:00 PM	8.7899	8.7943			N/A
4/24/2019	EURHKD	3:30:00 PM	8.7863	8.791			N/A
4/24/2019	EURHKD.fx	9:30:00 AM	8.78757	8.7858			N/A
4/24/2019	EURHKD.fx	11:30:00 AM	8.79629	8.79519			N/A
4/24/2019	EURHKD.fx	1:30:00 PM	8.79264	8.7914			N/A
4/24/2019	EURHKD.fx	3:30:00 PM	8.78913	8.78818			N/A
4/24/2019	EURHUF	9:30:00 AM	320.72	321.38			N/A
4/24/2019	EURHUF	11:30:00 AM	320.89	321.48			N/A
4/24/2019	EURHUF	1:30:00 PM	320.55	321.2			N/A
4/24/2019	EURHUF	3:30:00 PM	320.63	321.24			N/A
4/24/2019	EURHUF.fx	9:30:00 AM	320.98	321.19			N/A
4/24/2019	EURHUF.fx	11:30:00 AM	321.161	321.364			N/A
4/24/2019	EURHUF.fx	1:30:00 PM	320.831	321.019			N/A
4/24/2019	EURHUF.fx	3:30:00 PM	320.924	321.098			N/A
4/24/2019	EURJPY	9:30:00 AM	125.269	125.242			N/A
4/24/2019	EURJPY	11:30:00 AM	125.411	125.409			N/A

4/24/2019	EURJPY	1:30:00 PM	125.408	125.412			N/A
4/24/2019	EURJPY	3:30:00 PM	125.308	125.31			N/A
4/24/2019	EURJPY.fx	9:30:00 AM	125.272	125.238			N/A
4/24/2019	EURJPY.fx	11:30:00 AM	125.414	125.404			N/A
4/24/2019	EURJPY.fx	1:30:00 PM	125.41	125.408			N/A
4/24/2019	EURJPY.fx	3:30:00 PM	125.31	125.307			N/A
4/24/2019	EURMXN	9:30:00 AM	21.2667	21.2817			N/A
4/24/2019	EURMXN	11:30:00 AM	21.2593	21.2765			N/A
4/24/2019	EURMXN	1:30:00 PM	21.2395	21.2583			N/A
4/24/2019	EURMXN	3:30:00 PM	21.2389	21.2528			N/A
4/24/2019	EURMXN.fx	9:30:00 AM	21.2757	21.273			N/A
4/24/2019	EURMXN.fx	11:30:00 AM	21.2682	21.2673			N/A
4/24/2019	EURMXN.fx	1:30:00 PM	21.2481	21.2495			N/A
4/24/2019	EURMXN.fx	3:30:00 PM	21.2483	21.2429			N/A
4/24/2019	EURNOK	9:30:00 AM	9.6083	9.6188			N/A
4/24/2019	EURNOK	11:30:00 AM	9.6101	9.6217			N/A
4/24/2019	EURNOK	1:30:00 PM	9.6104	9.6216			N/A
4/24/2019	EURNOK	3:30:00 PM	9.604	9.6147			N/A
4/24/2019	EURNOK.fx	9:30:00 AM	9.61374	9.61352			N/A
4/24/2019	EURNOK.fx	11:30:00 AM	9.61571	9.61623			N/A
4/24/2019	EURNOK.fx	1:30:00 PM	9.61579	9.61618			N/A
4/24/2019	EURNOK.fx	3:30:00 PM	9.60949	9.6091			N/A
4/24/2019	EURNZD	9:30:00 AM	1.69293	1.69347			N/A
4/24/2019	EURNZD	11:30:00 AM	1.69339	1.6941			N/A
4/24/2019	EURNZD	1:30:00 PM	1.69359	1.6943			N/A
4/24/2019	EURNZD	3:30:00 PM	1.69311	1.69386			N/A
4/24/2019	EURNZD.fx	9:30:00 AM	1.69335	1.69302			N/A
4/24/2019	EURNZD.fx	11:30:00 AM	1.69381	1.69366			N/A
4/24/2019	EURNZD.fx	1:30:00 PM	1.69403	1.69384			N/A
4/24/2019	EURNZD.fx	3:30:00 PM	1.69352	1.69343			N/A
4/24/2019	EURPLN	9:30:00 AM	4.2863	4.2891			N/A
4/24/2019	EURPLN	11:30:00 AM	4.2872	4.2903			N/A
4/24/2019	EURPLN	1:30:00 PM	4.2884	4.2916			N/A
4/24/2019	EURPLN	3:30:00 PM	4.2882	4.2913			N/A

4/24/2019	EURPLN.fx	9:30:00 AM	4.28555	4.28972			N/A
4/24/2019	EURPLN.fx	11:30:00 AM	4.28647	4.29092			N/A
4/24/2019	EURPLN.fx	1:30:00 PM	4.28777	4.29219			N/A
4/24/2019	EURPLN.fx	3:30:00 PM	4.28757	4.29182			N/A
4/24/2019	EURRUB	9:30:00 AM					N/A
4/24/2019	EURRUB	11:30:00 AM	71.429	71.859			N/A
4/24/2019	EURRUB	1:30:00 PM	71.46	71.905			N/A
4/24/2019	EURRUB	3:30:00 PM	71.627	72.054			N/A
4/24/2019	EURSEK	9:30:00 AM	10.5095	10.5117			N/A
4/24/2019	EURSEK	11:30:00 AM	10.5015	10.5059			N/A
4/24/2019	EURSEK	1:30:00 PM	10.4999	10.5024			N/A
4/24/2019	EURSEK	3:30:00 PM	10.5036	10.5063			N/A
4/24/2019	EURSEK.fx	9:30:00 AM	10.5113	10.51026			N/A
4/24/2019	EURSEK.fx	11:30:00 AM	10.50316	10.50414			N/A
4/24/2019	EURSEK.fx	1:30:00 PM	10.50168	10.50062			N/A
4/24/2019	EURSEK.fx	3:30:00 PM	10.5053	10.50452			N/A
4/24/2019	EURSGD	9:30:00 AM	1.5233	1.5241			N/A
4/24/2019	EURSGD	11:30:00 AM	1.5236	1.5244			N/A
4/24/2019	EURSGD	1:30:00 PM	1.5235	1.5243			N/A
4/24/2019	EURSGD	3:30:00 PM	1.523	1.5238			N/A
4/24/2019	EURSGD.fx	9:30:00 AM	1.52375	1.52364			N/A
4/24/2019	EURSGD.fx	11:30:00 AM	1.52398	1.52397			N/A
4/24/2019	EURSGD.fx	1:30:00 PM	1.52394	1.52385			N/A
4/24/2019	EURSGD.fx	3:30:00 PM	1.52337	1.52337			N/A
4/24/2019	EURUSD	9:30:00 AM	1.12054	1.12048			N/A
4/24/2019	EURUSD	11:30:00 AM	1.12135	1.12136			N/A
4/24/2019	EURUSD	1:30:00 PM	1.12101	1.12101			N/A
4/24/2019	EURUSD	3:30:00 PM	1.12042	1.12047			N/A
4/24/2019	EURUSD.fx	9:30:00 AM	1.12075	1.12057			N/A
4/24/2019	EURUSD.fx	11:30:00 AM	1.12156	1.12145			N/A
4/24/2019	EURUSD.fx	1:30:00 PM	1.12121	1.1211			N/A
4/24/2019	EURUSD.fx	3:30:00 PM	1.12063	1.12056			N/A
4/24/2019	EURZAR	9:30:00 AM	16.1011	16.1167			N/A
4/24/2019	EURZAR	11:30:00 AM	16.0801	16.0951			N/A

4/24/2019	EURZAR	1:30:00 PM	16.0757	16.0957			N/A
4/24/2019	EURZAR	3:30:00 PM	16.1016	16.117			N/A
4/24/2019	EURZAR.fx	9:30:00 AM	16.10113	16.11777			N/A
4/24/2019	EURZAR.fx	11:30:00 AM	16.07955	16.0943			N/A
4/24/2019	EURZAR.fx	1:30:00 PM	16.07541	16.09619			N/A
4/24/2019	EURZAR.fx	3:30:00 PM	16.10154	16.11756			N/A
4/24/2019	GBPAUD	9:30:00 AM	1.83756	1.83828			N/A
4/24/2019	GBPAUD	11:30:00 AM	1.83503	1.83582			N/A
4/24/2019	GBPAUD	1:30:00 PM	1.83954	1.84011			N/A
4/24/2019	GBPAUD	3:30:00 PM	1.84029	1.84082			N/A
4/24/2019	GBPAUD.fx	9:30:00 AM	1.83792	1.83785			N/A
4/24/2019	GBPAUD.fx	11:30:00 AM	1.83543	1.83543			N/A
4/24/2019	GBPAUD.fx	1:30:00 PM	1.83996	1.83969			N/A
4/24/2019	GBPAUD.fx	3:30:00 PM	1.84068	1.84038			N/A
4/24/2019	GBPCAD	9:30:00 AM	1.73871	1.73941			N/A
4/24/2019	GBPCAD	11:30:00 AM	1.73886	1.7397			N/A
4/24/2019	GBPCAD	1:30:00 PM	1.74091	1.74131			N/A
4/24/2019	GBPCAD	3:30:00 PM	1.74116	1.74184			N/A
4/24/2019	GBPCAD.fx	9:30:00 AM	1.73908	1.73899			N/A
4/24/2019	GBPCAD.fx	11:30:00 AM	1.73925	1.73932			N/A
4/24/2019	GBPCAD.fx	1:30:00 PM	1.74133	1.7409			N/A
4/24/2019	GBPCAD.fx	3:30:00 PM	1.74155	1.74145			N/A
4/24/2019	GBPCHF	9:30:00 AM	1.31846	1.31885			N/A
4/24/2019	GBPCHF	11:30:00 AM	1.31659	1.31708			N/A
4/24/2019	GBPCHF	1:30:00 PM	1.31828	1.31871			N/A
4/24/2019	GBPCHF	3:30:00 PM	1.31871	1.31908			N/A
4/24/2019	GBPCHF.fx	9:30:00 AM	1.31864	1.31864			N/A
4/24/2019	GBPCHF.fx	11:30:00 AM	1.31678	1.31687			N/A
4/24/2019	GBPCHF.fx	1:30:00 PM	1.31847	1.31849			N/A
4/24/2019	GBPCHF.fx	3:30:00 PM	1.31889	1.31888			N/A
4/24/2019	GBPCZK	9:30:00 AM	29.656	29.675			N/A
4/24/2019	GBPCZK	11:30:00 AM	29.64	29.662			N/A
4/24/2019	GBPCZK	1:30:00 PM	29.682	29.701			N/A
4/24/2019	GBPCZK	3:30:00 PM	29.702	29.724			N/A

4/24/2019	GBPDKK	9:30:00 AM	8.607	8.617			N/A
4/24/2019	GBPDKK	11:30:00 AM	8.599	8.611			N/A
4/24/2019	GBPDKK	1:30:00 PM	8.616	8.627			N/A
4/24/2019	GBPDKK	3:30:00 PM	8.623	8.634			N/A
4/24/2019	GBPDKK.fx	9:30:00 AM	8.6053	8.6176			N/A
4/24/2019	GBPDKK.fx	11:30:00 AM	8.5981	8.6111			N/A
4/24/2019	GBPDKK.fx	1:30:00 PM	8.6145	8.627			N/A
4/24/2019	GBPDKK.fx	3:30:00 PM	8.6219	8.6343			N/A
4/24/2019	GBPHKD	9:30:00 AM	10.1295	10.1349			N/A
4/24/2019	GBPHKD	11:30:00 AM	10.1321	10.138			N/A
4/24/2019	GBPHKD	1:30:00 PM	10.1465	10.1508			N/A
4/24/2019	GBPHKD	3:30:00 PM	10.1509	10.1562			N/A
4/24/2019	GBPHUF	9:30:00 AM	369.96	370.42			N/A
4/24/2019	GBPHUF	11:30:00 AM	369.85	370.31			N/A
4/24/2019	GBPHUF	1:30:00 PM	370.18	370.62			N/A
4/24/2019	GBPHUF	3:30:00 PM	370.53	371.01			N/A
4/24/2019	GBPJPY	9:30:00 AM	144.46	144.481			N/A
4/24/2019	GBPJPY	11:30:00 AM	144.516	144.555			N/A
4/24/2019	GBPJPY	1:30:00 PM	144.781	144.813			N/A
4/24/2019	GBPJPY	3:30:00 PM	144.782	144.816			N/A
4/24/2019	GBPJPY.fx	9:30:00 AM	144.48	144.46			N/A
4/24/2019	GBPJPY.fx	11:30:00 AM	144.535	144.535			N/A
4/24/2019	GBPJPY.fx	1:30:00 PM	144.802	144.792			N/A
4/24/2019	GBPJPY.fx	3:30:00 PM	144.803	144.795			N/A
4/24/2019	GBPMXN	9:30:00 AM	24.5293	24.5376			N/A
4/24/2019	GBPMXN	11:30:00 AM	24.5003	24.5116			N/A
4/24/2019	GBPMXN	1:30:00 PM	24.521	24.5329			N/A
4/24/2019	GBPMXN	3:30:00 PM	24.542	24.5511			N/A
4/24/2019	GBPNOK	9:30:00 AM	11.0844	11.0936			N/A
4/24/2019	GBPNOK	11:30:00 AM	11.0767	11.0876			N/A
4/24/2019	GBPNOK	1:30:00 PM	11.0979	11.1076			N/A
4/24/2019	GBPNOK	3:30:00 PM	11.0993	11.1084			N/A
4/24/2019	GBPNOK.fx	9:30:00 AM	11.08921	11.08869			N/A
4/24/2019	GBPNOK.fx	11:30:00 AM	11.08162	11.08259			N/A

4/24/2019	GBPNOK.fx	1:30:00 PM	11.10296	11.10269			N/A
4/24/2019	GBPNOK.fx	3:30:00 PM	11.10434	11.10346			N/A
4/24/2019	GBPNZD	9:30:00 AM	1.95244	1.9531			N/A
4/24/2019	GBPNZD	11:30:00 AM	1.95167	1.95226			N/A
4/24/2019	GBPNZD	1:30:00 PM	1.9552	1.95584			N/A
4/24/2019	GBPNZD	3:30:00 PM	1.95637	1.95703			N/A
4/24/2019	GBPNZD.fx	9:30:00 AM	1.95281	1.95268			N/A
4/24/2019	GBPNZD.fx	11:30:00 AM	1.95203	1.95189			N/A
4/24/2019	GBPNZD.fx	1:30:00 PM	1.9556	1.95545			N/A
4/24/2019	GBPNZD.fx	3:30:00 PM	1.95673	1.95668			N/A
4/24/2019	GBPPLN	9:30:00 AM	4.9451	4.9464			N/A
4/24/2019	GBPPLN	11:30:00 AM	4.9421	4.9436			N/A
4/24/2019	GBPPLN	1:30:00 PM	4.9524	4.954			N/A
4/24/2019	GBPPLN	3:30:00 PM	4.9564	4.9579			N/A
4/24/2019	GBPPLN.fx	9:30:00 AM	4.94297	4.94854			N/A
4/24/2019	GBPPLN.fx	11:30:00 AM	4.93996	4.94564			N/A
4/24/2019	GBPPLN.fx	1:30:00 PM	4.95023	4.95604			N/A
4/24/2019	GBPPLN.fx	3:30:00 PM	4.95443	4.96004			N/A
4/24/2019	GBPSEK	9:30:00 AM	12.1201	12.1277			N/A
4/24/2019	GBPSEK	11:30:00 AM	12.1015	12.11			N/A
4/24/2019	GBPSEK	1:30:00 PM	12.1201	12.1274			N/A
4/24/2019	GBPSEK	3:30:00 PM	12.1354	12.1426			N/A
4/24/2019	GBPSEK.fx	9:30:00 AM	12.11637	12.13156			N/A
4/24/2019	GBPSEK.fx	11:30:00 AM	12.09798	12.11353			N/A
4/24/2019	GBPSEK.fx	1:30:00 PM	12.11674	12.13079			N/A
4/24/2019	GBPSEK.fx	3:30:00 PM	12.13188	12.14612			N/A
4/24/2019	GBPSGD	9:30:00 AM	1.7572	1.7578			N/A
4/24/2019	GBPSGD	11:30:00 AM	1.7561	1.7567			N/A
4/24/2019	GBPSGD	1:30:00 PM	1.7591	1.7598			N/A
4/24/2019	GBPSGD	3:30:00 PM	1.76	1.7607			N/A
4/24/2019	GBPSGD.fx	9:30:00 AM	1.75533	1.75956			N/A
4/24/2019	GBPSGD.fx	11:30:00 AM	1.75416	1.7585			N/A
4/24/2019	GBPSGD.fx	1:30:00 PM	1.75729	1.76152			N/A
4/24/2019	GBPSGD.fx	3:30:00 PM	1.75819	1.76249			N/A



4/24/2019	GBPUSD	9:30:00 AM	1.29256	1.29254			N/A
4/24/2019	GBPUSD	11:30:00 AM	1.29255	1.29252			N/A
4/24/2019	GBPUSD	1:30:00 PM	1.29446	1.2944			N/A
4/24/2019	GBPUSD	3:30:00 PM	1.29489	1.29486			N/A
4/24/2019	GBPUSD.fx	9:30:00 AM	1.29262	1.29248			N/A
4/24/2019	GBPUSD.fx	11:30:00 AM	1.2926	1.29247			N/A
4/24/2019	GBPUSD.fx	1:30:00 PM	1.29452	1.29433			N/A
4/24/2019	GBPUSD.fx	3:30:00 PM	1.29496	1.29481			N/A
4/24/2019	GBPZAR	9:30:00 AM	18.5653	18.5928			N/A
4/24/2019	GBPZAR	11:30:00 AM	18.5297	18.5525			N/A
4/24/2019	GBPZAR	1:30:00 PM	18.557	18.5858			N/A
4/24/2019	GBPZAR	3:30:00 PM	18.6026	18.6265			N/A
4/24/2019	GBPZAR.fx	9:30:00 AM	18.5727	18.5853			N/A
4/24/2019	GBPZAR.fx	11:30:00 AM	18.5365	18.5449			N/A
4/24/2019	GBPZAR.fx	1:30:00 PM	18.5642	18.5787			N/A
4/24/2019	GBPZAR.fx	3:30:00 PM	18.6105	18.6193			N/A
4/24/2019	GOLD	9:30:00 AM	1270.07	1270.29			N/A
4/24/2019	GOLD	11:30:00 AM	1273.54	1273.61			N/A
4/24/2019	GOLD	1:30:00 PM	1272.27	1272.32			N/A
4/24/2019	GOLD	3:30:00 PM	1270.84	1270.67			N/A
4/24/2019	HKDJPY	9:30:00 AM	14.26	14.26			N/A
4/24/2019	HKDJPY	11:30:00 AM					N/A
4/24/2019	HKDJPY	1:30:00 PM	14.27	14.27			N/A
4/24/2019	HKDJPY	3:30:00 PM	14.26	14.27			N/A
4/24/2019	HKDJPY.fx	9:30:00 AM	14.251	14.257			N/A
4/24/2019	HKDJPY.fx	11:30:00 AM	14.253	14.261			N/A
4/24/2019	HKDJPY.fx	1:30:00 PM	14.259	14.267			N/A
4/24/2019	HKDJPY.fx	3:30:00 PM	14.254	14.261			N/A
4/24/2019	HUFJPY	9:30:00 AM	0.3906	0.3909			N/A
4/24/2019	HUFJPY	11:30:00 AM	0.3906	0.3909			N/A
4/24/2019	HUFJPY	1:30:00 PM	0.391	0.3913			N/A
4/24/2019	HUFJPY	3:30:00 PM	0.3908	0.3911			N/A
4/24/2019	JP225.i	9:30:00 AM	22149.36	22164.36			N/A
4/24/2019	JP225.i	11:30:00 AM	22174.36	22189.36			N/A

4/24/2019	JP225.i	1:30:00 PM	22229.36	22246.86			N/A
4/24/2019	JP225.i	3:30:00 PM	22199.36	22214.36			N/A
4/24/2019	MXNJPY	9:30:00 AM	5.88	5.9			N/A
4/24/2019	MXNJPY	11:30:00 AM	5.9	5.91			N/A
4/24/2019	MXNJPY	1:30:00 PM					N/A
4/24/2019	MXNJPY	3:30:00 PM	5.89	5.91			N/A
4/24/2019	NASDAQ.i	9:30:00 AM					N/A
4/24/2019	NASDAQ.i	11:30:00 AM					N/A
4/24/2019	NASDAQ.i	1:30:00 PM					N/A
4/24/2019	NASDAQ.i	3:30:00 PM					N/A
4/24/2019	NOKJPY	9:30:00 AM	13.02	13.05			N/A
4/24/2019	NOKJPY	11:30:00 AM					N/A
4/24/2019	NOKJPY	1:30:00 PM	13.02	13.06			N/A
4/24/2019	NOKJPY	3:30:00 PM	13.03	13.06			N/A
4/24/2019	NOKJPY.fx	9:30:00 AM	13.028	13.03			N/A
4/24/2019	NOKJPY.fx	11:30:00 AM	13.038	13.045			N/A
4/24/2019	NOKJPY.fx	1:30:00 PM	13.039	13.045			N/A
4/24/2019	NOKJPY.fx	3:30:00 PM	13.038	13.043			N/A
4/24/2019	NZDCAD	9:30:00 AM	0.89034	0.89093			N/A
4/24/2019	NZDCAD	11:30:00 AM	0.89079	0.89141			N/A
4/24/2019	NZDCAD	1:30:00 PM	0.89015	0.89069			N/A
4/24/2019	NZDCAD	3:30:00 PM	0.88978	0.89045			N/A
4/24/2019	NZDCAD.fx	9:30:00 AM	0.89068	0.8906			N/A
4/24/2019	NZDCAD.fx	11:30:00 AM	0.89113	0.89108			N/A
4/24/2019	NZDCAD.fx	1:30:00 PM	0.89049	0.89033			N/A
4/24/2019	NZDCAD.fx	3:30:00 PM	0.89011	0.8901			N/A
4/24/2019	NZDCHF	9:30:00 AM	0.67483	0.67551			N/A
4/24/2019	NZDCHF	11:30:00 AM	0.6742	0.67488			N/A
4/24/2019	NZDCHF	1:30:00 PM	0.67379	0.6745			N/A
4/24/2019	NZDCHF	3:30:00 PM	0.67358	0.67431			N/A
4/24/2019	NZDCHF.fx	9:30:00 AM	0.67518	0.67515			N/A
4/24/2019	NZDCHF.fx	11:30:00 AM	0.67454	0.67452			N/A
4/24/2019	NZDCHF.fx	1:30:00 PM	0.67414	0.67414			N/A
4/24/2019	NZDCHF.fx	3:30:00 PM	0.67392	0.67394			N/A

4/24/2019	NZDCZK	9:30:00 AM	15.188	15.198			N/A
4/24/2019	NZDCZK	11:30:00 AM	15.187	15.199			N/A
4/24/2019	NZDCZK	1:30:00 PM	15.18	15.19			N/A
4/24/2019	NZDCZK	3:30:00 PM	15.181	15.193			N/A
4/24/2019	NZDDKK	9:30:00 AM	4.408	4.412			N/A
4/24/2019	NZDDKK	11:30:00 AM					N/A
4/24/2019	NZDDKK	1:30:00 PM					N/A
4/24/2019	NZDDKK	3:30:00 PM					N/A
4/24/2019	NZDHKD	9:30:00 AM	5.1876	5.1905			N/A
4/24/2019	NZDHKD	11:30:00 AM	5.1912	5.1941			N/A
4/24/2019	NZDHKD	1:30:00 PM	5.1886	5.1915			N/A
4/24/2019	NZDHKD	3:30:00 PM	5.1888	5.1912			N/A
4/24/2019	NZDHUF	9:30:00 AM	189.43	189.72			N/A
4/24/2019	NZDHUF	11:30:00 AM	189.47	189.76			N/A
4/24/2019	NZDHUF	1:30:00 PM	189.28	189.57			N/A
4/24/2019	NZDHUF	3:30:00 PM	189.37	189.65			N/A
4/24/2019	NZDJPY	9:30:00 AM	73.9	73.968			N/A
4/24/2019	NZDJPY	11:30:00 AM	73.966	74.033			N/A
4/24/2019	NZDJPY	1:30:00 PM	73.963	74.033			N/A
4/24/2019	NZDJPY	3:30:00 PM	73.919	73.99			N/A
4/24/2019	NZDJPY.fx	9:30:00 AM	73.931	73.936			N/A
4/24/2019	NZDJPY.fx	11:30:00 AM	73.999	73.999			N/A
4/24/2019	NZDJPY.fx	1:30:00 PM	73.994	74			N/A
4/24/2019	NZDJPY.fx	3:30:00 PM	73.951	73.958			N/A
4/24/2019	NZDMXN	9:30:00 AM	12.5621	12.5647			N/A
4/24/2019	NZDMXN	11:30:00 AM	12.5538	12.5577			N/A
4/24/2019	NZDMXN	1:30:00 PM	12.54	12.5458			N/A
4/24/2019	NZDMXN	3:30:00 PM	12.544	12.5461			N/A
4/24/2019	NZDNOK	9:30:00 AM	5.6756	5.6787			N/A
4/24/2019	NZDNOK	11:30:00 AM	5.6743	5.678			N/A
4/24/2019	NZDNOK	1:30:00 PM	5.6748	5.6783			N/A
4/24/2019	NZDNOK	3:30:00 PM	5.6716	5.6755			N/A
4/24/2019	NZDPLN	9:30:00 AM	2.5316	2.5329			N/A
4/24/2019	NZDPLN	11:30:00 AM	2.5314	2.5329			N/A

4/24/2019	NZDPLN	1:30:00 PM	2.5319	2.5333			N/A
4/24/2019	NZDPLN	3:30:00 PM	2.5329	2.5342			N/A
4/24/2019	NZDSEK	9:30:00 AM	6.2045	6.2102			N/A
4/24/2019	NZDSEK	11:30:00 AM	6.198	6.2041			N/A
4/24/2019	NZDSEK	1:30:00 PM	6.1953	6.2011			N/A
4/24/2019	NZDSEK	3:30:00 PM	6.1991	6.2058			N/A
4/24/2019	NZDSGD	9:30:00 AM	0.8998	0.9005			N/A
4/24/2019	NZDSGD	11:30:00 AM	0.8997	0.9003			N/A
4/24/2019	NZDSGD	1:30:00 PM	0.8995	0.9			N/A
4/24/2019	NZDSGD	3:30:00 PM	0.8995	0.9001			N/A
4/24/2019	NZDSGD.fx	9:30:00 AM	0.89978	0.90037			N/A
4/24/2019	NZDSGD.fx	11:30:00 AM	0.89968	0.9002			N/A
4/24/2019	NZDSGD.fx	1:30:00 PM	0.89955	0.90011			N/A
4/24/2019	NZDSGD.fx	3:30:00 PM	0.89942	0.90001			N/A
4/24/2019	NZDUSD	9:30:00 AM	0.66192	0.66205			N/A
4/24/2019	NZDUSD	11:30:00 AM	0.66219	0.66226			N/A
4/24/2019	NZDUSD	1:30:00 PM	0.66195	0.66206			N/A
4/24/2019	NZDUSD	3:30:00 PM	0.66177	0.66189			N/A
4/24/2019	NZDUSD.fx	9:30:00 AM	0.66199	0.66205			N/A
4/24/2019	NZDUSD.fx	11:30:00 AM	0.66227	0.66226			N/A
4/24/2019	NZDUSD.fx	1:30:00 PM	0.66202	0.66208			N/A
4/24/2019	NZDUSD.fx	3:30:00 PM	0.66185	0.6619			N/A
4/24/2019	NZDZAR	9:30:00 AM	9.5019	9.5197			N/A
4/24/2019	NZDZAR	11:30:00 AM	9.4884	9.5026			N/A
4/24/2019	NZDZAR	1:30:00 PM	9.4853	9.5024			N/A
4/24/2019	NZDZAR	3:30:00 PM	9.5016	9.5171			N/A
4/24/2019	SEKJPY	9:30:00 AM	11.91	11.93			N/A
4/24/2019	SEKJPY	11:30:00 AM	11.94	11.95			N/A
4/24/2019	SEKJPY	1:30:00 PM	11.94	11.95			N/A
4/24/2019	SEKJPY	3:30:00 PM	11.93	11.94			N/A
4/24/2019	SEKJPY.fx	9:30:00 AM	11.907	11.923			N/A
4/24/2019	SEKJPY.fx	11:30:00 AM	11.93	11.948			N/A
4/24/2019	SEKJPY.fx	1:30:00 PM	11.934	11.95			N/A
4/24/2019	SEKJPY.fx	3:30:00 PM	11.92	11.936			N/A

4/24/2019	SGDJPY	9:30:00 AM	82.17	82.2			N/A
4/24/2019	SGDJPY	11:30:00 AM	82.3	82.29			N/A
4/24/2019	SGDJPY	1:30:00 PM	82.32	82.3			N/A
4/24/2019	SGDJPY	3:30:00 PM	82.25	82.25			N/A
4/24/2019	SILVER	9:30:00 AM	14.61	15			N/A
4/24/2019	SILVER	11:30:00 AM	14.66	15.05			N/A
4/24/2019	SILVER	1:30:00 PM	14.64	15.01			N/A
4/24/2019	SILVER	3:30:00 PM	14.65	15.01			N/A
4/24/2019	SPX500.i	9:30:00 AM	2931.79	2932.84			N/A
4/24/2019	SPX500.i	11:30:00 AM	2932.04	2933.09			N/A
4/24/2019	SPX500.i	1:30:00 PM	2936.54	2937.34			N/A
4/24/2019	SPX500.i	3:30:00 PM	2936.54	2937.59			N/A
4/24/2019	UK100.i	9:30:00 AM	7519.08	7521.33			N/A
4/24/2019	UK100.i	11:30:00 AM	7498.83	7500.58			N/A
4/24/2019	UK100.i	1:30:00 PM	7512.58	7514			N/A
4/24/2019	UK100.i	3:30:00 PM	7490.33	7491.08			N/A
4/24/2019	USDCAD	9:30:00 AM	1.3455	1.34547			N/A
4/24/2019	USDCAD	11:30:00 AM	1.34561	1.34567			N/A
4/24/2019	USDCAD	1:30:00 PM	1.34515	1.34505			N/A
4/24/2019	USDCAD	3:30:00 PM	1.34497	1.34498			N/A
4/24/2019	USDCAD.fx	9:30:00 AM	1.34552	1.34543			N/A
4/24/2019	USDCAD.fx	11:30:00 AM	1.34563	1.34564			N/A
4/24/2019	USDCAD.fx	1:30:00 PM	1.34518	1.34501			N/A
4/24/2019	USDCAD.fx	3:30:00 PM	1.345	1.34494			N/A
4/24/2019	USDCHF	9:30:00 AM	1.02015	1.02018			N/A
4/24/2019	USDCHF	11:30:00 AM	1.01876	1.01885			N/A
4/24/2019	USDCHF	1:30:00 PM	1.01855	1.01859			N/A
4/24/2019	USDCHF	3:30:00 PM	1.01846	1.01862			N/A
4/24/2019	USDCHF.fx	9:30:00 AM	1.0202	1.02012			N/A
4/24/2019	USDCHF.fx	11:30:00 AM	1.01881	1.01877			N/A
4/24/2019	USDCHF.fx	1:30:00 PM	1.0186	1.01852			N/A
4/24/2019	USDCHF.fx	3:30:00 PM	1.01852	1.01856			N/A
4/24/2019	USDCZK	9:30:00 AM	22.96	22.979			N/A
4/24/2019	USDCZK	11:30:00 AM	22.949	22.97			N/A

4/24/2019	USDCZK	1:30:00 PM	22.943	22.964			N/A
4/24/2019	USDCZK	3:30:00 PM	22.954	22.975			N/A
4/24/2019	USDCZK.fx	9:30:00 AM	22.9702	22.9699			N/A
4/24/2019	USDCZK.fx	11:30:00 AM	22.957	22.9613			N/A
4/24/2019	USDCZK.fx	1:30:00 PM	22.953	22.9542			N/A
4/24/2019	USDCZK.fx	3:30:00 PM	22.9626	22.966			N/A
4/24/2019	USDDKK	9:30:00 AM	6.6613	6.6644			N/A
4/24/2019	USDDKK	11:30:00 AM	6.6561	6.6595			N/A
4/24/2019	USDDKK	1:30:00 PM	6.6586	6.6623			N/A
4/24/2019	USDDKK	3:30:00 PM	6.662	6.6656			N/A
4/24/2019	USDDKK.fx	9:30:00 AM	6.66182	6.66232			N/A
4/24/2019	USDDKK.fx	11:30:00 AM	6.6567	6.65753			N/A
4/24/2019	USDDKK.fx	1:30:00 PM	6.65908	6.65992			N/A
4/24/2019	USDDKK.fx	3:30:00 PM	6.66247	6.66353			N/A
4/24/2019	USDHKD	9:30:00 AM	7.8405	7.8407			N/A
4/24/2019	USDHKD	11:30:00 AM	7.8425	7.8428			N/A
4/24/2019	USDHKD	1:30:00 PM	7.8416	7.8417			N/A
4/24/2019	USDHKD	3:30:00 PM	7.8426	7.843			N/A
4/24/2019	USDHKD.fx	9:30:00 AM	7.84044	7.84094			N/A
4/24/2019	USDHKD.fx	11:30:00 AM	7.84252	7.84301			N/A
4/24/2019	USDHKD.fx	1:30:00 PM	7.84163	7.84221			N/A
4/24/2019	USDHKD.fx	3:30:00 PM	7.84255	7.8431			N/A
4/24/2019	USDHUF	9:30:00 AM	286.28	286.72			N/A
4/24/2019	USDHUF	11:30:00 AM	286.22	286.67			N/A
4/24/2019	USDHUF	1:30:00 PM	286.03	286.47			N/A
4/24/2019	USDHUF	3:30:00 PM	286.23	286.7			N/A
4/24/2019	USDHUF.fx	9:30:00 AM	286.485	286.515			N/A
4/24/2019	USDHUF.fx	11:30:00 AM	286.423	286.457			N/A
4/24/2019	USDHUF.fx	1:30:00 PM	286.234	286.267			N/A
4/24/2019	USDHUF.fx	3:30:00 PM	286.445	286.487			N/A
4/24/2019	USDINR	9:30:00 AM	64.94	74.93			N/A
4/24/2019	USDINR	11:30:00 AM	64.86	74.85			N/A
4/24/2019	USDINR	1:30:00 PM					N/A
4/24/2019	USDINR	3:30:00 PM					N/A

4/24/2019	USDJPY	9:30:00 AM	111.769	111.769			N/A
4/24/2019	USDJPY	11:30:00 AM	111.814	111.832			N/A
4/24/2019	USDJPY	1:30:00 PM	111.856	111.864			N/A
4/24/2019	USDJPY	3:30:00 PM	111.817	111.832			N/A
4/24/2019	USDJPY.fx	9:30:00 AM	111.775	111.762			N/A
4/24/2019	USDJPY.fx	11:30:00 AM	111.821	111.825			N/A
4/24/2019	USDJPY.fx	1:30:00 PM	111.862	111.857			N/A
4/24/2019	USDJPY.fx	3:30:00 PM	111.823	111.824			N/A
4/24/2019	USDMXN	9:30:00 AM	18.983	18.985			N/A
4/24/2019	USDMXN	11:30:00 AM	18.963	18.967			N/A
4/24/2019	USDMXN	1:30:00 PM	18.949	18.957			N/A
4/24/2019	USDMXN	3:30:00 PM	18.959	18.96			N/A
4/24/2019	USDMXN.fx	9:30:00 AM	18.9873	18.9818			N/A
4/24/2019	USDMXN.fx	11:30:00 AM	18.9663	18.9636			N/A
4/24/2019	USDMXN.fx	1:30:00 PM	18.9521	18.9532			N/A
4/24/2019	USDMXN.fx	3:30:00 PM	18.9626	18.9563			N/A
4/24/2019	USDNOK	9:30:00 AM	8.5757	8.5823			N/A
4/24/2019	USDNOK	11:30:00 AM	8.5705	8.5787			N/A
4/24/2019	USDNOK	1:30:00 PM	8.5738	8.5807			N/A
4/24/2019	USDNOK	3:30:00 PM	8.5718	8.5792			N/A
4/24/2019	USDNOK.fx	9:30:00 AM	8.57977	8.57796			N/A
4/24/2019	USDNOK.fx	11:30:00 AM	8.5746	8.57426			N/A
4/24/2019	USDNOK.fx	1:30:00 PM	8.57776	8.57629			N/A
4/24/2019	USDNOK.fx	3:30:00 PM	8.5758	8.5748			N/A
4/24/2019	USDPLN	9:30:00 AM	3.8256	3.8266			N/A
4/24/2019	USDPLN	11:30:00 AM	3.8235	3.8245			N/A
4/24/2019	USDPLN	1:30:00 PM	3.8258	3.8269			N/A
4/24/2019	USDPLN	3:30:00 PM	3.8276	3.8287			N/A
4/24/2019	USDPLN.fx	9:30:00 AM	3.82481	3.82741			N/A
4/24/2019	USDPLN.fx	11:30:00 AM	3.82268	3.8254			N/A
4/24/2019	USDPLN.fx	1:30:00 PM	3.82499	3.82771			N/A
4/24/2019	USDPLN.fx	3:30:00 PM	3.82677	3.82953			N/A
4/24/2019	USDRUB	9:30:00 AM					N/A
4/24/2019	USDRUB	11:30:00 AM	63.8	64.193			N/A

4/24/2019	USDRUB	1:30:00 PM	63.858	64.248			N/A
4/24/2019	USDRUB	3:30:00 PM	64.034	64.41			N/A
4/24/2019	USDSEK	9:30:00 AM	9.3781	9.3808			N/A
4/24/2019	USDSEK	11:30:00 AM	9.364	9.3667			N/A
4/24/2019	USDSEK	1:30:00 PM	9.3652	9.368			N/A
4/24/2019	USDSEK	3:30:00 PM	9.373	9.3756			N/A
4/24/2019	USDSEK.fx	9:30:00 AM	9.38056	9.37899			N/A
4/24/2019	USDSEK.fx	11:30:00 AM	9.36652	9.36496			N/A
4/24/2019	USDSEK.fx	1:30:00 PM	9.36775	9.3661			N/A
4/24/2019	USDSEK.fx	3:30:00 PM	9.37552	9.37358			N/A
4/24/2019	USDSGD	9:30:00 AM	1.3595	1.3595			N/A
4/24/2019	USDSGD	11:30:00 AM	1.3587	1.3591			N/A
4/24/2019	USDSGD	1:30:00 PM	1.3591	1.3595			N/A
4/24/2019	USDSGD	3:30:00 PM	1.3593	1.3597			N/A
4/24/2019	USDSGD.fx	9:30:00 AM	1.35941	1.35987			N/A
4/24/2019	USDSGD.fx	11:30:00 AM	1.35869	1.35908			N/A
4/24/2019	USDSGD.fx	1:30:00 PM	1.35898	1.35947			N/A
4/24/2019	USDSGD.fx	3:30:00 PM	1.3592	1.35969			N/A
4/24/2019	USDZAR	9:30:00 AM	14.3666	14.383			N/A
4/24/2019	USDZAR	11:30:00 AM	14.3355	14.3522			N/A
4/24/2019	USDZAR	1:30:00 PM	14.3389	14.3574			N/A
4/24/2019	USDZAR	3:30:00 PM	14.3688	14.3833			N/A
4/24/2019	USDZAR.fx	9:30:00 AM	14.37155	14.37775			N/A
4/24/2019	USDZAR.fx	11:30:00 AM	14.34137	14.34612			N/A
4/24/2019	USDZAR.fx	1:30:00 PM	14.34487	14.35062			N/A
4/24/2019	USDZAR.fx	3:30:00 PM	14.37528	14.37673			N/A
4/24/2019	XAUUSD	9:30:00 AM	1270.08	1270.29			N/A
4/24/2019	XAUUSD	11:30:00 AM	1273.53	1273.62			N/A
4/24/2019	XAUUSD	1:30:00 PM	1272.28	1272.32			N/A
4/24/2019	XAUUSD	3:30:00 PM	1270.84	1270.67			N/A
4/24/2019	ZARJPY	9:30:00 AM	7.75	7.78			N/A
4/24/2019	ZARJPY	11:30:00 AM	7.78	7.8			N/A
4/24/2019	ZARJPY	1:30:00 PM	7.77	7.81			N/A
4/24/2019	ZARJPY	3:30:00 PM	7.75	7.79			N/A



4/24/2019	ZARJPY.fx	9:30:00 AM	7.773	7.777			N/A
4/24/2019	ZARJPY.fx	11:30:00 AM	7.795	7.798			N/A
4/24/2019	ZARJPY.fx	1:30:00 PM	7.793	7.798			N/A
4/24/2019	ZARJPY.fx	3:30:00 PM	7.777	7.779			N/A
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4/25/2019	#AA	11:30:00 AM					N/A
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4/25/2019	#AA	3:30:00 PM					N/A
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4/25/2019	#AABA	3:30:00 PM					N/A
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4/25/2019	#AAL	11:30:00 AM					N/A
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4/25/2019	#AAL	3:30:00 PM	33.23	34.12			N/A
4/25/2019	#AAPL	9:30:00 AM					N/A
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4/25/2019	#AMZN	9:30:00 AM					N/A
4/25/2019	#AMZN	11:30:00 AM					N/A

4/25/2019	#AMZN	1:30:00 PM					N/A
4/25/2019	#AMZN	3:30:00 PM					N/A
4/25/2019	#AXP	9:30:00 AM					N/A
4/25/2019	#AXP	11:30:00 AM					N/A
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4/25/2019	#Bitcoin	9:30:00 AM	5407.71	5437.71			N/A
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4/25/2019	#Bitcoin	1:30:00 PM	5455.71	5490.71			N/A
4/25/2019	#Bitcoin	3:30:00 PM	5469.11	5503.81			N/A

4/25/2019	#BK	9:30:00 AM					N/A
4/25/2019	#BK	11:30:00 AM					N/A
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4/25/2019	#CHL	3:30:00 PM					N/A
4/25/2019	#CL.f	9:30:00 AM	65.877	65.937			N/A
4/25/2019	#CL.f	11:30:00 AM	66.089	66.097			N/A
4/25/2019	#CL.f	1:30:00 PM	66.155	66.184			N/A
4/25/2019	#CL.f	3:30:00 PM	66.021	66.051			N/A
4/25/2019	#CMCSA	9:30:00 AM					N/A
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4/25/2019	#Ethereum	9:30:00 AM	162.66	164.49			N/A
4/25/2019	#Ethereum	11:30:00 AM	162.9	164.89			N/A
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4/25/2019	#F	9:30:00 AM					N/A
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4/25/2019	AUDNOK.fx	11:30:00 AM	6.0905	6.0848			N/A
4/25/2019	AUDNOK.fx	1:30:00 PM	6.0772	6.079			N/A
4/25/2019	AUDNOK.fx	3:30:00 PM	6.0824	6.0815			N/A
4/25/2019	AUDNZD	9:30:00 AM	1.06358	1.06444			N/A
4/25/2019	AUDNZD	11:30:00 AM	1.06269	1.06344			N/A
4/25/2019	AUDNZD	1:30:00 PM	1.06194	1.06283			N/A
4/25/2019	AUDNZD	3:30:00 PM	1.06078	1.06124			N/A
4/25/2019	AUDNZD.fx	9:30:00 AM	1.06404	1.06397			N/A
4/25/2019	AUDNZD.fx	11:30:00 AM	1.06314	1.06296			N/A
4/25/2019	AUDNZD.fx	1:30:00 PM	1.06237	1.06237			N/A
4/25/2019	AUDNZD.fx	3:30:00 PM	1.06119	1.06079			N/A
4/25/2019	AUDPLN	9:30:00 AM	2.7002	2.7035			N/A
4/25/2019	AUDPLN	11:30:00 AM	2.7013	2.7031			N/A

4/25/2019	AUDPLN	1:30:00 PM	2.6988	2.7019			N/A
4/25/2019	AUDPLN	3:30:00 PM	2.6995	2.7015			N/A
4/25/2019	AUDSEK	9:30:00 AM	6.6117	6.6138			N/A
4/25/2019	AUDSEK	11:30:00 AM	6.6976	6.6939			N/A
4/25/2019	AUDSEK	1:30:00 PM	6.6951	6.6959			N/A
4/25/2019	AUDSEK	3:30:00 PM	6.6856	6.6834			N/A
4/25/2019	AUDSEK.fx	9:30:00 AM	6.6071	6.6182			N/A
4/25/2019	AUDSEK.fx	11:30:00 AM	6.6929	6.6984			N/A
4/25/2019	AUDSEK.fx	1:30:00 PM	6.6907	6.7003			N/A
4/25/2019	AUDSEK.fx	3:30:00 PM	6.6812	6.6878			N/A
4/25/2019	AUDSGD	9:30:00 AM	0.956	0.9561			N/A
4/25/2019	AUDSGD	11:30:00 AM	0.9559	0.9556			N/A
4/25/2019	AUDSGD	1:30:00 PM	0.955	0.9552			N/A
4/25/2019	AUDSGD	3:30:00 PM	0.9546	0.9547			N/A
4/25/2019	AUDSGD.fx	9:30:00 AM	0.95605	0.95601			N/A
4/25/2019	AUDSGD.fx	11:30:00 AM	0.95599	0.95552			N/A
4/25/2019	AUDSGD.fx	1:30:00 PM	0.95511	0.95513			N/A
4/25/2019	AUDSGD.fx	3:30:00 PM	0.95468	0.95457			N/A
4/25/2019	AUDUSD	9:30:00 AM	0.70155	0.7016			N/A
4/25/2019	AUDUSD	11:30:00 AM	0.70078	0.70033			N/A
4/25/2019	AUDUSD	1:30:00 PM	0.7001	0.70011			N/A
4/25/2019	AUDUSD	3:30:00 PM	0.69922	0.69906			N/A
4/25/2019	AUDUSD.fx	9:30:00 AM	0.70159	0.70154			N/A
4/25/2019	AUDUSD.fx	11:30:00 AM	0.70085	0.70027			N/A
4/25/2019	AUDUSD.fx	1:30:00 PM	0.70016	0.70006			N/A
4/25/2019	AUDUSD.fx	3:30:00 PM	0.69924	0.69903			N/A
4/25/2019	AUDZAR	9:30:00 AM	10.1219	10.1348			N/A
4/25/2019	AUDZAR	11:30:00 AM	10.14	10.1488			N/A
4/25/2019	AUDZAR	1:30:00 PM	10.1614	10.174			N/A
4/25/2019	AUDZAR	3:30:00 PM	10.1558	10.1676			N/A
4/25/2019	AUS200.i	9:30:00 AM					N/A
4/25/2019	AUS200.i	11:30:00 AM	6384.22	6387.62			N/A
4/25/2019	AUS200.i	1:30:00 PM	6391.62	6394.62			N/A
4/25/2019	AUS200.i	3:30:00 PM	6393.42	6396.62			N/A



4/25/2019	BCHUSD	9:30:00 AM	282.11	283.92			N/A
4/25/2019	BCHUSD	11:30:00 AM	285.33	287.13			N/A
4/25/2019	BCHUSD	1:30:00 PM	288.97	289.95			N/A
4/25/2019	BCHUSD	3:30:00 PM	287.82	289.79			N/A
4/25/2019	CADCHF	9:30:00 AM	0.75651	0.75713			N/A
4/25/2019	CADCHF	11:30:00 AM	0.75579	0.75643			N/A
4/25/2019	CADCHF	1:30:00 PM	0.75612	0.75676			N/A
4/25/2019	CADCHF	3:30:00 PM	0.75651	0.75667			N/A
4/25/2019	CADCHF.fx	9:30:00 AM	0.75686	0.75676			N/A
4/25/2019	CADCHF.fx	11:30:00 AM	0.75613	0.75607			N/A
4/25/2019	CADCHF.fx	1:30:00 PM	0.75645	0.75639			N/A
4/25/2019	CADCHF.fx	3:30:00 PM	0.75682	0.75633			N/A
4/25/2019	CADCZK	9:30:00 AM	17.089	17.104			N/A
4/25/2019	CADCZK	11:30:00 AM	17.097	17.112			N/A
4/25/2019	CADCZK	1:30:00 PM	17.092	17.106			N/A
4/25/2019	CADCZK	3:30:00 PM	17.116	17.125			N/A
4/25/2019	CADDDKK	9:30:00 AM	4.962	4.966			N/A
4/25/2019	CADDDKK	11:30:00 AM	4.961	4.965			N/A
4/25/2019	CADDDKK	1:30:00 PM	4.961	4.964			N/A
4/25/2019	CADDDKK	3:30:00 PM	4.968	4.971			N/A
4/25/2019	CADHKD	9:30:00 AM	5.8116	5.8153			N/A
4/25/2019	CADHKD	11:30:00 AM	5.8057	5.8085			N/A
4/25/2019	CADHKD	1:30:00 PM	5.8039	5.8072			N/A
4/25/2019	CADHKD	3:30:00 PM	5.8047	5.8078			N/A
4/25/2019	CADHUF	9:30:00 AM	213.68	213.81			N/A
4/25/2019	CADHUF	11:30:00 AM	214.04	214.19			N/A
4/25/2019	CADHUF	1:30:00 PM	214.03	214.16			N/A
4/25/2019	CADHUF	3:30:00 PM	214.39	214.49			N/A
4/25/2019	CADJPY	9:30:00 AM	82.961	83.021			N/A
4/25/2019	CADJPY	11:30:00 AM	82.83	82.898			N/A
4/25/2019	CADJPY	1:30:00 PM	82.783	82.853			N/A
4/25/2019	CADJPY	3:30:00 PM	82.818	82.862			N/A
4/25/2019	CADJPY.fx	9:30:00 AM	82.995	82.986			N/A
4/25/2019	CADJPY.fx	11:30:00 AM	82.863	82.863			N/A

4/25/2019	CADJPY.fx	1:30:00 PM	82.816	82.819			N/A
4/25/2019	CADJPY.fx	3:30:00 PM	82.848	82.828			N/A
4/25/2019	CADMXN	9:30:00 AM	14.1354	14.147			N/A
4/25/2019	CADMXN	11:30:00 AM	14.1434	14.1526			N/A
4/25/2019	CADMXN	1:30:00 PM	14.1473	14.1572			N/A
4/25/2019	CADMXN	3:30:00 PM	14.1974	14.2057			N/A
4/25/2019	CADNOK	9:30:00 AM	6.4026	6.4072			N/A
4/25/2019	CADNOK	11:30:00 AM	6.4308	6.4311			N/A
4/25/2019	CADNOK	1:30:00 PM	6.4234	6.427			N/A
4/25/2019	CADNOK	3:30:00 PM	6.4371	6.4374			N/A
4/25/2019	CADPLN	9:30:00 AM	2.8533	2.8551			N/A
4/25/2019	CADPLN	11:30:00 AM	2.8545	2.8564			N/A
4/25/2019	CADPLN	1:30:00 PM	2.8541	2.8555			N/A
4/25/2019	CADPLN	3:30:00 PM	2.8586	2.8596			N/A
4/25/2019	CADSEK	9:30:00 AM	6.9843	6.9865			N/A
4/25/2019	CADSEK	11:30:00 AM	7.0754	7.0767			N/A
4/25/2019	CADSEK	1:30:00 PM	7.0774	7.0777			N/A
4/25/2019	CADSEK	3:30:00 PM	7.0785	7.0768			N/A
4/25/2019	CADSGD	9:30:00 AM	1.0094	1.0096			N/A
4/25/2019	CADSGD	11:30:00 AM	1.0095	1.0098			N/A
4/25/2019	CADSGD	1:30:00 PM	1.0091	1.0094			N/A
4/25/2019	CADSGD	3:30:00 PM	1.0104	1.0107			N/A
4/25/2019	CADZAR	9:30:00 AM	10.6954	10.7114			N/A
4/25/2019	CADZAR	11:30:00 AM	10.7182	10.7315			N/A
4/25/2019	CADZAR	1:30:00 PM	10.7445	10.7594			N/A
4/25/2019	CADZAR	3:30:00 PM	10.7547	10.7711			N/A
4/25/2019	CHFCZK	9:30:00 AM	22.584	22.601			N/A
4/25/2019	CHFCZK	11:30:00 AM	22.617	22.632			N/A
4/25/2019	CHFCZK	1:30:00 PM	22.6	22.616			N/A
4/25/2019	CHFCZK	3:30:00 PM	22.621	22.633			N/A
4/25/2019	CHFDKK	9:30:00 AM	6.556	6.559			N/A
4/25/2019	CHFDKK	11:30:00 AM	6.564	6.566			N/A
4/25/2019	CHFDKK	1:30:00 PM	6.559	6.562			N/A
4/25/2019	CHFDKK	3:30:00 PM	6.568	6.569			N/A

4/25/2019	CHFDKK.fx	9:30:00 AM	6.5545	6.5607			N/A
4/25/2019	CHFDKK.fx	11:30:00 AM	6.5629	6.5686			N/A
4/25/2019	CHFDKK.fx	1:30:00 PM	6.5577	6.5636			N/A
4/25/2019	CHFDKK.fx	3:30:00 PM	6.5664	6.5712			N/A
4/25/2019	CHFHKD	9:30:00 AM	7.6813	7.6836			N/A
4/25/2019	CHFHKD	11:30:00 AM	7.6801	7.6824			N/A
4/25/2019	CHFHKD	1:30:00 PM	7.6745	7.6771			N/A
4/25/2019	CHFHKD	3:30:00 PM	7.6733	7.6745			N/A
4/25/2019	CHFHUF	9:30:00 AM	282.32	282.63			N/A
4/25/2019	CHFHUF	11:30:00 AM	283.02	283.4			N/A
4/25/2019	CHFHUF	1:30:00 PM	282.88	283.26			N/A
4/25/2019	CHFHUF	3:30:00 PM	283.3	283.59			N/A
4/25/2019	CHFJPY	9:30:00 AM	109.692	109.75			N/A
4/25/2019	CHFJPY	11:30:00 AM	109.626	109.684			N/A
4/25/2019	CHFJPY	1:30:00 PM	109.522	109.581			N/A
4/25/2019	CHFJPY	3:30:00 PM	109.536	109.552			N/A
4/25/2019	CHFJPY.fx	9:30:00 AM	109.724	109.716			N/A
4/25/2019	CHFJPY.fx	11:30:00 AM	109.659	109.65			N/A
4/25/2019	CHFJPY.fx	1:30:00 PM	109.555	109.547			N/A
4/25/2019	CHFJPY.fx	3:30:00 PM	109.569	109.52			N/A
4/25/2019	CHFMXN	9:30:00 AM	18.6787	18.695			N/A
4/25/2019	CHFMXN	11:30:00 AM	18.7071	18.7204			N/A
4/25/2019	CHFMXN	1:30:00 PM	18.7054	18.7197			N/A
4/25/2019	CHFMXN	3:30:00 PM	18.7661	18.7756			N/A
4/25/2019	CHFNOK	9:30:00 AM	8.4619	8.4688			N/A
4/25/2019	CHFNOK	11:30:00 AM	8.5103	8.5119			N/A
4/25/2019	CHFNOK	1:30:00 PM	8.4929	8.5003			N/A
4/25/2019	CHFNOK	3:30:00 PM	8.511	8.5154			N/A
4/25/2019	CHFNOK.fx	9:30:00 AM	8.46529	8.46531			N/A
4/25/2019	CHFNOK.fx	11:30:00 AM	8.5137	8.50836			N/A
4/25/2019	CHFNOK.fx	1:30:00 PM	8.49637	8.49682			N/A
4/25/2019	CHFNOK.fx	3:30:00 PM	8.51449	8.51224			N/A
4/25/2019	CHFPLN	9:30:00 AM	3.7708	3.7734			N/A
4/25/2019	CHFPLN	11:30:00 AM	3.7765	3.7793			N/A

4/25/2019	CHFPLN	1:30:00 PM	3.7733	3.7762			N/A
4/25/2019	CHFPLN	3:30:00 PM	3.7791	3.7796			N/A
4/25/2019	CHFPLN.fx	9:30:00 AM	3.76846	3.77571			N/A
4/25/2019	CHFPLN.fx	11:30:00 AM	3.77406	3.78161			N/A
4/25/2019	CHFPLN.fx	1:30:00 PM	3.77104	3.77853			N/A
4/25/2019	CHFPLN.fx	3:30:00 PM	3.77671	3.78294			N/A
4/25/2019	CHFSEK	9:30:00 AM	9.2289	9.2335			N/A
4/25/2019	CHFSEK	11:30:00 AM	9.3595	9.3597			N/A
4/25/2019	CHFSEK	1:30:00 PM	9.3568	9.3581			N/A
4/25/2019	CHFSEK	3:30:00 PM	9.3533	9.3549			N/A
4/25/2019	CHFSGD	9:30:00 AM	1.3347	1.3349			N/A
4/25/2019	CHFSGD	11:30:00 AM	1.3361	1.3364			N/A
4/25/2019	CHFSGD	1:30:00 PM	1.3349	1.3353			N/A
4/25/2019	CHFSGD	3:30:00 PM	1.3364	1.3362			N/A
4/25/2019	CHFSGD.fx	9:30:00 AM	1.33498	1.33467			N/A
4/25/2019	CHFSGD.fx	11:30:00 AM	1.33626	1.33619			N/A
4/25/2019	CHFSGD.fx	1:30:00 PM	1.33512	1.33507			N/A
4/25/2019	CHFSGD.fx	3:30:00 PM	1.33653	1.33608			N/A
4/25/2019	CHFZAR	9:30:00 AM	14.1397	14.1492			N/A
4/25/2019	CHFZAR	11:30:00 AM	14.1799	14.1901			N/A
4/25/2019	CHFZAR	1:30:00 PM	14.2099	14.2219			N/A
4/25/2019	CHFZAR	3:30:00 PM	14.2217	14.2297			N/A
4/25/2019	CZKJPY	9:30:00 AM					N/A
4/25/2019	CZKJPY	11:30:00 AM	4.842	4.846			N/A
4/25/2019	CZKJPY	1:30:00 PM	4.842	4.845			N/A
4/25/2019	CZKJPY	3:30:00 PM	4.836	4.84			N/A
4/25/2019	DAX30.i	9:30:00 AM	12330.86	12330.61			N/A
4/25/2019	DAX30.i	11:30:00 AM	12307.36	12308.11			N/A
4/25/2019	DAX30.i	1:30:00 PM	12326.61	12327.11			N/A
4/25/2019	DAX30.i	3:30:00 PM	12319.86	12317.11			N/A
4/25/2019	DJ30.i	9:30:00 AM					N/A
4/25/2019	DJ30.i	11:30:00 AM					N/A
4/25/2019	DJ30.i	1:30:00 PM					N/A
4/25/2019	DJ30.i	3:30:00 PM					N/A

4/25/2019	DKKJPY	9:30:00 AM					N/A
4/25/2019	DKKJPY	11:30:00 AM	16.7	16.72			N/A
4/25/2019	DKKJPY	1:30:00 PM					N/A
4/25/2019	DKKJPY	3:30:00 PM					N/A
4/25/2019	EURAUD	9:30:00 AM	1.58902	1.58935			N/A
4/25/2019	EURAUD	11:30:00 AM	1.5896	1.58898			N/A
4/25/2019	EURAUD	1:30:00 PM	1.58996	1.59035			N/A
4/25/2019	EURAUD	3:30:00 PM	1.5907	1.59003			N/A
4/25/2019	EURAUD.fx	9:30:00 AM	1.58923	1.58913			N/A
4/25/2019	EURAUD.fx	11:30:00 AM	1.58982	1.58876			N/A
4/25/2019	EURAUD.fx	1:30:00 PM	1.59018	1.59014			N/A
4/25/2019	EURAUD.fx	3:30:00 PM	1.5909	1.58981			N/A
4/25/2019	EURCAD	9:30:00 AM	1.50414	1.50481			N/A
4/25/2019	EURCAD	11:30:00 AM	1.50363	1.50439			N/A
4/25/2019	EURCAD	1:30:00 PM	1.5041	1.50479			N/A
4/25/2019	EURCAD	3:30:00 PM	1.50229	1.5022			N/A
4/25/2019	EURCAD.fx	9:30:00 AM	1.50458	1.50437			N/A
4/25/2019	EURCAD.fx	11:30:00 AM	1.50404	1.50398			N/A
4/25/2019	EURCAD.fx	1:30:00 PM	1.50454	1.50435			N/A
4/25/2019	EURCAD.fx	3:30:00 PM	1.5027	1.50177			N/A
4/25/2019	EURCHF	9:30:00 AM	1.13857	1.13868			N/A
4/25/2019	EURCHF	11:30:00 AM	1.13717	1.13723			N/A
4/25/2019	EURCHF	1:30:00 PM	1.13798	1.13807			N/A
4/25/2019	EURCHF	3:30:00 PM	1.13676	1.1366			N/A
4/25/2019	EURCHF.fx	9:30:00 AM	1.13863	1.13863			N/A
4/25/2019	EURCHF.fx	11:30:00 AM	1.13723	1.13715			N/A
4/25/2019	EURCHF.fx	1:30:00 PM	1.13803	1.138			N/A
4/25/2019	EURCHF.fx	3:30:00 PM	1.13676	1.13655			N/A
4/25/2019	EURCZK	9:30:00 AM	25.701	25.741			N/A
4/25/2019	EURCZK	11:30:00 AM	25.705	25.743			N/A
4/25/2019	EURCZK	1:30:00 PM	25.705	25.744			N/A
4/25/2019	EURCZK	3:30:00 PM	25.696	25.735			N/A
4/25/2019	EURDKK	9:30:00 AM	7.4661	7.4673			N/A
4/25/2019	EURDKK	11:30:00 AM					N/A

4/25/2019	EURDKK	1:30:00 PM	7.4653	7.4665			N/A
4/25/2019	EURDKK	3:30:00 PM	7.4644	7.465			N/A
4/25/2019	EURGBP	9:30:00 AM	0.86455	0.86459			N/A
4/25/2019	EURGBP	11:30:00 AM	0.86425	0.86425			N/A
4/25/2019	EURGBP	1:30:00 PM	0.86501	0.8649	5000	5000	N/A
4/25/2019	EURGBP	3:30:00 PM	0.86422	0.86408			N/A
4/25/2019	EURGBP.fx	9:30:00 AM	0.86458	0.86454			N/A
4/25/2019	EURGBP.fx	11:30:00 AM	0.86429	0.86421			N/A
4/25/2019	EURGBP.fx	1:30:00 PM	0.86504	0.86485			N/A
4/25/2019	EURGBP.fx	3:30:00 PM	0.86415	0.86404			N/A
4/25/2019	EURHKD	9:30:00 AM	8.7452	8.7487			N/A
4/25/2019	EURHKD	11:30:00 AM	8.7349	8.7381			N/A
4/25/2019	EURHKD	1:30:00 PM	8.7338	8.7374			N/A
4/25/2019	EURHKD	3:30:00 PM	8.7232	8.7237			N/A
4/25/2019	EURHKD.fx	9:30:00 AM	8.74804	8.74586			N/A
4/25/2019	EURHKD.fx	11:30:00 AM	8.73773	8.73519			N/A
4/25/2019	EURHKD.fx	1:30:00 PM	8.73653	8.73461			N/A
4/25/2019	EURHKD.fx	3:30:00 PM	8.72595	8.72127			N/A
4/25/2019	EURHUF	9:30:00 AM	321.41	322.03			N/A
4/25/2019	EURHUF	11:30:00 AM	321.95	322.41			N/A
4/25/2019	EURHUF	1:30:00 PM	321.83	322.47			N/A
4/25/2019	EURHUF	3:30:00 PM	322.1	322.75			N/A
4/25/2019	EURHUF.fx	9:30:00 AM	321.684	321.743			N/A
4/25/2019	EURHUF.fx	11:30:00 AM	322.231	322.41			N/A
4/25/2019	EURHUF.fx	1:30:00 PM	322.129	322.308			N/A
4/25/2019	EURHUF.fx	3:30:00 PM	322.38	322.479			N/A
4/25/2019	EURJPY	9:30:00 AM	124.919	124.915			N/A
4/25/2019	EURJPY	11:30:00 AM	124.691	124.688			N/A
4/25/2019	EURJPY	1:30:00 PM	124.664	124.657			N/A
4/25/2019	EURJPY	3:30:00 PM	124.519	124.483			N/A
4/25/2019	EURJPY.fx	9:30:00 AM	124.921	124.912			N/A
4/25/2019	EURJPY.fx	11:30:00 AM	124.692	124.684			N/A
4/25/2019	EURJPY.fx	1:30:00 PM	124.667	124.653			N/A
4/25/2019	EURJPY.fx	3:30:00 PM	124.517	124.481			N/A

4/25/2019	EURMXN	9:30:00 AM	21.2704	21.2888			N/A
4/25/2019	EURMXN	11:30:00 AM	21.277	21.2939			N/A
4/25/2019	EURMXN	1:30:00 PM	21.2876	21.3052			N/A
4/25/2019	EURMXN	3:30:00 PM	21.3353	21.3444			N/A
4/25/2019	EURMXN.fx	9:30:00 AM	21.2797	21.2798			N/A
4/25/2019	EURMXN.fx	11:30:00 AM	21.2866	21.2843			N/A
4/25/2019	EURMXN.fx	1:30:00 PM	21.2965	21.2962			N/A
4/25/2019	EURMXN.fx	3:30:00 PM	21.3425	21.3362			N/A
4/25/2019	EURNOK	9:30:00 AM	9.6334	9.6442			N/A
4/25/2019	EURNOK	11:30:00 AM	9.6762	9.6814			N/A
4/25/2019	EURNOK	1:30:00 PM	9.6631	9.6749			N/A
4/25/2019	EURNOK	3:30:00 PM	9.6716	9.681			N/A
4/25/2019	EURNOK.fx	9:30:00 AM	9.63864	9.6388			N/A
4/25/2019	EURNOK.fx	11:30:00 AM	9.68171	9.67616			N/A
4/25/2019	EURNOK.fx	1:30:00 PM	9.66839	9.6696			N/A
4/25/2019	EURNOK.fx	3:30:00 PM	9.67678	9.67588			N/A
4/25/2019	EURNZD	9:30:00 AM	1.69114	1.69181			N/A
4/25/2019	EURNZD	11:30:00 AM	1.69018	1.69013			N/A
4/25/2019	EURNZD	1:30:00 PM	1.68967	1.69044			N/A
4/25/2019	EURNZD	3:30:00 PM	1.68789	1.68799			N/A
4/25/2019	EURNZD.fx	9:30:00 AM	1.69157	1.69135			N/A
4/25/2019	EURNZD.fx	11:30:00 AM	1.69061	1.68969			N/A
4/25/2019	EURNZD.fx	1:30:00 PM	1.69009	1.68999			N/A
4/25/2019	EURNZD.fx	3:30:00 PM	1.6883	1.68759			N/A
4/25/2019	EURPLN	9:30:00 AM	4.2937	4.2963			N/A
4/25/2019	EURPLN	11:30:00 AM	4.2947	4.2976			N/A
4/25/2019	EURPLN	1:30:00 PM	4.2941	4.2973			N/A
4/25/2019	EURPLN	3:30:00 PM	4.2952	4.2968			N/A
4/25/2019	EURPLN.fx	9:30:00 AM	4.29303	4.29685			N/A
4/25/2019	EURPLN.fx	11:30:00 AM	4.29424	4.29822			N/A
4/25/2019	EURPLN.fx	1:30:00 PM	4.29354	4.29782			N/A
4/25/2019	EURPLN.fx	3:30:00 PM	4.29462	4.29773			N/A
4/25/2019	EURRUB	9:30:00 AM					N/A
4/25/2019	EURRUB	11:30:00 AM	71.838	72.267			N/A

4/25/2019	EURRUB	1:30:00 PM	71.819	72.237			N/A
4/25/2019	EURRUB	3:30:00 PM	71.909	72.316			N/A
4/25/2019	EURSEK	9:30:00 AM	10.5104	10.5144			N/A
4/25/2019	EURSEK	11:30:00 AM	10.6466	10.6455			N/A
4/25/2019	EURSEK	1:30:00 PM	10.6504	10.6511			N/A
4/25/2019	EURSEK	3:30:00 PM	10.6332	10.6336			N/A
4/25/2019	EURSEK.fx	9:30:00 AM	10.51215	10.51264			N/A
4/25/2019	EURSEK.fx	11:30:00 AM	10.64831	10.64366			N/A
4/25/2019	EURSEK.fx	1:30:00 PM	10.65194	10.64935			N/A
4/25/2019	EURSEK.fx	3:30:00 PM	10.63436	10.63192			N/A
4/25/2019	EURSGD	9:30:00 AM	1.5197	1.5201			N/A
4/25/2019	EURSGD	11:30:00 AM	1.5192	1.5199			N/A
4/25/2019	EURSGD	1:30:00 PM	1.519	1.5197			N/A
4/25/2019	EURSGD	3:30:00 PM	1.5186	1.5189			N/A
4/25/2019	EURSGD.fx	9:30:00 AM	1.52004	1.51969			N/A
4/25/2019	EURSGD.fx	11:30:00 AM	1.51958	1.5195			N/A
4/25/2019	EURSGD.fx	1:30:00 PM	1.51938	1.51932			N/A
4/25/2019	EURSGD.fx	3:30:00 PM	1.51902	1.51851			N/A
4/25/2019	EURUSD	9:30:00 AM	1.11522	1.1151	10	10	N/A
4/25/2019	EURUSD	11:30:00 AM	1.11379	1.11366	10	10	N/A
4/25/2019	EURUSD	1:30:00 PM	1.1136	1.11349			N/A
4/25/2019	EURUSD	3:30:00 PM	1.11226	1.11178	10	10	N/A
4/25/2019	EURUSD.fx	9:30:00 AM	1.11542	1.1152			N/A
4/25/2019	EURUSD.fx	11:30:00 AM	1.11399	1.11373			N/A
4/25/2019	EURUSD.fx	1:30:00 PM	1.1138	1.11358			N/A
4/25/2019	EURUSD.fx	3:30:00 PM	1.11246	1.11188			N/A
4/25/2019	EURZAR	9:30:00 AM	16.1017	16.1169			N/A
4/25/2019	EURZAR	11:30:00 AM	16.1337	16.147			N/A
4/25/2019	EURZAR	1:30:00 PM	16.1729	16.1903			N/A
4/25/2019	EURZAR	3:30:00 PM	16.1743	16.1846			N/A
4/25/2019	EURZAR.fx	9:30:00 AM	16.10028	16.11763			N/A
4/25/2019	EURZAR.fx	11:30:00 AM	16.13261	16.14775			N/A
4/25/2019	EURZAR.fx	1:30:00 PM	16.17314	16.19056			N/A
4/25/2019	EURZAR.fx	3:30:00 PM	16.17352	16.18482			N/A



4/25/2019	GBPAUD	9:30:00 AM	1.83839	1.83904			N/A
4/25/2019	GBPAUD	11:30:00 AM	1.83996	1.83946			N/A
4/25/2019	GBPAUD	1:30:00 PM	1.83893	1.8393			N/A
4/25/2019	GBPAUD	3:30:00 PM	1.84132	1.84104			N/A
4/25/2019	GBPAUD.fx	9:30:00 AM	1.8388	1.83864			N/A
4/25/2019	GBPAUD.fx	11:30:00 AM	1.84036	1.83906			N/A
4/25/2019	GBPAUD.fx	1:30:00 PM	1.83935	1.83891			N/A
4/25/2019	GBPAUD.fx	3:30:00 PM	1.84172	1.84073			N/A
4/25/2019	GBPCAD	9:30:00 AM	1.73972	1.74046			N/A
4/25/2019	GBPCAD	11:30:00 AM	1.73997	1.74065			N/A
4/25/2019	GBPCAD	1:30:00 PM	1.73905	1.73963			N/A
4/25/2019	GBPCAD	3:30:00 PM	1.73853	1.73852			N/A
4/25/2019	GBPCAD.fx	9:30:00 AM	1.7401	1.74005			N/A
4/25/2019	GBPCAD.fx	11:30:00 AM	1.74036	1.74028			N/A
4/25/2019	GBPCAD.fx	1:30:00 PM	1.73946	1.73924			N/A
4/25/2019	GBPCAD.fx	3:30:00 PM	1.7389	1.73816			N/A
4/25/2019	GBPCHF	9:30:00 AM	1.31679	1.31711			N/A
4/25/2019	GBPCHF	11:30:00 AM	1.31569	1.31595			N/A
4/25/2019	GBPCHF	1:30:00 PM	1.31565	1.31578			N/A
4/25/2019	GBPCHF	3:30:00 PM	1.31538	1.31545			N/A
4/25/2019	GBPCHF.fx	9:30:00 AM	1.31697	1.31688			N/A
4/25/2019	GBPCHF.fx	11:30:00 AM	1.31588	1.31574			N/A
4/25/2019	GBPCHF.fx	1:30:00 PM	1.31585	1.31558			N/A
4/25/2019	GBPCHF.fx	3:30:00 PM	1.31555	1.31529			N/A
4/25/2019	GBPCZK	9:30:00 AM	29.738	29.76			N/A
4/25/2019	GBPCZK	11:30:00 AM	29.756	29.772			N/A
4/25/2019	GBPCZK	1:30:00 PM	29.733	29.747			N/A
4/25/2019	GBPCZK	3:30:00 PM	29.751	29.765			N/A
4/25/2019	GBPDKK	9:30:00 AM	8.631	8.642			N/A
4/25/2019	GBPDKK	11:30:00 AM	8.635	8.645			N/A
4/25/2019	GBPDKK	1:30:00 PM	8.628	8.637			N/A
4/25/2019	GBPDKK	3:30:00 PM	8.637	8.645			N/A
4/25/2019	GBPDKK.fx	9:30:00 AM	8.6301	8.6426			N/A
4/25/2019	GBPDKK.fx	11:30:00 AM	8.6333	8.6453			N/A

4/25/2019	GBPDKK.fx	1:30:00 PM	8.6263	8.6374			N/A
4/25/2019	GBPDKK.fx	3:30:00 PM	8.6349	8.6472			N/A
4/25/2019	GBPHKD	9:30:00 AM	10.1133	10.1173			N/A
4/25/2019	GBPHKD	11:30:00 AM	10.1031	10.1087			N/A
4/25/2019	GBPHKD	1:30:00 PM	10.0946	10.0986			N/A
4/25/2019	GBPHKD	3:30:00 PM	10.0908	10.0937			N/A
4/25/2019	GBPHUF	9:30:00 AM	371.75	372.12			N/A
4/25/2019	GBPHUF	11:30:00 AM	372.37	372.81			N/A
4/25/2019	GBPHUF	1:30:00 PM	372.18	372.57			N/A
4/25/2019	GBPHUF	3:30:00 PM	372.6	372.93			N/A
4/25/2019	GBPJPY	9:30:00 AM	144.434	144.46			N/A
4/25/2019	GBPJPY	11:30:00 AM	144.223	144.259			N/A
4/25/2019	GBPJPY	1:30:00 PM	144.075	144.096			N/A
4/25/2019	GBPJPY	3:30:00 PM	144.04	144.056			N/A
4/25/2019	GBPJPY.fx	9:30:00 AM	144.453	144.441			N/A
4/25/2019	GBPJPY.fx	11:30:00 AM	144.242	144.24			N/A
4/25/2019	GBPJPY.fx	1:30:00 PM	144.095	144.076			N/A
4/25/2019	GBPJPY.fx	3:30:00 PM	144.058	144.038			N/A
4/25/2019	GBPMXN	9:30:00 AM	24.5976	24.6121			N/A
4/25/2019	GBPMXN	11:30:00 AM	24.6149	24.6263			N/A
4/25/2019	GBPMXN	1:30:00 PM	24.609	24.6197			N/A
4/25/2019	GBPMXN	3:30:00 PM	24.6825	24.6918			N/A
4/25/2019	GBPNOK	9:30:00 AM	11.1431	11.1537			N/A
4/25/2019	GBPNOK	11:30:00 AM	11.1967	11.2015			N/A
4/25/2019	GBPNOK	1:30:00 PM	11.1745	11.1827			N/A
4/25/2019	GBPNOK	3:30:00 PM	11.1941	11.2022			N/A
4/25/2019	GBPNOK.fx	9:30:00 AM	11.14791	11.1488			N/A
4/25/2019	GBPNOK.fx	11:30:00 AM	11.20184	11.19658			N/A
4/25/2019	GBPNOK.fx	1:30:00 PM	11.17932	11.1778			N/A
4/25/2019	GBPNOK.fx	3:30:00 PM	11.19874	11.1984			N/A
4/25/2019	GBPNZD	9:30:00 AM	1.95601	1.95671			N/A
4/25/2019	GBPNZD	11:30:00 AM	1.95584	1.95547			N/A
4/25/2019	GBPNZD	1:30:00 PM	1.95372	1.95398			N/A
4/25/2019	GBPNZD	3:30:00 PM	1.95358	1.95355			N/A

4/25/2019	GBPNZD.fx	9:30:00 AM	1.95641	1.95631			N/A
4/25/2019	GBPNZD.fx	11:30:00 AM	1.95621	1.95507			N/A
4/25/2019	GBPNZD.fx	1:30:00 PM	1.95409	1.9536			N/A
4/25/2019	GBPNZD.fx	3:30:00 PM	1.95392	1.95327			N/A
4/25/2019	GBPPLN	9:30:00 AM	4.967	4.9685			N/A
4/25/2019	GBPPLN	11:30:00 AM	4.9706	4.9716			N/A
4/25/2019	GBPPLN	1:30:00 PM	4.9662	4.9666			N/A
4/25/2019	GBPPLN	3:30:00 PM	4.9713	4.9716			N/A
4/25/2019	GBPPLN.fx	9:30:00 AM	4.96474	4.97063			N/A
4/25/2019	GBPPLN.fx	11:30:00 AM	4.96865	4.97369			N/A
4/25/2019	GBPPLN.fx	1:30:00 PM	4.96413	4.96873			N/A
4/25/2019	GBPPLN.fx	3:30:00 PM	4.96922	4.97467			N/A
4/25/2019	GBPSEK	9:30:00 AM	12.1556	12.1633			N/A
4/25/2019	GBPSEK	11:30:00 AM	12.3166	12.3203			N/A
4/25/2019	GBPSEK	1:30:00 PM	12.3136	12.3143			N/A
4/25/2019	GBPSEK	3:30:00 PM	12.3046	12.3087			N/A
4/25/2019	GBPSEK.fx	9:30:00 AM	12.15225	12.16675			N/A
4/25/2019	GBPSEK.fx	11:30:00 AM	12.31293	12.32398			N/A
4/25/2019	GBPSEK.fx	1:30:00 PM	12.30996	12.31799			N/A
4/25/2019	GBPSEK.fx	3:30:00 PM	12.29997	12.31232			N/A
4/25/2019	GBPSGD	9:30:00 AM	1.7577	1.7581			N/A
4/25/2019	GBPSGD	11:30:00 AM	1.758	1.7586			N/A
4/25/2019	GBPSGD	1:30:00 PM	1.7563	1.7569			N/A
4/25/2019	GBPSGD	3:30:00 PM	1.7575	1.7577			N/A
4/25/2019	GBPSGD.fx	9:30:00 AM	1.75589	1.75991			N/A
4/25/2019	GBPSGD.fx	11:30:00 AM	1.75615	1.76043			N/A
4/25/2019	GBPSGD.fx	1:30:00 PM	1.75452	1.75866			N/A
4/25/2019	GBPSGD.fx	3:30:00 PM	1.75565	1.75961			N/A
4/25/2019	GBPUSD	9:30:00 AM	1.29004	1.28992			N/A
4/25/2019	GBPUSD	11:30:00 AM	1.28886	1.2888			N/A
4/25/2019	GBPUSD	1:30:00 PM	1.2876	1.28748			N/A
4/25/2019	GBPUSD	3:30:00 PM	1.28732	1.28687			N/A
4/25/2019	GBPUSD.fx	9:30:00 AM	1.29009	1.28986			N/A
4/25/2019	GBPUSD.fx	11:30:00 AM	1.28891	1.28874			N/A

4/25/2019	GBPUSD.fx	1:30:00 PM	1.28765	1.28742			N/A
4/25/2019	GBPUSD.fx	3:30:00 PM	1.28736	1.28683			N/A
4/25/2019	GBPZAR	9:30:00 AM	18.6197	18.6444			N/A
4/25/2019	GBPZAR	11:30:00 AM	18.6661	18.686			N/A
4/25/2019	GBPZAR	1:30:00 PM	18.6961	18.7197			N/A
4/25/2019	GBPZAR	3:30:00 PM	18.7132	18.7343			N/A
4/25/2019	GBPZAR.fx	9:30:00 AM	18.6263	18.6374			N/A
4/25/2019	GBPZAR.fx	11:30:00 AM	18.6735	18.6782			N/A
4/25/2019	GBPZAR.fx	1:30:00 PM	18.7035	18.7118			N/A
4/25/2019	GBPZAR.fx	3:30:00 PM	18.72	18.7265			N/A
4/25/2019	GOLD	9:30:00 AM	1276.11	1276.32			N/A
4/25/2019	GOLD	11:30:00 AM	1277.35	1277.27			N/A
4/25/2019	GOLD	1:30:00 PM	1277.45	1277.68			N/A
4/25/2019	GOLD	3:30:00 PM	1277.93	1276.9			N/A
4/25/2019	HKDJPY	9:30:00 AM	14.27	14.28			N/A
4/25/2019	HKDJPY	11:30:00 AM	14.26	14.27			N/A
4/25/2019	HKDJPY	1:30:00 PM					N/A
4/25/2019	HKDJPY	3:30:00 PM	14.26	14.27			N/A
4/25/2019	HKDJPY.fx	9:30:00 AM	14.267	14.273			N/A
4/25/2019	HKDJPY.fx	11:30:00 AM	14.259	14.266			N/A
4/25/2019	HKDJPY.fx	1:30:00 PM	14.256	14.264			N/A
4/25/2019	HKDJPY.fx	3:30:00 PM	14.259	14.264			N/A
4/25/2019	HUFJPY	9:30:00 AM	0.3884	0.3887			N/A
4/25/2019	HUFJPY	11:30:00 AM	0.387	0.3873			N/A
4/25/2019	HUFJPY	1:30:00 PM	0.3868	0.3871			N/A
4/25/2019	HUFJPY	3:30:00 PM	0.3863	0.3866			N/A
4/25/2019	JP225.i	9:30:00 AM	22307.92	22324.59			N/A
4/25/2019	JP225.i	11:30:00 AM					N/A
4/25/2019	JP225.i	1:30:00 PM	22274.59	22289.59			N/A
4/25/2019	JP225.i	3:30:00 PM	22267.09	22274.59			N/A
4/25/2019	MXNJPY	9:30:00 AM	5.86	5.88			N/A
4/25/2019	MXNJPY	11:30:00 AM	5.85	5.86			N/A
4/25/2019	MXNJPY	1:30:00 PM	5.84	5.85			N/A
4/25/2019	MXNJPY	3:30:00 PM	5.82	5.83			N/A

4/25/2019	NASDAQ.i	9:30:00 AM					N/A
4/25/2019	NASDAQ.i	11:30:00 AM					N/A
4/25/2019	NASDAQ.i	1:30:00 PM					N/A
4/25/2019	NASDAQ.i	3:30:00 PM					N/A
4/25/2019	NOKJPY	9:30:00 AM	12.94	12.97			N/A
4/25/2019	NOKJPY	11:30:00 AM	12.86	12.89			N/A
4/25/2019	NOKJPY	1:30:00 PM	12.88	12.91			N/A
4/25/2019	NOKJPY	3:30:00 PM	12.85	12.88			N/A
4/25/2019	NOKJPY.fx	9:30:00 AM	12.953	12.958			N/A
4/25/2019	NOKJPY.fx	11:30:00 AM	12.878	12.878			N/A
4/25/2019	NOKJPY.fx	1:30:00 PM	12.885	12.891			N/A
4/25/2019	NOKJPY.fx	3:30:00 PM	12.86	12.865			N/A
4/25/2019	NZDCAD	9:30:00 AM	0.88907	0.88977			N/A
4/25/2019	NZDCAD	11:30:00 AM	0.88971	0.89002			N/A
4/25/2019	NZDCAD	1:30:00 PM	0.8899	0.89049			N/A
4/25/2019	NZDCAD	3:30:00 PM	0.88974	0.89001			N/A
4/25/2019	NZDCAD.fx	9:30:00 AM	0.88942	0.88941			N/A
4/25/2019	NZDCAD.fx	11:30:00 AM	0.89005	0.88968			N/A
4/25/2019	NZDCAD.fx	1:30:00 PM	0.89023	0.89016			N/A
4/25/2019	NZDCAD.fx	3:30:00 PM	0.89005	0.8897			N/A
4/25/2019	NZDCHF	9:30:00 AM	0.67283	0.67346			N/A
4/25/2019	NZDCHF	11:30:00 AM	0.67266	0.67307			N/A
4/25/2019	NZDCHF	1:30:00 PM	0.67301	0.67371			N/A
4/25/2019	NZDCHF	3:30:00 PM	0.67318	0.67357			N/A
4/25/2019	NZDCHF.fx	9:30:00 AM	0.67316	0.6731			N/A
4/25/2019	NZDCHF.fx	11:30:00 AM	0.673	0.67271			N/A
4/25/2019	NZDCHF.fx	1:30:00 PM	0.67335	0.67336			N/A
4/25/2019	NZDCHF.fx	3:30:00 PM	0.67348	0.67322			N/A
4/25/2019	NZDCZK	9:30:00 AM	15.2	15.21			N/A
4/25/2019	NZDCZK	11:30:00 AM	15.216	15.223			N/A
4/25/2019	NZDCZK	1:30:00 PM	15.214	15.225			N/A
4/25/2019	NZDCZK	3:30:00 PM	15.231	15.236			N/A
4/25/2019	NZDDKK	9:30:00 AM					N/A
4/25/2019	NZDDKK	11:30:00 AM	4.415	4.417			N/A

4/25/2019	NZDDKK	1:30:00 PM	4.416	4.419			N/A
4/25/2019	NZDDKK	3:30:00 PM	4.42	4.423			N/A
4/25/2019	NZDHKD	9:30:00 AM	5.1697	5.1712			N/A
4/25/2019	NZDHKD	11:30:00 AM	5.1669	5.1661			N/A
4/25/2019	NZDHKD	1:30:00 PM	5.1661	5.1681			N/A
4/25/2019	NZDHKD	3:30:00 PM	5.1653	5.1665			N/A
4/25/2019	NZDHUF	9:30:00 AM	189.97	190.22			N/A
4/25/2019	NZDHUF	11:30:00 AM	190.41	190.61			N/A
4/25/2019	NZDHUF	1:30:00 PM	190.42	190.7			N/A
4/25/2019	NZDHUF	3:30:00 PM	190.69	190.91			N/A
4/25/2019	NZDJPY	9:30:00 AM	73.779	73.843			N/A
4/25/2019	NZDJPY	11:30:00 AM	73.716	73.746			N/A
4/25/2019	NZDJPY	1:30:00 PM	73.691	73.751			N/A
4/25/2019	NZDJPY	3:30:00 PM	73.689	73.724			N/A
4/25/2019	NZDJPY.fx	9:30:00 AM	73.811	73.81			N/A
4/25/2019	NZDJPY.fx	11:30:00 AM	73.749	73.713			N/A
4/25/2019	NZDJPY.fx	1:30:00 PM	73.723	73.719			N/A
4/25/2019	NZDJPY.fx	3:30:00 PM	73.716	73.694			N/A
4/25/2019	NZDMXN	9:30:00 AM	12.5726	12.5777			N/A
4/25/2019	NZDMXN	11:30:00 AM	12.5869	12.586			N/A
4/25/2019	NZDMXN	1:30:00 PM	12.5936	12.5981			N/A
4/25/2019	NZDMXN	3:30:00 PM	12.635	12.6367			N/A
4/25/2019	NZDNOK	9:30:00 AM	5.6942	5.6981			N/A
4/25/2019	NZDNOK	11:30:00 AM	5.7232	5.7203			N/A
4/25/2019	NZDNOK	1:30:00 PM	5.7172	5.7201			N/A
4/25/2019	NZDNOK	3:30:00 PM	5.7266	5.7283			N/A
4/25/2019	NZDPLN	9:30:00 AM	2.5378	2.5392			N/A
4/25/2019	NZDPLN	11:30:00 AM	2.5397	2.5406			N/A
4/25/2019	NZDPLN	1:30:00 PM	2.5403	2.5413			N/A
4/25/2019	NZDPLN	3:30:00 PM	2.5434	2.5444			N/A
4/25/2019	NZDSEK	9:30:00 AM	6.2093	6.2155			N/A
4/25/2019	NZDSEK	11:30:00 AM	6.2944	6.2958			N/A
4/25/2019	NZDSEK	1:30:00 PM	6.2968	6.3012			N/A
4/25/2019	NZDSEK	3:30:00 PM	6.2957	6.2983			N/A

4/25/2019	NZDSGD	9:30:00 AM	0.8983	0.8989			N/A
4/25/2019	NZDSGD	11:30:00 AM	0.899	0.8992			N/A
4/25/2019	NZDSGD	1:30:00 PM	0.8988	0.8993			N/A
4/25/2019	NZDSGD	3:30:00 PM	0.8995	0.8999			N/A
4/25/2019	NZDSGD.fx	9:30:00 AM	0.89832	0.8988			N/A
4/25/2019	NZDSGD.fx	11:30:00 AM	0.89899	0.89916			N/A
4/25/2019	NZDSGD.fx	1:30:00 PM	0.89876	0.89926			N/A
4/25/2019	NZDSGD.fx	3:30:00 PM	0.89948	0.8999			N/A
4/25/2019	NZDUSD	9:30:00 AM	0.65927	0.65939			N/A
4/25/2019	NZDUSD	11:30:00 AM	0.65914	0.65883			N/A
4/25/2019	NZDUSD	1:30:00 PM	0.65894	0.65894			N/A
4/25/2019	NZDUSD	3:30:00 PM	0.65893	0.65872			N/A
4/25/2019	NZDUSD.fx	9:30:00 AM	0.65935	0.6594			N/A
4/25/2019	NZDUSD.fx	11:30:00 AM	0.65921	0.65884			N/A
4/25/2019	NZDUSD.fx	1:30:00 PM	0.65901	0.65896			N/A
4/25/2019	NZDUSD.fx	3:30:00 PM	0.65896	0.65875			N/A
4/25/2019	NZDZAR	9:30:00 AM	9.5112	9.5263			N/A
4/25/2019	NZDZAR	11:30:00 AM	9.5362	9.5478			N/A
4/25/2019	NZDZAR	1:30:00 PM	9.5621	9.577			N/A
4/25/2019	NZDZAR	3:30:00 PM	9.5693	9.5818			N/A
4/25/2019	SEKJPY	9:30:00 AM					N/A
4/25/2019	SEKJPY	11:30:00 AM	11.71	11.72			N/A
4/25/2019	SEKJPY	1:30:00 PM	11.69	11.71			N/A
4/25/2019	SEKJPY	3:30:00 PM	11.71	11.71			N/A
4/25/2019	SEKJPY.fx	9:30:00 AM	11.873	11.89			N/A
4/25/2019	SEKJPY.fx	11:30:00 AM	11.704	11.719			N/A
4/25/2019	SEKJPY.fx	1:30:00 PM	11.697	11.711			N/A
4/25/2019	SEKJPY.fx	3:30:00 PM	11.7	11.715			N/A
4/25/2019	SGDJPY	9:30:00 AM	82.16	82.12			N/A
4/25/2019	SGDJPY	11:30:00 AM	81.97	82			N/A
4/25/2019	SGDJPY	1:30:00 PM	82.02	82			N/A
4/25/2019	SGDJPY	3:30:00 PM	81.9	81.91			N/A
4/25/2019	SILVER	9:30:00 AM	14.72	15.09			N/A
4/25/2019	SILVER	11:30:00 AM	14.73	15.11			N/A

4/25/2019	SILVER	1:30:00 PM	14.69	15.08			N/A
4/25/2019	SILVER	3:30:00 PM	14.73	15.1			N/A
4/25/2019	SPX500.i	9:30:00 AM	2932.04	2933.09			N/A
4/25/2019	SPX500.i	11:30:00 AM					N/A
4/25/2019	SPX500.i	1:30:00 PM	2929.54	2930.09			N/A
4/25/2019	SPX500.i	3:30:00 PM	2932.79	2931.84			N/A
4/25/2019	UK100.i	9:30:00 AM	7493.04	7495.04			N/A
4/25/2019	UK100.i	11:30:00 AM	7453.38	7452.79			N/A
4/25/2019	UK100.i	1:30:00 PM	7459.6	7460.1			N/A
4/25/2019	UK100.i	3:30:00 PM	7442.84	7442.92			N/A
4/25/2019	USDCAD	9:30:00 AM	1.34897	1.34898			N/A
4/25/2019	USDCAD	11:30:00 AM	1.35052	1.35036			N/A
4/25/2019	USDCAD	1:30:00 PM	1.35098	1.35099			N/A
4/25/2019	USDCAD	3:30:00 PM	1.35085	1.35077			N/A
4/25/2019	USDCAD.fx	9:30:00 AM	1.349	1.34894			N/A
4/25/2019	USDCAD.fx	11:30:00 AM	1.35055	1.35033			N/A
4/25/2019	USDCAD.fx	1:30:00 PM	1.35101	1.35095			N/A
4/25/2019	USDCAD.fx	3:30:00 PM	1.35087	1.35076			N/A
4/25/2019	USDCHF	9:30:00 AM	1.02093	1.02084			N/A
4/25/2019	USDCHF	11:30:00 AM	1.02104	1.02091			N/A
4/25/2019	USDCHF	1:30:00 PM	1.02186	1.02184			N/A
4/25/2019	USDCHF	3:30:00 PM	1.02224	1.02167			N/A
4/25/2019	USDCHF.fx	9:30:00 AM	1.02097	1.02078			N/A
4/25/2019	USDCHF.fx	11:30:00 AM	1.02109	1.02084			N/A
4/25/2019	USDCHF.fx	1:30:00 PM	1.02191	1.02177			N/A
4/25/2019	USDCHF.fx	3:30:00 PM	1.02226	1.02161			N/A
4/25/2019	USDCZK	9:30:00 AM	23.072	23.091			N/A
4/25/2019	USDCZK	11:30:00 AM	23.107	23.123			N/A
4/25/2019	USDCZK	1:30:00 PM	23.109	23.127			N/A
4/25/2019	USDCZK	3:30:00 PM	23.137	23.146			N/A
4/25/2019	USDCZK.fx	9:30:00 AM	23.0816	23.081			N/A
4/25/2019	USDCZK.fx	11:30:00 AM	23.1157	23.1147			N/A
4/25/2019	USDCZK.fx	1:30:00 PM	23.117	23.1182			N/A
4/25/2019	USDCZK.fx	3:30:00 PM	23.144	23.14			N/A



4/25/2019	USDDKK	9:30:00 AM	6.6943	6.6968			N/A
4/25/2019	USDDKK	11:30:00 AM	6.7027	6.7054			N/A
4/25/2019	USDDKK	1:30:00 PM	6.7033	6.706			N/A
4/25/2019	USDDKK	3:30:00 PM	6.7141	6.7144			N/A
4/25/2019	USDDKK.fx	9:30:00 AM	6.69469	6.69479			N/A
4/25/2019	USDDKK.fx	11:30:00 AM	6.70334	6.70317			N/A
4/25/2019	USDDKK.fx	1:30:00 PM	6.70379	6.704			N/A
4/25/2019	USDDKK.fx	3:30:00 PM	6.71446	6.71231			N/A
4/25/2019	USDHKD	9:30:00 AM	7.8424	7.8426			N/A
4/25/2019	USDHKD	11:30:00 AM	7.8426	7.8424			N/A
4/25/2019	USDHKD	1:30:00 PM	7.8433	7.8434			N/A
4/25/2019	USDHKD	3:30:00 PM	7.8434	7.8433			N/A
4/25/2019	USDHKD.fx	9:30:00 AM	7.84231	7.84287			N/A
4/25/2019	USDHKD.fx	11:30:00 AM					N/A
4/25/2019	USDHKD.fx	1:30:00 PM	7.84348	7.84404			N/A
4/25/2019	USDHKD.fx	3:30:00 PM	7.84332	7.84388			N/A
4/25/2019	USDHUF	9:30:00 AM	288.23	288.62			N/A
4/25/2019	USDHUF	11:30:00 AM	289.17	289.56			N/A
4/25/2019	USDHUF	1:30:00 PM	289.11	289.52			N/A
4/25/2019	USDHUF	3:30:00 PM	289.72	290.04			N/A
4/25/2019	USDHUF.fx	9:30:00 AM	288.427	288.411			N/A
4/25/2019	USDHUF.fx	11:30:00 AM	289.373	289.355			N/A
4/25/2019	USDHUF.fx	1:30:00 PM	289.323	289.305			N/A
4/25/2019	USDHUF.fx	3:30:00 PM	289.914	289.886			N/A
4/25/2019	USDINR	9:30:00 AM	64.96	74.94			N/A
4/25/2019	USDINR	11:30:00 AM	65.15	75.14			N/A
4/25/2019	USDINR	1:30:00 PM					N/A
4/25/2019	USDINR	3:30:00 PM					N/A
4/25/2019	USDJPY	9:30:00 AM	111.92	111.917			N/A
4/25/2019	USDJPY	11:30:00 AM	111.864	111.868			N/A
4/25/2019	USDJPY	1:30:00 PM	111.85	111.863			N/A
4/25/2019	USDJPY	3:30:00 PM	111.881	111.858			N/A
4/25/2019	USDJPY.fx	9:30:00 AM	111.926	111.91			N/A
4/25/2019	USDJPY.fx	11:30:00 AM	111.871	111.86			N/A

4/25/2019	USDJPY.fx	1:30:00 PM	111.856	111.855			N/A
4/25/2019	USDJPY.fx	3:30:00 PM	111.885	111.852			N/A
4/25/2019	USDMXN	9:30:00 AM	19.076	19.083			N/A
4/25/2019	USDMXN	11:30:00 AM	19.107	19.112			N/A
4/25/2019	USDMXN	1:30:00 PM	19.12	19.124			N/A
4/25/2019	USDMXN	3:30:00 PM	19.186	19.19			N/A
4/25/2019	USDMXN.fx	9:30:00 AM	19.0801	19.0794			N/A
4/25/2019	USDMXN.fx	11:30:00 AM	19.1114	19.1074			N/A
4/25/2019	USDMXN.fx	1:30:00 PM	19.1229	19.1201			N/A
4/25/2019	USDMXN.fx	3:30:00 PM	19.1891	19.1855			N/A
4/25/2019	USDNOK	9:30:00 AM	8.639	8.6462			N/A
4/25/2019	USDNOK	11:30:00 AM	8.6879	8.6924			N/A
4/25/2019	USDNOK	1:30:00 PM	8.6787	8.6856			N/A
4/25/2019	USDNOK	3:30:00 PM	8.6975	8.7019			N/A
4/25/2019	USDNOK.fx	9:30:00 AM	8.64273	8.64176			N/A
4/25/2019	USDNOK.fx	11:30:00 AM	8.69243	8.6878			N/A
4/25/2019	USDNOK.fx	1:30:00 PM	8.68258	8.68124			N/A
4/25/2019	USDNOK.fx	3:30:00 PM	8.7013	8.69822			N/A
4/25/2019	USDPLN	9:30:00 AM	3.8501	3.8518			N/A
4/25/2019	USDPLN	11:30:00 AM	3.8567	3.8572			N/A
4/25/2019	USDPLN	1:30:00 PM	3.8568	3.8575			N/A
4/25/2019	USDPLN	3:30:00 PM	3.8631	3.8619			N/A
4/25/2019	USDPLN.fx	9:30:00 AM	3.84936	3.85251			N/A
4/25/2019	USDPLN.fx	11:30:00 AM	3.85614	3.85805			N/A
4/25/2019	USDPLN.fx	1:30:00 PM	3.85593	3.85831			N/A
4/25/2019	USDPLN.fx	3:30:00 PM	3.86187	3.86402			N/A
4/25/2019	USDRUB	9:30:00 AM					N/A
4/25/2019	USDRUB	11:30:00 AM	64.627	65.001			N/A
4/25/2019	USDRUB	1:30:00 PM	64.62	64.98			N/A
4/25/2019	USDRUB	3:30:00 PM	64.766	65.155			N/A
4/25/2019	USDSEK	9:30:00 AM	9.4238	9.4263			N/A
4/25/2019	USDSEK	11:30:00 AM	9.5566	9.5583			N/A
4/25/2019	USDSEK	1:30:00 PM	9.5631	9.5624			N/A
4/25/2019	USDSEK	3:30:00 PM	9.5633	9.5608			N/A

4/25/2019	USDSEK.fx	9:30:00 AM	9.42721	9.42427			N/A
4/25/2019	USDSEK.fx	11:30:00 AM	9.55913	9.55642			N/A
4/25/2019	USDSEK.fx	1:30:00 PM	9.5659	9.56055			N/A
4/25/2019	USDSEK.fx	3:30:00 PM	9.56555	9.5588			N/A
4/25/2019	USDSGD	9:30:00 AM	1.3626	1.3629			N/A
4/25/2019	USDSGD	11:30:00 AM	1.3642	1.3643			N/A
4/25/2019	USDSGD	1:30:00 PM	1.3642	1.3644			N/A
4/25/2019	USDSGD	3:30:00 PM	1.3655	1.3658			N/A
4/25/2019	USDSGD.fx	9:30:00 AM	1.36252	1.36286			N/A
4/25/2019	USDSGD.fx	11:30:00 AM	1.3642	1.36435			N/A
4/25/2019	USDSGD.fx	1:30:00 PM	1.36412	1.36443			N/A
4/25/2019	USDSGD.fx	3:30:00 PM	1.36541	1.36576			N/A
4/25/2019	USDZAR	9:30:00 AM	14.436	14.4503			N/A
4/25/2019	USDZAR	11:30:00 AM	14.4855	14.496			N/A
4/25/2019	USDZAR	1:30:00 PM	14.522	14.5373			N/A
4/25/2019	USDZAR	3:30:00 PM	14.54	14.555			N/A
4/25/2019	USDZAR.fx	9:30:00 AM	14.43997	14.44442			N/A
4/25/2019	USDZAR.fx	11:30:00 AM	14.49227	14.49032			N/A
4/25/2019	USDZAR.fx	1:30:00 PM	14.52802	14.53185			N/A
4/25/2019	USDZAR.fx	3:30:00 PM	14.54651	14.54918			N/A
4/25/2019	XAUUSD	9:30:00 AM	1276.13	1276.32			N/A
4/25/2019	XAUUSD	11:30:00 AM	1277.34	1277.27			N/A
4/25/2019	XAUUSD	1:30:00 PM	1277.45	1277.67			N/A
4/25/2019	XAUUSD	3:30:00 PM	1277.93	1276.87			N/A
4/25/2019	ZARJPY	9:30:00 AM	7.72	7.75			N/A
4/25/2019	ZARJPY	11:30:00 AM	7.7	7.73			N/A
4/25/2019	ZARJPY	1:30:00 PM	7.67	7.69			N/A
4/25/2019	ZARJPY	3:30:00 PM	7.66	7.68			N/A
4/25/2019	ZARJPY.fx	9:30:00 AM	7.74	7.743			N/A
4/25/2019	ZARJPY.fx	11:30:00 AM	7.71	7.713			N/A
4/25/2019	ZARJPY.fx	1:30:00 PM	7.689	7.693			N/A
4/25/2019	ZARJPY.fx	3:30:00 PM	7.68	7.683			N/A
4/26/2019	#AA	9:30:00 AM					N/A
4/26/2019	#AA	11:30:00 AM					N/A

4/26/2019	#AA	1:30:00 PM					N/A
4/26/2019	#AA	3:30:00 PM					N/A
4/26/2019	#AABA	9:30:00 AM					N/A
4/26/2019	#AABA	11:30:00 AM					N/A
4/26/2019	#AABA	1:30:00 PM					N/A
4/26/2019	#AABA	3:30:00 PM					N/A
4/26/2019	#AAL	9:30:00 AM					N/A
4/26/2019	#AAL	11:30:00 AM					N/A
4/26/2019	#AAL	1:30:00 PM					N/A
4/26/2019	#AAL	3:30:00 PM	32.03	32.9			N/A
4/26/2019	#AAPL	9:30:00 AM					N/A
4/26/2019	#AAPL	11:30:00 AM					N/A
4/26/2019	#AAPL	1:30:00 PM					N/A
4/26/2019	#AAPL	3:30:00 PM					N/A
4/26/2019	#ADBE	9:30:00 AM					N/A
4/26/2019	#ADBE	11:30:00 AM					N/A
4/26/2019	#ADBE	1:30:00 PM					N/A
4/26/2019	#ADBE	3:30:00 PM					N/A
4/26/2019	#AIG	9:30:00 AM					N/A
4/26/2019	#AIG	11:30:00 AM					N/A
4/26/2019	#AIG	1:30:00 PM					N/A
4/26/2019	#AIG	3:30:00 PM					N/A
4/26/2019	#AMD	9:30:00 AM					N/A
4/26/2019	#AMD	11:30:00 AM					N/A
4/26/2019	#AMD	1:30:00 PM					N/A
4/26/2019	#AMD	3:30:00 PM					N/A
4/26/2019	#AMZN	9:30:00 AM					N/A
4/26/2019	#AMZN	11:30:00 AM					N/A
4/26/2019	#AMZN	1:30:00 PM					N/A
4/26/2019	#AMZN	3:30:00 PM					N/A
4/26/2019	#AXP	9:30:00 AM					N/A
4/26/2019	#AXP	11:30:00 AM					N/A
4/26/2019	#AXP	1:30:00 PM					N/A
4/26/2019	#AXP	3:30:00 PM					N/A

4/26/2019	#BA	9:30:00 AM					N/A
4/26/2019	#BA	11:30:00 AM					N/A
4/26/2019	#BA	1:30:00 PM					N/A
4/26/2019	#BA	3:30:00 PM					N/A
4/26/2019	#BABA	9:30:00 AM					N/A
4/26/2019	#BABA	11:30:00 AM					N/A
4/26/2019	#BABA	1:30:00 PM					N/A
4/26/2019	#BABA	3:30:00 PM					N/A
4/26/2019	#BAC	9:30:00 AM					N/A
4/26/2019	#BAC	11:30:00 AM					N/A
4/26/2019	#BAC	1:30:00 PM					N/A
4/26/2019	#BAC	3:30:00 PM					N/A
4/26/2019	#BARC	9:30:00 AM					N/A
4/26/2019	#BARC	11:30:00 AM					N/A
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4/26/2019	#BARC	3:30:00 PM					N/A
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4/26/2019	#UL	9:30:00 AM					N/A
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4/26/2019	#UL	1:30:00 PM					N/A
4/26/2019	#UL	3:30:00 PM					N/A
4/26/2019	#UPS	9:30:00 AM					N/A
4/26/2019	#UPS	11:30:00 AM					N/A
4/26/2019	#UPS	1:30:00 PM					N/A
4/26/2019	#UPS	3:30:00 PM					N/A
4/26/2019	#UTX	9:30:00 AM					N/A
4/26/2019	#UTX	11:30:00 AM					N/A
4/26/2019	#UTX	1:30:00 PM					N/A
4/26/2019	#UTX	3:30:00 PM					N/A
4/26/2019	#V	9:30:00 AM					N/A
4/26/2019	#V	11:30:00 AM					N/A

4/26/2019	#V	1:30:00 PM					N/A
4/26/2019	#V	3:30:00 PM					N/A
4/26/2019	#VOD	9:30:00 AM					N/A
4/26/2019	#VOD	11:30:00 AM					N/A
4/26/2019	#VOD	1:30:00 PM					N/A
4/26/2019	#VOD	3:30:00 PM					N/A
4/26/2019	#VZ	9:30:00 AM					N/A
4/26/2019	#VZ	11:30:00 AM					N/A
4/26/2019	#VZ	1:30:00 PM					N/A
4/26/2019	#VZ	3:30:00 PM					N/A
4/26/2019	#WDC	9:30:00 AM					N/A
4/26/2019	#WDC	11:30:00 AM					N/A
4/26/2019	#WDC	1:30:00 PM					N/A
4/26/2019	#WDC	3:30:00 PM					N/A
4/26/2019	#WFC	9:30:00 AM					N/A
4/26/2019	#WFC	11:30:00 AM					N/A
4/26/2019	#WFC	1:30:00 PM					N/A
4/26/2019	#WFC	3:30:00 PM					N/A
4/26/2019	#WMT	9:30:00 AM					N/A
4/26/2019	#WMT	11:30:00 AM					N/A
4/26/2019	#WMT	1:30:00 PM					N/A
4/26/2019	#WMT	3:30:00 PM					N/A
4/26/2019	#XOM	9:30:00 AM					N/A
4/26/2019	#XOM	11:30:00 AM					N/A
4/26/2019	#XOM	1:30:00 PM					N/A
4/26/2019	#XOM	3:30:00 PM					N/A
4/26/2019	#YHOO	9:30:00 AM					N/A
4/26/2019	#YHOO	11:30:00 AM					N/A
4/26/2019	#YHOO	1:30:00 PM					N/A
4/26/2019	#YHOO	3:30:00 PM					N/A
4/26/2019	#ZNGA	9:30:00 AM					N/A
4/26/2019	#ZNGA	11:30:00 AM					N/A
4/26/2019	#ZNGA	1:30:00 PM					N/A
4/26/2019	#ZNGA	3:30:00 PM					N/A



4/26/2019	AUDCAD	9:30:00 AM	0.94662	0.9471			N/A
4/26/2019	AUDCAD	11:30:00 AM	0.94751	0.94819			N/A
4/26/2019	AUDCAD	1:30:00 PM	0.94893	0.9496			N/A
4/26/2019	AUDCAD	3:30:00 PM	0.94814	0.94755			N/A
4/26/2019	AUDCAD.fx	9:30:00 AM	0.94695	0.94673			N/A
4/26/2019	AUDCAD.fx	11:30:00 AM	0.94785	0.94784			N/A
4/26/2019	AUDCAD.fx	1:30:00 PM	0.94926	0.94925			N/A
4/26/2019	AUDCAD.fx	3:30:00 PM	0.94846	0.94722			N/A
4/26/2019	AUDCHF	9:30:00 AM	0.7165	0.71709			N/A
4/26/2019	AUDCHF	11:30:00 AM	0.71735	0.718			N/A
4/26/2019	AUDCHF	1:30:00 PM	0.71786	0.71856			N/A
4/26/2019	AUDCHF	3:30:00 PM	0.71907	0.71893			N/A
4/26/2019	AUDCHF.fx	9:30:00 AM	0.71684	0.71673			N/A
4/26/2019	AUDCHF.fx	11:30:00 AM	0.71769	0.71765			N/A
4/26/2019	AUDCHF.fx	1:30:00 PM	0.7182	0.71821			N/A
4/26/2019	AUDCHF.fx	3:30:00 PM	0.7194	0.71872			N/A
4/26/2019	AUDCZK	9:30:00 AM	16.201	16.213			N/A
4/26/2019	AUDCZK	11:30:00 AM	16.21	16.227			N/A
4/26/2019	AUDCZK	1:30:00 PM	16.208	16.224			N/A
4/26/2019	AUDCZK	3:30:00 PM	16.218	16.222			N/A
4/26/2019	AUDDKK	9:30:00 AM	4.7066	4.7098			N/A
4/26/2019	AUDDKK	11:30:00 AM	4.7098	4.7144			N/A
4/26/2019	AUDDKK	1:30:00 PM	4.7142	4.7189			N/A
4/26/2019	AUDDKK	3:30:00 PM	4.7189	4.7189			N/A
4/26/2019	AUDHKD	9:30:00 AM	5.5088	5.5113			N/A
4/26/2019	AUDHKD	11:30:00 AM	5.5126	5.5165			N/A
4/26/2019	AUDHKD	1:30:00 PM	5.5161	5.5191			N/A
4/26/2019	AUDHKD	3:30:00 PM	5.5145	5.5088			N/A
4/26/2019	AUDHUF	9:30:00 AM	202.95	203.12			N/A
4/26/2019	AUDHUF	11:30:00 AM	203.25	203.39			N/A
4/26/2019	AUDHUF	1:30:00 PM	203.14	203.28			N/A
4/26/2019	AUDHUF	3:30:00 PM	203.26	203.36			N/A
4/26/2019	AUDJPY	9:30:00 AM	78.466	78.516			N/A
4/26/2019	AUDJPY	11:30:00 AM	78.497	78.558			N/A

4/26/2019	AUDJPY	1:30:00 PM	78.616	78.682			N/A
4/26/2019	AUDJPY	3:30:00 PM	78.702	78.666			N/A
4/26/2019	AUDJPY.fx	9:30:00 AM	78.5	78.481			N/A
4/26/2019	AUDJPY.fx	11:30:00 AM	78.53	78.523			N/A
4/26/2019	AUDJPY.fx	1:30:00 PM	78.649	78.648			N/A
4/26/2019	AUDJPY.fx	3:30:00 PM	78.734	78.638			N/A
4/26/2019	AUDMXN	9:30:00 AM	13.3727	13.3795			N/A
4/26/2019	AUDMXN	11:30:00 AM	13.3765	13.3851			N/A
4/26/2019	AUDMXN	1:30:00 PM	13.3943	13.4022			N/A
4/26/2019	AUDMXN	3:30:00 PM	13.4072	13.4025			N/A
4/26/2019	AUDNOK	9:30:00 AM	6.0874	6.0907			N/A
4/26/2019	AUDNOK	11:30:00 AM	6.0939	6.0985			N/A
4/26/2019	AUDNOK	1:30:00 PM	6.103	6.1068			N/A
4/26/2019	AUDNOK	3:30:00 PM	6.1124	6.1115			N/A
4/26/2019	AUDNOK.fx	9:30:00 AM	6.0889	6.089			N/A
4/26/2019	AUDNOK.fx	11:30:00 AM	6.0955	6.0966			N/A
4/26/2019	AUDNOK.fx	1:30:00 PM	6.1046	6.1051			N/A
4/26/2019	AUDNOK.fx	3:30:00 PM	6.1139	6.1104			N/A
4/26/2019	AUDNZD	9:30:00 AM	1.05675	1.05748			N/A
4/26/2019	AUDNZD	11:30:00 AM	1.05691	1.05779			N/A
4/26/2019	AUDNZD	1:30:00 PM	1.05767	1.05851			N/A
4/26/2019	AUDNZD	3:30:00 PM	1.05785	1.05809			N/A
4/26/2019	AUDNZD.fx	9:30:00 AM	1.05719	1.05701			N/A
4/26/2019	AUDNZD.fx	11:30:00 AM	1.05736	1.05735			N/A
4/26/2019	AUDNZD.fx	1:30:00 PM	1.0581	1.05806			N/A
4/26/2019	AUDNZD.fx	3:30:00 PM	1.0581	1.05767			N/A
4/26/2019	AUDPLN	9:30:00 AM	2.7042	2.7068			N/A
4/26/2019	AUDPLN	11:30:00 AM	2.7066	2.7098			N/A
4/26/2019	AUDPLN	1:30:00 PM	2.707	2.7102			N/A
4/26/2019	AUDPLN	3:30:00 PM	2.711	2.7105			N/A
4/26/2019	AUDSEK	9:30:00 AM	6.692	6.6928			N/A
4/26/2019	AUDSEK	11:30:00 AM	6.6815	6.6842			N/A
4/26/2019	AUDSEK	1:30:00 PM	6.6882	6.6915			N/A
4/26/2019	AUDSEK	3:30:00 PM	6.6876	6.6835			N/A

4/26/2019	AUDSEK.fx	9:30:00 AM	6.6873	6.6972			N/A
4/26/2019	AUDSEK.fx	11:30:00 AM	6.6768	6.6887			N/A
4/26/2019	AUDSEK.fx	1:30:00 PM	6.6838	6.696			N/A
4/26/2019	AUDSEK.fx	3:30:00 PM	6.6834	6.6887			N/A
4/26/2019	AUDSGD	9:30:00 AM	0.957	0.9572			N/A
4/26/2019	AUDSGD	11:30:00 AM	0.9581	0.9583			N/A
4/26/2019	AUDSGD	1:30:00 PM	0.9588	0.959			N/A
4/26/2019	AUDSGD	3:30:00 PM	0.959	0.9576			N/A
4/26/2019	AUDSGD.fx	9:30:00 AM	0.95712	0.95707			N/A
4/26/2019	AUDSGD.fx	11:30:00 AM	0.95813	0.95819			N/A
4/26/2019	AUDSGD.fx	1:30:00 PM	0.95892	0.95901			N/A
4/26/2019	AUDSGD.fx	3:30:00 PM	0.95909	0.95771			N/A
4/26/2019	AUDUSD	9:30:00 AM	0.70258	0.70258			N/A
4/26/2019	AUDUSD	11:30:00 AM	0.70312	0.70321			N/A
4/26/2019	AUDUSD	1:30:00 PM	0.70357	0.70365			N/A
4/26/2019	AUDUSD	3:30:00 PM	0.70368	0.70229			N/A
4/26/2019	AUDUSD.fx	9:30:00 AM	0.70264	0.70252			N/A
4/26/2019	AUDUSD.fx	11:30:00 AM	0.70317	0.70315			N/A
4/26/2019	AUDUSD.fx	1:30:00 PM	0.70363	0.70359			N/A
4/26/2019	AUDUSD.fx	3:30:00 PM	0.70372	0.70225			N/A
4/26/2019	AUDZAR	9:30:00 AM	10.1122	10.1147			N/A
4/26/2019	AUDZAR	11:30:00 AM	10.1022	10.1135			N/A
4/26/2019	AUDZAR	1:30:00 PM	10.1302	10.1406			N/A
4/26/2019	AUDZAR	3:30:00 PM	10.1484	10.0984			N/A
4/26/2019	AUS200.i	9:30:00 AM					N/A
4/26/2019	AUS200.i	11:30:00 AM	6385.7	6389.2			N/A
4/26/2019	AUS200.i	1:30:00 PM	6385.7	6389.2			N/A
4/26/2019	AUS200.i	3:30:00 PM	6390.1	6388.67			N/A
4/26/2019	BCHUSD	9:30:00 AM	275.51	277.35			N/A
4/26/2019	BCHUSD	11:30:00 AM	276.82	278.44			N/A
4/26/2019	BCHUSD	1:30:00 PM	276.67	278.42			N/A
4/26/2019	BCHUSD	3:30:00 PM	275.68	277.41			N/A
4/26/2019	CADCHF	9:30:00 AM	0.75667	0.75733			N/A
4/26/2019	CADCHF	11:30:00 AM	0.75681	0.75751			N/A

4/26/2019	CADCHF	1:30:00 PM	0.75625	0.75697			N/A
4/26/2019	CADCHF	3:30:00 PM	0.75851	0.75845			N/A
4/26/2019	CADCHF.fx	9:30:00 AM	0.75701	0.75698			N/A
4/26/2019	CADCHF.fx	11:30:00 AM	0.75715	0.75716			N/A
4/26/2019	CADCHF.fx	1:30:00 PM	0.75659	0.75662			N/A
4/26/2019	CADCHF.fx	3:30:00 PM	0.75869	0.75823			N/A
4/26/2019	CADCZK	9:30:00 AM	17.113	17.127			N/A
4/26/2019	CADCZK	11:30:00 AM	17.105	17.122			N/A
4/26/2019	CADCZK	1:30:00 PM	17.078	17.094			N/A
4/26/2019	CADCZK	3:30:00 PM	17.122	17.119			N/A
4/26/2019	CADDKK	9:30:00 AM	4.972	4.975			N/A
4/26/2019	CADDKK	11:30:00 AM	4.97	4.972			N/A
4/26/2019	CADDKK	1:30:00 PM	4.967	4.971			N/A
4/26/2019	CADDKK	3:30:00 PM	4.978	4.975			N/A
4/26/2019	CADHKD	9:30:00 AM	5.8184	5.8214			N/A
4/26/2019	CADHKD	11:30:00 AM	5.8167	5.8207			N/A
4/26/2019	CADHKD	1:30:00 PM	5.8123	5.8156			N/A
4/26/2019	CADHKD	3:30:00 PM	5.8178	5.8165			N/A
4/26/2019	CADHUF	9:30:00 AM	214.39	214.53			N/A
4/26/2019	CADHUF	11:30:00 AM	214.51	214.57			N/A
4/26/2019	CADHUF	1:30:00 PM	214.06	214.14			N/A
4/26/2019	CADHUF	3:30:00 PM	214.61	214.51			N/A
4/26/2019	CADJPY	9:30:00 AM	82.861	82.922			N/A
4/26/2019	CADJPY	11:30:00 AM	82.816	82.881			N/A
4/26/2019	CADJPY	1:30:00 PM	82.822	82.886			N/A
4/26/2019	CADJPY	3:30:00 PM	83.015	83			N/A
4/26/2019	CADJPY.fx	9:30:00 AM	82.894	82.888			N/A
4/26/2019	CADJPY.fx	11:30:00 AM	82.849	82.846			N/A
4/26/2019	CADJPY.fx	1:30:00 PM	82.855	82.851			N/A
4/26/2019	CADJPY.fx	3:30:00 PM	83.034	82.967			N/A
4/26/2019	CADMXN	9:30:00 AM	14.1247	14.1328			N/A
4/26/2019	CADMXN	11:30:00 AM	14.1143	14.1245			N/A
4/26/2019	CADMXN	1:30:00 PM	14.1114	14.1229			N/A
4/26/2019	CADMXN	3:30:00 PM	14.1551	14.1509			N/A

4/26/2019	CADNOK	9:30:00 AM	6.4277	6.4323			N/A
4/26/2019	CADNOK	11:30:00 AM	6.4271	6.4308			N/A
4/26/2019	CADNOK	1:30:00 PM	6.4266	6.4303			N/A
4/26/2019	CADNOK	3:30:00 PM	6.4457	6.4417			N/A
4/26/2019	CADPLN	9:30:00 AM	2.8562	2.8581			N/A
4/26/2019	CADPLN	11:30:00 AM	2.8559	2.8579			N/A
4/26/2019	CADPLN	1:30:00 PM	2.852	2.8538			N/A
4/26/2019	CADPLN	3:30:00 PM	2.8579	2.8579			N/A
4/26/2019	CADSEK	9:30:00 AM	7.066	7.0688			N/A
4/26/2019	CADSEK	11:30:00 AM	7.0467	7.0505			N/A
4/26/2019	CADSEK	1:30:00 PM	7.0447	7.048			N/A
4/26/2019	CADSEK	3:30:00 PM	7.0523	7.0469			N/A
4/26/2019	CADSGD	9:30:00 AM	1.01	1.0103			N/A
4/26/2019	CADSGD	11:30:00 AM	1.0103	1.0106			N/A
4/26/2019	CADSGD	1:30:00 PM	1.0096	1.0099			N/A
4/26/2019	CADSGD	3:30:00 PM	1.0102	1.0105			N/A
4/26/2019	CADZAR	9:30:00 AM	10.6813	10.6846			N/A
4/26/2019	CADZAR	11:30:00 AM	10.6591	10.6728			N/A
4/26/2019	CADZAR	1:30:00 PM	10.6722	10.6857			N/A
4/26/2019	CADZAR	3:30:00 PM	10.7134	10.6541			N/A
4/26/2019	CHFCZK	9:30:00 AM	22.61	22.622			N/A
4/26/2019	CHFCZK	11:30:00 AM	22.596	22.61			N/A
4/26/2019	CHFCZK	1:30:00 PM	22.577	22.591			N/A
4/26/2019	CHFCZK	3:30:00 PM	22.57	22.575			N/A
4/26/2019	CHFDKK	9:30:00 AM	6.568	6.57			N/A
4/26/2019	CHFDKK	11:30:00 AM	6.565	6.567			N/A
4/26/2019	CHFDKK	1:30:00 PM	6.566	6.568			N/A
4/26/2019	CHFDKK	3:30:00 PM	6.562	6.563			N/A
4/26/2019	CHFDKK.fx	9:30:00 AM	6.5665	6.571			N/A
4/26/2019	CHFDKK.fx	11:30:00 AM	6.563	6.5687			N/A
4/26/2019	CHFDKK.fx	1:30:00 PM	6.5643	6.57			N/A
4/26/2019	CHFDKK.fx	3:30:00 PM	6.561	6.5643			N/A
4/26/2019	CHFHKD	9:30:00 AM	7.687	7.6907			N/A
4/26/2019	CHFHKD	11:30:00 AM	7.6838	7.6876			N/A

4/26/2019	CHFHKD	1:30:00 PM	7.6832	7.686			N/A
4/26/2019	CHFHKD	3:30:00 PM	7.6766	7.6645			N/A
4/26/2019	CHFHUF	9:30:00 AM	283.15	283.48			N/A
4/26/2019	CHFHUF	11:30:00 AM	283.25	283.5			N/A
4/26/2019	CHFHUF	1:30:00 PM	282.78	283.13			N/A
4/26/2019	CHFHUF	3:30:00 PM	282.78	283.08			N/A
4/26/2019	CHFJPY	9:30:00 AM	109.535	109.602			N/A
4/26/2019	CHFJPY	11:30:00 AM	109.449	109.516			N/A
4/26/2019	CHFJPY	1:30:00 PM	109.541	109.603			N/A
4/26/2019	CHFJPY	3:30:00 PM	109.51	109.508			N/A
4/26/2019	CHFJPY.fx	9:30:00 AM	109.568	109.567			N/A
4/26/2019	CHFJPY.fx	11:30:00 AM	109.483	109.483			N/A
4/26/2019	CHFJPY.fx	1:30:00 PM	109.574	109.568			N/A
4/26/2019	CHFJPY.fx	3:30:00 PM	109.525	109.479			N/A
4/26/2019	CHFMXN	9:30:00 AM	18.6615	18.6696			N/A
4/26/2019	CHFMXN	11:30:00 AM	18.6417	18.6542			N/A
4/26/2019	CHFMXN	1:30:00 PM	18.6516	18.6668			N/A
4/26/2019	CHFMXN	3:30:00 PM	18.6609	18.6575			N/A
4/26/2019	CHFNOK	9:30:00 AM	8.4926	8.4983			N/A
4/26/2019	CHFNOK	11:30:00 AM	8.4907	8.4982			N/A
4/26/2019	CHFNOK	1:30:00 PM	8.4969	8.5025			N/A
4/26/2019	CHFNOK	3:30:00 PM	8.4987	8.5026			N/A
4/26/2019	CHFNOK.fx	9:30:00 AM	8.49598	8.49481			N/A
4/26/2019	CHFNOK.fx	11:30:00 AM	8.49421	8.49466			N/A
4/26/2019	CHFNOK.fx	1:30:00 PM	8.50043	8.49898			N/A
4/26/2019	CHFNOK.fx	3:30:00 PM	8.50187	8.49903			N/A
4/26/2019	CHFPLN	9:30:00 AM	3.7736	3.7758			N/A
4/26/2019	CHFPLN	11:30:00 AM	3.7721	3.7752			N/A
4/26/2019	CHFPLN	1:30:00 PM	3.7699	3.7729			N/A
4/26/2019	CHFPLN	3:30:00 PM	3.77	3.7704			N/A
4/26/2019	CHFPLN.fx	9:30:00 AM	3.77114	3.77815			N/A
4/26/2019	CHFPLN.fx	11:30:00 AM	3.76976	3.77743			N/A
4/26/2019	CHFPLN.fx	1:30:00 PM	3.76744	3.77523			N/A
4/26/2019	CHFPLN.fx	3:30:00 PM	3.76679	3.77433			N/A

4/26/2019	CHFSEK	9:30:00 AM	9.3358	9.337			N/A
4/26/2019	CHFSEK	11:30:00 AM	9.3079	9.3128			N/A
4/26/2019	CHFSEK	1:30:00 PM	9.3114	9.3154			N/A
4/26/2019	CHFSEK	3:30:00 PM	9.2944	9.2917			N/A
4/26/2019	CHFSGD	9:30:00 AM	1.3351	1.3355			N/A
4/26/2019	CHFSGD	11:30:00 AM	1.3349	1.3354			N/A
4/26/2019	CHFSGD	1:30:00 PM	1.3351	1.3355			N/A
4/26/2019	CHFSGD	3:30:00 PM	1.3333	1.332			N/A
4/26/2019	CHFSGD.fx	9:30:00 AM	1.33533	1.33527			N/A
4/26/2019	CHFSGD.fx	11:30:00 AM	1.33508	1.33511			N/A
4/26/2019	CHFSGD.fx	1:30:00 PM	1.33524	1.33527			N/A
4/26/2019	CHFSGD.fx	3:30:00 PM	1.33352	1.33201			N/A
4/26/2019	CHFZAR	9:30:00 AM	14.1164	14.1098			N/A
4/26/2019	CHFZAR	11:30:00 AM	14.0831	14.0925			N/A
4/26/2019	CHFZAR	1:30:00 PM	14.1096	14.1195			N/A
4/26/2019	CHFZAR	3:30:00 PM	14.1259	14.0528			N/A
4/26/2019	CZKJPY	9:30:00 AM	4.841	4.844			N/A
4/26/2019	CZKJPY	11:30:00 AM	4.839	4.843			N/A
4/26/2019	CZKJPY	1:30:00 PM	4.848	4.851			N/A
4/26/2019	CZKJPY	3:30:00 PM	4.848	4.849			N/A
4/26/2019	DAX30.i	9:30:00 AM	12295.44	12296.19			N/A
4/26/2019	DAX30.i	11:30:00 AM	12303.94	12299.44			N/A
4/26/2019	DAX30.i	1:30:00 PM	12315.44	12313.94			N/A
4/26/2019	DAX30.i	3:30:00 PM	12334.94	12309.94			N/A
4/26/2019	DJ30.i	9:30:00 AM					N/A
4/26/2019	DJ30.i	11:30:00 AM					N/A
4/26/2019	DJ30.i	1:30:00 PM					N/A
4/26/2019	DJ30.i	3:30:00 PM					N/A
4/26/2019	DKKJPY	9:30:00 AM					N/A
4/26/2019	DKKJPY	11:30:00 AM	16.66	16.68			N/A
4/26/2019	DKKJPY	1:30:00 PM	16.67	16.69			N/A
4/26/2019	DKKJPY	3:30:00 PM	16.69	16.69			N/A
4/26/2019	EURAUD	9:30:00 AM	1.58532	1.58515			N/A
4/26/2019	EURAUD	11:30:00 AM	1.58358	1.58399			N/A

4/26/2019	EURAUD	1:30:00 PM	1.58204	1.58249			N/A
4/26/2019	EURAUD	3:30:00 PM	1.58227	1.58077			N/A
4/26/2019	EURAUD.fx	9:30:00 AM	1.58554	1.58493			N/A
4/26/2019	EURAUD.fx	11:30:00 AM	1.58379	1.58375			N/A
4/26/2019	EURAUD.fx	1:30:00 PM	1.58225	1.58226			N/A
4/26/2019	EURAUD.fx	3:30:00 PM	1.58245	1.58055			N/A
4/26/2019	EURCAD	9:30:00 AM	1.50118	1.5018			N/A
4/26/2019	EURCAD	11:30:00 AM	1.50137	1.50218			N/A
4/26/2019	EURCAD	1:30:00 PM	1.50213	1.50294			N/A
4/26/2019	EURCAD	3:30:00 PM	1.50021	1.49937			N/A
4/26/2019	EURCAD.fx	9:30:00 AM	1.50159	1.50139			N/A
4/26/2019	EURCAD.fx	11:30:00 AM	1.5018	1.50175			N/A
4/26/2019	EURCAD.fx	1:30:00 PM	1.50256	1.5025			N/A
4/26/2019	EURCAD.fx	3:30:00 PM	1.5003	1.49907			N/A
4/26/2019	EURCHF	9:30:00 AM	1.13674	1.13653			N/A
4/26/2019	EURCHF	11:30:00 AM	1.13706	1.13709			N/A
4/26/2019	EURCHF	1:30:00 PM	1.13679	1.13687			N/A
4/26/2019	EURCHF	3:30:00 PM	1.13774	1.13733			N/A
4/26/2019	EURCHF.fx	9:30:00 AM	1.1368	1.13648			N/A
4/26/2019	EURCHF.fx	11:30:00 AM	1.13711	1.13703			N/A
4/26/2019	EURCHF.fx	1:30:00 PM	1.13685	1.13681			N/A
4/26/2019	EURCHF.fx	3:30:00 PM	1.13777	1.1373			N/A
4/26/2019	EURCZK	9:30:00 AM	25.684	25.723			N/A
4/26/2019	EURCZK	11:30:00 AM	25.679	25.716			N/A
4/26/2019	EURCZK	1:30:00 PM	25.651	25.689			N/A
4/26/2019	EURCZK	3:30:00 PM	25.659	25.69			N/A
4/26/2019	EURDKK	9:30:00 AM	7.4647	7.4659			N/A
4/26/2019	EURDKK	11:30:00 AM	7.4645	7.4658			N/A
4/26/2019	EURDKK	1:30:00 PM	7.4612	7.4624			N/A
4/26/2019	EURDKK	3:30:00 PM	7.4635	7.4643			N/A
4/26/2019	EURGBP	9:30:00 AM	0.86295	0.86296			N/A
4/26/2019	EURGBP	11:30:00 AM	0.86326	0.86331			N/A
4/26/2019	EURGBP	1:30:00 PM	0.8628	0.86282			N/A
4/26/2019	EURGBP	3:30:00 PM	0.86321	0.86273	1000	1000	N/A



4/26/2019	EURGBP.fx	9:30:00 AM	0.86298	0.8629			N/A
4/26/2019	EURGBP.fx	11:30:00 AM	0.86329	0.86327			N/A
4/26/2019	EURGBP.fx	1:30:00 PM	0.86284	0.86277			N/A
4/26/2019	EURGBP.fx	3:30:00 PM	0.86326	0.8627			N/A
4/26/2019	EURHKD	9:30:00 AM	8.7385	8.7418			N/A
4/26/2019	EURHKD	11:30:00 AM	8.7374	8.7423			N/A
4/26/2019	EURHKD	1:30:00 PM	8.7342	8.7392			N/A
4/26/2019	EURHKD	3:30:00 PM	8.7322	8.7206			N/A
4/26/2019	EURHKD.fx	9:30:00 AM	8.74128	8.73894			N/A
4/26/2019	EURHKD.fx	11:30:00 AM	8.74028	8.7394			N/A
4/26/2019	EURHKD.fx	1:30:00 PM	8.73704	8.73626			N/A
4/26/2019	EURHKD.fx	3:30:00 PM	8.73312	8.71861			N/A
4/26/2019	EURHUF	9:30:00 AM	321.75	322.36			N/A
4/26/2019	EURHUF	11:30:00 AM	322.03	322.64			N/A
4/26/2019	EURHUF	1:30:00 PM	321.53	322.11			N/A
4/26/2019	EURHUF	3:30:00 PM	321.77	322.43			N/A
4/26/2019	EURHUF.fx	9:30:00 AM	322.035	322.209			N/A
4/26/2019	EURHUF.fx	11:30:00 AM	322.295	322.479			N/A
4/26/2019	EURHUF.fx	1:30:00 PM	321.791	321.98			N/A
4/26/2019	EURHUF.fx	3:30:00 PM	322.045	322.122			N/A
4/26/2019	EURJPY	9:30:00 AM	124.539	124.514			N/A
4/26/2019	EURJPY	11:30:00 AM	124.478	124.479			N/A
4/26/2019	EURJPY	1:30:00 PM	124.549	124.555			N/A
4/26/2019	EURJPY	3:30:00 PM	124.582	124.519			N/A
4/26/2019	EURJPY.fx	9:30:00 AM	124.541	124.509			N/A
4/26/2019	EURJPY.fx	11:30:00 AM	124.481	124.476			N/A
4/26/2019	EURJPY.fx	1:30:00 PM	124.552	124.551			N/A
4/26/2019	EURJPY.fx	3:30:00 PM	124.584	124.516			N/A
4/26/2019	EURMXN	9:30:00 AM	21.2099	21.2239			N/A
4/26/2019	EURMXN	11:30:00 AM	21.2022	21.2129			N/A
4/26/2019	EURMXN	1:30:00 PM	21.2061	21.2254			N/A
4/26/2019	EURMXN	3:30:00 PM	21.2322	21.2276			N/A
4/26/2019	EURMXN.f	9:30:00 AM	21.2182	21.2155			N/A
4/26/2019	EURMXN.f	11:30:00 AM	21.2111	21.2039			N/A

4/26/2019	EURMXN.fx	1:30:00 PM	21.2153	21.2164			N/A
4/26/2019	EURMXN.fx	3:30:00 PM	21.2401	21.2181			N/A
4/26/2019	EURNOK	9:30:00 AM	9.6506	9.6618			N/A
4/26/2019	EURNOK	11:30:00 AM	9.6533	9.6644			N/A
4/26/2019	EURNOK	1:30:00 PM	9.658	9.668			N/A
4/26/2019	EURNOK	3:30:00 PM	9.6645	9.6743			N/A
4/26/2019	EURNOK.fx	9:30:00 AM	9.65581	9.65653			N/A
4/26/2019	EURNOK.fx	11:30:00 AM	9.65869	9.65893			N/A
4/26/2019	EURNOK.fx	1:30:00 PM	9.66359	9.66229			N/A
4/26/2019	EURNOK.fx	3:30:00 PM	9.6694	9.66913			N/A
4/26/2019	EURNZD	9:30:00 AM	1.67602	1.67665			N/A
4/26/2019	EURNZD	11:30:00 AM	1.67488	1.67572			N/A
4/26/2019	EURNZD	1:30:00 PM	1.67443	1.67516			N/A
4/26/2019	EURNZD	3:30:00 PM	1.67423	1.67325			N/A
4/26/2019	EURNZD.fx	9:30:00 AM	1.67645	1.67619			N/A
4/26/2019	EURNZD.fx	11:30:00 AM	1.67531	1.67529			N/A
4/26/2019	EURNZD.fx	1:30:00 PM	1.67486	1.67473			N/A
4/26/2019	EURNZD.fx	3:30:00 PM	1.67451	1.67285			N/A
4/26/2019	EURPLN	9:30:00 AM	4.2887	4.2916			N/A
4/26/2019	EURPLN	11:30:00 AM	4.2891	4.2924			N/A
4/26/2019	EURPLN	1:30:00 PM	4.2857	4.2875			N/A
4/26/2019	EURPLN	3:30:00 PM	4.2884	4.2891			N/A
4/26/2019	EURPLN.fx	9:30:00 AM	4.28797	4.29222			N/A
4/26/2019	EURPLN.fx	11:30:00 AM	4.28869	4.29302			N/A
4/26/2019	EURPLN.fx	1:30:00 PM	4.285	4.28962			N/A
4/26/2019	EURPLN.fx	3:30:00 PM	4.28776	4.29003			N/A
4/26/2019	EURRUB	9:30:00 AM					N/A
4/26/2019	EURRUB	11:30:00 AM	71.695	72.129			N/A
4/26/2019	EURRUB	1:30:00 PM	71.862	72.281			N/A
4/26/2019	EURRUB	3:30:00 PM	71.786	72.045			N/A
4/26/2019	EURSEK	9:30:00 AM	10.6119	10.6144			N/A
4/26/2019	EURSEK	11:30:00 AM	10.5859	10.5902			N/A
4/26/2019	EURSEK	1:30:00 PM	10.587	10.5912			N/A
4/26/2019	EURSEK	3:30:00 PM	10.5748	10.5784			N/A

4/26/2019	EURSEK.fx	9:30:00 AM	10.6134	10.61265			N/A
4/26/2019	EURSEK.fx	11:30:00 AM	10.58746	10.58854			N/A
4/26/2019	EURSEK.fx	1:30:00 PM	10.58886	10.58942			N/A
4/26/2019	EURSEK.fx	3:30:00 PM	10.57655	10.57683			N/A
4/26/2019	EURSGD	9:30:00 AM	1.5174	1.5181			N/A
4/26/2019	EURSGD	11:30:00 AM	1.5177	1.5186			N/A
4/26/2019	EURSGD	1:30:00 PM	1.5175	1.5184			N/A
4/26/2019	EURSGD	3:30:00 PM	1.5169	1.5154			N/A
4/26/2019	EURSGD.fx	9:30:00 AM	1.51781	1.51767			N/A
4/26/2019	EURSGD.fx	11:30:00 AM	1.51808	1.51815			N/A
4/26/2019	EURSGD.fx	1:30:00 PM	1.51789	1.51797			N/A
4/26/2019	EURSGD.fx	3:30:00 PM	1.51718	1.51522			N/A
4/26/2019	EURUSD	9:30:00 AM	1.11403	1.11386	10	10	N/A
4/26/2019	EURUSD	11:30:00 AM	1.11388	1.11396			N/A
4/26/2019	EURUSD	1:30:00 PM	1.11353	1.1136	10	10	N/A
4/26/2019	EURUSD	3:30:00 PM	1.11328	1.11115	10	10	N/A
4/26/2019	EURUSD.fx	9:30:00 AM	1.11424	1.11396			N/A
4/26/2019	EURUSD.fx	11:30:00 AM	1.11409	1.11405			N/A
4/26/2019	EURUSD.fx	1:30:00 PM	1.11374	1.11369			N/A
4/26/2019	EURUSD.fx	3:30:00 PM	1.11335	1.11129			N/A
4/26/2019	EURZAR	9:30:00 AM	16.0447	16.0435			N/A
4/26/2019	EURZAR	11:30:00 AM	16.0147	16.0321			N/A
4/26/2019	EURZAR	1:30:00 PM	16.042	16.0628			N/A
4/26/2019	EURZAR	3:30:00 PM	16.0784	16.0481			N/A
4/26/2019	EURZAR.fx	9:30:00 AM	16.04378	16.04511			N/A
4/26/2019	EURZAR.fx	11:30:00 AM	16.01382	16.03236			N/A
4/26/2019	EURZAR.fx	1:30:00 PM	16.04198	16.06276			N/A
4/26/2019	EURZAR.fx	3:30:00 PM	16.0729	16.05595			N/A
4/26/2019	GBPAUD	9:30:00 AM	1.83753	1.83757			N/A
4/26/2019	GBPAUD	11:30:00 AM	1.83497	1.83566			N/A
4/26/2019	GBPAUD	1:30:00 PM	1.83422	1.83479			N/A
4/26/2019	GBPAUD	3:30:00 PM	1.83404	1.83272			N/A
4/26/2019	GBPAUD.fx	9:30:00 AM	1.83795	1.83716			N/A
4/26/2019	GBPAUD.fx	11:30:00 AM	1.83537	1.83526			N/A

4/26/2019	GBPAUD.fx	1:30:00 PM	1.83463	1.8344			N/A
4/26/2019	GBPAUD.fx	3:30:00 PM	1.83439	1.83235			N/A
4/26/2019	GBPCAD	9:30:00 AM	1.73958	1.74018			N/A
4/26/2019	GBPCAD	11:30:00 AM	1.73917	1.74			N/A
4/26/2019	GBPCAD	1:30:00 PM	1.74126	1.74167			N/A
4/26/2019	GBPCAD	3:30:00 PM	1.73789	1.73732			N/A
4/26/2019	GBPCAD.fx	9:30:00 AM	1.73997	1.73979			N/A
4/26/2019	GBPCAD.fx	11:30:00 AM	1.73955	1.7396			N/A
4/26/2019	GBPCAD.fx	1:30:00 PM	1.74169	1.74128			N/A
4/26/2019	GBPCAD.fx	3:30:00 PM	1.73827	1.73719			N/A
4/26/2019	GBPCHF	9:30:00 AM	1.31701	1.3172			N/A
4/26/2019	GBPCHF	11:30:00 AM	1.31694	1.31734			N/A
4/26/2019	GBPCHF	1:30:00 PM	1.31746	1.31772			N/A
4/26/2019	GBPCHF	3:30:00 PM	1.3182	1.31794			N/A
4/26/2019	GBPCHF.fx	9:30:00 AM	1.3172	1.31701			N/A
4/26/2019	GBPCHF.fx	11:30:00 AM	1.31715	1.31712			N/A
4/26/2019	GBPCHF.fx	1:30:00 PM	1.31768	1.31752			N/A
4/26/2019	GBPCHF.fx	3:30:00 PM	1.31837	1.31788			N/A
4/26/2019	GBPCZK	9:30:00 AM	29.776	29.794			N/A
4/26/2019	GBPCZK	11:30:00 AM	29.757	29.776			N/A
4/26/2019	GBPCZK	1:30:00 PM	29.744	29.761			N/A
4/26/2019	GBPCZK	3:30:00 PM	29.745	29.744			N/A
4/26/2019	GBPDKK	9:30:00 AM	8.648	8.658			N/A
4/26/2019	GBPDKK	11:30:00 AM	8.643	8.654			N/A
4/26/2019	GBPDKK	1:30:00 PM	8.648	8.659			N/A
4/26/2019	GBPDKK	3:30:00 PM	8.649	8.653			N/A
4/26/2019	GBPDKK.fx	9:30:00 AM	8.6461	8.6581			N/A
4/26/2019	GBPDKK.fx	11:30:00 AM	8.6418	8.6543			N/A
4/26/2019	GBPDKK.fx	1:30:00 PM	8.6468	8.659			N/A
4/26/2019	GBPDKK.fx	3:30:00 PM	8.6468	8.6544			N/A
4/26/2019	GBPHKD	9:30:00 AM	10.1226	10.1276			N/A
4/26/2019	GBPHKD	11:30:00 AM	10.1184	10.1237			N/A
4/26/2019	GBPHKD	1:30:00 PM	10.1216	10.125			N/A
4/26/2019	GBPHKD	3:30:00 PM	10.1111	10.1011			N/A

4/26/2019	GBPHUF	9:30:00 AM	372.9	373.33			N/A
4/26/2019	GBPHUF	11:30:00 AM	373.03	373.32			N/A
4/26/2019	GBPHUF	1:30:00 PM	372.7	372.95			N/A
4/26/2019	GBPHUF	3:30:00 PM	372.65	372.92			N/A
4/26/2019	GBPJPY	9:30:00 AM	144.254	144.275			N/A
4/26/2019	GBPJPY	11:30:00 AM	144.141	144.173			N/A
4/26/2019	GBPJPY	1:30:00 PM	144.303	144.336			N/A
4/26/2019	GBPJPY	3:30:00 PM	144.297	144.267			N/A
4/26/2019	GBPJPY.fx	9:30:00 AM	144.274	144.255			N/A
4/26/2019	GBPJPY.fx	11:30:00 AM	144.16	144.152			N/A
4/26/2019	GBPJPY.fx	1:30:00 PM	144.323	144.315			N/A
4/26/2019	GBPJPY.fx	3:30:00 PM	144.313	144.248			N/A
4/26/2019	GBPMXN	9:30:00 AM	24.5756	24.5827			N/A
4/26/2019	GBPMXN	11:30:00 AM	24.5524	24.5646			N/A
4/26/2019	GBPMXN	1:30:00 PM	24.5776	24.5853			N/A
4/26/2019	GBPMXN	3:30:00 PM	24.5948	24.5808			N/A
4/26/2019	GBPNOK	9:30:00 AM	11.1843	11.1945			N/A
4/26/2019	GBPNOK	11:30:00 AM	11.1828	11.1937			N/A
4/26/2019	GBPNOK	1:30:00 PM	11.1947	11.2045			N/A
4/26/2019	GBPNOK	3:30:00 PM	11.2024	11.2058			N/A
4/26/2019	GBPNOK.fx	9:30:00 AM	11.18924	11.18977			N/A
4/26/2019	GBPNOK.fx	11:30:00 AM	11.18778	11.1885			N/A
4/26/2019	GBPNOK.fx	1:30:00 PM	11.19967	11.19939			N/A
4/26/2019	GBPNOK.fx	3:30:00 PM	11.20647	11.2011			N/A
4/26/2019	GBPNZD	9:30:00 AM	1.94218	1.94271			N/A
4/26/2019	GBPNZD	11:30:00 AM	1.94034	1.94095			N/A
4/26/2019	GBPNZD	1:30:00 PM	1.94076	1.94145			N/A
4/26/2019	GBPNZD	3:30:00 PM	1.94037	1.9388			N/A
4/26/2019	GBPNZD.fx	9:30:00 AM	1.94256	1.94232			N/A
4/26/2019	GBPNZD.fx	11:30:00 AM	1.94071	1.94056			N/A
4/26/2019	GBPNZD.fx	1:30:00 PM	1.94112	1.94107			N/A
4/26/2019	GBPNZD.fx	3:30:00 PM	1.94065	1.93834			N/A
4/26/2019	GBPPLN	9:30:00 AM	4.9712	4.9724			N/A
4/26/2019	GBPPLN	11:30:00 AM	4.9695	4.971			N/A

4/26/2019	GBPPLN	1:30:00 PM	4.9683	4.9699			N/A
4/26/2019	GBPPLN	3:30:00 PM	4.9702	4.9693			N/A
4/26/2019	GBPPLN.fx	9:30:00 AM	4.9691	4.97454			N/A
4/26/2019	GBPPLN.fx	11:30:00 AM	4.96741	4.97304			N/A
4/26/2019	GBPPLN.fx	1:30:00 PM	4.96609	4.97201			N/A
4/26/2019	GBPPLN.fx	3:30:00 PM	4.96737	4.97206			N/A
4/26/2019	GBPSEK	9:30:00 AM	12.2958	12.3016			N/A
4/26/2019	GBPSEK	11:30:00 AM	12.2608	12.2692			N/A
4/26/2019	GBPSEK	1:30:00 PM	12.268	12.2769			N/A
4/26/2019	GBPSEK	3:30:00 PM	12.2551	12.2562			N/A
4/26/2019	GBPSEK.fx	9:30:00 AM	12.29215	12.30526			N/A
4/26/2019	GBPSEK.fx	11:30:00 AM	12.25704	12.27272			N/A
4/26/2019	GBPSEK.fx	1:30:00 PM	12.26454	12.28039			N/A
4/26/2019	GBPSEK.fx	3:30:00 PM	12.25207	12.25965			N/A
4/26/2019	GBPSGD	9:30:00 AM	1.7584	1.759			N/A
4/26/2019	GBPSGD	11:30:00 AM	1.7582	1.7588			N/A
4/26/2019	GBPSGD	1:30:00 PM	1.7591	1.7597			N/A
4/26/2019	GBPSGD	3:30:00 PM	1.7574	1.7559			N/A
4/26/2019	GBPSGD.fx	9:30:00 AM	1.75662	1.7608			N/A
4/26/2019	GBPSGD.fx	11:30:00 AM	1.75634	1.76064			N/A
4/26/2019	GBPSGD.fx	1:30:00 PM	1.75726	1.76142			N/A
4/26/2019	GBPSGD.fx	3:30:00 PM	1.75554	1.75814			N/A
4/26/2019	GBPUSD	9:30:00 AM	1.29109	1.29091			N/A
4/26/2019	GBPUSD	11:30:00 AM	1.29046	1.29049			N/A
4/26/2019	GBPUSD	1:30:00 PM	1.2909	1.29078			N/A
4/26/2019	GBPUSD	3:30:00 PM	1.2896	1.28773			N/A
4/26/2019	GBPUSD.fx	9:30:00 AM	1.29114	1.29086			N/A
4/26/2019	GBPUSD.fx	11:30:00 AM	1.29051	1.29043			N/A
4/26/2019	GBPUSD.fx	1:30:00 PM	1.29096	1.29071			N/A
4/26/2019	GBPUSD.fx	3:30:00 PM	1.28962	1.28774			N/A
4/26/2019	GBPZAR	9:30:00 AM	18.5886	18.5944			N/A
4/26/2019	GBPZAR	11:30:00 AM	18.547	18.5746			N/A
4/26/2019	GBPZAR	1:30:00 PM	18.5914	18.6189			N/A
4/26/2019	GBPZAR	3:30:00 PM	18.6298	18.5774			N/A

4/26/2019	GBPZAR.fx	9:30:00 AM	18.5928	18.5893			N/A
4/26/2019	GBPZAR.fx	11:30:00 AM	18.5542	18.5675			N/A
4/26/2019	GBPZAR.fx	1:30:00 PM	18.5988	18.6116			N/A
4/26/2019	GBPZAR.fx	3:30:00 PM	18.6307	18.5968			N/A
4/26/2019	GOLD	9:30:00 AM	1281.32	1281.64			N/A
4/26/2019	GOLD	11:30:00 AM	1282.18	1282.52			N/A
4/26/2019	GOLD	1:30:00 PM	1280.15	1280.43			N/A
4/26/2019	GOLD	3:30:00 PM	1279.15	1274.85			N/A
4/26/2019	HKDJPY	9:30:00 AM	14.24	14.25			N/A
4/26/2019	HKDJPY	11:30:00 AM	14.23	14.24			N/A
4/26/2019	HKDJPY	1:30:00 PM	14.25	14.27			N/A
4/26/2019	HKDJPY	3:30:00 PM	14.28	14.27			N/A
4/26/2019	HKDJPY.fx	9:30:00 AM	14.234	14.242			N/A
4/26/2019	HKDJPY.fx	11:30:00 AM	14.23	14.237			N/A
4/26/2019	HKDJPY.fx	1:30:00 PM	14.243	14.25			N/A
4/26/2019	HKDJPY.fx	3:30:00 PM	14.273	14.259			N/A
4/26/2019	HUFJPY	9:30:00 AM	0.3865	0.3868			N/A
4/26/2019	HUFJPY	11:30:00 AM	0.3862	0.3865			N/A
4/26/2019	HUFJPY	1:30:00 PM	0.387	0.3873			N/A
4/26/2019	HUFJPY	3:30:00 PM	0.3868	0.3871			N/A
4/26/2019	JP225.i	9:30:00 AM	22257.22	22264.33			N/A
4/26/2019	JP225.i	11:30:00 AM	22239.33	22254.33			N/A
4/26/2019	JP225.i	1:30:00 PM	22261.83	22279.33			N/A
4/26/2019	JP225.i	3:30:00 PM	22296.83	22283.5			N/A
4/26/2019	MXNJPY	9:30:00 AM	5.87	5.87			N/A
4/26/2019	MXNJPY	11:30:00 AM	5.86	5.87			N/A
4/26/2019	MXNJPY	1:30:00 PM	5.86	5.87			N/A
4/26/2019	MXNJPY	3:30:00 PM	5.86	5.86			N/A
4/26/2019	NASDAQ.i	9:30:00 AM					N/A
4/26/2019	NASDAQ.i	11:30:00 AM					N/A
4/26/2019	NASDAQ.i	1:30:00 PM					N/A
4/26/2019	NASDAQ.i	3:30:00 PM					N/A
4/26/2019	NOKJPY	9:30:00 AM	12.88	12.91			N/A
4/26/2019	NOKJPY	11:30:00 AM	12.87	12.9			N/A

4/26/2019	NOKJPY	1:30:00 PM	12.87	12.9			N/A
4/26/2019	NOKJPY	3:30:00 PM	12.87	12.89			N/A
4/26/2019	NOKJPY.fx	9:30:00 AM	12.889	12.894			N/A
4/26/2019	NOKJPY.fx	11:30:00 AM	12.88	12.886			N/A
4/26/2019	NOKJPY.fx	1:30:00 PM	12.883	12.887			N/A
4/26/2019	NOKJPY.fx	3:30:00 PM	12.876	12.877			N/A
4/26/2019	NZDCAD	9:30:00 AM	0.89536	0.89605			N/A
4/26/2019	NZDCAD	11:30:00 AM	0.89608	0.89674			N/A
4/26/2019	NZDCAD	1:30:00 PM	0.89687	0.89742			N/A
4/26/2019	NZDCAD	3:30:00 PM	0.89628	0.8954			N/A
4/26/2019	NZDCAD.fx	9:30:00 AM	0.8957	0.8957			N/A
4/26/2019	NZDCAD.fx	11:30:00 AM	0.89641	0.8964			N/A
4/26/2019	NZDCAD.fx	1:30:00 PM	0.8972	0.89708			N/A
4/26/2019	NZDCAD.fx	3:30:00 PM	0.89663	0.89539			N/A
4/26/2019	NZDCHF	9:30:00 AM	0.67772	0.67837			N/A
4/26/2019	NZDCHF	11:30:00 AM	0.67838	0.67907			N/A
4/26/2019	NZDCHF	1:30:00 PM	0.67846	0.67909			N/A
4/26/2019	NZDCHF	3:30:00 PM	0.67963	0.67944			N/A
4/26/2019	NZDCHF.fx	9:30:00 AM	0.67806	0.67802			N/A
4/26/2019	NZDCHF.fx	11:30:00 AM	0.67872	0.67871			N/A
4/26/2019	NZDCHF.fx	1:30:00 PM	0.6788	0.67874			N/A
4/26/2019	NZDCHF.fx	3:30:00 PM	0.67998	0.67929			N/A
4/26/2019	NZDCZK	9:30:00 AM	15.326	15.338			N/A
4/26/2019	NZDCZK	11:30:00 AM	15.333	15.345			N/A
4/26/2019	NZDCZK	1:30:00 PM	15.321	15.331			N/A
4/26/2019	NZDCZK	3:30:00 PM	15.331	15.33			N/A
4/26/2019	NZDDKK	9:30:00 AM					N/A
4/26/2019	NZDDKK	11:30:00 AM	4.454	4.458			N/A
4/26/2019	NZDDKK	1:30:00 PM	4.455	4.457			N/A
4/26/2019	NZDDKK	3:30:00 PM	4.456	4.457			N/A
4/26/2019	NZDHKD	9:30:00 AM	5.2104	5.2124			N/A
4/26/2019	NZDHKD	11:30:00 AM	5.2135	5.2163			N/A
4/26/2019	NZDHKD	1:30:00 PM	5.2129	5.2156			N/A
4/26/2019	NZDHKD	3:30:00 PM	5.2132	5.2052			N/A



4/26/2019	NZDHUF	9:30:00 AM	191.92	192.2			N/A
4/26/2019	NZDHUF	11:30:00 AM	192.18	192.39			N/A
4/26/2019	NZDHUF	1:30:00 PM	191.95	192.14			N/A
4/26/2019	NZDHUF	3:30:00 PM	192.06	192.24			N/A
4/26/2019	NZDJPY	9:30:00 AM	74.212	74.272			N/A
4/26/2019	NZDJPY	11:30:00 AM	74.228	74.292			N/A
4/26/2019	NZDJPY	1:30:00 PM	74.29	74.359			N/A
4/26/2019	NZDJPY	3:30:00 PM	74.377	74.358			N/A
4/26/2019	NZDJPY.fx	9:30:00 AM	74.244	74.24			N/A
4/26/2019	NZDJPY.fx	11:30:00 AM	74.258	74.259			N/A
4/26/2019	NZDJPY.fx	1:30:00 PM	74.321	74.326			N/A
4/26/2019	NZDJPY.fx	3:30:00 PM	74.407	74.326			N/A
4/26/2019	NZDMXN	9:30:00 AM	12.6498	12.6539			N/A
4/26/2019	NZDMXN	11:30:00 AM	12.652	12.6555			N/A
4/26/2019	NZDMXN	1:30:00 PM	12.6602	12.6638			N/A
4/26/2019	NZDMXN	3:30:00 PM	12.6765	12.6633			N/A
4/26/2019	NZDNOK	9:30:00 AM	5.7558	5.7595			N/A
4/26/2019	NZDNOK	11:30:00 AM	5.7606	5.7632			N/A
4/26/2019	NZDNOK	1:30:00 PM	5.7646	5.7666			N/A
4/26/2019	NZDNOK	3:30:00 PM	5.7697	5.7684			N/A
4/26/2019	NZDPLN	9:30:00 AM	2.5576	2.5589			N/A
4/26/2019	NZDPLN	11:30:00 AM	2.5597	2.5611			N/A
4/26/2019	NZDPLN	1:30:00 PM	2.558	2.5593			N/A
4/26/2019	NZDPLN	3:30:00 PM	2.5595	2.5594			N/A
4/26/2019	NZDSEK	9:30:00 AM	6.3258	6.3317			N/A
4/26/2019	NZDSEK	11:30:00 AM	6.3138	6.3204			N/A
4/26/2019	NZDSEK	1:30:00 PM	6.3162	6.3225			N/A
4/26/2019	NZDSEK	3:30:00 PM	6.3112	6.3112			N/A
4/26/2019	NZDSGD	9:30:00 AM	0.9051	0.9058			N/A
4/26/2019	NZDSGD	11:30:00 AM	0.9059	0.9066			N/A
4/26/2019	NZDSGD	1:30:00 PM	0.9061	0.9067			N/A
4/26/2019	NZDSGD	3:30:00 PM	0.9065	0.9049			N/A
4/26/2019	NZDSGD.fx	9:30:00 AM	0.90509	0.90566			N/A
4/26/2019	NZDSGD.fx	11:30:00 AM	0.90589	0.90646			N/A

4/26/2019	NZDSGD.fx	1:30:00 PM	0.90609	0.90661			N/A
4/26/2019	NZDSGD.fx	3:30:00 PM	0.90642	0.90519			N/A
4/26/2019	NZDUSD	9:30:00 AM	0.66451	0.66458			N/A
4/26/2019	NZDUSD	11:30:00 AM	0.66489	0.66501			N/A
4/26/2019	NZDUSD	1:30:00 PM	0.66491	0.665			N/A
4/26/2019	NZDUSD	3:30:00 PM	0.66515	0.6636			N/A
4/26/2019	NZDUSD.fx	9:30:00 AM	0.66459	0.66459			N/A
4/26/2019	NZDUSD.fx	11:30:00 AM	0.66496	0.66501			N/A
4/26/2019	NZDUSD.fx	1:30:00 PM	0.66498	0.66501			N/A
4/26/2019	NZDUSD.fx	3:30:00 PM	0.66522	0.66371			N/A
4/26/2019	NZDZAR	9:30:00 AM	9.5632	9.5689			N/A
4/26/2019	NZDZAR	11:30:00 AM	9.5519	9.5654			N/A
4/26/2019	NZDZAR	1:30:00 PM	9.572	9.5847			N/A
4/26/2019	NZDZAR	3:30:00 PM	9.5917	9.5459			N/A
4/26/2019	SEKJPY	9:30:00 AM	11.73	11.74			N/A
4/26/2019	SEKJPY	11:30:00 AM					N/A
4/26/2019	SEKJPY	1:30:00 PM					N/A
4/26/2019	SEKJPY	3:30:00 PM	11.78	11.78			N/A
4/26/2019	SEKJPY.fx	9:30:00 AM	11.725	11.738			N/A
4/26/2019	SEKJPY.fx	11:30:00 AM	11.746	11.764			N/A
4/26/2019	SEKJPY.fx	1:30:00 PM	11.752	11.77			N/A
4/26/2019	SEKJPY.fx	3:30:00 PM	11.769	11.781			N/A
4/26/2019	SGDJPY	9:30:00 AM	81.97	82			N/A
4/26/2019	SGDJPY	11:30:00 AM	81.95	81.94			N/A
4/26/2019	SGDJPY	1:30:00 PM	82.01	82			N/A
4/26/2019	SGDJPY	3:30:00 PM	82.13	82.04			N/A
4/26/2019	SILVER	9:30:00 AM	14.81	15.19			N/A
4/26/2019	SILVER	11:30:00 AM	14.84	15.22			N/A
4/26/2019	SILVER	1:30:00 PM	14.82	15.2			N/A
4/26/2019	SILVER	3:30:00 PM	14.78	15.11			N/A
4/26/2019	SPX500.i	9:30:00 AM	2921.86	2922.66			N/A
4/26/2019	SPX500.i	11:30:00 AM	2922.36	2923.16			N/A
4/26/2019	SPX500.i	1:30:00 PM					N/A
4/26/2019	SPX500.i	3:30:00 PM	2930.11	2924.16			N/A

4/26/2019	UK100.i	9:30:00 AM	7444.74	7446.24			N/A
4/26/2019	UK100.i	11:30:00 AM	7425.49	7425.99			N/A
4/26/2019	UK100.i	1:30:00 PM	7432.99	7433.49			N/A
4/26/2019	UK100.i	3:30:00 PM	7441.74	7436.74			N/A
4/26/2019	USDCAD	9:30:00 AM	1.34778	1.34776			N/A
4/26/2019	USDCAD	11:30:00 AM	1.34798	1.34806			N/A
4/26/2019	USDCAD	1:30:00 PM	1.3491	1.34912			N/A
4/26/2019	USDCAD	3:30:00 PM	1.34898	1.3477			N/A
4/26/2019	USDCAD.fx	9:30:00 AM	1.34781	1.34773			N/A
4/26/2019	USDCAD.fx	11:30:00 AM	1.34802	1.34803			N/A
4/26/2019	USDCAD.fx	1:30:00 PM	1.34912	1.34909			N/A
4/26/2019	USDCAD.fx	3:30:00 PM	1.34899	1.34776			N/A
4/26/2019	USDCHF	9:30:00 AM	1.02017	1.0203			N/A
4/26/2019	USDCHF	11:30:00 AM	1.02059	1.02069			N/A
4/26/2019	USDCHF	1:30:00 PM	1.02071	1.02076			N/A
4/26/2019	USDCHF	3:30:00 PM	1.02361	1.02171			N/A
4/26/2019	USDCHF.fx	9:30:00 AM	1.02022	1.02024			N/A
4/26/2019	USDCHF.fx	11:30:00 AM	1.02063	1.02062			N/A
4/26/2019	USDCHF.fx	1:30:00 PM	1.02076	1.02069			N/A
4/26/2019	USDCHF.fx	3:30:00 PM	1.02359	1.02172			N/A
4/26/2019	USDCZK	9:30:00 AM	23.081	23.096			N/A
4/26/2019	USDCZK	11:30:00 AM	23.075	23.096			N/A
4/26/2019	USDCZK	1:30:00 PM	23.058	23.08			N/A
4/26/2019	USDCZK	3:30:00 PM	23.108	23.086			N/A
4/26/2019	USDCZK.fx	9:30:00 AM	23.0896	23.0872			N/A
4/26/2019	USDCZK.fx	11:30:00 AM	23.083	23.0876			N/A
4/26/2019	USDCZK.fx	1:30:00 PM	23.0662	23.071			N/A
4/26/2019	USDCZK.fx	3:30:00 PM	23.111	23.0876			N/A
4/26/2019	USDDKK	9:30:00 AM	6.7013	6.7036			N/A
4/26/2019	USDDKK	11:30:00 AM	6.7004	6.7041			N/A
4/26/2019	USDDKK	1:30:00 PM	6.7022	6.7061			N/A
4/26/2019	USDDKK	3:30:00 PM	6.7167	6.7077			N/A
4/26/2019	USDDKK.fx	9:30:00 AM	6.70177	6.70159			N/A
4/26/2019	USDDKK.fx	11:30:00 AM	6.70087	6.70211			N/A

4/26/2019	USDDKK.fx	1:30:00 PM	6.70277	6.704			N/A
4/26/2019	USDDKK.fx	3:30:00 PM	6.71645	6.70679			N/A
4/26/2019	USDHKD	9:30:00 AM	7.8449	7.845			N/A
4/26/2019	USDHKD	11:30:00 AM	7.8447	7.8448			N/A
4/26/2019	USDHKD	1:30:00 PM	7.8444	7.8448			N/A
4/26/2019	USDHKD	3:30:00 PM	7.8448	7.8446			N/A
4/26/2019	USDHKD.fx	9:30:00 AM	7.8448	7.84522			N/A
4/26/2019	USDHKD.fx	11:30:00 AM	7.84467	7.8452			N/A
4/26/2019	USDHKD.fx	1:30:00 PM	7.84431	7.84479			N/A
4/26/2019	USDHKD.fx	3:30:00 PM	7.84468	7.84503			N/A
4/26/2019	USDHUF	9:30:00 AM	288.94	289.33			N/A
4/26/2019	USDHUF	11:30:00 AM	289.14	289.6			N/A
4/26/2019	USDHUF	1:30:00 PM	288.8	289.27			N/A
4/26/2019	USDHUF	3:30:00 PM	289.55	289.62			N/A
4/26/2019	USDHUF.fx	9:30:00 AM	289.15	289.128			N/A
4/26/2019	USDHUF.fx	11:30:00 AM	289.335	289.395			N/A
4/26/2019	USDHUF.fx	1:30:00 PM	289.003	289.065			N/A
4/26/2019	USDHUF.fx	3:30:00 PM	289.705	289.348			N/A
4/26/2019	USDINR	9:30:00 AM	65.14	75.14			N/A
4/26/2019	USDINR	11:30:00 AM	65.1	75.09			N/A
4/26/2019	USDINR	1:30:00 PM					N/A
4/26/2019	USDINR	3:30:00 PM					N/A
4/26/2019	USDJPY	9:30:00 AM	111.693	111.701			N/A
4/26/2019	USDJPY	11:30:00 AM	111.652	111.66			N/A
4/26/2019	USDJPY	1:30:00 PM	111.756	111.76			N/A
4/26/2019	USDJPY	3:30:00 PM	112.019	111.802	1000	1000	N/A
4/26/2019	USDJPY.fx	9:30:00 AM	111.699	111.693			N/A
4/26/2019	USDJPY.fx	11:30:00 AM	111.659	111.652			N/A
4/26/2019	USDJPY.fx	1:30:00 PM	111.762	111.753			N/A
4/26/2019	USDJPY.fx	3:30:00 PM	112.022	111.803			N/A
4/26/2019	USDMXN	9:30:00 AM	19.044	19.045			N/A
4/26/2019	USDMXN	11:30:00 AM	19.035	19.037			N/A
4/26/2019	USDMXN	1:30:00 PM	19.045	19.054			N/A
4/26/2019	USDMXN	3:30:00 PM	19.101	19.073			N/A

4/26/2019	USDMXN.f	9:30:00 AM	19.0477	19.0421			N/A
4/26/2019	USDMXN.f	11:30:00 AM	19.0387	19.0324			N/A
4/26/2019	USDMXN.f	1:30:00 PM	19.0496	19.0498			N/A
4/26/2019	USDMXN.f	3:30:00 PM	19.1051	19.0687			N/A
4/26/2019	USDNOK	9:30:00 AM	8.6643	8.6706			N/A
4/26/2019	USDNOK	11:30:00 AM	8.6661	8.674			N/A
4/26/2019	USDNOK	1:30:00 PM	8.6736	8.6798			N/A
4/26/2019	USDNOK	3:30:00 PM	8.6968	8.6898			N/A
4/26/2019	USDNOK.fx	9:30:00 AM	8.66812	8.66628			N/A
4/26/2019	USDNOK.fx	11:30:00 AM	8.67027	8.66955			N/A
4/26/2019	USDNOK.fx	1:30:00 PM	8.67736	8.67523			N/A
4/26/2019	USDNOK.fx	3:30:00 PM	8.69955	8.68552			N/A
4/26/2019	USDPLN	9:30:00 AM	3.8507	3.8513			N/A
4/26/2019	USDPLN	11:30:00 AM	3.8507	3.8522			N/A
4/26/2019	USDPLN	1:30:00 PM	3.8488	3.8504			N/A
4/26/2019	USDPLN	3:30:00 PM	3.8583	3.8534			N/A
4/26/2019	USDPLN.fx	9:30:00 AM	3.84986	3.85208			N/A
4/26/2019	USDPLN.fx	11:30:00 AM	3.85004	3.85291			N/A
4/26/2019	USDPLN.fx	1:30:00 PM	3.84798	3.85119			N/A
4/26/2019	USDPLN.fx	3:30:00 PM	3.85664	3.85484			N/A
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4/26/2019	USDRUB	11:30:00 AM	64.467	64.855			N/A
4/26/2019	USDRUB	1:30:00 PM	64.637	65.015			N/A
4/26/2019	USDRUB	3:30:00 PM	64.686	64.954			N/A
4/26/2019	USDSEK	9:30:00 AM	9.526	9.5261			N/A
4/26/2019	USDSEK	11:30:00 AM	9.5018	9.5057			N/A
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4/26/2019	USDSEK.fx	9:30:00 AM	9.52855	9.52434			N/A
4/26/2019	USDSEK.fx	11:30:00 AM	9.50422	9.504			N/A
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4/26/2019	USDSEK.fx	3:30:00 PM	9.51662	9.50045			N/A
4/26/2019	USDSGD	9:30:00 AM	1.3622	1.3623			N/A
4/26/2019	USDSGD	11:30:00 AM	1.3625	1.3628			N/A

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4/26/2019	USDSGD	3:30:00 PM	1.364	1.3632			N/A
4/26/2019	USDSGD.fx	9:30:00 AM	1.36211	1.36248			N/A
4/26/2019	USDSGD.fx	11:30:00 AM	1.36245	1.36287			N/A
4/26/2019	USDSGD.fx	1:30:00 PM	1.36271	1.36318			N/A
4/26/2019	USDSGD.fx	3:30:00 PM	1.36392	1.36308			N/A
4/26/2019	USDZAR	9:30:00 AM	14.4027	14.4003			N/A
4/26/2019	USDZAR	11:30:00 AM	14.3752	14.3909			N/A
4/26/2019	USDZAR	1:30:00 PM	14.4042	14.4233			N/A
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4/26/2019	USDZAR.fx	11:30:00 AM	14.38109	14.38446			N/A
4/26/2019	USDZAR.fx	1:30:00 PM	14.41102	14.41672			N/A
4/26/2019	USDZAR.fx	3:30:00 PM	14.43164	14.43714			N/A
4/26/2019	XAUUSD	9:30:00 AM	1281.33	1281.64			N/A
4/26/2019	XAUUSD	11:30:00 AM	1282.19	1282.52			N/A
4/26/2019	XAUUSD	1:30:00 PM	1280.16	1280.43			N/A
4/26/2019	XAUUSD	3:30:00 PM	1279.14	1274.76			N/A
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4/26/2019	ZARJPY.fx	11:30:00 AM	7.752	7.755			N/A
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4/29/2019	#NG.f	3:30:00 PM	2.553	2.572			N/A
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4/29/2019	#QQQ	3:30:00 PM					N/A
4/29/2019	#Ripple	9:30:00 AM	0.3096	0.3135			N/A
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4/29/2019	#Ripple	3:30:00 PM	0.3003	0.3045			N/A



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4/29/2019	#S	11:30:00 AM					N/A
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4/29/2019	#UBS	3:30:00 PM					N/A
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4/29/2019	#UL	11:30:00 AM					N/A
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4/29/2019	#V	3:30:00 PM					N/A
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4/29/2019	#ZNGA	1:30:00 PM					N/A
4/29/2019	#ZNGA	3:30:00 PM					N/A
4/29/2019	AUDCAD	9:30:00 AM	0.94897	0.94964			N/A
4/29/2019	AUDCAD	11:30:00 AM	0.94916	0.94979			N/A
4/29/2019	AUDCAD	1:30:00 PM	0.94942	0.95012			N/A
4/29/2019	AUDCAD	3:30:00 PM	0.94994	0.95043			N/A
4/29/2019	AUDCAD.fx	9:30:00 AM	0.9493	0.94927			N/A
4/29/2019	AUDCAD.fx	11:30:00 AM	0.94949	0.94943			N/A

4/29/2019	AUDCAD.fx	1:30:00 PM	0.94976	0.94978			N/A
4/29/2019	AUDCAD.fx	3:30:00 PM	0.95026	0.95009			N/A
4/29/2019	AUDCHF	9:30:00 AM	0.71878	0.71947			N/A
4/29/2019	AUDCHF	11:30:00 AM	0.71851	0.71921			N/A
4/29/2019	AUDCHF	1:30:00 PM	0.71883	0.71901			N/A
4/29/2019	AUDCHF	3:30:00 PM	0.71929	0.71983			N/A
4/29/2019	AUDCHF.fx	9:30:00 AM	0.71912	0.71912			N/A
4/29/2019	AUDCHF.fx	11:30:00 AM	0.71885	0.71886			N/A
4/29/2019	AUDCHF.fx	1:30:00 PM	0.71916	0.71867			N/A
4/29/2019	AUDCHF.fx	3:30:00 PM	0.71963	0.71949			N/A
4/29/2019	AUDCZK	9:30:00 AM	16.23	16.247			N/A
4/29/2019	AUDCZK	11:30:00 AM	16.203	16.219			N/A
4/29/2019	AUDCZK	1:30:00 PM	16.211	16.227			N/A
4/29/2019	AUDCZK	3:30:00 PM	16.218	16.227			N/A
4/29/2019	AUDDKK	9:30:00 AM	4.7185	4.723			N/A
4/29/2019	AUDDKK	11:30:00 AM	4.7144	4.7191			N/A
4/29/2019	AUDDKK	1:30:00 PM	4.7163	4.7207			N/A
4/29/2019	AUDDKK	3:30:00 PM	4.7164	4.7201			N/A
4/29/2019	AUDHKD	9:30:00 AM	5.5305	5.5343			N/A
4/29/2019	AUDHKD	11:30:00 AM	5.528	5.5317			N/A
4/29/2019	AUDHKD	1:30:00 PM	5.529	5.5325			N/A
4/29/2019	AUDHKD	3:30:00 PM	5.5294	5.5303			N/A
4/29/2019	AUDHUF	9:30:00 AM	203.58	203.81			N/A
4/29/2019	AUDHUF	11:30:00 AM	203.5	203.74			N/A
4/29/2019	AUDHUF	1:30:00 PM	203.73	203.96			N/A
4/29/2019	AUDHUF	3:30:00 PM	203.68	203.78			N/A
4/29/2019	AUDJPY	9:30:00 AM	78.749	78.816			N/A
4/29/2019	AUDJPY	11:30:00 AM	78.789	78.84			N/A
4/29/2019	AUDJPY	1:30:00 PM	78.761	78.833			N/A
4/29/2019	AUDJPY	3:30:00 PM	78.769	78.814			N/A
4/29/2019	AUDJPY.fx	9:30:00 AM	78.782	78.78			N/A
4/29/2019	AUDJPY.fx	11:30:00 AM	78.823	78.804			N/A
4/29/2019	AUDJPY.fx	1:30:00 PM	78.795	78.799			N/A
4/29/2019	AUDJPY.fx	3:30:00 PM	78.803	78.777			N/A

4/29/2019	AUDMXN	9:30:00 AM	13.3399	13.35			N/A
4/29/2019	AUDMXN	11:30:00 AM	13.3283	13.3383			N/A
4/29/2019	AUDMXN	1:30:00 PM	13.3326	13.3421			N/A
4/29/2019	AUDMXN	3:30:00 PM	13.3304	13.3371			N/A
4/29/2019	AUDNOK	9:30:00 AM	6.1203	6.1256			N/A
4/29/2019	AUDNOK	11:30:00 AM	6.1141	6.1193			N/A
4/29/2019	AUDNOK	1:30:00 PM	6.1193	6.1245			N/A
4/29/2019	AUDNOK	3:30:00 PM	6.1198	6.1226			N/A
4/29/2019	AUDNOK.fx	9:30:00 AM	6.1218	6.124			N/A
4/29/2019	AUDNOK.fx	11:30:00 AM	6.1157	6.1175			N/A
4/29/2019	AUDNOK.fx	1:30:00 PM	6.1208	6.1228			N/A
4/29/2019	AUDNOK.fx	3:30:00 PM	6.1213	6.1208			N/A
4/29/2019	AUDNZD	9:30:00 AM	1.05669	1.05757			N/A
4/29/2019	AUDNZD	11:30:00 AM	1.05742	1.05826			N/A
4/29/2019	AUDNZD	1:30:00 PM	1.05729	1.05818			N/A
4/29/2019	AUDNZD	3:30:00 PM	1.05699	1.05772			N/A
4/29/2019	AUDNZD.fx	9:30:00 AM	1.05712	1.05712			N/A
4/29/2019	AUDNZD.fx	11:30:00 AM	1.05787	1.05779			N/A
4/29/2019	AUDNZD.fx	1:30:00 PM	1.05773	1.05773			N/A
4/29/2019	AUDNZD.fx	3:30:00 PM	1.05742	1.05728			N/A
4/29/2019	AUDPLN	9:30:00 AM	2.7143	2.7175			N/A
4/29/2019	AUDPLN	11:30:00 AM	2.7113	2.7142			N/A
4/29/2019	AUDPLN	1:30:00 PM	2.7118	2.7149			N/A
4/29/2019	AUDPLN	3:30:00 PM	2.7118	2.7144			N/A
4/29/2019	AUDSEK	9:30:00 AM	6.7063	6.7096			N/A
4/29/2019	AUDSEK	11:30:00 AM	6.7003	6.703			N/A
4/29/2019	AUDSEK	1:30:00 PM	6.6995	6.7028			N/A
4/29/2019	AUDSEK	3:30:00 PM	6.7061	6.7078			N/A
4/29/2019	AUDSEK.fx	9:30:00 AM	6.7016	6.7141			N/A
4/29/2019	AUDSEK.fx	11:30:00 AM	6.6958	6.7075			N/A
4/29/2019	AUDSEK.fx	1:30:00 PM	6.6949	6.7071			N/A
4/29/2019	AUDSEK.fx	3:30:00 PM	6.7015	6.7121			N/A
4/29/2019	AUDSGD	9:30:00 AM	0.9601	0.9604			N/A
4/29/2019	AUDSGD	11:30:00 AM	0.9598	0.9601			N/A

4/29/2019	AUDSGD	1:30:00 PM	0.9601	0.9603			N/A
4/29/2019	AUDSGD	3:30:00 PM	0.9603	0.9605			N/A
4/29/2019	AUDSGD.fx	9:30:00 AM	0.9602	0.96029			N/A
4/29/2019	AUDSGD.fx	11:30:00 AM	0.95994	0.95999			N/A
4/29/2019	AUDSGD.fx	1:30:00 PM	0.96019	0.96031			N/A
4/29/2019	AUDSGD.fx	3:30:00 PM	0.96037	0.9604			N/A
4/29/2019	AUDUSD	9:30:00 AM	0.70556	0.70563			N/A
4/29/2019	AUDUSD	11:30:00 AM	0.70513	0.70518			N/A
4/29/2019	AUDUSD	1:30:00 PM	0.70517	0.70529			N/A
4/29/2019	AUDUSD	3:30:00 PM	0.70533	0.70516			N/A
4/29/2019	AUDUSD.fx	9:30:00 AM	0.70561	0.70557			N/A
4/29/2019	AUDUSD.fx	11:30:00 AM	0.70519	0.70512			N/A
4/29/2019	AUDUSD.fx	1:30:00 PM	0.70522	0.70523			N/A
4/29/2019	AUDUSD.fx	3:30:00 PM	0.70539	0.70512			N/A
4/29/2019	AUDZAR	9:30:00 AM	10.1036	10.1187			N/A
4/29/2019	AUDZAR	11:30:00 AM	10.0968	10.1031			N/A
4/29/2019	AUDZAR	1:30:00 PM	10.0897	10.0999			N/A
4/29/2019	AUDZAR	3:30:00 PM	10.0846	10.0931			N/A
4/29/2019	AUS200.i	9:30:00 AM					N/A
4/29/2019	AUS200.i	11:30:00 AM	6373.79	6376.69			N/A
4/29/2019	AUS200.i	1:30:00 PM	6362.39	6365.69			N/A
4/29/2019	AUS200.i	3:30:00 PM	6362.69	6366.49			N/A
4/29/2019	BCHUSD	9:30:00 AM	262.56	264.38			N/A
4/29/2019	BCHUSD	11:30:00 AM	261.17	263.12			N/A
4/29/2019	BCHUSD	1:30:00 PM	254.92	254.88			N/A
4/29/2019	BCHUSD	3:30:00 PM	246.16	247.01			N/A
4/29/2019	CADCHF	9:30:00 AM	0.75717	0.75792			N/A
4/29/2019	CADCHF	11:30:00 AM	0.75679	0.75742			N/A
4/29/2019	CADCHF	1:30:00 PM	0.75686	0.75702			N/A
4/29/2019	CADCHF	3:30:00 PM	0.75701	0.75751			N/A
4/29/2019	CADCHF.fx	9:30:00 AM	0.7575	0.75756			N/A
4/29/2019	CADCHF.fx	11:30:00 AM	0.75713	0.75707			N/A
4/29/2019	CADCHF.fx	1:30:00 PM	0.75718	0.75667			N/A
4/29/2019	CADCHF.fx	3:30:00 PM	0.75735	0.75718			N/A

4/29/2019	CADCZK	9:30:00 AM	17.1	17.118			N/A
4/29/2019	CADCZK	11:30:00 AM	17.07	17.084			N/A
4/29/2019	CADCZK	1:30:00 PM	17.071	17.088			N/A
4/29/2019	CADCZK	3:30:00 PM	17.07	17.079			N/A
4/29/2019	CADDDKK	9:30:00 AM					N/A
4/29/2019	CADDDKK	11:30:00 AM	4.966	4.97			N/A
4/29/2019	CADDDKK	1:30:00 PM	4.967	4.97			N/A
4/29/2019	CADDDKK	3:30:00 PM	4.965	4.966			N/A
4/29/2019	CADHKD	9:30:00 AM	5.8277	5.8316			N/A
4/29/2019	CADHKD	11:30:00 AM	5.8229	5.8268			N/A
4/29/2019	CADHKD	1:30:00 PM	5.8221	5.8259			N/A
4/29/2019	CADHKD	3:30:00 PM	5.8198	5.8222			N/A
4/29/2019	CADHUF	9:30:00 AM	214.53	214.69			N/A
4/29/2019	CADHUF	11:30:00 AM	214.41	214.56			N/A
4/29/2019	CADHUF	1:30:00 PM	214.57	214.73			N/A
4/29/2019	CADHUF	3:30:00 PM	214.43	214.44			N/A
4/29/2019	CADJPY	9:30:00 AM	82.956	83.026			N/A
4/29/2019	CADJPY	11:30:00 AM	82.985	83.034			N/A
4/29/2019	CADJPY	1:30:00 PM	82.928	83			N/A
4/29/2019	CADJPY	3:30:00 PM	82.908	82.937			N/A
4/29/2019	CADJPY.fx	9:30:00 AM	82.989	82.99			N/A
4/29/2019	CADJPY.fx	11:30:00 AM	83.018	82.999			N/A
4/29/2019	CADJPY.fx	1:30:00 PM	82.961	82.964			N/A
4/29/2019	CADJPY.fx	3:30:00 PM	82.941	82.901			N/A
4/29/2019	CADMXN	9:30:00 AM	14.0551	14.0666			N/A
4/29/2019	CADMXN	11:30:00 AM	14.04	14.0509			N/A
4/29/2019	CADMXN	1:30:00 PM	14.0393	14.0505			N/A
4/29/2019	CADMXN	3:30:00 PM	14.0318	14.0391			N/A
4/29/2019	CADNOK	9:30:00 AM	6.4457	6.4506			N/A
4/29/2019	CADNOK	11:30:00 AM	6.439	6.4433			N/A
4/29/2019	CADNOK	1:30:00 PM	6.442	6.4467			N/A
4/29/2019	CADNOK	3:30:00 PM	6.4387	6.4407			N/A
4/29/2019	CADPLN	9:30:00 AM	2.8595	2.8613			N/A
4/29/2019	CADPLN	11:30:00 AM	2.8561	2.858			N/A

4/29/2019	CADPLN	1:30:00 PM	2.8556	2.8574			N/A
4/29/2019	CADPLN	3:30:00 PM	2.8541	2.8547			N/A
4/29/2019	CADSEK	9:30:00 AM	7.0623	7.0662			N/A
4/29/2019	CADSEK	11:30:00 AM	7.056	7.0588			N/A
4/29/2019	CADSEK	1:30:00 PM	7.0524	7.0558			N/A
4/29/2019	CADSEK	3:30:00 PM	7.0558	7.0575			N/A
4/29/2019	CADSGD	9:30:00 AM	1.0108	1.0111			N/A
4/29/2019	CADSGD	11:30:00 AM	1.0104	1.0107			N/A
4/29/2019	CADSGD	1:30:00 PM	1.0103	1.0106			N/A
4/29/2019	CADSGD	3:30:00 PM	1.0101	1.0104			N/A
4/29/2019	CADZAR	9:30:00 AM	10.6449	10.6617			N/A
4/29/2019	CADZAR	11:30:00 AM	10.6365	10.6423			N/A
4/29/2019	CADZAR	1:30:00 PM	10.625	10.6362			N/A
4/29/2019	CADZAR	3:30:00 PM	10.6156	10.6253			N/A
4/29/2019	CHFCZK	9:30:00 AM	22.577	22.595			N/A
4/29/2019	CHFCZK	11:30:00 AM	22.549	22.565			N/A
4/29/2019	CHFCZK	1:30:00 PM	22.567	22.565			N/A
4/29/2019	CHFCZK	3:30:00 PM	22.546	22.554			N/A
4/29/2019	CHFDKK	9:30:00 AM	6.563	6.566			N/A
4/29/2019	CHFDKK	11:30:00 AM	6.559	6.562			N/A
4/29/2019	CHFDKK	1:30:00 PM	6.564	6.561			N/A
4/29/2019	CHFDKK	3:30:00 PM	6.556	6.558			N/A
4/29/2019	CHFDKK.fx	9:30:00 AM	6.561	6.5677			N/A
4/29/2019	CHFDKK.fx	11:30:00 AM	6.5577	6.5636			N/A
4/29/2019	CHFDKK.fx	1:30:00 PM	6.5616	6.5631			N/A
4/29/2019	CHFDKK.fx	3:30:00 PM	6.554	6.5588			N/A
4/29/2019	CHFHKD	9:30:00 AM	7.6939	7.6978			N/A
4/29/2019	CHFHKD	11:30:00 AM	7.6925	7.6946			N/A
4/29/2019	CHFHKD	1:30:00 PM	7.696	7.6935			N/A
4/29/2019	CHFHKD	3:30:00 PM	7.686	7.6882			N/A
4/29/2019	CHFHUF	9:30:00 AM	283.12	283.5			N/A
4/29/2019	CHFHUF	11:30:00 AM	283.11	283.5			N/A
4/29/2019	CHFHUF	1:30:00 PM	283.51	283.69			N/A
4/29/2019	CHFHUF	3:30:00 PM	283.08	283.33			N/A



4/29/2019	CHFJPY	9:30:00 AM	109.569	109.635			N/A
4/29/2019	CHFJPY	11:30:00 AM	109.663	109.706			N/A
4/29/2019	CHFJPY	1:30:00 PM	109.66	109.646			N/A
4/29/2019	CHFJPY	3:30:00 PM	109.526	109.575			N/A
4/29/2019	CHFJPY.fx	9:30:00 AM	109.602	109.6			N/A
4/29/2019	CHFJPY.fx	11:30:00 AM	109.697	109.671			N/A
4/29/2019	CHFJPY.fx	1:30:00 PM	109.693	109.612			N/A
4/29/2019	CHFJPY.fx	3:30:00 PM	109.561	109.54			N/A
4/29/2019	CHFMXN	9:30:00 AM	18.555	18.5701			N/A
4/29/2019	CHFMXN	11:30:00 AM	18.544	18.5598			N/A
4/29/2019	CHFMXN	1:30:00 PM	18.5549	18.5568			N/A
4/29/2019	CHFMXN	3:30:00 PM	18.5322	18.5411			N/A
4/29/2019	CHFNOK	9:30:00 AM	8.5101	8.5181			N/A
4/29/2019	CHFNOK	11:30:00 AM	8.505	8.5126			N/A
4/29/2019	CHFNOK	1:30:00 PM	8.5143	8.5161			N/A
4/29/2019	CHFNOK	3:30:00 PM	8.5047	8.5091			N/A
4/29/2019	CHFNOK.fx	9:30:00 AM	8.51348	8.51481			N/A
4/29/2019	CHFNOK.fx	11:30:00 AM	8.50864	8.509			N/A
4/29/2019	CHFNOK.fx	1:30:00 PM	8.51788	8.51239			N/A
4/29/2019	CHFNOK.fx	3:30:00 PM	8.50778	8.50551			N/A
4/29/2019	CHFPLN	9:30:00 AM	3.775	3.778			N/A
4/29/2019	CHFPLN	11:30:00 AM	3.7722	3.775			N/A
4/29/2019	CHFPLN	1:30:00 PM	3.7741	3.7744			N/A
4/29/2019	CHFPLN	3:30:00 PM	3.7701	3.7717			N/A
4/29/2019	CHFPLN.fx	9:30:00 AM	3.77266	3.78027			N/A
4/29/2019	CHFPLN.fx	11:30:00 AM	3.76986	3.77725			N/A
4/29/2019	CHFPLN.fx	1:30:00 PM	3.77184	3.77681			N/A
4/29/2019	CHFPLN.fx	3:30:00 PM	3.76679	3.77404			N/A
4/29/2019	CHFSEK	9:30:00 AM	9.3237	9.3285			N/A
4/29/2019	CHFSEK	11:30:00 AM	9.3192	9.3234			N/A
4/29/2019	CHFSEK	1:30:00 PM	9.3217	9.319			N/A
4/29/2019	CHFSEK	3:30:00 PM	9.3177	9.3199			N/A
4/29/2019	CHFSGD	9:30:00 AM	1.3352	1.3353			N/A
4/29/2019	CHFSGD	11:30:00 AM	1.3352	1.3356			N/A

4/29/2019	CHFSGD	1:30:00 PM	1.336	1.3354			N/A
4/29/2019	CHFSGD	3:30:00 PM	1.3345	1.3348			N/A
4/29/2019	CHFSGD.fx	9:30:00 AM	1.33533	1.33538			N/A
4/29/2019	CHFSGD.fx	11:30:00 AM	1.33543	1.33537			N/A
4/29/2019	CHFSGD.fx	1:30:00 PM	1.33613	1.33524			N/A
4/29/2019	CHFSGD.fx	3:30:00 PM	1.33464	1.33466			N/A
4/29/2019	CHFZAR	9:30:00 AM	14.0565	14.071			N/A
4/29/2019	CHFZAR	11:30:00 AM	14.0523	14.0532			N/A
4/29/2019	CHFZAR	1:30:00 PM	14.039	14.0431			N/A
4/29/2019	CHFZAR	3:30:00 PM	14.0223	14.0284			N/A
4/29/2019	CZKJPY	9:30:00 AM	4.849	4.853			N/A
4/29/2019	CZKJPY	11:30:00 AM	4.859	4.863			N/A
4/29/2019	CZKJPY	1:30:00 PM	4.856	4.859			N/A
4/29/2019	CZKJPY	3:30:00 PM	4.856	4.859			N/A
4/29/2019	DAX30.i	9:30:00 AM	12339.9	12339.4			N/A
4/29/2019	DAX30.i	11:30:00 AM	12371.4	12367.9			N/A
4/29/2019	DAX30.i	1:30:00 PM	12291.4	12290.4			N/A
4/29/2019	DAX30.i	3:30:00 PM	12310.9	12307.4			N/A
4/29/2019	DJ30.i	9:30:00 AM					N/A
4/29/2019	DJ30.i	11:30:00 AM					N/A
4/29/2019	DJ30.i	1:30:00 PM					N/A
4/29/2019	DJ30.i	3:30:00 PM					N/A
4/29/2019	DKKJPY	9:30:00 AM					N/A
4/29/2019	DKKJPY	11:30:00 AM					N/A
4/29/2019	DKKJPY	1:30:00 PM					N/A
4/29/2019	DKKJPY	3:30:00 PM					N/A
4/29/2019	EURAUD	9:30:00 AM	1.58069	1.58108			N/A
4/29/2019	EURAUD	11:30:00 AM	1.58205	1.58241			N/A
4/29/2019	EURAUD	1:30:00 PM	1.58148	1.58194			N/A
4/29/2019	EURAUD	3:30:00 PM	1.58162	1.58169			N/A
4/29/2019	EURAUD.fx	9:30:00 AM	1.58089	1.58088			N/A
4/29/2019	EURAUD.fx	11:30:00 AM	1.58226	1.58219			N/A
4/29/2019	EURAUD.fx	1:30:00 PM	1.58167	1.58172			N/A
4/29/2019	EURAUD.fx	3:30:00 PM	1.58184	1.58149			N/A

4/29/2019	EURCAD	9:30:00 AM	1.50086	1.50174			N/A
4/29/2019	EURCAD	11:30:00 AM	1.50256	1.50319			N/A
4/29/2019	EURCAD	1:30:00 PM	1.5024	1.50329			N/A
4/29/2019	EURCAD	3:30:00 PM	1.50324	1.50366			N/A
4/29/2019	EURCAD.fx	9:30:00 AM	1.50128	1.50132			N/A
4/29/2019	EURCAD.fx	11:30:00 AM	1.50298	1.50277			N/A
4/29/2019	EURCAD.fx	1:30:00 PM	1.50282	1.50286			N/A
4/29/2019	EURCAD.fx	3:30:00 PM	1.50364	1.50324			N/A
4/29/2019	EURCHF	9:30:00 AM	1.13724	1.13736			N/A
4/29/2019	EURCHF	11:30:00 AM	1.13786	1.13792			N/A
4/29/2019	EURCHF	1:30:00 PM	1.13795	1.13722			N/A
4/29/2019	EURCHF	3:30:00 PM	1.13864	1.13838			N/A
4/29/2019	EURCHF.fx	9:30:00 AM	1.13731	1.1373			N/A
4/29/2019	EURCHF.fx	11:30:00 AM	1.13793	1.13785			N/A
4/29/2019	EURCHF.fx	1:30:00 PM	1.13801	1.13715			N/A
4/29/2019	EURCHF.fx	3:30:00 PM	1.1387	1.13834			N/A
4/29/2019	EURCZK	9:30:00 AM	25.664	25.704			N/A
4/29/2019	EURCZK	11:30:00 AM	25.643	25.682			N/A
4/29/2019	EURCZK	1:30:00 PM	25.647	25.685			N/A
4/29/2019	EURCZK	3:30:00 PM	25.655	25.684			N/A
4/29/2019	EURDKK	9:30:00 AM	7.4641	7.4654			N/A
4/29/2019	EURDKK	11:30:00 AM	7.4637	7.465			N/A
4/29/2019	EURDKK	1:30:00 PM					N/A
4/29/2019	EURDKK	3:30:00 PM	7.4645	7.4657			N/A
4/29/2019	EURGBP	9:30:00 AM	0.86274	0.86283			N/A
4/29/2019	EURGBP	11:30:00 AM	0.86225	0.86231			N/A
4/29/2019	EURGBP	1:30:00 PM	0.86291	0.86305			N/A
4/29/2019	EURGBP	3:30:00 PM	0.86377	0.8637			N/A
4/29/2019	EURGBP.fx	9:30:00 AM	0.86279	0.86278			N/A
4/29/2019	EURGBP.fx	11:30:00 AM	0.86228	0.86225			N/A
4/29/2019	EURGBP.fx	1:30:00 PM	0.86295	0.863			N/A
4/29/2019	EURGBP.fx	3:30:00 PM	0.86381	0.86367			N/A
4/29/2019	EURHKD	9:30:00 AM	8.7505	8.7554			N/A
4/29/2019	EURHKD	11:30:00 AM	8.7535	8.7574			N/A

4/29/2019	EURHKD	1:30:00 PM	8.751	8.7562			N/A
4/29/2019	EURHKD	3:30:00 PM	8.7519	8.7532			N/A
4/29/2019	EURHKD.fx	9:30:00 AM	8.75334	8.75246			N/A
4/29/2019	EURHKD.fx	11:30:00 AM	8.75635	8.75455			N/A
4/29/2019	EURHKD.fx	1:30:00 PM	8.75383	8.75334			N/A
4/29/2019	EURHKD.fx	3:30:00 PM	8.75468	8.75061			N/A
4/29/2019	EURHUF	9:30:00 AM	321.93	322.64			N/A
4/29/2019	EURHUF	11:30:00 AM	322.07	322.73			N/A
4/29/2019	EURHUF	1:30:00 PM	322.34	322.95			N/A
4/29/2019	EURHUF	3:30:00 PM	322.23	322.9			N/A
4/29/2019	EURHUF.fx	9:30:00 AM	322.203	322.37			N/A
4/29/2019	EURHUF.fx	11:30:00 AM	322.363	322.506			N/A
4/29/2019	EURHUF.fx	1:30:00 PM	322.621	322.775			N/A
4/29/2019	EURHUF.fx	3:30:00 PM	322.523	322.68			N/A
4/29/2019	EURJPY	9:30:00 AM	124.638	124.644			N/A
4/29/2019	EURJPY	11:30:00 AM	124.805	124.784			N/A
4/29/2019	EURJPY	1:30:00 PM	124.723	124.732			N/A
4/29/2019	EURJPY	3:30:00 PM	124.735	124.686			N/A
4/29/2019	EURJPY.fx	9:30:00 AM	124.639	124.64			N/A
4/29/2019	EURJPY.fx	11:30:00 AM	124.806	124.781			N/A
4/29/2019	EURJPY.fx	1:30:00 PM	124.724	124.728			N/A
4/29/2019	EURJPY.fx	3:30:00 PM	124.739	124.683			N/A
4/29/2019	EURMXN	9:30:00 AM	21.1035	21.1191			N/A
4/29/2019	EURMXN	11:30:00 AM	21.1022	21.1204			N/A
4/29/2019	EURMXN	1:30:00 PM	21.1025	21.121			N/A
4/29/2019	EURMXN	3:30:00 PM	21.1017	21.1099			N/A
4/29/2019	EURMXN.f	9:30:00 AM	21.1126	21.1108			N/A
4/29/2019	EURMXN.f	11:30:00 AM	21.1103	21.1119			N/A
4/29/2019	EURMXN.f	1:30:00 PM	21.1114	21.1122			N/A
4/29/2019	EURMXN.f	3:30:00 PM	21.1102	21.1006			N/A
4/29/2019	EURNOK	9:30:00 AM	9.6768	9.6894			N/A
4/29/2019	EURNOK	11:30:00 AM	9.6758	9.6877			N/A
4/29/2019	EURNOK	1:30:00 PM	9.6806	9.6928			N/A
4/29/2019	EURNOK	3:30:00 PM	9.6796	9.691			N/A

4/29/2019	EURNOK.fx	9:30:00 AM	9.68219	9.68398			N/A
4/29/2019	EURNOK.fx	11:30:00 AM	9.68121	9.68228			N/A
4/29/2019	EURNOK.fx	1:30:00 PM	9.68629	9.68728			N/A
4/29/2019	EURNOK.fx	3:30:00 PM	9.68491	9.68544			N/A
4/29/2019	EURNZD	9:30:00 AM	1.67146	1.67225			N/A
4/29/2019	EURNZD	11:30:00 AM	1.67409	1.67473			N/A
4/29/2019	EURNZD	1:30:00 PM	1.67328	1.67409			N/A
4/29/2019	EURNZD	3:30:00 PM	1.67299	1.67311			N/A
4/29/2019	EURNZD.fx	9:30:00 AM	1.67187	1.67183			N/A
4/29/2019	EURNZD.fx	11:30:00 AM	1.67453	1.6743			N/A
4/29/2019	EURNZD.fx	1:30:00 PM	1.67369	1.67367			N/A
4/29/2019	EURNZD.fx	3:30:00 PM	1.67341	1.67271			N/A
4/29/2019	EURPLN	9:30:00 AM	4.2935	4.2961			N/A
4/29/2019	EURPLN	11:30:00 AM	4.2921	4.2951			N/A
4/29/2019	EURPLN	1:30:00 PM	4.2921	4.2951			N/A
4/29/2019	EURPLN	3:30:00 PM	4.2916	4.2946			N/A
4/29/2019	EURPLN.fx	9:30:00 AM	4.29281	4.29697			N/A
4/29/2019	EURPLN.fx	11:30:00 AM	4.29157	4.2957			N/A
4/29/2019	EURPLN.fx	1:30:00 PM	4.29147	4.29532			N/A
4/29/2019	EURPLN.fx	3:30:00 PM	4.29077	4.29504			N/A
4/29/2019	EURRUB	9:30:00 AM					N/A
4/29/2019	EURRUB	11:30:00 AM	71.833	72.263			N/A
4/29/2019	EURRUB	1:30:00 PM	71.813	72.256			N/A
4/29/2019	EURRUB	3:30:00 PM	71.626	72.036			N/A
4/29/2019	EURSEK	9:30:00 AM	10.6061	10.611			N/A
4/29/2019	EURSEK	11:30:00 AM	10.6057	10.61			N/A
4/29/2019	EURSEK	1:30:00 PM	10.6009	10.6057			N/A
4/29/2019	EURSEK	3:30:00 PM	10.6097	10.6138			N/A
4/29/2019	EURSEK.fx	9:30:00 AM	10.60762	10.60942			N/A
4/29/2019	EURSEK.fx	11:30:00 AM	10.6075	10.60827			N/A
4/29/2019	EURSEK.fx	1:30:00 PM	10.60286	10.60392			N/A
4/29/2019	EURSEK.fx	3:30:00 PM	10.6115	10.61214			N/A
4/29/2019	EURSGD	9:30:00 AM	1.5182	1.5191			N/A
4/29/2019	EURSGD	11:30:00 AM	1.5191	1.5199			N/A

4/29/2019	EURSGD	1:30:00 PM	1.519	1.5199			N/A
4/29/2019	EURSGD	3:30:00 PM	1.5193	1.5198			N/A
4/29/2019	EURSGD.fx	9:30:00 AM	1.51861	1.51867			N/A
4/29/2019	EURSGD.fx	11:30:00 AM	1.51952	1.51946			N/A
4/29/2019	EURSGD.fx	1:30:00 PM	1.51937	1.51947			N/A
4/29/2019	EURSGD.fx	3:30:00 PM	1.51971	1.51943			N/A
4/29/2019	EURUSD	9:30:00 AM	1.11575	1.11582			N/A
4/29/2019	EURUSD	11:30:00 AM	1.11607	1.116			N/A
4/29/2019	EURUSD	1:30:00 PM	1.1157	1.11581			N/A
4/29/2019	EURUSD	3:30:00 PM	1.11589	1.11546			N/A
4/29/2019	EURUSD.fx	9:30:00 AM	1.11596	1.11591			N/A
4/29/2019	EURUSD.fx	11:30:00 AM	1.11628	1.11609			N/A
4/29/2019	EURUSD.fx	1:30:00 PM	1.1159	1.1159			N/A
4/29/2019	EURUSD.fx	3:30:00 PM	1.11609	1.11556			N/A
4/29/2019	EURZAR	9:30:00 AM	15.9874	16.0061			N/A
4/29/2019	EURZAR	11:30:00 AM	15.9911	15.9955			N/A
4/29/2019	EURZAR	1:30:00 PM	15.974	15.9853			N/A
4/29/2019	EURZAR	3:30:00 PM	15.9705	15.9742			N/A
4/29/2019	EURZAR.fx	9:30:00 AM	15.9868	16.00738			N/A
4/29/2019	EURZAR.fx	11:30:00 AM	15.98996	15.99615			N/A
4/29/2019	EURZAR.fx	1:30:00 PM	15.97344	15.98589			N/A
4/29/2019	EURZAR.fx	3:30:00 PM	15.96915	15.9756			N/A
4/29/2019	GBPAUD	9:30:00 AM	1.83265	1.83324			N/A
4/29/2019	GBPAUD	11:30:00 AM	1.8353	1.83583			N/A
4/29/2019	GBPAUD	1:30:00 PM	1.83311	1.83394			N/A
4/29/2019	GBPAUD	3:30:00 PM	1.83142	1.83192			N/A
4/29/2019	GBPAUD.fx	9:30:00 AM	1.83304	1.83284			N/A
4/29/2019	GBPAUD.fx	11:30:00 AM	1.8357	1.83543			N/A
4/29/2019	GBPAUD.fx	1:30:00 PM	1.8335	1.83354			N/A
4/29/2019	GBPAUD.fx	3:30:00 PM	1.8318	1.83153			N/A
4/29/2019	GBPCAD	9:30:00 AM	1.73963	1.74042			N/A
4/29/2019	GBPCAD	11:30:00 AM	1.74258	1.74305			N/A
4/29/2019	GBPCAD	1:30:00 PM	1.74099	1.74182			N/A
4/29/2019	GBPCAD	3:30:00 PM	1.74029	1.7408			N/A

4/29/2019	GBPCAD.fx	9:30:00 AM	1.74002	1.74003			N/A
4/29/2019	GBPCAD.fx	11:30:00 AM	1.74299	1.74266			N/A
4/29/2019	GBPCAD.fx	1:30:00 PM	1.74139	1.74141			N/A
4/29/2019	GBPCAD.fx	3:30:00 PM	1.74066	1.7404			N/A
4/29/2019	GBPCHF	9:30:00 AM	1.31794	1.31837			N/A
4/29/2019	GBPCHF	11:30:00 AM	1.31944	1.31974			N/A
4/29/2019	GBPCHF	1:30:00 PM	1.31843	1.31795			N/A
4/29/2019	GBPCHF	3:30:00 PM	1.31797	1.31818			N/A
4/29/2019	GBPCHF.fx	9:30:00 AM	1.31814	1.31816			N/A
4/29/2019	GBPCHF.fx	11:30:00 AM	1.31964	1.31952			N/A
4/29/2019	GBPCHF.fx	1:30:00 PM	1.31862	1.31775			N/A
4/29/2019	GBPCHF.fx	3:30:00 PM	1.31815	1.31806			N/A
4/29/2019	GBPCZK	9:30:00 AM	29.755	29.777			N/A
4/29/2019	GBPCZK	11:30:00 AM	29.75	29.769			N/A
4/29/2019	GBPCZK	1:30:00 PM	29.73	29.75			N/A
4/29/2019	GBPCZK	3:30:00 PM	29.709	29.721			N/A
4/29/2019	GBPDKK	9:30:00 AM	8.648	8.659			N/A
4/29/2019	GBPDKK	11:30:00 AM	8.653	8.664			N/A
4/29/2019	GBPDKK	1:30:00 PM	8.646	8.657			N/A
4/29/2019	GBPDKK	3:30:00 PM	8.638	8.648			N/A
4/29/2019	GBPDKK.fx	9:30:00 AM	8.6467	8.6595			N/A
4/29/2019	GBPDKK.fx	11:30:00 AM	8.6516	8.6645			N/A
4/29/2019	GBPDKK.fx	1:30:00 PM	8.644	8.6579			N/A
4/29/2019	GBPDKK.fx	3:30:00 PM	8.6375	8.6489			N/A
4/29/2019	GBPHKD	9:30:00 AM	10.1392	10.1443			N/A
4/29/2019	GBPHKD	11:30:00 AM	10.1482	10.1528			N/A
4/29/2019	GBPHKD	1:30:00 PM	10.1385	10.1436			N/A
4/29/2019	GBPHKD	3:30:00 PM	10.1288	10.1294			N/A
4/29/2019	GBPHUF	9:30:00 AM	373.14	373.59			N/A
4/29/2019	GBPHUF	11:30:00 AM	373.55	373.98			N/A
4/29/2019	GBPHUF	1:30:00 PM	373.52	374			N/A
4/29/2019	GBPHUF	3:30:00 PM	373.09	373.33			N/A
4/29/2019	GBPJPY	9:30:00 AM	144.418	144.449			N/A
4/29/2019	GBPJPY	11:30:00 AM	144.687	144.718			N/A

4/29/2019	GBPJPY	1:30:00 PM	144.483	144.526			N/A
4/29/2019	GBPJPY	3:30:00 PM	144.355	144.351			N/A
4/29/2019	GBPJPY.fx	9:30:00 AM	144.438	144.43			N/A
4/29/2019	GBPJPY.fx	11:30:00 AM	144.705	144.697			N/A
4/29/2019	GBPJPY.fx	1:30:00 PM	144.503	144.507			N/A
4/29/2019	GBPJPY.fx	3:30:00 PM	144.374	144.332			N/A
4/29/2019	GBPMXN	9:30:00 AM	24.455	24.4696			N/A
4/29/2019	GBPMXN	11:30:00 AM	24.4689	24.4813			N/A
4/29/2019	GBPMXN	1:30:00 PM	24.4485	24.4626			N/A
4/29/2019	GBPMXN	3:30:00 PM	24.4194	24.4297			N/A
4/29/2019	GBPNOK	9:30:00 AM	11.2174	11.2288			N/A
4/29/2019	GBPNOK	11:30:00 AM	11.2231	11.2332			N/A
4/29/2019	GBPNOK	1:30:00 PM	11.2189	11.2305			N/A
4/29/2019	GBPNOK	3:30:00 PM	11.2088	11.217			N/A
4/29/2019	GBPNOK.fx	9:30:00 AM	11.22237	11.22409			N/A
4/29/2019	GBPNOK.fx	11:30:00 AM	11.2281	11.22829			N/A
4/29/2019	GBPNOK.fx	1:30:00 PM	11.224	11.22549			N/A
4/29/2019	GBPNOK.fx	3:30:00 PM	11.21338	11.21203			N/A
4/29/2019	GBPNZD	9:30:00 AM	1.93734	1.93807			N/A
4/29/2019	GBPNZD	11:30:00 AM	1.94146	1.94195			N/A
4/29/2019	GBPNZD	1:30:00 PM	1.93905	1.93975			N/A
4/29/2019	GBPNZD	3:30:00 PM	1.93669	1.93681			N/A
4/29/2019	GBPNZD.fx	9:30:00 AM	1.93772	1.93768			N/A
4/29/2019	GBPNZD.fx	11:30:00 AM	1.94182	1.94157			N/A
4/29/2019	GBPNZD.fx	1:30:00 PM	1.93941	1.93936			N/A
4/29/2019	GBPNZD.fx	3:30:00 PM	1.93709	1.93645			N/A
4/29/2019	GBPPLN	9:30:00 AM	4.9771	4.9788			N/A
4/29/2019	GBPPLN	11:30:00 AM	4.9788	4.98			N/A
4/29/2019	GBPPLN	1:30:00 PM	4.9746	4.9762			N/A
4/29/2019	GBPPLN	3:30:00 PM	4.9696	4.9707			N/A
4/29/2019	GBPPLN.fx	9:30:00 AM	4.97495	4.98111			N/A
4/29/2019	GBPPLN.fx	11:30:00 AM	4.97664	4.98198			N/A
4/29/2019	GBPPLN.fx	1:30:00 PM	4.97245	4.97803			N/A
4/29/2019	GBPPLN.fx	3:30:00 PM	4.96738	4.97284			N/A



4/29/2019	GBPSEK	9:30:00 AM	12.2911	12.3001			N/A
4/29/2019	GBPSEK	11:30:00 AM	12.2974	12.3059			N/A
4/29/2019	GBPSEK	1:30:00 PM	12.2819	12.292			N/A
4/29/2019	GBPSEK	3:30:00 PM	12.2826	12.289			N/A
4/29/2019	GBPSEK.fx	9:30:00 AM	12.28731	12.30395			N/A
4/29/2019	GBPSEK.fx	11:30:00 AM	12.29389	12.30974			N/A
4/29/2019	GBPSEK.fx	1:30:00 PM	12.27848	12.29545			N/A
4/29/2019	GBPSEK.fx	3:30:00 PM	12.27891	12.29291			N/A
4/29/2019	GBPSGD	9:30:00 AM	1.7599	1.7605			N/A
4/29/2019	GBPSGD	11:30:00 AM	1.7619	1.7626			N/A
4/29/2019	GBPSGD	1:30:00 PM	1.7603	1.7611			N/A
4/29/2019	GBPSGD	3:30:00 PM	1.7589	1.7595			N/A
4/29/2019	GBPSGD.fx	9:30:00 AM	1.75804	1.76234			N/A
4/29/2019	GBPSGD.fx	11:30:00 AM	1.76003	1.76434			N/A
4/29/2019	GBPSGD.fx	1:30:00 PM	1.75844	1.76288			N/A
4/29/2019	GBPSGD.fx	3:30:00 PM	1.75708	1.76138			N/A
4/29/2019	GBPUSD	9:30:00 AM	1.29337	1.29328			N/A
4/29/2019	GBPUSD	11:30:00 AM	1.2944	1.29427			N/A
4/29/2019	GBPUSD	1:30:00 PM	1.29299	1.29303			N/A
4/29/2019	GBPUSD	3:30:00 PM	1.29196	1.29162			N/A
4/29/2019	GBPUSD.fx	9:30:00 AM	1.29343	1.29322			N/A
4/29/2019	GBPUSD.fx	11:30:00 AM	1.29445	1.29421			N/A
4/29/2019	GBPUSD.fx	1:30:00 PM	1.29305	1.29297			N/A
4/29/2019	GBPUSD.fx	3:30:00 PM	1.29202	1.2916			N/A
4/29/2019	GBPZAR	9:30:00 AM	18.527	18.5557			N/A
4/29/2019	GBPZAR	11:30:00 AM	18.5415	18.5543			N/A
4/29/2019	GBPZAR	1:30:00 PM	18.5079	18.5274			N/A
4/29/2019	GBPZAR	3:30:00 PM	18.4848	18.4977			N/A
4/29/2019	GBPZAR.fx	9:30:00 AM	18.5348	18.5484			N/A
4/29/2019	GBPZAR.fx	11:30:00 AM	18.5478	18.5471			N/A
4/29/2019	GBPZAR.fx	1:30:00 PM	18.5149	18.5197			N/A
4/29/2019	GBPZAR.fx	3:30:00 PM	18.4898	18.4906			N/A
4/29/2019	GOLD	9:30:00 AM	1284.21	1284.33	2	2	N/A
4/29/2019	GOLD	11:30:00 AM	1281.88	1281.77			N/A

4/29/2019	GOLD	1:30:00 PM	1282.67	1283.1			N/A
4/29/2019	GOLD	3:30:00 PM	1284.09	1283.61			N/A
4/29/2019	HKDJPY	9:30:00 AM					N/A
4/29/2019	HKDJPY	11:30:00 AM	14.25	14.26			N/A
4/29/2019	HKDJPY	1:30:00 PM					N/A
4/29/2019	HKDJPY	3:30:00 PM	14.24	14.25			N/A
4/29/2019	HKDJPY.fx	9:30:00 AM	14.229	14.237			N/A
4/29/2019	HKDJPY.fx	11:30:00 AM	14.244	14.25			N/A
4/29/2019	HKDJPY.fx	1:30:00 PM	14.237	14.245			N/A
4/29/2019	HKDJPY.fx	3:30:00 PM	14.239	14.242			N/A
4/29/2019	HUFJPY	9:30:00 AM	0.3869	0.3872			N/A
4/29/2019	HUFJPY	11:30:00 AM	0.387	0.3873			N/A
4/29/2019	HUFJPY	1:30:00 PM	0.3867	0.3869			N/A
4/29/2019	HUFJPY	3:30:00 PM	0.3866	0.3869			N/A
4/29/2019	JP225.i	9:30:00 AM	22401.82	22419.32			N/A
4/29/2019	JP225.i	11:30:00 AM	22429.32	22444.32			N/A
4/29/2019	JP225.i	1:30:00 PM	22374.32	22389.32			N/A
4/29/2019	JP225.i	3:30:00 PM	22364.32	22374.32			N/A
4/29/2019	MXNJPY	9:30:00 AM	5.9	5.9			N/A
4/29/2019	MXNJPY	11:30:00 AM	5.9	5.91			N/A
4/29/2019	MXNJPY	1:30:00 PM	5.9	5.91			N/A
4/29/2019	MXNJPY	3:30:00 PM	5.9	5.91			N/A
4/29/2019	NASDAQ.i	9:30:00 AM					N/A
4/29/2019	NASDAQ.i	11:30:00 AM					N/A
4/29/2019	NASDAQ.i	1:30:00 PM					N/A
4/29/2019	NASDAQ.i	3:30:00 PM					N/A
4/29/2019	NOKJPY	9:30:00 AM	12.86	12.89			N/A
4/29/2019	NOKJPY	11:30:00 AM	12.87	12.9			N/A
4/29/2019	NOKJPY	1:30:00 PM					N/A
4/29/2019	NOKJPY	3:30:00 PM	12.87	12.89			N/A
4/29/2019	NOKJPY.fx	9:30:00 AM	12.865	12.872			N/A
4/29/2019	NOKJPY.fx	11:30:00 AM	12.884	12.889			N/A
4/29/2019	NOKJPY.fx	1:30:00 PM	12.869	12.877			N/A
4/29/2019	NOKJPY.fx	3:30:00 PM	12.873	12.876			N/A

4/29/2019	NZDCAD	9:30:00 AM	0.89765	0.89836			N/A
4/29/2019	NZDCAD	11:30:00 AM	0.89721	0.89792			N/A
4/29/2019	NZDCAD	1:30:00 PM	0.89761	0.89826			N/A
4/29/2019	NZDCAD	3:30:00 PM	0.89839	0.8988			N/A
4/29/2019	NZDCAD.fx	9:30:00 AM	0.89799	0.89802			N/A
4/29/2019	NZDCAD.fx	11:30:00 AM	0.89754	0.89758			N/A
4/29/2019	NZDCAD.fx	1:30:00 PM	0.89794	0.89792			N/A
4/29/2019	NZDCAD.fx	3:30:00 PM	0.89871	0.89847			N/A
4/29/2019	NZDCHF	9:30:00 AM	0.6799	0.68061			N/A
4/29/2019	NZDCHF	11:30:00 AM	0.67922	0.67989			N/A
4/29/2019	NZDCHF	1:30:00 PM	0.67957	0.67979			N/A
4/29/2019	NZDCHF	3:30:00 PM	0.68028	0.68075			N/A
4/29/2019	NZDCHF.fx	9:30:00 AM	0.68024	0.68027			N/A
4/29/2019	NZDCHF.fx	11:30:00 AM	0.67956	0.67954			N/A
4/29/2019	NZDCHF.fx	1:30:00 PM	0.6799	0.67942			N/A
4/29/2019	NZDCHF.fx	3:30:00 PM	0.68061	0.68044			N/A
4/29/2019	NZDCZK	9:30:00 AM	15.355	15.367			N/A
4/29/2019	NZDCZK	11:30:00 AM	15.32	15.331			N/A
4/29/2019	NZDCZK	1:30:00 PM	15.329	15.34			N/A
4/29/2019	NZDCZK	3:30:00 PM	15.341	15.344			N/A
4/29/2019	NZDDKK	9:30:00 AM					N/A
4/29/2019	NZDDKK	11:30:00 AM					N/A
4/29/2019	NZDDKK	1:30:00 PM	4.459	4.462			N/A
4/29/2019	NZDDKK	3:30:00 PM	4.461	4.463			N/A
4/29/2019	NZDHKD	9:30:00 AM	5.2324	5.2352			N/A
4/29/2019	NZDHKD	11:30:00 AM	5.2252	5.228			N/A
4/29/2019	NZDHKD	1:30:00 PM	5.2272	5.2298			N/A
4/29/2019	NZDHKD	3:30:00 PM	5.2293	5.2293			N/A
4/29/2019	NZDHUF	9:30:00 AM	192.53	192.82			N/A
4/29/2019	NZDHUF	11:30:00 AM	192.33	192.62			N/A
4/29/2019	NZDHUF	1:30:00 PM	192.57	192.85			N/A
4/29/2019	NZDHUF	3:30:00 PM	192.6	192.75			N/A
4/29/2019	NZDJPY	9:30:00 AM	74.487	74.554			N/A
4/29/2019	NZDJPY	11:30:00 AM	74.47	74.529			N/A

4/29/2019	NZDJPY	1:30:00 PM	74.455	74.525			N/A
4/29/2019	NZDJPY	3:30:00 PM	74.486	74.531			N/A
4/29/2019	NZDJPY.fx	9:30:00 AM	74.519	74.52			N/A
4/29/2019	NZDJPY.fx	11:30:00 AM	74.501	74.497			N/A
4/29/2019	NZDJPY.fx	1:30:00 PM	74.485	74.493			N/A
4/29/2019	NZDJPY.fx	3:30:00 PM	74.517	74.497			N/A
4/29/2019	NZDMXN	9:30:00 AM	12.6204	12.6265			N/A
4/29/2019	NZDMXN	11:30:00 AM	12.6013	12.6059			N/A
4/29/2019	NZDMXN	1:30:00 PM	12.6056	12.6112			N/A
4/29/2019	NZDMXN	3:30:00 PM	12.6085	12.6103			N/A
4/29/2019	NZDNOK	9:30:00 AM	5.7872	5.791			N/A
4/29/2019	NZDNOK	11:30:00 AM	5.778	5.7819			N/A
4/29/2019	NZDNOK	1:30:00 PM	5.7837	5.787			N/A
4/29/2019	NZDNOK	3:30:00 PM	5.7858	5.7857			N/A
4/29/2019	NZDPLN	9:30:00 AM	2.5676	2.569			N/A
4/29/2019	NZDPLN	11:30:00 AM	2.5627	2.5641			N/A
4/29/2019	NZDPLN	1:30:00 PM	2.5638	2.5649			N/A
4/29/2019	NZDPLN	3:30:00 PM	2.5643	2.5645			N/A
4/29/2019	NZDSEK	9:30:00 AM	6.3389	6.3457			N/A
4/29/2019	NZDSEK	11:30:00 AM	6.3296	6.3358			N/A
4/29/2019	NZDSEK	1:30:00 PM	6.3296	6.3361			N/A
4/29/2019	NZDSEK	3:30:00 PM	6.3379	6.3418			N/A
4/29/2019	NZDSGD	9:30:00 AM	0.9081	0.9087			N/A
4/29/2019	NZDSGD	11:30:00 AM	0.9072	0.9078			N/A
4/29/2019	NZDSGD	1:30:00 PM	0.9075	0.908			N/A
4/29/2019	NZDSGD	3:30:00 PM	0.9081	0.9085			N/A
4/29/2019	NZDSGD.fx	9:30:00 AM	0.90809	0.90861			N/A
4/29/2019	NZDSGD.fx	11:30:00 AM	0.90722	0.90777			N/A
4/29/2019	NZDSGD.fx	1:30:00 PM	0.90753	0.90809			N/A
4/29/2019	NZDSGD.fx	3:30:00 PM	0.90807	0.90845			N/A
4/29/2019	NZDUSD	9:30:00 AM	0.6674	0.66743			N/A
4/29/2019	NZDUSD	11:30:00 AM	0.66647	0.6666			N/A
4/29/2019	NZDUSD	1:30:00 PM	0.66662	0.66671			N/A
4/29/2019	NZDUSD	3:30:00 PM	0.66704	0.66682			N/A

4/29/2019	NZDUSD.fx	9:30:00 AM	0.66748	0.66745			N/A
4/29/2019	NZDUSD.fx	11:30:00 AM	0.66654	0.66662			N/A
4/29/2019	NZDUSD.fx	1:30:00 PM	0.66669	0.66673			N/A
4/29/2019	NZDUSD.fx	3:30:00 PM	0.66712	0.66685			N/A
4/29/2019	NZDZAR	9:30:00 AM	9.5563	9.5726			N/A
4/29/2019	NZDZAR	11:30:00 AM	9.5437	9.5507			N/A
4/29/2019	NZDZAR	1:30:00 PM	9.5367	9.5493			N/A
4/29/2019	NZDZAR	3:30:00 PM	9.5364	9.5462			N/A
4/29/2019	SEKJPY	9:30:00 AM	11.75	11.76			N/A
4/29/2019	SEKJPY	11:30:00 AM	11.76	11.77			N/A
4/29/2019	SEKJPY	1:30:00 PM					N/A
4/29/2019	SEKJPY	3:30:00 PM	11.75	11.76			N/A
4/29/2019	SEKJPY.fx	9:30:00 AM	11.739	11.758			N/A
4/29/2019	SEKJPY.fx	11:30:00 AM	11.756	11.772			N/A
4/29/2019	SEKJPY.fx	1:30:00 PM	11.753	11.772			N/A
4/29/2019	SEKJPY.fx	3:30:00 PM	11.745	11.76			N/A
4/29/2019	SGDJPY	9:30:00 AM	82	82.03			N/A
4/29/2019	SGDJPY	11:30:00 AM	82.09	82.1			N/A
4/29/2019	SGDJPY	1:30:00 PM	82.06	82.05			N/A
4/29/2019	SGDJPY	3:30:00 PM	82.01	82.02			N/A
4/29/2019	SILVER	9:30:00 AM	14.83	15.21			N/A
4/29/2019	SILVER	11:30:00 AM	14.79	15.16			N/A
4/29/2019	SILVER	1:30:00 PM	14.8	15.18			N/A
4/29/2019	SILVER	3:30:00 PM	14.8	15.18			N/A
4/29/2019	SPX500.i	9:30:00 AM					N/A
4/29/2019	SPX500.i	11:30:00 AM	2943.59	2944.64			N/A
4/29/2019	SPX500.i	1:30:00 PM	2939.09	2939.89			N/A
4/29/2019	SPX500.i	3:30:00 PM	2940.59	2940.89			N/A
4/29/2019	UK100.i	9:30:00 AM	7443.15	7445.48			N/A
4/29/2019	UK100.i	11:30:00 AM	7439.65	7439.9			N/A
4/29/2019	UK100.i	1:30:00 PM	7423.75	7424.15			N/A
4/29/2019	UK100.i	3:30:00 PM	7448.15	7448.48			N/A
4/29/2019	USDCAD	9:30:00 AM	1.3454	1.3454			N/A
4/29/2019	USDCAD	11:30:00 AM	1.34651	1.34653			N/A

4/29/2019	USDCAD	1:30:00 PM	1.34675	1.3469			N/A
4/29/2019	USDCAD	3:30:00 PM	1.3475	1.34725			N/A
4/29/2019	USDCAD.fx	9:30:00 AM	1.34543	1.34537			N/A
4/29/2019	USDCAD.fx	11:30:00 AM	1.34654	1.34649			N/A
4/29/2019	USDCAD.fx	1:30:00 PM	1.34679	1.34685			N/A
4/29/2019	USDCAD.fx	3:30:00 PM	1.34754	1.34721			N/A
4/29/2019	USDCHF	9:30:00 AM	1.01913	1.01914			N/A
4/29/2019	USDCHF	11:30:00 AM	1.01941	1.01942			N/A
4/29/2019	USDCHF	1:30:00 PM	1.01971	1.01906			N/A
4/29/2019	USDCHF	3:30:00 PM	1.02032	1.02023			N/A
4/29/2019	USDCHF.fx	9:30:00 AM	1.01918	1.01908			N/A
4/29/2019	USDCHF.fx	11:30:00 AM	1.01946	1.01935			N/A
4/29/2019	USDCHF.fx	1:30:00 PM	1.01977	1.019			N/A
4/29/2019	USDCHF.fx	3:30:00 PM	1.02036	1.02017			N/A
4/29/2019	USDCZK	9:30:00 AM	23.023	23.046			N/A
4/29/2019	USDCZK	11:30:00 AM	23.001	23.019			N/A
4/29/2019	USDCZK	1:30:00 PM	23.008	23.031			N/A
4/29/2019	USDCZK	3:30:00 PM	23.02	23.029			N/A
4/29/2019	USDCZK.fx	9:30:00 AM	23.031	23.0381			N/A
4/29/2019	USDCZK.fx	11:30:00 AM	23.0095	23.011			N/A
4/29/2019	USDCZK.fx	1:30:00 PM	23.0172	23.021			N/A
4/29/2019	USDCZK.fx	3:30:00 PM	23.0249	23.02			N/A
4/29/2019	USDDKK	9:30:00 AM	6.6892	6.6934			N/A
4/29/2019	USDDKK	11:30:00 AM	6.6881	6.6911			N/A
4/29/2019	USDDKK	1:30:00 PM	6.6892	6.6932			N/A
4/29/2019	USDDKK	3:30:00 PM	6.6912	6.6922			N/A
4/29/2019	USDDKK.fx	9:30:00 AM	6.68977	6.69103			N/A
4/29/2019	USDDKK.fx	11:30:00 AM	6.68857	6.68902			N/A
4/29/2019	USDDKK.fx	1:30:00 PM	6.68975	6.69123			N/A
4/29/2019	USDDKK.fx	3:30:00 PM	6.69151	6.68982			N/A
4/29/2019	USDHKD	9:30:00 AM	7.8433	7.8437			N/A
4/29/2019	USDHKD	11:30:00 AM	7.8438	7.8442			N/A
4/29/2019	USDHKD	1:30:00 PM	7.8442	7.8444			N/A
4/29/2019	USDHKD	3:30:00 PM	7.8438	7.844			N/A

4/29/2019	USDHKD.fx	9:30:00 AM	7.84329	7.84373			N/A
4/29/2019	USDHKD.fx	11:30:00 AM	7.84379	7.84435			N/A
4/29/2019	USDHKD.fx	1:30:00 PM	7.84408	7.84466			N/A
4/29/2019	USDHKD.fx	3:30:00 PM	7.84383	7.844			N/A
4/29/2019	USDHUF	9:30:00 AM	288.6	289.03			N/A
4/29/2019	USDHUF	11:30:00 AM	288.66	289.09			N/A
4/29/2019	USDHUF	1:30:00 PM	288.95	289.41			N/A
4/29/2019	USDHUF	3:30:00 PM	288.96	289.29			N/A
4/29/2019	USDHUF.fx	9:30:00 AM	288.785	288.835			N/A
4/29/2019	USDHUF.fx	11:30:00 AM	288.868	288.877			N/A
4/29/2019	USDHUF.fx	1:30:00 PM	289.155	289.204			N/A
4/29/2019	USDHUF.fx	3:30:00 PM	289.155	289.087			N/A
4/29/2019	USDINR	9:30:00 AM					N/A
4/29/2019	USDINR	11:30:00 AM					N/A
4/29/2019	USDINR	1:30:00 PM					N/A
4/29/2019	USDINR	3:30:00 PM					N/A
4/29/2019	USDJPY	9:30:00 AM	111.631	111.639			N/A
4/29/2019	USDJPY	11:30:00 AM	111.756	111.748			N/A
4/29/2019	USDJPY	1:30:00 PM	111.708	111.72			N/A
4/29/2019	USDJPY	3:30:00 PM	111.721	111.685			N/A
4/29/2019	USDJPY.fx	9:30:00 AM	111.637	111.632			N/A
4/29/2019	USDJPY.fx	11:30:00 AM	111.762	111.741			N/A
4/29/2019	USDJPY.fx	1:30:00 PM	111.714	111.712			N/A
4/29/2019	USDJPY.fx	3:30:00 PM	111.727	111.677			N/A
4/29/2019	USDMXN	9:30:00 AM	18.915	18.92			N/A
4/29/2019	USDMXN	11:30:00 AM	18.912	18.916			N/A
4/29/2019	USDMXN	1:30:00 PM	18.916	18.922			N/A
4/29/2019	USDMXN	3:30:00 PM	18.918	18.913			N/A
4/29/2019	USDMXN.f	9:30:00 AM	18.9205	18.9169			N/A
4/29/2019	USDMXN.f	11:30:00 AM	18.9152	18.9131			N/A
4/29/2019	USDMXN.f	1:30:00 PM	18.9196	18.9189			N/A
4/29/2019	USDMXN.f	3:30:00 PM	18.9208	18.909			N/A
4/29/2019	USDNOK	9:30:00 AM	8.6731	8.6817			N/A
4/29/2019	USDNOK	11:30:00 AM	8.6703	8.6778			N/A

4/29/2019	USDNOK	1:30:00 PM	8.6761	8.6853			N/A
4/29/2019	USDNOK	3:30:00 PM	8.6782	8.6824			N/A
4/29/2019	USDNOK.fx	9:30:00 AM	8.67686	8.67717			N/A
4/29/2019	USDNOK.fx	11:30:00 AM	8.67438	8.67349			N/A
4/29/2019	USDNOK.fx	1:30:00 PM	8.68028	8.68075			N/A
4/29/2019	USDNOK.fx	3:30:00 PM	8.68166	8.67748			N/A
4/29/2019	USDPLN	9:30:00 AM	3.8483	3.8491			N/A
4/29/2019	USDPLN	11:30:00 AM	3.8463	3.8471			N/A
4/29/2019	USDPLN	1:30:00 PM	3.847	3.848			N/A
4/29/2019	USDPLN	3:30:00 PM	3.8477	3.8472			N/A
4/29/2019	USDPLN.fx	9:30:00 AM	3.84748	3.85002			N/A
4/29/2019	USDPLN.fx	11:30:00 AM	3.84558	3.84787			N/A
4/29/2019	USDPLN.fx	1:30:00 PM	3.84616	3.84873			N/A
4/29/2019	USDPLN.fx	3:30:00 PM	3.84678	3.84817			N/A
4/29/2019	USDRUB	9:30:00 AM					N/A
4/29/2019	USDRUB	11:30:00 AM	64.485	64.865			N/A
4/29/2019	USDRUB	1:30:00 PM	64.48	64.87			N/A
4/29/2019	USDRUB	3:30:00 PM	64.302	64.672			N/A
4/29/2019	USDSEK	9:30:00 AM	9.5042	9.5081			N/A
4/29/2019	USDSEK	11:30:00 AM	9.5018	9.5046			N/A
4/29/2019	USDSEK	1:30:00 PM	9.4995	9.5038			N/A
4/29/2019	USDSEK	3:30:00 PM	9.5079	9.5103			N/A
4/29/2019	USDSEK.fx	9:30:00 AM	9.5068	9.50637			N/A
4/29/2019	USDSEK.fx	11:30:00 AM	9.50455	9.50264			N/A
4/29/2019	USDSEK.fx	1:30:00 PM	9.50243	9.50178			N/A
4/29/2019	USDSEK.fx	3:30:00 PM	9.51086	9.50832			N/A
4/29/2019	USDSGD	9:30:00 AM	1.3607	1.3611			N/A
4/29/2019	USDSGD	11:30:00 AM	1.3612	1.3615			N/A
4/29/2019	USDSGD	1:30:00 PM	1.3614	1.3617			N/A
4/29/2019	USDSGD	3:30:00 PM	1.3617	1.3618			N/A
4/29/2019	USDSGD.fx	9:30:00 AM	1.36066	1.36109			N/A
4/29/2019	USDSGD.fx	11:30:00 AM	1.36119	1.36153			N/A
4/29/2019	USDSGD.fx	1:30:00 PM	1.36134	1.36184			N/A
4/29/2019	USDSGD.fx	3:30:00 PM	1.36174	1.36185			N/A



4/29/2019	USDZAR	9:30:00 AM	14.3283	14.3434			N/A
4/29/2019	USDZAR	11:30:00 AM	14.3281	14.3302			N/A
4/29/2019	USDZAR	1:30:00 PM	14.3152	14.3256			N/A
4/29/2019	USDZAR	3:30:00 PM	14.3127	14.3172			N/A
4/29/2019	USDZAR.fx	9:30:00 AM	14.3339	14.33762			N/A
4/29/2019	USDZAR.fx	11:30:00 AM	14.33447	14.32373			N/A
4/29/2019	USDZAR.fx	1:30:00 PM	14.321	14.31919			N/A
4/29/2019	USDZAR.fx	3:30:00 PM	14.31785	14.31092			N/A
4/29/2019	XAUUSD	9:30:00 AM	1284.21	1284.31			N/A
4/29/2019	XAUUSD	11:30:00 AM	1281.88	1281.73			N/A
4/29/2019	XAUUSD	1:30:00 PM	1282.67	1283.1			N/A
4/29/2019	XAUUSD	3:30:00 PM	1284.08	1283.6			N/A
4/29/2019	ZARJPY	9:30:00 AM	7.76	7.78			N/A
4/29/2019	ZARJPY	11:30:00 AM	7.78	7.79			N/A
4/29/2019	ZARJPY	1:30:00 PM	7.77	7.79			N/A
4/29/2019	ZARJPY	3:30:00 PM	7.78	7.8			N/A
4/29/2019	ZARJPY.fx	9:30:00 AM	7.777	7.781			N/A
4/29/2019	ZARJPY.fx	11:30:00 AM	7.793	7.79			N/A
4/29/2019	ZARJPY.fx	1:30:00 PM	7.793	7.794			N/A
4/29/2019	ZARJPY.fx	3:30:00 PM	7.8	7.795			N/A
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4/30/2019	#AA	11:30:00 AM					N/A
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4/30/2019	#BIDU	3:30:00 PM					N/A
4/30/2019	#Bitcoin	9:30:00 AM	5454.51	5487.11			N/A
4/30/2019	#Bitcoin	11:30:00 AM					N/A
4/30/2019	#Bitcoin	1:30:00 PM	5476.91	5511.71			N/A
4/30/2019	#Bitcoin	3:30:00 PM	5511.46	5545.91			N/A
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4/30/2019	#CHL	3:30:00 PM					N/A
4/30/2019	#CL.f	9:30:00 AM	63.439	63.49			N/A
4/30/2019	#CL.f	11:30:00 AM	63.776	63.778			N/A
4/30/2019	#CL.f	1:30:00 PM	64.091	64.124			N/A
4/30/2019	#CL.f	3:30:00 PM	64.577	64.59			N/A
4/30/2019	#CMCSA	9:30:00 AM					N/A
4/30/2019	#CMCSA	11:30:00 AM					N/A
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4/30/2019	#Ethereum	1:30:00 PM	164.99	166.91			N/A
4/30/2019	#Ethereum	3:30:00 PM	166.07	167.78			N/A
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4/30/2019	AUDCAD	11:30:00 AM	0.94852	0.94898			N/A
4/30/2019	AUDCAD	1:30:00 PM	0.94799	0.9487			N/A
4/30/2019	AUDCAD	3:30:00 PM	0.94818	0.94739			N/A
4/30/2019	AUDCAD.fx	9:30:00 AM	0.94853	0.94843			N/A
4/30/2019	AUDCAD.fx	11:30:00 AM	0.94885	0.94863			N/A
4/30/2019	AUDCAD.fx	1:30:00 PM	0.94834	0.94836			N/A
4/30/2019	AUDCAD.fx	3:30:00 PM	0.94848	0.94715			N/A
4/30/2019	AUDCHF	9:30:00 AM	0.71692	0.71752			N/A
4/30/2019	AUDCHF	11:30:00 AM	0.71743	0.71793			N/A
4/30/2019	AUDCHF	1:30:00 PM	0.71826	0.71896			N/A
4/30/2019	AUDCHF	3:30:00 PM	0.71825	0.71889			N/A

4/30/2019	AUDCHF.fx	9:30:00 AM	0.71725	0.71717			N/A
4/30/2019	AUDCHF.fx	11:30:00 AM	0.71777	0.71759			N/A
4/30/2019	AUDCHF.fx	1:30:00 PM	0.7186	0.7186			N/A
4/30/2019	AUDCHF.fx	3:30:00 PM	0.71859	0.71855			N/A
4/30/2019	AUDCZK	9:30:00 AM	16.134	16.149			N/A
4/30/2019	AUDCZK	11:30:00 AM	16.132	16.142			N/A
4/30/2019	AUDCZK	1:30:00 PM	16.121	16.137			N/A
4/30/2019	AUDCZK	3:30:00 PM	16.095	16.108			N/A
4/30/2019	AUDDKK	9:30:00 AM	4.6969	4.7011			N/A
4/30/2019	AUDDKK	11:30:00 AM	4.698	4.7003			N/A
4/30/2019	AUDDKK	1:30:00 PM	4.6952	4.6998			N/A
4/30/2019	AUDDKK	3:30:00 PM	4.6871	4.6914			N/A
4/30/2019	AUDHKD	9:30:00 AM	5.5172	5.5211			N/A
4/30/2019	AUDHKD	11:30:00 AM	5.5291	5.5317			N/A
4/30/2019	AUDHKD	1:30:00 PM	5.5282	5.5321			N/A
4/30/2019	AUDHKD	3:30:00 PM	5.5249	5.5273			N/A
4/30/2019	AUDHUF	9:30:00 AM	203.18	203.43			N/A
4/30/2019	AUDHUF	11:30:00 AM	203.15	203.3			N/A
4/30/2019	AUDHUF	1:30:00 PM	202.99	203.22			N/A
4/30/2019	AUDHUF	3:30:00 PM	202.63	202.71			N/A
4/30/2019	AUDJPY	9:30:00 AM	78.366	78.413			N/A
4/30/2019	AUDJPY	11:30:00 AM	78.517	78.533			N/A
4/30/2019	AUDJPY	1:30:00 PM	78.479	78.542			N/A
4/30/2019	AUDJPY	3:30:00 PM	78.43	78.485			N/A
4/30/2019	AUDJPY.fx	9:30:00 AM	78.4	78.378			N/A
4/30/2019	AUDJPY.fx	11:30:00 AM	78.55	78.498			N/A
4/30/2019	AUDJPY.fx	1:30:00 PM	78.513	78.507			N/A
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4/30/2019	AUDMXN	9:30:00 AM	13.3919	13.4007			N/A
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4/30/2019	AUDMXN	1:30:00 PM	13.3912	13.4013			N/A
4/30/2019	AUDMXN	3:30:00 PM	13.37	13.3731			N/A
4/30/2019	AUDNOK	9:30:00 AM	6.097	6.1016			N/A
4/30/2019	AUDNOK	11:30:00 AM	6.0936	6.0972			N/A

4/30/2019	AUDNOK	1:30:00 PM	6.0855	6.0906			N/A
4/30/2019	AUDNOK	3:30:00 PM	6.0734	6.0767			N/A
4/30/2019	AUDNOK.fx	9:30:00 AM	6.0986	6.0999			N/A
4/30/2019	AUDNOK.fx	11:30:00 AM	6.0953	6.0953			N/A
4/30/2019	AUDNOK.fx	1:30:00 PM	6.0871	6.0888			N/A
4/30/2019	AUDNOK.fx	3:30:00 PM	6.0749	6.0751			N/A
4/30/2019	AUDNZD	9:30:00 AM	1.05657	1.05743			N/A
4/30/2019	AUDNZD	11:30:00 AM	1.05642	1.05718			N/A
4/30/2019	AUDNZD	1:30:00 PM	1.0565	1.05738			N/A
4/30/2019	AUDNZD	3:30:00 PM	1.05587	1.0567			N/A
4/30/2019	AUDNZD.fx	9:30:00 AM	1.05701	1.05698			N/A
4/30/2019	AUDNZD.fx	11:30:00 AM	1.05686	1.05672			N/A
4/30/2019	AUDNZD.fx	1:30:00 PM	1.05695	1.05694			N/A
4/30/2019	AUDNZD.fx	3:30:00 PM	1.05631	1.05627			N/A
4/30/2019	AUDPLN	9:30:00 AM	2.7012	2.7042			N/A
4/30/2019	AUDPLN	11:30:00 AM	2.6988	2.7006			N/A
4/30/2019	AUDPLN	1:30:00 PM	2.6968	2.7			N/A
4/30/2019	AUDPLN	3:30:00 PM	2.6902	2.6932			N/A
4/30/2019	AUDSEK	9:30:00 AM	6.6965	6.699			N/A
4/30/2019	AUDSEK	11:30:00 AM	6.6915	6.6928			N/A
4/30/2019	AUDSEK	1:30:00 PM	6.6899	6.6929			N/A
4/30/2019	AUDSEK	3:30:00 PM	6.6815	6.6832			N/A
4/30/2019	AUDSEK.fx	9:30:00 AM	6.692	6.7035			N/A
4/30/2019	AUDSEK.fx	11:30:00 AM	6.6871	6.6969			N/A
4/30/2019	AUDSEK.fx	1:30:00 PM	6.6853	6.6973			N/A
4/30/2019	AUDSEK.fx	3:30:00 PM	6.677	6.6877			N/A
4/30/2019	AUDSGD	9:30:00 AM	0.959	0.9592			N/A
4/30/2019	AUDSGD	11:30:00 AM	0.9599	0.9598			N/A
4/30/2019	AUDSGD	1:30:00 PM	0.9593	0.9592			N/A
4/30/2019	AUDSGD	3:30:00 PM	0.959	0.9591			N/A
4/30/2019	AUDSGD.fx	9:30:00 AM	0.95911	0.95913			N/A
4/30/2019	AUDSGD.fx	11:30:00 AM	0.95999	0.95974			N/A
4/30/2019	AUDSGD.fx	1:30:00 PM	0.95944	0.95956			N/A
4/30/2019	AUDSGD.fx	3:30:00 PM	0.95906	0.95904			N/A



4/30/2019	AUDUSD	9:30:00 AM	0.70371	0.70369			N/A
4/30/2019	AUDUSD	11:30:00 AM	0.70534	0.70512			N/A
4/30/2019	AUDUSD	1:30:00 PM	0.70509	0.70519			N/A
4/30/2019	AUDUSD	3:30:00 PM	0.70463	0.70461			N/A
4/30/2019	AUDUSD.fx	9:30:00 AM	0.70376	0.70364			N/A
4/30/2019	AUDUSD.fx	11:30:00 AM	0.7054	0.70506			N/A
4/30/2019	AUDUSD.fx	1:30:00 PM	0.70512	0.70513			N/A
4/30/2019	AUDUSD.fx	3:30:00 PM	0.70468	0.70456			N/A
4/30/2019	AUDZAR	9:30:00 AM	10.0984	10.1088			N/A
4/30/2019	AUDZAR	11:30:00 AM	10.095	10.1047			N/A
4/30/2019	AUDZAR	1:30:00 PM	10.0812	10.0962			N/A
4/30/2019	AUDZAR	3:30:00 PM	10.0623	10.0709			N/A
4/30/2019	AUS200.i	9:30:00 AM	6327.02	6331.52			N/A
4/30/2019	AUS200.i	11:30:00 AM	6332.52	6335.02			N/A
4/30/2019	AUS200.i	1:30:00 PM	6335.02	6338.52			N/A
4/30/2019	AUS200.i	3:30:00 PM	6337.92	6341.52			N/A
4/30/2019	BCHUSD	9:30:00 AM	245.42	246.96			N/A
4/30/2019	BCHUSD	11:30:00 AM	246.6	248.53			N/A
4/30/2019	BCHUSD	1:30:00 PM	253.62	255.43			N/A
4/30/2019	BCHUSD	3:30:00 PM	256.98	258.37			N/A
4/30/2019	CADCHF	9:30:00 AM	0.75582	0.75655			N/A
4/30/2019	CADCHF	11:30:00 AM	0.75615	0.75679			N/A
4/30/2019	CADCHF	1:30:00 PM	0.75742	0.7581			N/A
4/30/2019	CADCHF	3:30:00 PM	0.75868	0.75787			N/A
4/30/2019	CADCHF.fx	9:30:00 AM	0.75616	0.7562			N/A
4/30/2019	CADCHF.fx	11:30:00 AM	0.7565	0.75643			N/A
4/30/2019	CADCHF.fx	1:30:00 PM	0.75776	0.75775			N/A
4/30/2019	CADCHF.fx	3:30:00 PM	0.75894	0.75756			N/A
4/30/2019	CADCZK	9:30:00 AM	17.012	17.03			N/A
4/30/2019	CADCZK	11:30:00 AM	17.009	17.017			N/A
4/30/2019	CADCZK	1:30:00 PM	17.003	17.018			N/A
4/30/2019	CADCZK	3:30:00 PM	17.003	16.985			N/A
4/30/2019	CADDDKK	9:30:00 AM	4.953	4.957			N/A
4/30/2019	CADDDKK	11:30:00 AM	4.952	4.955			N/A

4/30/2019	CADDDKK	1:30:00 PM	4.953	4.956			N/A
4/30/2019	CADDDKK	3:30:00 PM	4.95	4.944			N/A
4/30/2019	CADHKD	9:30:00 AM	5.8184	5.8223			N/A
4/30/2019	CADHKD	11:30:00 AM	5.8287	5.8322			N/A
4/30/2019	CADHKD	1:30:00 PM	5.8305	5.8343			N/A
4/30/2019	CADHKD	3:30:00 PM	5.8377	5.8286			N/A
4/30/2019	CADHUF	9:30:00 AM	214.29	214.46			N/A
4/30/2019	CADHUF	11:30:00 AM	214.23	214.29			N/A
4/30/2019	CADHUF	1:30:00 PM	214.13	214.27			N/A
4/30/2019	CADHUF	3:30:00 PM	213.99	213.76			N/A
4/30/2019	CADJPY	9:30:00 AM	82.618	82.675			N/A
4/30/2019	CADJPY	11:30:00 AM	82.753	82.785			N/A
4/30/2019	CADJPY	1:30:00 PM	82.752	82.819			N/A
4/30/2019	CADJPY	3:30:00 PM	82.828	82.745			N/A
4/30/2019	CADJPY.fx	9:30:00 AM	82.651	82.639			N/A
4/30/2019	CADJPY.fx	11:30:00 AM	82.785	82.75			N/A
4/30/2019	CADJPY.fx	1:30:00 PM	82.784	82.785			N/A
4/30/2019	CADJPY.fx	3:30:00 PM	82.86	82.712			N/A
4/30/2019	CADMXN	9:30:00 AM	14.1213	14.1327			N/A
4/30/2019	CADMXN	11:30:00 AM	14.1401	14.1496			N/A
4/30/2019	CADMXN	1:30:00 PM	14.1221	14.1347			N/A
4/30/2019	CADMXN	3:30:00 PM	14.1203	14.1039			N/A
4/30/2019	CADNOK	9:30:00 AM	6.4272	6.432			N/A
4/30/2019	CADNOK	11:30:00 AM	6.4225	6.4253			N/A
4/30/2019	CADNOK	1:30:00 PM	6.4164	6.421			N/A
4/30/2019	CADNOK	3:30:00 PM	6.4114	6.403			N/A
4/30/2019	CADPLN	9:30:00 AM	2.848	2.85			N/A
4/30/2019	CADPLN	11:30:00 AM	2.8454	2.8459			N/A
4/30/2019	CADPLN	1:30:00 PM	2.8441	2.8459			N/A
4/30/2019	CADPLN	3:30:00 PM	2.841	2.8371			N/A
4/30/2019	CADSEK	9:30:00 AM	7.059	7.0627			N/A
4/30/2019	CADSEK	11:30:00 AM	7.0526	7.0537			N/A
4/30/2019	CADSEK	1:30:00 PM	7.0533	7.0567			N/A
4/30/2019	CADSEK	3:30:00 PM	7.0566	7.0449			N/A

4/30/2019	CADSGD	9:30:00 AM	1.0108	1.0111			N/A
4/30/2019	CADSGD	11:30:00 AM	1.0112	1.0115			N/A
4/30/2019	CADSGD	1:30:00 PM	1.011	1.0113			N/A
4/30/2019	CADSGD	3:30:00 PM	1.012	1.0111			N/A
4/30/2019	CADZAR	9:30:00 AM	10.6482	10.6611			N/A
4/30/2019	CADZAR	11:30:00 AM	10.6415	10.6534			N/A
4/30/2019	CADZAR	1:30:00 PM	10.6316	10.6485			N/A
4/30/2019	CADZAR	3:30:00 PM	10.6243	10.6213			N/A
4/30/2019	CHFCZK	9:30:00 AM	22.504	22.519			N/A
4/30/2019	CHFCZK	11:30:00 AM	22.488	22.496			N/A
4/30/2019	CHFCZK	1:30:00 PM	22.442	22.457			N/A
4/30/2019	CHFCZK	3:30:00 PM	22.407	22.42			N/A
4/30/2019	CHFDKK	9:30:00 AM	6.55	6.553			N/A
4/30/2019	CHFDKK	11:30:00 AM	6.547	6.548			N/A
4/30/2019	CHFDKK	1:30:00 PM	6.535	6.538			N/A
4/30/2019	CHFDKK	3:30:00 PM	6.524	6.526			N/A
4/30/2019	CHFDKK.fx	9:30:00 AM	6.5485	6.5544			N/A
4/30/2019	CHFDKK.fx	11:30:00 AM	6.5457	6.5495			N/A
4/30/2019	CHFDKK.fx	1:30:00 PM	6.5337	6.5395			N/A
4/30/2019	CHFDKK.fx	3:30:00 PM	6.5223	6.5279			N/A
4/30/2019	CHFHKD	9:30:00 AM	7.6953	7.6984			N/A
4/30/2019	CHFHKD	11:30:00 AM	7.7074	7.7095			N/A
4/30/2019	CHFHKD	1:30:00 PM	7.6959	7.699			N/A
4/30/2019	CHFHKD	3:30:00 PM	7.6913	7.6935			N/A
4/30/2019	CHFHUF	9:30:00 AM	283.35	283.71			N/A
4/30/2019	CHFHUF	11:30:00 AM	283.12	283.4			N/A
4/30/2019	CHFHUF	1:30:00 PM	282.53	282.87			N/A
4/30/2019	CHFHUF	3:30:00 PM	282.02	282.22			N/A
4/30/2019	CHFJPY	9:30:00 AM	109.307	109.356			N/A
4/30/2019	CHFJPY	11:30:00 AM	109.45	109.456			N/A
4/30/2019	CHFJPY	1:30:00 PM	109.265	109.322			N/A
4/30/2019	CHFJPY	3:30:00 PM	109.194	109.253			N/A
4/30/2019	CHFJPY.fx	9:30:00 AM	109.34	109.321			N/A
4/30/2019	CHFJPY.fx	11:30:00 AM	109.483	109.422			N/A

4/30/2019	CHFJPY.fx	1:30:00 PM	109.299	109.287			N/A
4/30/2019	CHFJPY.fx	3:30:00 PM	109.226	109.219			N/A
4/30/2019	CHFMXN	9:30:00 AM	18.6744	18.6911			N/A
4/30/2019	CHFMXN	11:30:00 AM	18.6954	18.7049			N/A
4/30/2019	CHFMXN	1:30:00 PM	18.6385	18.6541			N/A
4/30/2019	CHFMXN	3:30:00 PM	18.6075	18.6187			N/A
4/30/2019	CHFNOK	9:30:00 AM	8.5009	8.5077			N/A
4/30/2019	CHFNOK	11:30:00 AM	8.4911	8.4968			N/A
4/30/2019	CHFNOK	1:30:00 PM	8.4684	8.4759			N/A
4/30/2019	CHFNOK	3:30:00 PM	8.4511	8.4561			N/A
4/30/2019	CHFNOK.fx	9:30:00 AM	8.50435	8.50435			N/A
4/30/2019	CHFNOK.fx	11:30:00 AM	8.49487	8.49316			N/A
4/30/2019	CHFNOK.fx	1:30:00 PM	8.47214	8.47223			N/A
4/30/2019	CHFNOK.fx	3:30:00 PM	8.4545	8.45243			N/A
4/30/2019	CHFPLN	9:30:00 AM	3.7682	3.7709			N/A
4/30/2019	CHFPLN	11:30:00 AM	3.7625	3.7638			N/A
4/30/2019	CHFPLN	1:30:00 PM	3.7546	3.7572			N/A
4/30/2019	CHFPLN	3:30:00 PM	3.7454	3.7483			N/A
4/30/2019	CHFPLN.fx	9:30:00 AM	3.76582	3.77315			N/A
4/30/2019	CHFPLN.fx	11:30:00 AM	3.76034	3.76616			N/A
4/30/2019	CHFPLN.fx	1:30:00 PM	3.75214	3.75953			N/A
4/30/2019	CHFPLN.fx	3:30:00 PM	3.74286	3.75053			N/A
4/30/2019	CHFSEK	9:30:00 AM	9.3357	9.3396			N/A
4/30/2019	CHFSEK	11:30:00 AM	9.3225	9.3254			N/A
4/30/2019	CHFSEK	1:30:00 PM	9.3094	9.3127			N/A
4/30/2019	CHFSEK	3:30:00 PM	9.2965	9.2992			N/A
4/30/2019	CHFSGD	9:30:00 AM	1.3371	1.3376			N/A
4/30/2019	CHFSGD	11:30:00 AM	1.3374	1.3376			N/A
4/30/2019	CHFSGD	1:30:00 PM	1.335	1.3354			N/A
4/30/2019	CHFSGD	3:30:00 PM	1.3345	1.3348			N/A
4/30/2019	CHFSGD.fx	9:30:00 AM	1.33726	1.33736			N/A
4/30/2019	CHFSGD.fx	11:30:00 AM	1.33753	1.33739			N/A
4/30/2019	CHFSGD.fx	1:30:00 PM	1.33523	1.33522			N/A
4/30/2019	CHFSGD.fx	3:30:00 PM	1.33462	1.33468			N/A

4/30/2019	CHFZAR	9:30:00 AM	14.0871	14.0957			N/A
4/30/2019	CHFZAR	11:30:00 AM	14.0731	14.0806			N/A
4/30/2019	CHFZAR	1:30:00 PM	14.0358	14.0493			N/A
4/30/2019	CHFZAR	3:30:00 PM	14.009	14.0174			N/A
4/30/2019	CZKJPY	9:30:00 AM	4.854	4.858			N/A
4/30/2019	CZKJPY	11:30:00 AM	4.865	4.864			N/A
4/30/2019	CZKJPY	1:30:00 PM	4.866	4.87			N/A
4/30/2019	CZKJPY	3:30:00 PM	4.87	4.874			N/A
4/30/2019	DAX30.i	9:30:00 AM	12307.32	12307.07			N/A
4/30/2019	DAX30.i	11:30:00 AM	12319.57	12313.57			N/A
4/30/2019	DAX30.i	1:30:00 PM	12332.57	12331.07			N/A
4/30/2019	DAX30.i	3:30:00 PM	12328.07	12328.32			N/A
4/30/2019	DJ30.i	9:30:00 AM					N/A
4/30/2019	DJ30.i	11:30:00 AM					N/A
4/30/2019	DJ30.i	1:30:00 PM					N/A
4/30/2019	DJ30.i	3:30:00 PM					N/A
4/30/2019	DKKJPY	9:30:00 AM					N/A
4/30/2019	DKKJPY	11:30:00 AM	16.72	16.73			N/A
4/30/2019	DKKJPY	1:30:00 PM					N/A
4/30/2019	DKKJPY	3:30:00 PM	16.74	16.75			N/A
4/30/2019	EURAUD	9:30:00 AM	1.58805	1.58828			N/A
4/30/2019	EURAUD	11:30:00 AM	1.58823	1.58786			N/A
4/30/2019	EURAUD	1:30:00 PM	1.58848	1.58884			N/A
4/30/2019	EURAUD	3:30:00 PM	1.59127	1.59154			N/A
4/30/2019	EURAUD.fx	9:30:00 AM	1.58825	1.58807			N/A
4/30/2019	EURAUD.fx	11:30:00 AM	1.58843	1.58762			N/A
4/30/2019	EURAUD.fx	1:30:00 PM	1.58869	1.58863			N/A
4/30/2019	EURAUD.fx	3:30:00 PM	1.59146	1.59132			N/A
4/30/2019	EURCAD	9:30:00 AM	1.5065	1.50726			N/A
4/30/2019	EURCAD	11:30:00 AM	1.5071	1.50712			N/A
4/30/2019	EURCAD	1:30:00 PM	1.5068	1.5075			N/A
4/30/2019	EURCAD	3:30:00 PM	1.50971	1.5077			N/A
4/30/2019	EURCAD.fx	9:30:00 AM	1.50691	1.50684			N/A
4/30/2019	EURCAD.fx	11:30:00 AM	1.5075	1.5067			N/A

4/30/2019	EURCAD.fx	1:30:00 PM	1.50723	1.50708			N/A
4/30/2019	EURCAD.fx	3:30:00 PM	1.51012	1.50752			N/A
4/30/2019	EURCHF	9:30:00 AM	1.13945	1.13947			N/A
4/30/2019	EURCHF	11:30:00 AM	1.14023	1.13992			N/A
4/30/2019	EURCHF	1:30:00 PM	1.14199	1.14203			N/A
4/30/2019	EURCHF	3:30:00 PM	1.14396	1.14397			N/A
4/30/2019	EURCHF.fx	9:30:00 AM	1.13951	1.13941			N/A
4/30/2019	EURCHF.fx	11:30:00 AM	1.14029	1.13985			N/A
4/30/2019	EURCHF.fx	1:30:00 PM	1.14204	1.14197			N/A
4/30/2019	EURCHF.fx	3:30:00 PM	1.14402	1.14393			N/A
4/30/2019	EURCZK	9:30:00 AM	25.627	25.667			N/A
4/30/2019	EURCZK	11:30:00 AM	25.62	25.658			N/A
4/30/2019	EURCZK	1:30:00 PM	25.616	25.654			N/A
4/30/2019	EURCZK	3:30:00 PM	25.62	25.655			N/A
4/30/2019	EURDKK	9:30:00 AM	7.4639	7.4652			N/A
4/30/2019	EURDKK	11:30:00 AM	7.4636	7.4647			N/A
4/30/2019	EURDKK	1:30:00 PM	7.4636	7.4648			N/A
4/30/2019	EURDKK	3:30:00 PM	7.4613	7.4625			N/A
4/30/2019	EURGBP	9:30:00 AM	0.86429	0.86436			N/A
4/30/2019	EURGBP	11:30:00 AM	0.86346	0.86325			N/A
4/30/2019	EURGBP	1:30:00 PM	0.86257	0.86251			N/A
4/30/2019	EURGBP	3:30:00 PM	0.86221	0.86215			N/A
4/30/2019	EURGBP.fx	9:30:00 AM	0.86433	0.86432			N/A
4/30/2019	EURGBP.fx	11:30:00 AM	0.86349	0.86319			N/A
4/30/2019	EURGBP.fx	1:30:00 PM	0.8626	0.86246			N/A
4/30/2019	EURGBP.fx	3:30:00 PM	0.86223	0.8621			N/A
4/30/2019	EURHKD	9:30:00 AM	8.7691	8.7737			N/A
4/30/2019	EURHKD	11:30:00 AM	8.7896	8.788			N/A
4/30/2019	EURHKD	1:30:00 PM	8.7897	8.7938			N/A
4/30/2019	EURHKD	3:30:00 PM	8.7985	8.8025			N/A
4/30/2019	EURHKD.fx	9:30:00 AM	8.77191	8.77086			N/A
4/30/2019	EURHKD.fx	11:30:00 AM	8.7922	8.7852			N/A
4/30/2019	EURHKD.fx	1:30:00 PM	8.79254	8.79096			N/A
4/30/2019	EURHKD.fx	3:30:00 PM	8.80125	8.79984			N/A

4/30/2019	EURHUF	9:30:00 AM	322.8	323.53			N/A
4/30/2019	EURHUF	11:30:00 AM	322.68	323.34			N/A
4/30/2019	EURHUF	1:30:00 PM	322.55	323.2			N/A
4/30/2019	EURHUF	3:30:00 PM	322.62	323.33			N/A
4/30/2019	EURHUF.fx	9:30:00 AM	323.042	323.275			N/A
4/30/2019	EURHUF.fx	11:30:00 AM	322.969	323.043			N/A
4/30/2019	EURHUF.fx	1:30:00 PM	322.853	322.994			N/A
4/30/2019	EURHUF.fx	3:30:00 PM	322.889	323.051			N/A
4/30/2019	EURJPY	9:30:00 AM	124.587	124.567			N/A
4/30/2019	EURJPY	11:30:00 AM	124.822	124.721			N/A
4/30/2019	EURJPY	1:30:00 PM	124.819	124.804			N/A
4/30/2019	EURJPY	3:30:00 PM	124.951	124.939			N/A
4/30/2019	EURJPY.fx	9:30:00 AM	124.59	124.565			N/A
4/30/2019	EURJPY.fx	11:30:00 AM	124.824	124.717			N/A
4/30/2019	EURJPY.fx	1:30:00 PM	124.82	124.8			N/A
4/30/2019	EURJPY.fx	3:30:00 PM	124.951	124.935			N/A
4/30/2019	EURMXN	9:30:00 AM	21.2816	21.2995			N/A
4/30/2019	EURMXN	11:30:00 AM	21.3158	21.3235			N/A
4/30/2019	EURMXN	1:30:00 PM	21.2886	21.3069			N/A
4/30/2019	EURMXN	3:30:00 PM	21.2885	21.3047			N/A
4/30/2019	EURMXN.fx	9:30:00 AM	21.2909	21.291			N/A
4/30/2019	EURMXN.fx	11:30:00 AM	21.3266	21.3145			N/A
4/30/2019	EURMXN.fx	1:30:00 PM	21.2976	21.2978			N/A
4/30/2019	EURMXN.fx	3:30:00 PM	21.298	21.2959			N/A
4/30/2019	EURNOK	9:30:00 AM	9.6844	9.6964			N/A
4/30/2019	EURNOK	11:30:00 AM	9.6778	9.6883			N/A
4/30/2019	EURNOK	1:30:00 PM	9.6691	9.6815			N/A
4/30/2019	EURNOK	3:30:00 PM	9.666	9.6751			N/A
4/30/2019	EURNOK.fx	9:30:00 AM	9.69001	9.69095			N/A
4/30/2019	EURNOK.fx	11:30:00 AM	9.6833	9.68282			N/A
4/30/2019	EURNOK.fx	1:30:00 PM	9.6745	9.67608			N/A
4/30/2019	EURNOK.fx	3:30:00 PM	9.67142	9.66971			N/A
4/30/2019	EURNZD	9:30:00 AM	1.67898	1.67978			N/A
4/30/2019	EURNZD	11:30:00 AM	1.67888	1.67884			N/A

4/30/2019	EURNZD	1:30:00 PM	1.6794	1.6801			N/A
4/30/2019	EURNZD	3:30:00 PM	1.68144	1.6818			N/A
4/30/2019	EURNZD.fx	9:30:00 AM	1.6794	1.67936			N/A
4/30/2019	EURNZD.fx	11:30:00 AM	1.67932	1.6784			N/A
4/30/2019	EURNZD.fx	1:30:00 PM	1.67982	1.67965			N/A
4/30/2019	EURNZD.fx	3:30:00 PM	1.68183	1.68146			N/A
4/30/2019	EURPLN	9:30:00 AM	4.2934	4.2966			N/A
4/30/2019	EURPLN	11:30:00 AM	4.2887	4.2916			N/A
4/30/2019	EURPLN	1:30:00 PM	4.2876	4.2908			N/A
4/30/2019	EURPLN	3:30:00 PM	4.2844	4.2877			N/A
4/30/2019	EURPLN.fx	9:30:00 AM	4.29271	4.29712			N/A
4/30/2019	EURPLN.fx	11:30:00 AM	4.28807	4.29205			N/A
4/30/2019	EURPLN.fx	1:30:00 PM	4.28695	4.29132			N/A
4/30/2019	EURPLN.fx	3:30:00 PM	4.28388	4.28842			N/A
4/30/2019	EURRUB	9:30:00 AM					N/A
4/30/2019	EURRUB	11:30:00 AM	72.001	72.398			N/A
4/30/2019	EURRUB	1:30:00 PM	71.903	72.344			N/A
4/30/2019	EURRUB	3:30:00 PM	71.908	72.335			N/A
4/30/2019	EURSEK	9:30:00 AM	10.6389	10.6438			N/A
4/30/2019	EURSEK	11:30:00 AM	10.6294	10.6331			N/A
4/30/2019	EURSEK	1:30:00 PM	10.6318	10.6368			N/A
4/30/2019	EURSEK	3:30:00 PM	10.6378	10.6396			N/A
4/30/2019	EURSEK.fx	9:30:00 AM	10.64053	10.64217			N/A
4/30/2019	EURSEK.fx	11:30:00 AM	10.63106	10.63105			N/A
4/30/2019	EURSEK.fx	1:30:00 PM	10.63346	10.63522			N/A
4/30/2019	EURSEK.fx	3:30:00 PM	10.6385	10.63788			N/A
4/30/2019	EURSGD	9:30:00 AM	1.5235	1.5242			N/A
4/30/2019	EURSGD	11:30:00 AM	1.5248	1.5249			N/A
4/30/2019	EURSGD	1:30:00 PM	1.5246	1.5252			N/A
4/30/2019	EURSGD	3:30:00 PM	1.5265	1.5272			N/A
4/30/2019	EURSGD.fx	9:30:00 AM	1.52383	1.52381			N/A
4/30/2019	EURSGD.fx	11:30:00 AM	1.52521	1.52448			N/A
4/30/2019	EURSGD.fx	1:30:00 PM	1.52497	1.52482			N/A
4/30/2019	EURSGD.fx	3:30:00 PM	1.52688	1.5268			N/A



4/30/2019	EURUSD	9:30:00 AM	1.11785	1.11785		500	N/A
4/30/2019	EURUSD	11:30:00 AM	1.12053	1.11976	10	200	N/A
4/30/2019	EURUSD	1:30:00 PM	1.12053	1.12049			N/A
4/30/2019	EURUSD	3:30:00 PM	1.1217	1.1216			N/A
4/30/2019	EURUSD.fx	9:30:00 AM	1.11806	1.11795			N/A
4/30/2019	EURUSD.fx	11:30:00 AM	1.12073	1.11986			N/A
4/30/2019	EURUSD.fx	1:30:00 PM	1.12073	1.12059			N/A
4/30/2019	EURUSD.fx	3:30:00 PM	1.12189	1.12171			N/A
4/30/2019	EURZAR	9:30:00 AM	16.0533	16.0671			N/A
4/30/2019	EURZAR	11:30:00 AM	16.0427	16.0569			N/A
4/30/2019	EURZAR	1:30:00 PM	16.0308	16.0487			N/A
4/30/2019	EURZAR	3:30:00 PM	16.0273	16.044			N/A
4/30/2019	EURZAR.fx	9:30:00 AM	16.05267	16.06803			N/A
4/30/2019	EURZAR.fx	11:30:00 AM	16.04232	16.0574			N/A
4/30/2019	EURZAR.fx	1:30:00 PM	16.03018	16.04844			N/A
4/30/2019	EURZAR.fx	3:30:00 PM	16.02778	16.04489			N/A
4/30/2019	GBPAUD	9:30:00 AM	1.83772	1.83839			N/A
4/30/2019	GBPAUD	11:30:00 AM	1.83991	1.84			N/A
4/30/2019	GBPAUD	1:30:00 PM	1.84217	1.84263			N/A
4/30/2019	GBPAUD	3:30:00 PM	1.8463	1.84655			N/A
4/30/2019	GBPAUD.fx	9:30:00 AM	1.83811	1.838			N/A
4/30/2019	GBPAUD.fx	11:30:00 AM	1.84029	1.8396			N/A
4/30/2019	GBPAUD.fx	1:30:00 PM	1.84258	1.84224			N/A
4/30/2019	GBPAUD.fx	3:30:00 PM	1.8467	1.84616			N/A
4/30/2019	GBPCAD	9:30:00 AM	1.74299	1.74376			N/A
4/30/2019	GBPCAD	11:30:00 AM	1.74532	1.74591			N/A
4/30/2019	GBPCAD	1:30:00 PM	1.747	1.74748			N/A
4/30/2019	GBPCAD	3:30:00 PM	1.75092	1.74857			N/A
4/30/2019	GBPCAD.fx	9:30:00 AM	1.74336	1.74337			N/A
4/30/2019	GBPCAD.fx	11:30:00 AM	1.7457	1.74553			N/A
4/30/2019	GBPCAD.fx	1:30:00 PM	1.74738	1.74709			N/A
4/30/2019	GBPCAD.fx	3:30:00 PM	1.75134	1.74851			N/A
4/30/2019	GBPCHF	9:30:00 AM	1.31813	1.31852			N/A
4/30/2019	GBPCHF	11:30:00 AM	1.32037	1.3207			N/A

4/30/2019	GBPCHE	1:30:00 PM	1.32395	1.32404			N/A
4/30/2019	GBPCHE	3:30:00 PM	1.32684	1.32697			N/A
4/30/2019	GBPCHE.fx	9:30:00 AM	1.3183	1.31832			N/A
4/30/2019	GBPCHE.fx	11:30:00 AM	1.32056	1.32049			N/A
4/30/2019	GBPCHE.fx	1:30:00 PM	1.32414	1.32383			N/A
4/30/2019	GBPCHE.fx	3:30:00 PM	1.32703	1.32678			N/A
4/30/2019	GBPCZK	9:30:00 AM	29.66	29.682			N/A
4/30/2019	GBPCZK	11:30:00 AM	29.689	29.701			N/A
4/30/2019	GBPCZK	1:30:00 PM	29.711	29.726			N/A
4/30/2019	GBPCZK	3:30:00 PM	29.727	29.741			N/A
4/30/2019	GBPDKK	9:30:00 AM	8.633	8.643			N/A
4/30/2019	GBPDKK	11:30:00 AM	8.643	8.651			N/A
4/30/2019	GBPDKK	1:30:00 PM	8.651	8.661			N/A
4/30/2019	GBPDKK	3:30:00 PM	8.654	8.664			N/A
4/30/2019	GBPDKK.fx	9:30:00 AM	8.6307	8.6438			N/A
4/30/2019	GBPDKK.fx	11:30:00 AM	8.6415	8.6518			N/A
4/30/2019	GBPDKK.fx	1:30:00 PM	8.6492	8.6604			N/A
4/30/2019	GBPDKK.fx	3:30:00 PM	8.6528	8.6639			N/A
4/30/2019	GBPHKD	9:30:00 AM	10.1426	10.1474			N/A
4/30/2019	GBPHKD	11:30:00 AM	10.1758	10.1785			N/A
4/30/2019	GBPHKD	1:30:00 PM	10.1876	10.1906			N/A
4/30/2019	GBPHKD	3:30:00 PM	10.2026	10.2061			N/A
4/30/2019	GBPHUF	9:30:00 AM	373.46	373.93			N/A
4/30/2019	GBPHUF	11:30:00 AM	373.82	374.13			N/A
4/30/2019	GBPHUF	1:30:00 PM	374.01	374.41			N/A
4/30/2019	GBPHUF	3:30:00 PM	374.18	374.36			N/A
4/30/2019	GBPJPY	9:30:00 AM	144.101	144.116			N/A
4/30/2019	GBPJPY	11:30:00 AM	144.522	144.487			N/A
4/30/2019	GBPJPY	1:30:00 PM	144.67	144.671			N/A
4/30/2019	GBPJPY	3:30:00 PM	144.891	144.896			N/A
4/30/2019	GBPJPY.fx	9:30:00 AM	144.119	144.096			N/A
4/30/2019	GBPJPY.fx	11:30:00 AM	144.539	144.468			N/A
4/30/2019	GBPJPY.fx	1:30:00 PM	144.689	144.652			N/A
4/30/2019	GBPJPY.fx	3:30:00 PM	144.911	144.877			N/A

4/30/2019	GBPMXN	9:30:00 AM	24.6174	24.6324			N/A
4/30/2019	GBPMXN	11:30:00 AM	24.6853	24.6924			N/A
4/30/2019	GBPMXN	1:30:00 PM	24.677	24.6878			N/A
4/30/2019	GBPMXN	3:30:00 PM	24.6865	24.6943			N/A
4/30/2019	GBPNOK	9:30:00 AM	11.206	11.2168			N/A
4/30/2019	GBPNOK	11:30:00 AM	11.2119	11.2209			N/A
4/30/2019	GBPNOK	1:30:00 PM	11.2125	11.2221			N/A
4/30/2019	GBPNOK	3:30:00 PM	11.2129	11.219			N/A
4/30/2019	GBPNOK.fx	9:30:00 AM	11.21051	11.21198			N/A
4/30/2019	GBPNOK.fx	11:30:00 AM	11.21668	11.21603			N/A
4/30/2019	GBPNOK.fx	1:30:00 PM	11.21737	11.21704			N/A
4/30/2019	GBPNOK.fx	3:30:00 PM	11.21718	11.21423			N/A
4/30/2019	GBPNZD	9:30:00 AM	1.94247	1.94317			N/A
4/30/2019	GBPNZD	11:30:00 AM	1.94435	1.94451			N/A
4/30/2019	GBPNZD	1:30:00 PM	1.94717	1.94753			N/A
4/30/2019	GBPNZD	3:30:00 PM	1.95015	1.95057			N/A
4/30/2019	GBPNZD.fx	9:30:00 AM	1.94284	1.94278			N/A
4/30/2019	GBPNZD.fx	11:30:00 AM	1.94471	1.9441			N/A
4/30/2019	GBPNZD.fx	1:30:00 PM	1.94755	1.94715			N/A
4/30/2019	GBPNZD.fx	3:30:00 PM	1.95051	1.9502			N/A
4/30/2019	GBPPLN	9:30:00 AM	4.968	4.9693			N/A
4/30/2019	GBPPLN	11:30:00 AM	4.9688	4.9687			N/A
4/30/2019	GBPPLN	1:30:00 PM	4.972	4.9732			N/A
4/30/2019	GBPPLN	3:30:00 PM	4.9704	4.9713			N/A
4/30/2019	GBPPLN.fx	9:30:00 AM	4.96585	4.97165			N/A
4/30/2019	GBPPLN.fx	11:30:00 AM	4.96664	4.97077			N/A
4/30/2019	GBPPLN.fx	1:30:00 PM	4.96996	4.97522			N/A
4/30/2019	GBPPLN.fx	3:30:00 PM	4.96815	4.97353			N/A
4/30/2019	GBPSEK	9:30:00 AM	12.3074	12.3165			N/A
4/30/2019	GBPSEK	11:30:00 AM	12.311	12.3173			N/A
4/30/2019	GBPSEK	1:30:00 PM	12.3255	12.3328			N/A
4/30/2019	GBPSEK	3:30:00 PM	12.3357	12.3422			N/A
4/30/2019	GBPSEK.fx	9:30:00 AM	12.30372	12.32025			N/A
4/30/2019	GBPSEK.fx	11:30:00 AM	12.30754	12.3209			N/A

4/30/2019	GBPSEK.fx	1:30:00 PM	12.32179	12.33624			N/A
4/30/2019	GBPSEK.fx	3:30:00 PM	12.33104	12.3459			N/A
4/30/2019	GBPSGD	9:30:00 AM	1.7627	1.7635			N/A
4/30/2019	GBPSGD	11:30:00 AM	1.766	1.7665			N/A
4/30/2019	GBPSGD	1:30:00 PM	1.7677	1.768			N/A
4/30/2019	GBPSGD	3:30:00 PM	1.7707	1.7712			N/A
4/30/2019	GBPSGD.fx	9:30:00 AM	1.76083	1.76525			N/A
4/30/2019	GBPSGD.fx	11:30:00 AM	1.76413	1.76826			N/A
4/30/2019	GBPSGD.fx	1:30:00 PM	1.76583	1.76982			N/A
4/30/2019	GBPSGD.fx	3:30:00 PM	1.76885	1.77309			N/A
4/30/2019	GBPUSD	9:30:00 AM	1.29343	1.29343			N/A
4/30/2019	GBPUSD	11:30:00 AM	1.29775	1.29735			N/A
4/30/2019	GBPUSD	1:30:00 PM	1.29929	1.299			N/A
4/30/2019	GBPUSD	3:30:00 PM	1.30121	1.30104			N/A
4/30/2019	GBPUSD.fx	9:30:00 AM	1.29348	1.29338			N/A
4/30/2019	GBPUSD.fx	11:30:00 AM	1.2978	1.29729			N/A
4/30/2019	GBPUSD.fx	1:30:00 PM	1.29934	1.29894			N/A
4/30/2019	GBPUSD.fx	3:30:00 PM	1.30126	1.30099			N/A
4/30/2019	GBPZAR	9:30:00 AM	18.5708	18.5919			N/A
4/30/2019	GBPZAR	11:30:00 AM	18.5818	18.6018			N/A
4/30/2019	GBPZAR	1:30:00 PM	18.5824	18.6097			N/A
4/30/2019	GBPZAR	3:30:00 PM	18.5867	18.6129			N/A
4/30/2019	GBPZAR.fx	9:30:00 AM	18.5775	18.5852			N/A
4/30/2019	GBPZAR.fx	11:30:00 AM	18.5896	18.5948			N/A
4/30/2019	GBPZAR.fx	1:30:00 PM	18.589	18.6033			N/A
4/30/2019	GBPZAR.fx	3:30:00 PM	18.5944	18.6052			N/A
4/30/2019	GOLD	9:30:00 AM	1282.85	1283.12			N/A
4/30/2019	GOLD	11:30:00 AM	1284.23	1284.52			N/A
4/30/2019	GOLD	1:30:00 PM	1284.87	1285.26			N/A
4/30/2019	GOLD	3:30:00 PM	1283.31	1282.69			N/A
4/30/2019	HKDJPY	9:30:00 AM	14.2	14.21			N/A
4/30/2019	HKDJPY	11:30:00 AM					N/A
4/30/2019	HKDJPY	1:30:00 PM					N/A
4/30/2019	HKDJPY	3:30:00 PM					N/A

4/30/2019	HKDJPY.fx	9:30:00 AM	14.194	14.2			N/A
4/30/2019	HKDJPY.fx	11:30:00 AM	14.189	14.194			N/A
4/30/2019	HKDJPY.fx	1:30:00 PM	14.186	14.194			N/A
4/30/2019	HKDJPY.fx	3:30:00 PM	14.188	14.194			N/A
4/30/2019	HUFJPY	9:30:00 AM	0.3857	0.386			N/A
4/30/2019	HUFJPY	11:30:00 AM	0.386	0.3863			N/A
4/30/2019	HUFJPY	1:30:00 PM	0.3865	0.3868			N/A
4/30/2019	HUFJPY	3:30:00 PM	0.3869	0.3872			N/A
4/30/2019	JP225.i	9:30:00 AM	22324.29	22339.29			N/A
4/30/2019	JP225.i	11:30:00 AM	22334.29	22343.46			N/A
4/30/2019	JP225.i	1:30:00 PM	22339.29	22354.29			N/A
4/30/2019	JP225.i	3:30:00 PM	22364.29	22374.29			N/A
4/30/2019	MXNJPY	9:30:00 AM	5.84	5.85			N/A
4/30/2019	MXNJPY	11:30:00 AM	5.84	5.85			N/A
4/30/2019	MXNJPY	1:30:00 PM	5.85	5.86			N/A
4/30/2019	MXNJPY	3:30:00 PM	5.86	5.87			N/A
4/30/2019	NASDAQ.i	9:30:00 AM					N/A
4/30/2019	NASDAQ.i	11:30:00 AM					N/A
4/30/2019	NASDAQ.i	1:30:00 PM					N/A
4/30/2019	NASDAQ.i	3:30:00 PM					N/A
4/30/2019	NOKJPY	9:30:00 AM	12.84	12.87			N/A
4/30/2019	NOKJPY	11:30:00 AM	12.88	12.9			N/A
4/30/2019	NOKJPY	1:30:00 PM	12.89	12.92			N/A
4/30/2019	NOKJPY	3:30:00 PM	12.9	12.93			N/A
4/30/2019	NOKJPY.fx	9:30:00 AM	12.851	12.856			N/A
4/30/2019	NOKJPY.fx	11:30:00 AM	12.885	12.881			N/A
4/30/2019	NOKJPY.fx	1:30:00 PM	12.894	12.899			N/A
4/30/2019	NOKJPY.fx	3:30:00 PM	12.915	12.918			N/A
4/30/2019	NZDCAD	9:30:00 AM	0.897	0.89767			N/A
4/30/2019	NZDCAD	11:30:00 AM	0.89746	0.89805			N/A
4/30/2019	NZDCAD	1:30:00 PM	0.89691	0.8976			N/A
4/30/2019	NZDCAD	3:30:00 PM	0.89766	0.89686			N/A
4/30/2019	NZDCAD.fx	9:30:00 AM	0.89732	0.89734			N/A
4/30/2019	NZDCAD.fx	11:30:00 AM	0.89779	0.89771			N/A

4/30/2019	NZDCAD.fx	1:30:00 PM	0.89724	0.89727			N/A
4/30/2019	NZDCAD.fx	3:30:00 PM	0.89798	0.89689			N/A
4/30/2019	NZDCHF	9:30:00 AM	0.67817	0.67887			N/A
4/30/2019	NZDCHF	11:30:00 AM	0.67882	0.6794			N/A
4/30/2019	NZDCHF	1:30:00 PM	0.67956	0.68025			N/A
4/30/2019	NZDCHF	3:30:00 PM	0.68007	0.68056			N/A
4/30/2019	NZDCHF.fx	9:30:00 AM	0.67851	0.67852			N/A
4/30/2019	NZDCHF.fx	11:30:00 AM	0.67915	0.67904			N/A
4/30/2019	NZDCHF.fx	1:30:00 PM	0.67989	0.6799			N/A
4/30/2019	NZDCHF.fx	3:30:00 PM	0.68036	0.68022			N/A
4/30/2019	NZDCZK	9:30:00 AM					N/A
4/30/2019	NZDCZK	11:30:00 AM	15.267	15.273			N/A
4/30/2019	NZDCZK	1:30:00 PM	15.255	15.265			N/A
4/30/2019	NZDCZK	3:30:00 PM	15.24	15.248			N/A
4/30/2019	NZDDKK	9:30:00 AM	4.444	4.447			N/A
4/30/2019	NZDDKK	11:30:00 AM	4.444	4.447			N/A
4/30/2019	NZDDKK	1:30:00 PM	4.443	4.446			N/A
4/30/2019	NZDDKK	3:30:00 PM	4.437	4.439			N/A
4/30/2019	NZDHKD	9:30:00 AM	5.2198	5.2227			N/A
4/30/2019	NZDHKD	11:30:00 AM	5.2322	5.2342			N/A
4/30/2019	NZDHKD	1:30:00 PM	5.2307	5.2331			N/A
4/30/2019	NZDHKD	3:30:00 PM	5.2314	5.232			N/A
4/30/2019	NZDHUF	9:30:00 AM	192.18	192.48			N/A
4/30/2019	NZDHUF	11:30:00 AM	192.21	192.4			N/A
4/30/2019	NZDHUF	1:30:00 PM	192.02	192.29			N/A
4/30/2019	NZDHUF	3:30:00 PM	191.79	191.94			N/A
4/30/2019	NZDJPY	9:30:00 AM	74.128	74.183			N/A
4/30/2019	NZDJPY	11:30:00 AM	74.288	74.317			N/A
4/30/2019	NZDJPY	1:30:00 PM	74.242	74.309			N/A
4/30/2019	NZDJPY	3:30:00 PM	74.258	74.296			N/A
4/30/2019	NZDJPY.fx	9:30:00 AM	74.159	74.151			N/A
4/30/2019	NZDJPY.fx	11:30:00 AM	74.319	74.284			N/A
4/30/2019	NZDJPY.fx	1:30:00 PM	74.273	74.277			N/A
4/30/2019	NZDJPY.fx	3:30:00 PM	74.285	74.264			N/A

4/30/2019	NZDMXN	9:30:00 AM	12.6698	12.6761			N/A
4/30/2019	NZDMXN	11:30:00 AM	12.6941	12.697			N/A
4/30/2019	NZDMXN	1:30:00 PM	12.6714	12.6769			N/A
4/30/2019	NZDMXN	3:30:00 PM	12.6577	12.6588			N/A
4/30/2019	NZDNOK	9:30:00 AM	5.766	5.7699			N/A
4/30/2019	NZDNOK	11:30:00 AM	5.7644	5.7665			N/A
4/30/2019	NZDNOK	1:30:00 PM	5.7563	5.7596			N/A
4/30/2019	NZDNOK	3:30:00 PM	5.7468	5.7471			N/A
4/30/2019	NZDPLN	9:30:00 AM	2.555	2.5564			N/A
4/30/2019	NZDPLN	11:30:00 AM	2.554	2.554			N/A
4/30/2019	NZDPLN	1:30:00 PM	2.5515	2.5527			N/A
4/30/2019	NZDPLN	3:30:00 PM	2.5459	2.5466			N/A
4/30/2019	NZDSEK	9:30:00 AM	6.3307	6.3375			N/A
4/30/2019	NZDSEK	11:30:00 AM	6.3278	6.3324			N/A
4/30/2019	NZDSEK	1:30:00 PM	6.3257	6.3317			N/A
4/30/2019	NZDSEK	3:30:00 PM	6.3215	6.3258			N/A
4/30/2019	NZDSGD	9:30:00 AM	0.9071	0.9078			N/A
4/30/2019	NZDSGD	11:30:00 AM	0.9082	0.9085			N/A
4/30/2019	NZDSGD	1:30:00 PM	0.9075	0.9082			N/A
4/30/2019	NZDSGD	3:30:00 PM	0.9078	0.9081			N/A
4/30/2019	NZDSGD.fx	9:30:00 AM	0.90709	0.9077			N/A
4/30/2019	NZDSGD.fx	11:30:00 AM	0.90818	0.90849			N/A
4/30/2019	NZDSGD.fx	1:30:00 PM	0.90749	0.90811			N/A
4/30/2019	NZDSGD.fx	3:30:00 PM	0.90772	0.90821			N/A
4/30/2019	NZDUSD	9:30:00 AM	0.66565	0.66573			N/A
4/30/2019	NZDUSD	11:30:00 AM	0.66737	0.66724			N/A
4/30/2019	NZDUSD	1:30:00 PM	0.66704	0.66717			N/A
4/30/2019	NZDUSD	3:30:00 PM	0.66707	0.66704			N/A
4/30/2019	NZDUSD.fx	9:30:00 AM	0.66571	0.66575			N/A
4/30/2019	NZDUSD.fx	11:30:00 AM	0.66745	0.66725			N/A
4/30/2019	NZDUSD.fx	1:30:00 PM	0.66712	0.66718			N/A
4/30/2019	NZDUSD.fx	3:30:00 PM	0.66711	0.66705			N/A
4/30/2019	NZDZAR	9:30:00 AM	9.5514	9.5647			N/A
4/30/2019	NZDZAR	11:30:00 AM	9.5502	9.5627			N/A

4/30/2019	NZDZAR	1:30:00 PM	9.5366	9.5524			N/A
4/30/2019	NZDZAR	3:30:00 PM	9.5243	9.5352			N/A
4/30/2019	SEKJPY	9:30:00 AM	11.71	11.72			N/A
4/30/2019	SEKJPY	11:30:00 AM	11.74	11.75			N/A
4/30/2019	SEKJPY	1:30:00 PM					N/A
4/30/2019	SEKJPY	3:30:00 PM	11.74	11.75			N/A
4/30/2019	SEKJPY.fx	9:30:00 AM	11.698	11.715			N/A
4/30/2019	SEKJPY.fx	11:30:00 AM	11.732	11.74			N/A
4/30/2019	SEKJPY.fx	1:30:00 PM	11.727	11.744			N/A
4/30/2019	SEKJPY.fx	3:30:00 PM	11.736	11.751			N/A
4/30/2019	SGDJPY	9:30:00 AM	81.69	81.71			N/A
4/30/2019	SGDJPY	11:30:00 AM	81.78	81.78			N/A
4/30/2019	SGDJPY	1:30:00 PM	81.79	81.81			N/A
4/30/2019	SGDJPY	3:30:00 PM	81.77	81.79			N/A
4/30/2019	SILVER	9:30:00 AM	14.75	15.13			N/A
4/30/2019	SILVER	11:30:00 AM	14.77	15.15			N/A
4/30/2019	SILVER	1:30:00 PM	14.79	15.17			N/A
4/30/2019	SILVER	3:30:00 PM	14.76	15.15			N/A
4/30/2019	SPX500.i	9:30:00 AM	2938.97	2940			N/A
4/30/2019	SPX500.i	11:30:00 AM	2939.97	2940.52			N/A
4/30/2019	SPX500.i	1:30:00 PM	2940.47	2941.52			N/A
4/30/2019	SPX500.i	3:30:00 PM	2942.27	2943.27			N/A
4/30/2019	UK100.i	9:30:00 AM	7444.47	7446.13			N/A
4/30/2019	UK100.i	11:30:00 AM	7437.88	7434.63			N/A
4/30/2019	UK100.i	1:30:00 PM	7432.13	7433.13			N/A
4/30/2019	UK100.i	3:30:00 PM	7435.55	7436.63			N/A
4/30/2019	USDCAD	9:30:00 AM	1.34786	1.34791			N/A
4/30/2019	USDCAD	11:30:00 AM	1.34546	1.34518			N/A
4/30/2019	USDCAD	1:30:00 PM	1.34493	1.34503			N/A
4/30/2019	USDCAD	3:30:00 PM	1.3462	1.34404		1000	N/A
4/30/2019	USDCAD.fx	9:30:00 AM	1.34789	1.34787			N/A
4/30/2019	USDCAD.fx	11:30:00 AM	1.3455	1.34515			N/A
4/30/2019	USDCAD.fx	1:30:00 PM	1.34495	1.34499			N/A
4/30/2019	USDCAD.fx	3:30:00 PM	1.34622	1.34405			N/A



4/30/2019	USDCHE	9:30:00 AM	1.01918	1.01925			N/A
4/30/2019	USDCHE	11:30:00 AM	1.0178	1.01753		1000	N/A
4/30/2019	USDCHE	1:30:00 PM	1.01907	1.0191			N/A
4/30/2019	USDCHE	3:30:00 PM	1.01981	1.01979			N/A
4/30/2019	USDCHE.fx	9:30:00 AM	1.01923	1.0192			N/A
4/30/2019	USDCHE.fx	11:30:00 AM	1.01785	1.01747			N/A
4/30/2019	USDCHE.fx	1:30:00 PM	1.01913	1.01904			N/A
4/30/2019	USDCHE.fx	3:30:00 PM	1.01984	1.01974			N/A
4/30/2019	USDCZK	9:30:00 AM	22.95	22.97			N/A
4/30/2019	USDCZK	11:30:00 AM	22.902	22.909			N/A
4/30/2019	USDCZK	1:30:00 PM	22.883	22.903			N/A
4/30/2019	USDCZK	3:30:00 PM	22.862	22.881			N/A
4/30/2019	USDCZK.fx	9:30:00 AM	22.958	22.9622			N/A
4/30/2019	USDCZK.fx	11:30:00 AM	22.9106	22.8993			N/A
4/30/2019	USDCZK.fx	1:30:00 PM	22.8906	22.895			N/A
4/30/2019	USDCZK.fx	3:30:00 PM	22.8692	22.874			N/A
4/30/2019	USDDKK	9:30:00 AM	6.677	6.6803			N/A
4/30/2019	USDDKK	11:30:00 AM	6.6653	6.6644			N/A
4/30/2019	USDDKK	1:30:00 PM	6.661	6.664			N/A
4/30/2019	USDDKK	3:30:00 PM	6.654	6.6574			N/A
4/30/2019	USDDKK.fx	9:30:00 AM	6.67745	6.67835			N/A
4/30/2019	USDDKK.fx	11:30:00 AM	6.66563	6.66212			N/A
4/30/2019	USDDKK.fx	1:30:00 PM	6.66145	6.66202			N/A
4/30/2019	USDDKK.fx	3:30:00 PM	6.65427	6.65506			N/A
4/30/2019	USDHKD	9:30:00 AM	7.8455	7.8456			N/A
4/30/2019	USDHKD	11:30:00 AM	7.8447	7.8449			N/A
4/30/2019	USDHKD	1:30:00 PM	7.8449	7.8452			N/A
4/30/2019	USDHKD	3:30:00 PM	7.8444	7.8443			N/A
4/30/2019	USDHKD.fx	9:30:00 AM	7.84552	7.8458			N/A
4/30/2019	USDHKD.fx	11:30:00 AM	7.8447	7.84525			N/A
4/30/2019	USDHKD.fx	1:30:00 PM	7.84479	7.84538			N/A
4/30/2019	USDHKD.fx	3:30:00 PM	7.84459	7.84511			N/A
4/30/2019	USDHUF	9:30:00 AM	288.83	289.27			N/A
4/30/2019	USDHUF	11:30:00 AM	288.23	288.47			N/A

4/30/2019	USDHUF	1:30:00 PM	287.95	288.38			N/A
4/30/2019	USDHUF	3:30:00 PM	287.66	288.11			N/A
4/30/2019	USDHUF.fx	9:30:00 AM	289.016	289.085			N/A
4/30/2019	USDHUF.fx	11:30:00 AM	288.433	288.27			N/A
4/30/2019	USDHUF.fx	1:30:00 PM	288.155	288.157			N/A
4/30/2019	USDHUF.fx	3:30:00 PM	287.854	287.886			N/A
4/30/2019	USDINR	9:30:00 AM	64.83	74.82			N/A
4/30/2019	USDINR	11:30:00 AM	64.76	74.75			N/A
4/30/2019	USDINR	1:30:00 PM					N/A
4/30/2019	USDINR	3:30:00 PM					N/A
4/30/2019	USDJPY	9:30:00 AM	111.38	111.381			N/A
4/30/2019	USDJPY	11:30:00 AM	111.334	111.328			N/A
4/30/2019	USDJPY	1:30:00 PM	111.318	111.328			N/A
4/30/2019	USDJPY	3:30:00 PM	111.33	111.323			N/A
4/30/2019	USDJPY.fx	9:30:00 AM	111.387	111.375			N/A
4/30/2019	USDJPY.fx	11:30:00 AM	111.34	111.32			N/A
4/30/2019	USDJPY.fx	1:30:00 PM	111.324	111.321			N/A
4/30/2019	USDJPY.fx	3:30:00 PM	111.334	111.316			N/A
4/30/2019	USDMXN	9:30:00 AM	19.04	19.046			N/A
4/30/2019	USDMXN	11:30:00 AM	19.033	19.033			N/A
4/30/2019	USDMXN	1:30:00 PM	19.001	19.009			N/A
4/30/2019	USDMXN	3:30:00 PM	18.981	18.986			N/A
4/30/2019	USDMXN.fx	9:30:00 AM	19.0433	19.0426			N/A
4/30/2019	USDMXN.fx	11:30:00 AM	19.0375	19.0291			N/A
4/30/2019	USDMXN.fx	1:30:00 PM	19.0043	19.0052			N/A
4/30/2019	USDMXN.fx	3:30:00 PM	18.9851	18.983			N/A
4/30/2019	USDNOK	9:30:00 AM	8.6639	8.6716			N/A
4/30/2019	USDNOK	11:30:00 AM	8.6425	8.6454			N/A
4/30/2019	USDNOK	1:30:00 PM	8.63	8.6378			N/A
4/30/2019	USDNOK	3:30:00 PM	8.6184	8.6234			N/A
4/30/2019	USDNOK.fx	9:30:00 AM	8.66805	8.66715			N/A
4/30/2019	USDNOK.fx	11:30:00 AM	8.64644	8.64092			N/A
4/30/2019	USDNOK.fx	1:30:00 PM	8.63393	8.63335			N/A
4/30/2019	USDNOK.fx	3:30:00 PM	8.62181	8.61878			N/A

4/30/2019	USDPLN	9:30:00 AM	3.8402	3.8413			N/A
4/30/2019	USDPLN	11:30:00 AM	3.8293	3.8275			N/A
4/30/2019	USDPLN	1:30:00 PM	3.8259	3.8268			N/A
4/30/2019	USDPLN	3:30:00 PM	3.8191	3.8203			N/A
4/30/2019	USDPLN.fx	9:30:00 AM	3.83939	3.84201			N/A
4/30/2019	USDPLN.fx	11:30:00 AM	3.82848	3.82837			N/A
4/30/2019	USDPLN.fx	1:30:00 PM	3.82508	3.82755			N/A
4/30/2019	USDPLN.fx	3:30:00 PM	3.81809	3.8211			N/A
4/30/2019	USDRUB	9:30:00 AM					N/A
4/30/2019	USDRUB	11:30:00 AM	64.35	64.722			N/A
4/30/2019	USDRUB	1:30:00 PM	64.255	64.643			N/A
4/30/2019	USDRUB	3:30:00 PM	64.189	64.578			N/A
4/30/2019	USDSEK	9:30:00 AM	9.5161	9.5196			N/A
4/30/2019	USDSEK	11:30:00 AM	9.4903	9.4883			N/A
4/30/2019	USDSEK	1:30:00 PM	9.4872	9.4906			N/A
4/30/2019	USDSEK	3:30:00 PM	9.4822	9.4839			N/A
4/30/2019	USDSEK.fx	9:30:00 AM	9.51866	9.51781			N/A
4/30/2019	USDSEK.fx	11:30:00 AM	9.4929	9.48614			N/A
4/30/2019	USDSEK.fx	1:30:00 PM	9.48972	9.48876			N/A
4/30/2019	USDSEK.fx	3:30:00 PM	9.48434	9.48188			N/A
4/30/2019	USDSGD	9:30:00 AM	1.3628	1.3631			N/A
4/30/2019	USDSGD	11:30:00 AM	1.3611	1.3611			N/A
4/30/2019	USDSGD	1:30:00 PM	1.3605	1.3609			N/A
4/30/2019	USDSGD	3:30:00 PM	1.3609	1.3606			N/A
4/30/2019	USDSGD.fx	9:30:00 AM	1.36282	1.36316			N/A
4/30/2019	USDSGD.fx	11:30:00 AM	1.36103	1.36116			N/A
4/30/2019	USDSGD.fx	1:30:00 PM	1.36045	1.36096			N/A
4/30/2019	USDSGD.fx	3:30:00 PM	1.36076	1.36128			N/A
4/30/2019	USDZAR	9:30:00 AM	14.3594	14.372			N/A
4/30/2019	USDZAR	11:30:00 AM	14.3242	14.3314			N/A
4/30/2019	USDZAR	1:30:00 PM	14.304	14.3206			N/A
4/30/2019	USDZAR	3:30:00 PM	14.2888	14.3032			N/A
4/30/2019	USDZAR.fx	9:30:00 AM	14.3651	14.36622			N/A
4/30/2019	USDZAR.fx	11:30:00 AM	14.3309	14.3248			N/A

4/30/2019	USDZAR.fx	1:30:00 PM	14.30958	14.31352			N/A
4/30/2019	USDZAR.fx	3:30:00 PM	14.29386	14.29732			N/A
4/30/2019	XAUUSD	9:30:00 AM	1282.85	1283.11			N/A
4/30/2019	XAUUSD	11:30:00 AM	1284.23	1284.52			N/A
4/30/2019	XAUUSD	1:30:00 PM	1284.87	1285.24			N/A
4/30/2019	XAUUSD	3:30:00 PM	1283.3	1282.69			N/A
4/30/2019	ZARJPY	9:30:00 AM	7.73	7.75			N/A
4/30/2019	ZARJPY	11:30:00 AM	7.75	7.76			N/A
4/30/2019	ZARJPY	1:30:00 PM	7.75	7.77			N/A
4/30/2019	ZARJPY	3:30:00 PM	7.76	7.78			N/A
4/30/2019	ZARJPY.fx	9:30:00 AM	7.747	7.748			N/A
4/30/2019	ZARJPY.fx	11:30:00 AM	7.765	7.762			N/A
4/30/2019	ZARJPY.fx	1:30:00 PM	7.77	7.773			N/A
4/30/2019	ZARJPY.fx	3:30:00 PM	7.779	7.783			N/A
5/1/2019	#AA	9:30:00 AM					N/A
5/1/2019	#AA	11:30:00 AM					N/A
5/1/2019	#AA	1:30:00 PM					N/A
5/1/2019	#AA	3:30:00 PM					N/A
5/1/2019	#AABA	9:30:00 AM					N/A
5/1/2019	#AABA	11:30:00 AM					N/A
5/1/2019	#AABA	1:30:00 PM					N/A
5/1/2019	#AABA	3:30:00 PM					N/A
5/1/2019	#AAL	9:30:00 AM					N/A
5/1/2019	#AAL	11:30:00 AM					N/A
5/1/2019	#AAL	1:30:00 PM					N/A
5/1/2019	#AAL	3:30:00 PM					N/A
5/1/2019	#AAPL	9:30:00 AM					N/A
5/1/2019	#AAPL	11:30:00 AM					N/A
5/1/2019	#AAPL	1:30:00 PM					N/A
5/1/2019	#AAPL	3:30:00 PM					N/A
5/1/2019	#ADBE	9:30:00 AM					N/A
5/1/2019	#ADBE	11:30:00 AM					N/A
5/1/2019	#ADBE	1:30:00 PM					N/A
5/1/2019	#ADBE	3:30:00 PM					N/A

5/1/2019	#AIG	9:30:00 AM					N/A
5/1/2019	#AIG	11:30:00 AM					N/A
5/1/2019	#AIG	1:30:00 PM					N/A
5/1/2019	#AIG	3:30:00 PM					N/A
5/1/2019	#AMD	9:30:00 AM					N/A
5/1/2019	#AMD	11:30:00 AM					N/A
5/1/2019	#AMD	1:30:00 PM					N/A
5/1/2019	#AMD	3:30:00 PM					N/A
5/1/2019	#AMZN	9:30:00 AM					N/A
5/1/2019	#AMZN	11:30:00 AM					N/A
5/1/2019	#AMZN	1:30:00 PM					N/A
5/1/2019	#AMZN	3:30:00 PM					N/A
5/1/2019	#AXP	9:30:00 AM					N/A
5/1/2019	#AXP	11:30:00 AM					N/A
5/1/2019	#AXP	1:30:00 PM					N/A
5/1/2019	#AXP	3:30:00 PM					N/A
5/1/2019	#BA	9:30:00 AM					N/A
5/1/2019	#BA	11:30:00 AM					N/A
5/1/2019	#BA	1:30:00 PM					N/A
5/1/2019	#BA	3:30:00 PM					N/A
5/1/2019	#BABA	9:30:00 AM					N/A
5/1/2019	#BABA	11:30:00 AM					N/A
5/1/2019	#BABA	1:30:00 PM					N/A
5/1/2019	#BABA	3:30:00 PM					N/A
5/1/2019	#BAC	9:30:00 AM					N/A
5/1/2019	#BAC	11:30:00 AM					N/A
5/1/2019	#BAC	1:30:00 PM					N/A
5/1/2019	#BAC	3:30:00 PM					N/A
5/1/2019	#BARC	9:30:00 AM					N/A
5/1/2019	#BARC	11:30:00 AM					N/A
5/1/2019	#BARC	1:30:00 PM					N/A
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5/1/2019	#UL	1:30:00 PM					N/A
5/1/2019	#UL	3:30:00 PM					N/A
5/1/2019	#UPS	9:30:00 AM					N/A
5/1/2019	#UPS	11:30:00 AM					N/A
5/1/2019	#UPS	1:30:00 PM					N/A
5/1/2019	#UPS	3:30:00 PM					N/A
5/1/2019	#UTX	9:30:00 AM					N/A
5/1/2019	#UTX	11:30:00 AM					N/A
5/1/2019	#UTX	1:30:00 PM					N/A
5/1/2019	#UTX	3:30:00 PM					N/A
5/1/2019	#V	9:30:00 AM					N/A
5/1/2019	#V	11:30:00 AM					N/A
5/1/2019	#V	1:30:00 PM					N/A
5/1/2019	#V	3:30:00 PM					N/A
5/1/2019	#VOD	9:30:00 AM					N/A
5/1/2019	#VOD	11:30:00 AM					N/A
5/1/2019	#VOD	1:30:00 PM					N/A
5/1/2019	#VOD	3:30:00 PM					N/A
5/1/2019	#VZ	9:30:00 AM					N/A
5/1/2019	#VZ	11:30:00 AM					N/A
5/1/2019	#VZ	1:30:00 PM					N/A
5/1/2019	#VZ	3:30:00 PM					N/A
5/1/2019	#WDC	9:30:00 AM					N/A
5/1/2019	#WDC	11:30:00 AM					N/A
5/1/2019	#WDC	1:30:00 PM					N/A
5/1/2019	#WDC	3:30:00 PM					N/A
5/1/2019	#WFC	9:30:00 AM					N/A
5/1/2019	#WFC	11:30:00 AM					N/A
5/1/2019	#WFC	1:30:00 PM					N/A
5/1/2019	#WFC	3:30:00 PM					N/A



5/1/2019	#WMT	9:30:00 AM					N/A
5/1/2019	#WMT	11:30:00 AM					N/A
5/1/2019	#WMT	1:30:00 PM					N/A
5/1/2019	#WMT	3:30:00 PM					N/A
5/1/2019	#XOM	9:30:00 AM					N/A
5/1/2019	#XOM	11:30:00 AM					N/A
5/1/2019	#XOM	1:30:00 PM					N/A
5/1/2019	#XOM	3:30:00 PM					N/A
5/1/2019	#YHOO	9:30:00 AM					N/A
5/1/2019	#YHOO	11:30:00 AM					N/A
5/1/2019	#YHOO	1:30:00 PM					N/A
5/1/2019	#YHOO	3:30:00 PM					N/A
5/1/2019	#ZNGA	9:30:00 AM					N/A
5/1/2019	#ZNGA	11:30:00 AM					N/A
5/1/2019	#ZNGA	1:30:00 PM					N/A
5/1/2019	#ZNGA	3:30:00 PM					N/A
5/1/2019	AUDCAD	9:30:00 AM	0.94309	0.94383			N/A
5/1/2019	AUDCAD	11:30:00 AM	0.94473	0.94523			N/A
5/1/2019	AUDCAD	1:30:00 PM	0.94446	0.94512			N/A
5/1/2019	AUDCAD	3:30:00 PM	0.94388	0.94439			N/A
5/1/2019	AUDCAD.fx	9:30:00 AM	0.94345	0.94348			N/A
5/1/2019	AUDCAD.fx	11:30:00 AM	0.94507	0.94488			N/A
5/1/2019	AUDCAD.fx	1:30:00 PM	0.9448	0.94478			N/A
5/1/2019	AUDCAD.fx	3:30:00 PM	0.94421	0.94404			N/A
5/1/2019	AUDCHF	9:30:00 AM	0.71852	0.71922			N/A
5/1/2019	AUDCHF	11:30:00 AM	0.71759	0.71829			N/A
5/1/2019	AUDCHF	1:30:00 PM	0.71638	0.71714			N/A
5/1/2019	AUDCHF	3:30:00 PM	0.71567	0.71634			N/A
5/1/2019	AUDCHF.fx	9:30:00 AM	0.71888	0.71887			N/A
5/1/2019	AUDCHF.fx	11:30:00 AM	0.71794	0.71793			N/A
5/1/2019	AUDCHF.fx	1:30:00 PM	0.71672	0.71679			N/A
5/1/2019	AUDCHF.fx	3:30:00 PM	0.71601	0.71599			N/A
5/1/2019	AUDCZK	9:30:00 AM	16.091	16.108			N/A
5/1/2019	AUDCZK	11:30:00 AM	16.083	16.099			N/A

5/1/2019	AUDCZK	1:30:00 PM					N/A
5/1/2019	AUDCZK	3:30:00 PM	16.051	16.065			N/A
5/1/2019	AUDDKK	9:30:00 AM	4.6909	4.6955			N/A
5/1/2019	AUDDKK	11:30:00 AM	4.6895	4.6941			N/A
5/1/2019	AUDDKK	1:30:00 PM	4.6851	4.6898			N/A
5/1/2019	AUDDKK	3:30:00 PM	4.6819	4.6865			N/A
5/1/2019	AUDHKD	9:30:00 AM	5.5276	5.5309			N/A
5/1/2019	AUDHKD	11:30:00 AM	5.5325	5.5365			N/A
5/1/2019	AUDHKD	1:30:00 PM	5.5325	5.5364			N/A
5/1/2019	AUDHKD	3:30:00 PM	5.5244	5.5279			N/A
5/1/2019	AUDHUF	9:30:00 AM	203.42	203.58			N/A
5/1/2019	AUDHUF	11:30:00 AM	203.62	203.77			N/A
5/1/2019	AUDHUF	1:30:00 PM	203.43	203.67			N/A
5/1/2019	AUDHUF	3:30:00 PM	203.27	203.51			N/A
5/1/2019	AUDJPY	9:30:00 AM	78.609	78.682			N/A
5/1/2019	AUDJPY	11:30:00 AM	78.628	78.698			N/A
5/1/2019	AUDJPY	1:30:00 PM	78.527	78.601			N/A
5/1/2019	AUDJPY	3:30:00 PM	78.444	78.508			N/A
5/1/2019	AUDJPY.fx	9:30:00 AM	78.643	78.647			N/A
5/1/2019	AUDJPY.fx	11:30:00 AM	78.662	78.663			N/A
5/1/2019	AUDJPY.fx	1:30:00 PM	78.561	78.567			N/A
5/1/2019	AUDJPY.fx	3:30:00 PM	78.478	78.475			N/A
5/1/2019	AUDMXN	9:30:00 AM	13.3373	13.3473			N/A
5/1/2019	AUDMXN	11:30:00 AM	13.3431	13.351			N/A
5/1/2019	AUDMXN	1:30:00 PM	13.3468	13.357			N/A
5/1/2019	AUDMXN	3:30:00 PM	13.318	13.3246			N/A
5/1/2019	AUDNOK	9:30:00 AM	6.0794	6.0847			N/A
5/1/2019	AUDNOK	11:30:00 AM	6.09	6.092			N/A
5/1/2019	AUDNOK	1:30:00 PM	6.0842	6.0898			N/A
5/1/2019	AUDNOK	3:30:00 PM	6.0822	6.0868			N/A
5/1/2019	AUDNOK.fx	9:30:00 AM	6.0809	6.0831			N/A
5/1/2019	AUDNOK.fx	11:30:00 AM	6.0915	6.093			N/A
5/1/2019	AUDNOK.fx	1:30:00 PM	6.0857	6.0881			N/A
5/1/2019	AUDNOK.fx	3:30:00 PM	6.0838	6.0851			N/A

5/1/2019	AUDNZD	9:30:00 AM	1.05998	1.06089			N/A
5/1/2019	AUDNZD	11:30:00 AM	1.05971	1.06059			N/A
5/1/2019	AUDNZD	1:30:00 PM	1.05854	1.0595			N/A
5/1/2019	AUDNZD	3:30:00 PM	1.05864	1.05947			N/A
5/1/2019	AUDNZD.fx	9:30:00 AM	1.06042	1.06044			N/A
5/1/2019	AUDNZD.fx	11:30:00 AM	1.06014	1.06015			N/A
5/1/2019	AUDNZD.fx	1:30:00 PM	1.059	1.05904			N/A
5/1/2019	AUDNZD.fx	3:30:00 PM	1.05908	1.05902			N/A
5/1/2019	AUDPLN	9:30:00 AM	2.6929	2.6959			N/A
5/1/2019	AUDPLN	11:30:00 AM	2.6896	2.6928			N/A
5/1/2019	AUDPLN	1:30:00 PM	2.6856	2.6888			N/A
5/1/2019	AUDPLN	3:30:00 PM	2.6842	2.6874			N/A
5/1/2019	AUDSEK	9:30:00 AM	6.692	6.6953			N/A
5/1/2019	AUDSEK	11:30:00 AM	6.7046	6.7073			N/A
5/1/2019	AUDSEK	1:30:00 PM	6.6975	6.7013			N/A
5/1/2019	AUDSEK	3:30:00 PM	6.6955	6.6981			N/A
5/1/2019	AUDSEK.fx	9:30:00 AM	6.6874	6.6996			N/A
5/1/2019	AUDSEK.fx	11:30:00 AM	6.7001	6.7114			N/A
5/1/2019	AUDSEK.fx	1:30:00 PM	6.6929	6.7057			N/A
5/1/2019	AUDSEK.fx	3:30:00 PM	6.6909	6.7026			N/A
5/1/2019	AUDSGD	9:30:00 AM	0.9581	0.9584			N/A
5/1/2019	AUDSGD	11:30:00 AM	0.9589	0.9591			N/A
5/1/2019	AUDSGD	1:30:00 PM	0.9586	0.9589			N/A
5/1/2019	AUDSGD	3:30:00 PM	0.9578	0.958			N/A
5/1/2019	AUDSGD.fx	9:30:00 AM	0.95817	0.95825			N/A
5/1/2019	AUDSGD.fx	11:30:00 AM	0.95896	0.95905			N/A
5/1/2019	AUDSGD.fx	1:30:00 PM	0.95866	0.95884			N/A
5/1/2019	AUDSGD.fx	3:30:00 PM	0.95792	0.95789			N/A
5/1/2019	AUDUSD	9:30:00 AM	0.70496	0.7051			N/A
5/1/2019	AUDUSD	11:30:00 AM	0.70564	0.70576			N/A
5/1/2019	AUDUSD	1:30:00 PM	0.70554	0.70572			N/A
5/1/2019	AUDUSD	3:30:00 PM	0.70463	0.70451			N/A
5/1/2019	AUDUSD.fx	9:30:00 AM	0.70501	0.70505			N/A
5/1/2019	AUDUSD.fx	11:30:00 AM	0.70569	0.7057			N/A

5/1/2019	AUDUSD.fx	1:30:00 PM	0.70559	0.70567			N/A
5/1/2019	AUDUSD.fx	3:30:00 PM	0.70468	0.70445			N/A
5/1/2019	AUDZAR	9:30:00 AM	10.0554	10.0686			N/A
5/1/2019	AUDZAR	11:30:00 AM	10.0766	10.0886			N/A
5/1/2019	AUDZAR	1:30:00 PM	10.0758	10.0914			N/A
5/1/2019	AUDZAR	3:30:00 PM	10.0875	10.1002			N/A
5/1/2019	AUS200.i	9:30:00 AM					N/A
5/1/2019	AUS200.i	11:30:00 AM	6370.78	6374.48			N/A
5/1/2019	AUS200.i	1:30:00 PM					N/A
5/1/2019	AUS200.i	3:30:00 PM	6376.68	6379.28			N/A
5/1/2019	BCHUSD	9:30:00 AM	275.16	276.78			N/A
5/1/2019	BCHUSD	11:30:00 AM	274.81	276.08			N/A
5/1/2019	BCHUSD	1:30:00 PM	275.01	276.81			N/A
5/1/2019	BCHUSD	3:30:00 PM	272.6	274.35			N/A
5/1/2019	CADCHF	9:30:00 AM	0.76156	0.76231			N/A
5/1/2019	CADCHF	11:30:00 AM	0.75951	0.76002			N/A
5/1/2019	CADCHF	1:30:00 PM	0.75832	0.75901			N/A
5/1/2019	CADCHF	3:30:00 PM	0.75807	0.7587			N/A
5/1/2019	CADCHF.fx	9:30:00 AM	0.76191	0.76196			N/A
5/1/2019	CADCHF.fx	11:30:00 AM	0.75986	0.75966			N/A
5/1/2019	CADCHF.fx	1:30:00 PM	0.75866	0.75866			N/A
5/1/2019	CADCHF.fx	3:30:00 PM	0.75841	0.75835			N/A
5/1/2019	CADCZK	9:30:00 AM	17.059	17.077			N/A
5/1/2019	CADCZK	11:30:00 AM	17.023	17.039			N/A
5/1/2019	CADCZK	1:30:00 PM	16.994	17.01			N/A
5/1/2019	CADCZK	3:30:00 PM	17.003	17.02			N/A
5/1/2019	CADDDKK	9:30:00 AM					N/A
5/1/2019	CADDDKK	11:30:00 AM	4.963	4.967			N/A
5/1/2019	CADDDKK	1:30:00 PM					N/A
5/1/2019	CADDDKK	3:30:00 PM					N/A
5/1/2019	CADHKD	9:30:00 AM	5.8594	5.8633			N/A
5/1/2019	CADHKD	11:30:00 AM	5.8568	5.8601			N/A
5/1/2019	CADHKD	1:30:00 PM	5.8568	5.8602			N/A
5/1/2019	CADHKD	3:30:00 PM	5.8523	5.8563			N/A

5/1/2019	CADHUF	9:30:00 AM	215.68	215.78			N/A
5/1/2019	CADHUF	11:30:00 AM	215.54	215.65			N/A
5/1/2019	CADHUF	1:30:00 PM	215.4	215.55			N/A
5/1/2019	CADHUF	3:30:00 PM	215.4	215.54			N/A
5/1/2019	CADJPY	9:30:00 AM	83.32	83.397			N/A
5/1/2019	CADJPY	11:30:00 AM	83.213	83.269			N/A
5/1/2019	CADJPY	1:30:00 PM	83.123	83.191			N/A
5/1/2019	CADJPY	3:30:00 PM	83.095	83.146			N/A
5/1/2019	CADJPY.fx	9:30:00 AM	83.353	83.362			N/A
5/1/2019	CADJPY.fx	11:30:00 AM	83.247	83.234			N/A
5/1/2019	CADJPY.fx	1:30:00 PM	83.156	83.156			N/A
5/1/2019	CADJPY.fx	3:30:00 PM	83.128	83.112			N/A
5/1/2019	CADMXN	9:30:00 AM	14.1376	14.1505			N/A
5/1/2019	CADMXN	11:30:00 AM	14.1214	14.1334			N/A
5/1/2019	CADMXN	1:30:00 PM	14.1288	14.1408			N/A
5/1/2019	CADMXN	3:30:00 PM	14.1069	14.116			N/A
5/1/2019	CADNOK	9:30:00 AM	6.4408	6.4457			N/A
5/1/2019	CADNOK	11:30:00 AM	6.4434	6.4469			N/A
5/1/2019	CADNOK	1:30:00 PM	6.4392	6.4436			N/A
5/1/2019	CADNOK	3:30:00 PM	6.4414	6.4462			N/A
5/1/2019	CADPLN	9:30:00 AM	2.8544	2.8562			N/A
5/1/2019	CADPLN	11:30:00 AM	2.8473	2.8491			N/A
5/1/2019	CADPLN	1:30:00 PM	2.843	2.8443			N/A
5/1/2019	CADPLN	3:30:00 PM	2.8438	2.8457			N/A
5/1/2019	CADSEK	9:30:00 AM	7.091	7.0947			N/A
5/1/2019	CADSEK	11:30:00 AM	7.0935	7.0973			N/A
5/1/2019	CADSEK	1:30:00 PM	7.0878	7.091			N/A
5/1/2019	CADSEK	3:30:00 PM	7.0906	7.0937			N/A
5/1/2019	CADSGD	9:30:00 AM	1.015	1.0153			N/A
5/1/2019	CADSGD	11:30:00 AM	1.0145	1.0148			N/A
5/1/2019	CADSGD	1:30:00 PM	1.0141	1.0143			N/A
5/1/2019	CADSGD	3:30:00 PM	1.0138	1.0141			N/A
5/1/2019	CADZAR	9:30:00 AM	10.6597	10.6757			N/A
5/1/2019	CADZAR	11:30:00 AM	10.6645	10.68			N/A

5/1/2019	CADZAR	1:30:00 PM	10.666	10.6836			N/A
5/1/2019	CADZAR	3:30:00 PM	10.6868	10.6991			N/A
5/1/2019	CHFCZK	9:30:00 AM	22.394	22.41			N/A
5/1/2019	CHFCZK	11:30:00 AM	22.411	22.425			N/A
5/1/2019	CHFCZK	1:30:00 PM	22.402	22.419			N/A
5/1/2019	CHFCZK	3:30:00 PM	22.423	22.44			N/A
5/1/2019	CHFDKK	9:30:00 AM	6.527	6.529			N/A
5/1/2019	CHFDKK	11:30:00 AM	6.534	6.536			N/A
5/1/2019	CHFDKK	1:30:00 PM					N/A
5/1/2019	CHFDKK	3:30:00 PM					N/A
5/1/2019	CHFDKK.fx	9:30:00 AM	6.5253	6.5316			N/A
5/1/2019	CHFDKK.fx	11:30:00 AM	6.5328	6.5384			N/A
5/1/2019	CHFDKK.fx	1:30:00 PM	6.5367	6.5432			N/A
5/1/2019	CHFDKK.fx	3:30:00 PM	6.5389	6.545			N/A
5/1/2019	CHFHKD	9:30:00 AM	7.6906	7.6945			N/A
5/1/2019	CHFHKD	11:30:00 AM	7.7082	7.7109			N/A
5/1/2019	CHFHKD	1:30:00 PM	7.7208	7.7245			N/A
5/1/2019	CHFHKD	3:30:00 PM	7.7175	7.7214			N/A
5/1/2019	CHFHUF	9:30:00 AM	282.98	283.29			N/A
5/1/2019	CHFHUF	11:30:00 AM	283.65	283.9			N/A
5/1/2019	CHFHUF	1:30:00 PM	283.84	284.23			N/A
5/1/2019	CHFHUF	3:30:00 PM	283.93	284.32			N/A
5/1/2019	CHFJPY	9:30:00 AM	109.405	109.479			N/A
5/1/2019	CHFJPY	11:30:00 AM	109.574	109.638			N/A
5/1/2019	CHFJPY	1:30:00 PM	109.618	109.688			N/A
5/1/2019	CHFJPY	3:30:00 PM	109.609	109.671			N/A
5/1/2019	CHFJPY.fx	9:30:00 AM	109.439	109.445			N/A
5/1/2019	CHFJPY.fx	11:30:00 AM	109.608	109.604			N/A
5/1/2019	CHFJPY.fx	1:30:00 PM	109.65	109.654			N/A
5/1/2019	CHFJPY.fx	3:30:00 PM	109.643	109.636			N/A
5/1/2019	CHFMXN	9:30:00 AM	18.5556	18.5729			N/A
5/1/2019	CHFMXN	11:30:00 AM	18.5886	18.6004			N/A
5/1/2019	CHFMXN	1:30:00 PM	18.6245	18.6407			N/A
5/1/2019	CHFMXN	3:30:00 PM	18.602	18.6151			N/A

5/1/2019	CHFNOK	9:30:00 AM	8.4567	8.4645			N/A
5/1/2019	CHFNOK	11:30:00 AM	8.4822	8.4873			N/A
5/1/2019	CHFNOK	1:30:00 PM	8.4879	8.4964			N/A
5/1/2019	CHFNOK	3:30:00 PM	8.4937	8.5016			N/A
5/1/2019	CHFNOK.fx	9:30:00 AM	8.4603	8.46093			N/A
5/1/2019	CHFNOK.fx	11:30:00 AM	8.48577	8.48629			N/A
5/1/2019	CHFNOK.fx	1:30:00 PM	8.49135	8.49285			N/A
5/1/2019	CHFNOK.fx	3:30:00 PM	8.49714	8.49815			N/A
5/1/2019	CHFPLN	9:30:00 AM	3.7476	3.7495			N/A
5/1/2019	CHFPLN	11:30:00 AM	3.7481	3.7509			N/A
5/1/2019	CHFPLN	1:30:00 PM	3.7483	3.7516			N/A
5/1/2019	CHFPLN	3:30:00 PM	3.7506	3.7534			N/A
5/1/2019	CHFPLN.fx	9:30:00 AM	3.74504	3.75335			N/A
5/1/2019	CHFPLN.fx	11:30:00 AM	3.74584	3.75313			N/A
5/1/2019	CHFPLN.fx	1:30:00 PM	3.74594	3.75353			N/A
5/1/2019	CHFPLN.fx	3:30:00 PM	3.74823	3.75575			N/A
5/1/2019	CHFSEK	9:30:00 AM	9.3075	9.3114			N/A
5/1/2019	CHFSEK	11:30:00 AM	9.3372	9.34			N/A
5/1/2019	CHFSEK	1:30:00 PM	9.3429	9.3476			N/A
5/1/2019	CHFSEK	3:30:00 PM	9.3493	9.3542			N/A
5/1/2019	CHFSGD	9:30:00 AM	1.3328	1.333			N/A
5/1/2019	CHFSGD	11:30:00 AM	1.3356	1.336			N/A
5/1/2019	CHFSGD	1:30:00 PM	1.3374	1.3379			N/A
5/1/2019	CHFSGD	3:30:00 PM	1.3377	1.3381			N/A
5/1/2019	CHFSGD.fx	9:30:00 AM	1.33293	1.33305			N/A
5/1/2019	CHFSGD.fx	11:30:00 AM	1.33581	1.33581			N/A
5/1/2019	CHFSGD.fx	1:30:00 PM	1.33753	1.33767			N/A
5/1/2019	CHFSGD.fx	3:30:00 PM	1.33783	1.33787			N/A
5/1/2019	CHFZAR	9:30:00 AM	13.9949	14.0081			N/A
5/1/2019	CHFZAR	11:30:00 AM	14.0415	14.0512			N/A
5/1/2019	CHFZAR	1:30:00 PM	14.0642	14.0792			N/A
5/1/2019	CHFZAR	3:30:00 PM	14.0953	14.1052			N/A
5/1/2019	CZKJPY	9:30:00 AM					N/A
5/1/2019	CZKJPY	11:30:00 AM					N/A

5/1/2019	CZKJPY	1:30:00 PM	4.89	4.893			N/A
5/1/2019	CZKJPY	3:30:00 PM	4.885	4.889			N/A
5/1/2019	DAX30.i	9:30:00 AM	12395.2	12395.9			N/A
5/1/2019	DAX30.i	11:30:00 AM	12396.55	12397.02			N/A
5/1/2019	DAX30.i	1:30:00 PM	12393.9	12395.95			N/A
5/1/2019	DAX30.i	3:30:00 PM	12402.9	12401.82			N/A
5/1/2019	DJ30.i	9:30:00 AM					N/A
5/1/2019	DJ30.i	11:30:00 AM					N/A
5/1/2019	DJ30.i	1:30:00 PM					N/A
5/1/2019	DJ30.i	3:30:00 PM					N/A
5/1/2019	DKKJPY	9:30:00 AM					N/A
5/1/2019	DKKJPY	11:30:00 AM	16.76	16.78			N/A
5/1/2019	DKKJPY	1:30:00 PM					N/A
5/1/2019	DKKJPY	3:30:00 PM					N/A
5/1/2019	EURAUD	9:30:00 AM	1.58987	1.5903			N/A
5/1/2019	EURAUD	11:30:00 AM	1.59033	1.59062			N/A
5/1/2019	EURAUD	1:30:00 PM	1.59171	1.59223			N/A
5/1/2019	EURAUD	3:30:00 PM	1.59302	1.59337			N/A
5/1/2019	EURAUD.fx	9:30:00 AM	1.59007	1.59008			N/A
5/1/2019	EURAUD.fx	11:30:00 AM	1.59053	1.5904			N/A
5/1/2019	EURAUD.fx	1:30:00 PM	1.59191	1.59202			N/A
5/1/2019	EURAUD.fx	3:30:00 PM	1.59323	1.59316			N/A
5/1/2019	EURCAD	9:30:00 AM	1.50036	1.50123			N/A
5/1/2019	EURCAD	11:30:00 AM	1.50315	1.50379			N/A
5/1/2019	EURCAD	1:30:00 PM	1.50426	1.50501			N/A
5/1/2019	EURCAD	3:30:00 PM	1.50445	1.50508			N/A
5/1/2019	EURCAD.fx	9:30:00 AM	1.50077	1.50081			N/A
5/1/2019	EURCAD.fx	11:30:00 AM	1.50356	1.50337			N/A
5/1/2019	EURCAD.fx	1:30:00 PM	1.50468	1.5046			N/A
5/1/2019	EURCAD.fx	3:30:00 PM	1.50487	1.50465			N/A
5/1/2019	EURCHF	9:30:00 AM	1.14349	1.1436			N/A
5/1/2019	EURCHF	11:30:00 AM	1.14228	1.14226			N/A
5/1/2019	EURCHF	1:30:00 PM	1.14143	1.14159			N/A
5/1/2019	EURCHF	3:30:00 PM	1.14114	1.14122			N/A



5/1/2019	EURCHF.fx	9:30:00 AM	1.14354	1.14355			N/A
5/1/2019	EURCHF.fx	11:30:00 AM	1.14233	1.14219			N/A
5/1/2019	EURCHF.fx	1:30:00 PM	1.14149	1.14154			N/A
5/1/2019	EURCHF.fx	3:30:00 PM	1.1412	1.14117			N/A
5/1/2019	EURCZK	9:30:00 AM	25.594	25.633			N/A
5/1/2019	EURCZK	11:30:00 AM	25.585	25.624			N/A
5/1/2019	EURCZK	1:30:00 PM					N/A
5/1/2019	EURCZK	3:30:00 PM	25.576	25.613			N/A
5/1/2019	EURDKK	9:30:00 AM	7.4618	7.463			N/A
5/1/2019	EURDKK	11:30:00 AM	7.4625	7.4638			N/A
5/1/2019	EURDKK	1:30:00 PM	7.4635	7.4647			N/A
5/1/2019	EURDKK	3:30:00 PM	7.4648	7.4657			N/A
5/1/2019	EURGBP	9:30:00 AM	0.86018	0.86024			N/A
5/1/2019	EURGBP	11:30:00 AM	0.85985	0.85969			N/A
5/1/2019	EURGBP	1:30:00 PM	0.85974	0.85983			N/A
5/1/2019	EURGBP	3:30:00 PM	0.8591	0.85913			N/A
5/1/2019	EURGBP.fx	9:30:00 AM	0.86022	0.86018			N/A
5/1/2019	EURGBP.fx	11:30:00 AM	0.85982	0.85965			N/A
5/1/2019	EURGBP.fx	1:30:00 PM	0.85978	0.85978			N/A
5/1/2019	EURGBP.fx	3:30:00 PM	0.85913	0.85909			N/A
5/1/2019	EURHKD	9:30:00 AM	8.795	8.8003			N/A
5/1/2019	EURHKD	11:30:00 AM	8.8062	8.8107			N/A
5/1/2019	EURHKD	1:30:00 PM	8.8131	8.8185			N/A
5/1/2019	EURHKD	3:30:00 PM	8.808	8.8109			N/A
5/1/2019	EURHKD.fx	9:30:00 AM	8.79793	8.79743			N/A
5/1/2019	EURHKD.fx	11:30:00 AM	8.80901	8.80791			N/A
5/1/2019	EURHKD.fx	1:30:00 PM	8.81583	8.8158			N/A
5/1/2019	EURHKD.fx	3:30:00 PM	8.81086	8.8081			N/A
5/1/2019	EURHUF	9:30:00 AM	323.65	324.18			N/A
5/1/2019	EURHUF	11:30:00 AM	323.92	324.56			N/A
5/1/2019	EURHUF	1:30:00 PM	323.93	324.55			N/A
5/1/2019	EURHUF	3:30:00 PM	323.96	324.66			N/A
5/1/2019	EURHUF.fx	9:30:00 AM	323.921	324.046			N/A
5/1/2019	EURHUF.fx	11:30:00 AM	324.191	324.41			N/A

5/1/2019	EURHUF.fx	1:30:00 PM					N/A
5/1/2019	EURHUF.fx	3:30:00 PM	324.239	324.438			N/A
5/1/2019	EURJPY	9:30:00 AM	125.14	125.147			N/A
5/1/2019	EURJPY	11:30:00 AM	125.195	125.189			N/A
5/1/2019	EURJPY	1:30:00 PM	125.158	125.166			N/A
5/1/2019	EURJPY	3:30:00 PM	125.117	125.111			N/A
5/1/2019	EURJPY.fx	9:30:00 AM	125.142	125.142			N/A
5/1/2019	EURJPY.fx	11:30:00 AM	125.197	125.186			N/A
5/1/2019	EURJPY.fx	1:30:00 PM	125.16	125.162			N/A
5/1/2019	EURJPY.fx	3:30:00 PM	125.118	125.108			N/A
5/1/2019	EURMXN	9:30:00 AM	21.2231	21.2427			N/A
5/1/2019	EURMXN	11:30:00 AM	21.2342	21.2542			N/A
5/1/2019	EURMXN	1:30:00 PM	21.2613	21.281			N/A
5/1/2019	EURMXN	3:30:00 PM	21.2305	21.2436			N/A
5/1/2019	EURMXN.fx	9:30:00 AM	21.2318	21.2345			N/A
5/1/2019	EURMXN.fx	11:30:00 AM	21.2436	21.2447			N/A
5/1/2019	EURMXN.fx	1:30:00 PM	21.2697	21.2722			N/A
5/1/2019	EURMXN.fx	3:30:00 PM	21.2397	21.2341			N/A
5/1/2019	EURNOK	9:30:00 AM	9.6691	9.6814			N/A
5/1/2019	EURNOK	11:30:00 AM	9.6875	9.698			N/A
5/1/2019	EURNOK	1:30:00 PM	9.6875	9.7001			N/A
5/1/2019	EURNOK	3:30:00 PM	9.6916	9.7037			N/A
5/1/2019	EURNOK.fx	9:30:00 AM	9.67439	9.67597			N/A
5/1/2019	EURNOK.fx	11:30:00 AM	9.69319	9.6926			N/A
5/1/2019	EURNOK.fx	1:30:00 PM	9.6928	9.6948			N/A
5/1/2019	EURNOK.fx	3:30:00 PM	9.6969	9.69842			N/A
5/1/2019	EURNZD	9:30:00 AM	1.68639	1.68728			N/A
5/1/2019	EURNZD	11:30:00 AM	1.68637	1.68714			N/A
5/1/2019	EURNZD	1:30:00 PM	1.68612	1.68701			N/A
5/1/2019	EURNZD	3:30:00 PM	1.68766	1.68819			N/A
5/1/2019	EURNZD.fx	9:30:00 AM	1.68681	1.68685			N/A
5/1/2019	EURNZD.fx	11:30:00 AM	1.68679	1.68671			N/A
5/1/2019	EURNZD.fx	1:30:00 PM	1.68656	1.68657			N/A
5/1/2019	EURNZD.fx	3:30:00 PM	1.6881	1.68777			N/A

5/1/2019	EURPLN	9:30:00 AM	4.2857	4.2889			N/A
5/1/2019	EURPLN	11:30:00 AM	4.2811	4.2824			N/A
5/1/2019	EURPLN	1:30:00 PM	4.2789	4.2818			N/A
5/1/2019	EURPLN	3:30:00 PM	4.2801	4.2831			N/A
5/1/2019	EURPLN.fx	9:30:00 AM	4.28497	4.28969			N/A
5/1/2019	EURPLN.fx	11:30:00 AM	4.28047	4.28503			N/A
5/1/2019	EURPLN.fx	1:30:00 PM	4.27815	4.28242			N/A
5/1/2019	EURPLN.fx	3:30:00 PM	4.27947	4.28377			N/A
5/1/2019	EURRUB	9:30:00 AM					N/A
5/1/2019	EURRUB	11:30:00 AM					N/A
5/1/2019	EURRUB	1:30:00 PM					N/A
5/1/2019	EURRUB	3:30:00 PM					N/A
5/1/2019	EURSEK	9:30:00 AM	10.6459	10.6498			N/A
5/1/2019	EURSEK	11:30:00 AM	10.6672	10.6711			N/A
5/1/2019	EURSEK	1:30:00 PM	10.6663	10.6714			N/A
5/1/2019	EURSEK	3:30:00 PM	10.6716	10.6757			N/A
5/1/2019	EURSEK.fx	9:30:00 AM	10.64738	10.64808			N/A
5/1/2019	EURSEK.fx	11:30:00 AM	10.66876	10.66956			N/A
5/1/2019	EURSEK.fx	1:30:00 PM	10.66805	10.67017			N/A
5/1/2019	EURSEK.fx	3:30:00 PM	10.67308	10.67419			N/A
5/1/2019	EURSGD	9:30:00 AM	1.5239	1.5247			N/A
5/1/2019	EURSGD	11:30:00 AM	1.5255	1.5262			N/A
5/1/2019	EURSGD	1:30:00 PM	1.5264	1.5269			N/A
5/1/2019	EURSGD	3:30:00 PM	1.5264	1.5271			N/A
5/1/2019	EURSGD.fx	9:30:00 AM	1.52428	1.52431			N/A
5/1/2019	EURSGD.fx	11:30:00 AM	1.52585	1.52582			N/A
5/1/2019	EURSGD.fx	1:30:00 PM	1.52684	1.52693			N/A
5/1/2019	EURSGD.fx	3:30:00 PM	1.52677	1.52668			N/A
5/1/2019	EURUSD	9:30:00 AM	1.12131	1.12141			N/A
5/1/2019	EURUSD	11:30:00 AM	1.12262	1.12264			N/A
5/1/2019	EURUSD	1:30:00 PM	1.12356	1.12368			N/A
5/1/2019	EURUSD	3:30:00 PM	1.12289	1.12273			N/A
5/1/2019	EURUSD.fx	9:30:00 AM	1.12151	1.1215			N/A
5/1/2019	EURUSD.fx	11:30:00 AM	1.12282	1.12274			N/A

5/1/2019	EURUSD.fx	1:30:00 PM	1.12376	1.12378			N/A
5/1/2019	EURUSD.fx	3:30:00 PM	1.1231	1.12279			N/A
5/1/2019	EURZAR	9:30:00 AM	16.0128	16.0272			N/A
5/1/2019	EURZAR	11:30:00 AM	16.0427	16.0603			N/A
5/1/2019	EURZAR	1:30:00 PM	16.0544	16.075			N/A
5/1/2019	EURZAR	3:30:00 PM	16.0867	16.1008			N/A
5/1/2019	EURZAR.fx	9:30:00 AM	16.01194	16.02728			N/A
5/1/2019	EURZAR.fx	11:30:00 AM	16.04185	16.06102			N/A
5/1/2019	EURZAR.fx	1:30:00 PM	16.05396	16.07563			N/A
5/1/2019	EURZAR.fx	3:30:00 PM	16.08565	16.102			N/A
5/1/2019	GBPAUD	9:30:00 AM	1.84897	1.84961			N/A
5/1/2019	GBPAUD	11:30:00 AM	1.85059	1.85076			N/A
5/1/2019	GBPAUD	1:30:00 PM	1.85196	1.85272			N/A
5/1/2019	GBPAUD	3:30:00 PM	1.85487	1.85546			N/A
5/1/2019	GBPAUD.fx	9:30:00 AM	1.84937	1.84919			N/A
5/1/2019	GBPAUD.fx	11:30:00 AM	1.851	1.85055			N/A
5/1/2019	GBPAUD.fx	1:30:00 PM	1.85235	1.85234			N/A
5/1/2019	GBPAUD.fx	3:30:00 PM	1.85529	1.85507			N/A
5/1/2019	GBPCAD	9:30:00 AM	1.74436	1.74505			N/A
5/1/2019	GBPCAD	11:30:00 AM	1.74873	1.74867			N/A
5/1/2019	GBPCAD	1:30:00 PM	1.74973	1.75036			N/A
5/1/2019	GBPCAD	3:30:00 PM	1.75132	1.75175			N/A
5/1/2019	GBPCAD.fx	9:30:00 AM	1.74475	1.74463			N/A
5/1/2019	GBPCAD.fx	11:30:00 AM	1.74913	1.74847			N/A
5/1/2019	GBPCAD.fx	1:30:00 PM	1.75013	1.74998			N/A
5/1/2019	GBPCAD.fx	3:30:00 PM	1.75172	1.75135			N/A
5/1/2019	GBPCHF	9:30:00 AM	1.32916	1.32954			N/A
5/1/2019	GBPCHF	11:30:00 AM	1.32862	1.32874			N/A
5/1/2019	GBPCHF	1:30:00 PM	1.32746	1.32788			N/A
5/1/2019	GBPCHF	3:30:00 PM	1.32817	1.32848			N/A
5/1/2019	GBPCHF.fx	9:30:00 AM	1.32936	1.32931			N/A
5/1/2019	GBPCHF.fx	11:30:00 AM	1.32881	1.32867			N/A
5/1/2019	GBPCHF.fx	1:30:00 PM	1.32768	1.32769			N/A
5/1/2019	GBPCHF.fx	3:30:00 PM	1.32836	1.32828			N/A

5/1/2019	GBPCZK	9:30:00 AM	29.766	29.787			N/A
5/1/2019	GBPCZK	11:30:00 AM	29.773	29.782			N/A
5/1/2019	GBPCZK	1:30:00 PM	29.739	29.761			N/A
5/1/2019	GBPCZK	3:30:00 PM	29.782	29.8			N/A
5/1/2019	GBPDKK	9:30:00 AM	8.674	8.685			N/A
5/1/2019	GBPDKK	11:30:00 AM	8.679	8.688			N/A
5/1/2019	GBPDKK	1:30:00 PM	8.678	8.689			N/A
5/1/2019	GBPDKK	3:30:00 PM	8.685	8.696			N/A
5/1/2019	GBPDKK.fx	9:30:00 AM	8.6724	8.6852			N/A
5/1/2019	GBPDKK.fx	11:30:00 AM	8.6778	8.6891			N/A
5/1/2019	GBPDKK.fx	1:30:00 PM	8.6765	8.6894			N/A
5/1/2019	GBPDKK.fx	3:30:00 PM	8.6838	8.696			N/A
5/1/2019	GBPHKD	9:30:00 AM	10.222	10.2272			N/A
5/1/2019	GBPHKD	11:30:00 AM	10.2422	10.2426			N/A
5/1/2019	GBPHKD	1:30:00 PM	10.2489	10.2544			N/A
5/1/2019	GBPHKD	3:30:00 PM	10.25	10.2532			N/A
5/1/2019	GBPHUF	9:30:00 AM	376.15	376.5			N/A
5/1/2019	GBPHUF	11:30:00 AM	376.87	377.02			N/A
5/1/2019	GBPHUF	1:30:00 PM	376.81	377.28			N/A
5/1/2019	GBPHUF	3:30:00 PM	377.11	377.57			N/A
5/1/2019	GBPJPY	9:30:00 AM	145.436	145.47			N/A
5/1/2019	GBPJPY	11:30:00 AM	145.6	145.597			N/A
5/1/2019	GBPJPY	1:30:00 PM	145.528	145.572			N/A
5/1/2019	GBPJPY	3:30:00 PM	145.594	145.622			N/A
5/1/2019	GBPJPY.fx	9:30:00 AM	145.456	145.45			N/A
5/1/2019	GBPJPY.fx	11:30:00 AM	145.62	145.589			N/A
5/1/2019	GBPJPY.fx	1:30:00 PM	145.547	145.554			N/A
5/1/2019	GBPJPY.fx	3:30:00 PM	145.615	145.601			N/A
5/1/2019	GBPMXN	9:30:00 AM	24.667	24.6816			N/A
5/1/2019	GBPMXN	11:30:00 AM	24.6985	24.6998			N/A
5/1/2019	GBPMXN	1:30:00 PM	24.7255	24.7409			N/A
5/1/2019	GBPMXN	3:30:00 PM	24.7091	24.7175			N/A
5/1/2019	GBPNOK	9:30:00 AM	11.2423	11.2528			N/A
5/1/2019	GBPNOK	11:30:00 AM	11.2705	11.2799			N/A

5/1/2019	GBPNOK	1:30:00 PM	11.2692	11.2806			N/A
5/1/2019	GBPNOK	3:30:00 PM	11.2826	11.2931			N/A
5/1/2019	GBPNOK.fx	9:30:00 AM	11.24702	11.2479			N/A
5/1/2019	GBPNOK.fx	11:30:00 AM	11.2755	11.27506			N/A
5/1/2019	GBPNOK.fx	1:30:00 PM	11.27383	11.27579			N/A
5/1/2019	GBPNOK.fx	3:30:00 PM	11.28758	11.28817			N/A
5/1/2019	GBPNZD	9:30:00 AM	1.96066	1.9613			N/A
5/1/2019	GBPNZD	11:30:00 AM	1.96189	1.96203			N/A
5/1/2019	GBPNZD	1:30:00 PM	1.96127	1.962			N/A
5/1/2019	GBPNZD	3:30:00 PM	1.96445	1.96495			N/A
5/1/2019	GBPNZD.fx	9:30:00 AM	1.96103	1.96091			N/A
5/1/2019	GBPNZD.fx	11:30:00 AM	1.96228	1.96177			N/A
5/1/2019	GBPNZD.fx	1:30:00 PM	1.96165	1.96161			N/A
5/1/2019	GBPNZD.fx	3:30:00 PM	1.96482	1.96458			N/A
5/1/2019	GBPPLN	9:30:00 AM	4.9827	4.9844			N/A
5/1/2019	GBPPLN	11:30:00 AM	4.9809	4.9812			N/A
5/1/2019	GBPPLN	1:30:00 PM	4.9772	4.9792			N/A
5/1/2019	GBPPLN	3:30:00 PM	4.9828	4.984			N/A
5/1/2019	GBPPLN.fx	9:30:00 AM	4.98026	4.98685			N/A
5/1/2019	GBPPLN.fx	11:30:00 AM	4.97851	4.98402			N/A
5/1/2019	GBPPLN.fx	1:30:00 PM	4.97496	4.98136			N/A
5/1/2019	GBPPLN.fx	3:30:00 PM	4.98046	4.98639			N/A
5/1/2019	GBPSEK	9:30:00 AM	12.3748	12.3822			N/A
5/1/2019	GBPSEK	11:30:00 AM	12.4074	12.4131			N/A
5/1/2019	GBPSEK	1:30:00 PM	12.4044	12.4138			N/A
5/1/2019	GBPSEK	3:30:00 PM	12.4198	12.4279			N/A
5/1/2019	GBPSEK.fx	9:30:00 AM	12.37073	12.38578			N/A
5/1/2019	GBPSEK.fx	11:30:00 AM	12.4035	12.41808			N/A
5/1/2019	GBPSEK.fx	1:30:00 PM	12.40077	12.41745			N/A
5/1/2019	GBPSEK.fx	3:30:00 PM	12.41631	12.4315			N/A
5/1/2019	GBPSGD	9:30:00 AM	1.7717	1.7724			N/A
5/1/2019	GBPSGD	11:30:00 AM	1.7748	1.7748			N/A
5/1/2019	GBPSGD	1:30:00 PM	1.7756	1.7763			N/A
5/1/2019	GBPSGD	3:30:00 PM	1.7769	1.7774			N/A

5/1/2019	GBPSGD.fx	9:30:00 AM	1.7699	1.77419			N/A
5/1/2019	GBPSGD.fx	11:30:00 AM	1.77288	1.77688			N/A
5/1/2019	GBPSGD.fx	1:30:00 PM	1.77375	1.7781			N/A
5/1/2019	GBPSGD.fx	3:30:00 PM	1.77504	1.77914			N/A
5/1/2019	GBPUSD	9:30:00 AM	1.30378	1.30373			N/A
5/1/2019	GBPUSD	11:30:00 AM	1.30618	1.30576			N/A
5/1/2019	GBPUSD	1:30:00 PM	1.30706	1.30706			N/A
5/1/2019	GBPUSD	3:30:00 PM	1.30723	1.3069			N/A
5/1/2019	GBPUSD.fx	9:30:00 AM	1.30383	1.30368			N/A
5/1/2019	GBPUSD.fx	11:30:00 AM	1.30624	1.30576			N/A
5/1/2019	GBPUSD.fx	1:30:00 PM	1.30712	1.30702			N/A
5/1/2019	GBPUSD.fx	3:30:00 PM	1.30728	1.30684			N/A
5/1/2019	GBPZAR	9:30:00 AM	18.6127	18.6352			N/A
5/1/2019	GBPZAR	11:30:00 AM	18.6601	18.6822			N/A
5/1/2019	GBPZAR	1:30:00 PM	18.6705	18.6995			N/A
5/1/2019	GBPZAR	3:30:00 PM	18.7207	18.7447			N/A
5/1/2019	GBPZAR.fx	9:30:00 AM	18.6197	18.6282			N/A
5/1/2019	GBPZAR.fx	11:30:00 AM	18.6663	18.6788			N/A
5/1/2019	GBPZAR.fx	1:30:00 PM	18.6774	18.6923			N/A
5/1/2019	GBPZAR.fx	3:30:00 PM	18.7274	18.7377			N/A
5/1/2019	GOLD	9:30:00 AM	1279.01	1279.27			N/A
5/1/2019	GOLD	11:30:00 AM	1280.99	1281.22			N/A
5/1/2019	GOLD	1:30:00 PM	1282.29	1282.63			N/A
5/1/2019	GOLD	3:30:00 PM	1282.2	1281.15			N/A
5/1/2019	HKDJPY	9:30:00 AM	14.22	14.23			N/A
5/1/2019	HKDJPY	11:30:00 AM	14.21	14.23			N/A
5/1/2019	HKDJPY	1:30:00 PM					N/A
5/1/2019	HKDJPY	3:30:00 PM	14.2	14.2			N/A
5/1/2019	HKDJPY.fx	9:30:00 AM	14.214	14.222			N/A
5/1/2019	HKDJPY.fx	11:30:00 AM	14.203	14.211			N/A
5/1/2019	HKDJPY.fx	1:30:00 PM	14.187	14.195			N/A
5/1/2019	HKDJPY.fx	3:30:00 PM	14.194	14.197			N/A
5/1/2019	HUFJPY	9:30:00 AM	0.3863	0.3867			N/A
5/1/2019	HUFJPY	11:30:00 AM	0.3861	0.3864			N/A

5/1/2019	HUFJPY	1:30:00 PM	0.386	0.3864			N/A
5/1/2019	HUFJPY	3:30:00 PM	0.3858	0.3861			N/A
5/1/2019	JP225.i	9:30:00 AM	22456.73	22474.23			N/A
5/1/2019	JP225.i	11:30:00 AM	22449.23	22466.73			N/A
5/1/2019	JP225.i	1:30:00 PM					N/A
5/1/2019	JP225.i	3:30:00 PM	22401.73	22414.23			N/A
5/1/2019	MXNJPY	9:30:00 AM	5.89	5.91			N/A
5/1/2019	MXNJPY	11:30:00 AM	5.88	5.9			N/A
5/1/2019	MXNJPY	1:30:00 PM	5.88	5.89			N/A
5/1/2019	MXNJPY	3:30:00 PM	5.88	5.89			N/A
5/1/2019	NASDAQ.i	9:30:00 AM					N/A
5/1/2019	NASDAQ.i	11:30:00 AM					N/A
5/1/2019	NASDAQ.i	1:30:00 PM					N/A
5/1/2019	NASDAQ.i	3:30:00 PM					N/A
5/1/2019	NOKJPY	9:30:00 AM	12.92	12.95			N/A
5/1/2019	NOKJPY	11:30:00 AM	12.9	12.93			N/A
5/1/2019	NOKJPY	1:30:00 PM	12.9	12.93			N/A
5/1/2019	NOKJPY	3:30:00 PM	12.89	12.92			N/A
5/1/2019	NOKJPY.fx	9:30:00 AM	12.928	12.936			N/A
5/1/2019	NOKJPY.fx	11:30:00 AM	12.909	12.916			N/A
5/1/2019	NOKJPY.fx	1:30:00 PM	12.904	12.913			N/A
5/1/2019	NOKJPY.fx	3:30:00 PM	12.896	12.902			N/A
5/1/2019	NZDCAD	9:30:00 AM	0.88932	0.89011			N/A
5/1/2019	NZDCAD	11:30:00 AM	0.89108	0.89166			N/A
5/1/2019	NZDCAD	1:30:00 PM	0.89181	0.89248			N/A
5/1/2019	NZDCAD	3:30:00 PM	0.89126	0.89166			N/A
5/1/2019	NZDCAD.fx	9:30:00 AM	0.88965	0.88977			N/A
5/1/2019	NZDCAD.fx	11:30:00 AM	0.89141	0.89132			N/A
5/1/2019	NZDCAD.fx	1:30:00 PM	0.89215	0.89213			N/A
5/1/2019	NZDCAD.fx	3:30:00 PM	0.89162	0.89131			N/A
5/1/2019	NZDCHF	9:30:00 AM	0.67753	0.67828			N/A
5/1/2019	NZDCHF	11:30:00 AM	0.67689	0.67759			N/A
5/1/2019	NZDCHF	1:30:00 PM	0.67646	0.67721			N/A
5/1/2019	NZDCHF	3:30:00 PM	0.67581	0.67637			N/A



5/1/2019	NZDCHF.fx	9:30:00 AM	0.67787	0.67793			N/A
5/1/2019	NZDCHF.fx	11:30:00 AM	0.67723	0.67723			N/A
5/1/2019	NZDCHF.fx	1:30:00 PM	0.6768	0.67685			N/A
5/1/2019	NZDCHF.fx	3:30:00 PM	0.67616	0.67601			N/A
5/1/2019	NZDCZK	9:30:00 AM	15.177	15.19			N/A
5/1/2019	NZDCZK	11:30:00 AM	15.173	15.186			N/A
5/1/2019	NZDCZK	1:30:00 PM	15.159	15.171			N/A
5/1/2019	NZDCZK	3:30:00 PM	15.159	15.167			N/A
5/1/2019	NZDDKK	9:30:00 AM	4.423	4.426			N/A
5/1/2019	NZDDKK	11:30:00 AM	4.423	4.427			N/A
5/1/2019	NZDDKK	1:30:00 PM					N/A
5/1/2019	NZDDKK	3:30:00 PM					N/A
5/1/2019	NZDHKD	9:30:00 AM	5.2125	5.2154			N/A
5/1/2019	NZDHKD	11:30:00 AM	5.219	5.2219			N/A
5/1/2019	NZDHKD	1:30:00 PM	5.2239	5.2268			N/A
5/1/2019	NZDHKD	3:30:00 PM	5.2168	5.2185			N/A
5/1/2019	NZDHUF	9:30:00 AM	191.78	192.01			N/A
5/1/2019	NZDHUF	11:30:00 AM	192.03	192.23			N/A
5/1/2019	NZDHUF	1:30:00 PM	192.05	192.34			N/A
5/1/2019	NZDHUF	3:30:00 PM	191.9	192.19			N/A
5/1/2019	NZDJPY	9:30:00 AM	74.122	74.199			N/A
5/1/2019	NZDJPY	11:30:00 AM	74.159	74.232			N/A
5/1/2019	NZDJPY	1:30:00 PM	74.146	74.222			N/A
5/1/2019	NZDJPY	3:30:00 PM	74.065	74.126			N/A
5/1/2019	NZDJPY.fx	9:30:00 AM	74.152	74.167			N/A
5/1/2019	NZDJPY.fx	11:30:00 AM	74.192	74.2			N/A
5/1/2019	NZDJPY.fx	1:30:00 PM	74.177	74.189			N/A
5/1/2019	NZDJPY.fx	3:30:00 PM	74.096	74.093			N/A
5/1/2019	NZDMXN	9:30:00 AM	12.578	12.5849			N/A
5/1/2019	NZDMXN	11:30:00 AM	12.5873	12.5917			N/A
5/1/2019	NZDMXN	1:30:00 PM	12.6044	12.6103			N/A
5/1/2019	NZDMXN	3:30:00 PM	12.5767	12.5789			N/A
5/1/2019	NZDNOK	9:30:00 AM	5.7294	5.7332			N/A
5/1/2019	NZDNOK	11:30:00 AM	5.7422	5.7441			N/A

5/1/2019	NZDNOK	1:30:00 PM	5.7434	5.7471			N/A
5/1/2019	NZDNOK	3:30:00 PM	5.7426	5.745			N/A
5/1/2019	NZDPLN	9:30:00 AM	2.5395	2.5408			N/A
5/1/2019	NZDPLN	11:30:00 AM	2.5374	2.5385			N/A
5/1/2019	NZDPLN	1:30:00 PM	2.5357	2.5369			N/A
5/1/2019	NZDPLN	3:30:00 PM	2.5349	2.5362			N/A
5/1/2019	NZDSEK	9:30:00 AM	6.3059	6.3128			N/A
5/1/2019	NZDSEK	11:30:00 AM	6.3196	6.3259			N/A
5/1/2019	NZDSEK	1:30:00 PM	6.3199	6.3266			N/A
5/1/2019	NZDSEK	3:30:00 PM	6.3182	6.3243			N/A
5/1/2019	NZDSGD	9:30:00 AM	0.9033	0.904			N/A
5/1/2019	NZDSGD	11:30:00 AM	0.9043	0.9048			N/A
5/1/2019	NZDSGD	1:30:00 PM	0.905	0.9057			N/A
5/1/2019	NZDSGD	3:30:00 PM	0.9043	0.9047			N/A
5/1/2019	NZDSGD.fx	9:30:00 AM	0.90331	0.90391			N/A
5/1/2019	NZDSGD.fx	11:30:00 AM	0.9043	0.90489			N/A
5/1/2019	NZDSGD.fx	1:30:00 PM	0.90501	0.90561			N/A
5/1/2019	NZDSGD.fx	3:30:00 PM	0.90431	0.90461			N/A
5/1/2019	NZDUSD	9:30:00 AM	0.66472	0.6649			N/A
5/1/2019	NZDUSD	11:30:00 AM	0.66551	0.66569			N/A
5/1/2019	NZDUSD	1:30:00 PM	0.66617	0.66635			N/A
5/1/2019	NZDUSD	3:30:00 PM	0.66533	0.66512			N/A
5/1/2019	NZDUSD.fx	9:30:00 AM	0.66479	0.66492			N/A
5/1/2019	NZDUSD.fx	11:30:00 AM	0.66559	0.66569			N/A
5/1/2019	NZDUSD.fx	1:30:00 PM	0.66625	0.66636			N/A
5/1/2019	NZDUSD.fx	3:30:00 PM	0.6654	0.66513			N/A
5/1/2019	NZDZAR	9:30:00 AM	9.481	9.4967			N/A
5/1/2019	NZDZAR	11:30:00 AM	9.5023	9.5179			N/A
5/1/2019	NZDZAR	1:30:00 PM	9.5128	9.5298			N/A
5/1/2019	NZDZAR	3:30:00 PM	9.5225	9.5382			N/A
5/1/2019	SEKJPY	9:30:00 AM	11.75	11.76			N/A
5/1/2019	SEKJPY	11:30:00 AM	11.73	11.74			N/A
5/1/2019	SEKJPY	1:30:00 PM					N/A
5/1/2019	SEKJPY	3:30:00 PM					N/A

5/1/2019	SEKJPY.fx	9:30:00 AM	11.744	11.761			N/A
5/1/2019	SEKJPY.fx	11:30:00 AM	11.724	11.742			N/A
5/1/2019	SEKJPY.fx	1:30:00 PM	11.721	11.739			N/A
5/1/2019	SEKJPY.fx	3:30:00 PM	11.713	11.73			N/A
5/1/2019	SGDJPY	9:30:00 AM	82.06	82.08			N/A
5/1/2019	SGDJPY	11:30:00 AM	81.99	82.02			N/A
5/1/2019	SGDJPY	1:30:00 PM	81.93	81.94			N/A
5/1/2019	SGDJPY	3:30:00 PM	81.89	81.91			N/A
5/1/2019	SILVER	9:30:00 AM	14.69	15.08			N/A
5/1/2019	SILVER	11:30:00 AM	14.73	15.11			N/A
5/1/2019	SILVER	1:30:00 PM	14.72	15.11			N/A
5/1/2019	SILVER	3:30:00 PM	14.66	15.03			N/A
5/1/2019	SPX500.i	9:30:00 AM	2958.64	2959.44			N/A
5/1/2019	SPX500.i	11:30:00 AM	2958.89	2960.19			N/A
5/1/2019	SPX500.i	1:30:00 PM	2956.89	2958.19			N/A
5/1/2019	SPX500.i	3:30:00 PM	2957.89	2958.69			N/A
5/1/2019	UK100.i	9:30:00 AM					N/A
5/1/2019	UK100.i	11:30:00 AM	7442.27	7444.6			N/A
5/1/2019	UK100.i	1:30:00 PM	7416.6	7416.6			N/A
5/1/2019	UK100.i	3:30:00 PM	7422.1	7423.52			N/A
5/1/2019	USDCAD	9:30:00 AM	1.33816	1.33832			N/A
5/1/2019	USDCAD	11:30:00 AM	1.33922	1.33907			N/A
5/1/2019	USDCAD	1:30:00 PM	1.33895	1.33899			N/A
5/1/2019	USDCAD	3:30:00 PM	1.34004	1.33996			N/A
5/1/2019	USDCAD.fx	9:30:00 AM	1.33819	1.33829			N/A
5/1/2019	USDCAD.fx	11:30:00 AM	1.33926	1.33904			N/A
5/1/2019	USDCAD.fx	1:30:00 PM	1.33898	1.33895			N/A
5/1/2019	USDCAD.fx	3:30:00 PM	1.34007	1.33992			N/A
5/1/2019	USDCHF	9:30:00 AM	1.01958	1.0197			N/A
5/1/2019	USDCHF	11:30:00 AM	1.01738	1.01743			N/A
5/1/2019	USDCHF	1:30:00 PM	1.01572	1.01585			N/A
5/1/2019	USDCHF	3:30:00 PM	1.01629	1.01619			N/A
5/1/2019	USDCHF.fx	9:30:00 AM	1.01963	1.01964			N/A
5/1/2019	USDCHF.fx	11:30:00 AM	1.01742	1.01736			N/A

5/1/2019	USDCHF.fx	1:30:00 PM	1.01576	1.0158			N/A
5/1/2019	USDCHF.fx	3:30:00 PM	1.01633	1.01613			N/A
5/1/2019	USDCZK	9:30:00 AM	22.848	22.871			N/A
5/1/2019	USDCZK	11:30:00 AM	22.814	22.835			N/A
5/1/2019	USDCZK	1:30:00 PM	22.771	22.791			N/A
5/1/2019	USDCZK	3:30:00 PM	22.803	22.821			N/A
5/1/2019	USDCZK.fx	9:30:00 AM	22.855	22.863			N/A
5/1/2019	USDCZK.fx	11:30:00 AM	22.8217	22.8262			N/A
5/1/2019	USDCZK.fx	1:30:00 PM	22.779	22.7852			N/A
5/1/2019	USDCZK.fx	3:30:00 PM	22.8108	22.8117			N/A
5/1/2019	USDDKK	9:30:00 AM	6.6553	6.6597			N/A
5/1/2019	USDDKK	11:30:00 AM	6.6482	6.6515			N/A
5/1/2019	USDDKK	1:30:00 PM	6.642	6.646			N/A
5/1/2019	USDDKK	3:30:00 PM	6.648	6.65			N/A
5/1/2019	USDDKK.fx	9:30:00 AM	6.65587	6.65739			N/A
5/1/2019	USDDKK.fx	11:30:00 AM	6.64853	6.64942			N/A
5/1/2019	USDDKK.fx	1:30:00 PM	6.64237	6.64401			N/A
5/1/2019	USDDKK.fx	3:30:00 PM	6.64831	6.64801			N/A
5/1/2019	USDHKD	9:30:00 AM	7.8445	7.8446			N/A
5/1/2019	USDHKD	11:30:00 AM	7.8449	7.8451			N/A
5/1/2019	USDHKD	1:30:00 PM	7.8446	7.845			N/A
5/1/2019	USDHKD	3:30:00 PM					N/A
5/1/2019	USDHKD.fx	9:30:00 AM	7.84444	7.84483			N/A
5/1/2019	USDHKD.fx	11:30:00 AM	7.84494	7.8455			N/A
5/1/2019	USDHKD.fx	1:30:00 PM	7.84452	7.84512			N/A
5/1/2019	USDHKD.fx	3:30:00 PM					N/A
5/1/2019	USDHUF	9:30:00 AM	288.69	289.1			N/A
5/1/2019	USDHUF	11:30:00 AM	288.62	289.07			N/A
5/1/2019	USDHUF	1:30:00 PM	288.34	288.82			N/A
5/1/2019	USDHUF	3:30:00 PM	288.61	289.01			N/A
5/1/2019	USDHUF.fx	9:30:00 AM	288.885	288.939			N/A
5/1/2019	USDHUF.fx	11:30:00 AM	288.809	288.877			N/A
5/1/2019	USDHUF.fx	1:30:00 PM	288.552	288.627			N/A
5/1/2019	USDHUF.fx	3:30:00 PM	288.804	288.807			N/A

5/1/2019	USDINR	9:30:00 AM					N/A
5/1/2019	USDINR	11:30:00 AM					N/A
5/1/2019	USDINR	1:30:00 PM					N/A
5/1/2019	USDINR	3:30:00 PM					N/A
5/1/2019	USDJPY	9:30:00 AM	111.525	111.545			N/A
5/1/2019	USDJPY	11:30:00 AM	111.448	111.461			N/A
5/1/2019	USDJPY	1:30:00 PM	111.32	111.332			N/A
5/1/2019	USDJPY	3:30:00 PM	111.38	111.351			N/A
5/1/2019	USDJPY.fx	9:30:00 AM	111.532	111.538			N/A
5/1/2019	USDJPY.fx	11:30:00 AM	111.454	111.454			N/A
5/1/2019	USDJPY.fx	1:30:00 PM	111.326	111.324			N/A
5/1/2019	USDJPY.fx	3:30:00 PM	111.386	111.344			N/A
5/1/2019	USDMXN	9:30:00 AM	18.928	18.937			N/A
5/1/2019	USDMXN	11:30:00 AM	18.917	18.923			N/A
5/1/2019	USDMXN	1:30:00 PM	18.923	18.932			N/A
5/1/2019	USDMXN	3:30:00 PM	18.91	18.915			N/A
5/1/2019	USDMXN.f	9:30:00 AM	18.9313	18.9333			N/A
5/1/2019	USDMXN.f	11:30:00 AM	18.9215	18.9215			N/A
5/1/2019	USDMXN.f	1:30:00 PM	18.9274	18.9284			N/A
5/1/2019	USDMXN.f	3:30:00 PM	18.9137	18.9099			N/A
5/1/2019	USDNOK	9:30:00 AM	8.6229	8.6312			N/A
5/1/2019	USDNOK	11:30:00 AM	8.6296	8.6373			N/A
5/1/2019	USDNOK	1:30:00 PM	8.622	8.6307			N/A
5/1/2019	USDNOK	3:30:00 PM	8.6326	8.6395			N/A
5/1/2019	USDNOK.fx	9:30:00 AM	8.62682	8.62687			N/A
5/1/2019	USDNOK.fx	11:30:00 AM	8.63377	8.63274			N/A
5/1/2019	USDNOK.fx	1:30:00 PM	8.62588	8.62642			N/A
5/1/2019	USDNOK.fx	3:30:00 PM	8.63646	8.63505			N/A
5/1/2019	USDPLN	9:30:00 AM	3.8209	3.8227			N/A
5/1/2019	USDPLN	11:30:00 AM	3.8128	3.8142			N/A
5/1/2019	USDPLN	1:30:00 PM	3.8072	3.8087			N/A
5/1/2019	USDPLN	3:30:00 PM	3.8117	3.812			N/A
5/1/2019	USDPLN.fx	9:30:00 AM	3.82011	3.82351			N/A
5/1/2019	USDPLN.fx	11:30:00 AM	3.81198	3.81487			N/A

5/1/2019	USDPLN.fx	1:30:00 PM	3.80635	3.80944			N/A
5/1/2019	USDPLN.fx	3:30:00 PM	3.81073	3.81281			N/A
5/1/2019	USDRUB	9:30:00 AM					N/A
5/1/2019	USDRUB	11:30:00 AM	64.328	64.726			N/A
5/1/2019	USDRUB	1:30:00 PM	64.397	64.794			N/A
5/1/2019	USDRUB	3:30:00 PM	64.498	64.896			N/A
5/1/2019	USDSEK	9:30:00 AM	9.4919	9.4955			N/A
5/1/2019	USDSEK	11:30:00 AM	9.5002	9.5047			N/A
5/1/2019	USDSEK	1:30:00 PM	9.4914	9.4961			N/A
5/1/2019	USDSEK	3:30:00 PM	9.5038	9.5054			N/A
5/1/2019	USDSEK.fx	9:30:00 AM	9.49447	9.49335			N/A
5/1/2019	USDSEK.fx	11:30:00 AM	9.50325	9.50259			N/A
5/1/2019	USDSEK.fx	1:30:00 PM	9.49397	9.49432			N/A
5/1/2019	USDSEK.fx	3:30:00 PM	9.50691	9.50346			N/A
5/1/2019	USDSGD	9:30:00 AM	1.359	1.3592			N/A
5/1/2019	USDSGD	11:30:00 AM	1.3588	1.3591			N/A
5/1/2019	USDSGD	1:30:00 PM	1.3585	1.3589			N/A
5/1/2019	USDSGD	3:30:00 PM	1.3595	1.3596			N/A
5/1/2019	USDSGD.fx	9:30:00 AM	1.35893	1.35937			N/A
5/1/2019	USDSGD.fx	11:30:00 AM	1.35876	1.35917			N/A
5/1/2019	USDSGD.fx	1:30:00 PM	1.35845	1.35899			N/A
5/1/2019	USDSGD.fx	3:30:00 PM	1.35944	1.35971			N/A
5/1/2019	USDZAR	9:30:00 AM	14.2773	14.2905			N/A
5/1/2019	USDZAR	11:30:00 AM	14.2875	14.3052			N/A
5/1/2019	USDZAR	1:30:00 PM	14.2856	14.3051			N/A
5/1/2019	USDZAR	3:30:00 PM	14.3278	14.3368			N/A
5/1/2019	USDZAR.fx	9:30:00 AM	14.28287	14.28388			N/A
5/1/2019	USDZAR.fx	11:30:00 AM	14.29277	14.29993			N/A
5/1/2019	USDZAR.fx	1:30:00 PM	14.29155	14.2992			N/A
5/1/2019	USDZAR.fx	3:30:00 PM	14.33352	14.33114			N/A
5/1/2019	XAUUSD	9:30:00 AM	1279.01	1279.27			N/A
5/1/2019	XAUUSD	11:30:00 AM	1280.99	1281.23			N/A
5/1/2019	XAUUSD	1:30:00 PM	1282.3	1282.63			N/A
5/1/2019	XAUUSD	3:30:00 PM	1282.19	1281.15			N/A

5/1/2019	ZARJPY	9:30:00 AM	7.78	7.8			N/A
5/1/2019	ZARJPY	11:30:00 AM	7.77	7.8			N/A
5/1/2019	ZARJPY	1:30:00 PM	7.76	7.8			N/A
5/1/2019	ZARJPY	3:30:00 PM	7.75	7.77			N/A
5/1/2019	ZARJPY.fx	9:30:00 AM	7.801	7.804			N/A
5/1/2019	ZARJPY.fx	11:30:00 AM	7.787	7.792			N/A
5/1/2019	ZARJPY.fx	1:30:00 PM	7.778	7.784			N/A
5/1/2019	ZARJPY.fx	3:30:00 PM	7.763	7.765			N/A
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5/2/2019	#NG.f	9:30:00 AM	2.602	2.621			N/A
5/2/2019	#NG.f	11:30:00 AM					N/A
5/2/2019	#NG.f	1:30:00 PM					N/A
5/2/2019	#NG.f	3:30:00 PM	2.585	2.603			N/A
5/2/2019	#NKE	9:30:00 AM					N/A
5/2/2019	#NKE	11:30:00 AM					N/A

5/2/2019	#NKE	1:30:00 PM					N/A
5/2/2019	#NKE	3:30:00 PM					N/A
5/2/2019	#NOK	9:30:00 AM					N/A
5/2/2019	#NOK	11:30:00 AM					N/A
5/2/2019	#NOK	1:30:00 PM					N/A
5/2/2019	#NOK	3:30:00 PM					N/A
5/2/2019	#NTDOY	9:30:00 AM					N/A
5/2/2019	#NTDOY	11:30:00 AM					N/A
5/2/2019	#NTDOY	1:30:00 PM					N/A
5/2/2019	#NTDOY	3:30:00 PM					N/A
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5/2/2019	#ORAN	1:30:00 PM					N/A
5/2/2019	#ORAN	3:30:00 PM					N/A
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5/2/2019	#ORCL	1:30:00 PM					N/A
5/2/2019	#ORCL	3:30:00 PM					N/A
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5/2/2019	#PBR	1:30:00 PM					N/A
5/2/2019	#PBR	3:30:00 PM					N/A
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5/2/2019	#PEP	1:30:00 PM					N/A
5/2/2019	#PEP	3:30:00 PM					N/A
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5/2/2019	#PFE	1:30:00 PM					N/A
5/2/2019	#PFE	3:30:00 PM					N/A
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5/2/2019	#PG	11:30:00 AM					N/A
5/2/2019	#PG	1:30:00 PM					N/A
5/2/2019	#PG	3:30:00 PM					N/A



5/2/2019	#POT	9:30:00 AM					N/A
5/2/2019	#POT	11:30:00 AM					N/A
5/2/2019	#POT	1:30:00 PM					N/A
5/2/2019	#POT	3:30:00 PM					N/A
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5/2/2019	#QCOM	3:30:00 PM					N/A
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5/2/2019	#QQQ	1:30:00 PM					N/A
5/2/2019	#QQQ	3:30:00 PM					N/A
5/2/2019	#Ripple	9:30:00 AM	0.3143	0.3188			N/A
5/2/2019	#Ripple	11:30:00 AM					N/A
5/2/2019	#Ripple	1:30:00 PM					N/A
5/2/2019	#Ripple	3:30:00 PM					N/A
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5/2/2019	#S	1:30:00 PM					N/A
5/2/2019	#S	3:30:00 PM					N/A
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5/2/2019	#SBUX	11:30:00 AM					N/A
5/2/2019	#SBUX	1:30:00 PM					N/A
5/2/2019	#SBUX	3:30:00 PM					N/A
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5/2/2019	#SNE	3:30:00 PM					N/A
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5/2/2019	#SPY	3:30:00 PM					N/A
5/2/2019	#T	9:30:00 AM					N/A
5/2/2019	#T	11:30:00 AM					N/A

5/2/2019	#T	1:30:00 PM					N/A
5/2/2019	#T	3:30:00 PM					N/A
5/2/2019	#TEVA	9:30:00 AM					N/A
5/2/2019	#TEVA	11:30:00 AM					N/A
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5/2/2019	#TEVA	3:30:00 PM					N/A
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5/2/2019	#TRI	11:30:00 AM					N/A
5/2/2019	#TRI	1:30:00 PM					N/A
5/2/2019	#TRI	3:30:00 PM					N/A
5/2/2019	#TRV	9:30:00 AM					N/A
5/2/2019	#TRV	11:30:00 AM					N/A
5/2/2019	#TRV	1:30:00 PM					N/A
5/2/2019	#TRV	3:30:00 PM					N/A
5/2/2019	#TSCO	9:30:00 AM					N/A
5/2/2019	#TSCO	11:30:00 AM					N/A
5/2/2019	#TSCO	1:30:00 PM					N/A
5/2/2019	#TSCO	3:30:00 PM					N/A
5/2/2019	#TSLA	9:30:00 AM					N/A
5/2/2019	#TSLA	11:30:00 AM					N/A
5/2/2019	#TSLA	1:30:00 PM					N/A
5/2/2019	#TSLA	3:30:00 PM					N/A
5/2/2019	#TWTR	9:30:00 AM					N/A
5/2/2019	#TWTR	11:30:00 AM					N/A
5/2/2019	#TWTR	1:30:00 PM					N/A
5/2/2019	#TWTR	3:30:00 PM					N/A
5/2/2019	#UBS	9:30:00 AM					N/A
5/2/2019	#UBS	11:30:00 AM					N/A
5/2/2019	#UBS	1:30:00 PM					N/A
5/2/2019	#UBS	3:30:00 PM					N/A
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5/2/2019	#UL	11:30:00 AM					N/A
5/2/2019	#UL	1:30:00 PM					N/A
5/2/2019	#UL	3:30:00 PM					N/A

5/2/2019	#UPS	9:30:00 AM					N/A
5/2/2019	#UPS	11:30:00 AM					N/A
5/2/2019	#UPS	1:30:00 PM					N/A
5/2/2019	#UPS	3:30:00 PM					N/A
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5/2/2019	#UTX	1:30:00 PM					N/A
5/2/2019	#UTX	3:30:00 PM					N/A
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5/2/2019	#V	11:30:00 AM					N/A
5/2/2019	#V	1:30:00 PM					N/A
5/2/2019	#V	3:30:00 PM					N/A
5/2/2019	#VOD	9:30:00 AM					N/A
5/2/2019	#VOD	11:30:00 AM					N/A
5/2/2019	#VOD	1:30:00 PM					N/A
5/2/2019	#VOD	3:30:00 PM					N/A
5/2/2019	#VZ	9:30:00 AM					N/A
5/2/2019	#VZ	11:30:00 AM					N/A
5/2/2019	#VZ	1:30:00 PM					N/A
5/2/2019	#VZ	3:30:00 PM					N/A
5/2/2019	#WDC	9:30:00 AM					N/A
5/2/2019	#WDC	11:30:00 AM					N/A
5/2/2019	#WDC	1:30:00 PM					N/A
5/2/2019	#WDC	3:30:00 PM					N/A
5/2/2019	#WFC	9:30:00 AM					N/A
5/2/2019	#WFC	11:30:00 AM					N/A
5/2/2019	#WFC	1:30:00 PM					N/A
5/2/2019	#WFC	3:30:00 PM					N/A
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5/2/2019	#WMT	11:30:00 AM					N/A
5/2/2019	#WMT	1:30:00 PM					N/A
5/2/2019	#WMT	3:30:00 PM					N/A
5/2/2019	#XOM	9:30:00 AM					N/A
5/2/2019	#XOM	11:30:00 AM					N/A

5/2/2019	#XOM	1:30:00 PM					N/A
5/2/2019	#XOM	3:30:00 PM					N/A
5/2/2019	#YHOO	9:30:00 AM					N/A
5/2/2019	#YHOO	11:30:00 AM					N/A
5/2/2019	#YHOO	1:30:00 PM					N/A
5/2/2019	#YHOO	3:30:00 PM					N/A
5/2/2019	#ZNGA	9:30:00 AM					N/A
5/2/2019	#ZNGA	11:30:00 AM					N/A
5/2/2019	#ZNGA	1:30:00 PM					N/A
5/2/2019	#ZNGA	3:30:00 PM					N/A
5/2/2019	AUDCAD	9:30:00 AM	0.94277	0.94345			N/A
5/2/2019	AUDCAD	11:30:00 AM	0.94425	0.94494			N/A
5/2/2019	AUDCAD	1:30:00 PM	0.94318	0.94391			N/A
5/2/2019	AUDCAD	3:30:00 PM	0.9431	0.94362			N/A
5/2/2019	AUDCAD.fx	9:30:00 AM	0.94309	0.9431			N/A
5/2/2019	AUDCAD.fx	11:30:00 AM	0.94458	0.94459			N/A
5/2/2019	AUDCAD.fx	1:30:00 PM	0.94351	0.94355			N/A
5/2/2019	AUDCAD.fx	3:30:00 PM	0.94339	0.94327			N/A
5/2/2019	AUDCHF	9:30:00 AM	0.71453	0.71508			N/A
5/2/2019	AUDCHF	11:30:00 AM	0.71529	0.71594			N/A
5/2/2019	AUDCHF	1:30:00 PM	0.71536	0.71604			N/A
5/2/2019	AUDCHF	3:30:00 PM	0.71438	0.71494			N/A
5/2/2019	AUDCHF.fx	9:30:00 AM	0.71487	0.71474			N/A
5/2/2019	AUDCHF.fx	11:30:00 AM	0.71563	0.71559			N/A
5/2/2019	AUDCHF.fx	1:30:00 PM	0.71571	0.71568			N/A
5/2/2019	AUDCHF.fx	3:30:00 PM	0.71472	0.71459			N/A
5/2/2019	AUDCZK	9:30:00 AM	16.042	16.057			N/A
5/2/2019	AUDCZK	11:30:00 AM	16.044	16.06			N/A
5/2/2019	AUDCZK	1:30:00 PM	16.046	16.062			N/A
5/2/2019	AUDCZK	3:30:00 PM	16.056	16.061			N/A
5/2/2019	AUDDKK	9:30:00 AM	4.6783	4.6823			N/A
5/2/2019	AUDDKK	11:30:00 AM	4.6757	4.6798			N/A
5/2/2019	AUDDKK	1:30:00 PM	4.677	4.6815			N/A
5/2/2019	AUDDKK	3:30:00 PM	4.6724	4.6763			N/A

5/2/2019	AUDHKD	9:30:00 AM	5.5052	5.5091			N/A
5/2/2019	AUDHKD	11:30:00 AM	5.5087	5.512			N/A
5/2/2019	AUDHKD	1:30:00 PM	5.5029	5.5068			N/A
5/2/2019	AUDHKD	3:30:00 PM	5.4983	5.5022			N/A
5/2/2019	AUDHUF	9:30:00 AM	203.25	203.42			N/A
5/2/2019	AUDHUF	11:30:00 AM	203.05	203.2			N/A
5/2/2019	AUDHUF	1:30:00 PM	202.99	203.22			N/A
5/2/2019	AUDHUF	3:30:00 PM	202.55	202.73			N/A
5/2/2019	AUDJPY	9:30:00 AM	78.293	78.347			N/A
5/2/2019	AUDJPY	11:30:00 AM	78.329	78.397			N/A
5/2/2019	AUDJPY	1:30:00 PM	78.26	78.328			N/A
5/2/2019	AUDJPY	3:30:00 PM	78.179	78.235			N/A
5/2/2019	AUDJPY.fx	9:30:00 AM	78.326	78.312			N/A
5/2/2019	AUDJPY.fx	11:30:00 AM	78.363	78.363			N/A
5/2/2019	AUDJPY.fx	1:30:00 PM	78.294	78.293			N/A
5/2/2019	AUDJPY.fx	3:30:00 PM	78.212	78.2			N/A
5/2/2019	AUDMXN	9:30:00 AM	13.324	13.3326			N/A
5/2/2019	AUDMXN	11:30:00 AM	13.3054	13.3136			N/A
5/2/2019	AUDMXN	1:30:00 PM	13.3143	13.324			N/A
5/2/2019	AUDMXN	3:30:00 PM	13.3036	13.31			N/A
5/2/2019	AUDNOK	9:30:00 AM	6.0914	6.0941			N/A
5/2/2019	AUDNOK	11:30:00 AM	6.1007	6.1048			N/A
5/2/2019	AUDNOK	1:30:00 PM	6.1014	6.1064			N/A
5/2/2019	AUDNOK	3:30:00 PM	6.1155	6.1141			N/A
5/2/2019	AUDNOK.fx	9:30:00 AM	6.0928	6.0929			N/A
5/2/2019	AUDNOK.fx	11:30:00 AM	6.1022	6.103			N/A
5/2/2019	AUDNOK.fx	1:30:00 PM	6.1029	6.1047			N/A
5/2/2019	AUDNOK.fx	3:30:00 PM	6.1159	6.1124			N/A
5/2/2019	AUDNZD	9:30:00 AM	1.05888	1.05977			N/A
5/2/2019	AUDNZD	11:30:00 AM	1.05853	1.05939			N/A
5/2/2019	AUDNZD	1:30:00 PM	1.05857	1.05946			N/A
5/2/2019	AUDNZD	3:30:00 PM	1.05859	1.05944			N/A
5/2/2019	AUDNZD.fx	9:30:00 AM	1.05931	1.0593			N/A
5/2/2019	AUDNZD.fx	11:30:00 AM	1.05898	1.05893			N/A

5/2/2019	AUDNZD.fx	1:30:00 PM	1.05902	1.05901			N/A
5/2/2019	AUDNZD.fx	3:30:00 PM	1.05903	1.059			N/A
5/2/2019	AUDPLN	9:30:00 AM	2.6852	2.6882			N/A
5/2/2019	AUDPLN	11:30:00 AM	2.6801	2.6829			N/A
5/2/2019	AUDPLN	1:30:00 PM	2.681	2.6841			N/A
5/2/2019	AUDPLN	3:30:00 PM	2.6781	2.6811			N/A
5/2/2019	AUDSEK	9:30:00 AM	6.7039	6.6939			N/A
5/2/2019	AUDSEK	11:30:00 AM	6.6962	6.6955			N/A
5/2/2019	AUDSEK	1:30:00 PM	6.6934	6.6958			N/A
5/2/2019	AUDSEK	3:30:00 PM	6.6981	6.6974			N/A
5/2/2019	AUDSEK.fx	9:30:00 AM	6.6987	6.7008			N/A
5/2/2019	AUDSEK.fx	11:30:00 AM	6.6918	6.7			N/A
5/2/2019	AUDSEK.fx	1:30:00 PM	6.6893	6.7004			N/A
5/2/2019	AUDSEK.fx	3:30:00 PM	6.6925	6.7017			N/A
5/2/2019	AUDSGD	9:30:00 AM	0.9558	0.9559			N/A
5/2/2019	AUDSGD	11:30:00 AM	0.9559	0.9561			N/A
5/2/2019	AUDSGD	1:30:00 PM	0.9556	0.9559			N/A
5/2/2019	AUDSGD	3:30:00 PM	0.9551	0.9551			N/A
5/2/2019	AUDSGD.fx	9:30:00 AM	0.95585	0.95582			N/A
5/2/2019	AUDSGD.fx	11:30:00 AM	0.956	0.95606			N/A
5/2/2019	AUDSGD.fx	1:30:00 PM	0.95566	0.95578			N/A
5/2/2019	AUDSGD.fx	3:30:00 PM	0.95517	0.95507			N/A
5/2/2019	AUDUSD	9:30:00 AM	0.70214	0.70211			N/A
5/2/2019	AUDUSD	11:30:00 AM	0.70264	0.70274			N/A
5/2/2019	AUDUSD	1:30:00 PM	0.70188	0.70201			N/A
5/2/2019	AUDUSD	3:30:00 PM	0.70142	0.70136			N/A
5/2/2019	AUDUSD.fx	9:30:00 AM	0.70219	0.70206			N/A
5/2/2019	AUDUSD.fx	11:30:00 AM	0.70269	0.70268			N/A
5/2/2019	AUDUSD.fx	1:30:00 PM	0.70193	0.70195			N/A
5/2/2019	AUDUSD.fx	3:30:00 PM	0.70148	0.7013			N/A
5/2/2019	AUDZAR	9:30:00 AM	10.1362	10.1447			N/A
5/2/2019	AUDZAR	11:30:00 AM	10.1256	10.1371			N/A
5/2/2019	AUDZAR	1:30:00 PM	10.1338	10.1484			N/A
5/2/2019	AUDZAR	3:30:00 PM	10.1406	10.1544			N/A

5/2/2019	AUS200.i	9:30:00 AM					N/A
5/2/2019	AUS200.i	11:30:00 AM	6353.86	6357.36			N/A
5/2/2019	AUS200.i	1:30:00 PM	6355.86	6359.36			N/A
5/2/2019	AUS200.i	3:30:00 PM	6353.86	6356.36			N/A
5/2/2019	BCHUSD	9:30:00 AM	276.83	278.7			N/A
5/2/2019	BCHUSD	11:30:00 AM					N/A
5/2/2019	BCHUSD	1:30:00 PM					N/A
5/2/2019	BCHUSD	3:30:00 PM					N/A
5/2/2019	CADCHF	9:30:00 AM	0.75765	0.75814			N/A
5/2/2019	CADCHF	11:30:00 AM	0.75727	0.75791			N/A
5/2/2019	CADCHF	1:30:00 PM	0.75815	0.75886			N/A
5/2/2019	CADCHF	3:30:00 PM	0.75737	0.75773			N/A
5/2/2019	CADCHF.fx	9:30:00 AM	0.75801	0.7578			N/A
5/2/2019	CADCHF.fx	11:30:00 AM	0.75761	0.75755			N/A
5/2/2019	CADCHF.fx	1:30:00 PM	0.75849	0.75851			N/A
5/2/2019	CADCHF.fx	3:30:00 PM	0.75772	0.7574			N/A
5/2/2019	CADCZK	9:30:00 AM	17.011	17.026			N/A
5/2/2019	CADCZK	11:30:00 AM	16.987	17.003			N/A
5/2/2019	CADCZK	1:30:00 PM	17.008	17.025			N/A
5/2/2019	CADCZK	3:30:00 PM	17.026	17.025			N/A
5/2/2019	CADDKK	9:30:00 AM	4.961	4.965			N/A
5/2/2019	CADDKK	11:30:00 AM	4.95	4.954			N/A
5/2/2019	CADDKK	1:30:00 PM	4.957	4.961			N/A
5/2/2019	CADDKK	3:30:00 PM	4.952	4.956			N/A
5/2/2019	CADHKD	9:30:00 AM	5.8382	5.8413			N/A
5/2/2019	CADHKD	11:30:00 AM	5.8322	5.836			N/A
5/2/2019	CADHKD	1:30:00 PM	5.8328	5.8366			N/A
5/2/2019	CADHKD	3:30:00 PM	5.8302	5.8329			N/A
5/2/2019	CADHUF	9:30:00 AM	215.59	215.67			N/A
5/2/2019	CADHUF	11:30:00 AM	215.02	215.12			N/A
5/2/2019	CADHUF	1:30:00 PM					N/A
5/2/2019	CADHUF	3:30:00 PM	214.82	214.87			N/A
5/2/2019	CADJPY	9:30:00 AM	83.021	83.068			N/A
5/2/2019	CADJPY	11:30:00 AM	82.925	82.996			N/A

5/2/2019	CADJPY	1:30:00 PM	82.942	83.014			N/A
5/2/2019	CADJPY	3:30:00 PM	82.885	82.927			N/A
5/2/2019	CADJPY.fx	9:30:00 AM	83.055	83.034			N/A
5/2/2019	CADJPY.fx	11:30:00 AM	82.959	82.96			N/A
5/2/2019	CADJPY.fx	1:30:00 PM	82.975	82.979			N/A
5/2/2019	CADJPY.fx	3:30:00 PM	82.918	82.894			N/A
5/2/2019	CADMXN	9:30:00 AM	14.1284	14.1398			N/A
5/2/2019	CADMXN	11:30:00 AM	14.0866	14.0975			N/A
5/2/2019	CADMXN	1:30:00 PM	14.1114	14.1235			N/A
5/2/2019	CADMXN	3:30:00 PM	14.1065	14.1118			N/A
5/2/2019	CADNOK	9:30:00 AM	6.4572	6.4574			N/A
5/2/2019	CADNOK	11:30:00 AM	6.4565	6.4593			N/A
5/2/2019	CADNOK	1:30:00 PM	6.4653	6.4697			N/A
5/2/2019	CADNOK	3:30:00 PM	6.4783	6.4778			N/A
5/2/2019	CADPLN	9:30:00 AM	2.8476	2.8495			N/A
5/2/2019	CADPLN	11:30:00 AM	2.8373	2.8393			N/A
5/2/2019	CADPLN	1:30:00 PM	2.8415	2.8434			N/A
5/2/2019	CADPLN	3:30:00 PM	2.8388	2.8392			N/A
5/2/2019	CADSEK	9:30:00 AM	7.105	7.0973			N/A
5/2/2019	CADSEK	11:30:00 AM	7.0861	7.0867			N/A
5/2/2019	CADSEK	1:30:00 PM	7.0923	7.0945			N/A
5/2/2019	CADSEK	3:30:00 PM	7.0971	7.0978			N/A
5/2/2019	CADSGD	9:30:00 AM	1.0127	1.013			N/A
5/2/2019	CADSGD	11:30:00 AM	1.0114	1.0117			N/A
5/2/2019	CADSGD	1:30:00 PM	1.0121	1.0124			N/A
5/2/2019	CADSGD	3:30:00 PM					N/A
5/2/2019	CADZAR	9:30:00 AM	10.7482	10.7581			N/A
5/2/2019	CADZAR	11:30:00 AM	10.7212	10.734			N/A
5/2/2019	CADZAR	1:30:00 PM	10.7407	10.7569			N/A
5/2/2019	CADZAR	3:30:00 PM	10.7528	10.7659			N/A
5/2/2019	CHFCZK	9:30:00 AM	22.45	22.466			N/A
5/2/2019	CHFCZK	11:30:00 AM	22.429	22.443			N/A
5/2/2019	CHFCZK	1:30:00 PM	22.429	22.445			N/A
5/2/2019	CHFCZK	3:30:00 PM	22.476	22.479			N/A



5/2/2019	CHFDKK	9:30:00 AM	6.546	6.55			N/A
5/2/2019	CHFDKK	11:30:00 AM	6.535	6.538			N/A
5/2/2019	CHFDKK	1:30:00 PM	6.536	6.54			N/A
5/2/2019	CHFDKK	3:30:00 PM	6.539	6.542			N/A
5/2/2019	CHFDKK.fx	9:30:00 AM	6.5447	6.5502			N/A
5/2/2019	CHFDKK.fx	11:30:00 AM	6.5339	6.5392			N/A
5/2/2019	CHFDKK.fx	1:30:00 PM	6.5347	6.5408			N/A
5/2/2019	CHFDKK.fx	3:30:00 PM	6.5373	6.5431			N/A
5/2/2019	CHFHKD	9:30:00 AM	7.7033	7.707			N/A
5/2/2019	CHFHKD	11:30:00 AM	7.701	7.7031			N/A
5/2/2019	CHFHKD	1:30:00 PM	7.6916	7.6953			N/A
5/2/2019	CHFHKD	3:30:00 PM	7.6972	7.6993			N/A
5/2/2019	CHFHUF	9:30:00 AM	284.42	284.65			N/A
5/2/2019	CHFHUF	11:30:00 AM	283.8	284.03			N/A
5/2/2019	CHFHUF	1:30:00 PM	283.67	284.05			N/A
5/2/2019	CHFHUF	3:30:00 PM	283.45	283.81			N/A
5/2/2019	CHFJPY	9:30:00 AM	109.555	109.62			N/A
5/2/2019	CHFJPY	11:30:00 AM	109.492	109.55			N/A
5/2/2019	CHFJPY	1:30:00 PM	109.38	109.446			N/A
5/2/2019	CHFJPY	3:30:00 PM	109.427	109.482			N/A
5/2/2019	CHFJPY.fx	9:30:00 AM	109.588	109.587			N/A
5/2/2019	CHFJPY.fx	11:30:00 AM	109.524	109.515			N/A
5/2/2019	CHFJPY.fx	1:30:00 PM	109.413	109.412			N/A
5/2/2019	CHFJPY.fx	3:30:00 PM	109.459	109.448			N/A
5/2/2019	CHFMXN	9:30:00 AM	18.6446	18.655			N/A
5/2/2019	CHFMXN	11:30:00 AM	18.5976	18.6093			N/A
5/2/2019	CHFMXN	1:30:00 PM	18.6064	18.6236			N/A
5/2/2019	CHFMXN	3:30:00 PM	18.618	18.6299			N/A
5/2/2019	CHFNOK	9:30:00 AM	8.5221	8.5244			N/A
5/2/2019	CHFNOK	11:30:00 AM	8.5241	8.5311			N/A
5/2/2019	CHFNOK	1:30:00 PM	8.5245	8.5324			N/A
5/2/2019	CHFNOK	3:30:00 PM	8.5579	8.5541			N/A
5/2/2019	CHFNOK.fx	9:30:00 AM	8.52533	8.52173			N/A
5/2/2019	CHFNOK.fx	11:30:00 AM	8.52763	8.52764			N/A

5/2/2019	CHFNOK.fx	1:30:00 PM	8.52797	8.52882			N/A
5/2/2019	CHFNOK.fx	3:30:00 PM	8.55938	8.55048			N/A
5/2/2019	CHFPLN	9:30:00 AM	3.7575	3.7603			N/A
5/2/2019	CHFPLN	11:30:00 AM	3.746	3.7487			N/A
5/2/2019	CHFPLN	1:30:00 PM	3.7468	3.75			N/A
5/2/2019	CHFPLN	3:30:00 PM	3.7486	3.7511			N/A
5/2/2019	CHFPLN.fx	9:30:00 AM	3.75504	3.76263			N/A
5/2/2019	CHFPLN.fx	11:30:00 AM	3.74366	3.75103			N/A
5/2/2019	CHFPLN.fx	1:30:00 PM	3.74446	3.75223			N/A
5/2/2019	CHFPLN.fx	3:30:00 PM	3.74574	3.75341			N/A
5/2/2019	CHFSEK	9:30:00 AM	9.3738	9.3636			N/A
5/2/2019	CHFSEK	11:30:00 AM	9.3545	9.3543			N/A
5/2/2019	CHFSEK	1:30:00 PM	9.3517	9.3545			N/A
5/2/2019	CHFSEK	3:30:00 PM	9.3707	9.3681			N/A
5/2/2019	CHFSGD	9:30:00 AM	1.337	1.3374			N/A
5/2/2019	CHFSGD	11:30:00 AM	1.3359	1.3362			N/A
5/2/2019	CHFSGD	1:30:00 PM	1.3352	1.3356			N/A
5/2/2019	CHFSGD	3:30:00 PM	1.3363	1.3365			N/A
5/2/2019	CHFSGD.fx	9:30:00 AM	1.33715	1.33721			N/A
5/2/2019	CHFSGD.fx	11:30:00 AM	1.33605	1.33597			N/A
5/2/2019	CHFSGD.fx	1:30:00 PM	1.33535	1.33544			N/A
5/2/2019	CHFSGD.fx	3:30:00 PM	1.33648	1.3363			N/A
5/2/2019	CHFZAR	9:30:00 AM	14.1877	14.1902			N/A
5/2/2019	CHFZAR	11:30:00 AM	14.1582	14.1655			N/A
5/2/2019	CHFZAR	1:30:00 PM	14.1656	14.1798			N/A
5/2/2019	CHFZAR	3:30:00 PM	14.1966	14.2094			N/A
5/2/2019	CZKJPY	9:30:00 AM					N/A
5/2/2019	CZKJPY	11:30:00 AM	4.881	4.884			N/A
5/2/2019	CZKJPY	1:30:00 PM					N/A
5/2/2019	CZKJPY	3:30:00 PM	4.869	4.871			N/A
5/2/2019	DAX30.i	9:30:00 AM	12357.16	12352.66			N/A
5/2/2019	DAX30.i	11:30:00 AM	12361.26	12355.66			N/A
5/2/2019	DAX30.i	1:30:00 PM	12377.91	12376.66			N/A
5/2/2019	DAX30.i	3:30:00 PM	12364.66	12361.41			N/A

5/2/2019	DJ30.i	9:30:00 AM					N/A
5/2/2019	DJ30.i	11:30:00 AM					N/A
5/2/2019	DJ30.i	1:30:00 PM					N/A
5/2/2019	DJ30.i	3:30:00 PM					N/A
5/2/2019	DKKJPY	9:30:00 AM	16.73	16.75			N/A
5/2/2019	DKKJPY	11:30:00 AM	16.75	16.77			N/A
5/2/2019	DKKJPY	1:30:00 PM	16.74	16.75			N/A
5/2/2019	DKKJPY	3:30:00 PM					N/A
5/2/2019	EURAUD	9:30:00 AM	1.59434	1.59459			N/A
5/2/2019	EURAUD	11:30:00 AM	1.5952	1.5954			N/A
5/2/2019	EURAUD	1:30:00 PM	1.59467	1.59505			N/A
5/2/2019	EURAUD	3:30:00 PM	1.59651	1.59664			N/A
5/2/2019	EURAUD.fx	9:30:00 AM	1.59454	1.59437			N/A
5/2/2019	EURAUD.fx	11:30:00 AM	1.59541	1.59519			N/A
5/2/2019	EURAUD.fx	1:30:00 PM	1.59489	1.59482			N/A
5/2/2019	EURAUD.fx	3:30:00 PM	1.5967	1.59643			N/A
5/2/2019	EURCAD	9:30:00 AM	1.50405	1.50465			N/A
5/2/2019	EURCAD	11:30:00 AM	1.50712	1.50781			N/A
5/2/2019	EURCAD	1:30:00 PM	1.50506	1.50584			N/A
5/2/2019	EURCAD	3:30:00 PM	1.50666	1.50684			N/A
5/2/2019	EURCAD.fx	9:30:00 AM	1.50448	1.50422			N/A
5/2/2019	EURCAD.fx	11:30:00 AM	1.50755	1.50739			N/A
5/2/2019	EURCAD.fx	1:30:00 PM	1.50548	1.50541			N/A
5/2/2019	EURCAD.fx	3:30:00 PM	1.50702	1.5064			N/A
5/2/2019	EURCHF	9:30:00 AM	1.14018	1.14016			N/A
5/2/2019	EURCHF	11:30:00 AM	1.14208	1.14206			N/A
5/2/2019	EURCHF	1:30:00 PM	1.14183	1.14195			N/A
5/2/2019	EURCHF	3:30:00 PM	1.14142	1.14146			N/A
5/2/2019	EURCHF.fx	9:30:00 AM	1.14023	1.1401			N/A
5/2/2019	EURCHF.fx	11:30:00 AM	1.14213	1.142			N/A
5/2/2019	EURCHF.fx	1:30:00 PM	1.14189	1.14189			N/A
5/2/2019	EURCHF.fx	3:30:00 PM	1.14147	1.14141			N/A
5/2/2019	EURCZK	9:30:00 AM	25.582	25.621			N/A
5/2/2019	EURCZK	11:30:00 AM	25.601	25.639			N/A

5/2/2019	EURCZK	1:30:00 PM	25.597	25.636			N/A
5/2/2019	EURCZK	3:30:00 PM	25.642	25.664			N/A
5/2/2019	EURDKK	9:30:00 AM	7.4648	7.466			N/A
5/2/2019	EURDKK	11:30:00 AM	7.464	7.4651			N/A
5/2/2019	EURDKK	1:30:00 PM	7.4647	7.4656			N/A
5/2/2019	EURDKK	3:30:00 PM	7.4613	7.4626			N/A
5/2/2019	EURGBP	9:30:00 AM	0.85828	0.85824			N/A
5/2/2019	EURGBP	11:30:00 AM	0.85824	0.85818			N/A
5/2/2019	EURGBP	1:30:00 PM	0.85829	0.85829			N/A
5/2/2019	EURGBP	3:30:00 PM	0.85893	0.85899			N/A
5/2/2019	EURGBP.fx	9:30:00 AM	0.85831	0.85819			N/A
5/2/2019	EURGBP.fx	11:30:00 AM	0.85827	0.85812			N/A
5/2/2019	EURGBP.fx	1:30:00 PM	0.85831	0.85825			N/A
5/2/2019	EURGBP.fx	3:30:00 PM	0.85895	0.85895			N/A
5/2/2019	EURHKD	9:30:00 AM	8.784	8.7882			N/A
5/2/2019	EURHKD	11:30:00 AM	8.795	8.7993			N/A
5/2/2019	EURHKD	1:30:00 PM	8.783	8.7877			N/A
5/2/2019	EURHKD	3:30:00 PM	8.7872	8.7891			N/A
5/2/2019	EURHKD.fx	9:30:00 AM	8.78681	8.78535			N/A
5/2/2019	EURHKD.fx	11:30:00 AM	8.7979	8.79646			N/A
5/2/2019	EURHKD.fx	1:30:00 PM	8.78584	8.78487			N/A
5/2/2019	EURHKD.fx	3:30:00 PM	8.78987	8.78639			N/A
5/2/2019	EURHUF	9:30:00 AM	324.24	324.97			N/A
5/2/2019	EURHUF	11:30:00 AM	324.04	324.65			N/A
5/2/2019	EURHUF	1:30:00 PM	323.87	324.47			N/A
5/2/2019	EURHUF	3:30:00 PM	323.63	324.34			N/A
5/2/2019	EURHUF.fx	9:30:00 AM	324.521	324.678			N/A
5/2/2019	EURHUF.fx	11:30:00 AM	324.331	324.48			N/A
5/2/2019	EURHUF.fx	1:30:00 PM	324.151	324.32			N/A
5/2/2019	EURHUF.fx	3:30:00 PM	323.906	324.075			N/A
5/2/2019	EURJPY	9:30:00 AM	124.95	124.942			N/A
5/2/2019	EURJPY	11:30:00 AM	125.071	125.071			N/A
5/2/2019	EURJPY	1:30:00 PM	124.939	124.934			N/A
5/2/2019	EURJPY	3:30:00 PM	124.932	124.924			N/A

5/2/2019	EURJPY.fx	9:30:00 AM	124.951	124.94			N/A
5/2/2019	EURJPY.fx	11:30:00 AM	125.073	125.067			N/A
5/2/2019	EURJPY.fx	1:30:00 PM	124.941	124.93			N/A
5/2/2019	EURJPY.fx	3:30:00 PM	124.935	124.921			N/A
5/2/2019	EURMXN	9:30:00 AM	21.2584	21.2756			N/A
5/2/2019	EURMXN	11:30:00 AM	21.2409	21.2585			N/A
5/2/2019	EURMXN	1:30:00 PM	21.2489	21.2681			N/A
5/2/2019	EURMXN	3:30:00 PM	21.2573	21.2693			N/A
5/2/2019	EURMXN.fx	9:30:00 AM	21.267	21.2663			N/A
5/2/2019	EURMXN.fx	11:30:00 AM	21.2499	21.249			N/A
5/2/2019	EURMXN.fx	1:30:00 PM	21.2575	21.2595			N/A
5/2/2019	EURMXN.fx	3:30:00 PM	21.2668	21.2599			N/A
5/2/2019	EURNOK	9:30:00 AM	9.7146	9.7212			N/A
5/2/2019	EURNOK	11:30:00 AM	9.7328	9.7453			N/A
5/2/2019	EURNOK	1:30:00 PM	9.7323	9.7444			N/A
5/2/2019	EURNOK	3:30:00 PM	9.7668	9.7656			N/A
5/2/2019	EURNOK.fx	9:30:00 AM	9.71959	9.71655			N/A
5/2/2019	EURNOK.fx	11:30:00 AM	9.7384	9.73994			N/A
5/2/2019	EURNOK.fx	1:30:00 PM	9.73761	9.73909			N/A
5/2/2019	EURNOK.fx	3:30:00 PM	9.77111	9.76025			N/A
5/2/2019	EURNZD	9:30:00 AM	1.68936	1.68993			N/A
5/2/2019	EURNZD	11:30:00 AM	1.68969	1.69037			N/A
5/2/2019	EURNZD	1:30:00 PM	1.68931	1.69003			N/A
5/2/2019	EURNZD	3:30:00 PM	1.69113	1.69164			N/A
5/2/2019	EURNZD.fx	9:30:00 AM	1.68976	1.68951			N/A
5/2/2019	EURNZD.fx	11:30:00 AM	1.69013	1.68994			N/A
5/2/2019	EURNZD.fx	1:30:00 PM	1.68974	1.68959			N/A
5/2/2019	EURNZD.fx	3:30:00 PM	1.69151	1.69121			N/A
5/2/2019	EURPLN	9:30:00 AM	4.284	4.2873			N/A
5/2/2019	EURPLN	11:30:00 AM	4.278	4.2813			N/A
5/2/2019	EURPLN	1:30:00 PM	4.2784	4.2818			N/A
5/2/2019	EURPLN	3:30:00 PM	4.2781	4.2815			N/A
5/2/2019	EURPLN.fx	9:30:00 AM	4.2833	4.28807			N/A
5/2/2019	EURPLN.fx	11:30:00 AM	4.27737	4.28184			N/A

5/2/2019	EURPLN.fx	1:30:00 PM	4.27779	4.28242			N/A
5/2/2019	EURPLN.fx	3:30:00 PM	4.27761	4.28212			N/A
5/2/2019	EURRUB	9:30:00 AM					N/A
5/2/2019	EURRUB	11:30:00 AM	72.715	73.156			N/A
5/2/2019	EURRUB	1:30:00 PM	72.763	73.198			N/A
5/2/2019	EURRUB	3:30:00 PM	72.936	73.355			N/A
5/2/2019	EURSEK	9:30:00 AM	10.6934	10.675			N/A
5/2/2019	EURSEK	11:30:00 AM	10.6856	10.6858			N/A
5/2/2019	EURSEK	1:30:00 PM	10.6797	10.6834			N/A
5/2/2019	EURSEK	3:30:00 PM	10.6996	10.6945			N/A
5/2/2019	EURSEK.fx	9:30:00 AM	10.69389	10.67704			N/A
5/2/2019	EURSEK.fx	11:30:00 AM	10.68719	10.68412			N/A
5/2/2019	EURSEK.fx	1:30:00 PM	10.68157	10.68166			N/A
5/2/2019	EURSEK.fx	3:30:00 PM	10.69972	10.69294			N/A
5/2/2019	EURSGD	9:30:00 AM	1.5243	1.525			N/A
5/2/2019	EURSGD	11:30:00 AM	1.5254	1.5262			N/A
5/2/2019	EURSGD	1:30:00 PM	1.5245	1.5253			N/A
5/2/2019	EURSGD	3:30:00 PM	1.5252	1.5257			N/A
5/2/2019	EURSGD.fx	9:30:00 AM	1.5247	1.52464			N/A
5/2/2019	EURSGD.fx	11:30:00 AM	1.52578	1.52575			N/A
5/2/2019	EURSGD.fx	1:30:00 PM	1.5249	1.52487			N/A
5/2/2019	EURSGD.fx	3:30:00 PM	1.5256	1.52528			N/A
5/2/2019	EURUSD	9:30:00 AM	1.11981	1.11979			N/A
5/2/2019	EURUSD	11:30:00 AM	1.12128	1.12129			N/A
5/2/2019	EURUSD	1:30:00 PM	1.1198	1.11984			N/A
5/2/2019	EURUSD	3:30:00 PM	1.12029	1.11994			N/A
5/2/2019	EURUSD.fx	9:30:00 AM	1.12001	1.11988			N/A
5/2/2019	EURUSD.fx	11:30:00 AM	1.12148	1.12139			N/A
5/2/2019	EURUSD.fx	1:30:00 PM	1.12001	1.11993			N/A
5/2/2019	EURUSD.fx	3:30:00 PM	1.1205	1.12003			N/A
5/2/2019	EURZAR	9:30:00 AM	16.1773	16.19			N/A
5/2/2019	EURZAR	11:30:00 AM	16.1701	16.1897			N/A
5/2/2019	EURZAR	1:30:00 PM	16.1777	16.196			N/A
5/2/2019	EURZAR	3:30:00 PM	16.2131	16.2292			N/A

5/2/2019	EURZAR.fx	9:30:00 AM	16.17626	16.19078			N/A
5/2/2019	EURZAR.fx	11:30:00 AM	16.17041	16.18948			N/A
5/2/2019	EURZAR.fx	1:30:00 PM	16.1774	16.19567			N/A
5/2/2019	EURZAR.fx	3:30:00 PM	16.21284	16.22954			N/A
5/2/2019	GBPAUD	9:30:00 AM	1.85845	1.85867			N/A
5/2/2019	GBPAUD	11:30:00 AM	1.85957	1.85996			N/A
5/2/2019	GBPAUD	1:30:00 PM	1.85885	1.85926			N/A
5/2/2019	GBPAUD	3:30:00 PM	1.85931	1.85979			N/A
5/2/2019	GBPAUD.fx	9:30:00 AM	1.85885	1.85828			N/A
5/2/2019	GBPAUD.fx	11:30:00 AM	1.85992	1.85954			N/A
5/2/2019	GBPAUD.fx	1:30:00 PM	1.85923	1.85886			N/A
5/2/2019	GBPAUD.fx	3:30:00 PM	1.85968	1.85943			N/A
5/2/2019	GBPCAD	9:30:00 AM	1.75277	1.75297			N/A
5/2/2019	GBPCAD	11:30:00 AM	1.75647	1.75691			N/A
5/2/2019	GBPCAD	1:30:00 PM	1.75393	1.75441			N/A
5/2/2019	GBPCAD	3:30:00 PM	1.7541	1.75435			N/A
5/2/2019	GBPCAD.fx	9:30:00 AM	1.75315	1.75256			N/A
5/2/2019	GBPCAD.fx	11:30:00 AM	1.75684	1.75653			N/A
5/2/2019	GBPCAD.fx	1:30:00 PM	1.75431	1.75402			N/A
5/2/2019	GBPCAD.fx	3:30:00 PM	1.75441	1.75397			N/A
5/2/2019	GBPCHF	9:30:00 AM	1.32837	1.32864			N/A
5/2/2019	GBPCHF	11:30:00 AM	1.33072	1.33077			N/A
5/2/2019	GBPCHF	1:30:00 PM	1.33027	1.3306			N/A
5/2/2019	GBPCHF	3:30:00 PM	1.32872	1.32902			N/A
5/2/2019	GBPCHF.fx	9:30:00 AM	1.32855	1.32845			N/A
5/2/2019	GBPCHF.fx	11:30:00 AM	1.33087	1.33058			N/A
5/2/2019	GBPCHF.fx	1:30:00 PM	1.33048	1.33039			N/A
5/2/2019	GBPCHF.fx	3:30:00 PM	1.32889	1.32886			N/A
5/2/2019	GBPCZK	9:30:00 AM	29.824	29.841			N/A
5/2/2019	GBPCZK	11:30:00 AM	29.843	29.862			N/A
5/2/2019	GBPCZK	1:30:00 PM	29.84	29.858			N/A
5/2/2019	GBPCZK	3:30:00 PM	29.865	29.863			N/A
5/2/2019	GBPDKK	9:30:00 AM	8.694	8.704			N/A
5/2/2019	GBPDKK	11:30:00 AM	8.695	8.704			N/A

5/2/2019	GBPDKK	1:30:00 PM	8.693	8.704			N/A
5/2/2019	GBPDKK	3:30:00 PM	8.687	8.697			N/A
5/2/2019	GBPDKK.fx	9:30:00 AM	8.6926	8.704			N/A
5/2/2019	GBPDKK.fx	11:30:00 AM	8.693	8.7043			N/A
5/2/2019	GBPDKK.fx	1:30:00 PM	8.6919	8.704			N/A
5/2/2019	GBPDKK.fx	3:30:00 PM	8.6851	8.6974			N/A
5/2/2019	GBPHKD	9:30:00 AM	10.234	10.2379			N/A
5/2/2019	GBPHKD	11:30:00 AM	10.2463	10.2495			N/A
5/2/2019	GBPHKD	1:30:00 PM	10.2325	10.2369			N/A
5/2/2019	GBPHKD	3:30:00 PM	10.2273	10.2302			N/A
5/2/2019	GBPHUF	9:30:00 AM	377.83	378.08			N/A
5/2/2019	GBPHUF	11:30:00 AM	377.59	377.9			N/A
5/2/2019	GBPHUF	1:30:00 PM	377.41	377.83			N/A
5/2/2019	GBPHUF	3:30:00 PM	376.66	377.04			N/A
5/2/2019	GBPJPY	9:30:00 AM	145.575	145.585	75000	75000	N/A
5/2/2019	GBPJPY	11:30:00 AM	145.73	145.75			N/A
5/2/2019	GBPJPY	1:30:00 PM	145.541	145.57			N/A
5/2/2019	GBPJPY	3:30:00 PM	145.422	145.449			N/A
5/2/2019	GBPJPY.fx	9:30:00 AM	145.595	145.566			N/A
5/2/2019	GBPJPY.fx	11:30:00 AM	145.747	145.73			N/A
5/2/2019	GBPJPY.fx	1:30:00 PM	145.56	145.551			N/A
5/2/2019	GBPJPY.fx	3:30:00 PM	145.44	145.429			N/A
5/2/2019	GBPMXN	9:30:00 AM	24.7706	24.7754			N/A
5/2/2019	GBPMXN	11:30:00 AM	24.7464	24.7581			N/A
5/2/2019	GBPMXN	1:30:00 PM	24.7571	24.771			N/A
5/2/2019	GBPMXN	3:30:00 PM	24.7431	24.7502			N/A
5/2/2019	GBPNOK	9:30:00 AM	11.3219	11.3253			N/A
5/2/2019	GBPNOK	11:30:00 AM	11.3441	11.3528			N/A
5/2/2019	GBPNOK	1:30:00 PM	11.3418	11.352			N/A
5/2/2019	GBPNOK	3:30:00 PM	11.3719	11.3687			N/A
5/2/2019	GBPNOK.fx	9:30:00 AM	11.32627	11.32158			N/A
5/2/2019	GBPNOK.fx	11:30:00 AM	11.34867	11.34851			N/A
5/2/2019	GBPNOK.fx	1:30:00 PM	11.34653	11.34725			N/A
5/2/2019	GBPNOK.fx	3:30:00 PM	11.37429	11.36386			N/A



5/2/2019	GBPNZD	9:30:00 AM	1.96884	1.96883			N/A
5/2/2019	GBPNZD	11:30:00 AM	1.96911	1.9696			N/A
5/2/2019	GBPNZD	1:30:00 PM	1.96853	1.96903			N/A
5/2/2019	GBPNZD	3:30:00 PM	1.96894	1.9695			N/A
5/2/2019	GBPNZD.fx	9:30:00 AM	1.96919	1.96847			N/A
5/2/2019	GBPNZD.fx	11:30:00 AM	1.96943	1.96929			N/A
5/2/2019	GBPNZD.fx	1:30:00 PM	1.96887	1.9687			N/A
5/2/2019	GBPNZD.fx	3:30:00 PM	1.96928	1.96916			N/A
5/2/2019	GBPPLN	9:30:00 AM	4.9929	4.9939			N/A
5/2/2019	GBPPLN	11:30:00 AM	4.9862	4.9873			N/A
5/2/2019	GBPPLN	1:30:00 PM	4.9862	4.9874			N/A
5/2/2019	GBPPLN	3:30:00 PM	4.9822	4.9836			N/A
5/2/2019	GBPPLN.fx	9:30:00 AM	4.99079	4.99624			N/A
5/2/2019	GBPPLN.fx	11:30:00 AM	4.98404	4.98944			N/A
5/2/2019	GBPPLN.fx	1:30:00 PM	4.98396	4.98954			N/A
5/2/2019	GBPPLN.fx	3:30:00 PM	4.9796	4.98574			N/A
5/2/2019	GBPSEK	9:30:00 AM	12.4562	12.4395			N/A
5/2/2019	GBPSEK	11:30:00 AM	12.45	12.4522			N/A
5/2/2019	GBPSEK	1:30:00 PM	12.4409	12.4484			N/A
5/2/2019	GBPSEK	3:30:00 PM	12.454	12.453			N/A
5/2/2019	GBPSEK.fx	9:30:00 AM	12.44892	12.44852			N/A
5/2/2019	GBPSEK.fx	11:30:00 AM	12.44614	12.45656			N/A
5/2/2019	GBPSEK.fx	1:30:00 PM	12.43699	12.45229			N/A
5/2/2019	GBPSEK.fx	3:30:00 PM	12.44749	12.45665			N/A
5/2/2019	GBPSGD	9:30:00 AM	1.7765	1.7768			N/A
5/2/2019	GBPSGD	11:30:00 AM	1.7777	1.7783			N/A
5/2/2019	GBPSGD	1:30:00 PM	1.7766	1.7771			N/A
5/2/2019	GBPSGD	3:30:00 PM	1.7759	1.7762			N/A
5/2/2019	GBPSGD.fx	9:30:00 AM	1.77463	1.77865			N/A
5/2/2019	GBPSGD.fx	11:30:00 AM	1.77586	1.78016			N/A
5/2/2019	GBPSGD.fx	1:30:00 PM	1.77469	1.77891			N/A
5/2/2019	GBPSGD.fx	3:30:00 PM	1.77406	1.77805			N/A
5/2/2019	GBPUSD	9:30:00 AM	1.30521	1.30494			N/A
5/2/2019	GBPUSD	11:30:00 AM	1.30692	1.30679			N/A

5/2/2019	GBPUSD	1:30:00 PM	1.30505	1.30493			N/A
5/2/2019	GBPUSD	3:30:00 PM	1.30452	1.30413		2500	N/A
5/2/2019	GBPUSD.fx	9:30:00 AM	1.30526	1.30488			N/A
5/2/2019	GBPUSD.fx	11:30:00 AM	1.30696	1.30672			N/A
5/2/2019	GBPUSD.fx	1:30:00 PM	1.3051	1.30488			N/A
5/2/2019	GBPUSD.fx	3:30:00 PM	1.30456	1.30409			N/A
5/2/2019	GBPZAR	9:30:00 AM	18.8515	18.8691			N/A
5/2/2019	GBPZAR	11:30:00 AM	18.8429	18.8703			N/A
5/2/2019	GBPZAR	1:30:00 PM	18.8487	18.8761			N/A
5/2/2019	GBPZAR	3:30:00 PM	18.8764	18.9018			N/A
5/2/2019	GBPZAR.fx	9:30:00 AM	18.8585	18.8623			N/A
5/2/2019	GBPZAR.fx	11:30:00 AM	18.8481	18.8631			N/A
5/2/2019	GBPZAR.fx	1:30:00 PM	18.855	18.8695			N/A
5/2/2019	GBPZAR.fx	3:30:00 PM	18.8829	18.8949			N/A
5/2/2019	GOLD	9:30:00 AM	1271.83	1272.05			N/A
5/2/2019	GOLD	11:30:00 AM	1270.54	1270.6			N/A
5/2/2019	GOLD	1:30:00 PM	1270.95	1271.22			N/A
5/2/2019	GOLD	3:30:00 PM	1270.49	1269.09			N/A
5/2/2019	HKDJPY	9:30:00 AM	14.22	14.23			N/A
5/2/2019	HKDJPY	11:30:00 AM	14.22	14.23			N/A
5/2/2019	HKDJPY	1:30:00 PM	14.22	14.24			N/A
5/2/2019	HKDJPY	3:30:00 PM	14.22	14.22			N/A
5/2/2019	HKDJPY.fx	9:30:00 AM	14.214	14.222			N/A
5/2/2019	HKDJPY.fx	11:30:00 AM	14.211	14.218			N/A
5/2/2019	HKDJPY.fx	1:30:00 PM	14.214	14.222			N/A
5/2/2019	HKDJPY.fx	3:30:00 PM	14.211	14.215			N/A
5/2/2019	HUFJPY	9:30:00 AM	0.3852	0.3856			N/A
5/2/2019	HUFJPY	11:30:00 AM	0.3858	0.3861			N/A
5/2/2019	HUFJPY	1:30:00 PM	0.3855	0.3858			N/A
5/2/2019	HUFJPY	3:30:00 PM	0.3859	0.3862			N/A
5/2/2019	JP225.i	9:30:00 AM	22299.19	22313.36			N/A
5/2/2019	JP225.i	11:30:00 AM	22334.19	22344.19			N/A
5/2/2019	JP225.i	1:30:00 PM	22314.19	22329.19			N/A
5/2/2019	JP225.i	3:30:00 PM	22284.19	22296.69			N/A

5/2/2019	MXNJPY	9:30:00 AM	5.87	5.88			N/A
5/2/2019	MXNJPY	11:30:00 AM	5.89	5.89			N/A
5/2/2019	MXNJPY	1:30:00 PM	5.87	5.88			N/A
5/2/2019	MXNJPY	3:30:00 PM	5.87	5.88			N/A
5/2/2019	NASDAQ.i	9:30:00 AM					N/A
5/2/2019	NASDAQ.i	11:30:00 AM					N/A
5/2/2019	NASDAQ.i	1:30:00 PM					N/A
5/2/2019	NASDAQ.i	3:30:00 PM					N/A
5/2/2019	NOKJPY	9:30:00 AM	12.85	12.87			N/A
5/2/2019	NOKJPY	11:30:00 AM	12.83	12.86			N/A
5/2/2019	NOKJPY	1:30:00 PM	12.81	12.85			N/A
5/2/2019	NOKJPY	3:30:00 PM	12.78	12.8			N/A
5/2/2019	NOKJPY.fx	9:30:00 AM	12.855	12.856			N/A
5/2/2019	NOKJPY.fx	11:30:00 AM	12.838	12.844			N/A
5/2/2019	NOKJPY.fx	1:30:00 PM	12.825	12.832			N/A
5/2/2019	NOKJPY.fx	3:30:00 PM	12.795	12.788			N/A
5/2/2019	NZDCAD	9:30:00 AM	0.88997	0.89059			N/A
5/2/2019	NZDCAD	11:30:00 AM	0.89166	0.89234			N/A
5/2/2019	NZDCAD	1:30:00 PM	0.89064	0.89134			N/A
5/2/2019	NZDCAD	3:30:00 PM	0.89059	0.89103			N/A
5/2/2019	NZDCAD.fx	9:30:00 AM	0.8903	0.89025			N/A
5/2/2019	NZDCAD.fx	11:30:00 AM	0.89199	0.892			N/A
5/2/2019	NZDCAD.fx	1:30:00 PM	0.89098	0.891			N/A
5/2/2019	NZDCAD.fx	3:30:00 PM	0.89085	0.8907			N/A
5/2/2019	NZDCHF	9:30:00 AM	0.67454	0.67507			N/A
5/2/2019	NZDCHF	11:30:00 AM	0.67543	0.67606			N/A
5/2/2019	NZDCHF	1:30:00 PM	0.67545	0.67615			N/A
5/2/2019	NZDCHF	3:30:00 PM	0.67457	0.67516			N/A
5/2/2019	NZDCHF.fx	9:30:00 AM	0.67488	0.67472			N/A
5/2/2019	NZDCHF.fx	11:30:00 AM	0.67577	0.6757			N/A
5/2/2019	NZDCHF.fx	1:30:00 PM	0.67579	0.67579			N/A
5/2/2019	NZDCHF.fx	3:30:00 PM	0.6749	0.67483			N/A
5/2/2019	NZDCZK	9:30:00 AM	15.146	15.157			N/A
5/2/2019	NZDCZK	11:30:00 AM	15.152	15.164			N/A

5/2/2019	NZDCZK	1:30:00 PM	15.154	15.165			N/A
5/2/2019	NZDCZK	3:30:00 PM	15.164	15.165			N/A
5/2/2019	NZDDKK	9:30:00 AM	4.416	4.42			N/A
5/2/2019	NZDDKK	11:30:00 AM	4.415	4.419			N/A
5/2/2019	NZDDKK	1:30:00 PM	4.416	4.419			N/A
5/2/2019	NZDDKK	3:30:00 PM	4.41	4.414			N/A
5/2/2019	NZDHKD	9:30:00 AM	5.1973	5.1993			N/A
5/2/2019	NZDHKD	11:30:00 AM	5.2019	5.2048			N/A
5/2/2019	NZDHKD	1:30:00 PM	5.1962	5.199			N/A
5/2/2019	NZDHKD	3:30:00 PM	5.1924	5.1945			N/A
5/2/2019	NZDHUF	9:30:00 AM	191.84	192.06			N/A
5/2/2019	NZDHUF	11:30:00 AM	191.68	191.91			N/A
5/2/2019	NZDHUF	1:30:00 PM	191.64	191.93			N/A
5/2/2019	NZDHUF	3:30:00 PM	191.23	191.48			N/A
5/2/2019	NZDJPY	9:30:00 AM	73.908	73.964			N/A
5/2/2019	NZDJPY	11:30:00 AM	73.962	74.034			N/A
5/2/2019	NZDJPY	1:30:00 PM	73.894	73.968			N/A
5/2/2019	NZDJPY	3:30:00 PM	73.82	73.877			N/A
5/2/2019	NZDJPY.fx	9:30:00 AM	73.939	73.931			N/A
5/2/2019	NZDJPY.fx	11:30:00 AM	73.994	74.001			N/A
5/2/2019	NZDJPY.fx	1:30:00 PM	73.925	73.935			N/A
5/2/2019	NZDJPY.fx	3:30:00 PM	73.851	73.844			N/A
5/2/2019	NZDMXN	9:30:00 AM	12.5783	12.5834			N/A
5/2/2019	NZDMXN	11:30:00 AM	12.5643	12.5707			N/A
5/2/2019	NZDMXN	1:30:00 PM	12.5729	12.5792			N/A
5/2/2019	NZDMXN	3:30:00 PM	12.5634	12.566			N/A
5/2/2019	NZDNOK	9:30:00 AM	5.7476	5.7474			N/A
5/2/2019	NZDNOK	11:30:00 AM	5.7577	5.7606			N/A
5/2/2019	NZDNOK	1:30:00 PM	5.7595	5.7627			N/A
5/2/2019	NZDNOK	3:30:00 PM	5.7703	5.7683			N/A
5/2/2019	NZDPLN	9:30:00 AM	2.535	2.5363			N/A
5/2/2019	NZDPLN	11:30:00 AM	2.5304	2.5318			N/A
5/2/2019	NZDPLN	1:30:00 PM	2.5314	2.5325			N/A
5/2/2019	NZDPLN	3:30:00 PM	2.5281	2.5286			N/A

5/2/2019	NZDSEK	9:30:00 AM	6.322	6.3202			N/A
5/2/2019	NZDSEK	11:30:00 AM	6.3177	6.3225			N/A
5/2/2019	NZDSEK	1:30:00 PM	6.3161	6.3217			N/A
5/2/2019	NZDSEK	3:30:00 PM	6.3193	6.323			N/A
5/2/2019	NZDSGD	9:30:00 AM	0.9021	0.9026			N/A
5/2/2019	NZDSGD	11:30:00 AM	0.9025	0.9032			N/A
5/2/2019	NZDSGD	1:30:00 PM	0.9022	0.9028			N/A
5/2/2019	NZDSGD	3:30:00 PM	0.9017	0.9021			N/A
5/2/2019	NZDSGD.fx	9:30:00 AM	0.9021	0.90255			N/A
5/2/2019	NZDSGD.fx	11:30:00 AM	0.90249	0.90311			N/A
5/2/2019	NZDSGD.fx	1:30:00 PM	0.90215	0.90277			N/A
5/2/2019	NZDSGD.fx	3:30:00 PM	0.90172	0.90201			N/A
5/2/2019	NZDUSD	9:30:00 AM	0.66276	0.66277			N/A
5/2/2019	NZDUSD	11:30:00 AM	0.66343	0.6636			N/A
5/2/2019	NZDUSD	1:30:00 PM	0.6627	0.66287			N/A
5/2/2019	NZDUSD	3:30:00 PM	0.6623	0.66219			N/A
5/2/2019	NZDUSD.fx	9:30:00 AM	0.66283	0.66278			N/A
5/2/2019	NZDUSD.fx	11:30:00 AM	0.6635	0.66361			N/A
5/2/2019	NZDUSD.fx	1:30:00 PM	0.66277	0.66288			N/A
5/2/2019	NZDUSD.fx	3:30:00 PM	0.66238	0.66221			N/A
5/2/2019	NZDZAR	9:30:00 AM	9.566	9.5773			N/A
5/2/2019	NZDZAR	11:30:00 AM	9.5579	9.5743			N/A
5/2/2019	NZDZAR	1:30:00 PM	9.567	9.5828			N/A
5/2/2019	NZDZAR	3:30:00 PM	9.5737	9.5893			N/A
5/2/2019	SEKJPY	9:30:00 AM	11.7	11.69			N/A
5/2/2019	SEKJPY	11:30:00 AM	11.71	11.72			N/A
5/2/2019	SEKJPY	1:30:00 PM	11.7	11.71			N/A
5/2/2019	SEKJPY	3:30:00 PM	11.68	11.68			N/A
5/2/2019	SEKJPY.fx	9:30:00 AM	11.693	11.695			N/A
5/2/2019	SEKJPY.fx	11:30:00 AM	11.698	11.711			N/A
5/2/2019	SEKJPY.fx	1:30:00 PM	11.688	11.705			N/A
5/2/2019	SEKJPY.fx	3:30:00 PM	11.673	11.685			N/A
5/2/2019	SGDJPY	9:30:00 AM	81.93	81.94			N/A
5/2/2019	SGDJPY	11:30:00 AM	81.96	81.97			N/A

5/2/2019	SGDJPY	1:30:00 PM	81.9	81.92			N/A
5/2/2019	SGDJPY	3:30:00 PM	81.85	81.87			N/A
5/2/2019	SILVER	9:30:00 AM	14.45	14.84			N/A
5/2/2019	SILVER	11:30:00 AM	14.44	14.82			N/A
5/2/2019	SILVER	1:30:00 PM	14.48	14.86			N/A
5/2/2019	SILVER	3:30:00 PM	14.47	14.83			N/A
5/2/2019	SPX500.i	9:30:00 AM	2925.31	2926.36			N/A
5/2/2019	SPX500.i	11:30:00 AM	2927.81	2928.61			N/A
5/2/2019	SPX500.i	1:30:00 PM	2927.81	2929.03			N/A
5/2/2019	SPX500.i	3:30:00 PM	2925.81	2925.36			N/A
5/2/2019	UK100.i	9:30:00 AM	7366.3	7366.72			N/A
5/2/2019	UK100.i	11:30:00 AM	7382.8	7383.05			N/A
5/2/2019	UK100.i	1:30:00 PM	7383.3	7382.8			N/A
5/2/2019	UK100.i	3:30:00 PM	7378.47	7377.3			N/A
5/2/2019	USDCAD	9:30:00 AM	1.34351	1.34324	1000	1000	N/A
5/2/2019	USDCAD	11:30:00 AM	1.34436	1.34437			N/A
5/2/2019	USDCAD	1:30:00 PM	1.34428	1.34438			N/A
5/2/2019	USDCAD	3:30:00 PM	1.34518	1.34479			N/A
5/2/2019	USDCAD.fx	9:30:00 AM	1.34353	1.34321			N/A
5/2/2019	USDCAD.fx	11:30:00 AM	1.34438	1.34434			N/A
5/2/2019	USDCAD.fx	1:30:00 PM	1.34431	1.34435			N/A
5/2/2019	USDCAD.fx	3:30:00 PM	1.34519	1.34476			N/A
5/2/2019	USDCHF	9:30:00 AM	1.01803	1.01809			N/A
5/2/2019	USDCHF	11:30:00 AM	1.01839	1.01834			N/A
5/2/2019	USDCHF	1:30:00 PM	1.01953	1.01962			N/A
5/2/2019	USDCHF	3:30:00 PM	1.01903	1.01881			N/A
5/2/2019	USDCHF.fx	9:30:00 AM	1.01807	1.01804			N/A
5/2/2019	USDCHF.fx	11:30:00 AM	1.01843	1.01829			N/A
5/2/2019	USDCHF.fx	1:30:00 PM	1.01957	1.01956			N/A
5/2/2019	USDCHF.fx	3:30:00 PM	1.01907	1.01876			N/A
5/2/2019	USDCZK	9:30:00 AM	22.869	22.89			N/A
5/2/2019	USDCZK	11:30:00 AM	22.854	22.875			N/A
5/2/2019	USDCZK	1:30:00 PM	22.881	22.902			N/A
5/2/2019	USDCZK	3:30:00 PM	22.918	22.92			N/A

5/2/2019	USDCZK.fx	9:30:00 AM	22.8768	22.8812			N/A
5/2/2019	USDCZK.fx	11:30:00 AM	22.863	22.8664			N/A
5/2/2019	USDCZK.fx	1:30:00 PM	22.8885	22.8941			N/A
5/2/2019	USDCZK.fx	3:30:00 PM	22.9245	22.9128			N/A
5/2/2019	USDDKK	9:30:00 AM	6.6651	6.6682			N/A
5/2/2019	USDDKK	11:30:00 AM	6.6561	6.6594			N/A
5/2/2019	USDDKK	1:30:00 PM	6.6646	6.6682			N/A
5/2/2019	USDDKK	3:30:00 PM	6.6643	6.6654			N/A
5/2/2019	USDDKK.fx	9:30:00 AM	6.6654	6.66623			N/A
5/2/2019	USDDKK.fx	11:30:00 AM	6.65648	6.65739			N/A
5/2/2019	USDDKK.fx	1:30:00 PM	6.66519	6.6662			N/A
5/2/2019	USDDKK.fx	3:30:00 PM	6.66462	6.66334			N/A
5/2/2019	USDHKD	9:30:00 AM	7.845	7.8449			N/A
5/2/2019	USDHKD	11:30:00 AM	7.8445	7.8446			N/A
5/2/2019	USDHKD	1:30:00 PM	7.8431	7.8436			N/A
5/2/2019	USDHKD	3:30:00 PM	7.8445	7.8447			N/A
5/2/2019	USDHKD.fx	9:30:00 AM	7.84491	7.84538			N/A
5/2/2019	USDHKD.fx	11:30:00 AM	7.84442	7.84469			N/A
5/2/2019	USDHKD.fx	1:30:00 PM	7.84386	7.84444			N/A
5/2/2019	USDHKD.fx	3:30:00 PM	7.84449	7.84478			N/A
5/2/2019	USDHUF	9:30:00 AM	289.62	290.05			N/A
5/2/2019	USDHUF	11:30:00 AM	289.05	289.5			N/A
5/2/2019	USDHUF	1:30:00 PM	289.27	289.73			N/A
5/2/2019	USDHUF	3:30:00 PM	289.04	289.36			N/A
5/2/2019	USDHUF.fx	9:30:00 AM	289.825	289.837			N/A
5/2/2019	USDHUF.fx	11:30:00 AM	289.256	289.295			N/A
5/2/2019	USDHUF.fx	1:30:00 PM	289.475	289.515			N/A
5/2/2019	USDHUF.fx	3:30:00 PM	289.236	289.183			N/A
5/2/2019	USDINR	9:30:00 AM					N/A
5/2/2019	USDINR	11:30:00 AM	64.55	74.55			N/A
5/2/2019	USDINR	1:30:00 PM					N/A
5/2/2019	USDINR	3:30:00 PM					N/A
5/2/2019	USDJPY	9:30:00 AM	111.538	111.552			N/A
5/2/2019	USDJPY	11:30:00 AM	111.506	111.518			N/A

5/2/2019	USDJPY	1:30:00 PM	111.526	111.54			N/A
5/2/2019	USDJPY	3:30:00 PM	111.511	111.477			N/A
5/2/2019	USDJPY.fx	9:30:00 AM	111.544	111.544			N/A
5/2/2019	USDJPY.fx	11:30:00 AM	111.512	111.511			N/A
5/2/2019	USDJPY.fx	1:30:00 PM	111.532	111.533			N/A
5/2/2019	USDJPY.fx	3:30:00 PM	111.517	111.47			N/A
5/2/2019	USDMXN	9:30:00 AM	18.988	18.989			N/A
5/2/2019	USDMXN	11:30:00 AM	18.944	18.952			N/A
5/2/2019	USDMXN	1:30:00 PM	18.977	18.985			N/A
5/2/2019	USDMXN	3:30:00 PM	18.981	18.981			N/A
5/2/2019	USDMXN.f	9:30:00 AM	18.9912	18.9876			N/A
5/2/2019	USDMXN.f	11:30:00 AM	18.9478	18.9483			N/A
5/2/2019	USDMXN.f	1:30:00 PM	18.9804	18.9821			N/A
5/2/2019	USDMXN.f	3:30:00 PM	18.9851	18.9771			N/A
5/2/2019	USDNOK	9:30:00 AM	8.676	8.6793			N/A
5/2/2019	USDNOK	11:30:00 AM	8.6807	8.6889			N/A
5/2/2019	USDNOK	1:30:00 PM	8.6912	8.6995			N/A
5/2/2019	USDNOK	3:30:00 PM	8.7185	8.7168			N/A
5/2/2019	USDNOK.fx	9:30:00 AM	8.67955	8.67537			N/A
5/2/2019	USDNOK.fx	11:30:00 AM	8.68473	8.68454			N/A
5/2/2019	USDNOK.fx	1:30:00 PM	8.69504	8.69518			N/A
5/2/2019	USDNOK.fx	3:30:00 PM	8.72134	8.71203			N/A
5/2/2019	USDPLN	9:30:00 AM	3.8258	3.827			N/A
5/2/2019	USDPLN	11:30:00 AM	3.8153	3.8167			N/A
5/2/2019	USDPLN	1:30:00 PM	3.8205	3.822			N/A
5/2/2019	USDPLN	3:30:00 PM	3.82	3.8202			N/A
5/2/2019	USDPLN.fx	9:30:00 AM	3.82488	3.82792			N/A
5/2/2019	USDPLN.fx	11:30:00 AM	3.81443	3.81741			N/A
5/2/2019	USDPLN.fx	1:30:00 PM	3.81976	3.82273			N/A
5/2/2019	USDPLN.fx	3:30:00 PM	3.81918	3.82118			N/A
5/2/2019	USDRUB	9:30:00 AM					N/A
5/2/2019	USDRUB	11:30:00 AM	64.947	65.34			N/A
5/2/2019	USDRUB	1:30:00 PM	65.077	65.459			N/A
5/2/2019	USDRUB	3:30:00 PM	65.227	65.582			N/A



5/2/2019	USDSEK	9:30:00 AM	9.5473	9.5314			N/A
5/2/2019	USDSEK	11:30:00 AM	9.5281	9.5286			N/A
5/2/2019	USDSEK	1:30:00 PM	9.5347	9.5383			N/A
5/2/2019	USDSEK	3:30:00 PM	9.5492	9.5463			N/A
5/2/2019	USDSEK.fx	9:30:00 AM	9.54894	9.531			N/A
5/2/2019	USDSEK.fx	11:30:00 AM	9.53112	9.52668			N/A
5/2/2019	USDSEK.fx	1:30:00 PM	9.53762	9.53653			N/A
5/2/2019	USDSEK.fx	3:30:00 PM	9.55126	9.54451			N/A
5/2/2019	USDSGD	9:30:00 AM	1.3612	1.3615			N/A
5/2/2019	USDSGD	11:30:00 AM	1.3603	1.3607			N/A
5/2/2019	USDSGD	1:30:00 PM	1.3613	1.3618			N/A
5/2/2019	USDSGD	3:30:00 PM	1.3616	1.3618			N/A
5/2/2019	USDSGD.fx	9:30:00 AM	1.36115	1.36156			N/A
5/2/2019	USDSGD.fx	11:30:00 AM	1.36027	1.3608			N/A
5/2/2019	USDSGD.fx	1:30:00 PM	1.36128	1.36179			N/A
5/2/2019	USDSGD.fx	3:30:00 PM	1.36156	1.36176			N/A
5/2/2019	USDZAR	9:30:00 AM	14.4453	14.456			N/A
5/2/2019	USDZAR	11:30:00 AM	14.4182	14.438			N/A
5/2/2019	USDZAR	1:30:00 PM	14.4447	14.4604			N/A
5/2/2019	USDZAR	3:30:00 PM	14.4713	14.486			N/A
5/2/2019	USDZAR.fx	9:30:00 AM	14.4499	14.45035			N/A
5/2/2019	USDZAR.fx	11:30:00 AM	14.42471	14.43137			N/A
5/2/2019	USDZAR.fx	1:30:00 PM	14.45129	14.45392			N/A
5/2/2019	USDZAR.fx	3:30:00 PM	14.47757	14.48054			N/A
5/2/2019	XAUUSD	9:30:00 AM	1271.82	1272.04			N/A
5/2/2019	XAUUSD	11:30:00 AM	1270.54	1270.6			N/A
5/2/2019	XAUUSD	1:30:00 PM	1270.95	1271.22			N/A
5/2/2019	XAUUSD	3:30:00 PM	1270.49	1269.09			N/A
5/2/2019	ZARJPY	9:30:00 AM	7.7	7.71			N/A
5/2/2019	ZARJPY	11:30:00 AM	7.69	7.73			N/A
5/2/2019	ZARJPY	1:30:00 PM	7.7	7.73			N/A
5/2/2019	ZARJPY	3:30:00 PM	7.68	7.7			N/A
5/2/2019	ZARJPY.fx	9:30:00 AM	7.714	7.716			N/A
5/2/2019	ZARJPY.fx	11:30:00 AM	7.722	7.728			N/A

5/2/2019	ZARJPY.fx	1:30:00 PM	7.712	7.715			N/A
5/2/2019	ZARJPY.fx	3:30:00 PM	7.694	7.698			N/A
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5/3/2019	#AA	11:30:00 AM					N/A
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5/3/2019	#AA	3:30:00 PM					N/A
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5/3/2019	#AMZN	3:30:00 PM					N/A

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5/3/2019	#BIDU	11:30:00 AM					N/A
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5/3/2019	#BIDU	3:30:00 PM					N/A
5/3/2019	#Bitcoin	9:30:00 AM	5826.74	5846.26			N/A
5/3/2019	#Bitcoin	11:30:00 AM	5852.9	5883.48			N/A
5/3/2019	#Bitcoin	1:30:00 PM	6018.91	6048.16			N/A
5/3/2019	#Bitcoin	3:30:00 PM	6019.46	6048.25			N/A
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5/3/2019	#C	11:30:00 AM					N/A
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5/3/2019	#C	3:30:00 PM					N/A
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5/3/2019	#CHL	3:30:00 PM					N/A
5/3/2019	#CL.f	9:30:00 AM	61.772	61.824			N/A
5/3/2019	#CL.f	11:30:00 AM	61.524	61.439			N/A
5/3/2019	#CL.f	1:30:00 PM	61.787	61.813			N/A
5/3/2019	#CL.f	3:30:00 PM	62.129	62.104			N/A
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5/3/2019	AUDCZK	9:30:00 AM	16.072	16.088			N/A
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5/3/2019	AUDDKK	3:30:00 PM	4.6823	4.6838			N/A
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5/3/2019	AUDHKD	11:30:00 AM	5.4863	5.4901			N/A
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5/3/2019	AUDHKD	3:30:00 PM	5.4855	5.483			N/A
5/3/2019	AUDHUF	9:30:00 AM	202.76	202.92			N/A
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5/3/2019	AUDJPY.fx	11:30:00 AM	78.028	78.029			N/A
5/3/2019	AUDJPY.fx	1:30:00 PM	78.01	78.008			N/A
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5/3/2019	AUDMXN	9:30:00 AM	13.3645	13.3732			N/A
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5/3/2019	AUDNOK	11:30:00 AM	6.132	6.1368			N/A
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5/3/2019	AUDNOK	3:30:00 PM	6.1369	6.1367			N/A
5/3/2019	AUDNOK.fx	9:30:00 AM	6.1307	6.1318			N/A
5/3/2019	AUDNOK.fx	11:30:00 AM	6.1336	6.1347			N/A
5/3/2019	AUDNOK.fx	1:30:00 PM	6.1346	6.1367			N/A
5/3/2019	AUDNOK.fx	3:30:00 PM	6.137	6.1352			N/A
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5/3/2019	AUDNZD	3:30:00 PM	1.05712	1.05745			N/A
5/3/2019	AUDNZD.fx	9:30:00 AM	1.05669	1.05664			N/A
5/3/2019	AUDNZD.fx	11:30:00 AM	1.05733	1.05735			N/A
5/3/2019	AUDNZD.fx	1:30:00 PM	1.05769	1.0577			N/A
5/3/2019	AUDNZD.fx	3:30:00 PM	1.0575	1.05716			N/A
5/3/2019	AUDPLN	9:30:00 AM	2.6833	2.6863			N/A
5/3/2019	AUDPLN	11:30:00 AM	2.6842	2.6874			N/A
5/3/2019	AUDPLN	1:30:00 PM	2.6884	2.6917			N/A
5/3/2019	AUDPLN	3:30:00 PM	2.6876	2.6888			N/A



5/3/2019	AUDSEK	9:30:00 AM	6.6992	6.7019			N/A
5/3/2019	AUDSEK	11:30:00 AM	6.6975	6.6997			N/A
5/3/2019	AUDSEK	1:30:00 PM	6.7143	6.7177			N/A
5/3/2019	AUDSEK	3:30:00 PM	6.7153	6.7147			N/A
5/3/2019	AUDSEK.fx	9:30:00 AM	6.6946	6.7063			N/A
5/3/2019	AUDSEK.fx	11:30:00 AM	6.6929	6.7041			N/A
5/3/2019	AUDSEK.fx	1:30:00 PM	6.7098	6.7222			N/A
5/3/2019	AUDSEK.fx	3:30:00 PM	6.7093	6.7194			N/A
5/3/2019	AUDSGD	9:30:00 AM	0.9534	0.9537			N/A
5/3/2019	AUDSGD	11:30:00 AM	0.9539	0.9541			N/A
5/3/2019	AUDSGD	1:30:00 PM	0.9542	0.9544			N/A
5/3/2019	AUDSGD	3:30:00 PM	0.9542	0.9532			N/A
5/3/2019	AUDSGD.fx	9:30:00 AM	0.95351	0.95348			N/A
5/3/2019	AUDSGD.fx	11:30:00 AM	0.95404	0.95413			N/A
5/3/2019	AUDSGD.fx	1:30:00 PM	0.95431	0.9544			N/A
5/3/2019	AUDSGD.fx	3:30:00 PM	0.95393	0.95317			N/A
5/3/2019	AUDUSD	9:30:00 AM	0.69939	0.69943			N/A
5/3/2019	AUDUSD	11:30:00 AM	0.69969	0.69981			N/A
5/3/2019	AUDUSD	1:30:00 PM	0.69961	0.69973			N/A
5/3/2019	AUDUSD	3:30:00 PM	0.69973	0.69868			N/A
5/3/2019	AUDUSD.fx	9:30:00 AM	0.69943	0.69937			N/A
5/3/2019	AUDUSD.fx	11:30:00 AM	0.69974	0.69975			N/A
5/3/2019	AUDUSD.fx	1:30:00 PM	0.69965	0.69967			N/A
5/3/2019	AUDUSD.fx	3:30:00 PM	0.69965	0.69864			N/A
5/3/2019	AUDZAR	9:30:00 AM	10.1734	10.1834			N/A
5/3/2019	AUDZAR	11:30:00 AM	10.1695	10.1811			N/A
5/3/2019	AUDZAR	1:30:00 PM	10.1625	10.1757			N/A
5/3/2019	AUDZAR	3:30:00 PM	10.1484	10.1469			N/A
5/3/2019	AUS200.i	9:30:00 AM					N/A
5/3/2019	AUS200.i	11:30:00 AM	6348.33	6352.83			N/A
5/3/2019	AUS200.i	1:30:00 PM	6347.53	6351.53			N/A
5/3/2019	AUS200.i	3:30:00 PM	6353.2	6352.63			N/A
5/3/2019	BCHUSD	9:30:00 AM	269.5	271.3			N/A
5/3/2019	BCHUSD	11:30:00 AM	265.6	267.28			N/A

5/3/2019	BCHUSD	1:30:00 PM	287.95	289.82			N/A
5/3/2019	BCHUSD	3:30:00 PM					N/A
5/3/2019	CADCHF	9:30:00 AM	0.75716	0.75788			N/A
5/3/2019	CADCHF	11:30:00 AM	0.75744	0.75816			N/A
5/3/2019	CADCHF	1:30:00 PM	0.75747	0.75821			N/A
5/3/2019	CADCHF	3:30:00 PM	0.75718	0.75727			N/A
5/3/2019	CADCHF.fx	9:30:00 AM	0.75748	0.75754			N/A
5/3/2019	CADCHF.fx	11:30:00 AM	0.75778	0.75781			N/A
5/3/2019	CADCHF.fx	1:30:00 PM	0.75782	0.75785			N/A
5/3/2019	CADCHF.fx	3:30:00 PM	0.75749	0.75706			N/A
5/3/2019	CADCZK	9:30:00 AM	17.066	17.082			N/A
5/3/2019	CADCZK	11:30:00 AM	17.076	17.092			N/A
5/3/2019	CADCZK	1:30:00 PM	17.094	17.111			N/A
5/3/2019	CADCZK	3:30:00 PM	17.097	17.099			N/A
5/3/2019	CADDDKK	9:30:00 AM	4.963	4.967			N/A
5/3/2019	CADDDKK	11:30:00 AM	4.965	4.969			N/A
5/3/2019	CADDDKK	1:30:00 PM					N/A
5/3/2019	CADDDKK	3:30:00 PM	4.967	4.968			N/A
5/3/2019	CADHKD	9:30:00 AM	5.8222	5.8261			N/A
5/3/2019	CADHKD	11:30:00 AM	5.8245	5.8284			N/A
5/3/2019	CADHKD	1:30:00 PM	5.822	5.8258			N/A
5/3/2019	CADHKD	3:30:00 PM	5.8221	5.8172			N/A
5/3/2019	CADHUF	9:30:00 AM	215.31	215.43			N/A
5/3/2019	CADHUF	11:30:00 AM	215.26	215.4			N/A
5/3/2019	CADHUF	1:30:00 PM	215.28	215.43			N/A
5/3/2019	CADHUF	3:30:00 PM	215	215			N/A
5/3/2019	CADJPY	9:30:00 AM	82.75	82.821			N/A
5/3/2019	CADJPY	11:30:00 AM	82.795	82.863			N/A
5/3/2019	CADJPY	1:30:00 PM	82.742	82.814			N/A
5/3/2019	CADJPY	3:30:00 PM	82.829	82.809			N/A
5/3/2019	CADJPY.fx	9:30:00 AM	82.783	82.785			N/A
5/3/2019	CADJPY.fx	11:30:00 AM	82.829	82.827			N/A
5/3/2019	CADJPY.fx	1:30:00 PM	82.775	82.779			N/A
5/3/2019	CADJPY.fx	3:30:00 PM	82.836	82.783			N/A

5/3/2019	CADMXN	9:30:00 AM	14.1897	14.2013			N/A
5/3/2019	CADMXN	11:30:00 AM	14.1942	14.206			N/A
5/3/2019	CADMXN	1:30:00 PM	14.1913	14.2037			N/A
5/3/2019	CADMXN	3:30:00 PM	14.1925	14.1926			N/A
5/3/2019	CADNOK	9:30:00 AM	6.5056	6.5082			N/A
5/3/2019	CADNOK	11:30:00 AM	6.5076	6.511			N/A
5/3/2019	CADNOK	1:30:00 PM	6.5074	6.5118			N/A
5/3/2019	CADNOK	3:30:00 PM	6.509	6.5059			N/A
5/3/2019	CADPLN	9:30:00 AM	2.8492	2.8511			N/A
5/3/2019	CADPLN	11:30:00 AM	2.8491	2.8508			N/A
5/3/2019	CADPLN	1:30:00 PM	2.8534	2.855			N/A
5/3/2019	CADPLN	3:30:00 PM	2.8501	2.8503			N/A
5/3/2019	CADSEK	9:30:00 AM	7.1101	7.114			N/A
5/3/2019	CADSEK	11:30:00 AM	7.1078	7.1108			N/A
5/3/2019	CADSEK	1:30:00 PM	7.1236	7.1272			N/A
5/3/2019	CADSEK	3:30:00 PM	7.1222	7.1184			N/A
5/3/2019	CADSGD	9:30:00 AM	1.0115	1.0118			N/A
5/3/2019	CADSGD	11:30:00 AM	1.0118	1.0121			N/A
5/3/2019	CADSGD	1:30:00 PM	1.012	1.0123			N/A
5/3/2019	CADSGD	3:30:00 PM	1.0116	1.0113			N/A
5/3/2019	CADZAR	9:30:00 AM	10.8013	10.8147			N/A
5/3/2019	CADZAR	11:30:00 AM	10.7965	10.8096			N/A
5/3/2019	CADZAR	1:30:00 PM	10.7848	10.8005			N/A
5/3/2019	CADZAR	3:30:00 PM	10.7713	10.7664			N/A
5/3/2019	CHFCZK	9:30:00 AM	22.532	22.55			N/A
5/3/2019	CHFCZK	11:30:00 AM	22.537	22.554			N/A
5/3/2019	CHFCZK	1:30:00 PM	22.561	22.575			N/A
5/3/2019	CHFCZK	3:30:00 PM	22.579	22.586			N/A
5/3/2019	CHFDKK	9:30:00 AM	6.552	6.555			N/A
5/3/2019	CHFDKK	11:30:00 AM	6.553	6.555			N/A
5/3/2019	CHFDKK	1:30:00 PM	6.554	6.557			N/A
5/3/2019	CHFDKK	3:30:00 PM	6.562	6.562			N/A
5/3/2019	CHFDKK.fx	9:30:00 AM	6.5504	6.5568			N/A
5/3/2019	CHFDKK.fx	11:30:00 AM	6.5513	6.5574			N/A

5/3/2019	CHFDKK.fx	1:30:00 PM	6.5529	6.5587			N/A
5/3/2019	CHFDKK.fx	3:30:00 PM	6.5602	6.5641			N/A
5/3/2019	CHFHKD	9:30:00 AM	7.687	7.6909			N/A
5/3/2019	CHFHKD	11:30:00 AM	7.6872	7.6905			N/A
5/3/2019	CHFHKD	1:30:00 PM	7.6836	7.687			N/A
5/3/2019	CHFHKD	3:30:00 PM	7.6891	7.685			N/A
5/3/2019	CHFHUF	9:30:00 AM	284.11	284.49			N/A
5/3/2019	CHFHUF	11:30:00 AM	284.02	284.36			N/A
5/3/2019	CHFHUF	1:30:00 PM	284.01	284.37			N/A
5/3/2019	CHFHUF	3:30:00 PM	283.84	284.12			N/A
5/3/2019	CHFJPY	9:30:00 AM	109.253	109.322			N/A
5/3/2019	CHFJPY	11:30:00 AM	109.272	109.335			N/A
5/3/2019	CHFJPY	1:30:00 PM	109.203	109.272			N/A
5/3/2019	CHFJPY	3:30:00 PM	109.377	109.34			N/A
5/3/2019	CHFJPY.fx	9:30:00 AM	109.286	109.288			N/A
5/3/2019	CHFJPY.fx	11:30:00 AM	109.306	109.301			N/A
5/3/2019	CHFJPY.fx	1:30:00 PM	109.236	109.237			N/A
5/3/2019	CHFJPY.fx	3:30:00 PM	109.393	109.307			N/A
5/3/2019	CHFMXN	9:30:00 AM	18.7328	18.7485			N/A
5/3/2019	CHFMXN	11:30:00 AM	18.7303	18.7468			N/A
5/3/2019	CHFMXN	1:30:00 PM	18.7269	18.7434			N/A
5/3/2019	CHFMXN	3:30:00 PM	18.7441	18.7425			N/A
5/3/2019	CHFNOK	9:30:00 AM	8.5896	8.5965			N/A
5/3/2019	CHFNOK	11:30:00 AM	8.5888	8.597			N/A
5/3/2019	CHFNOK	1:30:00 PM	8.5877	8.5951			N/A
5/3/2019	CHFNOK	3:30:00 PM	8.5958	8.6018			N/A
5/3/2019	CHFNOK.fx	9:30:00 AM	8.59276	8.59307			N/A
5/3/2019	CHFNOK.fx	11:30:00 AM	8.59218	8.59347			N/A
5/3/2019	CHFNOK.fx	1:30:00 PM	8.5912	8.59159			N/A
5/3/2019	CHFNOK.fx	3:30:00 PM	8.59853	8.59862			N/A
5/3/2019	CHFPLN	9:30:00 AM	3.7614	3.7641			N/A
5/3/2019	CHFPLN	11:30:00 AM	3.7607	3.7634			N/A
5/3/2019	CHFPLN	1:30:00 PM	3.7651	3.768			N/A
5/3/2019	CHFPLN	3:30:00 PM	3.766	3.7675			N/A

5/3/2019	CHFPLN.fx	9:30:00 AM	3.75894	3.7665			N/A
5/3/2019	CHFPLN.fx	11:30:00 AM	3.75826	3.76565			N/A
5/3/2019	CHFPLN.fx	1:30:00 PM	3.76274	3.77025			N/A
5/3/2019	CHFPLN.fx	3:30:00 PM	3.76295	3.77048			N/A
5/3/2019	CHFSEK	9:30:00 AM	9.387	9.3919			N/A
5/3/2019	CHFSEK	11:30:00 AM	9.3804	9.3836			N/A
5/3/2019	CHFSEK	1:30:00 PM	9.4008	9.4046			N/A
5/3/2019	CHFSEK	3:30:00 PM	9.403	9.4006			N/A
5/3/2019	CHFSGD	9:30:00 AM	1.3362	1.3366			N/A
5/3/2019	CHFSGD	11:30:00 AM	1.3361	1.3366			N/A
5/3/2019	CHFSGD	1:30:00 PM	1.3361	1.3365			N/A
5/3/2019	CHFSGD	3:30:00 PM	1.3371	1.3359			N/A
5/3/2019	CHFSGD.fx	9:30:00 AM	1.33633	1.33639			N/A
5/3/2019	CHFSGD.fx	11:30:00 AM	1.33643	1.33638			N/A
5/3/2019	CHFSGD.fx	1:30:00 PM	1.33631	1.33637			N/A
5/3/2019	CHFSGD.fx	3:30:00 PM	1.3365	1.33574			N/A
5/3/2019	CHFZAR	9:30:00 AM	14.2636	14.2731			N/A
5/3/2019	CHFZAR	11:30:00 AM	14.2511	14.2604			N/A
5/3/2019	CHFZAR	1:30:00 PM	14.2357	14.2484			N/A
5/3/2019	CHFZAR	3:30:00 PM	14.2329	14.2203			N/A
5/3/2019	CZKJPY	9:30:00 AM					N/A
5/3/2019	CZKJPY	11:30:00 AM					N/A
5/3/2019	CZKJPY	1:30:00 PM	4.839	4.843			N/A
5/3/2019	CZKJPY	3:30:00 PM	4.844	4.845			N/A
5/3/2019	DAX30.i	9:30:00 AM	12354.57	12354.07			N/A
5/3/2019	DAX30.i	11:30:00 AM	12399.32	12398.82			N/A
5/3/2019	DAX30.i	1:30:00 PM	12384.32	12382.82			N/A
5/3/2019	DAX30.i	3:30:00 PM	12440.51	12405.07			N/A
5/3/2019	DJ30.i	9:30:00 AM					N/A
5/3/2019	DJ30.i	11:30:00 AM					N/A
5/3/2019	DJ30.i	1:30:00 PM					N/A
5/3/2019	DJ30.i	3:30:00 PM					N/A
5/3/2019	DKKJPY	9:30:00 AM					N/A
5/3/2019	DKKJPY	11:30:00 AM					N/A

5/3/2019	DKKJPY	1:30:00 PM					N/A
5/3/2019	DKKJPY	3:30:00 PM	16.68	16.69			N/A
5/3/2019	EURAUD	9:30:00 AM	1.59579	1.59613			N/A
5/3/2019	EURAUD	11:30:00 AM	1.59468	1.5951			N/A
5/3/2019	EURAUD	1:30:00 PM	1.59368	1.59416			N/A
5/3/2019	EURAUD	3:30:00 PM	1.5939	1.59326			N/A
5/3/2019	EURAUD.fx	9:30:00 AM	1.59599	1.59591			N/A
5/3/2019	EURAUD.fx	11:30:00 AM	1.59489	1.59487			N/A
5/3/2019	EURAUD.fx	1:30:00 PM	1.5939	1.59394			N/A
5/3/2019	EURAUD.fx	3:30:00 PM	1.59411	1.59317			N/A
5/3/2019	EURCAD	9:30:00 AM	1.50337	1.50424			N/A
5/3/2019	EURCAD	11:30:00 AM	1.50267	1.50345			N/A
5/3/2019	EURCAD	1:30:00 PM	1.50226	1.50308			N/A
5/3/2019	EURCAD	3:30:00 PM	1.50276	1.50215			N/A
5/3/2019	EURCAD.fx	9:30:00 AM	1.5038	1.50381			N/A
5/3/2019	EURCAD.fx	11:30:00 AM	1.50309	1.50303			N/A
5/3/2019	EURCAD.fx	1:30:00 PM	1.50267	1.50265			N/A
5/3/2019	EURCAD.fx	3:30:00 PM	1.50296	1.50176			N/A
5/3/2019	EURCHF	9:30:00 AM	1.13908	1.13925			N/A
5/3/2019	EURCHF	11:30:00 AM	1.139	1.1391			N/A
5/3/2019	EURCHF	1:30:00 PM	1.13874	1.1388	500	500	N/A
5/3/2019	EURCHF	3:30:00 PM	1.13789	1.13754			N/A
5/3/2019	EURCHF.fx	9:30:00 AM	1.13914	1.13919			N/A
5/3/2019	EURCHF.fx	11:30:00 AM	1.13907	1.13904			N/A
5/3/2019	EURCHF.fx	1:30:00 PM	1.13879	1.13874			N/A
5/3/2019	EURCHF.fx	3:30:00 PM	1.1379	1.1375			N/A
5/3/2019	EURCZK	9:30:00 AM	25.655	25.693			N/A
5/3/2019	EURCZK	11:30:00 AM	25.657	25.696			N/A
5/3/2019	EURCZK	1:30:00 PM	25.677	25.716			N/A
5/3/2019	EURCZK	3:30:00 PM	25.67	25.705			N/A
5/3/2019	EURDKK	9:30:00 AM	7.4627	7.4631			N/A
5/3/2019	EURDKK	11:30:00 AM	7.4629	7.4632			N/A
5/3/2019	EURDKK	1:30:00 PM	7.4647	7.4649			N/A
5/3/2019	EURDKK	3:30:00 PM	7.4645	7.4654			N/A

5/3/2019	EURGBP	9:30:00 AM	0.85665	0.85678			N/A
5/3/2019	EURGBP	11:30:00 AM	0.85743	0.8574			N/A
5/3/2019	EURGBP	1:30:00 PM	0.85849	0.85857			N/A
5/3/2019	EURGBP	3:30:00 PM	0.85792	0.85733			N/A
5/3/2019	EURGBP.fx	9:30:00 AM	0.85668	0.85672			N/A
5/3/2019	EURGBP.fx	11:30:00 AM	0.85745	0.85735			N/A
5/3/2019	EURGBP.fx	1:30:00 PM	0.85852	0.85852			N/A
5/3/2019	EURGBP.fx	3:30:00 PM	0.85786	0.85728			N/A
5/3/2019	EURHKD	9:30:00 AM	8.7572	8.7623			N/A
5/3/2019	EURHKD	11:30:00 AM	8.7556	8.761			N/A
5/3/2019	EURHKD	1:30:00 PM	8.7499	8.7546			N/A
5/3/2019	EURHKD	3:30:00 PM	8.7484	8.7387			N/A
5/3/2019	EURHKD.fx	9:30:00 AM	8.75999	8.75933			N/A
5/3/2019	EURHKD.fx	11:30:00 AM	8.75847	8.75813			N/A
5/3/2019	EURHKD.fx	1:30:00 PM	8.75278	8.75181			N/A
5/3/2019	EURHKD.fx	3:30:00 PM	8.75037	8.73606			N/A
5/3/2019	EURHUF	9:30:00 AM	323.74	324.45			N/A
5/3/2019	EURHUF	11:30:00 AM	323.52	324.12			N/A
5/3/2019	EURHUF	1:30:00 PM	323.33	323.95			N/A
5/3/2019	EURHUF	3:30:00 PM	323.03	323.73			N/A
5/3/2019	EURHUF.fx	9:30:00 AM	324.011	324.204			N/A
5/3/2019	EURHUF.fx	11:30:00 AM	323.841	323.97			N/A
5/3/2019	EURHUF.fx	1:30:00 PM	323.659	323.808			N/A
5/3/2019	EURHUF.fx	3:30:00 PM	323.308	323.451			N/A
5/3/2019	EURJPY	9:30:00 AM	124.491	124.499			N/A
5/3/2019	EURJPY	11:30:00 AM	124.498	124.506			N/A
5/3/2019	EURJPY	1:30:00 PM	124.399	124.395			N/A
5/3/2019	EURJPY	3:30:00 PM	124.457	124.335			N/A
5/3/2019	EURJPY.fx	9:30:00 AM	124.493	124.496			N/A
5/3/2019	EURJPY.fx	11:30:00 AM	124.5	124.503			N/A
5/3/2019	EURJPY.fx	1:30:00 PM	124.401	124.392			N/A
5/3/2019	EURJPY.fx	3:30:00 PM	124.452	124.333			N/A
5/3/2019	EURMXN	9:30:00 AM	21.3423	21.3595			N/A
5/3/2019	EURMXN	11:30:00 AM	21.3388	21.3591			N/A

5/3/2019	EURMXN	1:30:00 PM	21.3286	21.3479			N/A
5/3/2019	EURMXN	3:30:00 PM	21.3509	21.3306			N/A
5/3/2019	EURMXN.fx	9:30:00 AM	21.3508	21.3502			N/A
5/3/2019	EURMXN.fx	11:30:00 AM	21.3477	21.3498			N/A
5/3/2019	EURMXN.fx	1:30:00 PM	21.3378	21.3388			N/A
5/3/2019	EURMXN.fx	3:30:00 PM	21.3601	21.3221			N/A
5/3/2019	EURNOK	9:30:00 AM	9.7833	9.7942			N/A
5/3/2019	EURNOK	11:30:00 AM	9.7817	9.794			N/A
5/3/2019	EURNOK	1:30:00 PM	9.7776	9.7899			N/A
5/3/2019	EURNOK	3:30:00 PM	9.779	9.7879			N/A
5/3/2019	EURNOK.fx	9:30:00 AM	9.78863	9.78877			N/A
5/3/2019	EURNOK.fx	11:30:00 AM	9.78746	9.7886			N/A
5/3/2019	EURNOK.fx	1:30:00 PM	9.78305	9.78436			N/A
5/3/2019	EURNOK.fx	3:30:00 PM	9.78242	9.7831			N/A
5/3/2019	EURNZD	9:30:00 AM	1.68663	1.68739			N/A
5/3/2019	EURNZD	11:30:00 AM	1.68656	1.68744			N/A
5/3/2019	EURNZD	1:30:00 PM	1.68616	1.68694	21100	21100	N/A
5/3/2019	EURNZD	3:30:00 PM	1.68556	1.68509			N/A
5/3/2019	EURNZD.fx	9:30:00 AM	1.68705	1.68696			N/A
5/3/2019	EURNZD.fx	11:30:00 AM	1.68697	1.68703			N/A
5/3/2019	EURNZD.fx	1:30:00 PM	1.68659	1.68652			N/A
5/3/2019	EURNZD.fx	3:30:00 PM	1.68587	1.68489			N/A
5/3/2019	EURPLN	9:30:00 AM	4.2849	4.2877			N/A
5/3/2019	EURPLN	11:30:00 AM	4.2837	4.2855			N/A
5/3/2019	EURPLN	1:30:00 PM	4.2876	4.291			N/A
5/3/2019	EURPLN	3:30:00 PM	4.2841	4.2868			N/A
5/3/2019	EURPLN.fx	9:30:00 AM	4.28417	4.28899			N/A
5/3/2019	EURPLN.fx	11:30:00 AM	4.28308	4.28762			N/A
5/3/2019	EURPLN.fx	1:30:00 PM	4.28697	4.29162			N/A
5/3/2019	EURPLN.fx	3:30:00 PM	4.28286	4.28779			N/A
5/3/2019	EURRUB	9:30:00 AM					N/A
5/3/2019	EURRUB	11:30:00 AM	72.633	73.047			N/A
5/3/2019	EURRUB	1:30:00 PM	72.55	72.985			N/A
5/3/2019	EURRUB	3:30:00 PM	72.467	72.824			N/A



5/3/2019	EURSEK	9:30:00 AM	10.6951	10.7001			N/A
5/3/2019	EURSEK	11:30:00 AM	10.686	10.6892			N/A
5/3/2019	EURSEK	1:30:00 PM	10.7066	10.7107			N/A
5/3/2019	EURSEK	3:30:00 PM	10.7046	10.7062			N/A
5/3/2019	EURSEK.fx	9:30:00 AM	10.69687	10.69832			N/A
5/3/2019	EURSEK.fx	11:30:00 AM	10.68765	10.68744			N/A
5/3/2019	EURSEK.fx	1:30:00 PM	10.70823	10.70889			N/A
5/3/2019	EURSEK.fx	3:30:00 PM	10.70597	10.70567			N/A
5/3/2019	EURSGD	9:30:00 AM	1.5219	1.5227			N/A
5/3/2019	EURSGD	11:30:00 AM	1.5218	1.5227			N/A
5/3/2019	EURSGD	1:30:00 PM	1.5214	1.5222			N/A
5/3/2019	EURSGD	3:30:00 PM	1.5209	1.5197			N/A
5/3/2019	EURSGD.fx	9:30:00 AM	1.52229	1.5223			N/A
5/3/2019	EURSGD.fx	11:30:00 AM	1.52219	1.52227			N/A
5/3/2019	EURSGD.fx	1:30:00 PM	1.52179	1.52177			N/A
5/3/2019	EURSGD.fx	3:30:00 PM	1.52081	1.51929			N/A
5/3/2019	EURUSD	9:30:00 AM	1.11644	1.11651			N/A
5/3/2019	EURUSD	11:30:00 AM	1.11623	1.11635	10	10	N/A
5/3/2019	EURUSD	1:30:00 PM	1.11548	1.11552	300	10	N/A
5/3/2019	EURUSD	3:30:00 PM	1.11532	1.11347	10	40	N/A
5/3/2019	EURUSD.fx	9:30:00 AM	1.11664	1.1166			N/A
5/3/2019	EURUSD.fx	11:30:00 AM	1.11644	1.11644			N/A
5/3/2019	EURUSD.fx	1:30:00 PM	1.11569	1.11561			N/A
5/3/2019	EURUSD.fx	3:30:00 PM	1.11542	1.11358			N/A
5/3/2019	EURZAR	9:30:00 AM	16.2522	16.2692			N/A
5/3/2019	EURZAR	11:30:00 AM	16.2373	16.2541			N/A
5/3/2019	EURZAR	1:30:00 PM	16.212	16.2278			N/A
5/3/2019	EURZAR	3:30:00 PM	16.2038	16.1732			N/A
5/3/2019	EURZAR.fx	9:30:00 AM	16.25235	16.26907			N/A
5/3/2019	EURZAR.fx	11:30:00 AM	16.23667	16.25482			N/A
5/3/2019	EURZAR.fx	1:30:00 PM	16.21184	16.22865			N/A
5/3/2019	EURZAR.fx	3:30:00 PM	16.19289	16.17364			N/A
5/3/2019	GBPAUD	9:30:00 AM	1.86336	1.86399			N/A
5/3/2019	GBPAUD	11:30:00 AM	1.86075	1.86115			N/A

5/3/2019	GBPAUD	1:30:00 PM	1.85704	1.85774		100	N/A
5/3/2019	GBPAUD	3:30:00 PM	1.85958	1.85829			N/A
5/3/2019	GBPAUD.fx	9:30:00 AM	1.86378	1.86359			N/A
5/3/2019	GBPAUD.fx	11:30:00 AM	1.86114	1.86079			N/A
5/3/2019	GBPAUD.fx	1:30:00 PM	1.85745	1.85735			N/A
5/3/2019	GBPAUD.fx	3:30:00 PM	1.85998	1.8582			N/A
5/3/2019	GBPCAD	9:30:00 AM	1.75502	1.7558			N/A
5/3/2019	GBPCAD	11:30:00 AM	1.75292	1.75335			N/A
5/3/2019	GBPCAD	1:30:00 PM	1.74997	1.75076			N/A
5/3/2019	GBPCAD	3:30:00 PM	1.75184	1.75156			N/A
5/3/2019	GBPCAD.fx	9:30:00 AM	1.75536	1.75541			N/A
5/3/2019	GBPCAD.fx	11:30:00 AM	1.75332	1.753			N/A
5/3/2019	GBPCAD.fx	1:30:00 PM	1.75036	1.75037			N/A
5/3/2019	GBPCAD.fx	3:30:00 PM	1.75206	1.75129			N/A
5/3/2019	GBPCHF	9:30:00 AM	1.32945	1.32991			N/A
5/3/2019	GBPCHF	11:30:00 AM	1.32843	1.32859			N/A
5/3/2019	GBPCHF	1:30:00 PM	1.32621	1.32659			N/A
5/3/2019	GBPCHF	3:30:00 PM	1.3267	1.32634			N/A
5/3/2019	GBPCHF.fx	9:30:00 AM	1.32962	1.32971			N/A
5/3/2019	GBPCHF.fx	11:30:00 AM	1.32863	1.32841			N/A
5/3/2019	GBPCHF.fx	1:30:00 PM	1.32643	1.32639			N/A
5/3/2019	GBPCHF.fx	3:30:00 PM	1.32688	1.32631			N/A
5/3/2019	GBPCZK	9:30:00 AM	29.957	29.98			N/A
5/3/2019	GBPCZK	11:30:00 AM	29.943	29.956			N/A
5/3/2019	GBPCZK	1:30:00 PM	29.922	29.942			N/A
5/3/2019	GBPCZK	3:30:00 PM	29.939	29.954			N/A
5/3/2019	GBPDKK	9:30:00 AM	8.709	8.72			N/A
5/3/2019	GBPDKK	11:30:00 AM	8.703	8.714			N/A
5/3/2019	GBPDKK	1:30:00 PM	8.691	8.702			N/A
5/3/2019	GBPDKK	3:30:00 PM	8.704	8.707			N/A
5/3/2019	GBPDKK.fx	9:30:00 AM	8.7077	8.7208			N/A
5/3/2019	GBPDKK.fx	11:30:00 AM	8.7015	8.7141			N/A
5/3/2019	GBPDKK.fx	1:30:00 PM	8.6895	8.7021			N/A
5/3/2019	GBPDKK.fx	3:30:00 PM	8.7023	8.71			N/A

5/3/2019	GBPHKD	9:30:00 AM	10.2196	10.225			N/A
5/3/2019	GBPHKD	11:30:00 AM	10.2112	10.2149			N/A
5/3/2019	GBPHKD	1:30:00 PM	10.1905	10.1952			N/A
5/3/2019	GBPHKD	3:30:00 PM	10.1952	10.1895			N/A
5/3/2019	GBPHUF	9:30:00 AM	377.71	378.19			N/A
5/3/2019	GBPHUF	11:30:00 AM	377.42	377.65			N/A
5/3/2019	GBPHUF	1:30:00 PM	376.7	377.15			N/A
5/3/2019	GBPHUF	3:30:00 PM	376.38	376.75			N/A
5/3/2019	GBPJPY	9:30:00 AM	145.292	145.34			N/A
5/3/2019	GBPJPY	11:30:00 AM	145.197	145.222			N/A
5/3/2019	GBPJPY	1:30:00 PM	144.875	144.911			N/A
5/3/2019	GBPJPY	3:30:00 PM	145.074	145.035			N/A
5/3/2019	GBPJPY.fx	9:30:00 AM	145.311	145.321			N/A
5/3/2019	GBPJPY.fx	11:30:00 AM	145.218	145.207			N/A
5/3/2019	GBPJPY.fx	1:30:00 PM	144.894	144.891			N/A
5/3/2019	GBPJPY.fx	3:30:00 PM	145.078	145.021			N/A
5/3/2019	GBPMXN	9:30:00 AM	24.9095	24.9234			N/A
5/3/2019	GBPMXN	11:30:00 AM	24.8888	24.898			N/A
5/3/2019	GBPMXN	1:30:00 PM	24.8411	24.8556			N/A
5/3/2019	GBPMXN	3:30:00 PM	24.854	24.8529			N/A
5/3/2019	GBPNOK	9:30:00 AM	11.4218	11.4313			N/A
5/3/2019	GBPNOK	11:30:00 AM	11.4112	11.4218			N/A
5/3/2019	GBPNOK	1:30:00 PM	11.3905	11.4016			N/A
5/3/2019	GBPNOK	3:30:00 PM	11.4051	11.4086			N/A
5/3/2019	GBPNOK.fx	9:30:00 AM	11.42661	11.42654			N/A
5/3/2019	GBPNOK.fx	11:30:00 AM	11.416	11.41772			N/A
5/3/2019	GBPNOK.fx	1:30:00 PM	11.39532	11.39678			N/A
5/3/2019	GBPNOK.fx	3:30:00 PM	11.40952	11.40865			N/A
5/3/2019	GBPNZD	9:30:00 AM	1.96889	1.96961			N/A
5/3/2019	GBPNZD	11:30:00 AM	1.96741	1.96796			N/A
5/3/2019	GBPNZD	1:30:00 PM	1.96415	1.96487			N/A
5/3/2019	GBPNZD	3:30:00 PM	1.96612	1.96452			N/A
5/3/2019	GBPNZD.fx	9:30:00 AM	1.96924	1.96922			N/A
5/3/2019	GBPNZD.fx	11:30:00 AM	1.96774	1.96766			N/A

5/3/2019	GBPNZD.fx	1:30:00 PM	1.96451	1.9645			N/A
5/3/2019	GBPNZD.fx	3:30:00 PM	1.96637	1.96424			N/A
5/3/2019	GBPPLN	9:30:00 AM	5.0029	5.0041			N/A
5/3/2019	GBPPLN	11:30:00 AM	4.9979	4.9985			N/A
5/3/2019	GBPPLN	1:30:00 PM	4.9954	4.9972			N/A
5/3/2019	GBPPLN	3:30:00 PM	4.9983	4.9964			N/A
5/3/2019	GBPPLN.fx	9:30:00 AM	5.00046	5.00654			N/A
5/3/2019	GBPPLN.fx	11:30:00 AM	4.99549	5.00104			N/A
5/3/2019	GBPPLN.fx	1:30:00 PM	4.99321	4.99938			N/A
5/3/2019	GBPPLN.fx	3:30:00 PM	4.99529	5.00022			N/A
5/3/2019	GBPSEK	9:30:00 AM	12.4819	12.4915			N/A
5/3/2019	GBPSEK	11:30:00 AM	12.4608	12.4676			N/A
5/3/2019	GBPSEK	1:30:00 PM	12.4696	12.4775			N/A
5/3/2019	GBPSEK	3:30:00 PM	12.4833	12.4817			N/A
5/3/2019	GBPSEK.fx	9:30:00 AM	12.47828	12.49499			N/A
5/3/2019	GBPSEK.fx	11:30:00 AM	12.4576	12.47197			N/A
5/3/2019	GBPSEK.fx	1:30:00 PM	12.46592	12.48125			N/A
5/3/2019	GBPSEK.fx	3:30:00 PM	12.47897	12.48862			N/A
5/3/2019	GBPSGD	9:30:00 AM	1.7766	1.7763			N/A
5/3/2019	GBPSGD	11:30:00 AM	1.7753	1.7758			N/A
5/3/2019	GBPSGD	1:30:00 PM	1.7723	1.7731			N/A
5/3/2019	GBPSGD	3:30:00 PM	1.7731	1.7722			N/A
5/3/2019	GBPSGD.fx	9:30:00 AM	1.77477	1.77927			N/A
5/3/2019	GBPSGD.fx	11:30:00 AM	1.77348	1.77771			N/A
5/3/2019	GBPSGD.fx	1:30:00 PM	1.77045	1.77485			N/A
5/3/2019	GBPSGD.fx	3:30:00 PM	1.77099	1.77461			N/A
5/3/2019	GBPUSD	9:30:00 AM	1.30344	1.3035			N/A
5/3/2019	GBPUSD	11:30:00 AM	1.30228	1.3022			N/A
5/3/2019	GBPUSD	1:30:00 PM	1.29957	1.2996	40	20500	N/A
5/3/2019	GBPUSD	3:30:00 PM	1.30034	1.29903			N/A
5/3/2019	GBPUSD.fx	9:30:00 AM	1.3035	1.30344			N/A
5/3/2019	GBPUSD.fx	11:30:00 AM	1.30234	1.30213			N/A
5/3/2019	GBPUSD.fx	1:30:00 PM	1.29963	1.29954			N/A
5/3/2019	GBPUSD.fx	3:30:00 PM	1.30034	1.29898			N/A

5/3/2019	GBPZAR	9:30:00 AM	18.9736	18.9996			N/A
5/3/2019	GBPZAR	11:30:00 AM	18.9413	18.966			N/A
5/3/2019	GBPZAR	1:30:00 PM	18.8868	18.9118			N/A
5/3/2019	GBPZAR	3:30:00 PM	18.8909	18.8628			N/A
5/3/2019	GBPZAR.fx	9:30:00 AM	18.9806	18.9917			N/A
5/3/2019	GBPZAR.fx	11:30:00 AM	18.9478	18.9619			N/A
5/3/2019	GBPZAR.fx	1:30:00 PM	18.8941	18.9048			N/A
5/3/2019	GBPZAR.fx	3:30:00 PM	18.8944	18.859			N/A
5/3/2019	GOLD	9:30:00 AM	1271.97	1272.28			N/A
5/3/2019	GOLD	11:30:00 AM	1269.84	1270.16			N/A
5/3/2019	GOLD	1:30:00 PM	1270.45	1270.81			N/A
5/3/2019	GOLD	3:30:00 PM	1271.94	1269.02			N/A
5/3/2019	HKDJPY	9:30:00 AM					N/A
5/3/2019	HKDJPY	11:30:00 AM	14.21	14.22			N/A
5/3/2019	HKDJPY	1:30:00 PM					N/A
5/3/2019	HKDJPY	3:30:00 PM	14.23	14.23			N/A
5/3/2019	HKDJPY.fx	9:30:00 AM	14.206	14.214			N/A
5/3/2019	HKDJPY.fx	11:30:00 AM	14.21	14.218			N/A
5/3/2019	HKDJPY.fx	1:30:00 PM	14.207	14.215			N/A
5/3/2019	HKDJPY.fx	3:30:00 PM	14.228	14.227			N/A
5/3/2019	HUFJPY	9:30:00 AM	0.3846	0.385			N/A
5/3/2019	HUFJPY	11:30:00 AM	0.3846	0.3849			N/A
5/3/2019	HUFJPY	1:30:00 PM	0.3844	0.3847			N/A
5/3/2019	HUFJPY	3:30:00 PM	0.3852	0.3855			N/A
5/3/2019	JP225.i	9:30:00 AM	22284.13	22299.13			N/A
5/3/2019	JP225.i	11:30:00 AM	22339.13	22351.63			N/A
5/3/2019	JP225.i	1:30:00 PM	22318.3	22334.13			N/A
5/3/2019	JP225.i	3:30:00 PM	22379.96	22374.13			N/A
5/3/2019	MXNJPY	9:30:00 AM	5.83	5.84			N/A
5/3/2019	MXNJPY	11:30:00 AM					N/A
5/3/2019	MXNJPY	1:30:00 PM					N/A
5/3/2019	MXNJPY	3:30:00 PM	5.83	5.83			N/A
5/3/2019	NASDAQ.i	9:30:00 AM					N/A
5/3/2019	NASDAQ.i	11:30:00 AM					N/A

5/3/2019	NASDAQ.i	1:30:00 PM					N/A
5/3/2019	NASDAQ.i	3:30:00 PM					N/A
5/3/2019	NOKJPY	9:30:00 AM	12.71	12.74			N/A
5/3/2019	NOKJPY	11:30:00 AM	12.71	12.74			N/A
5/3/2019	NOKJPY	1:30:00 PM	12.69	12.73			N/A
5/3/2019	NOKJPY	3:30:00 PM	12.71	12.73			N/A
5/3/2019	NOKJPY.fx	9:30:00 AM	12.715	12.72			N/A
5/3/2019	NOKJPY.fx	11:30:00 AM	12.716	12.724			N/A
5/3/2019	NOKJPY.fx	1:30:00 PM	12.711	12.718			N/A
5/3/2019	NOKJPY.fx	3:30:00 PM	12.712	12.715			N/A
5/3/2019	NZDCAD	9:30:00 AM	0.89103	0.89176			N/A
5/3/2019	NZDCAD	11:30:00 AM	0.89062	0.8913			N/A
5/3/2019	NZDCAD	1:30:00 PM	0.89061	0.89136			N/A
5/3/2019	NZDCAD	3:30:00 PM	0.89151	0.89128			N/A
5/3/2019	NZDCAD.fx	9:30:00 AM	0.89136	0.89142			N/A
5/3/2019	NZDCAD.fx	11:30:00 AM	0.89095	0.89097			N/A
5/3/2019	NZDCAD.fx	1:30:00 PM	0.89095	0.89102			N/A
5/3/2019	NZDCAD.fx	3:30:00 PM	0.89143	0.89099			N/A
5/3/2019	NZDCHF	9:30:00 AM	0.67491	0.67562			N/A
5/3/2019	NZDCHF	11:30:00 AM	0.67485	0.67556			N/A
5/3/2019	NZDCHF	1:30:00 PM	0.67487	0.67559			N/A
5/3/2019	NZDCHF	3:30:00 PM	0.67506	0.67516			N/A
5/3/2019	NZDCHF.fx	9:30:00 AM	0.67525	0.67527			N/A
5/3/2019	NZDCHF.fx	11:30:00 AM	0.67518	0.6752			N/A
5/3/2019	NZDCHF.fx	1:30:00 PM	0.67521	0.67524			N/A
5/3/2019	NZDCHF.fx	3:30:00 PM	0.67531	0.67483			N/A
5/3/2019	NZDCZK	9:30:00 AM	15.212	15.223			N/A
5/3/2019	NZDCZK	11:30:00 AM	15.213	15.225			N/A
5/3/2019	NZDCZK	1:30:00 PM	15.229	15.241			N/A
5/3/2019	NZDCZK	3:30:00 PM	15.243	15.241			N/A
5/3/2019	NZDDKK	9:30:00 AM					N/A
5/3/2019	NZDDKK	11:30:00 AM					N/A
5/3/2019	NZDDKK	1:30:00 PM	4.425	4.428			N/A
5/3/2019	NZDDKK	3:30:00 PM	4.427	4.428			N/A

5/3/2019	NZDHKD	9:30:00 AM					N/A
5/3/2019	NZDHKD	11:30:00 AM	5.1889	5.1914			N/A
5/3/2019	NZDHKD	1:30:00 PM	5.1863	5.1891			N/A
5/3/2019	NZDHKD	3:30:00 PM	5.1894	5.184			N/A
5/3/2019	NZDHUF	9:30:00 AM	191.83	192.08			N/A
5/3/2019	NZDHUF	11:30:00 AM	191.66	191.95			N/A
5/3/2019	NZDHUF	1:30:00 PM	191.71	191.98			N/A
5/3/2019	NZDHUF	3:30:00 PM	191.59	191.72			N/A
5/3/2019	NZDJPY	9:30:00 AM	73.76	73.83			N/A
5/3/2019	NZDJPY	11:30:00 AM	73.759	73.836			N/A
5/3/2019	NZDJPY	1:30:00 PM	73.717	73.791			N/A
5/3/2019	NZDJPY	3:30:00 PM	73.837	73.795			N/A
5/3/2019	NZDJPY.fx	9:30:00 AM	73.791	73.797			N/A
5/3/2019	NZDJPY.fx	11:30:00 AM	73.79	73.804			N/A
5/3/2019	NZDJPY.fx	1:30:00 PM	73.748	73.759			N/A
5/3/2019	NZDJPY.fx	3:30:00 PM	73.837	73.765			N/A
5/3/2019	NZDMXN	9:30:00 AM	12.6481	12.6533			N/A
5/3/2019	NZDMXN	11:30:00 AM	12.6463	12.652			N/A
5/3/2019	NZDMXN	1:30:00 PM	12.6434	12.6499			N/A
5/3/2019	NZDMXN	3:30:00 PM	12.6498	12.6476			N/A
5/3/2019	NZDNOK	9:30:00 AM	5.7978	5.7998			N/A
5/3/2019	NZDNOK	11:30:00 AM	5.7967	5.7997			N/A
5/3/2019	NZDNOK	1:30:00 PM	5.7968	5.8001			N/A
5/3/2019	NZDNOK	3:30:00 PM	5.8018	5.7983			N/A
5/3/2019	NZDPLN	9:30:00 AM	2.5395	2.5408			N/A
5/3/2019	NZDPLN	11:30:00 AM	2.5382	2.5396			N/A
5/3/2019	NZDPLN	1:30:00 PM	2.5418	2.5429			N/A
5/3/2019	NZDPLN	3:30:00 PM	2.5398	2.541			N/A
5/3/2019	NZDSEK	9:30:00 AM	6.335	6.3419			N/A
5/3/2019	NZDSEK	11:30:00 AM	6.3302	6.3358			N/A
5/3/2019	NZDSEK	1:30:00 PM	6.3436	6.3502			N/A
5/3/2019	NZDSEK	3:30:00 PM	6.3454	6.3461			N/A
5/3/2019	NZDSGD	9:30:00 AM	0.9021	0.9027			N/A
5/3/2019	NZDSGD	11:30:00 AM	0.902	0.9025			N/A

5/3/2019	NZDSGD	1:30:00 PM	0.9019	0.9025			N/A
5/3/2019	NZDSGD	3:30:00 PM	0.9026	0.9017			N/A
5/3/2019	NZDSGD.fx	9:30:00 AM	0.90213	0.90267			N/A
5/3/2019	NZDSGD.fx	11:30:00 AM	0.902	0.90265			N/A
5/3/2019	NZDSGD.fx	1:30:00 PM	0.90199	0.90262			N/A
5/3/2019	NZDSGD.fx	3:30:00 PM	0.90227	0.90167			N/A
5/3/2019	NZDUSD	9:30:00 AM	0.66182	0.66192			N/A
5/3/2019	NZDUSD	11:30:00 AM	0.66164	0.66183			N/A
5/3/2019	NZDUSD	1:30:00 PM	0.66138	0.66154			N/A
5/3/2019	NZDUSD	3:30:00 PM	0.66185	0.66069			N/A
5/3/2019	NZDUSD.fx	9:30:00 AM	0.66189	0.66194			N/A
5/3/2019	NZDUSD.fx	11:30:00 AM	0.66171	0.66185			N/A
5/3/2019	NZDUSD.fx	1:30:00 PM	0.66145	0.66155			N/A
5/3/2019	NZDUSD.fx	3:30:00 PM	0.66173	0.66072			N/A
5/3/2019	NZDZAR	9:30:00 AM	9.6254	9.6387			N/A
5/3/2019	NZDZAR	11:30:00 AM	9.6163	9.6297			N/A
5/3/2019	NZDZAR	1:30:00 PM	9.6057	9.6216			N/A
5/3/2019	NZDZAR	3:30:00 PM	9.5993	9.5962			N/A
5/3/2019	SEKJPY	9:30:00 AM	11.64	11.65			N/A
5/3/2019	SEKJPY	11:30:00 AM	11.65	11.66			N/A
5/3/2019	SEKJPY	1:30:00 PM	11.62	11.63			N/A
5/3/2019	SEKJPY	3:30:00 PM	11.63	11.63			N/A
5/3/2019	SEKJPY.fx	9:30:00 AM	11.628	11.647			N/A
5/3/2019	SEKJPY.fx	11:30:00 AM	11.64	11.659			N/A
5/3/2019	SEKJPY.fx	1:30:00 PM	11.606	11.625			N/A
5/3/2019	SEKJPY.fx	3:30:00 PM	11.611	11.625			N/A
5/3/2019	SGDJPY	9:30:00 AM	81.74	81.77			N/A
5/3/2019	SGDJPY	11:30:00 AM	81.81	81.8			N/A
5/3/2019	SGDJPY	1:30:00 PM	81.75	81.74			N/A
5/3/2019	SGDJPY	3:30:00 PM	81.84	81.81			N/A
5/3/2019	SILVER	9:30:00 AM	14.45	14.82			N/A
5/3/2019	SILVER	11:30:00 AM	14.43	14.81			N/A
5/3/2019	SILVER	1:30:00 PM	14.47	14.86			N/A
5/3/2019	SILVER	3:30:00 PM	14.48	14.84			N/A



5/3/2019	SPX500.i	9:30:00 AM	2921.79	2922.84			N/A
5/3/2019	SPX500.i	11:30:00 AM	2927.29	2928.34			N/A
5/3/2019	SPX500.i	1:30:00 PM	2925.29	2926.34			N/A
5/3/2019	SPX500.i	3:30:00 PM	2929.75	2926.8			N/A
5/3/2019	UK100.i	9:30:00 AM	7362.65	7363.49			N/A
5/3/2019	UK100.i	11:30:00 AM	7394.65	7395.82			N/A
5/3/2019	UK100.i	1:30:00 PM	7413.15	7415.15			N/A
5/3/2019	UK100.i	3:30:00 PM	7420	7412.5			N/A
5/3/2019	USDCAD	9:30:00 AM	1.34673	1.34676			N/A
5/3/2019	USDCAD	11:30:00 AM	1.34633	1.34633			N/A
5/3/2019	USDCAD	1:30:00 PM	1.34687	1.34701		1000	N/A
5/3/2019	USDCAD	3:30:00 PM	1.34885	1.3469	1000	1000	N/A
5/3/2019	USDCAD.fx	9:30:00 AM	1.34674	1.34673			N/A
5/3/2019	USDCAD.fx	11:30:00 AM	1.34637	1.34629			N/A
5/3/2019	USDCAD.fx	1:30:00 PM	1.34689	1.34697			N/A
5/3/2019	USDCAD.fx	3:30:00 PM	1.34876	1.34705			N/A
5/3/2019	USDCHF	9:30:00 AM	1.02014	1.02023			N/A
5/3/2019	USDCHF	11:30:00 AM	1.02023	1.02029			N/A
5/3/2019	USDCHF	1:30:00 PM	1.02067	1.0208			N/A
5/3/2019	USDCHF	3:30:00 PM	1.02137	1.01999			N/A
5/3/2019	USDCHF.fx	9:30:00 AM	1.02018	1.02018			N/A
5/3/2019	USDCHF.fx	11:30:00 AM	1.02028	1.02023			N/A
5/3/2019	USDCHF.fx	1:30:00 PM	1.02072	1.02073			N/A
5/3/2019	USDCHF.fx	3:30:00 PM	1.02141	1.02001			N/A
5/3/2019	USDCZK	9:30:00 AM	23.002	23.024			N/A
5/3/2019	USDCZK	11:30:00 AM	23.008	23.031			N/A
5/3/2019	USDCZK	1:30:00 PM	23.04	23.062			N/A
5/3/2019	USDCZK	3:30:00 PM	23.08	23.064			N/A
5/3/2019	USDCZK.fx	9:30:00 AM	23.0103	23.0164			N/A
5/3/2019	USDCZK.fx	11:30:00 AM	23.0168	23.022			N/A
5/3/2019	USDCZK.fx	1:30:00 PM	23.048	23.0528			N/A
5/3/2019	USDCZK.fx	3:30:00 PM	23.0876	23.0606			N/A
5/3/2019	USDDKK	9:30:00 AM	6.6848	6.6885			N/A
5/3/2019	USDDKK	11:30:00 AM	6.6858	6.6899			N/A

5/3/2019	USDDKK	1:30:00 PM	6.6907	6.6944			N/A
5/3/2019	USDDKK	3:30:00 PM	6.7027	6.6957			N/A
5/3/2019	USDDKK.fx	9:30:00 AM	6.68531	6.68654			N/A
5/3/2019	USDDKK.fx	11:30:00 AM	6.6863	6.68786			N/A
5/3/2019	USDDKK.fx	1:30:00 PM	6.69121	6.6923			N/A
5/3/2019	USDDKK.fx	3:30:00 PM	6.70349	6.69413			N/A
5/3/2019	USDHKD	9:30:00 AM	7.8444	7.8449			N/A
5/3/2019	USDHKD	11:30:00 AM	7.8446	7.8449			N/A
5/3/2019	USDHKD	1:30:00 PM	7.8445	7.8442			N/A
5/3/2019	USDHKD	3:30:00 PM	7.8448	7.845			N/A
5/3/2019	USDHKD.fx	9:30:00 AM	7.84459	7.84513			N/A
5/3/2019	USDHKD.fx	11:30:00 AM	7.84461	7.84513			N/A
5/3/2019	USDHKD.fx	1:30:00 PM	7.84461	7.84521			N/A
5/3/2019	USDHKD.fx	3:30:00 PM	7.84463	7.84526			N/A
5/3/2019	USDHUF	9:30:00 AM	290.02	290.47			N/A
5/3/2019	USDHUF	11:30:00 AM	289.88	290.36			N/A
5/3/2019	USDHUF	1:30:00 PM	289.94	290.4			N/A
5/3/2019	USDHUF	3:30:00 PM	290.16	290.12			N/A
5/3/2019	USDHUF.fx	9:30:00 AM	290.22	290.275			N/A
5/3/2019	USDHUF.fx	11:30:00 AM	290.105	290.137			N/A
5/3/2019	USDHUF.fx	1:30:00 PM	290.155	290.183			N/A
5/3/2019	USDHUF.fx	3:30:00 PM	290.352	289.926			N/A
5/3/2019	USDINR	9:30:00 AM	64.26	74.25			N/A
5/3/2019	USDINR	11:30:00 AM	64.26	74.23			N/A
5/3/2019	USDINR	1:30:00 PM					N/A
5/3/2019	USDINR	3:30:00 PM					N/A
5/3/2019	USDJPY	9:30:00 AM	111.475	111.491			N/A
5/3/2019	USDJPY	11:30:00 AM	111.501	111.517			N/A
5/3/2019	USDJPY	1:30:00 PM	111.483	111.499			N/A
5/3/2019	USDJPY	3:30:00 PM	111.686	111.538		200	N/A
5/3/2019	USDJPY.fx	9:30:00 AM	111.481	111.483			N/A
5/3/2019	USDJPY.fx	11:30:00 AM	111.507	111.51			N/A
5/3/2019	USDJPY.fx	1:30:00 PM	111.489	111.492			N/A
5/3/2019	USDJPY.fx	3:30:00 PM	111.683	111.551			N/A

5/3/2019	USDMXN	9:30:00 AM	19.118	19.124			N/A
5/3/2019	USDMXN	11:30:00 AM	19.118	19.125			N/A
5/3/2019	USDMXN	1:30:00 PM	19.122	19.13			N/A
5/3/2019	USDMXN	3:30:00 PM	19.173	19.125			N/A
5/3/2019	USDMXN.fx	9:30:00 AM	19.1225	19.1208			N/A
5/3/2019	USDMXN.fx	11:30:00 AM	19.1215	19.1232			N/A
5/3/2019	USDMXN.fx	1:30:00 PM	19.1254	19.1268			N/A
5/3/2019	USDMXN.fx	3:30:00 PM	19.1765	19.1234			N/A
5/3/2019	USDNOK	9:30:00 AM	8.7634	8.7707			N/A
5/3/2019	USDNOK	11:30:00 AM	8.7629	8.7714			N/A
5/3/2019	USDNOK	1:30:00 PM	8.7657	8.7736			N/A
5/3/2019	USDNOK	3:30:00 PM	8.78	8.7776			N/A
5/3/2019	USDNOK.fx	9:30:00 AM	8.76716	8.76573			N/A
5/3/2019	USDNOK.fx	11:30:00 AM	8.76708	8.76706			N/A
5/3/2019	USDNOK.fx	1:30:00 PM	8.76953	8.76923			N/A
5/3/2019	USDNOK.fx	3:30:00 PM	8.78346	8.77437			N/A
5/3/2019	USDPLN	9:30:00 AM	3.8382	3.8391			N/A
5/3/2019	USDPLN	11:30:00 AM	3.8376	3.8388			N/A
5/3/2019	USDPLN	1:30:00 PM	3.8439	3.8453			N/A
5/3/2019	USDPLN	3:30:00 PM	3.8475	3.8425			N/A
5/3/2019	USDPLN.fx	9:30:00 AM	3.83731	3.83991			N/A
5/3/2019	USDPLN.fx	11:30:00 AM	3.83679	3.83943			N/A
5/3/2019	USDPLN.fx	1:30:00 PM	3.84316	3.84601			N/A
5/3/2019	USDPLN.fx	3:30:00 PM	3.84618	3.84367			N/A
5/3/2019	USDRUB	9:30:00 AM					N/A
5/3/2019	USDRUB	11:30:00 AM	65.173	65.537			N/A
5/3/2019	USDRUB	1:30:00 PM	65.14	65.533			N/A
5/3/2019	USDRUB	3:30:00 PM	65.166	65.502			N/A
5/3/2019	USDSEK	9:30:00 AM	9.5778	9.582			N/A
5/3/2019	USDSEK	11:30:00 AM	9.5708	9.574			N/A
5/3/2019	USDSEK	1:30:00 PM	9.5963	9.6005			N/A
5/3/2019	USDSEK	3:30:00 PM	9.6093	9.5976			N/A
5/3/2019	USDSEK.fx	9:30:00 AM	9.58056	9.58009			N/A
5/3/2019	USDSEK.fx	11:30:00 AM	9.57338	9.57212			N/A

5/3/2019	USDSEK.fx	1:30:00 PM	9.59916	9.5986			N/A
5/3/2019	USDSEK.fx	3:30:00 PM	9.61222	9.6008			N/A
5/3/2019	USDSGD	9:30:00 AM	1.3631	1.3634			N/A
5/3/2019	USDSGD	11:30:00 AM	1.3633	1.3635			N/A
5/3/2019	USDSGD	1:30:00 PM	1.3637	1.3641			N/A
5/3/2019	USDSGD	3:30:00 PM	1.3641	1.3641			N/A
5/3/2019	USDSGD.fx	9:30:00 AM	1.36303	1.36353			N/A
5/3/2019	USDSGD.fx	11:30:00 AM	1.36319	1.36372			N/A
5/3/2019	USDSGD.fx	1:30:00 PM	1.36376	1.36428			N/A
5/3/2019	USDSGD.fx	3:30:00 PM	1.36401	1.36418			N/A
5/3/2019	USDZAR	9:30:00 AM	14.5552	14.5698			N/A
5/3/2019	USDZAR	11:30:00 AM	14.5434	14.5591			N/A
5/3/2019	USDZAR	1:30:00 PM	14.5305	14.5462			N/A
5/3/2019	USDZAR	3:30:00 PM	14.5355	14.5073			N/A
5/3/2019	USDZAR.fx	9:30:00 AM	14.56103	14.56322			N/A
5/3/2019	USDZAR.fx	11:30:00 AM	14.54811	14.55322			N/A
5/3/2019	USDZAR.fx	1:30:00 PM	14.53661	14.54001			N/A
5/3/2019	USDZAR.fx	3:30:00 PM	14.5365	14.50346			N/A
5/3/2019	XAUUSD	9:30:00 AM	1271.97	1272.27			N/A
5/3/2019	XAUUSD	11:30:00 AM	1269.83	1270.12			N/A
5/3/2019	XAUUSD	1:30:00 PM	1270.45	1270.81			N/A
5/3/2019	XAUUSD	3:30:00 PM	1271.91	1269.07			N/A
5/3/2019	ZARJPY	9:30:00 AM	7.64	7.65			N/A
5/3/2019	ZARJPY	11:30:00 AM	7.64	7.66			N/A
5/3/2019	ZARJPY	1:30:00 PM	7.65	7.67			N/A
5/3/2019	ZARJPY	3:30:00 PM	7.68	7.68			N/A
5/3/2019	ZARJPY.fx	9:30:00 AM	7.651	7.654			N/A
5/3/2019	ZARJPY.fx	11:30:00 AM	7.658	7.663			N/A
5/3/2019	ZARJPY.fx	1:30:00 PM	7.664	7.668			N/A
5/3/2019	ZARJPY.fx	3:30:00 PM	7.691	7.675			N/A
5/6/2019	#AA	9:30:00 AM					N/A
5/6/2019	#AA	11:30:00 AM					N/A
5/6/2019	#AA	1:30:00 PM					N/A
5/6/2019	#AA	3:30:00 PM					N/A

5/6/2019	#AABA	9:30:00 AM					N/A
5/6/2019	#AABA	11:30:00 AM					N/A
5/6/2019	#AABA	1:30:00 PM					N/A
5/6/2019	#AABA	3:30:00 PM					N/A
5/6/2019	#AAL	9:30:00 AM					N/A
5/6/2019	#AAL	11:30:00 AM					N/A
5/6/2019	#AAL	1:30:00 PM					N/A
5/6/2019	#AAL	3:30:00 PM					N/A
5/6/2019	#AAPL	9:30:00 AM					N/A
5/6/2019	#AAPL	11:30:00 AM					N/A
5/6/2019	#AAPL	1:30:00 PM					N/A
5/6/2019	#AAPL	3:30:00 PM					N/A
5/6/2019	#ADBE	9:30:00 AM					N/A
5/6/2019	#ADBE	11:30:00 AM					N/A
5/6/2019	#ADBE	1:30:00 PM					N/A
5/6/2019	#ADBE	3:30:00 PM					N/A
5/6/2019	#AIG	9:30:00 AM					N/A
5/6/2019	#AIG	11:30:00 AM					N/A
5/6/2019	#AIG	1:30:00 PM					N/A
5/6/2019	#AIG	3:30:00 PM					N/A
5/6/2019	#AMD	9:30:00 AM					N/A
5/6/2019	#AMD	11:30:00 AM					N/A
5/6/2019	#AMD	1:30:00 PM					N/A
5/6/2019	#AMD	3:30:00 PM					N/A
5/6/2019	#AMZN	9:30:00 AM					N/A
5/6/2019	#AMZN	11:30:00 AM					N/A
5/6/2019	#AMZN	1:30:00 PM					N/A
5/6/2019	#AMZN	3:30:00 PM					N/A
5/6/2019	#AXP	9:30:00 AM					N/A
5/6/2019	#AXP	11:30:00 AM					N/A
5/6/2019	#AXP	1:30:00 PM					N/A
5/6/2019	#AXP	3:30:00 PM					N/A
5/6/2019	#BA	9:30:00 AM					N/A
5/6/2019	#BA	11:30:00 AM					N/A

5/6/2019	#BA	1:30:00 PM					N/A
5/6/2019	#BA	3:30:00 PM					N/A
5/6/2019	#BABA	9:30:00 AM					N/A
5/6/2019	#BABA	11:30:00 AM					N/A
5/6/2019	#BABA	1:30:00 PM					N/A
5/6/2019	#BABA	3:30:00 PM					N/A
5/6/2019	#BAC	9:30:00 AM					N/A
5/6/2019	#BAC	11:30:00 AM					N/A
5/6/2019	#BAC	1:30:00 PM					N/A
5/6/2019	#BAC	3:30:00 PM					N/A
5/6/2019	#BARC	9:30:00 AM					N/A
5/6/2019	#BARC	11:30:00 AM					N/A
5/6/2019	#BARC	1:30:00 PM					N/A
5/6/2019	#BARC	3:30:00 PM					N/A
5/6/2019	#BHP	9:30:00 AM					N/A
5/6/2019	#BHP	11:30:00 AM					N/A
5/6/2019	#BHP	1:30:00 PM					N/A
5/6/2019	#BHP	3:30:00 PM					N/A
5/6/2019	#BIDU	9:30:00 AM					N/A
5/6/2019	#BIDU	11:30:00 AM					N/A
5/6/2019	#BIDU	1:30:00 PM					N/A
5/6/2019	#BIDU	3:30:00 PM					N/A
5/6/2019	#Bitcoin	9:30:00 AM	5909.85	5935.69			N/A
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5/6/2019	#UTX	3:30:00 PM					N/A
5/6/2019	#V	9:30:00 AM					N/A
5/6/2019	#V	11:30:00 AM					N/A
5/6/2019	#V	1:30:00 PM					N/A
5/6/2019	#V	3:30:00 PM					N/A



5/6/2019	#VOD	9:30:00 AM					N/A
5/6/2019	#VOD	11:30:00 AM					N/A
5/6/2019	#VOD	1:30:00 PM					N/A
5/6/2019	#VOD	3:30:00 PM					N/A
5/6/2019	#VZ	9:30:00 AM					N/A
5/6/2019	#VZ	11:30:00 AM					N/A
5/6/2019	#VZ	1:30:00 PM					N/A
5/6/2019	#VZ	3:30:00 PM					N/A
5/6/2019	#WDC	9:30:00 AM					N/A
5/6/2019	#WDC	11:30:00 AM					N/A
5/6/2019	#WDC	1:30:00 PM					N/A
5/6/2019	#WDC	3:30:00 PM					N/A
5/6/2019	#WFC	9:30:00 AM					N/A
5/6/2019	#WFC	11:30:00 AM					N/A
5/6/2019	#WFC	1:30:00 PM					N/A
5/6/2019	#WFC	3:30:00 PM					N/A
5/6/2019	#WMT	9:30:00 AM					N/A
5/6/2019	#WMT	11:30:00 AM					N/A
5/6/2019	#WMT	1:30:00 PM					N/A
5/6/2019	#WMT	3:30:00 PM					N/A
5/6/2019	#XOM	9:30:00 AM					N/A
5/6/2019	#XOM	11:30:00 AM					N/A
5/6/2019	#XOM	1:30:00 PM					N/A
5/6/2019	#XOM	3:30:00 PM					N/A
5/6/2019	#YHOO	9:30:00 AM					N/A
5/6/2019	#YHOO	11:30:00 AM					N/A
5/6/2019	#YHOO	1:30:00 PM					N/A
5/6/2019	#YHOO	3:30:00 PM					N/A
5/6/2019	#ZNGA	9:30:00 AM					N/A
5/6/2019	#ZNGA	11:30:00 AM					N/A
5/6/2019	#ZNGA	1:30:00 PM					N/A
5/6/2019	#ZNGA	3:30:00 PM					N/A
5/6/2019	AUDCAD	9:30:00 AM	0.94255	0.94318			N/A
5/6/2019	AUDCAD	11:30:00 AM	0.94164	0.94232			N/A

5/6/2019	AUDCAD	1:30:00 PM	0.94113	0.94184			N/A
5/6/2019	AUDCAD	3:30:00 PM	0.94172	0.94239			N/A
5/6/2019	AUDCAD.fx	9:30:00 AM	0.94287	0.94283			N/A
5/6/2019	AUDCAD.fx	11:30:00 AM	0.94199	0.94197			N/A
5/6/2019	AUDCAD.fx	1:30:00 PM	0.94146	0.94149			N/A
5/6/2019	AUDCAD.fx	3:30:00 PM	0.94206	0.94203			N/A
5/6/2019	AUDCHF	9:30:00 AM	0.70973	0.71036			N/A
5/6/2019	AUDCHF	11:30:00 AM	0.71079	0.71149			N/A
5/6/2019	AUDCHF	1:30:00 PM	0.71127	0.712			N/A
5/6/2019	AUDCHF	3:30:00 PM	0.71157	0.7122			N/A
5/6/2019	AUDCHF.fx	9:30:00 AM	0.71007	0.71001			N/A
5/6/2019	AUDCHF.fx	11:30:00 AM	0.71113	0.71114			N/A
5/6/2019	AUDCHF.fx	1:30:00 PM	0.71162	0.71164			N/A
5/6/2019	AUDCHF.fx	3:30:00 PM	0.71192	0.71185			N/A
5/6/2019	AUDCZK	9:30:00 AM	16.033	16.048			N/A
5/6/2019	AUDCZK	11:30:00 AM	16.046	16.063			N/A
5/6/2019	AUDCZK	1:30:00 PM	16.036	16.053			N/A
5/6/2019	AUDCZK	3:30:00 PM	16.034	16.049			N/A
5/6/2019	AUDDKK	9:30:00 AM	4.6598	4.6639			N/A
5/6/2019	AUDDKK	11:30:00 AM	4.6626	4.667			N/A
5/6/2019	AUDDKK	1:30:00 PM	4.6595	4.6643			N/A
5/6/2019	AUDDKK	3:30:00 PM	4.6595	4.6637			N/A
5/6/2019	AUDHKD	9:30:00 AM	5.4797	5.4836			N/A
5/6/2019	AUDHKD	11:30:00 AM	5.4826	5.4865			N/A
5/6/2019	AUDHKD	1:30:00 PM	5.4787	5.4824			N/A
5/6/2019	AUDHKD	3:30:00 PM	5.4815	5.4841			N/A
5/6/2019	AUDHUF	9:30:00 AM	201.72	201.94			N/A
5/6/2019	AUDHUF	11:30:00 AM	202.06	202.3			N/A
5/6/2019	AUDHUF	1:30:00 PM	201.73	201.96			N/A
5/6/2019	AUDHUF	3:30:00 PM	201.7	201.93			N/A
5/6/2019	AUDJPY	9:30:00 AM	77.356	77.415			N/A
5/6/2019	AUDJPY	11:30:00 AM	77.376	77.443			N/A
5/6/2019	AUDJPY	1:30:00 PM	77.356	77.424			N/A
5/6/2019	AUDJPY	3:30:00 PM	77.498	77.552			N/A

5/6/2019	AUDJPY.fx	9:30:00 AM	77.389	77.379			N/A
5/6/2019	AUDJPY.fx	11:30:00 AM	77.41	77.409			N/A
5/6/2019	AUDJPY.fx	1:30:00 PM	77.39	77.388			N/A
5/6/2019	AUDJPY.fx	3:30:00 PM	77.535	77.517			N/A
5/6/2019	AUDMXN	9:30:00 AM	13.3224	13.3318			N/A
5/6/2019	AUDMXN	11:30:00 AM	13.3059	13.3136			N/A
5/6/2019	AUDMXN	1:30:00 PM	13.2909	13.3			N/A
5/6/2019	AUDMXN	3:30:00 PM	13.3106	13.3177			N/A
5/6/2019	AUDNOK	9:30:00 AM	6.1115	6.1162			N/A
5/6/2019	AUDNOK	11:30:00 AM	6.119	6.1237			N/A
5/6/2019	AUDNOK	1:30:00 PM	6.1167	6.1218			N/A
5/6/2019	AUDNOK	3:30:00 PM	6.1111	6.1157			N/A
5/6/2019	AUDNOK.fx	9:30:00 AM	6.1134	6.1146			N/A
5/6/2019	AUDNOK.fx	11:30:00 AM	6.1205	6.1222			N/A
5/6/2019	AUDNOK.fx	1:30:00 PM	6.1181	6.1201			N/A
5/6/2019	AUDNOK.fx	3:30:00 PM	6.1127	6.114			N/A
5/6/2019	AUDNZD	9:30:00 AM	1.05444	1.05529			N/A
5/6/2019	AUDNZD	11:30:00 AM	1.05535	1.05623			N/A
5/6/2019	AUDNZD	1:30:00 PM	1.05586	1.05674			N/A
5/6/2019	AUDNZD	3:30:00 PM	1.05694	1.0578			N/A
5/6/2019	AUDNZD.fx	9:30:00 AM	1.05488	1.05483			N/A
5/6/2019	AUDNZD.fx	11:30:00 AM	1.0558	1.05578			N/A
5/6/2019	AUDNZD.fx	1:30:00 PM	1.05628	1.05628			N/A
5/6/2019	AUDNZD.fx	3:30:00 PM	1.05737	1.05736			N/A
5/6/2019	AUDPLN	9:30:00 AM	2.6737	2.6765			N/A
5/6/2019	AUDPLN	11:30:00 AM	2.6752	2.6773			N/A
5/6/2019	AUDPLN	1:30:00 PM	2.6726	2.6758			N/A
5/6/2019	AUDPLN	3:30:00 PM	2.6724	2.6752			N/A
5/6/2019	AUDSEK	9:30:00 AM	6.6895	6.6914			N/A
5/6/2019	AUDSEK	11:30:00 AM	6.6974	6.6991			N/A
5/6/2019	AUDSEK	1:30:00 PM	6.6974	6.7005			N/A
5/6/2019	AUDSEK	3:30:00 PM	6.6962	6.6982			N/A
5/6/2019	AUDSEK.fx	9:30:00 AM	6.6849	6.6957			N/A
5/6/2019	AUDSEK.fx	11:30:00 AM	6.6928	6.7037			N/A

5/6/2019	AUDSEK.fx	1:30:00 PM	6.6928	6.7051			N/A
5/6/2019	AUDSEK.fx	3:30:00 PM	6.6917	6.7027			N/A
5/6/2019	AUDSGD	9:30:00 AM	0.9529	0.9531			N/A
5/6/2019	AUDSGD	11:30:00 AM	0.9528	0.9531			N/A
5/6/2019	AUDSGD	1:30:00 PM	0.9524	0.9527			N/A
5/6/2019	AUDSGD	3:30:00 PM	0.9528	0.9531			N/A
5/6/2019	AUDSGD.fx	9:30:00 AM	0.95295	0.95296			N/A
5/6/2019	AUDSGD.fx	11:30:00 AM	0.95291	0.95301			N/A
5/6/2019	AUDSGD.fx	1:30:00 PM	0.95248	0.95259			N/A
5/6/2019	AUDSGD.fx	3:30:00 PM	0.95303	0.95303			N/A
5/6/2019	AUDUSD	9:30:00 AM	0.6988	0.69881			N/A
5/6/2019	AUDUSD	11:30:00 AM	0.69914	0.69922			N/A
5/6/2019	AUDUSD	1:30:00 PM	0.6986	0.69872	1000	1000	N/A
5/6/2019	AUDUSD	3:30:00 PM	0.69892	0.69889			N/A
5/6/2019	AUDUSD.fx	9:30:00 AM	0.69885	0.69876			N/A
5/6/2019	AUDUSD.fx	11:30:00 AM	0.69919	0.69916			N/A
5/6/2019	AUDUSD.fx	1:30:00 PM	0.69866	0.69866			N/A
5/6/2019	AUDUSD.fx	3:30:00 PM	0.69898	0.69884			N/A
5/6/2019	AUDZAR	9:30:00 AM	10.1027	10.1136			N/A
5/6/2019	AUDZAR	11:30:00 AM	10.1058	10.1193			N/A
5/6/2019	AUDZAR	1:30:00 PM	10.1084	10.122			N/A
5/6/2019	AUDZAR	3:30:00 PM	10.1312	10.145			N/A
5/6/2019	AUS200.i	9:30:00 AM					N/A
5/6/2019	AUS200.i	11:30:00 AM	6268.6	6272.1			N/A
5/6/2019	AUS200.i	1:30:00 PM	6273.1	6276.8			N/A
5/6/2019	AUS200.i	3:30:00 PM	6277.6	6280.6			N/A
5/6/2019	BCHUSD	9:30:00 AM					N/A
5/6/2019	BCHUSD	11:30:00 AM					N/A
5/6/2019	BCHUSD	1:30:00 PM	292.9	294.77			N/A
5/6/2019	BCHUSD	3:30:00 PM	292.4	294.04			N/A
5/6/2019	CADCHF	9:30:00 AM	0.75274	0.75342			N/A
5/6/2019	CADCHF	11:30:00 AM	0.75459	0.75524			N/A
5/6/2019	CADCHF	1:30:00 PM	0.75549	0.75621			N/A
5/6/2019	CADCHF	3:30:00 PM	0.75535	0.75598			N/A

5/6/2019	CADCHF.fx	9:30:00 AM	0.75308	0.75307			N/A
5/6/2019	CADCHF.fx	11:30:00 AM	0.75493	0.75488			N/A
5/6/2019	CADCHF.fx	1:30:00 PM	0.75583	0.75586			N/A
5/6/2019	CADCHF.fx	3:30:00 PM	0.75569	0.75563			N/A
5/6/2019	CADCZK	9:30:00 AM	17.008	17.024			N/A
5/6/2019	CADCZK	11:30:00 AM	17.038	17.053			N/A
5/6/2019	CADCZK	1:30:00 PM	17.035	17.052			N/A
5/6/2019	CADCZK	3:30:00 PM	17.022	17.039			N/A
5/6/2019	CADDDKK	9:30:00 AM	4.943	4.947			N/A
5/6/2019	CADDDKK	11:30:00 AM	4.951	4.955			N/A
5/6/2019	CADDDKK	1:30:00 PM					N/A
5/6/2019	CADDDKK	3:30:00 PM	4.948	4.951			N/A
5/6/2019	CADHKD	9:30:00 AM	5.8129	5.8166			N/A
5/6/2019	CADHKD	11:30:00 AM	5.8215	5.8252			N/A
5/6/2019	CADHKD	1:30:00 PM	5.8201	5.8237			N/A
5/6/2019	CADHKD	3:30:00 PM	5.8197	5.8227			N/A
5/6/2019	CADHUF	9:30:00 AM	214.01	214.17			N/A
5/6/2019	CADHUF	11:30:00 AM	214.59	214.75			N/A
5/6/2019	CADHUF	1:30:00 PM	214.34	214.49			N/A
5/6/2019	CADHUF	3:30:00 PM	214.18	214.34			N/A
5/6/2019	CADJPY	9:30:00 AM	82.041	82.11			N/A
5/6/2019	CADJPY	11:30:00 AM	82.145	82.207			N/A
5/6/2019	CADJPY	1:30:00 PM	82.164	82.232			N/A
5/6/2019	CADJPY	3:30:00 PM	82.264	82.321			N/A
5/6/2019	CADJPY.fx	9:30:00 AM	82.075	82.075			N/A
5/6/2019	CADJPY.fx	11:30:00 AM	82.179	82.17			N/A
5/6/2019	CADJPY.fx	1:30:00 PM	82.197	82.197			N/A
5/6/2019	CADJPY.fx	3:30:00 PM	82.302	82.287			N/A
5/6/2019	CADMXN	9:30:00 AM	14.1303	14.1431			N/A
5/6/2019	CADMXN	11:30:00 AM	14.1263	14.1372			N/A
5/6/2019	CADMXN	1:30:00 PM	14.1187	14.1293			N/A
5/6/2019	CADMXN	3:30:00 PM	14.131	14.1383			N/A
5/6/2019	CADNOK	9:30:00 AM	6.483	6.486			N/A
5/6/2019	CADNOK	11:30:00 AM	6.4952	6.5			N/A

5/6/2019	CADNOK	1:30:00 PM	6.4957	6.5001			N/A
5/6/2019	CADNOK	3:30:00 PM	6.4863	6.4907			N/A
5/6/2019	CADPLN	9:30:00 AM	2.8358	2.8376			N/A
5/6/2019	CADPLN	11:30:00 AM	2.8394	2.8413			N/A
5/6/2019	CADPLN	1:30:00 PM	2.8392	2.8408			N/A
5/6/2019	CADPLN	3:30:00 PM	2.8373	2.8392			N/A
5/6/2019	CADSEK	9:30:00 AM	7.0932	7.0962			N/A
5/6/2019	CADSEK	11:30:00 AM	7.1073	7.1109			N/A
5/6/2019	CADSEK	1:30:00 PM	7.1121	7.1154			N/A
5/6/2019	CADSEK	3:30:00 PM	7.1068	7.1095			N/A
5/6/2019	CADSGD	9:30:00 AM	1.0103	1.0107			N/A
5/6/2019	CADSGD	11:30:00 AM	1.0111	1.0114			N/A
5/6/2019	CADSGD	1:30:00 PM	1.011	1.0113			N/A
5/6/2019	CADSGD	3:30:00 PM	1.011	1.0113			N/A
5/6/2019	CADZAR	9:30:00 AM	10.7168	10.7292			N/A
5/6/2019	CADZAR	11:30:00 AM	10.7296	10.7457			N/A
5/6/2019	CADZAR	1:30:00 PM	10.7377	10.753			N/A
5/6/2019	CADZAR	3:30:00 PM	10.7559	10.7719			N/A
5/6/2019	CHFCZK	9:30:00 AM	22.587	22.605			N/A
5/6/2019	CHFCZK	11:30:00 AM	22.573	22.59			N/A
5/6/2019	CHFCZK	1:30:00 PM	22.542	22.558			N/A
5/6/2019	CHFCZK	3:30:00 PM	22.53	22.548			N/A
5/6/2019	CHFDKK	9:30:00 AM	6.564	6.567			N/A
5/6/2019	CHFDKK	11:30:00 AM					N/A
5/6/2019	CHFDKK	1:30:00 PM					N/A
5/6/2019	CHFDKK	3:30:00 PM	6.547	6.55			N/A
5/6/2019	CHFDKK.fx	9:30:00 AM	6.5626	6.5686			N/A
5/6/2019	CHFDKK.fx	11:30:00 AM	6.5566	6.5628			N/A
5/6/2019	CHFDKK.fx	1:30:00 PM	6.5479	6.554			N/A
5/6/2019	CHFDKK.fx	3:30:00 PM	6.545	6.5513			N/A
5/6/2019	CHFHKD	9:30:00 AM	7.7196	7.7235			N/A
5/6/2019	CHFHKD	11:30:00 AM	7.7119	7.7158			N/A
5/6/2019	CHFHKD	1:30:00 PM	7.7009	7.7048			N/A
5/6/2019	CHFHKD	3:30:00 PM	7.701	7.7049			N/A

5/6/2019	CHFHUF	9:30:00 AM	284.1	284.5			N/A
5/6/2019	CHFHUF	11:30:00 AM	284.18	284.54			N/A
5/6/2019	CHFHUF	1:30:00 PM	283.5	283.87			N/A
5/6/2019	CHFHUF	3:30:00 PM	283.37	283.74			N/A
5/6/2019	CHFJPY	9:30:00 AM	108.951	109.021			N/A
5/6/2019	CHFJPY	11:30:00 AM	108.817	108.878			N/A
5/6/2019	CHFJPY	1:30:00 PM	108.72	108.779			N/A
5/6/2019	CHFJPY	3:30:00 PM	108.868	108.934			N/A
5/6/2019	CHFJPY.fx	9:30:00 AM	108.983	108.987			N/A
5/6/2019	CHFJPY.fx	11:30:00 AM	108.851	108.843			N/A
5/6/2019	CHFJPY.fx	1:30:00 PM	108.753	108.744			N/A
5/6/2019	CHFJPY.fx	3:30:00 PM	108.901	108.899			N/A
5/6/2019	CHFMXN	9:30:00 AM	18.7645	18.7822			N/A
5/6/2019	CHFMXN	11:30:00 AM	18.7126	18.728			N/A
5/6/2019	CHFMXN	1:30:00 PM	18.6797	18.6946			N/A
5/6/2019	CHFMXN	3:30:00 PM	18.7015	18.71			N/A
5/6/2019	CHFNOK	9:30:00 AM	8.607	8.6148			N/A
5/6/2019	CHFNOK	11:30:00 AM	8.6043	8.6113			N/A
5/6/2019	CHFNOK	1:30:00 PM	8.5949	8.6025			N/A
5/6/2019	CHFNOK	3:30:00 PM	8.5843	8.5901			N/A
5/6/2019	CHFNOK.fx	9:30:00 AM	8.61054	8.61147			N/A
5/6/2019	CHFNOK.fx	11:30:00 AM	8.60764	8.6079			N/A
5/6/2019	CHFNOK.fx	1:30:00 PM	8.59836	8.59894			N/A
5/6/2019	CHFNOK.fx	3:30:00 PM	8.58785	8.58658			N/A
5/6/2019	CHFPLN	9:30:00 AM	3.7663	3.7686			N/A
5/6/2019	CHFPLN	11:30:00 AM	3.7624	3.7641			N/A
5/6/2019	CHFPLN	1:30:00 PM	3.7562	3.7592			N/A
5/6/2019	CHFPLN	3:30:00 PM	3.7543	3.7575			N/A
5/6/2019	CHFPLN.fx	9:30:00 AM	3.7638	3.77105			N/A
5/6/2019	CHFPLN.fx	11:30:00 AM	3.75991	3.76643			N/A
5/6/2019	CHFPLN.fx	1:30:00 PM	3.75376	3.76135			N/A
5/6/2019	CHFPLN.fx	3:30:00 PM	3.75196	3.75975			N/A
5/6/2019	CHFSEK	9:30:00 AM	9.4201	9.4231			N/A
5/6/2019	CHFSEK	11:30:00 AM	9.4166	9.4192			N/A

5/6/2019	CHFSEK	1:30:00 PM	9.4098	9.4139			N/A
5/6/2019	CHFSEK	3:30:00 PM	9.4056	9.4087			N/A
5/6/2019	CHFSGD	9:30:00 AM	1.3419	1.3424			N/A
5/6/2019	CHFSGD	11:30:00 AM	1.3398	1.3402			N/A
5/6/2019	CHFSGD	1:30:00 PM	1.3383	1.3388			N/A
5/6/2019	CHFSGD	3:30:00 PM	1.3385	1.339			N/A
5/6/2019	CHFSGD.fx	9:30:00 AM	1.34213	1.34215			N/A
5/6/2019	CHFSGD.fx	11:30:00 AM	1.34002	1.33997			N/A
5/6/2019	CHFSGD.fx	1:30:00 PM	1.33848	1.33855			N/A
5/6/2019	CHFSGD.fx	3:30:00 PM	1.33873	1.33877			N/A
5/6/2019	CHFZAR	9:30:00 AM	14.2343	14.2426			N/A
5/6/2019	CHFZAR	11:30:00 AM	14.2181	14.2302			N/A
5/6/2019	CHFZAR	1:30:00 PM	14.2118	14.2233			N/A
5/6/2019	CHFZAR	3:30:00 PM	14.2386	14.2483			N/A
5/6/2019	CZKJPY	9:30:00 AM					N/A
5/6/2019	CZKJPY	11:30:00 AM	4.82	4.823			N/A
5/6/2019	CZKJPY	1:30:00 PM	4.822	4.825			N/A
5/6/2019	CZKJPY	3:30:00 PM					N/A
5/6/2019	DAX30.i	9:30:00 AM					N/A
5/6/2019	DAX30.i	11:30:00 AM					N/A
5/6/2019	DAX30.i	1:30:00 PM					N/A
5/6/2019	DAX30.i	3:30:00 PM					N/A
5/6/2019	DJ30.i	9:30:00 AM					N/A
5/6/2019	DJ30.i	11:30:00 AM					N/A
5/6/2019	DJ30.i	1:30:00 PM					N/A
5/6/2019	DJ30.i	3:30:00 PM					N/A
5/6/2019	DKKJPY	9:30:00 AM					N/A
5/6/2019	DKKJPY	11:30:00 AM	16.59	16.61			N/A
5/6/2019	DKKJPY	1:30:00 PM					N/A
5/6/2019	DKKJPY	3:30:00 PM					N/A
5/6/2019	EURAUD	9:30:00 AM	1.60081	1.601			N/A
5/6/2019	EURAUD	11:30:00 AM	1.5997	1.60012			N/A
5/6/2019	EURAUD	1:30:00 PM	1.60071	1.60115			N/A
5/6/2019	EURAUD	3:30:00 PM	1.60097	1.60119			N/A



5/6/2019	EURAUD.fx	9:30:00 AM	1.60101	1.60078			N/A
5/6/2019	EURAUD.fx	11:30:00 AM	1.59991	1.59991			N/A
5/6/2019	EURAUD.fx	1:30:00 PM	1.60091	1.60092			N/A
5/6/2019	EURAUD.fx	3:30:00 PM	1.60118	1.60097			N/A
5/6/2019	EURCAD	9:30:00 AM	1.50957	1.51028			N/A
5/6/2019	EURCAD	11:30:00 AM	1.50731	1.50808			N/A
5/6/2019	EURCAD	1:30:00 PM	1.50743	1.5083			N/A
5/6/2019	EURCAD	3:30:00 PM	1.50853	1.50922			N/A
5/6/2019	EURCAD.fx	9:30:00 AM	1.50999	1.50986			N/A
5/6/2019	EURCAD.fx	11:30:00 AM	1.50775	1.50766			N/A
5/6/2019	EURCAD.fx	1:30:00 PM	1.50785	1.50788			N/A
5/6/2019	EURCAD.fx	3:30:00 PM	1.50894	1.50879			N/A
5/6/2019	EURCHF	9:30:00 AM	1.13705	1.13717			N/A
5/6/2019	EURCHF	11:30:00 AM	1.13813	1.13823			N/A
5/6/2019	EURCHF	1:30:00 PM	1.13965	1.13977			N/A
5/6/2019	EURCHF	3:30:00 PM	1.14015	1.14026			N/A
5/6/2019	EURCHF.fx	9:30:00 AM	1.13711	1.13711			N/A
5/6/2019	EURCHF.fx	11:30:00 AM	1.13818	1.13816			N/A
5/6/2019	EURCHF.fx	1:30:00 PM	1.13971	1.13971			N/A
5/6/2019	EURCHF.fx	3:30:00 PM	1.14021	1.1402			N/A
5/6/2019	EURCZK	9:30:00 AM	25.672	25.711			N/A
5/6/2019	EURCZK	11:30:00 AM					N/A
5/6/2019	EURCZK	1:30:00 PM	25.678	25.717			N/A
5/6/2019	EURCZK	3:30:00 PM	25.675	25.715			N/A
5/6/2019	EURDKK	9:30:00 AM	7.4637	7.465			N/A
5/6/2019	EURDKK	11:30:00 AM	7.4648	7.4657			N/A
5/6/2019	EURDKK	1:30:00 PM	7.4643	7.4655			N/A
5/6/2019	EURDKK	3:30:00 PM	7.4655	7.4662			N/A
5/6/2019	EURGBP	9:30:00 AM	0.85312	0.85319			N/A
5/6/2019	EURGBP	11:30:00 AM	0.85323	0.85317			N/A
5/6/2019	EURGBP	1:30:00 PM	0.85378	0.85386			N/A
5/6/2019	EURGBP	3:30:00 PM	0.85477	0.85484			N/A
5/6/2019	EURGBP.fx	9:30:00 AM	0.85316	0.85313			N/A
5/6/2019	EURGBP.fx	11:30:00 AM	0.85324	0.85311			N/A

5/6/2019	EURGBP.fx	1:30:00 PM	0.85381	0.85379			N/A
5/6/2019	EURGBP.fx	3:30:00 PM	0.8548	0.85479			N/A
5/6/2019	EURHKD	9:30:00 AM	8.778	8.7828			N/A
5/6/2019	EURHKD	11:30:00 AM	8.7779	8.7818			N/A
5/6/2019	EURHKD	1:30:00 PM	8.7774	8.7823			N/A
5/6/2019	EURHKD	3:30:00 PM	8.7811	8.7858			N/A
5/6/2019	EURHKD.fx	9:30:00 AM	8.78083	8.78			N/A
5/6/2019	EURHKD.fx	11:30:00 AM	8.78076	8.77891			N/A
5/6/2019	EURHKD.fx	1:30:00 PM	8.78028	8.77941			N/A
5/6/2019	EURHKD.fx	3:30:00 PM	8.78391	8.78306			N/A
5/6/2019	EURHUF	9:30:00 AM	323.03	323.76			N/A
5/6/2019	EURHUF	11:30:00 AM	323.42	324.08			N/A
5/6/2019	EURHUF	1:30:00 PM	323.06	323.76			N/A
5/6/2019	EURHUF	3:30:00 PM	323.06	323.71			N/A
5/6/2019	EURHUF.fx	9:30:00 AM	323.299	323.494			N/A
5/6/2019	EURHUF.fx	11:30:00 AM	323.681	323.832			N/A
5/6/2019	EURHUF.fx	1:30:00 PM	323.319	323.526			N/A
5/6/2019	EURHUF.fx	3:30:00 PM	323.337	323.518			N/A
5/6/2019	EURJPY	9:30:00 AM	123.926	123.932			N/A
5/6/2019	EURJPY	11:30:00 AM	123.893	123.888			N/A
5/6/2019	EURJPY	1:30:00 PM	123.942	123.944			N/A
5/6/2019	EURJPY	3:30:00 PM	124.167	124.167			N/A
5/6/2019	EURJPY.fx	9:30:00 AM	123.93	123.928			N/A
5/6/2019	EURJPY.fx	11:30:00 AM	123.895	123.884			N/A
5/6/2019	EURJPY.fx	1:30:00 PM	123.945	123.939			N/A
5/6/2019	EURJPY.fx	3:30:00 PM	124.175	124.163			N/A
5/6/2019	EURMXN	9:30:00 AM	21.3397	21.3588			N/A
5/6/2019	EURMXN	11:30:00 AM	21.301	21.319			N/A
5/6/2019	EURMXN	1:30:00 PM	21.2926	21.3105			N/A
5/6/2019	EURMXN	3:30:00 PM	21.3258	21.3353			N/A
5/6/2019	EURMXN.fx	9:30:00 AM	21.3486	21.3502			N/A
5/6/2019	EURMXN.fx	11:30:00 AM	21.31	21.3096			N/A
5/6/2019	EURMXN.fx	1:30:00 PM	21.3008	21.3022			N/A
5/6/2019	EURMXN.fx	3:30:00 PM	21.3355	21.3263			N/A

5/6/2019	EURNOK	9:30:00 AM	9.7853	9.7974			N/A
5/6/2019	EURNOK	11:30:00 AM	9.7917	9.8027			N/A
5/6/2019	EURNOK	1:30:00 PM	9.7942	9.8062			N/A
5/6/2019	EURNOK	3:30:00 PM	9.7865	9.7964			N/A
5/6/2019	EURNOK.fx	9:30:00 AM	9.79089	9.7917			N/A
5/6/2019	EURNOK.fx	11:30:00 AM	9.79731	9.7973			N/A
5/6/2019	EURNOK.fx	1:30:00 PM	9.7996	9.80066			N/A
5/6/2019	EURNOK.fx	3:30:00 PM	9.79191	9.79096			N/A
5/6/2019	EURNZD	9:30:00 AM	1.68899	1.68975			N/A
5/6/2019	EURNZD	11:30:00 AM	1.68944	1.69027			N/A
5/6/2019	EURNZD	1:30:00 PM	1.69132	1.69206			N/A
5/6/2019	EURNZD	3:30:00 PM	1.69322	1.69386			N/A
5/6/2019	EURNZD.fx	9:30:00 AM	1.68941	1.68933			N/A
5/6/2019	EURNZD.fx	11:30:00 AM	1.68988	1.68983			N/A
5/6/2019	EURNZD.fx	1:30:00 PM	1.69176	1.69164			N/A
5/6/2019	EURNZD.fx	3:30:00 PM	1.69365	1.69344			N/A
5/6/2019	EURPLN	9:30:00 AM	4.2831	4.2854			N/A
5/6/2019	EURPLN	11:30:00 AM	4.2825	4.2842			N/A
5/6/2019	EURPLN	1:30:00 PM	4.2812	4.2831			N/A
5/6/2019	EURPLN	3:30:00 PM	4.2809	4.284			N/A
5/6/2019	EURPLN.fx	9:30:00 AM	4.28247	4.28599			N/A
5/6/2019	EURPLN.fx	11:30:00 AM	4.28167	4.28482			N/A
5/6/2019	EURPLN.fx	1:30:00 PM	4.28037	4.28502			N/A
5/6/2019	EURPLN.fx	3:30:00 PM	4.28027	4.28472			N/A
5/6/2019	EURRUB	9:30:00 AM					N/A
5/6/2019	EURRUB	11:30:00 AM	72.636	73.074			N/A
5/6/2019	EURRUB	1:30:00 PM	72.541	72.982			N/A
5/6/2019	EURRUB	3:30:00 PM	72.61	73.047			N/A
5/6/2019	EURSEK	9:30:00 AM	10.714	10.7164			N/A
5/6/2019	EURSEK	11:30:00 AM	10.7197	10.7212			N/A
5/6/2019	EURSEK	1:30:00 PM	10.7262	10.731			N/A
5/6/2019	EURSEK	3:30:00 PM	10.7262	10.7286			N/A
5/6/2019	EURSEK.fx	9:30:00 AM	10.71603	10.71466			N/A
5/6/2019	EURSEK.fx	11:30:00 AM	10.72153	10.71952			N/A

5/6/2019	EURSEK.fx	1:30:00 PM	10.72786	10.72929			N/A
5/6/2019	EURSEK.fx	3:30:00 PM	10.72779	10.72676			N/A
5/6/2019	EURSGD	9:30:00 AM	1.5258	1.5266			N/A
5/6/2019	EURSGD	11:30:00 AM	1.5249	1.5256			N/A
5/6/2019	EURSGD	1:30:00 PM	1.5252	1.526			N/A
5/6/2019	EURSGD	3:30:00 PM	1.526	1.5269			N/A
5/6/2019	EURSGD.fx	9:30:00 AM	1.52618	1.52613			N/A
5/6/2019	EURSGD.fx	11:30:00 AM	1.52527	1.52517			N/A
5/6/2019	EURSGD.fx	1:30:00 PM	1.52551	1.52557			N/A
5/6/2019	EURSGD.fx	3:30:00 PM	1.52641	1.52647			N/A
5/6/2019	EURUSD	9:30:00 AM	1.11894	1.119			N/A
5/6/2019	EURUSD	11:30:00 AM	1.1189	1.11885			N/A
5/6/2019	EURUSD	1:30:00 PM	1.11879	1.11886			N/A
5/6/2019	EURUSD	3:30:00 PM	1.11924	1.11929			N/A
5/6/2019	EURUSD.fx	9:30:00 AM	1.11915	1.11909			N/A
5/6/2019	EURUSD.fx	11:30:00 AM	1.11911	1.11894			N/A
5/6/2019	EURUSD.fx	1:30:00 PM	1.11899	1.11895			N/A
5/6/2019	EURUSD.fx	3:30:00 PM	1.11943	1.11938			N/A
5/6/2019	EURZAR	9:30:00 AM	16.187	16.2008			N/A
5/6/2019	EURZAR	11:30:00 AM	16.1849	16.2024			N/A
5/6/2019	EURZAR	1:30:00 PM	16.1993	16.2173			N/A
5/6/2019	EURZAR	3:30:00 PM	16.2372	16.2526			N/A
5/6/2019	EURZAR.fx	9:30:00 AM	16.1862	16.20273			N/A
5/6/2019	EURZAR.fx	11:30:00 AM	16.18443	16.2029			N/A
5/6/2019	EURZAR.fx	1:30:00 PM	16.19798	16.21857			N/A
5/6/2019	EURZAR.fx	3:30:00 PM	16.23714	16.25268			N/A
5/6/2019	GBPAUD	9:30:00 AM	1.87679	1.87729			N/A
5/6/2019	GBPAUD	11:30:00 AM	1.87575	1.87612			N/A
5/6/2019	GBPAUD	1:30:00 PM	1.8754	1.87611			N/A
5/6/2019	GBPAUD	3:30:00 PM	1.87355	1.874			N/A
5/6/2019	GBPAUD.fx	9:30:00 AM	1.87718	1.87688			N/A
5/6/2019	GBPAUD.fx	11:30:00 AM	1.87615	1.87572			N/A
5/6/2019	GBPAUD.fx	1:30:00 PM	1.87581	1.87573			N/A
5/6/2019	GBPAUD.fx	3:30:00 PM	1.87394	1.87361			N/A

5/6/2019	GBPCAD	9:30:00 AM	1.76954	1.77017			N/A
5/6/2019	GBPCAD	11:30:00 AM	1.76692	1.76736			N/A
5/6/2019	GBPCAD	1:30:00 PM	1.76571	1.76642			N/A
5/6/2019	GBPCAD	3:30:00 PM	1.76486	1.76548			N/A
5/6/2019	GBPCAD.fx	9:30:00 AM	1.76995	1.76976			N/A
5/6/2019	GBPCAD.fx	11:30:00 AM	1.76731	1.76699			N/A
5/6/2019	GBPCAD.fx	1:30:00 PM	1.76608	1.76602			N/A
5/6/2019	GBPCAD.fx	3:30:00 PM	1.76526	1.76508			N/A
5/6/2019	GBPCHF	9:30:00 AM	1.33271	1.33307			N/A
5/6/2019	GBPCHF	11:30:00 AM	1.33394	1.33415			N/A
5/6/2019	GBPCHF	1:30:00 PM	1.3347	1.33507			N/A
5/6/2019	GBPCHF	3:30:00 PM	1.33369	1.3341			N/A
5/6/2019	GBPCHF.fx	9:30:00 AM	1.3329	1.33287			N/A
5/6/2019	GBPCHF.fx	11:30:00 AM	1.33412	1.33397			N/A
5/6/2019	GBPCHF.fx	1:30:00 PM	1.3349	1.33486			N/A
5/6/2019	GBPCHF.fx	3:30:00 PM	1.33387	1.3339			N/A
5/6/2019	GBPCZK	9:30:00 AM	30.103	30.123			N/A
5/6/2019	GBPCZK	11:30:00 AM	30.11	30.127			N/A
5/6/2019	GBPCZK	1:30:00 PM	30.086	30.108			N/A
5/6/2019	GBPCZK	3:30:00 PM	30.048	30.07			N/A
5/6/2019	GBPDKK	9:30:00 AM	8.746	8.757			N/A
5/6/2019	GBPDKK	11:30:00 AM	8.747	8.756			N/A
5/6/2019	GBPDKK	1:30:00 PM	8.74	8.751			N/A
5/6/2019	GBPDKK	3:30:00 PM	8.729	8.741			N/A
5/6/2019	GBPDKK.fx	9:30:00 AM	8.7448	8.7573			N/A
5/6/2019	GBPDKK.fx	11:30:00 AM	8.7451	8.7566			N/A
5/6/2019	GBPDKK.fx	1:30:00 PM	8.7385	8.7513			N/A
5/6/2019	GBPDKK.fx	3:30:00 PM	8.7281	8.7409			N/A
5/6/2019	GBPHKD	9:30:00 AM	10.2874	10.292			N/A
5/6/2019	GBPHKD	11:30:00 AM	10.2873	10.2892			N/A
5/6/2019	GBPHKD	1:30:00 PM	10.2783	10.2829			N/A
5/6/2019	GBPHKD	3:30:00 PM	10.2705	10.2756			N/A
5/6/2019	GBPHUF	9:30:00 AM	378.64	379.07			N/A
5/6/2019	GBPHUF	11:30:00 AM	379.1	379.45			N/A

5/6/2019	GBPHUF	1:30:00 PM	378.39	378.86			N/A
5/6/2019	GBPHUF	3:30:00 PM	377.93	378.39			N/A
5/6/2019	GBPJPY	9:30:00 AM	145.243	145.282			N/A
5/6/2019	GBPJPY	11:30:00 AM	145.206	145.211			N/A
5/6/2019	GBPJPY	1:30:00 PM	145.142	145.185			N/A
5/6/2019	GBPJPY	3:30:00 PM	145.247	145.276			N/A
5/6/2019	GBPJPY.fx	9:30:00 AM	145.263	145.262			N/A
5/6/2019	GBPJPY.fx	11:30:00 AM	145.228	145.19			N/A
5/6/2019	GBPJPY.fx	1:30:00 PM	145.163	145.164			N/A
5/6/2019	GBPJPY.fx	3:30:00 PM	145.267	145.256			N/A
5/6/2019	GBPMXN	9:30:00 AM	25.0112	25.0241			N/A
5/6/2019	GBPMXN	11:30:00 AM	24.9625	24.973			N/A
5/6/2019	GBPMXN	1:30:00 PM	24.9333	24.9483			N/A
5/6/2019	GBPMXN	3:30:00 PM	24.9451	24.9484			N/A
5/6/2019	GBPNOK	9:30:00 AM	11.4715	11.482			N/A
5/6/2019	GBPNOK	11:30:00 AM	11.4791	11.4876			N/A
5/6/2019	GBPNOK	1:30:00 PM	11.472	11.4835			N/A
5/6/2019	GBPNOK	3:30:00 PM	11.4507	11.4589			N/A
5/6/2019	GBPNOK.fx	9:30:00 AM	11.47659	11.47707			N/A
5/6/2019	GBPNOK.fx	11:30:00 AM	11.48412	11.48254			N/A
5/6/2019	GBPNOK.fx	1:30:00 PM	11.47701	11.47843			N/A
5/6/2019	GBPNOK.fx	3:30:00 PM	11.45562	11.45388			N/A
5/6/2019	GBPNZD	9:30:00 AM	1.97975	1.98042			N/A
5/6/2019	GBPNZD	11:30:00 AM	1.98042	1.98081			N/A
5/6/2019	GBPNZD	1:30:00 PM	1.98099	1.98165			N/A
5/6/2019	GBPNZD	3:30:00 PM	1.98097	1.9815			N/A
5/6/2019	GBPNZD.fx	9:30:00 AM	1.98012	1.98005			N/A
5/6/2019	GBPNZD.fx	11:30:00 AM	1.98078	1.98042			N/A
5/6/2019	GBPNZD.fx	1:30:00 PM	1.98134	1.98129			N/A
5/6/2019	GBPNZD.fx	3:30:00 PM	1.98136	1.98114			N/A
5/6/2019	GBPPLN	9:30:00 AM	5.0214	5.0216			N/A
5/6/2019	GBPPLN	11:30:00 AM	5.0202	5.0202			N/A
5/6/2019	GBPPLN	1:30:00 PM	5.0151	5.0169			N/A
5/6/2019	GBPPLN	3:30:00 PM	5.0093	5.0107			N/A

5/6/2019	GBPPLN.fx	9:30:00 AM	5.01905	5.02382			N/A
5/6/2019	GBPPLN.fx	11:30:00 AM	5.01805	5.02222			N/A
5/6/2019	GBPPLN.fx	1:30:00 PM	5.01296	5.01907			N/A
5/6/2019	GBPPLN.fx	3:30:00 PM	5.00705	5.01291			N/A
5/6/2019	GBPSEK	9:30:00 AM	12.5566	12.5622			N/A
5/6/2019	GBPSEK	11:30:00 AM	12.5635	12.5673			N/A
5/6/2019	GBPSEK	1:30:00 PM	12.5607	12.5701			N/A
5/6/2019	GBPSEK	3:30:00 PM	12.5468	12.5528			N/A
5/6/2019	GBPSEK.fx	9:30:00 AM	12.5526	12.5656			N/A
5/6/2019	GBPSEK.fx	11:30:00 AM	12.56	12.57091			N/A
5/6/2019	GBPSEK.fx	1:30:00 PM	12.55704	12.57385			N/A
5/6/2019	GBPSEK.fx	3:30:00 PM	12.54291	12.55627			N/A
5/6/2019	GBPSGD	9:30:00 AM	1.7887	1.7892			N/A
5/6/2019	GBPSGD	11:30:00 AM	1.7874	1.7878			N/A
5/6/2019	GBPSGD	1:30:00 PM	1.7864	1.7872			N/A
5/6/2019	GBPSGD	3:30:00 PM	1.7854	1.7861			N/A
5/6/2019	GBPSGD.fx	9:30:00 AM	1.78681	1.79097			N/A
5/6/2019	GBPSGD.fx	11:30:00 AM	1.7857	1.78958			N/A
5/6/2019	GBPSGD.fx	1:30:00 PM	1.78454	1.78896			N/A
5/6/2019	GBPSGD.fx	3:30:00 PM	1.78355	1.78794			N/A
5/6/2019	GBPUSD	9:30:00 AM	1.31186	1.31179			N/A
5/6/2019	GBPUSD	11:30:00 AM	1.3118	1.31137			N/A
5/6/2019	GBPUSD	1:30:00 PM	1.31054	1.31054			N/A
5/6/2019	GBPUSD	3:30:00 PM	1.30956	1.30955			N/A
5/6/2019	GBPUSD.fx	9:30:00 AM	1.31191	1.31173			N/A
5/6/2019	GBPUSD.fx	11:30:00 AM	1.31186	1.31131			N/A
5/6/2019	GBPUSD.fx	1:30:00 PM	1.3106	1.31048			N/A
5/6/2019	GBPUSD.fx	3:30:00 PM	1.30961	1.30948			N/A
5/6/2019	GBPZAR	9:30:00 AM	18.9705	18.9909			N/A
5/6/2019	GBPZAR	11:30:00 AM	18.9655	18.9937			N/A
5/6/2019	GBPZAR	1:30:00 PM	18.9683	18.9962			N/A
5/6/2019	GBPZAR	3:30:00 PM	18.9916	19.0154			N/A
5/6/2019	GBPZAR.fx	9:30:00 AM	18.9781	18.9854			N/A
5/6/2019	GBPZAR.fx	11:30:00 AM	18.9727	18.9863			N/A

5/6/2019	GBPZAR.fx	1:30:00 PM	18.975	18.9897			N/A
5/6/2019	GBPZAR.fx	3:30:00 PM	18.9993	19.0083			N/A
5/6/2019	GOLD	9:30:00 AM	1281.68	1281.86			N/A
5/6/2019	GOLD	11:30:00 AM	1282.71	1283.02			N/A
5/6/2019	GOLD	1:30:00 PM	1281.23	1281.39			N/A
5/6/2019	GOLD	3:30:00 PM	1278.56	1278.67			N/A
5/6/2019	HKDJPY	9:30:00 AM	14.12	14.12			N/A
5/6/2019	HKDJPY	11:30:00 AM					N/A
5/6/2019	HKDJPY	1:30:00 PM	14.11	14.13			N/A
5/6/2019	HKDJPY	3:30:00 PM	14.14	14.15			N/A
5/6/2019	HKDJPY.fx	9:30:00 AM	14.11	14.116			N/A
5/6/2019	HKDJPY.fx	11:30:00 AM	14.107	14.113			N/A
5/6/2019	HKDJPY.fx	1:30:00 PM	14.113	14.12			N/A
5/6/2019	HKDJPY.fx	3:30:00 PM	14.133	14.139			N/A
5/6/2019	HUFJPY	9:30:00 AM	0.3836	0.3839			N/A
5/6/2019	HUFJPY	11:30:00 AM	0.383	0.3833			N/A
5/6/2019	HUFJPY	1:30:00 PM	0.3835	0.3838			N/A
5/6/2019	HUFJPY	3:30:00 PM	0.3841	0.3844			N/A
5/6/2019	JP225.i	9:30:00 AM	21999	22004			N/A
5/6/2019	JP225.i	11:30:00 AM	21964	21971.5			N/A
5/6/2019	JP225.i	1:30:00 PM	21964	21974			N/A
5/6/2019	JP225.i	3:30:00 PM	22016.95	22029			N/A
5/6/2019	MXNJPY	9:30:00 AM	5.8	5.81			N/A
5/6/2019	MXNJPY	11:30:00 AM	5.81	5.82			N/A
5/6/2019	MXNJPY	1:30:00 PM	5.82	5.83			N/A
5/6/2019	MXNJPY	3:30:00 PM	5.82	5.83			N/A
5/6/2019	NASDAQ.i	9:30:00 AM					N/A
5/6/2019	NASDAQ.i	11:30:00 AM					N/A
5/6/2019	NASDAQ.i	1:30:00 PM					N/A
5/6/2019	NASDAQ.i	3:30:00 PM					N/A
5/6/2019	NOKJPY	9:30:00 AM	12.64	12.68			N/A
5/6/2019	NOKJPY	11:30:00 AM	12.63	12.66			N/A
5/6/2019	NOKJPY	1:30:00 PM	12.64	12.67			N/A
5/6/2019	NOKJPY	3:30:00 PM	12.66	12.7			N/A



5/6/2019	NOKJPY.fx	9:30:00 AM	12.652	12.661			N/A
5/6/2019	NOKJPY.fx	11:30:00 AM	12.643	12.648			N/A
5/6/2019	NOKJPY.fx	1:30:00 PM	12.643	12.651			N/A
5/6/2019	NOKJPY.fx	3:30:00 PM	12.68	12.684			N/A
5/6/2019	NZDCAD	9:30:00 AM	0.89347	0.89415			N/A
5/6/2019	NZDCAD	11:30:00 AM	0.89188	0.89255			N/A
5/6/2019	NZDCAD	1:30:00 PM	0.891	0.89164			N/A
5/6/2019	NZDCAD	3:30:00 PM	0.89059	0.89129			N/A
5/6/2019	NZDCAD.fx	9:30:00 AM	0.89381	0.89381			N/A
5/6/2019	NZDCAD.fx	11:30:00 AM	0.89222	0.89221			N/A
5/6/2019	NZDCAD.fx	1:30:00 PM	0.89134	0.8913			N/A
5/6/2019	NZDCAD.fx	3:30:00 PM	0.89092	0.89095			N/A
5/6/2019	NZDCHF	9:30:00 AM	0.67277	0.67348			N/A
5/6/2019	NZDCHF	11:30:00 AM	0.67318	0.67394			N/A
5/6/2019	NZDCHF	1:30:00 PM	0.67338	0.67407			N/A
5/6/2019	NZDCHF	3:30:00 PM	0.67293	0.6736			N/A
5/6/2019	NZDCHF.fx	9:30:00 AM	0.6731	0.67311			N/A
5/6/2019	NZDCHF.fx	11:30:00 AM	0.67352	0.67358			N/A
5/6/2019	NZDCHF.fx	1:30:00 PM	0.67371	0.67372			N/A
5/6/2019	NZDCHF.fx	3:30:00 PM	0.67328	0.67324			N/A
5/6/2019	NZDCZK	9:30:00 AM	15.201	15.213			N/A
5/6/2019	NZDCZK	11:30:00 AM	15.2	15.212			N/A
5/6/2019	NZDCZK	1:30:00 PM	15.184	15.195			N/A
5/6/2019	NZDCZK	3:30:00 PM	15.165	15.177			N/A
5/6/2019	NZDDKK	9:30:00 AM	4.418	4.421			N/A
5/6/2019	NZDDKK	11:30:00 AM					N/A
5/6/2019	NZDDKK	1:30:00 PM					N/A
5/6/2019	NZDDKK	3:30:00 PM	4.406	4.41			N/A
5/6/2019	NZDHKD	9:30:00 AM	5.1945	5.1974			N/A
5/6/2019	NZDHKD	11:30:00 AM	5.1933	5.1959			N/A
5/6/2019	NZDHKD	1:30:00 PM	5.1869	5.1893			N/A
5/6/2019	NZDHKD	3:30:00 PM	5.1843	5.1858			N/A
5/6/2019	NZDHUF	9:30:00 AM	191.18	191.47			N/A
5/6/2019	NZDHUF	11:30:00 AM	191.33	191.63			N/A

5/6/2019	NZDHUF	1:30:00 PM	190.94	191.21			N/A
5/6/2019	NZDHUF	3:30:00 PM	190.71	190.99			N/A
5/6/2019	NZDJPY	9:30:00 AM	73.325	73.396			N/A
5/6/2019	NZDJPY	11:30:00 AM	73.284	73.351			N/A
5/6/2019	NZDJPY	1:30:00 PM	73.232	73.302			N/A
5/6/2019	NZDJPY	3:30:00 PM	73.291	73.346			N/A
5/6/2019	NZDJPY.fx	9:30:00 AM	73.356	73.364			N/A
5/6/2019	NZDJPY.fx	11:30:00 AM	73.316	73.317			N/A
5/6/2019	NZDJPY.fx	1:30:00 PM	73.263	73.269			N/A
5/6/2019	NZDJPY.fx	3:30:00 PM	73.322	73.313			N/A
5/6/2019	NZDMXN	9:30:00 AM	12.6295	12.6363			N/A
5/6/2019	NZDMXN	11:30:00 AM	12.6023	12.6076			N/A
5/6/2019	NZDMXN	1:30:00 PM	12.5835	12.5887			N/A
5/6/2019	NZDMXN	3:30:00 PM	12.5891	12.5917			N/A
5/6/2019	NZDNOK	9:30:00 AM	5.7929	5.7959			N/A
5/6/2019	NZDNOK	11:30:00 AM	5.7941	5.7978			N/A
5/6/2019	NZDNOK	1:30:00 PM	5.7889	5.7921			N/A
5/6/2019	NZDNOK	3:30:00 PM	5.7773	5.7812			N/A
5/6/2019	NZDPLN	9:30:00 AM	2.5344	2.5354			N/A
5/6/2019	NZDPLN	11:30:00 AM	2.5328	2.5342			N/A
5/6/2019	NZDPLN	1:30:00 PM	2.5303	2.5313			N/A
5/6/2019	NZDPLN	3:30:00 PM	2.5275	2.5287			N/A
5/6/2019	NZDSEK	9:30:00 AM	6.3371	6.3424			N/A
5/6/2019	NZDSEK	11:30:00 AM	6.3377	6.3443			N/A
5/6/2019	NZDSEK	1:30:00 PM	6.3361	6.3422			N/A
5/6/2019	NZDSEK	3:30:00 PM	6.3287	6.334			N/A
5/6/2019	NZDSGD	9:30:00 AM	0.9031	0.9037			N/A
5/6/2019	NZDSGD	11:30:00 AM	0.9024	0.9029			N/A
5/6/2019	NZDSGD	1:30:00 PM	0.9015	0.9021			N/A
5/6/2019	NZDSGD	3:30:00 PM	0.901	0.9017			N/A
5/6/2019	NZDSGD.fx	9:30:00 AM	0.90313	0.90366			N/A
5/6/2019	NZDSGD.fx	11:30:00 AM	0.90231	0.90281			N/A
5/6/2019	NZDSGD.fx	1:30:00 PM	0.90148	0.90201			N/A
5/6/2019	NZDSGD.fx	3:30:00 PM	0.90108	0.90159			N/A

5/6/2019	NZDUSD	9:30:00 AM	0.66237	0.66246			N/A
5/6/2019	NZDUSD	11:30:00 AM	0.66214	0.66218			N/A
5/6/2019	NZDUSD	1:30:00 PM	0.66134	0.66143			N/A
5/6/2019	NZDUSD	3:30:00 PM	0.66093	0.66095			N/A
5/6/2019	NZDUSD.fx	9:30:00 AM	0.66245	0.66247			N/A
5/6/2019	NZDUSD.fx	11:30:00 AM	0.66222	0.66218			N/A
5/6/2019	NZDUSD.fx	1:30:00 PM	0.6614	0.66144			N/A
5/6/2019	NZDUSD.fx	3:30:00 PM	0.661	0.66096			N/A
5/6/2019	NZDZAR	9:30:00 AM	9.5749	9.588			N/A
5/6/2019	NZDZAR	11:30:00 AM	9.5699	9.5856			N/A
5/6/2019	NZDZAR	1:30:00 PM	9.5676	9.5831			N/A
5/6/2019	NZDZAR	3:30:00 PM	9.5795	9.5951			N/A
5/6/2019	SEKJPY	9:30:00 AM	11.57	11.57			N/A
5/6/2019	SEKJPY	11:30:00 AM	11.56	11.57			N/A
5/6/2019	SEKJPY	1:30:00 PM	11.56	11.56			N/A
5/6/2019	SEKJPY	3:30:00 PM	11.58	11.58			N/A
5/6/2019	SEKJPY.fx	9:30:00 AM	11.557	11.573			N/A
5/6/2019	SEKJPY.fx	11:30:00 AM	11.548	11.564			N/A
5/6/2019	SEKJPY.fx	1:30:00 PM	11.543	11.562			N/A
5/6/2019	SEKJPY.fx	3:30:00 PM	11.566	11.584			N/A
5/6/2019	SGDJPY	9:30:00 AM	81.18	81.2			N/A
5/6/2019	SGDJPY	11:30:00 AM	81.21	81.23			N/A
5/6/2019	SGDJPY	1:30:00 PM	81.26	81.24			N/A
5/6/2019	SGDJPY	3:30:00 PM	81.31	81.34			N/A
5/6/2019	SILVER	9:30:00 AM	14.67	15.06			N/A
5/6/2019	SILVER	11:30:00 AM	14.66	15.04			N/A
5/6/2019	SILVER	1:30:00 PM	14.65	15.03			N/A
5/6/2019	SILVER	3:30:00 PM	14.6	14.99			N/A
5/6/2019	SPX500.i	9:30:00 AM	2893.85	2893.65			N/A
5/6/2019	SPX500.i	11:30:00 AM	2896.85	2896.65			N/A
5/6/2019	SPX500.i	1:30:00 PM	2896.6	2896.4			N/A
5/6/2019	SPX500.i	3:30:00 PM	2903.35	2903.4			N/A
5/6/2019	UK100.i	9:30:00 AM	7293	7291.8			N/A
5/6/2019	UK100.i	11:30:00 AM	7290.8	7291.4			N/A

5/6/2019	UK100.i	1:30:00 PM	7285.5	7287			N/A
5/6/2019	UK100.i	3:30:00 PM	7297.2	7297.2			N/A
5/6/2019	USDCAD	9:30:00 AM	1.34927	1.34927			N/A
5/6/2019	USDCAD	11:30:00 AM	1.34737	1.34722			N/A
5/6/2019	USDCAD	1:30:00 PM	1.34754	1.34765			N/A
5/6/2019	USDCAD	3:30:00 PM	1.34799	1.34785			N/A
5/6/2019	USDCAD.fx	9:30:00 AM	1.34931	1.34924			N/A
5/6/2019	USDCAD.fx	11:30:00 AM	1.34741	1.34718			N/A
5/6/2019	USDCAD.fx	1:30:00 PM	1.34757	1.34762			N/A
5/6/2019	USDCAD.fx	3:30:00 PM	1.34802	1.34781			N/A
5/6/2019	USDCHF	9:30:00 AM	1.01599	1.01614			N/A
5/6/2019	USDCHF	11:30:00 AM	1.01714	1.01713			N/A
5/6/2019	USDCHF	1:30:00 PM	1.0185	1.01857			N/A
5/6/2019	USDCHF	3:30:00 PM	1.01855	1.01864			N/A
5/6/2019	USDCHF.fx	9:30:00 AM	1.01604	1.01608			N/A
5/6/2019	USDCHF.fx	11:30:00 AM	1.0172	1.01706			N/A
5/6/2019	USDCHF.fx	1:30:00 PM	1.01855	1.0185			N/A
5/6/2019	USDCHF.fx	3:30:00 PM	1.0186	1.01857			N/A
5/6/2019	USDCZK	9:30:00 AM	22.966	22.989			N/A
5/6/2019	USDCZK	11:30:00 AM	22.972	22.99			N/A
5/6/2019	USDCZK	1:30:00 PM	22.973	22.996			N/A
5/6/2019	USDCZK	3:30:00 PM	22.962	22.982			N/A
5/6/2019	USDCZK.fx	9:30:00 AM	22.9748	22.9804			N/A
5/6/2019	USDCZK.fx	11:30:00 AM	22.981	22.98			N/A
5/6/2019	USDCZK.fx	1:30:00 PM	22.9809	22.9878			N/A
5/6/2019	USDCZK.fx	3:30:00 PM	22.9701	22.9749			N/A
5/6/2019	USDDKK	9:30:00 AM	6.6703	6.6738			N/A
5/6/2019	USDDKK	11:30:00 AM	6.6714	6.6742			N/A
5/6/2019	USDDKK	1:30:00 PM	6.6713	6.6753			N/A
5/6/2019	USDDKK	3:30:00 PM	6.6688	6.6722			N/A
5/6/2019	USDDKK.fx	9:30:00 AM	6.67065	6.67174			N/A
5/6/2019	USDDKK.fx	11:30:00 AM	6.67176	6.67214			N/A
5/6/2019	USDDKK.fx	1:30:00 PM	6.67186	6.67312			N/A
5/6/2019	USDDKK.fx	3:30:00 PM	6.66914	6.6702			N/A

5/6/2019	USDHKD	9:30:00 AM	7.8456	7.8458			N/A
5/6/2019	USDHKD	11:30:00 AM	7.8457	7.846			N/A
5/6/2019	USDHKD	1:30:00 PM	7.8459	7.8463			N/A
5/6/2019	USDHKD	3:30:00 PM	7.8452	7.8457			N/A
5/6/2019	USDHKD.fx	9:30:00 AM	7.84555	7.84608			N/A
5/6/2019	USDHKD.fx	11:30:00 AM	7.84564	7.8462			N/A
5/6/2019	USDHKD.fx	1:30:00 PM	7.84598	7.84654			N/A
5/6/2019	USDHKD.fx	3:30:00 PM					N/A
5/6/2019	USDHUF	9:30:00 AM	288.73	289.19			N/A
5/6/2019	USDHUF	11:30:00 AM	289.09	289.56			N/A
5/6/2019	USDHUF	1:30:00 PM	288.81	289.28			N/A
5/6/2019	USDHUF	3:30:00 PM	288.69	289.13			N/A
5/6/2019	USDHUF.fx	9:30:00 AM	288.927	288.987			N/A
5/6/2019	USDHUF.fx	11:30:00 AM	289.292	289.355			N/A
5/6/2019	USDHUF.fx	1:30:00 PM	289.005	289.084			N/A
5/6/2019	USDHUF.fx	3:30:00 PM	288.885	288.926			N/A
5/6/2019	USDINR	9:30:00 AM	64.4	74.38			N/A
5/6/2019	USDINR	11:30:00 AM	64.41	74.4			N/A
5/6/2019	USDINR	1:30:00 PM					N/A
5/6/2019	USDINR	3:30:00 PM					N/A
5/6/2019	USDJPY	9:30:00 AM	110.731	110.742			N/A
5/6/2019	USDJPY	11:30:00 AM	110.714	110.719			N/A
5/6/2019	USDJPY	1:30:00 PM	110.764	110.769			N/A
5/6/2019	USDJPY	3:30:00 PM	110.924	110.927			N/A
5/6/2019	USDJPY.fx	9:30:00 AM	110.736	110.734			N/A
5/6/2019	USDJPY.fx	11:30:00 AM	110.72	110.712			N/A
5/6/2019	USDJPY.fx	1:30:00 PM	110.77	110.762			N/A
5/6/2019	USDJPY.fx	3:30:00 PM	110.93	110.917			N/A
5/6/2019	USDMXN	9:30:00 AM	19.073	19.081			N/A
5/6/2019	USDMXN	11:30:00 AM	19.042	19.044			N/A
5/6/2019	USDMXN	1:30:00 PM	19.033	19.041			N/A
5/6/2019	USDMXN	3:30:00 PM	19.056	19.053			N/A
5/6/2019	USDMXN.f	9:30:00 AM	19.0761	19.0773			N/A
5/6/2019	USDMXN.f	11:30:00 AM	19.0457	19.0409			N/A

5/6/2019	USDMXN.f	1:30:00 PM	19.0365	19.0363			N/A
5/6/2019	USDMXN.f	3:30:00 PM	19.0602	19.0497			N/A
5/6/2019	USDNOK	9:30:00 AM	8.7461	8.7538			N/A
5/6/2019	USDNOK	11:30:00 AM	8.7521	8.7591			N/A
5/6/2019	USDNOK	1:30:00 PM	8.7543	8.7629			N/A
5/6/2019	USDNOK	3:30:00 PM	8.7443	8.7497			N/A
5/6/2019	USDNOK.fx	9:30:00 AM	8.74989	8.74915			N/A
5/6/2019	USDNOK.fx	11:30:00 AM	8.75606	8.75464			N/A
5/6/2019	USDNOK.fx	1:30:00 PM	8.75825	8.75835			N/A
5/6/2019	USDNOK.fx	3:30:00 PM	8.74815	8.74541			N/A
5/6/2019	USDPLN	9:30:00 AM	3.8276	3.8285			N/A
5/6/2019	USDPLN	11:30:00 AM	3.8281	3.8278			N/A
5/6/2019	USDPLN	1:30:00 PM	3.8267	3.8283			N/A
5/6/2019	USDPLN	3:30:00 PM	3.825	3.8263			N/A
5/6/2019	USDPLN.fx	9:30:00 AM	3.82678	3.82931			N/A
5/6/2019	USDPLN.fx	11:30:00 AM	3.82717	3.82821			N/A
5/6/2019	USDPLN.fx	1:30:00 PM	3.82585	3.82904			N/A
5/6/2019	USDPLN.fx	3:30:00 PM	3.82409	3.82708			N/A
5/6/2019	USDRUB	9:30:00 AM					N/A
5/6/2019	USDRUB	11:30:00 AM	65.029	65.41			N/A
5/6/2019	USDRUB	1:30:00 PM	64.942	65.336			N/A
5/6/2019	USDRUB	3:30:00 PM	64.982	65.362			N/A
5/6/2019	USDSEK	9:30:00 AM	9.5727	9.5752			N/A
5/6/2019	USDSEK	11:30:00 AM	9.578	9.5804			N/A
5/6/2019	USDSEK	1:30:00 PM	9.5855	9.5899			N/A
5/6/2019	USDSEK	3:30:00 PM	9.5818	9.5841			N/A
5/6/2019	USDSEK.fx	9:30:00 AM	9.57549	9.57343			N/A
5/6/2019	USDSEK.fx	11:30:00 AM	9.58061	9.57865			N/A
5/6/2019	USDSEK.fx	1:30:00 PM	9.58793	9.58799			N/A
5/6/2019	USDSEK.fx	3:30:00 PM	9.58443	9.58211			N/A
5/6/2019	USDSGD	9:30:00 AM	1.3636	1.3639			N/A
5/6/2019	USDSGD	11:30:00 AM	1.3628	1.3632			N/A
5/6/2019	USDSGD	1:30:00 PM	1.3632	1.3636			N/A
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5/6/2019	USDSGD.fx	9:30:00 AM	1.36348	1.3639			N/A
5/6/2019	USDSGD.fx	11:30:00 AM	1.36276	1.3632			N/A
5/6/2019	USDSGD.fx	1:30:00 PM	1.36312	1.36359			N/A
5/6/2019	USDSGD.fx	3:30:00 PM	1.36339	1.36376			N/A
5/6/2019	USDZAR	9:30:00 AM	14.4652	14.4758			N/A
5/6/2019	USDZAR	11:30:00 AM	14.4627	14.4758			N/A
5/6/2019	USDZAR	1:30:00 PM	14.4754	14.4924			N/A
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5/6/2019	USDZAR.fx	3:30:00 PM					N/A
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5/6/2019	XAUUSD	11:30:00 AM	1282.71	1283			N/A
5/6/2019	XAUUSD	1:30:00 PM	1281.24	1281.38			N/A
5/6/2019	XAUUSD	3:30:00 PM	1278.56	1278.67			N/A
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5/6/2019	ZARJPY	11:30:00 AM	7.63	7.65			N/A
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5/6/2019	ZARJPY.fx	3:30:00 PM	7.643	7.644			N/A
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5/7/2019	#ORCL	1:30:00 PM					N/A
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5/7/2019	#Ripple	9:30:00 AM	0.3172	0.3219			N/A
5/7/2019	#Ripple	11:30:00 AM	0.3177	0.3226			N/A
5/7/2019	#Ripple	1:30:00 PM	0.3154	0.3201			N/A
5/7/2019	#Ripple	3:30:00 PM	0.3151	0.3198			N/A
5/7/2019	#S	9:30:00 AM					N/A
5/7/2019	#S	11:30:00 AM					N/A

5/7/2019	#S	1:30:00 PM					N/A
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5/7/2019	#TSCO	11:30:00 AM					N/A
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5/7/2019	#TSCO	3:30:00 PM					N/A

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5/7/2019	#UBS	1:30:00 PM					N/A
5/7/2019	#UBS	3:30:00 PM					N/A
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5/7/2019	#UL	3:30:00 PM					N/A
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5/7/2019	#UPS	3:30:00 PM					N/A
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5/7/2019	#UTX	11:30:00 AM					N/A
5/7/2019	#UTX	1:30:00 PM					N/A
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5/7/2019	#V	3:30:00 PM					N/A
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5/7/2019	#WMT	1:30:00 PM					N/A
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5/7/2019	#YHOO	3:30:00 PM					N/A
5/7/2019	#ZNGA	9:30:00 AM					N/A
5/7/2019	#ZNGA	11:30:00 AM					N/A
5/7/2019	#ZNGA	1:30:00 PM					N/A
5/7/2019	#ZNGA	3:30:00 PM					N/A
5/7/2019	AUDCAD	9:30:00 AM	0.94468	0.94502			N/A
5/7/2019	AUDCAD	11:30:00 AM	0.94323	0.94392			N/A
5/7/2019	AUDCAD	1:30:00 PM	0.94312	0.94387			N/A
5/7/2019	AUDCAD	3:30:00 PM	0.94405	0.94471			N/A
5/7/2019	AUDCAD.fx	9:30:00 AM	0.94503	0.94468			N/A
5/7/2019	AUDCAD.fx	11:30:00 AM	0.94356	0.94358			N/A
5/7/2019	AUDCAD.fx	1:30:00 PM	0.94345	0.94353			N/A
5/7/2019	AUDCAD.fx	3:30:00 PM	0.94439	0.94436			N/A

5/7/2019	AUDCHF	9:30:00 AM	0.71532	0.7158			N/A
5/7/2019	AUDCHF	11:30:00 AM	0.71504	0.71567			N/A
5/7/2019	AUDCHF	1:30:00 PM	0.71493	0.71563			N/A
5/7/2019	AUDCHF	3:30:00 PM	0.7154	0.71613			N/A
5/7/2019	AUDCHF.fx	9:30:00 AM	0.71566	0.71545			N/A
5/7/2019	AUDCHF.fx	11:30:00 AM	0.71538	0.71532			N/A
5/7/2019	AUDCHF.fx	1:30:00 PM	0.71527	0.71528			N/A
5/7/2019	AUDCHF.fx	3:30:00 PM	0.71575	0.71577			N/A
5/7/2019	AUDCZK	9:30:00 AM	16.115	16.128			N/A
5/7/2019	AUDCZK	11:30:00 AM	16.111	16.126			N/A
5/7/2019	AUDCZK	1:30:00 PM	16.094	16.11			N/A
5/7/2019	AUDCZK	3:30:00 PM	16.108	16.123			N/A
5/7/2019	AUDDKK	9:30:00 AM	4.6842	4.6879			N/A
5/7/2019	AUDDKK	11:30:00 AM	4.6807	4.685			N/A
5/7/2019	AUDDKK	1:30:00 PM	4.6753	4.6796			N/A
5/7/2019	AUDDKK	3:30:00 PM	4.6781	4.6828			N/A
5/7/2019	AUDHKD	9:30:00 AM	5.5216	5.5241			N/A
5/7/2019	AUDHKD	11:30:00 AM	5.5091	5.5119			N/A
5/7/2019	AUDHKD	1:30:00 PM	5.5034	5.507			N/A
5/7/2019	AUDHKD	3:30:00 PM	5.5012	5.505			N/A
5/7/2019	AUDHUF	9:30:00 AM	202.95	202.86			N/A
5/7/2019	AUDHUF	11:30:00 AM	202.96	203.19			N/A
5/7/2019	AUDHUF	1:30:00 PM	202.9	203.12			N/A
5/7/2019	AUDHUF	3:30:00 PM					N/A
5/7/2019	AUDJPY	9:30:00 AM	77.956	77.992			N/A
5/7/2019	AUDJPY	11:30:00 AM	77.67	77.727			N/A
5/7/2019	AUDJPY	1:30:00 PM	77.57	77.642			N/A
5/7/2019	AUDJPY	3:30:00 PM	77.58	77.649			N/A
5/7/2019	AUDJPY.fx	9:30:00 AM	77.99	77.956			N/A
5/7/2019	AUDJPY.fx	11:30:00 AM	77.704	77.692			N/A
5/7/2019	AUDJPY.fx	1:30:00 PM	77.604	77.607			N/A
5/7/2019	AUDJPY.fx	3:30:00 PM	77.614	77.614			N/A
5/7/2019	AUDMXN	9:30:00 AM	13.3353	13.3406			N/A
5/7/2019	AUDMXN	11:30:00 AM	13.3273	13.3365			N/A

5/7/2019	AUDMXN	1:30:00 PM	13.3225	13.3305			N/A
5/7/2019	AUDMXN	3:30:00 PM	13.3497	13.356			N/A
5/7/2019	AUDNOK	9:30:00 AM	6.1244	6.1285			N/A
5/7/2019	AUDNOK	11:30:00 AM	6.1124	6.1174			N/A
5/7/2019	AUDNOK	1:30:00 PM	6.1047	6.1098			N/A
5/7/2019	AUDNOK	3:30:00 PM	6.1146	6.1196			N/A
5/7/2019	AUDNOK.fx	9:30:00 AM	6.126	6.1268			N/A
5/7/2019	AUDNOK.fx	11:30:00 AM	6.1141	6.1156			N/A
5/7/2019	AUDNOK.fx	1:30:00 PM	6.1063	6.108			N/A
5/7/2019	AUDNOK.fx	3:30:00 PM	6.1162	6.1178			N/A
5/7/2019	AUDNZD	9:30:00 AM	1.06299	1.06371			N/A
5/7/2019	AUDNZD	11:30:00 AM	1.06242	1.06312			N/A
5/7/2019	AUDNZD	1:30:00 PM	1.06266	1.06339			N/A
5/7/2019	AUDNZD	3:30:00 PM	1.06324	1.06407			N/A
5/7/2019	AUDNZD.fx	9:30:00 AM	1.06344	1.06325			N/A
5/7/2019	AUDNZD.fx	11:30:00 AM	1.06286	1.06266			N/A
5/7/2019	AUDNZD.fx	1:30:00 PM	1.0631	1.06295			N/A
5/7/2019	AUDNZD.fx	3:30:00 PM	1.06368	1.06361			N/A
5/7/2019	AUDPLN	9:30:00 AM	2.6871	2.6893			N/A
5/7/2019	AUDPLN	11:30:00 AM	2.6859	2.6889			N/A
5/7/2019	AUDPLN	1:30:00 PM	2.6839	2.687			N/A
5/7/2019	AUDPLN	3:30:00 PM	2.6856	2.6889			N/A
5/7/2019	AUDSEK	9:30:00 AM	6.7182	6.7202			N/A
5/7/2019	AUDSEK	11:30:00 AM	6.7055	6.7065			N/A
5/7/2019	AUDSEK	1:30:00 PM	6.7048	6.708			N/A
5/7/2019	AUDSEK	3:30:00 PM	6.7152	6.7161			N/A
5/7/2019	AUDSEK.fx	9:30:00 AM	6.7136	6.7246			N/A
5/7/2019	AUDSEK.fx	11:30:00 AM	6.7009	6.7109			N/A
5/7/2019	AUDSEK.fx	1:30:00 PM	6.7006	6.7123			N/A
5/7/2019	AUDSEK.fx	3:30:00 PM	6.7108	6.7205			N/A
5/7/2019	AUDSGD	9:30:00 AM	0.9582	0.9583			N/A
5/7/2019	AUDSGD	11:30:00 AM	0.9563	0.9565			N/A
5/7/2019	AUDSGD	1:30:00 PM	0.9556	0.9558			N/A
5/7/2019	AUDSGD	3:30:00 PM	0.9557	0.956			N/A

5/7/2019	AUDSGD.fx	9:30:00 AM	0.95832	0.95816			N/A
5/7/2019	AUDSGD.fx	11:30:00 AM	0.95641	0.95644			N/A
5/7/2019	AUDSGD.fx	1:30:00 PM	0.95566	0.95577			N/A
5/7/2019	AUDSGD.fx	3:30:00 PM	0.95583	0.95591			N/A
5/7/2019	AUDUSD	9:30:00 AM	0.70401	0.70389			N/A
5/7/2019	AUDUSD	11:30:00 AM	0.7022	0.70228			N/A
5/7/2019	AUDUSD	1:30:00 PM	0.7016	0.70172			N/A
5/7/2019	AUDUSD	3:30:00 PM	0.7014	0.70147			N/A
5/7/2019	AUDUSD.fx	9:30:00 AM	0.70407	0.70383			N/A
5/7/2019	AUDUSD.fx	11:30:00 AM	0.70225	0.70222			N/A
5/7/2019	AUDUSD.fx	1:30:00 PM	0.70165	0.70166			N/A
5/7/2019	AUDUSD.fx	3:30:00 PM	0.70145	0.70141			N/A
5/7/2019	AUDZAR	9:30:00 AM	10.1515	10.1639			N/A
5/7/2019	AUDZAR	11:30:00 AM	10.1467	10.1619			N/A
5/7/2019	AUDZAR	1:30:00 PM	10.1344	10.1474			N/A
5/7/2019	AUDZAR	3:30:00 PM	10.1118	10.1277			N/A
5/7/2019	AUS200.i	9:30:00 AM					N/A
5/7/2019	AUS200.i	11:30:00 AM	6301.17	6304.47			N/A
5/7/2019	AUS200.i	1:30:00 PM	6293.97	6296.97			N/A
5/7/2019	AUS200.i	3:30:00 PM	6288.67	6291.47			N/A
5/7/2019	BCHUSD	9:30:00 AM	303.26	305.14			N/A
5/7/2019	BCHUSD	11:30:00 AM	302.54	304.33			N/A
5/7/2019	BCHUSD	1:30:00 PM	301.69	303.58			N/A
5/7/2019	BCHUSD	3:30:00 PM	302.61	304.59			N/A
5/7/2019	CADCHF	9:30:00 AM	0.75702	0.75764			N/A
5/7/2019	CADCHF	11:30:00 AM	0.75779	0.75845			N/A
5/7/2019	CADCHF	1:30:00 PM	0.75775	0.75845			N/A
5/7/2019	CADCHF	3:30:00 PM	0.75758	0.75823			N/A
5/7/2019	CADCHF.fx	9:30:00 AM	0.75735	0.75728			N/A
5/7/2019	CADCHF.fx	11:30:00 AM	0.75813	0.7581			N/A
5/7/2019	CADCHF.fx	1:30:00 PM	0.75809	0.7581			N/A
5/7/2019	CADCHF.fx	3:30:00 PM	0.75794	0.75788			N/A
5/7/2019	CADCZK	9:30:00 AM	17.059	17.071			N/A
5/7/2019	CADCZK	11:30:00 AM	17.078	17.094			N/A

5/7/2019	CADCZK	1:30:00 PM	17.062	17.077			N/A
5/7/2019	CADCZK	3:30:00 PM	17.06	17.076			N/A
5/7/2019	CADDKK	9:30:00 AM					N/A
5/7/2019	CADDKK	11:30:00 AM					N/A
5/7/2019	CADDKK	1:30:00 PM					N/A
5/7/2019	CADDKK	3:30:00 PM	4.955	4.958			N/A
5/7/2019	CADHKD	9:30:00 AM	5.8441	5.848			N/A
5/7/2019	CADHKD	11:30:00 AM	5.8385	5.8424			N/A
5/7/2019	CADHKD	1:30:00 PM	5.8339	5.8375			N/A
5/7/2019	CADHKD	3:30:00 PM	5.8267	5.8299			N/A
5/7/2019	CADHUF	9:30:00 AM	214.87	214.67			N/A
5/7/2019	CADHUF	11:30:00 AM	215.16	215.33			N/A
5/7/2019	CADHUF	1:30:00 PM	215.12	215.28			N/A
5/7/2019	CADHUF	3:30:00 PM	215.16	215.3			N/A
5/7/2019	CADJPY	9:30:00 AM	82.492	82.553			N/A
5/7/2019	CADJPY	11:30:00 AM	82.313	82.376			N/A
5/7/2019	CADJPY	1:30:00 PM	82.219	82.29			N/A
5/7/2019	CADJPY	3:30:00 PM	82.155	82.217			N/A
5/7/2019	CADJPY.fx	9:30:00 AM	82.526	82.519			N/A
5/7/2019	CADJPY.fx	11:30:00 AM	82.347	82.341			N/A
5/7/2019	CADJPY.fx	1:30:00 PM	82.253	82.255			N/A
5/7/2019	CADJPY.fx	3:30:00 PM	82.189	82.182			N/A
5/7/2019	CADMXN	9:30:00 AM	14.1136	14.1252			N/A
5/7/2019	CADMXN	11:30:00 AM	14.1269	14.1374			N/A
5/7/2019	CADMXN	1:30:00 PM	14.1218	14.1321			N/A
5/7/2019	CADMXN	3:30:00 PM	14.1365	14.1463			N/A
5/7/2019	CADNOK	9:30:00 AM	6.4802	6.4849			N/A
5/7/2019	CADNOK	11:30:00 AM	6.4769	6.4817			N/A
5/7/2019	CADNOK	1:30:00 PM	6.4695	6.4737			N/A
5/7/2019	CADNOK	3:30:00 PM	6.4735	6.4785			N/A
5/7/2019	CADPLN	9:30:00 AM	2.8443	2.8456			N/A
5/7/2019	CADPLN	11:30:00 AM	2.8465	2.8484			N/A
5/7/2019	CADPLN	1:30:00 PM	2.8452	2.8468			N/A
5/7/2019	CADPLN	3:30:00 PM	2.8442	2.8461			N/A



5/7/2019	CADSEK	9:30:00 AM	7.1092	7.1107			N/A
5/7/2019	CADSEK	11:30:00 AM	7.1049	7.1058			N/A
5/7/2019	CADSEK	1:30:00 PM	7.105	7.1081			N/A
5/7/2019	CADSEK	3:30:00 PM	7.1092	7.111			N/A
5/7/2019	CADSGD	9:30:00 AM	1.0135	1.0138			N/A
5/7/2019	CADSGD	11:30:00 AM	1.013	1.0133			N/A
5/7/2019	CADSGD	1:30:00 PM	1.0122	1.0125			N/A
5/7/2019	CADSGD	3:30:00 PM	1.0113	1.0115			N/A
5/7/2019	CADZAR	9:30:00 AM	10.7453	10.7591			N/A
5/7/2019	CADZAR	11:30:00 AM	10.7541	10.772			N/A
5/7/2019	CADZAR	1:30:00 PM	10.7424	10.7577			N/A
5/7/2019	CADZAR	3:30:00 PM	10.7089	10.7253			N/A
5/7/2019	CHFCZK	9:30:00 AM	22.526	22.539			N/A
5/7/2019	CHFCZK	11:30:00 AM	22.53	22.547			N/A
5/7/2019	CHFCZK	1:30:00 PM	22.509	22.524			N/A
5/7/2019	CHFCZK	3:30:00 PM	22.512	22.528			N/A
5/7/2019	CHFDKK	9:30:00 AM	6.547	6.55			N/A
5/7/2019	CHFDKK	11:30:00 AM					N/A
5/7/2019	CHFDKK	1:30:00 PM	6.538	6.54			N/A
5/7/2019	CHFDKK	3:30:00 PM	6.538	6.541			N/A
5/7/2019	CHFDKK.fx	9:30:00 AM	6.5456	6.5514			N/A
5/7/2019	CHFDKK.fx	11:30:00 AM	6.5429	6.5491			N/A
5/7/2019	CHFDKK.fx	1:30:00 PM	6.5363	6.5419			N/A
5/7/2019	CHFDKK.fx	3:30:00 PM	6.5361	6.5421			N/A
5/7/2019	CHFHKD	9:30:00 AM	7.7175	7.7211			N/A
5/7/2019	CHFHKD	11:30:00 AM	7.702	7.7059			N/A
5/7/2019	CHFHKD	1:30:00 PM	7.6966	7.6994			N/A
5/7/2019	CHFHKD	3:30:00 PM	7.6882	7.6919			N/A
5/7/2019	CHFHUF	9:30:00 AM	283.64	283.56			N/A
5/7/2019	CHFHUF	11:30:00 AM	283.75	284.13			N/A
5/7/2019	CHFHUF	1:30:00 PM	283.69	284.05			N/A
5/7/2019	CHFHUF	3:30:00 PM	283.8	284.19			N/A
5/7/2019	CHFJPY	9:30:00 AM	108.935	108.997			N/A
5/7/2019	CHFJPY	11:30:00 AM	108.582	108.648			N/A

5/7/2019	CHFJPY	1:30:00 PM	108.467	108.531			N/A
5/7/2019	CHFJPY	3:30:00 PM	108.402	108.471			N/A
5/7/2019	CHFJPY.fx	9:30:00 AM	108.969	108.962			N/A
5/7/2019	CHFJPY.fx	11:30:00 AM	108.615	108.614			N/A
5/7/2019	CHFJPY.fx	1:30:00 PM	108.501	108.496			N/A
5/7/2019	CHFJPY.fx	3:30:00 PM	108.435	108.437			N/A
5/7/2019	CHFMXN	9:30:00 AM	18.6388	18.6514			N/A
5/7/2019	CHFMXN	11:30:00 AM	18.6344	18.6487			N/A
5/7/2019	CHFMXN	1:30:00 PM	18.6287	18.6426			N/A
5/7/2019	CHFMXN	3:30:00 PM	18.6539	18.6648			N/A
5/7/2019	CHFNOK	9:30:00 AM	8.558	8.565			N/A
5/7/2019	CHFNOK	11:30:00 AM	8.5445	8.5518			N/A
5/7/2019	CHFNOK	1:30:00 PM	8.5343	8.5418			N/A
5/7/2019	CHFNOK	3:30:00 PM	8.5424	8.5499			N/A
5/7/2019	CHFNOK.fx	9:30:00 AM	8.5615	8.56158			N/A
5/7/2019	CHFNOK.fx	11:30:00 AM	8.54807	8.54819			N/A
5/7/2019	CHFNOK.fx	1:30:00 PM	8.53798	8.53811			N/A
5/7/2019	CHFNOK.fx	3:30:00 PM	8.54601	8.5463			N/A
5/7/2019	CHFPLN	9:30:00 AM	3.7558	3.7573			N/A
5/7/2019	CHFPLN	11:30:00 AM	3.7555	3.7584			N/A
5/7/2019	CHFPLN	1:30:00 PM	3.753	3.7558			N/A
5/7/2019	CHFPLN	3:30:00 PM	3.7528	3.7557			N/A
5/7/2019	CHFPLN.fx	9:30:00 AM	3.75334	3.75965			N/A
5/7/2019	CHFPLN.fx	11:30:00 AM	3.75306	3.76073			N/A
5/7/2019	CHFPLN.fx	1:30:00 PM	3.75074	3.75803			N/A
5/7/2019	CHFPLN.fx	3:30:00 PM	3.75046	3.75803			N/A
5/7/2019	CHFSEK	9:30:00 AM	9.388	9.3891			N/A
5/7/2019	CHFSEK	11:30:00 AM	9.373	9.3735			N/A
5/7/2019	CHFSEK	1:30:00 PM	9.3732	9.3763			N/A
5/7/2019	CHFSEK	3:30:00 PM	9.3816	9.3819			N/A
5/7/2019	CHFSGD	9:30:00 AM	1.339	1.3394			N/A
5/7/2019	CHFSGD	11:30:00 AM	1.3369	1.3372			N/A
5/7/2019	CHFSGD	1:30:00 PM	1.3359	1.3362			N/A
5/7/2019	CHFSGD	3:30:00 PM	1.3353	1.3357			N/A

5/7/2019	CHFSGD.fx	9:30:00 AM	1.33915	1.33922			N/A
5/7/2019	CHFSGD.fx	11:30:00 AM	1.33703	1.33699			N/A
5/7/2019	CHFSGD.fx	1:30:00 PM	1.33607	1.33615			N/A
5/7/2019	CHFSGD.fx	3:30:00 PM	1.33543	1.33547			N/A
5/7/2019	CHFZAR	9:30:00 AM	14.1923	14.2028			N/A
5/7/2019	CHFZAR	11:30:00 AM	14.1903	14.2045			N/A
5/7/2019	CHFZAR	1:30:00 PM	14.175	14.1867			N/A
5/7/2019	CHFZAR	3:30:00 PM	14.1342	14.1491			N/A
5/7/2019	CZKJPY	9:30:00 AM					N/A
5/7/2019	CZKJPY	11:30:00 AM	4.819	4.822			N/A
5/7/2019	CZKJPY	1:30:00 PM	4.818	4.821			N/A
5/7/2019	CZKJPY	3:30:00 PM					N/A
5/7/2019	DAX30.i	9:30:00 AM	12316.19	12312.19			N/A
5/7/2019	DAX30.i	11:30:00 AM	12286.69	12283.44			N/A
5/7/2019	DAX30.i	1:30:00 PM	12230.19	12227.19			N/A
5/7/2019	DAX30.i	3:30:00 PM	12233.69	12231.44			N/A
5/7/2019	DJ30.i	9:30:00 AM					N/A
5/7/2019	DJ30.i	11:30:00 AM					N/A
5/7/2019	DJ30.i	1:30:00 PM					N/A
5/7/2019	DJ30.i	3:30:00 PM					N/A
5/7/2019	DKKJPY	9:30:00 AM					N/A
5/7/2019	DKKJPY	11:30:00 AM	16.59	16.61			N/A
5/7/2019	DKKJPY	1:30:00 PM	16.59	16.61			N/A
5/7/2019	DKKJPY	3:30:00 PM	16.58	16.6			N/A
5/7/2019	EURAUD	9:30:00 AM	1.59268	1.59268			N/A
5/7/2019	EURAUD	11:30:00 AM	1.5937	1.5939			N/A
5/7/2019	EURAUD	1:30:00 PM	1.59536	1.59572			N/A
5/7/2019	EURAUD	3:30:00 PM	1.59426	1.59469			N/A
5/7/2019	EURAUD.fx	9:30:00 AM	1.5929	1.59246			N/A
5/7/2019	EURAUD.fx	11:30:00 AM	1.5939	1.59368			N/A
5/7/2019	EURAUD.fx	1:30:00 PM	1.59556	1.5955			N/A
5/7/2019	EURAUD.fx	3:30:00 PM	1.59447	1.59448			N/A
5/7/2019	EURCAD	9:30:00 AM	1.50508	1.50584			N/A
5/7/2019	EURCAD	11:30:00 AM	1.50413	1.50482			N/A

5/7/2019	EURCAD	1:30:00 PM	1.50558	1.50631			N/A
5/7/2019	EURCAD	3:30:00 PM	1.50602	1.50674			N/A
5/7/2019	EURCAD.fx	9:30:00 AM	1.5055	1.50542			N/A
5/7/2019	EURCAD.fx	11:30:00 AM	1.50456	1.5044			N/A
5/7/2019	EURCAD.fx	1:30:00 PM	1.50601	1.50588			N/A
5/7/2019	EURCAD.fx	3:30:00 PM	1.50641	1.5063			N/A
5/7/2019	EURCHF	9:30:00 AM	1.14009	1.14014			N/A
5/7/2019	EURCHF	11:30:00 AM	1.1405	1.14061			N/A
5/7/2019	EURCHF	1:30:00 PM	1.14169	1.14169			N/A
5/7/2019	EURCHF	3:30:00 PM	1.14166	1.14173			N/A
5/7/2019	EURCHF.fx	9:30:00 AM	1.14014	1.14008			N/A
5/7/2019	EURCHF.fx	11:30:00 AM	1.14054	1.14055			N/A
5/7/2019	EURCHF.fx	1:30:00 PM	1.14174	1.14163			N/A
5/7/2019	EURCHF.fx	3:30:00 PM	1.14171	1.14167			N/A
5/7/2019	EURCZK	9:30:00 AM	25.671	25.705			N/A
5/7/2019	EURCZK	11:30:00 AM					N/A
5/7/2019	EURCZK	1:30:00 PM	25.686	25.723			N/A
5/7/2019	EURCZK	3:30:00 PM	25.687	25.726			N/A
5/7/2019	EURDKK	9:30:00 AM	7.465	7.4659			N/A
5/7/2019	EURDKK	11:30:00 AM	7.4654	7.4661			N/A
5/7/2019	EURDKK	1:30:00 PM	7.4641	7.4653			N/A
5/7/2019	EURDKK	3:30:00 PM	7.4647	7.4654			N/A
5/7/2019	EURGBP	9:30:00 AM	0.85479	0.85482			N/A
5/7/2019	EURGBP	11:30:00 AM	0.85519	0.8552			N/A
5/7/2019	EURGBP	1:30:00 PM	0.85603	0.85602			N/A
5/7/2019	EURGBP	3:30:00 PM	0.85674	0.8568			N/A
5/7/2019	EURGBP.fx	9:30:00 AM	0.85484	0.85477			N/A
5/7/2019	EURGBP.fx	11:30:00 AM	0.85522	0.85515			N/A
5/7/2019	EURGBP.fx	1:30:00 PM	0.85607	0.85597			N/A
5/7/2019	EURGBP.fx	3:30:00 PM	0.85678	0.85675			N/A
5/7/2019	EURHKD	9:30:00 AM	8.7996	8.8039			N/A
5/7/2019	EURHKD	11:30:00 AM	8.7856	8.7895			N/A
5/7/2019	EURHKD	1:30:00 PM	8.7869	8.7911			N/A
5/7/2019	EURHKD	3:30:00 PM	8.7785	8.7827			N/A

5/7/2019	EURHKD.fx	9:30:00 AM	8.80243	8.80111			N/A
5/7/2019	EURHKD.fx	11:30:00 AM	8.78842	8.78656			N/A
5/7/2019	EURHKD.fx	1:30:00 PM	8.78978	8.78828			N/A
5/7/2019	EURHKD.fx	3:30:00 PM	8.7812	8.77988			N/A
5/7/2019	EURHUF	9:30:00 AM	323.33	323.55			N/A
5/7/2019	EURHUF	11:30:00 AM	323.53	324.16			N/A
5/7/2019	EURHUF	1:30:00 PM	323.77	324.42			N/A
5/7/2019	EURHUF	3:30:00 PM	323.94	324.68			N/A
5/7/2019	EURHUF.fx	9:30:00 AM	323.59	323.318			N/A
5/7/2019	EURHUF.fx	11:30:00 AM	323.835	324.018			N/A
5/7/2019	EURHUF.fx	1:30:00 PM	324.099	324.288			N/A
5/7/2019	EURHUF.fx	3:30:00 PM	324.217	324.404			N/A
5/7/2019	EURJPY	9:30:00 AM	124.24	124.229			N/A
5/7/2019	EURJPY	11:30:00 AM	123.879	123.877			N/A
5/7/2019	EURJPY	1:30:00 PM	123.872	123.867			N/A
5/7/2019	EURJPY	3:30:00 PM	123.795	123.801			N/A
5/7/2019	EURJPY.fx	9:30:00 AM	124.243	124.225			N/A
5/7/2019	EURJPY.fx	11:30:00 AM	123.881	123.874			N/A
5/7/2019	EURJPY.fx	1:30:00 PM	123.875	123.862			N/A
5/7/2019	EURJPY.fx	3:30:00 PM	123.798	123.797			N/A
5/7/2019	EURMXN	9:30:00 AM	21.2528	21.2679			N/A
5/7/2019	EURMXN	11:30:00 AM	21.2547	21.2713			N/A
5/7/2019	EURMXN	1:30:00 PM	21.2703	21.2876			N/A
5/7/2019	EURMXN	3:30:00 PM	21.2974	21.3111			N/A
5/7/2019	EURMXN.fx	9:30:00 AM	21.2606	21.2599			N/A
5/7/2019	EURMXN.fx	11:30:00 AM	21.2642	21.2628			N/A
5/7/2019	EURMXN.fx	1:30:00 PM	21.2794	21.2785			N/A
5/7/2019	EURMXN.fx	3:30:00 PM	21.3067	21.3018			N/A
5/7/2019	EURNOK	9:30:00 AM	9.7552	9.7669			N/A
5/7/2019	EURNOK	11:30:00 AM	9.744	9.7552			N/A
5/7/2019	EURNOK	1:30:00 PM	9.7417	9.7538			N/A
5/7/2019	EURNOK	3:30:00 PM	9.7515	9.763			N/A
5/7/2019	EURNOK.fx	9:30:00 AM	9.76051	9.76148			N/A
5/7/2019	EURNOK.fx	11:30:00 AM	9.74946	9.74964			N/A

5/7/2019	EURNOK.fx	1:30:00 PM	9.74729	9.74837			N/A
5/7/2019	EURNOK.fx	3:30:00 PM	9.75695	9.75749			N/A
5/7/2019	EURNZD	9:30:00 AM	1.69387	1.69454			N/A
5/7/2019	EURNZD	11:30:00 AM	1.69416	1.6948			N/A
5/7/2019	EURNZD	1:30:00 PM	1.69648	1.69713			N/A
5/7/2019	EURNZD	3:30:00 PM	1.69628	1.69698			N/A
5/7/2019	EURNZD.fx	9:30:00 AM	1.6943	1.6941			N/A
5/7/2019	EURNZD.fx	11:30:00 AM	1.69458	1.69435			N/A
5/7/2019	EURNZD.fx	1:30:00 PM	1.69691	1.69671			N/A
5/7/2019	EURNZD.fx	3:30:00 PM	1.6967	1.69654			N/A
5/7/2019	EURPLN	9:30:00 AM	4.2819	4.2837			N/A
5/7/2019	EURPLN	11:30:00 AM	4.2833	4.2864			N/A
5/7/2019	EURPLN	1:30:00 PM	4.2848	4.2879			N/A
5/7/2019	EURPLN	3:30:00 PM	4.2846	4.2878			N/A
5/7/2019	EURPLN.fx	9:30:00 AM	4.2815	4.28422			N/A
5/7/2019	EURPLN.fx	11:30:00 AM	4.28267	4.28682			N/A
5/7/2019	EURPLN.fx	1:30:00 PM	4.28417	4.28842			N/A
5/7/2019	EURPLN.fx	3:30:00 PM	4.28397	4.28842			N/A
5/7/2019	EURRUB	9:30:00 AM					N/A
5/7/2019	EURRUB	11:30:00 AM	72.67	73.103			N/A
5/7/2019	EURRUB	1:30:00 PM	72.652	73.088			N/A
5/7/2019	EURRUB	3:30:00 PM	72.45	72.884			N/A
5/7/2019	EURSEK	9:30:00 AM	10.7051	10.7069			N/A
5/7/2019	EURSEK	11:30:00 AM	10.6925	10.6918			N/A
5/7/2019	EURSEK	1:30:00 PM	10.7028	10.7067			N/A
5/7/2019	EURSEK	3:30:00 PM	10.7111	10.7123			N/A
5/7/2019	EURSEK.fx	9:30:00 AM	10.70661	10.70523			N/A
5/7/2019	EURSEK.fx	11:30:00 AM	10.69418	10.69024			N/A
5/7/2019	EURSEK.fx	1:30:00 PM	10.70463	10.70487			N/A
5/7/2019	EURSEK.fx	3:30:00 PM	10.71256	10.71061			N/A
5/7/2019	EURSGD	9:30:00 AM	1.5265	1.5272			N/A
5/7/2019	EURSGD	11:30:00 AM	1.5246	1.5249			N/A
5/7/2019	EURSGD	1:30:00 PM	1.525	1.5249			N/A
5/7/2019	EURSGD	3:30:00 PM	1.5243	1.5251			N/A

5/7/2019	EURSGD.fx	9:30:00 AM	1.52686	1.5268			N/A
5/7/2019	EURSGD.fx	11:30:00 AM	1.52503	1.52492			N/A
5/7/2019	EURSGD.fx	1:30:00 PM	1.52543	1.52538			N/A
5/7/2019	EURSGD.fx	3:30:00 PM	1.52464	1.52467			N/A
5/7/2019	EURUSD	9:30:00 AM	1.12147	1.12145			N/A
5/7/2019	EURUSD	11:30:00 AM	1.11957	1.11952			N/A
5/7/2019	EURUSD	1:30:00 PM	1.11977	1.11974		20	N/A
5/7/2019	EURUSD	3:30:00 PM	1.11867	1.11865			N/A
5/7/2019	EURUSD.fx	9:30:00 AM	1.12167	1.12154			N/A
5/7/2019	EURUSD.fx	11:30:00 AM	1.11978	1.11961			N/A
5/7/2019	EURUSD.fx	1:30:00 PM	1.11998	1.11983			N/A
5/7/2019	EURUSD.fx	3:30:00 PM	1.11888	1.11874			N/A
5/7/2019	EURZAR	9:30:00 AM	16.1839	16.1988			N/A
5/7/2019	EURZAR	11:30:00 AM	16.1867	16.2055			N/A
5/7/2019	EURZAR	1:30:00 PM	16.1857	16.2004			N/A
5/7/2019	EURZAR	3:30:00 PM	16.139	16.1585			N/A
5/7/2019	EURZAR.fx	9:30:00 AM	16.18306	16.20008			N/A
5/7/2019	EURZAR.fx	11:30:00 AM	16.18658	16.20535			N/A
5/7/2019	EURZAR.fx	1:30:00 PM	16.18502	16.20103			N/A
5/7/2019	EURZAR.fx	3:30:00 PM	16.13925	16.15861			N/A
5/7/2019	GBPAUD	9:30:00 AM	1.86376	1.86404			N/A
5/7/2019	GBPAUD	11:30:00 AM	1.86428	1.86451			N/A
5/7/2019	GBPAUD	1:30:00 PM	1.86437	1.86485			N/A
5/7/2019	GBPAUD	3:30:00 PM	1.86142	1.86213			N/A
5/7/2019	GBPAUD.fx	9:30:00 AM	1.86417	1.86364			N/A
5/7/2019	GBPAUD.fx	11:30:00 AM	1.86468	1.86413			N/A
5/7/2019	GBPAUD.fx	1:30:00 PM	1.86477	1.86445			N/A
5/7/2019	GBPAUD.fx	3:30:00 PM	1.8618	1.86172			N/A
5/7/2019	GBPCAD	9:30:00 AM	1.76088	1.76141			N/A
5/7/2019	GBPCAD	11:30:00 AM	1.75904	1.75943			N/A
5/7/2019	GBPCAD	1:30:00 PM	1.75901	1.75947			N/A
5/7/2019	GBPCAD	3:30:00 PM	1.75794	1.75856			N/A
5/7/2019	GBPCAD.fx	9:30:00 AM	1.76128	1.76102			N/A
5/7/2019	GBPCAD.fx	11:30:00 AM	1.75943	1.75904			N/A

5/7/2019	GBPCAD.fx	1:30:00 PM	1.75941	1.75908			N/A
5/7/2019	GBPCAD.fx	3:30:00 PM	1.75834	1.75817			N/A
5/7/2019	GBPCHF	9:30:00 AM	1.33357	1.33394			N/A
5/7/2019	GBPCHF	11:30:00 AM	1.33355	1.33382			N/A
5/7/2019	GBPCHF	1:30:00 PM	1.33364	1.3338			N/A
5/7/2019	GBPCHF	3:30:00 PM	1.33243	1.33276			N/A
5/7/2019	GBPCHF.fx	9:30:00 AM	1.33375	1.33374			N/A
5/7/2019	GBPCHF.fx	11:30:00 AM	1.33374	1.33362			N/A
5/7/2019	GBPCHF.fx	1:30:00 PM	1.33382	1.33361			N/A
5/7/2019	GBPCHF.fx	3:30:00 PM	1.33262	1.33256			N/A
5/7/2019	GBPCZK	9:30:00 AM	30.041	30.057			N/A
5/7/2019	GBPCZK	11:30:00 AM	30.044	30.063			N/A
5/7/2019	GBPCZK	1:30:00 PM	30.018	30.036			N/A
5/7/2019	GBPCZK	3:30:00 PM	29.997	30.013			N/A
5/7/2019	GBPDKK	9:30:00 AM	8.73	8.74			N/A
5/7/2019	GBPDKK	11:30:00 AM	8.726	8.736			N/A
5/7/2019	GBPDKK	1:30:00 PM	8.717	8.727			N/A
5/7/2019	GBPDKK	3:30:00 PM	8.709	8.72			N/A
5/7/2019	GBPDKK.fx	9:30:00 AM	8.7281	8.7406			N/A
5/7/2019	GBPDKK.fx	11:30:00 AM	8.7243	8.7362			N/A
5/7/2019	GBPDKK.fx	1:30:00 PM	8.7155	8.7274			N/A
5/7/2019	GBPDKK.fx	3:30:00 PM	8.7079	8.72			N/A
5/7/2019	GBPHKD	9:30:00 AM	10.2915	10.297			N/A
5/7/2019	GBPHKD	11:30:00 AM	10.2715	10.2751			N/A
5/7/2019	GBPHKD	1:30:00 PM	10.2636	10.2669			N/A
5/7/2019	GBPHKD	3:30:00 PM	10.2437	10.2493			N/A
5/7/2019	GBPHUF	9:30:00 AM	378.24	378.11			N/A
5/7/2019	GBPHUF	11:30:00 AM	378.4	378.85			N/A
5/7/2019	GBPHUF	1:30:00 PM	378.33	378.77			N/A
5/7/2019	GBPHUF	3:30:00 PM	378.15	378.6			N/A
5/7/2019	GBPJPY	9:30:00 AM	145.317	145.345			N/A
5/7/2019	GBPJPY	11:30:00 AM	144.849	144.864			N/A
5/7/2019	GBPJPY	1:30:00 PM	144.7	144.71			N/A
5/7/2019	GBPJPY	3:30:00 PM	144.484	144.513			N/A



5/7/2019	GBPJPY.fx	9:30:00 AM	145.337	145.326			N/A
5/7/2019	GBPJPY.fx	11:30:00 AM	144.868	144.844			N/A
5/7/2019	GBPJPY.fx	1:30:00 PM	144.72	144.69			N/A
5/7/2019	GBPJPY.fx	3:30:00 PM	144.504	144.492			N/A
5/7/2019	GBPMXN	9:30:00 AM	24.8593	24.8674			N/A
5/7/2019	GBPMXN	11:30:00 AM	24.8519	24.8622			N/A
5/7/2019	GBPMXN	1:30:00 PM	24.8456	24.8558			N/A
5/7/2019	GBPMXN	3:30:00 PM	24.8567	24.8657			N/A
5/7/2019	GBPNOK	9:30:00 AM	11.4136	11.4241			N/A
5/7/2019	GBPNOK	11:30:00 AM	11.3958	11.4051			N/A
5/7/2019	GBPNOK	1:30:00 PM	11.3829	11.3919			N/A
5/7/2019	GBPNOK	3:30:00 PM	11.3834	11.3935			N/A
5/7/2019	GBPNOK.fx	9:30:00 AM	11.41827	11.41926			N/A
5/7/2019	GBPNOK.fx	11:30:00 AM	11.40049	11.40019			N/A
5/7/2019	GBPNOK.fx	1:30:00 PM	11.38787	11.3872			N/A
5/7/2019	GBPNOK.fx	3:30:00 PM	11.38818	11.38838			N/A
5/7/2019	GBPNZD	9:30:00 AM	1.98169	1.98226			N/A
5/7/2019	GBPNZD	11:30:00 AM	1.98111	1.98155			N/A
5/7/2019	GBPNZD	1:30:00 PM	1.98209	1.98246			N/A
5/7/2019	GBPNZD	3:30:00 PM	1.98006	1.9805			N/A
5/7/2019	GBPNZD.fx	9:30:00 AM	1.98207	1.98188			N/A
5/7/2019	GBPNZD.fx	11:30:00 AM	1.98147	1.98116			N/A
5/7/2019	GBPNZD.fx	1:30:00 PM	1.98246	1.98209			N/A
5/7/2019	GBPNZD.fx	3:30:00 PM	1.98042	1.98012			N/A
5/7/2019	GBPPLN	9:30:00 AM	5.0103	5.0102			N/A
5/7/2019	GBPPLN	11:30:00 AM	5.01	5.0111			N/A
5/7/2019	GBPPLN	1:30:00 PM	5.0068	5.0083			N/A
5/7/2019	GBPPLN	3:30:00 PM	5.0021	5.0037			N/A
5/7/2019	GBPPLN.fx	9:30:00 AM	5.00814	5.01236			N/A
5/7/2019	GBPPLN.fx	11:30:00 AM	5.00779	5.01318			N/A
5/7/2019	GBPPLN.fx	1:30:00 PM	5.00468	5.01031			N/A
5/7/2019	GBPPLN.fx	3:30:00 PM	4.99996	5.00594			N/A
5/7/2019	GBPSEK	9:30:00 AM	12.521	12.5269			N/A
5/7/2019	GBPSEK	11:30:00 AM	12.5017	12.5033			N/A

5/7/2019	GBPSEK	1:30:00 PM	12.5022	12.5087			N/A
5/7/2019	GBPSEK	3:30:00 PM	12.501	12.5055			N/A
5/7/2019	GBPSEK.fx	9:30:00 AM	12.51716	12.53077			N/A
5/7/2019	GBPSEK.fx	11:30:00 AM	12.49808	12.5071			N/A
5/7/2019	GBPSEK.fx	1:30:00 PM	12.49849	12.51254			N/A
5/7/2019	GBPSEK.fx	3:30:00 PM	12.49753	12.50922			N/A
5/7/2019	GBPSGD	9:30:00 AM	1.7858	1.7864			N/A
5/7/2019	GBPSGD	11:30:00 AM	1.7831	1.7834			N/A
5/7/2019	GBPSGD	1:30:00 PM	1.7818	1.7822			N/A
5/7/2019	GBPSGD	3:30:00 PM	1.7793	1.7799			N/A
5/7/2019	GBPSGD.fx	9:30:00 AM	1.78404	1.78825			N/A
5/7/2019	GBPSGD.fx	11:30:00 AM	1.78123	1.7852			N/A
5/7/2019	GBPSGD.fx	1:30:00 PM	1.77992	1.78404			N/A
5/7/2019	GBPSGD.fx	3:30:00 PM	1.77745	1.78171			N/A
5/7/2019	GBPUSD	9:30:00 AM	1.3121	1.31206			N/A
5/7/2019	GBPUSD	11:30:00 AM	1.30946	1.30915			N/A
5/7/2019	GBPUSD	1:30:00 PM	1.3084	1.30815		8400	N/A
5/7/2019	GBPUSD	3:30:00 PM	1.30595	1.30585			N/A
5/7/2019	GBPUSD.fx	9:30:00 AM	1.31216	1.31201			N/A
5/7/2019	GBPUSD.fx	11:30:00 AM	1.30951	1.30909			N/A
5/7/2019	GBPUSD.fx	1:30:00 PM	1.30846	1.3081			N/A
5/7/2019	GBPUSD.fx	3:30:00 PM	1.306	1.30577			N/A
5/7/2019	GBPZAR	9:30:00 AM	18.9295	18.9524			N/A
5/7/2019	GBPZAR	11:30:00 AM	18.9254	18.9507			N/A
5/7/2019	GBPZAR	1:30:00 PM	18.9046	18.926			N/A
5/7/2019	GBPZAR	3:30:00 PM	18.8333	18.8621			N/A
5/7/2019	GBPZAR.fx	9:30:00 AM	18.936	18.947			N/A
5/7/2019	GBPZAR.fx	11:30:00 AM	18.9326	18.9433			N/A
5/7/2019	GBPZAR.fx	1:30:00 PM	18.9112	18.9183			N/A
5/7/2019	GBPZAR.fx	3:30:00 PM	18.8408	18.8551			N/A
5/7/2019	GOLD	9:30:00 AM	1282.77	1282.94			N/A
5/7/2019	GOLD	11:30:00 AM	1281.29	1281.36			N/A
5/7/2019	GOLD	1:30:00 PM	1281.56	1281.89			N/A
5/7/2019	GOLD	3:30:00 PM	1279.43	1279.1			N/A

5/7/2019	HKDJPY	9:30:00 AM	14.11	14.12			N/A
5/7/2019	HKDJPY	11:30:00 AM	14.1	14.11			N/A
5/7/2019	HKDJPY	1:30:00 PM	14.1	14.1			N/A
5/7/2019	HKDJPY	3:30:00 PM	14.1	14.11			N/A
5/7/2019	HKDJPY.fx	9:30:00 AM	14.11	14.117			N/A
5/7/2019	HKDJPY.fx	11:30:00 AM	14.094	14.1			N/A
5/7/2019	HKDJPY.fx	1:30:00 PM	14.089	14.096			N/A
5/7/2019	HKDJPY.fx	3:30:00 PM	14.095	14.102			N/A
5/7/2019	HUFJPY	9:30:00 AM	0.384	0.3842			N/A
5/7/2019	HUFJPY	11:30:00 AM	0.3828	0.3831			N/A
5/7/2019	HUFJPY	1:30:00 PM	0.3823	0.3826			N/A
5/7/2019	HUFJPY	3:30:00 PM	0.3818	0.3821			N/A
5/7/2019	JP225.i	9:30:00 AM	22053.96	22058.96			N/A
5/7/2019	JP225.i	11:30:00 AM	21968.96	21978.96			N/A
5/7/2019	JP225.i	1:30:00 PM	21918.96	21936.08			N/A
5/7/2019	JP225.i	3:30:00 PM	21903.96	21917.3			N/A
5/7/2019	MXNJPY	9:30:00 AM					N/A
5/7/2019	MXNJPY	11:30:00 AM	5.83	5.84			N/A
5/7/2019	MXNJPY	1:30:00 PM					N/A
5/7/2019	MXNJPY	3:30:00 PM	5.81	5.82			N/A
5/7/2019	NASDAQ.i	9:30:00 AM					N/A
5/7/2019	NASDAQ.i	11:30:00 AM					N/A
5/7/2019	NASDAQ.i	1:30:00 PM					N/A
5/7/2019	NASDAQ.i	3:30:00 PM					N/A
5/7/2019	NOKJPY	9:30:00 AM	12.72	12.75			N/A
5/7/2019	NOKJPY	11:30:00 AM	12.7	12.73			N/A
5/7/2019	NOKJPY	1:30:00 PM	12.7	12.73			N/A
5/7/2019	NOKJPY	3:30:00 PM	12.68	12.71			N/A
5/7/2019	NOKJPY.fx	9:30:00 AM	12.725	12.73			N/A
5/7/2019	NOKJPY.fx	11:30:00 AM	12.704	12.709			N/A
5/7/2019	NOKJPY.fx	1:30:00 PM	12.704	12.711			N/A
5/7/2019	NOKJPY.fx	3:30:00 PM	12.685	12.692			N/A
5/7/2019	NZDCAD	9:30:00 AM	0.88831	0.88889			N/A
5/7/2019	NZDCAD	11:30:00 AM	0.88757	0.8881			N/A

5/7/2019	NZDCAD	1:30:00 PM	0.88728	0.88785			N/A
5/7/2019	NZDCAD	3:30:00 PM	0.88753	0.8882			N/A
5/7/2019	NZDCAD.fx	9:30:00 AM	0.88871	0.88856			N/A
5/7/2019	NZDCAD.fx	11:30:00 AM	0.88791	0.88775			N/A
5/7/2019	NZDCAD.fx	1:30:00 PM	0.88762	0.8875			N/A
5/7/2019	NZDCAD.fx	3:30:00 PM	0.88787	0.88786			N/A
5/7/2019	NZDCHF	9:30:00 AM	0.67261	0.67326			N/A
5/7/2019	NZDCHF	11:30:00 AM	0.67277	0.67343			N/A
5/7/2019	NZDCHF	1:30:00 PM	0.67252	0.67318			N/A
5/7/2019	NZDCHF	3:30:00 PM	0.67259	0.67325			N/A
5/7/2019	NZDCHF.fx	9:30:00 AM	0.67296	0.6729			N/A
5/7/2019	NZDCHF.fx	11:30:00 AM	0.67311	0.67308			N/A
5/7/2019	NZDCHF.fx	1:30:00 PM	0.67286	0.67282			N/A
5/7/2019	NZDCHF.fx	3:30:00 PM	0.67294	0.67289			N/A
5/7/2019	NZDCZK	9:30:00 AM	15.156	15.165			N/A
5/7/2019	NZDCZK	11:30:00 AM	15.162	15.173			N/A
5/7/2019	NZDCZK	1:30:00 PM	15.143	15.153			N/A
5/7/2019	NZDCZK	3:30:00 PM	15.145	15.158			N/A
5/7/2019	NZDDKK	9:30:00 AM					N/A
5/7/2019	NZDDKK	11:30:00 AM					N/A
5/7/2019	NZDDKK	1:30:00 PM	4.397	4.401			N/A
5/7/2019	NZDDKK	3:30:00 PM					N/A
5/7/2019	NZDHKD	9:30:00 AM	5.1921	5.195			N/A
5/7/2019	NZDHKD	11:30:00 AM	5.1828	5.1857			N/A
5/7/2019	NZDHKD	1:30:00 PM	5.1775	5.179			N/A
5/7/2019	NZDHKD	3:30:00 PM	5.1722	5.1744			N/A
5/7/2019	NZDHUF	9:30:00 AM	190.82	190.79			N/A
5/7/2019	NZDHUF	11:30:00 AM	190.93	191.22			N/A
5/7/2019	NZDHUF	1:30:00 PM	190.83	191.09			N/A
5/7/2019	NZDHUF	3:30:00 PM	190.91	191.21			N/A
5/7/2019	NZDJPY	9:30:00 AM	73.3	73.357			N/A
5/7/2019	NZDJPY	11:30:00 AM	73.078	73.142			N/A
5/7/2019	NZDJPY	1:30:00 PM	72.976	73.035			N/A
5/7/2019	NZDJPY	3:30:00 PM	72.934	73.002			N/A

5/7/2019	NZDJPY.fx	9:30:00 AM	73.331	73.324			N/A
5/7/2019	NZDJPY.fx	11:30:00 AM	73.11	73.11			N/A
5/7/2019	NZDJPY.fx	1:30:00 PM	73.008	73.002			N/A
5/7/2019	NZDJPY.fx	3:30:00 PM	72.966	72.97			N/A
5/7/2019	NZDMXN	9:30:00 AM	12.5424	12.5456			N/A
5/7/2019	NZDMXN	11:30:00 AM	12.5418	12.5457			N/A
5/7/2019	NZDMXN	1:30:00 PM	12.5334	12.5374			N/A
5/7/2019	NZDMXN	3:30:00 PM	12.5504	12.5552			N/A
5/7/2019	NZDNOK	9:30:00 AM	5.7568	5.7607			N/A
5/7/2019	NZDNOK	11:30:00 AM	5.7501	5.753			N/A
5/7/2019	NZDNOK	1:30:00 PM	5.7411	5.7438			N/A
5/7/2019	NZDNOK	3:30:00 PM	5.7475	5.7507			N/A
5/7/2019	NZDPLN	9:30:00 AM	2.5269	2.5282			N/A
5/7/2019	NZDPLN	11:30:00 AM	2.527	2.5282			N/A
5/7/2019	NZDPLN	1:30:00 PM	2.5249	2.5257			N/A
5/7/2019	NZDPLN	3:30:00 PM	2.525	2.5263			N/A
5/7/2019	NZDSEK	9:30:00 AM	6.3135	6.3188			N/A
5/7/2019	NZDSEK	11:30:00 AM	6.305	6.3091			N/A
5/7/2019	NZDSEK	1:30:00 PM	6.3032	6.3085			N/A
5/7/2019	NZDSEK	3:30:00 PM	6.3093	6.3137			N/A
5/7/2019	NZDSGD	9:30:00 AM	0.901	0.9015			N/A
5/7/2019	NZDSGD	11:30:00 AM	0.8997	0.9002			N/A
5/7/2019	NZDSGD	1:30:00 PM	0.8988	0.8993			N/A
5/7/2019	NZDSGD	3:30:00 PM	0.8984	0.899			N/A
5/7/2019	NZDSGD.fx	9:30:00 AM	0.90098	0.90141			N/A
5/7/2019	NZDSGD.fx	11:30:00 AM	0.89972	0.90018			N/A
5/7/2019	NZDSGD.fx	1:30:00 PM	0.89879	0.89921			N/A
5/7/2019	NZDSGD.fx	3:30:00 PM	0.89838	0.89891			N/A
5/7/2019	NZDUSD	9:30:00 AM	0.66194	0.662			N/A
5/7/2019	NZDUSD	11:30:00 AM	0.66072	0.66072			N/A
5/7/2019	NZDUSD	1:30:00 PM	0.65999	0.66001			N/A
5/7/2019	NZDUSD	3:30:00 PM	0.65935	0.6594			N/A
5/7/2019	NZDUSD.fx	9:30:00 AM	0.66202	0.66201			N/A
5/7/2019	NZDUSD.fx	11:30:00 AM	0.66079	0.66073			N/A

5/7/2019	NZDUSD.fx	1:30:00 PM	0.66006	0.66002			N/A
5/7/2019	NZDUSD.fx	3:30:00 PM	0.65943	0.65941			N/A
5/7/2019	NZDZAR	9:30:00 AM	9.5444	9.5594			N/A
5/7/2019	NZDZAR	11:30:00 AM	9.5452	9.5615			N/A
5/7/2019	NZDZAR	1:30:00 PM	9.5318	9.546			N/A
5/7/2019	NZDZAR	3:30:00 PM	9.5047	9.5221			N/A
5/7/2019	SEKJPY	9:30:00 AM	11.61	11.61			N/A
5/7/2019	SEKJPY	11:30:00 AM	11.58	11.59			N/A
5/7/2019	SEKJPY	1:30:00 PM					N/A
5/7/2019	SEKJPY	3:30:00 PM	11.56	11.57			N/A
5/7/2019	SEKJPY.fx	9:30:00 AM	11.597	11.612			N/A
5/7/2019	SEKJPY.fx	11:30:00 AM	11.58	11.592			N/A
5/7/2019	SEKJPY.fx	1:30:00 PM	11.563	11.58			N/A
5/7/2019	SEKJPY.fx	3:30:00 PM	11.549	11.564			N/A
5/7/2019	SGDJPY	9:30:00 AM	81.34	81.36			N/A
5/7/2019	SGDJPY	11:30:00 AM	81.25	81.24			N/A
5/7/2019	SGDJPY	1:30:00 PM	81.18	81.2			N/A
5/7/2019	SGDJPY	3:30:00 PM	81.2	81.2			N/A
5/7/2019	SILVER	9:30:00 AM	14.73	15.11			N/A
5/7/2019	SILVER	11:30:00 AM	14.68	15.05			N/A
5/7/2019	SILVER	1:30:00 PM	14.65	15.03			N/A
5/7/2019	SILVER	3:30:00 PM	14.64	15.01			N/A
5/7/2019	SPX500.i	9:30:00 AM	2930.11	2929.39			N/A
5/7/2019	SPX500.i	11:30:00 AM	2922.59	2923.39			N/A
5/7/2019	SPX500.i	1:30:00 PM	2918.34	2918.89			N/A
5/7/2019	SPX500.i	3:30:00 PM	2914.09	2914.64			N/A
5/7/2019	UK100.i	9:30:00 AM	7366.41	7365.74			N/A
5/7/2019	UK100.i	11:30:00 AM	7365.99	7366.49			N/A
5/7/2019	UK100.i	1:30:00 PM	7319.99	7320.49			N/A
5/7/2019	UK100.i	3:30:00 PM	7314.49	7315.07			N/A
5/7/2019	USDCAD	9:30:00 AM	1.34231	1.34222			N/A
5/7/2019	USDCAD	11:30:00 AM	1.34364	1.34375			N/A
5/7/2019	USDCAD	1:30:00 PM	1.34467	1.34475			N/A
5/7/2019	USDCAD	3:30:00 PM	1.3465	1.34632			N/A

5/7/2019	USDCAD.fx	9:30:00 AM	1.34234	1.34219			N/A
5/7/2019	USDCAD.fx	11:30:00 AM	1.34367	1.34371			N/A
5/7/2019	USDCAD.fx	1:30:00 PM	1.34471	1.34471			N/A
5/7/2019	USDCAD.fx	3:30:00 PM	1.34653	1.34627			N/A
5/7/2019	USDCHF	9:30:00 AM	1.01647	1.01656			N/A
5/7/2019	USDCHF	11:30:00 AM	1.01861	1.01866			N/A
5/7/2019	USDCHF	1:30:00 PM	1.01941	1.01946			N/A
5/7/2019	USDCHF	3:30:00 PM	1.0204	1.02044			N/A
5/7/2019	USDCHF.fx	9:30:00 AM	1.01652	1.0165			N/A
5/7/2019	USDCHF.fx	11:30:00 AM	1.01866	1.0186			N/A
5/7/2019	USDCHF.fx	1:30:00 PM	1.01946	1.0194			N/A
5/7/2019	USDCHF.fx	3:30:00 PM	1.02045	1.02038			N/A
5/7/2019	USDCZK	9:30:00 AM	22.911	22.929			N/A
5/7/2019	USDCZK	11:30:00 AM	22.962	22.982			N/A
5/7/2019	USDCZK	1:30:00 PM	22.96	22.981			N/A
5/7/2019	USDCZK	3:30:00 PM	22.985	23.003			N/A
5/7/2019	USDCZK.fx	9:30:00 AM	22.918	22.9227			N/A
5/7/2019	USDCZK.fx	11:30:00 AM	22.9708	22.9722			N/A
5/7/2019	USDCZK.fx	1:30:00 PM	22.9675	22.9712			N/A
5/7/2019	USDCZK.fx	3:30:00 PM	22.9931	22.994			N/A
5/7/2019	USDDKK	9:30:00 AM	6.6558	6.659			N/A
5/7/2019	USDDKK	11:30:00 AM	6.6672	6.6704			N/A
5/7/2019	USDDKK	1:30:00 PM	6.6655	6.6686			N/A
5/7/2019	USDDKK	3:30:00 PM	6.6722	6.6753			N/A
5/7/2019	USDDKK.fx	9:30:00 AM	6.65625	6.657			N/A
5/7/2019	USDDKK.fx	11:30:00 AM	6.66771	6.66814			N/A
5/7/2019	USDDKK.fx	1:30:00 PM	6.66594	6.66649			N/A
5/7/2019	USDDKK.fx	3:30:00 PM	6.67259	6.67328			N/A
5/7/2019	USDHKD	9:30:00 AM	7.8472	7.8475			N/A
5/7/2019	USDHKD	11:30:00 AM	7.8479	7.8483			N/A
5/7/2019	USDHKD	1:30:00 PM	7.8477	7.8477			N/A
5/7/2019	USDHKD	3:30:00 PM	7.8476	7.8478			N/A
5/7/2019	USDHKD.fx	9:30:00 AM	7.84719	7.84768			N/A
5/7/2019	USDHKD.fx	11:30:00 AM	7.84783	7.84836			N/A

5/7/2019	USDHKD.fx	1:30:00 PM	7.84765	7.8482			N/A
5/7/2019	USDHKD.fx	3:30:00 PM					N/A
5/7/2019	USDHUF	9:30:00 AM	288.34	288.36			N/A
5/7/2019	USDHUF	11:30:00 AM	289.1	289.53			N/A
5/7/2019	USDHUF	1:30:00 PM	289.25	289.7			N/A
5/7/2019	USDHUF	3:30:00 PM	289.66	290.09			N/A
5/7/2019	USDHUF.fx	9:30:00 AM	288.555	288.196			N/A
5/7/2019	USDHUF.fx	11:30:00 AM	289.323	289.307			N/A
5/7/2019	USDHUF.fx	1:30:00 PM	289.454	289.48			N/A
5/7/2019	USDHUF.fx	3:30:00 PM	289.855	289.885			N/A
5/7/2019	USDINR	9:30:00 AM	64.33	74.31			N/A
5/7/2019	USDINR	11:30:00 AM	64.36	74.35			N/A
5/7/2019	USDINR	1:30:00 PM					N/A
5/7/2019	USDINR	3:30:00 PM					N/A
5/7/2019	USDJPY	9:30:00 AM	110.761	110.763			N/A
5/7/2019	USDJPY	11:30:00 AM	110.643	110.642			N/A
5/7/2019	USDJPY	1:30:00 PM	110.598	110.611			N/A
5/7/2019	USDJPY	3:30:00 PM	110.65	110.656			N/A
5/7/2019	USDJPY.fx	9:30:00 AM	110.766	110.755			N/A
5/7/2019	USDJPY.fx	11:30:00 AM	110.649	110.635			N/A
5/7/2019	USDJPY.fx	1:30:00 PM	110.604	110.604			N/A
5/7/2019	USDJPY.fx	3:30:00 PM	110.656	110.649			N/A
5/7/2019	USDMXN	9:30:00 AM	18.954	18.958			N/A
5/7/2019	USDMXN	11:30:00 AM	18.989	18.994			N/A
5/7/2019	USDMXN	1:30:00 PM	18.998	19.004			N/A
5/7/2019	USDMXN	3:30:00 PM	19.042	19.043			N/A
5/7/2019	USDMXN.f	9:30:00 AM	18.9584	18.9537			N/A
5/7/2019	USDMXN.f	11:30:00 AM	18.9929	18.9893			N/A
5/7/2019	USDMXN.f	1:30:00 PM	19.0012	19.0004			N/A
5/7/2019	USDMXN.f	3:30:00 PM	19.0462	19.0391			N/A
5/7/2019	USDNOK	9:30:00 AM	8.6993	8.7065			N/A
5/7/2019	USDNOK	11:30:00 AM	8.7042	8.7119			N/A
5/7/2019	USDNOK	1:30:00 PM	8.7	8.708			N/A
5/7/2019	USDNOK	3:30:00 PM	8.7171	8.725			N/A



5/7/2019	USDNOK.fx	9:30:00 AM	8.70319	8.70213			N/A
5/7/2019	USDNOK.fx	11:30:00 AM	8.70813	8.70738			N/A
5/7/2019	USDNOK.fx	1:30:00 PM	8.70404	8.70365			N/A
5/7/2019	USDNOK.fx	3:30:00 PM	8.72109	8.72036			N/A
5/7/2019	USDPLN	9:30:00 AM	3.8184	3.8184			N/A
5/7/2019	USDPLN	11:30:00 AM	3.8265	3.8274			N/A
5/7/2019	USDPLN	1:30:00 PM	3.8269	3.8278			N/A
5/7/2019	USDPLN	3:30:00 PM	3.8305	3.8316			N/A
5/7/2019	USDPLN.fx	9:30:00 AM	3.81758	3.81913			N/A
5/7/2019	USDPLN.fx	11:30:00 AM	3.82578	3.82816			N/A
5/7/2019	USDPLN.fx	1:30:00 PM	3.82606	3.82849			N/A
5/7/2019	USDPLN.fx	3:30:00 PM	3.8297	3.83233			N/A
5/7/2019	USDRUB	9:30:00 AM					N/A
5/7/2019	USDRUB	11:30:00 AM	65.012	65.406			N/A
5/7/2019	USDRUB	1:30:00 PM	64.986	65.379			N/A
5/7/2019	USDRUB	3:30:00 PM	64.873	65.258			N/A
5/7/2019	USDSEK	9:30:00 AM	9.5441	9.5452			N/A
5/7/2019	USDSEK	11:30:00 AM	9.5487	9.5495			N/A
5/7/2019	USDSEK	1:30:00 PM	9.5557	9.5594			N/A
5/7/2019	USDSEK	3:30:00 PM	9.5737	9.5745			N/A
5/7/2019	USDSEK.fx	9:30:00 AM	9.54666	9.54342			N/A
5/7/2019	USDSEK.fx	11:30:00 AM	9.55159	9.54769			N/A
5/7/2019	USDSEK.fx	1:30:00 PM	9.55887	9.5574			N/A
5/7/2019	USDSEK.fx	3:30:00 PM	9.57652	9.57264			N/A
5/7/2019	USDSGD	9:30:00 AM	1.3612	1.3614			N/A
5/7/2019	USDSGD	11:30:00 AM	1.3618	1.3619			N/A
5/7/2019	USDSGD	1:30:00 PM	1.3619	1.3623			N/A
5/7/2019	USDSGD	3:30:00 PM	1.3626	1.3629			N/A
5/7/2019	USDSGD.fx	9:30:00 AM	1.36108	1.36143			N/A
5/7/2019	USDSGD.fx	11:30:00 AM	1.36174	1.36216			N/A
5/7/2019	USDSGD.fx	1:30:00 PM	1.36188	1.36231			N/A
5/7/2019	USDSGD.fx	3:30:00 PM	1.36253	1.36296			N/A
5/7/2019	USDZAR	9:30:00 AM	14.4273	14.441			N/A
5/7/2019	USDZAR	11:30:00 AM	14.4558	14.4736			N/A

5/7/2019	USDZAR	1:30:00 PM	14.4513	14.4661			N/A
5/7/2019	USDZAR	3:30:00 PM	14.4246	14.441			N/A
5/7/2019	USDZAR.fx	9:30:00 AM					N/A
5/7/2019	USDZAR.fx	11:30:00 AM					N/A
5/7/2019	USDZAR.fx	1:30:00 PM					N/A
5/7/2019	USDZAR.fx	3:30:00 PM					N/A
5/7/2019	XAUUSD	9:30:00 AM	1282.77	1282.93			N/A
5/7/2019	XAUUSD	11:30:00 AM	1281.32	1281.36			N/A
5/7/2019	XAUUSD	1:30:00 PM	1281.56	1281.89			N/A
5/7/2019	XAUUSD	3:30:00 PM	1279.41	1279.08			N/A
5/7/2019	ZARJPY	9:30:00 AM	7.66	7.68			N/A
5/7/2019	ZARJPY	11:30:00 AM	7.63	7.65			N/A
5/7/2019	ZARJPY	1:30:00 PM	7.63	7.65			N/A
5/7/2019	ZARJPY	3:30:00 PM	7.65	7.67			N/A
5/7/2019	ZARJPY.fx	9:30:00 AM	7.672	7.673			N/A
5/7/2019	ZARJPY.fx	11:30:00 AM	7.646	7.649			N/A
5/7/2019	ZARJPY.fx	1:30:00 PM	7.648	7.651			N/A
5/7/2019	ZARJPY.fx	3:30:00 PM	7.664	7.667			N/A
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5/8/2019	#Bitcoin	11:30:00 AM	6099.6	6133.55			N/A
5/8/2019	#Bitcoin	1:30:00 PM	6087	6121.85			N/A
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5/8/2019	#CL.f	11:30:00 AM	61.824	61.772			N/A
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5/8/2019	#CL.f	3:30:00 PM	61.72	61.697			N/A
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5/8/2019	AUDCAD	11:30:00 AM	0.94434	0.94494			N/A
5/8/2019	AUDCAD	1:30:00 PM	0.94328	0.94393			N/A
5/8/2019	AUDCAD	3:30:00 PM	0.94223	0.94287			N/A
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5/8/2019	AUDCAD.fx	11:30:00 AM	0.94468	0.94458			N/A
5/8/2019	AUDCAD.fx	1:30:00 PM	0.94362	0.94358			N/A
5/8/2019	AUDCAD.fx	3:30:00 PM	0.94256	0.94252			N/A
5/8/2019	AUDCHF	9:30:00 AM	0.71502	0.71564			N/A
5/8/2019	AUDCHF	11:30:00 AM	0.71416	0.71469			N/A
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5/8/2019	AUDCHF	3:30:00 PM	0.71356	0.71396			N/A
5/8/2019	AUDCHF.fx	9:30:00 AM	0.71537	0.71529			N/A
5/8/2019	AUDCHF.fx	11:30:00 AM	0.7145	0.71434			N/A

5/8/2019	AUDCHF.fx	1:30:00 PM	0.71216	0.71204			N/A
5/8/2019	AUDCHF.fx	3:30:00 PM	0.7139	0.7136			N/A
5/8/2019	AUDCZK	9:30:00 AM	16.096	16.111			N/A
5/8/2019	AUDCZK	11:30:00 AM	16.092	16.107			N/A
5/8/2019	AUDCZK	1:30:00 PM	16.058	16.072			N/A
5/8/2019	AUDCZK	3:30:00 PM	16.064	16.081			N/A
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5/8/2019	AUDDKK	11:30:00 AM	4.6743	4.6787			N/A
5/8/2019	AUDDKK	1:30:00 PM	4.6648	4.669			N/A
5/8/2019	AUDDKK	3:30:00 PM	4.6668	4.671			N/A
5/8/2019	AUDHKD	9:30:00 AM	5.5082	5.5121			N/A
5/8/2019	AUDHKD	11:30:00 AM	5.5072	5.5102			N/A
5/8/2019	AUDHKD	1:30:00 PM	5.4914	5.494			N/A
5/8/2019	AUDHKD	3:30:00 PM	5.4967	5.4998			N/A
5/8/2019	AUDHUF	9:30:00 AM	202.85	203.06			N/A
5/8/2019	AUDHUF	11:30:00 AM	203.05	203.27			N/A
5/8/2019	AUDHUF	1:30:00 PM	202.63	202.86			N/A
5/8/2019	AUDHUF	3:30:00 PM	202.54	202.77			N/A
5/8/2019	AUDJPY	9:30:00 AM	77.232	77.291			N/A
5/8/2019	AUDJPY	11:30:00 AM	77.296	77.344			N/A
5/8/2019	AUDJPY	1:30:00 PM	76.996	77.036			N/A
5/8/2019	AUDJPY	3:30:00 PM	77.12	77.179			N/A
5/8/2019	AUDJPY.fx	9:30:00 AM	77.266	77.256			N/A
5/8/2019	AUDJPY.fx	11:30:00 AM	77.329	77.308			N/A
5/8/2019	AUDJPY.fx	1:30:00 PM	77.03	77.001			N/A
5/8/2019	AUDJPY.fx	3:30:00 PM	77.155	77.143			N/A
5/8/2019	AUDMXN	9:30:00 AM	13.3461	13.3558			N/A
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5/8/2019	AUDMXN	1:30:00 PM	13.3642	13.3725			N/A
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5/8/2019	AUDNOK	9:30:00 AM	6.1278	6.1323			N/A
5/8/2019	AUDNOK	11:30:00 AM	6.1305	6.1338			N/A
5/8/2019	AUDNOK	1:30:00 PM	6.1397	6.1426			N/A
5/8/2019	AUDNOK	3:30:00 PM	6.1442	6.1481			N/A



5/8/2019	AUDNOK.f	9:30:00 AM	6.1294	6.1306			N/A
5/8/2019	AUDNOK.f	11:30:00 AM	6.1321	6.1321			N/A
5/8/2019	AUDNOK.f	1:30:00 PM	6.1413	6.1409			N/A
5/8/2019	AUDNOK.f	3:30:00 PM	6.1458	6.1464			N/A
5/8/2019	AUDNZD	9:30:00 AM	1.06504	1.06582			N/A
5/8/2019	AUDNZD	11:30:00 AM	1.06395	1.0647			N/A
5/8/2019	AUDNZD	1:30:00 PM	1.06305	1.06392			N/A
5/8/2019	AUDNZD	3:30:00 PM	1.06268	1.06354			N/A
5/8/2019	AUDNZD.fx	9:30:00 AM	1.06549	1.06536			N/A
5/8/2019	AUDNZD.fx	11:30:00 AM	1.06439	1.06425			N/A
5/8/2019	AUDNZD.fx	1:30:00 PM	1.06348	1.06348			N/A
5/8/2019	AUDNZD.fx	3:30:00 PM	1.06312	1.06307			N/A
5/8/2019	AUDPLN	9:30:00 AM	2.6857	2.6885			N/A
5/8/2019	AUDPLN	11:30:00 AM	2.6855	2.6885			N/A
5/8/2019	AUDPLN	1:30:00 PM	2.6824	2.6853			N/A
5/8/2019	AUDPLN	3:30:00 PM	2.6826	2.6855			N/A
5/8/2019	AUDSEK	9:30:00 AM	6.7208	6.722			N/A
5/8/2019	AUDSEK	11:30:00 AM	6.7141	6.7156			N/A
5/8/2019	AUDSEK	1:30:00 PM	6.7164	6.7156			N/A
5/8/2019	AUDSEK	3:30:00 PM	6.7199	6.7221			N/A
5/8/2019	AUDSEK.fx	9:30:00 AM	6.7161	6.7265			N/A
5/8/2019	AUDSEK.fx	11:30:00 AM	6.7095	6.7199			N/A
5/8/2019	AUDSEK.fx	1:30:00 PM	6.712	6.7199			N/A
5/8/2019	AUDSEK.fx	3:30:00 PM	6.7156	6.7265			N/A
5/8/2019	AUDSGD	9:30:00 AM	0.9556	0.9559			N/A
5/8/2019	AUDSGD	11:30:00 AM	0.9551	0.9553			N/A
5/8/2019	AUDSGD	1:30:00 PM	0.9537	0.9538			N/A
5/8/2019	AUDSGD	3:30:00 PM	0.9542	0.9544			N/A
5/8/2019	AUDSGD.fx	9:30:00 AM	0.95571	0.95579			N/A
5/8/2019	AUDSGD.fx	11:30:00 AM	0.95519	0.95516			N/A
5/8/2019	AUDSGD.fx	1:30:00 PM	0.95375	0.9537			N/A
5/8/2019	AUDSGD.fx	3:30:00 PM	0.95425	0.95425			N/A
5/8/2019	AUDUSD	9:30:00 AM	0.70226	0.70227			N/A
5/8/2019	AUDUSD	11:30:00 AM	0.70204	0.70196			N/A

5/8/2019	AUDUSD	1:30:00 PM	0.69998	0.7			N/A
5/8/2019	AUDUSD	3:30:00 PM	0.70067	0.70066			N/A
5/8/2019	AUDUSD.fx	9:30:00 AM	0.70231	0.70221			N/A
5/8/2019	AUDUSD.fx	11:30:00 AM	0.70209	0.70189			N/A
5/8/2019	AUDUSD.fx	1:30:00 PM	0.70004	0.69992			N/A
5/8/2019	AUDUSD.fx	3:30:00 PM	0.70072	0.70061			N/A
5/8/2019	AUDZAR	9:30:00 AM	10.0968	10.1064			N/A
5/8/2019	AUDZAR	11:30:00 AM	10.0413	10.0533			N/A
5/8/2019	AUDZAR	1:30:00 PM	10.0698	10.0802			N/A
5/8/2019	AUDZAR	3:30:00 PM	10.0426	10.0565			N/A
5/8/2019	AUS200.i	9:30:00 AM	6262.25	6266.75			N/A
5/8/2019	AUS200.i	11:30:00 AM	6276.15	6278.65			N/A
5/8/2019	AUS200.i	1:30:00 PM	6254.65	6257.05			N/A
5/8/2019	AUS200.i	3:30:00 PM	6255.55	6258.15			N/A
5/8/2019	BCHUSD	9:30:00 AM	295.96	297.62			N/A
5/8/2019	BCHUSD	11:30:00 AM	296.35	297.37			N/A
5/8/2019	BCHUSD	1:30:00 PM	293.5	295.07			N/A
5/8/2019	BCHUSD	3:30:00 PM	294.48	296.26			N/A
5/8/2019	CADCHF	9:30:00 AM	0.75633	0.75702			N/A
5/8/2019	CADCHF	11:30:00 AM	0.75597	0.7566			N/A
5/8/2019	CADCHF	1:30:00 PM	0.75437	0.75496			N/A
5/8/2019	CADCHF	3:30:00 PM	0.75707	0.75747			N/A
5/8/2019	CADCHF.fx	9:30:00 AM	0.75667	0.75666			N/A
5/8/2019	CADCHF.fx	11:30:00 AM	0.75631	0.75623			N/A
5/8/2019	CADCHF.fx	1:30:00 PM	0.7547	0.75461			N/A
5/8/2019	CADCHF.fx	3:30:00 PM	0.75741	0.7571			N/A
5/8/2019	CADCZK	9:30:00 AM	17.028	17.045			N/A
5/8/2019	CADCZK	11:30:00 AM	17.038	17.055			N/A
5/8/2019	CADCZK	1:30:00 PM	17.022	17.036			N/A
5/8/2019	CADCZK	3:30:00 PM	17.046	17.064			N/A
5/8/2019	CADDDKK	9:30:00 AM					N/A
5/8/2019	CADDDKK	11:30:00 AM					N/A
5/8/2019	CADDDKK	1:30:00 PM	4.945	4.948			N/A
5/8/2019	CADDDKK	3:30:00 PM	4.952	4.956			N/A

5/8/2019	CADHKD	9:30:00 AM	5.8279	5.8318			N/A
5/8/2019	CADHKD	11:30:00 AM	5.8302	5.8339			N/A
5/8/2019	CADHKD	1:30:00 PM	5.8203	5.8235			N/A
5/8/2019	CADHKD	3:30:00 PM	5.8326	5.8364			N/A
5/8/2019	CADHUF	9:30:00 AM	214.63	214.8			N/A
5/8/2019	CADHUF	11:30:00 AM	215.04	215.17			N/A
5/8/2019	CADHUF	1:30:00 PM	214.81	214.96			N/A
5/8/2019	CADHUF	3:30:00 PM	214.97	215.12			N/A
5/8/2019	CADJPY	9:30:00 AM	81.696	81.76			N/A
5/8/2019	CADJPY	11:30:00 AM	81.82	81.883			N/A
5/8/2019	CADJPY	1:30:00 PM	81.596	81.647			N/A
5/8/2019	CADJPY	3:30:00 PM	81.822	81.882			N/A
5/8/2019	CADJPY.fx	9:30:00 AM	81.729	81.725			N/A
5/8/2019	CADJPY.fx	11:30:00 AM	81.853	81.847			N/A
5/8/2019	CADJPY.fx	1:30:00 PM	81.629	81.607			N/A
5/8/2019	CADJPY.fx	3:30:00 PM	81.857	81.847			N/A
5/8/2019	CADMXN	9:30:00 AM	14.1187	14.1302			N/A
5/8/2019	CADMXN	11:30:00 AM	14.1353	14.1452			N/A
5/8/2019	CADMXN	1:30:00 PM	14.1646	14.1753			N/A
5/8/2019	CADMXN	3:30:00 PM	14.1706	14.176			N/A
5/8/2019	CADNOK	9:30:00 AM	6.4807	6.4855			N/A
5/8/2019	CADNOK	11:30:00 AM	6.4889	6.4915			N/A
5/8/2019	CADNOK	1:30:00 PM	6.5065	6.5088			N/A
5/8/2019	CADNOK	3:30:00 PM	6.5183	6.5213			N/A
5/8/2019	CADPLN	9:30:00 AM	2.8417	2.8435			N/A
5/8/2019	CADPLN	11:30:00 AM	2.8431	2.8449			N/A
5/8/2019	CADPLN	1:30:00 PM	2.8432	2.8447			N/A
5/8/2019	CADPLN	3:30:00 PM	2.8469	2.8488			N/A
5/8/2019	CADSEK	9:30:00 AM	7.107	7.1095			N/A
5/8/2019	CADSEK	11:30:00 AM	7.1057	7.1077			N/A
5/8/2019	CADSEK	1:30:00 PM	7.1171	7.1164			N/A
5/8/2019	CADSEK	3:30:00 PM	7.1277	7.131			N/A
5/8/2019	CADSGD	9:30:00 AM	1.0104	1.0107			N/A
5/8/2019	CADSGD	11:30:00 AM	1.0103	1.0106			N/A

5/8/2019	CADSGD	1:30:00 PM	1.0101	1.0103			N/A
5/8/2019	CADSGD	3:30:00 PM	1.0119	1.0122			N/A
5/8/2019	CADZAR	9:30:00 AM	10.6818	10.692			N/A
5/8/2019	CADZAR	11:30:00 AM	10.6314	10.6447			N/A
5/8/2019	CADZAR	1:30:00 PM	10.6735	10.6843			N/A
5/8/2019	CADZAR	3:30:00 PM	10.6553	10.6715			N/A
5/8/2019	CHFCZK	9:30:00 AM	22.509	22.525			N/A
5/8/2019	CHFCZK	11:30:00 AM	22.533	22.549			N/A
5/8/2019	CHFCZK	1:30:00 PM	22.557	22.572			N/A
5/8/2019	CHFCZK	3:30:00 PM	22.519	22.528			N/A
5/8/2019	CHFDKK	9:30:00 AM	6.536	6.539			N/A
5/8/2019	CHFDKK	11:30:00 AM	6.545	6.547			N/A
5/8/2019	CHFDKK	1:30:00 PM	6.552	6.555			N/A
5/8/2019	CHFDKK	3:30:00 PM	6.541	6.542			N/A
5/8/2019	CHFDKK.fx	9:30:00 AM	6.5348	6.5407			N/A
5/8/2019	CHFDKK.fx	11:30:00 AM	6.5434	6.5487			N/A
5/8/2019	CHFDKK.fx	1:30:00 PM	6.5507	6.5561			N/A
5/8/2019	CHFDKK.fx	3:30:00 PM	6.5394	6.5432			N/A
5/8/2019	CHFHKD	9:30:00 AM	7.7028	7.7066			N/A
5/8/2019	CHFHKD	11:30:00 AM	7.7103	7.7141			N/A
5/8/2019	CHFHKD	1:30:00 PM	7.7132	7.7163			N/A
5/8/2019	CHFHKD	3:30:00 PM	7.7035	7.7049			N/A
5/8/2019	CHFHUF	9:30:00 AM	283.59	283.97			N/A
5/8/2019	CHFHUF	11:30:00 AM	284.29	284.59			N/A
5/8/2019	CHFHUF	1:30:00 PM	284.59	284.92			N/A
5/8/2019	CHFHUF	3:30:00 PM	283.84	284.13			N/A
5/8/2019	CHFJPY	9:30:00 AM	107.979	108.043			N/A
5/8/2019	CHFJPY	11:30:00 AM	108.198	108.264			N/A
5/8/2019	CHFJPY	1:30:00 PM	108.127	108.184			N/A
5/8/2019	CHFJPY	3:30:00 PM	108.067	108.111			N/A
5/8/2019	CHFJPY.fx	9:30:00 AM	108.013	108.009			N/A
5/8/2019	CHFJPY.fx	11:30:00 AM	108.234	108.229			N/A
5/8/2019	CHFJPY.fx	1:30:00 PM	108.159	108.149			N/A
5/8/2019	CHFJPY.fx	3:30:00 PM	108.101	108.076			N/A

5/8/2019	CHF MXN	9:30:00 AM	18.6619	18.675			N/A
5/8/2019	CHF MXN	11:30:00 AM	18.6926	18.7039			N/A
5/8/2019	CHF MXN	1:30:00 PM	18.7698	18.7839			N/A
5/8/2019	CHF MXN	3:30:00 PM	18.7182	18.7176			N/A
5/8/2019	CHF NOK	9:30:00 AM	8.5656	8.5726			N/A
5/8/2019	CHF NOK	11:30:00 AM	8.5814	8.585			N/A
5/8/2019	CHF NOK	1:30:00 PM	8.6226	8.6259			N/A
5/8/2019	CHF NOK	3:30:00 PM	8.6082	8.6137			N/A
5/8/2019	CHF NOK.fx	9:30:00 AM	8.56922	8.56914			N/A
5/8/2019	CHF NOK.fx	11:30:00 AM	8.58498	8.5814			N/A
5/8/2019	CHF NOK.fx	1:30:00 PM	8.62618	8.6223			N/A
5/8/2019	CHF NOK.fx	3:30:00 PM	8.6118	8.61006			N/A
5/8/2019	CHF PLN	9:30:00 AM	3.7553	3.7575			N/A
5/8/2019	CHF PLN	11:30:00 AM	3.7601	3.7625			N/A
5/8/2019	CHF PLN	1:30:00 PM	3.7676	3.77			N/A
5/8/2019	CHF PLN	3:30:00 PM	3.7596	3.7616			N/A
5/8/2019	CHF PLN.fx	9:30:00 AM	3.75296	3.75991			N/A
5/8/2019	CHF PLN.fx	11:30:00 AM	3.75768	3.76465			N/A
5/8/2019	CHF PLN.fx	1:30:00 PM	3.76526	3.77233			N/A
5/8/2019	CHF PLN.fx	3:30:00 PM	3.75724	3.76383			N/A
5/8/2019	CHF SEK	9:30:00 AM	9.3934	9.396			N/A
5/8/2019	CHF SEK	11:30:00 AM	9.3966	9.3981			N/A
5/8/2019	CHF SEK	1:30:00 PM	9.4319	9.4286			N/A
5/8/2019	CHF SEK	3:30:00 PM	9.4135	9.4153			N/A
5/8/2019	CHF SGD	9:30:00 AM	1.3359	1.3362			N/A
5/8/2019	CHF SGD	11:30:00 AM	1.3369	1.3373			N/A
5/8/2019	CHF SGD	1:30:00 PM	1.3392	1.3394			N/A
5/8/2019	CHF SGD	3:30:00 PM	1.3369	1.337			N/A
5/8/2019	CHF SGD.fx	9:30:00 AM	1.33605	1.33604			N/A
5/8/2019	CHF SGD.fx	11:30:00 AM	1.33711	1.33697			N/A
5/8/2019	CHF SGD.fx	1:30:00 PM	1.33936	1.33924			N/A
5/8/2019	CHF SGD.fx	3:30:00 PM	1.33713	1.33684			N/A
5/8/2019	CHF ZAR	9:30:00 AM	14.1211	14.1272			N/A
5/8/2019	CHF ZAR	11:30:00 AM	14.0638	14.0699			N/A

5/8/2019	CHFZAR	1:30:00 PM	14.149	14.1538			N/A
5/8/2019	CHFZAR	3:30:00 PM	14.0776	14.0868			N/A
5/8/2019	CZKJPY	9:30:00 AM					N/A
5/8/2019	CZKJPY	11:30:00 AM	4.801	4.805			N/A
5/8/2019	CZKJPY	1:30:00 PM	4.793	4.796			N/A
5/8/2019	CZKJPY	3:30:00 PM					N/A
5/8/2019	DAX30.i	9:30:00 AM	12097.01	12092.51			N/A
5/8/2019	DAX30.i	11:30:00 AM	12174.76	12169.61			N/A
5/8/2019	DAX30.i	1:30:00 PM	12086.51	12080.01			N/A
5/8/2019	DAX30.i	3:30:00 PM	12144.26	12139.76			N/A
5/8/2019	DJ30.i	9:30:00 AM					N/A
5/8/2019	DJ30.i	11:30:00 AM					N/A
5/8/2019	DJ30.i	1:30:00 PM					N/A
5/8/2019	DJ30.i	3:30:00 PM					N/A
5/8/2019	DKKJPY	9:30:00 AM					N/A
5/8/2019	DKKJPY	11:30:00 AM	16.54	16.55			N/A
5/8/2019	DKKJPY	1:30:00 PM	16.51	16.52			N/A
5/8/2019	DKKJPY	3:30:00 PM	16.52	16.54			N/A
5/8/2019	EURAUD	9:30:00 AM	1.59558	1.59591			N/A
5/8/2019	EURAUD	11:30:00 AM	1.59567	1.59587			N/A
5/8/2019	EURAUD	1:30:00 PM	1.59901	1.59916			N/A
5/8/2019	EURAUD	3:30:00 PM	1.59823	1.59856			N/A
5/8/2019	EURAUD.fx	9:30:00 AM	1.59578	1.59569			N/A
5/8/2019	EURAUD.fx	11:30:00 AM	1.59587	1.59566			N/A
5/8/2019	EURAUD.fx	1:30:00 PM	1.59921	1.59895			N/A
5/8/2019	EURAUD.fx	3:30:00 PM	1.59842	1.59833			N/A
5/8/2019	EURCAD	9:30:00 AM	1.50877	1.50962			N/A
5/8/2019	EURCAD	11:30:00 AM	1.50756	1.5084			N/A
5/8/2019	EURCAD	1:30:00 PM	1.5091	1.50974			N/A
5/8/2019	EURCAD	3:30:00 PM	1.50668	1.5075			N/A
5/8/2019	EURCAD.fx	9:30:00 AM	1.5092	1.5092			N/A
5/8/2019	EURCAD.fx	11:30:00 AM	1.50798	1.50798			N/A
5/8/2019	EURCAD.fx	1:30:00 PM	1.50951	1.50931			N/A
5/8/2019	EURCAD.fx	3:30:00 PM	1.50711	1.50707			N/A

5/8/2019	EURCHF	9:30:00 AM	1.1419	1.14197			N/A
5/8/2019	EURCHF	11:30:00 AM	1.1405	1.14048			N/A
5/8/2019	EURCHF	1:30:00 PM	1.13917	1.13916			N/A
5/8/2019	EURCHF	3:30:00 PM	1.14143	1.14112			N/A
5/8/2019	EURCHF.fx	9:30:00 AM	1.14196	1.14191			N/A
5/8/2019	EURCHF.fx	11:30:00 AM	1.14056	1.14041			N/A
5/8/2019	EURCHF.fx	1:30:00 PM	1.13922	1.1391			N/A
5/8/2019	EURCHF.fx	3:30:00 PM	1.14149	1.14106			N/A
5/8/2019	EURCZK	9:30:00 AM	25.691	25.727			N/A
5/8/2019	EURCZK	11:30:00 AM					N/A
5/8/2019	EURCZK	1:30:00 PM	25.682	25.721			N/A
5/8/2019	EURCZK	3:30:00 PM	25.682	25.721			N/A
5/8/2019	EURDKK	9:30:00 AM	7.4651	7.4655			N/A
5/8/2019	EURDKK	11:30:00 AM	7.4639	7.4651			N/A
5/8/2019	EURDKK	1:30:00 PM	7.464	7.4653			N/A
5/8/2019	EURDKK	3:30:00 PM	7.4648	7.4659			N/A
5/8/2019	EURGBP	9:30:00 AM	0.85785	0.85799			N/A
5/8/2019	EURGBP	11:30:00 AM	0.85846	0.85851			N/A
5/8/2019	EURGBP	1:30:00 PM	0.86053	0.86049			N/A
5/8/2019	EURGBP	3:30:00 PM	0.86102	0.86101			N/A
5/8/2019	EURGBP.fx	9:30:00 AM	0.85789	0.85794			N/A
5/8/2019	EURGBP.fx	11:30:00 AM	0.8585	0.85846			N/A
5/8/2019	EURGBP.fx	1:30:00 PM	0.86057	0.86044			N/A
5/8/2019	EURGBP.fx	3:30:00 PM	0.86106	0.86096			N/A
5/8/2019	EURHKD	9:30:00 AM	8.7962	8.8011			N/A
5/8/2019	EURHKD	11:30:00 AM	8.7938	8.7979			N/A
5/8/2019	EURHKD	1:30:00 PM	8.7868	8.7903			N/A
5/8/2019	EURHKD	3:30:00 PM	8.7912	8.7959			N/A
5/8/2019	EURHKD.fx	9:30:00 AM	8.79902	8.79825			N/A
5/8/2019	EURHKD.fx	11:30:00 AM	8.79663	8.79503			N/A
5/8/2019	EURHKD.fx	1:30:00 PM	8.78955	8.78738			N/A
5/8/2019	EURHKD.fx	3:30:00 PM	8.79405	8.79299			N/A
5/8/2019	EURHUF	9:30:00 AM	323.78	324.52			N/A
5/8/2019	EURHUF	11:30:00 AM	324.19	324.7			N/A

5/8/2019	EURHUF	1:30:00 PM	324.13	324.82			N/A
5/8/2019	EURHUF	3:30:00 PM	323.8	324.54			N/A
5/8/2019	EURHUF.fx	9:30:00 AM	324.058	324.258			N/A
5/8/2019	EURHUF.fx	11:30:00 AM	324.461	324.547			N/A
5/8/2019	EURHUF.fx	1:30:00 PM	324.416	324.55			N/A
5/8/2019	EURHUF.fx	3:30:00 PM	324.09	324.263			N/A
5/8/2019	EURJPY	9:30:00 AM	123.345	123.337			N/A
5/8/2019	EURJPY	11:30:00 AM	123.435	123.43			N/A
5/8/2019	EURJPY	1:30:00 PM	123.219	123.194			N/A
5/8/2019	EURJPY	3:30:00 PM	123.358	123.359			N/A
5/8/2019	EURJPY.fx	9:30:00 AM	123.348	123.333			N/A
5/8/2019	EURJPY.fx	11:30:00 AM	123.437	123.426			N/A
5/8/2019	EURJPY.fx	1:30:00 PM	123.222	123.19			N/A
5/8/2019	EURJPY.fx	3:30:00 PM	123.36	123.355			N/A
5/8/2019	EURMXN	9:30:00 AM	21.3116	21.3279			N/A
5/8/2019	EURMXN	11:30:00 AM	21.3192	21.3342			N/A
5/8/2019	EURMXN	1:30:00 PM	21.3832	21.4009			N/A
5/8/2019	EURMXN	3:30:00 PM	21.3582	21.3677			N/A
5/8/2019	EURMXN.fx	9:30:00 AM	21.3199	21.3196			N/A
5/8/2019	EURMXN.fx	11:30:00 AM	21.3287	21.3247			N/A
5/8/2019	EURMXN.fx	1:30:00 PM	21.3929	21.392			N/A
5/8/2019	EURMXN.fx	3:30:00 PM	21.3674	21.3581			N/A
5/8/2019	EURNOK	9:30:00 AM	9.7797	9.7912			N/A
5/8/2019	EURNOK	11:30:00 AM	9.7851	9.7932			N/A
5/8/2019	EURNOK	1:30:00 PM	9.8204	9.8278			N/A
5/8/2019	EURNOK	3:30:00 PM	9.822	9.8321			N/A
5/8/2019	EURNOK.fx	9:30:00 AM	9.78497	9.78598			N/A
5/8/2019	EURNOK.fx	11:30:00 AM	9.79052	9.78776			N/A
5/8/2019	EURNOK.fx	1:30:00 PM	9.82593	9.82208			N/A
5/8/2019	EURNOK.fx	3:30:00 PM	9.82752	9.82661			N/A
5/8/2019	EURNZD	9:30:00 AM	1.70052	1.70118			N/A
5/8/2019	EURNZD	11:30:00 AM	1.69876	1.69922			N/A
5/8/2019	EURNZD	1:30:00 PM	1.70088	1.70157			N/A
5/8/2019	EURNZD	3:30:00 PM	1.69947	1.70027			N/A



5/8/2019	EURNZD.fx	9:30:00 AM	1.70096	1.70074			N/A
5/8/2019	EURNZD.fx	11:30:00 AM	1.69917	1.69878			N/A
5/8/2019	EURNZD.fx	1:30:00 PM	1.70131	1.70114			N/A
5/8/2019	EURNZD.fx	3:30:00 PM	1.69988	1.69984			N/A
5/8/2019	EURPLN	9:30:00 AM	4.2883	4.2907			N/A
5/8/2019	EURPLN	11:30:00 AM	4.2883	4.2909			N/A
5/8/2019	EURPLN	1:30:00 PM	4.2918	4.2945			N/A
5/8/2019	EURPLN	3:30:00 PM	4.2903	4.2936			N/A
5/8/2019	EURPLN.fx	9:30:00 AM	4.28766	4.29139			N/A
5/8/2019	EURPLN.fx	11:30:00 AM	4.28767	4.29142			N/A
5/8/2019	EURPLN.fx	1:30:00 PM	4.29107	4.29522			N/A
5/8/2019	EURPLN.fx	3:30:00 PM	4.28977	4.29412			N/A
5/8/2019	EURRUB	9:30:00 AM					N/A
5/8/2019	EURRUB	11:30:00 AM	72.736	73.154			N/A
5/8/2019	EURRUB	1:30:00 PM	72.82	73.221			N/A
5/8/2019	EURRUB	3:30:00 PM	72.62	73.057			N/A
5/8/2019	EURSEK	9:30:00 AM	10.7284	10.7306			N/A
5/8/2019	EURSEK	11:30:00 AM	10.7186	10.7193			N/A
5/8/2019	EURSEK	1:30:00 PM	10.7435	10.7421			N/A
5/8/2019	EURSEK	3:30:00 PM	10.7449	10.7485			N/A
5/8/2019	EURSEK.fx	9:30:00 AM	10.72991	10.72898			N/A
5/8/2019	EURSEK.fx	11:30:00 AM	10.72019	10.71752			N/A
5/8/2019	EURSEK.fx	1:30:00 PM	10.74684	10.74047			N/A
5/8/2019	EURSEK.fx	3:30:00 PM	10.74654	10.74682			N/A
5/8/2019	EURSGD	9:30:00 AM	1.5253	1.5261			N/A
5/8/2019	EURSGD	11:30:00 AM	1.5244	1.5253			N/A
5/8/2019	EURSGD	1:30:00 PM	1.5253	1.5259			N/A
5/8/2019	EURSGD	3:30:00 PM	1.5254	1.5263			N/A
5/8/2019	EURSGD.fx	9:30:00 AM	1.52568	1.52572			N/A
5/8/2019	EURSGD.fx	11:30:00 AM	1.52483	1.52486			N/A
5/8/2019	EURSGD.fx	1:30:00 PM	1.52572	1.5255			N/A
5/8/2019	EURSGD.fx	3:30:00 PM	1.52579	1.52585			N/A
5/8/2019	EURUSD	9:30:00 AM	1.1209	1.12094			N/A
5/8/2019	EURUSD	11:30:00 AM	1.12054	1.12049			N/A

5/8/2019	EURUSD	1:30:00 PM	1.11963	1.11951	100	100	N/A
5/8/2019	EURUSD	3:30:00 PM	1.12019	1.12023			N/A
5/8/2019	EURUSD.fx	9:30:00 AM	1.1211	1.12104			N/A
5/8/2019	EURUSD.fx	11:30:00 AM	1.12074	1.12058			N/A
5/8/2019	EURUSD.fx	1:30:00 PM	1.11983	1.1196			N/A
5/8/2019	EURUSD.fx	3:30:00 PM	1.1204	1.12032			N/A
5/8/2019	EURZAR	9:30:00 AM	16.1271	16.1385			N/A
5/8/2019	EURZAR	11:30:00 AM	16.039	16.051			N/A
5/8/2019	EURZAR	1:30:00 PM	16.1175	16.1289			N/A
5/8/2019	EURZAR	3:30:00 PM	16.0647	16.083			N/A
5/8/2019	EURZAR.fx	9:30:00 AM	16.12566	16.1386			N/A
5/8/2019	EURZAR.fx	11:30:00 AM	16.03811	16.05193			N/A
5/8/2019	EURZAR.fx	1:30:00 PM	16.11666	16.12982			N/A
5/8/2019	EURZAR.fx	3:30:00 PM	16.06386	16.08354			N/A
5/8/2019	GBPAUD	9:30:00 AM	1.86038	1.86104			N/A
5/8/2019	GBPAUD	11:30:00 AM	1.85929	1.85977			N/A
5/8/2019	GBPAUD	1:30:00 PM	1.85882	1.85921			N/A
5/8/2019	GBPAUD	3:30:00 PM	1.85696	1.85728			N/A
5/8/2019	GBPAUD.fx	9:30:00 AM	1.86078	1.86063			N/A
5/8/2019	GBPAUD.fx	11:30:00 AM	1.85968	1.85937			N/A
5/8/2019	GBPAUD.fx	1:30:00 PM	1.85921	1.85881			N/A
5/8/2019	GBPAUD.fx	3:30:00 PM	1.85737	1.85688			N/A
5/8/2019	GBPCAD	9:30:00 AM	1.75871	1.75956			N/A
5/8/2019	GBPCAD	11:30:00 AM	1.75625	1.75696			N/A
5/8/2019	GBPCAD	1:30:00 PM	1.75389	1.75436			N/A
5/8/2019	GBPCAD	3:30:00 PM	1.75019	1.75064			N/A
5/8/2019	GBPCAD.fx	9:30:00 AM	1.7591	1.75916			N/A
5/8/2019	GBPCAD.fx	11:30:00 AM	1.75663	1.75656			N/A
5/8/2019	GBPCAD.fx	1:30:00 PM	1.75428	1.75396			N/A
5/8/2019	GBPCAD.fx	3:30:00 PM	1.75058	1.75023			N/A
5/8/2019	GBPCHF	9:30:00 AM	1.33087	1.3313			N/A
5/8/2019	GBPCHF	11:30:00 AM	1.32836	1.32857			N/A
5/8/2019	GBPCHF	1:30:00 PM	1.32376	1.32394			N/A
5/8/2019	GBPCHF	3:30:00 PM	1.3254	1.32562			N/A

5/8/2019	GBPCHF.fx	9:30:00 AM	1.33106	1.33107			N/A
5/8/2019	GBPCHF.fx	11:30:00 AM	1.32855	1.32836			N/A
5/8/2019	GBPCHF.fx	1:30:00 PM	1.32394	1.32373			N/A
5/8/2019	GBPCHF.fx	3:30:00 PM	1.32558	1.32542			N/A
5/8/2019	GBPCZK	9:30:00 AM	29.955	29.978			N/A
5/8/2019	GBPCZK	11:30:00 AM	29.929	29.948			N/A
5/8/2019	GBPCZK	1:30:00 PM	29.858	29.875			N/A
5/8/2019	GBPCZK	3:30:00 PM	29.84	29.859			N/A
5/8/2019	GBPDKK	9:30:00 AM	8.697	8.708			N/A
5/8/2019	GBPDKK	11:30:00 AM	8.692	8.702			N/A
5/8/2019	GBPDKK	1:30:00 PM	8.672	8.681			N/A
5/8/2019	GBPDKK	3:30:00 PM	8.666	8.676			N/A
5/8/2019	GBPDKK.fx	9:30:00 AM	8.6954	8.7086			N/A
5/8/2019	GBPDKK.fx	11:30:00 AM	8.6902	8.7024			N/A
5/8/2019	GBPDKK.fx	1:30:00 PM	8.6702	8.6814			N/A
5/8/2019	GBPDKK.fx	3:30:00 PM	8.6648	8.6766			N/A
5/8/2019	GBPHKD	9:30:00 AM	10.2503	10.2562			N/A
5/8/2019	GBPHKD	11:30:00 AM	10.2415	10.245			N/A
5/8/2019	GBPHKD	1:30:00 PM	10.2098	10.2129			N/A
5/8/2019	GBPHKD	3:30:00 PM	10.2072	10.2129			N/A
5/8/2019	GBPHUF	9:30:00 AM	377.42	377.88			N/A
5/8/2019	GBPHUF	11:30:00 AM	377.6	378.01			N/A
5/8/2019	GBPHUF	1:30:00 PM	376.69	377.07			N/A
5/8/2019	GBPHUF	3:30:00 PM	376.14	376.59			N/A
5/8/2019	GBPJPY	9:30:00 AM	143.753	143.785			N/A
5/8/2019	GBPJPY	11:30:00 AM	143.775	143.783			N/A
5/8/2019	GBPJPY	1:30:00 PM	143.186	143.186			N/A
5/8/2019	GBPJPY	3:30:00 PM	143.258	143.294			N/A
5/8/2019	GBPJPY.fx	9:30:00 AM	143.774	143.765			N/A
5/8/2019	GBPJPY.fx	11:30:00 AM	143.794	143.763			N/A
5/8/2019	GBPJPY.fx	1:30:00 PM	143.205	143.166			N/A
5/8/2019	GBPJPY.fx	3:30:00 PM	143.278	143.273			N/A
5/8/2019	GBPMXN	9:30:00 AM	24.8367	24.8498			N/A
5/8/2019	GBPMXN	11:30:00 AM	24.8299	24.8389			N/A

5/8/2019	GBPMXN	1:30:00 PM	24.8467	24.8578			N/A
5/8/2019	GBPMXN	3:30:00 PM	24.8058	24.8052			N/A
5/8/2019	GBPNOK	9:30:00 AM	11.4006	11.4116			N/A
5/8/2019	GBPNOK	11:30:00 AM	11.3984	11.4063			N/A
5/8/2019	GBPNOK	1:30:00 PM	11.414	11.4196			N/A
5/8/2019	GBPNOK	3:30:00 PM	11.4084	11.4185			N/A
5/8/2019	GBPNOK.fx	9:30:00 AM	11.40519	11.40699			N/A
5/8/2019	GBPNOK.fx	11:30:00 AM	11.40347	11.40141			N/A
5/8/2019	GBPNOK.fx	1:30:00 PM	11.41899	11.41462			N/A
5/8/2019	GBPNOK.fx	3:30:00 PM	11.41349	11.41335			N/A
5/8/2019	GBPNZD	9:30:00 AM	1.98224	1.98284			N/A
5/8/2019	GBPNZD	11:30:00 AM	1.97898	1.97919			N/A
5/8/2019	GBPNZD	1:30:00 PM	1.97679	1.97729			N/A
5/8/2019	GBPNZD	3:30:00 PM	1.97407	1.9745			N/A
5/8/2019	GBPNZD.fx	9:30:00 AM	1.98261	1.98246			N/A
5/8/2019	GBPNZD.fx	11:30:00 AM	1.97936	1.97883			N/A
5/8/2019	GBPNZD.fx	1:30:00 PM	1.97719	1.97691			N/A
5/8/2019	GBPNZD.fx	3:30:00 PM	1.97441	1.97413			N/A
5/8/2019	GBPPLN	9:30:00 AM	4.9993	5.0005			N/A
5/8/2019	GBPPLN	11:30:00 AM	4.9956	4.9975			N/A
5/8/2019	GBPPLN	1:30:00 PM	4.9886	4.9895			N/A
5/8/2019	GBPPLN	3:30:00 PM	4.9839	4.9855			N/A
5/8/2019	GBPPLN.fx	9:30:00 AM	4.99698	5.00285			N/A
5/8/2019	GBPPLN.fx	11:30:00 AM	4.99346	4.99951			N/A
5/8/2019	GBPPLN.fx	1:30:00 PM	4.98646	4.99145			N/A
5/8/2019	GBPPLN.fx	3:30:00 PM	4.98196	4.98757			N/A
5/8/2019	GBPSEK	9:30:00 AM	12.503	12.5102			N/A
5/8/2019	GBPSEK	11:30:00 AM	12.4825	12.4882			N/A
5/8/2019	GBPSEK	1:30:00 PM	12.4854	12.4848			N/A
5/8/2019	GBPSEK	3:30:00 PM	12.4769	12.4858			N/A
5/8/2019	GBPSEK.fx	9:30:00 AM	12.49943	12.51394			N/A
5/8/2019	GBPSEK.fx	11:30:00 AM	12.47886	12.49172			N/A
5/8/2019	GBPSEK.fx	1:30:00 PM	12.4819	12.48861			N/A
5/8/2019	GBPSEK.fx	3:30:00 PM	12.47356	12.48914			N/A

5/8/2019	GBPSGD	9:30:00 AM	1.778	1.7788			N/A
5/8/2019	GBPSGD	11:30:00 AM	1.776	1.7766			N/A
5/8/2019	GBPSGD	1:30:00 PM	1.7728	1.7732			N/A
5/8/2019	GBPSGD	3:30:00 PM	1.7719	1.7725			N/A
5/8/2019	GBPSGD.fx	9:30:00 AM	1.77612	1.78058			N/A
5/8/2019	GBPSGD.fx	11:30:00 AM	1.77417	1.77836			N/A
5/8/2019	GBPSGD.fx	1:30:00 PM	1.77098	1.77498			N/A
5/8/2019	GBPSGD.fx	3:30:00 PM	1.77004	1.77432			N/A
5/8/2019	GBPUSD	9:30:00 AM	1.30669	1.30675			N/A
5/8/2019	GBPUSD	11:30:00 AM	1.30552	1.30526			N/A
5/8/2019	GBPUSD	1:30:00 PM	1.3014	1.30117			N/A
5/8/2019	GBPUSD	3:30:00 PM	1.30119	1.30121			N/A
5/8/2019	GBPUSD.fx	9:30:00 AM	1.30675	1.30668			N/A
5/8/2019	GBPUSD.fx	11:30:00 AM	1.30557	1.3052			N/A
5/8/2019	GBPUSD.fx	1:30:00 PM	1.30145	1.3011			N/A
5/8/2019	GBPUSD.fx	3:30:00 PM	1.30125	1.30114			N/A
5/8/2019	GBPZAR	9:30:00 AM	18.7941	18.8128			N/A
5/8/2019	GBPZAR	11:30:00 AM	18.6806	18.6994			N/A
5/8/2019	GBPZAR	1:30:00 PM	18.7286	18.7453			N/A
5/8/2019	GBPZAR	3:30:00 PM	18.6571	18.6826			N/A
5/8/2019	GBPZAR.fx	9:30:00 AM	18.7991	18.8077			N/A
5/8/2019	GBPZAR.fx	11:30:00 AM	18.6874	18.6926			N/A
5/8/2019	GBPZAR.fx	1:30:00 PM	18.7353	18.7371			N/A
5/8/2019	GBPZAR.fx	3:30:00 PM	18.6639	18.6751			N/A
5/8/2019	GOLD	9:30:00 AM	1287.45	1287.8			N/A
5/8/2019	GOLD	11:30:00 AM	1287.06	1287.15			N/A
5/8/2019	GOLD	1:30:00 PM	1288.23	1288.53			N/A
5/8/2019	GOLD	3:30:00 PM	1290.89	1290.79			N/A
5/8/2019	HKDJPY	9:30:00 AM	14.02	14.03			N/A
5/8/2019	HKDJPY	11:30:00 AM	14.02	14.04			N/A
5/8/2019	HKDJPY	1:30:00 PM	14.02	14.03			N/A
5/8/2019	HKDJPY	3:30:00 PM	14.03	14.04			N/A
5/8/2019	HKDJPY.fx	9:30:00 AM	14.015	14.02			N/A
5/8/2019	HKDJPY.fx	11:30:00 AM	14.029	14.036			N/A

5/8/2019	HKDJPY.fx	1:30:00 PM	14.015	14.021			N/A
5/8/2019	HKDJPY.fx	3:30:00 PM	14.025	14.031			N/A
5/8/2019	HUFJPY	9:30:00 AM	0.3807	0.381			N/A
5/8/2019	HUFJPY	11:30:00 AM	0.3808	0.3811			N/A
5/8/2019	HUFJPY	1:30:00 PM	0.3799	0.3802			N/A
5/8/2019	HUFJPY	3:30:00 PM	0.3807	0.381			N/A
5/8/2019	JP225.i	9:30:00 AM	21559.15	21574.15			N/A
5/8/2019	JP225.i	11:30:00 AM	21634.15	21644.15			N/A
5/8/2019	JP225.i	1:30:00 PM	21484.15	21484.15			N/A
5/8/2019	JP225.i	3:30:00 PM	21484.15	21494.15			N/A
5/8/2019	MXNJPY	9:30:00 AM	5.79	5.79			N/A
5/8/2019	MXNJPY	11:30:00 AM	5.79	5.8			N/A
5/8/2019	MXNJPY	1:30:00 PM	5.76	5.77			N/A
5/8/2019	MXNJPY	3:30:00 PM	5.78	5.78			N/A
5/8/2019	NASDAQ.i	9:30:00 AM					N/A
5/8/2019	NASDAQ.i	11:30:00 AM					N/A
5/8/2019	NASDAQ.i	1:30:00 PM					N/A
5/8/2019	NASDAQ.i	3:30:00 PM					N/A
5/8/2019	NOKJPY	9:30:00 AM	12.59	12.62			N/A
5/8/2019	NOKJPY	11:30:00 AM	12.6	12.63			N/A
5/8/2019	NOKJPY	1:30:00 PM	12.53	12.56			N/A
5/8/2019	NOKJPY	3:30:00 PM	12.54	12.57			N/A
5/8/2019	NOKJPY.fx	9:30:00 AM	12.602	12.607			N/A
5/8/2019	NOKJPY.fx	11:30:00 AM	12.609	12.61			N/A
5/8/2019	NOKJPY.fx	1:30:00 PM	12.541	12.541			N/A
5/8/2019	NOKJPY.fx	3:30:00 PM	12.551	12.556			N/A
5/8/2019	NZDCAD	9:30:00 AM	0.887	0.88763			N/A
5/8/2019	NZDCAD	11:30:00 AM	0.8873	0.88785			N/A
5/8/2019	NZDCAD	1:30:00 PM	0.8869	0.88758			N/A
5/8/2019	NZDCAD	3:30:00 PM	0.88623	0.88693			N/A
5/8/2019	NZDCAD.fx	9:30:00 AM	0.88734	0.88728			N/A
5/8/2019	NZDCAD.fx	11:30:00 AM	0.88764	0.88752			N/A
5/8/2019	NZDCAD.fx	1:30:00 PM	0.88723	0.88724			N/A
5/8/2019	NZDCAD.fx	3:30:00 PM	0.88658	0.88659			N/A

5/8/2019	NZDCHF	9:30:00 AM	0.67109	0.67171			N/A
5/8/2019	NZDCHF	11:30:00 AM	0.67103	0.6715			N/A
5/8/2019	NZDCHF	1:30:00 PM	0.66925	0.6699			N/A
5/8/2019	NZDCHF	3:30:00 PM	0.67116	0.67161			N/A
5/8/2019	NZDCHF.fx	9:30:00 AM	0.67143	0.67135			N/A
5/8/2019	NZDCHF.fx	11:30:00 AM	0.67137	0.67115			N/A
5/8/2019	NZDCHF.fx	1:30:00 PM	0.66958	0.66954			N/A
5/8/2019	NZDCHF.fx	3:30:00 PM	0.67151	0.67126			N/A
5/8/2019	NZDCZK	9:30:00 AM	15.11	15.12			N/A
5/8/2019	NZDCZK	11:30:00 AM	15.121	15.132			N/A
5/8/2019	NZDCZK	1:30:00 PM	15.101	15.112			N/A
5/8/2019	NZDCZK	3:30:00 PM	15.113	15.125			N/A
5/8/2019	NZDDKK	9:30:00 AM					N/A
5/8/2019	NZDDKK	11:30:00 AM	4.391	4.395			N/A
5/8/2019	NZDDKK	1:30:00 PM	4.386	4.389			N/A
5/8/2019	NZDDKK	3:30:00 PM					N/A
5/8/2019	NZDHKD	9:30:00 AM	5.1695	5.1722			N/A
5/8/2019	NZDHKD	11:30:00 AM	5.1743	5.1763			N/A
5/8/2019	NZDHKD	1:30:00 PM	5.1632	5.1654			N/A
5/8/2019	NZDHKD	3:30:00 PM	5.1707	5.173			N/A
5/8/2019	NZDHUF	9:30:00 AM	190.34	190.6			N/A
5/8/2019	NZDHUF	11:30:00 AM	190.75	190.99			N/A
5/8/2019	NZDHUF	1:30:00 PM	190.48	190.75			N/A
5/8/2019	NZDHUF	3:30:00 PM	190.49	190.77			N/A
5/8/2019	NZDJPY	9:30:00 AM	72.491	72.547			N/A
5/8/2019	NZDJPY	11:30:00 AM	72.626	72.674			N/A
5/8/2019	NZDJPY	1:30:00 PM	72.394	72.444			N/A
5/8/2019	NZDJPY	3:30:00 PM	72.539	72.6			N/A
5/8/2019	NZDJPY.fx	9:30:00 AM	72.524	72.514			N/A
5/8/2019	NZDJPY.fx	11:30:00 AM	72.656	72.641			N/A
5/8/2019	NZDJPY.fx	1:30:00 PM	72.426	72.411			N/A
5/8/2019	NZDJPY.fx	3:30:00 PM	72.57	72.569			N/A
5/8/2019	NZDMXN	9:30:00 AM	12.5268	12.5322			N/A
5/8/2019	NZDMXN	11:30:00 AM	12.5444	12.549			N/A

5/8/2019	NZDMXN	1:30:00 PM	12.5665	12.5714			N/A
5/8/2019	NZDMXN	3:30:00 PM	12.5627	12.5636			N/A
5/8/2019	NZDNOK	9:30:00 AM	5.7487	5.7526			N/A
5/8/2019	NZDNOK	11:30:00 AM	5.7578	5.7597			N/A
5/8/2019	NZDNOK	1:30:00 PM	5.7718	5.7731			N/A
5/8/2019	NZDNOK	3:30:00 PM	5.7778	5.7802			N/A
5/8/2019	NZDPLN	9:30:00 AM	2.5206	2.522			N/A
5/8/2019	NZDPLN	11:30:00 AM	2.5234	2.5246			N/A
5/8/2019	NZDPLN	1:30:00 PM	2.5221	2.5231			N/A
5/8/2019	NZDPLN	3:30:00 PM	2.5237	2.5249			N/A
5/8/2019	NZDSEK	9:30:00 AM	6.3025	6.3093			N/A
5/8/2019	NZDSEK	11:30:00 AM	6.3032	6.3082			N/A
5/8/2019	NZDSEK	1:30:00 PM	6.3115	6.3135			N/A
5/8/2019	NZDSEK	3:30:00 PM	6.3167	6.3228			N/A
5/8/2019	NZDSGD	9:30:00 AM	0.8968	0.8974			N/A
5/8/2019	NZDSGD	11:30:00 AM	0.8973	0.8978			N/A
5/8/2019	NZDSGD	1:30:00 PM	0.8965	0.8971			N/A
5/8/2019	NZDSGD	3:30:00 PM	0.8974	0.8979			N/A
5/8/2019	NZDSGD.fx	9:30:00 AM	0.89678	0.89728			N/A
5/8/2019	NZDSGD.fx	11:30:00 AM	0.89728	0.89771			N/A
5/8/2019	NZDSGD.fx	1:30:00 PM	0.89653	0.89701			N/A
5/8/2019	NZDSGD.fx	3:30:00 PM	0.89734	0.8979			N/A
5/8/2019	NZDUSD	9:30:00 AM	0.65903	0.65909			N/A
5/8/2019	NZDUSD	11:30:00 AM	0.65958	0.65949			N/A
5/8/2019	NZDUSD	1:30:00 PM	0.6581	0.65818			N/A
5/8/2019	NZDUSD	3:30:00 PM	0.659	0.65907			N/A
5/8/2019	NZDUSD.fx	9:30:00 AM	0.65911	0.6591			N/A
5/8/2019	NZDUSD.fx	11:30:00 AM	0.65965	0.65951			N/A
5/8/2019	NZDUSD.fx	1:30:00 PM	0.65818	0.6582			N/A
5/8/2019	NZDUSD.fx	3:30:00 PM	0.65907	0.65909			N/A
5/8/2019	NZDZAR	9:30:00 AM	9.4736	9.4856			N/A
5/8/2019	NZDZAR	11:30:00 AM	9.4325	9.4456			N/A
5/8/2019	NZDZAR	1:30:00 PM	9.4669	9.4785			N/A
5/8/2019	NZDZAR	3:30:00 PM	9.4441	9.46			N/A



5/8/2019	SEKJPY	9:30:00 AM	11.49	11.5			N/A
5/8/2019	SEKJPY	11:30:00 AM	11.52	11.52			N/A
5/8/2019	SEKJPY	1:30:00 PM	11.47	11.48			N/A
5/8/2019	SEKJPY	3:30:00 PM	11.48	11.49			N/A
5/8/2019	SEKJPY.fx	9:30:00 AM	11.488	11.503			N/A
5/8/2019	SEKJPY.fx	11:30:00 AM	11.508	11.521			N/A
5/8/2019	SEKJPY.fx	1:30:00 PM	11.462	11.471			N/A
5/8/2019	SEKJPY.fx	3:30:00 PM	11.469	11.488			N/A
5/8/2019	SGDJPY	9:30:00 AM	80.84	80.84			N/A
5/8/2019	SGDJPY	11:30:00 AM	80.95	80.94			N/A
5/8/2019	SGDJPY	1:30:00 PM	80.78	80.75			N/A
5/8/2019	SGDJPY	3:30:00 PM	80.85	80.84			N/A
5/8/2019	SILVER	9:30:00 AM	14.75	15.14			N/A
5/8/2019	SILVER	11:30:00 AM	14.74	15.13			N/A
5/8/2019	SILVER	1:30:00 PM	14.71	15.08			N/A
5/8/2019	SILVER	3:30:00 PM	14.75	15.14			N/A
5/8/2019	SPX500.i	9:30:00 AM	2890.11	2890.41			N/A
5/8/2019	SPX500.i	11:30:00 AM	2896.36	2896.54			N/A
5/8/2019	SPX500.i	1:30:00 PM	2878.99	2878.62			N/A
5/8/2019	SPX500.i	3:30:00 PM	2878.11	2878.41			N/A
5/8/2019	UK100.i	9:30:00 AM	7244.46	7245.21			N/A
5/8/2019	UK100.i	11:30:00 AM	7256.46	7254.55			N/A
5/8/2019	UK100.i	1:30:00 PM	7240.96	7241.21			N/A
5/8/2019	UK100.i	3:30:00 PM	7251.96	7251.13			N/A
5/8/2019	USDCAD	9:30:00 AM	1.34622	1.3463			N/A
5/8/2019	USDCAD	11:30:00 AM	1.34574	1.34565			N/A
5/8/2019	USDCAD	1:30:00 PM	1.34811	1.34804			N/A
5/8/2019	USDCAD	3:30:00 PM	1.34528	1.34519			N/A
5/8/2019	USDCAD.fx	9:30:00 AM	1.34625	1.34627			N/A
5/8/2019	USDCAD.fx	11:30:00 AM	1.34577	1.34561			N/A
5/8/2019	USDCAD.fx	1:30:00 PM	1.34814	1.34801			N/A
5/8/2019	USDCAD.fx	3:30:00 PM	1.34532	1.34515			N/A
5/8/2019	USDCHF	9:30:00 AM	1.0186	1.01866			N/A
5/8/2019	USDCHF	11:30:00 AM	1.01764	1.0177	1000	1000	N/A

5/8/2019	USDCHF	1:30:00 PM	1.01736	1.01738			N/A
5/8/2019	USDCHF	3:30:00 PM	1.01875	1.01858			N/A
5/8/2019	USDCHF.fx	9:30:00 AM	1.01865	1.0186			N/A
5/8/2019	USDCHF.fx	11:30:00 AM	1.01769	1.01763			N/A
5/8/2019	USDCHF.fx	1:30:00 PM	1.01741	1.01733			N/A
5/8/2019	USDCHF.fx	3:30:00 PM	1.01879	1.01852			N/A
5/8/2019	USDCZK	9:30:00 AM	22.941	22.962			N/A
5/8/2019	USDCZK	11:30:00 AM	22.944	22.964			N/A
5/8/2019	USDCZK	1:30:00 PM	22.964	22.982			N/A
5/8/2019	USDCZK	3:30:00 PM	22.949	22.97			N/A
5/8/2019	USDCZK.fx	9:30:00 AM	22.9473	22.9557			N/A
5/8/2019	USDCZK.fx	11:30:00 AM	22.9528	22.9547			N/A
5/8/2019	USDCZK.fx	1:30:00 PM	22.9718	22.9742			N/A
5/8/2019	USDCZK.fx	3:30:00 PM	22.9568	22.9602			N/A
5/8/2019	USDDKK	9:30:00 AM	6.6583	6.662			N/A
5/8/2019	USDDKK	11:30:00 AM	6.661	6.6642			N/A
5/8/2019	USDDKK	1:30:00 PM	6.6666	6.6694			N/A
5/8/2019	USDDKK	3:30:00 PM	6.6625	6.666			N/A
5/8/2019	USDDKK.fx	9:30:00 AM	6.65879	6.65993			N/A
5/8/2019	USDDKK.fx	11:30:00 AM	6.66145	6.66202			N/A
5/8/2019	USDDKK.fx	1:30:00 PM	6.66724	6.66734			N/A
5/8/2019	USDDKK.fx	3:30:00 PM	6.66299	6.66402			N/A
5/8/2019	USDHKD	9:30:00 AM	7.8482	7.8486			N/A
5/8/2019	USDHKD	11:30:00 AM	7.8485	7.8486			N/A
5/8/2019	USDHKD	1:30:00 PM	7.8486	7.8484			N/A
5/8/2019	USDHKD	3:30:00 PM					N/A
5/8/2019	USDHKD.fx	9:30:00 AM	7.84816	7.84868			N/A
5/8/2019	USDHKD.fx	11:30:00 AM	7.84847	7.84894			N/A
5/8/2019	USDHKD.fx	1:30:00 PM	7.84852	7.84909			N/A
5/8/2019	USDHKD.fx	3:30:00 PM	7.8485	7.84907			N/A
5/8/2019	USDHUF	9:30:00 AM	288.9	289.36			N/A
5/8/2019	USDHUF	11:30:00 AM	289.38	289.73			N/A
5/8/2019	USDHUF	1:30:00 PM	289.56	289.99			N/A
5/8/2019	USDHUF	3:30:00 PM	289.15	289.61			N/A

5/8/2019	USDHUF.fx	9:30:00 AM	289.116	289.147			N/A
5/8/2019	USDHUF.fx	11:30:00 AM	289.583	289.525			N/A
5/8/2019	USDHUF.fx	1:30:00 PM	289.756	289.785			N/A
5/8/2019	USDHUF.fx	3:30:00 PM	289.345	289.398			N/A
5/8/2019	USDINR	9:30:00 AM	64.61	74.6			N/A
5/8/2019	USDINR	11:30:00 AM	64.5	74.49			N/A
5/8/2019	USDINR	1:30:00 PM					N/A
5/8/2019	USDINR	3:30:00 PM					N/A
5/8/2019	USDJPY	9:30:00 AM	110.023	110.023			N/A
5/8/2019	USDJPY	11:30:00 AM	110.138	110.151			N/A
5/8/2019	USDJPY	1:30:00 PM	110.033	110.022			N/A
5/8/2019	USDJPY	3:30:00 PM	110.107	110.112			N/A
5/8/2019	USDJPY.fx	9:30:00 AM	110.029	110.016			N/A
5/8/2019	USDJPY.fx	11:30:00 AM	110.144	110.144			N/A
5/8/2019	USDJPY.fx	1:30:00 PM	110.039	110.015			N/A
5/8/2019	USDJPY.fx	3:30:00 PM	110.113	110.103			N/A
5/8/2019	USDMXN	9:30:00 AM	19.015	19.019			N/A
5/8/2019	USDMXN	11:30:00 AM	19.03	19.031			N/A
5/8/2019	USDMXN	1:30:00 PM	19.103	19.108			N/A
5/8/2019	USDMXN	3:30:00 PM	19.071	19.067			N/A
5/8/2019	USDMXN.fx	9:30:00 AM	19.0194	19.0161			N/A
5/8/2019	USDMXN.fx	11:30:00 AM	19.0347	19.0271			N/A
5/8/2019	USDMXN.fx	1:30:00 PM	19.1061	19.1037			N/A
5/8/2019	USDMXN.fx	3:30:00 PM	19.074	19.0624			N/A
5/8/2019	USDNOK	9:30:00 AM	8.7251	8.7327			N/A
5/8/2019	USDNOK	11:30:00 AM	8.7336	8.7373			N/A
5/8/2019	USDNOK	1:30:00 PM	8.7716	8.7765			N/A
5/8/2019	USDNOK	3:30:00 PM	8.7682	8.7758			N/A
5/8/2019	USDNOK.fx	9:30:00 AM	8.72892	8.72846			N/A
5/8/2019	USDNOK.fx	11:30:00 AM	8.73747	8.73282			N/A
5/8/2019	USDNOK.fx	1:30:00 PM	8.77571	8.77184			N/A
5/8/2019	USDNOK.fx	3:30:00 PM	8.77226	8.77118			N/A
5/8/2019	USDPLN	9:30:00 AM	3.8258	3.8267			N/A
5/8/2019	USDPLN	11:30:00 AM	3.8276	3.828			N/A

5/8/2019	USDPLN	1:30:00 PM	3.8338	3.8346			N/A
5/8/2019	USDPLN	3:30:00 PM	3.8301	3.8316			N/A
5/8/2019	USDPLN.fx	9:30:00 AM	3.82517	3.82751			N/A
5/8/2019	USDPLN.fx	11:30:00 AM	3.82675	3.82883			N/A
5/8/2019	USDPLN.fx	1:30:00 PM	3.83306	3.83531			N/A
5/8/2019	USDPLN.fx	3:30:00 PM	3.82928	3.83233			N/A
5/8/2019	USDRUB	9:30:00 AM					N/A
5/8/2019	USDRUB	11:30:00 AM	64.994	65.366			N/A
5/8/2019	USDRUB	1:30:00 PM	65.129	65.492			N/A
5/8/2019	USDRUB	3:30:00 PM	64.909	65.303			N/A
5/8/2019	USDSEK	9:30:00 AM	9.5691	9.5714			N/A
5/8/2019	USDSEK	11:30:00 AM	9.5649	9.5641			N/A
5/8/2019	USDSEK	1:30:00 PM	9.5959	9.5933			N/A
5/8/2019	USDSEK	3:30:00 PM	9.5896	9.5943			N/A
5/8/2019	USDSEK.fx	9:30:00 AM	9.5717	9.56961			N/A
5/8/2019	USDSEK.fx	11:30:00 AM	9.56733	9.56231			N/A
5/8/2019	USDSEK.fx	1:30:00 PM	9.5985	9.59138			N/A
5/8/2019	USDSEK.fx	3:30:00 PM	9.5922	9.59221			N/A
5/8/2019	USDSGD	9:30:00 AM	1.3608	1.3611			N/A
5/8/2019	USDSGD	11:30:00 AM	1.3606	1.3608			N/A
5/8/2019	USDSGD	1:30:00 PM	1.3624	1.3627			N/A
5/8/2019	USDSGD	3:30:00 PM	1.3618	1.3619			N/A
5/8/2019	USDSGD.fx	9:30:00 AM	1.3608	1.36113			N/A
5/8/2019	USDSGD.fx	11:30:00 AM	1.36054	1.3608			N/A
5/8/2019	USDSGD.fx	1:30:00 PM	1.36234	1.36275			N/A
5/8/2019	USDSGD.fx	3:30:00 PM	1.3617	1.36214			N/A
5/8/2019	USDZAR	9:30:00 AM	14.3842	14.3933			N/A
5/8/2019	USDZAR	11:30:00 AM	14.3127	14.3217			N/A
5/8/2019	USDZAR	1:30:00 PM	14.3946	14.4031			N/A
5/8/2019	USDZAR	3:30:00 PM	14.3391	14.3548			N/A
5/8/2019	USDZAR.fx	9:30:00 AM					N/A
5/8/2019	USDZAR.fx	11:30:00 AM	14.31882	14.31542			N/A
5/8/2019	USDZAR.fx	1:30:00 PM	14.40054	14.39742			N/A
5/8/2019	USDZAR.fx	3:30:00 PM	14.34522	14.3486			N/A

5/8/2019	XAUUSD	9:30:00 AM	1287.45	1287.79			N/A
5/8/2019	XAUUSD	11:30:00 AM	1287.06	1287.13			N/A
5/8/2019	XAUUSD	1:30:00 PM	1288.23	1288.52			N/A
5/8/2019	XAUUSD	3:30:00 PM	1290.87	1290.78			N/A
5/8/2019	ZARJPY	9:30:00 AM	7.63	7.65			N/A
5/8/2019	ZARJPY	11:30:00 AM	7.68	7.7			N/A
5/8/2019	ZARJPY	1:30:00 PM	7.63	7.64			N/A
5/8/2019	ZARJPY	3:30:00 PM	7.66	7.68			N/A
5/8/2019	ZARJPY.fx	9:30:00 AM	7.646	7.647			N/A
5/8/2019	ZARJPY.fx	11:30:00 AM	7.693	7.692			N/A
5/8/2019	ZARJPY.fx	1:30:00 PM	7.641	7.64			N/A
5/8/2019	ZARJPY.fx	3:30:00 PM	7.673	7.675			N/A
5/9/2019	#AA	9:30:00 AM					N/A
5/9/2019	#AA	11:30:00 AM					N/A
5/9/2019	#AA	1:30:00 PM					N/A
5/9/2019	#AA	3:30:00 PM					N/A
5/9/2019	#AABA	9:30:00 AM					N/A
5/9/2019	#AABA	11:30:00 AM					N/A
5/9/2019	#AABA	1:30:00 PM					N/A
5/9/2019	#AABA	3:30:00 PM					N/A
5/9/2019	#AAL	9:30:00 AM					N/A
5/9/2019	#AAL	11:30:00 AM					N/A
5/9/2019	#AAL	1:30:00 PM					N/A
5/9/2019	#AAL	3:30:00 PM					N/A
5/9/2019	#AAPL	9:30:00 AM					N/A
5/9/2019	#AAPL	11:30:00 AM					N/A
5/9/2019	#AAPL	1:30:00 PM					N/A
5/9/2019	#AAPL	3:30:00 PM					N/A
5/9/2019	#ADBE	9:30:00 AM					N/A
5/9/2019	#ADBE	11:30:00 AM					N/A
5/9/2019	#ADBE	1:30:00 PM					N/A
5/9/2019	#ADBE	3:30:00 PM					N/A
5/9/2019	#AIG	9:30:00 AM					N/A
5/9/2019	#AIG	11:30:00 AM					N/A

5/9/2019	#AIG	1:30:00 PM					N/A
5/9/2019	#AIG	3:30:00 PM					N/A
5/9/2019	#AMD	9:30:00 AM					N/A
5/9/2019	#AMD	11:30:00 AM					N/A
5/9/2019	#AMD	1:30:00 PM					N/A
5/9/2019	#AMD	3:30:00 PM					N/A
5/9/2019	#AMZN	9:30:00 AM					N/A
5/9/2019	#AMZN	11:30:00 AM					N/A
5/9/2019	#AMZN	1:30:00 PM					N/A
5/9/2019	#AMZN	3:30:00 PM					N/A
5/9/2019	#AXP	9:30:00 AM					N/A
5/9/2019	#AXP	11:30:00 AM					N/A
5/9/2019	#AXP	1:30:00 PM					N/A
5/9/2019	#AXP	3:30:00 PM					N/A
5/9/2019	#BA	9:30:00 AM					N/A
5/9/2019	#BA	11:30:00 AM					N/A
5/9/2019	#BA	1:30:00 PM					N/A
5/9/2019	#BA	3:30:00 PM					N/A
5/9/2019	#BABA	9:30:00 AM					N/A
5/9/2019	#BABA	11:30:00 AM					N/A
5/9/2019	#BABA	1:30:00 PM					N/A
5/9/2019	#BABA	3:30:00 PM					N/A
5/9/2019	#BAC	9:30:00 AM					N/A
5/9/2019	#BAC	11:30:00 AM					N/A
5/9/2019	#BAC	1:30:00 PM					N/A
5/9/2019	#BAC	3:30:00 PM					N/A
5/9/2019	#BARC	9:30:00 AM					N/A
5/9/2019	#BARC	11:30:00 AM					N/A
5/9/2019	#BARC	1:30:00 PM					N/A
5/9/2019	#BARC	3:30:00 PM					N/A
5/9/2019	#BHP	9:30:00 AM					N/A
5/9/2019	#BHP	11:30:00 AM					N/A
5/9/2019	#BHP	1:30:00 PM					N/A
5/9/2019	#BHP	3:30:00 PM					N/A

5/9/2019	#BIDU	9:30:00 AM					N/A
5/9/2019	#BIDU	11:30:00 AM					N/A
5/9/2019	#BIDU	1:30:00 PM					N/A
5/9/2019	#BIDU	3:30:00 PM					N/A
5/9/2019	#Bitcoin	9:30:00 AM	6271.3	6297.7			N/A
5/9/2019	#Bitcoin	11:30:00 AM	6262.6	6292.46			N/A
5/9/2019	#Bitcoin	1:30:00 PM	6255.9	6286.95			N/A
5/9/2019	#Bitcoin	3:30:00 PM	6191.1	6215.2			N/A
5/9/2019	#BK	9:30:00 AM					N/A
5/9/2019	#BK	11:30:00 AM					N/A
5/9/2019	#BK	1:30:00 PM					N/A
5/9/2019	#BK	3:30:00 PM					N/A
5/9/2019	#BLT	9:30:00 AM					N/A
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5/9/2019	#BLT	1:30:00 PM					N/A
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5/9/2019	#VZ	1:30:00 PM					N/A
5/9/2019	#VZ	3:30:00 PM					N/A
5/9/2019	#WDC	9:30:00 AM					N/A
5/9/2019	#WDC	11:30:00 AM					N/A
5/9/2019	#WDC	1:30:00 PM					N/A
5/9/2019	#WDC	3:30:00 PM					N/A
5/9/2019	#WFC	9:30:00 AM					N/A
5/9/2019	#WFC	11:30:00 AM					N/A
5/9/2019	#WFC	1:30:00 PM					N/A
5/9/2019	#WFC	3:30:00 PM					N/A
5/9/2019	#WMT	9:30:00 AM					N/A
5/9/2019	#WMT	11:30:00 AM					N/A

5/9/2019	#WMT	1:30:00 PM					N/A
5/9/2019	#WMT	3:30:00 PM					N/A
5/9/2019	#XOM	9:30:00 AM					N/A
5/9/2019	#XOM	11:30:00 AM					N/A
5/9/2019	#XOM	1:30:00 PM					N/A
5/9/2019	#XOM	3:30:00 PM					N/A
5/9/2019	#YHOO	9:30:00 AM					N/A
5/9/2019	#YHOO	11:30:00 AM					N/A
5/9/2019	#YHOO	1:30:00 PM					N/A
5/9/2019	#YHOO	3:30:00 PM					N/A
5/9/2019	#ZNGA	9:30:00 AM					N/A
5/9/2019	#ZNGA	11:30:00 AM					N/A
5/9/2019	#ZNGA	1:30:00 PM					N/A
5/9/2019	#ZNGA	3:30:00 PM					N/A
5/9/2019	AUDCAD	9:30:00 AM	0.94066	0.94131			N/A
5/9/2019	AUDCAD	11:30:00 AM	0.93968	0.94037			N/A
5/9/2019	AUDCAD	1:30:00 PM	0.93933	0.93992			N/A
5/9/2019	AUDCAD	3:30:00 PM	0.94057	0.94074			N/A
5/9/2019	AUDCAD.fx	9:30:00 AM	0.94098	0.94096			N/A
5/9/2019	AUDCAD.fx	11:30:00 AM	0.94002	0.94			N/A
5/9/2019	AUDCAD.fx	1:30:00 PM	0.93967	0.93957			N/A
5/9/2019	AUDCAD.fx	3:30:00 PM	0.94087	0.94056			N/A
5/9/2019	AUDCHF	9:30:00 AM	0.71082	0.71138			N/A
5/9/2019	AUDCHF	11:30:00 AM	0.70913	0.70981			N/A
5/9/2019	AUDCHF	1:30:00 PM	0.7104	0.71088			N/A
5/9/2019	AUDCHF	3:30:00 PM	0.70912	0.70977			N/A
5/9/2019	AUDCHF.fx	9:30:00 AM	0.71116	0.71103			N/A
5/9/2019	AUDCHF.fx	11:30:00 AM	0.70947	0.70946			N/A
5/9/2019	AUDCHF.fx	1:30:00 PM	0.71074	0.71053			N/A
5/9/2019	AUDCHF.fx	3:30:00 PM	0.70946	0.70945			N/A
5/9/2019	AUDCZK	9:30:00 AM	16.008	16.023			N/A
5/9/2019	AUDCZK	11:30:00 AM	16.017	16.03			N/A
5/9/2019	AUDCZK	1:30:00 PM	16.01	16.025			N/A
5/9/2019	AUDCZK	3:30:00 PM	15.995	16.01			N/A

5/9/2019	AUDDKK	9:30:00 AM	4.6484	4.6525			N/A
5/9/2019	AUDDKK	11:30:00 AM	4.6512	4.6555			N/A
5/9/2019	AUDDKK	1:30:00 PM	4.6513	4.6558			N/A
5/9/2019	AUDDKK	3:30:00 PM	4.6487	4.6529			N/A
5/9/2019	AUDHKD	9:30:00 AM	5.4712	5.4746			N/A
5/9/2019	AUDHKD	11:30:00 AM	5.4646	5.4685			N/A
5/9/2019	AUDHKD	1:30:00 PM	5.47	5.4731			N/A
5/9/2019	AUDHKD	3:30:00 PM	5.4706	5.4742			N/A
5/9/2019	AUDHUF	9:30:00 AM	201.69	201.92			N/A
5/9/2019	AUDHUF	11:30:00 AM	202.12	202.34			N/A
5/9/2019	AUDHUF	1:30:00 PM	201.59	201.81			N/A
5/9/2019	AUDHUF	3:30:00 PM	201.1	201.31			N/A
5/9/2019	AUDJPY	9:30:00 AM	76.603	76.658			N/A
5/9/2019	AUDJPY	11:30:00 AM	76.383	76.44			N/A
5/9/2019	AUDJPY	1:30:00 PM	76.546	76.601			N/A
5/9/2019	AUDJPY	3:30:00 PM	76.56	76.616			N/A
5/9/2019	AUDJPY.fx	9:30:00 AM	76.637	76.623			N/A
5/9/2019	AUDJPY.fx	11:30:00 AM	76.417	76.404			N/A
5/9/2019	AUDJPY.fx	1:30:00 PM	76.58	76.566			N/A
5/9/2019	AUDJPY.fx	3:30:00 PM	76.592	76.582			N/A
5/9/2019	AUDMXN	9:30:00 AM	13.35	13.3556			N/A
5/9/2019	AUDMXN	11:30:00 AM	13.3438	13.3524			N/A
5/9/2019	AUDMXN	1:30:00 PM	13.3615	13.3705			N/A
5/9/2019	AUDMXN	3:30:00 PM	13.357	13.3618			N/A
5/9/2019	AUDNOK	9:30:00 AM	6.1159	6.12			N/A
5/9/2019	AUDNOK	11:30:00 AM	6.1178	6.1202			N/A
5/9/2019	AUDNOK	1:30:00 PM	6.0991	6.104			N/A
5/9/2019	AUDNOK	3:30:00 PM	6.1094	6.1135			N/A
5/9/2019	AUDNOK.f	9:30:00 AM	6.1173	6.1183			N/A
5/9/2019	AUDNOK.f	11:30:00 AM	6.1193	6.1185			N/A
5/9/2019	AUDNOK.f	1:30:00 PM	6.1007	6.1023			N/A
5/9/2019	AUDNOK.f	3:30:00 PM	6.1109	6.1119			N/A
5/9/2019	AUDNZD	9:30:00 AM	1.05982	1.06065			N/A
5/9/2019	AUDNZD	11:30:00 AM	1.05929	1.06015			N/A

5/9/2019	AUDNZD	1:30:00 PM	1.06048	1.06135			N/A
5/9/2019	AUDNZD	3:30:00 PM	1.05984	1.06063			N/A
5/9/2019	AUDNZD.fx	9:30:00 AM	1.06027	1.06019			N/A
5/9/2019	AUDNZD.fx	11:30:00 AM	1.05974	1.05969			N/A
5/9/2019	AUDNZD.fx	1:30:00 PM	1.06094	1.0609			N/A
5/9/2019	AUDNZD.fx	3:30:00 PM	1.0602	1.0602			N/A
5/9/2019	AUDPLN	9:30:00 AM	2.6737	2.6767			N/A
5/9/2019	AUDPLN	11:30:00 AM	2.6775	2.6801			N/A
5/9/2019	AUDPLN	1:30:00 PM	2.6746	2.6777			N/A
5/9/2019	AUDPLN	3:30:00 PM	2.6733	2.6761			N/A
5/9/2019	AUDSEK	9:30:00 AM	6.7104	6.7107			N/A
5/9/2019	AUDSEK	11:30:00 AM	6.7283	6.7295			N/A
5/9/2019	AUDSEK	1:30:00 PM	6.728	6.7309			N/A
5/9/2019	AUDSEK	3:30:00 PM	6.7285	6.7299			N/A
5/9/2019	AUDSEK.fx	9:30:00 AM	6.7058	6.7153			N/A
5/9/2019	AUDSEK.fx	11:30:00 AM	6.7238	6.7337			N/A
5/9/2019	AUDSEK.fx	1:30:00 PM	6.7234	6.7354			N/A
5/9/2019	AUDSEK.fx	3:30:00 PM	6.7239	6.7345			N/A
5/9/2019	AUDSGD	9:30:00 AM	0.9508	0.9509			N/A
5/9/2019	AUDSGD	11:30:00 AM	0.9504	0.9507			N/A
5/9/2019	AUDSGD	1:30:00 PM	0.9508	0.951			N/A
5/9/2019	AUDSGD	3:30:00 PM	0.9512	0.9514			N/A
5/9/2019	AUDSGD.fx	9:30:00 AM	0.95087	0.95082			N/A
5/9/2019	AUDSGD.fx	11:30:00 AM	0.95051	0.95058			N/A
5/9/2019	AUDSGD.fx	1:30:00 PM	0.9509	0.95092			N/A
5/9/2019	AUDSGD.fx	3:30:00 PM	0.95115	0.95127			N/A
5/9/2019	AUDUSD	9:30:00 AM	0.6975	0.69748			N/A
5/9/2019	AUDUSD	11:30:00 AM	0.69662	0.69675			N/A
5/9/2019	AUDUSD	1:30:00 PM	0.69731	0.69738			N/A
5/9/2019	AUDUSD	3:30:00 PM	0.69748	0.69747			N/A
5/9/2019	AUDUSD.fx	9:30:00 AM	0.69756	0.69742			N/A
5/9/2019	AUDUSD.fx	11:30:00 AM	0.69668	0.69667			N/A
5/9/2019	AUDUSD.fx	1:30:00 PM	0.69737	0.69732			N/A
5/9/2019	AUDUSD.fx	3:30:00 PM	0.69749	0.69742			N/A

5/9/2019	AUDZAR	9:30:00 AM	10.005	10.0147			N/A
5/9/2019	AUDZAR	11:30:00 AM	10.0324	10.0479			N/A
5/9/2019	AUDZAR	1:30:00 PM	10.0282	10.0407			N/A
5/9/2019	AUDZAR	3:30:00 PM	9.981	9.9962			N/A
5/9/2019	AUS200.i	9:30:00 AM					N/A
5/9/2019	AUS200.i	11:30:00 AM	6288.48	6288.98			N/A
5/9/2019	AUS200.i	1:30:00 PM	6283.48	6286.78			N/A
5/9/2019	AUS200.i	3:30:00 PM	6276.48	6278.58			N/A
5/9/2019	BCHUSD	9:30:00 AM	293.85	295.73			N/A
5/9/2019	BCHUSD	11:30:00 AM	296.27	296.68			N/A
5/9/2019	BCHUSD	1:30:00 PM	294.79	296.79			N/A
5/9/2019	BCHUSD	3:30:00 PM	290.57	292.4			N/A
5/9/2019	CADCHF	9:30:00 AM	0.75538	0.75599			N/A
5/9/2019	CADCHF	11:30:00 AM	0.75435	0.75508			N/A
5/9/2019	CADCHF	1:30:00 PM	0.75603	0.75654			N/A
5/9/2019	CADCHF	3:30:00 PM	0.75411	0.75431			N/A
5/9/2019	CADCHF.fx	9:30:00 AM	0.75571	0.75563			N/A
5/9/2019	CADCHF.fx	11:30:00 AM	0.7547	0.75472			N/A
5/9/2019	CADCHF.fx	1:30:00 PM	0.75637	0.75618			N/A
5/9/2019	CADCHF.fx	3:30:00 PM	0.75434	0.75398			N/A
5/9/2019	CADCZK	9:30:00 AM	17.013	17.03			N/A
5/9/2019	CADCZK	11:30:00 AM	17.041	17.055			N/A
5/9/2019	CADCZK	1:30:00 PM	17.041	17.056			N/A
5/9/2019	CADCZK	3:30:00 PM	17.012	17.018			N/A
5/9/2019	CADDDKK	9:30:00 AM					N/A
5/9/2019	CADDDKK	11:30:00 AM					N/A
5/9/2019	CADDDKK	1:30:00 PM	4.951	4.954			N/A
5/9/2019	CADDDKK	3:30:00 PM	4.943	4.943			N/A
5/9/2019	CADHKD	9:30:00 AM	5.8154	5.8192			N/A
5/9/2019	CADHKD	11:30:00 AM	5.8139	5.8175			N/A
5/9/2019	CADHKD	1:30:00 PM	5.8219	5.8255			N/A
5/9/2019	CADHKD	3:30:00 PM	5.8182	5.8188			N/A
5/9/2019	CADHUF	9:30:00 AM	214.41	214.57			N/A
5/9/2019	CADHUF	11:30:00 AM	215.09	215.23			N/A

5/9/2019	CADHUF	1:30:00 PM	214.6	214.74			N/A
5/9/2019	CADHUF	3:30:00 PM	213.94	213.95			N/A
5/9/2019	CADJPY	9:30:00 AM	81.406	81.47			N/A
5/9/2019	CADJPY	11:30:00 AM	81.254	81.316			N/A
5/9/2019	CADJPY	1:30:00 PM	81.465	81.521			N/A
5/9/2019	CADJPY	3:30:00 PM	81.417	81.422			N/A
5/9/2019	CADJPY.fx	9:30:00 AM	81.439	81.435			N/A
5/9/2019	CADJPY.fx	11:30:00 AM	81.289	81.28			N/A
5/9/2019	CADJPY.fx	1:30:00 PM	81.5	81.485			N/A
5/9/2019	CADJPY.fx	3:30:00 PM	81.44	81.388			N/A
5/9/2019	CADMXN	9:30:00 AM	14.1877	14.1962			N/A
5/9/2019	CADMXN	11:30:00 AM	14.1954	14.2067			N/A
5/9/2019	CADMXN	1:30:00 PM	14.2203	14.2321			N/A
5/9/2019	CADMXN	3:30:00 PM	14.2034	14.2063			N/A
5/9/2019	CADNOK	9:30:00 AM	6.4976	6.5019			N/A
5/9/2019	CADNOK	11:30:00 AM	6.5074	6.509			N/A
5/9/2019	CADNOK	1:30:00 PM	6.4901	6.4943			N/A
5/9/2019	CADNOK	3:30:00 PM	6.4925	6.4929			N/A
5/9/2019	CADPLN	9:30:00 AM	2.8417	2.8436			N/A
5/9/2019	CADPLN	11:30:00 AM	2.8483	2.8502			N/A
5/9/2019	CADPLN	1:30:00 PM	2.8468	2.8484			N/A
5/9/2019	CADPLN	3:30:00 PM	2.8416	2.8416			N/A
5/9/2019	CADSEK	9:30:00 AM	7.1287	7.1303			N/A
5/9/2019	CADSEK	11:30:00 AM	7.1568	7.158			N/A
5/9/2019	CADSEK	1:30:00 PM	7.1585	7.1614			N/A
5/9/2019	CADSEK	3:30:00 PM	7.1507	7.1502			N/A
5/9/2019	CADSGD	9:30:00 AM	1.0097	1.0101			N/A
5/9/2019	CADSGD	11:30:00 AM	1.0106	1.0109			N/A
5/9/2019	CADSGD	1:30:00 PM	1.0112	1.0115			N/A
5/9/2019	CADSGD	3:30:00 PM	1.0107	1.011			N/A
5/9/2019	CADZAR	9:30:00 AM	10.6339	10.645			N/A
5/9/2019	CADZAR	11:30:00 AM	10.6738	10.6908			N/A
5/9/2019	CADZAR	1:30:00 PM	10.6721	10.6876			N/A
5/9/2019	CADZAR	3:30:00 PM	10.6152	10.6259			N/A

5/9/2019	CHFCZK	9:30:00 AM	22.519	22.535			N/A
5/9/2019	CHFCZK	11:30:00 AM	22.584	22.596			N/A
5/9/2019	CHFCZK	1:30:00 PM	22.539	22.551			N/A
5/9/2019	CHFCZK	3:30:00 PM	22.555	22.57			N/A
5/9/2019	CHFDKK	9:30:00 AM	6.538	6.542			N/A
5/9/2019	CHFDKK	11:30:00 AM	6.558	6.56			N/A
5/9/2019	CHFDKK	1:30:00 PM	6.547	6.549			N/A
5/9/2019	CHFDKK	3:30:00 PM	6.554	6.557			N/A
5/9/2019	CHFDKK.fx	9:30:00 AM	6.5368	6.5429			N/A
5/9/2019	CHFDKK.fx	11:30:00 AM	6.5562	6.5614			N/A
5/9/2019	CHFDKK.fx	1:30:00 PM	6.5456	6.5504			N/A
5/9/2019	CHFDKK.fx	3:30:00 PM	6.5523	6.5579			N/A
5/9/2019	CHFHKD	9:30:00 AM	7.6966	7.7004			N/A
5/9/2019	CHFHKD	11:30:00 AM	7.7048	7.7088			N/A
5/9/2019	CHFHKD	1:30:00 PM	7.7003	7.7022			N/A
5/9/2019	CHFHKD	3:30:00 PM	7.7141	7.7168			N/A
5/9/2019	CHFHUF	9:30:00 AM	283.69	284.05			N/A
5/9/2019	CHFHUF	11:30:00 AM	284.94	285.3			N/A
5/9/2019	CHFHUF	1:30:00 PM	283.72	284.06			N/A
5/9/2019	CHFHUF	3:30:00 PM	283.5	283.87			N/A
5/9/2019	CHFJPY	9:30:00 AM	107.744	107.797			N/A
5/9/2019	CHFJPY	11:30:00 AM	107.671	107.734			N/A
5/9/2019	CHFJPY	1:30:00 PM	107.725	107.777			N/A
5/9/2019	CHFJPY	3:30:00 PM	107.927	107.969			N/A
5/9/2019	CHFJPY.fx	9:30:00 AM	107.778	107.763			N/A
5/9/2019	CHFJPY.fx	11:30:00 AM	107.704	107.7			N/A
5/9/2019	CHFJPY.fx	1:30:00 PM	107.758	107.742			N/A
5/9/2019	CHFJPY.fx	3:30:00 PM	107.957	107.936			N/A
5/9/2019	CHFMXN	9:30:00 AM	18.776	18.79			N/A
5/9/2019	CHFMXN	11:30:00 AM	18.8099	18.8258			N/A
5/9/2019	CHFMXN	1:30:00 PM	18.8071	18.8187			N/A
5/9/2019	CHFMXN	3:30:00 PM	18.8332	18.8396			N/A
5/9/2019	CHFNOK	9:30:00 AM	8.6	8.6075			N/A
5/9/2019	CHFNOK	11:30:00 AM	8.6231	8.6262			N/A

5/9/2019	CHFNOK	1:30:00 PM	8.5831	8.5894			N/A
5/9/2019	CHFNOK	3:30:00 PM	8.6106	8.617			N/A
5/9/2019	CHFNOK.fx	9:30:00 AM	8.60332	8.6042			N/A
5/9/2019	CHFNOK.fx	11:30:00 AM	8.62648	8.62264			N/A
5/9/2019	CHFNOK.fx	1:30:00 PM	8.58666	8.58594			N/A
5/9/2019	CHFNOK.fx	3:30:00 PM	8.61399	8.61367			N/A
5/9/2019	CHFPLN	9:30:00 AM	3.7607	3.7634			N/A
5/9/2019	CHFPLN	11:30:00 AM	3.7749	3.7769			N/A
5/9/2019	CHFPLN	1:30:00 PM	3.7646	3.7669			N/A
5/9/2019	CHFPLN	3:30:00 PM	3.7691	3.7712			N/A
5/9/2019	CHFPLN.fx	9:30:00 AM	3.75824	3.76581			N/A
5/9/2019	CHFPLN.fx	11:30:00 AM	3.77254	3.77923			N/A
5/9/2019	CHFPLN.fx	1:30:00 PM	3.76216	3.76913			N/A
5/9/2019	CHFPLN.fx	3:30:00 PM	3.76666	3.77365			N/A
5/9/2019	CHFSEK	9:30:00 AM	9.4342	9.4362			N/A
5/9/2019	CHFSEK	11:30:00 AM	9.4832	9.4841			N/A
5/9/2019	CHFSEK	1:30:00 PM	9.4672	9.4692			N/A
5/9/2019	CHFSEK	3:30:00 PM	9.4818	9.4834			N/A
5/9/2019	CHFSGD	9:30:00 AM	1.337	1.3374			N/A
5/9/2019	CHFSGD	11:30:00 AM	1.3397	1.3401			N/A
5/9/2019	CHFSGD	1:30:00 PM	1.338	1.3382			N/A
5/9/2019	CHFSGD	3:30:00 PM	1.3408	1.3409			N/A
5/9/2019	CHFSGD.fx	9:30:00 AM	1.33714	1.33717			N/A
5/9/2019	CHFSGD.fx	11:30:00 AM	1.33983	1.33985			N/A
5/9/2019	CHFSGD.fx	1:30:00 PM	1.33821	1.33805			N/A
5/9/2019	CHFSGD.fx	3:30:00 PM	1.34072	1.34079			N/A
5/9/2019	CHFZAR	9:30:00 AM	14.0791	14.0827			N/A
5/9/2019	CHFZAR	11:30:00 AM	14.1479	14.1618			N/A
5/9/2019	CHFZAR	1:30:00 PM	14.1198	14.1278			N/A
5/9/2019	CHFZAR	3:30:00 PM	14.0769	14.0895			N/A
5/9/2019	CZKJPY	9:30:00 AM	4.783	4.787			N/A
5/9/2019	CZKJPY	11:30:00 AM	4.768	4.77			N/A
5/9/2019	CZKJPY	1:30:00 PM	4.779	4.782			N/A
5/9/2019	CZKJPY	3:30:00 PM	4.785	4.788			N/A



5/9/2019	DAX30.i	9:30:00 AM	12128.71	12127.71			N/A
5/9/2019	DAX30.i	11:30:00 AM	12080.96	12074.46			N/A
5/9/2019	DAX30.i	1:30:00 PM	12083.71	12079.71			N/A
5/9/2019	DAX30.i	3:30:00 PM	12063.96	12057.71			N/A
5/9/2019	DJ30.i	9:30:00 AM					N/A
5/9/2019	DJ30.i	11:30:00 AM					N/A
5/9/2019	DJ30.i	1:30:00 PM					N/A
5/9/2019	DJ30.i	3:30:00 PM					N/A
5/9/2019	DKKJPY	9:30:00 AM					N/A
5/9/2019	DKKJPY	11:30:00 AM					N/A
5/9/2019	DKKJPY	1:30:00 PM					N/A
5/9/2019	DKKJPY	3:30:00 PM	16.48	16.49			N/A
5/9/2019	EURAUD	9:30:00 AM	1.60464	1.60481			N/A
5/9/2019	EURAUD	11:30:00 AM	1.60371	1.60397			N/A
5/9/2019	EURAUD	1:30:00 PM	1.60367	1.60397			N/A
5/9/2019	EURAUD	3:30:00 PM	1.60457	1.60494			N/A
5/9/2019	EURAUD.fx	9:30:00 AM	1.60484	1.60459			N/A
5/9/2019	EURAUD.fx	11:30:00 AM	1.60391	1.60375			N/A
5/9/2019	EURAUD.fx	1:30:00 PM	1.60387	1.60375			N/A
5/9/2019	EURAUD.fx	3:30:00 PM	1.60477	1.60476			N/A
5/9/2019	EURCAD	9:30:00 AM	1.51027	1.51099			N/A
5/9/2019	EURCAD	11:30:00 AM	1.50791	1.50848			N/A
5/9/2019	EURCAD	1:30:00 PM	1.5072	1.50796			N/A
5/9/2019	EURCAD	3:30:00 PM	1.51022	1.51001			N/A
5/9/2019	EURCAD.fx	9:30:00 AM	1.5107	1.51057			N/A
5/9/2019	EURCAD.fx	11:30:00 AM	1.50833	1.50807			N/A
5/9/2019	EURCAD.fx	1:30:00 PM	1.50762	1.50753			N/A
5/9/2019	EURCAD.fx	3:30:00 PM	1.51061	1.50977			N/A
5/9/2019	EURCHF	9:30:00 AM	1.14151	1.14158			N/A
5/9/2019	EURCHF	11:30:00 AM	1.13831	1.13824			N/A
5/9/2019	EURCHF	1:30:00 PM	1.1402	1.14009			N/A
5/9/2019	EURCHF	3:30:00 PM	1.13892	1.13896			N/A
5/9/2019	EURCHF.fx	9:30:00 AM	1.14156	1.14152			N/A
5/9/2019	EURCHF.fx	11:30:00 AM	1.13838	1.13818			N/A

5/9/2019	EURCHF.fx	1:30:00 PM	1.14026	1.14002			N/A
5/9/2019	EURCHF.fx	3:30:00 PM	1.13897	1.1389			N/A
5/9/2019	EURCZK	9:30:00 AM	25.691	25.731			N/A
5/9/2019	EURCZK	11:30:00 AM	25.691	25.726			N/A
5/9/2019	EURCZK	1:30:00 PM	25.681	25.72			N/A
5/9/2019	EURCZK	3:30:00 PM	25.673	25.711			N/A
5/9/2019	EURDKK	9:30:00 AM	7.4634	7.4647			N/A
5/9/2019	EURDKK	11:30:00 AM	7.4647	7.4656			N/A
5/9/2019	EURDKK	1:30:00 PM	7.4651	7.4662			N/A
5/9/2019	EURDKK	3:30:00 PM	7.4646	7.4659			N/A
5/9/2019	EURGBP	9:30:00 AM	0.85982	0.85983			N/A
5/9/2019	EURGBP	11:30:00 AM	0.86083	0.86067			N/A
5/9/2019	EURGBP	1:30:00 PM	0.86161	0.8616			N/A
5/9/2019	EURGBP	3:30:00 PM	0.86188	0.86186			N/A
5/9/2019	EURGBP.fx	9:30:00 AM	0.85985	0.85978			N/A
5/9/2019	EURGBP.fx	11:30:00 AM	0.86087	0.86062			N/A
5/9/2019	EURGBP.fx	1:30:00 PM	0.86164	0.86155			N/A
5/9/2019	EURGBP.fx	3:30:00 PM	0.86189	0.86183			N/A
5/9/2019	EURHKD	9:30:00 AM	8.7863	8.7911			N/A
5/9/2019	EURHKD	11:30:00 AM	8.7714	8.7746			N/A
5/9/2019	EURHKD	1:30:00 PM	8.779	8.784			N/A
5/9/2019	EURHKD	3:30:00 PM	8.7869	8.7902			N/A
5/9/2019	EURHKD.fx	9:30:00 AM	8.78917	8.78825			N/A
5/9/2019	EURHKD.fx	11:30:00 AM	8.77423	8.7718			N/A
5/9/2019	EURHKD.fx	1:30:00 PM	8.78184	8.78113			N/A
5/9/2019	EURHKD.fx	3:30:00 PM	8.78929	8.78739			N/A
5/9/2019	EURHUF	9:30:00 AM	323.79	324.49			N/A
5/9/2019	EURHUF	11:30:00 AM	324.25	324.86			N/A
5/9/2019	EURHUF	1:30:00 PM	323.37	323.98			N/A
5/9/2019	EURHUF	3:30:00 PM	322.98	323.7			N/A
5/9/2019	EURHUF.fx	9:30:00 AM	324.044	324.232			N/A
5/9/2019	EURHUF.fx	11:30:00 AM	324.539	324.716			N/A
5/9/2019	EURHUF.fx	1:30:00 PM	323.645	323.855			N/A
5/9/2019	EURHUF.fx	3:30:00 PM	323.247	323.44			N/A

5/9/2019	EURJPY	9:30:00 AM	123.028	123.019			N/A
5/9/2019	EURJPY	11:30:00 AM	122.604	122.58			N/A
5/9/2019	EURJPY	1:30:00 PM	122.862	122.852			N/A
5/9/2019	EURJPY	3:30:00 PM	122.957	122.934			N/A
5/9/2019	EURJPY.fx	9:30:00 AM	123.03	123.015			N/A
5/9/2019	EURJPY.fx	11:30:00 AM	122.607	122.576			N/A
5/9/2019	EURJPY.fx	1:30:00 PM	122.864	122.848			N/A
5/9/2019	EURJPY.fx	3:30:00 PM	122.959	122.932			N/A
5/9/2019	EURMXN	9:30:00 AM	21.4347	21.4509			N/A
5/9/2019	EURMXN	11:30:00 AM	21.4134	21.4297			N/A
5/9/2019	EURMXN	1:30:00 PM	21.4409	21.4607			N/A
5/9/2019	EURMXN	3:30:00 PM	21.4542	21.4619			N/A
5/9/2019	EURMXN.fx	9:30:00 AM	21.4432	21.4421			N/A
5/9/2019	EURMXN.fx	11:30:00 AM	21.4225	21.4212			N/A
5/9/2019	EURMXN.fx	1:30:00 PM	21.4498	21.4513			N/A
5/9/2019	EURMXN.fx	3:30:00 PM	21.4633	21.4529			N/A
5/9/2019	EURNOK	9:30:00 AM	9.8156	9.8273			N/A
5/9/2019	EURNOK	11:30:00 AM	9.8147	9.8213			N/A
5/9/2019	EURNOK	1:30:00 PM	9.7834	9.7954			N/A
5/9/2019	EURNOK	3:30:00 PM	9.8056	9.816			N/A
5/9/2019	EURNOK.fx	9:30:00 AM	9.82073	9.82206			N/A
5/9/2019	EURNOK.fx	11:30:00 AM	9.82029	9.81581			N/A
5/9/2019	EURNOK.fx	1:30:00 PM	9.78881	9.78991			N/A
5/9/2019	EURNOK.fx	3:30:00 PM	9.81102	9.8109			N/A
5/9/2019	EURNZD	9:30:00 AM	1.70182	1.70234			N/A
5/9/2019	EURNZD	11:30:00 AM	1.7	1.7005			N/A
5/9/2019	EURNZD	1:30:00 PM	1.70185	1.70255			N/A
5/9/2019	EURNZD	3:30:00 PM	1.70179	1.70231			N/A
5/9/2019	EURNZD.fx	9:30:00 AM	1.70225	1.70189			N/A
5/9/2019	EURNZD.fx	11:30:00 AM	1.70044	1.70005			N/A
5/9/2019	EURNZD.fx	1:30:00 PM	1.70226	1.7021			N/A
5/9/2019	EURNZD.fx	3:30:00 PM	1.70206	1.70191			N/A
5/9/2019	EURPLN	9:30:00 AM	4.2931	4.296			N/A
5/9/2019	EURPLN	11:30:00 AM	4.2965	4.2996			N/A

5/9/2019	EURPLN	1:30:00 PM	4.2918	4.2951			N/A
5/9/2019	EURPLN	3:30:00 PM	4.2928	4.2951			N/A
5/9/2019	EURPLN.fx	9:30:00 AM	4.29227	4.29672			N/A
5/9/2019	EURPLN.fx	11:30:00 AM	4.29591	4.30012			N/A
5/9/2019	EURPLN.fx	1:30:00 PM	4.29117	4.29574			N/A
5/9/2019	EURPLN.fx	3:30:00 PM	4.29211	4.29585			N/A
5/9/2019	EURRUB	9:30:00 AM					N/A
5/9/2019	EURRUB	11:30:00 AM					N/A
5/9/2019	EURRUB	1:30:00 PM					N/A
5/9/2019	EURRUB	3:30:00 PM					N/A
5/9/2019	EURSEK	9:30:00 AM	10.7717	10.7736			N/A
5/9/2019	EURSEK	11:30:00 AM	10.7964	10.7967			N/A
5/9/2019	EURSEK	1:30:00 PM	10.7949	10.7991			N/A
5/9/2019	EURSEK	3:30:00 PM	10.8019	10.8036			N/A
5/9/2019	EURSEK.fx	9:30:00 AM	10.77316	10.77198			N/A
5/9/2019	EURSEK.fx	11:30:00 AM	10.79808	10.79493			N/A
5/9/2019	EURSEK.fx	1:30:00 PM	10.79653	10.79749			N/A
5/9/2019	EURSEK.fx	3:30:00 PM	10.80371	10.80249			N/A
5/9/2019	EURSGD	9:30:00 AM	1.526	1.5269			N/A
5/9/2019	EURSGD	11:30:00 AM	1.5248	1.5255			N/A
5/9/2019	EURSGD	1:30:00 PM	1.5253	1.5261			N/A
5/9/2019	EURSGD	3:30:00 PM	1.527	1.5275			N/A
5/9/2019	EURSGD.fx	9:30:00 AM	1.52638	1.52647			N/A
5/9/2019	EURSGD.fx	11:30:00 AM	1.52523	1.52502			N/A
5/9/2019	EURSGD.fx	1:30:00 PM	1.52568	1.52571			N/A
5/9/2019	EURSGD.fx	3:30:00 PM	1.52716	1.52709			N/A
5/9/2019	EURUSD	9:30:00 AM	1.11957	1.11961			N/A
5/9/2019	EURUSD	11:30:00 AM	1.11769	1.11754			N/A
5/9/2019	EURUSD	1:30:00 PM	1.11865	1.11872			N/A
5/9/2019	EURUSD	3:30:00 PM	1.11967	1.11952	100	100	N/A
5/9/2019	EURUSD.fx	9:30:00 AM	1.11977	1.1197			N/A
5/9/2019	EURUSD.fx	11:30:00 AM	1.11789	1.11763			N/A
5/9/2019	EURUSD.fx	1:30:00 PM	1.11885	1.11881			N/A
5/9/2019	EURUSD.fx	3:30:00 PM	1.11982	1.11962			N/A

5/9/2019	EURZAR	9:30:00 AM	16.0722	16.079			N/A
5/9/2019	EURZAR	11:30:00 AM	16.1059	16.1231			N/A
5/9/2019	EURZAR	1:30:00 PM	16.0956	16.1134			N/A
5/9/2019	EURZAR	3:30:00 PM	16.0395	16.0569			N/A
5/9/2019	EURZAR.fx	9:30:00 AM	16.07117	16.07974			N/A
5/9/2019	EURZAR.fx	11:30:00 AM	16.10504	16.12406			N/A
5/9/2019	EURZAR.fx	1:30:00 PM	16.09545	16.11378			N/A
5/9/2019	EURZAR.fx	3:30:00 PM	16.03859	16.05783			N/A
5/9/2019	GBPAUD	9:30:00 AM	1.86689	1.86739			N/A
5/9/2019	GBPAUD	11:30:00 AM	1.86395	1.8642			N/A
5/9/2019	GBPAUD	1:30:00 PM	1.86195	1.86233			N/A
5/9/2019	GBPAUD	3:30:00 PM	1.86241	1.86303			N/A
5/9/2019	GBPAUD.fx	9:30:00 AM	1.86728	1.86699			N/A
5/9/2019	GBPAUD.fx	11:30:00 AM	1.86433	1.86377			N/A
5/9/2019	GBPAUD.fx	1:30:00 PM	1.86236	1.86191			N/A
5/9/2019	GBPAUD.fx	3:30:00 PM	1.86279	1.8627			N/A
5/9/2019	GBPCAD	9:30:00 AM	1.75656	1.75729			N/A
5/9/2019	GBPCAD	11:30:00 AM	1.7521	1.75249			N/A
5/9/2019	GBPCAD	1:30:00 PM	1.74936	1.74999			N/A
5/9/2019	GBPCAD	3:30:00 PM	1.75228	1.75219			N/A
5/9/2019	GBPCAD.fx	9:30:00 AM	1.75692	1.75691			N/A
5/9/2019	GBPCAD.fx	11:30:00 AM	1.75248	1.7521			N/A
5/9/2019	GBPCAD.fx	1:30:00 PM	1.74976	1.74958			N/A
5/9/2019	GBPCAD.fx	3:30:00 PM	1.75265	1.75203			N/A
5/9/2019	GBPCHF	9:30:00 AM	1.32752	1.32777			N/A
5/9/2019	GBPCHF	11:30:00 AM	1.32242	1.3226			N/A
5/9/2019	GBPCHF	1:30:00 PM	1.32321	1.32328			N/A
5/9/2019	GBPCHF	3:30:00 PM	1.32138	1.32155			N/A
5/9/2019	GBPCHF.fx	9:30:00 AM	1.32771	1.32756			N/A
5/9/2019	GBPCHF.fx	11:30:00 AM	1.32261	1.32239			N/A
5/9/2019	GBPCHF.fx	1:30:00 PM	1.32341	1.32307			N/A
5/9/2019	GBPCHF.fx	3:30:00 PM	1.32156	1.32139			N/A
5/9/2019	GBPCZK	9:30:00 AM	29.892	29.911			N/A
5/9/2019	GBPCZK	11:30:00 AM	29.862	29.874			N/A

5/9/2019	GBPCZK	1:30:00 PM	29.818	29.837			N/A
5/9/2019	GBPCZK	3:30:00 PM	29.801	29.819			N/A
5/9/2019	GBPDKK	9:30:00 AM	8.678	8.688			N/A
5/9/2019	GBPDKK	11:30:00 AM	8.67	8.678			N/A
5/9/2019	GBPDKK	1:30:00 PM	8.66	8.671			N/A
5/9/2019	GBPDKK	3:30:00 PM	8.658	8.669			N/A
5/9/2019	GBPDKK.fx	9:30:00 AM	8.6765	8.6888			N/A
5/9/2019	GBPDKK.fx	11:30:00 AM	8.6687	8.6787			N/A
5/9/2019	GBPDKK.fx	1:30:00 PM	8.6589	8.6711			N/A
5/9/2019	GBPDKK.fx	3:30:00 PM	8.6567	8.6694			N/A
5/9/2019	GBPHKD	9:30:00 AM	10.2153	10.2211			N/A
5/9/2019	GBPHKD	11:30:00 AM	10.1881	10.1917			N/A
5/9/2019	GBPHKD	1:30:00 PM	10.1864	10.1908			N/A
5/9/2019	GBPHKD	3:30:00 PM	10.1911	10.1959			N/A
5/9/2019	GBPHUF	9:30:00 AM	376.59	377.03			N/A
5/9/2019	GBPHUF	11:30:00 AM	376.81	377.18			N/A
5/9/2019	GBPHUF	1:30:00 PM	375.38	375.8			N/A
5/9/2019	GBPHUF	3:30:00 PM	374.61	375.02			N/A
5/9/2019	GBPJPY	9:30:00 AM	143.057	143.098			N/A
5/9/2019	GBPJPY	11:30:00 AM	142.426	142.447			N/A
5/9/2019	GBPJPY	1:30:00 PM	142.583	142.592			N/A
5/9/2019	GBPJPY	3:30:00 PM	142.657	142.663			N/A
5/9/2019	GBPJPY.fx	9:30:00 AM	143.076	143.078			N/A
5/9/2019	GBPJPY.fx	11:30:00 AM	142.445	142.428			N/A
5/9/2019	GBPJPY.fx	1:30:00 PM	142.603	142.571			N/A
5/9/2019	GBPJPY.fx	3:30:00 PM	142.676	142.645			N/A
5/9/2019	GBPMXN	9:30:00 AM	24.9272	24.9368			N/A
5/9/2019	GBPMXN	11:30:00 AM	24.8764	24.8892			N/A
5/9/2019	GBPMXN	1:30:00 PM	24.8819	24.8959			N/A
5/9/2019	GBPMXN	3:30:00 PM	24.8852	24.8907			N/A
5/9/2019	GBPNOK	9:30:00 AM	11.4175	11.4275			N/A
5/9/2019	GBPNOK	11:30:00 AM	11.4052	11.4071			N/A
5/9/2019	GBPNOK	1:30:00 PM	11.3572	11.3671			N/A
5/9/2019	GBPNOK	3:30:00 PM	11.3795	11.3885			N/A

5/9/2019	GBPNOK.fx	9:30:00 AM	11.42205	11.42242			N/A
5/9/2019	GBPNOK.fx	11:30:00 AM	11.40993	11.40218			N/A
5/9/2019	GBPNOK.fx	1:30:00 PM	11.36205	11.36201			N/A
5/9/2019	GBPNOK.fx	3:30:00 PM	11.38434	11.38439			N/A
5/9/2019	GBPNZD	9:30:00 AM	1.97946	1.97978			N/A
5/9/2019	GBPNZD	11:30:00 AM	1.97535	1.9755			N/A
5/9/2019	GBPNZD	1:30:00 PM	1.97546	1.97583			N/A
5/9/2019	GBPNZD	3:30:00 PM	1.97473	1.97518			N/A
5/9/2019	GBPNZD.fx	9:30:00 AM	1.97979	1.97941			N/A
5/9/2019	GBPNZD.fx	11:30:00 AM	1.97572	1.97508			N/A
5/9/2019	GBPNZD.fx	1:30:00 PM	1.97581	1.97545			N/A
5/9/2019	GBPNZD.fx	3:30:00 PM	1.97502	1.97484			N/A
5/9/2019	GBPPLN	9:30:00 AM	4.994	4.9955			N/A
5/9/2019	GBPPLN	11:30:00 AM	4.9935	4.9938			N/A
5/9/2019	GBPPLN	1:30:00 PM	4.9824	4.9838			N/A
5/9/2019	GBPPLN	3:30:00 PM	4.9822	4.9823			N/A
5/9/2019	GBPPLN.fx	9:30:00 AM	4.99166	4.99763			N/A
5/9/2019	GBPPLN.fx	11:30:00 AM	4.99141	4.99585			N/A
5/9/2019	GBPPLN.fx	1:30:00 PM	4.98026	4.98583			N/A
5/9/2019	GBPPLN.fx	3:30:00 PM	4.97992	4.98505			N/A
5/9/2019	GBPSEK	9:30:00 AM	12.5262	12.5309			N/A
5/9/2019	GBPSEK	11:30:00 AM	12.5418	12.5432			N/A
5/9/2019	GBPSEK	1:30:00 PM	12.5273	12.5348			N/A
5/9/2019	GBPSEK	3:30:00 PM	12.5321	12.5363			N/A
5/9/2019	GBPSEK.fx	9:30:00 AM	12.52263	12.5345			N/A
5/9/2019	GBPSEK.fx	11:30:00 AM	12.53793	12.54682			N/A
5/9/2019	GBPSEK.fx	1:30:00 PM	12.52358	12.53853			N/A
5/9/2019	GBPSEK.fx	3:30:00 PM	12.52839	12.54043			N/A
5/9/2019	GBPSGD	9:30:00 AM	1.775	1.7756			N/A
5/9/2019	GBPSGD	11:30:00 AM	1.7718	1.7721			N/A
5/9/2019	GBPSGD	1:30:00 PM	1.7705	1.7711			N/A
5/9/2019	GBPSGD	3:30:00 PM	1.7718	1.7722			N/A
5/9/2019	GBPSGD.fx	9:30:00 AM	1.77319	1.77734			N/A
5/9/2019	GBPSGD.fx	11:30:00 AM	1.77	1.77388			N/A

5/9/2019	GBPSGD.fx	1:30:00 PM	1.76863	1.77285			N/A
5/9/2019	GBPSGD.fx	3:30:00 PM	1.76966	1.77409			N/A
5/9/2019	GBPUSD	9:30:00 AM	1.30227	1.30233			N/A
5/9/2019	GBPUSD	11:30:00 AM	1.29885	1.29854			N/A
5/9/2019	GBPUSD	1:30:00 PM	1.29856	1.29851			N/A
5/9/2019	GBPUSD	3:30:00 PM	1.29939	1.29923			N/A
5/9/2019	GBPUSD.fx	9:30:00 AM	1.30233	1.30228			N/A
5/9/2019	GBPUSD.fx	11:30:00 AM	1.2989	1.29848			N/A
5/9/2019	GBPUSD.fx	1:30:00 PM	1.29861	1.29845			N/A
5/9/2019	GBPUSD.fx	3:30:00 PM	1.2993	1.29919			N/A
5/9/2019	GBPZAR	9:30:00 AM	18.6893	18.7028			N/A
5/9/2019	GBPZAR	11:30:00 AM	18.7104	18.7285			N/A
5/9/2019	GBPZAR	1:30:00 PM	18.6772	18.7033			N/A
5/9/2019	GBPZAR	3:30:00 PM	18.6085	18.6352			N/A
5/9/2019	GBPZAR.fx	9:30:00 AM	18.6957	18.6963			N/A
5/9/2019	GBPZAR.fx	11:30:00 AM	18.7174	18.72			N/A
5/9/2019	GBPZAR.fx	1:30:00 PM	18.6845	18.696			N/A
5/9/2019	GBPZAR.fx	3:30:00 PM	18.6146	18.6281			N/A
5/9/2019	GOLD	9:30:00 AM	1283.27	1283.56	0.05	0.05	N/A
5/9/2019	GOLD	11:30:00 AM	1284.97	1285.18			N/A
5/9/2019	GOLD	1:30:00 PM	1284.72	1285			N/A
5/9/2019	GOLD	3:30:00 PM	1282.46	1282.36			N/A
5/9/2019	HKDJPY	9:30:00 AM	14	14.01			N/A
5/9/2019	HKDJPY	11:30:00 AM	13.98	13.98			N/A
5/9/2019	HKDJPY	1:30:00 PM	13.99	14			N/A
5/9/2019	HKDJPY	3:30:00 PM	13.99	14			N/A
5/9/2019	HKDJPY.fx	9:30:00 AM	13.994	14			N/A
5/9/2019	HKDJPY.fx	11:30:00 AM	13.97	13.975			N/A
5/9/2019	HKDJPY.fx	1:30:00 PM	13.987	13.992			N/A
5/9/2019	HKDJPY.fx	3:30:00 PM	13.987	13.991			N/A
5/9/2019	HUFJPY	9:30:00 AM	0.3798	0.3801			N/A
5/9/2019	HUFJPY	11:30:00 AM	0.3778	0.3781			N/A
5/9/2019	HUFJPY	1:30:00 PM	0.3797	0.38			N/A
5/9/2019	HUFJPY	3:30:00 PM	0.3805	0.3808			N/A



5/9/2019	JP225.i	9:30:00 AM	21393.25	21408.25			N/A
5/9/2019	JP225.i	11:30:00 AM	21294.08	21304.08			N/A
5/9/2019	JP225.i	1:30:00 PM	21304.08	21314.08			N/A
5/9/2019	JP225.i	3:30:00 PM	21259.08	21264.91			N/A
5/9/2019	MXNJPY	9:30:00 AM	5.74	5.75			N/A
5/9/2019	MXNJPY	11:30:00 AM					N/A
5/9/2019	MXNJPY	1:30:00 PM	5.73	5.74			N/A
5/9/2019	MXNJPY	3:30:00 PM	5.73	5.74			N/A
5/9/2019	NASDAQ.i	9:30:00 AM					N/A
5/9/2019	NASDAQ.i	11:30:00 AM					N/A
5/9/2019	NASDAQ.i	1:30:00 PM					N/A
5/9/2019	NASDAQ.i	3:30:00 PM					N/A
5/9/2019	NOKJPY	9:30:00 AM	12.52	12.54			N/A
5/9/2019	NOKJPY	11:30:00 AM	12.48	12.5			N/A
5/9/2019	NOKJPY	1:30:00 PM	12.54	12.57			N/A
5/9/2019	NOKJPY	3:30:00 PM	12.52	12.55			N/A
5/9/2019	NOKJPY.fx	9:30:00 AM	12.523	12.529			N/A
5/9/2019	NOKJPY.fx	11:30:00 AM	12.488	12.488			N/A
5/9/2019	NOKJPY.fx	1:30:00 PM	12.546	12.554			N/A
5/9/2019	NOKJPY.fx	3:30:00 PM	12.53	12.534			N/A
5/9/2019	NZDCAD	9:30:00 AM	0.88722	0.8878			N/A
5/9/2019	NZDCAD	11:30:00 AM	0.8867	0.88741			N/A
5/9/2019	NZDCAD	1:30:00 PM	0.88532	0.88596			N/A
5/9/2019	NZDCAD	3:30:00 PM	0.88719	0.88729			N/A
5/9/2019	NZDCAD.fx	9:30:00 AM	0.88756	0.88746			N/A
5/9/2019	NZDCAD.fx	11:30:00 AM	0.88703	0.88705			N/A
5/9/2019	NZDCAD.fx	1:30:00 PM	0.88565	0.88562			N/A
5/9/2019	NZDCAD.fx	3:30:00 PM	0.88751	0.88713			N/A
5/9/2019	NZDCHF	9:30:00 AM	0.67041	0.67097			N/A
5/9/2019	NZDCHF	11:30:00 AM	0.66913	0.66983			N/A
5/9/2019	NZDCHF	1:30:00 PM	0.66955	0.67009			N/A
5/9/2019	NZDCHF	3:30:00 PM	0.66888	0.66944			N/A
5/9/2019	NZDCHF.fx	9:30:00 AM	0.67075	0.67061			N/A
5/9/2019	NZDCHF.fx	11:30:00 AM	0.66948	0.66947			N/A

5/9/2019	NZDCHF.fx	1:30:00 PM	0.66991	0.66974			N/A
5/9/2019	NZDCHF.fx	3:30:00 PM	0.66921	0.66915			N/A
5/9/2019	NZDCZK	9:30:00 AM	15.101	15.11			N/A
5/9/2019	NZDCZK	11:30:00 AM	15.116	15.126			N/A
5/9/2019	NZDCZK	1:30:00 PM	15.092	15.103			N/A
5/9/2019	NZDCZK	3:30:00 PM	15.089	15.098			N/A
5/9/2019	NZDDKK	9:30:00 AM	4.384	4.388			N/A
5/9/2019	NZDDKK	11:30:00 AM	4.389	4.392			N/A
5/9/2019	NZDDKK	1:30:00 PM	4.384	4.387			N/A
5/9/2019	NZDDKK	3:30:00 PM	4.382	4.386			N/A
5/9/2019	NZDHKD	9:30:00 AM	5.1598	5.1628			N/A
5/9/2019	NZDHKD	11:30:00 AM	5.1562	5.1591			N/A
5/9/2019	NZDHKD	1:30:00 PM	5.1556	5.1581			N/A
5/9/2019	NZDHKD	3:30:00 PM	5.1596	5.1622			N/A
5/9/2019	NZDHUF	9:30:00 AM	190.19	190.47			N/A
5/9/2019	NZDHUF	11:30:00 AM	190.71	190.98			N/A
5/9/2019	NZDHUF	1:30:00 PM	189.96	190.24			N/A
5/9/2019	NZDHUF	3:30:00 PM	189.65	189.9			N/A
5/9/2019	NZDJPY	9:30:00 AM	72.246	72.302			N/A
5/9/2019	NZDJPY	11:30:00 AM	72.073	72.134			N/A
5/9/2019	NZDJPY	1:30:00 PM	72.144	72.207			N/A
5/9/2019	NZDJPY	3:30:00 PM	72.207	72.267			N/A
5/9/2019	NZDJPY.fx	9:30:00 AM	72.278	72.27			N/A
5/9/2019	NZDJPY.fx	11:30:00 AM	72.106	72.101			N/A
5/9/2019	NZDJPY.fx	1:30:00 PM	72.178	72.175			N/A
5/9/2019	NZDJPY.fx	3:30:00 PM	72.238	72.237			N/A
5/9/2019	NZDMXN	9:30:00 AM	12.5922	12.5935			N/A
5/9/2019	NZDMXN	11:30:00 AM	12.5925	12.5965			N/A
5/9/2019	NZDMXN	1:30:00 PM	12.5944	12.5998			N/A
5/9/2019	NZDMXN	3:30:00 PM	12.6	12.6007			N/A
5/9/2019	NZDNOK	9:30:00 AM	5.7662	5.7687			N/A
5/9/2019	NZDNOK	11:30:00 AM	5.7709	5.7728			N/A
5/9/2019	NZDNOK	1:30:00 PM	5.7472	5.7505			N/A
5/9/2019	NZDNOK	3:30:00 PM	5.7581	5.7613			N/A

5/9/2019	NZDPLN	9:30:00 AM	2.5215	2.5229			N/A
5/9/2019	NZDPLN	11:30:00 AM	2.5263	2.5274			N/A
5/9/2019	NZDPLN	1:30:00 PM	2.521	2.5221			N/A
5/9/2019	NZDPLN	3:30:00 PM	2.5205	2.5209			N/A
5/9/2019	NZDSEK	9:30:00 AM	6.3243	6.328			N/A
5/9/2019	NZDSEK	11:30:00 AM	6.3449	6.3499			N/A
5/9/2019	NZDSEK	1:30:00 PM	6.3371	6.3431			N/A
5/9/2019	NZDSEK	3:30:00 PM	6.3409	6.345			N/A
5/9/2019	NZDSGD	9:30:00 AM	0.8965	0.8971			N/A
5/9/2019	NZDSGD	11:30:00 AM	0.8967	0.8974			N/A
5/9/2019	NZDSGD	1:30:00 PM	0.8961	0.8966			N/A
5/9/2019	NZDSGD	3:30:00 PM	0.897	0.8975			N/A
5/9/2019	NZDSGD.fx	9:30:00 AM	0.89658	0.89701			N/A
5/9/2019	NZDSGD.fx	11:30:00 AM	0.89668	0.89731			N/A
5/9/2019	NZDSGD.fx	1:30:00 PM	0.89606	0.89657			N/A
5/9/2019	NZDSGD.fx	3:30:00 PM	0.89693	0.89747			N/A
5/9/2019	NZDUSD	9:30:00 AM	0.6578	0.65779			N/A
5/9/2019	NZDUSD	11:30:00 AM	0.65728	0.65744			N/A
5/9/2019	NZDUSD	1:30:00 PM	0.65718	0.65729			N/A
5/9/2019	NZDUSD	3:30:00 PM	0.65778	0.65781			N/A
5/9/2019	NZDUSD.fx	9:30:00 AM	0.65788	0.6578			N/A
5/9/2019	NZDUSD.fx	11:30:00 AM	0.65736	0.65745			N/A
5/9/2019	NZDUSD.fx	1:30:00 PM	0.65725	0.6573			N/A
5/9/2019	NZDUSD.fx	3:30:00 PM	0.65785	0.65782			N/A
5/9/2019	NZDZAR	9:30:00 AM	9.4351	9.447			N/A
5/9/2019	NZDZAR	11:30:00 AM	9.465	9.4821			N/A
5/9/2019	NZDZAR	1:30:00 PM	9.4492	9.465			N/A
5/9/2019	NZDZAR	3:30:00 PM	9.4119	9.4284			N/A
5/9/2019	SEKJPY	9:30:00 AM	11.42	11.43			N/A
5/9/2019	SEKJPY	11:30:00 AM	11.36	11.36			N/A
5/9/2019	SEKJPY	1:30:00 PM	11.38	11.39			N/A
5/9/2019	SEKJPY	3:30:00 PM	11.38	11.39			N/A
5/9/2019	SEKJPY.fx	9:30:00 AM	11.412	11.427			N/A
5/9/2019	SEKJPY.fx	11:30:00 AM	11.35	11.362			N/A

5/9/2019	SEKJPY.fx	1:30:00 PM	11.369	11.387			N/A
5/9/2019	SEKJPY.fx	3:30:00 PM	11.374	11.388			N/A
5/9/2019	SGDJPY	9:30:00 AM	80.57	80.59			N/A
5/9/2019	SGDJPY	11:30:00 AM	80.35	80.37			N/A
5/9/2019	SGDJPY	1:30:00 PM	80.49	80.53			N/A
5/9/2019	SGDJPY	3:30:00 PM	80.49	80.51			N/A
5/9/2019	SILVER	9:30:00 AM	14.66	15.04			N/A
5/9/2019	SILVER	11:30:00 AM	14.65	15.02			N/A
5/9/2019	SILVER	1:30:00 PM	14.63	15			N/A
5/9/2019	SILVER	3:30:00 PM	14.58	14.94			N/A
5/9/2019	SPX500.i	9:30:00 AM	2871.37	2871.42			N/A
5/9/2019	SPX500.i	11:30:00 AM	2862.44	2862.92			N/A
5/9/2019	SPX500.i	1:30:00 PM	2865.37	2865.46			N/A
5/9/2019	SPX500.i	3:30:00 PM	2865.12	2864.67			N/A
5/9/2019	UK100.i	9:30:00 AM	7244.48	7245.48			N/A
5/9/2019	UK100.i	11:30:00 AM	7239.06	7236.39			N/A
5/9/2019	UK100.i	1:30:00 PM	7248.31	7248.89			N/A
5/9/2019	UK100.i	3:30:00 PM	7245.73	7246.06			N/A
5/9/2019	USDCAD	9:30:00 AM	1.34916	1.34916			N/A
5/9/2019	USDCAD	11:30:00 AM	1.34935	1.34941			N/A
5/9/2019	USDCAD	1:30:00 PM	1.34752	1.34755			N/A
5/9/2019	USDCAD	3:30:00 PM	1.34908	1.34841			N/A
5/9/2019	USDCAD.fx	9:30:00 AM	1.3492	1.34913			N/A
5/9/2019	USDCAD.fx	11:30:00 AM	1.34939	1.34937			N/A
5/9/2019	USDCAD.fx	1:30:00 PM	1.34756	1.3475			N/A
5/9/2019	USDCAD.fx	3:30:00 PM	1.34911	1.34847			N/A
5/9/2019	USDCHF	9:30:00 AM	1.01948	1.01948			N/A
5/9/2019	USDCHF	11:30:00 AM	1.0183	1.01836			N/A
5/9/2019	USDCHF	1:30:00 PM	1.0191	1.019			N/A
5/9/2019	USDCHF	3:30:00 PM	1.0172	1.01713			N/A
5/9/2019	USDCHF.fx	9:30:00 AM	1.01952	1.01942			N/A
5/9/2019	USDCHF.fx	11:30:00 AM	1.01834	1.0183			N/A
5/9/2019	USDCHF.fx	1:30:00 PM	1.01915	1.01894			N/A
5/9/2019	USDCHF.fx	3:30:00 PM	1.01725	1.01709			N/A

5/9/2019	USDCZK	9:30:00 AM	22.969	22.991			N/A
5/9/2019	USDCZK	11:30:00 AM	23.012	23.03			N/A
5/9/2019	USDCZK	1:30:00 PM	22.977	22.999			N/A
5/9/2019	USDCZK	3:30:00 PM	22.958	22.977			N/A
5/9/2019	USDCZK.fx	9:30:00 AM	22.9761	22.9832			N/A
5/9/2019	USDCZK.fx	11:30:00 AM	23.0208	23.0197			N/A
5/9/2019	USDCZK.fx	1:30:00 PM	22.9854	22.9902			N/A
5/9/2019	USDCZK.fx	3:30:00 PM	22.9659	22.9683			N/A
5/9/2019	USDDKK	9:30:00 AM	6.6662	6.6697			N/A
5/9/2019	USDDKK	11:30:00 AM	6.6785	6.6811			N/A
5/9/2019	USDDKK	1:30:00 PM	6.6715	6.6753			N/A
5/9/2019	USDDKK	3:30:00 PM	6.6671	6.6701			N/A
5/9/2019	USDDKK.fx	9:30:00 AM	6.66667	6.66779			N/A
5/9/2019	USDDKK.fx	11:30:00 AM	6.67918	6.6791			N/A
5/9/2019	USDDKK.fx	1:30:00 PM	6.67208	6.67337			N/A
5/9/2019	USDDKK.fx	3:30:00 PM	6.66756	6.66817			N/A
5/9/2019	USDHKD	9:30:00 AM	7.848	7.8485			N/A
5/9/2019	USDHKD	11:30:00 AM	7.8479	7.8482			N/A
5/9/2019	USDHKD	1:30:00 PM	7.8479	7.8483			N/A
5/9/2019	USDHKD	3:30:00 PM	7.848	7.8482			N/A
5/9/2019	USDHKD.fx	9:30:00 AM	7.84797	7.8485			N/A
5/9/2019	USDHKD.fx	11:30:00 AM	7.84783	7.84838			N/A
5/9/2019	USDHKD.fx	1:30:00 PM	7.84789	7.84835			N/A
5/9/2019	USDHKD.fx	3:30:00 PM	7.84804	7.84842			N/A
5/9/2019	USDHUF	9:30:00 AM	289.27	289.71			N/A
5/9/2019	USDHUF	11:30:00 AM	290.23	290.63			N/A
5/9/2019	USDHUF	1:30:00 PM	289.13	289.61			N/A
5/9/2019	USDHUF	3:30:00 PM	288.57	288.99			N/A
5/9/2019	USDHUF.fx	9:30:00 AM	289.465	289.51			N/A
5/9/2019	USDHUF.fx	11:30:00 AM	290.443	290.429			N/A
5/9/2019	USDHUF.fx	1:30:00 PM	289.334	289.405			N/A
5/9/2019	USDHUF.fx	3:30:00 PM	288.761	288.804			N/A
5/9/2019	USDINR	9:30:00 AM	64.87	74.85			N/A
5/9/2019	USDINR	11:30:00 AM	64.99	74.97			N/A

5/9/2019	USDINR	1:30:00 PM					N/A
5/9/2019	USDINR	3:30:00 PM					N/A
5/9/2019	USDJPY	9:30:00 AM	109.864	109.869			N/A
5/9/2019	USDJPY	11:30:00 AM	109.679	109.671			N/A
5/9/2019	USDJPY	1:30:00 PM	109.809	109.806			N/A
5/9/2019	USDJPY	3:30:00 PM	109.816	109.798			N/A
5/9/2019	USDJPY.fx	9:30:00 AM	109.87	109.862			N/A
5/9/2019	USDJPY.fx	11:30:00 AM	109.685	109.664			N/A
5/9/2019	USDJPY.fx	1:30:00 PM	109.815	109.799			N/A
5/9/2019	USDJPY.fx	3:30:00 PM	109.82	109.794			N/A
5/9/2019	USDMXN	9:30:00 AM	19.148	19.153			N/A
5/9/2019	USDMXN	11:30:00 AM	19.161	19.167			N/A
5/9/2019	USDMXN	1:30:00 PM	19.168	19.177			N/A
5/9/2019	USDMXN	3:30:00 PM	19.164	19.164			N/A
5/9/2019	USDMXN.f	9:30:00 AM	19.1512	19.1483			N/A
5/9/2019	USDMXN.f	11:30:00 AM	19.1649	19.1621			N/A
5/9/2019	USDMXN.f	1:30:00 PM	19.1723	19.1727			N/A
5/9/2019	USDMXN.f	3:30:00 PM	19.1672	19.1596			N/A
5/9/2019	USDNOK	9:30:00 AM	8.7677	8.775			N/A
5/9/2019	USDNOK	11:30:00 AM	8.7809	8.7853			N/A
5/9/2019	USDNOK	1:30:00 PM	8.7457	8.7544			N/A
5/9/2019	USDNOK	3:30:00 PM	8.7591	8.7655			N/A
5/9/2019	USDNOK.fx	9:30:00 AM	8.77134	8.77085			N/A
5/9/2019	USDNOK.fx	11:30:00 AM	8.78478	8.7807			N/A
5/9/2019	USDNOK.fx	1:30:00 PM	8.74965	8.75016			N/A
5/9/2019	USDNOK.fx	3:30:00 PM	8.76313	8.76123			N/A
5/9/2019	USDPLN	9:30:00 AM	3.8346	3.836			N/A
5/9/2019	USDPLN	11:30:00 AM	3.8451	3.8452			N/A
5/9/2019	USDPLN	1:30:00 PM	3.8367	3.8382			N/A
5/9/2019	USDPLN	3:30:00 PM	3.8349	3.8349			N/A
5/9/2019	USDPLN.fx	9:30:00 AM	3.83366	3.83681			N/A
5/9/2019	USDPLN.fx	11:30:00 AM	3.84418	3.84601			N/A
5/9/2019	USDPLN.fx	1:30:00 PM	3.83586	3.83903			N/A
5/9/2019	USDPLN.fx	3:30:00 PM	3.83402	3.83612			N/A

5/9/2019	USDRUB	9:30:00 AM					N/A
5/9/2019	USDRUB	11:30:00 AM					N/A
5/9/2019	USDRUB	1:30:00 PM					N/A
5/9/2019	USDRUB	3:30:00 PM					N/A
5/9/2019	USDSEK	9:30:00 AM	9.6194	9.6213			N/A
5/9/2019	USDSEK	11:30:00 AM	9.6569	9.6586			N/A
5/9/2019	USDSEK	1:30:00 PM	9.6474	9.6521			N/A
5/9/2019	USDSEK	3:30:00 PM	9.6471	9.6476			N/A
5/9/2019	USDSEK.fx	9:30:00 AM	9.62184	9.61893			N/A
5/9/2019	USDSEK.fx	11:30:00 AM	9.65963	9.65644			N/A
5/9/2019	USDSEK.fx	1:30:00 PM	9.64989	9.65028			N/A
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5/9/2019	USDSGD	9:30:00 AM	1.3631	1.3631			N/A
5/9/2019	USDSGD	11:30:00 AM	1.3642	1.3646			N/A
5/9/2019	USDSGD	1:30:00 PM	1.3634	1.3637			N/A
5/9/2019	USDSGD	3:30:00 PM	1.3637	1.3639			N/A
5/9/2019	USDSGD.fx	9:30:00 AM	1.36306	1.36335			N/A
5/9/2019	USDSGD.fx	11:30:00 AM	1.36421	1.36463			N/A
5/9/2019	USDSGD.fx	1:30:00 PM	1.3634	1.36387			N/A
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5/9/2019	USDZAR	9:30:00 AM	14.3532	14.3603			N/A
5/9/2019	USDZAR	11:30:00 AM	14.4079	14.4221			N/A
5/9/2019	USDZAR	1:30:00 PM	14.3856	14.4019			N/A
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5/9/2019	USDZAR.fx	11:30:00 AM	14.41447	14.42048			N/A
5/9/2019	USDZAR.fx	1:30:00 PM	14.39162	14.39582			N/A
5/9/2019	USDZAR.fx	3:30:00 PM	14.32886	14.33568			N/A
5/9/2019	XAUUSD	9:30:00 AM	1283.27	1283.56			N/A
5/9/2019	XAUUSD	11:30:00 AM	1284.98	1285.16			N/A
5/9/2019	XAUUSD	1:30:00 PM	1284.72	1284.99			N/A
5/9/2019	XAUUSD	3:30:00 PM	1282.46	1282.36			N/A
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5/9/2019	ZARJPY	11:30:00 AM	7.59	7.61			N/A

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5/10/2019	#ZNGA	3:30:00 PM					N/A
5/10/2019	AUDCAD	9:30:00 AM	0.94181	0.94244			N/A
5/10/2019	AUDCAD	11:30:00 AM	0.94166	0.94222			N/A
5/10/2019	AUDCAD	1:30:00 PM	0.94092	0.94159			N/A
5/10/2019	AUDCAD	3:30:00 PM	0.94171	0.93926			N/A
5/10/2019	AUDCAD.fx	9:30:00 AM	0.94215	0.94208			N/A
5/10/2019	AUDCAD.fx	11:30:00 AM	0.94197	0.94188			N/A
5/10/2019	AUDCAD.fx	1:30:00 PM	0.94126	0.94124			N/A
5/10/2019	AUDCAD.fx	3:30:00 PM	0.94175	0.93899			N/A
5/10/2019	AUDCHF	9:30:00 AM	0.7094	0.71011			N/A
5/10/2019	AUDCHF	11:30:00 AM	0.70995	0.71067			N/A
5/10/2019	AUDCHF	1:30:00 PM	0.70942	0.71014			N/A
5/10/2019	AUDCHF	3:30:00 PM	0.70874	0.70848			N/A
5/10/2019	AUDCHF.fx	9:30:00 AM	0.70975	0.70976			N/A
5/10/2019	AUDCHF.fx	11:30:00 AM	0.71028	0.71033			N/A
5/10/2019	AUDCHF.fx	1:30:00 PM	0.70978	0.70979			N/A
5/10/2019	AUDCHF.fx	3:30:00 PM	0.70906	0.70814			N/A
5/10/2019	AUDCZK	9:30:00 AM	16.014	16.031			N/A
5/10/2019	AUDCZK	11:30:00 AM	16.02	16.032			N/A
5/10/2019	AUDCZK	1:30:00 PM	16.005	16.021			N/A
5/10/2019	AUDCZK	3:30:00 PM	16.024	16.021			N/A
5/10/2019	AUDDKK	9:30:00 AM	4.6496	4.6544			N/A
5/10/2019	AUDDKK	11:30:00 AM	4.6543	4.6582			N/A
5/10/2019	AUDDKK	1:30:00 PM	4.6503	4.6551			N/A
5/10/2019	AUDDKK	3:30:00 PM	4.6538	4.6535			N/A
5/10/2019	AUDHKD	9:30:00 AM	5.4868	5.4906			N/A
5/10/2019	AUDHKD	11:30:00 AM	5.4894	5.493			N/A

5/10/2019	AUDHKD	1:30:00 PM	5.4884	5.4918			N/A
5/10/2019	AUDHKD	3:30:00 PM	5.4939	5.4904			N/A
5/10/2019	AUDHUF	9:30:00 AM	201.81	202.03			N/A
5/10/2019	AUDHUF	11:30:00 AM	201.52	201.72			N/A
5/10/2019	AUDHUF	1:30:00 PM	201.32	201.55			N/A
5/10/2019	AUDHUF	3:30:00 PM	201.49	201.53			N/A
5/10/2019	AUDJPY	9:30:00 AM	76.753	76.817			N/A
5/10/2019	AUDJPY	11:30:00 AM	76.879	76.906			N/A
5/10/2019	AUDJPY	1:30:00 PM	76.823	76.888	50	50	N/A
5/10/2019	AUDJPY	3:30:00 PM	76.811	76.768			N/A
5/10/2019	AUDJPY.fx	9:30:00 AM	76.787	76.781			N/A
5/10/2019	AUDJPY.fx	11:30:00 AM	76.911	76.872			N/A
5/10/2019	AUDJPY.fx	1:30:00 PM	76.857	76.852			N/A
5/10/2019	AUDJPY.fx	3:30:00 PM	76.847	76.733			N/A
5/10/2019	AUDMXN	9:30:00 AM	13.4576	13.4625			N/A
5/10/2019	AUDMXN	11:30:00 AM	13.4322	13.4357			N/A
5/10/2019	AUDMXN	1:30:00 PM	13.3995	13.4042			N/A
5/10/2019	AUDMXN	3:30:00 PM	13.4211	13.4118			N/A
5/10/2019	AUDNOK	9:30:00 AM	6.1356	6.1407			N/A
5/10/2019	AUDNOK	11:30:00 AM	6.122	6.126			N/A
5/10/2019	AUDNOK	1:30:00 PM	6.1121	6.1175			N/A
5/10/2019	AUDNOK	3:30:00 PM	6.1194	6.1168			N/A
5/10/2019	AUDNOK.fx	9:30:00 AM	6.1371	6.1391			N/A
5/10/2019	AUDNOK.fx	11:30:00 AM	6.1235	6.1244			N/A
5/10/2019	AUDNOK.fx	1:30:00 PM	6.1137	6.1158			N/A
5/10/2019	AUDNOK.fx	3:30:00 PM	6.1205	6.115			N/A
5/10/2019	AUDNZD	9:30:00 AM	1.06096	1.06182			N/A
5/10/2019	AUDNZD	11:30:00 AM	1.06062	1.06145			N/A
5/10/2019	AUDNZD	1:30:00 PM	1.06038	1.0613			N/A
5/10/2019	AUDNZD	3:30:00 PM	1.0599	1.06052			N/A
5/10/2019	AUDNZD.fx	9:30:00 AM	1.0614	1.06136			N/A
5/10/2019	AUDNZD.fx	11:30:00 AM	1.06103	1.061			N/A
5/10/2019	AUDNZD.fx	1:30:00 PM	1.06081	1.06085			N/A
5/10/2019	AUDNZD.fx	3:30:00 PM	1.06023	1.06008			N/A

5/10/2019	AUDPLN	9:30:00 AM	2.6774	2.6804			N/A
5/10/2019	AUDPLN	11:30:00 AM	2.6784	2.6811			N/A
5/10/2019	AUDPLN	1:30:00 PM	2.6772	2.6804			N/A
5/10/2019	AUDPLN	3:30:00 PM	2.6774	2.678			N/A
5/10/2019	AUDSEK	9:30:00 AM	6.7496	6.7515			N/A
5/10/2019	AUDSEK	11:30:00 AM	6.7383	6.7404			N/A
5/10/2019	AUDSEK	1:30:00 PM	6.7289	6.7316			N/A
5/10/2019	AUDSEK	3:30:00 PM	6.7377	6.7347			N/A
5/10/2019	AUDSEK.fx	9:30:00 AM	6.7449	6.7561			N/A
5/10/2019	AUDSEK.fx	11:30:00 AM	6.7338	6.7448			N/A
5/10/2019	AUDSEK.fx	1:30:00 PM	6.7243	6.7361			N/A
5/10/2019	AUDSEK.fx	3:30:00 PM	6.7321	6.7389			N/A
5/10/2019	AUDSGD	9:30:00 AM	0.9531	0.9534			N/A
5/10/2019	AUDSGD	11:30:00 AM	0.9536	0.9538			N/A
5/10/2019	AUDSGD	1:30:00 PM	0.9532	0.9535			N/A
5/10/2019	AUDSGD	3:30:00 PM	0.9544	0.9538			N/A
5/10/2019	AUDSGD.fx	9:30:00 AM	0.95321	0.95327			N/A
5/10/2019	AUDSGD.fx	11:30:00 AM	0.95371	0.95365			N/A
5/10/2019	AUDSGD.fx	1:30:00 PM	0.95331	0.95343			N/A
5/10/2019	AUDSGD.fx	3:30:00 PM	0.95446	0.95359			N/A
5/10/2019	AUDUSD	9:30:00 AM	0.69958	0.69964			N/A
5/10/2019	AUDUSD	11:30:00 AM	0.69999	0.69998			N/A
5/10/2019	AUDUSD	1:30:00 PM	0.69969	0.6998			N/A
5/10/2019	AUDUSD	3:30:00 PM	0.70055	0.69965			N/A
5/10/2019	AUDUSD.fx	9:30:00 AM	0.69963	0.69958			N/A
5/10/2019	AUDUSD.fx	11:30:00 AM	0.70003	0.69993			N/A
5/10/2019	AUDUSD.fx	1:30:00 PM	0.69975	0.69974			N/A
5/10/2019	AUDUSD.fx	3:30:00 PM	0.70059	0.69961			N/A
5/10/2019	AUDZAR	9:30:00 AM	10.0015	10.0069			N/A
5/10/2019	AUDZAR	11:30:00 AM	9.9633	9.9724			N/A
5/10/2019	AUDZAR	1:30:00 PM	9.9364	9.9501			N/A
5/10/2019	AUDZAR	3:30:00 PM	9.9494	9.9585			N/A
5/10/2019	AUS200.i	9:30:00 AM					N/A
5/10/2019	AUS200.i	11:30:00 AM	6317.84	6317.54			N/A

5/10/2019	AUS200.i	1:30:00 PM	6327.04	6330.34			N/A
5/10/2019	AUS200.i	3:30:00 PM	6310.23	6306.3			N/A
5/10/2019	BCHUSD	9:30:00 AM	297.89	299.33			N/A
5/10/2019	BCHUSD	11:30:00 AM	295.87	297.21			N/A
5/10/2019	BCHUSD	1:30:00 PM	294.4	296.34			N/A
5/10/2019	BCHUSD	3:30:00 PM	293.12	294.57			N/A
5/10/2019	CADCHF	9:30:00 AM	0.753	0.7537			N/A
5/10/2019	CADCHF	11:30:00 AM	0.75377	0.75442			N/A
5/10/2019	CADCHF	1:30:00 PM	0.75371	0.75443	50	50	N/A
5/10/2019	CADCHF	3:30:00 PM	0.75497	0.7521			N/A
5/10/2019	CADCHF.fx	9:30:00 AM	0.75334	0.75335			N/A
5/10/2019	CADCHF.fx	11:30:00 AM	0.7541	0.75408			N/A
5/10/2019	CADCHF.fx	1:30:00 PM	0.75405	0.75407			N/A
5/10/2019	CADCHF.fx	3:30:00 PM	0.75526	0.75199			N/A
5/10/2019	CADCZK	9:30:00 AM	17.001	17.018			N/A
5/10/2019	CADCZK	11:30:00 AM	17.013	17.021			N/A
5/10/2019	CADCZK	1:30:00 PM	17.007	17.023			N/A
5/10/2019	CADCZK	3:30:00 PM	17.073	17.009			N/A
5/10/2019	CADDDKK	9:30:00 AM					N/A
5/10/2019	CADDDKK	11:30:00 AM	4.942	4.943			N/A
5/10/2019	CADDDKK	1:30:00 PM					N/A
5/10/2019	CADDDKK	3:30:00 PM	4.957	4.941			N/A
5/10/2019	CADHKD	9:30:00 AM	5.8251	5.8288			N/A
5/10/2019	CADHKD	11:30:00 AM	5.8292	5.8326			N/A
5/10/2019	CADHKD	1:30:00 PM	5.8318	5.8353			N/A
5/10/2019	CADHKD	3:30:00 PM	5.8534	5.8295			N/A
5/10/2019	CADHUF	9:30:00 AM	214.27	214.42			N/A
5/10/2019	CADHUF	11:30:00 AM	214.03	214.13			N/A
5/10/2019	CADHUF	1:30:00 PM	213.97	214.11			N/A
5/10/2019	CADHUF	3:30:00 PM	214.71	213.89			N/A
5/10/2019	CADJPY	9:30:00 AM	81.475	81.529			N/A
5/10/2019	CADJPY	11:30:00 AM	81.611	81.647			N/A
5/10/2019	CADJPY	1:30:00 PM	81.617	81.681			N/A
5/10/2019	CADJPY	3:30:00 PM	81.82	81.523			N/A



5/10/2019	CADJPY.fx	9:30:00 AM	81.509	81.494			N/A
5/10/2019	CADJPY.fx	11:30:00 AM	81.643	81.612			N/A
5/10/2019	CADJPY.fx	1:30:00 PM	81.65	81.646			N/A
5/10/2019	CADJPY.fx	3:30:00 PM	81.848	81.51			N/A
5/10/2019	CADMXN	9:30:00 AM	14.2861	14.2939			N/A
5/10/2019	CADMXN	11:30:00 AM	14.262	14.2686			N/A
5/10/2019	CADMXN	1:30:00 PM	14.2375	14.2441			N/A
5/10/2019	CADMXN	3:30:00 PM	14.2978	14.2507			N/A
5/10/2019	CADNOK	9:30:00 AM	6.5123	6.5164			N/A
5/10/2019	CADNOK	11:30:00 AM	6.4968	6.4996			N/A
5/10/2019	CADNOK	1:30:00 PM	6.4927	6.4973			N/A
5/10/2019	CADNOK	3:30:00 PM	6.514	6.4907			N/A
5/10/2019	CADPLN	9:30:00 AM	2.8418	2.8436			N/A
5/10/2019	CADPLN	11:30:00 AM	2.8433	2.8437			N/A
5/10/2019	CADPLN	1:30:00 PM	2.8448	2.8466			N/A
5/10/2019	CADPLN	3:30:00 PM	2.8511	2.8414			N/A
5/10/2019	CADSEK	9:30:00 AM	7.1629	7.1662			N/A
5/10/2019	CADSEK	11:30:00 AM	7.1523	7.1535			N/A
5/10/2019	CADSEK	1:30:00 PM	7.1473	7.151			N/A
5/10/2019	CADSEK	3:30:00 PM	7.173	7.1474			N/A
5/10/2019	CADSGD	9:30:00 AM	1.011	1.0113			N/A
5/10/2019	CADSGD	11:30:00 AM	1.0117	1.012			N/A
5/10/2019	CADSGD	1:30:00 PM	1.0121	1.0124			N/A
5/10/2019	CADSGD	3:30:00 PM	1.0151	1.0117			N/A
5/10/2019	CADZAR	9:30:00 AM	10.6166	10.6248			N/A
5/10/2019	CADZAR	11:30:00 AM	10.5777	10.5905			N/A
5/10/2019	CADZAR	1:30:00 PM	10.5576	10.5731			N/A
5/10/2019	CADZAR	3:30:00 PM	10.5962	10.5776			N/A
5/10/2019	CHFCZK	9:30:00 AM	22.572	22.588			N/A
5/10/2019	CHFCZK	11:30:00 AM	22.563	22.571			N/A
5/10/2019	CHFCZK	1:30:00 PM	22.558	22.574			N/A
5/10/2019	CHFCZK	3:30:00 PM	22.61	22.62			N/A
5/10/2019	CHFDKK	9:30:00 AM	6.553	6.556			N/A
5/10/2019	CHFDKK	11:30:00 AM	6.555	6.558			N/A

5/10/2019	CHFDKK	1:30:00 PM	6.554	6.557			N/A
5/10/2019	CHFDKK	3:30:00 PM	6.567	6.567			N/A
5/10/2019	CHFDKK.fx	9:30:00 AM	6.5512	6.5573			N/A
5/10/2019	CHFDKK.fx	11:30:00 AM	6.5532	6.5581			N/A
5/10/2019	CHFDKK.fx	1:30:00 PM	6.5523	6.5585			N/A
5/10/2019	CHFDKK.fx	3:30:00 PM	6.5652	6.5689			N/A
5/10/2019	CHFHKD	9:30:00 AM	7.7333	7.7371			N/A
5/10/2019	CHFHKD	11:30:00 AM	7.7315	7.7354			N/A
5/10/2019	CHFHKD	1:30:00 PM	7.7349	7.7381			N/A
5/10/2019	CHFHKD	3:30:00 PM	7.7537	7.7528			N/A
5/10/2019	CHFHUF	9:30:00 AM	284.36	284.73			N/A
5/10/2019	CHFHUF	11:30:00 AM	283.77	284.09			N/A
5/10/2019	CHFHUF	1:30:00 PM	283.68	284.05			N/A
5/10/2019	CHFHUF	3:30:00 PM	284.3	284.59			N/A
5/10/2019	CHFJPY	9:30:00 AM	108.157	108.213			N/A
5/10/2019	CHFJPY	11:30:00 AM	108.244	108.262			N/A
5/10/2019	CHFJPY	1:30:00 PM	108.249	108.311			N/A
5/10/2019	CHFJPY	3:30:00 PM	108.379	108.396			N/A
5/10/2019	CHFJPY.fx	9:30:00 AM	108.187	108.178			N/A
5/10/2019	CHFJPY.fx	11:30:00 AM	108.277	108.228			N/A
5/10/2019	CHFJPY.fx	1:30:00 PM	108.282	108.277			N/A
5/10/2019	CHFJPY.fx	3:30:00 PM	108.391	108.364			N/A
5/10/2019	CHFMXN	9:30:00 AM	18.9639	18.9734			N/A
5/10/2019	CHFMXN	11:30:00 AM	18.9152	18.9223			N/A
5/10/2019	CHFMXN	1:30:00 PM	18.8812	18.8909			N/A
5/10/2019	CHFMXN	3:30:00 PM	18.9422	18.9331			N/A
5/10/2019	CHFNOK	9:30:00 AM	8.6446	8.6523			N/A
5/10/2019	CHFNOK	11:30:00 AM	8.6185	8.6252			N/A
5/10/2019	CHFNOK	1:30:00 PM	8.6109	8.619			N/A
5/10/2019	CHFNOK	3:30:00 PM	8.6328	8.6346			N/A
5/10/2019	CHFNOK.fx	9:30:00 AM	8.64792	8.64891			N/A
5/10/2019	CHFNOK.fx	11:30:00 AM	8.62184	8.62172			N/A
5/10/2019	CHFNOK.fx	1:30:00 PM	8.61452	8.61536			N/A
5/10/2019	CHFNOK.fx	3:30:00 PM	8.6338	8.63143			N/A

5/10/2019	CHFPLN	9:30:00 AM	3.7729	3.7757			N/A
5/10/2019	CHFPLN	11:30:00 AM	3.7715	3.7738			N/A
5/10/2019	CHFPLN	1:30:00 PM	3.7725	3.7754			N/A
5/10/2019	CHFPLN	3:30:00 PM	3.7782	3.7791			N/A
5/10/2019	CHFPLN.fx	9:30:00 AM	3.77036	3.77825			N/A
5/10/2019	CHFPLN.fx	11:30:00 AM	3.76906	3.77615			N/A
5/10/2019	CHFPLN.fx	1:30:00 PM	3.77026	3.77763			N/A
5/10/2019	CHFPLN.fx	3:30:00 PM	3.77554	3.78176			N/A
5/10/2019	CHFSEK	9:30:00 AM	9.5081	9.513			N/A
5/10/2019	CHFSEK	11:30:00 AM	9.4848	9.4874			N/A
5/10/2019	CHFSEK	1:30:00 PM	9.4793	9.4836			N/A
5/10/2019	CHFSEK	3:30:00 PM	9.5064	9.5025			N/A
5/10/2019	CHFSGD	9:30:00 AM	1.3428	1.3433			N/A
5/10/2019	CHFSGD	11:30:00 AM	1.3425	1.3428			N/A
5/10/2019	CHFSGD	1:30:00 PM	1.343	1.3431			N/A
5/10/2019	CHFSGD	3:30:00 PM	1.3466	1.3462			N/A
5/10/2019	CHFSGD.fx	9:30:00 AM	1.34303	1.34307			N/A
5/10/2019	CHFSGD.fx	11:30:00 AM	1.34272	1.34258			N/A
5/10/2019	CHFSGD.fx	1:30:00 PM	1.34313	1.34325			N/A
5/10/2019	CHFSGD.fx	3:30:00 PM	1.34676	1.34607			N/A
5/10/2019	CHFZAR	9:30:00 AM	14.0974	14.0987			N/A
5/10/2019	CHFZAR	11:30:00 AM	14.0345	14.0399			N/A
5/10/2019	CHFZAR	1:30:00 PM	14.0058	14.0176			N/A
5/10/2019	CHFZAR	3:30:00 PM	14.055	14.0484			N/A
5/10/2019	CZKJPY	9:30:00 AM					N/A
5/10/2019	CZKJPY	11:30:00 AM	4.798	4.798			N/A
5/10/2019	CZKJPY	1:30:00 PM	4.798	4.801			N/A
5/10/2019	CZKJPY	3:30:00 PM	4.793	4.796			N/A
5/10/2019	DAX30.i	9:30:00 AM	12080.05	12078.05			N/A
5/10/2019	DAX30.i	11:30:00 AM	12111.3	12093.55			N/A
5/10/2019	DAX30.i	1:30:00 PM	12106.3	12100.8			N/A
5/10/2019	DAX30.i	3:30:00 PM	12054.25	12031.8			N/A
5/10/2019	DJ30.i	9:30:00 AM					N/A
5/10/2019	DJ30.i	11:30:00 AM					N/A

5/10/2019	DJ30.i	1:30:00 PM					N/A
5/10/2019	DJ30.i	3:30:00 PM					N/A
5/10/2019	DKKJPY	9:30:00 AM					N/A
5/10/2019	DKKJPY	11:30:00 AM	16.53	16.53			N/A
5/10/2019	DKKJPY	1:30:00 PM					N/A
5/10/2019	DKKJPY	3:30:00 PM					N/A
5/10/2019	EURAUD	9:30:00 AM	1.6041	1.60445			N/A
5/10/2019	EURAUD	11:30:00 AM	1.60269	1.60279			N/A
5/10/2019	EURAUD	1:30:00 PM	1.60377	1.60417			N/A
5/10/2019	EURAUD	3:30:00 PM	1.60442	1.6029			N/A
5/10/2019	EURAUD.fx	9:30:00 AM	1.60431	1.60422			N/A
5/10/2019	EURAUD.fx	11:30:00 AM	1.60287	1.60258			N/A
5/10/2019	EURAUD.fx	1:30:00 PM	1.60398	1.60393			N/A
5/10/2019	EURAUD.fx	3:30:00 PM	1.60463	1.60269			N/A
5/10/2019	EURCAD	9:30:00 AM	1.51168	1.51236			N/A
5/10/2019	EURCAD	11:30:00 AM	1.51006	1.5104			N/A
5/10/2019	EURCAD	1:30:00 PM	1.50994	1.51075			N/A
5/10/2019	EURCAD	3:30:00 PM	1.51151	1.50562			N/A
5/10/2019	EURCAD.fx	9:30:00 AM	1.51209	1.51193			N/A
5/10/2019	EURCAD.fx	11:30:00 AM	1.51046	1.50998			N/A
5/10/2019	EURCAD.fx	1:30:00 PM	1.51038	1.51032			N/A
5/10/2019	EURCAD.fx	3:30:00 PM	1.51133	1.50526			N/A
5/10/2019	EURCHF	9:30:00 AM	1.13907	1.13914			N/A
5/10/2019	EURCHF	11:30:00 AM	1.13889	1.13878			N/A
5/10/2019	EURCHF	1:30:00 PM	1.13884	1.13896			N/A
5/10/2019	EURCHF	3:30:00 PM	1.13706	1.13662		10	N/A
5/10/2019	EURCHF.fx	9:30:00 AM	1.13912	1.13908			N/A
5/10/2019	EURCHF.fx	11:30:00 AM	1.13893	1.13873			N/A
5/10/2019	EURCHF.fx	1:30:00 PM	1.1389	1.1389			N/A
5/10/2019	EURCHF.fx	3:30:00 PM	1.13708	1.1366			N/A
5/10/2019	EURCZK	9:30:00 AM	25.698	25.737			N/A
5/10/2019	EURCZK	11:30:00 AM	25.679	25.715			N/A
5/10/2019	EURCZK	1:30:00 PM	25.677	25.716			N/A
5/10/2019	EURCZK	3:30:00 PM	25.688	25.721			N/A

5/10/2019	EURDKK	9:30:00 AM	7.4638	7.4651			N/A
5/10/2019	EURDKK	11:30:00 AM	7.4638	7.4651			N/A
5/10/2019	EURDKK	1:30:00 PM	7.4653	7.4663			N/A
5/10/2019	EURDKK	3:30:00 PM	7.4641	7.4648			N/A
5/10/2019	EURGBP	9:30:00 AM	0.86311	0.86317			N/A
5/10/2019	EURGBP	11:30:00 AM	0.86293	0.86217			N/A
5/10/2019	EURGBP	1:30:00 PM	0.86272	0.8628			N/A
5/10/2019	EURGBP	3:30:00 PM	0.86286	0.86258			N/A
5/10/2019	EURGBP.fx	9:30:00 AM	0.86314	0.86312			N/A
5/10/2019	EURGBP.fx	11:30:00 AM	0.86297	0.86218			N/A
5/10/2019	EURGBP.fx	1:30:00 PM	0.86276	0.86274			N/A
5/10/2019	EURGBP.fx	3:30:00 PM	0.86287	0.86253			N/A
5/10/2019	EURHKD	9:30:00 AM	8.8102	8.8143			N/A
5/10/2019	EURHKD	11:30:00 AM	8.8075	8.8091			N/A
5/10/2019	EURHKD	1:30:00 PM	8.8105	8.8147			N/A
5/10/2019	EURHKD	3:30:00 PM	8.8181	8.8155			N/A
5/10/2019	EURHKD.fx	9:30:00 AM	8.81297	8.81144			N/A
5/10/2019	EURHKD.fx	11:30:00 AM	8.81033	8.80631			N/A
5/10/2019	EURHKD.fx	1:30:00 PM	8.8133	8.81189			N/A
5/10/2019	EURHKD.fx	3:30:00 PM	8.82091	8.81371			N/A
5/10/2019	EURHUF	9:30:00 AM	323.88	324.54			N/A
5/10/2019	EURHUF	11:30:00 AM	323.21	323.78			N/A
5/10/2019	EURHUF	1:30:00 PM	323.02	323.73			N/A
5/10/2019	EURHUF	3:30:00 PM	323.24	323.93			N/A
5/10/2019	EURHUF.fx	9:30:00 AM	324.17	324.274			N/A
5/10/2019	EURHUF.fx	11:30:00 AM	323.464	323.655			N/A
5/10/2019	EURHUF.fx	1:30:00 PM	323.282	323.448			N/A
5/10/2019	EURHUF.fx	3:30:00 PM	323.493	323.673			N/A
5/10/2019	EURJPY	9:30:00 AM	123.237	123.232			N/A
5/10/2019	EURJPY	11:30:00 AM	123.326	123.239			N/A
5/10/2019	EURJPY	1:30:00 PM	123.321	123.319			N/A
5/10/2019	EURJPY	3:30:00 PM	123.228	123.179			N/A
5/10/2019	EURJPY.fx	9:30:00 AM	123.24	123.225			N/A
5/10/2019	EURJPY.fx	11:30:00 AM	123.328	123.235			N/A

5/10/2019	EURJPY.fx	1:30:00 PM	123.326	123.314			N/A
5/10/2019	EURJPY.fx	3:30:00 PM	123.227	123.175			N/A
5/10/2019	EURMXN	9:30:00 AM	21.6032	21.6152			N/A
5/10/2019	EURMXN	11:30:00 AM	21.5493	21.5525			N/A
5/10/2019	EURMXN	1:30:00 PM	21.5055	21.5178			N/A
5/10/2019	EURMXN	3:30:00 PM	21.5619	21.5271			N/A
5/10/2019	EURMXN.fx	9:30:00 AM	21.6117	21.6072			N/A
5/10/2019	EURMXN.fx	11:30:00 AM	21.5582	21.5433			N/A
5/10/2019	EURMXN.fx	1:30:00 PM	21.5154	21.5081			N/A
5/10/2019	EURMXN.fx	3:30:00 PM	21.5706	21.5286			N/A
5/10/2019	EURNOK	9:30:00 AM	9.8454	9.857			N/A
5/10/2019	EURNOK	11:30:00 AM	9.8128	9.8234			N/A
5/10/2019	EURNOK	1:30:00 PM	9.8055	9.8173			N/A
5/10/2019	EURNOK	3:30:00 PM	9.8109	9.8202			N/A
5/10/2019	EURNOK.fx	9:30:00 AM	9.85071	9.8516			N/A
5/10/2019	EURNOK.fx	11:30:00 AM	9.8182	9.8179			N/A
5/10/2019	EURNOK.fx	1:30:00 PM	9.8109	9.81182			N/A
5/10/2019	EURNOK.fx	3:30:00 PM	9.81422	9.81506			N/A
5/10/2019	EURNZD	9:30:00 AM	1.70309	1.70378			N/A
5/10/2019	EURNZD	11:30:00 AM	1.70091	1.70141			N/A
5/10/2019	EURNZD	1:30:00 PM	1.70178	1.70257			N/A
5/10/2019	EURNZD	3:30:00 PM	1.70157	1.70033			N/A
5/10/2019	EURNZD.fx	9:30:00 AM	1.70352	1.70337			N/A
5/10/2019	EURNZD.fx	11:30:00 AM	1.7013	1.70099			N/A
5/10/2019	EURNZD.fx	1:30:00 PM	1.7022	1.70214			N/A
5/10/2019	EURNZD.fx	3:30:00 PM	1.70169	1.70004			N/A
5/10/2019	EURPLN	9:30:00 AM	4.2978	4.3006			N/A
5/10/2019	EURPLN	11:30:00 AM	4.2947	4.2979			N/A
5/10/2019	EURPLN	1:30:00 PM	4.2966	4.2997			N/A
5/10/2019	EURPLN	3:30:00 PM	4.2944	4.2971			N/A
5/10/2019	EURPLN.fx	9:30:00 AM	4.29697	4.30152			N/A
5/10/2019	EURPLN.fx	11:30:00 AM	4.2942	4.29833			N/A
5/10/2019	EURPLN.fx	1:30:00 PM	4.29603	4.30032			N/A
5/10/2019	EURPLN.fx	3:30:00 PM	4.29373	4.29793			N/A

5/10/2019	EURRUB	9:30:00 AM					N/A
5/10/2019	EURRUB	11:30:00 AM	72.826	73.229			N/A
5/10/2019	EURRUB	1:30:00 PM	72.828	73.254			N/A
5/10/2019	EURRUB	3:30:00 PM	73.05	73.319			N/A
5/10/2019	EURSEK	9:30:00 AM	10.8327	10.8354			N/A
5/10/2019	EURSEK	11:30:00 AM	10.8032	10.8077			N/A
5/10/2019	EURSEK	1:30:00 PM	10.7969	10.8013			N/A
5/10/2019	EURSEK	3:30:00 PM	10.8049	10.8074			N/A
5/10/2019	EURSEK.fx	9:30:00 AM	10.83436	10.83383			N/A
5/10/2019	EURSEK.fx	11:30:00 AM	10.80489	10.80603			N/A
5/10/2019	EURSEK.fx	1:30:00 PM	10.79856	10.79925			N/A
5/10/2019	EURSEK.fx	3:30:00 PM	10.80629	10.80676			N/A
5/10/2019	EURSGD	9:30:00 AM	1.5295	1.5302			N/A
5/10/2019	EURSGD	11:30:00 AM	1.529	1.5292			N/A
5/10/2019	EURSGD	1:30:00 PM	1.5293	1.5301			N/A
5/10/2019	EURSGD	3:30:00 PM	1.5307	1.5306			N/A
5/10/2019	EURSGD.fx	9:30:00 AM	1.52986	1.52979			N/A
5/10/2019	EURSGD.fx	11:30:00 AM	1.52933	1.5288			N/A
5/10/2019	EURSGD.fx	1:30:00 PM	1.52978	1.52974			N/A
5/10/2019	EURSGD.fx	3:30:00 PM	1.53098	1.53025			N/A
5/10/2019	EURUSD	9:30:00 AM	1.12266	1.12261			N/A
5/10/2019	EURUSD	11:30:00 AM	1.12234	1.12197			N/A
5/10/2019	EURUSD	1:30:00 PM	1.12266	1.12265		10	N/A
5/10/2019	EURUSD	3:30:00 PM	1.12364	1.12263		10	N/A
5/10/2019	EURUSD.fx	9:30:00 AM	1.12286	1.1227			N/A
5/10/2019	EURUSD.fx	11:30:00 AM	1.12254	1.12207			N/A
5/10/2019	EURUSD.fx	1:30:00 PM	1.12288	1.12274			N/A
5/10/2019	EURUSD.fx	3:30:00 PM	1.12382	1.12277			N/A
5/10/2019	EURZAR	9:30:00 AM	16.06	16.0648			N/A
5/10/2019	EURZAR	11:30:00 AM	15.9918	15.9984			N/A
5/10/2019	EURZAR	1:30:00 PM	15.9523	15.9678			N/A
5/10/2019	EURZAR	3:30:00 PM	15.9818	15.9828			N/A
5/10/2019	EURZAR.fx	9:30:00 AM	16.05941	16.06591			N/A
5/10/2019	EURZAR.fx	11:30:00 AM	15.99092	15.9989			N/A

5/10/2019	EURZAR.fx	1:30:00 PM	15.95168	15.96818			N/A
5/10/2019	EURZAR.fx	3:30:00 PM	15.98018	15.98752			N/A
5/10/2019	GBPAUD	9:30:00 AM	1.85898	1.85961			N/A
5/10/2019	GBPAUD	11:30:00 AM	1.85935	1.85839			N/A
5/10/2019	GBPAUD	1:30:00 PM	1.85956	1.86015			N/A
5/10/2019	GBPAUD	3:30:00 PM	1.8601	1.85911			N/A
5/10/2019	GBPAUD.fx	9:30:00 AM	1.85936	1.85919			N/A
5/10/2019	GBPAUD.fx	11:30:00 AM	1.85959	1.858			N/A
5/10/2019	GBPAUD.fx	1:30:00 PM	1.85997	1.85974			N/A
5/10/2019	GBPAUD.fx	3:30:00 PM	1.8602	1.85871			N/A
5/10/2019	GBPCAD	9:30:00 AM	1.75144	1.75196			N/A
5/10/2019	GBPCAD	11:30:00 AM	1.7514	1.75039			N/A
5/10/2019	GBPCAD	1:30:00 PM	1.7503	1.75099			N/A
5/10/2019	GBPCAD	3:30:00 PM	1.7522	1.74541			N/A
5/10/2019	GBPCAD.fx	9:30:00 AM	1.75185	1.75157			N/A
5/10/2019	GBPCAD.fx	11:30:00 AM	1.75168	1.75002			N/A
5/10/2019	GBPCAD.fx	1:30:00 PM	1.7507	1.7506			N/A
5/10/2019	GBPCAD.fx	3:30:00 PM	1.75204	1.74504			N/A
5/10/2019	GBPCHF	9:30:00 AM	1.31952	1.31985			N/A
5/10/2019	GBPCHF	11:30:00 AM	1.32079	1.31998			N/A
5/10/2019	GBPCHF	1:30:00 PM	1.3199	1.32027			N/A
5/10/2019	GBPCHF	3:30:00 PM	1.31783	1.31748			N/A
5/10/2019	GBPCHF.fx	9:30:00 AM	1.31971	1.31964			N/A
5/10/2019	GBPCHF.fx	11:30:00 AM	1.32089	1.31978			N/A
5/10/2019	GBPCHF.fx	1:30:00 PM	1.32011	1.32006			N/A
5/10/2019	GBPCHF.fx	3:30:00 PM	1.31792	1.3173			N/A
5/10/2019	GBPCZK	9:30:00 AM	29.784	29.805			N/A
5/10/2019	GBPCZK	11:30:00 AM	29.788	29.784			N/A
5/10/2019	GBPCZK	1:30:00 PM	29.773	29.794			N/A
5/10/2019	GBPCZK	3:30:00 PM	29.792	29.803			N/A
5/10/2019	GBPDKK	9:30:00 AM	8.645	8.656			N/A
5/10/2019	GBPDKK	11:30:00 AM	8.654	8.657			N/A
5/10/2019	GBPDKK	1:30:00 PM	8.649	8.659			N/A
5/10/2019	GBPDKK	3:30:00 PM	8.653	8.658			N/A



5/10/2019	GBPDKK.fx	9:30:00 AM	8.6435	8.656			N/A
5/10/2019	GBPDKK.fx	11:30:00 AM	8.652	8.6578			N/A
5/10/2019	GBPDKK.fx	1:30:00 PM	8.6473	8.6598			N/A
5/10/2019	GBPDKK.fx	3:30:00 PM	8.6482	8.6586			N/A
5/10/2019	GBPHKD	9:30:00 AM	10.2039	10.2078			N/A
5/10/2019	GBPHKD	11:30:00 AM	10.2115	10.2053			N/A
5/10/2019	GBPHKD	1:30:00 PM	10.2093	10.213			N/A
5/10/2019	GBPHKD	3:30:00 PM	10.2144	10.2142			N/A
5/10/2019	GBPHUF	9:30:00 AM	375.25	375.66			N/A
5/10/2019	GBPHUF	11:30:00 AM	374.66	374.82			N/A
5/10/2019	GBPHUF	1:30:00 PM	374.42	374.86			N/A
5/10/2019	GBPHUF	3:30:00 PM	374.57	374.96			N/A
5/10/2019	GBPJPY	9:30:00 AM	142.751	142.788			N/A
5/10/2019	GBPJPY	11:30:00 AM	142.974	142.845			N/A
5/10/2019	GBPJPY	1:30:00 PM	142.93	142.952			N/A
5/10/2019	GBPJPY	3:30:00 PM	142.841	142.762			N/A
5/10/2019	GBPJPY.fx	9:30:00 AM	142.77	142.768			N/A
5/10/2019	GBPJPY.fx	11:30:00 AM	142.981	142.828			N/A
5/10/2019	GBPJPY.fx	1:30:00 PM	142.951	142.932			N/A
5/10/2019	GBPJPY.fx	3:30:00 PM	142.837	142.746			N/A
5/10/2019	GBPMXN	9:30:00 AM	25.0267	25.0291			N/A
5/10/2019	GBPMXN	11:30:00 AM	24.9847	24.963			N/A
5/10/2019	GBPMXN	1:30:00 PM	24.9228	24.9315			N/A
5/10/2019	GBPMXN	3:30:00 PM	24.9596	24.9451			N/A
5/10/2019	GBPNOK	9:30:00 AM	11.4077	11.4183			N/A
5/10/2019	GBPNOK	11:30:00 AM	11.3833	11.3834			N/A
5/10/2019	GBPNOK	1:30:00 PM	11.3671	11.3775			N/A
5/10/2019	GBPNOK	3:30:00 PM	11.3755	11.3795			N/A
5/10/2019	GBPNOK.fx	9:30:00 AM	11.41234	11.4134			N/A
5/10/2019	GBPNOK.fx	11:30:00 AM	11.38589	11.37836			N/A
5/10/2019	GBPNOK.fx	1:30:00 PM	11.37186	11.37283			N/A
5/10/2019	GBPNOK.fx	3:30:00 PM	11.37637	11.37462			N/A
5/10/2019	GBPNZD	9:30:00 AM	1.97324	1.97373			N/A
5/10/2019	GBPNZD	11:30:00 AM	1.97295	1.97165			N/A

5/10/2019	GBPNZD	1:30:00 PM	1.97266	1.9733			N/A
5/10/2019	GBPNZD	3:30:00 PM	1.97215	1.97116			N/A
5/10/2019	GBPNZD.fx	9:30:00 AM	1.97359	1.97337			N/A
5/10/2019	GBPNZD.fx	11:30:00 AM	1.97311	1.97129			N/A
5/10/2019	GBPNZD.fx	1:30:00 PM	1.97304	1.9729			N/A
5/10/2019	GBPNZD.fx	3:30:00 PM	1.97198	1.97101			N/A
5/10/2019	GBPPLN	9:30:00 AM	4.9806	4.9815			N/A
5/10/2019	GBPPLN	11:30:00 AM	4.9817	4.9795			N/A
5/10/2019	GBPPLN	1:30:00 PM	4.9809	4.9828			N/A
5/10/2019	GBPPLN	3:30:00 PM	4.9794	4.9791			N/A
5/10/2019	GBPPLN.fx	9:30:00 AM	4.97826	4.98402			N/A
5/10/2019	GBPPLN.fx	11:30:00 AM	4.97909	4.98155			N/A
5/10/2019	GBPPLN.fx	1:30:00 PM	4.97877	4.98496			N/A
5/10/2019	GBPPLN.fx	3:30:00 PM	4.97614	4.98155			N/A
5/10/2019	GBPSEK	9:30:00 AM	12.548	12.5561			N/A
5/10/2019	GBPSEK	11:30:00 AM	12.5279	12.5252			N/A
5/10/2019	GBPSEK	1:30:00 PM	12.5121	12.5219			N/A
5/10/2019	GBPSEK	3:30:00 PM	12.5254	12.529			N/A
5/10/2019	GBPSEK.fx	9:30:00 AM	12.54418	12.55998			N/A
5/10/2019	GBPSEK.fx	11:30:00 AM	12.52165	12.5289			N/A
5/10/2019	GBPSEK.fx	1:30:00 PM	12.50855	12.52547			N/A
5/10/2019	GBPSEK.fx	3:30:00 PM	12.51748	12.53341			N/A
5/10/2019	GBPSGD	9:30:00 AM	1.7722	1.7727			N/A
5/10/2019	GBPSGD	11:30:00 AM	1.7734	1.7722			N/A
5/10/2019	GBPSGD	1:30:00 PM	1.7729	1.7734			N/A
5/10/2019	GBPSGD	3:30:00 PM	1.7745	1.7744			N/A
5/10/2019	GBPSGD.fx	9:30:00 AM	1.77032	1.77442			N/A
5/10/2019	GBPSGD.fx	11:30:00 AM	1.77119	1.77399			N/A
5/10/2019	GBPSGD.fx	1:30:00 PM	1.77104	1.77523			N/A
5/10/2019	GBPSGD.fx	3:30:00 PM	1.77223	1.77621			N/A
5/10/2019	GBPUSD	9:30:00 AM	1.30084	1.30069			N/A
5/10/2019	GBPUSD	11:30:00 AM	1.30203	1.30043	3200	3200	N/A
5/10/2019	GBPUSD	1:30:00 PM	1.30153	1.3014			N/A
5/10/2019	GBPUSD	3:30:00 PM	1.30252	1.3016			N/A

5/10/2019	GBPUSD.fx	9:30:00 AM	1.3009	1.3006			N/A
5/10/2019	GBPUSD.fx	11:30:00 AM	1.30205	1.3004			N/A
5/10/2019	GBPUSD.fx	1:30:00 PM	1.30159	1.30135			N/A
5/10/2019	GBPUSD.fx	3:30:00 PM	1.30256	1.30171			N/A
5/10/2019	GBPZAR	9:30:00 AM	18.6034	18.614			N/A
5/10/2019	GBPZAR	11:30:00 AM	18.5418	18.5451			N/A
5/10/2019	GBPZAR	1:30:00 PM	18.4863	18.5108			N/A
5/10/2019	GBPZAR	3:30:00 PM	18.5243	18.5317			N/A
5/10/2019	GBPZAR.fx	9:30:00 AM	18.6096	18.6085			N/A
5/10/2019	GBPZAR.fx	11:30:00 AM	18.5489	18.5377			N/A
5/10/2019	GBPZAR.fx	1:30:00 PM	18.4937	18.5033			N/A
5/10/2019	GBPZAR.fx	3:30:00 PM	18.5221	18.5275			N/A
5/10/2019	GOLD	9:30:00 AM	1284.56	1284.76			N/A
5/10/2019	GOLD	11:30:00 AM	1284.8	1284.85			N/A
5/10/2019	GOLD	1:30:00 PM	1285.61	1285.93			N/A
5/10/2019	GOLD	3:30:00 PM	1287.94	1286.15			N/A
5/10/2019	HKDJPY	9:30:00 AM	13.98	13.99			N/A
5/10/2019	HKDJPY	11:30:00 AM	14	14			N/A
5/10/2019	HKDJPY	1:30:00 PM	13.99	14			N/A
5/10/2019	HKDJPY	3:30:00 PM	13.97	13.98			N/A
5/10/2019	HKDJPY.fx	9:30:00 AM	13.981	13.985			N/A
5/10/2019	HKDJPY.fx	11:30:00 AM	13.994	13.997			N/A
5/10/2019	HKDJPY.fx	1:30:00 PM	13.989	13.997			N/A
5/10/2019	HKDJPY.fx	3:30:00 PM	13.975	13.972			N/A
5/10/2019	HUFJPY	9:30:00 AM	0.3803	0.3806			N/A
5/10/2019	HUFJPY	11:30:00 AM	0.3811	0.3814			N/A
5/10/2019	HUFJPY	1:30:00 PM	0.3816	0.382			N/A
5/10/2019	HUFJPY	3:30:00 PM	0.3811	0.3814			N/A
5/10/2019	JP225.i	9:30:00 AM	21328.97	21338.97			N/A
5/10/2019	JP225.i	11:30:00 AM	21338.97	21330.64			N/A
5/10/2019	JP225.i	1:30:00 PM	21353.97	21366.47			N/A
5/10/2019	JP225.i	3:30:00 PM	21242.92	21213.97			N/A
5/10/2019	MXNJPY	9:30:00 AM	5.7	5.71			N/A
5/10/2019	MXNJPY	11:30:00 AM	5.72	5.73			N/A

5/10/2019	MXNJPY	1:30:00 PM					N/A
5/10/2019	MXNJPY	3:30:00 PM	5.72	5.72			N/A
5/10/2019	NASDAQ.i	9:30:00 AM					N/A
5/10/2019	NASDAQ.i	11:30:00 AM					N/A
5/10/2019	NASDAQ.i	1:30:00 PM					N/A
5/10/2019	NASDAQ.i	3:30:00 PM					N/A
5/10/2019	NOKJPY	9:30:00 AM	12.5	12.53			N/A
5/10/2019	NOKJPY	11:30:00 AM	12.55	12.57			N/A
5/10/2019	NOKJPY	1:30:00 PM	12.56	12.59			N/A
5/10/2019	NOKJPY	3:30:00 PM	12.54	12.57			N/A
5/10/2019	NOKJPY.fx	9:30:00 AM	12.506	12.513			N/A
5/10/2019	NOKJPY.fx	11:30:00 AM	12.555	12.555			N/A
5/10/2019	NOKJPY.fx	1:30:00 PM	12.566	12.573			N/A
5/10/2019	NOKJPY.fx	3:30:00 PM	12.552	12.554			N/A
5/10/2019	NZDCAD	9:30:00 AM	0.88726	0.888			N/A
5/10/2019	NZDCAD	11:30:00 AM	0.88746	0.888			N/A
5/10/2019	NZDCAD	1:30:00 PM	0.88696	0.88766			N/A
5/10/2019	NZDCAD	3:30:00 PM	0.88804	0.88578			N/A
5/10/2019	NZDCAD.fx	9:30:00 AM	0.88759	0.88768			N/A
5/10/2019	NZDCAD.fx	11:30:00 AM	0.88777	0.88768			N/A
5/10/2019	NZDCAD.fx	1:30:00 PM	0.8873	0.88732			N/A
5/10/2019	NZDCAD.fx	3:30:00 PM	0.88798	0.88554			N/A
5/10/2019	NZDCHF	9:30:00 AM	0.66833	0.66904			N/A
5/10/2019	NZDCHF	11:30:00 AM	0.66909	0.6698			N/A
5/10/2019	NZDCHF	1:30:00 PM	0.66871	0.66943			N/A
5/10/2019	NZDCHF	3:30:00 PM	0.66842	0.66831			N/A
5/10/2019	NZDCHF.fx	9:30:00 AM	0.66866	0.66869			N/A
5/10/2019	NZDCHF.fx	11:30:00 AM	0.66942	0.66947			N/A
5/10/2019	NZDCHF.fx	1:30:00 PM	0.66905	0.66908			N/A
5/10/2019	NZDCHF.fx	3:30:00 PM	0.66871	0.66798			N/A
5/10/2019	NZDCZK	9:30:00 AM	15.091	15.102			N/A
5/10/2019	NZDCZK	11:30:00 AM	15.101	15.107			N/A
5/10/2019	NZDCZK	1:30:00 PM	15.09	15.102			N/A
5/10/2019	NZDCZK	3:30:00 PM	15.115	15.107			N/A

5/10/2019	NZDDKK	9:30:00 AM					N/A
5/10/2019	NZDDKK	11:30:00 AM	4.385	4.389			N/A
5/10/2019	NZDDKK	1:30:00 PM	4.384	4.387			N/A
5/10/2019	NZDDKK	3:30:00 PM	4.387	4.387			N/A
5/10/2019	NZDHKD	9:30:00 AM	5.1696	5.1725			N/A
5/10/2019	NZDHKD	11:30:00 AM	5.1739	5.1763			N/A
5/10/2019	NZDHKD	1:30:00 PM	5.1737	5.1763			N/A
5/10/2019	NZDHKD	3:30:00 PM	5.1824	5.1776			N/A
5/10/2019	NZDHUF	9:30:00 AM	190.08	190.36			N/A
5/10/2019	NZDHUF	11:30:00 AM	189.88	190.14			N/A
5/10/2019	NZDHUF	1:30:00 PM	189.74	190.02			N/A
5/10/2019	NZDHUF	3:30:00 PM	190	190.08			N/A
5/10/2019	NZDJPY	9:30:00 AM	72.313	72.374			N/A
5/10/2019	NZDJPY	11:30:00 AM	72.452	72.485			N/A
5/10/2019	NZDJPY	1:30:00 PM	72.414	72.48			N/A
5/10/2019	NZDJPY	3:30:00 PM	72.444	72.42			N/A
5/10/2019	NZDJPY.fx	9:30:00 AM	72.344	72.34			N/A
5/10/2019	NZDJPY.fx	11:30:00 AM	72.483	72.453			N/A
5/10/2019	NZDJPY.fx	1:30:00 PM	72.446	72.447			N/A
5/10/2019	NZDJPY.fx	3:30:00 PM	72.47	72.387			N/A
5/10/2019	NZDMXN	9:30:00 AM	12.6798	12.682			N/A
5/10/2019	NZDMXN	11:30:00 AM	12.6611	12.6614			N/A
5/10/2019	NZDMXN	1:30:00 PM	12.6321	12.6331			N/A
5/10/2019	NZDMXN	3:30:00 PM	12.6601	12.6491			N/A
5/10/2019	NZDNOK	9:30:00 AM	5.7791	5.7829			N/A
5/10/2019	NZDNOK	11:30:00 AM	5.7658	5.7686			N/A
5/10/2019	NZDNOK	1:30:00 PM	5.7598	5.7634			N/A
5/10/2019	NZDNOK	3:30:00 PM	5.7673	5.7665			N/A
5/10/2019	NZDPLN	9:30:00 AM	2.5221	2.5235			N/A
5/10/2019	NZDPLN	11:30:00 AM	2.5234	2.524			N/A
5/10/2019	NZDPLN	1:30:00 PM	2.5238	2.5249			N/A
5/10/2019	NZDPLN	3:30:00 PM	2.5231	2.5227			N/A
5/10/2019	NZDSEK	9:30:00 AM	6.355	6.3614			N/A
5/10/2019	NZDSEK	11:30:00 AM	6.3455	6.3512			N/A

5/10/2019	NZDSEK	1:30:00 PM	6.3389	6.3451			N/A
5/10/2019	NZDSEK	3:30:00 PM	6.3517	6.3491			N/A
5/10/2019	NZDSGD	9:30:00 AM	0.8978	0.8985			N/A
5/10/2019	NZDSGD	11:30:00 AM	0.8986	0.8991			N/A
5/10/2019	NZDSGD	1:30:00 PM	0.8984	0.8991			N/A
5/10/2019	NZDSGD	3:30:00 PM	0.9002	0.8997			N/A
5/10/2019	NZDSGD.fx	9:30:00 AM	0.89778	0.8984			N/A
5/10/2019	NZDSGD.fx	11:30:00 AM	0.8986	0.89902			N/A
5/10/2019	NZDSGD.fx	1:30:00 PM	0.89841	0.899			N/A
5/10/2019	NZDSGD.fx	3:30:00 PM	0.90001	0.89985			N/A
5/10/2019	NZDUSD	9:30:00 AM	0.65902	0.65915			N/A
5/10/2019	NZDUSD	11:30:00 AM	0.65967	0.65966			N/A
5/10/2019	NZDUSD	1:30:00 PM	0.65952	0.65961			N/A
5/10/2019	NZDUSD	3:30:00 PM	0.66082	0.65985			N/A
5/10/2019	NZDUSD.fx	9:30:00 AM	0.65909	0.65916			N/A
5/10/2019	NZDUSD.fx	11:30:00 AM	0.65974	0.65968			N/A
5/10/2019	NZDUSD.fx	1:30:00 PM	0.65959	0.65962			N/A
5/10/2019	NZDUSD.fx	3:30:00 PM	0.66088	0.65996			N/A
5/10/2019	NZDZAR	9:30:00 AM	9.4203	9.4293			N/A
5/10/2019	NZDZAR	11:30:00 AM	9.3885	9.4003			N/A
5/10/2019	NZDZAR	1:30:00 PM	9.3646	9.3803			N/A
5/10/2019	NZDZAR	3:30:00 PM	9.3821	9.3938			N/A
5/10/2019	SEKJPY	9:30:00 AM	11.37	11.38			N/A
5/10/2019	SEKJPY	11:30:00 AM	11.41	11.42			N/A
5/10/2019	SEKJPY	1:30:00 PM	11.42	11.43			N/A
5/10/2019	SEKJPY	3:30:00 PM	11.4	11.41			N/A
5/10/2019	SEKJPY.fx	9:30:00 AM	11.365	11.382			N/A
5/10/2019	SEKJPY.fx	11:30:00 AM	11.404	11.414			N/A
5/10/2019	SEKJPY.fx	1:30:00 PM	11.41	11.428			N/A
5/10/2019	SEKJPY.fx	3:30:00 PM	11.392	11.407			N/A
5/10/2019	SGDJPY	9:30:00 AM	80.53	80.55			N/A
5/10/2019	SGDJPY	11:30:00 AM	80.6	80.61			N/A
5/10/2019	SGDJPY	1:30:00 PM	80.6	80.61			N/A
5/10/2019	SGDJPY	3:30:00 PM	80.48	80.46			N/A

5/10/2019	SILVER	9:30:00 AM	14.59	14.97			N/A
5/10/2019	SILVER	11:30:00 AM	14.6	14.97			N/A
5/10/2019	SILVER	1:30:00 PM	14.59	14.97			N/A
5/10/2019	SILVER	3:30:00 PM	14.6	14.96			N/A
5/10/2019	SPX500.i	9:30:00 AM	2868.91	2869.21			N/A
5/10/2019	SPX500.i	11:30:00 AM	2867.41	2866.96			N/A
5/10/2019	SPX500.i	1:30:00 PM	2867.41	2867.46			N/A
5/10/2019	SPX500.i	3:30:00 PM	2855	2849.06			N/A
5/10/2019	UK100.i	9:30:00 AM	7260.21	7260.71			N/A
5/10/2019	UK100.i	11:30:00 AM	7254.21	7249.8			N/A
5/10/2019	UK100.i	1:30:00 PM	7243.3	7243.46			N/A
5/10/2019	UK100.i	3:30:00 PM	7229.4	7221			N/A
5/10/2019	USDCAD	9:30:00 AM	1.34662	1.34674			N/A
5/10/2019	USDCAD	11:30:00 AM	1.34575	1.34566			N/A
5/10/2019	USDCAD	1:30:00 PM	1.3452	1.34518			N/A
5/10/2019	USDCAD	3:30:00 PM	1.34675	1.34017		1000	N/A
5/10/2019	USDCAD.fx	9:30:00 AM	1.34664	1.34671			N/A
5/10/2019	USDCAD.fx	11:30:00 AM	1.34577	1.34563			N/A
5/10/2019	USDCAD.fx	1:30:00 PM	1.34524	1.34514			N/A
5/10/2019	USDCAD.fx	3:30:00 PM	1.34657	1.34016			N/A
5/10/2019	USDCHF	9:30:00 AM	1.01448	1.01455			N/A
5/10/2019	USDCHF	11:30:00 AM	1.01477	1.01472			N/A
5/10/2019	USDCHF	1:30:00 PM	1.0143	1.01435			N/A
5/10/2019	USDCHF	3:30:00 PM	1.01224	1.01168			N/A
5/10/2019	USDCHF.fx	9:30:00 AM	1.01452	1.0145			N/A
5/10/2019	USDCHF.fx	11:30:00 AM	1.0148	1.01466			N/A
5/10/2019	USDCHF.fx	1:30:00 PM	1.01435	1.01429			N/A
5/10/2019	USDCHF.fx	3:30:00 PM	1.01219	1.01163			N/A
5/10/2019	USDCZK	9:30:00 AM	22.913	22.933			N/A
5/10/2019	USDCZK	11:30:00 AM	22.912	22.921			N/A
5/10/2019	USDCZK	1:30:00 PM	22.894	22.915			N/A
5/10/2019	USDCZK	3:30:00 PM	22.903	22.905			N/A
5/10/2019	USDCZK.fx	9:30:00 AM	22.922	22.9241			N/A
5/10/2019	USDCZK.fx	11:30:00 AM	22.9211	22.9123			N/A

5/10/2019	USDCZK.fx	1:30:00 PM	22.9018	22.9062			N/A
5/10/2019	USDCZK.fx	3:30:00 PM	22.9068	22.8967			N/A
5/10/2019	USDDKK	9:30:00 AM	6.6486	6.6518			N/A
5/10/2019	USDDKK	11:30:00 AM	6.6524	6.6537			N/A
5/10/2019	USDDKK	1:30:00 PM	6.6483	6.6517			N/A
5/10/2019	USDDKK	3:30:00 PM	6.6483	6.6461			N/A
5/10/2019	USDDKK.fx	9:30:00 AM	6.6492	6.64982			N/A
5/10/2019	USDDKK.fx	11:30:00 AM	6.65292	6.6517			N/A
5/10/2019	USDDKK.fx	1:30:00 PM	6.6489	6.64948			N/A
5/10/2019	USDDKK.fx	3:30:00 PM	6.64816	6.6439			N/A
5/10/2019	USDHKD	9:30:00 AM	7.8477	7.848			N/A
5/10/2019	USDHKD	11:30:00 AM	7.8476	7.848			N/A
5/10/2019	USDHKD	1:30:00 PM	7.8478	7.8482			N/A
5/10/2019	USDHKD	3:30:00 PM	7.8479	7.8482			N/A
5/10/2019	USDHKD.fx	9:30:00 AM	7.84767	7.84818			N/A
5/10/2019	USDHKD.fx	11:30:00 AM	7.84758	7.84807			N/A
5/10/2019	USDHKD.fx	1:30:00 PM	7.84776	7.84828			N/A
5/10/2019	USDHKD.fx	3:30:00 PM	7.84784	7.84832			N/A
5/10/2019	USDHUF	9:30:00 AM	288.56	288.97			N/A
5/10/2019	USDHUF	11:30:00 AM	288.13	288.49			N/A
5/10/2019	USDHUF	1:30:00 PM	287.8	288.23			N/A
5/10/2019	USDHUF	3:30:00 PM	287.93	288.16			N/A
5/10/2019	USDHUF.fx	9:30:00 AM	288.76	288.757			N/A
5/10/2019	USDHUF.fx	11:30:00 AM	288.332	288.288			N/A
5/10/2019	USDHUF.fx	1:30:00 PM	288.005	288.025			N/A
5/10/2019	USDHUF.fx	3:30:00 PM	288.092	287.976			N/A
5/10/2019	USDINR	9:30:00 AM	64.91	74.88			N/A
5/10/2019	USDINR	11:30:00 AM	64.79	74.77			N/A
5/10/2019	USDINR	1:30:00 PM					N/A
5/10/2019	USDINR	3:30:00 PM					N/A
5/10/2019	USDJPY	9:30:00 AM	109.763	109.747			N/A
5/10/2019	USDJPY	11:30:00 AM	109.86	109.838			N/A
5/10/2019	USDJPY	1:30:00 PM	109.828	109.839			N/A
5/10/2019	USDJPY	3:30:00 PM	109.733	109.643			N/A



5/10/2019	USDJPY.fx	9:30:00 AM	109.769	109.74			N/A
5/10/2019	USDJPY.fx	11:30:00 AM	109.864	109.83			N/A
5/10/2019	USDJPY.fx	1:30:00 PM	109.833	109.831			N/A
5/10/2019	USDJPY.fx	3:30:00 PM	109.731	109.638			N/A
5/10/2019	USDMXN	9:30:00 AM	19.246	19.248			N/A
5/10/2019	USDMXN	11:30:00 AM	19.201	19.203			N/A
5/10/2019	USDMXN	1:30:00 PM	19.157	19.158			N/A
5/10/2019	USDMXN	3:30:00 PM	19.2	19.162			N/A
5/10/2019	USDMXN.f	9:30:00 AM	19.249	19.2447			N/A
5/10/2019	USDMXN.f	11:30:00 AM	19.2054	19.199			N/A
5/10/2019	USDMXN.f	1:30:00 PM	19.1614	19.1539			N/A
5/10/2019	USDMXN.f	3:30:00 PM	19.2031	19.1592			N/A
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5/10/2019	USDNOK.fx	3:30:00 PM	8.73885	8.73275			N/A
5/10/2019	USDPLN	9:30:00 AM	3.8285	3.8295			N/A
5/10/2019	USDPLN	11:30:00 AM	3.8282	3.828			N/A
5/10/2019	USDPLN	1:30:00 PM	3.8276	3.8285			N/A
5/10/2019	USDPLN	3:30:00 PM	3.8249	3.823			N/A
5/10/2019	USDPLN.fx	9:30:00 AM	3.82756	3.83041			N/A
5/10/2019	USDPLN.fx	11:30:00 AM	3.82738	3.82872			N/A
5/10/2019	USDPLN.fx	1:30:00 PM	3.82678	3.82922			N/A
5/10/2019	USDPLN.fx	3:30:00 PM	3.82365	3.82397			N/A
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5/10/2019	USDRUB	11:30:00 AM	64.986	65.369			N/A
5/10/2019	USDRUB	1:30:00 PM	64.977	65.359			N/A
5/10/2019	USDRUB	3:30:00 PM	65.132	65.462			N/A
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5/10/2019	USDSEK	11:30:00 AM	9.6272	9.6276			N/A

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5/10/2019	USDSEK	3:30:00 PM	9.6212	9.6172			N/A
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5/10/2019	USDSEK.fx	11:30:00 AM	9.62975	9.6258			N/A
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5/10/2019	USDSGD.fx	9:30:00 AM	1.36233	1.36274			N/A
5/10/2019	USDSGD.fx	11:30:00 AM	1.36219	1.36262			N/A
5/10/2019	USDSGD.fx	1:30:00 PM	1.36225	1.36265			N/A
5/10/2019	USDSGD.fx	3:30:00 PM	1.36253	1.36249			N/A
5/10/2019	USDZAR	9:30:00 AM	14.3042	14.3105			N/A
5/10/2019	USDZAR	11:30:00 AM	14.2448	14.2572			N/A
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5/10/2019	XAUUSD	11:30:00 AM	1284.79	1284.83			N/A
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5/10/2019	XAUUSD	3:30:00 PM	1287.93	1286.15			N/A
5/10/2019	ZARJPY	9:30:00 AM	7.66	7.67			N/A
5/10/2019	ZARJPY	11:30:00 AM	7.69	7.71			N/A
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5/10/2019	ZARJPY.fx	11:30:00 AM	7.708	7.707			N/A
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5/13/2019	AUDCAD	3:30:00 PM	0.93652	0.937			N/A
5/13/2019	AUDCAD.fx	9:30:00 AM	0.93745	0.93731			N/A
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5/13/2019	AUDCAD.fx	1:30:00 PM	0.9368	0.9368			N/A
5/13/2019	AUDCAD.fx	3:30:00 PM	0.93686	0.93663			N/A
5/13/2019	AUDCHF	9:30:00 AM	0.70433	0.70483			N/A
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5/13/2019	AUDCHF.fx	3:30:00 PM	0.70118	0.70108			N/A
5/13/2019	AUDCZK	9:30:00 AM	15.962	15.976			N/A
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5/13/2019	AUDHKD	11:30:00 AM	5.4703	5.4742			N/A
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5/13/2019	AUDHKD	3:30:00 PM	5.4678	5.4706			N/A
5/13/2019	AUDHUF	9:30:00 AM	200.73	200.9			N/A
5/13/2019	AUDHUF	11:30:00 AM	200.97	201.12			N/A
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5/13/2019	AUDJPY	1:30:00 PM	76.499	76.55			N/A
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5/13/2019	AUDJPY.fx	9:30:00 AM	76.532	76.511			N/A
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5/13/2019	AUDNOK	1:30:00 PM	6.0935	6.0979			N/A
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5/13/2019	AUDNOK.fx	9:30:00 AM	6.094	6.0944			N/A
5/13/2019	AUDNOK.fx	11:30:00 AM	6.0982	6.0989			N/A
5/13/2019	AUDNOK.fx	1:30:00 PM	6.0951	6.0962			N/A
5/13/2019	AUDNOK.fx	3:30:00 PM	6.0815	6.0826			N/A
5/13/2019	AUDNZD	9:30:00 AM	1.05968	1.06057			N/A
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5/13/2019	AUDNZD.fx	9:30:00 AM	1.06014	1.06013			N/A
5/13/2019	AUDNZD.fx	11:30:00 AM	1.05985	1.05982			N/A
5/13/2019	AUDNZD.fx	1:30:00 PM	1.05969	1.05972			N/A
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5/13/2019	AUDPLN	1:30:00 PM	2.6702	2.6733			N/A
5/13/2019	AUDPLN	3:30:00 PM	2.6657	2.668			N/A
5/13/2019	AUDSEK	9:30:00 AM	6.7196	6.722			N/A
5/13/2019	AUDSEK	11:30:00 AM	6.7256	6.728			N/A

5/13/2019	AUDSEK	1:30:00 PM	6.724	6.7261			N/A
5/13/2019	AUDSEK	3:30:00 PM	6.7113	6.7129			N/A
5/13/2019	AUDSEK.fx	9:30:00 AM	6.7153	6.7263			N/A
5/13/2019	AUDSEK.fx	11:30:00 AM	6.7209	6.7325			N/A
5/13/2019	AUDSEK.fx	1:30:00 PM	6.7195	6.7306			N/A
5/13/2019	AUDSEK.fx	3:30:00 PM	6.7068	6.7172			N/A
5/13/2019	AUDSGD	9:30:00 AM	0.9538	0.954			N/A
5/13/2019	AUDSGD	11:30:00 AM	0.9543	0.9546			N/A
5/13/2019	AUDSGD	1:30:00 PM	0.9543	0.9545			N/A
5/13/2019	AUDSGD	3:30:00 PM	0.9538	0.9539			N/A
5/13/2019	AUDSGD.fx	9:30:00 AM	0.95401	0.95387			N/A
5/13/2019	AUDSGD.fx	11:30:00 AM	0.95434	0.95445			N/A
5/13/2019	AUDSGD.fx	1:30:00 PM	0.95434	0.95433			N/A
5/13/2019	AUDSGD.fx	3:30:00 PM	0.95384	0.95375			N/A
5/13/2019	AUDUSD	9:30:00 AM	0.6974	0.69731			N/A
5/13/2019	AUDUSD	11:30:00 AM	0.69732	0.69744			N/A
5/13/2019	AUDUSD	1:30:00 PM	0.69775	0.69778			N/A
5/13/2019	AUDUSD	3:30:00 PM	0.69712	0.69703			N/A
5/13/2019	AUDUSD.fx	9:30:00 AM	0.69745	0.69725			N/A
5/13/2019	AUDUSD.fx	11:30:00 AM	0.69737	0.69738			N/A
5/13/2019	AUDUSD.fx	1:30:00 PM	0.6978	0.69772			N/A
5/13/2019	AUDUSD.fx	3:30:00 PM	0.69717	0.69698			N/A
5/13/2019	AUDZAR	9:30:00 AM	9.9212	9.9307			N/A
5/13/2019	AUDZAR	11:30:00 AM	9.951	9.9624			N/A
5/13/2019	AUDZAR	1:30:00 PM	9.9497	9.9611			N/A
5/13/2019	AUDZAR	3:30:00 PM	9.9623	9.9712			N/A
5/13/2019	AUS200.i	9:30:00 AM					N/A
5/13/2019	AUS200.i	11:30:00 AM	6296.63	6299.13			N/A
5/13/2019	AUS200.i	1:30:00 PM	6293.63	6297.13			N/A
5/13/2019	AUS200.i	3:30:00 PM	6280.63	6280.13			N/A
5/13/2019	BCHUSD	9:30:00 AM	370.61	371.98			N/A
5/13/2019	BCHUSD	11:30:00 AM	363.18	364.53			N/A
5/13/2019	BCHUSD	1:30:00 PM	364.47	366.47			N/A
5/13/2019	BCHUSD	3:30:00 PM	376.41	377.62			N/A

5/13/2019	CADCHF	9:30:00 AM	0.75135	0.75197			N/A
5/13/2019	CADCHF	11:30:00 AM	0.75104	0.75173			N/A
5/13/2019	CADCHF	1:30:00 PM	0.75071	0.75137			N/A
5/13/2019	CADCHF	3:30:00 PM	0.74817	0.74862			N/A
5/13/2019	CADCHF.fx	9:30:00 AM	0.75169	0.75162			N/A
5/13/2019	CADCHF.fx	11:30:00 AM	0.75139	0.75138			N/A
5/13/2019	CADCHF.fx	1:30:00 PM	0.75106	0.75101			N/A
5/13/2019	CADCHF.fx	3:30:00 PM	0.74851	0.74827			N/A
5/13/2019	CADCZK	9:30:00 AM	17.03	17.045			N/A
5/13/2019	CADCZK	11:30:00 AM	17.058	17.075			N/A
5/13/2019	CADCZK	1:30:00 PM	17.061	17.078			N/A
5/13/2019	CADCZK	3:30:00 PM	17.035	17.048			N/A
5/13/2019	CADDDKK	9:30:00 AM	4.943	4.946			N/A
5/13/2019	CADDDKK	11:30:00 AM					N/A
5/13/2019	CADDDKK	1:30:00 PM	4.948	4.951			N/A
5/13/2019	CADDDKK	3:30:00 PM	4.938	4.94			N/A
5/13/2019	CADHKD	9:30:00 AM	5.8361	5.8401			N/A
5/13/2019	CADHKD	11:30:00 AM	5.8402	5.8438			N/A
5/13/2019	CADHKD	1:30:00 PM	5.8435	5.8469			N/A
5/13/2019	CADHKD	3:30:00 PM	5.8381	5.8418			N/A
5/13/2019	CADHUF	9:30:00 AM	214.19	214.33			N/A
5/13/2019	CADHUF	11:30:00 AM	214.57	214.69			N/A
5/13/2019	CADHUF	1:30:00 PM	214.7	214.84			N/A
5/13/2019	CADHUF	3:30:00 PM	213.9	213.89			N/A
5/13/2019	CADJPY	9:30:00 AM	81.599	81.665			N/A
5/13/2019	CADJPY	11:30:00 AM	81.628	81.674			N/A
5/13/2019	CADJPY	1:30:00 PM	81.659	81.714			N/A
5/13/2019	CADJPY	3:30:00 PM	81.279	81.308			N/A
5/13/2019	CADJPY.fx	9:30:00 AM	81.632	81.632			N/A
5/13/2019	CADJPY.fx	11:30:00 AM	81.66	81.639			N/A
5/13/2019	CADJPY.fx	1:30:00 PM	81.694	81.678			N/A
5/13/2019	CADJPY.fx	3:30:00 PM	81.312	81.273			N/A
5/13/2019	CADMXN	9:30:00 AM	14.263	14.2691			N/A
5/13/2019	CADMXN	11:30:00 AM	14.2931	14.3036			N/A

5/13/2019	CADMXN	1:30:00 PM	14.2945	14.3055			N/A
5/13/2019	CADMXN	3:30:00 PM	14.3013	14.3108			N/A
5/13/2019	CADNOK	9:30:00 AM	6.498	6.5027			N/A
5/13/2019	CADNOK	11:30:00 AM	6.5069	6.511			N/A
5/13/2019	CADNOK	1:30:00 PM	6.5034	6.5078			N/A
5/13/2019	CADNOK	3:30:00 PM	6.4901	6.4928			N/A
5/13/2019	CADPLN	9:30:00 AM	2.8472	2.8491			N/A
5/13/2019	CADPLN	11:30:00 AM	2.851	2.853			N/A
5/13/2019	CADPLN	1:30:00 PM	2.8508	2.8526			N/A
5/13/2019	CADPLN	3:30:00 PM	2.8462	2.8479			N/A
5/13/2019	CADSEK	9:30:00 AM	7.1664	7.1703			N/A
5/13/2019	CADSEK	11:30:00 AM	7.1775	7.1814			N/A
5/13/2019	CADSEK	1:30:00 PM	7.1764	7.1788			N/A
5/13/2019	CADSEK	3:30:00 PM	7.1649	7.1675			N/A
5/13/2019	CADSGD	9:30:00 AM	1.0168	1.0171			N/A
5/13/2019	CADSGD	11:30:00 AM	1.0179	1.0182			N/A
5/13/2019	CADSGD	1:30:00 PM	1.018	1.0183			N/A
5/13/2019	CADSGD	3:30:00 PM	1.0174	1.0177			N/A
5/13/2019	CADZAR	9:30:00 AM	10.5852	10.5972			N/A
5/13/2019	CADZAR	11:30:00 AM	10.6246	10.6374			N/A
5/13/2019	CADZAR	1:30:00 PM	10.6225	10.6345			N/A
5/13/2019	CADZAR	3:30:00 PM	10.6365	10.6476			N/A
5/13/2019	CHFCZK	9:30:00 AM	22.661	22.675			N/A
5/13/2019	CHFCZK	11:30:00 AM	22.713	22.722			N/A
5/13/2019	CHFCZK	1:30:00 PM	22.722	22.738			N/A
5/13/2019	CHFCZK	3:30:00 PM	22.762	22.773			N/A
5/13/2019	CHFDKK	9:30:00 AM	6.576	6.578			N/A
5/13/2019	CHFDKK	11:30:00 AM	6.584	6.587			N/A
5/13/2019	CHFDKK	1:30:00 PM					N/A
5/13/2019	CHFDKK	3:30:00 PM	6.598	6.6			N/A
5/13/2019	CHFDKK.fx	9:30:00 AM	6.5744	6.5797			N/A
5/13/2019	CHFDKK.fx	11:30:00 AM	6.5825	6.5879			N/A
5/13/2019	CHFDKK.fx	1:30:00 PM	6.5859	6.5921			N/A
5/13/2019	CHFDKK.fx	3:30:00 PM	6.5965	6.601			N/A

5/13/2019	CHFHKD	9:30:00 AM	7.7652	7.7681			N/A
5/13/2019	CHFHKD	11:30:00 AM	7.7742	7.7775			N/A
5/13/2019	CHFHKD	1:30:00 PM	7.7814	7.7853			N/A
5/13/2019	CHFHKD	3:30:00 PM	7.802	7.8043			N/A
5/13/2019	CHFHUF	9:30:00 AM	284.88	285.23			N/A
5/13/2019	CHFHUF	11:30:00 AM	285.54	285.81			N/A
5/13/2019	CHFHUF	1:30:00 PM	285.8	286.17			N/A
5/13/2019	CHFHUF	3:30:00 PM	285.73	285.83			N/A
5/13/2019	CHFJPY	9:30:00 AM	108.574	108.624			N/A
5/13/2019	CHFJPY	11:30:00 AM	108.646	108.681			N/A
5/13/2019	CHFJPY	1:30:00 PM	108.732	108.797			N/A
5/13/2019	CHFJPY	3:30:00 PM	108.601	108.638			N/A
5/13/2019	CHFJPY.fx	9:30:00 AM	108.607	108.59			N/A
5/13/2019	CHFJPY.fx	11:30:00 AM	108.679	108.647			N/A
5/13/2019	CHFJPY.fx	1:30:00 PM	108.766	108.763			N/A
5/13/2019	CHFJPY.fx	3:30:00 PM	108.633	108.603			N/A
5/13/2019	CHFMXN	9:30:00 AM	18.977	18.9844			N/A
5/13/2019	CHFMXN	11:30:00 AM	19.0237	19.0376			N/A
5/13/2019	CHFMXN	1:30:00 PM	19.0349	19.0489			N/A
5/13/2019	CHFMXN	3:30:00 PM	19.1099	19.1181			N/A
5/13/2019	CHFNOK	9:30:00 AM	8.6453	8.6526			N/A
5/13/2019	CHFNOK	11:30:00 AM	8.6606	8.6672			N/A
5/13/2019	CHFNOK	1:30:00 PM	8.6599	8.6663			N/A
5/13/2019	CHFNOK	3:30:00 PM	8.6722	8.6777			N/A
5/13/2019	CHFNOK.fx	9:30:00 AM	8.64869	8.64934			N/A
5/13/2019	CHFNOK.fx	11:30:00 AM	8.6641	8.66371			N/A
5/13/2019	CHFNOK.fx	1:30:00 PM	8.66343	8.66272			N/A
5/13/2019	CHFNOK.fx	3:30:00 PM	8.67576	8.67416			N/A
5/13/2019	CHFPLN	9:30:00 AM	3.7878	3.7904			N/A
5/13/2019	CHFPLN	11:30:00 AM	3.7943	3.7971			N/A
5/13/2019	CHFPLN	1:30:00 PM	3.7957	3.7986			N/A
5/13/2019	CHFPLN	3:30:00 PM	3.8032	3.8047			N/A
5/13/2019	CHFPLN.fx	9:30:00 AM	3.78536	3.79271			N/A
5/13/2019	CHFPLN.fx	11:30:00 AM	3.79194	3.79944			N/A

5/13/2019	CHFPLN.fx	1:30:00 PM	3.79326	3.80085			N/A
5/13/2019	CHFPLN.fx	3:30:00 PM	3.80084	3.80695			N/A
5/13/2019	CHFSEK	9:30:00 AM	9.5353	9.5386			N/A
5/13/2019	CHFSEK	11:30:00 AM	9.5537	9.5574			N/A
5/13/2019	CHFSEK	1:30:00 PM	9.556	9.5591			N/A
5/13/2019	CHFSEK	3:30:00 PM	9.5729	9.5744			N/A
5/13/2019	CHFSGD	9:30:00 AM	1.3538	1.354			N/A
5/13/2019	CHFSGD	11:30:00 AM	1.3557	1.356			N/A
5/13/2019	CHFSGD	1:30:00 PM	1.3563	1.3564			N/A
5/13/2019	CHFSGD	3:30:00 PM	1.3605	1.3605			N/A
5/13/2019	CHFSGD.fx	9:30:00 AM	1.35393	1.35378			N/A
5/13/2019	CHFSGD.fx	11:30:00 AM	1.35588	1.35583			N/A
5/13/2019	CHFSGD.fx	1:30:00 PM	1.35633	1.35647			N/A
5/13/2019	CHFSGD.fx	3:30:00 PM	1.3607	1.36026			N/A
5/13/2019	CHFZAR	9:30:00 AM	14.0888	14.096			N/A
5/13/2019	CHFZAR	11:30:00 AM	14.1449	14.1529			N/A
5/13/2019	CHFZAR	1:30:00 PM	14.1493	14.1547			N/A
5/13/2019	CHFZAR	3:30:00 PM	14.2164	14.2199			N/A
5/13/2019	CZKJPY	9:30:00 AM	4.791	4.794			N/A
5/13/2019	CZKJPY	11:30:00 AM	4.784	4.786			N/A
5/13/2019	CZKJPY	1:30:00 PM	4.785	4.788			N/A
5/13/2019	CZKJPY	3:30:00 PM	4.77	4.774			N/A
5/13/2019	DAX30.i	9:30:00 AM	12081.35	12077.6			N/A
5/13/2019	DAX30.i	11:30:00 AM	11967.1	11959.35			N/A
5/13/2019	DAX30.i	1:30:00 PM	11968.6	11964.35			N/A
5/13/2019	DAX30.i	3:30:00 PM	11888.1	11875.25			N/A
5/13/2019	DJ30.i	9:30:00 AM					N/A
5/13/2019	DJ30.i	11:30:00 AM					N/A
5/13/2019	DJ30.i	1:30:00 PM					N/A
5/13/2019	DJ30.i	3:30:00 PM					N/A
5/13/2019	DKKJPY	9:30:00 AM					N/A
5/13/2019	DKKJPY	11:30:00 AM	16.51	16.52			N/A
5/13/2019	DKKJPY	1:30:00 PM					N/A
5/13/2019	DKKJPY	3:30:00 PM	16.47	16.48			N/A

5/13/2019	EURAUD	9:30:00 AM	1.61052	1.61033			N/A
5/13/2019	EURAUD	11:30:00 AM	1.60985	1.61028			N/A
5/13/2019	EURAUD	1:30:00 PM	1.60979	1.61006			N/A
5/13/2019	EURAUD	3:30:00 PM	1.61324	1.6134			N/A
5/13/2019	EURAUD.fx	9:30:00 AM	1.61072	1.61011			N/A
5/13/2019	EURAUD.fx	11:30:00 AM	1.61006	1.61006			N/A
5/13/2019	EURAUD.fx	1:30:00 PM	1.60999	1.60984			N/A
5/13/2019	EURAUD.fx	3:30:00 PM	1.61343	1.61319			N/A
5/13/2019	EURCAD	9:30:00 AM	1.50986	1.5105			N/A
5/13/2019	EURCAD	11:30:00 AM	1.50841	1.50926			N/A
5/13/2019	EURCAD	1:30:00 PM	1.50834	1.50912			N/A
5/13/2019	EURCAD	3:30:00 PM	1.51163	1.51213			N/A
5/13/2019	EURCAD.fx	9:30:00 AM	1.51027	1.51012			N/A
5/13/2019	EURCAD.fx	11:30:00 AM	1.50883	1.50884			N/A
5/13/2019	EURCAD.fx	1:30:00 PM	1.50876	1.50869			N/A
5/13/2019	EURCAD.fx	3:30:00 PM	1.51205	1.51172			N/A
5/13/2019	EURCHF	9:30:00 AM	1.13521	1.13517			N/A
5/13/2019	EURCHF	11:30:00 AM	1.13373	1.13372			N/A
5/13/2019	EURCHF	1:30:00 PM	1.13307	1.13319			N/A
5/13/2019	EURCHF	3:30:00 PM	1.13161	1.13145			N/A
5/13/2019	EURCHF.fx	9:30:00 AM	1.13526	1.13511			N/A
5/13/2019	EURCHF.fx	11:30:00 AM	1.1338	1.13366			N/A
5/13/2019	EURCHF.fx	1:30:00 PM	1.13313	1.13313			N/A
5/13/2019	EURCHF.fx	3:30:00 PM	1.13168	1.13139			N/A
5/13/2019	EURCZK	9:30:00 AM	25.709	25.744			N/A
5/13/2019	EURCZK	11:30:00 AM	25.735	25.767			N/A
5/13/2019	EURCZK	1:30:00 PM	25.732	25.771			N/A
5/13/2019	EURCZK	3:30:00 PM	25.739	25.776			N/A
5/13/2019	EURDKK	9:30:00 AM	7.4651	7.4658			N/A
5/13/2019	EURDKK	11:30:00 AM	7.4651	7.4662			N/A
5/13/2019	EURDKK	1:30:00 PM	7.465	7.4657			N/A
5/13/2019	EURDKK	3:30:00 PM	7.4661	7.4663			N/A
5/13/2019	EURGBP	9:30:00 AM	0.86336	0.8633			N/A
5/13/2019	EURGBP	11:30:00 AM	0.86327	0.86336			N/A

5/13/2019	EURGBP	1:30:00 PM	0.86282	0.86281			N/A
5/13/2019	EURGBP	3:30:00 PM	0.86353	0.86344			N/A
5/13/2019	EURGBP.fx	9:30:00 AM	0.8634	0.86325			N/A
5/13/2019	EURGBP.fx	11:30:00 AM	0.86332	0.86331			N/A
5/13/2019	EURGBP.fx	1:30:00 PM	0.86286	0.86275			N/A
5/13/2019	EURGBP.fx	3:30:00 PM	0.86357	0.8634			N/A
5/13/2019	EURHKD	9:30:00 AM	8.8146	8.8191			N/A
5/13/2019	EURHKD	11:30:00 AM	8.8132	8.8187			N/A
5/13/2019	EURHKD	1:30:00 PM	8.8174	8.8226			N/A
5/13/2019	EURHKD	3:30:00 PM	8.8289	8.8316			N/A
5/13/2019	EURHKD.fx	9:30:00 AM	8.81733	8.81632			N/A
5/13/2019	EURHKD.fx	11:30:00 AM	8.81602	8.8159			N/A
5/13/2019	EURHKD.fx	1:30:00 PM	8.82018	8.8197			N/A
5/13/2019	EURHKD.fx	3:30:00 PM	8.83169	8.82887			N/A
5/13/2019	EURHUF	9:30:00 AM	323.29	323.93			N/A
5/13/2019	EURHUF	11:30:00 AM	323.65	324.27			N/A
5/13/2019	EURHUF	1:30:00 PM	323.78	324.51			N/A
5/13/2019	EURHUF	3:30:00 PM	323.23	323.87			N/A
5/13/2019	EURHUF.fx	9:30:00 AM	323.557	323.718			N/A
5/13/2019	EURHUF.fx	11:30:00 AM	323.939	324.014			N/A
5/13/2019	EURHUF.fx	1:30:00 PM	324.049	324.228			N/A
5/13/2019	EURHUF.fx	3:30:00 PM	323.493	323.646			N/A
5/13/2019	EURJPY	9:30:00 AM	123.282	123.281			N/A
5/13/2019	EURJPY	11:30:00 AM	123.209	123.184			N/A
5/13/2019	EURJPY	1:30:00 PM	123.246	123.241			N/A
5/13/2019	EURJPY	3:30:00 PM	122.925	122.896			N/A
5/13/2019	EURJPY.fx	9:30:00 AM	123.284	123.276			N/A
5/13/2019	EURJPY.fx	11:30:00 AM	123.211	123.18			N/A
5/13/2019	EURJPY.fx	1:30:00 PM	123.249	123.238			N/A
5/13/2019	EURJPY.fx	3:30:00 PM	122.927	122.893			N/A
5/13/2019	EURMXN	9:30:00 AM	21.5439	21.5487			N/A
5/13/2019	EURMXN	11:30:00 AM	21.5688	21.5856			N/A
5/13/2019	EURMXN	1:30:00 PM	21.5691	21.5873			N/A
5/13/2019	EURMXN	3:30:00 PM	21.6238	21.6331			N/A



5/13/2019	EURMXN.fx	9:30:00 AM	21.5527	21.5402			N/A
5/13/2019	EURMXN.fx	11:30:00 AM	21.5768	21.5776			N/A
5/13/2019	EURMXN.fx	1:30:00 PM	21.577	21.5793			N/A
5/13/2019	EURMXN.fx	3:30:00 PM	21.6332	21.6234			N/A
5/13/2019	EURNOK	9:30:00 AM	9.812	9.8239			N/A
5/13/2019	EURNOK	11:30:00 AM	9.8176	9.8274			N/A
5/13/2019	EURNOK	1:30:00 PM	9.8112	9.8216			N/A
5/13/2019	EURNOK	3:30:00 PM	9.812	9.8217			N/A
5/13/2019	EURNOK.fx	9:30:00 AM	9.81718	9.8187			N/A
5/13/2019	EURNOK.fx	11:30:00 AM	9.82301	9.82198			N/A
5/13/2019	EURNOK.fx	1:30:00 PM	9.8167	9.81616			N/A
5/13/2019	EURNOK.fx	3:30:00 PM	9.81754	9.81616			N/A
5/13/2019	EURNZD	9:30:00 AM	1.70777	1.7079			N/A
5/13/2019	EURNZD	11:30:00 AM	1.70664	1.70739			N/A
5/13/2019	EURNZD	1:30:00 PM	1.70632	1.70703			N/A
5/13/2019	EURNZD	3:30:00 PM	1.70786	1.7086			N/A
5/13/2019	EURNZD.fx	9:30:00 AM	1.7082	1.70749			N/A
5/13/2019	EURNZD.fx	11:30:00 AM	1.70705	1.70698			N/A
5/13/2019	EURNZD.fx	1:30:00 PM	1.70674	1.70661			N/A
5/13/2019	EURNZD.fx	3:30:00 PM	1.70828	1.70817			N/A
5/13/2019	EURPLN	9:30:00 AM	4.2998	4.3026			N/A
5/13/2019	EURPLN	11:30:00 AM	4.3017	4.3048			N/A
5/13/2019	EURPLN	1:30:00 PM	4.3009	4.3035			N/A
5/13/2019	EURPLN	3:30:00 PM	4.3029	4.3051			N/A
5/13/2019	EURPLN.fx	9:30:00 AM	4.29898	4.30338			N/A
5/13/2019	EURPLN.fx	11:30:00 AM	4.30107	4.30562			N/A
5/13/2019	EURPLN.fx	1:30:00 PM	4.30027	4.30472			N/A
5/13/2019	EURPLN.fx	3:30:00 PM	4.30222	4.30552			N/A
5/13/2019	EURRUB	9:30:00 AM					N/A
5/13/2019	EURRUB	11:30:00 AM	73.148	73.567			N/A
5/13/2019	EURRUB	1:30:00 PM	73.001	73.445			N/A
5/13/2019	EURRUB	3:30:00 PM	73.263	73.687			N/A
5/13/2019	EURSEK	9:30:00 AM	10.8268	10.8291			N/A
5/13/2019	EURSEK	11:30:00 AM	10.8328	10.836			N/A

5/13/2019	EURSEK	1:30:00 PM	10.8287	10.8323			N/A
5/13/2019	EURSEK	3:30:00 PM	10.8327	10.8337			N/A
5/13/2019	EURSEK.fx	9:30:00 AM	10.82835	10.82725			N/A
5/13/2019	EURSEK.fx	11:30:00 AM	10.83437	10.83432			N/A
5/13/2019	EURSEK.fx	1:30:00 PM	10.83057	10.83042			N/A
5/13/2019	EURSEK.fx	3:30:00 PM	10.83448	10.83177			N/A
5/13/2019	EURSGD	9:30:00 AM	1.5365	1.5372			N/A
5/13/2019	EURSGD	11:30:00 AM	1.5368	1.5376			N/A
5/13/2019	EURSGD	1:30:00 PM	1.5366	1.5374			N/A
5/13/2019	EURSGD	3:30:00 PM	1.5391	1.5397			N/A
5/13/2019	EURSGD.fx	9:30:00 AM	1.53687	1.53682			N/A
5/13/2019	EURSGD.fx	11:30:00 AM	1.53714	1.53722			N/A
5/13/2019	EURSGD.fx	1:30:00 PM	1.53692	1.53702			N/A
5/13/2019	EURSGD.fx	3:30:00 PM	1.53948	1.53927			N/A
5/13/2019	EURUSD	9:30:00 AM	1.12328	1.12331			N/A
5/13/2019	EURUSD	11:30:00 AM	1.12303	1.12314			N/A
5/13/2019	EURUSD	1:30:00 PM	1.12357	1.12367			N/A
5/13/2019	EURUSD	3:30:00 PM	1.12501	1.12478			N/A
5/13/2019	EURUSD.fx	9:30:00 AM	1.12348	1.1234			N/A
5/13/2019	EURUSD.fx	11:30:00 AM	1.12323	1.12323			N/A
5/13/2019	EURUSD.fx	1:30:00 PM	1.12377	1.12376			N/A
5/13/2019	EURUSD.fx	3:30:00 PM	1.12521	1.12487			N/A
5/13/2019	EURZAR	9:30:00 AM	15.9926	16.0042			N/A
5/13/2019	EURZAR	11:30:00 AM	16.0378	16.0485			N/A
5/13/2019	EURZAR	1:30:00 PM	16.0329	16.0435			N/A
5/13/2019	EURZAR	3:30:00 PM	16.0927	16.1007			N/A
5/13/2019	EURZAR.fx	9:30:00 AM	15.99243	16.00487			N/A
5/13/2019	EURZAR.fx	11:30:00 AM	16.03769	16.04875			N/A
5/13/2019	EURZAR.fx	1:30:00 PM	16.03234	16.04424			N/A
5/13/2019	EURZAR.fx	3:30:00 PM	16.09195	16.10137			N/A
5/13/2019	GBPAUD	9:30:00 AM	1.86592	1.86633			N/A
5/13/2019	GBPAUD	11:30:00 AM	1.86523	1.86608			N/A
5/13/2019	GBPAUD	1:30:00 PM	1.86628	1.86675			N/A
5/13/2019	GBPAUD	3:30:00 PM	1.86895	1.86923			N/A

5/13/2019	GBPAUD.fx	9:30:00 AM	1.86633	1.86592			N/A
5/13/2019	GBPAUD.fx	11:30:00 AM	1.86563	1.86567			N/A
5/13/2019	GBPAUD.fx	1:30:00 PM	1.86666	1.86635			N/A
5/13/2019	GBPAUD.fx	3:30:00 PM	1.86935	1.86882			N/A
5/13/2019	GBPCAD	9:30:00 AM	1.74893	1.74956			N/A
5/13/2019	GBPCAD	11:30:00 AM	1.74742	1.74811			N/A
5/13/2019	GBPCAD	1:30:00 PM	1.74837	1.74886			N/A
5/13/2019	GBPCAD	3:30:00 PM	1.75063	1.75122			N/A
5/13/2019	GBPCAD.fx	9:30:00 AM	1.74932	1.74916			N/A
5/13/2019	GBPCAD.fx	11:30:00 AM	1.7478	1.74771			N/A
5/13/2019	GBPCAD.fx	1:30:00 PM	1.74875	1.74846			N/A
5/13/2019	GBPCAD.fx	3:30:00 PM	1.75103	1.75083			N/A
5/13/2019	GBPCHF	9:30:00 AM	1.31469	1.31503			N/A
5/13/2019	GBPCHF	11:30:00 AM	1.3131	1.31338			N/A
5/13/2019	GBPCHF	1:30:00 PM	1.31319	1.31341			N/A
5/13/2019	GBPCHF	3:30:00 PM	1.31042	1.31032			N/A
5/13/2019	GBPCHF.fx	9:30:00 AM	1.31488	1.31482			N/A
5/13/2019	GBPCHF.fx	11:30:00 AM	1.31328	1.31316			N/A
5/13/2019	GBPCHF.fx	1:30:00 PM	1.31337	1.31319			N/A
5/13/2019	GBPCHF.fx	3:30:00 PM	1.31063	1.3101			N/A
5/13/2019	GBPCZK	9:30:00 AM	29.79	29.81			N/A
5/13/2019	GBPCZK	11:30:00 AM	29.823	29.834			N/A
5/13/2019	GBPCZK	1:30:00 PM	29.836	29.854			N/A
5/13/2019	GBPCZK	3:30:00 PM	29.823	29.839			N/A
5/13/2019	GBPDKK	9:30:00 AM	8.642	8.653			N/A
5/13/2019	GBPDKK	11:30:00 AM	8.643	8.654			N/A
5/13/2019	GBPDKK	1:30:00 PM	8.649	8.659			N/A
5/13/2019	GBPDKK	3:30:00 PM	8.644	8.652			N/A
5/13/2019	GBPDKK.fx	9:30:00 AM	8.6423	8.6538			N/A
5/13/2019	GBPDKK.fx	11:30:00 AM	8.6417	8.6544			N/A
5/13/2019	GBPDKK.fx	1:30:00 PM	8.6476	8.6591			N/A
5/13/2019	GBPDKK.fx	3:30:00 PM	8.6421	8.6528			N/A
5/13/2019	GBPHKD	9:30:00 AM	10.2086	10.2123			N/A
5/13/2019	GBPHKD	11:30:00 AM	10.2069	10.2123			N/A

5/13/2019	GBPHKD	1:30:00 PM	10.2179	10.2214			N/A
5/13/2019	GBPHKD	3:30:00 PM	10.2207	10.2248			N/A
5/13/2019	GBPHUF	9:30:00 AM	374.55	374.94			N/A
5/13/2019	GBPHUF	11:30:00 AM	374.95	375.27			N/A
5/13/2019	GBPHUF	1:30:00 PM	375.31	375.71			N/A
5/13/2019	GBPHUF	3:30:00 PM	374.31	374.49			N/A
5/13/2019	GBPJPY	9:30:00 AM	142.785	142.801			N/A
5/13/2019	GBPJPY	11:30:00 AM	142.7	142.705			N/A
5/13/2019	GBPJPY	1:30:00 PM	142.84	142.839			N/A
5/13/2019	GBPJPY	3:30:00 PM	142.353	142.34			N/A
5/13/2019	GBPJPY.fx	9:30:00 AM	142.805	142.781			N/A
5/13/2019	GBPJPY.fx	11:30:00 AM	142.72	142.684			N/A
5/13/2019	GBPJPY.fx	1:30:00 PM	142.859	142.819			N/A
5/13/2019	GBPJPY.fx	3:30:00 PM	142.373	142.32			N/A
5/13/2019	GBPMXN	9:30:00 AM	24.9493	24.9532			N/A
5/13/2019	GBPMXN	11:30:00 AM	24.9805	24.993			N/A
5/13/2019	GBPMXN	1:30:00 PM	24.9948	25.0066			N/A
5/13/2019	GBPMXN	3:30:00 PM	25.0359	25.0462			N/A
5/13/2019	GBPNOK	9:30:00 AM	11.3671	11.3775			N/A
5/13/2019	GBPNOK	11:30:00 AM	11.3735	11.3823			N/A
5/13/2019	GBPNOK	1:30:00 PM	11.3733	11.3823			N/A
5/13/2019	GBPNOK	3:30:00 PM	11.3641	11.3725			N/A
5/13/2019	GBPNOK.fx	9:30:00 AM	11.37149	11.37307			N/A
5/13/2019	GBPNOK.fx	11:30:00 AM	11.37832	11.37745			N/A
5/13/2019	GBPNOK.fx	1:30:00 PM	11.37829	11.37739			N/A
5/13/2019	GBPNOK.fx	3:30:00 PM	11.36914	11.36742			N/A
5/13/2019	GBPNZD	9:30:00 AM	1.97814	1.97848			N/A
5/13/2019	GBPNZD	11:30:00 AM	1.97695	1.9776			N/A
5/13/2019	GBPNZD	1:30:00 PM	1.97772	1.97815			N/A
5/13/2019	GBPNZD	3:30:00 PM	1.97817	1.97836			N/A
5/13/2019	GBPNZD.fx	9:30:00 AM	1.9785	1.9781			N/A
5/13/2019	GBPNZD.fx	11:30:00 AM	1.97731	1.97722			N/A
5/13/2019	GBPNZD.fx	1:30:00 PM	1.97807	1.97778			N/A
5/13/2019	GBPNZD.fx	3:30:00 PM	1.97852	1.97799			N/A

5/13/2019	GBPPLN	9:30:00 AM	4.9816	4.9827			N/A
5/13/2019	GBPPLN	11:30:00 AM	4.9836	4.9854			N/A
5/13/2019	GBPPLN	1:30:00 PM	4.986	4.9872			N/A
5/13/2019	GBPPLN	3:30:00 PM	4.9839	4.9855			N/A
5/13/2019	GBPPLN.fx	9:30:00 AM	4.97926	4.9849			N/A
5/13/2019	GBPPLN.fx	11:30:00 AM	4.98146	4.98754			N/A
5/13/2019	GBPPLN.fx	1:30:00 PM	4.98392	4.98953			N/A
5/13/2019	GBPPLN.fx	3:30:00 PM	4.98189	4.98754			N/A
5/13/2019	GBPSEK	9:30:00 AM	12.5376	12.5462			N/A
5/13/2019	GBPSEK	11:30:00 AM	12.5459	12.5536			N/A
5/13/2019	GBPSEK	1:30:00 PM	12.5497	12.5558			N/A
5/13/2019	GBPSEK	3:30:00 PM	12.5427	12.5499			N/A
5/13/2019	GBPSEK.fx	9:30:00 AM	12.53378	12.54984			N/A
5/13/2019	GBPSEK.fx	11:30:00 AM	12.54223	12.55708			N/A
5/13/2019	GBPSEK.fx	1:30:00 PM	12.54603	12.55937			N/A
5/13/2019	GBPSEK.fx	3:30:00 PM	12.53917	12.55329			N/A
5/13/2019	GBPSGD	9:30:00 AM	1.7798	1.7804			N/A
5/13/2019	GBPSGD	11:30:00 AM	1.7803	1.781			N/A
5/13/2019	GBPSGD	1:30:00 PM	1.7812	1.7816			N/A
5/13/2019	GBPSGD	3:30:00 PM	1.7825	1.7832			N/A
5/13/2019	GBPSGD.fx	9:30:00 AM	1.77802	1.78218			N/A
5/13/2019	GBPSGD.fx	11:30:00 AM	1.77842	1.7828			N/A
5/13/2019	GBPSGD.fx	1:30:00 PM	1.77933	1.78345			N/A
5/13/2019	GBPSGD.fx	3:30:00 PM	1.78063	1.78499			N/A
5/13/2019	GBPUSD	9:30:00 AM	1.30138	1.30117			N/A
5/13/2019	GBPUSD	11:30:00 AM	1.30108	1.30107			N/A
5/13/2019	GBPUSD	1:30:00 PM	1.30255	1.30235			N/A
5/13/2019	GBPUSD	3:30:00 PM	1.3029	1.30292			N/A
5/13/2019	GBPUSD.fx	9:30:00 AM	1.30145	1.30112			N/A
5/13/2019	GBPUSD.fx	11:30:00 AM	1.30113	1.30101			N/A
5/13/2019	GBPUSD.fx	1:30:00 PM	1.30259	1.30229			N/A
5/13/2019	GBPUSD.fx	3:30:00 PM	1.30295	1.30286			N/A
5/13/2019	GBPZAR	9:30:00 AM	18.5205	18.5405			N/A
5/13/2019	GBPZAR	11:30:00 AM	18.5731	18.5923			N/A

5/13/2019	GBPZAR	1:30:00 PM	18.5767	18.597			N/A
5/13/2019	GBPZAR	3:30:00 PM	18.6323	18.6513			N/A
5/13/2019	GBPZAR.fx	9:30:00 AM	18.5283	18.5334			N/A
5/13/2019	GBPZAR.fx	11:30:00 AM	18.5807	18.5848			N/A
5/13/2019	GBPZAR.fx	1:30:00 PM	18.5839	18.5893			N/A
5/13/2019	GBPZAR.fx	3:30:00 PM	18.6391	18.6444			N/A
5/13/2019	GOLD	9:30:00 AM	1283.36	1283.41			N/A
5/13/2019	GOLD	11:30:00 AM	1283.03	1283.1			N/A
5/13/2019	GOLD	1:30:00 PM	1283.62	1283.96			N/A
5/13/2019	GOLD	3:30:00 PM	1287.56	1287.29			N/A
5/13/2019	HKDJPY	9:30:00 AM					N/A
5/13/2019	HKDJPY	11:30:00 AM	13.97	13.98			N/A
5/13/2019	HKDJPY	1:30:00 PM					N/A
5/13/2019	HKDJPY	3:30:00 PM	13.92	13.93			N/A
5/13/2019	HKDJPY.fx	9:30:00 AM	13.978	13.985			N/A
5/13/2019	HKDJPY.fx	11:30:00 AM	13.972	13.975			N/A
5/13/2019	HKDJPY.fx	1:30:00 PM	13.969	13.976			N/A
5/13/2019	HKDJPY.fx	3:30:00 PM	13.918	13.919			N/A
5/13/2019	HUFJPY	9:30:00 AM	0.3812	0.3815			N/A
5/13/2019	HUFJPY	11:30:00 AM	0.3802	0.3805			N/A
5/13/2019	HUFJPY	1:30:00 PM	0.3804	0.3807			N/A
5/13/2019	HUFJPY	3:30:00 PM	0.3802	0.3806			N/A
5/13/2019	JP225.i	9:30:00 AM	21198.92	21213.92			N/A
5/13/2019	JP225.i	11:30:00 AM	21108.92	21123.92			N/A
5/13/2019	JP225.i	1:30:00 PM	21113.92	21123.92			N/A
5/13/2019	JP225.i	3:30:00 PM	20958.92	20953.92			N/A
5/13/2019	MXNJPY	9:30:00 AM	5.72	5.73			N/A
5/13/2019	MXNJPY	11:30:00 AM	5.71	5.72			N/A
5/13/2019	MXNJPY	1:30:00 PM					N/A
5/13/2019	MXNJPY	3:30:00 PM	5.68	5.69			N/A
5/13/2019	NASDAQ.i	9:30:00 AM					N/A
5/13/2019	NASDAQ.i	11:30:00 AM					N/A
5/13/2019	NASDAQ.i	1:30:00 PM					N/A
5/13/2019	NASDAQ.i	3:30:00 PM					N/A

5/13/2019	NOKJPY	9:30:00 AM	12.55	12.58			N/A
5/13/2019	NOKJPY	11:30:00 AM	12.53	12.56			N/A
5/13/2019	NOKJPY	1:30:00 PM	12.54	12.57			N/A
5/13/2019	NOKJPY	3:30:00 PM	12.51	12.54			N/A
5/13/2019	NOKJPY.fx	9:30:00 AM	12.553	12.56			N/A
5/13/2019	NOKJPY.fx	11:30:00 AM	12.541	12.543			N/A
5/13/2019	NOKJPY.fx	1:30:00 PM	12.553	12.557			N/A
5/13/2019	NOKJPY.fx	3:30:00 PM	12.52	12.52			N/A
5/13/2019	NZDCAD	9:30:00 AM	0.88397	0.88451			N/A
5/13/2019	NZDCAD	11:30:00 AM	0.88359	0.88423			N/A
5/13/2019	NZDCAD	1:30:00 PM	0.88368	0.88438			N/A
5/13/2019	NZDCAD	3:30:00 PM	0.88481	0.88532			N/A
5/13/2019	NZDCAD.fx	9:30:00 AM	0.8843	0.88417			N/A
5/13/2019	NZDCAD.fx	11:30:00 AM	0.88391	0.8839			N/A
5/13/2019	NZDCAD.fx	1:30:00 PM	0.88402	0.88404			N/A
5/13/2019	NZDCAD.fx	3:30:00 PM	0.88516	0.88498			N/A
5/13/2019	NZDCHF	9:30:00 AM	0.66438	0.66488			N/A
5/13/2019	NZDCHF	11:30:00 AM	0.66386	0.6645			N/A
5/13/2019	NZDCHF	1:30:00 PM	0.66359	0.66425			N/A
5/13/2019	NZDCHF	3:30:00 PM	0.66211	0.66274			N/A
5/13/2019	NZDCHF.fx	9:30:00 AM	0.66471	0.66452			N/A
5/13/2019	NZDCHF.fx	11:30:00 AM	0.6642	0.66415			N/A
5/13/2019	NZDCHF.fx	1:30:00 PM	0.66393	0.6639			N/A
5/13/2019	NZDCHF.fx	3:30:00 PM	0.66245	0.66239			N/A
5/13/2019	NZDCZK	9:30:00 AM	15.06	15.068			N/A
5/13/2019	NZDCZK	11:30:00 AM	15.081	15.088			N/A
5/13/2019	NZDCZK	1:30:00 PM	15.083	15.093			N/A
5/13/2019	NZDCZK	3:30:00 PM	15.075	15.086			N/A
5/13/2019	NZDDKK	9:30:00 AM	4.37	4.373			N/A
5/13/2019	NZDDKK	11:30:00 AM					N/A
5/13/2019	NZDDKK	1:30:00 PM	4.373	4.377			N/A
5/13/2019	NZDDKK	3:30:00 PM	4.369	4.373			N/A
5/13/2019	NZDHKD	9:30:00 AM	5.1606	5.1618			N/A
5/13/2019	NZDHKD	11:30:00 AM	5.1612	5.164			N/A

5/13/2019	NZDHKD	1:30:00 PM	5.165	5.1671			N/A
5/13/2019	NZDHKD	3:30:00 PM	5.166	5.1688			N/A
5/13/2019	NZDHUF	9:30:00 AM	189.31	189.53			N/A
5/13/2019	NZDHUF	11:30:00 AM	189.58	189.8			N/A
5/13/2019	NZDHUF	1:30:00 PM	189.69	189.95			N/A
5/13/2019	NZDHUF	3:30:00 PM	189.2	189.34			N/A
5/13/2019	NZDJPY	9:30:00 AM	72.159	72.209			N/A
5/13/2019	NZDJPY	11:30:00 AM	72.144	72.197			N/A
5/13/2019	NZDJPY	1:30:00 PM	72.184	72.24			N/A
5/13/2019	NZDJPY	3:30:00 PM	71.927	71.975			N/A
5/13/2019	NZDJPY.fx	9:30:00 AM	72.19	72.176			N/A
5/13/2019	NZDJPY.fx	11:30:00 AM	72.175	72.164			N/A
5/13/2019	NZDJPY.fx	1:30:00 PM	72.215	72.207			N/A
5/13/2019	NZDJPY.fx	3:30:00 PM	71.958	71.943			N/A
5/13/2019	NZDMXN	9:30:00 AM	12.6119	12.6141			N/A
5/13/2019	NZDMXN	11:30:00 AM	12.6337	12.6371			N/A
5/13/2019	NZDMXN	1:30:00 PM	12.6358	12.6418			N/A
5/13/2019	NZDMXN	3:30:00 PM	12.6565	12.6609			N/A
5/13/2019	NZDNOK	9:30:00 AM	5.745	5.7473			N/A
5/13/2019	NZDNOK	11:30:00 AM	5.7503	5.7533			N/A
5/13/2019	NZDNOK	1:30:00 PM	5.7484	5.7513			N/A
5/13/2019	NZDNOK	3:30:00 PM	5.7427	5.7446			N/A
5/13/2019	NZDPLN	9:30:00 AM	2.5175	2.5183			N/A
5/13/2019	NZDPLN	11:30:00 AM	2.5195	2.5209			N/A
5/13/2019	NZDPLN	1:30:00 PM	2.5199	2.5208			N/A
5/13/2019	NZDPLN	3:30:00 PM	2.5186	2.5201			N/A
5/13/2019	NZDSEK	9:30:00 AM	6.3341	6.3402			N/A
5/13/2019	NZDSEK	11:30:00 AM	6.3411	6.348			N/A
5/13/2019	NZDSEK	1:30:00 PM	6.3413	6.3466			N/A
5/13/2019	NZDSEK	3:30:00 PM	6.3374	6.3438			N/A
5/13/2019	NZDSGD	9:30:00 AM	0.8997	0.9001			N/A
5/13/2019	NZDSGD	11:30:00 AM	0.9002	0.9006			N/A
5/13/2019	NZDSGD	1:30:00 PM	0.9003	0.9009			N/A
5/13/2019	NZDSGD	3:30:00 PM	0.9009	0.9012			N/A



5/13/2019	NZDSGD.fx	9:30:00 AM	0.89968	0.90001			N/A
5/13/2019	NZDSGD.fx	11:30:00 AM	0.90023	0.9008			N/A
5/13/2019	NZDSGD.fx	1:30:00 PM	0.9003	0.90081			N/A
5/13/2019	NZDSGD.fx	3:30:00 PM	0.90098	0.90135			N/A
5/13/2019	NZDUSD	9:30:00 AM	0.65781	0.65773			N/A
5/13/2019	NZDUSD	11:30:00 AM	0.65791	0.65804			N/A
5/13/2019	NZDUSD	1:30:00 PM	0.65837	0.65843			N/A
5/13/2019	NZDUSD	3:30:00 PM	0.6586	0.65853			N/A
5/13/2019	NZDUSD.fx	9:30:00 AM	0.65788	0.65774			N/A
5/13/2019	NZDUSD.fx	11:30:00 AM	0.65799	0.65806			N/A
5/13/2019	NZDUSD.fx	1:30:00 PM	0.65844	0.65845			N/A
5/13/2019	NZDUSD.fx	3:30:00 PM	0.65867	0.65855			N/A
5/13/2019	NZDZAR	9:30:00 AM	9.3566	9.3685			N/A
5/13/2019	NZDZAR	11:30:00 AM	9.3872	9.4002			N/A
5/13/2019	NZDZAR	1:30:00 PM	9.3872	9.4002			N/A
5/13/2019	NZDZAR	3:30:00 PM	9.4102	9.4223			N/A
5/13/2019	SEKJPY	9:30:00 AM	11.38	11.4			N/A
5/13/2019	SEKJPY	11:30:00 AM	11.37	11.38			N/A
5/13/2019	SEKJPY	1:30:00 PM	11.38	11.39			N/A
5/13/2019	SEKJPY	3:30:00 PM	11.35	11.35			N/A
5/13/2019	SEKJPY.fx	9:30:00 AM	11.376	11.393			N/A
5/13/2019	SEKJPY.fx	11:30:00 AM	11.363	11.378			N/A
5/13/2019	SEKJPY.fx	1:30:00 PM	11.371	11.387			N/A
5/13/2019	SEKJPY.fx	3:30:00 PM	11.339	11.351			N/A
5/13/2019	SGDJPY	9:30:00 AM	80.19	80.21			N/A
5/13/2019	SGDJPY	11:30:00 AM	80.12	80.13			N/A
5/13/2019	SGDJPY	1:30:00 PM	80.18	80.18			N/A
5/13/2019	SGDJPY	3:30:00 PM	79.82	79.83			N/A
5/13/2019	SILVER	9:30:00 AM	14.48	14.86			N/A
5/13/2019	SILVER	11:30:00 AM	14.46	14.84			N/A
5/13/2019	SILVER	1:30:00 PM	14.47	14.85			N/A
5/13/2019	SILVER	3:30:00 PM	14.46	14.82			N/A
5/13/2019	SPX500.i	9:30:00 AM	2856.65	2857.7			N/A
5/13/2019	SPX500.i	11:30:00 AM	2850.4	2850.95			N/A

5/13/2019	SPX500.i	1:30:00 PM	2851.4	2851.7			N/A
5/13/2019	SPX500.i	3:30:00 PM	2833.15	2831.45			N/A
5/13/2019	UK100.i	9:30:00 AM	7221.58	7221.99			N/A
5/13/2019	UK100.i	11:30:00 AM	7200.58	7198.49			N/A
5/13/2019	UK100.i	1:30:00 PM	7204.49	7204.99			N/A
5/13/2019	UK100.i	3:30:00 PM	7176.83	7175.24			N/A
5/13/2019	USDCAD	9:30:00 AM	1.34428	1.34426			N/A
5/13/2019	USDCAD	11:30:00 AM	1.34328	1.34334			N/A
5/13/2019	USDCAD	1:30:00 PM	1.34263	1.34259			N/A
5/13/2019	USDCAD	3:30:00 PM	1.34395	1.3439			N/A
5/13/2019	USDCAD.fx	9:30:00 AM	1.34432	1.34423			N/A
5/13/2019	USDCAD.fx	11:30:00 AM	1.34331	1.34331			N/A
5/13/2019	USDCAD.fx	1:30:00 PM	1.34267	1.34255			N/A
5/13/2019	USDCAD.fx	3:30:00 PM	1.34398	1.34387			N/A
5/13/2019	USDCHF	9:30:00 AM	1.01051	1.01044			N/A
5/13/2019	USDCHF	11:30:00 AM	1.00934	1.00936			N/A
5/13/2019	USDCHF	1:30:00 PM	1.00824	1.00841			N/A
5/13/2019	USDCHF	3:30:00 PM	1.0059	1.00559			N/A
5/13/2019	USDCHF.fx	9:30:00 AM	1.01055	1.01036			N/A
5/13/2019	USDCHF.fx	11:30:00 AM	1.00939	1.0093			N/A
5/13/2019	USDCHF.fx	1:30:00 PM	1.00829	1.00835			N/A
5/13/2019	USDCHF.fx	3:30:00 PM	1.00595	1.00553			N/A
5/13/2019	USDCZK	9:30:00 AM	22.909	22.928			N/A
5/13/2019	USDCZK	11:30:00 AM	22.937	22.953			N/A
5/13/2019	USDCZK	1:30:00 PM	22.923	22.945			N/A
5/13/2019	USDCZK	3:30:00 PM	22.906	22.923			N/A
5/13/2019	USDCZK.fx	9:30:00 AM	22.9188	22.9195			N/A
5/13/2019	USDCZK.fx	11:30:00 AM	22.9448	22.946			N/A
5/13/2019	USDCZK.fx	1:30:00 PM	22.9307	22.937			N/A
5/13/2019	USDCZK.fx	3:30:00 PM	22.9139	22.9141			N/A
5/13/2019	USDDKK	9:30:00 AM	6.6448	6.6482			N/A
5/13/2019	USDDKK	11:30:00 AM	6.6454	6.6496			N/A
5/13/2019	USDDKK	1:30:00 PM	6.6426	6.6466			N/A
5/13/2019	USDDKK	3:30:00 PM	6.6367	6.6388			N/A

5/13/2019	USDDKK.fx	9:30:00 AM	6.64514	6.64614			N/A
5/13/2019	USDDKK.fx	11:30:00 AM	6.64605	6.64762			N/A
5/13/2019	USDDKK.fx	1:30:00 PM	6.64307	6.64462			N/A
5/13/2019	USDDKK.fx	3:30:00 PM	6.63718	6.63666			N/A
5/13/2019	USDHKD	9:30:00 AM	7.8479	7.8482			N/A
5/13/2019	USDHKD	11:30:00 AM	7.8485	7.8489			N/A
5/13/2019	USDHKD	1:30:00 PM	7.8482	7.8484			N/A
5/13/2019	USDHKD	3:30:00 PM	7.8486	7.8487			N/A
5/13/2019	USDHKD.fx	9:30:00 AM	7.84785	7.84842			N/A
5/13/2019	USDHKD.fx	11:30:00 AM	7.84844	7.84891			N/A
5/13/2019	USDHKD.fx	1:30:00 PM	7.84825	7.84878			N/A
5/13/2019	USDHKD.fx	3:30:00 PM	7.84858	7.84911			N/A
5/13/2019	USDHUF	9:30:00 AM	287.87	288.31			N/A
5/13/2019	USDHUF	11:30:00 AM	288.25	288.62			N/A
5/13/2019	USDHUF	1:30:00 PM	288.2	288.66			N/A
5/13/2019	USDHUF	3:30:00 PM	287.39	287.82			N/A
5/13/2019	USDHUF.fx	9:30:00 AM	288.07	288.107			N/A
5/13/2019	USDHUF.fx	11:30:00 AM	288.455	288.414			N/A
5/13/2019	USDHUF.fx	1:30:00 PM	288.403	288.447			N/A
5/13/2019	USDHUF.fx	3:30:00 PM	287.582	287.617			N/A
5/13/2019	USDINR	9:30:00 AM	65.32	75.29			N/A
5/13/2019	USDINR	11:30:00 AM	65.37	75.36			N/A
5/13/2019	USDINR	1:30:00 PM					N/A
5/13/2019	USDINR	3:30:00 PM					N/A
5/13/2019	USDJPY	9:30:00 AM	109.729	109.741			N/A
5/13/2019	USDJPY	11:30:00 AM	109.691	109.671			N/A
5/13/2019	USDJPY	1:30:00 PM	109.668	109.673			N/A
5/13/2019	USDJPY	3:30:00 PM	109.272	109.235			N/A
5/13/2019	USDJPY.fx	9:30:00 AM	109.734	109.734			N/A
5/13/2019	USDJPY.fx	11:30:00 AM	109.696	109.664			N/A
5/13/2019	USDJPY.fx	1:30:00 PM	109.674	109.666			N/A
5/13/2019	USDJPY.fx	3:30:00 PM	109.277	109.228			N/A
5/13/2019	USDMXN	9:30:00 AM	19.181	19.18			N/A
5/13/2019	USDMXN	11:30:00 AM	19.207	19.214			N/A

5/13/2019	USDMXN	1:30:00 PM	19.2	19.205			N/A
5/13/2019	USDMXN	3:30:00 PM	19.224	19.226			N/A
5/13/2019	USDMXN.fx	9:30:00 AM	19.1843	19.174			N/A
5/13/2019	USDMXN.fx	11:30:00 AM	19.2102	19.2088			N/A
5/13/2019	USDMXN.fx	1:30:00 PM	19.2038	19.2019			N/A
5/13/2019	USDMXN.fx	3:30:00 PM	19.2277	19.2213			N/A
5/13/2019	USDNOK	9:30:00 AM	8.7353	8.7436			N/A
5/13/2019	USDNOK	11:30:00 AM	8.7419	8.7484			N/A
5/13/2019	USDNOK	1:30:00 PM	8.7322	8.739			N/A
5/13/2019	USDNOK	3:30:00 PM	8.7221	8.7286			N/A
5/13/2019	USDNOK.fx	9:30:00 AM	8.73928	8.73948			N/A
5/13/2019	USDNOK.fx	11:30:00 AM	8.7457	8.74411			N/A
5/13/2019	USDNOK.fx	1:30:00 PM	8.736	8.73446			N/A
5/13/2019	USDNOK.fx	3:30:00 PM	8.72641	8.72399			N/A
5/13/2019	USDPLN	9:30:00 AM	3.828	3.8293			N/A
5/13/2019	USDPLN	11:30:00 AM	3.8303	3.8319			N/A
5/13/2019	USDPLN	1:30:00 PM	3.828	3.8296			N/A
5/13/2019	USDPLN	3:30:00 PM	3.8251	3.8264			N/A
5/13/2019	USDPLN.fx	9:30:00 AM	3.82711	3.83018			N/A
5/13/2019	USDPLN.fx	11:30:00 AM	3.82947	3.83262			N/A
5/13/2019	USDPLN.fx	1:30:00 PM	3.82726	3.83024			N/A
5/13/2019	USDPLN.fx	3:30:00 PM	3.82432	3.82723			N/A
5/13/2019	USDRUB	9:30:00 AM					N/A
5/13/2019	USDRUB	11:30:00 AM	65.236	65.604			N/A
5/13/2019	USDRUB	1:30:00 PM	65.073	65.468			N/A
5/13/2019	USDRUB	3:30:00 PM	65.227	65.618			N/A
5/13/2019	USDSEK	9:30:00 AM	9.6367	9.6389			N/A
5/13/2019	USDSEK	11:30:00 AM	9.6438	9.6469			N/A
5/13/2019	USDSEK	1:30:00 PM	9.6357	9.6387			N/A
5/13/2019	USDSEK	3:30:00 PM	9.6276	9.6303			N/A
5/13/2019	USDSEK.fx	9:30:00 AM	9.63924	9.63719			N/A
5/13/2019	USDSEK.fx	11:30:00 AM	9.64633	9.64499			N/A
5/13/2019	USDSEK.fx	1:30:00 PM	9.63842	9.6368			N/A
5/13/2019	USDSEK.fx	3:30:00 PM	9.63023	9.62834			N/A

5/13/2019	USDSGD	9:30:00 AM	1.3679	1.3681			N/A
5/13/2019	USDSGD	11:30:00 AM	1.3684	1.3687			N/A
5/13/2019	USDSGD	1:30:00 PM	1.3675	1.3678			N/A
5/13/2019	USDSGD	3:30:00 PM	1.3682	1.3685			N/A
5/13/2019	USDSGD.fx	9:30:00 AM	1.36781	1.36811			N/A
5/13/2019	USDSGD.fx	11:30:00 AM	1.36829	1.36871			N/A
5/13/2019	USDSGD.fx	1:30:00 PM	1.36744	1.36793			N/A
5/13/2019	USDSGD.fx	3:30:00 PM	1.36808	1.3685			N/A
5/13/2019	USDZAR	9:30:00 AM	14.2358	14.245			N/A
5/13/2019	USDZAR	11:30:00 AM	14.2775	14.2871			N/A
5/13/2019	USDZAR	1:30:00 PM	14.2674	14.2756			N/A
5/13/2019	USDZAR	3:30:00 PM	14.3031	14.3122			N/A
5/13/2019	USDZAR.fx	9:30:00 AM					N/A
5/13/2019	USDZAR.fx	11:30:00 AM					N/A
5/13/2019	USDZAR.fx	1:30:00 PM					N/A
5/13/2019	USDZAR.fx	3:30:00 PM					N/A
5/13/2019	XAUUSD	9:30:00 AM	1283.38	1283.41			N/A
5/13/2019	XAUUSD	11:30:00 AM	1283.04	1283.1			N/A
5/13/2019	XAUUSD	1:30:00 PM	1283.62	1283.96			N/A
5/13/2019	XAUUSD	3:30:00 PM	1287.58	1287.29			N/A
5/13/2019	ZARJPY	9:30:00 AM	7.69	7.7			N/A
5/13/2019	ZARJPY	11:30:00 AM	7.66	7.68			N/A
5/13/2019	ZARJPY	1:30:00 PM	7.67	7.7			N/A
5/13/2019	ZARJPY	3:30:00 PM	7.62	7.64			N/A
5/13/2019	ZARJPY.fx	9:30:00 AM	7.705	7.705			N/A
5/13/2019	ZARJPY.fx	11:30:00 AM	7.68	7.678			N/A
5/13/2019	ZARJPY.fx	1:30:00 PM	7.685	7.686			N/A
5/13/2019	ZARJPY.fx	3:30:00 PM	7.638	7.634			N/A
5/14/2019	#AA	9:30:00 AM					N/A
5/14/2019	#AA	11:30:00 AM					N/A
5/14/2019	#AA	1:30:00 PM					N/A
5/14/2019	#AA	3:30:00 PM					N/A
5/14/2019	#AABA	9:30:00 AM					N/A
5/14/2019	#AABA	11:30:00 AM					N/A

5/14/2019	#AABA	1:30:00 PM					N/A
5/14/2019	#AABA	3:30:00 PM					N/A
5/14/2019	#AAL	9:30:00 AM					N/A
5/14/2019	#AAL	11:30:00 AM					N/A
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5/14/2019	#AAL	3:30:00 PM					N/A
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5/14/2019	#AAPL	11:30:00 AM					N/A
5/14/2019	#AAPL	1:30:00 PM					N/A
5/14/2019	#AAPL	3:30:00 PM					N/A
5/14/2019	#ADBE	9:30:00 AM					N/A
5/14/2019	#ADBE	11:30:00 AM					N/A
5/14/2019	#ADBE	1:30:00 PM					N/A
5/14/2019	#ADBE	3:30:00 PM					N/A
5/14/2019	#AIG	9:30:00 AM					N/A
5/14/2019	#AIG	11:30:00 AM					N/A
5/14/2019	#AIG	1:30:00 PM					N/A
5/14/2019	#AIG	3:30:00 PM					N/A
5/14/2019	#AMD	9:30:00 AM					N/A
5/14/2019	#AMD	11:30:00 AM					N/A
5/14/2019	#AMD	1:30:00 PM					N/A
5/14/2019	#AMD	3:30:00 PM					N/A
5/14/2019	#AMZN	9:30:00 AM					N/A
5/14/2019	#AMZN	11:30:00 AM					N/A
5/14/2019	#AMZN	1:30:00 PM					N/A
5/14/2019	#AMZN	3:30:00 PM					N/A
5/14/2019	#AXP	9:30:00 AM					N/A
5/14/2019	#AXP	11:30:00 AM					N/A
5/14/2019	#AXP	1:30:00 PM					N/A
5/14/2019	#AXP	3:30:00 PM					N/A
5/14/2019	#BA	9:30:00 AM					N/A
5/14/2019	#BA	11:30:00 AM					N/A
5/14/2019	#BA	1:30:00 PM					N/A
5/14/2019	#BA	3:30:00 PM					N/A

5/14/2019	#BABA	9:30:00 AM					N/A
5/14/2019	#BABA	11:30:00 AM					N/A
5/14/2019	#BABA	1:30:00 PM					N/A
5/14/2019	#BABA	3:30:00 PM					N/A
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5/14/2019	#BAC	1:30:00 PM					N/A
5/14/2019	#BAC	3:30:00 PM					N/A
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5/14/2019	#BARC	11:30:00 AM					N/A
5/14/2019	#BARC	1:30:00 PM					N/A
5/14/2019	#BARC	3:30:00 PM					N/A
5/14/2019	#BHP	9:30:00 AM					N/A
5/14/2019	#BHP	11:30:00 AM					N/A
5/14/2019	#BHP	1:30:00 PM					N/A
5/14/2019	#BHP	3:30:00 PM					N/A
5/14/2019	#BIDU	9:30:00 AM					N/A
5/14/2019	#BIDU	11:30:00 AM					N/A
5/14/2019	#BIDU	1:30:00 PM					N/A
5/14/2019	#BIDU	3:30:00 PM					N/A
5/14/2019	#Bitcoin	9:30:00 AM	7968.3	7982.7			N/A
5/14/2019	#Bitcoin	11:30:00 AM	8112.9	8102.05			N/A
5/14/2019	#Bitcoin	1:30:00 PM	7941.85	7937.7			N/A
5/14/2019	#Bitcoin	3:30:00 PM	8121.3	8131.6			N/A
5/14/2019	#BK	9:30:00 AM					N/A
5/14/2019	#BK	11:30:00 AM					N/A
5/14/2019	#BK	1:30:00 PM					N/A
5/14/2019	#BK	3:30:00 PM					N/A
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5/14/2019	#VZ	11:30:00 AM					N/A
5/14/2019	#VZ	1:30:00 PM					N/A
5/14/2019	#VZ	3:30:00 PM					N/A
5/14/2019	#WDC	9:30:00 AM					N/A
5/14/2019	#WDC	11:30:00 AM					N/A
5/14/2019	#WDC	1:30:00 PM					N/A
5/14/2019	#WDC	3:30:00 PM					N/A
5/14/2019	#WFC	9:30:00 AM					N/A
5/14/2019	#WFC	11:30:00 AM					N/A
5/14/2019	#WFC	1:30:00 PM					N/A
5/14/2019	#WFC	3:30:00 PM					N/A
5/14/2019	#WMT	9:30:00 AM					N/A
5/14/2019	#WMT	11:30:00 AM					N/A
5/14/2019	#WMT	1:30:00 PM					N/A
5/14/2019	#WMT	3:30:00 PM					N/A
5/14/2019	#XOM	9:30:00 AM					N/A
5/14/2019	#XOM	11:30:00 AM					N/A
5/14/2019	#XOM	1:30:00 PM					N/A
5/14/2019	#XOM	3:30:00 PM					N/A
5/14/2019	#YHOO	9:30:00 AM					N/A
5/14/2019	#YHOO	11:30:00 AM					N/A
5/14/2019	#YHOO	1:30:00 PM					N/A
5/14/2019	#YHOO	3:30:00 PM					N/A
5/14/2019	#ZNGA	9:30:00 AM					N/A
5/14/2019	#ZNGA	11:30:00 AM					N/A
5/14/2019	#ZNGA	1:30:00 PM					N/A
5/14/2019	#ZNGA	3:30:00 PM					N/A
5/14/2019	AUDCAD	9:30:00 AM	0.93575	0.93637			N/A
5/14/2019	AUDCAD	11:30:00 AM	0.93476	0.93528			N/A
5/14/2019	AUDCAD	1:30:00 PM	0.93413	0.93465			N/A
5/14/2019	AUDCAD	3:30:00 PM	0.93521	0.93581			N/A

5/14/2019	AUDCAD.fx	9:30:00 AM	0.93609	0.93603			N/A
5/14/2019	AUDCAD.fx	11:30:00 AM	0.93509	0.93493			N/A
5/14/2019	AUDCAD.fx	1:30:00 PM	0.93445	0.93429			N/A
5/14/2019	AUDCAD.fx	3:30:00 PM	0.93555	0.93547			N/A
5/14/2019	AUDCHF	9:30:00 AM	0.69897	0.69963			N/A
5/14/2019	AUDCHF	11:30:00 AM	0.69916	0.69969			N/A
5/14/2019	AUDCHF	1:30:00 PM	0.69961	0.70026			N/A
5/14/2019	AUDCHF	3:30:00 PM	0.69912	0.69966			N/A
5/14/2019	AUDCHF.fx	9:30:00 AM	0.69931	0.69928			N/A
5/14/2019	AUDCHF.fx	11:30:00 AM	0.69949	0.69935			N/A
5/14/2019	AUDCHF.fx	1:30:00 PM	0.69996	0.69991			N/A
5/14/2019	AUDCHF.fx	3:30:00 PM	0.69946	0.69931			N/A
5/14/2019	AUDCZK	9:30:00 AM	15.909	15.924			N/A
5/14/2019	AUDCZK	11:30:00 AM	15.883	15.897			N/A
5/14/2019	AUDCZK	1:30:00 PM	15.902	15.918			N/A
5/14/2019	AUDCZK	3:30:00 PM	15.923	15.933			N/A
5/14/2019	AUDDKK	9:30:00 AM	4.6156	4.6202			N/A
5/14/2019	AUDDKK	11:30:00 AM	4.6119	4.6153			N/A
5/14/2019	AUDDKK	1:30:00 PM	4.6158	4.6204			N/A
5/14/2019	AUDDKK	3:30:00 PM	4.6212	4.6257			N/A
5/14/2019	AUDHKD	9:30:00 AM	5.4507	5.4544			N/A
5/14/2019	AUDHKD	11:30:00 AM	5.4467	5.45			N/A
5/14/2019	AUDHKD	1:30:00 PM	5.446	5.4494			N/A
5/14/2019	AUDHKD	3:30:00 PM	5.4447	5.4485			N/A
5/14/2019	AUDHUF	9:30:00 AM	200.17	200.25			N/A
5/14/2019	AUDHUF	11:30:00 AM	199.87	200.07			N/A
5/14/2019	AUDHUF	1:30:00 PM	200.23	200.4			N/A
5/14/2019	AUDHUF	3:30:00 PM	200.5	200.6			N/A
5/14/2019	AUDJPY	9:30:00 AM	76.1	76.156			N/A
5/14/2019	AUDJPY	11:30:00 AM	76.092	76.133			N/A
5/14/2019	AUDJPY	1:30:00 PM	76.12	76.181			N/A
5/14/2019	AUDJPY	3:30:00 PM	75.995	76.029			N/A
5/14/2019	AUDJPY.fx	9:30:00 AM	76.134	76.121			N/A
5/14/2019	AUDJPY.fx	11:30:00 AM	76.126	76.099			N/A

5/14/2019	AUDJPY.fx	1:30:00 PM	76.153	76.145			N/A
5/14/2019	AUDJPY.fx	3:30:00 PM	76.03	75.994			N/A
5/14/2019	AUDMXN	9:30:00 AM	13.3341	13.3425			N/A
5/14/2019	AUDMXN	11:30:00 AM	13.3184	13.3261			N/A
5/14/2019	AUDMXN	1:30:00 PM	13.304	13.3127			N/A
5/14/2019	AUDMXN	3:30:00 PM	13.3054	13.3144			N/A
5/14/2019	AUDNOK	9:30:00 AM	6.0727	6.077			N/A
5/14/2019	AUDNOK	11:30:00 AM	6.0641	6.0685			N/A
5/14/2019	AUDNOK	1:30:00 PM	6.0597	6.0644			N/A
5/14/2019	AUDNOK	3:30:00 PM	6.0683	6.0719			N/A
5/14/2019	AUDNOK.fx	9:30:00 AM	6.0742	6.0753			N/A
5/14/2019	AUDNOK.fx	11:30:00 AM	6.0658	6.0667			N/A
5/14/2019	AUDNOK.fx	1:30:00 PM	6.0612	6.0626			N/A
5/14/2019	AUDNOK.fx	3:30:00 PM	6.07	6.07			N/A
5/14/2019	AUDNZD	9:30:00 AM	1.05563	1.05645			N/A
5/14/2019	AUDNZD	11:30:00 AM	1.05509	1.05578			N/A
5/14/2019	AUDNZD	1:30:00 PM	1.0544	1.05531			N/A
5/14/2019	AUDNZD	3:30:00 PM	1.0549	1.05572			N/A
5/14/2019	AUDNZD.fx	9:30:00 AM	1.05607	1.056			N/A
5/14/2019	AUDNZD.fx	11:30:00 AM	1.05551	1.05532			N/A
5/14/2019	AUDNZD.fx	1:30:00 PM	1.05485	1.05485			N/A
5/14/2019	AUDNZD.fx	3:30:00 PM	1.05534	1.05527			N/A
5/14/2019	AUDPLN	9:30:00 AM	2.6609	2.664			N/A
5/14/2019	AUDPLN	11:30:00 AM	2.6599	2.6626			N/A
5/14/2019	AUDPLN	1:30:00 PM	2.6633	2.6664			N/A
5/14/2019	AUDPLN	3:30:00 PM	2.6645	2.6677			N/A
5/14/2019	AUDSEK	9:30:00 AM	6.6857	6.6866			N/A
5/14/2019	AUDSEK	11:30:00 AM	6.663	6.6644			N/A
5/14/2019	AUDSEK	1:30:00 PM	6.6623	6.6654			N/A
5/14/2019	AUDSEK	3:30:00 PM	6.6733	6.6753			N/A
5/14/2019	AUDSEK.fx	9:30:00 AM	6.6814	6.6908			N/A
5/14/2019	AUDSEK.fx	11:30:00 AM	6.6585	6.6687			N/A
5/14/2019	AUDSEK.fx	1:30:00 PM	6.6577	6.6698			N/A
5/14/2019	AUDSEK.fx	3:30:00 PM	6.6689	6.6797			N/A

5/14/2019	AUDSGD	9:30:00 AM	0.9509	0.9511			N/A
5/14/2019	AUDSGD	11:30:00 AM	0.9505	0.9508			N/A
5/14/2019	AUDSGD	1:30:00 PM	0.9499	0.9502			N/A
5/14/2019	AUDSGD	3:30:00 PM	0.9503	0.9504			N/A
5/14/2019	AUDSGD.fx	9:30:00 AM	0.95093	0.95096			N/A
5/14/2019	AUDSGD.fx	11:30:00 AM	0.9507	0.95069			N/A
5/14/2019	AUDSGD.fx	1:30:00 PM	0.94998	0.95011			N/A
5/14/2019	AUDSGD.fx	3:30:00 PM	0.95051	0.95054			N/A
5/14/2019	AUDUSD	9:30:00 AM	0.69485	0.69493			N/A
5/14/2019	AUDUSD	11:30:00 AM	0.6944	0.69434			N/A
5/14/2019	AUDUSD	1:30:00 PM	0.69421	0.69428			N/A
5/14/2019	AUDUSD	3:30:00 PM	0.69415	0.69417			N/A
5/14/2019	AUDUSD.fx	9:30:00 AM	0.6949	0.69486			N/A
5/14/2019	AUDUSD.fx	11:30:00 AM	0.69443	0.69429			N/A
5/14/2019	AUDUSD.fx	1:30:00 PM	0.69426	0.69422			N/A
5/14/2019	AUDUSD.fx	3:30:00 PM	0.69421	0.69409			N/A
5/14/2019	AUDZAR	9:30:00 AM	9.9425	9.9516			N/A
5/14/2019	AUDZAR	11:30:00 AM	9.8847	9.8988			N/A
5/14/2019	AUDZAR	1:30:00 PM	9.8839	9.8963			N/A
5/14/2019	AUDZAR	3:30:00 PM	9.8835	9.8948			N/A
5/14/2019	AUS200.i	9:30:00 AM					N/A
5/14/2019	AUS200.i	11:30:00 AM	6237.1	6238.8			N/A
5/14/2019	AUS200.i	1:30:00 PM	6250.4	6253.9			N/A
5/14/2019	AUS200.i	3:30:00 PM	6244.4	6246.9			N/A
5/14/2019	BCHUSD	9:30:00 AM	412.53	413.44			N/A
5/14/2019	BCHUSD	11:30:00 AM	408.8	409.09			N/A
5/14/2019	BCHUSD	1:30:00 PM	401.92	402.09			N/A
5/14/2019	BCHUSD	3:30:00 PM	408.32	409.46			N/A
5/14/2019	CADCHF	9:30:00 AM	0.74672	0.74737			N/A
5/14/2019	CADCHF	11:30:00 AM	0.74769	0.74834			N/A
5/14/2019	CADCHF	1:30:00 PM	0.74885	0.74935			N/A
5/14/2019	CADCHF	3:30:00 PM	0.74738	0.74782			N/A
5/14/2019	CADCHF.fx	9:30:00 AM	0.74706	0.74702			N/A
5/14/2019	CADCHF.fx	11:30:00 AM	0.74803	0.748			N/A

5/14/2019	CADCHF.fx	1:30:00 PM	0.7492	0.74899			N/A
5/14/2019	CADCHF.fx	3:30:00 PM	0.74772	0.74746			N/A
5/14/2019	CADCZK	9:30:00 AM	17.001	17.016			N/A
5/14/2019	CADCZK	11:30:00 AM	16.99	17.007			N/A
5/14/2019	CADCZK	1:30:00 PM	17.023	17.036			N/A
5/14/2019	CADCZK	3:30:00 PM	17.024	17.034			N/A
5/14/2019	CADDDKK	9:30:00 AM	4.932	4.934			N/A
5/14/2019	CADDDKK	11:30:00 AM	4.932	4.936			N/A
5/14/2019	CADDDKK	1:30:00 PM	4.941	4.944			N/A
5/14/2019	CADDDKK	3:30:00 PM	4.941	4.944			N/A
5/14/2019	CADHKD	9:30:00 AM	5.8241	5.828			N/A
5/14/2019	CADHKD	11:30:00 AM	5.8258	5.8297			N/A
5/14/2019	CADHKD	1:30:00 PM	5.8291	5.8325			N/A
5/14/2019	CADHKD	3:30:00 PM	5.8217	5.8245			N/A
5/14/2019	CADHUF	9:30:00 AM	213.91	213.94			N/A
5/14/2019	CADHUF	11:30:00 AM	213.84	213.99			N/A
5/14/2019	CADHUF	1:30:00 PM	214.39	214.44			N/A
5/14/2019	CADHUF	3:30:00 PM	214.41	214.41			N/A
5/14/2019	CADJPY	9:30:00 AM	81.299	81.356			N/A
5/14/2019	CADJPY	11:30:00 AM	81.371	81.429			N/A
5/14/2019	CADJPY	1:30:00 PM	81.462	81.53			N/A
5/14/2019	CADJPY	3:30:00 PM	81.242	81.264			N/A
5/14/2019	CADJPY.fx	9:30:00 AM	81.334	81.321			N/A
5/14/2019	CADJPY.fx	11:30:00 AM	81.404	81.395			N/A
5/14/2019	CADJPY.fx	1:30:00 PM	81.496	81.495			N/A
5/14/2019	CADJPY.fx	3:30:00 PM	81.276	81.229			N/A
5/14/2019	CADMXN	9:30:00 AM	14.2461	14.258			N/A
5/14/2019	CADMXN	11:30:00 AM	14.247	14.2571			N/A
5/14/2019	CADMXN	1:30:00 PM	14.2413	14.2489			N/A
5/14/2019	CADMXN	3:30:00 PM	14.2264	14.2349			N/A
5/14/2019	CADNOK	9:30:00 AM	6.4863	6.488			N/A
5/14/2019	CADNOK	11:30:00 AM	6.4848	6.486			N/A
5/14/2019	CADNOK	1:30:00 PM	6.4846	6.4878			N/A
5/14/2019	CADNOK	3:30:00 PM	6.4857	6.4869			N/A

5/14/2019	CADPLN	9:30:00 AM	2.8427	2.8446			N/A
5/14/2019	CADPLN	11:30:00 AM	2.8452	2.8469			N/A
5/14/2019	CADPLN	1:30:00 PM	2.8508	2.8522			N/A
5/14/2019	CADPLN	3:30:00 PM	2.8486	2.8505			N/A
5/14/2019	CADSEK	9:30:00 AM	7.14	7.1419			N/A
5/14/2019	CADSEK	11:30:00 AM	7.124	7.1257			N/A
5/14/2019	CADSEK	1:30:00 PM	7.1294	7.1313			N/A
5/14/2019	CADSEK	3:30:00 PM	7.1319	7.1343			N/A
5/14/2019	CADSGD	9:30:00 AM	1.0155	1.0157			N/A
5/14/2019	CADSGD	11:30:00 AM	1.016	1.0163			N/A
5/14/2019	CADSGD	1:30:00 PM	1.016	1.0162			N/A
5/14/2019	CADSGD	3:30:00 PM	1.0154	1.0157			N/A
5/14/2019	CADZAR	9:30:00 AM	10.623	10.6338			N/A
5/14/2019	CADZAR	11:30:00 AM	10.5733	10.5903			N/A
5/14/2019	CADZAR	1:30:00 PM	10.5779	10.5922			N/A
5/14/2019	CADZAR	3:30:00 PM	10.5663	10.5802			N/A
5/14/2019	CHFCZK	9:30:00 AM	22.761	22.773			N/A
5/14/2019	CHFCZK	11:30:00 AM	22.719	22.734			N/A
5/14/2019	CHFCZK	1:30:00 PM	22.729	22.743			N/A
5/14/2019	CHFCZK	3:30:00 PM	22.779	22.781			N/A
5/14/2019	CHFDKK	9:30:00 AM	6.602	6.604			N/A
5/14/2019	CHFDKK	11:30:00 AM	6.594	6.597			N/A
5/14/2019	CHFDKK	1:30:00 PM	6.596	6.599			N/A
5/14/2019	CHFDKK	3:30:00 PM	6.61	6.612			N/A
5/14/2019	CHFDKK.fx	9:30:00 AM	6.6004	6.6063			N/A
5/14/2019	CHFDKK.fx	11:30:00 AM	6.593	6.5988			N/A
5/14/2019	CHFDKK.fx	1:30:00 PM	6.595	6.6006			N/A
5/14/2019	CHFDKK.fx	3:30:00 PM	6.6086	6.6132			N/A
5/14/2019	CHFHKD	9:30:00 AM	7.7965	7.8004			N/A
5/14/2019	CHFHKD	11:30:00 AM	7.7899	7.7935			N/A
5/14/2019	CHFHKD	1:30:00 PM	7.7836	7.7863			N/A
5/14/2019	CHFHKD	3:30:00 PM	7.7874	7.7913			N/A
5/14/2019	CHFHUF	9:30:00 AM	286.29	286.44			N/A
5/14/2019	CHFHUF	11:30:00 AM	285.87	286.18			N/A

5/14/2019	CHFHUF	1:30:00 PM	286.09	286.39			N/A
5/14/2019	CHFHUF	3:30:00 PM	286.78	286.9			N/A
5/14/2019	CHFJPY	9:30:00 AM	108.832	108.893			N/A
5/14/2019	CHFJPY	11:30:00 AM	108.794	108.846			N/A
5/14/2019	CHFJPY	1:30:00 PM	108.771	108.816			N/A
5/14/2019	CHFJPY	3:30:00 PM	108.668	108.702			N/A
5/14/2019	CHFJPY.fx	9:30:00 AM	108.864	108.857			N/A
5/14/2019	CHFJPY.fx	11:30:00 AM	108.826	108.811			N/A
5/14/2019	CHFJPY.fx	1:30:00 PM	108.804	108.78			N/A
5/14/2019	CHFJPY.fx	3:30:00 PM	108.705	108.667			N/A
5/14/2019	CHFMXN	9:30:00 AM	19.0701	19.0851			N/A
5/14/2019	CHFMXN	11:30:00 AM	19.0467	19.0615			N/A
5/14/2019	CHFMXN	1:30:00 PM	19.0122	19.0248			N/A
5/14/2019	CHFMXN	3:30:00 PM	19.0302	19.0435			N/A
5/14/2019	CHFNOK	9:30:00 AM	8.684	8.6895			N/A
5/14/2019	CHFNOK	11:30:00 AM	8.6705	8.6753			N/A
5/14/2019	CHFNOK	1:30:00 PM	8.6573	8.6637			N/A
5/14/2019	CHFNOK	3:30:00 PM	8.6775	8.6807			N/A
5/14/2019	CHFNOK.fx	9:30:00 AM	8.68747	8.68605			N/A
5/14/2019	CHFNOK.fx	11:30:00 AM	8.67416	8.67169			N/A
5/14/2019	CHFNOK.fx	1:30:00 PM	8.66102	8.66			N/A
5/14/2019	CHFNOK.fx	3:30:00 PM	8.68138	8.67699			N/A
5/14/2019	CHFPLN	9:30:00 AM	3.806	3.8088			N/A
5/14/2019	CHFPLN	11:30:00 AM	3.8034	3.8064			N/A
5/14/2019	CHFPLN	1:30:00 PM	3.806	3.8084			N/A
5/14/2019	CHFPLN	3:30:00 PM	3.8108	3.8132			N/A
5/14/2019	CHFPLN.fx	9:30:00 AM	3.80346	3.81121			N/A
5/14/2019	CHFPLN.fx	11:30:00 AM	3.80104	3.80855			N/A
5/14/2019	CHFPLN.fx	1:30:00 PM	3.80372	3.81073			N/A
5/14/2019	CHFPLN.fx	3:30:00 PM	3.80846	3.81545			N/A
5/14/2019	CHFSEK	9:30:00 AM	9.5595	9.5604			N/A
5/14/2019	CHFSEK	11:30:00 AM	9.5252	9.5259			N/A
5/14/2019	CHFSEK	1:30:00 PM	9.5175	9.5212			N/A
5/14/2019	CHFSEK	3:30:00 PM	9.5423	9.5423			N/A



5/14/2019	CHFSGD	9:30:00 AM	1.3597	1.3601			N/A
5/14/2019	CHFSGD	11:30:00 AM	1.3591	1.3594			N/A
5/14/2019	CHFSGD	1:30:00 PM	1.3572	1.3575			N/A
5/14/2019	CHFSGD	3:30:00 PM	1.3589	1.3593			N/A
5/14/2019	CHFSGD.fx	9:30:00 AM	1.35983	1.35989			N/A
5/14/2019	CHFSGD.fx	11:30:00 AM	1.35932	1.35926			N/A
5/14/2019	CHFSGD.fx	1:30:00 PM	1.35742	1.35727			N/A
5/14/2019	CHFSGD.fx	3:30:00 PM	1.35911	1.35906			N/A
5/14/2019	CHFZAR	9:30:00 AM	14.2243	14.2297			N/A
5/14/2019	CHFZAR	11:30:00 AM	14.1432	14.1544			N/A
5/14/2019	CHFZAR	1:30:00 PM	14.1277	14.1378			N/A
5/14/2019	CHFZAR	3:30:00 PM	14.1406	14.1456			N/A
5/14/2019	CZKJPY	9:30:00 AM					N/A
5/14/2019	CZKJPY	11:30:00 AM					N/A
5/14/2019	CZKJPY	1:30:00 PM	4.784	4.788			N/A
5/14/2019	CZKJPY	3:30:00 PM	4.771	4.772			N/A
5/14/2019	DAX30.i	9:30:00 AM	11914.95	11909.2			N/A
5/14/2019	DAX30.i	11:30:00 AM	11906.45	11900.7			N/A
5/14/2019	DAX30.i	1:30:00 PM	11932.2	11929.95			N/A
5/14/2019	DAX30.i	3:30:00 PM	11933.45	11925.45			N/A
5/14/2019	DJ30.i	9:30:00 AM					N/A
5/14/2019	DJ30.i	11:30:00 AM					N/A
5/14/2019	DJ30.i	1:30:00 PM					N/A
5/14/2019	DJ30.i	3:30:00 PM					N/A
5/14/2019	DKKJPY	9:30:00 AM					N/A
5/14/2019	DKKJPY	11:30:00 AM	16.5	16.52			N/A
5/14/2019	DKKJPY	1:30:00 PM					N/A
5/14/2019	DKKJPY	3:30:00 PM	16.44	16.46			N/A
5/14/2019	EURAUD	9:30:00 AM	1.61631	1.61665			N/A
5/14/2019	EURAUD	11:30:00 AM	1.61817	1.6182			N/A
5/14/2019	EURAUD	1:30:00 PM	1.61657	1.61697			N/A
5/14/2019	EURAUD	3:30:00 PM	1.61464	1.61503			N/A
5/14/2019	EURAUD.fx	9:30:00 AM	1.6165	1.61643			N/A
5/14/2019	EURAUD.fx	11:30:00 AM	1.61837	1.61798			N/A

5/14/2019	EURAUD.fx	1:30:00 PM	1.61678	1.61677			N/A
5/14/2019	EURAUD.fx	3:30:00 PM	1.61486	1.61482			N/A
5/14/2019	EURCAD	9:30:00 AM	1.51333	1.51406			N/A
5/14/2019	EURCAD	11:30:00 AM	1.51318	1.51403			N/A
5/14/2019	EURCAD	1:30:00 PM	1.51104	1.51142			N/A
5/14/2019	EURCAD	3:30:00 PM	1.51095	1.51161			N/A
5/14/2019	EURCAD.fx	9:30:00 AM	1.51375	1.51365			N/A
5/14/2019	EURCAD.fx	11:30:00 AM	1.51358	1.51361			N/A
5/14/2019	EURCAD.fx	1:30:00 PM	1.51145	1.51098			N/A
5/14/2019	EURCAD.fx	3:30:00 PM	1.51141	1.51118			N/A
5/14/2019	EURCHF	9:30:00 AM	1.13079	1.13084			N/A
5/14/2019	EURCHF	11:30:00 AM	1.1322	1.13223			N/A
5/14/2019	EURCHF	1:30:00 PM	1.13205	1.13209			N/A
5/14/2019	EURCHF	3:30:00 PM	1.1299	1.12976			N/A
5/14/2019	EURCHF.fx	9:30:00 AM	1.13084	1.13078			N/A
5/14/2019	EURCHF.fx	11:30:00 AM	1.13226	1.13218			N/A
5/14/2019	EURCHF.fx	1:30:00 PM	1.13211	1.13202			N/A
5/14/2019	EURCHF.fx	3:30:00 PM	1.12996	1.12969			N/A
5/14/2019	EURCZK	9:30:00 AM	25.724	25.759			N/A
5/14/2019	EURCZK	11:30:00 AM					N/A
5/14/2019	EURCZK	1:30:00 PM	25.716	25.753			N/A
5/14/2019	EURCZK	3:30:00 PM	25.72	25.748			N/A
5/14/2019	EURDKK	9:30:00 AM	7.4656	7.4668			N/A
5/14/2019	EURDKK	11:30:00 AM	7.467	7.4683			N/A
5/14/2019	EURDKK	1:30:00 PM	7.4674	7.4683			N/A
5/14/2019	EURDKK	3:30:00 PM	7.4683	7.4693			N/A
5/14/2019	EURGBP	9:30:00 AM	0.86754	0.86762			N/A
5/14/2019	EURGBP	11:30:00 AM	0.86876	0.86863			N/A
5/14/2019	EURGBP	1:30:00 PM	0.867	0.86701		20	N/A
5/14/2019	EURGBP	3:30:00 PM	0.86686	0.86687			N/A
5/14/2019	EURGBP.fx	9:30:00 AM	0.86758	0.86758			N/A
5/14/2019	EURGBP.fx	11:30:00 AM	0.8688	0.86865			N/A
5/14/2019	EURGBP.fx	1:30:00 PM	0.86703	0.86696			N/A
5/14/2019	EURGBP.fx	3:30:00 PM	0.8669	0.86681			N/A

5/14/2019	EURHKD	9:30:00 AM	8.8173	8.8223			N/A
5/14/2019	EURHKD	11:30:00 AM	8.8198	8.825			N/A
5/14/2019	EURHKD	1:30:00 PM	8.8113	8.8149			N/A
5/14/2019	EURHKD	3:30:00 PM	8.7995	8.8029			N/A
5/14/2019	EURHKD.fx	9:30:00 AM	8.82013	8.81948			N/A
5/14/2019	EURHKD.fx	11:30:00 AM	8.82263	8.82217			N/A
5/14/2019	EURHKD.fx	1:30:00 PM	8.81416	8.81196			N/A
5/14/2019	EURHKD.fx	3:30:00 PM	8.80234	8.80002			N/A
5/14/2019	EURHUF	9:30:00 AM	323.67	324.33			N/A
5/14/2019	EURHUF	11:30:00 AM	323.65	324.15			N/A
5/14/2019	EURHUF	1:30:00 PM	323.81	324.48			N/A
5/14/2019	EURHUF	3:30:00 PM	323.93	324.28			N/A
5/14/2019	EURHUF.fx	9:30:00 AM	323.938	324.049			N/A
5/14/2019	EURHUF.fx	11:30:00 AM	323.939	324.123			N/A
5/14/2019	EURHUF.fx	1:30:00 PM	324.082	324.21			N/A
5/14/2019	EURHUF.fx	3:30:00 PM	324.211	324.294			N/A
5/14/2019	EURJPY	9:30:00 AM	123.106	123.102			N/A
5/14/2019	EURJPY	11:30:00 AM	123.214	123.205			N/A
5/14/2019	EURJPY	1:30:00 PM	123.173	123.148			N/A
5/14/2019	EURJPY	3:30:00 PM	122.825	122.763			N/A
5/14/2019	EURJPY.fx	9:30:00 AM	123.108	123.097			N/A
5/14/2019	EURJPY.fx	11:30:00 AM	123.214	123.201			N/A
5/14/2019	EURJPY.fx	1:30:00 PM	123.175	123.144			N/A
5/14/2019	EURJPY.fx	3:30:00 PM	122.826	122.758			N/A
5/14/2019	EURMXN	9:30:00 AM	21.5678	21.5867			N/A
5/14/2019	EURMXN	11:30:00 AM	21.5671	21.5862			N/A
5/14/2019	EURMXN	1:30:00 PM	21.5232	21.5407			N/A
5/14/2019	EURMXN	3:30:00 PM	21.503	21.5191			N/A
5/14/2019	EURMXN.fx	9:30:00 AM	21.5778	21.5773			N/A
5/14/2019	EURMXN.fx	11:30:00 AM	21.5762	21.5769			N/A
5/14/2019	EURMXN.fx	1:30:00 PM	21.5319	21.5321			N/A
5/14/2019	EURMXN.fx	3:30:00 PM	21.5122	21.5099			N/A
5/14/2019	EURNOK	9:30:00 AM	9.818	9.828			N/A
5/14/2019	EURNOK	11:30:00 AM	9.8153	9.8245			N/A

5/14/2019	EURNOK	1:30:00 PM	9.7987	9.8096			N/A
5/14/2019	EURNOK	3:30:00 PM	9.8015	9.8106			N/A
5/14/2019	EURNOK.fx	9:30:00 AM	9.82341	9.82259			N/A
5/14/2019	EURNOK.fx	11:30:00 AM	9.82083	9.81877			N/A
5/14/2019	EURNOK.fx	1:30:00 PM	9.80411	9.80397			N/A
5/14/2019	EURNOK.fx	3:30:00 PM	9.80691	9.80517			N/A
5/14/2019	EURNZD	9:30:00 AM	1.70722	1.70796			N/A
5/14/2019	EURNZD	11:30:00 AM	1.70808	1.7089			N/A
5/14/2019	EURNZD	1:30:00 PM	1.70569	1.70647			N/A
5/14/2019	EURNZD	3:30:00 PM	1.70446	1.70515			N/A
5/14/2019	EURNZD.fx	9:30:00 AM	1.70763	1.70753			N/A
5/14/2019	EURNZD.fx	11:30:00 AM	1.70852	1.70845			N/A
5/14/2019	EURNZD.fx	1:30:00 PM	1.70612	1.70604			N/A
5/14/2019	EURNZD.fx	3:30:00 PM	1.70487	1.70472			N/A
5/14/2019	EURPLN	9:30:00 AM	4.3038	4.3069			N/A
5/14/2019	EURPLN	11:30:00 AM	4.3064	4.3096			N/A
5/14/2019	EURPLN	1:30:00 PM	4.3085	4.3114			N/A
5/14/2019	EURPLN	3:30:00 PM	4.3053	4.3084			N/A
5/14/2019	EURPLN.fx	9:30:00 AM	4.30308	4.30772			N/A
5/14/2019	EURPLN.fx	11:30:00 AM	4.30577	4.31007			N/A
5/14/2019	EURPLN.fx	1:30:00 PM	4.30785	4.31202			N/A
5/14/2019	EURPLN.fx	3:30:00 PM	4.30467	4.30908			N/A
5/14/2019	EURRUB	9:30:00 AM					N/A
5/14/2019	EURRUB	11:30:00 AM	73.155	73.578			N/A
5/14/2019	EURRUB	1:30:00 PM	73	73.392			N/A
5/14/2019	EURRUB	3:30:00 PM	72.837	73.266			N/A
5/14/2019	EURSEK	9:30:00 AM	10.8116	10.8119			N/A
5/14/2019	EURSEK	11:30:00 AM	10.7866	10.7861			N/A
5/14/2019	EURSEK	1:30:00 PM	10.7751	10.7803			N/A
5/14/2019	EURSEK	3:30:00 PM	10.7816	10.7832			N/A
5/14/2019	EURSEK.fx	9:30:00 AM	10.81354	10.81015			N/A
5/14/2019	EURSEK.fx	11:30:00 AM	10.78824	10.78451			N/A
5/14/2019	EURSEK.fx	1:30:00 PM	10.77674	10.77872			N/A
5/14/2019	EURSEK.fx	3:30:00 PM	10.78326	10.7816			N/A

5/14/2019	EURSGD	9:30:00 AM	1.5373	1.5382			N/A
5/14/2019	EURSGD	11:30:00 AM	1.5386	1.5394			N/A
5/14/2019	EURSGD	1:30:00 PM	1.5362	1.537			N/A
5/14/2019	EURSGD	3:30:00 PM	1.5352	1.5358			N/A
5/14/2019	EURSGD.fx	9:30:00 AM	1.53773	1.53775			N/A
5/14/2019	EURSGD.fx	11:30:00 AM	1.53898	1.53896			N/A
5/14/2019	EURSGD.fx	1:30:00 PM	1.53661	1.53655			N/A
5/14/2019	EURSGD.fx	3:30:00 PM	1.53559	1.53541			N/A
5/14/2019	EURUSD	9:30:00 AM	1.12349	1.12357			N/A
5/14/2019	EURUSD	11:30:00 AM	1.12385	1.12394			N/A
5/14/2019	EURUSD	1:30:00 PM	1.12276	1.12265			N/A
5/14/2019	EURUSD	3:30:00 PM	1.12124	1.12109			N/A
5/14/2019	EURUSD.fx	9:30:00 AM	1.12369	1.12367			N/A
5/14/2019	EURUSD.fx	11:30:00 AM	1.12404	1.12403			N/A
5/14/2019	EURUSD.fx	1:30:00 PM	1.12296	1.12272			N/A
5/14/2019	EURUSD.fx	3:30:00 PM	1.12144	1.12118			N/A
5/14/2019	EURZAR	9:30:00 AM	16.0867	16.1026			N/A
5/14/2019	EURZAR	11:30:00 AM	16.0166	16.0366			N/A
5/14/2019	EURZAR	1:30:00 PM	15.9928	16.0089			N/A
5/14/2019	EURZAR	3:30:00 PM	15.9763	15.9945			N/A
5/14/2019	EURZAR.fx	9:30:00 AM	16.08598	16.10361			N/A
5/14/2019	EURZAR.fx	11:30:00 AM	16.01587	16.03726			N/A
5/14/2019	EURZAR.fx	1:30:00 PM	15.99212	16.00972			N/A
5/14/2019	EURZAR.fx	3:30:00 PM	15.97568	15.99559			N/A
5/14/2019	GBPAUD	9:30:00 AM	1.86365	1.86415			N/A
5/14/2019	GBPAUD	11:30:00 AM	1.86332	1.86354			N/A
5/14/2019	GBPAUD	1:30:00 PM	1.86518	1.86588			N/A
5/14/2019	GBPAUD	3:30:00 PM	1.86332	1.86383			N/A
5/14/2019	GBPAUD.fx	9:30:00 AM	1.86403	1.86376			N/A
5/14/2019	GBPAUD.fx	11:30:00 AM	1.86371	1.86327			N/A
5/14/2019	GBPAUD.fx	1:30:00 PM	1.86559	1.86547			N/A
5/14/2019	GBPAUD.fx	3:30:00 PM	1.86374	1.86344			N/A
5/14/2019	GBPCAD	9:30:00 AM	1.7444	1.74505			N/A
5/14/2019	GBPCAD	11:30:00 AM	1.74227	1.74255			N/A

5/14/2019	GBPCAD	1:30:00 PM	1.74293	1.74338			N/A
5/14/2019	GBPCAD	3:30:00 PM	1.74325	1.74367			N/A
5/14/2019	GBPCAD.fx	9:30:00 AM	1.74478	1.74467			N/A
5/14/2019	GBPCAD.fx	11:30:00 AM	1.74257	1.74215			N/A
5/14/2019	GBPCAD.fx	1:30:00 PM	1.74331	1.74296			N/A
5/14/2019	GBPCAD.fx	3:30:00 PM	1.74365	1.74327			N/A
5/14/2019	GBPCHF	9:30:00 AM	1.30323	1.3036			N/A
5/14/2019	GBPCHF	11:30:00 AM	1.30342	1.30343			N/A
5/14/2019	GBPCHF	1:30:00 PM	1.30562	1.30592			N/A
5/14/2019	GBPCHF	3:30:00 PM	1.30335	1.30327			N/A
5/14/2019	GBPCHF.fx	9:30:00 AM	1.30341	1.30341			N/A
5/14/2019	GBPCHF.fx	11:30:00 AM	1.30346	1.30323			N/A
5/14/2019	GBPCHF.fx	1:30:00 PM	1.30583	1.30571			N/A
5/14/2019	GBPCHF.fx	3:30:00 PM	1.30356	1.30306			N/A
5/14/2019	GBPCZK	9:30:00 AM	29.66	29.679			N/A
5/14/2019	GBPCZK	11:30:00 AM	29.608	29.623			N/A
5/14/2019	GBPCZK	1:30:00 PM	29.673	29.692			N/A
5/14/2019	GBPCZK	3:30:00 PM	29.678	29.688			N/A
5/14/2019	GBPDKK	9:30:00 AM	8.602	8.613			N/A
5/14/2019	GBPDKK	11:30:00 AM	8.593	8.602			N/A
5/14/2019	GBPDKK	1:30:00 PM	8.611	8.621			N/A
5/14/2019	GBPDKK	3:30:00 PM	8.612	8.621			N/A
5/14/2019	GBPDKK.fx	9:30:00 AM	8.6006	8.6136			N/A
5/14/2019	GBPDKK.fx	11:30:00 AM	8.5911	8.6024			N/A
5/14/2019	GBPDKK.fx	1:30:00 PM	8.6091	8.6212			N/A
5/14/2019	GBPDKK.fx	3:30:00 PM	8.6103	8.6219			N/A
5/14/2019	GBPHKD	9:30:00 AM	10.1605	10.1656			N/A
5/14/2019	GBPHKD	11:30:00 AM	10.1518	10.1549			N/A
5/14/2019	GBPHKD	1:30:00 PM	10.1614	10.1653			N/A
5/14/2019	GBPHKD	3:30:00 PM	10.1475	10.1523			N/A
5/14/2019	GBPHUF	9:30:00 AM	373.11	373.26			N/A
5/14/2019	GBPHUF	11:30:00 AM	372.49	372.87			N/A
5/14/2019	GBPHUF	1:30:00 PM	373.53	373.86			N/A
5/14/2019	GBPHUF	3:30:00 PM	373.63	373.85			N/A

5/14/2019	GBPJPY	9:30:00 AM	141.875	141.913			N/A
5/14/2019	GBPJPY	11:30:00 AM	141.85	141.835			N/A
5/14/2019	GBPJPY	1:30:00 PM	142.052	142.073			N/A
5/14/2019	GBPJPY	3:30:00 PM	141.675	141.635			N/A
5/14/2019	GBPJPY.fx	9:30:00 AM	141.895	141.894			N/A
5/14/2019	GBPJPY.fx	11:30:00 AM	141.865	141.816			N/A
5/14/2019	GBPJPY.fx	1:30:00 PM	142.071	142.052			N/A
5/14/2019	GBPJPY.fx	3:30:00 PM	141.695	141.615			N/A
5/14/2019	GBPMXN	9:30:00 AM	24.8551	24.8693			N/A
5/14/2019	GBPMXN	11:30:00 AM	24.8242	24.8331			N/A
5/14/2019	GBPMXN	1:30:00 PM	24.8226	24.8329			N/A
5/14/2019	GBPMXN	3:30:00 PM	24.8004	24.8107			N/A
5/14/2019	GBPNOK	9:30:00 AM	11.3178	11.3266			N/A
5/14/2019	GBPNOK	11:30:00 AM	11.2993	11.3076			N/A
5/14/2019	GBPNOK	1:30:00 PM	11.3038	11.3137			N/A
5/14/2019	GBPNOK	3:30:00 PM	11.3072	11.3156			N/A
5/14/2019	GBPNOK.fx	9:30:00 AM	11.32263	11.32182			N/A
5/14/2019	GBPNOK.fx	11:30:00 AM	11.30407	11.30418			N/A
5/14/2019	GBPNOK.fx	1:30:00 PM	11.30881	11.30873			N/A
5/14/2019	GBPNOK.fx	3:30:00 PM	11.312	11.31092			N/A
5/14/2019	GBPNZD	9:30:00 AM	1.96796	1.96864			N/A
5/14/2019	GBPNZD	11:30:00 AM	1.96655	1.96692			N/A
5/14/2019	GBPNZD	1:30:00 PM	1.96751	1.96814			N/A
5/14/2019	GBPNZD	3:30:00 PM	1.96647	1.96684			N/A
5/14/2019	GBPNZD.fx	9:30:00 AM	1.96832	1.96827			N/A
5/14/2019	GBPNZD.fx	11:30:00 AM	1.9669	1.96651			N/A
5/14/2019	GBPNZD.fx	1:30:00 PM	1.96786	1.96777			N/A
5/14/2019	GBPNZD.fx	3:30:00 PM	1.96684	1.96647			N/A
5/14/2019	GBPPLN	9:30:00 AM	4.9618	4.9633			N/A
5/14/2019	GBPPLN	11:30:00 AM	4.9591	4.9594			N/A
5/14/2019	GBPPLN	1:30:00 PM	4.9706	4.9719			N/A
5/14/2019	GBPPLN	3:30:00 PM	4.9678	4.9689			N/A
5/14/2019	GBPPLN.fx	9:30:00 AM	4.95944	4.96554			N/A
5/14/2019	GBPPLN.fx	11:30:00 AM	4.95652	4.96142			N/A

5/14/2019	GBPPLN.fx	1:30:00 PM	4.96846	4.97399			N/A
5/14/2019	GBPPLN.fx	3:30:00 PM	4.96574	4.97096			N/A
5/14/2019	GBPSEK	9:30:00 AM	12.4601	12.4647			N/A
5/14/2019	GBPSEK	11:30:00 AM	12.4164	12.4185			N/A
5/14/2019	GBPSEK	1:30:00 PM	12.4272	12.4353			N/A
5/14/2019	GBPSEK	3:30:00 PM	12.4345	12.441			N/A
5/14/2019	GBPSEK.fx	9:30:00 AM	12.4566	12.46843			N/A
5/14/2019	GBPSEK.fx	11:30:00 AM	12.41231	12.42387			N/A
5/14/2019	GBPSEK.fx	1:30:00 PM	12.42349	12.43901			N/A
5/14/2019	GBPSEK.fx	3:30:00 PM	12.43059	12.44468			N/A
5/14/2019	GBPSGD	9:30:00 AM	1.7721	1.7729			N/A
5/14/2019	GBPSGD	11:30:00 AM	1.7715	1.7719			N/A
5/14/2019	GBPSGD	1:30:00 PM	1.7721	1.7727			N/A
5/14/2019	GBPSGD	3:30:00 PM	1.7711	1.7715			N/A
5/14/2019	GBPSGD.fx	9:30:00 AM	1.77034	1.77469			N/A
5/14/2019	GBPSGD.fx	11:30:00 AM	1.76955	1.77366			N/A
5/14/2019	GBPSGD.fx	1:30:00 PM	1.77023	1.7745			N/A
5/14/2019	GBPSGD.fx	3:30:00 PM	1.76935	1.77333			N/A
5/14/2019	GBPUSD	9:30:00 AM	1.29518	1.29517			N/A
5/14/2019	GBPUSD	11:30:00 AM	1.29427	1.29374			N/A
5/14/2019	GBPUSD	1:30:00 PM	1.29521	1.29514			N/A
5/14/2019	GBPUSD	3:30:00 PM	1.29371	1.2934			N/A
5/14/2019	GBPUSD.fx	9:30:00 AM	1.29524	1.29511			N/A
5/14/2019	GBPUSD.fx	11:30:00 AM	1.29412	1.29367			N/A
5/14/2019	GBPUSD.fx	1:30:00 PM	1.29527	1.29508			N/A
5/14/2019	GBPUSD.fx	3:30:00 PM	1.29377	1.29333			N/A
5/14/2019	GBPZAR	9:30:00 AM	18.5384	18.5646			N/A
5/14/2019	GBPZAR	11:30:00 AM	18.4391	18.4609			N/A
5/14/2019	GBPZAR	1:30:00 PM	18.4418	18.4679			N/A
5/14/2019	GBPZAR	3:30:00 PM	18.4278	18.4543			N/A
5/14/2019	GBPZAR.fx	9:30:00 AM	18.5453	18.5575			N/A
5/14/2019	GBPZAR.fx	11:30:00 AM	18.4425	18.4537			N/A
5/14/2019	GBPZAR.fx	1:30:00 PM	18.4489	18.4609			N/A
5/14/2019	GBPZAR.fx	3:30:00 PM	18.4344	18.4481			N/A



5/14/2019	GOLD	9:30:00 AM	1298.51	1298.83			N/A
5/14/2019	GOLD	11:30:00 AM	1297.75	1297.97			N/A
5/14/2019	GOLD	1:30:00 PM	1297.51	1297.82			N/A
5/14/2019	GOLD	3:30:00 PM	1299.21	1299.26			N/A
5/14/2019	HKDJPY	9:30:00 AM	13.96	13.97			N/A
5/14/2019	HKDJPY	11:30:00 AM	13.97	13.97			N/A
5/14/2019	HKDJPY	1:30:00 PM	13.98	13.99			N/A
5/14/2019	HKDJPY	3:30:00 PM	13.95	13.96			N/A
5/14/2019	HKDJPY.fx	9:30:00 AM	13.954	13.96			N/A
5/14/2019	HKDJPY.fx	11:30:00 AM	13.962	13.967			N/A
5/14/2019	HKDJPY.fx	1:30:00 PM	13.97	13.977			N/A
5/14/2019	HKDJPY.fx	3:30:00 PM	13.949	13.952			N/A
5/14/2019	HUFJPY	9:30:00 AM	0.3804	0.3807			N/A
5/14/2019	HUFJPY	11:30:00 AM	0.3805	0.3808			N/A
5/14/2019	HUFJPY	1:30:00 PM	0.3803	0.3805			N/A
5/14/2019	HUFJPY	3:30:00 PM	0.3792	0.3795			N/A
5/14/2019	JP225.i	9:30:00 AM	20998.86	21013.86			N/A
5/14/2019	JP225.i	11:30:00 AM	21031.36	21036.36			N/A
5/14/2019	JP225.i	1:30:00 PM	21103.86	21118.86			N/A
5/14/2019	JP225.i	3:30:00 PM	21058.86	21066.36			N/A
5/14/2019	MXNJPY	9:30:00 AM	5.71	5.71			N/A
5/14/2019	MXNJPY	11:30:00 AM	5.71	5.72			N/A
5/14/2019	MXNJPY	1:30:00 PM	5.72	5.73			N/A
5/14/2019	MXNJPY	3:30:00 PM	5.71	5.72			N/A
5/14/2019	NASDAQ.i	9:30:00 AM					N/A
5/14/2019	NASDAQ.i	11:30:00 AM					N/A
5/14/2019	NASDAQ.i	1:30:00 PM					N/A
5/14/2019	NASDAQ.i	3:30:00 PM					N/A
5/14/2019	NOKJPY	9:30:00 AM	12.52	12.55			N/A
5/14/2019	NOKJPY	11:30:00 AM	12.54	12.56			N/A
5/14/2019	NOKJPY	1:30:00 PM	12.54	12.58			N/A
5/14/2019	NOKJPY	3:30:00 PM	12.52	12.54			N/A
5/14/2019	NOKJPY.fx	9:30:00 AM	12.531	12.534			N/A
5/14/2019	NOKJPY.fx	11:30:00 AM	12.547	12.548			N/A

5/14/2019	NOKJPY.fx	1:30:00 PM	12.559	12.564			N/A
5/14/2019	NOKJPY.fx	3:30:00 PM	12.524	12.522			N/A
5/14/2019	NZDCAD	9:30:00 AM	0.88614	0.88671			N/A
5/14/2019	NZDCAD	11:30:00 AM	0.88558	0.8863			N/A
5/14/2019	NZDCAD	1:30:00 PM	0.88556	0.88606			N/A
5/14/2019	NZDCAD	3:30:00 PM	0.88624	0.88672			N/A
5/14/2019	NZDCAD.fx	9:30:00 AM	0.88647	0.88639			N/A
5/14/2019	NZDCAD.fx	11:30:00 AM	0.88591	0.88596			N/A
5/14/2019	NZDCAD.fx	1:30:00 PM	0.88589	0.88571			N/A
5/14/2019	NZDCAD.fx	3:30:00 PM	0.88658	0.88638			N/A
5/14/2019	NZDCHF	9:30:00 AM	0.66188	0.66256			N/A
5/14/2019	NZDCHF	11:30:00 AM	0.66237	0.66303			N/A
5/14/2019	NZDCHF	1:30:00 PM	0.66318	0.66389			N/A
5/14/2019	NZDCHF	3:30:00 PM	0.66241	0.66304			N/A
5/14/2019	NZDCHF.fx	9:30:00 AM	0.66221	0.66222			N/A
5/14/2019	NZDCHF.fx	11:30:00 AM	0.66271	0.66268			N/A
5/14/2019	NZDCHF.fx	1:30:00 PM	0.66353	0.66353			N/A
5/14/2019	NZDCHF.fx	3:30:00 PM	0.66275	0.66267			N/A
5/14/2019	NZDCZK	9:30:00 AM	15.068	15.079			N/A
5/14/2019	NZDCZK	11:30:00 AM	15.051	15.063			N/A
5/14/2019	NZDCZK	1:30:00 PM	15.078	15.089			N/A
5/14/2019	NZDCZK	3:30:00 PM	15.091	15.096			N/A
5/14/2019	NZDDKK	9:30:00 AM	4.37	4.374			N/A
5/14/2019	NZDDKK	11:30:00 AM	4.368	4.372			N/A
5/14/2019	NZDDKK	1:30:00 PM	4.376	4.379			N/A
5/14/2019	NZDDKK	3:30:00 PM	4.379	4.382			N/A
5/14/2019	NZDHKD	9:30:00 AM	5.1614	5.1643			N/A
5/14/2019	NZDHKD	11:30:00 AM	5.1604	5.1633			N/A
5/14/2019	NZDHKD	1:30:00 PM	5.1629	5.1653			N/A
5/14/2019	NZDHKD	3:30:00 PM	5.1595	5.1623			N/A
5/14/2019	NZDHUF	9:30:00 AM	189.51	189.68			N/A
5/14/2019	NZDHUF	11:30:00 AM	189.33	189.62			N/A
5/14/2019	NZDHUF	1:30:00 PM	189.77	190.01			N/A
5/14/2019	NZDHUF	3:30:00 PM	189.96	190.12			N/A

5/14/2019	NZDJPY	9:30:00 AM	72.057	72.124			N/A
5/14/2019	NZDJPY	11:30:00 AM	72.087	72.146			N/A
5/14/2019	NZDJPY	1:30:00 PM	72.16	72.22			N/A
5/14/2019	NZDJPY	3:30:00 PM	72.009	72.052			N/A
5/14/2019	NZDJPY.fx	9:30:00 AM	72.088	72.092			N/A
5/14/2019	NZDJPY.fx	11:30:00 AM	72.117	72.113			N/A
5/14/2019	NZDJPY.fx	1:30:00 PM	72.192	72.187			N/A
5/14/2019	NZDJPY.fx	3:30:00 PM	72.039	72.02			N/A
5/14/2019	NZDMXN	9:30:00 AM	12.6276	12.6326			N/A
5/14/2019	NZDMXN	11:30:00 AM	12.621	12.6259			N/A
5/14/2019	NZDMXN	1:30:00 PM	12.6132	12.618			N/A
5/14/2019	NZDMXN	3:30:00 PM	12.6091	12.6149			N/A
5/14/2019	NZDNOK	9:30:00 AM	5.7484	5.7491			N/A
5/14/2019	NZDNOK	11:30:00 AM	5.7436	5.7444			N/A
5/14/2019	NZDNOK	1:30:00 PM	5.7429	5.7459			N/A
5/14/2019	NZDNOK	3:30:00 PM	5.7482	5.7485			N/A
5/14/2019	NZDPLN	9:30:00 AM	2.5191	2.5203			N/A
5/14/2019	NZDPLN	11:30:00 AM	2.5196	2.5209			N/A
5/14/2019	NZDPLN	1:30:00 PM	2.5249	2.526			N/A
5/14/2019	NZDPLN	3:30:00 PM	2.5245	2.5259			N/A
5/14/2019	NZDSEK	9:30:00 AM	6.3263	6.3302			N/A
5/14/2019	NZDSEK	11:30:00 AM	6.3081	6.3132			N/A
5/14/2019	NZDSEK	1:30:00 PM	6.3115	6.3177			N/A
5/14/2019	NZDSEK	3:30:00 PM	6.319	6.3243			N/A
5/14/2019	NZDSGD	9:30:00 AM	0.9003	0.9009			N/A
5/14/2019	NZDSGD	11:30:00 AM	0.9005	0.9011			N/A
5/14/2019	NZDSGD	1:30:00 PM	0.9004	0.901			N/A
5/14/2019	NZDSGD	3:30:00 PM	0.9004	0.9011			N/A
5/14/2019	NZDSGD.fx	9:30:00 AM	0.90028	0.90081			N/A
5/14/2019	NZDSGD.fx	11:30:00 AM	0.90048	0.90108			N/A
5/14/2019	NZDSGD.fx	1:30:00 PM	0.90035	0.90091			N/A
5/14/2019	NZDSGD.fx	3:30:00 PM	0.9004	0.901			N/A
5/14/2019	NZDUSD	9:30:00 AM	0.65794	0.65804			N/A
5/14/2019	NZDUSD	11:30:00 AM	0.6578	0.65791			N/A

5/14/2019	NZDUSD	1:30:00 PM	0.65806	0.65813			N/A
5/14/2019	NZDUSD	3:30:00 PM	0.65769	0.65777			N/A
5/14/2019	NZDUSD.fx	9:30:00 AM	0.65801	0.65806			N/A
5/14/2019	NZDUSD.fx	11:30:00 AM	0.65788	0.65792			N/A
5/14/2019	NZDUSD.fx	1:30:00 PM	0.65814	0.65815			N/A
5/14/2019	NZDUSD.fx	3:30:00 PM	0.65776	0.65778			N/A
5/14/2019	NZDZAR	9:30:00 AM	9.4132	9.4241			N/A
5/14/2019	NZDZAR	11:30:00 AM	9.3639	9.3809			N/A
5/14/2019	NZDZAR	1:30:00 PM	9.3683	9.382			N/A
5/14/2019	NZDZAR	3:30:00 PM	9.3635	9.3764			N/A
5/14/2019	SEKJPY	9:30:00 AM	11.39	11.39			N/A
5/14/2019	SEKJPY	11:30:00 AM	11.42	11.43			N/A
5/14/2019	SEKJPY	1:30:00 PM	11.43	11.44			N/A
5/14/2019	SEKJPY	3:30:00 PM	11.39	11.4			N/A
5/14/2019	SEKJPY.fx	9:30:00 AM	11.378	11.392			N/A
5/14/2019	SEKJPY.fx	11:30:00 AM	11.416	11.428			N/A
5/14/2019	SEKJPY.fx	1:30:00 PM	11.419	11.435			N/A
5/14/2019	SEKJPY.fx	3:30:00 PM	11.383	11.394			N/A
5/14/2019	SGDJPY	9:30:00 AM	80.02	80.05			N/A
5/14/2019	SGDJPY	11:30:00 AM	80.04	80.05			N/A
5/14/2019	SGDJPY	1:30:00 PM	80.18	80.15			N/A
5/14/2019	SGDJPY	3:30:00 PM	79.94	79.95			N/A
5/14/2019	SILVER	9:30:00 AM	14.59	14.96			N/A
5/14/2019	SILVER	11:30:00 AM	14.57	14.94			N/A
5/14/2019	SILVER	1:30:00 PM	14.56	14.94			N/A
5/14/2019	SILVER	3:30:00 PM	14.62	15			N/A
5/14/2019	SPX500.i	9:30:00 AM	2817.97	2818.02			N/A
5/14/2019	SPX500.i	11:30:00 AM	2817.72	2816.77			N/A
5/14/2019	SPX500.i	1:30:00 PM	2826.22	2827.02			N/A
5/14/2019	SPX500.i	3:30:00 PM	2825.72	2825.02			N/A
5/14/2019	UK100.i	9:30:00 AM	7189.84	7187.34			N/A
5/14/2019	UK100.i	11:30:00 AM	7219.59	7218.34			N/A
5/14/2019	UK100.i	1:30:00 PM	7228.84	7228.34			N/A
5/14/2019	UK100.i	3:30:00 PM	7236.26	7234.51			N/A

5/14/2019	USDCAD	9:30:00 AM	1.34711	1.34711			N/A
5/14/2019	USDCAD	11:30:00 AM	1.34657	1.34666			N/A
5/14/2019	USDCAD	1:30:00 PM	1.34597	1.34593			N/A
5/14/2019	USDCAD	3:30:00 PM	1.3479	1.34758			N/A
5/14/2019	USDCAD.fx	9:30:00 AM	1.34714	1.34707			N/A
5/14/2019	USDCAD.fx	11:30:00 AM	1.34659	1.34663			N/A
5/14/2019	USDCAD.fx	1:30:00 PM	1.346	1.34589			N/A
5/14/2019	USDCAD.fx	3:30:00 PM	1.34794	1.34754			N/A
5/14/2019	USDCHF	9:30:00 AM	1.00634	1.0064			N/A
5/14/2019	USDCHF	11:30:00 AM	1.00729	1.00727			N/A
5/14/2019	USDCHF	1:30:00 PM	1.00824	1.00816			N/A
5/14/2019	USDCHF	3:30:00 PM	1.00752	1.00759			N/A
5/14/2019	USDCHF.fx	9:30:00 AM	1.00638	1.00634			N/A
5/14/2019	USDCHF.fx	11:30:00 AM	1.00734	1.00722			N/A
5/14/2019	USDCHF.fx	1:30:00 PM	1.00829	1.00809			N/A
5/14/2019	USDCHF.fx	3:30:00 PM	1.00757	1.00752			N/A
5/14/2019	USDCZK	9:30:00 AM	22.921	22.94			N/A
5/14/2019	USDCZK	11:30:00 AM	22.898	22.92			N/A
5/14/2019	USDCZK	1:30:00 PM	22.927	22.947			N/A
5/14/2019	USDCZK	3:30:00 PM	22.963	22.974			N/A
5/14/2019	USDCZK.fx	9:30:00 AM	22.9285	22.9309			N/A
5/14/2019	USDCZK.fx	11:30:00 AM	22.9066	22.9103			N/A
5/14/2019	USDCZK.fx	1:30:00 PM	22.9358	22.9383			N/A
5/14/2019	USDCZK.fx	3:30:00 PM	22.9706	22.9661			N/A
5/14/2019	USDDKK	9:30:00 AM	6.6442	6.6481			N/A
5/14/2019	USDDKK	11:30:00 AM	6.6426	6.6465			N/A
5/14/2019	USDDKK	1:30:00 PM	6.6512	6.6542			N/A
5/14/2019	USDDKK	3:30:00 PM	6.6607	6.663			N/A
5/14/2019	USDDKK.fx	9:30:00 AM	6.64472	6.64602			N/A
5/14/2019	USDDKK.fx	11:30:00 AM	6.6432	6.64453			N/A
5/14/2019	USDDKK.fx	1:30:00 PM	6.65197	6.65213			N/A
5/14/2019	USDDKK.fx	3:30:00 PM	6.66104	6.66099			N/A
5/14/2019	USDHKD	9:30:00 AM	7.8488	7.8491			N/A
5/14/2019	USDHKD	11:30:00 AM	7.8486	7.8484			N/A

5/14/2019	USDHKD	1:30:00 PM	7.8486	7.8487			N/A
5/14/2019	USDHKD	3:30:00 PM	7.8487	7.8485			N/A
5/14/2019	USDHKD.fx	9:30:00 AM	7.84879	7.84929			N/A
5/14/2019	USDHKD.fx	11:30:00 AM	7.84853	7.84899			N/A
5/14/2019	USDHKD.fx	1:30:00 PM	7.84873	7.84932			N/A
5/14/2019	USDHKD.fx	3:30:00 PM	7.84866	7.84923			N/A
5/14/2019	USDHUF	9:30:00 AM	288.13	288.52			N/A
5/14/2019	USDHUF	11:30:00 AM	288.05	288.53			N/A
5/14/2019	USDHUF	1:30:00 PM	288.49	288.86			N/A
5/14/2019	USDHUF	3:30:00 PM	289.01	289.33			N/A
5/14/2019	USDHUF.fx	9:30:00 AM	288.343	288.317			N/A
5/14/2019	USDHUF.fx	11:30:00 AM	288.264	288.325			N/A
5/14/2019	USDHUF.fx	1:30:00 PM	288.697	288.664			N/A
5/14/2019	USDHUF.fx	3:30:00 PM	289.213	289.135			N/A
5/14/2019	USDINR	9:30:00 AM	65.5	75.49			N/A
5/14/2019	USDINR	11:30:00 AM	65.4	75.37			N/A
5/14/2019	USDINR	1:30:00 PM					N/A
5/14/2019	USDINR	3:30:00 PM					N/A
5/14/2019	USDJPY	9:30:00 AM	109.553	109.558			N/A
5/14/2019	USDJPY	11:30:00 AM	109.614	109.61			N/A
5/14/2019	USDJPY	1:30:00 PM	109.685	109.692			N/A
5/14/2019	USDJPY	3:30:00 PM	109.519	109.495			N/A
5/14/2019	USDJPY.fx	9:30:00 AM	109.56	109.55			N/A
5/14/2019	USDJPY.fx	11:30:00 AM	109.62	109.604			N/A
5/14/2019	USDJPY.fx	1:30:00 PM	109.69	109.685			N/A
5/14/2019	USDJPY.fx	3:30:00 PM	109.524	109.488			N/A
5/14/2019	USDMXN	9:30:00 AM	19.199	19.206			N/A
5/14/2019	USDMXN	11:30:00 AM	19.192	19.199			N/A
5/14/2019	USDMXN	1:30:00 PM	19.174	19.178			N/A
5/14/2019	USDMXN	3:30:00 PM	19.18	19.188			N/A
5/14/2019	USDMXN.f	9:30:00 AM	19.2034	19.2026			N/A
5/14/2019	USDMXN.f	11:30:00 AM	19.1956	19.1955			N/A
5/14/2019	USDMXN.f	1:30:00 PM	19.1775	19.175			N/A
5/14/2019	USDMXN.f	3:30:00 PM	19.1837	19.1835			N/A

5/14/2019	USDNOK	9:30:00 AM	8.7389	8.7458			N/A
5/14/2019	USDNOK	11:30:00 AM	8.7339	8.7392			N/A
5/14/2019	USDNOK	1:30:00 PM	8.7286	8.736			N/A
5/14/2019	USDNOK	3:30:00 PM	8.7426	8.7472			N/A
5/14/2019	USDNOK.fx	9:30:00 AM	8.74267	8.74114			N/A
5/14/2019	USDNOK.fx	11:30:00 AM	8.73777	8.73474			N/A
5/14/2019	USDNOK.fx	1:30:00 PM	8.73257	8.73149			N/A
5/14/2019	USDNOK.fx	3:30:00 PM	8.74669	8.74264			N/A
5/14/2019	USDPLN	9:30:00 AM	3.8308	3.8323			N/A
5/14/2019	USDPLN	11:30:00 AM	3.8319	3.8335			N/A
5/14/2019	USDPLN	1:30:00 PM	3.838	3.839			N/A
5/14/2019	USDPLN	3:30:00 PM	3.8404	3.8413			N/A
5/14/2019	USDPLN.fx	9:30:00 AM	3.82996	3.83311			N/A
5/14/2019	USDPLN.fx	11:30:00 AM	3.83116	3.83414			N/A
5/14/2019	USDPLN.fx	1:30:00 PM	3.83718	3.83963			N/A
5/14/2019	USDPLN.fx	3:30:00 PM	3.83958	3.8421			N/A
5/14/2019	USDRUB	9:30:00 AM					N/A
5/14/2019	USDRUB	11:30:00 AM	65.199	65.578			N/A
5/14/2019	USDRUB	1:30:00 PM	65.119	65.484			N/A
5/14/2019	USDRUB	3:30:00 PM	65.076	65.449			N/A
5/14/2019	USDSEK	9:30:00 AM	9.6212	9.6225			N/A
5/14/2019	USDSEK	11:30:00 AM	9.5957	9.5959			N/A
5/14/2019	USDSEK	1:30:00 PM	9.5968	9.5997			N/A
5/14/2019	USDSEK	3:30:00 PM	9.6146	9.6153			N/A
5/14/2019	USDSEK.fx	9:30:00 AM	9.62415	9.62057			N/A
5/14/2019	USDSEK.fx	11:30:00 AM	9.59823	9.59415			N/A
5/14/2019	USDSEK.fx	1:30:00 PM	9.59947	9.59783			N/A
5/14/2019	USDSEK.fx	3:30:00 PM	9.61766	9.61337			N/A
5/14/2019	USDSGD	9:30:00 AM	1.3684	1.3687			N/A
5/14/2019	USDSGD	11:30:00 AM	1.3691	1.3692			N/A
5/14/2019	USDSGD	1:30:00 PM	1.3683	1.3684			N/A
5/14/2019	USDSGD	3:30:00 PM	1.3692	1.3695			N/A
5/14/2019	USDSGD.fx	9:30:00 AM	1.36828	1.36869			N/A
5/14/2019	USDSGD.fx	11:30:00 AM	1.36899	1.36933			N/A

5/14/2019	USDSGD.fx	1:30:00 PM	1.36826	1.36866			N/A
5/14/2019	USDSGD.fx	3:30:00 PM	1.36913	1.36955			N/A
5/14/2019	USDZAR	9:30:00 AM	14.3159	14.3312			N/A
5/14/2019	USDZAR	11:30:00 AM	14.2487	14.2673			N/A
5/14/2019	USDZAR	1:30:00 PM	14.2421	14.2573			N/A
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5/14/2019	USDZAR.fx	1:30:00 PM					N/A
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5/14/2019	XAUUSD	9:30:00 AM	1298.51	1298.83			N/A
5/14/2019	XAUUSD	11:30:00 AM	1297.75	1297.95			N/A
5/14/2019	XAUUSD	1:30:00 PM	1297.54	1297.82			N/A
5/14/2019	XAUUSD	3:30:00 PM	1299.23	1299.26			N/A
5/14/2019	ZARJPY	9:30:00 AM	7.63	7.65			N/A
5/14/2019	ZARJPY	11:30:00 AM	7.67	7.69			N/A
5/14/2019	ZARJPY	1:30:00 PM	7.68	7.7			N/A
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5/14/2019	ZARJPY.fx	9:30:00 AM	7.647	7.65			N/A
5/14/2019	ZARJPY.fx	11:30:00 AM	7.685	7.689			N/A
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5/15/2019	#S	11:30:00 AM					N/A
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5/15/2019	#S	3:30:00 PM					N/A

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5/15/2019	#ZNGA	1:30:00 PM					N/A
5/15/2019	#ZNGA	3:30:00 PM					N/A
5/15/2019	AUDCAD	9:30:00 AM	0.93281	0.93347			N/A
5/15/2019	AUDCAD	11:30:00 AM	0.93257	0.93331			N/A
5/15/2019	AUDCAD	1:30:00 PM	0.93229	0.93295			N/A
5/15/2019	AUDCAD	3:30:00 PM	0.93288	0.93276			N/A
5/15/2019	AUDCAD.fx	9:30:00 AM	0.93314	0.93313			N/A
5/15/2019	AUDCAD.fx	11:30:00 AM	0.9329	0.93296			N/A
5/15/2019	AUDCAD.fx	1:30:00 PM	0.93263	0.93259			N/A
5/15/2019	AUDCAD.fx	3:30:00 PM	0.93321	0.9327			N/A
5/15/2019	AUDCHF	9:30:00 AM	0.69872	0.69942			N/A
5/15/2019	AUDCHF	11:30:00 AM	0.69663	0.69734			N/A

5/15/2019	AUDCHF	1:30:00 PM	0.69621	0.6968			N/A
5/15/2019	AUDCHF	3:30:00 PM	0.69692	0.69731			N/A
5/15/2019	AUDCHF.fx	9:30:00 AM	0.69906	0.69907			N/A
5/15/2019	AUDCHF.fx	11:30:00 AM	0.69698	0.69699			N/A
5/15/2019	AUDCHF.fx	1:30:00 PM	0.69656	0.69645			N/A
5/15/2019	AUDCHF.fx	3:30:00 PM	0.69716	0.69709			N/A
5/15/2019	AUDCZK	9:30:00 AM	15.903	15.92			N/A
5/15/2019	AUDCZK	11:30:00 AM	15.876	15.893			N/A
5/15/2019	AUDCZK	1:30:00 PM	15.886	15.899			N/A
5/15/2019	AUDCZK	3:30:00 PM	15.914	15.925			N/A
5/15/2019	AUDDKK	9:30:00 AM	4.6153	4.62			N/A
5/15/2019	AUDDKK	11:30:00 AM	4.6096	4.6143			N/A
5/15/2019	AUDDKK	1:30:00 PM	4.6105	4.6149			N/A
5/15/2019	AUDDKK	3:30:00 PM	4.6174	4.621			N/A
5/15/2019	AUDHKD	9:30:00 AM	5.4369	5.4407			N/A
5/15/2019	AUDHKD	11:30:00 AM	5.4329	5.4368			N/A
5/15/2019	AUDHKD	1:30:00 PM	5.4253	5.4288			N/A
5/15/2019	AUDHKD	3:30:00 PM	5.4283	5.4317			N/A
5/15/2019	AUDHUF	9:30:00 AM	200.6	200.84			N/A
5/15/2019	AUDHUF	11:30:00 AM	200.44	200.68			N/A
5/15/2019	AUDHUF	1:30:00 PM	200.47	200.64			N/A
5/15/2019	AUDHUF	3:30:00 PM	200.86	201.03			N/A
5/15/2019	AUDJPY	9:30:00 AM	75.986	76.05			N/A
5/15/2019	AUDJPY	11:30:00 AM	75.814	75.883			N/A
5/15/2019	AUDJPY	1:30:00 PM	75.55	75.615			N/A
5/15/2019	AUDJPY	3:30:00 PM	75.597	75.613			N/A
5/15/2019	AUDJPY.fx	9:30:00 AM	76.02	76.015			N/A
5/15/2019	AUDJPY.fx	11:30:00 AM	75.847	75.848			N/A
5/15/2019	AUDJPY.fx	1:30:00 PM	75.584	75.58			N/A
5/15/2019	AUDJPY.fx	3:30:00 PM	75.621	75.579			N/A
5/15/2019	AUDMXN	9:30:00 AM	13.2677	13.278			N/A
5/15/2019	AUDMXN	11:30:00 AM	13.2588	13.2679			N/A
5/15/2019	AUDMXN	1:30:00 PM	13.2632	13.2693			N/A
5/15/2019	AUDMXN	3:30:00 PM	13.2809	13.2889			N/A

5/15/2019	AUDNOK	9:30:00 AM	6.0594	6.0644			N/A
5/15/2019	AUDNOK	11:30:00 AM	6.0555	6.0606			N/A
5/15/2019	AUDNOK	1:30:00 PM	6.0503	6.0547			N/A
5/15/2019	AUDNOK	3:30:00 PM	6.0587	6.0605			N/A
5/15/2019	AUDNOK.fx	9:30:00 AM	6.0609	6.0627			N/A
5/15/2019	AUDNOK.fx	11:30:00 AM	6.0571	6.0588			N/A
5/15/2019	AUDNOK.fx	1:30:00 PM	6.052	6.0528			N/A
5/15/2019	AUDNOK.fx	3:30:00 PM	6.0587	6.0588			N/A
5/15/2019	AUDNZD	9:30:00 AM	1.05459	1.05553			N/A
5/15/2019	AUDNZD	11:30:00 AM	1.05473	1.0556			N/A
5/15/2019	AUDNZD	1:30:00 PM	1.05447	1.05534			N/A
5/15/2019	AUDNZD	3:30:00 PM	1.0553	1.05601			N/A
5/15/2019	AUDNZD.fx	9:30:00 AM	1.05502	1.05506			N/A
5/15/2019	AUDNZD.fx	11:30:00 AM	1.05516	1.05514			N/A
5/15/2019	AUDNZD.fx	1:30:00 PM	1.0549	1.05487			N/A
5/15/2019	AUDNZD.fx	3:30:00 PM	1.05562	1.05554			N/A
5/15/2019	AUDPLN	9:30:00 AM	2.6634	2.6664			N/A
5/15/2019	AUDPLN	11:30:00 AM	2.6606	2.663			N/A
5/15/2019	AUDPLN	1:30:00 PM	2.6613	2.6642			N/A
5/15/2019	AUDPLN	3:30:00 PM	2.6641	2.6667			N/A
5/15/2019	AUDSEK	9:30:00 AM	6.6562	6.6595			N/A
5/15/2019	AUDSEK	11:30:00 AM	6.6489	6.652			N/A
5/15/2019	AUDSEK	1:30:00 PM	6.6516	6.6543			N/A
5/15/2019	AUDSEK	3:30:00 PM	6.6627	6.6626			N/A
5/15/2019	AUDSEK.fx	9:30:00 AM	6.6516	6.6638			N/A
5/15/2019	AUDSEK.fx	11:30:00 AM	6.6443	6.6564			N/A
5/15/2019	AUDSEK.fx	1:30:00 PM	6.647	6.6588			N/A
5/15/2019	AUDSEK.fx	3:30:00 PM	6.6578	6.6688			N/A
5/15/2019	AUDSGD	9:30:00 AM	0.9481	0.9484			N/A
5/15/2019	AUDSGD	11:30:00 AM	0.9475	0.9477			N/A
5/15/2019	AUDSGD	1:30:00 PM	0.9469	0.9471			N/A
5/15/2019	AUDSGD	3:30:00 PM	0.9475	0.9476			N/A
5/15/2019	AUDSGD.fx	9:30:00 AM	0.94821	0.94835			N/A
5/15/2019	AUDSGD.fx	11:30:00 AM	0.94757	0.94763			N/A

5/15/2019	AUDSGD.fx	1:30:00 PM	0.94698	0.947			N/A
5/15/2019	AUDSGD.fx	3:30:00 PM	0.94755	0.94754			N/A
5/15/2019	AUDUSD	9:30:00 AM	0.69294	0.69305			N/A
5/15/2019	AUDUSD	11:30:00 AM	0.69251	0.69259			N/A
5/15/2019	AUDUSD	1:30:00 PM	0.69153	0.6916			N/A
5/15/2019	AUDUSD	3:30:00 PM	0.69204	0.69205			N/A
5/15/2019	AUDUSD.fx	9:30:00 AM	0.693	0.693			N/A
5/15/2019	AUDUSD.fx	11:30:00 AM	0.69257	0.69253			N/A
5/15/2019	AUDUSD.fx	1:30:00 PM	0.69158	0.69154			N/A
5/15/2019	AUDUSD.fx	3:30:00 PM	0.69209	0.69201			N/A
5/15/2019	AUDZAR	9:30:00 AM	9.8642	9.8788			N/A
5/15/2019	AUDZAR	11:30:00 AM	9.8489	9.8629			N/A
5/15/2019	AUDZAR	1:30:00 PM	9.8589	9.8706			N/A
5/15/2019	AUDZAR	3:30:00 PM	9.867	9.8753			N/A
5/15/2019	AUS200.i	9:30:00 AM	6289.84	6294.34			N/A
5/15/2019	AUS200.i	11:30:00 AM	6284.94	6288.14			N/A
5/15/2019	AUS200.i	1:30:00 PM	6269.34	6272.34			N/A
5/15/2019	AUS200.i	3:30:00 PM	6262.84	6263.34			N/A
5/15/2019	BCHUSD	9:30:00 AM	398.26	400.12			N/A
5/15/2019	BCHUSD	11:30:00 AM	391.39	393.31			N/A
5/15/2019	BCHUSD	1:30:00 PM	397.26	398.53			N/A
5/15/2019	BCHUSD	3:30:00 PM	395.87	395.67			N/A
5/15/2019	CADCHF	9:30:00 AM	0.7488	0.74949			N/A
5/15/2019	CADCHF	11:30:00 AM	0.74673	0.74743			N/A
5/15/2019	CADCHF	1:30:00 PM	0.74655	0.74716			N/A
5/15/2019	CADCHF	3:30:00 PM	0.74737	0.74728			N/A
5/15/2019	CADCHF.fx	9:30:00 AM	0.74914	0.74913			N/A
5/15/2019	CADCHF.fx	11:30:00 AM	0.74706	0.74708			N/A
5/15/2019	CADCHF.fx	1:30:00 PM	0.74692	0.74679			N/A
5/15/2019	CADCHF.fx	3:30:00 PM	0.74749	0.74694			N/A
5/15/2019	CADCZK	9:30:00 AM	17.048	17.062			N/A
5/15/2019	CADCZK	11:30:00 AM	17.021	17.038			N/A
5/15/2019	CADCZK	1:30:00 PM	17.039	17.051			N/A
5/15/2019	CADCZK	3:30:00 PM	17.076	17.078			N/A



5/15/2019	CADDKK	9:30:00 AM					N/A
5/15/2019	CADDKK	11:30:00 AM					N/A
5/15/2019	CADDKK	1:30:00 PM	4.944	4.947			N/A
5/15/2019	CADDKK	3:30:00 PM	4.954	4.954			N/A
5/15/2019	CADHKD	9:30:00 AM	5.8272	5.8311			N/A
5/15/2019	CADHKD	11:30:00 AM	5.8246	5.8285			N/A
5/15/2019	CADHKD	1:30:00 PM	5.8188	5.8221			N/A
5/15/2019	CADHKD	3:30:00 PM	5.8245	5.824			N/A
5/15/2019	CADHUF	9:30:00 AM	215.06	215.2			N/A
5/15/2019	CADHUF	11:30:00 AM	214.93	215.09			N/A
5/15/2019	CADHUF	1:30:00 PM	215.04	215.13			N/A
5/15/2019	CADHUF	3:30:00 PM	215.55	215.56			N/A
5/15/2019	CADJPY	9:30:00 AM	81.434	81.497			N/A
5/15/2019	CADJPY	11:30:00 AM	81.265	81.336			N/A
5/15/2019	CADJPY	1:30:00 PM	81.007	81.076			N/A
5/15/2019	CADJPY	3:30:00 PM	81.076	81.02			N/A
5/15/2019	CADJPY.fx	9:30:00 AM	81.468	81.462			N/A
5/15/2019	CADJPY.fx	11:30:00 AM	81.299	81.302			N/A
5/15/2019	CADJPY.fx	1:30:00 PM	81.04	81.041			N/A
5/15/2019	CADJPY.fx	3:30:00 PM	81.085	80.987			N/A
5/15/2019	CADMXN	9:30:00 AM	14.2194	14.2322			N/A
5/15/2019	CADMXN	11:30:00 AM	14.2136	14.2249			N/A
5/15/2019	CADMXN	1:30:00 PM	14.2242	14.2315			N/A
5/15/2019	CADMXN	3:30:00 PM	14.2488	14.248			N/A
5/15/2019	CADNOK	9:30:00 AM	6.4918	6.4967			N/A
5/15/2019	CADNOK	11:30:00 AM	6.49	6.4949			N/A
5/15/2019	CADNOK	1:30:00 PM	6.4866	6.4876			N/A
5/15/2019	CADNOK	3:30:00 PM	6.4952	6.494			N/A
5/15/2019	CADPLN	9:30:00 AM	2.8543	2.8562			N/A
5/15/2019	CADPLN	11:30:00 AM	2.8515	2.8534			N/A
5/15/2019	CADPLN	1:30:00 PM	2.8537	2.8554			N/A
5/15/2019	CADPLN	3:30:00 PM	2.8576	2.858			N/A
5/15/2019	CADSEK	9:30:00 AM	7.1314	7.1353			N/A
5/15/2019	CADSEK	11:30:00 AM	7.1262	7.1296			N/A

5/15/2019	CADSEK	1:30:00 PM	7.1309	7.1339			N/A
5/15/2019	CADSEK	3:30:00 PM	7.1423	7.1443			N/A
5/15/2019	CADSGD	9:30:00 AM	1.0158	1.0161			N/A
5/15/2019	CADSGD	11:30:00 AM	1.015	1.0153			N/A
5/15/2019	CADSGD	1:30:00 PM	1.0148	1.0151			N/A
5/15/2019	CADSGD	3:30:00 PM	1.0154	1.0157			N/A
5/15/2019	CADZAR	9:30:00 AM	10.5729	10.5885			N/A
5/15/2019	CADZAR	11:30:00 AM	10.5584	10.5743			N/A
5/15/2019	CADZAR	1:30:00 PM	10.5727	10.5866			N/A
5/15/2019	CADZAR	3:30:00 PM	10.582	10.5933			N/A
5/15/2019	CHFCZK	9:30:00 AM	22.759	22.772			N/A
5/15/2019	CHFCZK	11:30:00 AM	22.787	22.804			N/A
5/15/2019	CHFCZK	1:30:00 PM	22.82	22.827			N/A
5/15/2019	CHFCZK	3:30:00 PM	22.843	22.849			N/A
5/15/2019	CHFDKK	9:30:00 AM	6.606	6.609			N/A
5/15/2019	CHFDKK	11:30:00 AM	6.617	6.62			N/A
5/15/2019	CHFDKK	1:30:00 PM	6.623	6.625			N/A
5/15/2019	CHFDKK	3:30:00 PM	6.628	6.628			N/A
5/15/2019	CHFDKK.fx	9:30:00 AM	6.6046	6.6101			N/A
5/15/2019	CHFDKK.fx	11:30:00 AM	6.6158	6.6215			N/A
5/15/2019	CHFDKK.fx	1:30:00 PM	6.6214	6.6271			N/A
5/15/2019	CHFDKK.fx	3:30:00 PM	6.6256	6.6307			N/A
5/15/2019	CHFHKD	9:30:00 AM	7.7789	7.7828			N/A
5/15/2019	CHFHKD	11:30:00 AM	7.7977	7.8016			N/A
5/15/2019	CHFHKD	1:30:00 PM	7.792	7.7948			N/A
5/15/2019	CHFHKD	3:30:00 PM	7.7913	7.7925			N/A
5/15/2019	CHFHUF	9:30:00 AM	287	287.35			N/A
5/15/2019	CHFHUF	11:30:00 AM	287.62	287.99			N/A
5/15/2019	CHFHUF	1:30:00 PM	287.91	288.14			N/A
5/15/2019	CHFHUF	3:30:00 PM	288.21	288.5			N/A
5/15/2019	CHFJPY	9:30:00 AM	108.708	108.775			N/A
5/15/2019	CHFJPY	11:30:00 AM	108.789	108.856			N/A
5/15/2019	CHFJPY	1:30:00 PM	108.486	108.537			N/A
5/15/2019	CHFJPY	3:30:00 PM	108.431	108.457			N/A

5/15/2019	CHFJPY.fx	9:30:00 AM	108.743	108.74			N/A
5/15/2019	CHFJPY.fx	11:30:00 AM	108.823	108.82			N/A
5/15/2019	CHFJPY.fx	1:30:00 PM	108.519	108.502			N/A
5/15/2019	CHFJPY.fx	3:30:00 PM	108.456	108.424			N/A
5/15/2019	CHFMXN	9:30:00 AM	18.9817	18.9986			N/A
5/15/2019	CHFMXN	11:30:00 AM	19.0258	19.0408			N/A
5/15/2019	CHFMXN	1:30:00 PM	19.048	19.056			N/A
5/15/2019	CHFMXN	3:30:00 PM	19.0595	19.067			N/A
5/15/2019	CHFNOK	9:30:00 AM	8.6694	8.6769			N/A
5/15/2019	CHFNOK	11:30:00 AM	8.6902	8.6971			N/A
5/15/2019	CHFNOK	1:30:00 PM	8.6894	8.6941			N/A
5/15/2019	CHFNOK	3:30:00 PM	8.6922	8.6963			N/A
5/15/2019	CHFNOK.fx	9:30:00 AM	8.67295	8.67351			N/A
5/15/2019	CHFNOK.fx	11:30:00 AM	8.69369	8.69353			N/A
5/15/2019	CHFNOK.fx	1:30:00 PM	8.69307	8.69047			N/A
5/15/2019	CHFNOK.fx	3:30:00 PM	8.69315	8.69277			N/A
5/15/2019	CHFPLN	9:30:00 AM	3.8108	3.8133			N/A
5/15/2019	CHFPLN	11:30:00 AM	3.8182	3.8199			N/A
5/15/2019	CHFPLN	1:30:00 PM	3.8216	3.8242			N/A
5/15/2019	CHFPLN	3:30:00 PM	3.8224	3.8244			N/A
5/15/2019	CHFPLN.fx	9:30:00 AM	3.80845	3.81563			N/A
5/15/2019	CHFPLN.fx	11:30:00 AM	3.81594	3.82205			N/A
5/15/2019	CHFPLN.fx	1:30:00 PM	3.81924	3.82647			N/A
5/15/2019	CHFPLN.fx	3:30:00 PM	3.81978	3.82718			N/A
5/15/2019	CHFSEK	9:30:00 AM	9.5202	9.5239			N/A
5/15/2019	CHFSEK	11:30:00 AM	9.5384	9.5432			N/A
5/15/2019	CHFSEK	1:30:00 PM	9.5483	9.552			N/A
5/15/2019	CHFSEK	3:30:00 PM	9.5549	9.555			N/A
5/15/2019	CHFSGD	9:30:00 AM	1.3563	1.3568			N/A
5/15/2019	CHFSGD	11:30:00 AM	1.3594	1.3598			N/A
5/15/2019	CHFSGD	1:30:00 PM	1.3595	1.3598			N/A
5/15/2019	CHFSGD	3:30:00 PM	1.3593	1.3593			N/A
5/15/2019	CHFSGD.fx	9:30:00 AM	1.35653	1.35659			N/A
5/15/2019	CHFSGD.fx	11:30:00 AM	1.35961	1.35957			N/A

5/15/2019	CHFSGD.fx	1:30:00 PM	1.35964	1.35961			N/A
5/15/2019	CHFSGD.fx	3:30:00 PM	1.35928	1.35921			N/A
5/15/2019	CHFZAR	9:30:00 AM	14.118	14.1309			N/A
5/15/2019	CHFZAR	11:30:00 AM	14.1377	14.1503			N/A
5/15/2019	CHFZAR	1:30:00 PM	14.1628	14.1726			N/A
5/15/2019	CHFZAR	3:30:00 PM	14.161	14.1662			N/A
5/15/2019	CZKJPY	9:30:00 AM	4.776	4.78			N/A
5/15/2019	CZKJPY	11:30:00 AM	4.773	4.776			N/A
5/15/2019	CZKJPY	1:30:00 PM	4.755	4.757			N/A
5/15/2019	CZKJPY	3:30:00 PM	4.748	4.75			N/A
5/15/2019	DAX30.i	9:30:00 AM	12032.93	12031.68			N/A
5/15/2019	DAX30.i	11:30:00 AM	11972.18	11962.18			N/A
5/15/2019	DAX30.i	1:30:00 PM	11910.43	11910.18			N/A
5/15/2019	DAX30.i	3:30:00 PM	11891.18	11880.68			N/A
5/15/2019	DJ30.i	9:30:00 AM					N/A
5/15/2019	DJ30.i	11:30:00 AM					N/A
5/15/2019	DJ30.i	1:30:00 PM					N/A
5/15/2019	DJ30.i	3:30:00 PM					N/A
5/15/2019	DKKJPY	9:30:00 AM	16.46	16.48			N/A
5/15/2019	DKKJPY	11:30:00 AM					N/A
5/15/2019	DKKJPY	1:30:00 PM					N/A
5/15/2019	DKKJPY	3:30:00 PM	16.38	16.39			N/A
5/15/2019	EURAUD	9:30:00 AM	1.61627	1.61665			N/A
5/15/2019	EURAUD	11:30:00 AM	1.61842	1.61879			N/A
5/15/2019	EURAUD	1:30:00 PM	1.61823	1.61848			N/A
5/15/2019	EURAUD	3:30:00 PM	1.61614	1.61601			N/A
5/15/2019	EURAUD.fx	9:30:00 AM	1.61648	1.61643			N/A
5/15/2019	EURAUD.fx	11:30:00 AM	1.61863	1.61856			N/A
5/15/2019	EURAUD.fx	1:30:00 PM	1.61844	1.61826			N/A
5/15/2019	EURAUD.fx	3:30:00 PM	1.61628	1.61595			N/A
5/15/2019	EURCAD	9:30:00 AM	1.50856	1.50927			N/A
5/15/2019	EURCAD	11:30:00 AM	1.51015	1.51105			N/A
5/15/2019	EURCAD	1:30:00 PM	1.5094	1.51018			N/A
5/15/2019	EURCAD	3:30:00 PM	1.50852	1.50769			N/A

5/15/2019	EURCAD.fx	9:30:00 AM	1.50899	1.50884			N/A
5/15/2019	EURCAD.fx	11:30:00 AM	1.51059	1.51062			N/A
5/15/2019	EURCAD.fx	1:30:00 PM	1.50983	1.50975			N/A
5/15/2019	EURCAD.fx	3:30:00 PM	1.50894	1.50752			N/A
5/15/2019	EURCHF	9:30:00 AM	1.1304	1.13041			N/A
5/15/2019	EURCHF	11:30:00 AM	1.12853	1.12854			N/A
5/15/2019	EURCHF	1:30:00 PM	1.1276	1.12762			N/A
5/15/2019	EURCHF	3:30:00 PM	1.12707	1.12696			N/A
5/15/2019	EURCHF.fx	9:30:00 AM	1.13046	1.13035			N/A
5/15/2019	EURCHF.fx	11:30:00 AM	1.12859	1.12848			N/A
5/15/2019	EURCHF.fx	1:30:00 PM	1.12766	1.12755			N/A
5/15/2019	EURCHF.fx	3:30:00 PM	1.12713	1.12693			N/A
5/15/2019	EURCZK	9:30:00 AM	25.713	25.751			N/A
5/15/2019	EURCZK	11:30:00 AM	25.702	25.742			N/A
5/15/2019	EURCZK	1:30:00 PM	25.717	25.748			N/A
5/15/2019	EURCZK	3:30:00 PM	25.723	25.757			N/A
5/15/2019	EURDKK	9:30:00 AM					N/A
5/15/2019	EURDKK	11:30:00 AM	7.4685	7.4696			N/A
5/15/2019	EURDKK	1:30:00 PM	7.4639	7.4642			N/A
5/15/2019	EURDKK	3:30:00 PM	7.465	7.4656			N/A
5/15/2019	EURGBP	9:30:00 AM	0.8683	0.86829			N/A
5/15/2019	EURGBP	11:30:00 AM	0.86844	0.86848		20	N/A
5/15/2019	EURGBP	1:30:00 PM	0.8677	0.86775		20	N/A
5/15/2019	EURGBP	3:30:00 PM	0.86939	0.86907		20	N/A
5/15/2019	EURGBP.fx	9:30:00 AM	0.86833	0.86824			N/A
5/15/2019	EURGBP.fx	11:30:00 AM	0.86848	0.86843			N/A
5/15/2019	EURGBP.fx	1:30:00 PM	0.86774	0.8677			N/A
5/15/2019	EURGBP.fx	3:30:00 PM	0.86938	0.86902			N/A
5/15/2019	EURHKD	9:30:00 AM	8.7944	8.7984			N/A
5/15/2019	EURHKD	11:30:00 AM	8.8001	8.8045			N/A
5/15/2019	EURHKD	1:30:00 PM	8.7862	8.7914			N/A
5/15/2019	EURHKD	3:30:00 PM	8.7813	8.783			N/A
5/15/2019	EURHKD.fx	9:30:00 AM	8.79722	8.79544			N/A
5/15/2019	EURHKD.fx	11:30:00 AM	8.80304	8.80168			N/A

5/15/2019	EURHKD.fx	1:30:00 PM	8.78904	8.78855			N/A
5/15/2019	EURHKD.fx	3:30:00 PM	8.78328	8.78032			N/A
5/15/2019	EURHUF	9:30:00 AM	324.37	325.07			N/A
5/15/2019	EURHUF	11:30:00 AM	324.53	325.15			N/A
5/15/2019	EURHUF	1:30:00 PM	324.59	325.12			N/A
5/15/2019	EURHUF	3:30:00 PM	324.96	325.55			N/A
5/15/2019	EURHUF.fx	9:30:00 AM	324.649	324.828			N/A
5/15/2019	EURHUF.fx	11:30:00 AM	324.821	324.952			N/A
5/15/2019	EURHUF.fx	1:30:00 PM	324.881	325.038			N/A
5/15/2019	EURHUF.fx	3:30:00 PM	325.24	325.291			N/A
5/15/2019	EURJPY	9:30:00 AM	122.93	122.917			N/A
5/15/2019	EURJPY	11:30:00 AM	122.809	122.816			N/A
5/15/2019	EURJPY	1:30:00 PM	122.36	122.362			N/A
5/15/2019	EURJPY	3:30:00 PM	122.243	122.189			N/A
5/15/2019	EURJPY.fx	9:30:00 AM	122.934	122.913			N/A
5/15/2019	EURJPY.fx	11:30:00 AM	122.812	122.812			N/A
5/15/2019	EURJPY.fx	1:30:00 PM	122.362	122.358			N/A
5/15/2019	EURJPY.fx	3:30:00 PM	122.234	122.186			N/A
5/15/2019	EURMXN	9:30:00 AM	21.4583	21.4773			N/A
5/15/2019	EURMXN	11:30:00 AM	21.4724	21.4912			N/A
5/15/2019	EURMXN	1:30:00 PM	21.4801	21.4933			N/A
5/15/2019	EURMXN	3:30:00 PM	21.4791	21.4897			N/A
5/15/2019	EURMXN.fx	9:30:00 AM	21.4677	21.4683			N/A
5/15/2019	EURMXN.fx	11:30:00 AM	21.4811	21.4828			N/A
5/15/2019	EURMXN.fx	1:30:00 PM	21.4894	21.4843			N/A
5/15/2019	EURMXN.fx	3:30:00 PM	21.4847	21.4797			N/A
5/15/2019	EURNOK	9:30:00 AM	9.798	9.8103			N/A
5/15/2019	EURNOK	11:30:00 AM	9.8049	9.8167			N/A
5/15/2019	EURNOK	1:30:00 PM	9.796	9.8055			N/A
5/15/2019	EURNOK	3:30:00 PM	9.7927	9.803			N/A
5/15/2019	EURNOK.fx	9:30:00 AM	9.80343	9.8048			N/A
5/15/2019	EURNOK.fx	11:30:00 AM	9.81049	9.81128			N/A
5/15/2019	EURNOK.fx	1:30:00 PM	9.80155	9.79992			N/A
5/15/2019	EURNOK.fx	3:30:00 PM	9.79638	9.7976			N/A

5/15/2019	EURNZD	9:30:00 AM	1.70575	1.70646			N/A
5/15/2019	EURNZD	11:30:00 AM	1.70805	1.70885			N/A
5/15/2019	EURNZD	1:30:00 PM	1.70753	1.70818			N/A
5/15/2019	EURNZD	3:30:00 PM	1.70642	1.70683			N/A
5/15/2019	EURNZD.fx	9:30:00 AM	1.70615	1.70605			N/A
5/15/2019	EURNZD.fx	11:30:00 AM	1.70847	1.70841			N/A
5/15/2019	EURNZD.fx	1:30:00 PM	1.70794	1.70774			N/A
5/15/2019	EURNZD.fx	3:30:00 PM	1.70676	1.70643			N/A
5/15/2019	EURPLN	9:30:00 AM	4.308	4.3107			N/A
5/15/2019	EURPLN	11:30:00 AM	4.3089	4.3108			N/A
5/15/2019	EURPLN	1:30:00 PM	4.3092	4.3124			N/A
5/15/2019	EURPLN	3:30:00 PM	4.3077	4.3106			N/A
5/15/2019	EURPLN.fx	9:30:00 AM	4.30708	4.31131			N/A
5/15/2019	EURPLN.fx	11:30:00 AM	4.30829	4.31132			N/A
5/15/2019	EURPLN.fx	1:30:00 PM	4.30867	4.31282			N/A
5/15/2019	EURPLN.fx	3:30:00 PM	4.30716	4.31153			N/A
5/15/2019	EURRUB	9:30:00 AM					N/A
5/15/2019	EURRUB	11:30:00 AM	72.292	72.73			N/A
5/15/2019	EURRUB	1:30:00 PM	72.233	72.665			N/A
5/15/2019	EURRUB	3:30:00 PM	72.129	72.449			N/A
5/15/2019	EURSEK	9:30:00 AM	10.7635	10.7686			N/A
5/15/2019	EURSEK	11:30:00 AM	10.7658	10.7705			N/A
5/15/2019	EURSEK	1:30:00 PM	10.7682	10.7731			N/A
5/15/2019	EURSEK	3:30:00 PM	10.7706	10.7714			N/A
5/15/2019	EURSEK.fx	9:30:00 AM	10.76508	10.76689			N/A
5/15/2019	EURSEK.fx	11:30:00 AM	10.76756	10.7692			N/A
5/15/2019	EURSEK.fx	1:30:00 PM	10.77008	10.77133			N/A
5/15/2019	EURSEK.fx	3:30:00 PM	10.7724	10.7704			N/A
5/15/2019	EURSGD	9:30:00 AM	1.5331	1.5338			N/A
5/15/2019	EURSGD	11:30:00 AM	1.534	1.5347			N/A
5/15/2019	EURSGD	1:30:00 PM	1.5328	1.5336			N/A
5/15/2019	EURSGD	3:30:00 PM	1.5317	1.5321			N/A
5/15/2019	EURSGD.fx	9:30:00 AM	1.53343	1.53342			N/A
5/15/2019	EURSGD.fx	11:30:00 AM	1.53436	1.5343			N/A

5/15/2019	EURSGD.fx	1:30:00 PM	1.5331	1.53317			N/A
5/15/2019	EURSGD.fx	3:30:00 PM	1.53192	1.53177			N/A
5/15/2019	EURUSD	9:30:00 AM	1.12047	1.12044			N/A
5/15/2019	EURUSD	11:30:00 AM	1.12121	1.12119			N/A
5/15/2019	EURUSD	1:30:00 PM	1.11943	1.11953			N/A
5/15/2019	EURUSD	3:30:00 PM	1.11875	1.11846			N/A
5/15/2019	EURUSD.fx	9:30:00 AM	1.12066	1.1205			N/A
5/15/2019	EURUSD.fx	11:30:00 AM	1.12141	1.12128			N/A
5/15/2019	EURUSD.fx	1:30:00 PM	1.11964	1.11961			N/A
5/15/2019	EURUSD.fx	3:30:00 PM	1.1189	1.11857			N/A
5/15/2019	EURZAR	9:30:00 AM	15.9619	15.9778			N/A
5/15/2019	EURZAR	11:30:00 AM	15.9564	15.9739			N/A
5/15/2019	EURZAR	1:30:00 PM	15.9726	15.9838			N/A
5/15/2019	EURZAR	3:30:00 PM	15.9665	15.9675			N/A
5/15/2019	EURZAR.fx	9:30:00 AM	15.961	15.97823			N/A
5/15/2019	EURZAR.fx	11:30:00 AM	15.95584	15.97423			N/A
5/15/2019	EURZAR.fx	1:30:00 PM	15.97184	15.98397			N/A
5/15/2019	EURZAR.fx	3:30:00 PM	15.96524	15.96823			N/A
5/15/2019	GBPAUD	9:30:00 AM	1.86216	1.86267			N/A
5/15/2019	GBPAUD	11:30:00 AM	1.86413	1.86475			N/A
5/15/2019	GBPAUD	1:30:00 PM	1.86555	1.86602			N/A
5/15/2019	GBPAUD	3:30:00 PM	1.85999	1.85992			N/A
5/15/2019	GBPAUD.fx	9:30:00 AM	1.86256	1.86226			N/A
5/15/2019	GBPAUD.fx	11:30:00 AM	1.86453	1.86436			N/A
5/15/2019	GBPAUD.fx	1:30:00 PM	1.86596	1.86552			N/A
5/15/2019	GBPAUD.fx	3:30:00 PM	1.86039	1.85973			N/A
5/15/2019	GBPCAD	9:30:00 AM	1.73759	1.7382			N/A
5/15/2019	GBPCAD	11:30:00 AM	1.73906	1.73971			N/A
5/15/2019	GBPCAD	1:30:00 PM	1.7397	1.74028			N/A
5/15/2019	GBPCAD	3:30:00 PM	1.73575	1.73432			N/A
5/15/2019	GBPCAD.fx	9:30:00 AM	1.73798	1.73781			N/A
5/15/2019	GBPCAD.fx	11:30:00 AM	1.73946	1.73929			N/A
5/15/2019	GBPCAD.fx	1:30:00 PM	1.74011	1.73979			N/A
5/15/2019	GBPCAD.fx	3:30:00 PM	1.73613	1.73418			N/A



5/15/2019	GBPCHE	9:30:00 AM	1.30177	1.30216			N/A
5/15/2019	GBPCHE	11:30:00 AM	1.29934	1.29966			N/A
5/15/2019	GBPCHE	1:30:00 PM	1.29927	1.29969			N/A
5/15/2019	GBPCHE	3:30:00 PM	1.29661	1.29621			N/A
5/15/2019	GBPCHE.fx	9:30:00 AM	1.30196	1.30197			N/A
5/15/2019	GBPCHE.fx	11:30:00 AM	1.29955	1.29944			N/A
5/15/2019	GBPCHE.fx	1:30:00 PM	1.29946	1.29948			N/A
5/15/2019	GBPCHE.fx	3:30:00 PM	1.29677	1.29625			N/A
5/15/2019	GBPCZK	9:30:00 AM	29.626	29.642			N/A
5/15/2019	GBPCZK	11:30:00 AM	29.608	29.629			N/A
5/15/2019	GBPCZK	1:30:00 PM	29.65	29.659			N/A
5/15/2019	GBPCZK	3:30:00 PM	29.605	29.615			N/A
5/15/2019	GBPDKK	9:30:00 AM	8.597	8.608			N/A
5/15/2019	GBPDKK	11:30:00 AM	8.595	8.606			N/A
5/15/2019	GBPDKK	1:30:00 PM	8.603	8.613			N/A
5/15/2019	GBPDKK	3:30:00 PM	8.59	8.596			N/A
5/15/2019	GBPDKK.fx	9:30:00 AM	8.5949	8.6071			N/A
5/15/2019	GBPDKK.fx	11:30:00 AM	8.5935	8.6059			N/A
5/15/2019	GBPDKK.fx	1:30:00 PM	8.601	8.6133			N/A
5/15/2019	GBPDKK.fx	3:30:00 PM	8.5884	8.5994			N/A
5/15/2019	GBPHKD	9:30:00 AM	10.1262	10.1314			N/A
5/15/2019	GBPHKD	11:30:00 AM	10.1299	10.1357			N/A
5/15/2019	GBPHKD	1:30:00 PM	10.1234	10.1276			N/A
5/15/2019	GBPHKD	3:30:00 PM	10.0982	10.0993			N/A
5/15/2019	GBPHUF	9:30:00 AM	373.61	374			N/A
5/15/2019	GBPHUF	11:30:00 AM	373.73	374.17			N/A
5/15/2019	GBPHUF	1:30:00 PM	374.08	374.36			N/A
5/15/2019	GBPHUF	3:30:00 PM	373.61	373.85			N/A
5/15/2019	GBPJPY	9:30:00 AM	141.559	141.596			N/A
5/15/2019	GBPJPY	11:30:00 AM	141.404	141.426			N/A
5/15/2019	GBPJPY	1:30:00 PM	141.001	141.021			N/A
5/15/2019	GBPJPY	3:30:00 PM	140.61	140.587		2000	N/A
5/15/2019	GBPJPY.fx	9:30:00 AM	141.578	141.575			N/A
5/15/2019	GBPJPY.fx	11:30:00 AM	141.424	141.405			N/A

5/15/2019	GBPJPY.fx	1:30:00 PM	141.022	141			N/A
5/15/2019	GBPJPY.fx	3:30:00 PM	140.623	140.576			N/A
5/15/2019	GBPMXN	9:30:00 AM	24.7132	24.7265			N/A
5/15/2019	GBPMXN	11:30:00 AM	24.7221	24.7374			N/A
5/15/2019	GBPMXN	1:30:00 PM	24.751	24.7554			N/A
5/15/2019	GBPMXN	3:30:00 PM	24.7035	24.7089			N/A
5/15/2019	GBPNOK	9:30:00 AM	11.2852	11.2953			N/A
5/15/2019	GBPNOK	11:30:00 AM	11.2909	11.3015			N/A
5/15/2019	GBPNOK	1:30:00 PM	11.2899	11.2974			N/A
5/15/2019	GBPNOK	3:30:00 PM	11.2666	11.2749			N/A
5/15/2019	GBPNOK.fx	9:30:00 AM	11.28999	11.29058			N/A
5/15/2019	GBPNOK.fx	11:30:00 AM	11.29599	11.29645			N/A
5/15/2019	GBPNOK.fx	1:30:00 PM	11.295	11.29228			N/A
5/15/2019	GBPNOK.fx	3:30:00 PM	11.27148	11.27122			N/A
5/15/2019	GBPNZD	9:30:00 AM	1.96475	1.96514			N/A
5/15/2019	GBPNZD	11:30:00 AM	1.9669	1.96758			N/A
5/15/2019	GBPNZD	1:30:00 PM	1.96802	1.9683			N/A
5/15/2019	GBPNZD	3:30:00 PM	1.96334	1.96346			N/A
5/15/2019	GBPNZD.fx	9:30:00 AM	1.96511	1.96477			N/A
5/15/2019	GBPNZD.fx	11:30:00 AM	1.96729	1.96718			N/A
5/15/2019	GBPNZD.fx	1:30:00 PM	1.96839	1.96792			N/A
5/15/2019	GBPNZD.fx	3:30:00 PM	1.9637	1.9632			N/A
5/15/2019	GBPPLN	9:30:00 AM	4.9628	4.9635			N/A
5/15/2019	GBPPLN	11:30:00 AM	4.9626	4.9626			N/A
5/15/2019	GBPPLN	1:30:00 PM	4.9671	4.9685			N/A
5/15/2019	GBPPLN	3:30:00 PM	4.9577	4.957			N/A
5/15/2019	GBPPLN.fx	9:30:00 AM	4.96055	4.96552			N/A
5/15/2019	GBPPLN.fx	11:30:00 AM	4.96051	4.96454			N/A
5/15/2019	GBPPLN.fx	1:30:00 PM	4.96518	4.97058			N/A
5/15/2019	GBPPLN.fx	3:30:00 PM	4.95546	4.96068			N/A
5/15/2019	GBPSEK	9:30:00 AM	12.3953	12.4034			N/A
5/15/2019	GBPSEK	11:30:00 AM	12.395	12.4037			N/A
5/15/2019	GBPSEK	1:30:00 PM	12.4083	12.4169			N/A
5/15/2019	GBPSEK	3:30:00 PM	12.3909	12.389			N/A

5/15/2019	GBPSEK.fx	9:30:00 AM	12.39154	12.40713			N/A
5/15/2019	GBPSEK.fx	11:30:00 AM	12.39154	12.40697			N/A
5/15/2019	GBPSEK.fx	1:30:00 PM	12.40493	12.42027			N/A
5/15/2019	GBPSEK.fx	3:30:00 PM	12.38671	12.39562			N/A
5/15/2019	GBPSGD	9:30:00 AM	1.7659	1.7665			N/A
5/15/2019	GBPSGD	11:30:00 AM	1.7664	1.7671			N/A
5/15/2019	GBPSGD	1:30:00 PM	1.7665	1.7672			N/A
5/15/2019	GBPSGD	3:30:00 PM	1.7623	1.7624			N/A
5/15/2019	GBPSGD.fx	9:30:00 AM	1.764	1.76825			N/A
5/15/2019	GBPSGD.fx	11:30:00 AM	1.76454	1.76888			N/A
5/15/2019	GBPSGD.fx	1:30:00 PM	1.76468	1.76896			N/A
5/15/2019	GBPSGD.fx	3:30:00 PM	1.76042	1.76455			N/A
5/15/2019	GBPUSD	9:30:00 AM	1.29067	1.29066			N/A
5/15/2019	GBPUSD	11:30:00 AM	1.29118	1.29118			N/A
5/15/2019	GBPUSD	1:30:00 PM	1.2903	1.29027			N/A
5/15/2019	GBPUSD	3:30:00 PM	1.28736	1.28679			N/A
5/15/2019	GBPUSD.fx	9:30:00 AM	1.29073	1.2906			N/A
5/15/2019	GBPUSD.fx	11:30:00 AM	1.29124	1.29111			N/A
5/15/2019	GBPUSD.fx	1:30:00 PM	1.29036	1.2902			N/A
5/15/2019	GBPUSD.fx	3:30:00 PM	1.28739	1.28683			N/A
5/15/2019	GBPZAR	9:30:00 AM	18.3818	18.4057			N/A
5/15/2019	GBPZAR	11:30:00 AM	18.3713	18.3968			N/A
5/15/2019	GBPZAR	1:30:00 PM	18.4051	18.4267			N/A
5/15/2019	GBPZAR	3:30:00 PM	18.3673	18.376			N/A
5/15/2019	GBPZAR.fx	9:30:00 AM	18.3892	18.3993			N/A
5/15/2019	GBPZAR.fx	11:30:00 AM	18.3786	18.3893			N/A
5/15/2019	GBPZAR.fx	1:30:00 PM	18.4118	18.419			N/A
5/15/2019	GBPZAR.fx	3:30:00 PM	18.3734	18.3689			N/A
5/15/2019	GOLD	9:30:00 AM	1294.54	1294.83			N/A
5/15/2019	GOLD	11:30:00 AM	1297.42	1297.64			N/A
5/15/2019	GOLD	1:30:00 PM	1298.15	1298.42			N/A
5/15/2019	GOLD	3:30:00 PM	1299.86	1299.29			N/A
5/15/2019	HKDJPY	9:30:00 AM	13.98	13.98			N/A
5/15/2019	HKDJPY	11:30:00 AM					N/A

5/15/2019	HKDJPY	1:30:00 PM	13.92	13.93			N/A
5/15/2019	HKDJPY	3:30:00 PM	13.92	13.92			N/A
5/15/2019	HKDJPY.fx	9:30:00 AM	13.969	13.977			N/A
5/15/2019	HKDJPY.fx	11:30:00 AM	13.948	13.955			N/A
5/15/2019	HKDJPY.fx	1:30:00 PM	13.918	13.925			N/A
5/15/2019	HKDJPY.fx	3:30:00 PM	13.913	13.915			N/A
5/15/2019	HUFJPY	9:30:00 AM	0.3789	0.3792			N/A
5/15/2019	HUFJPY	11:30:00 AM	0.3783	0.3786			N/A
5/15/2019	HUFJPY	1:30:00 PM	0.3769	0.3772			N/A
5/15/2019	HUFJPY	3:30:00 PM	0.3762	0.3765			N/A
5/15/2019	JP225.i	9:30:00 AM	21175.5	21188.83			N/A
5/15/2019	JP225.i	11:30:00 AM	21073.83	21086.33			N/A
5/15/2019	JP225.i	1:30:00 PM	20963.83	20978.83			N/A
5/15/2019	JP225.i	3:30:00 PM	20944.67	20938.83			N/A
5/15/2019	MXNJPY	9:30:00 AM	5.73	5.74			N/A
5/15/2019	MXNJPY	11:30:00 AM	5.72	5.73			N/A
5/15/2019	MXNJPY	1:30:00 PM	5.7	5.7			N/A
5/15/2019	MXNJPY	3:30:00 PM	5.69	5.7			N/A
5/15/2019	NASDAQ.i	9:30:00 AM					N/A
5/15/2019	NASDAQ.i	11:30:00 AM					N/A
5/15/2019	NASDAQ.i	1:30:00 PM					N/A
5/15/2019	NASDAQ.i	3:30:00 PM					N/A
5/15/2019	NOKJPY	9:30:00 AM	12.53	12.56			N/A
5/15/2019	NOKJPY	11:30:00 AM	12.51	12.54			N/A
5/15/2019	NOKJPY	1:30:00 PM	12.48	12.5			N/A
5/15/2019	NOKJPY	3:30:00 PM	12.46	12.49			N/A
5/15/2019	NOKJPY.fx	9:30:00 AM	12.535	12.541			N/A
5/15/2019	NOKJPY.fx	11:30:00 AM	12.515	12.522			N/A
5/15/2019	NOKJPY.fx	1:30:00 PM	12.484	12.488			N/A
5/15/2019	NOKJPY.fx	3:30:00 PM	12.473	12.476			N/A
5/15/2019	NZDCAD	9:30:00 AM	0.88411	0.88477			N/A
5/15/2019	NZDCAD	11:30:00 AM	0.88384	0.88454			N/A
5/15/2019	NZDCAD	1:30:00 PM	0.88372	0.88439			N/A
5/15/2019	NZDCAD	3:30:00 PM	0.88375	0.88339			N/A

5/15/2019	NZDCAD.fx	9:30:00 AM	0.88444	0.88444			N/A
5/15/2019	NZDCAD.fx	11:30:00 AM	0.88418	0.8842			N/A
5/15/2019	NZDCAD.fx	1:30:00 PM	0.88406	0.88406			N/A
5/15/2019	NZDCAD.fx	3:30:00 PM	0.88407	0.88344			N/A
5/15/2019	NZDCHF	9:30:00 AM	0.66227	0.66294			N/A
5/15/2019	NZDCHF	11:30:00 AM	0.66021	0.66093			N/A
5/15/2019	NZDCHF	1:30:00 PM	0.65996	0.66054			N/A
5/15/2019	NZDCHF	3:30:00 PM	0.66014	0.66054			N/A
5/15/2019	NZDCHF.fx	9:30:00 AM	0.6626	0.66259			N/A
5/15/2019	NZDCHF.fx	11:30:00 AM	0.66057	0.66058			N/A
5/15/2019	NZDCHF.fx	1:30:00 PM	0.66029	0.66019			N/A
5/15/2019	NZDCHF.fx	3:30:00 PM	0.66046	0.66032			N/A
5/15/2019	NZDCZK	9:30:00 AM	15.076	15.088			N/A
5/15/2019	NZDCZK	11:30:00 AM					N/A
5/15/2019	NZDCZK	1:30:00 PM	15.062	15.07			N/A
5/15/2019	NZDCZK	3:30:00 PM	15.078	15.084			N/A
5/15/2019	NZDDKK	9:30:00 AM					N/A
5/15/2019	NZDDKK	11:30:00 AM					N/A
5/15/2019	NZDDKK	1:30:00 PM	4.37	4.374			N/A
5/15/2019	NZDDKK	3:30:00 PM	4.372	4.375			N/A
5/15/2019	NZDHKD	9:30:00 AM	5.1534	5.1559			N/A
5/15/2019	NZDHKD	11:30:00 AM	5.1491	5.152			N/A
5/15/2019	NZDHKD	1:30:00 PM	5.143	5.1455			N/A
5/15/2019	NZDHKD	3:30:00 PM	5.1422	5.1443			N/A
5/15/2019	NZDHUF	9:30:00 AM	190.09	190.39			N/A
5/15/2019	NZDHUF	11:30:00 AM	189.93	190.23			N/A
5/15/2019	NZDHUF	1:30:00 PM	189.99	190.22			N/A
5/15/2019	NZDHUF	3:30:00 PM	190.24	190.45			N/A
5/15/2019	NZDJPY	9:30:00 AM	72.02	72.084			N/A
5/15/2019	NZDJPY	11:30:00 AM	71.849	71.92			N/A
5/15/2019	NZDJPY	1:30:00 PM	71.612	71.682			N/A
5/15/2019	NZDJPY	3:30:00 PM	71.601	71.636			N/A
5/15/2019	NZDJPY.fx	9:30:00 AM	72.053	72.052			N/A
5/15/2019	NZDJPY.fx	11:30:00 AM	71.882	71.887			N/A

5/15/2019	NZDJPY.fx	1:30:00 PM	71.644	71.649			N/A
5/15/2019	NZDJPY.fx	3:30:00 PM	71.622	71.605			N/A
5/15/2019	NZDMXN	9:30:00 AM	12.5769	12.5824			N/A
5/15/2019	NZDMXN	11:30:00 AM	12.5665	12.5725			N/A
5/15/2019	NZDMXN	1:30:00 PM	12.5738	12.5762			N/A
5/15/2019	NZDMXN	3:30:00 PM	12.5806	12.5853			N/A
5/15/2019	NZDNOK	9:30:00 AM	5.7409	5.7446			N/A
5/15/2019	NZDNOK	11:30:00 AM	5.737	5.7407			N/A
5/15/2019	NZDNOK	1:30:00 PM	5.7329	5.7339			N/A
5/15/2019	NZDNOK	3:30:00 PM	5.7335	5.7354			N/A
5/15/2019	NZDPLN	9:30:00 AM	2.5241	2.5255			N/A
5/15/2019	NZDPLN	11:30:00 AM	2.5209	2.5223			N/A
5/15/2019	NZDPLN	1:30:00 PM	2.5223	2.5236			N/A
5/15/2019	NZDPLN	3:30:00 PM	2.5231	2.5241			N/A
5/15/2019	NZDSEK	9:30:00 AM	6.3047	6.3114			N/A
5/15/2019	NZDSEK	11:30:00 AM	6.2973	6.3042			N/A
5/15/2019	NZDSEK	1:30:00 PM	6.3007	6.3071			N/A
5/15/2019	NZDSEK	3:30:00 PM	6.3062	6.3094			N/A
5/15/2019	NZDSGD	9:30:00 AM	0.8985	0.8992			N/A
5/15/2019	NZDSGD	11:30:00 AM	0.8978	0.8984			N/A
5/15/2019	NZDSGD	1:30:00 PM	0.8975	0.898			N/A
5/15/2019	NZDSGD	3:30:00 PM	0.8975	0.8979			N/A
5/15/2019	NZDSGD.fx	9:30:00 AM	0.89851	0.89909			N/A
5/15/2019	NZDSGD.fx	11:30:00 AM	0.89778	0.89837			N/A
5/15/2019	NZDSGD.fx	1:30:00 PM	0.89748	0.89791			N/A
5/15/2019	NZDSGD.fx	3:30:00 PM	0.89743	0.8979			N/A
5/15/2019	NZDUSD	9:30:00 AM	0.65674	0.65685			N/A
5/15/2019	NZDUSD	11:30:00 AM	0.65625	0.65638			N/A
5/15/2019	NZDUSD	1:30:00 PM	0.6555	0.65557			N/A
5/15/2019	NZDUSD	3:30:00 PM	0.65556	0.65547			N/A
5/15/2019	NZDUSD.fx	9:30:00 AM	0.6568	0.65687			N/A
5/15/2019	NZDUSD.fx	11:30:00 AM	0.65633	0.65638			N/A
5/15/2019	NZDUSD.fx	1:30:00 PM	0.65559	0.65558			N/A
5/15/2019	NZDUSD.fx	3:30:00 PM	0.65564	0.65554			N/A

5/15/2019	NZDZAR	9:30:00 AM	9.3479	9.3637			N/A
5/15/2019	NZDZAR	11:30:00 AM	9.3329	9.3481			N/A
5/15/2019	NZDZAR	1:30:00 PM	9.3429	9.3573			N/A
5/15/2019	NZDZAR	3:30:00 PM	9.3447	9.3546			N/A
5/15/2019	SEKJPY	9:30:00 AM	11.42	11.43			N/A
5/15/2019	SEKJPY	11:30:00 AM	11.4	11.42			N/A
5/15/2019	SEKJPY	1:30:00 PM	11.35	11.37			N/A
5/15/2019	SEKJPY	3:30:00 PM	11.35	11.35			N/A
5/15/2019	SEKJPY.fx	9:30:00 AM	11.408	11.426			N/A
5/15/2019	SEKJPY.fx	11:30:00 AM	11.395	11.414			N/A
5/15/2019	SEKJPY.fx	1:30:00 PM	11.351	11.37			N/A
5/15/2019	SEKJPY.fx	3:30:00 PM	11.34	11.352			N/A
5/15/2019	SGDJPY	9:30:00 AM	80.16	80.16			N/A
5/15/2019	SGDJPY	11:30:00 AM	80.05	80.04			N/A
5/15/2019	SGDJPY	1:30:00 PM	79.78	79.81			N/A
5/15/2019	SGDJPY	3:30:00 PM	79.76	79.76			N/A
5/15/2019	SILVER	9:30:00 AM	14.61	14.99			N/A
5/15/2019	SILVER	11:30:00 AM	14.64	15.01			N/A
5/15/2019	SILVER	1:30:00 PM	14.63	15			N/A
5/15/2019	SILVER	3:30:00 PM	14.62	14.99			N/A
5/15/2019	SPX500.i	9:30:00 AM	2846.3	2847.1			N/A
5/15/2019	SPX500.i	11:30:00 AM	2837.8	2838.35			N/A
5/15/2019	SPX500.i	1:30:00 PM	2827.8	2828.6			N/A
5/15/2019	SPX500.i	3:30:00 PM	2825.1	2822.39			N/A
5/15/2019	UK100.i	9:30:00 AM	7268.71	7269.04			N/A
5/15/2019	UK100.i	11:30:00 AM	7252.79	7251.79			N/A
5/15/2019	UK100.i	1:30:00 PM	7237.54	7237.79			N/A
5/15/2019	UK100.i	3:30:00 PM	7240.54	7237.29			N/A
5/15/2019	USDCAD	9:30:00 AM	1.34654	1.34658			N/A
5/15/2019	USDCAD	11:30:00 AM	1.34716	1.34717			N/A
5/15/2019	USDCAD	1:30:00 PM	1.34855	1.3485			N/A
5/15/2019	USDCAD	3:30:00 PM	1.34867	1.3476			N/A
5/15/2019	USDCAD.fx	9:30:00 AM	1.34657	1.34655			N/A
5/15/2019	USDCAD.fx	11:30:00 AM	1.34719	1.34713			N/A

5/15/2019	USDCAD.fx	1:30:00 PM	1.34859	1.34847			N/A
5/15/2019	USDCAD.fx	3:30:00 PM	1.34869	1.34766			N/A
5/15/2019	USDCHE	9:30:00 AM	1.00873	1.00883			N/A
5/15/2019	USDCHE	11:30:00 AM	1.00637	1.00644			N/A
5/15/2019	USDCHE	1:30:00 PM	1.00712	1.00717			N/A
5/15/2019	USDCHE	3:30:00 PM	1.00755	1.00723			N/A
5/15/2019	USDCHE.fx	9:30:00 AM	1.00877	1.00876			N/A
5/15/2019	USDCHE.fx	11:30:00 AM	1.00644	1.00637			N/A
5/15/2019	USDCHE.fx	1:30:00 PM	1.00717	1.00711			N/A
5/15/2019	USDCHE.fx	3:30:00 PM	1.0075	1.00725			N/A
5/15/2019	USDCZK	9:30:00 AM	22.972	22.992			N/A
5/15/2019	USDCZK	11:30:00 AM	22.944	22.965			N/A
5/15/2019	USDCZK	1:30:00 PM	22.994	23.012			N/A
5/15/2019	USDCZK	3:30:00 PM	23.021	23.034			N/A
5/15/2019	USDCZK.fx	9:30:00 AM	22.9795	22.9842			N/A
5/15/2019	USDCZK.fx	11:30:00 AM	22.954	22.9556			N/A
5/15/2019	USDCZK.fx	1:30:00 PM	23.002	23.0032			N/A
5/15/2019	USDCZK.fx	3:30:00 PM	23.0277	23.0303			N/A
5/15/2019	USDDKK	9:30:00 AM	6.6629	6.6658			N/A
5/15/2019	USDDKK	11:30:00 AM	6.6585	6.6619			N/A
5/15/2019	USDDKK	1:30:00 PM	6.6685	6.6724			N/A
5/15/2019	USDDKK	3:30:00 PM	6.6754	6.6772			N/A
5/15/2019	USDDKK.fx	9:30:00 AM	6.66319	6.66372			N/A
5/15/2019	USDDKK.fx	11:30:00 AM	6.6589	6.65964			N/A
5/15/2019	USDDKK.fx	1:30:00 PM	6.66894	6.67037			N/A
5/15/2019	USDDKK.fx	3:30:00 PM	6.6757	6.67513			N/A
5/15/2019	USDHKD	9:30:00 AM	7.8495	7.8499			N/A
5/15/2019	USDHKD	11:30:00 AM	7.8495	7.85			N/A
5/15/2019	USDHKD	1:30:00 PM	7.8495	7.8498			N/A
5/15/2019	USDHKD	3:30:00 PM	7.8496	7.85			N/A
5/15/2019	USDHKD.fx	9:30:00 AM	7.84947	7.84992			N/A
5/15/2019	USDHKD.fx	11:30:00 AM	7.8495	7.85003			N/A
5/15/2019	USDHKD.fx	1:30:00 PM	7.8495	7.85002			N/A
5/15/2019	USDHKD.fx	3:30:00 PM	7.8495	7.85007			N/A



5/15/2019	USDHUF	9:30:00 AM	289.57	290			N/A
5/15/2019	USDHUF	11:30:00 AM	289.52	289.94			N/A
5/15/2019	USDHUF	1:30:00 PM	290	290.48			N/A
5/15/2019	USDHUF	3:30:00 PM	290.51	290.89			N/A
5/15/2019	USDHUF.fx	9:30:00 AM	289.772	289.775			N/A
5/15/2019	USDHUF.fx	11:30:00 AM	289.733	289.728			N/A
5/15/2019	USDHUF.fx	1:30:00 PM	290.205	290.267			N/A
5/15/2019	USDHUF.fx	3:30:00 PM	290.723	290.716			N/A
5/15/2019	USDINR	9:30:00 AM	65.22	75.21			N/A
5/15/2019	USDINR	11:30:00 AM	65.24	75.22			N/A
5/15/2019	USDINR	1:30:00 PM					N/A
5/15/2019	USDINR	3:30:00 PM					N/A
5/15/2019	USDJPY	9:30:00 AM	109.69	109.697			N/A
5/15/2019	USDJPY	11:30:00 AM	109.519	109.526			N/A
5/15/2019	USDJPY	1:30:00 PM	109.284	109.289			N/A
5/15/2019	USDJPY	3:30:00 PM	109.289	109.211		1600	N/A
5/15/2019	USDJPY.fx	9:30:00 AM	109.695	109.69			N/A
5/15/2019	USDJPY.fx	11:30:00 AM	109.525	109.519			N/A
5/15/2019	USDJPY.fx	1:30:00 PM	109.29	109.282			N/A
5/15/2019	USDJPY.fx	3:30:00 PM	109.287	109.205			N/A
5/15/2019	USDMXN	9:30:00 AM	19.154	19.162			N/A
5/15/2019	USDMXN	11:30:00 AM	19.154	19.161			N/A
5/15/2019	USDMXN	1:30:00 PM	19.191	19.192			N/A
5/15/2019	USDMXN	3:30:00 PM	19.203	19.205			N/A
5/15/2019	USDMXN.f	9:30:00 AM	19.1573	19.1592			N/A
5/15/2019	USDMXN.f	11:30:00 AM	19.1576	19.1572			N/A
5/15/2019	USDMXN.f	1:30:00 PM	19.1946	19.1886			N/A
5/15/2019	USDMXN.f	3:30:00 PM	19.2059	19.2014			N/A
5/15/2019	USDNOK	9:30:00 AM	8.7432	8.7509			N/A
5/15/2019	USDNOK	11:30:00 AM	8.7437	8.7513			N/A
5/15/2019	USDNOK	1:30:00 PM	8.7484	8.7545			N/A
5/15/2019	USDNOK	3:30:00 PM	8.7533	8.7587			N/A
5/15/2019	USDNOK.fx	9:30:00 AM	8.74726	8.74663			N/A
5/15/2019	USDNOK.fx	11:30:00 AM	8.74765	8.74674			N/A

5/15/2019	USDNOK.fx	1:30:00 PM	8.75271	8.74999			N/A
5/15/2019	USDNOK.fx	3:30:00 PM	8.75628	8.75419			N/A
5/15/2019	USDPLN	9:30:00 AM	3.8449	3.846			N/A
5/15/2019	USDPLN	11:30:00 AM	3.8435	3.8435			N/A
5/15/2019	USDPLN	1:30:00 PM	3.8494	3.8509			N/A
5/15/2019	USDPLN	3:30:00 PM	3.8515	3.8518			N/A
5/15/2019	USDPLN.fx	9:30:00 AM	3.84413	3.84663			N/A
5/15/2019	USDPLN.fx	11:30:00 AM	3.84267	3.84421			N/A
5/15/2019	USDPLN.fx	1:30:00 PM	3.84868	3.85161			N/A
5/15/2019	USDPLN.fx	3:30:00 PM	3.85045	3.85316			N/A
5/15/2019	USDRUB	9:30:00 AM					N/A
5/15/2019	USDRUB	11:30:00 AM	64.584	64.971			N/A
5/15/2019	USDRUB	1:30:00 PM	64.632	65.013			N/A
5/15/2019	USDRUB	3:30:00 PM	64.58	64.967			N/A
5/15/2019	USDSEK	9:30:00 AM	9.6053	9.6091			N/A
5/15/2019	USDSEK	11:30:00 AM	9.6008	9.6047			N/A
5/15/2019	USDSEK	1:30:00 PM	9.6173	9.6216			N/A
5/15/2019	USDSEK	3:30:00 PM	9.6284	9.6267			N/A
5/15/2019	USDSEK.fx	9:30:00 AM	9.608	9.60694			N/A
5/15/2019	USDSEK.fx	11:30:00 AM	9.60361	9.60251			N/A
5/15/2019	USDSEK.fx	1:30:00 PM	9.61995	9.61976			N/A
5/15/2019	USDSEK.fx	3:30:00 PM	9.6308	9.62577			N/A
5/15/2019	USDSGD	9:30:00 AM	1.3683	1.3686			N/A
5/15/2019	USDSGD	11:30:00 AM	1.3681	1.3684			N/A
5/15/2019	USDSGD	1:30:00 PM	1.3692	1.3696			N/A
5/15/2019	USDSGD	3:30:00 PM	1.3692	1.3695			N/A
5/15/2019	USDSGD.fx	9:30:00 AM	1.3682	1.36862			N/A
5/15/2019	USDSGD.fx	11:30:00 AM	1.36804	1.36853			N/A
5/15/2019	USDSGD.fx	1:30:00 PM	1.3691	1.36958			N/A
5/15/2019	USDSGD.fx	3:30:00 PM	1.36904	1.36949			N/A
5/15/2019	USDZAR	9:30:00 AM	14.2433	14.2591			N/A
5/15/2019	USDZAR	11:30:00 AM	14.23	14.2446			N/A
5/15/2019	USDZAR	1:30:00 PM	14.2662	14.2777			N/A
5/15/2019	USDZAR	3:30:00 PM	14.274	14.2713			N/A

5/15/2019	USDZAR.fx	9:30:00 AM					N/A
5/15/2019	USDZAR.fx	11:30:00 AM					N/A
5/15/2019	USDZAR.fx	1:30:00 PM					N/A
5/15/2019	USDZAR.fx	3:30:00 PM					N/A
5/15/2019	XAUUSD	9:30:00 AM	1294.55	1294.83			N/A
5/15/2019	XAUUSD	11:30:00 AM	1297.42	1297.63			N/A
5/15/2019	XAUUSD	1:30:00 PM	1298.16	1298.42			N/A
5/15/2019	XAUUSD	3:30:00 PM	1299.85	1299.28			N/A
5/15/2019	ZARJPY	9:30:00 AM	7.68	7.7			N/A
5/15/2019	ZARJPY	11:30:00 AM	7.67	7.69			N/A
5/15/2019	ZARJPY	1:30:00 PM	7.64	7.66			N/A
5/15/2019	ZARJPY	3:30:00 PM	7.64	7.65			N/A
5/15/2019	ZARJPY.fx	9:30:00 AM	7.695	7.698			N/A
5/15/2019	ZARJPY.fx	11:30:00 AM	7.691	7.694			N/A
5/15/2019	ZARJPY.fx	1:30:00 PM	7.657	7.658			N/A
5/15/2019	ZARJPY.fx	3:30:00 PM	7.654	7.65			N/A
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5/16/2019	#Bitcoin	9:30:00 AM	8023.65	8053.45			N/A
5/16/2019	#Bitcoin	11:30:00 AM	8014.5	8042.3			N/A
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5/16/2019	#CL.f	9:30:00 AM	62.64	62.664			N/A
5/16/2019	#CL.f	11:30:00 AM	62.704	62.714			N/A
5/16/2019	#CL.f	1:30:00 PM	62.78	62.803			N/A
5/16/2019	#CL.f	3:30:00 PM	63.094	63.117			N/A
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5/16/2019	AUDCAD	11:30:00 AM	0.9292	0.92971			N/A
5/16/2019	AUDCAD	1:30:00 PM	0.92828	0.92884			N/A
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5/16/2019	AUDCAD.fx	9:30:00 AM	0.92844	0.92835			N/A
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5/16/2019	AUDCAD.fx	3:30:00 PM	0.92805	0.92788			N/A
5/16/2019	AUDCHF	9:30:00 AM	0.69609	0.69666			N/A
5/16/2019	AUDCHF	11:30:00 AM	0.69832	0.6989			N/A
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5/16/2019	AUDCHF.fx	9:30:00 AM	0.69643	0.69632			N/A
5/16/2019	AUDCHF.fx	11:30:00 AM	0.69866	0.69855			N/A
5/16/2019	AUDCHF.fx	1:30:00 PM	0.69917	0.69906			N/A
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5/16/2019	AUDDKK	9:30:00 AM	4.6016	4.6055			N/A
5/16/2019	AUDDKK	11:30:00 AM	4.6095	4.6138			N/A
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5/16/2019	AUDHKD	9:30:00 AM	5.4192	5.4223			N/A
5/16/2019	AUDHKD	11:30:00 AM	5.4336	5.4375			N/A
5/16/2019	AUDHKD	1:30:00 PM	5.4359	5.4383			N/A
5/16/2019	AUDHKD	3:30:00 PM	5.4252	5.4291			N/A
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5/16/2019	AUDHUF	11:30:00 AM	200.24	200.46			N/A
5/16/2019	AUDHUF	1:30:00 PM	200.27	200.36			N/A
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5/16/2019	AUDJPY	11:30:00 AM	75.831	75.878			N/A
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5/16/2019	AUDJPY	3:30:00 PM	75.871	75.879			N/A
5/16/2019	AUDJPY.fx	9:30:00 AM	75.617	75.601			N/A
5/16/2019	AUDJPY.fx	11:30:00 AM	75.865	75.842			N/A
5/16/2019	AUDJPY.fx	1:30:00 PM	75.982	75.974			N/A
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5/16/2019	AUDNOK	11:30:00 AM	6.022	6.0266			N/A
5/16/2019	AUDNOK	1:30:00 PM	6.016	6.02			N/A
5/16/2019	AUDNOK	3:30:00 PM	6.0171	6.021			N/A
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5/16/2019	AUDNOK.f	11:30:00 AM	6.0236	6.0248			N/A

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5/16/2019	AUDNZD	3:30:00 PM	1.05268	1.05339			N/A
5/16/2019	AUDNZD.fx	9:30:00 AM	1.05454	1.05451			N/A
5/16/2019	AUDNZD.fx	11:30:00 AM	1.05399	1.05387			N/A
5/16/2019	AUDNZD.fx	1:30:00 PM	1.05308	1.05305			N/A
5/16/2019	AUDNZD.fx	3:30:00 PM	1.05312	1.05293			N/A
5/16/2019	AUDPLN	9:30:00 AM	2.6496	2.6524			N/A
5/16/2019	AUDPLN	11:30:00 AM	2.6518	2.6548			N/A
5/16/2019	AUDPLN	1:30:00 PM	2.6526	2.6552			N/A
5/16/2019	AUDPLN	3:30:00 PM	2.6505	2.6526			N/A
5/16/2019	AUDSEK	9:30:00 AM	6.6355	6.6376			N/A
5/16/2019	AUDSEK	11:30:00 AM	6.6464	6.6483			N/A
5/16/2019	AUDSEK	1:30:00 PM	6.6378	6.6402			N/A
5/16/2019	AUDSEK	3:30:00 PM	6.6374	6.6394			N/A
5/16/2019	AUDSEK.fx	9:30:00 AM	6.631	6.642			N/A
5/16/2019	AUDSEK.fx	11:30:00 AM	6.6419	6.6527			N/A
5/16/2019	AUDSEK.fx	1:30:00 PM	6.6333	6.6446			N/A
5/16/2019	AUDSEK.fx	3:30:00 PM	6.6325	6.6438			N/A
5/16/2019	AUDSGD	9:30:00 AM	0.9456	0.9458			N/A
5/16/2019	AUDSGD	11:30:00 AM	0.9479	0.948			N/A
5/16/2019	AUDSGD	1:30:00 PM	0.948	0.9482			N/A
5/16/2019	AUDSGD	3:30:00 PM	0.9468	0.9469			N/A
5/16/2019	AUDSGD.fx	9:30:00 AM	0.94574	0.9457			N/A
5/16/2019	AUDSGD.fx	11:30:00 AM	0.94796	0.94793			N/A
5/16/2019	AUDSGD.fx	1:30:00 PM	0.94811	0.94805			N/A
5/16/2019	AUDSGD.fx	3:30:00 PM	0.94684	0.94681			N/A
5/16/2019	AUDUSD	9:30:00 AM	0.69081	0.69077			N/A
5/16/2019	AUDUSD	11:30:00 AM	0.69266	0.69266			N/A
5/16/2019	AUDUSD	1:30:00 PM	0.69287	0.69286			N/A
5/16/2019	AUDUSD	3:30:00 PM	0.69166	0.69164			N/A

5/16/2019	AUDUSD.fx	9:30:00 AM	0.69085	0.69072			N/A
5/16/2019	AUDUSD.fx	11:30:00 AM	0.69271	0.6926			N/A
5/16/2019	AUDUSD.fx	1:30:00 PM	0.69292	0.6928			N/A
5/16/2019	AUDUSD.fx	3:30:00 PM	0.69172	0.69158			N/A
5/16/2019	AUDZAR	9:30:00 AM	9.8407	9.8427			N/A
5/16/2019	AUDZAR	11:30:00 AM	9.82	9.8309			N/A
5/16/2019	AUDZAR	1:30:00 PM	9.7847	9.795			N/A
5/16/2019	AUDZAR	3:30:00 PM	9.7689	9.7781			N/A
5/16/2019	AUS200.i	9:30:00 AM					N/A
5/16/2019	AUS200.i	11:30:00 AM	6336.75	6338.75			N/A
5/16/2019	AUS200.i	1:30:00 PM	6357.75	6358.25			N/A
5/16/2019	AUS200.i	3:30:00 PM	6365.65	6365.75			N/A
5/16/2019	BCHUSD	9:30:00 AM	435.97	435.85			N/A
5/16/2019	BCHUSD	11:30:00 AM	432.6	433.65			N/A
5/16/2019	BCHUSD	1:30:00 PM	407.45	409.45			N/A
5/16/2019	BCHUSD	3:30:00 PM	410.24	410.3			N/A
5/16/2019	CADCHF	9:30:00 AM	0.74967	0.75038			N/A
5/16/2019	CADCHF	11:30:00 AM	0.75121	0.75185			N/A
5/16/2019	CADCHF	1:30:00 PM	0.75251	0.75315			N/A
5/16/2019	CADCHF	3:30:00 PM	0.75189	0.7522			N/A
5/16/2019	CADCHF.fx	9:30:00 AM	0.75001	0.75003			N/A
5/16/2019	CADCHF.fx	11:30:00 AM	0.75156	0.75148			N/A
5/16/2019	CADCHF.fx	1:30:00 PM	0.75284	0.75279			N/A
5/16/2019	CADCHF.fx	3:30:00 PM	0.75223	0.75188			N/A
5/16/2019	CADCZK	9:30:00 AM	17.055	17.069			N/A
5/16/2019	CADCZK	11:30:00 AM	17.065	17.08			N/A
5/16/2019	CADCZK	1:30:00 PM	17.08	17.095			N/A
5/16/2019	CADCZK	3:30:00 PM	17.075	17.089			N/A
5/16/2019	CADDDKK	9:30:00 AM					N/A
5/16/2019	CADDDKK	11:30:00 AM					N/A
5/16/2019	CADDDKK	1:30:00 PM	4.969	4.973			N/A
5/16/2019	CADDDKK	3:30:00 PM	4.966	4.969			N/A
5/16/2019	CADHKD	9:30:00 AM	5.8375	5.8414			N/A
5/16/2019	CADHKD	11:30:00 AM	5.8464	5.8501			N/A

5/16/2019	CADHKD	1:30:00 PM	5.8542	5.8576			N/A
5/16/2019	CADHKD	3:30:00 PM	5.8473	5.8512			N/A
5/16/2019	CADHUF	9:30:00 AM	215.57	215.63			N/A
5/16/2019	CADHUF	11:30:00 AM	215.49	215.66			N/A
5/16/2019	CADHUF	1:30:00 PM	215.72	215.74			N/A
5/16/2019	CADHUF	3:30:00 PM	215.52	215.55			N/A
5/16/2019	CADJPY	9:30:00 AM	81.403	81.469			N/A
5/16/2019	CADJPY	11:30:00 AM	81.576	81.632			N/A
5/16/2019	CADJPY	1:30:00 PM	81.788	81.855			N/A
5/16/2019	CADJPY	3:30:00 PM	81.754	81.761			N/A
5/16/2019	CADJPY.fx	9:30:00 AM	81.436	81.434			N/A
5/16/2019	CADJPY.fx	11:30:00 AM	81.609	81.597			N/A
5/16/2019	CADJPY.fx	1:30:00 PM	81.823	81.819			N/A
5/16/2019	CADJPY.fx	3:30:00 PM	81.788	81.731			N/A
5/16/2019	CADMXN	9:30:00 AM	14.1825	14.1947			N/A
5/16/2019	CADMXN	11:30:00 AM	14.1721	14.1831			N/A
5/16/2019	CADMXN	1:30:00 PM	14.1537	14.1652			N/A
5/16/2019	CADMXN	3:30:00 PM	14.17	14.1773			N/A
5/16/2019	CADNOK	9:30:00 AM	6.4845	6.4894			N/A
5/16/2019	CADNOK	11:30:00 AM	6.477	6.4819			N/A
5/16/2019	CADNOK	1:30:00 PM	6.4771	6.4814			N/A
5/16/2019	CADNOK	3:30:00 PM	6.482	6.4845			N/A
5/16/2019	CADPLN	9:30:00 AM	2.8541	2.856			N/A
5/16/2019	CADPLN	11:30:00 AM	2.8534	2.8553			N/A
5/16/2019	CADPLN	1:30:00 PM	2.8568	2.8585			N/A
5/16/2019	CADPLN	3:30:00 PM	2.8557	2.8575			N/A
5/16/2019	CADSEK	9:30:00 AM	7.1448	7.1482			N/A
5/16/2019	CADSEK	11:30:00 AM	7.1486	7.1525			N/A
5/16/2019	CADSEK	1:30:00 PM	7.1463	7.1494			N/A
5/16/2019	CADSEK	3:30:00 PM	7.1502	7.153			N/A
5/16/2019	CADSGD	9:30:00 AM	1.018	1.0183			N/A
5/16/2019	CADSGD	11:30:00 AM	1.019	1.0193			N/A
5/16/2019	CADSGD	1:30:00 PM	1.0203	1.0205			N/A
5/16/2019	CADSGD	3:30:00 PM	1.0194	1.0197			N/A

5/16/2019	CADZAR	9:30:00 AM	10.6011	10.605			N/A
5/16/2019	CADZAR	11:30:00 AM	10.5654	10.5794			N/A
5/16/2019	CADZAR	1:30:00 PM	10.5373	10.5498			N/A
5/16/2019	CADZAR	3:30:00 PM	10.5271	10.5383			N/A
5/16/2019	CHFCZK	9:30:00 AM	22.743	22.756			N/A
5/16/2019	CHFCZK	11:30:00 AM	22.709	22.724			N/A
5/16/2019	CHFCZK	1:30:00 PM	22.691	22.705			N/A
5/16/2019	CHFCZK	3:30:00 PM	22.709	22.721			N/A
5/16/2019	CHFDKK	9:30:00 AM	6.61	6.613			N/A
5/16/2019	CHFDKK	11:30:00 AM	6.601	6.604			N/A
5/16/2019	CHFDKK	1:30:00 PM	6.601	6.604			N/A
5/16/2019	CHFDKK	3:30:00 PM	6.605	6.606			N/A
5/16/2019	CHFDKK.fx	9:30:00 AM	6.6082	6.6145			N/A
5/16/2019	CHFDKK.fx	11:30:00 AM	6.5992	6.6049			N/A
5/16/2019	CHFDKK.fx	1:30:00 PM	6.5993	6.6051			N/A
5/16/2019	CHFDKK.fx	3:30:00 PM	6.603	6.6075			N/A
5/16/2019	CHFHKD	9:30:00 AM	7.7839	7.7878			N/A
5/16/2019	CHFHKD	11:30:00 AM	7.7803	7.7842			N/A
5/16/2019	CHFHKD	1:30:00 PM	7.7767	7.7804			N/A
5/16/2019	CHFHKD	3:30:00 PM	7.7778	7.7784			N/A
5/16/2019	CHFHUF	9:30:00 AM	287.34	287.56			N/A
5/16/2019	CHFHUF	11:30:00 AM	286.66	287.05			N/A
5/16/2019	CHFHUF	1:30:00 PM	286.47	286.65			N/A
5/16/2019	CHFHUF	3:30:00 PM	286.48	286.77			N/A
5/16/2019	CHFJPY	9:30:00 AM	108.543	108.613			N/A
5/16/2019	CHFJPY	11:30:00 AM	108.547	108.609			N/A
5/16/2019	CHFJPY	1:30:00 PM	108.655	108.711			N/A
5/16/2019	CHFJPY	3:30:00 PM	108.686	108.719			N/A
5/16/2019	CHFJPY.fx	9:30:00 AM	108.576	108.579			N/A
5/16/2019	CHFJPY.fx	11:30:00 AM	108.581	108.575			N/A
5/16/2019	CHFJPY.fx	1:30:00 PM	108.689	108.676			N/A
5/16/2019	CHFJPY.fx	3:30:00 PM	108.718	108.685			N/A
5/16/2019	CHFMXN	9:30:00 AM	18.9099	18.9257			N/A
5/16/2019	CHFMXN	11:30:00 AM	18.8589	18.8719			N/A

5/16/2019	CHF MXN	1:30:00 PM	18.8014	18.8155			N/A
5/16/2019	CHF MXN	3:30:00 PM	18.8424	18.8507			N/A
5/16/2019	CHF NOK	9:30:00 AM	8.6471	8.6556			N/A
5/16/2019	CHF NOK	11:30:00 AM	8.6204	8.6279			N/A
5/16/2019	CHF NOK	1:30:00 PM	8.6049	8.6124			N/A
5/16/2019	CHF NOK	3:30:00 PM	8.6229	8.6249			N/A
5/16/2019	CHF NOK.fx	9:30:00 AM	8.65045	8.65231			N/A
5/16/2019	CHF NOK.fx	11:30:00 AM	8.6239	8.6243			N/A
5/16/2019	CHF NOK.fx	1:30:00 PM	8.60848	8.60886			N/A
5/16/2019	CHF NOK.fx	3:30:00 PM	8.62603	8.62143			N/A
5/16/2019	CHF PLN	9:30:00 AM	3.8057	3.8084			N/A
5/16/2019	CHF PLN	11:30:00 AM	3.7966	3.7994			N/A
5/16/2019	CHF PLN	1:30:00 PM	3.7944	3.7974			N/A
5/16/2019	CHF PLN	3:30:00 PM	3.799	3.8005			N/A
5/16/2019	CHF PLN.fx	9:30:00 AM	3.80324	3.81081			N/A
5/16/2019	CHF PLN.fx	11:30:00 AM	3.79434	3.80153			N/A
5/16/2019	CHF PLN.fx	1:30:00 PM	3.79206	3.79965			N/A
5/16/2019	CHF PLN.fx	3:30:00 PM	3.79526	3.80329			N/A
5/16/2019	CHF SEK	9:30:00 AM	9.5267	9.531			N/A
5/16/2019	CHF SEK	11:30:00 AM	9.5121	9.5168			N/A
5/16/2019	CHF SEK	1:30:00 PM	9.4928	9.4968			N/A
5/16/2019	CHF SEK	3:30:00 PM	9.5088	9.5085			N/A
5/16/2019	CHF SGD	9:30:00 AM	1.358	1.3584			N/A
5/16/2019	CHF SGD	11:30:00 AM	1.3569	1.3574			N/A
5/16/2019	CHF SGD	1:30:00 PM	1.356	1.3563			N/A
5/16/2019	CHF SGD	3:30:00 PM	1.3567	1.3566			N/A
5/16/2019	CHF SGD.fx	9:30:00 AM	1.35814	1.35822			N/A
5/16/2019	CHF SGD.fx	11:30:00 AM	1.35705	1.35712			N/A
5/16/2019	CHF SGD.fx	1:30:00 PM	1.35622	1.35617			N/A
5/16/2019	CHF SGD.fx	3:30:00 PM	1.3568	1.35645			N/A
5/16/2019	CHF ZAR	9:30:00 AM	14.1385	14.1358			N/A
5/16/2019	CHF ZAR	11:30:00 AM	14.063	14.0735			N/A
5/16/2019	CHF ZAR	1:30:00 PM	14.0009	14.0087			N/A
5/16/2019	CHF ZAR	3:30:00 PM	14.0019	14.0111			N/A

5/16/2019	CZKJPY	9:30:00 AM	4.772	4.776			N/A
5/16/2019	CZKJPY	11:30:00 AM					N/A
5/16/2019	CZKJPY	1:30:00 PM	4.788	4.792			N/A
5/16/2019	CZKJPY	3:30:00 PM	4.786	4.787			N/A
5/16/2019	DAX30.i	9:30:00 AM	12048.38	12048.38			N/A
5/16/2019	DAX30.i	11:30:00 AM	12056.63	12052.13			N/A
5/16/2019	DAX30.i	1:30:00 PM	12178.63	12175.63			N/A
5/16/2019	DAX30.i	3:30:00 PM	12176.57	12161.38			N/A
5/16/2019	DJ30.i	9:30:00 AM					N/A
5/16/2019	DJ30.i	11:30:00 AM					N/A
5/16/2019	DJ30.i	1:30:00 PM					N/A
5/16/2019	DJ30.i	3:30:00 PM					N/A
5/16/2019	DKKJPY	9:30:00 AM	16.43	16.44			N/A
5/16/2019	DKKJPY	11:30:00 AM					N/A
5/16/2019	DKKJPY	1:30:00 PM					N/A
5/16/2019	DKKJPY	3:30:00 PM					N/A
5/16/2019	EURAUD	9:30:00 AM	1.62152	1.62163			N/A
5/16/2019	EURAUD	11:30:00 AM	1.61851	1.61873			N/A
5/16/2019	EURAUD	1:30:00 PM	1.61724	1.61734			N/A
5/16/2019	EURAUD	3:30:00 PM	1.61923	1.61928			N/A
5/16/2019	EURAUD.fx	9:30:00 AM	1.62171	1.62141			N/A
5/16/2019	EURAUD.fx	11:30:00 AM	1.61872	1.61852			N/A
5/16/2019	EURAUD.fx	1:30:00 PM	1.61746	1.61711			N/A
5/16/2019	EURAUD.fx	3:30:00 PM	1.6194	1.61908			N/A
5/16/2019	EURCAD	9:30:00 AM	1.50571	1.50655			N/A
5/16/2019	EURCAD	11:30:00 AM	1.50468	1.5055			N/A
5/16/2019	EURCAD	1:30:00 PM	1.5021	1.50274			N/A
5/16/2019	EURCAD	3:30:00 PM	1.5031	1.50356			N/A
5/16/2019	EURCAD.fx	9:30:00 AM	1.50613	1.50612			N/A
5/16/2019	EURCAD.fx	11:30:00 AM	1.50511	1.50508			N/A
5/16/2019	EURCAD.fx	1:30:00 PM	1.50252	1.50233			N/A
5/16/2019	EURCAD.fx	3:30:00 PM	1.50342	1.50314			N/A
5/16/2019	EURCHF	9:30:00 AM	1.12957	1.12969			N/A
5/16/2019	EURCHF	11:30:00 AM	1.13115	1.13119			N/A

5/16/2019	EURCHF	1:30:00 PM	1.13111	1.13117			N/A
5/16/2019	EURCHF	3:30:00 PM	1.1307	1.1305			N/A
5/16/2019	EURCHF.fx	9:30:00 AM	1.12963	1.12963			N/A
5/16/2019	EURCHF.fx	11:30:00 AM	1.1312	1.13113			N/A
5/16/2019	EURCHF.fx	1:30:00 PM	1.13117	1.13111			N/A
5/16/2019	EURCHF.fx	3:30:00 PM	1.13076	1.13045			N/A
5/16/2019	EURCZK	9:30:00 AM	25.677	25.712			N/A
5/16/2019	EURCZK	11:30:00 AM	25.675	25.711			N/A
5/16/2019	EURCZK	1:30:00 PM	25.651	25.69			N/A
5/16/2019	EURCZK	3:30:00 PM	25.659	25.694			N/A
5/16/2019	EURDKK	9:30:00 AM	7.4668	7.468			N/A
5/16/2019	EURDKK	11:30:00 AM	7.4666	7.4675			N/A
5/16/2019	EURDKK	1:30:00 PM	7.4655	7.4666			N/A
5/16/2019	EURDKK	3:30:00 PM	7.467	7.4675			N/A
5/16/2019	EURGBP	9:30:00 AM	0.87267	0.87279			N/A
5/16/2019	EURGBP	11:30:00 AM	0.87401	0.87413			N/A
5/16/2019	EURGBP	1:30:00 PM	0.87394	0.87393			N/A
5/16/2019	EURGBP	3:30:00 PM	0.87458	0.87464			N/A
5/16/2019	EURGBP.fx	9:30:00 AM	0.87271	0.87274			N/A
5/16/2019	EURGBP.fx	11:30:00 AM	0.87404	0.87407			N/A
5/16/2019	EURGBP.fx	1:30:00 PM	0.87399	0.87388			N/A
5/16/2019	EURGBP.fx	3:30:00 PM	0.8746	0.8746			N/A
5/16/2019	EURHKD	9:30:00 AM	8.793	8.7981			N/A
5/16/2019	EURHKD	11:30:00 AM	8.8007	8.8061			N/A
5/16/2019	EURHKD	1:30:00 PM	8.7963	8.8014			N/A
5/16/2019	EURHKD	3:30:00 PM	8.7924	8.7958			N/A
5/16/2019	EURHKD.fx	9:30:00 AM	8.79583	8.79526			N/A
5/16/2019	EURHKD.fx	11:30:00 AM	8.80351	8.80325			N/A
5/16/2019	EURHKD.fx	1:30:00 PM	8.79914	8.79849			N/A
5/16/2019	EURHKD.fx	3:30:00 PM	8.79503	8.79304			N/A
5/16/2019	EURHUF	9:30:00 AM	324.55	325.1			N/A
5/16/2019	EURHUF	11:30:00 AM	324.18	324.86			N/A
5/16/2019	EURHUF	1:30:00 PM	323.93	324.52			N/A
5/16/2019	EURHUF	3:30:00 PM	323.85	324.43			N/A



5/16/2019	EURHUF.fx	9:30:00 AM	324.813	324.848			N/A
5/16/2019	EURHUF.fx	11:30:00 AM	324.467	324.6			N/A
5/16/2019	EURHUF.fx	1:30:00 PM	324.21	324.228			N/A
5/16/2019	EURHUF.fx	3:30:00 PM	324.131	324.308			N/A
5/16/2019	EURJPY	9:30:00 AM	122.649	122.654			N/A
5/16/2019	EURJPY	11:30:00 AM	122.825	122.819			N/A
5/16/2019	EURJPY	1:30:00 PM	122.931	122.928			N/A
5/16/2019	EURJPY	3:30:00 PM	122.937	122.875			N/A
5/16/2019	EURJPY.fx	9:30:00 AM	122.651	122.65			N/A
5/16/2019	EURJPY.fx	11:30:00 AM	122.827	122.815			N/A
5/16/2019	EURJPY.fx	1:30:00 PM	122.934	122.924			N/A
5/16/2019	EURJPY.fx	3:30:00 PM	122.939	122.872			N/A
5/16/2019	EURMXN	9:30:00 AM	21.363	21.3812			N/A
5/16/2019	EURMXN	11:30:00 AM	21.333	21.3507			N/A
5/16/2019	EURMXN	1:30:00 PM	21.2681	21.2857			N/A
5/16/2019	EURMXN	3:30:00 PM	21.3042	21.316			N/A
5/16/2019	EURMXN.fx	9:30:00 AM	21.3721	21.3724			N/A
5/16/2019	EURMXN.fx	11:30:00 AM	21.3422	21.3416			N/A
5/16/2019	EURMXN.fx	1:30:00 PM	21.2771	21.2766			N/A
5/16/2019	EURMXN.fx	3:30:00 PM	21.3135	21.3061			N/A
5/16/2019	EURNOK	9:30:00 AM	9.7665	9.7789			N/A
5/16/2019	EURNOK	11:30:00 AM	9.7489	9.7615			N/A
5/16/2019	EURNOK	1:30:00 PM	9.7316	9.7425			N/A
5/16/2019	EURNOK	3:30:00 PM	9.7461	9.7545			N/A
5/16/2019	EURNOK.fx	9:30:00 AM	9.77179	9.77367			N/A
5/16/2019	EURNOK.fx	11:30:00 AM	9.75431	9.75585			N/A
5/16/2019	EURNOK.fx	1:30:00 PM	9.73721	9.73688			N/A
5/16/2019	EURNOK.fx	3:30:00 PM	9.75099	9.74898			N/A
5/16/2019	EURNZD	9:30:00 AM	1.71033	1.71088			N/A
5/16/2019	EURNZD	11:30:00 AM	1.70639	1.70678			N/A
5/16/2019	EURNZD	1:30:00 PM	1.70348	1.70396			N/A
5/16/2019	EURNZD	3:30:00 PM	1.70543	1.70616			N/A
5/16/2019	EURNZD.fx	9:30:00 AM	1.71075	1.71046			N/A
5/16/2019	EURNZD.fx	11:30:00 AM	1.70682	1.70634			N/A

5/16/2019	EURNZD.fx	1:30:00 PM	1.7039	1.70352			N/A
5/16/2019	EURNZD.fx	3:30:00 PM	1.7058	1.70573			N/A
5/16/2019	EURPLN	9:30:00 AM	4.2991	4.302			N/A
5/16/2019	EURPLN	11:30:00 AM	4.2945	4.2977			N/A
5/16/2019	EURPLN	1:30:00 PM	4.292	4.2952			N/A
5/16/2019	EURPLN	3:30:00 PM	4.2941	4.2962			N/A
5/16/2019	EURPLN.fx	9:30:00 AM	4.29847	4.30264			N/A
5/16/2019	EURPLN.fx	11:30:00 AM	4.29395	4.29833			N/A
5/16/2019	EURPLN.fx	1:30:00 PM	4.29127	4.29582			N/A
5/16/2019	EURPLN.fx	3:30:00 PM	4.29331	4.29732			N/A
5/16/2019	EURRUB	9:30:00 AM					N/A
5/16/2019	EURRUB	11:30:00 AM	72.035	72.46			N/A
5/16/2019	EURRUB	1:30:00 PM	71.943	72.383			N/A
5/16/2019	EURRUB	3:30:00 PM	71.903	72.323			N/A
5/16/2019	EURSEK	9:30:00 AM	10.7631	10.7679			N/A
5/16/2019	EURSEK	11:30:00 AM	10.7613	10.7657			N/A
5/16/2019	EURSEK	1:30:00 PM	10.7391	10.7431			N/A
5/16/2019	EURSEK	3:30:00 PM	10.7525	10.7527			N/A
5/16/2019	EURSEK.fx	9:30:00 AM	10.76468	10.76633			N/A
5/16/2019	EURSEK.fx	11:30:00 AM	10.76295	10.76409			N/A
5/16/2019	EURSEK.fx	1:30:00 PM	10.7408	10.74131			N/A
5/16/2019	EURSEK.fx	3:30:00 PM	10.75388	10.75098			N/A
5/16/2019	EURSGD	9:30:00 AM	1.5338	1.5347			N/A
5/16/2019	EURSGD	11:30:00 AM	1.5346	1.5354			N/A
5/16/2019	EURSGD	1:30:00 PM	1.5336	1.5344			N/A
5/16/2019	EURSGD	3:30:00 PM	1.5335	1.5342			N/A
5/16/2019	EURSGD.fx	9:30:00 AM	1.5342	1.53426			N/A
5/16/2019	EURSGD.fx	11:30:00 AM	1.53499	1.53511			N/A
5/16/2019	EURSGD.fx	1:30:00 PM	1.53399	1.53397			N/A
5/16/2019	EURSGD.fx	3:30:00 PM	1.53387	1.53379			N/A
5/16/2019	EURUSD	9:30:00 AM	1.12036	1.12044	40	40	N/A
5/16/2019	EURUSD	11:30:00 AM	1.12134	1.12148			N/A
5/16/2019	EURUSD	1:30:00 PM	1.1208	1.12089			N/A
5/16/2019	EURUSD	3:30:00 PM	1.12029	1.12016			N/A

5/16/2019	EURUSD.fx	9:30:00 AM	1.12056	1.12053			N/A
5/16/2019	EURUSD.fx	11:30:00 AM	1.12155	1.12156			N/A
5/16/2019	EURUSD.fx	1:30:00 PM	1.12101	1.12098			N/A
5/16/2019	EURUSD.fx	3:30:00 PM	1.12049	1.12025			N/A
5/16/2019	EURZAR	9:30:00 AM	15.9723	15.975			N/A
5/16/2019	EURZAR	11:30:00 AM	15.9078	15.9231			N/A
5/16/2019	EURZAR	1:30:00 PM	15.8363	15.8507			N/A
5/16/2019	EURZAR	3:30:00 PM	15.8316	15.8499			N/A
5/16/2019	EURZAR.fx	9:30:00 AM	15.97185	15.97541			N/A
5/16/2019	EURZAR.fx	11:30:00 AM	15.90728	15.92375			N/A
5/16/2019	EURZAR.fx	1:30:00 PM	15.83633	15.85109			N/A
5/16/2019	EURZAR.fx	3:30:00 PM	15.83098	15.85032			N/A
5/16/2019	GBPAUD	9:30:00 AM	1.85848	1.8589			N/A
5/16/2019	GBPAUD	11:30:00 AM	1.85222	1.85277			N/A
5/16/2019	GBPAUD	1:30:00 PM	1.85106	1.85143			N/A
5/16/2019	GBPAUD	3:30:00 PM	1.85187	1.85226			N/A
5/16/2019	GBPAUD.fx	9:30:00 AM	1.85886	1.85851			N/A
5/16/2019	GBPAUD.fx	11:30:00 AM	1.85263	1.85239			N/A
5/16/2019	GBPAUD.fx	1:30:00 PM	1.85146	1.85101			N/A
5/16/2019	GBPAUD.fx	3:30:00 PM	1.85226	1.85184			N/A
5/16/2019	GBPCAD	9:30:00 AM	1.72534	1.72608			N/A
5/16/2019	GBPCAD	11:30:00 AM	1.72151	1.72228			N/A
5/16/2019	GBPCAD	1:30:00 PM	1.71896	1.71941			N/A
5/16/2019	GBPCAD	3:30:00 PM	1.71856	1.71902			N/A
5/16/2019	GBPCAD.fx	9:30:00 AM	1.72571	1.72568			N/A
5/16/2019	GBPCAD.fx	11:30:00 AM	1.72191	1.7219			N/A
5/16/2019	GBPCAD.fx	1:30:00 PM	1.71938	1.719			N/A
5/16/2019	GBPCAD.fx	3:30:00 PM	1.71892	1.7186			N/A
5/16/2019	GBPCHF	9:30:00 AM	1.2941	1.2946			N/A
5/16/2019	GBPCHF	11:30:00 AM	1.29399	1.29434			N/A
5/16/2019	GBPCHF	1:30:00 PM	1.29424	1.2944			N/A
5/16/2019	GBPCHF	3:30:00 PM	1.29261	1.2927			N/A
5/16/2019	GBPCHF.fx	9:30:00 AM	1.29429	1.2944			N/A
5/16/2019	GBPCHF.fx	11:30:00 AM	1.29417	1.29413			N/A

5/16/2019	GBPCHF.fx	1:30:00 PM	1.29445	1.29418			N/A
5/16/2019	GBPCHF.fx	3:30:00 PM	1.29279	1.2925			N/A
5/16/2019	GBPCZK	9:30:00 AM	29.432	29.448			N/A
5/16/2019	GBPCZK	11:30:00 AM	29.383	29.403			N/A
5/16/2019	GBPCZK	1:30:00 PM	29.364	29.381			N/A
5/16/2019	GBPCZK	3:30:00 PM	29.347	29.365			N/A
5/16/2019	GBPDKK	9:30:00 AM	8.552	8.563			N/A
5/16/2019	GBPDKK	11:30:00 AM	8.539	8.55			N/A
5/16/2019	GBPDKK	1:30:00 PM	8.541	8.551			N/A
5/16/2019	GBPDKK	3:30:00 PM	8.534	8.544			N/A
5/16/2019	GBPDKK.fx	9:30:00 AM	8.5506	8.5638			N/A
5/16/2019	GBPDKK.fx	11:30:00 AM	8.5372	8.5503			N/A
5/16/2019	GBPDKK.fx	1:30:00 PM	8.539	8.5509			N/A
5/16/2019	GBPDKK.fx	3:30:00 PM	8.532	8.5448			N/A
5/16/2019	GBPHKD	9:30:00 AM	10.0727	10.0786			N/A
5/16/2019	GBPHKD	11:30:00 AM	10.0667	10.0726			N/A
5/16/2019	GBPHKD	1:30:00 PM	10.0633	10.0673			N/A
5/16/2019	GBPHKD	3:30:00 PM	10.0496	10.0546			N/A
5/16/2019	GBPHUF	9:30:00 AM	371.87	372.14			N/A
5/16/2019	GBPHUF	11:30:00 AM	370.91	371.4			N/A
5/16/2019	GBPHUF	1:30:00 PM	370.68	370.97			N/A
5/16/2019	GBPHUF	3:30:00 PM	370.28	370.56			N/A
5/16/2019	GBPJPY	9:30:00 AM	140.51	140.554			N/A
5/16/2019	GBPJPY	11:30:00 AM	140.511	140.534			N/A
5/16/2019	GBPJPY	1:30:00 PM	140.654	140.67			N/A
5/16/2019	GBPJPY	3:30:00 PM	140.542	140.514			N/A
5/16/2019	GBPJPY.fx	9:30:00 AM	140.53	140.535			N/A
5/16/2019	GBPJPY.fx	11:30:00 AM	140.53	140.513			N/A
5/16/2019	GBPJPY.fx	1:30:00 PM	140.675	140.65			N/A
5/16/2019	GBPJPY.fx	3:30:00 PM	140.558	140.494			N/A
5/16/2019	GBPMXN	9:30:00 AM	24.4734	24.489			N/A
5/16/2019	GBPMXN	11:30:00 AM	24.4032	24.4154			N/A
5/16/2019	GBPMXN	1:30:00 PM	24.3339	24.3452			N/A
5/16/2019	GBPMXN	3:30:00 PM	24.3542	24.3641			N/A

5/16/2019	GBPNOK	9:30:00 AM	11.1915	11.2035			N/A
5/16/2019	GBPNOK	11:30:00 AM	11.1542	11.1661			N/A
5/16/2019	GBPNOK	1:30:00 PM	11.1373	11.1461			N/A
5/16/2019	GBPNOK	3:30:00 PM	11.1445	11.1516			N/A
5/16/2019	GBPNOK.fx	9:30:00 AM	11.19604	11.19907			N/A
5/16/2019	GBPNOK.fx	11:30:00 AM	11.15907	11.16114			N/A
5/16/2019	GBPNOK.fx	1:30:00 PM	11.14198	11.14123			N/A
5/16/2019	GBPNOK.fx	3:30:00 PM	11.14848	11.14664			N/A
5/16/2019	GBPNZD	9:30:00 AM	1.95983	1.96026			N/A
5/16/2019	GBPNZD	11:30:00 AM	1.95235	1.95257			N/A
5/16/2019	GBPNZD	1:30:00 PM	1.9494	1.94971			N/A
5/16/2019	GBPNZD	3:30:00 PM	1.95	1.95072			N/A
5/16/2019	GBPNZD.fx	9:30:00 AM	1.96018	1.95989			N/A
5/16/2019	GBPNZD.fx	11:30:00 AM	1.95269	1.95221			N/A
5/16/2019	GBPNZD.fx	1:30:00 PM	1.94975	1.9493			N/A
5/16/2019	GBPNZD.fx	3:30:00 PM	1.95033	1.95032			N/A
5/16/2019	GBPPLN	9:30:00 AM	4.9268	4.9284			N/A
5/16/2019	GBPPLN	11:30:00 AM	4.914	4.9161			N/A
5/16/2019	GBPPLN	1:30:00 PM	4.9123	4.9137			N/A
5/16/2019	GBPPLN	3:30:00 PM	4.9112	4.9115			N/A
5/16/2019	GBPPLN.fx	9:30:00 AM	4.92454	4.9307			N/A
5/16/2019	GBPPLN.fx	11:30:00 AM	4.91196	4.91808			N/A
5/16/2019	GBPPLN.fx	1:30:00 PM	4.91014	4.91587			N/A
5/16/2019	GBPPLN.fx	3:30:00 PM	4.90808	4.91474			N/A
5/16/2019	GBPSEK	9:30:00 AM	12.3307	12.3405			N/A
5/16/2019	GBPSEK	11:30:00 AM	12.31	12.3191			N/A
5/16/2019	GBPSEK	1:30:00 PM	12.2865	12.2942			N/A
5/16/2019	GBPSEK	3:30:00 PM	12.2925	12.2973			N/A
5/16/2019	GBPSEK.fx	9:30:00 AM	12.327	12.34409			N/A
5/16/2019	GBPSEK.fx	11:30:00 AM	12.30665	12.32278			N/A
5/16/2019	GBPSEK.fx	1:30:00 PM	12.28304	12.29789			N/A
5/16/2019	GBPSEK.fx	3:30:00 PM	12.28799	12.30079			N/A
5/16/2019	GBPSGD	9:30:00 AM	1.7575	1.7583			N/A
5/16/2019	GBPSGD	11:30:00 AM	1.7557	1.7566			N/A

5/16/2019	GBPSGD	1:30:00 PM	1.755	1.7555			N/A
5/16/2019	GBPSGD	3:30:00 PM	1.7534	1.754			N/A
5/16/2019	GBPSGD.fx	9:30:00 AM	1.75564	1.76012			N/A
5/16/2019	GBPSGD.fx	11:30:00 AM	1.75395	1.75836			N/A
5/16/2019	GBPSGD.fx	1:30:00 PM	1.75314	1.75734			N/A
5/16/2019	GBPSGD.fx	3:30:00 PM	1.75151	1.75582			N/A
5/16/2019	GBPUSD	9:30:00 AM	1.28389	1.28397			N/A
5/16/2019	GBPUSD	11:30:00 AM	1.28313	1.28318			N/A
5/16/2019	GBPUSD	1:30:00 PM	1.28275	1.28264			N/A
5/16/2019	GBPUSD	3:30:00 PM	1.28109	1.28089			N/A
5/16/2019	GBPUSD.fx	9:30:00 AM	1.28394	1.28392			N/A
5/16/2019	GBPUSD.fx	11:30:00 AM	1.28318	1.28313			N/A
5/16/2019	GBPUSD.fx	1:30:00 PM	1.28281	1.28257			N/A
5/16/2019	GBPUSD.fx	3:30:00 PM	1.2811	1.28082			N/A
5/16/2019	GBPZAR	9:30:00 AM	18.2986	18.3068			N/A
5/16/2019	GBPZAR	11:30:00 AM	18.1958	18.2212			N/A
5/16/2019	GBPZAR	1:30:00 PM	18.1169	18.1433			N/A
5/16/2019	GBPZAR	3:30:00 PM	18.0979	18.1254			N/A
5/16/2019	GBPZAR.fx	9:30:00 AM	18.3045	18.3001			N/A
5/16/2019	GBPZAR.fx	11:30:00 AM	18.2033	18.2137			N/A
5/16/2019	GBPZAR.fx	1:30:00 PM	18.125	18.1363			N/A
5/16/2019	GBPZAR.fx	3:30:00 PM	18.1047	18.1184			N/A
5/16/2019	GOLD	9:30:00 AM	1296.8	1297.08			N/A
5/16/2019	GOLD	11:30:00 AM	1296.79	1297.09			N/A
5/16/2019	GOLD	1:30:00 PM	1294.42	1294.43			N/A
5/16/2019	GOLD	3:30:00 PM	1293.97	1291.75			N/A
5/16/2019	HKDJPY	9:30:00 AM	13.95	13.95			N/A
5/16/2019	HKDJPY	11:30:00 AM					N/A
5/16/2019	HKDJPY	1:30:00 PM					N/A
5/16/2019	HKDJPY	3:30:00 PM	13.98	13.98			N/A
5/16/2019	HKDJPY.fx	9:30:00 AM	13.94	13.948			N/A
5/16/2019	HKDJPY.fx	11:30:00 AM	13.947	13.954			N/A
5/16/2019	HKDJPY.fx	1:30:00 PM	13.967	13.974			N/A
5/16/2019	HKDJPY.fx	3:30:00 PM	13.977	13.974			N/A

5/16/2019	HUFJPY	9:30:00 AM	0.3781	0.3783			N/A
5/16/2019	HUFJPY	11:30:00 AM	0.3784	0.3787			N/A
5/16/2019	HUFJPY	1:30:00 PM	0.3793	0.3795			N/A
5/16/2019	HUFJPY	3:30:00 PM	0.3793	0.3796			N/A
5/16/2019	JP225.i	9:30:00 AM	21038.75	21056.25			N/A
5/16/2019	JP225.i	11:30:00 AM	21068.75	21083.75			N/A
5/16/2019	JP225.i	1:30:00 PM	21206.25	21218.75			N/A
5/16/2019	JP225.i	3:30:00 PM	21198.75	21194.58			N/A
5/16/2019	MXNJPY	9:30:00 AM	5.74	5.75			N/A
5/16/2019	MXNJPY	11:30:00 AM	5.75	5.76			N/A
5/16/2019	MXNJPY	1:30:00 PM	5.78	5.79			N/A
5/16/2019	MXNJPY	3:30:00 PM	5.77	5.77			N/A
5/16/2019	NASDAQ.i	9:30:00 AM					N/A
5/16/2019	NASDAQ.i	11:30:00 AM					N/A
5/16/2019	NASDAQ.i	1:30:00 PM					N/A
5/16/2019	NASDAQ.i	3:30:00 PM					N/A
5/16/2019	NOKJPY	9:30:00 AM					N/A
5/16/2019	NOKJPY	11:30:00 AM	12.58	12.61			N/A
5/16/2019	NOKJPY	1:30:00 PM	12.61	12.64			N/A
5/16/2019	NOKJPY	3:30:00 PM	12.59	12.62			N/A
5/16/2019	NOKJPY.fx	9:30:00 AM	12.546	12.555			N/A
5/16/2019	NOKJPY.fx	11:30:00 AM	12.588	12.594			N/A
5/16/2019	NOKJPY.fx	1:30:00 PM	12.622	12.629			N/A
5/16/2019	NOKJPY.fx	3:30:00 PM	12.608	12.604			N/A
5/16/2019	NZDCAD	9:30:00 AM	0.88009	0.88072			N/A
5/16/2019	NZDCAD	11:30:00 AM	0.88167	0.88207			N/A
5/16/2019	NZDCAD	1:30:00 PM	0.88148	0.88208			N/A
5/16/2019	NZDCAD	3:30:00 PM	0.88108	0.88155			N/A
5/16/2019	NZDCAD.fx	9:30:00 AM	0.88042	0.88039			N/A
5/16/2019	NZDCAD.fx	11:30:00 AM	0.88201	0.88174			N/A
5/16/2019	NZDCAD.fx	1:30:00 PM	0.88181	0.88175			N/A
5/16/2019	NZDCAD.fx	3:30:00 PM	0.88132	0.88121			N/A
5/16/2019	NZDCHF	9:30:00 AM	0.66007	0.66067			N/A
5/16/2019	NZDCHF	11:30:00 AM	0.66256	0.66311			N/A

5/16/2019	NZDCHF	1:30:00 PM	0.66358	0.66418			N/A
5/16/2019	NZDCHF	3:30:00 PM	0.66255	0.66304			N/A
5/16/2019	NZDCHF.fx	9:30:00 AM	0.66041	0.66032			N/A
5/16/2019	NZDCHF.fx	11:30:00 AM	0.66289	0.66276			N/A
5/16/2019	NZDCHF.fx	1:30:00 PM	0.66392	0.66383			N/A
5/16/2019	NZDCHF.fx	3:30:00 PM	0.66288	0.66271			N/A
5/16/2019	NZDCZK	9:30:00 AM	15.016	15.023			N/A
5/16/2019	NZDCZK	11:30:00 AM	15.051	15.057			N/A
5/16/2019	NZDCZK	1:30:00 PM	15.063	15.07			N/A
5/16/2019	NZDCZK	3:30:00 PM	15.047	15.057			N/A
5/16/2019	NZDDKK	9:30:00 AM	4.363	4.367			N/A
5/16/2019	NZDDKK	11:30:00 AM					N/A
5/16/2019	NZDDKK	1:30:00 PM	4.381	4.384			N/A
5/16/2019	NZDDKK	3:30:00 PM	4.375	4.379			N/A
5/16/2019	NZDHKD	9:30:00 AM	5.1386	5.1408			N/A
5/16/2019	NZDHKD	11:30:00 AM	5.1557	5.158			N/A
5/16/2019	NZDHKD	1:30:00 PM	5.1617	5.1637			N/A
5/16/2019	NZDHKD	3:30:00 PM	5.1526	5.1555			N/A
5/16/2019	NZDHUF	9:30:00 AM	189.68	189.87			N/A
5/16/2019	NZDHUF	11:30:00 AM	189.96	190.21			N/A
5/16/2019	NZDHUF	1:30:00 PM	190.13	190.28			N/A
5/16/2019	NZDHUF	3:30:00 PM	189.82	190.02			N/A
5/16/2019	NZDJPY	9:30:00 AM	71.673	71.729			N/A
5/16/2019	NZDJPY	11:30:00 AM	71.948	71.992			N/A
5/16/2019	NZDJPY	1:30:00 PM	72.119	72.185			N/A
5/16/2019	NZDJPY	3:30:00 PM	72.038	72.067			N/A
5/16/2019	NZDJPY.fx	9:30:00 AM	71.704	71.696			N/A
5/16/2019	NZDJPY.fx	11:30:00 AM	71.98	71.959			N/A
5/16/2019	NZDJPY.fx	1:30:00 PM	72.152	72.153			N/A
5/16/2019	NZDJPY.fx	3:30:00 PM	72.069	72.036			N/A
5/16/2019	NZDMXN	9:30:00 AM	12.4862	12.4912			N/A
5/16/2019	NZDMXN	11:30:00 AM	12.5001	12.5033			N/A
5/16/2019	NZDMXN	1:30:00 PM	12.4812	12.4861			N/A
5/16/2019	NZDMXN	3:30:00 PM	12.4871	12.4906			N/A



5/16/2019	NZDNOK	9:30:00 AM	5.708	5.7111			N/A
5/16/2019	NZDNOK	11:30:00 AM	5.7118	5.715			N/A
5/16/2019	NZDNOK	1:30:00 PM	5.7109	5.7136			N/A
5/16/2019	NZDNOK	3:30:00 PM	5.7105	5.7141			N/A
5/16/2019	NZDPLN	9:30:00 AM	2.5123	2.5133			N/A
5/16/2019	NZDPLN	11:30:00 AM	2.5157	2.5171			N/A
5/16/2019	NZDPLN	1:30:00 PM	2.5189	2.5198			N/A
5/16/2019	NZDPLN	3:30:00 PM	2.5168	2.5181			N/A
5/16/2019	NZDSEK	9:30:00 AM	6.2878	6.2932			N/A
5/16/2019	NZDSEK	11:30:00 AM	6.3019	6.307			N/A
5/16/2019	NZDSEK	1:30:00 PM	6.2988	6.3045			N/A
5/16/2019	NZDSEK	3:30:00 PM	6.2981	6.3038			N/A
5/16/2019	NZDSGD	9:30:00 AM	0.8966	0.8971			N/A
5/16/2019	NZDSGD	11:30:00 AM	0.8993	0.8997			N/A
5/16/2019	NZDSGD	1:30:00 PM	0.9001	0.9005			N/A
5/16/2019	NZDSGD	3:30:00 PM	0.899	0.8995			N/A
5/16/2019	NZDSGD.fx	9:30:00 AM	0.89658	0.89704			N/A
5/16/2019	NZDSGD.fx	11:30:00 AM	0.89926	0.89961			N/A
5/16/2019	NZDSGD.fx	1:30:00 PM	0.90008	0.90056			N/A
5/16/2019	NZDSGD.fx	3:30:00 PM	0.89882	0.89942			N/A
5/16/2019	NZDUSD	9:30:00 AM	0.65502	0.65503			N/A
5/16/2019	NZDUSD	11:30:00 AM	0.65717	0.65713			N/A
5/16/2019	NZDUSD	1:30:00 PM	0.6579	0.65794			N/A
5/16/2019	NZDUSD	3:30:00 PM	0.65671	0.6568			N/A
5/16/2019	NZDUSD.fx	9:30:00 AM	0.6551	0.65504			N/A
5/16/2019	NZDUSD.fx	11:30:00 AM	0.65725	0.65714			N/A
5/16/2019	NZDUSD.fx	1:30:00 PM	0.65797	0.65795			N/A
5/16/2019	NZDUSD.fx	3:30:00 PM	0.65679	0.65681			N/A
5/16/2019	NZDZAR	9:30:00 AM	9.33	9.335			N/A
5/16/2019	NZDZAR	11:30:00 AM	9.316	9.3278			N/A
5/16/2019	NZDZAR	1:30:00 PM	9.2896	9.302			N/A
5/16/2019	NZDZAR	3:30:00 PM	9.2739	9.2874			N/A
5/16/2019	SEKJPY	9:30:00 AM	11.39	11.4			N/A
5/16/2019	SEKJPY	11:30:00 AM					N/A

5/16/2019	SEKJPY	1:30:00 PM	11.45	11.45			N/A
5/16/2019	SEKJPY	3:30:00 PM	11.43	11.43			N/A
5/16/2019	SEKJPY.fx	9:30:00 AM	11.383	11.402			N/A
5/16/2019	SEKJPY.fx	11:30:00 AM	11.401	11.419			N/A
5/16/2019	SEKJPY.fx	1:30:00 PM	11.435	11.454			N/A
5/16/2019	SEKJPY.fx	3:30:00 PM	11.426	11.434			N/A
5/16/2019	SGDJPY	9:30:00 AM	79.93	79.94			N/A
5/16/2019	SGDJPY	11:30:00 AM	80.02	80.01			N/A
5/16/2019	SGDJPY	1:30:00 PM	80.14	80.14			N/A
5/16/2019	SGDJPY	3:30:00 PM	80.12	80.11			N/A
5/16/2019	SILVER	9:30:00 AM	14.59	14.97			N/A
5/16/2019	SILVER	11:30:00 AM	14.61	14.99			N/A
5/16/2019	SILVER	1:30:00 PM	14.6	14.98			N/A
5/16/2019	SILVER	3:30:00 PM	14.6	14.96			N/A
5/16/2019	SPX500.i	9:30:00 AM	2844.06	2844.9			N/A
5/16/2019	SPX500.i	11:30:00 AM	2850.1	2850.9			N/A
5/16/2019	SPX500.i	1:30:00 PM	2863.85	2864.4			N/A
5/16/2019	SPX500.i	3:30:00 PM	2862.85	2862.4			N/A
5/16/2019	UK100.i	9:30:00 AM	7270.06	7270.81			N/A
5/16/2019	UK100.i	11:30:00 AM	7300.48	7297.73			N/A
5/16/2019	UK100.i	1:30:00 PM	7319.48	7318.73			N/A
5/16/2019	UK100.i	3:30:00 PM	7322.73	7320.06			N/A
5/16/2019	USDCAD	9:30:00 AM	1.34411	1.34411			N/A
5/16/2019	USDCAD	11:30:00 AM	1.34198	1.34203			N/A
5/16/2019	USDCAD	1:30:00 PM	1.3403	1.34027			N/A
5/16/2019	USDCAD	3:30:00 PM	1.34182	1.34185			N/A
5/16/2019	USDCAD.fx	9:30:00 AM	1.34414	1.34408			N/A
5/16/2019	USDCAD.fx	11:30:00 AM	1.34202	1.34199			N/A
5/16/2019	USDCAD.fx	1:30:00 PM	1.34033	1.34023			N/A
5/16/2019	USDCAD.fx	3:30:00 PM	1.34181	1.3418			N/A
5/16/2019	USDCHF	9:30:00 AM	1.00803	1.00815			N/A
5/16/2019	USDCHF	11:30:00 AM	1.00852	1.0086			N/A
5/16/2019	USDCHF	1:30:00 PM	1.00905	1.00904			N/A
5/16/2019	USDCHF	3:30:00 PM	1.00933	1.00894			N/A

5/16/2019	USDCHF.fx	9:30:00 AM	1.00808	1.00808			N/A
5/16/2019	USDCHF.fx	11:30:00 AM	1.00858	1.00853			N/A
5/16/2019	USDCHF.fx	1:30:00 PM	1.0091	1.00898			N/A
5/16/2019	USDCHF.fx	3:30:00 PM	1.00937	1.0089			N/A
5/16/2019	USDCZK	9:30:00 AM	22.939	22.96			N/A
5/16/2019	USDCZK	11:30:00 AM	22.917	22.936			N/A
5/16/2019	USDCZK	1:30:00 PM	22.906	22.927			N/A
5/16/2019	USDCZK	3:30:00 PM	22.929	22.949			N/A
5/16/2019	USDCZK.fx	9:30:00 AM	22.946	22.951			N/A
5/16/2019	USDCZK.fx	11:30:00 AM	22.9258	22.9278			N/A
5/16/2019	USDCZK.fx	1:30:00 PM	22.9145	22.9175			N/A
5/16/2019	USDCZK.fx	3:30:00 PM	22.9375	22.9397			N/A
5/16/2019	USDDKK	9:30:00 AM	6.6633	6.6671			N/A
5/16/2019	USDDKK	11:30:00 AM	6.6568	6.6609			N/A
5/16/2019	USDDKK	1:30:00 PM	6.6602	6.6641			N/A
5/16/2019	USDDKK	3:30:00 PM	6.6645	6.667			N/A
5/16/2019	USDDKK.fx	9:30:00 AM	6.66374	6.66512			N/A
5/16/2019	USDDKK.fx	11:30:00 AM	6.65728	6.65883			N/A
5/16/2019	USDDKK.fx	1:30:00 PM	6.66067	6.66203			N/A
5/16/2019	USDDKK.fx	3:30:00 PM	6.66488	6.6651			N/A
5/16/2019	USDHKD	9:30:00 AM	7.849	7.8493			N/A
5/16/2019	USDHKD	11:30:00 AM	7.8491	7.8494			N/A
5/16/2019	USDHKD	1:30:00 PM	7.8489	7.849			N/A
5/16/2019	USDHKD	3:30:00 PM	7.849	7.8493			N/A
5/16/2019	USDHKD.fx	9:30:00 AM	7.84901	7.84955			N/A
5/16/2019	USDHKD.fx	11:30:00 AM	7.84898	7.84953			N/A
5/16/2019	USDHKD.fx	1:30:00 PM	7.84881	7.84935			N/A
5/16/2019	USDHKD.fx	3:30:00 PM	7.84891	7.84936			N/A
5/16/2019	USDHUF	9:30:00 AM	289.73	290.06			N/A
5/16/2019	USDHUF	11:30:00 AM	289.13	289.6			N/A
5/16/2019	USDHUF	1:30:00 PM	289.07	289.4			N/A
5/16/2019	USDHUF	3:30:00 PM	289.17	289.58			N/A
5/16/2019	USDHUF.fx	9:30:00 AM	289.927	289.855			N/A
5/16/2019	USDHUF.fx	11:30:00 AM	289.344	289.378			N/A

5/16/2019	USDHUF.fx	1:30:00 PM	289.265	289.178			N/A
5/16/2019	USDHUF.fx	3:30:00 PM	289.364	289.378			N/A
5/16/2019	USDINR	9:30:00 AM	65.25	75.24			N/A
5/16/2019	USDINR	11:30:00 AM	65.15	75.15			N/A
5/16/2019	USDINR	1:30:00 PM					N/A
5/16/2019	USDINR	3:30:00 PM					N/A
5/16/2019	USDJPY	9:30:00 AM	109.448	109.462			N/A
5/16/2019	USDJPY	11:30:00 AM	109.51	109.511			N/A
5/16/2019	USDJPY	1:30:00 PM	109.657	109.665			N/A
5/16/2019	USDJPY	3:30:00 PM	109.739	109.664			N/A
5/16/2019	USDJPY.fx	9:30:00 AM	109.454	109.455			N/A
5/16/2019	USDJPY.fx	11:30:00 AM	109.516	109.504			N/A
5/16/2019	USDJPY.fx	1:30:00 PM	109.663	109.657			N/A
5/16/2019	USDJPY.fx	3:30:00 PM	109.745	109.661			N/A
5/16/2019	USDMXN	9:30:00 AM	19.069	19.076			N/A
5/16/2019	USDMXN	11:30:00 AM	19.026	19.032			N/A
5/16/2019	USDMXN	1:30:00 PM	18.977	18.984			N/A
5/16/2019	USDMXN	3:30:00 PM	19.02	19.022			N/A
5/16/2019	USDMXN.f	9:30:00 AM	19.0729	19.0718			N/A
5/16/2019	USDMXN.f	11:30:00 AM	19.0295	19.0283			N/A
5/16/2019	USDMXN.f	1:30:00 PM	18.9812	18.9801			N/A
5/16/2019	USDMXN.f	3:30:00 PM	19.024	19.018			N/A
5/16/2019	USDNOK	9:30:00 AM	8.7164	8.7253			N/A
5/16/2019	USDNOK	11:30:00 AM	8.6929	8.7018			N/A
5/16/2019	USDNOK	1:30:00 PM	8.6816	8.6897			N/A
5/16/2019	USDNOK	3:30:00 PM	8.6989	8.7057			N/A
5/16/2019	USDNOK.fx	9:30:00 AM	8.72027	8.72107			N/A
5/16/2019	USDNOK.fx	11:30:00 AM	8.69685	8.69744			N/A
5/16/2019	USDNOK.fx	1:30:00 PM	8.68567	8.68532			N/A
5/16/2019	USDNOK.fx	3:30:00 PM	8.70247	8.70121			N/A
5/16/2019	USDPLN	9:30:00 AM	3.8373	3.8386			N/A
5/16/2019	USDPLN	11:30:00 AM	3.8297	3.8314			N/A
5/16/2019	USDPLN	1:30:00 PM	3.8293	3.8309			N/A
5/16/2019	USDPLN	3:30:00 PM	3.8338	3.8337			N/A

5/16/2019	USDPLN.fx	9:30:00 AM	3.83646	3.83932			N/A
5/16/2019	USDPLN.fx	11:30:00 AM	3.82888	3.83206			N/A
5/16/2019	USDPLN.fx	1:30:00 PM	3.82857	3.83161			N/A
5/16/2019	USDPLN.fx	3:30:00 PM	3.83283	3.83499			N/A
5/16/2019	USDRUB	9:30:00 AM					N/A
5/16/2019	USDRUB	11:30:00 AM	64.352	64.731			N/A
5/16/2019	USDRUB	1:30:00 PM	64.303	64.696			N/A
5/16/2019	USDRUB	3:30:00 PM	64.296	64.673			N/A
5/16/2019	USDSEK	9:30:00 AM	9.6048	9.6094			N/A
5/16/2019	USDSEK	11:30:00 AM	9.5946	9.5989			N/A
5/16/2019	USDSEK	1:30:00 PM	9.5792	9.5837			N/A
5/16/2019	USDSEK	3:30:00 PM	9.5963	9.5985			N/A
5/16/2019	USDSEK.fx	9:30:00 AM	9.60736	9.60747			N/A
5/16/2019	USDSEK.fx	11:30:00 AM	9.59711	9.59709			N/A
5/16/2019	USDSEK.fx	1:30:00 PM	9.58165	9.58177			N/A
5/16/2019	USDSEK.fx	3:30:00 PM	9.59855	9.59663			N/A
5/16/2019	USDSGD	9:30:00 AM	1.3688	1.3692			N/A
5/16/2019	USDSGD	11:30:00 AM	1.3684	1.3688			N/A
5/16/2019	USDSGD	1:30:00 PM	1.3682	1.3684			N/A
5/16/2019	USDSGD	3:30:00 PM	1.3688	1.3691			N/A
5/16/2019	USDSGD.fx	9:30:00 AM	1.36881	1.36924			N/A
5/16/2019	USDSGD.fx	11:30:00 AM	1.36831	1.3688			N/A
5/16/2019	USDSGD.fx	1:30:00 PM	1.36808	1.36854			N/A
5/16/2019	USDSGD.fx	3:30:00 PM	1.36868	1.36913			N/A
5/16/2019	USDZAR	9:30:00 AM	14.2533	14.256			N/A
5/16/2019	USDZAR	11:30:00 AM	14.1843	14.1976			N/A
5/16/2019	USDZAR	1:30:00 PM	14.1273	14.1403			N/A
5/16/2019	USDZAR	3:30:00 PM	14.1303	14.1461			N/A
5/16/2019	USDZAR.fx	9:30:00 AM					N/A
5/16/2019	USDZAR.fx	11:30:00 AM					N/A
5/16/2019	USDZAR.fx	1:30:00 PM					N/A
5/16/2019	USDZAR.fx	3:30:00 PM					N/A
5/16/2019	XAUUSD	9:30:00 AM	1296.8	1297.08			N/A
5/16/2019	XAUUSD	11:30:00 AM	1296.79	1297.09			N/A

5/16/2019	XAUUSD	1:30:00 PM	1294.42	1294.43			N/A
5/16/2019	XAUUSD	3:30:00 PM	1293.97	1291.75			N/A
5/16/2019	ZARJPY	9:30:00 AM	7.66	7.68			N/A
5/16/2019	ZARJPY	11:30:00 AM	7.7	7.72			N/A
5/16/2019	ZARJPY	1:30:00 PM	7.74	7.76			N/A
5/16/2019	ZARJPY	3:30:00 PM	7.74	7.76			N/A
5/16/2019	ZARJPY.fx	9:30:00 AM	7.68	7.676			N/A
5/16/2019	ZARJPY.fx	11:30:00 AM	7.715	7.718			N/A
5/16/2019	ZARJPY.fx	1:30:00 PM	7.758	7.759			N/A
5/16/2019	ZARJPY.fx	3:30:00 PM	7.759	7.759			N/A
5/17/2019	#AA	9:30:00 AM					N/A
5/17/2019	#AA	11:30:00 AM					N/A
5/17/2019	#AA	1:30:00 PM					N/A
5/17/2019	#AA	3:30:00 PM					N/A
5/17/2019	#AABA	9:30:00 AM					N/A
5/17/2019	#AABA	11:30:00 AM					N/A
5/17/2019	#AABA	1:30:00 PM					N/A
5/17/2019	#AABA	3:30:00 PM					N/A
5/17/2019	#AAL	9:30:00 AM					N/A
5/17/2019	#AAL	11:30:00 AM					N/A
5/17/2019	#AAL	1:30:00 PM					N/A
5/17/2019	#AAL	3:30:00 PM					N/A
5/17/2019	#AAPL	9:30:00 AM					N/A
5/17/2019	#AAPL	11:30:00 AM					N/A
5/17/2019	#AAPL	1:30:00 PM					N/A
5/17/2019	#AAPL	3:30:00 PM					N/A
5/17/2019	#ADBE	9:30:00 AM					N/A
5/17/2019	#ADBE	11:30:00 AM					N/A
5/17/2019	#ADBE	1:30:00 PM					N/A
5/17/2019	#ADBE	3:30:00 PM					N/A
5/17/2019	#AIG	9:30:00 AM					N/A
5/17/2019	#AIG	11:30:00 AM					N/A
5/17/2019	#AIG	1:30:00 PM					N/A
5/17/2019	#AIG	3:30:00 PM					N/A

5/17/2019	#AMD	9:30:00 AM					N/A
5/17/2019	#AMD	11:30:00 AM					N/A
5/17/2019	#AMD	1:30:00 PM					N/A
5/17/2019	#AMD	3:30:00 PM					N/A
5/17/2019	#AMZN	9:30:00 AM					N/A
5/17/2019	#AMZN	11:30:00 AM					N/A
5/17/2019	#AMZN	1:30:00 PM					N/A
5/17/2019	#AMZN	3:30:00 PM					N/A
5/17/2019	#AXP	9:30:00 AM					N/A
5/17/2019	#AXP	11:30:00 AM					N/A
5/17/2019	#AXP	1:30:00 PM					N/A
5/17/2019	#AXP	3:30:00 PM					N/A
5/17/2019	#BA	9:30:00 AM					N/A
5/17/2019	#BA	11:30:00 AM					N/A
5/17/2019	#BA	1:30:00 PM					N/A
5/17/2019	#BA	3:30:00 PM					N/A
5/17/2019	#BABA	9:30:00 AM					N/A
5/17/2019	#BABA	11:30:00 AM					N/A
5/17/2019	#BABA	1:30:00 PM					N/A
5/17/2019	#BABA	3:30:00 PM					N/A
5/17/2019	#BAC	9:30:00 AM					N/A
5/17/2019	#BAC	11:30:00 AM					N/A
5/17/2019	#BAC	1:30:00 PM					N/A
5/17/2019	#BAC	3:30:00 PM					N/A
5/17/2019	#BARC	9:30:00 AM					N/A
5/17/2019	#BARC	11:30:00 AM					N/A
5/17/2019	#BARC	1:30:00 PM					N/A
5/17/2019	#BARC	3:30:00 PM					N/A
5/17/2019	#BHP	9:30:00 AM					N/A
5/17/2019	#BHP	11:30:00 AM					N/A
5/17/2019	#BHP	1:30:00 PM					N/A
5/17/2019	#BHP	3:30:00 PM					N/A
5/17/2019	#BIDU	9:30:00 AM					N/A
5/17/2019	#BIDU	11:30:00 AM					N/A

5/17/2019	#BIDU	1:30:00 PM					N/A
5/17/2019	#BIDU	3:30:00 PM					N/A
5/17/2019	#Bitcoin	9:30:00 AM	7230.7	7239.4			N/A
5/17/2019	#Bitcoin	11:30:00 AM	7313.1	7347.95			N/A
5/17/2019	#Bitcoin	1:30:00 PM	7259.35	7274.75			N/A
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5/17/2019	#V	11:30:00 AM					N/A
5/17/2019	#V	1:30:00 PM					N/A
5/17/2019	#V	3:30:00 PM					N/A
5/17/2019	#VOD	9:30:00 AM					N/A
5/17/2019	#VOD	11:30:00 AM					N/A
5/17/2019	#VOD	1:30:00 PM					N/A
5/17/2019	#VOD	3:30:00 PM					N/A
5/17/2019	#VZ	9:30:00 AM					N/A
5/17/2019	#VZ	11:30:00 AM					N/A
5/17/2019	#VZ	1:30:00 PM					N/A
5/17/2019	#VZ	3:30:00 PM					N/A
5/17/2019	#WDC	9:30:00 AM					N/A
5/17/2019	#WDC	11:30:00 AM					N/A
5/17/2019	#WDC	1:30:00 PM					N/A
5/17/2019	#WDC	3:30:00 PM					N/A
5/17/2019	#WFC	9:30:00 AM					N/A
5/17/2019	#WFC	11:30:00 AM					N/A
5/17/2019	#WFC	1:30:00 PM					N/A
5/17/2019	#WFC	3:30:00 PM					N/A
5/17/2019	#WMT	9:30:00 AM					N/A
5/17/2019	#WMT	11:30:00 AM					N/A
5/17/2019	#WMT	1:30:00 PM					N/A
5/17/2019	#WMT	3:30:00 PM					N/A

5/17/2019	#XOM	9:30:00 AM					N/A
5/17/2019	#XOM	11:30:00 AM					N/A
5/17/2019	#XOM	1:30:00 PM					N/A
5/17/2019	#XOM	3:30:00 PM					N/A
5/17/2019	#YHOO	9:30:00 AM					N/A
5/17/2019	#YHOO	11:30:00 AM					N/A
5/17/2019	#YHOO	1:30:00 PM					N/A
5/17/2019	#YHOO	3:30:00 PM					N/A
5/17/2019	#ZNGA	9:30:00 AM					N/A
5/17/2019	#ZNGA	11:30:00 AM					N/A
5/17/2019	#ZNGA	1:30:00 PM					N/A
5/17/2019	#ZNGA	3:30:00 PM					N/A
5/17/2019	AUDCAD	9:30:00 AM	0.92786	0.9282			N/A
5/17/2019	AUDCAD	11:30:00 AM	0.92693	0.9275			N/A
5/17/2019	AUDCAD	1:30:00 PM	0.92715	0.92776			N/A
5/17/2019	AUDCAD	3:30:00 PM	0.92829	0.92875			N/A
5/17/2019	AUDCAD.fx	9:30:00 AM	0.92819	0.92786			N/A
5/17/2019	AUDCAD.fx	11:30:00 AM	0.92727	0.92713			N/A
5/17/2019	AUDCAD.fx	1:30:00 PM	0.9275	0.92741			N/A
5/17/2019	AUDCAD.fx	3:30:00 PM	0.92865	0.92838			N/A
5/17/2019	AUDCHF	9:30:00 AM	0.69459	0.69486			N/A
5/17/2019	AUDCHF	11:30:00 AM	0.69382	0.6944			N/A
5/17/2019	AUDCHF	1:30:00 PM	0.69457	0.69525			N/A
5/17/2019	AUDCHF	3:30:00 PM	0.69477	0.69527			N/A
5/17/2019	AUDCHF.fx	9:30:00 AM	0.69494	0.69452			N/A
5/17/2019	AUDCHF.fx	11:30:00 AM	0.69416	0.69404			N/A
5/17/2019	AUDCHF.fx	1:30:00 PM	0.69491	0.6949			N/A
5/17/2019	AUDCHF.fx	3:30:00 PM	0.69511	0.69492			N/A
5/17/2019	AUDCZK	9:30:00 AM	15.822	15.831			N/A
5/17/2019	AUDCZK	11:30:00 AM	15.82	15.836			N/A
5/17/2019	AUDCZK	1:30:00 PM	15.83	15.844			N/A
5/17/2019	AUDCZK	3:30:00 PM	15.834	15.849			N/A
5/17/2019	AUDDKK	9:30:00 AM	4.5988	4.6015			N/A
5/17/2019	AUDDKK	11:30:00 AM	4.5961	4.5999			N/A

5/17/2019	AUDDKK	1:30:00 PM	4.5955	4.5994			N/A
5/17/2019	AUDDKK	3:30:00 PM	4.597	4.601			N/A
5/17/2019	AUDHKD	9:30:00 AM	5.4026	5.404			N/A
5/17/2019	AUDHKD	11:30:00 AM	5.3972	5.4			N/A
5/17/2019	AUDHKD	1:30:00 PM	5.3948	5.3981			N/A
5/17/2019	AUDHKD	3:30:00 PM	5.3985	5.4005			N/A
5/17/2019	AUDHUF	9:30:00 AM	199.81	199.95			N/A
5/17/2019	AUDHUF	11:30:00 AM	199.65	199.89			N/A
5/17/2019	AUDHUF	1:30:00 PM	200.37	200.6			N/A
5/17/2019	AUDHUF	3:30:00 PM	200.79	201.01			N/A
5/17/2019	AUDJPY	9:30:00 AM	75.443	75.447			N/A
5/17/2019	AUDJPY	11:30:00 AM	75.398	75.442			N/A
5/17/2019	AUDJPY	1:30:00 PM	75.39	75.452			N/A
5/17/2019	AUDJPY	3:30:00 PM	75.357	75.395			N/A
5/17/2019	AUDJPY.fx	9:30:00 AM	75.477	75.412			N/A
5/17/2019	AUDJPY.fx	11:30:00 AM	75.433	75.406			N/A
5/17/2019	AUDJPY.fx	1:30:00 PM	75.423	75.415			N/A
5/17/2019	AUDJPY.fx	3:30:00 PM	75.391	75.359			N/A
5/17/2019	AUDMXN	9:30:00 AM	13.173	13.1796			N/A
5/17/2019	AUDMXN	11:30:00 AM	13.1701	13.1788			N/A
5/17/2019	AUDMXN	1:30:00 PM	13.1711	13.1789			N/A
5/17/2019	AUDMXN	3:30:00 PM	13.2026	13.2071			N/A
5/17/2019	AUDNOK	9:30:00 AM	6.0347	6.038			N/A
5/17/2019	AUDNOK	11:30:00 AM	6.0288	6.0326			N/A
5/17/2019	AUDNOK	1:30:00 PM	6.0235	6.0281			N/A
5/17/2019	AUDNOK	3:30:00 PM	6.0302	6.034			N/A
5/17/2019	AUDNOK.f	9:30:00 AM	6.0362	6.0362			N/A
5/17/2019	AUDNOK.f	11:30:00 AM	6.0304	6.0308			N/A
5/17/2019	AUDNOK.f	1:30:00 PM	6.0251	6.0263			N/A
5/17/2019	AUDNOK.f	3:30:00 PM	6.0318	6.0322			N/A
5/17/2019	AUDNZD	9:30:00 AM	1.05242	1.05313			N/A
5/17/2019	AUDNZD	11:30:00 AM	1.0523	1.05311			N/A
5/17/2019	AUDNZD	1:30:00 PM	1.05295	1.05381			N/A
5/17/2019	AUDNZD	3:30:00 PM	1.05314	1.05392			N/A

5/17/2019	AUDNZD.fx	9:30:00 AM	1.05285	1.05267			N/A
5/17/2019	AUDNZD.fx	11:30:00 AM	1.05276	1.05264			N/A
5/17/2019	AUDNZD.fx	1:30:00 PM	1.05341	1.05336			N/A
5/17/2019	AUDNZD.fx	3:30:00 PM	1.05359	1.05346			N/A
5/17/2019	AUDPLN	9:30:00 AM	2.6514	2.6526			N/A
5/17/2019	AUDPLN	11:30:00 AM	2.6501	2.6528			N/A
5/17/2019	AUDPLN	1:30:00 PM	2.6502	2.6532			N/A
5/17/2019	AUDPLN	3:30:00 PM	2.6484	2.6512			N/A
5/17/2019	AUDSEK	9:30:00 AM	6.6429	6.6436			N/A
5/17/2019	AUDSEK	11:30:00 AM	6.6356	6.6361			N/A
5/17/2019	AUDSEK	1:30:00 PM	6.6259	6.6285			N/A
5/17/2019	AUDSEK	3:30:00 PM	6.6281	6.6296			N/A
5/17/2019	AUDSEK.fx	9:30:00 AM	6.6383	6.6477			N/A
5/17/2019	AUDSEK.fx	11:30:00 AM	6.6309	6.6403			N/A
5/17/2019	AUDSEK.fx	1:30:00 PM	6.6213	6.6328			N/A
5/17/2019	AUDSEK.fx	3:30:00 PM	6.6237	6.6341			N/A
5/17/2019	AUDSGD	9:30:00 AM	0.9468	0.9468			N/A
5/17/2019	AUDSGD	11:30:00 AM	0.9461	0.9464			N/A
5/17/2019	AUDSGD	1:30:00 PM	0.9459	0.9462			N/A
5/17/2019	AUDSGD	3:30:00 PM	0.9463	0.9463			N/A
5/17/2019	AUDSGD.fx	9:30:00 AM	0.94684	0.94661			N/A
5/17/2019	AUDSGD.fx	11:30:00 AM	0.94616	0.94626			N/A
5/17/2019	AUDSGD.fx	1:30:00 PM	0.94596	0.94604			N/A
5/17/2019	AUDSGD.fx	3:30:00 PM	0.94636	0.94623			N/A
5/17/2019	AUDUSD	9:30:00 AM	0.68868	0.68837			N/A
5/17/2019	AUDUSD	11:30:00 AM	0.68792	0.68788			N/A
5/17/2019	AUDUSD	1:30:00 PM	0.68765	0.68774			N/A
5/17/2019	AUDUSD	3:30:00 PM	0.68806	0.68791			N/A
5/17/2019	AUDUSD.fx	9:30:00 AM	0.68874	0.68831			N/A
5/17/2019	AUDUSD.fx	11:30:00 AM	0.68797	0.68782			N/A
5/17/2019	AUDUSD.fx	1:30:00 PM	0.6877	0.68769			N/A
5/17/2019	AUDUSD.fx	3:30:00 PM	0.68812	0.68785			N/A
5/17/2019	AUDZAR	9:30:00 AM	9.8552	9.8675			N/A
5/17/2019	AUDZAR	11:30:00 AM	9.8551	9.8667			N/A

5/17/2019	AUDZAR	1:30:00 PM	9.8662	9.8799			N/A
5/17/2019	AUDZAR	3:30:00 PM	9.8799	9.8934			N/A
5/17/2019	AUS200.i	9:30:00 AM	6354.43	6358.93			N/A
5/17/2019	AUS200.i	11:30:00 AM	6359.13	6361.73			N/A
5/17/2019	AUS200.i	1:30:00 PM	6362.03	6364.93			N/A
5/17/2019	AUS200.i	3:30:00 PM	6340.93	6343.23			N/A
5/17/2019	BCHUSD	9:30:00 AM	372.48	373.65			N/A
5/17/2019	BCHUSD	11:30:00 AM	376.32	377.65			N/A
5/17/2019	BCHUSD	1:30:00 PM	369.55	369.4			N/A
5/17/2019	BCHUSD	3:30:00 PM	356.15	355.04			N/A
5/17/2019	CADCHF	9:30:00 AM	0.74833	0.74892			N/A
5/17/2019	CADCHF	11:30:00 AM	0.74828	0.74892			N/A
5/17/2019	CADCHF	1:30:00 PM	0.74889	0.74959			N/A
5/17/2019	CADCHF	3:30:00 PM	0.74819	0.74874			N/A
5/17/2019	CADCHF.fx	9:30:00 AM	0.74866	0.74857			N/A
5/17/2019	CADCHF.fx	11:30:00 AM	0.74862	0.74856			N/A
5/17/2019	CADCHF.fx	1:30:00 PM	0.74924	0.74923			N/A
5/17/2019	CADCHF.fx	3:30:00 PM	0.74854	0.74838			N/A
5/17/2019	CADCZK	9:30:00 AM	17.05	17.066			N/A
5/17/2019	CADCZK	11:30:00 AM	17.068	17.082			N/A
5/17/2019	CADCZK	1:30:00 PM	17.071	17.088			N/A
5/17/2019	CADCZK	3:30:00 PM	17.057	17.069			N/A
5/17/2019	CADDDKK	9:30:00 AM					N/A
5/17/2019	CADDDKK	11:30:00 AM	4.958	4.961			N/A
5/17/2019	CADDDKK	1:30:00 PM					N/A
5/17/2019	CADDDKK	3:30:00 PM	4.952	4.955			N/A
5/17/2019	CADHKD	9:30:00 AM	5.8215	5.8254			N/A
5/17/2019	CADHKD	11:30:00 AM	5.8214	5.8253			N/A
5/17/2019	CADHKD	1:30:00 PM	5.8174	5.821			N/A
5/17/2019	CADHKD	3:30:00 PM	5.8144	5.8168			N/A
5/17/2019	CADHUF	9:30:00 AM	215.36	215.51			N/A
5/17/2019	CADHUF	11:30:00 AM	215.41	215.57			N/A
5/17/2019	CADHUF	1:30:00 PM	216.12	216.28			N/A
5/17/2019	CADHUF	3:30:00 PM	216.34	216.44			N/A

5/17/2019	CADJPY	9:30:00 AM	81.279	81.315			N/A
5/17/2019	CADJPY	11:30:00 AM	81.313	81.371			N/A
5/17/2019	CADJPY	1:30:00 PM	81.289	81.348			N/A
5/17/2019	CADJPY	3:30:00 PM	81.146	81.2			N/A
5/17/2019	CADJPY.fx	9:30:00 AM	81.312	81.279			N/A
5/17/2019	CADJPY.fx	11:30:00 AM	81.347	81.336			N/A
5/17/2019	CADJPY.fx	1:30:00 PM	81.323	81.312			N/A
5/17/2019	CADJPY.fx	3:30:00 PM	81.18	81.165			N/A
5/17/2019	CADMXN	9:30:00 AM	14.2008	14.2046			N/A
5/17/2019	CADMXN	11:30:00 AM	14.2059	14.2168			N/A
5/17/2019	CADMXN	1:30:00 PM	14.203	14.2132			N/A
5/17/2019	CADMXN	3:30:00 PM	14.2227	14.2245			N/A
5/17/2019	CADNOK	9:30:00 AM	6.5018	6.5064			N/A
5/17/2019	CADNOK	11:30:00 AM	6.5008	6.5051			N/A
5/17/2019	CADNOK	1:30:00 PM	6.494	6.4985			N/A
5/17/2019	CADNOK	3:30:00 PM	6.4938	6.4967			N/A
5/17/2019	CADPLN	9:30:00 AM	2.8565	2.8585			N/A
5/17/2019	CADPLN	11:30:00 AM	2.8587	2.8606			N/A
5/17/2019	CADPLN	1:30:00 PM	2.8581	2.8599			N/A
5/17/2019	CADPLN	3:30:00 PM	2.8524	2.8544			N/A
5/17/2019	CADSEK	9:30:00 AM	7.1552	7.1591			N/A
5/17/2019	CADSEK	11:30:00 AM	7.155	7.1562			N/A
5/17/2019	CADSEK	1:30:00 PM	7.1425	7.1459			N/A
5/17/2019	CADSEK	3:30:00 PM	7.1371	7.1377			N/A
5/17/2019	CADSGD	9:30:00 AM	1.0198	1.0201			N/A
5/17/2019	CADSGD	11:30:00 AM	1.0199	1.0202			N/A
5/17/2019	CADSGD	1:30:00 PM	1.0192	1.0195			N/A
5/17/2019	CADSGD	3:30:00 PM	1.0186	1.0189			N/A
5/17/2019	CADZAR	9:30:00 AM	10.6241	10.6329			N/A
5/17/2019	CADZAR	11:30:00 AM	10.6311	10.6424			N/A
5/17/2019	CADZAR	1:30:00 PM	10.6393	10.6546			N/A
5/17/2019	CADZAR	3:30:00 PM	10.6435	10.6556			N/A
5/17/2019	CHFCZK	9:30:00 AM	22.78	22.794			N/A
5/17/2019	CHFCZK	11:30:00 AM	22.803	22.816			N/A

5/17/2019	CHFCZK	1:30:00 PM	22.789	22.802			N/A
5/17/2019	CHFCZK	3:30:00 PM	22.792	22.804			N/A
5/17/2019	CHFDKK	9:30:00 AM	6.619	6.623			N/A
5/17/2019	CHFDKK	11:30:00 AM	6.622	6.626			N/A
5/17/2019	CHFDKK	1:30:00 PM	6.615	6.617			N/A
5/17/2019	CHFDKK	3:30:00 PM	6.616	6.618			N/A
5/17/2019	CHFDKK.fx	9:30:00 AM	6.6188	6.6242			N/A
5/17/2019	CHFDKK.fx	11:30:00 AM	6.6208	6.6269			N/A
5/17/2019	CHFDKK.fx	1:30:00 PM	6.6134	6.6187			N/A
5/17/2019	CHFDKK.fx	3:30:00 PM	6.6146	6.6196			N/A
5/17/2019	CHFHKD	9:30:00 AM	7.7774	7.7813			N/A
5/17/2019	CHFHKD	11:30:00 AM	7.7764	7.7801			N/A
5/17/2019	CHFHKD	1:30:00 PM	7.7653	7.769			N/A
5/17/2019	CHFHKD	3:30:00 PM	7.7675	7.7715			N/A
5/17/2019	CHFHUF	9:30:00 AM	287.61	287.97			N/A
5/17/2019	CHFHUF	11:30:00 AM	287.68	288.03			N/A
5/17/2019	CHFHUF	1:30:00 PM	288.39	288.75			N/A
5/17/2019	CHFHUF	3:30:00 PM	288.94	289.27			N/A
5/17/2019	CHFJPY	9:30:00 AM	108.57	108.619			N/A
5/17/2019	CHFJPY	11:30:00 AM	108.627	108.687			N/A
5/17/2019	CHFJPY	1:30:00 PM	108.501	108.566			N/A
5/17/2019	CHFJPY	3:30:00 PM	108.419	108.473			N/A
5/17/2019	CHFJPY.fx	9:30:00 AM	108.603	108.584			N/A
5/17/2019	CHFJPY.fx	11:30:00 AM	108.661	108.653			N/A
5/17/2019	CHFJPY.fx	1:30:00 PM	108.535	108.531			N/A
5/17/2019	CHFJPY.fx	3:30:00 PM	108.452	108.437			N/A
5/17/2019	CHFMXN	9:30:00 AM	18.9717	18.9727			N/A
5/17/2019	CHFMXN	11:30:00 AM	18.9777	18.9911			N/A
5/17/2019	CHFMXN	1:30:00 PM	18.9577	18.97			N/A
5/17/2019	CHFMXN	3:30:00 PM	19.0014	19.0044			N/A
5/17/2019	CHFNOK	9:30:00 AM	8.6854	8.6916			N/A
5/17/2019	CHFNOK	11:30:00 AM	8.6841	8.692			N/A
5/17/2019	CHFNOK	1:30:00 PM	8.6679	8.675			N/A
5/17/2019	CHFNOK	3:30:00 PM	8.6761	8.6811			N/A



5/17/2019	CHFNOX.fx	9:30:00 AM	8.68877	8.68815			N/A
5/17/2019	CHFNOX.fx	11:30:00 AM	8.68772	8.68837			N/A
5/17/2019	CHFNOX.fx	1:30:00 PM	8.67148	8.6715			N/A
5/17/2019	CHFNOX.fx	3:30:00 PM	8.67982	8.67748			N/A
5/17/2019	CHFPLN	9:30:00 AM	3.8165	3.8191			N/A
5/17/2019	CHFPLN	11:30:00 AM	3.8183	3.8214			N/A
5/17/2019	CHFPLN	1:30:00 PM	3.8147	3.8172			N/A
5/17/2019	CHFPLN	3:30:00 PM	3.8112	3.8137			N/A
5/17/2019	CHFPLN.fx	9:30:00 AM	3.81389	3.82151			N/A
5/17/2019	CHFPLN.fx	11:30:00 AM	3.81596	3.82367			N/A
5/17/2019	CHFPLN.fx	1:30:00 PM	3.81226	3.81943			N/A
5/17/2019	CHFPLN.fx	3:30:00 PM	3.80883	3.81583			N/A
5/17/2019	CHFSEK	9:30:00 AM	9.5587	9.5636			N/A
5/17/2019	CHFSEK	11:30:00 AM	9.5577	9.5593			N/A
5/17/2019	CHFSEK	1:30:00 PM	9.5338	9.5376			N/A
5/17/2019	CHFSEK	3:30:00 PM	9.5358	9.5363			N/A
5/17/2019	CHFSGD	9:30:00 AM	1.3628	1.3629			N/A
5/17/2019	CHFSGD	11:30:00 AM	1.3632	1.3634			N/A
5/17/2019	CHFSGD	1:30:00 PM	1.3612	1.3617			N/A
5/17/2019	CHFSGD	3:30:00 PM	1.3615	1.3618			N/A
5/17/2019	CHFSGD.fx	9:30:00 AM	1.36293	1.36275			N/A
5/17/2019	CHFSGD.fx	11:30:00 AM	1.36337	1.3632			N/A
5/17/2019	CHFSGD.fx	1:30:00 PM	1.3614	1.36147			N/A
5/17/2019	CHFSGD.fx	3:30:00 PM	1.36166	1.36165			N/A
5/17/2019	CHFZAR	9:30:00 AM	14.1979	14.1973			N/A
5/17/2019	CHFZAR	11:30:00 AM	14.2065	14.2121			N/A
5/17/2019	CHFZAR	1:30:00 PM	14.205	14.2166			N/A
5/17/2019	CHFZAR	3:30:00 PM	14.2242	14.2311			N/A
5/17/2019	CZKJPY	9:30:00 AM	4.766	4.768			N/A
5/17/2019	CZKJPY	11:30:00 AM	4.763	4.766			N/A
5/17/2019	CZKJPY	1:30:00 PM	4.761	4.764			N/A
5/17/2019	CZKJPY	3:30:00 PM	4.756	4.76			N/A
5/17/2019	DAX30.i	9:30:00 AM	12231.11	12228.11			N/A
5/17/2019	DAX30.i	11:30:00 AM	12212.36	12207.61			N/A

5/17/2019	DAX30.i	1:30:00 PM	12212.11	12203.86			N/A
5/17/2019	DAX30.i	3:30:00 PM	12149.11	12145.86			N/A
5/17/2019	DJ30.i	9:30:00 AM					N/A
5/17/2019	DJ30.i	11:30:00 AM					N/A
5/17/2019	DJ30.i	1:30:00 PM					N/A
5/17/2019	DJ30.i	3:30:00 PM					N/A
5/17/2019	DKKJPY	9:30:00 AM	16.41	16.43			N/A
5/17/2019	DKKJPY	11:30:00 AM	16.4	16.42			N/A
5/17/2019	DKKJPY	1:30:00 PM	16.41	16.42			N/A
5/17/2019	DKKJPY	3:30:00 PM					N/A
5/17/2019	EURAUD	9:30:00 AM	1.62312	1.62271			N/A
5/17/2019	EURAUD	11:30:00 AM	1.62366	1.62377			N/A
5/17/2019	EURAUD	1:30:00 PM	1.62373	1.62386			N/A
5/17/2019	EURAUD	3:30:00 PM	1.62305	1.62328			N/A
5/17/2019	EURAUD.fx	9:30:00 AM	1.6233	1.62249			N/A
5/17/2019	EURAUD.fx	11:30:00 AM	1.62387	1.62354			N/A
5/17/2019	EURAUD.fx	1:30:00 PM	1.62392	1.62363			N/A
5/17/2019	EURAUD.fx	3:30:00 PM	1.62325	1.62306			N/A
5/17/2019	EURCAD	9:30:00 AM	1.50623	1.50701			N/A
5/17/2019	EURCAD	11:30:00 AM	1.50573	1.50644			N/A
5/17/2019	EURCAD	1:30:00 PM	1.50615	1.50693			N/A
5/17/2019	EURCAD	3:30:00 PM	1.50753	1.50798			N/A
5/17/2019	EURCAD.fx	9:30:00 AM	1.50665	1.50657			N/A
5/17/2019	EURCAD.fx	11:30:00 AM	1.50616	1.50602			N/A
5/17/2019	EURCAD.fx	1:30:00 PM	1.50658	1.5065			N/A
5/17/2019	EURCAD.fx	3:30:00 PM	1.50795	1.50755			N/A
5/17/2019	EURCHF	9:30:00 AM	1.12789	1.12787			N/A
5/17/2019	EURCHF	11:30:00 AM	1.12739	1.12753			N/A
5/17/2019	EURCHF	1:30:00 PM	1.12878	1.12876			N/A
5/17/2019	EURCHF	3:30:00 PM	1.12859	1.12849			N/A
5/17/2019	EURCHF.fx	9:30:00 AM	1.12794	1.12782			N/A
5/17/2019	EURCHF.fx	11:30:00 AM	1.12745	1.12746			N/A
5/17/2019	EURCHF.fx	1:30:00 PM	1.12884	1.12869			N/A
5/17/2019	EURCHF.fx	3:30:00 PM	1.12865	1.12843			N/A

5/17/2019	EURCZK	9:30:00 AM	25.677	25.715			N/A
5/17/2019	EURCZK	11:30:00 AM	25.696	25.731			N/A
5/17/2019	EURCZK	1:30:00 PM	25.708	25.746			N/A
5/17/2019	EURCZK	3:30:00 PM	25.706	25.745			N/A
5/17/2019	EURDKK	9:30:00 AM	7.4668	7.4681			N/A
5/17/2019	EURDKK	11:30:00 AM	7.4668	7.4679			N/A
5/17/2019	EURDKK	1:30:00 PM	7.4673	7.4683			N/A
5/17/2019	EURDKK	3:30:00 PM	7.4658	7.467			N/A
5/17/2019	EURGBP	9:30:00 AM	0.87418	0.87427			N/A
5/17/2019	EURGBP	11:30:00 AM	0.87421	0.87424			N/A
5/17/2019	EURGBP	1:30:00 PM	0.87586	0.87578			N/A
5/17/2019	EURGBP	3:30:00 PM	0.876	0.87607			N/A
5/17/2019	EURGBP.fx	9:30:00 AM	0.87421	0.87423			N/A
5/17/2019	EURGBP.fx	11:30:00 AM	0.87425	0.87419			N/A
5/17/2019	EURGBP.fx	1:30:00 PM	0.87589	0.87574			N/A
5/17/2019	EURGBP.fx	3:30:00 PM	0.87604	0.87602			N/A
5/17/2019	EURHKD	9:30:00 AM	8.7723	8.7762			N/A
5/17/2019	EURHKD	11:30:00 AM	8.7677	8.773			N/A
5/17/2019	EURHKD	1:30:00 PM	8.7665	8.77			N/A
5/17/2019	EURHKD	3:30:00 PM	8.7672	8.7702			N/A
5/17/2019	EURHKD.fx	9:30:00 AM	8.77513	8.77338			N/A
5/17/2019	EURHKD.fx	11:30:00 AM	8.7705	8.77011			N/A
5/17/2019	EURHKD.fx	1:30:00 PM	8.76927	8.76725			N/A
5/17/2019	EURHKD.fx	3:30:00 PM	8.77001	8.76741			N/A
5/17/2019	EURHUF	9:30:00 AM	324.36	324.99			N/A
5/17/2019	EURHUF	11:30:00 AM	324.29	324.96			N/A
5/17/2019	EURHUF	1:30:00 PM	325.44	326.14			N/A
5/17/2019	EURHUF	3:30:00 PM	326.01	326.7			N/A
5/17/2019	EURHUF.fx	9:30:00 AM	324.641	324.798			N/A
5/17/2019	EURHUF.fx	11:30:00 AM	324.559	324.702			N/A
5/17/2019	EURHUF.fx	1:30:00 PM	325.711	325.848			N/A
5/17/2019	EURHUF.fx	3:30:00 PM	326.291	326.398			N/A
5/17/2019	EURJPY	9:30:00 AM	122.502	122.464			N/A
5/17/2019	EURJPY	11:30:00 AM	122.508	122.502			N/A

5/17/2019	EURJPY	1:30:00 PM	122.519	122.499			N/A
5/17/2019	EURJPY	3:30:00 PM	122.404	122.377			N/A
5/17/2019	EURJPY.fx	9:30:00 AM	122.504	122.46			N/A
5/17/2019	EURJPY.fx	11:30:00 AM	122.51	122.498			N/A
5/17/2019	EURJPY.fx	1:30:00 PM	122.521	122.495			N/A
5/17/2019	EURJPY.fx	3:30:00 PM	122.407	122.372			N/A
5/17/2019	EURMXN	9:30:00 AM	21.3978	21.4037			N/A
5/17/2019	EURMXN	11:30:00 AM	21.3972	21.4151			N/A
5/17/2019	EURMXN	1:30:00 PM	21.4014	21.4143			N/A
5/17/2019	EURMXN	3:30:00 PM	21.4445	21.4516			N/A
5/17/2019	EURMXN.fx	9:30:00 AM	21.4065	21.3949			N/A
5/17/2019	EURMXN.fx	11:30:00 AM	21.406	21.4067			N/A
5/17/2019	EURMXN.fx	1:30:00 PM	21.4098	21.4058			N/A
5/17/2019	EURMXN.fx	3:30:00 PM	21.4534	21.4426			N/A
5/17/2019	EURNOK	9:30:00 AM	9.7938	9.8051			N/A
5/17/2019	EURNOK	11:30:00 AM	9.7894	9.8009			N/A
5/17/2019	EURNOK	1:30:00 PM	9.7825	9.7939			N/A
5/17/2019	EURNOK	3:30:00 PM	9.7889	9.7991			N/A
5/17/2019	EURNOK.fx	9:30:00 AM	9.79895	9.79981			N/A
5/17/2019	EURNOK.fx	11:30:00 AM	9.79468	9.79538			N/A
5/17/2019	EURNOK.fx	1:30:00 PM	9.78789	9.7881			N/A
5/17/2019	EURNOK.fx	3:30:00 PM	9.79459	9.79348			N/A
5/17/2019	EURNZD	9:30:00 AM	1.70903	1.70939			N/A
5/17/2019	EURNZD	11:30:00 AM	1.70954	1.71006			N/A
5/17/2019	EURNZD	1:30:00 PM	1.71088	1.71132			N/A
5/17/2019	EURNZD	3:30:00 PM	1.71029	1.71101			N/A
5/17/2019	EURNZD.fx	9:30:00 AM	1.70943	1.70894			N/A
5/17/2019	EURNZD.fx	11:30:00 AM	1.70997	1.70963			N/A
5/17/2019	EURNZD.fx	1:30:00 PM	1.7113	1.71089			N/A
5/17/2019	EURNZD.fx	3:30:00 PM	1.71072	1.7106			N/A
5/17/2019	EURPLN	9:30:00 AM	4.3044	4.3069			N/A
5/17/2019	EURPLN	11:30:00 AM	4.3051	4.3082			N/A
5/17/2019	EURPLN	1:30:00 PM	4.3059	4.3089			N/A
5/17/2019	EURPLN	3:30:00 PM	4.3011	4.3041			N/A

5/17/2019	EURPLN.fx	9:30:00 AM	4.30358	4.30762			N/A
5/17/2019	EURPLN.fx	11:30:00 AM	4.30437	4.30892			N/A
5/17/2019	EURPLN.fx	1:30:00 PM	4.30547	4.30922			N/A
5/17/2019	EURPLN.fx	3:30:00 PM	4.30057	4.30458			N/A
5/17/2019	EURRUB	9:30:00 AM					N/A
5/17/2019	EURRUB	11:30:00 AM	71.87	72.307			N/A
5/17/2019	EURRUB	1:30:00 PM	71.818	72.248			N/A
5/17/2019	EURRUB	3:30:00 PM	71.863	72.303			N/A
5/17/2019	EURSEK	9:30:00 AM	10.7825	10.7874			N/A
5/17/2019	EURSEK	11:30:00 AM	10.7771	10.7787			N/A
5/17/2019	EURSEK	1:30:00 PM	10.763	10.7665			N/A
5/17/2019	EURSEK	3:30:00 PM	10.7628	10.7639			N/A
5/17/2019	EURSEK.fx	9:30:00 AM	10.78441	10.78554			N/A
5/17/2019	EURSEK.fx	11:30:00 AM	10.77878	10.77674			N/A
5/17/2019	EURSEK.fx	1:30:00 PM	10.76486	10.76443			N/A
5/17/2019	EURSEK.fx	3:30:00 PM	10.76475	10.76224			N/A
5/17/2019	EURSGD	9:30:00 AM	1.5368	1.5375			N/A
5/17/2019	EURSGD	11:30:00 AM	1.5368	1.5373			N/A
5/17/2019	EURSGD	1:30:00 PM	1.5365	1.5371			N/A
5/17/2019	EURSGD	3:30:00 PM	1.5363	1.537			N/A
5/17/2019	EURSGD.fx	9:30:00 AM	1.53713	1.53707			N/A
5/17/2019	EURSGD.fx	11:30:00 AM	1.53711	1.53691			N/A
5/17/2019	EURSGD.fx	1:30:00 PM	1.53688	1.53667			N/A
5/17/2019	EURSGD.fx	3:30:00 PM	1.53664	1.53656			N/A
5/17/2019	EURUSD	9:30:00 AM	1.11767	1.11761			N/A
5/17/2019	EURUSD	11:30:00 AM	1.11716	1.11728			N/A
5/17/2019	EURUSD	1:30:00 PM	1.11698	1.11688			N/A
5/17/2019	EURUSD	3:30:00 PM	1.11704	1.11688	30	30	N/A
5/17/2019	EURUSD.fx	9:30:00 AM	1.11787	1.1177			N/A
5/17/2019	EURUSD.fx	11:30:00 AM	1.11736	1.11738			N/A
5/17/2019	EURUSD.fx	1:30:00 PM	1.11718	1.11696			N/A
5/17/2019	EURUSD.fx	3:30:00 PM	1.11724	1.11697			N/A
5/17/2019	EURZAR	9:30:00 AM	16.0139	16.0175			N/A
5/17/2019	EURZAR	11:30:00 AM	16.0179	16.0272			N/A

5/17/2019	EURZAR	1:30:00 PM	16.0339	16.0509			N/A
5/17/2019	EURZAR	3:30:00 PM	16.0524	16.0665			N/A
5/17/2019	EURZAR.fx	9:30:00 AM	16.01307	16.01777			N/A
5/17/2019	EURZAR.fx	11:30:00 AM	16.01744	16.02804			N/A
5/17/2019	EURZAR.fx	1:30:00 PM	16.0328	16.05147			N/A
5/17/2019	EURZAR.fx	3:30:00 PM	16.05181	16.06602			N/A
5/17/2019	GBPAUD	9:30:00 AM	1.85718	1.85696			N/A
5/17/2019	GBPAUD	11:30:00 AM	1.85798	1.85812			N/A
5/17/2019	GBPAUD	1:30:00 PM	1.85437	1.85484			N/A
5/17/2019	GBPAUD	3:30:00 PM	1.85327	1.85371			N/A
5/17/2019	GBPAUD.fx	9:30:00 AM	1.85757	1.85654			N/A
5/17/2019	GBPAUD.fx	11:30:00 AM	1.85839	1.85772			N/A
5/17/2019	GBPAUD.fx	1:30:00 PM	1.85476	1.85443			N/A
5/17/2019	GBPAUD.fx	3:30:00 PM	1.85369	1.85329			N/A
5/17/2019	GBPCAD	9:30:00 AM	1.72304	1.72371			N/A
5/17/2019	GBPCAD	11:30:00 AM	1.72249	1.723			N/A
5/17/2019	GBPCAD	1:30:00 PM	1.71987	1.72037			N/A
5/17/2019	GBPCAD	3:30:00 PM	1.72099	1.72134			N/A
5/17/2019	GBPCAD.fx	9:30:00 AM	1.72341	1.72331			N/A
5/17/2019	GBPCAD.fx	11:30:00 AM	1.7229	1.72259			N/A
5/17/2019	GBPCAD.fx	1:30:00 PM	1.72026	1.71998			N/A
5/17/2019	GBPCAD.fx	3:30:00 PM	1.72138	1.72092			N/A
5/17/2019	GBPCHF	9:30:00 AM	1.28996	1.29036			N/A
5/17/2019	GBPCHF	11:30:00 AM	1.28952	1.28983			N/A
5/17/2019	GBPCHF	1:30:00 PM	1.28865	1.28889			N/A
5/17/2019	GBPCHF	3:30:00 PM	1.28813	1.28843			N/A
5/17/2019	GBPCHF.fx	9:30:00 AM	1.29016	1.29017			N/A
5/17/2019	GBPCHF.fx	11:30:00 AM	1.28973	1.28962			N/A
5/17/2019	GBPCHF.fx	1:30:00 PM	1.28884	1.2887			N/A
5/17/2019	GBPCHF.fx	3:30:00 PM	1.28833	1.28821			N/A
5/17/2019	GBPCZK	9:30:00 AM	29.382	29.404			N/A
5/17/2019	GBPCZK	11:30:00 AM	29.408	29.418			N/A
5/17/2019	GBPCZK	1:30:00 PM	29.365	29.383			N/A
5/17/2019	GBPCZK	3:30:00 PM	29.354	29.375			N/A

5/17/2019	GBPDKK	9:30:00 AM	8.538	8.549			N/A
5/17/2019	GBPDKK	11:30:00 AM	8.538	8.548			N/A
5/17/2019	GBPDKK	1:30:00 PM	8.523	8.532			N/A
5/17/2019	GBPDKK	3:30:00 PM	8.52	8.53			N/A
5/17/2019	GBPDKK.fx	9:30:00 AM	8.5362	8.5492			N/A
5/17/2019	GBPDKK.fx	11:30:00 AM	8.5367	8.5486			N/A
5/17/2019	GBPDKK.fx	1:30:00 PM	8.5214	8.5325			N/A
5/17/2019	GBPDKK.fx	3:30:00 PM	8.5181	8.5307			N/A
5/17/2019	GBPHKD	9:30:00 AM	10.032	10.0364			N/A
5/17/2019	GBPHKD	11:30:00 AM	10.0274	10.0325			N/A
5/17/2019	GBPHKD	1:30:00 PM	10.0067	10.0099			N/A
5/17/2019	GBPHKD	3:30:00 PM	10.0057	10.0096			N/A
5/17/2019	GBPHUF	9:30:00 AM	370.99	371.45			N/A
5/17/2019	GBPHUF	11:30:00 AM	371	371.36			N/A
5/17/2019	GBPHUF	1:30:00 PM	371.61	372.03			N/A
5/17/2019	GBPHUF	3:30:00 PM	372.15	372.61			N/A
5/17/2019	GBPJPY	9:30:00 AM	140.105	140.105			N/A
5/17/2019	GBPJPY	11:30:00 AM	140.113	140.142			N/A
5/17/2019	GBPJPY	1:30:00 PM	139.868	139.878			N/A
5/17/2019	GBPJPY	3:30:00 PM	139.713	139.716			N/A
5/17/2019	GBPJPY.fx	9:30:00 AM	140.123	140.086			N/A
5/17/2019	GBPJPY.fx	11:30:00 AM	140.132	140.122			N/A
5/17/2019	GBPJPY.fx	1:30:00 PM	139.888	139.857			N/A
5/17/2019	GBPJPY.fx	3:30:00 PM	139.733	139.695			N/A
5/17/2019	GBPMXN	9:30:00 AM	24.4737	24.4716			N/A
5/17/2019	GBPMXN	11:30:00 AM	24.4728	24.4858			N/A
5/17/2019	GBPMXN	1:30:00 PM	24.4294	24.4387			N/A
5/17/2019	GBPMXN	3:30:00 PM	24.4753	24.4756			N/A
5/17/2019	GBPNOK	9:30:00 AM	11.2044	11.2146			N/A
5/17/2019	GBPNOK	11:30:00 AM	11.1999	11.2094			N/A
5/17/2019	GBPNOK	1:30:00 PM	11.1711	11.1804			N/A
5/17/2019	GBPNOK	3:30:00 PM	11.1755	11.1845			N/A
5/17/2019	GBPNOK.fx	9:30:00 AM	11.2089	11.20987			N/A
5/17/2019	GBPNOK.fx	11:30:00 AM	11.20468	11.20433			N/A

5/17/2019	GBPNOK.fx	1:30:00 PM	11.17613	11.17555			N/A
5/17/2019	GBPNOK.fx	3:30:00 PM	11.18049	11.17949			N/A
5/17/2019	GBPNZD	9:30:00 AM	1.95498	1.95519			N/A
5/17/2019	GBPNZD	11:30:00 AM	1.95577	1.95587			N/A
5/17/2019	GBPNZD	1:30:00 PM	1.95335	1.95379			N/A
5/17/2019	GBPNZD	3:30:00 PM	1.95249	1.95305			N/A
5/17/2019	GBPNZD.fx	9:30:00 AM	1.95532	1.95478			N/A
5/17/2019	GBPNZD.fx	11:30:00 AM	1.95613	1.95548			N/A
5/17/2019	GBPNZD.fx	1:30:00 PM	1.95371	1.9534			N/A
5/17/2019	GBPNZD.fx	3:30:00 PM	1.95289	1.95262			N/A
5/17/2019	GBPPLN	9:30:00 AM	4.9247	4.9257			N/A
5/17/2019	GBPPLN	11:30:00 AM	4.9255	4.927			N/A
5/17/2019	GBPPLN	1:30:00 PM	4.9175	4.9186			N/A
5/17/2019	GBPPLN	3:30:00 PM	4.9105	4.9124			N/A
5/17/2019	GBPPLN.fx	9:30:00 AM	4.92232	4.92804			N/A
5/17/2019	GBPPLN.fx	11:30:00 AM	4.92341	4.92911			N/A
5/17/2019	GBPPLN.fx	1:30:00 PM	4.91546	4.92056			N/A
5/17/2019	GBPPLN.fx	3:30:00 PM	4.90846	4.91424			N/A
5/17/2019	GBPSEK	9:30:00 AM	12.3318	12.341			N/A
5/17/2019	GBPSEK	11:30:00 AM	12.3253	12.3308			N/A
5/17/2019	GBPSEK	1:30:00 PM	12.2869	12.2928			N/A
5/17/2019	GBPSEK	3:30:00 PM	12.2841	12.2894			N/A
5/17/2019	GBPSEK.fx	9:30:00 AM	12.32823	12.34461			N/A
5/17/2019	GBPSEK.fx	11:30:00 AM	12.32218	12.3345			N/A
5/17/2019	GBPSEK.fx	1:30:00 PM	12.28334	12.29681			N/A
5/17/2019	GBPSEK.fx	3:30:00 PM	12.28007	12.29302			N/A
5/17/2019	GBPSGD	9:30:00 AM	1.7579	1.7585			N/A
5/17/2019	GBPSGD	11:30:00 AM	1.7581	1.7583			N/A
5/17/2019	GBPSGD	1:30:00 PM	1.7542	1.7547			N/A
5/17/2019	GBPSGD	3:30:00 PM	1.7538	1.7543			N/A
5/17/2019	GBPSGD.fx	9:30:00 AM	1.75605	1.76035			N/A
5/17/2019	GBPSGD.fx	11:30:00 AM	1.75622	1.76006			N/A
5/17/2019	GBPSGD.fx	1:30:00 PM	1.75238	1.75654			N/A
5/17/2019	GBPSGD.fx	3:30:00 PM	1.75194	1.75614			N/A



5/17/2019	GBPUSD	9:30:00 AM	1.27865	1.27859			N/A
5/17/2019	GBPUSD	11:30:00 AM	1.27814	1.27812			N/A
5/17/2019	GBPUSD	1:30:00 PM	1.27546	1.27528	3000	200	N/A
5/17/2019	GBPUSD	3:30:00 PM	1.27533	1.27512			N/A
5/17/2019	GBPUSD.fx	9:30:00 AM	1.2787	1.27853			N/A
5/17/2019	GBPUSD.fx	11:30:00 AM	1.2782	1.27806			N/A
5/17/2019	GBPUSD.fx	1:30:00 PM	1.27552	1.27522			N/A
5/17/2019	GBPUSD.fx	3:30:00 PM	1.2754	1.27506			N/A
5/17/2019	GBPZAR	9:30:00 AM	18.3146	18.3257			N/A
5/17/2019	GBPZAR	11:30:00 AM	18.3203	18.3368			N/A
5/17/2019	GBPZAR	1:30:00 PM	18.3029	18.3287			N/A
5/17/2019	GBPZAR	3:30:00 PM	18.3209	18.3414			N/A
5/17/2019	GBPZAR.fx	9:30:00 AM	18.3214	18.3189			N/A
5/17/2019	GBPZAR.fx	11:30:00 AM	18.3273	18.3296			N/A
5/17/2019	GBPZAR.fx	1:30:00 PM	18.3101	18.3217			N/A
5/17/2019	GBPZAR.fx	3:30:00 PM	18.3285	18.3338			N/A
5/17/2019	GOLD	9:30:00 AM	1288.39	1288.52			N/A
5/17/2019	GOLD	11:30:00 AM	1286.43	1286.82			N/A
5/17/2019	GOLD	1:30:00 PM	1284.46	1284.78			N/A
5/17/2019	GOLD	3:30:00 PM	1285.46	1285.43			N/A
5/17/2019	HKDJPY	9:30:00 AM	13.96	13.97			N/A
5/17/2019	HKDJPY	11:30:00 AM	13.97	13.98			N/A
5/17/2019	HKDJPY	1:30:00 PM					N/A
5/17/2019	HKDJPY	3:30:00 PM	13.96	13.97			N/A
5/17/2019	HKDJPY.fx	9:30:00 AM	13.956	13.961			N/A
5/17/2019	HKDJPY.fx	11:30:00 AM	13.964	13.97			N/A
5/17/2019	HKDJPY.fx	1:30:00 PM	13.968	13.975			N/A
5/17/2019	HKDJPY.fx	3:30:00 PM	13.953	13.96			N/A
5/17/2019	HUFJPY	9:30:00 AM	0.3776	0.3779			N/A
5/17/2019	HUFJPY	11:30:00 AM	0.3778	0.3781			N/A
5/17/2019	HUFJPY	1:30:00 PM	0.3763	0.3765			N/A
5/17/2019	HUFJPY	3:30:00 PM	0.3752	0.3755			N/A
5/17/2019	JP225.i	9:30:00 AM	21238.67	21251.17			N/A
5/17/2019	JP225.i	11:30:00 AM	21218.67	21228.67			N/A

5/17/2019	JP225.i	1:30:00 PM	21218.67	21228.67			N/A
5/17/2019	JP225.i	3:30:00 PM	21138.67	21153.67			N/A
5/17/2019	MXNJPY	9:30:00 AM	5.73	5.73			N/A
5/17/2019	MXNJPY	11:30:00 AM	5.72	5.73			N/A
5/17/2019	MXNJPY	1:30:00 PM					N/A
5/17/2019	MXNJPY	3:30:00 PM	5.71	5.71			N/A
5/17/2019	NASDAQ.i	9:30:00 AM					N/A
5/17/2019	NASDAQ.i	11:30:00 AM					N/A
5/17/2019	NASDAQ.i	1:30:00 PM					N/A
5/17/2019	NASDAQ.i	3:30:00 PM					N/A
5/17/2019	NOKJPY	9:30:00 AM	12.49	12.52			N/A
5/17/2019	NOKJPY	11:30:00 AM	12.5	12.53			N/A
5/17/2019	NOKJPY	1:30:00 PM	12.51	12.54			N/A
5/17/2019	NOKJPY	3:30:00 PM	12.49	12.51			N/A
5/17/2019	NOKJPY.fx	9:30:00 AM	12.498	12.5			N/A
5/17/2019	NOKJPY.fx	11:30:00 AM	12.504	12.509			N/A
5/17/2019	NOKJPY.fx	1:30:00 PM	12.513	12.519			N/A
5/17/2019	NOKJPY.fx	3:30:00 PM	12.496	12.497			N/A
5/17/2019	NZDCAD	9:30:00 AM	0.88121	0.8818			N/A
5/17/2019	NZDCAD	11:30:00 AM	0.88055	0.88114			N/A
5/17/2019	NZDCAD	1:30:00 PM	0.88018	0.88075			N/A
5/17/2019	NZDCAD	3:30:00 PM	0.88113	0.88166			N/A
5/17/2019	NZDCAD.fx	9:30:00 AM	0.88156	0.88144			N/A
5/17/2019	NZDCAD.fx	11:30:00 AM	0.88088	0.8808			N/A
5/17/2019	NZDCAD.fx	1:30:00 PM	0.88051	0.8804			N/A
5/17/2019	NZDCAD.fx	3:30:00 PM	0.88146	0.88131			N/A
5/17/2019	NZDCHF	9:30:00 AM	0.65967	0.66013			N/A
5/17/2019	NZDCHF	11:30:00 AM	0.65909	0.65971			N/A
5/17/2019	NZDCHF	1:30:00 PM	0.65937	0.66002			N/A
5/17/2019	NZDCHF	3:30:00 PM	0.65941	0.66001			N/A
5/17/2019	NZDCHF.fx	9:30:00 AM	0.66002	0.65978			N/A
5/17/2019	NZDCHF.fx	11:30:00 AM	0.65943	0.65935			N/A
5/17/2019	NZDCHF.fx	1:30:00 PM	0.6597	0.65966			N/A
5/17/2019	NZDCHF.fx	3:30:00 PM	0.65975	0.65966			N/A

5/17/2019	NZDCZK	9:30:00 AM	15.029	15.038			N/A
5/17/2019	NZDCZK	11:30:00 AM	15.031	15.043			N/A
5/17/2019	NZDCZK	1:30:00 PM	15.031	15.039			N/A
5/17/2019	NZDCZK	3:30:00 PM	15.032	15.043			N/A
5/17/2019	NZDDKK	9:30:00 AM					N/A
5/17/2019	NZDDKK	11:30:00 AM	4.365	4.369			N/A
5/17/2019	NZDDKK	1:30:00 PM	4.362	4.366			N/A
5/17/2019	NZDDKK	3:30:00 PM					N/A
5/17/2019	NZDHKD	9:30:00 AM	5.1313	5.1326			N/A
5/17/2019	NZDHKD	11:30:00 AM	5.1271	5.1291			N/A
5/17/2019	NZDHKD	1:30:00 PM	5.1216	5.1235			N/A
5/17/2019	NZDHKD	3:30:00 PM	5.1234	5.1256			N/A
5/17/2019	NZDHUF	9:30:00 AM	189.74	189.97			N/A
5/17/2019	NZDHUF	11:30:00 AM	189.62	189.91			N/A
5/17/2019	NZDHUF	1:30:00 PM	190.18	190.45			N/A
5/17/2019	NZDHUF	3:30:00 PM	190.54	190.82			N/A
5/17/2019	NZDJPY	9:30:00 AM	71.65	71.675			N/A
5/17/2019	NZDJPY	11:30:00 AM	71.625	71.673			N/A
5/17/2019	NZDJPY	1:30:00 PM	71.569	71.629			N/A
5/17/2019	NZDJPY	3:30:00 PM	71.521	71.572			N/A
5/17/2019	NZDJPY.fx	9:30:00 AM	71.683	71.642			N/A
5/17/2019	NZDJPY.fx	11:30:00 AM	71.656	71.639			N/A
5/17/2019	NZDJPY.fx	1:30:00 PM	71.6	71.595			N/A
5/17/2019	NZDJPY.fx	3:30:00 PM	71.552	71.538			N/A
5/17/2019	NZDMXN	9:30:00 AM	12.5152	12.5175			N/A
5/17/2019	NZDMXN	11:30:00 AM	12.5118	12.5179			N/A
5/17/2019	NZDMXN	1:30:00 PM	12.5042	12.508			N/A
5/17/2019	NZDMXN	3:30:00 PM	12.5333	12.5336			N/A
5/17/2019	NZDNOK	9:30:00 AM	5.7293	5.7332			N/A
5/17/2019	NZDNOK	11:30:00 AM	5.7253	5.7282			N/A
5/17/2019	NZDNOK	1:30:00 PM	5.7169	5.7199			N/A
5/17/2019	NZDNOK	3:30:00 PM	5.7218	5.7242			N/A
5/17/2019	NZDPLN	9:30:00 AM	2.5177	2.5185			N/A
5/17/2019	NZDPLN	11:30:00 AM	2.5174	2.5187			N/A

5/17/2019	NZDPLN	1:30:00 PM	2.516	2.5172			N/A
5/17/2019	NZDPLN	3:30:00 PM	2.5136	2.515			N/A
5/17/2019	NZDSEK	9:30:00 AM	6.3047	6.3099			N/A
5/17/2019	NZDSEK	11:30:00 AM	6.2992	6.3035			N/A
5/17/2019	NZDSEK	1:30:00 PM	6.286	6.2919			N/A
5/17/2019	NZDSEK	3:30:00 PM	6.2866	6.2918			N/A
5/17/2019	NZDSGD	9:30:00 AM	0.8991	0.8996			N/A
5/17/2019	NZDSGD	11:30:00 AM	0.8986	0.8991			N/A
5/17/2019	NZDSGD	1:30:00 PM	0.8978	0.8984			N/A
5/17/2019	NZDSGD	3:30:00 PM	0.898	0.8985			N/A
5/17/2019	NZDSGD.fx	9:30:00 AM	0.89908	0.8995			N/A
5/17/2019	NZDSGD.fx	11:30:00 AM	0.89856	0.89907			N/A
5/17/2019	NZDSGD.fx	1:30:00 PM	0.89778	0.89831			N/A
5/17/2019	NZDSGD.fx	3:30:00 PM	0.89798	0.89841			N/A
5/17/2019	NZDUSD	9:30:00 AM	0.65401	0.6539			N/A
5/17/2019	NZDUSD	11:30:00 AM	0.65346	0.65346			N/A
5/17/2019	NZDUSD	1:30:00 PM	0.65276	0.65281			N/A
5/17/2019	NZDUSD	3:30:00 PM	0.65301	0.65298			N/A
5/17/2019	NZDUSD.fx	9:30:00 AM	0.6541	0.6539			N/A
5/17/2019	NZDUSD.fx	11:30:00 AM	0.65354	0.65347			N/A
5/17/2019	NZDUSD.fx	1:30:00 PM	0.65283	0.65282			N/A
5/17/2019	NZDUSD.fx	3:30:00 PM	0.65307	0.65299			N/A
5/17/2019	NZDZAR	9:30:00 AM	9.3605	9.3724			N/A
5/17/2019	NZDZAR	11:30:00 AM	9.3602	9.3738			N/A
5/17/2019	NZDZAR	1:30:00 PM	9.3639	9.3799			N/A
5/17/2019	NZDZAR	3:30:00 PM	9.3762	9.3905			N/A
5/17/2019	SEKJPY	9:30:00 AM	11.36	11.37			N/A
5/17/2019	SEKJPY	11:30:00 AM	11.37	11.38			N/A
5/17/2019	SEKJPY	1:30:00 PM	11.38	11.39			N/A
5/17/2019	SEKJPY	3:30:00 PM	11.37	11.38			N/A
5/17/2019	SEKJPY.fx	9:30:00 AM	11.349	11.364			N/A
5/17/2019	SEKJPY.fx	11:30:00 AM	11.359	11.374			N/A
5/17/2019	SEKJPY.fx	1:30:00 PM	11.371	11.389			N/A
5/17/2019	SEKJPY.fx	3:30:00 PM	11.365	11.376			N/A

5/17/2019	SGDJPY	9:30:00 AM	79.68	79.68			N/A
5/17/2019	SGDJPY	11:30:00 AM	79.67	79.69			N/A
5/17/2019	SGDJPY	1:30:00 PM	79.69	79.72			N/A
5/17/2019	SGDJPY	3:30:00 PM	79.66	79.64			N/A
5/17/2019	SILVER	9:30:00 AM	14.35	14.73			N/A
5/17/2019	SILVER	11:30:00 AM	14.3	14.68			N/A
5/17/2019	SILVER	1:30:00 PM	14.27	14.65			N/A
5/17/2019	SILVER	3:30:00 PM	14.26	14.64			N/A
5/17/2019	SPX500.i	9:30:00 AM	2865.74	2865.79			N/A
5/17/2019	SPX500.i	11:30:00 AM	2862.99	2862.92			N/A
5/17/2019	SPX500.i	1:30:00 PM	2865.49	2865.79			N/A
5/17/2019	SPX500.i	3:30:00 PM	2852.49	2852.54			N/A
5/17/2019	UK100.i	9:30:00 AM	7325.33	7325.33			N/A
5/17/2019	UK100.i	11:30:00 AM	7321.99	7320.99			N/A
5/17/2019	UK100.i	1:30:00 PM	7338.99	7338.49			N/A
5/17/2019	UK100.i	3:30:00 PM	7311.99	7312.49			N/A
5/17/2019	USDCAD	9:30:00 AM	1.34794	1.34774			N/A
5/17/2019	USDCAD	11:30:00 AM	1.3479	1.34785			N/A
5/17/2019	USDCAD	1:30:00 PM	1.34871	1.34863			N/A
5/17/2019	USDCAD	3:30:00 PM	1.34983	1.34961			N/A
5/17/2019	USDCAD.fx	9:30:00 AM	1.34797	1.34771			N/A
5/17/2019	USDCAD.fx	11:30:00 AM	1.34793	1.34782			N/A
5/17/2019	USDCAD.fx	1:30:00 PM	1.34876	1.3486			N/A
5/17/2019	USDCAD.fx	3:30:00 PM	1.34988	1.34955			N/A
5/17/2019	USDCHF	9:30:00 AM	1.009	1.00911			N/A
5/17/2019	USDCHF	11:30:00 AM	1.00895	1.00909			N/A
5/17/2019	USDCHF	1:30:00 PM	1.01044	1.01056			N/A
5/17/2019	USDCHF	3:30:00 PM	1.01027	1.01028			N/A
5/17/2019	USDCHF.fx	9:30:00 AM	1.00904	1.00905			N/A
5/17/2019	USDCHF.fx	11:30:00 AM	1.009	1.00901			N/A
5/17/2019	USDCHF.fx	1:30:00 PM	1.01049	1.01048			N/A
5/17/2019	USDCHF.fx	3:30:00 PM	1.01031	1.01021			N/A
5/17/2019	USDCZK	9:30:00 AM	22.997	23.016			N/A
5/17/2019	USDCZK	11:30:00 AM	23.022	23.04			N/A

5/17/2019	USDCZK	1:30:00 PM	23.039	23.059			N/A
5/17/2019	USDCZK	3:30:00 PM	23.038	23.055			N/A
5/17/2019	USDCZK.fx	9:30:00 AM	23.0048	23.0084			N/A
5/17/2019	USDCZK.fx	11:30:00 AM	23.0314	23.03			N/A
5/17/2019	USDCZK.fx	1:30:00 PM	23.048	23.0499			N/A
5/17/2019	USDCZK.fx	3:30:00 PM	23.0462	23.0456			N/A
5/17/2019	USDDKK	9:30:00 AM	6.6805	6.6837			N/A
5/17/2019	USDDKK	11:30:00 AM	6.6824	6.6865			N/A
5/17/2019	USDDKK	1:30:00 PM	6.6847	6.6874			N/A
5/17/2019	USDDKK	3:30:00 PM	6.6843	6.6867			N/A
5/17/2019	USDDKK.fx	9:30:00 AM	6.68107	6.68158			N/A
5/17/2019	USDDKK.fx	11:30:00 AM	6.68295	6.68447			N/A
5/17/2019	USDDKK.fx	1:30:00 PM	6.68525	6.68548			N/A
5/17/2019	USDDKK.fx	3:30:00 PM	6.68493	6.68473			N/A
5/17/2019	USDHKD	9:30:00 AM	7.8493	7.8497			N/A
5/17/2019	USDHKD	11:30:00 AM	7.849	7.8489			N/A
5/17/2019	USDHKD	1:30:00 PM	7.849	7.8493			N/A
5/17/2019	USDHKD	3:30:00 PM	7.8492	7.8494			N/A
5/17/2019	USDHKD.fx	9:30:00 AM	7.84937	7.84993			N/A
5/17/2019	USDHKD.fx	11:30:00 AM	7.84886	7.8494			N/A
5/17/2019	USDHKD.fx	1:30:00 PM	7.84895	7.84949			N/A
5/17/2019	USDHKD.fx	3:30:00 PM	7.84917	7.84973			N/A
5/17/2019	USDHUF	9:30:00 AM	290.28	290.69			N/A
5/17/2019	USDHUF	11:30:00 AM	290.32	290.75			N/A
5/17/2019	USDHUF	1:30:00 PM	291.47	291.88			N/A
5/17/2019	USDHUF	3:30:00 PM	291.96	292.34			N/A
5/17/2019	USDHUF.fx	9:30:00 AM	290.485	290.48			N/A
5/17/2019	USDHUF.fx	11:30:00 AM	290.523	290.545			N/A
5/17/2019	USDHUF.fx	1:30:00 PM	291.675	291.667			N/A
5/17/2019	USDHUF.fx	3:30:00 PM	292.163	292.117			N/A
5/17/2019	USDINR	9:30:00 AM	65.19	75.18			N/A
5/17/2019	USDINR	11:30:00 AM	65.17	75.16			N/A
5/17/2019	USDINR	1:30:00 PM					N/A
5/17/2019	USDINR	3:30:00 PM					N/A

5/17/2019	USDJPY	9:30:00 AM	109.579	109.57			N/A
5/17/2019	USDJPY	11:30:00 AM	109.637	109.639			N/A
5/17/2019	USDJPY	1:30:00 PM	109.669	109.675			N/A
5/17/2019	USDJPY	3:30:00 PM	109.554	109.562			N/A
5/17/2019	USDJPY.fx	9:30:00 AM	109.585	109.563			N/A
5/17/2019	USDJPY.fx	11:30:00 AM	109.643	109.632			N/A
5/17/2019	USDJPY.fx	1:30:00 PM	109.674	109.668			N/A
5/17/2019	USDJPY.fx	3:30:00 PM	109.56	109.555			N/A
5/17/2019	USDMXN	9:30:00 AM	19.149	19.141			N/A
5/17/2019	USDMXN	11:30:00 AM	19.155	19.161			N/A
5/17/2019	USDMXN	1:30:00 PM	19.163	19.167			N/A
5/17/2019	USDMXN	3:30:00 PM	19.203	19.195			N/A
5/17/2019	USDMXN.f	9:30:00 AM	19.1519	19.1375			N/A
5/17/2019	USDMXN.f	11:30:00 AM	19.1578	19.1577			N/A
5/17/2019	USDMXN.f	1:30:00 PM	19.1663	19.1628			N/A
5/17/2019	USDMXN.f	3:30:00 PM	19.2066	19.1915			N/A
5/17/2019	USDNOK	9:30:00 AM	8.764	8.7701			N/A
5/17/2019	USDNOK	11:30:00 AM	8.7625	8.7709			N/A
5/17/2019	USDNOK	1:30:00 PM	8.7589	8.7666			N/A
5/17/2019	USDNOK	3:30:00 PM	8.7652	8.7698			N/A
5/17/2019	USDNOK.fx	9:30:00 AM	8.76773	8.76565			N/A
5/17/2019	USDNOK.fx	11:30:00 AM	8.76658	8.76625			N/A
5/17/2019	USDNOK.fx	1:30:00 PM	8.76286	8.7621			N/A
5/17/2019	USDNOK.fx	3:30:00 PM	8.76938	8.76529			N/A
5/17/2019	USDPLN	9:30:00 AM	3.8516	3.8527			N/A
5/17/2019	USDPLN	11:30:00 AM	3.8535	3.8551			N/A
5/17/2019	USDPLN	1:30:00 PM	3.8557	3.8564			N/A
5/17/2019	USDPLN	3:30:00 PM	3.8513	3.8518			N/A
5/17/2019	USDPLN.fx	9:30:00 AM	3.85074	3.85341			N/A
5/17/2019	USDPLN.fx	11:30:00 AM	3.85268	3.85583			N/A
5/17/2019	USDPLN.fx	1:30:00 PM	3.85496	3.85713			N/A
5/17/2019	USDPLN.fx	3:30:00 PM	3.85048	3.85245			N/A
5/17/2019	USDRUB	9:30:00 AM					N/A
5/17/2019	USDRUB	11:30:00 AM	64.438	64.826			N/A

5/17/2019	USDRUB	1:30:00 PM	64.417	64.793			N/A
5/17/2019	USDRUB	3:30:00 PM	64.448	64.835			N/A
5/17/2019	USDSEK	9:30:00 AM	9.6467	9.6497			N/A
5/17/2019	USDSEK	11:30:00 AM	9.6443	9.6463			N/A
5/17/2019	USDSEK	1:30:00 PM	9.6346	9.6384			N/A
5/17/2019	USDSEK	3:30:00 PM	9.6349	9.634			N/A
5/17/2019	USDSEK.fx	9:30:00 AM	9.64953	9.64769			N/A
5/17/2019	USDSEK.fx	11:30:00 AM	9.64731	9.64415			N/A
5/17/2019	USDSEK.fx	1:30:00 PM	9.63731	9.63648			N/A
5/17/2019	USDSEK.fx	3:30:00 PM	9.63797	9.63206			N/A
5/17/2019	USDSGD	9:30:00 AM	1.375	1.3751			N/A
5/17/2019	USDSGD	11:30:00 AM	1.3755	1.3754			N/A
5/17/2019	USDSGD	1:30:00 PM	1.3755	1.3757			N/A
5/17/2019	USDSGD	3:30:00 PM	1.3754	1.3756			N/A
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5/17/2019	USDSGD.fx	11:30:00 AM	1.37538	1.37554			N/A
5/17/2019	USDSGD.fx	1:30:00 PM	1.37539	1.37584			N/A
5/17/2019	USDSGD.fx	3:30:00 PM	1.37527	1.37558			N/A
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5/17/2019	USDZAR.fx	3:30:00 PM					N/A
5/17/2019	XAUUSD	9:30:00 AM	1288.4	1288.52			N/A
5/17/2019	XAUUSD	11:30:00 AM	1286.43	1286.81			N/A
5/17/2019	XAUUSD	1:30:00 PM	1284.48	1284.77			N/A
5/17/2019	XAUUSD	3:30:00 PM	1285.48	1285.43			N/A
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5/17/2019	ZARJPY	11:30:00 AM	7.63	7.64			N/A
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5/17/2019	ZARJPY.fx	11:30:00 AM	7.645	7.644			N/A
5/17/2019	ZARJPY.fx	1:30:00 PM	7.634	7.636			N/A
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5/20/2019	#NG.f	1:30:00 PM	2.668	2.687			N/A
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5/20/2019	#POT	11:30:00 AM					N/A
5/20/2019	#POT	1:30:00 PM					N/A
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5/20/2019	#QQQ	3:30:00 PM					N/A
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5/20/2019	#Ripple	11:30:00 AM	0.3922	0.3958			N/A
5/20/2019	#Ripple	1:30:00 PM	0.3971	0.4016			N/A
5/20/2019	#Ripple	3:30:00 PM	0.3925	0.3964			N/A
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5/20/2019	#S	11:30:00 AM					N/A
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5/20/2019	#S	3:30:00 PM					N/A
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5/20/2019	#SBUX	1:30:00 PM					N/A
5/20/2019	#SBUX	3:30:00 PM					N/A
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5/20/2019	#SNE	3:30:00 PM					N/A
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5/20/2019	#SPY	3:30:00 PM					N/A
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5/20/2019	#T	3:30:00 PM					N/A
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5/20/2019	#TRV	11:30:00 AM					N/A
5/20/2019	#TRV	1:30:00 PM					N/A
5/20/2019	#TRV	3:30:00 PM					N/A
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5/20/2019	#TSCO	11:30:00 AM					N/A
5/20/2019	#TSCO	1:30:00 PM					N/A
5/20/2019	#TSCO	3:30:00 PM					N/A
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5/20/2019	#TSLA	1:30:00 PM					N/A
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5/20/2019	#TWTR	3:30:00 PM					N/A
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5/20/2019	#UBS	11:30:00 AM					N/A
5/20/2019	#UBS	1:30:00 PM					N/A
5/20/2019	#UBS	3:30:00 PM					N/A
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5/20/2019	#UL	11:30:00 AM					N/A
5/20/2019	#UL	1:30:00 PM					N/A
5/20/2019	#UL	3:30:00 PM					N/A
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5/20/2019	#UPS	11:30:00 AM					N/A
5/20/2019	#UPS	1:30:00 PM					N/A
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5/20/2019	#UTX	11:30:00 AM					N/A
5/20/2019	#UTX	1:30:00 PM					N/A
5/20/2019	#UTX	3:30:00 PM					N/A
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5/20/2019	#V	3:30:00 PM					N/A
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5/20/2019	#VOD	3:30:00 PM					N/A
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5/20/2019	#WDC	3:30:00 PM					N/A
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5/20/2019	#WFC	1:30:00 PM					N/A
5/20/2019	#WFC	3:30:00 PM					N/A
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5/20/2019	#WMT	11:30:00 AM					N/A
5/20/2019	#WMT	1:30:00 PM					N/A
5/20/2019	#WMT	3:30:00 PM					N/A
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5/20/2019	#XOM	3:30:00 PM					N/A
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5/20/2019	#YHOO	11:30:00 AM					N/A

5/20/2019	#YHOO	1:30:00 PM					N/A
5/20/2019	#YHOO	3:30:00 PM					N/A
5/20/2019	#ZNGA	9:30:00 AM					N/A
5/20/2019	#ZNGA	11:30:00 AM					N/A
5/20/2019	#ZNGA	1:30:00 PM					N/A
5/20/2019	#ZNGA	3:30:00 PM					N/A
5/20/2019	AUDCAD	9:30:00 AM	0.92956	0.93017			N/A
5/20/2019	AUDCAD	11:30:00 AM	0.93042	0.93114			N/A
5/20/2019	AUDCAD	1:30:00 PM	0.92937	0.93003			N/A
5/20/2019	AUDCAD	3:30:00 PM	0.92798	0.92863			N/A
5/20/2019	AUDCAD.fx	9:30:00 AM	0.92988	0.92983			N/A
5/20/2019	AUDCAD.fx	11:30:00 AM	0.93075	0.9308			N/A
5/20/2019	AUDCAD.fx	1:30:00 PM	0.9297	0.92969			N/A
5/20/2019	AUDCAD.fx	3:30:00 PM	0.92832	0.92828			N/A
5/20/2019	AUDCHF	9:30:00 AM	0.70004	0.70053			N/A
5/20/2019	AUDCHF	11:30:00 AM	0.70017	0.70087			N/A
5/20/2019	AUDCHF	1:30:00 PM	0.69781	0.69844			N/A
5/20/2019	AUDCHF	3:30:00 PM	0.69736	0.69795			N/A
5/20/2019	AUDCHF.fx	9:30:00 AM	0.70038	0.70018			N/A
5/20/2019	AUDCHF.fx	11:30:00 AM	0.70052	0.70052			N/A
5/20/2019	AUDCHF.fx	1:30:00 PM	0.69816	0.69809			N/A
5/20/2019	AUDCHF.fx	3:30:00 PM	0.69773	0.6976			N/A
5/20/2019	AUDCZK	9:30:00 AM	15.977	15.992			N/A
5/20/2019	AUDCZK	11:30:00 AM	15.979	15.996			N/A
5/20/2019	AUDCZK	1:30:00 PM	15.951	15.967			N/A
5/20/2019	AUDCZK	3:30:00 PM	15.939	15.951			N/A
5/20/2019	AUDDKK	9:30:00 AM	4.6333	4.6373			N/A
5/20/2019	AUDDKK	11:30:00 AM	4.6356	4.6402			N/A
5/20/2019	AUDDKK	1:30:00 PM	4.6275	4.6317			N/A
5/20/2019	AUDDKK	3:30:00 PM	4.6244	4.628			N/A
5/20/2019	AUDHKD	9:30:00 AM	5.4303	5.4335			N/A
5/20/2019	AUDHKD	11:30:00 AM	5.4378	5.4417			N/A
5/20/2019	AUDHKD	1:30:00 PM	5.4254	5.4287			N/A
5/20/2019	AUDHKD	3:30:00 PM	5.425	5.4284			N/A

5/20/2019	AUDHUF	9:30:00 AM	202.23	202.46			N/A
5/20/2019	AUDHUF	11:30:00 AM	202.32	202.56			N/A
5/20/2019	AUDHUF	1:30:00 PM	202.03	202.23			N/A
5/20/2019	AUDHUF	3:30:00 PM	201.65	201.88			N/A
5/20/2019	AUDJPY	9:30:00 AM	76.208	76.267			N/A
5/20/2019	AUDJPY	11:30:00 AM	76.312	76.377			N/A
5/20/2019	AUDJPY	1:30:00 PM	76.015	76.071			N/A
5/20/2019	AUDJPY	3:30:00 PM	75.953	76.01			N/A
5/20/2019	AUDJPY.fx	9:30:00 AM	76.241	76.232			N/A
5/20/2019	AUDJPY.fx	11:30:00 AM	76.346	76.342			N/A
5/20/2019	AUDJPY.fx	1:30:00 PM	76.048	76.035			N/A
5/20/2019	AUDJPY.fx	3:30:00 PM	75.988	75.974			N/A
5/20/2019	AUDMXN	9:30:00 AM	13.2227	13.2308			N/A
5/20/2019	AUDMXN	11:30:00 AM	13.2399	13.2491			N/A
5/20/2019	AUDMXN	1:30:00 PM	13.2347	13.2439			N/A
5/20/2019	AUDMXN	3:30:00 PM	13.2117	13.2217			N/A
5/20/2019	AUDNOK	9:30:00 AM	6.0738	6.078			N/A
5/20/2019	AUDNOK	11:30:00 AM	6.0778	6.0822			N/A
5/20/2019	AUDNOK	1:30:00 PM	6.0761	6.0806			N/A
5/20/2019	AUDNOK	3:30:00 PM	6.0696	6.0731			N/A
5/20/2019	AUDNOK.fx	9:30:00 AM	6.0753	6.0765			N/A
5/20/2019	AUDNOK.fx	11:30:00 AM	6.0793	6.0805			N/A
5/20/2019	AUDNOK.fx	1:30:00 PM	6.0776	6.0789			N/A
5/20/2019	AUDNOK.fx	3:30:00 PM	6.0711	6.0713			N/A
5/20/2019	AUDNZD	9:30:00 AM	1.05825	1.05914			N/A
5/20/2019	AUDNZD	11:30:00 AM	1.05881	1.05973			N/A
5/20/2019	AUDNZD	1:30:00 PM	1.05786	1.05866			N/A
5/20/2019	AUDNZD	3:30:00 PM	1.05704	1.05792			N/A
5/20/2019	AUDNZD.fx	9:30:00 AM	1.05869	1.05868			N/A
5/20/2019	AUDNZD.fx	11:30:00 AM	1.05927	1.05927			N/A
5/20/2019	AUDNZD.fx	1:30:00 PM	1.0583	1.05821			N/A
5/20/2019	AUDNZD.fx	3:30:00 PM	1.05748	1.05746			N/A
5/20/2019	AUDPLN	9:30:00 AM	2.6699	2.6725			N/A
5/20/2019	AUDPLN	11:30:00 AM	2.668	2.6712			N/A

5/20/2019	AUDPLN	1:30:00 PM	2.6643	2.6674			N/A
5/20/2019	AUDPLN	3:30:00 PM	2.6607	2.6631			N/A
5/20/2019	AUDSEK	9:30:00 AM	6.6744	6.6746			N/A
5/20/2019	AUDSEK	11:30:00 AM	6.676	6.6791			N/A
5/20/2019	AUDSEK	1:30:00 PM	6.6752	6.6781			N/A
5/20/2019	AUDSEK	3:30:00 PM	6.6728	6.6742			N/A
5/20/2019	AUDSEK.fx	9:30:00 AM	6.6699	6.6791			N/A
5/20/2019	AUDSEK.fx	11:30:00 AM	6.6713	6.6837			N/A
5/20/2019	AUDSEK.fx	1:30:00 PM	6.6708	6.6825			N/A
5/20/2019	AUDSEK.fx	3:30:00 PM	6.6683	6.6785			N/A
5/20/2019	AUDSGD	9:30:00 AM	0.9525	0.9528			N/A
5/20/2019	AUDSGD	11:30:00 AM	0.953	0.9533			N/A
5/20/2019	AUDSGD	1:30:00 PM	0.9517	0.952			N/A
5/20/2019	AUDSGD	3:30:00 PM	0.9514	0.9516			N/A
5/20/2019	AUDSGD.fx	9:30:00 AM	0.95257	0.95257			N/A
5/20/2019	AUDSGD.fx	11:30:00 AM	0.95309	0.95321			N/A
5/20/2019	AUDSGD.fx	1:30:00 PM	0.95179	0.95187			N/A
5/20/2019	AUDSGD.fx	3:30:00 PM	0.95156	0.9515			N/A
5/20/2019	AUDUSD	9:30:00 AM	0.69233	0.69234			N/A
5/20/2019	AUDUSD	11:30:00 AM	0.69318	0.6933			N/A
5/20/2019	AUDUSD	1:30:00 PM	0.69155	0.6916			N/A
5/20/2019	AUDUSD	3:30:00 PM	0.69149	0.69149			N/A
5/20/2019	AUDUSD.fx	9:30:00 AM	0.69238	0.69228			N/A
5/20/2019	AUDUSD.fx	11:30:00 AM	0.69326	0.69324			N/A
5/20/2019	AUDUSD.fx	1:30:00 PM	0.6916	0.69154			N/A
5/20/2019	AUDUSD.fx	3:30:00 PM	0.69155	0.69143			N/A
5/20/2019	AUDZAR	9:30:00 AM	9.9607	9.9711			N/A
5/20/2019	AUDZAR	11:30:00 AM	9.9504	9.9637			N/A
5/20/2019	AUDZAR	1:30:00 PM	9.9448	9.9598			N/A
5/20/2019	AUDZAR	3:30:00 PM	9.9162	9.9311			N/A
5/20/2019	AUS200.i	9:30:00 AM					N/A
5/20/2019	AUS200.i	11:30:00 AM	6471.17	6474.67			N/A
5/20/2019	AUS200.i	1:30:00 PM	6436.17	6438.67			N/A
5/20/2019	AUS200.i	3:30:00 PM	6433.17	6436.47			N/A



5/20/2019	BCHUSD	9:30:00 AM	417.01	417.19			N/A
5/20/2019	BCHUSD	11:30:00 AM	415.03	415.1			N/A
5/20/2019	BCHUSD	1:30:00 PM	419.65	420.84			N/A
5/20/2019	BCHUSD	3:30:00 PM	414.83	416.73			N/A
5/20/2019	CADCHF	9:30:00 AM	0.75281	0.75337			N/A
5/20/2019	CADCHF	11:30:00 AM	0.75224	0.75296			N/A
5/20/2019	CADCHF	1:30:00 PM	0.75059	0.75122			N/A
5/20/2019	CADCHF	3:30:00 PM	0.75123	0.7518			N/A
5/20/2019	CADCHF.fx	9:30:00 AM	0.75315	0.75302			N/A
5/20/2019	CADCHF.fx	11:30:00 AM	0.75257	0.75261			N/A
5/20/2019	CADCHF.fx	1:30:00 PM	0.75093	0.75086			N/A
5/20/2019	CADCHF.fx	3:30:00 PM	0.75156	0.75144			N/A
5/20/2019	CADCZK	9:30:00 AM	17.185	17.202			N/A
5/20/2019	CADCZK	11:30:00 AM	17.171	17.188			N/A
5/20/2019	CADCZK	1:30:00 PM	17.162	17.178			N/A
5/20/2019	CADCZK	3:30:00 PM	17.173	17.185			N/A
5/20/2019	CADDDKK	9:30:00 AM					N/A
5/20/2019	CADDDKK	11:30:00 AM					N/A
5/20/2019	CADDDKK	1:30:00 PM	4.979	4.983			N/A
5/20/2019	CADDDKK	3:30:00 PM	4.983	4.986			N/A
5/20/2019	CADHKD	9:30:00 AM	5.8408	5.8447			N/A
5/20/2019	CADHKD	11:30:00 AM	5.8434	5.8473			N/A
5/20/2019	CADHKD	1:30:00 PM	5.8367	5.8402			N/A
5/20/2019	CADHKD	3:30:00 PM	5.8445	5.8484			N/A
5/20/2019	CADHUF	9:30:00 AM	217.56	217.73			N/A
5/20/2019	CADHUF	11:30:00 AM	217.46	217.61			N/A
5/20/2019	CADHUF	1:30:00 PM	217.38	217.52			N/A
5/20/2019	CADHUF	3:30:00 PM	217.3	217.46			N/A
5/20/2019	CADJPY	9:30:00 AM	81.95	82.021			N/A
5/20/2019	CADJPY	11:30:00 AM	81.987	82.056			N/A
5/20/2019	CADJPY	1:30:00 PM	81.763	81.816			N/A
5/20/2019	CADJPY	3:30:00 PM	81.816	81.877			N/A
5/20/2019	CADJPY.fx	9:30:00 AM	81.984	81.986			N/A
5/20/2019	CADJPY.fx	11:30:00 AM	82.02	82.021			N/A

5/20/2019	CADJPY.fx	1:30:00 PM	81.796	81.782			N/A
5/20/2019	CADJPY.fx	3:30:00 PM	81.849	81.842			N/A
5/20/2019	CADMXN	9:30:00 AM	14.2206	14.233			N/A
5/20/2019	CADMXN	11:30:00 AM	14.226	14.2381			N/A
5/20/2019	CADMXN	1:30:00 PM	14.2372	14.2482			N/A
5/20/2019	CADMXN	3:30:00 PM	14.2343	14.2445			N/A
5/20/2019	CADNOK	9:30:00 AM	6.5308	6.5348			N/A
5/20/2019	CADNOK	11:30:00 AM	6.5288	6.5331			N/A
5/20/2019	CADNOK	1:30:00 PM	6.5349	6.5388			N/A
5/20/2019	CADNOK	3:30:00 PM	6.5371	6.5409			N/A
5/20/2019	CADPLN	9:30:00 AM	2.8721	2.8739			N/A
5/20/2019	CADPLN	11:30:00 AM	2.8666	2.8685			N/A
5/20/2019	CADPLN	1:30:00 PM	2.8664	2.8681			N/A
5/20/2019	CADPLN	3:30:00 PM	2.8664	2.8683			N/A
5/20/2019	CADSEK	9:30:00 AM	7.1754	7.1769			N/A
5/20/2019	CADSEK	11:30:00 AM	7.1718	7.1749			N/A
5/20/2019	CADSEK	1:30:00 PM	7.1791	7.1823			N/A
5/20/2019	CADSEK	3:30:00 PM	7.186	7.1884			N/A
5/20/2019	CADSGD	9:30:00 AM	1.0237	1.024			N/A
5/20/2019	CADSGD	11:30:00 AM	1.0233	1.0236			N/A
5/20/2019	CADSGD	1:30:00 PM	1.0231	1.0233			N/A
5/20/2019	CADSGD	3:30:00 PM	1.0242	1.0245			N/A
5/20/2019	CADZAR	9:30:00 AM	10.7126	10.7261			N/A
5/20/2019	CADZAR	11:30:00 AM	10.6922	10.7072			N/A
5/20/2019	CADZAR	1:30:00 PM	10.6981	10.7145			N/A
5/20/2019	CADZAR	3:30:00 PM	10.6832	10.7006			N/A
5/20/2019	CHFCZK	9:30:00 AM	22.823	22.837			N/A
5/20/2019	CHFCZK	11:30:00 AM	22.82	22.837			N/A
5/20/2019	CHFCZK	1:30:00 PM	22.858	22.873			N/A
5/20/2019	CHFCZK	3:30:00 PM	22.855	22.868			N/A
5/20/2019	CHFDKK	9:30:00 AM	6.617	6.621			N/A
5/20/2019	CHFDKK	11:30:00 AM	6.619	6.622			N/A
5/20/2019	CHFDKK	1:30:00 PM	6.63	6.633			N/A
5/20/2019	CHFDKK	3:30:00 PM	6.63	6.633			N/A

5/20/2019	CHFDKK.fx	9:30:00 AM	6.6168	6.6219			N/A
5/20/2019	CHFDKK.fx	11:30:00 AM	6.6177	6.6235			N/A
5/20/2019	CHFDKK.fx	1:30:00 PM	6.6285	6.6346			N/A
5/20/2019	CHFDKK.fx	3:30:00 PM	6.6283	6.634			N/A
5/20/2019	CHFHKD	9:30:00 AM	7.757	7.7605			N/A
5/20/2019	CHFHKD	11:30:00 AM	7.7652	7.7691			N/A
5/20/2019	CHFHKD	1:30:00 PM	7.7739	7.7769			N/A
5/20/2019	CHFHKD	3:30:00 PM	7.7783	7.7818			N/A
5/20/2019	CHFHUF	9:30:00 AM	288.84	289.18			N/A
5/20/2019	CHFHUF	11:30:00 AM	288.88	289.24			N/A
5/20/2019	CHFHUF	1:30:00 PM	289.39	289.76			N/A
5/20/2019	CHFHUF	3:30:00 PM	289.08	289.43			N/A
5/20/2019	CHFJPY	9:30:00 AM	108.839	108.891			N/A
5/20/2019	CHFJPY	11:30:00 AM	108.948	109.018			N/A
5/20/2019	CHFJPY	1:30:00 PM	108.894	108.96			N/A
5/20/2019	CHFJPY	3:30:00 PM	108.875	108.938			N/A
5/20/2019	CHFJPY.fx	9:30:00 AM	108.872	108.856			N/A
5/20/2019	CHFJPY.fx	11:30:00 AM	108.981	108.983			N/A
5/20/2019	CHFJPY.fx	1:30:00 PM	108.928	108.926			N/A
5/20/2019	CHFJPY.fx	3:30:00 PM	108.908	108.904			N/A
5/20/2019	CHFMXN	9:30:00 AM	18.8854	18.8988			N/A
5/20/2019	CHFMXN	11:30:00 AM	18.9036	18.9188			N/A
5/20/2019	CHFMXN	1:30:00 PM	18.9616	18.9729			N/A
5/20/2019	CHFMXN	3:30:00 PM	18.9411	18.9554			N/A
5/20/2019	CHFNOK	9:30:00 AM	8.6735	8.6787			N/A
5/20/2019	CHFNOK	11:30:00 AM	8.6762	8.683			N/A
5/20/2019	CHFNOK	1:30:00 PM	8.703	8.7102			N/A
5/20/2019	CHFNOK	3:30:00 PM	8.6984	8.706			N/A
5/20/2019	CHFNOK.fx	9:30:00 AM	8.67692	8.67523			N/A
5/20/2019	CHFNOK.fx	11:30:00 AM	8.67968	8.67934			N/A
5/20/2019	CHFNOK.fx	1:30:00 PM	8.70652	8.70666			N/A
5/20/2019	CHFNOK.fx	3:30:00 PM	8.70208	8.70248			N/A
5/20/2019	CHFPLN	9:30:00 AM	3.814	3.8156			N/A
5/20/2019	CHFPLN	11:30:00 AM	3.8095	3.8123			N/A

5/20/2019	CHFPLN	1:30:00 PM	3.8168	3.8198			N/A
5/20/2019	CHFPLN	3:30:00 PM	3.8139	3.8169			N/A
5/20/2019	CHFPLN.fx	9:30:00 AM	3.81144	3.81785			N/A
5/20/2019	CHFPLN.fx	11:30:00 AM	3.80714	3.81473			N/A
5/20/2019	CHFPLN.fx	1:30:00 PM	3.81448	3.82211			N/A
5/20/2019	CHFPLN.fx	3:30:00 PM	3.81154	3.81916			N/A
5/20/2019	CHFSEK	9:30:00 AM	9.5279	9.5303			N/A
5/20/2019	CHFSEK	11:30:00 AM	9.5292	9.5335			N/A
5/20/2019	CHFSEK	1:30:00 PM	9.5613	9.5644			N/A
5/20/2019	CHFSEK	3:30:00 PM	9.5618	9.5667			N/A
5/20/2019	CHFSGD	9:30:00 AM	1.36	1.3604			N/A
5/20/2019	CHFSGD	11:30:00 AM	1.3605	1.3608			N/A
5/20/2019	CHFSGD	1:30:00 PM	1.3631	1.3635			N/A
5/20/2019	CHFSGD	3:30:00 PM	1.3638	1.3643			N/A
5/20/2019	CHFSGD.fx	9:30:00 AM	1.36033	1.36017			N/A
5/20/2019	CHFSGD.fx	11:30:00 AM	1.36063	1.36072			N/A
5/20/2019	CHFSGD.fx	1:30:00 PM	1.36343	1.36339			N/A
5/20/2019	CHFSGD.fx	3:30:00 PM	1.36393	1.36395			N/A
5/20/2019	CHFZAR	9:30:00 AM	14.2283	14.241			N/A
5/20/2019	CHFZAR	11:30:00 AM	14.212	14.223			N/A
5/20/2019	CHFZAR	1:30:00 PM	14.2526	14.264			N/A
5/20/2019	CHFZAR	3:30:00 PM	14.2198	14.2342			N/A
5/20/2019	CZKJPY	9:30:00 AM					N/A
5/20/2019	CZKJPY	11:30:00 AM					N/A
5/20/2019	CZKJPY	1:30:00 PM	4.763	4.766			N/A
5/20/2019	CZKJPY	3:30:00 PM					N/A
5/20/2019	DAX30.i	9:30:00 AM	12224.85	12223.6			N/A
5/20/2019	DAX30.i	11:30:00 AM	12222.35	12214.6			N/A
5/20/2019	DAX30.i	1:30:00 PM	12079.1	12069.6			N/A
5/20/2019	DAX30.i	3:30:00 PM	12036.85	12033.85			N/A
5/20/2019	DJ30.i	9:30:00 AM					N/A
5/20/2019	DJ30.i	11:30:00 AM					N/A
5/20/2019	DJ30.i	1:30:00 PM					N/A
5/20/2019	DJ30.i	3:30:00 PM					N/A

5/20/2019	DKKJPY	9:30:00 AM					N/A
5/20/2019	DKKJPY	11:30:00 AM					N/A
5/20/2019	DKKJPY	1:30:00 PM	16.43	16.45			N/A
5/20/2019	DKKJPY	3:30:00 PM	16.43	16.44			N/A
5/20/2019	EURAUD	9:30:00 AM	1.61036	1.61052			N/A
5/20/2019	EURAUD	11:30:00 AM	1.60941	1.60986			N/A
5/20/2019	EURAUD	1:30:00 PM	1.61232	1.6126			N/A
5/20/2019	EURAUD	3:30:00 PM	1.61364	1.61358			N/A
5/20/2019	EURAUD.fx	9:30:00 AM	1.61056	1.61032			N/A
5/20/2019	EURAUD.fx	11:30:00 AM	1.60961	1.60964			N/A
5/20/2019	EURAUD.fx	1:30:00 PM	1.61252	1.61238			N/A
5/20/2019	EURAUD.fx	3:30:00 PM	1.61385	1.61337			N/A
5/20/2019	EURCAD	9:30:00 AM	1.4976	1.49846			N/A
5/20/2019	EURCAD	11:30:00 AM	1.49837	1.4992			N/A
5/20/2019	EURCAD	1:30:00 PM	1.49935	1.50006			N/A
5/20/2019	EURCAD	3:30:00 PM	1.49834	1.49875			N/A
5/20/2019	EURCAD.fx	9:30:00 AM	1.49803	1.49798			N/A
5/20/2019	EURCAD.fx	11:30:00 AM	1.49879	1.49879			N/A
5/20/2019	EURCAD.fx	1:30:00 PM	1.49977	1.49963			N/A
5/20/2019	EURCAD.fx	3:30:00 PM	1.49877	1.49832			N/A
5/20/2019	EURCHF	9:30:00 AM	1.12821	1.12812			N/A
5/20/2019	EURCHF	11:30:00 AM	1.12797	1.12801			N/A
5/20/2019	EURCHF	1:30:00 PM	1.12608	1.1262			N/A
5/20/2019	EURCHF	3:30:00 PM	1.12617	1.12621			N/A
5/20/2019	EURCHF.fx	9:30:00 AM	1.12826	1.12806			N/A
5/20/2019	EURCHF.fx	11:30:00 AM	1.12802	1.12795			N/A
5/20/2019	EURCHF.fx	1:30:00 PM	1.12614	1.12613			N/A
5/20/2019	EURCHF.fx	3:30:00 PM	1.12623	1.12615			N/A
5/20/2019	EURCZK	9:30:00 AM	25.734	25.774			N/A
5/20/2019	EURCZK	11:30:00 AM	25.727	25.766			N/A
5/20/2019	EURCZK	1:30:00 PM	25.727	25.765			N/A
5/20/2019	EURCZK	3:30:00 PM	25.723	25.761			N/A
5/20/2019	EURDKK	9:30:00 AM	7.4669	7.4682			N/A
5/20/2019	EURDKK	11:30:00 AM	7.4674	7.468			N/A

5/20/2019	EURDKK	1:30:00 PM	7.4662	7.4673			N/A
5/20/2019	EURDKK	3:30:00 PM	7.4673	7.4684			N/A
5/20/2019	EURGBP	9:30:00 AM	0.87617	0.87608			N/A
5/20/2019	EURGBP	11:30:00 AM	0.87542	0.87523			N/A
5/20/2019	EURGBP	1:30:00 PM	0.87557	0.87556			N/A
5/20/2019	EURGBP	3:30:00 PM	0.87584	0.87595			N/A
5/20/2019	EURGBP.fx	9:30:00 AM	0.8762	0.87603			N/A
5/20/2019	EURGBP.fx	11:30:00 AM	0.87546	0.87517			N/A
5/20/2019	EURGBP.fx	1:30:00 PM	0.8756	0.87551			N/A
5/20/2019	EURGBP.fx	3:30:00 PM	0.87588	0.8759			N/A
5/20/2019	EURHKD	9:30:00 AM	8.7511	8.7562			N/A
5/20/2019	EURHKD	11:30:00 AM	8.7594	8.7641			N/A
5/20/2019	EURHKD	1:30:00 PM	8.7542	8.7588			N/A
5/20/2019	EURHKD	3:30:00 PM	8.76	8.7642			N/A
5/20/2019	EURHKD.fx	9:30:00 AM	8.75402	8.7533			N/A
5/20/2019	EURHKD.fx	11:30:00 AM	8.76219	8.76124			N/A
5/20/2019	EURHKD.fx	1:30:00 PM	8.75702	8.75597			N/A
5/20/2019	EURHKD.fx	3:30:00 PM	8.76282	8.76129			N/A
5/20/2019	EURHUF	9:30:00 AM	325.78	326.48			N/A
5/20/2019	EURHUF	11:30:00 AM	325.79	326.4			N/A
5/20/2019	EURHUF	1:30:00 PM	325.82	326.53			N/A
5/20/2019	EURHUF	3:30:00 PM	325.5	326.1			N/A
5/20/2019	EURHUF.fx	9:30:00 AM	326.016	326.204			N/A
5/20/2019	EURHUF.fx	11:30:00 AM	326.059	326.228			N/A
5/20/2019	EURHUF.fx	1:30:00 PM	326.091	326.238			N/A
5/20/2019	EURHUF.fx	3:30:00 PM	325.779	325.91			N/A
5/20/2019	EURJPY	9:30:00 AM	122.816	122.82			N/A
5/20/2019	EURJPY	11:30:00 AM	122.934	122.929			N/A
5/20/2019	EURJPY	1:30:00 PM	122.664	122.663			N/A
5/20/2019	EURJPY	3:30:00 PM	122.654	122.641			N/A
5/20/2019	EURJPY.fx	9:30:00 AM	122.819	122.816			N/A
5/20/2019	EURJPY.fx	11:30:00 AM	122.937	122.925			N/A
5/20/2019	EURJPY.fx	1:30:00 PM	122.667	122.659			N/A
5/20/2019	EURJPY.fx	3:30:00 PM	122.657	122.637			N/A

5/20/2019	EURMXN	9:30:00 AM	21.3053	21.3247			N/A
5/20/2019	EURMXN	11:30:00 AM	21.3248	21.3422			N/A
5/20/2019	EURMXN	1:30:00 PM	21.3535	21.3692			N/A
5/20/2019	EURMXN	3:30:00 PM	21.3341	21.3488			N/A
5/20/2019	EURMXN.fx	9:30:00 AM	21.3138	21.3163			N/A
5/20/2019	EURMXN.fx	11:30:00 AM	21.3332	21.3337			N/A
5/20/2019	EURMXN.fx	1:30:00 PM	21.3629	21.3603			N/A
5/20/2019	EURMXN.fx	3:30:00 PM	21.3436	21.3393			N/A
5/20/2019	EURNOK	9:30:00 AM	9.7824	9.7937			N/A
5/20/2019	EURNOK	11:30:00 AM	9.7845	9.7955			N/A
5/20/2019	EURNOK	1:30:00 PM	9.7992	9.8103			N/A
5/20/2019	EURNOK	3:30:00 PM	9.7944	9.8067			N/A
5/20/2019	EURNOK.fx	9:30:00 AM	9.78765	9.78843			N/A
5/20/2019	EURNOK.fx	11:30:00 AM	9.79001	9.78978			N/A
5/20/2019	EURNOK.fx	1:30:00 PM	9.80463	9.80468			N/A
5/20/2019	EURNOK.fx	3:30:00 PM	9.79978	9.80096			N/A
5/20/2019	EURNZD	9:30:00 AM	1.70531	1.70595			N/A
5/20/2019	EURNZD	11:30:00 AM	1.70531	1.70608			N/A
5/20/2019	EURNZD	1:30:00 PM	1.7066	1.70742			N/A
5/20/2019	EURNZD	3:30:00 PM	1.70689	1.70711			N/A
5/20/2019	EURNZD.fx	9:30:00 AM	1.70573	1.70553			N/A
5/20/2019	EURNZD.fx	11:30:00 AM	1.70572	1.70564			N/A
5/20/2019	EURNZD.fx	1:30:00 PM	1.70704	1.70699			N/A
5/20/2019	EURNZD.fx	3:30:00 PM	1.70732	1.70667			N/A
5/20/2019	EURPLN	9:30:00 AM	4.3024	4.305			N/A
5/20/2019	EURPLN	11:30:00 AM	4.2968	4.2991			N/A
5/20/2019	EURPLN	1:30:00 PM	4.2984	4.3015			N/A
5/20/2019	EURPLN	3:30:00 PM	4.2952	4.2985			N/A
5/20/2019	EURPLN.fx	9:30:00 AM	4.30147	4.30562			N/A
5/20/2019	EURPLN.fx	11:30:00 AM	4.29627	4.30062			N/A
5/20/2019	EURPLN.fx	1:30:00 PM	4.29777	4.30212			N/A
5/20/2019	EURPLN.fx	3:30:00 PM	4.29457	4.29912			N/A
5/20/2019	EURRUB	9:30:00 AM					N/A
5/20/2019	EURRUB	11:30:00 AM	71.655	72.096			N/A

5/20/2019	EURRUB	1:30:00 PM	71.648	72.084			N/A
5/20/2019	EURRUB	3:30:00 PM	71.696	72.115			N/A
5/20/2019	EURSEK	9:30:00 AM	10.7518	10.7536			N/A
5/20/2019	EURSEK	11:30:00 AM	10.7501	10.7549			N/A
5/20/2019	EURSEK	1:30:00 PM	10.7675	10.7716			N/A
5/20/2019	EURSEK	3:30:00 PM	10.7696	10.7746			N/A
5/20/2019	EURSEK.fx	9:30:00 AM	10.75378	10.75194			N/A
5/20/2019	EURSEK.fx	11:30:00 AM	10.7516	10.75326			N/A
5/20/2019	EURSEK.fx	1:30:00 PM	10.7693	10.76982			N/A
5/20/2019	EURSEK.fx	3:30:00 PM	10.77128	10.77275			N/A
5/20/2019	EURSGD	9:30:00 AM	1.5342	1.535			N/A
5/20/2019	EURSGD	11:30:00 AM	1.5344	1.5352			N/A
5/20/2019	EURSGD	1:30:00 PM	1.535	1.5357			N/A
5/20/2019	EURSGD	3:30:00 PM	1.5357	1.5363			N/A
5/20/2019	EURSGD.fx	9:30:00 AM	1.5346	1.53463			N/A
5/20/2019	EURSGD.fx	11:30:00 AM	1.5348	1.53484			N/A
5/20/2019	EURSGD.fx	1:30:00 PM	1.53537	1.53532			N/A
5/20/2019	EURSGD.fx	3:30:00 PM	1.53612	1.53591			N/A
5/20/2019	EURUSD	9:30:00 AM	1.11516	1.11524			N/A
5/20/2019	EURUSD	11:30:00 AM	1.11612	1.11616			N/A
5/20/2019	EURUSD	1:30:00 PM	1.11537	1.11541			N/A
5/20/2019	EURUSD	3:30:00 PM	1.11612	1.11608			N/A
5/20/2019	EURUSD.fx	9:30:00 AM	1.11536	1.11533			N/A
5/20/2019	EURUSD.fx	11:30:00 AM	1.11633	1.11625			N/A
5/20/2019	EURUSD.fx	1:30:00 PM	1.11555	1.11549			N/A
5/20/2019	EURUSD.fx	3:30:00 PM	1.11632	1.11617			N/A
5/20/2019	EURZAR	9:30:00 AM	16.0532	16.0687			N/A
5/20/2019	EURZAR	11:30:00 AM	16.0313	16.0478			N/A
5/20/2019	EURZAR	1:30:00 PM	16.0504	16.0671			N/A
5/20/2019	EURZAR	3:30:00 PM	16.0153	16.0328			N/A
5/20/2019	EURZAR.fx	9:30:00 AM	16.05347	16.06953			N/A
5/20/2019	EURZAR.fx	11:30:00 AM	16.03069	16.04833			N/A
5/20/2019	EURZAR.fx	1:30:00 PM	16.05035	16.06766			N/A
5/20/2019	EURZAR.fx	3:30:00 PM	16.01481	16.03314			N/A



5/20/2019	GBPAUD	9:30:00 AM	1.83877	1.83883			N/A
5/20/2019	GBPAUD	11:30:00 AM	1.83954	1.83965			N/A
5/20/2019	GBPAUD	1:30:00 PM	1.842	1.84256			N/A
5/20/2019	GBPAUD	3:30:00 PM	1.84279	1.84305			N/A
5/20/2019	GBPAUD.fx	9:30:00 AM	1.83916	1.83843			N/A
5/20/2019	GBPAUD.fx	11:30:00 AM	1.83995	1.83925			N/A
5/20/2019	GBPAUD.fx	1:30:00 PM	1.84241	1.84215			N/A
5/20/2019	GBPAUD.fx	3:30:00 PM	1.8432	1.84265			N/A
5/20/2019	GBPCAD	9:30:00 AM	1.70966	1.71007		10	N/A
5/20/2019	GBPCAD	11:30:00 AM	1.71215	1.71238			N/A
5/20/2019	GBPCAD	1:30:00 PM	1.71253	1.7131			N/A
5/20/2019	GBPCAD	3:30:00 PM	1.71067	1.71107			N/A
5/20/2019	GBPCAD.fx	9:30:00 AM	1.71005	1.70966			N/A
5/20/2019	GBPCAD.fx	11:30:00 AM	1.71254	1.71199			N/A
5/20/2019	GBPCAD.fx	1:30:00 PM	1.71293	1.7127			N/A
5/20/2019	GBPCAD.fx	3:30:00 PM	1.71108	1.71066			N/A
5/20/2019	GBPCHF	9:30:00 AM	1.28768	1.28788			N/A
5/20/2019	GBPCHF	11:30:00 AM	1.28864	1.28861			N/A
5/20/2019	GBPCHF	1:30:00 PM	1.28611	1.28629			N/A
5/20/2019	GBPCHF	3:30:00 PM	1.28554	1.28596			N/A
5/20/2019	GBPCHF.fx	9:30:00 AM	1.28786	1.28768			N/A
5/20/2019	GBPCHF.fx	11:30:00 AM	1.28883	1.2884			N/A
5/20/2019	GBPCHF.fx	1:30:00 PM	1.2863	1.28608			N/A
5/20/2019	GBPCHF.fx	3:30:00 PM	1.28572	1.28573			N/A
5/20/2019	GBPCZK	9:30:00 AM	29.386	29.401			N/A
5/20/2019	GBPCZK	11:30:00 AM	29.407	29.418			N/A
5/20/2019	GBPCZK	1:30:00 PM	29.394	29.414			N/A
5/20/2019	GBPCZK	3:30:00 PM	29.378	29.399			N/A
5/20/2019	GBPDKK	9:30:00 AM	8.52	8.529			N/A
5/20/2019	GBPDKK	11:30:00 AM	8.528	8.537			N/A
5/20/2019	GBPDKK	1:30:00 PM	8.525	8.536			N/A
5/20/2019	GBPDKK	3:30:00 PM	8.521	8.532			N/A
5/20/2019	GBPDKK.fx	9:30:00 AM	8.518	8.5292			N/A
5/20/2019	GBPDKK.fx	11:30:00 AM	8.5268	8.5369			N/A

5/20/2019	GBPDKK.fx	1:30:00 PM	8.5237	8.5355			N/A
5/20/2019	GBPDKK.fx	3:30:00 PM	8.5197	8.5328			N/A
5/20/2019	GBPHKD	9:30:00 AM	9.986	9.9905			N/A
5/20/2019	GBPHKD	11:30:00 AM	10.0061	10.0076			N/A
5/20/2019	GBPHKD	1:30:00 PM	9.9966	10.0006			N/A
5/20/2019	GBPHKD	3:30:00 PM	9.9984	10.0035			N/A
5/20/2019	GBPHUF	9:30:00 AM	371.89	372.26			N/A
5/20/2019	GBPHUF	11:30:00 AM	372.24	372.58			N/A
5/20/2019	GBPHUF	1:30:00 PM	372.16	372.61			N/A
5/20/2019	GBPHUF	3:30:00 PM	371.64	372.03			N/A
5/20/2019	GBPJPY	9:30:00 AM	140.177	140.187			N/A
5/20/2019	GBPJPY	11:30:00 AM	140.443	140.436			N/A
5/20/2019	GBPJPY	1:30:00 PM	140.097	140.101			N/A
5/20/2019	GBPJPY	3:30:00 PM	140.01	140.039			N/A
5/20/2019	GBPJPY.fx	9:30:00 AM	140.196	140.166			N/A
5/20/2019	GBPJPY.fx	11:30:00 AM	140.463	140.416			N/A
5/20/2019	GBPJPY.fx	1:30:00 PM	140.116	140.083			N/A
5/20/2019	GBPJPY.fx	3:30:00 PM	140.03	140.018			N/A
5/20/2019	GBPMXN	9:30:00 AM	24.3173	24.3275			N/A
5/20/2019	GBPMXN	11:30:00 AM	24.3639	24.37			N/A
5/20/2019	GBPMXN	1:30:00 PM	24.384	24.3952			N/A
5/20/2019	GBPMXN	3:30:00 PM	24.3525	24.3637			N/A
5/20/2019	GBPNOK	9:30:00 AM	11.1683	11.1758			N/A
5/20/2019	GBPNOK	11:30:00 AM	11.1812	11.1874			N/A
5/20/2019	GBPNOK	1:30:00 PM	11.193	11.2034			N/A
5/20/2019	GBPNOK	3:30:00 PM	11.1834	11.1948			N/A
5/20/2019	GBPNOK.fx	9:30:00 AM	11.173	11.17114			N/A
5/20/2019	GBPNOK.fx	11:30:00 AM	11.18646	11.18199			N/A
5/20/2019	GBPNOK.fx	1:30:00 PM	11.19795	11.19823			N/A
5/20/2019	GBPNOK.fx	3:30:00 PM	11.18824	11.18956			N/A
5/20/2019	GBPNZD	9:30:00 AM	1.94667	1.9468			N/A
5/20/2019	GBPNZD	11:30:00 AM	1.94853	1.9487			N/A
5/20/2019	GBPNZD	1:30:00 PM	1.94945	1.94995			N/A
5/20/2019	GBPNZD	3:30:00 PM	1.94877	1.94894			N/A

5/20/2019	GBPNZD.fx	9:30:00 AM	1.94705	1.94644			N/A
5/20/2019	GBPNZD.fx	11:30:00 AM	1.94892	1.94834			N/A
5/20/2019	GBPNZD.fx	1:30:00 PM	1.94981	1.94956			N/A
5/20/2019	GBPNZD.fx	3:30:00 PM	1.94915	1.94856			N/A
5/20/2019	GBPPLN	9:30:00 AM	4.9122	4.9123			N/A
5/20/2019	GBPPLN	11:30:00 AM	4.9105	4.9109			N/A
5/20/2019	GBPPLN	1:30:00 PM	4.9105	4.9116			N/A
5/20/2019	GBPPLN	3:30:00 PM	4.9047	4.9067			N/A
5/20/2019	GBPPLN.fx	9:30:00 AM	4.90983	4.91452			N/A
5/20/2019	GBPPLN.fx	11:30:00 AM	4.90844	4.91304			N/A
5/20/2019	GBPPLN.fx	1:30:00 PM	4.90841	4.91354			N/A
5/20/2019	GBPPLN.fx	3:30:00 PM	4.90251	4.90886			N/A
5/20/2019	GBPSEK	9:30:00 AM	12.2684	12.2755			N/A
5/20/2019	GBPSEK	11:30:00 AM	12.2817	12.2866			N/A
5/20/2019	GBPSEK	1:30:00 PM	12.2965	12.304			N/A
5/20/2019	GBPSEK	3:30:00 PM	12.2939	12.3035			N/A
5/20/2019	GBPSEK.fx	9:30:00 AM	12.26468	12.27932			N/A
5/20/2019	GBPSEK.fx	11:30:00 AM	12.27806	12.29044			N/A
5/20/2019	GBPSEK.fx	1:30:00 PM	12.29294	12.30797			N/A
5/20/2019	GBPSEK.fx	3:30:00 PM	12.29029	12.30709			N/A
5/20/2019	GBPSGD	9:30:00 AM	1.7514	1.7517			N/A
5/20/2019	GBPSGD	11:30:00 AM	1.7534	1.7536			N/A
5/20/2019	GBPSGD	1:30:00 PM	1.7533	1.7539			N/A
5/20/2019	GBPSGD	3:30:00 PM	1.7534	1.754			N/A
5/20/2019	GBPSGD.fx	9:30:00 AM	1.74954	1.75356			N/A
5/20/2019	GBPSGD.fx	11:30:00 AM	1.75148	1.75536			N/A
5/20/2019	GBPSGD.fx	1:30:00 PM	1.75148	1.75569			N/A
5/20/2019	GBPSGD.fx	3:30:00 PM	1.75155	1.75583			N/A
5/20/2019	GBPUSD	9:30:00 AM	1.27313	1.27292			N/A
5/20/2019	GBPUSD	11:30:00 AM	1.27546	1.27508			N/A
5/20/2019	GBPUSD	1:30:00 PM	1.27421	1.27406			N/A
5/20/2019	GBPUSD	3:30:00 PM	1.27439	1.27436			N/A
5/20/2019	GBPUSD.fx	9:30:00 AM	1.27319	1.27284			N/A
5/20/2019	GBPUSD.fx	11:30:00 AM	1.27552	1.27503			N/A

5/20/2019	GBPUSD.fx	1:30:00 PM	1.27426	1.274			N/A
5/20/2019	GBPUSD.fx	3:30:00 PM	1.27444	1.27429			N/A
5/20/2019	GBPZAR	9:30:00 AM	18.3195	18.3459			N/A
5/20/2019	GBPZAR	11:30:00 AM	18.3125	18.3339			N/A
5/20/2019	GBPZAR	1:30:00 PM	18.3264	18.3532			N/A
5/20/2019	GBPZAR	3:30:00 PM	18.2815	18.3088			N/A
5/20/2019	GBPZAR.fx	9:30:00 AM	18.327	18.3393			N/A
5/20/2019	GBPZAR.fx	11:30:00 AM	18.3194	18.3264			N/A
5/20/2019	GBPZAR.fx	1:30:00 PM	18.3341	18.3461			N/A
5/20/2019	GBPZAR.fx	3:30:00 PM	18.2887	18.3017			N/A
5/20/2019	GOLD	9:30:00 AM	1276.14	1276.55			N/A
5/20/2019	GOLD	11:30:00 AM	1275.5	1275.73			N/A
5/20/2019	GOLD	1:30:00 PM	1274.85	1275.06			N/A
5/20/2019	GOLD	3:30:00 PM	1276.7	1276.81			N/A
5/20/2019	HKDJPY	9:30:00 AM					N/A
5/20/2019	HKDJPY	11:30:00 AM					N/A
5/20/2019	HKDJPY	1:30:00 PM	14.01	14.02			N/A
5/20/2019	HKDJPY	3:30:00 PM	14	14.01			N/A
5/20/2019	HKDJPY.fx	9:30:00 AM	14.026	14.033			N/A
5/20/2019	HKDJPY.fx	11:30:00 AM	14.026	14.033			N/A
5/20/2019	HKDJPY.fx	1:30:00 PM	14.004	14.01			N/A
5/20/2019	HKDJPY.fx	3:30:00 PM	13.994	14			N/A
5/20/2019	HUFJPY	9:30:00 AM	0.3768	0.3771			N/A
5/20/2019	HUFJPY	11:30:00 AM	0.3772	0.3775			N/A
5/20/2019	HUFJPY	1:30:00 PM	0.3762	0.3765			N/A
5/20/2019	HUFJPY	3:30:00 PM	0.3766	0.377			N/A
5/20/2019	JP225.i	9:30:00 AM	21281.1	21293.6			N/A
5/20/2019	JP225.i	11:30:00 AM	21313.6	21328.6			N/A
5/20/2019	JP225.i	1:30:00 PM	21148.6	21153.6			N/A
5/20/2019	JP225.i	3:30:00 PM	21088.6	21102.55			N/A
5/20/2019	MXNJPY	9:30:00 AM					N/A
5/20/2019	MXNJPY	11:30:00 AM					N/A
5/20/2019	MXNJPY	1:30:00 PM					N/A
5/20/2019	MXNJPY	3:30:00 PM	5.75	5.76			N/A

5/20/2019	NASDAQ.i	9:30:00 AM					N/A
5/20/2019	NASDAQ.i	11:30:00 AM					N/A
5/20/2019	NASDAQ.i	1:30:00 PM					N/A
5/20/2019	NASDAQ.i	3:30:00 PM					N/A
5/20/2019	NOKJPY	9:30:00 AM	12.54	12.57			N/A
5/20/2019	NOKJPY	11:30:00 AM	12.55	12.58			N/A
5/20/2019	NOKJPY	1:30:00 PM					N/A
5/20/2019	NOKJPY	3:30:00 PM	12.5	12.53			N/A
5/20/2019	NOKJPY.fx	9:30:00 AM	12.544	12.551			N/A
5/20/2019	NOKJPY.fx	11:30:00 AM	12.554	12.559			N/A
5/20/2019	NOKJPY.fx	1:30:00 PM	12.508	12.513			N/A
5/20/2019	NOKJPY.fx	3:30:00 PM	12.512	12.517			N/A
5/20/2019	NZDCAD	9:30:00 AM	0.87797	0.87863			N/A
5/20/2019	NZDCAD	11:30:00 AM	0.87831	0.87905			N/A
5/20/2019	NZDCAD	1:30:00 PM	0.8782	0.87888			N/A
5/20/2019	NZDCAD	3:30:00 PM	0.87758	0.87819			N/A
5/20/2019	NZDCAD.fx	9:30:00 AM	0.8783	0.8783			N/A
5/20/2019	NZDCAD.fx	11:30:00 AM	0.87865	0.87871			N/A
5/20/2019	NZDCAD.fx	1:30:00 PM	0.87854	0.87853			N/A
5/20/2019	NZDCAD.fx	3:30:00 PM	0.87791	0.87785			N/A
5/20/2019	NZDCHF	9:30:00 AM	0.66117	0.66176			N/A
5/20/2019	NZDCHF	11:30:00 AM	0.66095	0.66167			N/A
5/20/2019	NZDCHF	1:30:00 PM	0.65935	0.66005			N/A
5/20/2019	NZDCHF	3:30:00 PM	0.65947	0.66001			N/A
5/20/2019	NZDCHF.fx	9:30:00 AM	0.6615	0.66137			N/A
5/20/2019	NZDCHF.fx	11:30:00 AM	0.66129	0.66131			N/A
5/20/2019	NZDCHF.fx	1:30:00 PM	0.65969	0.6597			N/A
5/20/2019	NZDCHF.fx	3:30:00 PM	0.6598	0.65966			N/A
5/20/2019	NZDCZK	9:30:00 AM	15.093	15.103			N/A
5/20/2019	NZDCZK	11:30:00 AM	15.087	15.099			N/A
5/20/2019	NZDCZK	1:30:00 PM	15.076	15.087			N/A
5/20/2019	NZDCZK	3:30:00 PM	15.076	15.082			N/A
5/20/2019	NZDDKK	9:30:00 AM					N/A
5/20/2019	NZDDKK	11:30:00 AM					N/A

5/20/2019	NZDDKK	1:30:00 PM	4.373	4.377			N/A
5/20/2019	NZDDKK	3:30:00 PM	4.372	4.376			N/A
5/20/2019	NZDHKD	9:30:00 AM	5.1287	5.1316			N/A
5/20/2019	NZDHKD	11:30:00 AM	5.1336	5.1365			N/A
5/20/2019	NZDHKD	1:30:00 PM	5.1264	5.129			N/A
5/20/2019	NZDHKD	3:30:00 PM	5.1304	5.1327			N/A
5/20/2019	NZDHUF	9:30:00 AM	190.96	191.26			N/A
5/20/2019	NZDHUF	11:30:00 AM	190.96	191.24			N/A
5/20/2019	NZDHUF	1:30:00 PM	190.86	191.13			N/A
5/20/2019	NZDHUF	3:30:00 PM	190.65	190.93			N/A
5/20/2019	NZDJPY	9:30:00 AM	71.977	72.043			N/A
5/20/2019	NZDJPY	11:30:00 AM	72.037	72.108			N/A
5/20/2019	NZDJPY	1:30:00 PM	71.824	71.891			N/A
5/20/2019	NZDJPY	3:30:00 PM	71.823	71.88			N/A
5/20/2019	NZDJPY.fx	9:30:00 AM	72.007	72.009			N/A
5/20/2019	NZDJPY.fx	11:30:00 AM	72.068	72.075			N/A
5/20/2019	NZDJPY.fx	1:30:00 PM	71.855	71.858			N/A
5/20/2019	NZDJPY.fx	3:30:00 PM	71.853	71.846			N/A
5/20/2019	NZDMXN	9:30:00 AM	12.4897	12.4957			N/A
5/20/2019	NZDMXN	11:30:00 AM	12.4995	12.5053			N/A
5/20/2019	NZDMXN	1:30:00 PM	12.5071	12.5112			N/A
5/20/2019	NZDMXN	3:30:00 PM	12.4945	12.4995			N/A
5/20/2019	NZDNOK	9:30:00 AM	5.7345	5.7383			N/A
5/20/2019	NZDNOK	11:30:00 AM	5.7355	5.7389			N/A
5/20/2019	NZDNOK	1:30:00 PM	5.7398	5.7427			N/A
5/20/2019	NZDNOK	3:30:00 PM	5.7377	5.7403			N/A
5/20/2019	NZDPLN	9:30:00 AM	2.5217	2.5232			N/A
5/20/2019	NZDPLN	11:30:00 AM	2.5184	2.5199			N/A
5/20/2019	NZDPLN	1:30:00 PM	2.5176	2.5188			N/A
5/20/2019	NZDPLN	3:30:00 PM	2.5159	2.5172			N/A
5/20/2019	NZDSEK	9:30:00 AM	6.2989	6.3034			N/A
5/20/2019	NZDSEK	11:30:00 AM	6.2984	6.3054			N/A
5/20/2019	NZDSEK	1:30:00 PM	6.3034	6.31			N/A
5/20/2019	NZDSEK	3:30:00 PM	6.3053	6.3108			N/A

5/20/2019	NZDSGD	9:30:00 AM	0.8995	0.9			N/A
5/20/2019	NZDSGD	11:30:00 AM	0.8995	0.8997			N/A
5/20/2019	NZDSGD	1:30:00 PM	0.8991	0.8998			N/A
5/20/2019	NZDSGD	3:30:00 PM	0.8995	0.9001			N/A
5/20/2019	NZDSGD.fx	9:30:00 AM	0.89949	0.90001			N/A
5/20/2019	NZDSGD.fx	11:30:00 AM	0.89951	0.90015			N/A
5/20/2019	NZDSGD.fx	1:30:00 PM	0.89911	0.89971			N/A
5/20/2019	NZDSGD.fx	3:30:00 PM	0.89959	0.90001			N/A
5/20/2019	NZDUSD	9:30:00 AM	0.65385	0.65392			N/A
5/20/2019	NZDUSD	11:30:00 AM	0.65434	0.65449			N/A
5/20/2019	NZDUSD	1:30:00 PM	0.65337	0.65348			N/A
5/20/2019	NZDUSD	3:30:00 PM	0.65384	0.65384			N/A
5/20/2019	NZDUSD.fx	9:30:00 AM	0.65392	0.65393			N/A
5/20/2019	NZDUSD.fx	11:30:00 AM	0.65441	0.6545			N/A
5/20/2019	NZDUSD.fx	1:30:00 PM	0.65346	0.65349			N/A
5/20/2019	NZDUSD.fx	3:30:00 PM	0.65393	0.65385			N/A
5/20/2019	NZDZAR	9:30:00 AM	9.4057	9.4189			N/A
5/20/2019	NZDZAR	11:30:00 AM	9.3917	9.407			N/A
5/20/2019	NZDZAR	1:30:00 PM	9.3955	9.4115			N/A
5/20/2019	NZDZAR	3:30:00 PM	9.376	9.392			N/A
5/20/2019	SEKJPY	9:30:00 AM	11.42	11.43			N/A
5/20/2019	SEKJPY	11:30:00 AM	11.43	11.44			N/A
5/20/2019	SEKJPY	1:30:00 PM	11.39	11.4			N/A
5/20/2019	SEKJPY	3:30:00 PM	11.39	11.39			N/A
5/20/2019	SEKJPY.fx	9:30:00 AM	11.414	11.429			N/A
5/20/2019	SEKJPY.fx	11:30:00 AM	11.423	11.441			N/A
5/20/2019	SEKJPY.fx	1:30:00 PM	11.381	11.398			N/A
5/20/2019	SEKJPY.fx	3:30:00 PM	11.377	11.394			N/A
5/20/2019	SGDJPY	9:30:00 AM	80.01	80.03			N/A
5/20/2019	SGDJPY	11:30:00 AM	80.06	80.09			N/A
5/20/2019	SGDJPY	1:30:00 PM	79.86	79.89			N/A
5/20/2019	SGDJPY	3:30:00 PM	79.83	79.84			N/A
5/20/2019	SILVER	9:30:00 AM	14.22	14.6			N/A
5/20/2019	SILVER	11:30:00 AM	14.22	14.59			N/A

5/20/2019	SILVER	1:30:00 PM	14.2	14.58			N/A
5/20/2019	SILVER	3:30:00 PM	14.23	14.6			N/A
5/20/2019	SPX500.i	9:30:00 AM	2866.33	2867.13			N/A
5/20/2019	SPX500.i	11:30:00 AM	2868.58	2868.63			N/A
5/20/2019	SPX500.i	1:30:00 PM	2847.08	2845.94			N/A
5/20/2019	SPX500.i	3:30:00 PM	2839.33	2839.76			N/A
5/20/2019	UK100.i	9:30:00 AM	7350.49	7352.74			N/A
5/20/2019	UK100.i	11:30:00 AM	7352.49	7351.99			N/A
5/20/2019	UK100.i	1:30:00 PM	7293.49	7292.66			N/A
5/20/2019	UK100.i	3:30:00 PM	7279.49	7280.99			N/A
5/20/2019	USDCAD	9:30:00 AM	1.34312	1.34317			N/A
5/20/2019	USDCAD	11:30:00 AM	1.34262	1.34271			N/A
5/20/2019	USDCAD	1:30:00 PM	1.34434	1.34441			N/A
5/20/2019	USDCAD	3:30:00 PM	1.34259	1.34249			N/A
5/20/2019	USDCAD.fx	9:30:00 AM	1.34316	1.34312			N/A
5/20/2019	USDCAD.fx	11:30:00 AM	1.34266	1.34268			N/A
5/20/2019	USDCAD.fx	1:30:00 PM	1.34442	1.34438			N/A
5/20/2019	USDCAD.fx	3:30:00 PM	1.34262	1.34245			N/A
5/20/2019	USDCHF	9:30:00 AM	1.01152	1.01149			N/A
5/20/2019	USDCHF	11:30:00 AM	1.01041	1.01053			N/A
5/20/2019	USDCHF	1:30:00 PM	1.00946	1.00953			N/A
5/20/2019	USDCHF	3:30:00 PM	1.00891	1.00896			N/A
5/20/2019	USDCHF.fx	9:30:00 AM	1.01157	1.01144			N/A
5/20/2019	USDCHF.fx	11:30:00 AM	1.01045	1.01047			N/A
5/20/2019	USDCHF.fx	1:30:00 PM	1.00951	1.00948			N/A
5/20/2019	USDCHF.fx	3:30:00 PM	1.00896	1.00889			N/A
5/20/2019	USDCZK	9:30:00 AM	23.097	23.12			N/A
5/20/2019	USDCZK	11:30:00 AM	23.072	23.094			N/A
5/20/2019	USDCZK	1:30:00 PM	23.087	23.108			N/A
5/20/2019	USDCZK	3:30:00 PM	23.071	23.09			N/A
5/20/2019	USDCZK.fx	9:30:00 AM	23.1053	23.111			N/A
5/20/2019	USDCZK.fx	11:30:00 AM	23.0808	23.085			N/A
5/20/2019	USDCZK.fx	1:30:00 PM	23.096	23.0996			N/A
5/20/2019	USDCZK.fx	3:30:00 PM	23.0808	23.0804			N/A



5/20/2019	USDDKK	9:30:00 AM	6.6943	6.6982			N/A
5/20/2019	USDDKK	11:30:00 AM	6.6891	6.6927			N/A
5/20/2019	USDDKK	1:30:00 PM	6.6936	6.6971			N/A
5/20/2019	USDDKK	3:30:00 PM	6.6894	6.6927			N/A
5/20/2019	USDDKK.fx	9:30:00 AM	6.69477	6.69616			N/A
5/20/2019	USDDKK.fx	11:30:00 AM	6.68954	6.69062			N/A
5/20/2019	USDDKK.fx	1:30:00 PM	6.69415	6.69507			N/A
5/20/2019	USDDKK.fx	3:30:00 PM	6.68995	6.6906			N/A
5/20/2019	USDHKD	9:30:00 AM	7.8482	7.8483			N/A
5/20/2019	USDHKD	11:30:00 AM	7.8487	7.8491			N/A
5/20/2019	USDHKD	1:30:00 PM	7.8492	7.8493			N/A
5/20/2019	USDHKD	3:30:00 PM	7.8492	7.8496			N/A
5/20/2019	USDHKD.fx	9:30:00 AM	7.84815	7.84851			N/A
5/20/2019	USDHKD.fx	11:30:00 AM	7.84871	7.8492			N/A
5/20/2019	USDHKD.fx	1:30:00 PM	7.84926	7.84983			N/A
5/20/2019	USDHKD.fx	3:30:00 PM					N/A
5/20/2019	USDHUF	9:30:00 AM	292.2	292.63			N/A
5/20/2019	USDHUF	11:30:00 AM	291.96	292.38			N/A
5/20/2019	USDHUF	1:30:00 PM	292.17	292.62			N/A
5/20/2019	USDHUF	3:30:00 PM	291.71	292.16			N/A
5/20/2019	USDHUF.fx	9:30:00 AM	292.375	292.435			N/A
5/20/2019	USDHUF.fx	11:30:00 AM	292.162	292.175			N/A
5/20/2019	USDHUF.fx	1:30:00 PM	292.382	292.405			N/A
5/20/2019	USDHUF.fx	3:30:00 PM	291.922	291.946			N/A
5/20/2019	USDINR	9:30:00 AM	64.55	74.54			N/A
5/20/2019	USDINR	11:30:00 AM	64.53	74.52			N/A
5/20/2019	USDINR	1:30:00 PM					N/A
5/20/2019	USDINR	3:30:00 PM					N/A
5/20/2019	USDJPY	9:30:00 AM	110.11	110.125			N/A
5/20/2019	USDJPY	11:30:00 AM	110.118	110.132		300	N/A
5/20/2019	USDJPY	1:30:00 PM	109.958	109.96			N/A
5/20/2019	USDJPY	3:30:00 PM	109.873	109.879			N/A
5/20/2019	USDJPY.fx	9:30:00 AM	110.115	110.118			N/A
5/20/2019	USDJPY.fx	11:30:00 AM	110.124	110.124			N/A

5/20/2019	USDJPY.fx	1:30:00 PM	109.964	109.953			N/A
5/20/2019	USDJPY.fx	3:30:00 PM	109.879	109.872			N/A
5/20/2019	USDMXN	9:30:00 AM	19.107	19.115			N/A
5/20/2019	USDMXN	11:30:00 AM	19.108	19.114			N/A
5/20/2019	USDMXN	1:30:00 PM	19.147	19.151			N/A
5/20/2019	USDMXN	3:30:00 PM	19.116	19.122			N/A
5/20/2019	USDMXN.f	9:30:00 AM	19.1107	19.1121			N/A
5/20/2019	USDMXN.f	11:30:00 AM	19.1115	19.1108			N/A
5/20/2019	USDMXN.f	1:30:00 PM	19.1507	19.1472			N/A
5/20/2019	USDMXN.f	3:30:00 PM	19.1202	19.1186			N/A
5/20/2019	USDNOK	9:30:00 AM	8.7724	8.7804			N/A
5/20/2019	USDNOK	11:30:00 AM	8.7669	8.7741			N/A
5/20/2019	USDNOK	1:30:00 PM	8.7853	8.7935			N/A
5/20/2019	USDNOK	3:30:00 PM	8.7764	8.7839			N/A
5/20/2019	USDNOK.fx	9:30:00 AM	8.7764	8.7756			N/A
5/20/2019	USDNOK.fx	11:30:00 AM	8.77113	8.76944			N/A
5/20/2019	USDNOK.fx	1:30:00 PM	8.78952	8.78894			N/A
5/20/2019	USDNOK.fx	3:30:00 PM	8.78034	8.77934			N/A
5/20/2019	USDPLN	9:30:00 AM	3.8581	3.8592			N/A
5/20/2019	USDPLN	11:30:00 AM	3.85	3.8515			N/A
5/20/2019	USDPLN	1:30:00 PM	3.8539	3.8553			N/A
5/20/2019	USDPLN	3:30:00 PM	3.8488	3.85			N/A
5/20/2019	USDPLN.fx	9:30:00 AM	3.8572	3.85993			N/A
5/20/2019	USDPLN.fx	11:30:00 AM	3.84926	3.85231			N/A
5/20/2019	USDPLN.fx	1:30:00 PM	3.85318	3.85611			N/A
5/20/2019	USDPLN.fx	3:30:00 PM	3.84802	3.8508			N/A
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5/20/2019	USDRUB	11:30:00 AM	64.309	64.697			N/A
5/20/2019	USDRUB	1:30:00 PM	64.343	64.73			N/A
5/20/2019	USDRUB	3:30:00 PM	64.34	64.729			N/A
5/20/2019	USDSEK	9:30:00 AM	9.6393	9.6412			N/A
5/20/2019	USDSEK	11:30:00 AM	9.6302	9.6337			N/A
5/20/2019	USDSEK	1:30:00 PM	9.6516	9.6556			N/A
5/20/2019	USDSEK	3:30:00 PM	9.6484	9.6519			N/A

5/20/2019	USDSEK.fx	9:30:00 AM	9.6425	9.63949			N/A
5/20/2019	USDSEK.fx	11:30:00 AM	9.63276	9.63189			N/A
5/20/2019	USDSEK.fx	1:30:00 PM	9.65431	9.65372			N/A
5/20/2019	USDSEK.fx	3:30:00 PM	9.65093	9.64995			N/A
5/20/2019	USDSGD	9:30:00 AM	1.3757	1.3759			N/A
5/20/2019	USDSGD	11:30:00 AM	1.3748	1.375			N/A
5/20/2019	USDSGD	1:30:00 PM	1.3762	1.3765			N/A
5/20/2019	USDSGD	3:30:00 PM	1.3759	1.3762			N/A
5/20/2019	USDSGD.fx	9:30:00 AM	1.37566	1.37612			N/A
5/20/2019	USDSGD.fx	11:30:00 AM	1.37471	1.37511			N/A
5/20/2019	USDSGD.fx	1:30:00 PM	1.37612	1.37652			N/A
5/20/2019	USDSGD.fx	3:30:00 PM	1.37585	1.37629			N/A
5/20/2019	USDZAR	9:30:00 AM	14.3925	14.4074			N/A
5/20/2019	USDZAR	11:30:00 AM	14.3622	14.376			N/A
5/20/2019	USDZAR	1:30:00 PM	14.3875	14.4026			N/A
5/20/2019	USDZAR	3:30:00 PM	14.3473	14.365			N/A
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5/20/2019	USDZAR.fx	1:30:00 PM					N/A
5/20/2019	USDZAR.fx	3:30:00 PM					N/A
5/20/2019	XAUUSD	9:30:00 AM	1276.14	1276.53			N/A
5/20/2019	XAUUSD	11:30:00 AM	1275.5	1275.72			N/A
5/20/2019	XAUUSD	1:30:00 PM	1274.86	1275.06			N/A
5/20/2019	XAUUSD	3:30:00 PM	1276.7	1276.81			N/A
5/20/2019	ZARJPY	9:30:00 AM	7.63	7.65			N/A
5/20/2019	ZARJPY	11:30:00 AM	7.65	7.66			N/A
5/20/2019	ZARJPY	1:30:00 PM	7.62	7.64			N/A
5/20/2019	ZARJPY	3:30:00 PM	7.64	7.65			N/A
5/20/2019	ZARJPY.fx	9:30:00 AM	7.644	7.648			N/A
5/20/2019	ZARJPY.fx	11:30:00 AM	7.663	7.665			N/A
5/20/2019	ZARJPY.fx	1:30:00 PM	7.637	7.639			N/A
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5/21/2019	AUDCAD.fx	3:30:00 PM	0.92188	0.92169			N/A
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5/21/2019	AUDDKK	11:30:00 AM	4.6046	4.6093			N/A
5/21/2019	AUDDKK	1:30:00 PM	4.6053	4.6099			N/A
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5/21/2019	AUDJPY.fx	11:30:00 AM	75.708	75.711			N/A
5/21/2019	AUDJPY.fx	1:30:00 PM	75.831	75.824			N/A
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5/21/2019	AUDNOK	1:30:00 PM	6.0395	6.0438			N/A
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5/21/2019	AUDNOK.fx	11:30:00 AM	6.044	6.0448			N/A
5/21/2019	AUDNOK.fx	1:30:00 PM	6.0411	6.042			N/A
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5/21/2019	AUDNZD.fx	9:30:00 AM	1.05609	1.0561			N/A
5/21/2019	AUDNZD.fx	11:30:00 AM	1.05651	1.05655			N/A
5/21/2019	AUDNZD.fx	1:30:00 PM	1.05761	1.0576			N/A
5/21/2019	AUDNZD.fx	3:30:00 PM	1.05646	1.05648			N/A
5/21/2019	AUDPLN	9:30:00 AM	2.6487	2.6516			N/A
5/21/2019	AUDPLN	11:30:00 AM	2.6538	2.6563			N/A
5/21/2019	AUDPLN	1:30:00 PM	2.6555	2.6589			N/A
5/21/2019	AUDPLN	3:30:00 PM	2.654	2.6571			N/A
5/21/2019	AUDSEK	9:30:00 AM	6.6565	6.6592			N/A
5/21/2019	AUDSEK	11:30:00 AM	6.6512	6.6539			N/A
5/21/2019	AUDSEK	1:30:00 PM	6.6474	6.6503			N/A
5/21/2019	AUDSEK	3:30:00 PM	6.6427	6.6454			N/A

5/21/2019	AUDSEK.fx	9:30:00 AM	6.6519	6.6637			N/A
5/21/2019	AUDSEK.fx	11:30:00 AM	6.6468	6.6582			N/A
5/21/2019	AUDSEK.fx	1:30:00 PM	6.643	6.6547			N/A
5/21/2019	AUDSEK.fx	3:30:00 PM	6.6381	6.6497			N/A
5/21/2019	AUDSGD	9:30:00 AM	0.9466	0.9466			N/A
5/21/2019	AUDSGD	11:30:00 AM	0.9479	0.9482			N/A
5/21/2019	AUDSGD	1:30:00 PM	0.9481	0.9485			N/A
5/21/2019	AUDSGD	3:30:00 PM	0.9477	0.948			N/A
5/21/2019	AUDSGD.fx	9:30:00 AM	0.94669	0.94672			N/A
5/21/2019	AUDSGD.fx	11:30:00 AM	0.94801	0.94813			N/A
5/21/2019	AUDSGD.fx	1:30:00 PM	0.94826	0.94837			N/A
5/21/2019	AUDSGD.fx	3:30:00 PM	0.94781	0.94787			N/A
5/21/2019	AUDUSD	9:30:00 AM	0.6873	0.68739			N/A
5/21/2019	AUDUSD	11:30:00 AM	0.68733	0.68747			N/A
5/21/2019	AUDUSD	1:30:00 PM	0.68794	0.68799			N/A
5/21/2019	AUDUSD	3:30:00 PM	0.68766	0.6877			N/A
5/21/2019	AUDUSD.fx	9:30:00 AM	0.68736	0.68733			N/A
5/21/2019	AUDUSD.fx	11:30:00 AM	0.68739	0.68741			N/A
5/21/2019	AUDUSD.fx	1:30:00 PM	0.68799	0.68793			N/A
5/21/2019	AUDUSD.fx	3:30:00 PM	0.68771	0.68764			N/A
5/21/2019	AUDZAR	9:30:00 AM	9.9	9.9131			N/A
5/21/2019	AUDZAR	11:30:00 AM	9.9339	9.9481			N/A
5/21/2019	AUDZAR	1:30:00 PM	9.907	9.9176			N/A
5/21/2019	AUDZAR	3:30:00 PM	9.9222	9.9274			N/A
5/21/2019	AUS200.i	9:30:00 AM	6486.74	6491.24			N/A
5/21/2019	AUS200.i	11:30:00 AM	6482.24	6483.99			N/A
5/21/2019	AUS200.i	1:30:00 PM	6488.94	6491.24			N/A
5/21/2019	AUS200.i	3:30:00 PM	6495.44	6497.24			N/A
5/21/2019	BCHUSD	9:30:00 AM	417.16	417.3			N/A
5/21/2019	BCHUSD	11:30:00 AM	423.48	424.29			N/A
5/21/2019	BCHUSD	1:30:00 PM	419.26	419.62			N/A
5/21/2019	BCHUSD	3:30:00 PM	419.85	420.82			N/A
5/21/2019	CADCHF	9:30:00 AM	0.75275	0.75337			N/A
5/21/2019	CADCHF	11:30:00 AM	0.75231	0.75294			N/A

5/21/2019	CADCHF	1:30:00 PM	0.75209	0.75279			N/A
5/21/2019	CADCHF	3:30:00 PM	0.75363	0.75427			N/A
5/21/2019	CADCHF.fx	9:30:00 AM	0.75309	0.75302			N/A
5/21/2019	CADCHF.fx	11:30:00 AM	0.75266	0.75258			N/A
5/21/2019	CADCHF.fx	1:30:00 PM	0.75242	0.75244			N/A
5/21/2019	CADCHF.fx	3:30:00 PM	0.75397	0.75392			N/A
5/21/2019	CADCZK	9:30:00 AM	17.204	17.217			N/A
5/21/2019	CADCZK	11:30:00 AM	17.216	17.233			N/A
5/21/2019	CADCZK	1:30:00 PM	17.208	17.225			N/A
5/21/2019	CADCZK	3:30:00 PM	17.22	17.235			N/A
5/21/2019	CADDKK	9:30:00 AM					N/A
5/21/2019	CADDKK	11:30:00 AM					N/A
5/21/2019	CADDKK	1:30:00 PM	4.99	4.993			N/A
5/21/2019	CADDKK	3:30:00 PM	4.994	4.998			N/A
5/21/2019	CADHKD	9:30:00 AM	5.8417	5.8456			N/A
5/21/2019	CADHKD	11:30:00 AM	5.8435	5.8474			N/A
5/21/2019	CADHKD	1:30:00 PM	5.8468	5.8505			N/A
5/21/2019	CADHKD	3:30:00 PM	5.8535	5.8575			N/A
5/21/2019	CADHUF	9:30:00 AM	217.98	218.13			N/A
5/21/2019	CADHUF	11:30:00 AM	218.63	218.79			N/A
5/21/2019	CADHUF	1:30:00 PM	218.45	218.62			N/A
5/21/2019	CADHUF	3:30:00 PM	218.24	218.39			N/A
5/21/2019	CADJPY	9:30:00 AM	82.007	82.06			N/A
5/21/2019	CADJPY	11:30:00 AM	81.987	82.058			N/A
5/21/2019	CADJPY	1:30:00 PM	82.1	82.167			N/A
5/21/2019	CADJPY	3:30:00 PM	82.382	82.44			N/A
5/21/2019	CADJPY.fx	9:30:00 AM	82.041	82.026			N/A
5/21/2019	CADJPY.fx	11:30:00 AM	82.021	82.024			N/A
5/21/2019	CADJPY.fx	1:30:00 PM	82.133	82.132			N/A
5/21/2019	CADJPY.fx	3:30:00 PM	82.416	82.406			N/A
5/21/2019	CADMXN	9:30:00 AM	14.1993	14.211			N/A
5/21/2019	CADMXN	11:30:00 AM	14.2271	14.24			N/A
5/21/2019	CADMXN	1:30:00 PM	14.2123	14.2211			N/A
5/21/2019	CADMXN	3:30:00 PM	14.2402	14.2465			N/A

5/21/2019	CADNOK	9:30:00 AM	6.5512	6.5561			N/A
5/21/2019	CADNOK	11:30:00 AM	6.5463	6.5497			N/A
5/21/2019	CADNOK	1:30:00 PM	6.5409	6.5447			N/A
5/21/2019	CADNOK	3:30:00 PM	6.5468	6.5508			N/A
5/21/2019	CADPLN	9:30:00 AM	2.8694	2.8713			N/A
5/21/2019	CADPLN	11:30:00 AM	2.8749	2.8767			N/A
5/21/2019	CADPLN	1:30:00 PM	2.8771	2.8789			N/A
5/21/2019	CADPLN	3:30:00 PM	2.8793	2.8812			N/A
5/21/2019	CADSEK	9:30:00 AM	7.2093	7.2121			N/A
5/21/2019	CADSEK	11:30:00 AM	7.2047	7.2075			N/A
5/21/2019	CADSEK	1:30:00 PM	7.199	7.2018			N/A
5/21/2019	CADSEK	3:30:00 PM	7.2052	7.2072			N/A
5/21/2019	CADSGD	9:30:00 AM	1.0247	1.025			N/A
5/21/2019	CADSGD	11:30:00 AM	1.0263	1.0266			N/A
5/21/2019	CADSGD	1:30:00 PM	1.0265	1.0267			N/A
5/21/2019	CADSGD	3:30:00 PM	1.0274	1.0278			N/A
5/21/2019	CADZAR	9:30:00 AM	10.7263	10.7413			N/A
5/21/2019	CADZAR	11:30:00 AM	10.7642	10.7801			N/A
5/21/2019	CADZAR	1:30:00 PM	10.7328	10.7445			N/A
5/21/2019	CADZAR	3:30:00 PM	10.7658	10.7708			N/A
5/21/2019	CHFCZK	9:30:00 AM	22.847	22.864			N/A
5/21/2019	CHFCZK	11:30:00 AM	22.881	22.896			N/A
5/21/2019	CHFCZK	1:30:00 PM	22.873	22.891			N/A
5/21/2019	CHFCZK	3:30:00 PM	22.844	22.858			N/A
5/21/2019	CHFDKK	9:30:00 AM	6.623	6.626			N/A
5/21/2019	CHFDKK	11:30:00 AM	6.63	6.634			N/A
5/21/2019	CHFDKK	1:30:00 PM	6.631	6.635			N/A
5/21/2019	CHFDKK	3:30:00 PM	6.624	6.627			N/A
5/21/2019	CHFDKK.fx	9:30:00 AM	6.6213	6.6273			N/A
5/21/2019	CHFDKK.fx	11:30:00 AM	6.6289	6.6345			N/A
5/21/2019	CHFDKK.fx	1:30:00 PM	6.6296	6.6359			N/A
5/21/2019	CHFDKK.fx	3:30:00 PM	6.6222	6.6275			N/A
5/21/2019	CHFHKD	9:30:00 AM	7.7592	7.763			N/A
5/21/2019	CHFHKD	11:30:00 AM	7.7649	7.7673			N/A

5/21/2019	CHFHKD	1:30:00 PM	7.7712	7.7751			N/A
5/21/2019	CHFHKD	3:30:00 PM	7.7648	7.7686			N/A
5/21/2019	CHFHUF	9:30:00 AM	289.39	289.78			N/A
5/21/2019	CHFHUF	11:30:00 AM	290.45	290.79			N/A
5/21/2019	CHFHUF	1:30:00 PM	290.25	290.63			N/A
5/21/2019	CHFHUF	3:30:00 PM	289.4	289.76			N/A
5/21/2019	CHFJPY	9:30:00 AM	108.902	108.97			N/A
5/21/2019	CHFJPY	11:30:00 AM	108.954	109.013			N/A
5/21/2019	CHFJPY	1:30:00 PM	109.12	109.193			N/A
5/21/2019	CHFJPY	3:30:00 PM	109.276	109.34			N/A
5/21/2019	CHFJPY.fx	9:30:00 AM	108.936	108.933			N/A
5/21/2019	CHFJPY.fx	11:30:00 AM	108.987	108.978			N/A
5/21/2019	CHFJPY.fx	1:30:00 PM	109.154	109.157			N/A
5/21/2019	CHFJPY.fx	3:30:00 PM	109.309	109.306			N/A
5/21/2019	CHFMXN	9:30:00 AM	18.8567	18.8729			N/A
5/21/2019	CHFMXN	11:30:00 AM	18.9048	18.9197			N/A
5/21/2019	CHFMXN	1:30:00 PM	18.8885	18.9016			N/A
5/21/2019	CHFMXN	3:30:00 PM	18.889	18.8973			N/A
5/21/2019	CHFNOK	9:30:00 AM	8.7011	8.708			N/A
5/21/2019	CHFNOK	11:30:00 AM	8.6979	8.7049			N/A
5/21/2019	CHFNOK	1:30:00 PM	8.6942	8.7004			N/A
5/21/2019	CHFNOK	3:30:00 PM	8.6848	8.6904			N/A
5/21/2019	CHFNOK.fx	9:30:00 AM	8.7044	8.70466			N/A
5/21/2019	CHFNOK.fx	11:30:00 AM	8.70137	8.70141			N/A
5/21/2019	CHFNOK.fx	1:30:00 PM	8.69774	8.69683			N/A
5/21/2019	CHFNOK.fx	3:30:00 PM	8.68849	8.68672			N/A
5/21/2019	CHFPLN	9:30:00 AM	3.8107	3.8139			N/A
5/21/2019	CHFPLN	11:30:00 AM	3.8215	3.823			N/A
5/21/2019	CHFPLN	1:30:00 PM	3.8237	3.8266			N/A
5/21/2019	CHFPLN	3:30:00 PM	3.8196	3.8223			N/A
5/21/2019	CHFPLN.fx	9:30:00 AM	3.80836	3.81613			N/A
5/21/2019	CHFPLN.fx	11:30:00 AM	3.81915	3.82521			N/A
5/21/2019	CHFPLN.fx	1:30:00 PM	3.82136	3.82885			N/A
5/21/2019	CHFPLN.fx	3:30:00 PM	3.81724	3.82445			N/A

5/21/2019	CHFSEK	9:30:00 AM	9.5739	9.5787			N/A
5/21/2019	CHFSEK	11:30:00 AM	9.5738	9.576			N/A
5/21/2019	CHFSEK	1:30:00 PM	9.5681	9.5715			N/A
5/21/2019	CHFSEK	3:30:00 PM	9.5573	9.5596			N/A
5/21/2019	CHFSGD	9:30:00 AM	1.3616	1.362			N/A
5/21/2019	CHFSGD	11:30:00 AM	1.3646	1.3649			N/A
5/21/2019	CHFSGD	1:30:00 PM	1.3649	1.3654			N/A
5/21/2019	CHFSGD	3:30:00 PM	1.3637	1.3641			N/A
5/21/2019	CHFSGD.fx	9:30:00 AM	1.36185	1.36183			N/A
5/21/2019	CHFSGD.fx	11:30:00 AM	1.36478	1.36474			N/A
5/21/2019	CHFSGD.fx	1:30:00 PM	1.36508	1.36517			N/A
5/21/2019	CHFSGD.fx	3:30:00 PM	1.36385	1.36387			N/A
5/21/2019	CHFZAR	9:30:00 AM	14.2482	14.259			N/A
5/21/2019	CHFZAR	11:30:00 AM	14.308	14.3197			N/A
5/21/2019	CHFZAR	1:30:00 PM	14.2695	14.2758			N/A
5/21/2019	CHFZAR	3:30:00 PM	14.2848	14.2835			N/A
5/21/2019	CZKJPY	9:30:00 AM					N/A
5/21/2019	CZKJPY	11:30:00 AM	4.761	4.764			N/A
5/21/2019	CZKJPY	1:30:00 PM					N/A
5/21/2019	CZKJPY	3:30:00 PM					N/A
5/21/2019	DAX30.i	9:30:00 AM	12093.21	12089.71			N/A
5/21/2019	DAX30.i	11:30:00 AM	12129.96	12129.21			N/A
5/21/2019	DAX30.i	1:30:00 PM	12162.21	12153.96			N/A
5/21/2019	DAX30.i	3:30:00 PM	12155.96	12151.46			N/A
5/21/2019	DJ30.i	9:30:00 AM					N/A
5/21/2019	DJ30.i	11:30:00 AM					N/A
5/21/2019	DJ30.i	1:30:00 PM					N/A
5/21/2019	DJ30.i	3:30:00 PM					N/A
5/21/2019	DKKJPY	9:30:00 AM	16.45	16.47			N/A
5/21/2019	DKKJPY	11:30:00 AM	16.44	16.46			N/A
5/21/2019	DKKJPY	1:30:00 PM					N/A
5/21/2019	DKKJPY	3:30:00 PM					N/A
5/21/2019	EURAUD	9:30:00 AM	1.62119	1.62141			N/A
5/21/2019	EURAUD	11:30:00 AM	1.62032	1.62074			N/A

5/21/2019	EURAUD	1:30:00 PM	1.62009	1.62044			N/A
5/21/2019	EURAUD	3:30:00 PM	1.62134	1.62161			N/A
5/21/2019	EURAUD.fx	9:30:00 AM	1.6214	1.62118			N/A
5/21/2019	EURAUD.fx	11:30:00 AM	1.62052	1.62053			N/A
5/21/2019	EURAUD.fx	1:30:00 PM	1.62031	1.62022			N/A
5/21/2019	EURAUD.fx	3:30:00 PM	1.62156	1.6214			N/A
5/21/2019	EURCAD	9:30:00 AM	1.49684	1.49749			N/A
5/21/2019	EURCAD	11:30:00 AM	1.49595	1.49675			N/A
5/21/2019	EURCAD	1:30:00 PM	1.496	1.49687			N/A
5/21/2019	EURCAD	3:30:00 PM	1.49493	1.49555			N/A
5/21/2019	EURCAD.fx	9:30:00 AM	1.49725	1.49707			N/A
5/21/2019	EURCAD.fx	11:30:00 AM	1.49637	1.49632			N/A
5/21/2019	EURCAD.fx	1:30:00 PM	1.49642	1.49645			N/A
5/21/2019	EURCAD.fx	3:30:00 PM	1.49536	1.49513			N/A
5/21/2019	EURCHF	9:30:00 AM	1.12743	1.12752			N/A
5/21/2019	EURCHF	11:30:00 AM	1.12615	1.12616			N/A
5/21/2019	EURCHF	1:30:00 PM	1.12591	1.12606			N/A
5/21/2019	EURCHF	3:30:00 PM	1.12734	1.12731			N/A
5/21/2019	EURCHF.fx	9:30:00 AM	1.12748	1.12746			N/A
5/21/2019	EURCHF.fx	11:30:00 AM	1.12622	1.12609			N/A
5/21/2019	EURCHF.fx	1:30:00 PM	1.12597	1.126			N/A
5/21/2019	EURCHF.fx	3:30:00 PM	1.12739	1.12725			N/A
5/21/2019	EURCZK	9:30:00 AM	25.746	25.785			N/A
5/21/2019	EURCZK	11:30:00 AM					N/A
5/21/2019	EURCZK	1:30:00 PM	25.741	25.78			N/A
5/21/2019	EURCZK	3:30:00 PM	25.738	25.777			N/A
5/21/2019	EURDKK	9:30:00 AM	7.467	7.4683			N/A
5/21/2019	EURDKK	11:30:00 AM					N/A
5/21/2019	EURDKK	1:30:00 PM	7.4668	7.4678			N/A
5/21/2019	EURDKK	3:30:00 PM	7.4678	7.4691			N/A
5/21/2019	EURGBP	9:30:00 AM	0.87702	0.87704			N/A
5/21/2019	EURGBP	11:30:00 AM	0.87825	0.87817			N/A
5/21/2019	EURGBP	1:30:00 PM	0.87805	0.87818			N/A
5/21/2019	EURGBP	3:30:00 PM	0.87556	0.87554			N/A



5/21/2019	EURGBP.fx	9:30:00 AM	0.87705	0.87699			N/A
5/21/2019	EURGBP.fx	11:30:00 AM	0.87828	0.87812			N/A
5/21/2019	EURGBP.fx	1:30:00 PM	0.87809	0.87813			N/A
5/21/2019	EURGBP.fx	3:30:00 PM	0.8756	0.87548			N/A
5/21/2019	EURHKD	9:30:00 AM	8.7477	8.7525			N/A
5/21/2019	EURHKD	11:30:00 AM	8.7442	8.7494			N/A
5/21/2019	EURHKD	1:30:00 PM	8.75	8.7554			N/A
5/21/2019	EURHKD	3:30:00 PM	8.7536	8.7583			N/A
5/21/2019	EURHKD.fx	9:30:00 AM	8.75048	8.74964			N/A
5/21/2019	EURHKD.fx	11:30:00 AM	8.74703	8.74651			N/A
5/21/2019	EURHKD.fx	1:30:00 PM	8.75284	8.75246			N/A
5/21/2019	EURHKD.fx	3:30:00 PM	8.75644	8.75548			N/A
5/21/2019	EURHUF	9:30:00 AM	326.17	326.82			N/A
5/21/2019	EURHUF	11:30:00 AM	327	327.71			N/A
5/21/2019	EURHUF	1:30:00 PM	326.77	327.49			N/A
5/21/2019	EURHUF	3:30:00 PM	326.19	326.93			N/A
5/21/2019	EURHUF.fx	9:30:00 AM	326.501	326.67			N/A
5/21/2019	EURHUF.fx	11:30:00 AM	327.281	327.428			N/A
5/21/2019	EURHUF.fx	1:30:00 PM	327.069	327.19			N/A
5/21/2019	EURHUF.fx	3:30:00 PM	326.481	326.648			N/A
5/21/2019	EURJPY	9:30:00 AM	122.823	122.821			N/A
5/21/2019	EURJPY	11:30:00 AM	122.731	122.74			N/A
5/21/2019	EURJPY	1:30:00 PM	122.902	122.911			N/A
5/21/2019	EURJPY	3:30:00 PM	123.224	123.217			N/A
5/21/2019	EURJPY.fx	9:30:00 AM	122.825	122.817			N/A
5/21/2019	EURJPY.fx	11:30:00 AM	122.733	122.736			N/A
5/21/2019	EURJPY.fx	1:30:00 PM	122.904	122.907			N/A
5/21/2019	EURJPY.fx	3:30:00 PM	123.227	123.214			N/A
5/21/2019	EURMXN	9:30:00 AM	21.2622	21.2809			N/A
5/21/2019	EURMXN	11:30:00 AM	21.2908	21.3103			N/A
5/21/2019	EURMXN	1:30:00 PM	21.2694	21.2845			N/A
5/21/2019	EURMXN	3:30:00 PM	21.2942	21.3068			N/A
5/21/2019	EURMXN.f	9:30:00 AM	21.2705	21.2727			N/A
5/21/2019	EURMXN.f	11:30:00 AM	21.2998	21.3008			N/A

5/21/2019	EURMXN.fx	1:30:00 PM	21.2784	21.2757			N/A
5/21/2019	EURMXN.fx	3:30:00 PM	21.3033	21.2973			N/A
5/21/2019	EURNOK	9:30:00 AM	9.8087	9.8197			N/A
5/21/2019	EURNOK	11:30:00 AM	9.7936	9.8042			N/A
5/21/2019	EURNOK	1:30:00 PM	9.7877	9.7982			N/A
5/21/2019	EURNOK	3:30:00 PM	9.7884	9.7989			N/A
5/21/2019	EURNOK.fx	9:30:00 AM	9.81421	9.81429			N/A
5/21/2019	EURNOK.fx	11:30:00 AM	9.79902	9.79877			N/A
5/21/2019	EURNOK.fx	1:30:00 PM	9.79327	9.7926			N/A
5/21/2019	EURNOK.fx	3:30:00 PM	9.79394	9.7933			N/A
5/21/2019	EURNZD	9:30:00 AM	1.71256	1.7132			N/A
5/21/2019	EURNZD	11:30:00 AM	1.71236	1.71319			N/A
5/21/2019	EURNZD	1:30:00 PM	1.7139	1.71473			N/A
5/21/2019	EURNZD	3:30:00 PM	1.71334	1.71403			N/A
5/21/2019	EURNZD.fx	9:30:00 AM	1.71296	1.71274			N/A
5/21/2019	EURNZD.fx	11:30:00 AM	1.71279	1.71275			N/A
5/21/2019	EURNZD.fx	1:30:00 PM	1.71434	1.7143			N/A
5/21/2019	EURNZD.fx	3:30:00 PM	1.71375	1.71359			N/A
5/21/2019	EURPLN	9:30:00 AM	4.2967	4.299			N/A
5/21/2019	EURPLN	11:30:00 AM	4.3034	4.3051			N/A
5/21/2019	EURPLN	1:30:00 PM	4.3054	4.3086			N/A
5/21/2019	EURPLN	3:30:00 PM	4.3059	4.3089			N/A
5/21/2019	EURPLN.fx	9:30:00 AM	4.29587	4.30042			N/A
5/21/2019	EURPLN.fx	11:30:00 AM	4.30291	4.30562			N/A
5/21/2019	EURPLN.fx	1:30:00 PM	4.3049	4.30912			N/A
5/21/2019	EURPLN.fx	3:30:00 PM	4.3053	4.30962			N/A
5/21/2019	EURRUB	9:30:00 AM					N/A
5/21/2019	EURRUB	11:30:00 AM	71.617	72.046			N/A
5/21/2019	EURRUB	1:30:00 PM	71.583	72.018			N/A
5/21/2019	EURRUB	3:30:00 PM	71.628	72.066			N/A
5/21/2019	EURSEK	9:30:00 AM	10.7962	10.8008			N/A
5/21/2019	EURSEK	11:30:00 AM	10.7834	10.7864			N/A
5/21/2019	EURSEK	1:30:00 PM	10.7752	10.776			N/A
5/21/2019	EURSEK	3:30:00 PM	10.7753	10.7784			N/A

5/21/2019	EURSEK.fx	9:30:00 AM	10.79776	10.79872			N/A
5/21/2019	EURSEK.fx	11:30:00 AM	10.78526	10.7844			N/A
5/21/2019	EURSEK.fx	1:30:00 PM	10.77716	10.77702			N/A
5/21/2019	EURSEK.fx	3:30:00 PM	10.77687	10.77664			N/A
5/21/2019	EURSGD	9:30:00 AM	1.5351	1.5358			N/A
5/21/2019	EURSGD	11:30:00 AM	1.5366	1.5374			N/A
5/21/2019	EURSGD	1:30:00 PM	1.5368	1.5376			N/A
5/21/2019	EURSGD	3:30:00 PM	1.5371	1.5379			N/A
5/21/2019	EURSGD.fx	9:30:00 AM	1.53546	1.53543			N/A
5/21/2019	EURSGD.fx	11:30:00 AM	1.53693	1.53695			N/A
5/21/2019	EURSGD.fx	1:30:00 PM	1.53708	1.53721			N/A
5/21/2019	EURSGD.fx	3:30:00 PM	1.53748	1.53751			N/A
5/21/2019	EURUSD	9:30:00 AM	1.11461	1.11466	10	300	N/A
5/21/2019	EURUSD	11:30:00 AM	1.11416	1.11423			N/A
5/21/2019	EURUSD	1:30:00 PM	1.11489	1.11501			N/A
5/21/2019	EURUSD	3:30:00 PM	1.11533	1.11535			N/A
5/21/2019	EURUSD.fx	9:30:00 AM	1.11481	1.11475			N/A
5/21/2019	EURUSD.fx	11:30:00 AM	1.11436	1.11432			N/A
5/21/2019	EURUSD.fx	1:30:00 PM	1.1151	1.11511			N/A
5/21/2019	EURUSD.fx	3:30:00 PM	1.11553	1.11544			N/A
5/21/2019	EURZAR	9:30:00 AM	16.0661	16.0805			N/A
5/21/2019	EURZAR	11:30:00 AM	16.1127	16.1298			N/A
5/21/2019	EURZAR	1:30:00 PM	16.068	16.0793			N/A
5/21/2019	EURZAR	3:30:00 PM	16.1032	16.1057			N/A
5/21/2019	EURZAR.fx	9:30:00 AM	16.06545	16.08036			N/A
5/21/2019	EURZAR.fx	11:30:00 AM	16.11226	16.13035			N/A
5/21/2019	EURZAR.fx	1:30:00 PM	16.06735	16.07971			N/A
5/21/2019	EURZAR.fx	3:30:00 PM	16.10238	16.10662			N/A
5/21/2019	GBPAUD	9:30:00 AM	1.84909	1.84956			N/A
5/21/2019	GBPAUD	11:30:00 AM	1.8457	1.84625			N/A
5/21/2019	GBPAUD	1:30:00 PM	1.84554	1.84633			N/A
5/21/2019	GBPAUD	3:30:00 PM	1.85259	1.85289			N/A
5/21/2019	GBPAUD.fx	9:30:00 AM	1.84949	1.84914			N/A
5/21/2019	GBPAUD.fx	11:30:00 AM	1.8461	1.84584			N/A

5/21/2019	GBPAUD.fx	1:30:00 PM	1.84594	1.84584			N/A
5/21/2019	GBPAUD.fx	3:30:00 PM	1.85297	1.85246			N/A
5/21/2019	GBPCAD	9:30:00 AM	1.70682	1.70733			N/A
5/21/2019	GBPCAD	11:30:00 AM	1.70362	1.70419			N/A
5/21/2019	GBPCAD	1:30:00 PM	1.70376	1.70451			N/A
5/21/2019	GBPCAD	3:30:00 PM	1.70744	1.70804			N/A
5/21/2019	GBPCAD.fx	9:30:00 AM	1.70721	1.7069			N/A
5/21/2019	GBPCAD.fx	11:30:00 AM	1.70404	1.7038			N/A
5/21/2019	GBPCAD.fx	1:30:00 PM	1.70416	1.70412			N/A
5/21/2019	GBPCAD.fx	3:30:00 PM	1.70782	1.70765			N/A
5/21/2019	GBPCHF	9:30:00 AM	1.28545	1.28574			N/A
5/21/2019	GBPCHF	11:30:00 AM	1.28233	1.28242			N/A
5/21/2019	GBPCHF	1:30:00 PM	1.28205	1.2825			N/A
5/21/2019	GBPCHF	3:30:00 PM	1.28749	1.28768			N/A
5/21/2019	GBPCHF.fx	9:30:00 AM	1.28564	1.28553			N/A
5/21/2019	GBPCHF.fx	11:30:00 AM	1.28251	1.28221			N/A
5/21/2019	GBPCHF.fx	1:30:00 PM	1.28224	1.2823			N/A
5/21/2019	GBPCHF.fx	3:30:00 PM	1.28769	1.28749			N/A
5/21/2019	GBPCZK	9:30:00 AM	29.368	29.387			N/A
5/21/2019	GBPCZK	11:30:00 AM	29.336	29.354			N/A
5/21/2019	GBPCZK	1:30:00 PM	29.324	29.347			N/A
5/21/2019	GBPCZK	3:30:00 PM	29.409	29.427			N/A
5/21/2019	GBPDKK	9:30:00 AM	8.512	8.522			N/A
5/21/2019	GBPDKK	11:30:00 AM	8.5	8.51			N/A
5/21/2019	GBPDKK	1:30:00 PM	8.5	8.511			N/A
5/21/2019	GBPDKK	3:30:00 PM	8.526	8.536			N/A
5/21/2019	GBPDKK.fx	9:30:00 AM	8.51	8.5223			N/A
5/21/2019	GBPDKK.fx	11:30:00 AM	8.4985	8.5099			N/A
5/21/2019	GBPDKK.fx	1:30:00 PM	8.4986	8.5114			N/A
5/21/2019	GBPDKK.fx	3:30:00 PM	8.5243	8.5361			N/A
5/21/2019	GBPHKD	9:30:00 AM	9.9727	9.9773			N/A
5/21/2019	GBPHKD	11:30:00 AM	9.9554	9.9601			N/A
5/21/2019	GBPHKD	1:30:00 PM	9.9629	9.9681			N/A
5/21/2019	GBPHKD	3:30:00 PM	9.996	10.0002			N/A

5/21/2019	GBPHUF	9:30:00 AM	371.99	372.45			N/A
5/21/2019	GBPHUF	11:30:00 AM	372.4	372.81			N/A
5/21/2019	GBPHUF	1:30:00 PM	372.15	372.6			N/A
5/21/2019	GBPHUF	3:30:00 PM	372.6	373			N/A
5/21/2019	GBPJPY	9:30:00 AM	140.037	140.059			N/A
5/21/2019	GBPJPY	11:30:00 AM	139.746	139.769			N/A
5/21/2019	GBPJPY	1:30:00 PM	139.946	139.991			N/A
5/21/2019	GBPJPY	3:30:00 PM	140.737	140.742			N/A
5/21/2019	GBPJPY.fx	9:30:00 AM	140.056	140.04			N/A
5/21/2019	GBPJPY.fx	11:30:00 AM	139.767	139.749			N/A
5/21/2019	GBPJPY.fx	1:30:00 PM	139.964	139.971			N/A
5/21/2019	GBPJPY.fx	3:30:00 PM	140.756	140.723			N/A
5/21/2019	GBPMXN	9:30:00 AM	24.2415	24.2545			N/A
5/21/2019	GBPMXN	11:30:00 AM	24.2421	24.2545			N/A
5/21/2019	GBPMXN	1:30:00 PM	24.2198	24.2297			N/A
5/21/2019	GBPMXN	3:30:00 PM	24.321	24.3226			N/A
5/21/2019	GBPNOK	9:30:00 AM	11.1853	11.1951			N/A
5/21/2019	GBPNOK	11:30:00 AM	11.1545	11.1618			N/A
5/21/2019	GBPNOK	1:30:00 PM	11.1476	11.1568			N/A
5/21/2019	GBPNOK	3:30:00 PM	11.1819	11.19			N/A
5/21/2019	GBPNOK.fx	9:30:00 AM	11.19	11.19022			N/A
5/21/2019	GBPNOK.fx	11:30:00 AM	11.15926	11.15652			N/A
5/21/2019	GBPNOK.fx	1:30:00 PM	11.15258	11.1518			N/A
5/21/2019	GBPNOK.fx	3:30:00 PM	11.18681	11.18506			N/A
5/21/2019	GBPNZD	9:30:00 AM	1.9529	1.95323			N/A
5/21/2019	GBPNZD	11:30:00 AM	1.95007	1.95064			N/A
5/21/2019	GBPNZD	1:30:00 PM	1.95189	1.95271			N/A
5/21/2019	GBPNZD	3:30:00 PM	1.95722	1.95744			N/A
5/21/2019	GBPNZD.fx	9:30:00 AM	1.95325	1.95284			N/A
5/21/2019	GBPNZD.fx	11:30:00 AM	1.95044	1.95025			N/A
5/21/2019	GBPNZD.fx	1:30:00 PM	1.95225	1.95234			N/A
5/21/2019	GBPNZD.fx	3:30:00 PM	1.95757	1.95706			N/A
5/21/2019	GBPPLN	9:30:00 AM	4.9001	4.9018			N/A
5/21/2019	GBPPLN	11:30:00 AM	4.9012	4.901			N/A

5/21/2019	GBPPLN	1:30:00 PM	4.904	4.9056			N/A
5/21/2019	GBPPLN	3:30:00 PM	4.9193	4.9202			N/A
5/21/2019	GBPPLN.fx	9:30:00 AM	4.89803	4.90388			N/A
5/21/2019	GBPPLN.fx	11:30:00 AM	4.89911	4.90304			N/A
5/21/2019	GBPPLN.fx	1:30:00 PM	4.90193	4.90761			N/A
5/21/2019	GBPPLN.fx	3:30:00 PM	4.91717	4.92237			N/A
5/21/2019	GBPSEK	9:30:00 AM	12.3084	12.3169			N/A
5/21/2019	GBPSEK	11:30:00 AM	12.2774	12.2838			N/A
5/21/2019	GBPSEK	1:30:00 PM	12.2691	12.2771			N/A
5/21/2019	GBPSEK	3:30:00 PM	12.3056	12.3115			N/A
5/21/2019	GBPSEK.fx	9:30:00 AM	12.30491	12.3203			N/A
5/21/2019	GBPSEK.fx	11:30:00 AM	12.27403	12.28703			N/A
5/21/2019	GBPSEK.fx	1:30:00 PM	12.26569	12.28051			N/A
5/21/2019	GBPSEK.fx	3:30:00 PM	12.30185	12.31516			N/A
5/21/2019	GBPSGD	9:30:00 AM	1.7505	1.751			N/A
5/21/2019	GBPSGD	11:30:00 AM	1.7499	1.7504			N/A
5/21/2019	GBPSGD	1:30:00 PM	1.7501	1.751			N/A
5/21/2019	GBPSGD	3:30:00 PM	1.7559	1.7564			N/A
5/21/2019	GBPSGD.fx	9:30:00 AM	1.74872	1.75283			N/A
5/21/2019	GBPSGD.fx	11:30:00 AM	1.74804	1.75222			N/A
5/21/2019	GBPSGD.fx	1:30:00 PM	1.74825	1.75276			N/A
5/21/2019	GBPSGD.fx	3:30:00 PM	1.75406	1.75816			N/A
5/21/2019	GBPUSD	9:30:00 AM	1.27117	1.27105			N/A
5/21/2019	GBPUSD	11:30:00 AM	1.26897	1.26886			N/A
5/21/2019	GBPUSD	1:30:00 PM	1.26985	1.26994			N/A
5/21/2019	GBPUSD	3:30:00 PM	1.27412	1.27402	10		N/A
5/21/2019	GBPUSD.fx	9:30:00 AM	1.27123	1.27099			N/A
5/21/2019	GBPUSD.fx	11:30:00 AM	1.26902	1.26879			N/A
5/21/2019	GBPUSD.fx	1:30:00 PM	1.26991	1.26988			N/A
5/21/2019	GBPUSD.fx	3:30:00 PM	1.27417	1.27395			N/A
5/21/2019	GBPZAR	9:30:00 AM	18.3172	18.3402			N/A
5/21/2019	GBPZAR	11:30:00 AM	18.3463	18.3714			N/A
5/21/2019	GBPZAR	1:30:00 PM	18.2951	18.3154			N/A
5/21/2019	GBPZAR	3:30:00 PM	18.388	18.3973			N/A

5/21/2019	GBPZAR.fx	9:30:00 AM	18.3246	18.3324			N/A
5/21/2019	GBPZAR.fx	11:30:00 AM	18.3533	18.3641			N/A
5/21/2019	GBPZAR.fx	1:30:00 PM	18.3021	18.3081			N/A
5/21/2019	GBPZAR.fx	3:30:00 PM	18.3951	18.3905			N/A
5/21/2019	GOLD	9:30:00 AM	1274.87	1275.15			N/A
5/21/2019	GOLD	11:30:00 AM	1275.12	1275.52			N/A
5/21/2019	GOLD	1:30:00 PM	1275.92	1276.32			N/A
5/21/2019	GOLD	3:30:00 PM	1271.44	1271.54			N/A
5/21/2019	HKDJPY	9:30:00 AM	14.04	14.05			N/A
5/21/2019	HKDJPY	11:30:00 AM					N/A
5/21/2019	HKDJPY	1:30:00 PM					N/A
5/21/2019	HKDJPY	3:30:00 PM	14.07	14.08			N/A
5/21/2019	HKDJPY.fx	9:30:00 AM	14.033	14.039			N/A
5/21/2019	HKDJPY.fx	11:30:00 AM	14.027	14.034			N/A
5/21/2019	HKDJPY.fx	1:30:00 PM	14.037	14.045			N/A
5/21/2019	HKDJPY.fx	3:30:00 PM	14.069	14.075			N/A
5/21/2019	HUFJPY	9:30:00 AM	0.3764	0.3767			N/A
5/21/2019	HUFJPY	11:30:00 AM	0.3753	0.3756			N/A
5/21/2019	HUFJPY	1:30:00 PM	0.3759	0.3762			N/A
5/21/2019	HUFJPY	3:30:00 PM	0.3777	0.378			N/A
5/21/2019	JP225.i	9:30:00 AM	21241.04	21256.04			N/A
5/21/2019	JP225.i	11:30:00 AM	21238.54	21251.04			N/A
5/21/2019	JP225.i	1:30:00 PM	21288.54	21308.54			N/A
5/21/2019	JP225.i	3:30:00 PM	21316.04	21323.54			N/A
5/21/2019	MXNJPY	9:30:00 AM					N/A
5/21/2019	MXNJPY	11:30:00 AM					N/A
5/21/2019	MXNJPY	1:30:00 PM	5.78	5.79			N/A
5/21/2019	MXNJPY	3:30:00 PM	5.78	5.79			N/A
5/21/2019	NASDAQ.i	9:30:00 AM					N/A
5/21/2019	NASDAQ.i	11:30:00 AM					N/A
5/21/2019	NASDAQ.i	1:30:00 PM					N/A
5/21/2019	NASDAQ.i	3:30:00 PM					N/A
5/21/2019	NOKJPY	9:30:00 AM	12.51	12.54			N/A
5/21/2019	NOKJPY	11:30:00 AM	12.51	12.55			N/A

5/21/2019	NOKJPY	1:30:00 PM	12.54	12.58			N/A
5/21/2019	NOKJPY	3:30:00 PM	12.57	12.6			N/A
5/21/2019	NOKJPY.fx	9:30:00 AM	12.512	12.518			N/A
5/21/2019	NOKJPY.fx	11:30:00 AM	12.522	12.528			N/A
5/21/2019	NOKJPY.fx	1:30:00 PM	12.548	12.553			N/A
5/21/2019	NOKJPY.fx	3:30:00 PM	12.58	12.583			N/A
5/21/2019	NZDCAD	9:30:00 AM	0.87371	0.87439			N/A
5/21/2019	NZDCAD	11:30:00 AM	0.87329	0.87398			N/A
5/21/2019	NZDCAD	1:30:00 PM	0.87256	0.87326			N/A
5/21/2019	NZDCAD	3:30:00 PM	0.87227	0.8728			N/A
5/21/2019	NZDCAD.fx	9:30:00 AM	0.87404	0.87405			N/A
5/21/2019	NZDCAD.fx	11:30:00 AM	0.87364	0.87363			N/A
5/21/2019	NZDCAD.fx	1:30:00 PM	0.87289	0.87292			N/A
5/21/2019	NZDCAD.fx	3:30:00 PM	0.87261	0.87246			N/A
5/21/2019	NZDCHF	9:30:00 AM	0.65793	0.65855			N/A
5/21/2019	NZDCHF	11:30:00 AM	0.65718	0.65784			N/A
5/21/2019	NZDCHF	1:30:00 PM	0.65645	0.65718			N/A
5/21/2019	NZDCHF	3:30:00 PM	0.65755	0.65816			N/A
5/21/2019	NZDCHF.fx	9:30:00 AM	0.65828	0.6582			N/A
5/21/2019	NZDCHF.fx	11:30:00 AM	0.65752	0.65749			N/A
5/21/2019	NZDCHF.fx	1:30:00 PM	0.65679	0.65682			N/A
5/21/2019	NZDCHF.fx	3:30:00 PM	0.65789	0.65781			N/A
5/21/2019	NZDCZK	9:30:00 AM	15.036	15.046			N/A
5/21/2019	NZDCZK	11:30:00 AM					N/A
5/21/2019	NZDCZK	1:30:00 PM	15.02	15.032			N/A
5/21/2019	NZDCZK	3:30:00 PM	15.024	15.036			N/A
5/21/2019	NZDDKK	9:30:00 AM					N/A
5/21/2019	NZDDKK	11:30:00 AM					N/A
5/21/2019	NZDDKK	1:30:00 PM					N/A
5/21/2019	NZDDKK	3:30:00 PM					N/A
5/21/2019	NZDHKD	9:30:00 AM	5.1057	5.1084			N/A
5/21/2019	NZDHKD	11:30:00 AM	5.104	5.1068			N/A
5/21/2019	NZDHKD	1:30:00 PM	5.1028	5.1054			N/A
5/21/2019	NZDHKD	3:30:00 PM	5.1066	5.1095			N/A



5/21/2019	NZDHUF	9:30:00 AM	190.42	190.7			N/A
5/21/2019	NZDHUF	11:30:00 AM	190.89	191.17			N/A
5/21/2019	NZDHUF	1:30:00 PM	190.58	190.86			N/A
5/21/2019	NZDHUF	3:30:00 PM	190.31	190.6			N/A
5/21/2019	NZDJPY	9:30:00 AM	71.675	71.735			N/A
5/21/2019	NZDJPY	11:30:00 AM	71.622	71.695			N/A
5/21/2019	NZDJPY	1:30:00 PM	71.659	71.73			N/A
5/21/2019	NZDJPY	3:30:00 PM	71.875	71.936			N/A
5/21/2019	NZDJPY.fx	9:30:00 AM	71.707	71.7			N/A
5/21/2019	NZDJPY.fx	11:30:00 AM	71.653	71.662			N/A
5/21/2019	NZDJPY.fx	1:30:00 PM	71.69	71.698			N/A
5/21/2019	NZDJPY.fx	3:30:00 PM	71.908	71.904			N/A
5/21/2019	NZDMXN	9:30:00 AM	12.4108	12.4169			N/A
5/21/2019	NZDMXN	11:30:00 AM	12.4286	12.4351			N/A
5/21/2019	NZDMXN	1:30:00 PM	12.4055	12.409			N/A
5/21/2019	NZDMXN	3:30:00 PM	12.424	12.4272			N/A
5/21/2019	NZDNOK	9:30:00 AM	5.7254	5.7293			N/A
5/21/2019	NZDNOK	11:30:00 AM	5.7177	5.7204			N/A
5/21/2019	NZDNOK	1:30:00 PM	5.7085	5.7114			N/A
5/21/2019	NZDNOK	3:30:00 PM	5.7106	5.7144			N/A
5/21/2019	NZDPLN	9:30:00 AM	2.5077	2.5091			N/A
5/21/2019	NZDPLN	11:30:00 AM	2.5109	2.5123			N/A
5/21/2019	NZDPLN	1:30:00 PM	2.5109	2.5122			N/A
5/21/2019	NZDPLN	3:30:00 PM	2.5119	2.5132			N/A
5/21/2019	NZDSEK	9:30:00 AM	6.2979	6.3045			N/A
5/21/2019	NZDSEK	11:30:00 AM	6.291	6.2972			N/A
5/21/2019	NZDSEK	1:30:00 PM	6.2803	6.2867			N/A
5/21/2019	NZDSEK	3:30:00 PM	6.2831	6.2892			N/A
5/21/2019	NZDSGD	9:30:00 AM	0.8961	0.8968			N/A
5/21/2019	NZDSGD	11:30:00 AM	0.8971	0.8977			N/A
5/21/2019	NZDSGD	1:30:00 PM	0.8963	0.897			N/A
5/21/2019	NZDSGD	3:30:00 PM	0.8969	0.8975			N/A
5/21/2019	NZDSGD.fx	9:30:00 AM	0.89615	0.89671			N/A
5/21/2019	NZDSGD.fx	11:30:00 AM	0.89708	0.89764			N/A

5/21/2019	NZDSGD.fx	1:30:00 PM	0.89634	0.89694			N/A
5/21/2019	NZDSGD.fx	3:30:00 PM	0.89693	0.89746			N/A
5/21/2019	NZDUSD	9:30:00 AM	0.65073	0.65083			N/A
5/21/2019	NZDUSD	11:30:00 AM	0.65049	0.65064			N/A
5/21/2019	NZDUSD	1:30:00 PM	0.65034	0.65048			N/A
5/21/2019	NZDUSD	3:30:00 PM	0.65084	0.65091			N/A
5/21/2019	NZDUSD.fx	9:30:00 AM	0.65079	0.65084			N/A
5/21/2019	NZDUSD.fx	11:30:00 AM	0.65056	0.65065			N/A
5/21/2019	NZDUSD.fx	1:30:00 PM	0.65041	0.65049			N/A
5/21/2019	NZDUSD.fx	3:30:00 PM	0.65092	0.65092			N/A
5/21/2019	NZDZAR	9:30:00 AM	9.3712	9.3868			N/A
5/21/2019	NZDZAR	11:30:00 AM	9.4004	9.4166			N/A
5/21/2019	NZDZAR	1:30:00 PM	9.3658	9.3774			N/A
5/21/2019	NZDZAR	3:30:00 PM	9.3898	9.3974			N/A
5/21/2019	SEKJPY	9:30:00 AM	11.37	11.38			N/A
5/21/2019	SEKJPY	11:30:00 AM	11.38	11.4			N/A
5/21/2019	SEKJPY	1:30:00 PM	11.41	11.41			N/A
5/21/2019	SEKJPY	3:30:00 PM	11.43	11.44			N/A
5/21/2019	SEKJPY.fx	9:30:00 AM	11.365	11.383			N/A
5/21/2019	SEKJPY.fx	11:30:00 AM	11.371	11.389			N/A
5/21/2019	SEKJPY.fx	1:30:00 PM	11.395	11.412			N/A
5/21/2019	SEKJPY.fx	3:30:00 PM	11.425	11.441			N/A
5/21/2019	SGDJPY	9:30:00 AM	79.99	79.99			N/A
5/21/2019	SGDJPY	11:30:00 AM	79.83	79.85			N/A
5/21/2019	SGDJPY	1:30:00 PM	79.95	79.96			N/A
5/21/2019	SGDJPY	3:30:00 PM	80.11	80.14			N/A
5/21/2019	SILVER	9:30:00 AM	14.23	14.61			N/A
5/21/2019	SILVER	11:30:00 AM	14.22	14.59			N/A
5/21/2019	SILVER	1:30:00 PM	14.24	14.62			N/A
5/21/2019	SILVER	3:30:00 PM	14.21	14.58			N/A
5/21/2019	SPX500.i	9:30:00 AM	2853.18	2853.54			N/A
5/21/2019	SPX500.i	11:30:00 AM	2852.59	2853.29			N/A
5/21/2019	SPX500.i	1:30:00 PM	2859.74	2860.04			N/A
5/21/2019	SPX500.i	3:30:00 PM	2857.74	2857.54			N/A

5/21/2019	UK100.i	9:30:00 AM	7331.67	7334.17			N/A
5/21/2019	UK100.i	11:30:00 AM	7356.42	7355.17			N/A
5/21/2019	UK100.i	1:30:00 PM	7365.67	7366.17			N/A
5/21/2019	UK100.i	3:30:00 PM	7348.67	7345.17			N/A
5/21/2019	USDCAD	9:30:00 AM	1.34302	1.34305			N/A
5/21/2019	USDCAD	11:30:00 AM	1.34277	1.34285			N/A
5/21/2019	USDCAD	1:30:00 PM	1.342	1.34203			N/A
5/21/2019	USDCAD	3:30:00 PM	1.34044	1.34045			N/A
5/21/2019	USDCAD.fx	9:30:00 AM	1.34305	1.34301			N/A
5/21/2019	USDCAD.fx	11:30:00 AM	1.3428	1.34281			N/A
5/21/2019	USDCAD.fx	1:30:00 PM	1.34203	1.34199			N/A
5/21/2019	USDCAD.fx	3:30:00 PM	1.34047	1.34041			N/A
5/21/2019	USDCHF	9:30:00 AM	1.01137	1.01139			N/A
5/21/2019	USDCHF	11:30:00 AM	1.01059	1.01062			N/A
5/21/2019	USDCHF	1:30:00 PM	1.00969	1.00983			N/A
5/21/2019	USDCHF	3:30:00 PM	1.01057	1.01064			N/A
5/21/2019	USDCHF.fx	9:30:00 AM	1.01142	1.01132			N/A
5/21/2019	USDCHF.fx	11:30:00 AM	1.01064	1.01055			N/A
5/21/2019	USDCHF.fx	1:30:00 PM	1.00974	1.00977			N/A
5/21/2019	USDCHF.fx	3:30:00 PM	1.01062	1.01058			N/A
5/21/2019	USDCZK	9:30:00 AM	23.12	23.14			N/A
5/21/2019	USDCZK	11:30:00 AM	23.134	23.156			N/A
5/21/2019	USDCZK	1:30:00 PM	23.107	23.129			N/A
5/21/2019	USDCZK	3:30:00 PM	23.098	23.119			N/A
5/21/2019	USDCZK.fx	9:30:00 AM	23.1276	23.134			N/A
5/21/2019	USDCZK.fx	11:30:00 AM	23.1421	23.148			N/A
5/21/2019	USDCZK.fx	1:30:00 PM	23.116	23.1222			N/A
5/21/2019	USDCZK.fx	3:30:00 PM	23.1066	23.11			N/A
5/21/2019	USDDKK	9:30:00 AM	6.6987	6.7024			N/A
5/21/2019	USDDKK	11:30:00 AM	6.7007	6.7047			N/A
5/21/2019	USDDKK	1:30:00 PM	6.6963	6.7003			N/A
5/21/2019	USDDKK	3:30:00 PM	6.6942	6.6978			N/A
5/21/2019	USDDKK.fx	9:30:00 AM	6.69917	6.70039			N/A
5/21/2019	USDDKK.fx	11:30:00 AM	6.70126	6.70259			N/A

5/21/2019	USDDKK.fx	1:30:00 PM	6.69677	6.69831			N/A
5/21/2019	USDDKK.fx	3:30:00 PM	6.6947	6.69572			N/A
5/21/2019	USDHKD	9:30:00 AM	7.8489	7.8491			N/A
5/21/2019	USDHKD	11:30:00 AM	7.849	7.8493			N/A
5/21/2019	USDHKD	1:30:00 PM					N/A
5/21/2019	USDHKD	3:30:00 PM					N/A
5/21/2019	USDHKD.fx	9:30:00 AM	7.84884	7.84938			N/A
5/21/2019	USDHKD.fx	11:30:00 AM	7.849	7.84948			N/A
5/21/2019	USDHKD.fx	1:30:00 PM					N/A
5/21/2019	USDHKD.fx	3:30:00 PM	7.84914	7.84972			N/A
5/21/2019	USDHUF	9:30:00 AM	292.73	293.19			N/A
5/21/2019	USDHUF	11:30:00 AM	293.54	293.98			N/A
5/21/2019	USDHUF	1:30:00 PM	293.13	293.59			N/A
5/21/2019	USDHUF	3:30:00 PM	292.52	292.95			N/A
5/21/2019	USDHUF.fx	9:30:00 AM	292.935	292.975			N/A
5/21/2019	USDHUF.fx	11:30:00 AM	293.753	293.775			N/A
5/21/2019	USDHUF.fx	1:30:00 PM	293.335	293.375			N/A
5/21/2019	USDHUF.fx	3:30:00 PM	292.715	292.745			N/A
5/21/2019	USDINR	9:30:00 AM	64.74	74.73			N/A
5/21/2019	USDINR	11:30:00 AM	64.72	74.71			N/A
5/21/2019	USDINR	1:30:00 PM					N/A
5/21/2019	USDINR	3:30:00 PM					N/A
5/21/2019	USDJPY	9:30:00 AM	110.174	110.17			N/A
5/21/2019	USDJPY	11:30:00 AM	110.132	110.146			N/A
5/21/2019	USDJPY	1:30:00 PM	110.213	110.228			N/A
5/21/2019	USDJPY	3:30:00 PM	110.466	110.465			N/A
5/21/2019	USDJPY.fx	9:30:00 AM	110.18	110.163			N/A
5/21/2019	USDJPY.fx	11:30:00 AM	110.137	110.138			N/A
5/21/2019	USDJPY.fx	1:30:00 PM	110.219	110.221			N/A
5/21/2019	USDJPY.fx	3:30:00 PM	110.472	110.458			N/A
5/21/2019	USDMXN	9:30:00 AM	19.077	19.085			N/A
5/21/2019	USDMXN	11:30:00 AM	19.111	19.119			N/A
5/21/2019	USDMXN	1:30:00 PM	19.078	19.083			N/A
5/21/2019	USDMXN	3:30:00 PM	19.095	19.094			N/A

5/21/2019	USDMXN.f	9:30:00 AM	19.0796	19.0826			N/A
5/21/2019	USDMXN.f	11:30:00 AM	19.1146	19.1146			N/A
5/21/2019	USDMXN.f	1:30:00 PM	19.0824	19.0791			N/A
5/21/2019	USDMXN.f	3:30:00 PM	19.0983	19.0902			N/A
5/21/2019	USDNOK	9:30:00 AM	8.7997	8.808			N/A
5/21/2019	USDNOK	11:30:00 AM	8.7903	8.7975			N/A
5/21/2019	USDNOK	1:30:00 PM	8.779	8.7857			N/A
5/21/2019	USDNOK	3:30:00 PM	8.7764	8.7834			N/A
5/21/2019	USDNOK.fx	9:30:00 AM	8.80363	8.80355			N/A
5/21/2019	USDNOK.fx	11:30:00 AM	8.79419	8.79292			N/A
5/21/2019	USDNOK.fx	1:30:00 PM	8.78306	8.78124			N/A
5/21/2019	USDNOK.fx	3:30:00 PM	8.78073	8.7788			N/A
5/21/2019	USDPLN	9:30:00 AM	3.8548	3.8564			N/A
5/21/2019	USDPLN	11:30:00 AM	3.8624	3.8627			N/A
5/21/2019	USDPLN	1:30:00 PM	3.8617	3.8631			N/A
5/21/2019	USDPLN	3:30:00 PM	3.8609	3.862			N/A
5/21/2019	USDPLN.fx	9:30:00 AM	3.85405	3.85704			N/A
5/21/2019	USDPLN.fx	11:30:00 AM	3.86169	3.86346			N/A
5/21/2019	USDPLN.fx	1:30:00 PM	3.86098	3.86383			N/A
5/21/2019	USDPLN.fx	3:30:00 PM	3.86009	3.86281			N/A
5/21/2019	USDRUB	9:30:00 AM					N/A
5/21/2019	USDRUB	11:30:00 AM	64.386	64.761			N/A
5/21/2019	USDRUB	1:30:00 PM	64.312	64.695			N/A
5/21/2019	USDRUB	3:30:00 PM	64.331	64.711			N/A
5/21/2019	USDSEK	9:30:00 AM	9.6839	9.688			N/A
5/21/2019	USDSEK	11:30:00 AM	9.6761	9.6791			N/A
5/21/2019	USDSEK	1:30:00 PM	9.6627	9.6661			N/A
5/21/2019	USDSEK	3:30:00 PM	9.6595	9.6617			N/A
5/21/2019	USDSEK.fx	9:30:00 AM	9.68661	9.68607			N/A
5/21/2019	USDSEK.fx	11:30:00 AM	9.679	9.67694			N/A
5/21/2019	USDSEK.fx	1:30:00 PM	9.66554	9.66387			N/A
5/21/2019	USDSEK.fx	3:30:00 PM	9.66207	9.65977			N/A
5/21/2019	USDSGD	9:30:00 AM	1.3772	1.3775			N/A
5/21/2019	USDSGD	11:30:00 AM	1.379	1.3794			N/A

5/21/2019	USDSGD	1:30:00 PM	1.3783	1.3787			N/A
5/21/2019	USDSGD	3:30:00 PM	1.3782	1.3785			N/A
5/21/2019	USDSGD.fx	9:30:00 AM	1.37711	1.37755			N/A
5/21/2019	USDSGD.fx	11:30:00 AM	1.37895	1.37944			N/A
5/21/2019	USDSGD.fx	1:30:00 PM	1.37824	1.3787			N/A
5/21/2019	USDSGD.fx	3:30:00 PM	1.37811	1.37854			N/A
5/21/2019	USDZAR	9:30:00 AM	14.4114	14.4247			N/A
5/21/2019	USDZAR	11:30:00 AM	14.4589	14.4749			N/A
5/21/2019	USDZAR	1:30:00 PM	14.4095	14.4189			N/A
5/21/2019	USDZAR	3:30:00 PM	14.4375	14.4377			N/A
5/21/2019	USDZAR.fx	9:30:00 AM					N/A
5/21/2019	USDZAR.fx	11:30:00 AM					N/A
5/21/2019	USDZAR.fx	1:30:00 PM					N/A
5/21/2019	USDZAR.fx	3:30:00 PM					N/A
5/21/2019	XAUUSD	9:30:00 AM	1274.89	1275.15			N/A
5/21/2019	XAUUSD	11:30:00 AM	1275.13	1275.52			N/A
5/21/2019	XAUUSD	1:30:00 PM	1275.92	1276.3			N/A
5/21/2019	XAUUSD	3:30:00 PM	1271.44	1271.54			N/A
5/21/2019	ZARJPY	9:30:00 AM					N/A
5/21/2019	ZARJPY	11:30:00 AM	7.6	7.63			N/A
5/21/2019	ZARJPY	1:30:00 PM	7.63	7.65			N/A
5/21/2019	ZARJPY	3:30:00 PM	7.64	7.65			N/A
5/21/2019	ZARJPY.fx	9:30:00 AM	7.64	7.642			N/A
5/21/2019	ZARJPY.fx	11:30:00 AM	7.611	7.614			N/A
5/21/2019	ZARJPY.fx	1:30:00 PM	7.646	7.646			N/A
5/21/2019	ZARJPY.fx	3:30:00 PM	7.653	7.648			N/A
5/22/2019	#AA	9:30:00 AM					N/A
5/22/2019	#AA	11:30:00 AM					N/A
5/22/2019	#AA	1:30:00 PM					N/A
5/22/2019	#AA	3:30:00 PM					N/A
5/22/2019	#AABA	9:30:00 AM					N/A
5/22/2019	#AABA	11:30:00 AM					N/A
5/22/2019	#AABA	1:30:00 PM					N/A
5/22/2019	#AABA	3:30:00 PM					N/A

5/22/2019	#AAL	9:30:00 AM					N/A
5/22/2019	#AAL	11:30:00 AM					N/A
5/22/2019	#AAL	1:30:00 PM					N/A
5/22/2019	#AAL	3:30:00 PM					N/A
5/22/2019	#AAPL	9:30:00 AM					N/A
5/22/2019	#AAPL	11:30:00 AM					N/A
5/22/2019	#AAPL	1:30:00 PM					N/A
5/22/2019	#AAPL	3:30:00 PM					N/A
5/22/2019	#ADBE	9:30:00 AM					N/A
5/22/2019	#ADBE	11:30:00 AM					N/A
5/22/2019	#ADBE	1:30:00 PM					N/A
5/22/2019	#ADBE	3:30:00 PM					N/A
5/22/2019	#AIG	9:30:00 AM					N/A
5/22/2019	#AIG	11:30:00 AM					N/A
5/22/2019	#AIG	1:30:00 PM					N/A
5/22/2019	#AIG	3:30:00 PM					N/A
5/22/2019	#AMD	9:30:00 AM					N/A
5/22/2019	#AMD	11:30:00 AM					N/A
5/22/2019	#AMD	1:30:00 PM					N/A
5/22/2019	#AMD	3:30:00 PM					N/A
5/22/2019	#AMZN	9:30:00 AM					N/A
5/22/2019	#AMZN	11:30:00 AM					N/A
5/22/2019	#AMZN	1:30:00 PM					N/A
5/22/2019	#AMZN	3:30:00 PM					N/A
5/22/2019	#AXP	9:30:00 AM					N/A
5/22/2019	#AXP	11:30:00 AM					N/A
5/22/2019	#AXP	1:30:00 PM					N/A
5/22/2019	#AXP	3:30:00 PM					N/A
5/22/2019	#BA	9:30:00 AM					N/A
5/22/2019	#BA	11:30:00 AM					N/A
5/22/2019	#BA	1:30:00 PM					N/A
5/22/2019	#BA	3:30:00 PM					N/A
5/22/2019	#BABA	9:30:00 AM					N/A
5/22/2019	#BABA	11:30:00 AM					N/A

5/22/2019	#BABA	1:30:00 PM					N/A
5/22/2019	#BABA	3:30:00 PM					N/A
5/22/2019	#BAC	9:30:00 AM					N/A
5/22/2019	#BAC	11:30:00 AM					N/A
5/22/2019	#BAC	1:30:00 PM					N/A
5/22/2019	#BAC	3:30:00 PM					N/A
5/22/2019	#BARC	9:30:00 AM					N/A
5/22/2019	#BARC	11:30:00 AM					N/A
5/22/2019	#BARC	1:30:00 PM					N/A
5/22/2019	#BARC	3:30:00 PM					N/A
5/22/2019	#BHP	9:30:00 AM					N/A
5/22/2019	#BHP	11:30:00 AM					N/A
5/22/2019	#BHP	1:30:00 PM					N/A
5/22/2019	#BHP	3:30:00 PM					N/A
5/22/2019	#BIDU	9:30:00 AM					N/A
5/22/2019	#BIDU	11:30:00 AM					N/A
5/22/2019	#BIDU	1:30:00 PM					N/A
5/22/2019	#BIDU	3:30:00 PM					N/A
5/22/2019	#Bitcoin	9:30:00 AM	7923.7	7956.7			N/A
5/22/2019	#Bitcoin	11:30:00 AM	7927.9	7950.25			N/A
5/22/2019	#Bitcoin	1:30:00 PM	7912.2	7936.2			N/A
5/22/2019	#Bitcoin	3:30:00 PM	7824.95	7845.75			N/A
5/22/2019	#BK	9:30:00 AM					N/A
5/22/2019	#BK	11:30:00 AM					N/A
5/22/2019	#BK	1:30:00 PM					N/A
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5/22/2019	#VOD	1:30:00 PM					N/A
5/22/2019	#VOD	3:30:00 PM					N/A

5/22/2019	#VZ	9:30:00 AM					N/A
5/22/2019	#VZ	11:30:00 AM					N/A
5/22/2019	#VZ	1:30:00 PM					N/A
5/22/2019	#VZ	3:30:00 PM					N/A
5/22/2019	#WDC	9:30:00 AM					N/A
5/22/2019	#WDC	11:30:00 AM					N/A
5/22/2019	#WDC	1:30:00 PM					N/A
5/22/2019	#WDC	3:30:00 PM					N/A
5/22/2019	#WFC	9:30:00 AM					N/A
5/22/2019	#WFC	11:30:00 AM					N/A
5/22/2019	#WFC	1:30:00 PM					N/A
5/22/2019	#WFC	3:30:00 PM					N/A
5/22/2019	#WMT	9:30:00 AM					N/A
5/22/2019	#WMT	11:30:00 AM					N/A
5/22/2019	#WMT	1:30:00 PM					N/A
5/22/2019	#WMT	3:30:00 PM					N/A
5/22/2019	#XOM	9:30:00 AM					N/A
5/22/2019	#XOM	11:30:00 AM					N/A
5/22/2019	#XOM	1:30:00 PM					N/A
5/22/2019	#XOM	3:30:00 PM					N/A
5/22/2019	#YHOO	9:30:00 AM					N/A
5/22/2019	#YHOO	11:30:00 AM					N/A
5/22/2019	#YHOO	1:30:00 PM					N/A
5/22/2019	#YHOO	3:30:00 PM					N/A
5/22/2019	#ZNGA	9:30:00 AM					N/A
5/22/2019	#ZNGA	11:30:00 AM					N/A
5/22/2019	#ZNGA	1:30:00 PM					N/A
5/22/2019	#ZNGA	3:30:00 PM					N/A
5/22/2019	AUDCAD	9:30:00 AM	0.92186	0.92252			N/A
5/22/2019	AUDCAD	11:30:00 AM	0.92262	0.92308			N/A
5/22/2019	AUDCAD	1:30:00 PM	0.92228	0.92296			N/A
5/22/2019	AUDCAD	3:30:00 PM	0.92117	0.92084			N/A
5/22/2019	AUDCAD.fx	9:30:00 AM	0.92219	0.92217			N/A
5/22/2019	AUDCAD.fx	11:30:00 AM	0.92296	0.92274			N/A

5/22/2019	AUDCAD.fx	1:30:00 PM	0.92261	0.9226			N/A
5/22/2019	AUDCAD.fx	3:30:00 PM	0.9215	0.92054			N/A
5/22/2019	AUDCHF	9:30:00 AM	0.69534	0.69599			N/A
5/22/2019	AUDCHF	11:30:00 AM	0.69585	0.69653			N/A
5/22/2019	AUDCHF	1:30:00 PM	0.69581	0.69648			N/A
5/22/2019	AUDCHF	3:30:00 PM	0.69336	0.69385			N/A
5/22/2019	AUDCHF.fx	9:30:00 AM	0.69568	0.69563			N/A
5/22/2019	AUDCHF.fx	11:30:00 AM	0.6962	0.69619			N/A
5/22/2019	AUDCHF.fx	1:30:00 PM	0.69616	0.69612			N/A
5/22/2019	AUDCHF.fx	3:30:00 PM	0.69371	0.69349			N/A
5/22/2019	AUDCZK	9:30:00 AM	15.859	15.876			N/A
5/22/2019	AUDCZK	11:30:00 AM	15.892	15.906			N/A
5/22/2019	AUDCZK	1:30:00 PM	15.885	15.901			N/A
5/22/2019	AUDCZK	3:30:00 PM	15.885	15.897			N/A
5/22/2019	AUDDKK	9:30:00 AM	4.6018	4.6065			N/A
5/22/2019	AUDDKK	11:30:00 AM	4.6077	4.6116			N/A
5/22/2019	AUDDKK	1:30:00 PM	4.6053	4.6101			N/A
5/22/2019	AUDDKK	3:30:00 PM	4.6015	4.6051			N/A
5/22/2019	AUDHKD	9:30:00 AM	5.3936	5.3975			N/A
5/22/2019	AUDHKD	11:30:00 AM	5.4038	5.4077			N/A
5/22/2019	AUDHKD	1:30:00 PM	5.4077	5.4112			N/A
5/22/2019	AUDHKD	3:30:00 PM	5.4036	5.4045			N/A
5/22/2019	AUDHUF	9:30:00 AM	200.98	201.21			N/A
5/22/2019	AUDHUF	11:30:00 AM	201.39	201.48			N/A
5/22/2019	AUDHUF	1:30:00 PM	201.22	201.45			N/A
5/22/2019	AUDHUF	3:30:00 PM	201.11	201.24			N/A
5/22/2019	AUDJPY	9:30:00 AM	75.939	76			N/A
5/22/2019	AUDJPY	11:30:00 AM	76.044	76.096			N/A
5/22/2019	AUDJPY	1:30:00 PM	76.115	76.178			N/A
5/22/2019	AUDJPY	3:30:00 PM	75.971	75.997			N/A
5/22/2019	AUDJPY.fx	9:30:00 AM	75.973	75.965			N/A
5/22/2019	AUDJPY.fx	11:30:00 AM	76.078	76.061			N/A
5/22/2019	AUDJPY.fx	1:30:00 PM	76.15	76.142			N/A
5/22/2019	AUDJPY.fx	3:30:00 PM	76.005	75.962			N/A

5/22/2019	AUDMXN	9:30:00 AM	13.0667	13.0753			N/A
5/22/2019	AUDMXN	11:30:00 AM	13.0909	13.0985			N/A
5/22/2019	AUDMXN	1:30:00 PM	13.0773	13.0866			N/A
5/22/2019	AUDMXN	3:30:00 PM	13.0812	13.0893			N/A
5/22/2019	AUDNOK	9:30:00 AM	6.0281	6.0328			N/A
5/22/2019	AUDNOK	11:30:00 AM	6.0226	6.0266			N/A
5/22/2019	AUDNOK	1:30:00 PM	6.0181	6.0233			N/A
5/22/2019	AUDNOK	3:30:00 PM	6.0157	6.0196			N/A
5/22/2019	AUDNOK.fx	9:30:00 AM	6.0297	6.0311			N/A
5/22/2019	AUDNOK.fx	11:30:00 AM	6.0241	6.0249			N/A
5/22/2019	AUDNOK.fx	1:30:00 PM	6.0197	6.0216			N/A
5/22/2019	AUDNOK.fx	3:30:00 PM	6.0176	6.0178			N/A
5/22/2019	AUDNZD	9:30:00 AM	1.05795	1.05887			N/A
5/22/2019	AUDNZD	11:30:00 AM	1.05836	1.0591			N/A
5/22/2019	AUDNZD	1:30:00 PM	1.05879	1.05973			N/A
5/22/2019	AUDNZD	3:30:00 PM	1.0583	1.05891			N/A
5/22/2019	AUDNZD.fx	9:30:00 AM	1.05839	1.05842			N/A
5/22/2019	AUDNZD.fx	11:30:00 AM	1.05879	1.05864			N/A
5/22/2019	AUDNZD.fx	1:30:00 PM	1.05923	1.05927			N/A
5/22/2019	AUDNZD.fx	3:30:00 PM	1.05874	1.05846			N/A
5/22/2019	AUDPLN	9:30:00 AM	2.6544	2.6575			N/A
5/22/2019	AUDPLN	11:30:00 AM	2.6582	2.661			N/A
5/22/2019	AUDPLN	1:30:00 PM	2.656	2.6594			N/A
5/22/2019	AUDPLN	3:30:00 PM	2.6524	2.6548			N/A
5/22/2019	AUDSEK	9:30:00 AM	6.6375	6.6397			N/A
5/22/2019	AUDSEK	11:30:00 AM	6.6402	6.6421			N/A
5/22/2019	AUDSEK	1:30:00 PM	6.6354	6.6387			N/A
5/22/2019	AUDSEK	3:30:00 PM	6.634	6.6357			N/A
5/22/2019	AUDSEK.fx	9:30:00 AM	6.633	6.6437			N/A
5/22/2019	AUDSEK.fx	11:30:00 AM	6.6357	6.6463			N/A
5/22/2019	AUDSEK.fx	1:30:00 PM	6.6308	6.6433			N/A
5/22/2019	AUDSEK.fx	3:30:00 PM	6.6301	6.6402			N/A
5/22/2019	AUDSGD	9:30:00 AM	0.9491	0.9493			N/A
5/22/2019	AUDSGD	11:30:00 AM	0.9497	0.9498			N/A

5/22/2019	AUDSGD	1:30:00 PM	0.9497	0.95			N/A
5/22/2019	AUDSGD	3:30:00 PM	0.9494	0.9495			N/A
5/22/2019	AUDSGD.fx	9:30:00 AM	0.94915	0.94918			N/A
5/22/2019	AUDSGD.fx	11:30:00 AM	0.94983	0.9497			N/A
5/22/2019	AUDSGD.fx	1:30:00 PM	0.94981	0.94988			N/A
5/22/2019	AUDSGD.fx	3:30:00 PM	0.94953	0.94933			N/A
5/22/2019	AUDUSD	9:30:00 AM	0.68756	0.68765			N/A
5/22/2019	AUDUSD	11:30:00 AM	0.68886	0.68886			N/A
5/22/2019	AUDUSD	1:30:00 PM	0.68926	0.68933			N/A
5/22/2019	AUDUSD	3:30:00 PM	0.68887	0.68863			N/A
5/22/2019	AUDUSD.fx	9:30:00 AM	0.68761	0.68759			N/A
5/22/2019	AUDUSD.fx	11:30:00 AM	0.68891	0.68881			N/A
5/22/2019	AUDUSD.fx	1:30:00 PM	0.68931	0.68927			N/A
5/22/2019	AUDUSD.fx	3:30:00 PM	0.68892	0.68857			N/A
5/22/2019	AUDZAR	9:30:00 AM	9.9048	9.9179			N/A
5/22/2019	AUDZAR	11:30:00 AM	9.8839	9.8929			N/A
5/22/2019	AUDZAR	1:30:00 PM	9.8776	9.888			N/A
5/22/2019	AUDZAR	3:30:00 PM	9.8897	9.9018			N/A
5/22/2019	AUS200.i	9:30:00 AM					N/A
5/22/2019	AUS200.i	11:30:00 AM	6498.95	6502.45			N/A
5/22/2019	AUS200.i	1:30:00 PM	6511.95	6515.45			N/A
5/22/2019	AUS200.i	3:30:00 PM	6494.35	6495.85			N/A
5/22/2019	BCHUSD	9:30:00 AM	425.37	427.36			N/A
5/22/2019	BCHUSD	11:30:00 AM	423.37	424.62			N/A
5/22/2019	BCHUSD	1:30:00 PM	420.53	421.07			N/A
5/22/2019	BCHUSD	3:30:00 PM	417.1	418.8			N/A
5/22/2019	CADCHF	9:30:00 AM	0.75399	0.75472			N/A
5/22/2019	CADCHF	11:30:00 AM	0.75414	0.75467			N/A
5/22/2019	CADCHF	1:30:00 PM	0.75414	0.75489			N/A
5/22/2019	CADCHF	3:30:00 PM	0.75332	0.75268			N/A
5/22/2019	CADCHF.fx	9:30:00 AM	0.75434	0.75437			N/A
5/22/2019	CADCHF.fx	11:30:00 AM	0.75448	0.75433			N/A
5/22/2019	CADCHF.fx	1:30:00 PM	0.75449	0.75453			N/A
5/22/2019	CADCHF.fx	3:30:00 PM	0.75366	0.75232			N/A

5/22/2019	CADCZK	9:30:00 AM	17.201	17.218			N/A
5/22/2019	CADCZK	11:30:00 AM	17.224	17.239			N/A
5/22/2019	CADCZK	1:30:00 PM	17.22	17.237			N/A
5/22/2019	CADCZK	3:30:00 PM	17.264	17.251			N/A
5/22/2019	CADDDKK	9:30:00 AM					N/A
5/22/2019	CADDDKK	11:30:00 AM	4.994	4.997			N/A
5/22/2019	CADDDKK	1:30:00 PM					N/A
5/22/2019	CADDDKK	3:30:00 PM	4.998	4.994			N/A
5/22/2019	CADHKD	9:30:00 AM	5.8501	5.854			N/A
5/22/2019	CADHKD	11:30:00 AM	5.8571	5.861			N/A
5/22/2019	CADHKD	1:30:00 PM	5.8622	5.866			N/A
5/22/2019	CADHKD	3:30:00 PM	5.8731	5.8627			N/A
5/22/2019	CADHUF	9:30:00 AM	218.01	218.18			N/A
5/22/2019	CADHUF	11:30:00 AM	218.33	218.3			N/A
5/22/2019	CADHUF	1:30:00 PM	218.16	218.33			N/A
5/22/2019	CADHUF	3:30:00 PM	218.54	218.28			N/A
5/22/2019	CADJPY	9:30:00 AM	82.344	82.409			N/A
5/22/2019	CADJPY	11:30:00 AM	82.395	82.467			N/A
5/22/2019	CADJPY	1:30:00 PM	82.497	82.568			N/A
5/22/2019	CADJPY	3:30:00 PM	82.532	82.429			N/A
5/22/2019	CADJPY.fx	9:30:00 AM	82.377	82.375			N/A
5/22/2019	CADJPY.fx	11:30:00 AM	82.427	82.433			N/A
5/22/2019	CADJPY.fx	1:30:00 PM	82.53	82.532			N/A
5/22/2019	CADJPY.fx	3:30:00 PM	82.568	82.404			N/A
5/22/2019	CADMXN	9:30:00 AM	14.17	14.1813			N/A
5/22/2019	CADMXN	11:30:00 AM	14.186	14.1959			N/A
5/22/2019	CADMXN	1:30:00 PM	14.1752	14.1877			N/A
5/22/2019	CADMXN	3:30:00 PM	14.2162	14.2021			N/A
5/22/2019	CADNOK	9:30:00 AM	6.5356	6.5401			N/A
5/22/2019	CADNOK	11:30:00 AM	6.525	6.5267			N/A
5/22/2019	CADNOK	1:30:00 PM	6.5222	6.5265			N/A
5/22/2019	CADNOK	3:30:00 PM	6.5332	6.5245			N/A
5/22/2019	CADPLN	9:30:00 AM	2.8788	2.8807			N/A
5/22/2019	CADPLN	11:30:00 AM	2.8803	2.8814			N/A

5/22/2019	CADPLN	1:30:00 PM	2.8794	2.8812			N/A
5/22/2019	CADPLN	3:30:00 PM	2.8809	2.8771			N/A
5/22/2019	CADSEK	9:30:00 AM	7.1959	7.1981			N/A
5/22/2019	CADSEK	11:30:00 AM	7.1935	7.1963			N/A
5/22/2019	CADSEK	1:30:00 PM	7.1906	7.1941			N/A
5/22/2019	CADSEK	3:30:00 PM	7.2064	7.196			N/A
5/22/2019	CADSGD	9:30:00 AM	1.0286	1.0289			N/A
5/22/2019	CADSGD	11:30:00 AM	1.0284	1.0287			N/A
5/22/2019	CADSGD	1:30:00 PM	1.0287	1.029			N/A
5/22/2019	CADSGD	3:30:00 PM	1.0306	1.0299			N/A
5/22/2019	CADZAR	9:30:00 AM	10.7422	10.7569			N/A
5/22/2019	CADZAR	11:30:00 AM	10.7125	10.7218			N/A
5/22/2019	CADZAR	1:30:00 PM	10.7078	10.7194			N/A
5/22/2019	CADZAR	3:30:00 PM	10.7465	10.7424			N/A
5/22/2019	CHFCZK	9:30:00 AM	22.807	22.822			N/A
5/22/2019	CHFCZK	11:30:00 AM	22.835	22.848			N/A
5/22/2019	CHFCZK	1:30:00 PM	22.827	22.843			N/A
5/22/2019	CHFCZK	3:30:00 PM	22.914	22.921			N/A
5/22/2019	CHFDKK	9:30:00 AM	6.616	6.62			N/A
5/22/2019	CHFDKK	11:30:00 AM	6.62	6.622			N/A
5/22/2019	CHFDKK	1:30:00 PM	6.618	6.621			N/A
5/22/2019	CHFDKK	3:30:00 PM	6.636	6.638			N/A
5/22/2019	CHFDKK.fx	9:30:00 AM	6.6155	6.6212			N/A
5/22/2019	CHFDKK.fx	11:30:00 AM	6.6186	6.6236			N/A
5/22/2019	CHFDKK.fx	1:30:00 PM	6.616	6.6221			N/A
5/22/2019	CHFDKK.fx	3:30:00 PM	6.6343	6.6397			N/A
5/22/2019	CHFHKD	9:30:00 AM	7.7562	7.7601			N/A
5/22/2019	CHFHKD	11:30:00 AM	7.7653	7.7677			N/A
5/22/2019	CHFHKD	1:30:00 PM	7.7703	7.7741			N/A
5/22/2019	CHFHKD	3:30:00 PM	7.7936	7.7953			N/A
5/22/2019	CHFHUF	9:30:00 AM	288.95	289.33			N/A
5/22/2019	CHFHUF	11:30:00 AM	289.31	289.5			N/A
5/22/2019	CHFHUF	1:30:00 PM	289.08	289.45			N/A
5/22/2019	CHFHUF	3:30:00 PM	290.02	290.26			N/A



5/22/2019	CHFJPY	9:30:00 AM	109.17	109.235			N/A
5/22/2019	CHFJPY	11:30:00 AM	109.245	109.285			N/A
5/22/2019	CHFJPY	1:30:00 PM	109.347	109.419			N/A
5/22/2019	CHFJPY	3:30:00 PM	109.545	109.58			N/A
5/22/2019	CHFJPY.fx	9:30:00 AM	109.203	109.201			N/A
5/22/2019	CHFJPY.fx	11:30:00 AM	109.277	109.252			N/A
5/22/2019	CHFJPY.fx	1:30:00 PM	109.38	109.384			N/A
5/22/2019	CHFJPY.fx	3:30:00 PM	109.579	109.545			N/A
5/22/2019	CHFMXN	9:30:00 AM	18.7856	18.8			N/A
5/22/2019	CHFMXN	11:30:00 AM	18.8057	18.8207			N/A
5/22/2019	CHFMXN	1:30:00 PM	18.7873	18.8046			N/A
5/22/2019	CHFMXN	3:30:00 PM	18.8653	18.8759			N/A
5/22/2019	CHFNOK	9:30:00 AM	8.6653	8.6718			N/A
5/22/2019	CHFNOK	11:30:00 AM	8.6498	8.6566			N/A
5/22/2019	CHFNOK	1:30:00 PM	8.6451	8.652			N/A
5/22/2019	CHFNOK	3:30:00 PM	8.673	8.6785			N/A
5/22/2019	CHFNOK.fx	9:30:00 AM	8.66867	8.6683			N/A
5/22/2019	CHFNOK.fx	11:30:00 AM	8.65345	8.65288			N/A
5/22/2019	CHFNOK.fx	1:30:00 PM	8.64862	8.6484			N/A
5/22/2019	CHFNOK.fx	3:30:00 PM	8.67658	8.67492			N/A
5/22/2019	CHFPLN	9:30:00 AM	3.8168	3.8195			N/A
5/22/2019	CHFPLN	11:30:00 AM	3.8189	3.8213			N/A
5/22/2019	CHFPLN	1:30:00 PM	3.8162	3.8193			N/A
5/22/2019	CHFPLN	3:30:00 PM	3.8243	3.8271			N/A
5/22/2019	CHFPLN.fx	9:30:00 AM	3.81456	3.82165			N/A
5/22/2019	CHFPLN.fx	11:30:00 AM	3.81634	3.82365			N/A
5/22/2019	CHFPLN.fx	1:30:00 PM	3.81384	3.82152			N/A
5/22/2019	CHFPLN.fx	3:30:00 PM	3.82194	3.82945			N/A
5/22/2019	CHFSEK	9:30:00 AM	9.5398	9.5418			N/A
5/22/2019	CHFSEK	11:30:00 AM	9.5361	9.5392			N/A
5/22/2019	CHFSEK	1:30:00 PM	9.5305	9.5347			N/A
5/22/2019	CHFSEK	3:30:00 PM	9.5633	9.5667			N/A
5/22/2019	CHFSGD	9:30:00 AM	1.3642	1.3645			N/A
5/22/2019	CHFSGD	11:30:00 AM	1.3641	1.3643			N/A

5/22/2019	CHFSGD	1:30:00 PM	1.3642	1.3647			N/A
5/22/2019	CHFSGD	3:30:00 PM	1.3687	1.369			N/A
5/22/2019	CHFSGD.fx	9:30:00 AM	1.36453	1.36427			N/A
5/22/2019	CHFSGD.fx	11:30:00 AM	1.36432	1.36408			N/A
5/22/2019	CHFSGD.fx	1:30:00 PM	1.36443	1.36447			N/A
5/22/2019	CHFSGD.fx	3:30:00 PM	1.36893	1.36878			N/A
5/22/2019	CHFZAR	9:30:00 AM	14.2447	14.2562			N/A
5/22/2019	CHFZAR	11:30:00 AM	14.203	14.211			N/A
5/22/2019	CHFZAR	1:30:00 PM	14.1965	14.2044			N/A
5/22/2019	CHFZAR	3:30:00 PM	14.2662	14.2745			N/A
5/22/2019	CZKJPY	9:30:00 AM					N/A
5/22/2019	CZKJPY	11:30:00 AM	4.783	4.787			N/A
5/22/2019	CZKJPY	1:30:00 PM	4.789	4.793			N/A
5/22/2019	CZKJPY	3:30:00 PM	4.78	4.783			N/A
5/22/2019	DAX30.i	9:30:00 AM	12130.16	12128.16			N/A
5/22/2019	DAX30.i	11:30:00 AM	12138.41	12136.41			N/A
5/22/2019	DAX30.i	1:30:00 PM	12198.41	12195.66			N/A
5/22/2019	DAX30.i	3:30:00 PM	12071.16	12067.91			N/A
5/22/2019	DJ30.i	9:30:00 AM					N/A
5/22/2019	DJ30.i	11:30:00 AM					N/A
5/22/2019	DJ30.i	1:30:00 PM					N/A
5/22/2019	DJ30.i	3:30:00 PM					N/A
5/22/2019	DKKJPY	9:30:00 AM					N/A
5/22/2019	DKKJPY	11:30:00 AM	16.5	16.52			N/A
5/22/2019	DKKJPY	1:30:00 PM					N/A
5/22/2019	DKKJPY	3:30:00 PM	16.52	16.53			N/A
5/22/2019	EURAUD	9:30:00 AM	1.62129	1.6217			N/A
5/22/2019	EURAUD	11:30:00 AM	1.61943	1.61958			N/A
5/22/2019	EURAUD	1:30:00 PM	1.61985	1.6203			N/A
5/22/2019	EURAUD	3:30:00 PM	1.62174	1.62164			N/A
5/22/2019	EURAUD.fx	9:30:00 AM	1.62149	1.62148			N/A
5/22/2019	EURAUD.fx	11:30:00 AM	1.61964	1.61934			N/A
5/22/2019	EURAUD.fx	1:30:00 PM	1.62006	1.62007			N/A
5/22/2019	EURAUD.fx	3:30:00 PM	1.62194	1.62141			N/A

5/22/2019	EURCAD	9:30:00 AM	1.49551	1.49631			N/A
5/22/2019	EURCAD	11:30:00 AM	1.49482	1.49543			N/A
5/22/2019	EURCAD	1:30:00 PM	1.49485	1.49573			N/A
5/22/2019	EURCAD	3:30:00 PM	1.49447	1.49339			N/A
5/22/2019	EURCAD.fx	9:30:00 AM	1.49592	1.49588			N/A
5/22/2019	EURCAD.fx	11:30:00 AM	1.49523	1.49501			N/A
5/22/2019	EURCAD.fx	1:30:00 PM	1.49527	1.4953			N/A
5/22/2019	EURCAD.fx	3:30:00 PM	1.49481	1.49303			N/A
5/22/2019	EURCHF	9:30:00 AM	1.1284	1.12845			N/A
5/22/2019	EURCHF	11:30:00 AM	1.128	1.12788			N/A
5/22/2019	EURCHF	1:30:00 PM	1.12818	1.12825			N/A
5/22/2019	EURCHF	3:30:00 PM	1.12519	1.12515			N/A
5/22/2019	EURCHF.fx	9:30:00 AM	1.12846	1.12839			N/A
5/22/2019	EURCHF.fx	11:30:00 AM	1.12805	1.12783			N/A
5/22/2019	EURCHF.fx	1:30:00 PM	1.12823	1.12818			N/A
5/22/2019	EURCHF.fx	3:30:00 PM	1.12525	1.12509			N/A
5/22/2019	EURCZK	9:30:00 AM	25.722	25.761			N/A
5/22/2019	EURCZK	11:30:00 AM	25.74	25.779			N/A
5/22/2019	EURCZK	1:30:00 PM	25.74	25.779			N/A
5/22/2019	EURCZK	3:30:00 PM	25.768	25.796			N/A
5/22/2019	EURDKK	9:30:00 AM					N/A
5/22/2019	EURDKK	11:30:00 AM	7.4655	7.4659			N/A
5/22/2019	EURDKK	1:30:00 PM	7.4664	7.4672			N/A
5/22/2019	EURDKK	3:30:00 PM	7.4671	7.4682			N/A
5/22/2019	EURGBP	9:30:00 AM	0.87863	0.87864			N/A
5/22/2019	EURGBP	11:30:00 AM	0.88056	0.88033			N/A
5/22/2019	EURGBP	1:30:00 PM	0.88128	0.88127			N/A
5/22/2019	EURGBP	3:30:00 PM	0.88236	0.88239			N/A
5/22/2019	EURGBP.fx	9:30:00 AM	0.87867	0.87858			N/A
5/22/2019	EURGBP.fx	11:30:00 AM	0.88059	0.88035			N/A
5/22/2019	EURGBP.fx	1:30:00 PM	0.88132	0.88122			N/A
5/22/2019	EURGBP.fx	3:30:00 PM	0.8824	0.88234			N/A
5/22/2019	EURHKD	9:30:00 AM	8.7525	8.7573			N/A
5/22/2019	EURHKD	11:30:00 AM	8.7585	8.7623			N/A

5/22/2019	EURHKD	1:30:00 PM	8.7667	8.7717			N/A
5/22/2019	EURHKD	3:30:00 PM	8.7688	8.7729			N/A
5/22/2019	EURHKD.fx	9:30:00 AM	8.75538	8.75447			N/A
5/22/2019	EURHKD.fx	11:30:00 AM	8.76128	8.75946			N/A
5/22/2019	EURHKD.fx	1:30:00 PM	8.76956	8.76889			N/A
5/22/2019	EURHKD.fx	3:30:00 PM	8.77164	8.77002			N/A
5/22/2019	EURHUF	9:30:00 AM	326.01	326.6			N/A
5/22/2019	EURHUF	11:30:00 AM	326.27	326.93			N/A
5/22/2019	EURHUF	1:30:00 PM	326.09	326.82			N/A
5/22/2019	EURHUF	3:30:00 PM	326.26	326.97			N/A
5/22/2019	EURHUF.fx	9:30:00 AM	326.284	326.45			N/A
5/22/2019	EURHUF.fx	11:30:00 AM	326.541	326.641			N/A
5/22/2019	EURHUF.fx	1:30:00 PM	326.371	326.548			N/A
5/22/2019	EURHUF.fx	3:30:00 PM	326.539	326.685			N/A
5/22/2019	EURJPY	9:30:00 AM	123.232	123.225			N/A
5/22/2019	EURJPY	11:30:00 AM	123.253	123.234			N/A
5/22/2019	EURJPY	1:30:00 PM	123.408	123.406			N/A
5/22/2019	EURJPY	3:30:00 PM	123.284	123.265		10	N/A
5/22/2019	EURJPY.fx	9:30:00 AM	123.234	123.221			N/A
5/22/2019	EURJPY.fx	11:30:00 AM	123.255	123.231			N/A
5/22/2019	EURJPY.fx	1:30:00 PM	123.411	123.402			N/A
5/22/2019	EURJPY.fx	3:30:00 PM	123.287	123.261			N/A
5/22/2019	EURMXN	9:30:00 AM	21.2021	21.2176			N/A
5/22/2019	EURMXN	11:30:00 AM	21.2132	21.2327			N/A
5/22/2019	EURMXN	1:30:00 PM	21.1989	21.2183			N/A
5/22/2019	EURMXN	3:30:00 PM	21.2325	21.2436			N/A
5/22/2019	EURMXN.f	9:30:00 AM	21.2122	21.2093			N/A
5/22/2019	EURMXN.f	11:30:00 AM	21.2218	21.2236			N/A
5/22/2019	EURMXN.f	1:30:00 PM	21.2077	21.2096			N/A
5/22/2019	EURMXN.f	3:30:00 PM	21.2424	21.2346			N/A
5/22/2019	EURNOK	9:30:00 AM	9.776	9.7874			N/A
5/22/2019	EURNOK	11:30:00 AM	9.7542	9.7666			N/A
5/22/2019	EURNOK	1:30:00 PM	9.7517	9.7633			N/A
5/22/2019	EURNOK	3:30:00 PM	9.7563	9.7671			N/A

5/22/2019	EURNOK.fx	9:30:00 AM	9.78129	9.78208			N/A
5/22/2019	EURNOK.fx	11:30:00 AM	9.75988	9.76089			N/A
5/22/2019	EURNOK.fx	1:30:00 PM	9.7571	9.7577			N/A
5/22/2019	EURNOK.fx	3:30:00 PM	9.7618	9.76158			N/A
5/22/2019	EURNZD	9:30:00 AM	1.71643	1.71723			N/A
5/22/2019	EURNZD	11:30:00 AM	1.71492	1.71558			N/A
5/22/2019	EURNZD	1:30:00 PM	1.71627	1.71713			N/A
5/22/2019	EURNZD	3:30:00 PM	1.71709	1.71762			N/A
5/22/2019	EURNZD.fx	9:30:00 AM	1.71686	1.71679			N/A
5/22/2019	EURNZD.fx	11:30:00 AM	1.71535	1.71513			N/A
5/22/2019	EURNZD.fx	1:30:00 PM	1.71669	1.71669			N/A
5/22/2019	EURNZD.fx	3:30:00 PM	1.7175	1.71718			N/A
5/22/2019	EURPLN	9:30:00 AM	4.3068	4.3099			N/A
5/22/2019	EURPLN	11:30:00 AM	4.3073	4.3074			N/A
5/22/2019	EURPLN	1:30:00 PM	4.3056	4.3078			N/A
5/22/2019	EURPLN	3:30:00 PM	4.3031	4.3062			N/A
5/22/2019	EURPLN.fx	9:30:00 AM	4.30636	4.31042			N/A
5/22/2019	EURPLN.fx	11:30:00 AM	4.30676	4.31101			N/A
5/22/2019	EURPLN.fx	1:30:00 PM	4.30497	4.30922			N/A
5/22/2019	EURPLN.fx	3:30:00 PM	4.30257	4.30682			N/A
5/22/2019	EURRUB	9:30:00 AM					N/A
5/22/2019	EURRUB	11:30:00 AM	71.493	71.926			N/A
5/22/2019	EURRUB	1:30:00 PM	71.324	71.762			N/A
5/22/2019	EURRUB	3:30:00 PM	71.454	71.895			N/A
5/22/2019	EURSEK	9:30:00 AM	10.7669	10.7687			N/A
5/22/2019	EURSEK	11:30:00 AM	10.7583	10.7615			N/A
5/22/2019	EURSEK	1:30:00 PM	10.7541	10.7591			N/A
5/22/2019	EURSEK	3:30:00 PM	10.7618	10.7644			N/A
5/22/2019	EURSEK.fx	9:30:00 AM	10.76858	10.76684			N/A
5/22/2019	EURSEK.fx	11:30:00 AM	10.76001	10.75992			N/A
5/22/2019	EURSEK.fx	1:30:00 PM	10.75577	10.75746			N/A
5/22/2019	EURSEK.fx	3:30:00 PM	10.76345	10.76273			N/A
5/22/2019	EURSGD	9:30:00 AM	1.5394	1.54			N/A
5/22/2019	EURSGD	11:30:00 AM	1.5384	1.539			N/A

5/22/2019	EURSGD	1:30:00 PM	1.539	1.5398			N/A
5/22/2019	EURSGD	3:30:00 PM	1.5398	1.5406			N/A
5/22/2019	EURSGD.fx	9:30:00 AM	1.5397	1.53958			N/A
5/22/2019	EURSGD.fx	11:30:00 AM	1.53876	1.53861			N/A
5/22/2019	EURSGD.fx	1:30:00 PM	1.53939	1.53942			N/A
5/22/2019	EURSGD.fx	3:30:00 PM	1.5402	1.54017			N/A
5/22/2019	EURUSD	9:30:00 AM	1.11519	1.11522			N/A
5/22/2019	EURUSD	11:30:00 AM	1.11591	1.11586			N/A
5/22/2019	EURUSD	1:30:00 PM	1.11692	1.117			N/A
5/22/2019	EURUSD	3:30:00 PM	1.1172	1.11714			N/A
5/22/2019	EURUSD.fx	9:30:00 AM	1.11539	1.11531			N/A
5/22/2019	EURUSD.fx	11:30:00 AM	1.1161	1.11597			N/A
5/22/2019	EURUSD.fx	1:30:00 PM	1.11713	1.1171			N/A
5/22/2019	EURUSD.fx	3:30:00 PM	1.11741	1.11723			N/A
5/22/2019	EURZAR	9:30:00 AM	16.0772	16.0927			N/A
5/22/2019	EURZAR	11:30:00 AM	16.0241	16.0401			N/A
5/22/2019	EURZAR	1:30:00 PM	16.0186	16.0311			N/A
5/22/2019	EURZAR	3:30:00 PM	16.059	16.0726			N/A
5/22/2019	EURZAR.fx	9:30:00 AM	16.07671	16.09283			N/A
5/22/2019	EURZAR.fx	11:30:00 AM	16.02317	16.03989			N/A
5/22/2019	EURZAR.fx	1:30:00 PM	16.01856	16.03174			N/A
5/22/2019	EURZAR.fx	3:30:00 PM	16.05865	16.07313			N/A
5/22/2019	GBPAUD	9:30:00 AM	1.84596	1.84641			N/A
5/22/2019	GBPAUD	11:30:00 AM	1.84012	1.83996			N/A
5/22/2019	GBPAUD	1:30:00 PM	1.83863	1.8393			N/A
5/22/2019	GBPAUD	3:30:00 PM	1.83852	1.83873			N/A
5/22/2019	GBPAUD.fx	9:30:00 AM	1.84636	1.84599			N/A
5/22/2019	GBPAUD.fx	11:30:00 AM	1.84047	1.83955			N/A
5/22/2019	GBPAUD.fx	1:30:00 PM	1.83903	1.83891			N/A
5/22/2019	GBPAUD.fx	3:30:00 PM	1.83892	1.83832			N/A
5/22/2019	GBPCAD	9:30:00 AM	1.70217	1.70278			N/A
5/22/2019	GBPCAD	11:30:00 AM	1.69822	1.69833			N/A
5/22/2019	GBPCAD	1:30:00 PM	1.69645	1.69702			N/A
5/22/2019	GBPCAD	3:30:00 PM	1.69431	1.6924			N/A

5/22/2019	GBPCAD.fx	9:30:00 AM	1.70256	1.70239			N/A
5/22/2019	GBPCAD.fx	11:30:00 AM	1.69841	1.69793			N/A
5/22/2019	GBPCAD.fx	1:30:00 PM	1.69685	1.69658			N/A
5/22/2019	GBPCAD.fx	3:30:00 PM	1.69459	1.69201			N/A
5/22/2019	GBPCHF	9:30:00 AM	1.28409	1.28444			N/A
5/22/2019	GBPCHF	11:30:00 AM	1.28114	1.28094			N/A
5/22/2019	GBPCHF	1:30:00 PM	1.28012	1.28033			N/A
5/22/2019	GBPCHF	3:30:00 PM	1.27503	1.27538			N/A
5/22/2019	GBPCHF.fx	9:30:00 AM	1.28428	1.28423			N/A
5/22/2019	GBPCHF.fx	11:30:00 AM	1.28131	1.28077			N/A
5/22/2019	GBPCHF.fx	1:30:00 PM	1.28031	1.28012			N/A
5/22/2019	GBPCHF.fx	3:30:00 PM	1.27524	1.27516			N/A
5/22/2019	GBPCZK	9:30:00 AM	29.288	29.306			N/A
5/22/2019	GBPCZK	11:30:00 AM	29.251	29.261			N/A
5/22/2019	GBPCZK	1:30:00 PM	29.22	29.238			N/A
5/22/2019	GBPCZK	3:30:00 PM	29.213	29.225			N/A
5/22/2019	GBPDKK	9:30:00 AM	8.496	8.506			N/A
5/22/2019	GBPDKK	11:30:00 AM	8.479	8.487			N/A
5/22/2019	GBPDKK	1:30:00 PM	8.469	8.479			N/A
5/22/2019	GBPDKK	3:30:00 PM	8.459	8.467			N/A
5/22/2019	GBPDKK.fx	9:30:00 AM	8.4943	8.506			N/A
5/22/2019	GBPDKK.fx	11:30:00 AM	8.4772	8.4872			N/A
5/22/2019	GBPDKK.fx	1:30:00 PM	8.4678	8.4798			N/A
5/22/2019	GBPDKK.fx	3:30:00 PM	8.4574	8.4697			N/A
5/22/2019	GBPHKD	9:30:00 AM	9.959	9.9641			N/A
5/22/2019	GBPHKD	11:30:00 AM	9.9462	9.9477			N/A
5/22/2019	GBPHKD	1:30:00 PM	9.9466	9.9499			N/A
5/22/2019	GBPHKD	3:30:00 PM	9.9355	9.9386			N/A
5/22/2019	GBPHUF	9:30:00 AM	371.08	371.49			N/A
5/22/2019	GBPHUF	11:30:00 AM	370.65	370.67			N/A
5/22/2019	GBPHUF	1:30:00 PM	370.04	370.48			N/A
5/22/2019	GBPHUF	3:30:00 PM	369.76	370.06			N/A
5/22/2019	GBPJPY	9:30:00 AM	140.233	140.252			N/A
5/22/2019	GBPJPY	11:30:00 AM	140.002	139.978			N/A

5/22/2019	GBPJPY	1:30:00 PM	140.026	140.041			N/A
5/22/2019	GBPJPY	3:30:00 PM	139.706	139.717			N/A
5/22/2019	GBPJPY.fx	9:30:00 AM	140.251	140.233			N/A
5/22/2019	GBPJPY.fx	11:30:00 AM	140.005	139.963			N/A
5/22/2019	GBPJPY.fx	1:30:00 PM	140.046	140.021			N/A
5/22/2019	GBPJPY.fx	3:30:00 PM	139.727	139.699			N/A
5/22/2019	GBPMXN	9:30:00 AM	24.1258	24.1353			N/A
5/22/2019	GBPMXN	11:30:00 AM	24.092	24.0956			N/A
5/22/2019	GBPMXN	1:30:00 PM	24.0527	24.0642			N/A
5/22/2019	GBPMXN	3:30:00 PM	24.0556	24.0637			N/A
5/22/2019	GBPNOK	9:30:00 AM	11.1284	11.1377			N/A
5/22/2019	GBPNOK	11:30:00 AM	11.0814	11.0896			N/A
5/22/2019	GBPNOK	1:30:00 PM	11.0666	11.0772			N/A
5/22/2019	GBPNOK	3:30:00 PM	11.0587	11.0676			N/A
5/22/2019	GBPNOK.fx	9:30:00 AM	11.13325	11.13312			N/A
5/22/2019	GBPNOK.fx	11:30:00 AM	11.08628	11.08442			N/A
5/22/2019	GBPNOK.fx	1:30:00 PM	11.0717	11.07206			N/A
5/22/2019	GBPNOK.fx	3:30:00 PM	11.0635	11.06229			N/A
5/22/2019	GBPNZD	9:30:00 AM	1.95376	1.95425			N/A
5/22/2019	GBPNZD	11:30:00 AM	1.94835	1.94821			N/A
5/22/2019	GBPNZD	1:30:00 PM	1.94757	1.9483			N/A
5/22/2019	GBPNZD	3:30:00 PM	1.94616	1.94653			N/A
5/22/2019	GBPNZD.fx	9:30:00 AM	1.95415	1.95387			N/A
5/22/2019	GBPNZD.fx	11:30:00 AM	1.94863	1.94779			N/A
5/22/2019	GBPNZD.fx	1:30:00 PM	1.94795	1.9479			N/A
5/22/2019	GBPNZD.fx	3:30:00 PM	1.94655	1.94613			N/A
5/22/2019	GBPPLN	9:30:00 AM	4.903	4.9041			N/A
5/22/2019	GBPPLN	11:30:00 AM	4.8937	4.8942			N/A
5/22/2019	GBPPLN	1:30:00 PM	4.8868	4.888			N/A
5/22/2019	GBPPLN	3:30:00 PM	4.8779	4.8795			N/A
5/22/2019	GBPPLN.fx	9:30:00 AM	4.90106	4.90604			N/A
5/22/2019	GBPPLN.fx	11:30:00 AM	4.89146	4.89632			N/A
5/22/2019	GBPPLN.fx	1:30:00 PM	4.88463	4.88996			N/A
5/22/2019	GBPPLN.fx	3:30:00 PM	4.87595	4.88154			N/A



5/22/2019	GBPSEK	9:30:00 AM	12.2528	12.2582			N/A
5/22/2019	GBPSEK	11:30:00 AM	12.2191	12.223			N/A
5/22/2019	GBPSEK	1:30:00 PM	12.2019	12.2098			N/A
5/22/2019	GBPSEK	3:30:00 PM	12.1949	12.2019			N/A
5/22/2019	GBPSEK.fx	9:30:00 AM	12.24911	12.26193			N/A
5/22/2019	GBPSEK.fx	11:30:00 AM	12.21403	12.22683			N/A
5/22/2019	GBPSEK.fx	1:30:00 PM	12.19829	12.21347			N/A
5/22/2019	GBPSEK.fx	3:30:00 PM	12.19128	12.20535			N/A
5/22/2019	GBPSGD	9:30:00 AM	1.7521	1.7526			N/A
5/22/2019	GBPSGD	11:30:00 AM	1.7477	1.7477			N/A
5/22/2019	GBPSGD	1:30:00 PM	1.7464	1.7471			N/A
5/22/2019	GBPSGD	3:30:00 PM	1.7453	1.7458			N/A
5/22/2019	GBPSGD.fx	9:30:00 AM	1.75035	1.75435			N/A
5/22/2019	GBPSGD.fx	11:30:00 AM	1.74569	1.7496			N/A
5/22/2019	GBPSGD.fx	1:30:00 PM	1.74469	1.74886			N/A
5/22/2019	GBPSGD.fx	3:30:00 PM	1.74344	1.74763			N/A
5/22/2019	GBPUSD	9:30:00 AM	1.26942	1.2693			N/A
5/22/2019	GBPUSD	11:30:00 AM	1.26797	1.2674	600	100	N/A
5/22/2019	GBPUSD	1:30:00 PM	1.2677	1.26751			N/A
5/22/2019	GBPUSD	3:30:00 PM	1.26635	1.26626			N/A
5/22/2019	GBPUSD.fx	9:30:00 AM	1.26948	1.26923			N/A
5/22/2019	GBPUSD.fx	11:30:00 AM	1.26798	1.26736			N/A
5/22/2019	GBPUSD.fx	1:30:00 PM	1.26776	1.26745			N/A
5/22/2019	GBPUSD.fx	3:30:00 PM	1.26642	1.26619			N/A
5/22/2019	GBPZAR	9:30:00 AM	18.2934	18.3169			N/A
5/22/2019	GBPZAR	11:30:00 AM	18.1988	18.2176			N/A
5/22/2019	GBPZAR	1:30:00 PM	18.173	18.1937			N/A
5/22/2019	GBPZAR	3:30:00 PM	18.1968	18.2169			N/A
5/22/2019	GBPZAR.fx	9:30:00 AM	18.3009	18.3087			N/A
5/22/2019	GBPZAR.fx	11:30:00 AM	18.2062	18.2109			N/A
5/22/2019	GBPZAR.fx	1:30:00 PM	18.1806	18.1862			N/A
5/22/2019	GBPZAR.fx	3:30:00 PM	18.2043	18.2098			N/A
5/22/2019	GOLD	9:30:00 AM	1273.05	1273.38			N/A
5/22/2019	GOLD	11:30:00 AM	1273.91	1274.22			N/A

5/22/2019	GOLD	1:30:00 PM	1274.01	1274.35			N/A
5/22/2019	GOLD	3:30:00 PM	1276.91	1276.82			N/A
5/22/2019	HKDJPY	9:30:00 AM	14.07	14.09			N/A
5/22/2019	HKDJPY	11:30:00 AM	14.07	14.08			N/A
5/22/2019	HKDJPY	1:30:00 PM	14.07	14.08			N/A
5/22/2019	HKDJPY	3:30:00 PM	14.06	14.06			N/A
5/22/2019	HKDJPY.fx	9:30:00 AM	14.072	14.078			N/A
5/22/2019	HKDJPY.fx	11:30:00 AM	14.064	14.071			N/A
5/22/2019	HKDJPY.fx	1:30:00 PM	14.068	14.075			N/A
5/22/2019	HKDJPY.fx	3:30:00 PM	14.051	14.057			N/A
5/22/2019	HUFJPY	9:30:00 AM	0.3778	0.3781			N/A
5/22/2019	HUFJPY	11:30:00 AM	0.3776	0.3779			N/A
5/22/2019	HUFJPY	1:30:00 PM	0.3782	0.3785			N/A
5/22/2019	HUFJPY	3:30:00 PM	0.3778	0.3781			N/A
5/22/2019	JP225.i	9:30:00 AM	21288.51	21301.01			N/A
5/22/2019	JP225.i	11:30:00 AM	21258.51	21276.01			N/A
5/22/2019	JP225.i	1:30:00 PM	21321.01	21338.51			N/A
5/22/2019	JP225.i	3:30:00 PM	21213.51	21218.51			N/A
5/22/2019	MXNJPY	9:30:00 AM	5.81	5.82			N/A
5/22/2019	MXNJPY	11:30:00 AM	5.81	5.82			N/A
5/22/2019	MXNJPY	1:30:00 PM	5.82	5.83			N/A
5/22/2019	MXNJPY	3:30:00 PM	5.81	5.81			N/A
5/22/2019	NASDAQ.i	9:30:00 AM					N/A
5/22/2019	NASDAQ.i	11:30:00 AM					N/A
5/22/2019	NASDAQ.i	1:30:00 PM					N/A
5/22/2019	NASDAQ.i	3:30:00 PM					N/A
5/22/2019	NOKJPY	9:30:00 AM	12.59	12.62			N/A
5/22/2019	NOKJPY	11:30:00 AM	12.62	12.65			N/A
5/22/2019	NOKJPY	1:30:00 PM	12.64	12.67			N/A
5/22/2019	NOKJPY	3:30:00 PM	12.62	12.65			N/A
5/22/2019	NOKJPY.fx	9:30:00 AM	12.595	12.6			N/A
5/22/2019	NOKJPY.fx	11:30:00 AM	12.624	12.63			N/A
5/22/2019	NOKJPY.fx	1:30:00 PM	12.645	12.65			N/A
5/22/2019	NOKJPY.fx	3:30:00 PM	12.627	12.63			N/A

5/22/2019	NZDCAD	9:30:00 AM	0.87098	0.87168			N/A
5/22/2019	NZDCAD	11:30:00 AM	0.87134	0.87196			N/A
5/22/2019	NZDCAD	1:30:00 PM	0.87069	0.87137			N/A
5/22/2019	NZDCAD	3:30:00 PM	0.87069	0.86977			N/A
5/22/2019	NZDCAD.fx	9:30:00 AM	0.87132	0.87133			N/A
5/22/2019	NZDCAD.fx	11:30:00 AM	0.87167	0.87161			N/A
5/22/2019	NZDCAD.fx	1:30:00 PM	0.87102	0.87103			N/A
5/22/2019	NZDCAD.fx	3:30:00 PM	0.87091	0.86948			N/A
5/22/2019	NZDCHF	9:30:00 AM	0.65693	0.65764			N/A
5/22/2019	NZDCHF	11:30:00 AM	0.65728	0.6579			N/A
5/22/2019	NZDCHF	1:30:00 PM	0.65686	0.65756			N/A
5/22/2019	NZDCHF	3:30:00 PM	0.65492	0.65541			N/A
5/22/2019	NZDCHF.fx	9:30:00 AM	0.65727	0.65728			N/A
5/22/2019	NZDCHF.fx	11:30:00 AM	0.65761	0.65755			N/A
5/22/2019	NZDCHF.fx	1:30:00 PM	0.6572	0.65721			N/A
5/22/2019	NZDCHF.fx	3:30:00 PM	0.65525	0.65505			N/A
5/22/2019	NZDCZK	9:30:00 AM	14.986	14.999			N/A
5/22/2019	NZDCZK	11:30:00 AM	15.012	15.023			N/A
5/22/2019	NZDCZK	1:30:00 PM	14.998	15.01			N/A
5/22/2019	NZDCZK	3:30:00 PM	15.007	15.017			N/A
5/22/2019	NZDDKK	9:30:00 AM	4.348	4.352			N/A
5/22/2019	NZDDKK	11:30:00 AM	4.352	4.355			N/A
5/22/2019	NZDDKK	1:30:00 PM					N/A
5/22/2019	NZDDKK	3:30:00 PM	4.346	4.349			N/A
5/22/2019	NZDHKD	9:30:00 AM	5.0961	5.0989			N/A
5/22/2019	NZDHKD	11:30:00 AM	5.1042	5.107			N/A
5/22/2019	NZDHKD	1:30:00 PM	5.1053	5.1076			N/A
5/22/2019	NZDHKD	3:30:00 PM	5.1039	5.1052			N/A
5/22/2019	NZDHUF	9:30:00 AM	189.85	190.14			N/A
5/22/2019	NZDHUF	11:30:00 AM	190.19	190.32			N/A
5/22/2019	NZDHUF	1:30:00 PM	189.91	190.2			N/A
5/22/2019	NZDHUF	3:30:00 PM	189.92	190.15			N/A
5/22/2019	NZDJPY	9:30:00 AM	71.744	71.808			N/A
5/22/2019	NZDJPY	11:30:00 AM	71.82	71.882			N/A

5/22/2019	NZDJPY	1:30:00 PM	71.856	71.92			N/A
5/22/2019	NZDJPY	3:30:00 PM	71.753	71.805			N/A
5/22/2019	NZDJPY.fx	9:30:00 AM	71.777	71.775			N/A
5/22/2019	NZDJPY.fx	11:30:00 AM	71.85	71.85			N/A
5/22/2019	NZDJPY.fx	1:30:00 PM	71.887	71.886			N/A
5/22/2019	NZDJPY.fx	3:30:00 PM	71.785	71.772			N/A
5/22/2019	NZDMXN	9:30:00 AM	12.3463	12.3506			N/A
5/22/2019	NZDMXN	11:30:00 AM	12.3646	12.3687			N/A
5/22/2019	NZDMXN	1:30:00 PM	12.3464	12.3519			N/A
5/22/2019	NZDMXN	3:30:00 PM	12.3587	12.3615			N/A
5/22/2019	NZDNOK	9:30:00 AM	5.6932	5.6965			N/A
5/22/2019	NZDNOK	11:30:00 AM	5.6862	5.6875			N/A
5/22/2019	NZDNOK	1:30:00 PM	5.6795	5.6832			N/A
5/22/2019	NZDNOK	3:30:00 PM	5.6794	5.6816			N/A
5/22/2019	NZDPLN	9:30:00 AM	2.5078	2.5092			N/A
5/22/2019	NZDPLN	11:30:00 AM	2.5097	2.5112			N/A
5/22/2019	NZDPLN	1:30:00 PM	2.5075	2.5087			N/A
5/22/2019	NZDPLN	3:30:00 PM	2.5049	2.5052			N/A
5/22/2019	NZDSEK	9:30:00 AM	6.2662	6.2721			N/A
5/22/2019	NZDSEK	11:30:00 AM	6.2663	6.2732			N/A
5/22/2019	NZDSEK	1:30:00 PM	6.26	6.2663			N/A
5/22/2019	NZDSEK	3:30:00 PM	6.2617	6.2672			N/A
5/22/2019	NZDSGD	9:30:00 AM	0.8966	0.8971			N/A
5/22/2019	NZDSGD	11:30:00 AM	0.8969	0.8974			N/A
5/22/2019	NZDSGD	1:30:00 PM	0.8964	0.8971			N/A
5/22/2019	NZDSGD	3:30:00 PM	0.8967	0.8971			N/A
5/22/2019	NZDSGD.fx	9:30:00 AM	0.89656	0.89701			N/A
5/22/2019	NZDSGD.fx	11:30:00 AM	0.89687	0.89733			N/A
5/22/2019	NZDSGD.fx	1:30:00 PM	0.89644	0.89699			N/A
5/22/2019	NZDSGD.fx	3:30:00 PM	0.89664	0.89702			N/A
5/22/2019	NZDUSD	9:30:00 AM	0.64957	0.64964			N/A
5/22/2019	NZDUSD	11:30:00 AM	0.65054	0.65064			N/A
5/22/2019	NZDUSD	1:30:00 PM	0.65064	0.65074			N/A
5/22/2019	NZDUSD	3:30:00 PM	0.65062	0.65056			N/A

5/22/2019	NZDUSD.fx	9:30:00 AM	0.64965	0.64966			N/A
5/22/2019	NZDUSD.fx	11:30:00 AM	0.65061	0.65065			N/A
5/22/2019	NZDUSD.fx	1:30:00 PM	0.65071	0.65075			N/A
5/22/2019	NZDUSD.fx	3:30:00 PM	0.65069	0.65058			N/A
5/22/2019	NZDZAR	9:30:00 AM	9.3561	9.3712			N/A
5/22/2019	NZDZAR	11:30:00 AM	9.3336	9.3452			N/A
5/22/2019	NZDZAR	1:30:00 PM	9.3229	9.3355			N/A
5/22/2019	NZDZAR	3:30:00 PM	9.3408	9.3535			N/A
5/22/2019	SEKJPY	9:30:00 AM	11.45	11.45			N/A
5/22/2019	SEKJPY	11:30:00 AM	11.46	11.46			N/A
5/22/2019	SEKJPY	1:30:00 PM	11.48	11.48			N/A
5/22/2019	SEKJPY	3:30:00 PM	11.46	11.46			N/A
5/22/2019	SEKJPY.fx	9:30:00 AM	11.436	11.451			N/A
5/22/2019	SEKJPY.fx	11:30:00 AM	11.445	11.463			N/A
5/22/2019	SEKJPY.fx	1:30:00 PM	11.463	11.481			N/A
5/22/2019	SEKJPY.fx	3:30:00 PM	11.446	11.461			N/A
5/22/2019	SGDJPY	9:30:00 AM	80.01	80.03			N/A
5/22/2019	SGDJPY	11:30:00 AM	80.06	80.09			N/A
5/22/2019	SGDJPY	1:30:00 PM	80.15	80.17			N/A
5/22/2019	SGDJPY	3:30:00 PM	80.03	80.03			N/A
5/22/2019	SILVER	9:30:00 AM	14.23	14.6			N/A
5/22/2019	SILVER	11:30:00 AM	14.24	14.61			N/A
5/22/2019	SILVER	1:30:00 PM	14.26	14.64			N/A
5/22/2019	SILVER	3:30:00 PM	14.3	14.67			N/A
5/22/2019	SPX500.i	9:30:00 AM	2861.34	2862.14			N/A
5/22/2019	SPX500.i	11:30:00 AM	2859.34	2860.14			N/A
5/22/2019	SPX500.i	1:30:00 PM	2864.59	2865.14			N/A
5/22/2019	SPX500.i	3:30:00 PM	2851.59	2851.14			N/A
5/22/2019	UK100.i	9:30:00 AM	7350.33	7352.83			N/A
5/22/2019	UK100.i	11:30:00 AM	7354.58	7354.58			N/A
5/22/2019	UK100.i	1:30:00 PM	7368.33	7369.08			N/A
5/22/2019	UK100.i	3:30:00 PM	7326.83	7324.58			N/A
5/22/2019	USDCAD	9:30:00 AM	1.34121	1.34127			N/A
5/22/2019	USDCAD	11:30:00 AM	1.33965	1.33975			N/A

5/22/2019	USDCAD	1:30:00 PM	1.33849	1.33862			N/A
5/22/2019	USDCAD	3:30:00 PM	1.33896	1.33617			N/A
5/22/2019	USDCAD.fx	9:30:00 AM	1.34124	1.34123			N/A
5/22/2019	USDCAD.fx	11:30:00 AM	1.33967	1.33973			N/A
5/22/2019	USDCAD.fx	1:30:00 PM	1.33852	1.33857			N/A
5/22/2019	USDCAD.fx	3:30:00 PM	1.33885	1.33615			N/A
5/22/2019	USDCHF	9:30:00 AM	1.01169	1.0118			N/A
5/22/2019	USDCHF	11:30:00 AM	1.01072	1.0106			N/A
5/22/2019	USDCHF	1:30:00 PM	1.00987	1.01004			N/A
5/22/2019	USDCHF	3:30:00 PM	1.00706	1.00696			N/A
5/22/2019	USDCHF.fx	9:30:00 AM	1.01173	1.01174			N/A
5/22/2019	USDCHF.fx	11:30:00 AM	1.01076	1.01055			N/A
5/22/2019	USDCHF.fx	1:30:00 PM	1.00992	1.00998			N/A
5/22/2019	USDCHF.fx	3:30:00 PM	1.00711	1.00689			N/A
5/22/2019	USDCZK	9:30:00 AM	23.09	23.112			N/A
5/22/2019	USDCZK	11:30:00 AM	23.092	23.111			N/A
5/22/2019	USDCZK	1:30:00 PM	23.068	23.092			N/A
5/22/2019	USDCZK	3:30:00 PM	23.09	23.104			N/A
5/22/2019	USDCZK.fx	9:30:00 AM	23.0979	23.1033			N/A
5/22/2019	USDCZK.fx	11:30:00 AM	23.1005	23.1021			N/A
5/22/2019	USDCZK.fx	1:30:00 PM	23.077	23.082			N/A
5/22/2019	USDCZK.fx	3:30:00 PM	23.0988	23.0945			N/A
5/22/2019	USDDKK	9:30:00 AM	6.6951	6.6987			N/A
5/22/2019	USDDKK	11:30:00 AM	6.691	6.694			N/A
5/22/2019	USDDKK	1:30:00 PM	6.6836	6.6877			N/A
5/22/2019	USDDKK	3:30:00 PM	6.6827	6.686			N/A
5/22/2019	USDDKK.fx	9:30:00 AM	6.69548	6.69658			N/A
5/22/2019	USDDKK.fx	11:30:00 AM	6.69148	6.692			N/A
5/22/2019	USDDKK.fx	1:30:00 PM	6.68425	6.68562			N/A
5/22/2019	USDDKK.fx	3:30:00 PM	6.68353	6.68387			N/A
5/22/2019	USDHKD	9:30:00 AM	7.8493	7.8496			N/A
5/22/2019	USDHKD	11:30:00 AM	7.8493	7.8493			N/A
5/22/2019	USDHKD	1:30:00 PM	7.8497	7.8501			N/A
5/22/2019	USDHKD	3:30:00 PM	7.8496	7.8498			N/A

5/22/2019	USDHKD.fx	9:30:00 AM	7.84919	7.84977			N/A
5/22/2019	USDHKD.fx	11:30:00 AM	7.84929	7.84973			N/A
5/22/2019	USDHKD.fx	1:30:00 PM	7.84961	7.85012			N/A
5/22/2019	USDHKD.fx	3:30:00 PM	7.84958	7.85014			N/A
5/22/2019	USDHUF	9:30:00 AM	292.39	292.84			N/A
5/22/2019	USDHUF	11:30:00 AM	292.46	292.82			N/A
5/22/2019	USDHUF	1:30:00 PM	292	292.47			N/A
5/22/2019	USDHUF	3:30:00 PM	292.12	292.51			N/A
5/22/2019	USDHUF.fx	9:30:00 AM	292.585	292.645			N/A
5/22/2019	USDHUF.fx	11:30:00 AM	292.664	292.628			N/A
5/22/2019	USDHUF.fx	1:30:00 PM	292.202	292.274			N/A
5/22/2019	USDHUF.fx	3:30:00 PM	292.329	292.297			N/A
5/22/2019	USDINR	9:30:00 AM	64.76	74.74			N/A
5/22/2019	USDINR	11:30:00 AM	64.68	74.67			N/A
5/22/2019	USDINR	1:30:00 PM					N/A
5/22/2019	USDINR	3:30:00 PM					N/A
5/22/2019	USDJPY	9:30:00 AM	110.484	110.49			N/A
5/22/2019	USDJPY	11:30:00 AM	110.427	110.435	4300	4300	N/A
5/22/2019	USDJPY	1:30:00 PM	110.465	110.476			N/A
5/22/2019	USDJPY	3:30:00 PM	110.327	110.333			N/A
5/22/2019	USDJPY.fx	9:30:00 AM	110.49	110.482			N/A
5/22/2019	USDJPY.fx	11:30:00 AM	110.432	110.429			N/A
5/22/2019	USDJPY.fx	1:30:00 PM	110.47	110.469			N/A
5/22/2019	USDJPY.fx	3:30:00 PM	110.332	110.326			N/A
5/22/2019	USDMXN	9:30:00 AM	19.013	19.02			N/A
5/22/2019	USDMXN	11:30:00 AM	19.013	19.019			N/A
5/22/2019	USDMXN	1:30:00 PM	18.982	18.989			N/A
5/22/2019	USDMXN	3:30:00 PM	19.008	19.006			N/A
5/22/2019	USDMXN.f	9:30:00 AM	19.0175	19.0156			N/A
5/22/2019	USDMXN.f	11:30:00 AM	19.0161	19.0154			N/A
5/22/2019	USDMXN.f	1:30:00 PM	18.9851	18.9849			N/A
5/22/2019	USDMXN.f	3:30:00 PM	19.0131	19.0024			N/A
5/22/2019	USDNOK	9:30:00 AM	8.7669	8.7741			N/A
5/22/2019	USDNOK	11:30:00 AM	8.7421	8.7496			N/A

5/22/2019	USDNOK	1:30:00 PM	8.7309	8.7386			N/A
5/22/2019	USDNOK	3:30:00 PM	8.7336	8.7401			N/A
5/22/2019	USDNOK.fx	9:30:00 AM	8.77067	8.76973			N/A
5/22/2019	USDNOK.fx	11:30:00 AM	8.74597	8.74513			N/A
5/22/2019	USDNOK.fx	1:30:00 PM	8.73507	8.73416			N/A
5/22/2019	USDNOK.fx	3:30:00 PM	8.73806	8.73545			N/A
5/22/2019	USDPLN	9:30:00 AM	3.8622	3.8634			N/A
5/22/2019	USDPLN	11:30:00 AM	3.8603	3.8615			N/A
5/22/2019	USDPLN	1:30:00 PM	3.855	3.8565			N/A
5/22/2019	USDPLN	3:30:00 PM	3.8522	3.8531			N/A
5/22/2019	USDPLN.fx	9:30:00 AM	3.86148	3.86403			N/A
5/22/2019	USDPLN.fx	11:30:00 AM	3.85948	3.86224			N/A
5/22/2019	USDPLN.fx	1:30:00 PM	3.85426	3.85723			N/A
5/22/2019	USDPLN.fx	3:30:00 PM	3.85145	3.85382			N/A
5/22/2019	USDRUB	9:30:00 AM					N/A
5/22/2019	USDRUB	11:30:00 AM	64.169	64.567			N/A
5/22/2019	USDRUB	1:30:00 PM	63.961	64.352			N/A
5/22/2019	USDRUB	3:30:00 PM	64.069	64.451			N/A
5/22/2019	USDSEK	9:30:00 AM	9.6534	9.6543			N/A
5/22/2019	USDSEK	11:30:00 AM	9.6385	9.6423			N/A
5/22/2019	USDSEK	1:30:00 PM	9.6264	9.6306			N/A
5/22/2019	USDSEK	3:30:00 PM	9.6324	9.6333			N/A
5/22/2019	USDSEK.fx	9:30:00 AM	9.65595	9.65226			N/A
5/22/2019	USDSEK.fx	11:30:00 AM	9.64105	9.6402			N/A
5/22/2019	USDSEK.fx	1:30:00 PM	9.62901	9.6287			N/A
5/22/2019	USDSEK.fx	3:30:00 PM	9.63506	9.6312			N/A
5/22/2019	USDSGD	9:30:00 AM	1.3803	1.3805			N/A
5/22/2019	USDSGD	11:30:00 AM	1.3786	1.3789			N/A
5/22/2019	USDSGD	1:30:00 PM	1.3779	1.3782			N/A
5/22/2019	USDSGD	3:30:00 PM	1.3783	1.3786			N/A
5/22/2019	USDSGD.fx	9:30:00 AM	1.38029	1.38051			N/A
5/22/2019	USDSGD.fx	11:30:00 AM	1.37853	1.37893			N/A
5/22/2019	USDSGD.fx	1:30:00 PM	1.37779	1.37825			N/A
5/22/2019	USDSGD.fx	3:30:00 PM	1.37836	1.37862			N/A



5/22/2019	USDZAR	9:30:00 AM	14.4149	14.4286			N/A
5/22/2019	USDZAR	11:30:00 AM	14.358	14.3721			N/A
5/22/2019	USDZAR	1:30:00 PM	14.34	14.3499			N/A
5/22/2019	USDZAR	3:30:00 PM	14.3735	14.3832			N/A
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5/22/2019	USDZAR.fx	11:30:00 AM					N/A
5/22/2019	USDZAR.fx	1:30:00 PM					N/A
5/22/2019	USDZAR.fx	3:30:00 PM					N/A
5/22/2019	XAUUSD	9:30:00 AM	1273.06	1273.37			N/A
5/22/2019	XAUUSD	11:30:00 AM	1273.91	1274.21			N/A
5/22/2019	XAUUSD	1:30:00 PM	1274.01	1274.34			N/A
5/22/2019	XAUUSD	3:30:00 PM	1276.92	1276.8			N/A
5/22/2019	ZARJPY	9:30:00 AM					N/A
5/22/2019	ZARJPY	11:30:00 AM	7.67	7.69			N/A
5/22/2019	ZARJPY	1:30:00 PM	7.68	7.72			N/A
5/22/2019	ZARJPY	3:30:00 PM	7.66	7.69			N/A
5/22/2019	ZARJPY.fx	9:30:00 AM	7.66	7.662			N/A
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5/22/2019	ZARJPY.fx	1:30:00 PM	7.701	7.701			N/A
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5/23/2019	#ZNGA	3:30:00 PM					N/A
5/23/2019	AUDCAD	9:30:00 AM	0.92412	0.92468			N/A
5/23/2019	AUDCAD	11:30:00 AM	0.9243	0.92498			N/A
5/23/2019	AUDCAD	1:30:00 PM	0.92511	0.92557			N/A
5/23/2019	AUDCAD	3:30:00 PM	0.92599	0.9265			N/A
5/23/2019	AUDCAD.fx	9:30:00 AM	0.92445	0.92432			N/A
5/23/2019	AUDCAD.fx	11:30:00 AM	0.92462	0.92464			N/A
5/23/2019	AUDCAD.fx	1:30:00 PM	0.92545	0.92521			N/A
5/23/2019	AUDCAD.fx	3:30:00 PM	0.92634	0.92615			N/A
5/23/2019	AUDCHF	9:30:00 AM	0.69296	0.69361			N/A
5/23/2019	AUDCHF	11:30:00 AM	0.693	0.6937			N/A
5/23/2019	AUDCHF	1:30:00 PM	0.69264	0.69334			N/A
5/23/2019	AUDCHF	3:30:00 PM	0.69247	0.69306			N/A

5/23/2019	AUDCHF.fx	9:30:00 AM	0.6933	0.69326			N/A
5/23/2019	AUDCHF.fx	11:30:00 AM	0.69335	0.69335			N/A
5/23/2019	AUDCHF.fx	1:30:00 PM	0.693	0.69298			N/A
5/23/2019	AUDCHF.fx	3:30:00 PM	0.69282	0.69271			N/A
5/23/2019	AUDCZK	9:30:00 AM	15.89	15.907			N/A
5/23/2019	AUDCZK	11:30:00 AM	15.908	15.925			N/A
5/23/2019	AUDCZK	1:30:00 PM	15.903	15.919			N/A
5/23/2019	AUDCZK	3:30:00 PM	15.915	15.929			N/A
5/23/2019	AUDDKK	9:30:00 AM	4.6018	4.6063			N/A
5/23/2019	AUDDKK	11:30:00 AM	4.6046	4.6094			N/A
5/23/2019	AUDDKK	1:30:00 PM	4.6042	4.6087			N/A
5/23/2019	AUDDKK	3:30:00 PM	4.6084	4.613			N/A
5/23/2019	AUDHKD	9:30:00 AM	5.3909	5.3941			N/A
5/23/2019	AUDHKD	11:30:00 AM	5.3888	5.3921			N/A
5/23/2019	AUDHKD	1:30:00 PM	5.3881	5.3914			N/A
5/23/2019	AUDHKD	3:30:00 PM	5.3946	5.3969			N/A
5/23/2019	AUDHUF	9:30:00 AM	200.98	201.14			N/A
5/23/2019	AUDHUF	11:30:00 AM	201.44	201.68			N/A
5/23/2019	AUDHUF	1:30:00 PM	201.49	201.73			N/A
5/23/2019	AUDHUF	3:30:00 PM	201.64	201.77			N/A
5/23/2019	AUDJPY	9:30:00 AM	75.805	75.869			N/A
5/23/2019	AUDJPY	11:30:00 AM	75.664	75.71			N/A
5/23/2019	AUDJPY	1:30:00 PM	75.559	75.623			N/A
5/23/2019	AUDJPY	3:30:00 PM	75.614	75.661			N/A
5/23/2019	AUDJPY.fx	9:30:00 AM	75.839	75.834			N/A
5/23/2019	AUDJPY.fx	11:30:00 AM	75.698	75.674			N/A
5/23/2019	AUDJPY.fx	1:30:00 PM	75.594	75.587			N/A
5/23/2019	AUDJPY.fx	3:30:00 PM	75.649	75.628			N/A
5/23/2019	AUDMXN	9:30:00 AM	13.0709	13.0769			N/A
5/23/2019	AUDMXN	11:30:00 AM	13.0591	13.0654			N/A
5/23/2019	AUDMXN	1:30:00 PM	13.085	13.0935			N/A
5/23/2019	AUDMXN	3:30:00 PM	13.0689	13.0752			N/A
5/23/2019	AUDNOK	9:30:00 AM	6.0212	6.0255			N/A
5/23/2019	AUDNOK	11:30:00 AM	6.0153	6.0194			N/A

5/23/2019	AUDNOK	1:30:00 PM	6.0161	6.0207			N/A
5/23/2019	AUDNOK	3:30:00 PM	6.019	6.0229			N/A
5/23/2019	AUDNOK.fx	9:30:00 AM	6.0228	6.0238			N/A
5/23/2019	AUDNOK.fx	11:30:00 AM	6.0169	6.0176			N/A
5/23/2019	AUDNOK.fx	1:30:00 PM	6.0177	6.019			N/A
5/23/2019	AUDNOK.fx	3:30:00 PM	6.0206	6.0212			N/A
5/23/2019	AUDNZD	9:30:00 AM	1.05846	1.05927			N/A
5/23/2019	AUDNZD	11:30:00 AM	1.05826	1.0591			N/A
5/23/2019	AUDNZD	1:30:00 PM	1.05868	1.05953			N/A
5/23/2019	AUDNZD	3:30:00 PM	1.05872	1.05955			N/A
5/23/2019	AUDNZD.fx	9:30:00 AM	1.05889	1.05882			N/A
5/23/2019	AUDNZD.fx	11:30:00 AM	1.05869	1.05866			N/A
5/23/2019	AUDNZD.fx	1:30:00 PM	1.05913	1.05908			N/A
5/23/2019	AUDNZD.fx	3:30:00 PM	1.05918	1.05913			N/A
5/23/2019	AUDPLN	9:30:00 AM	2.6528	2.6559			N/A
5/23/2019	AUDPLN	11:30:00 AM	2.6572	2.6604			N/A
5/23/2019	AUDPLN	1:30:00 PM	2.6565	2.6591			N/A
5/23/2019	AUDPLN	3:30:00 PM	2.6569	2.6601			N/A
5/23/2019	AUDSEK	9:30:00 AM	6.6257	6.6285			N/A
5/23/2019	AUDSEK	11:30:00 AM	6.6197	6.6227			N/A
5/23/2019	AUDSEK	1:30:00 PM	6.6267	6.6298			N/A
5/23/2019	AUDSEK	3:30:00 PM	6.6284	6.6314			N/A
5/23/2019	AUDSEK.fx	9:30:00 AM	6.6211	6.633			N/A
5/23/2019	AUDSEK.fx	11:30:00 AM	6.6153	6.6268			N/A
5/23/2019	AUDSEK.fx	1:30:00 PM	6.6221	6.6342			N/A
5/23/2019	AUDSEK.fx	3:30:00 PM	6.6239	6.6357			N/A
5/23/2019	AUDSGD	9:30:00 AM	0.9488	0.9491			N/A
5/23/2019	AUDSGD	11:30:00 AM	0.9492	0.9495			N/A
5/23/2019	AUDSGD	1:30:00 PM	0.9493	0.9495			N/A
5/23/2019	AUDSGD	3:30:00 PM	0.95	0.9502			N/A
5/23/2019	AUDSGD.fx	9:30:00 AM	0.94893	0.94893			N/A
5/23/2019	AUDSGD.fx	11:30:00 AM	0.94931	0.94933			N/A
5/23/2019	AUDSGD.fx	1:30:00 PM	0.94935	0.94938			N/A
5/23/2019	AUDSGD.fx	3:30:00 PM	0.95009	0.95008			N/A



5/23/2019	AUDUSD	9:30:00 AM	0.68738	0.6874			N/A
5/23/2019	AUDUSD	11:30:00 AM	0.68681	0.68691			N/A
5/23/2019	AUDUSD	1:30:00 PM	0.68684	0.68683			N/A
5/23/2019	AUDUSD	3:30:00 PM	0.68777	0.68769			N/A
5/23/2019	AUDUSD.fx	9:30:00 AM	0.68743	0.68734			N/A
5/23/2019	AUDUSD.fx	11:30:00 AM	0.68686	0.68685			N/A
5/23/2019	AUDUSD.fx	1:30:00 PM	0.68689	0.68677			N/A
5/23/2019	AUDUSD.fx	3:30:00 PM	0.68783	0.68765			N/A
5/23/2019	AUDZAR	9:30:00 AM	9.9002	9.9048			N/A
5/23/2019	AUDZAR	11:30:00 AM	9.9208	9.9348			N/A
5/23/2019	AUDZAR	1:30:00 PM	9.9295	9.9373			N/A
5/23/2019	AUDZAR	3:30:00 PM	9.9222	9.9345			N/A
5/23/2019	AUS200.i	9:30:00 AM					N/A
5/23/2019	AUS200.i	11:30:00 AM	6478.5	6481.5			N/A
5/23/2019	AUS200.i	1:30:00 PM	6474	6477.5			N/A
5/23/2019	AUS200.i	3:30:00 PM	6477.2	6478.5			N/A
5/23/2019	BCHUSD	9:30:00 AM	390.96	391.46			N/A
5/23/2019	BCHUSD	11:30:00 AM	383.46	384.73			N/A
5/23/2019	BCHUSD	1:30:00 PM	391.09	392.32			N/A
5/23/2019	BCHUSD	3:30:00 PM	392.16	393.69			N/A
5/23/2019	CADCHF	9:30:00 AM	0.74963	0.75028			N/A
5/23/2019	CADCHF	11:30:00 AM	0.74949	0.75019			N/A
5/23/2019	CADCHF	1:30:00 PM	0.74859	0.74918			N/A
5/23/2019	CADCHF	3:30:00 PM	0.74773	0.74818			N/A
5/23/2019	CADCHF.fx	9:30:00 AM	0.74997	0.74994			N/A
5/23/2019	CADCHF.fx	11:30:00 AM	0.74984	0.74983			N/A
5/23/2019	CADCHF.fx	1:30:00 PM	0.74894	0.74882			N/A
5/23/2019	CADCHF.fx	3:30:00 PM	0.74806	0.74782			N/A
5/23/2019	CADCZK	9:30:00 AM	17.194	17.21			N/A
5/23/2019	CADCZK	11:30:00 AM	17.206	17.223			N/A
5/23/2019	CADCZK	1:30:00 PM	17.19	17.203			N/A
5/23/2019	CADCZK	3:30:00 PM	17.186	17.2			N/A
5/23/2019	CADDDKK	9:30:00 AM	4.979	4.982			N/A
5/23/2019	CADDDKK	11:30:00 AM					N/A

5/23/2019	CADDDKK	1:30:00 PM	4.977	4.981			N/A
5/23/2019	CADDDKK	3:30:00 PM	4.976	4.98			N/A
5/23/2019	CADHKD	9:30:00 AM	5.8331	5.837			N/A
5/23/2019	CADHKD	11:30:00 AM	5.8284	5.8322			N/A
5/23/2019	CADHKD	1:30:00 PM	5.823	5.8264			N/A
5/23/2019	CADHKD	3:30:00 PM	5.8241	5.828			N/A
5/23/2019	CADHUF	9:30:00 AM	217.5	217.57			N/A
5/23/2019	CADHUF	11:30:00 AM	217.92	218.09			N/A
5/23/2019	CADHUF	1:30:00 PM	217.82	217.96			N/A
5/23/2019	CADHUF	3:30:00 PM	217.74	217.85			N/A
5/23/2019	CADJPY	9:30:00 AM	82.006	82.073			N/A
5/23/2019	CADJPY	11:30:00 AM	81.836	81.876			N/A
5/23/2019	CADJPY	1:30:00 PM	81.658	81.712			N/A
5/23/2019	CADJPY	3:30:00 PM	81.641	81.693			N/A
5/23/2019	CADJPY.fx	9:30:00 AM	82.04	82.038			N/A
5/23/2019	CADJPY.fx	11:30:00 AM	81.869	81.842			N/A
5/23/2019	CADJPY.fx	1:30:00 PM	81.691	81.677			N/A
5/23/2019	CADJPY.fx	3:30:00 PM	81.676	81.66			N/A
5/23/2019	CADMXN	9:30:00 AM	14.1419	14.1487			N/A
5/23/2019	CADMXN	11:30:00 AM	14.1236	14.1333			N/A
5/23/2019	CADMXN	1:30:00 PM	14.1402	14.1507			N/A
5/23/2019	CADMXN	3:30:00 PM	14.1102	14.121			N/A
5/23/2019	CADNOK	9:30:00 AM	6.5115	6.5141			N/A
5/23/2019	CADNOK	11:30:00 AM	6.504	6.5082			N/A
5/23/2019	CADNOK	1:30:00 PM	6.5009	6.5042			N/A
5/23/2019	CADNOK	3:30:00 PM	6.4966	6.4998			N/A
5/23/2019	CADPLN	9:30:00 AM	2.8694	2.8706			N/A
5/23/2019	CADPLN	11:30:00 AM	2.8741	2.876			N/A
5/23/2019	CADPLN	1:30:00 PM	2.871	2.8722			N/A
5/23/2019	CADPLN	3:30:00 PM	2.8685	2.8698			N/A
5/23/2019	CADSEK	9:30:00 AM	7.1653	7.1677			N/A
5/23/2019	CADSEK	11:30:00 AM	7.1568	7.1606			N/A
5/23/2019	CADSEK	1:30:00 PM	7.1603	7.162			N/A
5/23/2019	CADSEK	3:30:00 PM	7.1547	7.1575			N/A

5/23/2019	CADSGD	9:30:00 AM	1.0258	1.0261			N/A
5/23/2019	CADSGD	11:30:00 AM	1.0261	1.0264			N/A
5/23/2019	CADSGD	1:30:00 PM	1.0251	1.0254			N/A
5/23/2019	CADSGD	3:30:00 PM					N/A
5/23/2019	CADZAR	9:30:00 AM	10.7125	10.7163			N/A
5/23/2019	CADZAR	11:30:00 AM	10.7307	10.7457			N/A
5/23/2019	CADZAR	1:30:00 PM	10.7301	10.7395			N/A
5/23/2019	CADZAR	3:30:00 PM	10.7135	10.7288			N/A
5/23/2019	CHFCZK	9:30:00 AM	22.931	22.948			N/A
5/23/2019	CHFCZK	11:30:00 AM	22.951	22.968			N/A
5/23/2019	CHFCZK	1:30:00 PM	22.957	22.974			N/A
5/23/2019	CHFCZK	3:30:00 PM	22.982	22.998			N/A
5/23/2019	CHFDKK	9:30:00 AM	6.639	6.642			N/A
5/23/2019	CHFDKK	11:30:00 AM	6.643	6.646			N/A
5/23/2019	CHFDKK	1:30:00 PM	6.646	6.649			N/A
5/23/2019	CHFDKK	3:30:00 PM	6.654	6.657			N/A
5/23/2019	CHFDKK.fx	9:30:00 AM	6.638	6.6439			N/A
5/23/2019	CHFDKK.fx	11:30:00 AM	6.6414	6.6471			N/A
5/23/2019	CHFDKK.fx	1:30:00 PM	6.6441	6.6502			N/A
5/23/2019	CHFDKK.fx	3:30:00 PM	6.6525	6.6577			N/A
5/23/2019	CHFHKD	9:30:00 AM	7.7798	7.7827			N/A
5/23/2019	CHFHKD	11:30:00 AM	7.7737	7.7776			N/A
5/23/2019	CHFHKD	1:30:00 PM	7.7777	7.781			N/A
5/23/2019	CHFHKD	3:30:00 PM	7.7901	7.7911			N/A
5/23/2019	CHFHUF	9:30:00 AM	289.97	290.26			N/A
5/23/2019	CHFHUF	11:30:00 AM	290.58	290.95			N/A
5/23/2019	CHFHUF	1:30:00 PM	290.8	291.19			N/A
5/23/2019	CHFHUF	3:30:00 PM	291.1	291.34			N/A
5/23/2019	CHFJPY	9:30:00 AM	109.361	109.423			N/A
5/23/2019	CHFJPY	11:30:00 AM	109.145	109.178			N/A
5/23/2019	CHFJPY	1:30:00 PM	109.044	109.111			N/A
5/23/2019	CHFJPY	3:30:00 PM	109.171	109.196			N/A
5/23/2019	CHFJPY.fx	9:30:00 AM	109.393	109.389			N/A
5/23/2019	CHFJPY.fx	11:30:00 AM	109.178	109.142			N/A

5/23/2019	CHFJPY.fx	1:30:00 PM	109.078	109.076			N/A
5/23/2019	CHFJPY.fx	3:30:00 PM	109.204	109.162			N/A
5/23/2019	CHFMXN	9:30:00 AM	18.8572	18.8696			N/A
5/23/2019	CHFMXN	11:30:00 AM	18.8376	18.8507			N/A
5/23/2019	CHFMXN	1:30:00 PM	18.8851	18.8991			N/A
5/23/2019	CHFMXN	3:30:00 PM	18.8692	18.8784			N/A
5/23/2019	CHFNOK	9:30:00 AM	8.6847	8.6913			N/A
5/23/2019	CHFNOK	11:30:00 AM	8.6757	8.6814			N/A
5/23/2019	CHFNOK	1:30:00 PM	8.6811	8.6884			N/A
5/23/2019	CHFNOK	3:30:00 PM	8.6872	8.6945			N/A
5/23/2019	CHFNOK.fx	9:30:00 AM	8.68818	8.6879			N/A
5/23/2019	CHFNOK.fx	11:30:00 AM	8.67925	8.6777			N/A
5/23/2019	CHFNOK.fx	1:30:00 PM	8.68466	8.6848			N/A
5/23/2019	CHFNOK.fx	3:30:00 PM	8.6908	8.69094			N/A
5/23/2019	CHFPLN	9:30:00 AM	3.8273	3.8304			N/A
5/23/2019	CHFPLN	11:30:00 AM	3.8332	3.8362			N/A
5/23/2019	CHFPLN	1:30:00 PM	3.8342	3.8365			N/A
5/23/2019	CHFPLN	3:30:00 PM	3.836	3.8383			N/A
5/23/2019	CHFPLN.fx	9:30:00 AM	3.82484	3.83269			N/A
5/23/2019	CHFPLN.fx	11:30:00 AM	3.83072	3.83865			N/A
5/23/2019	CHFPLN.fx	1:30:00 PM	3.83184	3.83873			N/A
5/23/2019	CHFPLN.fx	3:30:00 PM	3.83356	3.84075			N/A
5/23/2019	CHFSEK	9:30:00 AM	9.555	9.5591			N/A
5/23/2019	CHFSEK	11:30:00 AM	9.5462	9.5491			N/A
5/23/2019	CHFSEK	1:30:00 PM	9.5616	9.5656			N/A
5/23/2019	CHFSEK	3:30:00 PM	9.5669	9.5699			N/A
5/23/2019	CHFSGD	9:30:00 AM	1.3686	1.369			N/A
5/23/2019	CHFSGD	11:30:00 AM	1.3691	1.3693			N/A
5/23/2019	CHFSGD	1:30:00 PM	1.3698	1.3702			N/A
5/23/2019	CHFSGD	3:30:00 PM	1.3714	1.3715			N/A
5/23/2019	CHFSGD.fx	9:30:00 AM	1.3688	1.36882			N/A
5/23/2019	CHFSGD.fx	11:30:00 AM	1.36924	1.36912			N/A
5/23/2019	CHFSGD.fx	1:30:00 PM	1.36994	1.36999			N/A
5/23/2019	CHFSGD.fx	3:30:00 PM	1.37163	1.37127			N/A

5/23/2019	CHFZAR	9:30:00 AM	14.2887	14.2879			N/A
5/23/2019	CHFZAR	11:30:00 AM	14.3161	14.3282			N/A
5/23/2019	CHFZAR	1:30:00 PM	14.3357	14.3396			N/A
5/23/2019	CHFZAR	3:30:00 PM	14.3309	14.3397			N/A
5/23/2019	CZKJPY	9:30:00 AM					N/A
5/23/2019	CZKJPY	11:30:00 AM	4.755	4.757			N/A
5/23/2019	CZKJPY	1:30:00 PM					N/A
5/23/2019	CZKJPY	3:30:00 PM					N/A
5/23/2019	DAX30.i	9:30:00 AM	12062.58	12062.58			N/A
5/23/2019	DAX30.i	11:30:00 AM	11979.08	11972.08			N/A
5/23/2019	DAX30.i	1:30:00 PM	11946.33	11941.08			N/A
5/23/2019	DAX30.i	3:30:00 PM	11977.08	11964.08			N/A
5/23/2019	DJ30.i	9:30:00 AM					N/A
5/23/2019	DJ30.i	11:30:00 AM					N/A
5/23/2019	DJ30.i	1:30:00 PM					N/A
5/23/2019	DJ30.i	3:30:00 PM					N/A
5/23/2019	DKKJPY	9:30:00 AM	16.47	16.49			N/A
5/23/2019	DKKJPY	11:30:00 AM	16.43	16.45			N/A
5/23/2019	DKKJPY	1:30:00 PM					N/A
5/23/2019	DKKJPY	3:30:00 PM					N/A
5/23/2019	EURAUD	9:30:00 AM	1.62123	1.62157			N/A
5/23/2019	EURAUD	11:30:00 AM	1.6202	1.62056			N/A
5/23/2019	EURAUD	1:30:00 PM	1.62037	1.62074			N/A
5/23/2019	EURAUD	3:30:00 PM	1.61905	1.61938			N/A
5/23/2019	EURAUD.fx	9:30:00 AM	1.62143	1.62136			N/A
5/23/2019	EURAUD.fx	11:30:00 AM	1.62041	1.62031			N/A
5/23/2019	EURAUD.fx	1:30:00 PM	1.62057	1.62053			N/A
5/23/2019	EURAUD.fx	3:30:00 PM	1.61925	1.61915			N/A
5/23/2019	EURCAD	9:30:00 AM	1.49901	1.49977			N/A
5/23/2019	EURCAD	11:30:00 AM	1.49845	1.49923			N/A
5/23/2019	EURCAD	1:30:00 PM	1.49985	1.50044			N/A
5/23/2019	EURCAD	3:30:00 PM	1.50005	1.50063			N/A
5/23/2019	EURCAD.fx	9:30:00 AM	1.49942	1.49934			N/A
5/23/2019	EURCAD.fx	11:30:00 AM	1.49887	1.49882			N/A

5/23/2019	EURCAD.fx	1:30:00 PM	1.50027	1.50001			N/A
5/23/2019	EURCAD.fx	3:30:00 PM	1.50047	1.50023			N/A
5/23/2019	EURCHF	9:30:00 AM	1.12447	1.12454			N/A
5/23/2019	EURCHF	11:30:00 AM	1.12386	1.12394			N/A
5/23/2019	EURCHF	1:30:00 PM	1.12342	1.12352			N/A
5/23/2019	EURCHF	3:30:00 PM	1.12221	1.12214			N/A
5/23/2019	EURCHF.fx	9:30:00 AM	1.12452	1.12448			N/A
5/23/2019	EURCHF.fx	11:30:00 AM	1.12392	1.12389			N/A
5/23/2019	EURCHF.fx	1:30:00 PM	1.12346	1.12346			N/A
5/23/2019	EURCHF.fx	3:30:00 PM	1.12227	1.12207			N/A
5/23/2019	EURCZK	9:30:00 AM					N/A
5/23/2019	EURCZK	11:30:00 AM					N/A
5/23/2019	EURCZK	1:30:00 PM	25.778	25.816			N/A
5/23/2019	EURCZK	3:30:00 PM	25.776	25.814			N/A
5/23/2019	EURDKK	9:30:00 AM	7.4657	7.4669			N/A
5/23/2019	EURDKK	11:30:00 AM	7.4661	7.4673			N/A
5/23/2019	EURDKK	1:30:00 PM	7.4666	7.4678			N/A
5/23/2019	EURDKK	3:30:00 PM	7.4668	7.468			N/A
5/23/2019	EURGBP	9:30:00 AM	0.88225	0.88205			N/A
5/23/2019	EURGBP	11:30:00 AM	0.88289	0.88291			N/A
5/23/2019	EURGBP	1:30:00 PM	0.88127	0.88128			N/A
5/23/2019	EURGBP	3:30:00 PM	0.88105	0.88101			N/A
5/23/2019	EURGBP.fx	9:30:00 AM	0.88229	0.882			N/A
5/23/2019	EURGBP.fx	11:30:00 AM	0.88293	0.88285			N/A
5/23/2019	EURGBP.fx	1:30:00 PM	0.8813	0.88123			N/A
5/23/2019	EURGBP.fx	3:30:00 PM	0.88107	0.88096			N/A
5/23/2019	EURHKD	9:30:00 AM	8.7478	8.7524			N/A
5/23/2019	EURHKD	11:30:00 AM	8.7368	8.7416			N/A
5/23/2019	EURHKD	1:30:00 PM	8.7376	8.7417			N/A
5/23/2019	EURHKD	3:30:00 PM	8.7416	8.7449			N/A
5/23/2019	EURHKD.fx	9:30:00 AM	8.75063	8.74955			N/A
5/23/2019	EURHKD.fx	11:30:00 AM	8.73955	8.73864			N/A
5/23/2019	EURHKD.fx	1:30:00 PM	8.74046	8.73881			N/A
5/23/2019	EURHKD.fx	3:30:00 PM	8.74439	8.74219			N/A

5/23/2019	EURHUF	9:30:00 AM	326.03	326.55			N/A
5/23/2019	EURHUF	11:30:00 AM	326.49	327.13			N/A
5/23/2019	EURHUF	1:30:00 PM	326.64	327.25			N/A
5/23/2019	EURHUF	3:30:00 PM	326.62	327.33			N/A
5/23/2019	EURHUF.fx	9:30:00 AM	326.283	326.468			N/A
5/23/2019	EURHUF.fx	11:30:00 AM	326.781	326.948			N/A
5/23/2019	EURHUF.fx	1:30:00 PM	326.929	327.108			N/A
5/23/2019	EURHUF.fx	3:30:00 PM	326.88	327.04			N/A
5/23/2019	EURJPY	9:30:00 AM	123.007	123.01			N/A
5/23/2019	EURJPY	11:30:00 AM	122.709	122.669			N/A
5/23/2019	EURJPY	1:30:00 PM	122.546	122.547			N/A
5/23/2019	EURJPY	3:30:00 PM	122.53	122.511			N/A
5/23/2019	EURJPY.fx	9:30:00 AM	123.009	123.006			N/A
5/23/2019	EURJPY.fx	11:30:00 AM	122.712	122.664			N/A
5/23/2019	EURJPY.fx	1:30:00 PM	122.549	122.542			N/A
5/23/2019	EURJPY.fx	3:30:00 PM	122.534	122.508			N/A
5/23/2019	EURMXN	9:30:00 AM	21.2086	21.2224			N/A
5/23/2019	EURMXN	11:30:00 AM	21.176	21.1876			N/A
5/23/2019	EURMXN	1:30:00 PM	21.2169	21.235			N/A
5/23/2019	EURMXN	3:30:00 PM	21.1747	21.1916			N/A
5/23/2019	EURMXN.fx	9:30:00 AM	21.2181	21.2138			N/A
5/23/2019	EURMXN.fx	11:30:00 AM	21.1847	21.1786			N/A
5/23/2019	EURMXN.fx	1:30:00 PM	21.2256	21.2263			N/A
5/23/2019	EURMXN.fx	3:30:00 PM	21.1847	21.1822			N/A
5/23/2019	EURNOK	9:30:00 AM	9.7642	9.7751			N/A
5/23/2019	EURNOK	11:30:00 AM	9.7489	9.7593			N/A
5/23/2019	EURNOK	1:30:00 PM	9.7512	9.7625			N/A
5/23/2019	EURNOK	3:30:00 PM	9.7471	9.7581			N/A
5/23/2019	EURNOK.fx	9:30:00 AM	9.76945	9.76978			N/A
5/23/2019	EURNOK.fx	11:30:00 AM	9.75435	9.75368			N/A
5/23/2019	EURNOK.fx	1:30:00 PM	9.75674	9.75706			N/A
5/23/2019	EURNOK.fx	3:30:00 PM	9.75281	9.7526			N/A
5/23/2019	EURNZD	9:30:00 AM	1.71706	1.7178			N/A
5/23/2019	EURNZD	11:30:00 AM	1.71577	1.71649			N/A

5/23/2019	EURNZD	1:30:00 PM	1.71659	1.7174			N/A
5/23/2019	EURNZD	3:30:00 PM	1.71535	1.71601			N/A
5/23/2019	EURNZD.fx	9:30:00 AM	1.71747	1.71739			N/A
5/23/2019	EURNZD.fx	11:30:00 AM	1.71619	1.71608			N/A
5/23/2019	EURNZD.fx	1:30:00 PM	1.71702	1.71695			N/A
5/23/2019	EURNZD.fx	3:30:00 PM	1.71578	1.71559			N/A
5/23/2019	EURPLN	9:30:00 AM	4.3037	4.3071			N/A
5/23/2019	EURPLN	11:30:00 AM	4.3083	4.3114			N/A
5/23/2019	EURPLN	1:30:00 PM	4.3076	4.3102			N/A
5/23/2019	EURPLN	3:30:00 PM	4.3045	4.3075			N/A
5/23/2019	EURPLN.fx	9:30:00 AM	4.30317	4.30772			N/A
5/23/2019	EURPLN.fx	11:30:00 AM	4.30768	4.31192			N/A
5/23/2019	EURPLN.fx	1:30:00 PM	4.30707	4.31068			N/A
5/23/2019	EURPLN.fx	3:30:00 PM	4.30392	4.30822			N/A
5/23/2019	EURRUB	9:30:00 AM					N/A
5/23/2019	EURRUB	11:30:00 AM	71.437	71.871			N/A
5/23/2019	EURRUB	1:30:00 PM	71.716	72.14			N/A
5/23/2019	EURRUB	3:30:00 PM	71.751	72.178			N/A
5/23/2019	EURSEK	9:30:00 AM	10.7466	10.751			N/A
5/23/2019	EURSEK	11:30:00 AM	10.7305	10.7342			N/A
5/23/2019	EURSEK	1:30:00 PM	10.7439	10.7476			N/A
5/23/2019	EURSEK	3:30:00 PM	10.7371	10.7409			N/A
5/23/2019	EURSEK.fx	9:30:00 AM	10.74821	10.74914			N/A
5/23/2019	EURSEK.fx	11:30:00 AM	10.73238	10.73231			N/A
5/23/2019	EURSEK.fx	1:30:00 PM	10.74564	10.74592			N/A
5/23/2019	EURSEK.fx	3:30:00 PM	10.73919	10.73892			N/A
5/23/2019	EURSGD	9:30:00 AM	1.5388	1.5396			N/A
5/23/2019	EURSGD	11:30:00 AM	1.5385	1.5392			N/A
5/23/2019	EURSGD	1:30:00 PM	1.5387	1.5395			N/A
5/23/2019	EURSGD	3:30:00 PM	1.5387	1.5394			N/A
5/23/2019	EURSGD.fx	9:30:00 AM	1.53915	1.5392			N/A
5/23/2019	EURSGD.fx	11:30:00 AM	1.53893	1.53875			N/A
5/23/2019	EURSGD.fx	1:30:00 PM	1.53905	1.53914			N/A
5/23/2019	EURSGD.fx	3:30:00 PM	1.53908	1.53895			N/A



5/23/2019	EURUSD	9:30:00 AM	1.1148	1.11481			N/A
5/23/2019	EURUSD	11:30:00 AM	1.11324	1.1133	10	10	N/A
5/23/2019	EURUSD	1:30:00 PM	1.11336	1.11332			N/A
5/23/2019	EURUSD	3:30:00 PM	1.11393	1.11378			N/A
5/23/2019	EURUSD.fx	9:30:00 AM	1.11501	1.11491			N/A
5/23/2019	EURUSD.fx	11:30:00 AM	1.11345	1.11339			N/A
5/23/2019	EURUSD.fx	1:30:00 PM	1.11356	1.11341			N/A
5/23/2019	EURUSD.fx	3:30:00 PM	1.11414	1.11388			N/A
5/23/2019	EURZAR	9:30:00 AM	16.0708	16.0762			N/A
5/23/2019	EURZAR	11:30:00 AM	16.0921	16.1088			N/A
5/23/2019	EURZAR	1:30:00 PM	16.106	16.1163			N/A
5/23/2019	EURZAR	3:30:00 PM	16.0844	16.0999			N/A
5/23/2019	EURZAR.fx	9:30:00 AM	16.07021	16.07675			N/A
5/23/2019	EURZAR.fx	11:30:00 AM	16.0915	16.10939			N/A
5/23/2019	EURZAR.fx	1:30:00 PM	16.10575	16.11704			N/A
5/23/2019	EURZAR.fx	3:30:00 PM	16.08341	16.10073			N/A
5/23/2019	GBPAUD	9:30:00 AM	1.83859	1.83884			N/A
5/23/2019	GBPAUD	11:30:00 AM	1.8357	1.83627			N/A
5/23/2019	GBPAUD	1:30:00 PM	1.83937	1.83985			N/A
5/23/2019	GBPAUD	3:30:00 PM	1.83818	1.83892			N/A
5/23/2019	GBPAUD.fx	9:30:00 AM	1.83897	1.83846			N/A
5/23/2019	GBPAUD.fx	11:30:00 AM	1.83612	1.83588			N/A
5/23/2019	GBPAUD.fx	1:30:00 PM	1.83978	1.83945			N/A
5/23/2019	GBPAUD.fx	3:30:00 PM	1.83859	1.83859			N/A
5/23/2019	GBPCAD	9:30:00 AM	1.69972	1.69976			N/A
5/23/2019	GBPCAD	11:30:00 AM	1.69733	1.69793			N/A
5/23/2019	GBPCAD	1:30:00 PM	1.70208	1.70265			N/A
5/23/2019	GBPCAD	3:30:00 PM	1.70275	1.70312			N/A
5/23/2019	GBPCAD.fx	9:30:00 AM	1.7001	1.69937			N/A
5/23/2019	GBPCAD.fx	11:30:00 AM	1.69772	1.69754			N/A
5/23/2019	GBPCAD.fx	1:30:00 PM	1.70248	1.70226			N/A
5/23/2019	GBPCAD.fx	3:30:00 PM	1.70314	1.70283			N/A
5/23/2019	GBPCHF	9:30:00 AM	1.2747	1.27469			N/A
5/23/2019	GBPCHF	11:30:00 AM	1.27285	1.27315			N/A

5/23/2019	GBPCHF	1:30:00 PM	1.27467	1.27498			N/A
5/23/2019	GBPCHF	3:30:00 PM	1.27361	1.27384			N/A
5/23/2019	GBPCHF.fx	9:30:00 AM	1.27487	1.27446			N/A
5/23/2019	GBPCHF.fx	11:30:00 AM	1.27305	1.27295			N/A
5/23/2019	GBPCHF.fx	1:30:00 PM	1.27487	1.27478			N/A
5/23/2019	GBPCHF.fx	3:30:00 PM	1.2738	1.27363			N/A
5/23/2019	GBPCZK	9:30:00 AM	29.229	29.243			N/A
5/23/2019	GBPCZK	11:30:00 AM	29.212	29.232			N/A
5/23/2019	GBPCZK	1:30:00 PM	29.262	29.282			N/A
5/23/2019	GBPCZK	3:30:00 PM	29.268	29.284			N/A
5/23/2019	GBPDKK	9:30:00 AM	8.461	8.47			N/A
5/23/2019	GBPDKK	11:30:00 AM	8.454	8.464			N/A
5/23/2019	GBPDKK	1:30:00 PM	8.469	8.48			N/A
5/23/2019	GBPDKK	3:30:00 PM	8.473	8.482			N/A
5/23/2019	GBPDKK.fx	9:30:00 AM	8.4602	8.4704			N/A
5/23/2019	GBPDKK.fx	11:30:00 AM	8.4521	8.4641			N/A
5/23/2019	GBPDKK.fx	1:30:00 PM	8.4678	8.4801			N/A
5/23/2019	GBPDKK.fx	3:30:00 PM	8.4711	8.483			N/A
5/23/2019	GBPHKD	9:30:00 AM	9.9159	9.9172			N/A
5/23/2019	GBPHKD	11:30:00 AM	9.8943	9.8982			N/A
5/23/2019	GBPHKD	1:30:00 PM	9.9133	9.9175			N/A
5/23/2019	GBPHKD	3:30:00 PM	9.9196	9.9214			N/A
5/23/2019	GBPHUF	9:30:00 AM	369.59	369.92			N/A
5/23/2019	GBPHUF	11:30:00 AM	369.85	370.3			N/A
5/23/2019	GBPHUF	1:30:00 PM	370.67	371.12			N/A
5/23/2019	GBPHUF	3:30:00 PM	370.73	370.98			N/A
5/23/2019	GBPJPY	9:30:00 AM	139.451	139.431	100	100	N/A
5/23/2019	GBPJPY	11:30:00 AM	138.975	138.948			N/A
5/23/2019	GBPJPY	1:30:00 PM	139.048	139.068			N/A
5/23/2019	GBPJPY	3:30:00 PM	139.063	139.056			N/A
5/23/2019	GBPJPY.fx	9:30:00 AM	139.47	139.412			N/A
5/23/2019	GBPJPY.fx	11:30:00 AM	138.995	138.928			N/A
5/23/2019	GBPJPY.fx	1:30:00 PM	139.067	139.048			N/A
5/23/2019	GBPJPY.fx	3:30:00 PM	139.082	139.042			N/A

5/23/2019	GBPMXN	9:30:00 AM	24.0391	24.047			N/A
5/23/2019	GBPMXN	11:30:00 AM	23.9814	23.9892			N/A
5/23/2019	GBPMXN	1:30:00 PM	24.0742	24.0876			N/A
5/23/2019	GBPMXN	3:30:00 PM	24.0307	24.0387			N/A
5/23/2019	GBPNOK	9:30:00 AM	11.072	11.0783			N/A
5/23/2019	GBPNOK	11:30:00 AM	11.0437	11.0526			N/A
5/23/2019	GBPNOK	1:30:00 PM	11.0669	11.0766			N/A
5/23/2019	GBPNOK	3:30:00 PM	11.0648	11.0748			N/A
5/23/2019	GBPNOK.fx	9:30:00 AM	11.07669	11.0736			N/A
5/23/2019	GBPNOK.fx	11:30:00 AM	11.04865	11.04771			N/A
5/23/2019	GBPNOK.fx	1:30:00 PM	11.07184	11.0716			N/A
5/23/2019	GBPNOK.fx	3:30:00 PM	11.07005	11.06962			N/A
5/23/2019	GBPNZD	9:30:00 AM	1.94696	1.94699			N/A
5/23/2019	GBPNZD	11:30:00 AM	1.9435	1.94403			N/A
5/23/2019	GBPNZD	1:30:00 PM	1.94806	1.94858			N/A
5/23/2019	GBPNZD	3:30:00 PM	1.94704	1.94746			N/A
5/23/2019	GBPNZD.fx	9:30:00 AM	1.94731	1.94663			N/A
5/23/2019	GBPNZD.fx	11:30:00 AM	1.94386	1.94367			N/A
5/23/2019	GBPNZD.fx	1:30:00 PM	1.94843	1.94819			N/A
5/23/2019	GBPNZD.fx	3:30:00 PM	1.94741	1.94723			N/A
5/23/2019	GBPPLN	9:30:00 AM	4.8805	4.8807			N/A
5/23/2019	GBPPLN	11:30:00 AM	4.8808	4.8822			N/A
5/23/2019	GBPPLN	1:30:00 PM	4.8892	4.8897			N/A
5/23/2019	GBPPLN	3:30:00 PM	4.8868	4.8882			N/A
5/23/2019	GBPPLN.fx	9:30:00 AM	4.8784	4.88288			N/A
5/23/2019	GBPPLN.fx	11:30:00 AM	4.87846	4.88437			N/A
5/23/2019	GBPPLN.fx	1:30:00 PM	4.88696	4.89179			N/A
5/23/2019	GBPPLN.fx	3:30:00 PM	4.88446	4.89065			N/A
5/23/2019	GBPSEK	9:30:00 AM	12.1826	12.1875			N/A
5/23/2019	GBPSEK	11:30:00 AM	12.1525	12.1596			N/A
5/23/2019	GBPSEK	1:30:00 PM	12.1904	12.1972			N/A
5/23/2019	GBPSEK	3:30:00 PM	12.185	12.1929			N/A
5/23/2019	GBPSEK.fx	9:30:00 AM	12.17898	12.19157			N/A
5/23/2019	GBPSEK.fx	11:30:00 AM	12.149	12.16321			N/A

5/23/2019	GBPSEK.fx	1:30:00 PM	12.18676	12.2008			N/A
5/23/2019	GBPSEK.fx	3:30:00 PM	12.18193	12.19708			N/A
5/23/2019	GBPSGD	9:30:00 AM	1.7447	1.7449			N/A
5/23/2019	GBPSGD	11:30:00 AM	1.7428	1.7431			N/A
5/23/2019	GBPSGD	1:30:00 PM	1.7462	1.7469			N/A
5/23/2019	GBPSGD	3:30:00 PM	1.7466	1.7469			N/A
5/23/2019	GBPSGD.fx	9:30:00 AM	1.74295	1.74674			N/A
5/23/2019	GBPSGD.fx	11:30:00 AM	1.74094	1.74492			N/A
5/23/2019	GBPSGD.fx	1:30:00 PM	1.74437	1.74865			N/A
5/23/2019	GBPSGD.fx	3:30:00 PM	1.74474	1.74885			N/A
5/23/2019	GBPUSD	9:30:00 AM	1.2642	1.26362	4900	4900	N/A
5/23/2019	GBPUSD	11:30:00 AM	1.26116	1.26104			N/A
5/23/2019	GBPUSD	1:30:00 PM	1.26364	1.26355			N/A
5/23/2019	GBPUSD	3:30:00 PM	1.26458	1.26422	100	100	N/A
5/23/2019	GBPUSD.fx	9:30:00 AM	1.26425	1.26356			N/A
5/23/2019	GBPUSD.fx	11:30:00 AM	1.26121	1.26099			N/A
5/23/2019	GBPUSD.fx	1:30:00 PM	1.26369	1.26348			N/A
5/23/2019	GBPUSD.fx	3:30:00 PM	1.26464	1.26413			N/A
5/23/2019	GBPZAR	9:30:00 AM	18.215	18.2304			N/A
5/23/2019	GBPZAR	11:30:00 AM	18.2245	18.2478			N/A
5/23/2019	GBPZAR	1:30:00 PM	18.273	18.2923			N/A
5/23/2019	GBPZAR	3:30:00 PM	18.2527	18.2788			N/A
5/23/2019	GBPZAR.fx	9:30:00 AM	18.2225	18.2221			N/A
5/23/2019	GBPZAR.fx	11:30:00 AM	18.2317	18.2409			N/A
5/23/2019	GBPZAR.fx	1:30:00 PM	18.2805	18.2846			N/A
5/23/2019	GBPZAR.fx	3:30:00 PM	18.2592	18.2717			N/A
5/23/2019	GOLD	9:30:00 AM	1274.04	1274.19			N/A
5/23/2019	GOLD	11:30:00 AM	1275.42	1275.59			N/A
5/23/2019	GOLD	1:30:00 PM	1276.58	1276.85			N/A
5/23/2019	GOLD	3:30:00 PM	1283.41	1282.61			N/A
5/23/2019	HKDJPY	9:30:00 AM	14.06	14.07			N/A
5/23/2019	HKDJPY	11:30:00 AM	14.04	14.05			N/A
5/23/2019	HKDJPY	1:30:00 PM					N/A
5/23/2019	HKDJPY	3:30:00 PM	14.01	14.02			N/A

5/23/2019	HKDJPY.fx	9:30:00 AM	14.054	14.061			N/A
5/23/2019	HKDJPY.fx	11:30:00 AM	14.036	14.039			N/A
5/23/2019	HKDJPY.fx	1:30:00 PM	14.018	14.024			N/A
5/23/2019	HKDJPY.fx	3:30:00 PM	14.012	14.016			N/A
5/23/2019	HUFJPY	9:30:00 AM	0.3772	0.3775			N/A
5/23/2019	HUFJPY	11:30:00 AM	0.3758	0.3761			N/A
5/23/2019	HUFJPY	1:30:00 PM	0.375	0.3753			N/A
5/23/2019	HUFJPY	3:30:00 PM	0.3751	0.3754			N/A
5/23/2019	JP225.i	9:30:00 AM	21095.83	21108.33			N/A
5/23/2019	JP225.i	11:30:00 AM	21013.33	21023.33			N/A
5/23/2019	JP225.i	1:30:00 PM	20943.33	20958.33			N/A
5/23/2019	JP225.i	3:30:00 PM	20955.83	20960.83			N/A
5/23/2019	MXNJPY	9:30:00 AM	5.8	5.81			N/A
5/23/2019	MXNJPY	11:30:00 AM					N/A
5/23/2019	MXNJPY	1:30:00 PM	5.76	5.78			N/A
5/23/2019	MXNJPY	3:30:00 PM	5.78	5.79			N/A
5/23/2019	NASDAQ.i	9:30:00 AM					N/A
5/23/2019	NASDAQ.i	11:30:00 AM					N/A
5/23/2019	NASDAQ.i	1:30:00 PM					N/A
5/23/2019	NASDAQ.i	3:30:00 PM					N/A
5/23/2019	NOKJPY	9:30:00 AM	12.58	12.61			N/A
5/23/2019	NOKJPY	11:30:00 AM	12.57	12.6			N/A
5/23/2019	NOKJPY	1:30:00 PM	12.55	12.58			N/A
5/23/2019	NOKJPY	3:30:00 PM	12.55	12.58			N/A
5/23/2019	NOKJPY.fx	9:30:00 AM	12.588	12.594			N/A
5/23/2019	NOKJPY.fx	11:30:00 AM	12.578	12.58			N/A
5/23/2019	NOKJPY.fx	1:30:00 PM	12.557	12.563			N/A
5/23/2019	NOKJPY.fx	3:30:00 PM	12.562	12.566			N/A
5/23/2019	NZDCAD	9:30:00 AM	0.87267	0.87333			N/A
5/23/2019	NZDCAD	11:30:00 AM	0.87304	0.87371			N/A
5/23/2019	NZDCAD	1:30:00 PM	0.87344	0.87397			N/A
5/23/2019	NZDCAD	3:30:00 PM	0.87421	0.87481			N/A
5/23/2019	NZDCAD.fx	9:30:00 AM	0.873	0.873			N/A
5/23/2019	NZDCAD.fx	11:30:00 AM	0.87338	0.87337			N/A

5/23/2019	NZDCAD.fx	1:30:00 PM	0.87377	0.87363			N/A
5/23/2019	NZDCAD.fx	3:30:00 PM	0.87455	0.87448			N/A
5/23/2019	NZDCHF	9:30:00 AM	0.65441	0.65508			N/A
5/23/2019	NZDCHF	11:30:00 AM	0.65456	0.65528			N/A
5/23/2019	NZDCHF	1:30:00 PM	0.65394	0.65465			N/A
5/23/2019	NZDCHF	3:30:00 PM	0.65378	0.65435			N/A
5/23/2019	NZDCHF.fx	9:30:00 AM	0.65475	0.65473			N/A
5/23/2019	NZDCHF.fx	11:30:00 AM	0.6549	0.65492			N/A
5/23/2019	NZDCHF.fx	1:30:00 PM	0.65429	0.65429			N/A
5/23/2019	NZDCHF.fx	3:30:00 PM	0.65411	0.654			N/A
5/23/2019	NZDCZK	9:30:00 AM	15.01	15.022			N/A
5/23/2019	NZDCZK	11:30:00 AM	15.027	15.039			N/A
5/23/2019	NZDCZK	1:30:00 PM	15.018	15.028			N/A
5/23/2019	NZDCZK	3:30:00 PM	15.028	15.04			N/A
5/23/2019	NZDDKK	9:30:00 AM	4.345	4.349			N/A
5/23/2019	NZDDKK	11:30:00 AM					N/A
5/23/2019	NZDDKK	1:30:00 PM					N/A
5/23/2019	NZDDKK	3:30:00 PM	4.351	4.354			N/A
5/23/2019	NZDHKD	9:30:00 AM	5.0916	5.0941			N/A
5/23/2019	NZDHKD	11:30:00 AM	5.0892	5.0921			N/A
5/23/2019	NZDHKD	1:30:00 PM	5.0873	5.0897			N/A
5/23/2019	NZDHKD	3:30:00 PM	5.0927	5.0951			N/A
5/23/2019	NZDHUF	9:30:00 AM	189.78	189.99			N/A
5/23/2019	NZDHUF	11:30:00 AM	190.23	190.52			N/A
5/23/2019	NZDHUF	1:30:00 PM	190.21	190.49			N/A
5/23/2019	NZDHUF	3:30:00 PM	190.32	190.54			N/A
5/23/2019	NZDJPY	9:30:00 AM	71.589	71.656			N/A
5/23/2019	NZDJPY	11:30:00 AM	71.468	71.517			N/A
5/23/2019	NZDJPY	1:30:00 PM	71.338	71.404			N/A
5/23/2019	NZDJPY	3:30:00 PM	71.385	71.446			N/A
5/23/2019	NZDJPY.fx	9:30:00 AM	71.62	71.623			N/A
5/23/2019	NZDJPY.fx	11:30:00 AM	71.499	71.484			N/A
5/23/2019	NZDJPY.fx	1:30:00 PM	71.369	71.371			N/A
5/23/2019	NZDJPY.fx	3:30:00 PM	71.416	71.414			N/A

5/23/2019	NZDMXN	9:30:00 AM	12.3451	12.3474			N/A
5/23/2019	NZDMXN	11:30:00 AM	12.3357	12.3392			N/A
5/23/2019	NZDMXN	1:30:00 PM	12.3554	12.36			N/A
5/23/2019	NZDMXN	3:30:00 PM	12.3388	12.343			N/A
5/23/2019	NZDNOK	9:30:00 AM	5.6833	5.6858			N/A
5/23/2019	NZDNOK	11:30:00 AM	5.6795	5.6827			N/A
5/23/2019	NZDNOK	1:30:00 PM	5.6786	5.6817			N/A
5/23/2019	NZDNOK	3:30:00 PM	5.6795	5.6817			N/A
5/23/2019	NZDPLN	9:30:00 AM	2.5046	2.5053			N/A
5/23/2019	NZDPLN	11:30:00 AM	2.5098	2.5113			N/A
5/23/2019	NZDPLN	1:30:00 PM	2.5082	2.509			N/A
5/23/2019	NZDPLN	3:30:00 PM	2.5079	2.5089			N/A
5/23/2019	NZDSEK	9:30:00 AM	6.2518	6.2581			N/A
5/23/2019	NZDSEK	11:30:00 AM	6.2477	6.2539			N/A
5/23/2019	NZDSEK	1:30:00 PM	6.2524	6.2586			N/A
5/23/2019	NZDSEK	3:30:00 PM	6.253	6.2597			N/A
5/23/2019	NZDSGD	9:30:00 AM	0.8959	0.8966			N/A
5/23/2019	NZDSGD	11:30:00 AM	0.8964	0.897			N/A
5/23/2019	NZDSGD	1:30:00 PM	0.8961	0.8967			N/A
5/23/2019	NZDSGD	3:30:00 PM	0.8968	0.8974			N/A
5/23/2019	NZDSGD.fx	9:30:00 AM	0.89593	0.8965			N/A
5/23/2019	NZDSGD.fx	11:30:00 AM	0.89643	0.89693			N/A
5/23/2019	NZDSGD.fx	1:30:00 PM	0.8961	0.89666			N/A
5/23/2019	NZDSGD.fx	3:30:00 PM	0.89677	0.8973			N/A
5/23/2019	NZDUSD	9:30:00 AM	0.64906	0.64916			N/A
5/23/2019	NZDUSD	11:30:00 AM	0.64867	0.64881			N/A
5/23/2019	NZDUSD	1:30:00 PM	0.64843	0.64847			N/A
5/23/2019	NZDUSD	3:30:00 PM	0.64925	0.6493			N/A
5/23/2019	NZDUSD.fx	9:30:00 AM	0.64913	0.64917			N/A
5/23/2019	NZDUSD.fx	11:30:00 AM	0.64875	0.64882			N/A
5/23/2019	NZDUSD.fx	1:30:00 PM	0.64852	0.64848			N/A
5/23/2019	NZDUSD.fx	3:30:00 PM	0.64933	0.64932			N/A
5/23/2019	NZDZAR	9:30:00 AM	9.3484	9.3546			N/A
5/23/2019	NZDZAR	11:30:00 AM	9.3687	9.3843			N/A

5/23/2019	NZDZAR	1:30:00 PM	9.3732	9.3833			N/A
5/23/2019	NZDZAR	3:30:00 PM	9.3656	9.3813			N/A
5/23/2019	SEKJPY	9:30:00 AM	11.44	11.45			N/A
5/23/2019	SEKJPY	11:30:00 AM	11.43	11.44			N/A
5/23/2019	SEKJPY	1:30:00 PM	11.4	11.41			N/A
5/23/2019	SEKJPY	3:30:00 PM	11.41	11.42			N/A
5/23/2019	SEKJPY.fx	9:30:00 AM	11.434	11.453			N/A
5/23/2019	SEKJPY.fx	11:30:00 AM	11.424	11.439			N/A
5/23/2019	SEKJPY.fx	1:30:00 PM	11.396	11.413			N/A
5/23/2019	SEKJPY.fx	3:30:00 PM	11.4	11.417			N/A
5/23/2019	SGDJPY	9:30:00 AM	79.91	79.91			N/A
5/23/2019	SGDJPY	11:30:00 AM	79.7	79.71			N/A
5/23/2019	SGDJPY	1:30:00 PM	79.64	79.62			N/A
5/23/2019	SGDJPY	3:30:00 PM	79.59	79.61			N/A
5/23/2019	SILVER	9:30:00 AM	14.27	14.64			N/A
5/23/2019	SILVER	11:30:00 AM	14.26	14.64			N/A
5/23/2019	SILVER	1:30:00 PM	14.28	14.65			N/A
5/23/2019	SILVER	3:30:00 PM	14.39	14.75			N/A
5/23/2019	SPX500.i	9:30:00 AM	2840.75	2841.8			N/A
5/23/2019	SPX500.i	11:30:00 AM	2835	2835.3			N/A
5/23/2019	SPX500.i	1:30:00 PM	2828.54	2829.3			N/A
5/23/2019	SPX500.i	3:30:00 PM	2831.38	2830.55			N/A
5/23/2019	UK100.i	9:30:00 AM	7298.77	7299.02			N/A
5/23/2019	UK100.i	11:30:00 AM	7273.36	7273.52			N/A
5/23/2019	UK100.i	1:30:00 PM	7233.52	7234.27			N/A
5/23/2019	UK100.i	3:30:00 PM	7247.36	7244.02			N/A
5/23/2019	USDCAD	9:30:00 AM	1.34487	1.34499			N/A
5/23/2019	USDCAD	11:30:00 AM	1.34626	1.3463			N/A
5/23/2019	USDCAD	1:30:00 PM	1.34743	1.34738			N/A
5/23/2019	USDCAD	3:30:00 PM	1.34691	1.34692			N/A
5/23/2019	USDCAD.fx	9:30:00 AM	1.34491	1.34496			N/A
5/23/2019	USDCAD.fx	11:30:00 AM	1.34628	1.34627			N/A
5/23/2019	USDCAD.fx	1:30:00 PM	1.34745	1.34734			N/A
5/23/2019	USDCAD.fx	3:30:00 PM	1.34694	1.34686			N/A



5/23/2019	USDCHF	9:30:00 AM	1.00854	1.00856			N/A
5/23/2019	USDCHF	11:30:00 AM	1.00937	1.00946			N/A
5/23/2019	USDCHF	1:30:00 PM	1.00894	1.00896			N/A
5/23/2019	USDCHF	3:30:00 PM	1.00747	1.00719			N/A
5/23/2019	USDCHF.fx	9:30:00 AM	1.00859	1.00849			N/A
5/23/2019	USDCHF.fx	11:30:00 AM	1.00942	1.00939			N/A
5/23/2019	USDCHF.fx	1:30:00 PM	1.00899	1.00889			N/A
5/23/2019	USDCHF.fx	3:30:00 PM	1.00751	1.00711			N/A
5/23/2019	USDCZK	9:30:00 AM	23.141	23.163			N/A
5/23/2019	USDCZK	11:30:00 AM	23.182	23.205			N/A
5/23/2019	USDCZK	1:30:00 PM	23.178	23.198			N/A
5/23/2019	USDCZK	3:30:00 PM	23.166	23.184			N/A
5/23/2019	USDCZK.fx	9:30:00 AM	23.15	23.1542			N/A
5/23/2019	USDCZK.fx	11:30:00 AM	23.191	23.196			N/A
5/23/2019	USDCZK.fx	1:30:00 PM	23.1872	23.188			N/A
5/23/2019	USDCZK.fx	3:30:00 PM	23.175	23.1742			N/A
5/23/2019	USDDKK	9:30:00 AM	6.6967	6.7002			N/A
5/23/2019	USDDKK	11:30:00 AM	6.7059	6.7095			N/A
5/23/2019	USDDKK	1:30:00 PM	6.7059	6.7089			N/A
5/23/2019	USDDKK	3:30:00 PM	6.7035	6.7062			N/A
5/23/2019	USDDKK.fx	9:30:00 AM	6.69735	6.69822			N/A
5/23/2019	USDDKK.fx	11:30:00 AM	6.70633	6.70744			N/A
5/23/2019	USDDKK.fx	1:30:00 PM	6.70644	6.70694			N/A
5/23/2019	USDDKK.fx	3:30:00 PM	6.70386	6.70395			N/A
5/23/2019	USDHKD	9:30:00 AM	7.8478	7.8481			N/A
5/23/2019	USDHKD	11:30:00 AM	7.8488	7.8487			N/A
5/23/2019	USDHKD	1:30:00 PM	7.8486	7.8491			N/A
5/23/2019	USDHKD	3:30:00 PM	7.8483	7.8485			N/A
5/23/2019	USDHKD.fx	9:30:00 AM	7.84772	7.8481			N/A
5/23/2019	USDHKD.fx	11:30:00 AM	7.84866	7.84919			N/A
5/23/2019	USDHKD.fx	1:30:00 PM	7.84863	7.8491			N/A
5/23/2019	USDHKD.fx	3:30:00 PM	7.84818	7.84869			N/A
5/23/2019	USDHUF	9:30:00 AM	292.55	292.95			N/A
5/23/2019	USDHUF	11:30:00 AM	293.35	293.8			N/A

5/23/2019	USDHUF	1:30:00 PM	293.47	293.9			N/A
5/23/2019	USDHUF	3:30:00 PM	293.3	293.7			N/A
5/23/2019	USDHUF.fx	9:30:00 AM	292.745	292.754			N/A
5/23/2019	USDHUF.fx	11:30:00 AM	293.554	293.587			N/A
5/23/2019	USDHUF.fx	1:30:00 PM	293.675	293.693			N/A
5/23/2019	USDHUF.fx	3:30:00 PM	293.493	293.495			N/A
5/23/2019	USDINR	9:30:00 AM	64.61	74.58			N/A
5/23/2019	USDINR	11:30:00 AM	64.75	74.73			N/A
5/23/2019	USDINR	1:30:00 PM					N/A
5/23/2019	USDINR	3:30:00 PM					N/A
5/23/2019	USDJPY	9:30:00 AM	110.324	110.33			N/A
5/23/2019	USDJPY	11:30:00 AM	110.204	110.177			N/A
5/23/2019	USDJPY	1:30:00 PM	110.055	110.054			N/A
5/23/2019	USDJPY	3:30:00 PM	109.996	109.987			N/A
5/23/2019	USDJPY.fx	9:30:00 AM	110.331	110.323			N/A
5/23/2019	USDJPY.fx	11:30:00 AM	110.208	110.17			N/A
5/23/2019	USDJPY.fx	1:30:00 PM	110.061	110.047			N/A
5/23/2019	USDJPY.fx	3:30:00 PM	110.002	109.98			N/A
5/23/2019	USDMXN	9:30:00 AM	19.027	19.028			N/A
5/23/2019	USDMXN	11:30:00 AM	19.023	19.026			N/A
5/23/2019	USDMXN	1:30:00 PM	19.059	19.064			N/A
5/23/2019	USDMXN	3:30:00 PM	19.012	19.019			N/A
5/23/2019	USDMXN.f	9:30:00 AM	19.031	19.0245			N/A
5/23/2019	USDMXN.f	11:30:00 AM	19.0263	19.022			N/A
5/23/2019	USDMXN.f	1:30:00 PM	19.0623	19.0605			N/A
5/23/2019	USDMXN.f	3:30:00 PM	19.0156	19.0154			N/A
5/23/2019	USDNOK	9:30:00 AM	8.7586	8.7669			N/A
5/23/2019	USDNOK	11:30:00 AM	8.7574	8.7639			N/A
5/23/2019	USDNOK	1:30:00 PM	8.7594	8.7662			N/A
5/23/2019	USDNOK	3:30:00 PM	8.752	8.7579			N/A
5/23/2019	USDNOK.fx	9:30:00 AM	8.76253	8.76263			N/A
5/23/2019	USDNOK.fx	11:30:00 AM	8.76127	8.75927			N/A
5/23/2019	USDNOK.fx	1:30:00 PM	8.76342	8.76164			N/A
5/23/2019	USDNOK.fx	3:30:00 PM	8.75612	8.75298			N/A

5/23/2019	USDPLN	9:30:00 AM	3.8609	3.8622			N/A
5/23/2019	USDPLN	11:30:00 AM	3.8701	3.8716			N/A
5/23/2019	USDPLN	1:30:00 PM	3.8696	3.8701			N/A
5/23/2019	USDPLN	3:30:00 PM	3.8651	3.8659			N/A
5/23/2019	USDPLN.fx	9:30:00 AM	3.86018	3.86289			N/A
5/23/2019	USDPLN.fx	11:30:00 AM	3.86925	3.87233			N/A
5/23/2019	USDPLN.fx	1:30:00 PM	3.86874	3.87072			N/A
5/23/2019	USDPLN.fx	3:30:00 PM	3.86429	3.86663			N/A
5/23/2019	USDRUB	9:30:00 AM					N/A
5/23/2019	USDRUB	11:30:00 AM	64.292	64.68			N/A
5/23/2019	USDRUB	1:30:00 PM	64.537	64.916			N/A
5/23/2019	USDRUB	3:30:00 PM	64.533	64.928			N/A
5/23/2019	USDSEK	9:30:00 AM	9.6383	9.6416			N/A
5/23/2019	USDSEK	11:30:00 AM	9.6371	9.6408			N/A
5/23/2019	USDSEK	1:30:00 PM	9.6489	9.6509			N/A
5/23/2019	USDSEK	3:30:00 PM	9.6386	9.6405			N/A
5/23/2019	USDSEK.fx	9:30:00 AM	9.64095	9.63969			N/A
5/23/2019	USDSEK.fx	11:30:00 AM	9.64003	9.63872			N/A
5/23/2019	USDSEK.fx	1:30:00 PM	9.65188	9.64904			N/A
5/23/2019	USDSEK.fx	3:30:00 PM	9.6411	9.63888			N/A
5/23/2019	USDSGD	9:30:00 AM	1.3804	1.3807			N/A
5/23/2019	USDSGD	11:30:00 AM	1.3819	1.3822			N/A
5/23/2019	USDSGD	1:30:00 PM	1.3821	1.3823			N/A
5/23/2019	USDSGD	3:30:00 PM	1.3812	1.3815			N/A
5/23/2019	USDSGD.fx	9:30:00 AM	1.38034	1.38071			N/A
5/23/2019	USDSGD.fx	11:30:00 AM	1.3819	1.38224			N/A
5/23/2019	USDSGD.fx	1:30:00 PM	1.38205	1.38237			N/A
5/23/2019	USDSGD.fx	3:30:00 PM	1.38127	1.38164			N/A
5/23/2019	USDZAR	9:30:00 AM	14.415	14.4188			N/A
5/23/2019	USDZAR	11:30:00 AM	14.4527	14.4677			N/A
5/23/2019	USDZAR	1:30:00 PM	14.4638	14.4719			N/A
5/23/2019	USDZAR	3:30:00 PM	14.4395	14.4511			N/A
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5/23/2019	USDZAR.fx	11:30:00 AM					N/A

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5/23/2019	USDZAR.fx	3:30:00 PM					N/A
5/23/2019	XAUUSD	9:30:00 AM	1274.04	1274.18			N/A
5/23/2019	XAUUSD	11:30:00 AM	1275.42	1275.56			N/A
5/23/2019	XAUUSD	1:30:00 PM	1276.58	1276.84			N/A
5/23/2019	XAUUSD	3:30:00 PM	1283.38	1282.61			N/A
5/23/2019	ZARJPY	9:30:00 AM	7.64	7.65			N/A
5/23/2019	ZARJPY	11:30:00 AM	7.6	7.62			N/A
5/23/2019	ZARJPY	1:30:00 PM	7.59	7.61			N/A
5/23/2019	ZARJPY	3:30:00 PM	7.6	7.61			N/A
5/23/2019	ZARJPY.fx	9:30:00 AM	7.651	7.651			N/A
5/23/2019	ZARJPY.fx	11:30:00 AM	7.618	7.621			N/A
5/23/2019	ZARJPY.fx	1:30:00 PM	7.606	7.605			N/A
5/23/2019	ZARJPY.fx	3:30:00 PM	7.613	7.614			N/A
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5/24/2019	AUDHUF	11:30:00 AM	200.87	201.05			N/A
5/24/2019	AUDHUF	1:30:00 PM	201.03	201.26			N/A
5/24/2019	AUDHUF	3:30:00 PM	200.75	200.88			N/A
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5/24/2019	AUDNZD	3:30:00 PM	1.05538	1.05627			N/A
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5/24/2019	AUDNZD.fx	3:30:00 PM	1.0558	1.0558			N/A
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5/24/2019	AUDPLN	11:30:00 AM	2.649	2.6521			N/A
5/24/2019	AUDPLN	1:30:00 PM	2.6516	2.6546			N/A
5/24/2019	AUDPLN	3:30:00 PM	2.6501	2.6527			N/A
5/24/2019	AUDSEK	9:30:00 AM	6.6171	6.6178			N/A
5/24/2019	AUDSEK	11:30:00 AM	6.6168	6.62			N/A
5/24/2019	AUDSEK	1:30:00 PM	6.6065	6.6083			N/A
5/24/2019	AUDSEK	3:30:00 PM	6.603	6.6055			N/A
5/24/2019	AUDSEK.fx	9:30:00 AM	6.6124	6.6222			N/A
5/24/2019	AUDSEK.fx	11:30:00 AM	6.6123	6.6242			N/A
5/24/2019	AUDSEK.fx	1:30:00 PM	6.602	6.6127			N/A
5/24/2019	AUDSEK.fx	3:30:00 PM	6.5984	6.6096			N/A
5/24/2019	AUDSGD	9:30:00 AM	0.9498	0.9501			N/A
5/24/2019	AUDSGD	11:30:00 AM	0.9503	0.9505			N/A
5/24/2019	AUDSGD	1:30:00 PM	0.9506	0.9507			N/A
5/24/2019	AUDSGD	3:30:00 PM	0.951	0.9512			N/A
5/24/2019	AUDSGD.fx	9:30:00 AM	0.94991	0.94994			N/A
5/24/2019	AUDSGD.fx	11:30:00 AM	0.9504	0.95043			N/A
5/24/2019	AUDSGD.fx	1:30:00 PM	0.95071	0.95073			N/A
5/24/2019	AUDSGD.fx	3:30:00 PM	0.95111	0.95111			N/A
5/24/2019	AUDUSD	9:30:00 AM	0.68968	0.68969			N/A
5/24/2019	AUDUSD	11:30:00 AM	0.69015	0.69026			N/A
5/24/2019	AUDUSD	1:30:00 PM	0.69068	0.69074			N/A
5/24/2019	AUDUSD	3:30:00 PM	0.69103	0.69104			N/A
5/24/2019	AUDUSD.fx	9:30:00 AM	0.68974	0.68963			N/A
5/24/2019	AUDUSD.fx	11:30:00 AM	0.6902	0.6902			N/A

5/24/2019	AUDUSD.fx	1:30:00 PM	0.69074	0.69068			N/A
5/24/2019	AUDUSD.fx	3:30:00 PM	0.69108	0.691			N/A
5/24/2019	AUDZAR	9:30:00 AM	9.9298	9.9418			N/A
5/24/2019	AUDZAR	11:30:00 AM	9.9432	9.9561			N/A
5/24/2019	AUDZAR	1:30:00 PM	9.943	9.9552			N/A
5/24/2019	AUDZAR	3:30:00 PM	9.946	9.9582			N/A
5/24/2019	AUS200.i	9:30:00 AM					N/A
5/24/2019	AUS200.i	11:30:00 AM	6471.93	6474.13			N/A
5/24/2019	AUS200.i	1:30:00 PM	6478.53	6480.13			N/A
5/24/2019	AUS200.i	3:30:00 PM	6469.93	6471.83			N/A
5/24/2019	BCHUSD	9:30:00 AM	407.45	408.82			N/A
5/24/2019	BCHUSD	11:30:00 AM	423.19	423.73			N/A
5/24/2019	BCHUSD	1:30:00 PM	426.31	427.35			N/A
5/24/2019	BCHUSD	3:30:00 PM	423.66	423.22			N/A
5/24/2019	CADCHF	9:30:00 AM	0.74413	0.74482			N/A
5/24/2019	CADCHF	11:30:00 AM	0.74471	0.74542			N/A
5/24/2019	CADCHF	1:30:00 PM	0.74498	0.74565			N/A
5/24/2019	CADCHF	3:30:00 PM	0.74452	0.74503			N/A
5/24/2019	CADCHF.fx	9:30:00 AM	0.74449	0.74446			N/A
5/24/2019	CADCHF.fx	11:30:00 AM	0.74506	0.74506			N/A
5/24/2019	CADCHF.fx	1:30:00 PM	0.74532	0.74528			N/A
5/24/2019	CADCHF.fx	3:30:00 PM	0.74484	0.74469			N/A
5/24/2019	CADCZK	9:30:00 AM	17.127	17.14			N/A
5/24/2019	CADCZK	11:30:00 AM	17.146	17.163			N/A
5/24/2019	CADCZK	1:30:00 PM	17.135	17.15			N/A
5/24/2019	CADCZK	3:30:00 PM	17.125	17.132			N/A
5/24/2019	CADDDKK	9:30:00 AM					N/A
5/24/2019	CADDDKK	11:30:00 AM	4.959	4.963			N/A
5/24/2019	CADDDKK	1:30:00 PM	4.959	4.962			N/A
5/24/2019	CADDDKK	3:30:00 PM	4.956	4.958			N/A
5/24/2019	CADHKD	9:30:00 AM	5.826	5.8299			N/A
5/24/2019	CADHKD	11:30:00 AM	5.8321	5.8357			N/A
5/24/2019	CADHKD	1:30:00 PM	5.832	5.8354			N/A
5/24/2019	CADHKD	3:30:00 PM	5.831	5.8344			N/A

5/24/2019	CADHUF	9:30:00 AM	216.23	216.38			N/A
5/24/2019	CADHUF	11:30:00 AM	216.46	216.57			N/A
5/24/2019	CADHUF	1:30:00 PM	216.43	216.58			N/A
5/24/2019	CADHUF	3:30:00 PM	215.99	216.01			N/A
5/24/2019	CADJPY	9:30:00 AM	81.29	81.352			N/A
5/24/2019	CADJPY	11:30:00 AM	81.403	81.462			N/A
5/24/2019	CADJPY	1:30:00 PM	81.513	81.572			N/A
5/24/2019	CADJPY	3:30:00 PM	81.392	81.428			N/A
5/24/2019	CADJPY.fx	9:30:00 AM	81.323	81.317			N/A
5/24/2019	CADJPY.fx	11:30:00 AM	81.438	81.427			N/A
5/24/2019	CADJPY.fx	1:30:00 PM	81.546	81.536			N/A
5/24/2019	CADJPY.fx	3:30:00 PM	81.425	81.395			N/A
5/24/2019	CADMXN	9:30:00 AM	14.1096	14.1205			N/A
5/24/2019	CADMXN	11:30:00 AM	14.1182	14.1295			N/A
5/24/2019	CADMXN	1:30:00 PM	14.1318	14.1406			N/A
5/24/2019	CADMXN	3:30:00 PM	14.1469	14.1559			N/A
5/24/2019	CADNOK	9:30:00 AM	6.4849	6.4875			N/A
5/24/2019	CADNOK	11:30:00 AM	6.4804	6.4832			N/A
5/24/2019	CADNOK	1:30:00 PM	6.4756	6.4798			N/A
5/24/2019	CADNOK	3:30:00 PM	6.4705	6.4721			N/A
5/24/2019	CADPLN	9:30:00 AM	2.8524	2.8533			N/A
5/24/2019	CADPLN	11:30:00 AM	2.8535	2.8547			N/A
5/24/2019	CADPLN	1:30:00 PM	2.8542	2.8559			N/A
5/24/2019	CADPLN	3:30:00 PM	2.8502	2.8512			N/A
5/24/2019	CADSEK	9:30:00 AM	7.1242	7.125			N/A
5/24/2019	CADSEK	11:30:00 AM	7.1256	7.1295			N/A
5/24/2019	CADSEK	1:30:00 PM	7.1084	7.1102			N/A
5/24/2019	CADSEK	3:30:00 PM	7.1005	7.1024			N/A
5/24/2019	CADSGD	9:30:00 AM	1.0224	1.0227			N/A
5/24/2019	CADSGD	11:30:00 AM	1.023	1.0233			N/A
5/24/2019	CADSGD	1:30:00 PM	1.0223	1.0227			N/A
5/24/2019	CADSGD	3:30:00 PM	1.0224	1.0227			N/A
5/24/2019	CADZAR	9:30:00 AM	10.697	10.7074			N/A
5/24/2019	CADZAR	11:30:00 AM	10.7128	10.7271			N/A

5/24/2019	CADZAR	1:30:00 PM	10.7024	10.7163			N/A
5/24/2019	CADZAR	3:30:00 PM	10.6997	10.7133			N/A
5/24/2019	CHFCZK	9:30:00 AM	23.008	23.019			N/A
5/24/2019	CHFCZK	11:30:00 AM	23.016	23.033			N/A
5/24/2019	CHFCZK	1:30:00 PM	22.994	23.01			N/A
5/24/2019	CHFCZK	3:30:00 PM	22.994	23.001			N/A
5/24/2019	CHFDKK	9:30:00 AM	6.649	6.651			N/A
5/24/2019	CHFDKK	11:30:00 AM	6.656	6.659			N/A
5/24/2019	CHFDKK	1:30:00 PM	6.653	6.657			N/A
5/24/2019	CHFDKK	3:30:00 PM	6.654	6.657			N/A
5/24/2019	CHFDKK.fx	9:30:00 AM	6.6475	6.6521			N/A
5/24/2019	CHFDKK.fx	11:30:00 AM	6.6545	6.6608			N/A
5/24/2019	CHFDKK.fx	1:30:00 PM	6.6517	6.6577			N/A
5/24/2019	CHFDKK.fx	3:30:00 PM	6.6525	6.6581			N/A
5/24/2019	CHFHKD	9:30:00 AM	7.8262	7.8302			N/A
5/24/2019	CHFHKD	11:30:00 AM	7.8287	7.8316			N/A
5/24/2019	CHFHKD	1:30:00 PM	7.8255	7.829			N/A
5/24/2019	CHFHKD	3:30:00 PM	7.8304	7.8321			N/A
5/24/2019	CHFHUF	9:30:00 AM	290.37	290.69			N/A
5/24/2019	CHFHUF	11:30:00 AM	290.45	290.77			N/A
5/24/2019	CHFHUF	1:30:00 PM	290.32	290.69			N/A
5/24/2019	CHFHUF	3:30:00 PM	289.98	290.15			N/A
5/24/2019	CHFJPY	9:30:00 AM	109.202	109.263			N/A
5/24/2019	CHFJPY	11:30:00 AM	109.278	109.319			N/A
5/24/2019	CHFJPY	1:30:00 PM	109.369	109.436			N/A
5/24/2019	CHFJPY	3:30:00 PM	109.285	109.338			N/A
5/24/2019	CHFJPY.fx	9:30:00 AM	109.235	109.228			N/A
5/24/2019	CHFJPY.fx	11:30:00 AM	109.313	109.285			N/A
5/24/2019	CHFJPY.fx	1:30:00 PM	109.401	109.401			N/A
5/24/2019	CHFJPY.fx	3:30:00 PM	109.317	109.305			N/A
5/24/2019	CHFMXN	9:30:00 AM	18.9526	18.968			N/A
5/24/2019	CHFMXN	11:30:00 AM	18.9495	18.9648			N/A
5/24/2019	CHFMXN	1:30:00 PM	18.9617	18.9718			N/A
5/24/2019	CHFMXN	3:30:00 PM	18.9959	19.0078			N/A

5/24/2019	CHFNOK	9:30:00 AM	8.7107	8.7154			N/A
5/24/2019	CHFNOK	11:30:00 AM	8.6986	8.7064			N/A
5/24/2019	CHFNOK	1:30:00 PM	8.6883	8.6956			N/A
5/24/2019	CHFNOK	3:30:00 PM	8.6881	8.6952			N/A
5/24/2019	CHFNOK.fx	9:30:00 AM	8.71408	8.7119			N/A
5/24/2019	CHFNOK.fx	11:30:00 AM	8.70218	8.70278			N/A
5/24/2019	CHFNOK.fx	1:30:00 PM	8.69196	8.6917			N/A
5/24/2019	CHFNOK.fx	3:30:00 PM	8.69141	8.6916			N/A
5/24/2019	CHFPLN	9:30:00 AM	3.8312	3.8322			N/A
5/24/2019	CHFPLN	11:30:00 AM	3.8304	3.8336			N/A
5/24/2019	CHFPLN	1:30:00 PM	3.8295	3.8326			N/A
5/24/2019	CHFPLN	3:30:00 PM	3.8277	3.8296			N/A
5/24/2019	CHFPLN.fx	9:30:00 AM	3.82884	3.83448			N/A
5/24/2019	CHFPLN.fx	11:30:00 AM	3.82794	3.83595			N/A
5/24/2019	CHFPLN.fx	1:30:00 PM	3.82726	3.83481			N/A
5/24/2019	CHFPLN.fx	3:30:00 PM	3.82514	3.83203			N/A
5/24/2019	CHFSEK	9:30:00 AM	9.5695	9.5697			N/A
5/24/2019	CHFSEK	11:30:00 AM	9.5641	9.569			N/A
5/24/2019	CHFSEK	1:30:00 PM	9.5392	9.5417			N/A
5/24/2019	CHFSEK	3:30:00 PM	9.533	9.5369			N/A
5/24/2019	CHFSGD	9:30:00 AM	1.3737	1.3741			N/A
5/24/2019	CHFSGD	11:30:00 AM	1.3739	1.3742			N/A
5/24/2019	CHFSGD	1:30:00 PM	1.3726	1.373			N/A
5/24/2019	CHFSGD	3:30:00 PM	1.3733	1.3735			N/A
5/24/2019	CHFSGD.fx	9:30:00 AM	1.37386	1.37387			N/A
5/24/2019	CHFSGD.fx	11:30:00 AM	1.37403	1.37403			N/A
5/24/2019	CHFSGD.fx	1:30:00 PM	1.37282	1.37282			N/A
5/24/2019	CHFSGD.fx	3:30:00 PM	1.3734	1.3733			N/A
5/24/2019	CHFZAR	9:30:00 AM	14.3723	14.3768			N/A
5/24/2019	CHFZAR	11:30:00 AM	14.3822	14.3928			N/A
5/24/2019	CHFZAR	1:30:00 PM	14.3641	14.3731			N/A
5/24/2019	CHFZAR	3:30:00 PM	14.3708	14.3811			N/A
5/24/2019	CZKJPY	9:30:00 AM	4.746	4.749			N/A
5/24/2019	CZKJPY	11:30:00 AM	4.746	4.75			N/A

5/24/2019	CZKJPY	1:30:00 PM	4.756	4.759			N/A
5/24/2019	CZKJPY	3:30:00 PM	4.754	4.756			N/A
5/24/2019	DAX30.i	9:30:00 AM	11996.67	11996.17			N/A
5/24/2019	DAX30.i	11:30:00 AM	12049.67	12044.42			N/A
5/24/2019	DAX30.i	1:30:00 PM	12046.77	12043.67			N/A
5/24/2019	DAX30.i	3:30:00 PM	12041.67	12038.17			N/A
5/24/2019	DJ30.i	9:30:00 AM					N/A
5/24/2019	DJ30.i	11:30:00 AM					N/A
5/24/2019	DJ30.i	1:30:00 PM					N/A
5/24/2019	DJ30.i	3:30:00 PM					N/A
5/24/2019	DKKJPY	9:30:00 AM					N/A
5/24/2019	DKKJPY	11:30:00 AM					N/A
5/24/2019	DKKJPY	1:30:00 PM					N/A
5/24/2019	DKKJPY	3:30:00 PM	16.43	16.44			N/A
5/24/2019	EURAUD	9:30:00 AM	1.6235	1.62372			N/A
5/24/2019	EURAUD	11:30:00 AM	1.62089	1.62124			N/A
5/24/2019	EURAUD	1:30:00 PM	1.61959	1.61994			N/A
5/24/2019	EURAUD	3:30:00 PM	1.61971	1.61986			N/A
5/24/2019	EURAUD.fx	9:30:00 AM	1.62371	1.6235			N/A
5/24/2019	EURAUD.fx	11:30:00 AM	1.62108	1.621			N/A
5/24/2019	EURAUD.fx	1:30:00 PM	1.61979	1.61972			N/A
5/24/2019	EURAUD.fx	3:30:00 PM	1.61987	1.61964			N/A
5/24/2019	EURCAD	9:30:00 AM	1.50815	1.50871			N/A
5/24/2019	EURCAD	11:30:00 AM	1.50514	1.5059			N/A
5/24/2019	EURCAD	1:30:00 PM	1.50528	1.50608			N/A
5/24/2019	EURCAD	3:30:00 PM	1.50633	1.50686			N/A
5/24/2019	EURCAD.fx	9:30:00 AM	1.50858	1.50828			N/A
5/24/2019	EURCAD.fx	11:30:00 AM	1.50556	1.50548			N/A
5/24/2019	EURCAD.fx	1:30:00 PM	1.50571	1.50564			N/A
5/24/2019	EURCAD.fx	3:30:00 PM	1.50673	1.50647			N/A
5/24/2019	EURCHF	9:30:00 AM	1.12308	1.12295			N/A
5/24/2019	EURCHF	11:30:00 AM	1.12162	1.12178			N/A
5/24/2019	EURCHF	1:30:00 PM	1.12216	1.12225			N/A
5/24/2019	EURCHF	3:30:00 PM	1.12207	1.12208			N/A



5/24/2019	EURCHF.fx	9:30:00 AM	1.12313	1.12288			N/A
5/24/2019	EURCHF.fx	11:30:00 AM	1.12167	1.12172			N/A
5/24/2019	EURCHF.fx	1:30:00 PM	1.12222	1.12218			N/A
5/24/2019	EURCHF.fx	3:30:00 PM	1.12211	1.12203			N/A
5/24/2019	EURCZK	9:30:00 AM	25.822	25.86			N/A
5/24/2019	EURCZK	11:30:00 AM	25.804	25.843			N/A
5/24/2019	EURCZK	1:30:00 PM	25.789	25.828			N/A
5/24/2019	EURCZK	3:30:00 PM	25.787	25.817			N/A
5/24/2019	EURDKK	9:30:00 AM	7.4667	7.4675			N/A
5/24/2019	EURDKK	11:30:00 AM	7.466	7.4673			N/A
5/24/2019	EURDKK	1:30:00 PM	7.467	7.4674			N/A
5/24/2019	EURDKK	3:30:00 PM	7.4662	7.4668			N/A
5/24/2019	EURGBP	9:30:00 AM	0.88327	0.88321			N/A
5/24/2019	EURGBP	11:30:00 AM	0.88292	0.88285			N/A
5/24/2019	EURGBP	1:30:00 PM	0.88065	0.88069			N/A
5/24/2019	EURGBP	3:30:00 PM	0.88389	0.8838			N/A
5/24/2019	EURGBP.fx	9:30:00 AM	0.88331	0.88315			N/A
5/24/2019	EURGBP.fx	11:30:00 AM	0.88291	0.88281			N/A
5/24/2019	EURGBP.fx	1:30:00 PM	0.88069	0.88064			N/A
5/24/2019	EURGBP.fx	3:30:00 PM	0.88392	0.88376			N/A
5/24/2019	EURHKD	9:30:00 AM	8.791	8.7928			N/A
5/24/2019	EURHKD	11:30:00 AM	8.782	8.7863			N/A
5/24/2019	EURHKD	1:30:00 PM	8.7816	8.7866			N/A
5/24/2019	EURHKD	3:30:00 PM	8.7867	8.7902			N/A
5/24/2019	EURHKD.fx	9:30:00 AM	8.79379	8.78999			N/A
5/24/2019	EURHKD.fx	11:30:00 AM	8.78485	8.78336			N/A
5/24/2019	EURHKD.fx	1:30:00 PM	8.78442	8.78375			N/A
5/24/2019	EURHKD.fx	3:30:00 PM	8.78951	8.78752			N/A
5/24/2019	EURHUF	9:30:00 AM	326.02	326.66			N/A
5/24/2019	EURHUF	11:30:00 AM	325.8	326.5			N/A
5/24/2019	EURHUF	1:30:00 PM	325.74	326.33			N/A
5/24/2019	EURHUF	3:30:00 PM	325.35	325.82			N/A
5/24/2019	EURHUF.fx	9:30:00 AM	326.312	326.38			N/A
5/24/2019	EURHUF.fx	11:30:00 AM	326.071	326.234			N/A

5/24/2019	EURHUF.fx	1:30:00 PM	326.021	326.205			N/A
5/24/2019	EURHUF.fx	3:30:00 PM	325.62	325.531			N/A
5/24/2019	EURJPY	9:30:00 AM	122.687	122.654			N/A
5/24/2019	EURJPY	11:30:00 AM	122.613	122.588			N/A
5/24/2019	EURJPY	1:30:00 PM	122.773	122.77			N/A
5/24/2019	EURJPY	3:30:00 PM	122.664	122.641			N/A
5/24/2019	EURJPY.fx	9:30:00 AM	122.69	122.65			N/A
5/24/2019	EURJPY.fx	11:30:00 AM	122.615	122.584			N/A
5/24/2019	EURJPY.fx	1:30:00 PM	122.775	122.766			N/A
5/24/2019	EURJPY.fx	3:30:00 PM	122.666	122.638			N/A
5/24/2019	EURMXN	9:30:00 AM	21.2883	21.3049			N/A
5/24/2019	EURMXN	11:30:00 AM	21.2597	21.2783			N/A
5/24/2019	EURMXN	1:30:00 PM	21.2824	21.2965			N/A
5/24/2019	EURMXN	3:30:00 PM	21.3196	21.3355			N/A
5/24/2019	EURMXN.fx	9:30:00 AM	21.2971	21.2958			N/A
5/24/2019	EURMXN.fx	11:30:00 AM	21.2684	21.2699			N/A
5/24/2019	EURMXN.fx	1:30:00 PM	21.2908	21.2881			N/A
5/24/2019	EURMXN.fx	3:30:00 PM	21.3283	21.3265			N/A
5/24/2019	EURNOK	9:30:00 AM	9.7789	9.7902			N/A
5/24/2019	EURNOK	11:30:00 AM	9.7555	9.7674			N/A
5/24/2019	EURNOK	1:30:00 PM	9.7484	9.76			N/A
5/24/2019	EURNOK	3:30:00 PM	9.7466	9.7585			N/A
5/24/2019	EURNOK.fx	9:30:00 AM	9.78445	9.78463			N/A
5/24/2019	EURNOK.fx	11:30:00 AM	9.76115	9.7617			N/A
5/24/2019	EURNOK.fx	1:30:00 PM	9.75386	9.75416			N/A
5/24/2019	EURNOK.fx	3:30:00 PM	9.75202	9.75303			N/A
5/24/2019	EURNZD	9:30:00 AM	1.71537	1.71619			N/A
5/24/2019	EURNZD	11:30:00 AM	1.7132	1.71395			N/A
5/24/2019	EURNZD	1:30:00 PM	1.71019	1.71105			N/A
5/24/2019	EURNZD	3:30:00 PM	1.71052	1.71111			N/A
5/24/2019	EURNZD.fx	9:30:00 AM	1.71578	1.71574			N/A
5/24/2019	EURNZD.fx	11:30:00 AM	1.71365	1.71349			N/A
5/24/2019	EURNZD.fx	1:30:00 PM	1.71062	1.71062			N/A
5/24/2019	EURNZD.fx	3:30:00 PM	1.7109	1.71067			N/A

5/24/2019	EURPLN	9:30:00 AM	4.3021	4.3038			N/A
5/24/2019	EURPLN	11:30:00 AM	4.2967	4.2999			N/A
5/24/2019	EURPLN	1:30:00 PM	4.2975	4.3007			N/A
5/24/2019	EURPLN	3:30:00 PM	4.2947	4.2969			N/A
5/24/2019	EURPLN.fx	9:30:00 AM	4.30137	4.30452			N/A
5/24/2019	EURPLN.fx	11:30:00 AM	4.29607	4.30042			N/A
5/24/2019	EURPLN.fx	1:30:00 PM	4.29707	4.30122			N/A
5/24/2019	EURPLN.fx	3:30:00 PM	4.29406	4.29752			N/A
5/24/2019	EURRUB	9:30:00 AM					N/A
5/24/2019	EURRUB	11:30:00 AM	71.922	72.355			N/A
5/24/2019	EURRUB	1:30:00 PM	71.909	72.349			N/A
5/24/2019	EURRUB	3:30:00 PM	71.81	72.236			N/A
5/24/2019	EURSEK	9:30:00 AM	10.7466	10.7493			N/A
5/24/2019	EURSEK	11:30:00 AM	10.7301	10.735			N/A
5/24/2019	EURSEK	1:30:00 PM	10.7062	10.707			N/A
5/24/2019	EURSEK	3:30:00 PM	10.6986	10.7032			N/A
5/24/2019	EURSEK.fx	9:30:00 AM	10.74818	10.74763			N/A
5/24/2019	EURSEK.fx	11:30:00 AM	10.73184	10.73334			N/A
5/24/2019	EURSEK.fx	1:30:00 PM	10.70812	10.70519			N/A
5/24/2019	EURSEK.fx	3:30:00 PM	10.70012	10.70149			N/A
5/24/2019	EURSGD	9:30:00 AM	1.5427	1.5431			N/A
5/24/2019	EURSGD	11:30:00 AM	1.5409	1.5416			N/A
5/24/2019	EURSGD	1:30:00 PM	1.5402	1.541			N/A
5/24/2019	EURSGD	3:30:00 PM	1.5408	1.5414			N/A
5/24/2019	EURSGD.fx	9:30:00 AM	1.5431	1.5427			N/A
5/24/2019	EURSGD.fx	11:30:00 AM	1.54131	1.5412			N/A
5/24/2019	EURSGD.fx	1:30:00 PM	1.54055	1.54057			N/A
5/24/2019	EURSGD.fx	3:30:00 PM	1.54112	1.54101			N/A
5/24/2019	EURUSD	9:30:00 AM	1.12018	1.11987		300	N/A
5/24/2019	EURUSD	11:30:00 AM	1.11911	1.11909	800	800	N/A
5/24/2019	EURUSD	1:30:00 PM	1.11901	1.11909			N/A
5/24/2019	EURUSD	3:30:00 PM	1.1196	1.11946	10	10	N/A
5/24/2019	EURUSD.fx	9:30:00 AM	1.12038	1.11996			N/A
5/24/2019	EURUSD.fx	11:30:00 AM	1.11931	1.11919			N/A

5/24/2019	EURUSD.fx	1:30:00 PM	1.11921	1.11919			N/A
5/24/2019	EURUSD.fx	3:30:00 PM	1.1198	1.11958			N/A
5/24/2019	EURZAR	9:30:00 AM	16.1391	16.154			N/A
5/24/2019	EURZAR	11:30:00 AM	16.1358	16.15			N/A
5/24/2019	EURZAR	1:30:00 PM	16.1224	16.1365			N/A
5/24/2019	EURZAR	3:30:00 PM	16.1324	16.144			N/A
5/24/2019	EURZAR.fx	9:30:00 AM	16.13848	16.1535			N/A
5/24/2019	EURZAR.fx	11:30:00 AM	16.13492	16.15077			N/A
5/24/2019	EURZAR.fx	1:30:00 PM	16.12161	16.13729			N/A
5/24/2019	EURZAR.fx	3:30:00 PM	16.13098	16.14515			N/A
5/24/2019	GBPAUD	9:30:00 AM	1.83863	1.83922			N/A
5/24/2019	GBPAUD	11:30:00 AM	1.83661	1.83696			N/A
5/24/2019	GBPAUD	1:30:00 PM	1.83969	1.84043			N/A
5/24/2019	GBPAUD	3:30:00 PM	1.83317	1.83351			N/A
5/24/2019	GBPAUD.fx	9:30:00 AM	1.83903	1.83881			N/A
5/24/2019	GBPAUD.fx	11:30:00 AM	1.83706	1.83674			N/A
5/24/2019	GBPAUD.fx	1:30:00 PM	1.84007	1.84002			N/A
5/24/2019	GBPAUD.fx	3:30:00 PM	1.83354	1.83323			N/A
5/24/2019	GBPCAD	9:30:00 AM	1.70761	1.70812			N/A
5/24/2019	GBPCAD	11:30:00 AM	1.70504	1.70558			N/A
5/24/2019	GBPCAD	1:30:00 PM	1.70948	1.7101			N/A
5/24/2019	GBPCAD	3:30:00 PM	1.70452	1.70469			N/A
5/24/2019	GBPCAD.fx	9:30:00 AM	1.70802	1.70769			N/A
5/24/2019	GBPCAD.fx	11:30:00 AM	1.70544	1.70527			N/A
5/24/2019	GBPCAD.fx	1:30:00 PM	1.70986	1.7097			N/A
5/24/2019	GBPCAD.fx	3:30:00 PM	1.70488	1.70435			N/A
5/24/2019	GBPCHF	9:30:00 AM	1.27132	1.27146			N/A
5/24/2019	GBPCHF	11:30:00 AM	1.27037	1.27059			N/A
5/24/2019	GBPCHF	1:30:00 PM	1.27408	1.2744			N/A
5/24/2019	GBPCHF	3:30:00 PM	1.2694	1.26954			N/A
5/24/2019	GBPCHF.fx	9:30:00 AM	1.27151	1.27127			N/A
5/24/2019	GBPCHF.fx	11:30:00 AM	1.27055	1.27049			N/A
5/24/2019	GBPCHF.fx	1:30:00 PM	1.27432	1.27419			N/A
5/24/2019	GBPCHF.fx	3:30:00 PM	1.26958	1.26937			N/A

5/24/2019	GBPCZK	9:30:00 AM	29.25	29.266			N/A
5/24/2019	GBPCZK	11:30:00 AM	29.24	29.254			N/A
5/24/2019	GBPCZK	1:30:00 PM	29.297	29.318			N/A
5/24/2019	GBPCZK	3:30:00 PM	29.183	29.197			N/A
5/24/2019	GBPDKK	9:30:00 AM	8.451	8.46			N/A
5/24/2019	GBPDKK	11:30:00 AM	8.455	8.465			N/A
5/24/2019	GBPDKK	1:30:00 PM	8.475	8.486			N/A
5/24/2019	GBPDKK	3:30:00 PM	8.445	8.454			N/A
5/24/2019	GBPDKK.fx	9:30:00 AM	8.4493	8.4606			N/A
5/24/2019	GBPDKK.fx	11:30:00 AM	8.4529	8.4649			N/A
5/24/2019	GBPDKK.fx	1:30:00 PM	8.4736	8.4861			N/A
5/24/2019	GBPDKK.fx	3:30:00 PM	8.4435	8.455			N/A
5/24/2019	GBPHKD	9:30:00 AM	9.9503	9.9536			N/A
5/24/2019	GBPHKD	11:30:00 AM	9.9457	9.9476			N/A
5/24/2019	GBPHKD	1:30:00 PM	9.9713	9.9755			N/A
5/24/2019	GBPHKD	3:30:00 PM	9.9401	9.9405			N/A
5/24/2019	GBPHUF	9:30:00 AM	369.16	369.6			N/A
5/24/2019	GBPHUF	11:30:00 AM	369.01	369.27			N/A
5/24/2019	GBPHUF	1:30:00 PM	369.92	370.37			N/A
5/24/2019	GBPHUF	3:30:00 PM	368.1	368.34			N/A
5/24/2019	GBPJPY	9:30:00 AM	138.87	138.888			N/A
5/24/2019	GBPJPY	11:30:00 AM	138.863	138.858			N/A
5/24/2019	GBPJPY	1:30:00 PM	139.4	139.42			N/A
5/24/2019	GBPJPY	3:30:00 PM	138.769	138.77			N/A
5/24/2019	GBPJPY.fx	9:30:00 AM	138.89	138.868			N/A
5/24/2019	GBPJPY.fx	11:30:00 AM	138.883	138.85			N/A
5/24/2019	GBPJPY.fx	1:30:00 PM	139.417	139.4			N/A
5/24/2019	GBPJPY.fx	3:30:00 PM	138.787	138.752			N/A
5/24/2019	GBPMXN	9:30:00 AM	24.0969	24.1096			N/A
5/24/2019	GBPMXN	11:30:00 AM	24.0772	24.0839			N/A
5/24/2019	GBPMXN	1:30:00 PM	24.1629	24.1715			N/A
5/24/2019	GBPMXN	3:30:00 PM	24.1168	24.1228			N/A
5/24/2019	GBPNOK	9:30:00 AM	11.0737	11.0833			N/A
5/24/2019	GBPNOK	11:30:00 AM	11.0527	11.0625			N/A

5/24/2019	GBPNOK	1:30:00 PM	11.0711	11.082			N/A
5/24/2019	GBPNOK	3:30:00 PM	11.0299	11.0394			N/A
5/24/2019	GBPNOK.fx	9:30:00 AM	11.07871	11.07849			N/A
5/24/2019	GBPNOK.fx	11:30:00 AM	11.05768	11.0578			N/A
5/24/2019	GBPNOK.fx	1:30:00 PM	11.07596	11.07699			N/A
5/24/2019	GBPNOK.fx	3:30:00 PM	11.0346	11.03437			N/A
5/24/2019	GBPNZD	9:30:00 AM	1.94245	1.94285			N/A
5/24/2019	GBPNZD	11:30:00 AM	1.94075	1.94115			N/A
5/24/2019	GBPNZD	1:30:00 PM	1.94216	1.9429			N/A
5/24/2019	GBPNZD	3:30:00 PM	1.93548	1.93586			N/A
5/24/2019	GBPNZD.fx	9:30:00 AM	1.9428	1.94246			N/A
5/24/2019	GBPNZD.fx	11:30:00 AM	1.94115	1.94089			N/A
5/24/2019	GBPNZD.fx	1:30:00 PM	1.94251	1.94256			N/A
5/24/2019	GBPNZD.fx	3:30:00 PM	1.9358	1.93556			N/A
5/24/2019	GBPPLN	9:30:00 AM	4.8723	4.8722			N/A
5/24/2019	GBPPLN	11:30:00 AM	4.8682	4.8692			N/A
5/24/2019	GBPPLN	1:30:00 PM	4.8812	4.8828			N/A
5/24/2019	GBPPLN	3:30:00 PM	4.8608	4.8612			N/A
5/24/2019	GBPPLN.fx	9:30:00 AM	4.87004	4.87431			N/A
5/24/2019	GBPPLN.fx	11:30:00 AM	4.86596	4.87198			N/A
5/24/2019	GBPPLN.fx	1:30:00 PM	4.87918	4.88492			N/A
5/24/2019	GBPPLN.fx	3:30:00 PM	4.85868	4.86305			N/A
5/24/2019	GBPSEK	9:30:00 AM	12.1657	12.171			N/A
5/24/2019	GBPSEK	11:30:00 AM	12.1528	12.1602			N/A
5/24/2019	GBPSEK	1:30:00 PM	12.1548	12.1607			N/A
5/24/2019	GBPSEK	3:30:00 PM	12.1035	12.1107			N/A
5/24/2019	GBPSEK.fx	9:30:00 AM	12.16196	12.17465			N/A
5/24/2019	GBPSEK.fx	11:30:00 AM	12.14896	12.16489			N/A
5/24/2019	GBPSEK.fx	1:30:00 PM	12.15077	12.16432			N/A
5/24/2019	GBPSEK.fx	3:30:00 PM	12.09955	12.11539			N/A
5/24/2019	GBPSGD	9:30:00 AM	1.7467	1.7471			N/A
5/24/2019	GBPSGD	11:30:00 AM	1.7456	1.746			N/A
5/24/2019	GBPSGD	1:30:00 PM	1.7492	1.7497			N/A
5/24/2019	GBPSGD	3:30:00 PM	1.7435	1.7437			N/A

5/24/2019	GBPSGD.fx	9:30:00 AM	1.74486	1.74884			N/A
5/24/2019	GBPSGD.fx	11:30:00 AM	1.74377	1.74801			N/A
5/24/2019	GBPSGD.fx	1:30:00 PM	1.7473	1.75156			N/A
5/24/2019	GBPSGD.fx	3:30:00 PM	1.74167	1.74567			N/A
5/24/2019	GBPUSD	9:30:00 AM	1.26843	1.26814			N/A
5/24/2019	GBPUSD	11:30:00 AM	1.26786	1.26771			N/A
5/24/2019	GBPUSD	1:30:00 PM	1.27101	1.2709			N/A
5/24/2019	GBPUSD	3:30:00 PM	1.26705	1.26665			N/A
5/24/2019	GBPUSD.fx	9:30:00 AM	1.26849	1.26809			N/A
5/24/2019	GBPUSD.fx	11:30:00 AM	1.26793	1.26768			N/A
5/24/2019	GBPUSD.fx	1:30:00 PM	1.27107	1.27083			N/A
5/24/2019	GBPUSD.fx	3:30:00 PM	1.26709	1.2666			N/A
5/24/2019	GBPZAR	9:30:00 AM	18.274	18.2941			N/A
5/24/2019	GBPZAR	11:30:00 AM	18.279	18.301			N/A
5/24/2019	GBPZAR	1:30:00 PM	18.3078	18.3306			N/A
5/24/2019	GBPZAR	3:30:00 PM	18.2532	18.2731			N/A
5/24/2019	GBPZAR.fx	9:30:00 AM	18.2804	18.287			N/A
5/24/2019	GBPZAR.fx	11:30:00 AM	18.285	18.2937			N/A
5/24/2019	GBPZAR.fx	1:30:00 PM	18.3154	18.3236			N/A
5/24/2019	GBPZAR.fx	3:30:00 PM	18.2605	18.2667			N/A
5/24/2019	GOLD	9:30:00 AM	1284.8	1285.11			N/A
5/24/2019	GOLD	11:30:00 AM	1282.56	1282.91			N/A
5/24/2019	GOLD	1:30:00 PM	1280.99	1281.24			N/A
5/24/2019	GOLD	3:30:00 PM	1283.61	1283.46			N/A
5/24/2019	HKDJPY	9:30:00 AM	13.94	13.96			N/A
5/24/2019	HKDJPY	11:30:00 AM	13.96	13.97			N/A
5/24/2019	HKDJPY	1:30:00 PM	13.98	13.99			N/A
5/24/2019	HKDJPY	3:30:00 PM	13.95	13.96			N/A
5/24/2019	HKDJPY.fx	9:30:00 AM	13.948	13.956			N/A
5/24/2019	HKDJPY.fx	11:30:00 AM	13.953	13.959			N/A
5/24/2019	HKDJPY.fx	1:30:00 PM	13.972	13.979			N/A
5/24/2019	HKDJPY.fx	3:30:00 PM	13.953	13.957			N/A
5/24/2019	HUFJPY	9:30:00 AM	0.3761	0.3764			N/A
5/24/2019	HUFJPY	11:30:00 AM	0.3761	0.3764			N/A

5/24/2019	HUFJPY	1:30:00 PM	0.3767	0.377			N/A
5/24/2019	HUFJPY	3:30:00 PM	0.3767	0.3769			N/A
5/24/2019	JP225.i	9:30:00 AM	21095.89	21108.39			N/A
5/24/2019	JP225.i	11:30:00 AM	21148.39	21158.39			N/A
5/24/2019	JP225.i	1:30:00 PM	21173.39	21188.39			N/A
5/24/2019	JP225.i	3:30:00 PM	21128.39	21135.89			N/A
5/24/2019	MXNJPY	9:30:00 AM	5.76	5.77			N/A
5/24/2019	MXNJPY	11:30:00 AM	5.76	5.77			N/A
5/24/2019	MXNJPY	1:30:00 PM	5.77	5.78			N/A
5/24/2019	MXNJPY	3:30:00 PM	5.75	5.76			N/A
5/24/2019	NASDAQ.i	9:30:00 AM					N/A
5/24/2019	NASDAQ.i	11:30:00 AM					N/A
5/24/2019	NASDAQ.i	1:30:00 PM					N/A
5/24/2019	NASDAQ.i	3:30:00 PM					N/A
5/24/2019	NOKJPY	9:30:00 AM	12.52	12.55			N/A
5/24/2019	NOKJPY	11:30:00 AM	12.55	12.58			N/A
5/24/2019	NOKJPY	1:30:00 PM	12.58	12.61			N/A
5/24/2019	NOKJPY	3:30:00 PM					N/A
5/24/2019	NOKJPY.fx	9:30:00 AM	12.535	12.538			N/A
5/24/2019	NOKJPY.fx	11:30:00 AM	12.558	12.561			N/A
5/24/2019	NOKJPY.fx	1:30:00 PM	12.584	12.59			N/A
5/24/2019	NOKJPY.fx	3:30:00 PM	12.574	12.579			N/A
5/24/2019	NZDCAD	9:30:00 AM	0.87889	0.87943			N/A
5/24/2019	NZDCAD	11:30:00 AM	0.87823	0.87895			N/A
5/24/2019	NZDCAD	1:30:00 PM	0.87984	0.88053			N/A
5/24/2019	NZDCAD	3:30:00 PM	0.88039	0.88092			N/A
5/24/2019	NZDCAD.fx	9:30:00 AM	0.87922	0.87909			N/A
5/24/2019	NZDCAD.fx	11:30:00 AM	0.87857	0.87861			N/A
5/24/2019	NZDCAD.fx	1:30:00 PM	0.88018	0.88019			N/A
5/24/2019	NZDCAD.fx	3:30:00 PM	0.88071	0.8806			N/A
5/24/2019	NZDCHF	9:30:00 AM	0.65423	0.65482			N/A
5/24/2019	NZDCHF	11:30:00 AM	0.65425	0.65494			N/A
5/24/2019	NZDCHF	1:30:00 PM	0.65566	0.65638		200	N/A
5/24/2019	NZDCHF	3:30:00 PM	0.65561	0.65621			N/A



5/24/2019	NZDCHF.fx	9:30:00 AM	0.65457	0.65446			N/A
5/24/2019	NZDCHF.fx	11:30:00 AM	0.65459	0.65458			N/A
5/24/2019	NZDCHF.fx	1:30:00 PM	0.656	0.65602			N/A
5/24/2019	NZDCHF.fx	3:30:00 PM	0.6559	0.65587			N/A
5/24/2019	NZDCZK	9:30:00 AM	15.054	15.066			N/A
5/24/2019	NZDCZK	11:30:00 AM	15.063	15.075			N/A
5/24/2019	NZDCZK	1:30:00 PM	15.08	15.092			N/A
5/24/2019	NZDCZK	3:30:00 PM	15.077	15.082			N/A
5/24/2019	NZDDKK	9:30:00 AM	4.35	4.354			N/A
5/24/2019	NZDDKK	11:30:00 AM	4.356	4.36			N/A
5/24/2019	NZDDKK	1:30:00 PM	4.363	4.367			N/A
5/24/2019	NZDDKK	3:30:00 PM	4.363	4.364			N/A
5/24/2019	NZDHKD	9:30:00 AM	5.1212	5.1234			N/A
5/24/2019	NZDHKD	11:30:00 AM	5.1227	5.1251			N/A
5/24/2019	NZDHKD	1:30:00 PM	5.132	5.1345			N/A
5/24/2019	NZDHKD	3:30:00 PM	5.1343	5.1352			N/A
5/24/2019	NZDHUF	9:30:00 AM	189.99	190.25			N/A
5/24/2019	NZDHUF	11:30:00 AM	190.06	190.32			N/A
5/24/2019	NZDHUF	1:30:00 PM	190.38	190.67			N/A
5/24/2019	NZDHUF	3:30:00 PM	190.1	190.28			N/A
5/24/2019	NZDJPY	9:30:00 AM	71.472	71.525			N/A
5/24/2019	NZDJPY	11:30:00 AM	71.515	71.579			N/A
5/24/2019	NZDJPY	1:30:00 PM	71.738	71.805			N/A
5/24/2019	NZDJPY	3:30:00 PM	71.667	71.722			N/A
5/24/2019	NZDJPY.fx	9:30:00 AM	71.503	71.492			N/A
5/24/2019	NZDJPY.fx	11:30:00 AM	71.547	71.545			N/A
5/24/2019	NZDJPY.fx	1:30:00 PM	71.769	71.771			N/A
5/24/2019	NZDJPY.fx	3:30:00 PM	71.697	71.69			N/A
5/24/2019	NZDMXN	9:30:00 AM	12.4028	12.409			N/A
5/24/2019	NZDMXN	11:30:00 AM	12.4023	12.4081			N/A
5/24/2019	NZDMXN	1:30:00 PM	12.4378	12.4403			N/A
5/24/2019	NZDMXN	3:30:00 PM	12.4573	12.4611			N/A
5/24/2019	NZDNOK	9:30:00 AM	5.6988	5.7026			N/A
5/24/2019	NZDNOK	11:30:00 AM	5.6923	5.6943			N/A

5/24/2019	NZDNOK	1:30:00 PM	5.6983	5.7014			N/A
5/24/2019	NZDNOK	3:30:00 PM	5.6963	5.6973			N/A
5/24/2019	NZDPLN	9:30:00 AM	2.5068	2.5082			N/A
5/24/2019	NZDPLN	11:30:00 AM	2.5059	2.5074			N/A
5/24/2019	NZDPLN	1:30:00 PM	2.5117	2.513			N/A
5/24/2019	NZDPLN	3:30:00 PM	2.5091	2.5098			N/A
5/24/2019	NZDSEK	9:30:00 AM	6.259	6.2645			N/A
5/24/2019	NZDSEK	11:30:00 AM	6.257	6.264			N/A
5/24/2019	NZDSEK	1:30:00 PM	6.2538	6.2583			N/A
5/24/2019	NZDSEK	3:30:00 PM	6.2484	6.2546			N/A
5/24/2019	NZDSGD	9:30:00 AM	0.899	0.8995			N/A
5/24/2019	NZDSGD	11:30:00 AM	0.8992	0.8998			N/A
5/24/2019	NZDSGD	1:30:00 PM	0.9003	0.9008			N/A
5/24/2019	NZDSGD	3:30:00 PM	0.9005	0.9011			N/A
5/24/2019	NZDSGD.fx	9:30:00 AM	0.89904	0.89941			N/A
5/24/2019	NZDSGD.fx	11:30:00 AM	0.89918	0.8997			N/A
5/24/2019	NZDSGD.fx	1:30:00 PM	0.90028	0.90081			N/A
5/24/2019	NZDSGD.fx	3:30:00 PM	0.90057	0.90108			N/A
5/24/2019	NZDUSD	9:30:00 AM	0.65287	0.65278			N/A
5/24/2019	NZDUSD	11:30:00 AM	0.65304	0.65319			N/A
5/24/2019	NZDUSD	1:30:00 PM	0.65415	0.65427			N/A
5/24/2019	NZDUSD	3:30:00 PM	0.65445	0.65444			N/A
5/24/2019	NZDUSD.fx	9:30:00 AM	0.65295	0.65279			N/A
5/24/2019	NZDUSD.fx	11:30:00 AM	0.65312	0.65319			N/A
5/24/2019	NZDUSD.fx	1:30:00 PM	0.65423	0.65429			N/A
5/24/2019	NZDUSD.fx	3:30:00 PM	0.65452	0.65447			N/A
5/24/2019	NZDZAR	9:30:00 AM	9.3991	9.4119			N/A
5/24/2019	NZDZAR	11:30:00 AM	9.4079	9.4228			N/A
5/24/2019	NZDZAR	1:30:00 PM	9.4168	9.4303			N/A
5/24/2019	NZDZAR	3:30:00 PM	9.4188	9.4326			N/A
5/24/2019	SEKJPY	9:30:00 AM	11.41	11.42			N/A
5/24/2019	SEKJPY	11:30:00 AM	11.43	11.43			N/A
5/24/2019	SEKJPY	1:30:00 PM	11.47	11.47			N/A
5/24/2019	SEKJPY	3:30:00 PM	11.46	11.47			N/A

5/24/2019	SEKJPY.fx	9:30:00 AM	11.407	11.42			N/A
5/24/2019	SEKJPY.fx	11:30:00 AM	11.415	11.431			N/A
5/24/2019	SEKJPY.fx	1:30:00 PM	11.46	11.473			N/A
5/24/2019	SEKJPY.fx	3:30:00 PM	11.453	11.47			N/A
5/24/2019	SGDJPY	9:30:00 AM	79.47	79.5			N/A
5/24/2019	SGDJPY	11:30:00 AM	79.52	79.54			N/A
5/24/2019	SGDJPY	1:30:00 PM	79.66	79.69			N/A
5/24/2019	SGDJPY	3:30:00 PM	79.56	79.58			N/A
5/24/2019	SILVER	9:30:00 AM	14.38	14.75			N/A
5/24/2019	SILVER	11:30:00 AM	14.37	14.74			N/A
5/24/2019	SILVER	1:30:00 PM	14.35	14.72			N/A
5/24/2019	SILVER	3:30:00 PM	14.38	14.75			N/A
5/24/2019	SPX500.i	9:30:00 AM	2828.11	2828.91			N/A
5/24/2019	SPX500.i	11:30:00 AM	2835.86	2835.91			N/A
5/24/2019	SPX500.i	1:30:00 PM	2837.36	2837.66			N/A
5/24/2019	SPX500.i	3:30:00 PM	2832.11	2831.6			N/A
5/24/2019	UK100.i	9:30:00 AM	7250.85	7252.1			N/A
5/24/2019	UK100.i	11:30:00 AM	7282.52	7281.52			N/A
5/24/2019	UK100.i	1:30:00 PM	7275.27	7275.69			N/A
5/24/2019	UK100.i	3:30:00 PM	7296.02	7295.19			N/A
5/24/2019	USDCAD	9:30:00 AM	1.34665	1.34658			N/A
5/24/2019	USDCAD	11:30:00 AM	1.34509	1.34515			N/A
5/24/2019	USDCAD	1:30:00 PM	1.34529	1.34527			N/A
5/24/2019	USDCAD	3:30:00 PM	1.34564	1.34542			N/A
5/24/2019	USDCAD.fx	9:30:00 AM	1.34669	1.34655			N/A
5/24/2019	USDCAD.fx	11:30:00 AM	1.34513	1.34511			N/A
5/24/2019	USDCAD.fx	1:30:00 PM	1.34533	1.34523			N/A
5/24/2019	USDCAD.fx	3:30:00 PM	1.34565	1.34539			N/A
5/24/2019	USDCHF	9:30:00 AM	1.00253	1.00256			N/A
5/24/2019	USDCHF	11:30:00 AM	1.00219	1.00221			N/A
5/24/2019	USDCHF	1:30:00 PM	1.00263	1.00272			N/A
5/24/2019	USDCHF	3:30:00 PM	1.00221	1.00212			N/A
5/24/2019	USDCHF.fx	9:30:00 AM	1.00258	1.0025			N/A
5/24/2019	USDCHF.fx	11:30:00 AM	1.00224	1.00214			N/A

5/24/2019	USDCHF.fx	1:30:00 PM	1.00267	1.00265			N/A
5/24/2019	USDCHF.fx	3:30:00 PM	1.00225	1.00207			N/A
5/24/2019	USDCZK	9:30:00 AM	23.082	23.095			N/A
5/24/2019	USDCZK	11:30:00 AM	23.081	23.102			N/A
5/24/2019	USDCZK	1:30:00 PM	23.068	23.09			N/A
5/24/2019	USDCZK	3:30:00 PM	23.06	23.07			N/A
5/24/2019	USDCZK.fx	9:30:00 AM	23.0893	23.0876			N/A
5/24/2019	USDCZK.fx	11:30:00 AM	23.09	23.093			N/A
5/24/2019	USDCZK.fx	1:30:00 PM	23.0779	23.08			N/A
5/24/2019	USDCZK.fx	3:30:00 PM	23.0687	23.0603			N/A
5/24/2019	USDDKK	9:30:00 AM	6.6664	6.6682			N/A
5/24/2019	USDDKK	11:30:00 AM	6.6714	6.6749			N/A
5/24/2019	USDDKK	1:30:00 PM	6.6715	6.6754			N/A
5/24/2019	USDDKK	3:30:00 PM	6.6691	6.6716			N/A
5/24/2019	USDDKK.fx	9:30:00 AM	6.66716	6.66606			N/A
5/24/2019	USDDKK.fx	11:30:00 AM	6.67188	6.67263			N/A
5/24/2019	USDDKK.fx	1:30:00 PM	6.67201	6.67322			N/A
5/24/2019	USDDKK.fx	3:30:00 PM	6.66956	6.66953			N/A
5/24/2019	USDHKD	9:30:00 AM	7.8484	7.8488			N/A
5/24/2019	USDHKD	11:30:00 AM	7.8481	7.8485			N/A
5/24/2019	USDHKD	1:30:00 PM	7.8482	7.8487			N/A
5/24/2019	USDHKD	3:30:00 PM	7.8488	7.8493			N/A
5/24/2019	USDHKD.fx	9:30:00 AM	7.84838	7.84891			N/A
5/24/2019	USDHKD.fx	11:30:00 AM	7.84802	7.84854			N/A
5/24/2019	USDHKD.fx	1:30:00 PM	7.84822	7.84878			N/A
5/24/2019	USDHKD.fx	3:30:00 PM	7.84885	7.84934			N/A
5/24/2019	USDHUF	9:30:00 AM	291.16	291.53			N/A
5/24/2019	USDHUF	11:30:00 AM	291.19	291.62			N/A
5/24/2019	USDHUF	1:30:00 PM	291.14	291.61			N/A
5/24/2019	USDHUF	3:30:00 PM	290.71	290.89			N/A
5/24/2019	USDHUF.fx	9:30:00 AM	291.367	291.329			N/A
5/24/2019	USDHUF.fx	11:30:00 AM	291.385	291.413			N/A
5/24/2019	USDHUF.fx	1:30:00 PM	291.345	291.41			N/A
5/24/2019	USDHUF.fx	3:30:00 PM	290.895	290.682			N/A

5/24/2019	USDINR	9:30:00 AM	64.62	74.6			N/A
5/24/2019	USDINR	11:30:00 AM	64.66	74.64			N/A
5/24/2019	USDINR	1:30:00 PM					N/A
5/24/2019	USDINR	3:30:00 PM					N/A
5/24/2019	USDJPY	9:30:00 AM	109.51	109.517			N/A
5/24/2019	USDJPY	11:30:00 AM	109.539	109.535			N/A
5/24/2019	USDJPY	1:30:00 PM	109.691	109.698			N/A
5/24/2019	USDJPY	3:30:00 PM	109.559	109.531			N/A
5/24/2019	USDJPY.fx	9:30:00 AM	109.516	109.51			N/A
5/24/2019	USDJPY.fx	11:30:00 AM	109.545	109.529			N/A
5/24/2019	USDJPY.fx	1:30:00 PM	109.696	109.691			N/A
5/24/2019	USDJPY.fx	3:30:00 PM	109.553	109.525			N/A
5/24/2019	USDMXN	9:30:00 AM	19.009	19.012			N/A
5/24/2019	USDMXN	11:30:00 AM	18.998	19.005			N/A
5/24/2019	USDMXN	1:30:00 PM	19.019	19.021			N/A
5/24/2019	USDMXN	3:30:00 PM	19.044	19.049			N/A
5/24/2019	USDMXN.f	9:30:00 AM	19.0127	19.0073			N/A
5/24/2019	USDMXN.f	11:30:00 AM	19.0019	19.0007			N/A
5/24/2019	USDMXN.f	1:30:00 PM	19.0229	19.0173			N/A
5/24/2019	USDMXN.f	3:30:00 PM	19.0472	19.0453			N/A
5/24/2019	USDNOK	9:30:00 AM	8.7331	8.7379			N/A
5/24/2019	USDNOK	11:30:00 AM	8.7181	8.7257			N/A
5/24/2019	USDNOK	1:30:00 PM	8.7116	8.719			N/A
5/24/2019	USDNOK	3:30:00 PM	8.7069	8.7135			N/A
5/24/2019	USDNOK.fx	9:30:00 AM	8.73695	8.73334			N/A
5/24/2019	USDNOK.fx	11:30:00 AM	8.72215	8.72117			N/A
5/24/2019	USDNOK.fx	1:30:00 PM	8.71566	8.71445			N/A
5/24/2019	USDNOK.fx	3:30:00 PM	8.71096	8.70903			N/A
5/24/2019	USDPLN	9:30:00 AM	3.8418	3.8412			N/A
5/24/2019	USDPLN	11:30:00 AM	3.8397	3.841			N/A
5/24/2019	USDPLN	1:30:00 PM	3.8405	3.8421			N/A
5/24/2019	USDPLN	3:30:00 PM	3.8369	3.8369			N/A
5/24/2019	USDPLN.fx	9:30:00 AM	3.841	3.84192			N/A
5/24/2019	USDPLN.fx	11:30:00 AM	3.83896	3.84171			N/A

5/24/2019	USDPLN.fx	1:30:00 PM	3.83978	3.84271			N/A
5/24/2019	USDPLN.fx	3:30:00 PM	3.83605	3.83762			N/A
5/24/2019	USDRUB	9:30:00 AM					N/A
5/24/2019	USDRUB	11:30:00 AM	64.372	64.751			N/A
5/24/2019	USDRUB	1:30:00 PM	64.359	64.747			N/A
5/24/2019	USDRUB	3:30:00 PM	64.249	64.629			N/A
5/24/2019	USDSEK	9:30:00 AM	9.5953	9.5939			N/A
5/24/2019	USDSEK	11:30:00 AM	9.5868	9.5906			N/A
5/24/2019	USDSEK	1:30:00 PM	9.5656	9.5661			N/A
5/24/2019	USDSEK	3:30:00 PM	9.5557	9.558			N/A
5/24/2019	USDSEK.fx	9:30:00 AM	9.59783	9.59191			N/A
5/24/2019	USDSEK.fx	11:30:00 AM	9.5895	9.58862			N/A
5/24/2019	USDSEK.fx	1:30:00 PM	9.56833	9.564			N/A
5/24/2019	USDSEK.fx	3:30:00 PM	9.55831	9.55589			N/A
5/24/2019	USDSGD	9:30:00 AM	1.3772	1.3775			N/A
5/24/2019	USDSGD	11:30:00 AM	1.3769	1.3772			N/A
5/24/2019	USDSGD	1:30:00 PM	1.3763	1.3767			N/A
5/24/2019	USDSGD	3:30:00 PM	1.3762	1.3765			N/A
5/24/2019	USDSGD.fx	9:30:00 AM	1.37717	1.37752			N/A
5/24/2019	USDSGD.fx	11:30:00 AM	1.37685	1.37722			N/A
5/24/2019	USDSGD.fx	1:30:00 PM	1.37624	1.37668			N/A
5/24/2019	USDSGD.fx	3:30:00 PM	1.37612	1.37657			N/A
5/24/2019	USDZAR	9:30:00 AM	14.4107	14.4177			N/A
5/24/2019	USDZAR	11:30:00 AM	14.4164	14.429			N/A
5/24/2019	USDZAR	1:30:00 PM	14.405	14.4172			N/A
5/24/2019	USDZAR	3:30:00 PM	14.4082	14.4171			N/A
5/24/2019	USDZAR.fx	9:30:00 AM					N/A
5/24/2019	USDZAR.fx	11:30:00 AM					N/A
5/24/2019	USDZAR.fx	1:30:00 PM					N/A
5/24/2019	USDZAR.fx	3:30:00 PM					N/A
5/24/2019	XAUUSD	9:30:00 AM	1284.81	1285.11			N/A
5/24/2019	XAUUSD	11:30:00 AM	1282.56	1282.9			N/A
5/24/2019	XAUUSD	1:30:00 PM	1280.99	1281.23			N/A
5/24/2019	XAUUSD	3:30:00 PM	1283.6	1283.44			N/A

5/24/2019	ZARJPY	9:30:00 AM	7.58	7.6			N/A
5/24/2019	ZARJPY	11:30:00 AM	7.58	7.6			N/A
5/24/2019	ZARJPY	1:30:00 PM	7.6	7.62			N/A
5/24/2019	ZARJPY	3:30:00 PM	7.57	7.6			N/A
5/24/2019	ZARJPY.fx	9:30:00 AM	7.597	7.598			N/A
5/24/2019	ZARJPY.fx	11:30:00 AM	7.594	7.595			N/A
5/24/2019	ZARJPY.fx	1:30:00 PM	7.611	7.612			N/A
5/24/2019	ZARJPY.fx	3:30:00 PM	7.6	7.6			N/A
5/27/2019	#AA	9:30:00 AM					N/A
5/27/2019	#AA	11:30:00 AM					N/A
5/27/2019	#AA	1:30:00 PM					N/A
5/27/2019	#AA	3:30:00 PM					N/A
5/27/2019	#AABA	9:30:00 AM					N/A
5/27/2019	#AABA	11:30:00 AM					N/A
5/27/2019	#AABA	1:30:00 PM					N/A
5/27/2019	#AABA	3:30:00 PM					N/A
5/27/2019	#AAL	9:30:00 AM					N/A
5/27/2019	#AAL	11:30:00 AM					N/A
5/27/2019	#AAL	1:30:00 PM					N/A
5/27/2019	#AAL	3:30:00 PM					N/A
5/27/2019	#AAPL	9:30:00 AM					N/A
5/27/2019	#AAPL	11:30:00 AM					N/A
5/27/2019	#AAPL	1:30:00 PM					N/A
5/27/2019	#AAPL	3:30:00 PM					N/A
5/27/2019	#ADBE	9:30:00 AM					N/A
5/27/2019	#ADBE	11:30:00 AM					N/A
5/27/2019	#ADBE	1:30:00 PM					N/A
5/27/2019	#ADBE	3:30:00 PM					N/A
5/27/2019	#AIG	9:30:00 AM					N/A
5/27/2019	#AIG	11:30:00 AM					N/A
5/27/2019	#AIG	1:30:00 PM					N/A
5/27/2019	#AIG	3:30:00 PM					N/A
5/27/2019	#AMD	9:30:00 AM					N/A
5/27/2019	#AMD	11:30:00 AM					N/A

5/27/2019	#AMD	1:30:00 PM					N/A
5/27/2019	#AMD	3:30:00 PM					N/A
5/27/2019	#AMZN	9:30:00 AM					N/A
5/27/2019	#AMZN	11:30:00 AM					N/A
5/27/2019	#AMZN	1:30:00 PM					N/A
5/27/2019	#AMZN	3:30:00 PM					N/A
5/27/2019	#AXP	9:30:00 AM					N/A
5/27/2019	#AXP	11:30:00 AM					N/A
5/27/2019	#AXP	1:30:00 PM					N/A
5/27/2019	#AXP	3:30:00 PM					N/A
5/27/2019	#BA	9:30:00 AM					N/A
5/27/2019	#BA	11:30:00 AM					N/A
5/27/2019	#BA	1:30:00 PM					N/A
5/27/2019	#BA	3:30:00 PM					N/A
5/27/2019	#BABA	9:30:00 AM					N/A
5/27/2019	#BABA	11:30:00 AM					N/A
5/27/2019	#BABA	1:30:00 PM					N/A
5/27/2019	#BABA	3:30:00 PM					N/A
5/27/2019	#BAC	9:30:00 AM					N/A
5/27/2019	#BAC	11:30:00 AM					N/A
5/27/2019	#BAC	1:30:00 PM					N/A
5/27/2019	#BAC	3:30:00 PM					N/A
5/27/2019	#BARC	9:30:00 AM					N/A
5/27/2019	#BARC	11:30:00 AM					N/A
5/27/2019	#BARC	1:30:00 PM					N/A
5/27/2019	#BARC	3:30:00 PM					N/A
5/27/2019	#BHP	9:30:00 AM					N/A
5/27/2019	#BHP	11:30:00 AM					N/A
5/27/2019	#BHP	1:30:00 PM					N/A
5/27/2019	#BHP	3:30:00 PM					N/A
5/27/2019	#BIDU	9:30:00 AM					N/A
5/27/2019	#BIDU	11:30:00 AM					N/A
5/27/2019	#BIDU	1:30:00 PM					N/A
5/27/2019	#BIDU	3:30:00 PM					N/A



5/27/2019	#Bitcoin	9:30:00 AM	8753.35	8786.9			N/A
5/27/2019	#Bitcoin	11:30:00 AM	8739.4	8767.1			N/A
5/27/2019	#Bitcoin	1:30:00 PM	8734.6	8769.45			N/A
5/27/2019	#Bitcoin	3:30:00 PM	8809.06	8837.55			N/A
5/27/2019	#BK	9:30:00 AM					N/A
5/27/2019	#BK	11:30:00 AM					N/A
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5/27/2019	#BK	3:30:00 PM					N/A
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5/27/2019	#VZ	1:30:00 PM					N/A
5/27/2019	#VZ	3:30:00 PM					N/A
5/27/2019	#WDC	9:30:00 AM					N/A
5/27/2019	#WDC	11:30:00 AM					N/A
5/27/2019	#WDC	1:30:00 PM					N/A
5/27/2019	#WDC	3:30:00 PM					N/A
5/27/2019	#WFC	9:30:00 AM					N/A
5/27/2019	#WFC	11:30:00 AM					N/A
5/27/2019	#WFC	1:30:00 PM					N/A
5/27/2019	#WFC	3:30:00 PM					N/A
5/27/2019	#WMT	9:30:00 AM					N/A
5/27/2019	#WMT	11:30:00 AM					N/A
5/27/2019	#WMT	1:30:00 PM					N/A
5/27/2019	#WMT	3:30:00 PM					N/A
5/27/2019	#XOM	9:30:00 AM					N/A
5/27/2019	#XOM	11:30:00 AM					N/A

5/27/2019	#XOM	1:30:00 PM					N/A
5/27/2019	#XOM	3:30:00 PM					N/A
5/27/2019	#YHOO	9:30:00 AM					N/A
5/27/2019	#YHOO	11:30:00 AM					N/A
5/27/2019	#YHOO	1:30:00 PM					N/A
5/27/2019	#YHOO	3:30:00 PM					N/A
5/27/2019	#ZNGA	9:30:00 AM					N/A
5/27/2019	#ZNGA	11:30:00 AM					N/A
5/27/2019	#ZNGA	1:30:00 PM					N/A
5/27/2019	#ZNGA	3:30:00 PM					N/A
5/27/2019	AUDCAD	9:30:00 AM	0.93085	0.93141			N/A
5/27/2019	AUDCAD	11:30:00 AM	0.93058	0.93129			N/A
5/27/2019	AUDCAD	1:30:00 PM	0.93083	0.93152			N/A
5/27/2019	AUDCAD	3:30:00 PM	0.93082	0.93151			N/A
5/27/2019	AUDCAD.fx	9:30:00 AM	0.93117	0.93104			N/A
5/27/2019	AUDCAD.fx	11:30:00 AM	0.93092	0.93095			N/A
5/27/2019	AUDCAD.fx	1:30:00 PM	0.93115	0.93117			N/A
5/27/2019	AUDCAD.fx	3:30:00 PM	0.93115	0.93116			N/A
5/27/2019	AUDCHF	9:30:00 AM	0.69547	0.69603			N/A
5/27/2019	AUDCHF	11:30:00 AM	0.69614	0.69687			N/A
5/27/2019	AUDCHF	1:30:00 PM	0.69537	0.69604			N/A
5/27/2019	AUDCHF	3:30:00 PM	0.69576	0.69643			N/A
5/27/2019	AUDCHF.fx	9:30:00 AM	0.69581	0.69568			N/A
5/27/2019	AUDCHF.fx	11:30:00 AM	0.69648	0.69652			N/A
5/27/2019	AUDCHF.fx	1:30:00 PM	0.69577	0.69569			N/A
5/27/2019	AUDCHF.fx	3:30:00 PM	0.69611	0.69608			N/A
5/27/2019	AUDCZK	9:30:00 AM	15.964	15.978			N/A
5/27/2019	AUDCZK	11:30:00 AM	15.957	15.967			N/A
5/27/2019	AUDCZK	1:30:00 PM	15.956	15.972			N/A
5/27/2019	AUDCZK	3:30:00 PM	15.953	15.971			N/A
5/27/2019	AUDDKK	9:30:00 AM	4.6183	4.6223			N/A
5/27/2019	AUDDKK	11:30:00 AM	4.6174	4.6222			N/A
5/27/2019	AUDDKK	1:30:00 PM	4.6162	4.6208			N/A
5/27/2019	AUDDKK	3:30:00 PM	4.6166	4.6214			N/A

5/27/2019	AUDHKD	9:30:00 AM	5.438	5.4419			N/A
5/27/2019	AUDHKD	11:30:00 AM	5.4315	5.4353			N/A
5/27/2019	AUDHKD	1:30:00 PM	5.4308	5.4343			N/A
5/27/2019	AUDHKD	3:30:00 PM	5.4323	5.4362			N/A
5/27/2019	AUDHUF	9:30:00 AM	201.1	201.3			N/A
5/27/2019	AUDHUF	11:30:00 AM	201.18	201.41			N/A
5/27/2019	AUDHUF	1:30:00 PM	201.2	201.43			N/A
5/27/2019	AUDHUF	3:30:00 PM	201.26	201.51			N/A
5/27/2019	AUDJPY	9:30:00 AM	75.914	75.954			N/A
5/27/2019	AUDJPY	11:30:00 AM	75.8	75.87			N/A
5/27/2019	AUDJPY	1:30:00 PM	75.743	75.814			N/A
5/27/2019	AUDJPY	3:30:00 PM	75.774	75.846			N/A
5/27/2019	AUDJPY.fx	9:30:00 AM	75.948	75.92			N/A
5/27/2019	AUDJPY.fx	11:30:00 AM	75.833	75.835			N/A
5/27/2019	AUDJPY.fx	1:30:00 PM	75.777	75.779			N/A
5/27/2019	AUDJPY.fx	3:30:00 PM	75.808	75.811			N/A
5/27/2019	AUDMXN	9:30:00 AM	13.1853	13.1923			N/A
5/27/2019	AUDMXN	11:30:00 AM	13.185	13.1959			N/A
5/27/2019	AUDMXN	1:30:00 PM	13.1883	13.1979			N/A
5/27/2019	AUDMXN	3:30:00 PM	13.1797	13.1903			N/A
5/27/2019	AUDNOK	9:30:00 AM	6.0207	6.0249			N/A
5/27/2019	AUDNOK	11:30:00 AM	6.0221	6.026			N/A
5/27/2019	AUDNOK	1:30:00 PM	6.0283	6.0336			N/A
5/27/2019	AUDNOK	3:30:00 PM	6.0305	6.0353			N/A
5/27/2019	AUDNOK.fx	9:30:00 AM	6.0222	6.0232			N/A
5/27/2019	AUDNOK.fx	11:30:00 AM	6.0236	6.0258			N/A
5/27/2019	AUDNOK.fx	1:30:00 PM	6.0298	6.032			N/A
5/27/2019	AUDNOK.fx	3:30:00 PM	6.0319	6.0337			N/A
5/27/2019	AUDNZD	9:30:00 AM	1.05727	1.05806			N/A
5/27/2019	AUDNZD	11:30:00 AM	1.0572	1.05814			N/A
5/27/2019	AUDNZD	1:30:00 PM	1.05709	1.058			N/A
5/27/2019	AUDNZD	3:30:00 PM	1.0573	1.05825			N/A
5/27/2019	AUDNZD.fx	9:30:00 AM	1.05771	1.0576			N/A
5/27/2019	AUDNZD.fx	11:30:00 AM	1.05764	1.05769			N/A

5/27/2019	AUDNZD.fx	1:30:00 PM	1.05753	1.05754			N/A
5/27/2019	AUDNZD.fx	3:30:00 PM	1.05773	1.05776			N/A
5/27/2019	AUDPLN	9:30:00 AM	2.654	2.6564			N/A
5/27/2019	AUDPLN	11:30:00 AM	2.6544	2.6573			N/A
5/27/2019	AUDPLN	1:30:00 PM	2.6549	2.6582			N/A
5/27/2019	AUDPLN	3:30:00 PM	2.6532	2.6562			N/A
5/27/2019	AUDSEK	9:30:00 AM	6.6143	6.6159			N/A
5/27/2019	AUDSEK	11:30:00 AM	6.6125	6.6158			N/A
5/27/2019	AUDSEK	1:30:00 PM	6.6218	6.625			N/A
5/27/2019	AUDSEK	3:30:00 PM	6.6312	6.6342			N/A
5/27/2019	AUDSEK.fx	9:30:00 AM	6.6096	6.6203			N/A
5/27/2019	AUDSEK.fx	11:30:00 AM	6.608	6.6202			N/A
5/27/2019	AUDSEK.fx	1:30:00 PM	6.6172	6.6294			N/A
5/27/2019	AUDSEK.fx	3:30:00 PM	6.6264	6.6388			N/A
5/27/2019	AUDSGD	9:30:00 AM	0.9526	0.9527			N/A
5/27/2019	AUDSGD	11:30:00 AM	0.9515	0.9517			N/A
5/27/2019	AUDSGD	1:30:00 PM	0.9515	0.9518			N/A
5/27/2019	AUDSGD	3:30:00 PM	0.9517	0.952			N/A
5/27/2019	AUDSGD.fx	9:30:00 AM	0.95265	0.95261			N/A
5/27/2019	AUDSGD.fx	11:30:00 AM	0.95158	0.95169			N/A
5/27/2019	AUDSGD.fx	1:30:00 PM	0.95156	0.95168			N/A
5/27/2019	AUDSGD.fx	3:30:00 PM	0.95176	0.95186			N/A
5/27/2019	AUDUSD	9:30:00 AM	0.69324	0.69319			N/A
5/27/2019	AUDUSD	11:30:00 AM	0.6923	0.69243			N/A
5/27/2019	AUDUSD	1:30:00 PM	0.69222	0.69236			N/A
5/27/2019	AUDUSD	3:30:00 PM	0.69235	0.69251			N/A
5/27/2019	AUDUSD.fx	9:30:00 AM	0.69329	0.69313			N/A
5/27/2019	AUDUSD.fx	11:30:00 AM	0.69235	0.69237			N/A
5/27/2019	AUDUSD.fx	1:30:00 PM	0.69228	0.6923			N/A
5/27/2019	AUDUSD.fx	3:30:00 PM	0.69241	0.69245			N/A
5/27/2019	AUDZAR	9:30:00 AM	9.9695	9.9792			N/A
5/27/2019	AUDZAR	11:30:00 AM	9.9756	9.9904			N/A
5/27/2019	AUDZAR	1:30:00 PM	10.0038	10.0186			N/A
5/27/2019	AUDZAR	3:30:00 PM	10.0002	10.0162			N/A

5/27/2019	AUS200.i	9:30:00 AM	6456.78	6461.28			N/A
5/27/2019	AUS200.i	11:30:00 AM	6460.98	6464.68			N/A
5/27/2019	AUS200.i	1:30:00 PM	6454.78	6459.08			N/A
5/27/2019	AUS200.i	3:30:00 PM	6459.18	6463.18			N/A
5/27/2019	BCHUSD	9:30:00 AM	446.21	447.9			N/A
5/27/2019	BCHUSD	11:30:00 AM	442.75	444.03			N/A
5/27/2019	BCHUSD	1:30:00 PM	441.64	443.3			N/A
5/27/2019	BCHUSD	3:30:00 PM	445.28	446.87			N/A
5/27/2019	CADCHF	9:30:00 AM	0.74688	0.74754			N/A
5/27/2019	CADCHF	11:30:00 AM	0.74783	0.74852			N/A
5/27/2019	CADCHF	1:30:00 PM	0.7468	0.74749			N/A
5/27/2019	CADCHF	3:30:00 PM	0.74721	0.74788			N/A
5/27/2019	CADCHF.fx	9:30:00 AM	0.74722	0.74718			N/A
5/27/2019	CADCHF.fx	11:30:00 AM	0.74816	0.74817			N/A
5/27/2019	CADCHF.fx	1:30:00 PM	0.74714	0.74713			N/A
5/27/2019	CADCHF.fx	3:30:00 PM	0.74756	0.74753			N/A
5/27/2019	CADCZK	9:30:00 AM	17.148	17.164			N/A
5/27/2019	CADCZK	11:30:00 AM	17.145	17.155			N/A
5/27/2019	CADCZK	1:30:00 PM	17.139	17.156			N/A
5/27/2019	CADCZK	3:30:00 PM	17.136	17.154			N/A
5/27/2019	CADDKK	9:30:00 AM	4.961	4.964			N/A
5/27/2019	CADDKK	11:30:00 AM	4.961	4.965			N/A
5/27/2019	CADDKK	1:30:00 PM					N/A
5/27/2019	CADDKK	3:30:00 PM					N/A
5/27/2019	CADHKD	9:30:00 AM	5.8412	5.845			N/A
5/27/2019	CADHKD	11:30:00 AM	5.8357	5.8396			N/A
5/27/2019	CADHKD	1:30:00 PM	5.8331	5.8371			N/A
5/27/2019	CADHKD	3:30:00 PM	5.8348	5.8386			N/A
5/27/2019	CADHUF	9:30:00 AM	216.04	216.17			N/A
5/27/2019	CADHUF	11:30:00 AM	216.18	216.36			N/A
5/27/2019	CADHUF	1:30:00 PM	216.15	216.32			N/A
5/27/2019	CADHUF	3:30:00 PM					N/A
5/27/2019	CADJPY	9:30:00 AM	81.525	81.573			N/A
5/27/2019	CADJPY	11:30:00 AM	81.425	81.493			N/A

5/27/2019	CADJPY	1:30:00 PM	81.341	81.418			N/A
5/27/2019	CADJPY	3:30:00 PM	81.378	81.446			N/A
5/27/2019	CADJPY.fx	9:30:00 AM	81.558	81.539			N/A
5/27/2019	CADJPY.fx	11:30:00 AM	81.455	81.458			N/A
5/27/2019	CADJPY.fx	1:30:00 PM	81.374	81.384			N/A
5/27/2019	CADJPY.fx	3:30:00 PM	81.411	81.411			N/A
5/27/2019	CADMXN	9:30:00 AM	14.1614	14.1733			N/A
5/27/2019	CADMXN	11:30:00 AM	14.165	14.1779			N/A
5/27/2019	CADMXN	1:30:00 PM	14.1643	14.1772			N/A
5/27/2019	CADMXN	3:30:00 PM	14.156	14.169			N/A
5/27/2019	CADNOK	9:30:00 AM	6.4651	6.4698			N/A
5/27/2019	CADNOK	11:30:00 AM	6.4686	6.4733			N/A
5/27/2019	CADNOK	1:30:00 PM	6.4731	6.478			N/A
5/27/2019	CADNOK	3:30:00 PM	6.4758	6.48			N/A
5/27/2019	CADPLN	9:30:00 AM	2.8505	2.8523			N/A
5/27/2019	CADPLN	11:30:00 AM	2.8519	2.8538			N/A
5/27/2019	CADPLN	1:30:00 PM	2.8517	2.8536			N/A
5/27/2019	CADPLN	3:30:00 PM	2.8504	2.8522			N/A
5/27/2019	CADSEK	9:30:00 AM	7.101	7.1049			N/A
5/27/2019	CADSEK	11:30:00 AM	7.1014	7.1053			N/A
5/27/2019	CADSEK	1:30:00 PM	7.1098	7.1133			N/A
5/27/2019	CADSEK	3:30:00 PM	7.1201	7.1239			N/A
5/27/2019	CADSGD	9:30:00 AM	1.0223	1.0225			N/A
5/27/2019	CADSGD	11:30:00 AM	1.0217	1.022			N/A
5/27/2019	CADSGD	1:30:00 PM	1.0212	1.0215			N/A
5/27/2019	CADSGD	3:30:00 PM	1.0214	1.0217			N/A
5/27/2019	CADZAR	9:30:00 AM	10.709	10.7203			N/A
5/27/2019	CADZAR	11:30:00 AM	10.7183	10.7339			N/A
5/27/2019	CADZAR	1:30:00 PM	10.7452	10.7616			N/A
5/27/2019	CADZAR	3:30:00 PM	10.7412	10.7592			N/A
5/27/2019	CHFCZK	9:30:00 AM					N/A
5/27/2019	CHFCZK	11:30:00 AM	22.92	22.926			N/A
5/27/2019	CHFCZK	1:30:00 PM	22.944	22.961			N/A
5/27/2019	CHFCZK	3:30:00 PM	22.927	22.945			N/A



5/27/2019	CHFDKK	9:30:00 AM					N/A
5/27/2019	CHFDKK	11:30:00 AM					N/A
5/27/2019	CHFDKK	1:30:00 PM	6.637	6.641			N/A
5/27/2019	CHFDKK	3:30:00 PM	6.634	6.637			N/A
5/27/2019	CHFDKK.fx	9:30:00 AM	6.6377	6.6438			N/A
5/27/2019	CHFDKK.fx	11:30:00 AM	6.6296	6.6359			N/A
5/27/2019	CHFDKK.fx	1:30:00 PM	6.6358	6.6414			N/A
5/27/2019	CHFDKK.fx	3:30:00 PM	6.6326	6.6387			N/A
5/27/2019	CHFHKD	9:30:00 AM	7.8184	7.8223			N/A
5/27/2019	CHFHKD	11:30:00 AM	7.8008	7.8047			N/A
5/27/2019	CHFHKD	1:30:00 PM	7.8086	7.8125			N/A
5/27/2019	CHFHKD	3:30:00 PM	7.8064	7.8102			N/A
5/27/2019	CHFHUF	9:30:00 AM	289.06	289.42			N/A
5/27/2019	CHFHUF	11:30:00 AM	288.88	289.27			N/A
5/27/2019	CHFHUF	1:30:00 PM	289.25	289.64			N/A
5/27/2019	CHFHUF	3:30:00 PM	289.15	289.55			N/A
5/27/2019	CHFJPY	9:30:00 AM	109.109	109.162			N/A
5/27/2019	CHFJPY	11:30:00 AM	108.844	108.913			N/A
5/27/2019	CHFJPY	1:30:00 PM	108.887	108.953			N/A
5/27/2019	CHFJPY	3:30:00 PM	108.871	108.94			N/A
5/27/2019	CHFJPY.fx	9:30:00 AM	109.142	109.126			N/A
5/27/2019	CHFJPY.fx	11:30:00 AM	108.876	108.879			N/A
5/27/2019	CHFJPY.fx	1:30:00 PM	108.92	108.918			N/A
5/27/2019	CHFJPY.fx	3:30:00 PM	108.903	108.906			N/A
5/27/2019	CHFMXN	9:30:00 AM	18.9545	18.9685			N/A
5/27/2019	CHFMXN	11:30:00 AM	18.9344	18.9512			N/A
5/27/2019	CHFMXN	1:30:00 PM	18.9593	18.9771			N/A
5/27/2019	CHFMXN	3:30:00 PM	18.9374	18.9553			N/A
5/27/2019	CHFNOK	9:30:00 AM	8.6533	8.6604			N/A
5/27/2019	CHFNOK	11:30:00 AM	8.6457	8.6539			N/A
5/27/2019	CHFNOK	1:30:00 PM	8.6647	8.6724			N/A
5/27/2019	CHFNOK	3:30:00 PM	8.6631	8.6701			N/A
5/27/2019	CHFNOK.fx	9:30:00 AM	8.6567	8.65698			N/A
5/27/2019	CHFNOK.fx	11:30:00 AM	8.64911	8.65051			N/A

5/27/2019	CHFNOK.fx	1:30:00 PM	8.66799	8.66901			N/A
5/27/2019	CHFNOK.fx	3:30:00 PM	8.66643	8.66659			N/A
5/27/2019	CHFPLN	9:30:00 AM	3.8151	3.8174			N/A
5/27/2019	CHFPLN	11:30:00 AM	3.812	3.8144			N/A
5/27/2019	CHFPLN	1:30:00 PM	3.8169	3.8198			N/A
5/27/2019	CHFPLN	3:30:00 PM	3.8123	3.8153			N/A
5/27/2019	CHFPLN.fx	9:30:00 AM	3.81253	3.81979			N/A
5/27/2019	CHFPLN.fx	11:30:00 AM	3.80956	3.81683			N/A
5/27/2019	CHFPLN.fx	1:30:00 PM	3.81445	3.82215			N/A
5/27/2019	CHFPLN.fx	3:30:00 PM	3.80984	3.81763			N/A
5/27/2019	CHFSEK	9:30:00 AM	9.5047	9.5089			N/A
5/27/2019	CHFSEK	11:30:00 AM	9.4926	9.4971			N/A
5/27/2019	CHFSEK	1:30:00 PM	9.5166	9.5207			N/A
5/27/2019	CHFSEK	3:30:00 PM	9.525	9.5289			N/A
5/27/2019	CHFSGD	9:30:00 AM	1.369	1.3695			N/A
5/27/2019	CHFSGD	11:30:00 AM	1.3661	1.3666			N/A
5/27/2019	CHFSGD	1:30:00 PM	1.3676	1.3681			N/A
5/27/2019	CHFSGD	3:30:00 PM	1.3672	1.3676			N/A
5/27/2019	CHFSGD.fx	9:30:00 AM	1.36919	1.36926			N/A
5/27/2019	CHFSGD.fx	11:30:00 AM	1.36624	1.36637			N/A
5/27/2019	CHFSGD.fx	1:30:00 PM	1.36783	1.36783			N/A
5/27/2019	CHFSGD.fx	3:30:00 PM	1.36733	1.36737			N/A
5/27/2019	CHFZAR	9:30:00 AM	14.3378	14.3435			N/A
5/27/2019	CHFZAR	11:30:00 AM	14.3298	14.3438			N/A
5/27/2019	CHFZAR	1:30:00 PM	14.3874	14.4007			N/A
5/27/2019	CHFZAR	3:30:00 PM	14.3734	14.3886			N/A
5/27/2019	CZKJPY	9:30:00 AM	4.753	4.757			N/A
5/27/2019	CZKJPY	11:30:00 AM	4.75	4.752			N/A
5/27/2019	CZKJPY	1:30:00 PM					N/A
5/27/2019	CZKJPY	3:30:00 PM					N/A
5/27/2019	DAX30.i	9:30:00 AM	12061.68	12055.43			N/A
5/27/2019	DAX30.i	11:30:00 AM	12061.93	12059.93			N/A
5/27/2019	DAX30.i	1:30:00 PM	12049.18	12050.18			N/A
5/27/2019	DAX30.i	3:30:00 PM	12071.93	12070.93			N/A

5/27/2019	DJ30.i	9:30:00 AM					N/A
5/27/2019	DJ30.i	11:30:00 AM					N/A
5/27/2019	DJ30.i	1:30:00 PM					N/A
5/27/2019	DJ30.i	3:30:00 PM					N/A
5/27/2019	DKKJPY	9:30:00 AM	16.43	16.45			N/A
5/27/2019	DKKJPY	11:30:00 AM					N/A
5/27/2019	DKKJPY	1:30:00 PM					N/A
5/27/2019	DKKJPY	3:30:00 PM					N/A
5/27/2019	EURAUD	9:30:00 AM	1.61571	1.61578			N/A
5/27/2019	EURAUD	11:30:00 AM	1.61579	1.61623			N/A
5/27/2019	EURAUD	1:30:00 PM	1.61623	1.61666			N/A
5/27/2019	EURAUD	3:30:00 PM	1.61616	1.61658			N/A
5/27/2019	EURAUD.fx	9:30:00 AM	1.61593	1.61556			N/A
5/27/2019	EURAUD.fx	11:30:00 AM	1.61599	1.61601			N/A
5/27/2019	EURAUD.fx	1:30:00 PM	1.61644	1.61644			N/A
5/27/2019	EURAUD.fx	3:30:00 PM	1.61637	1.61636			N/A
5/27/2019	EURCAD	9:30:00 AM	1.50466	1.50538			N/A
5/27/2019	EURCAD	11:30:00 AM	1.50455	1.50535			N/A
5/27/2019	EURCAD	1:30:00 PM	1.5053	1.5062			N/A
5/27/2019	EURCAD	3:30:00 PM	1.50524	1.50612			N/A
5/27/2019	EURCAD.fx	9:30:00 AM	1.50506	1.50497			N/A
5/27/2019	EURCAD.fx	11:30:00 AM	1.50497	1.50493			N/A
5/27/2019	EURCAD.fx	1:30:00 PM	1.50573	1.50576			N/A
5/27/2019	EURCAD.fx	3:30:00 PM	1.50565	1.50568			N/A
5/27/2019	EURCHF	9:30:00 AM	1.12452	1.12462			N/A
5/27/2019	EURCHF	11:30:00 AM	1.1259	1.12602			N/A
5/27/2019	EURCHF	1:30:00 PM	1.12496	1.12502			N/A
5/27/2019	EURCHF	3:30:00 PM	1.12553	1.12561			N/A
5/27/2019	EURCHF.fx	9:30:00 AM	1.12457	1.12456			N/A
5/27/2019	EURCHF.fx	11:30:00 AM	1.12596	1.12597			N/A
5/27/2019	EURCHF.fx	1:30:00 PM	1.12502	1.12496			N/A
5/27/2019	EURCHF.fx	3:30:00 PM	1.12558	1.12555			N/A
5/27/2019	EURCZK	9:30:00 AM	25.798	25.837			N/A
5/27/2019	EURCZK	11:30:00 AM	25.792	25.821			N/A

5/27/2019	EURCZK	1:30:00 PM					N/A
5/27/2019	EURCZK	3:30:00 PM					N/A
5/27/2019	EURDKK	9:30:00 AM	7.467	7.468			N/A
5/27/2019	EURDKK	11:30:00 AM	7.4674	7.4683			N/A
5/27/2019	EURDKK	1:30:00 PM	7.4666	7.4678			N/A
5/27/2019	EURDKK	3:30:00 PM	7.4669	7.4682			N/A
5/27/2019	EURGBP	9:30:00 AM	0.87944	0.87948			N/A
5/27/2019	EURGBP	11:30:00 AM	0.88005	0.88011			N/A
5/27/2019	EURGBP	1:30:00 PM	0.88268	0.88269			N/A
5/27/2019	EURGBP	3:30:00 PM	0.88259	0.88247			N/A
5/27/2019	EURGBP.fx	9:30:00 AM	0.87947	0.87943			N/A
5/27/2019	EURGBP.fx	11:30:00 AM	0.88008	0.88007			N/A
5/27/2019	EURGBP.fx	1:30:00 PM	0.88271	0.88265			N/A
5/27/2019	EURGBP.fx	3:30:00 PM	0.88262	0.88242			N/A
5/27/2019	EURHKD	9:30:00 AM	8.7926	8.7975			N/A
5/27/2019	EURHKD	11:30:00 AM	8.7832	8.7881			N/A
5/27/2019	EURHKD	1:30:00 PM	8.7843	8.7897			N/A
5/27/2019	EURHKD	3:30:00 PM	8.7858	8.7913			N/A
5/27/2019	EURHKD.fx	9:30:00 AM	8.79557	8.79468			N/A
5/27/2019	EURHKD.fx	11:30:00 AM	8.78604	8.7853			N/A
5/27/2019	EURHKD.fx	1:30:00 PM	8.78711	8.78681			N/A
5/27/2019	EURHKD.fx	3:30:00 PM	8.78858	8.78849			N/A
5/27/2019	EURHUF	9:30:00 AM	325.04	325.69			N/A
5/27/2019	EURHUF	11:30:00 AM	325.21	325.82			N/A
5/27/2019	EURHUF	1:30:00 PM	325.33	325.94			N/A
5/27/2019	EURHUF	3:30:00 PM	325.43	326.01			N/A
5/27/2019	EURHUF.fx	9:30:00 AM	325.274	325.456			N/A
5/27/2019	EURHUF.fx	11:30:00 AM	325.516	325.708			N/A
5/27/2019	EURHUF.fx	1:30:00 PM	325.637	325.808			N/A
5/27/2019	EURHUF.fx	3:30:00 PM	325.685	325.908			N/A
5/27/2019	EURJPY	9:30:00 AM	122.738	122.724			N/A
5/27/2019	EURJPY	11:30:00 AM	122.592	122.596			N/A
5/27/2019	EURJPY	1:30:00 PM	122.531	122.542			N/A
5/27/2019	EURJPY	3:30:00 PM	122.576	122.584			N/A

5/27/2019	EURJPY.fx	9:30:00 AM	122.741	122.72			N/A
5/27/2019	EURJPY.fx	11:30:00 AM	122.595	122.592			N/A
5/27/2019	EURJPY.fx	1:30:00 PM	122.533	122.538			N/A
5/27/2019	EURJPY.fx	3:30:00 PM	122.578	122.58			N/A
5/27/2019	EURMXN	9:30:00 AM	21.3178	21.3338			N/A
5/27/2019	EURMXN	11:30:00 AM	21.3219	21.341			N/A
5/27/2019	EURMXN	1:30:00 PM	21.3299	21.3506			N/A
5/27/2019	EURMXN	3:30:00 PM	21.3172	21.3381			N/A
5/27/2019	EURMXN.fx	9:30:00 AM	21.3271	21.3248			N/A
5/27/2019	EURMXN.fx	11:30:00 AM	21.3306	21.3322			N/A
5/27/2019	EURMXN.fx	1:30:00 PM	21.3379	21.3424			N/A
5/27/2019	EURMXN.fx	3:30:00 PM	21.3259	21.3292			N/A
5/27/2019	EURNOK	9:30:00 AM	9.7296	9.7404			N/A
5/27/2019	EURNOK	11:30:00 AM	9.7334	9.7453			N/A
5/27/2019	EURNOK	1:30:00 PM	9.7456	9.7583			N/A
5/27/2019	EURNOK	3:30:00 PM	9.7488	9.7605			N/A
5/27/2019	EURNOK.fx	9:30:00 AM	9.73531	9.7348			N/A
5/27/2019	EURNOK.fx	11:30:00 AM	9.73901	9.7398			N/A
5/27/2019	EURNOK.fx	1:30:00 PM	9.7511	9.7526			N/A
5/27/2019	EURNOK.fx	3:30:00 PM	9.75414	9.7551			N/A
5/27/2019	EURNZD	9:30:00 AM	1.70923	1.70992			N/A
5/27/2019	EURNZD	11:30:00 AM	1.70945	1.71022			N/A
5/27/2019	EURNZD	1:30:00 PM	1.70965	1.71053			N/A
5/27/2019	EURNZD	3:30:00 PM	1.70991	1.71078			N/A
5/27/2019	EURNZD.fx	9:30:00 AM	1.70964	1.70951			N/A
5/27/2019	EURNZD.fx	11:30:00 AM	1.70987	1.70977			N/A
5/27/2019	EURNZD.fx	1:30:00 PM	1.71006	1.7101			N/A
5/27/2019	EURNZD.fx	3:30:00 PM	1.71032	1.71034			N/A
5/27/2019	EURPLN	9:30:00 AM	4.2903	4.2926			N/A
5/27/2019	EURPLN	11:30:00 AM	4.2922	4.2948			N/A
5/27/2019	EURPLN	1:30:00 PM	4.2941	4.2964			N/A
5/27/2019	EURPLN	3:30:00 PM	4.291	4.2942			N/A
5/27/2019	EURPLN.fx	9:30:00 AM	4.28942	4.29339			N/A
5/27/2019	EURPLN.fx	11:30:00 AM	4.29147	4.29559			N/A

5/27/2019	EURPLN.fx	1:30:00 PM					N/A
5/27/2019	EURPLN.fx	3:30:00 PM	4.29017	4.29492			N/A
5/27/2019	EURRUB	9:30:00 AM					N/A
5/27/2019	EURRUB	11:30:00 AM	71.8	72.236			N/A
5/27/2019	EURRUB	1:30:00 PM	71.778	72.218			N/A
5/27/2019	EURRUB	3:30:00 PM	71.831	72.273			N/A
5/27/2019	EURSEK	9:30:00 AM	10.6899	10.6941			N/A
5/27/2019	EURSEK	11:30:00 AM	10.6901	10.6947			N/A
5/27/2019	EURSEK	1:30:00 PM	10.708	10.7128			N/A
5/27/2019	EURSEK	3:30:00 PM	10.7222	10.7265			N/A
5/27/2019	EURSEK.fx	9:30:00 AM	10.69156	10.69244			N/A
5/27/2019	EURSEK.fx	11:30:00 AM	10.69176	10.69291			N/A
5/27/2019	EURSEK.fx	1:30:00 PM	10.70979	10.71094			N/A
5/27/2019	EURSEK.fx	3:30:00 PM	10.7237	10.72462			N/A
5/27/2019	EURSGD	9:30:00 AM	1.5394	1.5401			N/A
5/27/2019	EURSGD	11:30:00 AM	1.5381	1.5389			N/A
5/27/2019	EURSGD	1:30:00 PM	1.5384	1.5391			N/A
5/27/2019	EURSGD	3:30:00 PM	1.5386	1.5395			N/A
5/27/2019	EURSGD.fx	9:30:00 AM	1.53977	1.53972			N/A
5/27/2019	EURSGD.fx	11:30:00 AM	1.5384	1.53844			N/A
5/27/2019	EURSGD.fx	1:30:00 PM	1.5388	1.53887			N/A
5/27/2019	EURSGD.fx	3:30:00 PM	1.53898	1.53913			N/A
5/27/2019	EURUSD	9:30:00 AM	1.1203	1.12035			N/A
5/27/2019	EURUSD	11:30:00 AM	1.11908	1.11915			N/A
5/27/2019	EURUSD	1:30:00 PM	1.11923	1.11936			N/A
5/27/2019	EURUSD	3:30:00 PM	1.11939	1.11955			N/A
5/27/2019	EURUSD.fx	9:30:00 AM	1.12051	1.12044			N/A
5/27/2019	EURUSD.fx	11:30:00 AM	1.11928	1.11923			N/A
5/27/2019	EURUSD.fx	1:30:00 PM	1.11943	1.11945			N/A
5/27/2019	EURUSD.fx	3:30:00 PM	1.1196	1.11965			N/A
5/27/2019	EURZAR	9:30:00 AM	16.1249	16.1378			N/A
5/27/2019	EURZAR	11:30:00 AM	16.1356	16.155			N/A
5/27/2019	EURZAR	1:30:00 PM	16.1862	16.2061			N/A
5/27/2019	EURZAR	3:30:00 PM	16.1795	16.2005			N/A

5/27/2019	EURZAR.fx	9:30:00 AM	16.12397	16.13959			N/A
5/27/2019	EURZAR.fx	11:30:00 AM	16.13564	16.15553			N/A
5/27/2019	EURZAR.fx	1:30:00 PM	16.18537	16.20666			N/A
5/27/2019	EURZAR.fx	3:30:00 PM	16.1789	16.20109			N/A
5/27/2019	GBPAUD	9:30:00 AM	1.83768	1.83812			N/A
5/27/2019	GBPAUD	11:30:00 AM	1.8365	1.83723			N/A
5/27/2019	GBPAUD	1:30:00 PM	1.83161	1.83224			N/A
5/27/2019	GBPAUD	3:30:00 PM	1.83211	1.83235			N/A
5/27/2019	GBPAUD.fx	9:30:00 AM	1.83808	1.83772			N/A
5/27/2019	GBPAUD.fx	11:30:00 AM	1.83692	1.83683			N/A
5/27/2019	GBPAUD.fx	1:30:00 PM	1.83204	1.83183			N/A
5/27/2019	GBPAUD.fx	3:30:00 PM	1.83251	1.83195			N/A
5/27/2019	GBPCAD	9:30:00 AM	1.71098	1.71168			N/A
5/27/2019	GBPCAD	11:30:00 AM	1.70966	1.71041			N/A
5/27/2019	GBPCAD	1:30:00 PM	1.70547	1.70621			N/A
5/27/2019	GBPCAD	3:30:00 PM	1.70594	1.70622			N/A
5/27/2019	GBPCAD.fx	9:30:00 AM	1.71139	1.71131			N/A
5/27/2019	GBPCAD.fx	11:30:00 AM	1.71006	1.71002			N/A
5/27/2019	GBPCAD.fx	1:30:00 PM	1.70587	1.7058			N/A
5/27/2019	GBPCAD.fx	3:30:00 PM	1.70633	1.70579			N/A
5/27/2019	GBPCHF	9:30:00 AM	1.27852	1.2789			N/A
5/27/2019	GBPCHF	11:30:00 AM	1.27918	1.27961			N/A
5/27/2019	GBPCHF	1:30:00 PM	1.27428	1.27465			N/A
5/27/2019	GBPCHF	3:30:00 PM	1.27526	1.27545			N/A
5/27/2019	GBPCHF.fx	9:30:00 AM	1.27871	1.27871			N/A
5/27/2019	GBPCHF.fx	11:30:00 AM	1.27938	1.27941			N/A
5/27/2019	GBPCHF.fx	1:30:00 PM	1.27446	1.27445			N/A
5/27/2019	GBPCHF.fx	3:30:00 PM	1.27544	1.27523			N/A
5/27/2019	GBPCZK	9:30:00 AM	29.345	29.366			N/A
5/27/2019	GBPCZK	11:30:00 AM	29.319	29.326			N/A
5/27/2019	GBPCZK	1:30:00 PM	29.237	29.257			N/A
5/27/2019	GBPCZK	3:30:00 PM	29.24	29.256			N/A
5/27/2019	GBPDKK	9:30:00 AM	8.487	8.498			N/A
5/27/2019	GBPDKK	11:30:00 AM	8.482	8.492			N/A

5/27/2019	GBPDKK	1:30:00 PM	8.457	8.467			N/A
5/27/2019	GBPDKK	3:30:00 PM	8.458	8.468			N/A
5/27/2019	GBPDKK.fx	9:30:00 AM	8.4855	8.4979			N/A
5/27/2019	GBPDKK.fx	11:30:00 AM	8.4797	8.4922			N/A
5/27/2019	GBPDKK.fx	1:30:00 PM	8.455	8.4672			N/A
5/27/2019	GBPDKK.fx	3:30:00 PM	8.4576	8.4682			N/A
5/27/2019	GBPHKD	9:30:00 AM	9.9957	10.0014			N/A
5/27/2019	GBPHKD	11:30:00 AM	9.9774	9.9832			N/A
5/27/2019	GBPHKD	1:30:00 PM	9.9495	9.9547			N/A
5/27/2019	GBPHKD	3:30:00 PM	9.9548	9.9581			N/A
5/27/2019	GBPHUF	9:30:00 AM	369.59	370			N/A
5/27/2019	GBPHUF	11:30:00 AM	369.55	370.01			N/A
5/27/2019	GBPHUF	1:30:00 PM	368.58	369.03			N/A
5/27/2019	GBPHUF	3:30:00 PM	368.77	369.16			N/A
5/27/2019	GBPJPY	9:30:00 AM	139.545	139.569			N/A
5/27/2019	GBPJPY	11:30:00 AM	139.277	139.318			N/A
5/27/2019	GBPJPY	1:30:00 PM	138.801	138.839			N/A
5/27/2019	GBPJPY	3:30:00 PM	138.884	138.903			N/A
5/27/2019	GBPJPY.fx	9:30:00 AM	139.564	139.55			N/A
5/27/2019	GBPJPY.fx	11:30:00 AM	139.295	139.3			N/A
5/27/2019	GBPJPY.fx	1:30:00 PM	138.821	138.819			N/A
5/27/2019	GBPJPY.fx	3:30:00 PM	138.903	138.883			N/A
5/27/2019	GBPMXN	9:30:00 AM	24.2357	24.247			N/A
5/27/2019	GBPMXN	11:30:00 AM	24.2221	24.238			N/A
5/27/2019	GBPMXN	1:30:00 PM	24.162	24.1773			N/A
5/27/2019	GBPMXN	3:30:00 PM	24.1536	24.1647			N/A
5/27/2019	GBPNOK	9:30:00 AM	11.0645	11.0747			N/A
5/27/2019	GBPNOK	11:30:00 AM	11.0608	11.0721			N/A
5/27/2019	GBPNOK	1:30:00 PM	11.0428	11.0534			N/A
5/27/2019	GBPNOK	3:30:00 PM	11.0494	11.0567			N/A
5/27/2019	GBPNOK.fx	9:30:00 AM	11.06951	11.0699			N/A
5/27/2019	GBPNOK.fx	11:30:00 AM	11.06561	11.0671			N/A
5/27/2019	GBPNOK.fx	1:30:00 PM	11.04762	11.04849			N/A
5/27/2019	GBPNOK.fx	3:30:00 PM	11.05416	11.05206			N/A



5/27/2019	GBPNZD	9:30:00 AM	1.94364	1.94428			N/A
5/27/2019	GBPNZD	11:30:00 AM	1.94245	1.94313			N/A
5/27/2019	GBPNZD	1:30:00 PM	1.93701	1.93753			N/A
5/27/2019	GBPNZD	3:30:00 PM	1.93785	1.93819			N/A
5/27/2019	GBPNZD.fx	9:30:00 AM	1.94401	1.94388			N/A
5/27/2019	GBPNZD.fx	11:30:00 AM	1.94283	1.94274			N/A
5/27/2019	GBPNZD.fx	1:30:00 PM	1.93736	1.93718			N/A
5/27/2019	GBPNZD.fx	3:30:00 PM	1.93821	1.93783			N/A
5/27/2019	GBPPLN	9:30:00 AM	4.8795	4.8803			N/A
5/27/2019	GBPPLN	11:30:00 AM	4.8783	4.879			N/A
5/27/2019	GBPPLN	1:30:00 PM	4.8658	4.8674			N/A
5/27/2019	GBPPLN	3:30:00 PM	4.8635	4.8643			N/A
5/27/2019	GBPPLN.fx	9:30:00 AM	4.87717	4.88268			N/A
5/27/2019	GBPPLN.fx	11:30:00 AM	4.87604	4.8812			N/A
5/27/2019	GBPPLN.fx	1:30:00 PM	4.86385	4.86951			N/A
5/27/2019	GBPPLN.fx	3:30:00 PM	4.86114	4.86645			N/A
5/27/2019	GBPSEK	9:30:00 AM	12.1538	12.1615			N/A
5/27/2019	GBPSEK	11:30:00 AM	12.145	12.1536			N/A
5/27/2019	GBPSEK	1:30:00 PM	12.1294	12.1374			N/A
5/27/2019	GBPSEK	3:30:00 PM	12.1496	12.1546			N/A
5/27/2019	GBPSEK.fx	9:30:00 AM	12.14998	12.16515			N/A
5/27/2019	GBPSEK.fx	11:30:00 AM	12.14108	12.15695			N/A
5/27/2019	GBPSEK.fx	1:30:00 PM	12.12523	12.14094			N/A
5/27/2019	GBPSEK.fx	3:30:00 PM	12.14561	12.15816			N/A
5/27/2019	GBPSGD	9:30:00 AM	1.7505	1.7513			N/A
5/27/2019	GBPSGD	11:30:00 AM	1.7477	1.7485			N/A
5/27/2019	GBPSGD	1:30:00 PM	1.743	1.7437			N/A
5/27/2019	GBPSGD	3:30:00 PM	1.7436	1.7441			N/A
5/27/2019	GBPSGD.fx	9:30:00 AM	1.74868	1.75308			N/A
5/27/2019	GBPSGD.fx	11:30:00 AM	1.74586	1.75029			N/A
5/27/2019	GBPSGD.fx	1:30:00 PM	1.74118	1.74549			N/A
5/27/2019	GBPSGD.fx	3:30:00 PM	1.74191	1.7459			N/A
5/27/2019	GBPUSD	9:30:00 AM	1.27407	1.27402			N/A
5/27/2019	GBPUSD	11:30:00 AM	1.2718	1.27181	10000	10000	N/A

5/27/2019	GBPUSD	1:30:00 PM	1.26821	1.2682		N/A
5/27/2019	GBPUSD	3:30:00 PM	1.26876	1.26854		N/A
5/27/2019	GBPUSD.fx	9:30:00 AM	1.27411	1.27397		N/A
5/27/2019	GBPUSD.fx	11:30:00 AM	1.27179	1.27176		N/A
5/27/2019	GBPUSD.fx	1:30:00 PM	1.26826	1.26815		N/A
5/27/2019	GBPUSD.fx	3:30:00 PM	1.2688	1.26847		N/A
5/27/2019	GBPZAR	9:30:00 AM	18.3324	18.3542		N/A
5/27/2019	GBPZAR	11:30:00 AM	18.3314	18.3586		N/A
5/27/2019	GBPZAR	1:30:00 PM	18.3342	18.3616		N/A
5/27/2019	GBPZAR	3:30:00 PM	18.3331	18.3578		N/A
5/27/2019	GBPZAR.fx	9:30:00 AM	18.3383	18.3494		N/A
5/27/2019	GBPZAR.fx	11:30:00 AM	18.3398	18.3515		N/A
5/27/2019	GBPZAR.fx	1:30:00 PM	18.3415	18.3545		N/A
5/27/2019	GBPZAR.fx	3:30:00 PM	18.3398	18.35		N/A
5/27/2019	GOLD	9:30:00 AM	1286.08	1286.38		N/A
5/27/2019	GOLD	11:30:00 AM	1286.56	1286.99		N/A
5/27/2019	GOLD	1:30:00 PM	1285.79	1286.19		N/A
5/27/2019	GOLD	3:30:00 PM	1285.09	1285.34		N/A
5/27/2019	HKDJPY	9:30:00 AM	13.96	13.96		N/A
5/27/2019	HKDJPY	11:30:00 AM	13.95	13.96		N/A
5/27/2019	HKDJPY	1:30:00 PM				N/A
5/27/2019	HKDJPY	3:30:00 PM	13.95	13.97		N/A
5/27/2019	HKDJPY.fx	9:30:00 AM	13.951	13.956		N/A
5/27/2019	HKDJPY.fx	11:30:00 AM	13.949	13.957		N/A
5/27/2019	HKDJPY.fx	1:30:00 PM	13.94	13.948		N/A
5/27/2019	HKDJPY.fx	3:30:00 PM	13.943	13.95		N/A
5/27/2019	HUFJPY	9:30:00 AM	0.3776	0.3779		N/A
5/27/2019	HUFJPY	11:30:00 AM	0.3769	0.3772		N/A
5/27/2019	HUFJPY	1:30:00 PM	0.3765	0.3768		N/A
5/27/2019	HUFJPY	3:30:00 PM	0.3766	0.3769		N/A
5/27/2019	JP225.i	9:30:00 AM	21193.14	21208.14		N/A
5/27/2019	JP225.i	11:30:00 AM	21190.64	21208.14		N/A
5/27/2019	JP225.i	1:30:00 PM	21183.14	21200.64		N/A
5/27/2019	JP225.i	3:30:00 PM	21205.64	21223.14		N/A

5/27/2019	MXNJPY	9:30:00 AM	5.76	5.76			N/A
5/27/2019	MXNJPY	11:30:00 AM	5.75	5.76			N/A
5/27/2019	MXNJPY	1:30:00 PM					N/A
5/27/2019	MXNJPY	3:30:00 PM	5.75	5.77			N/A
5/27/2019	NASDAQ.i	9:30:00 AM					N/A
5/27/2019	NASDAQ.i	11:30:00 AM					N/A
5/27/2019	NASDAQ.i	1:30:00 PM					N/A
5/27/2019	NASDAQ.i	3:30:00 PM					N/A
5/27/2019	NOKJPY	9:30:00 AM	12.6	12.63			N/A
5/27/2019	NOKJPY	11:30:00 AM	12.58	12.61			N/A
5/27/2019	NOKJPY	1:30:00 PM	12.56	12.58			N/A
5/27/2019	NOKJPY	3:30:00 PM	12.56	12.59			N/A
5/27/2019	NOKJPY.fx	9:30:00 AM	12.605	12.61			N/A
5/27/2019	NOKJPY.fx	11:30:00 AM	12.583	12.591			N/A
5/27/2019	NOKJPY.fx	1:30:00 PM	12.56	12.569			N/A
5/27/2019	NOKJPY.fx	3:30:00 PM	12.563	12.57			N/A
5/27/2019	NZDCAD	9:30:00 AM	0.88004	0.88069			N/A
5/27/2019	NZDCAD	11:30:00 AM	0.87984	0.88052			N/A
5/27/2019	NZDCAD	1:30:00 PM	0.88014	0.88088			N/A
5/27/2019	NZDCAD	3:30:00 PM	0.87997	0.88066			N/A
5/27/2019	NZDCAD.fx	9:30:00 AM	0.88037	0.88036			N/A
5/27/2019	NZDCAD.fx	11:30:00 AM	0.88018	0.88019			N/A
5/27/2019	NZDCAD.fx	1:30:00 PM	0.88049	0.88053			N/A
5/27/2019	NZDCAD.fx	3:30:00 PM	0.88032	0.88033			N/A
5/27/2019	NZDCHF	9:30:00 AM	0.65747	0.65815			N/A
5/27/2019	NZDCHF	11:30:00 AM	0.65817	0.65889			N/A
5/27/2019	NZDCHF	1:30:00 PM	0.65751	0.65822			N/A
5/27/2019	NZDCHF	3:30:00 PM	0.65773	0.65846			N/A
5/27/2019	NZDCHF.fx	9:30:00 AM	0.6578	0.6578			N/A
5/27/2019	NZDCHF.fx	11:30:00 AM	0.65851	0.65854			N/A
5/27/2019	NZDCHF.fx	1:30:00 PM	0.65785	0.65787			N/A
5/27/2019	NZDCHF.fx	3:30:00 PM	0.65806	0.65809			N/A
5/27/2019	NZDCZK	9:30:00 AM	15.095	15.106			N/A
5/27/2019	NZDCZK	11:30:00 AM	15.089	15.095			N/A

5/27/2019	NZDCZK	1:30:00 PM	15.089	15.102			N/A
5/27/2019	NZDCZK	3:30:00 PM	15.085	15.098			N/A
5/27/2019	NZDDKK	9:30:00 AM					N/A
5/27/2019	NZDDKK	11:30:00 AM					N/A
5/27/2019	NZDDKK	1:30:00 PM					N/A
5/27/2019	NZDDKK	3:30:00 PM					N/A
5/27/2019	NZDHKD	9:30:00 AM	5.1414	5.1443			N/A
5/27/2019	NZDHKD	11:30:00 AM	5.1356	5.1383			N/A
5/27/2019	NZDHKD	1:30:00 PM	5.1351	5.1379			N/A
5/27/2019	NZDHKD	3:30:00 PM	5.1352	5.1381			N/A
5/27/2019	NZDHUF	9:30:00 AM	190.08	190.35			N/A
5/27/2019	NZDHUF	11:30:00 AM	190.17	190.46			N/A
5/27/2019	NZDHUF	1:30:00 PM	190.21	190.5			N/A
5/27/2019	NZDHUF	3:30:00 PM	190.21	190.51			N/A
5/27/2019	NZDJPY	9:30:00 AM	71.766	71.819			N/A
5/27/2019	NZDJPY	11:30:00 AM	71.666	71.734			N/A
5/27/2019	NZDJPY	1:30:00 PM	71.617	71.693			N/A
5/27/2019	NZDJPY	3:30:00 PM	71.633	71.707			N/A
5/27/2019	NZDJPY.fx	9:30:00 AM	71.798	71.786			N/A
5/27/2019	NZDJPY.fx	11:30:00 AM	71.698	71.701			N/A
5/27/2019	NZDJPY.fx	1:30:00 PM	71.649	71.66			N/A
5/27/2019	NZDJPY.fx	3:30:00 PM	71.664	71.673			N/A
5/27/2019	NZDMXN	9:30:00 AM	12.4669	12.471			N/A
5/27/2019	NZDMXN	11:30:00 AM	12.467	12.4739			N/A
5/27/2019	NZDMXN	1:30:00 PM	12.4709	12.4774			N/A
5/27/2019	NZDMXN	3:30:00 PM	12.4607	12.4676			N/A
5/27/2019	NZDNOK	9:30:00 AM	5.6912	5.6944			N/A
5/27/2019	NZDNOK	11:30:00 AM	5.6924	5.6959			N/A
5/27/2019	NZDNOK	1:30:00 PM	5.6983	5.7021			N/A
5/27/2019	NZDNOK	3:30:00 PM	5.6994	5.7031			N/A
5/27/2019	NZDPLN	9:30:00 AM	2.5092	2.5106			N/A
5/27/2019	NZDPLN	11:30:00 AM	2.5096	2.511			N/A
5/27/2019	NZDPLN	1:30:00 PM	2.5103	2.5117			N/A
5/27/2019	NZDPLN	3:30:00 PM	2.5086	2.51			N/A

5/27/2019	NZDSEK	9:30:00 AM	6.2486	6.255			N/A
5/27/2019	NZDSEK	11:30:00 AM	6.2474	6.2542			N/A
5/27/2019	NZDSEK	1:30:00 PM	6.2569	6.2633			N/A
5/27/2019	NZDSEK	3:30:00 PM	6.2644	6.271			N/A
5/27/2019	NZDSGD	9:30:00 AM	0.9004	0.901			N/A
5/27/2019	NZDSGD	11:30:00 AM	0.8995	0.8997			N/A
5/27/2019	NZDSGD	1:30:00 PM	0.8996	0.9002			N/A
5/27/2019	NZDSGD	3:30:00 PM	0.8995	0.9002			N/A
5/27/2019	NZDSGD.fx	9:30:00 AM	0.90039	0.90094			N/A
5/27/2019	NZDSGD.fx	11:30:00 AM	0.89948	0.90004			N/A
5/27/2019	NZDSGD.fx	1:30:00 PM	0.89958	0.90016			N/A
5/27/2019	NZDSGD.fx	3:30:00 PM	0.89952	0.90017			N/A
5/27/2019	NZDUSD	9:30:00 AM	0.65533	0.65539			N/A
5/27/2019	NZDUSD	11:30:00 AM	0.65451	0.65463			N/A
5/27/2019	NZDUSD	1:30:00 PM	0.65449	0.65466			N/A
5/27/2019	NZDUSD	3:30:00 PM	0.65449	0.65466			N/A
5/27/2019	NZDUSD.fx	9:30:00 AM	0.6554	0.6554			N/A
5/27/2019	NZDUSD.fx	11:30:00 AM	0.65458	0.65465			N/A
5/27/2019	NZDUSD.fx	1:30:00 PM	0.65457	0.65467			N/A
5/27/2019	NZDUSD.fx	3:30:00 PM	0.65456	0.65468			N/A
5/27/2019	NZDZAR	9:30:00 AM	9.424	9.4359			N/A
5/27/2019	NZDZAR	11:30:00 AM	9.43	9.4466			N/A
5/27/2019	NZDZAR	1:30:00 PM	9.4579	9.4741			N/A
5/27/2019	NZDZAR	3:30:00 PM	9.452	9.4699			N/A
5/27/2019	SEKJPY	9:30:00 AM	11.48	11.49			N/A
5/27/2019	SEKJPY	11:30:00 AM	11.47	11.48			N/A
5/27/2019	SEKJPY	1:30:00 PM					N/A
5/27/2019	SEKJPY	3:30:00 PM	11.43	11.44			N/A
5/27/2019	SEKJPY.fx	9:30:00 AM	11.47	11.487			N/A
5/27/2019	SEKJPY.fx	11:30:00 AM	11.456	11.475			N/A
5/27/2019	SEKJPY.fx	1:30:00 PM	11.431	11.45			N/A
5/27/2019	SEKJPY.fx	3:30:00 PM	11.42	11.438			N/A
5/27/2019	SGDJPY	9:30:00 AM	79.68	79.7			N/A
5/27/2019	SGDJPY	11:30:00 AM	79.67	79.69			N/A

5/27/2019	SGDJPY	1:30:00 PM	79.64	79.63			N/A
5/27/2019	SGDJPY	3:30:00 PM	79.63	79.65			N/A
5/27/2019	SILVER	9:30:00 AM	14.41	14.79			N/A
5/27/2019	SILVER	11:30:00 AM	14.42	14.79			N/A
5/27/2019	SILVER	1:30:00 PM	14.39	14.77			N/A
5/27/2019	SILVER	3:30:00 PM	14.38	14.76			N/A
5/27/2019	SPX500.i	9:30:00 AM	2833.06	2832.86			N/A
5/27/2019	SPX500.i	11:30:00 AM	2832.81	2833.49			N/A
5/27/2019	SPX500.i	1:30:00 PM	2827.81	2828.86			N/A
5/27/2019	SPX500.i	3:30:00 PM	2830.06	2830.61			N/A
5/27/2019	UK100.i	9:30:00 AM	7296.3	7296.9			N/A
5/27/2019	UK100.i	11:30:00 AM	7295.82	7297.74			N/A
5/27/2019	UK100.i	1:30:00 PM	7286.34	7288.86			N/A
5/27/2019	UK100.i	3:30:00 PM	7293.38	7295.06			N/A
5/27/2019	USDCAD	9:30:00 AM	1.34327	1.34319			N/A
5/27/2019	USDCAD	11:30:00 AM	1.3446	1.34468			N/A
5/27/2019	USDCAD	1:30:00 PM	1.34503	1.3452			N/A
5/27/2019	USDCAD	3:30:00 PM	1.3448	1.34489			N/A
5/27/2019	USDCAD.fx	9:30:00 AM	1.34329	1.34316			N/A
5/27/2019	USDCAD.fx	11:30:00 AM	1.34462	1.34465			N/A
5/27/2019	USDCAD.fx	1:30:00 PM	1.34506	1.34517			N/A
5/27/2019	USDCAD.fx	3:30:00 PM	1.34482	1.34485			N/A
5/27/2019	USDCHF	9:30:00 AM	1.0036	1.00373			N/A
5/27/2019	USDCHF	11:30:00 AM	1.00593	1.00605			N/A
5/27/2019	USDCHF	1:30:00 PM	1.00492	1.00501			N/A
5/27/2019	USDCHF	3:30:00 PM	1.00527	1.00538			N/A
5/27/2019	USDCHF.fx	9:30:00 AM	1.00364	1.00367			N/A
5/27/2019	USDCHF.fx	11:30:00 AM	1.00598	1.00599			N/A
5/27/2019	USDCHF.fx	1:30:00 PM	1.00498	1.00495			N/A
5/27/2019	USDCHF.fx	3:30:00 PM	1.00532	1.00532			N/A
5/27/2019	USDCZK	9:30:00 AM	23.052	23.073			N/A
5/27/2019	USDCZK	11:30:00 AM	23.074	23.083			N/A
5/27/2019	USDCZK	1:30:00 PM	23.072	23.094			N/A
5/27/2019	USDCZK	3:30:00 PM	23.064	23.087			N/A

5/27/2019	USDCZK.fx	9:30:00 AM	23.0605	23.0659			N/A
5/27/2019	USDCZK.fx	11:30:00 AM	23.082	23.0741			N/A
5/27/2019	USDCZK.fx	1:30:00 PM	23.0796	23.0872			N/A
5/27/2019	USDCZK.fx	3:30:00 PM	23.072	23.079			N/A
5/27/2019	USDDKK	9:30:00 AM	6.6641	6.6678			N/A
5/27/2019	USDDKK	11:30:00 AM	6.6713	6.675			N/A
5/27/2019	USDDKK	1:30:00 PM	6.6705	6.6745			N/A
5/27/2019	USDDKK	3:30:00 PM	6.6693	6.6737			N/A
5/27/2019	USDDKK.fx	9:30:00 AM	6.66447	6.66568			N/A
5/27/2019	USDDKK.fx	11:30:00 AM	6.67177	6.67307			N/A
5/27/2019	USDDKK.fx	1:30:00 PM	6.67087	6.67248			N/A
5/27/2019	USDDKK.fx	3:30:00 PM	6.66994	6.67162			N/A
5/27/2019	USDHKD	9:30:00 AM	7.849	7.8493			N/A
5/27/2019	USDHKD	11:30:00 AM	7.8493	7.8496			N/A
5/27/2019	USDHKD	1:30:00 PM	7.8486	7.8491			N/A
5/27/2019	USDHKD	3:30:00 PM	7.8493	7.8498			N/A
5/27/2019	USDHKD.fx	9:30:00 AM	7.84912	7.84969			N/A
5/27/2019	USDHKD.fx	11:30:00 AM	7.84927	7.84973			N/A
5/27/2019	USDHKD.fx	1:30:00 PM	7.84908	7.84966			N/A
5/27/2019	USDHKD.fx	3:30:00 PM	7.84927	7.84981			N/A
5/27/2019	USDHUF	9:30:00 AM	290.16	290.57			N/A
5/27/2019	USDHUF	11:30:00 AM	290.67	291.15			N/A
5/27/2019	USDHUF	1:30:00 PM	290.72	291.19			N/A
5/27/2019	USDHUF	3:30:00 PM	290.74	291.23			N/A
5/27/2019	USDHUF.fx	9:30:00 AM	290.347	290.39			N/A
5/27/2019	USDHUF.fx	11:30:00 AM	290.858	290.957			N/A
5/27/2019	USDHUF.fx	1:30:00 PM	290.932	291			N/A
5/27/2019	USDHUF.fx	3:30:00 PM	290.925	291.045			N/A
5/27/2019	USDINR	9:30:00 AM	64.45	74.44			N/A
5/27/2019	USDINR	11:30:00 AM	64.6	74.57			N/A
5/27/2019	USDINR	1:30:00 PM					N/A
5/27/2019	USDINR	3:30:00 PM					N/A
5/27/2019	USDJPY	9:30:00 AM	109.539	109.529			N/A
5/27/2019	USDJPY	11:30:00 AM	109.522	109.537			N/A

5/27/2019	USDJPY	1:30:00 PM	109.453	109.47			N/A
5/27/2019	USDJPY	3:30:00 PM	109.476	109.489			N/A
5/27/2019	USDJPY.fx	9:30:00 AM	109.545	109.522			N/A
5/27/2019	USDJPY.fx	11:30:00 AM	109.527	109.53			N/A
5/27/2019	USDJPY.fx	1:30:00 PM	109.458	109.463			N/A
5/27/2019	USDJPY.fx	3:30:00 PM	109.481	109.482			N/A
5/27/2019	USDMXN	9:30:00 AM	19.03	19.035			N/A
5/27/2019	USDMXN	11:30:00 AM	19.054	19.062			N/A
5/27/2019	USDMXN	1:30:00 PM					N/A
5/27/2019	USDMXN	3:30:00 PM	19.044	19.053			N/A
5/27/2019	USDMXN.f	9:30:00 AM	19.0351	19.0312			N/A
5/27/2019	USDMXN.f	11:30:00 AM	19.0577	19.0578			N/A
5/27/2019	USDMXN.f	1:30:00 PM	19.0617	19.0642			N/A
5/27/2019	USDMXN.f	3:30:00 PM	19.0474	19.0495			N/A
5/27/2019	USDNOK	9:30:00 AM	8.685	8.6923			N/A
5/27/2019	USDNOK	11:30:00 AM	8.6975	8.7062			N/A
5/27/2019	USDNOK	1:30:00 PM	8.7072	8.7162			N/A
5/27/2019	USDNOK	3:30:00 PM	8.7086	8.7167			N/A
5/27/2019	USDNOK.fx	9:30:00 AM	8.689	8.6878			N/A
5/27/2019	USDNOK.fx	11:30:00 AM	8.70142	8.70156			N/A
5/27/2019	USDNOK.fx	1:30:00 PM	8.71133	8.71166			N/A
5/27/2019	USDNOK.fx	3:30:00 PM	8.71252	8.71234			N/A
5/27/2019	USDPLN	9:30:00 AM	3.8298	3.8306			N/A
5/27/2019	USDPLN	11:30:00 AM	3.8356	3.8365			N/A
5/27/2019	USDPLN	1:30:00 PM	3.8366	3.8383			N/A
5/27/2019	USDPLN	3:30:00 PM	3.8332	3.8348			N/A
5/27/2019	USDPLN.fx	9:30:00 AM	3.82886	3.83142			N/A
5/27/2019	USDPLN.fx	11:30:00 AM	3.83478	3.83724			N/A
5/27/2019	USDPLN.fx	1:30:00 PM	3.83586	3.83891			N/A
5/27/2019	USDPLN.fx	3:30:00 PM	3.83238	3.83553			N/A
5/27/2019	USDRUB	9:30:00 AM					N/A
5/27/2019	USDRUB	11:30:00 AM	64.264	64.65			N/A
5/27/2019	USDRUB	1:30:00 PM	64.233	64.622			N/A
5/27/2019	USDRUB	3:30:00 PM	64.27	64.665			N/A



5/27/2019	USDSEK	9:30:00 AM	9.5403	9.5444			N/A
5/27/2019	USDSEK	11:30:00 AM	9.5503	9.5544			N/A
5/27/2019	USDSEK	1:30:00 PM	9.5649	9.5694			N/A
5/27/2019	USDSEK	3:30:00 PM	9.5763	9.5805			N/A
5/27/2019	USDSEK.fx	9:30:00 AM	9.54307	9.5426			N/A
5/27/2019	USDSEK.fx	11:30:00 AM	9.55298	9.55249			N/A
5/27/2019	USDSEK.fx	1:30:00 PM	9.56747	9.56746			N/A
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5/27/2019	USDSGD	11:30:00 AM	1.3743	1.3745			N/A
5/27/2019	USDSGD	1:30:00 PM	1.3745	1.3748			N/A
5/27/2019	USDSGD	3:30:00 PM	1.3745	1.3748			N/A
5/27/2019	USDSGD.fx	9:30:00 AM	1.37404	1.37442			N/A
5/27/2019	USDSGD.fx	11:30:00 AM	1.37422	1.37473			N/A
5/27/2019	USDSGD.fx	1:30:00 PM	1.37439	1.37486			N/A
5/27/2019	USDSGD.fx	3:30:00 PM	1.37437	1.37489			N/A
5/27/2019	USDZAR	9:30:00 AM	14.3916	14.4028			N/A
5/27/2019	USDZAR	11:30:00 AM	14.4159	14.4336			N/A
5/27/2019	USDZAR	1:30:00 PM	14.4586	14.477			N/A
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5/27/2019	XAUUSD	11:30:00 AM	1286.56	1286.99			N/A
5/27/2019	XAUUSD	1:30:00 PM	1285.8	1286.2			N/A
5/27/2019	XAUUSD	3:30:00 PM	1285.11	1285.34			N/A
5/27/2019	ZARJPY	9:30:00 AM	7.58	7.61			N/A
5/27/2019	ZARJPY	11:30:00 AM	7.57	7.59			N/A
5/27/2019	ZARJPY	1:30:00 PM	7.54	7.57			N/A
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5/28/2019	#NTDOY	3:30:00 PM					N/A
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5/28/2019	#Ripple	11:30:00 AM	0.4252	0.429			N/A
5/28/2019	#Ripple	1:30:00 PM	0.4249	0.4298			N/A
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5/28/2019	#SBUX	1:30:00 PM					N/A
5/28/2019	#SBUX	3:30:00 PM					N/A
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5/28/2019	#SNE	3:30:00 PM					N/A
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5/28/2019	#TRV	3:30:00 PM					N/A
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5/28/2019	#TSCO	3:30:00 PM					N/A
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5/28/2019	#UBS	1:30:00 PM					N/A
5/28/2019	#UBS	3:30:00 PM					N/A
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5/28/2019	#UPS	3:30:00 PM					N/A
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5/28/2019	#YHOO	11:30:00 AM					N/A
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5/28/2019	#YHOO	3:30:00 PM					N/A

5/28/2019	#ZNGA	9:30:00 AM					N/A
5/28/2019	#ZNGA	11:30:00 AM					N/A
5/28/2019	#ZNGA	1:30:00 PM					N/A
5/28/2019	#ZNGA	3:30:00 PM					N/A
5/28/2019	AUDCAD	9:30:00 AM	0.93024	0.93093			N/A
5/28/2019	AUDCAD	11:30:00 AM	0.93037	0.93102			N/A
5/28/2019	AUDCAD	1:30:00 PM	0.93177	0.93235			N/A
5/28/2019	AUDCAD	3:30:00 PM	0.93203	0.93266			N/A
5/28/2019	AUDCAD.fx	9:30:00 AM	0.93056	0.93059			N/A
5/28/2019	AUDCAD.fx	11:30:00 AM	0.9307	0.93065			N/A
5/28/2019	AUDCAD.fx	1:30:00 PM	0.9321	0.93198			N/A
5/28/2019	AUDCAD.fx	3:30:00 PM	0.93238	0.93231			N/A
5/28/2019	AUDCHF	9:30:00 AM	0.69511	0.69577			N/A
5/28/2019	AUDCHF	11:30:00 AM	0.69428	0.69493			N/A
5/28/2019	AUDCHF	1:30:00 PM	0.69466	0.69506			N/A
5/28/2019	AUDCHF	3:30:00 PM	0.69602	0.69671			N/A
5/28/2019	AUDCHF.fx	9:30:00 AM	0.69546	0.69542			N/A
5/28/2019	AUDCHF.fx	11:30:00 AM	0.69462	0.69458			N/A
5/28/2019	AUDCHF.fx	1:30:00 PM	0.69501	0.6947			N/A
5/28/2019	AUDCHF.fx	3:30:00 PM	0.69637	0.69635			N/A
5/28/2019	AUDCZK	9:30:00 AM	15.97	15.986			N/A
5/28/2019	AUDCZK	11:30:00 AM	15.95	15.966			N/A
5/28/2019	AUDCZK	1:30:00 PM	15.97	15.983			N/A
5/28/2019	AUDCZK	3:30:00 PM	15.968	15.984			N/A
5/28/2019	AUDDKK	9:30:00 AM	4.6201	4.6249			N/A
5/28/2019	AUDDKK	11:30:00 AM	4.6136	4.6183			N/A
5/28/2019	AUDDKK	1:30:00 PM	4.6173	4.6209			N/A
5/28/2019	AUDDKK	3:30:00 PM	4.6177	4.6223			N/A
5/28/2019	AUDHKD	9:30:00 AM	5.4317	5.4356			N/A
5/28/2019	AUDHKD	11:30:00 AM	5.4263	5.4302			N/A
5/28/2019	AUDHKD	1:30:00 PM	5.4285	5.4312			N/A
5/28/2019	AUDHKD	3:30:00 PM	5.4297	5.4336			N/A
5/28/2019	AUDHUF	9:30:00 AM	201.42	201.64			N/A
5/28/2019	AUDHUF	11:30:00 AM	201.53	201.69			N/A

5/28/2019	AUDHUF	1:30:00 PM	201.84	202.05			N/A
5/28/2019	AUDHUF	3:30:00 PM	201.99	202.22			N/A
5/28/2019	AUDJPY	9:30:00 AM	75.768	75.841			N/A
5/28/2019	AUDJPY	11:30:00 AM	75.551	75.608	20000	20000	N/A
5/28/2019	AUDJPY	1:30:00 PM	75.639	75.685			N/A
5/28/2019	AUDJPY	3:30:00 PM	75.784	75.842			N/A
5/28/2019	AUDJPY.fx	9:30:00 AM	75.802	75.806			N/A
5/28/2019	AUDJPY.fx	11:30:00 AM	75.585	75.572			N/A
5/28/2019	AUDJPY.fx	1:30:00 PM	75.673	75.649			N/A
5/28/2019	AUDJPY.fx	3:30:00 PM	75.819	75.807			N/A
5/28/2019	AUDMXN	9:30:00 AM	13.1907	13.1979			N/A
5/28/2019	AUDMXN	11:30:00 AM	13.2005	13.2095			N/A
5/28/2019	AUDMXN	1:30:00 PM	13.2216	13.2285			N/A
5/28/2019	AUDMXN	3:30:00 PM	13.2084	13.2182			N/A
5/28/2019	AUDNOK	9:30:00 AM	6.0241	6.0292			N/A
5/28/2019	AUDNOK	11:30:00 AM	6.0104	6.0151			N/A
5/28/2019	AUDNOK	1:30:00 PM	6.0196	6.0234			N/A
5/28/2019	AUDNOK	3:30:00 PM	6.01	6.0147			N/A
5/28/2019	AUDNOK.fx	9:30:00 AM	6.0256	6.0276			N/A
5/28/2019	AUDNOK.fx	11:30:00 AM	6.012	6.0133			N/A
5/28/2019	AUDNOK.fx	1:30:00 PM	6.0212	6.0216			N/A
5/28/2019	AUDNOK.fx	3:30:00 PM	6.0116	6.013			N/A
5/28/2019	AUDNZD	9:30:00 AM	1.05608	1.05692			N/A
5/28/2019	AUDNZD	11:30:00 AM	1.05549	1.05638			N/A
5/28/2019	AUDNZD	1:30:00 PM	1.0562	1.05694			N/A
5/28/2019	AUDNZD	3:30:00 PM	1.05718	1.0581			N/A
5/28/2019	AUDNZD.fx	9:30:00 AM	1.05652	1.05648			N/A
5/28/2019	AUDNZD.fx	11:30:00 AM	1.05592	1.05593			N/A
5/28/2019	AUDNZD.fx	1:30:00 PM	1.05664	1.05647			N/A
5/28/2019	AUDNZD.fx	3:30:00 PM	1.05761	1.05766			N/A
5/28/2019	AUDPLN	9:30:00 AM	2.6555	2.6578			N/A
5/28/2019	AUDPLN	11:30:00 AM	2.6552	2.6575			N/A
5/28/2019	AUDPLN	1:30:00 PM	2.6558	2.6587			N/A
5/28/2019	AUDPLN	3:30:00 PM	2.6563	2.6594			N/A



5/28/2019	AUDSEK	9:30:00 AM	6.629	6.6313			N/A
5/28/2019	AUDSEK	11:30:00 AM	6.6034	6.6066			N/A
5/28/2019	AUDSEK	1:30:00 PM	6.6203	6.6223			N/A
5/28/2019	AUDSEK	3:30:00 PM	6.6108	6.6133			N/A
5/28/2019	AUDSEK.fx	9:30:00 AM	6.6245	6.6357			N/A
5/28/2019	AUDSEK.fx	11:30:00 AM	6.5988	6.611			N/A
5/28/2019	AUDSEK.fx	1:30:00 PM	6.6157	6.6266			N/A
5/28/2019	AUDSEK.fx	3:30:00 PM	6.6062	6.6177			N/A
5/28/2019	AUDSGD	9:30:00 AM	0.9532	0.9534			N/A
5/28/2019	AUDSGD	11:30:00 AM	0.953	0.9532			N/A
5/28/2019	AUDSGD	1:30:00 PM	0.9534	0.9535			N/A
5/28/2019	AUDSGD	3:30:00 PM	0.9538	0.9539			N/A
5/28/2019	AUDSGD.fx	9:30:00 AM	0.95323	0.95335			N/A
5/28/2019	AUDSGD.fx	11:30:00 AM	0.95306	0.95313			N/A
5/28/2019	AUDSGD.fx	1:30:00 PM	0.95349	0.95337			N/A
5/28/2019	AUDSGD.fx	3:30:00 PM	0.95387	0.95395			N/A
5/28/2019	AUDUSD	9:30:00 AM	0.69242	0.69252			N/A
5/28/2019	AUDUSD	11:30:00 AM	0.69167	0.69176			N/A
5/28/2019	AUDUSD	1:30:00 PM	0.69202	0.69195			N/A
5/28/2019	AUDUSD	3:30:00 PM	0.69212	0.69225			N/A
5/28/2019	AUDUSD.fx	9:30:00 AM	0.69246	0.69246			N/A
5/28/2019	AUDUSD.fx	11:30:00 AM	0.69172	0.69171			N/A
5/28/2019	AUDUSD.fx	1:30:00 PM	0.69207	0.69189			N/A
5/28/2019	AUDUSD.fx	3:30:00 PM	0.69217	0.69219			N/A
5/28/2019	AUDZAR	9:30:00 AM	10.0076	10.012			N/A
5/28/2019	AUDZAR	11:30:00 AM	10.0768	10.0898			N/A
5/28/2019	AUDZAR	1:30:00 PM	10.108	10.1179			N/A
5/28/2019	AUDZAR	3:30:00 PM	10.1127	10.1258			N/A
5/28/2019	AUS200.i	9:30:00 AM					N/A
5/28/2019	AUS200.i	11:30:00 AM	6466.25	6469.35			N/A
5/28/2019	AUS200.i	1:30:00 PM	6460.95	6463.95			N/A
5/28/2019	AUS200.i	3:30:00 PM	6478.95	6482			N/A
5/28/2019	BCHUSD	9:30:00 AM	441.11	441.4			N/A
5/28/2019	BCHUSD	11:30:00 AM	442.41	444.17			N/A

5/28/2019	BCHUSD	1:30:00 PM	442.71	444.12			N/A
5/28/2019	BCHUSD	3:30:00 PM	444.59	446.5			N/A
5/28/2019	CADCHF	9:30:00 AM	0.74697	0.74764			N/A
5/28/2019	CADCHF	11:30:00 AM	0.74599	0.74661			N/A
5/28/2019	CADCHF	1:30:00 PM	0.74519	0.74575			N/A
5/28/2019	CADCHF	3:30:00 PM	0.74657	0.74722			N/A
5/28/2019	CADCHF.fx	9:30:00 AM	0.74731	0.74728			N/A
5/28/2019	CADCHF.fx	11:30:00 AM	0.74635	0.74626			N/A
5/28/2019	CADCHF.fx	1:30:00 PM	0.74557	0.74539			N/A
5/28/2019	CADCHF.fx	3:30:00 PM	0.74691	0.74686			N/A
5/28/2019	CADCZK	9:30:00 AM	17.165	17.181			N/A
5/28/2019	CADCZK	11:30:00 AM	17.141	17.157			N/A
5/28/2019	CADCZK	1:30:00 PM	17.136	17.152			N/A
5/28/2019	CADCZK	3:30:00 PM	17.131	17.147			N/A
5/28/2019	CADDKK	9:30:00 AM	4.966	4.97			N/A
5/28/2019	CADDKK	11:30:00 AM	4.958	4.962			N/A
5/28/2019	CADDKK	1:30:00 PM	4.955	4.958			N/A
5/28/2019	CADDKK	3:30:00 PM					N/A
5/28/2019	CADHKD	9:30:00 AM	5.8383	5.8423			N/A
5/28/2019	CADHKD	11:30:00 AM	5.8318	5.8352			N/A
5/28/2019	CADHKD	1:30:00 PM	5.8248	5.8286			N/A
5/28/2019	CADHKD	3:30:00 PM	5.825	5.8283			N/A
5/28/2019	CADHUF	9:30:00 AM	216.52	216.68			N/A
5/28/2019	CADHUF	11:30:00 AM	216.61	216.7			N/A
5/28/2019	CADHUF	1:30:00 PM	216.63	216.76			N/A
5/28/2019	CADHUF	3:30:00 PM	216.72	216.89			N/A
5/28/2019	CADJPY	9:30:00 AM	81.423	81.496			N/A
5/28/2019	CADJPY	11:30:00 AM	81.186	81.23			N/A
5/28/2019	CADJPY	1:30:00 PM	81.148	81.207			N/A
5/28/2019	CADJPY	3:30:00 PM	81.29	81.342			N/A
5/28/2019	CADJPY.fx	9:30:00 AM	81.456	81.461			N/A
5/28/2019	CADJPY.fx	11:30:00 AM	81.22	81.195			N/A
5/28/2019	CADJPY.fx	1:30:00 PM	81.182	81.172			N/A
5/28/2019	CADJPY.fx	3:30:00 PM	81.324	81.307			N/A

5/28/2019	CADMXN	9:30:00 AM	14.1771	14.1862			N/A
5/28/2019	CADMXN	11:30:00 AM	14.1854	14.1972			N/A
5/28/2019	CADMXN	1:30:00 PM	14.1857	14.1974			N/A
5/28/2019	CADMXN	3:30:00 PM	14.1696	14.1805			N/A
5/28/2019	CADNOK	9:30:00 AM	6.472	6.4769			N/A
5/28/2019	CADNOK	11:30:00 AM	6.4572	6.4621			N/A
5/28/2019	CADNOK	1:30:00 PM	6.4574	6.4619			N/A
5/28/2019	CADNOK	3:30:00 PM	6.4458	6.45			N/A
5/28/2019	CADPLN	9:30:00 AM	2.854	2.8553			N/A
5/28/2019	CADPLN	11:30:00 AM	2.853	2.8548			N/A
5/28/2019	CADPLN	1:30:00 PM	2.8498	2.8515			N/A
5/28/2019	CADPLN	3:30:00 PM	2.8494	2.8514			N/A
5/28/2019	CADSEK	9:30:00 AM	7.1219	7.125			N/A
5/28/2019	CADSEK	11:30:00 AM	7.0931	7.097			N/A
5/28/2019	CADSEK	1:30:00 PM	7.1013	7.1046			N/A
5/28/2019	CADSEK	3:30:00 PM	7.0885	7.0923			N/A
5/28/2019	CADSGD	9:30:00 AM	1.0239	1.0242			N/A
5/28/2019	CADSGD	11:30:00 AM	1.0235	1.0238			N/A
5/28/2019	CADSGD	1:30:00 PM	1.0223	1.0226			N/A
5/28/2019	CADSGD	3:30:00 PM	1.0224	1.0227			N/A
5/28/2019	CADZAR	9:30:00 AM	10.7549	10.7608			N/A
5/28/2019	CADZAR	11:30:00 AM	10.8284	10.8425			N/A
5/28/2019	CADZAR	1:30:00 PM	10.847	10.8593			N/A
5/28/2019	CADZAR	3:30:00 PM	10.8479	10.8622			N/A
5/28/2019	CHFCZK	9:30:00 AM	22.974	22.99			N/A
5/28/2019	CHFCZK	11:30:00 AM	22.972	22.989			N/A
5/28/2019	CHFCZK	1:30:00 PM	22.993	23.003			N/A
5/28/2019	CHFCZK	3:30:00 PM	22.94	22.958			N/A
5/28/2019	CHFDKK	9:30:00 AM	6.648	6.651			N/A
5/28/2019	CHFDKK	11:30:00 AM	6.646	6.649			N/A
5/28/2019	CHFDKK	1:30:00 PM	6.649	6.649			N/A
5/28/2019	CHFDKK	3:30:00 PM	6.635	6.638			N/A
5/28/2019	CHFDKK.fx	9:30:00 AM	6.6462	6.6521			N/A
5/28/2019	CHFDKK.fx	11:30:00 AM	6.6444	6.6502			N/A

5/28/2019	CHFDKK.fx	1:30:00 PM	6.6477	6.6518			N/A
5/28/2019	CHFDKK.fx	3:30:00 PM	6.6334	6.6396			N/A
5/28/2019	CHFHKD	9:30:00 AM	7.8135	7.8175			N/A
5/28/2019	CHFHKD	11:30:00 AM	7.815	7.8183			N/A
5/28/2019	CHFHKD	1:30:00 PM	7.8155	7.8169			N/A
5/28/2019	CHFHKD	3:30:00 PM	7.7993	7.8032			N/A
5/28/2019	CHFHUF	9:30:00 AM	289.67	290.05			N/A
5/28/2019	CHFHUF	11:30:00 AM	290.18	290.48			N/A
5/28/2019	CHFHUF	1:30:00 PM	290.57	290.8			N/A
5/28/2019	CHFHUF	3:30:00 PM	290.1	290.46			N/A
5/28/2019	CHFJPY	9:30:00 AM	108.968	109.029			N/A
5/28/2019	CHFJPY	11:30:00 AM	108.789	108.824			N/A
5/28/2019	CHFJPY	1:30:00 PM	108.863	108.913			N/A
5/28/2019	CHFJPY	3:30:00 PM	108.835	108.897			N/A
5/28/2019	CHFJPY.fx	9:30:00 AM	109.001	108.992			N/A
5/28/2019	CHFJPY.fx	11:30:00 AM	108.823	108.788			N/A
5/28/2019	CHFJPY.fx	1:30:00 PM	108.898	108.878			N/A
5/28/2019	CHFJPY.fx	3:30:00 PM	108.871	108.861			N/A
5/28/2019	CHFMXN	9:30:00 AM	18.9714	18.984			N/A
5/28/2019	CHFMXN	11:30:00 AM	19.0098	19.0237			N/A
5/28/2019	CHFMXN	1:30:00 PM	19.0321	19.0415			N/A
5/28/2019	CHFMXN	3:30:00 PM	18.9709	18.9867			N/A
5/28/2019	CHFNOK	9:30:00 AM	8.6619	8.6696			N/A
5/28/2019	CHFNOK	11:30:00 AM	8.6532	8.6594			N/A
5/28/2019	CHFNOK	1:30:00 PM	8.6632	8.6686			N/A
5/28/2019	CHFNOK	3:30:00 PM	8.6299	8.6381			N/A
5/28/2019	CHFNOK.fx	9:30:00 AM	8.66537	8.66612			N/A
5/28/2019	CHFNOK.fx	11:30:00 AM	8.65687	8.65577			N/A
5/28/2019	CHFNOK.fx	1:30:00 PM	8.66688	8.665			N/A
5/28/2019	CHFNOK.fx	3:30:00 PM	8.63349	8.63453			N/A
5/28/2019	CHFPLN	9:30:00 AM	3.8193	3.8207			N/A
5/28/2019	CHFPLN	11:30:00 AM	3.8234	3.8256			N/A
5/28/2019	CHFPLN	1:30:00 PM	3.8233	3.8251			N/A
5/28/2019	CHFPLN	3:30:00 PM	3.8152	3.8182			N/A

5/28/2019	CHFPLN.fx	9:30:00 AM	3.81687	3.82294			N/A
5/28/2019	CHFPLN.fx	11:30:00 AM	3.82108	3.82775			N/A
5/28/2019	CHFPLN.fx	1:30:00 PM	3.82086	3.82745			N/A
5/28/2019	CHFPLN.fx	3:30:00 PM	3.81286	3.82057			N/A
5/28/2019	CHFSEK	9:30:00 AM	9.5316	9.5341			N/A
5/28/2019	CHFSEK	11:30:00 AM	9.5051	9.5098			N/A
5/28/2019	CHFSEK	1:30:00 PM	9.5275	9.5287			N/A
5/28/2019	CHFSEK	3:30:00 PM	9.4915	9.4955			N/A
5/28/2019	CHFSGD	9:30:00 AM	1.3707	1.371			N/A
5/28/2019	CHFSGD	11:30:00 AM	1.372	1.3723			N/A
5/28/2019	CHFSGD	1:30:00 PM	1.3721	1.3724			N/A
5/28/2019	CHFSGD	3:30:00 PM	1.3697	1.3701			N/A
5/28/2019	CHFSGD.fx	9:30:00 AM	1.37083	1.37077			N/A
5/28/2019	CHFSGD.fx	11:30:00 AM	1.37216	1.37207			N/A
5/28/2019	CHFSGD.fx	1:30:00 PM	1.37234	1.37211			N/A
5/28/2019	CHFSGD.fx	3:30:00 PM	1.36983	1.36995			N/A
5/28/2019	CHFZAR	9:30:00 AM	14.396	14.3971			N/A
5/28/2019	CHFZAR	11:30:00 AM	14.5153	14.525			N/A
5/28/2019	CHFZAR	1:30:00 PM	14.5563	14.5625			N/A
5/28/2019	CHFZAR	3:30:00 PM	14.5285	14.5406			N/A
5/28/2019	CZKJPY	9:30:00 AM					N/A
5/28/2019	CZKJPY	11:30:00 AM	4.735	4.738			N/A
5/28/2019	CZKJPY	1:30:00 PM	4.735	4.738			N/A
5/28/2019	CZKJPY	3:30:00 PM					N/A
5/28/2019	DAX30.i	9:30:00 AM	12090.36	12086.11			N/A
5/28/2019	DAX30.i	11:30:00 AM	12010.61	12001.11			N/A
5/28/2019	DAX30.i	1:30:00 PM	12008.36	12005.36			N/A
5/28/2019	DAX30.i	3:30:00 PM	12080.11	12075.36			N/A
5/28/2019	DJ30.i	9:30:00 AM					N/A
5/28/2019	DJ30.i	11:30:00 AM					N/A
5/28/2019	DJ30.i	1:30:00 PM					N/A
5/28/2019	DJ30.i	3:30:00 PM					N/A
5/28/2019	DKKJPY	9:30:00 AM					N/A
5/28/2019	DKKJPY	11:30:00 AM	16.37	16.39			N/A

5/28/2019	DKKJPY	1:30:00 PM					N/A
5/28/2019	DKKJPY	3:30:00 PM					N/A
5/28/2019	EURAUD	9:30:00 AM	1.61428	1.61471			N/A
5/28/2019	EURAUD	11:30:00 AM	1.61672	1.61709			N/A
5/28/2019	EURAUD	1:30:00 PM	1.61578	1.61585			N/A
5/28/2019	EURAUD	3:30:00 PM	1.61534	1.61563			N/A
5/28/2019	EURAUD.fx	9:30:00 AM	1.61449	1.61448			N/A
5/28/2019	EURAUD.fx	11:30:00 AM	1.61694	1.61687			N/A
5/28/2019	EURAUD.fx	1:30:00 PM	1.616	1.61562			N/A
5/28/2019	EURAUD.fx	3:30:00 PM	1.61552	1.6154			N/A
5/28/2019	EURCAD	9:30:00 AM	1.50256	1.50343			N/A
5/28/2019	EURCAD	11:30:00 AM	1.50506	1.50582			N/A
5/28/2019	EURCAD	1:30:00 PM	1.50622	1.50699			N/A
5/28/2019	EURCAD	3:30:00 PM	1.50637	1.50712			N/A
5/28/2019	EURCAD.fx	9:30:00 AM	1.50299	1.50301			N/A
5/28/2019	EURCAD.fx	11:30:00 AM	1.50548	1.5054			N/A
5/28/2019	EURCAD.fx	1:30:00 PM	1.50665	1.50656			N/A
5/28/2019	EURCAD.fx	3:30:00 PM	1.5068	1.50668			N/A
5/28/2019	EURCHF	9:30:00 AM	1.1232	1.12328			N/A
5/28/2019	EURCHF	11:30:00 AM	1.12355	1.12358			N/A
5/28/2019	EURCHF	1:30:00 PM	1.12334	1.12311			N/A
5/28/2019	EURCHF	3:30:00 PM	1.12539	1.1255			N/A
5/28/2019	EURCHF.fx	9:30:00 AM	1.12327	1.12321			N/A
5/28/2019	EURCHF.fx	11:30:00 AM	1.1236	1.12353			N/A
5/28/2019	EURCHF.fx	1:30:00 PM	1.1234	1.12304			N/A
5/28/2019	EURCHF.fx	3:30:00 PM	1.12545	1.12543			N/A
5/28/2019	EURCZK	9:30:00 AM	25.79	25.827			N/A
5/28/2019	EURCZK	11:30:00 AM	25.795	25.835			N/A
5/28/2019	EURCZK	1:30:00 PM	25.807	25.846			N/A
5/28/2019	EURCZK	3:30:00 PM	25.802	25.841			N/A
5/28/2019	EURDKK	9:30:00 AM					N/A
5/28/2019	EURDKK	11:30:00 AM	7.468	7.4692			N/A
5/28/2019	EURDKK	1:30:00 PM	7.4681	7.4691			N/A
5/28/2019	EURDKK	3:30:00 PM	7.4681	7.4694			N/A

5/28/2019	EURGBP	9:30:00 AM	0.88178	0.88169			N/A
5/28/2019	EURGBP	11:30:00 AM	0.8836	0.88368			N/A
5/28/2019	EURGBP	1:30:00 PM	0.88302	0.88312			N/A
5/28/2019	EURGBP	3:30:00 PM	0.8835	0.88351			N/A
5/28/2019	EURGBP.fx	9:30:00 AM	0.88182	0.88164			N/A
5/28/2019	EURGBP.fx	11:30:00 AM	0.88364	0.88363			N/A
5/28/2019	EURGBP.fx	1:30:00 PM	0.88306	0.88307			N/A
5/28/2019	EURGBP.fx	3:30:00 PM	0.88356	0.88345			N/A
5/28/2019	EURHKD	9:30:00 AM	8.7754	8.7805			N/A
5/28/2019	EURHKD	11:30:00 AM	8.7796	8.7847			N/A
5/28/2019	EURHKD	1:30:00 PM	8.7766	8.7813			N/A
5/28/2019	EURHKD	3:30:00 PM	8.777	8.782			N/A
5/28/2019	EURHKD.fx	9:30:00 AM	8.77826	8.77761			N/A
5/28/2019	EURHKD.fx	11:30:00 AM	8.7824	8.78179			N/A
5/28/2019	EURHKD.fx	1:30:00 PM	8.77947	8.77841			N/A
5/28/2019	EURHKD.fx	3:30:00 PM	8.77983	8.77915			N/A
5/28/2019	EURHUF	9:30:00 AM	325.33	326.05			N/A
5/28/2019	EURHUF	11:30:00 AM	325.96	326.58			N/A
5/28/2019	EURHUF	1:30:00 PM	326.23	326.83			N/A
5/28/2019	EURHUF	3:30:00 PM	326.45	327.02			N/A
5/28/2019	EURHUF.fx	9:30:00 AM	325.611	325.768			N/A
5/28/2019	EURHUF.fx	11:30:00 AM	326.242	326.308			N/A
5/28/2019	EURHUF.fx	1:30:00 PM	326.509	326.64			N/A
5/28/2019	EURHUF.fx	3:30:00 PM	326.729	326.868			N/A
5/28/2019	EURJPY	9:30:00 AM	122.426	122.435			N/A
5/28/2019	EURJPY	11:30:00 AM	122.259	122.241			N/A
5/28/2019	EURJPY	1:30:00 PM	122.307	122.302			N/A
5/28/2019	EURJPY	3:30:00 PM	122.526	122.517			N/A
5/28/2019	EURJPY.fx	9:30:00 AM	122.429	122.431			N/A
5/28/2019	EURJPY.fx	11:30:00 AM	122.265	122.237			N/A
5/28/2019	EURJPY.fx	1:30:00 PM	122.31	122.297			N/A
5/28/2019	EURJPY.fx	3:30:00 PM	122.529	122.513			N/A
5/28/2019	EURMXN	9:30:00 AM	21.3118	21.3255			N/A
5/28/2019	EURMXN	11:30:00 AM	21.3587	21.3759			N/A

5/28/2019	EURMXN	1:30:00 PM	21.3737	21.3932			N/A
5/28/2019	EURMXN	3:30:00 PM	21.3505	21.3686			N/A
5/28/2019	EURMXN.fx	9:30:00 AM	21.3199	21.3169			N/A
5/28/2019	EURMXN.fx	11:30:00 AM	21.3677	21.3668			N/A
5/28/2019	EURMXN.fx	1:30:00 PM	21.3828	21.3837			N/A
5/28/2019	EURMXN.fx	3:30:00 PM	21.3606	21.3586			N/A
5/28/2019	EURNOK	9:30:00 AM	9.7276	9.7399			N/A
5/28/2019	EURNOK	11:30:00 AM	9.7208	9.7311			N/A
5/28/2019	EURNOK	1:30:00 PM	9.7278	9.7398			N/A
5/28/2019	EURNOK	3:30:00 PM	9.7113	9.7232			N/A
5/28/2019	EURNOK.fx	9:30:00 AM	9.7329	9.73463			N/A
5/28/2019	EURNOK.fx	11:30:00 AM	9.72641	9.72547			N/A
5/28/2019	EURNOK.fx	1:30:00 PM	9.73328	9.7343			N/A
5/28/2019	EURNOK.fx	3:30:00 PM	9.71684	9.71765			N/A
5/28/2019	EURNZD	9:30:00 AM	1.70599	1.70673			N/A
5/28/2019	EURNZD	11:30:00 AM	1.70759	1.70837			N/A
5/28/2019	EURNZD	1:30:00 PM	1.70751	1.70824			N/A
5/28/2019	EURNZD	3:30:00 PM	1.70883	1.70963			N/A
5/28/2019	EURNZD.fx	9:30:00 AM	1.70643	1.7063			N/A
5/28/2019	EURNZD.fx	11:30:00 AM	1.70799	1.70794			N/A
5/28/2019	EURNZD.fx	1:30:00 PM	1.70794	1.70778			N/A
5/28/2019	EURNZD.fx	3:30:00 PM	1.70926	1.70915			N/A
5/28/2019	EURPLN	9:30:00 AM	4.29	4.2914			N/A
5/28/2019	EURPLN	11:30:00 AM	4.2955	4.2976			N/A
5/28/2019	EURPLN	1:30:00 PM	4.2941	4.2967			N/A
5/28/2019	EURPLN	3:30:00 PM	4.2936	4.297			N/A
5/28/2019	EURPLN.fx	9:30:00 AM	4.28947	4.29312			N/A
5/28/2019	EURPLN.fx	11:30:00 AM	4.29501	4.29812			N/A
5/28/2019	EURPLN.fx	1:30:00 PM	4.29348	4.29722			N/A
5/28/2019	EURPLN.fx	3:30:00 PM	4.29297	4.29758			N/A
5/28/2019	EURRUB	9:30:00 AM					N/A
5/28/2019	EURRUB	11:30:00 AM	71.873	72.297			N/A
5/28/2019	EURRUB	1:30:00 PM	71.948	72.379			N/A
5/28/2019	EURRUB	3:30:00 PM	71.923	72.339			N/A



5/28/2019	EURSEK	9:30:00 AM	10.7077	10.7103			N/A
5/28/2019	EURSEK	11:30:00 AM	10.6816	10.6859			N/A
5/28/2019	EURSEK	1:30:00 PM	10.7004	10.7045			N/A
5/28/2019	EURSEK	3:30:00 PM	10.6838	10.6877			N/A
5/28/2019	EURSEK.fx	9:30:00 AM	10.70948	10.7083			N/A
5/28/2019	EURSEK.fx	11:30:00 AM	10.68328	10.6842			N/A
5/28/2019	EURSEK.fx	1:30:00 PM	10.70198	10.70402			N/A
5/28/2019	EURSEK.fx	3:30:00 PM	10.68562	10.68602			N/A
5/28/2019	EURSGD	9:30:00 AM	1.5393	1.5401			N/A
5/28/2019	EURSGD	11:30:00 AM	1.5412	1.5421			N/A
5/28/2019	EURSGD	1:30:00 PM	1.5408	1.5416			N/A
5/28/2019	EURSGD	3:30:00 PM	1.5412	1.5417			N/A
5/28/2019	EURSGD.fx	9:30:00 AM	1.53963	1.5397			N/A
5/28/2019	EURSGD.fx	11:30:00 AM	1.54158	1.54163			N/A
5/28/2019	EURSGD.fx	1:30:00 PM	1.54115	1.54119			N/A
5/28/2019	EURSGD.fx	3:30:00 PM	1.54161	1.54164			N/A
5/28/2019	EURUSD	9:30:00 AM	1.11821	1.1183			N/A
5/28/2019	EURUSD	11:30:00 AM	1.11866	1.11875			N/A
5/28/2019	EURUSD	1:30:00 PM	1.11839	1.11842			N/A
5/28/2019	EURUSD	3:30:00 PM	1.11844	1.11851			N/A
5/28/2019	EURUSD.fx	9:30:00 AM	1.11842	1.11841			N/A
5/28/2019	EURUSD.fx	11:30:00 AM	1.11886	1.11884			N/A
5/28/2019	EURUSD.fx	1:30:00 PM	1.1186	1.11851			N/A
5/28/2019	EURUSD.fx	3:30:00 PM	1.11865	1.1186			N/A
5/28/2019	EURZAR	9:30:00 AM	16.1737	16.1751			N/A
5/28/2019	EURZAR	11:30:00 AM	16.3111	16.3241			N/A
5/28/2019	EURZAR	1:30:00 PM	16.3493	16.362			N/A
5/28/2019	EURZAR	3:30:00 PM	16.3524	16.3685			N/A
5/28/2019	EURZAR.fx	9:30:00 AM	16.1724	16.17606			N/A
5/28/2019	EURZAR.fx	11:30:00 AM	16.31093	16.32363			N/A
5/28/2019	EURZAR.fx	1:30:00 PM	16.34885	16.36214			N/A
5/28/2019	EURZAR.fx	3:30:00 PM	16.35188	16.36898			N/A
5/28/2019	GBPAUD	9:30:00 AM	1.83152	1.83185			N/A
5/28/2019	GBPAUD	11:30:00 AM	1.83015	1.83094			N/A

5/28/2019	GBPAUD	1:30:00 PM	1.83024	1.83062			N/A
5/28/2019	GBPAUD	3:30:00 PM	1.82886	1.82941			N/A
5/28/2019	GBPAUD.fx	9:30:00 AM	1.8319	1.83145			N/A
5/28/2019	GBPAUD.fx	11:30:00 AM	1.83055	1.83052			N/A
5/28/2019	GBPAUD.fx	1:30:00 PM	1.83066	1.83021			N/A
5/28/2019	GBPAUD.fx	3:30:00 PM	1.82926	1.82901			N/A
5/28/2019	GBPCAD	9:30:00 AM	1.70443	1.70477			N/A
5/28/2019	GBPCAD	11:30:00 AM	1.70334	1.70402			N/A
5/28/2019	GBPCAD	1:30:00 PM	1.70572	1.7065			N/A
5/28/2019	GBPCAD	3:30:00 PM	1.70515	1.70579			N/A
5/28/2019	GBPCAD.fx	9:30:00 AM	1.70482	1.70437			N/A
5/28/2019	GBPCAD.fx	11:30:00 AM	1.70373	1.70361			N/A
5/28/2019	GBPCAD.fx	1:30:00 PM	1.70611	1.70611			N/A
5/28/2019	GBPCAD.fx	3:30:00 PM	1.70555	1.70538			N/A
5/28/2019	GBPCHF	9:30:00 AM	1.27375	1.27398			N/A
5/28/2019	GBPCHF	11:30:00 AM	1.27135	1.27171			N/A
5/28/2019	GBPCHF	1:30:00 PM	1.27187	1.27199			N/A
5/28/2019	GBPCHF	3:30:00 PM	1.27367	1.27394			N/A
5/28/2019	GBPCHF.fx	9:30:00 AM	1.27393	1.27378			N/A
5/28/2019	GBPCHF.fx	11:30:00 AM	1.27156	1.2715			N/A
5/28/2019	GBPCHF.fx	1:30:00 PM	1.27205	1.27181			N/A
5/28/2019	GBPCHF.fx	3:30:00 PM	1.27387	1.27374			N/A
5/28/2019	GBPCZK	9:30:00 AM	29.26	29.278			N/A
5/28/2019	GBPCZK	11:30:00 AM	29.202	29.224			N/A
5/28/2019	GBPCZK	1:30:00 PM	29.235	29.257			N/A
5/28/2019	GBPCZK	3:30:00 PM	29.216	29.235			N/A
5/28/2019	GBPDKK	9:30:00 AM	8.464	8.474			N/A
5/28/2019	GBPDKK	11:30:00 AM	8.446	8.457			N/A
5/28/2019	GBPDKK	1:30:00 PM	8.452	8.463			N/A
5/28/2019	GBPDKK	3:30:00 PM	8.448	8.458			N/A
5/28/2019	GBPDKK.fx	9:30:00 AM	8.4633	8.4746			N/A
5/28/2019	GBPDKK.fx	11:30:00 AM	8.4445	8.4576			N/A
5/28/2019	GBPDKK.fx	1:30:00 PM	8.4505	8.463			N/A
5/28/2019	GBPDKK.fx	3:30:00 PM	8.4467	8.4585			N/A

5/28/2019	GBPHKD	9:30:00 AM	9.9513	9.9547			N/A
5/28/2019	GBPHKD	11:30:00 AM	9.9331	9.939			N/A
5/28/2019	GBPHKD	1:30:00 PM	9.9367	9.9417			N/A
5/28/2019	GBPHKD	3:30:00 PM	9.9336	9.9376			N/A
5/28/2019	GBPHUF	9:30:00 AM	368.94	369.35			N/A
5/28/2019	GBPHUF	11:30:00 AM	368.89	369.25			N/A
5/28/2019	GBPHUF	1:30:00 PM	369.44	369.83			N/A
5/28/2019	GBPHUF	3:30:00 PM	369.48	369.92			N/A
5/28/2019	GBPJPY	9:30:00 AM	138.846	138.857			N/A
5/28/2019	GBPJPY	11:30:00 AM	138.341	138.359			N/A
5/28/2019	GBPJPY	1:30:00 PM	138.485	138.515			N/A
5/28/2019	GBPJPY	3:30:00 PM	138.677	138.678			N/A
5/28/2019	GBPJPY.fx	9:30:00 AM	138.865	138.836			N/A
5/28/2019	GBPJPY.fx	11:30:00 AM	138.36	138.34			N/A
5/28/2019	GBPJPY.fx	1:30:00 PM	138.504	138.496			N/A
5/28/2019	GBPJPY.fx	3:30:00 PM	138.698	138.659			N/A
5/28/2019	GBPMXN	9:30:00 AM	24.1613	24.1715			N/A
5/28/2019	GBPMXN	11:30:00 AM	24.1677	24.1794			N/A
5/28/2019	GBPMXN	1:30:00 PM	24.2011	24.2139			N/A
5/28/2019	GBPMXN	3:30:00 PM	24.1645	24.176			N/A
5/28/2019	GBPNOK	9:30:00 AM	11.0346	11.0436			N/A
5/28/2019	GBPNOK	11:30:00 AM	11.0013	11.0122			N/A
5/28/2019	GBPNOK	1:30:00 PM	11.0169	11.0277			N/A
5/28/2019	GBPNOK	3:30:00 PM	10.9933	11.0032			N/A
5/28/2019	GBPNOK.fx	9:30:00 AM	11.03958	11.03883			N/A
5/28/2019	GBPNOK.fx	11:30:00 AM	11.00613	11.00738			N/A
5/28/2019	GBPNOK.fx	1:30:00 PM	11.02168	11.02285			N/A
5/28/2019	GBPNOK.fx	3:30:00 PM	10.99816	10.9981			N/A
5/28/2019	GBPNZD	9:30:00 AM	1.93516	1.93529			N/A
5/28/2019	GBPNZD	11:30:00 AM	1.93251	1.93327			N/A
5/28/2019	GBPNZD	1:30:00 PM	1.93363	1.93436			N/A
5/28/2019	GBPNZD	3:30:00 PM	1.93434	1.93485			N/A
5/28/2019	GBPNZD.fx	9:30:00 AM	1.9355	1.93493			N/A
5/28/2019	GBPNZD.fx	11:30:00 AM	1.93284	1.93293			N/A

5/28/2019	GBPNZD.fx	1:30:00 PM	1.93398	1.93396			N/A
5/28/2019	GBPNZD.fx	3:30:00 PM	1.93471	1.93446			N/A
5/28/2019	GBPPLN	9:30:00 AM	4.8663	4.8657			N/A
5/28/2019	GBPPLN	11:30:00 AM	4.8621	4.8627			N/A
5/28/2019	GBPPLN	1:30:00 PM	4.8634	4.8649			N/A
5/28/2019	GBPPLN	3:30:00 PM	4.861	4.8623			N/A
5/28/2019	GBPPLN.fx	9:30:00 AM	4.86411	4.86776			N/A
5/28/2019	GBPPLN.fx	11:30:00 AM	4.86002	4.86487			N/A
5/28/2019	GBPPLN.fx	1:30:00 PM	4.86123	4.86704			N/A
5/28/2019	GBPPLN.fx	3:30:00 PM	4.85895	4.86444			N/A
5/28/2019	GBPSEK	9:30:00 AM	12.142	12.147			N/A
5/28/2019	GBPSEK	11:30:00 AM	12.0861	12.0955			N/A
5/28/2019	GBPSEK	1:30:00 PM	12.1154	12.1246			N/A
5/28/2019	GBPSEK	3:30:00 PM	12.0911	12.0983			N/A
5/28/2019	GBPSEK.fx	9:30:00 AM	12.1385	12.15047			N/A
5/28/2019	GBPSEK.fx	11:30:00 AM	12.08241	12.09915			N/A
5/28/2019	GBPSEK.fx	1:30:00 PM	12.11179	12.1283			N/A
5/28/2019	GBPSEK.fx	3:30:00 PM	12.08752	12.10204			N/A
5/28/2019	GBPSGD	9:30:00 AM	1.746	1.7464			N/A
5/28/2019	GBPSGD	11:30:00 AM	1.7443	1.7451			N/A
5/28/2019	GBPSGD	1:30:00 PM	1.7449	1.7457			N/A
5/28/2019	GBPSGD	3:30:00 PM	1.7447	1.7452			N/A
5/28/2019	GBPSGD.fx	9:30:00 AM	1.74421	1.74816			N/A
5/28/2019	GBPSGD.fx	11:30:00 AM	1.74241	1.74687			N/A
5/28/2019	GBPSGD.fx	1:30:00 PM	1.74306	1.74746			N/A
5/28/2019	GBPSGD.fx	3:30:00 PM	1.74281	1.74697			N/A
5/28/2019	GBPUSD	9:30:00 AM	1.26859	1.26827			N/A
5/28/2019	GBPUSD	11:30:00 AM	1.26613	1.26619			N/A
5/28/2019	GBPUSD	1:30:00 PM	1.26665	1.26668		100	N/A
5/28/2019	GBPUSD	3:30:00 PM	1.2662	1.26609			N/A
5/28/2019	GBPUSD.fx	9:30:00 AM	1.26864	1.26822			N/A
5/28/2019	GBPUSD.fx	11:30:00 AM	1.26619	1.26613			N/A
5/28/2019	GBPUSD.fx	1:30:00 PM	1.26671	1.26662			N/A
5/28/2019	GBPUSD.fx	3:30:00 PM	1.26626	1.26603			N/A

5/28/2019	GBPZAR	9:30:00 AM	18.3372	18.3466			N/A
5/28/2019	GBPZAR	11:30:00 AM	18.4549	18.476			N/A
5/28/2019	GBPZAR	1:30:00 PM	18.5113	18.5328			N/A
5/28/2019	GBPZAR	3:30:00 PM	18.5057	18.5287			N/A
5/28/2019	GBPZAR.fx	9:30:00 AM	18.3435	18.3399			N/A
5/28/2019	GBPZAR.fx	11:30:00 AM	18.4622	18.4694			N/A
5/28/2019	GBPZAR.fx	1:30:00 PM	18.519	18.5242			N/A
5/28/2019	GBPZAR.fx	3:30:00 PM	18.5134	18.5212			N/A
5/28/2019	GOLD	9:30:00 AM	1283.35	1283.68			N/A
5/28/2019	GOLD	11:30:00 AM	1283.96	1284			N/A
5/28/2019	GOLD	1:30:00 PM	1283.59	1283.98			N/A
5/28/2019	GOLD	3:30:00 PM	1277.58	1277.25			N/A
5/28/2019	HKDJPY	9:30:00 AM	13.94	13.96			N/A
5/28/2019	HKDJPY	11:30:00 AM	13.92	13.93			N/A
5/28/2019	HKDJPY	1:30:00 PM					N/A
5/28/2019	HKDJPY	3:30:00 PM	13.95	13.96			N/A
5/28/2019	HKDJPY.fx	9:30:00 AM	13.943	13.95			N/A
5/28/2019	HKDJPY.fx	11:30:00 AM	13.918	13.922			N/A
5/28/2019	HKDJPY.fx	1:30:00 PM	13.927	13.934			N/A
5/28/2019	HKDJPY.fx	3:30:00 PM	13.952	13.957			N/A
5/28/2019	HUFJPY	9:30:00 AM	0.3764	0.3767			N/A
5/28/2019	HUFJPY	11:30:00 AM	0.3751	0.3754			N/A
5/28/2019	HUFJPY	1:30:00 PM	0.3747	0.3751			N/A
5/28/2019	HUFJPY	3:30:00 PM	0.3752	0.3755			N/A
5/28/2019	JP225.i	9:30:00 AM	21206.05	21213.1			N/A
5/28/2019	JP225.i	11:30:00 AM	21138.1	21150.6			N/A
5/28/2019	JP225.i	1:30:00 PM	21123.1	21138.1			N/A
5/28/2019	JP225.i	3:30:00 PM	21203.1	21213.1			N/A
5/28/2019	MXNJPY	9:30:00 AM	5.74	5.75			N/A
5/28/2019	MXNJPY	11:30:00 AM					N/A
5/28/2019	MXNJPY	1:30:00 PM	5.72	5.73			N/A
5/28/2019	MXNJPY	3:30:00 PM	5.74	5.75			N/A
5/28/2019	NASDAQ.i	9:30:00 AM					N/A
5/28/2019	NASDAQ.i	11:30:00 AM					N/A

5/28/2019	NASDAQ.i	1:30:00 PM					N/A
5/28/2019	NASDAQ.i	3:30:00 PM					N/A
5/28/2019	NOKJPY	9:30:00 AM	12.57	12.61			N/A
5/28/2019	NOKJPY	11:30:00 AM	12.56	12.59			N/A
5/28/2019	NOKJPY	1:30:00 PM	12.56	12.58			N/A
5/28/2019	NOKJPY	3:30:00 PM	12.6	12.63			N/A
5/28/2019	NOKJPY.fx	9:30:00 AM	12.574	12.582			N/A
5/28/2019	NOKJPY.fx	11:30:00 AM	12.566	12.572			N/A
5/28/2019	NOKJPY.fx	1:30:00 PM	12.562	12.568			N/A
5/28/2019	NOKJPY.fx	3:30:00 PM	12.606	12.612			N/A
5/28/2019	NZDCAD	9:30:00 AM	0.88048	0.88117			N/A
5/28/2019	NZDCAD	11:30:00 AM	0.88107	0.8817			N/A
5/28/2019	NZDCAD	1:30:00 PM	0.88178	0.88248			N/A
5/28/2019	NZDCAD	3:30:00 PM	0.8812	0.88189			N/A
5/28/2019	NZDCAD.fx	9:30:00 AM	0.88081	0.88083			N/A
5/28/2019	NZDCAD.fx	11:30:00 AM	0.88141	0.88135			N/A
5/28/2019	NZDCAD.fx	1:30:00 PM	0.88212	0.88214			N/A
5/28/2019	NZDCAD.fx	3:30:00 PM	0.88158	0.88153			N/A
5/28/2019	NZDCHF	9:30:00 AM	0.65794	0.65856			N/A
5/28/2019	NZDCHF	11:30:00 AM	0.65749	0.65814			N/A
5/28/2019	NZDCHF	1:30:00 PM	0.65738	0.65793			N/A
5/28/2019	NZDCHF	3:30:00 PM	0.65806	0.65879			N/A
5/28/2019	NZDCHF.fx	9:30:00 AM	0.65828	0.6582			N/A
5/28/2019	NZDCHF.fx	11:30:00 AM	0.65782	0.65779			N/A
5/28/2019	NZDCHF.fx	1:30:00 PM	0.65772	0.65758			N/A
5/28/2019	NZDCHF.fx	3:30:00 PM	0.65841	0.65844			N/A
5/28/2019	NZDCZK	9:30:00 AM	15.119	15.128			N/A
5/28/2019	NZDCZK	11:30:00 AM	15.107	15.119			N/A
5/28/2019	NZDCZK	1:30:00 PM	15.116	15.127			N/A
5/28/2019	NZDCZK	3:30:00 PM	15.1	15.112			N/A
5/28/2019	NZDDKK	9:30:00 AM					N/A
5/28/2019	NZDDKK	11:30:00 AM					N/A
5/28/2019	NZDDKK	1:30:00 PM	4.37	4.373			N/A
5/28/2019	NZDDKK	3:30:00 PM					N/A

5/28/2019	NZDHKD	9:30:00 AM	5.1409	5.1437			N/A
5/28/2019	NZDHKD	11:30:00 AM	5.1385	5.1413			N/A
5/28/2019	NZDHKD	1:30:00 PM	5.1374	5.1398			N/A
5/28/2019	NZDHKD	3:30:00 PM	5.1342	5.1367			N/A
5/28/2019	NZDHUF	9:30:00 AM	190.61	190.87			N/A
5/28/2019	NZDHUF	11:30:00 AM	190.82	191.03			N/A
5/28/2019	NZDHUF	1:30:00 PM	190.99	191.24			N/A
5/28/2019	NZDHUF	3:30:00 PM	190.94	191.22			N/A
5/28/2019	NZDJPY	9:30:00 AM	71.715	71.786			N/A
5/28/2019	NZDJPY	11:30:00 AM	71.545	71.607			N/A
5/28/2019	NZDJPY	1:30:00 PM	71.582	71.641			N/A
5/28/2019	NZDJPY	3:30:00 PM	71.653	71.717			N/A
5/28/2019	NZDJPY.fx	9:30:00 AM	71.747	71.753			N/A
5/28/2019	NZDJPY.fx	11:30:00 AM	71.576	71.574			N/A
5/28/2019	NZDJPY.fx	1:30:00 PM	71.613	71.608			N/A
5/28/2019	NZDJPY.fx	3:30:00 PM	71.684	71.684			N/A
5/28/2019	NZDMXN	9:30:00 AM	12.4864	12.4892			N/A
5/28/2019	NZDMXN	11:30:00 AM	12.5026	12.5083			N/A
5/28/2019	NZDMXN	1:30:00 PM	12.5131	12.5186			N/A
5/28/2019	NZDMXN	3:30:00 PM	12.4896	12.4951			N/A
5/28/2019	NZDNOK	9:30:00 AM	5.6993	5.7032			N/A
5/28/2019	NZDNOK	11:30:00 AM	5.6901	5.6934			N/A
5/28/2019	NZDNOK	1:30:00 PM	5.6951	5.6986			N/A
5/28/2019	NZDNOK	3:30:00 PM	5.6807	5.6845			N/A
5/28/2019	NZDPLN	9:30:00 AM	2.5132	2.514			N/A
5/28/2019	NZDPLN	11:30:00 AM	2.5138	2.5151			N/A
5/28/2019	NZDPLN	1:30:00 PM	2.5135	2.5147			N/A
5/28/2019	NZDPLN	3:30:00 PM	2.5116	2.513			N/A
5/28/2019	NZDSEK	9:30:00 AM	6.2695	6.276			N/A
5/28/2019	NZDSEK	11:30:00 AM	6.2484	6.2552			N/A
5/28/2019	NZDSEK	1:30:00 PM	6.2611	6.2673			N/A
5/28/2019	NZDSEK	3:30:00 PM	6.2455	6.2521			N/A
5/28/2019	NZDSGD	9:30:00 AM	0.902	0.9027			N/A
5/28/2019	NZDSGD	11:30:00 AM	0.9023	0.903			N/A

5/28/2019	NZDSGD	1:30:00 PM	0.9021	0.9027			N/A
5/28/2019	NZDSGD	3:30:00 PM	0.9017	0.9023			N/A
5/28/2019	NZDSGD.fx	9:30:00 AM	0.90203	0.90257			N/A
5/28/2019	NZDSGD.fx	11:30:00 AM	0.9023	0.90289			N/A
5/28/2019	NZDSGD.fx	1:30:00 PM	0.90211	0.90265			N/A
5/28/2019	NZDSGD.fx	3:30:00 PM	0.90168	0.90223			N/A
5/28/2019	NZDUSD	9:30:00 AM	0.65534	0.65546			N/A
5/28/2019	NZDUSD	11:30:00 AM	0.65495	0.65506			N/A
5/28/2019	NZDUSD	1:30:00 PM	0.65485	0.65494			N/A
5/28/2019	NZDUSD	3:30:00 PM	0.65435	0.65451			N/A
5/28/2019	NZDUSD.fx	9:30:00 AM	0.65541	0.65547			N/A
5/28/2019	NZDUSD.fx	11:30:00 AM	0.65503	0.65507			N/A
5/28/2019	NZDUSD.fx	1:30:00 PM	0.65493	0.65495			N/A
5/28/2019	NZDUSD.fx	3:30:00 PM	0.65444	0.65452			N/A
5/28/2019	NZDZAR	9:30:00 AM	9.4706	9.4766			N/A
5/28/2019	NZDZAR	11:30:00 AM	9.5411	9.5538			N/A
5/28/2019	NZDZAR	1:30:00 PM	9.5649	9.5776			N/A
5/28/2019	NZDZAR	3:30:00 PM	9.5591	9.5748			N/A
5/28/2019	SEKJPY	9:30:00 AM	11.44	11.44			N/A
5/28/2019	SEKJPY	11:30:00 AM	11.45	11.45			N/A
5/28/2019	SEKJPY	1:30:00 PM	11.43	11.44			N/A
5/28/2019	SEKJPY	3:30:00 PM	11.47	11.47			N/A
5/28/2019	SEKJPY.fx	9:30:00 AM	11.424	11.441			N/A
5/28/2019	SEKJPY.fx	11:30:00 AM	11.434	11.45			N/A
5/28/2019	SEKJPY.fx	1:30:00 PM	11.418	11.435			N/A
5/28/2019	SEKJPY.fx	3:30:00 PM	11.457	11.473			N/A
5/28/2019	SGDJPY	9:30:00 AM	79.49	79.52			N/A
5/28/2019	SGDJPY	11:30:00 AM	79.26	79.29			N/A
5/28/2019	SGDJPY	1:30:00 PM	79.34	79.35			N/A
5/28/2019	SGDJPY	3:30:00 PM	79.47	79.47			N/A
5/28/2019	SILVER	9:30:00 AM	14.34	14.72			N/A
5/28/2019	SILVER	11:30:00 AM	14.29	14.66			N/A
5/28/2019	SILVER	1:30:00 PM	14.3	14.67			N/A
5/28/2019	SILVER	3:30:00 PM	14.16	14.5			N/A



5/28/2019	SPX500.i	9:30:00 AM	2834.74	2835.54			N/A
5/28/2019	SPX500.i	11:30:00 AM	2825.12	2825.04			N/A
5/28/2019	SPX500.i	1:30:00 PM	2823.28	2824.04			N/A
5/28/2019	SPX500.i	3:30:00 PM	2832.74	2833.04			N/A
5/28/2019	UK100.i	9:30:00 AM	7305.38	7306.38			N/A
5/28/2019	UK100.i	11:30:00 AM	7283.38	7280.97			N/A
5/28/2019	UK100.i	1:30:00 PM	7272.63	7272.88			N/A
5/28/2019	UK100.i	3:30:00 PM	7315.88	7315.47			N/A
5/28/2019	USDCAD	9:30:00 AM	1.34382	1.34398			N/A
5/28/2019	USDCAD	11:30:00 AM	1.34557	1.34553			N/A
5/28/2019	USDCAD	1:30:00 PM	1.34698	1.34696			N/A
5/28/2019	USDCAD	3:30:00 PM	1.34698	1.34694			N/A
5/28/2019	USDCAD.fx	9:30:00 AM	1.34385	1.34394			N/A
5/28/2019	USDCAD.fx	11:30:00 AM	1.3456	1.3455			N/A
5/28/2019	USDCAD.fx	1:30:00 PM	1.34702	1.34693			N/A
5/28/2019	USDCAD.fx	3:30:00 PM	1.34702	1.34691			N/A
5/28/2019	USDCHF	9:30:00 AM	1.00423	1.00427			N/A
5/28/2019	USDCHF	11:30:00 AM	1.00416	1.00416			N/A
5/28/2019	USDCHF	1:30:00 PM	1.00414	1.00402	100	100	N/A
5/28/2019	USDCHF	3:30:00 PM	1.00595	1.00608			N/A
5/28/2019	USDCHF.fx	9:30:00 AM	1.00429	1.0042			N/A
5/28/2019	USDCHF.fx	11:30:00 AM	1.00421	1.0041			N/A
5/28/2019	USDCHF.fx	1:30:00 PM	1.00419	1.00395			N/A
5/28/2019	USDCHF.fx	3:30:00 PM	1.00601	1.00601			N/A
5/28/2019	USDCZK	9:30:00 AM	23.087	23.108			N/A
5/28/2019	USDCZK	11:30:00 AM	23.081	23.103			N/A
5/28/2019	USDCZK	1:30:00 PM	23.099	23.12			N/A
5/28/2019	USDCZK	3:30:00 PM	23.092	23.113			N/A
5/28/2019	USDCZK.fx	9:30:00 AM	23.0941	23.101			N/A
5/28/2019	USDCZK.fx	11:30:00 AM	23.089	23.0952			N/A
5/28/2019	USDCZK.fx	1:30:00 PM	23.1069	23.111			N/A
5/28/2019	USDCZK.fx	3:30:00 PM	23.1014	23.105			N/A
5/28/2019	USDDKK	9:30:00 AM	6.6744	6.6781			N/A
5/28/2019	USDDKK	11:30:00 AM	6.6717	6.6757			N/A

5/28/2019	USDDKK	1:30:00 PM	6.6737	6.6776			N/A
5/28/2019	USDDKK	3:30:00 PM	6.6735	6.6772			N/A
5/28/2019	USDDKK.fx	9:30:00 AM	6.67469	6.67613			N/A
5/28/2019	USDDKK.fx	11:30:00 AM	6.67226	6.67358			N/A
5/28/2019	USDDKK.fx	1:30:00 PM	6.67441	6.67552			N/A
5/28/2019	USDDKK.fx	3:30:00 PM	6.67385	6.67512			N/A
5/28/2019	USDHKD	9:30:00 AM	7.8483	7.8485			N/A
5/28/2019	USDHKD	11:30:00 AM	7.8487	7.8492			N/A
5/28/2019	USDHKD	1:30:00 PM	7.8482	7.8486			N/A
5/28/2019	USDHKD	3:30:00 PM	7.848	7.8485			N/A
5/28/2019	USDHKD.fx	9:30:00 AM	7.84828	7.84885			N/A
5/28/2019	USDHKD.fx	11:30:00 AM	7.8489	7.84941			N/A
5/28/2019	USDHKD.fx	1:30:00 PM	7.84821	7.84869			N/A
5/28/2019	USDHKD.fx	3:30:00 PM	7.84815	7.8487			N/A
5/28/2019	USDHUF	9:30:00 AM	290.97	291.43			N/A
5/28/2019	USDHUF	11:30:00 AM	291.43	291.81			N/A
5/28/2019	USDHUF	1:30:00 PM	291.76	292.17			N/A
5/28/2019	USDHUF	3:30:00 PM	291.92	292.34			N/A
5/28/2019	USDHUF.fx	9:30:00 AM	291.183	291.219			N/A
5/28/2019	USDHUF.fx	11:30:00 AM	291.639	291.606			N/A
5/28/2019	USDHUF.fx	1:30:00 PM	291.965	291.976			N/A
5/28/2019	USDHUF.fx	3:30:00 PM	292.113	292.145			N/A
5/28/2019	USDINR	9:30:00 AM	64.62	74.61			N/A
5/28/2019	USDINR	11:30:00 AM	64.7	74.7			N/A
5/28/2019	USDINR	1:30:00 PM					N/A
5/28/2019	USDINR	3:30:00 PM					N/A
5/28/2019	USDJPY	9:30:00 AM	109.464	109.474			N/A
5/28/2019	USDJPY	11:30:00 AM	109.277	109.262			N/A
5/28/2019	USDJPY	1:30:00 PM	109.34	109.343			N/A
5/28/2019	USDJPY	3:30:00 PM	109.528	109.527			N/A
5/28/2019	USDJPY.fx	9:30:00 AM	109.47	109.466			N/A
5/28/2019	USDJPY.fx	11:30:00 AM	109.282	109.254			N/A
5/28/2019	USDJPY.fx	1:30:00 PM	109.346	109.336			N/A
5/28/2019	USDJPY.fx	3:30:00 PM	109.534	109.52			N/A

5/28/2019	USDMXN	9:30:00 AM	19.06	19.063			N/A
5/28/2019	USDMXN	11:30:00 AM	19.095	19.101			N/A
5/28/2019	USDMXN	1:30:00 PM	19.114	19.119			N/A
5/28/2019	USDMXN	3:30:00 PM	19.091	19.098			N/A
5/28/2019	USDMXN.fx	9:30:00 AM	19.0634	19.059			N/A
5/28/2019	USDMXN.fx	11:30:00 AM	19.0987	19.0969			N/A
5/28/2019	USDMXN.fx	1:30:00 PM	19.1168	19.1154			N/A
5/28/2019	USDMXN.fx	3:30:00 PM	19.0949	19.0934			N/A
5/28/2019	USDNOK	9:30:00 AM	8.6984	8.7073			N/A
5/28/2019	USDNOK	11:30:00 AM	8.6889	8.6973			N/A
5/28/2019	USDNOK	1:30:00 PM	8.6975	8.7057			N/A
5/28/2019	USDNOK	3:30:00 PM	8.6819	8.6905			N/A
5/28/2019	USDNOK.fx	9:30:00 AM	8.70218	8.7029			N/A
5/28/2019	USDNOK.fx	11:30:00 AM	8.69295	8.69202			N/A
5/28/2019	USDNOK.fx	1:30:00 PM	8.7017	8.70114			N/A
5/28/2019	USDNOK.fx	3:30:00 PM	8.68574	8.68609			N/A
5/28/2019	USDPLN	9:30:00 AM	3.8365	3.8367			N/A
5/28/2019	USDPLN	11:30:00 AM	3.8399	3.8404			N/A
5/28/2019	USDPLN	1:30:00 PM	3.8398	3.8406			N/A
5/28/2019	USDPLN	3:30:00 PM	3.839	3.8406			N/A
5/28/2019	USDPLN.fx	9:30:00 AM	3.83571	3.83749			N/A
5/28/2019	USDPLN.fx	11:30:00 AM	3.83926	3.84121			N/A
5/28/2019	USDPLN.fx	1:30:00 PM	3.839	3.84131			N/A
5/28/2019	USDPLN.fx	3:30:00 PM	3.83825	3.84133			N/A
5/28/2019	USDRUB	9:30:00 AM					N/A
5/28/2019	USDRUB	11:30:00 AM	64.354	64.733			N/A
5/28/2019	USDRUB	1:30:00 PM	64.438	64.823			N/A
5/28/2019	USDRUB	3:30:00 PM	64.41	64.78			N/A
5/28/2019	USDSEK	9:30:00 AM	9.5725	9.5755			N/A
5/28/2019	USDSEK	11:30:00 AM	9.5459	9.5498			N/A
5/28/2019	USDSEK	1:30:00 PM	9.5655	9.5699			N/A
5/28/2019	USDSEK	3:30:00 PM	9.5499	9.5529			N/A
5/28/2019	USDSEK.fx	9:30:00 AM	9.57528	9.57373			N/A
5/28/2019	USDSEK.fx	11:30:00 AM	9.54837	9.54798			N/A

5/28/2019	USDSEK.fx	1:30:00 PM	9.56814	9.56769			N/A
5/28/2019	USDSEK.fx	3:30:00 PM	9.55256	9.55106			N/A
5/28/2019	USDSGD	9:30:00 AM	1.3766	1.3769			N/A
5/28/2019	USDSGD	11:30:00 AM	1.3777	1.3781			N/A
5/28/2019	USDSGD	1:30:00 PM	1.3777	1.378			N/A
5/28/2019	USDSGD	3:30:00 PM	1.378	1.3782			N/A
5/28/2019	USDSGD.fx	9:30:00 AM	1.37647	1.3769			N/A
5/28/2019	USDSGD.fx	11:30:00 AM	1.37767	1.37809			N/A
5/28/2019	USDSGD.fx	1:30:00 PM	1.37762	1.37804			N/A
5/28/2019	USDSGD.fx	3:30:00 PM	1.37788	1.37834			N/A
5/28/2019	USDZAR	9:30:00 AM	14.4613	14.4619			N/A
5/28/2019	USDZAR	11:30:00 AM	14.5774	14.5882			N/A
5/28/2019	USDZAR	1:30:00 PM	14.6175	14.6293			N/A
5/28/2019	USDZAR	3:30:00 PM	14.6182	14.6327			N/A
5/28/2019	USDZAR.fx	9:30:00 AM					N/A
5/28/2019	USDZAR.fx	11:30:00 AM					N/A
5/28/2019	USDZAR.fx	1:30:00 PM					N/A
5/28/2019	USDZAR.fx	3:30:00 PM					N/A
5/28/2019	XAUUSD	9:30:00 AM	1283.38	1283.68			N/A
5/28/2019	XAUUSD	11:30:00 AM	1283.97	1284			N/A
5/28/2019	XAUUSD	1:30:00 PM	1283.59	1283.98			N/A
5/28/2019	XAUUSD	3:30:00 PM	1277.58	1277.27			N/A
5/28/2019	ZARJPY	9:30:00 AM	7.56	7.57			N/A
5/28/2019	ZARJPY	11:30:00 AM	7.48	7.49			N/A
5/28/2019	ZARJPY	1:30:00 PM	7.46	7.48			N/A
5/28/2019	ZARJPY	3:30:00 PM	7.47	7.49			N/A
5/28/2019	ZARJPY.fx	9:30:00 AM	7.571	7.567			N/A
5/28/2019	ZARJPY.fx	11:30:00 AM	7.492	7.492			N/A
5/28/2019	ZARJPY.fx	1:30:00 PM	7.476	7.477			N/A
5/28/2019	ZARJPY.fx	3:30:00 PM	7.488	7.49			N/A
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5/29/2019	#Bitcoin	11:30:00 AM	8589.5	8600.6			N/A
5/29/2019	#Bitcoin	1:30:00 PM	8699.5	8692.6			N/A
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5/29/2019	AUDCAD	11:30:00 AM	0.93396	0.93464			N/A

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5/29/2019	AUDCAD.fx	9:30:00 AM	0.93424	0.93428			N/A
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5/29/2019	AUDCAD.fx	1:30:00 PM	0.93455	0.93446			N/A
5/29/2019	AUDCAD.fx	3:30:00 PM	0.93445	0.93423			N/A
5/29/2019	AUDCHF	9:30:00 AM	0.69626	0.69693			N/A
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5/29/2019	AUDCZK	9:30:00 AM	16.012	16.029			N/A
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5/29/2019	AUDDKK	1:30:00 PM	4.6287	4.6326			N/A
5/29/2019	AUDDKK	3:30:00 PM	4.6338	4.6374			N/A
5/29/2019	AUDHKD	9:30:00 AM	5.4307	5.434			N/A
5/29/2019	AUDHKD	11:30:00 AM	5.4255	5.4284			N/A
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5/29/2019	AUDHKD	3:30:00 PM	5.4309	5.4348			N/A
5/29/2019	AUDHUF	9:30:00 AM	202.84	203.07			N/A
5/29/2019	AUDHUF	11:30:00 AM	202.73	202.89			N/A
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5/29/2019	AUDJPY	9:30:00 AM	75.579	75.639			N/A
5/29/2019	AUDJPY	11:30:00 AM	75.553	75.592			N/A
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5/29/2019	AUDJPY.fx	1:30:00 PM	75.66	75.633			N/A
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5/29/2019	AUDMXN	1:30:00 PM	13.2925	13.3001			N/A
5/29/2019	AUDMXN	3:30:00 PM	13.2993	13.3033			N/A
5/29/2019	AUDNOK	9:30:00 AM	6.0395	6.0443			N/A
5/29/2019	AUDNOK	11:30:00 AM	6.044	6.0489			N/A
5/29/2019	AUDNOK	1:30:00 PM	6.0505	6.0555			N/A
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5/29/2019	AUDNOK.fx	9:30:00 AM	6.0411	6.0426			N/A
5/29/2019	AUDNOK.fx	11:30:00 AM	6.0457	6.0472			N/A
5/29/2019	AUDNOK.fx	1:30:00 PM	6.0521	6.0537			N/A
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5/29/2019	AUDNZD	11:30:00 AM	1.06012	1.06095			N/A
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5/29/2019	AUDNZD	3:30:00 PM	1.0613	1.06212			N/A
5/29/2019	AUDNZD.fx	9:30:00 AM	1.05858	1.0586			N/A
5/29/2019	AUDNZD.fx	11:30:00 AM	1.06055	1.0605			N/A
5/29/2019	AUDNZD.fx	1:30:00 PM	1.06142	1.06129			N/A
5/29/2019	AUDNZD.fx	3:30:00 PM	1.06175	1.06166			N/A
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5/29/2019	AUDPLN	1:30:00 PM	2.6663	2.6692			N/A
5/29/2019	AUDPLN	3:30:00 PM	2.6689	2.6716			N/A
5/29/2019	AUDSEK	9:30:00 AM	6.6405	6.6436			N/A
5/29/2019	AUDSEK	11:30:00 AM	6.6432	6.6448			N/A
5/29/2019	AUDSEK	1:30:00 PM	6.6354	6.6379			N/A
5/29/2019	AUDSEK	3:30:00 PM	6.6452	6.6473			N/A
5/29/2019	AUDSEK.fx	9:30:00 AM	6.636	6.648			N/A
5/29/2019	AUDSEK.fx	11:30:00 AM	6.6386	6.6492			N/A

5/29/2019	AUDSEK.fx	1:30:00 PM	6.631	6.6424			N/A
5/29/2019	AUDSEK.fx	3:30:00 PM	6.6405	6.6517			N/A
5/29/2019	AUDSGD	9:30:00 AM	0.9567	0.9569			N/A
5/29/2019	AUDSGD	11:30:00 AM	0.9563	0.9565			N/A
5/29/2019	AUDSGD	1:30:00 PM	0.956	0.9561			N/A
5/29/2019	AUDSGD	3:30:00 PM	0.9566	0.9568			N/A
5/29/2019	AUDSGD.fx	9:30:00 AM	0.95677	0.95672			N/A
5/29/2019	AUDSGD.fx	11:30:00 AM	0.95637	0.95641			N/A
5/29/2019	AUDSGD.fx	1:30:00 PM	0.95614	0.95609			N/A
5/29/2019	AUDSGD.fx	3:30:00 PM	0.95666	0.95658			N/A
5/29/2019	AUDUSD	9:30:00 AM	0.69225	0.69236			N/A
5/29/2019	AUDUSD	11:30:00 AM	0.69163	0.69165			N/A
5/29/2019	AUDUSD	1:30:00 PM	0.69183	0.69184			N/A
5/29/2019	AUDUSD	3:30:00 PM	0.69241	0.69237			N/A
5/29/2019	AUDUSD.fx	9:30:00 AM	0.6923	0.6923			N/A
5/29/2019	AUDUSD.fx	11:30:00 AM	0.69169	0.69159			N/A
5/29/2019	AUDUSD.fx	1:30:00 PM	0.69188	0.69178			N/A
5/29/2019	AUDUSD.fx	3:30:00 PM	0.69246	0.69231			N/A
5/29/2019	AUDZAR	9:30:00 AM	10.2514	10.2593			N/A
5/29/2019	AUDZAR	11:30:00 AM	10.2751	10.2886			N/A
5/29/2019	AUDZAR	1:30:00 PM	10.2211	10.2328			N/A
5/29/2019	AUDZAR	3:30:00 PM	10.2261	10.2332			N/A
5/29/2019	AUS200.i	9:30:00 AM					N/A
5/29/2019	AUS200.i	11:30:00 AM	6421.68	6423.18			N/A
5/29/2019	AUS200.i	1:30:00 PM	6418.18	6421.68			N/A
5/29/2019	AUS200.i	3:30:00 PM	6404.68	6407.18			N/A
5/29/2019	BCHUSD	9:30:00 AM	438.2	439.58			N/A
5/29/2019	BCHUSD	11:30:00 AM	453.18	450.9			N/A
5/29/2019	BCHUSD	1:30:00 PM	461.1	461.61			N/A
5/29/2019	BCHUSD	3:30:00 PM	455.51	456.97			N/A
5/29/2019	CADCHF	9:30:00 AM	0.74525	0.74592			N/A
5/29/2019	CADCHF	11:30:00 AM	0.74412	0.74474			N/A
5/29/2019	CADCHF	1:30:00 PM	0.74445	0.74519			N/A
5/29/2019	CADCHF	3:30:00 PM	0.74493	0.74557			N/A

5/29/2019	CADCHF.fx	9:30:00 AM	0.74559	0.74555			N/A
5/29/2019	CADCHF.fx	11:30:00 AM	0.74446	0.74438			N/A
5/29/2019	CADCHF.fx	1:30:00 PM	0.74479	0.74483			N/A
5/29/2019	CADCHF.fx	3:30:00 PM	0.74528	0.74522			N/A
5/29/2019	CADCZK	9:30:00 AM	17.142	17.159			N/A
5/29/2019	CADCZK	11:30:00 AM	17.131	17.149			N/A
5/29/2019	CADCZK	1:30:00 PM	17.148	17.164			N/A
5/29/2019	CADCZK	3:30:00 PM	17.166	17.183			N/A
5/29/2019	CADDDKK	9:30:00 AM	4.956	4.96			N/A
5/29/2019	CADDDKK	11:30:00 AM					N/A
5/29/2019	CADDDKK	1:30:00 PM					N/A
5/29/2019	CADDDKK	3:30:00 PM					N/A
5/29/2019	CADHKD	9:30:00 AM	5.8138	5.8174			N/A
5/29/2019	CADHKD	11:30:00 AM	5.8082	5.8115			N/A
5/29/2019	CADHKD	1:30:00 PM	5.8088	5.8125			N/A
5/29/2019	CADHKD	3:30:00 PM	5.8142	5.818			N/A
5/29/2019	CADHUF	9:30:00 AM	217.19	217.36			N/A
5/29/2019	CADHUF	11:30:00 AM	217.06	217.17			N/A
5/29/2019	CADHUF	1:30:00 PM	216.75	216.91			N/A
5/29/2019	CADHUF	3:30:00 PM	216.7	216.85			N/A
5/29/2019	CADJPY	9:30:00 AM	80.899	80.955			N/A
5/29/2019	CADJPY	11:30:00 AM	80.865	80.905			N/A
5/29/2019	CADJPY	1:30:00 PM	80.922	80.977			N/A
5/29/2019	CADJPY	3:30:00 PM	80.974	81.038			N/A
5/29/2019	CADJPY.fx	9:30:00 AM	80.933	80.92			N/A
5/29/2019	CADJPY.fx	11:30:00 AM	80.898	80.87			N/A
5/29/2019	CADJPY.fx	1:30:00 PM	80.954	80.942			N/A
5/29/2019	CADJPY.fx	3:30:00 PM	81.007	81.003			N/A
5/29/2019	CADMXN	9:30:00 AM	14.231	14.2386			N/A
5/29/2019	CADMXN	11:30:00 AM	14.2452	14.2565			N/A
5/29/2019	CADMXN	1:30:00 PM	14.2252	14.2368			N/A
5/29/2019	CADMXN	3:30:00 PM	14.2386	14.2392			N/A
5/29/2019	CADNOK	9:30:00 AM	6.4632	6.4681			N/A
5/29/2019	CADNOK	11:30:00 AM	6.4676	6.4726			N/A

5/29/2019	CADNOK	1:30:00 PM	6.4735	6.4781			N/A
5/29/2019	CADNOK	3:30:00 PM	6.4882	6.4932			N/A
5/29/2019	CADPLN	9:30:00 AM	2.8528	2.8546			N/A
5/29/2019	CADPLN	11:30:00 AM	2.8519	2.8537			N/A
5/29/2019	CADPLN	1:30:00 PM	2.8535	2.8553			N/A
5/29/2019	CADPLN	3:30:00 PM	2.8566	2.8585			N/A
5/29/2019	CADSEK	9:30:00 AM	7.1055	7.1091			N/A
5/29/2019	CADSEK	11:30:00 AM	7.1075	7.1109			N/A
5/29/2019	CADSEK	1:30:00 PM	7.0983	7.1019			N/A
5/29/2019	CADSEK	3:30:00 PM	7.1096	7.1133			N/A
5/29/2019	CADSGD	9:30:00 AM	1.0233	1.0237			N/A
5/29/2019	CADSGD	11:30:00 AM	1.0231	1.0234			N/A
5/29/2019	CADSGD	1:30:00 PM	1.0224	1.0227			N/A
5/29/2019	CADSGD	3:30:00 PM	1.023	1.0233			N/A
5/29/2019	CADZAR	9:30:00 AM	10.9744	10.9836			N/A
5/29/2019	CADZAR	11:30:00 AM	10.9993	11.0148			N/A
5/29/2019	CADZAR	1:30:00 PM	10.9379	10.9534			N/A
5/29/2019	CADZAR	3:30:00 PM	10.9456	10.9533			N/A
5/29/2019	CHFCZK	9:30:00 AM	22.996	23.014			N/A
5/29/2019	CHFCZK	11:30:00 AM	23.018	23.035			N/A
5/29/2019	CHFCZK	1:30:00 PM	23.029	23.045			N/A
5/29/2019	CHFCZK	3:30:00 PM	23.04	23.056			N/A
5/29/2019	CHFDKK	9:30:00 AM	6.648	6.651			N/A
5/29/2019	CHFDKK	11:30:00 AM	6.653	6.657			N/A
5/29/2019	CHFDKK	1:30:00 PM	6.652	6.655			N/A
5/29/2019	CHFDKK	3:30:00 PM	6.658	6.66			N/A
5/29/2019	CHFDKK.fx	9:30:00 AM	6.6467	6.6528			N/A
5/29/2019	CHFDKK.fx	11:30:00 AM	6.6527	6.658			N/A
5/29/2019	CHFDKK.fx	1:30:00 PM	6.6511	6.6572			N/A
5/29/2019	CHFDKK.fx	3:30:00 PM	6.6562	6.6614			N/A
5/29/2019	CHFHKD	9:30:00 AM	7.7999	7.8037			N/A
5/29/2019	CHFHKD	11:30:00 AM	7.8036	7.8075			N/A
5/29/2019	CHFHKD	1:30:00 PM	7.8003	7.8042			N/A
5/29/2019	CHFHKD	3:30:00 PM	7.8035	7.8073			N/A

5/29/2019	CHFHUF	9:30:00 AM	291.25	291.64			N/A
5/29/2019	CHFHUF	11:30:00 AM	291.5	291.86			N/A
5/29/2019	CHFHUF	1:30:00 PM	290.96	291.35			N/A
5/29/2019	CHFHUF	3:30:00 PM	290.72	291.06			N/A
5/29/2019	CHFJPY	9:30:00 AM	108.494	108.561			N/A
5/29/2019	CHFJPY	11:30:00 AM	108.614	108.656			N/A
5/29/2019	CHFJPY	1:30:00 PM	108.639	108.692			N/A
5/29/2019	CHFJPY	3:30:00 PM	108.646	108.706			N/A
5/29/2019	CHFJPY.fx	9:30:00 AM	108.526	108.526			N/A
5/29/2019	CHFJPY.fx	11:30:00 AM	108.649	108.621			N/A
5/29/2019	CHFJPY.fx	1:30:00 PM	108.671	108.658			N/A
5/29/2019	CHFJPY.fx	3:30:00 PM	108.679	108.671			N/A
5/29/2019	CHFMXN	9:30:00 AM	19.0882	19.1008			N/A
5/29/2019	CHFMXN	11:30:00 AM	19.1399	19.151			N/A
5/29/2019	CHFMXN	1:30:00 PM	19.1005	19.1175			N/A
5/29/2019	CHFMXN	3:30:00 PM	19.1071	19.1104			N/A
5/29/2019	CHFNOK	9:30:00 AM	8.67	8.6767			N/A
5/29/2019	CHFNOK	11:30:00 AM	8.69	8.6966			N/A
5/29/2019	CHFNOK	1:30:00 PM	8.6928	8.6997			N/A
5/29/2019	CHFNOK	3:30:00 PM	8.7073	8.7147			N/A
5/29/2019	CHFNOK.fx	9:30:00 AM	8.67357	8.67319			N/A
5/29/2019	CHFNOK.fx	11:30:00 AM	8.69354	8.69296			N/A
5/29/2019	CHFNOK.fx	1:30:00 PM	8.6963	8.69609			N/A
5/29/2019	CHFNOK.fx	3:30:00 PM	8.71107	8.71103			N/A
5/29/2019	CHFPLN	9:30:00 AM	3.8265	3.8293			N/A
5/29/2019	CHFPLN	11:30:00 AM	3.8316	3.8344			N/A
5/29/2019	CHFPLN	1:30:00 PM	3.831	3.8342			N/A
5/29/2019	CHFPLN	3:30:00 PM	3.8334	3.8362			N/A
5/29/2019	CHFPLN.fx	9:30:00 AM	3.82416	3.83155			N/A
5/29/2019	CHFPLN.fx	11:30:00 AM	3.82926	3.83661			N/A
5/29/2019	CHFPLN.fx	1:30:00 PM	3.82864	3.83653			N/A
5/29/2019	CHFPLN.fx	3:30:00 PM	3.83104	3.83853			N/A
5/29/2019	CHFSEK	9:30:00 AM	9.532	9.5362			N/A
5/29/2019	CHFSEK	11:30:00 AM	9.5489	9.5533			N/A

5/29/2019	CHFSEK	1:30:00 PM	9.5315	9.5361			N/A
5/29/2019	CHFSEK	3:30:00 PM	9.541	9.5457			N/A
5/29/2019	CHFSGD	9:30:00 AM	1.3736	1.3737			N/A
5/29/2019	CHFSGD	11:30:00 AM	1.3749	1.3754			N/A
5/29/2019	CHFSGD	1:30:00 PM	1.3735	1.374			N/A
5/29/2019	CHFSGD	3:30:00 PM	1.3738	1.3741			N/A
5/29/2019	CHFSGD.fx	9:30:00 AM	1.37372	1.37347			N/A
5/29/2019	CHFSGD.fx	11:30:00 AM	1.37521	1.37517			N/A
5/29/2019	CHFSGD.fx	1:30:00 PM	1.37363	1.37384			N/A
5/29/2019	CHFSGD.fx	3:30:00 PM	1.37393	1.37393			N/A
5/29/2019	CHFZAR	9:30:00 AM	14.7259	14.7276			N/A
5/29/2019	CHFZAR	11:30:00 AM	14.7803	14.7947			N/A
5/29/2019	CHFZAR	1:30:00 PM	14.6918	14.7042			N/A
5/29/2019	CHFZAR	3:30:00 PM	14.6925	14.695			N/A
5/29/2019	CZKJPY	9:30:00 AM	4.718	4.722			N/A
5/29/2019	CZKJPY	11:30:00 AM	4.719	4.722			N/A
5/29/2019	CZKJPY	1:30:00 PM	4.718	4.721			N/A
5/29/2019	CZKJPY	3:30:00 PM					N/A
5/29/2019	DAX30.i	9:30:00 AM	11913.92	11908.27			N/A
5/29/2019	DAX30.i	11:30:00 AM	11877.52	11869.02			N/A
5/29/2019	DAX30.i	1:30:00 PM	11883.02	11882.02			N/A
5/29/2019	DAX30.i	3:30:00 PM	11837.27	11833.42			N/A
5/29/2019	DJ30.i	9:30:00 AM					N/A
5/29/2019	DJ30.i	11:30:00 AM					N/A
5/29/2019	DJ30.i	1:30:00 PM					N/A
5/29/2019	DJ30.i	3:30:00 PM					N/A
5/29/2019	DKKJPY	9:30:00 AM					N/A
5/29/2019	DKKJPY	11:30:00 AM					N/A
5/29/2019	DKKJPY	1:30:00 PM	16.34	16.36			N/A
5/29/2019	DKKJPY	3:30:00 PM					N/A
5/29/2019	EURAUD	9:30:00 AM	1.61141	1.61174			N/A
5/29/2019	EURAUD	11:30:00 AM	1.61249	1.61283			N/A
5/29/2019	EURAUD	1:30:00 PM	1.61174	1.61188			N/A
5/29/2019	EURAUD	3:30:00 PM	1.60997	1.61001			N/A



5/29/2019	EURAUD.fx	9:30:00 AM	1.6116	1.61151			N/A
5/29/2019	EURAUD.fx	11:30:00 AM	1.6127	1.6126			N/A
5/29/2019	EURAUD.fx	1:30:00 PM	1.61195	1.61165			N/A
5/29/2019	EURAUD.fx	3:30:00 PM	1.61018	1.60979			N/A
5/29/2019	EURCAD	9:30:00 AM	1.50582	1.50658			N/A
5/29/2019	EURCAD	11:30:00 AM	1.50686	1.50768			N/A
5/29/2019	EURCAD	1:30:00 PM	1.50638	1.50724			N/A
5/29/2019	EURCAD	3:30:00 PM	1.5045	1.50523			N/A
5/29/2019	EURCAD.fx	9:30:00 AM	1.50622	1.50617			N/A
5/29/2019	EURCAD.fx	11:30:00 AM	1.50729	1.50725			N/A
5/29/2019	EURCAD.fx	1:30:00 PM	1.5068	1.50681			N/A
5/29/2019	EURCAD.fx	3:30:00 PM	1.50492	1.50481			N/A
5/29/2019	EURCHF	9:30:00 AM	1.12316	1.12328			N/A
5/29/2019	EURCHF	11:30:00 AM	1.12225	1.12225			N/A
5/29/2019	EURCHF	1:30:00 PM	1.12244	1.12256			N/A
5/29/2019	EURCHF	3:30:00 PM	1.12167	1.12163			N/A
5/29/2019	EURCHF.fx	9:30:00 AM	1.12322	1.12321			N/A
5/29/2019	EURCHF.fx	11:30:00 AM	1.12232	1.12218			N/A
5/29/2019	EURCHF.fx	1:30:00 PM	1.12251	1.12251			N/A
5/29/2019	EURCHF.fx	3:30:00 PM	1.12174	1.12156			N/A
5/29/2019	EURCZK	9:30:00 AM					N/A
5/29/2019	EURCZK	11:30:00 AM	25.813	25.853			N/A
5/29/2019	EURCZK	1:30:00 PM					N/A
5/29/2019	EURCZK	3:30:00 PM					N/A
5/29/2019	EURDKK	9:30:00 AM					N/A
5/29/2019	EURDKK	11:30:00 AM	7.4677	7.469			N/A
5/29/2019	EURDKK	1:30:00 PM					N/A
5/29/2019	EURDKK	3:30:00 PM	7.4643	7.4655			N/A
5/29/2019	EURGBP	9:30:00 AM	0.88179	0.88191			N/A
5/29/2019	EURGBP	11:30:00 AM	0.88299	0.88308			N/A
5/29/2019	EURGBP	1:30:00 PM	0.88194	0.88202			N/A
5/29/2019	EURGBP	3:30:00 PM	0.88188	0.88192			N/A
5/29/2019	EURGBP.fx	9:30:00 AM	0.88182	0.88185			N/A
5/29/2019	EURGBP.fx	11:30:00 AM	0.88303	0.88302			N/A

5/29/2019	EURGBP.fx	1:30:00 PM	0.88198	0.88196			N/A
5/29/2019	EURGBP.fx	3:30:00 PM	0.88192	0.88187			N/A
5/29/2019	EURHKD	9:30:00 AM	8.7581	8.7635			N/A
5/29/2019	EURHKD	11:30:00 AM	8.7558	8.7607			N/A
5/29/2019	EURHKD	1:30:00 PM	8.7535	8.759			N/A
5/29/2019	EURHKD	3:30:00 PM	8.7513	8.756			N/A
5/29/2019	EURHKD.fx	9:30:00 AM	8.76093	8.7606			N/A
5/29/2019	EURHKD.fx	11:30:00 AM	8.75862	8.75785			N/A
5/29/2019	EURHKD.fx	1:30:00 PM	8.75634	8.75619			N/A
5/29/2019	EURHKD.fx	3:30:00 PM	8.75408	8.75307			N/A
5/29/2019	EURHUF	9:30:00 AM	327.01	327.61			N/A
5/29/2019	EURHUF	11:30:00 AM	327.04	327.69			N/A
5/29/2019	EURHUF	1:30:00 PM	326.48	327.07			N/A
5/29/2019	EURHUF	3:30:00 PM	325.97	326.68			N/A
5/29/2019	EURHUF.fx	9:30:00 AM	327.289	327.478			N/A
5/29/2019	EURHUF.fx	11:30:00 AM	327.311	327.418			N/A
5/29/2019	EURHUF.fx	1:30:00 PM	326.761	326.94			N/A
5/29/2019	EURHUF.fx	3:30:00 PM	326.249	326.388			N/A
5/29/2019	EURJPY	9:30:00 AM	121.893	121.896			N/A
5/29/2019	EURJPY	11:30:00 AM	121.932	121.898			N/A
5/29/2019	EURJPY	1:30:00 PM	121.977	121.968			N/A
5/29/2019	EURJPY	3:30:00 PM	121.904	121.898			N/A
5/29/2019	EURJPY.fx	9:30:00 AM	121.895	121.893			N/A
5/29/2019	EURJPY.fx	11:30:00 AM	121.935	121.894			N/A
5/29/2019	EURJPY.fx	1:30:00 PM	121.98	121.964			N/A
5/29/2019	EURJPY.fx	3:30:00 PM	121.907	121.894			N/A
5/29/2019	EURMXN	9:30:00 AM	21.4373	21.4527			N/A
5/29/2019	EURMXN	11:30:00 AM	21.4756	21.491			N/A
5/29/2019	EURMXN	1:30:00 PM	21.437	21.4576			N/A
5/29/2019	EURMXN	3:30:00 PM	21.4292	21.4302			N/A
5/29/2019	EURMXN.fx	9:30:00 AM	21.4464	21.444			N/A
5/29/2019	EURMXN.fx	11:30:00 AM	21.4838	21.4823			N/A
5/29/2019	EURMXN.fx	1:30:00 PM	21.4455	21.4486			N/A
5/29/2019	EURMXN.fx	3:30:00 PM	21.4389	21.4207			N/A

5/29/2019	EURNOK	9:30:00 AM	9.7363	9.7475			N/A
5/29/2019	EURNOK	11:30:00 AM	9.7501	9.7619			N/A
5/29/2019	EURNOK	1:30:00 PM	9.7563	9.7667			N/A
5/29/2019	EURNOK	3:30:00 PM	9.7657	9.7769			N/A
5/29/2019	EURNOK.fx	9:30:00 AM	9.74189	9.74186			N/A
5/29/2019	EURNOK.fx	11:30:00 AM	9.75552	9.75644			N/A
5/29/2019	EURNOK.fx	1:30:00 PM	9.76169	9.76118			N/A
5/29/2019	EURNOK.fx	3:30:00 PM	9.77128	9.77139			N/A
5/29/2019	EURNZD	9:30:00 AM	1.70629	1.70701			N/A
5/29/2019	EURNZD	11:30:00 AM	1.71057	1.71138			N/A
5/29/2019	EURNZD	1:30:00 PM	1.71126	1.71134			N/A
5/29/2019	EURNZD	3:30:00 PM	1.7097	1.71031			N/A
5/29/2019	EURNZD.fx	9:30:00 AM	1.70671	1.70656			N/A
5/29/2019	EURNZD.fx	11:30:00 AM	1.711	1.71094			N/A
5/29/2019	EURNZD.fx	1:30:00 PM	1.71167	1.71095			N/A
5/29/2019	EURNZD.fx	3:30:00 PM	1.71014	1.70984			N/A
5/29/2019	EURPLN	9:30:00 AM	4.2975	4.3002			N/A
5/29/2019	EURPLN	11:30:00 AM	4.2991	4.3024			N/A
5/29/2019	EURPLN	1:30:00 PM	4.2999	4.3031			N/A
5/29/2019	EURPLN	3:30:00 PM	4.299	4.3023			N/A
5/29/2019	EURPLN.fx	9:30:00 AM	4.29698	4.30082			N/A
5/29/2019	EURPLN.fx	11:30:00 AM	4.29857	4.30302			N/A
5/29/2019	EURPLN.fx	1:30:00 PM	4.29927	4.30356			N/A
5/29/2019	EURPLN.fx	3:30:00 PM	4.29837	4.30282			N/A
5/29/2019	EURRUB	9:30:00 AM					N/A
5/29/2019	EURRUB	11:30:00 AM	72.128	72.567			N/A
5/29/2019	EURRUB	1:30:00 PM	72.306	72.739			N/A
5/29/2019	EURRUB	3:30:00 PM	72.4	72.834			N/A
5/29/2019	EURSEK	9:30:00 AM	10.7073	10.7121			N/A
5/29/2019	EURSEK	11:30:00 AM	10.7186	10.7218			N/A
5/29/2019	EURSEK	1:30:00 PM	10.7005	10.7048			N/A
5/29/2019	EURSEK	3:30:00 PM	10.7038	10.7074			N/A
5/29/2019	EURSEK.fx	9:30:00 AM	10.70892	10.71055			N/A
5/29/2019	EURSEK.fx	11:30:00 AM	10.72019	10.72004			N/A

5/29/2019	EURSEK.fx	1:30:00 PM	10.7023	10.70294			N/A
5/29/2019	EURSEK.fx	3:30:00 PM	10.70557	10.70563			N/A
5/29/2019	EURSGD	9:30:00 AM	1.5422	1.5427			N/A
5/29/2019	EURSGD	11:30:00 AM	1.5425	1.5434			N/A
5/29/2019	EURSGD	1:30:00 PM	1.5412	1.5421			N/A
5/29/2019	EURSGD	3:30:00 PM	1.5404	1.5412			N/A
5/29/2019	EURSGD.fx	9:30:00 AM	1.54264	1.54232			N/A
5/29/2019	EURSGD.fx	11:30:00 AM	1.54288	1.54297			N/A
5/29/2019	EURSGD.fx	1:30:00 PM	1.54163	1.54172			N/A
5/29/2019	EURSGD.fx	3:30:00 PM	1.54078	1.54077			N/A
5/29/2019	EURUSD	9:30:00 AM	1.11589	1.11601			N/A
5/29/2019	EURUSD	11:30:00 AM	1.1156	1.11567			N/A
5/29/2019	EURUSD	1:30:00 PM	1.11528	1.11543		10	N/A
5/29/2019	EURUSD	3:30:00 PM	1.11503	1.11509			N/A
5/29/2019	EURUSD.fx	9:30:00 AM	1.1161	1.1161			N/A
5/29/2019	EURUSD.fx	11:30:00 AM	1.11581	1.11576			N/A
5/29/2019	EURUSD.fx	1:30:00 PM	1.11548	1.11552			N/A
5/29/2019	EURUSD.fx	3:30:00 PM	1.11523	1.11518			N/A
5/29/2019	EURZAR	9:30:00 AM	16.5368	16.5452			N/A
5/29/2019	EURZAR	11:30:00 AM	16.5867	16.6052			N/A
5/29/2019	EURZAR	1:30:00 PM	16.489	16.5065			N/A
5/29/2019	EURZAR	3:30:00 PM	16.4795	16.4836			N/A
5/29/2019	EURZAR.fx	9:30:00 AM	16.53709	16.54617			N/A
5/29/2019	EURZAR.fx	11:30:00 AM	16.58603	16.60603			N/A
5/29/2019	EURZAR.fx	1:30:00 PM	16.48874	16.50691			N/A
5/29/2019	EURZAR.fx	3:30:00 PM	16.47893	16.48398			N/A
5/29/2019	GBPAUD	9:30:00 AM	1.82786	1.82847			N/A
5/29/2019	GBPAUD	11:30:00 AM	1.82671	1.82731			N/A
5/29/2019	GBPAUD	1:30:00 PM	1.82794	1.82841			N/A
5/29/2019	GBPAUD	3:30:00 PM	1.82622	1.82637			N/A
5/29/2019	GBPAUD.fx	9:30:00 AM	1.82827	1.82805			N/A
5/29/2019	GBPAUD.fx	11:30:00 AM	1.82711	1.82691			N/A
5/29/2019	GBPAUD.fx	1:30:00 PM	1.82833	1.82801			N/A
5/29/2019	GBPAUD.fx	3:30:00 PM	1.82662	1.82596			N/A

5/29/2019	GBPCAD	9:30:00 AM	1.70764	1.70837			N/A
5/29/2019	GBPCAD	11:30:00 AM	1.70658	1.70738			N/A
5/29/2019	GBPCAD	1:30:00 PM	1.7081	1.70884			N/A
5/29/2019	GBPCAD	3:30:00 PM	1.70601	1.70669			N/A
5/29/2019	GBPCAD.fx	9:30:00 AM	1.70804	1.70797			N/A
5/29/2019	GBPCAD.fx	11:30:00 AM	1.70698	1.70697			N/A
5/29/2019	GBPCAD.fx	1:30:00 PM	1.70849	1.70845			N/A
5/29/2019	GBPCAD.fx	3:30:00 PM	1.70641	1.7063			N/A
5/29/2019	GBPCHF	9:30:00 AM	1.27339	1.27382			N/A
5/29/2019	GBPCHF	11:30:00 AM	1.27065	1.27097			N/A
5/29/2019	GBPCHF	1:30:00 PM	1.27239	1.27282			N/A
5/29/2019	GBPCHF	3:30:00 PM	1.27164	1.27192			N/A
5/29/2019	GBPCHF.fx	9:30:00 AM	1.27359	1.27361			N/A
5/29/2019	GBPCHF.fx	11:30:00 AM	1.27085	1.27076			N/A
5/29/2019	GBPCHF.fx	1:30:00 PM	1.27259	1.27261			N/A
5/29/2019	GBPCHF.fx	3:30:00 PM	1.27183	1.27171			N/A
5/29/2019	GBPCZK	9:30:00 AM	29.279	29.302			N/A
5/29/2019	GBPCZK	11:30:00 AM	29.243	29.264			N/A
5/29/2019	GBPCZK	1:30:00 PM	29.297	29.318			N/A
5/29/2019	GBPCZK	3:30:00 PM	29.292	29.313			N/A
5/29/2019	GBPDKK	9:30:00 AM	8.464	8.475			N/A
5/29/2019	GBPDKK	11:30:00 AM	8.452	8.463			N/A
5/29/2019	GBPDKK	1:30:00 PM	8.463	8.473			N/A
5/29/2019	GBPDKK	3:30:00 PM	8.463	8.474			N/A
5/29/2019	GBPDKK.fx	9:30:00 AM	8.4622	8.4753			N/A
5/29/2019	GBPDKK.fx	11:30:00 AM	8.4508	8.4637			N/A
5/29/2019	GBPDKK.fx	1:30:00 PM	8.4616	8.4739			N/A
5/29/2019	GBPDKK.fx	3:30:00 PM	8.4619	8.4741			N/A
5/29/2019	GBPHKD	9:30:00 AM	9.9292	9.9349			N/A
5/29/2019	GBPHKD	11:30:00 AM	9.9137	9.9177			N/A
5/29/2019	GBPHKD	1:30:00 PM	9.9234	9.9279			N/A
5/29/2019	GBPHKD	3:30:00 PM	9.9212	9.9262			N/A
5/29/2019	GBPHUF	9:30:00 AM	370.82	371.29			N/A
5/29/2019	GBPHUF	11:30:00 AM	370.36	370.74			N/A

5/29/2019	GBPHUF	1:30:00 PM	370.17	370.63			N/A
5/29/2019	GBPHUF	3:30:00 PM	369.62	370.09			N/A
5/29/2019	GBPJPY	9:30:00 AM	138.213	138.245			N/A
5/29/2019	GBPJPY	11:30:00 AM	138.071	138.064			N/A
5/29/2019	GBPJPY	1:30:00 PM	138.286	138.3			N/A
5/29/2019	GBPJPY	3:30:00 PM	138.215	138.233			N/A
5/29/2019	GBPJPY.fx	9:30:00 AM	138.232	138.225			N/A
5/29/2019	GBPJPY.fx	11:30:00 AM	138.092	138.044			N/A
5/29/2019	GBPJPY.fx	1:30:00 PM	138.306	138.281			N/A
5/29/2019	GBPJPY.fx	3:30:00 PM	138.234	138.213			N/A
5/29/2019	GBPMXN	9:30:00 AM	24.3053	24.3146			N/A
5/29/2019	GBPMXN	11:30:00 AM	24.3157	24.3275			N/A
5/29/2019	GBPMXN	1:30:00 PM	24.3029	24.3168			N/A
5/29/2019	GBPMXN	3:30:00 PM	24.2969	24.2907			N/A
5/29/2019	GBPNOK	9:30:00 AM	11.0409	11.0513			N/A
5/29/2019	GBPNOK	11:30:00 AM	11.0424	11.0534			N/A
5/29/2019	GBPNOK	1:30:00 PM	11.0618	11.0718			N/A
5/29/2019	GBPNOK	3:30:00 PM	11.0743	11.0837			N/A
5/29/2019	GBPNOK.fx	9:30:00 AM	11.04584	11.04664			N/A
5/29/2019	GBPNOK.fx	11:30:00 AM	11.04719	11.04852			N/A
5/29/2019	GBPNOK.fx	1:30:00 PM	11.06678	11.06678			N/A
5/29/2019	GBPNOK.fx	3:30:00 PM	11.07911	11.07902			N/A
5/29/2019	GBPNZD	9:30:00 AM	1.93506	1.93562			N/A
5/29/2019	GBPNZD	11:30:00 AM	1.93734	1.938			N/A
5/29/2019	GBPNZD	1:30:00 PM	1.94033	1.94032			N/A
5/29/2019	GBPNZD	3:30:00 PM	1.93882	1.93917			N/A
5/29/2019	GBPNZD.fx	9:30:00 AM	1.93542	1.93521			N/A
5/29/2019	GBPNZD.fx	11:30:00 AM	1.93767	1.93763			N/A
5/29/2019	GBPNZD.fx	1:30:00 PM	1.9407	1.93993			N/A
5/29/2019	GBPNZD.fx	3:30:00 PM	1.93916	1.93878			N/A
5/29/2019	GBPPLN	9:30:00 AM	4.8741	4.8758			N/A
5/29/2019	GBPPLN	11:30:00 AM	4.8696	4.8714			N/A
5/29/2019	GBPPLN	1:30:00 PM	4.8761	4.878			N/A
5/29/2019	GBPPLN	3:30:00 PM	4.8759	4.8773			N/A

5/29/2019	GBPPLN.fx	9:30:00 AM	4.87206	4.87797			N/A
5/29/2019	GBPPLN.fx	11:30:00 AM	4.86754	4.87354			N/A
5/29/2019	GBPPLN.fx	1:30:00 PM	4.87399	4.88001			N/A
5/29/2019	GBPPLN.fx	3:30:00 PM	4.87379	4.87942			N/A
5/29/2019	GBPSEK	9:30:00 AM	12.1386	12.1485			N/A
5/29/2019	GBPSEK	11:30:00 AM	12.1355	12.1428			N/A
5/29/2019	GBPSEK	1:30:00 PM	12.1299	12.1385			N/A
5/29/2019	GBPSEK	3:30:00 PM	12.1346	12.1417			N/A
5/29/2019	GBPSEK.fx	9:30:00 AM	12.13492	12.15215			N/A
5/29/2019	GBPSEK.fx	11:30:00 AM	12.13183	12.14646			N/A
5/29/2019	GBPSEK.fx	1:30:00 PM	12.1261	12.14235			N/A
5/29/2019	GBPSEK.fx	3:30:00 PM	12.13096	12.14539			N/A
5/29/2019	GBPSGD	9:30:00 AM	1.749	1.7493			N/A
5/29/2019	GBPSGD	11:30:00 AM	1.747	1.7477			N/A
5/29/2019	GBPSGD	1:30:00 PM	1.7477	1.7483			N/A
5/29/2019	GBPSGD	3:30:00 PM	1.7468	1.7474			N/A
5/29/2019	GBPSGD.fx	9:30:00 AM	1.74715	1.75115			N/A
5/29/2019	GBPSGD.fx	11:30:00 AM	1.74516	1.74948			N/A
5/29/2019	GBPSGD.fx	1:30:00 PM	1.7458	1.75016			N/A
5/29/2019	GBPSGD.fx	3:30:00 PM	1.74496	1.7492			N/A
5/29/2019	GBPUSD	9:30:00 AM	1.2656	1.26566			N/A
5/29/2019	GBPUSD	11:30:00 AM	1.26362	1.26359			N/A
5/29/2019	GBPUSD	1:30:00 PM	1.26477	1.26478			N/A
5/29/2019	GBPUSD	3:30:00 PM	1.26451	1.26449			N/A
5/29/2019	GBPUSD.fx	9:30:00 AM	1.26566	1.26561			N/A
5/29/2019	GBPUSD.fx	11:30:00 AM	1.26368	1.2635			N/A
5/29/2019	GBPUSD.fx	1:30:00 PM	1.26482	1.26472			N/A
5/29/2019	GBPUSD.fx	3:30:00 PM	1.26457	1.26443			N/A
5/29/2019	GBPZAR	9:30:00 AM	18.7499	18.7658			N/A
5/29/2019	GBPZAR	11:30:00 AM	18.7804	18.8075			N/A
5/29/2019	GBPZAR	1:30:00 PM	18.6919	18.7185			N/A
5/29/2019	GBPZAR	3:30:00 PM	18.6831	18.6956			N/A
5/29/2019	GBPZAR.fx	9:30:00 AM	18.7565	18.7587			N/A
5/29/2019	GBPZAR.fx	11:30:00 AM	18.7875	18.8005			N/A

5/29/2019	GBPZAR.fx	1:30:00 PM	18.699	18.7113			N/A
5/29/2019	GBPZAR.fx	3:30:00 PM	18.6902	18.6866			N/A
5/29/2019	GOLD	9:30:00 AM	1283.18	1283.39			N/A
5/29/2019	GOLD	11:30:00 AM	1284.81	1285.08			N/A
5/29/2019	GOLD	1:30:00 PM	1283.45	1283.67			N/A
5/29/2019	GOLD	3:30:00 PM	1283.98	1283.84			N/A
5/29/2019	HKDJPY	9:30:00 AM	13.91	13.92			N/A
5/29/2019	HKDJPY	11:30:00 AM	13.92	13.93			N/A
5/29/2019	HKDJPY	1:30:00 PM	13.93	13.94			N/A
5/29/2019	HKDJPY	3:30:00 PM	13.93	13.94			N/A
5/29/2019	HKDJPY.fx	9:30:00 AM	13.91	13.916			N/A
5/29/2019	HKDJPY.fx	11:30:00 AM	13.917	13.921			N/A
5/29/2019	HKDJPY.fx	1:30:00 PM	13.927	13.932			N/A
5/29/2019	HKDJPY.fx	3:30:00 PM	13.921	13.928			N/A
5/29/2019	HUFJPY	9:30:00 AM	0.3726	0.3729			N/A
5/29/2019	HUFJPY	11:30:00 AM	0.3726	0.3729			N/A
5/29/2019	HUFJPY	1:30:00 PM	0.3734	0.3737			N/A
5/29/2019	HUFJPY	3:30:00 PM	0.3738	0.3741			N/A
5/29/2019	JP225.i	9:30:00 AM	20903.05	20918.05			N/A
5/29/2019	JP225.i	11:30:00 AM	20898.05	20898.05			N/A
5/29/2019	JP225.i	1:30:00 PM	20900.55	20914.72			N/A
5/29/2019	JP225.i	3:30:00 PM	20868.05	20878.05			N/A
5/29/2019	MXNJPY	9:30:00 AM	5.67	5.69			N/A
5/29/2019	MXNJPY	11:30:00 AM	5.68	5.68			N/A
5/29/2019	MXNJPY	1:30:00 PM	5.69	5.7			N/A
5/29/2019	MXNJPY	3:30:00 PM	5.69	5.7			N/A
5/29/2019	NASDAQ.i	9:30:00 AM					N/A
5/29/2019	NASDAQ.i	11:30:00 AM					N/A
5/29/2019	NASDAQ.i	1:30:00 PM					N/A
5/29/2019	NASDAQ.i	3:30:00 PM					N/A
5/29/2019	NOKJPY	9:30:00 AM	12.5	12.53			N/A
5/29/2019	NOKJPY	11:30:00 AM	12.49	12.51			N/A
5/29/2019	NOKJPY	1:30:00 PM	12.49	12.51			N/A
5/29/2019	NOKJPY	3:30:00 PM	12.47	12.5			N/A



5/29/2019	NOKJPY.fx	9:30:00 AM	12.51	12.515			N/A
5/29/2019	NOKJPY.fx	11:30:00 AM	12.495	12.498			N/A
5/29/2019	NOKJPY.fx	1:30:00 PM	12.494	12.498			N/A
5/29/2019	NOKJPY.fx	3:30:00 PM	12.473	12.479			N/A
5/29/2019	NZDCAD	9:30:00 AM	0.88221	0.88289			N/A
5/29/2019	NZDCAD	11:30:00 AM	0.88061	0.88131			N/A
5/29/2019	NZDCAD	1:30:00 PM	0.88028	0.8807			N/A
5/29/2019	NZDCAD	3:30:00 PM	0.8797	0.8803			N/A
5/29/2019	NZDCAD.fx	9:30:00 AM	0.88253	0.88253			N/A
5/29/2019	NZDCAD.fx	11:30:00 AM	0.88095	0.88097			N/A
5/29/2019	NZDCAD.fx	1:30:00 PM	0.88063	0.88036			N/A
5/29/2019	NZDCAD.fx	3:30:00 PM	0.88003	0.87996			N/A
5/29/2019	NZDCHF	9:30:00 AM	0.65764	0.65831			N/A
5/29/2019	NZDCHF	11:30:00 AM	0.65543	0.65609			N/A
5/29/2019	NZDCHF	1:30:00 PM	0.65554	0.656			N/A
5/29/2019	NZDCHF	3:30:00 PM	0.65549	0.65614			N/A
5/29/2019	NZDCHF.fx	9:30:00 AM	0.65798	0.65796			N/A
5/29/2019	NZDCHF.fx	11:30:00 AM	0.65576	0.65574			N/A
5/29/2019	NZDCHF.fx	1:30:00 PM	0.65587	0.65565			N/A
5/29/2019	NZDCHF.fx	3:30:00 PM	0.65583	0.65579			N/A
5/29/2019	NZDCZK	9:30:00 AM	15.128	15.14			N/A
5/29/2019	NZDCZK	11:30:00 AM					N/A
5/29/2019	NZDCZK	1:30:00 PM	15.101	15.106			N/A
5/29/2019	NZDCZK	3:30:00 PM	15.107	15.117			N/A
5/29/2019	NZDDKK	9:30:00 AM					N/A
5/29/2019	NZDDKK	11:30:00 AM					N/A
5/29/2019	NZDDKK	1:30:00 PM	4.361	4.363			N/A
5/29/2019	NZDDKK	3:30:00 PM	4.364	4.368			N/A
5/29/2019	NZDHKD	9:30:00 AM	5.1302	5.1331			N/A
5/29/2019	NZDHKD	11:30:00 AM	5.1156	5.1185			N/A
5/29/2019	NZDHKD	1:30:00 PM	5.1141	5.115			N/A
5/29/2019	NZDHKD	3:30:00 PM	5.116	5.1188			N/A
5/29/2019	NZDHUF	9:30:00 AM	191.58	191.86			N/A
5/29/2019	NZDHUF	11:30:00 AM	191.1	191.35			N/A

5/29/2019	NZDHUF	1:30:00 PM	190.76	190.98			N/A
5/29/2019	NZDHUF	3:30:00 PM	190.59	190.84			N/A
5/29/2019	NZDJPY	9:30:00 AM	71.393	71.455			N/A
5/29/2019	NZDJPY	11:30:00 AM	71.233	71.28			N/A
5/29/2019	NZDJPY	1:30:00 PM	71.259	71.296			N/A
5/29/2019	NZDJPY	3:30:00 PM	71.254	71.323			N/A
5/29/2019	NZDJPY.fx	9:30:00 AM	71.426	71.423			N/A
5/29/2019	NZDJPY.fx	11:30:00 AM	71.264	71.247			N/A
5/29/2019	NZDJPY.fx	1:30:00 PM	71.29	71.257			N/A
5/29/2019	NZDJPY.fx	3:30:00 PM	71.285	71.29			N/A
5/29/2019	NZDMXN	9:30:00 AM	12.5588	12.5613			N/A
5/29/2019	NZDMXN	11:30:00 AM	12.5485	12.5532			N/A
5/29/2019	NZDMXN	1:30:00 PM	12.5265	12.5276			N/A
5/29/2019	NZDMXN	3:30:00 PM	12.5284	12.5265			N/A
5/29/2019	NZDNOK	9:30:00 AM	5.7026	5.7065			N/A
5/29/2019	NZDNOK	11:30:00 AM	5.6968	5.7006			N/A
5/29/2019	NZDNOK	1:30:00 PM	5.6989	5.7012			N/A
5/29/2019	NZDNOK	3:30:00 PM	5.7085	5.7124			N/A
5/29/2019	NZDPLN	9:30:00 AM	2.5175	2.5189			N/A
5/29/2019	NZDPLN	11:30:00 AM	2.5121	2.5135			N/A
5/29/2019	NZDPLN	1:30:00 PM	2.5118	2.5128			N/A
5/29/2019	NZDPLN	3:30:00 PM	2.5132	2.5146			N/A
5/29/2019	NZDSEK	9:30:00 AM	6.2678	6.2747			N/A
5/29/2019	NZDSEK	11:30:00 AM	6.2581	6.2649			N/A
5/29/2019	NZDSEK	1:30:00 PM	6.2475	6.2519			N/A
5/29/2019	NZDSEK	3:30:00 PM	6.2533	6.2601			N/A
5/29/2019	NZDSGD	9:30:00 AM	0.9036	0.9041			N/A
5/29/2019	NZDSGD	11:30:00 AM	0.9015	0.9022			N/A
5/29/2019	NZDSGD	1:30:00 PM	0.9008	0.901			N/A
5/29/2019	NZDSGD	3:30:00 PM	0.9008	0.9014			N/A
5/29/2019	NZDSGD.fx	9:30:00 AM	0.90358	0.90401			N/A
5/29/2019	NZDSGD.fx	11:30:00 AM	0.90148	0.90207			N/A
5/29/2019	NZDSGD.fx	1:30:00 PM	0.90078	0.90098			N/A
5/29/2019	NZDSGD.fx	3:30:00 PM	0.90078	0.90128			N/A

5/29/2019	NZDUSD	9:30:00 AM	0.65388	0.65399			N/A
5/29/2019	NZDUSD	11:30:00 AM	0.65206	0.65215			N/A
5/29/2019	NZDUSD	1:30:00 PM	0.65186	0.65174			N/A
5/29/2019	NZDUSD	3:30:00 PM	0.65208	0.65213			N/A
5/29/2019	NZDUSD.fx	9:30:00 AM	0.65395	0.654			N/A
5/29/2019	NZDUSD.fx	11:30:00 AM	0.65213	0.65217			N/A
5/29/2019	NZDUSD.fx	1:30:00 PM	0.65193	0.65174			N/A
5/29/2019	NZDUSD.fx	3:30:00 PM	0.65215	0.65214			N/A
5/29/2019	NZDZAR	9:30:00 AM	9.6813	9.6915			N/A
5/29/2019	NZDZAR	11:30:00 AM	9.6863	9.7022			N/A
5/29/2019	NZDZAR	1:30:00 PM	9.6292	9.6409			N/A
5/29/2019	NZDZAR	3:30:00 PM	9.6287	9.6384			N/A
5/29/2019	SEKJPY	9:30:00 AM	11.38	11.39			N/A
5/29/2019	SEKJPY	11:30:00 AM	11.37	11.38			N/A
5/29/2019	SEKJPY	1:30:00 PM	11.4	11.41			N/A
5/29/2019	SEKJPY	3:30:00 PM	11.39	11.4			N/A
5/29/2019	SEKJPY.fx	9:30:00 AM	11.372	11.391			N/A
5/29/2019	SEKJPY.fx	11:30:00 AM	11.364	11.381			N/A
5/29/2019	SEKJPY.fx	1:30:00 PM	11.388	11.405			N/A
5/29/2019	SEKJPY.fx	3:30:00 PM	11.377	11.395			N/A
5/29/2019	SGDJPY	9:30:00 AM	79	79.02			N/A
5/29/2019	SGDJPY	11:30:00 AM	78.99	79.01			N/A
5/29/2019	SGDJPY	1:30:00 PM	79.09	79.12			N/A
5/29/2019	SGDJPY	3:30:00 PM	79.09	79.11			N/A
5/29/2019	SILVER	9:30:00 AM	14.21	14.59			N/A
5/29/2019	SILVER	11:30:00 AM	14.22	14.59			N/A
5/29/2019	SILVER	1:30:00 PM	14.18	14.56			N/A
5/29/2019	SILVER	3:30:00 PM	14.2	14.57			N/A
5/29/2019	SPX500.i	9:30:00 AM	2789.16	2789.44			N/A
5/29/2019	SPX500.i	11:30:00 AM	2789.14	2787.94			N/A
5/29/2019	SPX500.i	1:30:00 PM	2788.14	2788.74			N/A
5/29/2019	SPX500.i	3:30:00 PM	2785.14	2785.94			N/A
5/29/2019	UK100.i	9:30:00 AM	7225.06	7225.06			N/A
5/29/2019	UK100.i	11:30:00 AM	7189.31	7187.31			N/A

5/29/2019	UK100.i	1:30:00 PM	7176.31	7176.81			N/A
5/29/2019	UK100.i	3:30:00 PM	7156.56	7155.56			N/A
5/29/2019	USDCAD	9:30:00 AM	1.3495	1.34958			N/A
5/29/2019	USDCAD	11:30:00 AM	1.35091	1.35085			N/A
5/29/2019	USDCAD	1:30:00 PM	1.35077	1.35087			N/A
5/29/2019	USDCAD	3:30:00 PM	1.34939	1.34948			N/A
5/29/2019	USDCAD.fx	9:30:00 AM	1.34957	1.34955			N/A
5/29/2019	USDCAD.fx	11:30:00 AM	1.35094	1.35081			N/A
5/29/2019	USDCAD.fx	1:30:00 PM	1.3508	1.35083			N/A
5/29/2019	USDCAD.fx	3:30:00 PM	1.34943	1.34943			N/A
5/29/2019	USDCHF	9:30:00 AM	1.00606	1.00615			N/A
5/29/2019	USDCHF	11:30:00 AM	1.00552	1.0056			N/A
5/29/2019	USDCHF	1:30:00 PM	1.00595	1.00611			N/A
5/29/2019	USDCHF	3:30:00 PM	1.00556	1.0056			N/A
5/29/2019	USDCHF.fx	9:30:00 AM	1.0061	1.00609			N/A
5/29/2019	USDCHF.fx	11:30:00 AM	1.00558	1.00553			N/A
5/29/2019	USDCHF.fx	1:30:00 PM	1.006	1.00604			N/A
5/29/2019	USDCHF.fx	3:30:00 PM	1.00562	1.00553			N/A
5/29/2019	USDCZK	9:30:00 AM	23.152	23.175			N/A
5/29/2019	USDCZK	11:30:00 AM	23.161	23.183			N/A
5/29/2019	USDCZK	1:30:00 PM	23.181	23.204			N/A
5/29/2019	USDCZK	3:30:00 PM	23.183	23.204			N/A
5/29/2019	USDCZK.fx	9:30:00 AM	23.1597	23.167			N/A
5/29/2019	USDCZK.fx	11:30:00 AM	23.169	23.174			N/A
5/29/2019	USDCZK.fx	1:30:00 PM	23.189	23.1951			N/A
5/29/2019	USDCZK.fx	3:30:00 PM	23.1916	23.1947			N/A
5/29/2019	USDDKK	9:30:00 AM	6.6884	6.6924			N/A
5/29/2019	USDDKK	11:30:00 AM	6.6905	6.6942			N/A
5/29/2019	USDDKK	1:30:00 PM	6.6923	6.6964			N/A
5/29/2019	USDDKK	3:30:00 PM	6.6938	6.6976			N/A
5/29/2019	USDDKK.fx	9:30:00 AM	6.68901	6.69039			N/A
5/29/2019	USDDKK.fx	11:30:00 AM	6.69103	6.69204			N/A
5/29/2019	USDDKK.fx	1:30:00 PM	6.69287	6.69433			N/A
5/29/2019	USDDKK.fx	3:30:00 PM	6.69449	6.69555			N/A

5/29/2019	USDHKD	9:30:00 AM					N/A
5/29/2019	USDHKD	11:30:00 AM	7.8492	7.8495			N/A
5/29/2019	USDHKD	1:30:00 PM	7.8494	7.8496			N/A
5/29/2019	USDHKD	3:30:00 PM	7.8492	7.8495			N/A
5/29/2019	USDHKD.fx	9:30:00 AM	7.84918	7.84973			N/A
5/29/2019	USDHKD.fx	11:30:00 AM	7.84911	7.84965			N/A
5/29/2019	USDHKD.fx	1:30:00 PM					N/A
5/29/2019	USDHKD.fx	3:30:00 PM	7.84913	7.8497			N/A
5/29/2019	USDHUF	9:30:00 AM	293.09	293.56			N/A
5/29/2019	USDHUF	11:30:00 AM	293.18	293.6			N/A
5/29/2019	USDHUF	1:30:00 PM	292.76	293.24			N/A
5/29/2019	USDHUF	3:30:00 PM	292.39	292.85			N/A
5/29/2019	USDHUF.fx	9:30:00 AM	293.278	293.365			N/A
5/29/2019	USDHUF.fx	11:30:00 AM	293.371	293.403			N/A
5/29/2019	USDHUF.fx	1:30:00 PM	292.963	293.052			N/A
5/29/2019	USDHUF.fx	3:30:00 PM	292.583	292.648			N/A
5/29/2019	USDINR	9:30:00 AM	64.88	74.86			N/A
5/29/2019	USDINR	11:30:00 AM	64.93	74.92			N/A
5/29/2019	USDINR	1:30:00 PM					N/A
5/29/2019	USDINR	3:30:00 PM					N/A
5/29/2019	USDJPY	9:30:00 AM	109.215	109.215			N/A
5/29/2019	USDJPY	11:30:00 AM	109.273	109.256			N/A
5/29/2019	USDJPY	1:30:00 PM	109.346	109.341		100	N/A
5/29/2019	USDJPY	3:30:00 PM	109.31	109.312			N/A
5/29/2019	USDJPY.fx	9:30:00 AM	109.221	109.208			N/A
5/29/2019	USDJPY.fx	11:30:00 AM	109.278	109.249			N/A
5/29/2019	USDJPY.fx	1:30:00 PM	109.353	109.333			N/A
5/29/2019	USDJPY.fx	3:30:00 PM	109.316	109.305			N/A
5/29/2019	USDMXN	9:30:00 AM	19.212	19.214			N/A
5/29/2019	USDMXN	11:30:00 AM	19.253	19.255			N/A
5/29/2019	USDMXN	1:30:00 PM	19.222	19.231			N/A
5/29/2019	USDMXN	3:30:00 PM	19.221	19.213			N/A
5/29/2019	USDMXN.f	9:30:00 AM	19.2156	19.2112			N/A
5/29/2019	USDMXN.f	11:30:00 AM	19.2563	19.2515			N/A

5/29/2019	USDMXN.f	1:30:00 PM	19.2261	19.2278			N/A
5/29/2019	USDMXN.f	3:30:00 PM	19.2251	19.2088			N/A
5/29/2019	USDNOK	9:30:00 AM	8.7223	8.7305			N/A
5/29/2019	USDNOK	11:30:00 AM	8.738	8.7456			N/A
5/29/2019	USDNOK	1:30:00 PM	8.7449	8.7529			N/A
5/29/2019	USDNOK	3:30:00 PM	8.7562	8.7641			N/A
5/29/2019	USDNOK.fx	9:30:00 AM	8.72646	8.72599			N/A
5/29/2019	USDNOK.fx	11:30:00 AM	8.74187	8.74114			N/A
5/29/2019	USDNOK.fx	1:30:00 PM	8.749	8.74804			N/A
5/29/2019	USDNOK.fx	3:30:00 PM	8.76032	8.75966			N/A
5/29/2019	USDPLN	9:30:00 AM	3.851	3.8521			N/A
5/29/2019	USDPLN	11:30:00 AM	3.8537	3.8553			N/A
5/29/2019	USDPLN	1:30:00 PM	3.8552	3.857			N/A
5/29/2019	USDPLN	3:30:00 PM	3.8557	3.8572			N/A
5/29/2019	USDPLN.fx	9:30:00 AM	3.85028	3.85294			N/A
5/29/2019	USDPLN.fx	11:30:00 AM	3.8529	3.85601			N/A
5/29/2019	USDPLN.fx	1:30:00 PM	3.85447	3.85771			N/A
5/29/2019	USDPLN.fx	3:30:00 PM	3.85498	3.85794			N/A
5/29/2019	USDRUB	9:30:00 AM					N/A
5/29/2019	USDRUB	11:30:00 AM	64.757	65.153			N/A
5/29/2019	USDRUB	1:30:00 PM	64.934	65.318			N/A
5/29/2019	USDRUB	3:30:00 PM	65.033	65.427			N/A
5/29/2019	USDSEK	9:30:00 AM	9.5905	9.5951			N/A
5/29/2019	USDSEK	11:30:00 AM	9.6031	9.6068			N/A
5/29/2019	USDSEK	1:30:00 PM	9.5896	9.5941			N/A
5/29/2019	USDSEK	3:30:00 PM	9.5956	9.5991			N/A
5/29/2019	USDSEK.fx	9:30:00 AM	9.59297	9.59319			N/A
5/29/2019	USDSEK.fx	11:30:00 AM	9.60574	9.60496			N/A
5/29/2019	USDSEK.fx	1:30:00 PM	9.59233	9.59207			N/A
5/29/2019	USDSEK.fx	3:30:00 PM	9.59825	9.59719			N/A
5/29/2019	USDSGD	9:30:00 AM	1.382	1.3821			N/A
5/29/2019	USDSGD	11:30:00 AM	1.3827	1.383			N/A
5/29/2019	USDSGD	1:30:00 PM	1.3819	1.382			N/A
5/29/2019	USDSGD	3:30:00 PM	1.3815	1.3818			N/A

5/29/2019	USDSGD.fx	9:30:00 AM	1.38192	1.38209			N/A
5/29/2019	USDSGD.fx	11:30:00 AM	1.38258	1.383			N/A
5/29/2019	USDSGD.fx	1:30:00 PM	1.38177	1.38228			N/A
5/29/2019	USDSGD.fx	3:30:00 PM	1.3814	1.38186			N/A
5/29/2019	USDZAR	9:30:00 AM	14.8139	14.8239			N/A
5/29/2019	USDZAR	11:30:00 AM	14.8653	14.882			N/A
5/29/2019	USDZAR	1:30:00 PM	14.7815	14.7971			N/A
5/29/2019	USDZAR	3:30:00 PM	14.7778	14.7825			N/A
5/29/2019	USDZAR.fx	9:30:00 AM	14.81938	14.81764			N/A
5/29/2019	USDZAR.fx	11:30:00 AM	14.87147	14.87672			N/A
5/29/2019	USDZAR.fx	1:30:00 PM	14.78806	14.7912			N/A
5/29/2019	USDZAR.fx	3:30:00 PM	14.78298	14.77682			N/A
5/29/2019	XAUUSD	9:30:00 AM	1283.19	1283.39			N/A
5/29/2019	XAUUSD	11:30:00 AM	1284.81	1285.07			N/A
5/29/2019	XAUUSD	1:30:00 PM	1283.45	1283.66			N/A
5/29/2019	XAUUSD	3:30:00 PM	1283.98	1283.84			N/A
5/29/2019	ZARJPY	9:30:00 AM	7.35	7.37			N/A
5/29/2019	ZARJPY	11:30:00 AM	7.33	7.35			N/A
5/29/2019	ZARJPY	1:30:00 PM	7.38	7.39			N/A
5/29/2019	ZARJPY	3:30:00 PM	7.38	7.4			N/A
5/29/2019	ZARJPY.fx	9:30:00 AM	7.37	7.37			N/A
5/29/2019	ZARJPY.fx	11:30:00 AM	7.345	7.347			N/A
5/29/2019	ZARJPY.fx	1:30:00 PM	7.392	7.395			N/A
5/29/2019	ZARJPY.fx	3:30:00 PM	7.396	7.394			N/A
5/30/2019	#AA	9:30:00 AM					N/A
5/30/2019	#AA	11:30:00 AM					N/A
5/30/2019	#AA	1:30:00 PM					N/A
5/30/2019	#AA	3:30:00 PM					N/A
5/30/2019	#AABA	9:30:00 AM					N/A
5/30/2019	#AABA	11:30:00 AM					N/A
5/30/2019	#AABA	1:30:00 PM					N/A
5/30/2019	#AABA	3:30:00 PM					N/A
5/30/2019	#AAL	9:30:00 AM					N/A
5/30/2019	#AAL	11:30:00 AM					N/A

5/30/2019	#AAL	1:30:00 PM					N/A
5/30/2019	#AAL	3:30:00 PM					N/A
5/30/2019	#AAPL	9:30:00 AM					N/A
5/30/2019	#AAPL	11:30:00 AM					N/A
5/30/2019	#AAPL	1:30:00 PM					N/A
5/30/2019	#AAPL	3:30:00 PM					N/A
5/30/2019	#ADBE	9:30:00 AM					N/A
5/30/2019	#ADBE	11:30:00 AM					N/A
5/30/2019	#ADBE	1:30:00 PM					N/A
5/30/2019	#ADBE	3:30:00 PM					N/A
5/30/2019	#AIG	9:30:00 AM					N/A
5/30/2019	#AIG	11:30:00 AM					N/A
5/30/2019	#AIG	1:30:00 PM					N/A
5/30/2019	#AIG	3:30:00 PM					N/A
5/30/2019	#AMD	9:30:00 AM					N/A
5/30/2019	#AMD	11:30:00 AM					N/A
5/30/2019	#AMD	1:30:00 PM					N/A
5/30/2019	#AMD	3:30:00 PM					N/A
5/30/2019	#AMZN	9:30:00 AM					N/A
5/30/2019	#AMZN	11:30:00 AM					N/A
5/30/2019	#AMZN	1:30:00 PM					N/A
5/30/2019	#AMZN	3:30:00 PM					N/A
5/30/2019	#AXP	9:30:00 AM					N/A
5/30/2019	#AXP	11:30:00 AM					N/A
5/30/2019	#AXP	1:30:00 PM					N/A
5/30/2019	#AXP	3:30:00 PM					N/A
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5/30/2019	#BA	11:30:00 AM					N/A
5/30/2019	#BA	1:30:00 PM					N/A
5/30/2019	#BA	3:30:00 PM					N/A
5/30/2019	#BABA	9:30:00 AM					N/A
5/30/2019	#BABA	11:30:00 AM					N/A
5/30/2019	#BABA	1:30:00 PM					N/A
5/30/2019	#BABA	3:30:00 PM					N/A



5/30/2019	#BAC	9:30:00 AM					N/A
5/30/2019	#BAC	11:30:00 AM					N/A
5/30/2019	#BAC	1:30:00 PM					N/A
5/30/2019	#BAC	3:30:00 PM					N/A
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5/30/2019	#BARC	11:30:00 AM					N/A
5/30/2019	#BARC	1:30:00 PM					N/A
5/30/2019	#BARC	3:30:00 PM					N/A
5/30/2019	#BHP	9:30:00 AM					N/A
5/30/2019	#BHP	11:30:00 AM					N/A
5/30/2019	#BHP	1:30:00 PM					N/A
5/30/2019	#BHP	3:30:00 PM					N/A
5/30/2019	#BIDU	9:30:00 AM					N/A
5/30/2019	#BIDU	11:30:00 AM					N/A
5/30/2019	#BIDU	1:30:00 PM					N/A
5/30/2019	#BIDU	3:30:00 PM					N/A
5/30/2019	#Bitcoin	9:30:00 AM	8740.7	8775.2			N/A
5/30/2019	#Bitcoin	11:30:00 AM	8684.4	8716.9			N/A
5/30/2019	#Bitcoin	1:30:00 PM	8773.45	8798.45			N/A
5/30/2019	#Bitcoin	3:30:00 PM	8735.6	8765.9			N/A
5/30/2019	#BK	9:30:00 AM					N/A
5/30/2019	#BK	11:30:00 AM					N/A
5/30/2019	#BK	1:30:00 PM					N/A
5/30/2019	#BK	3:30:00 PM					N/A
5/30/2019	#BLT	9:30:00 AM					N/A
5/30/2019	#BLT	11:30:00 AM					N/A
5/30/2019	#BLT	1:30:00 PM					N/A
5/30/2019	#BLT	3:30:00 PM					N/A
5/30/2019	#BP	9:30:00 AM					N/A
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5/30/2019	#WDC	1:30:00 PM					N/A
5/30/2019	#WDC	3:30:00 PM					N/A
5/30/2019	#WFC	9:30:00 AM					N/A
5/30/2019	#WFC	11:30:00 AM					N/A
5/30/2019	#WFC	1:30:00 PM					N/A
5/30/2019	#WFC	3:30:00 PM					N/A
5/30/2019	#WMT	9:30:00 AM					N/A
5/30/2019	#WMT	11:30:00 AM					N/A
5/30/2019	#WMT	1:30:00 PM					N/A
5/30/2019	#WMT	3:30:00 PM					N/A
5/30/2019	#XOM	9:30:00 AM					N/A
5/30/2019	#XOM	11:30:00 AM					N/A
5/30/2019	#XOM	1:30:00 PM					N/A
5/30/2019	#XOM	3:30:00 PM					N/A
5/30/2019	#YHOO	9:30:00 AM					N/A
5/30/2019	#YHOO	11:30:00 AM					N/A
5/30/2019	#YHOO	1:30:00 PM					N/A
5/30/2019	#YHOO	3:30:00 PM					N/A
5/30/2019	#ZNGA	9:30:00 AM					N/A
5/30/2019	#ZNGA	11:30:00 AM					N/A
5/30/2019	#ZNGA	1:30:00 PM					N/A
5/30/2019	#ZNGA	3:30:00 PM					N/A
5/30/2019	AUDCAD	9:30:00 AM	0.93594	0.93666			N/A
5/30/2019	AUDCAD	11:30:00 AM	0.93572	0.93637			N/A
5/30/2019	AUDCAD	1:30:00 PM	0.93438	0.93506			N/A
5/30/2019	AUDCAD	3:30:00 PM	0.93362	0.9338			N/A
5/30/2019	AUDCAD.fx	9:30:00 AM	0.93628	0.93631			N/A
5/30/2019	AUDCAD.fx	11:30:00 AM	0.93604	0.93601			N/A
5/30/2019	AUDCAD.fx	1:30:00 PM	0.9347	0.93471			N/A
5/30/2019	AUDCAD.fx	3:30:00 PM	0.93396	0.9335			N/A

5/30/2019	AUDCHF	9:30:00 AM	0.69803	0.69872			N/A
5/30/2019	AUDCHF	11:30:00 AM	0.69915	0.69977			N/A
5/30/2019	AUDCHF	1:30:00 PM	0.69912	0.69982			N/A
5/30/2019	AUDCHF	3:30:00 PM	0.6972	0.69777			N/A
5/30/2019	AUDCHF.fx	9:30:00 AM	0.69837	0.69837			N/A
5/30/2019	AUDCHF.fx	11:30:00 AM	0.6995	0.69942			N/A
5/30/2019	AUDCHF.fx	1:30:00 PM	0.69946	0.69947			N/A
5/30/2019	AUDCHF.fx	3:30:00 PM	0.69753	0.69744			N/A
5/30/2019	AUDCZK	9:30:00 AM	16.074	16.092			N/A
5/30/2019	AUDCZK	11:30:00 AM	16.068	16.086			N/A
5/30/2019	AUDCZK	1:30:00 PM	16.052	16.066			N/A
5/30/2019	AUDCZK	3:30:00 PM	16.032	16.043			N/A
5/30/2019	AUDDKK	9:30:00 AM	4.6469	4.6518			N/A
5/30/2019	AUDDKK	11:30:00 AM	4.6472	4.6518			N/A
5/30/2019	AUDDKK	1:30:00 PM	4.6441	4.6478			N/A
5/30/2019	AUDDKK	3:30:00 PM	4.6381	4.6413			N/A
5/30/2019	AUDHKD	9:30:00 AM	5.4362	5.4402			N/A
5/30/2019	AUDHKD	11:30:00 AM	5.4379	5.4415			N/A
5/30/2019	AUDHKD	1:30:00 PM	5.435	5.4385			N/A
5/30/2019	AUDHKD	3:30:00 PM	5.4283	5.4291			N/A
5/30/2019	AUDHUF	9:30:00 AM	202.63	202.87			N/A
5/30/2019	AUDHUF	11:30:00 AM	202.41	202.61			N/A
5/30/2019	AUDHUF	1:30:00 PM	201.88	202.11			N/A
5/30/2019	AUDHUF	3:30:00 PM	201.56	201.65			N/A
5/30/2019	AUDJPY	9:30:00 AM	75.998	76.063			N/A
5/30/2019	AUDJPY	11:30:00 AM	76.052	76.11			N/A
5/30/2019	AUDJPY	1:30:00 PM	76.001	76.065			N/A
5/30/2019	AUDJPY	3:30:00 PM	75.884	75.922			N/A
5/30/2019	AUDJPY.fx	9:30:00 AM	76.032	76.027			N/A
5/30/2019	AUDJPY.fx	11:30:00 AM	76.086	76.074			N/A
5/30/2019	AUDJPY.fx	1:30:00 PM	76.034	76.029			N/A
5/30/2019	AUDJPY.fx	3:30:00 PM	75.916	75.895			N/A
5/30/2019	AUDMXN	9:30:00 AM	13.2557	13.2653			N/A
5/30/2019	AUDMXN	11:30:00 AM	13.2616	13.2715			N/A

5/30/2019	AUDMXN	1:30:00 PM	13.2373	13.2472			N/A
5/30/2019	AUDMXN	3:30:00 PM	13.2408	13.2439			N/A
5/30/2019	AUDNOK	9:30:00 AM	6.0593	6.0645			N/A
5/30/2019	AUDNOK	11:30:00 AM	6.0688	6.0739			N/A
5/30/2019	AUDNOK	1:30:00 PM	6.0644	6.0695			N/A
5/30/2019	AUDNOK	3:30:00 PM	6.0632	6.0665			N/A
5/30/2019	AUDNOK.fx	9:30:00 AM	6.0607	6.0629			N/A
5/30/2019	AUDNOK.fx	11:30:00 AM	6.0704	6.0722			N/A
5/30/2019	AUDNOK.fx	1:30:00 PM	6.066	6.0676			N/A
5/30/2019	AUDNOK.fx	3:30:00 PM	6.0646	6.0651			N/A
5/30/2019	AUDNZD	9:30:00 AM	1.06213	1.06302			N/A
5/30/2019	AUDNZD	11:30:00 AM	1.06205	1.06292			N/A
5/30/2019	AUDNZD	1:30:00 PM	1.06187	1.06273			N/A
5/30/2019	AUDNZD	3:30:00 PM	1.06182	1.06229			N/A
5/30/2019	AUDNZD.fx	9:30:00 AM	1.06257	1.06257			N/A
5/30/2019	AUDNZD.fx	11:30:00 AM	1.06249	1.06248			N/A
5/30/2019	AUDNZD.fx	1:30:00 PM	1.06232	1.06227			N/A
5/30/2019	AUDNZD.fx	3:30:00 PM	1.06226	1.06212			N/A
5/30/2019	AUDPLN	9:30:00 AM	2.6708	2.6741			N/A
5/30/2019	AUDPLN	11:30:00 AM	2.6702	2.6734			N/A
5/30/2019	AUDPLN	1:30:00 PM	2.6664	2.6696			N/A
5/30/2019	AUDPLN	3:30:00 PM	2.663	2.6654			N/A
5/30/2019	AUDSEK	9:30:00 AM	6.6189	6.6221			N/A
5/30/2019	AUDSEK	11:30:00 AM	6.6214	6.6246			N/A
5/30/2019	AUDSEK	1:30:00 PM	6.612	6.6146			N/A
5/30/2019	AUDSEK	3:30:00 PM	6.6022	6.6033			N/A
5/30/2019	AUDSEK.fx	9:30:00 AM	6.6142	6.6266			N/A
5/30/2019	AUDSEK.fx	11:30:00 AM	6.6168	6.6291			N/A
5/30/2019	AUDSEK.fx	1:30:00 PM	6.6073	6.6189			N/A
5/30/2019	AUDSEK.fx	3:30:00 PM	6.5978	6.6083			N/A
5/30/2019	AUDSGD	9:30:00 AM	0.9557	0.956			N/A
5/30/2019	AUDSGD	11:30:00 AM	0.9561	0.9564			N/A
5/30/2019	AUDSGD	1:30:00 PM	0.9558	0.9561			N/A
5/30/2019	AUDSGD	3:30:00 PM	0.9546	0.9545			N/A

5/30/2019	AUDSGD.fx	9:30:00 AM	0.95575	0.95587			N/A
5/30/2019	AUDSGD.fx	11:30:00 AM	0.9562	0.95629			N/A
5/30/2019	AUDSGD.fx	1:30:00 PM	0.95591	0.95597			N/A
5/30/2019	AUDSGD.fx	3:30:00 PM	0.95469	0.9544			N/A
5/30/2019	AUDUSD	9:30:00 AM	0.69296	0.69308			N/A
5/30/2019	AUDUSD	11:30:00 AM	0.69325	0.69336			N/A
5/30/2019	AUDUSD	1:30:00 PM	0.69291	0.69299			N/A
5/30/2019	AUDUSD	3:30:00 PM	0.69211	0.69183			N/A
5/30/2019	AUDUSD.fx	9:30:00 AM	0.69301	0.69302			N/A
5/30/2019	AUDUSD.fx	11:30:00 AM	0.6933	0.6933			N/A
5/30/2019	AUDUSD.fx	1:30:00 PM	0.69297	0.69293			N/A
5/30/2019	AUDUSD.fx	3:30:00 PM	0.69215	0.6918			N/A
5/30/2019	AUDZAR	9:30:00 AM	10.1488	10.1635			N/A
5/30/2019	AUDZAR	11:30:00 AM	10.1319	10.1429			N/A
5/30/2019	AUDZAR	1:30:00 PM	10.1129	10.1272			N/A
5/30/2019	AUDZAR	3:30:00 PM	10.1091	10.1129			N/A
5/30/2019	AUS200.i	9:30:00 AM					N/A
5/30/2019	AUS200.i	11:30:00 AM	6395.28	6398.58			N/A
5/30/2019	AUS200.i	1:30:00 PM	6394.28	6397.08			N/A
5/30/2019	AUS200.i	3:30:00 PM	6394.48	6396.78			N/A
5/30/2019	BCHUSD	9:30:00 AM	482.24	484.22			N/A
5/30/2019	BCHUSD	11:30:00 AM	477.32	478.08			N/A
5/30/2019	BCHUSD	1:30:00 PM	482.51	484.21			N/A
5/30/2019	BCHUSD	3:30:00 PM	479.42	481.37			N/A
5/30/2019	CADCHF	9:30:00 AM	0.74551	0.74622			N/A
5/30/2019	CADCHF	11:30:00 AM	0.74697	0.74755			N/A
5/30/2019	CADCHF	1:30:00 PM	0.74795	0.74864			N/A
5/30/2019	CADCHF	3:30:00 PM	0.74679	0.74721			N/A
5/30/2019	CADCHF.fx	9:30:00 AM	0.74586	0.74587			N/A
5/30/2019	CADCHF.fx	11:30:00 AM	0.74731	0.74719			N/A
5/30/2019	CADCHF.fx	1:30:00 PM	0.7483	0.74828			N/A
5/30/2019	CADCHF.fx	3:30:00 PM	0.7471	0.74686			N/A
5/30/2019	CADCZK	9:30:00 AM	17.17	17.188			N/A
5/30/2019	CADCZK	11:30:00 AM	17.17	17.186			N/A

5/30/2019	CADCZK	1:30:00 PM	17.176	17.189			N/A
5/30/2019	CADCZK	3:30:00 PM	17.174	17.186			N/A
5/30/2019	CADDKK	9:30:00 AM					N/A
5/30/2019	CADDKK	11:30:00 AM					N/A
5/30/2019	CADDKK	1:30:00 PM	4.969	4.972			N/A
5/30/2019	CADDKK	3:30:00 PM					N/A
5/30/2019	CADHKD	9:30:00 AM	5.8072	5.8111			N/A
5/30/2019	CADHKD	11:30:00 AM	5.8105	5.8139			N/A
5/30/2019	CADHKD	1:30:00 PM	5.8154	5.8188			N/A
5/30/2019	CADHKD	3:30:00 PM	5.8135	5.8161			N/A
5/30/2019	CADHUF	9:30:00 AM	216.49	216.65			N/A
5/30/2019	CADHUF	11:30:00 AM	216.31	216.44			N/A
5/30/2019	CADHUF	1:30:00 PM	216.06	216.18			N/A
5/30/2019	CADHUF	3:30:00 PM	215.88	215.97			N/A
5/30/2019	CADJPY	9:30:00 AM	81.167	81.234			N/A
5/30/2019	CADJPY	11:30:00 AM	81.255	81.305			N/A
5/30/2019	CADJPY	1:30:00 PM	81.308	81.374			N/A
5/30/2019	CADJPY	3:30:00 PM	81.271	81.32			N/A
5/30/2019	CADJPY.fx	9:30:00 AM	81.201	81.199			N/A
5/30/2019	CADJPY.fx	11:30:00 AM	81.288	81.27			N/A
5/30/2019	CADJPY.fx	1:30:00 PM	81.341	81.339			N/A
5/30/2019	CADJPY.fx	3:30:00 PM	81.302	81.287			N/A
5/30/2019	CADMXN	9:30:00 AM	14.158	14.1708			N/A
5/30/2019	CADMXN	11:30:00 AM	14.1697	14.1793			N/A
5/30/2019	CADMXN	1:30:00 PM	14.1637	14.1747			N/A
5/30/2019	CADMXN	3:30:00 PM	14.1822	14.1834			N/A
5/30/2019	CADNOK	9:30:00 AM	6.4708	6.4754			N/A
5/30/2019	CADNOK	11:30:00 AM	6.4822	6.4859			N/A
5/30/2019	CADNOK	1:30:00 PM	6.4865	6.4908			N/A
5/30/2019	CADNOK	3:30:00 PM	6.4902	6.4936			N/A
5/30/2019	CADPLN	9:30:00 AM	2.8533	2.8552			N/A
5/30/2019	CADPLN	11:30:00 AM	2.8528	2.8547			N/A
5/30/2019	CADPLN	1:30:00 PM	2.8529	2.8545			N/A
5/30/2019	CADPLN	3:30:00 PM	2.8509	2.8528			N/A



5/30/2019	CADSEK	9:30:00 AM	7.0677	7.0715			N/A
5/30/2019	CADSEK	11:30:00 AM	7.0721	7.0754			N/A
5/30/2019	CADSEK	1:30:00 PM	7.0719	7.0747			N/A
5/30/2019	CADSEK	3:30:00 PM	7.0686	7.0714			N/A
5/30/2019	CADSGD	9:30:00 AM	1.0203	1.0206			N/A
5/30/2019	CADSGD	11:30:00 AM	1.0209	1.0212			N/A
5/30/2019	CADSGD	1:30:00 PM	1.0219	1.0222			N/A
5/30/2019	CADSGD	3:30:00 PM	1.0214	1.0218			N/A
5/30/2019	CADZAR	9:30:00 AM	10.8397	10.8571			N/A
5/30/2019	CADZAR	11:30:00 AM	10.8256	10.8383			N/A
5/30/2019	CADZAR	1:30:00 PM	10.8201	10.8358			N/A
5/30/2019	CADZAR	3:30:00 PM	10.8307	10.8321			N/A
5/30/2019	CHFCZK	9:30:00 AM					N/A
5/30/2019	CHFCZK	11:30:00 AM	22.982	22.996			N/A
5/30/2019	CHFCZK	1:30:00 PM	22.957	22.971			N/A
5/30/2019	CHFCZK	3:30:00 PM	22.995	23.008			N/A
5/30/2019	CHFDKK	9:30:00 AM	6.656	6.66			N/A
5/30/2019	CHFDKK	11:30:00 AM	6.646	6.649			N/A
5/30/2019	CHFDKK	1:30:00 PM	6.642	6.644			N/A
5/30/2019	CHFDKK	3:30:00 PM	6.651	6.654			N/A
5/30/2019	CHFDKK.fx	9:30:00 AM	6.6548	6.6609			N/A
5/30/2019	CHFDKK.fx	11:30:00 AM	6.6448	6.6505			N/A
5/30/2019	CHFDKK.fx	1:30:00 PM	6.6401	6.6456			N/A
5/30/2019	CHFDKK.fx	3:30:00 PM	6.6497	6.655			N/A
5/30/2019	CHFHKD	9:30:00 AM	7.7867	7.7903			N/A
5/30/2019	CHFHKD	11:30:00 AM	7.7778	7.7812			N/A
5/30/2019	CHFHKD	1:30:00 PM	7.7728	7.7766			N/A
5/30/2019	CHFHKD	3:30:00 PM	7.7854	7.7855			N/A
5/30/2019	CHFHUF	9:30:00 AM	290.18	290.58			N/A
5/30/2019	CHFHUF	11:30:00 AM	289.39	289.76			N/A
5/30/2019	CHFHUF	1:30:00 PM	288.66	289.01			N/A
5/30/2019	CHFHUF	3:30:00 PM	289.01	289.24			N/A
5/30/2019	CHFJPY	9:30:00 AM	108.83	108.9			N/A
5/30/2019	CHFJPY	11:30:00 AM	108.736	108.808			N/A

5/30/2019	CHFJPY	1:30:00 PM	108.667	108.734			N/A
5/30/2019	CHFJPY	3:30:00 PM	108.8	108.844			N/A
5/30/2019	CHFJPY.fx	9:30:00 AM	108.863	108.865			N/A
5/30/2019	CHFJPY.fx	11:30:00 AM	108.769	108.773			N/A
5/30/2019	CHFJPY.fx	1:30:00 PM	108.7	108.699			N/A
5/30/2019	CHFJPY.fx	3:30:00 PM	108.832	108.826			N/A
5/30/2019	CHFMXN	9:30:00 AM	18.9828	19.0001			N/A
5/30/2019	CHFMXN	11:30:00 AM	18.9626	18.9781			N/A
5/30/2019	CHFMXN	1:30:00 PM	18.9291	18.9453			N/A
5/30/2019	CHFMXN	3:30:00 PM	18.9859	18.9917			N/A
5/30/2019	CHFNOK	9:30:00 AM	8.6762	8.6838			N/A
5/30/2019	CHFNOK	11:30:00 AM	8.6761	8.6837			N/A
5/30/2019	CHFNOK	1:30:00 PM	8.6697	8.6774			N/A
5/30/2019	CHFNOK	3:30:00 PM	8.6919	8.6984			N/A
5/30/2019	CHFNOK.fx	9:30:00 AM	8.67952	8.68047			N/A
5/30/2019	CHFNOK.fx	11:30:00 AM	8.6796	8.6801			N/A
5/30/2019	CHFNOK.fx	1:30:00 PM	8.67326	8.67382			N/A
5/30/2019	CHFNOK.fx	3:30:00 PM	8.69507	8.69508			N/A
5/30/2019	CHFPLN	9:30:00 AM	3.8253	3.8283			N/A
5/30/2019	CHFPLN	11:30:00 AM	3.8183	3.8213			N/A
5/30/2019	CHFPLN	1:30:00 PM	3.813	3.8158			N/A
5/30/2019	CHFPLN	3:30:00 PM	3.8188	3.821			N/A
5/30/2019	CHFPLN.fx	9:30:00 AM	3.82286	3.83058			N/A
5/30/2019	CHFPLN.fx	11:30:00 AM	3.81586	3.82351			N/A
5/30/2019	CHFPLN.fx	1:30:00 PM	3.81064	3.81809			N/A
5/30/2019	CHFPLN.fx	3:30:00 PM	3.81564	3.82353			N/A
5/30/2019	CHFSEK	9:30:00 AM	9.4765	9.4809			N/A
5/30/2019	CHFSEK	11:30:00 AM	9.4655	9.4702			N/A
5/30/2019	CHFSEK	1:30:00 PM	9.4513	9.4552			N/A
5/30/2019	CHFSEK	3:30:00 PM	9.464	9.4649			N/A
5/30/2019	CHFSGD	9:30:00 AM	1.3684	1.3689			N/A
5/30/2019	CHFSGD	11:30:00 AM	1.3669	1.3673			N/A
5/30/2019	CHFSGD	1:30:00 PM	1.3665	1.3669			N/A
5/30/2019	CHFSGD	3:30:00 PM	1.3685	1.3686			N/A

5/30/2019	CHFSGD.fx	9:30:00 AM	1.36863	1.36867			N/A
5/30/2019	CHFSGD.fx	11:30:00 AM	1.36719	1.3671			N/A
5/30/2019	CHFSGD.fx	1:30:00 PM	1.36662	1.36671			N/A
5/30/2019	CHFSGD.fx	3:30:00 PM	1.36871	1.36849			N/A
5/30/2019	CHFZAR	9:30:00 AM	14.5382	14.553			N/A
5/30/2019	CHFZAR	11:30:00 AM	14.4936	14.501			N/A
5/30/2019	CHFZAR	1:30:00 PM	14.465	14.4788			N/A
5/30/2019	CHFZAR	3:30:00 PM	14.5027	14.5			N/A
5/30/2019	CZKJPY	9:30:00 AM					N/A
5/30/2019	CZKJPY	11:30:00 AM	4.731	4.734			N/A
5/30/2019	CZKJPY	1:30:00 PM					N/A
5/30/2019	CZKJPY	3:30:00 PM	4.731	4.734			N/A
5/30/2019	DAX30.i	9:30:00 AM	11882.17	11879.17			N/A
5/30/2019	DAX30.i	11:30:00 AM	11894.67	11891.92			N/A
5/30/2019	DAX30.i	1:30:00 PM	11899.92	11899.42			N/A
5/30/2019	DAX30.i	3:30:00 PM	11871.17	11864.67			N/A
5/30/2019	DJ30.i	9:30:00 AM					N/A
5/30/2019	DJ30.i	11:30:00 AM					N/A
5/30/2019	DJ30.i	1:30:00 PM					N/A
5/30/2019	DJ30.i	3:30:00 PM					N/A
5/30/2019	DKKJPY	9:30:00 AM					N/A
5/30/2019	DKKJPY	11:30:00 AM	16.37	16.39			N/A
5/30/2019	DKKJPY	1:30:00 PM	16.36	16.38			N/A
5/30/2019	DKKJPY	3:30:00 PM	16.37	16.38			N/A
5/30/2019	EURAUD	9:30:00 AM	1.60554	1.606			N/A
5/30/2019	EURAUD	11:30:00 AM	1.60551	1.60587			N/A
5/30/2019	EURAUD	1:30:00 PM	1.60669	1.60698			N/A
5/30/2019	EURAUD	3:30:00 PM	1.60915	1.60903			N/A
5/30/2019	EURAUD.fx	9:30:00 AM	1.60574	1.60576			N/A
5/30/2019	EURAUD.fx	11:30:00 AM	1.60572	1.60566			N/A
5/30/2019	EURAUD.fx	1:30:00 PM	1.6069	1.60674			N/A
5/30/2019	EURAUD.fx	3:30:00 PM	1.6093	1.60882			N/A
5/30/2019	EURCAD	9:30:00 AM	1.50361	1.50448			N/A
5/30/2019	EURCAD	11:30:00 AM	1.50318	1.50392			N/A

5/30/2019	EURCAD	1:30:00 PM	1.5022	1.50281			N/A
5/30/2019	EURCAD	3:30:00 PM	1.50272	1.50315			N/A
5/30/2019	EURCAD.fx	9:30:00 AM	1.50403	1.50407			N/A
5/30/2019	EURCAD.fx	11:30:00 AM	1.50361	1.5035			N/A
5/30/2019	EURCAD.fx	1:30:00 PM	1.50263	1.50238			N/A
5/30/2019	EURCAD.fx	3:30:00 PM	1.50313	1.50278			N/A
5/30/2019	EURCHF	9:30:00 AM	1.12177	1.12187			N/A
5/30/2019	EURCHF	11:30:00 AM	1.12353	1.12358			N/A
5/30/2019	EURCHF	1:30:00 PM	1.12434	1.12435			N/A
5/30/2019	EURCHF	3:30:00 PM	1.12274	1.12267			N/A
5/30/2019	EURCHF.fx	9:30:00 AM	1.12182	1.12181			N/A
5/30/2019	EURCHF.fx	11:30:00 AM	1.12359	1.12351			N/A
5/30/2019	EURCHF.fx	1:30:00 PM	1.1244	1.12429			N/A
5/30/2019	EURCHF.fx	3:30:00 PM	1.12276	1.12261			N/A
5/30/2019	EURCZK	9:30:00 AM	25.817	25.857			N/A
5/30/2019	EURCZK	11:30:00 AM	25.807	25.845			N/A
5/30/2019	EURCZK	1:30:00 PM	25.796	25.835			N/A
5/30/2019	EURCZK	3:30:00 PM	25.8	25.837			N/A
5/30/2019	EURDKK	9:30:00 AM	7.4672	7.4681			N/A
5/30/2019	EURDKK	11:30:00 AM	7.4677	7.4679			N/A
5/30/2019	EURDKK	1:30:00 PM	7.4662	7.4674			N/A
5/30/2019	EURDKK	3:30:00 PM					N/A
5/30/2019	EURGBP	9:30:00 AM	0.8813	0.88139			N/A
5/30/2019	EURGBP	11:30:00 AM	0.8812	0.88124			N/A
5/30/2019	EURGBP	1:30:00 PM	0.8823	0.88236			N/A
5/30/2019	EURGBP	3:30:00 PM	0.88199	0.88198			N/A
5/30/2019	EURGBP.fx	9:30:00 AM	0.88134	0.88134			N/A
5/30/2019	EURGBP.fx	11:30:00 AM	0.88125	0.88119			N/A
5/30/2019	EURGBP.fx	1:30:00 PM	0.88234	0.88231			N/A
5/30/2019	EURGBP.fx	3:30:00 PM	0.882	0.88202			N/A
5/30/2019	EURHKD	9:30:00 AM	8.7353	8.7406			N/A
5/30/2019	EURHKD	11:30:00 AM	8.738	8.7434			N/A
5/30/2019	EURHKD	1:30:00 PM	8.7393	8.7433			N/A
5/30/2019	EURHKD	3:30:00 PM	8.7406	8.7422			N/A

5/30/2019	EURHKD.fx	9:30:00 AM	8.73824	8.73773			N/A
5/30/2019	EURHKD.fx	11:30:00 AM	8.74083	8.74047			N/A
5/30/2019	EURHKD.fx	1:30:00 PM	8.74217	8.74039			N/A
5/30/2019	EURHKD.fx	3:30:00 PM	8.74339	8.73966			N/A
5/30/2019	EURHUF	9:30:00 AM	325.51	326.08			N/A
5/30/2019	EURHUF	11:30:00 AM	325.09	325.79			N/A
5/30/2019	EURHUF	1:30:00 PM	324.5	325.09			N/A
5/30/2019	EURHUF	3:30:00 PM	324.42	325.11			N/A
5/30/2019	EURHUF.fx	9:30:00 AM	325.768	325.97			N/A
5/30/2019	EURHUF.fx	11:30:00 AM	325.371	325.49			N/A
5/30/2019	EURHUF.fx	1:30:00 PM	324.761	324.938			N/A
5/30/2019	EURHUF.fx	3:30:00 PM	324.658	324.851			N/A
5/30/2019	EURJPY	9:30:00 AM	122.128	122.132			N/A
5/30/2019	EURJPY	11:30:00 AM	122.212	122.206			N/A
5/30/2019	EURJPY	1:30:00 PM	122.216	122.207			N/A
5/30/2019	EURJPY	3:30:00 PM	122.187	122.158			N/A
5/30/2019	EURJPY.fx	9:30:00 AM	122.13	122.128			N/A
5/30/2019	EURJPY.fx	11:30:00 AM	122.214	122.202			N/A
5/30/2019	EURJPY.fx	1:30:00 PM	122.218	122.203			N/A
5/30/2019	EURJPY.fx	3:30:00 PM	122.188	122.167			N/A
5/30/2019	EURMXN	9:30:00 AM	21.2976	21.3171			N/A
5/30/2019	EURMXN	11:30:00 AM	21.3084	21.3247			N/A
5/30/2019	EURMXN	1:30:00 PM	21.286	21.3034			N/A
5/30/2019	EURMXN	3:30:00 PM	21.3173	21.326			N/A
5/30/2019	EURMXN.fx	9:30:00 AM	21.3063	21.3088			N/A
5/30/2019	EURMXN.fx	11:30:00 AM	21.3171	21.3164			N/A
5/30/2019	EURMXN.fx	1:30:00 PM	21.2953	21.2942			N/A
5/30/2019	EURMXN.fx	3:30:00 PM	21.3263	21.3163			N/A
5/30/2019	EURNOK	9:30:00 AM	9.7315	9.7436			N/A
5/30/2019	EURNOK	11:30:00 AM	9.746	9.7581			N/A
5/30/2019	EURNOK	1:30:00 PM	9.7457	9.7579			N/A
5/30/2019	EURNOK	3:30:00 PM	9.756	9.7675			N/A
5/30/2019	EURNOK.fx	9:30:00 AM	9.73673	9.7382			N/A
5/30/2019	EURNOK.fx	11:30:00 AM	9.75151	9.75271			N/A

5/30/2019	EURNOK.fx	1:30:00 PM	9.75129	9.7524			N/A
5/30/2019	EURNOK.fx	3:30:00 PM	9.76136	9.76237			N/A
5/30/2019	EURNZD	9:30:00 AM	1.70655	1.70733			N/A
5/30/2019	EURNZD	11:30:00 AM	1.70628	1.70718			N/A
5/30/2019	EURNZD	1:30:00 PM	1.7073	1.70798			N/A
5/30/2019	EURNZD	3:30:00 PM	1.70954	1.70993			N/A
5/30/2019	EURNZD.fx	9:30:00 AM	1.70695	1.70691			N/A
5/30/2019	EURNZD.fx	11:30:00 AM	1.70671	1.70674			N/A
5/30/2019	EURNZD.fx	1:30:00 PM	1.70774	1.70753			N/A
5/30/2019	EURNZD.fx	3:30:00 PM	1.70992	1.70974			N/A
5/30/2019	EURPLN	9:30:00 AM	4.2913	4.2946			N/A
5/30/2019	EURPLN	11:30:00 AM	4.2901	4.2934			N/A
5/30/2019	EURPLN	1:30:00 PM	4.2869	4.2901			N/A
5/30/2019	EURPLN	3:30:00 PM	4.2867	4.2898			N/A
5/30/2019	EURPLN.fx	9:30:00 AM	4.29057	4.29522			N/A
5/30/2019	EURPLN.fx	11:30:00 AM	4.2894	4.29392			N/A
5/30/2019	EURPLN.fx	1:30:00 PM	4.28637	4.29062			N/A
5/30/2019	EURPLN.fx	3:30:00 PM	4.28604	4.29028			N/A
5/30/2019	EURRUB	9:30:00 AM					N/A
5/30/2019	EURRUB	11:30:00 AM	72.15	72.582			N/A
5/30/2019	EURRUB	1:30:00 PM	72.02	72.454			N/A
5/30/2019	EURRUB	3:30:00 PM	72.022	72.36			N/A
5/30/2019	EURSEK	9:30:00 AM	10.6323	10.6369			N/A
5/30/2019	EURSEK	11:30:00 AM	10.6357	10.641			N/A
5/30/2019	EURSEK	1:30:00 PM	10.6276	10.6326			N/A
5/30/2019	EURSEK	3:30:00 PM	10.627	10.6304			N/A
5/30/2019	EURSEK.fx	9:30:00 AM	10.63368	10.63528			N/A
5/30/2019	EURSEK.fx	11:30:00 AM	10.63734	10.63937			N/A
5/30/2019	EURSEK.fx	1:30:00 PM	10.62929	10.63092			N/A
5/30/2019	EURSEK.fx	3:30:00 PM	10.62773	10.62894			N/A
5/30/2019	EURSGD	9:30:00 AM	1.535	1.5359			N/A
5/30/2019	EURSGD	11:30:00 AM	1.5357	1.5364			N/A
5/30/2019	EURSGD	1:30:00 PM	1.5363	1.5369			N/A
5/30/2019	EURSGD	3:30:00 PM	1.5363	1.5367			N/A

5/30/2019	EURSGD.fx	9:30:00 AM	1.53537	1.53542			N/A
5/30/2019	EURSGD.fx	11:30:00 AM	1.53602	1.53603			N/A
5/30/2019	EURSGD.fx	1:30:00 PM	1.53661	1.53652			N/A
5/30/2019	EURSGD.fx	3:30:00 PM	1.53664	1.53636			N/A
5/30/2019	EURUSD	9:30:00 AM	1.11302	1.11314			N/A
5/30/2019	EURUSD	11:30:00 AM	1.11345	1.11356			N/A
5/30/2019	EURUSD	1:30:00 PM	1.11372	1.11366			N/A
5/30/2019	EURUSD	3:30:00 PM	1.11381	1.11347			N/A
5/30/2019	EURUSD.fx	9:30:00 AM	1.11322	1.11324			N/A
5/30/2019	EURUSD.fx	11:30:00 AM	1.11365	1.11365			N/A
5/30/2019	EURUSD.fx	1:30:00 PM	1.11393	1.11376			N/A
5/30/2019	EURUSD.fx	3:30:00 PM	1.114	1.11361			N/A
5/30/2019	EURZAR	9:30:00 AM	16.3117	16.3312			N/A
5/30/2019	EURZAR	11:30:00 AM	16.2857	16.2974			N/A
5/30/2019	EURZAR	1:30:00 PM	16.266	16.2845			N/A
5/30/2019	EURZAR	3:30:00 PM	16.2892	16.2895			N/A
5/30/2019	EURZAR.fx	9:30:00 AM	16.31135	16.33193			N/A
5/30/2019	EURZAR.fx	11:30:00 AM	16.28483	16.29784			N/A
5/30/2019	EURZAR.fx	1:30:00 PM	16.26537	16.28493			N/A
5/30/2019	EURZAR.fx	3:30:00 PM	16.28842	16.29099			N/A
5/30/2019	GBPAUD	9:30:00 AM	1.82231	1.82294			N/A
5/30/2019	GBPAUD	11:30:00 AM	1.82251	1.82307			N/A
5/30/2019	GBPAUD	1:30:00 PM	1.82157	1.82219			N/A
5/30/2019	GBPAUD	3:30:00 PM	1.82481	1.82511			N/A
5/30/2019	GBPAUD.fx	9:30:00 AM	1.82271	1.82253			N/A
5/30/2019	GBPAUD.fx	11:30:00 AM	1.82293	1.82267			N/A
5/30/2019	GBPAUD.fx	1:30:00 PM	1.82197	1.82179			N/A
5/30/2019	GBPAUD.fx	3:30:00 PM	1.82516	1.82472			N/A
5/30/2019	GBPCAD	9:30:00 AM	1.7062	1.70692			N/A
5/30/2019	GBPCAD	11:30:00 AM	1.70588	1.70644			N/A
5/30/2019	GBPCAD	1:30:00 PM	1.70269	1.70318			N/A
5/30/2019	GBPCAD	3:30:00 PM	1.70378	1.70418			N/A
5/30/2019	GBPCAD.fx	9:30:00 AM	1.70659	1.70652			N/A
5/30/2019	GBPCAD.fx	11:30:00 AM	1.70626	1.70603			N/A

5/30/2019	GBPCAD.fx	1:30:00 PM	1.70308	1.70279			N/A
5/30/2019	GBPCAD.fx	3:30:00 PM	1.70418	1.70388			N/A
5/30/2019	GBPCHF	9:30:00 AM	1.27266	1.27305			N/A
5/30/2019	GBPCHF	11:30:00 AM	1.27485	1.27513			N/A
5/30/2019	GBPCHF	1:30:00 PM	1.27417	1.27449			N/A
5/30/2019	GBPCHF	3:30:00 PM	1.27291	1.273			N/A
5/30/2019	GBPCHF.fx	9:30:00 AM	1.27285	1.27285			N/A
5/30/2019	GBPCHF.fx	11:30:00 AM	1.27505	1.27492			N/A
5/30/2019	GBPCHF.fx	1:30:00 PM	1.27436	1.27429			N/A
5/30/2019	GBPCHF.fx	3:30:00 PM	1.2729	1.27281			N/A
5/30/2019	GBPCZK	9:30:00 AM	29.304	29.326			N/A
5/30/2019	GBPCZK	11:30:00 AM	29.298	29.315			N/A
5/30/2019	GBPCZK	1:30:00 PM	29.248	29.268			N/A
5/30/2019	GBPCZK	3:30:00 PM	29.262	29.281			N/A
5/30/2019	GBPDKK	9:30:00 AM	8.469	8.48			N/A
5/30/2019	GBPDKK	11:30:00 AM	8.471	8.481			N/A
5/30/2019	GBPDKK	1:30:00 PM	8.46	8.471			N/A
5/30/2019	GBPDKK	3:30:00 PM	8.463	8.473			N/A
5/30/2019	GBPDKK.fx	9:30:00 AM	8.468	8.4807			N/A
5/30/2019	GBPDKK.fx	11:30:00 AM	8.4694	8.4815			N/A
5/30/2019	GBPDKK.fx	1:30:00 PM	8.4584	8.4711			N/A
5/30/2019	GBPDKK.fx	3:30:00 PM	8.4609	8.4739			N/A
5/30/2019	GBPHKD	9:30:00 AM	9.9096	9.9149			N/A
5/30/2019	GBPHKD	11:30:00 AM	9.9136	9.9193			N/A
5/30/2019	GBPHKD	1:30:00 PM	9.9031	9.9073			N/A
5/30/2019	GBPHKD	3:30:00 PM	9.9067	9.9085			N/A
5/30/2019	GBPHUF	9:30:00 AM	369.34	369.79			N/A
5/30/2019	GBPHUF	11:30:00 AM	368.94	369.36			N/A
5/30/2019	GBPHUF	1:30:00 PM	367.79	368.24			N/A
5/30/2019	GBPHUF	3:30:00 PM	367.76	368.06			N/A
5/30/2019	GBPJPY	9:30:00 AM	138.553	138.589			N/A
5/30/2019	GBPJPY	11:30:00 AM	138.668	138.691			N/A
5/30/2019	GBPJPY	1:30:00 PM	138.501	138.523			N/A
5/30/2019	GBPJPY	3:30:00 PM	138.517	138.531			N/A



5/30/2019	GBPJPY.fx	9:30:00 AM	138.572	138.57			N/A
5/30/2019	GBPJPY.fx	11:30:00 AM	138.689	138.672			N/A
5/30/2019	GBPJPY.fx	1:30:00 PM	138.52	138.503			N/A
5/30/2019	GBPJPY.fx	3:30:00 PM	138.534	138.519			N/A
5/30/2019	GBPMXN	9:30:00 AM	24.1622	24.1767			N/A
5/30/2019	GBPMXN	11:30:00 AM	24.1773	24.188			N/A
5/30/2019	GBPMXN	1:30:00 PM	24.1221	24.1337			N/A
5/30/2019	GBPMXN	3:30:00 PM	24.1625	24.1665			N/A
5/30/2019	GBPNOK	9:30:00 AM	11.0433	11.054			N/A
5/30/2019	GBPNOK	11:30:00 AM	11.061	11.0722			N/A
5/30/2019	GBPNOK	1:30:00 PM	11.0471	11.058			N/A
5/30/2019	GBPNOK	3:30:00 PM	11.0637	11.0736			N/A
5/30/2019	GBPNOK.fx	9:30:00 AM	11.04795	11.04915			N/A
5/30/2019	GBPNOK.fx	11:30:00 AM	11.06592	11.06718			N/A
5/30/2019	GBPNOK.fx	1:30:00 PM	11.05196	11.05305			N/A
5/30/2019	GBPNOK.fx	3:30:00 PM	11.06717	11.069			N/A
5/30/2019	GBPNZD	9:30:00 AM	1.93639	1.93699			N/A
5/30/2019	GBPNZD	11:30:00 AM	1.93645	1.93708			N/A
5/30/2019	GBPNZD	1:30:00 PM	1.93505	1.93563			N/A
5/30/2019	GBPNZD	3:30:00 PM	1.93823	1.93874			N/A
5/30/2019	GBPNZD.fx	9:30:00 AM	1.93673	1.93663			N/A
5/30/2019	GBPNZD.fx	11:30:00 AM	1.9368	1.93669			N/A
5/30/2019	GBPNZD.fx	1:30:00 PM	1.93543	1.93524			N/A
5/30/2019	GBPNZD.fx	3:30:00 PM	1.93859	1.93839			N/A
5/30/2019	GBPPLN	9:30:00 AM	4.87	4.872			N/A
5/30/2019	GBPPLN	11:30:00 AM	4.8694	4.8709			N/A
5/30/2019	GBPPLN	1:30:00 PM	4.8599	4.8614			N/A
5/30/2019	GBPPLN	3:30:00 PM	4.8611	4.8628			N/A
5/30/2019	GBPPLN.fx	9:30:00 AM	4.86792	4.87396			N/A
5/30/2019	GBPPLN.fx	11:30:00 AM	4.8673	4.87295			N/A
5/30/2019	GBPPLN.fx	1:30:00 PM	4.85772	4.86352			N/A
5/30/2019	GBPPLN.fx	3:30:00 PM	4.85876	4.86481			N/A
5/30/2019	GBPSEK	9:30:00 AM	12.0621	12.0704			N/A
5/30/2019	GBPSEK	11:30:00 AM	12.0681	12.0764			N/A

5/30/2019	GBPSEK	1:30:00 PM	12.0436	12.0526			N/A
5/30/2019	GBPSEK	3:30:00 PM	12.0473	12.0544			N/A
5/30/2019	GBPSEK.fx	9:30:00 AM	12.05824	12.07434			N/A
5/30/2019	GBPSEK.fx	11:30:00 AM	12.06448	12.08009			N/A
5/30/2019	GBPSEK.fx	1:30:00 PM	12.03989	12.05624			N/A
5/30/2019	GBPSEK.fx	3:30:00 PM	12.04209	12.05869			N/A
5/30/2019	GBPSGD	9:30:00 AM	1.7418	1.7425			N/A
5/30/2019	GBPSGD	11:30:00 AM	1.7427	1.7434			N/A
5/30/2019	GBPSGD	1:30:00 PM	1.7413	1.7419			N/A
5/30/2019	GBPSGD	3:30:00 PM	1.7419	1.7422			N/A
5/30/2019	GBPSGD.fx	9:30:00 AM	1.73995	1.7443			N/A
5/30/2019	GBPSGD.fx	11:30:00 AM	1.74089	1.74516			N/A
5/30/2019	GBPSGD.fx	1:30:00 PM	1.73942	1.74366			N/A
5/30/2019	GBPSGD.fx	3:30:00 PM	1.74002	1.74419			N/A
5/30/2019	GBPUSD	9:30:00 AM	1.26312	1.26312			N/A
5/30/2019	GBPUSD	11:30:00 AM	1.26378	1.26376			N/A
5/30/2019	GBPUSD	1:30:00 PM	1.26246	1.26234			N/A
5/30/2019	GBPUSD	3:30:00 PM	1.263	1.26265			N/A
5/30/2019	GBPUSD.fx	9:30:00 AM	1.26317	1.26307			N/A
5/30/2019	GBPUSD.fx	11:30:00 AM	1.26384	1.2637			N/A
5/30/2019	GBPUSD.fx	1:30:00 PM	1.26251	1.26228			N/A
5/30/2019	GBPUSD.fx	3:30:00 PM	1.26303	1.26265			N/A
5/30/2019	GBPZAR	9:30:00 AM	18.5047	18.5328			N/A
5/30/2019	GBPZAR	11:30:00 AM	18.477	18.4983			N/A
5/30/2019	GBPZAR	1:30:00 PM	18.4326	18.4599			N/A
5/30/2019	GBPZAR	3:30:00 PM	18.4636	18.4715			N/A
5/30/2019	GBPZAR.fx	9:30:00 AM	18.5124	18.5251			N/A
5/30/2019	GBPZAR.fx	11:30:00 AM	18.4841	18.4904			N/A
5/30/2019	GBPZAR.fx	1:30:00 PM	18.4404	18.4526			N/A
5/30/2019	GBPZAR.fx	3:30:00 PM	18.4682	18.4658			N/A
5/30/2019	GOLD	9:30:00 AM	1277.4	1277.5			N/A
5/30/2019	GOLD	11:30:00 AM	1276.22	1276.18			N/A
5/30/2019	GOLD	1:30:00 PM	1276.11	1276.19			N/A
5/30/2019	GOLD	3:30:00 PM	1280.89	1279.77			N/A

5/30/2019	HKDJPY	9:30:00 AM	13.98	13.99			N/A
5/30/2019	HKDJPY	11:30:00 AM					N/A
5/30/2019	HKDJPY	1:30:00 PM					N/A
5/30/2019	HKDJPY	3:30:00 PM	13.98	13.98			N/A
5/30/2019	HKDJPY.fx	9:30:00 AM	13.973	13.979			N/A
5/30/2019	HKDJPY.fx	11:30:00 AM	13.978	13.983			N/A
5/30/2019	HKDJPY.fx	1:30:00 PM	13.976	13.984			N/A
5/30/2019	HKDJPY.fx	3:30:00 PM	13.975	13.977			N/A
5/30/2019	HUFJPY	9:30:00 AM	0.375	0.3753			N/A
5/30/2019	HUFJPY	11:30:00 AM	0.3758	0.3761			N/A
5/30/2019	HUFJPY	1:30:00 PM	0.3764	0.3767			N/A
5/30/2019	HUFJPY	3:30:00 PM	0.3765	0.3767			N/A
5/30/2019	JP225.i	9:30:00 AM	20915.5	20930.5			N/A
5/30/2019	JP225.i	11:30:00 AM	20948	20961.93			N/A
5/30/2019	JP225.i	1:30:00 PM	20948	20965.5			N/A
5/30/2019	JP225.i	3:30:00 PM	20926.33	20935.5			N/A
5/30/2019	MXNJPY	9:30:00 AM					N/A
5/30/2019	MXNJPY	11:30:00 AM					N/A
5/30/2019	MXNJPY	1:30:00 PM	5.74	5.75			N/A
5/30/2019	MXNJPY	3:30:00 PM	5.73	5.74			N/A
5/30/2019	NASDAQ.i	9:30:00 AM					N/A
5/30/2019	NASDAQ.i	11:30:00 AM					N/A
5/30/2019	NASDAQ.i	1:30:00 PM					N/A
5/30/2019	NASDAQ.i	3:30:00 PM					N/A
5/30/2019	NOKJPY	9:30:00 AM	12.53	12.56			N/A
5/30/2019	NOKJPY	11:30:00 AM					N/A
5/30/2019	NOKJPY	1:30:00 PM	12.53	12.55			N/A
5/30/2019	NOKJPY	3:30:00 PM	12.51	12.53			N/A
5/30/2019	NOKJPY.fx	9:30:00 AM	12.539	12.546			N/A
5/30/2019	NOKJPY.fx	11:30:00 AM	12.528	12.535			N/A
5/30/2019	NOKJPY.fx	1:30:00 PM	12.53	12.535			N/A
5/30/2019	NOKJPY.fx	3:30:00 PM	12.513	12.519			N/A
5/30/2019	NZDCAD	9:30:00 AM	0.88084	0.88153			N/A
5/30/2019	NZDCAD	11:30:00 AM	0.88062	0.88132			N/A

5/30/2019	NZDCAD	1:30:00 PM	0.8796	0.88027			N/A
5/30/2019	NZDCAD	3:30:00 PM	0.87892	0.87924			N/A
5/30/2019	NZDCAD.fx	9:30:00 AM	0.88117	0.8812			N/A
5/30/2019	NZDCAD.fx	11:30:00 AM	0.88099	0.88097			N/A
5/30/2019	NZDCAD.fx	1:30:00 PM	0.87994	0.87991			N/A
5/30/2019	NZDCAD.fx	3:30:00 PM	0.87916	0.87897			N/A
5/30/2019	NZDCHF	9:30:00 AM	0.65687	0.65758			N/A
5/30/2019	NZDCHF	11:30:00 AM	0.65794	0.65864			N/A
5/30/2019	NZDCHF	1:30:00 PM	0.65805	0.65877			N/A
5/30/2019	NZDCHF	3:30:00 PM	0.65652	0.6569			N/A
5/30/2019	NZDCHF.fx	9:30:00 AM	0.65721	0.65722			N/A
5/30/2019	NZDCHF.fx	11:30:00 AM	0.65828	0.65828			N/A
5/30/2019	NZDCHF.fx	1:30:00 PM	0.65839	0.65842			N/A
5/30/2019	NZDCHF.fx	3:30:00 PM	0.65658	0.65657			N/A
5/30/2019	NZDCZK	9:30:00 AM					N/A
5/30/2019	NZDCZK	11:30:00 AM					N/A
5/30/2019	NZDCZK	1:30:00 PM	15.113	15.123			N/A
5/30/2019	NZDCZK	3:30:00 PM	15.096	15.105			N/A
5/30/2019	NZDDKK	9:30:00 AM					N/A
5/30/2019	NZDDKK	11:30:00 AM					N/A
5/30/2019	NZDDKK	1:30:00 PM					N/A
5/30/2019	NZDDKK	3:30:00 PM	4.365	4.369			N/A
5/30/2019	NZDHKD	9:30:00 AM	5.1159	5.1188			N/A
5/30/2019	NZDHKD	11:30:00 AM	5.1182	5.1211			N/A
5/30/2019	NZDHKD	1:30:00 PM	5.1164	5.119			N/A
5/30/2019	NZDHKD	3:30:00 PM	5.11	5.1112			N/A
5/30/2019	NZDHUF	9:30:00 AM	190.67	190.95			N/A
5/30/2019	NZDHUF	11:30:00 AM	190.46	190.75			N/A
5/30/2019	NZDHUF	1:30:00 PM	190.01	190.28			N/A
5/30/2019	NZDHUF	3:30:00 PM	189.7	189.89			N/A
5/30/2019	NZDJPY	9:30:00 AM	71.517	71.584			N/A
5/30/2019	NZDJPY	11:30:00 AM	71.571	71.637			N/A
5/30/2019	NZDJPY	1:30:00 PM	71.533	71.605			N/A
5/30/2019	NZDJPY	3:30:00 PM	71.441	71.484			N/A

5/30/2019	NZDJPY.fx	9:30:00 AM	71.549	71.55			N/A
5/30/2019	NZDJPY.fx	11:30:00 AM	71.602	71.605			N/A
5/30/2019	NZDJPY.fx	1:30:00 PM	71.565	71.572			N/A
5/30/2019	NZDJPY.fx	3:30:00 PM	71.457	71.453			N/A
5/30/2019	NZDMXN	9:30:00 AM	12.4754	12.4819			N/A
5/30/2019	NZDMXN	11:30:00 AM	12.4829	12.4889			N/A
5/30/2019	NZDMXN	1:30:00 PM	12.4634	12.4682			N/A
5/30/2019	NZDMXN	3:30:00 PM	12.465	12.4648			N/A
5/30/2019	NZDNOK	9:30:00 AM	5.7004	5.7044			N/A
5/30/2019	NZDNOK	11:30:00 AM	5.7096	5.7132			N/A
5/30/2019	NZDNOK	1:30:00 PM	5.707	5.7102			N/A
5/30/2019	NZDNOK	3:30:00 PM	5.7055	5.7061			N/A
5/30/2019	NZDPLN	9:30:00 AM	2.5136	2.515			N/A
5/30/2019	NZDPLN	11:30:00 AM	2.5132	2.5147			N/A
5/30/2019	NZDPLN	1:30:00 PM	2.51	2.5112			N/A
5/30/2019	NZDPLN	3:30:00 PM	2.5056	2.5069			N/A
5/30/2019	NZDSEK	9:30:00 AM	6.2247	6.2316			N/A
5/30/2019	NZDSEK	11:30:00 AM	6.2276	6.2344			N/A
5/30/2019	NZDSEK	1:30:00 PM	6.2194	6.2258			N/A
5/30/2019	NZDSEK	3:30:00 PM	6.2104	6.2166			N/A
5/30/2019	NZDSGD	9:30:00 AM	0.8993	0.8995			N/A
5/30/2019	NZDSGD	11:30:00 AM	0.8997	0.9001			N/A
5/30/2019	NZDSGD	1:30:00 PM	0.8996	0.9002			N/A
5/30/2019	NZDSGD	3:30:00 PM	0.8985	0.8989			N/A
5/30/2019	NZDSGD.fx	9:30:00 AM	0.89928	0.89985			N/A
5/30/2019	NZDSGD.fx	11:30:00 AM	0.89971	0.90031			N/A
5/30/2019	NZDSGD.fx	1:30:00 PM	0.89959	0.90021			N/A
5/30/2019	NZDSGD.fx	3:30:00 PM	0.89847	0.8989			N/A
5/30/2019	NZDUSD	9:30:00 AM	0.65213	0.65225			N/A
5/30/2019	NZDUSD	11:30:00 AM	0.65243	0.65259			N/A
5/30/2019	NZDUSD	1:30:00 PM	0.65222	0.65235			N/A
5/30/2019	NZDUSD	3:30:00 PM	0.65147	0.6514			N/A
5/30/2019	NZDUSD.fx	9:30:00 AM	0.6522	0.65225			N/A
5/30/2019	NZDUSD.fx	11:30:00 AM	0.6525	0.6526			N/A

5/30/2019	NZDUSD.fx	1:30:00 PM	0.6523	0.65236			N/A
5/30/2019	NZDUSD.fx	3:30:00 PM	0.65155	0.65142			N/A
5/30/2019	NZDZAR	9:30:00 AM	9.5487	9.5659			N/A
5/30/2019	NZDZAR	11:30:00 AM	9.5344	9.5474			N/A
5/30/2019	NZDZAR	1:30:00 PM	9.518	9.534			N/A
5/30/2019	NZDZAR	3:30:00 PM	9.5166	9.5226			N/A
5/30/2019	SEKJPY	9:30:00 AM	11.49	11.49			N/A
5/30/2019	SEKJPY	11:30:00 AM	11.49	11.5			N/A
5/30/2019	SEKJPY	1:30:00 PM	11.49	11.51			N/A
5/30/2019	SEKJPY	3:30:00 PM	11.5	11.5			N/A
5/30/2019	SEKJPY.fx	9:30:00 AM	11.475	11.493			N/A
5/30/2019	SEKJPY.fx	11:30:00 AM	11.478	11.496			N/A
5/30/2019	SEKJPY.fx	1:30:00 PM	11.488	11.505			N/A
5/30/2019	SEKJPY.fx	3:30:00 PM	11.487	11.504			N/A
5/30/2019	SGDJPY	9:30:00 AM	79.52	79.54			N/A
5/30/2019	SGDJPY	11:30:00 AM	79.56	79.55			N/A
5/30/2019	SGDJPY	1:30:00 PM	79.5	79.53			N/A
5/30/2019	SGDJPY	3:30:00 PM	79.49	79.5			N/A
5/30/2019	SILVER	9:30:00 AM	14.2	14.57			N/A
5/30/2019	SILVER	11:30:00 AM	14.19	14.57			N/A
5/30/2019	SILVER	1:30:00 PM	14.22	14.59			N/A
5/30/2019	SILVER	3:30:00 PM	14.27	14.63			N/A
5/30/2019	SPX500.i	9:30:00 AM	2786.88	2787.68			N/A
5/30/2019	SPX500.i	11:30:00 AM	2790.01	2790.68			N/A
5/30/2019	SPX500.i	1:30:00 PM	2791.13	2792.18			N/A
5/30/2019	SPX500.i	3:30:00 PM	2790.51	2789.43			N/A
5/30/2019	UK100.i	9:30:00 AM	7191.52	7192.6			N/A
5/30/2019	UK100.i	11:30:00 AM	7203.35	7203.85			N/A
5/30/2019	UK100.i	1:30:00 PM	7223.1	7222.85			N/A
5/30/2019	UK100.i	3:30:00 PM	7221.1	7219.6			N/A
5/30/2019	USDCAD	9:30:00 AM	1.35108	1.35118			N/A
5/30/2019	USDCAD	11:30:00 AM	1.35022	1.35016			N/A
5/30/2019	USDCAD	1:30:00 PM	1.34904	1.34906			N/A
5/30/2019	USDCAD	3:30:00 PM	1.34949	1.34926			N/A

5/30/2019	USDCAD.fx	9:30:00 AM	1.35111	1.35115			N/A
5/30/2019	USDCAD.fx	11:30:00 AM	1.35025	1.35012			N/A
5/30/2019	USDCAD.fx	1:30:00 PM	1.34907	1.34902			N/A
5/30/2019	USDCAD.fx	3:30:00 PM	1.34941	1.34925			N/A
5/30/2019	USDCHF	9:30:00 AM	1.00767	1.00777			N/A
5/30/2019	USDCHF	11:30:00 AM	1.00886	1.0089			N/A
5/30/2019	USDCHF	1:30:00 PM	1.00937	1.00945			N/A
5/30/2019	USDCHF	3:30:00 PM	1.00817	1.00782			N/A
5/30/2019	USDCHF.fx	9:30:00 AM	1.00772	1.0077			N/A
5/30/2019	USDCHF.fx	11:30:00 AM	1.00891	1.00884			N/A
5/30/2019	USDCHF.fx	1:30:00 PM	1.00941	1.00939			N/A
5/30/2019	USDCHF.fx	3:30:00 PM	1.00812	1.00777			N/A
5/30/2019	USDCZK	9:30:00 AM	23.217	23.24			N/A
5/30/2019	USDCZK	11:30:00 AM	23.199	23.221			N/A
5/30/2019	USDCZK	1:30:00 PM	23.187	23.206			N/A
5/30/2019	USDCZK	3:30:00 PM	23.194	23.209			N/A
5/30/2019	USDCZK.fx	9:30:00 AM	23.2253	23.232			N/A
5/30/2019	USDCZK.fx	11:30:00 AM	23.2068	23.212			N/A
5/30/2019	USDCZK.fx	1:30:00 PM	23.1955	23.197			N/A
5/30/2019	USDCZK.fx	3:30:00 PM	23.2014	23.2001			N/A
5/30/2019	USDDKK	9:30:00 AM	6.7075	6.7115			N/A
5/30/2019	USDDKK	11:30:00 AM	6.7049	6.7088			N/A
5/30/2019	USDDKK	1:30:00 PM	6.7041	6.7071			N/A
5/30/2019	USDDKK	3:30:00 PM	6.7053	6.7064			N/A
5/30/2019	USDDKK.fx	9:30:00 AM	6.70795	6.70952			N/A
5/30/2019	USDDKK.fx	11:30:00 AM	6.70541	6.70676			N/A
5/30/2019	USDDKK.fx	1:30:00 PM	6.70461	6.70511			N/A
5/30/2019	USDDKK.fx	3:30:00 PM	6.70529	6.70431			N/A
5/30/2019	USDHKD	9:30:00 AM	7.8488	7.8491			N/A
5/30/2019	USDHKD	11:30:00 AM	7.8484	7.8487			N/A
5/30/2019	USDHKD	1:30:00 PM	7.8477	7.8481			N/A
5/30/2019	USDHKD	3:30:00 PM	7.8481	7.8481			N/A
5/30/2019	USDHKD.fx	9:30:00 AM	7.84885	7.8494			N/A
5/30/2019	USDHKD.fx	11:30:00 AM	7.84837	7.84891			N/A

5/30/2019	USDHKD.fx	1:30:00 PM	7.84762	7.84815			N/A
5/30/2019	USDHKD.fx	3:30:00 PM	7.84806	7.84856			N/A
5/30/2019	USDHUF	9:30:00 AM	292.47	292.95			N/A
5/30/2019	USDHUF	11:30:00 AM	292.02	292.45			N/A
5/30/2019	USDHUF	1:30:00 PM	291.45	291.87			N/A
5/30/2019	USDHUF	3:30:00 PM	291.43	291.76			N/A
5/30/2019	USDHUF.fx	9:30:00 AM	292.655	292.765			N/A
5/30/2019	USDHUF.fx	11:30:00 AM	292.215	292.237			N/A
5/30/2019	USDHUF.fx	1:30:00 PM	291.635	291.667			N/A
5/30/2019	USDHUF.fx	3:30:00 PM	291.564	291.576			N/A
5/30/2019	USDINR	9:30:00 AM	64.82	74.81			N/A
5/30/2019	USDINR	11:30:00 AM	64.84	74.82			N/A
5/30/2019	USDINR	1:30:00 PM					N/A
5/30/2019	USDINR	3:30:00 PM					N/A
5/30/2019	USDJPY	9:30:00 AM	109.704	109.71			N/A
5/30/2019	USDJPY	11:30:00 AM	109.736	109.736			N/A
5/30/2019	USDJPY	1:30:00 PM	109.716	109.728			N/A
5/30/2019	USDJPY	3:30:00 PM	109.71	109.681			N/A
5/30/2019	USDJPY.fx	9:30:00 AM	109.71	109.702			N/A
5/30/2019	USDJPY.fx	11:30:00 AM	109.742	109.729			N/A
5/30/2019	USDJPY.fx	1:30:00 PM	109.722	109.721			N/A
5/30/2019	USDJPY.fx	3:30:00 PM	109.713	109.675			N/A
5/30/2019	USDMXN	9:30:00 AM	19.136	19.145			N/A
5/30/2019	USDMXN	11:30:00 AM	19.139	19.144			N/A
5/30/2019	USDMXN	1:30:00 PM	19.115	19.121			N/A
5/30/2019	USDMXN	3:30:00 PM	19.148	19.14			N/A
5/30/2019	USDMXN.f	9:30:00 AM	19.1396	19.1413			N/A
5/30/2019	USDMXN.f	11:30:00 AM	19.1425	19.1409			N/A
5/30/2019	USDMXN.f	1:30:00 PM	19.1185	19.1175			N/A
5/30/2019	USDMXN.f	3:30:00 PM	19.1501	19.136			N/A
5/30/2019	USDNOK	9:30:00 AM	8.7428	8.7518			N/A
5/30/2019	USDNOK	11:30:00 AM	8.7528	8.7613			N/A
5/30/2019	USDNOK	1:30:00 PM	8.7516	8.7591			N/A
5/30/2019	USDNOK	3:30:00 PM	8.7625	8.7674			N/A



5/30/2019	USDNOK.fx	9:30:00 AM	8.74665	8.74726			N/A
5/30/2019	USDNOK.fx	11:30:00 AM	8.75685	8.75699			N/A
5/30/2019	USDNOK.fx	1:30:00 PM	8.75564	8.75453			N/A
5/30/2019	USDNOK.fx	3:30:00 PM	8.76557	8.76292			N/A
5/30/2019	USDPLN	9:30:00 AM	3.8555	3.8572			N/A
5/30/2019	USDPLN	11:30:00 AM	3.853	3.8545			N/A
5/30/2019	USDPLN	1:30:00 PM	3.8496	3.8508			N/A
5/30/2019	USDPLN	3:30:00 PM	3.8501	3.8502			N/A
5/30/2019	USDPLN.fx	9:30:00 AM	3.8547	3.85791			N/A
5/30/2019	USDPLN.fx	11:30:00 AM	3.85218	3.85523			N/A
5/30/2019	USDPLN.fx	1:30:00 PM	3.84886	3.85153			N/A
5/30/2019	USDPLN.fx	3:30:00 PM	3.84923	3.85107			N/A
5/30/2019	USDRUB	9:30:00 AM					N/A
5/30/2019	USDRUB	11:30:00 AM	64.912	65.299			N/A
5/30/2019	USDRUB	1:30:00 PM	64.785	65.179			N/A
5/30/2019	USDRUB	3:30:00 PM	64.796	65.146			N/A
5/30/2019	USDSEK	9:30:00 AM	9.5503	9.5549			N/A
5/30/2019	USDSEK	11:30:00 AM	9.55	9.5546			N/A
5/30/2019	USDSEK	1:30:00 PM	9.5418	9.545			N/A
5/30/2019	USDSEK	3:30:00 PM	9.5426	9.5428			N/A
5/30/2019	USDSEK.fx	9:30:00 AM	9.55294	9.55325			N/A
5/30/2019	USDSEK.fx	11:30:00 AM	9.5526	9.55279			N/A
5/30/2019	USDSEK.fx	1:30:00 PM	9.54437	9.54298			N/A
5/30/2019	USDSEK.fx	3:30:00 PM	9.54358	9.54088			N/A
5/30/2019	USDSGD	9:30:00 AM	1.379	1.3795			N/A
5/30/2019	USDSGD	11:30:00 AM	1.3792	1.3795			N/A
5/30/2019	USDSGD	1:30:00 PM	1.3794	1.3797			N/A
5/30/2019	USDSGD	3:30:00 PM	1.3794	1.3796			N/A
5/30/2019	USDSGD.fx	9:30:00 AM	1.37897	1.37942			N/A
5/30/2019	USDSGD.fx	11:30:00 AM	1.37907	1.3795			N/A
5/30/2019	USDSGD.fx	1:30:00 PM	1.37929	1.37976			N/A
5/30/2019	USDSGD.fx	3:30:00 PM	1.37925	1.37967			N/A
5/30/2019	USDZAR	9:30:00 AM	14.652	14.6708			N/A
5/30/2019	USDZAR	11:30:00 AM	14.6235	14.6345			N/A

5/30/2019	USDZAR	1:30:00 PM	14.6027	14.6194			N/A
5/30/2019	USDZAR	3:30:00 PM	14.6263	14.6227			N/A
5/30/2019	USDZAR.fx	9:30:00 AM	14.65769	14.66532			N/A
5/30/2019	USDZAR.fx	11:30:00 AM	14.62927	14.62778			N/A
5/30/2019	USDZAR.fx	1:30:00 PM	14.60847	14.61333			N/A
5/30/2019	USDZAR.fx	3:30:00 PM	14.62946	14.61773			N/A
5/30/2019	XAUUSD	9:30:00 AM	1277.42	1277.5			N/A
5/30/2019	XAUUSD	11:30:00 AM	1276.22	1276.18			N/A
5/30/2019	XAUUSD	1:30:00 PM	1276.12	1276.18			N/A
5/30/2019	XAUUSD	3:30:00 PM	1280.89	1279.79			N/A
5/30/2019	ZARJPY	9:30:00 AM	7.45	7.49			N/A
5/30/2019	ZARJPY	11:30:00 AM	7.48	7.51			N/A
5/30/2019	ZARJPY	1:30:00 PM	7.47	7.51			N/A
5/30/2019	ZARJPY	3:30:00 PM	7.49	7.5			N/A
5/30/2019	ZARJPY.fx	9:30:00 AM	7.48	7.484			N/A
5/30/2019	ZARJPY.fx	11:30:00 AM	7.501	7.502			N/A
5/30/2019	ZARJPY.fx	1:30:00 PM	7.506	7.511			N/A
5/30/2019	ZARJPY.fx	3:30:00 PM	7.502	7.499			N/A
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5/31/2019	#QQQ	3:30:00 PM					N/A
5/31/2019	#Ripple	9:30:00 AM	0.4157	0.4196			N/A
5/31/2019	#Ripple	11:30:00 AM	0.4164	0.4205			N/A
5/31/2019	#Ripple	1:30:00 PM	0.4167	0.4215			N/A
5/31/2019	#Ripple	3:30:00 PM	0.4179	0.4222			N/A
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5/31/2019	#SBUX	11:30:00 AM					N/A
5/31/2019	#SBUX	1:30:00 PM					N/A
5/31/2019	#SBUX	3:30:00 PM					N/A

5/31/2019	#SNE	9:30:00 AM					N/A
5/31/2019	#SNE	11:30:00 AM					N/A
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5/31/2019	#SNE	3:30:00 PM					N/A
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5/31/2019	#TSLA	3:30:00 PM					N/A
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5/31/2019	#UPS	1:30:00 PM					N/A
5/31/2019	#UPS	3:30:00 PM					N/A
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5/31/2019	#UTX	11:30:00 AM					N/A
5/31/2019	#UTX	1:30:00 PM					N/A
5/31/2019	#UTX	3:30:00 PM					N/A
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5/31/2019	#V	1:30:00 PM					N/A
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5/31/2019	#WDC	11:30:00 AM					N/A
5/31/2019	#WDC	1:30:00 PM					N/A
5/31/2019	#WDC	3:30:00 PM					N/A

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5/31/2019	#WFC	11:30:00 AM					N/A
5/31/2019	#WFC	1:30:00 PM					N/A
5/31/2019	#WFC	3:30:00 PM					N/A
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5/31/2019	#XOM	1:30:00 PM					N/A
5/31/2019	#XOM	3:30:00 PM					N/A
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5/31/2019	#YHOO	11:30:00 AM					N/A
5/31/2019	#YHOO	1:30:00 PM					N/A
5/31/2019	#YHOO	3:30:00 PM					N/A
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5/31/2019	#ZNGA	11:30:00 AM					N/A
5/31/2019	#ZNGA	1:30:00 PM					N/A
5/31/2019	#ZNGA	3:30:00 PM					N/A
5/31/2019	AUDCAD	9:30:00 AM	0.93583	0.93644			N/A
5/31/2019	AUDCAD	11:30:00 AM	0.93653	0.9372			N/A
5/31/2019	AUDCAD	1:30:00 PM	0.93759	0.93816			N/A
5/31/2019	AUDCAD	3:30:00 PM	0.9368	0.93601			N/A
5/31/2019	AUDCAD.fx	9:30:00 AM	0.93616	0.93608			N/A
5/31/2019	AUDCAD.fx	11:30:00 AM	0.93688	0.93685			N/A
5/31/2019	AUDCAD.fx	1:30:00 PM	0.93793	0.93782			N/A
5/31/2019	AUDCAD.fx	3:30:00 PM	0.93709	0.93588			N/A
5/31/2019	AUDCHF	9:30:00 AM	0.69505	0.69574			N/A
5/31/2019	AUDCHF	11:30:00 AM	0.69587	0.69656			N/A
5/31/2019	AUDCHF	1:30:00 PM	0.69443	0.69505			N/A
5/31/2019	AUDCHF	3:30:00 PM	0.69476	0.6953			N/A
5/31/2019	AUDCHF.fx	9:30:00 AM	0.69539	0.69539			N/A
5/31/2019	AUDCHF.fx	11:30:00 AM	0.69621	0.69621			N/A

5/31/2019	AUDCHF.fx	1:30:00 PM	0.69478	0.6947			N/A
5/31/2019	AUDCHF.fx	3:30:00 PM	0.69507	0.69496			N/A
5/31/2019	AUDCZK	9:30:00 AM	16.018	16.035			N/A
5/31/2019	AUDCZK	11:30:00 AM	16.018	16.036			N/A
5/31/2019	AUDCZK	1:30:00 PM	15.998	16.013			N/A
5/31/2019	AUDCZK	3:30:00 PM	15.98	15.99			N/A
5/31/2019	AUDDKK	9:30:00 AM	4.6342	4.6381			N/A
5/31/2019	AUDDKK	11:30:00 AM	4.634	4.6387			N/A
5/31/2019	AUDDKK	1:30:00 PM	4.6304	4.635			N/A
5/31/2019	AUDDKK	3:30:00 PM	4.6263	4.6301			N/A
5/31/2019	AUDHKD	9:30:00 AM	5.4199	5.4238			N/A
5/31/2019	AUDHKD	11:30:00 AM	5.4273	5.4312			N/A
5/31/2019	AUDHKD	1:30:00 PM	5.4228	5.4264			N/A
5/31/2019	AUDHKD	3:30:00 PM	5.4172	5.4205			N/A
5/31/2019	AUDHUF	9:30:00 AM	201.52	201.67			N/A
5/31/2019	AUDHUF	11:30:00 AM	201.46	201.71			N/A
5/31/2019	AUDHUF	1:30:00 PM	201.1	201.26			N/A
5/31/2019	AUDHUF	3:30:00 PM	200.7	200.88			N/A
5/31/2019	AUDJPY	9:30:00 AM	75.273	75.334			N/A
5/31/2019	AUDJPY	11:30:00 AM	75.314	75.37			N/A
5/31/2019	AUDJPY	1:30:00 PM	75.209	75.266			N/A
5/31/2019	AUDJPY	3:30:00 PM	75.177	75.204			N/A
5/31/2019	AUDJPY.fx	9:30:00 AM	75.307	75.298			N/A
5/31/2019	AUDJPY.fx	11:30:00 AM	75.348	75.335			N/A
5/31/2019	AUDJPY.fx	1:30:00 PM	75.243	75.23			N/A
5/31/2019	AUDJPY.fx	3:30:00 PM	75.21	75.17			N/A
5/31/2019	AUDMXN	9:30:00 AM	13.5265	13.5312			N/A
5/31/2019	AUDMXN	11:30:00 AM	13.5975	13.6051			N/A
5/31/2019	AUDMXN	1:30:00 PM	13.6426	13.643			N/A
5/31/2019	AUDMXN	3:30:00 PM	13.5433	13.5469			N/A
5/31/2019	AUDNOK	9:30:00 AM	6.0716	6.0765			N/A
5/31/2019	AUDNOK	11:30:00 AM	6.0723	6.0778			N/A
5/31/2019	AUDNOK	1:30:00 PM	6.0761	6.0814			N/A
5/31/2019	AUDNOK	3:30:00 PM	6.0657	6.0696			N/A



5/31/2019	AUDNOK.fx	9:30:00 AM	6.0731	6.0748			N/A
5/31/2019	AUDNOK.fx	11:30:00 AM	6.0739	6.076			N/A
5/31/2019	AUDNOK.fx	1:30:00 PM	6.0778	6.0797			N/A
5/31/2019	AUDNOK.fx	3:30:00 PM	6.0672	6.068			N/A
5/31/2019	AUDNZD	9:30:00 AM	1.06126	1.06218			N/A
5/31/2019	AUDNZD	11:30:00 AM	1.06072	1.06159			N/A
5/31/2019	AUDNZD	1:30:00 PM	1.06115	1.06205			N/A
5/31/2019	AUDNZD	3:30:00 PM	1.06156	1.06241			N/A
5/31/2019	AUDNZD.fx	9:30:00 AM	1.06171	1.06173			N/A
5/31/2019	AUDNZD.fx	11:30:00 AM	1.06116	1.06113			N/A
5/31/2019	AUDNZD.fx	1:30:00 PM	1.0616	1.0616			N/A
5/31/2019	AUDNZD.fx	3:30:00 PM	1.06198	1.06196			N/A
5/31/2019	AUDPLN	9:30:00 AM	2.6628	2.6657			N/A
5/31/2019	AUDPLN	11:30:00 AM	2.6611	2.6645			N/A
5/31/2019	AUDPLN	1:30:00 PM	2.6567	2.66			N/A
5/31/2019	AUDPLN	3:30:00 PM	2.6538	2.6564			N/A
5/31/2019	AUDSEK	9:30:00 AM	6.599	6.6022			N/A
5/31/2019	AUDSEK	11:30:00 AM	6.6108	6.6122			N/A
5/31/2019	AUDSEK	1:30:00 PM	6.6098	6.6123			N/A
5/31/2019	AUDSEK	3:30:00 PM	6.592	6.5925			N/A
5/31/2019	AUDSEK.fx	9:30:00 AM	6.5944	6.6065			N/A
5/31/2019	AUDSEK.fx	11:30:00 AM	6.6062	6.6162			N/A
5/31/2019	AUDSEK.fx	1:30:00 PM	6.6052	6.6167			N/A
5/31/2019	AUDSEK.fx	3:30:00 PM	6.5857	6.597			N/A
5/31/2019	AUDSGD	9:30:00 AM	0.9532	0.9534			N/A
5/31/2019	AUDSGD	11:30:00 AM	0.9531	0.9531			N/A
5/31/2019	AUDSGD	1:30:00 PM	0.9528	0.9531			N/A
5/31/2019	AUDSGD	3:30:00 PM	0.9528	0.953			N/A
5/31/2019	AUDSGD.fx	9:30:00 AM	0.95328	0.95332			N/A
5/31/2019	AUDSGD.fx	11:30:00 AM	0.95316	0.9532			N/A
5/31/2019	AUDSGD.fx	1:30:00 PM	0.95291	0.95297			N/A
5/31/2019	AUDSGD.fx	3:30:00 PM	0.95288	0.95296			N/A
5/31/2019	AUDUSD	9:30:00 AM	0.69116	0.69122			N/A
5/31/2019	AUDUSD	11:30:00 AM	0.69229	0.69234			N/A

5/31/2019	AUDUSD	1:30:00 PM	0.69172	0.69172			N/A
5/31/2019	AUDUSD	3:30:00 PM	0.69113	0.69118			N/A
5/31/2019	AUDUSD.fx	9:30:00 AM	0.69121	0.69116			N/A
5/31/2019	AUDUSD.fx	11:30:00 AM	0.69235	0.69227			N/A
5/31/2019	AUDUSD.fx	1:30:00 PM	0.69177	0.69166			N/A
5/31/2019	AUDUSD.fx	3:30:00 PM	0.69117	0.69113			N/A
5/31/2019	AUDZAR	9:30:00 AM	10.2068	10.2202			N/A
5/31/2019	AUDZAR	11:30:00 AM	10.2052	10.2203			N/A
5/31/2019	AUDZAR	1:30:00 PM	10.2049	10.2152			N/A
5/31/2019	AUDZAR	3:30:00 PM	10.129	10.1408			N/A
5/31/2019	AUS200.i	9:30:00 AM					N/A
5/31/2019	AUS200.i	11:30:00 AM	6387.1	6389.2			N/A
5/31/2019	AUS200.i	1:30:00 PM	6378.5	6381.1			N/A
5/31/2019	AUS200.i	3:30:00 PM	6384.1	6385.6			N/A
5/31/2019	BCHUSD	9:30:00 AM	434.96	436.58			N/A
5/31/2019	BCHUSD	11:30:00 AM	434.88	436.58			N/A
5/31/2019	BCHUSD	1:30:00 PM	435.33	437.29			N/A
5/31/2019	BCHUSD	3:30:00 PM	437.06	438.24			N/A
5/31/2019	CADCHF	9:30:00 AM	0.74248	0.74315			N/A
5/31/2019	CADCHF	11:30:00 AM	0.74279	0.74344			N/A
5/31/2019	CADCHF	1:30:00 PM	0.74045	0.74113			N/A
5/31/2019	CADCHF	3:30:00 PM	0.74256	0.74205			N/A
5/31/2019	CADCHF.fx	9:30:00 AM	0.74281	0.7428			N/A
5/31/2019	CADCHF.fx	11:30:00 AM	0.74313	0.74309			N/A
5/31/2019	CADCHF.fx	1:30:00 PM	0.74079	0.74077			N/A
5/31/2019	CADCHF.fx	3:30:00 PM	0.74278	0.74172			N/A
5/31/2019	CADCZK	9:30:00 AM	17.115	17.131			N/A
5/31/2019	CADCZK	11:30:00 AM	17.102	17.119			N/A
5/31/2019	CADCZK	1:30:00 PM	17.062	17.075			N/A
5/31/2019	CADCZK	3:30:00 PM	17.08	17.072			N/A
5/31/2019	CADDDKK	9:30:00 AM	4.952	4.955			N/A
5/31/2019	CADDDKK	11:30:00 AM	4.948	4.952			N/A
5/31/2019	CADDDKK	1:30:00 PM	4.939	4.942			N/A
5/31/2019	CADDDKK	3:30:00 PM	4.943	4.94			N/A

5/31/2019	CADHKD	9:30:00 AM	5.7905	5.7944			N/A
5/31/2019	CADHKD	11:30:00 AM	5.7935	5.7974			N/A
5/31/2019	CADHKD	1:30:00 PM	5.783	5.7864			N/A
5/31/2019	CADHKD	3:30:00 PM	5.7908	5.7852			N/A
5/31/2019	CADHUF	9:30:00 AM	215.36	215.41			N/A
5/31/2019	CADHUF	11:30:00 AM	215.11	215.27			N/A
5/31/2019	CADHUF	1:30:00 PM	214.51	214.56			N/A
5/31/2019	CADHUF	3:30:00 PM	214.53	214.36			N/A
5/31/2019	CADJPY	9:30:00 AM	80.406	80.477			N/A
5/31/2019	CADJPY	11:30:00 AM	80.389	80.448			N/A
5/31/2019	CADJPY	1:30:00 PM	80.196	80.258			N/A
5/31/2019	CADJPY	3:30:00 PM	80.334	80.246			N/A
5/31/2019	CADJPY.fx	9:30:00 AM	80.439	80.442			N/A
5/31/2019	CADJPY.fx	11:30:00 AM	80.422	80.414			N/A
5/31/2019	CADJPY.fx	1:30:00 PM	80.23	80.222			N/A
5/31/2019	CADJPY.fx	3:30:00 PM	80.366	80.214			N/A
5/31/2019	CADMXN	9:30:00 AM	14.4504	14.4583			N/A
5/31/2019	CADMXN	11:30:00 AM	14.5157	14.5248			N/A
5/31/2019	CADMXN	1:30:00 PM	14.5497	14.5487			N/A
5/31/2019	CADMXN	3:30:00 PM	14.4728	14.4628			N/A
5/31/2019	CADNOK	9:30:00 AM	6.4848	6.4878			N/A
5/31/2019	CADNOK	11:30:00 AM	6.4807	6.4851			N/A
5/31/2019	CADNOK	1:30:00 PM	6.4781	6.4821			N/A
5/31/2019	CADNOK	3:30:00 PM	6.4792	6.4729			N/A
5/31/2019	CADPLN	9:30:00 AM	2.8446	2.8466			N/A
5/31/2019	CADPLN	11:30:00 AM	2.8412	2.8431			N/A
5/31/2019	CADPLN	1:30:00 PM	2.8333	2.8348			N/A
5/31/2019	CADPLN	3:30:00 PM	2.8354	2.8333			N/A
5/31/2019	CADSEK	9:30:00 AM	7.0475	7.0514			N/A
5/31/2019	CADSEK	11:30:00 AM	7.0545	7.0569			N/A
5/31/2019	CADSEK	1:30:00 PM	7.0465	7.0484			N/A
5/31/2019	CADSEK	3:30:00 PM	7.0409	7.0336			N/A
5/31/2019	CADSGD	9:30:00 AM	1.0175	1.0178			N/A
5/31/2019	CADSGD	11:30:00 AM	1.0169	1.0172			N/A

5/31/2019	CADSGD	1:30:00 PM	1.0153	1.0156			N/A
5/31/2019	CADSGD	3:30:00 PM	1.0171	1.0175			N/A
5/31/2019	CADZAR	9:30:00 AM	10.9049	10.9189			N/A
5/31/2019	CADZAR	11:30:00 AM	10.8941	10.9109			N/A
5/31/2019	CADZAR	1:30:00 PM	10.8833	10.8943			N/A
5/31/2019	CADZAR	3:30:00 PM	10.8258	10.827			N/A
5/31/2019	CHFCZK	9:30:00 AM	23.044	23.06			N/A
5/31/2019	CHFCZK	11:30:00 AM	23.018	23.033			N/A
5/31/2019	CHFCZK	1:30:00 PM	23.037	23.049			N/A
5/31/2019	CHFCZK	3:30:00 PM	23.002	23.006			N/A
5/31/2019	CHFDKK	9:30:00 AM	6.666	6.669			N/A
5/31/2019	CHFDKK	11:30:00 AM	6.658	6.661			N/A
5/31/2019	CHFDKK	1:30:00 PM	6.667	6.67			N/A
5/31/2019	CHFDKK	3:30:00 PM	6.658	6.66			N/A
5/31/2019	CHFDKK.fx	9:30:00 AM	6.6648	6.6709			N/A
5/31/2019	CHFDKK.fx	11:30:00 AM	6.6568	6.6623			N/A
5/31/2019	CHFDKK.fx	1:30:00 PM	6.6655	6.6711			N/A
5/31/2019	CHFDKK.fx	3:30:00 PM	6.6567	6.6611			N/A
5/31/2019	CHFHKD	9:30:00 AM	7.7968	7.8007			N/A
5/31/2019	CHFHKD	11:30:00 AM	7.7989	7.8014			N/A
5/31/2019	CHFHKD	1:30:00 PM	7.8076	7.8111			N/A
5/31/2019	CHFHKD	3:30:00 PM	7.7961	7.7998			N/A
5/31/2019	CHFHUF	9:30:00 AM	289.83	290.11			N/A
5/31/2019	CHFHUF	11:30:00 AM	289.44	289.78			N/A
5/31/2019	CHFHUF	1:30:00 PM	289.51	289.74			N/A
5/31/2019	CHFHUF	3:30:00 PM	288.79	289.1			N/A
5/31/2019	CHFJPY	9:30:00 AM	108.262	108.322			N/A
5/31/2019	CHFJPY	11:30:00 AM	108.196	108.245			N/A
5/31/2019	CHFJPY	1:30:00 PM	108.265	108.331			N/A
5/31/2019	CHFJPY	3:30:00 PM	108.168	108.182			N/A
5/31/2019	CHFJPY.fx	9:30:00 AM	108.295	108.287			N/A
5/31/2019	CHFJPY.fx	11:30:00 AM	108.229	108.21			N/A
5/31/2019	CHFJPY.fx	1:30:00 PM	108.298	108.297			N/A
5/31/2019	CHFJPY.fx	3:30:00 PM	108.201	108.15			N/A

5/31/2019	CHF MXN	9:30:00 AM	19.4557	19.4651			N/A
5/31/2019	CHF MXN	11:30:00 AM	19.5344	19.5452			N/A
5/31/2019	CHF MXN	1:30:00 PM	19.6428	19.6415			N/A
5/31/2019	CHF MXN	3:30:00 PM	19.492	19.4993			N/A
5/31/2019	CHF NOK	9:30:00 AM	8.7309	8.7388			N/A
5/31/2019	CHF NOK	11:30:00 AM	8.7217	8.7294			N/A
5/31/2019	CHF NOK	1:30:00 PM	8.7463	8.753			N/A
5/31/2019	CHF NOK	3:30:00 PM	8.7267	8.7325			N/A
5/31/2019	CHF NOK.fx	9:30:00 AM	8.73439	8.73535			N/A
5/31/2019	CHF NOK.fx	11:30:00 AM	8.72523	8.72587			N/A
5/31/2019	CHF NOK.fx	1:30:00 PM	8.7499	8.74942			N/A
5/31/2019	CHF NOK.fx	3:30:00 PM	8.73012	8.72916			N/A
5/31/2019	CHF PLN	9:30:00 AM	3.8301	3.8329			N/A
5/31/2019	CHF PLN	11:30:00 AM	3.8231	3.826			N/A
5/31/2019	CHF PLN	1:30:00 PM	3.825	3.8275			N/A
5/31/2019	CHF PLN	3:30:00 PM	3.8188	3.8211			N/A
5/31/2019	CHF PLN.fx	9:30:00 AM	3.82754	3.83533			N/A
5/31/2019	CHF PLN.fx	11:30:00 AM	3.82089	3.82813			N/A
5/31/2019	CHF PLN.fx	1:30:00 PM	3.82264	3.82981			N/A
5/31/2019	CHF PLN.fx	3:30:00 PM	3.81636	3.82375			N/A
5/31/2019	CHF SEK	9:30:00 AM	9.4883	9.4932			N/A
5/31/2019	CHF SEK	11:30:00 AM	9.4967	9.4957			N/A
5/31/2019	CHF SEK	1:30:00 PM	9.5129	9.5154			N/A
5/31/2019	CHF SEK	3:30:00 PM	9.4809	9.4831			N/A
5/31/2019	CHF SGD	9:30:00 AM	1.3707	1.3712			N/A
5/31/2019	CHF SGD	11:30:00 AM	1.3689	1.3693			N/A
5/31/2019	CHF SGD	1:30:00 PM	1.3716	1.3718			N/A
5/31/2019	CHF SGD	3:30:00 PM	1.371	1.3711			N/A
5/31/2019	CHF SGD.fx	9:30:00 AM	1.37092	1.37095			N/A
5/31/2019	CHF SGD.fx	11:30:00 AM	1.36916	1.36909			N/A
5/31/2019	CHF SGD.fx	1:30:00 PM	1.37173	1.37157			N/A
5/31/2019	CHF SGD.fx	3:30:00 PM	1.37112	1.37099			N/A
5/31/2019	CHF ZAR	9:30:00 AM	14.685	14.6973			N/A
5/31/2019	CHF ZAR	11:30:00 AM	14.6666	14.6798			N/A

5/31/2019	CHFZAR	1:30:00 PM	14.6977	14.7034			N/A
5/31/2019	CHFZAR	3:30:00 PM	14.5825	14.5897			N/A
5/31/2019	CZKJPY	9:30:00 AM					N/A
5/31/2019	CZKJPY	11:30:00 AM	4.7	4.703			N/A
5/31/2019	CZKJPY	1:30:00 PM	4.7	4.703			N/A
5/31/2019	CZKJPY	3:30:00 PM	4.702	4.704			N/A
5/31/2019	DAX30.i	9:30:00 AM	11760.12	11760.37			N/A
5/31/2019	DAX30.i	11:30:00 AM	11717.12	11711.12			N/A
5/31/2019	DAX30.i	1:30:00 PM	11683.87	11681.12			N/A
5/31/2019	DAX30.i	3:30:00 PM	11679.12	11670.77			N/A
5/31/2019	DJ30.i	9:30:00 AM					N/A
5/31/2019	DJ30.i	11:30:00 AM					N/A
5/31/2019	DJ30.i	1:30:00 PM					N/A
5/31/2019	DJ30.i	3:30:00 PM					N/A
5/31/2019	DKKJPY	9:30:00 AM	16.24	16.26			N/A
5/31/2019	DKKJPY	11:30:00 AM					N/A
5/31/2019	DKKJPY	1:30:00 PM					N/A
5/31/2019	DKKJPY	3:30:00 PM					N/A
5/31/2019	EURAUD	9:30:00 AM	1.60979	1.61019			N/A
5/31/2019	EURAUD	11:30:00 AM	1.60985	1.61033			N/A
5/31/2019	EURAUD	1:30:00 PM	1.61119	1.61163			N/A
5/31/2019	EURAUD	3:30:00 PM	1.6129	1.61301			N/A
5/31/2019	EURAUD.fx	9:30:00 AM	1.60999	1.60997			N/A
5/31/2019	EURAUD.fx	11:30:00 AM	1.61007	1.6101			N/A
5/31/2019	EURAUD.fx	1:30:00 PM	1.61142	1.6114			N/A
5/31/2019	EURAUD.fx	3:30:00 PM	1.61311	1.61279			N/A
5/31/2019	EURCAD	9:30:00 AM	1.50736	1.50814			N/A
5/31/2019	EURCAD	11:30:00 AM	1.50862	1.50939			N/A
5/31/2019	EURCAD	1:30:00 PM	1.51148	1.51219			N/A
5/31/2019	EURCAD	3:30:00 PM	1.51187	1.5102			N/A
5/31/2019	EURCAD.fx	9:30:00 AM	1.50777	1.50772			N/A
5/31/2019	EURCAD.fx	11:30:00 AM	1.50902	1.50898			N/A
5/31/2019	EURCAD.fx	1:30:00 PM	1.5119	1.51177			N/A
5/31/2019	EURCAD.fx	3:30:00 PM	1.51224	1.50981			N/A

5/31/2019	EURCHF	9:30:00 AM	1.11995	1.12003			N/A
5/31/2019	EURCHF	11:30:00 AM	1.12138	1.12137			N/A
5/31/2019	EURCHF	1:30:00 PM	1.11994	1.11994			N/A
5/31/2019	EURCHF	3:30:00 PM	1.12158	1.12141			N/A
5/31/2019	EURCHF.fx	9:30:00 AM	1.12	1.11997			N/A
5/31/2019	EURCHF.fx	11:30:00 AM	1.12143	1.1213			N/A
5/31/2019	EURCHF.fx	1:30:00 PM	1.11999	1.11987			N/A
5/31/2019	EURCHF.fx	3:30:00 PM	1.1216	1.12137			N/A
5/31/2019	EURCZK	9:30:00 AM	25.795	25.835			N/A
5/31/2019	EURCZK	11:30:00 AM	25.797	25.837			N/A
5/31/2019	EURCZK	1:30:00 PM	25.785	25.821			N/A
5/31/2019	EURCZK	3:30:00 PM	25.783	25.811			N/A
5/31/2019	EURDKK	9:30:00 AM	7.4653	7.4658			N/A
5/31/2019	EURDKK	11:30:00 AM	7.4671	7.4679			N/A
5/31/2019	EURDKK	1:30:00 PM	7.4673	7.4677			N/A
5/31/2019	EURDKK	3:30:00 PM	7.4643	7.4656			N/A
5/31/2019	EURGBP	9:30:00 AM	0.88324	0.88298			N/A
5/31/2019	EURGBP	11:30:00 AM	0.88312	0.88323			N/A
5/31/2019	EURGBP	1:30:00 PM	0.88596	0.88596			N/A
5/31/2019	EURGBP	3:30:00 PM	0.88659	0.88655			N/A
5/31/2019	EURGBP.fx	9:30:00 AM	0.88328	0.88293			N/A
5/31/2019	EURGBP.fx	11:30:00 AM	0.88315	0.88318			N/A
5/31/2019	EURGBP.fx	1:30:00 PM	0.886	0.88591			N/A
5/31/2019	EURGBP.fx	3:30:00 PM	0.88661	0.88652			N/A
5/31/2019	EURHKD	9:30:00 AM	8.7326	8.7374			N/A
5/31/2019	EURHKD	11:30:00 AM	8.7447	8.7489			N/A
5/31/2019	EURHKD	1:30:00 PM	8.7443	8.7485			N/A
5/31/2019	EURHKD	3:30:00 PM	8.7453	8.7472			N/A
5/31/2019	EURHKD.fx	9:30:00 AM	8.73542	8.73449			N/A
5/31/2019	EURHKD.fx	11:30:00 AM	8.74751	8.74605			N/A
5/31/2019	EURHKD.fx	1:30:00 PM	8.7471	8.74559			N/A
5/31/2019	EURHKD.fx	3:30:00 PM	8.74787	8.74436			N/A
5/31/2019	EURHUF	9:30:00 AM	324.58	325.26			N/A
5/31/2019	EURHUF	11:30:00 AM	324.47	325.16			N/A

5/31/2019	EURHUF	1:30:00 PM	324.16	324.77			N/A
5/31/2019	EURHUF	3:30:00 PM	323.94	324.38			N/A
5/31/2019	EURHUF.fx	9:30:00 AM	324.827	325.008			N/A
5/31/2019	EURHUF.fx	11:30:00 AM	324.753	324.922			N/A
5/31/2019	EURHUF.fx	1:30:00 PM	324.441	324.499			N/A
5/31/2019	EURHUF.fx	3:30:00 PM	324.218	324.376			N/A
5/31/2019	EURJPY	9:30:00 AM	121.286	121.282			N/A
5/31/2019	EURJPY	11:30:00 AM	121.358	121.344			N/A
5/31/2019	EURJPY	1:30:00 PM	121.289	121.277			N/A
5/31/2019	EURJPY	3:30:00 PM	121.334	121.298			N/A
5/31/2019	EURJPY.fx	9:30:00 AM	121.288	121.278			N/A
5/31/2019	EURJPY.fx	11:30:00 AM	121.36	121.34			N/A
5/31/2019	EURJPY.fx	1:30:00 PM	121.291	121.274			N/A
5/31/2019	EURJPY.fx	3:30:00 PM	121.336	121.295			N/A
5/31/2019	EURMXN	9:30:00 AM	21.7922	21.8045			N/A
5/31/2019	EURMXN	11:30:00 AM	21.9096	21.9234			N/A
5/31/2019	EURMXN	1:30:00 PM	21.9988	22.001			N/A
5/31/2019	EURMXN	3:30:00 PM	21.8652	21.8737			N/A
5/31/2019	EURMXN.fx	9:30:00 AM	21.799	21.7967			N/A
5/31/2019	EURMXN.fx	11:30:00 AM	21.9181	21.9152			N/A
5/31/2019	EURMXN.fx	1:30:00 PM	22.0077	21.9916			N/A
5/31/2019	EURMXN.fx	3:30:00 PM	21.8741	21.8658			N/A
5/31/2019	EURNOK	9:30:00 AM	9.7768	9.7893			N/A
5/31/2019	EURNOK	11:30:00 AM	9.7785	9.791			N/A
5/31/2019	EURNOK	1:30:00 PM	9.7928	9.8049			N/A
5/31/2019	EURNOK	3:30:00 PM	9.785	9.7967			N/A
5/31/2019	EURNOK.fx	9:30:00 AM	9.78208	9.78401			N/A
5/31/2019	EURNOK.fx	11:30:00 AM	9.78384	9.7856			N/A
5/31/2019	EURNOK.fx	1:30:00 PM	9.79827	9.7995			N/A
5/31/2019	EURNOK.fx	3:30:00 PM	9.78968	9.79148			N/A
5/31/2019	EURNZD	9:30:00 AM	1.70975	1.7105			N/A
5/31/2019	EURNZD	11:30:00 AM	1.70887	1.70969			N/A
5/31/2019	EURNZD	1:30:00 PM	1.71106	1.71175			N/A
5/31/2019	EURNZD	3:30:00 PM	1.71342	1.71393			N/A



5/31/2019	EURNZD.fx	9:30:00 AM	1.71015	1.71004			N/A
5/31/2019	EURNZD.fx	11:30:00 AM	1.70929	1.70926			N/A
5/31/2019	EURNZD.fx	1:30:00 PM	1.71146	1.71133			N/A
5/31/2019	EURNZD.fx	3:30:00 PM	1.71381	1.71348			N/A
5/31/2019	EURPLN	9:30:00 AM	4.2896	4.2924			N/A
5/31/2019	EURPLN	11:30:00 AM	4.2872	4.2905			N/A
5/31/2019	EURPLN	1:30:00 PM	4.2835	4.2866			N/A
5/31/2019	EURPLN	3:30:00 PM	4.2824	4.2856			N/A
5/31/2019	EURPLN.fx	9:30:00 AM	4.28877	4.29319			N/A
5/31/2019	EURPLN.fx	11:30:00 AM	4.28667	4.29098			N/A
5/31/2019	EURPLN.fx	1:30:00 PM	4.28297	4.28719			N/A
5/31/2019	EURPLN.fx	3:30:00 PM	4.28176	4.28633			N/A
5/31/2019	EURRUB	9:30:00 AM					N/A
5/31/2019	EURRUB	11:30:00 AM	72.578	73.017			N/A
5/31/2019	EURRUB	1:30:00 PM	72.698	73.118			N/A
5/31/2019	EURRUB	3:30:00 PM	72.5	72.924			N/A
5/31/2019	EURSEK	9:30:00 AM	10.6282	10.6331			N/A
5/31/2019	EURSEK	11:30:00 AM	10.6485	10.6492			N/A
5/31/2019	EURSEK	1:30:00 PM	10.6548	10.6584			N/A
5/31/2019	EURSEK	3:30:00 PM	10.6353	10.6369			N/A
5/31/2019	EURSEK.fx	9:30:00 AM	10.62976	10.63157			N/A
5/31/2019	EURSEK.fx	11:30:00 AM	10.6502	10.64723			N/A
5/31/2019	EURSEK.fx	1:30:00 PM	10.65648	10.65661			N/A
5/31/2019	EURSEK.fx	3:30:00 PM	10.63597	10.63532			N/A
5/31/2019	EURSGD	9:30:00 AM	1.535	1.5358			N/A
5/31/2019	EURSGD	11:30:00 AM	1.535	1.5357			N/A
5/31/2019	EURSGD	1:30:00 PM	1.5359	1.5365			N/A
5/31/2019	EURSGD	3:30:00 PM	1.5374	1.5378			N/A
5/31/2019	EURSGD.fx	9:30:00 AM	1.53537	1.53539			N/A
5/31/2019	EURSGD.fx	11:30:00 AM	1.53531	1.53526			N/A
5/31/2019	EURSGD.fx	1:30:00 PM	1.53622	1.53607			N/A
5/31/2019	EURSGD.fx	3:30:00 PM	1.53777	1.53745			N/A
5/31/2019	EURUSD	9:30:00 AM	1.11305	1.1131			N/A
5/31/2019	EURUSD	11:30:00 AM	1.11496	1.11493			N/A

5/31/2019	EURUSD	1:30:00 PM	1.11493	1.11489			N/A
5/31/2019	EURUSD	3:30:00 PM	1.1152	1.11489			N/A
5/31/2019	EURUSD.fx	9:30:00 AM	1.11325	1.11319			N/A
5/31/2019	EURUSD.fx	11:30:00 AM	1.11516	1.11502			N/A
5/31/2019	EURUSD.fx	1:30:00 PM	1.11513	1.11498			N/A
5/31/2019	EURUSD.fx	3:30:00 PM	1.11538	1.115			N/A
5/31/2019	EURZAR	9:30:00 AM	16.4528	16.4701			N/A
5/31/2019	EURZAR	11:30:00 AM	16.4477	16.4669			N/A
5/31/2019	EURZAR	1:30:00 PM	16.4624	16.4719			N/A
5/31/2019	EURZAR	3:30:00 PM	16.3616	16.3751			N/A
5/31/2019	EURZAR.fx	9:30:00 AM	16.45201	16.47052			N/A
5/31/2019	EURZAR.fx	11:30:00 AM	16.44719	16.46748			N/A
5/31/2019	EURZAR.fx	1:30:00 PM	16.46139	16.47275			N/A
5/31/2019	EURZAR.fx	3:30:00 PM	16.3606	16.37546			N/A
5/31/2019	GBPAUD	9:30:00 AM	1.82369	1.82383			N/A
5/31/2019	GBPAUD	11:30:00 AM	1.82334	1.82415			N/A
5/31/2019	GBPAUD	1:30:00 PM	1.81925	1.8197			N/A
5/31/2019	GBPAUD	3:30:00 PM	1.81965	1.82019			N/A
5/31/2019	GBPAUD.fx	9:30:00 AM	1.82411	1.82343			N/A
5/31/2019	GBPAUD.fx	11:30:00 AM	1.82376	1.82375			N/A
5/31/2019	GBPAUD.fx	1:30:00 PM	1.81965	1.81929			N/A
5/31/2019	GBPAUD.fx	3:30:00 PM	1.82003	1.81978			N/A
5/31/2019	GBPCAD	9:30:00 AM	1.70738	1.70722			N/A
5/31/2019	GBPCAD	11:30:00 AM	1.70831	1.70902			N/A
5/31/2019	GBPCAD	1:30:00 PM	1.70608	1.70666			N/A
5/31/2019	GBPCAD	3:30:00 PM	1.70527	1.70334			N/A
5/31/2019	GBPCAD.fx	9:30:00 AM	1.70777	1.70684			N/A
5/31/2019	GBPCAD.fx	11:30:00 AM	1.70873	1.70864			N/A
5/31/2019	GBPCAD.fx	1:30:00 PM	1.70648	1.70625			N/A
5/31/2019	GBPCAD.fx	3:30:00 PM	1.70562	1.70296			N/A
5/31/2019	GBPCHF	9:30:00 AM	1.26824	1.26815			N/A
5/31/2019	GBPCHF	11:30:00 AM	1.26958	1.26992			N/A
5/31/2019	GBPCHF	1:30:00 PM	1.26387	1.26413			N/A
5/31/2019	GBPCHF	3:30:00 PM	1.26484	1.26498			N/A

5/31/2019	GBPCHF.fx	9:30:00 AM	1.26843	1.26796			N/A
5/31/2019	GBPCHF.fx	11:30:00 AM	1.26978	1.26972			N/A
5/31/2019	GBPCHF.fx	1:30:00 PM	1.2641	1.26393			N/A
5/31/2019	GBPCHF.fx	3:30:00 PM	1.26496	1.26478			N/A
5/31/2019	GBPCZK	9:30:00 AM	29.225	29.236			N/A
5/31/2019	GBPCZK	11:30:00 AM	29.221	29.243			N/A
5/31/2019	GBPCZK	1:30:00 PM	29.116	29.132			N/A
5/31/2019	GBPCZK	3:30:00 PM	29.09	29.098			N/A
5/31/2019	GBPDKK	9:30:00 AM	8.452	8.461			N/A
5/31/2019	GBPDKK	11:30:00 AM	8.451	8.462			N/A
5/31/2019	GBPDKK	1:30:00 PM	8.425	8.435			N/A
5/31/2019	GBPDKK	3:30:00 PM	8.418	8.429			N/A
5/31/2019	GBPDKK.fx	9:30:00 AM	8.4518	8.4612			N/A
5/31/2019	GBPDKK.fx	11:30:00 AM	8.4494	8.4626			N/A
5/31/2019	GBPDKK.fx	1:30:00 PM	8.4234	8.4351			N/A
5/31/2019	GBPDKK.fx	3:30:00 PM	8.4177	8.4292			N/A
5/31/2019	GBPHKD	9:30:00 AM	9.8885	9.8893			N/A
5/31/2019	GBPHKD	11:30:00 AM	9.8987	9.9046			N/A
5/31/2019	GBPHKD	1:30:00 PM	9.8671	9.8713			N/A
5/31/2019	GBPHKD	3:30:00 PM	9.859	9.8632			N/A
5/31/2019	GBPHUF	9:30:00 AM	367.55	367.89			N/A
5/31/2019	GBPHUF	11:30:00 AM	367.4	367.87			N/A
5/31/2019	GBPHUF	1:30:00 PM	365.91	366.19			N/A
5/31/2019	GBPHUF	3:30:00 PM	365.24	365.63			N/A
5/31/2019	GBPJPY	9:30:00 AM	137.354	137.325			N/A
5/31/2019	GBPJPY	11:30:00 AM	137.395	137.418			N/A
5/31/2019	GBPJPY	1:30:00 PM	136.883	136.894			N/A
5/31/2019	GBPJPY	3:30:00 PM	136.851	136.835			N/A
5/31/2019	GBPJPY.fx	9:30:00 AM	137.374	137.305			N/A
5/31/2019	GBPJPY.fx	11:30:00 AM	137.414	137.397			N/A
5/31/2019	GBPJPY.fx	1:30:00 PM	136.903	136.874			N/A
5/31/2019	GBPJPY.fx	3:30:00 PM	136.868	136.817			N/A
5/31/2019	GBPMXN	9:30:00 AM	24.6774	24.6742			N/A
5/31/2019	GBPMXN	11:30:00 AM	24.8013	24.8122			N/A

5/31/2019	GBPMXN	1:30:00 PM	24.8264	24.8213			N/A
5/31/2019	GBPMXN	3:30:00 PM	24.6535	24.6577			N/A
5/31/2019	GBPNOK	9:30:00 AM	11.0745	11.0814			N/A
5/31/2019	GBPNOK	11:30:00 AM	11.0734	11.0851			N/A
5/31/2019	GBPNOK	1:30:00 PM	11.0549	11.0648			N/A
5/31/2019	GBPNOK	3:30:00 PM	11.038	11.048			N/A
5/31/2019	GBPNOK.fx	9:30:00 AM	11.07924	11.07662			N/A
5/31/2019	GBPNOK.fx	11:30:00 AM	11.07831	11.08027			N/A
5/31/2019	GBPNOK.fx	1:30:00 PM	11.0602	11.05978			N/A
5/31/2019	GBPNOK.fx	3:30:00 PM	11.04268	11.04327			N/A
5/31/2019	GBPNZD	9:30:00 AM	1.93629	1.93647			N/A
5/31/2019	GBPNZD	11:30:00 AM	1.93493	1.9357			N/A
5/31/2019	GBPNZD	1:30:00 PM	1.93147	1.93171			N/A
5/31/2019	GBPNZD	3:30:00 PM	1.93261	1.9331			N/A
5/31/2019	GBPNZD.fx	9:30:00 AM	1.93668	1.9361			N/A
5/31/2019	GBPNZD.fx	11:30:00 AM	1.93527	1.93533			N/A
5/31/2019	GBPNZD.fx	1:30:00 PM	1.93185	1.93137			N/A
5/31/2019	GBPNZD.fx	3:30:00 PM	1.93294	1.93276			N/A
5/31/2019	GBPPLN	9:30:00 AM	4.8593	4.8587			N/A
5/31/2019	GBPPLN	11:30:00 AM	4.8552	4.8572			N/A
5/31/2019	GBPPLN	1:30:00 PM	4.8361	4.8373			N/A
5/31/2019	GBPPLN	3:30:00 PM	4.8316	4.8327			N/A
5/31/2019	GBPPLN.fx	9:30:00 AM	4.85712	4.86104			N/A
5/31/2019	GBPPLN.fx	11:30:00 AM	4.85306	4.85926			N/A
5/31/2019	GBPPLN.fx	1:30:00 PM	4.83396	4.83954			N/A
5/31/2019	GBPPLN.fx	3:30:00 PM	4.82956	4.83518			N/A
5/31/2019	GBPSEK	9:30:00 AM	12.0359	12.0402			N/A
5/31/2019	GBPSEK	11:30:00 AM	12.0549	12.0601			N/A
5/31/2019	GBPSEK	1:30:00 PM	12.0253	12.0316			N/A
5/31/2019	GBPSEK	3:30:00 PM	11.9943	12.0002			N/A
5/31/2019	GBPSEK.fx	9:30:00 AM	12.0322	12.04397			N/A
5/31/2019	GBPSEK.fx	11:30:00 AM	12.05124	12.06325			N/A
5/31/2019	GBPSEK.fx	1:30:00 PM	12.02169	12.03509			N/A
5/31/2019	GBPSEK.fx	3:30:00 PM	11.98822	12.00432			N/A

5/31/2019	GBPSGD	9:30:00 AM	1.7387	1.7386			N/A
5/31/2019	GBPSGD	11:30:00 AM	1.7381	1.7388			N/A
5/31/2019	GBPSGD	1:30:00 PM	1.7338	1.7341			N/A
5/31/2019	GBPSGD	3:30:00 PM	1.7339	1.7346			N/A
5/31/2019	GBPSGD.fx	9:30:00 AM	1.73683	1.74035			N/A
5/31/2019	GBPSGD.fx	11:30:00 AM	1.73621	1.74056			N/A
5/31/2019	GBPSGD.fx	1:30:00 PM	1.73196	1.73583			N/A
5/31/2019	GBPSGD.fx	3:30:00 PM	1.73205	1.73636			N/A
5/31/2019	GBPUSD	9:30:00 AM	1.26086	1.26025			N/A
5/31/2019	GBPUSD	11:30:00 AM	1.26263	1.26258			N/A
5/31/2019	GBPUSD	1:30:00 PM	1.25859	1.25842			N/A
5/31/2019	GBPUSD	3:30:00 PM	1.2579	1.2577		2100	N/A
5/31/2019	GBPUSD.fx	9:30:00 AM	1.26092	1.26019			N/A
5/31/2019	GBPUSD.fx	11:30:00 AM	1.26269	1.26252			N/A
5/31/2019	GBPUSD.fx	1:30:00 PM	1.25865	1.25837			N/A
5/31/2019	GBPUSD.fx	3:30:00 PM	1.25793	1.25765			N/A
5/31/2019	GBPZAR	9:30:00 AM	18.632	18.6507			N/A
5/31/2019	GBPZAR	11:30:00 AM	18.6195	18.6487			N/A
5/31/2019	GBPZAR	1:30:00 PM	18.5793	18.5952			N/A
5/31/2019	GBPZAR	3:30:00 PM	18.4506	18.4728			N/A
5/31/2019	GBPZAR.fx	9:30:00 AM	18.6388	18.6434			N/A
5/31/2019	GBPZAR.fx	11:30:00 AM	18.6263	18.6415			N/A
5/31/2019	GBPZAR.fx	1:30:00 PM	18.5866	18.5878			N/A
5/31/2019	GBPZAR.fx	3:30:00 PM	18.4565	18.4669			N/A
5/31/2019	GOLD	9:30:00 AM	1292.85	1293.04			N/A
5/31/2019	GOLD	11:30:00 AM	1294.71	1294.58			N/A
5/31/2019	GOLD	1:30:00 PM	1298.44	1298.31			N/A
5/31/2019	GOLD	3:30:00 PM	1297.81	1297.41			N/A
5/31/2019	HKDJPY	9:30:00 AM	13.89	13.89			N/A
5/31/2019	HKDJPY	11:30:00 AM	13.87	13.88			N/A
5/31/2019	HKDJPY	1:30:00 PM	13.87	13.88			N/A
5/31/2019	HKDJPY	3:30:00 PM	13.87	13.88			N/A
5/31/2019	HKDJPY.fx	9:30:00 AM	13.88	13.887			N/A
5/31/2019	HKDJPY.fx	11:30:00 AM	13.87	13.876			N/A

5/31/2019	HKDJPY.fx	1:30:00 PM	13.863	13.869			N/A
5/31/2019	HKDJPY.fx	3:30:00 PM	13.872	13.87			N/A
5/31/2019	HUFJPY	9:30:00 AM	0.3735	0.3738			N/A
5/31/2019	HUFJPY	11:30:00 AM	0.3739	0.3742			N/A
5/31/2019	HUFJPY	1:30:00 PM	0.374	0.3743			N/A
5/31/2019	HUFJPY	3:30:00 PM	0.3744	0.3747			N/A
5/31/2019	JP225.i	9:30:00 AM	20552.96	20567.96			N/A
5/31/2019	JP225.i	11:30:00 AM	20497.96	20502.96			N/A
5/31/2019	JP225.i	1:30:00 PM	20417.96	20427.96			N/A
5/31/2019	JP225.i	3:30:00 PM	20402.96	20402.96			N/A
5/31/2019	MXNJPY	9:30:00 AM	5.56	5.57			N/A
5/31/2019	MXNJPY	11:30:00 AM	5.54	5.55			N/A
5/31/2019	MXNJPY	1:30:00 PM	5.51	5.52			N/A
5/31/2019	MXNJPY	3:30:00 PM	5.55	5.55			N/A
5/31/2019	NASDAQ.i	9:30:00 AM					N/A
5/31/2019	NASDAQ.i	11:30:00 AM					N/A
5/31/2019	NASDAQ.i	1:30:00 PM					N/A
5/31/2019	NASDAQ.i	3:30:00 PM					N/A
5/31/2019	NOKJPY	9:30:00 AM	12.39	12.42			N/A
5/31/2019	NOKJPY	11:30:00 AM	12.38	12.42			N/A
5/31/2019	NOKJPY	1:30:00 PM	12.36	12.4			N/A
5/31/2019	NOKJPY	3:30:00 PM	12.38	12.41			N/A
5/31/2019	NOKJPY.fx	9:30:00 AM	12.394	12.401			N/A
5/31/2019	NOKJPY.fx	11:30:00 AM	12.399	12.405			N/A
5/31/2019	NOKJPY.fx	1:30:00 PM	12.375	12.379			N/A
5/31/2019	NOKJPY.fx	3:30:00 PM	12.39	12.393			N/A
5/31/2019	NZDCAD	9:30:00 AM	0.88141	0.882			N/A
5/31/2019	NZDCAD	11:30:00 AM	0.88257	0.88319			N/A
5/31/2019	NZDCAD	1:30:00 PM	0.88319	0.88373			N/A
5/31/2019	NZDCAD	3:30:00 PM	0.88213	0.88139			N/A
5/31/2019	NZDCAD.fx	9:30:00 AM	0.88175	0.88166			N/A
5/31/2019	NZDCAD.fx	11:30:00 AM	0.88292	0.88285			N/A
5/31/2019	NZDCAD.fx	1:30:00 PM	0.88354	0.88339			N/A
5/31/2019	NZDCAD.fx	3:30:00 PM	0.88242	0.88121			N/A

5/31/2019	NZDCHF	9:30:00 AM	0.65457	0.65525			N/A
5/31/2019	NZDCHF	11:30:00 AM	0.65573	0.65639			N/A
5/31/2019	NZDCHF	1:30:00 PM	0.65409	0.65467			N/A
5/31/2019	NZDCHF	3:30:00 PM	0.65411	0.65467			N/A
5/31/2019	NZDCHF.fx	9:30:00 AM	0.6549	0.6549			N/A
5/31/2019	NZDCHF.fx	11:30:00 AM	0.65607	0.65603			N/A
5/31/2019	NZDCHF.fx	1:30:00 PM	0.65443	0.65432			N/A
5/31/2019	NZDCHF.fx	3:30:00 PM	0.65443	0.65433			N/A
5/31/2019	NZDCZK	9:30:00 AM	15.09	15.101			N/A
5/31/2019	NZDCZK	11:30:00 AM					N/A
5/31/2019	NZDCZK	1:30:00 PM	15.073	15.082			N/A
5/31/2019	NZDCZK	3:30:00 PM	15.05	15.056			N/A
5/31/2019	NZDDKK	9:30:00 AM	4.365	4.369			N/A
5/31/2019	NZDDKK	11:30:00 AM	4.368	4.371			N/A
5/31/2019	NZDDKK	1:30:00 PM	4.362	4.365			N/A
5/31/2019	NZDDKK	3:30:00 PM					N/A
5/31/2019	NZDHKD	9:30:00 AM	5.1046	5.1075			N/A
5/31/2019	NZDHKD	11:30:00 AM	5.1147	5.1176			N/A
5/31/2019	NZDHKD	1:30:00 PM	5.1085	5.1106			N/A
5/31/2019	NZDHKD	3:30:00 PM	5.101	5.1038			N/A
5/31/2019	NZDHUF	9:30:00 AM	189.77	189.98			N/A
5/31/2019	NZDHUF	11:30:00 AM	189.82	190.09			N/A
5/31/2019	NZDHUF	1:30:00 PM	189.4	189.62			N/A
5/31/2019	NZDHUF	3:30:00 PM	188.94	189.19			N/A
5/31/2019	NZDJPY	9:30:00 AM	70.893	70.951			N/A
5/31/2019	NZDJPY	11:30:00 AM	70.97	71.025			N/A
5/31/2019	NZDJPY	1:30:00 PM	70.838	70.896			N/A
5/31/2019	NZDJPY	3:30:00 PM	70.78	70.815			N/A
5/31/2019	NZDJPY.fx	9:30:00 AM	70.924	70.919			N/A
5/31/2019	NZDJPY.fx	11:30:00 AM	71	70.993			N/A
5/31/2019	NZDJPY.fx	1:30:00 PM	70.87	70.864			N/A
5/31/2019	NZDJPY.fx	3:30:00 PM	70.811	70.784			N/A
5/31/2019	NZDMXN	9:30:00 AM	12.7405	12.7421			N/A
5/31/2019	NZDMXN	11:30:00 AM	12.8149	12.8182			N/A

5/31/2019	NZDMXN	1:30:00 PM	12.8518	12.8482			N/A
5/31/2019	NZDMXN	3:30:00 PM	12.7552	12.7553			N/A
5/31/2019	NZDNOK	9:30:00 AM	5.7165	5.7188			N/A
5/31/2019	NZDNOK	11:30:00 AM	5.7204	5.7242			N/A
5/31/2019	NZDNOK	1:30:00 PM	5.7222	5.7254			N/A
5/31/2019	NZDNOK	3:30:00 PM	5.7074	5.7106			N/A
5/31/2019	NZDPLN	9:30:00 AM	2.5077	2.5092			N/A
5/31/2019	NZDPLN	11:30:00 AM	2.5081	2.5094			N/A
5/31/2019	NZDPLN	1:30:00 PM	2.5027	2.5038			N/A
5/31/2019	NZDPLN	3:30:00 PM	2.498	2.4988			N/A
5/31/2019	NZDSEK	9:30:00 AM	6.2111	6.218			N/A
5/31/2019	NZDSEK	11:30:00 AM	6.2256	6.231			N/A
5/31/2019	NZDSEK	1:30:00 PM	6.2218	6.2278			N/A
5/31/2019	NZDSEK	3:30:00 PM	6.2015	6.2066			N/A
5/31/2019	NZDSGD	9:30:00 AM	0.8977	0.8982			N/A
5/31/2019	NZDSGD	11:30:00 AM	0.898	0.8986			N/A
5/31/2019	NZDSGD	1:30:00 PM	0.8974	0.898			N/A
5/31/2019	NZDSGD	3:30:00 PM	0.8971	0.8977			N/A
5/31/2019	NZDSGD.fx	9:30:00 AM	0.89768	0.89815			N/A
5/31/2019	NZDSGD.fx	11:30:00 AM	0.898	0.89855			N/A
5/31/2019	NZDSGD.fx	1:30:00 PM	0.89738	0.8979			N/A
5/31/2019	NZDSGD.fx	3:30:00 PM	0.89701	0.89762			N/A
5/31/2019	NZDUSD	9:30:00 AM	0.65095	0.65099			N/A
5/31/2019	NZDUSD	11:30:00 AM	0.65238	0.65241			N/A
5/31/2019	NZDUSD	1:30:00 PM	0.65156	0.65155			N/A
5/31/2019	NZDUSD	3:30:00 PM	0.65075	0.6508			N/A
5/31/2019	NZDUSD.fx	9:30:00 AM	0.65103	0.65101			N/A
5/31/2019	NZDUSD.fx	11:30:00 AM	0.65245	0.65242			N/A
5/31/2019	NZDUSD.fx	1:30:00 PM	0.65164	0.65156			N/A
5/31/2019	NZDUSD.fx	3:30:00 PM	0.65082	0.65082			N/A
5/31/2019	NZDZAR	9:30:00 AM	9.6117	9.6272			N/A
5/31/2019	NZDZAR	11:30:00 AM	9.6152	9.632			N/A
5/31/2019	NZDZAR	1:30:00 PM	9.6113	9.6235			N/A
5/31/2019	NZDZAR	3:30:00 PM	9.5367	9.5504			N/A



5/31/2019	SEKJPY	9:30:00 AM	11.41	11.42			N/A
5/31/2019	SEKJPY	11:30:00 AM	11.4	11.41			N/A
5/31/2019	SEKJPY	1:30:00 PM	11.39	11.39			N/A
5/31/2019	SEKJPY	3:30:00 PM	11.41	11.41			N/A
5/31/2019	SEKJPY.fx	9:30:00 AM	11.399	11.418			N/A
5/31/2019	SEKJPY.fx	11:30:00 AM	11.389	11.404			N/A
5/31/2019	SEKJPY.fx	1:30:00 PM	11.373	11.388			N/A
5/31/2019	SEKJPY.fx	3:30:00 PM	11.4	11.414			N/A
5/31/2019	SGDJPY	9:30:00 AM	78.96	78.99			N/A
5/31/2019	SGDJPY	11:30:00 AM	79.01	79.04			N/A
5/31/2019	SGDJPY	1:30:00 PM	78.93	78.94			N/A
5/31/2019	SGDJPY	3:30:00 PM	78.89	78.88			N/A
5/31/2019	SILVER	9:30:00 AM	14.32	14.7			N/A
5/31/2019	SILVER	11:30:00 AM	14.34	14.71			N/A
5/31/2019	SILVER	1:30:00 PM	14.34	14.72			N/A
5/31/2019	SILVER	3:30:00 PM	14.32	14.69			N/A
5/31/2019	SPX500.i	9:30:00 AM	2765.31	2766.32			N/A
5/31/2019	SPX500.i	11:30:00 AM	2762.77	2763.07			N/A
5/31/2019	SPX500.i	1:30:00 PM	2756.27	2756.67			N/A
5/31/2019	SPX500.i	3:30:00 PM	2758.02	2757.57			N/A
5/31/2019	UK100.i	9:30:00 AM	7179.49	7179.24			N/A
5/31/2019	UK100.i	11:30:00 AM	7150.24	7148.99			N/A
5/31/2019	UK100.i	1:30:00 PM	7146.57	7146.99			N/A
5/31/2019	UK100.i	3:30:00 PM	7140.49	7139.91			N/A
5/31/2019	USDCAD	9:30:00 AM	1.35434	1.3545			N/A
5/31/2019	USDCAD	11:30:00 AM	1.35333	1.3533			N/A
5/31/2019	USDCAD	1:30:00 PM	1.35582	1.35587			N/A
5/31/2019	USDCAD	3:30:00 PM	1.35591	1.35388	30000	30000	N/A
5/31/2019	USDCAD.fx	9:30:00 AM	1.35437	1.35446			N/A
5/31/2019	USDCAD.fx	11:30:00 AM	1.35336	1.35326			N/A
5/31/2019	USDCAD.fx	1:30:00 PM	1.35585	1.35581			N/A
5/31/2019	USDCAD.fx	3:30:00 PM	1.35591	1.35404			N/A
5/31/2019	USDCHF	9:30:00 AM	1.00604	1.00609			N/A
5/31/2019	USDCHF	11:30:00 AM	1.00562	1.00562			N/A

5/31/2019	USDCHF	1:30:00 PM	1.0043	1.00442			N/A
5/31/2019	USDCHF	3:30:00 PM	1.00574	1.00556			N/A
5/31/2019	USDCHF.fx	9:30:00 AM	1.00608	1.00603			N/A
5/31/2019	USDCHF.fx	11:30:00 AM	1.00566	1.00555			N/A
5/31/2019	USDCHF.fx	1:30:00 PM	1.00435	1.00436			N/A
5/31/2019	USDCHF.fx	3:30:00 PM	1.00577	1.00552			N/A
5/31/2019	USDCZK	9:30:00 AM	23.198	23.214			N/A
5/31/2019	USDCZK	11:30:00 AM	23.162	23.183			N/A
5/31/2019	USDCZK	1:30:00 PM	23.15	23.169			N/A
5/31/2019	USDCZK	3:30:00 PM	23.147	23.163			N/A
5/31/2019	USDCZK.fx	9:30:00 AM	23.206	23.2117			N/A
5/31/2019	USDCZK.fx	11:30:00 AM	23.17	23.1748			N/A
5/31/2019	USDCZK.fx	1:30:00 PM	23.159	23.1593			N/A
5/31/2019	USDCZK.fx	3:30:00 PM	23.1549	23.1572			N/A
5/31/2019	USDDKK	9:30:00 AM	6.7073	6.711			N/A
5/31/2019	USDDKK	11:30:00 AM	6.6964	6.6995			N/A
5/31/2019	USDDKK	1:30:00 PM	6.6966	6.6999			N/A
5/31/2019	USDDKK	3:30:00 PM	6.6969	6.6983			N/A
5/31/2019	USDDKK.fx	9:30:00 AM	6.70785	6.70902			N/A
5/31/2019	USDDKK.fx	11:30:00 AM	6.69695	6.69753			N/A
5/31/2019	USDDKK.fx	1:30:00 PM	6.69715	6.69763			N/A
5/31/2019	USDDKK.fx	3:30:00 PM	6.69714	6.6962			N/A
5/31/2019	USDHKD	9:30:00 AM	7.8464	7.8466			N/A
5/31/2019	USDHKD	11:30:00 AM	7.844	7.8441			N/A
5/31/2019	USDHKD	1:30:00 PM	7.8435	7.8437			N/A
5/31/2019	USDHKD	3:30:00 PM	7.8426	7.8427			N/A
5/31/2019	USDHKD.fx	9:30:00 AM	7.8463	7.84688			N/A
5/31/2019	USDHKD.fx	11:30:00 AM	7.84402	7.84411			N/A
5/31/2019	USDHKD.fx	1:30:00 PM	7.84349	7.84398			N/A
5/31/2019	USDHKD.fx	3:30:00 PM	7.84254	7.84297			N/A
5/31/2019	USDHUF	9:30:00 AM	291.66	292.1			N/A
5/31/2019	USDHUF	11:30:00 AM	291.09	291.54			N/A
5/31/2019	USDHUF	1:30:00 PM	290.83	291.14			N/A
5/31/2019	USDHUF	3:30:00 PM	290.61	290.98			N/A

5/31/2019	USDHUF.fx	9:30:00 AM	291.847	291.928			N/A
5/31/2019	USDHUF.fx	11:30:00 AM	291.284	291.332			N/A
5/31/2019	USDHUF.fx	1:30:00 PM	291.027	290.946			N/A
5/31/2019	USDHUF.fx	3:30:00 PM	290.814	290.789			N/A
5/31/2019	USDINR	9:30:00 AM	64.81	74.78			N/A
5/31/2019	USDINR	11:30:00 AM	64.87	74.85			N/A
5/31/2019	USDINR	1:30:00 PM					N/A
5/31/2019	USDINR	3:30:00 PM					N/A
5/31/2019	USDJPY	9:30:00 AM	108.944	108.953			N/A
5/31/2019	USDJPY	11:30:00 AM	108.824	108.83	800	800	N/A
5/31/2019	USDJPY	1:30:00 PM	108.768	108.775			N/A
5/31/2019	USDJPY	3:30:00 PM	108.825	108.764			N/A
5/31/2019	USDJPY.fx	9:30:00 AM	108.95	108.945			N/A
5/31/2019	USDJPY.fx	11:30:00 AM	108.83	108.823			N/A
5/31/2019	USDJPY.fx	1:30:00 PM	108.774	108.767			N/A
5/31/2019	USDJPY.fx	3:30:00 PM	108.83	108.758			N/A
5/31/2019	USDMXN	9:30:00 AM	19.578	19.581			N/A
5/31/2019	USDMXN	11:30:00 AM	19.653	19.654			N/A
5/31/2019	USDMXN	1:30:00 PM	19.735	19.725			N/A
5/31/2019	USDMXN	3:30:00 PM	19.61	19.609			N/A
5/31/2019	USDMXN.fx	9:30:00 AM	19.5825	19.5782			N/A
5/31/2019	USDMXN.fx	11:30:00 AM	19.6548	19.6518			N/A
5/31/2019	USDMXN.fx	1:30:00 PM	19.7388	19.7216			N/A
5/31/2019	USDMXN.fx	3:30:00 PM	19.6129	19.6056			N/A
5/31/2019	USDNOK	9:30:00 AM	8.7842	8.7925			N/A
5/31/2019	USDNOK	11:30:00 AM	8.7714	8.7787			N/A
5/31/2019	USDNOK	1:30:00 PM	8.7846	8.7914			N/A
5/31/2019	USDNOK	3:30:00 PM	8.7764	8.7827			N/A
5/31/2019	USDNOK.fx	9:30:00 AM	8.78809	8.78815			N/A
5/31/2019	USDNOK.fx	11:30:00 AM	8.77526	8.77414			N/A
5/31/2019	USDNOK.fx	1:30:00 PM	8.78853	8.78675			N/A
5/31/2019	USDNOK.fx	3:30:00 PM	8.78019	8.77851			N/A
5/31/2019	USDPLN	9:30:00 AM	3.8541	3.8554			N/A
5/31/2019	USDPLN	11:30:00 AM	3.8456	3.8468			N/A

5/31/2019	USDPLN	1:30:00 PM	3.8425	3.8434			N/A
5/31/2019	USDPLN	3:30:00 PM	3.8415	3.8418			N/A
5/31/2019	USDPLN.fx	9:30:00 AM	3.85326	3.85614			N/A
5/31/2019	USDPLN.fx	11:30:00 AM	3.84477	3.84751			N/A
5/31/2019	USDPLN.fx	1:30:00 PM	3.84176	3.84411			N/A
5/31/2019	USDPLN.fx	3:30:00 PM	3.84067	3.84291			N/A
5/31/2019	USDRUB	9:30:00 AM					N/A
5/31/2019	USDRUB	11:30:00 AM	65.202	65.59			N/A
5/31/2019	USDRUB	1:30:00 PM	65.317	65.691			N/A
5/31/2019	USDRUB	3:30:00 PM	65.124	65.493			N/A
5/31/2019	USDSEK	9:30:00 AM	9.5471	9.5512			N/A
5/31/2019	USDSEK	11:30:00 AM	9.5482	9.55			N/A
5/31/2019	USDSEK	1:30:00 PM	9.5557	9.5573			N/A
5/31/2019	USDSEK	3:30:00 PM	9.5352	9.5378			N/A
5/31/2019	USDSEK.fx	9:30:00 AM	9.54979	9.54941			N/A
5/31/2019	USDSEK.fx	11:30:00 AM	9.55091	9.54779			N/A
5/31/2019	USDSEK.fx	1:30:00 PM	9.55814	9.55526			N/A
5/31/2019	USDSEK.fx	3:30:00 PM	9.53791	9.53621			N/A
5/31/2019	USDSGD	9:30:00 AM	1.3791	1.3793			N/A
5/31/2019	USDSGD	11:30:00 AM	1.3767	1.3769			N/A
5/31/2019	USDSGD	1:30:00 PM	1.3776	1.3777			N/A
5/31/2019	USDSGD	3:30:00 PM	1.3787	1.3789			N/A
5/31/2019	USDSGD.fx	9:30:00 AM	1.37896	1.37946			N/A
5/31/2019	USDSGD.fx	11:30:00 AM	1.37662	1.37704			N/A
5/31/2019	USDSGD.fx	1:30:00 PM	1.37756	1.37773			N/A
5/31/2019	USDSGD.fx	3:30:00 PM	1.37859	1.379			N/A
5/31/2019	USDZAR	9:30:00 AM	14.7784	14.7941			N/A
5/31/2019	USDZAR	11:30:00 AM	14.7504	14.7683			N/A
5/31/2019	USDZAR	1:30:00 PM	14.7642	14.7727			N/A
5/31/2019	USDZAR	3:30:00 PM	14.6725	14.6809			N/A
5/31/2019	USDZAR.fx	9:30:00 AM	14.78367	14.78822			N/A
5/31/2019	USDZAR.fx	11:30:00 AM	14.75631	14.76206			N/A
5/31/2019	USDZAR.fx	1:30:00 PM	14.77019	14.76652			N/A
5/31/2019	USDZAR.fx	3:30:00 PM	14.67847	14.67763			N/A

5/31/2019	XAUUSD	9:30:00 AM	1292.86	1293.03			N/A
5/31/2019	XAUUSD	11:30:00 AM	1294.71	1294.58			N/A
5/31/2019	XAUUSD	1:30:00 PM	1298.47	1298.3			N/A
5/31/2019	XAUUSD	3:30:00 PM	1297.86	1297.41			N/A
5/31/2019	ZARJPY	9:30:00 AM	7.35	7.37			N/A
5/31/2019	ZARJPY	11:30:00 AM	7.36	7.38			N/A
5/31/2019	ZARJPY	1:30:00 PM	7.35	7.37			N/A
5/31/2019	ZARJPY	3:30:00 PM	7.4	7.41			N/A
5/31/2019	ZARJPY.fx	9:30:00 AM	7.366	7.369			N/A
5/31/2019	ZARJPY.fx	11:30:00 AM	7.371	7.375			N/A
5/31/2019	ZARJPY.fx	1:30:00 PM	7.365	7.365			N/A
5/31/2019	ZARJPY.fx	3:30:00 PM	7.412	7.41			N/A
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6/3/2019	#Bitcoin	9:30:00 AM	8564.21	8581.9			N/A
6/3/2019	#Bitcoin	11:30:00 AM	8474.7	8507.2			N/A
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6/3/2019	#CL.f	11:30:00 AM	53.044	52.923			N/A
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6/3/2019	#Ethereum	9:30:00 AM	265.07	266.51			N/A
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6/3/2019	#KHC	3:30:00 PM					N/A
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6/3/2019	#KO	1:30:00 PM					N/A
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6/3/2019	#MU	3:30:00 PM					N/A
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6/3/2019	#NFLX	1:30:00 PM					N/A
6/3/2019	#NFLX	3:30:00 PM					N/A
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6/3/2019	#NG.f	11:30:00 AM	2.454	2.473			N/A

6/3/2019	#NG.f	1:30:00 PM	2.428	2.447			N/A
6/3/2019	#NG.f	3:30:00 PM	2.432	2.45			N/A
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6/3/2019	#NKE	11:30:00 AM					N/A
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6/3/2019	#SNE	3:30:00 PM					N/A
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6/3/2019	#TRI	1:30:00 PM					N/A
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6/3/2019	#TSCO	3:30:00 PM					N/A
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6/3/2019	#YHOO	3:30:00 PM					N/A
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6/3/2019	#ZNGA	1:30:00 PM					N/A
6/3/2019	#ZNGA	3:30:00 PM					N/A
6/3/2019	AUDCAD	9:30:00 AM	0.93733	0.93797			N/A
6/3/2019	AUDCAD	11:30:00 AM	0.93874	0.93929			N/A
6/3/2019	AUDCAD	1:30:00 PM	0.93852	0.93917			N/A
6/3/2019	AUDCAD	3:30:00 PM	0.93903	0.93964			N/A
6/3/2019	AUDCAD.fx	9:30:00 AM	0.93766	0.93763			N/A
6/3/2019	AUDCAD.fx	11:30:00 AM	0.93908	0.93891			N/A
6/3/2019	AUDCAD.fx	1:30:00 PM	0.93885	0.93882			N/A
6/3/2019	AUDCAD.fx	3:30:00 PM	0.93937	0.93928			N/A
6/3/2019	AUDCHF	9:30:00 AM	0.69323	0.69393			N/A
6/3/2019	AUDCHF	11:30:00 AM	0.69236	0.6928			N/A
6/3/2019	AUDCHF	1:30:00 PM	0.69483	0.69549			N/A
6/3/2019	AUDCHF	3:30:00 PM	0.69395	0.69455			N/A
6/3/2019	AUDCHF.fx	9:30:00 AM	0.69358	0.69358			N/A
6/3/2019	AUDCHF.fx	11:30:00 AM	0.6927	0.69245			N/A
6/3/2019	AUDCHF.fx	1:30:00 PM	0.69519	0.69514			N/A
6/3/2019	AUDCHF.fx	3:30:00 PM	0.6943	0.69419			N/A
6/3/2019	AUDCZK	9:30:00 AM	16.055	16.07			N/A
6/3/2019	AUDCZK	11:30:00 AM	16.056	16.07			N/A
6/3/2019	AUDCZK	1:30:00 PM	16.051	16.067			N/A
6/3/2019	AUDCZK	3:30:00 PM	16.039	16.055			N/A

6/3/2019	AUDDKK	9:30:00 AM	4.6401	4.6446			N/A
6/3/2019	AUDDKK	11:30:00 AM	4.6409	4.6449			N/A
6/3/2019	AUDDKK	1:30:00 PM	4.6435	4.6478			N/A
6/3/2019	AUDDKK	3:30:00 PM	4.6409	4.6451			N/A
6/3/2019	AUDHKD	9:30:00 AM	5.4395	5.4434			N/A
6/3/2019	AUDHKD	11:30:00 AM	5.4398	5.4432			N/A
6/3/2019	AUDHKD	1:30:00 PM	5.4471	5.4507			N/A
6/3/2019	AUDHKD	3:30:00 PM	5.4522	5.4561			N/A
6/3/2019	AUDHUF	9:30:00 AM	201.85	201.97			N/A
6/3/2019	AUDHUF	11:30:00 AM	201.46	201.67			N/A
6/3/2019	AUDHUF	1:30:00 PM	201.53	201.74			N/A
6/3/2019	AUDHUF	3:30:00 PM	201.02	201.22			N/A
6/3/2019	AUDJPY	9:30:00 AM	75.158	75.219			N/A
6/3/2019	AUDJPY	11:30:00 AM	75.17	75.214			N/A
6/3/2019	AUDJPY	1:30:00 PM	75.322	75.391			N/A
6/3/2019	AUDJPY	3:30:00 PM	75.345	75.414			N/A
6/3/2019	AUDJPY.fx	9:30:00 AM	75.192	75.184			N/A
6/3/2019	AUDJPY.fx	11:30:00 AM	75.204	75.178			N/A
6/3/2019	AUDJPY.fx	1:30:00 PM	75.357	75.352			N/A
6/3/2019	AUDJPY.fx	3:30:00 PM	75.379	75.378			N/A
6/3/2019	AUDMXN	9:30:00 AM	13.6324	13.6419			N/A
6/3/2019	AUDMXN	11:30:00 AM	13.6295	13.6364			N/A
6/3/2019	AUDMXN	1:30:00 PM	13.6471	13.6536			N/A
6/3/2019	AUDMXN	3:30:00 PM	13.7356	13.7401			N/A
6/3/2019	AUDNOK	9:30:00 AM	6.0791	6.0782			N/A
6/3/2019	AUDNOK	11:30:00 AM	6.0833	6.0874			N/A
6/3/2019	AUDNOK	1:30:00 PM	6.0776	6.0824			N/A
6/3/2019	AUDNOK	3:30:00 PM	6.0703	6.0735			N/A
6/3/2019	AUDNOK.f	9:30:00 AM	6.0787	6.0767			N/A
6/3/2019	AUDNOK.f	11:30:00 AM	6.0849	6.0857			N/A
6/3/2019	AUDNOK.f	1:30:00 PM	6.0792	6.0806			N/A
6/3/2019	AUDNOK.f	3:30:00 PM	6.0719	6.0716			N/A
6/3/2019	AUDNZD	9:30:00 AM	1.06057	1.06142			N/A
6/3/2019	AUDNZD	11:30:00 AM	1.05945	1.06025			N/A

6/3/2019	AUDNZD	1:30:00 PM	1.05921	1.06005			N/A
6/3/2019	AUDNZD	3:30:00 PM	1.05945	1.06033			N/A
6/3/2019	AUDNZD.fx	9:30:00 AM	1.06102	1.06098			N/A
6/3/2019	AUDNZD.fx	11:30:00 AM	1.05989	1.05978			N/A
6/3/2019	AUDNZD.fx	1:30:00 PM	1.05965	1.05959			N/A
6/3/2019	AUDNZD.fx	3:30:00 PM	1.0599	1.05988			N/A
6/3/2019	AUDPLN	9:30:00 AM	2.6609	2.6641			N/A
6/3/2019	AUDPLN	11:30:00 AM	2.6613	2.664			N/A
6/3/2019	AUDPLN	1:30:00 PM	2.6623	2.6653			N/A
6/3/2019	AUDPLN	3:30:00 PM	2.6616	2.6646			N/A
6/3/2019	AUDSEK	9:30:00 AM	6.5892	6.5893			N/A
6/3/2019	AUDSEK	11:30:00 AM	6.5946	6.5961			N/A
6/3/2019	AUDSEK	1:30:00 PM	6.5944	6.5972			N/A
6/3/2019	AUDSEK	3:30:00 PM	6.5931	6.5939			N/A
6/3/2019	AUDSEK.fx	9:30:00 AM	6.584	6.5938			N/A
6/3/2019	AUDSEK.fx	11:30:00 AM	6.5901	6.6007			N/A
6/3/2019	AUDSEK.fx	1:30:00 PM	6.5899	6.6017			N/A
6/3/2019	AUDSEK.fx	3:30:00 PM	6.5885	6.5983			N/A
6/3/2019	AUDSGD	9:30:00 AM	0.9523	0.9526			N/A
6/3/2019	AUDSGD	11:30:00 AM	0.9525	0.9526			N/A
6/3/2019	AUDSGD	1:30:00 PM	0.953	0.9533			N/A
6/3/2019	AUDSGD	3:30:00 PM	0.9532	0.9535			N/A
6/3/2019	AUDSGD.fx	9:30:00 AM	0.95243	0.95248			N/A
6/3/2019	AUDSGD.fx	11:30:00 AM	0.95262	0.95249			N/A
6/3/2019	AUDSGD.fx	1:30:00 PM	0.95311	0.95323			N/A
6/3/2019	AUDSGD.fx	3:30:00 PM	0.95332	0.95337			N/A
6/3/2019	AUDUSD	9:30:00 AM	0.69443	0.6945			N/A
6/3/2019	AUDUSD	11:30:00 AM	0.69477	0.69466			N/A
6/3/2019	AUDUSD	1:30:00 PM	0.69555	0.69564			N/A
6/3/2019	AUDUSD	3:30:00 PM	0.69612	0.69622			N/A
6/3/2019	AUDUSD.fx	9:30:00 AM	0.69448	0.69444			N/A
6/3/2019	AUDUSD.fx	11:30:00 AM	0.69482	0.6946			N/A
6/3/2019	AUDUSD.fx	1:30:00 PM	0.6956	0.69558			N/A
6/3/2019	AUDUSD.fx	3:30:00 PM	0.69618	0.69616			N/A

6/3/2019	AUDZAR	9:30:00 AM	10.1167	10.1309			N/A
6/3/2019	AUDZAR	11:30:00 AM	10.1122	10.1251			N/A
6/3/2019	AUDZAR	1:30:00 PM	10.0939	10.1081			N/A
6/3/2019	AUDZAR	3:30:00 PM	10.0965	10.1095			N/A
6/3/2019	AUS200.i	9:30:00 AM	6308.57	6312.97			N/A
6/3/2019	AUS200.i	11:30:00 AM	6302.87	6304.67			N/A
6/3/2019	AUS200.i	1:30:00 PM	6316.67	6319.67			N/A
6/3/2019	AUS200.i	3:30:00 PM	6315.67	6319.67			N/A
6/3/2019	BCHUSD	9:30:00 AM	449.82	450.21			N/A
6/3/2019	BCHUSD	11:30:00 AM	439.9	441.29			N/A
6/3/2019	BCHUSD	1:30:00 PM	443.64	445.2			N/A
6/3/2019	BCHUSD	3:30:00 PM	441.61	443.04			N/A
6/3/2019	CADCHF	9:30:00 AM	0.73937	0.74008			N/A
6/3/2019	CADCHF	11:30:00 AM	0.73729	0.73779			N/A
6/3/2019	CADCHF	1:30:00 PM	0.74011	0.7408			N/A
6/3/2019	CADCHF	3:30:00 PM	0.73885	0.73929			N/A
6/3/2019	CADCHF.fx	9:30:00 AM	0.73971	0.73973			N/A
6/3/2019	CADCHF.fx	11:30:00 AM	0.73763	0.73743			N/A
6/3/2019	CADCHF.fx	1:30:00 PM	0.74045	0.74045			N/A
6/3/2019	CADCHF.fx	3:30:00 PM	0.7392	0.73893			N/A
6/3/2019	CADCZK	9:30:00 AM	17.127	17.142			N/A
6/3/2019	CADCZK	11:30:00 AM	17.101	17.116			N/A
6/3/2019	CADCZK	1:30:00 PM	17.1	17.116			N/A
6/3/2019	CADCZK	3:30:00 PM	17.079	17.093			N/A
6/3/2019	CADDKK	9:30:00 AM	4.95	4.953			N/A
6/3/2019	CADDKK	11:30:00 AM	4.942	4.946			N/A
6/3/2019	CADDKK	1:30:00 PM	4.948	4.951			N/A
6/3/2019	CADDKK	3:30:00 PM	4.942	4.946			N/A
6/3/2019	CADHKD	9:30:00 AM	5.8031	5.807			N/A
6/3/2019	CADHKD	11:30:00 AM	5.7944	5.7981			N/A
6/3/2019	CADHKD	1:30:00 PM	5.8031	5.8067			N/A
6/3/2019	CADHKD	3:30:00 PM	5.805	5.8089			N/A
6/3/2019	CADHUF	9:30:00 AM	215.37	215.39			N/A
6/3/2019	CADHUF	11:30:00 AM	214.62	214.76			N/A

6/3/2019	CADHUF	1:30:00 PM	214.73	214.88			N/A
6/3/2019	CADHUF	3:30:00 PM	214.09	214.18			N/A
6/3/2019	CADJPY	9:30:00 AM	80.161	80.223			N/A
6/3/2019	CADJPY	11:30:00 AM	80.045	80.103			N/A
6/3/2019	CADJPY	1:30:00 PM	80.232	80.298			N/A
6/3/2019	CADJPY	3:30:00 PM	80.219	80.273			N/A
6/3/2019	CADJPY.fx	9:30:00 AM	80.195	80.189			N/A
6/3/2019	CADJPY.fx	11:30:00 AM	80.078	80.068			N/A
6/3/2019	CADJPY.fx	1:30:00 PM	80.265	80.263			N/A
6/3/2019	CADJPY.fx	3:30:00 PM	80.252	80.238			N/A
6/3/2019	CADMXN	9:30:00 AM	14.541	14.5533			N/A
6/3/2019	CADMXN	11:30:00 AM	14.5156	14.5268			N/A
6/3/2019	CADMXN	1:30:00 PM	14.5383	14.5468			N/A
6/3/2019	CADMXN	3:30:00 PM	14.6237	14.6318			N/A
6/3/2019	CADNOK	9:30:00 AM	6.4782	6.4789			N/A
6/3/2019	CADNOK	11:30:00 AM	6.4762	6.479			N/A
6/3/2019	CADNOK	1:30:00 PM	6.4727	6.477			N/A
6/3/2019	CADNOK	3:30:00 PM	6.4614	6.465			N/A
6/3/2019	CADPLN	9:30:00 AM	2.8382	2.8401			N/A
6/3/2019	CADPLN	11:30:00 AM	2.8347	2.8363			N/A
6/3/2019	CADPLN	1:30:00 PM	2.8363	2.8378			N/A
6/3/2019	CADPLN	3:30:00 PM	2.8336	2.8355			N/A
6/3/2019	CADSEK	9:30:00 AM	7.0251	7.0228			N/A
6/3/2019	CADSEK	11:30:00 AM	7.0202	7.0236			N/A
6/3/2019	CADSEK	1:30:00 PM	7.0226	7.0257			N/A
6/3/2019	CADSEK	3:30:00 PM	7.0175	7.0195			N/A
6/3/2019	CADSGD	9:30:00 AM	1.0152	1.0155			N/A
6/3/2019	CADSGD	11:30:00 AM	1.0139	1.0142			N/A
6/3/2019	CADSGD	1:30:00 PM	1.0146	1.0148			N/A
6/3/2019	CADSGD	3:30:00 PM	1.0145	1.0148			N/A
6/3/2019	CADZAR	9:30:00 AM	10.7914	10.8083			N/A
6/3/2019	CADZAR	11:30:00 AM	10.7699	10.7857			N/A
6/3/2019	CADZAR	1:30:00 PM	10.7531	10.7688			N/A
6/3/2019	CADZAR	3:30:00 PM	10.7504	10.7657			N/A

6/3/2019	CHFCZK	9:30:00 AM	23.157	23.172			N/A
6/3/2019	CHFCZK	11:30:00 AM	23.192	23.205			N/A
6/3/2019	CHFCZK	1:30:00 PM	23.098	23.115			N/A
6/3/2019	CHFCZK	3:30:00 PM	23.111	23.124			N/A
6/3/2019	CHFDKK	9:30:00 AM	6.692	6.694			N/A
6/3/2019	CHFDKK	11:30:00 AM	6.704	6.706			N/A
6/3/2019	CHFDKK	1:30:00 PM	6.682	6.685			N/A
6/3/2019	CHFDKK	3:30:00 PM	6.687	6.689			N/A
6/3/2019	CHFDKK.fx	9:30:00 AM	6.6909	6.6969			N/A
6/3/2019	CHFDKK.fx	11:30:00 AM	6.7023	6.7073			N/A
6/3/2019	CHFDKK.fx	1:30:00 PM	6.6806	6.6868			N/A
6/3/2019	CHFDKK.fx	3:30:00 PM	6.6856	6.6905			N/A
6/3/2019	CHFHKD	9:30:00 AM	7.8456	7.8495			N/A
6/3/2019	CHFHKD	11:30:00 AM	7.8574	7.861			N/A
6/3/2019	CHFHKD	1:30:00 PM	7.8384	7.8416			N/A
6/3/2019	CHFHKD	3:30:00 PM	7.8571	7.8585			N/A
6/3/2019	CHFHUF	9:30:00 AM	291.07	291.28			N/A
6/3/2019	CHFHUF	11:30:00 AM	290.94	291.29			N/A
6/3/2019	CHFHUF	1:30:00 PM	289.92	290.29			N/A
6/3/2019	CHFHUF	3:30:00 PM	289.57	289.92			N/A
6/3/2019	CHFJPY	9:30:00 AM	108.376	108.439			N/A
6/3/2019	CHFJPY	11:30:00 AM	108.544	108.6			N/A
6/3/2019	CHFJPY	1:30:00 PM	108.363	108.431			N/A
6/3/2019	CHFJPY	3:30:00 PM	108.546	108.603			N/A
6/3/2019	CHFJPY.fx	9:30:00 AM	108.409	108.406			N/A
6/3/2019	CHFJPY.fx	11:30:00 AM	108.578	108.565			N/A
6/3/2019	CHFJPY.fx	1:30:00 PM	108.396	108.396			N/A
6/3/2019	CHFJPY.fx	3:30:00 PM	108.579	108.569			N/A
6/3/2019	CHFMXN	9:30:00 AM	19.6583	19.6744			N/A
6/3/2019	CHFMXN	11:30:00 AM	19.683	19.6955			N/A
6/3/2019	CHFMXN	1:30:00 PM	19.6348	19.6467			N/A
6/3/2019	CHFMXN	3:30:00 PM	19.7905	19.795			N/A
6/3/2019	CHFNOK	9:30:00 AM	8.7647	8.7634			N/A
6/3/2019	CHFNOK	11:30:00 AM	8.7847	8.7889			N/A

6/3/2019	CHFNOK	1:30:00 PM	8.7417	8.7498			N/A
6/3/2019	CHFNOK	3:30:00 PM	8.7432	8.7474			N/A
6/3/2019	CHFNOK.fx	9:30:00 AM	8.76559	8.75996			N/A
6/3/2019	CHFNOK.fx	11:30:00 AM	8.78826	8.7854			N/A
6/3/2019	CHFNOK.fx	1:30:00 PM	8.7452	8.74629			N/A
6/3/2019	CHFNOK.fx	3:30:00 PM	8.74682	8.7438			N/A
6/3/2019	CHFPLN	9:30:00 AM	3.8372	3.8403			N/A
6/3/2019	CHFPLN	11:30:00 AM	3.8433	3.8459			N/A
6/3/2019	CHFPLN	1:30:00 PM	3.8305	3.8335			N/A
6/3/2019	CHFPLN	3:30:00 PM	3.8346	3.8371			N/A
6/3/2019	CHFPLN.fx	9:30:00 AM	3.8345	3.84275			N/A
6/3/2019	CHFPLN.fx	11:30:00 AM	3.84115	3.84803			N/A
6/3/2019	CHFPLN.fx	1:30:00 PM	3.82812	3.83583			N/A
6/3/2019	CHFPLN.fx	3:30:00 PM	3.83226	3.83943			N/A
6/3/2019	CHFSEK	9:30:00 AM	9.4981	9.4945			N/A
6/3/2019	CHFSEK	11:30:00 AM	9.5201	9.5235			N/A
6/3/2019	CHFSEK	1:30:00 PM	9.4845	9.4888			N/A
6/3/2019	CHFSEK	3:30:00 PM	9.4961	9.4955			N/A
6/3/2019	CHFSGD	9:30:00 AM	1.3731	1.3735			N/A
6/3/2019	CHFSGD	11:30:00 AM	1.3754	1.3756			N/A
6/3/2019	CHFSGD	1:30:00 PM	1.371	1.3714			N/A
6/3/2019	CHFSGD	3:30:00 PM	1.3732	1.3733			N/A
6/3/2019	CHFSGD.fx	9:30:00 AM	1.37325	1.37335			N/A
6/3/2019	CHFSGD.fx	11:30:00 AM	1.37561	1.37537			N/A
6/3/2019	CHFSGD.fx	1:30:00 PM	1.37125	1.37123			N/A
6/3/2019	CHFSGD.fx	3:30:00 PM	1.37345	1.37307			N/A
6/3/2019	CHFZAR	9:30:00 AM	14.5923	14.6072			N/A
6/3/2019	CHFZAR	11:30:00 AM	14.6077	14.6179			N/A
6/3/2019	CHFZAR	1:30:00 PM	14.5267	14.5405			N/A
6/3/2019	CHFZAR	3:30:00 PM	14.5505	14.5601			N/A
6/3/2019	CZKJPY	9:30:00 AM					N/A
6/3/2019	CZKJPY	11:30:00 AM	4.68	4.683			N/A
6/3/2019	CZKJPY	1:30:00 PM	4.691	4.694			N/A
6/3/2019	CZKJPY	3:30:00 PM	4.696	4.699			N/A



6/3/2019	DAX30.i	9:30:00 AM	11641.61	11636.61			N/A
6/3/2019	DAX30.i	11:30:00 AM	11664.86	11660.86			N/A
6/3/2019	DAX30.i	1:30:00 PM	11708.86	11708.61			N/A
6/3/2019	DAX30.i	3:30:00 PM	11702.61	11702.36			N/A
6/3/2019	DJ30.i	9:30:00 AM					N/A
6/3/2019	DJ30.i	11:30:00 AM					N/A
6/3/2019	DJ30.i	1:30:00 PM					N/A
6/3/2019	DJ30.i	3:30:00 PM					N/A
6/3/2019	DKKJPY	9:30:00 AM					N/A
6/3/2019	DKKJPY	11:30:00 AM					N/A
6/3/2019	DKKJPY	1:30:00 PM					N/A
6/3/2019	DKKJPY	3:30:00 PM					N/A
6/3/2019	EURAUD	9:30:00 AM	1.60769	1.60797			N/A
6/3/2019	EURAUD	11:30:00 AM	1.60759	1.60774			N/A
6/3/2019	EURAUD	1:30:00 PM	1.6066	1.60689			N/A
6/3/2019	EURAUD	3:30:00 PM	1.6075	1.60784			N/A
6/3/2019	EURAUD.fx	9:30:00 AM	1.60788	1.60776			N/A
6/3/2019	EURAUD.fx	11:30:00 AM	1.60779	1.60751			N/A
6/3/2019	EURAUD.fx	1:30:00 PM	1.60681	1.60666			N/A
6/3/2019	EURAUD.fx	3:30:00 PM	1.60771	1.60761			N/A
6/3/2019	EURCAD	9:30:00 AM	1.5078	1.50846			N/A
6/3/2019	EURCAD	11:30:00 AM	1.50989	1.51053			N/A
6/3/2019	EURCAD	1:30:00 PM	1.50865	1.50943			N/A
6/3/2019	EURCAD	3:30:00 PM	1.5105	1.51102			N/A
6/3/2019	EURCAD.fx	9:30:00 AM	1.50821	1.50802			N/A
6/3/2019	EURCAD.fx	11:30:00 AM	1.5103	1.5101			N/A
6/3/2019	EURCAD.fx	1:30:00 PM	1.50907	1.50902			N/A
6/3/2019	EURCAD.fx	3:30:00 PM	1.51092	1.51059			N/A
6/3/2019	EURCHF	9:30:00 AM	1.11558	1.11565			N/A
6/3/2019	EURCHF	11:30:00 AM	1.1139	1.11379			N/A
6/3/2019	EURCHF	1:30:00 PM	1.1173	1.11743			N/A
6/3/2019	EURCHF	3:30:00 PM	1.11665	1.11656			N/A
6/3/2019	EURCHF.fx	9:30:00 AM	1.11563	1.11559			N/A
6/3/2019	EURCHF.fx	11:30:00 AM	1.11396	1.11372			N/A

6/3/2019	EURCHF.fx	1:30:00 PM	1.11735	1.11737			N/A
6/3/2019	EURCHF.fx	3:30:00 PM	1.11671	1.11649			N/A
6/3/2019	EURCZK	9:30:00 AM	25.819	25.858			N/A
6/3/2019	EURCZK	11:30:00 AM	25.815	25.855			N/A
6/3/2019	EURCZK	1:30:00 PM	25.795	25.834			N/A
6/3/2019	EURCZK	3:30:00 PM	25.791	25.83			N/A
6/3/2019	EURDKK	9:30:00 AM	7.4669	7.4679			N/A
6/3/2019	EURDKK	11:30:00 AM	7.4635	7.4648			N/A
6/3/2019	EURDKK	1:30:00 PM	7.4662	7.4669			N/A
6/3/2019	EURDKK	3:30:00 PM	7.4657	7.467			N/A
6/3/2019	EURGBP	9:30:00 AM	0.88431	0.88434			N/A
6/3/2019	EURGBP	11:30:00 AM	0.88348	0.88324			N/A
6/3/2019	EURGBP	1:30:00 PM	0.88402	0.88404			N/A
6/3/2019	EURGBP	3:30:00 PM	0.88686	0.88684			N/A
6/3/2019	EURGBP.fx	9:30:00 AM	0.88436	0.88429			N/A
6/3/2019	EURGBP.fx	11:30:00 AM	0.8835	0.88319			N/A
6/3/2019	EURGBP.fx	1:30:00 PM	0.88405	0.88399			N/A
6/3/2019	EURGBP.fx	3:30:00 PM	0.8869	0.8868			N/A
6/3/2019	EURHKD	9:30:00 AM	8.7534	8.7571			N/A
6/3/2019	EURHKD	11:30:00 AM	8.7522	8.7562			N/A
6/3/2019	EURHKD	1:30:00 PM	8.7584	8.763			N/A
6/3/2019	EURHKD	3:30:00 PM	8.7716	8.7755			N/A
6/3/2019	EURHKD.fx	9:30:00 AM	8.75623	8.75427			N/A
6/3/2019	EURHKD.fx	11:30:00 AM	8.75501	8.75331			N/A
6/3/2019	EURHKD.fx	1:30:00 PM	8.76128	8.76011			N/A
6/3/2019	EURHKD.fx	3:30:00 PM	8.7744	8.77257			N/A
6/3/2019	EURHUF	9:30:00 AM	324.7	325.38			N/A
6/3/2019	EURHUF	11:30:00 AM	324.13	324.86			N/A
6/3/2019	EURHUF	1:30:00 PM	323.88	324.48			N/A
6/3/2019	EURHUF	3:30:00 PM	323.28	324			N/A
6/3/2019	EURHUF.fx	9:30:00 AM	324.963	325.144			N/A
6/3/2019	EURHUF.fx	11:30:00 AM	324.401	324.571			N/A
6/3/2019	EURHUF.fx	1:30:00 PM	324.16	324.345			N/A
6/3/2019	EURHUF.fx	3:30:00 PM	323.559	323.728			N/A

6/3/2019	EURJPY	9:30:00 AM	120.937	120.938			N/A
6/3/2019	EURJPY	11:30:00 AM	120.932	120.921			N/A
6/3/2019	EURJPY	1:30:00 PM	121.119	121.12			N/A
6/3/2019	EURJPY	3:30:00 PM	121.236	121.23			N/A
6/3/2019	EURJPY.fx	9:30:00 AM	120.939	120.934			N/A
6/3/2019	EURJPY.fx	11:30:00 AM	120.936	120.917			N/A
6/3/2019	EURJPY.fx	1:30:00 PM	121.122	121.115			N/A
6/3/2019	EURJPY.fx	3:30:00 PM	121.238	121.226			N/A
6/3/2019	EURMXN	9:30:00 AM	21.9349	21.952			N/A
6/3/2019	EURMXN	11:30:00 AM	21.9254	21.9433			N/A
6/3/2019	EURMXN	1:30:00 PM	21.9409	21.9557			N/A
6/3/2019	EURMXN	3:30:00 PM	22.0974	22.1059			N/A
6/3/2019	EURMXN.fx	9:30:00 AM	21.9436	21.9436			N/A
6/3/2019	EURMXN.fx	11:30:00 AM	21.9342	21.9345			N/A
6/3/2019	EURMXN.fx	1:30:00 PM	21.9497	21.9469			N/A
6/3/2019	EURMXN.fx	3:30:00 PM	22.1068	22.0962			N/A
6/3/2019	EURNOK	9:30:00 AM	9.7756	9.7781			N/A
6/3/2019	EURNOK	11:30:00 AM	9.7819	9.792			N/A
6/3/2019	EURNOK	1:30:00 PM	9.766	9.7783			N/A
6/3/2019	EURNOK	3:30:00 PM	9.7603	9.7699			N/A
6/3/2019	EURNOK.fx	9:30:00 AM	9.7793	9.77314			N/A
6/3/2019	EURNOK.fx	11:30:00 AM	9.78741	9.78655			N/A
6/3/2019	EURNOK.fx	1:30:00 PM	9.77146	9.77282			N/A
6/3/2019	EURNOK.fx	3:30:00 PM	9.76582	9.76447			N/A
6/3/2019	EURNZD	9:30:00 AM	1.70618	1.70696			N/A
6/3/2019	EURNZD	11:30:00 AM	1.70417	1.70484			N/A
6/3/2019	EURNZD	1:30:00 PM	1.70281	1.70349			N/A
6/3/2019	EURNZD	3:30:00 PM	1.70421	1.70498			N/A
6/3/2019	EURNZD.fx	9:30:00 AM	1.70658	1.70653			N/A
6/3/2019	EURNZD.fx	11:30:00 AM	1.70459	1.7044			N/A
6/3/2019	EURNZD.fx	1:30:00 PM	1.70319	1.70307			N/A
6/3/2019	EURNZD.fx	3:30:00 PM	1.70462	1.70455			N/A
6/3/2019	EURPLN	9:30:00 AM	4.281	4.2841			N/A
6/3/2019	EURPLN	11:30:00 AM	4.2806	4.2838			N/A

6/3/2019	EURPLN	1:30:00 PM	4.28	4.2832			N/A
6/3/2019	EURPLN	3:30:00 PM	4.2814	4.2844			N/A
6/3/2019	EURPLN.fx	9:30:00 AM	4.28013	4.28492			N/A
6/3/2019	EURPLN.fx	11:30:00 AM	4.28007	4.28442			N/A
6/3/2019	EURPLN.fx	1:30:00 PM	4.27942	4.28372			N/A
6/3/2019	EURPLN.fx	3:30:00 PM	4.28089	4.28482			N/A
6/3/2019	EURRUB	9:30:00 AM					N/A
6/3/2019	EURRUB	11:30:00 AM	72.911	73.351			N/A
6/3/2019	EURRUB	1:30:00 PM	72.724	73.154			N/A
6/3/2019	EURRUB	3:30:00 PM	72.728	73.148			N/A
6/3/2019	EURSEK	9:30:00 AM	10.5997	10.5977			N/A
6/3/2019	EURSEK	11:30:00 AM	10.6048	10.6085			N/A
6/3/2019	EURSEK	1:30:00 PM	10.5992	10.6038			N/A
6/3/2019	EURSEK	3:30:00 PM	10.6034	10.605			N/A
6/3/2019	EURSEK.fx	9:30:00 AM	10.60078	10.59615			N/A
6/3/2019	EURSEK.fx	11:30:00 AM	10.6066	10.60698			N/A
6/3/2019	EURSEK.fx	1:30:00 PM	10.60085	10.60217			N/A
6/3/2019	EURSEK.fx	3:30:00 PM	10.60496	10.60304			N/A
6/3/2019	EURSGD	9:30:00 AM	1.5317	1.5324			N/A
6/3/2019	EURSGD	11:30:00 AM	1.5317	1.5324			N/A
6/3/2019	EURSGD	1:30:00 PM	1.5318	1.5325			N/A
6/3/2019	EURSGD	3:30:00 PM	1.533	1.5337			N/A
6/3/2019	EURSGD.fx	9:30:00 AM	1.53209	1.53197			N/A
6/3/2019	EURSGD.fx	11:30:00 AM	1.53212	1.53198			N/A
6/3/2019	EURSGD.fx	1:30:00 PM	1.53219	1.53212			N/A
6/3/2019	EURSGD.fx	3:30:00 PM	1.53343	1.53331			N/A
6/3/2019	EURUSD	9:30:00 AM	1.11686	1.11679			N/A
6/3/2019	EURUSD	11:30:00 AM	1.11714	1.11708			N/A
6/3/2019	EURUSD	1:30:00 PM	1.11791	1.11793			N/A
6/3/2019	EURUSD	3:30:00 PM	1.11953	1.11947			N/A
6/3/2019	EURUSD.fx	9:30:00 AM	1.11707	1.11688			N/A
6/3/2019	EURUSD.fx	11:30:00 AM	1.11734	1.11717			N/A
6/3/2019	EURUSD.fx	1:30:00 PM	1.11811	1.11801			N/A
6/3/2019	EURUSD.fx	3:30:00 PM	1.11973	1.11956			N/A

6/3/2019	EURZAR	9:30:00 AM	16.2862	16.3047			N/A
6/3/2019	EURZAR	11:30:00 AM	16.2781	16.2942			N/A
6/3/2019	EURZAR	1:30:00 PM	16.2348	16.2536			N/A
6/3/2019	EURZAR	3:30:00 PM	16.2479	16.2649			N/A
6/3/2019	EURZAR.fx	9:30:00 AM	16.285	16.30544			N/A
6/3/2019	EURZAR.fx	11:30:00 AM	16.27785	16.29495			N/A
6/3/2019	EURZAR.fx	1:30:00 PM	16.23454	16.25385			N/A
6/3/2019	EURZAR.fx	3:30:00 PM	16.24791	16.26575			N/A
6/3/2019	GBPAUD	9:30:00 AM	1.81862	1.81915			N/A
6/3/2019	GBPAUD	11:30:00 AM	1.82082	1.8208			N/A
6/3/2019	GBPAUD	1:30:00 PM	1.81802	1.8185			N/A
6/3/2019	GBPAUD	3:30:00 PM	1.81318	1.81382			N/A
6/3/2019	GBPAUD.fx	9:30:00 AM	1.81902	1.81875			N/A
6/3/2019	GBPAUD.fx	11:30:00 AM	1.8212	1.82054			N/A
6/3/2019	GBPAUD.fx	1:30:00 PM	1.81841	1.8181			N/A
6/3/2019	GBPAUD.fx	3:30:00 PM	1.81358	1.81342			N/A
6/3/2019	GBPCAD	9:30:00 AM	1.70515	1.70583			N/A
6/3/2019	GBPCAD	11:30:00 AM	1.70967	1.70956			N/A
6/3/2019	GBPCAD	1:30:00 PM	1.70672	1.70731			N/A
6/3/2019	GBPCAD	3:30:00 PM	1.70332	1.70374			N/A
6/3/2019	GBPCAD.fx	9:30:00 AM	1.70552	1.70545			N/A
6/3/2019	GBPCAD.fx	11:30:00 AM	1.71006	1.70923			N/A
6/3/2019	GBPCAD.fx	1:30:00 PM	1.70713	1.70692			N/A
6/3/2019	GBPCAD.fx	3:30:00 PM	1.70372	1.70332			N/A
6/3/2019	GBPCHF	9:30:00 AM	1.26137	1.26175			N/A
6/3/2019	GBPCHF	11:30:00 AM	1.26099	1.26081			N/A
6/3/2019	GBPCHF	1:30:00 PM	1.26382	1.26414			N/A
6/3/2019	GBPCHF	3:30:00 PM	1.25889	1.25925			N/A
6/3/2019	GBPCHF.fx	9:30:00 AM	1.26155	1.26156			N/A
6/3/2019	GBPCHF.fx	11:30:00 AM	1.26117	1.26065			N/A
6/3/2019	GBPCHF.fx	1:30:00 PM	1.26401	1.26393			N/A
6/3/2019	GBPCHF.fx	3:30:00 PM	1.25908	1.25905			N/A
6/3/2019	GBPCZK	9:30:00 AM	29.208	29.227			N/A
6/3/2019	GBPCZK	11:30:00 AM	29.241	29.251			N/A

6/3/2019	GBPCZK	1:30:00 PM	29.19	29.21			N/A
6/3/2019	GBPCZK	3:30:00 PM	29.093	29.113			N/A
6/3/2019	GBPDKK	9:30:00 AM	8.44	8.45			N/A
6/3/2019	GBPDKK	11:30:00 AM	8.451	8.458			N/A
6/3/2019	GBPDKK	1:30:00 PM	8.443	8.453			N/A
6/3/2019	GBPDKK	3:30:00 PM	8.416	8.426			N/A
6/3/2019	GBPDKK.fx	9:30:00 AM	8.438	8.4504			N/A
6/3/2019	GBPDKK.fx	11:30:00 AM	8.4492	8.4592			N/A
6/3/2019	GBPDKK.fx	1:30:00 PM	8.4415	8.4537			N/A
6/3/2019	GBPDKK.fx	3:30:00 PM	8.4146	8.4264			N/A
6/3/2019	GBPHKD	9:30:00 AM	9.8957	9.9016			N/A
6/3/2019	GBPHKD	11:30:00 AM	9.9064	9.9076			N/A
6/3/2019	GBPHKD	1:30:00 PM	9.9057	9.9093			N/A
6/3/2019	GBPHKD	3:30:00 PM	9.8892	9.8928			N/A
6/3/2019	GBPHUF	9:30:00 AM	367.14	367.4			N/A
6/3/2019	GBPHUF	11:30:00 AM	366.82	367.19			N/A
6/3/2019	GBPHUF	1:30:00 PM	366.4	366.84			N/A
6/3/2019	GBPHUF	3:30:00 PM	364.54	364.95			N/A
6/3/2019	GBPJPY	9:30:00 AM	136.748	136.776			N/A
6/3/2019	GBPJPY	11:30:00 AM	136.902	136.891			N/A
6/3/2019	GBPJPY	1:30:00 PM	136.997	137.021			N/A
6/3/2019	GBPJPY	3:30:00 PM	136.681	136.72			N/A
6/3/2019	GBPJPY.fx	9:30:00 AM	136.767	136.756			N/A
6/3/2019	GBPJPY.fx	11:30:00 AM	136.921	136.875			N/A
6/3/2019	GBPJPY.fx	1:30:00 PM	137.017	137.002			N/A
6/3/2019	GBPJPY.fx	3:30:00 PM	136.701	136.699			N/A
6/3/2019	GBPMXN	9:30:00 AM	24.7997	24.8124			N/A
6/3/2019	GBPMXN	11:30:00 AM	24.8193	24.823			N/A
6/3/2019	GBPMXN	1:30:00 PM	24.8144	24.8269			N/A
6/3/2019	GBPMXN	3:30:00 PM	24.9151	24.917			N/A
6/3/2019	GBPNOK	9:30:00 AM	11.0535	11.0552			N/A
6/3/2019	GBPNOK	11:30:00 AM	11.0772	11.0834			N/A
6/3/2019	GBPNOK	1:30:00 PM	11.0491	11.0594			N/A
6/3/2019	GBPNOK	3:30:00 PM	11.0075	11.0145			N/A

6/3/2019	GBPNOK.fx	9:30:00 AM	11.05392	11.05114			N/A
6/3/2019	GBPNOK.fx	11:30:00 AM	11.08196	11.07921			N/A
6/3/2019	GBPNOK.fx	1:30:00 PM	11.05408	11.05475			N/A
6/3/2019	GBPNOK.fx	3:30:00 PM	11.0126	11.00919			N/A
6/3/2019	GBPNZD	9:30:00 AM	1.92952	1.93014			N/A
6/3/2019	GBPNZD	11:30:00 AM	1.92968	1.92971			N/A
6/3/2019	GBPNZD	1:30:00 PM	1.92633	1.92689			N/A
6/3/2019	GBPNZD	3:30:00 PM	1.92193	1.9224			N/A
6/3/2019	GBPNZD.fx	9:30:00 AM	1.92987	1.92977			N/A
6/3/2019	GBPNZD.fx	11:30:00 AM	1.93006	1.92934			N/A
6/3/2019	GBPNZD.fx	1:30:00 PM	1.92669	1.92653			N/A
6/3/2019	GBPNZD.fx	3:30:00 PM	1.92227	1.92199			N/A
6/3/2019	GBPPLN	9:30:00 AM	4.8419	4.8433			N/A
6/3/2019	GBPPLN	11:30:00 AM	4.8476	4.8481			N/A
6/3/2019	GBPPLN	1:30:00 PM	4.8426	4.844			N/A
6/3/2019	GBPPLN	3:30:00 PM	4.8289	4.8301			N/A
6/3/2019	GBPPLN.fx	9:30:00 AM	4.83949	4.84568			N/A
6/3/2019	GBPPLN.fx	11:30:00 AM	4.84536	4.85013			N/A
6/3/2019	GBPPLN.fx	1:30:00 PM	4.84047	4.84622			N/A
6/3/2019	GBPPLN.fx	3:30:00 PM	4.82695	4.83216			N/A
6/3/2019	GBPSEK	9:30:00 AM	11.9842	11.9854			N/A
6/3/2019	GBPSEK	11:30:00 AM	12.0057	12.0084			N/A
6/3/2019	GBPSEK	1:30:00 PM	11.988	11.9965			N/A
6/3/2019	GBPSEK	3:30:00 PM	11.9552	11.9584			N/A
6/3/2019	GBPSEK.fx	9:30:00 AM	11.97909	11.98931			N/A
6/3/2019	GBPSEK.fx	11:30:00 AM	12.00202	12.01464			N/A
6/3/2019	GBPSEK.fx	1:30:00 PM	11.98456	12.00021			N/A
6/3/2019	GBPSEK.fx	3:30:00 PM	11.95163	11.96185			N/A
6/3/2019	GBPSGD	9:30:00 AM	1.7322	1.7328			N/A
6/3/2019	GBPSGD	11:30:00 AM	1.7343	1.7342			N/A
6/3/2019	GBPSGD	1:30:00 PM	1.7328	1.7334			N/A
6/3/2019	GBPSGD	3:30:00 PM	1.7288	1.7292			N/A
6/3/2019	GBPSGD.fx	9:30:00 AM	1.73033	1.73464			N/A
6/3/2019	GBPSGD.fx	11:30:00 AM	1.73247	1.73617			N/A

6/3/2019	GBPSGD.fx	1:30:00 PM	1.73104	1.73517			N/A
6/3/2019	GBPSGD.fx	3:30:00 PM	1.72694	1.73098			N/A
6/3/2019	GBPUSD	9:30:00 AM	1.26319	1.26317			N/A
6/3/2019	GBPUSD	11:30:00 AM	1.26505	1.26451			N/A
6/3/2019	GBPUSD	1:30:00 PM	1.26476	1.26466			N/A
6/3/2019	GBPUSD	3:30:00 PM	1.26259	1.26244			N/A
6/3/2019	GBPUSD.fx	9:30:00 AM	1.26324	1.26311			N/A
6/3/2019	GBPUSD.fx	11:30:00 AM	1.2651	1.26447			N/A
6/3/2019	GBPUSD.fx	1:30:00 PM	1.26481	1.2646			N/A
6/3/2019	GBPUSD.fx	3:30:00 PM	1.26265	1.26238			N/A
6/3/2019	GBPZAR	9:30:00 AM	18.4142	18.4419			N/A
6/3/2019	GBPZAR	11:30:00 AM	18.4259	18.4466			N/A
6/3/2019	GBPZAR	1:30:00 PM	18.3609	18.3892			N/A
6/3/2019	GBPZAR	3:30:00 PM	18.319	18.342			N/A
6/3/2019	GBPZAR.fx	9:30:00 AM	18.4213	18.4364			N/A
6/3/2019	GBPZAR.fx	11:30:00 AM	18.433	18.4422			N/A
6/3/2019	GBPZAR.fx	1:30:00 PM	18.3682	18.3822			N/A
6/3/2019	GBPZAR.fx	3:30:00 PM	18.3261	18.3352			N/A
6/3/2019	GOLD	9:30:00 AM	1310.82	1310.84			N/A
6/3/2019	GOLD	11:30:00 AM	1314.89	1315.18			N/A
6/3/2019	GOLD	1:30:00 PM	1317.03	1317.03			N/A
6/3/2019	GOLD	3:30:00 PM	1317.76	1317.9			N/A
6/3/2019	HKDJPY	9:30:00 AM	13.81	13.83			N/A
6/3/2019	HKDJPY	11:30:00 AM	13.81	13.82			N/A
6/3/2019	HKDJPY	1:30:00 PM	13.83	13.84			N/A
6/3/2019	HKDJPY	3:30:00 PM	13.82	13.83			N/A
6/3/2019	HKDJPY.fx	9:30:00 AM	13.81	13.815			N/A
6/3/2019	HKDJPY.fx	11:30:00 AM	13.809	13.816			N/A
6/3/2019	HKDJPY.fx	1:30:00 PM	13.821	13.829			N/A
6/3/2019	HKDJPY.fx	3:30:00 PM	13.814	13.819			N/A
6/3/2019	HUFJPY	9:30:00 AM	0.3724	0.3727			N/A
6/3/2019	HUFJPY	11:30:00 AM	0.373	0.3732			N/A
6/3/2019	HUFJPY	1:30:00 PM	0.3737	0.374			N/A
6/3/2019	HUFJPY	3:30:00 PM	0.3748	0.3751			N/A



6/3/2019	JP225.i	9:30:00 AM	20377.85	20392.85			N/A
6/3/2019	JP225.i	11:30:00 AM	20357.85	20370.35			N/A
6/3/2019	JP225.i	1:30:00 PM	20426.18	20442.85			N/A
6/3/2019	JP225.i	3:30:00 PM	20417.85	20432.85			N/A
6/3/2019	MXNJPY	9:30:00 AM					N/A
6/3/2019	MXNJPY	11:30:00 AM	5.51	5.52			N/A
6/3/2019	MXNJPY	1:30:00 PM	5.52	5.53			N/A
6/3/2019	MXNJPY	3:30:00 PM	5.49	5.49			N/A
6/3/2019	NASDAQ.i	9:30:00 AM					N/A
6/3/2019	NASDAQ.i	11:30:00 AM					N/A
6/3/2019	NASDAQ.i	1:30:00 PM					N/A
6/3/2019	NASDAQ.i	3:30:00 PM					N/A
6/3/2019	NOKJPY	9:30:00 AM	12.36	12.38			N/A
6/3/2019	NOKJPY	11:30:00 AM	12.35	12.37			N/A
6/3/2019	NOKJPY	1:30:00 PM	12.38	12.41			N/A
6/3/2019	NOKJPY	3:30:00 PM	12.4	12.43			N/A
6/3/2019	NOKJPY.fx	9:30:00 AM	12.372	12.376			N/A
6/3/2019	NOKJPY.fx	11:30:00 AM	12.355	12.357			N/A
6/3/2019	NOKJPY.fx	1:30:00 PM	12.39	12.398			N/A
6/3/2019	NOKJPY.fx	3:30:00 PM	12.414	12.416			N/A
6/3/2019	NZDCAD	9:30:00 AM	0.8834	0.88407			N/A
6/3/2019	NZDCAD	11:30:00 AM	0.88568	0.88625			N/A
6/3/2019	NZDCAD	1:30:00 PM	0.88572	0.88634			N/A
6/3/2019	NZDCAD	3:30:00 PM	0.886	0.88656			N/A
6/3/2019	NZDCAD.fx	9:30:00 AM	0.88373	0.88373			N/A
6/3/2019	NZDCAD.fx	11:30:00 AM	0.88603	0.88591			N/A
6/3/2019	NZDCAD.fx	1:30:00 PM	0.88605	0.886			N/A
6/3/2019	NZDCAD.fx	3:30:00 PM	0.88633	0.88621			N/A
6/3/2019	NZDCHF	9:30:00 AM	0.65334	0.65406			N/A
6/3/2019	NZDCHF	11:30:00 AM	0.6532	0.65373			N/A
6/3/2019	NZDCHF	1:30:00 PM	0.65574	0.65641			N/A
6/3/2019	NZDCHF	3:30:00 PM	0.65474	0.65536			N/A
6/3/2019	NZDCHF.fx	9:30:00 AM	0.65367	0.65371			N/A
6/3/2019	NZDCHF.fx	11:30:00 AM	0.65354	0.65337			N/A

6/3/2019	NZDCHF.fx	1:30:00 PM	0.65608	0.65605			N/A
6/3/2019	NZDCHF.fx	3:30:00 PM	0.65508	0.65501			N/A
6/3/2019	NZDCZK	9:30:00 AM	15.134	15.146			N/A
6/3/2019	NZDCZK	11:30:00 AM	15.15	15.162			N/A
6/3/2019	NZDCZK	1:30:00 PM	15.15	15.162			N/A
6/3/2019	NZDCZK	3:30:00 PM	15.134	15.147			N/A
6/3/2019	NZDDKK	9:30:00 AM	4.373	4.375			N/A
6/3/2019	NZDDKK	11:30:00 AM					N/A
6/3/2019	NZDDKK	1:30:00 PM					N/A
6/3/2019	NZDDKK	3:30:00 PM					N/A
6/3/2019	NZDHKD	9:30:00 AM	5.1272	5.1299			N/A
6/3/2019	NZDHKD	11:30:00 AM	5.1324	5.1353			N/A
6/3/2019	NZDHKD	1:30:00 PM	5.141	5.1433			N/A
6/3/2019	NZDHKD	3:30:00 PM	5.1445	5.147			N/A
6/3/2019	NZDHUF	9:30:00 AM	190.2	190.39			N/A
6/3/2019	NZDHUF	11:30:00 AM	190.03	190.32			N/A
6/3/2019	NZDHUF	1:30:00 PM	190.14	190.42			N/A
6/3/2019	NZDHUF	3:30:00 PM	189.61	189.87			N/A
6/3/2019	NZDJPY	9:30:00 AM	70.832	70.899			N/A
6/3/2019	NZDJPY	11:30:00 AM	70.918	70.977			N/A
6/3/2019	NZDJPY	1:30:00 PM	71.082	71.152			N/A
6/3/2019	NZDJPY	3:30:00 PM	71.086	71.153			N/A
6/3/2019	NZDJPY.fx	9:30:00 AM	70.864	70.866			N/A
6/3/2019	NZDJPY.fx	11:30:00 AM	70.949	70.944			N/A
6/3/2019	NZDJPY.fx	1:30:00 PM	71.113	71.119			N/A
6/3/2019	NZDJPY.fx	3:30:00 PM	71.118	71.12			N/A
6/3/2019	NZDMXN	9:30:00 AM	12.8493	12.8546			N/A
6/3/2019	NZDMXN	11:30:00 AM	12.8601	12.8641			N/A
6/3/2019	NZDMXN	1:30:00 PM	12.8796	12.8832			N/A
6/3/2019	NZDMXN	3:30:00 PM	12.9601	12.9613			N/A
6/3/2019	NZDNOK	9:30:00 AM	5.7239	5.7239			N/A
6/3/2019	NZDNOK	11:30:00 AM	5.7355	5.7394			N/A
6/3/2019	NZDNOK	1:30:00 PM	5.7337	5.7371			N/A
6/3/2019	NZDNOK	3:30:00 PM	5.7251	5.7282			N/A

6/3/2019	NZDPLN	9:30:00 AM	2.5076	2.509			N/A
6/3/2019	NZDPLN	11:30:00 AM	2.5105	2.5119			N/A
6/3/2019	NZDPLN	1:30:00 PM	2.5125	2.5136			N/A
6/3/2019	NZDPLN	3:30:00 PM	2.5112	2.5125			N/A
6/3/2019	NZDSEK	9:30:00 AM	6.2048	6.2067			N/A
6/3/2019	NZDSEK	11:30:00 AM	6.2165	6.2219			N/A
6/3/2019	NZDSEK	1:30:00 PM	6.2188	6.2253			N/A
6/3/2019	NZDSEK	3:30:00 PM	6.2158	6.221			N/A
6/3/2019	NZDSGD	9:30:00 AM	0.8974	0.8978			N/A
6/3/2019	NZDSGD	11:30:00 AM	0.8985	0.8991			N/A
6/3/2019	NZDSGD	1:30:00 PM	0.8993	0.8999			N/A
6/3/2019	NZDSGD	3:30:00 PM	0.8992	0.8998			N/A
6/3/2019	NZDSGD.fx	9:30:00 AM	0.8974	0.89797			N/A
6/3/2019	NZDSGD.fx	11:30:00 AM	0.89848	0.899			N/A
6/3/2019	NZDSGD.fx	1:30:00 PM	0.89926	0.89982			N/A
6/3/2019	NZDSGD.fx	3:30:00 PM	0.89924	0.89978			N/A
6/3/2019	NZDUSD	9:30:00 AM	0.65444	0.65452			N/A
6/3/2019	NZDUSD	11:30:00 AM	0.65542	0.65543			N/A
6/3/2019	NZDUSD	1:30:00 PM	0.65636	0.65647			N/A
6/3/2019	NZDUSD	3:30:00 PM	0.65675	0.65684			N/A
6/3/2019	NZDUSD.fx	9:30:00 AM	0.6545	0.65453			N/A
6/3/2019	NZDUSD.fx	11:30:00 AM	0.6555	0.65544			N/A
6/3/2019	NZDUSD.fx	1:30:00 PM	0.65643	0.65648			N/A
6/3/2019	NZDUSD.fx	3:30:00 PM	0.65682	0.65685			N/A
6/3/2019	NZDZAR	9:30:00 AM	9.5325	9.5495			N/A
6/3/2019	NZDZAR	11:30:00 AM	9.5387	9.5545			N/A
6/3/2019	NZDZAR	1:30:00 PM	9.5241	9.5403			N/A
6/3/2019	NZDZAR	3:30:00 PM	9.5235	9.5391			N/A
6/3/2019	SEKJPY	9:30:00 AM	11.41	11.42			N/A
6/3/2019	SEKJPY	11:30:00 AM	11.4	11.41			N/A
6/3/2019	SEKJPY	1:30:00 PM	11.43	11.43			N/A
6/3/2019	SEKJPY	3:30:00 PM	11.43	11.44			N/A
6/3/2019	SEKJPY.fx	9:30:00 AM	11.404	11.416			N/A
6/3/2019	SEKJPY.fx	11:30:00 AM	11.391	11.409			N/A

6/3/2019	SEKJPY.fx	1:30:00 PM	11.415	11.434			N/A
6/3/2019	SEKJPY.fx	3:30:00 PM	11.426	11.439			N/A
6/3/2019	SGDJPY	9:30:00 AM	78.92	78.94			N/A
6/3/2019	SGDJPY	11:30:00 AM	78.91	78.93			N/A
6/3/2019	SGDJPY	1:30:00 PM	79.03	79.05			N/A
6/3/2019	SGDJPY	3:30:00 PM	79.04	79.06			N/A
6/3/2019	SILVER	9:30:00 AM	14.4	14.77			N/A
6/3/2019	SILVER	11:30:00 AM	14.48	14.85			N/A
6/3/2019	SILVER	1:30:00 PM	14.52	14.9			N/A
6/3/2019	SILVER	3:30:00 PM	14.53	14.91			N/A
6/3/2019	SPX500.i	9:30:00 AM	2739.65	2740.2			N/A
6/3/2019	SPX500.i	11:30:00 AM	2737.4	2737.7			N/A
6/3/2019	SPX500.i	1:30:00 PM	2743.15	2743.7			N/A
6/3/2019	SPX500.i	3:30:00 PM	2744.9	2745.2			N/A
6/3/2019	UK100.i	9:30:00 AM	7130.74	7129.49			N/A
6/3/2019	UK100.i	11:30:00 AM	7099.41	7096.91			N/A
6/3/2019	UK100.i	1:30:00 PM	7142.28	7142.49			N/A
6/3/2019	UK100.i	3:30:00 PM	7156.99	7157.49			N/A
6/3/2019	USDCAD	9:30:00 AM	1.35017	1.35028			N/A
6/3/2019	USDCAD	11:30:00 AM	1.35177	1.35167			N/A
6/3/2019	USDCAD	1:30:00 PM	1.34969	1.34978			N/A
6/3/2019	USDCAD	3:30:00 PM	1.34931	1.34935			N/A
6/3/2019	USDCAD.fx	9:30:00 AM	1.3502	1.35025			N/A
6/3/2019	USDCAD.fx	11:30:00 AM	1.35179	1.35163			N/A
6/3/2019	USDCAD.fx	1:30:00 PM	1.34972	1.34974			N/A
6/3/2019	USDCAD.fx	3:30:00 PM	1.34934	1.34931			N/A
6/3/2019	USDCHF	9:30:00 AM	0.99874	0.9988			N/A
6/3/2019	USDCHF	11:30:00 AM	0.99694	0.99687			N/A
6/3/2019	USDCHF	1:30:00 PM	0.99936	0.99944			N/A
6/3/2019	USDCHF	3:30:00 PM	0.99735	0.99715			N/A
6/3/2019	USDCHF.fx	9:30:00 AM	0.99879	0.99873			N/A
6/3/2019	USDCHF.fx	11:30:00 AM	0.99699	0.9968			N/A
6/3/2019	USDCHF.fx	1:30:00 PM	0.9994	0.99938			N/A
6/3/2019	USDCHF.fx	3:30:00 PM	0.99741	0.99709			N/A

6/3/2019	USDCZK	9:30:00 AM	23.145	23.163			N/A
6/3/2019	USDCZK	11:30:00 AM	23.135	23.154			N/A
6/3/2019	USDCZK	1:30:00 PM	23.098	23.119			N/A
6/3/2019	USDCZK	3:30:00 PM	23.062	23.082			N/A
6/3/2019	USDCZK.fx	9:30:00 AM	23.1527	23.1545			N/A
6/3/2019	USDCZK.fx	11:30:00 AM	23.1427	23.1439			N/A
6/3/2019	USDCZK.fx	1:30:00 PM	23.106	23.1102			N/A
6/3/2019	USDCZK.fx	3:30:00 PM	23.0708	23.0724			N/A
6/3/2019	USDDKK	9:30:00 AM	6.6841	6.6871			N/A
6/3/2019	USDDKK	11:30:00 AM	6.6827	6.6859			N/A
6/3/2019	USDDKK	1:30:00 PM	6.678	6.6815			N/A
6/3/2019	USDDKK	3:30:00 PM	6.6687	6.6717			N/A
6/3/2019	USDDKK.fx	9:30:00 AM	6.68477	6.68516			N/A
6/3/2019	USDDKK.fx	11:30:00 AM	6.68341	6.68389			N/A
6/3/2019	USDDKK.fx	1:30:00 PM	6.67847	6.67945			N/A
6/3/2019	USDDKK.fx	3:30:00 PM	6.66918	6.66964			N/A
6/3/2019	USDHKD	9:30:00 AM	7.8382	7.8384			N/A
6/3/2019	USDHKD	11:30:00 AM	7.8352	7.8355			N/A
6/3/2019	USDHKD	1:30:00 PM	7.8348	7.8351			N/A
6/3/2019	USDHKD	3:30:00 PM	7.8358	7.836			N/A
6/3/2019	USDHKD.fx	9:30:00 AM	7.83811	7.83862			N/A
6/3/2019	USDHKD.fx	11:30:00 AM	7.83526	7.83567			N/A
6/3/2019	USDHKD.fx	1:30:00 PM					N/A
6/3/2019	USDHKD.fx	3:30:00 PM	7.83569	7.83628			N/A
6/3/2019	USDHUF	9:30:00 AM	290.78	291.17			N/A
6/3/2019	USDHUF	11:30:00 AM	290.21	290.65			N/A
6/3/2019	USDHUF	1:30:00 PM	289.79	290.24			N/A
6/3/2019	USDHUF	3:30:00 PM	288.84	289.27			N/A
6/3/2019	USDHUF.fx	9:30:00 AM	290.946	291.007			N/A
6/3/2019	USDHUF.fx	11:30:00 AM	290.405	290.446			N/A
6/3/2019	USDHUF.fx	1:30:00 PM	289.983	290.038			N/A
6/3/2019	USDHUF.fx	3:30:00 PM	289.033	289.068			N/A
6/3/2019	USDINR	9:30:00 AM	64.44	74.43			N/A
6/3/2019	USDINR	11:30:00 AM	64.4	74.39			N/A

6/3/2019	USDINR	1:30:00 PM					N/A
6/3/2019	USDINR	3:30:00 PM					N/A
6/3/2019	USDJPY	9:30:00 AM	108.277	108.271			N/A
6/3/2019	USDJPY	11:30:00 AM	108.232	108.239			N/A
6/3/2019	USDJPY	1:30:00 PM	108.329	108.339			N/A
6/3/2019	USDJPY	3:30:00 PM	108.279	108.274			N/A
6/3/2019	USDJPY.fx	9:30:00 AM	108.284	108.263			N/A
6/3/2019	USDJPY.fx	11:30:00 AM	108.238	108.232			N/A
6/3/2019	USDJPY.fx	1:30:00 PM	108.335	108.331			N/A
6/3/2019	USDJPY.fx	3:30:00 PM	108.285	108.267			N/A
6/3/2019	USDMXN	9:30:00 AM	19.641	19.649			N/A
6/3/2019	USDMXN	11:30:00 AM	19.628	19.634			N/A
6/3/2019	USDMXN	1:30:00 PM	19.629	19.633			N/A
6/3/2019	USDMXN	3:30:00 PM	19.74	19.74			N/A
6/3/2019	USDMXN.fx	9:30:00 AM	19.6449	19.6453			N/A
6/3/2019	USDMXN.fx	11:30:00 AM	19.6319	19.6308			N/A
6/3/2019	USDMXN.fx	1:30:00 PM	19.6325	19.6289			N/A
6/3/2019	USDMXN.fx	3:30:00 PM	19.7443	19.7353			N/A
6/3/2019	USDNOK	9:30:00 AM	8.7515	8.7527			N/A
6/3/2019	USDNOK	11:30:00 AM	8.7573	8.7627			N/A
6/3/2019	USDNOK	1:30:00 PM	8.7365	8.745			N/A
6/3/2019	USDNOK	3:30:00 PM	8.7193	8.7254			N/A
6/3/2019	USDNOK.fx	9:30:00 AM	8.75203	8.74853			N/A
6/3/2019	USDNOK.fx	11:30:00 AM	8.76147	8.75824			N/A
6/3/2019	USDNOK.fx	1:30:00 PM	8.74052	8.7406			N/A
6/3/2019	USDNOK.fx	3:30:00 PM	8.72334	8.72093			N/A
6/3/2019	USDPLN	9:30:00 AM	3.8334	3.8345			N/A
6/3/2019	USDPLN	11:30:00 AM	3.8322	3.8333			N/A
6/3/2019	USDPLN	1:30:00 PM	3.8288	3.8301			N/A
6/3/2019	USDPLN	3:30:00 PM	3.8247	3.8259			N/A
6/3/2019	USDPLN.fx	9:30:00 AM	3.83238	3.83551			N/A
6/3/2019	USDPLN.fx	11:30:00 AM	3.83138	3.83403			N/A
6/3/2019	USDPLN.fx	1:30:00 PM	3.82808	3.83091			N/A
6/3/2019	USDPLN.fx	3:30:00 PM	3.82391	3.82653			N/A

6/3/2019	USDRUB	9:30:00 AM					N/A
6/3/2019	USDRUB	11:30:00 AM	65.374	65.764			N/A
6/3/2019	USDRUB	1:30:00 PM	65.157	65.541			N/A
6/3/2019	USDRUB	3:30:00 PM	65.068	65.444			N/A
6/3/2019	USDSEK	9:30:00 AM	9.4889	9.4869			N/A
6/3/2019	USDSEK	11:30:00 AM	9.492	9.4952			N/A
6/3/2019	USDSEK	1:30:00 PM	9.4799	9.4839			N/A
6/3/2019	USDSEK	3:30:00 PM	9.4706	9.4716			N/A
6/3/2019	USDSEK.fx	9:30:00 AM	9.49097	9.48505			N/A
6/3/2019	USDSEK.fx	11:30:00 AM	9.49465	9.49349			N/A
6/3/2019	USDSEK.fx	1:30:00 PM	9.48242	9.48207			N/A
6/3/2019	USDSEK.fx	3:30:00 PM	9.47323	9.46965			N/A
6/3/2019	USDSGD	9:30:00 AM	1.3712	1.3715			N/A
6/3/2019	USDSGD	11:30:00 AM	1.3709	1.3713			N/A
6/3/2019	USDSGD	1:30:00 PM	1.3701	1.3705			N/A
6/3/2019	USDSGD	3:30:00 PM	1.3693	1.3696			N/A
6/3/2019	USDSGD.fx	9:30:00 AM	1.3712	1.3717			N/A
6/3/2019	USDSGD.fx	11:30:00 AM	1.37089	1.37133			N/A
6/3/2019	USDSGD.fx	1:30:00 PM	1.37004	1.37048			N/A
6/3/2019	USDSGD.fx	3:30:00 PM	1.36916	1.3696			N/A
6/3/2019	USDZAR	9:30:00 AM	14.5797	14.5987			N/A
6/3/2019	USDZAR	11:30:00 AM	14.5685	14.5829			N/A
6/3/2019	USDZAR	1:30:00 PM	14.5212	14.5375			N/A
6/3/2019	USDZAR	3:30:00 PM	14.5114	14.5269			N/A
6/3/2019	USDZAR.fx	9:30:00 AM	14.58577	14.59309			N/A
6/3/2019	USDZAR.fx	11:30:00 AM	14.57455	14.5768			N/A
6/3/2019	USDZAR.fx	1:30:00 PM	14.52763	14.53099			N/A
6/3/2019	USDZAR.fx	3:30:00 PM	14.51727	14.52112			N/A
6/3/2019	XAUUSD	9:30:00 AM	1310.82	1310.84			N/A
6/3/2019	XAUUSD	11:30:00 AM	1314.89	1315.17			N/A
6/3/2019	XAUUSD	1:30:00 PM	1317.03	1317.02			N/A
6/3/2019	XAUUSD	3:30:00 PM	1317.76	1317.9			N/A
6/3/2019	ZARJPY	9:30:00 AM	7.4	7.42			N/A
6/3/2019	ZARJPY	11:30:00 AM	7.4	7.44			N/A

6/3/2019	ZARJPY	1:30:00 PM	7.44	7.46			N/A
6/3/2019	ZARJPY	3:30:00 PM	7.44	7.46			N/A
6/3/2019	ZARJPY.fx	9:30:00 AM	7.419	7.423			N/A
6/3/2019	ZARJPY.fx	11:30:00 AM	7.423	7.427			N/A
6/3/2019	ZARJPY.fx	1:30:00 PM	7.453	7.457			N/A
6/3/2019	ZARJPY.fx	3:30:00 PM	7.456	7.459			N/A
6/4/2019	#AA	9:30:00 AM					N/A
6/4/2019	#AA	11:30:00 AM					N/A
6/4/2019	#AA	1:30:00 PM					N/A
6/4/2019	#AA	3:30:00 PM					N/A
6/4/2019	#AABA	9:30:00 AM					N/A
6/4/2019	#AABA	11:30:00 AM					N/A
6/4/2019	#AABA	1:30:00 PM					N/A
6/4/2019	#AABA	3:30:00 PM					N/A
6/4/2019	#AAL	9:30:00 AM					N/A
6/4/2019	#AAL	11:30:00 AM					N/A
6/4/2019	#AAL	1:30:00 PM					N/A
6/4/2019	#AAL	3:30:00 PM					N/A
6/4/2019	#AAPL	9:30:00 AM					N/A
6/4/2019	#AAPL	11:30:00 AM					N/A
6/4/2019	#AAPL	1:30:00 PM					N/A
6/4/2019	#AAPL	3:30:00 PM					N/A
6/4/2019	#ADBE	9:30:00 AM					N/A
6/4/2019	#ADBE	11:30:00 AM					N/A
6/4/2019	#ADBE	1:30:00 PM					N/A
6/4/2019	#ADBE	3:30:00 PM					N/A
6/4/2019	#AIG	9:30:00 AM					N/A
6/4/2019	#AIG	11:30:00 AM					N/A
6/4/2019	#AIG	1:30:00 PM					N/A
6/4/2019	#AIG	3:30:00 PM					N/A
6/4/2019	#AMD	9:30:00 AM					N/A
6/4/2019	#AMD	11:30:00 AM					N/A
6/4/2019	#AMD	1:30:00 PM					N/A
6/4/2019	#AMD	3:30:00 PM					N/A



6/4/2019	#AMZN	9:30:00 AM					N/A
6/4/2019	#AMZN	11:30:00 AM					N/A
6/4/2019	#AMZN	1:30:00 PM					N/A
6/4/2019	#AMZN	3:30:00 PM					N/A
6/4/2019	#AXP	9:30:00 AM					N/A
6/4/2019	#AXP	11:30:00 AM					N/A
6/4/2019	#AXP	1:30:00 PM					N/A
6/4/2019	#AXP	3:30:00 PM					N/A
6/4/2019	#BA	9:30:00 AM					N/A
6/4/2019	#BA	11:30:00 AM					N/A
6/4/2019	#BA	1:30:00 PM					N/A
6/4/2019	#BA	3:30:00 PM					N/A
6/4/2019	#BABA	9:30:00 AM					N/A
6/4/2019	#BABA	11:30:00 AM					N/A
6/4/2019	#BABA	1:30:00 PM					N/A
6/4/2019	#BABA	3:30:00 PM					N/A
6/4/2019	#BAC	9:30:00 AM					N/A
6/4/2019	#BAC	11:30:00 AM					N/A
6/4/2019	#BAC	1:30:00 PM					N/A
6/4/2019	#BAC	3:30:00 PM					N/A
6/4/2019	#BARC	9:30:00 AM					N/A
6/4/2019	#BARC	11:30:00 AM					N/A
6/4/2019	#BARC	1:30:00 PM					N/A
6/4/2019	#BARC	3:30:00 PM					N/A
6/4/2019	#BHP	9:30:00 AM					N/A
6/4/2019	#BHP	11:30:00 AM					N/A
6/4/2019	#BHP	1:30:00 PM					N/A
6/4/2019	#BHP	3:30:00 PM					N/A
6/4/2019	#BIDU	9:30:00 AM					N/A
6/4/2019	#BIDU	11:30:00 AM					N/A
6/4/2019	#BIDU	1:30:00 PM					N/A
6/4/2019	#BIDU	3:30:00 PM					N/A
6/4/2019	#Bitcoin	9:30:00 AM	7914.5	7941.05			N/A
6/4/2019	#Bitcoin	11:30:00 AM	7887.7	7922.55			N/A

6/4/2019	#Bitcoin	1:30:00 PM	7946.06	7978.75			N/A
6/4/2019	#Bitcoin	3:30:00 PM	7878.8	7898.5			N/A
6/4/2019	#BK	9:30:00 AM					N/A
6/4/2019	#BK	11:30:00 AM					N/A
6/4/2019	#BK	1:30:00 PM					N/A
6/4/2019	#BK	3:30:00 PM					N/A
6/4/2019	#BLT	9:30:00 AM					N/A
6/4/2019	#BLT	11:30:00 AM					N/A
6/4/2019	#BLT	1:30:00 PM					N/A
6/4/2019	#BLT	3:30:00 PM					N/A
6/4/2019	#BP	9:30:00 AM					N/A
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6/4/2019	#BP	1:30:00 PM					N/A
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6/4/2019	#WDC	1:30:00 PM					N/A
6/4/2019	#WDC	3:30:00 PM					N/A
6/4/2019	#WFC	9:30:00 AM					N/A
6/4/2019	#WFC	11:30:00 AM					N/A
6/4/2019	#WFC	1:30:00 PM					N/A
6/4/2019	#WFC	3:30:00 PM					N/A
6/4/2019	#WMT	9:30:00 AM					N/A
6/4/2019	#WMT	11:30:00 AM					N/A
6/4/2019	#WMT	1:30:00 PM					N/A
6/4/2019	#WMT	3:30:00 PM					N/A
6/4/2019	#XOM	9:30:00 AM					N/A
6/4/2019	#XOM	11:30:00 AM					N/A
6/4/2019	#XOM	1:30:00 PM					N/A
6/4/2019	#XOM	3:30:00 PM					N/A

6/4/2019	#YHOO	9:30:00 AM					N/A
6/4/2019	#YHOO	11:30:00 AM					N/A
6/4/2019	#YHOO	1:30:00 PM					N/A
6/4/2019	#YHOO	3:30:00 PM					N/A
6/4/2019	#ZNGA	9:30:00 AM					N/A
6/4/2019	#ZNGA	11:30:00 AM					N/A
6/4/2019	#ZNGA	1:30:00 PM					N/A
6/4/2019	#ZNGA	3:30:00 PM					N/A
6/4/2019	AUDCAD	9:30:00 AM	0.9374	0.93795			N/A
6/4/2019	AUDCAD	11:30:00 AM	0.93768	0.93835			N/A
6/4/2019	AUDCAD	1:30:00 PM	0.9375	0.93816			N/A
6/4/2019	AUDCAD	3:30:00 PM	0.93724	0.93782			N/A
6/4/2019	AUDCAD.fx	9:30:00 AM	0.93774	0.93761			N/A
6/4/2019	AUDCAD.fx	11:30:00 AM	0.93802	0.93798			N/A
6/4/2019	AUDCAD.fx	1:30:00 PM	0.93783	0.93781			N/A
6/4/2019	AUDCAD.fx	3:30:00 PM	0.93757	0.93746			N/A
6/4/2019	AUDCHF	9:30:00 AM	0.69219	0.69288			N/A
6/4/2019	AUDCHF	11:30:00 AM	0.69284	0.69345			N/A
6/4/2019	AUDCHF	1:30:00 PM	0.69345	0.69412			N/A
6/4/2019	AUDCHF	3:30:00 PM	0.69342	0.69404			N/A
6/4/2019	AUDCHF.fx	9:30:00 AM	0.69253	0.69253			N/A
6/4/2019	AUDCHF.fx	11:30:00 AM	0.69318	0.6931			N/A
6/4/2019	AUDCHF.fx	1:30:00 PM	0.6938	0.69377			N/A
6/4/2019	AUDCHF.fx	3:30:00 PM	0.69376	0.69369			N/A
6/4/2019	AUDCZK	9:30:00 AM	15.968	15.984			N/A
6/4/2019	AUDCZK	11:30:00 AM	15.956	15.973			N/A
6/4/2019	AUDCZK	1:30:00 PM	15.976	15.99			N/A
6/4/2019	AUDCZK	3:30:00 PM	15.958	15.974			N/A
6/4/2019	AUDDKK	9:30:00 AM	4.6281	4.6328			N/A
6/4/2019	AUDDKK	11:30:00 AM	4.6292	4.6339			N/A
6/4/2019	AUDDKK	1:30:00 PM	4.6341	4.6389			N/A
6/4/2019	AUDDKK	3:30:00 PM	4.633	4.6377			N/A
6/4/2019	AUDHKD	9:30:00 AM	5.4692	5.473			N/A
6/4/2019	AUDHKD	11:30:00 AM	5.4698	5.4737			N/A

6/4/2019	AUDHKD	1:30:00 PM	5.4717	5.4754			N/A
6/4/2019	AUDHKD	3:30:00 PM	5.466	5.469			N/A
6/4/2019	AUDHUF	9:30:00 AM	200.1	200.33			N/A
6/4/2019	AUDHUF	11:30:00 AM	199.44	199.64			N/A
6/4/2019	AUDHUF	1:30:00 PM	199.95	200.12			N/A
6/4/2019	AUDHUF	3:30:00 PM	199.64	199.87			N/A
6/4/2019	AUDJPY	9:30:00 AM	75.287	75.353			N/A
6/4/2019	AUDJPY	11:30:00 AM	75.413	75.484			N/A
6/4/2019	AUDJPY	1:30:00 PM	75.411	75.478			N/A
6/4/2019	AUDJPY	3:30:00 PM	75.45	75.504			N/A
6/4/2019	AUDJPY.fx	9:30:00 AM	75.321	75.316			N/A
6/4/2019	AUDJPY.fx	11:30:00 AM	75.447	75.448			N/A
6/4/2019	AUDJPY.fx	1:30:00 PM	75.445	75.443			N/A
6/4/2019	AUDJPY.fx	3:30:00 PM	75.484	75.469			N/A
6/4/2019	AUDMXN	9:30:00 AM	13.7769	13.7847			N/A
6/4/2019	AUDMXN	11:30:00 AM	13.7345	13.7417			N/A
6/4/2019	AUDMXN	1:30:00 PM	13.7517	13.7578			N/A
6/4/2019	AUDMXN	3:30:00 PM	13.7077	13.7115			N/A
6/4/2019	AUDNOK	9:30:00 AM	6.0614	6.0663			N/A
6/4/2019	AUDNOK	11:30:00 AM	6.0667	6.0713			N/A
6/4/2019	AUDNOK	1:30:00 PM	6.0758	6.0808			N/A
6/4/2019	AUDNOK	3:30:00 PM	6.0726	6.0767			N/A
6/4/2019	AUDNOK.fx	9:30:00 AM	6.063	6.0647			N/A
6/4/2019	AUDNOK.fx	11:30:00 AM	6.0684	6.0695			N/A
6/4/2019	AUDNOK.fx	1:30:00 PM	6.0774	6.0791			N/A
6/4/2019	AUDNOK.fx	3:30:00 PM	6.0742	6.0751			N/A
6/4/2019	AUDNZD	9:30:00 AM	1.0586	1.05931			N/A
6/4/2019	AUDNZD	11:30:00 AM	1.05881	1.05964			N/A
6/4/2019	AUDNZD	1:30:00 PM	1.05853	1.05943			N/A
6/4/2019	AUDNZD	3:30:00 PM	1.05818	1.059			N/A
6/4/2019	AUDNZD.fx	9:30:00 AM	1.05903	1.05888			N/A
6/4/2019	AUDNZD.fx	11:30:00 AM	1.05926	1.05917			N/A
6/4/2019	AUDNZD.fx	1:30:00 PM	1.05897	1.05896			N/A
6/4/2019	AUDNZD.fx	3:30:00 PM	1.05863	1.05854			N/A

6/4/2019	AUDPLN	9:30:00 AM	2.6523	2.6554			N/A
6/4/2019	AUDPLN	11:30:00 AM	2.6516	2.6548			N/A
6/4/2019	AUDPLN	1:30:00 PM	2.6576	2.6601			N/A
6/4/2019	AUDPLN	3:30:00 PM	2.655	2.6581			N/A
6/4/2019	AUDSEK	9:30:00 AM	6.5895	6.5923			N/A
6/4/2019	AUDSEK	11:30:00 AM	6.5881	6.5908			N/A
6/4/2019	AUDSEK	1:30:00 PM	6.5952	6.5975			N/A
6/4/2019	AUDSEK	3:30:00 PM	6.5924	6.5951			N/A
6/4/2019	AUDSEK.fx	9:30:00 AM	6.585	6.5967			N/A
6/4/2019	AUDSEK.fx	11:30:00 AM	6.5836	6.5952			N/A
6/4/2019	AUDSEK.fx	1:30:00 PM	6.5906	6.602			N/A
6/4/2019	AUDSEK.fx	3:30:00 PM	6.5879	6.5996			N/A
6/4/2019	AUDSGD	9:30:00 AM	0.9553	0.9556			N/A
6/4/2019	AUDSGD	11:30:00 AM	0.9556	0.9559			N/A
6/4/2019	AUDSGD	1:30:00 PM	0.9556	0.9559			N/A
6/4/2019	AUDSGD	3:30:00 PM	0.9549	0.9552			N/A
6/4/2019	AUDSGD.fx	9:30:00 AM	0.95541	0.95548			N/A
6/4/2019	AUDSGD.fx	11:30:00 AM	0.95566	0.95575			N/A
6/4/2019	AUDSGD.fx	1:30:00 PM	0.95566	0.95577			N/A
6/4/2019	AUDSGD.fx	3:30:00 PM	0.95501	0.95506			N/A
6/4/2019	AUDUSD	9:30:00 AM	0.6979	0.69796			N/A
6/4/2019	AUDUSD	11:30:00 AM	0.69828	0.69837			N/A
6/4/2019	AUDUSD	1:30:00 PM	0.69841	0.69849			N/A
6/4/2019	AUDUSD	3:30:00 PM	0.69765	0.69765			N/A
6/4/2019	AUDUSD.fx	9:30:00 AM	0.69795	0.69791			N/A
6/4/2019	AUDUSD.fx	11:30:00 AM	0.69833	0.69832			N/A
6/4/2019	AUDUSD.fx	1:30:00 PM	0.69846	0.69843			N/A
6/4/2019	AUDUSD.fx	3:30:00 PM	0.6977	0.69759			N/A
6/4/2019	AUDZAR	9:30:00 AM	10.0721	10.0864			N/A
6/4/2019	AUDZAR	11:30:00 AM	10.0598	10.0727			N/A
6/4/2019	AUDZAR	1:30:00 PM	10.2056	10.2197			N/A
6/4/2019	AUDZAR	3:30:00 PM	10.225	10.2156			N/A
6/4/2019	AUS200.i	9:30:00 AM					N/A
6/4/2019	AUS200.i	11:30:00 AM	6343.48	6347.08			N/A

6/4/2019	AUS200.i	1:30:00 PM	6357.28	6359.78			N/A
6/4/2019	AUS200.i	3:30:00 PM	6364.28	6367.78			N/A
6/4/2019	BCHUSD	9:30:00 AM	403.14	404.79			N/A
6/4/2019	BCHUSD	11:30:00 AM	409.15	410.95			N/A
6/4/2019	BCHUSD	1:30:00 PM	407.3	409.26			N/A
6/4/2019	BCHUSD	3:30:00 PM	403.26	402.53			N/A
6/4/2019	CADCHF	9:30:00 AM	0.73829	0.73888			N/A
6/4/2019	CADCHF	11:30:00 AM	0.73866	0.73925			N/A
6/4/2019	CADCHF	1:30:00 PM	0.73947	0.74008			N/A
6/4/2019	CADCHF	3:30:00 PM	0.73964	0.74019			N/A
6/4/2019	CADCHF.fx	9:30:00 AM	0.73864	0.73853			N/A
6/4/2019	CADCHF.fx	11:30:00 AM	0.73901	0.7389			N/A
6/4/2019	CADCHF.fx	1:30:00 PM	0.73981	0.73973			N/A
6/4/2019	CADCHF.fx	3:30:00 PM	0.73999	0.73983			N/A
6/4/2019	CADCZK	9:30:00 AM	17.033	17.048			N/A
6/4/2019	CADCZK	11:30:00 AM	17.015	17.032			N/A
6/4/2019	CADCZK	1:30:00 PM	17.04	17.052			N/A
6/4/2019	CADCZK	3:30:00 PM	17.025	17.039			N/A
6/4/2019	CADDKK	9:30:00 AM					N/A
6/4/2019	CADDKK	11:30:00 AM	4.935	4.939			N/A
6/4/2019	CADDKK	1:30:00 PM					N/A
6/4/2019	CADDKK	3:30:00 PM					N/A
6/4/2019	CADHKD	9:30:00 AM	5.8341	5.8374			N/A
6/4/2019	CADHKD	11:30:00 AM	5.8331	5.837			N/A
6/4/2019	CADHKD	1:30:00 PM	5.8358	5.8395			N/A
6/4/2019	CADHKD	3:30:00 PM	5.831	5.8347			N/A
6/4/2019	CADHUF	9:30:00 AM	213.46	213.62			N/A
6/4/2019	CADHUF	11:30:00 AM	212.71	212.84			N/A
6/4/2019	CADHUF	1:30:00 PM	213.23	213.37			N/A
6/4/2019	CADHUF	3:30:00 PM	213.02	213.17			N/A
6/4/2019	CADJPY	9:30:00 AM	80.299	80.355			N/A
6/4/2019	CADJPY	11:30:00 AM	80.402	80.47			N/A
6/4/2019	CADJPY	1:30:00 PM	80.413	80.477			N/A
6/4/2019	CADJPY	3:30:00 PM	80.488	80.529			N/A



6/4/2019	CADJPY.fx	9:30:00 AM	80.332	80.319			N/A
6/4/2019	CADJPY.fx	11:30:00 AM	80.435	80.436			N/A
6/4/2019	CADJPY.fx	1:30:00 PM	80.447	80.442			N/A
6/4/2019	CADJPY.fx	3:30:00 PM	80.522	80.494			N/A
6/4/2019	CADMXN	9:30:00 AM	14.697	14.7034			N/A
6/4/2019	CADMXN	11:30:00 AM	14.6437	14.6541			N/A
6/4/2019	CADMXN	1:30:00 PM	14.6647	14.6737			N/A
6/4/2019	CADMXN	3:30:00 PM	14.6218	14.6292			N/A
6/4/2019	CADNOK	9:30:00 AM	6.4633	6.4681			N/A
6/4/2019	CADNOK	11:30:00 AM	6.4653	6.4691			N/A
6/4/2019	CADNOK	1:30:00 PM	6.4781	6.4823			N/A
6/4/2019	CADNOK	3:30:00 PM	6.4766	6.4805			N/A
6/4/2019	CADPLN	9:30:00 AM	2.8289	2.8308			N/A
6/4/2019	CADPLN	11:30:00 AM	2.8275	2.8295			N/A
6/4/2019	CADPLN	1:30:00 PM	2.8346	2.836			N/A
6/4/2019	CADPLN	3:30:00 PM	2.8323	2.8341			N/A
6/4/2019	CADSEK	9:30:00 AM	7.0253	7.0292			N/A
6/4/2019	CADSEK	11:30:00 AM	7.0225	7.0251			N/A
6/4/2019	CADSEK	1:30:00 PM	7.0308	7.0337			N/A
6/4/2019	CADSEK	3:30:00 PM	7.0299	7.0329			N/A
6/4/2019	CADSGD	9:30:00 AM	1.0183	1.0186			N/A
6/4/2019	CADSGD	11:30:00 AM	1.0183	1.0186			N/A
6/4/2019	CADSGD	1:30:00 PM	1.0183	1.0186			N/A
6/4/2019	CADSGD	3:30:00 PM	1.0181	1.0184			N/A
6/4/2019	CADZAR	9:30:00 AM	10.7432	10.7585			N/A
6/4/2019	CADZAR	11:30:00 AM	10.727	10.7408			N/A
6/4/2019	CADZAR	1:30:00 PM	10.8846	10.8996			N/A
6/4/2019	CADZAR	3:30:00 PM	10.907	10.8992			N/A
6/4/2019	CHFCZK	9:30:00 AM	23.067	23.08			N/A
6/4/2019	CHFCZK	11:30:00 AM	23.031	23.045			N/A
6/4/2019	CHFCZK	1:30:00 PM	23.036	23.05			N/A
6/4/2019	CHFCZK	3:30:00 PM	23.013	23.028			N/A
6/4/2019	CHFDKK	9:30:00 AM	6.685	6.688			N/A
6/4/2019	CHFDKK	11:30:00 AM	6.682	6.684			N/A

6/4/2019	CHFDKK	1:30:00 PM	6.682	6.685			N/A
6/4/2019	CHFDKK	3:30:00 PM	6.681	6.684			N/A
6/4/2019	CHFDKK.fx	9:30:00 AM	6.6836	6.6894			N/A
6/4/2019	CHFDKK.fx	11:30:00 AM	6.6802	6.6848			N/A
6/4/2019	CHFDKK.fx	1:30:00 PM	6.6806	6.6864			N/A
6/4/2019	CHFDKK.fx	3:30:00 PM	6.6795	6.6853			N/A
6/4/2019	CHFHKD	9:30:00 AM	7.8997	7.903			N/A
6/4/2019	CHFHKD	11:30:00 AM	7.8949	7.8979			N/A
6/4/2019	CHFHKD	1:30:00 PM	7.8895	7.8927			N/A
6/4/2019	CHFHKD	3:30:00 PM	7.8816	7.8852			N/A
6/4/2019	CHFHUF	9:30:00 AM	288.96	289.33			N/A
6/4/2019	CHFHUF	11:30:00 AM	287.81	288.09			N/A
6/4/2019	CHFHUF	1:30:00 PM	288.2	288.5			N/A
6/4/2019	CHFHUF	3:30:00 PM	287.83	288.19			N/A
6/4/2019	CHFJPY	9:30:00 AM	108.725	108.79			N/A
6/4/2019	CHFJPY	11:30:00 AM	108.82	108.878			N/A
6/4/2019	CHFJPY	1:30:00 PM	108.711	108.774			N/A
6/4/2019	CHFJPY	3:30:00 PM	108.779	108.834			N/A
6/4/2019	CHFJPY.fx	9:30:00 AM	108.759	108.757			N/A
6/4/2019	CHFJPY.fx	11:30:00 AM	108.853	108.844			N/A
6/4/2019	CHFJPY.fx	1:30:00 PM	108.744	108.74			N/A
6/4/2019	CHFJPY.fx	3:30:00 PM	108.811	108.799			N/A
6/4/2019	CHFMXN	9:30:00 AM	19.8975	19.9095			N/A
6/4/2019	CHFMXN	11:30:00 AM	19.8209	19.8305			N/A
6/4/2019	CHFMXN	1:30:00 PM	19.8262	19.8344			N/A
6/4/2019	CHFMXN	3:30:00 PM	19.7652	19.7698			N/A
6/4/2019	CHFNOK	9:30:00 AM	8.7524	8.7595			N/A
6/4/2019	CHFNOK	11:30:00 AM	8.7525	8.76			N/A
6/4/2019	CHFNOK	1:30:00 PM	8.7579	8.7643			N/A
6/4/2019	CHFNOK	3:30:00 PM	8.7539	8.7597			N/A
6/4/2019	CHFNOK.fx	9:30:00 AM	8.7559	8.75595			N/A
6/4/2019	CHFNOK.fx	11:30:00 AM	8.75608	8.75639			N/A
6/4/2019	CHFNOK.fx	1:30:00 PM	8.76146	8.7608			N/A
6/4/2019	CHFNOK.fx	3:30:00 PM	8.75763	8.7561			N/A

6/4/2019	CHFPLN	9:30:00 AM	3.8312	3.8335			N/A
6/4/2019	CHFPLN	11:30:00 AM	3.8265	3.8287			N/A
6/4/2019	CHFPLN	1:30:00 PM	3.8311	3.8336			N/A
6/4/2019	CHFPLN	3:30:00 PM	3.828	3.8308			N/A
6/4/2019	CHFPLN.fx	9:30:00 AM	3.82863	3.83555			N/A
6/4/2019	CHFPLN.fx	11:30:00 AM	3.82414	3.83106			N/A
6/4/2019	CHFPLN.fx	1:30:00 PM	3.82884	3.8358			N/A
6/4/2019	CHFPLN.fx	3:30:00 PM	3.82571	3.83313			N/A
6/4/2019	CHFSEK	9:30:00 AM	9.5133	9.5167			N/A
6/4/2019	CHFSEK	11:30:00 AM	9.503	9.5074			N/A
6/4/2019	CHFSEK	1:30:00 PM	9.5036	9.5073			N/A
6/4/2019	CHFSEK	3:30:00 PM	9.5014	9.5053			N/A
6/4/2019	CHFSGD	9:30:00 AM	1.3795	1.3799			N/A
6/4/2019	CHFSGD	11:30:00 AM	1.3788	1.3789			N/A
6/4/2019	CHFSGD	1:30:00 PM	1.3775	1.3778			N/A
6/4/2019	CHFSGD	3:30:00 PM	1.3766	1.3769			N/A
6/4/2019	CHFSGD.fx	9:30:00 AM	1.37966	1.37966			N/A
6/4/2019	CHFSGD.fx	11:30:00 AM	1.37893	1.37876			N/A
6/4/2019	CHFSGD.fx	1:30:00 PM	1.37773	1.37764			N/A
6/4/2019	CHFSGD.fx	3:30:00 PM	1.37676	1.37671			N/A
6/4/2019	CHFZAR	9:30:00 AM	14.5515	14.563			N/A
6/4/2019	CHFZAR	11:30:00 AM	14.5215	14.5327			N/A
6/4/2019	CHFZAR	1:30:00 PM	14.7188	14.7295			N/A
6/4/2019	CHFZAR	3:30:00 PM	14.7477	14.724			N/A
6/4/2019	CZKJPY	9:30:00 AM					N/A
6/4/2019	CZKJPY	11:30:00 AM	4.724	4.728			N/A
6/4/2019	CZKJPY	1:30:00 PM					N/A
6/4/2019	CZKJPY	3:30:00 PM					N/A
6/4/2019	DAX30.i	9:30:00 AM	11724.04	11722.04			N/A
6/4/2019	DAX30.i	11:30:00 AM	11822.29	11817.04			N/A
6/4/2019	DAX30.i	1:30:00 PM	11901.54	11900.29			N/A
6/4/2019	DAX30.i	3:30:00 PM	11953.54	11952.04			N/A
6/4/2019	DJ30.i	9:30:00 AM					N/A
6/4/2019	DJ30.i	11:30:00 AM					N/A

6/4/2019	DJ30.i	1:30:00 PM					N/A
6/4/2019	DJ30.i	3:30:00 PM					N/A
6/4/2019	DKKJPY	9:30:00 AM					N/A
6/4/2019	DKKJPY	11:30:00 AM	16.29	16.31			N/A
6/4/2019	DKKJPY	1:30:00 PM					N/A
6/4/2019	DKKJPY	3:30:00 PM	16.28	16.3			N/A
6/4/2019	EURAUD	9:30:00 AM	1.61186	1.61227			N/A
6/4/2019	EURAUD	11:30:00 AM	1.61147	1.61185			N/A
6/4/2019	EURAUD	1:30:00 PM	1.60972	1.61013			N/A
6/4/2019	EURAUD	3:30:00 PM	1.61017	1.61048			N/A
6/4/2019	EURAUD.fx	9:30:00 AM	1.61207	1.61206			N/A
6/4/2019	EURAUD.fx	11:30:00 AM	1.61169	1.61163			N/A
6/4/2019	EURAUD.fx	1:30:00 PM	1.60993	1.6099			N/A
6/4/2019	EURAUD.fx	3:30:00 PM	1.61034	1.61026			N/A
6/4/2019	EURCAD	9:30:00 AM	1.51186	1.51255			N/A
6/4/2019	EURCAD	11:30:00 AM	1.5119	1.51273			N/A
6/4/2019	EURCAD	1:30:00 PM	1.51006	1.51078			N/A
6/4/2019	EURCAD	3:30:00 PM	1.51006	1.51064			N/A
6/4/2019	EURCAD.fx	9:30:00 AM	1.51228	1.51213			N/A
6/4/2019	EURCAD.fx	11:30:00 AM	1.51231	1.51231			N/A
6/4/2019	EURCAD.fx	1:30:00 PM	1.51048	1.51035			N/A
6/4/2019	EURCAD.fx	3:30:00 PM	1.51049	1.51022			N/A
6/4/2019	EURCHF	9:30:00 AM	1.11686	1.11691			N/A
6/4/2019	EURCHF	11:30:00 AM	1.11758	1.11749			N/A
6/4/2019	EURCHF	1:30:00 PM	1.11734	1.1174			N/A
6/4/2019	EURCHF	3:30:00 PM	1.11753	1.11756			N/A
6/4/2019	EURCHF.fx	9:30:00 AM	1.11691	1.11686			N/A
6/4/2019	EURCHF.fx	11:30:00 AM	1.11764	1.11744			N/A
6/4/2019	EURCHF.fx	1:30:00 PM	1.1174	1.11734			N/A
6/4/2019	EURCHF.fx	3:30:00 PM	1.11758	1.1175			N/A
6/4/2019	EURCZK	9:30:00 AM	25.748	25.786			N/A
6/4/2019	EURCZK	11:30:00 AM					N/A
6/4/2019	EURCZK	1:30:00 PM	25.726	25.762			N/A
6/4/2019	EURCZK	3:30:00 PM	25.703	25.742			N/A

6/4/2019	EURDKK	9:30:00 AM	7.4654	7.4667			N/A
6/4/2019	EURDKK	11:30:00 AM	7.466	7.4673			N/A
6/4/2019	EURDKK	1:30:00 PM	7.4655	7.4667			N/A
6/4/2019	EURDKK	3:30:00 PM	7.4671	7.4681			N/A
6/4/2019	EURGBP	9:30:00 AM	0.88804	0.88807			N/A
6/4/2019	EURGBP	11:30:00 AM	0.88957	0.88933			N/A
6/4/2019	EURGBP	1:30:00 PM	0.88753	0.88767			N/A
6/4/2019	EURGBP	3:30:00 PM	0.88674	0.88669			N/A
6/4/2019	EURGBP.fx	9:30:00 AM	0.88808	0.88803			N/A
6/4/2019	EURGBP.fx	11:30:00 AM	0.88963	0.88928			N/A
6/4/2019	EURGBP.fx	1:30:00 PM	0.88756	0.88762			N/A
6/4/2019	EURGBP.fx	3:30:00 PM	0.88676	0.88664			N/A
6/4/2019	EURHKD	9:30:00 AM	8.8224	8.8272			N/A
6/4/2019	EURHKD	11:30:00 AM	8.8227	8.8274			N/A
6/4/2019	EURHKD	1:30:00 PM	8.816	8.8201			N/A
6/4/2019	EURHKD	3:30:00 PM	8.8085	8.8129			N/A
6/4/2019	EURHKD.fx	9:30:00 AM	8.82513	8.82433			N/A
6/4/2019	EURHKD.fx	11:30:00 AM	8.82555	8.82455			N/A
6/4/2019	EURHKD.fx	1:30:00 PM	8.81881	8.81729			N/A
6/4/2019	EURHKD.fx	3:30:00 PM	8.81121	8.8101			N/A
6/4/2019	EURHUF	9:30:00 AM	322.7	323.28			N/A
6/4/2019	EURHUF	11:30:00 AM	321.7	322.35			N/A
6/4/2019	EURHUF	1:30:00 PM	321.95	322.63			N/A
6/4/2019	EURHUF	3:30:00 PM	321.62	322.32			N/A
6/4/2019	EURHUF.fx	9:30:00 AM	322.989	323.14			N/A
6/4/2019	EURHUF.fx	11:30:00 AM	321.991	322.068			N/A
6/4/2019	EURHUF.fx	1:30:00 PM	322.243	322.346			N/A
6/4/2019	EURHUF.fx	3:30:00 PM	321.878	322.05			N/A
6/4/2019	EURJPY	9:30:00 AM	121.466	121.469			N/A
6/4/2019	EURJPY	11:30:00 AM	121.643	121.642			N/A
6/4/2019	EURJPY	1:30:00 PM	121.504	121.506			N/A
6/4/2019	EURJPY	3:30:00 PM	121.603	121.588			N/A
6/4/2019	EURJPY.fx	9:30:00 AM	121.469	121.464			N/A
6/4/2019	EURJPY.fx	11:30:00 AM	121.647	121.638			N/A

6/4/2019	EURJPY.fx	1:30:00 PM	121.507	121.502			N/A
6/4/2019	EURJPY.fx	3:30:00 PM	121.605	121.584			N/A
6/4/2019	EURMXN	9:30:00 AM	22.2255	22.239			N/A
6/4/2019	EURMXN	11:30:00 AM	22.1526	22.1678			N/A
6/4/2019	EURMXN	1:30:00 PM	22.1546	22.1675			N/A
6/4/2019	EURMXN	3:30:00 PM	22.0894	22.0968			N/A
6/4/2019	EURMXN.fx	9:30:00 AM	22.2337	22.2303			N/A
6/4/2019	EURMXN.fx	11:30:00 AM	22.1619	22.1587			N/A
6/4/2019	EURMXN.fx	1:30:00 PM	22.1626	22.1591			N/A
6/4/2019	EURMXN.fx	3:30:00 PM	22.0984	22.0877			N/A
6/4/2019	EURNOK	9:30:00 AM	9.7739	9.7853			N/A
6/4/2019	EURNOK	11:30:00 AM	9.7797	9.7904			N/A
6/4/2019	EURNOK	1:30:00 PM	9.784	9.795			N/A
6/4/2019	EURNOK	3:30:00 PM	9.7809	9.7913			N/A
6/4/2019	EURNOK.fx	9:30:00 AM	9.77961	9.77968			N/A
6/4/2019	EURNOK.fx	11:30:00 AM	9.78535	9.78468			N/A
6/4/2019	EURNOK.fx	1:30:00 PM	9.7894	9.78948			N/A
6/4/2019	EURNOK.fx	3:30:00 PM	9.78654	9.7856			N/A
6/4/2019	EURNZD	9:30:00 AM	1.70752	1.70805			N/A
6/4/2019	EURNZD	11:30:00 AM	1.70739	1.70813			N/A
6/4/2019	EURNZD	1:30:00 PM	1.70516	1.70585			N/A
6/4/2019	EURNZD	3:30:00 PM	1.70497	1.70572			N/A
6/4/2019	EURNZD.fx	9:30:00 AM	1.70795	1.70763			N/A
6/4/2019	EURNZD.fx	11:30:00 AM	1.70783	1.70769			N/A
6/4/2019	EURNZD.fx	1:30:00 PM	1.70559	1.70541			N/A
6/4/2019	EURNZD.fx	3:30:00 PM	1.70539	1.70528			N/A
6/4/2019	EURPLN	9:30:00 AM	4.2791	4.2813			N/A
6/4/2019	EURPLN	11:30:00 AM	4.2759	4.2791			N/A
6/4/2019	EURPLN	1:30:00 PM	4.281	4.2832			N/A
6/4/2019	EURPLN	3:30:00 PM	4.2778	4.2811			N/A
6/4/2019	EURPLN.fx	9:30:00 AM	4.27807	4.28192			N/A
6/4/2019	EURPLN.fx	11:30:00 AM	4.27527	4.27982			N/A
6/4/2019	EURPLN.fx	1:30:00 PM	4.28057	4.2838			N/A
6/4/2019	EURPLN.fx	3:30:00 PM	4.27728	4.28162			N/A

6/4/2019	EURRUB	9:30:00 AM					N/A
6/4/2019	EURRUB	11:30:00 AM	73.028	73.466			N/A
6/4/2019	EURRUB	1:30:00 PM	73.083	73.507			N/A
6/4/2019	EURRUB	3:30:00 PM	72.986	73.421			N/A
6/4/2019	EURSEK	9:30:00 AM	10.6275	10.6319			N/A
6/4/2019	EURSEK	11:30:00 AM	10.6223	10.6263			N/A
6/4/2019	EURSEK	1:30:00 PM	10.622	10.6259			N/A
6/4/2019	EURSEK	3:30:00 PM	10.6204	10.6247			N/A
6/4/2019	EURSEK.fx	9:30:00 AM	10.6295	10.63002			N/A
6/4/2019	EURSEK.fx	11:30:00 AM	10.62392	10.62477			N/A
6/4/2019	EURSEK.fx	1:30:00 PM	10.62356	10.62424			N/A
6/4/2019	EURSEK.fx	3:30:00 PM	10.62207	10.62291			N/A
6/4/2019	EURSGD	9:30:00 AM	1.5406	1.5414			N/A
6/4/2019	EURSGD	11:30:00 AM	1.5405	1.5414			N/A
6/4/2019	EURSGD	1:30:00 PM	1.539	1.5397			N/A
6/4/2019	EURSGD	3:30:00 PM	1.5382	1.539			N/A
6/4/2019	EURSGD.fx	9:30:00 AM	1.54089	1.54096			N/A
6/4/2019	EURSGD.fx	11:30:00 AM	1.54089	1.54096			N/A
6/4/2019	EURSGD.fx	1:30:00 PM	1.53935	1.53929			N/A
6/4/2019	EURSGD.fx	3:30:00 PM	1.53855	1.53859			N/A
6/4/2019	EURUSD	9:30:00 AM	1.12538	1.12543			N/A
6/4/2019	EURUSD	11:30:00 AM	1.12568	1.12573			N/A
6/4/2019	EURUSD	1:30:00 PM	1.12476	1.12472			N/A
6/4/2019	EURUSD	3:30:00 PM	1.12373	1.12374			N/A
6/4/2019	EURUSD.fx	9:30:00 AM	1.12558	1.12552			N/A
6/4/2019	EURUSD.fx	11:30:00 AM	1.12588	1.12582			N/A
6/4/2019	EURUSD.fx	1:30:00 PM	1.12496	1.12481			N/A
6/4/2019	EURUSD.fx	3:30:00 PM	1.12392	1.12383			N/A
6/4/2019	EURZAR	9:30:00 AM	16.2548	16.2719			N/A
6/4/2019	EURZAR	11:30:00 AM	16.2348	16.2492			N/A
6/4/2019	EURZAR	1:30:00 PM	16.4483	16.4645			N/A
6/4/2019	EURZAR	3:30:00 PM	16.4843	16.461			N/A
6/4/2019	EURZAR.fx	9:30:00 AM	16.25451	16.27268			N/A
6/4/2019	EURZAR.fx	11:30:00 AM	16.23456	16.24973			N/A

6/4/2019	EURZAR.fx	1:30:00 PM	16.44781	16.46501			N/A
6/4/2019	EURZAR.fx	3:30:00 PM	16.48146	16.46153			N/A
6/4/2019	GBPAUD	9:30:00 AM	1.81569	1.81626			N/A
6/4/2019	GBPAUD	11:30:00 AM	1.8126	1.81256			N/A
6/4/2019	GBPAUD	1:30:00 PM	1.81413	1.81487			N/A
6/4/2019	GBPAUD	3:30:00 PM	1.81647	1.81704			N/A
6/4/2019	GBPAUD.fx	9:30:00 AM	1.8161	1.81586			N/A
6/4/2019	GBPAUD.fx	11:30:00 AM	1.81299	1.81223			N/A
6/4/2019	GBPAUD.fx	1:30:00 PM	1.81454	1.81447			N/A
6/4/2019	GBPAUD.fx	3:30:00 PM	1.81687	1.81665			N/A
6/4/2019	GBPCAD	9:30:00 AM	1.70254	1.70307			N/A
6/4/2019	GBPCAD	11:30:00 AM	1.70013	1.70021			N/A
6/4/2019	GBPCAD	1:30:00 PM	1.70139	1.70201			N/A
6/4/2019	GBPCAD	3:30:00 PM	1.70302	1.70341			N/A
6/4/2019	GBPCAD.fx	9:30:00 AM	1.70296	1.70269			N/A
6/4/2019	GBPCAD.fx	11:30:00 AM	1.70052	1.69984			N/A
6/4/2019	GBPCAD.fx	1:30:00 PM	1.70178	1.70161			N/A
6/4/2019	GBPCAD.fx	3:30:00 PM	1.70341	1.70302			N/A
6/4/2019	GBPCHF	9:30:00 AM	1.25752	1.2578			N/A
6/4/2019	GBPCHF	11:30:00 AM	1.25645	1.25623			N/A
6/4/2019	GBPCHF	1:30:00 PM	1.2587	1.25908			N/A
6/4/2019	GBPCHF	3:30:00 PM	1.26017	1.26045			N/A
6/4/2019	GBPCHF.fx	9:30:00 AM	1.25771	1.2576			N/A
6/4/2019	GBPCHF.fx	11:30:00 AM	1.25664	1.25606			N/A
6/4/2019	GBPCHF.fx	1:30:00 PM	1.25888	1.25888			N/A
6/4/2019	GBPCHF.fx	3:30:00 PM	1.26035	1.26024			N/A
6/4/2019	GBPCZK	9:30:00 AM	29.005	29.024			N/A
6/4/2019	GBPCZK	11:30:00 AM	28.935	28.945			N/A
6/4/2019	GBPCZK	1:30:00 PM	28.994	29.012			N/A
6/4/2019	GBPCZK	3:30:00 PM	28.999	29.017			N/A
6/4/2019	GBPDKK	9:30:00 AM	8.405	8.415			N/A
6/4/2019	GBPDKK	11:30:00 AM	8.393	8.4			N/A
6/4/2019	GBPDKK	1:30:00 PM	8.408	8.42			N/A
6/4/2019	GBPDKK	3:30:00 PM	8.417	8.427			N/A



6/4/2019	GBPDKK.fx	9:30:00 AM	8.403	8.4154			N/A
6/4/2019	GBPDKK.fx	11:30:00 AM	8.391	8.4009			N/A
6/4/2019	GBPDKK.fx	1:30:00 PM	8.4069	8.4201			N/A
6/4/2019	GBPDKK.fx	3:30:00 PM	8.416	8.4275			N/A
6/4/2019	GBPHKD	9:30:00 AM	9.9334	9.9373			N/A
6/4/2019	GBPHKD	11:30:00 AM	9.918	9.9191			N/A
6/4/2019	GBPHKD	1:30:00 PM	9.9298	9.9346			N/A
6/4/2019	GBPHKD	3:30:00 PM	9.9316	9.936			N/A
6/4/2019	GBPHUF	9:30:00 AM	363.36	363.82			N/A
6/4/2019	GBPHUF	11:30:00 AM	361.57	361.87			N/A
6/4/2019	GBPHUF	1:30:00 PM	362.77	363.14			N/A
6/4/2019	GBPHUF	3:30:00 PM	362.72	363.1			N/A
6/4/2019	GBPJPY	9:30:00 AM	136.763	136.793			N/A
6/4/2019	GBPJPY	11:30:00 AM	136.769	136.744			N/A
6/4/2019	GBPJPY	1:30:00 PM	136.876	136.91			N/A
6/4/2019	GBPJPY	3:30:00 PM	137.114	137.133			N/A
6/4/2019	GBPJPY.fx	9:30:00 AM	136.782	136.774			N/A
6/4/2019	GBPJPY.fx	11:30:00 AM	136.788	136.727			N/A
6/4/2019	GBPJPY.fx	1:30:00 PM	136.895	136.891			N/A
6/4/2019	GBPJPY.fx	3:30:00 PM	137.133	137.113			N/A
6/4/2019	GBPMXN	9:30:00 AM	25.0212	25.033			N/A
6/4/2019	GBPMXN	11:30:00 AM	24.901	24.9082			N/A
6/4/2019	GBPMXN	1:30:00 PM	24.9554	24.9633			N/A
6/4/2019	GBPMXN	3:30:00 PM	24.9071	24.9074			N/A
6/4/2019	GBPNOK	9:30:00 AM	11.007	11.0172			N/A
6/4/2019	GBPNOK	11:30:00 AM	10.998	11.0035			N/A
6/4/2019	GBPNOK	1:30:00 PM	11.0238	11.0349			N/A
6/4/2019	GBPNOK	3:30:00 PM	11.0322	11.0403			N/A
6/4/2019	GBPNOK.fx	9:30:00 AM	11.01198	11.01215			N/A
6/4/2019	GBPNOK.fx	11:30:00 AM	11.00294	10.99893			N/A
6/4/2019	GBPNOK.fx	1:30:00 PM	11.02884	11.0298			N/A
6/4/2019	GBPNOK.fx	3:30:00 PM	11.03718	11.03529			N/A
6/4/2019	GBPNZD	9:30:00 AM	1.92298	1.92322			N/A
6/4/2019	GBPNZD	11:30:00 AM	1.91995	1.91999			N/A

6/4/2019	GBPNZD	1:30:00 PM	1.9212	1.92189			N/A
6/4/2019	GBPNZD	3:30:00 PM	1.92288	1.92343			N/A
6/4/2019	GBPNZD.fx	9:30:00 AM	1.92332	1.92283			N/A
6/4/2019	GBPNZD.fx	11:30:00 AM	1.92031	1.91966			N/A
6/4/2019	GBPNZD.fx	1:30:00 PM	1.92156	1.92152			N/A
6/4/2019	GBPNZD.fx	3:30:00 PM	1.92324	1.92305			N/A
6/4/2019	GBPPLN	9:30:00 AM	4.8193	4.82			N/A
6/4/2019	GBPPLN	11:30:00 AM	4.8092	4.8094			N/A
6/4/2019	GBPPLN	1:30:00 PM	4.824	4.825			N/A
6/4/2019	GBPPLN	3:30:00 PM	4.8256	4.8269			N/A
6/4/2019	GBPPLN.fx	9:30:00 AM	4.81724	4.82221			N/A
6/4/2019	GBPPLN.fx	11:30:00 AM	4.80696	4.81176			N/A
6/4/2019	GBPPLN.fx	1:30:00 PM	4.82196	4.82703			N/A
6/4/2019	GBPPLN.fx	3:30:00 PM	4.82362	4.82904			N/A
6/4/2019	GBPSEK	9:30:00 AM	11.9652	11.9737			N/A
6/4/2019	GBPSEK	11:30:00 AM	11.9425	11.9464			N/A
6/4/2019	GBPSEK	1:30:00 PM	11.9647	11.9735			N/A
6/4/2019	GBPSEK	3:30:00 PM	11.9758	11.9834			N/A
6/4/2019	GBPSEK.fx	9:30:00 AM	11.96134	11.97738			N/A
6/4/2019	GBPSEK.fx	11:30:00 AM	11.93835	11.95103			N/A
6/4/2019	GBPSEK.fx	1:30:00 PM	11.96089	11.97722			N/A
6/4/2019	GBPSEK.fx	3:30:00 PM	11.9721	11.98699			N/A
6/4/2019	GBPSGD	9:30:00 AM	1.7348	1.7355			N/A
6/4/2019	GBPSGD	11:30:00 AM	1.7323	1.7324			N/A
6/4/2019	GBPSGD	1:30:00 PM	1.7339	1.7345			N/A
6/4/2019	GBPSGD	3:30:00 PM	1.7348	1.7354			N/A
6/4/2019	GBPSGD.fx	9:30:00 AM	1.73303	1.73725			N/A
6/4/2019	GBPSGD.fx	11:30:00 AM	1.73047	1.7343			N/A
6/4/2019	GBPSGD.fx	1:30:00 PM	1.73208	1.73634			N/A
6/4/2019	GBPSGD.fx	3:30:00 PM	1.73298	1.73717			N/A
6/4/2019	GBPUSD	9:30:00 AM	1.26753	1.26738			N/A
6/4/2019	GBPUSD	11:30:00 AM	1.26597	1.26547			N/A
6/4/2019	GBPUSD	1:30:00 PM	1.26739	1.26727			N/A
6/4/2019	GBPUSD	3:30:00 PM	1.26748	1.26736			N/A

6/4/2019	GBPUSD.fx	9:30:00 AM	1.26751	1.26732			N/A
6/4/2019	GBPUSD.fx	11:30:00 AM	1.26602	1.26541			N/A
6/4/2019	GBPUSD.fx	1:30:00 PM	1.26745	1.2672			N/A
6/4/2019	GBPUSD.fx	3:30:00 PM	1.26753	1.26731			N/A
6/4/2019	GBPZAR	9:30:00 AM	18.3014	18.3262			N/A
6/4/2019	GBPZAR	11:30:00 AM	18.2504	18.267			N/A
6/4/2019	GBPZAR	1:30:00 PM	18.5279	18.5536			N/A
6/4/2019	GBPZAR	3:30:00 PM	18.5855	18.567			N/A
6/4/2019	GBPZAR.fx	9:30:00 AM	18.309	18.3194			N/A
6/4/2019	GBPZAR.fx	11:30:00 AM	18.2584	18.261			N/A
6/4/2019	GBPZAR.fx	1:30:00 PM	18.5329	18.5488			N/A
6/4/2019	GBPZAR.fx	3:30:00 PM	18.5915	18.5618			N/A
6/4/2019	GOLD	9:30:00 AM	1325.64	1325.96			N/A
6/4/2019	GOLD	11:30:00 AM	1328.56	1328.58			N/A
6/4/2019	GOLD	1:30:00 PM	1326.1	1326.31			N/A
6/4/2019	GOLD	3:30:00 PM	1322.12	1322			N/A
6/4/2019	HKDJPY	9:30:00 AM	13.76	13.77			N/A
6/4/2019	HKDJPY	11:30:00 AM	13.78	13.79			N/A
6/4/2019	HKDJPY	1:30:00 PM	13.78	13.79			N/A
6/4/2019	HKDJPY	3:30:00 PM	13.8	13.81			N/A
6/4/2019	HKDJPY.fx	9:30:00 AM	13.761	13.766			N/A
6/4/2019	HKDJPY.fx	11:30:00 AM	13.78	13.786			N/A
6/4/2019	HKDJPY.fx	1:30:00 PM	13.775	13.781			N/A
6/4/2019	HKDJPY.fx	3:30:00 PM	13.798	13.802			N/A
6/4/2019	HUFJPY	9:30:00 AM	0.3763	0.3766			N/A
6/4/2019	HUFJPY	11:30:00 AM	0.378	0.3783			N/A
6/4/2019	HUFJPY	1:30:00 PM	0.3772	0.3775			N/A
6/4/2019	HUFJPY	3:30:00 PM	0.378	0.3783			N/A
6/4/2019	JP225.i	9:30:00 AM	20342.81	20353.26			N/A
6/4/2019	JP225.i	11:30:00 AM	20442.81	20457.81			N/A
6/4/2019	JP225.i	1:30:00 PM	20480.31	20492.81			N/A
6/4/2019	JP225.i	3:30:00 PM	20507.81	20525.31			N/A
6/4/2019	MXNJPY	9:30:00 AM	5.47	5.47			N/A
6/4/2019	MXNJPY	11:30:00 AM	5.49	5.5			N/A

6/4/2019	MXNJPY	1:30:00 PM	5.48	5.49			N/A
6/4/2019	MXNJPY	3:30:00 PM	5.5	5.51			N/A
6/4/2019	NASDAQ.i	9:30:00 AM					N/A
6/4/2019	NASDAQ.i	11:30:00 AM					N/A
6/4/2019	NASDAQ.i	1:30:00 PM					N/A
6/4/2019	NASDAQ.i	3:30:00 PM					N/A
6/4/2019	NOKJPY	9:30:00 AM					N/A
6/4/2019	NOKJPY	11:30:00 AM	12.42	12.45			N/A
6/4/2019	NOKJPY	1:30:00 PM	12.4	12.43			N/A
6/4/2019	NOKJPY	3:30:00 PM	12.42	12.44			N/A
6/4/2019	NOKJPY.fx	9:30:00 AM	12.418	12.424			N/A
6/4/2019	NOKJPY.fx	11:30:00 AM	12.428	12.435			N/A
6/4/2019	NOKJPY.fx	1:30:00 PM	12.409	12.415			N/A
6/4/2019	NOKJPY.fx	3:30:00 PM	12.424	12.427			N/A
6/4/2019	NZDCAD	9:30:00 AM	0.88524	0.88577			N/A
6/4/2019	NZDCAD	11:30:00 AM	0.88521	0.88583			N/A
6/4/2019	NZDCAD	1:30:00 PM	0.88524	0.88592			N/A
6/4/2019	NZDCAD	3:30:00 PM	0.88536	0.88592			N/A
6/4/2019	NZDCAD.fx	9:30:00 AM	0.88556	0.88544			N/A
6/4/2019	NZDCAD.fx	11:30:00 AM	0.88554	0.88549			N/A
6/4/2019	NZDCAD.fx	1:30:00 PM	0.88557	0.88556			N/A
6/4/2019	NZDCAD.fx	3:30:00 PM	0.88569	0.88556			N/A
6/4/2019	NZDCHF	9:30:00 AM	0.65367	0.65429			N/A
6/4/2019	NZDCHF	11:30:00 AM	0.65408	0.65466			N/A
6/4/2019	NZDCHF	1:30:00 PM	0.65483	0.65548			N/A
6/4/2019	NZDCHF	3:30:00 PM	0.65499	0.65566			N/A
6/4/2019	NZDCHF.fx	9:30:00 AM	0.65401	0.65394			N/A
6/4/2019	NZDCHF.fx	11:30:00 AM	0.65443	0.65431			N/A
6/4/2019	NZDCHF.fx	1:30:00 PM	0.65517	0.65512			N/A
6/4/2019	NZDCHF.fx	3:30:00 PM	0.65533	0.65531			N/A
6/4/2019	NZDCZK	9:30:00 AM	15.083	15.091			N/A
6/4/2019	NZDCZK	11:30:00 AM	15.067	15.078			N/A
6/4/2019	NZDCZK	1:30:00 PM	15.089	15.097			N/A
6/4/2019	NZDCZK	3:30:00 PM	15.076	15.088			N/A

6/4/2019	NZDDKK	9:30:00 AM					N/A
6/4/2019	NZDDKK	11:30:00 AM					N/A
6/4/2019	NZDDKK	1:30:00 PM					N/A
6/4/2019	NZDDKK	3:30:00 PM					N/A
6/4/2019	NZDHKD	9:30:00 AM	5.1642	5.1671			N/A
6/4/2019	NZDHKD	11:30:00 AM	5.1639	5.1668			N/A
6/4/2019	NZDHKD	1:30:00 PM	5.1671	5.1698			N/A
6/4/2019	NZDHKD	3:30:00 PM	5.1635	5.1659			N/A
6/4/2019	NZDHUF	9:30:00 AM	188.92	189.18			N/A
6/4/2019	NZDHUF	11:30:00 AM	188.26	188.51			N/A
6/4/2019	NZDHUF	1:30:00 PM	188.78	189			N/A
6/4/2019	NZDHUF	3:30:00 PM	188.55	188.84			N/A
6/4/2019	NZDJPY	9:30:00 AM	71.097	71.156			N/A
6/4/2019	NZDJPY	11:30:00 AM	71.196	71.261			N/A
6/4/2019	NZDJPY	1:30:00 PM	71.21	71.277			N/A
6/4/2019	NZDJPY	3:30:00 PM	71.273	71.329			N/A
6/4/2019	NZDJPY.fx	9:30:00 AM	71.128	71.124			N/A
6/4/2019	NZDJPY.fx	11:30:00 AM	71.227	71.228			N/A
6/4/2019	NZDJPY.fx	1:30:00 PM	71.241	71.244			N/A
6/4/2019	NZDJPY.fx	3:30:00 PM	71.304	71.296			N/A
6/4/2019	NZDMXN	9:30:00 AM	13.0122	13.0132			N/A
6/4/2019	NZDMXN	11:30:00 AM	12.9678	12.9713			N/A
6/4/2019	NZDMXN	1:30:00 PM	12.9857	12.9891			N/A
6/4/2019	NZDMXN	3:30:00 PM	12.9499	12.9501			N/A
6/4/2019	NZDNOK	9:30:00 AM	5.7219	5.725			N/A
6/4/2019	NZDNOK	11:30:00 AM	5.7244	5.7264			N/A
6/4/2019	NZDNOK	1:30:00 PM	5.7357	5.7391			N/A
6/4/2019	NZDNOK	3:30:00 PM	5.7345	5.7376			N/A
6/4/2019	NZDPLN	9:30:00 AM	2.5042	2.5056			N/A
6/4/2019	NZDPLN	11:30:00 AM	2.5032	2.5045			N/A
6/4/2019	NZDPLN	1:30:00 PM	2.5098	2.5107			N/A
6/4/2019	NZDPLN	3:30:00 PM	2.5077	2.5089			N/A
6/4/2019	NZDSEK	9:30:00 AM	6.2179	6.2243			N/A
6/4/2019	NZDSEK	11:30:00 AM	6.2144	6.2213			N/A

6/4/2019	NZDSEK	1:30:00 PM	6.2232	6.2291			N/A
6/4/2019	NZDSEK	3:30:00 PM	6.2224	6.2292			N/A
6/4/2019	NZDSGD	9:30:00 AM	0.902	0.9025			N/A
6/4/2019	NZDSGD	11:30:00 AM	0.902	0.9026			N/A
6/4/2019	NZDSGD	1:30:00 PM	0.9022	0.9024			N/A
6/4/2019	NZDSGD	3:30:00 PM	0.9019	0.9025			N/A
6/4/2019	NZDSGD.fx	9:30:00 AM	0.902	0.90243			N/A
6/4/2019	NZDSGD.fx	11:30:00 AM	0.90194	0.9025			N/A
6/4/2019	NZDSGD.fx	1:30:00 PM	0.9022	0.90277			N/A
6/4/2019	NZDSGD.fx	3:30:00 PM	0.90188	0.90241			N/A
6/4/2019	NZDUSD	9:30:00 AM	0.65901	0.65902			N/A
6/4/2019	NZDUSD	11:30:00 AM	0.65916	0.65925			N/A
6/4/2019	NZDUSD	1:30:00 PM	0.65942	0.65953			N/A
6/4/2019	NZDUSD	3:30:00 PM	0.65897	0.659			N/A
6/4/2019	NZDUSD.fx	9:30:00 AM	0.65908	0.65903			N/A
6/4/2019	NZDUSD.fx	11:30:00 AM	0.65923	0.65925			N/A
6/4/2019	NZDUSD.fx	1:30:00 PM	0.65949	0.65954			N/A
6/4/2019	NZDUSD.fx	3:30:00 PM	0.65904	0.659			N/A
6/4/2019	NZDZAR	9:30:00 AM	9.5098	9.5247			N/A
6/4/2019	NZDZAR	11:30:00 AM	9.4963	9.5097			N/A
6/4/2019	NZDZAR	1:30:00 PM	9.6353	9.6516			N/A
6/4/2019	NZDZAR	3:30:00 PM	9.6568	9.651			N/A
6/4/2019	SEKJPY	9:30:00 AM	11.42	11.44			N/A
6/4/2019	SEKJPY	11:30:00 AM	11.45	11.46			N/A
6/4/2019	SEKJPY	1:30:00 PM	11.44	11.45			N/A
6/4/2019	SEKJPY	3:30:00 PM	11.45	11.46			N/A
6/4/2019	SEKJPY.fx	9:30:00 AM	11.417	11.436			N/A
6/4/2019	SEKJPY.fx	11:30:00 AM	11.439	11.458			N/A
6/4/2019	SEKJPY.fx	1:30:00 PM	11.428	11.446			N/A
6/4/2019	SEKJPY.fx	3:30:00 PM	11.438	11.455			N/A
6/4/2019	SGDJPY	9:30:00 AM	78.8	78.82			N/A
6/4/2019	SGDJPY	11:30:00 AM	78.94	78.95			N/A
6/4/2019	SGDJPY	1:30:00 PM	78.91	78.93			N/A
6/4/2019	SGDJPY	3:30:00 PM	79	79.02			N/A

6/4/2019	SILVER	9:30:00 AM	14.57	14.94			N/A
6/4/2019	SILVER	11:30:00 AM	14.6	14.98			N/A
6/4/2019	SILVER	1:30:00 PM	14.56	14.94			N/A
6/4/2019	SILVER	3:30:00 PM	14.53	14.9			N/A
6/4/2019	SPX500.i	9:30:00 AM	2748.99	2750.04			N/A
6/4/2019	SPX500.i	11:30:00 AM	2757.49	2758.54			N/A
6/4/2019	SPX500.i	1:30:00 PM	2762.49	2762.79			N/A
6/4/2019	SPX500.i	3:30:00 PM	2767.99	2768.54			N/A
6/4/2019	UK100.i	9:30:00 AM	7157.24	7156.91			N/A
6/4/2019	UK100.i	11:30:00 AM	7175.91	7176.41			N/A
6/4/2019	UK100.i	1:30:00 PM	7205.16	7205.91			N/A
6/4/2019	UK100.i	3:30:00 PM	7216.74	7216.16			N/A
6/4/2019	USDCAD	9:30:00 AM	1.34358	1.34356			N/A
6/4/2019	USDCAD	11:30:00 AM	1.34319	1.34333			N/A
6/4/2019	USDCAD	1:30:00 PM	1.3427	1.34282			N/A
6/4/2019	USDCAD	3:30:00 PM	1.34402	1.34385			N/A
6/4/2019	USDCAD.fx	9:30:00 AM	1.34361	1.34353			N/A
6/4/2019	USDCAD.fx	11:30:00 AM	1.34323	1.34329			N/A
6/4/2019	USDCAD.fx	1:30:00 PM	1.34273	1.34278			N/A
6/4/2019	USDCAD.fx	3:30:00 PM	1.34406	1.3438			N/A
6/4/2019	USDCHF	9:30:00 AM	0.99234	0.99233			N/A
6/4/2019	USDCHF	11:30:00 AM	0.99266	0.99257			N/A
6/4/2019	USDCHF	1:30:00 PM	0.99332	0.9933			N/A
6/4/2019	USDCHF	3:30:00 PM	0.99441	0.99436			N/A
6/4/2019	USDCHF.fx	9:30:00 AM	0.99238	0.99228			N/A
6/4/2019	USDCHF.fx	11:30:00 AM	0.9927	0.9925			N/A
6/4/2019	USDCHF.fx	1:30:00 PM	0.99337	0.99324			N/A
6/4/2019	USDCHF.fx	3:30:00 PM	0.99445	0.9943			N/A
6/4/2019	USDCZK	9:30:00 AM	22.9	22.922			N/A
6/4/2019	USDCZK	11:30:00 AM	22.874	22.896			N/A
6/4/2019	USDCZK	1:30:00 PM	22.897	22.914			N/A
6/4/2019	USDCZK	3:30:00 PM	22.897	22.918			N/A
6/4/2019	USDCZK.fx	9:30:00 AM	22.9087	22.913			N/A
6/4/2019	USDCZK.fx	11:30:00 AM	22.883	22.887			N/A

6/4/2019	USDCZK.fx	1:30:00 PM	22.906	22.905			N/A
6/4/2019	USDCZK.fx	3:30:00 PM	22.905	22.9092			N/A
6/4/2019	USDDKK	9:30:00 AM	6.6334	6.6371			N/A
6/4/2019	USDDKK	11:30:00 AM	6.6315	6.6354			N/A
6/4/2019	USDDKK	1:30:00 PM	6.6377	6.6409			N/A
6/4/2019	USDDKK	3:30:00 PM	6.6433	6.6466			N/A
6/4/2019	USDDKK.fx	9:30:00 AM	6.63379	6.63506			N/A
6/4/2019	USDDKK.fx	11:30:00 AM	6.63207	6.63323			N/A
6/4/2019	USDDKK.fx	1:30:00 PM	6.63813	6.63869			N/A
6/4/2019	USDDKK.fx	3:30:00 PM	6.64378	6.64465			N/A
6/4/2019	USDHKD	9:30:00 AM	7.8401	7.8404			N/A
6/4/2019	USDHKD	11:30:00 AM	7.8385	7.8385			N/A
6/4/2019	USDHKD	1:30:00 PM	7.8385	7.8387			N/A
6/4/2019	USDHKD	3:30:00 PM	7.8392	7.8393			N/A
6/4/2019	USDHKD.fx	9:30:00 AM	7.84009	7.84068			N/A
6/4/2019	USDHKD.fx	11:30:00 AM	7.83854	7.83855			N/A
6/4/2019	USDHKD.fx	1:30:00 PM	7.83882	7.83937			N/A
6/4/2019	USDHKD.fx	3:30:00 PM	7.83919	7.8398			N/A
6/4/2019	USDHUF	9:30:00 AM	286.81	287.24			N/A
6/4/2019	USDHUF	11:30:00 AM	285.83	286.23			N/A
6/4/2019	USDHUF	1:30:00 PM	286.34	286.72			N/A
6/4/2019	USDHUF	3:30:00 PM	286.26	286.7			N/A
6/4/2019	USDHUF.fx	9:30:00 AM	287.005	287.055			N/A
6/4/2019	USDHUF.fx	11:30:00 AM	286.033	286.028			N/A
6/4/2019	USDHUF.fx	1:30:00 PM	286.538	286.535			N/A
6/4/2019	USDHUF.fx	3:30:00 PM	286.453	286.509			N/A
6/4/2019	USDINR	9:30:00 AM	64.31	74.3			N/A
6/4/2019	USDINR	11:30:00 AM	64.29	74.28			N/A
6/4/2019	USDINR	1:30:00 PM					N/A
6/4/2019	USDINR	3:30:00 PM					N/A
6/4/2019	USDJPY	9:30:00 AM	107.924	107.918			N/A
6/4/2019	USDJPY	11:30:00 AM	108.04	108.047			N/A
6/4/2019	USDJPY	1:30:00 PM	108.016	108.017			N/A
6/4/2019	USDJPY	3:30:00 PM	108.201	108.184			N/A



6/4/2019	USDJPY.fx	9:30:00 AM	107.93	107.91			N/A
6/4/2019	USDJPY.fx	11:30:00 AM	108.046	108.04			N/A
6/4/2019	USDJPY.fx	1:30:00 PM	108.021	108.01			N/A
6/4/2019	USDJPY.fx	3:30:00 PM	108.206	108.177			N/A
6/4/2019	USDMXN	9:30:00 AM	19.753	19.754			N/A
6/4/2019	USDMXN	11:30:00 AM	19.681	19.684			N/A
6/4/2019	USDMXN	1:30:00 PM	19.7	19.702			N/A
6/4/2019	USDMXN	3:30:00 PM	19.659	19.657			N/A
6/4/2019	USDMXN.f	9:30:00 AM	19.7561	19.7501			N/A
6/4/2019	USDMXN.f	11:30:00 AM	19.685	19.6806			N/A
6/4/2019	USDMXN.f	1:30:00 PM	19.7029	19.6984			N/A
6/4/2019	USDMXN.f	3:30:00 PM	19.6639	19.6529			N/A
6/4/2019	USDNOK	9:30:00 AM	8.6849	8.6927			N/A
6/4/2019	USDNOK	11:30:00 AM	8.6876	8.6952			N/A
6/4/2019	USDNOK	1:30:00 PM	8.6988	8.7063			N/A
6/4/2019	USDNOK	3:30:00 PM	8.7042	8.7104			N/A
6/4/2019	USDNOK.fx	9:30:00 AM	8.68886	8.68804			N/A
6/4/2019	USDNOK.fx	11:30:00 AM	8.69171	8.69046			N/A
6/4/2019	USDNOK.fx	1:30:00 PM	8.70279	8.70179			N/A
6/4/2019	USDNOK.fx	3:30:00 PM	8.70839	8.70596			N/A
6/4/2019	USDPLN	9:30:00 AM	3.8022	3.803			N/A
6/4/2019	USDPLN	11:30:00 AM	3.7987	3.8003			N/A
6/4/2019	USDPLN	1:30:00 PM	3.8066	3.8069			N/A
6/4/2019	USDPLN	3:30:00 PM	3.8071	3.8084			N/A
6/4/2019	USDPLN.fx	9:30:00 AM	3.80117	3.80374			N/A
6/4/2019	USDPLN.fx	11:30:00 AM	3.79793	3.80103			N/A
6/4/2019	USDPLN.fx	1:30:00 PM	3.80587	3.8076			N/A
6/4/2019	USDPLN.fx	3:30:00 PM	3.80637	3.80913			N/A
6/4/2019	USDRUB	9:30:00 AM					N/A
6/4/2019	USDRUB	11:30:00 AM	64.977	65.371			N/A
6/4/2019	USDRUB	1:30:00 PM	65.079	65.46			N/A
6/4/2019	USDRUB	3:30:00 PM	65.056	65.443			N/A
6/4/2019	USDSEK	9:30:00 AM	9.4413	9.4448			N/A
6/4/2019	USDSEK	11:30:00 AM	9.4337	9.4374			N/A

6/4/2019	USDSEK	1:30:00 PM	9.442	9.4444			N/A
6/4/2019	USDSEK	3:30:00 PM	9.4487	9.4528			N/A
6/4/2019	USDSEK.fx	9:30:00 AM	9.44417	9.44274			N/A
6/4/2019	USDSEK.fx	11:30:00 AM	9.43622	9.43544			N/A
6/4/2019	USDSEK.fx	1:30:00 PM	9.44456	9.44256			N/A
6/4/2019	USDSEK.fx	3:30:00 PM	9.45121	9.45067			N/A
6/4/2019	USDSGD	9:30:00 AM	1.3688	1.3692			N/A
6/4/2019	USDSGD	11:30:00 AM	1.3684	1.3688			N/A
6/4/2019	USDSGD	1:30:00 PM	1.3682	1.3685			N/A
6/4/2019	USDSGD	3:30:00 PM	1.3688	1.3691			N/A
6/4/2019	USDSGD.fx	9:30:00 AM	1.36867	1.36919			N/A
6/4/2019	USDSGD.fx	11:30:00 AM	1.36834	1.36881			N/A
6/4/2019	USDSGD.fx	1:30:00 PM	1.36809	1.36854			N/A
6/4/2019	USDSGD.fx	3:30:00 PM	1.36866	1.3691			N/A
6/4/2019	USDZAR	9:30:00 AM	14.4414	14.4566			N/A
6/4/2019	USDZAR	11:30:00 AM	14.419	14.434			N/A
6/4/2019	USDZAR	1:30:00 PM	14.6228	14.6375			N/A
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6/4/2019	USDZAR.fx	11:30:00 AM	14.42589	14.42752			N/A
6/4/2019	USDZAR.fx	1:30:00 PM					N/A
6/4/2019	USDZAR.fx	3:30:00 PM					N/A
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6/4/2019	XAUUSD	11:30:00 AM	1328.55	1328.56			N/A
6/4/2019	XAUUSD	1:30:00 PM	1326.1	1326.3			N/A
6/4/2019	XAUUSD	3:30:00 PM	1322.12	1322			N/A
6/4/2019	ZARJPY	9:30:00 AM	7.45	7.47			N/A
6/4/2019	ZARJPY	11:30:00 AM	7.47	7.49			N/A
6/4/2019	ZARJPY	1:30:00 PM	7.37	7.38			N/A
6/4/2019	ZARJPY	3:30:00 PM	7.37	7.38			N/A
6/4/2019	ZARJPY.fx	9:30:00 AM	7.466	7.47			N/A
6/4/2019	ZARJPY.fx	11:30:00 AM	7.487	7.49			N/A
6/4/2019	ZARJPY.fx	1:30:00 PM	7.381	7.385			N/A
6/4/2019	ZARJPY.fx	3:30:00 PM	7.389	7.374			N/A

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6/5/2019	#ORAN	3:30:00 PM					N/A
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6/5/2019	#QCOM	11:30:00 AM					N/A
6/5/2019	#QCOM	1:30:00 PM					N/A
6/5/2019	#QCOM	3:30:00 PM					N/A

6/5/2019	#QQQ	9:30:00 AM					N/A
6/5/2019	#QQQ	11:30:00 AM					N/A
6/5/2019	#QQQ	1:30:00 PM					N/A
6/5/2019	#QQQ	3:30:00 PM					N/A
6/5/2019	#Ripple	9:30:00 AM	0.3917	0.3955			N/A
6/5/2019	#Ripple	11:30:00 AM	0.3996	0.4042			N/A
6/5/2019	#Ripple	1:30:00 PM	0.4016	0.4062			N/A
6/5/2019	#Ripple	3:30:00 PM	0.4003	0.4053			N/A
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6/5/2019	#S	11:30:00 AM					N/A
6/5/2019	#S	1:30:00 PM					N/A
6/5/2019	#S	3:30:00 PM					N/A
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6/5/2019	#SBUX	3:30:00 PM					N/A
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6/5/2019	#SPY	1:30:00 PM					N/A
6/5/2019	#SPY	3:30:00 PM					N/A
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6/5/2019	#T	3:30:00 PM					N/A
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6/5/2019	#TEVA	3:30:00 PM					N/A
6/5/2019	#TRI	9:30:00 AM					N/A
6/5/2019	#TRI	11:30:00 AM					N/A

6/5/2019	#TRI	1:30:00 PM					N/A
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6/5/2019	#TRV	9:30:00 AM					N/A
6/5/2019	#TRV	11:30:00 AM					N/A
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6/5/2019	#TSCO	1:30:00 PM					N/A
6/5/2019	#TSCO	3:30:00 PM					N/A
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6/5/2019	#UBS	3:30:00 PM					N/A
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6/5/2019	#UL	11:30:00 AM					N/A
6/5/2019	#UL	1:30:00 PM					N/A
6/5/2019	#UL	3:30:00 PM					N/A
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6/5/2019	#UPS	1:30:00 PM					N/A
6/5/2019	#UPS	3:30:00 PM					N/A
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6/5/2019	#UTX	11:30:00 AM					N/A
6/5/2019	#UTX	1:30:00 PM					N/A
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6/5/2019	#V	9:30:00 AM					N/A
6/5/2019	#V	11:30:00 AM					N/A
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6/5/2019	#V	3:30:00 PM					N/A
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6/5/2019	#WFC	1:30:00 PM					N/A
6/5/2019	#WFC	3:30:00 PM					N/A
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6/5/2019	#WMT	3:30:00 PM					N/A
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6/5/2019	#YHOO	11:30:00 AM					N/A
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6/5/2019	#YHOO	3:30:00 PM					N/A
6/5/2019	#ZNGA	9:30:00 AM					N/A
6/5/2019	#ZNGA	11:30:00 AM					N/A

6/5/2019	#ZNGA	1:30:00 PM					N/A
6/5/2019	#ZNGA	3:30:00 PM					N/A
6/5/2019	AUDCAD	9:30:00 AM	0.93683	0.93725			N/A
6/5/2019	AUDCAD	11:30:00 AM	0.93613	0.93676			N/A
6/5/2019	AUDCAD	1:30:00 PM	0.93576	0.93638			N/A
6/5/2019	AUDCAD	3:30:00 PM	0.93583	0.93649			N/A
6/5/2019	AUDCAD.fx	9:30:00 AM	0.93716	0.93691			N/A
6/5/2019	AUDCAD.fx	11:30:00 AM	0.93646	0.93642			N/A
6/5/2019	AUDCAD.fx	1:30:00 PM	0.93613	0.93604			N/A
6/5/2019	AUDCAD.fx	3:30:00 PM	0.93615	0.93616			N/A
6/5/2019	AUDCHF	9:30:00 AM	0.69334	0.69392			N/A
6/5/2019	AUDCHF	11:30:00 AM	0.69415	0.69478			N/A
6/5/2019	AUDCHF	1:30:00 PM	0.69386	0.69456			N/A
6/5/2019	AUDCHF	3:30:00 PM	0.69001	0.69059			N/A
6/5/2019	AUDCHF.fx	9:30:00 AM	0.69368	0.69357			N/A
6/5/2019	AUDCHF.fx	11:30:00 AM	0.69449	0.69444			N/A
6/5/2019	AUDCHF.fx	1:30:00 PM	0.69421	0.69422			N/A
6/5/2019	AUDCHF.fx	3:30:00 PM	0.69035	0.69025			N/A
6/5/2019	AUDCZK	9:30:00 AM	15.952	15.965			N/A
6/5/2019	AUDCZK	11:30:00 AM	15.918	15.935			N/A
6/5/2019	AUDCZK	1:30:00 PM	15.919	15.935			N/A
6/5/2019	AUDCZK	3:30:00 PM	15.858	15.874			N/A
6/5/2019	AUDDKK	9:30:00 AM	4.6397	4.6437			N/A
6/5/2019	AUDDKK	11:30:00 AM	4.6341	4.6386			N/A
6/5/2019	AUDDKK	1:30:00 PM	4.6355	4.6402			N/A
6/5/2019	AUDDKK	3:30:00 PM	4.6239	4.6281			N/A
6/5/2019	AUDHKD	9:30:00 AM	5.4891	5.4914			N/A
6/5/2019	AUDHKD	11:30:00 AM	5.4842	5.4881			N/A
6/5/2019	AUDHKD	1:30:00 PM	5.4861	5.4896			N/A
6/5/2019	AUDHKD	3:30:00 PM	5.4827	5.4863			N/A
6/5/2019	AUDHUF	9:30:00 AM	199.84	200.05			N/A
6/5/2019	AUDHUF	11:30:00 AM	199.52	199.76			N/A
6/5/2019	AUDHUF	1:30:00 PM	199.47	199.7			N/A
6/5/2019	AUDHUF	3:30:00 PM	198.82	199.05			N/A



6/5/2019	AUDJPY	9:30:00 AM	75.595	75.648			N/A
6/5/2019	AUDJPY	11:30:00 AM	75.757	75.809			N/A
6/5/2019	AUDJPY	1:30:00 PM	75.811	75.879			N/A
6/5/2019	AUDJPY	3:30:00 PM	75.455	75.52			N/A
6/5/2019	AUDJPY.fx	9:30:00 AM	75.629	75.612			N/A
6/5/2019	AUDJPY.fx	11:30:00 AM	75.791	75.774			N/A
6/5/2019	AUDJPY.fx	1:30:00 PM	75.844	75.844			N/A
6/5/2019	AUDJPY.fx	3:30:00 PM	75.488	75.485			N/A
6/5/2019	AUDMXN	9:30:00 AM	13.7268	13.7356			N/A
6/5/2019	AUDMXN	11:30:00 AM	13.6904	13.6922			N/A
6/5/2019	AUDMXN	1:30:00 PM	13.6806	13.6831			N/A
6/5/2019	AUDMXN	3:30:00 PM	13.7258	13.7296			N/A
6/5/2019	AUDNOK	9:30:00 AM	6.0808	6.0846			N/A
6/5/2019	AUDNOK	11:30:00 AM	6.0747	6.0794			N/A
6/5/2019	AUDNOK	1:30:00 PM	6.0708	6.0758			N/A
6/5/2019	AUDNOK	3:30:00 PM	6.0575	6.0628			N/A
6/5/2019	AUDNOK.fx	9:30:00 AM	6.0824	6.0829			N/A
6/5/2019	AUDNOK.fx	11:30:00 AM	6.0763	6.0776			N/A
6/5/2019	AUDNOK.fx	1:30:00 PM	6.0724	6.074			N/A
6/5/2019	AUDNOK.fx	3:30:00 PM	6.0591	6.0611			N/A
6/5/2019	AUDNZD	9:30:00 AM	1.05341	1.05411			N/A
6/5/2019	AUDNZD	11:30:00 AM	1.05368	1.05455			N/A
6/5/2019	AUDNZD	1:30:00 PM	1.05347	1.05435			N/A
6/5/2019	AUDNZD	3:30:00 PM	1.05009	1.05094			N/A
6/5/2019	AUDNZD.fx	9:30:00 AM	1.05386	1.05365			N/A
6/5/2019	AUDNZD.fx	11:30:00 AM	1.05412	1.05409			N/A
6/5/2019	AUDNZD.fx	1:30:00 PM	1.0539	1.05389			N/A
6/5/2019	AUDNZD.fx	3:30:00 PM	1.05052	1.0505			N/A
6/5/2019	AUDPLN	9:30:00 AM	2.6584	2.6613			N/A
6/5/2019	AUDPLN	11:30:00 AM	2.6539	2.6571			N/A
6/5/2019	AUDPLN	1:30:00 PM	2.6564	2.6594			N/A
6/5/2019	AUDPLN	3:30:00 PM	2.6476	2.6506			N/A
6/5/2019	AUDSEK	9:30:00 AM	6.5992	6.6008			N/A
6/5/2019	AUDSEK	11:30:00 AM	6.5933	6.5946			N/A

6/5/2019	AUDSEK	1:30:00 PM	6.5996	6.6023			N/A
6/5/2019	AUDSEK	3:30:00 PM	6.5797	6.5825			N/A
6/5/2019	AUDSEK.fx	9:30:00 AM	6.5947	6.6053			N/A
6/5/2019	AUDSEK.fx	11:30:00 AM	6.5888	6.599			N/A
6/5/2019	AUDSEK.fx	1:30:00 PM	6.5951	6.6067			N/A
6/5/2019	AUDSEK.fx	3:30:00 PM	6.5748	6.5869			N/A
6/5/2019	AUDSGD	9:30:00 AM	0.9549	0.9551			N/A
6/5/2019	AUDSGD	11:30:00 AM	0.9547	0.9548			N/A
6/5/2019	AUDSGD	1:30:00 PM	0.9549	0.9552			N/A
6/5/2019	AUDSGD	3:30:00 PM	0.9536	0.9538			N/A
6/5/2019	AUDSGD.fx	9:30:00 AM	0.95503	0.95497			N/A
6/5/2019	AUDSGD.fx	11:30:00 AM	0.95479	0.95473			N/A
6/5/2019	AUDSGD.fx	1:30:00 PM	0.95498	0.95508			N/A
6/5/2019	AUDSGD.fx	3:30:00 PM	0.9537	0.95373			N/A
6/5/2019	AUDUSD	9:30:00 AM	0.70032	0.70029			N/A
6/5/2019	AUDUSD	11:30:00 AM	0.69991	0.70004			N/A
6/5/2019	AUDUSD	1:30:00 PM	0.70019	0.70023			N/A
6/5/2019	AUDUSD	3:30:00 PM	0.69955	0.6996			N/A
6/5/2019	AUDUSD.fx	9:30:00 AM	0.70037	0.70022			N/A
6/5/2019	AUDUSD.fx	11:30:00 AM	0.69996	0.69998			N/A
6/5/2019	AUDUSD.fx	1:30:00 PM	0.70024	0.70017			N/A
6/5/2019	AUDUSD.fx	3:30:00 PM	0.69959	0.69955			N/A
6/5/2019	AUDZAR	9:30:00 AM	10.2742	10.2783			N/A
6/5/2019	AUDZAR	11:30:00 AM	10.311	10.3269			N/A
6/5/2019	AUDZAR	1:30:00 PM	10.294	10.304			N/A
6/5/2019	AUDZAR	3:30:00 PM	10.2751	10.2885			N/A
6/5/2019	AUS200.i	9:30:00 AM	6355.94	6360.44			N/A
6/5/2019	AUS200.i	11:30:00 AM	6374.94	6377.44			N/A
6/5/2019	AUS200.i	1:30:00 PM	6383.84	6386.94			N/A
6/5/2019	AUS200.i	3:30:00 PM	6372.94	6376.94			N/A
6/5/2019	BCHUSD	9:30:00 AM	396.77	397.05			N/A
6/5/2019	BCHUSD	11:30:00 AM	416.62	418.04			N/A
6/5/2019	BCHUSD	1:30:00 PM	419.65	421.22			N/A
6/5/2019	BCHUSD	3:30:00 PM	411.41	413.34			N/A

6/5/2019	CADCHF	9:30:00 AM	0.73991	0.74053			N/A
6/5/2019	CADCHF	11:30:00 AM	0.74132	0.74187			N/A
6/5/2019	CADCHF	1:30:00 PM	0.74128	0.74198			N/A
6/5/2019	CADCHF	3:30:00 PM	0.73717	0.73766			N/A
6/5/2019	CADCHF.fx	9:30:00 AM	0.74025	0.74018			N/A
6/5/2019	CADCHF.fx	11:30:00 AM	0.74166	0.74152			N/A
6/5/2019	CADCHF.fx	1:30:00 PM	0.74162	0.74163			N/A
6/5/2019	CADCHF.fx	3:30:00 PM	0.7375	0.73732			N/A
6/5/2019	CADCZK	9:30:00 AM	17.027	17.043			N/A
6/5/2019	CADCZK	11:30:00 AM	17.002	17.018			N/A
6/5/2019	CADCZK	1:30:00 PM	17.009	17.025			N/A
6/5/2019	CADCZK	3:30:00 PM	16.942	16.957			N/A
6/5/2019	CADDDKK	9:30:00 AM	4.952	4.956			N/A
6/5/2019	CADDDKK	11:30:00 AM	4.948	4.952			N/A
6/5/2019	CADDDKK	1:30:00 PM					N/A
6/5/2019	CADDDKK	3:30:00 PM	4.939	4.943			N/A
6/5/2019	CADHKD	9:30:00 AM	5.8582	5.8621			N/A
6/5/2019	CADHKD	11:30:00 AM	5.8578	5.8617			N/A
6/5/2019	CADHKD	1:30:00 PM	5.8617	5.8653			N/A
6/5/2019	CADHKD	3:30:00 PM	5.8572	5.8612			N/A
6/5/2019	CADHUF	9:30:00 AM	213.33	213.48			N/A
6/5/2019	CADHUF	11:30:00 AM	213.14	213.3			N/A
6/5/2019	CADHUF	1:30:00 PM	213.16	213.32			N/A
6/5/2019	CADHUF	3:30:00 PM	212.43	212.61			N/A
6/5/2019	CADJPY	9:30:00 AM	80.671	80.739			N/A
6/5/2019	CADJPY	11:30:00 AM	80.906	80.95			N/A
6/5/2019	CADJPY	1:30:00 PM	80.992	81.058			N/A
6/5/2019	CADJPY	3:30:00 PM	80.604	80.667			N/A
6/5/2019	CADJPY.fx	9:30:00 AM	80.704	80.703			N/A
6/5/2019	CADJPY.fx	11:30:00 AM	80.94	80.915			N/A
6/5/2019	CADJPY.fx	1:30:00 PM	81.026	81.022			N/A
6/5/2019	CADJPY.fx	3:30:00 PM	80.636	80.633			N/A
6/5/2019	CADMXN	9:30:00 AM	14.6512	14.6613			N/A
6/5/2019	CADMXN	11:30:00 AM	14.6232	14.6242			N/A

6/5/2019	CADMXN	1:30:00 PM	14.6181	14.6201			N/A
6/5/2019	CADMXN	3:30:00 PM	14.6635	14.6687			N/A
6/5/2019	CADNOK	9:30:00 AM	6.4882	6.4909			N/A
6/5/2019	CADNOK	11:30:00 AM	6.4833	6.488			N/A
6/5/2019	CADNOK	1:30:00 PM	6.4845	6.4887			N/A
6/5/2019	CADNOK	3:30:00 PM	6.4699	6.4749			N/A
6/5/2019	CADPLN	9:30:00 AM	2.8369	2.8387			N/A
6/5/2019	CADPLN	11:30:00 AM	2.8345	2.8361			N/A
6/5/2019	CADPLN	1:30:00 PM	2.8383	2.8399			N/A
6/5/2019	CADPLN	3:30:00 PM	2.8287	2.8304			N/A
6/5/2019	CADSEK	9:30:00 AM	7.04	7.0419			N/A
6/5/2019	CADSEK	11:30:00 AM	7.0391	7.0409			N/A
6/5/2019	CADSEK	1:30:00 PM	7.0484	7.0517			N/A
6/5/2019	CADSEK	3:30:00 PM	7.0292	7.0332			N/A
6/5/2019	CADSGD	9:30:00 AM	1.0186	1.0189			N/A
6/5/2019	CADSGD	11:30:00 AM	1.019	1.0193			N/A
6/5/2019	CADSGD	1:30:00 PM	1.0195	1.0198			N/A
6/5/2019	CADSGD	3:30:00 PM					N/A
6/5/2019	CADZAR	9:30:00 AM	10.9652	10.9714			N/A
6/5/2019	CADZAR	11:30:00 AM	11.0121	11.0294			N/A
6/5/2019	CADZAR	1:30:00 PM	10.9991	11.0093			N/A
6/5/2019	CADZAR	3:30:00 PM	10.9768	10.9922			N/A
6/5/2019	CHFCZK	9:30:00 AM	23.006	23.022			N/A
6/5/2019	CHFCZK	11:30:00 AM	22.932	22.946			N/A
6/5/2019	CHFCZK	1:30:00 PM	22.939	22.955			N/A
6/5/2019	CHFCZK	3:30:00 PM	22.971	22.986			N/A
6/5/2019	CHFDKK	9:30:00 AM	6.69	6.693			N/A
6/5/2019	CHFDKK	11:30:00 AM	6.675	6.677			N/A
6/5/2019	CHFDKK	1:30:00 PM	6.679	6.683			N/A
6/5/2019	CHFDKK	3:30:00 PM	6.7	6.703			N/A
6/5/2019	CHFDKK.fx	9:30:00 AM	6.6885	6.6945			N/A
6/5/2019	CHFDKK.fx	11:30:00 AM	6.6733	6.6787			N/A
6/5/2019	CHFDKK.fx	1:30:00 PM	6.6775	6.6838			N/A
6/5/2019	CHFDKK.fx	3:30:00 PM	6.6984	6.7039			N/A

6/5/2019	CHFHKD	9:30:00 AM	7.9151	7.919			N/A
6/5/2019	CHFHKD	11:30:00 AM	7.9	7.903			N/A
6/5/2019	CHFHKD	1:30:00 PM	7.9052	7.9084			N/A
6/5/2019	CHFHKD	3:30:00 PM	7.941	7.9447			N/A
6/5/2019	CHFHUF	9:30:00 AM	288.12	288.49			N/A
6/5/2019	CHFHUF	11:30:00 AM	287.35	287.72			N/A
6/5/2019	CHFHUF	1:30:00 PM	287.36	287.74			N/A
6/5/2019	CHFHUF	3:30:00 PM	287.93	288.3			N/A
6/5/2019	CHFJPY	9:30:00 AM	108.993	109.059			N/A
6/5/2019	CHFJPY	11:30:00 AM	109.094	109.145			N/A
6/5/2019	CHFJPY	1:30:00 PM	109.222	109.284			N/A
6/5/2019	CHFJPY	3:30:00 PM	109.321	109.384			N/A
6/5/2019	CHFJPY.fx	9:30:00 AM	109.026	109.024			N/A
6/5/2019	CHFJPY.fx	11:30:00 AM	109.127	109.111			N/A
6/5/2019	CHFJPY.fx	1:30:00 PM	109.254	109.25			N/A
6/5/2019	CHFJPY.fx	3:30:00 PM	109.353	109.351			N/A
6/5/2019	CHFMXN	9:30:00 AM	19.794	19.8083			N/A
6/5/2019	CHFMXN	11:30:00 AM	19.7197	19.7204			N/A
6/5/2019	CHFMXN	1:30:00 PM	19.7107	19.7154			N/A
6/5/2019	CHFMXN	3:30:00 PM	19.8788	19.8848			N/A
6/5/2019	CHFNOK	9:30:00 AM	8.7664	8.7721			N/A
6/5/2019	CHFNOK	11:30:00 AM	8.7474	8.7538			N/A
6/5/2019	CHFNOK	1:30:00 PM	8.7449	8.752			N/A
6/5/2019	CHFNOK	3:30:00 PM	8.7754	8.782			N/A
6/5/2019	CHFNOK.fx	9:30:00 AM	8.76998	8.76865			N/A
6/5/2019	CHFNOK.fx	11:30:00 AM	8.75089	8.75012			N/A
6/5/2019	CHFNOK.fx	1:30:00 PM	8.74846	8.74841			N/A
6/5/2019	CHFNOK.fx	3:30:00 PM	8.77908	8.77872			N/A
6/5/2019	CHFPLN	9:30:00 AM	3.8329	3.8359			N/A
6/5/2019	CHFPLN	11:30:00 AM	3.8224	3.8252			N/A
6/5/2019	CHFPLN	1:30:00 PM	3.8271	3.83			N/A
6/5/2019	CHFPLN	3:30:00 PM	3.8363	3.8392			N/A
6/5/2019	CHFPLN.fx	9:30:00 AM	3.83044	3.83833			N/A
6/5/2019	CHFPLN.fx	11:30:00 AM	3.81996	3.82743			N/A

6/5/2019	CHFPLN.fx	1:30:00 PM	3.82474	3.83234			N/A
6/5/2019	CHFPLN.fx	3:30:00 PM	3.83405	3.84141			N/A
6/5/2019	CHFSEK	9:30:00 AM	9.5109	9.5129			N/A
6/5/2019	CHFSEK	11:30:00 AM	9.4924	9.495			N/A
6/5/2019	CHFSEK	1:30:00 PM	9.505	9.5088			N/A
6/5/2019	CHFSEK	3:30:00 PM	9.531	9.5334			N/A
6/5/2019	CHFSGD	9:30:00 AM	1.3766	1.377			N/A
6/5/2019	CHFSGD	11:30:00 AM	1.3747	1.375			N/A
6/5/2019	CHFSGD	1:30:00 PM	1.3755	1.3759			N/A
6/5/2019	CHFSGD	3:30:00 PM	1.3816	1.3818			N/A
6/5/2019	CHFSGD.fx	9:30:00 AM	1.37683	1.37677			N/A
6/5/2019	CHFSGD.fx	11:30:00 AM	1.37493	1.37477			N/A
6/5/2019	CHFSGD.fx	1:30:00 PM	1.37573	1.37574			N/A
6/5/2019	CHFSGD.fx	3:30:00 PM	1.38171	1.38156			N/A
6/5/2019	CHFZAR	9:30:00 AM	14.8178	14.8178			N/A
6/5/2019	CHFZAR	11:30:00 AM	14.8568	14.8691			N/A
6/5/2019	CHFZAR	1:30:00 PM	14.8363	14.8421			N/A
6/5/2019	CHFZAR	3:30:00 PM	14.8856	14.8967			N/A
6/5/2019	CZKJPY	9:30:00 AM	4.737	4.741			N/A
6/5/2019	CZKJPY	11:30:00 AM	4.757	4.759			N/A
6/5/2019	CZKJPY	1:30:00 PM	4.761	4.764			N/A
6/5/2019	CZKJPY	3:30:00 PM					N/A
6/5/2019	DAX30.i	9:30:00 AM	11967.23	11966.48			N/A
6/5/2019	DAX30.i	11:30:00 AM	12018.23	12009.48			N/A
6/5/2019	DAX30.i	1:30:00 PM	12029.73	12024.48			N/A
6/5/2019	DAX30.i	3:30:00 PM	11968.23	11966.48			N/A
6/5/2019	DJ30.i	9:30:00 AM					N/A
6/5/2019	DJ30.i	11:30:00 AM					N/A
6/5/2019	DJ30.i	1:30:00 PM					N/A
6/5/2019	DJ30.i	3:30:00 PM					N/A
6/5/2019	DKKJPY	9:30:00 AM	16.29	16.31			N/A
6/5/2019	DKKJPY	11:30:00 AM					N/A
6/5/2019	DKKJPY	1:30:00 PM	16.36	16.37			N/A
6/5/2019	DKKJPY	3:30:00 PM					N/A

6/5/2019	EURAUD	9:30:00 AM	1.60837	1.60846			N/A
6/5/2019	EURAUD	11:30:00 AM	1.61003	1.61037			N/A
6/5/2019	EURAUD	1:30:00 PM	1.60944	1.60985			N/A
6/5/2019	EURAUD	3:30:00 PM	1.61374	1.61404			N/A
6/5/2019	EURAUD.fx	9:30:00 AM	1.60859	1.60824			N/A
6/5/2019	EURAUD.fx	11:30:00 AM	1.61023	1.61013			N/A
6/5/2019	EURAUD.fx	1:30:00 PM	1.60963	1.60964			N/A
6/5/2019	EURAUD.fx	3:30:00 PM	1.61391	1.61383			N/A
6/5/2019	EURCAD	9:30:00 AM	1.50738	1.50811			N/A
6/5/2019	EURCAD	11:30:00 AM	1.50809	1.50876			N/A
6/5/2019	EURCAD	1:30:00 PM	1.50693	1.50769			N/A
6/5/2019	EURCAD	3:30:00 PM	1.51104	1.51169			N/A
6/5/2019	EURCAD.fx	9:30:00 AM	1.5078	1.50769			N/A
6/5/2019	EURCAD.fx	11:30:00 AM	1.50851	1.50833			N/A
6/5/2019	EURCAD.fx	1:30:00 PM	1.50734	1.50727			N/A
6/5/2019	EURCAD.fx	3:30:00 PM	1.51144	1.51128			N/A
6/5/2019	EURCHF	9:30:00 AM	1.11605	1.11615			N/A
6/5/2019	EURCHF	11:30:00 AM	1.11863	1.11861			N/A
6/5/2019	EURCHF	1:30:00 PM	1.11778	1.11793			N/A
6/5/2019	EURCHF	3:30:00 PM	1.11447	1.11448			N/A
6/5/2019	EURCHF.fx	9:30:00 AM	1.11611	1.11609			N/A
6/5/2019	EURCHF.fx	11:30:00 AM	1.11869	1.11855			N/A
6/5/2019	EURCHF.fx	1:30:00 PM	1.11784	1.11787			N/A
6/5/2019	EURCHF.fx	3:30:00 PM	1.11452	1.11442			N/A
6/5/2019	EURCZK	9:30:00 AM	25.663	25.699			N/A
6/5/2019	EURCZK	11:30:00 AM	25.637	25.675			N/A
6/5/2019	EURCZK	1:30:00 PM	25.63	25.668			N/A
6/5/2019	EURCZK	3:30:00 PM	25.59	25.629			N/A
6/5/2019	EURDKK	9:30:00 AM	7.4673	7.4678			N/A
6/5/2019	EURDKK	11:30:00 AM	7.4665	7.4678			N/A
6/5/2019	EURDKK	1:30:00 PM	7.4667	7.468			N/A
6/5/2019	EURDKK	3:30:00 PM					N/A
6/5/2019	EURGBP	9:30:00 AM	0.88665	0.88641			N/A
6/5/2019	EURGBP	11:30:00 AM	0.88674	0.88632			N/A

6/5/2019	EURGBP	1:30:00 PM	0.88708	0.88716			N/A
6/5/2019	EURGBP	3:30:00 PM	0.88661	0.88664			N/A
6/5/2019	EURGBP.fx	9:30:00 AM	0.88668	0.88634			N/A
6/5/2019	EURGBP.fx	11:30:00 AM	0.88678	0.88628			N/A
6/5/2019	EURGBP.fx	1:30:00 PM	0.88711	0.88711			N/A
6/5/2019	EURGBP.fx	3:30:00 PM	0.88664	0.88659			N/A
6/5/2019	EURHKD	9:30:00 AM	8.8358	8.8401			N/A
6/5/2019	EURHKD	11:30:00 AM	8.8397	8.8444			N/A
6/5/2019	EURHKD	1:30:00 PM	8.8388	8.8431			N/A
6/5/2019	EURHKD	3:30:00 PM	8.8549	8.8592			N/A
6/5/2019	EURHKD.fx	9:30:00 AM	8.83861	8.83727			N/A
6/5/2019	EURHKD.fx	11:30:00 AM	8.84245	8.84158			N/A
6/5/2019	EURHKD.fx	1:30:00 PM	8.84163	8.84025			N/A
6/5/2019	EURHKD.fx	3:30:00 PM	8.85764	8.85627			N/A
6/5/2019	EURHUF	9:30:00 AM	321.51	322.11			N/A
6/5/2019	EURHUF	11:30:00 AM	321.49	322.1			N/A
6/5/2019	EURHUF	1:30:00 PM	321.16	321.83			N/A
6/5/2019	EURHUF	3:30:00 PM	320.89	321.61			N/A
6/5/2019	EURHUF.fx	9:30:00 AM	321.809	321.963			N/A
6/5/2019	EURHUF.fx	11:30:00 AM	321.791	321.97			N/A
6/5/2019	EURHUF.fx	1:30:00 PM	321.424	321.608			N/A
6/5/2019	EURHUF.fx	3:30:00 PM	321.151	321.348			N/A
6/5/2019	EURJPY	9:30:00 AM	121.678	121.679			N/A
6/5/2019	EURJPY	11:30:00 AM	122.081	122.057			N/A
6/5/2019	EURJPY	1:30:00 PM	122.128	122.126			N/A
6/5/2019	EURJPY	3:30:00 PM	121.87	121.876			N/A
6/5/2019	EURJPY.fx	9:30:00 AM	121.68	121.674			N/A
6/5/2019	EURJPY.fx	11:30:00 AM	122.084	122.051			N/A
6/5/2019	EURJPY.fx	1:30:00 PM	122.13	122.122			N/A
6/5/2019	EURJPY.fx	3:30:00 PM	121.872	121.872			N/A
6/5/2019	EURMXN	9:30:00 AM	22.0926	22.1093			N/A
6/5/2019	EURMXN	11:30:00 AM	22.0613	22.0653			N/A
6/5/2019	EURMXN	1:30:00 PM	22.0365	22.0429			N/A
6/5/2019	EURMXN	3:30:00 PM	22.1727	22.1755			N/A



6/5/2019	EURMXN.fx	9:30:00 AM	22.1007	22.1014			N/A
6/5/2019	EURMXN.fx	11:30:00 AM	22.0697	22.0566			N/A
6/5/2019	EURMXN.fx	1:30:00 PM	22.045	22.0344			N/A
6/5/2019	EURMXN.fx	3:30:00 PM	22.1816	22.1664			N/A
6/5/2019	EURNOK	9:30:00 AM	9.7821	9.7921			N/A
6/5/2019	EURNOK	11:30:00 AM	9.7826	9.7943			N/A
6/5/2019	EURNOK	1:30:00 PM	9.774	9.7848			N/A
6/5/2019	EURNOK	3:30:00 PM	9.7781	9.7899			N/A
6/5/2019	EURNOK.fx	9:30:00 AM	9.78759	9.7868			N/A
6/5/2019	EURNOK.fx	11:30:00 AM	9.78801	9.78879			N/A
6/5/2019	EURNOK.fx	1:30:00 PM	9.77943	9.77918			N/A
6/5/2019	EURNOK.fx	3:30:00 PM	9.78357	9.78434			N/A
6/5/2019	EURNZD	9:30:00 AM	1.69509	1.69574			N/A
6/5/2019	EURNZD	11:30:00 AM	1.69765	1.69834			N/A
6/5/2019	EURNZD	1:30:00 PM	1.69671	1.69741			N/A
6/5/2019	EURNZD	3:30:00 PM	1.69575	1.69651			N/A
6/5/2019	EURNZD.fx	9:30:00 AM	1.69549	1.69532			N/A
6/5/2019	EURNZD.fx	11:30:00 AM	1.69806	1.69791			N/A
6/5/2019	EURNZD.fx	1:30:00 PM	1.69712	1.69698			N/A
6/5/2019	EURNZD.fx	3:30:00 PM	1.69614	1.69608			N/A
6/5/2019	EURPLN	9:30:00 AM	4.2778	4.2811			N/A
6/5/2019	EURPLN	11:30:00 AM	4.2757	4.2789			N/A
6/5/2019	EURPLN	1:30:00 PM	4.2784	4.2812			N/A
6/5/2019	EURPLN	3:30:00 PM	4.2753	4.2788			N/A
6/5/2019	EURPLN.fx	9:30:00 AM	4.27717	4.28185			N/A
6/5/2019	EURPLN.fx	11:30:00 AM	4.27509	4.27961			N/A
6/5/2019	EURPLN.fx	1:30:00 PM	4.27777	4.28186			N/A
6/5/2019	EURPLN.fx	3:30:00 PM	4.2748	4.27916			N/A
6/5/2019	EURRUB	9:30:00 AM					N/A
6/5/2019	EURRUB	11:30:00 AM	73.044	73.481			N/A
6/5/2019	EURRUB	1:30:00 PM	72.997	73.438			N/A
6/5/2019	EURRUB	3:30:00 PM	73.141	73.58			N/A
6/5/2019	EURSEK	9:30:00 AM	10.6195	10.6228			N/A
6/5/2019	EURSEK	11:30:00 AM	10.623	10.6247			N/A

6/5/2019	EURSEK	1:30:00 PM	10.6293	10.6332			N/A
6/5/2019	EURSEK	3:30:00 PM	10.6246	10.6294			N/A
6/5/2019	EURSEK.fx	9:30:00 AM	10.62106	10.62115			N/A
6/5/2019	EURSEK.fx	11:30:00 AM	10.62457	10.6228			N/A
6/5/2019	EURSEK.fx	1:30:00 PM	10.63107	10.63144			N/A
6/5/2019	EURSEK.fx	3:30:00 PM	10.62601	10.62798			N/A
6/5/2019	EURSGD	9:30:00 AM	1.5363	1.537			N/A
6/5/2019	EURSGD	11:30:00 AM	1.5377	1.5383			N/A
6/5/2019	EURSGD	1:30:00 PM	1.5375	1.5383			N/A
6/5/2019	EURSGD	3:30:00 PM	1.5394	1.5402			N/A
6/5/2019	EURSGD.fx	9:30:00 AM	1.53669	1.53657			N/A
6/5/2019	EURSGD.fx	11:30:00 AM	1.53804	1.53784			N/A
6/5/2019	EURSGD.fx	1:30:00 PM	1.53786	1.53789			N/A
6/5/2019	EURSGD.fx	3:30:00 PM	1.53979	1.53984			N/A
6/5/2019	EURUSD	9:30:00 AM	1.12667	1.1267			N/A
6/5/2019	EURUSD	11:30:00 AM	1.12732	1.12736			N/A
6/5/2019	EURUSD	1:30:00 PM	1.12739	1.12736	100	100	N/A
6/5/2019	EURUSD	3:30:00 PM	1.12929	1.12929			N/A
6/5/2019	EURUSD.fx	9:30:00 AM	1.12688	1.12679			N/A
6/5/2019	EURUSD.fx	11:30:00 AM	1.12752	1.12745			N/A
6/5/2019	EURUSD.fx	1:30:00 PM	1.12759	1.12745			N/A
6/5/2019	EURUSD.fx	3:30:00 PM	1.1295	1.12939			N/A
6/5/2019	EURZAR	9:30:00 AM	16.5431	16.5442			N/A
6/5/2019	EURZAR	11:30:00 AM	16.6251	16.6435			N/A
6/5/2019	EURZAR	1:30:00 PM	16.5861	16.5969			N/A
6/5/2019	EURZAR	3:30:00 PM	16.5989	16.6135			N/A
6/5/2019	EURZAR.fx	9:30:00 AM	16.54327	16.54553			N/A
6/5/2019	EURZAR.fx	11:30:00 AM	16.62426	16.64368			N/A
6/5/2019	EURZAR.fx	1:30:00 PM	16.58592	16.59759			N/A
6/5/2019	EURZAR.fx	3:30:00 PM	16.5982	16.61448			N/A
6/5/2019	GBPAUD	9:30:00 AM	1.81483	1.81486			N/A
6/5/2019	GBPAUD	11:30:00 AM	1.81713	1.81693			N/A
6/5/2019	GBPAUD	1:30:00 PM	1.81476	1.81554			N/A
6/5/2019	GBPAUD	3:30:00 PM	1.82056	1.82138			N/A

6/5/2019	GBPAUD.fx	9:30:00 AM	1.81522	1.81446			N/A
6/5/2019	GBPAUD.fx	11:30:00 AM	1.81752	1.81661			N/A
6/5/2019	GBPAUD.fx	1:30:00 PM	1.81516	1.81513			N/A
6/5/2019	GBPAUD.fx	3:30:00 PM	1.82094	1.82101			N/A
6/5/2019	GBPCAD	9:30:00 AM	1.70078	1.70079			N/A
6/5/2019	GBPCAD	11:30:00 AM	1.70175	1.70148			N/A
6/5/2019	GBPCAD	1:30:00 PM	1.69878	1.69948			N/A
6/5/2019	GBPCAD	3:30:00 PM	1.70433	1.70512			N/A
6/5/2019	GBPCAD.fx	9:30:00 AM	1.70117	1.70041			N/A
6/5/2019	GBPCAD.fx	11:30:00 AM	1.70215	1.70115			N/A
6/5/2019	GBPCAD.fx	1:30:00 PM	1.69917	1.69908			N/A
6/5/2019	GBPCAD.fx	3:30:00 PM	1.70471	1.70476			N/A
6/5/2019	GBPCHF	9:30:00 AM	1.25903	1.25888			N/A
6/5/2019	GBPCHF	11:30:00 AM	1.26206	1.26167			N/A
6/5/2019	GBPCHF	1:30:00 PM	1.25991	1.26034			N/A
6/5/2019	GBPCHF	3:30:00 PM	1.25696	1.25719			N/A
6/5/2019	GBPCHF.fx	9:30:00 AM	1.25921	1.25865			N/A
6/5/2019	GBPCHF.fx	11:30:00 AM	1.26225	1.26148			N/A
6/5/2019	GBPCHF.fx	1:30:00 PM	1.26011	1.26014			N/A
6/5/2019	GBPCHF.fx	3:30:00 PM	1.25714	1.257			N/A
6/5/2019	GBPCZK	9:30:00 AM	28.962	28.974			N/A
6/5/2019	GBPCZK	11:30:00 AM	28.937	28.943			N/A
6/5/2019	GBPCZK	1:30:00 PM	28.901	28.922			N/A
6/5/2019	GBPCZK	3:30:00 PM	28.876	28.896			N/A
6/5/2019	GBPDKK	9:30:00 AM	8.421	8.429			N/A
6/5/2019	GBPDKK	11:30:00 AM	8.42	8.428			N/A
6/5/2019	GBPDKK	1:30:00 PM	8.414	8.424			N/A
6/5/2019	GBPDKK	3:30:00 PM	8.418	8.43			N/A
6/5/2019	GBPDKK.fx	9:30:00 AM	8.4194	8.4293			N/A
6/5/2019	GBPDKK.fx	11:30:00 AM	8.4198	8.4287			N/A
6/5/2019	GBPDKK.fx	1:30:00 PM	8.4121	8.4249			N/A
6/5/2019	GBPDKK.fx	3:30:00 PM	8.4172	8.4299			N/A
6/5/2019	GBPHKD	9:30:00 AM	9.9654	9.9653			N/A
6/5/2019	GBPHKD	11:30:00 AM	9.9694	9.9676			N/A

6/5/2019	GBPHKD	1:30:00 PM	9.9592	9.9637			N/A
6/5/2019	GBPHKD	3:30:00 PM	9.9822	9.987			N/A
6/5/2019	GBPHUF	9:30:00 AM	362.74	363.07			N/A
6/5/2019	GBPHUF	11:30:00 AM	362.61	362.86			N/A
6/5/2019	GBPHUF	1:30:00 PM	362.05	362.51			N/A
6/5/2019	GBPHUF	3:30:00 PM	361.95	362.4			N/A
6/5/2019	GBPJPY	9:30:00 AM	137.265	137.251			N/A
6/5/2019	GBPJPY	11:30:00 AM	137.732	137.655			N/A
6/5/2019	GBPJPY	1:30:00 PM	137.654	137.683			N/A
6/5/2019	GBPJPY	3:30:00 PM	137.441	137.481			N/A
6/5/2019	GBPJPY.fx	9:30:00 AM	137.291	137.232			N/A
6/5/2019	GBPJPY.fx	11:30:00 AM	137.751	137.641			N/A
6/5/2019	GBPJPY.fx	1:30:00 PM	137.674	137.664			N/A
6/5/2019	GBPJPY.fx	3:30:00 PM	137.459	137.463			N/A
6/5/2019	GBPMXN	9:30:00 AM	24.9182	24.9248			N/A
6/5/2019	GBPMXN	11:30:00 AM	24.8733	24.8725			N/A
6/5/2019	GBPMXN	1:30:00 PM	24.8342	24.8377			N/A
6/5/2019	GBPMXN	3:30:00 PM	24.9903	24.9972			N/A
6/5/2019	GBPNOK	9:30:00 AM	11.0355	11.0439			N/A
6/5/2019	GBPNOK	11:30:00 AM	11.0383	11.0441			N/A
6/5/2019	GBPNOK	1:30:00 PM	11.0184	11.0291			N/A
6/5/2019	GBPNOK	3:30:00 PM	11.0295	11.0409			N/A
6/5/2019	GBPNOK.fx	9:30:00 AM	11.03993	11.03913			N/A
6/5/2019	GBPNOK.fx	11:30:00 AM	11.04308	11.03943			N/A
6/5/2019	GBPNOK.fx	1:30:00 PM	11.02328	11.02399			N/A
6/5/2019	GBPNOK.fx	3:30:00 PM	11.03436	11.03615			N/A
6/5/2019	GBPNZD	9:30:00 AM	1.91265	1.91236			N/A
6/5/2019	GBPNZD	11:30:00 AM	1.91557	1.91519			N/A
6/5/2019	GBPNZD	1:30:00 PM	1.91267	1.91328			N/A
6/5/2019	GBPNZD	3:30:00 PM	1.91262	1.91326			N/A
6/5/2019	GBPNZD.fx	9:30:00 AM	1.91301	1.91199			N/A
6/5/2019	GBPNZD.fx	11:30:00 AM	1.91592	1.91485			N/A
6/5/2019	GBPNZD.fx	1:30:00 PM	1.91305	1.91291			N/A
6/5/2019	GBPNZD.fx	3:30:00 PM	1.91295	1.91292			N/A

6/5/2019	GBPPLN	9:30:00 AM	4.8269	4.8272			N/A
6/5/2019	GBPPLN	11:30:00 AM	4.8254	4.8244			N/A
6/5/2019	GBPPLN	1:30:00 PM	4.8238	4.8252			N/A
6/5/2019	GBPPLN	3:30:00 PM	4.8232	4.825			N/A
6/5/2019	GBPPLN.fx	9:30:00 AM	4.82452	4.82943			N/A
6/5/2019	GBPPLN.fx	11:30:00 AM	4.82331	4.82679			N/A
6/5/2019	GBPPLN.fx	1:30:00 PM	4.8216	4.82733			N/A
6/5/2019	GBPPLN.fx	3:30:00 PM	4.82116	4.8271			N/A
6/5/2019	GBPSEK	9:30:00 AM	11.9781	11.9829			N/A
6/5/2019	GBPSEK	11:30:00 AM	11.9826	11.9816			N/A
6/5/2019	GBPSEK	1:30:00 PM	11.9788	11.9874			N/A
6/5/2019	GBPSEK	3:30:00 PM	11.9807	11.9894			N/A
6/5/2019	GBPSEK.fx	9:30:00 AM	11.97461	11.98666			N/A
6/5/2019	GBPSEK.fx	11:30:00 AM	11.97902	11.98674			N/A
6/5/2019	GBPSEK.fx	1:30:00 PM	11.97522	11.99098			N/A
6/5/2019	GBPSEK.fx	3:30:00 PM	11.9768	11.99332			N/A
6/5/2019	GBPSGD	9:30:00 AM	1.7334	1.7333			N/A
6/5/2019	GBPSGD	11:30:00 AM	1.7352	1.7345			N/A
6/5/2019	GBPSGD	1:30:00 PM	1.7332	1.7339			N/A
6/5/2019	GBPSGD	3:30:00 PM	1.7365	1.7372			N/A
6/5/2019	GBPSGD.fx	9:30:00 AM	1.73162	1.73513			N/A
6/5/2019	GBPSGD.fx	11:30:00 AM	1.73333	1.73645			N/A
6/5/2019	GBPSGD.fx	1:30:00 PM	1.73134	1.73572			N/A
6/5/2019	GBPSGD.fx	3:30:00 PM	1.73456	1.73888			N/A
6/5/2019	GBPUSD	9:30:00 AM	1.27139	1.27081			N/A
6/5/2019	GBPUSD	11:30:00 AM	1.27222	1.27143			N/A
6/5/2019	GBPUSD	1:30:00 PM	1.27101	1.27095			N/A
6/5/2019	GBPUSD	3:30:00 PM	1.27391	1.27392	200	200	N/A
6/5/2019	GBPUSD.fx	9:30:00 AM	1.27145	1.27076			N/A
6/5/2019	GBPUSD.fx	11:30:00 AM	1.27227	1.27138			N/A
6/5/2019	GBPUSD.fx	1:30:00 PM	1.27107	1.27089			N/A
6/5/2019	GBPUSD.fx	3:30:00 PM	1.27397	1.27386			N/A
6/5/2019	GBPZAR	9:30:00 AM	18.6543	18.6653			N/A
6/5/2019	GBPZAR	11:30:00 AM	18.753	18.7732			N/A

6/5/2019	GBPZAR	1:30:00 PM	18.6932	18.7125			N/A
6/5/2019	GBPZAR	3:30:00 PM	18.718	18.7418			N/A
6/5/2019	GBPZAR.fx	9:30:00 AM	18.6616	18.6588			N/A
6/5/2019	GBPZAR.fx	11:30:00 AM	18.7605	18.7675			N/A
6/5/2019	GBPZAR.fx	1:30:00 PM	18.6995	18.7052			N/A
6/5/2019	GBPZAR.fx	3:30:00 PM	18.7258	18.7355			N/A
6/5/2019	GOLD	9:30:00 AM	1331.56	1331.56			N/A
6/5/2019	GOLD	11:30:00 AM	1333.86	1334.04			N/A
6/5/2019	GOLD	1:30:00 PM	1337.17	1337.28			N/A
6/5/2019	GOLD	3:30:00 PM	1342.15	1342.39			N/A
6/5/2019	HKDJPY	9:30:00 AM	13.77	13.78			N/A
6/5/2019	HKDJPY	11:30:00 AM	13.81	13.81			N/A
6/5/2019	HKDJPY	1:30:00 PM	13.82	13.82			N/A
6/5/2019	HKDJPY	3:30:00 PM	13.76	13.77			N/A
6/5/2019	HKDJPY.fx	9:30:00 AM	13.764	13.771			N/A
6/5/2019	HKDJPY.fx	11:30:00 AM	13.802	13.808			N/A
6/5/2019	HKDJPY.fx	1:30:00 PM	13.811	13.817			N/A
6/5/2019	HKDJPY.fx	3:30:00 PM	13.756	13.762			N/A
6/5/2019	HUFJPY	9:30:00 AM	0.3785	0.3788			N/A
6/5/2019	HUFJPY	11:30:00 AM	0.3794	0.3796			N/A
6/5/2019	HUFJPY	1:30:00 PM	0.3801	0.3804			N/A
6/5/2019	HUFJPY	3:30:00 PM	0.3795	0.3799			N/A
6/5/2019	JP225.i	9:30:00 AM	20700.3	20717.8			N/A
6/5/2019	JP225.i	11:30:00 AM	20772.8	20782.8			N/A
6/5/2019	JP225.i	1:30:00 PM	20842.8	20852.8			N/A
6/5/2019	JP225.i	3:30:00 PM	20723.63	20742.8			N/A
6/5/2019	MXNJPY	9:30:00 AM	5.51	5.51			N/A
6/5/2019	MXNJPY	11:30:00 AM	5.53	5.54			N/A
6/5/2019	MXNJPY	1:30:00 PM	5.54	5.56			N/A
6/5/2019	MXNJPY	3:30:00 PM	5.5	5.5			N/A
6/5/2019	NASDAQ.i	9:30:00 AM					N/A
6/5/2019	NASDAQ.i	11:30:00 AM					N/A
6/5/2019	NASDAQ.i	1:30:00 PM					N/A
6/5/2019	NASDAQ.i	3:30:00 PM					N/A

6/5/2019	NOKJPY	9:30:00 AM	12.42	12.45			N/A
6/5/2019	NOKJPY	11:30:00 AM	12.46	12.49			N/A
6/5/2019	NOKJPY	1:30:00 PM	12.48	12.51			N/A
6/5/2019	NOKJPY	3:30:00 PM					N/A
6/5/2019	NOKJPY.fx	9:30:00 AM	12.43	12.435			N/A
6/5/2019	NOKJPY.fx	11:30:00 AM	12.469	12.473			N/A
6/5/2019	NOKJPY.fx	1:30:00 PM	12.485	12.491			N/A
6/5/2019	NOKJPY.fx	3:30:00 PM	12.453	12.46			N/A
6/5/2019	NZDCAD	9:30:00 AM	0.88902	0.88959			N/A
6/5/2019	NZDCAD	11:30:00 AM	0.88801	0.88874			N/A
6/5/2019	NZDCAD	1:30:00 PM	0.88789	0.88846			N/A
6/5/2019	NZDCAD	3:30:00 PM	0.89083	0.89144			N/A
6/5/2019	NZDCAD.fx	9:30:00 AM	0.88936	0.88924			N/A
6/5/2019	NZDCAD.fx	11:30:00 AM	0.88834	0.8884			N/A
6/5/2019	NZDCAD.fx	1:30:00 PM	0.88823	0.88812			N/A
6/5/2019	NZDCAD.fx	3:30:00 PM	0.89114	0.89111			N/A
6/5/2019	NZDCHF	9:30:00 AM	0.65795	0.6586			N/A
6/5/2019	NZDCHF	11:30:00 AM	0.65851	0.65912			N/A
6/5/2019	NZDCHF	1:30:00 PM	0.65838	0.65903			N/A
6/5/2019	NZDCHF	3:30:00 PM	0.65675	0.65743			N/A
6/5/2019	NZDCHF.fx	9:30:00 AM	0.65828	0.65825			N/A
6/5/2019	NZDCHF.fx	11:30:00 AM	0.65885	0.65877			N/A
6/5/2019	NZDCHF.fx	1:30:00 PM	0.65872	0.65867			N/A
6/5/2019	NZDCHF.fx	3:30:00 PM	0.65709	0.65708			N/A
6/5/2019	NZDCZK	9:30:00 AM	15.141	15.152			N/A
6/5/2019	NZDCZK	11:30:00 AM	15.103	15.114			N/A
6/5/2019	NZDCZK	1:30:00 PM	15.107	15.118			N/A
6/5/2019	NZDCZK	3:30:00 PM	15.093	15.105			N/A
6/5/2019	NZDDKK	9:30:00 AM	4.403	4.406			N/A
6/5/2019	NZDDKK	11:30:00 AM	4.394	4.398			N/A
6/5/2019	NZDDKK	1:30:00 PM	4.399	4.402			N/A
6/5/2019	NZDDKK	3:30:00 PM					N/A
6/5/2019	NZDHKD	9:30:00 AM	5.2088	5.2113			N/A
6/5/2019	NZDHKD	11:30:00 AM	5.2025	5.2054			N/A

6/5/2019	NZDHKD	1:30:00 PM	5.2055	5.208			N/A
6/5/2019	NZDHKD	3:30:00 PM	5.2172	5.2199			N/A
6/5/2019	NZDHUF	9:30:00 AM	189.6	189.88			N/A
6/5/2019	NZDHUF	11:30:00 AM	189.23	189.52			N/A
6/5/2019	NZDHUF	1:30:00 PM	189.22	189.49			N/A
6/5/2019	NZDHUF	3:30:00 PM	189.17	189.44			N/A
6/5/2019	NZDJPY	9:30:00 AM	71.735	71.8			N/A
6/5/2019	NZDJPY	11:30:00 AM	71.867	71.918			N/A
6/5/2019	NZDJPY	1:30:00 PM	71.931	72.002			N/A
6/5/2019	NZDJPY	3:30:00 PM	71.821	71.892			N/A
6/5/2019	NZDJPY.fx	9:30:00 AM	71.767	71.768			N/A
6/5/2019	NZDJPY.fx	11:30:00 AM	71.898	71.885			N/A
6/5/2019	NZDJPY.fx	1:30:00 PM	71.964	71.968			N/A
6/5/2019	NZDJPY.fx	3:30:00 PM	71.852	71.86			N/A
6/5/2019	NZDMXN	9:30:00 AM	13.0274	13.0326			N/A
6/5/2019	NZDMXN	11:30:00 AM	12.9884	12.9865			N/A
6/5/2019	NZDMXN	1:30:00 PM	12.9818	12.9809			N/A
6/5/2019	NZDMXN	3:30:00 PM	13.0624	13.0644			N/A
6/5/2019	NZDNOK	9:30:00 AM	5.7681	5.7706			N/A
6/5/2019	NZDNOK	11:30:00 AM	5.7586	5.7622			N/A
6/5/2019	NZDNOK	1:30:00 PM	5.7586	5.7617			N/A
6/5/2019	NZDNOK	3:30:00 PM	5.7633	5.7671			N/A
6/5/2019	NZDPLN	9:30:00 AM	2.5224	2.5238			N/A
6/5/2019	NZDPLN	11:30:00 AM	2.5174	2.5188			N/A
6/5/2019	NZDPLN	1:30:00 PM	2.5206	2.5216			N/A
6/5/2019	NZDPLN	3:30:00 PM	2.5202	2.5216			N/A
6/5/2019	NZDSEK	9:30:00 AM	6.2576	6.2618			N/A
6/5/2019	NZDSEK	11:30:00 AM	6.2499	6.2553			N/A
6/5/2019	NZDSEK	1:30:00 PM	6.2576	6.2633			N/A
6/5/2019	NZDSEK	3:30:00 PM	6.2595	6.2659			N/A
6/5/2019	NZDSGD	9:30:00 AM	0.906	0.9066			N/A
6/5/2019	NZDSGD	11:30:00 AM	0.9056	0.906			N/A
6/5/2019	NZDSGD	1:30:00 PM	0.9059	0.9064			N/A
6/5/2019	NZDSGD	3:30:00 PM	0.9076	0.9082			N/A



6/5/2019	NZDSGD.fx	9:30:00 AM	0.90602	0.90655			N/A
6/5/2019	NZDSGD.fx	11:30:00 AM	0.90558	0.90591			N/A
6/5/2019	NZDSGD.fx	1:30:00 PM	0.90591	0.90643			N/A
6/5/2019	NZDSGD.fx	3:30:00 PM	0.90758	0.90815			N/A
6/5/2019	NZDUSD	9:30:00 AM	0.66451	0.66459			N/A
6/5/2019	NZDUSD	11:30:00 AM	0.66394	0.66404			N/A
6/5/2019	NZDUSD	1:30:00 PM	0.66432	0.66433			N/A
6/5/2019	NZDUSD	3:30:00 PM	0.66583	0.66593			N/A
6/5/2019	NZDUSD.fx	9:30:00 AM	0.66458	0.66461			N/A
6/5/2019	NZDUSD.fx	11:30:00 AM	0.66401	0.66405			N/A
6/5/2019	NZDUSD.fx	1:30:00 PM	0.6644	0.66433			N/A
6/5/2019	NZDUSD.fx	3:30:00 PM	0.6659	0.66595			N/A
6/5/2019	NZDZAR	9:30:00 AM	9.7474	9.7548			N/A
6/5/2019	NZDZAR	11:30:00 AM	9.78	9.7967			N/A
6/5/2019	NZDZAR	1:30:00 PM	9.7659	9.7776			N/A
6/5/2019	NZDZAR	3:30:00 PM	9.7764	9.793			N/A
6/5/2019	SEKJPY	9:30:00 AM	11.46	11.47			N/A
6/5/2019	SEKJPY	11:30:00 AM	11.49	11.5			N/A
6/5/2019	SEKJPY	1:30:00 PM	11.49	11.5			N/A
6/5/2019	SEKJPY	3:30:00 PM					N/A
6/5/2019	SEKJPY.fx	9:30:00 AM	11.448	11.465			N/A
6/5/2019	SEKJPY.fx	11:30:00 AM	11.481	11.498			N/A
6/5/2019	SEKJPY.fx	1:30:00 PM	11.479	11.496			N/A
6/5/2019	SEKJPY.fx	3:30:00 PM	11.458	11.478			N/A
6/5/2019	SGDJPY	9:30:00 AM	79.16	79.18			N/A
6/5/2019	SGDJPY	11:30:00 AM	79.33	79.36			N/A
6/5/2019	SGDJPY	1:30:00 PM	79.38	79.41			N/A
6/5/2019	SGDJPY	3:30:00 PM	79.12	79.14			N/A
6/5/2019	SILVER	9:30:00 AM	14.65	15.02			N/A
6/5/2019	SILVER	11:30:00 AM	14.66	15.04			N/A
6/5/2019	SILVER	1:30:00 PM	14.66	15.03			N/A
6/5/2019	SILVER	3:30:00 PM	14.75	15.13			N/A
6/5/2019	SPX500.i	9:30:00 AM	2807.03	2807.58			N/A
6/5/2019	SPX500.i	11:30:00 AM	2814.85	2815.08			N/A

6/5/2019	SPX500.i	1:30:00 PM	2822.68	2822.83			N/A
6/5/2019	SPX500.i	3:30:00 PM	2812.03	2813.08			N/A
6/5/2019	UK100.i	9:30:00 AM	7221.31	7222.31			N/A
6/5/2019	UK100.i	11:30:00 AM	7237.56	7236.56			N/A
6/5/2019	UK100.i	1:30:00 PM	7254.31	7254.31			N/A
6/5/2019	UK100.i	3:30:00 PM	7228.31	7229.31			N/A
6/5/2019	USDCAD	9:30:00 AM	1.33812	1.33812			N/A
6/5/2019	USDCAD	11:30:00 AM	1.33789	1.33781			N/A
6/5/2019	USDCAD	1:30:00 PM	1.33687	1.33689			N/A
6/5/2019	USDCAD	3:30:00 PM	1.33822	1.33822			N/A
6/5/2019	USDCAD.fx	9:30:00 AM	1.33816	1.33807			N/A
6/5/2019	USDCAD.fx	11:30:00 AM	1.33792	1.33777			N/A
6/5/2019	USDCAD.fx	1:30:00 PM	1.33691	1.33687			N/A
6/5/2019	USDCAD.fx	3:30:00 PM	1.33825	1.33819			N/A
6/5/2019	USDCHF	9:30:00 AM	0.99043	0.99049			N/A
6/5/2019	USDCHF	11:30:00 AM	0.99208	0.99215			N/A
6/5/2019	USDCHF	1:30:00 PM	0.99144	0.99145			N/A
6/5/2019	USDCHF	3:30:00 PM	0.98684	0.98673			N/A
6/5/2019	USDCHF.fx	9:30:00 AM	0.99047	0.99042			N/A
6/5/2019	USDCHF.fx	11:30:00 AM	0.99213	0.99209			N/A
6/5/2019	USDCHF.fx	1:30:00 PM	0.99148	0.99139			N/A
6/5/2019	USDCHF.fx	3:30:00 PM	0.98688	0.98668			N/A
6/5/2019	USDCZK	9:30:00 AM	22.801	22.822			N/A
6/5/2019	USDCZK	11:30:00 AM	22.765	22.786			N/A
6/5/2019	USDCZK	1:30:00 PM	22.757	22.778			N/A
6/5/2019	USDCZK	3:30:00 PM	22.684	22.706			N/A
6/5/2019	USDCZK.fx	9:30:00 AM	22.808	22.8135			N/A
6/5/2019	USDCZK.fx	11:30:00 AM	22.7736	22.777			N/A
6/5/2019	USDCZK.fx	1:30:00 PM	22.765	22.7681			N/A
6/5/2019	USDCZK.fx	3:30:00 PM	22.6924	22.698			N/A
6/5/2019	USDDKK	9:30:00 AM	6.6267	6.6302			N/A
6/5/2019	USDDKK	11:30:00 AM	6.6225	6.6263			N/A
6/5/2019	USDDKK	1:30:00 PM	6.6227	6.6259			N/A
6/5/2019	USDDKK	3:30:00 PM	6.6113	6.6149			N/A

6/5/2019	USDDKK.fx	9:30:00 AM	6.6272	6.62823			N/A
6/5/2019	USDDKK.fx	11:30:00 AM	6.62302	6.62417			N/A
6/5/2019	USDDKK.fx	1:30:00 PM	6.62309	6.62383			N/A
6/5/2019	USDDKK.fx	3:30:00 PM	6.61181	6.61289			N/A
6/5/2019	USDHKD	9:30:00 AM	7.8411	7.8415			N/A
6/5/2019	USDHKD	11:30:00 AM	7.8402	7.8404			N/A
6/5/2019	USDHKD	1:30:00 PM	7.8389	7.8393			N/A
6/5/2019	USDHKD	3:30:00 PM					N/A
6/5/2019	USDHKD.fx	9:30:00 AM	7.84112	7.84159			N/A
6/5/2019	USDHKD.fx	11:30:00 AM	7.84009	7.84056			N/A
6/5/2019	USDHKD.fx	1:30:00 PM					N/A
6/5/2019	USDHKD.fx	3:30:00 PM	7.83972	7.84033			N/A
6/5/2019	USDHUF	9:30:00 AM	285.43	285.87			N/A
6/5/2019	USDHUF	11:30:00 AM	285.25	285.72			N/A
6/5/2019	USDHUF	1:30:00 PM	284.94	285.37			N/A
6/5/2019	USDHUF	3:30:00 PM	284.2	284.66			N/A
6/5/2019	USDHUF.fx	9:30:00 AM	285.642	285.669			N/A
6/5/2019	USDHUF.fx	11:30:00 AM	285.455	285.515			N/A
6/5/2019	USDHUF.fx	1:30:00 PM	285.13	285.175			N/A
6/5/2019	USDHUF.fx	3:30:00 PM	284.394	284.47			N/A
6/5/2019	USDINR	9:30:00 AM					N/A
6/5/2019	USDINR	11:30:00 AM					N/A
6/5/2019	USDINR	1:30:00 PM					N/A
6/5/2019	USDINR	3:30:00 PM					N/A
6/5/2019	USDJPY	9:30:00 AM	107.984	107.99			N/A
6/5/2019	USDJPY	11:30:00 AM	108.27	108.259			N/A
6/5/2019	USDJPY	1:30:00 PM	108.319	108.318			N/A
6/5/2019	USDJPY	3:30:00 PM	107.901	107.899			N/A
6/5/2019	USDJPY.fx	9:30:00 AM	107.989	107.983			N/A
6/5/2019	USDJPY.fx	11:30:00 AM	108.276	108.251			N/A
6/5/2019	USDJPY.fx	1:30:00 PM	108.325	108.311			N/A
6/5/2019	USDJPY.fx	3:30:00 PM	107.907	107.892			N/A
6/5/2019	USDMXN	9:30:00 AM	19.611	19.617			N/A
6/5/2019	USDMXN	11:30:00 AM	19.569	19.565			N/A

6/5/2019	USDMXN	1:30:00 PM	19.549	19.543			N/A
6/5/2019	USDMXN	3:30:00 PM	19.637	19.628			N/A
6/5/2019	USDMXN.fx	9:30:00 AM	19.6148	19.613			N/A
6/5/2019	USDMXN.fx	11:30:00 AM	19.5757	19.5619			N/A
6/5/2019	USDMXN.fx	1:30:00 PM	19.553	19.5393			N/A
6/5/2019	USDMXN.fx	3:30:00 PM	19.6412	19.6238			N/A
6/5/2019	USDNOK	9:30:00 AM	8.6826	8.6888			N/A
6/5/2019	USDNOK	11:30:00 AM	8.6779	8.6857			N/A
6/5/2019	USDNOK	1:30:00 PM	8.6698	8.6767			N/A
6/5/2019	USDNOK	3:30:00 PM	8.659	8.6668			N/A
6/5/2019	USDNOK.fx	9:30:00 AM	8.68672	8.68464			N/A
6/5/2019	USDNOK.fx	11:30:00 AM	8.682	8.68136			N/A
6/5/2019	USDNOK.fx	1:30:00 PM	8.67425	8.67214			N/A
6/5/2019	USDNOK.fx	3:30:00 PM	8.6629	8.6623			N/A
6/5/2019	USDPLN	9:30:00 AM	3.7972	3.7985			N/A
6/5/2019	USDPLN	11:30:00 AM	3.7928	3.7944			N/A
6/5/2019	USDPLN	1:30:00 PM	3.7952	3.7961			N/A
6/5/2019	USDPLN	3:30:00 PM	3.7862	3.7875			N/A
6/5/2019	USDPLN.fx	9:30:00 AM	3.79631	3.79929			N/A
6/5/2019	USDPLN.fx	11:30:00 AM	3.79198	3.79519			N/A
6/5/2019	USDPLN.fx	1:30:00 PM	3.79438	3.79692			N/A
6/5/2019	USDPLN.fx	3:30:00 PM	3.78543	3.78823			N/A
6/5/2019	USDRUB	9:30:00 AM					N/A
6/5/2019	USDRUB	11:30:00 AM	64.895	65.294			N/A
6/5/2019	USDRUB	1:30:00 PM	64.859	65.245			N/A
6/5/2019	USDRUB	3:30:00 PM	64.873	65.258			N/A
6/5/2019	USDSEK	9:30:00 AM	9.4218	9.424			N/A
6/5/2019	USDSEK	11:30:00 AM	9.4186	9.4208			N/A
6/5/2019	USDSEK	1:30:00 PM	9.4246	9.4278			N/A
6/5/2019	USDSEK	3:30:00 PM	9.4044	9.4083			N/A
6/5/2019	USDSEK.fx	9:30:00 AM	9.42435	9.42222			N/A
6/5/2019	USDSEK.fx	11:30:00 AM	9.42139	9.41879			N/A
6/5/2019	USDSEK.fx	1:30:00 PM	9.42722	9.42579			N/A
6/5/2019	USDSEK.fx	3:30:00 PM	9.40693	9.4066			N/A

6/5/2019	USDSGD	9:30:00 AM	1.3636	1.3639			N/A
6/5/2019	USDSGD	11:30:00 AM	1.364	1.3642			N/A
6/5/2019	USDSGD	1:30:00 PM	1.3638	1.3641			N/A
6/5/2019	USDSGD	3:30:00 PM	1.3632	1.3634			N/A
6/5/2019	USDSGD.fx	9:30:00 AM	1.36346	1.3639			N/A
6/5/2019	USDSGD.fx	11:30:00 AM	1.36386	1.36416			N/A
6/5/2019	USDSGD.fx	1:30:00 PM	1.36374	1.3641			N/A
6/5/2019	USDSGD.fx	3:30:00 PM	1.3631	1.36347			N/A
6/5/2019	USDZAR	9:30:00 AM	14.681	14.6823			N/A
6/5/2019	USDZAR	11:30:00 AM	14.7462	14.7617			N/A
6/5/2019	USDZAR	1:30:00 PM	14.7112	14.7187			N/A
6/5/2019	USDZAR	3:30:00 PM	14.6957	14.7081			N/A
6/5/2019	USDZAR.fx	9:30:00 AM					N/A
6/5/2019	USDZAR.fx	11:30:00 AM					N/A
6/5/2019	USDZAR.fx	1:30:00 PM					N/A
6/5/2019	USDZAR.fx	3:30:00 PM					N/A
6/5/2019	XAUUSD	9:30:00 AM	1331.56	1331.55			N/A
6/5/2019	XAUUSD	11:30:00 AM	1333.86	1334.03			N/A
6/5/2019	XAUUSD	1:30:00 PM	1337.17	1337.27			N/A
6/5/2019	XAUUSD	3:30:00 PM	1342.16	1342.37			N/A
6/5/2019	ZARJPY	9:30:00 AM	7.34	7.35			N/A
6/5/2019	ZARJPY	11:30:00 AM	7.31	7.34			N/A
6/5/2019	ZARJPY	1:30:00 PM	7.34	7.36			N/A
6/5/2019	ZARJPY	3:30:00 PM	7.32	7.36			N/A
6/5/2019	ZARJPY.fx	9:30:00 AM	7.356	7.352			N/A
6/5/2019	ZARJPY.fx	11:30:00 AM	7.336	7.339			N/A
6/5/2019	ZARJPY.fx	1:30:00 PM	7.36	7.36			N/A
6/5/2019	ZARJPY.fx	3:30:00 PM	7.337	7.341			N/A
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6/6/2019	#CL.f	11:30:00 AM	52.09	52.07			N/A
6/6/2019	#CL.f	1:30:00 PM	51.889	51.87			N/A
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6/6/2019	#ZNGA	3:30:00 PM					N/A
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6/6/2019	AUDCAD	11:30:00 AM	0.93543	0.93597			N/A
6/6/2019	AUDCAD	1:30:00 PM	0.9354	0.93612			N/A
6/6/2019	AUDCAD	3:30:00 PM	0.93556	0.93611			N/A

6/6/2019	AUDCAD.fx	9:30:00 AM	0.93489	0.93488			N/A
6/6/2019	AUDCAD.fx	11:30:00 AM	0.93576	0.93563			N/A
6/6/2019	AUDCAD.fx	1:30:00 PM	0.93573	0.93578			N/A
6/6/2019	AUDCAD.fx	3:30:00 PM	0.93582	0.9358			N/A
6/6/2019	AUDCHF	9:30:00 AM	0.69212	0.69272			N/A
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6/6/2019	AUDCHF	3:30:00 PM	0.69229	0.69296			N/A
6/6/2019	AUDCHF.fx	9:30:00 AM	0.69247	0.69237			N/A
6/6/2019	AUDCHF.fx	11:30:00 AM	0.69396	0.69391			N/A
6/6/2019	AUDCHF.fx	1:30:00 PM	0.69449	0.69442			N/A
6/6/2019	AUDCHF.fx	3:30:00 PM	0.69262	0.69263			N/A
6/6/2019	AUDCZK	9:30:00 AM	15.902	15.914			N/A
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6/6/2019	AUDCZK	3:30:00 PM	15.884	15.898			N/A
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6/6/2019	AUDDKK	11:30:00 AM	4.635	4.6394			N/A
6/6/2019	AUDDKK	1:30:00 PM	4.6371	4.6417			N/A
6/6/2019	AUDDKK	3:30:00 PM	4.6279	4.6318			N/A
6/6/2019	AUDHKD	9:30:00 AM	5.4597	5.463			N/A
6/6/2019	AUDHKD	11:30:00 AM	5.4682	5.4721			N/A
6/6/2019	AUDHKD	1:30:00 PM	5.4684	5.4717			N/A
6/6/2019	AUDHKD	3:30:00 PM	5.4723	5.4756			N/A
6/6/2019	AUDHUF	9:30:00 AM	199.42	199.57			N/A
6/6/2019	AUDHUF	11:30:00 AM	199.34	199.58			N/A
6/6/2019	AUDHUF	1:30:00 PM	199.46	199.69			N/A
6/6/2019	AUDHUF	3:30:00 PM	198.85	199.03			N/A
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6/6/2019	AUDJPY	11:30:00 AM	75.485	75.551			N/A
6/6/2019	AUDJPY	1:30:00 PM	75.469	75.532			N/A
6/6/2019	AUDJPY	3:30:00 PM	75.475	75.54			N/A
6/6/2019	AUDJPY.fx	9:30:00 AM	75.316	75.286			N/A
6/6/2019	AUDJPY.fx	11:30:00 AM	75.518	75.516			N/A

6/6/2019	AUDJPY.fx	1:30:00 PM	75.503	75.496			N/A
6/6/2019	AUDJPY.fx	3:30:00 PM	75.508	75.505			N/A
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6/6/2019	AUDMXN	1:30:00 PM	13.7469	13.7469			N/A
6/6/2019	AUDMXN	3:30:00 PM	13.7704	13.7726			N/A
6/6/2019	AUDNOK	9:30:00 AM	6.082	6.0854			N/A
6/6/2019	AUDNOK	11:30:00 AM	6.0825	6.0859			N/A
6/6/2019	AUDNOK	1:30:00 PM	6.0832	6.0886			N/A
6/6/2019	AUDNOK	3:30:00 PM	6.0786	6.0828			N/A
6/6/2019	AUDNOK.fx	9:30:00 AM	6.0835	6.0838			N/A
6/6/2019	AUDNOK.fx	11:30:00 AM	6.0841	6.0843			N/A
6/6/2019	AUDNOK.fx	1:30:00 PM	6.0848	6.0869			N/A
6/6/2019	AUDNOK.fx	3:30:00 PM	6.0801	6.0814			N/A
6/6/2019	AUDNZD	9:30:00 AM	1.05123	1.05206			N/A
6/6/2019	AUDNZD	11:30:00 AM	1.05233	1.05322			N/A
6/6/2019	AUDNZD	1:30:00 PM	1.05289	1.0538			N/A
6/6/2019	AUDNZD	3:30:00 PM	1.0523	1.05309			N/A
6/6/2019	AUDNZD.fx	9:30:00 AM	1.05167	1.05161			N/A
6/6/2019	AUDNZD.fx	11:30:00 AM	1.05276	1.05279			N/A
6/6/2019	AUDNZD.fx	1:30:00 PM	1.05335	1.05335			N/A
6/6/2019	AUDNZD.fx	3:30:00 PM	1.05275	1.05264			N/A
6/6/2019	AUDPLN	9:30:00 AM	2.6535	2.6562			N/A
6/6/2019	AUDPLN	11:30:00 AM	2.6543	2.6575			N/A
6/6/2019	AUDPLN	1:30:00 PM	2.6559	2.6589			N/A
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6/6/2019	AUDSEK	1:30:00 PM	6.5888	6.5921			N/A
6/6/2019	AUDSEK	3:30:00 PM	6.5808	6.5828			N/A
6/6/2019	AUDSEK.fx	9:30:00 AM	6.574	6.5848			N/A
6/6/2019	AUDSEK.fx	11:30:00 AM	6.5747	6.5841			N/A
6/6/2019	AUDSEK.fx	1:30:00 PM	6.5843	6.5966			N/A
6/6/2019	AUDSEK.fx	3:30:00 PM	6.5758	6.5874			N/A

6/6/2019	AUDSGD	9:30:00 AM	0.9517	0.9519			N/A
6/6/2019	AUDSGD	11:30:00 AM	0.9526	0.9526			N/A
6/6/2019	AUDSGD	1:30:00 PM	0.9522	0.9525			N/A
6/6/2019	AUDSGD	3:30:00 PM	0.9524	0.9526			N/A
6/6/2019	AUDSGD.fx	9:30:00 AM	0.95175	0.95178			N/A
6/6/2019	AUDSGD.fx	11:30:00 AM	0.95266	0.95264			N/A
6/6/2019	AUDSGD.fx	1:30:00 PM	0.95242	0.95246			N/A
6/6/2019	AUDSGD.fx	3:30:00 PM	0.95244	0.95252			N/A
6/6/2019	AUDUSD	9:30:00 AM	0.69667	0.69669			N/A
6/6/2019	AUDUSD	11:30:00 AM	0.69783	0.69788			N/A
6/6/2019	AUDUSD	1:30:00 PM	0.69774	0.69785			N/A
6/6/2019	AUDUSD	3:30:00 PM	0.69842	0.69838			N/A
6/6/2019	AUDUSD.fx	9:30:00 AM	0.69672	0.69664			N/A
6/6/2019	AUDUSD.fx	11:30:00 AM	0.69789	0.69782			N/A
6/6/2019	AUDUSD.fx	1:30:00 PM	0.6978	0.69779			N/A
6/6/2019	AUDUSD.fx	3:30:00 PM	0.69846	0.69833			N/A
6/6/2019	AUDZAR	9:30:00 AM	10.4024	10.4128			N/A
6/6/2019	AUDZAR	11:30:00 AM	10.3786	10.3924			N/A
6/6/2019	AUDZAR	1:30:00 PM	10.3866	10.3957			N/A
6/6/2019	AUDZAR	3:30:00 PM	10.3671	10.3761			N/A
6/6/2019	AUS200.i	9:30:00 AM					N/A
6/6/2019	AUS200.i	11:30:00 AM	6400.2	6403.7			N/A
6/6/2019	AUS200.i	1:30:00 PM	6406.5	6409.7			N/A
6/6/2019	AUS200.i	3:30:00 PM	6400.7	6403.5			N/A
6/6/2019	BCHUSD	9:30:00 AM	404.27	406.2			N/A
6/6/2019	BCHUSD	11:30:00 AM	402.75	403.44			N/A
6/6/2019	BCHUSD	1:30:00 PM	400.66	402.12			N/A
6/6/2019	BCHUSD	3:30:00 PM	399.64	401.15			N/A
6/6/2019	CADCHF	9:30:00 AM	0.74032	0.74091			N/A
6/6/2019	CADCHF	11:30:00 AM	0.74131	0.74193			N/A
6/6/2019	CADCHF	1:30:00 PM	0.74183	0.74241			N/A
6/6/2019	CADCHF	3:30:00 PM	0.73986	0.74037			N/A
6/6/2019	CADCHF.fx	9:30:00 AM	0.74065	0.74056			N/A
6/6/2019	CADCHF.fx	11:30:00 AM	0.74166	0.74158			N/A

6/6/2019	CADCHF.fx	1:30:00 PM	0.74217	0.74206			N/A
6/6/2019	CADCHF.fx	3:30:00 PM	0.74018	0.74004			N/A
6/6/2019	CADCZK	9:30:00 AM	17.012	17.024			N/A
6/6/2019	CADCZK	11:30:00 AM	17.006	17.024			N/A
6/6/2019	CADCZK	1:30:00 PM	17.006	17.022			N/A
6/6/2019	CADCZK	3:30:00 PM	16.98	16.99			N/A
6/6/2019	CADDDKK	9:30:00 AM	4.956	4.96			N/A
6/6/2019	CADDDKK	11:30:00 AM					N/A
6/6/2019	CADDDKK	1:30:00 PM					N/A
6/6/2019	CADDDKK	3:30:00 PM	4.945	4.948			N/A
6/6/2019	CADHKD	9:30:00 AM	5.841	5.844			N/A
6/6/2019	CADHKD	11:30:00 AM	5.8442	5.8479			N/A
6/6/2019	CADHKD	1:30:00 PM	5.8446	5.8479			N/A
6/6/2019	CADHKD	3:30:00 PM	5.8487	5.8514			N/A
6/6/2019	CADHUF	9:30:00 AM	213.36	213.46			N/A
6/6/2019	CADHUF	11:30:00 AM	213.09	213.27			N/A
6/6/2019	CADHUF	1:30:00 PM	213.22	213.37			N/A
6/6/2019	CADHUF	3:30:00 PM	212.58	212.66			N/A
6/6/2019	CADJPY	9:30:00 AM	80.533	80.571			N/A
6/6/2019	CADJPY	11:30:00 AM	80.678	80.745			N/A
6/6/2019	CADJPY	1:30:00 PM	80.658	80.717			N/A
6/6/2019	CADJPY	3:30:00 PM	80.66	80.71			N/A
6/6/2019	CADJPY.fx	9:30:00 AM	80.567	80.537			N/A
6/6/2019	CADJPY.fx	11:30:00 AM	80.712	80.71			N/A
6/6/2019	CADJPY.fx	1:30:00 PM	80.691	80.679			N/A
6/6/2019	CADJPY.fx	3:30:00 PM	80.692	80.68			N/A
6/6/2019	CADMXN	9:30:00 AM	14.731	14.7398			N/A
6/6/2019	CADMXN	11:30:00 AM	14.6893	14.6977			N/A
6/6/2019	CADMXN	1:30:00 PM	14.6916	14.6933			N/A
6/6/2019	CADMXN	3:30:00 PM	14.7165	14.7202			N/A
6/6/2019	CADNOK	9:30:00 AM	6.5039	6.5066			N/A
6/6/2019	CADNOK	11:30:00 AM	6.4989	6.5032			N/A
6/6/2019	CADNOK	1:30:00 PM	6.5	6.5045			N/A
6/6/2019	CADNOK	3:30:00 PM	6.4921	6.4958			N/A

6/6/2019	CADPLN	9:30:00 AM	2.8382	2.84			N/A
6/6/2019	CADPLN	11:30:00 AM	2.8369	2.8388			N/A
6/6/2019	CADPLN	1:30:00 PM	2.8387	2.8404			N/A
6/6/2019	CADPLN	3:30:00 PM	2.8322	2.8341			N/A
6/6/2019	CADSEK	9:30:00 AM	7.0351	7.0378			N/A
6/6/2019	CADSEK	11:30:00 AM	7.0292	7.0314			N/A
6/6/2019	CADSEK	1:30:00 PM	7.0402	7.0435			N/A
6/6/2019	CADSEK	3:30:00 PM	7.0304	7.0325			N/A
6/6/2019	CADSGD	9:30:00 AM	1.0174	1.0177			N/A
6/6/2019	CADSGD	11:30:00 AM	1.0175	1.0178			N/A
6/6/2019	CADSGD	1:30:00 PM	1.0171	1.0174			N/A
6/6/2019	CADSGD	3:30:00 PM	1.0169	1.0172			N/A
6/6/2019	CADZAR	9:30:00 AM	11.1279	11.1397			N/A
6/6/2019	CADZAR	11:30:00 AM	11.093	11.1081			N/A
6/6/2019	CADZAR	1:30:00 PM	11.1005	11.1114			N/A
6/6/2019	CADZAR	3:30:00 PM	11.0803	11.0903			N/A
6/6/2019	CHFCZK	9:30:00 AM	22.979	22.985			N/A
6/6/2019	CHFCZK	11:30:00 AM	22.937	22.952			N/A
6/6/2019	CHFCZK	1:30:00 PM	22.922	22.934			N/A
6/6/2019	CHFCZK	3:30:00 PM	22.945	22.957			N/A
6/6/2019	CHFDKK	9:30:00 AM	6.693	6.695			N/A
6/6/2019	CHFDKK	11:30:00 AM	6.681	6.684			N/A
6/6/2019	CHFDKK	1:30:00 PM	6.678	6.681			N/A
6/6/2019	CHFDKK	3:30:00 PM	6.683	6.686			N/A
6/6/2019	CHFDKK.fx	9:30:00 AM	6.6917	6.6959			N/A
6/6/2019	CHFDKK.fx	11:30:00 AM	6.6796	6.6852			N/A
6/6/2019	CHFDKK.fx	1:30:00 PM	6.6778	6.6826			N/A
6/6/2019	CHFDKK.fx	3:30:00 PM	6.6815	6.6871			N/A
6/6/2019	CHFHKD	9:30:00 AM	7.8876	7.8899			N/A
6/6/2019	CHFHKD	11:30:00 AM	7.8832	7.886			N/A
6/6/2019	CHFHKD	1:30:00 PM	7.8771	7.8796			N/A
6/6/2019	CHFHKD	3:30:00 PM	7.9043	7.9068			N/A
6/6/2019	CHFHUF	9:30:00 AM	288.08	288.31			N/A
6/6/2019	CHFHUF	11:30:00 AM	287.31	287.68			N/A

6/6/2019	CHFHUF	1:30:00 PM	287.27	287.6			N/A
6/6/2019	CHFHUF	3:30:00 PM	287.13	287.46			N/A
6/6/2019	CHFJPY	9:30:00 AM	108.751	108.772			N/A
6/6/2019	CHFJPY	11:30:00 AM	108.793	108.858			N/A
6/6/2019	CHFJPY	1:30:00 PM	108.685	108.743			N/A
6/6/2019	CHFJPY	3:30:00 PM	108.989	109.04			N/A
6/6/2019	CHFJPY.fx	9:30:00 AM	108.782	108.739			N/A
6/6/2019	CHFJPY.fx	11:30:00 AM	108.826	108.824			N/A
6/6/2019	CHFJPY.fx	1:30:00 PM	108.718	108.708			N/A
6/6/2019	CHFJPY.fx	3:30:00 PM	109.02	109.007			N/A
6/6/2019	CHFMXN	9:30:00 AM	19.8949	19.9032			N/A
6/6/2019	CHFMXN	11:30:00 AM	19.8091	19.8222			N/A
6/6/2019	CHFMXN	1:30:00 PM	19.8009	19.7986			N/A
6/6/2019	CHFMXN	3:30:00 PM	19.8872	19.8919			N/A
6/6/2019	CHFNOK	9:30:00 AM	8.7843	8.7891			N/A
6/6/2019	CHFNOK	11:30:00 AM	8.7648	8.7705			N/A
6/6/2019	CHFNOK	1:30:00 PM	8.7603	8.7668			N/A
6/6/2019	CHFNOK	3:30:00 PM	8.7763	8.7829			N/A
6/6/2019	CHFNOK.fx	9:30:00 AM	8.7879	8.78583			N/A
6/6/2019	CHFNOK.fx	11:30:00 AM	8.76832	8.76701			N/A
6/6/2019	CHFNOK.fx	1:30:00 PM	8.76377	8.76324			N/A
6/6/2019	CHFNOK.fx	3:30:00 PM	8.77892	8.77942			N/A
6/6/2019	CHFPLN	9:30:00 AM	3.8336	3.8355			N/A
6/6/2019	CHFPLN	11:30:00 AM	3.826	3.8289			N/A
6/6/2019	CHFPLN	1:30:00 PM	3.8252	3.8275			N/A
6/6/2019	CHFPLN	3:30:00 PM	3.829	3.8314			N/A
6/6/2019	CHFPLN.fx	9:30:00 AM	3.83096	3.83815			N/A
6/6/2019	CHFPLN.fx	11:30:00 AM	3.82346	3.83124			N/A
6/6/2019	CHFPLN.fx	1:30:00 PM	3.82278	3.82985			N/A
6/6/2019	CHFPLN.fx	3:30:00 PM	3.82574	3.83393			N/A
6/6/2019	CHFSEK	9:30:00 AM	9.5006	9.503			N/A
6/6/2019	CHFSEK	11:30:00 AM	9.4813	9.4816			N/A
6/6/2019	CHFSEK	1:30:00 PM	9.4882	9.4909			N/A
6/6/2019	CHFSEK	3:30:00 PM	9.5001	9.5035			N/A



6/6/2019	CHFSGD	9:30:00 AM	1.3745	1.3747			N/A
6/6/2019	CHFSGD	11:30:00 AM	1.3727	1.373			N/A
6/6/2019	CHFSGD	1:30:00 PM	1.3713	1.3716			N/A
6/6/2019	CHFSGD	3:30:00 PM	1.3751	1.3754			N/A
6/6/2019	CHFSGD.fx	9:30:00 AM	1.37472	1.37457			N/A
6/6/2019	CHFSGD.fx	11:30:00 AM	1.37289	1.37277			N/A
6/6/2019	CHFSGD.fx	1:30:00 PM	1.37145	1.37137			N/A
6/6/2019	CHFSGD.fx	3:30:00 PM	1.37523	1.37522			N/A
6/6/2019	CHFZAR	9:30:00 AM	15.0314	15.0374			N/A
6/6/2019	CHFZAR	11:30:00 AM	14.9633	14.9758			N/A
6/6/2019	CHFZAR	1:30:00 PM	14.9651	14.9683			N/A
6/6/2019	CHFZAR	3:30:00 PM	14.9747	14.983			N/A
6/6/2019	CZKJPY	9:30:00 AM	4.734	4.735			N/A
6/6/2019	CZKJPY	11:30:00 AM					N/A
6/6/2019	CZKJPY	1:30:00 PM	4.742	4.746			N/A
6/6/2019	CZKJPY	3:30:00 PM	4.75	4.753			N/A
6/6/2019	DAX30.i	9:30:00 AM	11966.39	11964.39			N/A
6/6/2019	DAX30.i	11:30:00 AM	12034.89	12032.39			N/A
6/6/2019	DAX30.i	1:30:00 PM	12061.39	12054.89			N/A
6/6/2019	DAX30.i	3:30:00 PM	12002.39	11995.39			N/A
6/6/2019	DJ30.i	9:30:00 AM					N/A
6/6/2019	DJ30.i	11:30:00 AM					N/A
6/6/2019	DJ30.i	1:30:00 PM					N/A
6/6/2019	DJ30.i	3:30:00 PM					N/A
6/6/2019	DKKJPY	9:30:00 AM	16.25	16.26			N/A
6/6/2019	DKKJPY	11:30:00 AM					N/A
6/6/2019	DKKJPY	1:30:00 PM	16.28	16.29			N/A
6/6/2019	DKKJPY	3:30:00 PM	16.32	16.33			N/A
6/6/2019	EURAUD	9:30:00 AM	1.61083	1.61091			N/A
6/6/2019	EURAUD	11:30:00 AM	1.60983	1.61007			N/A
6/6/2019	EURAUD	1:30:00 PM	1.60911	1.60947			N/A
6/6/2019	EURAUD	3:30:00 PM	1.61232	1.61252			N/A
6/6/2019	EURAUD.fx	9:30:00 AM	1.61104	1.61071			N/A
6/6/2019	EURAUD.fx	11:30:00 AM	1.61004	1.60987			N/A

6/6/2019	EURAUD.fx	1:30:00 PM	1.60932	1.60926			N/A
6/6/2019	EURAUD.fx	3:30:00 PM	1.61252	1.61232			N/A
6/6/2019	EURCAD	9:30:00 AM	1.50616	1.50671			N/A
6/6/2019	EURCAD	11:30:00 AM	1.50657	1.50736			N/A
6/6/2019	EURCAD	1:30:00 PM	1.50597	1.50679			N/A
6/6/2019	EURCAD	3:30:00 PM	1.50917	1.50958			N/A
6/6/2019	EURCAD.fx	9:30:00 AM	1.50658	1.50628			N/A
6/6/2019	EURCAD.fx	11:30:00 AM	1.50698	1.50694			N/A
6/6/2019	EURCAD.fx	1:30:00 PM	1.50639	1.50638			N/A
6/6/2019	EURCAD.fx	3:30:00 PM	1.50958	1.50918			N/A
6/6/2019	EURCHF	9:30:00 AM	1.11585	1.11559			N/A
6/6/2019	EURCHF	11:30:00 AM	1.11764	1.11765			N/A
6/6/2019	EURCHF	1:30:00 PM	1.11807	1.11796			N/A
6/6/2019	EURCHF	3:30:00 PM	1.11723	1.11702			N/A
6/6/2019	EURCHF.fx	9:30:00 AM	1.11591	1.11553			N/A
6/6/2019	EURCHF.fx	11:30:00 AM	1.11769	1.11759			N/A
6/6/2019	EURCHF.fx	1:30:00 PM	1.11812	1.11789			N/A
6/6/2019	EURCHF.fx	3:30:00 PM	1.11728	1.11711			N/A
6/6/2019	EURCZK	9:30:00 AM	25.618	25.653			N/A
6/6/2019	EURCZK	11:30:00 AM					N/A
6/6/2019	EURCZK	1:30:00 PM	25.608	25.647			N/A
6/6/2019	EURCZK	3:30:00 PM	25.614	25.653			N/A
6/6/2019	EURDKK	9:30:00 AM	7.4664	7.4677			N/A
6/6/2019	EURDKK	11:30:00 AM					N/A
6/6/2019	EURDKK	1:30:00 PM	7.4664	7.4674			N/A
6/6/2019	EURDKK	3:30:00 PM	7.4669	7.4682			N/A
6/6/2019	EURGBP	9:30:00 AM	0.88555	0.88549			N/A
6/6/2019	EURGBP	11:30:00 AM	0.88539	0.88551			N/A
6/6/2019	EURGBP	1:30:00 PM	0.88498	0.88506			N/A
6/6/2019	EURGBP	3:30:00 PM	0.88546	0.8854			N/A
6/6/2019	EURGBP.fx	9:30:00 AM	0.88558	0.88544			N/A
6/6/2019	EURGBP.fx	11:30:00 AM	0.88542	0.88545			N/A
6/6/2019	EURGBP.fx	1:30:00 PM	0.88502	0.88502			N/A
6/6/2019	EURGBP.fx	3:30:00 PM	0.88549	0.88537			N/A

6/6/2019	EURHKD	9:30:00 AM	8.8016	8.8031			N/A
6/6/2019	EURHKD	11:30:00 AM	8.8096	8.8146			N/A
6/6/2019	EURHKD	1:30:00 PM	8.8061	8.8108			N/A
6/6/2019	EURHKD	3:30:00 PM	8.8326	8.8338			N/A
6/6/2019	EURHKD.fx	9:30:00 AM	8.80443	8.80025			N/A
6/6/2019	EURHKD.fx	11:30:00 AM	8.81245	8.81179			N/A
6/6/2019	EURHKD.fx	1:30:00 PM	8.80888	8.80795			N/A
6/6/2019	EURHKD.fx	3:30:00 PM	8.83545	8.83127			N/A
6/6/2019	EURHUF	9:30:00 AM	321.36	321.99			N/A
6/6/2019	EURHUF	11:30:00 AM	321.03	321.62			N/A
6/6/2019	EURHUF	1:30:00 PM	321.04	321.65			N/A
6/6/2019	EURHUF	3:30:00 PM	320.84	321.55			N/A
6/6/2019	EURHUF.fx	9:30:00 AM	321.564	321.718			N/A
6/6/2019	EURHUF.fx	11:30:00 AM	321.291	321.469			N/A
6/6/2019	EURHUF.fx	1:30:00 PM	321.371	321.509			N/A
6/6/2019	EURHUF.fx	3:30:00 PM	321.107	321.288			N/A
6/6/2019	EURJPY	9:30:00 AM	121.384	121.306	10	10	N/A
6/6/2019	EURJPY	11:30:00 AM	121.625	121.628			N/A
6/6/2019	EURJPY	1:30:00 PM	121.552	121.544			N/A
6/6/2019	EURJPY	3:30:00 PM	121.807	121.782			N/A
6/6/2019	EURJPY.fx	9:30:00 AM	121.387	121.302			N/A
6/6/2019	EURJPY.fx	11:30:00 AM	121.628	121.623			N/A
6/6/2019	EURJPY.fx	1:30:00 PM	121.555	121.54			N/A
6/6/2019	EURJPY.fx	3:30:00 PM	121.81	121.781			N/A
6/6/2019	EURMXN	9:30:00 AM	22.1983	22.2119			N/A
6/6/2019	EURMXN	11:30:00 AM	22.1411	22.1558			N/A
6/6/2019	EURMXN	1:30:00 PM	22.1369	22.1413			N/A
6/6/2019	EURMXN	3:30:00 PM	22.2231	22.2269			N/A
6/6/2019	EURMXN.fx	9:30:00 AM	22.206	22.204			N/A
6/6/2019	EURMXN.fx	11:30:00 AM	22.1492	22.1479			N/A
6/6/2019	EURMXN.fx	1:30:00 PM	22.1461	22.1324			N/A
6/6/2019	EURMXN.fx	3:30:00 PM	22.2319	22.2181			N/A
6/6/2019	EURNOK	9:30:00 AM	9.7978	9.8097			N/A
6/6/2019	EURNOK	11:30:00 AM	9.7934	9.8044			N/A

6/6/2019	EURNOK	1:30:00 PM	9.792	9.8037			N/A
6/6/2019	EURNOK	3:30:00 PM	9.8023	9.8132			N/A
6/6/2019	EURNOK.fx	9:30:00 AM	9.80329	9.80412			N/A
6/6/2019	EURNOK.fx	11:30:00 AM	9.79895	9.79896			N/A
6/6/2019	EURNOK.fx	1:30:00 PM	9.79742	9.79818			N/A
6/6/2019	EURNOK.fx	3:30:00 PM	9.80749	9.80932			N/A
6/6/2019	EURNZD	9:30:00 AM	1.69441	1.6948			N/A
6/6/2019	EURNZD	11:30:00 AM	1.69518	1.69576			N/A
6/6/2019	EURNZD	1:30:00 PM	1.6953	1.69613			N/A
6/6/2019	EURNZD	3:30:00 PM	1.69764	1.69829			N/A
6/6/2019	EURNZD.fx	9:30:00 AM	1.69482	1.69438			N/A
6/6/2019	EURNZD.fx	11:30:00 AM	1.6956	1.69534			N/A
6/6/2019	EURNZD.fx	1:30:00 PM	1.69574	1.69568			N/A
6/6/2019	EURNZD.fx	3:30:00 PM	1.69807	1.69785			N/A
6/6/2019	EURPLN	9:30:00 AM	4.2764	4.2795			N/A
6/6/2019	EURPLN	11:30:00 AM	4.276	4.279			N/A
6/6/2019	EURPLN	1:30:00 PM	4.2762	4.2794			N/A
6/6/2019	EURPLN	3:30:00 PM	4.2771	4.2804			N/A
6/6/2019	EURPLN.fx	9:30:00 AM	4.27572	4.28043			N/A
6/6/2019	EURPLN.fx	11:30:00 AM	4.27537	4.27952			N/A
6/6/2019	EURPLN.fx	1:30:00 PM	4.27567	4.27998			N/A
6/6/2019	EURPLN.fx	3:30:00 PM	4.27657	4.28099			N/A
6/6/2019	EURRUB	9:30:00 AM					N/A
6/6/2019	EURRUB	11:30:00 AM	72.861	73.302			N/A
6/6/2019	EURRUB	1:30:00 PM	72.848	73.286			N/A
6/6/2019	EURRUB	3:30:00 PM	73.052	73.402			N/A
6/6/2019	EURSEK	9:30:00 AM	10.6	10.6048			N/A
6/6/2019	EURSEK	11:30:00 AM	10.5959	10.5972			N/A
6/6/2019	EURSEK	1:30:00 PM	10.6076	10.6122			N/A
6/6/2019	EURSEK	3:30:00 PM	10.615	10.6177			N/A
6/6/2019	EURSEK.fx	9:30:00 AM	10.60162	10.60326			N/A
6/6/2019	EURSEK.fx	11:30:00 AM	10.59746	10.59522			N/A
6/6/2019	EURSEK.fx	1:30:00 PM	10.60926	10.61054			N/A
6/6/2019	EURSEK.fx	3:30:00 PM	10.61681	10.61634			N/A

6/6/2019	EURSGD	9:30:00 AM	1.5334	1.5339			N/A
6/6/2019	EURSGD	11:30:00 AM	1.5339	1.5347			N/A
6/6/2019	EURSGD	1:30:00 PM	1.5329	1.5336			N/A
6/6/2019	EURSGD	3:30:00 PM	1.5361	1.5365			N/A
6/6/2019	EURSGD.fx	9:30:00 AM	1.53378	1.53355			N/A
6/6/2019	EURSGD.fx	11:30:00 AM	1.53423	1.53428			N/A
6/6/2019	EURSGD.fx	1:30:00 PM	1.53333	1.53316			N/A
6/6/2019	EURSGD.fx	3:30:00 PM	1.53648	1.53617			N/A
6/6/2019	EURUSD	9:30:00 AM	1.12264	1.12225			N/A
6/6/2019	EURUSD	11:30:00 AM	1.1237	1.12377			N/A
6/6/2019	EURUSD	1:30:00 PM	1.12312	1.12311			N/A
6/6/2019	EURUSD	3:30:00 PM	1.1265	1.12609			N/A
6/6/2019	EURUSD.fx	9:30:00 AM	1.12284	1.12235			N/A
6/6/2019	EURUSD.fx	11:30:00 AM	1.1239	1.12386			N/A
6/6/2019	EURUSD.fx	1:30:00 PM	1.12332	1.1232			N/A
6/6/2019	EURUSD.fx	3:30:00 PM	1.1267	1.12621			N/A
6/6/2019	EURZAR	9:30:00 AM	16.7751	16.7838			N/A
6/6/2019	EURZAR	11:30:00 AM	16.7255	16.7413			N/A
6/6/2019	EURZAR	1:30:00 PM	16.7297	16.7409			N/A
6/6/2019	EURZAR	3:30:00 PM	16.7363	16.7461			N/A
6/6/2019	EURZAR.fx	9:30:00 AM	16.77394	16.78507			N/A
6/6/2019	EURZAR.fx	11:30:00 AM	16.72466	16.74212			N/A
6/6/2019	EURZAR.fx	1:30:00 PM	16.72927	16.74137			N/A
6/6/2019	EURZAR.fx	3:30:00 PM	16.73505	16.74783			N/A
6/6/2019	GBPAUD	9:30:00 AM	1.81941	1.82011			N/A
6/6/2019	GBPAUD	11:30:00 AM	1.81864	1.81914			N/A
6/6/2019	GBPAUD	1:30:00 PM	1.81859	1.81941			N/A
6/6/2019	GBPAUD	3:30:00 PM	1.82139	1.82204			N/A
6/6/2019	GBPAUD.fx	9:30:00 AM	1.81981	1.81969			N/A
6/6/2019	GBPAUD.fx	11:30:00 AM	1.81903	1.81876			N/A
6/6/2019	GBPAUD.fx	1:30:00 PM	1.81898	1.81897			N/A
6/6/2019	GBPAUD.fx	3:30:00 PM	1.82174	1.82167			N/A
6/6/2019	GBPCAD	9:30:00 AM	1.70097	1.70166			N/A
6/6/2019	GBPCAD	11:30:00 AM	1.70146	1.70229			N/A

6/6/2019	GBPCAD	1:30:00 PM	1.70175	1.70242			N/A
6/6/2019	GBPCAD	3:30:00 PM	1.70447	1.7049			N/A
6/6/2019	GBPCAD.fx	9:30:00 AM	1.70137	1.70126			N/A
6/6/2019	GBPCAD.fx	11:30:00 AM	1.70187	1.70189			N/A
6/6/2019	GBPCAD.fx	1:30:00 PM	1.70215	1.70202			N/A
6/6/2019	GBPCAD.fx	3:30:00 PM	1.70481	1.70457			N/A
6/6/2019	GBPCHF	9:30:00 AM	1.25984	1.26014			N/A
6/6/2019	GBPCHF	11:30:00 AM	1.26205	1.26234			N/A
6/6/2019	GBPCHF	1:30:00 PM	1.26308	1.26337			N/A
6/6/2019	GBPCHF	3:30:00 PM	1.26157	1.26191			N/A
6/6/2019	GBPCHF.fx	9:30:00 AM	1.25999	1.25995			N/A
6/6/2019	GBPCHF.fx	11:30:00 AM	1.26223	1.26212			N/A
6/6/2019	GBPCHF.fx	1:30:00 PM	1.26329	1.26318			N/A
6/6/2019	GBPCHF.fx	3:30:00 PM	1.26175	1.26175			N/A
6/6/2019	GBPCZK	9:30:00 AM	28.943	28.956			N/A
6/6/2019	GBPCZK	11:30:00 AM	28.943	28.966			N/A
6/6/2019	GBPCZK	1:30:00 PM	28.946	28.967			N/A
6/6/2019	GBPCZK	3:30:00 PM	28.94	28.958			N/A
6/6/2019	GBPDKK	9:30:00 AM	8.43	8.439			N/A
6/6/2019	GBPDKK	11:30:00 AM	8.43	8.441			N/A
6/6/2019	GBPDKK	1:30:00 PM	8.434	8.445			N/A
6/6/2019	GBPDKK	3:30:00 PM	8.43	8.44			N/A
6/6/2019	GBPDKK.fx	9:30:00 AM	8.428	8.4396			N/A
6/6/2019	GBPDKK.fx	11:30:00 AM	8.4281	8.4409			N/A
6/6/2019	GBPDKK.fx	1:30:00 PM	8.4324	8.4451			N/A
6/6/2019	GBPDKK.fx	3:30:00 PM	8.4277	8.4399			N/A
6/6/2019	GBPHKD	9:30:00 AM	9.935	9.94			N/A
6/6/2019	GBPHKD	11:30:00 AM	9.9465	9.9522			N/A
6/6/2019	GBPHKD	1:30:00 PM	9.9473	9.9524			N/A
6/6/2019	GBPHKD	3:30:00 PM	9.9718	9.9735			N/A
6/6/2019	GBPHUF	9:30:00 AM	362.86	363.2			N/A
6/6/2019	GBPHUF	11:30:00 AM	362.55	363.03			N/A
6/6/2019	GBPHUF	1:30:00 PM	362.79	363.24			N/A
6/6/2019	GBPHUF	3:30:00 PM	362.2	362.59			N/A

6/6/2019	GBPJPY	9:30:00 AM	137.044	137.03			N/A
6/6/2019	GBPJPY	11:30:00 AM	137.344	137.383			N/A
6/6/2019	GBPJPY	1:30:00 PM	137.325	137.358			N/A
6/6/2019	GBPJPY	3:30:00 PM	137.546	137.566			N/A
6/6/2019	GBPJPY.fx	9:30:00 AM	137.063	137.011			N/A
6/6/2019	GBPJPY.fx	11:30:00 AM	137.364	137.362			N/A
6/6/2019	GBPJPY.fx	1:30:00 PM	137.343	137.337			N/A
6/6/2019	GBPJPY.fx	3:30:00 PM	137.565	137.548			N/A
6/6/2019	GBPMXN	9:30:00 AM	25.0623	25.0714			N/A
6/6/2019	GBPMXN	11:30:00 AM	25	25.0091			N/A
6/6/2019	GBPMXN	1:30:00 PM	25.007	25.0038			N/A
6/6/2019	GBPMXN	3:30:00 PM	25.0886	25.0897			N/A
6/6/2019	GBPNOK	9:30:00 AM	11.0665	11.0752			N/A
6/6/2019	GBPNOK	11:30:00 AM	11.061	11.0718			N/A
6/6/2019	GBPNOK	1:30:00 PM	11.0643	11.0759			N/A
6/6/2019	GBPNOK	3:30:00 PM	11.0724	11.0816			N/A
6/6/2019	GBPNOK.fx	9:30:00 AM	11.071	11.07039			N/A
6/6/2019	GBPNOK.fx	11:30:00 AM	11.06577	11.06699			N/A
6/6/2019	GBPNOK.fx	1:30:00 PM	11.06903	11.07098			N/A
6/6/2019	GBPNOK.fx	3:30:00 PM	11.07614	11.07727			N/A
6/6/2019	GBPNZD	9:30:00 AM	1.91338	1.91394			N/A
6/6/2019	GBPNZD	11:30:00 AM	1.91465	1.91504			N/A
6/6/2019	GBPNZD	1:30:00 PM	1.91555	1.91634			N/A
6/6/2019	GBPNZD	3:30:00 PM	1.91762	1.91794			N/A
6/6/2019	GBPNZD.fx	9:30:00 AM	1.91374	1.91359			N/A
6/6/2019	GBPNZD.fx	11:30:00 AM	1.91503	1.91472			N/A
6/6/2019	GBPNZD.fx	1:30:00 PM	1.91593	1.91595			N/A
6/6/2019	GBPNZD.fx	3:30:00 PM	1.91769	1.91755			N/A
6/6/2019	GBPPLN	9:30:00 AM	4.8307	4.8317			N/A
6/6/2019	GBPPLN	11:30:00 AM	4.8302	4.8317			N/A
6/6/2019	GBPPLN	1:30:00 PM	4.8329	4.8344			N/A
6/6/2019	GBPPLN	3:30:00 PM	4.8317	4.833			N/A
6/6/2019	GBPPLN.fx	9:30:00 AM	4.82838	4.83405			N/A
6/6/2019	GBPPLN.fx	11:30:00 AM	4.82796	4.83386			N/A

6/6/2019	GBPPLN.fx	1:30:00 PM	4.83093	4.83654			N/A
6/6/2019	GBPPLN.fx	3:30:00 PM	4.82901	4.83535			N/A
6/6/2019	GBPSEK	9:30:00 AM	11.9699	11.9765			N/A
6/6/2019	GBPSEK	11:30:00 AM	11.9642	11.9711			N/A
6/6/2019	GBPSEK	1:30:00 PM	11.9837	11.9931			N/A
6/6/2019	GBPSEK	3:30:00 PM	11.9867	11.9932			N/A
6/6/2019	GBPSEK.fx	9:30:00 AM	11.96633	11.9802			N/A
6/6/2019	GBPSEK.fx	11:30:00 AM	11.96062	11.97456			N/A
6/6/2019	GBPSEK.fx	1:30:00 PM	11.98002	11.99669			N/A
6/6/2019	GBPSEK.fx	3:30:00 PM	11.98289	11.99711			N/A
6/6/2019	GBPSGD	9:30:00 AM	1.7317	1.7324			N/A
6/6/2019	GBPSGD	11:30:00 AM	1.7325	1.7332			N/A
6/6/2019	GBPSGD	1:30:00 PM	1.7322	1.7329			N/A
6/6/2019	GBPSGD	3:30:00 PM	1.7349	1.7352			N/A
6/6/2019	GBPSGD.fx	9:30:00 AM	1.72983	1.73412			N/A
6/6/2019	GBPSGD.fx	11:30:00 AM	1.73059	1.73496			N/A
6/6/2019	GBPSGD.fx	1:30:00 PM	1.73031	1.73466			N/A
6/6/2019	GBPSGD.fx	3:30:00 PM	1.73307	1.73729			N/A
6/6/2019	GBPUSD	9:30:00 AM	1.26781	1.26769			N/A
6/6/2019	GBPUSD	11:30:00 AM	1.26923	1.26931			N/A
6/6/2019	GBPUSD	1:30:00 PM	1.26921	1.26927			N/A
6/6/2019	GBPUSD	3:30:00 PM	1.27245	1.27205			N/A
6/6/2019	GBPUSD.fx	9:30:00 AM	1.26786	1.26763			N/A
6/6/2019	GBPUSD.fx	11:30:00 AM	1.26927	1.26925			N/A
6/6/2019	GBPUSD.fx	1:30:00 PM	1.26927	1.26921			N/A
6/6/2019	GBPUSD.fx	3:30:00 PM	1.27251	1.27208			N/A
6/6/2019	GBPZAR	9:30:00 AM	18.938	18.9575			N/A
6/6/2019	GBPZAR	11:30:00 AM	18.8863	18.9102			N/A
6/6/2019	GBPZAR	1:30:00 PM	18.8997	18.9195			N/A
6/6/2019	GBPZAR	3:30:00 PM	18.8975	18.9183			N/A
6/6/2019	GBPZAR.fx	9:30:00 AM	18.944	18.9503			N/A
6/6/2019	GBPZAR.fx	11:30:00 AM	18.8936	18.9027			N/A
6/6/2019	GBPZAR.fx	1:30:00 PM	18.9077	18.9117			N/A
6/6/2019	GBPZAR.fx	3:30:00 PM	18.9046	18.912			N/A



6/6/2019	GOLD	9:30:00 AM	1331.7	1331.92			N/A
6/6/2019	GOLD	11:30:00 AM	1336.53	1336.81			N/A
6/6/2019	GOLD	1:30:00 PM	1336.35	1336.56			N/A
6/6/2019	GOLD	3:30:00 PM	1337.36	1336.84			N/A
6/6/2019	HKDJPY	9:30:00 AM	13.78	13.79			N/A
6/6/2019	HKDJPY	11:30:00 AM	13.8	13.81			N/A
6/6/2019	HKDJPY	1:30:00 PM	13.8	13.81			N/A
6/6/2019	HKDJPY	3:30:00 PM	13.79	13.8			N/A
6/6/2019	HKDJPY.fx	9:30:00 AM	13.783	13.786			N/A
6/6/2019	HKDJPY.fx	11:30:00 AM	13.798	13.805			N/A
6/6/2019	HKDJPY.fx	1:30:00 PM	13.795	13.802			N/A
6/6/2019	HKDJPY.fx	3:30:00 PM	13.784	13.79			N/A
6/6/2019	HUFJPY	9:30:00 AM	0.378	0.3782			N/A
6/6/2019	HUFJPY	11:30:00 AM	0.3788	0.3791			N/A
6/6/2019	HUFJPY	1:30:00 PM	0.3784	0.3787			N/A
6/6/2019	HUFJPY	3:30:00 PM	0.3794	0.3798			N/A
6/6/2019	JP225.i	9:30:00 AM	20742.76	20757.76			N/A
6/6/2019	JP225.i	11:30:00 AM	20822.76	20842.76			N/A
6/6/2019	JP225.i	1:30:00 PM	20832.76	20842.76			N/A
6/6/2019	JP225.i	3:30:00 PM	20797.76	20802.76			N/A
6/6/2019	MXNJPY	9:30:00 AM	5.47	5.47			N/A
6/6/2019	MXNJPY	11:30:00 AM					N/A
6/6/2019	MXNJPY	1:30:00 PM	5.49	5.5			N/A
6/6/2019	MXNJPY	3:30:00 PM	5.48	5.49			N/A
6/6/2019	NASDAQ.i	9:30:00 AM					N/A
6/6/2019	NASDAQ.i	11:30:00 AM					N/A
6/6/2019	NASDAQ.i	1:30:00 PM					N/A
6/6/2019	NASDAQ.i	3:30:00 PM					N/A
6/6/2019	NOKJPY	9:30:00 AM	12.37	12.4			N/A
6/6/2019	NOKJPY	11:30:00 AM	12.4	12.43			N/A
6/6/2019	NOKJPY	1:30:00 PM	12.39	12.43			N/A
6/6/2019	NOKJPY	3:30:00 PM	12.41	12.44			N/A
6/6/2019	NOKJPY.fx	9:30:00 AM	12.378	12.377			N/A
6/6/2019	NOKJPY.fx	11:30:00 AM	12.409	12.415			N/A

6/6/2019	NOKJPY.fx	1:30:00 PM	12.403	12.409			N/A
6/6/2019	NOKJPY.fx	3:30:00 PM	12.415	12.42			N/A
6/6/2019	NZDCAD	9:30:00 AM	0.8887	0.88933			N/A
6/6/2019	NZDCAD	11:30:00 AM	0.88852	0.88905			N/A
6/6/2019	NZDCAD	1:30:00 PM	0.88805	0.8887			N/A
6/6/2019	NZDCAD	3:30:00 PM	0.88869	0.88919			N/A
6/6/2019	NZDCAD.fx	9:30:00 AM	0.88902	0.88898			N/A
6/6/2019	NZDCAD.fx	11:30:00 AM	0.88886	0.88872			N/A
6/6/2019	NZDCAD.fx	1:30:00 PM	0.88839	0.88836			N/A
6/6/2019	NZDCAD.fx	3:30:00 PM	0.88902	0.88888			N/A
6/6/2019	NZDCHF	9:30:00 AM	0.65814	0.6587			N/A
6/6/2019	NZDCHF	11:30:00 AM	0.65881	0.65949			N/A
6/6/2019	NZDCHF	1:30:00 PM	0.65897	0.65961			N/A
6/6/2019	NZDCHF	3:30:00 PM	0.65766	0.65823			N/A
6/6/2019	NZDCHF.fx	9:30:00 AM	0.65847	0.65835			N/A
6/6/2019	NZDCHF.fx	11:30:00 AM	0.65916	0.65914			N/A
6/6/2019	NZDCHF.fx	1:30:00 PM	0.65931	0.65926			N/A
6/6/2019	NZDCHF.fx	3:30:00 PM	0.658	0.65793			N/A
6/6/2019	NZDCZK	9:30:00 AM	15.123	15.131			N/A
6/6/2019	NZDCZK	11:30:00 AM	15.114	15.126			N/A
6/6/2019	NZDCZK	1:30:00 PM	15.107	15.118			N/A
6/6/2019	NZDCZK	3:30:00 PM	15.09	15.101			N/A
6/6/2019	NZDDKK	9:30:00 AM	4.405	4.408			N/A
6/6/2019	NZDDKK	11:30:00 AM	4.403	4.406			N/A
6/6/2019	NZDDKK	1:30:00 PM					N/A
6/6/2019	NZDDKK	3:30:00 PM	4.394	4.398			N/A
6/6/2019	NZDHKD	9:30:00 AM	5.1915	5.1942			N/A
6/6/2019	NZDHKD	11:30:00 AM	5.1941	5.1964			N/A
6/6/2019	NZDHKD	1:30:00 PM	5.1913	5.1936			N/A
6/6/2019	NZDHKD	3:30:00 PM	5.1986	5.2005			N/A
6/6/2019	NZDHUF	9:30:00 AM	189.57	189.79			N/A
6/6/2019	NZDHUF	11:30:00 AM	189.3	189.59			N/A
6/6/2019	NZDHUF	1:30:00 PM	189.32	189.6			N/A
6/6/2019	NZDHUF	3:30:00 PM	188.84	189.1			N/A

6/6/2019	NZDJPY	9:30:00 AM	71.587	71.631			N/A
6/6/2019	NZDJPY	11:30:00 AM	71.703	71.768			N/A
6/6/2019	NZDJPY	1:30:00 PM	71.648	71.713			N/A
6/6/2019	NZDJPY	3:30:00 PM	71.703	71.758			N/A
6/6/2019	NZDJPY.fx	9:30:00 AM	71.619	71.599			N/A
6/6/2019	NZDJPY.fx	11:30:00 AM	71.734	71.734			N/A
6/6/2019	NZDJPY.fx	1:30:00 PM	71.68	71.679			N/A
6/6/2019	NZDJPY.fx	3:30:00 PM	71.734	71.73			N/A
6/6/2019	NZDMXN	9:30:00 AM	13.0944	13.0984			N/A
6/6/2019	NZDMXN	11:30:00 AM	13.0546	13.0597			N/A
6/6/2019	NZDMXN	1:30:00 PM	13.0514	13.0476			N/A
6/6/2019	NZDMXN	3:30:00 PM	13.0834	13.0805			N/A
6/6/2019	NZDNOK	9:30:00 AM	5.7806	5.7825			N/A
6/6/2019	NZDNOK	11:30:00 AM	5.7757	5.7779			N/A
6/6/2019	NZDNOK	1:30:00 PM	5.7735	5.7767			N/A
6/6/2019	NZDNOK	3:30:00 PM	5.7694	5.7724			N/A
6/6/2019	NZDPLN	9:30:00 AM	2.5228	2.524			N/A
6/6/2019	NZDPLN	11:30:00 AM	2.5213	2.5227			N/A
6/6/2019	NZDPLN	1:30:00 PM	2.5215	2.5226			N/A
6/6/2019	NZDPLN	3:30:00 PM	2.5172	2.5186			N/A
6/6/2019	NZDSEK	9:30:00 AM	6.2513	6.2566			N/A
6/6/2019	NZDSEK	11:30:00 AM	6.2447	6.2493			N/A
6/6/2019	NZDSEK	1:30:00 PM	6.2512	6.2575			N/A
6/6/2019	NZDSEK	3:30:00 PM	6.2462	6.2523			N/A
6/6/2019	NZDSGD	9:30:00 AM	0.9048	0.9053			N/A
6/6/2019	NZDSGD	11:30:00 AM	0.9047	0.9052			N/A
6/6/2019	NZDSGD	1:30:00 PM	0.9039	0.9045			N/A
6/6/2019	NZDSGD	3:30:00 PM	0.9046	0.9051			N/A
6/6/2019	NZDSGD.fx	9:30:00 AM	0.90479	0.90526			N/A
6/6/2019	NZDSGD.fx	11:30:00 AM	0.90468	0.90511			N/A
6/6/2019	NZDSGD.fx	1:30:00 PM	0.90396	0.90441			N/A
6/6/2019	NZDSGD.fx	3:30:00 PM	0.90459	0.90506			N/A
6/6/2019	NZDUSD	9:30:00 AM	0.66238	0.66244			N/A
6/6/2019	NZDUSD	11:30:00 AM	0.66279	0.66281			N/A

6/6/2019	NZDUSD	1:30:00 PM	0.66234	0.66244			N/A
6/6/2019	NZDUSD	3:30:00 PM	0.66341	0.66325			N/A
6/6/2019	NZDUSD.fx	9:30:00 AM	0.66245	0.66245			N/A
6/6/2019	NZDUSD.fx	11:30:00 AM	0.66286	0.66282			N/A
6/6/2019	NZDUSD.fx	1:30:00 PM	0.66241	0.66245			N/A
6/6/2019	NZDUSD.fx	3:30:00 PM	0.66349	0.66331			N/A
6/6/2019	NZDZAR	9:30:00 AM	9.8888	9.9019			N/A
6/6/2019	NZDZAR	11:30:00 AM	9.8558	9.8716			N/A
6/6/2019	NZDZAR	1:30:00 PM	9.8585	9.8697			N/A
6/6/2019	NZDZAR	3:30:00 PM	9.8453	9.8567			N/A
6/6/2019	SEKJPY	9:30:00 AM	11.45	11.45			N/A
6/6/2019	SEKJPY	11:30:00 AM	11.48	11.49			N/A
6/6/2019	SEKJPY	1:30:00 PM	11.46	11.47			N/A
6/6/2019	SEKJPY	3:30:00 PM	11.47	11.48			N/A
6/6/2019	SEKJPY.fx	9:30:00 AM	11.439	11.45			N/A
6/6/2019	SEKJPY.fx	11:30:00 AM	11.47	11.485			N/A
6/6/2019	SEKJPY.fx	1:30:00 PM	11.447	11.464			N/A
6/6/2019	SEKJPY.fx	3:30:00 PM	11.464	11.481			N/A
6/6/2019	SGDJPY	9:30:00 AM	79.1	79.1			N/A
6/6/2019	SGDJPY	11:30:00 AM	79.24	79.27			N/A
6/6/2019	SGDJPY	1:30:00 PM	79.26	79.27			N/A
6/6/2019	SGDJPY	3:30:00 PM	79.24	79.27			N/A
6/6/2019	SILVER	9:30:00 AM	14.63	15.01			N/A
6/6/2019	SILVER	11:30:00 AM	14.75	15.12			N/A
6/6/2019	SILVER	1:30:00 PM	14.75	15.12			N/A
6/6/2019	SILVER	3:30:00 PM	14.79	15.15			N/A
6/6/2019	SPX500.i	9:30:00 AM	2822.43	2822.36			N/A
6/6/2019	SPX500.i	11:30:00 AM	2834.81	2835.48			N/A
6/6/2019	SPX500.i	1:30:00 PM	2835.68	2836.23			N/A
6/6/2019	SPX500.i	3:30:00 PM	2834.68	2834.98			N/A
6/6/2019	UK100.i	9:30:00 AM	7222.38	7222.13			N/A
6/6/2019	UK100.i	11:30:00 AM	7260.54	7261.29			N/A
6/6/2019	UK100.i	1:30:00 PM	7268.29	7267.54			N/A
6/6/2019	UK100.i	3:30:00 PM	7263.54	7262.88			N/A

6/6/2019	USDCAD	9:30:00 AM	1.34207	1.34196			N/A
6/6/2019	USDCAD	11:30:00 AM	1.34087	1.34098			N/A
6/6/2019	USDCAD	1:30:00 PM	1.34115	1.34115			N/A
6/6/2019	USDCAD	3:30:00 PM	1.34028	1.33994			N/A
6/6/2019	USDCAD.fx	9:30:00 AM	1.34211	1.34193			N/A
6/6/2019	USDCAD.fx	11:30:00 AM	1.34091	1.34095			N/A
6/6/2019	USDCAD.fx	1:30:00 PM	1.34119	1.3411			N/A
6/6/2019	USDCAD.fx	3:30:00 PM	1.34025	1.3399			N/A
6/6/2019	USDCHF	9:30:00 AM	0.99391	0.99379			N/A
6/6/2019	USDCHF	11:30:00 AM	0.99439	0.99438			N/A
6/6/2019	USDCHF	1:30:00 PM	0.99527	0.99524			N/A
6/6/2019	USDCHF	3:30:00 PM	0.99177	0.99167			N/A
6/6/2019	USDCHF.fx	9:30:00 AM	0.99396	0.99372			N/A
6/6/2019	USDCHF.fx	11:30:00 AM	0.99443	0.99432			N/A
6/6/2019	USDCHF.fx	1:30:00 PM	0.99531	0.99517			N/A
6/6/2019	USDCHF.fx	3:30:00 PM	0.99179	0.99161			N/A
6/6/2019	USDCZK	9:30:00 AM	22.851	22.862			N/A
6/6/2019	USDCZK	11:30:00 AM	22.82	22.843			N/A
6/6/2019	USDCZK	1:30:00 PM	22.825	22.846			N/A
6/6/2019	USDCZK	3:30:00 PM	22.77	22.785			N/A
6/6/2019	USDCZK.fx	9:30:00 AM	22.86	22.8541			N/A
6/6/2019	USDCZK.fx	11:30:00 AM	22.829	22.833			N/A
6/6/2019	USDCZK.fx	1:30:00 PM	22.8339	22.8368			N/A
6/6/2019	USDCZK.fx	3:30:00 PM	22.7777	22.7753			N/A
6/6/2019	USDDKK	9:30:00 AM	6.6526	6.6538			N/A
6/6/2019	USDDKK	11:30:00 AM	6.6437	6.6477			N/A
6/6/2019	USDDKK	1:30:00 PM	6.6476	6.6512			N/A
6/6/2019	USDDKK	3:30:00 PM	6.6294	6.6306			N/A
6/6/2019	USDDKK.fx	9:30:00 AM	6.65321	6.65171			N/A
6/6/2019	USDDKK.fx	11:30:00 AM	6.64427	6.64548			N/A
6/6/2019	USDDKK.fx	1:30:00 PM	6.64824	6.64897			N/A
6/6/2019	USDDKK.fx	3:30:00 PM	6.62943	6.6286			N/A
6/6/2019	USDHKD	9:30:00 AM	7.8403	7.8406			N/A
6/6/2019	USDHKD	11:30:00 AM	7.8399	7.8403			N/A

6/6/2019	USDHKD	1:30:00 PM	7.8409	7.8412			N/A
6/6/2019	USDHKD	3:30:00 PM	7.8408	7.8408			N/A
6/6/2019	USDHKD.fx	9:30:00 AM	7.84018	7.84075			N/A
6/6/2019	USDHKD.fx	11:30:00 AM	7.83985	7.84044			N/A
6/6/2019	USDHKD.fx	1:30:00 PM	7.84087	7.84147			N/A
6/6/2019	USDHKD.fx	3:30:00 PM	7.84081	7.84114			N/A
6/6/2019	USDHUF	9:30:00 AM	286.33	286.66			N/A
6/6/2019	USDHUF	11:30:00 AM	285.7	286.17			N/A
6/6/2019	USDHUF	1:30:00 PM	285.92	286.37			N/A
6/6/2019	USDHUF	3:30:00 PM	284.94	285.29			N/A
6/6/2019	USDHUF.fx	9:30:00 AM	286.499	286.465			N/A
6/6/2019	USDHUF.fx	11:30:00 AM	285.895	285.975			N/A
6/6/2019	USDHUF.fx	1:30:00 PM	286.125	286.155			N/A
6/6/2019	USDHUF.fx	3:30:00 PM	285.123	285.108			N/A
6/6/2019	USDINR	9:30:00 AM	64.34	74.32			N/A
6/6/2019	USDINR	11:30:00 AM	64.27	74.25			N/A
6/6/2019	USDINR	1:30:00 PM					N/A
6/6/2019	USDINR	3:30:00 PM					N/A
6/6/2019	USDJPY	9:30:00 AM	108.101	108.085			N/A
6/6/2019	USDJPY	11:30:00 AM	108.219	108.224			N/A
6/6/2019	USDJPY	1:30:00 PM	108.209	108.212			N/A
6/6/2019	USDJPY	3:30:00 PM	108.124	108.119			N/A
6/6/2019	USDJPY.fx	9:30:00 AM	108.107	108.078			N/A
6/6/2019	USDJPY.fx	11:30:00 AM	108.225	108.216			N/A
6/6/2019	USDJPY.fx	1:30:00 PM	108.214	108.203			N/A
6/6/2019	USDJPY.fx	3:30:00 PM	108.128	108.11			N/A
6/6/2019	USDMXN	9:30:00 AM	19.78	19.779			N/A
6/6/2019	USDMXN	11:30:00 AM	19.706	19.709			N/A
6/6/2019	USDMXN	1:30:00 PM	19.711	19.706			N/A
6/6/2019	USDMXN	3:30:00 PM	19.731	19.726			N/A
6/6/2019	USDMXN.f	9:30:00 AM	19.7834	19.776			N/A
6/6/2019	USDMXN.f	11:30:00 AM	19.7093	19.7047			N/A
6/6/2019	USDMXN.f	1:30:00 PM	19.7167	19.702			N/A
6/6/2019	USDMXN.f	3:30:00 PM	19.7339	19.7226			N/A

6/6/2019	USDNOK	9:30:00 AM	8.7304	8.735			N/A
6/6/2019	USDNOK	11:30:00 AM	8.7145	8.7225			N/A
6/6/2019	USDNOK	1:30:00 PM	8.7177	8.7258			N/A
6/6/2019	USDNOK	3:30:00 PM	8.704	8.7096			N/A
6/6/2019	USDNOK.fx	9:30:00 AM	8.73407	8.73023			N/A
6/6/2019	USDNOK.fx	11:30:00 AM	8.71852	8.71811			N/A
6/6/2019	USDNOK.fx	1:30:00 PM	8.72167	8.72145			N/A
6/6/2019	USDNOK.fx	3:30:00 PM	8.70768	8.70528			N/A
6/6/2019	USDPLN	9:30:00 AM	3.8108	3.8108			N/A
6/6/2019	USDPLN	11:30:00 AM	3.8055	3.8067			N/A
6/6/2019	USDPLN	1:30:00 PM	3.8078	3.8091			N/A
6/6/2019	USDPLN	3:30:00 PM	3.7983	3.7986			N/A
6/6/2019	USDPLN.fx	9:30:00 AM	3.80987	3.81163			N/A
6/6/2019	USDPLN.fx	11:30:00 AM	3.80468	3.80731			N/A
6/6/2019	USDPLN.fx	1:30:00 PM	3.80699	3.80981			N/A
6/6/2019	USDPLN.fx	3:30:00 PM	3.79731	3.79941			N/A
6/6/2019	USDRUB	9:30:00 AM					N/A
6/6/2019	USDRUB	11:30:00 AM	64.961	65.358			N/A
6/6/2019	USDRUB	1:30:00 PM	64.977	65.365			N/A
6/6/2019	USDRUB	3:30:00 PM	64.966	65.335			N/A
6/6/2019	USDSEK	9:30:00 AM	9.4436	9.4442			N/A
6/6/2019	USDSEK	11:30:00 AM	9.4275	9.4291			N/A
6/6/2019	USDSEK	1:30:00 PM	9.4431	9.4471			N/A
6/6/2019	USDSEK	3:30:00 PM	9.4237	9.4247			N/A
6/6/2019	USDSEK.fx	9:30:00 AM	9.44658	9.44253			N/A
6/6/2019	USDSEK.fx	11:30:00 AM	9.42984	9.42704			N/A
6/6/2019	USDSEK.fx	1:30:00 PM	9.44557	9.44533			N/A
6/6/2019	USDSEK.fx	3:30:00 PM	9.4257	9.42305			N/A
6/6/2019	USDSGD	9:30:00 AM	1.3661	1.3662			N/A
6/6/2019	USDSGD	11:30:00 AM	1.365	1.3654			N/A
6/6/2019	USDSGD	1:30:00 PM	1.3649	1.3652			N/A
6/6/2019	USDSGD	3:30:00 PM	1.3637	1.364			N/A
6/6/2019	USDSGD.fx	9:30:00 AM	1.36603	1.36622			N/A
6/6/2019	USDSGD.fx	11:30:00 AM	1.36493	1.3654			N/A

6/6/2019	USDSGD.fx	1:30:00 PM	1.36477	1.36519			N/A
6/6/2019	USDSGD.fx	3:30:00 PM	1.36358	1.36398			N/A
6/6/2019	USDZAR	9:30:00 AM	14.9404	14.9509			N/A
6/6/2019	USDZAR	11:30:00 AM	14.8823	14.8961			N/A
6/6/2019	USDZAR	1:30:00 PM	14.8938	14.9027			N/A
6/6/2019	USDZAR	3:30:00 PM	14.8587	14.8679			N/A
6/6/2019	USDZAR.fx	9:30:00 AM					N/A
6/6/2019	USDZAR.fx	11:30:00 AM					N/A
6/6/2019	USDZAR.fx	1:30:00 PM					N/A
6/6/2019	USDZAR.fx	3:30:00 PM					N/A
6/6/2019	XAUUSD	9:30:00 AM	1331.7	1331.91			N/A
6/6/2019	XAUUSD	11:30:00 AM	1336.54	1336.8			N/A
6/6/2019	XAUUSD	1:30:00 PM	1336.36	1336.55			N/A
6/6/2019	XAUUSD	3:30:00 PM	1337.37	1336.85			N/A
6/6/2019	ZARJPY	9:30:00 AM	7.22	7.23			N/A
6/6/2019	ZARJPY	11:30:00 AM	7.24	7.28			N/A
6/6/2019	ZARJPY	1:30:00 PM	7.24	7.28			N/A
6/6/2019	ZARJPY	3:30:00 PM	7.26	7.28			N/A
6/6/2019	ZARJPY.fx	9:30:00 AM	7.232	7.233			N/A
6/6/2019	ZARJPY.fx	11:30:00 AM	7.266	7.269			N/A
6/6/2019	ZARJPY.fx	1:30:00 PM	7.263	7.262			N/A
6/6/2019	ZARJPY.fx	3:30:00 PM	7.273	7.274			N/A
6/7/2019	#AA	9:30:00 AM					N/A
6/7/2019	#AA	11:30:00 AM					N/A
6/7/2019	#AA	1:30:00 PM					N/A
6/7/2019	#AA	3:30:00 PM					N/A
6/7/2019	#AABA	9:30:00 AM					N/A
6/7/2019	#AABA	11:30:00 AM					N/A
6/7/2019	#AABA	1:30:00 PM					N/A
6/7/2019	#AABA	3:30:00 PM					N/A
6/10/2019	#AAL	9:30:00 AM					N/A
6/10/2019	#AAL	11:30:00 AM					N/A
6/10/2019	#AAL	1:30:00 PM					N/A
6/10/2019	#AAL	3:30:00 PM					N/A



6/10/2019	#AAPL	9:30:00 AM					N/A
6/10/2019	#AAPL	11:30:00 AM					N/A
6/10/2019	#AAPL	1:30:00 PM					N/A
6/10/2019	#AAPL	3:30:00 PM					N/A
6/10/2019	#ADBE	9:30:00 AM					N/A
6/10/2019	#ADBE	11:30:00 AM					N/A
6/10/2019	#ADBE	1:30:00 PM					N/A
6/10/2019	#ADBE	3:30:00 PM					N/A
6/10/2019	#AIG	9:30:00 AM					N/A
6/10/2019	#AIG	11:30:00 AM					N/A
6/10/2019	#AIG	1:30:00 PM					N/A
6/10/2019	#AIG	3:30:00 PM					N/A
6/10/2019	#AMD	9:30:00 AM					N/A
6/10/2019	#AMD	11:30:00 AM					N/A
6/10/2019	#AMD	1:30:00 PM					N/A
6/10/2019	#AMD	3:30:00 PM					N/A
6/10/2019	#AMZN	9:30:00 AM					N/A
6/10/2019	#AMZN	11:30:00 AM					N/A
6/10/2019	#AMZN	1:30:00 PM					N/A
6/10/2019	#AMZN	3:30:00 PM					N/A
6/10/2019	#AXP	9:30:00 AM					N/A
6/10/2019	#AXP	11:30:00 AM					N/A
6/10/2019	#AXP	1:30:00 PM					N/A
6/10/2019	#AXP	3:30:00 PM					N/A
6/10/2019	#BA	9:30:00 AM					N/A
6/10/2019	#BA	11:30:00 AM					N/A
6/10/2019	#BA	1:30:00 PM					N/A
6/10/2019	#BA	3:30:00 PM					N/A
6/10/2019	#BABA	9:30:00 AM					N/A
6/10/2019	#BABA	11:30:00 AM					N/A
6/10/2019	#BABA	1:30:00 PM					N/A
6/10/2019	#BABA	3:30:00 PM					N/A
6/10/2019	#BAC	9:30:00 AM					N/A
6/10/2019	#BAC	11:30:00 AM					N/A

6/10/2019	#BAC	1:30:00 PM					N/A
6/10/2019	#BAC	3:30:00 PM					N/A
6/10/2019	#BARC	9:30:00 AM					N/A
6/10/2019	#BARC	11:30:00 AM					N/A
6/10/2019	#BARC	1:30:00 PM					N/A
6/10/2019	#BARC	3:30:00 PM					N/A
6/10/2019	#BHP	9:30:00 AM					N/A
6/10/2019	#BHP	11:30:00 AM					N/A
6/10/2019	#BHP	1:30:00 PM					N/A
6/10/2019	#BHP	3:30:00 PM					N/A
6/10/2019	#BIDU	9:30:00 AM					N/A
6/10/2019	#BIDU	11:30:00 AM					N/A
6/10/2019	#BIDU	1:30:00 PM					N/A
6/10/2019	#BIDU	3:30:00 PM					N/A
6/10/2019	#Bitcoin	9:30:00 AM	7697.5	7721.9			N/A
6/10/2019	#Bitcoin	11:30:00 AM	7724.6	7753.9			N/A
6/10/2019	#Bitcoin	1:30:00 PM	7652.4	7684			N/A
6/10/2019	#Bitcoin	3:30:00 PM	7962.25	7992.5			N/A
6/10/2019	#BK	9:30:00 AM					N/A
6/10/2019	#BK	11:30:00 AM					N/A
6/10/2019	#BK	1:30:00 PM					N/A
6/10/2019	#BK	3:30:00 PM					N/A
6/10/2019	#BLT	9:30:00 AM					N/A
6/10/2019	#BLT	11:30:00 AM					N/A
6/10/2019	#BLT	1:30:00 PM					N/A
6/10/2019	#BLT	3:30:00 PM					N/A
6/10/2019	#BP	9:30:00 AM					N/A
6/10/2019	#BP	11:30:00 AM					N/A
6/10/2019	#BP	1:30:00 PM					N/A
6/10/2019	#BP	3:30:00 PM					N/A
6/10/2019	#BTA	9:30:00 AM					N/A
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6/10/2019	#WFC	11:30:00 AM					N/A
6/10/2019	#WFC	1:30:00 PM					N/A
6/10/2019	#WFC	3:30:00 PM					N/A
6/10/2019	#WMT	9:30:00 AM					N/A
6/10/2019	#WMT	11:30:00 AM					N/A
6/10/2019	#WMT	1:30:00 PM					N/A
6/10/2019	#WMT	3:30:00 PM					N/A
6/10/2019	#XOM	9:30:00 AM					N/A
6/10/2019	#XOM	11:30:00 AM					N/A
6/10/2019	#XOM	1:30:00 PM					N/A
6/10/2019	#XOM	3:30:00 PM					N/A
6/10/2019	#YHOO	9:30:00 AM					N/A
6/10/2019	#YHOO	11:30:00 AM					N/A
6/10/2019	#YHOO	1:30:00 PM					N/A
6/10/2019	#YHOO	3:30:00 PM					N/A
6/10/2019	#ZNGA	9:30:00 AM					N/A
6/10/2019	#ZNGA	11:30:00 AM					N/A
6/10/2019	#ZNGA	1:30:00 PM					N/A
6/10/2019	#ZNGA	3:30:00 PM					N/A
6/10/2019	AUDCAD	9:30:00 AM	0.92391	0.92455			N/A
6/10/2019	AUDCAD	11:30:00 AM	0.92398	0.92462			N/A
6/10/2019	AUDCAD	1:30:00 PM	0.92455	0.92525			N/A
6/10/2019	AUDCAD	3:30:00 PM	0.92446	0.925			N/A
6/10/2019	AUDCAD.fx	9:30:00 AM	0.92424	0.9242			N/A
6/10/2019	AUDCAD.fx	11:30:00 AM	0.92431	0.92427			N/A
6/10/2019	AUDCAD.fx	1:30:00 PM	0.92489	0.92491			N/A
6/10/2019	AUDCAD.fx	3:30:00 PM	0.9248	0.92464			N/A
6/10/2019	AUDCHF	9:30:00 AM	0.68999	0.6907			N/A
6/10/2019	AUDCHF	11:30:00 AM	0.6897	0.69024			N/A

6/10/2019	AUDCHF	1:30:00 PM	0.69018	0.69087			N/A
6/10/2019	AUDCHF	3:30:00 PM	0.68987	0.69055			N/A
6/10/2019	AUDCHF.fx	9:30:00 AM	0.69034	0.69035			N/A
6/10/2019	AUDCHF.fx	11:30:00 AM	0.69004	0.6899			N/A
6/10/2019	AUDCHF.fx	1:30:00 PM	0.69053	0.69052			N/A
6/10/2019	AUDCHF.fx	3:30:00 PM	0.69022	0.6902			N/A
6/10/2019	AUDCZK	9:30:00 AM	15.753	15.769			N/A
6/10/2019	AUDCZK	11:30:00 AM	15.763	15.779			N/A
6/10/2019	AUDCZK	1:30:00 PM	15.766	15.782			N/A
6/10/2019	AUDCZK	3:30:00 PM	15.77	15.787			N/A
6/10/2019	AUDDKK	9:30:00 AM	4.5998	4.6045			N/A
6/10/2019	AUDDKK	11:30:00 AM	4.6022	4.6065			N/A
6/10/2019	AUDDKK	1:30:00 PM	4.6007	4.6056			N/A
6/10/2019	AUDDKK	3:30:00 PM	4.5996	4.6042			N/A
6/10/2019	AUDHKD	9:30:00 AM	5.4636	5.4674			N/A
6/10/2019	AUDHKD	11:30:00 AM	5.4603	5.4642			N/A
6/10/2019	AUDHKD	1:30:00 PM	5.4637	5.4671			N/A
6/10/2019	AUDHKD	3:30:00 PM	5.4594	5.4632			N/A
6/10/2019	AUDHUF	9:30:00 AM	197.05	197.26			N/A
6/10/2019	AUDHUF	11:30:00 AM	197.08	197.23			N/A
6/10/2019	AUDHUF	1:30:00 PM	197.14	197.38			N/A
6/10/2019	AUDHUF	3:30:00 PM	197.07	197.31			N/A
6/10/2019	AUDJPY	9:30:00 AM	75.674	75.745			N/A
6/10/2019	AUDJPY	11:30:00 AM	75.662	75.715			N/A
6/10/2019	AUDJPY	1:30:00 PM	75.647	75.714			N/A
6/10/2019	AUDJPY	3:30:00 PM	75.607	75.677			N/A
6/10/2019	AUDJPY.fx	9:30:00 AM	75.708	75.709			N/A
6/10/2019	AUDJPY.fx	11:30:00 AM	75.695	75.68			N/A
6/10/2019	AUDJPY.fx	1:30:00 PM	75.681	75.678			N/A
6/10/2019	AUDJPY.fx	3:30:00 PM	75.641	75.642			N/A
6/10/2019	AUDMXN	9:30:00 AM	13.3453	13.3475			N/A
6/10/2019	AUDMXN	11:30:00 AM	13.3651	13.3703			N/A
6/10/2019	AUDMXN	1:30:00 PM	13.3774	13.3831			N/A
6/10/2019	AUDMXN	3:30:00 PM	13.4002	13.4061			N/A

6/10/2019	AUDNOK	9:30:00 AM	6.0121	6.0172			N/A
6/10/2019	AUDNOK	11:30:00 AM	6.0264	6.0307			N/A
6/10/2019	AUDNOK	1:30:00 PM	6.0252	6.0304			N/A
6/10/2019	AUDNOK	3:30:00 PM	6.025	6.0303			N/A
6/10/2019	AUDNOK.fx	9:30:00 AM	6.0136	6.0155			N/A
6/10/2019	AUDNOK.fx	11:30:00 AM	6.0279	6.029			N/A
6/10/2019	AUDNOK.fx	1:30:00 PM	6.0269	6.0285			N/A
6/10/2019	AUDNOK.fx	3:30:00 PM	6.0268	6.0285			N/A
6/10/2019	AUDNZD	9:30:00 AM	1.05063	1.05146			N/A
6/10/2019	AUDNZD	11:30:00 AM	1.05196	1.05276			N/A
6/10/2019	AUDNZD	1:30:00 PM	1.05234	1.05325			N/A
6/10/2019	AUDNZD	3:30:00 PM	1.05183	1.05274			N/A
6/10/2019	AUDNZD.fx	9:30:00 AM	1.05108	1.05102			N/A
6/10/2019	AUDNZD.fx	11:30:00 AM	1.05239	1.0523			N/A
6/10/2019	AUDNZD.fx	1:30:00 PM	1.05278	1.05279			N/A
6/10/2019	AUDNZD.fx	3:30:00 PM	1.05227	1.05229			N/A
6/10/2019	AUDPLN	9:30:00 AM	2.6245	2.6277			N/A
6/10/2019	AUDPLN	11:30:00 AM	2.6264	2.6293			N/A
6/10/2019	AUDPLN	1:30:00 PM	2.6262	2.6291			N/A
6/10/2019	AUDPLN	3:30:00 PM	2.6247	2.628			N/A
6/10/2019	AUDSEK	9:30:00 AM	6.5553	6.5584			N/A
6/10/2019	AUDSEK	11:30:00 AM	6.5709	6.5732			N/A
6/10/2019	AUDSEK	1:30:00 PM	6.5665	6.5686			N/A
6/10/2019	AUDSEK	3:30:00 PM	6.5582	6.5611			N/A
6/10/2019	AUDSEK.fx	9:30:00 AM	6.5508	6.5629			N/A
6/10/2019	AUDSEK.fx	11:30:00 AM	6.5663	6.5776			N/A
6/10/2019	AUDSEK.fx	1:30:00 PM	6.562	6.573			N/A
6/10/2019	AUDSEK.fx	3:30:00 PM	6.5535	6.5655			N/A
6/10/2019	AUDSGD	9:30:00 AM	0.9522	0.9524			N/A
6/10/2019	AUDSGD	11:30:00 AM	0.9522	0.9525			N/A
6/10/2019	AUDSGD	1:30:00 PM	0.9526	0.9529			N/A
6/10/2019	AUDSGD	3:30:00 PM	0.9521	0.9524			N/A
6/10/2019	AUDSGD.fx	9:30:00 AM	0.95225	0.95235			N/A
6/10/2019	AUDSGD.fx	11:30:00 AM	0.95231	0.95238			N/A

6/10/2019	AUDSGD.fx	1:30:00 PM	0.95272	0.95278			N/A
6/10/2019	AUDSGD.fx	3:30:00 PM	0.95216	0.9523			N/A
6/10/2019	AUDUSD	9:30:00 AM	0.69692	0.69701			N/A
6/10/2019	AUDUSD	11:30:00 AM	0.6967	0.69674			N/A
6/10/2019	AUDUSD	1:30:00 PM	0.69701	0.69708			N/A
6/10/2019	AUDUSD	3:30:00 PM	0.69652	0.69667			N/A
6/10/2019	AUDUSD.fx	9:30:00 AM	0.69697	0.69695			N/A
6/10/2019	AUDUSD.fx	11:30:00 AM	0.69674	0.69669			N/A
6/10/2019	AUDUSD.fx	1:30:00 PM	0.69707	0.69702			N/A
6/10/2019	AUDUSD.fx	3:30:00 PM	0.69658	0.69661			N/A
6/10/2019	AUDZAR	9:30:00 AM	10.3711	10.3794			N/A
6/10/2019	AUDZAR	11:30:00 AM	10.3471	10.3551			N/A
6/10/2019	AUDZAR	1:30:00 PM	10.3613	10.3741			N/A
6/10/2019	AUDZAR	3:30:00 PM	10.3438	10.3595			N/A
6/10/2019	AUS200.i	9:30:00 AM					N/A
6/10/2019	AUS200.i	11:30:00 AM	6508.69	6504.79			N/A
6/10/2019	AUS200.i	1:30:00 PM	6499.99	6503.59			N/A
6/10/2019	AUS200.i	3:30:00 PM	6501.19	6504.69			N/A
6/10/2019	BCHUSD	9:30:00 AM	398.01	399.32			N/A
6/10/2019	BCHUSD	11:30:00 AM	396.31	397.74			N/A
6/10/2019	BCHUSD	1:30:00 PM	387.63	388.99			N/A
6/10/2019	BCHUSD	3:30:00 PM	404.89	406.69			N/A
6/10/2019	CADCHF	9:30:00 AM	0.74659	0.74729			N/A
6/10/2019	CADCHF	11:30:00 AM	0.74626	0.74668			N/A
6/10/2019	CADCHF	1:30:00 PM	0.74622	0.74692			N/A
6/10/2019	CADCHF	3:30:00 PM	0.74612	0.74663			N/A
6/10/2019	CADCHF.fx	9:30:00 AM	0.74693	0.74695			N/A
6/10/2019	CADCHF.fx	11:30:00 AM	0.7466	0.74633			N/A
6/10/2019	CADCHF.fx	1:30:00 PM	0.74656	0.74657			N/A
6/10/2019	CADCHF.fx	3:30:00 PM	0.74646	0.74628			N/A
6/10/2019	CADCZK	9:30:00 AM	17.048	17.064			N/A
6/10/2019	CADCZK	11:30:00 AM	17.059	17.073			N/A
6/10/2019	CADCZK	1:30:00 PM	17.05	17.065			N/A
6/10/2019	CADCZK	3:30:00 PM	17.059	17.072			N/A



6/10/2019	CADDDKK	9:30:00 AM					N/A
6/10/2019	CADDDKK	11:30:00 AM	4.98	4.984			N/A
6/10/2019	CADDDKK	1:30:00 PM	4.976	4.979			N/A
6/10/2019	CADDDKK	3:30:00 PM					N/A
6/10/2019	CADHKD	9:30:00 AM	5.9123	5.916			N/A
6/10/2019	CADHKD	11:30:00 AM	5.9094	5.9132			N/A
6/10/2019	CADHKD	1:30:00 PM	5.9083	5.9117			N/A
6/10/2019	CADHKD	3:30:00 PM	5.9058	5.9093			N/A
6/10/2019	CADHUF	9:30:00 AM	213.3	213.42			N/A
6/10/2019	CADHUF	11:30:00 AM	213.31	213.4			N/A
6/10/2019	CADHUF	1:30:00 PM	213.23	213.39			N/A
6/10/2019	CADHUF	3:30:00 PM	213.2	213.34			N/A
6/10/2019	CADJPY	9:30:00 AM	81.884	81.951			N/A
6/10/2019	CADJPY	11:30:00 AM	81.866	81.909			N/A
6/10/2019	CADJPY	1:30:00 PM	81.791	81.858			N/A
6/10/2019	CADJPY	3:30:00 PM	81.771	81.824			N/A
6/10/2019	CADJPY.fx	9:30:00 AM	81.917	81.916			N/A
6/10/2019	CADJPY.fx	11:30:00 AM	81.899	81.875			N/A
6/10/2019	CADJPY.fx	1:30:00 PM	81.825	81.823			N/A
6/10/2019	CADJPY.fx	3:30:00 PM	81.804	81.788			N/A
6/10/2019	CADMXN	9:30:00 AM	14.4424	14.4441			N/A
6/10/2019	CADMXN	11:30:00 AM	14.4612	14.471			N/A
6/10/2019	CADMXN	1:30:00 PM	14.4653	14.4724			N/A
6/10/2019	CADMXN	3:30:00 PM	14.4918	14.4984			N/A
6/10/2019	CADNOK	9:30:00 AM	6.5041	6.5086			N/A
6/10/2019	CADNOK	11:30:00 AM	6.5185	6.5218			N/A
6/10/2019	CADNOK	1:30:00 PM	6.514	6.5181			N/A
6/10/2019	CADNOK	3:30:00 PM	6.5153	6.5199			N/A
6/10/2019	CADPLN	9:30:00 AM	2.8403	2.8422			N/A
6/10/2019	CADPLN	11:30:00 AM	2.8412	2.8432			N/A
6/10/2019	CADPLN	1:30:00 PM	2.8396	2.8413			N/A
6/10/2019	CADPLN	3:30:00 PM	2.8394	2.8412			N/A
6/10/2019	CADSEK	9:30:00 AM	7.091	7.0948			N/A
6/10/2019	CADSEK	11:30:00 AM	7.1074	7.1104			N/A

6/10/2019	CADSEK	1:30:00 PM	7.0985	7.1005			N/A
6/10/2019	CADSEK	3:30:00 PM	7.0917	7.0939			N/A
6/10/2019	CADSGD	9:30:00 AM	1.0296	1.0299			N/A
6/10/2019	CADSGD	11:30:00 AM	1.0296	1.0299			N/A
6/10/2019	CADSGD	1:30:00 PM	1.0294	1.0296			N/A
6/10/2019	CADSGD	3:30:00 PM	1.0291	1.0294			N/A
6/10/2019	CADZAR	9:30:00 AM	11.2231	11.2321			N/A
6/10/2019	CADZAR	11:30:00 AM	11.1959	11.2071			N/A
6/10/2019	CADZAR	1:30:00 PM	11.2048	11.2186			N/A
6/10/2019	CADZAR	3:30:00 PM	11.1888	11.2046			N/A
6/10/2019	CHFCZK	9:30:00 AM	22.829	22.843			N/A
6/10/2019	CHFCZK	11:30:00 AM	22.857	22.869			N/A
6/10/2019	CHFCZK	1:30:00 PM	22.841	22.856			N/A
6/10/2019	CHFCZK	3:30:00 PM	22.858	22.874			N/A
6/10/2019	CHFDKK	9:30:00 AM	6.665	6.668			N/A
6/10/2019	CHFDKK	11:30:00 AM	6.672	6.675			N/A
6/10/2019	CHFDKK	1:30:00 PM	6.664	6.668			N/A
6/10/2019	CHFDKK	3:30:00 PM	6.666	6.669			N/A
6/10/2019	CHFDKK.fx	9:30:00 AM	6.6633	6.6697			N/A
6/10/2019	CHFDKK.fx	11:30:00 AM	6.6708	6.6758			N/A
6/10/2019	CHFDKK.fx	1:30:00 PM	6.6631	6.6693			N/A
6/10/2019	CHFDKK.fx	3:30:00 PM	6.6646	6.6703			N/A
6/10/2019	CHFHKD	9:30:00 AM	7.9165	7.9203			N/A
6/10/2019	CHFHKD	11:30:00 AM	7.9181	7.9193			N/A
6/10/2019	CHFHKD	1:30:00 PM	7.9149	7.9184			N/A
6/10/2019	CHFHKD	3:30:00 PM	7.9134	7.9164			N/A
6/10/2019	CHFHUF	9:30:00 AM	285.5	285.84			N/A
6/10/2019	CHFHUF	11:30:00 AM	285.72	285.92			N/A
6/10/2019	CHFHUF	1:30:00 PM	285.53	285.91			N/A
6/10/2019	CHFHUF	3:30:00 PM	285.55	285.94			N/A
6/10/2019	CHFJPY	9:30:00 AM	109.638	109.707			N/A
6/10/2019	CHFJPY	11:30:00 AM	109.667	109.734			N/A
6/10/2019	CHFJPY	1:30:00 PM	109.565	109.632			N/A
6/10/2019	CHFJPY	3:30:00 PM	109.569	109.622			N/A

6/10/2019	CHFJPY.fx	9:30:00 AM	109.671	109.672			N/A
6/10/2019	CHFJPY.fx	11:30:00 AM	109.7	109.7			N/A
6/10/2019	CHFJPY.fx	1:30:00 PM	109.599	109.597			N/A
6/10/2019	CHFJPY.fx	3:30:00 PM	109.604	109.587			N/A
6/10/2019	CHFMXN	9:30:00 AM	19.3359	19.3387			N/A
6/10/2019	CHFMXN	11:30:00 AM	19.3776	19.3831			N/A
6/10/2019	CHFMXN	1:30:00 PM	19.3764	19.3866			N/A
6/10/2019	CHFMXN	3:30:00 PM	19.4195	19.4277			N/A
6/10/2019	CHFNOK	9:30:00 AM	8.7084	8.7166			N/A
6/10/2019	CHFNOK	11:30:00 AM	8.7346	8.7397			N/A
6/10/2019	CHFNOK	1:30:00 PM	8.7252	8.733			N/A
6/10/2019	CHFNOK	3:30:00 PM	8.7296	8.7363			N/A
6/10/2019	CHFNOK.fx	9:30:00 AM	8.71204	8.7129			N/A
6/10/2019	CHFNOK.fx	11:30:00 AM	8.73812	8.73618			N/A
6/10/2019	CHFNOK.fx	1:30:00 PM	8.72879	8.72939			N/A
6/10/2019	CHFNOK.fx	3:30:00 PM	8.7332	8.73272			N/A
6/10/2019	CHFPLN	9:30:00 AM	3.8026	3.8057			N/A
6/10/2019	CHFPLN	11:30:00 AM	3.8074	3.8103			N/A
6/10/2019	CHFPLN	1:30:00 PM	3.8043	3.8066			N/A
6/10/2019	CHFPLN	3:30:00 PM	3.8037	3.8066			N/A
6/10/2019	CHFPLN.fx	9:30:00 AM	3.80014	3.80813			N/A
6/10/2019	CHFPLN.fx	11:30:00 AM	3.80492	3.81263			N/A
6/10/2019	CHFPLN.fx	1:30:00 PM	3.80204	3.80875			N/A
6/10/2019	CHFPLN.fx	3:30:00 PM	3.80144	3.80887			N/A
6/10/2019	CHFSEK	9:30:00 AM	9.4946	9.4994			N/A
6/10/2019	CHFSEK	11:30:00 AM	9.523	9.5251			N/A
6/10/2019	CHFSEK	1:30:00 PM	9.5086	9.5109			N/A
6/10/2019	CHFSEK	3:30:00 PM	9.5012	9.5048			N/A
6/10/2019	CHFSGD	9:30:00 AM	1.3793	1.3797			N/A
6/10/2019	CHFSGD	11:30:00 AM	1.3802	1.3804			N/A
6/10/2019	CHFSGD	1:30:00 PM	1.3796	1.3798			N/A
6/10/2019	CHFSGD	3:30:00 PM	1.3795	1.3798			N/A
6/10/2019	CHFSGD.fx	9:30:00 AM	1.37944	1.37948			N/A
6/10/2019	CHFSGD.fx	11:30:00 AM	1.38041	1.38022			N/A

6/10/2019	CHFSGD.fx	1:30:00 PM	1.37972	1.37984			N/A
6/10/2019	CHFSGD.fx	3:30:00 PM	1.37967	1.37964			N/A
6/10/2019	CHFZAR	9:30:00 AM	15.0303	15.0346			N/A
6/10/2019	CHFZAR	11:30:00 AM	15.0052	15.0068			N/A
6/10/2019	CHFZAR	1:30:00 PM	15.0122	15.0232			N/A
6/10/2019	CHFZAR	3:30:00 PM	14.9948	15.0091			N/A
6/10/2019	CZKJPY	9:30:00 AM					N/A
6/10/2019	CZKJPY	11:30:00 AM	4.798	4.801			N/A
6/10/2019	CZKJPY	1:30:00 PM					N/A
6/10/2019	CZKJPY	3:30:00 PM					N/A
6/10/2019	DAX30.i	9:30:00 AM	12112.04	12107.29			N/A
6/10/2019	DAX30.i	11:30:00 AM	12109.54	12095.29			N/A
6/10/2019	DAX30.i	1:30:00 PM	12067.54	12065.04			N/A
6/10/2019	DAX30.i	3:30:00 PM	12079.54	12079.04			N/A
6/10/2019	DJ30.i	9:30:00 AM					N/A
6/10/2019	DJ30.i	11:30:00 AM					N/A
6/10/2019	DJ30.i	1:30:00 PM					N/A
6/10/2019	DJ30.i	3:30:00 PM					N/A
6/10/2019	DKKJPY	9:30:00 AM					N/A
6/10/2019	DKKJPY	11:30:00 AM	16.44	16.46			N/A
6/10/2019	DKKJPY	1:30:00 PM					N/A
6/10/2019	DKKJPY	3:30:00 PM					N/A
6/10/2019	EURAUD	9:30:00 AM	1.62199	1.62235			N/A
6/10/2019	EURAUD	11:30:00 AM	1.62123	1.62151			N/A
6/10/2019	EURAUD	1:30:00 PM	1.6216	1.62199			N/A
6/10/2019	EURAUD	3:30:00 PM	1.62205	1.62249			N/A
6/10/2019	EURAUD.fx	9:30:00 AM	1.62219	1.62213			N/A
6/10/2019	EURAUD.fx	11:30:00 AM	1.62143	1.6213			N/A
6/10/2019	EURAUD.fx	1:30:00 PM	1.6218	1.62177			N/A
6/10/2019	EURAUD.fx	3:30:00 PM	1.62225	1.62227			N/A
6/10/2019	EURCAD	9:30:00 AM	1.49935	1.50019			N/A
6/10/2019	EURCAD	11:30:00 AM	1.49891	1.49947			N/A
6/10/2019	EURCAD	1:30:00 PM	1.50023	1.50097			N/A
6/10/2019	EURCAD	3:30:00 PM	1.50047	1.50098			N/A

6/10/2019	EURCAD.fx	9:30:00 AM	1.49976	1.49976			N/A
6/10/2019	EURCAD.fx	11:30:00 AM	1.49933	1.49906			N/A
6/10/2019	EURCAD.fx	1:30:00 PM	1.50062	1.50056			N/A
6/10/2019	EURCAD.fx	3:30:00 PM	1.50089	1.50056			N/A
6/10/2019	EURCHF	9:30:00 AM	1.1202	1.12031			N/A
6/10/2019	EURCHF	11:30:00 AM	1.11913	1.11909			N/A
6/10/2019	EURCHF	1:30:00 PM	1.12027	1.12039			N/A
6/10/2019	EURCHF	3:30:00 PM	1.1201	1.12015			N/A
6/10/2019	EURCHF.fx	9:30:00 AM	1.12026	1.12025			N/A
6/10/2019	EURCHF.fx	11:30:00 AM	1.11918	1.11903			N/A
6/10/2019	EURCHF.fx	1:30:00 PM	1.12033	1.12033			N/A
6/10/2019	EURCHF.fx	3:30:00 PM	1.12015	1.12008			N/A
6/10/2019	EURCZK	9:30:00 AM	25.559	25.596			N/A
6/10/2019	EURCZK	11:30:00 AM	25.563	25.601			N/A
6/10/2019	EURCZK	1:30:00 PM	25.574	25.613			N/A
6/10/2019	EURCZK	3:30:00 PM	25.589	25.628			N/A
6/10/2019	EURDKK	9:30:00 AM	7.4669	7.4682			N/A
6/10/2019	EURDKK	11:30:00 AM	7.4671	7.4681			N/A
6/10/2019	EURDKK	1:30:00 PM	7.4663	7.4675			N/A
6/10/2019	EURDKK	3:30:00 PM					N/A
6/10/2019	EURGBP	9:30:00 AM	0.88989	0.89			N/A
6/10/2019	EURGBP	11:30:00 AM	0.88958	0.88864			N/A
6/10/2019	EURGBP	1:30:00 PM	0.89093	0.8909			N/A
6/10/2019	EURGBP	3:30:00 PM	0.8924	0.89236			N/A
6/10/2019	EURGBP.fx	9:30:00 AM	0.88993	0.88995			N/A
6/10/2019	EURGBP.fx	11:30:00 AM	0.8896	0.88863			N/A
6/10/2019	EURGBP.fx	1:30:00 PM	0.89097	0.89084			N/A
6/10/2019	EURGBP.fx	3:30:00 PM	0.89244	0.89231			N/A
6/10/2019	EURHKD	9:30:00 AM	8.8687	8.8735			N/A
6/10/2019	EURHKD	11:30:00 AM	8.8605	8.8651			N/A
6/10/2019	EURHKD	1:30:00 PM	8.8669	8.872			N/A
6/10/2019	EURHKD	3:30:00 PM	8.864	8.8689			N/A
6/10/2019	EURHKD.fx	9:30:00 AM	8.87152	8.87069			N/A
6/10/2019	EURHKD.fx	11:30:00 AM	8.86335	8.86225			N/A

6/10/2019	EURHKD.fx	1:30:00 PM	8.8697	8.86909			N/A
6/10/2019	EURHKD.fx	3:30:00 PM	8.86683	8.86604			N/A
6/10/2019	EURHUF	9:30:00 AM	319.75	320.45			N/A
6/10/2019	EURHUF	11:30:00 AM	319.65	320.11			N/A
6/10/2019	EURHUF	1:30:00 PM	319.78	320.42			N/A
6/10/2019	EURHUF	3:30:00 PM	319.77	320.39			N/A
6/10/2019	EURHUF.fx	9:30:00 AM	319.956	320.2			N/A
6/10/2019	EURHUF.fx	11:30:00 AM	319.93	320.11			N/A
6/10/2019	EURHUF.fx	1:30:00 PM	320.091	320.256			N/A
6/10/2019	EURHUF.fx	3:30:00 PM	320.071	320.241			N/A
6/10/2019	EURJPY	9:30:00 AM	122.858	122.86			N/A
6/10/2019	EURJPY	11:30:00 AM	122.767	122.761			N/A
6/10/2019	EURJPY	1:30:00 PM	122.781	122.786			N/A
6/10/2019	EURJPY	3:30:00 PM	122.759	122.76			N/A
6/10/2019	EURJPY.fx	9:30:00 AM	122.861	122.856			N/A
6/10/2019	EURJPY.fx	11:30:00 AM	122.768	122.758			N/A
6/10/2019	EURJPY.fx	1:30:00 PM	122.784	122.781			N/A
6/10/2019	EURJPY.fx	3:30:00 PM	122.761	122.755			N/A
6/10/2019	EURMXN	9:30:00 AM	21.6639	21.6683			N/A
6/10/2019	EURMXN	11:30:00 AM	21.6855	21.6995			N/A
6/10/2019	EURMXN	1:30:00 PM	21.7116	21.7211			N/A
6/10/2019	EURMXN	3:30:00 PM	21.7539	21.7652			N/A
6/10/2019	EURMXN.fx	9:30:00 AM	21.6716	21.6598			N/A
6/10/2019	EURMXN.fx	11:30:00 AM	21.6942	21.6914			N/A
6/10/2019	EURMXN.fx	1:30:00 PM	21.72	21.7127			N/A
6/10/2019	EURMXN.fx	3:30:00 PM	21.7631	21.7562			N/A
6/10/2019	EURNOK	9:30:00 AM	9.7539	9.7665			N/A
6/10/2019	EURNOK	11:30:00 AM	9.773	9.7833			N/A
6/10/2019	EURNOK	1:30:00 PM	9.7732	9.7853			N/A
6/10/2019	EURNOK	3:30:00 PM	9.7761	9.7876			N/A
6/10/2019	EURNOK.fx	9:30:00 AM	9.75929	9.7611			N/A
6/10/2019	EURNOK.fx	11:30:00 AM	9.7785	9.77755			N/A
6/10/2019	EURNOK.fx	1:30:00 PM	9.77876	9.77961			N/A
6/10/2019	EURNOK.fx	3:30:00 PM	9.78153	9.78198			N/A

6/10/2019	EURNZD	9:30:00 AM	1.70524	1.70587			N/A
6/10/2019	EURNZD	11:30:00 AM	1.70659	1.70735			N/A
6/10/2019	EURNZD	1:30:00 PM	1.70763	1.7084			N/A
6/10/2019	EURNZD	3:30:00 PM	1.70729	1.70813			N/A
6/10/2019	EURNZD.fx	9:30:00 AM	1.70566	1.70544			N/A
6/10/2019	EURNZD.fx	11:30:00 AM	1.70699	1.70693			N/A
6/10/2019	EURNZD.fx	1:30:00 PM	1.70805	1.70795			N/A
6/10/2019	EURNZD.fx	3:30:00 PM	1.70772	1.7077			N/A
6/10/2019	EURPLN	9:30:00 AM	4.2598	4.2631			N/A
6/10/2019	EURPLN	11:30:00 AM	4.2608	4.264			N/A
6/10/2019	EURPLN	1:30:00 PM	4.262	4.2644			N/A
6/10/2019	EURPLN	3:30:00 PM	4.2607	4.2639			N/A
6/10/2019	EURPLN.fx	9:30:00 AM	4.25917	4.26391			N/A
6/10/2019	EURPLN.fx	11:30:00 AM	4.26022	4.26454			N/A
6/10/2019	EURPLN.fx	1:30:00 PM	4.26154	4.26487			N/A
6/10/2019	EURPLN.fx	3:30:00 PM	4.26007	4.26447			N/A
6/10/2019	EURRUB	9:30:00 AM					N/A
6/10/2019	EURRUB	11:30:00 AM	72.83	73.268			N/A
6/10/2019	EURRUB	1:30:00 PM	72.859	73.292			N/A
6/10/2019	EURRUB	3:30:00 PM	72.842	73.277			N/A
6/10/2019	EURSEK	9:30:00 AM	10.6378	10.6427			N/A
6/10/2019	EURSEK	11:30:00 AM	10.6581	10.6615			N/A
6/10/2019	EURSEK	1:30:00 PM	10.6537	10.6565			N/A
6/10/2019	EURSEK	3:30:00 PM	10.6435	10.6475			N/A
6/10/2019	EURSEK.fx	9:30:00 AM	10.63958	10.64065			N/A
6/10/2019	EURSEK.fx	11:30:00 AM	10.65976	10.6597			N/A
6/10/2019	EURSEK.fx	1:30:00 PM	10.65529	10.65482			N/A
6/10/2019	EURSEK.fx	3:30:00 PM	10.64516	10.64589			N/A
6/10/2019	EURSGD	9:30:00 AM	1.545	1.5458			N/A
6/10/2019	EURSGD	11:30:00 AM	1.5443	1.5452			N/A
6/10/2019	EURSGD	1:30:00 PM	1.5453	1.5458			N/A
6/10/2019	EURSGD	3:30:00 PM	1.545	1.5458			N/A
6/10/2019	EURSGD.fx	9:30:00 AM	1.54535	1.54535			N/A
6/10/2019	EURSGD.fx	11:30:00 AM	1.5447	1.54478			N/A

6/10/2019	EURSGD.fx	1:30:00 PM	1.54569	1.54578			N/A
6/10/2019	EURSGD.fx	3:30:00 PM	1.54536	1.54537			N/A
6/10/2019	EURUSD	9:30:00 AM	1.13083	1.13087			N/A
6/10/2019	EURUSD	11:30:00 AM	1.12992	1.12997			N/A
6/10/2019	EURUSD	1:30:00 PM	1.13072	1.1308			N/A
6/10/2019	EURUSD	3:30:00 PM	1.13031	1.13036			N/A
6/10/2019	EURUSD.fx	9:30:00 AM	1.13103	1.13096			N/A
6/10/2019	EURUSD.fx	11:30:00 AM	1.13012	1.13007			N/A
6/10/2019	EURUSD.fx	1:30:00 PM	1.13092	1.13089			N/A
6/10/2019	EURUSD.fx	3:30:00 PM	1.13051	1.13045			N/A
6/10/2019	EURZAR	9:30:00 AM	16.841	16.8484			N/A
6/10/2019	EURZAR	11:30:00 AM	16.7951	16.806			N/A
6/10/2019	EURZAR	1:30:00 PM	16.822	16.8366			N/A
6/10/2019	EURZAR	3:30:00 PM	16.7966	16.817			N/A
6/10/2019	EURZAR.fx	9:30:00 AM	16.83978	16.84979			N/A
6/10/2019	EURZAR.fx	11:30:00 AM	16.79445	16.80691			N/A
6/10/2019	EURZAR.fx	1:30:00 PM	16.82104	16.83739			N/A
6/10/2019	EURZAR.fx	3:30:00 PM	16.79635	16.81711			N/A
6/10/2019	GBPAUD	9:30:00 AM	1.82309	1.82378			N/A
6/10/2019	GBPAUD	11:30:00 AM	1.82492	1.82363			N/A
6/10/2019	GBPAUD	1:30:00 PM	1.82075	1.82129			N/A
6/10/2019	GBPAUD	3:30:00 PM	1.81832	1.81889			N/A
6/10/2019	GBPAUD.fx	9:30:00 AM	1.82348	1.82338			N/A
6/10/2019	GBPAUD.fx	11:30:00 AM	1.82524	1.82322			N/A
6/10/2019	GBPAUD.fx	1:30:00 PM	1.82115	1.82086			N/A
6/10/2019	GBPAUD.fx	3:30:00 PM	1.81872	1.81847			N/A
6/10/2019	GBPCAD	9:30:00 AM	1.68485	1.6857			N/A
6/10/2019	GBPCAD	11:30:00 AM	1.6867	1.6857			N/A
6/10/2019	GBPCAD	1:30:00 PM	1.68399	1.68453			N/A
6/10/2019	GBPCAD	3:30:00 PM	1.68153	1.68204			N/A
6/10/2019	GBPCAD.fx	9:30:00 AM	1.68525	1.6853			N/A
6/10/2019	GBPCAD.fx	11:30:00 AM	1.68704	1.68532			N/A
6/10/2019	GBPCAD.fx	1:30:00 PM	1.68438	1.68413			N/A
6/10/2019	GBPCAD.fx	3:30:00 PM	1.68193	1.68164			N/A



6/10/2019	GBPCHE	9:30:00 AM	1.25856	1.25903			N/A
6/10/2019	GBPCHE	11:30:00 AM	1.2594	1.25803			N/A
6/10/2019	GBPCHE	1:30:00 PM	1.25736	1.2576			N/A
6/10/2019	GBPCHE	3:30:00 PM	1.2551	1.25542			N/A
6/10/2019	GBPCHE.fx	9:30:00 AM	1.25876	1.25882			N/A
6/10/2019	GBPCHE.fx	11:30:00 AM	1.25952	1.25784			N/A
6/10/2019	GBPCHE.fx	1:30:00 PM	1.25757	1.25741			N/A
6/10/2019	GBPCHE.fx	3:30:00 PM	1.2553	1.25519			N/A
6/10/2019	GBPCZK	9:30:00 AM	28.729	28.751			N/A
6/10/2019	GBPCZK	11:30:00 AM	28.774	28.767			N/A
6/10/2019	GBPCZK	1:30:00 PM	28.717	28.735			N/A
6/10/2019	GBPCZK	3:30:00 PM	28.688	28.704			N/A
6/10/2019	GBPDKK	9:30:00 AM	8.387	8.398			N/A
6/10/2019	GBPDKK	11:30:00 AM	8.398	8.401			N/A
6/10/2019	GBPDKK	1:30:00 PM	8.377	8.388			N/A
6/10/2019	GBPDKK	3:30:00 PM	8.365	8.376			N/A
6/10/2019	GBPDKK.fx	9:30:00 AM	8.385	8.3987			N/A
6/10/2019	GBPDKK.fx	11:30:00 AM	8.3947	8.4012			N/A
6/10/2019	GBPDKK.fx	1:30:00 PM	8.3765	8.3886			N/A
6/10/2019	GBPDKK.fx	3:30:00 PM	8.3633	8.3749			N/A
6/10/2019	GBPHKD	9:30:00 AM	9.963	9.9689			N/A
6/10/2019	GBPHKD	11:30:00 AM	9.9677	9.9625			N/A
6/10/2019	GBPHKD	1:30:00 PM	9.9514	9.9551			N/A
6/10/2019	GBPHKD	3:30:00 PM	9.9311	9.9351			N/A
6/10/2019	GBPHUF	9:30:00 AM	359.31	359.74			N/A
6/10/2019	GBPHUF	11:30:00 AM	359.55	359.8			N/A
6/10/2019	GBPHUF	1:30:00 PM	359.01	359.44			N/A
6/10/2019	GBPHUF	3:30:00 PM	358.4	358.83			N/A
6/10/2019	GBPJPY	9:30:00 AM	138.036	138.071			N/A
6/10/2019	GBPJPY	11:30:00 AM	138.148	138.002			N/A
6/10/2019	GBPJPY	1:30:00 PM	137.799	137.831			N/A
6/10/2019	GBPJPY	3:30:00 PM	137.55	137.568			N/A
6/10/2019	GBPJPY.fx	9:30:00 AM	138.055	138.052			N/A
6/10/2019	GBPJPY.fx	11:30:00 AM	138.164	137.983			N/A

6/10/2019	GBPJPY.fx	1:30:00 PM	137.818	137.811			N/A
6/10/2019	GBPJPY.fx	3:30:00 PM	137.569	137.548			N/A
6/10/2019	GBPMXN	9:30:00 AM	24.3389	24.3375			N/A
6/10/2019	GBPMXN	11:30:00 AM	24.3881	24.3837			N/A
6/10/2019	GBPMXN	1:30:00 PM	24.3622	24.369			N/A
6/10/2019	GBPMXN	3:30:00 PM	24.3736	24.377			N/A
6/10/2019	GBPNOK	9:30:00 AM	10.9614	10.9733			N/A
6/10/2019	GBPNOK	11:30:00 AM	10.9979	10.9976			N/A
6/10/2019	GBPNOK	1:30:00 PM	10.9719	10.9818			N/A
6/10/2019	GBPNOK	3:30:00 PM	10.9567	10.9667			N/A
6/10/2019	GBPNOK.fx	9:30:00 AM	10.96638	10.96827			N/A
6/10/2019	GBPNOK.fx	11:30:00 AM	11.00172	10.99264			N/A
6/10/2019	GBPNOK.fx	1:30:00 PM	10.97705	10.97669			N/A
6/10/2019	GBPNOK.fx	3:30:00 PM	10.96167	10.96171			N/A
6/10/2019	GBPNZD	9:30:00 AM	1.91624	1.91672			N/A
6/10/2019	GBPNZD	11:30:00 AM	1.92045	1.91913			N/A
6/10/2019	GBPNZD	1:30:00 PM	1.91696	1.9174			N/A
6/10/2019	GBPNZD	3:30:00 PM	1.91341	1.91393			N/A
6/10/2019	GBPNZD.fx	9:30:00 AM	1.91659	1.91635			N/A
6/10/2019	GBPNZD.fx	11:30:00 AM	1.92076	1.91877			N/A
6/10/2019	GBPNZD.fx	1:30:00 PM	1.91733	1.917			N/A
6/10/2019	GBPNZD.fx	3:30:00 PM	1.91375	1.91357			N/A
6/10/2019	GBPPLN	9:30:00 AM	4.7876	4.7896			N/A
6/10/2019	GBPPLN	11:30:00 AM	4.7961	4.7921			N/A
6/10/2019	GBPPLN	1:30:00 PM	4.7842	4.7855			N/A
6/10/2019	GBPPLN	3:30:00 PM	4.7757	4.777			N/A
6/10/2019	GBPPLN.fx	9:30:00 AM	4.78521	4.79192			N/A
6/10/2019	GBPPLN.fx	11:30:00 AM	4.79346	4.79431			N/A
6/10/2019	GBPPLN.fx	1:30:00 PM	4.78215	4.78736			N/A
6/10/2019	GBPPLN.fx	3:30:00 PM	4.77348	4.7791			N/A
6/10/2019	GBPSEK	9:30:00 AM	11.9513	11.9608			N/A
6/10/2019	GBPSEK	11:30:00 AM	11.9903	11.9866			N/A
6/10/2019	GBPSEK	1:30:00 PM	11.9559	11.9624			N/A
6/10/2019	GBPSEK	3:30:00 PM	11.9259	11.9341			N/A

6/10/2019	GBPSEK.fx	9:30:00 AM	11.94748	11.96447			N/A
6/10/2019	GBPSEK.fx	11:30:00 AM	11.98554	11.99035			N/A
6/10/2019	GBPSEK.fx	1:30:00 PM	11.95254	11.96583			N/A
6/10/2019	GBPSEK.fx	3:30:00 PM	11.92218	11.93767			N/A
6/10/2019	GBPSGD	9:30:00 AM	1.7361	1.7368			N/A
6/10/2019	GBPSGD	11:30:00 AM	1.7376	1.7368			N/A
6/10/2019	GBPSGD	1:30:00 PM	1.7346	1.7353			N/A
6/10/2019	GBPSGD	3:30:00 PM	1.7315	1.732			N/A
6/10/2019	GBPSGD.fx	9:30:00 AM	1.73428	1.73864			N/A
6/10/2019	GBPSGD.fx	11:30:00 AM	1.73542	1.73856			N/A
6/10/2019	GBPSGD.fx	1:30:00 PM	1.7329	1.73709			N/A
6/10/2019	GBPSGD.fx	3:30:00 PM	1.72957	1.7338			N/A
6/10/2019	GBPUSD	9:30:00 AM	1.27085	1.27087			N/A
6/10/2019	GBPUSD	11:30:00 AM	1.27183	1.27025	54000	54000	N/A
6/10/2019	GBPUSD	1:30:00 PM	1.26943	1.26927			N/A
6/10/2019	GBPUSD	3:30:00 PM	1.26685	1.26673			N/A
6/10/2019	GBPUSD.fx	9:30:00 AM	1.2709	1.27081			N/A
6/10/2019	GBPUSD.fx	11:30:00 AM	1.27185	1.2702			N/A
6/10/2019	GBPUSD.fx	1:30:00 PM	1.26949	1.26922			N/A
6/10/2019	GBPUSD.fx	3:30:00 PM	1.2669	1.26667			N/A
6/10/2019	GBPZAR	9:30:00 AM	18.92	18.9371			N/A
6/10/2019	GBPZAR	11:30:00 AM	18.8878	18.8946			N/A
6/10/2019	GBPZAR	1:30:00 PM	18.8765	18.9001			N/A
6/10/2019	GBPZAR	3:30:00 PM	18.8193	18.8469			N/A
6/10/2019	GBPZAR.fx	9:30:00 AM	18.9266	18.9319			N/A
6/10/2019	GBPZAR.fx	11:30:00 AM	18.8921	18.8878			N/A
6/10/2019	GBPZAR.fx	1:30:00 PM	18.8834	18.893			N/A
6/10/2019	GBPZAR.fx	3:30:00 PM	18.8271	18.8393			N/A
6/10/2019	GOLD	9:30:00 AM	1326.81	1326.72			N/A
6/10/2019	GOLD	11:30:00 AM	1326.74	1326.75			N/A
6/10/2019	GOLD	1:30:00 PM	1328.58	1328.35			N/A
6/10/2019	GOLD	3:30:00 PM	1327.64	1327.65			N/A
6/10/2019	HKDJPY	9:30:00 AM	13.85	13.86			N/A
6/10/2019	HKDJPY	11:30:00 AM	13.85	13.86			N/A

6/10/2019	HKDJPY	1:30:00 PM	13.84	13.85			N/A
6/10/2019	HKDJPY	3:30:00 PM	13.85	13.86			N/A
6/10/2019	HKDJPY.fx	9:30:00 AM	13.845	13.852			N/A
6/10/2019	HKDJPY.fx	11:30:00 AM	13.848	13.853			N/A
6/10/2019	HKDJPY.fx	1:30:00 PM	13.839	13.846			N/A
6/10/2019	HKDJPY.fx	3:30:00 PM	13.841	13.848			N/A
6/10/2019	HUFJPY	9:30:00 AM	0.384	0.3843			N/A
6/10/2019	HUFJPY	11:30:00 AM	0.3838	0.3841			N/A
6/10/2019	HUFJPY	1:30:00 PM	0.3837	0.384			N/A
6/10/2019	HUFJPY	3:30:00 PM	0.3837	0.384			N/A
6/10/2019	JP225.i	9:30:00 AM	21145.12	21157.62			N/A
6/10/2019	JP225.i	11:30:00 AM	21156.79	21152.62			N/A
6/10/2019	JP225.i	1:30:00 PM	21142.62	21157.62			N/A
6/10/2019	JP225.i	3:30:00 PM	21142.62	21160.12			N/A
6/10/2019	MXNJPY	9:30:00 AM	5.67	5.69			N/A
6/10/2019	MXNJPY	11:30:00 AM	5.66	5.67			N/A
6/10/2019	MXNJPY	1:30:00 PM	5.65	5.66			N/A
6/10/2019	MXNJPY	3:30:00 PM					N/A
6/10/2019	NASDAQ.i	9:30:00 AM					N/A
6/10/2019	NASDAQ.i	11:30:00 AM					N/A
6/10/2019	NASDAQ.i	1:30:00 PM					N/A
6/10/2019	NASDAQ.i	3:30:00 PM					N/A
6/10/2019	NOKJPY	9:30:00 AM	12.58	12.61			N/A
6/10/2019	NOKJPY	11:30:00 AM	12.55	12.57			N/A
6/10/2019	NOKJPY	1:30:00 PM	12.55	12.58			N/A
6/10/2019	NOKJPY	3:30:00 PM	12.54	12.57			N/A
6/10/2019	NOKJPY.fx	9:30:00 AM	12.584	12.592			N/A
6/10/2019	NOKJPY.fx	11:30:00 AM	12.554	12.557			N/A
6/10/2019	NOKJPY.fx	1:30:00 PM	12.552	12.559			N/A
6/10/2019	NOKJPY.fx	3:30:00 PM	12.546	12.552			N/A
6/10/2019	NZDCAD	9:30:00 AM	0.87905	0.87961			N/A
6/10/2019	NZDCAD	11:30:00 AM	0.87806	0.87855			N/A
6/10/2019	NZDCAD	1:30:00 PM	0.8782	0.87885			N/A
6/10/2019	NZDCAD	3:30:00 PM	0.87852	0.87905			N/A

6/10/2019	NZDCAD.fx	9:30:00 AM	0.87939	0.87928			N/A
6/10/2019	NZDCAD.fx	11:30:00 AM	0.87838	0.87821			N/A
6/10/2019	NZDCAD.fx	1:30:00 PM	0.87853	0.87851			N/A
6/10/2019	NZDCAD.fx	3:30:00 PM	0.87885	0.87871			N/A
6/10/2019	NZDCHF	9:30:00 AM	0.65648	0.65715			N/A
6/10/2019	NZDCHF	11:30:00 AM	0.65531	0.65591			N/A
6/10/2019	NZDCHF	1:30:00 PM	0.65557	0.65625			N/A
6/10/2019	NZDCHF	3:30:00 PM	0.65557	0.65625			N/A
6/10/2019	NZDCHF.fx	9:30:00 AM	0.65685	0.65679			N/A
6/10/2019	NZDCHF.fx	11:30:00 AM	0.65563	0.65557			N/A
6/10/2019	NZDCHF.fx	1:30:00 PM	0.65591	0.65589			N/A
6/10/2019	NZDCHF.fx	3:30:00 PM	0.65593	0.65589			N/A
6/10/2019	NZDCZK	9:30:00 AM	14.991	15			N/A
6/10/2019	NZDCZK	11:30:00 AM	14.981	14.992			N/A
6/10/2019	NZDCZK	1:30:00 PM	14.978	14.989			N/A
6/10/2019	NZDCZK	3:30:00 PM	14.989	15.001			N/A
6/10/2019	NZDDKK	9:30:00 AM	4.376	4.38			N/A
6/10/2019	NZDDKK	11:30:00 AM	4.372	4.375			N/A
6/10/2019	NZDDKK	1:30:00 PM					N/A
6/10/2019	NZDDKK	3:30:00 PM	4.371	4.375			N/A
6/10/2019	NZDHKD	9:30:00 AM	5.199	5.201			N/A
6/10/2019	NZDHKD	11:30:00 AM	5.1888	5.1911			N/A
6/10/2019	NZDHKD	1:30:00 PM	5.1898	5.1923			N/A
6/10/2019	NZDHKD	3:30:00 PM	5.1884	5.191			N/A
6/10/2019	NZDHUF	9:30:00 AM	187.47	187.71			N/A
6/10/2019	NZDHUF	11:30:00 AM	187.23	187.44			N/A
6/10/2019	NZDHUF	1:30:00 PM	187.22	187.5			N/A
6/10/2019	NZDHUF	3:30:00 PM	187.23	187.53			N/A
6/10/2019	NZDJPY	9:30:00 AM	72.001	72.066			N/A
6/10/2019	NZDJPY	11:30:00 AM	71.89	71.95			N/A
6/10/2019	NZDJPY	1:30:00 PM	71.853	71.92			N/A
6/10/2019	NZDJPY	3:30:00 PM	71.851	71.917			N/A
6/10/2019	NZDJPY.fx	9:30:00 AM	72.032	72.033			N/A
6/10/2019	NZDJPY.fx	11:30:00 AM	71.921	71.918			N/A

6/10/2019	NZDJPY.fx	1:30:00 PM	71.885	71.887			N/A
6/10/2019	NZDJPY.fx	3:30:00 PM	71.882	71.885			N/A
6/10/2019	NZDMXN	9:30:00 AM	12.6986	12.6973			N/A
6/10/2019	NZDMXN	11:30:00 AM	12.7018	12.7025			N/A
6/10/2019	NZDMXN	1:30:00 PM	12.7078	12.7094			N/A
6/10/2019	NZDMXN	3:30:00 PM	12.7357	12.7367			N/A
6/10/2019	NZDNOK	9:30:00 AM	5.7185	5.7223			N/A
6/10/2019	NZDNOK	11:30:00 AM	5.7244	5.7253			N/A
6/10/2019	NZDNOK	1:30:00 PM	5.7215	5.725			N/A
6/10/2019	NZDNOK	3:30:00 PM	5.7239	5.7278			N/A
6/10/2019	NZDPLN	9:30:00 AM	2.4976	2.4988			N/A
6/10/2019	NZDPLN	11:30:00 AM	2.495	2.4962			N/A
6/10/2019	NZDPLN	1:30:00 PM	2.4942	2.4954			N/A
6/10/2019	NZDPLN	3:30:00 PM	2.4941	2.4954			N/A
6/10/2019	NZDSEK	9:30:00 AM	6.2322	6.2391			N/A
6/10/2019	NZDSEK	11:30:00 AM	6.2389	6.245			N/A
6/10/2019	NZDSEK	1:30:00 PM	6.2332	6.2385			N/A
6/10/2019	NZDSEK	3:30:00 PM	6.2289	6.2347			N/A
6/10/2019	NZDSGD	9:30:00 AM	0.9058	0.9064			N/A
6/10/2019	NZDSGD	11:30:00 AM	0.9047	0.9053			N/A
6/10/2019	NZDSGD	1:30:00 PM	0.9047	0.9053			N/A
6/10/2019	NZDSGD	3:30:00 PM	0.9046	0.9053			N/A
6/10/2019	NZDSGD.fx	9:30:00 AM	0.9058	0.90631			N/A
6/10/2019	NZDSGD.fx	11:30:00 AM	0.90467	0.90522			N/A
6/10/2019	NZDSGD.fx	1:30:00 PM	0.90471	0.90527			N/A
6/10/2019	NZDSGD.fx	3:30:00 PM	0.90462	0.90521			N/A
6/10/2019	NZDUSD	9:30:00 AM	0.66307	0.66307			N/A
6/10/2019	NZDUSD	11:30:00 AM	0.66194	0.66203			N/A
6/10/2019	NZDUSD	1:30:00 PM	0.66203	0.6621			N/A
6/10/2019	NZDUSD	3:30:00 PM	0.66188	0.662			N/A
6/10/2019	NZDUSD.fx	9:30:00 AM	0.66314	0.66309			N/A
6/10/2019	NZDUSD.fx	11:30:00 AM	0.66201	0.66205			N/A
6/10/2019	NZDUSD.fx	1:30:00 PM	0.66211	0.66211			N/A
6/10/2019	NZDUSD.fx	3:30:00 PM	0.66195	0.66202			N/A

6/10/2019	NZDZAR	9:30:00 AM	9.8658	9.8775			N/A
6/10/2019	NZDZAR	11:30:00 AM	9.8297	9.8397			N/A
6/10/2019	NZDZAR	1:30:00 PM	9.8401	9.8544			N/A
6/10/2019	NZDZAR	3:30:00 PM	9.828	9.8453			N/A
6/10/2019	SEKJPY	9:30:00 AM	11.55	11.56			N/A
6/10/2019	SEKJPY	11:30:00 AM	11.52	11.53			N/A
6/10/2019	SEKJPY	1:30:00 PM	11.52	11.53			N/A
6/10/2019	SEKJPY	3:30:00 PM					N/A
6/10/2019	SEKJPY.fx	9:30:00 AM	11.537	11.556			N/A
6/10/2019	SEKJPY.fx	11:30:00 AM	11.508	11.524			N/A
6/10/2019	SEKJPY.fx	1:30:00 PM	11.515	11.532			N/A
6/10/2019	SEKJPY.fx	3:30:00 PM	11.522	11.54			N/A
6/10/2019	SGDJPY	9:30:00 AM	79.49	79.5			N/A
6/10/2019	SGDJPY	11:30:00 AM	79.5	79.46			N/A
6/10/2019	SGDJPY	1:30:00 PM	79.4	79.43			N/A
6/10/2019	SGDJPY	3:30:00 PM	79.44	79.44			N/A
6/10/2019	SILVER	9:30:00 AM	14.57	14.95			N/A
6/10/2019	SILVER	11:30:00 AM	14.55	14.93			N/A
6/10/2019	SILVER	1:30:00 PM	14.55	14.92			N/A
6/10/2019	SILVER	3:30:00 PM	14.56	14.92			N/A
6/10/2019	SPX500.i	9:30:00 AM	2884.19	2884.71			N/A
6/10/2019	SPX500.i	11:30:00 AM	2883.66	2882.71			N/A
6/10/2019	SPX500.i	1:30:00 PM	2884.66	2885.46			N/A
6/10/2019	SPX500.i	3:30:00 PM	2887.16	2888.05			N/A
6/10/2019	UK100.i	9:30:00 AM	7371.85	7372.02			N/A
6/10/2019	UK100.i	11:30:00 AM	7368.68	7361.68			N/A
6/10/2019	UK100.i	1:30:00 PM	7369.52	7369.43			N/A
6/10/2019	UK100.i	3:30:00 PM	7371.93	7373.43			N/A
6/10/2019	USDCAD	9:30:00 AM	1.32605	1.32617			N/A
6/10/2019	USDCAD	11:30:00 AM	1.32674	1.32656			N/A
6/10/2019	USDCAD	1:30:00 PM	1.32694	1.32696			N/A
6/10/2019	USDCAD	3:30:00 PM	1.32762	1.32747			N/A
6/10/2019	USDCAD.fx	9:30:00 AM	1.32608	1.32613			N/A
6/10/2019	USDCAD.fx	11:30:00 AM	1.32676	1.32654			N/A

6/10/2019	USDCAD.fx	1:30:00 PM	1.32698	1.32691			N/A
6/10/2019	USDCAD.fx	3:30:00 PM	1.32761	1.32743			N/A
6/10/2019	USDCHE	9:30:00 AM	0.99047	0.99054			N/A
6/10/2019	USDCHE	11:30:00 AM	0.99029	0.99022			N/A
6/10/2019	USDCHE	1:30:00 PM	0.99056	0.99068			N/A
6/10/2019	USDCHE	3:30:00 PM	0.99082	0.99082			N/A
6/10/2019	USDCHE.fx	9:30:00 AM	0.99053	0.99047			N/A
6/10/2019	USDCHE.fx	11:30:00 AM	0.99034	0.99016			N/A
6/10/2019	USDCHE.fx	1:30:00 PM	0.99061	0.99062			N/A
6/10/2019	USDCHE.fx	3:30:00 PM	0.99087	0.99076			N/A
6/10/2019	USDCZK	9:30:00 AM	22.627	22.648			N/A
6/10/2019	USDCZK	11:30:00 AM	22.648	22.67			N/A
6/10/2019	USDCZK	1:30:00 PM	22.641	22.662			N/A
6/10/2019	USDCZK	3:30:00 PM	22.661	22.684			N/A
6/10/2019	USDCZK.fx	9:30:00 AM	22.6342	22.641			N/A
6/10/2019	USDCZK.fx	11:30:00 AM	22.6569	22.6602			N/A
6/10/2019	USDCZK.fx	1:30:00 PM	22.6495	22.654			N/A
6/10/2019	USDCZK.fx	3:30:00 PM	22.6699	22.675			N/A
6/10/2019	USDDKK	9:30:00 AM	6.6022	6.6059			N/A
6/10/2019	USDDKK	11:30:00 AM	6.6073	6.6113			N/A
6/10/2019	USDDKK	1:30:00 PM	6.6026	6.6065			N/A
6/10/2019	USDDKK	3:30:00 PM	6.6051	6.6089			N/A
6/10/2019	USDDKK.fx	9:30:00 AM	6.60257	6.6038			N/A
6/10/2019	USDDKK.fx	11:30:00 AM	6.60786	6.60898			N/A
6/10/2019	USDDKK.fx	1:30:00 PM	6.60307	6.60442			N/A
6/10/2019	USDDKK.fx	3:30:00 PM	6.60572	6.60691			N/A
6/10/2019	USDHKD	9:30:00 AM	7.8432	7.8436			N/A
6/10/2019	USDHKD	11:30:00 AM	7.8424	7.8423			N/A
6/10/2019	USDHKD	1:30:00 PM	7.8425	7.8428			N/A
6/10/2019	USDHKD	3:30:00 PM	7.8428	7.8431			N/A
6/10/2019	USDHKD.fx	9:30:00 AM					N/A
6/10/2019	USDHKD.fx	11:30:00 AM	7.84233	7.84279			N/A
6/10/2019	USDHKD.fx	1:30:00 PM	7.84244	7.84301			N/A
6/10/2019	USDHKD.fx	3:30:00 PM	7.84279	7.84333			N/A



6/10/2019	USDHUF	9:30:00 AM	282.81	283.26			N/A
6/10/2019	USDHUF	11:30:00 AM	282.96	283.42			N/A
6/10/2019	USDHUF	1:30:00 PM	282.89	283.35			N/A
6/10/2019	USDHUF	3:30:00 PM	282.98	283.45			N/A
6/10/2019	USDHUF.fx	9:30:00 AM	282.976	283.095			N/A
6/10/2019	USDHUF.fx	11:30:00 AM	283.155	283.217			N/A
6/10/2019	USDHUF.fx	1:30:00 PM	283.091	283.135			N/A
6/10/2019	USDHUF.fx	3:30:00 PM	283.177	283.245			N/A
6/10/2019	USDINR	9:30:00 AM	64.45	74.44			N/A
6/10/2019	USDINR	11:30:00 AM	64.53	74.53			N/A
6/10/2019	USDINR	1:30:00 PM					N/A
6/10/2019	USDINR	3:30:00 PM					N/A
6/10/2019	USDJPY	9:30:00 AM	108.626	108.632			N/A
6/10/2019	USDJPY	11:30:00 AM	108.632	108.624			N/A
6/10/2019	USDJPY	1:30:00 PM	108.565	108.576			N/A
6/10/2019	USDJPY	3:30:00 PM	108.582	108.593			N/A
6/10/2019	USDJPY.fx	9:30:00 AM	108.633	108.625			N/A
6/10/2019	USDJPY.fx	11:30:00 AM	108.638	108.618			N/A
6/10/2019	USDJPY.fx	1:30:00 PM	108.571	108.568			N/A
6/10/2019	USDJPY.fx	3:30:00 PM	108.589	108.585			N/A
6/10/2019	USDMXN	9:30:00 AM	19.16	19.154			N/A
6/10/2019	USDMXN	11:30:00 AM	19.195	19.197			N/A
6/10/2019	USDMXN	1:30:00 PM	19.203	19.203			N/A
6/10/2019	USDMXN	3:30:00 PM	19.247	19.248			N/A
6/10/2019	USDMXN.f	9:30:00 AM					N/A
6/10/2019	USDMXN.f	11:30:00 AM					N/A
6/10/2019	USDMXN.f	1:30:00 PM					N/A
6/10/2019	USDMXN.f	3:30:00 PM					N/A
6/10/2019	USDNOK	9:30:00 AM	8.6257	8.6338			N/A
6/10/2019	USDNOK	11:30:00 AM	8.6497	8.6564			N/A
6/10/2019	USDNOK	1:30:00 PM	8.6434	8.6518			N/A
6/10/2019	USDNOK	3:30:00 PM	8.6488	8.6573			N/A
6/10/2019	USDNOK.fx	9:30:00 AM	8.62953	8.62924			N/A
6/10/2019	USDNOK.fx	11:30:00 AM	8.65367	8.65168			N/A

6/10/2019	USDNOK.fx	1:30:00 PM	8.64746	8.6471			N/A
6/10/2019	USDNOK.fx	3:30:00 PM	8.65288	8.6528			N/A
6/10/2019	USDPLN	9:30:00 AM	3.7673	3.7688			N/A
6/10/2019	USDPLN	11:30:00 AM	3.7709	3.7723			N/A
6/10/2019	USDPLN	1:30:00 PM	3.7694	3.7702			N/A
6/10/2019	USDPLN	3:30:00 PM	3.7696	3.7711			N/A
6/10/2019	USDPLN.fx	9:30:00 AM	3.76636	3.76963			N/A
6/10/2019	USDPLN.fx	11:30:00 AM	3.77017	3.7731			N/A
6/10/2019	USDPLN.fx	1:30:00 PM	3.76867	3.77081			N/A
6/10/2019	USDPLN.fx	3:30:00 PM	3.76888	3.77182			N/A
6/10/2019	USDRUB	9:30:00 AM					N/A
6/10/2019	USDRUB	11:30:00 AM	64.561	64.947			N/A
6/10/2019	USDRUB	1:30:00 PM	64.542	64.924			N/A
6/10/2019	USDRUB	3:30:00 PM	64.543	64.934			N/A
6/10/2019	USDSEK	9:30:00 AM	9.4053	9.4097			N/A
6/10/2019	USDSEK	11:30:00 AM	9.4311	9.4339			N/A
6/10/2019	USDSEK	1:30:00 PM	9.4199	9.4226			N/A
6/10/2019	USDSEK	3:30:00 PM	9.4145	9.4182			N/A
6/10/2019	USDSEK.fx	9:30:00 AM	9.40801	9.40783			N/A
6/10/2019	USDSEK.fx	11:30:00 AM	9.43373	9.43201			N/A
6/10/2019	USDSEK.fx	1:30:00 PM	9.42251	9.42042			N/A
6/10/2019	USDSEK.fx	3:30:00 PM	9.41712	9.41625			N/A
6/10/2019	USDSGD	9:30:00 AM	1.3663	1.3666			N/A
6/10/2019	USDSGD	11:30:00 AM	1.3667	1.3671			N/A
6/10/2019	USDSGD	1:30:00 PM	1.3667	1.3669			N/A
6/10/2019	USDSGD	3:30:00 PM	1.3668	1.3669			N/A
6/10/2019	USDSGD.fx	9:30:00 AM	1.3662	1.36657			N/A
6/10/2019	USDSGD.fx	11:30:00 AM	1.36667	1.36714			N/A
6/10/2019	USDSGD.fx	1:30:00 PM	1.36663	1.36704			N/A
6/10/2019	USDSGD.fx	3:30:00 PM	1.36673	1.36723			N/A
6/10/2019	USDZAR	9:30:00 AM	14.8911	14.8978			N/A
6/10/2019	USDZAR	11:30:00 AM	14.8625	14.8717			N/A
6/10/2019	USDZAR	1:30:00 PM	14.8754	14.8877			N/A
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6/10/2019	USDZAR.fx	3:30:00 PM					N/A
6/10/2019	XAUUSD	9:30:00 AM	1326.81	1326.7			N/A
6/10/2019	XAUUSD	11:30:00 AM	1326.75	1326.75			N/A
6/10/2019	XAUUSD	1:30:00 PM	1328.58	1328.34			N/A
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6/10/2019	ZARJPY	3:30:00 PM	7.29	7.31			N/A
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6/10/2019	ZARJPY.fx	11:30:00 AM	7.306	7.306			N/A
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6/11/2019	#Ripple	11:30:00 AM	0.3911	0.3951			N/A
6/11/2019	#Ripple	1:30:00 PM	0.3864	0.3899			N/A
6/11/2019	#Ripple	3:30:00 PM	0.3848	0.3895			N/A
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6/11/2019	#ZNGA	1:30:00 PM					N/A
6/11/2019	#ZNGA	3:30:00 PM					N/A
6/11/2019	AUDCAD	9:30:00 AM	0.92178	0.9225			N/A
6/11/2019	AUDCAD	11:30:00 AM	0.92196	0.92257			N/A
6/11/2019	AUDCAD	1:30:00 PM	0.92202	0.9226			N/A
6/11/2019	AUDCAD	3:30:00 PM	0.92181	0.92229			N/A
6/11/2019	AUDCAD.fx	9:30:00 AM	0.9221	0.92215			N/A
6/11/2019	AUDCAD.fx	11:30:00 AM	0.92231	0.92223			N/A
6/11/2019	AUDCAD.fx	1:30:00 PM	0.92234	0.92226			N/A
6/11/2019	AUDCAD.fx	3:30:00 PM	0.92208	0.92193			N/A
6/11/2019	AUDCHF	9:30:00 AM	0.68834	0.68905			N/A
6/11/2019	AUDCHF	11:30:00 AM	0.68833	0.68896			N/A
6/11/2019	AUDCHF	1:30:00 PM	0.68955	0.69023			N/A
6/11/2019	AUDCHF	3:30:00 PM	0.68989	0.69054			N/A
6/11/2019	AUDCHF.fx	9:30:00 AM	0.68868	0.6887			N/A
6/11/2019	AUDCHF.fx	11:30:00 AM	0.68868	0.68862			N/A
6/11/2019	AUDCHF.fx	1:30:00 PM	0.68989	0.68988			N/A
6/11/2019	AUDCHF.fx	3:30:00 PM	0.69024	0.69019			N/A



6/11/2019	AUDCZK	9:30:00 AM	15.723	15.741			N/A
6/11/2019	AUDCZK	11:30:00 AM	15.738	15.753			N/A
6/11/2019	AUDCZK	1:30:00 PM	15.743	15.758			N/A
6/11/2019	AUDCZK	3:30:00 PM	15.736	15.75			N/A
6/11/2019	AUDDKK	9:30:00 AM	4.5869	4.5917			N/A
6/11/2019	AUDDKK	11:30:00 AM	4.5873	4.5918			N/A
6/11/2019	AUDDKK	1:30:00 PM	4.5878	4.5919			N/A
6/11/2019	AUDDKK	3:30:00 PM	4.5893	4.5927			N/A
6/11/2019	AUDHKD	9:30:00 AM	5.4469	5.4504			N/A
6/11/2019	AUDHKD	11:30:00 AM	5.4468	5.4496			N/A
6/11/2019	AUDHKD	1:30:00 PM	5.4492	5.4523			N/A
6/11/2019	AUDHKD	3:30:00 PM	5.444	5.4464			N/A
6/11/2019	AUDHUF	9:30:00 AM	196.49	196.67			N/A
6/11/2019	AUDHUF	11:30:00 AM	196.69	196.83			N/A
6/11/2019	AUDHUF	1:30:00 PM	196.92	197.13			N/A
6/11/2019	AUDHUF	3:30:00 PM	196.82	197.02			N/A
6/11/2019	AUDJPY	9:30:00 AM	75.519	75.58			N/A
6/11/2019	AUDJPY	11:30:00 AM	75.526	75.585			N/A
6/11/2019	AUDJPY	1:30:00 PM	75.605	75.668			N/A
6/11/2019	AUDJPY	3:30:00 PM	75.599	75.651			N/A
6/11/2019	AUDJPY.fx	9:30:00 AM	75.553	75.544			N/A
6/11/2019	AUDJPY.fx	11:30:00 AM	75.56	75.55			N/A
6/11/2019	AUDJPY.fx	1:30:00 PM	75.639	75.633			N/A
6/11/2019	AUDJPY.fx	3:30:00 PM	75.633	75.615			N/A
6/11/2019	AUDMXN	9:30:00 AM	13.3266	13.3323			N/A
6/11/2019	AUDMXN	11:30:00 AM	13.3271	13.3354			N/A
6/11/2019	AUDMXN	1:30:00 PM	13.3196	13.3261			N/A
6/11/2019	AUDMXN	3:30:00 PM	13.3219	13.3225			N/A
6/11/2019	AUDNOK	9:30:00 AM	6.0324	6.0374			N/A
6/11/2019	AUDNOK	11:30:00 AM	6.015	6.0197			N/A
6/11/2019	AUDNOK	1:30:00 PM	6.0102	6.0156			N/A
6/11/2019	AUDNOK	3:30:00 PM	6.0049	6.0086			N/A
6/11/2019	AUDNOK.fx	9:30:00 AM	6.0339	6.0358			N/A
6/11/2019	AUDNOK.fx	11:30:00 AM	6.0166	6.0179			N/A

6/11/2019	AUDNOK.f	1:30:00 PM	6.0118	6.0138			N/A
6/11/2019	AUDNOK.f	3:30:00 PM	6.0065	6.0076			N/A
6/11/2019	AUDNZD	9:30:00 AM	1.05391	1.05457			N/A
6/11/2019	AUDNZD	11:30:00 AM	1.05475	1.05564			N/A
6/11/2019	AUDNZD	1:30:00 PM	1.05607	1.05681			N/A
6/11/2019	AUDNZD	3:30:00 PM	1.05736	1.05817			N/A
6/11/2019	AUDNZD.fx	9:30:00 AM	1.05435	1.05411			N/A
6/11/2019	AUDNZD.fx	11:30:00 AM	1.05518	1.05519			N/A
6/11/2019	AUDNZD.fx	1:30:00 PM	1.0565	1.05636			N/A
6/11/2019	AUDNZD.fx	3:30:00 PM	1.0578	1.05771			N/A
6/11/2019	AUDPLN	9:30:00 AM	2.6171	2.6203			N/A
6/11/2019	AUDPLN	11:30:00 AM	2.6202	2.6232			N/A
6/11/2019	AUDPLN	1:30:00 PM	2.6211	2.6237			N/A
6/11/2019	AUDPLN	3:30:00 PM	2.6217	2.6243			N/A
6/11/2019	AUDSEK	9:30:00 AM	6.5472	6.5501			N/A
6/11/2019	AUDSEK	11:30:00 AM	6.5563	6.5594			N/A
6/11/2019	AUDSEK	1:30:00 PM	6.5673	6.5694			N/A
6/11/2019	AUDSEK	3:30:00 PM	6.5662	6.5678			N/A
6/11/2019	AUDSEK.fx	9:30:00 AM	6.5425	6.5546			N/A
6/11/2019	AUDSEK.fx	11:30:00 AM	6.5517	6.5638			N/A
6/11/2019	AUDSEK.fx	1:30:00 PM	6.5627	6.5738			N/A
6/11/2019	AUDSEK.fx	3:30:00 PM	6.5617	6.5729			N/A
6/11/2019	AUDSGD	9:30:00 AM	0.9492	0.9494			N/A
6/11/2019	AUDSGD	11:30:00 AM	0.9491	0.9494			N/A
6/11/2019	AUDSGD	1:30:00 PM	0.9494	0.9495			N/A
6/11/2019	AUDSGD	3:30:00 PM	0.9489	0.9488			N/A
6/11/2019	AUDSGD.fx	9:30:00 AM	0.94929	0.94937			N/A
6/11/2019	AUDSGD.fx	11:30:00 AM	0.94921	0.94929			N/A
6/11/2019	AUDSGD.fx	1:30:00 PM	0.94956	0.94956			N/A
6/11/2019	AUDSGD.fx	3:30:00 PM	0.94882	0.94874			N/A
6/11/2019	AUDUSD	9:30:00 AM	0.69525	0.69534			N/A
6/11/2019	AUDUSD	11:30:00 AM	0.6955	0.69553			N/A
6/11/2019	AUDUSD	1:30:00 PM	0.69581	0.6958			N/A
6/11/2019	AUDUSD	3:30:00 PM	0.69529	0.6951			N/A

6/11/2019	AUDUSD.fx	9:30:00 AM	0.69531	0.69528			N/A
6/11/2019	AUDUSD.fx	11:30:00 AM	0.69555	0.69548			N/A
6/11/2019	AUDUSD.fx	1:30:00 PM	0.69586	0.69575			N/A
6/11/2019	AUDUSD.fx	3:30:00 PM	0.69531	0.69505			N/A
6/11/2019	AUDZAR	9:30:00 AM	10.253	10.2659			N/A
6/11/2019	AUDZAR	11:30:00 AM	10.2438	10.2564			N/A
6/11/2019	AUDZAR	1:30:00 PM	10.2576	10.2703			N/A
6/11/2019	AUDZAR	3:30:00 PM	10.2626	10.2723			N/A
6/11/2019	AUS200.i	9:30:00 AM	6548.2	6550.7			N/A
6/11/2019	AUS200.i	11:30:00 AM	6555.43	6556.93			N/A
6/11/2019	AUS200.i	1:30:00 PM	6568.43	6571.63			N/A
6/11/2019	AUS200.i	3:30:00 PM	6571.93	6575.03			N/A
6/11/2019	BCHUSD	9:30:00 AM	398.77	400.01			N/A
6/11/2019	BCHUSD	11:30:00 AM	400.11	402.07			N/A
6/11/2019	BCHUSD	1:30:00 PM	394.2	395.29			N/A
6/11/2019	BCHUSD	3:30:00 PM	391.69	393.63			N/A
6/11/2019	CADCHF	9:30:00 AM	0.74649	0.74719			N/A
6/11/2019	CADCHF	11:30:00 AM	0.74637	0.74702			N/A
6/11/2019	CADCHF	1:30:00 PM	0.74764	0.74828			N/A
6/11/2019	CADCHF	3:30:00 PM	0.74832	0.74879			N/A
6/11/2019	CADCHF.fx	9:30:00 AM	0.74683	0.74684			N/A
6/11/2019	CADCHF.fx	11:30:00 AM	0.7467	0.74668			N/A
6/11/2019	CADCHF.fx	1:30:00 PM	0.74799	0.74793			N/A
6/11/2019	CADCHF.fx	3:30:00 PM	0.74866	0.74846			N/A
6/11/2019	CADCZK	9:30:00 AM	17.055	17.073			N/A
6/11/2019	CADCZK	11:30:00 AM	17.069	17.084			N/A
6/11/2019	CADCZK	1:30:00 PM	17.072	17.088			N/A
6/11/2019	CADCZK	3:30:00 PM	17.074	17.083			N/A
6/11/2019	CADDDKK	9:30:00 AM	4.976	4.98			N/A
6/11/2019	CADDDKK	11:30:00 AM	4.974	4.977			N/A
6/11/2019	CADDDKK	1:30:00 PM	4.976	4.979			N/A
6/11/2019	CADDDKK	3:30:00 PM	4.977	4.98			N/A
6/11/2019	CADHKD	9:30:00 AM	5.9079	5.9115			N/A
6/11/2019	CADHKD	11:30:00 AM	5.9066	5.9105			N/A

6/11/2019	CADHKD	1:30:00 PM	5.9088	5.9125			N/A
6/11/2019	CADHKD	3:30:00 PM	5.9061	5.9082			N/A
6/11/2019	CADHUF	9:30:00 AM	213.16	213.25			N/A
6/11/2019	CADHUF	11:30:00 AM	213.33	213.42			N/A
6/11/2019	CADHUF	1:30:00 PM	213.61	213.72			N/A
6/11/2019	CADHUF	3:30:00 PM	213.57	213.66			N/A
6/11/2019	CADJPY	9:30:00 AM	81.899	81.959			N/A
6/11/2019	CADJPY	11:30:00 AM	81.889	81.956			N/A
6/11/2019	CADJPY	1:30:00 PM	81.97	82.04			N/A
6/11/2019	CADJPY	3:30:00 PM	81.994	82.045			N/A
6/11/2019	CADJPY.fx	9:30:00 AM	81.933	81.924			N/A
6/11/2019	CADJPY.fx	11:30:00 AM	81.922	81.922			N/A
6/11/2019	CADJPY.fx	1:30:00 PM	82.003	82.004			N/A
6/11/2019	CADJPY.fx	3:30:00 PM	82.027	82.01			N/A
6/11/2019	CADMXN	9:30:00 AM	14.4537	14.461			N/A
6/11/2019	CADMXN	11:30:00 AM	14.4515	14.4634			N/A
6/11/2019	CADMXN	1:30:00 PM	14.4425	14.4535			N/A
6/11/2019	CADMXN	3:30:00 PM	14.4482	14.4547			N/A
6/11/2019	CADNOK	9:30:00 AM	6.5404	6.5452			N/A
6/11/2019	CADNOK	11:30:00 AM	6.5201	6.5239			N/A
6/11/2019	CADNOK	1:30:00 PM	6.5159	6.5195			N/A
6/11/2019	CADNOK	3:30:00 PM	6.5097	6.5117			N/A
6/11/2019	CADPLN	9:30:00 AM	2.8385	2.84			N/A
6/11/2019	CADPLN	11:30:00 AM	2.8408	2.8422			N/A
6/11/2019	CADPLN	1:30:00 PM	2.8424	2.8437			N/A
6/11/2019	CADPLN	3:30:00 PM	2.842	2.8435			N/A
6/11/2019	CADSEK	9:30:00 AM	7.0991	7.1022			N/A
6/11/2019	CADSEK	11:30:00 AM	7.1074	7.1113			N/A
6/11/2019	CADSEK	1:30:00 PM	7.1192	7.1221			N/A
6/11/2019	CADSEK	3:30:00 PM	7.1197	7.1166			N/A
6/11/2019	CADSGD	9:30:00 AM	1.0287	1.029			N/A
6/11/2019	CADSGD	11:30:00 AM					N/A
6/11/2019	CADSGD	1:30:00 PM	1.0288	1.0291			N/A
6/11/2019	CADSGD	3:30:00 PM	1.0286	1.0289			N/A

6/11/2019	CADZAR	9:30:00 AM	11.1212	11.135			N/A
6/11/2019	CADZAR	11:30:00 AM	11.1101	11.1238			N/A
6/11/2019	CADZAR	1:30:00 PM	11.1238	11.1367			N/A
6/11/2019	CADZAR	3:30:00 PM	11.1325	11.1435			N/A
6/11/2019	CHFCZK	9:30:00 AM	22.841	22.857			N/A
6/11/2019	CHFCZK	11:30:00 AM	22.863	22.878			N/A
6/11/2019	CHFCZK	1:30:00 PM	22.829	22.843			N/A
6/11/2019	CHFCZK	3:30:00 PM	22.811	22.824			N/A
6/11/2019	CHFDKK	9:30:00 AM	6.662	6.665			N/A
6/11/2019	CHFDKK	11:30:00 AM	6.663	6.666			N/A
6/11/2019	CHFDKK	1:30:00 PM	6.652	6.655			N/A
6/11/2019	CHFDKK	3:30:00 PM	6.651	6.653			N/A
6/11/2019	CHFDKK.fx	9:30:00 AM	6.6608	6.6668			N/A
6/11/2019	CHFDKK.fx	11:30:00 AM	6.6614	6.6669			N/A
6/11/2019	CHFDKK.fx	1:30:00 PM	6.6505	6.656			N/A
6/11/2019	CHFDKK.fx	3:30:00 PM	6.6491	6.6546			N/A
6/11/2019	CHFHKD	9:30:00 AM	7.9111	7.915			N/A
6/11/2019	CHFHKD	11:30:00 AM	7.9116	7.914			N/A
6/11/2019	CHFHKD	1:30:00 PM	7.9017	7.9037			N/A
6/11/2019	CHFHKD	3:30:00 PM	7.8917	7.8909			N/A
6/11/2019	CHFHUF	9:30:00 AM	285.35	285.62			N/A
6/11/2019	CHFHUF	11:30:00 AM	285.64	285.92			N/A
6/11/2019	CHFHUF	1:30:00 PM	285.48	285.82			N/A
6/11/2019	CHFHUF	3:30:00 PM	285.21	285.57			N/A
6/11/2019	CHFJPY	9:30:00 AM	109.668	109.728			N/A
6/11/2019	CHFJPY	11:30:00 AM	109.683	109.743			N/A
6/11/2019	CHFJPY	1:30:00 PM	109.612	109.663			N/A
6/11/2019	CHFJPY	3:30:00 PM	109.555	109.585			N/A
6/11/2019	CHFJPY.fx	9:30:00 AM	109.701	109.694			N/A
6/11/2019	CHFJPY.fx	11:30:00 AM	109.715	109.708			N/A
6/11/2019	CHFJPY.fx	1:30:00 PM	109.646	109.628			N/A
6/11/2019	CHFJPY.fx	3:30:00 PM	109.588	109.551			N/A
6/11/2019	CHFMXN	9:30:00 AM	19.354	19.3634			N/A
6/11/2019	CHFMXN	11:30:00 AM	19.3561	19.3699			N/A

6/11/2019	CHF MXN	1:30:00 PM	19.3106	19.323			N/A
6/11/2019	CHF MXN	3:30:00 PM	19.3061	19.3075			N/A
6/11/2019	CHF NOK	9:30:00 AM	8.7589	8.7664			N/A
6/11/2019	CHF NOK	11:30:00 AM	8.7347	8.7409			N/A
6/11/2019	CHF NOK	1:30:00 PM	8.7119	8.7192			N/A
6/11/2019	CHF NOK	3:30:00 PM	8.6993	8.7059			N/A
6/11/2019	CHF NOK.fx	9:30:00 AM	8.76239	8.76273			N/A
6/11/2019	CHF NOK.fx	11:30:00 AM	8.73805	8.73738			N/A
6/11/2019	CHF NOK.fx	1:30:00 PM	8.7154	8.71571			N/A
6/11/2019	CHF NOK.fx	3:30:00 PM	8.70278	8.70345			N/A
6/11/2019	CHF PLN	9:30:00 AM	3.801	3.8039			N/A
6/11/2019	CHF PLN	11:30:00 AM	3.8056	3.808			N/A
6/11/2019	CHF PLN	1:30:00 PM	3.8	3.8026			N/A
6/11/2019	CHF PLN	3:30:00 PM	3.7991	3.8018			N/A
6/11/2019	CHF PLN.fx	9:30:00 AM	3.79854	3.80633			N/A
6/11/2019	CHF PLN.fx	11:30:00 AM	3.80307	3.81015			N/A
6/11/2019	CHF PLN.fx	1:30:00 PM	3.79764	3.80475			N/A
6/11/2019	CHF PLN.fx	3:30:00 PM	3.79664	3.80411			N/A
6/11/2019	CHF SEK	9:30:00 AM	9.5062	9.51			N/A
6/11/2019	CHF SEK	11:30:00 AM	9.5187	9.5226			N/A
6/11/2019	CHF SEK	1:30:00 PM	9.5186	9.5222			N/A
6/11/2019	CHF SEK	3:30:00 PM	9.5114	9.5091			N/A
6/11/2019	CHF SGD	9:30:00 AM	1.3783	1.3786			N/A
6/11/2019	CHF SGD	11:30:00 AM	1.3783	1.3786			N/A
6/11/2019	CHF SGD	1:30:00 PM	1.3764	1.3766			N/A
6/11/2019	CHF SGD	3:30:00 PM	1.3747	1.3747			N/A
6/11/2019	CHF SGD.fx	9:30:00 AM	1.37844	1.37837			N/A
6/11/2019	CHF SGD.fx	11:30:00 AM	1.37842	1.37837			N/A
6/11/2019	CHF SGD.fx	1:30:00 PM	1.3765	1.37637			N/A
6/11/2019	CHF SGD.fx	3:30:00 PM	1.37483	1.37447			N/A
6/11/2019	CHF ZAR	9:30:00 AM	14.8953	14.9061			N/A
6/11/2019	CHF ZAR	11:30:00 AM	14.8839	14.8933			N/A
6/11/2019	CHF ZAR	1:30:00 PM	14.8756	14.8861			N/A
6/11/2019	CHF ZAR	3:30:00 PM	14.8776	14.8822			N/A

6/11/2019	CZKJPY	9:30:00 AM					N/A
6/11/2019	CZKJPY	11:30:00 AM	4.797	4.801			N/A
6/11/2019	CZKJPY	1:30:00 PM	4.801	4.804			N/A
6/11/2019	CZKJPY	3:30:00 PM	4.801	4.805			N/A
6/11/2019	DAX30.i	9:30:00 AM	12136.95	12135.45			N/A
6/11/2019	DAX30.i	11:30:00 AM	12181.2	12172.95			N/A
6/11/2019	DAX30.i	1:30:00 PM	12199.2	12196.95			N/A
6/11/2019	DAX30.i	3:30:00 PM	12207.2	12204.45			N/A
6/11/2019	DJ30.i	9:30:00 AM					N/A
6/11/2019	DJ30.i	11:30:00 AM					N/A
6/11/2019	DJ30.i	1:30:00 PM					N/A
6/11/2019	DJ30.i	3:30:00 PM					N/A
6/11/2019	DKKJPY	9:30:00 AM					N/A
6/11/2019	DKKJPY	11:30:00 AM					N/A
6/11/2019	DKKJPY	1:30:00 PM					N/A
6/11/2019	DKKJPY	3:30:00 PM	16.47	16.49			N/A
6/11/2019	EURAUD	9:30:00 AM	1.62665	1.62711			N/A
6/11/2019	EURAUD	11:30:00 AM	1.62659	1.62699			N/A
6/11/2019	EURAUD	1:30:00 PM	1.62656	1.62673			N/A
6/11/2019	EURAUD	3:30:00 PM	1.6263	1.62622			N/A
6/11/2019	EURAUD.fx	9:30:00 AM	1.62687	1.62689			N/A
6/11/2019	EURAUD.fx	11:30:00 AM	1.62678	1.62678			N/A
6/11/2019	EURAUD.fx	1:30:00 PM	1.62676	1.62651			N/A
6/11/2019	EURAUD.fx	3:30:00 PM	1.62648	1.626			N/A
6/11/2019	EURCAD	9:30:00 AM	1.50038	1.5012			N/A
6/11/2019	EURCAD	11:30:00 AM	1.50051	1.50121			N/A
6/11/2019	EURCAD	1:30:00 PM	1.50044	1.50121			N/A
6/11/2019	EURCAD	3:30:00 PM	1.50001	1.50006			N/A
6/11/2019	EURCAD.fx	9:30:00 AM	1.50079	1.50077			N/A
6/11/2019	EURCAD.fx	11:30:00 AM	1.50093	1.50079			N/A
6/11/2019	EURCAD.fx	1:30:00 PM	1.50086	1.5008			N/A
6/11/2019	EURCAD.fx	3:30:00 PM	1.50031	1.49965			N/A
6/11/2019	EURCHF	9:30:00 AM	1.1208	1.12087			N/A
6/11/2019	EURCHF	11:30:00 AM	1.12071	1.12069			N/A

6/11/2019	EURCHF	1:30:00 PM	1.1226	1.1226			N/A
6/11/2019	EURCHF	3:30:00 PM	1.12293	1.12283			N/A
6/11/2019	EURCHF.fx	9:30:00 AM	1.12087	1.1208			N/A
6/11/2019	EURCHF.fx	11:30:00 AM	1.12076	1.12065			N/A
6/11/2019	EURCHF.fx	1:30:00 PM	1.12267	1.12253			N/A
6/11/2019	EURCHF.fx	3:30:00 PM	1.123	1.12276			N/A
6/11/2019	EURCZK	9:30:00 AM	25.587	25.626			N/A
6/11/2019	EURCZK	11:30:00 AM	25.607	25.644			N/A
6/11/2019	EURCZK	1:30:00 PM	25.612	25.651			N/A
6/11/2019	EURCZK	3:30:00 PM	25.599	25.634			N/A
6/11/2019	EURDKK	9:30:00 AM	7.4685	7.4695			N/A
6/11/2019	EURDKK	11:30:00 AM	7.4672	7.4685			N/A
6/11/2019	EURDKK	1:30:00 PM	7.4673	7.4684			N/A
6/11/2019	EURDKK	3:30:00 PM					N/A
6/11/2019	EURGBP	9:30:00 AM	0.89242	0.89235			N/A
6/11/2019	EURGBP	11:30:00 AM	0.89189	0.89075			N/A
6/11/2019	EURGBP	1:30:00 PM	0.89003	0.88986			N/A
6/11/2019	EURGBP	3:30:00 PM	0.89076	0.89062			N/A
6/11/2019	EURGBP.fx	9:30:00 AM	0.89245	0.8923			N/A
6/11/2019	EURGBP.fx	11:30:00 AM	0.89192	0.89072			N/A
6/11/2019	EURGBP.fx	1:30:00 PM	0.89009	0.88981			N/A
6/11/2019	EURGBP.fx	3:30:00 PM	0.8908	0.89057			N/A
6/11/2019	EURHKD	9:30:00 AM	8.8671	8.8713			N/A
6/11/2019	EURHKD	11:30:00 AM	8.8675	8.871			N/A
6/11/2019	EURHKD	1:30:00 PM	8.8694	8.8741			N/A
6/11/2019	EURHKD	3:30:00 PM	8.8625	8.8605			N/A
6/11/2019	EURHKD.fx	9:30:00 AM	8.86996	8.86842			N/A
6/11/2019	EURHKD.fx	11:30:00 AM	8.87031	8.86827			N/A
6/11/2019	EURHKD.fx	1:30:00 PM	8.8722	8.87123			N/A
6/11/2019	EURHKD.fx	3:30:00 PM	8.86443	8.85773			N/A
6/11/2019	EURHUF	9:30:00 AM	319.82	320.46			N/A
6/11/2019	EURHUF	11:30:00 AM	320.09	320.82			N/A
6/11/2019	EURHUF	1:30:00 PM	320.46	321.1			N/A
6/11/2019	EURHUF	3:30:00 PM	320.34	320.99			N/A



6/11/2019	EURHUF.fx	9:30:00 AM	320.025	320.218			N/A
6/11/2019	EURHUF.fx	11:30:00 AM	320.371	320.537			N/A
6/11/2019	EURHUF.fx	1:30:00 PM	320.751	320.835			N/A
6/11/2019	EURHUF.fx	3:30:00 PM	320.614	320.678			N/A
6/11/2019	EURJPY	9:30:00 AM	122.96	122.949			N/A
6/11/2019	EURJPY	11:30:00 AM	122.961	122.944			N/A
6/11/2019	EURJPY	1:30:00 PM	123.076	123.078			N/A
6/11/2019	EURJPY	3:30:00 PM	123.055	123.002			N/A
6/11/2019	EURJPY.fx	9:30:00 AM	122.963	122.945			N/A
6/11/2019	EURJPY.fx	11:30:00 AM	122.964	122.942			N/A
6/11/2019	EURJPY.fx	1:30:00 PM	123.078	123.073			N/A
6/11/2019	EURJPY.fx	3:30:00 PM	123.056	122.998			N/A
6/11/2019	EURMXN	9:30:00 AM	21.6954	21.708			N/A
6/11/2019	EURMXN	11:30:00 AM	21.6958	21.7148			N/A
6/11/2019	EURMXN	1:30:00 PM	21.6784	21.6966			N/A
6/11/2019	EURMXN	3:30:00 PM	21.6853	21.6823			N/A
6/11/2019	EURMXN.f	9:30:00 AM	21.7028	21.7004			N/A
6/11/2019	EURMXN.f	11:30:00 AM	21.7041	21.7068			N/A
6/11/2019	EURMXN.f	1:30:00 PM	21.6866	21.6876			N/A
6/11/2019	EURMXN.f	3:30:00 PM	21.6914	21.6734			N/A
6/11/2019	EURNOK	9:30:00 AM	9.8156	9.8275			N/A
6/11/2019	EURNOK	11:30:00 AM	9.7865	9.7982			N/A
6/11/2019	EURNOK	1:30:00 PM	9.7786	9.7896			N/A
6/11/2019	EURNOK	3:30:00 PM	9.767	9.7783			N/A
6/11/2019	EURNOK.fx	9:30:00 AM	9.82101	9.82209			N/A
6/11/2019	EURNOK.fx	11:30:00 AM	9.79203	9.79275			N/A
6/11/2019	EURNOK.fx	1:30:00 PM	9.78423	9.784			N/A
6/11/2019	EURNOK.fx	3:30:00 PM	9.77231	9.7729			N/A
6/11/2019	EURNZD	9:30:00 AM	1.71552	1.71596			N/A
6/11/2019	EURNZD	11:30:00 AM	1.7168	1.71762			N/A
6/11/2019	EURNZD	1:30:00 PM	1.7188	1.71929			N/A
6/11/2019	EURNZD	3:30:00 PM	1.72073	1.72091			N/A
6/11/2019	EURNZD.fx	9:30:00 AM	1.71594	1.7155			N/A
6/11/2019	EURNZD.fx	11:30:00 AM	1.71723	1.71717			N/A

6/11/2019	EURNZD.fx	1:30:00 PM	1.71922	1.71884			N/A
6/11/2019	EURNZD.fx	3:30:00 PM	1.72114	1.72046			N/A
6/11/2019	EURPLN	9:30:00 AM	4.2604	4.2635			N/A
6/11/2019	EURPLN	11:30:00 AM	4.2647	4.2646			N/A
6/11/2019	EURPLN	1:30:00 PM	4.2657	4.2687			N/A
6/11/2019	EURPLN	3:30:00 PM	4.2659	4.2688			N/A
6/11/2019	EURPLN.fx	9:30:00 AM	4.25967	4.26412			N/A
6/11/2019	EURPLN.fx	11:30:00 AM	4.26406	4.26822			N/A
6/11/2019	EURPLN.fx	1:30:00 PM	4.26513	4.26926			N/A
6/11/2019	EURPLN.fx	3:30:00 PM	4.26542	4.26932			N/A
6/11/2019	EURRUB	9:30:00 AM					N/A
6/11/2019	EURRUB	11:30:00 AM	72.715	73.139			N/A
6/11/2019	EURRUB	1:30:00 PM	72.691	73.124			N/A
6/11/2019	EURRUB	3:30:00 PM	72.667	73.063			N/A
6/11/2019	EURSEK	9:30:00 AM	10.6564	10.6593			N/A
6/11/2019	EURSEK	11:30:00 AM	10.6695	10.6741			N/A
6/11/2019	EURSEK	1:30:00 PM	10.6864	10.6907			N/A
6/11/2019	EURSEK	3:30:00 PM	10.6824	10.6856			N/A
6/11/2019	EURSEK.fx	9:30:00 AM	10.65778	10.65797			N/A
6/11/2019	EURSEK.fx	11:30:00 AM	10.67125	10.67231			N/A
6/11/2019	EURSEK.fx	1:30:00 PM	10.68808	10.68903			N/A
6/11/2019	EURSEK.fx	3:30:00 PM	10.68388	10.68356			N/A
6/11/2019	EURSGD	9:30:00 AM	1.5446	1.5454			N/A
6/11/2019	EURSGD	11:30:00 AM	1.5444	1.5452			N/A
6/11/2019	EURSGD	1:30:00 PM	1.5448	1.5456			N/A
6/11/2019	EURSGD	3:30:00 PM	1.5437	1.5436			N/A
6/11/2019	EURSGD.fx	9:30:00 AM	1.54501	1.54501			N/A
6/11/2019	EURSGD.fx	11:30:00 AM	1.54478	1.54471			N/A
6/11/2019	EURSGD.fx	1:30:00 PM	1.54518	1.54517			N/A
6/11/2019	EURSGD.fx	3:30:00 PM	1.54398	1.54318			N/A
6/11/2019	EURUSD	9:30:00 AM	1.13146	1.13143			N/A
6/11/2019	EURUSD	11:30:00 AM	1.13175	1.13164			N/A
6/11/2019	EURUSD	1:30:00 PM	1.13212	1.13214			N/A
6/11/2019	EURUSD	3:30:00 PM	1.13117	1.1304			N/A

6/11/2019	EURUSD.fx	9:30:00 AM	1.13165	1.13153			N/A
6/11/2019	EURUSD.fx	11:30:00 AM	1.13195	1.13174			N/A
6/11/2019	EURUSD.fx	1:30:00 PM	1.13232	1.13223			N/A
6/11/2019	EURUSD.fx	3:30:00 PM	1.13134	1.13049			N/A
6/11/2019	EURZAR	9:30:00 AM	16.6968	16.7126			N/A
6/11/2019	EURZAR	11:30:00 AM	16.6867	16.6978			N/A
6/11/2019	EURZAR	1:30:00 PM	16.7039	16.7153			N/A
6/11/2019	EURZAR	3:30:00 PM	16.7152	16.7203			N/A
6/11/2019	EURZAR.fx	9:30:00 AM	16.69593	16.71376			N/A
6/11/2019	EURZAR.fx	11:30:00 AM	16.68596	16.69853			N/A
6/11/2019	EURZAR.fx	1:30:00 PM	16.70319	16.71626			N/A
6/11/2019	EURZAR.fx	3:30:00 PM	16.71324	16.72054			N/A
6/11/2019	GBPAUD	9:30:00 AM	1.82352	1.82399			N/A
6/11/2019	GBPAUD	11:30:00 AM	1.82667	1.82514			N/A
6/11/2019	GBPAUD	1:30:00 PM	1.82828	1.82854			N/A
6/11/2019	GBPAUD	3:30:00 PM	1.82628	1.82684			N/A
6/11/2019	GBPAUD.fx	9:30:00 AM	1.82392	1.82359			N/A
6/11/2019	GBPAUD.fx	11:30:00 AM	1.82703	1.82506			N/A
6/11/2019	GBPAUD.fx	1:30:00 PM	1.82867	1.82813			N/A
6/11/2019	GBPAUD.fx	3:30:00 PM	1.82669	1.82646			N/A
6/11/2019	GBPCAD	9:30:00 AM	1.6815	1.68203			N/A
6/11/2019	GBPCAD	11:30:00 AM	1.68472	1.68319			N/A
6/11/2019	GBPCAD	1:30:00 PM	1.68638	1.6866			N/A
6/11/2019	GBPCAD	3:30:00 PM	1.68383	1.68435			N/A
6/11/2019	GBPCAD.fx	9:30:00 AM	1.68189	1.68164			N/A
6/11/2019	GBPCAD.fx	11:30:00 AM	1.68513	1.68309			N/A
6/11/2019	GBPCAD.fx	1:30:00 PM	1.68676	1.68618			N/A
6/11/2019	GBPCAD.fx	3:30:00 PM	1.68416	1.68398			N/A
6/11/2019	GBPCHF	9:30:00 AM	1.25595	1.2561			N/A
6/11/2019	GBPCHF	11:30:00 AM	1.25803	1.25689			N/A
6/11/2019	GBPCHF	1:30:00 PM	1.26138	1.26148			N/A
6/11/2019	GBPCHF	3:30:00 PM	1.26055	1.26078			N/A
6/11/2019	GBPCHF.fx	9:30:00 AM	1.25614	1.2559			N/A
6/11/2019	GBPCHF.fx	11:30:00 AM	1.25822	1.25684			N/A

6/11/2019	GBPCHF.fx	1:30:00 PM	1.26153	1.26128			N/A
6/11/2019	GBPCHF.fx	3:30:00 PM	1.26074	1.26058			N/A
6/11/2019	GBPCZK	9:30:00 AM	28.684	28.702			N/A
6/11/2019	GBPCZK	11:30:00 AM	28.759	28.741			N/A
6/11/2019	GBPCZK	1:30:00 PM	28.794	28.807			N/A
6/11/2019	GBPCZK	3:30:00 PM	28.75	28.767			N/A
6/11/2019	GBPDKK	9:30:00 AM	8.366	8.375			N/A
6/11/2019	GBPDKK	11:30:00 AM	8.38	8.382			N/A
6/11/2019	GBPDKK	1:30:00 PM	8.388	8.397			N/A
6/11/2019	GBPDKK	3:30:00 PM	8.382	8.391			N/A
6/11/2019	GBPDKK.fx	9:30:00 AM	8.364	8.3758			N/A
6/11/2019	GBPDKK.fx	11:30:00 AM	8.3784	8.3828			N/A
6/11/2019	GBPDKK.fx	1:30:00 PM	8.3871	8.3977			N/A
6/11/2019	GBPDKK.fx	3:30:00 PM	8.3802	8.3912			N/A
6/11/2019	GBPHKD	9:30:00 AM	9.9349	9.9384			N/A
6/11/2019	GBPHKD	11:30:00 AM	9.9533	9.9419			N/A
6/11/2019	GBPHKD	1:30:00 PM	9.9663	9.9669			N/A
6/11/2019	GBPHKD	3:30:00 PM	9.9454	9.9464			N/A
6/11/2019	GBPHUF	9:30:00 AM	358.37	358.64			N/A
6/11/2019	GBPHUF	11:30:00 AM	359.36	359.17			N/A
6/11/2019	GBPHUF	1:30:00 PM	360.05	360.46			N/A
6/11/2019	GBPHUF	3:30:00 PM	359.5	359.9			N/A
6/11/2019	GBPJPY	9:30:00 AM	137.783	137.784			N/A
6/11/2019	GBPJPY	11:30:00 AM	138.03	137.873			N/A
6/11/2019	GBPJPY	1:30:00 PM	138.295	138.289			N/A
6/11/2019	GBPJPY	3:30:00 PM	138.127	138.133			N/A
6/11/2019	GBPJPY.fx	9:30:00 AM	137.802	137.764			N/A
6/11/2019	GBPJPY.fx	11:30:00 AM	138.048	137.871			N/A
6/11/2019	GBPJPY.fx	1:30:00 PM	138.316	138.269			N/A
6/11/2019	GBPJPY.fx	3:30:00 PM	138.148	138.114			N/A
6/11/2019	GBPMXN	9:30:00 AM	24.3086	24.3127			N/A
6/11/2019	GBPMXN	11:30:00 AM	24.3525	24.3312			N/A
6/11/2019	GBPMXN	1:30:00 PM	24.3596	24.3637			N/A
6/11/2019	GBPMXN	3:30:00 PM	24.3334	24.3335			N/A

6/11/2019	GBPNOK	9:30:00 AM	11.0016	11.0104			N/A
6/11/2019	GBPNOK	11:30:00 AM	10.9886	10.9867			N/A
6/11/2019	GBPNOK	1:30:00 PM	10.9891	10.9983			N/A
6/11/2019	GBPNOK	3:30:00 PM	10.9668	10.976			N/A
6/11/2019	GBPNOK.fx	9:30:00 AM	11.00644	11.00557			N/A
6/11/2019	GBPNOK.fx	11:30:00 AM	10.99361	10.98322			N/A
6/11/2019	GBPNOK.fx	1:30:00 PM	10.99389	10.99313			N/A
6/11/2019	GBPNOK.fx	3:30:00 PM	10.9715	10.97216			N/A
6/11/2019	GBPNZD	9:30:00 AM	1.92274	1.92271			N/A
6/11/2019	GBPNZD	11:30:00 AM	1.92752	1.92575			N/A
6/11/2019	GBPNZD	1:30:00 PM	1.9313	1.93168			N/A
6/11/2019	GBPNZD	3:30:00 PM	1.93188	1.9323			N/A
6/11/2019	GBPNZD.fx	9:30:00 AM	1.92309	1.92231			N/A
6/11/2019	GBPNZD.fx	11:30:00 AM	1.92785	1.92565			N/A
6/11/2019	GBPNZD.fx	1:30:00 PM	1.93171	1.93128			N/A
6/11/2019	GBPNZD.fx	3:30:00 PM	1.93226	1.93193			N/A
6/11/2019	GBPPLN	9:30:00 AM	4.7755	4.7765			N/A
6/11/2019	GBPPLN	11:30:00 AM	4.789	4.7852			N/A
6/11/2019	GBPPLN	1:30:00 PM	4.7946	4.795			N/A
6/11/2019	GBPPLN	3:30:00 PM	4.7905	4.7913			N/A
6/11/2019	GBPPLN.fx	9:30:00 AM	4.77318	4.77871			N/A
6/11/2019	GBPPLN.fx	11:30:00 AM	4.78685	4.78839			N/A
6/11/2019	GBPPLN.fx	1:30:00 PM	4.79254	4.79695			N/A
6/11/2019	GBPPLN.fx	3:30:00 PM	4.78843	4.79354			N/A
6/11/2019	GBPSEK	9:30:00 AM	11.9394	11.9463			N/A
6/11/2019	GBPSEK	11:30:00 AM	11.9771	11.9707			N/A
6/11/2019	GBPSEK	1:30:00 PM	12.0069	12.0129			N/A
6/11/2019	GBPSEK	3:30:00 PM	11.9923	11.998			N/A
6/11/2019	GBPSEK.fx	9:30:00 AM	11.93543	11.95021			N/A
6/11/2019	GBPSEK.fx	11:30:00 AM	11.97345	11.97645			N/A
6/11/2019	GBPSEK.fx	1:30:00 PM	12.00335	12.01639			N/A
6/11/2019	GBPSEK.fx	3:30:00 PM	11.98827	12.00268			N/A
6/11/2019	GBPSGD	9:30:00 AM	1.731	1.7316			N/A
6/11/2019	GBPSGD	11:30:00 AM	1.734	1.7324			N/A

6/11/2019	GBPSGD	1:30:00 PM	1.7359	1.7363			N/A
6/11/2019	GBPSGD	3:30:00 PM	1.7329	1.7332			N/A
6/11/2019	GBPSGD.fx	9:30:00 AM	1.72921	1.73337			N/A
6/11/2019	GBPSGD.fx	11:30:00 AM	1.73217	1.73443			N/A
6/11/2019	GBPSGD.fx	1:30:00 PM	1.73443	1.73812			N/A
6/11/2019	GBPSGD.fx	3:30:00 PM	1.73102	1.73496			N/A
6/11/2019	GBPUSD	9:30:00 AM	1.26819	1.26792			N/A
6/11/2019	GBPUSD	11:30:00 AM	1.27083	1.2689	1000	1000	N/A
6/11/2019	GBPUSD	1:30:00 PM	1.27256	1.2721	1000	10000	N/A
6/11/2019	GBPUSD	3:30:00 PM	1.26998	1.26945			N/A
6/11/2019	GBPUSD.fx	9:30:00 AM	1.26825	1.26786			N/A
6/11/2019	GBPUSD.fx	11:30:00 AM	1.27086	1.26893			N/A
6/11/2019	GBPUSD.fx	1:30:00 PM	1.27261	1.272			N/A
6/11/2019	GBPUSD.fx	3:30:00 PM	1.27	1.26939			N/A
6/11/2019	GBPZAR	9:30:00 AM	18.7058	18.7303			N/A
6/11/2019	GBPZAR	11:30:00 AM	18.7254	18.7353			N/A
6/11/2019	GBPZAR	1:30:00 PM	18.7626	18.7847			N/A
6/11/2019	GBPZAR	3:30:00 PM	18.7603	18.7773			N/A
6/11/2019	GBPZAR.fx	9:30:00 AM	18.7121	18.7232			N/A
6/11/2019	GBPZAR.fx	11:30:00 AM	18.7323	18.7321			N/A
6/11/2019	GBPZAR.fx	1:30:00 PM	18.7703	18.7777			N/A
6/11/2019	GBPZAR.fx	3:30:00 PM	18.7675	18.7703			N/A
6/11/2019	GOLD	9:30:00 AM	1326.96	1326.67			N/A
6/11/2019	GOLD	11:30:00 AM	1322.79	1322.86			N/A
6/11/2019	GOLD	1:30:00 PM	1322.48	1322.62			N/A
6/11/2019	GOLD	3:30:00 PM	1321.43	1321.03			N/A
6/11/2019	HKDJPY	9:30:00 AM	13.86	13.87			N/A
6/11/2019	HKDJPY	11:30:00 AM	13.86	13.87			N/A
6/11/2019	HKDJPY	1:30:00 PM	13.87	13.89			N/A
6/11/2019	HKDJPY	3:30:00 PM	13.88	13.89			N/A
6/11/2019	HKDJPY.fx	9:30:00 AM	13.859	13.865			N/A
6/11/2019	HKDJPY.fx	11:30:00 AM	13.858	13.866			N/A
6/11/2019	HKDJPY.fx	1:30:00 PM	13.869	13.875			N/A
6/11/2019	HKDJPY.fx	3:30:00 PM	13.88	13.886			N/A

6/11/2019	HUFJPY	9:30:00 AM	0.3844	0.3847			N/A
6/11/2019	HUFJPY	11:30:00 AM	0.384	0.3843			N/A
6/11/2019	HUFJPY	1:30:00 PM	0.3839	0.3842			N/A
6/11/2019	HUFJPY	3:30:00 PM	0.3841	0.3844			N/A
6/11/2019	JP225.i	9:30:00 AM	21200.3	21215.3			N/A
6/11/2019	JP225.i	11:30:00 AM	21241.97	21255.3			N/A
6/11/2019	JP225.i	1:30:00 PM	21295.3	21308.64			N/A
6/11/2019	JP225.i	3:30:00 PM	21291.97	21305.3			N/A
6/11/2019	MXNJPY	9:30:00 AM	5.67	5.67			N/A
6/11/2019	MXNJPY	11:30:00 AM	5.67	5.68			N/A
6/11/2019	MXNJPY	1:30:00 PM	5.68	5.68			N/A
6/11/2019	MXNJPY	3:30:00 PM	5.67	5.68			N/A
6/11/2019	NASDAQ.i	9:30:00 AM					N/A
6/11/2019	NASDAQ.i	11:30:00 AM					N/A
6/11/2019	NASDAQ.i	1:30:00 PM					N/A
6/11/2019	NASDAQ.i	3:30:00 PM					N/A
6/11/2019	NOKJPY	9:30:00 AM	12.51	12.54			N/A
6/11/2019	NOKJPY	11:30:00 AM	12.54	12.57			N/A
6/11/2019	NOKJPY	1:30:00 PM	12.57	12.6			N/A
6/11/2019	NOKJPY	3:30:00 PM	12.58	12.61			N/A
6/11/2019	NOKJPY.fx	9:30:00 AM	12.515	12.522			N/A
6/11/2019	NOKJPY.fx	11:30:00 AM	12.554	12.558			N/A
6/11/2019	NOKJPY.fx	1:30:00 PM	12.577	12.583			N/A
6/11/2019	NOKJPY.fx	3:30:00 PM	12.589	12.591			N/A
6/11/2019	NZDCAD	9:30:00 AM	0.87446	0.87496			N/A
6/11/2019	NZDCAD	11:30:00 AM	0.87368	0.87434			N/A
6/11/2019	NZDCAD	1:30:00 PM	0.87284	0.87333			N/A
6/11/2019	NZDCAD	3:30:00 PM	0.87147	0.8719			N/A
6/11/2019	NZDCAD.fx	9:30:00 AM	0.8748	0.87462			N/A
6/11/2019	NZDCAD.fx	11:30:00 AM	0.87401	0.87399			N/A
6/11/2019	NZDCAD.fx	1:30:00 PM	0.87319	0.87298			N/A
6/11/2019	NZDCAD.fx	3:30:00 PM	0.87175	0.87156			N/A
6/11/2019	NZDCHF	9:30:00 AM	0.65295	0.65355			N/A
6/11/2019	NZDCHF	11:30:00 AM	0.65233	0.65293			N/A

6/11/2019	NZDCHF	1:30:00 PM	0.65271	0.65336			N/A
6/11/2019	NZDCHF	3:30:00 PM	0.65222	0.65284			N/A
6/11/2019	NZDCHF.fx	9:30:00 AM	0.6533	0.6532			N/A
6/11/2019	NZDCHF.fx	11:30:00 AM	0.65266	0.65258			N/A
6/11/2019	NZDCHF.fx	1:30:00 PM	0.65306	0.65301			N/A
6/11/2019	NZDCHF.fx	3:30:00 PM	0.65255	0.65249			N/A
6/11/2019	NZDCZK	9:30:00 AM	14.918	14.927			N/A
6/11/2019	NZDCZK	11:30:00 AM	14.917	14.927			N/A
6/11/2019	NZDCZK	1:30:00 PM	14.905	14.914			N/A
6/11/2019	NZDCZK	3:30:00 PM	14.881	14.888			N/A
6/11/2019	NZDDKK	9:30:00 AM					N/A
6/11/2019	NZDDKK	11:30:00 AM	4.347	4.349			N/A
6/11/2019	NZDDKK	1:30:00 PM	4.342	4.346			N/A
6/11/2019	NZDDKK	3:30:00 PM	4.337	4.34			N/A
6/11/2019	NZDHKD	9:30:00 AM	5.1669	5.1688			N/A
6/11/2019	NZDHKD	11:30:00 AM	5.1618	5.1636			N/A
6/11/2019	NZDHKD	1:30:00 PM	5.1585	5.1596			N/A
6/11/2019	NZDHKD	3:30:00 PM	5.1469	5.1483			N/A
6/11/2019	NZDHUF	9:30:00 AM	186.33	186.59			N/A
6/11/2019	NZDHUF	11:30:00 AM	186.36	186.55			N/A
6/11/2019	NZDHUF	1:30:00 PM	186.37	186.63			N/A
6/11/2019	NZDHUF	3:30:00 PM	186.04	186.28			N/A
6/11/2019	NZDJPY	9:30:00 AM	71.629	71.687			N/A
6/11/2019	NZDJPY	11:30:00 AM	71.573	71.632			N/A
6/11/2019	NZDJPY	1:30:00 PM	71.569	71.623			N/A
6/11/2019	NZDJPY	3:30:00 PM	71.467	71.528			N/A
6/11/2019	NZDJPY.fx	9:30:00 AM	71.66	71.655			N/A
6/11/2019	NZDJPY.fx	11:30:00 AM	71.604	71.599			N/A
6/11/2019	NZDJPY.fx	1:30:00 PM	71.601	71.59			N/A
6/11/2019	NZDJPY.fx	3:30:00 PM	71.498	71.495			N/A
6/11/2019	NZDMXN	9:30:00 AM	12.643	12.6434			N/A
6/11/2019	NZDMXN	11:30:00 AM	12.6302	12.6355			N/A
6/11/2019	NZDMXN	1:30:00 PM	12.61	12.6115			N/A
6/11/2019	NZDMXN	3:30:00 PM	12.5944	12.5933			N/A



6/11/2019	NZDNOK	9:30:00 AM	5.7197	5.7233			N/A
6/11/2019	NZDNOK	11:30:00 AM	5.6975	5.7			N/A
6/11/2019	NZDNOK	1:30:00 PM	5.6876	5.6903			N/A
6/11/2019	NZDNOK	3:30:00 PM	5.6725	5.6742			N/A
6/11/2019	NZDPLN	9:30:00 AM	2.4824	2.4838			N/A
6/11/2019	NZDPLN	11:30:00 AM	2.4824	2.4831			N/A
6/11/2019	NZDPLN	1:30:00 PM	2.4812	2.4818			N/A
6/11/2019	NZDPLN	3:30:00 PM	2.4765	2.4777			N/A
6/11/2019	NZDSEK	9:30:00 AM	6.2063	6.2121			N/A
6/11/2019	NZDSEK	11:30:00 AM	6.2086	6.2148			N/A
6/11/2019	NZDSEK	1:30:00 PM	6.2125	6.2179			N/A
6/11/2019	NZDSEK	3:30:00 PM	6.2022	6.204			N/A
6/11/2019	NZDSGD	9:30:00 AM	0.9003	0.9007			N/A
6/11/2019	NZDSGD	11:30:00 AM	0.8993	0.8999			N/A
6/11/2019	NZDSGD	1:30:00 PM	0.8987	0.8991			N/A
6/11/2019	NZDSGD	3:30:00 PM	0.8968	0.8973			N/A
6/11/2019	NZDSGD.fx	9:30:00 AM	0.9003	0.90064			N/A
6/11/2019	NZDSGD.fx	11:30:00 AM	0.89931	0.89982			N/A
6/11/2019	NZDSGD.fx	1:30:00 PM	0.89868	0.89901			N/A
6/11/2019	NZDSGD.fx	3:30:00 PM	0.89678	0.89719			N/A
6/11/2019	NZDUSD	9:30:00 AM	0.65946	0.65946			N/A
6/11/2019	NZDUSD	11:30:00 AM	0.65905	0.65909			N/A
6/11/2019	NZDUSD	1:30:00 PM	0.65865	0.6586			N/A
6/11/2019	NZDUSD	3:30:00 PM	0.65724	0.65713			N/A
6/11/2019	NZDUSD.fx	9:30:00 AM	0.65953	0.65948			N/A
6/11/2019	NZDUSD.fx	11:30:00 AM	0.65913	0.6591			N/A
6/11/2019	NZDUSD.fx	1:30:00 PM	0.65873	0.65861			N/A
6/11/2019	NZDUSD.fx	3:30:00 PM	0.65729	0.65713			N/A
6/11/2019	NZDZAR	9:30:00 AM	9.7244	9.7375			N/A
6/11/2019	NZDZAR	11:30:00 AM	9.7057	9.7209			N/A
6/11/2019	NZDZAR	1:30:00 PM	9.7072	9.7215			N/A
6/11/2019	NZDZAR	3:30:00 PM	9.6998	9.7127			N/A
6/11/2019	SEKJPY	9:30:00 AM	11.54	11.54			N/A
6/11/2019	SEKJPY	11:30:00 AM					N/A

6/11/2019	SEKJPY	1:30:00 PM	11.52	11.52			N/A
6/11/2019	SEKJPY	3:30:00 PM	11.52	11.52			N/A
6/11/2019	SEKJPY.fx	9:30:00 AM	11.527	11.544			N/A
6/11/2019	SEKJPY.fx	11:30:00 AM	11.512	11.53			N/A
6/11/2019	SEKJPY.fx	1:30:00 PM	11.505	11.523			N/A
6/11/2019	SEKJPY.fx	3:30:00 PM	11.507	11.522			N/A
6/11/2019	SGDJPY	9:30:00 AM	79.55	79.57			N/A
6/11/2019	SGDJPY	11:30:00 AM	79.56	79.6			N/A
6/11/2019	SGDJPY	1:30:00 PM	79.62	79.65			N/A
6/11/2019	SGDJPY	3:30:00 PM	79.69	79.7			N/A
6/11/2019	SILVER	9:30:00 AM	14.51	14.87			N/A
6/11/2019	SILVER	11:30:00 AM	14.49	14.86			N/A
6/11/2019	SILVER	1:30:00 PM	14.5	14.88			N/A
6/11/2019	SILVER	3:30:00 PM	14.48	14.85			N/A
6/11/2019	SPX500.i	9:30:00 AM	2896.44	2896.99			N/A
6/11/2019	SPX500.i	11:30:00 AM	2896.94	2897.49			N/A
6/11/2019	SPX500.i	1:30:00 PM	2903.12	2903.49			N/A
6/11/2019	SPX500.i	3:30:00 PM	2904.19	2904.99			N/A
6/11/2019	UK100.i	9:30:00 AM	7396.58	7398.08			N/A
6/11/2019	UK100.i	11:30:00 AM	7411.83	7410.08			N/A
6/11/2019	UK100.i	1:30:00 PM	7415.93	7415.58			N/A
6/11/2019	UK100.i	3:30:00 PM	7416.33	7417.08			N/A
6/11/2019	USDCAD	9:30:00 AM	1.32629	1.32631			N/A
6/11/2019	USDCAD	11:30:00 AM	1.32605	1.32607			N/A
6/11/2019	USDCAD	1:30:00 PM	1.32552	1.32561			N/A
6/11/2019	USDCAD	3:30:00 PM	1.32653	1.32629			N/A
6/11/2019	USDCAD.fx	9:30:00 AM	1.32632	1.32627			N/A
6/11/2019	USDCAD.fx	11:30:00 AM	1.32608	1.32605			N/A
6/11/2019	USDCAD.fx	1:30:00 PM	1.32556	1.32556			N/A
6/11/2019	USDCAD.fx	3:30:00 PM	1.32656	1.32626			N/A
6/11/2019	USDCHF	9:30:00 AM	0.99049	0.99052			N/A
6/11/2019	USDCHF	11:30:00 AM	0.99015	0.99016			N/A
6/11/2019	USDCHF	1:30:00 PM	0.99145	0.99141			N/A
6/11/2019	USDCHF	3:30:00 PM	0.9931	0.99262			N/A

6/11/2019	USDCHF.fx	9:30:00 AM	0.99053	0.99046			N/A
6/11/2019	USDCHF.fx	11:30:00 AM	0.99018	0.9901			N/A
6/11/2019	USDCHF.fx	1:30:00 PM	0.9915	0.99134			N/A
6/11/2019	USDCHF.fx	3:30:00 PM	0.99315	0.99261			N/A
6/11/2019	USDCZK	9:30:00 AM	22.637	22.658			N/A
6/11/2019	USDCZK	11:30:00 AM	22.651	22.671			N/A
6/11/2019	USDCZK	1:30:00 PM	22.646	22.668			N/A
6/11/2019	USDCZK	3:30:00 PM	22.669	22.676			N/A
6/11/2019	USDCZK.fx	9:30:00 AM	22.6459	22.6496			N/A
6/11/2019	USDCZK.fx	11:30:00 AM	22.6615	22.662			N/A
6/11/2019	USDCZK.fx	1:30:00 PM	22.655	22.659			N/A
6/11/2019	USDCZK.fx	3:30:00 PM	22.6778	22.6683			N/A
6/11/2019	USDDKK	9:30:00 AM	6.5996	6.6029			N/A
6/11/2019	USDDKK	11:30:00 AM	6.5981	6.6009			N/A
6/11/2019	USDDKK	1:30:00 PM	6.5954	6.5989			N/A
6/11/2019	USDDKK	3:30:00 PM	6.6056	6.6046			N/A
6/11/2019	USDDKK.fx	9:30:00 AM	6.60018	6.60094			N/A
6/11/2019	USDDKK.fx	11:30:00 AM	6.59854	6.59885			N/A
6/11/2019	USDDKK.fx	1:30:00 PM	6.5958	6.59683			N/A
6/11/2019	USDDKK.fx	3:30:00 PM	6.60608	6.60277			N/A
6/11/2019	USDHKD	9:30:00 AM	7.8376	7.838			N/A
6/11/2019	USDHKD	11:30:00 AM	7.836	7.8363			N/A
6/11/2019	USDHKD	1:30:00 PM	7.8348	7.8351			N/A
6/11/2019	USDHKD	3:30:00 PM	7.8352	7.8356			N/A
6/11/2019	USDHKD.fx	9:30:00 AM	7.83765	7.83802			N/A
6/11/2019	USDHKD.fx	11:30:00 AM	7.83593	7.83624			N/A
6/11/2019	USDHKD.fx	1:30:00 PM	7.83498	7.8355			N/A
6/11/2019	USDHKD.fx	3:30:00 PM	7.83525	7.83559			N/A
6/11/2019	USDHUF	9:30:00 AM	282.73	283.11			N/A
6/11/2019	USDHUF	11:30:00 AM	282.92	283.34			N/A
6/11/2019	USDHUF	1:30:00 PM	283.13	283.5			N/A
6/11/2019	USDHUF	3:30:00 PM	283.4	283.7			N/A
6/11/2019	USDHUF.fx	9:30:00 AM	282.893	282.949			N/A
6/11/2019	USDHUF.fx	11:30:00 AM	283.114	283.148			N/A

6/11/2019	USDHUF.fx	1:30:00 PM	283.325	283.306			N/A
6/11/2019	USDHUF.fx	3:30:00 PM	283.608	283.51			N/A
6/11/2019	USDINR	9:30:00 AM	64.43	74.42			N/A
6/11/2019	USDINR	11:30:00 AM	64.38	74.37			N/A
6/11/2019	USDINR	1:30:00 PM					N/A
6/11/2019	USDINR	3:30:00 PM					N/A
6/11/2019	USDJPY	9:30:00 AM	108.659	108.658			N/A
6/11/2019	USDJPY	11:30:00 AM	108.627	108.636			N/A
6/11/2019	USDJPY	1:30:00 PM	108.698	108.699			N/A
6/11/2019	USDJPY	3:30:00 PM	108.789	108.775			N/A
6/11/2019	USDJPY.fx	9:30:00 AM	108.665	108.651			N/A
6/11/2019	USDJPY.fx	11:30:00 AM	108.632	108.63			N/A
6/11/2019	USDJPY.fx	1:30:00 PM	108.705	108.691			N/A
6/11/2019	USDJPY.fx	3:30:00 PM	108.795	108.772			N/A
6/11/2019	USDMXN	9:30:00 AM	19.178	19.177			N/A
6/11/2019	USDMXN	11:30:00 AM	19.175	19.18			N/A
6/11/2019	USDMXN	1:30:00 PM	19.15	19.157			N/A
6/11/2019	USDMXN	3:30:00 PM	19.171	19.175			N/A
6/11/2019	USDMXN.f	9:30:00 AM					N/A
6/11/2019	USDMXN.f	11:30:00 AM					N/A
6/11/2019	USDMXN.f	1:30:00 PM					N/A
6/11/2019	USDMXN.f	3:30:00 PM					N/A
6/11/2019	USDNOK	9:30:00 AM	8.6761	8.6833			N/A
6/11/2019	USDNOK	11:30:00 AM	8.6487	8.6552			N/A
6/11/2019	USDNOK	1:30:00 PM	8.6378	8.6449			N/A
6/11/2019	USDNOK	3:30:00 PM	8.6398	8.6421			N/A
6/11/2019	USDNOK.fx	9:30:00 AM	8.68022	8.67905			N/A
6/11/2019	USDNOK.fx	11:30:00 AM	8.65318	8.65071			N/A
6/11/2019	USDNOK.fx	1:30:00 PM	8.64194	8.64037			N/A
6/11/2019	USDNOK.fx	3:30:00 PM	8.64363	8.63893			N/A
6/11/2019	USDPLN	9:30:00 AM	3.7658	3.7671			N/A
6/11/2019	USDPLN	11:30:00 AM	3.769	3.7695			N/A
6/11/2019	USDPLN	1:30:00 PM	3.7681	3.7693			N/A
6/11/2019	USDPLN	3:30:00 PM	3.7737	3.7729			N/A

6/11/2019	USDPLN.fx	9:30:00 AM	3.76498	3.76783			N/A
6/11/2019	USDPLN.fx	11:30:00 AM	3.76816	3.77023			N/A
6/11/2019	USDPLN.fx	1:30:00 PM	3.76728	3.77001			N/A
6/11/2019	USDPLN.fx	3:30:00 PM	3.77287	3.77373			N/A
6/11/2019	USDRUB	9:30:00 AM					N/A
6/11/2019	USDRUB	11:30:00 AM	64.346	64.737			N/A
6/11/2019	USDRUB	1:30:00 PM	64.308	64.693			N/A
6/11/2019	USDRUB	3:30:00 PM	64.342	64.729			N/A
6/11/2019	USDSEK	9:30:00 AM	9.4163	9.4202			N/A
6/11/2019	USDSEK	11:30:00 AM	9.4266	9.4301			N/A
6/11/2019	USDSEK	1:30:00 PM	9.4375	9.4414			N/A
6/11/2019	USDSEK	3:30:00 PM	9.4465	9.4445			N/A
6/11/2019	USDSEK.fx	9:30:00 AM	9.41949	9.41864			N/A
6/11/2019	USDSEK.fx	11:30:00 AM	9.4292	9.42805			N/A
6/11/2019	USDSEK.fx	1:30:00 PM	9.44018	9.43931			N/A
6/11/2019	USDSEK.fx	3:30:00 PM	9.44992	9.44428			N/A
6/11/2019	USDSGD	9:30:00 AM	1.3652	1.3655			N/A
6/11/2019	USDSGD	11:30:00 AM	1.3647	1.365			N/A
6/11/2019	USDSGD	1:30:00 PM	1.3645	1.3649			N/A
6/11/2019	USDSGD	3:30:00 PM	1.3648	1.365			N/A
6/11/2019	USDSGD.fx	9:30:00 AM	1.36513	1.36548			N/A
6/11/2019	USDSGD.fx	11:30:00 AM	1.36464	1.36502			N/A
6/11/2019	USDSGD.fx	1:30:00 PM	1.36447	1.3649			N/A
6/11/2019	USDSGD.fx	3:30:00 PM	1.36473	1.36501			N/A
6/11/2019	USDZAR	9:30:00 AM	14.7548	14.7695			N/A
6/11/2019	USDZAR	11:30:00 AM	14.7441	14.7521			N/A
6/11/2019	USDZAR	1:30:00 PM	14.7525	14.7636			N/A
6/11/2019	USDZAR	3:30:00 PM	14.7788	14.7888			N/A
6/11/2019	USDZAR.fx	9:30:00 AM					N/A
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6/11/2019	USDZAR.fx	3:30:00 PM					N/A
6/11/2019	XAUUSD	9:30:00 AM	1326.96	1326.67			N/A
6/11/2019	XAUUSD	11:30:00 AM	1322.78	1322.85			N/A

6/11/2019	XAUUSD	1:30:00 PM	1322.48	1322.6			N/A
6/11/2019	XAUUSD	3:30:00 PM	1321.43	1321.02			N/A
6/11/2019	ZARJPY	9:30:00 AM	7.32	7.36			N/A
6/11/2019	ZARJPY	11:30:00 AM	7.35	7.37			N/A
6/11/2019	ZARJPY	1:30:00 PM	7.35	7.37			N/A
6/11/2019	ZARJPY	3:30:00 PM	7.34	7.36			N/A
6/11/2019	ZARJPY.fx	9:30:00 AM	7.359	7.361			N/A
6/11/2019	ZARJPY.fx	11:30:00 AM	7.366	7.364			N/A
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6/12/2019	#ZNGA	3:30:00 PM					N/A
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6/12/2019	AUDCAD	11:30:00 AM	0.92392	0.92453			N/A
6/12/2019	AUDCAD	1:30:00 PM	0.92375	0.92419			N/A
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6/12/2019	AUDCAD.fx	9:30:00 AM	0.9236	0.92352			N/A
6/12/2019	AUDCAD.fx	11:30:00 AM	0.92425	0.92418			N/A
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6/12/2019	AUDCAD.fx	3:30:00 PM	0.92452	0.92401			N/A
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6/12/2019	AUDCHF	1:30:00 PM	0.68982	0.69044			N/A
6/12/2019	AUDCHF	3:30:00 PM	0.69069	0.69093			N/A
6/12/2019	AUDCHF.fx	9:30:00 AM	0.68848	0.68843			N/A
6/12/2019	AUDCHF.fx	11:30:00 AM	0.68968	0.68954			N/A
6/12/2019	AUDCHF.fx	1:30:00 PM	0.69016	0.69008			N/A
6/12/2019	AUDCHF.fx	3:30:00 PM	0.69103	0.69073			N/A
6/12/2019	AUDCZK	9:30:00 AM	15.668	15.685			N/A
6/12/2019	AUDCZK	11:30:00 AM	15.689	15.704			N/A
6/12/2019	AUDCZK	1:30:00 PM	15.7	15.713			N/A
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6/12/2019	AUDDKK	9:30:00 AM	4.5743	4.579			N/A
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6/12/2019	AUDHUF	11:30:00 AM	197.05	197.3			N/A
6/12/2019	AUDHUF	1:30:00 PM	197.11	197.3			N/A
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6/12/2019	AUDJPY.fx	1:30:00 PM	75.305	75.291			N/A
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6/12/2019	AUDNOK	11:30:00 AM	6.0025	6.0064			N/A
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6/12/2019	AUDNOK.f	9:30:00 AM	5.9957	5.9977			N/A
6/12/2019	AUDNOK.f	11:30:00 AM	6.0041	6.0047			N/A
6/12/2019	AUDNOK.f	1:30:00 PM	6.0019	6.0025			N/A
6/12/2019	AUDNOK.f	3:30:00 PM	6.0004	6.0007			N/A
6/12/2019	AUDNZD	9:30:00 AM	1.05602	1.05693			N/A
6/12/2019	AUDNZD	11:30:00 AM	1.0558	1.05666			N/A
6/12/2019	AUDNZD	1:30:00 PM	1.05617	1.05703			N/A
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6/12/2019	AUDNZD.fx	1:30:00 PM	1.05661	1.05659			N/A
6/12/2019	AUDNZD.fx	3:30:00 PM	1.05613	1.05579			N/A
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6/12/2019	AUDPLN	11:30:00 AM	2.614	2.6171			N/A
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6/12/2019	AUDSEK.fx	9:30:00 AM	6.5558	6.5681			N/A
6/12/2019	AUDSEK.fx	11:30:00 AM	6.563	6.5747			N/A
6/12/2019	AUDSEK.fx	1:30:00 PM	6.5547	6.5654			N/A
6/12/2019	AUDSEK.fx	3:30:00 PM	6.5483	6.5582			N/A
6/12/2019	AUDSGD	9:30:00 AM	0.9481	0.9484			N/A
6/12/2019	AUDSGD	11:30:00 AM	0.9478	0.9481			N/A
6/12/2019	AUDSGD	1:30:00 PM	0.9481	0.9483			N/A
6/12/2019	AUDSGD	3:30:00 PM	0.9484	0.9484			N/A
6/12/2019	AUDSGD.fx	9:30:00 AM	0.94826	0.94831			N/A
6/12/2019	AUDSGD.fx	11:30:00 AM	0.94793	0.948			N/A
6/12/2019	AUDSGD.fx	1:30:00 PM	0.94822	0.94815			N/A
6/12/2019	AUDSGD.fx	3:30:00 PM	0.94846	0.94785			N/A
6/12/2019	AUDUSD	9:30:00 AM	0.69485	0.69494			N/A
6/12/2019	AUDUSD	11:30:00 AM	0.69506	0.69511			N/A
6/12/2019	AUDUSD	1:30:00 PM	0.69493	0.69487			N/A
6/12/2019	AUDUSD	3:30:00 PM	0.69564	0.6948			N/A
6/12/2019	AUDUSD.fx	9:30:00 AM	0.6949	0.69488			N/A
6/12/2019	AUDUSD.fx	11:30:00 AM	0.69511	0.69505			N/A
6/12/2019	AUDUSD.fx	1:30:00 PM	0.69498	0.69481			N/A
6/12/2019	AUDUSD.fx	3:30:00 PM	0.69568	0.69477			N/A
6/12/2019	AUDZAR	9:30:00 AM	10.1969	10.21			N/A
6/12/2019	AUDZAR	11:30:00 AM	10.2428	10.249			N/A

6/12/2019	AUDZAR	1:30:00 PM	10.2453	10.2593			N/A
6/12/2019	AUDZAR	3:30:00 PM	10.2486	10.255			N/A
6/12/2019	AUS200.i	9:30:00 AM	6545.4	6547.9			N/A
6/12/2019	AUS200.i	11:30:00 AM	6546.44	6549.94			N/A
6/12/2019	AUS200.i	1:30:00 PM	6546.64	6549.14			N/A
6/12/2019	AUS200.i	3:30:00 PM	6545.64	6547.24			N/A
6/12/2019	BCHUSD	9:30:00 AM	398.18	400			N/A
6/12/2019	BCHUSD	11:30:00 AM	398.63	400.26			N/A
6/12/2019	BCHUSD	1:30:00 PM	397.6	398.99			N/A
6/12/2019	BCHUSD	3:30:00 PM	399.85	401.63			N/A
6/12/2019	CADCHF	9:30:00 AM	0.74512	0.74578			N/A
6/12/2019	CADCHF	11:30:00 AM	0.74581	0.74646			N/A
6/12/2019	CADCHF	1:30:00 PM	0.74662	0.74724			N/A
6/12/2019	CADCHF	3:30:00 PM	0.74733	0.74769			N/A
6/12/2019	CADCHF.fx	9:30:00 AM	0.74545	0.74543			N/A
6/12/2019	CADCHF.fx	11:30:00 AM	0.74616	0.74611			N/A
6/12/2019	CADCHF.fx	1:30:00 PM	0.74697	0.74688			N/A
6/12/2019	CADCHF.fx	3:30:00 PM	0.74762	0.74734			N/A
6/12/2019	CADCZK	9:30:00 AM	16.969	16.984			N/A
6/12/2019	CADCZK	11:30:00 AM	16.977	16.994			N/A
6/12/2019	CADCZK	1:30:00 PM	16.994	17.009			N/A
6/12/2019	CADCZK	3:30:00 PM	16.989	16.993			N/A
6/12/2019	CADDKK	9:30:00 AM					N/A
6/12/2019	CADDKK	11:30:00 AM					N/A
6/12/2019	CADDKK	1:30:00 PM					N/A
6/12/2019	CADDKK	3:30:00 PM	4.957	4.957			N/A
6/12/2019	CADHKD	9:30:00 AM	5.8836	5.8871			N/A
6/12/2019	CADHKD	11:30:00 AM	5.8821	5.886			N/A
6/12/2019	CADHKD	1:30:00 PM	5.8803	5.884			N/A
6/12/2019	CADHKD	3:30:00 PM	5.8844	5.8843			N/A
6/12/2019	CADHUF	9:30:00 AM	212.86	213.02			N/A
6/12/2019	CADHUF	11:30:00 AM	213.28	213.43			N/A
6/12/2019	CADHUF	1:30:00 PM	213.37	213.52			N/A
6/12/2019	CADHUF	3:30:00 PM	213.28	213.25			N/A

6/12/2019	CADJPY	9:30:00 AM	81.482	81.54			N/A
6/12/2019	CADJPY	11:30:00 AM	81.409	81.474			N/A
6/12/2019	CADJPY	1:30:00 PM	81.462	81.524			N/A
6/12/2019	CADJPY	3:30:00 PM	81.5	81.543			N/A
6/12/2019	CADJPY.fx	9:30:00 AM	81.515	81.505			N/A
6/12/2019	CADJPY.fx	11:30:00 AM	81.442	81.438			N/A
6/12/2019	CADJPY.fx	1:30:00 PM	81.496	81.49			N/A
6/12/2019	CADJPY.fx	3:30:00 PM	81.529	81.508			N/A
6/12/2019	CADMXN	9:30:00 AM	14.3917	14.4033			N/A
6/12/2019	CADMXN	11:30:00 AM	14.4059	14.4154			N/A
6/12/2019	CADMXN	1:30:00 PM	14.3953	14.4056			N/A
6/12/2019	CADMXN	3:30:00 PM	14.3859	14.3872			N/A
6/12/2019	CADNOK	9:30:00 AM	6.49	6.4943			N/A
6/12/2019	CADNOK	11:30:00 AM	6.494	6.4972			N/A
6/12/2019	CADNOK	1:30:00 PM	6.4926	6.497			N/A
6/12/2019	CADNOK	3:30:00 PM	6.4912	6.4906			N/A
6/12/2019	CADPLN	9:30:00 AM	2.8277	2.8296			N/A
6/12/2019	CADPLN	11:30:00 AM	2.8288	2.8307			N/A
6/12/2019	CADPLN	1:30:00 PM	2.8299	2.8317			N/A
6/12/2019	CADPLN	3:30:00 PM	2.828	2.8274			N/A
6/12/2019	CADSEK	9:30:00 AM	7.1017	7.1057			N/A
6/12/2019	CADSEK	11:30:00 AM	7.1039	7.1078			N/A
6/12/2019	CADSEK	1:30:00 PM	7.0967	7.1			N/A
6/12/2019	CADSEK	3:30:00 PM	7.0873	7.088			N/A
6/12/2019	CADSGD	9:30:00 AM	1.0259	1.0262			N/A
6/12/2019	CADSGD	11:30:00 AM	1.0251	1.0254			N/A
6/12/2019	CADSGD	1:30:00 PM	1.0254	1.0257			N/A
6/12/2019	CADSGD	3:30:00 PM	1.0254	1.0257			N/A
6/12/2019	CADZAR	9:30:00 AM	11.0425	11.0562			N/A
6/12/2019	CADZAR	11:30:00 AM	11.086	11.0931			N/A
6/12/2019	CADZAR	1:30:00 PM	11.0892	11.1055			N/A
6/12/2019	CADZAR	3:30:00 PM	11.0923	11.1005			N/A
6/12/2019	CHFCZK	9:30:00 AM	22.768	22.782			N/A
6/12/2019	CHFCZK	11:30:00 AM	22.759	22.773			N/A

6/12/2019	CHFCZK	1:30:00 PM	22.756	22.772			N/A
6/12/2019	CHFCZK	3:30:00 PM	22.723	22.732			N/A
6/12/2019	CHFDKK	9:30:00 AM	6.646	6.649			N/A
6/12/2019	CHFDKK	11:30:00 AM	6.639	6.642			N/A
6/12/2019	CHFDKK	1:30:00 PM	6.64	6.643			N/A
6/12/2019	CHFDKK	3:30:00 PM	6.631	6.632			N/A
6/12/2019	CHFDKK.fx	9:30:00 AM	6.6449	6.6501			N/A
6/12/2019	CHFDKK.fx	11:30:00 AM	6.6382	6.6433			N/A
6/12/2019	CHFDKK.fx	1:30:00 PM	6.6385	6.6446			N/A
6/12/2019	CHFDKK.fx	3:30:00 PM	6.6292	6.6329			N/A
6/12/2019	CHFHKD	9:30:00 AM	7.8943	7.8969			N/A
6/12/2019	CHFHKD	11:30:00 AM	7.8851	7.8884			N/A
6/12/2019	CHFHKD	1:30:00 PM	7.8744	7.8781			N/A
6/12/2019	CHFHKD	3:30:00 PM	7.875	7.8696			N/A
6/12/2019	CHFHUF	9:30:00 AM	285.5	285.86			N/A
6/12/2019	CHFHUF	11:30:00 AM	285.8	286.13			N/A
6/12/2019	CHFHUF	1:30:00 PM	285.61	285.98			N/A
6/12/2019	CHFHUF	3:30:00 PM	285.16	285.42			N/A
6/12/2019	CHFJPY	9:30:00 AM	109.32	109.375			N/A
6/12/2019	CHFJPY	11:30:00 AM	109.119	109.177			N/A
6/12/2019	CHFJPY	1:30:00 PM	109.077	109.14			N/A
6/12/2019	CHFJPY	3:30:00 PM	109.04	109.067			N/A
6/12/2019	CHFJPY.fx	9:30:00 AM	109.353	109.341			N/A
6/12/2019	CHFJPY.fx	11:30:00 AM	109.152	109.142			N/A
6/12/2019	CHFJPY.fx	1:30:00 PM	109.109	109.104			N/A
6/12/2019	CHFJPY.fx	3:30:00 PM	109.072	109.039			N/A
6/12/2019	CHFMXN	9:30:00 AM	19.3072	19.3218			N/A
6/12/2019	CHFMXN	11:30:00 AM	19.3079	19.3208			N/A
6/12/2019	CHFMXN	1:30:00 PM	19.2746	19.288			N/A
6/12/2019	CHFMXN	3:30:00 PM	19.2501	19.2491			N/A
6/12/2019	CHFNOK	9:30:00 AM	8.7072	8.7141			N/A
6/12/2019	CHFNOK	11:30:00 AM	8.7043	8.7087			N/A
6/12/2019	CHFNOK	1:30:00 PM	8.6938	8.7006			N/A
6/12/2019	CHFNOK	3:30:00 PM	8.6831	8.6872			N/A



6/12/2019	CHFNOK.fx	9:30:00 AM	8.71067	8.71066			N/A
6/12/2019	CHFNOK.fx	11:30:00 AM	8.70836	8.70512			N/A
6/12/2019	CHFNOK.fx	1:30:00 PM	8.6974	8.69702			N/A
6/12/2019	CHFNOK.fx	3:30:00 PM	8.68563	8.6834			N/A
6/12/2019	CHFPLN	9:30:00 AM	3.7937	3.796			N/A
6/12/2019	CHFPLN	11:30:00 AM	3.7915	3.7941			N/A
6/12/2019	CHFPLN	1:30:00 PM	3.7889	3.792			N/A
6/12/2019	CHFPLN	3:30:00 PM	3.7846	3.7837			N/A
6/12/2019	CHFPLN.fx	9:30:00 AM	3.79126	3.79853			N/A
6/12/2019	CHFPLN.fx	11:30:00 AM	3.78918	3.79625			N/A
6/12/2019	CHFPLN.fx	1:30:00 PM	3.78656	3.79425			N/A
6/12/2019	CHFPLN.fx	3:30:00 PM	3.77954	3.78613			N/A
6/12/2019	CHFSEK	9:30:00 AM	9.5281	9.5319			N/A
6/12/2019	CHFSEK	11:30:00 AM	9.5217	9.5258			N/A
6/12/2019	CHFSEK	1:30:00 PM	9.5027	9.5066			N/A
6/12/2019	CHFSEK	3:30:00 PM	9.4818	9.4814			N/A
6/12/2019	CHFSGD	9:30:00 AM	1.3773	1.3776			N/A
6/12/2019	CHFSGD	11:30:00 AM	1.3744	1.3748			N/A
6/12/2019	CHFSGD	1:30:00 PM	1.3737	1.3742			N/A
6/12/2019	CHFSGD	3:30:00 PM	1.3731	1.3723			N/A
6/12/2019	CHFSGD.fx	9:30:00 AM	1.37748	1.37737			N/A
6/12/2019	CHFSGD.fx	11:30:00 AM	1.37465	1.37455			N/A
6/12/2019	CHFSGD.fx	1:30:00 PM	1.37389	1.37397			N/A
6/12/2019	CHFSGD.fx	3:30:00 PM	1.37293	1.37235			N/A
6/12/2019	CHFZAR	9:30:00 AM	14.8189	14.8278			N/A
6/12/2019	CHFZAR	11:30:00 AM	14.862	14.8631			N/A
6/12/2019	CHFZAR	1:30:00 PM	14.8517	14.865			N/A
6/12/2019	CHFZAR	3:30:00 PM	14.8446	14.8484			N/A
6/12/2019	CZKJPY	9:30:00 AM	4.801	4.804			N/A
6/12/2019	CZKJPY	11:30:00 AM					N/A
6/12/2019	CZKJPY	1:30:00 PM	4.792	4.796			N/A
6/12/2019	CZKJPY	3:30:00 PM	4.799	4.801			N/A
6/12/2019	DAX30.i	9:30:00 AM	12091.87	12087.35			N/A
6/12/2019	DAX30.i	11:30:00 AM	12089.12	12086.37			N/A

6/12/2019	DAX30.i	1:30:00 PM	12110.12	12104.12			N/A
6/12/2019	DAX30.i	3:30:00 PM	12094.37	12086.62			N/A
6/12/2019	DJ30.i	9:30:00 AM					N/A
6/12/2019	DJ30.i	11:30:00 AM					N/A
6/12/2019	DJ30.i	1:30:00 PM					N/A
6/12/2019	DJ30.i	3:30:00 PM					N/A
6/12/2019	DKKJPY	9:30:00 AM					N/A
6/12/2019	DKKJPY	11:30:00 AM					N/A
6/12/2019	DKKJPY	1:30:00 PM					N/A
6/12/2019	DKKJPY	3:30:00 PM	16.46	16.46			N/A
6/12/2019	EURAUD	9:30:00 AM	1.63102	1.63146			N/A
6/12/2019	EURAUD	11:30:00 AM	1.62999	1.63034			N/A
6/12/2019	EURAUD	1:30:00 PM	1.62862	1.62884			N/A
6/12/2019	EURAUD	3:30:00 PM	1.62991	1.62927			N/A
6/12/2019	EURAUD.fx	9:30:00 AM	1.63121	1.63124			N/A
6/12/2019	EURAUD.fx	11:30:00 AM	1.6302	1.63012			N/A
6/12/2019	EURAUD.fx	1:30:00 PM	1.62885	1.62862			N/A
6/12/2019	EURAUD.fx	3:30:00 PM	1.62991	1.62906			N/A
6/12/2019	EURCAD	9:30:00 AM	1.50671	1.50739			N/A
6/12/2019	EURCAD	11:30:00 AM	1.5068	1.50752			N/A
6/12/2019	EURCAD	1:30:00 PM	1.50512	1.50579			N/A
6/12/2019	EURCAD	3:30:00 PM	1.50656	1.50629			N/A
6/12/2019	EURCAD.fx	9:30:00 AM	1.50714	1.50697			N/A
6/12/2019	EURCAD.fx	11:30:00 AM	1.50721	1.5071			N/A
6/12/2019	EURCAD.fx	1:30:00 PM	1.50554	1.50538			N/A
6/12/2019	EURCAD.fx	3:30:00 PM	1.50696	1.50614			N/A
6/12/2019	EURCHF	9:30:00 AM	1.12345	1.12339			N/A
6/12/2019	EURCHF	11:30:00 AM	1.12463	1.12454			N/A
6/12/2019	EURCHF	1:30:00 PM	1.1244	1.1245			N/A
6/12/2019	EURCHF	3:30:00 PM	1.12629	1.126			N/A
6/12/2019	EURCHF.fx	9:30:00 AM	1.12351	1.12333			N/A
6/12/2019	EURCHF.fx	11:30:00 AM	1.12469	1.12448			N/A
6/12/2019	EURCHF.fx	1:30:00 PM	1.12446	1.12444			N/A
6/12/2019	EURCHF.fx	3:30:00 PM	1.12633	1.12595			N/A

6/12/2019	EURCZK	9:30:00 AM	25.564	25.602			N/A
6/12/2019	EURCZK	11:30:00 AM	25.58	25.618			N/A
6/12/2019	EURCZK	1:30:00 PM	25.575	25.613			N/A
6/12/2019	EURCZK	3:30:00 PM	25.571	25.605			N/A
6/12/2019	EURDKK	9:30:00 AM	7.4668	7.4679			N/A
6/12/2019	EURDKK	11:30:00 AM	7.4665	7.4678			N/A
6/12/2019	EURDKK	1:30:00 PM	7.4665	7.4676			N/A
6/12/2019	EURDKK	3:30:00 PM	7.4657	7.4667			N/A
6/12/2019	EURGBP	9:30:00 AM	0.89086	0.89091			N/A
6/12/2019	EURGBP	11:30:00 AM	0.88984	0.88994			N/A
6/12/2019	EURGBP	1:30:00 PM	0.88775	0.88754			N/A
6/12/2019	EURGBP	3:30:00 PM	0.88891	0.88878			N/A
6/12/2019	EURGBP.fx	9:30:00 AM	0.8909	0.89086			N/A
6/12/2019	EURGBP.fx	11:30:00 AM	0.88988	0.88989			N/A
6/12/2019	EURGBP.fx	1:30:00 PM	0.88778	0.88748			N/A
6/12/2019	EURGBP.fx	3:30:00 PM	0.88893	0.88874			N/A
6/12/2019	EURHKD	9:30:00 AM	8.8685	8.8724			N/A
6/12/2019	EURHKD	11:30:00 AM	8.8668	8.8708			N/A
6/12/2019	EURHKD	1:30:00 PM	8.8543	8.8589			N/A
6/12/2019	EURHKD	3:30:00 PM	8.8681	8.8624			N/A
6/12/2019	EURHKD.fx	9:30:00 AM	8.87125	8.86969			N/A
6/12/2019	EURHKD.fx	11:30:00 AM	8.86954	8.86804			N/A
6/12/2019	EURHKD.fx	1:30:00 PM	8.85704	8.85611			N/A
6/12/2019	EURHKD.fx	3:30:00 PM	8.8707	8.86002			N/A
6/12/2019	EURHUF	9:30:00 AM	320.66	321.36			N/A
6/12/2019	EURHUF	11:30:00 AM	321.32	321.93			N/A
6/12/2019	EURHUF	1:30:00 PM	321.1	321.69			N/A
6/12/2019	EURHUF	3:30:00 PM	321.18	321.48			N/A
6/12/2019	EURHUF.fx	9:30:00 AM	320.941	321.1			N/A
6/12/2019	EURHUF.fx	11:30:00 AM	321.589	321.76			N/A
6/12/2019	EURHUF.fx	1:30:00 PM	321.389	321.527			N/A
6/12/2019	EURHUF.fx	3:30:00 PM	321.461	321.496			N/A
6/12/2019	EURJPY	9:30:00 AM	122.846	122.832			N/A
6/12/2019	EURJPY	11:30:00 AM	122.749	122.75			N/A

6/12/2019	EURJPY	1:30:00 PM	122.685	122.687			N/A
6/12/2019	EURJPY	3:30:00 PM	122.828	122.759			N/A
6/12/2019	EURJPY.fx	9:30:00 AM	122.848	122.828			N/A
6/12/2019	EURJPY.fx	11:30:00 AM	122.752	122.745			N/A
6/12/2019	EURJPY.fx	1:30:00 PM	122.689	122.682			N/A
6/12/2019	EURJPY.fx	3:30:00 PM	122.83	122.781			N/A
6/12/2019	EURMXN	9:30:00 AM	21.6907	21.7097			N/A
6/12/2019	EURMXN	11:30:00 AM	21.7174	21.7294			N/A
6/12/2019	EURMXN	1:30:00 PM	21.6753	21.6918			N/A
6/12/2019	EURMXN	3:30:00 PM	21.6806	21.6771			N/A
6/12/2019	EURMXN.fx	9:30:00 AM	21.6992	21.7004			N/A
6/12/2019	EURMXN.fx	11:30:00 AM	21.7256	21.721			N/A
6/12/2019	EURMXN.fx	1:30:00 PM	21.6843	21.6828			N/A
6/12/2019	EURMXN.fx	3:30:00 PM	21.6893	21.6688			N/A
6/12/2019	EURNOK	9:30:00 AM	9.7796	9.7921			N/A
6/12/2019	EURNOK	11:30:00 AM	9.7867	9.7963			N/A
6/12/2019	EURNOK	1:30:00 PM	9.7742	9.7851			N/A
6/12/2019	EURNOK	3:30:00 PM	9.7753	9.7864			N/A
6/12/2019	EURNOK.fx	9:30:00 AM	9.7847	9.78682			N/A
6/12/2019	EURNOK.fx	11:30:00 AM	9.79203	9.79069			N/A
6/12/2019	EURNOK.fx	1:30:00 PM	9.77969	9.77953			N/A
6/12/2019	EURNOK.fx	3:30:00 PM	9.78063	9.78107			N/A
6/12/2019	EURNZD	9:30:00 AM	1.72359	1.72437			N/A
6/12/2019	EURNZD	11:30:00 AM	1.72203	1.72284			N/A
6/12/2019	EURNZD	1:30:00 PM	1.72142	1.72179			N/A
6/12/2019	EURNZD	3:30:00 PM	1.72131	1.72121			N/A
6/12/2019	EURNZD.fx	9:30:00 AM	1.72402	1.72393			N/A
6/12/2019	EURNZD.fx	11:30:00 AM	1.72245	1.72241			N/A
6/12/2019	EURNZD.fx	1:30:00 PM	1.72182	1.72135			N/A
6/12/2019	EURNZD.fx	3:30:00 PM	1.72144	1.72082			N/A
6/12/2019	EURPLN	9:30:00 AM	4.2618	4.2648			N/A
6/12/2019	EURPLN	11:30:00 AM	4.2636	4.2669			N/A
6/12/2019	EURPLN	1:30:00 PM	4.2606	4.2639			N/A
6/12/2019	EURPLN	3:30:00 PM	4.2612	4.2617			N/A

6/12/2019	EURPLN.fx	9:30:00 AM	4.26117	4.26545			N/A
6/12/2019	EURPLN.fx	11:30:00 AM	4.26296	4.26742			N/A
6/12/2019	EURPLN.fx	1:30:00 PM	4.26007	4.2644			N/A
6/12/2019	EURPLN.fx	3:30:00 PM	4.25996	4.26238			N/A
6/12/2019	EURRUB	9:30:00 AM					N/A
6/12/2019	EURRUB	11:30:00 AM					N/A
6/12/2019	EURRUB	1:30:00 PM					N/A
6/12/2019	EURRUB	3:30:00 PM					N/A
6/12/2019	EURSEK	9:30:00 AM	10.7056	10.7104			N/A
6/12/2019	EURSEK	11:30:00 AM	10.7095	10.7139			N/A
6/12/2019	EURSEK	1:30:00 PM	10.6867	10.6907			N/A
6/12/2019	EURSEK	3:30:00 PM	10.6791	10.6833			N/A
6/12/2019	EURSEK.fx	9:30:00 AM	10.70728	10.70864			N/A
6/12/2019	EURSEK.fx	11:30:00 AM	10.7112	10.7122			N/A
6/12/2019	EURSEK.fx	1:30:00 PM	10.68851	10.68892			N/A
6/12/2019	EURSEK.fx	3:30:00 PM	10.68061	10.68175			N/A
6/12/2019	EURSGD	9:30:00 AM	1.5471	1.5478			N/A
6/12/2019	EURSGD	11:30:00 AM	1.5455	1.5463			N/A
6/12/2019	EURSGD	1:30:00 PM	1.5446	1.5454			N/A
6/12/2019	EURSGD	3:30:00 PM	1.5461	1.5454			N/A
6/12/2019	EURSGD.fx	9:30:00 AM	1.54742	1.54742			N/A
6/12/2019	EURSGD.fx	11:30:00 AM	1.54589	1.54591			N/A
6/12/2019	EURSGD.fx	1:30:00 PM	1.54491	1.54497			N/A
6/12/2019	EURSGD.fx	3:30:00 PM	1.54638	1.54512			N/A
6/12/2019	EURUSD	9:30:00 AM	1.13377	1.13381			N/A
6/12/2019	EURUSD	11:30:00 AM	1.13335	1.13335			N/A
6/12/2019	EURUSD	1:30:00 PM	1.13208	1.13212	10	10	N/A
6/12/2019	EURUSD	3:30:00 PM	1.13381	1.13248	2500	2500	N/A
6/12/2019	EURUSD.fx	9:30:00 AM	1.13399	1.1339			N/A
6/12/2019	EURUSD.fx	11:30:00 AM	1.13355	1.13344			N/A
6/12/2019	EURUSD.fx	1:30:00 PM	1.13229	1.13221			N/A
6/12/2019	EURUSD.fx	3:30:00 PM	1.13401	1.13258			N/A
6/12/2019	EURZAR	9:30:00 AM	16.652	16.6655			N/A
6/12/2019	EURZAR	11:30:00 AM	16.7173	16.7181			N/A

6/12/2019	EURZAR	1:30:00 PM	16.7033	16.7217			N/A
6/12/2019	EURZAR	3:30:00 PM	16.7232	16.7261			N/A
6/12/2019	EURZAR.fx	9:30:00 AM	16.65075	16.66679			N/A
6/12/2019	EURZAR.fx	11:30:00 AM	16.71597	16.719			N/A
6/12/2019	EURZAR.fx	1:30:00 PM	16.70249	16.72227			N/A
6/12/2019	EURZAR.fx	3:30:00 PM	16.72274	16.72717			N/A
6/12/2019	GBPAUD	9:30:00 AM	1.83135	1.832			N/A
6/12/2019	GBPAUD	11:30:00 AM	1.83223	1.8329			N/A
6/12/2019	GBPAUD	1:30:00 PM	1.83532	1.83545			N/A
6/12/2019	GBPAUD	3:30:00 PM	1.83404	1.83381			N/A
6/12/2019	GBPAUD.fx	9:30:00 AM	1.83177	1.83159			N/A
6/12/2019	GBPAUD.fx	11:30:00 AM	1.83263	1.83249			N/A
6/12/2019	GBPAUD.fx	1:30:00 PM	1.83572	1.83504			N/A
6/12/2019	GBPAUD.fx	3:30:00 PM	1.83409	1.83342			N/A
6/12/2019	GBPCAD	9:30:00 AM	1.69126	1.69208			N/A
6/12/2019	GBPCAD	11:30:00 AM	1.69333	1.69397			N/A
6/12/2019	GBPCAD	1:30:00 PM	1.69585	1.69614			N/A
6/12/2019	GBPCAD	3:30:00 PM	1.69479	1.69459			N/A
6/12/2019	GBPCAD.fx	9:30:00 AM	1.69165	1.6917			N/A
6/12/2019	GBPCAD.fx	11:30:00 AM	1.69373	1.6936			N/A
6/12/2019	GBPCAD.fx	1:30:00 PM	1.69624	1.69574			N/A
6/12/2019	GBPCAD.fx	3:30:00 PM	1.69517	1.69476			N/A
6/12/2019	GBPCHF	9:30:00 AM	1.26085	1.26122			N/A
6/12/2019	GBPCHF	11:30:00 AM	1.26361	1.26382			N/A
6/12/2019	GBPCHF	1:30:00 PM	1.26681	1.26679			N/A
6/12/2019	GBPCHF	3:30:00 PM	1.26694	1.26692			N/A
6/12/2019	GBPCHF.fx	9:30:00 AM	1.26106	1.26102			N/A
6/12/2019	GBPCHF.fx	11:30:00 AM	1.2638	1.26362			N/A
6/12/2019	GBPCHF.fx	1:30:00 PM	1.26702	1.26658			N/A
6/12/2019	GBPCHF.fx	3:30:00 PM	1.26711	1.26674			N/A
6/12/2019	GBPCZK	9:30:00 AM	28.705	28.725			N/A
6/12/2019	GBPCZK	11:30:00 AM	28.756	28.774			N/A
6/12/2019	GBPCZK	1:30:00 PM	28.825	28.838			N/A
6/12/2019	GBPCZK	3:30:00 PM	28.782	28.794			N/A

6/12/2019	GBPDKK	9:30:00 AM	8.378	8.389			N/A
6/12/2019	GBPDKK	11:30:00 AM	8.387	8.398			N/A
6/12/2019	GBPDKK	1:30:00 PM	8.41	8.418			N/A
6/12/2019	GBPDKK	3:30:00 PM	8.398	8.407			N/A
6/12/2019	GBPDKK.fx	9:30:00 AM	8.3768	8.3893			N/A
6/12/2019	GBPDKK.fx	11:30:00 AM	8.3859	8.3987			N/A
6/12/2019	GBPDKK.fx	1:30:00 PM	8.4084	8.4185			N/A
6/12/2019	GBPDKK.fx	3:30:00 PM	8.396	8.4073			N/A
6/12/2019	GBPHKD	9:30:00 AM	9.9524	9.9574			N/A
6/12/2019	GBPHKD	11:30:00 AM	9.9621	9.9665			N/A
6/12/2019	GBPHKD	1:30:00 PM	9.9736	9.9763			N/A
6/12/2019	GBPHKD	3:30:00 PM	9.9719	9.968			N/A
6/12/2019	GBPHUF	9:30:00 AM	359.95	360.42			N/A
6/12/2019	GBPHUF	11:30:00 AM	361.09	361.55			N/A
6/12/2019	GBPHUF	1:30:00 PM	361.78	362.14			N/A
6/12/2019	GBPHUF	3:30:00 PM	361.21	361.45			N/A
6/12/2019	GBPJPY	9:30:00 AM	137.875	137.905			N/A
6/12/2019	GBPJPY	11:30:00 AM	137.922	137.954			N/A
6/12/2019	GBPJPY	1:30:00 PM	138.209	138.212			N/A
6/12/2019	GBPJPY	3:30:00 PM	138.164	138.15			N/A
6/12/2019	GBPJPY.fx	9:30:00 AM	137.895	137.885			N/A
6/12/2019	GBPJPY.fx	11:30:00 AM	137.94	137.934			N/A
6/12/2019	GBPJPY.fx	1:30:00 PM	138.229	138.191			N/A
6/12/2019	GBPJPY.fx	3:30:00 PM	138.18	138.149			N/A
6/12/2019	GBPMXN	9:30:00 AM	24.345	24.3597			N/A
6/12/2019	GBPMXN	11:30:00 AM	24.3995	24.4068			N/A
6/12/2019	GBPMXN	1:30:00 PM	24.414	24.4235			N/A
6/12/2019	GBPMXN	3:30:00 PM	24.3823	24.3734			N/A
6/12/2019	GBPNOK	9:30:00 AM	10.9791	10.99			N/A
6/12/2019	GBPNOK	11:30:00 AM	10.9988	11.0077			N/A
6/12/2019	GBPNOK	1:30:00 PM	11.0136	11.022			N/A
6/12/2019	GBPNOK	3:30:00 PM	10.9995	11.008			N/A
6/12/2019	GBPNOK.fx	9:30:00 AM	10.98399	10.98515			N/A
6/12/2019	GBPNOK.fx	11:30:00 AM	11.00378	11.00248			N/A

6/12/2019	GBPNOK.fx	1:30:00 PM	11.01838	11.01696			N/A
6/12/2019	GBPNOK.fx	3:30:00 PM	11.00342	11.00283			N/A
6/12/2019	GBPNZD	9:30:00 AM	1.93475	1.93546			N/A
6/12/2019	GBPNZD	11:30:00 AM	1.93524	1.93591			N/A
6/12/2019	GBPNZD	1:30:00 PM	1.93926	1.93928			N/A
6/12/2019	GBPNZD	3:30:00 PM	1.93655	1.93636	100	100	N/A
6/12/2019	GBPNZD.fx	9:30:00 AM	1.93512	1.93508			N/A
6/12/2019	GBPNZD.fx	11:30:00 AM	1.9356	1.93554			N/A
6/12/2019	GBPNZD.fx	1:30:00 PM	1.93962	1.93892			N/A
6/12/2019	GBPNZD.fx	3:30:00 PM	1.93654	1.936			N/A
6/12/2019	GBPPLN	9:30:00 AM	4.7847	4.7863			N/A
6/12/2019	GBPPLN	11:30:00 AM	4.7921	4.794			N/A
6/12/2019	GBPPLN	1:30:00 PM	4.8014	4.802			N/A
6/12/2019	GBPPLN	3:30:00 PM	4.7959	4.7935			N/A
6/12/2019	GBPPLN.fx	9:30:00 AM	4.78248	4.78865			N/A
6/12/2019	GBPPLN.fx	11:30:00 AM	4.79002	4.79604			N/A
6/12/2019	GBPPLN.fx	1:30:00 PM	4.79918	4.80396			N/A
6/12/2019	GBPPLN.fx	3:30:00 PM	4.79075	4.7956			N/A
6/12/2019	GBPSEK	9:30:00 AM	12.0152	12.024			N/A
6/12/2019	GBPSEK	11:30:00 AM	12.0328	12.0415			N/A
6/12/2019	GBPSEK	1:30:00 PM	12.0384	12.0447			N/A
6/12/2019	GBPSEK	3:30:00 PM	12.0137	12.0209			N/A
6/12/2019	GBPSEK.fx	9:30:00 AM	12.01169	12.02747			N/A
6/12/2019	GBPSEK.fx	11:30:00 AM	12.02942	12.04507			N/A
6/12/2019	GBPSEK.fx	1:30:00 PM	12.03472	12.04825			N/A
6/12/2019	GBPSEK.fx	3:30:00 PM	12.01021	12.02451			N/A
6/12/2019	GBPSGD	9:30:00 AM	1.7367	1.7374			N/A
6/12/2019	GBPSGD	11:30:00 AM	1.7369	1.7375			N/A
6/12/2019	GBPSGD	1:30:00 PM	1.7404	1.7406			N/A
6/12/2019	GBPSGD	3:30:00 PM	1.7393	1.7392			N/A
6/12/2019	GBPSGD.fx	9:30:00 AM	1.73483	1.73917			N/A
6/12/2019	GBPSGD.fx	11:30:00 AM	1.73505	1.73934			N/A
6/12/2019	GBPSGD.fx	1:30:00 PM	1.73854	1.74237			N/A
6/12/2019	GBPSGD.fx	3:30:00 PM	1.73711	1.74102			N/A



6/12/2019	GBPUSD	9:30:00 AM	1.27286	1.27282			N/A
6/12/2019	GBPUSD	11:30:00 AM	1.27381	1.27372			N/A
6/12/2019	GBPUSD	1:30:00 PM	1.27569	1.2754			N/A
6/12/2019	GBPUSD	3:30:00 PM	1.27558	1.27438		500	N/A
6/12/2019	GBPUSD.fx	9:30:00 AM	1.27291	1.27275			N/A
6/12/2019	GBPUSD.fx	11:30:00 AM	1.27387	1.27366			N/A
6/12/2019	GBPUSD.fx	1:30:00 PM	1.27573	1.27533			N/A
6/12/2019	GBPUSD.fx	3:30:00 PM	1.27562	1.27444			N/A
6/12/2019	GBPZAR	9:30:00 AM	18.6857	18.7096			N/A
6/12/2019	GBPZAR	11:30:00 AM	18.7822	18.7905			N/A
6/12/2019	GBPZAR	1:30:00 PM	18.8141	18.8393			N/A
6/12/2019	GBPZAR	3:30:00 PM	18.8112	18.8221			N/A
6/12/2019	GBPZAR.fx	9:30:00 AM	18.6934	18.7022			N/A
6/12/2019	GBPZAR.fx	11:30:00 AM	18.7905	18.7829			N/A
6/12/2019	GBPZAR.fx	1:30:00 PM	18.8211	18.8313			N/A
6/12/2019	GBPZAR.fx	3:30:00 PM	18.8168	18.8149			N/A
6/12/2019	GOLD	9:30:00 AM	1336.11	1335.88			N/A
6/12/2019	GOLD	11:30:00 AM	1337.39	1337.36			N/A
6/12/2019	GOLD	1:30:00 PM	1335.28	1335.49			N/A
6/12/2019	GOLD	3:30:00 PM	1335.92	1333.84			N/A
6/12/2019	HKDJPY	9:30:00 AM	13.85	13.86			N/A
6/12/2019	HKDJPY	11:30:00 AM	13.84	13.85			N/A
6/12/2019	HKDJPY	1:30:00 PM					N/A
6/12/2019	HKDJPY	3:30:00 PM	13.86	13.85			N/A
6/12/2019	HKDJPY.fx	9:30:00 AM	13.846	13.85			N/A
6/12/2019	HKDJPY.fx	11:30:00 AM	13.836	13.842			N/A
6/12/2019	HKDJPY.fx	1:30:00 PM	13.849	13.855			N/A
6/12/2019	HKDJPY.fx	3:30:00 PM	13.853	13.848			N/A
6/12/2019	HUFJPY	9:30:00 AM	0.383	0.3833			N/A
6/12/2019	HUFJPY	11:30:00 AM	0.3819	0.3822			N/A
6/12/2019	HUFJPY	1:30:00 PM	0.3819	0.3822			N/A
6/12/2019	HUFJPY	3:30:00 PM	0.3822	0.3826			N/A
6/12/2019	JP225.i	9:30:00 AM	21102.88	21120.38			N/A
6/12/2019	JP225.i	11:30:00 AM	21080.38	21097.88			N/A

6/12/2019	JP225.i	1:30:00 PM	21082.88	21097.88			N/A
6/12/2019	JP225.i	3:30:00 PM	21107.88	21108.72			N/A
6/12/2019	MXNJPY	9:30:00 AM	5.66	5.67			N/A
6/12/2019	MXNJPY	11:30:00 AM	5.65	5.66			N/A
6/12/2019	MXNJPY	1:30:00 PM	5.66	5.67			N/A
6/12/2019	MXNJPY	3:30:00 PM	5.67	5.67			N/A
6/12/2019	NASDAQ.i	9:30:00 AM					N/A
6/12/2019	NASDAQ.i	11:30:00 AM					N/A
6/12/2019	NASDAQ.i	1:30:00 PM					N/A
6/12/2019	NASDAQ.i	3:30:00 PM					N/A
6/12/2019	NOKJPY	9:30:00 AM	12.54	12.57			N/A
6/12/2019	NOKJPY	11:30:00 AM	12.52	12.55			N/A
6/12/2019	NOKJPY	1:30:00 PM	12.53	12.56			N/A
6/12/2019	NOKJPY	3:30:00 PM	12.55	12.57			N/A
6/12/2019	NOKJPY.fx	9:30:00 AM	12.55	12.556			N/A
6/12/2019	NOKJPY.fx	11:30:00 AM	12.535	12.539			N/A
6/12/2019	NOKJPY.fx	1:30:00 PM	12.542	12.548			N/A
6/12/2019	NOKJPY.fx	3:30:00 PM	12.556	12.558			N/A
6/12/2019	NZDCAD	9:30:00 AM	0.87388	0.87453			N/A
6/12/2019	NZDCAD	11:30:00 AM	0.87471	0.87536			N/A
6/12/2019	NZDCAD	1:30:00 PM	0.87428	0.87465			N/A
6/12/2019	NZDCAD	3:30:00 PM	0.87511	0.87514			N/A
6/12/2019	NZDCAD.fx	9:30:00 AM	0.87421	0.8742			N/A
6/12/2019	NZDCAD.fx	11:30:00 AM	0.87504	0.87501			N/A
6/12/2019	NZDCAD.fx	1:30:00 PM	0.87462	0.87431			N/A
6/12/2019	NZDCAD.fx	3:30:00 PM	0.87542	0.87517			N/A
6/12/2019	NZDCHF	9:30:00 AM	0.65132	0.65199			N/A
6/12/2019	NZDCHF	11:30:00 AM	0.65257	0.65324			N/A
6/12/2019	NZDCHF	1:30:00 PM	0.65286	0.65344			N/A
6/12/2019	NZDCHF	3:30:00 PM	0.65404	0.65447			N/A
6/12/2019	NZDCHF.fx	9:30:00 AM	0.65167	0.65163			N/A
6/12/2019	NZDCHF.fx	11:30:00 AM	0.65292	0.65285			N/A
6/12/2019	NZDCHF.fx	1:30:00 PM	0.65321	0.65308			N/A
6/12/2019	NZDCHF.fx	3:30:00 PM	0.65433	0.65421			N/A

6/12/2019	NZDCZK	9:30:00 AM	14.832	14.844			N/A
6/12/2019	NZDCZK	11:30:00 AM	14.855	14.866			N/A
6/12/2019	NZDCZK	1:30:00 PM	14.862	14.869			N/A
6/12/2019	NZDCZK	3:30:00 PM	14.862	14.865			N/A
6/12/2019	NZDDKK	9:30:00 AM					N/A
6/12/2019	NZDDKK	11:30:00 AM					N/A
6/12/2019	NZDDKK	1:30:00 PM	4.336	4.339			N/A
6/12/2019	NZDDKK	3:30:00 PM	4.335	4.337			N/A
6/12/2019	NZDHKD	9:30:00 AM	5.1432	5.145			N/A
6/12/2019	NZDHKD	11:30:00 AM	5.1461	5.1481			N/A
6/12/2019	NZDHKD	1:30:00 PM	5.1421	5.1432			N/A
6/12/2019	NZDHKD	3:30:00 PM	5.1504	5.1455			N/A
6/12/2019	NZDHUF	9:30:00 AM	185.97	186.26			N/A
6/12/2019	NZDHUF	11:30:00 AM	186.52	186.8			N/A
6/12/2019	NZDHUF	1:30:00 PM	186.51	186.74			N/A
6/12/2019	NZDHUF	3:30:00 PM	186.45	186.65			N/A
6/12/2019	NZDJPY	9:30:00 AM	71.224	71.286			N/A
6/12/2019	NZDJPY	11:30:00 AM	71.228	71.298			N/A
6/12/2019	NZDJPY	1:30:00 PM	71.241	71.29			N/A
6/12/2019	NZDJPY	3:30:00 PM	71.33	71.338			N/A
6/12/2019	NZDJPY.fx	9:30:00 AM	71.256	71.253			N/A
6/12/2019	NZDJPY.fx	11:30:00 AM	71.26	71.265			N/A
6/12/2019	NZDJPY.fx	1:30:00 PM	71.273	71.257			N/A
6/12/2019	NZDJPY.fx	3:30:00 PM	71.359	71.34			N/A
6/12/2019	NZDMXN	9:30:00 AM	12.5797	12.5857			N/A
6/12/2019	NZDMXN	11:30:00 AM	12.6047	12.608			N/A
6/12/2019	NZDMXN	1:30:00 PM	12.5895	12.5901			N/A
6/12/2019	NZDMXN	3:30:00 PM	12.5933	12.5785			N/A
6/12/2019	NZDNOK	9:30:00 AM	5.6723	5.6758			N/A
6/12/2019	NZDNOK	11:30:00 AM	5.6811	5.6837			N/A
6/12/2019	NZDNOK	1:30:00 PM	5.6772	5.6801			N/A
6/12/2019	NZDNOK	3:30:00 PM	5.6765	5.6779			N/A
6/12/2019	NZDPLN	9:30:00 AM	2.4715	2.473			N/A
6/12/2019	NZDPLN	11:30:00 AM	2.4746	2.4758			N/A

6/12/2019	NZDPLN	1:30:00 PM	2.4746	2.4756			N/A
6/12/2019	NZDPLN	3:30:00 PM	2.4729	2.4734			N/A
6/12/2019	NZDSEK	9:30:00 AM	6.2053	6.212			N/A
6/12/2019	NZDSEK	11:30:00 AM	6.2129	6.2196			N/A
6/12/2019	NZDSEK	1:30:00 PM	6.2039	6.2086			N/A
6/12/2019	NZDSEK	3:30:00 PM	6.2	6.1989			N/A
6/12/2019	NZDSGD	9:30:00 AM	0.8973	0.898			N/A
6/12/2019	NZDSGD	11:30:00 AM	0.8973	0.8979			N/A
6/12/2019	NZDSGD	1:30:00 PM	0.8972	0.8974			N/A
6/12/2019	NZDSGD	3:30:00 PM	0.8981	0.8977			N/A
6/12/2019	NZDSGD.fx	9:30:00 AM	0.89734	0.89788			N/A
6/12/2019	NZDSGD.fx	11:30:00 AM	0.89723	0.8978			N/A
6/12/2019	NZDSGD.fx	1:30:00 PM	0.89721	0.89754			N/A
6/12/2019	NZDSGD.fx	3:30:00 PM	0.89806	0.89822			N/A
6/12/2019	NZDUSD	9:30:00 AM	0.65766	0.65777			N/A
6/12/2019	NZDUSD	11:30:00 AM	0.65801	0.65808			N/A
6/12/2019	NZDUSD	1:30:00 PM	0.65768	0.65757			N/A
6/12/2019	NZDUSD	3:30:00 PM	0.65882	0.65791			N/A
6/12/2019	NZDUSD.fx	9:30:00 AM	0.65773	0.65777			N/A
6/12/2019	NZDUSD.fx	11:30:00 AM	0.65808	0.65809			N/A
6/12/2019	NZDUSD.fx	1:30:00 PM	0.65775	0.65759			N/A
6/12/2019	NZDUSD.fx	3:30:00 PM	0.65888	0.65812			N/A
6/12/2019	NZDZAR	9:30:00 AM	9.6497	9.6647			N/A
6/12/2019	NZDZAR	11:30:00 AM	9.696	9.7042			N/A
6/12/2019	NZDZAR	1:30:00 PM	9.6945	9.7096			N/A
6/12/2019	NZDZAR	3:30:00 PM	9.7051	9.7087			N/A
6/12/2019	SEKJPY	9:30:00 AM	11.47	11.48			N/A
6/12/2019	SEKJPY	11:30:00 AM	11.46	11.47			N/A
6/12/2019	SEKJPY	1:30:00 PM	11.48	11.49			N/A
6/12/2019	SEKJPY	3:30:00 PM	11.5	11.5			N/A
6/12/2019	SEKJPY.fx	9:30:00 AM	11.463	11.48			N/A
6/12/2019	SEKJPY.fx	11:30:00 AM	11.45	11.468			N/A
6/12/2019	SEKJPY.fx	1:30:00 PM	11.469	11.487			N/A
6/12/2019	SEKJPY.fx	3:30:00 PM	11.489	11.505			N/A

6/12/2019	SGDJPY	9:30:00 AM	79.35	79.38			N/A
6/12/2019	SGDJPY	11:30:00 AM	79.41	79.4			N/A
6/12/2019	SGDJPY	1:30:00 PM	79.4	79.41			N/A
6/12/2019	SGDJPY	3:30:00 PM	79.43	79.42			N/A
6/12/2019	SILVER	9:30:00 AM	14.65	15.01			N/A
6/12/2019	SILVER	11:30:00 AM	14.66	15.03			N/A
6/12/2019	SILVER	1:30:00 PM	14.61	14.98			N/A
6/12/2019	SILVER	3:30:00 PM	14.64	14.99			N/A
6/12/2019	SPX500.i	9:30:00 AM	2879.91	2880.46			N/A
6/12/2019	SPX500.i	11:30:00 AM	2879.16	2879.71			N/A
6/12/2019	SPX500.i	1:30:00 PM	2878.66	2879.46			N/A
6/12/2019	SPX500.i	3:30:00 PM	2883.04	2880.78			N/A
6/12/2019	UK100.i	9:30:00 AM	7369.12	7370.12			N/A
6/12/2019	UK100.i	11:30:00 AM	7366.2	7366.2			N/A
6/12/2019	UK100.i	1:30:00 PM	7351.7	7351.7			N/A
6/12/2019	UK100.i	3:30:00 PM	7342.7	7340.95			N/A
6/12/2019	USDCAD	9:30:00 AM	1.32909	1.32908			N/A
6/12/2019	USDCAD	11:30:00 AM	1.32967	1.32973			N/A
6/12/2019	USDCAD	1:30:00 PM	1.32964	1.32969			N/A
6/12/2019	USDCAD	3:30:00 PM	1.32947	1.3287			N/A
6/12/2019	USDCAD.fx	9:30:00 AM	1.32913	1.32904			N/A
6/12/2019	USDCAD.fx	11:30:00 AM	1.3297	1.3297			N/A
6/12/2019	USDCAD.fx	1:30:00 PM	1.32969	1.32965			N/A
6/12/2019	USDCAD.fx	3:30:00 PM	1.32939	1.32868			N/A
6/12/2019	USDCHF	9:30:00 AM	0.99072	0.99069			N/A
6/12/2019	USDCHF	11:30:00 AM	0.99207	0.99211			N/A
6/12/2019	USDCHF	1:30:00 PM	0.9931	0.99315			N/A
6/12/2019	USDCHF	3:30:00 PM	0.99416	0.993			N/A
6/12/2019	USDCHF.fx	9:30:00 AM	0.99076	0.99063			N/A
6/12/2019	USDCHF.fx	11:30:00 AM	0.99212	0.99205			N/A
6/12/2019	USDCHF.fx	1:30:00 PM	0.99316	0.99309			N/A
6/12/2019	USDCHF.fx	3:30:00 PM	0.99412	0.99295			N/A
6/12/2019	USDCZK	9:30:00 AM	22.57	22.592			N/A
6/12/2019	USDCZK	11:30:00 AM	22.591	22.613			N/A

6/12/2019	USDCZK	1:30:00 PM	22.612	22.634			N/A
6/12/2019	USDCZK	3:30:00 PM	22.602	22.597			N/A
6/12/2019	USDCZK.fx	9:30:00 AM	22.579	22.5832			N/A
6/12/2019	USDCZK.fx	11:30:00 AM	22.5993	22.6032			N/A
6/12/2019	USDCZK.fx	1:30:00 PM	22.6206	22.6255			N/A
6/12/2019	USDCZK.fx	3:30:00 PM	22.6095	22.5887			N/A
6/12/2019	USDDKK	9:30:00 AM	6.585	6.5884			N/A
6/12/2019	USDDKK	11:30:00 AM	6.5875	6.591			N/A
6/12/2019	USDDKK	1:30:00 PM	6.5949	6.5984			N/A
6/12/2019	USDDKK	3:30:00 PM	6.5926	6.5882			N/A
6/12/2019	USDDKK.fx	9:30:00 AM	6.58546	6.58639			N/A
6/12/2019	USDDKK.fx	11:30:00 AM	6.58812	6.589			N/A
6/12/2019	USDDKK.fx	1:30:00 PM	6.59535	6.59642			N/A
6/12/2019	USDDKK.fx	3:30:00 PM	6.59274	6.58613			N/A
6/12/2019	USDHKD	9:30:00 AM	7.8229	7.8221			N/A
6/12/2019	USDHKD	11:30:00 AM	7.8243	7.8243			N/A
6/12/2019	USDHKD	1:30:00 PM	7.822	7.8222			N/A
6/12/2019	USDHKD	3:30:00 PM	7.8226	7.8228			N/A
6/12/2019	USDHKD.fx	9:30:00 AM	7.82283	7.82229			N/A
6/12/2019	USDHKD.fx	11:30:00 AM	7.82435	7.82436			N/A
6/12/2019	USDHKD.fx	1:30:00 PM	7.82198	7.82212			N/A
6/12/2019	USDHKD.fx	3:30:00 PM	7.82248	7.82285			N/A
6/12/2019	USDHUF	9:30:00 AM	282.88	283.34			N/A
6/12/2019	USDHUF	11:30:00 AM	283.58	284.02			N/A
6/12/2019	USDHUF	1:30:00 PM	283.67	284.13			N/A
6/12/2019	USDHUF	3:30:00 PM	283.45	283.67			N/A
6/12/2019	USDHUF.fx	9:30:00 AM	283.073	283.145			N/A
6/12/2019	USDHUF.fx	11:30:00 AM	283.781	283.815			N/A
6/12/2019	USDHUF.fx	1:30:00 PM	283.875	283.927			N/A
6/12/2019	USDHUF.fx	3:30:00 PM	283.852	283.467			N/A
6/12/2019	USDINR	9:30:00 AM	64.4	74.38			N/A
6/12/2019	USDINR	11:30:00 AM	64.34	74.33			N/A
6/12/2019	USDINR	1:30:00 PM					N/A
6/12/2019	USDINR	3:30:00 PM					N/A

6/12/2019	USDJPY	9:30:00 AM	108.335	108.33			N/A
6/12/2019	USDJPY	11:30:00 AM	108.287	108.286			N/A
6/12/2019	USDJPY	1:30:00 PM	108.354	108.358			N/A
6/12/2019	USDJPY	3:30:00 PM	108.399	108.308			N/A
6/12/2019	USDJPY.fx	9:30:00 AM	108.34	108.323			N/A
6/12/2019	USDJPY.fx	11:30:00 AM	108.292	108.279			N/A
6/12/2019	USDJPY.fx	1:30:00 PM	108.36	108.35			N/A
6/12/2019	USDJPY.fx	3:30:00 PM	108.398	108.301			N/A
6/12/2019	USDMXN	9:30:00 AM	19.134	19.141			N/A
6/12/2019	USDMXN	11:30:00 AM	19.163	19.167			N/A
6/12/2019	USDMXN	1:30:00 PM	19.148	19.154			N/A
6/12/2019	USDMXN	3:30:00 PM	19.131	19.117			N/A
6/12/2019	USDMXN.f	9:30:00 AM					N/A
6/12/2019	USDMXN.f	11:30:00 AM					N/A
6/12/2019	USDMXN.f	1:30:00 PM					N/A
6/12/2019	USDMXN.f	3:30:00 PM					N/A
6/12/2019	USDNOK	9:30:00 AM	8.6261	8.6345			N/A
6/12/2019	USDNOK	11:30:00 AM	8.6357	8.6415			N/A
6/12/2019	USDNOK	1:30:00 PM	8.6338	8.6419			N/A
6/12/2019	USDNOK	3:30:00 PM	8.6328	8.6294			N/A
6/12/2019	USDNOK.fx	9:30:00 AM	8.62988	8.63014			N/A
6/12/2019	USDNOK.fx	11:30:00 AM	8.63968	8.6367			N/A
6/12/2019	USDNOK.fx	1:30:00 PM	8.63776	8.63723			N/A
6/12/2019	USDNOK.fx	3:30:00 PM	8.63614	8.6247			N/A
6/12/2019	USDPLN	9:30:00 AM	3.7591	3.7604			N/A
6/12/2019	USDPLN	11:30:00 AM	3.7622	3.7635			N/A
6/12/2019	USDPLN	1:30:00 PM	3.7637	3.7651			N/A
6/12/2019	USDPLN	3:30:00 PM	3.7631	3.7574			N/A
6/12/2019	USDPLN.fx	9:30:00 AM	3.75828	3.76121			N/A
6/12/2019	USDPLN.fx	11:30:00 AM	3.76145	3.76421			N/A
6/12/2019	USDPLN.fx	1:30:00 PM	3.76288	3.76583			N/A
6/12/2019	USDPLN.fx	3:30:00 PM	3.76136	3.75837			N/A
6/12/2019	USDRUB	9:30:00 AM					N/A
6/12/2019	USDRUB	11:30:00 AM					N/A

6/12/2019	USDRUB	1:30:00 PM					N/A
6/12/2019	USDRUB	3:30:00 PM					N/A
6/12/2019	USDSEK	9:30:00 AM	9.441	9.4449			N/A
6/12/2019	USDSEK	11:30:00 AM	9.4476	9.4514			N/A
6/12/2019	USDSEK	1:30:00 PM	9.4375	9.4417			N/A
6/12/2019	USDSEK	3:30:00 PM	9.428	9.4211			N/A
6/12/2019	USDSEK.fx	9:30:00 AM	9.44344	9.44306			N/A
6/12/2019	USDSEK.fx	11:30:00 AM	9.45037	9.44948			N/A
6/12/2019	USDSEK.fx	1:30:00 PM	9.44017	9.43978			N/A
6/12/2019	USDSEK.fx	3:30:00 PM	9.43003	9.41918			N/A
6/12/2019	USDSGD	9:30:00 AM	1.3645	1.3649			N/A
6/12/2019	USDSGD	11:30:00 AM	1.3637	1.364			N/A
6/12/2019	USDSGD	1:30:00 PM	1.3644	1.3643			N/A
6/12/2019	USDSGD	3:30:00 PM	1.3639	1.3635			N/A
6/12/2019	USDSGD.fx	9:30:00 AM	1.36442	1.36488			N/A
6/12/2019	USDSGD.fx	11:30:00 AM	1.36362	1.364			N/A
6/12/2019	USDSGD.fx	1:30:00 PM	1.36429	1.36468			N/A
6/12/2019	USDSGD.fx	3:30:00 PM	1.36381	1.36354			N/A
6/12/2019	USDZAR	9:30:00 AM	14.6835	14.6968			N/A
6/12/2019	USDZAR	11:30:00 AM	14.7471	14.7502			N/A
6/12/2019	USDZAR	1:30:00 PM	14.7513	14.7692			N/A
6/12/2019	USDZAR	3:30:00 PM	14.7534	14.7539			N/A
6/12/2019	USDZAR.fx	9:30:00 AM					N/A
6/12/2019	USDZAR.fx	11:30:00 AM					N/A
6/12/2019	USDZAR.fx	1:30:00 PM					N/A
6/12/2019	USDZAR.fx	3:30:00 PM					N/A
6/12/2019	XAUUSD	9:30:00 AM	1336.13	1335.88			N/A
6/12/2019	XAUUSD	11:30:00 AM	1337.39	1337.35			N/A
6/12/2019	XAUUSD	1:30:00 PM	1335.29	1335.49			N/A
6/12/2019	XAUUSD	3:30:00 PM	1335.93	1333.83			N/A
6/12/2019	ZARJPY	9:30:00 AM	7.36	7.37			N/A
6/12/2019	ZARJPY	11:30:00 AM	7.33	7.34			N/A
6/12/2019	ZARJPY	1:30:00 PM					N/A
6/12/2019	ZARJPY	3:30:00 PM	7.33	7.34			N/A



6/12/2019	ZARJPY.fx	9:30:00 AM	7.372	7.375			N/A
6/12/2019	ZARJPY.fx	11:30:00 AM	7.344	7.34			N/A
6/12/2019	ZARJPY.fx	1:30:00 PM	7.339	7.343			N/A
6/12/2019	ZARJPY.fx	3:30:00 PM	7.346	7.341			N/A
6/13/2019	#AA	9:30:00 AM					N/A
6/13/2019	#AA	11:30:00 AM					N/A
6/13/2019	#AA	1:30:00 PM					N/A
6/13/2019	#AA	3:30:00 PM					N/A
6/13/2019	#AABA	9:30:00 AM					N/A
6/13/2019	#AABA	11:30:00 AM					N/A
6/13/2019	#AABA	1:30:00 PM					N/A
6/13/2019	#AABA	3:30:00 PM					N/A
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6/13/2019	#AAL	11:30:00 AM					N/A
6/13/2019	#AAL	1:30:00 PM					N/A
6/13/2019	#AAL	3:30:00 PM					N/A
6/13/2019	#AAPL	9:30:00 AM					N/A
6/13/2019	#AAPL	11:30:00 AM					N/A
6/13/2019	#AAPL	1:30:00 PM					N/A
6/13/2019	#AAPL	3:30:00 PM					N/A
6/13/2019	#ADBE	9:30:00 AM					N/A
6/13/2019	#ADBE	11:30:00 AM					N/A
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6/13/2019	#ADBE	3:30:00 PM					N/A
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6/13/2019	#AIG	1:30:00 PM					N/A
6/13/2019	#AIG	3:30:00 PM					N/A
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6/13/2019	#AMD	1:30:00 PM					N/A
6/13/2019	#AMD	3:30:00 PM					N/A
6/13/2019	#AMZN	9:30:00 AM					N/A
6/13/2019	#AMZN	11:30:00 AM					N/A

6/13/2019	#AMZN	1:30:00 PM					N/A
6/13/2019	#AMZN	3:30:00 PM					N/A
6/13/2019	#AXP	9:30:00 AM					N/A
6/13/2019	#AXP	11:30:00 AM					N/A
6/13/2019	#AXP	1:30:00 PM					N/A
6/13/2019	#AXP	3:30:00 PM					N/A
6/13/2019	#BA	9:30:00 AM					N/A
6/13/2019	#BA	11:30:00 AM					N/A
6/13/2019	#BA	1:30:00 PM					N/A
6/13/2019	#BA	3:30:00 PM					N/A
6/13/2019	#BABA	9:30:00 AM					N/A
6/13/2019	#BABA	11:30:00 AM					N/A
6/13/2019	#BABA	1:30:00 PM					N/A
6/13/2019	#BABA	3:30:00 PM					N/A
6/13/2019	#BAC	9:30:00 AM					N/A
6/13/2019	#BAC	11:30:00 AM					N/A
6/13/2019	#BAC	1:30:00 PM					N/A
6/13/2019	#BAC	3:30:00 PM					N/A
6/13/2019	#BARC	9:30:00 AM					N/A
6/13/2019	#BARC	11:30:00 AM					N/A
6/13/2019	#BARC	1:30:00 PM					N/A
6/13/2019	#BARC	3:30:00 PM					N/A
6/13/2019	#BHP	9:30:00 AM					N/A
6/13/2019	#BHP	11:30:00 AM					N/A
6/13/2019	#BHP	1:30:00 PM					N/A
6/13/2019	#BHP	3:30:00 PM					N/A
6/13/2019	#BIDU	9:30:00 AM					N/A
6/13/2019	#BIDU	11:30:00 AM					N/A
6/13/2019	#BIDU	1:30:00 PM					N/A
6/13/2019	#BIDU	3:30:00 PM					N/A
6/13/2019	#Bitcoin	9:30:00 AM	8085.1	8117.21			N/A
6/13/2019	#Bitcoin	11:30:00 AM	8102.1	8136.95			N/A
6/13/2019	#Bitcoin	1:30:00 PM	8069.6	8092.8			N/A
6/13/2019	#Bitcoin	3:30:00 PM	8112.8	8147.4			N/A

6/13/2019	#BK	9:30:00 AM					N/A
6/13/2019	#BK	11:30:00 AM					N/A
6/13/2019	#BK	1:30:00 PM					N/A
6/13/2019	#BK	3:30:00 PM					N/A
6/13/2019	#BLT	9:30:00 AM					N/A
6/13/2019	#BLT	11:30:00 AM					N/A
6/13/2019	#BLT	1:30:00 PM					N/A
6/13/2019	#BLT	3:30:00 PM					N/A
6/13/2019	#BP	9:30:00 AM					N/A
6/13/2019	#BP	11:30:00 AM					N/A
6/13/2019	#BP	1:30:00 PM					N/A
6/13/2019	#BP	3:30:00 PM					N/A
6/13/2019	#BTA	9:30:00 AM					N/A
6/13/2019	#BTA	11:30:00 AM					N/A
6/13/2019	#BTA	1:30:00 PM					N/A
6/13/2019	#BTA	3:30:00 PM					N/A
6/13/2019	#C	9:30:00 AM					N/A
6/13/2019	#C	11:30:00 AM					N/A
6/13/2019	#C	1:30:00 PM					N/A
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6/13/2019	#XOM	9:30:00 AM					N/A
6/13/2019	#XOM	11:30:00 AM					N/A
6/13/2019	#XOM	1:30:00 PM					N/A
6/13/2019	#XOM	3:30:00 PM					N/A
6/13/2019	#YHOO	9:30:00 AM					N/A
6/13/2019	#YHOO	11:30:00 AM					N/A

6/13/2019	#YHOO	1:30:00 PM					N/A
6/13/2019	#YHOO	3:30:00 PM					N/A
6/13/2019	#ZNGA	9:30:00 AM					N/A
6/13/2019	#ZNGA	11:30:00 AM					N/A
6/13/2019	#ZNGA	1:30:00 PM					N/A
6/13/2019	#ZNGA	3:30:00 PM					N/A
6/13/2019	AUDCAD	9:30:00 AM	0.92016	0.92077			N/A
6/13/2019	AUDCAD	11:30:00 AM	0.9204	0.9211			N/A
6/13/2019	AUDCAD	1:30:00 PM	0.9189	0.91958			N/A
6/13/2019	AUDCAD	3:30:00 PM	0.92014	0.92053			N/A
6/13/2019	AUDCAD.fx	9:30:00 AM	0.92049	0.92043			N/A
6/13/2019	AUDCAD.fx	11:30:00 AM	0.92074	0.92073			N/A
6/13/2019	AUDCAD.fx	1:30:00 PM	0.91923	0.91923			N/A
6/13/2019	AUDCAD.fx	3:30:00 PM	0.92047	0.92023			N/A
6/13/2019	AUDCHF	9:30:00 AM	0.68705	0.6876			N/A
6/13/2019	AUDCHF	11:30:00 AM	0.68615	0.68683			N/A
6/13/2019	AUDCHF	1:30:00 PM	0.68579	0.68647			N/A
6/13/2019	AUDCHF	3:30:00 PM	0.68584	0.68651			N/A
6/13/2019	AUDCHF.fx	9:30:00 AM	0.68739	0.68725			N/A
6/13/2019	AUDCHF.fx	11:30:00 AM	0.68649	0.68648			N/A
6/13/2019	AUDCHF.fx	1:30:00 PM	0.68613	0.68611			N/A
6/13/2019	AUDCHF.fx	3:30:00 PM	0.68618	0.68617			N/A
6/13/2019	AUDCZK	9:30:00 AM	15.622	15.636			N/A
6/13/2019	AUDCZK	11:30:00 AM	15.63	15.647			N/A
6/13/2019	AUDCZK	1:30:00 PM	15.625	15.642			N/A
6/13/2019	AUDCZK	3:30:00 PM	15.644	15.659			N/A
6/13/2019	AUDDKK	9:30:00 AM	4.563	4.5674			N/A
6/13/2019	AUDDKK	11:30:00 AM	4.5672	4.5716			N/A
6/13/2019	AUDDKK	1:30:00 PM	4.5659	4.5706			N/A
6/13/2019	AUDDKK	3:30:00 PM	4.5716	4.5761			N/A
6/13/2019	AUDHKD	9:30:00 AM	5.4032	5.407			N/A
6/13/2019	AUDHKD	11:30:00 AM	5.4055	5.4094			N/A
6/13/2019	AUDHKD	1:30:00 PM	5.4031	5.4065			N/A
6/13/2019	AUDHKD	3:30:00 PM	5.4086	5.4124			N/A

6/13/2019	AUDHUF	9:30:00 AM	196.76	196.97			N/A
6/13/2019	AUDHUF	11:30:00 AM	196.91	197.15			N/A
6/13/2019	AUDHUF	1:30:00 PM	196.93	197.16			N/A
6/13/2019	AUDHUF	3:30:00 PM	197	197.16			N/A
6/13/2019	AUDJPY	9:30:00 AM	74.805	74.86			N/A
6/13/2019	AUDJPY	11:30:00 AM	74.857	74.927			N/A
6/13/2019	AUDJPY	1:30:00 PM	74.878	74.943			N/A
6/13/2019	AUDJPY	3:30:00 PM	74.927	74.994			N/A
6/13/2019	AUDJPY.fx	9:30:00 AM	74.839	74.824			N/A
6/13/2019	AUDJPY.fx	11:30:00 AM	74.891	74.891			N/A
6/13/2019	AUDJPY.fx	1:30:00 PM	74.912	74.908			N/A
6/13/2019	AUDJPY.fx	3:30:00 PM	74.96	74.959			N/A
6/13/2019	AUDMXN	9:30:00 AM	13.2474	13.2567			N/A
6/13/2019	AUDMXN	11:30:00 AM	13.2473	13.2564			N/A
6/13/2019	AUDMXN	1:30:00 PM	13.2347	13.2424			N/A
6/13/2019	AUDMXN	3:30:00 PM	13.2566	13.2609			N/A
6/13/2019	AUDNOK	9:30:00 AM	5.9767	5.9806			N/A
6/13/2019	AUDNOK	11:30:00 AM	5.981	5.9859			N/A
6/13/2019	AUDNOK	1:30:00 PM	5.9776	5.9826			N/A
6/13/2019	AUDNOK	3:30:00 PM	5.982	5.987			N/A
6/13/2019	AUDNOK.fx	9:30:00 AM	5.9783	5.9789			N/A
6/13/2019	AUDNOK.fx	11:30:00 AM	5.9826	5.9842			N/A
6/13/2019	AUDNOK.fx	1:30:00 PM	5.9792	5.9808			N/A
6/13/2019	AUDNOK.fx	3:30:00 PM	5.9836	5.9853			N/A
6/13/2019	AUDNZD	9:30:00 AM	1.0505	1.05139			N/A
6/13/2019	AUDNZD	11:30:00 AM	1.05123	1.05214			N/A
6/13/2019	AUDNZD	1:30:00 PM	1.05147	1.05234			N/A
6/13/2019	AUDNZD	3:30:00 PM	1.05266	1.05349			N/A
6/13/2019	AUDNZD.fx	9:30:00 AM	1.05096	1.05093			N/A
6/13/2019	AUDNZD.fx	11:30:00 AM	1.05166	1.05168			N/A
6/13/2019	AUDNZD.fx	1:30:00 PM	1.05191	1.05188			N/A
6/13/2019	AUDNZD.fx	3:30:00 PM	1.05304	1.05305			N/A
6/13/2019	AUDPLN	9:30:00 AM	2.6004	2.6036			N/A
6/13/2019	AUDPLN	11:30:00 AM	2.6055	2.6084			N/A

6/13/2019	AUDPLN	1:30:00 PM	2.6049	2.6081			N/A
6/13/2019	AUDPLN	3:30:00 PM	2.6062	2.609			N/A
6/13/2019	AUDSEK	9:30:00 AM	6.541	6.544			N/A
6/13/2019	AUDSEK	11:30:00 AM	6.5496	6.5524			N/A
6/13/2019	AUDSEK	1:30:00 PM	6.5417	6.5452			N/A
6/13/2019	AUDSEK	3:30:00 PM	6.5523	6.5549			N/A
6/13/2019	AUDSEK.fx	9:30:00 AM	6.5364	6.5485			N/A
6/13/2019	AUDSEK.fx	11:30:00 AM	6.545	6.557			N/A
6/13/2019	AUDSEK.fx	1:30:00 PM	6.537	6.5496			N/A
6/13/2019	AUDSEK.fx	3:30:00 PM	6.5475	6.5593			N/A
6/13/2019	AUDSGD	9:30:00 AM	0.9435	0.9438			N/A
6/13/2019	AUDSGD	11:30:00 AM	0.9441	0.9443			N/A
6/13/2019	AUDSGD	1:30:00 PM	0.9435	0.9438			N/A
6/13/2019	AUDSGD	3:30:00 PM	0.9444	0.9447			N/A
6/13/2019	AUDSGD.fx	9:30:00 AM	0.94361	0.94371			N/A
6/13/2019	AUDSGD.fx	11:30:00 AM	0.94416	0.94426			N/A
6/13/2019	AUDSGD.fx	1:30:00 PM	0.94363	0.94372			N/A
6/13/2019	AUDSGD.fx	3:30:00 PM	0.9445	0.94457			N/A
6/13/2019	AUDUSD	9:30:00 AM	0.69088	0.69095			N/A
6/13/2019	AUDUSD	11:30:00 AM	0.69106	0.6912			N/A
6/13/2019	AUDUSD	1:30:00 PM	0.69061	0.69074			N/A
6/13/2019	AUDUSD	3:30:00 PM	0.6914	0.69149			N/A
6/13/2019	AUDUSD.fx	9:30:00 AM	0.69093	0.69089			N/A
6/13/2019	AUDUSD.fx	11:30:00 AM	0.69112	0.69114			N/A
6/13/2019	AUDUSD.fx	1:30:00 PM	0.69066	0.69068			N/A
6/13/2019	AUDUSD.fx	3:30:00 PM	0.69145	0.69145			N/A
6/13/2019	AUDZAR	9:30:00 AM	10.2822	10.2933			N/A
6/13/2019	AUDZAR	11:30:00 AM	10.247	10.2584			N/A
6/13/2019	AUDZAR	1:30:00 PM	10.2527	10.2649			N/A
6/13/2019	AUDZAR	3:30:00 PM	10.276	10.286			N/A
6/13/2019	AUS200.i	9:30:00 AM	6543.1	6545.6			N/A
6/13/2019	AUS200.i	11:30:00 AM	6560.93	6563.63			N/A
6/13/2019	AUS200.i	1:30:00 PM	6566.53	6569.63			N/A
6/13/2019	AUS200.i	3:30:00 PM	6560.13	6562.93			N/A



6/13/2019	BCHUSD	9:30:00 AM	406.32	408.29			N/A
6/13/2019	BCHUSD	11:30:00 AM	411.48	412.91			N/A
6/13/2019	BCHUSD	1:30:00 PM	408.1	409.6			N/A
6/13/2019	BCHUSD	3:30:00 PM	410.95	412.79			N/A
6/13/2019	CADCHF	9:30:00 AM	0.74651	0.74695			N/A
6/13/2019	CADCHF	11:30:00 AM	0.7452	0.74591			N/A
6/13/2019	CADCHF	1:30:00 PM	0.74607	0.74678			N/A
6/13/2019	CADCHF	3:30:00 PM	0.74539	0.74578			N/A
6/13/2019	CADCHF.fx	9:30:00 AM	0.74684	0.7466			N/A
6/13/2019	CADCHF.fx	11:30:00 AM	0.74554	0.74556			N/A
6/13/2019	CADCHF.fx	1:30:00 PM	0.74641	0.74642			N/A
6/13/2019	CADCHF.fx	3:30:00 PM	0.74571	0.74543			N/A
6/13/2019	CADCZK	9:30:00 AM	16.974	16.989			N/A
6/13/2019	CADCZK	11:30:00 AM	16.978	16.995			N/A
6/13/2019	CADCZK	1:30:00 PM	17.001	17.018			N/A
6/13/2019	CADCZK	3:30:00 PM	17.006	17.015			N/A
6/13/2019	CADDDKK	9:30:00 AM					N/A
6/13/2019	CADDDKK	11:30:00 AM					N/A
6/13/2019	CADDDKK	1:30:00 PM					N/A
6/13/2019	CADDDKK	3:30:00 PM	4.968	4.972			N/A
6/13/2019	CADHKD	9:30:00 AM	5.8712	5.8744			N/A
6/13/2019	CADHKD	11:30:00 AM	5.8715	5.8755			N/A
6/13/2019	CADHKD	1:30:00 PM	5.8785	5.8823			N/A
6/13/2019	CADHKD	3:30:00 PM	5.8789	5.8816			N/A
6/13/2019	CADHUF	9:30:00 AM	213.84	213.95			N/A
6/13/2019	CADHUF	11:30:00 AM	213.93	214.09			N/A
6/13/2019	CADHUF	1:30:00 PM	214.3	214.47			N/A
6/13/2019	CADHUF	3:30:00 PM	214.15	214.25			N/A
6/13/2019	CADJPY	9:30:00 AM	81.278	81.32			N/A
6/13/2019	CADJPY	11:30:00 AM	81.303	81.369			N/A
6/13/2019	CADJPY	1:30:00 PM	81.459	81.527			N/A
6/13/2019	CADJPY	3:30:00 PM	81.429	81.466			N/A
6/13/2019	CADJPY.fx	9:30:00 AM	81.311	81.284			N/A
6/13/2019	CADJPY.fx	11:30:00 AM	81.336	81.335			N/A

6/13/2019	CADJPY.fx	1:30:00 PM	81.492	81.492			N/A
6/13/2019	CADJPY.fx	3:30:00 PM	81.463	81.431			N/A
6/13/2019	CADMXN	9:30:00 AM	14.3939	14.4039			N/A
6/13/2019	CADMXN	11:30:00 AM	14.3884	14.3999			N/A
6/13/2019	CADMXN	1:30:00 PM	14.3984	14.4088			N/A
6/13/2019	CADMXN	3:30:00 PM	14.405	14.4144			N/A
6/13/2019	CADNOK	9:30:00 AM	6.4921	6.4963			N/A
6/13/2019	CADNOK	11:30:00 AM	6.4947	6.4996			N/A
6/13/2019	CADNOK	1:30:00 PM	6.5021	6.5063			N/A
6/13/2019	CADNOK	3:30:00 PM	6.4985	6.5027			N/A
6/13/2019	CADPLN	9:30:00 AM	2.8251	2.8269			N/A
6/13/2019	CADPLN	11:30:00 AM	2.8297	2.8313			N/A
6/13/2019	CADPLN	1:30:00 PM	2.8342	2.836			N/A
6/13/2019	CADPLN	3:30:00 PM	2.8312	2.833			N/A
6/13/2019	CADSEK	9:30:00 AM	7.1042	7.1071			N/A
6/13/2019	CADSEK	11:30:00 AM	7.1113	7.1152			N/A
6/13/2019	CADSEK	1:30:00 PM	7.1151	7.1185			N/A
6/13/2019	CADSEK	3:30:00 PM	7.1183	7.1202			N/A
6/13/2019	CADSGD	9:30:00 AM	1.0243	1.0246			N/A
6/13/2019	CADSGD	11:30:00 AM	1.0248	1.0251			N/A
6/13/2019	CADSGD	1:30:00 PM	1.0259	1.0262			N/A
6/13/2019	CADSGD	3:30:00 PM	1.026	1.0262			N/A
6/13/2019	CADZAR	9:30:00 AM	11.1721	11.1853			N/A
6/13/2019	CADZAR	11:30:00 AM	11.1299	11.1431			N/A
6/13/2019	CADZAR	1:30:00 PM	11.1544	11.1691			N/A
6/13/2019	CADZAR	3:30:00 PM	11.1693	11.1784			N/A
6/13/2019	CHFCZK	9:30:00 AM	22.74	22.747			N/A
6/13/2019	CHFCZK	11:30:00 AM	22.778	22.794			N/A
6/13/2019	CHFCZK	1:30:00 PM	22.782	22.798			N/A
6/13/2019	CHFCZK	3:30:00 PM	22.808	22.826			N/A
6/13/2019	CHFDKK	9:30:00 AM	6.641	6.643			N/A
6/13/2019	CHFDKK	11:30:00 AM	6.655	6.657			N/A
6/13/2019	CHFDKK	1:30:00 PM					N/A
6/13/2019	CHFDKK	3:30:00 PM	6.664	6.667			N/A

6/13/2019	CHFDKK.fx	9:30:00 AM	6.6392	6.6444			N/A
6/13/2019	CHFDKK.fx	11:30:00 AM	6.6533	6.6587			N/A
6/13/2019	CHFDKK.fx	1:30:00 PM	6.6548	6.6611			N/A
6/13/2019	CHFDKK.fx	3:30:00 PM	6.6627	6.6691			N/A
6/13/2019	CHFHKD	9:30:00 AM	7.8645	7.8673			N/A
6/13/2019	CHFHKD	11:30:00 AM	7.8766	7.8805			N/A
6/13/2019	CHFHKD	1:30:00 PM	7.877	7.8803			N/A
6/13/2019	CHFHKD	3:30:00 PM	7.8859	7.8888			N/A
6/13/2019	CHFHUF	9:30:00 AM	286.32	286.68			N/A
6/13/2019	CHFHUF	11:30:00 AM	286.9	287.27			N/A
6/13/2019	CHFHUF	1:30:00 PM	287.05	287.43			N/A
6/13/2019	CHFHUF	3:30:00 PM	287.17	287.45			N/A
6/13/2019	CHFJPY	9:30:00 AM	108.849	108.905			N/A
6/13/2019	CHFJPY	11:30:00 AM	109.068	109.122			N/A
6/13/2019	CHFJPY	1:30:00 PM	109.143	109.213			N/A
6/13/2019	CHFJPY	3:30:00 PM	109.212	109.277			N/A
6/13/2019	CHFJPY.fx	9:30:00 AM	108.882	108.87			N/A
6/13/2019	CHFJPY.fx	11:30:00 AM	109.101	109.089			N/A
6/13/2019	CHFJPY.fx	1:30:00 PM	109.176	109.178			N/A
6/13/2019	CHFJPY.fx	3:30:00 PM	109.243	109.244			N/A
6/13/2019	CHFMXN	9:30:00 AM	19.2802	19.2903			N/A
6/13/2019	CHFMXN	11:30:00 AM	19.3005	19.316			N/A
6/13/2019	CHFMXN	1:30:00 PM	19.2923	19.3047			N/A
6/13/2019	CHFMXN	3:30:00 PM	19.3236	19.3315			N/A
6/13/2019	CHFNOK	9:30:00 AM	8.6958	8.7005			N/A
6/13/2019	CHFNOK	11:30:00 AM	8.7123	8.72			N/A
6/13/2019	CHFNOK	1:30:00 PM	8.7122	8.7193			N/A
6/13/2019	CHFNOK	3:30:00 PM	8.7179	8.7256			N/A
6/13/2019	CHFNOK.fx	9:30:00 AM	8.69923	8.6971			N/A
6/13/2019	CHFNOK.fx	11:30:00 AM	8.71584	8.71651			N/A
6/13/2019	CHFNOK.fx	1:30:00 PM	8.7156	8.71589			N/A
6/13/2019	CHFNOK.fx	3:30:00 PM	8.72135	8.72212			N/A
6/13/2019	CHFPLN	9:30:00 AM	3.7843	3.7866			N/A
6/13/2019	CHFPLN	11:30:00 AM	3.7964	3.7987			N/A

6/13/2019	CHFPLN	1:30:00 PM	3.7974	3.8003			N/A
6/13/2019	CHFPLN	3:30:00 PM	3.7986	3.8016			N/A
6/13/2019	CHFPLN.fx	9:30:00 AM	3.78195	3.78894			N/A
6/13/2019	CHFPLN.fx	11:30:00 AM	3.794	3.80095			N/A
6/13/2019	CHFPLN.fx	1:30:00 PM	3.79496	3.80255			N/A
6/13/2019	CHFPLN.fx	3:30:00 PM	3.79614	3.80393			N/A
6/13/2019	CHFSEK	9:30:00 AM	9.5157	9.5187			N/A
6/13/2019	CHFSEK	11:30:00 AM	9.5396	9.5445			N/A
6/13/2019	CHFSEK	1:30:00 PM	9.5331	9.5375			N/A
6/13/2019	CHFSEK	3:30:00 PM	9.5479	9.551			N/A
6/13/2019	CHFSGD	9:30:00 AM	1.3729	1.373			N/A
6/13/2019	CHFSGD	11:30:00 AM	1.3754	1.3757			N/A
6/13/2019	CHFSGD	1:30:00 PM	1.3752	1.3756			N/A
6/13/2019	CHFSGD	3:30:00 PM	1.3764	1.3767			N/A
6/13/2019	CHFSGD.fx	9:30:00 AM	1.37303	1.37285			N/A
6/13/2019	CHFSGD.fx	11:30:00 AM	1.37553	1.37537			N/A
6/13/2019	CHFSGD.fx	1:30:00 PM	1.37536	1.37537			N/A
6/13/2019	CHFSGD.fx	3:30:00 PM	1.37653	1.37643			N/A
6/13/2019	CHFZAR	9:30:00 AM	14.9694	14.9728			N/A
6/13/2019	CHFZAR	11:30:00 AM	14.933	14.9435			N/A
6/13/2019	CHFZAR	1:30:00 PM	14.95	14.9611			N/A
6/13/2019	CHFZAR	3:30:00 PM	14.9835	14.9915			N/A
6/13/2019	CZKJPY	9:30:00 AM	4.787	4.791			N/A
6/13/2019	CZKJPY	11:30:00 AM					N/A
6/13/2019	CZKJPY	1:30:00 PM					N/A
6/13/2019	CZKJPY	3:30:00 PM	4.787	4.791			N/A
6/13/2019	DAX30.i	9:30:00 AM	12081.03	12078.78			N/A
6/13/2019	DAX30.i	11:30:00 AM	12170.03	12162.53			N/A
6/13/2019	DAX30.i	1:30:00 PM	12174.03	12170.03			N/A
6/13/2019	DAX30.i	3:30:00 PM	12165.53	12161.53			N/A
6/13/2019	DJ30.i	9:30:00 AM					N/A
6/13/2019	DJ30.i	11:30:00 AM					N/A
6/13/2019	DJ30.i	1:30:00 PM					N/A
6/13/2019	DJ30.i	3:30:00 PM					N/A

6/13/2019	DKKJPY	9:30:00 AM					N/A
6/13/2019	DKKJPY	11:30:00 AM					N/A
6/13/2019	DKKJPY	1:30:00 PM					N/A
6/13/2019	DKKJPY	3:30:00 PM	16.4	16.41			N/A
6/13/2019	EURAUD	9:30:00 AM	1.63499	1.63529			N/A
6/13/2019	EURAUD	11:30:00 AM	1.63361	1.63395			N/A
6/13/2019	EURAUD	1:30:00 PM	1.63392	1.63433			N/A
6/13/2019	EURAUD	3:30:00 PM	1.6319	1.63224			N/A
6/13/2019	EURAUD.fx	9:30:00 AM	1.63519	1.63506			N/A
6/13/2019	EURAUD.fx	11:30:00 AM	1.63383	1.63373			N/A
6/13/2019	EURAUD.fx	1:30:00 PM	1.63412	1.63412			N/A
6/13/2019	EURAUD.fx	3:30:00 PM	1.63209	1.63206			N/A
6/13/2019	EURCAD	9:30:00 AM	1.50535	1.50588			N/A
6/13/2019	EURCAD	11:30:00 AM	1.50443	1.50519			N/A
6/13/2019	EURCAD	1:30:00 PM	1.50225	1.50312			N/A
6/13/2019	EURCAD	3:30:00 PM	1.50246	1.50267			N/A
6/13/2019	EURCAD.fx	9:30:00 AM	1.50577	1.50545			N/A
6/13/2019	EURCAD.fx	11:30:00 AM	1.50487	1.50477			N/A
6/13/2019	EURCAD.fx	1:30:00 PM	1.50266	1.50269			N/A
6/13/2019	EURCAD.fx	3:30:00 PM	1.50288	1.50229			N/A
6/13/2019	EURCHF	9:30:00 AM	1.12432	1.12427			N/A
6/13/2019	EURCHF	11:30:00 AM	1.12195	1.12196			N/A
6/13/2019	EURCHF	1:30:00 PM	1.12156	1.12168			N/A
6/13/2019	EURCHF	3:30:00 PM	1.1202	1.12037			N/A
6/13/2019	EURCHF.fx	9:30:00 AM	1.12437	1.12421			N/A
6/13/2019	EURCHF.fx	11:30:00 AM	1.12201	1.12191			N/A
6/13/2019	EURCHF.fx	1:30:00 PM	1.12161	1.12162			N/A
6/13/2019	EURCHF.fx	3:30:00 PM	1.12026	1.1203			N/A
6/13/2019	EURCZK	9:30:00 AM	25.551	25.583			N/A
6/13/2019	EURCZK	11:30:00 AM	25.542	25.582			N/A
6/13/2019	EURCZK	1:30:00 PM	25.539	25.578			N/A
6/13/2019	EURCZK	3:30:00 PM	25.538	25.578			N/A
6/13/2019	EURDKK	9:30:00 AM	7.4667	7.468			N/A
6/13/2019	EURDKK	11:30:00 AM	7.4667	7.468			N/A

6/13/2019	EURDKK	1:30:00 PM	7.4659	7.4672			N/A
6/13/2019	EURDKK	3:30:00 PM	7.4659	7.467			N/A
6/13/2019	EURGBP	9:30:00 AM	0.89043	0.89039			N/A
6/13/2019	EURGBP	11:30:00 AM	0.8913	0.89105			N/A
6/13/2019	EURGBP	1:30:00 PM	0.89074	0.89085			N/A
6/13/2019	EURGBP	3:30:00 PM	0.88895	0.88846			N/A
6/13/2019	EURGBP.fx	9:30:00 AM	0.89047	0.89034			N/A
6/13/2019	EURGBP.fx	11:30:00 AM	0.89133	0.891			N/A
6/13/2019	EURGBP.fx	1:30:00 PM	0.89077	0.89081			N/A
6/13/2019	EURGBP.fx	3:30:00 PM	0.88898	0.88842			N/A
6/13/2019	EURHKD	9:30:00 AM	8.8412	8.8464			N/A
6/13/2019	EURHKD	11:30:00 AM	8.8375	8.8416			N/A
6/13/2019	EURHKD	1:30:00 PM	8.8349	8.8402			N/A
6/13/2019	EURHKD	3:30:00 PM	8.8347	8.839			N/A
6/13/2019	EURHKD.fx	9:30:00 AM	8.84415	8.84349			N/A
6/13/2019	EURHKD.fx	11:30:00 AM	8.84028	8.83877			N/A
6/13/2019	EURHKD.fx	1:30:00 PM	8.83764	8.83737			N/A
6/13/2019	EURHKD.fx	3:30:00 PM	8.83745	8.83641			N/A
6/13/2019	EURHUF	9:30:00 AM	321.84	322.54			N/A
6/13/2019	EURHUF	11:30:00 AM	321.81	322.42			N/A
6/13/2019	EURHUF	1:30:00 PM	321.85	322.51			N/A
6/13/2019	EURHUF	3:30:00 PM	321.69	322.31			N/A
6/13/2019	EURHUF.fx	9:30:00 AM	322.111	322.27			N/A
6/13/2019	EURHUF.fx	11:30:00 AM	322.091	322.248			N/A
6/13/2019	EURHUF.fx	1:30:00 PM	322.169	322.348			N/A
6/13/2019	EURHUF.fx	3:30:00 PM	321.976	322.12			N/A
6/13/2019	EURJPY	9:30:00 AM	122.407	122.405			N/A
6/13/2019	EURJPY	11:30:00 AM	122.397	122.4			N/A
6/13/2019	EURJPY	1:30:00 PM	122.454	122.462			N/A
6/13/2019	EURJPY	3:30:00 PM	122.383	122.389			N/A
6/13/2019	EURJPY.fx	9:30:00 AM	122.409	122.4			N/A
6/13/2019	EURJPY.fx	11:30:00 AM	122.399	122.396			N/A
6/13/2019	EURJPY.fx	1:30:00 PM	122.457	122.458			N/A
6/13/2019	EURJPY.fx	3:30:00 PM	122.386	122.385			N/A

6/13/2019	EURMXN	9:30:00 AM	21.6766	21.6914			N/A
6/13/2019	EURMXN	11:30:00 AM	21.6565	21.674			N/A
6/13/2019	EURMXN	1:30:00 PM	21.6408	21.6574			N/A
6/13/2019	EURMXN	3:30:00 PM	21.6492	21.6628			N/A
6/13/2019	EURMXN.fx	9:30:00 AM	21.6846	21.6827			N/A
6/13/2019	EURMXN.fx	11:30:00 AM	21.665	21.6655			N/A
6/13/2019	EURMXN.fx	1:30:00 PM	21.6498	21.6489			N/A
6/13/2019	EURMXN.fx	3:30:00 PM	21.6583	21.6544			N/A
6/13/2019	EURNOK	9:30:00 AM	9.7741	9.7834			N/A
6/13/2019	EURNOK	11:30:00 AM	9.773	9.7849			N/A
6/13/2019	EURNOK	1:30:00 PM	9.77	9.7816			N/A
6/13/2019	EURNOK	3:30:00 PM	9.7652	9.7767			N/A
6/13/2019	EURNOK.fx	9:30:00 AM	9.77922	9.77808			N/A
6/13/2019	EURNOK.fx	11:30:00 AM	9.77847	9.77919			N/A
6/13/2019	EURNOK.fx	1:30:00 PM	9.77541	9.7763			N/A
6/13/2019	EURNOK.fx	3:30:00 PM	9.77052	9.77137			N/A
6/13/2019	EURNZD	9:30:00 AM	1.71865	1.71947			N/A
6/13/2019	EURNZD	11:30:00 AM	1.71854	1.7192			N/A
6/13/2019	EURNZD	1:30:00 PM	1.71918	1.72002			N/A
6/13/2019	EURNZD	3:30:00 PM	1.71888	1.71968			N/A
6/13/2019	EURNZD.fx	9:30:00 AM	1.71908	1.71903			N/A
6/13/2019	EURNZD.fx	11:30:00 AM	1.71895	1.71876			N/A
6/13/2019	EURNZD.fx	1:30:00 PM	1.71959	1.71957			N/A
6/13/2019	EURNZD.fx	3:30:00 PM	1.71928	1.71926			N/A
6/13/2019	EURPLN	9:30:00 AM	4.2544	4.2576			N/A
6/13/2019	EURPLN	11:30:00 AM	4.2591	4.2618			N/A
6/13/2019	EURPLN	1:30:00 PM	4.2592	4.2624			N/A
6/13/2019	EURPLN	3:30:00 PM	4.2557	4.2573			N/A
6/13/2019	EURPLN.fx	9:30:00 AM	4.25387	4.25814			N/A
6/13/2019	EURPLN.fx	11:30:00 AM	4.25852	4.2624			N/A
6/13/2019	EURPLN.fx	1:30:00 PM	4.25864	4.26292			N/A
6/13/2019	EURPLN.fx	3:30:00 PM	4.25483	4.25932			N/A
6/13/2019	EURRUB	9:30:00 AM					N/A
6/13/2019	EURRUB	11:30:00 AM	72.603	73.038			N/A

6/13/2019	EURRUB	1:30:00 PM	72.587	73.028			N/A
6/13/2019	EURRUB	3:30:00 PM	72.584	73.017			N/A
6/13/2019	EURSEK	9:30:00 AM	10.6992	10.7032			N/A
6/13/2019	EURSEK	11:30:00 AM	10.7042	10.7092			N/A
6/13/2019	EURSEK	1:30:00 PM	10.6943	10.6989			N/A
6/13/2019	EURSEK	3:30:00 PM	10.698	10.7018			N/A
6/13/2019	EURSEK.fx	9:30:00 AM	10.70086	10.70155			N/A
6/13/2019	EURSEK.fx	11:30:00 AM	10.70588	10.70755			N/A
6/13/2019	EURSEK.fx	1:30:00 PM	10.69606	10.69712			N/A
6/13/2019	EURSEK.fx	3:30:00 PM	10.6997	10.70026			N/A
6/13/2019	EURSGD	9:30:00 AM	1.5432	1.544			N/A
6/13/2019	EURSGD	11:30:00 AM	1.5429	1.5436			N/A
6/13/2019	EURSGD	1:30:00 PM	1.5423	1.5431			N/A
6/13/2019	EURSGD	3:30:00 PM	1.5418	1.5424			N/A
6/13/2019	EURSGD.fx	9:30:00 AM	1.54354	1.54359			N/A
6/13/2019	EURSGD.fx	11:30:00 AM	1.54331	1.54317			N/A
6/13/2019	EURSGD.fx	1:30:00 PM	1.54261	1.54267			N/A
6/13/2019	EURSGD.fx	3:30:00 PM	1.54213	1.54201			N/A
6/13/2019	EURUSD	9:30:00 AM	1.12998	1.13003			N/A
6/13/2019	EURUSD	11:30:00 AM	1.12944	1.12939			N/A
6/13/2019	EURUSD	1:30:00 PM	1.12883	1.12894			N/A
6/13/2019	EURUSD	3:30:00 PM	1.12873	1.12868		12100	N/A
6/13/2019	EURUSD.fx	9:30:00 AM	1.13019	1.13013			N/A
6/13/2019	EURUSD.fx	11:30:00 AM	1.12964	1.12948			N/A
6/13/2019	EURUSD.fx	1:30:00 PM	1.12903	1.12903			N/A
6/13/2019	EURUSD.fx	3:30:00 PM	1.12894	1.12878			N/A
6/13/2019	EURZAR	9:30:00 AM	16.8336	16.8425			N/A
6/13/2019	EURZAR	11:30:00 AM	16.7578	16.7724			N/A
6/13/2019	EURZAR	1:30:00 PM	16.7713	16.7886			N/A
6/13/2019	EURZAR	3:30:00 PM	16.7927	16.8033			N/A
6/13/2019	EURZAR.fx	9:30:00 AM	16.83203	16.84364			N/A
6/13/2019	EURZAR.fx	11:30:00 AM	16.75735	16.77315			N/A
6/13/2019	EURZAR.fx	1:30:00 PM	16.77036	16.78841			N/A
6/13/2019	EURZAR.fx	3:30:00 PM	16.79167	16.8045			N/A



6/13/2019	GBPAUD	9:30:00 AM	1.83695	1.83742			N/A
6/13/2019	GBPAUD	11:30:00 AM	1.83392	1.83412			N/A
6/13/2019	GBPAUD	1:30:00 PM	1.83475	1.83548			N/A
6/13/2019	GBPAUD	3:30:00 PM	1.83736	1.83701			N/A
6/13/2019	GBPAUD.fx	9:30:00 AM	1.83734	1.837			N/A
6/13/2019	GBPAUD.fx	11:30:00 AM	1.83433	1.83373			N/A
6/13/2019	GBPAUD.fx	1:30:00 PM	1.83513	1.8352			N/A
6/13/2019	GBPAUD.fx	3:30:00 PM	1.83773	1.83661			N/A
6/13/2019	GBPCAD	9:30:00 AM	1.69083	1.69121			N/A
6/13/2019	GBPCAD	11:30:00 AM	1.68854	1.68877			N/A
6/13/2019	GBPCAD	1:30:00 PM	1.68652	1.68734			N/A
6/13/2019	GBPCAD	3:30:00 PM	1.69075	1.69098			N/A
6/13/2019	GBPCAD.fx	9:30:00 AM	1.69123	1.69081			N/A
6/13/2019	GBPCAD.fx	11:30:00 AM	1.68894	1.68835			N/A
6/13/2019	GBPCAD.fx	1:30:00 PM	1.6869	1.68694			N/A
6/13/2019	GBPCAD.fx	3:30:00 PM	1.69116	1.69058			N/A
6/13/2019	GBPCHF	9:30:00 AM	1.26261	1.26271			N/A
6/13/2019	GBPCHF	11:30:00 AM	1.25896	1.25898			N/A
6/13/2019	GBPCHF	1:30:00 PM	1.25892	1.25934			N/A
6/13/2019	GBPCHF	3:30:00 PM	1.26081	1.26042			N/A
6/13/2019	GBPCHF.fx	9:30:00 AM	1.2628	1.26251			N/A
6/13/2019	GBPCHF.fx	11:30:00 AM	1.25915	1.25876			N/A
6/13/2019	GBPCHF.fx	1:30:00 PM	1.25911	1.25914			N/A
6/13/2019	GBPCHF.fx	3:30:00 PM	1.26099	1.26024			N/A
6/13/2019	GBPCZK	9:30:00 AM	28.705	28.723			N/A
6/13/2019	GBPCZK	11:30:00 AM	28.676	28.688			N/A
6/13/2019	GBPCZK	1:30:00 PM	28.68	28.703			N/A
6/13/2019	GBPCZK	3:30:00 PM	28.755	28.76			N/A
6/13/2019	GBPDKK	9:30:00 AM	8.383	8.392			N/A
6/13/2019	GBPDKK	11:30:00 AM	8.376	8.384			N/A
6/13/2019	GBPDKK	1:30:00 PM	8.378	8.389			N/A
6/13/2019	GBPDKK	3:30:00 PM	8.4	8.407			N/A
6/13/2019	GBPDKK.fx	9:30:00 AM	8.3808	8.3925			N/A
6/13/2019	GBPDKK.fx	11:30:00 AM	8.3749	8.3846			N/A

6/13/2019	GBPDKK.fx	1:30:00 PM	8.3768	8.3898			N/A
6/13/2019	GBPDKK.fx	3:30:00 PM	8.3993	8.4068			N/A
6/13/2019	GBPHKD	9:30:00 AM	9.9283	9.9314			N/A
6/13/2019	GBPHKD	11:30:00 AM	9.9159	9.9184			N/A
6/13/2019	GBPHKD	1:30:00 PM	9.9161	9.9213			N/A
6/13/2019	GBPHKD	3:30:00 PM	9.9408	9.9413			N/A
6/13/2019	GBPHUF	9:30:00 AM	361.48	361.85			N/A
6/13/2019	GBPHUF	11:30:00 AM	361.19	361.53			N/A
6/13/2019	GBPHUF	1:30:00 PM	361.37	361.86			N/A
6/13/2019	GBPHUF	3:30:00 PM	362	362.31			N/A
6/13/2019	GBPJPY	9:30:00 AM	137.464	137.47			N/A
6/13/2019	GBPJPY	11:30:00 AM	137.362	137.347			N/A
6/13/2019	GBPJPY	1:30:00 PM	137.454	137.489			N/A
6/13/2019	GBPJPY	3:30:00 PM	137.741	137.685			N/A
6/13/2019	GBPJPY.fx	9:30:00 AM	137.483	137.45			N/A
6/13/2019	GBPJPY.fx	11:30:00 AM	137.382	137.327			N/A
6/13/2019	GBPJPY.fx	1:30:00 PM	137.473	137.469			N/A
6/13/2019	GBPJPY.fx	3:30:00 PM	137.759	137.666			N/A
6/13/2019	GBPMXN	9:30:00 AM	24.3423	24.3525			N/A
6/13/2019	GBPMXN	11:30:00 AM	24.3015	24.3074			N/A
6/13/2019	GBPMXN	1:30:00 PM	24.2889	24.3007			N/A
6/13/2019	GBPMXN	3:30:00 PM	24.3614	24.3629			N/A
6/13/2019	GBPNOK	9:30:00 AM	10.9794	10.9873			N/A
6/13/2019	GBPNOK	11:30:00 AM	10.9694	10.9772			N/A
6/13/2019	GBPNOK	1:30:00 PM	10.9683	10.9798			N/A
6/13/2019	GBPNOK	3:30:00 PM	10.9927	10.9976			N/A
6/13/2019	GBPNOK.fx	9:30:00 AM	10.98411	10.9826			N/A
6/13/2019	GBPNOK.fx	11:30:00 AM	10.97441	10.97192			N/A
6/13/2019	GBPNOK.fx	1:30:00 PM	10.97339	10.97481			N/A
6/13/2019	GBPNOK.fx	3:30:00 PM	10.99736	10.9927			N/A
6/13/2019	GBPNZD	9:30:00 AM	1.93048	1.93098			N/A
6/13/2019	GBPNZD	11:30:00 AM	1.92873	1.92891			N/A
6/13/2019	GBPNZD	1:30:00 PM	1.93004	1.93076			N/A
6/13/2019	GBPNZD	3:30:00 PM	1.93478	1.93444			N/A

6/13/2019	GBPNZD.fx	9:30:00 AM	1.93085	1.9306			N/A
6/13/2019	GBPNZD.fx	11:30:00 AM	1.9291	1.92856			N/A
6/13/2019	GBPNZD.fx	1:30:00 PM	1.93039	1.9304			N/A
6/13/2019	GBPNZD.fx	3:30:00 PM	1.93512	1.93405			N/A
6/13/2019	GBPPLN	9:30:00 AM	4.7793	4.7806			N/A
6/13/2019	GBPPLN	11:30:00 AM	4.7808	4.7809			N/A
6/13/2019	GBPPLN	1:30:00 PM	4.7821	4.7841			N/A
6/13/2019	GBPPLN	3:30:00 PM	4.7908	4.7898			N/A
6/13/2019	GBPPLN.fx	9:30:00 AM	4.77733	4.78263			N/A
6/13/2019	GBPPLN.fx	11:30:00 AM	4.77858	4.78306			N/A
6/13/2019	GBPPLN.fx	1:30:00 PM	4.78011	4.78604			N/A
6/13/2019	GBPPLN.fx	3:30:00 PM	4.7885	4.79202			N/A
6/13/2019	GBPSEK	9:30:00 AM	12.0155	12.0226			N/A
6/13/2019	GBPSEK	11:30:00 AM	12.0117	12.0169			N/A
6/13/2019	GBPSEK	1:30:00 PM	12.0033	12.0131			N/A
6/13/2019	GBPSEK	3:30:00 PM	12.0385	12.0408			N/A
6/13/2019	GBPSEK.fx	9:30:00 AM	12.01199	12.02623			N/A
6/13/2019	GBPSEK.fx	11:30:00 AM	12.00797	12.02039			N/A
6/13/2019	GBPSEK.fx	1:30:00 PM	11.99987	12.01663			N/A
6/13/2019	GBPSEK.fx	3:30:00 PM	12.03467	12.04452			N/A
6/13/2019	GBPSGD	9:30:00 AM	1.7334	1.7338			N/A
6/13/2019	GBPSGD	11:30:00 AM	1.7316	1.7319			N/A
6/13/2019	GBPSGD	1:30:00 PM	1.7314	1.7322			N/A
6/13/2019	GBPSGD	3:30:00 PM	1.7354	1.7351			N/A
6/13/2019	GBPSGD.fx	9:30:00 AM	1.73156	1.73563			N/A
6/13/2019	GBPSGD.fx	11:30:00 AM	1.72973	1.73374			N/A
6/13/2019	GBPSGD.fx	1:30:00 PM	1.72956	1.73398			N/A
6/13/2019	GBPSGD.fx	3:30:00 PM	1.73355	1.73687			N/A
6/13/2019	GBPUSD	9:30:00 AM	1.26939	1.26923			N/A
6/13/2019	GBPUSD	11:30:00 AM	1.26773	1.2674			N/A
6/13/2019	GBPUSD	1:30:00 PM	1.26743	1.2675			N/A
6/13/2019	GBPUSD	3:30:00 PM	1.27065	1.2699			N/A
6/13/2019	GBPUSD.fx	9:30:00 AM	1.26944	1.26918			N/A
6/13/2019	GBPUSD.fx	11:30:00 AM	1.26778	1.26734			N/A

6/13/2019	GBPUSD.fx	1:30:00 PM	1.26748	1.26744			N/A
6/13/2019	GBPUSD.fx	3:30:00 PM	1.2707	1.26985			N/A
6/13/2019	GBPZAR	9:30:00 AM	18.9027	18.9187			N/A
6/13/2019	GBPZAR	11:30:00 AM	18.803	18.8201			N/A
6/13/2019	GBPZAR	1:30:00 PM	18.8237	18.8477			N/A
6/13/2019	GBPZAR	3:30:00 PM	18.897	18.9044			N/A
6/13/2019	GBPZAR.fx	9:30:00 AM	18.9083	18.9119			N/A
6/13/2019	GBPZAR.fx	11:30:00 AM	18.8111	18.8126			N/A
6/13/2019	GBPZAR.fx	1:30:00 PM	18.8308	18.8404			N/A
6/13/2019	GBPZAR.fx	3:30:00 PM	18.9043	18.8977			N/A
6/13/2019	GOLD	9:30:00 AM	1337.39	1337.47			N/A
6/13/2019	GOLD	11:30:00 AM	1337.44	1337.6			N/A
6/13/2019	GOLD	1:30:00 PM	1336.32	1336.56			N/A
6/13/2019	GOLD	3:30:00 PM	1336.92	1336.86			N/A
6/13/2019	HKDJPY	9:30:00 AM	13.84	13.85			N/A
6/13/2019	HKDJPY	11:30:00 AM	13.85	13.86			N/A
6/13/2019	HKDJPY	1:30:00 PM	13.85	13.87			N/A
6/13/2019	HKDJPY	3:30:00 PM	13.85	13.86			N/A
6/13/2019	HKDJPY.fx	9:30:00 AM	13.837	13.843			N/A
6/13/2019	HKDJPY.fx	11:30:00 AM	13.843	13.849			N/A
6/13/2019	HKDJPY.fx	1:30:00 PM	13.852	13.859			N/A
6/13/2019	HKDJPY.fx	3:30:00 PM	13.845	13.851			N/A
6/13/2019	HUFJPY	9:30:00 AM	0.3802	0.3805			N/A
6/13/2019	HUFJPY	11:30:00 AM	0.3803	0.3806			N/A
6/13/2019	HUFJPY	1:30:00 PM	0.3802	0.3805			N/A
6/13/2019	HUFJPY	3:30:00 PM	0.3804	0.3807			N/A
6/13/2019	JP225.i	9:30:00 AM	20980.33	20995.33			N/A
6/13/2019	JP225.i	11:30:00 AM	21050.33	21065.33			N/A
6/13/2019	JP225.i	1:30:00 PM	21084.5	21095.33			N/A
6/13/2019	JP225.i	3:30:00 PM	21065.33	21077.83			N/A
6/13/2019	MXNJPY	9:30:00 AM	5.65	5.65			N/A
6/13/2019	MXNJPY	11:30:00 AM	5.65	5.66			N/A
6/13/2019	MXNJPY	1:30:00 PM	5.66	5.67			N/A
6/13/2019	MXNJPY	3:30:00 PM					N/A

6/13/2019	NASDAQ.i	9:30:00 AM					N/A
6/13/2019	NASDAQ.i	11:30:00 AM					N/A
6/13/2019	NASDAQ.i	1:30:00 PM					N/A
6/13/2019	NASDAQ.i	3:30:00 PM					N/A
6/13/2019	NOKJPY	9:30:00 AM	12.51	12.53			N/A
6/13/2019	NOKJPY	11:30:00 AM	12.51	12.54			N/A
6/13/2019	NOKJPY	1:30:00 PM	12.52	12.55			N/A
6/13/2019	NOKJPY	3:30:00 PM	12.52	12.55			N/A
6/13/2019	NOKJPY.fx	9:30:00 AM	12.516	12.519			N/A
6/13/2019	NOKJPY.fx	11:30:00 AM	12.513	12.52			N/A
6/13/2019	NOKJPY.fx	1:30:00 PM	12.523	12.53			N/A
6/13/2019	NOKJPY.fx	3:30:00 PM	12.522	12.529			N/A
6/13/2019	NZDCAD	9:30:00 AM	0.87555	0.87614			N/A
6/13/2019	NZDCAD	11:30:00 AM	0.87517	0.87583			N/A
6/13/2019	NZDCAD	1:30:00 PM	0.87351	0.8742			N/A
6/13/2019	NZDCAD	3:30:00 PM	0.87382	0.87409			N/A
6/13/2019	NZDCAD.fx	9:30:00 AM	0.87588	0.8758			N/A
6/13/2019	NZDCAD.fx	11:30:00 AM	0.87551	0.87549			N/A
6/13/2019	NZDCAD.fx	1:30:00 PM	0.87385	0.87386			N/A
6/13/2019	NZDCAD.fx	3:30:00 PM	0.87414	0.87382			N/A
6/13/2019	NZDCHF	9:30:00 AM	0.65371	0.65432			N/A
6/13/2019	NZDCHF	11:30:00 AM	0.65243	0.65307			N/A
6/13/2019	NZDCHF	1:30:00 PM	0.65189	0.65262			N/A
6/13/2019	NZDCHF	3:30:00 PM	0.65125	0.65197			N/A
6/13/2019	NZDCHF.fx	9:30:00 AM	0.65405	0.65396			N/A
6/13/2019	NZDCHF.fx	11:30:00 AM	0.65277	0.65271			N/A
6/13/2019	NZDCHF.fx	1:30:00 PM	0.65223	0.65226			N/A
6/13/2019	NZDCHF.fx	3:30:00 PM	0.65158	0.65162			N/A
6/13/2019	NZDCZK	9:30:00 AM	14.867	14.876			N/A
6/13/2019	NZDCZK	11:30:00 AM	14.863	14.875			N/A
6/13/2019	NZDCZK	1:30:00 PM	14.856	14.868			N/A
6/13/2019	NZDCZK	3:30:00 PM	14.858	14.87			N/A
6/13/2019	NZDDKK	9:30:00 AM	4.342	4.346			N/A
6/13/2019	NZDDKK	11:30:00 AM					N/A

6/13/2019	NZDDKK	1:30:00 PM	4.34	4.344			N/A
6/13/2019	NZDDKK	3:30:00 PM	4.341	4.345			N/A
6/13/2019	NZDHKD	9:30:00 AM	5.1411	5.144			N/A
6/13/2019	NZDHKD	11:30:00 AM	5.1403	5.1428			N/A
6/13/2019	NZDHKD	1:30:00 PM	5.1362	5.1387			N/A
6/13/2019	NZDHKD	3:30:00 PM	5.1364	5.1393			N/A
6/13/2019	NZDHUF	9:30:00 AM	187.18	187.45			N/A
6/13/2019	NZDHUF	11:30:00 AM	187.2	187.48			N/A
6/13/2019	NZDHUF	1:30:00 PM	187.16	187.45			N/A
6/13/2019	NZDHUF	3:30:00 PM	187.05	187.28			N/A
6/13/2019	NZDJPY	9:30:00 AM	71.174	71.235			N/A
6/13/2019	NZDJPY	11:30:00 AM	71.178	71.246			N/A
6/13/2019	NZDJPY	1:30:00 PM	71.178	71.25			N/A
6/13/2019	NZDJPY	3:30:00 PM	71.15	71.218			N/A
6/13/2019	NZDJPY.fx	9:30:00 AM	71.206	71.201			N/A
6/13/2019	NZDJPY.fx	11:30:00 AM	71.209	71.213			N/A
6/13/2019	NZDJPY.fx	1:30:00 PM	71.209	71.217			N/A
6/13/2019	NZDJPY.fx	3:30:00 PM	71.181	71.187			N/A
6/13/2019	NZDMXN	9:30:00 AM	12.6063	12.6112			N/A
6/13/2019	NZDMXN	11:30:00 AM	12.5972	12.602			N/A
6/13/2019	NZDMXN	1:30:00 PM	12.5816	12.586			N/A
6/13/2019	NZDMXN	3:30:00 PM	12.5893	12.5904			N/A
6/13/2019	NZDNOK	9:30:00 AM	5.6848	5.6877			N/A
6/13/2019	NZDNOK	11:30:00 AM	5.6854	5.6892			N/A
6/13/2019	NZDNOK	1:30:00 PM	5.6809	5.684			N/A
6/13/2019	NZDNOK	3:30:00 PM	5.6788	5.6801			N/A
6/13/2019	NZDPLN	9:30:00 AM	2.4741	2.4754			N/A
6/13/2019	NZDPLN	11:30:00 AM	2.4768	2.4782			N/A
6/13/2019	NZDPLN	1:30:00 PM	2.4762	2.4775			N/A
6/13/2019	NZDPLN	3:30:00 PM	2.4739	2.4753			N/A
6/13/2019	NZDSEK	9:30:00 AM	6.2186	6.2256			N/A
6/13/2019	NZDSEK	11:30:00 AM	6.223	6.2297			N/A
6/13/2019	NZDSEK	1:30:00 PM	6.2143	6.2208			N/A
6/13/2019	NZDSEK	3:30:00 PM	6.2175	6.2236			N/A

6/13/2019	NZDSGD	9:30:00 AM	0.8976	0.8983			N/A
6/13/2019	NZDSGD	11:30:00 AM	0.8975	0.8982			N/A
6/13/2019	NZDSGD	1:30:00 PM	0.8968	0.8973			N/A
6/13/2019	NZDSGD	3:30:00 PM	0.8967	0.8972			N/A
6/13/2019	NZDSGD.fx	9:30:00 AM	0.89762	0.89823			N/A
6/13/2019	NZDSGD.fx	11:30:00 AM	0.89752	0.89811			N/A
6/13/2019	NZDSGD.fx	1:30:00 PM	0.89682	0.89738			N/A
6/13/2019	NZDSGD.fx	3:30:00 PM	0.89665	0.8972			N/A
6/13/2019	NZDUSD	9:30:00 AM	0.65732	0.65743			N/A
6/13/2019	NZDUSD	11:30:00 AM	0.65705	0.65718			N/A
6/13/2019	NZDUSD	1:30:00 PM	0.65647	0.6566			N/A
6/13/2019	NZDUSD	3:30:00 PM	0.65651	0.65655	100	100	N/A
6/13/2019	NZDUSD.fx	9:30:00 AM	0.65739	0.65743			N/A
6/13/2019	NZDUSD.fx	11:30:00 AM	0.65712	0.65719			N/A
6/13/2019	NZDUSD.fx	1:30:00 PM	0.65655	0.65661			N/A
6/13/2019	NZDUSD.fx	3:30:00 PM	0.65658	0.65658			N/A
6/13/2019	NZDZAR	9:30:00 AM	9.7826	9.7946			N/A
6/13/2019	NZDZAR	11:30:00 AM	9.7418	9.7546			N/A
6/13/2019	NZDZAR	1:30:00 PM	9.744	9.7593			N/A
6/13/2019	NZDZAR	3:30:00 PM	9.756	9.7689			N/A
6/13/2019	SEKJPY	9:30:00 AM	11.44	11.45			N/A
6/13/2019	SEKJPY	11:30:00 AM					N/A
6/13/2019	SEKJPY	1:30:00 PM	11.45	11.46			N/A
6/13/2019	SEKJPY	3:30:00 PM	11.44	11.45			N/A
6/13/2019	SEKJPY.fx	9:30:00 AM	11.429	11.447			N/A
6/13/2019	SEKJPY.fx	11:30:00 AM	11.423	11.441			N/A
6/13/2019	SEKJPY.fx	1:30:00 PM	11.439	11.457			N/A
6/13/2019	SEKJPY.fx	3:30:00 PM	11.429	11.447			N/A
6/13/2019	SGDJPY	9:30:00 AM	79.3	79.3			N/A
6/13/2019	SGDJPY	11:30:00 AM	79.31	79.31			N/A
6/13/2019	SGDJPY	1:30:00 PM	79.36	79.38			N/A
6/13/2019	SGDJPY	3:30:00 PM	79.33	79.36			N/A
6/13/2019	SILVER	9:30:00 AM	14.64	15.02			N/A
6/13/2019	SILVER	11:30:00 AM	14.64	15.02			N/A

6/13/2019	SILVER	1:30:00 PM	14.62	15			N/A
6/13/2019	SILVER	3:30:00 PM	14.63	15			N/A
6/13/2019	SPX500.i	9:30:00 AM	2875.37	2875.42			N/A
6/13/2019	SPX500.i	11:30:00 AM	2886.87	2886.92			N/A
6/13/2019	SPX500.i	1:30:00 PM	2888.37	2889.17			N/A
6/13/2019	SPX500.i	3:30:00 PM	2887.62	2887.67			N/A
6/13/2019	UK100.i	9:30:00 AM	7344.07	7344.82			N/A
6/13/2019	UK100.i	11:30:00 AM	7381.24	7377.15			N/A
6/13/2019	UK100.i	1:30:00 PM	7383.82	7384.24			N/A
6/13/2019	UK100.i	3:30:00 PM	7370.57	7369.99			N/A
6/13/2019	USDCAD	9:30:00 AM	1.33234	1.33225			N/A
6/13/2019	USDCAD	11:30:00 AM	1.33233	1.33235			N/A
6/13/2019	USDCAD	1:30:00 PM	1.33095	1.33109			N/A
6/13/2019	USDCAD	3:30:00 PM	1.33135	1.33101			N/A
6/13/2019	USDCAD.fx	9:30:00 AM	1.33237	1.33221			N/A
6/13/2019	USDCAD.fx	11:30:00 AM	1.33236	1.33231			N/A
6/13/2019	USDCAD.fx	1:30:00 PM	1.331	1.33106			N/A
6/13/2019	USDCAD.fx	3:30:00 PM	1.33138	1.33097			N/A
6/13/2019	USDCHF	9:30:00 AM	0.99485	0.99475			N/A
6/13/2019	USDCHF	11:30:00 AM	0.99325	0.99327			N/A
6/13/2019	USDCHF	1:30:00 PM	0.99339	0.99348			N/A
6/13/2019	USDCHF	3:30:00 PM	0.99243	0.99239			N/A
6/13/2019	USDCHF.fx	9:30:00 AM	0.9949	0.99469			N/A
6/13/2019	USDCHF.fx	11:30:00 AM	0.9933	0.99319			N/A
6/13/2019	USDCHF.fx	1:30:00 PM	0.99344	0.99342			N/A
6/13/2019	USDCHF.fx	3:30:00 PM	0.99247	0.99233			N/A
6/13/2019	USDCZK	9:30:00 AM	22.632	22.653			N/A
6/13/2019	USDCZK	11:30:00 AM	22.638	22.658			N/A
6/13/2019	USDCZK	1:30:00 PM	22.645	22.669			N/A
6/13/2019	USDCZK	3:30:00 PM	22.651	22.67			N/A
6/13/2019	USDCZK.fx	9:30:00 AM	22.6406	22.6441			N/A
6/13/2019	USDCZK.fx	11:30:00 AM	22.6471	22.649			N/A
6/13/2019	USDCZK.fx	1:30:00 PM	22.6544	22.6595			N/A
6/13/2019	USDCZK.fx	3:30:00 PM	22.6587	22.6612			N/A



6/13/2019	USDDKK	9:30:00 AM	6.6063	6.6099			N/A
6/13/2019	USDDKK	11:30:00 AM	6.6103	6.6135			N/A
6/13/2019	USDDKK	1:30:00 PM	6.6131	6.617			N/A
6/13/2019	USDDKK	3:30:00 PM	6.6142	6.6176			N/A
6/13/2019	USDDKK.fx	9:30:00 AM	6.60678	6.60792			N/A
6/13/2019	USDDKK.fx	11:30:00 AM	6.61089	6.61148			N/A
6/13/2019	USDDKK.fx	1:30:00 PM	6.61352	6.61498			N/A
6/13/2019	USDDKK.fx	3:30:00 PM	6.61501	6.61562			N/A
6/13/2019	USDHKD	9:30:00 AM	7.8251	7.8248			N/A
6/13/2019	USDHKD	11:30:00 AM	7.8256	7.8256			N/A
6/13/2019	USDHKD	1:30:00 PM	7.8273	7.8273			N/A
6/13/2019	USDHKD	3:30:00 PM	7.8283	7.8278			N/A
6/13/2019	USDHKD.fx	9:30:00 AM	7.825	7.82463			N/A
6/13/2019	USDHKD.fx	11:30:00 AM	7.82556	7.82569			N/A
6/13/2019	USDHKD.fx	1:30:00 PM	7.82727	7.82774			N/A
6/13/2019	USDHKD.fx	3:30:00 PM	7.82814	7.82822			N/A
6/13/2019	USDHUF	9:30:00 AM	284.87	285.29			N/A
6/13/2019	USDHUF	11:30:00 AM	285	285.44			N/A
6/13/2019	USDHUF	1:30:00 PM	285.19	285.66			N/A
6/13/2019	USDHUF	3:30:00 PM	285.1	285.5			N/A
6/13/2019	USDHUF.fx	9:30:00 AM	285.063	285.116			N/A
6/13/2019	USDHUF.fx	11:30:00 AM	285.205	285.235			N/A
6/13/2019	USDHUF.fx	1:30:00 PM	285.384	285.456			N/A
6/13/2019	USDHUF.fx	3:30:00 PM	285.297	285.295			N/A
6/13/2019	USDINR	9:30:00 AM	64.35	74.34			N/A
6/13/2019	USDINR	11:30:00 AM					N/A
6/13/2019	USDINR	1:30:00 PM					N/A
6/13/2019	USDINR	3:30:00 PM					N/A
6/13/2019	USDJPY	9:30:00 AM	108.309	108.302			N/A
6/13/2019	USDJPY	11:30:00 AM	108.359	108.364			N/A
6/13/2019	USDJPY	1:30:00 PM	108.456	108.463			N/A
6/13/2019	USDJPY	3:30:00 PM	108.412	108.412			N/A
6/13/2019	USDJPY.fx	9:30:00 AM	108.315	108.294			N/A
6/13/2019	USDJPY.fx	11:30:00 AM	108.365	108.356			N/A

6/13/2019	USDJPY.fx	1:30:00 PM	108.462	108.456			N/A
6/13/2019	USDJPY.fx	3:30:00 PM	108.417	108.405			N/A
6/13/2019	USDMXN	9:30:00 AM	19.186	19.189			N/A
6/13/2019	USDMXN	11:30:00 AM	19.178	19.183			N/A
6/13/2019	USDMXN	1:30:00 PM	19.172	19.177			N/A
6/13/2019	USDMXN	3:30:00 PM	19.181	19.187			N/A
6/13/2019	USDMXN.f	9:30:00 AM					N/A
6/13/2019	USDMXN.f	11:30:00 AM					N/A
6/13/2019	USDMXN.f	1:30:00 PM					N/A
6/13/2019	USDMXN.f	3:30:00 PM					N/A
6/13/2019	USDNOK	9:30:00 AM	8.6502	8.6565			N/A
6/13/2019	USDNOK	11:30:00 AM	8.6537	8.6615			N/A
6/13/2019	USDNOK	1:30:00 PM	8.6546	8.6628			N/A
6/13/2019	USDNOK	3:30:00 PM	8.6516	8.6592			N/A
6/13/2019	USDNOK.fx	9:30:00 AM	8.65408	8.65194			N/A
6/13/2019	USDNOK.fx	11:30:00 AM	8.65774	8.6571			N/A
6/13/2019	USDNOK.fx	1:30:00 PM	8.65857	8.65831			N/A
6/13/2019	USDNOK.fx	3:30:00 PM	8.65546	8.65491			N/A
6/13/2019	USDPLN	9:30:00 AM	3.7652	3.7667			N/A
6/13/2019	USDPLN	11:30:00 AM	3.7716	3.7725			N/A
6/13/2019	USDPLN	1:30:00 PM	3.7729	3.7746			N/A
6/13/2019	USDPLN	3:30:00 PM	3.7709	3.7717			N/A
6/13/2019	USDPLN.fx	9:30:00 AM	3.76436	3.76742			N/A
6/13/2019	USDPLN.fx	11:30:00 AM	3.77085	3.77324			N/A
6/13/2019	USDPLN.fx	1:30:00 PM	3.77217	3.77531			N/A
6/13/2019	USDPLN.fx	3:30:00 PM	3.77	3.77241			N/A
6/13/2019	USDRUB	9:30:00 AM					N/A
6/13/2019	USDRUB	11:30:00 AM	64.396	64.792			N/A
6/13/2019	USDRUB	1:30:00 PM	64.414	64.81			N/A
6/13/2019	USDRUB	3:30:00 PM	64.42	64.816			N/A
6/13/2019	USDSEK	9:30:00 AM	9.4671	9.4707			N/A
6/13/2019	USDSEK	11:30:00 AM	9.4767	9.4799			N/A
6/13/2019	USDSEK	1:30:00 PM	9.4714	9.4759			N/A
6/13/2019	USDSEK	3:30:00 PM	9.4758	9.4793			N/A

6/13/2019	USDSEK.fx	9:30:00 AM	9.4695	9.46913			N/A
6/13/2019	USDSEK.fx	11:30:00 AM	9.47925	9.47803			N/A
6/13/2019	USDSEK.fx	1:30:00 PM	9.47388	9.47396			N/A
6/13/2019	USDSEK.fx	3:30:00 PM	9.47849	9.47749			N/A
6/13/2019	USDSGD	9:30:00 AM	1.3656	1.3659			N/A
6/13/2019	USDSGD	11:30:00 AM	1.3661	1.3663			N/A
6/13/2019	USDSGD	1:30:00 PM	1.3661	1.3666			N/A
6/13/2019	USDSGD	3:30:00 PM	1.3659	1.3662			N/A
6/13/2019	USDSGD.fx	9:30:00 AM	1.36561	1.36602			N/A
6/13/2019	USDSGD.fx	11:30:00 AM	1.36603	1.3664			N/A
6/13/2019	USDSGD.fx	1:30:00 PM	1.36609	1.36658			N/A
6/13/2019	USDSGD.fx	3:30:00 PM	1.36579	1.3663			N/A
6/13/2019	USDZAR	9:30:00 AM	14.8926	14.9021			N/A
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6/13/2019	USDZAR.fx	3:30:00 PM					N/A
6/13/2019	XAUUSD	9:30:00 AM	1337.4	1337.46			N/A
6/13/2019	XAUUSD	11:30:00 AM	1337.44	1337.59			N/A
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6/14/2019	#POT	1:30:00 PM					N/A
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6/14/2019	#QCOM	3:30:00 PM					N/A
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6/14/2019	#QQQ	1:30:00 PM					N/A
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6/14/2019	#Ripple	11:30:00 AM	0.3978	0.4023			N/A
6/14/2019	#Ripple	1:30:00 PM	0.3957	0.4006			N/A
6/14/2019	#Ripple	3:30:00 PM	0.3915	0.3943			N/A
6/14/2019	#S	9:30:00 AM					N/A
6/14/2019	#S	11:30:00 AM					N/A
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6/14/2019	#S	3:30:00 PM					N/A
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6/14/2019	#TRI	1:30:00 PM					N/A
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6/14/2019	#TRV	11:30:00 AM					N/A
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6/14/2019	#TSCO	3:30:00 PM					N/A
6/14/2019	#TSLA	9:30:00 AM					N/A
6/14/2019	#TSLA	11:30:00 AM					N/A
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6/14/2019	#UTX	3:30:00 PM					N/A
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6/14/2019	#V	1:30:00 PM					N/A
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6/14/2019	#VOD	9:30:00 AM					N/A
6/14/2019	#VOD	11:30:00 AM					N/A
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6/14/2019	#WMT	3:30:00 PM					N/A
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6/14/2019	#XOM	1:30:00 PM					N/A
6/14/2019	#XOM	3:30:00 PM					N/A
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6/14/2019	#YHOO	11:30:00 AM					N/A
6/14/2019	#YHOO	1:30:00 PM					N/A
6/14/2019	#YHOO	3:30:00 PM					N/A
6/14/2019	#ZNGA	9:30:00 AM					N/A
6/14/2019	#ZNGA	11:30:00 AM					N/A
6/14/2019	#ZNGA	1:30:00 PM					N/A
6/14/2019	#ZNGA	3:30:00 PM					N/A



6/14/2019	AUDCAD	9:30:00 AM	0.91982	0.92053			N/A
6/14/2019	AUDCAD	11:30:00 AM	0.91956	0.92016			N/A
6/14/2019	AUDCAD	1:30:00 PM	0.91967	0.92035			N/A
6/14/2019	AUDCAD	3:30:00 PM	0.91953	0.91987			N/A
6/14/2019	AUDCAD.fx	9:30:00 AM	0.92015	0.92018			N/A
6/14/2019	AUDCAD.fx	11:30:00 AM	0.91989	0.91981			N/A
6/14/2019	AUDCAD.fx	1:30:00 PM	0.92	0.92			N/A
6/14/2019	AUDCAD.fx	3:30:00 PM	0.91974	0.91953			N/A
6/14/2019	AUDCHF	9:30:00 AM	0.68507	0.68575			N/A
6/14/2019	AUDCHF	11:30:00 AM	0.68558	0.68617			N/A
6/14/2019	AUDCHF	1:30:00 PM	0.68631	0.68703			N/A
6/14/2019	AUDCHF	3:30:00 PM	0.68714	0.68722			N/A
6/14/2019	AUDCHF.fx	9:30:00 AM	0.68542	0.6854			N/A
6/14/2019	AUDCHF.fx	11:30:00 AM	0.68593	0.68582			N/A
6/14/2019	AUDCHF.fx	1:30:00 PM	0.68665	0.68667			N/A
6/14/2019	AUDCHF.fx	3:30:00 PM	0.68746	0.68686			N/A
6/14/2019	AUDCZK	9:30:00 AM	15.609	15.626			N/A
6/14/2019	AUDCZK	11:30:00 AM	15.597	15.615			N/A
6/14/2019	AUDCZK	1:30:00 PM	15.618	15.633			N/A
6/14/2019	AUDCZK	3:30:00 PM	15.624	15.623			N/A
6/14/2019	AUDDKK	9:30:00 AM	4.5656	4.5701			N/A
6/14/2019	AUDDKK	11:30:00 AM	4.5623	4.567			N/A
6/14/2019	AUDDKK	1:30:00 PM	4.5694	4.5742			N/A
6/14/2019	AUDDKK	3:30:00 PM	4.5757	4.576			N/A
6/14/2019	AUDHKD	9:30:00 AM	5.3967	5.3999			N/A
6/14/2019	AUDHKD	11:30:00 AM	5.3925	5.3964			N/A
6/14/2019	AUDHKD	1:30:00 PM	5.3967	5.4002			N/A
6/14/2019	AUDHKD	3:30:00 PM	5.3973	5.3956			N/A
6/14/2019	AUDHUF	9:30:00 AM	196.78	197.01			N/A
6/14/2019	AUDHUF	11:30:00 AM	196.56	196.8			N/A
6/14/2019	AUDHUF	1:30:00 PM	196.7	196.86			N/A
6/14/2019	AUDHUF	3:30:00 PM	196.76	196.84			N/A
6/14/2019	AUDJPY	9:30:00 AM	74.666	74.729			N/A
6/14/2019	AUDJPY	11:30:00 AM	74.577	74.644			N/A

6/14/2019	AUDJPY	1:30:00 PM	74.603	74.671			N/A
6/14/2019	AUDJPY	3:30:00 PM	74.708	74.704			N/A
6/14/2019	AUDJPY.fx	9:30:00 AM	74.7	74.694			N/A
6/14/2019	AUDJPY.fx	11:30:00 AM	74.611	74.608			N/A
6/14/2019	AUDJPY.fx	1:30:00 PM	74.637	74.636			N/A
6/14/2019	AUDJPY.fx	3:30:00 PM	74.74	74.68			N/A
6/14/2019	AUDMXN	9:30:00 AM	13.2313	13.2409			N/A
6/14/2019	AUDMXN	11:30:00 AM	13.2491	13.2595			N/A
6/14/2019	AUDMXN	1:30:00 PM	13.2329	13.2416			N/A
6/14/2019	AUDMXN	3:30:00 PM	13.2035	13.2098			N/A
6/14/2019	AUDNOK	9:30:00 AM	5.9877	5.9928			N/A
6/14/2019	AUDNOK	11:30:00 AM	5.9791	5.9828			N/A
6/14/2019	AUDNOK	1:30:00 PM	5.989	5.9941			N/A
6/14/2019	AUDNOK	3:30:00 PM	5.9879	5.9879			N/A
6/14/2019	AUDNOK.fx	9:30:00 AM	5.9892	5.9911			N/A
6/14/2019	AUDNOK.fx	11:30:00 AM	5.9807	5.9811			N/A
6/14/2019	AUDNOK.fx	1:30:00 PM	5.9906	5.9924			N/A
6/14/2019	AUDNOK.fx	3:30:00 PM	5.9894	5.9885			N/A
6/14/2019	AUDNZD	9:30:00 AM	1.05503	1.05596			N/A
6/14/2019	AUDNZD	11:30:00 AM	1.05426	1.05515			N/A
6/14/2019	AUDNZD	1:30:00 PM	1.05507	1.05601			N/A
6/14/2019	AUDNZD	3:30:00 PM	1.05613	1.05657			N/A
6/14/2019	AUDNZD.fx	9:30:00 AM	1.05547	1.05551			N/A
6/14/2019	AUDNZD.fx	11:30:00 AM	1.0547	1.0547			N/A
6/14/2019	AUDNZD.fx	1:30:00 PM	1.05551	1.05557			N/A
6/14/2019	AUDNZD.fx	3:30:00 PM	1.05655	1.05615			N/A
6/14/2019	AUDPLN	9:30:00 AM	2.6011	2.6045			N/A
6/14/2019	AUDPLN	11:30:00 AM	2.5998	2.603			N/A
6/14/2019	AUDPLN	1:30:00 PM	2.6025	2.6057			N/A
6/14/2019	AUDPLN	3:30:00 PM	2.6058	2.6062			N/A
6/14/2019	AUDSEK	9:30:00 AM	6.5442	6.5472			N/A
6/14/2019	AUDSEK	11:30:00 AM	6.5069	6.5096			N/A
6/14/2019	AUDSEK	1:30:00 PM	6.517	6.5203			N/A
6/14/2019	AUDSEK	3:30:00 PM	6.5192	6.5163			N/A

6/14/2019	AUDSEK.fx	9:30:00 AM	6.5397	6.5517			N/A
6/14/2019	AUDSEK.fx	11:30:00 AM	6.5023	6.514			N/A
6/14/2019	AUDSEK.fx	1:30:00 PM	6.5125	6.5247			N/A
6/14/2019	AUDSEK.fx	3:30:00 PM	6.5148	6.5227			N/A
6/14/2019	AUDSGD	9:30:00 AM	0.9431	0.9434			N/A
6/14/2019	AUDSGD	11:30:00 AM	0.9426	0.9429			N/A
6/14/2019	AUDSGD	1:30:00 PM	0.9432	0.9434			N/A
6/14/2019	AUDSGD	3:30:00 PM	0.9433	0.9433			N/A
6/14/2019	AUDSGD.fx	9:30:00 AM	0.94323	0.94332			N/A
6/14/2019	AUDSGD.fx	11:30:00 AM	0.94276	0.94278			N/A
6/14/2019	AUDSGD.fx	1:30:00 PM	0.94326	0.94334			N/A
6/14/2019	AUDSGD.fx	3:30:00 PM	0.94339	0.94318			N/A
6/14/2019	AUDUSD	9:30:00 AM	0.68964	0.68974			N/A
6/14/2019	AUDUSD	11:30:00 AM	0.68948	0.68962			N/A
6/14/2019	AUDUSD	1:30:00 PM	0.68986	0.68997			N/A
6/14/2019	AUDUSD	3:30:00 PM	0.68986	0.68942			N/A
6/14/2019	AUDUSD.fx	9:30:00 AM	0.68969	0.68969			N/A
6/14/2019	AUDUSD.fx	11:30:00 AM	0.68954	0.68956			N/A
6/14/2019	AUDUSD.fx	1:30:00 PM	0.68991	0.68991			N/A
6/14/2019	AUDUSD.fx	3:30:00 PM	0.68989	0.68937			N/A
6/14/2019	AUDZAR	9:30:00 AM	10.2262	10.2363			N/A
6/14/2019	AUDZAR	11:30:00 AM	10.2258	10.2409			N/A
6/14/2019	AUDZAR	1:30:00 PM	10.2118	10.2249			N/A
6/14/2019	AUDZAR	3:30:00 PM	10.1829	10.1835			N/A
6/14/2019	AUS200.i	9:30:00 AM	6552.2	6553.7			N/A
6/14/2019	AUS200.i	11:30:00 AM	6538.16	6540.66			N/A
6/14/2019	AUS200.i	1:30:00 PM	6529.16	6533.16			N/A
6/14/2019	AUS200.i	3:30:00 PM	6538.66	6539.56			N/A
6/14/2019	BCHUSD	9:30:00 AM	418.11	419.94			N/A
6/14/2019	BCHUSD	11:30:00 AM	424.8	424.9			N/A
6/14/2019	BCHUSD	1:30:00 PM	421.15	423.1			N/A
6/14/2019	BCHUSD	3:30:00 PM	421	422.78			N/A
6/14/2019	CADCHF	9:30:00 AM	0.74455	0.74521			N/A
6/14/2019	CADCHF	11:30:00 AM	0.74533	0.74588			N/A

6/14/2019	CADCHF	1:30:00 PM	0.74598	0.74669			N/A
6/14/2019	CADCHF	3:30:00 PM	0.74724	0.7469			N/A
6/14/2019	CADCHF.fx	9:30:00 AM	0.74488	0.74486			N/A
6/14/2019	CADCHF.fx	11:30:00 AM	0.74568	0.74553			N/A
6/14/2019	CADCHF.fx	1:30:00 PM	0.74632	0.74634			N/A
6/14/2019	CADCHF.fx	3:30:00 PM	0.74758	0.74669	1000	1000	N/A
6/14/2019	CADCZK	9:30:00 AM	16.966	16.984			N/A
6/14/2019	CADCZK	11:30:00 AM	16.961	16.977			N/A
6/14/2019	CADCZK	1:30:00 PM	16.98	16.995			N/A
6/14/2019	CADCZK	3:30:00 PM	16.991	16.987			N/A
6/14/2019	CADDKK	9:30:00 AM					N/A
6/14/2019	CADDKK	11:30:00 AM	4.961	4.965			N/A
6/14/2019	CADDKK	1:30:00 PM	4.968	4.97			N/A
6/14/2019	CADDKK	3:30:00 PM	4.973	4.973			N/A
6/14/2019	CADHKD	9:30:00 AM	5.866	5.8694			N/A
6/14/2019	CADHKD	11:30:00 AM	5.8638	5.8668			N/A
6/14/2019	CADHKD	1:30:00 PM	5.8672	5.8707			N/A
6/14/2019	CADHKD	3:30:00 PM	5.868	5.8689			N/A
6/14/2019	CADHUF	9:30:00 AM	213.92	214.09			N/A
6/14/2019	CADHUF	11:30:00 AM	213.78	213.93			N/A
6/14/2019	CADHUF	1:30:00 PM	213.87	213.95			N/A
6/14/2019	CADHUF	3:30:00 PM	214.02	213.96			N/A
6/14/2019	CADJPY	9:30:00 AM	81.144	81.209			N/A
6/14/2019	CADJPY	11:30:00 AM	81.077	81.142			N/A
6/14/2019	CADJPY	1:30:00 PM	81.091	81.159			N/A
6/14/2019	CADJPY	3:30:00 PM	81.242	81.201			N/A
6/14/2019	CADJPY.fx	9:30:00 AM	81.177	81.174			N/A
6/14/2019	CADJPY.fx	11:30:00 AM	81.111	81.107			N/A
6/14/2019	CADJPY.fx	1:30:00 PM	81.124	81.124			N/A
6/14/2019	CADJPY.fx	3:30:00 PM	81.274	81.178			N/A
6/14/2019	CADMXN	9:30:00 AM	14.3806	14.393			N/A
6/14/2019	CADMXN	11:30:00 AM	14.4051	14.4174			N/A
6/14/2019	CADMXN	1:30:00 PM	14.3851	14.3961			N/A
6/14/2019	CADMXN	3:30:00 PM	14.3582	14.3667			N/A

6/14/2019	CADNOK	9:30:00 AM	6.5062	6.5111			N/A
6/14/2019	CADNOK	11:30:00 AM	6.4995	6.5035			N/A
6/14/2019	CADNOK	1:30:00 PM	6.5086	6.5107			N/A
6/14/2019	CADNOK	3:30:00 PM	6.5055	6.5051			N/A
6/14/2019	CADPLN	9:30:00 AM	2.828	2.8296			N/A
6/14/2019	CADPLN	11:30:00 AM	2.8263	2.8281			N/A
6/14/2019	CADPLN	1:30:00 PM	2.8293	2.8308			N/A
6/14/2019	CADPLN	3:30:00 PM	2.8311	2.8314		12700	N/A
6/14/2019	CADSEK	9:30:00 AM	7.1109	7.1144			N/A
6/14/2019	CADSEK	11:30:00 AM	7.0721	7.076			N/A
6/14/2019	CADSEK	1:30:00 PM	7.0821	7.0851			N/A
6/14/2019	CADSEK	3:30:00 PM	7.0843	7.0802			N/A
6/14/2019	CADSGD	9:30:00 AM	1.0245	1.0248			N/A
6/14/2019	CADSGD	11:30:00 AM	1.0243	1.0246			N/A
6/14/2019	CADSGD	1:30:00 PM	1.0246	1.0249			N/A
6/14/2019	CADSGD	3:30:00 PM	1.0249	1.0252			N/A
6/14/2019	CADZAR	9:30:00 AM	11.1143	11.1269			N/A
6/14/2019	CADZAR	11:30:00 AM	11.1179	11.135			N/A
6/14/2019	CADZAR	1:30:00 PM	11.1015	11.1161			N/A
6/14/2019	CADZAR	3:30:00 PM	11.0737	11.0761			N/A
6/14/2019	CHFCZK	9:30:00 AM	22.782	22.798			N/A
6/14/2019	CHFCZK	11:30:00 AM	22.752	22.765			N/A
6/14/2019	CHFCZK	1:30:00 PM	22.755	22.768			N/A
6/14/2019	CHFCZK	3:30:00 PM	22.747	22.749			N/A
6/14/2019	CHFDKK	9:30:00 AM	6.663	6.666			N/A
6/14/2019	CHFDKK	11:30:00 AM	6.654	6.657			N/A
6/14/2019	CHFDKK	1:30:00 PM	6.657	6.66			N/A
6/14/2019	CHFDKK	3:30:00 PM	6.659	6.66			N/A
6/14/2019	CHFDKK.fx	9:30:00 AM	6.6611	6.6667			N/A
6/14/2019	CHFDKK.fx	11:30:00 AM	6.6527	6.6567			N/A
6/14/2019	CHFDKK.fx	1:30:00 PM	6.6552	6.6608			N/A
6/14/2019	CHFDKK.fx	3:30:00 PM	6.6575	6.6616			N/A
6/14/2019	CHFHKD	9:30:00 AM	7.8751	7.879			N/A
6/14/2019	CHFHKD	11:30:00 AM	7.8649	7.8674			N/A

6/14/2019	CHFHKD	1:30:00 PM	7.8623	7.8654			N/A
6/14/2019	CHFHKD	3:30:00 PM	7.8635	7.8549			N/A
6/14/2019	CHFHUF	9:30:00 AM	287.12	287.5			N/A
6/14/2019	CHFHUF	11:30:00 AM	286.65	286.97			N/A
6/14/2019	CHFHUF	1:30:00 PM	286.5	286.77			N/A
6/14/2019	CHFHUF	3:30:00 PM	286.43	286.72			N/A
6/14/2019	CHFJPY	9:30:00 AM	108.946	109.007			N/A
6/14/2019	CHFJPY	11:30:00 AM	108.759	108.814			N/A
6/14/2019	CHFJPY	1:30:00 PM	108.661	108.729			N/A
6/14/2019	CHFJPY	3:30:00 PM	108.7	108.733			N/A
6/14/2019	CHFJPY.fx	9:30:00 AM	108.979	108.972			N/A
6/14/2019	CHFJPY.fx	11:30:00 AM	108.791	108.772			N/A
6/14/2019	CHFJPY.fx	1:30:00 PM	108.693	108.695			N/A
6/14/2019	CHFJPY.fx	3:30:00 PM	108.731	108.704			N/A
6/14/2019	CHFMXN	9:30:00 AM	19.3079	19.3228			N/A
6/14/2019	CHFMXN	11:30:00 AM	19.3213	19.3341			N/A
6/14/2019	CHFMXN	1:30:00 PM	19.2746	19.2898			N/A
6/14/2019	CHFMXN	3:30:00 PM	19.2311	19.2271			N/A
6/14/2019	CHFNOK	9:30:00 AM	8.7359	8.7431			N/A
6/14/2019	CHFNOK	11:30:00 AM	8.7182	8.7233			N/A
6/14/2019	CHFNOK	1:30:00 PM	8.7217	8.7289			N/A
6/14/2019	CHFNOK	3:30:00 PM	8.712	8.7164			N/A
6/14/2019	CHFNOK.fx	9:30:00 AM	8.73926	8.73952			N/A
6/14/2019	CHFNOK.fx	11:30:00 AM	8.72167	8.71984			N/A
6/14/2019	CHFNOK.fx	1:30:00 PM	8.72526	8.72531			N/A
6/14/2019	CHFNOK.fx	3:30:00 PM	8.71485	8.71303			N/A
6/14/2019	CHFPLN	9:30:00 AM	3.7958	3.7987			N/A
6/14/2019	CHFPLN	11:30:00 AM	3.7915	3.7938			N/A
6/14/2019	CHFPLN	1:30:00 PM	3.791	3.7939			N/A
6/14/2019	CHFPLN	3:30:00 PM	3.7923	3.7939			N/A
6/14/2019	CHFPLN.fx	9:30:00 AM	3.79326	3.80106			N/A
6/14/2019	CHFPLN.fx	11:30:00 AM	3.78924	3.79599			N/A
6/14/2019	CHFPLN.fx	1:30:00 PM	3.78866	3.79616			N/A
6/14/2019	CHFPLN.fx	3:30:00 PM	3.78942	3.79663			N/A

6/14/2019	CHFSEK	9:30:00 AM	9.5461	9.551			N/A
6/14/2019	CHFSEK	11:30:00 AM	9.4868	9.4899			N/A
6/14/2019	CHFSEK	1:30:00 PM	9.49	9.4928			N/A
6/14/2019	CHFSEK	3:30:00 PM	9.4828	9.4823			N/A
6/14/2019	CHFSGD	9:30:00 AM	1.3761	1.3764			N/A
6/14/2019	CHFSGD	11:30:00 AM	1.3745	1.3748			N/A
6/14/2019	CHFSGD	1:30:00 PM	1.3736	1.374			N/A
6/14/2019	CHFSGD	3:30:00 PM	1.3739	1.3726			N/A
6/14/2019	CHFSGD.fx	9:30:00 AM	1.37623	1.37617			N/A
6/14/2019	CHFSGD.fx	11:30:00 AM	1.37465	1.37447			N/A
6/14/2019	CHFSGD.fx	1:30:00 PM	1.37373	1.37377			N/A
6/14/2019	CHFSGD.fx	3:30:00 PM	1.3734	1.3724			N/A
6/14/2019	CHFZAR	9:30:00 AM	14.9249	14.9334			N/A
6/14/2019	CHFZAR	11:30:00 AM	14.9165	14.9296			N/A
6/14/2019	CHFZAR	1:30:00 PM	14.8799	14.8908			N/A
6/14/2019	CHFZAR	3:30:00 PM	14.831	14.8217			N/A
6/14/2019	CZKJPY	9:30:00 AM					N/A
6/14/2019	CZKJPY	11:30:00 AM					N/A
6/14/2019	CZKJPY	1:30:00 PM	4.775	4.778			N/A
6/14/2019	CZKJPY	3:30:00 PM	4.78	4.78			N/A
6/14/2019	DAX30.i	9:30:00 AM	12156.44	12155.19			N/A
6/14/2019	DAX30.i	11:30:00 AM	12089.19	12083.69			N/A
6/14/2019	DAX30.i	1:30:00 PM	12053.94	12049.69			N/A
6/14/2019	DAX30.i	3:30:00 PM	12091.44	12074.44			N/A
6/14/2019	DJ30.i	9:30:00 AM					N/A
6/14/2019	DJ30.i	11:30:00 AM					N/A
6/14/2019	DJ30.i	1:30:00 PM					N/A
6/14/2019	DJ30.i	3:30:00 PM					N/A
6/14/2019	DKKJPY	9:30:00 AM	16.35	16.37			N/A
6/14/2019	DKKJPY	11:30:00 AM					N/A
6/14/2019	DKKJPY	1:30:00 PM					N/A
6/14/2019	DKKJPY	3:30:00 PM	16.34	16.35			N/A
6/14/2019	EURAUD	9:30:00 AM	1.63412	1.63449			N/A
6/14/2019	EURAUD	11:30:00 AM	1.6352	1.63561			N/A

6/14/2019	EURAUD	1:30:00 PM	1.63251	1.63297			N/A
6/14/2019	EURAUD	3:30:00 PM	1.63195	1.63083			N/A
6/14/2019	EURAUD.fx	9:30:00 AM	1.63432	1.63427			N/A
6/14/2019	EURAUD.fx	11:30:00 AM	1.63541	1.63538			N/A
6/14/2019	EURAUD.fx	1:30:00 PM	1.63271	1.63275			N/A
6/14/2019	EURAUD.fx	3:30:00 PM	1.63189	1.63063			N/A
6/14/2019	EURCAD	9:30:00 AM	1.50397	1.50484			N/A
6/14/2019	EURCAD	11:30:00 AM	1.50457	1.50514			N/A
6/14/2019	EURCAD	1:30:00 PM	1.50229	1.50314			N/A
6/14/2019	EURCAD	3:30:00 PM	1.50141	1.50046			N/A
6/14/2019	EURCAD.fx	9:30:00 AM	1.50439	1.50442			N/A
6/14/2019	EURCAD.fx	11:30:00 AM	1.50499	1.50472			N/A
6/14/2019	EURCAD.fx	1:30:00 PM	1.50272	1.50271			N/A
6/14/2019	EURCAD.fx	3:30:00 PM	1.50156	1.50006			N/A
6/14/2019	EURCHF	9:30:00 AM	1.12057	1.12062			N/A
6/14/2019	EURCHF	11:30:00 AM	1.12224	1.12204			N/A
6/14/2019	EURCHF	1:30:00 PM	1.12154	1.12159			N/A
6/14/2019	EURCHF	3:30:00 PM	1.12146	1.12124			N/A
6/14/2019	EURCHF.fx	9:30:00 AM	1.12063	1.12056			N/A
6/14/2019	EURCHF.fx	11:30:00 AM	1.1223	1.12197			N/A
6/14/2019	EURCHF.fx	1:30:00 PM	1.12162	1.12153			N/A
6/14/2019	EURCHF.fx	3:30:00 PM	1.12149	1.12122			N/A
6/14/2019	EURCZK	9:30:00 AM	25.515	25.554			N/A
6/14/2019	EURCZK	11:30:00 AM	25.513	25.552			N/A
6/14/2019	EURCZK	1:30:00 PM	25.506	25.544			N/A
6/14/2019	EURCZK	3:30:00 PM	25.491	25.515			N/A
6/14/2019	EURDKK	9:30:00 AM					N/A
6/14/2019	EURDKK	11:30:00 AM					N/A
6/14/2019	EURDKK	1:30:00 PM	7.4644	7.4654			N/A
6/14/2019	EURDKK	3:30:00 PM	7.4656	7.4669			N/A
6/14/2019	EURGBP	9:30:00 AM	0.8895	0.88946			N/A
6/14/2019	EURGBP	11:30:00 AM	0.8908	0.89085			N/A
6/14/2019	EURGBP	1:30:00 PM	0.89046	0.89049			N/A
6/14/2019	EURGBP	3:30:00 PM	0.89099	0.89054			N/A



6/14/2019	EURGBP.fx	9:30:00 AM	0.88955	0.8894			N/A
6/14/2019	EURGBP.fx	11:30:00 AM	0.89083	0.89078			N/A
6/14/2019	EURGBP.fx	1:30:00 PM	0.8905	0.89043			N/A
6/14/2019	EURGBP.fx	3:30:00 PM	0.891	0.89051			N/A
6/14/2019	EURHKD	9:30:00 AM	8.8248	8.8299			N/A
6/14/2019	EURHKD	11:30:00 AM	8.8249	8.8298			N/A
6/14/2019	EURHKD	1:30:00 PM	8.8184	8.8229			N/A
6/14/2019	EURHKD	3:30:00 PM	8.8139	8.8076			N/A
6/14/2019	EURHKD.fx	9:30:00 AM	8.82755	8.82705			N/A
6/14/2019	EURHKD.fx	11:30:00 AM	8.82777	8.82698			N/A
6/14/2019	EURHKD.fx	1:30:00 PM	8.82125	8.82006			N/A
6/14/2019	EURHKD.fx	3:30:00 PM	8.81598	8.80498			N/A
6/14/2019	EURHUF	9:30:00 AM	321.64	322.29			N/A
6/14/2019	EURHUF	11:30:00 AM	321.55	322.25			N/A
6/14/2019	EURHUF	1:30:00 PM	321.31	322.02			N/A
6/14/2019	EURHUF	3:30:00 PM	321.25	321.92			N/A
6/14/2019	EURHUF.fx	9:30:00 AM	321.96	322.154			N/A
6/14/2019	EURHUF.fx	11:30:00 AM	321.82	322.008			N/A
6/14/2019	EURHUF.fx	1:30:00 PM	321.563	321.73			N/A
6/14/2019	EURHUF.fx	3:30:00 PM	321.53	321.655			N/A
6/14/2019	EURJPY	9:30:00 AM	122.119	122.123			N/A
6/14/2019	EURJPY	11:30:00 AM	122.065	122.057			N/A
6/14/2019	EURJPY	1:30:00 PM	121.909	121.905			N/A
6/14/2019	EURJPY	3:30:00 PM	121.939	121.888			N/A
6/14/2019	EURJPY.fx	9:30:00 AM	122.122	122.119			N/A
6/14/2019	EURJPY.fx	11:30:00 AM	122.068	122.053			N/A
6/14/2019	EURJPY.fx	1:30:00 PM	121.912	121.9			N/A
6/14/2019	EURJPY.fx	3:30:00 PM	121.941	121.883			N/A
6/14/2019	EURMXN	9:30:00 AM	21.6371	21.6574			N/A
6/14/2019	EURMXN	11:30:00 AM	21.6809	21.699			N/A
6/14/2019	EURMXN	1:30:00 PM	21.6216	21.6382			N/A
6/14/2019	EURMXN	3:30:00 PM	21.5631	21.5581			N/A
6/14/2019	EURMXN.f	9:30:00 AM	21.6452	21.6492			N/A
6/14/2019	EURMXN.f	11:30:00 AM	21.6894	21.6903			N/A

6/14/2019	EURMXN.fx	1:30:00 PM	21.6303	21.6296			N/A
6/14/2019	EURMXN.fx	3:30:00 PM	21.5663	21.5496			N/A
6/14/2019	EURNOK	9:30:00 AM	9.7874	9.7984			N/A
6/14/2019	EURNOK	11:30:00 AM	9.7801	9.7887			N/A
6/14/2019	EURNOK	1:30:00 PM	9.7801	9.7921			N/A
6/14/2019	EURNOK	3:30:00 PM	9.7667	9.7772			N/A
6/14/2019	EURNOK.fx	9:30:00 AM	9.79261	9.79298			N/A
6/14/2019	EURNOK.fx	11:30:00 AM	9.7857	9.7832			N/A
6/14/2019	EURNOK.fx	1:30:00 PM	9.78551	9.78654			N/A
6/14/2019	EURNOK.fx	3:30:00 PM	9.77162	9.77197			N/A
6/14/2019	EURNZD	9:30:00 AM	1.72524	1.72603			N/A
6/14/2019	EURNZD	11:30:00 AM	1.72515	1.72587			N/A
6/14/2019	EURNZD	1:30:00 PM	1.72365	1.72448			N/A
6/14/2019	EURNZD	3:30:00 PM	1.72403	1.72393			N/A
6/14/2019	EURNZD.fx	9:30:00 AM	1.72565	1.72561			N/A
6/14/2019	EURNZD.fx	11:30:00 AM	1.72557	1.72544			N/A
6/14/2019	EURNZD.fx	1:30:00 PM	1.72406	1.72404			N/A
6/14/2019	EURNZD.fx	3:30:00 PM	1.72441	1.72352			N/A
6/14/2019	EURPLN	9:30:00 AM	4.2536	4.2568			N/A
6/14/2019	EURPLN	11:30:00 AM	4.2545	4.2573			N/A
6/14/2019	EURPLN	1:30:00 PM	4.2519	4.255			N/A
6/14/2019	EURPLN	3:30:00 PM	4.2524	4.2544			N/A
6/14/2019	EURPLN.fx	9:30:00 AM	4.25277	4.25752			N/A
6/14/2019	EURPLN.fx	11:30:00 AM	4.25397	4.25783			N/A
6/14/2019	EURPLN.fx	1:30:00 PM	4.25134	4.25552			N/A
6/14/2019	EURPLN.fx	3:30:00 PM	4.25126	4.25573			N/A
6/14/2019	EURRUB	9:30:00 AM					N/A
6/14/2019	EURRUB	11:30:00 AM	72.345	72.786			N/A
6/14/2019	EURRUB	1:30:00 PM	72.238	72.66			N/A
6/14/2019	EURRUB	3:30:00 PM	71.977	72.328			N/A
6/14/2019	EURSEK	9:30:00 AM	10.6996	10.7037			N/A
6/14/2019	EURSEK	11:30:00 AM	10.646	10.6495			N/A
6/14/2019	EURSEK	1:30:00 PM	10.6445	10.6496			N/A
6/14/2019	EURSEK	3:30:00 PM	10.635	10.6369			N/A

6/14/2019	EURSEK.fx	9:30:00 AM	10.70131	10.70202			N/A
6/14/2019	EURSEK.fx	11:30:00 AM	10.64764	10.64774			N/A
6/14/2019	EURSEK.fx	1:30:00 PM	10.64619	10.64792			N/A
6/14/2019	EURSEK.fx	3:30:00 PM	10.63659	10.63693			N/A
6/14/2019	EURSGD	9:30:00 AM	1.5418	1.5426			N/A
6/14/2019	EURSGD	11:30:00 AM	1.5421	1.5427			N/A
6/14/2019	EURSGD	1:30:00 PM	1.5404	1.5411			N/A
6/14/2019	EURSGD	3:30:00 PM	1.54	1.5392			N/A
6/14/2019	EURSGD.fx	9:30:00 AM	1.54213	1.54222			N/A
6/14/2019	EURSGD.fx	11:30:00 AM	1.54243	1.54225			N/A
6/14/2019	EURSGD.fx	1:30:00 PM	1.54078	1.54072			N/A
6/14/2019	EURSGD.fx	3:30:00 PM	1.54042	1.53875			N/A
6/14/2019	EURUSD	9:30:00 AM	1.12738	1.12746			N/A
6/14/2019	EURUSD	11:30:00 AM	1.12794	1.12795			N/A
6/14/2019	EURUSD	1:30:00 PM	1.12672	1.12673			N/A
6/14/2019	EURUSD	3:30:00 PM	1.12615	1.12479	10	100	N/A
6/14/2019	EURUSD.fx	9:30:00 AM	1.12759	1.12755			N/A
6/14/2019	EURUSD.fx	11:30:00 AM	1.12814	1.12804			N/A
6/14/2019	EURUSD.fx	1:30:00 PM	1.12692	1.12682			N/A
6/14/2019	EURUSD.fx	3:30:00 PM	1.12634	1.1249			N/A
6/14/2019	EURZAR	9:30:00 AM	16.7287	16.7417			N/A
6/14/2019	EURZAR	11:30:00 AM	16.7406	16.7594			N/A
6/14/2019	EURZAR	1:30:00 PM	16.6942	16.7126			N/A
6/14/2019	EURZAR	3:30:00 PM	16.6348	16.6338			N/A
6/14/2019	EURZAR.fx	9:30:00 AM	16.72742	16.74311			N/A
6/14/2019	EURZAR.fx	11:30:00 AM	16.73956	16.76052			N/A
6/14/2019	EURZAR.fx	1:30:00 PM	16.69361	16.71323			N/A
6/14/2019	EURZAR.fx	3:30:00 PM	16.63104	16.63516			N/A
6/14/2019	GBPAUD	9:30:00 AM	1.8377	1.83833			N/A
6/14/2019	GBPAUD	11:30:00 AM	1.83624	1.83684			N/A
6/14/2019	GBPAUD	1:30:00 PM	1.83394	1.83461			N/A
6/14/2019	GBPAUD	3:30:00 PM	1.83254	1.83147			N/A
6/14/2019	GBPAUD.fx	9:30:00 AM	1.8381	1.83791			N/A
6/14/2019	GBPAUD.fx	11:30:00 AM	1.83665	1.83644			N/A

6/14/2019	GBPAUD.fx	1:30:00 PM	1.83435	1.83421			N/A
6/14/2019	GBPAUD.fx	3:30:00 PM	1.83283	1.83111			N/A
6/14/2019	GBPCAD	9:30:00 AM	1.69098	1.69158			N/A
6/14/2019	GBPCAD	11:30:00 AM	1.68911	1.68967			N/A
6/14/2019	GBPCAD	1:30:00 PM	1.68722	1.68793			N/A
6/14/2019	GBPCAD	3:30:00 PM	1.68542	1.68421			N/A
6/14/2019	GBPCAD.fx	9:30:00 AM	1.69138	1.69119			N/A
6/14/2019	GBPCAD.fx	11:30:00 AM	1.68952	1.68927			N/A
6/14/2019	GBPCAD.fx	1:30:00 PM	1.68762	1.68752			N/A
6/14/2019	GBPCAD.fx	3:30:00 PM	1.68565	1.68383			N/A
6/14/2019	GBPCHF	9:30:00 AM	1.2597	1.25994			N/A
6/14/2019	GBPCHF	11:30:00 AM	1.25949	1.25975			N/A
6/14/2019	GBPCHF	1:30:00 PM	1.25929	1.25974			N/A
6/14/2019	GBPCHF	3:30:00 PM	1.25904	1.25873			N/A
6/14/2019	GBPCHF.fx	9:30:00 AM	1.25989	1.25972			N/A
6/14/2019	GBPCHF.fx	11:30:00 AM	1.25968	1.25954			N/A
6/14/2019	GBPCHF.fx	1:30:00 PM	1.25948	1.25952			N/A
6/14/2019	GBPCHF.fx	3:30:00 PM	1.2592	1.25867			N/A
6/14/2019	GBPCZK	9:30:00 AM	28.697	28.715			N/A
6/14/2019	GBPCZK	11:30:00 AM	28.652	28.672			N/A
6/14/2019	GBPCZK	1:30:00 PM	28.654	28.673			N/A
6/14/2019	GBPCZK	3:30:00 PM	28.632	28.63			N/A
6/14/2019	GBPDKK	9:30:00 AM	8.391	8.401			N/A
6/14/2019	GBPDKK	11:30:00 AM	8.378	8.389			N/A
6/14/2019	GBPDKK	1:30:00 PM	8.381	8.392			N/A
6/14/2019	GBPDKK	3:30:00 PM	8.381	8.387			N/A
6/14/2019	GBPDKK.fx	9:30:00 AM	8.3899	8.4012			N/A
6/14/2019	GBPDKK.fx	11:30:00 AM	8.3765	8.3887			N/A
6/14/2019	GBPDKK.fx	1:30:00 PM	8.3798	8.392			N/A
6/14/2019	GBPDKK.fx	3:30:00 PM	8.3795	8.3877			N/A
6/14/2019	GBPHKD	9:30:00 AM	9.9194	9.9235			N/A
6/14/2019	GBPHKD	11:30:00 AM	9.9048	9.9087			N/A
6/14/2019	GBPHKD	1:30:00 PM	9.9005	9.9053			N/A
6/14/2019	GBPHKD	3:30:00 PM	9.8926	9.8872			N/A

6/14/2019	GBPHUF	9:30:00 AM	361.67	362.11			N/A
6/14/2019	GBPHUF	11:30:00 AM	360.99	361.46			N/A
6/14/2019	GBPHUF	1:30:00 PM	360.82	361.11			N/A
6/14/2019	GBPHUF	3:30:00 PM	360.52	360.79			N/A
6/14/2019	GBPJPY	9:30:00 AM	137.291	137.298			N/A
6/14/2019	GBPJPY	11:30:00 AM	137.015	137.046			N/A
6/14/2019	GBPJPY	1:30:00 PM	136.88	136.924			N/A
6/14/2019	GBPJPY	3:30:00 PM	136.878	136.861			N/A
6/14/2019	GBPJPY.fx	9:30:00 AM	137.312	137.279			N/A
6/14/2019	GBPJPY.fx	11:30:00 AM	137.036	137.025			N/A
6/14/2019	GBPJPY.fx	1:30:00 PM	136.901	136.902			N/A
6/14/2019	GBPJPY.fx	3:30:00 PM	136.895	136.843			N/A
6/14/2019	GBPMXN	9:30:00 AM	24.3228	24.3344			N/A
6/14/2019	GBPMXN	11:30:00 AM	24.3345	24.3493			N/A
6/14/2019	GBPMXN	1:30:00 PM	24.2743	24.2892			N/A
6/14/2019	GBPMXN	3:30:00 PM	24.2006	24.2035			N/A
6/14/2019	GBPNOK	9:30:00 AM	11.0048	11.0154			N/A
6/14/2019	GBPNOK	11:30:00 AM	10.9803	10.9882			N/A
6/14/2019	GBPNOK	1:30:00 PM	10.9849	10.9952			N/A
6/14/2019	GBPNOK	3:30:00 PM	10.9678	10.9721			N/A
6/14/2019	GBPNOK.fx	9:30:00 AM	11.00954	11.01063			N/A
6/14/2019	GBPNOK.fx	11:30:00 AM	10.98554	10.98328			N/A
6/14/2019	GBPNOK.fx	1:30:00 PM	10.99022	10.98997			N/A
6/14/2019	GBPNOK.fx	3:30:00 PM	10.97252	10.96721			N/A
6/14/2019	GBPNZD	9:30:00 AM	1.93971	1.94025			N/A
6/14/2019	GBPNZD	11:30:00 AM	1.93683	1.93738			N/A
6/14/2019	GBPNZD	1:30:00 PM	1.93582	1.93652			N/A
6/14/2019	GBPNZD	3:30:00 PM	1.93567	1.93492			N/A
6/14/2019	GBPNZD.fx	9:30:00 AM	1.94009	1.93988			N/A
6/14/2019	GBPNZD.fx	11:30:00 AM	1.93718	1.93702			N/A
6/14/2019	GBPNZD.fx	1:30:00 PM	1.93619	1.93613			N/A
6/14/2019	GBPNZD.fx	3:30:00 PM	1.93596	1.93459			N/A
6/14/2019	GBPPLN	9:30:00 AM	4.7833	4.7844			N/A
6/14/2019	GBPPLN	11:30:00 AM	4.7765	4.778			N/A

6/14/2019	GBPPLN	1:30:00 PM	4.776	4.7775			N/A
6/14/2019	GBPPLN	3:30:00 PM	4.7754	4.7747			N/A
6/14/2019	GBPPLN.fx	9:30:00 AM	4.78097	4.78666			N/A
6/14/2019	GBPPLN.fx	11:30:00 AM	4.77446	4.78006			N/A
6/14/2019	GBPPLN.fx	1:30:00 PM	4.77386	4.77953			N/A
6/14/2019	GBPPLN.fx	3:30:00 PM	4.77286	4.77698			N/A
6/14/2019	GBPSEK	9:30:00 AM	12.0264	12.0347			N/A
6/14/2019	GBPSEK	11:30:00 AM	11.9487	11.9568			N/A
6/14/2019	GBPSEK	1:30:00 PM	11.9527	11.9611			N/A
6/14/2019	GBPSEK	3:30:00 PM	11.9408	11.9431			N/A
6/14/2019	GBPSEK.fx	9:30:00 AM	12.02339	12.03829			N/A
6/14/2019	GBPSEK.fx	11:30:00 AM	11.94525	11.96018			N/A
6/14/2019	GBPSEK.fx	1:30:00 PM	11.94957	11.96429			N/A
6/14/2019	GBPSEK.fx	3:30:00 PM	11.93687	11.94717			N/A
6/14/2019	GBPSGD	9:30:00 AM	1.7335	1.734			N/A
6/14/2019	GBPSGD	11:30:00 AM	1.7312	1.7318			N/A
6/14/2019	GBPSGD	1:30:00 PM	1.7299	1.7307			N/A
6/14/2019	GBPSGD	3:30:00 PM	1.7287	1.728			N/A
6/14/2019	GBPSGD.fx	9:30:00 AM	1.73168	1.73585			N/A
6/14/2019	GBPSGD.fx	11:30:00 AM	1.72935	1.73358			N/A
6/14/2019	GBPSGD.fx	1:30:00 PM	1.72807	1.73252			N/A
6/14/2019	GBPSGD.fx	3:30:00 PM	1.72649	1.72979			N/A
6/14/2019	GBPUSD	9:30:00 AM	1.26769	1.26754			N/A
6/14/2019	GBPUSD	11:30:00 AM	1.26639	1.26633			N/A
6/14/2019	GBPUSD	1:30:00 PM	1.26549	1.26554			N/A
6/14/2019	GBPUSD	3:30:00 PM	1.26427	1.2631	30		N/A
6/14/2019	GBPUSD.fx	9:30:00 AM	1.26775	1.26748			N/A
6/14/2019	GBPUSD.fx	11:30:00 AM	1.26645	1.26627			N/A
6/14/2019	GBPUSD.fx	1:30:00 PM	1.26555	1.26548			N/A
6/14/2019	GBPUSD.fx	3:30:00 PM	1.26429	1.26306			N/A
6/14/2019	GBPZAR	9:30:00 AM	18.8039	18.822			N/A
6/14/2019	GBPZAR	11:30:00 AM	18.7889	18.8167			N/A
6/14/2019	GBPZAR	1:30:00 PM	18.7422	18.7725			N/A
6/14/2019	GBPZAR	3:30:00 PM	18.6705	18.6732			N/A

6/14/2019	GBPZAR.fx	9:30:00 AM	18.811	18.8154			N/A
6/14/2019	GBPZAR.fx	11:30:00 AM	18.7965	18.8091			N/A
6/14/2019	GBPZAR.fx	1:30:00 PM	18.7503	18.7646			N/A
6/14/2019	GBPZAR.fx	3:30:00 PM	18.6762	18.6671			N/A
6/14/2019	GOLD	9:30:00 AM	1353.06	1352.53			N/A
6/14/2019	GOLD	11:30:00 AM	1355.51	1355.75			N/A
6/14/2019	GOLD	1:30:00 PM	1355.35	1355.51			N/A
6/14/2019	GOLD	3:30:00 PM	1354.67	1352.27			N/A
6/14/2019	HKDJPY	9:30:00 AM	13.84	13.84			N/A
6/14/2019	HKDJPY	11:30:00 AM	13.83	13.84			N/A
6/14/2019	HKDJPY	1:30:00 PM					N/A
6/14/2019	HKDJPY	3:30:00 PM	13.84	13.84			N/A
6/14/2019	HKDJPY.fx	9:30:00 AM	13.83	13.837			N/A
6/14/2019	HKDJPY.fx	11:30:00 AM	13.824	13.83			N/A
6/14/2019	HKDJPY.fx	1:30:00 PM	13.816	13.823			N/A
6/14/2019	HKDJPY.fx	3:30:00 PM	13.838	13.834			N/A
6/14/2019	HUFJPY	9:30:00 AM	0.3794	0.3797			N/A
6/14/2019	HUFJPY	11:30:00 AM	0.3796	0.3799			N/A
6/14/2019	HUFJPY	1:30:00 PM	0.3794	0.3796			N/A
6/14/2019	HUFJPY	3:30:00 PM	0.3795	0.3798			N/A
6/14/2019	JP225.i	9:30:00 AM	21080.32	21090.32			N/A
6/14/2019	JP225.i	11:30:00 AM	21017.82	21030.32			N/A
6/14/2019	JP225.i	1:30:00 PM	20980.32	20995.32			N/A
6/14/2019	JP225.i	3:30:00 PM	21025.32	21012.82			N/A
6/14/2019	MXNJPY	9:30:00 AM					N/A
6/14/2019	MXNJPY	11:30:00 AM	5.63	5.64			N/A
6/14/2019	MXNJPY	1:30:00 PM	5.64	5.66			N/A
6/14/2019	MXNJPY	3:30:00 PM	5.66	5.66			N/A
6/14/2019	NASDAQ.i	9:30:00 AM					N/A
6/14/2019	NASDAQ.i	11:30:00 AM					N/A
6/14/2019	NASDAQ.i	1:30:00 PM					N/A
6/14/2019	NASDAQ.i	3:30:00 PM					N/A
6/14/2019	NOKJPY	9:30:00 AM	12.46	12.49			N/A
6/14/2019	NOKJPY	11:30:00 AM	12.46	12.49			N/A

6/14/2019	NOKJPY	1:30:00 PM	12.45	12.49			N/A
6/14/2019	NOKJPY	3:30:00 PM	12.47	12.49			N/A
6/14/2019	NOKJPY.fx	9:30:00 AM	12.467	12.473			N/A
6/14/2019	NOKJPY.fx	11:30:00 AM	12.472	12.477			N/A
6/14/2019	NOKJPY.fx	1:30:00 PM	12.454	12.46			N/A
6/14/2019	NOKJPY.fx	3:30:00 PM	12.476	12.476			N/A
6/14/2019	NZDCAD	9:30:00 AM	0.87142	0.87216			N/A
6/14/2019	NZDCAD	11:30:00 AM	0.87183	0.87244			N/A
6/14/2019	NZDCAD	1:30:00 PM	0.87125	0.87195			N/A
6/14/2019	NZDCAD	3:30:00 PM	0.87072	0.87071			N/A
6/14/2019	NZDCAD.fx	9:30:00 AM	0.87175	0.87182			N/A
6/14/2019	NZDCAD.fx	11:30:00 AM	0.87217	0.87209			N/A
6/14/2019	NZDCAD.fx	1:30:00 PM	0.87159	0.87161			N/A
6/14/2019	NZDCAD.fx	3:30:00 PM	0.87088	0.87038			N/A
6/14/2019	NZDCHF	9:30:00 AM	0.64905	0.64972			N/A
6/14/2019	NZDCHF	11:30:00 AM	0.64997	0.65062			N/A
6/14/2019	NZDCHF	1:30:00 PM	0.65015	0.65089			N/A
6/14/2019	NZDCHF	3:30:00 PM	0.65032	0.6506			N/A
6/14/2019	NZDCHF.fx	9:30:00 AM	0.64939	0.64936			N/A
6/14/2019	NZDCHF.fx	11:30:00 AM	0.65035	0.65027			N/A
6/14/2019	NZDCHF.fx	1:30:00 PM	0.6505	0.65052			N/A
6/14/2019	NZDCHF.fx	3:30:00 PM	0.65064	0.65031			N/A
6/14/2019	NZDCZK	9:30:00 AM	14.79	14.803			N/A
6/14/2019	NZDCZK	11:30:00 AM	14.79	14.803			N/A
6/14/2019	NZDCZK	1:30:00 PM	14.799	14.809			N/A
6/14/2019	NZDCZK	3:30:00 PM	14.791	14.792			N/A
6/14/2019	NZDDKK	9:30:00 AM	4.326	4.329			N/A
6/14/2019	NZDDKK	11:30:00 AM					N/A
6/14/2019	NZDDKK	1:30:00 PM	4.329	4.331			N/A
6/14/2019	NZDDKK	3:30:00 PM	4.328	4.33			N/A
6/14/2019	NZDHKD	9:30:00 AM	5.1128	5.1155			N/A
6/14/2019	NZDHKD	11:30:00 AM	5.1131	5.1156			N/A
6/14/2019	NZDHKD	1:30:00 PM	5.1127	5.1153			N/A
6/14/2019	NZDHKD	3:30:00 PM	5.1103	5.1068			N/A



6/14/2019	NZDHUF	9:30:00 AM	186.38	186.67			N/A
6/14/2019	NZDHUF	11:30:00 AM	186.32	186.62			N/A
6/14/2019	NZDHUF	1:30:00 PM	186.3	186.52			N/A
6/14/2019	NZDHUF	3:30:00 PM	186.2	186.41			N/A
6/14/2019	NZDJPY	9:30:00 AM	70.737	70.803			N/A
6/14/2019	NZDJPY	11:30:00 AM	70.705	70.777			N/A
6/14/2019	NZDJPY	1:30:00 PM	70.674	70.743			N/A
6/14/2019	NZDJPY	3:30:00 PM	70.707	70.724			N/A
6/14/2019	NZDJPY.fx	9:30:00 AM	70.769	70.77			N/A
6/14/2019	NZDJPY.fx	11:30:00 AM	70.736	70.744			N/A
6/14/2019	NZDJPY.fx	1:30:00 PM	70.705	70.711			N/A
6/14/2019	NZDJPY.fx	3:30:00 PM	70.738	70.693			N/A
6/14/2019	NZDMXN	9:30:00 AM	12.5363	12.5423			N/A
6/14/2019	NZDMXN	11:30:00 AM	12.5621	12.5686			N/A
6/14/2019	NZDMXN	1:30:00 PM	12.5373	12.5423			N/A
6/14/2019	NZDMXN	3:30:00 PM	12.5019	12.5016			N/A
6/14/2019	NZDNOK	9:30:00 AM	5.671	5.6749			N/A
6/14/2019	NZDNOK	11:30:00 AM	5.6676	5.6697			N/A
6/14/2019	NZDNOK	1:30:00 PM	5.6717	5.6731			N/A
6/14/2019	NZDNOK	3:30:00 PM	5.6619	5.6639			N/A
6/14/2019	NZDPLN	9:30:00 AM	2.4647	2.4659			N/A
6/14/2019	NZDPLN	11:30:00 AM	2.4645	2.4659			N/A
6/14/2019	NZDPLN	1:30:00 PM	2.4655	2.4666			N/A
6/14/2019	NZDPLN	3:30:00 PM	2.4641	2.4647			N/A
6/14/2019	NZDSEK	9:30:00 AM	6.1957	6.2025			N/A
6/14/2019	NZDSEK	11:30:00 AM	6.1646	6.1715			N/A
6/14/2019	NZDSEK	1:30:00 PM	6.1695	6.1758			N/A
6/14/2019	NZDSEK	3:30:00 PM	6.164	6.1668			N/A
6/14/2019	NZDSGD	9:30:00 AM	0.8934	0.894			N/A
6/14/2019	NZDSGD	11:30:00 AM	0.8936	0.8942			N/A
6/14/2019	NZDSGD	1:30:00 PM	0.8933	0.894			N/A
6/14/2019	NZDSGD	3:30:00 PM	0.893	0.893			N/A
6/14/2019	NZDSGD.fx	9:30:00 AM	0.89338	0.89398			N/A
6/14/2019	NZDSGD.fx	11:30:00 AM	0.89358	0.89411			N/A

6/14/2019	NZDSGD.fx	1:30:00 PM	0.89338	0.89395			N/A
6/14/2019	NZDSGD.fx	3:30:00 PM	0.89268	0.89294			N/A
6/14/2019	NZDUSD	9:30:00 AM	0.65329	0.65345			N/A
6/14/2019	NZDUSD	11:30:00 AM	0.65367	0.65379			N/A
6/14/2019	NZDUSD	1:30:00 PM	0.6535	0.65362			N/A
6/14/2019	NZDUSD	3:30:00 PM	0.65304	0.65252			N/A
6/14/2019	NZDUSD.fx	9:30:00 AM	0.65339	0.65346			N/A
6/14/2019	NZDUSD.fx	11:30:00 AM	0.65374	0.65381			N/A
6/14/2019	NZDUSD.fx	1:30:00 PM	0.65357	0.65364			N/A
6/14/2019	NZDUSD.fx	3:30:00 PM	0.65309	0.65253			N/A
6/14/2019	NZDZAR	9:30:00 AM	9.6862	9.6988			N/A
6/14/2019	NZDZAR	11:30:00 AM	9.6938	9.7108			N/A
6/14/2019	NZDZAR	1:30:00 PM	9.6724	9.6877			N/A
6/14/2019	NZDZAR	3:30:00 PM	9.6373	9.6398			N/A
6/14/2019	SEKJPY	9:30:00 AM					N/A
6/14/2019	SEKJPY	11:30:00 AM	11.46	11.47			N/A
6/14/2019	SEKJPY	1:30:00 PM	11.45	11.46			N/A
6/14/2019	SEKJPY	3:30:00 PM	11.46	11.47			N/A
6/14/2019	SEKJPY.fx	9:30:00 AM	11.402	11.42			N/A
6/14/2019	SEKJPY.fx	11:30:00 AM	11.455	11.472			N/A
6/14/2019	SEKJPY.fx	1:30:00 PM	11.441	11.458			N/A
6/14/2019	SEKJPY.fx	3:30:00 PM	11.454	11.469			N/A
6/14/2019	SGDJPY	9:30:00 AM	79.15	79.18			N/A
6/14/2019	SGDJPY	11:30:00 AM	79.11	79.14			N/A
6/14/2019	SGDJPY	1:30:00 PM	79.09	79.12			N/A
6/14/2019	SGDJPY	3:30:00 PM	79.18	79.15			N/A
6/14/2019	SILVER	9:30:00 AM	14.8	15.17			N/A
6/14/2019	SILVER	11:30:00 AM	14.84	15.22			N/A
6/14/2019	SILVER	1:30:00 PM	14.87	15.24			N/A
6/14/2019	SILVER	3:30:00 PM	14.91	15.25			N/A
6/14/2019	SPX500.i	9:30:00 AM	2892.49	2893			N/A
6/14/2019	SPX500.i	11:30:00 AM	2886	2886.25			N/A
6/14/2019	SPX500.i	1:30:00 PM	2881.7	2882.5			N/A
6/14/2019	SPX500.i	3:30:00 PM	2888.89	2887.65			N/A

6/14/2019	UK100.i	9:30:00 AM	7373.3	7374.8			N/A
6/14/2019	UK100.i	11:30:00 AM	7343.55	7343.3			N/A
6/14/2019	UK100.i	1:30:00 PM	7325.05	7325.05			N/A
6/14/2019	UK100.i	3:30:00 PM	7341.05	7336.22			N/A
6/14/2019	USDCAD	9:30:00 AM	1.33419	1.33428			N/A
6/14/2019	USDCAD	11:30:00 AM	1.33404	1.33403			N/A
6/14/2019	USDCAD	1:30:00 PM	1.33355	1.33359			N/A
6/14/2019	USDCAD	3:30:00 PM	1.33404	1.33314			N/A
6/14/2019	USDCAD.fx	9:30:00 AM	1.33423	1.33424			N/A
6/14/2019	USDCAD.fx	11:30:00 AM	1.33407	1.33399			N/A
6/14/2019	USDCAD.fx	1:30:00 PM	1.33359	1.33356			N/A
6/14/2019	USDCAD.fx	3:30:00 PM	1.33405	1.33312			N/A
6/14/2019	USDCHF	9:30:00 AM	0.99381	0.99382			N/A
6/14/2019	USDCHF	11:30:00 AM	0.99475	0.99463			N/A
6/14/2019	USDCHF	1:30:00 PM	0.99524	0.99532			N/A
6/14/2019	USDCHF	3:30:00 PM	0.9967	0.99574			N/A
6/14/2019	USDCHF.fx	9:30:00 AM	0.99386	0.99376			N/A
6/14/2019	USDCHF.fx	11:30:00 AM	0.9948	0.99457			N/A
6/14/2019	USDCHF.fx	1:30:00 PM	0.99529	0.99526			N/A
6/14/2019	USDCHF.fx	3:30:00 PM	0.99675	0.99576	1000	1000	N/A
6/14/2019	USDCZK	9:30:00 AM	22.655	22.678			N/A
6/14/2019	USDCZK	11:30:00 AM	22.643	22.664			N/A
6/14/2019	USDCZK	1:30:00 PM	22.661	22.681			N/A
6/14/2019	USDCZK	3:30:00 PM	22.684	22.675			N/A
6/14/2019	USDCZK.fx	9:30:00 AM	22.6627	22.6696			N/A
6/14/2019	USDCZK.fx	11:30:00 AM	22.653	22.6546			N/A
6/14/2019	USDCZK.fx	1:30:00 PM	22.6693	22.672			N/A
6/14/2019	USDCZK.fx	3:30:00 PM	22.6914	22.6726			N/A
6/14/2019	USDDKK	9:30:00 AM	6.6216	6.6257			N/A
6/14/2019	USDDKK	11:30:00 AM	6.6186	6.6222			N/A
6/14/2019	USDDKK	1:30:00 PM	6.6259	6.6292			N/A
6/14/2019	USDDKK	3:30:00 PM	6.6371	6.6327			N/A
6/14/2019	USDDKK.fx	9:30:00 AM	6.62206	6.62344			N/A
6/14/2019	USDDKK.fx	11:30:00 AM	6.61917	6.62012			N/A

6/14/2019	USDDKK.fx	1:30:00 PM	6.6263	6.62712			N/A
6/14/2019	USDDKK.fx	3:30:00 PM	6.63766	6.63124			N/A
6/14/2019	USDHKD	9:30:00 AM	7.8284	7.8289			N/A
6/14/2019	USDHKD	11:30:00 AM	7.8256	7.8251			N/A
6/14/2019	USDHKD	1:30:00 PM	7.827	7.827			N/A
6/14/2019	USDHKD	3:30:00 PM	7.8276	7.8277			N/A
6/14/2019	USDHKD.fx	9:30:00 AM	7.82829	7.82888			N/A
6/14/2019	USDHKD.fx	11:30:00 AM	7.82543	7.82532			N/A
6/14/2019	USDHKD.fx	1:30:00 PM					N/A
6/14/2019	USDHKD.fx	3:30:00 PM	7.82748	7.82776			N/A
6/14/2019	USDHUF	9:30:00 AM	285.38	285.86			N/A
6/14/2019	USDHUF	11:30:00 AM	285.14	285.6			N/A
6/14/2019	USDHUF	1:30:00 PM	285.22	285.67			N/A
6/14/2019	USDHUF	3:30:00 PM	285.62	285.7			N/A
6/14/2019	USDHUF.fx	9:30:00 AM	285.573	285.657			N/A
6/14/2019	USDHUF.fx	11:30:00 AM	285.333	285.396			N/A
6/14/2019	USDHUF.fx	1:30:00 PM	285.426	285.455			N/A
6/14/2019	USDHUF.fx	3:30:00 PM	285.804	285.539			N/A
6/14/2019	USDINR	9:30:00 AM	64.55	74.55			N/A
6/14/2019	USDINR	11:30:00 AM	64.63	74.62			N/A
6/14/2019	USDINR	1:30:00 PM					N/A
6/14/2019	USDINR	3:30:00 PM					N/A
6/14/2019	USDJPY	9:30:00 AM	108.302	108.307			N/A
6/14/2019	USDJPY	11:30:00 AM	108.202	108.206			N/A
6/14/2019	USDJPY	1:30:00 PM	108.175	108.187			N/A
6/14/2019	USDJPY	3:30:00 PM	108.357	108.221			N/A
6/14/2019	USDJPY.fx	9:30:00 AM	108.308	108.3			N/A
6/14/2019	USDJPY.fx	11:30:00 AM	108.208	108.199			N/A
6/14/2019	USDJPY.fx	1:30:00 PM	108.18	108.18			N/A
6/14/2019	USDJPY.fx	3:30:00 PM	108.359	108.221			N/A
6/14/2019	USDMXN	9:30:00 AM	19.194	19.202			N/A
6/14/2019	USDMXN	11:30:00 AM	19.223	19.232			N/A
6/14/2019	USDMXN	1:30:00 PM	19.19	19.199			N/A
6/14/2019	USDMXN	3:30:00 PM	19.163	19.154			N/A

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6/14/2019	USDMXN.f	11:30:00 AM					N/A
6/14/2019	USDMXN.f	1:30:00 PM					N/A
6/14/2019	USDMXN.f	3:30:00 PM					N/A
6/14/2019	USDNOK	9:30:00 AM	8.6817	8.6892			N/A
6/14/2019	USDNOK	11:30:00 AM	8.6707	8.6772			N/A
6/14/2019	USDNOK	1:30:00 PM	8.6806	8.6883			N/A
6/14/2019	USDNOK	3:30:00 PM	8.6827	8.6798			N/A
6/14/2019	USDNOK.fx	9:30:00 AM	8.68544	8.68479			N/A
6/14/2019	USDNOK.fx	11:30:00 AM	8.67477	8.6727			N/A
6/14/2019	USDNOK.fx	1:30:00 PM	8.68477	8.68381			N/A
6/14/2019	USDNOK.fx	3:30:00 PM	8.6864	8.67628			N/A
6/14/2019	USDPLN	9:30:00 AM	3.7731	3.7746			N/A
6/14/2019	USDPLN	11:30:00 AM	3.7719	3.7732			N/A
6/14/2019	USDPLN	1:30:00 PM	3.7741	3.7753			N/A
6/14/2019	USDPLN	3:30:00 PM	3.7802	3.7756			N/A
6/14/2019	USDPLN.fx	9:30:00 AM	3.77218	3.77543			N/A
6/14/2019	USDPLN.fx	11:30:00 AM	3.77108	3.77394			N/A
6/14/2019	USDPLN.fx	1:30:00 PM	3.7733	3.77594			N/A
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6/14/2019	USDRUB	9:30:00 AM					N/A
6/14/2019	USDRUB	11:30:00 AM	64.243	64.635			N/A
6/14/2019	USDRUB	1:30:00 PM	64.219	64.586			N/A
6/14/2019	USDRUB	3:30:00 PM	64.075	64.436			N/A
6/14/2019	USDSEK	9:30:00 AM	9.4886	9.4925			N/A
6/14/2019	USDSEK	11:30:00 AM	9.4366	9.4402			N/A
6/14/2019	USDSEK	1:30:00 PM	9.4463	9.4499			N/A
6/14/2019	USDSEK	3:30:00 PM	9.4532	9.4459			N/A
6/14/2019	USDSEK.fx	9:30:00 AM	9.49112	9.49069			N/A
6/14/2019	USDSEK.fx	11:30:00 AM	9.43918	9.43823			N/A
6/14/2019	USDSEK.fx	1:30:00 PM	9.44891	9.44794			N/A
6/14/2019	USDSEK.fx	3:30:00 PM	9.45603	9.4456			N/A
6/14/2019	USDSGD	9:30:00 AM	1.3675	1.3679			N/A
6/14/2019	USDSGD	11:30:00 AM	1.3671	1.3674			N/A

6/14/2019	USDSGD	1:30:00 PM	1.3671	1.3675			N/A
6/14/2019	USDSGD	3:30:00 PM	1.3678	1.3677			N/A
6/14/2019	USDSGD.fx	9:30:00 AM	1.36747	1.36793			N/A
6/14/2019	USDSGD.fx	11:30:00 AM	1.36709	1.36742			N/A
6/14/2019	USDSGD.fx	1:30:00 PM	1.36703	1.36752			N/A
6/14/2019	USDSGD.fx	3:30:00 PM	1.36775	1.36776			N/A
6/14/2019	USDZAR	9:30:00 AM	14.8343	14.8463			N/A
6/14/2019	USDZAR	11:30:00 AM	14.8373	14.8553			N/A
6/14/2019	USDZAR	1:30:00 PM	14.8118	14.8312			N/A
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6/14/2019	USDZAR.fx	1:30:00 PM					N/A
6/14/2019	USDZAR.fx	3:30:00 PM					N/A
6/14/2019	XAUUSD	9:30:00 AM	1353.03	1352.53			N/A
6/14/2019	XAUUSD	11:30:00 AM	1355.52	1355.75			N/A
6/14/2019	XAUUSD	1:30:00 PM	1355.37	1355.51			N/A
6/14/2019	XAUUSD	3:30:00 PM	1354.72	1352.09			N/A
6/14/2019	ZARJPY	9:30:00 AM	7.27	7.3			N/A
6/14/2019	ZARJPY	11:30:00 AM	7.26	7.29			N/A
6/14/2019	ZARJPY	1:30:00 PM	7.28	7.3			N/A
6/14/2019	ZARJPY	3:30:00 PM	7.32	7.33			N/A
6/14/2019	ZARJPY.fx	9:30:00 AM	7.296	7.298			N/A
6/14/2019	ZARJPY.fx	11:30:00 AM	7.285	7.289			N/A
6/14/2019	ZARJPY.fx	1:30:00 PM	7.296	7.3			N/A
6/14/2019	ZARJPY.fx	3:30:00 PM	7.332	7.327			N/A
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6/17/2019	#JNJ	3:30:00 PM					N/A
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6/17/2019	#KO	3:30:00 PM					N/A
6/17/2019	#Litecoin	9:30:00 AM	134.99	135.63			N/A
6/17/2019	#Litecoin	11:30:00 AM	135.77	136.23			N/A
6/17/2019	#Litecoin	1:30:00 PM	134.93	135.46			N/A
6/17/2019	#Litecoin	3:30:00 PM	135.55	135.91			N/A
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6/17/2019	#NG.f	3:30:00 PM	2.362	2.376			N/A
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6/17/2019	#QQQ	3:30:00 PM					N/A
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6/17/2019	#Ripple	1:30:00 PM	0.4312	0.4358			N/A
6/17/2019	#Ripple	3:30:00 PM	0.4316	0.4348			N/A



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6/17/2019	#SBUX	3:30:00 PM					N/A
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6/17/2019	#SNE	3:30:00 PM					N/A
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6/17/2019	#UBS	11:30:00 AM					N/A
6/17/2019	#UBS	1:30:00 PM					N/A
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6/17/2019	#ZNGA	11:30:00 AM					N/A
6/17/2019	#ZNGA	1:30:00 PM					N/A
6/17/2019	#ZNGA	3:30:00 PM					N/A
6/17/2019	AUDCAD	9:30:00 AM	0.92152	0.92219			N/A
6/17/2019	AUDCAD	11:30:00 AM	0.92127	0.92198			N/A
6/17/2019	AUDCAD	1:30:00 PM	0.92087	0.92155			N/A
6/17/2019	AUDCAD	3:30:00 PM	0.92108	0.92149			N/A
6/17/2019	AUDCAD.fx	9:30:00 AM	0.92185	0.92185			N/A
6/17/2019	AUDCAD.fx	11:30:00 AM	0.9216	0.92163			N/A

6/17/2019	AUDCAD.fx	1:30:00 PM	0.9212	0.92119			N/A
6/17/2019	AUDCAD.fx	3:30:00 PM	0.92143	0.92116			N/A
6/17/2019	AUDCHF	9:30:00 AM	0.68687	0.68755			N/A
6/17/2019	AUDCHF	11:30:00 AM	0.68596	0.68657			N/A
6/17/2019	AUDCHF	1:30:00 PM	0.68609	0.68681			N/A
6/17/2019	AUDCHF	3:30:00 PM	0.68507	0.68552			N/A
6/17/2019	AUDCHF.fx	9:30:00 AM	0.68722	0.6872			N/A
6/17/2019	AUDCHF.fx	11:30:00 AM	0.68631	0.68622			N/A
6/17/2019	AUDCHF.fx	1:30:00 PM	0.68644	0.68645			N/A
6/17/2019	AUDCHF.fx	3:30:00 PM	0.68541	0.68517			N/A
6/17/2019	AUDCZK	9:30:00 AM	15.638	15.653			N/A
6/17/2019	AUDCZK	11:30:00 AM	15.635	15.653			N/A
6/17/2019	AUDCZK	1:30:00 PM	15.635	15.652			N/A
6/17/2019	AUDCZK	3:30:00 PM	15.603	15.616			N/A
6/17/2019	AUDDKK	9:30:00 AM	4.5781	4.5824			N/A
6/17/2019	AUDDKK	11:30:00 AM	4.5733	4.578			N/A
6/17/2019	AUDDKK	1:30:00 PM	4.5718	4.5763			N/A
6/17/2019	AUDDKK	3:30:00 PM	4.5633	4.5668			N/A
6/17/2019	AUDHKD	9:30:00 AM	5.378	5.3819			N/A
6/17/2019	AUDHKD	11:30:00 AM	5.378	5.3818			N/A
6/17/2019	AUDHKD	1:30:00 PM	5.3763	5.3801			N/A
6/17/2019	AUDHKD	3:30:00 PM	5.3784	5.3792			N/A
6/17/2019	AUDHUF	9:30:00 AM	197.49	197.73			N/A
6/17/2019	AUDHUF	11:30:00 AM	197.25	197.48			N/A
6/17/2019	AUDHUF	1:30:00 PM	197.23	197.46			N/A
6/17/2019	AUDHUF	3:30:00 PM	196.7	196.81			N/A
6/17/2019	AUDJPY	9:30:00 AM	74.619	74.686			N/A
6/17/2019	AUDJPY	11:30:00 AM	74.592	74.657			N/A
6/17/2019	AUDJPY	1:30:00 PM	74.606	74.672			N/A
6/17/2019	AUDJPY	3:30:00 PM	74.59	74.648			N/A
6/17/2019	AUDJPY.fx	9:30:00 AM	74.653	74.65			N/A
6/17/2019	AUDJPY.fx	11:30:00 AM	74.627	74.621			N/A
6/17/2019	AUDJPY.fx	1:30:00 PM	74.64	74.636			N/A
6/17/2019	AUDJPY.fx	3:30:00 PM	74.625	74.612			N/A

6/17/2019	AUDMXN	9:30:00 AM	13.1613	13.1707			N/A
6/17/2019	AUDMXN	11:30:00 AM	13.1521	13.1625			N/A
6/17/2019	AUDMXN	1:30:00 PM	13.1497	13.16			N/A
6/17/2019	AUDMXN	3:30:00 PM	13.1501	13.1531			N/A
6/17/2019	AUDNOK	9:30:00 AM	5.9898	5.9943			N/A
6/17/2019	AUDNOK	11:30:00 AM	5.9905	5.9956			N/A
6/17/2019	AUDNOK	1:30:00 PM	5.9944	5.9994			N/A
6/17/2019	AUDNOK	3:30:00 PM	5.9855	5.9893			N/A
6/17/2019	AUDNOK.fx	9:30:00 AM	5.9914	5.9925			N/A
6/17/2019	AUDNOK.fx	11:30:00 AM	5.9921	5.9939			N/A
6/17/2019	AUDNOK.fx	1:30:00 PM	5.996	5.9977			N/A
6/17/2019	AUDNOK.fx	3:30:00 PM	5.987	5.9876			N/A
6/17/2019	AUDNZD	9:30:00 AM	1.05566	1.05654			N/A
6/17/2019	AUDNZD	11:30:00 AM	1.05531	1.05621			N/A
6/17/2019	AUDNZD	1:30:00 PM	1.05521	1.05615			N/A
6/17/2019	AUDNZD	3:30:00 PM	1.05504	1.05572			N/A
6/17/2019	AUDNZD.fx	9:30:00 AM	1.05609	1.05608			N/A
6/17/2019	AUDNZD.fx	11:30:00 AM	1.05575	1.05575			N/A
6/17/2019	AUDNZD.fx	1:30:00 PM	1.05564	1.0557			N/A
6/17/2019	AUDNZD.fx	3:30:00 PM	1.05546	1.05529			N/A
6/17/2019	AUDPLN	9:30:00 AM	2.6092	2.6122			N/A
6/17/2019	AUDPLN	11:30:00 AM	2.608	2.6114			N/A
6/17/2019	AUDPLN	1:30:00 PM	2.608	2.6111			N/A
6/17/2019	AUDPLN	3:30:00 PM	2.6033	2.6056			N/A
6/17/2019	AUDSEK	9:30:00 AM	6.5257	6.5276			N/A
6/17/2019	AUDSEK	11:30:00 AM	6.5202	6.5231			N/A
6/17/2019	AUDSEK	1:30:00 PM	6.5219	6.5248			N/A
6/17/2019	AUDSEK	3:30:00 PM	6.5108	6.5118			N/A
6/17/2019	AUDSEK.fx	9:30:00 AM	6.5211	6.532			N/A
6/17/2019	AUDSEK.fx	11:30:00 AM	6.5157	6.5275			N/A
6/17/2019	AUDSEK.fx	1:30:00 PM	6.5174	6.5291			N/A
6/17/2019	AUDSEK.fx	3:30:00 PM	6.5062	6.5165			N/A
6/17/2019	AUDSGD	9:30:00 AM	0.9424	0.9426			N/A
6/17/2019	AUDSGD	11:30:00 AM	0.9418	0.9421			N/A

6/17/2019	AUDSGD	1:30:00 PM	0.9416	0.9419			N/A
6/17/2019	AUDSGD	3:30:00 PM	0.9414	0.9416			N/A
6/17/2019	AUDSGD.fx	9:30:00 AM	0.94252	0.94262			N/A
6/17/2019	AUDSGD.fx	11:30:00 AM	0.94187	0.94199			N/A
6/17/2019	AUDSGD.fx	1:30:00 PM	0.94165	0.94174			N/A
6/17/2019	AUDSGD.fx	3:30:00 PM	0.94152	0.94148			N/A
6/17/2019	AUDUSD	9:30:00 AM	0.68742	0.6875			N/A
6/17/2019	AUDUSD	11:30:00 AM	0.68716	0.68729			N/A
6/17/2019	AUDUSD	1:30:00 PM	0.68693	0.68704			N/A
6/17/2019	AUDUSD	3:30:00 PM	0.68738	0.68719			N/A
6/17/2019	AUDUSD.fx	9:30:00 AM	0.68747	0.68744			N/A
6/17/2019	AUDUSD.fx	11:30:00 AM	0.68722	0.68723			N/A
6/17/2019	AUDUSD.fx	1:30:00 PM	0.68698	0.68699			N/A
6/17/2019	AUDUSD.fx	3:30:00 PM	0.68744	0.68713			N/A
6/17/2019	AUDZAR	9:30:00 AM	10.1512	10.1644			N/A
6/17/2019	AUDZAR	11:30:00 AM	10.1575	10.1714			N/A
6/17/2019	AUDZAR	1:30:00 PM	10.1672	10.1793			N/A
6/17/2019	AUDZAR	3:30:00 PM	10.1543	10.1593			N/A
6/17/2019	AUS200.i	9:30:00 AM	6539.2	6541.7			N/A
6/17/2019	AUS200.i	11:30:00 AM	6538.54	6541.64			N/A
6/17/2019	AUS200.i	1:30:00 PM	6537.54	6541.04			N/A
6/17/2019	AUS200.i	3:30:00 PM	6533.14	6537.04			N/A
6/17/2019	BCHUSD	9:30:00 AM	439.56	441.26			N/A
6/17/2019	BCHUSD	11:30:00 AM	442.84	444.42			N/A
6/17/2019	BCHUSD	1:30:00 PM	441.43	442.9			N/A
6/17/2019	BCHUSD	3:30:00 PM	445.61	445.88			N/A
6/17/2019	CADCHF	9:30:00 AM	0.74514	0.74577			N/A
6/17/2019	CADCHF	11:30:00 AM	0.74432	0.74489			N/A
6/17/2019	CADCHF	1:30:00 PM	0.74484	0.74552			N/A
6/17/2019	CADCHF	3:30:00 PM	0.74369	0.74392			N/A
6/17/2019	CADCHF.fx	9:30:00 AM	0.74548	0.74542			N/A
6/17/2019	CADCHF.fx	11:30:00 AM	0.74467	0.74453			N/A
6/17/2019	CADCHF.fx	1:30:00 PM	0.74518	0.74516			N/A
6/17/2019	CADCHF.fx	3:30:00 PM	0.74403	0.74355			N/A

6/17/2019	CADCZK	9:30:00 AM	16.968	16.982			N/A
6/17/2019	CADCZK	11:30:00 AM	16.969	16.986			N/A
6/17/2019	CADCZK	1:30:00 PM	16.976	16.993			N/A
6/17/2019	CADCZK	3:30:00 PM	16.943	16.95			N/A
6/17/2019	CADDDKK	9:30:00 AM					N/A
6/17/2019	CADDDKK	11:30:00 AM					N/A
6/17/2019	CADDDKK	1:30:00 PM	4.964	4.967			N/A
6/17/2019	CADDDKK	3:30:00 PM	4.953	4.955			N/A
6/17/2019	CADHKD	9:30:00 AM	5.8353	5.8392			N/A
6/17/2019	CADHKD	11:30:00 AM	5.8357	5.8396			N/A
6/17/2019	CADHKD	1:30:00 PM	5.8376	5.8411			N/A
6/17/2019	CADHKD	3:30:00 PM	5.8382	5.8416			N/A
6/17/2019	CADHUF	9:30:00 AM	214.32	214.48			N/A
6/17/2019	CADHUF	11:30:00 AM	214.08	214.26			N/A
6/17/2019	CADHUF	1:30:00 PM	214.18	214.34			N/A
6/17/2019	CADHUF	3:30:00 PM	213.67	213.58			N/A
6/17/2019	CADJPY	9:30:00 AM	80.948	81.012			N/A
6/17/2019	CADJPY	11:30:00 AM	80.939	80.998			N/A
6/17/2019	CADJPY	1:30:00 PM	80.989	81.056			N/A
6/17/2019	CADJPY	3:30:00 PM	80.975	81.007			N/A
6/17/2019	CADJPY.fx	9:30:00 AM	80.982	80.978			N/A
6/17/2019	CADJPY.fx	11:30:00 AM	80.972	80.962			N/A
6/17/2019	CADJPY.fx	1:30:00 PM	81.023	81.02			N/A
6/17/2019	CADJPY.fx	3:30:00 PM	81.009	80.971			N/A
6/17/2019	CADMXN	9:30:00 AM	14.2782	14.2905			N/A
6/17/2019	CADMXN	11:30:00 AM	14.2726	14.2843			N/A
6/17/2019	CADMXN	1:30:00 PM	14.2767	14.2888			N/A
6/17/2019	CADMXN	3:30:00 PM	14.2776	14.2786			N/A
6/17/2019	CADNOK	9:30:00 AM	6.4965	6.5012			N/A
6/17/2019	CADNOK	11:30:00 AM	6.4989	6.5037			N/A
6/17/2019	CADNOK	1:30:00 PM	6.5063	6.5105			N/A
6/17/2019	CADNOK	3:30:00 PM	6.4947	6.4963			N/A
6/17/2019	CADPLN	9:30:00 AM	2.8304	2.8321			N/A
6/17/2019	CADPLN	11:30:00 AM	2.8301	2.832			N/A

6/17/2019	CADPLN	1:30:00 PM	2.8315	2.8333			N/A
6/17/2019	CADPLN	3:30:00 PM	2.8267	2.827			N/A
6/17/2019	CADSEK	9:30:00 AM	7.0773	7.0795			N/A
6/17/2019	CADSEK	11:30:00 AM	7.0731	7.077			N/A
6/17/2019	CADSEK	1:30:00 PM	7.0782	7.0812			N/A
6/17/2019	CADSEK	3:30:00 PM	7.0665	7.0655			N/A
6/17/2019	CADSGD	9:30:00 AM	1.0217	1.022			N/A
6/17/2019	CADSGD	11:30:00 AM	1.0213	1.0216			N/A
6/17/2019	CADSGD	1:30:00 PM	1.0215	1.0218			N/A
6/17/2019	CADSGD	3:30:00 PM	1.0213	1.0216			N/A
6/17/2019	CADZAR	9:30:00 AM	11.0139	11.0288			N/A
6/17/2019	CADZAR	11:30:00 AM	11.0244	11.0386			N/A
6/17/2019	CADZAR	1:30:00 PM	11.038	11.0528			N/A
6/17/2019	CADZAR	3:30:00 PM	11.0269	11.0279			N/A
6/17/2019	CHFCZK	9:30:00 AM	22.765	22.782			N/A
6/17/2019	CHFCZK	11:30:00 AM	22.794	22.809			N/A
6/17/2019	CHFCZK	1:30:00 PM	22.787	22.801			N/A
6/17/2019	CHFCZK	3:30:00 PM	22.779	22.79			N/A
6/17/2019	CHFDKK	9:30:00 AM	6.663	6.666			N/A
6/17/2019	CHFDKK	11:30:00 AM	6.666	6.669			N/A
6/17/2019	CHFDKK	1:30:00 PM	6.662	6.664			N/A
6/17/2019	CHFDKK	3:30:00 PM	6.661	6.662			N/A
6/17/2019	CHFDKK.fx	9:30:00 AM	6.6618	6.6678			N/A
6/17/2019	CHFDKK.fx	11:30:00 AM	6.6644	6.67			N/A
6/17/2019	CHFDKK.fx	1:30:00 PM	6.6603	6.6656			N/A
6/17/2019	CHFDKK.fx	3:30:00 PM	6.6596	6.6633			N/A
6/17/2019	CHFHKD	9:30:00 AM	7.8294	7.8321			N/A
6/17/2019	CHFHKD	11:30:00 AM	7.8388	7.8421			N/A
6/17/2019	CHFHKD	1:30:00 PM	7.8352	7.8386			N/A
6/17/2019	CHFHKD	3:30:00 PM	7.8532	7.8484			N/A
6/17/2019	CHFHUF	9:30:00 AM	287.43	287.81			N/A
6/17/2019	CHFHUF	11:30:00 AM	287.47	287.85			N/A
6/17/2019	CHFHUF	1:30:00 PM	287.37	287.73			N/A
6/17/2019	CHFHUF	3:30:00 PM	287.05	287.31			N/A



6/17/2019	CHFJPY	9:30:00 AM	108.595	108.664			N/A
6/17/2019	CHFJPY	11:30:00 AM	108.709	108.777			N/A
6/17/2019	CHFJPY	1:30:00 PM	108.696	108.765			N/A
6/17/2019	CHFJPY	3:30:00 PM	108.867	108.909			N/A
6/17/2019	CHFJPY.fx	9:30:00 AM	108.627	108.628			N/A
6/17/2019	CHFJPY.fx	11:30:00 AM	108.743	108.742			N/A
6/17/2019	CHFJPY.fx	1:30:00 PM	108.73	108.73			N/A
6/17/2019	CHFJPY.fx	3:30:00 PM	108.901	108.874			N/A
6/17/2019	CHFMXN	9:30:00 AM	19.1571	19.1705			N/A
6/17/2019	CHFMXN	11:30:00 AM	19.1715	19.1832			N/A
6/17/2019	CHFMXN	1:30:00 PM	19.1604	19.1755			N/A
6/17/2019	CHFMXN	3:30:00 PM	19.192	19.201			N/A
6/17/2019	CHFNOK	9:30:00 AM	8.7155	8.7225			N/A
6/17/2019	CHFNOK	11:30:00 AM	8.7293	8.736			N/A
6/17/2019	CHFNOK	1:30:00 PM	8.732	8.7397			N/A
6/17/2019	CHFNOK	3:30:00 PM	8.7343	8.7395			N/A
6/17/2019	CHFNOK.fx	9:30:00 AM	8.71904	8.71899			N/A
6/17/2019	CHFNOK.fx	11:30:00 AM	8.73278	8.73243			N/A
6/17/2019	CHFNOK.fx	1:30:00 PM	8.73567	8.73605			N/A
6/17/2019	CHFNOK.fx	3:30:00 PM	8.73779	8.73619			N/A
6/17/2019	CHFPLN	9:30:00 AM	3.7974	3.8003			N/A
6/17/2019	CHFPLN	11:30:00 AM	3.8018	3.8042			N/A
6/17/2019	CHFPLN	1:30:00 PM	3.8	3.8026			N/A
6/17/2019	CHFPLN	3:30:00 PM	3.7995	3.8012			N/A
6/17/2019	CHFPLN.fx	9:30:00 AM	3.79504	3.80265			N/A
6/17/2019	CHFPLN.fx	11:30:00 AM	3.79946	3.80633			N/A
6/17/2019	CHFPLN.fx	1:30:00 PM	3.7978	3.80485			N/A
6/17/2019	CHFPLN.fx	3:30:00 PM	3.79714	3.80367			N/A
6/17/2019	CHFSEK	9:30:00 AM	9.4942	9.4981			N/A
6/17/2019	CHFSEK	11:30:00 AM	9.4994	9.5036			N/A
6/17/2019	CHFSEK	1:30:00 PM	9.4995	9.5035			N/A
6/17/2019	CHFSEK	3:30:00 PM	9.4978	9.4993			N/A
6/17/2019	CHFSGD	9:30:00 AM	1.3715	1.3718			N/A
6/17/2019	CHFSGD	11:30:00 AM	1.3724	1.3728			N/A

6/17/2019	CHFSGD	1:30:00 PM	1.3717	1.372			N/A
6/17/2019	CHFSGD	3:30:00 PM	1.374	1.3739			N/A
6/17/2019	CHFSGD.fx	9:30:00 AM	1.37164	1.37158			N/A
6/17/2019	CHFSGD.fx	11:30:00 AM	1.37263	1.37253			N/A
6/17/2019	CHFSGD.fx	1:30:00 PM	1.37193	1.37177			N/A
6/17/2019	CHFSGD.fx	3:30:00 PM	1.37413	1.37347			N/A
6/17/2019	CHFZAR	9:30:00 AM	14.7783	14.7895			N/A
6/17/2019	CHFZAR	11:30:00 AM	14.8127	14.8199			N/A
6/17/2019	CHFZAR	1:30:00 PM	14.8184	14.8294			N/A
6/17/2019	CHFZAR	3:30:00 PM	14.8244	14.8251			N/A
6/17/2019	CZKJPY	9:30:00 AM					N/A
6/17/2019	CZKJPY	11:30:00 AM					N/A
6/17/2019	CZKJPY	1:30:00 PM					N/A
6/17/2019	CZKJPY	3:30:00 PM	4.778	4.782			N/A
6/17/2019	DAX30.i	9:30:00 AM	12117.93	12116.93			N/A
6/17/2019	DAX30.i	11:30:00 AM	12095.93	12092.43			N/A
6/17/2019	DAX30.i	1:30:00 PM	12106.43	12105.18			N/A
6/17/2019	DAX30.i	3:30:00 PM	12100.43	12097.43			N/A
6/17/2019	DJ30.i	9:30:00 AM					N/A
6/17/2019	DJ30.i	11:30:00 AM					N/A
6/17/2019	DJ30.i	1:30:00 PM					N/A
6/17/2019	DJ30.i	3:30:00 PM					N/A
6/17/2019	DKKJPY	9:30:00 AM					N/A
6/17/2019	DKKJPY	11:30:00 AM					N/A
6/17/2019	DKKJPY	1:30:00 PM					N/A
6/17/2019	DKKJPY	3:30:00 PM	16.35	16.37			N/A
6/17/2019	EURAUD	9:30:00 AM	1.62969	1.62991			N/A
6/17/2019	EURAUD	11:30:00 AM	1.63118	1.63156			N/A
6/17/2019	EURAUD	1:30:00 PM	1.63179	1.63223			N/A
6/17/2019	EURAUD	3:30:00 PM	1.63516	1.63507			N/A
6/17/2019	EURAUD.fx	9:30:00 AM	1.6299	1.6297			N/A
6/17/2019	EURAUD.fx	11:30:00 AM	1.63139	1.63135	1000	1000	N/A
6/17/2019	EURAUD.fx	1:30:00 PM	1.63198	1.63201			N/A
6/17/2019	EURAUD.fx	3:30:00 PM	1.63534	1.63485			N/A

6/17/2019	EURCAD	9:30:00 AM	1.50273	1.50336			N/A
6/17/2019	EURCAD	11:30:00 AM	1.50373	1.50449			N/A
6/17/2019	EURCAD	1:30:00 PM	1.50354	1.50432			N/A
6/17/2019	EURCAD	3:30:00 PM	1.50704	1.50703			N/A
6/17/2019	EURCAD.fx	9:30:00 AM	1.50314	1.50294			N/A
6/17/2019	EURCAD.fx	11:30:00 AM	1.50416	1.50407			N/A
6/17/2019	EURCAD.fx	1:30:00 PM	1.50396	1.50388			N/A
6/17/2019	EURCAD.fx	3:30:00 PM	1.50745	1.50661			N/A
6/17/2019	EURCHF	9:30:00 AM	1.12043	1.12047			N/A
6/17/2019	EURCHF	11:30:00 AM	1.11998	1.11999			N/A
6/17/2019	EURCHF	1:30:00 PM	1.12069	1.12071			N/A
6/17/2019	EURCHF	3:30:00 PM	1.12113	1.12084			N/A
6/17/2019	EURCHF.fx	9:30:00 AM	1.1205	1.12041			N/A
6/17/2019	EURCHF.fx	11:30:00 AM	1.12004	1.11992			N/A
6/17/2019	EURCHF.fx	1:30:00 PM	1.12076	1.12065			N/A
6/17/2019	EURCHF.fx	3:30:00 PM	1.12118	1.12078			N/A
6/17/2019	EURCZK	9:30:00 AM	25.492	25.531			N/A
6/17/2019	EURCZK	11:30:00 AM					N/A
6/17/2019	EURCZK	1:30:00 PM	25.522	25.561			N/A
6/17/2019	EURCZK	3:30:00 PM	25.523	25.556			N/A
6/17/2019	EURDKK	9:30:00 AM	7.4661	7.4674			N/A
6/17/2019	EURDKK	11:30:00 AM	7.4659	7.4671			N/A
6/17/2019	EURDKK	1:30:00 PM	7.4653	7.4665			N/A
6/17/2019	EURDKK	3:30:00 PM	7.4653	7.4666			N/A
6/17/2019	EURGBP	9:30:00 AM	0.89073	0.89066			N/A
6/17/2019	EURGBP	11:30:00 AM	0.89115	0.89118			N/A
6/17/2019	EURGBP	1:30:00 PM	0.89057	0.89061			N/A
6/17/2019	EURGBP	3:30:00 PM	0.89245	0.89203			N/A
6/17/2019	EURGBP.fx	9:30:00 AM	0.89077	0.8906			N/A
6/17/2019	EURGBP.fx	11:30:00 AM	0.89119	0.89113			N/A
6/17/2019	EURGBP.fx	1:30:00 PM	0.89062	0.89057			N/A
6/17/2019	EURGBP.fx	3:30:00 PM	0.8925	0.89197			N/A
6/17/2019	EURHKD	9:30:00 AM	8.7725	8.7758			N/A
6/17/2019	EURHKD	11:30:00 AM	8.779	8.7842			N/A

6/17/2019	EURHKD	1:30:00 PM	8.78	8.785		N/A
6/17/2019	EURHKD	3:30:00 PM	8.8028	8.8044		N/A
6/17/2019	EURHKD.fx	9:30:00 AM	8.77532	8.77294		N/A
6/17/2019	EURHKD.fx	11:30:00 AM	8.78183	8.78135		N/A
6/17/2019	EURHKD.fx	1:30:00 PM	8.78283	8.78216		N/A
6/17/2019	EURHKD.fx	3:30:00 PM	8.80563	8.80171		N/A
6/17/2019	EURHUF	9:30:00 AM	321.95	322.59		N/A
6/17/2019	EURHUF	11:30:00 AM	321.9	322.5		N/A
6/17/2019	EURHUF	1:30:00 PM	321.92	322.57		N/A
6/17/2019	EURHUF	3:30:00 PM	321.9	322.42		N/A
6/17/2019	EURHUF.fx	9:30:00 AM	322.231	322.398		N/A
6/17/2019	EURHUF.fx	11:30:00 AM	322.202	322.367		N/A
6/17/2019	EURHUF.fx	1:30:00 PM	322.28	322.43		N/A
6/17/2019	EURHUF.fx	3:30:00 PM	322.188	322.13		N/A
6/17/2019	EURJPY	9:30:00 AM	121.715	121.716		N/A
6/17/2019	EURJPY	11:30:00 AM	121.782	121.789		N/A
6/17/2019	EURJPY	1:30:00 PM	121.856	121.854		N/A
6/17/2019	EURJPY	3:30:00 PM	122.075	122.048		N/A
6/17/2019	EURJPY.fx	9:30:00 AM	121.718	121.711		N/A
6/17/2019	EURJPY.fx	11:30:00 AM	121.784	121.784		N/A
6/17/2019	EURJPY.fx	1:30:00 PM	121.858	121.85		N/A
6/17/2019	EURJPY.fx	3:30:00 PM	122.074	122.045		N/A
6/17/2019	EURMXN	9:30:00 AM	21.4658	21.4804		N/A
6/17/2019	EURMXN	11:30:00 AM	21.4733	21.4895		N/A
6/17/2019	EURMXN	1:30:00 PM	21.4746	21.4937		N/A
6/17/2019	EURMXN	3:30:00 PM	21.5208	21.5217		N/A
6/17/2019	EURMXN.f	9:30:00 AM	21.4742	21.4718		N/A
6/17/2019	EURMXN.f	11:30:00 AM	21.4821	21.481		N/A
6/17/2019	EURMXN.f	1:30:00 PM	21.4837	21.4853		N/A
6/17/2019	EURMXN.f	3:30:00 PM	21.5292	21.5124		N/A
6/17/2019	EURNOK	9:30:00 AM	9.7644	9.7741		N/A
6/17/2019	EURNOK	11:30:00 AM	9.7742	9.7863		N/A
6/17/2019	EURNOK	1:30:00 PM	9.7847	9.796		N/A
6/17/2019	EURNOK	3:30:00 PM	9.788	9.7997		N/A

6/17/2019	EURNOK.fx	9:30:00 AM	9.77003	9.76881			N/A
6/17/2019	EURNOK.fx	11:30:00 AM	9.77971	9.78048			N/A
6/17/2019	EURNOK.fx	1:30:00 PM	9.79032	9.79028			N/A
6/17/2019	EURNOK.fx	3:30:00 PM	9.79354	9.79428			N/A
6/17/2019	EURNZD	9:30:00 AM	1.72149	1.72221			N/A
6/17/2019	EURNZD	11:30:00 AM	1.72259	1.72336			N/A
6/17/2019	EURNZD	1:30:00 PM	1.72307	1.72389			N/A
6/17/2019	EURNZD	3:30:00 PM	1.72633	1.72645			N/A
6/17/2019	EURNZD.fx	9:30:00 AM	1.72192	1.72177			N/A
6/17/2019	EURNZD.fx	11:30:00 AM	1.72302	1.72292			N/A
6/17/2019	EURNZD.fx	1:30:00 PM	1.7235	1.72345			N/A
6/17/2019	EURNZD.fx	3:30:00 PM	1.72671	1.72602			N/A
6/17/2019	EURPLN	9:30:00 AM	4.2549	4.258			N/A
6/17/2019	EURPLN	11:30:00 AM	4.2576	4.2606			N/A
6/17/2019	EURPLN	1:30:00 PM	4.2586	4.2617			N/A
6/17/2019	EURPLN	3:30:00 PM	4.2587	4.2615			N/A
6/17/2019	EURPLN.fx	9:30:00 AM	4.254	4.2587			N/A
6/17/2019	EURPLN.fx	11:30:00 AM	4.25707	4.26112			N/A
6/17/2019	EURPLN.fx	1:30:00 PM	4.25797	4.26227			N/A
6/17/2019	EURPLN.fx	3:30:00 PM	4.25797	4.26202			N/A
6/17/2019	EURRUB	9:30:00 AM					N/A
6/17/2019	EURRUB	11:30:00 AM	71.754	72.191			N/A
6/17/2019	EURRUB	1:30:00 PM	71.801	72.233			N/A
6/17/2019	EURRUB	3:30:00 PM	71.86	72.275			N/A
6/17/2019	EURSEK	9:30:00 AM	10.6395	10.643			N/A
6/17/2019	EURSEK	11:30:00 AM	10.6408	10.6454			N/A
6/17/2019	EURSEK	1:30:00 PM	10.6478	10.6519			N/A
6/17/2019	EURSEK	3:30:00 PM	10.648	10.6524			N/A
6/17/2019	EURSEK.fx	9:30:00 AM	10.64131	10.64109			N/A
6/17/2019	EURSEK.fx	11:30:00 AM	10.6424	10.64372			N/A
6/17/2019	EURSEK.fx	1:30:00 PM	10.64946	10.65018			N/A
6/17/2019	EURSEK.fx	3:30:00 PM	10.64963	10.65054			N/A
6/17/2019	EURSGD	9:30:00 AM	1.5365	1.5371			N/A
6/17/2019	EURSGD	11:30:00 AM	1.5368	1.5377			N/A

6/17/2019	EURSGD	1:30:00 PM	1.537	1.5378			N/A
6/17/2019	EURSGD	3:30:00 PM	1.5398	1.5403			N/A
6/17/2019	EURSGD.fx	9:30:00 AM	1.53693	1.53674			N/A
6/17/2019	EURSGD.fx	11:30:00 AM	1.53719	1.53726			N/A
6/17/2019	EURSGD.fx	1:30:00 PM	1.53738	1.53738			N/A
6/17/2019	EURSGD.fx	3:30:00 PM	1.54017	1.53991			N/A
6/17/2019	EURUSD	9:30:00 AM	1.12077	1.12063	50	50	N/A
6/17/2019	EURUSD	11:30:00 AM	1.12134	1.12146			N/A
6/17/2019	EURUSD	1:30:00 PM	1.12137	1.12144			N/A
6/17/2019	EURUSD	3:30:00 PM	1.12442	1.12383		20	N/A
6/17/2019	EURUSD.fx	9:30:00 AM	1.12097	1.12072			N/A
6/17/2019	EURUSD.fx	11:30:00 AM	1.12155	1.12155			N/A
6/17/2019	EURUSD.fx	1:30:00 PM	1.12158	1.12153			N/A
6/17/2019	EURUSD.fx	3:30:00 PM	1.12464	1.12392		20	N/A
6/17/2019	EURZAR	9:30:00 AM	16.5607	16.5757			N/A
6/17/2019	EURZAR	11:30:00 AM	16.5896	16.6039			N/A
6/17/2019	EURZAR	1:30:00 PM	16.6069	16.6251			N/A
6/17/2019	EURZAR	3:30:00 PM	16.6287	16.628			N/A
6/17/2019	EURZAR.fx	9:30:00 AM	16.5597	16.57687			N/A
6/17/2019	EURZAR.fx	11:30:00 AM	16.58894	16.60464			N/A
6/17/2019	EURZAR.fx	1:30:00 PM	16.60677	16.626			N/A
6/17/2019	EURZAR.fx	3:30:00 PM	16.62715	16.62819			N/A
6/17/2019	GBPAUD	9:30:00 AM	1.83045	1.83055			N/A
6/17/2019	GBPAUD	11:30:00 AM	1.83104	1.83154			N/A
6/17/2019	GBPAUD	1:30:00 PM	1.83278	1.83345			N/A
6/17/2019	GBPAUD	3:30:00 PM	1.83325	1.83336			N/A
6/17/2019	GBPAUD.fx	9:30:00 AM	1.83082	1.83017			N/A
6/17/2019	GBPAUD.fx	11:30:00 AM	1.83141	1.83115			N/A
6/17/2019	GBPAUD.fx	1:30:00 PM	1.83318	1.83303			N/A
6/17/2019	GBPAUD.fx	3:30:00 PM	1.83366	1.83296			N/A
6/17/2019	GBPCAD	9:30:00 AM	1.68745	1.6876			N/A
6/17/2019	GBPCAD	11:30:00 AM	1.68756	1.68806			N/A
6/17/2019	GBPCAD	1:30:00 PM	1.68837	1.68898			N/A
6/17/2019	GBPCAD	3:30:00 PM	1.68899	1.689			N/A

6/17/2019	GBPCAD.fx	9:30:00 AM	1.68784	1.6872			N/A
6/17/2019	GBPCAD.fx	11:30:00 AM	1.68795	1.68767			N/A
6/17/2019	GBPCAD.fx	1:30:00 PM	1.68877	1.6886			N/A
6/17/2019	GBPCAD.fx	3:30:00 PM	1.68938	1.68867			N/A
6/17/2019	GBPCHF	9:30:00 AM	1.25785	1.258			N/A
6/17/2019	GBPCHF	11:30:00 AM	1.25656	1.25693			N/A
6/17/2019	GBPCHF	1:30:00 PM	1.2582	1.25855			N/A
6/17/2019	GBPCHF	3:30:00 PM	1.25652	1.25625			N/A
6/17/2019	GBPCHF.fx	9:30:00 AM	1.25804	1.2578			N/A
6/17/2019	GBPCHF.fx	11:30:00 AM	1.25676	1.25672			N/A
6/17/2019	GBPCHF.fx	1:30:00 PM	1.25839	1.25832			N/A
6/17/2019	GBPCHF.fx	3:30:00 PM	1.25672	1.25607			N/A
6/17/2019	GBPCZK	9:30:00 AM	28.63	28.65			N/A
6/17/2019	GBPCZK	11:30:00 AM	28.641	28.661			N/A
6/17/2019	GBPCZK	1:30:00 PM	28.668	28.688			N/A
6/17/2019	GBPCZK	3:30:00 PM	28.611	28.623			N/A
6/17/2019	GBPDKK	9:30:00 AM	8.379	8.389			N/A
6/17/2019	GBPDKK	11:30:00 AM	8.375	8.385			N/A
6/17/2019	GBPDKK	1:30:00 PM	8.38	8.39			N/A
6/17/2019	GBPDKK	3:30:00 PM	8.367	8.373			N/A
6/17/2019	GBPDKK.fx	9:30:00 AM	8.3784	8.3897			N/A
6/17/2019	GBPDKK.fx	11:30:00 AM	8.3729	8.3856			N/A
6/17/2019	GBPDKK.fx	1:30:00 PM	8.3783	8.3907			N/A
6/17/2019	GBPDKK.fx	3:30:00 PM	8.3653	8.3733			N/A
6/17/2019	GBPHKD	9:30:00 AM	9.848	9.8495			N/A
6/17/2019	GBPHKD	11:30:00 AM	9.849	9.8538			N/A
6/17/2019	GBPHKD	1:30:00 PM	9.8571	9.8616			N/A
6/17/2019	GBPHKD	3:30:00 PM	9.8622	9.8617			N/A
6/17/2019	GBPHUF	9:30:00 AM	361.51	361.94			N/A
6/17/2019	GBPHUF	11:30:00 AM	361.22	361.68			N/A
6/17/2019	GBPHUF	1:30:00 PM	361.55	362			N/A
6/17/2019	GBPHUF	3:30:00 PM	360.62	360.79			N/A
6/17/2019	GBPJPY	9:30:00 AM	136.65	136.656			N/A
6/17/2019	GBPJPY	11:30:00 AM	136.64	136.679			N/A

6/17/2019	GBPJPY	1:30:00 PM	136.809	136.834			N/A
6/17/2019	GBPJPY	3:30:00 PM	136.803	136.785			N/A
6/17/2019	GBPJPY.fx	9:30:00 AM	136.668	136.635			N/A
6/17/2019	GBPJPY.fx	11:30:00 AM	136.659	136.658			N/A
6/17/2019	GBPJPY.fx	1:30:00 PM	136.829	136.812			N/A
6/17/2019	GBPJPY.fx	3:30:00 PM	136.824	136.765			N/A
6/17/2019	GBPMXN	9:30:00 AM	24.0997	24.1039			N/A
6/17/2019	GBPMXN	11:30:00 AM	24.0923	24.1016			N/A
6/17/2019	GBPMXN	1:30:00 PM	24.1088	24.1225			N/A
6/17/2019	GBPMXN	3:30:00 PM	24.1084	24.1118			N/A
6/17/2019	GBPNOK	9:30:00 AM	10.9653	10.9713			N/A
6/17/2019	GBPNOK	11:30:00 AM	10.9699	10.9799			N/A
6/17/2019	GBPNOK	1:30:00 PM	10.9877	10.9981			N/A
6/17/2019	GBPNOK	3:30:00 PM	10.9739	10.9796			N/A
6/17/2019	GBPNOK.fx	9:30:00 AM	10.97032	10.9665			N/A
6/17/2019	GBPNOK.fx	11:30:00 AM	10.9748	10.97505			N/A
6/17/2019	GBPNOK.fx	1:30:00 PM	10.99276	10.99294			N/A
6/17/2019	GBPNOK.fx	3:30:00 PM	10.97877	10.97472			N/A
6/17/2019	GBPNZD	9:30:00 AM	1.9331	1.93328			N/A
6/17/2019	GBPNZD	11:30:00 AM	1.93315	1.93365			N/A
6/17/2019	GBPNZD	1:30:00 PM	1.93485	1.93548			N/A
6/17/2019	GBPNZD	3:30:00 PM	1.93467	1.93458			N/A
6/17/2019	GBPNZD.fx	9:30:00 AM	1.93347	1.9329			N/A
6/17/2019	GBPNZD.fx	11:30:00 AM	1.9335	1.93326			N/A
6/17/2019	GBPNZD.fx	1:30:00 PM	1.93521	1.93507			N/A
6/17/2019	GBPNZD.fx	3:30:00 PM	1.93507	1.93419			N/A
6/17/2019	GBPPLN	9:30:00 AM	4.7784	4.7793			N/A
6/17/2019	GBPPLN	11:30:00 AM	4.7787	4.7799			N/A
6/17/2019	GBPPLN	1:30:00 PM	4.7825	4.7843			N/A
6/17/2019	GBPPLN	3:30:00 PM	4.7754	4.7741			N/A
6/17/2019	GBPPLN.fx	9:30:00 AM	4.77617	4.78144			N/A
6/17/2019	GBPPLN.fx	11:30:00 AM	4.77646	4.78196			N/A
6/17/2019	GBPPLN.fx	1:30:00 PM	4.78052	4.78625			N/A
6/17/2019	GBPPLN.fx	3:30:00 PM	4.77322	4.7762			N/A



6/17/2019	GBPSEK	9:30:00 AM	11.9427	11.9501			N/A
6/17/2019	GBPSEK	11:30:00 AM	11.9383	11.9468			N/A
6/17/2019	GBPSEK	1:30:00 PM	11.9538	11.962			N/A
6/17/2019	GBPSEK	3:30:00 PM	11.9365	11.9382			N/A
6/17/2019	GBPSEK.fx	9:30:00 AM	11.93908	11.95345			N/A
6/17/2019	GBPSEK.fx	11:30:00 AM	11.93464	11.95009			N/A
6/17/2019	GBPSEK.fx	1:30:00 PM	11.95012	11.96548			N/A
6/17/2019	GBPSEK.fx	3:30:00 PM	11.93276	11.94176			N/A
6/17/2019	GBPSGD	9:30:00 AM	1.7254	1.7255			N/A
6/17/2019	GBPSGD	11:30:00 AM	1.7247	1.7253			N/A
6/17/2019	GBPSGD	1:30:00 PM	1.726	1.7266			N/A
6/17/2019	GBPSGD	3:30:00 PM	1.726	1.726			N/A
6/17/2019	GBPSGD.fx	9:30:00 AM	1.72357	1.72733			N/A
6/17/2019	GBPSGD.fx	11:30:00 AM	1.72287	1.72706			N/A
6/17/2019	GBPSGD.fx	1:30:00 PM	1.72412	1.72841			N/A
6/17/2019	GBPSGD.fx	3:30:00 PM	1.72418	1.72785			N/A
6/17/2019	GBPUSD	9:30:00 AM	1.25865	1.25817			N/A
6/17/2019	GBPUSD	11:30:00 AM	1.25855	1.25851			N/A
6/17/2019	GBPUSD	1:30:00 PM	1.25937	1.25929			N/A
6/17/2019	GBPUSD	3:30:00 PM	1.26034	1.25964			N/A
6/17/2019	GBPUSD.fx	9:30:00 AM	1.2587	1.2581			N/A
6/17/2019	GBPUSD.fx	11:30:00 AM	1.2586	1.25844			N/A
6/17/2019	GBPUSD.fx	1:30:00 PM	1.25942	1.25923			N/A
6/17/2019	GBPUSD.fx	3:30:00 PM	1.2604	1.25963			N/A
6/17/2019	GBPZAR	9:30:00 AM	18.5891	18.6118			N/A
6/17/2019	GBPZAR	11:30:00 AM	18.6135	18.6346			N/A
6/17/2019	GBPZAR	1:30:00 PM	18.6447	18.6714			N/A
6/17/2019	GBPZAR	3:30:00 PM	18.6354	18.6396			N/A
6/17/2019	GBPZAR.fx	9:30:00 AM	18.5955	18.6052			N/A
6/17/2019	GBPZAR.fx	11:30:00 AM	18.6206	18.6273			N/A
6/17/2019	GBPZAR.fx	1:30:00 PM	18.6521	18.6646			N/A
6/17/2019	GBPZAR.fx	3:30:00 PM	18.642	18.6323			N/A
6/17/2019	GOLD	9:30:00 AM	1338.78	1339.02			N/A
6/17/2019	GOLD	11:30:00 AM	1335.18	1335.45			N/A

6/17/2019	GOLD	1:30:00 PM	1334.61	1335			N/A
6/17/2019	GOLD	3:30:00 PM	1340.47	1339.05			N/A
6/17/2019	HKDJPY	9:30:00 AM					N/A
6/17/2019	HKDJPY	11:30:00 AM	13.87	13.88			N/A
6/17/2019	HKDJPY	1:30:00 PM	13.87	13.88			N/A
6/17/2019	HKDJPY	3:30:00 PM	13.87	13.87			N/A
6/17/2019	HKDJPY.fx	9:30:00 AM	13.868	13.874			N/A
6/17/2019	HKDJPY.fx	11:30:00 AM	13.864	13.871			N/A
6/17/2019	HKDJPY.fx	1:30:00 PM	13.87	13.876			N/A
6/17/2019	HKDJPY.fx	3:30:00 PM	13.864	13.864			N/A
6/17/2019	HUFJPY	9:30:00 AM	0.378	0.3783			N/A
6/17/2019	HUFJPY	11:30:00 AM	0.3781	0.3784			N/A
6/17/2019	HUFJPY	1:30:00 PM	0.3782	0.3785			N/A
6/17/2019	HUFJPY	3:30:00 PM	0.3791	0.3794			N/A
6/17/2019	JP225.i	9:30:00 AM	21120.22	21136.06			N/A
6/17/2019	JP225.i	11:30:00 AM	21120.22	21135.22			N/A
6/17/2019	JP225.i	1:30:00 PM	21125.22	21145.22			N/A
6/17/2019	JP225.i	3:30:00 PM	21137.72	21147.72			N/A
6/17/2019	MXNJPY	9:30:00 AM	5.67	5.68			N/A
6/17/2019	MXNJPY	11:30:00 AM	5.67	5.68			N/A
6/17/2019	MXNJPY	1:30:00 PM					N/A
6/17/2019	MXNJPY	3:30:00 PM	5.67	5.68			N/A
6/17/2019	NASDAQ.i	9:30:00 AM					N/A
6/17/2019	NASDAQ.i	11:30:00 AM					N/A
6/17/2019	NASDAQ.i	1:30:00 PM					N/A
6/17/2019	NASDAQ.i	3:30:00 PM					N/A
6/17/2019	NOKJPY	9:30:00 AM	12.45	12.48			N/A
6/17/2019	NOKJPY	11:30:00 AM	12.43	12.47			N/A
6/17/2019	NOKJPY	1:30:00 PM	12.44	12.48			N/A
6/17/2019	NOKJPY	3:30:00 PM	12.45	12.48			N/A
6/17/2019	NOKJPY.fx	9:30:00 AM	12.456	12.461			N/A
6/17/2019	NOKJPY.fx	11:30:00 AM	12.448	12.456			N/A
6/17/2019	NOKJPY.fx	1:30:00 PM	12.443	12.45			N/A
6/17/2019	NOKJPY.fx	3:30:00 PM	12.459	12.466			N/A

6/17/2019	NZDCAD	9:30:00 AM	0.87257	0.87325			N/A
6/17/2019	NZDCAD	11:30:00 AM	0.87261	0.87331			N/A
6/17/2019	NZDCAD	1:30:00 PM	0.87227	0.87297			N/A
6/17/2019	NZDCAD	3:30:00 PM	0.87283	0.87311			N/A
6/17/2019	NZDCAD.fx	9:30:00 AM	0.8729	0.87291			N/A
6/17/2019	NZDCAD.fx	11:30:00 AM	0.87294	0.87298			N/A
6/17/2019	NZDCAD.fx	1:30:00 PM	0.87261	0.87263			N/A
6/17/2019	NZDCAD.fx	3:30:00 PM	0.87316	0.87278			N/A
6/17/2019	NZDCHF	9:30:00 AM	0.65038	0.65108			N/A
6/17/2019	NZDCHF	11:30:00 AM	0.6497	0.65034			N/A
6/17/2019	NZDCHF	1:30:00 PM	0.64989	0.6506			N/A
6/17/2019	NZDCHF	3:30:00 PM	0.64908	0.64961			N/A
6/17/2019	NZDCHF.fx	9:30:00 AM	0.65072	0.65072			N/A
6/17/2019	NZDCHF.fx	11:30:00 AM	0.65004	0.64998			N/A
6/17/2019	NZDCHF.fx	1:30:00 PM	0.65024	0.65024			N/A
6/17/2019	NZDCHF.fx	3:30:00 PM	0.64943	0.64924			N/A
6/17/2019	NZDCZK	9:30:00 AM	14.809	14.821			N/A
6/17/2019	NZDCZK	11:30:00 AM	14.811	14.824			N/A
6/17/2019	NZDCZK	1:30:00 PM	14.813	14.825			N/A
6/17/2019	NZDCZK	3:30:00 PM	14.787	14.794			N/A
6/17/2019	NZDDKK	9:30:00 AM					N/A
6/17/2019	NZDDKK	11:30:00 AM					N/A
6/17/2019	NZDDKK	1:30:00 PM	4.331	4.334			N/A
6/17/2019	NZDDKK	3:30:00 PM	4.322	4.326			N/A
6/17/2019	NZDHKD	9:30:00 AM	5.0926	5.0954			N/A
6/17/2019	NZDHKD	11:30:00 AM	5.0938	5.0966			N/A
6/17/2019	NZDHKD	1:30:00 PM	5.0928	5.0957			N/A
6/17/2019	NZDHKD	3:30:00 PM	5.0966	5.096			N/A
6/17/2019	NZDHUF	9:30:00 AM	186.96	187.24			N/A
6/17/2019	NZDHUF	11:30:00 AM	186.78	187.08			N/A
6/17/2019	NZDHUF	1:30:00 PM	186.78	187.08			N/A
6/17/2019	NZDHUF	3:30:00 PM	186.33	186.52			N/A
6/17/2019	NZDJPY	9:30:00 AM	70.652	70.726			N/A
6/17/2019	NZDJPY	11:30:00 AM	70.652	70.717			N/A

6/17/2019	NZDJPY	1:30:00 PM	70.666	70.738			N/A
6/17/2019	NZDJPY	3:30:00 PM	70.671	70.726			N/A
6/17/2019	NZDJPY.fx	9:30:00 AM	70.683	70.692			N/A
6/17/2019	NZDJPY.fx	11:30:00 AM	70.683	70.683			N/A
6/17/2019	NZDJPY.fx	1:30:00 PM	70.698	70.705			N/A
6/17/2019	NZDJPY.fx	3:30:00 PM	70.702	70.693			N/A
6/17/2019	NZDMXN	9:30:00 AM	12.4631	12.4683			N/A
6/17/2019	NZDMXN	11:30:00 AM	12.4593	12.4642			N/A
6/17/2019	NZDMXN	1:30:00 PM	12.4571	12.4638			N/A
6/17/2019	NZDMXN	3:30:00 PM	12.4601	12.4615			N/A
6/17/2019	NZDNOK	9:30:00 AM	5.67	5.673			N/A
6/17/2019	NZDNOK	11:30:00 AM	5.672	5.6759			N/A
6/17/2019	NZDNOK	1:30:00 PM	5.6763	5.6798			N/A
6/17/2019	NZDNOK	3:30:00 PM	5.667	5.6698			N/A
6/17/2019	NZDPLN	9:30:00 AM	2.47	2.4714			N/A
6/17/2019	NZDPLN	11:30:00 AM	2.4703	2.4718			N/A
6/17/2019	NZDPLN	1:30:00 PM	2.4703	2.4716			N/A
6/17/2019	NZDPLN	3:30:00 PM	2.4659	2.4673			N/A
6/17/2019	NZDSEK	9:30:00 AM	6.1738	6.1805			N/A
6/17/2019	NZDSEK	11:30:00 AM	6.1712	6.1781			N/A
6/17/2019	NZDSEK	1:30:00 PM	6.1731	6.1796			N/A
6/17/2019	NZDSEK	3:30:00 PM	6.1632	6.1683			N/A
6/17/2019	NZDSGD	9:30:00 AM	0.8922	0.8929			N/A
6/17/2019	NZDSGD	11:30:00 AM	0.8919	0.8923			N/A
6/17/2019	NZDSGD	1:30:00 PM	0.8917	0.8923			N/A
6/17/2019	NZDSGD	3:30:00 PM	0.8919	0.8923			N/A
6/17/2019	NZDSGD.fx	9:30:00 AM	0.89223	0.89281			N/A
6/17/2019	NZDSGD.fx	11:30:00 AM	0.89188	0.89251			N/A
6/17/2019	NZDSGD.fx	1:30:00 PM	0.89172	0.89231			N/A
6/17/2019	NZDSGD.fx	3:30:00 PM	0.8919	0.89223			N/A
6/17/2019	NZDUSD	9:30:00 AM	0.65086	0.65096			N/A
6/17/2019	NZDUSD	11:30:00 AM	0.65081	0.65097			N/A
6/17/2019	NZDUSD	1:30:00 PM	0.65064	0.65077			N/A
6/17/2019	NZDUSD	3:30:00 PM	0.65131	0.65103			N/A

6/17/2019	NZDUSD.fx	9:30:00 AM	0.65094	0.65097			N/A
6/17/2019	NZDUSD.fx	11:30:00 AM	0.65089	0.65098			N/A
6/17/2019	NZDUSD.fx	1:30:00 PM	0.65071	0.65079			N/A
6/17/2019	NZDUSD.fx	3:30:00 PM	0.65138	0.65105			N/A
6/17/2019	NZDZAR	9:30:00 AM	9.6104	9.6248			N/A
6/17/2019	NZDZAR	11:30:00 AM	9.6211	9.6343			N/A
6/17/2019	NZDZAR	1:30:00 PM	9.6289	9.6434			N/A
6/17/2019	NZDZAR	3:30:00 PM	9.6195	9.6275			N/A
6/17/2019	SEKJPY	9:30:00 AM	11.44	11.45			N/A
6/17/2019	SEKJPY	11:30:00 AM	11.44	11.45			N/A
6/17/2019	SEKJPY	1:30:00 PM					N/A
6/17/2019	SEKJPY	3:30:00 PM	11.46	11.47			N/A
6/17/2019	SEKJPY.fx	9:30:00 AM	11.429	11.447			N/A
6/17/2019	SEKJPY.fx	11:30:00 AM	11.433	11.452			N/A
6/17/2019	SEKJPY.fx	1:30:00 PM	11.432	11.451			N/A
6/17/2019	SEKJPY.fx	3:30:00 PM	11.451	11.468			N/A
6/17/2019	SGDJPY	9:30:00 AM	79.17	79.19			N/A
6/17/2019	SGDJPY	11:30:00 AM	79.22	79.22			N/A
6/17/2019	SGDJPY	1:30:00 PM	79.23	79.25			N/A
6/17/2019	SGDJPY	3:30:00 PM	79.24	79.24			N/A
6/17/2019	SILVER	9:30:00 AM	14.65	15.03			N/A
6/17/2019	SILVER	11:30:00 AM	14.62	14.99			N/A
6/17/2019	SILVER	1:30:00 PM	14.61	14.99			N/A
6/17/2019	SILVER	3:30:00 PM	14.7	15.06			N/A
6/17/2019	SPX500.i	9:30:00 AM	2895.05	2896.1			N/A
6/17/2019	SPX500.i	11:30:00 AM	2893.05	2894.1			N/A
6/17/2019	SPX500.i	1:30:00 PM	2892.05	2892.85			N/A
6/17/2019	SPX500.i	3:30:00 PM	2893.8	2893.87			N/A
6/17/2019	UK100.i	9:30:00 AM	7362.01	7361.51			N/A
6/17/2019	UK100.i	11:30:00 AM	7358.01	7356.51			N/A
6/17/2019	UK100.i	1:30:00 PM	7343.51	7344.76			N/A
6/17/2019	UK100.i	3:30:00 PM	7339.68	7339.76			N/A
6/17/2019	USDCAD	9:30:00 AM	1.34098	1.34108			N/A
6/17/2019	USDCAD	11:30:00 AM	1.34111	1.34116			N/A

6/17/2019	USDCAD	1:30:00 PM	1.34089	1.34093			N/A
6/17/2019	USDCAD	3:30:00 PM	1.34061	1.3402			N/A
6/17/2019	USDCAD.fx	9:30:00 AM	1.34101	1.34104			N/A
6/17/2019	USDCAD.fx	11:30:00 AM	1.34115	1.34112			N/A
6/17/2019	USDCAD.fx	1:30:00 PM	1.34093	1.34089			N/A
6/17/2019	USDCAD.fx	3:30:00 PM	1.34064	1.34017			N/A
6/17/2019	USDCHF	9:30:00 AM	0.99967	0.99961			N/A
6/17/2019	USDCHF	11:30:00 AM	0.99856	0.9986			N/A
6/17/2019	USDCHF	1:30:00 PM	0.99922	0.99921			N/A
6/17/2019	USDCHF	3:30:00 PM	0.99729	0.99675	9000	9000	N/A
6/17/2019	USDCHF.fx	9:30:00 AM	0.99973	0.99955			N/A
6/17/2019	USDCHF.fx	11:30:00 AM	0.99864	0.99853			N/A
6/17/2019	USDCHF.fx	1:30:00 PM	0.99927	0.99914			N/A
6/17/2019	USDCHF.fx	3:30:00 PM	0.99735	0.99668			N/A
6/17/2019	USDCZK	9:30:00 AM	22.772	22.792			N/A
6/17/2019	USDCZK	11:30:00 AM	22.775	22.798			N/A
6/17/2019	USDCZK	1:30:00 PM	22.782	22.804			N/A
6/17/2019	USDCZK	3:30:00 PM	22.731	22.739			N/A
6/17/2019	USDCZK.fx	9:30:00 AM	22.7804	22.7836			N/A
6/17/2019	USDCZK.fx	11:30:00 AM	22.7836	22.7898			N/A
6/17/2019	USDCZK.fx	1:30:00 PM	22.79	22.796			N/A
6/17/2019	USDCZK.fx	3:30:00 PM	22.7391	22.7305			N/A
6/17/2019	USDDKK	9:30:00 AM	6.6619	6.6645			N/A
6/17/2019	USDDKK	11:30:00 AM	6.6567	6.6607			N/A
6/17/2019	USDDKK	1:30:00 PM	6.6568	6.6605			N/A
6/17/2019	USDDKK	3:30:00 PM	6.6416	6.643			N/A
6/17/2019	USDDKK.fx	9:30:00 AM	6.6623	6.6625			N/A
6/17/2019	USDDKK.fx	11:30:00 AM	6.65717	6.65853			N/A
6/17/2019	USDDKK.fx	1:30:00 PM	6.65725	6.65852			N/A
6/17/2019	USDDKK.fx	3:30:00 PM	6.6421	6.64056			N/A
6/17/2019	USDHKD	9:30:00 AM	7.8279	7.828			N/A
6/17/2019	USDHKD	11:30:00 AM	7.8298	7.83			N/A
6/17/2019	USDHKD	1:30:00 PM	7.8304	7.8307			N/A
6/17/2019	USDHKD	3:30:00 PM	7.8296	7.8298			N/A

6/17/2019	USDHKD.fx	9:30:00 AM	7.82789	7.82832			N/A
6/17/2019	USDHKD.fx	11:30:00 AM	7.82973	7.83002			N/A
6/17/2019	USDHKD.fx	1:30:00 PM	7.83034	7.83093			N/A
6/17/2019	USDHKD.fx	3:30:00 PM	7.82942	7.82997			N/A
6/17/2019	USDHUF	9:30:00 AM	287.38	287.77			N/A
6/17/2019	USDHUF	11:30:00 AM	287.12	287.59			N/A
6/17/2019	USDHUF	1:30:00 PM	287.19	287.61			N/A
6/17/2019	USDHUF	3:30:00 PM	286.5	286.65			N/A
6/17/2019	USDHUF.fx	9:30:00 AM	287.573	287.567			N/A
6/17/2019	USDHUF.fx	11:30:00 AM	287.335	287.376			N/A
6/17/2019	USDHUF.fx	1:30:00 PM	287.405	287.446			N/A
6/17/2019	USDHUF.fx	3:30:00 PM	286.674	286.447			N/A
6/17/2019	USDINR	9:30:00 AM	64.84	74.82			N/A
6/17/2019	USDINR	11:30:00 AM	64.76	74.75			N/A
6/17/2019	USDINR	1:30:00 PM					N/A
6/17/2019	USDINR	3:30:00 PM					N/A
6/17/2019	USDJPY	9:30:00 AM	108.593	108.588			N/A
6/17/2019	USDJPY	11:30:00 AM	108.584	108.589			N/A
6/17/2019	USDJPY	1:30:00 PM	108.645	108.645			N/A
6/17/2019	USDJPY	3:30:00 PM	108.589	108.54			N/A
6/17/2019	USDJPY.fx	9:30:00 AM	108.598	108.581			N/A
6/17/2019	USDJPY.fx	11:30:00 AM	108.59	108.581			N/A
6/17/2019	USDJPY.fx	1:30:00 PM	108.651	108.638			N/A
6/17/2019	USDJPY.fx	3:30:00 PM	108.594	108.533			N/A
6/17/2019	USDMXN	9:30:00 AM	19.155	19.162			N/A
6/17/2019	USDMXN	11:30:00 AM	19.151	19.156			N/A
6/17/2019	USDMXN	1:30:00 PM	19.151	19.16			N/A
6/17/2019	USDMXN	3:30:00 PM	19.147	19.139			N/A
6/17/2019	USDMXN.f	9:30:00 AM					N/A
6/17/2019	USDMXN.f	11:30:00 AM					N/A
6/17/2019	USDMXN.f	1:30:00 PM					N/A
6/17/2019	USDMXN.f	3:30:00 PM					N/A
6/17/2019	USDNOK	9:30:00 AM	8.7129	8.7208			N/A
6/17/2019	USDNOK	11:30:00 AM	8.7163	8.7249			N/A

6/17/2019	USDNOK	1:30:00 PM	8.7252	8.7332			N/A
6/17/2019	USDNOK	3:30:00 PM	8.7104	8.7133			N/A
6/17/2019	USDNOK.fx	9:30:00 AM	8.71695	8.71621			N/A
6/17/2019	USDNOK.fx	11:30:00 AM	8.72041	8.72042			N/A
6/17/2019	USDNOK.fx	1:30:00 PM	8.72962	8.72855			N/A
6/17/2019	USDNOK.fx	3:30:00 PM	8.71469	8.70867			N/A
6/17/2019	USDPLN	9:30:00 AM	3.7971	3.798			N/A
6/17/2019	USDPLN	11:30:00 AM	3.7966	3.7981			N/A
6/17/2019	USDPLN	1:30:00 PM	3.7978	3.7991			N/A
6/17/2019	USDPLN	3:30:00 PM	3.7905	3.7888			N/A
6/17/2019	USDPLN.fx	9:30:00 AM	3.79626	3.79861			N/A
6/17/2019	USDPLN.fx	11:30:00 AM	3.79597	3.79881			N/A
6/17/2019	USDPLN.fx	1:30:00 PM	3.79697	3.79981			N/A
6/17/2019	USDPLN.fx	3:30:00 PM	3.78955	3.78952			N/A
6/17/2019	USDRUB	9:30:00 AM					N/A
6/17/2019	USDRUB	11:30:00 AM	64.095	64.479			N/A
6/17/2019	USDRUB	1:30:00 PM	64.135	64.522			N/A
6/17/2019	USDRUB	3:30:00 PM	64.033	64.406			N/A
6/17/2019	USDSEK	9:30:00 AM	9.4927	9.4942			N/A
6/17/2019	USDSEK	11:30:00 AM	9.4872	9.4912			N/A
6/17/2019	USDSEK	1:30:00 PM	9.4934	9.4967			N/A
6/17/2019	USDSEK	3:30:00 PM	9.4721	9.4721			N/A
6/17/2019	USDSEK.fx	9:30:00 AM	9.49541	9.49212			N/A
6/17/2019	USDSEK.fx	11:30:00 AM	9.48979	9.48934			N/A
6/17/2019	USDSEK.fx	1:30:00 PM	9.49613	9.49486			N/A
6/17/2019	USDSEK.fx	3:30:00 PM	9.47439	9.47023			N/A
6/17/2019	USDSGD	9:30:00 AM	1.371	1.3713			N/A
6/17/2019	USDSGD	11:30:00 AM	1.3705	1.3709			N/A
6/17/2019	USDSGD	1:30:00 PM	1.3706	1.3709			N/A
6/17/2019	USDSGD	3:30:00 PM	1.3699	1.3698			N/A
6/17/2019	USDSGD.fx	9:30:00 AM	1.3709	1.37129			N/A
6/17/2019	USDSGD.fx	11:30:00 AM	1.37036	1.37087			N/A
6/17/2019	USDSGD.fx	1:30:00 PM	1.37051	1.37101			N/A
6/17/2019	USDSGD.fx	3:30:00 PM	1.36984	1.3698			N/A



6/17/2019	USDZAR	9:30:00 AM	14.7767	14.7895			N/A
6/17/2019	USDZAR	11:30:00 AM	14.7914	14.8041			N/A
6/17/2019	USDZAR	1:30:00 PM	14.8067	14.8229			N/A
6/17/2019	USDZAR	3:30:00 PM	14.7967	14.7868			N/A
6/17/2019	USDZAR.fx	9:30:00 AM					N/A
6/17/2019	USDZAR.fx	11:30:00 AM					N/A
6/17/2019	USDZAR.fx	1:30:00 PM					N/A
6/17/2019	USDZAR.fx	3:30:00 PM					N/A
6/17/2019	XAUUSD	9:30:00 AM	1338.78	1339			N/A
6/17/2019	XAUUSD	11:30:00 AM	1335.18	1335.45			N/A
6/17/2019	XAUUSD	1:30:00 PM	1334.61	1334.97			N/A
6/17/2019	XAUUSD	3:30:00 PM	1340.51	1339.03			N/A
6/17/2019	ZARJPY	9:30:00 AM	7.33	7.35			N/A
6/17/2019	ZARJPY	11:30:00 AM	7.32	7.34			N/A
6/17/2019	ZARJPY	1:30:00 PM	7.32	7.33			N/A
6/17/2019	ZARJPY	3:30:00 PM	7.33	7.34			N/A
6/17/2019	ZARJPY.fx	9:30:00 AM	7.345	7.347			N/A
6/17/2019	ZARJPY.fx	11:30:00 AM	7.336	7.338			N/A
6/17/2019	ZARJPY.fx	1:30:00 PM	7.331	7.335			N/A
6/17/2019	ZARJPY.fx	3:30:00 PM	7.343	7.338			N/A
6/18/2019	#AA	9:30:00 AM					N/A
6/18/2019	#AA	11:30:00 AM					N/A
6/18/2019	#AA	1:30:00 PM					N/A
6/18/2019	#AA	3:30:00 PM					N/A
6/18/2019	#AABA	9:30:00 AM					N/A
6/18/2019	#AABA	11:30:00 AM					N/A
6/18/2019	#AABA	1:30:00 PM					N/A
6/18/2019	#AABA	3:30:00 PM					N/A
6/18/2019	#AAL	9:30:00 AM					N/A
6/18/2019	#AAL	11:30:00 AM					N/A
6/18/2019	#AAL	1:30:00 PM					N/A
6/18/2019	#AAL	3:30:00 PM					N/A
6/18/2019	#AAPL	9:30:00 AM					N/A
6/18/2019	#AAPL	11:30:00 AM					N/A

6/18/2019	#AAPL	1:30:00 PM					N/A
6/18/2019	#AAPL	3:30:00 PM					N/A
6/18/2019	#ADBE	9:30:00 AM					N/A
6/18/2019	#ADBE	11:30:00 AM					N/A
6/18/2019	#ADBE	1:30:00 PM					N/A
6/18/2019	#ADBE	3:30:00 PM					N/A
6/18/2019	#AIG	9:30:00 AM					N/A
6/18/2019	#AIG	11:30:00 AM					N/A
6/18/2019	#AIG	1:30:00 PM					N/A
6/18/2019	#AIG	3:30:00 PM					N/A
6/18/2019	#AMD	9:30:00 AM					N/A
6/18/2019	#AMD	11:30:00 AM					N/A
6/18/2019	#AMD	1:30:00 PM					N/A
6/18/2019	#AMD	3:30:00 PM					N/A
6/18/2019	#AMZN	9:30:00 AM					N/A
6/18/2019	#AMZN	11:30:00 AM					N/A
6/18/2019	#AMZN	1:30:00 PM					N/A
6/18/2019	#AMZN	3:30:00 PM					N/A
6/18/2019	#AXP	9:30:00 AM					N/A
6/18/2019	#AXP	11:30:00 AM					N/A
6/18/2019	#AXP	1:30:00 PM					N/A
6/18/2019	#AXP	3:30:00 PM					N/A
6/18/2019	#BA	9:30:00 AM					N/A
6/18/2019	#BA	11:30:00 AM					N/A
6/18/2019	#BA	1:30:00 PM					N/A
6/18/2019	#BA	3:30:00 PM					N/A
6/18/2019	#BABA	9:30:00 AM					N/A
6/18/2019	#BABA	11:30:00 AM					N/A
6/18/2019	#BABA	1:30:00 PM					N/A
6/18/2019	#BABA	3:30:00 PM					N/A
6/18/2019	#BAC	9:30:00 AM					N/A
6/18/2019	#BAC	11:30:00 AM					N/A
6/18/2019	#BAC	1:30:00 PM					N/A
6/18/2019	#BAC	3:30:00 PM					N/A

6/18/2019	#BARC	9:30:00 AM					N/A
6/18/2019	#BARC	11:30:00 AM					N/A
6/18/2019	#BARC	1:30:00 PM					N/A
6/18/2019	#BARC	3:30:00 PM					N/A
6/18/2019	#BHP	9:30:00 AM					N/A
6/18/2019	#BHP	11:30:00 AM					N/A
6/18/2019	#BHP	1:30:00 PM					N/A
6/18/2019	#BHP	3:30:00 PM					N/A
6/18/2019	#BIDU	9:30:00 AM					N/A
6/18/2019	#BIDU	11:30:00 AM					N/A
6/18/2019	#BIDU	1:30:00 PM					N/A
6/18/2019	#BIDU	3:30:00 PM					N/A
6/18/2019	#Bitcoin	9:30:00 AM	9177	9191.36			N/A
6/18/2019	#Bitcoin	11:30:00 AM	9154.7	9180.45			N/A
6/18/2019	#Bitcoin	1:30:00 PM	9236.4	9265.75			N/A
6/18/2019	#Bitcoin	3:30:00 PM	9130.25	9153.3			N/A
6/18/2019	#BK	9:30:00 AM					N/A
6/18/2019	#BK	11:30:00 AM					N/A
6/18/2019	#BK	1:30:00 PM					N/A
6/18/2019	#BK	3:30:00 PM					N/A
6/18/2019	#BLT	9:30:00 AM					N/A
6/18/2019	#BLT	11:30:00 AM					N/A
6/18/2019	#BLT	1:30:00 PM					N/A
6/18/2019	#BLT	3:30:00 PM					N/A
6/18/2019	#BP	9:30:00 AM					N/A
6/18/2019	#BP	11:30:00 AM					N/A
6/18/2019	#BP	1:30:00 PM					N/A
6/18/2019	#BP	3:30:00 PM					N/A
6/18/2019	#BTA	9:30:00 AM					N/A
6/18/2019	#BTA	11:30:00 AM					N/A
6/18/2019	#BTA	1:30:00 PM					N/A
6/18/2019	#BTA	3:30:00 PM					N/A
6/18/2019	#C	9:30:00 AM					N/A
6/18/2019	#C	11:30:00 AM					N/A

6/18/2019	#C	1:30:00 PM					N/A
6/18/2019	#C	3:30:00 PM					N/A
6/18/2019	#CAT	9:30:00 AM					N/A
6/18/2019	#CAT	11:30:00 AM					N/A
6/18/2019	#CAT	1:30:00 PM					N/A
6/18/2019	#CAT	3:30:00 PM					N/A
6/18/2019	#CHL	9:30:00 AM					N/A
6/18/2019	#CHL	11:30:00 AM					N/A
6/18/2019	#CHL	1:30:00 PM					N/A
6/18/2019	#CHL	3:30:00 PM					N/A
6/18/2019	#CL.f	9:30:00 AM	51.95	51.961			N/A
6/18/2019	#CL.f	11:30:00 AM	52.212	52.203			N/A
6/18/2019	#CL.f	1:30:00 PM	51.76	51.764			N/A
6/18/2019	#CL.f	3:30:00 PM	52.389	52.433			N/A
6/18/2019	#CMCSA	9:30:00 AM					N/A
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6/18/2019	AUDCAD	9:30:00 AM	0.91656	0.91728			N/A
6/18/2019	AUDCAD	11:30:00 AM	0.91698	0.91765			N/A
6/18/2019	AUDCAD	1:30:00 PM	0.91869	0.91932			N/A
6/18/2019	AUDCAD	3:30:00 PM	0.91862	0.91913			N/A
6/18/2019	AUDCAD.fx	9:30:00 AM	0.9169	0.91693			N/A
6/18/2019	AUDCAD.fx	11:30:00 AM	0.9173	0.91731			N/A
6/18/2019	AUDCAD.fx	1:30:00 PM	0.91904	0.91898			N/A
6/18/2019	AUDCAD.fx	3:30:00 PM	0.91895	0.91878			N/A
6/18/2019	AUDCHF	9:30:00 AM	0.68205	0.68276			N/A
6/18/2019	AUDCHF	11:30:00 AM	0.68299	0.68359			N/A
6/18/2019	AUDCHF	1:30:00 PM	0.68408	0.68462			N/A
6/18/2019	AUDCHF	3:30:00 PM	0.68341	0.68404			N/A

6/18/2019	AUDCHF.fx	9:30:00 AM	0.6824	0.68241			N/A
6/18/2019	AUDCHF.fx	11:30:00 AM	0.68333	0.68324			N/A
6/18/2019	AUDCHF.fx	1:30:00 PM	0.68442	0.68427			N/A
6/18/2019	AUDCHF.fx	3:30:00 PM	0.68376	0.68369			N/A
6/18/2019	AUDCZK	9:30:00 AM	15.542	15.559			N/A
6/18/2019	AUDCZK	11:30:00 AM	15.612	15.627			N/A
6/18/2019	AUDCZK	1:30:00 PM	15.634	15.65			N/A
6/18/2019	AUDCZK	3:30:00 PM	15.647	15.659			N/A
6/18/2019	AUDDKK	9:30:00 AM	4.5436	4.5485			N/A
6/18/2019	AUDDKK	11:30:00 AM	4.5599	4.5637			N/A
6/18/2019	AUDDKK	1:30:00 PM	4.5653	4.5698			N/A
6/18/2019	AUDDKK	3:30:00 PM	4.5665	4.5704			N/A
6/18/2019	AUDHKD	9:30:00 AM	5.3544	5.3583			N/A
6/18/2019	AUDHKD	11:30:00 AM	5.3527	5.3563			N/A
6/18/2019	AUDHKD	1:30:00 PM	5.3597	5.363			N/A
6/18/2019	AUDHKD	3:30:00 PM	5.3603	5.3641			N/A
6/18/2019	AUDHUF	9:30:00 AM	195.91	196.14			N/A
6/18/2019	AUDHUF	11:30:00 AM	196.57	196.79			N/A
6/18/2019	AUDHUF	1:30:00 PM	196.87	197.08			N/A
6/18/2019	AUDHUF	3:30:00 PM	197.06	197.18			N/A
6/18/2019	AUDJPY	9:30:00 AM	74.017	74.085			N/A
6/18/2019	AUDJPY	11:30:00 AM	74.024	74.089			N/A
6/18/2019	AUDJPY	1:30:00 PM	74.121	74.173			N/A
6/18/2019	AUDJPY	3:30:00 PM	74.079	74.127			N/A
6/18/2019	AUDJPY.fx	9:30:00 AM	74.054	74.049			N/A
6/18/2019	AUDJPY.fx	11:30:00 AM	74.057	74.054			N/A
6/18/2019	AUDJPY.fx	1:30:00 PM	74.155	74.137			N/A
6/18/2019	AUDJPY.fx	3:30:00 PM	74.113	74.091			N/A
6/18/2019	AUDMXN	9:30:00 AM	13.0947	13.1045			N/A
6/18/2019	AUDMXN	11:30:00 AM	13.0828	13.0883			N/A
6/18/2019	AUDMXN	1:30:00 PM	13.0886	13.0967			N/A
6/18/2019	AUDMXN	3:30:00 PM	13.066	13.0721			N/A
6/18/2019	AUDNOK	9:30:00 AM	5.9672	5.9709			N/A
6/18/2019	AUDNOK	11:30:00 AM	5.9766	5.9804			N/A

6/18/2019	AUDNOK	1:30:00 PM	5.9825	5.987			N/A
6/18/2019	AUDNOK	3:30:00 PM	5.9833	5.9869			N/A
6/18/2019	AUDNOK.fx	9:30:00 AM	5.9687	5.9691			N/A
6/18/2019	AUDNOK.fx	11:30:00 AM	5.9782	5.9787			N/A
6/18/2019	AUDNOK.fx	1:30:00 PM	5.9841	5.9852			N/A
6/18/2019	AUDNOK.fx	3:30:00 PM	5.9848	5.9852			N/A
6/18/2019	AUDNZD	9:30:00 AM	1.05236	1.05326			N/A
6/18/2019	AUDNZD	11:30:00 AM	1.05069	1.05152			N/A
6/18/2019	AUDNZD	1:30:00 PM	1.05068	1.05154			N/A
6/18/2019	AUDNZD	3:30:00 PM	1.05153	1.05223			N/A
6/18/2019	AUDNZD.fx	9:30:00 AM	1.05279	1.05282			N/A
6/18/2019	AUDNZD.fx	11:30:00 AM	1.05112	1.05108			N/A
6/18/2019	AUDNZD.fx	1:30:00 PM	1.05112	1.05109			N/A
6/18/2019	AUDNZD.fx	3:30:00 PM	1.05193	1.05176			N/A
6/18/2019	AUDPLN	9:30:00 AM	2.593	2.5963			N/A
6/18/2019	AUDPLN	11:30:00 AM	2.6024	2.6052			N/A
6/18/2019	AUDPLN	1:30:00 PM	2.6045	2.6076			N/A
6/18/2019	AUDPLN	3:30:00 PM	2.6024	2.6052			N/A
6/18/2019	AUDSEK	9:30:00 AM	6.4782	6.4811			N/A
6/18/2019	AUDSEK	11:30:00 AM	6.488	6.4903			N/A
6/18/2019	AUDSEK	1:30:00 PM	6.5054	6.5082			N/A
6/18/2019	AUDSEK	3:30:00 PM	6.5113	6.5129			N/A
6/18/2019	AUDSEK.fx	9:30:00 AM	6.4737	6.4857			N/A
6/18/2019	AUDSEK.fx	11:30:00 AM	6.4834	6.4946			N/A
6/18/2019	AUDSEK.fx	1:30:00 PM	6.5007	6.5127			N/A
6/18/2019	AUDSEK.fx	3:30:00 PM	6.5065	6.5176			N/A
6/18/2019	AUDSGD	9:30:00 AM	0.9372	0.9376			N/A
6/18/2019	AUDSGD	11:30:00 AM	0.9379	0.9382			N/A
6/18/2019	AUDSGD	1:30:00 PM	0.9384	0.9387			N/A
6/18/2019	AUDSGD	3:30:00 PM	0.9382	0.9385			N/A
6/18/2019	AUDSGD.fx	9:30:00 AM	0.93732	0.93747			N/A
6/18/2019	AUDSGD.fx	11:30:00 AM	0.93799	0.93809			N/A
6/18/2019	AUDSGD.fx	1:30:00 PM	0.93852	0.93855			N/A
6/18/2019	AUDSGD.fx	3:30:00 PM	0.93832	0.93838			N/A



6/18/2019	AUDUSD	9:30:00 AM	0.68387	0.68399			N/A
6/18/2019	AUDUSD	11:30:00 AM	0.68371	0.68379			N/A
6/18/2019	AUDUSD	1:30:00 PM	0.68451	0.68455			N/A
6/18/2019	AUDUSD	3:30:00 PM	0.68462	0.68468			N/A
6/18/2019	AUDUSD.fx	9:30:00 AM	0.68392	0.68393			N/A
6/18/2019	AUDUSD.fx	11:30:00 AM	0.68376	0.68374			N/A
6/18/2019	AUDUSD.fx	1:30:00 PM	0.68456	0.6845			N/A
6/18/2019	AUDUSD.fx	3:30:00 PM	0.68467	0.68462			N/A
6/18/2019	AUDZAR	9:30:00 AM	10.0951	10.1102			N/A
6/18/2019	AUDZAR	11:30:00 AM	10.0402	10.0449			N/A
6/18/2019	AUDZAR	1:30:00 PM	10.0259	10.039			N/A
6/18/2019	AUDZAR	3:30:00 PM	9.9941	10.0029			N/A
6/18/2019	AUS200.i	9:30:00 AM	6571.5	6575			N/A
6/18/2019	AUS200.i	11:30:00 AM	6598.5	6601.1			N/A
6/18/2019	AUS200.i	1:30:00 PM	6596.4	6598.9			N/A
6/18/2019	AUS200.i	3:30:00 PM	6608.4	6611			N/A
6/18/2019	BCHUSD	9:30:00 AM	429.61	430.47			N/A
6/18/2019	BCHUSD	11:30:00 AM	429.75	431.23			N/A
6/18/2019	BCHUSD	1:30:00 PM	432.17	433.44			N/A
6/18/2019	BCHUSD	3:30:00 PM	425.79	427.06			N/A
6/18/2019	CADCHF	9:30:00 AM	0.7439	0.74457			N/A
6/18/2019	CADCHF	11:30:00 AM	0.74461	0.74514			N/A
6/18/2019	CADCHF	1:30:00 PM	0.74437	0.74494			N/A
6/18/2019	CADCHF	3:30:00 PM	0.74393	0.74443			N/A
6/18/2019	CADCHF.fx	9:30:00 AM	0.74425	0.74421			N/A
6/18/2019	CADCHF.fx	11:30:00 AM	0.74496	0.74478			N/A
6/18/2019	CADCHF.fx	1:30:00 PM	0.74471	0.74458			N/A
6/18/2019	CADCHF.fx	3:30:00 PM	0.74421	0.74409			N/A
6/18/2019	CADCZK	9:30:00 AM	16.954	16.97			N/A
6/18/2019	CADCZK	11:30:00 AM	17.024	17.037			N/A
6/18/2019	CADCZK	1:30:00 PM	17.015	17.03			N/A
6/18/2019	CADCZK	3:30:00 PM	17.033	17.047			N/A
6/18/2019	CADDDKK	9:30:00 AM	4.957	4.96			N/A
6/18/2019	CADDDKK	11:30:00 AM	4.972	4.976			N/A

6/18/2019	CADDKK	1:30:00 PM	4.969	4.973			N/A
6/18/2019	CADDKK	3:30:00 PM	4.971	4.974			N/A
6/18/2019	CADHKD	9:30:00 AM	5.841	5.8449			N/A
6/18/2019	CADHKD	11:30:00 AM	5.8365	5.8403			N/A
6/18/2019	CADHKD	1:30:00 PM	5.8328	5.8363			N/A
6/18/2019	CADHKD	3:30:00 PM	5.8356	5.8384			N/A
6/18/2019	CADHUF	9:30:00 AM	213.72	213.89			N/A
6/18/2019	CADHUF	11:30:00 AM	214.37	214.53			N/A
6/18/2019	CADHUF	1:30:00 PM	214.29	214.43			N/A
6/18/2019	CADHUF	3:30:00 PM	214.52	214.62			N/A
6/18/2019	CADJPY	9:30:00 AM	80.726	80.792			N/A
6/18/2019	CADJPY	11:30:00 AM	80.7	80.764			N/A
6/18/2019	CADJPY	1:30:00 PM	80.651	80.709			N/A
6/18/2019	CADJPY	3:30:00 PM	80.623	80.672			N/A
6/18/2019	CADJPY.fx	9:30:00 AM	80.76	80.757			N/A
6/18/2019	CADJPY.fx	11:30:00 AM	80.733	80.729			N/A
6/18/2019	CADJPY.fx	1:30:00 PM	80.684	80.675			N/A
6/18/2019	CADJPY.fx	3:30:00 PM	80.656	80.638			N/A
6/18/2019	CADMXN	9:30:00 AM	14.2829	14.2955			N/A
6/18/2019	CADMXN	11:30:00 AM	14.2649	14.272			N/A
6/18/2019	CADMXN	1:30:00 PM	14.2436	14.2541			N/A
6/18/2019	CADMXN	3:30:00 PM	14.2216	14.2309			N/A
6/18/2019	CADNOK	9:30:00 AM	6.5076	6.5101			N/A
6/18/2019	CADNOK	11:30:00 AM	6.5145	6.5177			N/A
6/18/2019	CADNOK	1:30:00 PM	6.509	6.5127			N/A
6/18/2019	CADNOK	3:30:00 PM	6.5103	6.5121			N/A
6/18/2019	CADPLN	9:30:00 AM	2.8285	2.8304			N/A
6/18/2019	CADPLN	11:30:00 AM	2.8371	2.8388			N/A
6/18/2019	CADPLN	1:30:00 PM	2.8347	2.8361			N/A
6/18/2019	CADPLN	3:30:00 PM	2.832	2.8334			N/A
6/18/2019	CADSEK	9:30:00 AM	7.0634	7.0673			N/A
6/18/2019	CADSEK	11:30:00 AM	7.0714	7.0742			N/A
6/18/2019	CADSEK	1:30:00 PM	7.0772	7.0803			N/A
6/18/2019	CADSEK	3:30:00 PM	7.0842	7.0872			N/A

6/18/2019	CADSGD	9:30:00 AM	1.0218	1.0221			N/A
6/18/2019	CADSGD	11:30:00 AM	1.0218	1.0221			N/A
6/18/2019	CADSGD	1:30:00 PM	1.0205	1.0208			N/A
6/18/2019	CADSGD	3:30:00 PM	1.0209	1.0211			N/A
6/18/2019	CADZAR	9:30:00 AM	11.0121	11.0286			N/A
6/18/2019	CADZAR	11:30:00 AM	10.9486	10.9529			N/A
6/18/2019	CADZAR	1:30:00 PM	10.9107	10.9268			N/A
6/18/2019	CADZAR	3:30:00 PM	10.88	10.8899			N/A
6/18/2019	CHFCZK	9:30:00 AM	22.785	22.8			N/A
6/18/2019	CHFCZK	11:30:00 AM	22.859	22.871			N/A
6/18/2019	CHFCZK	1:30:00 PM	22.856	22.866			N/A
6/18/2019	CHFCZK	3:30:00 PM	22.893	22.907			N/A
6/18/2019	CHFDKK	9:30:00 AM	6.66	6.663			N/A
6/18/2019	CHFDKK	11:30:00 AM	6.676	6.678			N/A
6/18/2019	CHFDKK	1:30:00 PM	6.674	6.675			N/A
6/18/2019	CHFDKK	3:30:00 PM	6.68	6.682			N/A
6/18/2019	CHFDKK.fx	9:30:00 AM	6.6588	6.6644			N/A
6/18/2019	CHFDKK.fx	11:30:00 AM	6.6742	6.6796			N/A
6/18/2019	CHFDKK.fx	1:30:00 PM	6.6721	6.6765			N/A
6/18/2019	CHFDKK.fx	3:30:00 PM	6.6789	6.6846			N/A
6/18/2019	CHFHKD	9:30:00 AM	7.8497	7.8536			N/A
6/18/2019	CHFHKD	11:30:00 AM	7.8378	7.8403			N/A
6/18/2019	CHFHKD	1:30:00 PM	7.8341	7.8363			N/A
6/18/2019	CHFHKD	3:30:00 PM	7.8425	7.8464			N/A
6/18/2019	CHFHUF	9:30:00 AM	287.14	287.51			N/A
6/18/2019	CHFHUF	11:30:00 AM	287.74	288.08			N/A
6/18/2019	CHFHUF	1:30:00 PM	287.73	288.04			N/A
6/18/2019	CHFHUF	3:30:00 PM	288.24	288.52			N/A
6/18/2019	CHFJPY	9:30:00 AM	108.486	108.547			N/A
6/18/2019	CHFJPY	11:30:00 AM	108.366	108.397			N/A
6/18/2019	CHFJPY	1:30:00 PM	108.316	108.371			N/A
6/18/2019	CHFJPY	3:30:00 PM	108.354	108.407			N/A
6/18/2019	CHFJPY.fx	9:30:00 AM	108.52	108.513			N/A
6/18/2019	CHFJPY.fx	11:30:00 AM	108.398	108.362			N/A

6/18/2019	CHFJPY.fx	1:30:00 PM	108.35	108.336			N/A
6/18/2019	CHFJPY.fx	3:30:00 PM	108.386	108.372			N/A
6/18/2019	CHFMXN	9:30:00 AM	19.1934	19.2077			N/A
6/18/2019	CHFMXN	11:30:00 AM	19.1535	19.1589			N/A
6/18/2019	CHFMXN	1:30:00 PM	19.1288	19.1413			N/A
6/18/2019	CHFMXN	3:30:00 PM	19.1146	19.125			N/A
6/18/2019	CHFNOK	9:30:00 AM	8.7442	8.7496			N/A
6/18/2019	CHFNOK	11:30:00 AM	8.7467	8.7515			N/A
6/18/2019	CHFNOK	1:30:00 PM	8.7425	8.748			N/A
6/18/2019	CHFNOK	3:30:00 PM	8.7503	8.7566			N/A
6/18/2019	CHFNOK.fx	9:30:00 AM	8.74749	8.74605			N/A
6/18/2019	CHFNOK.fx	11:30:00 AM	8.75027	8.74788			N/A
6/18/2019	CHFNOK.fx	1:30:00 PM	8.74599	8.74439			N/A
6/18/2019	CHFNOK.fx	3:30:00 PM	8.75366	8.75335			N/A
6/18/2019	CHFPLN	9:30:00 AM	3.8009	3.8039			N/A
6/18/2019	CHFPLN	11:30:00 AM	3.8099	3.8125			N/A
6/18/2019	CHFPLN	1:30:00 PM	3.8073	3.8096			N/A
6/18/2019	CHFPLN	3:30:00 PM	3.8073	3.8101			N/A
6/18/2019	CHFPLN.fx	9:30:00 AM	3.79846	3.80632			N/A
6/18/2019	CHFPLN.fx	11:30:00 AM	3.80744	3.81493			N/A
6/18/2019	CHFPLN.fx	1:30:00 PM	3.80488	3.81189			N/A
6/18/2019	CHFPLN.fx	3:30:00 PM	3.80484	3.81255			N/A
6/18/2019	CHFSEK	9:30:00 AM	9.492	9.496			N/A
6/18/2019	CHFSEK	11:30:00 AM	9.4937	9.4976			N/A
6/18/2019	CHFSEK	1:30:00 PM	9.5054	9.5079			N/A
6/18/2019	CHFSEK	3:30:00 PM	9.521	9.5244			N/A
6/18/2019	CHFSGD	9:30:00 AM	1.3735	1.3739			N/A
6/18/2019	CHFSGD	11:30:00 AM	1.3728	1.373			N/A
6/18/2019	CHFSGD	1:30:00 PM	1.3714	1.3715			N/A
6/18/2019	CHFSGD	3:30:00 PM	1.3723	1.3726			N/A
6/18/2019	CHFSGD.fx	9:30:00 AM	1.37367	1.37367			N/A
6/18/2019	CHFSGD.fx	11:30:00 AM	1.37296	1.37277			N/A
6/18/2019	CHFSGD.fx	1:30:00 PM	1.37153	1.37132			N/A
6/18/2019	CHFSGD.fx	3:30:00 PM	1.37245	1.37239			N/A

6/18/2019	CHFZAR	9:30:00 AM	14.8014	14.8143			N/A
6/18/2019	CHFZAR	11:30:00 AM	14.7038	14.6987			N/A
6/18/2019	CHFZAR	1:30:00 PM	14.657	14.6693			N/A
6/18/2019	CHFZAR	3:30:00 PM	14.623	14.6317			N/A
6/18/2019	CZKJPY	9:30:00 AM	4.76	4.764			N/A
6/18/2019	CZKJPY	11:30:00 AM	4.74	4.743			N/A
6/18/2019	CZKJPY	1:30:00 PM	4.74	4.742			N/A
6/18/2019	CZKJPY	3:30:00 PM					N/A
6/18/2019	DAX30.i	9:30:00 AM	12082.57	12082.32			N/A
6/18/2019	DAX30.i	11:30:00 AM	12153.57	12145.57			N/A
6/18/2019	DAX30.i	1:30:00 PM	12222.07	12212.32			N/A
6/18/2019	DAX30.i	3:30:00 PM	12303.32	12299.32			N/A
6/18/2019	DJ30.i	9:30:00 AM					N/A
6/18/2019	DJ30.i	11:30:00 AM					N/A
6/18/2019	DJ30.i	1:30:00 PM					N/A
6/18/2019	DJ30.i	3:30:00 PM					N/A
6/18/2019	DKKJPY	9:30:00 AM					N/A
6/18/2019	DKKJPY	11:30:00 AM	16.24	16.25			N/A
6/18/2019	DKKJPY	1:30:00 PM	16.23	16.25			N/A
6/18/2019	DKKJPY	3:30:00 PM	16.23	16.24			N/A
6/18/2019	EURAUD	9:30:00 AM	1.64179	1.64221			N/A
6/18/2019	EURAUD	11:30:00 AM	1.63613	1.63628			N/A
6/18/2019	EURAUD	1:30:00 PM	1.63409	1.63443			N/A
6/18/2019	EURAUD	3:30:00 PM	1.63385	1.63396			N/A
6/18/2019	EURAUD.fx	9:30:00 AM	1.64203	1.64198			N/A
6/18/2019	EURAUD.fx	11:30:00 AM	1.63633	1.63604			N/A
6/18/2019	EURAUD.fx	1:30:00 PM	1.63429	1.63421			N/A
6/18/2019	EURAUD.fx	3:30:00 PM	1.63402	1.63374			N/A
6/18/2019	EURCAD	9:30:00 AM	1.50581	1.50653			N/A
6/18/2019	EURCAD	11:30:00 AM	1.50122	1.50171			N/A
6/18/2019	EURCAD	1:30:00 PM	1.5021	1.5028			N/A
6/18/2019	EURCAD	3:30:00 PM	1.5015	1.50206			N/A
6/18/2019	EURCAD.fx	9:30:00 AM	1.50622	1.50609			N/A
6/18/2019	EURCAD.fx	11:30:00 AM	1.50163	1.50129			N/A

6/18/2019	EURCAD.fx	1:30:00 PM	1.50251	1.50238			N/A
6/18/2019	EURCAD.fx	3:30:00 PM	1.50188	1.50164			N/A
6/18/2019	EURCHF	9:30:00 AM	1.1209	1.12095			N/A
6/18/2019	EURCHF	11:30:00 AM	1.11839	1.11835			N/A
6/18/2019	EURCHF	1:30:00 PM	1.11888	1.11872			N/A
6/18/2019	EURCHF	3:30:00 PM	1.11758	1.11757			N/A
6/18/2019	EURCHF.fx	9:30:00 AM	1.12097	1.12089			N/A
6/18/2019	EURCHF.fx	11:30:00 AM	1.11845	1.11829			N/A
6/18/2019	EURCHF.fx	1:30:00 PM	1.11893	1.11866			N/A
6/18/2019	EURCHF.fx	3:30:00 PM	1.11762	1.11751			N/A
6/18/2019	EURCZK	9:30:00 AM	25.526	25.565			N/A
6/18/2019	EURCZK	11:30:00 AM	25.55	25.586			N/A
6/18/2019	EURCZK	1:30:00 PM	25.554	25.593			N/A
6/18/2019	EURCZK	3:30:00 PM	25.568	25.606			N/A
6/18/2019	EURDKK	9:30:00 AM					N/A
6/18/2019	EURDKK	11:30:00 AM	7.466	7.4673			N/A
6/18/2019	EURDKK	1:30:00 PM	7.4654	7.4666			N/A
6/18/2019	EURDKK	3:30:00 PM	7.465	7.466			N/A
6/18/2019	EURGBP	9:30:00 AM	0.89637	0.8962			N/A
6/18/2019	EURGBP	11:30:00 AM	0.89374	0.89357			N/A
6/18/2019	EURGBP	1:30:00 PM	0.89342	0.89349			N/A
6/18/2019	EURGBP	3:30:00 PM	0.89412	0.89414			N/A
6/18/2019	EURGBP.fx	9:30:00 AM	0.89641	0.89615			N/A
6/18/2019	EURGBP.fx	11:30:00 AM	0.89379	0.89352			N/A
6/18/2019	EURGBP.fx	1:30:00 PM	0.89346	0.89344			N/A
6/18/2019	EURGBP.fx	3:30:00 PM	0.89414	0.89408			N/A
6/18/2019	EURHKD	9:30:00 AM	8.799	8.8034			N/A
6/18/2019	EURHKD	11:30:00 AM	8.7662	8.7692			N/A
6/18/2019	EURHKD	1:30:00 PM	8.7651	8.7692			N/A
6/18/2019	EURHKD	3:30:00 PM	8.7656	8.7686			N/A
6/18/2019	EURHKD.fx	9:30:00 AM	8.80186	8.80052			N/A
6/18/2019	EURHKD.fx	11:30:00 AM	8.76903	8.76632			N/A
6/18/2019	EURHKD.fx	1:30:00 PM	8.76787	8.76633			N/A
6/18/2019	EURHKD.fx	3:30:00 PM	8.7682	8.76579			N/A

6/18/2019	EURHUF	9:30:00 AM	321.79	322.4			N/A
6/18/2019	EURHUF	11:30:00 AM	321.76	322.46			N/A
6/18/2019	EURHUF	1:30:00 PM	321.84	322.42			N/A
6/18/2019	EURHUF	3:30:00 PM	322.07	322.55			N/A
6/18/2019	EURHUF.fx	9:30:00 AM	322.051	322.273			N/A
6/18/2019	EURHUF.fx	11:30:00 AM	322.031	322.179			N/A
6/18/2019	EURHUF.fx	1:30:00 PM	322.119	322.282			N/A
6/18/2019	EURHUF.fx	3:30:00 PM	322.371	322.528			N/A
6/18/2019	EURJPY	9:30:00 AM	121.648	121.634			N/A
6/18/2019	EURJPY	11:30:00 AM	121.227	121.198			N/A
6/18/2019	EURJPY	1:30:00 PM	121.235	121.211			N/A
6/18/2019	EURJPY	3:30:00 PM	121.122	121.109			N/A
6/18/2019	EURJPY.fx	9:30:00 AM	121.651	121.627			N/A
6/18/2019	EURJPY.fx	11:30:00 AM	121.23	121.194			N/A
6/18/2019	EURJPY.fx	1:30:00 PM	121.237	121.206			N/A
6/18/2019	EURJPY.fx	3:30:00 PM	121.125	121.105			N/A
6/18/2019	EURMXN	9:30:00 AM	21.5157	21.5329			N/A
6/18/2019	EURMXN	11:30:00 AM	21.4225	21.4306			N/A
6/18/2019	EURMXN	1:30:00 PM	21.4035	21.4208			N/A
6/18/2019	EURMXN	3:30:00 PM	21.3624	21.3779			N/A
6/18/2019	EURMXN.fx	9:30:00 AM	21.5248	21.5244			N/A
6/18/2019	EURMXN.fx	11:30:00 AM	21.4316	21.4218			N/A
6/18/2019	EURMXN.fx	1:30:00 PM	21.4122	21.4118			N/A
6/18/2019	EURMXN.fx	3:30:00 PM	21.3704	21.3693			N/A
6/18/2019	EURNOK	9:30:00 AM	9.7995	9.8097			N/A
6/18/2019	EURNOK	11:30:00 AM	9.78	9.7891			N/A
6/18/2019	EURNOK	1:30:00 PM	9.7781	9.79			N/A
6/18/2019	EURNOK	3:30:00 PM	9.7768	9.7884			N/A
6/18/2019	EURNOK.fx	9:30:00 AM	9.80499	9.80438			N/A
6/18/2019	EURNOK.fx	11:30:00 AM	9.78561	9.78356			N/A
6/18/2019	EURNOK.fx	1:30:00 PM	9.78369	9.78455			N/A
6/18/2019	EURNOK.fx	3:30:00 PM	9.78231	9.78314			N/A
6/18/2019	EURNZD	9:30:00 AM	1.72898	1.72978			N/A
6/18/2019	EURNZD	11:30:00 AM	1.72018	1.72073			N/A

6/18/2019	EURNZD	1:30:00 PM	1.71806	1.7188			N/A
6/18/2019	EURNZD	3:30:00 PM	1.71902	1.71933			N/A
6/18/2019	EURNZD.fx	9:30:00 AM	1.72938	1.72934			N/A
6/18/2019	EURNZD.fx	11:30:00 AM	1.72059	1.72031			N/A
6/18/2019	EURNZD.fx	1:30:00 PM	1.71849	1.71835			N/A
6/18/2019	EURNZD.fx	3:30:00 PM	1.71939	1.71889			N/A
6/18/2019	EURPLN	9:30:00 AM	4.2606	4.264			N/A
6/18/2019	EURPLN	11:30:00 AM	4.2607	4.2637			N/A
6/18/2019	EURPLN	1:30:00 PM	4.2592	4.2622			N/A
6/18/2019	EURPLN	3:30:00 PM	4.2547	4.2579			N/A
6/18/2019	EURPLN.fx	9:30:00 AM	4.25987	4.26462			N/A
6/18/2019	EURPLN.fx	11:30:00 AM	4.26012	4.26447			N/A
6/18/2019	EURPLN.fx	1:30:00 PM	4.25867	4.26276			N/A
6/18/2019	EURPLN.fx	3:30:00 PM	4.2539	4.25842			N/A
6/18/2019	EURRUB	9:30:00 AM					N/A
6/18/2019	EURRUB	11:30:00 AM	71.62	72.032			N/A
6/18/2019	EURRUB	1:30:00 PM	71.605	72.042			N/A
6/18/2019	EURRUB	3:30:00 PM	71.531	71.922			N/A
6/18/2019	EURSEK	9:30:00 AM	10.6419	10.6457			N/A
6/18/2019	EURSEK	11:30:00 AM	10.6199	10.6217			N/A
6/18/2019	EURSEK	1:30:00 PM	10.6352	10.6404			N/A
6/18/2019	EURSEK	3:30:00 PM	10.6415	10.6463			N/A
6/18/2019	EURSEK.fx	9:30:00 AM	10.64346	10.64414			N/A
6/18/2019	EURSEK.fx	11:30:00 AM	10.62173	10.61972			N/A
6/18/2019	EURSEK.fx	1:30:00 PM	10.6367	10.63892			N/A
6/18/2019	EURSEK.fx	3:30:00 PM	10.64316	10.64502			N/A
6/18/2019	EURSGD	9:30:00 AM	1.5394	1.5402			N/A
6/18/2019	EURSGD	11:30:00 AM	1.5351	1.5357			N/A
6/18/2019	EURSGD	1:30:00 PM	1.534	1.5347			N/A
6/18/2019	EURSGD	3:30:00 PM	1.5335	1.534			N/A
6/18/2019	EURSGD.fx	9:30:00 AM	1.53982	1.53978			N/A
6/18/2019	EURSGD.fx	11:30:00 AM	1.53552	1.53531			N/A
6/18/2019	EURSGD.fx	1:30:00 PM	1.53442	1.53433			N/A
6/18/2019	EURSGD.fx	3:30:00 PM	1.53383	1.53358			N/A



6/18/2019	EURUSD	9:30:00 AM	1.12329	1.12329			N/A
6/18/2019	EURUSD	11:30:00 AM	1.11914	1.11894			N/A
6/18/2019	EURUSD	1:30:00 PM	1.11902	1.11896			N/A
6/18/2019	EURUSD	3:30:00 PM	1.119	1.1188			N/A
6/18/2019	EURUSD.fx	9:30:00 AM	1.1235	1.12338			N/A
6/18/2019	EURUSD.fx	11:30:00 AM	1.11934	1.11904			N/A
6/18/2019	EURUSD.fx	1:30:00 PM	1.11922	1.11905			N/A
6/18/2019	EURUSD.fx	3:30:00 PM	1.11919	1.1189			N/A
6/18/2019	EURZAR	9:30:00 AM	16.5937	16.6124			N/A
6/18/2019	EURZAR	11:30:00 AM	16.4461	16.4443			N/A
6/18/2019	EURZAR	1:30:00 PM	16.4012	16.4161			N/A
6/18/2019	EURZAR	3:30:00 PM	16.3487	16.3574			N/A
6/18/2019	EURZAR.fx	9:30:00 AM	16.5925	16.61334			N/A
6/18/2019	EURZAR.fx	11:30:00 AM	16.44529	16.44476			N/A
6/18/2019	EURZAR.fx	1:30:00 PM	16.40034	16.41696			N/A
6/18/2019	EURZAR.fx	3:30:00 PM	16.34674	16.35811			N/A
6/18/2019	GBPAUD	9:30:00 AM	1.8325	1.83284			N/A
6/18/2019	GBPAUD	11:30:00 AM	1.83142	1.83176			N/A
6/18/2019	GBPAUD	1:30:00 PM	1.82946	1.83013			N/A
6/18/2019	GBPAUD	3:30:00 PM	1.82771	1.82844			N/A
6/18/2019	GBPAUD.fx	9:30:00 AM	1.83288	1.83243			N/A
6/18/2019	GBPAUD.fx	11:30:00 AM	1.83181	1.83138			N/A
6/18/2019	GBPAUD.fx	1:30:00 PM	1.82987	1.82972			N/A
6/18/2019	GBPAUD.fx	3:30:00 PM	1.8281	1.82801			N/A
6/18/2019	GBPCAD	9:30:00 AM	1.6802	1.68069			N/A
6/18/2019	GBPCAD	11:30:00 AM	1.67987	1.68035			N/A
6/18/2019	GBPCAD	1:30:00 PM	1.6812	1.68203			N/A
6/18/2019	GBPCAD	3:30:00 PM	1.67942	1.67993			N/A
6/18/2019	GBPCAD.fx	9:30:00 AM	1.68059	1.68029			N/A
6/18/2019	GBPCAD.fx	11:30:00 AM	1.68027	1.67995			N/A
6/18/2019	GBPCAD.fx	1:30:00 PM	1.68158	1.68165			N/A
6/18/2019	GBPCAD.fx	3:30:00 PM	1.6798	1.67953			N/A
6/18/2019	GBPCHF	9:30:00 AM	1.25058	1.25071			N/A
6/18/2019	GBPCHF	11:30:00 AM	1.25136	1.25153			N/A

6/18/2019	GBPCHF	1:30:00 PM	1.25207	1.25235			N/A
6/18/2019	GBPCHF	3:30:00 PM	1.24968	1.25008			N/A
6/18/2019	GBPCHF.fx	9:30:00 AM	1.25078	1.25049			N/A
6/18/2019	GBPCHF.fx	11:30:00 AM	1.25154	1.25134			N/A
6/18/2019	GBPCHF.fx	1:30:00 PM	1.25226	1.25214			N/A
6/18/2019	GBPCHF.fx	3:30:00 PM	1.24987	1.24986			N/A
6/18/2019	GBPCZK	9:30:00 AM	28.493	28.506			N/A
6/18/2019	GBPCZK	11:30:00 AM	28.604	28.617			N/A
6/18/2019	GBPCZK	1:30:00 PM	28.612	28.632			N/A
6/18/2019	GBPCZK	3:30:00 PM	28.608	28.626			N/A
6/18/2019	GBPDKK	9:30:00 AM	8.327	8.336			N/A
6/18/2019	GBPDKK	11:30:00 AM	8.352	8.361			N/A
6/18/2019	GBPDKK	1:30:00 PM	8.353	8.364			N/A
6/18/2019	GBPDKK	3:30:00 PM	8.347	8.357			N/A
6/18/2019	GBPDKK.fx	9:30:00 AM	8.3263	8.3365			N/A
6/18/2019	GBPDKK.fx	11:30:00 AM	8.3506	8.361			N/A
6/18/2019	GBPDKK.fx	1:30:00 PM	8.3515	8.3641			N/A
6/18/2019	GBPDKK.fx	3:30:00 PM	8.3453	8.3575			N/A
6/18/2019	GBPHKD	9:30:00 AM	9.8154	9.8186			N/A
6/18/2019	GBPHKD	11:30:00 AM	9.8062	9.8106			N/A
6/18/2019	GBPHKD	1:30:00 PM	9.8076	9.8123			N/A
6/18/2019	GBPHKD	3:30:00 PM	9.8	9.805			N/A
6/18/2019	GBPHUF	9:30:00 AM	359.08	359.44			N/A
6/18/2019	GBPHUF	11:30:00 AM	360.05	360.46			N/A
6/18/2019	GBPHUF	1:30:00 PM	360.21	360.66			N/A
6/18/2019	GBPHUF	3:30:00 PM	360.21	360.52			N/A
6/18/2019	GBPJPY	9:30:00 AM	135.696	135.712			N/A
6/18/2019	GBPJPY	11:30:00 AM	135.637	135.637			N/A
6/18/2019	GBPJPY	1:30:00 PM	135.665	135.684			N/A
6/18/2019	GBPJPY	3:30:00 PM	135.455	135.468			N/A
6/18/2019	GBPJPY.fx	9:30:00 AM	135.715	135.692			N/A
6/18/2019	GBPJPY.fx	11:30:00 AM	135.657	135.617			N/A
6/18/2019	GBPJPY.fx	1:30:00 PM	135.684	135.664			N/A
6/18/2019	GBPJPY.fx	3:30:00 PM	135.475	135.448			N/A

6/18/2019	GBPMXN	9:30:00 AM	24.0014	24.0134			N/A
6/18/2019	GBPMXN	11:30:00 AM	23.9686	23.9691			N/A
6/18/2019	GBPMXN	1:30:00 PM	23.9499	23.9645			N/A
6/18/2019	GBPMXN	3:30:00 PM	23.8886	23.8959			N/A
6/18/2019	GBPNOK	9:30:00 AM	10.9364	10.9418			N/A
6/18/2019	GBPNOK	11:30:00 AM	10.9463	10.9528			N/A
6/18/2019	GBPNOK	1:30:00 PM	10.9458	10.9563			N/A
6/18/2019	GBPNOK	3:30:00 PM	10.9362	10.9456			N/A
6/18/2019	GBPNOK.fx	9:30:00 AM	10.9415	10.93687			N/A
6/18/2019	GBPNOK.fx	11:30:00 AM	10.95149	10.94786			N/A
6/18/2019	GBPNOK.fx	1:30:00 PM	10.95083	10.95137			N/A
6/18/2019	GBPNOK.fx	3:30:00 PM	10.941	10.94085			N/A
6/18/2019	GBPNZD	9:30:00 AM	1.9294	1.92955			N/A
6/18/2019	GBPNZD	11:30:00 AM	1.92505	1.92523			N/A
6/18/2019	GBPNZD	1:30:00 PM	1.92297	1.9237			N/A
6/18/2019	GBPNZD	3:30:00 PM	1.92254	1.92304			N/A
6/18/2019	GBPNZD.fx	9:30:00 AM	1.92975	1.92916			N/A
6/18/2019	GBPNZD.fx	11:30:00 AM	1.9254	1.92485			N/A
6/18/2019	GBPNZD.fx	1:30:00 PM	1.92337	1.92333			N/A
6/18/2019	GBPNZD.fx	3:30:00 PM	1.92283	1.92266			N/A
6/18/2019	GBPPLN	9:30:00 AM	4.7551	4.7558			N/A
6/18/2019	GBPPLN	11:30:00 AM	4.769	4.7696			N/A
6/18/2019	GBPPLN	1:30:00 PM	4.7679	4.7695			N/A
6/18/2019	GBPPLN	3:30:00 PM	4.7593	4.761			N/A
6/18/2019	GBPPLN.fx	9:30:00 AM	4.75275	4.75801			N/A
6/18/2019	GBPPLN.fx	11:30:00 AM	4.76691	4.77188			N/A
6/18/2019	GBPPLN.fx	1:30:00 PM	4.76564	4.77177			N/A
6/18/2019	GBPPLN.fx	3:30:00 PM	4.75704	4.76344			N/A
6/18/2019	GBPSEK	9:30:00 AM	11.8725	11.8773			N/A
6/18/2019	GBPSEK	11:30:00 AM	11.882	11.889			N/A
6/18/2019	GBPSEK	1:30:00 PM	11.9018	11.9106			N/A
6/18/2019	GBPSEK	3:30:00 PM	11.9005	11.9081			N/A
6/18/2019	GBPSEK.fx	9:30:00 AM	11.8689	11.88099			N/A
6/18/2019	GBPSEK.fx	11:30:00 AM	11.87833	11.89242			N/A

6/18/2019	GBPSEK.fx	1:30:00 PM	11.89792	11.91456			N/A
6/18/2019	GBPSEK.fx	3:30:00 PM	11.89654	11.91224			N/A
6/18/2019	GBPSGD	9:30:00 AM	1.7178	1.7182			N/A
6/18/2019	GBPSGD	11:30:00 AM	1.7179	1.7183			N/A
6/18/2019	GBPSGD	1:30:00 PM	1.717	1.7178			N/A
6/18/2019	GBPSGD	3:30:00 PM	1.715	1.7157			N/A
6/18/2019	GBPSGD.fx	9:30:00 AM	1.71594	1.72003			N/A
6/18/2019	GBPSGD.fx	11:30:00 AM	1.71606	1.72016			N/A
6/18/2019	GBPSGD.fx	1:30:00 PM	1.71513	1.71955			N/A
6/18/2019	GBPSGD.fx	3:30:00 PM	1.71313	1.71752			N/A
6/18/2019	GBPUSD	9:30:00 AM	1.25353	1.25335			N/A
6/18/2019	GBPUSD	11:30:00 AM	1.2524	1.25225			N/A
6/18/2019	GBPUSD	1:30:00 PM	1.25255	1.25256			N/A
6/18/2019	GBPUSD	3:30:00 PM	1.2516	1.25152			N/A
6/18/2019	GBPUSD.fx	9:30:00 AM	1.25358	1.2533			N/A
6/18/2019	GBPUSD.fx	11:30:00 AM	1.25246	1.25218			N/A
6/18/2019	GBPUSD.fx	1:30:00 PM	1.25259	1.25249			N/A
6/18/2019	GBPUSD.fx	3:30:00 PM	1.25166	1.25145			N/A
6/18/2019	GBPZAR	9:30:00 AM	18.5143	18.5357			N/A
6/18/2019	GBPZAR	11:30:00 AM	18.3998	18.4028			N/A
6/18/2019	GBPZAR	1:30:00 PM	18.3517	18.3787			N/A
6/18/2019	GBPZAR	3:30:00 PM	18.2792	18.2981			N/A
6/18/2019	GBPZAR.fx	9:30:00 AM	18.5205	18.5295			N/A
6/18/2019	GBPZAR.fx	11:30:00 AM	18.4057	18.3953			N/A
6/18/2019	GBPZAR.fx	1:30:00 PM	18.3589	18.3715			N/A
6/18/2019	GBPZAR.fx	3:30:00 PM	18.2845	18.2909			N/A
6/18/2019	GOLD	9:30:00 AM	1346.53	1346.54			N/A
6/18/2019	GOLD	11:30:00 AM	1346.25	1345.81			N/A
6/18/2019	GOLD	1:30:00 PM	1345.73	1345.79			N/A
6/18/2019	GOLD	3:30:00 PM	1352.15	1351.83			N/A
6/18/2019	HKDJPY	9:30:00 AM	13.82	13.83			N/A
6/18/2019	HKDJPY	11:30:00 AM	13.83	13.83			N/A
6/18/2019	HKDJPY	1:30:00 PM	13.83	13.84			N/A
6/18/2019	HKDJPY	3:30:00 PM	13.82	13.82			N/A

6/18/2019	HKDJPY.fx	9:30:00 AM	13.816	13.823			N/A
6/18/2019	HKDJPY.fx	11:30:00 AM	13.822	13.827			N/A
6/18/2019	HKDJPY.fx	1:30:00 PM	13.823	13.829			N/A
6/18/2019	HKDJPY.fx	3:30:00 PM	13.814	13.815			N/A
6/18/2019	HUFJPY	9:30:00 AM	0.3779	0.3782			N/A
6/18/2019	HUFJPY	11:30:00 AM	0.3766	0.3769			N/A
6/18/2019	HUFJPY	1:30:00 PM	0.3765	0.3768			N/A
6/18/2019	HUFJPY	3:30:00 PM	0.376	0.3763			N/A
6/18/2019	JP225.i	9:30:00 AM	20963.53	20980.2			N/A
6/18/2019	JP225.i	11:30:00 AM	21015.2	21030.2			N/A
6/18/2019	JP225.i	1:30:00 PM	21035.2	21047.7			N/A
6/18/2019	JP225.i	3:30:00 PM	21065.2	21080.2			N/A
6/18/2019	MXNJPY	9:30:00 AM					N/A
6/18/2019	MXNJPY	11:30:00 AM	5.66	5.67			N/A
6/18/2019	MXNJPY	1:30:00 PM					N/A
6/18/2019	MXNJPY	3:30:00 PM	5.67	5.68			N/A
6/18/2019	NASDAQ.i	9:30:00 AM					N/A
6/18/2019	NASDAQ.i	11:30:00 AM					N/A
6/18/2019	NASDAQ.i	1:30:00 PM					N/A
6/18/2019	NASDAQ.i	3:30:00 PM					N/A
6/18/2019	NOKJPY	9:30:00 AM	12.4	12.42			N/A
6/18/2019	NOKJPY	11:30:00 AM	12.38	12.41			N/A
6/18/2019	NOKJPY	1:30:00 PM	12.38	12.41			N/A
6/18/2019	NOKJPY	3:30:00 PM	12.37	12.4			N/A
6/18/2019	NOKJPY.fx	9:30:00 AM	12.405	12.407			N/A
6/18/2019	NOKJPY.fx	11:30:00 AM	12.384	12.39			N/A
6/18/2019	NOKJPY.fx	1:30:00 PM	12.387	12.392			N/A
6/18/2019	NOKJPY.fx	3:30:00 PM	12.379	12.384			N/A
6/18/2019	NZDCAD	9:30:00 AM	0.8706	0.87126			N/A
6/18/2019	NZDCAD	11:30:00 AM	0.87242	0.87303			N/A
6/18/2019	NZDCAD	1:30:00 PM	0.874	0.87469			N/A
6/18/2019	NZDCAD	3:30:00 PM	0.87334	0.87387			N/A
6/18/2019	NZDCAD.fx	9:30:00 AM	0.87094	0.87091			N/A
6/18/2019	NZDCAD.fx	11:30:00 AM	0.87275	0.8727			N/A

6/18/2019	NZDCAD.fx	1:30:00 PM	0.87434	0.87434			N/A
6/18/2019	NZDCAD.fx	3:30:00 PM	0.87368	0.87348			N/A
6/18/2019	NZDCHF	9:30:00 AM	0.64783	0.64851			N/A
6/18/2019	NZDCHF	11:30:00 AM	0.64974	0.65036			N/A
6/18/2019	NZDCHF	1:30:00 PM	0.65077	0.65136			N/A
6/18/2019	NZDCHF	3:30:00 PM	0.64974	0.65035			N/A
6/18/2019	NZDCHF.fx	9:30:00 AM	0.64818	0.64815			N/A
6/18/2019	NZDCHF.fx	11:30:00 AM	0.65009	0.65			N/A
6/18/2019	NZDCHF.fx	1:30:00 PM	0.65111	0.651			N/A
6/18/2019	NZDCHF.fx	3:30:00 PM	0.65008	0.65			N/A
6/18/2019	NZDCZK	9:30:00 AM	14.764	14.776			N/A
6/18/2019	NZDCZK	11:30:00 AM	14.855	14.866			N/A
6/18/2019	NZDCZK	1:30:00 PM	14.875	14.886			N/A
6/18/2019	NZDCZK	3:30:00 PM	14.88	14.886			N/A
6/18/2019	NZDDKK	9:30:00 AM					N/A
6/18/2019	NZDDKK	11:30:00 AM					N/A
6/18/2019	NZDDKK	1:30:00 PM					N/A
6/18/2019	NZDDKK	3:30:00 PM	4.342	4.344			N/A
6/18/2019	NZDHKD	9:30:00 AM	5.086	5.0888			N/A
6/18/2019	NZDHKD	11:30:00 AM	5.0927	5.0956			N/A
6/18/2019	NZDHKD	1:30:00 PM	5.0987	5.1012			N/A
6/18/2019	NZDHKD	3:30:00 PM	5.096	5.0989			N/A
6/18/2019	NZDHUF	9:30:00 AM	186.04	186.34			N/A
6/18/2019	NZDHUF	11:30:00 AM	186.97	187.25			N/A
6/18/2019	NZDHUF	1:30:00 PM	187.25	187.52			N/A
6/18/2019	NZDHUF	3:30:00 PM	187.32	187.49			N/A
6/18/2019	NZDJPY	9:30:00 AM	70.304	70.367			N/A
6/18/2019	NZDJPY	11:30:00 AM	70.426	70.484			N/A
6/18/2019	NZDJPY	1:30:00 PM	70.512	70.571			N/A
6/18/2019	NZDJPY	3:30:00 PM	70.428	70.48			N/A
6/18/2019	NZDJPY.fx	9:30:00 AM	70.338	70.334			N/A
6/18/2019	NZDJPY.fx	11:30:00 AM	70.457	70.452			N/A
6/18/2019	NZDJPY.fx	1:30:00 PM	70.542	70.538			N/A
6/18/2019	NZDJPY.fx	3:30:00 PM	70.459	70.447			N/A

6/18/2019	NZDMXN	9:30:00 AM	12.4386	12.4444			N/A
6/18/2019	NZDMXN	11:30:00 AM	12.4479	12.4492			N/A
6/18/2019	NZDMXN	1:30:00 PM	12.4528	12.4571			N/A
6/18/2019	NZDMXN	3:30:00 PM	12.4243	12.4248			N/A
6/18/2019	NZDNOK	9:30:00 AM	5.666	5.6681			N/A
6/18/2019	NZDNOK	11:30:00 AM	5.684	5.6857			N/A
6/18/2019	NZDNOK	1:30:00 PM	5.6897	5.6924			N/A
6/18/2019	NZDNOK	3:30:00 PM	5.6866	5.6862			N/A
6/18/2019	NZDPLN	9:30:00 AM	2.4628	2.4643			N/A
6/18/2019	NZDPLN	11:30:00 AM	2.4755	2.4769			N/A
6/18/2019	NZDPLN	1:30:00 PM	2.4779	2.479			N/A
6/18/2019	NZDPLN	3:30:00 PM	2.4737	2.474			N/A
6/18/2019	NZDSEK	9:30:00 AM	6.1485	6.1554			N/A
6/18/2019	NZDSEK	11:30:00 AM	6.1682	6.1742			N/A
6/18/2019	NZDSEK	1:30:00 PM	6.1844	6.1906			N/A
6/18/2019	NZDSEK	3:30:00 PM	6.1859	6.1908			N/A
6/18/2019	NZDSGD	9:30:00 AM	0.8901	0.8905			N/A
6/18/2019	NZDSGD	11:30:00 AM	0.8922	0.8928			N/A
6/18/2019	NZDSGD	1:30:00 PM	0.8926	0.8928			N/A
6/18/2019	NZDSGD	3:30:00 PM	0.8919	0.8922			N/A
6/18/2019	NZDSGD.fx	9:30:00 AM	0.8901	0.89062			N/A
6/18/2019	NZDSGD.fx	11:30:00 AM	0.89219	0.89272			N/A
6/18/2019	NZDSGD.fx	1:30:00 PM	0.8926	0.8932			N/A
6/18/2019	NZDSGD.fx	3:30:00 PM	0.89188	0.89242			N/A
6/18/2019	NZDUSD	9:30:00 AM	0.64952	0.64962			N/A
6/18/2019	NZDUSD	11:30:00 AM	0.65044	0.65049			N/A
6/18/2019	NZDUSD	1:30:00 PM	0.65114	0.65124			N/A
6/18/2019	NZDUSD	3:30:00 PM	0.65083	0.65093			N/A
6/18/2019	NZDUSD.fx	9:30:00 AM	0.64959	0.64963			N/A
6/18/2019	NZDUSD.fx	11:30:00 AM	0.65051	0.65051		1000	N/A
6/18/2019	NZDUSD.fx	1:30:00 PM	0.65121	0.65126			N/A
6/18/2019	NZDUSD.fx	3:30:00 PM	0.6509	0.65093			N/A
6/18/2019	NZDZAR	9:30:00 AM	9.5865	9.6039			N/A
6/18/2019	NZDZAR	11:30:00 AM	9.551	9.5563			N/A

6/18/2019	NZDZAR	1:30:00 PM	9.5359	9.5516			N/A
6/18/2019	NZDZAR	3:30:00 PM	9.4971	9.5117			N/A
6/18/2019	SEKJPY	9:30:00 AM	11.43	11.44			N/A
6/18/2019	SEKJPY	11:30:00 AM	11.41	11.42			N/A
6/18/2019	SEKJPY	1:30:00 PM	11.39	11.4			N/A
6/18/2019	SEKJPY	3:30:00 PM	11.38	11.39			N/A
6/18/2019	SEKJPY.fx	9:30:00 AM	11.42	11.436			N/A
6/18/2019	SEKJPY.fx	11:30:00 AM	11.404	11.42			N/A
6/18/2019	SEKJPY.fx	1:30:00 PM	11.387	11.403			N/A
6/18/2019	SEKJPY.fx	3:30:00 PM	11.37	11.388			N/A
6/18/2019	SGDJPY	9:30:00 AM	78.96	78.99			N/A
6/18/2019	SGDJPY	11:30:00 AM	78.92	78.94			N/A
6/18/2019	SGDJPY	1:30:00 PM	78.99	78.99			N/A
6/18/2019	SGDJPY	3:30:00 PM	78.94	78.96			N/A
6/18/2019	SILVER	9:30:00 AM	14.71	15.09			N/A
6/18/2019	SILVER	11:30:00 AM	14.7	15.08			N/A
6/18/2019	SILVER	1:30:00 PM	14.7	15.07			N/A
6/18/2019	SILVER	3:30:00 PM	14.8	15.17			N/A
6/18/2019	SPX500.i	9:30:00 AM	2890.44	2891.51			N/A
6/18/2019	SPX500.i	11:30:00 AM	2899.87	2900.42			N/A
6/18/2019	SPX500.i	1:30:00 PM	2902.12	2902.17			N/A
6/18/2019	SPX500.i	3:30:00 PM	2910.37	2911.17			N/A
6/18/2019	UK100.i	9:30:00 AM	7369.17	7370.67			N/A
6/18/2019	UK100.i	11:30:00 AM	7400.92	7400.17			N/A
6/18/2019	UK100.i	1:30:00 PM	7410.17	7409.92			N/A
6/18/2019	UK100.i	3:30:00 PM	7448.67	7446.42			N/A
6/18/2019	USDCAD	9:30:00 AM	1.34063	1.34079			N/A
6/18/2019	USDCAD	11:30:00 AM	1.3416	1.34167			N/A
6/18/2019	USDCAD	1:30:00 PM	1.34259	1.3426			N/A
6/18/2019	USDCAD	3:30:00 PM	1.3423	1.34187			N/A
6/18/2019	USDCAD.fx	9:30:00 AM	1.34066	1.34076			N/A
6/18/2019	USDCAD.fx	11:30:00 AM	1.34164	1.34163			N/A
6/18/2019	USDCAD.fx	1:30:00 PM	1.34263	1.34257			N/A
6/18/2019	USDCAD.fx	3:30:00 PM	1.34232	1.34184			N/A



6/18/2019	USDCHF	9:30:00 AM	0.99776	0.99778			N/A
6/18/2019	USDCHF	11:30:00 AM	0.99939	0.9992			N/A
6/18/2019	USDCHF	1:30:00 PM	0.99981	0.99968			N/A
6/18/2019	USDCHF	3:30:00 PM	0.99872	0.9986			N/A
6/18/2019	USDCHF.fx	9:30:00 AM	0.99781	0.99771			N/A
6/18/2019	USDCHF.fx	11:30:00 AM	0.99944	0.99914			N/A
6/18/2019	USDCHF.fx	1:30:00 PM	0.99985	0.99961			N/A
6/18/2019	USDCHF.fx	3:30:00 PM	0.99876	0.99854			N/A
6/18/2019	USDCZK	9:30:00 AM	22.748	22.77			N/A
6/18/2019	USDCZK	11:30:00 AM	22.856	22.874			N/A
6/18/2019	USDCZK	1:30:00 PM	22.86	22.881			N/A
6/18/2019	USDCZK	3:30:00 PM	22.878	22.894			N/A
6/18/2019	USDCZK.fx	9:30:00 AM	22.755	22.7633			N/A
6/18/2019	USDCZK.fx	11:30:00 AM	22.8658	22.8648			N/A
6/18/2019	USDCZK.fx	1:30:00 PM	22.8686	22.8711			N/A
6/18/2019	USDCZK.fx	3:30:00 PM	22.886	22.8871			N/A
6/18/2019	USDDKK	9:30:00 AM	6.6459	6.6491			N/A
6/18/2019	USDDKK	11:30:00 AM	6.6717	6.674			N/A
6/18/2019	USDDKK	1:30:00 PM	6.6716	6.6746			N/A
6/18/2019	USDDKK	3:30:00 PM	6.6722	6.6748			N/A
6/18/2019	USDDKK.fx	9:30:00 AM	6.64641	6.64707			N/A
6/18/2019	USDDKK.fx	11:30:00 AM	6.67206	6.67174			N/A
6/18/2019	USDDKK.fx	1:30:00 PM	6.67207	6.67255			N/A
6/18/2019	USDDKK.fx	3:30:00 PM	6.67292	6.67274			N/A
6/18/2019	USDHKD	9:30:00 AM	7.8339	7.8342			N/A
6/18/2019	USDHKD	11:30:00 AM	7.8338	7.834			N/A
6/18/2019	USDHKD	1:30:00 PM	7.8336	7.8339			N/A
6/18/2019	USDHKD	3:30:00 PM	7.8342	7.8342			N/A
6/18/2019	USDHKD.fx	9:30:00 AM	7.83387	7.83441			N/A
6/18/2019	USDHKD.fx	11:30:00 AM	7.83369	7.83425			N/A
6/18/2019	USDHKD.fx	1:30:00 PM	7.83355	7.8341			N/A
6/18/2019	USDHKD.fx	3:30:00 PM	7.83414	7.83468			N/A
6/18/2019	USDHUF	9:30:00 AM	286.53	287			N/A
6/18/2019	USDHUF	11:30:00 AM	287.59	288.03			N/A

6/18/2019	USDHUF	1:30:00 PM	287.69	288.13			N/A
6/18/2019	USDHUF	3:30:00 PM	287.94	288.36			N/A
6/18/2019	USDHUF.fx	9:30:00 AM	286.722	286.795			N/A
6/18/2019	USDHUF.fx	11:30:00 AM	287.785	287.83			N/A
6/18/2019	USDHUF.fx	1:30:00 PM	287.893	287.924			N/A
6/18/2019	USDHUF.fx	3:30:00 PM	288.142	288.147			N/A
6/18/2019	USDINR	9:30:00 AM	64.81	74.8			N/A
6/18/2019	USDINR	11:30:00 AM	64.8	74.79			N/A
6/18/2019	USDINR	1:30:00 PM					N/A
6/18/2019	USDINR	3:30:00 PM					N/A
6/18/2019	USDJPY	9:30:00 AM	108.269	108.273			N/A
6/18/2019	USDJPY	11:30:00 AM	108.313	108.308			N/A
6/18/2019	USDJPY	1:30:00 PM	108.317	108.318			N/A
6/18/2019	USDJPY	3:30:00 PM	108.253	108.216			N/A
6/18/2019	USDJPY.fx	9:30:00 AM	108.275	108.266			N/A
6/18/2019	USDJPY.fx	11:30:00 AM	108.318	108.301			N/A
6/18/2019	USDJPY.fx	1:30:00 PM	108.323	108.311			N/A
6/18/2019	USDJPY.fx	3:30:00 PM	108.259	108.21			N/A
6/18/2019	USDMXN	9:30:00 AM	19.156	19.163			N/A
6/18/2019	USDMXN	11:30:00 AM	19.145	19.146			N/A
6/18/2019	USDMXN	1:30:00 PM	19.131	19.137			N/A
6/18/2019	USDMXN	3:30:00 PM	19.097	19.099			N/A
6/18/2019	USDMXN.f	9:30:00 AM					N/A
6/18/2019	USDMXN.f	11:30:00 AM					N/A
6/18/2019	USDMXN.f	1:30:00 PM					N/A
6/18/2019	USDMXN.f	3:30:00 PM					N/A
6/18/2019	USDNOK	9:30:00 AM	8.7247	8.7304			N/A
6/18/2019	USDNOK	11:30:00 AM	8.7405	8.7469			N/A
6/18/2019	USDNOK	1:30:00 PM	8.7394	8.7464			N/A
6/18/2019	USDNOK	3:30:00 PM	8.7394	8.7449			N/A
6/18/2019	USDNOK.fx	9:30:00 AM	8.72871	8.72584			N/A
6/18/2019	USDNOK.fx	11:30:00 AM	8.74467	8.74248			N/A
6/18/2019	USDNOK.fx	1:30:00 PM	8.74328	8.74178			N/A
6/18/2019	USDNOK.fx	3:30:00 PM	8.74328	8.74057			N/A

6/18/2019	USDPLN	9:30:00 AM	3.793	3.7945			N/A
6/18/2019	USDPLN	11:30:00 AM	3.8079	3.8083			N/A
6/18/2019	USDPLN	1:30:00 PM	3.8063	3.8074			N/A
6/18/2019	USDPLN	3:30:00 PM	3.8028	3.8037			N/A
6/18/2019	USDPLN.fx	9:30:00 AM	3.79206	3.79519			N/A
6/18/2019	USDPLN.fx	11:30:00 AM	3.80708	3.80907			N/A
6/18/2019	USDPLN.fx	1:30:00 PM	3.80555	3.8082			N/A
6/18/2019	USDPLN.fx	3:30:00 PM	3.80208	3.8045			N/A
6/18/2019	USDRUB	9:30:00 AM					N/A
6/18/2019	USDRUB	11:30:00 AM	64.108	64.484			N/A
6/18/2019	USDRUB	1:30:00 PM	64.1	64.493			N/A
6/18/2019	USDRUB	3:30:00 PM	64.027	64.392			N/A
6/18/2019	USDSEK	9:30:00 AM	9.4722	9.4748			N/A
6/18/2019	USDSEK	11:30:00 AM	9.489	9.4916			N/A
6/18/2019	USDSEK	1:30:00 PM	9.5033	9.5064			N/A
6/18/2019	USDSEK	3:30:00 PM	9.5102	9.5121			N/A
6/18/2019	USDSEK.fx	9:30:00 AM	9.47459	9.47331			N/A
6/18/2019	USDSEK.fx	11:30:00 AM	9.49168	9.48972			N/A
6/18/2019	USDSEK.fx	1:30:00 PM	9.50595	9.50453			N/A
6/18/2019	USDSEK.fx	3:30:00 PM	9.51288	9.51058			N/A
6/18/2019	USDSGD	9:30:00 AM	1.3705	1.3709			N/A
6/18/2019	USDSGD	11:30:00 AM	1.3718	1.3721			N/A
6/18/2019	USDSGD	1:30:00 PM	1.3709	1.3713			N/A
6/18/2019	USDSGD	3:30:00 PM	1.3705	1.3708			N/A
6/18/2019	USDSGD.fx	9:30:00 AM	1.37039	1.37086			N/A
6/18/2019	USDSGD.fx	11:30:00 AM	1.37174	1.37214			N/A
6/18/2019	USDSGD.fx	1:30:00 PM	1.37087	1.37123			N/A
6/18/2019	USDSGD.fx	3:30:00 PM	1.37038	1.37078			N/A
6/18/2019	USDZAR	9:30:00 AM	14.7712	14.7865			N/A
6/18/2019	USDZAR	11:30:00 AM	14.694	14.6935			N/A
6/18/2019	USDZAR	1:30:00 PM	14.6546	14.6699			N/A
6/18/2019	USDZAR	3:30:00 PM	14.6059	14.6188			N/A
6/18/2019	USDZAR.fx	9:30:00 AM					N/A
6/18/2019	USDZAR.fx	11:30:00 AM					N/A

6/18/2019	USDZAR.fx	1:30:00 PM					N/A
6/18/2019	USDZAR.fx	3:30:00 PM					N/A
6/18/2019	XAUUSD	9:30:00 AM	1346.59	1346.54			N/A
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6/19/2019	#POT	11:30:00 AM					N/A
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6/19/2019	#QQQ	1:30:00 PM					N/A
6/19/2019	#QQQ	3:30:00 PM					N/A
6/19/2019	#Ripple	9:30:00 AM	0.4288	0.4332			N/A
6/19/2019	#Ripple	11:30:00 AM	0.4339	0.438			N/A
6/19/2019	#Ripple	1:30:00 PM	0.4303	0.4349			N/A
6/19/2019	#Ripple	3:30:00 PM	0.4304	0.4346			N/A
6/19/2019	#S	9:30:00 AM					N/A
6/19/2019	#S	11:30:00 AM					N/A
6/19/2019	#S	1:30:00 PM					N/A
6/19/2019	#S	3:30:00 PM					N/A
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6/19/2019	#SBUX	11:30:00 AM					N/A
6/19/2019	#SBUX	1:30:00 PM					N/A
6/19/2019	#SBUX	3:30:00 PM					N/A
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6/19/2019	#SNE	11:30:00 AM					N/A
6/19/2019	#SNE	1:30:00 PM					N/A
6/19/2019	#SNE	3:30:00 PM					N/A

6/19/2019	#SPY	9:30:00 AM					N/A
6/19/2019	#SPY	11:30:00 AM					N/A
6/19/2019	#SPY	1:30:00 PM					N/A
6/19/2019	#SPY	3:30:00 PM					N/A
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6/19/2019	#T	3:30:00 PM					N/A
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6/19/2019	#TSCO	1:30:00 PM					N/A
6/19/2019	#TSCO	3:30:00 PM					N/A
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6/19/2019	#TWTR	3:30:00 PM					N/A
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6/19/2019	#UBS	11:30:00 AM					N/A

6/19/2019	#UBS	1:30:00 PM					N/A
6/19/2019	#UBS	3:30:00 PM					N/A
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6/19/2019	#V	1:30:00 PM					N/A
6/19/2019	#V	3:30:00 PM					N/A
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6/19/2019	#VOD	1:30:00 PM					N/A
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6/19/2019	#VZ	1:30:00 PM					N/A
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6/19/2019	#WDC	1:30:00 PM					N/A
6/19/2019	#WDC	3:30:00 PM					N/A
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6/19/2019	#WFC	11:30:00 AM					N/A
6/19/2019	#WFC	1:30:00 PM					N/A
6/19/2019	#WFC	3:30:00 PM					N/A



6/19/2019	#WMT	9:30:00 AM					N/A
6/19/2019	#WMT	11:30:00 AM					N/A
6/19/2019	#WMT	1:30:00 PM					N/A
6/19/2019	#WMT	3:30:00 PM					N/A
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6/19/2019	#XOM	1:30:00 PM					N/A
6/19/2019	#XOM	3:30:00 PM					N/A
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6/19/2019	#YHOO	11:30:00 AM					N/A
6/19/2019	#YHOO	1:30:00 PM					N/A
6/19/2019	#YHOO	3:30:00 PM					N/A
6/19/2019	#ZNGA	9:30:00 AM					N/A
6/19/2019	#ZNGA	11:30:00 AM					N/A
6/19/2019	#ZNGA	1:30:00 PM					N/A
6/19/2019	#ZNGA	3:30:00 PM					N/A
6/19/2019	AUDCAD	9:30:00 AM	0.9195	0.92018			N/A
6/19/2019	AUDCAD	11:30:00 AM	0.91869	0.91938			N/A
6/19/2019	AUDCAD	1:30:00 PM	0.9191	0.91981			N/A
6/19/2019	AUDCAD	3:30:00 PM	0.91863	0.91716			N/A
6/19/2019	AUDCAD.fx	9:30:00 AM	0.91983	0.91983			N/A
6/19/2019	AUDCAD.fx	11:30:00 AM	0.91901	0.91904			N/A
6/19/2019	AUDCAD.fx	1:30:00 PM	0.91944	0.91947			N/A
6/19/2019	AUDCAD.fx	3:30:00 PM	0.91894	0.91681			N/A
6/19/2019	AUDCHF	9:30:00 AM	0.68757	0.68817			N/A
6/19/2019	AUDCHF	11:30:00 AM	0.68554	0.68617			N/A
6/19/2019	AUDCHF	1:30:00 PM	0.68558	0.68629			N/A
6/19/2019	AUDCHF	3:30:00 PM	0.68503	0.68555			N/A
6/19/2019	AUDCHF.fx	9:30:00 AM	0.68791	0.68782			N/A
6/19/2019	AUDCHF.fx	11:30:00 AM	0.68588	0.68584			N/A
6/19/2019	AUDCHF.fx	1:30:00 PM	0.68592	0.68594			N/A
6/19/2019	AUDCHF.fx	3:30:00 PM	0.68536	0.68522			N/A
6/19/2019	AUDCZK	9:30:00 AM	15.712	15.729			N/A
6/19/2019	AUDCZK	11:30:00 AM	15.694	15.712			N/A

6/19/2019	AUDCZK	1:30:00 PM	15.703	15.719			N/A
6/19/2019	AUDCZK	3:30:00 PM	15.702	15.714			N/A
6/19/2019	AUDDKK	9:30:00 AM	4.5859	4.5909			N/A
6/19/2019	AUDDKK	11:30:00 AM	4.576	4.581			N/A
6/19/2019	AUDDKK	1:30:00 PM	4.579	4.5838			N/A
6/19/2019	AUDDKK	3:30:00 PM	4.5768	4.5804			N/A
6/19/2019	AUDHKD	9:30:00 AM	5.3797	5.3834			N/A
6/19/2019	AUDHKD	11:30:00 AM	5.3737	5.3769			N/A
6/19/2019	AUDHKD	1:30:00 PM	5.3751	5.3786			N/A
6/19/2019	AUDHKD	3:30:00 PM	5.3716	5.3746			N/A
6/19/2019	AUDHUF	9:30:00 AM	198.32	198.56			N/A
6/19/2019	AUDHUF	11:30:00 AM	198.1	198.29			N/A
6/19/2019	AUDHUF	1:30:00 PM	198.46	198.69			N/A
6/19/2019	AUDHUF	3:30:00 PM	198.41	198.54			N/A
6/19/2019	AUDJPY	9:30:00 AM	74.446	74.511			N/A
6/19/2019	AUDJPY	11:30:00 AM	74.42	74.474			N/A
6/19/2019	AUDJPY	1:30:00 PM	74.478	74.547			N/A
6/19/2019	AUDJPY	3:30:00 PM	74.481	74.519			N/A
6/19/2019	AUDJPY.fx	9:30:00 AM	74.48	74.475			N/A
6/19/2019	AUDJPY.fx	11:30:00 AM	74.452	74.439			N/A
6/19/2019	AUDJPY.fx	1:30:00 PM	74.512	74.512			N/A
6/19/2019	AUDJPY.fx	3:30:00 PM	74.513	74.485			N/A
6/19/2019	AUDMXN	9:30:00 AM	13.1563	13.1646			N/A
6/19/2019	AUDMXN	11:30:00 AM	13.1303	13.1388			N/A
6/19/2019	AUDMXN	1:30:00 PM	13.1613	13.1657			N/A
6/19/2019	AUDMXN	3:30:00 PM	13.1524	13.1576			N/A
6/19/2019	AUDNOK	9:30:00 AM	6.0133	6.0183			N/A
6/19/2019	AUDNOK	11:30:00 AM	6.0033	6.0074			N/A
6/19/2019	AUDNOK	1:30:00 PM	6.0028	6.0073			N/A
6/19/2019	AUDNOK	3:30:00 PM	5.9998	6.0016			N/A
6/19/2019	AUDNOK.fx	9:30:00 AM	6.0147	6.0166			N/A
6/19/2019	AUDNOK.fx	11:30:00 AM	6.0048	6.0057			N/A
6/19/2019	AUDNOK.fx	1:30:00 PM	6.0044	6.0055			N/A
6/19/2019	AUDNOK.fx	3:30:00 PM	6.0012	5.9998			N/A

6/19/2019	AUDNZD	9:30:00 AM	1.05264	1.05351			N/A
6/19/2019	AUDNZD	11:30:00 AM	1.05306	1.0539			N/A
6/19/2019	AUDNZD	1:30:00 PM	1.05285	1.05374			N/A
6/19/2019	AUDNZD	3:30:00 PM	1.05279	1.05346			N/A
6/19/2019	AUDNZD.fx	9:30:00 AM	1.05308	1.05306			N/A
6/19/2019	AUDNZD.fx	11:30:00 AM	1.05349	1.05346			N/A
6/19/2019	AUDNZD.fx	1:30:00 PM	1.05329	1.05328			N/A
6/19/2019	AUDNZD.fx	3:30:00 PM	1.05322	1.05301			N/A
6/19/2019	AUDPLN	9:30:00 AM	2.6172	2.6204			N/A
6/19/2019	AUDPLN	11:30:00 AM	2.6127	2.6157			N/A
6/19/2019	AUDPLN	1:30:00 PM	2.6168	2.6198			N/A
6/19/2019	AUDPLN	3:30:00 PM	2.6153	2.6177			N/A
6/19/2019	AUDSEK	9:30:00 AM	6.5601	6.5631			N/A
6/19/2019	AUDSEK	11:30:00 AM	6.5563	6.5595			N/A
6/19/2019	AUDSEK	1:30:00 PM	6.5555	6.5578			N/A
6/19/2019	AUDSEK	3:30:00 PM	6.5571	6.5565			N/A
6/19/2019	AUDSEK.fx	9:30:00 AM	6.5553	6.5674			N/A
6/19/2019	AUDSEK.fx	11:30:00 AM	6.5515	6.5641			N/A
6/19/2019	AUDSEK.fx	1:30:00 PM	6.5508	6.5622			N/A
6/19/2019	AUDSEK.fx	3:30:00 PM	6.5528	6.5609			N/A
6/19/2019	AUDSGD	9:30:00 AM	0.9405	0.9407			N/A
6/19/2019	AUDSGD	11:30:00 AM	0.9395	0.9397			N/A
6/19/2019	AUDSGD	1:30:00 PM	0.9397	0.9399			N/A
6/19/2019	AUDSGD	3:30:00 PM	0.9396	0.9395			N/A
6/19/2019	AUDSGD.fx	9:30:00 AM	0.94059	0.94066			N/A
6/19/2019	AUDSGD.fx	11:30:00 AM	0.93959	0.93964			N/A
6/19/2019	AUDSGD.fx	1:30:00 PM	0.93976	0.93988			N/A
6/19/2019	AUDSGD.fx	3:30:00 PM	0.93964	0.93944			N/A
6/19/2019	AUDUSD	9:30:00 AM	0.68771	0.68783			N/A
6/19/2019	AUDUSD	11:30:00 AM	0.68694	0.68698			N/A
6/19/2019	AUDUSD	1:30:00 PM	0.6873	0.68742			N/A
6/19/2019	AUDUSD	3:30:00 PM	0.68707	0.68695			N/A
6/19/2019	AUDUSD.fx	9:30:00 AM	0.68776	0.68777			N/A
6/19/2019	AUDUSD.fx	11:30:00 AM	0.68697	0.68694			N/A

6/19/2019	AUDUSD.fx	1:30:00 PM	0.68735	0.68736			N/A
6/19/2019	AUDUSD.fx	3:30:00 PM	0.68711	0.6869			N/A
6/19/2019	AUDZAR	9:30:00 AM	9.9994	10.0093			N/A
6/19/2019	AUDZAR	11:30:00 AM	9.9629	9.971			N/A
6/19/2019	AUDZAR	1:30:00 PM	9.9879	9.9977			N/A
6/19/2019	AUDZAR	3:30:00 PM	9.9684	9.9799			N/A
6/19/2019	AUS200.i	9:30:00 AM	6650.6	6654.6			N/A
6/19/2019	AUS200.i	11:30:00 AM	6654.11	6656.01			N/A
6/19/2019	AUS200.i	1:30:00 PM	6663.11	6666.71			N/A
6/19/2019	AUS200.i	3:30:00 PM	6655.11	6658.31			N/A
6/19/2019	BCHUSD	9:30:00 AM	426.35	428.13			N/A
6/19/2019	BCHUSD	11:30:00 AM	428.73	430.46			N/A
6/19/2019	BCHUSD	1:30:00 PM	427.45	428.81			N/A
6/19/2019	BCHUSD	3:30:00 PM	425.89	427.17			N/A
6/19/2019	CADCHF	9:30:00 AM	0.74753	0.74808			N/A
6/19/2019	CADCHF	11:30:00 AM	0.74597	0.74657			N/A
6/19/2019	CADCHF	1:30:00 PM	0.74567	0.74639			N/A
6/19/2019	CADCHF	3:30:00 PM	0.74708	0.74714			N/A
6/19/2019	CADCHF.fx	9:30:00 AM	0.74786	0.74771			N/A
6/19/2019	CADCHF.fx	11:30:00 AM	0.7463	0.74623			N/A
6/19/2019	CADCHF.fx	1:30:00 PM	0.74601	0.74601			N/A
6/19/2019	CADCHF.fx	3:30:00 PM	0.7474	0.74682			N/A
6/19/2019	CADCZK	9:30:00 AM	17.085	17.102			N/A
6/19/2019	CADCZK	11:30:00 AM	17.082	17.099			N/A
6/19/2019	CADCZK	1:30:00 PM	17.083	17.099			N/A
6/19/2019	CADCZK	3:30:00 PM	17.129	17.111			N/A
6/19/2019	CADDDKK	9:30:00 AM	4.987	4.991			N/A
6/19/2019	CADDDKK	11:30:00 AM	4.98	4.984			N/A
6/19/2019	CADDDKK	1:30:00 PM	4.982	4.985			N/A
6/19/2019	CADDDKK	3:30:00 PM	4.992	4.985			N/A
6/19/2019	CADHKD	9:30:00 AM	5.8492	5.8531			N/A
6/19/2019	CADHKD	11:30:00 AM	5.8486	5.8518			N/A
6/19/2019	CADHKD	1:30:00 PM	5.8474	5.8506			N/A
6/19/2019	CADHKD	3:30:00 PM	5.8598	5.8495			N/A

6/19/2019	CADHUF	9:30:00 AM	215.69	215.85			N/A
6/19/2019	CADHUF	11:30:00 AM	215.69	215.75			N/A
6/19/2019	CADHUF	1:30:00 PM	215.92	216.08			N/A
6/19/2019	CADHUF	3:30:00 PM	216.51	216.12			N/A
6/19/2019	CADJPY	9:30:00 AM	80.935	81.001			N/A
6/19/2019	CADJPY	11:30:00 AM	80.979	81.031			N/A
6/19/2019	CADJPY	1:30:00 PM	81.007	81.072			N/A
6/19/2019	CADJPY	3:30:00 PM	81.22	81.225			N/A
6/19/2019	CADJPY.fx	9:30:00 AM	80.969	80.966			N/A
6/19/2019	CADJPY.fx	11:30:00 AM	81.011	80.999			N/A
6/19/2019	CADJPY.fx	1:30:00 PM	81.041	81.037			N/A
6/19/2019	CADJPY.fx	3:30:00 PM	81.252	81.048			N/A
6/19/2019	CADMXN	9:30:00 AM	14.3051	14.3138			N/A
6/19/2019	CADMXN	11:30:00 AM	14.2894	14.3006			N/A
6/19/2019	CADMXN	1:30:00 PM	14.3165	14.3219			N/A
6/19/2019	CADMXN	3:30:00 PM	14.3472	14.3249			N/A
6/19/2019	CADNOK	9:30:00 AM	6.5367	6.5416			N/A
6/19/2019	CADNOK	11:30:00 AM	6.5297	6.5338			N/A
6/19/2019	CADNOK	1:30:00 PM	6.5282	6.532			N/A
6/19/2019	CADNOK	3:30:00 PM	6.5398	6.5294			N/A
6/19/2019	CADPLN	9:30:00 AM	2.8456	2.8475			N/A
6/19/2019	CADPLN	11:30:00 AM	2.8426	2.8437			N/A
6/19/2019	CADPLN	1:30:00 PM	2.8467	2.848			N/A
6/19/2019	CADPLN	3:30:00 PM	2.8519	2.8467			N/A
6/19/2019	CADSEK	9:30:00 AM	7.1308	7.1334			N/A
6/19/2019	CADSEK	11:30:00 AM	7.1319	7.1353			N/A
6/19/2019	CADSEK	1:30:00 PM	7.128	7.1312			N/A
6/19/2019	CADSEK	3:30:00 PM	7.1466	7.1369			N/A
6/19/2019	CADSGD	9:30:00 AM	1.0218	1.022			N/A
6/19/2019	CADSGD	11:30:00 AM	1.0218	1.0221			N/A
6/19/2019	CADSGD	1:30:00 PM	1.0214	1.0217			N/A
6/19/2019	CADSGD	3:30:00 PM	1.0233	1.0219			N/A
6/19/2019	CADZAR	9:30:00 AM	10.8734	10.8839			N/A
6/19/2019	CADZAR	11:30:00 AM	10.8425	10.8527			N/A

6/19/2019	CADZAR	1:30:00 PM	10.8648	10.8756			N/A
6/19/2019	CADZAR	3:30:00 PM	10.875	10.864			N/A
6/19/2019	CHFCZK	9:30:00 AM	22.852	22.867			N/A
6/19/2019	CHFCZK	11:30:00 AM	22.895	22.91			N/A
6/19/2019	CHFCZK	1:30:00 PM	22.904	22.918			N/A
6/19/2019	CHFCZK	3:30:00 PM	22.922	22.938			N/A
6/19/2019	CHFDKK	9:30:00 AM	6.67	6.671			N/A
6/19/2019	CHFDKK	11:30:00 AM	6.674	6.677			N/A
6/19/2019	CHFDKK	1:30:00 PM	6.678	6.681			N/A
6/19/2019	CHFDKK	3:30:00 PM	6.68	6.682			N/A
6/19/2019	CHFDKK.fx	9:30:00 AM	6.668	6.6727			N/A
6/19/2019	CHFDKK.fx	11:30:00 AM	6.6726	6.6778			N/A
6/19/2019	CHFDKK.fx	1:30:00 PM	6.6764	6.6822			N/A
6/19/2019	CHFDKK.fx	3:30:00 PM	6.6785	6.6843			N/A
6/19/2019	CHFHKD	9:30:00 AM	7.8242	7.8259			N/A
6/19/2019	CHFHKD	11:30:00 AM	7.8378	7.8413			N/A
6/19/2019	CHFHKD	1:30:00 PM	7.8388	7.8424			N/A
6/19/2019	CHFHKD	3:30:00 PM	7.841	7.8445			N/A
6/19/2019	CHFHUF	9:30:00 AM	288.39	288.7			N/A
6/19/2019	CHFHUF	11:30:00 AM	288.92	289.2			N/A
6/19/2019	CHFHUF	1:30:00 PM	289.37	289.73			N/A
6/19/2019	CHFHUF	3:30:00 PM	289.54	289.86			N/A
6/19/2019	CHFJPY	9:30:00 AM	108.252	108.299			N/A
6/19/2019	CHFJPY	11:30:00 AM	108.525	108.577			N/A
6/19/2019	CHFJPY	1:30:00 PM	108.594	108.666			N/A
6/19/2019	CHFJPY	3:30:00 PM	108.686	108.751			N/A
6/19/2019	CHFJPY.fx	9:30:00 AM	108.286	108.265			N/A
6/19/2019	CHFJPY.fx	11:30:00 AM	108.557	108.544			N/A
6/19/2019	CHFJPY.fx	1:30:00 PM	108.627	108.631			N/A
6/19/2019	CHFJPY.fx	3:30:00 PM	108.717	108.717			N/A
6/19/2019	CHFMXN	9:30:00 AM	19.1284	19.1422			N/A
6/19/2019	CHFMXN	11:30:00 AM	19.1487	19.1637			N/A
6/19/2019	CHFMXN	1:30:00 PM	19.1921	19.1985			N/A
6/19/2019	CHFMXN	3:30:00 PM	19.1965	19.2115			N/A

6/19/2019	CHFNOK	9:30:00 AM	8.7424	8.7486			N/A
6/19/2019	CHFNOK	11:30:00 AM	8.7531	8.758			N/A
6/19/2019	CHFNOK	1:30:00 PM	8.7511	8.758			N/A
6/19/2019	CHFNOK	3:30:00 PM	8.7536	8.7591			N/A
6/19/2019	CHFNOK.fx	9:30:00 AM	8.74585	8.74502			N/A
6/19/2019	CHFNOK.fx	11:30:00 AM	8.75664	8.75421			N/A
6/19/2019	CHFNOK.fx	1:30:00 PM	8.7549	8.75438			N/A
6/19/2019	CHFNOK.fx	3:30:00 PM	8.75724	8.75567			N/A
6/19/2019	CHFPLN	9:30:00 AM	3.8068	3.8089			N/A
6/19/2019	CHFPLN	11:30:00 AM	3.8111	3.8135			N/A
6/19/2019	CHFPLN	1:30:00 PM	3.8167	3.8191			N/A
6/19/2019	CHFPLN	3:30:00 PM	3.8173	3.8204			N/A
6/19/2019	CHFPLN.fx	9:30:00 AM	3.80434	3.81125			N/A
6/19/2019	CHFPLN.fx	11:30:00 AM	3.80864	3.81593			N/A
6/19/2019	CHFPLN.fx	1:30:00 PM	3.81426	3.82143			N/A
6/19/2019	CHFPLN.fx	3:30:00 PM	3.81496	3.82293			N/A
6/19/2019	CHFSEK	9:30:00 AM	9.5351	9.5391			N/A
6/19/2019	CHFSEK	11:30:00 AM	9.5574	9.5613			N/A
6/19/2019	CHFSEK	1:30:00 PM	9.5553	9.5592			N/A
6/19/2019	CHFSEK	3:30:00 PM	9.5657	9.5666			N/A
6/19/2019	CHFSGD	9:30:00 AM	1.3675	1.3675			N/A
6/19/2019	CHFSGD	11:30:00 AM	1.3699	1.3702			N/A
6/19/2019	CHFSGD	1:30:00 PM	1.37	1.3704			N/A
6/19/2019	CHFSGD	3:30:00 PM	1.3709	1.3712			N/A
6/19/2019	CHFSGD.fx	9:30:00 AM	1.36767	1.36727			N/A
6/19/2019	CHFSGD.fx	11:30:00 AM	1.37003	1.36998			N/A
6/19/2019	CHFSGD.fx	1:30:00 PM	1.37013	1.37017			N/A
6/19/2019	CHFSGD.fx	3:30:00 PM	1.37102	1.37105			N/A
6/19/2019	CHFZAR	9:30:00 AM	14.5434	14.549			N/A
6/19/2019	CHFZAR	11:30:00 AM	14.5334	14.5397			N/A
6/19/2019	CHFZAR	1:30:00 PM	14.5688	14.5746			N/A
6/19/2019	CHFZAR	3:30:00 PM	14.5515	14.5658			N/A
6/19/2019	CZKJPY	9:30:00 AM					N/A
6/19/2019	CZKJPY	11:30:00 AM					N/A

6/19/2019	CZKJPY	1:30:00 PM	4.741	4.744			N/A
6/19/2019	CZKJPY	3:30:00 PM					N/A
6/19/2019	DAX30.i	9:30:00 AM	12348.44	12342.69			N/A
6/19/2019	DAX30.i	11:30:00 AM	12316.94	12312.19			N/A
6/19/2019	DAX30.i	1:30:00 PM	12336.69	12335.44			N/A
6/19/2019	DAX30.i	3:30:00 PM	12306.19	12302.69			N/A
6/19/2019	DJ30.i	9:30:00 AM					N/A
6/19/2019	DJ30.i	11:30:00 AM					N/A
6/19/2019	DJ30.i	1:30:00 PM					N/A
6/19/2019	DJ30.i	3:30:00 PM					N/A
6/19/2019	DKKJPY	9:30:00 AM					N/A
6/19/2019	DKKJPY	11:30:00 AM	16.26	16.28			N/A
6/19/2019	DKKJPY	1:30:00 PM	16.26	16.28			N/A
6/19/2019	DKKJPY	3:30:00 PM	16.27	16.29			N/A
6/19/2019	EURAUD	9:30:00 AM	1.62668	1.62713			N/A
6/19/2019	EURAUD	11:30:00 AM	1.63017	1.63065			N/A
6/19/2019	EURAUD	1:30:00 PM	1.62896	1.62947			N/A
6/19/2019	EURAUD	3:30:00 PM	1.63033	1.6302			N/A
6/19/2019	EURAUD.fx	9:30:00 AM	1.6269	1.62691			N/A
6/19/2019	EURAUD.fx	11:30:00 AM	1.63036	1.63044			N/A
6/19/2019	EURAUD.fx	1:30:00 PM	1.62917	1.62924			N/A
6/19/2019	EURAUD.fx	3:30:00 PM	1.63054	1.63001			N/A
6/19/2019	EURCAD	9:30:00 AM	1.49666	1.49746			N/A
6/19/2019	EURCAD	11:30:00 AM	1.49852	1.49937			N/A
6/19/2019	EURCAD	1:30:00 PM	1.49809	1.49896			N/A
6/19/2019	EURCAD	3:30:00 PM	1.49731	1.49571			N/A
6/19/2019	EURCAD.fx	9:30:00 AM	1.49708	1.49705			N/A
6/19/2019	EURCAD.fx	11:30:00 AM	1.49894	1.49896			N/A
6/19/2019	EURCAD.fx	1:30:00 PM	1.49852	1.49851			N/A
6/19/2019	EURCAD.fx	3:30:00 PM	1.49896	1.49525			N/A
6/19/2019	EURCHF	9:30:00 AM	1.11958	1.11945			N/A
6/19/2019	EURCHF	11:30:00 AM	1.11867	1.11863			N/A
6/19/2019	EURCHF	1:30:00 PM	1.11793	1.11797			N/A
6/19/2019	EURCHF	3:30:00 PM	1.11756	1.11765			N/A



6/19/2019	EURCHF.fx	9:30:00 AM	1.11965	1.11937			N/A
6/19/2019	EURCHF.fx	11:30:00 AM	1.11871	1.11857			N/A
6/19/2019	EURCHF.fx	1:30:00 PM	1.11799	1.11792			N/A
6/19/2019	EURCHF.fx	3:30:00 PM	1.1176	1.11759			N/A
6/19/2019	EURCZK	9:30:00 AM	25.568	25.606			N/A
6/19/2019	EURCZK	11:30:00 AM	25.596	25.636			N/A
6/19/2019	EURCZK	1:30:00 PM	25.59	25.628			N/A
6/19/2019	EURCZK	3:30:00 PM	25.603	25.641			N/A
6/19/2019	EURDKK	9:30:00 AM	7.4657	7.467			N/A
6/19/2019	EURDKK	11:30:00 AM	7.4654	7.4667			N/A
6/19/2019	EURDKK	1:30:00 PM	7.4653	7.4665			N/A
6/19/2019	EURDKK	3:30:00 PM	7.4661	7.4674			N/A
6/19/2019	EURGBP	9:30:00 AM	0.89125	0.89134			N/A
6/19/2019	EURGBP	11:30:00 AM	0.89143	0.89084			N/A
6/19/2019	EURGBP	1:30:00 PM	0.89077	0.89084			N/A
6/19/2019	EURGBP	3:30:00 PM	0.89028	0.89034			N/A
6/19/2019	EURGBP.fx	9:30:00 AM	0.89129	0.89129			N/A
6/19/2019	EURGBP.fx	11:30:00 AM	0.89142	0.8908			N/A
6/19/2019	EURGBP.fx	1:30:00 PM	0.89082	0.8908			N/A
6/19/2019	EURGBP.fx	3:30:00 PM	0.89031	0.89029			N/A
6/19/2019	EURHKD	9:30:00 AM	8.7584	8.7632			N/A
6/19/2019	EURHKD	11:30:00 AM	8.7683	8.7718			N/A
6/19/2019	EURHKD	1:30:00 PM	8.7634	8.768			N/A
6/19/2019	EURHKD	3:30:00 PM	8.764	8.7693			N/A
6/19/2019	EURHKD.fx	9:30:00 AM	8.76117	8.76039			N/A
6/19/2019	EURHKD.fx	11:30:00 AM	8.77112	8.76912			N/A
6/19/2019	EURHKD.fx	1:30:00 PM	8.76619	8.76524			N/A
6/19/2019	EURHKD.fx	3:30:00 PM	8.76676	8.76574			N/A
6/19/2019	EURHUF	9:30:00 AM	322.77	323.46			N/A
6/19/2019	EURHUF	11:30:00 AM	323.28	323.92			N/A
6/19/2019	EURHUF	1:30:00 PM	323.41	324.14			N/A
6/19/2019	EURHUF	3:30:00 PM	323.63	324.36			N/A
6/19/2019	EURHUF.fx	9:30:00 AM	323.059	323.238			N/A
6/19/2019	EURHUF.fx	11:30:00 AM	323.585	323.629			N/A

6/19/2019	EURHUF.fx	1:30:00 PM	323.683	323.858			N/A
6/19/2019	EURHUF.fx	3:30:00 PM	323.918	324.071			N/A
6/19/2019	EURJPY	9:30:00 AM	121.213	121.214			N/A
6/19/2019	EURJPY	11:30:00 AM	121.433	121.411			N/A
6/19/2019	EURJPY	1:30:00 PM	121.442	121.442			N/A
6/19/2019	EURJPY	3:30:00 PM	121.496	121.494			N/A
6/19/2019	EURJPY.fx	9:30:00 AM	121.217	121.21			N/A
6/19/2019	EURJPY.fx	11:30:00 AM	121.435	121.408			N/A
6/19/2019	EURJPY.fx	1:30:00 PM	121.445	121.438			N/A
6/19/2019	EURJPY.fx	3:30:00 PM	121.497	121.493			N/A
6/19/2019	EURMXN	9:30:00 AM	21.4181	21.432			N/A
6/19/2019	EURMXN	11:30:00 AM	21.4247	21.4418			N/A
6/19/2019	EURMXN	1:30:00 PM	21.4565	21.4659			N/A
6/19/2019	EURMXN	3:30:00 PM	21.4578	21.4749			N/A
6/19/2019	EURMXN.fx	9:30:00 AM	21.4267	21.4239			N/A
6/19/2019	EURMXN.fx	11:30:00 AM	21.4326	21.4334			N/A
6/19/2019	EURMXN.fx	1:30:00 PM	21.4649	21.4573			N/A
6/19/2019	EURMXN.fx	3:30:00 PM	21.4667	21.4661			N/A
6/19/2019	EURNOK	9:30:00 AM	9.7848	9.7968			N/A
6/19/2019	EURNOK	11:30:00 AM	9.7893	9.7998			N/A
6/19/2019	EURNOK	1:30:00 PM	9.781	9.7926			N/A
6/19/2019	EURNOK	3:30:00 PM	9.7808	9.7912			N/A
6/19/2019	EURNOK.fx	9:30:00 AM	9.7901	9.79138			N/A
6/19/2019	EURNOK.fx	11:30:00 AM	9.7949	9.79419			N/A
6/19/2019	EURNOK.fx	1:30:00 PM	9.78671	9.78684			N/A
6/19/2019	EURNOK.fx	3:30:00 PM	9.78636	9.78569			N/A
6/19/2019	EURNZD	9:30:00 AM	1.71351	1.71423			N/A
6/19/2019	EURNZD	11:30:00 AM	1.71786	1.71858			N/A
6/19/2019	EURNZD	1:30:00 PM	1.71631	1.71706			N/A
6/19/2019	EURNZD	3:30:00 PM	1.71726	1.71781			N/A
6/19/2019	EURNZD.fx	9:30:00 AM	1.71395	1.71379			N/A
6/19/2019	EURNZD.fx	11:30:00 AM	1.71825	1.71817			N/A
6/19/2019	EURNZD.fx	1:30:00 PM	1.71672	1.71664			N/A
6/19/2019	EURNZD.fx	3:30:00 PM	1.71767	1.71739			N/A

6/19/2019	EURPLN	9:30:00 AM	4.2612	4.2645			N/A
6/19/2019	EURPLN	11:30:00 AM	4.2628	4.2657			N/A
6/19/2019	EURPLN	1:30:00 PM	4.2666	4.2693			N/A
6/19/2019	EURPLN	3:30:00 PM	4.2663	4.2696			N/A
6/19/2019	EURPLN.fx	9:30:00 AM	4.26057	4.26502			N/A
6/19/2019	EURPLN.fx	11:30:00 AM	4.26222	4.26628			N/A
6/19/2019	EURPLN.fx	1:30:00 PM	4.26603	4.26974			N/A
6/19/2019	EURPLN.fx	3:30:00 PM	4.26562	4.27013			N/A
6/19/2019	EURRUB	9:30:00 AM					N/A
6/19/2019	EURRUB	11:30:00 AM	71.302	71.737			N/A
6/19/2019	EURRUB	1:30:00 PM	71.363	71.805			N/A
6/19/2019	EURRUB	3:30:00 PM	71.374	71.816			N/A
6/19/2019	EURSEK	9:30:00 AM	10.6786	10.6821			N/A
6/19/2019	EURSEK	11:30:00 AM	10.695	10.6997			N/A
6/19/2019	EURSEK	1:30:00 PM	10.6859	10.6893			N/A
6/19/2019	EURSEK	3:30:00 PM	10.6953	10.6952			N/A
6/19/2019	EURSEK.fx	9:30:00 AM	10.68008	10.68043			N/A
6/19/2019	EURSEK.fx	11:30:00 AM	10.69665	10.69805			N/A
6/19/2019	EURSEK.fx	1:30:00 PM	10.68768	10.68742			N/A
6/19/2019	EURSEK.fx	3:30:00 PM	10.69676	10.69349			N/A
6/19/2019	EURSGD	9:30:00 AM	1.5305	1.5313			N/A
6/19/2019	EURSGD	11:30:00 AM	1.5322	1.5329			N/A
6/19/2019	EURSGD	1:30:00 PM	1.5314	1.5322			N/A
6/19/2019	EURSGD	3:30:00 PM	1.5319	1.5327			N/A
6/19/2019	EURSGD.fx	9:30:00 AM	1.53092	1.5309			N/A
6/19/2019	EURSGD.fx	11:30:00 AM	1.53259	1.53248			N/A
6/19/2019	EURSGD.fx	1:30:00 PM	1.53173	1.53177			N/A
6/19/2019	EURSGD.fx	3:30:00 PM	1.53226	1.53232			N/A
6/19/2019	EURUSD	9:30:00 AM	1.11919	1.11924			N/A
6/19/2019	EURUSD	11:30:00 AM	1.12031	1.12027			N/A
6/19/2019	EURUSD	1:30:00 PM	1.12011	1.12014			N/A
6/19/2019	EURUSD	3:30:00 PM	1.12021	1.12033			N/A
6/19/2019	EURUSD.fx	9:30:00 AM	1.11939	1.11933			N/A
6/19/2019	EURUSD.fx	11:30:00 AM	1.1205	1.12037			N/A

6/19/2019	EURUSD.fx	1:30:00 PM	1.12031	1.12023			N/A
6/19/2019	EURUSD.fx	3:30:00 PM	1.1204	1.12043			N/A
6/19/2019	EURZAR	9:30:00 AM	16.2864	16.2941			N/A
6/19/2019	EURZAR	11:30:00 AM	16.2593	16.2751			N/A
6/19/2019	EURZAR	1:30:00 PM	16.2882	16.2997			N/A
6/19/2019	EURZAR	3:30:00 PM	16.2689	16.2896			N/A
6/19/2019	EURZAR.fx	9:30:00 AM	16.28508	16.29502			N/A
6/19/2019	EURZAR.fx	11:30:00 AM	16.25952	16.27534			N/A
6/19/2019	EURZAR.fx	1:30:00 PM	16.28784	16.30065			N/A
6/19/2019	EURZAR.fx	3:30:00 PM	16.26817	16.29032			N/A
6/19/2019	GBPAUD	9:30:00 AM	1.82564	1.82641			N/A
6/19/2019	GBPAUD	11:30:00 AM	1.83065	1.82993			N/A
6/19/2019	GBPAUD	1:30:00 PM	1.82928	1.82996			N/A
6/19/2019	GBPAUD	3:30:00 PM	1.83173	1.83192			N/A
6/19/2019	GBPAUD.fx	9:30:00 AM	1.82604	1.82601			N/A
6/19/2019	GBPAUD.fx	11:30:00 AM	1.83094	1.82971			N/A
6/19/2019	GBPAUD.fx	1:30:00 PM	1.82966	1.82956			N/A
6/19/2019	GBPAUD.fx	3:30:00 PM	1.83209	1.83155			N/A
6/19/2019	GBPCAD	9:30:00 AM	1.67925	1.68006			N/A
6/19/2019	GBPCAD	11:30:00 AM	1.6825	1.68184			N/A
6/19/2019	GBPCAD	1:30:00 PM	1.68182	1.6826			N/A
6/19/2019	GBPCAD	3:30:00 PM	1.68056	1.67977			N/A
6/19/2019	GBPCAD.fx	9:30:00 AM	1.67964	1.67966			N/A
6/19/2019	GBPCAD.fx	11:30:00 AM	1.68279	1.68163			N/A
6/19/2019	GBPCAD.fx	1:30:00 PM	1.68222	1.68221			N/A
6/19/2019	GBPCAD.fx	3:30:00 PM	1.68372	1.67938			N/A
6/19/2019	GBPCHF	9:30:00 AM	1.25602	1.25611			N/A
6/19/2019	GBPCHF	11:30:00 AM	1.25552	1.25499			N/A
6/19/2019	GBPCHF	1:30:00 PM	1.25475	1.25515			N/A
6/19/2019	GBPCHF	3:30:00 PM	1.25509	1.25553			N/A
6/19/2019	GBPCHF.fx	9:30:00 AM	1.25622	1.25592			N/A
6/19/2019	GBPCHF.fx	11:30:00 AM	1.25571	1.25487			N/A
6/19/2019	GBPCHF.fx	1:30:00 PM	1.25494	1.25495			N/A
6/19/2019	GBPCHF.fx	3:30:00 PM	1.25528	1.25533			N/A

6/19/2019	GBPCZK	9:30:00 AM	28.696	28.718			N/A
6/19/2019	GBPCZK	11:30:00 AM	28.745	28.741			N/A
6/19/2019	GBPCZK	1:30:00 PM	28.739	28.757			N/A
6/19/2019	GBPCZK	3:30:00 PM	28.767	28.79			N/A
6/19/2019	GBPDKK	9:30:00 AM	8.373	8.384			N/A
6/19/2019	GBPDKK	11:30:00 AM	8.378	8.382			N/A
6/19/2019	GBPDKK	1:30:00 PM	8.378	8.389			N/A
6/19/2019	GBPDKK	3:30:00 PM	8.382	8.393			N/A
6/19/2019	GBPDKK.fx	9:30:00 AM	8.3717	8.3848			N/A
6/19/2019	GBPDKK.fx	11:30:00 AM	8.376	8.3836			N/A
6/19/2019	GBPDKK.fx	1:30:00 PM	8.3762	8.3888			N/A
6/19/2019	GBPDKK.fx	3:30:00 PM	8.3808	8.3933			N/A
6/19/2019	GBPHKD	9:30:00 AM	9.824	9.8299			N/A
6/19/2019	GBPHKD	11:30:00 AM	9.8399	9.8364			N/A
6/19/2019	GBPHKD	1:30:00 PM	9.8355	9.8398			N/A
6/19/2019	GBPHKD	3:30:00 PM	9.8405	9.8458			N/A
6/19/2019	GBPHUF	9:30:00 AM	362.13	362.61			N/A
6/19/2019	GBPHUF	11:30:00 AM	362.76	362.78			N/A
6/19/2019	GBPHUF	1:30:00 PM	363.06	363.53			N/A
6/19/2019	GBPHUF	3:30:00 PM	363.44	363.8			N/A
6/19/2019	GBPJPY	9:30:00 AM	135.981	136.015			N/A
6/19/2019	GBPJPY	11:30:00 AM	136.298	136.204			N/A
6/19/2019	GBPJPY	1:30:00 PM	136.307	136.342			N/A
6/19/2019	GBPJPY	3:30:00 PM	136.45	136.488			N/A
6/19/2019	GBPJPY.fx	9:30:00 AM	136	135.994			N/A
6/19/2019	GBPJPY.fx	11:30:00 AM	136.313	136.199			N/A
6/19/2019	GBPJPY.fx	1:30:00 PM	136.327	136.322			N/A
6/19/2019	GBPJPY.fx	3:30:00 PM	136.469	136.47			N/A
6/19/2019	GBPMXN	9:30:00 AM	24.0278	24.0366			N/A
6/19/2019	GBPMXN	11:30:00 AM	24.044	24.0369			N/A
6/19/2019	GBPMXN	1:30:00 PM	24.0841	24.0861			N/A
6/19/2019	GBPMXN	3:30:00 PM	24.0956	24.1072			N/A
6/19/2019	GBPNOK	9:30:00 AM	10.9791	10.9906			N/A
6/19/2019	GBPNOK	11:30:00 AM	10.9908	10.9937			N/A

6/19/2019	GBPNOK	1:30:00 PM	10.9807	10.9917			N/A
6/19/2019	GBPNOK	3:30:00 PM	10.9873	10.9961			N/A
6/19/2019	GBPNOK.fx	9:30:00 AM	10.98399	10.98563			N/A
6/19/2019	GBPNOK.fx	11:30:00 AM	10.99539	10.99022			N/A
6/19/2019	GBPNOK.fx	1:30:00 PM	10.9859	10.98662			N/A
6/19/2019	GBPNOK.fx	3:30:00 PM	10.9921	10.99119			N/A
6/19/2019	GBPNZD	9:30:00 AM	1.92257	1.92324			N/A
6/19/2019	GBPNZD	11:30:00 AM	1.9284	1.92795			N/A
6/19/2019	GBPNZD	1:30:00 PM	1.92688	1.92737			N/A
6/19/2019	GBPNZD	3:30:00 PM	1.92893	1.92925			N/A
6/19/2019	GBPNZD.fx	9:30:00 AM	1.92295	1.92287			N/A
6/19/2019	GBPNZD.fx	11:30:00 AM	1.92872	1.92768			N/A
6/19/2019	GBPNZD.fx	1:30:00 PM	1.92728	1.92698			N/A
6/19/2019	GBPNZD.fx	3:30:00 PM	1.92928	1.92889			N/A
6/19/2019	GBPPLN	9:30:00 AM	4.7816	4.7833			N/A
6/19/2019	GBPPLN	11:30:00 AM	4.7859	4.784			N/A
6/19/2019	GBPPLN	1:30:00 PM	4.7901	4.7913			N/A
6/19/2019	GBPPLN	3:30:00 PM	4.7922	4.7941			N/A
6/19/2019	GBPPLN.fx	9:30:00 AM	4.77946	4.78546			N/A
6/19/2019	GBPPLN.fx	11:30:00 AM	4.78355	4.78697			N/A
6/19/2019	GBPPLN.fx	1:30:00 PM	4.78786	4.79353			N/A
6/19/2019	GBPPLN.fx	3:30:00 PM	4.78999	4.79615			N/A
6/19/2019	GBPSEK	9:30:00 AM	11.978	11.9863			N/A
6/19/2019	GBPSEK	11:30:00 AM	12.003	12.0028			N/A
6/19/2019	GBPSEK	1:30:00 PM	11.9921	12.0001			N/A
6/19/2019	GBPSEK	3:30:00 PM	12.01	12.0132			N/A
6/19/2019	GBPSEK.fx	9:30:00 AM	11.97404	11.9904			N/A
6/19/2019	GBPSEK.fx	11:30:00 AM	11.99878	12.0085			N/A
6/19/2019	GBPSEK.fx	1:30:00 PM	11.98823	12.00373			N/A
6/19/2019	GBPSEK.fx	3:30:00 PM	12.00596	12.01735			N/A
6/19/2019	GBPSGD	9:30:00 AM	1.7172	1.718			N/A
6/19/2019	GBPSGD	11:30:00 AM	1.7201	1.7193			N/A
6/19/2019	GBPSGD	1:30:00 PM	1.7192	1.7199			N/A
6/19/2019	GBPSGD	3:30:00 PM	1.7207	1.7215			N/A

6/19/2019	GBPSGD.fx	9:30:00 AM	1.71535	1.71983			N/A
6/19/2019	GBPSGD.fx	11:30:00 AM	1.71825	1.72138			N/A
6/19/2019	GBPSGD.fx	1:30:00 PM	1.71734	1.72166			N/A
6/19/2019	GBPSGD.fx	3:30:00 PM	1.71883	1.7233			N/A
6/19/2019	GBPUSD	9:30:00 AM	1.25586	1.25592			N/A
6/19/2019	GBPUSD	11:30:00 AM	1.25778	1.25672			N/A
6/19/2019	GBPUSD	1:30:00 PM	1.25753	1.25755			N/A
6/19/2019	GBPUSD	3:30:00 PM	1.25841	1.25846			N/A
6/19/2019	GBPUSD.fx	9:30:00 AM	1.25591	1.25585			N/A
6/19/2019	GBPUSD.fx	11:30:00 AM	1.25782	1.25674			N/A
6/19/2019	GBPUSD.fx	1:30:00 PM	1.25759	1.25749			N/A
6/19/2019	GBPUSD.fx	3:30:00 PM	1.25846	1.25841			N/A
6/19/2019	GBPZAR	9:30:00 AM	18.2689	18.2853			N/A
6/19/2019	GBPZAR	11:30:00 AM	18.2488	18.2609			N/A
6/19/2019	GBPZAR	1:30:00 PM	18.2813	18.3002			N/A
6/19/2019	GBPZAR	3:30:00 PM	18.2706	18.2994			N/A
6/19/2019	GBPZAR.fx	9:30:00 AM	18.2753	18.278			N/A
6/19/2019	GBPZAR.fx	11:30:00 AM	18.2568	18.2565			N/A
6/19/2019	GBPZAR.fx	1:30:00 PM	18.2883	18.2933			N/A
6/19/2019	GBPZAR.fx	3:30:00 PM	18.2783	18.2924			N/A
6/19/2019	GOLD	9:30:00 AM	1344.48	1344.29			N/A
6/19/2019	GOLD	11:30:00 AM	1342.43	1342.48			N/A
6/19/2019	GOLD	1:30:00 PM	1342.48	1342.76			N/A
6/19/2019	GOLD	3:30:00 PM	1344.13	1343.97			N/A
6/19/2019	HKDJPY	9:30:00 AM	13.84	13.85			N/A
6/19/2019	HKDJPY	11:30:00 AM	13.85	13.85			N/A
6/19/2019	HKDJPY	1:30:00 PM					N/A
6/19/2019	HKDJPY	3:30:00 PM	13.86	13.87			N/A
6/19/2019	HKDJPY.fx	9:30:00 AM	13.832	13.838			N/A
6/19/2019	HKDJPY.fx	11:30:00 AM	13.842	13.848			N/A
6/19/2019	HKDJPY.fx	1:30:00 PM	13.849	13.857			N/A
6/19/2019	HKDJPY.fx	3:30:00 PM	13.855	13.862			N/A
6/19/2019	HUFJPY	9:30:00 AM	0.3754	0.3757			N/A
6/19/2019	HUFJPY	11:30:00 AM	0.3756	0.3759			N/A

6/19/2019	HUFJPY	1:30:00 PM	0.3753	0.3756			N/A
6/19/2019	HUFJPY	3:30:00 PM	0.3753	0.3756			N/A
6/19/2019	JP225.i	9:30:00 AM	21302.59	21317.59			N/A
6/19/2019	JP225.i	11:30:00 AM	21298.42	21310.09			N/A
6/19/2019	JP225.i	1:30:00 PM	21310.92	21330.09			N/A
6/19/2019	JP225.i	3:30:00 PM	21310.09	21329.04			N/A
6/19/2019	MXNJPY	9:30:00 AM	5.66	5.67			N/A
6/19/2019	MXNJPY	11:30:00 AM	5.66	5.67			N/A
6/19/2019	MXNJPY	1:30:00 PM	5.66	5.67			N/A
6/19/2019	MXNJPY	3:30:00 PM	5.66	5.67			N/A
6/19/2019	NASDAQ.i	9:30:00 AM					N/A
6/19/2019	NASDAQ.i	11:30:00 AM					N/A
6/19/2019	NASDAQ.i	1:30:00 PM					N/A
6/19/2019	NASDAQ.i	3:30:00 PM					N/A
6/19/2019	NOKJPY	9:30:00 AM					N/A
6/19/2019	NOKJPY	11:30:00 AM	12.39	12.41			N/A
6/19/2019	NOKJPY	1:30:00 PM	12.4	12.43			N/A
6/19/2019	NOKJPY	3:30:00 PM	12.41	12.44			N/A
6/19/2019	NOKJPY.fx	9:30:00 AM	12.377	12.384			N/A
6/19/2019	NOKJPY.fx	11:30:00 AM	12.396	12.398			N/A
6/19/2019	NOKJPY.fx	1:30:00 PM	12.405	12.411			N/A
6/19/2019	NOKJPY.fx	3:30:00 PM	12.413	12.417			N/A
6/19/2019	NZDCAD	9:30:00 AM	0.87319	0.87383			N/A
6/19/2019	NZDCAD	11:30:00 AM	0.87207	0.87272			N/A
6/19/2019	NZDCAD	1:30:00 PM	0.8726	0.87323			N/A
6/19/2019	NZDCAD	3:30:00 PM	0.87229	0.87099			N/A
6/19/2019	NZDCAD.fx	9:30:00 AM	0.87352	0.87348			N/A
6/19/2019	NZDCAD.fx	11:30:00 AM	0.87239	0.8724			N/A
6/19/2019	NZDCAD.fx	1:30:00 PM	0.87294	0.8729			N/A
6/19/2019	NZDCAD.fx	3:30:00 PM	0.87253	0.87068		1000	N/A
6/19/2019	NZDCHF	9:30:00 AM	0.65291	0.65353			N/A
6/19/2019	NZDCHF	11:30:00 AM	0.65072	0.65136			N/A
6/19/2019	NZDCHF	1:30:00 PM	0.65088	0.65154			N/A
6/19/2019	NZDCHF	3:30:00 PM	0.6504	0.65102			N/A



6/19/2019	NZDCHF.fx	9:30:00 AM	0.65325	0.65318			N/A
6/19/2019	NZDCHF.fx	11:30:00 AM	0.65105	0.65102			N/A
6/19/2019	NZDCHF.fx	1:30:00 PM	0.65123	0.65118			N/A
6/19/2019	NZDCHF.fx	3:30:00 PM	0.65074	0.65067			N/A
6/19/2019	NZDCZK	9:30:00 AM	14.922	14.934			N/A
6/19/2019	NZDCZK	11:30:00 AM	14.901	14.912			N/A
6/19/2019	NZDCZK	1:30:00 PM	14.911	14.922			N/A
6/19/2019	NZDCZK	3:30:00 PM	14.912	14.921			N/A
6/19/2019	NZDDKK	9:30:00 AM	4.355	4.358			N/A
6/19/2019	NZDDKK	11:30:00 AM	4.343	4.347			N/A
6/19/2019	NZDDKK	1:30:00 PM	4.348	4.351			N/A
6/19/2019	NZDDKK	3:30:00 PM	4.345	4.349			N/A
6/19/2019	NZDHKD	9:30:00 AM	5.1083	5.111			N/A
6/19/2019	NZDHKD	11:30:00 AM	5.1009	5.1031			N/A
6/19/2019	NZDHKD	1:30:00 PM	5.1035	5.1054			N/A
6/19/2019	NZDHKD	3:30:00 PM	5.101	5.1029			N/A
6/19/2019	NZDHUF	9:30:00 AM	188.29	188.58			N/A
6/19/2019	NZDHUF	11:30:00 AM	188.01	188.23			N/A
6/19/2019	NZDHUF	1:30:00 PM	188.37	188.65			N/A
6/19/2019	NZDHUF	3:30:00 PM	188.37	188.57			N/A
6/19/2019	NZDJPY	9:30:00 AM	70.689	70.76			N/A
6/19/2019	NZDJPY	11:30:00 AM	70.641	70.694			N/A
6/19/2019	NZDJPY	1:30:00 PM	70.711	70.776			N/A
6/19/2019	NZDJPY	3:30:00 PM	70.712	70.772			N/A
6/19/2019	NZDJPY.fx	9:30:00 AM	70.72	70.727			N/A
6/19/2019	NZDJPY.fx	11:30:00 AM	70.671	70.662			N/A
6/19/2019	NZDJPY.fx	1:30:00 PM	70.742	70.743			N/A
6/19/2019	NZDJPY.fx	3:30:00 PM	70.743	70.741			N/A
6/19/2019	NZDMXN	9:30:00 AM	12.4942	12.4984			N/A
6/19/2019	NZDMXN	11:30:00 AM	12.465	12.4694			N/A
6/19/2019	NZDMXN	1:30:00 PM	12.4956	12.4973			N/A
6/19/2019	NZDMXN	3:30:00 PM	12.4914	12.4928			N/A
6/19/2019	NZDNOK	9:30:00 AM	5.7085	5.7123			N/A
6/19/2019	NZDNOK	11:30:00 AM	5.695	5.6981			N/A

6/19/2019	NZDNOK	1:30:00 PM	5.6975	5.7005			N/A
6/19/2019	NZDNOK	3:30:00 PM	5.693	5.6943			N/A
6/19/2019	NZDPLN	9:30:00 AM	2.4852	2.4867			N/A
6/19/2019	NZDPLN	11:30:00 AM	2.4793	2.4798			N/A
6/19/2019	NZDPLN	1:30:00 PM	2.4842	2.4853			N/A
6/19/2019	NZDPLN	3:30:00 PM	2.4817	2.483			N/A
6/19/2019	NZDSEK	9:30:00 AM	6.2253	6.2309			N/A
6/19/2019	NZDSEK	11:30:00 AM	6.2177	6.2246			N/A
6/19/2019	NZDSEK	1:30:00 PM	6.2191	6.2247			N/A
6/19/2019	NZDSEK	3:30:00 PM	6.2201	6.2245			N/A
6/19/2019	NZDSGD	9:30:00 AM	0.8929	0.8936			N/A
6/19/2019	NZDSGD	11:30:00 AM	0.8917	0.8922			N/A
6/19/2019	NZDSGD	1:30:00 PM	0.8919	0.8924			N/A
6/19/2019	NZDSGD	3:30:00 PM	0.892	0.8924			N/A
6/19/2019	NZDSGD.fx	9:30:00 AM	0.89298	0.89349			N/A
6/19/2019	NZDSGD.fx	11:30:00 AM	0.89167	0.89212			N/A
6/19/2019	NZDSGD.fx	1:30:00 PM	0.89199	0.89252			N/A
6/19/2019	NZDSGD.fx	3:30:00 PM	0.89197	0.89232			N/A
6/19/2019	NZDUSD	9:30:00 AM	0.65303	0.65313			N/A
6/19/2019	NZDUSD	11:30:00 AM	0.65203	0.65206			N/A
6/19/2019	NZDUSD	1:30:00 PM	0.65249	0.65255			N/A
6/19/2019	NZDUSD	3:30:00 PM	0.65229	0.65229			N/A
6/19/2019	NZDUSD.fx	9:30:00 AM	0.6531	0.65313			N/A
6/19/2019	NZDUSD.fx	11:30:00 AM	0.65209	0.65207			N/A
6/19/2019	NZDUSD.fx	1:30:00 PM	0.65256	0.65257			N/A
6/19/2019	NZDUSD.fx	3:30:00 PM	0.65235	0.65231			N/A
6/19/2019	NZDZAR	9:30:00 AM	9.4936	9.5051			N/A
6/19/2019	NZDZAR	11:30:00 AM	9.4555	9.4662			N/A
6/19/2019	NZDZAR	1:30:00 PM	9.4801	9.4928			N/A
6/19/2019	NZDZAR	3:30:00 PM	9.4643	9.4785			N/A
6/19/2019	SEKJPY	9:30:00 AM	11.35	11.36			N/A
6/19/2019	SEKJPY	11:30:00 AM	11.35	11.36			N/A
6/19/2019	SEKJPY	1:30:00 PM	11.36	11.37			N/A
6/19/2019	SEKJPY	3:30:00 PM	11.36	11.37			N/A

6/19/2019	SEKJPY.fx	9:30:00 AM	11.341	11.358			N/A
6/19/2019	SEKJPY.fx	11:30:00 AM	11.343	11.359			N/A
6/19/2019	SEKJPY.fx	1:30:00 PM	11.354	11.371			N/A
6/19/2019	SEKJPY.fx	3:30:00 PM	11.353	11.366			N/A
6/19/2019	SGDJPY	9:30:00 AM	79.16	79.17			N/A
6/19/2019	SGDJPY	11:30:00 AM	79.24	79.22			N/A
6/19/2019	SGDJPY	1:30:00 PM	79.27	79.28			N/A
6/19/2019	SGDJPY	3:30:00 PM	79.27	79.29			N/A
6/19/2019	SILVER	9:30:00 AM	14.77	15.15			N/A
6/19/2019	SILVER	11:30:00 AM	14.74	15.11			N/A
6/19/2019	SILVER	1:30:00 PM	14.75	15.13			N/A
6/19/2019	SILVER	3:30:00 PM	14.8	15.17			N/A
6/19/2019	SPX500.i	9:30:00 AM	2923.79	2924.84			N/A
6/19/2019	SPX500.i	11:30:00 AM	2922.29	2922.34			N/A
6/19/2019	SPX500.i	1:30:00 PM	2923.79	2924.09			N/A
6/19/2019	SPX500.i	3:30:00 PM	2922.79	2923.59			N/A
6/19/2019	UK100.i	9:30:00 AM	7465.46	7467.63			N/A
6/19/2019	UK100.i	11:30:00 AM	7429.71	7429.46			N/A
6/19/2019	UK100.i	1:30:00 PM	7434.88	7436.79			N/A
6/19/2019	UK100.i	3:30:00 PM	7425.88	7426.21			N/A
6/19/2019	USDCAD	9:30:00 AM	1.33742	1.33749			N/A
6/19/2019	USDCAD	11:30:00 AM	1.33794	1.33781			N/A
6/19/2019	USDCAD	1:30:00 PM	1.33769	1.33769			N/A
6/19/2019	USDCAD	3:30:00 PM	1.33568	1.33463	10	69000	N/A
6/19/2019	USDCAD.fx	9:30:00 AM	1.33746	1.33745			N/A
6/19/2019	USDCAD.fx	11:30:00 AM	1.33795	1.33778			N/A
6/19/2019	USDCAD.fx	1:30:00 PM	1.33773	1.33765			N/A
6/19/2019	USDCAD.fx	3:30:00 PM	1.33567	1.33462			N/A
6/19/2019	USDCHF	9:30:00 AM	1.00024	1.00003			N/A
6/19/2019	USDCHF	11:30:00 AM	0.99834	0.99839			N/A
6/19/2019	USDCHF	1:30:00 PM	0.99785	0.998			N/A
6/19/2019	USDCHF	3:30:00 PM	0.99748	0.99753			N/A
6/19/2019	USDCHF.fx	9:30:00 AM	1.00029	0.99996			N/A
6/19/2019	USDCHF.fx	11:30:00 AM	0.99838	0.99834			N/A

6/19/2019	USDCHF.fx	1:30:00 PM	0.9979	0.99793			N/A
6/19/2019	USDCHF.fx	3:30:00 PM	0.99751	0.99749			N/A
6/19/2019	USDCZK	9:30:00 AM	22.869	22.889			N/A
6/19/2019	USDCZK	11:30:00 AM	22.872	22.893			N/A
6/19/2019	USDCZK	1:30:00 PM	22.869	22.891			N/A
6/19/2019	USDCZK	3:30:00 PM	22.877	22.901			N/A
6/19/2019	USDCZK.fx	9:30:00 AM	22.8763	22.8815			N/A
6/19/2019	USDCZK.fx	11:30:00 AM	22.8813	22.8838			N/A
6/19/2019	USDCZK.fx	1:30:00 PM	22.8782	22.8803			N/A
6/19/2019	USDCZK.fx	3:30:00 PM	22.888	22.8911			N/A
6/19/2019	USDDKK	9:30:00 AM	6.6702	6.6739			N/A
6/19/2019	USDDKK	11:30:00 AM	6.6638	6.6669			N/A
6/19/2019	USDDKK	1:30:00 PM	6.6644	6.6679			N/A
6/19/2019	USDDKK	3:30:00 PM	6.6635	6.6674			N/A
6/19/2019	USDDKK.fx	9:30:00 AM	6.67065	6.67178			N/A
6/19/2019	USDDKK.fx	11:30:00 AM	6.66428	6.6649			N/A
6/19/2019	USDDKK.fx	1:30:00 PM	6.66496	6.66595			N/A
6/19/2019	USDDKK.fx	3:30:00 PM	6.66435	6.6654			N/A
6/19/2019	USDHKD	9:30:00 AM	7.8263	7.8264			N/A
6/19/2019	USDHKD	11:30:00 AM	7.8275	7.8272			N/A
6/19/2019	USDHKD	1:30:00 PM	7.8244	7.8247			N/A
6/19/2019	USDHKD	3:30:00 PM	7.8242	7.8237			N/A
6/19/2019	USDHKD.fx	9:30:00 AM	7.82632	7.82688			N/A
6/19/2019	USDHKD.fx	11:30:00 AM	7.82742	7.82726			N/A
6/19/2019	USDHKD.fx	1:30:00 PM	7.82445	7.82498			N/A
6/19/2019	USDHKD.fx	3:30:00 PM	7.82412	7.82467			N/A
6/19/2019	USDHUF	9:30:00 AM	288.46	288.91			N/A
6/19/2019	USDHUF	11:30:00 AM	288.63	289.01			N/A
6/19/2019	USDHUF	1:30:00 PM	288.8	289.24			N/A
6/19/2019	USDHUF	3:30:00 PM	288.94	289.41			N/A
6/19/2019	USDHUF.fx	9:30:00 AM	288.653	288.727			N/A
6/19/2019	USDHUF.fx	11:30:00 AM	288.841	288.809			N/A
6/19/2019	USDHUF.fx	1:30:00 PM	289.001	289.037			N/A
6/19/2019	USDHUF.fx	3:30:00 PM	289.142	289.206			N/A

6/19/2019	USDINR	9:30:00 AM	64.67	74.66			N/A
6/19/2019	USDINR	11:30:00 AM	64.76	74.74			N/A
6/19/2019	USDINR	1:30:00 PM					N/A
6/19/2019	USDINR	3:30:00 PM					N/A
6/19/2019	USDJPY	9:30:00 AM	108.286	108.288			N/A
6/19/2019	USDJPY	11:30:00 AM	108.379	108.374			N/A
6/19/2019	USDJPY	1:30:00 PM	108.398	108.411			N/A
6/19/2019	USDJPY	3:30:00 PM	108.437	108.448	3000	3000	N/A
6/19/2019	USDJPY.fx	9:30:00 AM	108.293	108.281			N/A
6/19/2019	USDJPY.fx	11:30:00 AM	108.384	108.368			N/A
6/19/2019	USDJPY.fx	1:30:00 PM	108.404	108.404			N/A
6/19/2019	USDJPY.fx	3:30:00 PM	108.442	108.442			N/A
6/19/2019	USDMXN	9:30:00 AM	19.14	19.141			N/A
6/19/2019	USDMXN	11:30:00 AM	19.125	19.131			N/A
6/19/2019	USDMXN	1:30:00 PM	19.159	19.156			N/A
6/19/2019	USDMXN	3:30:00 PM	19.156	19.163			N/A
6/19/2019	USDMXN.f	9:30:00 AM					N/A
6/19/2019	USDMXN.f	11:30:00 AM					N/A
6/19/2019	USDMXN.f	1:30:00 PM					N/A
6/19/2019	USDMXN.f	3:30:00 PM					N/A
6/19/2019	USDNOK	9:30:00 AM	8.7427	8.751			N/A
6/19/2019	USDNOK	11:30:00 AM	8.7389	8.7447			N/A
6/19/2019	USDNOK	1:30:00 PM	8.7329	8.7402			N/A
6/19/2019	USDNOK	3:30:00 PM	8.7315	8.7382			N/A
6/19/2019	USDNOK.fx	9:30:00 AM	8.74668	8.74647			N/A
6/19/2019	USDNOK.fx	11:30:00 AM	8.74315	8.74001			N/A
6/19/2019	USDNOK.fx	1:30:00 PM	8.73707	8.73556			N/A
6/19/2019	USDNOK.fx	3:30:00 PM	8.73578	8.73362			N/A
6/19/2019	USDPLN	9:30:00 AM	3.8068	3.8081			N/A
6/19/2019	USDPLN	11:30:00 AM	3.8046	3.8054			N/A
6/19/2019	USDPLN	1:30:00 PM	3.8086	3.8093			N/A
6/19/2019	USDPLN	3:30:00 PM	3.8074	3.8091			N/A
6/19/2019	USDPLN.fx	9:30:00 AM	3.80598	3.80882			N/A
6/19/2019	USDPLN.fx	11:30:00 AM	3.80387	3.80614			N/A

6/19/2019	USDPLN.fx	1:30:00 PM	3.80786	3.81006			N/A
6/19/2019	USDPLN.fx	3:30:00 PM	3.8069	3.80982			N/A
6/19/2019	USDRUB	9:30:00 AM					N/A
6/19/2019	USDRUB	11:30:00 AM	63.749	64.145			N/A
6/19/2019	USDRUB	1:30:00 PM	63.82	64.208			N/A
6/19/2019	USDRUB	3:30:00 PM	63.818	64.212			N/A
6/19/2019	USDSEK	9:30:00 AM	9.5374	9.5406			N/A
6/19/2019	USDSEK	11:30:00 AM	9.5433	9.5463			N/A
6/19/2019	USDSEK	1:30:00 PM	9.5362	9.5397			N/A
6/19/2019	USDSEK	3:30:00 PM	9.5428	9.5432			N/A
6/19/2019	USDSEK.fx	9:30:00 AM	9.53954	9.53891			N/A
6/19/2019	USDSEK.fx	11:30:00 AM	9.54592	9.54457			N/A
6/19/2019	USDSEK.fx	1:30:00 PM	9.53881	9.53758			N/A
6/19/2019	USDSEK.fx	3:30:00 PM	9.54569	9.54126			N/A
6/19/2019	USDSGD	9:30:00 AM	1.3675	1.3679			N/A
6/19/2019	USDSGD	11:30:00 AM	1.3677	1.368			N/A
6/19/2019	USDSGD	1:30:00 PM	1.3672	1.3673			N/A
6/19/2019	USDSGD	3:30:00 PM	1.3674	1.3675			N/A
6/19/2019	USDSGD.fx	9:30:00 AM	1.36738	1.36788			N/A
6/19/2019	USDSGD.fx	11:30:00 AM	1.36758	1.368			N/A
6/19/2019	USDSGD.fx	1:30:00 PM	1.36708	1.36753			N/A
6/19/2019	USDSGD.fx	3:30:00 PM	1.36734	1.36783			N/A
6/19/2019	USDZAR	9:30:00 AM	14.5499	14.5569			N/A
6/19/2019	USDZAR	11:30:00 AM	14.5106	14.5244			N/A
6/19/2019	USDZAR	1:30:00 PM	14.5406	14.5498			N/A
6/19/2019	USDZAR	3:30:00 PM	14.5206	14.5387			N/A
6/19/2019	USDZAR.fx	9:30:00 AM					N/A
6/19/2019	USDZAR.fx	11:30:00 AM	14.51697	14.51773			N/A
6/19/2019	USDZAR.fx	1:30:00 PM	14.54638	14.54422			N/A
6/19/2019	USDZAR.fx	3:30:00 PM	14.52736	14.53243			N/A
6/19/2019	XAUUSD	9:30:00 AM	1344.48	1344.29			N/A
6/19/2019	XAUUSD	11:30:00 AM	1342.44	1342.5			N/A
6/19/2019	XAUUSD	1:30:00 PM	1342.48	1342.76			N/A
6/19/2019	XAUUSD	3:30:00 PM	1344.13	1343.79			N/A

6/19/2019	ZARJPY	9:30:00 AM	7.43	7.44			N/A
6/19/2019	ZARJPY	11:30:00 AM	7.45	7.47			N/A
6/19/2019	ZARJPY	1:30:00 PM	7.43	7.45			N/A
6/19/2019	ZARJPY	3:30:00 PM	7.43	7.47			N/A
6/19/2019	ZARJPY.fx	9:30:00 AM	7.44	7.441			N/A
6/19/2019	ZARJPY.fx	11:30:00 AM	7.463	7.465			N/A
6/19/2019	ZARJPY.fx	1:30:00 PM	7.452	7.453			N/A
6/19/2019	ZARJPY.fx	3:30:00 PM	7.46	7.466			N/A
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6/20/2019	#CL.f	11:30:00 AM	55.435	55.451			N/A

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6/20/2019	#KO	3:30:00 PM					N/A
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6/20/2019	#Litecoin	11:30:00 AM	135.2	135.41			N/A

6/20/2019	#Litecoin	1:30:00 PM	134.88	135.42			N/A
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6/20/2019	#ZNGA	1:30:00 PM					N/A
6/20/2019	#ZNGA	3:30:00 PM					N/A
6/20/2019	AUDCAD	9:30:00 AM	0.91335	0.91403			N/A
6/20/2019	AUDCAD	11:30:00 AM	0.91389	0.91444			N/A
6/20/2019	AUDCAD	1:30:00 PM	0.91277	0.91317			N/A
6/20/2019	AUDCAD	3:30:00 PM	0.91149	0.91207			N/A
6/20/2019	AUDCAD.fx	9:30:00 AM	0.91368	0.91368			N/A
6/20/2019	AUDCAD.fx	11:30:00 AM	0.91422	0.91411			N/A
6/20/2019	AUDCAD.fx	1:30:00 PM	0.9131	0.91283			N/A
6/20/2019	AUDCAD.fx	3:30:00 PM	0.91175	0.91171			N/A
6/20/2019	AUDCHF	9:30:00 AM	0.68258	0.68326			N/A
6/20/2019	AUDCHF	11:30:00 AM	0.68316	0.68379			N/A
6/20/2019	AUDCHF	1:30:00 PM	0.6821	0.68263			N/A
6/20/2019	AUDCHF	3:30:00 PM	0.68207	0.68221			N/A
6/20/2019	AUDCHF.fx	9:30:00 AM	0.68292	0.68291			N/A
6/20/2019	AUDCHF.fx	11:30:00 AM	0.68349	0.68345			N/A
6/20/2019	AUDCHF.fx	1:30:00 PM	0.68244	0.68228			N/A
6/20/2019	AUDCHF.fx	3:30:00 PM	0.68236	0.68187			N/A
6/20/2019	AUDCZK	9:30:00 AM	15.659	15.676			N/A
6/20/2019	AUDCZK	11:30:00 AM	15.675	15.691			N/A
6/20/2019	AUDCZK	1:30:00 PM	15.662	15.677			N/A
6/20/2019	AUDCZK	3:30:00 PM	15.673	15.685			N/A
6/20/2019	AUDDKK	9:30:00 AM	4.5689	4.5737			N/A
6/20/2019	AUDDKK	11:30:00 AM	4.5736	4.5778			N/A
6/20/2019	AUDDKK	1:30:00 PM	4.5683	4.5723			N/A
6/20/2019	AUDDKK	3:30:00 PM	4.5729	4.5763			N/A

6/20/2019	AUDHKD	9:30:00 AM	5.3939	5.3978			N/A
6/20/2019	AUDHKD	11:30:00 AM	5.4044	5.4083			N/A
6/20/2019	AUDHKD	1:30:00 PM	5.4052	5.4076			N/A
6/20/2019	AUDHKD	3:30:00 PM					N/A
6/20/2019	AUDHUF	9:30:00 AM	197.83	198.01			N/A
6/20/2019	AUDHUF	11:30:00 AM	198.25	198.49			N/A
6/20/2019	AUDHUF	1:30:00 PM	198.23	198.42			N/A
6/20/2019	AUDHUF	3:30:00 PM	198.01	198.2			N/A
6/20/2019	AUDJPY	9:30:00 AM	74.245	74.314			N/A
6/20/2019	AUDJPY	11:30:00 AM	74.529	74.594			N/A
6/20/2019	AUDJPY	1:30:00 PM	74.586	74.638			N/A
6/20/2019	AUDJPY	3:30:00 PM	74.556	74.585			N/A
6/20/2019	AUDJPY.fx	9:30:00 AM	74.279	74.279			N/A
6/20/2019	AUDJPY.fx	11:30:00 AM	74.562	74.559			N/A
6/20/2019	AUDJPY.fx	1:30:00 PM	74.62	74.603			N/A
6/20/2019	AUDJPY.fx	3:30:00 PM	74.582	74.551			N/A
6/20/2019	AUDMXN	9:30:00 AM	13.0901	13.0991			N/A
6/20/2019	AUDMXN	11:30:00 AM	13.1096	13.1142			N/A
6/20/2019	AUDMXN	1:30:00 PM	13.0907	13.0979			N/A
6/20/2019	AUDMXN	3:30:00 PM	13.0923	13.1014			N/A
6/20/2019	AUDNOK	9:30:00 AM	5.9585	5.9627			N/A
6/20/2019	AUDNOK	11:30:00 AM	5.9265	5.929			N/A
6/20/2019	AUDNOK	1:30:00 PM	5.922	5.9257			N/A
6/20/2019	AUDNOK	3:30:00 PM	5.9194	5.9209			N/A
6/20/2019	AUDNOK.fx	9:30:00 AM	5.96	5.961			N/A
6/20/2019	AUDNOK.fx	11:30:00 AM	5.9281	5.9273			N/A
6/20/2019	AUDNOK.fx	1:30:00 PM	5.9235	5.924			N/A
6/20/2019	AUDNOK.fx	3:30:00 PM	5.9185	5.9194			N/A
6/20/2019	AUDNZD	9:30:00 AM	1.04867	1.04952			N/A
6/20/2019	AUDNZD	11:30:00 AM	1.05009	1.05098			N/A
6/20/2019	AUDNZD	1:30:00 PM	1.0497	1.05056			N/A
6/20/2019	AUDNZD	3:30:00 PM	1.05091	1.05155			N/A
6/20/2019	AUDNZD.fx	9:30:00 AM	1.0491	1.04907			N/A
6/20/2019	AUDNZD.fx	11:30:00 AM	1.05051	1.05053			N/A

6/20/2019	AUDNZD.fx	1:30:00 PM	1.05014	1.05011			N/A
6/20/2019	AUDNZD.fx	3:30:00 PM	1.0512	1.05111			N/A
6/20/2019	AUDPLN	9:30:00 AM	2.6049	2.6079			N/A
6/20/2019	AUDPLN	11:30:00 AM	2.6083	2.6113			N/A
6/20/2019	AUDPLN	1:30:00 PM	2.6045	2.6075			N/A
6/20/2019	AUDPLN	3:30:00 PM	2.6053	2.6078			N/A
6/20/2019	AUDSEK	9:30:00 AM	6.5149	6.5176			N/A
6/20/2019	AUDSEK	11:30:00 AM	6.5152	6.5172			N/A
6/20/2019	AUDSEK	1:30:00 PM	6.5153	6.5169			N/A
6/20/2019	AUDSEK	3:30:00 PM	6.5115	6.5133			N/A
6/20/2019	AUDSEK.fx	9:30:00 AM	6.5103	6.5222			N/A
6/20/2019	AUDSEK.fx	11:30:00 AM	6.5107	6.5219			N/A
6/20/2019	AUDSEK.fx	1:30:00 PM	6.5105	6.5213			N/A
6/20/2019	AUDSEK.fx	3:30:00 PM	6.5063	6.5175			N/A
6/20/2019	AUDSGD	9:30:00 AM	0.9378	0.9379			N/A
6/20/2019	AUDSGD	11:30:00 AM	0.9391	0.9392			N/A
6/20/2019	AUDSGD	1:30:00 PM	0.9388	0.9389			N/A
6/20/2019	AUDSGD	3:30:00 PM	0.9398	0.94			N/A
6/20/2019	AUDSGD.fx	9:30:00 AM	0.93788	0.93798			N/A
6/20/2019	AUDSGD.fx	11:30:00 AM	0.93917	0.93916			N/A
6/20/2019	AUDSGD.fx	1:30:00 PM	0.93891	0.93876			N/A
6/20/2019	AUDSGD.fx	3:30:00 PM	0.93984	0.93992			N/A
6/20/2019	AUDUSD	9:30:00 AM	0.69061	0.69069			N/A
6/20/2019	AUDUSD	11:30:00 AM	0.69211	0.69215			N/A
6/20/2019	AUDUSD	1:30:00 PM	0.69198	0.69188			N/A
6/20/2019	AUDUSD	3:30:00 PM	0.6931	0.69314			N/A
6/20/2019	AUDUSD.fx	9:30:00 AM	0.69066	0.69063			N/A
6/20/2019	AUDUSD.fx	11:30:00 AM	0.69215	0.6921			N/A
6/20/2019	AUDUSD.fx	1:30:00 PM	0.69203	0.69183			N/A
6/20/2019	AUDUSD.fx	3:30:00 PM	0.69316	0.69311			N/A
6/20/2019	AUDZAR	9:30:00 AM	9.8392	9.854			N/A
6/20/2019	AUDZAR	11:30:00 AM	9.8348	9.8474			N/A
6/20/2019	AUDZAR	1:30:00 PM	9.8349	9.8474			N/A
6/20/2019	AUDZAR	3:30:00 PM	9.856	9.8694			N/A

6/20/2019	AUS200.i	9:30:00 AM	6693.1	6694.6			N/A
6/20/2019	AUS200.i	11:30:00 AM	6700.46	6702.26			N/A
6/20/2019	AUS200.i	1:30:00 PM	6704.46	6707.06			N/A
6/20/2019	AUS200.i	3:30:00 PM					N/A
6/20/2019	BCHUSD	9:30:00 AM	425.54	427.41			N/A
6/20/2019	BCHUSD	11:30:00 AM	421.5	422.66			N/A
6/20/2019	BCHUSD	1:30:00 PM	417.47	419.19			N/A
6/20/2019	BCHUSD	3:30:00 PM	417.77	419.77			N/A
6/20/2019	CADCHF	9:30:00 AM	0.74712	0.74772			N/A
6/20/2019	CADCHF	11:30:00 AM	0.74734	0.74792			N/A
6/20/2019	CADCHF	1:30:00 PM	0.74706	0.74778			N/A
6/20/2019	CADCHF	3:30:00 PM	0.74804	0.74824			N/A
6/20/2019	CADCHF.fx	9:30:00 AM	0.74745	0.74737			N/A
6/20/2019	CADCHF.fx	11:30:00 AM	0.74766	0.74758			N/A
6/20/2019	CADCHF.fx	1:30:00 PM	0.7474	0.74741			N/A
6/20/2019	CADCHF.fx	3:30:00 PM	0.74834	0.74789			N/A
6/20/2019	CADCZK	9:30:00 AM	17.143	17.158			N/A
6/20/2019	CADCZK	11:30:00 AM	17.152	17.168			N/A
6/20/2019	CADCZK	1:30:00 PM	17.159	17.173			N/A
6/20/2019	CADCZK	3:30:00 PM	17.193	17.207			N/A
6/20/2019	CADDKK	9:30:00 AM					N/A
6/20/2019	CADDKK	11:30:00 AM	5.002	5.006			N/A
6/20/2019	CADDKK	1:30:00 PM	5.005	5.008			N/A
6/20/2019	CADDKK	3:30:00 PM	5.014	5.018			N/A
6/20/2019	CADHKD	9:30:00 AM	5.9048	5.9085			N/A
6/20/2019	CADHKD	11:30:00 AM	5.9136	5.9175			N/A
6/20/2019	CADHKD	1:30:00 PM	5.9204	5.9242			N/A
6/20/2019	CADHKD	3:30:00 PM					N/A
6/20/2019	CADHUF	9:30:00 AM	216.59	216.68			N/A
6/20/2019	CADHUF	11:30:00 AM	216.95	217.11			N/A
6/20/2019	CADHUF	1:30:00 PM	217.18	217.33			N/A
6/20/2019	CADHUF	3:30:00 PM	217.24	217.38			N/A
6/20/2019	CADJPY	9:30:00 AM	81.265	81.331			N/A
6/20/2019	CADJPY	11:30:00 AM	81.528	81.594			N/A

6/20/2019	CADJPY	1:30:00 PM	81.692	81.764			N/A
6/20/2019	CADJPY	3:30:00 PM	81.769	81.8			N/A
6/20/2019	CADJPY.fx	9:30:00 AM	81.298	81.297			N/A
6/20/2019	CADJPY.fx	11:30:00 AM	81.561	81.56			N/A
6/20/2019	CADJPY.fx	1:30:00 PM	81.725	81.729			N/A
6/20/2019	CADJPY.fx	3:30:00 PM	81.802	81.769			N/A
6/20/2019	CADMXN	9:30:00 AM	14.3282	14.3407			N/A
6/20/2019	CADMXN	11:30:00 AM	14.3413	14.3519			N/A
6/20/2019	CADMXN	1:30:00 PM	14.3391	14.3502			N/A
6/20/2019	CADMXN	3:30:00 PM	14.3619	14.3719			N/A
6/20/2019	CADNOK	9:30:00 AM	6.5203	6.5239			N/A
6/20/2019	CADNOK	11:30:00 AM	6.4798	6.4811			N/A
6/20/2019	CADNOK	1:30:00 PM	6.4855	6.4896			N/A
6/20/2019	CADNOK	3:30:00 PM	6.4876	6.4912			N/A
6/20/2019	CADPLN	9:30:00 AM	2.8518	2.8537			N/A
6/20/2019	CADPLN	11:30:00 AM	2.8524	2.8539			N/A
6/20/2019	CADPLN	1:30:00 PM	2.8532	2.8548			N/A
6/20/2019	CADPLN	3:30:00 PM	2.8565	2.858			N/A
6/20/2019	CADSEK	9:30:00 AM	7.1278	7.1305			N/A
6/20/2019	CADSEK	11:30:00 AM	7.1252	7.1277			N/A
6/20/2019	CADSEK	1:30:00 PM	7.1339	7.137			N/A
6/20/2019	CADSEK	3:30:00 PM	7.1398	7.1424			N/A
6/20/2019	CADSGD	9:30:00 AM	1.0259	1.0262			N/A
6/20/2019	CADSGD	11:30:00 AM	1.0266	1.0269			N/A
6/20/2019	CADSGD	1:30:00 PM	1.0276	1.0279			N/A
6/20/2019	CADSGD	3:30:00 PM	1.0301	1.0305			N/A
6/20/2019	CADZAR	9:30:00 AM	10.7698	10.7864			N/A
6/20/2019	CADZAR	11:30:00 AM	10.7614	10.7743			N/A
6/20/2019	CADZAR	1:30:00 PM	10.7745	10.7881			N/A
6/20/2019	CADZAR	3:30:00 PM	10.8111	10.8273			N/A
6/20/2019	CHFCZK	9:30:00 AM	22.94	22.955			N/A
6/20/2019	CHFCZK	11:30:00 AM	22.948	22.961			N/A
6/20/2019	CHFCZK	1:30:00 PM	22.963	22.975			N/A
6/20/2019	CHFCZK	3:30:00 PM	22.989	22.993			N/A



6/20/2019	CHFDKK	9:30:00 AM	6.692	6.695			N/A
6/20/2019	CHFDKK	11:30:00 AM	6.694	6.696			N/A
6/20/2019	CHFDKK	1:30:00 PM	6.697	6.699			N/A
6/20/2019	CHFDKK	3:30:00 PM	6.707	6.707			N/A
6/20/2019	CHFDKK.fx	9:30:00 AM	6.6909	6.6966			N/A
6/20/2019	CHFDKK.fx	11:30:00 AM	6.6921	6.6974			N/A
6/20/2019	CHFDKK.fx	1:30:00 PM	6.6953	6.7002			N/A
6/20/2019	CHFDKK.fx	3:30:00 PM	6.7059	6.7089			N/A
6/20/2019	CHFHKD	9:30:00 AM	7.9021	7.9047			N/A
6/20/2019	CHFHKD	11:30:00 AM	7.9117	7.9143			N/A
6/20/2019	CHFHKD	1:30:00 PM	7.9227	7.926			N/A
6/20/2019	CHFHKD	3:30:00 PM	7.9427	7.9385			N/A
6/20/2019	CHFHUF	9:30:00 AM	289.73	290.03			N/A
6/20/2019	CHFHUF	11:30:00 AM	290.13	290.52			N/A
6/20/2019	CHFHUF	1:30:00 PM	290.51	290.88			N/A
6/20/2019	CHFHUF	3:30:00 PM	290.38	290.61			N/A
6/20/2019	CHFJPY	9:30:00 AM	108.74	108.797			N/A
6/20/2019	CHFJPY	11:30:00 AM	109.063	109.121			N/A
6/20/2019	CHFJPY	1:30:00 PM	109.31	109.38			N/A
6/20/2019	CHFJPY	3:30:00 PM	109.342	109.316			N/A
6/20/2019	CHFJPY.fx	9:30:00 AM	108.773	108.762			N/A
6/20/2019	CHFJPY.fx	11:30:00 AM	109.095	109.088			N/A
6/20/2019	CHFJPY.fx	1:30:00 PM	109.344	109.345			N/A
6/20/2019	CHFJPY.fx	3:30:00 PM	109.374	109.285			N/A
6/20/2019	CHFMXN	9:30:00 AM	19.1729	19.1866			N/A
6/20/2019	CHFMXN	11:30:00 AM	19.184	19.1966			N/A
6/20/2019	CHFMXN	1:30:00 PM	19.1867	19.2015			N/A
6/20/2019	CHFMXN	3:30:00 PM	19.2056	19.2038			N/A
6/20/2019	CHFNOK	9:30:00 AM	8.7252	8.732			N/A
6/20/2019	CHFNOK	11:30:00 AM	8.6708	8.6755			N/A
6/20/2019	CHFNOK	1:30:00 PM	8.6779	8.6855			N/A
6/20/2019	CHFNOK	3:30:00 PM	8.6767	8.6808			N/A
6/20/2019	CHFNOK.fx	9:30:00 AM	8.72868	8.72845			N/A
6/20/2019	CHFNOK.fx	11:30:00 AM	8.67429	8.67198			N/A

6/20/2019	CHFNOK.fx	1:30:00 PM	8.68157	8.6819			N/A
6/20/2019	CHFNOK.fx	3:30:00 PM	8.67858	8.67711			N/A
6/20/2019	CHFPLN	9:30:00 AM	3.8156	3.818			N/A
6/20/2019	CHFPLN	11:30:00 AM	3.817	3.8196			N/A
6/20/2019	CHFPLN	1:30:00 PM	3.8181	3.8203			N/A
6/20/2019	CHFPLN	3:30:00 PM	3.8211	3.8218			N/A
6/20/2019	CHFPLN.fx	9:30:00 AM	3.81296	3.82045			N/A
6/20/2019	CHFPLN.fx	11:30:00 AM	3.81443	3.82213			N/A
6/20/2019	CHFPLN.fx	1:30:00 PM	3.81566	3.82253			N/A
6/20/2019	CHFPLN.fx	3:30:00 PM	3.81858	3.82504			N/A
6/20/2019	CHFSEK	9:30:00 AM	9.5381	9.5411			N/A
6/20/2019	CHFSEK	11:30:00 AM	9.5298	9.5335			N/A
6/20/2019	CHFSEK	1:30:00 PM	9.5455	9.5492			N/A
6/20/2019	CHFSEK	3:30:00 PM	9.5484	9.5433			N/A
6/20/2019	CHFSGD	9:30:00 AM	1.3733	1.3736			N/A
6/20/2019	CHFSGD	11:30:00 AM	1.3739	1.3743			N/A
6/20/2019	CHFSGD	1:30:00 PM	1.3757	1.3761			N/A
6/20/2019	CHFSGD	3:30:00 PM	1.3781	1.3775			N/A
6/20/2019	CHFSGD.fx	9:30:00 AM	1.37342	1.37337			N/A
6/20/2019	CHFSGD.fx	11:30:00 AM	1.37412	1.37408			N/A
6/20/2019	CHFSGD.fx	1:30:00 PM	1.37583	1.37595			N/A
6/20/2019	CHFSGD.fx	3:30:00 PM	1.3783	1.37743			N/A
6/20/2019	CHFZAR	9:30:00 AM	14.4153	14.4273			N/A
6/20/2019	CHFZAR	11:30:00 AM	14.3978	14.4099			N/A
6/20/2019	CHFZAR	1:30:00 PM	14.4206	14.4303			N/A
6/20/2019	CHFZAR	3:30:00 PM	14.4611	14.4653			N/A
6/20/2019	CZKJPY	9:30:00 AM	4.739	4.743			N/A
6/20/2019	CZKJPY	11:30:00 AM					N/A
6/20/2019	CZKJPY	1:30:00 PM					N/A
6/20/2019	CZKJPY	3:30:00 PM	4.755	4.757			N/A
6/20/2019	DAX30.i	9:30:00 AM	12373.38	12370.38			N/A
6/20/2019	DAX30.i	11:30:00 AM	12413.63	12405.88			N/A
6/20/2019	DAX30.i	1:30:00 PM	12417.13	12414.63			N/A
6/20/2019	DAX30.i	3:30:00 PM	12397.13	12395.88			N/A

6/20/2019	DJ30.i	9:30:00 AM					N/A
6/20/2019	DJ30.i	11:30:00 AM					N/A
6/20/2019	DJ30.i	1:30:00 PM					N/A
6/20/2019	DJ30.i	3:30:00 PM					N/A
6/20/2019	DKKJPY	9:30:00 AM					N/A
6/20/2019	DKKJPY	11:30:00 AM					N/A
6/20/2019	DKKJPY	1:30:00 PM	16.32	16.34			N/A
6/20/2019	DKKJPY	3:30:00 PM	16.31	16.32			N/A
6/20/2019	EURAUD	9:30:00 AM	1.63253	1.63299			N/A
6/20/2019	EURAUD	11:30:00 AM	1.63097	1.63121			N/A
6/20/2019	EURAUD	1:30:00 PM	1.63297	1.63315			N/A
6/20/2019	EURAUD	3:30:00 PM	1.63166	1.63142			N/A
6/20/2019	EURAUD.fx	9:30:00 AM	1.63273	1.63278			N/A
6/20/2019	EURAUD.fx	11:30:00 AM	1.63117	1.63099			N/A
6/20/2019	EURAUD.fx	1:30:00 PM	1.63316	1.63293			N/A
6/20/2019	EURAUD.fx	3:30:00 PM	1.63186	1.63126			N/A
6/20/2019	EURCAD	9:30:00 AM	1.492	1.49277			N/A
6/20/2019	EURCAD	11:30:00 AM	1.49133	1.49209			N/A
6/20/2019	EURCAD	1:30:00 PM	1.49108	1.49169			N/A
6/20/2019	EURCAD	3:30:00 PM	1.48795	1.48841			N/A
6/20/2019	EURCAD.fx	9:30:00 AM	1.49242	1.49235			N/A
6/20/2019	EURCAD.fx	11:30:00 AM	1.49174	1.49168			N/A
6/20/2019	EURCAD.fx	1:30:00 PM	1.49149	1.49125			N/A
6/20/2019	EURCAD.fx	3:30:00 PM	1.48833	1.48805			N/A
6/20/2019	EURCHF	9:30:00 AM	1.11544	1.11547			N/A
6/20/2019	EURCHF	11:30:00 AM	1.11523	1.11521			N/A
6/20/2019	EURCHF	1:30:00 PM	1.11474	1.11467			N/A
6/20/2019	EURCHF	3:30:00 PM	1.11346	1.11292			N/A
6/20/2019	EURCHF.fx	9:30:00 AM	1.11549	1.11541			N/A
6/20/2019	EURCHF.fx	11:30:00 AM	1.11527	1.11516			N/A
6/20/2019	EURCHF.fx	1:30:00 PM	1.1148	1.11461			N/A
6/20/2019	EURCHF.fx	3:30:00 PM	1.11347	1.11287			N/A
6/20/2019	EURCZK	9:30:00 AM	25.574	25.613			N/A
6/20/2019	EURCZK	11:30:00 AM	25.575	25.615			N/A

6/20/2019	EURCZK	1:30:00 PM	25.581	25.62			N/A
6/20/2019	EURCZK	3:30:00 PM	25.573	25.611			N/A
6/20/2019	EURDKK	9:30:00 AM	7.4648	7.4661			N/A
6/20/2019	EURDKK	11:30:00 AM					N/A
6/20/2019	EURDKK	1:30:00 PM	7.4647	7.4656			N/A
6/20/2019	EURDKK	3:30:00 PM	7.464	7.4653			N/A
6/20/2019	EURGBP	9:30:00 AM	0.88772	0.88773			N/A
6/20/2019	EURGBP	11:30:00 AM	0.8877	0.88764			N/A
6/20/2019	EURGBP	1:30:00 PM	0.88884	0.88882			N/A
6/20/2019	EURGBP	3:30:00 PM	0.8922	0.89201			N/A
6/20/2019	EURGBP.fx	9:30:00 AM	0.88775	0.88769			N/A
6/20/2019	EURGBP.fx	11:30:00 AM	0.88772	0.8876			N/A
6/20/2019	EURGBP.fx	1:30:00 PM	0.88888	0.88877			N/A
6/20/2019	EURGBP.fx	3:30:00 PM	0.89222	0.89206			N/A
6/20/2019	EURHKD	9:30:00 AM	8.8138	8.8184			N/A
6/20/2019	EURHKD	11:30:00 AM	8.8234	8.828			N/A
6/20/2019	EURHKD	1:30:00 PM	8.8319	8.8357			N/A
6/20/2019	EURHKD	3:30:00 PM	8.8432	8.8431			N/A
6/20/2019	EURHKD.fx	9:30:00 AM	8.81664	8.81551			N/A
6/20/2019	EURHKD.fx	11:30:00 AM	8.82616	8.82515			N/A
6/20/2019	EURHKD.fx	1:30:00 PM	8.83471	8.83287			N/A
6/20/2019	EURHKD.fx	3:30:00 PM	8.84549	8.84077			N/A
6/20/2019	EURHUF	9:30:00 AM	323.1	323.71			N/A
6/20/2019	EURHUF	11:30:00 AM	323.65	324.37			N/A
6/20/2019	EURHUF	1:30:00 PM	323.76	324.38			N/A
6/20/2019	EURHUF	3:30:00 PM	323.31	324.02			N/A
6/20/2019	EURHUF.fx	9:30:00 AM	323.379	323.418			N/A
6/20/2019	EURHUF.fx	11:30:00 AM	323.918	324.089			N/A
6/20/2019	EURHUF.fx	1:30:00 PM	324.081	324.185			N/A
6/20/2019	EURHUF.fx	3:30:00 PM	323.569	323.748			N/A
6/20/2019	EURJPY	9:30:00 AM	121.325	121.329			N/A
6/20/2019	EURJPY	11:30:00 AM	121.66	121.664			N/A
6/20/2019	EURJPY	1:30:00 PM	121.888	121.882			N/A
6/20/2019	EURJPY	3:30:00 PM	121.734	121.687			N/A

6/20/2019	EURJPY.fx	9:30:00 AM	121.327	121.326			N/A
6/20/2019	EURJPY.fx	11:30:00 AM	121.662	121.66			N/A
6/20/2019	EURJPY.fx	1:30:00 PM	121.89	121.879			N/A
6/20/2019	EURJPY.fx	3:30:00 PM	121.736	121.688			N/A
6/20/2019	EURMXN	9:30:00 AM	21.3886	21.4056			N/A
6/20/2019	EURMXN	11:30:00 AM	21.3996	21.4153			N/A
6/20/2019	EURMXN	1:30:00 PM	21.389	21.4077			N/A
6/20/2019	EURMXN	3:30:00 PM	21.3843	21.3924			N/A
6/20/2019	EURMXN.fx	9:30:00 AM	21.3968	21.3974			N/A
6/20/2019	EURMXN.fx	11:30:00 AM	21.4081	21.4069			N/A
6/20/2019	EURMXN.fx	1:30:00 PM	21.3974	21.3993			N/A
6/20/2019	EURMXN.fx	3:30:00 PM	21.3927	21.3883			N/A
6/20/2019	EURNOK	9:30:00 AM	9.731	9.7413			N/A
6/20/2019	EURNOK	11:30:00 AM	9.6689	9.6766			N/A
6/20/2019	EURNOK	1:30:00 PM	9.6717	9.6827			N/A
6/20/2019	EURNOK	3:30:00 PM	9.6573	9.6652			N/A
6/20/2019	EURNOK.fx	9:30:00 AM	9.73661	9.73553			N/A
6/20/2019	EURNOK.fx	11:30:00 AM	9.67444	9.67104			N/A
6/20/2019	EURNOK.fx	1:30:00 PM	9.67723	9.6771			N/A
6/20/2019	EURNOK.fx	3:30:00 PM	9.66125	9.66004			N/A
6/20/2019	EURNZD	9:30:00 AM	1.71321	1.71393			N/A
6/20/2019	EURNZD	11:30:00 AM	1.71382	1.71453			N/A
6/20/2019	EURNZD	1:30:00 PM	1.71526	1.71595			N/A
6/20/2019	EURNZD	3:30:00 PM	1.71541	1.71599			N/A
6/20/2019	EURNZD.fx	9:30:00 AM	1.71364	1.71351			N/A
6/20/2019	EURNZD.fx	11:30:00 AM	1.71423	1.71411			N/A
6/20/2019	EURNZD.fx	1:30:00 PM	1.71568	1.71551			N/A
6/20/2019	EURNZD.fx	3:30:00 PM	1.71577	1.71573			N/A
6/20/2019	EURPLN	9:30:00 AM	4.2559	4.2585			N/A
6/20/2019	EURPLN	11:30:00 AM	4.2565	4.2599			N/A
6/20/2019	EURPLN	1:30:00 PM	4.2558	4.2588			N/A
6/20/2019	EURPLN	3:30:00 PM	4.2524	4.2558			N/A
6/20/2019	EURPLN.fx	9:30:00 AM	4.25517	4.25922			N/A
6/20/2019	EURPLN.fx	11:30:00 AM	4.25592	4.26042			N/A

6/20/2019	EURPLN.fx	1:30:00 PM	4.25523	4.25922			N/A
6/20/2019	EURPLN.fx	3:30:00 PM					N/A
6/20/2019	EURRUB	9:30:00 AM					N/A
6/20/2019	EURRUB	11:30:00 AM	71.151	71.595			N/A
6/20/2019	EURRUB	1:30:00 PM	71.206	71.625			N/A
6/20/2019	EURRUB	3:30:00 PM	71.047	71.465			N/A
6/20/2019	EURSEK	9:30:00 AM	10.6424	10.6457			N/A
6/20/2019	EURSEK	11:30:00 AM	10.6312	10.6351			N/A
6/20/2019	EURSEK	1:30:00 PM	10.6431	10.6473			N/A
6/20/2019	EURSEK	3:30:00 PM	10.6299	10.6297			N/A
6/20/2019	EURSEK.fx	9:30:00 AM	10.64428	10.64413			N/A
6/20/2019	EURSEK.fx	11:30:00 AM	10.63292	10.63368			N/A
6/20/2019	EURSEK.fx	1:30:00 PM	10.64486	10.64531			N/A
6/20/2019	EURSEK.fx	3:30:00 PM	10.63146	10.62839			N/A
6/20/2019	EURSGD	9:30:00 AM	1.5316	1.5324			N/A
6/20/2019	EURSGD	11:30:00 AM	1.5323	1.5328			N/A
6/20/2019	EURSGD	1:30:00 PM	1.5334	1.534			N/A
6/20/2019	EURSGD	3:30:00 PM	1.5341	1.5341			N/A
6/20/2019	EURSGD.fx	9:30:00 AM	1.53198	1.53202			N/A
6/20/2019	EURSGD.fx	11:30:00 AM	1.53265	1.53236			N/A
6/20/2019	EURSGD.fx	1:30:00 PM	1.53377	1.5336			N/A
6/20/2019	EURSGD.fx	3:30:00 PM	1.53438	1.53376			N/A
6/20/2019	EURUSD	9:30:00 AM	1.12796	1.12797			N/A
6/20/2019	EURUSD	11:30:00 AM	1.12915	1.12923			N/A
6/20/2019	EURUSD	1:30:00 PM	1.13023	1.13012			N/A
6/20/2019	EURUSD	3:30:00 PM	1.13145	1.13086			N/A
6/20/2019	EURUSD.fx	9:30:00 AM	1.12816	1.12806			N/A
6/20/2019	EURUSD.fx	11:30:00 AM	1.12934	1.12933			N/A
6/20/2019	EURUSD.fx	1:30:00 PM	1.13043	1.13021			N/A
6/20/2019	EURUSD.fx	3:30:00 PM	1.13166	1.13098			N/A
6/20/2019	EURZAR	9:30:00 AM	16.0823	16.1002			N/A
6/20/2019	EURZAR	11:30:00 AM	16.0641	16.0799			N/A
6/20/2019	EURZAR	1:30:00 PM	16.0771	16.0934			N/A
6/20/2019	EURZAR	3:30:00 PM	16.104	16.118			N/A

6/20/2019	EURZAR.fx	9:30:00 AM	16.08234	16.10053			N/A
6/20/2019	EURZAR.fx	11:30:00 AM	16.06385	16.0804			N/A
6/20/2019	EURZAR.fx	1:30:00 PM	16.07617	16.09435			N/A
6/20/2019	EURZAR.fx	3:30:00 PM	16.10238	16.11876			N/A
6/20/2019	GBPAUD	9:30:00 AM	1.83969	1.84028			N/A
6/20/2019	GBPAUD	11:30:00 AM	1.83813	1.8383			N/A
6/20/2019	GBPAUD	1:30:00 PM	1.8378	1.83832			N/A
6/20/2019	GBPAUD	3:30:00 PM	1.82927	1.82969			N/A
6/20/2019	GBPAUD.fx	9:30:00 AM	1.84008	1.83988			N/A
6/20/2019	GBPAUD.fx	11:30:00 AM	1.83841	1.8379			N/A
6/20/2019	GBPAUD.fx	1:30:00 PM	1.8382	1.83792			N/A
6/20/2019	GBPAUD.fx	3:30:00 PM	1.82959	1.82931			N/A
6/20/2019	GBPCAD	9:30:00 AM	1.68085	1.6815			N/A
6/20/2019	GBPCAD	11:30:00 AM	1.6802	1.68068			N/A
6/20/2019	GBPCAD	1:30:00 PM	1.67777	1.67826			N/A
6/20/2019	GBPCAD	3:30:00 PM	1.66789	1.66824			N/A
6/20/2019	GBPCAD.fx	9:30:00 AM	1.68124	1.68111			N/A
6/20/2019	GBPCAD.fx	11:30:00 AM	1.68058	1.6803			N/A
6/20/2019	GBPCAD.fx	1:30:00 PM	1.67817	1.67785			N/A
6/20/2019	GBPCAD.fx	3:30:00 PM	1.66821	1.66786			N/A
6/20/2019	GBPCHF	9:30:00 AM	1.25646	1.25661			N/A
6/20/2019	GBPCHF	11:30:00 AM	1.25636	1.25641			N/A
6/20/2019	GBPCHF	1:30:00 PM	1.25406	1.25429			N/A
6/20/2019	GBPCHF	3:30:00 PM	1.24837	1.24764			N/A
6/20/2019	GBPCHF.fx	9:30:00 AM	1.25666	1.25641			N/A
6/20/2019	GBPCHF.fx	11:30:00 AM	1.25646	1.25621			N/A
6/20/2019	GBPCHF.fx	1:30:00 PM	1.25426	1.25409			N/A
6/20/2019	GBPCHF.fx	3:30:00 PM	1.24849	1.24744			N/A
6/20/2019	GBPCZK	9:30:00 AM	28.82	28.84			N/A
6/20/2019	GBPCZK	11:30:00 AM	28.826	28.841			N/A
6/20/2019	GBPCZK	1:30:00 PM	28.792	28.812			N/A
6/20/2019	GBPCZK	3:30:00 PM	28.686	28.699			N/A
6/20/2019	GBPDKK	9:30:00 AM	8.407	8.417			N/A
6/20/2019	GBPDKK	11:30:00 AM	8.407	8.416			N/A

6/20/2019	GBPDKK	1:30:00 PM	8.396	8.406			N/A
6/20/2019	GBPDKK	3:30:00 PM	8.367	8.374			N/A
6/20/2019	GBPDKK.fx	9:30:00 AM	8.4049	8.417			N/A
6/20/2019	GBPDKK.fx	11:30:00 AM	8.4052	8.4168			N/A
6/20/2019	GBPDKK.fx	1:30:00 PM	8.3942	8.4062			N/A
6/20/2019	GBPDKK.fx	3:30:00 PM	8.3635	8.3743			N/A
6/20/2019	GBPHKD	9:30:00 AM	9.9268	9.9304			N/A
6/20/2019	GBPHKD	11:30:00 AM	9.9377	9.9414			N/A
6/20/2019	GBPHKD	1:30:00 PM	9.9353	9.9386			N/A
6/20/2019	GBPHKD	3:30:00 PM	9.9067	9.912			N/A
6/20/2019	GBPHUF	9:30:00 AM	364	364.33			N/A
6/20/2019	GBPHUF	11:30:00 AM	364.47	364.88			N/A
6/20/2019	GBPHUF	1:30:00 PM	364.3	364.73			N/A
6/20/2019	GBPHUF	3:30:00 PM	362.33	362.67			N/A
6/20/2019	GBPJPY	9:30:00 AM	136.661	136.685			N/A
6/20/2019	GBPJPY	11:30:00 AM	137.051	137.07			N/A
6/20/2019	GBPJPY	1:30:00 PM	137.125	137.151			N/A
6/20/2019	GBPJPY	3:30:00 PM	136.459	136.43			N/A
6/20/2019	GBPJPY.fx	9:30:00 AM	136.68	136.666			N/A
6/20/2019	GBPJPY.fx	11:30:00 AM	137.065	137.05			N/A
6/20/2019	GBPJPY.fx	1:30:00 PM	137.145	137.132			N/A
6/20/2019	GBPJPY.fx	3:30:00 PM	136.458	136.419			N/A
6/20/2019	GBPMXN	9:30:00 AM	24.0907	24.102			N/A
6/20/2019	GBPMXN	11:30:00 AM	24.0993	24.1114			N/A
6/20/2019	GBPMXN	1:30:00 PM	24.062	24.0747			N/A
6/20/2019	GBPMXN	3:30:00 PM	23.9584	23.9719			N/A
6/20/2019	GBPNOK	9:30:00 AM	10.9635	10.9711			N/A
6/20/2019	GBPNOK	11:30:00 AM	10.8952	10.8989			N/A
6/20/2019	GBPNOK	1:30:00 PM	10.8832	10.8931			N/A
6/20/2019	GBPNOK	3:30:00 PM	10.8274	10.8326			N/A
6/20/2019	GBPNOK.fx	9:30:00 AM	10.96836	10.96619			N/A
6/20/2019	GBPNOK.fx	11:30:00 AM	10.89928	10.89396			N/A
6/20/2019	GBPNOK.fx	1:30:00 PM	10.88806	10.88794			N/A
6/20/2019	GBPNOK.fx	3:30:00 PM	10.8293	10.82795			N/A



6/20/2019	GBPNZD	9:30:00 AM	1.93003	1.93046			N/A
6/20/2019	GBPNZD	11:30:00 AM	1.93102	1.93126			N/A
6/20/2019	GBPNZD	1:30:00 PM	1.92996	1.93056			N/A
6/20/2019	GBPNZD	3:30:00 PM	1.92332	1.9234			N/A
6/20/2019	GBPNZD.fx	9:30:00 AM	1.93038	1.93009			N/A
6/20/2019	GBPNZD.fx	11:30:00 AM	1.93122	1.93091			N/A
6/20/2019	GBPNZD.fx	1:30:00 PM	1.93033	1.93018			N/A
6/20/2019	GBPNZD.fx	3:30:00 PM	1.92337	1.92305			N/A
6/20/2019	GBPPLN	9:30:00 AM	4.7953	4.7962			N/A
6/20/2019	GBPPLN	11:30:00 AM	4.7968	4.7975			N/A
6/20/2019	GBPPLN	1:30:00 PM	4.7893	4.7905			N/A
6/20/2019	GBPPLN	3:30:00 PM	4.7686	4.7689			N/A
6/20/2019	GBPPLN.fx	9:30:00 AM	4.79291	4.79854			N/A
6/20/2019	GBPPLN.fx	11:30:00 AM	4.79405	4.79979			N/A
6/20/2019	GBPPLN.fx	1:30:00 PM	4.78696	4.79256			N/A
6/20/2019	GBPPLN.fx	3:30:00 PM	4.76557	4.77134			N/A
6/20/2019	GBPSEK	9:30:00 AM	11.9864	11.9944			N/A
6/20/2019	GBPSEK	11:30:00 AM	11.9751	11.9821			N/A
6/20/2019	GBPSEK	1:30:00 PM	11.9723	11.9801			N/A
6/20/2019	GBPSEK	3:30:00 PM	11.9116	11.9156			N/A
6/20/2019	GBPSEK.fx	9:30:00 AM	11.98243	11.99836			N/A
6/20/2019	GBPSEK.fx	11:30:00 AM	11.97034	11.98648			N/A
6/20/2019	GBPSEK.fx	1:30:00 PM	11.96854	11.98387			N/A
6/20/2019	GBPSEK.fx	3:30:00 PM	11.90578	11.91993			N/A
6/20/2019	GBPSGD	9:30:00 AM	1.7255	1.726			N/A
6/20/2019	GBPSGD	11:30:00 AM	1.7266	1.7265			N/A
6/20/2019	GBPSGD	1:30:00 PM	1.7254	1.7259			N/A
6/20/2019	GBPSGD	3:30:00 PM	1.7193	1.7197			N/A
6/20/2019	GBPSGD.fx	9:30:00 AM	1.72365	1.72778			N/A
6/20/2019	GBPSGD.fx	11:30:00 AM	1.72445	1.72832			N/A
6/20/2019	GBPSGD.fx	1:30:00 PM	1.72356	1.72769			N/A
6/20/2019	GBPSGD.fx	3:30:00 PM	1.7174	1.72151			N/A
6/20/2019	GBPUSD	9:30:00 AM	1.27087	1.27064			N/A
6/20/2019	GBPUSD	11:30:00 AM	1.27236	1.27217			N/A

6/20/2019	GBPUSD	1:30:00 PM	1.27187	1.27168			N/A
6/20/2019	GBPUSD	3:30:00 PM	1.26818	1.26799			N/A
6/20/2019	GBPUSD.fx	9:30:00 AM	1.27093	1.27059			N/A
6/20/2019	GBPUSD.fx	11:30:00 AM	1.27242	1.27213			N/A
6/20/2019	GBPUSD.fx	1:30:00 PM	1.27192	1.27162			N/A
6/20/2019	GBPUSD.fx	3:30:00 PM	1.26822	1.26794			N/A
6/20/2019	GBPZAR	9:30:00 AM	18.1135	18.1402			N/A
6/20/2019	GBPZAR	11:30:00 AM	18.095	18.1191			N/A
6/20/2019	GBPZAR	1:30:00 PM	18.0865	18.1095			N/A
6/20/2019	GBPZAR	3:30:00 PM	18.0463	18.0688			N/A
6/20/2019	GBPZAR.fx	9:30:00 AM	18.1211	18.1327			N/A
6/20/2019	GBPZAR.fx	11:30:00 AM	18.1022	18.1116			N/A
6/20/2019	GBPZAR.fx	1:30:00 PM	18.0928	18.103			N/A
6/20/2019	GBPZAR.fx	3:30:00 PM	18.0532	18.0616			N/A
6/20/2019	GOLD	9:30:00 AM	1385.24	1384.96			N/A
6/20/2019	GOLD	11:30:00 AM	1381.36	1380.77			N/A
6/20/2019	GOLD	1:30:00 PM	1381.16	1381.13			N/A
6/20/2019	GOLD	3:30:00 PM	1386.41	1385.68			N/A
6/20/2019	HKDJPY	9:30:00 AM					N/A
6/20/2019	HKDJPY	11:30:00 AM	13.78	13.79			N/A
6/20/2019	HKDJPY	1:30:00 PM	13.8	13.81			N/A
6/20/2019	HKDJPY	3:30:00 PM	13.76	13.77			N/A
6/20/2019	HKDJPY.fx	9:30:00 AM	13.758	13.765			N/A
6/20/2019	HKDJPY.fx	11:30:00 AM	13.781	13.787			N/A
6/20/2019	HKDJPY.fx	1:30:00 PM	13.793	13.8			N/A
6/20/2019	HKDJPY.fx	3:30:00 PM	13.763	13.763			N/A
6/20/2019	HUFJPY	9:30:00 AM	0.3752	0.3755			N/A
6/20/2019	HUFJPY	11:30:00 AM	0.3759	0.3762			N/A
6/20/2019	HUFJPY	1:30:00 PM	0.3761	0.3765			N/A
6/20/2019	HUFJPY	3:30:00 PM	0.3764	0.3768			N/A
6/20/2019	JP225.i	9:30:00 AM	21455.26	21463.21			N/A
6/20/2019	JP225.i	11:30:00 AM	21515.26	21526.09			N/A
6/20/2019	JP225.i	1:30:00 PM	21610.26	21625.26			N/A
6/20/2019	JP225.i	3:30:00 PM	21590.26	21605.26			N/A

6/20/2019	MXNJPY	9:30:00 AM	5.67	5.68			N/A
6/20/2019	MXNJPY	11:30:00 AM	5.68	5.69			N/A
6/20/2019	MXNJPY	1:30:00 PM	5.7	5.71			N/A
6/20/2019	MXNJPY	3:30:00 PM	5.69	5.7			N/A
6/20/2019	NASDAQ.i	9:30:00 AM					N/A
6/20/2019	NASDAQ.i	11:30:00 AM					N/A
6/20/2019	NASDAQ.i	1:30:00 PM					N/A
6/20/2019	NASDAQ.i	3:30:00 PM					N/A
6/20/2019	NOKJPY	9:30:00 AM	12.45	12.48			N/A
6/20/2019	NOKJPY	11:30:00 AM	12.56	12.6			N/A
6/20/2019	NOKJPY	1:30:00 PM	12.58	12.61			N/A
6/20/2019	NOKJPY	3:30:00 PM	12.59	12.61			N/A
6/20/2019	NOKJPY.fx	9:30:00 AM	12.459	12.464			N/A
6/20/2019	NOKJPY.fx	11:30:00 AM	12.577	12.579			N/A
6/20/2019	NOKJPY.fx	1:30:00 PM	12.591	12.598			N/A
6/20/2019	NOKJPY.fx	3:30:00 PM	12.598	12.601			N/A
6/20/2019	NZDCAD	9:30:00 AM	0.87064	0.87122			N/A
6/20/2019	NZDCAD	11:30:00 AM	0.86988	0.8705			N/A
6/20/2019	NZDCAD	1:30:00 PM	0.86908	0.86959			N/A
6/20/2019	NZDCAD	3:30:00 PM	0.86708	0.86764			N/A
6/20/2019	NZDCAD.fx	9:30:00 AM	0.87097	0.87089			N/A
6/20/2019	NZDCAD.fx	11:30:00 AM	0.87021	0.87016			N/A
6/20/2019	NZDCAD.fx	1:30:00 PM	0.86941	0.86926			N/A
6/20/2019	NZDCAD.fx	3:30:00 PM	0.86738	0.86733			N/A
6/20/2019	NZDCHF	9:30:00 AM	0.65064	0.65131			N/A
6/20/2019	NZDCHF	11:30:00 AM	0.65025	0.6509			N/A
6/20/2019	NZDCHF	1:30:00 PM	0.64948	0.65006			N/A
6/20/2019	NZDCHF	3:30:00 PM	0.64872	0.64896			N/A
6/20/2019	NZDCHF.fx	9:30:00 AM	0.65097	0.65096			N/A
6/20/2019	NZDCHF.fx	11:30:00 AM	0.65058	0.65055			N/A
6/20/2019	NZDCHF.fx	1:30:00 PM	0.64982	0.64971			N/A
6/20/2019	NZDCHF.fx	3:30:00 PM	0.64898	0.64861			N/A
6/20/2019	NZDCZK	9:30:00 AM	14.929	14.94			N/A
6/20/2019	NZDCZK	11:30:00 AM	14.924	14.936			N/A

6/20/2019	NZDCZK	1:30:00 PM	14.916	14.926			N/A
6/20/2019	NZDCZK	3:30:00 PM	14.911	14.921			N/A
6/20/2019	NZDDKK	9:30:00 AM					N/A
6/20/2019	NZDDKK	11:30:00 AM					N/A
6/20/2019	NZDDKK	1:30:00 PM	4.35	4.353			N/A
6/20/2019	NZDDKK	3:30:00 PM					N/A
6/20/2019	NZDHKD	9:30:00 AM	5.1415	5.1442			N/A
6/20/2019	NZDHKD	11:30:00 AM	5.1444	5.1473			N/A
6/20/2019	NZDHKD	1:30:00 PM	5.1469	5.1488			N/A
6/20/2019	NZDHKD	3:30:00 PM	5.1506	5.1514			N/A
6/20/2019	NZDHUF	9:30:00 AM	188.53	188.77			N/A
6/20/2019	NZDHUF	11:30:00 AM	188.68	188.96			N/A
6/20/2019	NZDHUF	1:30:00 PM	188.71	188.97			N/A
6/20/2019	NZDHUF	3:30:00 PM	188.31	188.59			N/A
6/20/2019	NZDJPY	9:30:00 AM	70.769	70.84			N/A
6/20/2019	NZDJPY	11:30:00 AM	70.939	71.008			N/A
6/20/2019	NZDJPY	1:30:00 PM	71.018	71.079			N/A
6/20/2019	NZDJPY	3:30:00 PM	70.916	70.959			N/A
6/20/2019	NZDJPY.fx	9:30:00 AM	70.802	70.808			N/A
6/20/2019	NZDJPY.fx	11:30:00 AM	70.969	70.977			N/A
6/20/2019	NZDJPY.fx	1:30:00 PM	71.049	71.047			N/A
6/20/2019	NZDJPY.fx	3:30:00 PM	70.945	70.928			N/A
6/20/2019	NZDMXN	9:30:00 AM	12.4792	12.4826			N/A
6/20/2019	NZDMXN	11:30:00 AM	12.4795	12.4809			N/A
6/20/2019	NZDMXN	1:30:00 PM	12.4658	12.4707			N/A
6/20/2019	NZDMXN	3:30:00 PM	12.4576	12.4587			N/A
6/20/2019	NZDNOK	9:30:00 AM	5.6776	5.6808			N/A
6/20/2019	NZDNOK	11:30:00 AM	5.6364	5.6387			N/A
6/20/2019	NZDNOK	1:30:00 PM	5.6372	5.6401			N/A
6/20/2019	NZDNOK	3:30:00 PM	5.6262	5.6273			N/A
6/20/2019	NZDPLN	9:30:00 AM	2.4829	2.4844			N/A
6/20/2019	NZDPLN	11:30:00 AM	2.4815	2.4829			N/A
6/20/2019	NZDPLN	1:30:00 PM	2.4801	2.4811			N/A
6/20/2019	NZDPLN	3:30:00 PM	2.477	2.4785			N/A

6/20/2019	NZDSEK	9:30:00 AM	6.205	6.21			N/A
6/20/2019	NZDSEK	11:30:00 AM	6.1958	6.2027			N/A
6/20/2019	NZDSEK	1:30:00 PM	6.1991	6.205			N/A
6/20/2019	NZDSEK	3:30:00 PM	6.1897	6.1939			N/A
6/20/2019	NZDSGD	9:30:00 AM	0.8938	0.8944			N/A
6/20/2019	NZDSGD	11:30:00 AM	0.8938	0.8943			N/A
6/20/2019	NZDSGD	1:30:00 PM	0.8937	0.8943			N/A
6/20/2019	NZDSGD	3:30:00 PM	0.8939	0.8943			N/A
6/20/2019	NZDSGD.fx	9:30:00 AM	0.89378	0.89431			N/A
6/20/2019	NZDSGD.fx	11:30:00 AM	0.89377	0.89422			N/A
6/20/2019	NZDSGD.fx	1:30:00 PM	0.89378	0.89421			N/A
6/20/2019	NZDSGD.fx	3:30:00 PM	0.8939	0.89435			N/A
6/20/2019	NZDUSD	9:30:00 AM	0.65824	0.65833			N/A
6/20/2019	NZDUSD	11:30:00 AM	0.65872	0.65884			N/A
6/20/2019	NZDUSD	1:30:00 PM	0.65885	0.65881			N/A
6/20/2019	NZDUSD	3:30:00 PM	0.65938	0.65919			N/A
6/20/2019	NZDUSD.fx	9:30:00 AM	0.65831	0.65835			N/A
6/20/2019	NZDUSD.fx	11:30:00 AM	0.6588	0.65886			N/A
6/20/2019	NZDUSD.fx	1:30:00 PM	0.65891	0.65883			N/A
6/20/2019	NZDUSD.fx	3:30:00 PM	0.65945	0.65927			N/A
6/20/2019	NZDZAR	9:30:00 AM	9.3774	9.3939			N/A
6/20/2019	NZDZAR	11:30:00 AM	9.36	9.3748			N/A
6/20/2019	NZDZAR	1:30:00 PM	9.3635	9.3777			N/A
6/20/2019	NZDZAR	3:30:00 PM	9.3736	9.3901			N/A
6/20/2019	SEKJPY	9:30:00 AM	11.4	11.41			N/A
6/20/2019	SEKJPY	11:30:00 AM	11.44	11.45			N/A
6/20/2019	SEKJPY	1:30:00 PM	11.45	11.46			N/A
6/20/2019	SEKJPY	3:30:00 PM	11.45	11.46			N/A
6/20/2019	SEKJPY.fx	9:30:00 AM	11.389	11.408			N/A
6/20/2019	SEKJPY.fx	11:30:00 AM	11.432	11.451			N/A
6/20/2019	SEKJPY.fx	1:30:00 PM	11.442	11.458			N/A
6/20/2019	SEKJPY.fx	3:30:00 PM	11.444	11.457			N/A
6/20/2019	SGDJPY	9:30:00 AM	79.17	79.19			N/A
6/20/2019	SGDJPY	11:30:00 AM	79.4	79.39			N/A

6/20/2019	SGDJPY	1:30:00 PM	79.48	79.47			N/A
6/20/2019	SGDJPY	3:30:00 PM	79.32	79.32			N/A
6/20/2019	SILVER	9:30:00 AM	15.18	15.55			N/A
6/20/2019	SILVER	11:30:00 AM	15.17	15.54			N/A
6/20/2019	SILVER	1:30:00 PM	15.17	15.54			N/A
6/20/2019	SILVER	3:30:00 PM	15.21	15.57			N/A
6/20/2019	SPX500.i	9:30:00 AM	2945.16	2945.46			N/A
6/20/2019	SPX500.i	11:30:00 AM	2949.66	2950.46			N/A
6/20/2019	SPX500.i	1:30:00 PM	2954.51	2955.21			N/A
6/20/2019	SPX500.i	3:30:00 PM	2957.72	2958.88			N/A
6/20/2019	UK100.i	9:30:00 AM	7437.11	7437.94			N/A
6/20/2019	UK100.i	11:30:00 AM	7429.19	7427.36			N/A
6/20/2019	UK100.i	1:30:00 PM	7442.19	7443.44			N/A
6/20/2019	UK100.i	3:30:00 PM	7466.94	7467.86			N/A
6/20/2019	USDCAD	9:30:00 AM	1.32311	1.32295			N/A
6/20/2019	USDCAD	11:30:00 AM	1.32091	1.32094			N/A
6/20/2019	USDCAD	1:30:00 PM	1.31946	1.3196			N/A
6/20/2019	USDCAD	3:30:00 PM	1.3157	1.31538			N/A
6/20/2019	USDCAD.fx	9:30:00 AM	1.32314	1.32291			N/A
6/20/2019	USDCAD.fx	11:30:00 AM	1.32095	1.32091			N/A
6/20/2019	USDCAD.fx	1:30:00 PM	1.3195	1.31956			N/A
6/20/2019	USDCAD.fx	3:30:00 PM	1.31572	1.31535			N/A
6/20/2019	USDCHF	9:30:00 AM	0.98881	0.9888			N/A
6/20/2019	USDCHF	11:30:00 AM	0.9875	0.98749			N/A
6/20/2019	USDCHF	1:30:00 PM	0.98613	0.98625			N/A
6/20/2019	USDCHF	3:30:00 PM	0.98464	0.98387			N/A
6/20/2019	USDCHF.fx	9:30:00 AM	0.98886	0.98874			N/A
6/20/2019	USDCHF.fx	11:30:00 AM	0.98754	0.98744			N/A
6/20/2019	USDCHF.fx	1:30:00 PM	0.98618	0.98617			N/A
6/20/2019	USDCHF.fx	3:30:00 PM	0.98457	0.98382			N/A
6/20/2019	USDCZK	9:30:00 AM	22.697	22.718			N/A
6/20/2019	USDCZK	11:30:00 AM	22.672	22.695			N/A
6/20/2019	USDCZK	1:30:00 PM	22.659	22.678			N/A
6/20/2019	USDCZK	3:30:00 PM	22.636	22.649			N/A

6/20/2019	USDCZK.fx	9:30:00 AM	22.7051	22.7101			N/A
6/20/2019	USDCZK.fx	11:30:00 AM	22.6815	22.6861			N/A
6/20/2019	USDCZK.fx	1:30:00 PM	22.6683	22.669			N/A
6/20/2019	USDCZK.fx	3:30:00 PM	22.6413	22.6417			N/A
6/20/2019	USDDKK	9:30:00 AM	6.6178	6.6211			N/A
6/20/2019	USDDKK	11:30:00 AM	6.61	6.6138			N/A
6/20/2019	USDDKK	1:30:00 PM	6.6047	6.6074			N/A
6/20/2019	USDDKK	3:30:00 PM	6.6002	6.6015			N/A
6/20/2019	USDDKK.fx	9:30:00 AM	6.61826	6.61917			N/A
6/20/2019	USDDKK.fx	11:30:00 AM	6.61046	6.61174			N/A
6/20/2019	USDDKK.fx	1:30:00 PM	6.60518	6.60536			N/A
6/20/2019	USDDKK.fx	3:30:00 PM	6.60048	6.59876			N/A
6/20/2019	USDHKD	9:30:00 AM					N/A
6/20/2019	USDHKD	11:30:00 AM	7.8154	7.815			N/A
6/20/2019	USDHKD	1:30:00 PM	7.815	7.8154			N/A
6/20/2019	USDHKD	3:30:00 PM	7.8166	7.8169			N/A
6/20/2019	USDHKD.fx	9:30:00 AM					N/A
6/20/2019	USDHKD.fx	11:30:00 AM	7.81537	7.81502			N/A
6/20/2019	USDHKD.fx	1:30:00 PM	7.81493	7.81552			N/A
6/20/2019	USDHKD.fx	3:30:00 PM	7.81647	7.81698			N/A
6/20/2019	USDHUF	9:30:00 AM	286.51	286.88			N/A
6/20/2019	USDHUF	11:30:00 AM	286.67	287.13			N/A
6/20/2019	USDHUF	1:30:00 PM	286.55	286.99			N/A
6/20/2019	USDHUF	3:30:00 PM	285.97	286.28			N/A
6/20/2019	USDHUF.fx	9:30:00 AM	286.709	286.667			N/A
6/20/2019	USDHUF.fx	11:30:00 AM	286.869	286.927			N/A
6/20/2019	USDHUF.fx	1:30:00 PM	286.769	286.787			N/A
6/20/2019	USDHUF.fx	3:30:00 PM	286.095	286.088			N/A
6/20/2019	USDINR	9:30:00 AM	64.57	74.56			N/A
6/20/2019	USDINR	11:30:00 AM	64.57	74.57			N/A
6/20/2019	USDINR	1:30:00 PM					N/A
6/20/2019	USDINR	3:30:00 PM					N/A
6/20/2019	USDJPY	9:30:00 AM	107.549	107.552			N/A
6/20/2019	USDJPY	11:30:00 AM	107.728	107.733			N/A

6/20/2019	USDJPY	1:30:00 PM	107.829	107.837			N/A
6/20/2019	USDJPY	3:30:00 PM	107.627	107.569			N/A
6/20/2019	USDJPY.fx	9:30:00 AM	107.554	107.545			N/A
6/20/2019	USDJPY.fx	11:30:00 AM	107.733	107.727			N/A
6/20/2019	USDJPY.fx	1:30:00 PM	107.835	107.83			N/A
6/20/2019	USDJPY.fx	3:30:00 PM	107.628	107.563			N/A
6/20/2019	USDMXN	9:30:00 AM	18.965	18.97			N/A
6/20/2019	USDMXN	11:30:00 AM	18.954	18.958			N/A
6/20/2019	USDMXN	1:30:00 PM	18.928	18.935			N/A
6/20/2019	USDMXN	3:30:00 PM	18.909	18.911			N/A
6/20/2019	USDMXN.f	9:30:00 AM					N/A
6/20/2019	USDMXN.f	11:30:00 AM					N/A
6/20/2019	USDMXN.f	1:30:00 PM					N/A
6/20/2019	USDMXN.f	3:30:00 PM					N/A
6/20/2019	USDNOK	9:30:00 AM	8.6276	8.6349			N/A
6/20/2019	USDNOK	11:30:00 AM	8.5631	8.5672			N/A
6/20/2019	USDNOK	1:30:00 PM	8.558	8.5661			N/A
6/20/2019	USDNOK	3:30:00 PM	8.5399	8.5428			N/A
6/20/2019	USDNOK.fx	9:30:00 AM	8.63168	8.63019			N/A
6/20/2019	USDNOK.fx	11:30:00 AM	8.56715	8.5628			N/A
6/20/2019	USDNOK.fx	1:30:00 PM	8.56208	8.56168			N/A
6/20/2019	USDNOK.fx	3:30:00 PM	8.54212	8.53828			N/A
6/20/2019	USDPLN	9:30:00 AM	3.7731	3.7743			N/A
6/20/2019	USDPLN	11:30:00 AM	3.7698	3.7714			N/A
6/20/2019	USDPLN	1:30:00 PM	3.7661	3.7667			N/A
6/20/2019	USDPLN	3:30:00 PM	3.7607	3.7601			N/A
6/20/2019	USDPLN.fx	9:30:00 AM	3.7723	3.77519			N/A
6/20/2019	USDPLN.fx	11:30:00 AM	3.76899	3.77222			N/A
6/20/2019	USDPLN.fx	1:30:00 PM	3.76529	3.76741			N/A
6/20/2019	USDPLN.fx	3:30:00 PM	3.75958	3.76125			N/A
6/20/2019	USDRUB	9:30:00 AM					N/A
6/20/2019	USDRUB	11:30:00 AM	63.124	63.521			N/A
6/20/2019	USDRUB	1:30:00 PM	63.112	63.499			N/A
6/20/2019	USDRUB	3:30:00 PM	62.925	63.299			N/A



6/20/2019	USDSEK	9:30:00 AM	9.4326	9.4354			N/A
6/20/2019	USDSEK	11:30:00 AM	9.4125	9.4163			N/A
6/20/2019	USDSEK	1:30:00 PM	9.4152	9.4184			N/A
6/20/2019	USDSEK	3:30:00 PM	9.3944	9.3951			N/A
6/20/2019	USDSEK.fx	9:30:00 AM	9.43541	9.43347			N/A
6/20/2019	USDSEK.fx	11:30:00 AM	9.41534	9.41448			N/A
6/20/2019	USDSEK.fx	1:30:00 PM	9.41773	9.41647			N/A
6/20/2019	USDSEK.fx	3:30:00 PM	9.39631	9.39283			N/A
6/20/2019	USDSGD	9:30:00 AM	1.3579	1.3582			N/A
6/20/2019	USDSGD	11:30:00 AM	1.3568	1.357			N/A
6/20/2019	USDSGD	1:30:00 PM	1.3567	1.357			N/A
6/20/2019	USDSGD	3:30:00 PM	1.3558	1.3561			N/A
6/20/2019	USDSGD.fx	9:30:00 AM	1.35781	1.35825			N/A
6/20/2019	USDSGD.fx	11:30:00 AM	1.35686	1.35711			N/A
6/20/2019	USDSGD.fx	1:30:00 PM	1.35666	1.35709			N/A
6/20/2019	USDSGD.fx	3:30:00 PM	1.35574	1.35616			N/A
6/20/2019	USDZAR	9:30:00 AM	14.2569	14.2721			N/A
6/20/2019	USDZAR	11:30:00 AM	14.2239	14.2375			N/A
6/20/2019	USDZAR	1:30:00 PM	14.2233	14.237			N/A
6/20/2019	USDZAR	3:30:00 PM	14.2345	14.248			N/A
6/20/2019	USDZAR.fx	9:30:00 AM	14.26327	14.26474			N/A
6/20/2019	USDZAR.fx	11:30:00 AM	14.23051	14.23153			N/A
6/20/2019	USDZAR.fx	1:30:00 PM	14.22883	14.23117			N/A
6/20/2019	USDZAR.fx	3:30:00 PM	14.24107	14.24225			N/A
6/20/2019	XAUUSD	9:30:00 AM	1385.25	1384.94			N/A
6/20/2019	XAUUSD	11:30:00 AM	1381.39	1380.78			N/A
6/20/2019	XAUUSD	1:30:00 PM	1381.16	1381.13			N/A
6/20/2019	XAUUSD	3:30:00 PM	1386.43	1385.68			N/A
6/20/2019	ZARJPY	9:30:00 AM					N/A
6/20/2019	ZARJPY	11:30:00 AM	7.55	7.57			N/A
6/20/2019	ZARJPY	1:30:00 PM	7.55	7.58			N/A
6/20/2019	ZARJPY	3:30:00 PM	7.54	7.56			N/A
6/20/2019	ZARJPY.fx	9:30:00 AM	7.538	7.541			N/A
6/20/2019	ZARJPY.fx	11:30:00 AM	7.568	7.571			N/A

6/20/2019	ZARJPY.fx	1:30:00 PM	7.576	7.579			N/A
6/20/2019	ZARJPY.fx	3:30:00 PM	7.553	7.556			N/A
6/21/2019	#AA	9:30:00 AM					N/A
6/21/2019	#AA	11:30:00 AM					N/A
6/21/2019	#AA	1:30:00 PM					N/A
6/21/2019	#AA	3:30:00 PM					N/A
6/21/2019	#AABA	9:30:00 AM					N/A
6/21/2019	#AABA	11:30:00 AM					N/A
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6/21/2019	#AABA	3:30:00 PM					N/A
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6/21/2019	#AAPL	3:30:00 PM					N/A
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6/21/2019	#AIG	3:30:00 PM					N/A
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6/21/2019	#AMD	1:30:00 PM					N/A
6/21/2019	#AMD	3:30:00 PM					N/A
6/21/2019	#AMZN	9:30:00 AM					N/A
6/21/2019	#AMZN	11:30:00 AM					N/A
6/21/2019	#AMZN	1:30:00 PM					N/A
6/21/2019	#AMZN	3:30:00 PM					N/A

6/21/2019	#AXP	9:30:00 AM					N/A
6/21/2019	#AXP	11:30:00 AM					N/A
6/21/2019	#AXP	1:30:00 PM					N/A
6/21/2019	#AXP	3:30:00 PM					N/A
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6/21/2019	#BA	11:30:00 AM					N/A
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6/21/2019	#BA	3:30:00 PM					N/A
6/21/2019	#BABA	9:30:00 AM					N/A
6/21/2019	#BABA	11:30:00 AM					N/A
6/21/2019	#BABA	1:30:00 PM					N/A
6/21/2019	#BABA	3:30:00 PM					N/A
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6/21/2019	#BAC	11:30:00 AM					N/A
6/21/2019	#BAC	1:30:00 PM					N/A
6/21/2019	#BAC	3:30:00 PM					N/A
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6/21/2019	#BARC	11:30:00 AM					N/A
6/21/2019	#BARC	1:30:00 PM					N/A
6/21/2019	#BARC	3:30:00 PM					N/A
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6/21/2019	#BHP	11:30:00 AM					N/A
6/21/2019	#BHP	1:30:00 PM					N/A
6/21/2019	#BHP	3:30:00 PM					N/A
6/21/2019	#BIDU	9:30:00 AM					N/A
6/21/2019	#BIDU	11:30:00 AM					N/A
6/21/2019	#BIDU	1:30:00 PM					N/A
6/21/2019	#BIDU	3:30:00 PM					N/A
6/21/2019	#Bitcoin	9:30:00 AM	9694.15	9719.65			N/A
6/21/2019	#Bitcoin	11:30:00 AM	9742.6	9771.05			N/A
6/21/2019	#Bitcoin	1:30:00 PM	9800.91	9825.9			N/A
6/21/2019	#Bitcoin	3:30:00 PM	9812.6	9847.45			N/A
6/21/2019	#BK	9:30:00 AM					N/A
6/21/2019	#BK	11:30:00 AM					N/A

6/21/2019	#BK	1:30:00 PM					N/A
6/21/2019	#BK	3:30:00 PM					N/A
6/21/2019	#BLT	9:30:00 AM					N/A
6/21/2019	#BLT	11:30:00 AM					N/A
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6/21/2019	#BP	11:30:00 AM					N/A
6/21/2019	#BP	1:30:00 PM					N/A
6/21/2019	#BP	3:30:00 PM					N/A
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6/21/2019	#BTA	11:30:00 AM					N/A
6/21/2019	#BTA	1:30:00 PM					N/A
6/21/2019	#BTA	3:30:00 PM					N/A
6/21/2019	#C	9:30:00 AM					N/A
6/21/2019	#C	11:30:00 AM					N/A
6/21/2019	#C	1:30:00 PM					N/A
6/21/2019	#C	3:30:00 PM					N/A
6/21/2019	#CAT	9:30:00 AM					N/A
6/21/2019	#CAT	11:30:00 AM					N/A
6/21/2019	#CAT	1:30:00 PM					N/A
6/21/2019	#CAT	3:30:00 PM					N/A
6/21/2019	#CHL	9:30:00 AM					N/A
6/21/2019	#CHL	11:30:00 AM					N/A
6/21/2019	#CHL	1:30:00 PM					N/A
6/21/2019	#CHL	3:30:00 PM					N/A
6/21/2019	#CL.f	9:30:00 AM	56.909	56.917			N/A
6/21/2019	#CL.f	11:30:00 AM	57.269	57.29			N/A
6/21/2019	#CL.f	1:30:00 PM	57.726	57.687			N/A
6/21/2019	#CL.f	3:30:00 PM	57.536	57.521			N/A
6/21/2019	#CMCSA	9:30:00 AM					N/A
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6/21/2019	AUDCAD	11:30:00 AM	0.91235	0.91306			N/A
6/21/2019	AUDCAD	1:30:00 PM	0.91152	0.91212			N/A
6/21/2019	AUDCAD	3:30:00 PM	0.91157	0.91189			N/A
6/21/2019	AUDCAD.fx	9:30:00 AM	0.91331	0.9132			N/A
6/21/2019	AUDCAD.fx	11:30:00 AM	0.91269	0.91272			N/A
6/21/2019	AUDCAD.fx	1:30:00 PM	0.91185	0.91178			N/A
6/21/2019	AUDCAD.fx	3:30:00 PM	0.9118	0.91155			N/A
6/21/2019	AUDCHF	9:30:00 AM	0.67994	0.68051			N/A
6/21/2019	AUDCHF	11:30:00 AM	0.67948	0.68018			N/A
6/21/2019	AUDCHF	1:30:00 PM	0.67899	0.67965			N/A
6/21/2019	AUDCHF	3:30:00 PM	0.67728	0.67787			N/A
6/21/2019	AUDCHF.fx	9:30:00 AM	0.68029	0.68016			N/A
6/21/2019	AUDCHF.fx	11:30:00 AM	0.67983	0.67983			N/A
6/21/2019	AUDCHF.fx	1:30:00 PM	0.67933	0.6793			N/A
6/21/2019	AUDCHF.fx	3:30:00 PM	0.67761	0.67753			N/A
6/21/2019	AUDCZK	9:30:00 AM	15.685	15.701			N/A
6/21/2019	AUDCZK	11:30:00 AM	15.654	15.672			N/A
6/21/2019	AUDCZK	1:30:00 PM	15.642	15.656			N/A
6/21/2019	AUDCZK	3:30:00 PM	15.606	15.621			N/A
6/21/2019	AUDDKK	9:30:00 AM	4.5778	4.5821			N/A
6/21/2019	AUDDKK	11:30:00 AM	4.5665	4.5713			N/A
6/21/2019	AUDDKK	1:30:00 PM	4.563	4.5672			N/A
6/21/2019	AUDDKK	3:30:00 PM	4.5541	4.5585			N/A
6/21/2019	AUDHKD	9:30:00 AM	5.4033	5.4066			N/A
6/21/2019	AUDHKD	11:30:00 AM	5.399	5.4021			N/A
6/21/2019	AUDHKD	1:30:00 PM	5.398	5.4013			N/A
6/21/2019	AUDHKD	3:30:00 PM	5.3936	5.3964			N/A
6/21/2019	AUDHUF	9:30:00 AM	198.01	198.17			N/A
6/21/2019	AUDHUF	11:30:00 AM	197.97	198.13			N/A

6/21/2019	AUDHUF	1:30:00 PM	197.96	198.17			N/A
6/21/2019	AUDHUF	3:30:00 PM	197.51	197.73			N/A
6/21/2019	AUDJPY	9:30:00 AM	74.253	74.298			N/A
6/21/2019	AUDJPY	11:30:00 AM	74.257	74.321			N/A
6/21/2019	AUDJPY	1:30:00 PM	74.306	74.373			N/A
6/21/2019	AUDJPY	3:30:00 PM	74.19	74.255			N/A
6/21/2019	AUDJPY.fx	9:30:00 AM	74.287	74.262			N/A
6/21/2019	AUDJPY.fx	11:30:00 AM	74.29	74.285			N/A
6/21/2019	AUDJPY.fx	1:30:00 PM	74.34	74.338			N/A
6/21/2019	AUDJPY.fx	3:30:00 PM	74.223	74.22			N/A
6/21/2019	AUDMXN	9:30:00 AM	13.168	13.174			N/A
6/21/2019	AUDMXN	11:30:00 AM	13.1455	13.1545			N/A
6/21/2019	AUDMXN	1:30:00 PM	13.1582	13.1657			N/A
6/21/2019	AUDMXN	3:30:00 PM	13.1573	13.1658			N/A
6/21/2019	AUDNOK	9:30:00 AM	5.9322	5.9369			N/A
6/21/2019	AUDNOK	11:30:00 AM	5.9173	5.9226			N/A
6/21/2019	AUDNOK	1:30:00 PM	5.9202	5.9245			N/A
6/21/2019	AUDNOK	3:30:00 PM	5.9086	5.9134			N/A
6/21/2019	AUDNOK.fx	9:30:00 AM	5.9338	5.9351			N/A
6/21/2019	AUDNOK.fx	11:30:00 AM	5.9188	5.9209			N/A
6/21/2019	AUDNOK.fx	1:30:00 PM	5.9217	5.9229			N/A
6/21/2019	AUDNOK.fx	3:30:00 PM	5.9101	5.9116			N/A
6/21/2019	AUDNZD	9:30:00 AM	1.05152	1.05237			N/A
6/21/2019	AUDNZD	11:30:00 AM	1.0524	1.05328			N/A
6/21/2019	AUDNZD	1:30:00 PM	1.05259	1.05341			N/A
6/21/2019	AUDNZD	3:30:00 PM	1.0526	1.05335			N/A
6/21/2019	AUDNZD.fx	9:30:00 AM	1.05197	1.05192			N/A
6/21/2019	AUDNZD.fx	11:30:00 AM	1.05284	1.05284			N/A
6/21/2019	AUDNZD.fx	1:30:00 PM	1.05304	1.05296			N/A
6/21/2019	AUDNZD.fx	3:30:00 PM	1.05302	1.0529			N/A
6/21/2019	AUDPLN	9:30:00 AM	2.6097	2.6127			N/A
6/21/2019	AUDPLN	11:30:00 AM	2.6062	2.6094			N/A
6/21/2019	AUDPLN	1:30:00 PM	2.6041	2.6068			N/A
6/21/2019	AUDPLN	3:30:00 PM	2.5975	2.6004			N/A



6/21/2019	AUDSEK	9:30:00 AM	6.5221	6.5251			N/A
6/21/2019	AUDSEK	11:30:00 AM	6.4959	6.4992			N/A
6/21/2019	AUDSEK	1:30:00 PM	6.4894	6.4915			N/A
6/21/2019	AUDSEK	3:30:00 PM	6.4861	6.489			N/A
6/21/2019	AUDSEK.fx	9:30:00 AM	6.5173	6.5297			N/A
6/21/2019	AUDSEK.fx	11:30:00 AM	6.4913	6.5036			N/A
6/21/2019	AUDSEK.fx	1:30:00 PM	6.4848	6.496			N/A
6/21/2019	AUDSEK.fx	3:30:00 PM	6.4814	6.4935			N/A
6/21/2019	AUDSGD	9:30:00 AM	0.9399	0.9401			N/A
6/21/2019	AUDSGD	11:30:00 AM	0.9388	0.9391			N/A
6/21/2019	AUDSGD	1:30:00 PM	0.9386	0.9389			N/A
6/21/2019	AUDSGD	3:30:00 PM	0.9373	0.9373			N/A
6/21/2019	AUDSGD.fx	9:30:00 AM	0.93994	0.93995			N/A
6/21/2019	AUDSGD.fx	11:30:00 AM	0.93886	0.93901			N/A
6/21/2019	AUDSGD.fx	1:30:00 PM	0.93872	0.93877			N/A
6/21/2019	AUDSGD.fx	3:30:00 PM	0.93741	0.93745			N/A
6/21/2019	AUDUSD	9:30:00 AM	0.69227	0.69227			N/A
6/21/2019	AUDUSD	11:30:00 AM	0.69172	0.69188			N/A
6/21/2019	AUDUSD	1:30:00 PM	0.69151	0.69158			N/A
6/21/2019	AUDUSD	3:30:00 PM	0.69064	0.69064			N/A
6/21/2019	AUDUSD.fx	9:30:00 AM	0.69231	0.69221			N/A
6/21/2019	AUDUSD.fx	11:30:00 AM	0.69177	0.69182			N/A
6/21/2019	AUDUSD.fx	1:30:00 PM	0.69156	0.69153			N/A
6/21/2019	AUDUSD.fx	3:30:00 PM	0.69068	0.69058			N/A
6/21/2019	AUDZAR	9:30:00 AM	9.9502	9.9598			N/A
6/21/2019	AUDZAR	11:30:00 AM	9.95	9.9619			N/A
6/21/2019	AUDZAR	1:30:00 PM	9.9301	9.9343			N/A
6/21/2019	AUDZAR	3:30:00 PM	9.8775	9.8916			N/A
6/21/2019	AUS200.i	9:30:00 AM	6661.9	6661			N/A
6/21/2019	AUS200.i	11:30:00 AM	6679.5	6680.9			N/A
6/21/2019	AUS200.i	1:30:00 PM	6673.5	6676.5			N/A
6/21/2019	AUS200.i	3:30:00 PM	6680.5	6680.49			N/A
6/21/2019	BCHUSD	9:30:00 AM	433.51	434.98			N/A
6/21/2019	BCHUSD	11:30:00 AM	434.51	436.24			N/A

6/21/2019	BCHUSD	1:30:00 PM	454.82	453.91			N/A
6/21/2019	BCHUSD	3:30:00 PM	446.18	447.96			N/A
6/21/2019	CADCHF	9:30:00 AM	0.74448	0.74518			N/A
6/21/2019	CADCHF	11:30:00 AM	0.74451	0.74518			N/A
6/21/2019	CADCHF	1:30:00 PM	0.74466	0.74529			N/A
6/21/2019	CADCHF	3:30:00 PM	0.74295	0.74342			N/A
6/21/2019	CADCHF.fx	9:30:00 AM	0.74482	0.74483			N/A
6/21/2019	CADCHF.fx	11:30:00 AM	0.74486	0.74483			N/A
6/21/2019	CADCHF.fx	1:30:00 PM	0.745	0.74494			N/A
6/21/2019	CADCHF.fx	3:30:00 PM	0.74328	0.74313			N/A
6/21/2019	CADCZK	9:30:00 AM	17.179	17.194			N/A
6/21/2019	CADCZK	11:30:00 AM	17.156	17.174			N/A
6/21/2019	CADCZK	1:30:00 PM	17.158	17.174			N/A
6/21/2019	CADCZK	3:30:00 PM	17.13	17.136			N/A
6/21/2019	CADDDKK	9:30:00 AM	5.013	5.017			N/A
6/21/2019	CADDDKK	11:30:00 AM	5.004	5.008			N/A
6/21/2019	CADDDKK	1:30:00 PM					N/A
6/21/2019	CADDDKK	3:30:00 PM	4.995	4.998			N/A
6/21/2019	CADHKD	9:30:00 AM	5.9172	5.9209			N/A
6/21/2019	CADHKD	11:30:00 AM	5.9168	5.9205			N/A
6/21/2019	CADHKD	1:30:00 PM	5.9212	5.9249			N/A
6/21/2019	CADHKD	3:30:00 PM	5.9195	5.9199			N/A
6/21/2019	CADHUF	9:30:00 AM	216.92	216.97			N/A
6/21/2019	CADHUF	11:30:00 AM	217	217.1			N/A
6/21/2019	CADHUF	1:30:00 PM	217.17	217.32			N/A
6/21/2019	CADHUF	3:30:00 PM	216.76	216.85			N/A
6/21/2019	CADJPY	9:30:00 AM	81.303	81.359			N/A
6/21/2019	CADJPY	11:30:00 AM	81.363	81.427			N/A
6/21/2019	CADJPY	1:30:00 PM	81.493	81.558			N/A
6/21/2019	CADJPY	3:30:00 PM	81.39	81.419			N/A
6/21/2019	CADJPY.fx	9:30:00 AM	81.335	81.325			N/A
6/21/2019	CADJPY.fx	11:30:00 AM	81.396	81.393			N/A
6/21/2019	CADJPY.fx	1:30:00 PM	81.528	81.524			N/A
6/21/2019	CADJPY.fx	3:30:00 PM	81.422	81.392			N/A

6/21/2019	CADMXN	9:30:00 AM	14.4207	14.4277			N/A
6/21/2019	CADMXN	11:30:00 AM	14.4046	14.4167			N/A
6/21/2019	CADMXN	1:30:00 PM	14.4322	14.4434			N/A
6/21/2019	CADMXN	3:30:00 PM	14.4358	14.4434			N/A
6/21/2019	CADNOK	9:30:00 AM	6.4944	6.4971			N/A
6/21/2019	CADNOK	11:30:00 AM	6.4826	6.4852			N/A
6/21/2019	CADNOK	1:30:00 PM	6.492	6.4963			N/A
6/21/2019	CADNOK	3:30:00 PM	6.4797	6.4809			N/A
6/21/2019	CADPLN	9:30:00 AM	2.8576	2.8595			N/A
6/21/2019	CADPLN	11:30:00 AM	2.8555	2.857			N/A
6/21/2019	CADPLN	1:30:00 PM	2.8561	2.8579			N/A
6/21/2019	CADPLN	3:30:00 PM	2.8492	2.8495			N/A
6/21/2019	CADSEK	9:30:00 AM	7.1393	7.1425			N/A
6/21/2019	CADSEK	11:30:00 AM	7.1155	7.1195			N/A
6/21/2019	CADSEK	1:30:00 PM	7.1154	7.1186			N/A
6/21/2019	CADSEK	3:30:00 PM	7.115	7.1147			N/A
6/21/2019	CADSGD	9:30:00 AM	1.0285	1.0288			N/A
6/21/2019	CADSGD	11:30:00 AM	1.0282	1.0285			N/A
6/21/2019	CADSGD	1:30:00 PM	1.0288	1.0291			N/A
6/21/2019	CADSGD	3:30:00 PM	1.0281	1.0283			N/A
6/21/2019	CADZAR	9:30:00 AM	10.8975	10.9066			N/A
6/21/2019	CADZAR	11:30:00 AM	10.9035	10.9171			N/A
6/21/2019	CADZAR	1:30:00 PM	10.892	10.8978			N/A
6/21/2019	CADZAR	3:30:00 PM	10.8392	10.8506			N/A
6/21/2019	CHFCZK	9:30:00 AM	23.07	23.08			N/A
6/21/2019	CHFCZK	11:30:00 AM	23.038	23.053			N/A
6/21/2019	CHFCZK	1:30:00 PM	23.035	23.049			N/A
6/21/2019	CHFCZK	3:30:00 PM	23.044	23.06			N/A
6/21/2019	CHFDKK	9:30:00 AM	6.732	6.734			N/A
6/21/2019	CHFDKK	11:30:00 AM	6.719	6.722			N/A
6/21/2019	CHFDKK	1:30:00 PM	6.719	6.722			N/A
6/21/2019	CHFDKK	3:30:00 PM	6.724	6.726			N/A
6/21/2019	CHFDKK.fx	9:30:00 AM	6.7303	6.7356			N/A
6/21/2019	CHFDKK.fx	11:30:00 AM	6.7176	6.7235			N/A

6/21/2019	CHFDKK.fx	1:30:00 PM	6.7177	6.7228			N/A
6/21/2019	CHFDKK.fx	3:30:00 PM	6.7224	6.7271			N/A
6/21/2019	CHFHKD	9:30:00 AM	7.9454	7.9485			N/A
6/21/2019	CHFHKD	11:30:00 AM	7.9439	7.9465			N/A
6/21/2019	CHFHKD	1:30:00 PM	7.9487	7.9522			N/A
6/21/2019	CHFHKD	3:30:00 PM	7.9625	7.9664			N/A
6/21/2019	CHFHUF	9:30:00 AM	291.17	291.38			N/A
6/21/2019	CHFHUF	11:30:00 AM	291.28	291.52			N/A
6/21/2019	CHFHUF	1:30:00 PM	291.46	291.8			N/A
6/21/2019	CHFHUF	3:30:00 PM	291.57	291.92			N/A
6/21/2019	CHFJPY	9:30:00 AM	109.161	109.218			N/A
6/21/2019	CHFJPY	11:30:00 AM	109.251	109.303			N/A
6/21/2019	CHFJPY	1:30:00 PM	109.397	109.466			N/A
6/21/2019	CHFJPY	3:30:00 PM	109.51	109.566			N/A
6/21/2019	CHFJPY.fx	9:30:00 AM	109.194	109.182			N/A
6/21/2019	CHFJPY.fx	11:30:00 AM	109.284	109.268			N/A
6/21/2019	CHFJPY.fx	1:30:00 PM	109.43	109.43			N/A
6/21/2019	CHFJPY.fx	3:30:00 PM	109.545	109.534			N/A
6/21/2019	CHFMXN	9:30:00 AM	19.361	19.3705			N/A
6/21/2019	CHFMXN	11:30:00 AM	19.3413	19.355			N/A
6/21/2019	CHFMXN	1:30:00 PM	19.3726	19.3871			N/A
6/21/2019	CHFMXN	3:30:00 PM	19.4226	19.4388			N/A
6/21/2019	CHFNOK	9:30:00 AM	8.7207	8.7281			N/A
6/21/2019	CHFNOK	11:30:00 AM	8.704	8.7118			N/A
6/21/2019	CHFNOK	1:30:00 PM	8.7152	8.7219			N/A
6/21/2019	CHFNOK	3:30:00 PM	8.7208	8.7271			N/A
6/21/2019	CHFNOK.fx	9:30:00 AM	8.724	8.72447			N/A
6/21/2019	CHFNOK.fx	11:30:00 AM	8.70749	8.70832			N/A
6/21/2019	CHFNOK.fx	1:30:00 PM	8.71865	8.71836			N/A
6/21/2019	CHFNOK.fx	3:30:00 PM	8.72424	8.72356			N/A
6/21/2019	CHFPLN	9:30:00 AM	3.8376	3.8398			N/A
6/21/2019	CHFPLN	11:30:00 AM	3.8347	3.8376			N/A
6/21/2019	CHFPLN	1:30:00 PM	3.8341	3.8368			N/A
6/21/2019	CHFPLN	3:30:00 PM	3.8347	3.837			N/A

6/21/2019	CHFPLN.fx	9:30:00 AM	3.83516	3.84215			N/A
6/21/2019	CHFPLN.fx	11:30:00 AM	3.83226	3.83984			N/A
6/21/2019	CHFPLN.fx	1:30:00 PM	3.83184	3.83905			N/A
6/21/2019	CHFPLN.fx	3:30:00 PM	3.83223	3.83949			N/A
6/21/2019	CHFSEK	9:30:00 AM	9.5866	9.5904			N/A
6/21/2019	CHFSEK	11:30:00 AM	9.5533	9.5576			N/A
6/21/2019	CHFSEK	1:30:00 PM	9.5517	9.5549			N/A
6/21/2019	CHFSEK	3:30:00 PM	9.5713	9.5738			N/A
6/21/2019	CHFSGD	9:30:00 AM	1.3817	1.382			N/A
6/21/2019	CHFSGD	11:30:00 AM	1.381	1.3814			N/A
6/21/2019	CHFSGD	1:30:00 PM	1.3818	1.3822			N/A
6/21/2019	CHFSGD	3:30:00 PM	1.3834	1.3838			N/A
6/21/2019	CHFSGD.fx	9:30:00 AM	1.38186	1.38177			N/A
6/21/2019	CHFSGD.fx	11:30:00 AM	1.38114	1.38117			N/A
6/21/2019	CHFSGD.fx	1:30:00 PM	1.38198	1.38197			N/A
6/21/2019	CHFSGD.fx	3:30:00 PM	1.38352	1.38358			N/A
6/21/2019	CHFZAR	9:30:00 AM	14.6354	14.6398			N/A
6/21/2019	CHFZAR	11:30:00 AM	14.6445	14.6522			N/A
6/21/2019	CHFZAR	1:30:00 PM	14.6246	14.6228			N/A
6/21/2019	CHFZAR	3:30:00 PM	14.5865	14.5992			N/A
6/21/2019	CZKJPY	9:30:00 AM	4.731	4.735			N/A
6/21/2019	CZKJPY	11:30:00 AM					N/A
6/21/2019	CZKJPY	1:30:00 PM	4.749	4.752			N/A
6/21/2019	CZKJPY	3:30:00 PM					N/A
6/21/2019	DAX30.i	9:30:00 AM	12334.24	12332.99			N/A
6/21/2019	DAX30.i	11:30:00 AM	12389.74	12379.49			N/A
6/21/2019	DAX30.i	1:30:00 PM	12334.74	12331.74			N/A
6/21/2019	DAX30.i	3:30:00 PM	12344.74	12339.49			N/A
6/21/2019	DJ30.i	9:30:00 AM					N/A
6/21/2019	DJ30.i	11:30:00 AM					N/A
6/21/2019	DJ30.i	1:30:00 PM					N/A
6/21/2019	DJ30.i	3:30:00 PM					N/A
6/21/2019	DKKJPY	9:30:00 AM	16.22	16.24			N/A
6/21/2019	DKKJPY	11:30:00 AM	16.26	16.28			N/A

6/21/2019	DKKJPY	1:30:00 PM	16.28	16.3			N/A
6/21/2019	DKKJPY	3:30:00 PM					N/A
6/21/2019	EURAUD	9:30:00 AM	1.62933	1.62967			N/A
6/21/2019	EURAUD	11:30:00 AM	1.63322	1.6337			N/A
6/21/2019	EURAUD	1:30:00 PM	1.6347	1.6349			N/A
6/21/2019	EURAUD	3:30:00 PM	1.63779	1.63809			N/A
6/21/2019	EURAUD.fx	9:30:00 AM	1.62954	1.62946			N/A
6/21/2019	EURAUD.fx	11:30:00 AM	1.63342	1.63349			N/A
6/21/2019	EURAUD.fx	1:30:00 PM	1.6349	1.63469			N/A
6/21/2019	EURAUD.fx	3:30:00 PM	1.63799	1.63788			N/A
6/21/2019	EURCAD	9:30:00 AM	1.48838	1.4891			N/A
6/21/2019	EURCAD	11:30:00 AM	1.49099	1.49182			N/A
6/21/2019	EURCAD	1:30:00 PM	1.49076	1.49164			N/A
6/21/2019	EURCAD	3:30:00 PM	1.49383	1.4937			N/A
6/21/2019	EURCAD.fx	9:30:00 AM	1.48879	1.48868			N/A
6/21/2019	EURCAD.fx	11:30:00 AM	1.49141	1.49141			N/A
6/21/2019	EURCAD.fx	1:30:00 PM	1.49117	1.49123			N/A
6/21/2019	EURCAD.fx	3:30:00 PM	1.49408	1.4935			N/A
6/21/2019	EURCHF	9:30:00 AM	1.10885	1.10883			N/A
6/21/2019	EURCHF	11:30:00 AM	1.11088	1.11093			N/A
6/21/2019	EURCHF	1:30:00 PM	1.11095	1.1109			N/A
6/21/2019	EURCHF	3:30:00 PM	1.11022	1.11017			N/A
6/21/2019	EURCHF.fx	9:30:00 AM	1.1089	1.10878			N/A
6/21/2019	EURCHF.fx	11:30:00 AM	1.11093	1.11088			N/A
6/21/2019	EURCHF.fx	1:30:00 PM	1.11101	1.11083			N/A
6/21/2019	EURCHF.fx	3:30:00 PM	1.11027	1.11012			N/A
6/21/2019	EURCZK	9:30:00 AM	25.565	25.601			N/A
6/21/2019	EURCZK	11:30:00 AM	25.577	25.617			N/A
6/21/2019	EURCZK	1:30:00 PM	25.576	25.614			N/A
6/21/2019	EURCZK	3:30:00 PM	25.568	25.607			N/A
6/21/2019	EURDKK	9:30:00 AM	7.4637	7.4649			N/A
6/21/2019	EURDKK	11:30:00 AM	7.4643	7.4654			N/A
6/21/2019	EURDKK	1:30:00 PM	7.4645	7.4658			N/A
6/21/2019	EURDKK	3:30:00 PM	7.4634	7.4647			N/A

6/21/2019	EURGBP	9:30:00 AM	0.88965	0.88966			N/A
6/21/2019	EURGBP	11:30:00 AM	0.89139	0.89142			N/A
6/21/2019	EURGBP	1:30:00 PM	0.89284	0.89285			N/A
6/21/2019	EURGBP	3:30:00 PM	0.89404	0.89415			N/A
6/21/2019	EURGBP.fx	9:30:00 AM	0.88968	0.8896			N/A
6/21/2019	EURGBP.fx	11:30:00 AM	0.89142	0.89136			N/A
6/21/2019	EURGBP.fx	1:30:00 PM	0.89287	0.8928			N/A
6/21/2019	EURGBP.fx	3:30:00 PM	0.89406	0.89411			N/A
6/21/2019	EURHKD	9:30:00 AM	8.8107	8.8148			N/A
6/21/2019	EURHKD	11:30:00 AM	8.8245	8.8298			N/A
6/21/2019	EURHKD	1:30:00 PM	8.8307	8.8356			N/A
6/21/2019	EURHKD	3:30:00 PM	8.8412	8.8447			N/A
6/21/2019	EURHKD.fx	9:30:00 AM	8.81349	8.81209			N/A
6/21/2019	EURHKD.fx	11:30:00 AM	8.82733	8.827			N/A
6/21/2019	EURHKD.fx	1:30:00 PM	8.8335	8.83285			N/A
6/21/2019	EURHKD.fx	3:30:00 PM	8.84397	8.842			N/A
6/21/2019	EURHUF	9:30:00 AM	322.8	323.52			N/A
6/21/2019	EURHUF	11:30:00 AM	323.51	323.97			N/A
6/21/2019	EURHUF	1:30:00 PM	323.73	324.44			N/A
6/21/2019	EURHUF	3:30:00 PM	323.78	324.47			N/A
6/21/2019	EURHUF.fx	9:30:00 AM	323.051	323.272			N/A
6/21/2019	EURHUF.fx	11:30:00 AM	323.789	323.978			N/A
6/21/2019	EURHUF.fx	1:30:00 PM	323.992	324.17			N/A
6/21/2019	EURHUF.fx	3:30:00 PM	324.05	324.209			N/A
6/21/2019	EURJPY	9:30:00 AM	121.084	121.064			N/A
6/21/2019	EURJPY	11:30:00 AM	121.396	121.387			N/A
6/21/2019	EURJPY	1:30:00 PM	121.578	121.572			N/A
6/21/2019	EURJPY	3:30:00 PM	121.618	121.615			N/A
6/21/2019	EURJPY.fx	9:30:00 AM	121.086	121.06			N/A
6/21/2019	EURJPY.fx	11:30:00 AM	121.399	121.383			N/A
6/21/2019	EURJPY.fx	1:30:00 PM	121.581	121.568			N/A
6/21/2019	EURJPY.fx	3:30:00 PM	121.62	121.612			N/A
6/21/2019	EURMXN	9:30:00 AM	21.4705	21.4854			N/A
6/21/2019	EURMXN	11:30:00 AM	21.487	21.5074			N/A

6/21/2019	EURMXN	1:30:00 PM	21.5241	21.5426			N/A
6/21/2019	EURMXN	3:30:00 PM	21.5678	21.5847			N/A
6/21/2019	EURMXN.fx	9:30:00 AM	21.4794	21.4764			N/A
6/21/2019	EURMXN.fx	11:30:00 AM	21.4956	21.4989			N/A
6/21/2019	EURMXN.fx	1:30:00 PM	21.5325	21.5336			N/A
6/21/2019	EURMXN.fx	3:30:00 PM	21.5765	21.5756			N/A
6/21/2019	EURNOK	9:30:00 AM	9.6676	9.6798			N/A
6/21/2019	EURNOK	11:30:00 AM	9.6671	9.6796			N/A
6/21/2019	EURNOK	1:30:00 PM	9.6797	9.6917			N/A
6/21/2019	EURNOK	3:30:00 PM	9.6792	9.6913			N/A
6/21/2019	EURNOK.fx	9:30:00 AM	9.67322	9.67428			N/A
6/21/2019	EURNOK.fx	11:30:00 AM	9.67234	9.67431			N/A
6/21/2019	EURNOK.fx	1:30:00 PM	9.68533	9.68628			N/A
6/21/2019	EURNOK.fx	3:30:00 PM	9.68462	9.68577			N/A
6/21/2019	EURNZD	9:30:00 AM	1.71449	1.71506			N/A
6/21/2019	EURNZD	11:30:00 AM	1.72004	1.72081			N/A
6/21/2019	EURNZD	1:30:00 PM	1.72168	1.72247			N/A
6/21/2019	EURNZD	3:30:00 PM	1.72506	1.7256			N/A
6/21/2019	EURNZD.fx	9:30:00 AM	1.71492	1.71463			N/A
6/21/2019	EURNZD.fx	11:30:00 AM	1.72045	1.72039			N/A
6/21/2019	EURNZD.fx	1:30:00 PM	1.7221	1.72201			N/A
6/21/2019	EURNZD.fx	3:30:00 PM	1.72547	1.72517			N/A
6/21/2019	EURPLN	9:30:00 AM	4.2552	4.258			N/A
6/21/2019	EURPLN	11:30:00 AM	4.2598	4.2628			N/A
6/21/2019	EURPLN	1:30:00 PM	4.2592	4.2613			N/A
6/21/2019	EURPLN	3:30:00 PM	4.2568	4.2601			N/A
6/21/2019	EURPLN.fx	9:30:00 AM	4.25457	4.25852			N/A
6/21/2019	EURPLN.fx	11:30:00 AM	4.25922	4.26342			N/A
6/21/2019	EURPLN.fx	1:30:00 PM	4.25867	4.26312			N/A
6/21/2019	EURPLN.fx	3:30:00 PM	4.25626	4.26073			N/A
6/21/2019	EURRUB	9:30:00 AM					N/A
6/21/2019	EURRUB	11:30:00 AM	70.972	71.414			N/A
6/21/2019	EURRUB	1:30:00 PM	70.97	71.404			N/A
6/21/2019	EURRUB	3:30:00 PM	71.259	71.691			N/A



6/21/2019	EURSEK	9:30:00 AM	10.6314	10.6365			N/A
6/21/2019	EURSEK	11:30:00 AM	10.6148	10.6198			N/A
6/21/2019	EURSEK	1:30:00 PM	10.6121	10.6165			N/A
6/21/2019	EURSEK	3:30:00 PM	10.6279	10.6327			N/A
6/21/2019	EURSEK.fx	9:30:00 AM	10.63278	10.63502			N/A
6/21/2019	EURSEK.fx	11:30:00 AM	10.61635	10.61817			N/A
6/21/2019	EURSEK.fx	1:30:00 PM	10.61366	10.61494			N/A
6/21/2019	EURSEK.fx	3:30:00 PM	10.62945	10.63105			N/A
6/21/2019	EURSGD	9:30:00 AM	1.5319	1.5327			N/A
6/21/2019	EURSGD	11:30:00 AM	1.5339	1.5346			N/A
6/21/2019	EURSGD	1:30:00 PM	1.5348	1.5357			N/A
6/21/2019	EURSGD	3:30:00 PM	1.5357	1.5364			N/A
6/21/2019	EURSGD.fx	9:30:00 AM	1.53229	1.53225			N/A
6/21/2019	EURSGD.fx	11:30:00 AM	1.53427	1.53433			N/A
6/21/2019	EURSGD.fx	1:30:00 PM	1.53519	1.53527			N/A
6/21/2019	EURSGD.fx	3:30:00 PM	1.53607	1.53596			N/A
6/21/2019	EURUSD	9:30:00 AM	1.12833	1.12832			N/A
6/21/2019	EURUSD	11:30:00 AM	1.13025	1.13036			N/A
6/21/2019	EURUSD	1:30:00 PM	1.13076	1.13085			N/A
6/21/2019	EURUSD	3:30:00 PM	1.1315	1.1314			N/A
6/21/2019	EURUSD.fx	9:30:00 AM	1.12852	1.12841			N/A
6/21/2019	EURUSD.fx	11:30:00 AM	1.13046	1.13045			N/A
6/21/2019	EURUSD.fx	1:30:00 PM	1.13097	1.13093			N/A
6/21/2019	EURUSD.fx	3:30:00 PM	1.13169	1.13149			N/A
6/21/2019	EURZAR	9:30:00 AM	16.2304	16.2413			N/A
6/21/2019	EURZAR	11:30:00 AM	16.272	16.2902			N/A
6/21/2019	EURZAR	1:30:00 PM	16.2521	16.2509			N/A
6/21/2019	EURZAR	3:30:00 PM	16.2013	16.22			N/A
6/21/2019	EURZAR.fx	9:30:00 AM	16.2297	16.2433			N/A
6/21/2019	EURZAR.fx	11:30:00 AM	16.27124	16.2909			N/A
6/21/2019	EURZAR.fx	1:30:00 PM	16.25156	16.25103			N/A
6/21/2019	EURZAR.fx	3:30:00 PM	16.20036	16.22104			N/A
6/21/2019	GBPAUD	9:30:00 AM	1.83211	1.83247			N/A
6/21/2019	GBPAUD	11:30:00 AM	1.83285	1.83347			N/A

6/21/2019	GBPAUD	1:30:00 PM	1.83132	1.83204			N/A
6/21/2019	GBPAUD	3:30:00 PM	1.83233	1.83301			N/A
6/21/2019	GBPAUD.fx	9:30:00 AM	1.83252	1.83206			N/A
6/21/2019	GBPAUD.fx	11:30:00 AM	1.83325	1.83308			N/A
6/21/2019	GBPAUD.fx	1:30:00 PM	1.8317	1.83165			N/A
6/21/2019	GBPAUD.fx	3:30:00 PM	1.83271	1.83262			N/A
6/21/2019	GBPCAD	9:30:00 AM	1.67297	1.67377			N/A
6/21/2019	GBPCAD	11:30:00 AM	1.67284	1.67345			N/A
6/21/2019	GBPCAD	1:30:00 PM	1.66991	1.67053			N/A
6/21/2019	GBPCAD	3:30:00 PM	1.67085	1.67092			N/A
6/21/2019	GBPCAD.fx	9:30:00 AM	1.67335	1.67336			N/A
6/21/2019	GBPCAD.fx	11:30:00 AM	1.67324	1.67306			N/A
6/21/2019	GBPCAD.fx	1:30:00 PM	1.6703	1.67013			N/A
6/21/2019	GBPCAD.fx	3:30:00 PM	1.67106	1.67054			N/A
6/21/2019	GBPCHF	9:30:00 AM	1.24623	1.24662			N/A
6/21/2019	GBPCHF	11:30:00 AM	1.24603	1.24642			N/A
6/21/2019	GBPCHF	1:30:00 PM	1.24418	1.24444			N/A
6/21/2019	GBPCHF	3:30:00 PM	1.24156	1.24185			N/A
6/21/2019	GBPCHF.fx	9:30:00 AM	1.24643	1.24642			N/A
6/21/2019	GBPCHF.fx	11:30:00 AM	1.24621	1.24621			N/A
6/21/2019	GBPCHF.fx	1:30:00 PM	1.24437	1.24423			N/A
6/21/2019	GBPCHF.fx	3:30:00 PM	1.24174	1.24165			N/A
6/21/2019	GBPCZK	9:30:00 AM	28.746	28.764			N/A
6/21/2019	GBPCZK	11:30:00 AM	28.706	28.723			N/A
6/21/2019	GBPCZK	1:30:00 PM	28.657	28.675			N/A
6/21/2019	GBPCZK	3:30:00 PM	28.606	28.629			N/A
6/21/2019	GBPDKK	9:30:00 AM	8.387	8.397			N/A
6/21/2019	GBPDKK	11:30:00 AM	8.371	8.381			N/A
6/21/2019	GBPDKK	1:30:00 PM	8.357	8.368			N/A
6/21/2019	GBPDKK	3:30:00 PM	8.345	8.356			N/A
6/21/2019	GBPDKK.fx	9:30:00 AM	8.3855	8.3977			N/A
6/21/2019	GBPDKK.fx	11:30:00 AM	8.3693	8.3815			N/A
6/21/2019	GBPDKK.fx	1:30:00 PM	8.3557	8.3678			N/A
6/21/2019	GBPDKK.fx	3:30:00 PM	8.3438	8.3567			N/A

6/21/2019	GBPHKD	9:30:00 AM	9.9018	9.9046			N/A
6/21/2019	GBPHKD	11:30:00 AM	9.8977	9.9018			N/A
6/21/2019	GBPHKD	1:30:00 PM	9.8895	9.8931			N/A
6/21/2019	GBPHKD	3:30:00 PM	9.8855	9.89			N/A
6/21/2019	GBPHUF	9:30:00 AM	362.84	363.1			N/A
6/21/2019	GBPHUF	11:30:00 AM	362.95	363.21			N/A
6/21/2019	GBPHUF	1:30:00 PM	362.61	362.99			N/A
6/21/2019	GBPHUF	3:30:00 PM	361.96	362.42			N/A
6/21/2019	GBPJPY	9:30:00 AM	136.092	136.107			N/A
6/21/2019	GBPJPY	11:30:00 AM	136.18	136.191			N/A
6/21/2019	GBPJPY	1:30:00 PM	136.156	136.179			N/A
6/21/2019	GBPJPY	3:30:00 PM	136.004	136.038			N/A
6/21/2019	GBPJPY.fx	9:30:00 AM	136.11	136.087			N/A
6/21/2019	GBPJPY.fx	11:30:00 AM	136.2	136.171			N/A
6/21/2019	GBPJPY.fx	1:30:00 PM	136.176	136.16			N/A
6/21/2019	GBPJPY.fx	3:30:00 PM	136.02	136.02			N/A
6/21/2019	GBPMXN	9:30:00 AM	24.1296	24.1358			N/A
6/21/2019	GBPMXN	11:30:00 AM	24.1029	24.1129			N/A
6/21/2019	GBPMXN	1:30:00 PM	24.1049	24.1154			N/A
6/21/2019	GBPMXN	3:30:00 PM	24.1144	24.1294			N/A
6/21/2019	GBPNOK	9:30:00 AM	10.868	10.8792			N/A
6/21/2019	GBPNOK	11:30:00 AM	10.8465	10.8574			N/A
6/21/2019	GBPNOK	1:30:00 PM	10.8432	10.8531			N/A
6/21/2019	GBPNOK	3:30:00 PM	10.8268	10.8386			N/A
6/21/2019	GBPNOK.fx	9:30:00 AM	10.87307	10.87413			N/A
6/21/2019	GBPNOK.fx	11:30:00 AM	10.85125	10.85247			N/A
6/21/2019	GBPNOK.fx	1:30:00 PM	10.84802	10.84811			N/A
6/21/2019	GBPNOK.fx	3:30:00 PM	10.83175	10.83351			N/A
6/21/2019	GBPNZD	9:30:00 AM	1.92734	1.92756			N/A
6/21/2019	GBPNZD	11:30:00 AM	1.92983	1.93029			N/A
6/21/2019	GBPNZD	1:30:00 PM	1.92845	1.92906			N/A
6/21/2019	GBPNZD	3:30:00 PM	1.92952	1.93004			N/A
6/21/2019	GBPNZD.fx	9:30:00 AM	1.92769	1.92718			N/A
6/21/2019	GBPNZD.fx	11:30:00 AM	1.93018	1.92993			N/A

6/21/2019	GBPNZD.fx	1:30:00 PM	1.92884	1.92866			N/A
6/21/2019	GBPNZD.fx	3:30:00 PM	1.9299	1.92965			N/A
6/21/2019	GBPPLN	9:30:00 AM	4.784	4.7851			N/A
6/21/2019	GBPPLN	11:30:00 AM	4.7798	4.7815			N/A
6/21/2019	GBPPLN	1:30:00 PM	4.7718	4.7731			N/A
6/21/2019	GBPPLN	3:30:00 PM	4.762	4.764			N/A
6/21/2019	GBPPLN.fx	9:30:00 AM	4.78196	4.78716			N/A
6/21/2019	GBPPLN.fx	11:30:00 AM	4.77754	4.78354			N/A
6/21/2019	GBPPLN.fx	1:30:00 PM	4.76948	4.77521			N/A
6/21/2019	GBPPLN.fx	3:30:00 PM	4.75994	4.76607			N/A
6/21/2019	GBPSEK	9:30:00 AM	11.9487	11.9572			N/A
6/21/2019	GBPSEK	11:30:00 AM	11.9064	11.9151			N/A
6/21/2019	GBPSEK	1:30:00 PM	11.8846	11.8921			N/A
6/21/2019	GBPSEK	3:30:00 PM	11.8847	11.8945			N/A
6/21/2019	GBPSEK.fx	9:30:00 AM	11.94468	11.96101			N/A
6/21/2019	GBPSEK.fx	11:30:00 AM	11.90233	11.91889			N/A
6/21/2019	GBPSEK.fx	1:30:00 PM	11.88074	11.89592			N/A
6/21/2019	GBPSEK.fx	3:30:00 PM	11.88097	11.89828			N/A
6/21/2019	GBPSGD	9:30:00 AM	1.7219	1.7226			N/A
6/21/2019	GBPSGD	11:30:00 AM	1.721	1.7216			N/A
6/21/2019	GBPSGD	1:30:00 PM	1.7192	1.7199			N/A
6/21/2019	GBPSGD	3:30:00 PM	1.7177	1.7183			N/A
6/21/2019	GBPSGD.fx	9:30:00 AM	1.72009	1.72445			N/A
6/21/2019	GBPSGD.fx	11:30:00 AM	1.71915	1.72333			N/A
6/21/2019	GBPSGD.fx	1:30:00 PM	1.71744	1.72165			N/A
6/21/2019	GBPSGD.fx	3:30:00 PM	1.71582	1.72016			N/A
6/21/2019	GBPUSD	9:30:00 AM	1.26846	1.26846			N/A
6/21/2019	GBPUSD	11:30:00 AM	1.26826	1.26816			N/A
6/21/2019	GBPUSD	1:30:00 PM	1.26677	1.26668			N/A
6/21/2019	GBPUSD	3:30:00 PM	1.26572	1.26557			N/A
6/21/2019	GBPUSD.fx	9:30:00 AM	1.26852	1.2684			N/A
6/21/2019	GBPUSD.fx	11:30:00 AM	1.2683	1.26811			N/A
6/21/2019	GBPUSD.fx	1:30:00 PM	1.26683	1.26662			N/A
6/21/2019	GBPUSD.fx	3:30:00 PM	1.26576	1.26553			N/A

6/21/2019	GBPZAR	9:30:00 AM	18.2403	18.262			N/A
6/21/2019	GBPZAR	11:30:00 AM	18.251	18.2768			N/A
6/21/2019	GBPZAR	1:30:00 PM	18.1969	18.206			N/A
6/21/2019	GBPZAR	3:30:00 PM	18.1178	18.1453			N/A
6/21/2019	GBPZAR.fx	9:30:00 AM	18.247	18.2557			N/A
6/21/2019	GBPZAR.fx	11:30:00 AM	18.2583	18.2694			N/A
6/21/2019	GBPZAR.fx	1:30:00 PM	18.2038	18.1991			N/A
6/21/2019	GBPZAR.fx	3:30:00 PM	18.125	18.1378			N/A
6/21/2019	GOLD	9:30:00 AM	1394.42	1394.31			N/A
6/21/2019	GOLD	11:30:00 AM	1388.45	1388.45			N/A
6/21/2019	GOLD	1:30:00 PM	1391.98	1391.01			N/A
6/21/2019	GOLD	3:30:00 PM	1395.54	1394.25			N/A
6/21/2019	HKDJPY	9:30:00 AM	13.74	13.75			N/A
6/21/2019	HKDJPY	11:30:00 AM					N/A
6/21/2019	HKDJPY	1:30:00 PM	13.77	13.77			N/A
6/21/2019	HKDJPY	3:30:00 PM	13.75	13.76			N/A
6/21/2019	HKDJPY.fx	9:30:00 AM	13.735	13.74			N/A
6/21/2019	HKDJPY.fx	11:30:00 AM	13.748	13.754			N/A
6/21/2019	HKDJPY.fx	1:30:00 PM	13.759	13.766			N/A
6/21/2019	HKDJPY.fx	3:30:00 PM	13.749	13.753			N/A
6/21/2019	HUFJPY	9:30:00 AM	0.375	0.3753			N/A
6/21/2019	HUFJPY	11:30:00 AM	0.3751	0.3754			N/A
6/21/2019	HUFJPY	1:30:00 PM	0.3754	0.3757			N/A
6/21/2019	HUFJPY	3:30:00 PM	0.3756	0.3759			N/A
6/21/2019	JP225.i	9:30:00 AM	21272.72	21282.72			N/A
6/21/2019	JP225.i	11:30:00 AM	21295.22	21305.22			N/A
6/21/2019	JP225.i	1:30:00 PM	21300.22	21311.05			N/A
6/21/2019	JP225.i	3:30:00 PM	21275.22	21278.17			N/A
6/21/2019	MXNJPY	9:30:00 AM	5.64	5.65			N/A
6/21/2019	MXNJPY	11:30:00 AM	5.65	5.66			N/A
6/21/2019	MXNJPY	1:30:00 PM	5.65	5.66			N/A
6/21/2019	MXNJPY	3:30:00 PM	5.64	5.65			N/A
6/21/2019	NASDAQ.i	9:30:00 AM					N/A
6/21/2019	NASDAQ.i	11:30:00 AM					N/A

6/21/2019	NASDAQ.i	1:30:00 PM					N/A
6/21/2019	NASDAQ.i	3:30:00 PM					N/A
6/21/2019	NOKJPY	9:30:00 AM	12.51	12.53			N/A
6/21/2019	NOKJPY	11:30:00 AM	12.54	12.57			N/A
6/21/2019	NOKJPY	1:30:00 PM	12.53	12.57			N/A
6/21/2019	NOKJPY	3:30:00 PM	12.55	12.58			N/A
6/21/2019	NOKJPY.fx	9:30:00 AM	12.513	12.519			N/A
6/21/2019	NOKJPY.fx	11:30:00 AM	12.546	12.552			N/A
6/21/2019	NOKJPY.fx	1:30:00 PM	12.549	12.555			N/A
6/21/2019	NOKJPY.fx	3:30:00 PM	12.553	12.56			N/A
6/21/2019	NZDCAD	9:30:00 AM	0.86792	0.86842			N/A
6/21/2019	NZDCAD	11:30:00 AM	0.86652	0.86724			N/A
6/21/2019	NZDCAD	1:30:00 PM	0.86559	0.86629			N/A
6/21/2019	NZDCAD	3:30:00 PM	0.86573	0.8661			N/A
6/21/2019	NZDCAD.fx	9:30:00 AM	0.86825	0.86809			N/A
6/21/2019	NZDCAD.fx	11:30:00 AM	0.86688	0.8669			N/A
6/21/2019	NZDCAD.fx	1:30:00 PM	0.86594	0.86594			N/A
6/21/2019	NZDCAD.fx	3:30:00 PM	0.86596	0.86577			N/A
6/21/2019	NZDCHF	9:30:00 AM	0.64637	0.64691			N/A
6/21/2019	NZDCHF	11:30:00 AM	0.64537	0.64604			N/A
6/21/2019	NZDCHF	1:30:00 PM	0.64481	0.64545			N/A
6/21/2019	NZDCHF	3:30:00 PM	0.64319	0.64375			N/A
6/21/2019	NZDCHF.fx	9:30:00 AM	0.64671	0.64655			N/A
6/21/2019	NZDCHF.fx	11:30:00 AM	0.64571	0.64568			N/A
6/21/2019	NZDCHF.fx	1:30:00 PM	0.64515	0.6451			N/A
6/21/2019	NZDCHF.fx	3:30:00 PM	0.64352	0.64341			N/A
6/21/2019	NZDCZK	9:30:00 AM	14.912	14.924			N/A
6/21/2019	NZDCZK	11:30:00 AM	14.87	14.883			N/A
6/21/2019	NZDCZK	1:30:00 PM	14.856	14.868			N/A
6/21/2019	NZDCZK	3:30:00 PM	14.824	14.834			N/A
6/21/2019	NZDDKK	9:30:00 AM	4.351	4.354			N/A
6/21/2019	NZDDKK	11:30:00 AM	4.337	4.341			N/A
6/21/2019	NZDDKK	1:30:00 PM					N/A
6/21/2019	NZDDKK	3:30:00 PM	4.323	4.327			N/A

6/21/2019	NZDHKD	9:30:00 AM	5.137	5.1388			N/A
6/21/2019	NZDHKD	11:30:00 AM	5.1279	5.1305			N/A
6/21/2019	NZDHKD	1:30:00 PM	5.1266	5.129			N/A
6/21/2019	NZDHKD	3:30:00 PM	5.123	5.1241			N/A
6/21/2019	NZDHUF	9:30:00 AM	188.19	188.42			N/A
6/21/2019	NZDHUF	11:30:00 AM	187.98	188.24			N/A
6/21/2019	NZDHUF	1:30:00 PM	187.96	188.23			N/A
6/21/2019	NZDHUF	3:30:00 PM	187.54	187.81			N/A
6/21/2019	NZDJPY	9:30:00 AM	70.587	70.629			N/A
6/21/2019	NZDJPY	11:30:00 AM	70.524	70.596			N/A
6/21/2019	NZDJPY	1:30:00 PM	70.565	70.632			N/A
6/21/2019	NZDJPY	3:30:00 PM	70.457	70.519			N/A
6/21/2019	NZDJPY.fx	9:30:00 AM	70.619	70.595			N/A
6/21/2019	NZDJPY.fx	11:30:00 AM	70.555	70.563			N/A
6/21/2019	NZDJPY.fx	1:30:00 PM	70.597	70.598			N/A
6/21/2019	NZDJPY.fx	3:30:00 PM	70.488	70.487			N/A
6/21/2019	NZDMXN	9:30:00 AM	12.5177	12.5219			N/A
6/21/2019	NZDMXN	11:30:00 AM	12.4864	12.4926			N/A
6/21/2019	NZDMXN	1:30:00 PM	12.4973	12.5014			N/A
6/21/2019	NZDMXN	3:30:00 PM	12.4973	12.501			N/A
6/21/2019	NZDNOK	9:30:00 AM	5.6368	5.6396			N/A
6/21/2019	NZDNOK	11:30:00 AM	5.618	5.6205			N/A
6/21/2019	NZDNOK	1:30:00 PM	5.6206	5.6237			N/A
6/21/2019	NZDNOK	3:30:00 PM	5.6073	5.6105			N/A
6/21/2019	NZDPLN	9:30:00 AM	2.4808	2.4822			N/A
6/21/2019	NZDPLN	11:30:00 AM	2.4748	2.476			N/A
6/21/2019	NZDPLN	1:30:00 PM	2.4727	2.4739			N/A
6/21/2019	NZDPLN	3:30:00 PM	2.4661	2.4672			N/A
6/21/2019	NZDSEK	9:30:00 AM	6.195	6.2019			N/A
6/21/2019	NZDSEK	11:30:00 AM	6.1653	6.1721			N/A
6/21/2019	NZDSEK	1:30:00 PM	6.1584	6.1643			N/A
6/21/2019	NZDSEK	3:30:00 PM	6.1551	6.1611			N/A
6/21/2019	NZDSGD	9:30:00 AM	0.8932	0.8938			N/A
6/21/2019	NZDSGD	11:30:00 AM	0.8915	0.892			N/A

6/21/2019	NZDSGD	1:30:00 PM	0.8912	0.8919			N/A
6/21/2019	NZDSGD	3:30:00 PM	0.89	0.8906			N/A
6/21/2019	NZDSGD.fx	9:30:00 AM	0.89332	0.89371			N/A
6/21/2019	NZDSGD.fx	11:30:00 AM	0.89149	0.89211			N/A
6/21/2019	NZDSGD.fx	1:30:00 PM	0.89123	0.89181			N/A
6/21/2019	NZDSGD.fx	3:30:00 PM	0.89009	0.8905			N/A
6/21/2019	NZDUSD	9:30:00 AM	0.65805	0.65802			N/A
6/21/2019	NZDUSD	11:30:00 AM	0.65696	0.6571			N/A
6/21/2019	NZDUSD	1:30:00 PM	0.65664	0.65676			N/A
6/21/2019	NZDUSD	3:30:00 PM	0.65586	0.6558			N/A
6/21/2019	NZDUSD.fx	9:30:00 AM	0.65813	0.65803			N/A
6/21/2019	NZDUSD.fx	11:30:00 AM	0.65702	0.65711			N/A
6/21/2019	NZDUSD.fx	1:30:00 PM	0.65672	0.65677			N/A
6/21/2019	NZDUSD.fx	3:30:00 PM	0.65598	0.65582			N/A
6/21/2019	NZDZAR	9:30:00 AM	9.456	9.4685			N/A
6/21/2019	NZDZAR	11:30:00 AM	9.4477	9.4636			N/A
6/21/2019	NZDZAR	1:30:00 PM	9.4285	9.4348			N/A
6/21/2019	NZDZAR	3:30:00 PM	9.3789	9.3955			N/A
6/21/2019	SEKJPY	9:30:00 AM	11.39	11.39			N/A
6/21/2019	SEKJPY	11:30:00 AM	11.43	11.44			N/A
6/21/2019	SEKJPY	1:30:00 PM	11.46	11.46			N/A
6/21/2019	SEKJPY	3:30:00 PM					N/A
6/21/2019	SEKJPY.fx	9:30:00 AM	11.376	11.394			N/A
6/21/2019	SEKJPY.fx	11:30:00 AM	11.424	11.442			N/A
6/21/2019	SEKJPY.fx	1:30:00 PM	11.445	11.462			N/A
6/21/2019	SEKJPY.fx	3:30:00 PM	11.431	11.449			N/A
6/21/2019	SGDJPY	9:30:00 AM	78.99	79.01			N/A
6/21/2019	SGDJPY	11:30:00 AM	79.1	79.11			N/A
6/21/2019	SGDJPY	1:30:00 PM	79.18	79.18			N/A
6/21/2019	SGDJPY	3:30:00 PM	79.15	79.16			N/A
6/21/2019	SILVER	9:30:00 AM	15.15	15.52			N/A
6/21/2019	SILVER	11:30:00 AM	15.08	15.45			N/A
6/21/2019	SILVER	1:30:00 PM	15.11	15.47			N/A
6/21/2019	SILVER	3:30:00 PM	15.15	15.5			N/A



6/21/2019	SPX500.i	9:30:00 AM	2950.07	2950.62			N/A
6/21/2019	SPX500.i	11:30:00 AM	2953.57	2953.87			N/A
6/21/2019	SPX500.i	1:30:00 PM	2949.82	2950.37			N/A
6/21/2019	SPX500.i	3:30:00 PM	2951.07	2948.87			N/A
6/21/2019	UK100.i	9:30:00 AM	7430.62	7432.62			N/A
6/21/2019	UK100.i	11:30:00 AM	7459.12	7459.2			N/A
6/21/2019	UK100.i	1:30:00 PM	7440.87	7439.87			N/A
6/21/2019	UK100.i	3:30:00 PM	7444.62	7443.7			N/A
6/21/2019	USDCAD	9:30:00 AM	1.31924	1.3193			N/A
6/21/2019	USDCAD	11:30:00 AM	1.3193	1.31938			N/A
6/21/2019	USDCAD	1:30:00 PM	1.31852	1.3186			N/A
6/21/2019	USDCAD	3:30:00 PM	1.32038	1.31952		1600	N/A
6/21/2019	USDCAD.fx	9:30:00 AM	1.31928	1.31926			N/A
6/21/2019	USDCAD.fx	11:30:00 AM	1.31933	1.31934			N/A
6/21/2019	USDCAD.fx	1:30:00 PM	1.31855	1.31856			N/A
6/21/2019	USDCAD.fx	3:30:00 PM	1.32031	1.31952			N/A
6/21/2019	USDCHF	9:30:00 AM	0.98255	0.98265			N/A
6/21/2019	USDCHF	11:30:00 AM	0.98266	0.98271			N/A
6/21/2019	USDCHF	1:30:00 PM	0.98227	0.98229			N/A
6/21/2019	USDCHF	3:30:00 PM	0.98102	0.98114			N/A
6/21/2019	USDCHF.fx	9:30:00 AM	0.9826	0.98258			N/A
6/21/2019	USDCHF.fx	11:30:00 AM	0.98271	0.98265		2000	N/A
6/21/2019	USDCHF.fx	1:30:00 PM	0.98232	0.98223			N/A
6/21/2019	USDCHF.fx	3:30:00 PM	0.98105	0.98109			N/A
6/21/2019	USDCZK	9:30:00 AM	22.681	22.702			N/A
6/21/2019	USDCZK	11:30:00 AM	22.652	22.674			N/A
6/21/2019	USDCZK	1:30:00 PM	22.64	22.663			N/A
6/21/2019	USDCZK	3:30:00 PM	22.624	22.642			N/A
6/21/2019	USDCZK.fx	9:30:00 AM	22.6894	22.6931			N/A
6/21/2019	USDCZK.fx	11:30:00 AM	22.661	22.666			N/A
6/21/2019	USDCZK.fx	1:30:00 PM	22.6488	22.6541			N/A
6/21/2019	USDCZK.fx	3:30:00 PM	22.632	22.6331			N/A
6/21/2019	USDDKK	9:30:00 AM	6.6148	6.6182			N/A
6/21/2019	USDDKK	11:30:00 AM	6.6031	6.607			N/A

6/21/2019	USDDKK	1:30:00 PM	6.6002	6.6039			N/A
6/21/2019	USDDKK	3:30:00 PM	6.5971	6.5998			N/A
6/21/2019	USDDKK.fx	9:30:00 AM	6.61533	6.61616			N/A
6/21/2019	USDDKK.fx	11:30:00 AM	6.60352	6.60495			N/A
6/21/2019	USDDKK.fx	1:30:00 PM	6.6006	6.60194			N/A
6/21/2019	USDDKK.fx	3:30:00 PM	6.5976	6.59764			N/A
6/21/2019	USDHKD	9:30:00 AM	7.8095	7.8085			N/A
6/21/2019	USDHKD	11:30:00 AM	7.8085	7.8084			N/A
6/21/2019	USDHKD	1:30:00 PM	7.81	7.8104			N/A
6/21/2019	USDHKD	3:30:00 PM	7.814	7.8145			N/A
6/21/2019	USDHKD.fx	9:30:00 AM	7.80952	7.80857			N/A
6/21/2019	USDHKD.fx	11:30:00 AM	7.80849	7.80848			N/A
6/21/2019	USDHKD.fx	1:30:00 PM	7.80999	7.81047			N/A
6/21/2019	USDHKD.fx	3:30:00 PM					N/A
6/21/2019	USDHUF	9:30:00 AM	286.15	286.59			N/A
6/21/2019	USDHUF	11:30:00 AM	286.27	286.74			N/A
6/21/2019	USDHUF	1:30:00 PM	286.34	286.78			N/A
6/21/2019	USDHUF	3:30:00 PM	286.24	286.65			N/A
6/21/2019	USDHUF.fx	9:30:00 AM	286.315	286.409			N/A
6/21/2019	USDHUF.fx	11:30:00 AM	286.473	286.545			N/A
6/21/2019	USDHUF.fx	1:30:00 PM	286.535	286.587			N/A
6/21/2019	USDHUF.fx	3:30:00 PM	286.437	286.446			N/A
6/21/2019	USDINR	9:30:00 AM	64.65	74.64			N/A
6/21/2019	USDINR	11:30:00 AM	64.66	74.66			N/A
6/21/2019	USDINR	1:30:00 PM	64.54	74.54			N/A
6/21/2019	USDINR	3:30:00 PM					N/A
6/21/2019	USDJPY	9:30:00 AM	107.295	107.289			N/A
6/21/2019	USDJPY	11:30:00 AM	107.382	107.385			N/A
6/21/2019	USDJPY	1:30:00 PM	107.495	107.498			N/A
6/21/2019	USDJPY	3:30:00 PM	107.47	107.462			N/A
6/21/2019	USDJPY.fx	9:30:00 AM	107.3	107.282			N/A
6/21/2019	USDJPY.fx	11:30:00 AM	107.388	107.378			N/A
6/21/2019	USDJPY.fx	1:30:00 PM	107.5	107.491			N/A
6/21/2019	USDJPY.fx	3:30:00 PM	107.475	107.453			N/A

6/21/2019	USDMXN	9:30:00 AM	19.031	19.035			N/A
6/21/2019	USDMXN	11:30:00 AM	19.012	19.02			N/A
6/21/2019	USDMXN	1:30:00 PM	19.036	19.043			N/A
6/21/2019	USDMXN	3:30:00 PM	19.064	19.071			N/A
6/21/2019	USDMXN.fx	9:30:00 AM					N/A
6/21/2019	USDMXN.fx	11:30:00 AM					N/A
6/21/2019	USDMXN.fx	1:30:00 PM					N/A
6/21/2019	USDMXN.fx	3:30:00 PM					N/A
6/21/2019	USDNOK	9:30:00 AM	8.5684	8.5769			N/A
6/21/2019	USDNOK	11:30:00 AM	8.5531	8.5618			N/A
6/21/2019	USDNOK	1:30:00 PM	8.5602	8.5686			N/A
6/21/2019	USDNOK	3:30:00 PM	8.5558	8.5626			N/A
6/21/2019	USDNOK.fx	9:30:00 AM	8.57247	8.57244			N/A
6/21/2019	USDNOK.fx	11:30:00 AM	8.55715	8.55714			N/A
6/21/2019	USDNOK.fx	1:30:00 PM	8.5641	8.56411			N/A
6/21/2019	USDNOK.fx	3:30:00 PM	8.55958	8.5581			N/A
6/21/2019	USDPLN	9:30:00 AM	3.7716	3.7724			N/A
6/21/2019	USDPLN	11:30:00 AM	3.7689	3.7702			N/A
6/21/2019	USDPLN	1:30:00 PM	3.7668	3.7683			N/A
6/21/2019	USDPLN	3:30:00 PM	3.7629	3.7637			N/A
6/21/2019	USDPLN.fx	9:30:00 AM	3.77075	3.77317			N/A
6/21/2019	USDPLN.fx	11:30:00 AM	3.76808	3.77096			N/A
6/21/2019	USDPLN.fx	1:30:00 PM	3.76601	3.76902			N/A
6/21/2019	USDPLN.fx	3:30:00 PM	3.76209	3.76451			N/A
6/21/2019	USDRUB	9:30:00 AM					N/A
6/21/2019	USDRUB	11:30:00 AM	62.896	63.29			N/A
6/21/2019	USDRUB	1:30:00 PM	62.865	63.255			N/A
6/21/2019	USDRUB	3:30:00 PM	63.083	63.472			N/A
6/21/2019	USDSEK	9:30:00 AM	9.4209	9.4248			N/A
6/21/2019	USDSEK	11:30:00 AM	9.3895	9.3938			N/A
6/21/2019	USDSEK	1:30:00 PM	9.383	9.3868			N/A
6/21/2019	USDSEK	3:30:00 PM	9.3922	9.3952			N/A
6/21/2019	USDSEK.fx	9:30:00 AM	9.42316	9.42308			N/A
6/21/2019	USDSEK.fx	11:30:00 AM	9.39217	9.39195			N/A

6/21/2019	USDSEK.fx	1:30:00 PM	9.3858	9.38485			N/A
6/21/2019	USDSEK.fx	3:30:00 PM	9.39485	9.39296			N/A
6/21/2019	USDSGD	9:30:00 AM	1.3577	1.358			N/A
6/21/2019	USDSGD	11:30:00 AM	1.3571	1.3573			N/A
6/21/2019	USDSGD	1:30:00 PM	1.3573	1.3577			N/A
6/21/2019	USDSGD	3:30:00 PM	1.3573	1.3575			N/A
6/21/2019	USDSGD.fx	9:30:00 AM	1.3576	1.35799			N/A
6/21/2019	USDSGD.fx	11:30:00 AM	1.35699	1.35751			N/A
6/21/2019	USDSGD.fx	1:30:00 PM	1.3572	1.35771			N/A
6/21/2019	USDSGD.fx	3:30:00 PM	1.35717	1.35764			N/A
6/21/2019	USDZAR	9:30:00 AM	14.3832	14.3937			N/A
6/21/2019	USDZAR	11:30:00 AM	14.3942	14.4116			N/A
6/21/2019	USDZAR	1:30:00 PM	14.366	14.3695			N/A
6/21/2019	USDZAR	3:30:00 PM	14.3171	14.3334			N/A
6/21/2019	USDZAR.fx	9:30:00 AM	14.38882	14.38802			N/A
6/21/2019	USDZAR.fx	11:30:00 AM	14.39947	14.4047			N/A
6/21/2019	USDZAR.fx	1:30:00 PM	14.37555	14.36351			N/A
6/21/2019	USDZAR.fx	3:30:00 PM	14.32486	14.32733			N/A
6/21/2019	XAUUSD	9:30:00 AM	1394.43	1394.31			N/A
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6/24/2019	#POT	11:30:00 AM					N/A
6/24/2019	#POT	1:30:00 PM					N/A
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6/24/2019	#QCOM	1:30:00 PM					N/A
6/24/2019	#QCOM	3:30:00 PM					N/A
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6/24/2019	#QQQ	1:30:00 PM					N/A
6/24/2019	#QQQ	3:30:00 PM					N/A

6/24/2019	#Ripple	9:30:00 AM	0.4576	0.4623			N/A
6/24/2019	#Ripple	11:30:00 AM	0.4599	0.4649			N/A
6/24/2019	#Ripple	1:30:00 PM	0.4658	0.4696			N/A
6/24/2019	#Ripple	3:30:00 PM	0.4645	0.4688			N/A
6/24/2019	#S	9:30:00 AM					N/A
6/24/2019	#S	11:30:00 AM					N/A
6/24/2019	#S	1:30:00 PM					N/A
6/24/2019	#S	3:30:00 PM					N/A
6/24/2019	#SBUX	9:30:00 AM					N/A
6/24/2019	#SBUX	11:30:00 AM					N/A
6/24/2019	#SBUX	1:30:00 PM					N/A
6/24/2019	#SBUX	3:30:00 PM					N/A
6/24/2019	#SNE	9:30:00 AM					N/A
6/24/2019	#SNE	11:30:00 AM					N/A
6/24/2019	#SNE	1:30:00 PM					N/A
6/24/2019	#SNE	3:30:00 PM					N/A
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6/24/2019	#SPY	11:30:00 AM					N/A
6/24/2019	#SPY	1:30:00 PM					N/A
6/24/2019	#SPY	3:30:00 PM					N/A
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6/24/2019	#T	1:30:00 PM					N/A
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6/24/2019	#TRI	3:30:00 PM					N/A
6/24/2019	#TRV	9:30:00 AM					N/A
6/24/2019	#TRV	11:30:00 AM					N/A

6/24/2019	#TRV	1:30:00 PM					N/A
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6/24/2019	#TSCO	11:30:00 AM					N/A
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6/24/2019	#TSCO	3:30:00 PM					N/A
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6/24/2019	#TSLA	3:30:00 PM					N/A
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6/24/2019	#UBS	1:30:00 PM					N/A
6/24/2019	#UBS	3:30:00 PM					N/A
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6/24/2019	#UL	3:30:00 PM					N/A
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6/24/2019	#V	11:30:00 AM					N/A
6/24/2019	#V	1:30:00 PM					N/A
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6/24/2019	#VOD	9:30:00 AM					N/A
6/24/2019	#VOD	11:30:00 AM					N/A
6/24/2019	#VOD	1:30:00 PM					N/A
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6/24/2019	#WDC	3:30:00 PM					N/A
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6/24/2019	#WFC	3:30:00 PM					N/A
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6/24/2019	#WMT	3:30:00 PM					N/A
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6/24/2019	#XOM	11:30:00 AM					N/A
6/24/2019	#XOM	1:30:00 PM					N/A
6/24/2019	#XOM	3:30:00 PM					N/A
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6/24/2019	#YHOO	11:30:00 AM					N/A
6/24/2019	#YHOO	1:30:00 PM					N/A
6/24/2019	#YHOO	3:30:00 PM					N/A
6/24/2019	#ZNGA	9:30:00 AM					N/A
6/24/2019	#ZNGA	11:30:00 AM					N/A
6/24/2019	#ZNGA	1:30:00 PM					N/A
6/24/2019	#ZNGA	3:30:00 PM					N/A
6/24/2019	AUDCAD	9:30:00 AM	0.91721	0.91786			N/A
6/24/2019	AUDCAD	11:30:00 AM	0.91612	0.91671			N/A

6/24/2019	AUDCAD	1:30:00 PM	0.91572	0.91639			N/A
6/24/2019	AUDCAD	3:30:00 PM	0.9168	0.91748			N/A
6/24/2019	AUDCAD.fx	9:30:00 AM	0.91755	0.9175			N/A
6/24/2019	AUDCAD.fx	11:30:00 AM	0.91645	0.91637			N/A
6/24/2019	AUDCAD.fx	1:30:00 PM	0.91605	0.91604			N/A
6/24/2019	AUDCAD.fx	3:30:00 PM	0.91712	0.91714			N/A
6/24/2019	AUDCHF	9:30:00 AM	0.67967	0.68036			N/A
6/24/2019	AUDCHF	11:30:00 AM	0.67803	0.67855			N/A
6/24/2019	AUDCHF	1:30:00 PM	0.67728	0.67792			N/A
6/24/2019	AUDCHF	3:30:00 PM	0.67743	0.67809			N/A
6/24/2019	AUDCHF.fx	9:30:00 AM	0.68001	0.68001			N/A
6/24/2019	AUDCHF.fx	11:30:00 AM	0.67837	0.6782			N/A
6/24/2019	AUDCHF.fx	1:30:00 PM	0.67763	0.67757			N/A
6/24/2019	AUDCHF.fx	3:30:00 PM	0.67777	0.67774			N/A
6/24/2019	AUDCZK	9:30:00 AM	15.619	15.636			N/A
6/24/2019	AUDCZK	11:30:00 AM	15.593	15.609			N/A
6/24/2019	AUDCZK	1:30:00 PM	15.595	15.609			N/A
6/24/2019	AUDCZK	3:30:00 PM	15.601	15.617			N/A
6/24/2019	AUDDKK	9:30:00 AM	4.5604	4.565			N/A
6/24/2019	AUDDKK	11:30:00 AM	4.5519	4.5562			N/A
6/24/2019	AUDDKK	1:30:00 PM	4.5521	4.5565			N/A
6/24/2019	AUDDKK	3:30:00 PM	4.5541	4.5587			N/A
6/24/2019	AUDHKD	9:30:00 AM	5.4326	5.4363			N/A
6/24/2019	AUDHKD	11:30:00 AM	5.426	5.4299			N/A
6/24/2019	AUDHKD	1:30:00 PM	5.425	5.4286			N/A
6/24/2019	AUDHKD	3:30:00 PM	5.4267	5.4305			N/A
6/24/2019	AUDHUF	9:30:00 AM	197.79	197.98			N/A
6/24/2019	AUDHUF	11:30:00 AM	197.56	197.79			N/A
6/24/2019	AUDHUF	1:30:00 PM	197.4	197.64			N/A
6/24/2019	AUDHUF	3:30:00 PM	197.7	197.86			N/A
6/24/2019	AUDJPY	9:30:00 AM	74.726	74.779			N/A
6/24/2019	AUDJPY	11:30:00 AM	74.61	74.67			N/A
6/24/2019	AUDJPY	1:30:00 PM	74.555	74.623			N/A
6/24/2019	AUDJPY	3:30:00 PM	74.585	74.651			N/A

6/24/2019	AUDJPY.fx	9:30:00 AM	74.76	74.743			N/A
6/24/2019	AUDJPY.fx	11:30:00 AM	74.643	74.635			N/A
6/24/2019	AUDJPY.fx	1:30:00 PM	74.589	74.588			N/A
6/24/2019	AUDJPY.fx	3:30:00 PM	74.618	74.616			N/A
6/24/2019	AUDMXN	9:30:00 AM	13.27	13.2781			N/A
6/24/2019	AUDMXN	11:30:00 AM	13.2682	13.2756			N/A
6/24/2019	AUDMXN	1:30:00 PM	13.279	13.2881			N/A
6/24/2019	AUDMXN	3:30:00 PM	13.3026	13.3086			N/A
6/24/2019	AUDNOK	9:30:00 AM	5.8983	5.9032			N/A
6/24/2019	AUDNOK	11:30:00 AM	5.8882	5.893			N/A
6/24/2019	AUDNOK	1:30:00 PM	5.8849	5.8899			N/A
6/24/2019	AUDNOK	3:30:00 PM	5.8964	5.9015			N/A
6/24/2019	AUDNOK.fx	9:30:00 AM	5.8998	5.9016			N/A
6/24/2019	AUDNOK.fx	11:30:00 AM	5.8897	5.8913			N/A
6/24/2019	AUDNOK.fx	1:30:00 PM	5.8865	5.8881			N/A
6/24/2019	AUDNOK.fx	3:30:00 PM	5.8981	5.8998			N/A
6/24/2019	AUDNZD	9:30:00 AM	1.0518	1.05243			N/A
6/24/2019	AUDNZD	11:30:00 AM	1.05066	1.05158			N/A
6/24/2019	AUDNZD	1:30:00 PM	1.05112	1.05179			N/A
6/24/2019	AUDNZD	3:30:00 PM	1.0522	1.0531			N/A
6/24/2019	AUDNZD.fx	9:30:00 AM	1.05223	1.05199			N/A
6/24/2019	AUDNZD.fx	11:30:00 AM	1.0511	1.05112			N/A
6/24/2019	AUDNZD.fx	1:30:00 PM	1.05158	1.05133			N/A
6/24/2019	AUDNZD.fx	3:30:00 PM	1.05262	1.05266			N/A
6/24/2019	AUDPLN	9:30:00 AM	2.5979	2.6005			N/A
6/24/2019	AUDPLN	11:30:00 AM	2.5933	2.5964			N/A
6/24/2019	AUDPLN	1:30:00 PM	2.5935	2.5962			N/A
6/24/2019	AUDPLN	3:30:00 PM	2.5956	2.599			N/A
6/24/2019	AUDSEK	9:30:00 AM	6.4933	6.4956			N/A
6/24/2019	AUDSEK	11:30:00 AM	6.4764	6.4782			N/A
6/24/2019	AUDSEK	1:30:00 PM	6.471	6.4735			N/A
6/24/2019	AUDSEK	3:30:00 PM	6.4686	6.4716			N/A
6/24/2019	AUDSEK.fx	9:30:00 AM	6.4886	6.5004			N/A
6/24/2019	AUDSEK.fx	11:30:00 AM	6.472	6.4826			N/A

6/24/2019	AUDSEK.fx	1:30:00 PM	6.4663	6.4779			N/A
6/24/2019	AUDSEK.fx	3:30:00 PM	6.4639	6.4761			N/A
6/24/2019	AUDSGD	9:30:00 AM	0.9417	0.942			N/A
6/24/2019	AUDSGD	11:30:00 AM	0.9411	0.9413			N/A
6/24/2019	AUDSGD	1:30:00 PM	0.9407	0.941			N/A
6/24/2019	AUDSGD	3:30:00 PM	0.9414	0.9417			N/A
6/24/2019	AUDSGD.fx	9:30:00 AM	0.94177	0.94188			N/A
6/24/2019	AUDSGD.fx	11:30:00 AM	0.94116	0.94116			N/A
6/24/2019	AUDSGD.fx	1:30:00 PM	0.9408	0.94087			N/A
6/24/2019	AUDSGD.fx	3:30:00 PM	0.94146	0.94158			N/A
6/24/2019	AUDUSD	9:30:00 AM	0.69577	0.69586			N/A
6/24/2019	AUDUSD	11:30:00 AM	0.69493	0.69497			N/A
6/24/2019	AUDUSD	1:30:00 PM	0.69481	0.69492			N/A
6/24/2019	AUDUSD	3:30:00 PM	0.69524	0.69532			N/A
6/24/2019	AUDUSD.fx	9:30:00 AM	0.69583	0.6958			N/A
6/24/2019	AUDUSD.fx	11:30:00 AM	0.69498	0.69491			N/A
6/24/2019	AUDUSD.fx	1:30:00 PM	0.69486	0.69487			N/A
6/24/2019	AUDUSD.fx	3:30:00 PM	0.69529	0.69525			N/A
6/24/2019	AUDZAR	9:30:00 AM	9.9067	9.9153			N/A
6/24/2019	AUDZAR	11:30:00 AM	9.9084	9.9213			N/A
6/24/2019	AUDZAR	1:30:00 PM	9.9508	9.9655			N/A
6/24/2019	AUDZAR	3:30:00 PM	9.952	9.9648			N/A
6/24/2019	AUS200.i	9:30:00 AM	6665.7	6668.2			N/A
6/24/2019	AUS200.i	11:30:00 AM	6665.78	6668.28			N/A
6/24/2019	AUS200.i	1:30:00 PM	6669.58	6673.28			N/A
6/24/2019	AUS200.i	3:30:00 PM	6664.78	6668.28			N/A
6/24/2019	BCHUSD	9:30:00 AM	485.08	486.3			N/A
6/24/2019	BCHUSD	11:30:00 AM	488.56	490.06			N/A
6/24/2019	BCHUSD	1:30:00 PM	491.35	492.67			N/A
6/24/2019	BCHUSD	3:30:00 PM	487.42	488.76			N/A
6/24/2019	CADCHF	9:30:00 AM	0.74082	0.74147			N/A
6/24/2019	CADCHF	11:30:00 AM	0.73985	0.74045			N/A
6/24/2019	CADCHF	1:30:00 PM	0.73935	0.73999			N/A
6/24/2019	CADCHF	3:30:00 PM	0.73866	0.7393			N/A

6/24/2019	CADCHF.fx	9:30:00 AM	0.74115	0.74112			N/A
6/24/2019	CADCHF.fx	11:30:00 AM	0.74018	0.7401			N/A
6/24/2019	CADCHF.fx	1:30:00 PM	0.73969	0.73963			N/A
6/24/2019	CADCHF.fx	3:30:00 PM	0.73902	0.73895			N/A
6/24/2019	CADCZK	9:30:00 AM	17.028	17.042			N/A
6/24/2019	CADCZK	11:30:00 AM	17.018	17.034			N/A
6/24/2019	CADCZK	1:30:00 PM	17.027	17.042			N/A
6/24/2019	CADCZK	3:30:00 PM	17.015	17.03			N/A
6/24/2019	CADDDKK	9:30:00 AM	4.972	4.975			N/A
6/24/2019	CADDDKK	11:30:00 AM					N/A
6/24/2019	CADDDKK	1:30:00 PM	4.971	4.974			N/A
6/24/2019	CADDDKK	3:30:00 PM	4.967	4.968			N/A
6/24/2019	CADHKD	9:30:00 AM	5.922	5.9256			N/A
6/24/2019	CADHKD	11:30:00 AM	5.9213	5.9252			N/A
6/24/2019	CADHKD	1:30:00 PM	5.9236	5.927			N/A
6/24/2019	CADHKD	3:30:00 PM	5.9187	5.9214			N/A
6/24/2019	CADHUF	9:30:00 AM	215.66	215.73			N/A
6/24/2019	CADHUF	11:30:00 AM	215.64	215.82			N/A
6/24/2019	CADHUF	1:30:00 PM	215.58	215.74			N/A
6/24/2019	CADHUF	3:30:00 PM	215.68	215.74			N/A
6/24/2019	CADJPY	9:30:00 AM	81.439	81.502			N/A
6/24/2019	CADJPY	11:30:00 AM	81.418	81.482			N/A
6/24/2019	CADJPY	1:30:00 PM	81.391	81.455			N/A
6/24/2019	CADJPY	3:30:00 PM	81.329	81.39			N/A
6/24/2019	CADJPY.fx	9:30:00 AM	81.473	81.468			N/A
6/24/2019	CADJPY.fx	11:30:00 AM	81.452	81.447			N/A
6/24/2019	CADJPY.fx	1:30:00 PM	81.425	81.419			N/A
6/24/2019	CADJPY.fx	3:30:00 PM	81.362	81.355			N/A
6/24/2019	CADMXN	9:30:00 AM	14.4647	14.4756			N/A
6/24/2019	CADMXN	11:30:00 AM	14.4795	14.4912			N/A
6/24/2019	CADMXN	1:30:00 PM	14.4985	14.5086			N/A
6/24/2019	CADMXN	3:30:00 PM	14.5063	14.5139			N/A
6/24/2019	CADNOK	9:30:00 AM	6.4274	6.4323			N/A
6/24/2019	CADNOK	11:30:00 AM	6.4243	6.4291			N/A

6/24/2019	CADNOK	1:30:00 PM	6.4244	6.4278			N/A
6/24/2019	CADNOK	3:30:00 PM	6.4283	6.4303			N/A
6/24/2019	CADPLN	9:30:00 AM	2.8323	2.8339			N/A
6/24/2019	CADPLN	11:30:00 AM	2.8304	2.8323			N/A
6/24/2019	CADPLN	1:30:00 PM	2.8318	2.8329			N/A
6/24/2019	CADPLN	3:30:00 PM	2.8302	2.8318			N/A
6/24/2019	CADSEK	9:30:00 AM	7.0757	7.0778			N/A
6/24/2019	CADSEK	11:30:00 AM	7.066	7.0685			N/A
6/24/2019	CADSEK	1:30:00 PM	7.0631	7.0657			N/A
6/24/2019	CADSEK	3:30:00 PM	7.0514	7.0547			N/A
6/24/2019	CADSGD	9:30:00 AM	1.0259	1.0263			N/A
6/24/2019	CADSGD	11:30:00 AM	1.0261	1.0264			N/A
6/24/2019	CADSGD	1:30:00 PM	1.0263	1.0266			N/A
6/24/2019	CADSGD	3:30:00 PM	1.0258	1.0262			N/A
6/24/2019	CADZAR	9:30:00 AM	10.7988	10.8094			N/A
6/24/2019	CADZAR	11:30:00 AM	10.8142	10.8273			N/A
6/24/2019	CADZAR	1:30:00 PM	10.8647	10.8817			N/A
6/24/2019	CADZAR	3:30:00 PM	10.8536	10.8676			N/A
6/24/2019	CHFCZK	9:30:00 AM	22.978	22.994			N/A
6/24/2019	CHFCZK	11:30:00 AM	22.998	23.01			N/A
6/24/2019	CHFCZK	1:30:00 PM	23.023	23.038			N/A
6/24/2019	CHFCZK	3:30:00 PM	23.027	23.043			N/A
6/24/2019	CHFDKK	9:30:00 AM	6.709	6.711			N/A
6/24/2019	CHFDKK	11:30:00 AM	6.713	6.715			N/A
6/24/2019	CHFDKK	1:30:00 PM	6.719	6.723			N/A
6/24/2019	CHFDKK	3:30:00 PM	6.721	6.724			N/A
6/24/2019	CHFDKK.fx	9:30:00 AM	6.7071	6.7129			N/A
6/24/2019	CHFDKK.fx	11:30:00 AM	6.7117	6.7161			N/A
6/24/2019	CHFDKK.fx	1:30:00 PM	6.7184	6.7239			N/A
6/24/2019	CHFDKK.fx	3:30:00 PM	6.7199	6.7258			N/A
6/24/2019	CHFHKD	9:30:00 AM	7.992	7.9943			N/A
6/24/2019	CHFHKD	11:30:00 AM	8.0015	8.0054			N/A
6/24/2019	CHFHKD	1:30:00 PM	8.0095	8.0127			N/A
6/24/2019	CHFHKD	3:30:00 PM	8.0102	8.014			N/A

6/24/2019	CHFHUF	9:30:00 AM	290.92	291.2			N/A
6/24/2019	CHFHUF	11:30:00 AM	291.32	291.65			N/A
6/24/2019	CHFHUF	1:30:00 PM	291.38	291.75			N/A
6/24/2019	CHFHUF	3:30:00 PM	291.74	292.03			N/A
6/24/2019	CHFJPY	9:30:00 AM	109.908	109.946			N/A
6/24/2019	CHFJPY	11:30:00 AM	110.019	110.065			N/A
6/24/2019	CHFJPY	1:30:00 PM	110.057	110.101			N/A
6/24/2019	CHFJPY	3:30:00 PM	110.06	110.125			N/A
6/24/2019	CHFJPY.fx	9:30:00 AM	109.94	109.912			N/A
6/24/2019	CHFJPY.fx	11:30:00 AM	110.053	110.03			N/A
6/24/2019	CHFJPY.fx	1:30:00 PM	110.09	110.066			N/A
6/24/2019	CHFJPY.fx	3:30:00 PM	110.092	110.09			N/A
6/24/2019	CHFMXN	9:30:00 AM	19.5184	19.531			N/A
6/24/2019	CHFMXN	11:30:00 AM	19.5645	19.5784			N/A
6/24/2019	CHFMXN	1:30:00 PM	19.6017	19.6167			N/A
6/24/2019	CHFMXN	3:30:00 PM	19.6296	19.6435			N/A
6/24/2019	CHFNOK	9:30:00 AM	8.6738	8.6813			N/A
6/24/2019	CHFNOK	11:30:00 AM	8.6813	8.6874			N/A
6/24/2019	CHFNOK	1:30:00 PM	8.6856	8.6919			N/A
6/24/2019	CHFNOK	3:30:00 PM	8.6993	8.7073			N/A
6/24/2019	CHFNOK.fx	9:30:00 AM	8.67721	8.6778			N/A
6/24/2019	CHFNOK.fx	11:30:00 AM	8.68472	8.68388			N/A
6/24/2019	CHFNOK.fx	1:30:00 PM	8.68932	8.68828			N/A
6/24/2019	CHFNOK.fx	3:30:00 PM	8.7029	8.70372			N/A
6/24/2019	CHFPLN	9:30:00 AM	3.8217	3.8237			N/A
6/24/2019	CHFPLN	11:30:00 AM	3.8244	3.8265			N/A
6/24/2019	CHFPLN	1:30:00 PM	3.8284	3.8309			N/A
6/24/2019	CHFPLN	3:30:00 PM	3.8306	3.8335			N/A
6/24/2019	CHFPLN.fx	9:30:00 AM	3.81896	3.82615			N/A
6/24/2019	CHFPLN.fx	11:30:00 AM	3.82204	3.82883			N/A
6/24/2019	CHFPLN.fx	1:30:00 PM	3.82606	3.83305			N/A
6/24/2019	CHFPLN.fx	3:30:00 PM	3.82816	3.83593			N/A
6/24/2019	CHFSEK	9:30:00 AM	9.5478	9.5502			N/A
6/24/2019	CHFSEK	11:30:00 AM	9.5481	9.5499			N/A

6/24/2019	CHFSEK	1:30:00 PM	9.5497	9.5526			N/A
6/24/2019	CHFSEK	3:30:00 PM	9.5421	9.547			N/A
6/24/2019	CHFSGD	9:30:00 AM	1.3848	1.3852			N/A
6/24/2019	CHFSGD	11:30:00 AM	1.3874	1.3877			N/A
6/24/2019	CHFSGD	1:30:00 PM	1.3882	1.3887			N/A
6/24/2019	CHFSGD	3:30:00 PM	1.389	1.3894			N/A
6/24/2019	CHFSGD.fx	9:30:00 AM	1.38501	1.38504			N/A
6/24/2019	CHFSGD.fx	11:30:00 AM	1.38763	1.38747			N/A
6/24/2019	CHFSGD.fx	1:30:00 PM	1.38853	1.38853			N/A
6/24/2019	CHFSGD.fx	3:30:00 PM	1.38917	1.38919			N/A
6/24/2019	CHFZAR	9:30:00 AM	14.5759	14.5802			N/A
6/24/2019	CHFZAR	11:30:00 AM	14.6153	14.6234			N/A
6/24/2019	CHFZAR	1:30:00 PM	14.6935	14.7064			N/A
6/24/2019	CHFZAR	3:30:00 PM	14.6918	14.7012			N/A
6/24/2019	CZKJPY	9:30:00 AM	4.781	4.785			N/A
6/24/2019	CZKJPY	11:30:00 AM	4.783	4.787			N/A
6/24/2019	CZKJPY	1:30:00 PM	4.78	4.783			N/A
6/24/2019	CZKJPY	3:30:00 PM	4.779	4.782			N/A
6/24/2019	DAX30.i	9:30:00 AM	12324.63	12322.63			N/A
6/24/2019	DAX30.i	11:30:00 AM	12279.38	12274.38			N/A
6/24/2019	DAX30.i	1:30:00 PM	12263.88	12263.38			N/A
6/24/2019	DAX30.i	3:30:00 PM	12267.88	12267.13			N/A
6/24/2019	DJ30.i	9:30:00 AM					N/A
6/24/2019	DJ30.i	11:30:00 AM					N/A
6/24/2019	DJ30.i	1:30:00 PM					N/A
6/24/2019	DJ30.i	3:30:00 PM					N/A
6/24/2019	DKKJPY	9:30:00 AM	16.38	16.4			N/A
6/24/2019	DKKJPY	11:30:00 AM					N/A
6/24/2019	DKKJPY	1:30:00 PM					N/A
6/24/2019	DKKJPY	3:30:00 PM					N/A
6/24/2019	EURAUD	9:30:00 AM	1.63568	1.63602			N/A
6/24/2019	EURAUD	11:30:00 AM	1.63866	1.639			N/A
6/24/2019	EURAUD	1:30:00 PM	1.63865	1.63899			N/A
6/24/2019	EURAUD	3:30:00 PM	1.6378	1.63815			N/A



6/24/2019	EURAUD.fx	9:30:00 AM	1.63589	1.6358			N/A
6/24/2019	EURAUD.fx	11:30:00 AM	1.63886	1.63879			N/A
6/24/2019	EURAUD.fx	1:30:00 PM	1.63887	1.63877			N/A
6/24/2019	EURAUD.fx	3:30:00 PM	1.63799	1.63794			N/A
6/24/2019	EURCAD	9:30:00 AM	1.50112	1.50183			N/A
6/24/2019	EURCAD	11:30:00 AM	1.5021	1.50282			N/A
6/24/2019	EURCAD	1:30:00 PM	1.50141	1.50221			N/A
6/24/2019	EURCAD	3:30:00 PM	1.50242	1.50314			N/A
6/24/2019	EURCAD.fx	9:30:00 AM	1.50153	1.50139			N/A
6/24/2019	EURCAD.fx	11:30:00 AM	1.50252	1.50241			N/A
6/24/2019	EURCAD.fx	1:30:00 PM	1.50184	1.50179			N/A
6/24/2019	EURCAD.fx	3:30:00 PM	1.50285	1.50272			N/A
6/24/2019	EURCHF	9:30:00 AM	1.11274	1.1128			N/A
6/24/2019	EURCHF	11:30:00 AM	1.11214	1.11198			N/A
6/24/2019	EURCHF	1:30:00 PM	1.11084	1.11085			N/A
6/24/2019	EURCHF	3:30:00 PM	1.11055	1.11063			N/A
6/24/2019	EURCHF.fx	9:30:00 AM	1.11279	1.11272			N/A
6/24/2019	EURCHF.fx	11:30:00 AM	1.1122	1.11192			N/A
6/24/2019	EURCHF.fx	1:30:00 PM	1.1109	1.11078			N/A
6/24/2019	EURCHF.fx	3:30:00 PM	1.1106	1.11057			N/A
6/24/2019	EURCZK	9:30:00 AM	25.557	25.594			N/A
6/24/2019	EURCZK	11:30:00 AM					N/A
6/24/2019	EURCZK	1:30:00 PM	25.562	25.599			N/A
6/24/2019	EURCZK	3:30:00 PM	25.56	25.599			N/A
6/24/2019	EURDKK	9:30:00 AM					N/A
6/24/2019	EURDKK	11:30:00 AM					N/A
6/24/2019	EURDKK	1:30:00 PM	7.4642	7.4655			N/A
6/24/2019	EURDKK	3:30:00 PM	7.4648	7.4658			N/A
6/24/2019	EURGBP	9:30:00 AM	0.89216	0.89222			N/A
6/24/2019	EURGBP	11:30:00 AM	0.8943	0.89439			N/A
6/24/2019	EURGBP	1:30:00 PM	0.89391	0.89391			N/A
6/24/2019	EURGBP	3:30:00 PM	0.89447	0.89441			N/A
6/24/2019	EURGBP.fx	9:30:00 AM	0.8922	0.89218			N/A
6/24/2019	EURGBP.fx	11:30:00 AM	0.89433	0.89434			N/A

6/24/2019	EURGBP.fx	1:30:00 PM	0.89395	0.89386			N/A
6/24/2019	EURGBP.fx	3:30:00 PM	0.89452	0.89437			N/A
6/24/2019	EURHKD	9:30:00 AM	8.8923	8.8966			N/A
6/24/2019	EURHKD	11:30:00 AM	8.8985	8.9028			N/A
6/24/2019	EURHKD	1:30:00 PM	8.8974	8.9016			N/A
6/24/2019	EURHKD	3:30:00 PM	8.8956	8.9008			N/A
6/24/2019	EURHKD.fx	9:30:00 AM	8.89516	8.89392			N/A
6/24/2019	EURHKD.fx	11:30:00 AM	8.90128	8.89997			N/A
6/24/2019	EURHKD.fx	1:30:00 PM	8.90015	8.89883			N/A
6/24/2019	EURHKD.fx	3:30:00 PM	8.89843	8.89804			N/A
6/24/2019	EURHUF	9:30:00 AM	323.68	324.34			N/A
6/24/2019	EURHUF	11:30:00 AM	323.86	324.46			N/A
6/24/2019	EURHUF	1:30:00 PM	323.64	324.33			N/A
6/24/2019	EURHUF	3:30:00 PM	323.96	324.43			N/A
6/24/2019	EURHUF.fx	9:30:00 AM	323.919	324.07			N/A
6/24/2019	EURHUF.fx	11:30:00 AM	324.14	324.328			N/A
6/24/2019	EURHUF.fx	1:30:00 PM	323.939	324.08			N/A
6/24/2019	EURHUF.fx	3:30:00 PM	324.279	324.456			N/A
6/24/2019	EURJPY	9:30:00 AM	122.338	122.313			N/A
6/24/2019	EURJPY	11:30:00 AM	122.37	122.369			N/A
6/24/2019	EURJPY	1:30:00 PM	122.29	122.275			N/A
6/24/2019	EURJPY	3:30:00 PM	122.259	122.267			N/A
6/24/2019	EURJPY.fx	9:30:00 AM	122.341	122.309			N/A
6/24/2019	EURJPY.fx	11:30:00 AM	122.373	122.365			N/A
6/24/2019	EURJPY.fx	1:30:00 PM	122.293	122.27			N/A
6/24/2019	EURJPY.fx	3:30:00 PM	122.263	122.263			N/A
6/24/2019	EURMXN	9:30:00 AM	21.7221	21.7382			N/A
6/24/2019	EURMXN	11:30:00 AM	21.7586	21.7735			N/A
6/24/2019	EURMXN	1:30:00 PM	21.7765	21.7951			N/A
6/24/2019	EURMXN	3:30:00 PM	21.8021	21.8196			N/A
6/24/2019	EURMXN.fx	9:30:00 AM	21.7307	21.7295			N/A
6/24/2019	EURMXN.fx	11:30:00 AM	21.7672	21.765			N/A
6/24/2019	EURMXN.fx	1:30:00 PM	21.7847	21.7864			N/A
6/24/2019	EURMXN.fx	3:30:00 PM	21.8113	21.8103			N/A

6/24/2019	EURNOK	9:30:00 AM	9.6503	9.6623			N/A
6/24/2019	EURNOK	11:30:00 AM	9.6511	9.6634			N/A
6/24/2019	EURNOK	1:30:00 PM	9.6462	9.6574			N/A
6/24/2019	EURNOK	3:30:00 PM	9.6593	9.6721			N/A
6/24/2019	EURNOK.fx	9:30:00 AM	9.65571	9.65688			N/A
6/24/2019	EURNOK.fx	11:30:00 AM	9.65663	9.6579			N/A
6/24/2019	EURNOK.fx	1:30:00 PM	9.65169	9.65187			N/A
6/24/2019	EURNOK.fx	3:30:00 PM	9.66489	9.66651			N/A
6/24/2019	EURNZD	9:30:00 AM	1.72148	1.72182			N/A
6/24/2019	EURNZD	11:30:00 AM	1.72284	1.72366			N/A
6/24/2019	EURNZD	1:30:00 PM	1.72347	1.72399			N/A
6/24/2019	EURNZD	3:30:00 PM	1.72446	1.72518			N/A
6/24/2019	EURNZD.fx	9:30:00 AM	1.72187	1.7214			N/A
6/24/2019	EURNZD.fx	11:30:00 AM	1.72324	1.72324			N/A
6/24/2019	EURNZD.fx	1:30:00 PM	1.72389	1.72354			N/A
6/24/2019	EURNZD.fx	3:30:00 PM	1.72487	1.72476			N/A
6/24/2019	EURPLN	9:30:00 AM	4.2525	4.255			N/A
6/24/2019	EURPLN	11:30:00 AM	4.2524	4.2556			N/A
6/24/2019	EURPLN	1:30:00 PM	4.2528	4.2552			N/A
6/24/2019	EURPLN	3:30:00 PM	4.2543	4.2572			N/A
6/24/2019	EURPLN.fx	9:30:00 AM	4.25157	4.25562			N/A
6/24/2019	EURPLN.fx	11:30:00 AM	4.25173	4.25616			N/A
6/24/2019	EURPLN.fx	1:30:00 PM	4.25227	4.25579			N/A
6/24/2019	EURPLN.fx	3:30:00 PM	4.25347	4.25777			N/A
6/24/2019	EURRUB	9:30:00 AM					N/A
6/24/2019	EURRUB	11:30:00 AM	71.274	71.702			N/A
6/24/2019	EURRUB	1:30:00 PM	71.294	71.73			N/A
6/24/2019	EURRUB	3:30:00 PM	71.334	71.748			N/A
6/24/2019	EURSEK	9:30:00 AM	10.6264	10.6291			N/A
6/24/2019	EURSEK	11:30:00 AM	10.618	10.6208			N/A
6/24/2019	EURSEK	1:30:00 PM	10.6087	10.6128			N/A
6/24/2019	EURSEK	3:30:00 PM	10.5989	10.604			N/A
6/24/2019	EURSEK.fx	9:30:00 AM	10.6279	10.6277			N/A
6/24/2019	EURSEK.fx	11:30:00 AM	10.61965	10.61914			N/A

6/24/2019	EURSEK.fx	1:30:00 PM	10.61017	10.61114			N/A
6/24/2019	EURSEK.fx	3:30:00 PM	10.60056	10.60238			N/A
6/24/2019	EURSGD	9:30:00 AM	1.5409	1.5416			N/A
6/24/2019	EURSGD	11:30:00 AM	1.5427	1.5434			N/A
6/24/2019	EURSGD	1:30:00 PM	1.5421	1.5428			N/A
6/24/2019	EURSGD	3:30:00 PM	1.5424	1.5432			N/A
6/24/2019	EURSGD.fx	9:30:00 AM	1.54123	1.54125			N/A
6/24/2019	EURSGD.fx	11:30:00 AM	1.5431	1.54296			N/A
6/24/2019	EURSGD.fx	1:30:00 PM	1.54247	1.54241			N/A
6/24/2019	EURSGD.fx	3:30:00 PM	1.54275	1.54277			N/A
6/24/2019	EURUSD	9:30:00 AM	1.13848	1.13848			N/A
6/24/2019	EURUSD	11:30:00 AM	1.13923	1.13922			N/A
6/24/2019	EURUSD	1:30:00 PM	1.13907	1.13904			N/A
6/24/2019	EURUSD	3:30:00 PM	1.13904	1.13914			N/A
6/24/2019	EURUSD.fx	9:30:00 AM	1.13868	1.13856			N/A
6/24/2019	EURUSD.fx	11:30:00 AM	1.13943	1.13931			N/A
6/24/2019	EURUSD.fx	1:30:00 PM	1.13928	1.13914			N/A
6/24/2019	EURUSD.fx	3:30:00 PM	1.13924	1.13923			N/A
6/24/2019	EURZAR	9:30:00 AM	16.2217	16.2286			N/A
6/24/2019	EURZAR	11:30:00 AM	16.2521	16.2672			N/A
6/24/2019	EURZAR	1:30:00 PM	16.3239	16.3423			N/A
6/24/2019	EURZAR	3:30:00 PM	16.3233	16.3332			N/A
6/24/2019	EURZAR.fx	9:30:00 AM	16.22029	16.22979			N/A
6/24/2019	EURZAR.fx	11:30:00 AM	16.25159	16.26771			N/A
6/24/2019	EURZAR.fx	1:30:00 PM	16.32298	16.34222			N/A
6/24/2019	EURZAR.fx	3:30:00 PM	16.32191	16.33386			N/A
6/24/2019	GBPAUD	9:30:00 AM	1.83378	1.83445			N/A
6/24/2019	GBPAUD	11:30:00 AM	1.83283	1.83352			N/A
6/24/2019	GBPAUD	1:30:00 PM	1.83372	1.83431			N/A
6/24/2019	GBPAUD	3:30:00 PM	1.83167	1.83204			N/A
6/24/2019	GBPAUD.fx	9:30:00 AM	1.83418	1.83407			N/A
6/24/2019	GBPAUD.fx	11:30:00 AM	1.83322	1.83313			N/A
6/24/2019	GBPAUD.fx	1:30:00 PM	1.83411	1.83391			N/A
6/24/2019	GBPAUD.fx	3:30:00 PM	1.83205	1.83166			N/A

6/24/2019	GBPCAD	9:30:00 AM	1.6825	1.6832			N/A
6/24/2019	GBPCAD	11:30:00 AM	1.67955	1.68033			N/A
6/24/2019	GBPCAD	1:30:00 PM	1.6798	1.68033			N/A
6/24/2019	GBPCAD	3:30:00 PM	1.67987	1.68026			N/A
6/24/2019	GBPCAD.fx	9:30:00 AM	1.68288	1.68284			N/A
6/24/2019	GBPCAD.fx	11:30:00 AM	1.67994	1.67994			N/A
6/24/2019	GBPCAD.fx	1:30:00 PM	1.6802	1.67991			N/A
6/24/2019	GBPCAD.fx	3:30:00 PM	1.68026	1.67987			N/A
6/24/2019	GBPCHF	9:30:00 AM	1.24707	1.24736			N/A
6/24/2019	GBPCHF	11:30:00 AM	1.24332	1.24355			N/A
6/24/2019	GBPCHF	1:30:00 PM	1.2425	1.24286			N/A
6/24/2019	GBPCHF	3:30:00 PM	1.24151	1.24172			N/A
6/24/2019	GBPCHF.fx	9:30:00 AM	1.24725	1.24716			N/A
6/24/2019	GBPCHF.fx	11:30:00 AM	1.24351	1.24335			N/A
6/24/2019	GBPCHF.fx	1:30:00 PM	1.24269	1.24265			N/A
6/24/2019	GBPCHF.fx	3:30:00 PM	1.24171	1.24152			N/A
6/24/2019	GBPCZK	9:30:00 AM	28.655	28.674			N/A
6/24/2019	GBPCZK	11:30:00 AM	28.588	28.61			N/A
6/24/2019	GBPCZK	1:30:00 PM	28.606	28.624			N/A
6/24/2019	GBPCZK	3:30:00 PM	28.588	28.605			N/A
6/24/2019	GBPDKK	9:30:00 AM	8.364	8.375			N/A
6/24/2019	GBPDKK	11:30:00 AM	8.344	8.354			N/A
6/24/2019	GBPDKK	1:30:00 PM	8.347	8.358			N/A
6/24/2019	GBPDKK	3:30:00 PM	8.342	8.353			N/A
6/24/2019	GBPDKK.fx	9:30:00 AM	8.3627	8.3753			N/A
6/24/2019	GBPDKK.fx	11:30:00 AM	8.3421	8.3548			N/A
6/24/2019	GBPDKK.fx	1:30:00 PM	8.3463	8.3583			N/A
6/24/2019	GBPDKK.fx	3:30:00 PM	8.3419	8.3531			N/A
6/24/2019	GBPHKD	9:30:00 AM	9.9642	9.9688			N/A
6/24/2019	GBPHKD	11:30:00 AM	9.9466	9.952			N/A
6/24/2019	GBPHKD	1:30:00 PM	9.9513	9.9548			N/A
6/24/2019	GBPHKD	3:30:00 PM	9.9434	9.9473			N/A
6/24/2019	GBPHUF	9:30:00 AM	362.79	363.12			N/A
6/24/2019	GBPHUF	11:30:00 AM	362.13	362.61			N/A

6/24/2019	GBPHUF	1:30:00 PM	362.05	362.47			N/A
6/24/2019	GBPHUF	3:30:00 PM	362.2	362.49			N/A
6/24/2019	GBPJPY	9:30:00 AM	137.1	137.12			N/A
6/24/2019	GBPJPY	11:30:00 AM	136.809	136.85			N/A
6/24/2019	GBPJPY	1:30:00 PM	136.788	136.803			N/A
6/24/2019	GBPJPY	3:30:00 PM	136.679	136.7			N/A
6/24/2019	GBPJPY.fx	9:30:00 AM	137.118	137.1			N/A
6/24/2019	GBPJPY.fx	11:30:00 AM	136.827	136.831			N/A
6/24/2019	GBPJPY.fx	1:30:00 PM	136.808	136.783			N/A
6/24/2019	GBPJPY.fx	3:30:00 PM	136.697	136.68			N/A
6/24/2019	GBPMXN	9:30:00 AM	24.3409	24.3552			N/A
6/24/2019	GBPMXN	11:30:00 AM	24.3245	24.3364			N/A
6/24/2019	GBPMXN	1:30:00 PM	24.357	24.371			N/A
6/24/2019	GBPMXN	3:30:00 PM	24.37	24.3811			N/A
6/24/2019	GBPNOK	9:30:00 AM	10.8181	10.8285			N/A
6/24/2019	GBPNOK	11:30:00 AM	10.7927	10.8042			N/A
6/24/2019	GBPNOK	1:30:00 PM	10.7931	10.8025			N/A
6/24/2019	GBPNOK	3:30:00 PM	10.8015	10.8111			N/A
6/24/2019	GBPNOK.fx	9:30:00 AM	10.82318	10.82383			N/A
6/24/2019	GBPNOK.fx	11:30:00 AM	10.79777	10.79923			N/A
6/24/2019	GBPNOK.fx	1:30:00 PM	10.79832	10.79741			N/A
6/24/2019	GBPNOK.fx	3:30:00 PM	10.8065	10.80614			N/A
6/24/2019	GBPNZD	9:30:00 AM	1.92952	1.92996			N/A
6/24/2019	GBPNZD	11:30:00 AM	1.92651	1.92724			N/A
6/24/2019	GBPNZD	1:30:00 PM	1.92811	1.92855			N/A
6/24/2019	GBPNZD	3:30:00 PM	1.92814	1.92854			N/A
6/24/2019	GBPNZD.fx	9:30:00 AM	1.92987	1.92959			N/A
6/24/2019	GBPNZD.fx	11:30:00 AM	1.92684	1.92688			N/A
6/24/2019	GBPNZD.fx	1:30:00 PM	1.92845	1.92818			N/A
6/24/2019	GBPNZD.fx	3:30:00 PM	1.9285	1.92818			N/A
6/24/2019	GBPPLN	9:30:00 AM	4.7671	4.7682			N/A
6/24/2019	GBPPLN	11:30:00 AM	4.7559	4.7574			N/A
6/24/2019	GBPPLN	1:30:00 PM	4.7583	4.7598			N/A
6/24/2019	GBPPLN	3:30:00 PM	4.7574	4.7584			N/A

6/24/2019	GBPPLN.fx	9:30:00 AM	4.76452	4.77046			N/A
6/24/2019	GBPPLN.fx	11:30:00 AM	4.75364	4.7596			N/A
6/24/2019	GBPPLN.fx	1:30:00 PM	4.75604	4.76197			N/A
6/24/2019	GBPPLN.fx	3:30:00 PM	4.75524	4.76071			N/A
6/24/2019	GBPSEK	9:30:00 AM	11.9085	11.9151			N/A
6/24/2019	GBPSEK	11:30:00 AM	11.8707	11.8781			N/A
6/24/2019	GBPSEK	1:30:00 PM	11.8666	11.8748			N/A
6/24/2019	GBPSEK	3:30:00 PM	11.8492	11.8563			N/A
6/24/2019	GBPSEK.fx	9:30:00 AM	11.9044	11.91933			N/A
6/24/2019	GBPSEK.fx	11:30:00 AM	11.8672	11.88151			N/A
6/24/2019	GBPSEK.fx	1:30:00 PM	11.8636	11.87837			N/A
6/24/2019	GBPSEK.fx	3:30:00 PM	11.84564	11.86037			N/A
6/24/2019	GBPSGD	9:30:00 AM	1.7271	1.7278			N/A
6/24/2019	GBPSGD	11:30:00 AM	1.725	1.7257			N/A
6/24/2019	GBPSGD	1:30:00 PM	1.7253	1.7257			N/A
6/24/2019	GBPSGD	3:30:00 PM	1.7246	1.7251			N/A
6/24/2019	GBPSGD.fx	9:30:00 AM	1.72524	1.72957			N/A
6/24/2019	GBPSGD.fx	11:30:00 AM	1.72314	1.72746			N/A
6/24/2019	GBPSGD.fx	1:30:00 PM	1.72335	1.72754			N/A
6/24/2019	GBPSGD.fx	3:30:00 PM	1.72277	1.72686			N/A
6/24/2019	GBPUSD	9:30:00 AM	1.27616	1.2761			N/A
6/24/2019	GBPUSD	11:30:00 AM	1.27393	1.27399			N/A
6/24/2019	GBPUSD	1:30:00 PM	1.27446	1.27429			N/A
6/24/2019	GBPUSD	3:30:00 PM	1.27374	1.27356			N/A
6/24/2019	GBPUSD.fx	9:30:00 AM	1.2762	1.27604			N/A
6/24/2019	GBPUSD.fx	11:30:00 AM	1.27398	1.27393			N/A
6/24/2019	GBPUSD.fx	1:30:00 PM	1.27452	1.27423			N/A
6/24/2019	GBPUSD.fx	3:30:00 PM	1.27379	1.27349			N/A
6/24/2019	GBPZAR	9:30:00 AM	18.1762	18.1942			N/A
6/24/2019	GBPZAR	11:30:00 AM	18.1685	18.1928			N/A
6/24/2019	GBPZAR	1:30:00 PM	18.2585	18.2853			N/A
6/24/2019	GBPZAR	3:30:00 PM	18.247	18.2648			N/A
6/24/2019	GBPZAR.fx	9:30:00 AM	18.1834	18.1871			N/A
6/24/2019	GBPZAR.fx	11:30:00 AM	18.1758	18.1856			N/A

6/24/2019	GBPZAR.fx	1:30:00 PM	18.2652	18.2776			N/A
6/24/2019	GBPZAR.fx	3:30:00 PM	18.2536	18.2572			N/A
6/24/2019	GOLD	9:30:00 AM	1404.87	1404.84			N/A
6/24/2019	GOLD	11:30:00 AM	1404.14	1404.34			N/A
6/24/2019	GOLD	1:30:00 PM	1407.64	1407.75			N/A
6/24/2019	GOLD	3:30:00 PM	1406.89	1406.36			N/A
6/24/2019	HKDJPY	9:30:00 AM	13.75	13.76			N/A
6/24/2019	HKDJPY	11:30:00 AM	13.75	13.76			N/A
6/24/2019	HKDJPY	1:30:00 PM	13.74	13.75			N/A
6/24/2019	HKDJPY	3:30:00 PM	13.73	13.75			N/A
6/24/2019	HKDJPY.fx	9:30:00 AM	13.749	13.754			N/A
6/24/2019	HKDJPY.fx	11:30:00 AM	13.745	13.752			N/A
6/24/2019	HKDJPY.fx	1:30:00 PM	13.736	13.743			N/A
6/24/2019	HKDJPY.fx	3:30:00 PM	13.736	13.743			N/A
6/24/2019	HUFJPY	9:30:00 AM	0.3778	0.378			N/A
6/24/2019	HUFJPY	11:30:00 AM	0.3775	0.3778			N/A
6/24/2019	HUFJPY	1:30:00 PM	0.3776	0.378			N/A
6/24/2019	HUFJPY	3:30:00 PM	0.3773	0.3777			N/A
6/24/2019	JP225.i	9:30:00 AM	21285.09	21300.09			N/A
6/24/2019	JP225.i	11:30:00 AM	21255.09	21275.09			N/A
6/24/2019	JP225.i	1:30:00 PM	21245.09	21260.09			N/A
6/24/2019	JP225.i	3:30:00 PM					N/A
6/24/2019	MXNJPY	9:30:00 AM	5.63	5.64			N/A
6/24/2019	MXNJPY	11:30:00 AM					N/A
6/24/2019	MXNJPY	1:30:00 PM	5.61	5.62			N/A
6/24/2019	MXNJPY	3:30:00 PM	5.61	5.62			N/A
6/24/2019	NASDAQ.i	9:30:00 AM					N/A
6/24/2019	NASDAQ.i	11:30:00 AM					N/A
6/24/2019	NASDAQ.i	1:30:00 PM					N/A
6/24/2019	NASDAQ.i	3:30:00 PM					N/A
6/24/2019	NOKJPY	9:30:00 AM	12.66	12.69			N/A
6/24/2019	NOKJPY	11:30:00 AM					N/A
6/24/2019	NOKJPY	1:30:00 PM	12.66	12.69			N/A
6/24/2019	NOKJPY	3:30:00 PM	12.64	12.67			N/A



6/24/2019	NOKJPY.fx	9:30:00 AM	12.666	12.67			N/A
6/24/2019	NOKJPY.fx	11:30:00 AM	12.669	12.675			N/A
6/24/2019	NOKJPY.fx	1:30:00 PM	12.667	12.673			N/A
6/24/2019	NOKJPY.fx	3:30:00 PM	12.645	12.653			N/A
6/24/2019	NZDCAD	9:30:00 AM	0.87178	0.87238			N/A
6/24/2019	NZDCAD	11:30:00 AM	0.87154	0.87216			N/A
6/24/2019	NZDCAD	1:30:00 PM	0.87098	0.87148			N/A
6/24/2019	NZDCAD	3:30:00 PM	0.87092	0.87159			N/A
6/24/2019	NZDCAD.fx	9:30:00 AM	0.87212	0.87203			N/A
6/24/2019	NZDCAD.fx	11:30:00 AM	0.87187	0.87183			N/A
6/24/2019	NZDCAD.fx	1:30:00 PM	0.87132	0.87114			N/A
6/24/2019	NZDCAD.fx	3:30:00 PM	0.87125	0.87126			N/A
6/24/2019	NZDCHF	9:30:00 AM	0.64608	0.64662			N/A
6/24/2019	NZDCHF	11:30:00 AM	0.64503	0.64561			N/A
6/24/2019	NZDCHF	1:30:00 PM	0.6441	0.64478			N/A
6/24/2019	NZDCHF	3:30:00 PM	0.64354	0.64421			N/A
6/24/2019	NZDCHF.fx	9:30:00 AM	0.64642	0.64627			N/A
6/24/2019	NZDCHF.fx	11:30:00 AM	0.64537	0.64526			N/A
6/24/2019	NZDCHF.fx	1:30:00 PM	0.64444	0.64442			N/A
6/24/2019	NZDCHF.fx	3:30:00 PM	0.64388	0.64386			N/A
6/24/2019	NZDCZK	9:30:00 AM	14.85	14.859			N/A
6/24/2019	NZDCZK	11:30:00 AM					N/A
6/24/2019	NZDCZK	1:30:00 PM	14.834	14.844			N/A
6/24/2019	NZDCZK	3:30:00 PM	14.823	14.834			N/A
6/24/2019	NZDDKK	9:30:00 AM	4.335	4.339			N/A
6/24/2019	NZDDKK	11:30:00 AM	4.33	4.334			N/A
6/24/2019	NZDDKK	1:30:00 PM	4.33	4.333			N/A
6/24/2019	NZDDKK	3:30:00 PM	4.326	4.33			N/A
6/24/2019	NZDHKD	9:30:00 AM	5.1628	5.1657			N/A
6/24/2019	NZDHKD	11:30:00 AM	5.1622	5.1651			N/A
6/24/2019	NZDHKD	1:30:00 PM	5.1601	5.1623			N/A
6/24/2019	NZDHKD	3:30:00 PM	5.1553	5.1583			N/A
6/24/2019	NZDHUF	9:30:00 AM	187.98	188.15			N/A
6/24/2019	NZDHUF	11:30:00 AM	187.91	188.2			N/A

6/24/2019	NZDHUF	1:30:00 PM	187.72	187.98			N/A
6/24/2019	NZDHUF	3:30:00 PM	187.78	188			N/A
6/24/2019	NZDJPY	9:30:00 AM	71.014	71.081			N/A
6/24/2019	NZDJPY	11:30:00 AM	70.978	71.044			N/A
6/24/2019	NZDJPY	1:30:00 PM	70.912	70.965			N/A
6/24/2019	NZDJPY	3:30:00 PM	70.85	70.921			N/A
6/24/2019	NZDJPY.fx	9:30:00 AM	71.046	71.049			N/A
6/24/2019	NZDJPY.fx	11:30:00 AM	71.009	71.012			N/A
6/24/2019	NZDJPY.fx	1:30:00 PM	70.945	70.932			N/A
6/24/2019	NZDJPY.fx	3:30:00 PM	70.882	70.889			N/A
6/24/2019	NZDMXN	9:30:00 AM	12.6133	12.6174			N/A
6/24/2019	NZDMXN	11:30:00 AM	12.6235	12.6279			N/A
6/24/2019	NZDMXN	1:30:00 PM	12.6308	12.6352			N/A
6/24/2019	NZDMXN	3:30:00 PM	12.6379	12.6408			N/A
6/24/2019	NZDNOK	9:30:00 AM	5.605	5.6075			N/A
6/24/2019	NZDNOK	11:30:00 AM	5.6005	5.6039			N/A
6/24/2019	NZDNOK	1:30:00 PM	5.5964	5.5988			N/A
6/24/2019	NZDNOK	3:30:00 PM	5.5992	5.6008			N/A
6/24/2019	NZDPLN	9:30:00 AM	2.4689	2.4702			N/A
6/24/2019	NZDPLN	11:30:00 AM	2.4673	2.4688			N/A
6/24/2019	NZDPLN	1:30:00 PM	2.4666	2.4675			N/A
6/24/2019	NZDPLN	3:30:00 PM	2.4653	2.4664			N/A
6/24/2019	NZDSEK	9:30:00 AM	6.1673	6.1724			N/A
6/24/2019	NZDSEK	11:30:00 AM	6.1562	6.1631			N/A
6/24/2019	NZDSEK	1:30:00 PM	6.1509	6.1563			N/A
6/24/2019	NZDSEK	3:30:00 PM	6.1396	6.1463			N/A
6/24/2019	NZDSGD	9:30:00 AM	0.895	0.8955			N/A
6/24/2019	NZDSGD	11:30:00 AM	0.8951	0.8955			N/A
6/24/2019	NZDSGD	1:30:00 PM	0.8946	0.8951			N/A
6/24/2019	NZDSGD	3:30:00 PM	0.8942	0.8943			N/A
6/24/2019	NZDSGD.fx	9:30:00 AM	0.89498	0.89541			N/A
6/24/2019	NZDSGD.fx	11:30:00 AM	0.89512	0.89561			N/A
6/24/2019	NZDSGD.fx	1:30:00 PM	0.89458	0.895			N/A
6/24/2019	NZDSGD.fx	3:30:00 PM	0.89416	0.89472			N/A

6/24/2019	NZDUSD	9:30:00 AM	0.6613	0.66131			N/A
6/24/2019	NZDUSD	11:30:00 AM	0.66107	0.66116			N/A
6/24/2019	NZDUSD	1:30:00 PM	0.66084	0.66082			N/A
6/24/2019	NZDUSD	3:30:00 PM	0.66043	0.66051			N/A
6/24/2019	NZDUSD.fx	9:30:00 AM	0.66137	0.66133			N/A
6/24/2019	NZDUSD.fx	11:30:00 AM	0.66114	0.66118			N/A
6/24/2019	NZDUSD.fx	1:30:00 PM	0.66092	0.66084			N/A
6/24/2019	NZDUSD.fx	3:30:00 PM	0.6605	0.66053			N/A
6/24/2019	NZDZAR	9:30:00 AM	9.4135	9.4264			N/A
6/24/2019	NZDZAR	11:30:00 AM	9.4243	9.439			N/A
6/24/2019	NZDZAR	1:30:00 PM	9.4629	9.4782			N/A
6/24/2019	NZDZAR	3:30:00 PM	9.4527	9.4669			N/A
6/24/2019	SEKJPY	9:30:00 AM	11.51	11.52			N/A
6/24/2019	SEKJPY	11:30:00 AM	11.52	11.53			N/A
6/24/2019	SEKJPY	1:30:00 PM	11.53	11.53			N/A
6/24/2019	SEKJPY	3:30:00 PM	11.53	11.54			N/A
6/24/2019	SEKJPY.fx	9:30:00 AM	11.503	11.517			N/A
6/24/2019	SEKJPY.fx	11:30:00 AM	11.515	11.53			N/A
6/24/2019	SEKJPY.fx	1:30:00 PM	11.516	11.532			N/A
6/24/2019	SEKJPY.fx	3:30:00 PM	11.523	11.541			N/A
6/24/2019	SGDJPY	9:30:00 AM	79.33	79.36			N/A
6/24/2019	SGDJPY	11:30:00 AM	79.28	79.3			N/A
6/24/2019	SGDJPY	1:30:00 PM	79.31	79.27			N/A
6/24/2019	SGDJPY	3:30:00 PM	79.22	79.25			N/A
6/24/2019	SILVER	9:30:00 AM	15.18	15.56			N/A
6/24/2019	SILVER	11:30:00 AM	15.17	15.55			N/A
6/24/2019	SILVER	1:30:00 PM	15.2	15.57			N/A
6/24/2019	SILVER	3:30:00 PM	15.14	15.51			N/A
6/24/2019	SPX500.i	9:30:00 AM	2956.88	2957.68			N/A
6/24/2019	SPX500.i	11:30:00 AM	2954.78	2955.85			N/A
6/24/2019	SPX500.i	1:30:00 PM	2955.38	2956.43			N/A
6/24/2019	SPX500.i	3:30:00 PM	2952.63	2953.68			N/A
6/24/2019	UK100.i	9:30:00 AM	7406.44	7407.94			N/A
6/24/2019	UK100.i	11:30:00 AM	7421.53	7422.36			N/A

6/24/2019	UK100.i	1:30:00 PM	7420.19	7421.19			N/A
6/24/2019	UK100.i	3:30:00 PM	7423.19	7424.61			N/A
6/24/2019	USDCAD	9:30:00 AM	1.31867	1.31875			N/A
6/24/2019	USDCAD	11:30:00 AM	1.31869	1.31877			N/A
6/24/2019	USDCAD	1:30:00 PM	1.31831	1.31835	1000	1000	N/A
6/24/2019	USDCAD	3:30:00 PM	1.31913	1.3191			N/A
6/24/2019	USDCAD.fx	9:30:00 AM	1.31869	1.31871			N/A
6/24/2019	USDCAD.fx	11:30:00 AM	1.31872	1.31873			N/A
6/24/2019	USDCAD.fx	1:30:00 PM	1.31834	1.31831			N/A
6/24/2019	USDCAD.fx	3:30:00 PM	1.31915	1.31907			N/A
6/24/2019	USDCHF	9:30:00 AM	0.97733	0.97733			N/A
6/24/2019	USDCHF	11:30:00 AM	0.97605	0.97603			N/A
6/24/2019	USDCHF	1:30:00 PM	0.97514	0.97512			N/A
6/24/2019	USDCHF	3:30:00 PM	0.97478	0.97488			N/A
6/24/2019	USDCHF.fx	9:30:00 AM	0.97737	0.97727			N/A
6/24/2019	USDCHF.fx	11:30:00 AM	0.97611	0.97598			N/A
6/24/2019	USDCHF.fx	1:30:00 PM	0.97518	0.97505			N/A
6/24/2019	USDCHF.fx	3:30:00 PM	0.97482	0.97481			N/A
6/24/2019	USDCZK	9:30:00 AM	22.472	22.492			N/A
6/24/2019	USDCZK	11:30:00 AM	22.459	22.479			N/A
6/24/2019	USDCZK	1:30:00 PM	22.464	22.484			N/A
6/24/2019	USDCZK	3:30:00 PM	22.462	22.485			N/A
6/24/2019	USDCZK.fx	9:30:00 AM	22.479	22.4849			N/A
6/24/2019	USDCZK.fx	11:30:00 AM	22.467	22.47			N/A
6/24/2019	USDCZK.fx	1:30:00 PM	22.473	22.4742			N/A
6/24/2019	USDCZK.fx	3:30:00 PM	22.4719	22.475			N/A
6/24/2019	USDDKK	9:30:00 AM	6.5569	6.56			N/A
6/24/2019	USDDKK	11:30:00 AM	6.5521	6.5554			N/A
6/24/2019	USDDKK	1:30:00 PM	6.553	6.5563			N/A
6/24/2019	USDDKK	3:30:00 PM	6.5526	6.5565			N/A
6/24/2019	USDDKK.fx	9:30:00 AM	6.55725	6.55797			N/A
6/24/2019	USDDKK.fx	11:30:00 AM	6.5526	6.55334			N/A
6/24/2019	USDDKK.fx	1:30:00 PM	6.55344	6.55418			N/A
6/24/2019	USDDKK.fx	3:30:00 PM	6.55308	6.5544			N/A

6/24/2019	USDHKD	9:30:00 AM	7.8115	7.8118			N/A
6/24/2019	USDHKD	11:30:00 AM	7.8117	7.812			N/A
6/24/2019	USDHKD	1:30:00 PM	7.8117	7.8121			N/A
6/24/2019	USDHKD	3:30:00 PM	7.8102	7.8107			N/A
6/24/2019	USDHKD.fx	9:30:00 AM	7.81144	7.81194			N/A
6/24/2019	USDHKD.fx	11:30:00 AM	7.81164	7.81205			N/A
6/24/2019	USDHKD.fx	1:30:00 PM	7.81173	7.81226			N/A
6/24/2019	USDHKD.fx	3:30:00 PM	7.81041	7.81099			N/A
6/24/2019	USDHUF	9:30:00 AM	284.37	284.75			N/A
6/24/2019	USDHUF	11:30:00 AM	284.35	284.8			N/A
6/24/2019	USDHUF	1:30:00 PM	284.2	284.64			N/A
6/24/2019	USDHUF	3:30:00 PM	284.49	284.95			N/A
6/24/2019	USDHUF.fx	9:30:00 AM	284.533	284.569			N/A
6/24/2019	USDHUF.fx	11:30:00 AM	284.546	284.605			N/A
6/24/2019	USDHUF.fx	1:30:00 PM	284.413	284.423			N/A
6/24/2019	USDHUF.fx	3:30:00 PM	284.685	284.746			N/A
6/24/2019	USDINR	9:30:00 AM	64.48	74.47			N/A
6/24/2019	USDINR	11:30:00 AM					N/A
6/24/2019	USDINR	1:30:00 PM					N/A
6/24/2019	USDINR	3:30:00 PM					N/A
6/24/2019	USDJPY	9:30:00 AM	107.433	107.429			N/A
6/24/2019	USDJPY	11:30:00 AM	107.406	107.41			N/A
6/24/2019	USDJPY	1:30:00 PM	107.336	107.343			N/A
6/24/2019	USDJPY	3:30:00 PM	107.319	107.326			N/A
6/24/2019	USDJPY.fx	9:30:00 AM	107.439	107.422			N/A
6/24/2019	USDJPY.fx	11:30:00 AM	107.412	107.403			N/A
6/24/2019	USDJPY.fx	1:30:00 PM	107.342	107.336			N/A
6/24/2019	USDJPY.fx	3:30:00 PM	107.325	107.319			N/A
6/24/2019	USDMXN	9:30:00 AM	19.084	19.088			N/A
6/24/2019	USDMXN	11:30:00 AM	19.102	19.109			N/A
6/24/2019	USDMXN	1:30:00 PM	19.12	19.127			N/A
6/24/2019	USDMXN	3:30:00 PM	19.141	19.149			N/A
6/24/2019	USDMXN.f	9:30:00 AM					N/A
6/24/2019	USDMXN.f	11:30:00 AM					N/A

6/24/2019	USDMXN.f	1:30:00 PM					N/A
6/24/2019	USDMXN.f	3:30:00 PM					N/A
6/24/2019	USDNOK	9:30:00 AM	8.477	8.4845			N/A
6/24/2019	USDNOK	11:30:00 AM	8.4721	8.4802			N/A
6/24/2019	USDNOK	1:30:00 PM	8.4683	8.4765			N/A
6/24/2019	USDNOK	3:30:00 PM	8.4802	8.489			N/A
6/24/2019	USDNOK.fx	9:30:00 AM	8.481	8.47994			N/A
6/24/2019	USDNOK.fx	11:30:00 AM	8.47628	8.47587			N/A
6/24/2019	USDNOK.fx	1:30:00 PM	8.47266	8.47188			N/A
6/24/2019	USDNOK.fx	3:30:00 PM	8.48408	8.48452			N/A
6/24/2019	USDPLN	9:30:00 AM	3.7354	3.7363			N/A
6/24/2019	USDPLN	11:30:00 AM	3.7331	3.7342			N/A
6/24/2019	USDPLN	1:30:00 PM	3.734	3.7345			N/A
6/24/2019	USDPLN	3:30:00 PM	3.7347	3.7364			N/A
6/24/2019	USDPLN.fx	9:30:00 AM	3.73448	3.73703			N/A
6/24/2019	USDPLN.fx	11:30:00 AM	3.73227	3.73498			N/A
6/24/2019	USDPLN.fx	1:30:00 PM	3.73318	3.73537			N/A
6/24/2019	USDPLN.fx	3:30:00 PM	3.73398	3.73711			N/A
6/24/2019	USDRUB	9:30:00 AM					N/A
6/24/2019	USDRUB	11:30:00 AM	62.668	63.046			N/A
6/24/2019	USDRUB	1:30:00 PM	62.69	63.088			N/A
6/24/2019	USDRUB	3:30:00 PM	62.726	63.117			N/A
6/24/2019	USDSEK	9:30:00 AM	9.3321	9.3343			N/A
6/24/2019	USDSEK	11:30:00 AM	9.3197	9.3218			N/A
6/24/2019	USDSEK	1:30:00 PM	9.3123	9.3149			N/A
6/24/2019	USDSEK	3:30:00 PM	9.3033	9.3077			N/A
6/24/2019	USDSEK.fx	9:30:00 AM	9.33436	9.33278			N/A
6/24/2019	USDSEK.fx	11:30:00 AM	9.32217	9.31999			N/A
6/24/2019	USDSEK.fx	1:30:00 PM	9.31497	9.31301			N/A
6/24/2019	USDSEK.fx	3:30:00 PM	9.30598	9.30577			N/A
6/24/2019	USDSGD	9:30:00 AM	1.3535	1.3538			N/A
6/24/2019	USDSGD	11:30:00 AM	1.3541	1.3545			N/A
6/24/2019	USDSGD	1:30:00 PM	1.3538	1.3541			N/A
6/24/2019	USDSGD	3:30:00 PM	1.354	1.3542			N/A

6/24/2019	USDSGD.fx	9:30:00 AM	1.35337	1.3538			N/A
6/24/2019	USDSGD.fx	11:30:00 AM	1.35404	1.3545			N/A
6/24/2019	USDSGD.fx	1:30:00 PM	1.35374	1.35421			N/A
6/24/2019	USDSGD.fx	3:30:00 PM	1.35394	1.35437			N/A
6/24/2019	USDZAR	9:30:00 AM	14.2463	14.2533			N/A
6/24/2019	USDZAR	11:30:00 AM	14.2648	14.2781			N/A
6/24/2019	USDZAR	1:30:00 PM	14.3281	14.3469			N/A
6/24/2019	USDZAR	3:30:00 PM	14.3277	14.3379			N/A
6/24/2019	USDZAR.fx	9:30:00 AM	14.25207	14.24782			N/A
6/24/2019	USDZAR.fx	11:30:00 AM	14.27094	14.27206			N/A
6/24/2019	USDZAR.fx	1:30:00 PM	14.33357	14.34052			N/A
6/24/2019	USDZAR.fx	3:30:00 PM	14.33313	14.3321			N/A
6/24/2019	XAUUSD	9:30:00 AM	1404.87	1404.86			N/A
6/24/2019	XAUUSD	11:30:00 AM	1404.14	1404.34			N/A
6/24/2019	XAUUSD	1:30:00 PM	1407.65	1407.75			N/A
6/24/2019	XAUUSD	3:30:00 PM	1406.89	1406.36			N/A
6/24/2019	ZARJPY	9:30:00 AM	7.52	7.54			N/A
6/24/2019	ZARJPY	11:30:00 AM	7.51	7.53			N/A
6/24/2019	ZARJPY	1:30:00 PM	7.47	7.49			N/A
6/24/2019	ZARJPY	3:30:00 PM	7.47	7.49			N/A
6/24/2019	ZARJPY.fx	9:30:00 AM	7.538	7.539			N/A
6/24/2019	ZARJPY.fx	11:30:00 AM	7.524	7.527			N/A
6/24/2019	ZARJPY.fx	1:30:00 PM	7.484	7.489			N/A
6/24/2019	ZARJPY.fx	3:30:00 PM	7.487	7.488			N/A
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6/25/2019	#ZNGA	3:30:00 PM					N/A
6/25/2019	AUDCAD	9:30:00 AM	0.91741	0.91811			N/A
6/25/2019	AUDCAD	11:30:00 AM	0.91753	0.91822			N/A
6/25/2019	AUDCAD	1:30:00 PM	0.91789	0.91864			N/A
6/25/2019	AUDCAD	3:30:00 PM	0.9176	0.91819			N/A
6/25/2019	AUDCAD.fx	9:30:00 AM	0.91775	0.91777			N/A
6/25/2019	AUDCAD.fx	11:30:00 AM	0.91786	0.91787			N/A
6/25/2019	AUDCAD.fx	1:30:00 PM	0.91822	0.91829			N/A
6/25/2019	AUDCAD.fx	3:30:00 PM	0.91793	0.91783			N/A

6/25/2019	AUDCHF	9:30:00 AM	0.67572	0.67645			N/A
6/25/2019	AUDCHF	11:30:00 AM	0.67915	0.67974			N/A
6/25/2019	AUDCHF	1:30:00 PM	0.67987	0.68061			N/A
6/25/2019	AUDCHF	3:30:00 PM	0.67919	0.67987			N/A
6/25/2019	AUDCHF.fx	9:30:00 AM	0.67607	0.6761			N/A
6/25/2019	AUDCHF.fx	11:30:00 AM	0.67949	0.67939			N/A
6/25/2019	AUDCHF.fx	1:30:00 PM	0.68023	0.68025			N/A
6/25/2019	AUDCHF.fx	3:30:00 PM	0.67954	0.67952			N/A
6/25/2019	AUDCZK	9:30:00 AM	15.59	15.605			N/A
6/25/2019	AUDCZK	11:30:00 AM	15.615	15.632			N/A
6/25/2019	AUDCZK	1:30:00 PM	15.624	15.641			N/A
6/25/2019	AUDCZK	3:30:00 PM	15.614	15.63			N/A
6/25/2019	AUDDKK	9:30:00 AM	4.555	4.5597			N/A
6/25/2019	AUDDKK	11:30:00 AM	4.5653	4.5699			N/A
6/25/2019	AUDDKK	1:30:00 PM	4.568	4.5727			N/A
6/25/2019	AUDDKK	3:30:00 PM	4.5667	4.5711			N/A
6/25/2019	AUDHKD	9:30:00 AM					N/A
6/25/2019	AUDHKD	11:30:00 AM	5.4347	5.4386			N/A
6/25/2019	AUDHKD	1:30:00 PM	5.4369	5.4407			N/A
6/25/2019	AUDHKD	3:30:00 PM	5.4401	5.4433			N/A
6/25/2019	AUDHUF	9:30:00 AM	197.44	197.68			N/A
6/25/2019	AUDHUF	11:30:00 AM	198.13	198.36			N/A
6/25/2019	AUDHUF	1:30:00 PM	198.25	198.48			N/A
6/25/2019	AUDHUF	3:30:00 PM	198.21	198.37			N/A
6/25/2019	AUDJPY	9:30:00 AM	74.408	74.472			N/A
6/25/2019	AUDJPY	11:30:00 AM	74.541	74.598			N/A
6/25/2019	AUDJPY	1:30:00 PM	74.527	74.6			N/A
6/25/2019	AUDJPY	3:30:00 PM	74.61	74.67			N/A
6/25/2019	AUDJPY.fx	9:30:00 AM	74.443	74.436			N/A
6/25/2019	AUDJPY.fx	11:30:00 AM	74.575	74.563			N/A
6/25/2019	AUDJPY.fx	1:30:00 PM	74.561	74.565			N/A
6/25/2019	AUDJPY.fx	3:30:00 PM	74.644	74.635			N/A
6/25/2019	AUDMXN	9:30:00 AM	13.3387	13.349			N/A
6/25/2019	AUDMXN	11:30:00 AM	13.3948	13.404			N/A

6/25/2019	AUDMXN	1:30:00 PM	13.3891	13.3991			N/A
6/25/2019	AUDMXN	3:30:00 PM	13.3941	13.4017			N/A
6/25/2019	AUDNOK	9:30:00 AM	5.9087	5.9136			N/A
6/25/2019	AUDNOK	11:30:00 AM	5.9222	5.9267			N/A
6/25/2019	AUDNOK	1:30:00 PM	5.928	5.9326			N/A
6/25/2019	AUDNOK	3:30:00 PM	5.9265	5.9314			N/A
6/25/2019	AUDNOK.fx	9:30:00 AM	5.9102	5.912			N/A
6/25/2019	AUDNOK.fx	11:30:00 AM	5.9236	5.9251			N/A
6/25/2019	AUDNOK.fx	1:30:00 PM	5.9295	5.9309			N/A
6/25/2019	AUDNOK.fx	3:30:00 PM	5.9281	5.9297			N/A
6/25/2019	AUDNZD	9:30:00 AM	1.04742	1.04836			N/A
6/25/2019	AUDNZD	11:30:00 AM	1.04727	1.0482			N/A
6/25/2019	AUDNZD	1:30:00 PM	1.04816	1.04911			N/A
6/25/2019	AUDNZD	3:30:00 PM	1.04805	1.04896			N/A
6/25/2019	AUDNZD.fx	9:30:00 AM	1.04786	1.04791			N/A
6/25/2019	AUDNZD.fx	11:30:00 AM	1.04771	1.04774			N/A
6/25/2019	AUDNZD.fx	1:30:00 PM	1.0486	1.04866			N/A
6/25/2019	AUDNZD.fx	3:30:00 PM	1.04849	1.04851			N/A
6/25/2019	AUDPLN	9:30:00 AM	2.5956	2.5979			N/A
6/25/2019	AUDPLN	11:30:00 AM	2.6025	2.6058			N/A
6/25/2019	AUDPLN	1:30:00 PM	2.6018	2.6051			N/A
6/25/2019	AUDPLN	3:30:00 PM	2.6029	2.6059			N/A
6/25/2019	AUDSEK	9:30:00 AM	6.4598	6.4626			N/A
6/25/2019	AUDSEK	11:30:00 AM	6.4527	6.4545			N/A
6/25/2019	AUDSEK	1:30:00 PM	6.446	6.449			N/A
6/25/2019	AUDSEK	3:30:00 PM	6.4438	6.4462			N/A
6/25/2019	AUDSEK.fx	9:30:00 AM	6.4549	6.4673			N/A
6/25/2019	AUDSEK.fx	11:30:00 AM	6.448	6.459			N/A
6/25/2019	AUDSEK.fx	1:30:00 PM	6.4413	6.4535			N/A
6/25/2019	AUDSEK.fx	3:30:00 PM	6.4391	6.4509			N/A
6/25/2019	AUDSGD	9:30:00 AM	0.9419	0.9422			N/A
6/25/2019	AUDSGD	11:30:00 AM	0.9424	0.9427			N/A
6/25/2019	AUDSGD	1:30:00 PM	0.9432	0.9434			N/A
6/25/2019	AUDSGD	3:30:00 PM	0.9432	0.9435			N/A

6/25/2019	AUDSGD.fx	9:30:00 AM	0.94201	0.94215			N/A
6/25/2019	AUDSGD.fx	11:30:00 AM	0.94249	0.94261			N/A
6/25/2019	AUDSGD.fx	1:30:00 PM	0.94325	0.94337			N/A
6/25/2019	AUDSGD.fx	3:30:00 PM	0.94341	0.94346			N/A
6/25/2019	AUDUSD	9:30:00 AM	0.69586	0.696			N/A
6/25/2019	AUDUSD	11:30:00 AM	0.6966	0.69671			N/A
6/25/2019	AUDUSD	1:30:00 PM	0.69689	0.69703			N/A
6/25/2019	AUDUSD	3:30:00 PM	0.69713	0.69719			N/A
6/25/2019	AUDUSD.fx	9:30:00 AM	0.69591	0.69594			N/A
6/25/2019	AUDUSD.fx	11:30:00 AM	0.69665	0.69665			N/A
6/25/2019	AUDUSD.fx	1:30:00 PM	0.69694	0.69697			N/A
6/25/2019	AUDUSD.fx	3:30:00 PM	0.69719	0.69714			N/A
6/25/2019	AUDZAR	9:30:00 AM	9.9815	9.9955			N/A
6/25/2019	AUDZAR	11:30:00 AM	9.9489	9.9586			N/A
6/25/2019	AUDZAR	1:30:00 PM	9.9559	9.9707			N/A
6/25/2019	AUDZAR	3:30:00 PM	9.9552	9.9687			N/A
6/25/2019	AUS200.i	9:30:00 AM	6665.5	6667			N/A
6/25/2019	AUS200.i	11:30:00 AM	6669.52	6671.92			N/A
6/25/2019	AUS200.i	1:30:00 PM	6664.62	6668.12			N/A
6/25/2019	AUS200.i	3:30:00 PM	6668.32	6671.52			N/A
6/25/2019	BCHUSD	9:30:00 AM	498.09	499.27			N/A
6/25/2019	BCHUSD	11:30:00 AM	493.32	494.33			N/A
6/25/2019	BCHUSD	1:30:00 PM	490.28	492.2			N/A
6/25/2019	BCHUSD	3:30:00 PM	483.38	484.98			N/A
6/25/2019	CADCHF	9:30:00 AM	0.73632	0.73699			N/A
6/25/2019	CADCHF	11:30:00 AM	0.73992	0.74052			N/A
6/25/2019	CADCHF	1:30:00 PM	0.74041	0.74116			N/A
6/25/2019	CADCHF	3:30:00 PM	0.73997	0.74065			N/A
6/25/2019	CADCHF.fx	9:30:00 AM	0.73666	0.73664			N/A
6/25/2019	CADCHF.fx	11:30:00 AM	0.74026	0.74016			N/A
6/25/2019	CADCHF.fx	1:30:00 PM	0.74075	0.7408			N/A
6/25/2019	CADCHF.fx	3:30:00 PM	0.74031	0.74033			N/A
6/25/2019	CADCZK	9:30:00 AM	16.99	17.006			N/A
6/25/2019	CADCZK	11:30:00 AM	17.016	17.034			N/A

6/25/2019	CADCZK	1:30:00 PM	17.017	17.035			N/A
6/25/2019	CADCZK	3:30:00 PM	17.017	17.032			N/A
6/25/2019	CADDKK	9:30:00 AM					N/A
6/25/2019	CADDKK	11:30:00 AM					N/A
6/25/2019	CADDKK	1:30:00 PM					N/A
6/25/2019	CADDKK	3:30:00 PM	4.976	4.979			N/A
6/25/2019	CADHKD	9:30:00 AM	5.917	5.9209			N/A
6/25/2019	CADHKD	11:30:00 AM	5.9226	5.9265			N/A
6/25/2019	CADHKD	1:30:00 PM	5.922	5.9259			N/A
6/25/2019	CADHKD	3:30:00 PM	5.9274	5.9304			N/A
6/25/2019	CADHUF	9:30:00 AM	215.21	215.38			N/A
6/25/2019	CADHUF	11:30:00 AM	215.95	216.09			N/A
6/25/2019	CADHUF	1:30:00 PM	215.97	216.14			N/A
6/25/2019	CADHUF	3:30:00 PM	216.04	216.09			N/A
6/25/2019	CADJPY	9:30:00 AM	81.08	81.139			N/A
6/25/2019	CADJPY	11:30:00 AM	81.215	81.273			N/A
6/25/2019	CADJPY	1:30:00 PM	81.163	81.237			N/A
6/25/2019	CADJPY	3:30:00 PM	81.286	81.349			N/A
6/25/2019	CADJPY.fx	9:30:00 AM	81.114	81.103			N/A
6/25/2019	CADJPY.fx	11:30:00 AM	81.248	81.238			N/A
6/25/2019	CADJPY.fx	1:30:00 PM	81.196	81.202			N/A
6/25/2019	CADJPY.fx	3:30:00 PM	81.319	81.315			N/A
6/25/2019	CADMXN	9:30:00 AM	14.536	14.5487			N/A
6/25/2019	CADMXN	11:30:00 AM	14.5944	14.6066			N/A
6/25/2019	CADMXN	1:30:00 PM	14.583	14.5942			N/A
6/25/2019	CADMXN	3:30:00 PM	14.5951	14.6034			N/A
6/25/2019	CADNOK	9:30:00 AM	6.4374	6.4415			N/A
6/25/2019	CADNOK	11:30:00 AM	6.4521	6.4562			N/A
6/25/2019	CADNOK	1:30:00 PM	6.4546	6.459			N/A
6/25/2019	CADNOK	3:30:00 PM	6.4559	6.4578			N/A
6/25/2019	CADPLN	9:30:00 AM	2.8284	2.8295			N/A
6/25/2019	CADPLN	11:30:00 AM	2.8362	2.8381			N/A
6/25/2019	CADPLN	1:30:00 PM	2.8341	2.836			N/A
6/25/2019	CADPLN	3:30:00 PM	2.8359	2.8378			N/A



6/25/2019	CADSEK	9:30:00 AM	7.0371	7.0403			N/A
6/25/2019	CADSEK	11:30:00 AM	7.0291	7.0311			N/A
6/25/2019	CADSEK	1:30:00 PM	7.0189	7.0222			N/A
6/25/2019	CADSEK	3:30:00 PM	7.0189	7.0218			N/A
6/25/2019	CADSGD	9:30:00 AM	1.0258	1.0261			N/A
6/25/2019	CADSGD	11:30:00 AM	1.0262	1.0266			N/A
6/25/2019	CADSGD	1:30:00 PM	1.0265	1.0268			N/A
6/25/2019	CADSGD	3:30:00 PM	1.0269	1.0272			N/A
6/25/2019	CADZAR	9:30:00 AM	10.8778	10.8932			N/A
6/25/2019	CADZAR	11:30:00 AM	10.8414	10.8524			N/A
6/25/2019	CADZAR	1:30:00 PM	10.8438	10.8602			N/A
6/25/2019	CADZAR	3:30:00 PM	10.8484	10.861			N/A
6/25/2019	CHFCZK	9:30:00 AM	23.069	23.082			N/A
6/25/2019	CHFCZK	11:30:00 AM	22.994	23.005			N/A
6/25/2019	CHFCZK	1:30:00 PM	22.978	22.993			N/A
6/25/2019	CHFCZK	3:30:00 PM	22.989	23.006			N/A
6/25/2019	CHFDKK	9:30:00 AM	6.74	6.742			N/A
6/25/2019	CHFDKK	11:30:00 AM	6.722	6.724			N/A
6/25/2019	CHFDKK	1:30:00 PM	6.717	6.72			N/A
6/25/2019	CHFDKK	3:30:00 PM	6.722	6.724			N/A
6/25/2019	CHFDKK.fx	9:30:00 AM	6.738	6.7437			N/A
6/25/2019	CHFDKK.fx	11:30:00 AM	6.7206	6.725			N/A
6/25/2019	CHFDKK.fx	1:30:00 PM	6.7159	6.7216			N/A
6/25/2019	CHFDKK.fx	3:30:00 PM	6.7203	6.7267			N/A
6/25/2019	CHFHKD	9:30:00 AM	8.0332	8.036			N/A
6/25/2019	CHFHKD	11:30:00 AM	8.0026	8.0053			N/A
6/25/2019	CHFHKD	1:30:00 PM	7.9954	7.9992			N/A
6/25/2019	CHFHKD	3:30:00 PM	8.0074	8.0113			N/A
6/25/2019	CHFHUF	9:30:00 AM	292.09	292.46			N/A
6/25/2019	CHFHUF	11:30:00 AM	291.69	291.99			N/A
6/25/2019	CHFHUF	1:30:00 PM	291.49	291.86			N/A
6/25/2019	CHFHUF	3:30:00 PM	291.75	292.02			N/A
6/25/2019	CHFJPY	9:30:00 AM	110.076	110.139			N/A
6/25/2019	CHFJPY	11:30:00 AM	109.743	109.777			N/A

6/25/2019	CHFJPY	1:30:00 PM	109.579	109.648			N/A
6/25/2019	CHFJPY	3:30:00 PM	109.807	109.869			N/A
6/25/2019	CHFJPY.fx	9:30:00 AM	110.109	110.105			N/A
6/25/2019	CHFJPY.fx	11:30:00 AM	109.775	109.744			N/A
6/25/2019	CHFJPY.fx	1:30:00 PM	109.612	109.614			N/A
6/25/2019	CHFJPY.fx	3:30:00 PM	109.84	109.835			N/A
6/25/2019	CHFMXN	9:30:00 AM	19.7335	19.7495			N/A
6/25/2019	CHFMXN	11:30:00 AM	19.7195	19.7334			N/A
6/25/2019	CHFMXN	1:30:00 PM	19.6869	19.7033			N/A
6/25/2019	CHFMXN	3:30:00 PM	19.7162	19.7279			N/A
6/25/2019	CHFNOK	9:30:00 AM	8.7399	8.7465			N/A
6/25/2019	CHFNOK	11:30:00 AM	8.7167	8.7223			N/A
6/25/2019	CHFNOK	1:30:00 PM	8.7142	8.7214			N/A
6/25/2019	CHFNOK	3:30:00 PM	8.7215	8.729			N/A
6/25/2019	CHFNOK.fx	9:30:00 AM	8.74332	8.74308			N/A
6/25/2019	CHFNOK.fx	11:30:00 AM	8.72013	8.7189			N/A
6/25/2019	CHFNOK.fx	1:30:00 PM	8.71773	8.71792			N/A
6/25/2019	CHFNOK.fx	3:30:00 PM	8.72507	8.72541			N/A
6/25/2019	CHFPLN	9:30:00 AM	3.8401	3.8416			N/A
6/25/2019	CHFPLN	11:30:00 AM	3.8318	3.8341			N/A
6/25/2019	CHFPLN	1:30:00 PM	3.8259	3.8287			N/A
6/25/2019	CHFPLN	3:30:00 PM	3.8311	3.8343			N/A
6/25/2019	CHFPLN.fx	9:30:00 AM	3.83768	3.84393			N/A
6/25/2019	CHFPLN.fx	11:30:00 AM	3.82944	3.83635			N/A
6/25/2019	CHFPLN.fx	1:30:00 PM	3.82346	3.83115			N/A
6/25/2019	CHFPLN.fx	3:30:00 PM	3.82868	3.83663			N/A
6/25/2019	CHFSEK	9:30:00 AM	9.5529	9.5576			N/A
6/25/2019	CHFSEK	11:30:00 AM	9.4967	9.4978			N/A
6/25/2019	CHFSEK	1:30:00 PM	9.4757	9.4795			N/A
6/25/2019	CHFSEK	3:30:00 PM	9.481	9.4859			N/A
6/25/2019	CHFSGD	9:30:00 AM	1.3932	1.3936			N/A
6/25/2019	CHFSGD	11:30:00 AM	1.3872	1.3874			N/A
6/25/2019	CHFSGD	1:30:00 PM	1.3865	1.3864			N/A
6/25/2019	CHFSGD	3:30:00 PM	1.3882	1.3886			N/A

6/25/2019	CHFSGD.fx	9:30:00 AM	1.39343	1.39344			N/A
6/25/2019	CHFSGD.fx	11:30:00 AM	1.38737	1.38718			N/A
6/25/2019	CHFSGD.fx	1:30:00 PM	1.38666	1.38677			N/A
6/25/2019	CHFSGD.fx	3:30:00 PM	1.38833	1.38845			N/A
6/25/2019	CHFZAR	9:30:00 AM	14.7714	14.7831			N/A
6/25/2019	CHFZAR	11:30:00 AM	14.6541	14.6556			N/A
6/25/2019	CHFZAR	1:30:00 PM	14.6435	14.6572			N/A
6/25/2019	CHFZAR	3:30:00 PM	14.6582	14.6697			N/A
6/25/2019	CZKJPY	9:30:00 AM	4.771	4.774			N/A
6/25/2019	CZKJPY	11:30:00 AM					N/A
6/25/2019	CZKJPY	1:30:00 PM					N/A
6/25/2019	CZKJPY	3:30:00 PM	4.776	4.78			N/A
6/25/2019	DAX30.i	9:30:00 AM	12211.45	12208.95			N/A
6/25/2019	DAX30.i	11:30:00 AM	12264.2	12260.45			N/A
6/25/2019	DAX30.i	1:30:00 PM	12258.95	12258.2			N/A
6/25/2019	DAX30.i	3:30:00 PM	12255.2	12254.7			N/A
6/25/2019	DJ30.i	9:30:00 AM					N/A
6/25/2019	DJ30.i	11:30:00 AM					N/A
6/25/2019	DJ30.i	1:30:00 PM					N/A
6/25/2019	DJ30.i	3:30:00 PM					N/A
6/25/2019	DKKJPY	9:30:00 AM	16.33	16.35			N/A
6/25/2019	DKKJPY	11:30:00 AM					N/A
6/25/2019	DKKJPY	1:30:00 PM	16.32	16.33			N/A
6/25/2019	DKKJPY	3:30:00 PM					N/A
6/25/2019	EURAUD	9:30:00 AM	1.6375	1.63792		100	N/A
6/25/2019	EURAUD	11:30:00 AM	1.63371	1.6341			N/A
6/25/2019	EURAUD	1:30:00 PM	1.6326	1.63301			N/A
6/25/2019	EURAUD	3:30:00 PM	1.63325	1.63351			N/A
6/25/2019	EURAUD.fx	9:30:00 AM	1.63771	1.63769			N/A
6/25/2019	EURAUD.fx	11:30:00 AM	1.63391	1.63389			N/A
6/25/2019	EURAUD.fx	1:30:00 PM	1.63281	1.63278			N/A
6/25/2019	EURAUD.fx	3:30:00 PM	1.63345	1.6333			N/A
6/25/2019	EURCAD	9:30:00 AM	1.50313	1.504			N/A
6/25/2019	EURCAD	11:30:00 AM	1.49982	1.50063			N/A

6/25/2019	EURCAD	1:30:00 PM	1.4995	1.5003			N/A
6/25/2019	EURCAD	3:30:00 PM	1.49942	1.50019			N/A
6/25/2019	EURCAD.fx	9:30:00 AM	1.50354	1.50359			N/A
6/25/2019	EURCAD.fx	11:30:00 AM	1.50024	1.50021			N/A
6/25/2019	EURCAD.fx	1:30:00 PM	1.49991	1.49989			N/A
6/25/2019	EURCAD.fx	3:30:00 PM	1.49983	1.49977			N/A
6/25/2019	EURCHF	9:30:00 AM	1.10763	1.10765			N/A
6/25/2019	EURCHF	11:30:00 AM	1.11062	1.11043			N/A
6/25/2019	EURCHF	1:30:00 PM	1.11106	1.11108			N/A
6/25/2019	EURCHF	3:30:00 PM	1.11028	1.11043			N/A
6/25/2019	EURCHF.fx	9:30:00 AM	1.10768	1.1076			N/A
6/25/2019	EURCHF.fx	11:30:00 AM	1.11067	1.11037			N/A
6/25/2019	EURCHF.fx	1:30:00 PM	1.11113	1.11102			N/A
6/25/2019	EURCHF.fx	3:30:00 PM	1.11033	1.11037			N/A
6/25/2019	EURCZK	9:30:00 AM	25.536	25.574			N/A
6/25/2019	EURCZK	11:30:00 AM	25.519	25.557			N/A
6/25/2019	EURCZK	1:30:00 PM	25.516	25.555			N/A
6/25/2019	EURCZK	3:30:00 PM	25.511	25.55			N/A
6/25/2019	EURDKK	9:30:00 AM					N/A
6/25/2019	EURDKK	11:30:00 AM					N/A
6/25/2019	EURDKK	1:30:00 PM	7.4634	7.4645			N/A
6/25/2019	EURDKK	3:30:00 PM	7.463	7.4643			N/A
6/25/2019	EURGBP	9:30:00 AM	0.89385	0.89385			N/A
6/25/2019	EURGBP	11:30:00 AM	0.89219	0.89219			N/A
6/25/2019	EURGBP	1:30:00 PM	0.89245	0.89253			N/A
6/25/2019	EURGBP	3:30:00 PM	0.89436	0.89442			N/A
6/25/2019	EURGBP.fx	9:30:00 AM	0.89388	0.89379			N/A
6/25/2019	EURGBP.fx	11:30:00 AM	0.89222	0.89214			N/A
6/25/2019	EURGBP.fx	1:30:00 PM	0.89248	0.89249			N/A
6/25/2019	EURGBP.fx	3:30:00 PM	0.89439	0.89437			N/A
6/25/2019	EURHKD	9:30:00 AM	8.8975	8.9027			N/A
6/25/2019	EURHKD	11:30:00 AM	8.8866	8.8908			N/A
6/25/2019	EURHKD	1:30:00 PM	8.8838	8.8885			N/A
6/25/2019	EURHKD	3:30:00 PM	8.8914	8.8969			N/A

6/25/2019	EURHKD.fx	9:30:00 AM	8.90023	8.89997			N/A
6/25/2019	EURHKD.fx	11:30:00 AM	8.88937	8.88798			N/A
6/25/2019	EURHKD.fx	1:30:00 PM	8.88663	8.8857			N/A
6/25/2019	EURHKD.fx	3:30:00 PM	8.89424	8.89409			N/A
6/25/2019	EURHUF	9:30:00 AM	323.51	324.12			N/A
6/25/2019	EURHUF	11:30:00 AM	323.85	324.43			N/A
6/25/2019	EURHUF	1:30:00 PM	323.81	324.5			N/A
6/25/2019	EURHUF	3:30:00 PM	323.91	324.33			N/A
6/25/2019	EURHUF.fx	9:30:00 AM	323.761	323.988			N/A
6/25/2019	EURHUF.fx	11:30:00 AM	324.119	324.278			N/A
6/25/2019	EURHUF.fx	1:30:00 PM	324.111	324.252			N/A
6/25/2019	EURHUF.fx	3:30:00 PM	324.16	324.378			N/A
6/25/2019	EURJPY	9:30:00 AM	121.959	121.948			N/A
6/25/2019	EURJPY	11:30:00 AM	121.887	121.88			N/A
6/25/2019	EURJPY	1:30:00 PM	121.791	121.792			N/A
6/25/2019	EURJPY	3:30:00 PM	121.957	121.957			N/A
6/25/2019	EURJPY.fx	9:30:00 AM	121.962	121.944			N/A
6/25/2019	EURJPY.fx	11:30:00 AM	121.889	121.876			N/A
6/25/2019	EURJPY.fx	1:30:00 PM	121.794	121.788			N/A
6/25/2019	EURJPY.fx	3:30:00 PM	121.96	121.953			N/A
6/25/2019	EURMXN	9:30:00 AM	21.8599	21.8793			N/A
6/25/2019	EURMXN	11:30:00 AM	21.8997	21.9173			N/A
6/25/2019	EURMXN	1:30:00 PM	21.8767	21.8924			N/A
6/25/2019	EURMXN	3:30:00 PM	21.8925	21.9094			N/A
6/25/2019	EURMXN.fx	9:30:00 AM	21.8682	21.8712			N/A
6/25/2019	EURMXN.fx	11:30:00 AM	21.9077	21.909			N/A
6/25/2019	EURMXN.fx	1:30:00 PM	21.8847	21.884			N/A
6/25/2019	EURMXN.fx	3:30:00 PM	21.9018	21.9002			N/A
6/25/2019	EURNOK	9:30:00 AM	9.6783	9.69			N/A
6/25/2019	EURNOK	11:30:00 AM	9.6782	9.689			N/A
6/25/2019	EURNOK	1:30:00 PM	9.6813	9.6917			N/A
6/25/2019	EURNOK	3:30:00 PM	9.6819	9.6937			N/A
6/25/2019	EURNOK.fx	9:30:00 AM	9.68369	9.68458			N/A
6/25/2019	EURNOK.fx	11:30:00 AM	9.68355	9.68363			N/A

6/25/2019	EURNOK.fx	1:30:00 PM	9.68684	9.6862			N/A
6/25/2019	EURNOK.fx	3:30:00 PM	9.68749	9.68821			N/A
6/25/2019	EURNZD	9:30:00 AM	1.71637	1.71717			N/A
6/25/2019	EURNZD	11:30:00 AM	1.71213	1.71292			N/A
6/25/2019	EURNZD	1:30:00 PM	1.71238	1.71327			N/A
6/25/2019	EURNZD	3:30:00 PM	1.71294	1.71353			N/A
6/25/2019	EURNZD.fx	9:30:00 AM	1.71679	1.71674			N/A
6/25/2019	EURNZD.fx	11:30:00 AM	1.71255	1.71247			N/A
6/25/2019	EURNZD.fx	1:30:00 PM	1.7128	1.71284			N/A
6/25/2019	EURNZD.fx	3:30:00 PM	1.71336	1.71309			N/A
6/25/2019	EURPLN	9:30:00 AM	4.2533	4.255			N/A
6/25/2019	EURPLN	11:30:00 AM	4.2549	4.2581			N/A
6/25/2019	EURPLN	1:30:00 PM	4.2509	4.2542			N/A
6/25/2019	EURPLN	3:30:00 PM	4.2539	4.2571			N/A
6/25/2019	EURPLN.fx	9:30:00 AM	4.25237	4.25572			N/A
6/25/2019	EURPLN.fx	11:30:00 AM	4.25437	4.25869			N/A
6/25/2019	EURPLN.fx	1:30:00 PM	4.25037	4.25467			N/A
6/25/2019	EURPLN.fx	3:30:00 PM	4.25327	4.25774			N/A
6/25/2019	EURRUB	9:30:00 AM					N/A
6/25/2019	EURRUB	11:30:00 AM	70.847	71.281			N/A
6/25/2019	EURRUB	1:30:00 PM	71.01	71.45			N/A
6/25/2019	EURRUB	3:30:00 PM	71.109	71.543			N/A
6/25/2019	EURSEK	9:30:00 AM	10.5836	10.587			N/A
6/25/2019	EURSEK	11:30:00 AM	10.5476	10.5493			N/A
6/25/2019	EURSEK	1:30:00 PM	10.5292	10.5336			N/A
6/25/2019	EURSEK	3:30:00 PM	10.5291	10.5335			N/A
6/25/2019	EURSEK.fx	9:30:00 AM	10.58508	10.58552			N/A
6/25/2019	EURSEK.fx	11:30:00 AM	10.5492	10.54774			N/A
6/25/2019	EURSEK.fx	1:30:00 PM	10.53112	10.53177			N/A
6/25/2019	EURSEK.fx	3:30:00 PM	10.53071	10.53181			N/A
6/25/2019	EURSGD	9:30:00 AM	1.543	1.5434			N/A
6/25/2019	EURSGD	11:30:00 AM	1.5403	1.541			N/A
6/25/2019	EURSGD	1:30:00 PM	1.5404	1.5412			N/A
6/25/2019	EURSGD	3:30:00 PM	1.5411	1.542			N/A

6/25/2019	EURSGD.fx	9:30:00 AM	1.54338	1.54342			N/A
6/25/2019	EURSGD.fx	11:30:00 AM	1.54062	1.54062			N/A
6/25/2019	EURSGD.fx	1:30:00 PM	1.54079	1.54079			N/A
6/25/2019	EURSGD.fx	3:30:00 PM	1.54153	1.54159			N/A
6/25/2019	EURUSD	9:30:00 AM	1.13994	1.14006			N/A
6/25/2019	EURUSD	11:30:00 AM	1.1385	1.13852			N/A
6/25/2019	EURUSD	1:30:00 PM	1.13824	1.13827			N/A
6/25/2019	EURUSD	3:30:00 PM	1.13894	1.13906			N/A
6/25/2019	EURUSD.fx	9:30:00 AM	1.14014	1.14015			N/A
6/25/2019	EURUSD.fx	11:30:00 AM	1.13871	1.13861			N/A
6/25/2019	EURUSD.fx	1:30:00 PM	1.13844	1.13836			N/A
6/25/2019	EURUSD.fx	3:30:00 PM	1.13914	1.13915			N/A
6/25/2019	EURZAR	9:30:00 AM	16.3637	16.3793			N/A
6/25/2019	EURZAR	11:30:00 AM	16.2733	16.2815			N/A
6/25/2019	EURZAR	1:30:00 PM	16.2702	16.2891			N/A
6/25/2019	EURZAR	3:30:00 PM	16.2788	16.2993			N/A
6/25/2019	EURZAR.fx	9:30:00 AM	16.36297	16.38019			N/A
6/25/2019	EURZAR.fx	11:30:00 AM	16.27312	16.28206			N/A
6/25/2019	EURZAR.fx	1:30:00 PM	16.26975	16.28989			N/A
6/25/2019	EURZAR.fx	3:30:00 PM	16.27797	16.30017			N/A
6/25/2019	GBPAUD	9:30:00 AM	1.8325	1.83323			N/A
6/25/2019	GBPAUD	11:30:00 AM	1.83169	1.83237			N/A
6/25/2019	GBPAUD	1:30:00 PM	1.82981	1.83048			N/A
6/25/2019	GBPAUD	3:30:00 PM	1.82666	1.82722			N/A
6/25/2019	GBPAUD.fx	9:30:00 AM	1.83289	1.83284			N/A
6/25/2019	GBPAUD.fx	11:30:00 AM	1.8321	1.83198			N/A
6/25/2019	GBPAUD.fx	1:30:00 PM	1.83022	1.83006			N/A
6/25/2019	GBPAUD.fx	3:30:00 PM	1.82709	1.82681			N/A
6/25/2019	GBPCAD	9:30:00 AM	1.68181	1.68246			N/A
6/25/2019	GBPCAD	11:30:00 AM	1.68112	1.68189			N/A
6/25/2019	GBPCAD	1:30:00 PM	1.68022	1.68091			N/A
6/25/2019	GBPCAD	3:30:00 PM	1.67652	1.67724			N/A
6/25/2019	GBPCAD.fx	9:30:00 AM	1.68219	1.68207			N/A
6/25/2019	GBPCAD.fx	11:30:00 AM	1.68149	1.6815			N/A

6/25/2019	GBPCAD.fx	1:30:00 PM	1.68059	1.68052			N/A
6/25/2019	GBPCAD.fx	3:30:00 PM	1.67692	1.67684			N/A
6/25/2019	GBPCHF	9:30:00 AM	1.23897	1.23934			N/A
6/25/2019	GBPCHF	11:30:00 AM	1.24459	1.24486			N/A
6/25/2019	GBPCHF	1:30:00 PM	1.24477	1.24508			N/A
6/25/2019	GBPCHF	3:30:00 PM	1.24123	1.24168			N/A
6/25/2019	GBPCHF.fx	9:30:00 AM	1.23917	1.23915			N/A
6/25/2019	GBPCHF.fx	11:30:00 AM	1.24479	1.24465			N/A
6/25/2019	GBPCHF.fx	1:30:00 PM	1.24496	1.24487			N/A
6/25/2019	GBPCHF.fx	3:30:00 PM	1.24143	1.24148			N/A
6/25/2019	GBPCZK	9:30:00 AM	28.581	28.598			N/A
6/25/2019	GBPCZK	11:30:00 AM	28.613	28.633			N/A
6/25/2019	GBPCZK	1:30:00 PM	28.6	28.621			N/A
6/25/2019	GBPCZK	3:30:00 PM	28.534	28.554			N/A
6/25/2019	GBPDKK	9:30:00 AM	8.349	8.359			N/A
6/25/2019	GBPDKK	11:30:00 AM	8.363	8.374			N/A
6/25/2019	GBPDKK	1:30:00 PM	8.36	8.371			N/A
6/25/2019	GBPDKK	3:30:00 PM	8.341	8.353			N/A
6/25/2019	GBPDKK.fx	9:30:00 AM	8.347	8.3591			N/A
6/25/2019	GBPDKK.fx	11:30:00 AM	8.3619	8.3742			N/A
6/25/2019	GBPDKK.fx	1:30:00 PM	8.3581	8.3709			N/A
6/25/2019	GBPDKK.fx	3:30:00 PM	8.3404	8.3532			N/A
6/25/2019	GBPHKD	9:30:00 AM	9.9526	9.9569			N/A
6/25/2019	GBPHKD	11:30:00 AM	9.9578	9.9636			N/A
6/25/2019	GBPHKD	1:30:00 PM	9.9515	9.9561			N/A
6/25/2019	GBPHKD	3:30:00 PM	9.939	9.9436			N/A
6/25/2019	GBPHUF	9:30:00 AM	361.9	362.34			N/A
6/25/2019	GBPHUF	11:30:00 AM	362.98	363.41			N/A
6/25/2019	GBPHUF	1:30:00 PM	362.8	363.26			N/A
6/25/2019	GBPHUF	3:30:00 PM	362.14	362.43			N/A
6/25/2019	GBPJPY	9:30:00 AM	136.415	136.457			N/A
6/25/2019	GBPJPY	11:30:00 AM	136.611	136.619			N/A
6/25/2019	GBPJPY	1:30:00 PM	136.445	136.476			N/A
6/25/2019	GBPJPY	3:30:00 PM	136.334	136.382			N/A



6/25/2019	GBPJPY.fx	9:30:00 AM	136.434	136.437			N/A
6/25/2019	GBPJPY.fx	11:30:00 AM	136.63	136.599		1000	N/A
6/25/2019	GBPJPY.fx	1:30:00 PM	136.464	136.457			N/A
6/25/2019	GBPJPY.fx	3:30:00 PM	136.354	136.362			N/A
6/25/2019	GBPMXN	9:30:00 AM	24.4519	24.465			N/A
6/25/2019	GBPMXN	11:30:00 AM	24.5409	24.5539			N/A
6/25/2019	GBPMXN	1:30:00 PM	24.5077	24.5189			N/A
6/25/2019	GBPMXN	3:30:00 PM	24.4743	24.4835			N/A
6/25/2019	GBPNOK	9:30:00 AM	10.8295	10.8393			N/A
6/25/2019	GBPNOK	11:30:00 AM	10.8482	10.8581			N/A
6/25/2019	GBPNOK	1:30:00 PM	10.8488	10.8579			N/A
6/25/2019	GBPNOK	3:30:00 PM	10.8267	10.837			N/A
6/25/2019	GBPNOK.fx	9:30:00 AM	10.83442	10.83439			N/A
6/25/2019	GBPNOK.fx	11:30:00 AM	10.85293	10.85314			N/A
6/25/2019	GBPNOK.fx	1:30:00 PM	10.85355	10.85292			N/A
6/25/2019	GBPNOK.fx	3:30:00 PM	10.83179	10.83205			N/A
6/25/2019	GBPNZD	9:30:00 AM	1.92026	1.92095			N/A
6/25/2019	GBPNZD	11:30:00 AM	1.91918	1.91978			N/A
6/25/2019	GBPNZD	1:30:00 PM	1.91883	1.9195			N/A
6/25/2019	GBPNZD	3:30:00 PM	1.91534	1.91577			N/A
6/25/2019	GBPNZD.fx	9:30:00 AM	1.92063	1.92058			N/A
6/25/2019	GBPNZD.fx	11:30:00 AM	1.91953	1.91942			N/A
6/25/2019	GBPNZD.fx	1:30:00 PM	1.91917	1.91913			N/A
6/25/2019	GBPNZD.fx	3:30:00 PM	1.91571	1.91537			N/A
6/25/2019	GBPPLN	9:30:00 AM	4.7594	4.7593			N/A
6/25/2019	GBPPLN	11:30:00 AM	4.7702	4.7716			N/A
6/25/2019	GBPPLN	1:30:00 PM	4.7639	4.7657			N/A
6/25/2019	GBPPLN	3:30:00 PM	4.7572	4.759			N/A
6/25/2019	GBPPLN.fx	9:30:00 AM	4.75708	4.76165			N/A
6/25/2019	GBPPLN.fx	11:30:00 AM	4.76793	4.77384			N/A
6/25/2019	GBPPLN.fx	1:30:00 PM	4.76196	4.76791			N/A
6/25/2019	GBPPLN.fx	3:30:00 PM	4.75496	4.76104			N/A
6/25/2019	GBPSEK	9:30:00 AM	11.8377	11.8468			N/A
6/25/2019	GBPSEK	11:30:00 AM	11.8191	11.8261			N/A

6/25/2019	GBPSEK	1:30:00 PM	11.796	11.8044			N/A
6/25/2019	GBPSEK	3:30:00 PM	11.7703	11.7789			N/A
6/25/2019	GBPSEK.fx	9:30:00 AM	11.83337	11.85086			N/A
6/25/2019	GBPSEK.fx	11:30:00 AM	11.81522	11.82977			N/A
6/25/2019	GBPSEK.fx	1:30:00 PM	11.79244	11.80808			N/A
6/25/2019	GBPSEK.fx	3:30:00 PM	11.76652	11.78255			N/A
6/25/2019	GBPSGD	9:30:00 AM	1.7264	1.727			N/A
6/25/2019	GBPSGD	11:30:00 AM	1.7264	1.7272			N/A
6/25/2019	GBPSGD	1:30:00 PM	1.7261	1.7267			N/A
6/25/2019	GBPSGD	3:30:00 PM	1.7232	1.724			N/A
6/25/2019	GBPSGD.fx	9:30:00 AM	1.72453	1.72885			N/A
6/25/2019	GBPSGD.fx	11:30:00 AM	1.72454	1.72896			N/A
6/25/2019	GBPSGD.fx	1:30:00 PM	1.72423	1.72856			N/A
6/25/2019	GBPSGD.fx	3:30:00 PM	1.72134	1.72578			N/A
6/25/2019	GBPUSD	9:30:00 AM	1.27555	1.27551			N/A
6/25/2019	GBPUSD	11:30:00 AM	1.27623	1.27624			N/A
6/25/2019	GBPUSD	1:30:00 PM	1.27554	1.27548			N/A
6/25/2019	GBPUSD	3:30:00 PM	1.27363	1.2737			N/A
6/25/2019	GBPUSD.fx	9:30:00 AM	1.27561	1.27546			N/A
6/25/2019	GBPUSD.fx	11:30:00 AM	1.2763	1.27619			N/A
6/25/2019	GBPUSD.fx	1:30:00 PM	1.27559	1.27542			N/A
6/25/2019	GBPUSD.fx	3:30:00 PM	1.27368	1.27363			N/A
6/25/2019	GBPZAR	9:30:00 AM	18.3027	18.33			N/A
6/25/2019	GBPZAR	11:30:00 AM	18.2355	18.2507			N/A
6/25/2019	GBPZAR	1:30:00 PM	18.2262	18.2549			N/A
6/25/2019	GBPZAR	3:30:00 PM	18.1989	18.2275			N/A
6/25/2019	GBPZAR.fx	9:30:00 AM	18.3092	18.322			N/A
6/25/2019	GBPZAR.fx	11:30:00 AM	18.2421	18.2426			N/A
6/25/2019	GBPZAR.fx	1:30:00 PM	18.2336	18.2472			N/A
6/25/2019	GBPZAR.fx	3:30:00 PM	18.2062	18.2203			N/A
6/25/2019	GOLD	9:30:00 AM	1428.77	1427.1			N/A
6/25/2019	GOLD	11:30:00 AM	1432.15	1430.92			N/A
6/25/2019	GOLD	1:30:00 PM	1430.35	1430.37			N/A
6/25/2019	GOLD	3:30:00 PM	1425.14	1425.21			N/A

6/25/2019	HKDJPY	9:30:00 AM	13.7	13.71			N/A
6/25/2019	HKDJPY	11:30:00 AM	13.71	13.72			N/A
6/25/2019	HKDJPY	1:30:00 PM	13.71	13.72			N/A
6/25/2019	HKDJPY	3:30:00 PM	13.71	13.72			N/A
6/25/2019	HKDJPY.fx	9:30:00 AM	13.7	13.704			N/A
6/25/2019	HKDJPY.fx	11:30:00 AM	13.709	13.713			N/A
6/25/2019	HKDJPY.fx	1:30:00 PM	13.701	13.709			N/A
6/25/2019	HKDJPY.fx	3:30:00 PM	13.708	13.714			N/A
6/25/2019	HUFJPY	9:30:00 AM	0.3768	0.3772			N/A
6/25/2019	HUFJPY	11:30:00 AM	0.3763	0.3766			N/A
6/25/2019	HUFJPY	1:30:00 PM	0.376	0.3763			N/A
6/25/2019	HUFJPY	3:30:00 PM	0.3764	0.3767			N/A
6/25/2019	JP225.i	9:30:00 AM	21127.39	21139.89			N/A
6/25/2019	JP225.i	11:30:00 AM	21159.89	21174.89			N/A
6/25/2019	JP225.i	1:30:00 PM	21149.89	21164.89			N/A
6/25/2019	JP225.i	3:30:00 PM	21149.89	21164.89			N/A
6/25/2019	MXNJPY	9:30:00 AM	5.58	5.59			N/A
6/25/2019	MXNJPY	11:30:00 AM					N/A
6/25/2019	MXNJPY	1:30:00 PM	5.57	5.57			N/A
6/25/2019	MXNJPY	3:30:00 PM	5.57	5.58			N/A
6/25/2019	NASDAQ.i	9:30:00 AM					N/A
6/25/2019	NASDAQ.i	11:30:00 AM					N/A
6/25/2019	NASDAQ.i	1:30:00 PM					N/A
6/25/2019	NASDAQ.i	3:30:00 PM					N/A
6/25/2019	NOKJPY	9:30:00 AM	12.58	12.61			N/A
6/25/2019	NOKJPY	11:30:00 AM	12.57	12.6			N/A
6/25/2019	NOKJPY	1:30:00 PM	12.56	12.59			N/A
6/25/2019	NOKJPY	3:30:00 PM	12.58	12.61			N/A
6/25/2019	NOKJPY.fx	9:30:00 AM	12.591	12.595			N/A
6/25/2019	NOKJPY.fx	11:30:00 AM	12.584	12.589			N/A
6/25/2019	NOKJPY.fx	1:30:00 PM	12.57	12.577			N/A
6/25/2019	NOKJPY.fx	3:30:00 PM	12.585	12.591			N/A
6/25/2019	NZDCAD	9:30:00 AM	0.87547	0.87614			N/A
6/25/2019	NZDCAD	11:30:00 AM	0.87572	0.87639			N/A

6/25/2019	NZDCAD	1:30:00 PM	0.87531	0.87602			N/A
6/25/2019	NZDCAD	3:30:00 PM	0.87516	0.8757			N/A
6/25/2019	NZDCAD.fx	9:30:00 AM	0.8758	0.87581			N/A
6/25/2019	NZDCAD.fx	11:30:00 AM	0.87605	0.87605			N/A
6/25/2019	NZDCAD.fx	1:30:00 PM	0.87565	0.87568			N/A
6/25/2019	NZDCAD.fx	3:30:00 PM	0.8755	0.87536			N/A
6/25/2019	NZDCHF	9:30:00 AM	0.64481	0.64555			N/A
6/25/2019	NZDCHF	11:30:00 AM	0.64821	0.64878			N/A
6/25/2019	NZDCHF	1:30:00 PM	0.64833	0.64904			N/A
6/25/2019	NZDCHF	3:30:00 PM	0.64776	0.64842			N/A
6/25/2019	NZDCHF.fx	9:30:00 AM	0.64515	0.6452			N/A
6/25/2019	NZDCHF.fx	11:30:00 AM	0.64855	0.64843			N/A
6/25/2019	NZDCHF.fx	1:30:00 PM	0.64868	0.64868			N/A
6/25/2019	NZDCHF.fx	3:30:00 PM	0.6481	0.64806			N/A
6/25/2019	NZDCZK	9:30:00 AM	14.879	14.891			N/A
6/25/2019	NZDCZK	11:30:00 AM	14.905	14.917			N/A
6/25/2019	NZDCZK	1:30:00 PM	14.901	14.913			N/A
6/25/2019	NZDCZK	3:30:00 PM	14.895	14.905			N/A
6/25/2019	NZDDKK	9:30:00 AM					N/A
6/25/2019	NZDDKK	11:30:00 AM					N/A
6/25/2019	NZDDKK	1:30:00 PM					N/A
6/25/2019	NZDDKK	3:30:00 PM	4.354	4.357			N/A
6/25/2019	NZDHKD	9:30:00 AM	5.1811	5.184			N/A
6/25/2019	NZDHKD	11:30:00 AM	5.1867	5.1894			N/A
6/25/2019	NZDHKD	1:30:00 PM	5.1845	5.1873			N/A
6/25/2019	NZDHKD	3:30:00 PM	5.1891	5.1907			N/A
6/25/2019	NZDHUF	9:30:00 AM	188.38	188.67			N/A
6/25/2019	NZDHUF	11:30:00 AM	189.07	189.34			N/A
6/25/2019	NZDHUF	1:30:00 PM	189.01	189.3			N/A
6/25/2019	NZDHUF	3:30:00 PM	189	189.21			N/A
6/25/2019	NZDJPY	9:30:00 AM	71.006	71.072			N/A
6/25/2019	NZDJPY	11:30:00 AM	71.144	71.203			N/A
6/25/2019	NZDJPY	1:30:00 PM	71.069	71.141			N/A
6/25/2019	NZDJPY	3:30:00 PM	71.156	71.216			N/A

6/25/2019	NZDJPY.fx	9:30:00 AM	71.037	71.038			N/A
6/25/2019	NZDJPY.fx	11:30:00 AM	71.175	71.169			N/A
6/25/2019	NZDJPY.fx	1:30:00 PM	71.1	71.108			N/A
6/25/2019	NZDJPY.fx	3:30:00 PM	71.187	71.182			N/A
6/25/2019	NZDMXN	9:30:00 AM	12.7306	12.7368			N/A
6/25/2019	NZDMXN	11:30:00 AM	12.7853	12.7904			N/A
6/25/2019	NZDMXN	1:30:00 PM	12.7687	12.7736			N/A
6/25/2019	NZDMXN	3:30:00 PM	12.7758	12.779			N/A
6/25/2019	NZDNOK	9:30:00 AM	5.6363	5.64			N/A
6/25/2019	NZDNOK	11:30:00 AM	5.6503	5.6541			N/A
6/25/2019	NZDNOK	1:30:00 PM	5.6507	5.6542			N/A
6/25/2019	NZDNOK	3:30:00 PM	5.65	5.652			N/A
6/25/2019	NZDPLN	9:30:00 AM	2.476	2.4774			N/A
6/25/2019	NZDPLN	11:30:00 AM	2.4837	2.4851			N/A
6/25/2019	NZDPLN	1:30:00 PM	2.4812	2.4825			N/A
6/25/2019	NZDPLN	3:30:00 PM	2.4827	2.4838			N/A
6/25/2019	NZDSEK	9:30:00 AM	6.1594	6.1663			N/A
6/25/2019	NZDSEK	11:30:00 AM	6.1543	6.1596			N/A
6/25/2019	NZDSEK	1:30:00 PM	6.1427	6.1493			N/A
6/25/2019	NZDSEK	3:30:00 PM	6.1417	6.1471			N/A
6/25/2019	NZDSGD	9:30:00 AM	0.8987	0.8994			N/A
6/25/2019	NZDSGD	11:30:00 AM	0.8993	0.9			N/A
6/25/2019	NZDSGD	1:30:00 PM	0.8992	0.8995			N/A
6/25/2019	NZDSGD	3:30:00 PM	0.8995	0.9001			N/A
6/25/2019	NZDSGD.fx	9:30:00 AM	0.8987	0.89931			N/A
6/25/2019	NZDSGD.fx	11:30:00 AM	0.89933	0.89991			N/A
6/25/2019	NZDSGD.fx	1:30:00 PM	0.89925	0.89983			N/A
6/25/2019	NZDSGD.fx	3:30:00 PM	0.8995	0.90001			N/A
6/25/2019	NZDUSD	9:30:00 AM	0.66401	0.66414			N/A
6/25/2019	NZDUSD	11:30:00 AM	0.66483	0.66492			N/A
6/25/2019	NZDUSD	1:30:00 PM	0.66452	0.66464			N/A
6/25/2019	NZDUSD	3:30:00 PM	0.66483	0.66488			N/A
6/25/2019	NZDUSD.fx	9:30:00 AM	0.66408	0.66415			N/A
6/25/2019	NZDUSD.fx	11:30:00 AM	0.6649	0.66493			N/A

6/25/2019	NZDUSD.fx	1:30:00 PM	0.66459	0.66466			N/A
6/25/2019	NZDUSD.fx	3:30:00 PM	0.66491	0.6649			N/A
6/25/2019	NZDZAR	9:30:00 AM	9.5231	9.539			N/A
6/25/2019	NZDZAR	11:30:00 AM	9.4936	9.5056			N/A
6/25/2019	NZDZAR	1:30:00 PM	9.4919	9.5083			N/A
6/25/2019	NZDZAR	3:30:00 PM	9.4931	9.508			N/A
6/25/2019	SEKJPY	9:30:00 AM					N/A
6/25/2019	SEKJPY	11:30:00 AM	11.56	11.56			N/A
6/25/2019	SEKJPY	1:30:00 PM	11.56	11.57			N/A
6/25/2019	SEKJPY	3:30:00 PM					N/A
6/25/2019	SEKJPY.fx	9:30:00 AM	11.511	11.531			N/A
6/25/2019	SEKJPY.fx	11:30:00 AM	11.548	11.562			N/A
6/25/2019	SEKJPY.fx	1:30:00 PM	11.555	11.573			N/A
6/25/2019	SEKJPY.fx	3:30:00 PM	11.571	11.589			N/A
6/25/2019	SGDJPY	9:30:00 AM	78.99	79.01			N/A
6/25/2019	SGDJPY	11:30:00 AM	79.09	79.1			N/A
6/25/2019	SGDJPY	1:30:00 PM	79.01	79.04			N/A
6/25/2019	SGDJPY	3:30:00 PM	79.08	79.11			N/A
6/25/2019	SILVER	9:30:00 AM	15.21	15.57			N/A
6/25/2019	SILVER	11:30:00 AM	15.25	15.62			N/A
6/25/2019	SILVER	1:30:00 PM	15.23	15.61			N/A
6/25/2019	SILVER	3:30:00 PM	15.17	15.54			N/A
6/25/2019	SPX500.i	9:30:00 AM	2941.96	2942.51			N/A
6/25/2019	SPX500.i	11:30:00 AM	2944.71	2944.76			N/A
6/25/2019	SPX500.i	1:30:00 PM	2944.46	2945.51			N/A
6/25/2019	SPX500.i	3:30:00 PM	2945.78	2946.14			N/A
6/25/2019	UK100.i	9:30:00 AM	7399.3	7399.55			N/A
6/25/2019	UK100.i	11:30:00 AM	7403.8	7403.55			N/A
6/25/2019	UK100.i	1:30:00 PM	7408.8	7409.88			N/A
6/25/2019	UK100.i	3:30:00 PM	7423.8	7424.55			N/A
6/25/2019	USDCAD	9:30:00 AM	1.31874	1.31885			N/A
6/25/2019	USDCAD	11:30:00 AM	1.31749	1.31764			N/A
6/25/2019	USDCAD	1:30:00 PM	1.3175	1.31763			N/A
6/25/2019	USDCAD	3:30:00 PM	1.31663	1.31663			N/A

6/25/2019	USDCAD.fx	9:30:00 AM	1.31877	1.31882			N/A
6/25/2019	USDCAD.fx	11:30:00 AM	1.31752	1.31761			N/A
6/25/2019	USDCAD.fx	1:30:00 PM	1.31753	1.3176			N/A
6/25/2019	USDCAD.fx	3:30:00 PM	1.31665	1.3166			N/A
6/25/2019	USDCHF	9:30:00 AM	0.97148	0.97152			N/A
6/25/2019	USDCHF	11:30:00 AM	0.97532	0.97523			N/A
6/25/2019	USDCHF	1:30:00 PM	0.97596	0.97609			N/A
6/25/2019	USDCHF	3:30:00 PM	0.97463	0.97479		100	N/A
6/25/2019	USDCHF.fx	9:30:00 AM	0.97154	0.97146			N/A
6/25/2019	USDCHF.fx	11:30:00 AM	0.97537	0.97517			N/A
6/25/2019	USDCHF.fx	1:30:00 PM	0.976	0.97602			N/A
6/25/2019	USDCHF.fx	3:30:00 PM	0.97468	0.97473			N/A
6/25/2019	USDCZK	9:30:00 AM	22.424	22.447			N/A
6/25/2019	USDCZK	11:30:00 AM	22.436	22.458			N/A
6/25/2019	USDCZK	1:30:00 PM	22.44	22.462			N/A
6/25/2019	USDCZK	3:30:00 PM	22.421	22.444			N/A
6/25/2019	USDCZK.fx	9:30:00 AM	22.4319	22.4392			N/A
6/25/2019	USDCZK.fx	11:30:00 AM	22.4454	22.449			N/A
6/25/2019	USDCZK.fx	1:30:00 PM	22.449	22.4528			N/A
6/25/2019	USDCZK.fx	3:30:00 PM	22.4299	22.4342			N/A
6/25/2019	USDDKK	9:30:00 AM	6.5473	6.5515			N/A
6/25/2019	USDDKK	11:30:00 AM	6.5554	6.5592			N/A
6/25/2019	USDDKK	1:30:00 PM	6.5566	6.5602			N/A
6/25/2019	USDDKK	3:30:00 PM	6.5522	6.5563			N/A
6/25/2019	USDDKK.fx	9:30:00 AM	6.5478	6.54949			N/A
6/25/2019	USDDKK.fx	11:30:00 AM	6.55618	6.55715			N/A
6/25/2019	USDDKK.fx	1:30:00 PM	6.55708	6.55812			N/A
6/25/2019	USDDKK.fx	3:30:00 PM	6.55266	6.55424			N/A
6/25/2019	USDHKD	9:30:00 AM	7.8063	7.8062			N/A
6/25/2019	USDHKD	11:30:00 AM	7.8063	7.8063			N/A
6/25/2019	USDHKD	1:30:00 PM	7.8053	7.8058			N/A
6/25/2019	USDHKD	3:30:00 PM	7.8075	7.8075			N/A
6/25/2019	USDHKD.fx	9:30:00 AM	7.80622	7.80621			N/A
6/25/2019	USDHKD.fx	11:30:00 AM	7.80622	7.80627			N/A

6/25/2019	USDHKD.fx	1:30:00 PM	7.80552	7.80613			N/A
6/25/2019	USDHKD.fx	3:30:00 PM	7.80742	7.80807			N/A
6/25/2019	USDHUF	9:30:00 AM	283.81	284.28			N/A
6/25/2019	USDHUF	11:30:00 AM	284.51	284.93			N/A
6/25/2019	USDHUF	1:30:00 PM	284.54	284.99			N/A
6/25/2019	USDHUF	3:30:00 PM	284.42	284.9			N/A
6/25/2019	USDHUF.fx	9:30:00 AM	284.005	284.091			N/A
6/25/2019	USDHUF.fx	11:30:00 AM	284.708	284.736			N/A
6/25/2019	USDHUF.fx	1:30:00 PM	284.755	284.784			N/A
6/25/2019	USDHUF.fx	3:30:00 PM	284.61	284.706			N/A
6/25/2019	USDINR	9:30:00 AM	64.36	74.35			N/A
6/25/2019	USDINR	11:30:00 AM	64.35	74.34			N/A
6/25/2019	USDINR	1:30:00 PM					N/A
6/25/2019	USDINR	3:30:00 PM					N/A
6/25/2019	USDJPY	9:30:00 AM	106.969	106.961			N/A
6/25/2019	USDJPY	11:30:00 AM	107.048	107.037			N/A
6/25/2019	USDJPY	1:30:00 PM	106.977	106.992			N/A
6/25/2019	USDJPY	3:30:00 PM	107.058	107.061		100	N/A
6/25/2019	USDJPY.fx	9:30:00 AM	106.975	106.954			N/A
6/25/2019	USDJPY.fx	11:30:00 AM	107.054	107.03			N/A
6/25/2019	USDJPY.fx	1:30:00 PM	106.983	106.986			N/A
6/25/2019	USDJPY.fx	3:30:00 PM	107.063	107.054			N/A
6/25/2019	USDMXN	9:30:00 AM	19.177	19.186			N/A
6/25/2019	USDMXN	11:30:00 AM	19.237	19.245			N/A
6/25/2019	USDMXN	1:30:00 PM	19.221	19.229			N/A
6/25/2019	USDMXN	3:30:00 PM	19.224	19.228			N/A
6/25/2019	USDMXN.f	9:30:00 AM					N/A
6/25/2019	USDMXN.f	11:30:00 AM					N/A
6/25/2019	USDMXN.f	1:30:00 PM					N/A
6/25/2019	USDMXN.f	3:30:00 PM					N/A
6/25/2019	USDNOK	9:30:00 AM	8.49	8.4985			N/A
6/25/2019	USDNOK	11:30:00 AM	8.5003	8.5082			N/A
6/25/2019	USDNOK	1:30:00 PM	8.5049	8.5127			N/A
6/25/2019	USDNOK	3:30:00 PM	8.5008	8.5088			N/A



6/25/2019	USDNOK.fx	9:30:00 AM	8.49396	8.49404			N/A
6/25/2019	USDNOK.fx	11:30:00 AM	8.50438	8.50366			N/A
6/25/2019	USDNOK.fx	1:30:00 PM	8.50878	8.50844			N/A
6/25/2019	USDNOK.fx	3:30:00 PM	8.50475	8.50426			N/A
6/25/2019	USDPLN	9:30:00 AM	3.731	3.7315			N/A
6/25/2019	USDPLN	11:30:00 AM	3.7374	3.7388			N/A
6/25/2019	USDPLN	1:30:00 PM	3.7348	3.7362			N/A
6/25/2019	USDPLN	3:30:00 PM	3.7349	3.7365			N/A
6/25/2019	USDPLN.fx	9:30:00 AM	3.73016	3.73231			N/A
6/25/2019	USDPLN.fx	11:30:00 AM	3.73656	3.73953			N/A
6/25/2019	USDPLN.fx	1:30:00 PM	3.73408	3.73692			N/A
6/25/2019	USDPLN.fx	3:30:00 PM	3.73416	3.73731			N/A
6/25/2019	USDRUB	9:30:00 AM					N/A
6/25/2019	USDRUB	11:30:00 AM	62.329	62.72			N/A
6/25/2019	USDRUB	1:30:00 PM	62.484	62.883			N/A
6/25/2019	USDRUB	3:30:00 PM	62.539	62.924			N/A
6/25/2019	USDSEK	9:30:00 AM	9.2819	9.2854			N/A
6/25/2019	USDSEK	11:30:00 AM	9.2622	9.2641			N/A
6/25/2019	USDSEK	1:30:00 PM	9.2489	9.2526			N/A
6/25/2019	USDSEK	3:30:00 PM	9.2424	9.2466			N/A
6/25/2019	USDSEK.fx	9:30:00 AM	9.28456	9.28408			N/A
6/25/2019	USDSEK.fx	11:30:00 AM	9.26489	9.26215			N/A
6/25/2019	USDSEK.fx	1:30:00 PM	9.25171	9.25061			N/A
6/25/2019	USDSEK.fx	3:30:00 PM	9.24529	9.24475			N/A
6/25/2019	USDSGD	9:30:00 AM	1.3536	1.3538			N/A
6/25/2019	USDSGD	11:30:00 AM	1.3529	1.3532			N/A
6/25/2019	USDSGD	1:30:00 PM	1.3533	1.3533			N/A
6/25/2019	USDSGD	3:30:00 PM	1.3531	1.3535			N/A
6/25/2019	USDSGD.fx	9:30:00 AM	1.35347	1.35396			N/A
6/25/2019	USDSGD.fx	11:30:00 AM	1.35276	1.35321			N/A
6/25/2019	USDSGD.fx	1:30:00 PM	1.35323	1.35374			N/A
6/25/2019	USDSGD.fx	3:30:00 PM	1.35299	1.35351			N/A
6/25/2019	USDZAR	9:30:00 AM	14.3526	14.3675			N/A
6/25/2019	USDZAR	11:30:00 AM	14.2911	14.2977			N/A

6/25/2019	USDZAR	1:30:00 PM	14.2923	14.3097			N/A
6/25/2019	USDZAR	3:30:00 PM	14.2902	14.309			N/A
6/25/2019	USDZAR.fx	9:30:00 AM	14.35797	14.36202			N/A
6/25/2019	USDZAR.fx	11:30:00 AM	14.29703	14.29097			N/A
6/25/2019	USDZAR.fx	1:30:00 PM	14.29836	14.30312			N/A
6/25/2019	USDZAR.fx	3:30:00 PM	14.29635	14.30302			N/A
6/25/2019	XAUUSD	9:30:00 AM	1428.77	1427.09			N/A
6/25/2019	XAUUSD	11:30:00 AM	1432.18	1430.94			N/A
6/25/2019	XAUUSD	1:30:00 PM	1430.35	1430.37			N/A
6/25/2019	XAUUSD	3:30:00 PM	1425.14	1425.22			N/A
6/25/2019	ZARJPY	9:30:00 AM	7.43	7.45			N/A
6/25/2019	ZARJPY	11:30:00 AM	7.47	7.49			N/A
6/25/2019	ZARJPY	1:30:00 PM	7.46	7.5			N/A
6/25/2019	ZARJPY	3:30:00 PM	7.46	7.49			N/A
6/25/2019	ZARJPY.fx	9:30:00 AM	7.447	7.451			N/A
6/25/2019	ZARJPY.fx	11:30:00 AM	7.488	7.487			N/A
6/25/2019	ZARJPY.fx	1:30:00 PM	7.478	7.483			N/A
6/25/2019	ZARJPY.fx	3:30:00 PM	7.484	7.489			N/A
6/26/2019	#AA	9:30:00 AM					N/A
6/26/2019	#AA	11:30:00 AM					N/A
6/26/2019	#AA	1:30:00 PM					N/A
6/26/2019	#AA	3:30:00 PM					N/A
6/26/2019	#AABA	9:30:00 AM					N/A
6/26/2019	#AABA	11:30:00 AM					N/A
6/26/2019	#AABA	1:30:00 PM					N/A
6/26/2019	#AABA	3:30:00 PM					N/A
6/26/2019	#AAL	9:30:00 AM					N/A
6/26/2019	#AAL	11:30:00 AM	32.51	31.27			N/A
6/26/2019	#AAL	1:30:00 PM					N/A
6/26/2019	#AAL	3:30:00 PM					N/A
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6/26/2019	#AAPL	11:30:00 AM					N/A
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6/26/2019	#AAPL	3:30:00 PM					N/A

6/26/2019	#ADBE	9:30:00 AM					N/A
6/26/2019	#ADBE	11:30:00 AM					N/A
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6/26/2019	#ADBE	3:30:00 PM					N/A
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6/26/2019	#AIG	3:30:00 PM					N/A
6/26/2019	#AMD	9:30:00 AM					N/A
6/26/2019	#AMD	11:30:00 AM					N/A
6/26/2019	#AMD	1:30:00 PM					N/A
6/26/2019	#AMD	3:30:00 PM					N/A
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6/26/2019	#AMZN	11:30:00 AM					N/A
6/26/2019	#AMZN	1:30:00 PM					N/A
6/26/2019	#AMZN	3:30:00 PM					N/A
6/26/2019	#AXP	9:30:00 AM					N/A
6/26/2019	#AXP	11:30:00 AM					N/A
6/26/2019	#AXP	1:30:00 PM					N/A
6/26/2019	#AXP	3:30:00 PM					N/A
6/26/2019	#BA	9:30:00 AM					N/A
6/26/2019	#BA	11:30:00 AM					N/A
6/26/2019	#BA	1:30:00 PM					N/A
6/26/2019	#BA	3:30:00 PM					N/A
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6/26/2019	#BABA	11:30:00 AM					N/A
6/26/2019	#BABA	1:30:00 PM					N/A
6/26/2019	#BABA	3:30:00 PM					N/A
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6/26/2019	#BAC	3:30:00 PM					N/A
6/26/2019	#BARC	9:30:00 AM					N/A
6/26/2019	#BARC	11:30:00 AM					N/A

6/26/2019	#BARC	1:30:00 PM					N/A
6/26/2019	#BARC	3:30:00 PM					N/A
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6/26/2019	#BHP	11:30:00 AM					N/A
6/26/2019	#BHP	1:30:00 PM					N/A
6/26/2019	#BHP	3:30:00 PM					N/A
6/26/2019	#BIDU	9:30:00 AM					N/A
6/26/2019	#BIDU	11:30:00 AM					N/A
6/26/2019	#BIDU	1:30:00 PM					N/A
6/26/2019	#BIDU	3:30:00 PM					N/A
6/26/2019	#Bitcoin	9:30:00 AM	12597.15	12599.66			N/A
6/26/2019	#Bitcoin	11:30:00 AM	12547.15	12545.16			N/A
6/26/2019	#Bitcoin	1:30:00 PM	12578.26	12604.91			N/A
6/26/2019	#Bitcoin	3:30:00 PM	12658.03	12673.41			N/A
6/26/2019	#BK	9:30:00 AM					N/A
6/26/2019	#BK	11:30:00 AM					N/A
6/26/2019	#BK	1:30:00 PM					N/A
6/26/2019	#BK	3:30:00 PM					N/A
6/26/2019	#BLT	9:30:00 AM					N/A
6/26/2019	#BLT	11:30:00 AM					N/A
6/26/2019	#BLT	1:30:00 PM					N/A
6/26/2019	#BLT	3:30:00 PM					N/A
6/26/2019	#BP	9:30:00 AM					N/A
6/26/2019	#BP	11:30:00 AM					N/A
6/26/2019	#BP	1:30:00 PM					N/A
6/26/2019	#BP	3:30:00 PM					N/A
6/26/2019	#BTA	9:30:00 AM					N/A
6/26/2019	#BTA	11:30:00 AM					N/A
6/26/2019	#BTA	1:30:00 PM					N/A
6/26/2019	#BTA	3:30:00 PM					N/A
6/26/2019	#C	9:30:00 AM					N/A
6/26/2019	#C	11:30:00 AM					N/A
6/26/2019	#C	1:30:00 PM					N/A
6/26/2019	#C	3:30:00 PM					N/A

6/26/2019	#CAT	9:30:00 AM					N/A
6/26/2019	#CAT	11:30:00 AM					N/A
6/26/2019	#CAT	1:30:00 PM					N/A
6/26/2019	#CAT	3:30:00 PM					N/A
6/26/2019	#CHL	9:30:00 AM					N/A
6/26/2019	#CHL	11:30:00 AM					N/A
6/26/2019	#CHL	1:30:00 PM					N/A
6/26/2019	#CHL	3:30:00 PM					N/A
6/26/2019	#CL.f	9:30:00 AM	59.064	59.095		10	N/A
6/26/2019	#CL.f	11:30:00 AM	58.81	58.795			N/A
6/26/2019	#CL.f	1:30:00 PM	58.816	58.849			N/A
6/26/2019	#CL.f	3:30:00 PM	58.986	58.982			N/A
6/26/2019	#CMCSA	9:30:00 AM					N/A
6/26/2019	#CMCSA	11:30:00 AM					N/A
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6/26/2019	AUDCAD	1:30:00 PM	0.91861	0.91927			N/A
6/26/2019	AUDCAD	3:30:00 PM	0.91808	0.91865			N/A
6/26/2019	AUDCAD.fx	9:30:00 AM	0.91866	0.9187			N/A
6/26/2019	AUDCAD.fx	11:30:00 AM	0.91882	0.91882			N/A
6/26/2019	AUDCAD.fx	1:30:00 PM	0.91894	0.91892			N/A
6/26/2019	AUDCAD.fx	3:30:00 PM	0.91829	0.91833			N/A
6/26/2019	AUDCHF	9:30:00 AM	0.68081	0.68147			N/A
6/26/2019	AUDCHF	11:30:00 AM	0.68072	0.68131			N/A
6/26/2019	AUDCHF	1:30:00 PM	0.68292	0.68334			N/A
6/26/2019	AUDCHF	3:30:00 PM	0.68279	0.68312			N/A
6/26/2019	AUDCHF.fx	9:30:00 AM	0.68115	0.68112			N/A
6/26/2019	AUDCHF.fx	11:30:00 AM	0.68106	0.68096			N/A

6/26/2019	AUDCHF.fx	1:30:00 PM	0.68326	0.68299			N/A
6/26/2019	AUDCHF.fx	3:30:00 PM	0.68312	0.68281			N/A
6/26/2019	AUDCZK	9:30:00 AM	15.607	15.624			N/A
6/26/2019	AUDCZK	11:30:00 AM	15.645	15.66			N/A
6/26/2019	AUDCZK	1:30:00 PM	15.661	15.671			N/A
6/26/2019	AUDCZK	3:30:00 PM	15.635	15.646			N/A
6/26/2019	AUDDKK	9:30:00 AM	4.5813	4.5862			N/A
6/26/2019	AUDDKK	11:30:00 AM	4.5861	4.59			N/A
6/26/2019	AUDDKK	1:30:00 PM	4.5878	4.5908			N/A
6/26/2019	AUDDKK	3:30:00 PM	4.5862	4.5894			N/A
6/26/2019	AUDHKD	9:30:00 AM	5.4429	5.4466			N/A
6/26/2019	AUDHKD	11:30:00 AM	5.448	5.4519			N/A
6/26/2019	AUDHKD	1:30:00 PM	5.4496	5.453			N/A
6/26/2019	AUDHKD	3:30:00 PM	5.4496	5.4535			N/A
6/26/2019	AUDHUF	9:30:00 AM					N/A
6/26/2019	AUDHUF	11:30:00 AM	198.7	198.76			N/A
6/26/2019	AUDHUF	1:30:00 PM	198.65	198.82			N/A
6/26/2019	AUDHUF	3:30:00 PM	198.49	198.67			N/A
6/26/2019	AUDJPY	9:30:00 AM	74.861	74.923			N/A
6/26/2019	AUDJPY	11:30:00 AM	74.973	75.029			N/A
6/26/2019	AUDJPY	1:30:00 PM	75.18	75.231			N/A
6/26/2019	AUDJPY	3:30:00 PM	75.187	75.244			N/A
6/26/2019	AUDJPY.fx	9:30:00 AM	74.894	74.888			N/A
6/26/2019	AUDJPY.fx	11:30:00 AM	75.006	74.994			N/A
6/26/2019	AUDJPY.fx	1:30:00 PM	75.214	75.195			N/A
6/26/2019	AUDJPY.fx	3:30:00 PM	75.213	75.211			N/A
6/26/2019	AUDMXN	9:30:00 AM	13.3965	13.4062			N/A
6/26/2019	AUDMXN	11:30:00 AM	13.3924	13.398			N/A
6/26/2019	AUDMXN	1:30:00 PM	13.3872	13.3945			N/A
6/26/2019	AUDMXN	3:30:00 PM	13.3856	13.3933			N/A
6/26/2019	AUDNOK	9:30:00 AM	5.9459	5.9507			N/A
6/26/2019	AUDNOK	11:30:00 AM	5.9421	5.9455			N/A
6/26/2019	AUDNOK	1:30:00 PM	5.9395	5.9415			N/A
6/26/2019	AUDNOK	3:30:00 PM	5.9445	5.9479			N/A



6/26/2019	AUDNOK.fx	9:30:00 AM	5.9472	5.9496			N/A
6/26/2019	AUDNOK.fx	11:30:00 AM	5.9435	5.944			N/A
6/26/2019	AUDNOK.fx	1:30:00 PM	5.9407	5.9399			N/A
6/26/2019	AUDNOK.fx	3:30:00 PM	5.9457	5.9471			N/A
6/26/2019	AUDNZD	9:30:00 AM	1.04678	1.04768			N/A
6/26/2019	AUDNZD	11:30:00 AM	1.04607	1.04701			N/A
6/26/2019	AUDNZD	1:30:00 PM	1.04587	1.04658			N/A
6/26/2019	AUDNZD	3:30:00 PM	1.04481	1.04542			N/A
6/26/2019	AUDNZD.fx	9:30:00 AM	1.04723	1.04722			N/A
6/26/2019	AUDNZD.fx	11:30:00 AM	1.04654	1.04656			N/A
6/26/2019	AUDNZD.fx	1:30:00 PM	1.0463	1.04613			N/A
6/26/2019	AUDNZD.fx	3:30:00 PM	1.0452	1.04496		2000	N/A
6/26/2019	AUDPLN	9:30:00 AM	2.6118	2.615			N/A
6/26/2019	AUDPLN	11:30:00 AM	2.6193	2.6214			N/A
6/26/2019	AUDPLN	1:30:00 PM	2.6196	2.6216			N/A
6/26/2019	AUDPLN	3:30:00 PM	2.6184	2.6205			N/A
6/26/2019	AUDSEK	9:30:00 AM	6.4787	6.4804			N/A
6/26/2019	AUDSEK	11:30:00 AM	6.4709	6.4722			N/A
6/26/2019	AUDSEK	1:30:00 PM	6.4727	6.4721			N/A
6/26/2019	AUDSEK	3:30:00 PM	6.4809	6.4819			N/A
6/26/2019	AUDSEK.fx	9:30:00 AM	6.4738	6.4851			N/A
6/26/2019	AUDSEK.fx	11:30:00 AM	6.466	6.4768			N/A
6/26/2019	AUDSEK.fx	1:30:00 PM	6.4678	6.4764			N/A
6/26/2019	AUDSEK.fx	3:30:00 PM	6.4758	6.4877			N/A
6/26/2019	AUDSGD	9:30:00 AM	0.9448	0.9451			N/A
6/26/2019	AUDSGD	11:30:00 AM	0.9455	0.9458			N/A
6/26/2019	AUDSGD	1:30:00 PM	0.9457	0.9459			N/A
6/26/2019	AUDSGD	3:30:00 PM	0.9456	0.9457			N/A
6/26/2019	AUDSGD.fx	9:30:00 AM	0.94491	0.94503			N/A
6/26/2019	AUDSGD.fx	11:30:00 AM	0.94561	0.94568			N/A
6/26/2019	AUDSGD.fx	1:30:00 PM	0.94581	0.94584			N/A
6/26/2019	AUDSGD.fx	3:30:00 PM	0.9456	0.94566			N/A
6/26/2019	AUDUSD	9:30:00 AM	0.69739	0.6975			N/A
6/26/2019	AUDUSD	11:30:00 AM	0.69807	0.69814			N/A

6/26/2019	AUDUSD	1:30:00 PM	0.69831	0.69844			N/A
6/26/2019	AUDUSD	3:30:00 PM	0.69834	0.69844			N/A
6/26/2019	AUDUSD.fx	9:30:00 AM	0.69744	0.69744			N/A
6/26/2019	AUDUSD.fx	11:30:00 AM	0.69812	0.69808			N/A
6/26/2019	AUDUSD.fx	1:30:00 PM	0.69837	0.69838			N/A
6/26/2019	AUDUSD.fx	3:30:00 PM	0.69838	0.69837			N/A
6/26/2019	AUDZAR	9:30:00 AM	9.9914	10.0051			N/A
6/26/2019	AUDZAR	11:30:00 AM	9.9942	9.9968			N/A
6/26/2019	AUDZAR	1:30:00 PM	10.0108	10.0227			N/A
6/26/2019	AUDZAR	3:30:00 PM	9.9857	9.9991			N/A
6/26/2019	AUS200.i	9:30:00 AM	6641.8	6645.3			N/A
6/26/2019	AUS200.i	11:30:00 AM	6648.39	6651.79			N/A
6/26/2019	AUS200.i	1:30:00 PM	6668.19	6671.09			N/A
6/26/2019	AUS200.i	3:30:00 PM	6660.29	6662.79			N/A
6/26/2019	BCHUSD	9:30:00 AM	493.86	493.95			N/A
6/26/2019	BCHUSD	11:30:00 AM	490.61	491.76			N/A
6/26/2019	BCHUSD	1:30:00 PM	499.71	500.57			N/A
6/26/2019	BCHUSD	3:30:00 PM	510.8	511.4			N/A
6/26/2019	CADCHF	9:30:00 AM	0.7411	0.74178			N/A
6/26/2019	CADCHF	11:30:00 AM	0.74086	0.74147			N/A
6/26/2019	CADCHF	1:30:00 PM	0.74321	0.7436			N/A
6/26/2019	CADCHF	3:30:00 PM	0.74355	0.74377			N/A
6/26/2019	CADCHF.fx	9:30:00 AM	0.74143	0.74143			N/A
6/26/2019	CADCHF.fx	11:30:00 AM	0.7412	0.74111			N/A
6/26/2019	CADCHF.fx	1:30:00 PM	0.74353	0.74325			N/A
6/26/2019	CADCHF.fx	3:30:00 PM	0.74387	0.74345			N/A
6/26/2019	CADCZK	9:30:00 AM	16.992	17.01			N/A
6/26/2019	CADCZK	11:30:00 AM	17.03	17.045			N/A
6/26/2019	CADCZK	1:30:00 PM	17.045	17.056			N/A
6/26/2019	CADCZK	3:30:00 PM	17.03	17.041			N/A
6/26/2019	CADDDKK	9:30:00 AM					N/A
6/26/2019	CADDDKK	11:30:00 AM	4.992	4.994			N/A
6/26/2019	CADDDKK	1:30:00 PM	4.993	4.996			N/A
6/26/2019	CADDDKK	3:30:00 PM	4.993	4.997			N/A

6/26/2019	CADHKD	9:30:00 AM	5.9258	5.9297			N/A
6/26/2019	CADHKD	11:30:00 AM	5.931	5.9349			N/A
6/26/2019	CADHKD	1:30:00 PM	5.9315	5.9351			N/A
6/26/2019	CADHKD	3:30:00 PM	5.9355	5.9394			N/A
6/26/2019	CADHUF	9:30:00 AM	215.95	216.12			N/A
6/26/2019	CADHUF	11:30:00 AM	216.33	216.32			N/A
6/26/2019	CADHUF	1:30:00 PM	216.24	216.35			N/A
6/26/2019	CADHUF	3:30:00 PM	216.24	216.33			N/A
6/26/2019	CADJPY	9:30:00 AM	81.491	81.55			N/A
6/26/2019	CADJPY	11:30:00 AM	81.599	81.653			N/A
6/26/2019	CADJPY	1:30:00 PM	81.814	81.864			N/A
6/26/2019	CADJPY	3:30:00 PM	81.875	81.933			N/A
6/26/2019	CADJPY.fx	9:30:00 AM	81.523	81.516			N/A
6/26/2019	CADJPY.fx	11:30:00 AM	81.633	81.619			N/A
6/26/2019	CADJPY.fx	1:30:00 PM	81.851	81.829			N/A
6/26/2019	CADJPY.fx	3:30:00 PM	81.906	81.898			N/A
6/26/2019	CADMXN	9:30:00 AM	14.5841	14.5956			N/A
6/26/2019	CADMXN	11:30:00 AM	14.5774	14.5859			N/A
6/26/2019	CADMXN	1:30:00 PM	14.5693	14.5803			N/A
6/26/2019	CADMXN	3:30:00 PM	14.5785	14.5881			N/A
6/26/2019	CADNOK	9:30:00 AM	6.4709	6.4752			N/A
6/26/2019	CADNOK	11:30:00 AM	6.4661	6.4672			N/A
6/26/2019	CADNOK	1:30:00 PM	6.4627	6.4653			N/A
6/26/2019	CADNOK	3:30:00 PM	6.4701	6.4722			N/A
6/26/2019	CADPLN	9:30:00 AM	2.8433	2.8451			N/A
6/26/2019	CADPLN	11:30:00 AM	2.8507	2.8515			N/A
6/26/2019	CADPLN	1:30:00 PM	2.8511	2.8524			N/A
6/26/2019	CADPLN	3:30:00 PM	2.8509	2.8512			N/A
6/26/2019	CADSEK	9:30:00 AM	7.0506	7.0536			N/A
6/26/2019	CADSEK	11:30:00 AM	7.041	7.0429			N/A
6/26/2019	CADSEK	1:30:00 PM	7.0423	7.0424			N/A
6/26/2019	CADSEK	3:30:00 PM	7.0559	7.0544			N/A
6/26/2019	CADSGD	9:30:00 AM	1.0279	1.0282			N/A
6/26/2019	CADSGD	11:30:00 AM	1.0287	1.029			N/A

6/26/2019	CADSGD	1:30:00 PM	1.0286	1.0288			N/A
6/26/2019	CADSGD	3:30:00 PM	1.0289	1.0292			N/A
6/26/2019	CADZAR	9:30:00 AM	10.8777	10.8928			N/A
6/26/2019	CADZAR	11:30:00 AM	10.8783	10.8852			N/A
6/26/2019	CADZAR	1:30:00 PM	10.896	10.9088			N/A
6/26/2019	CADZAR	3:30:00 PM	10.8756	10.8905			N/A
6/26/2019	CHFCZK	9:30:00 AM	22.924	22.938			N/A
6/26/2019	CHFCZK	11:30:00 AM	22.981	22.995			N/A
6/26/2019	CHFCZK	1:30:00 PM	22.931	22.942			N/A
6/26/2019	CHFCZK	3:30:00 PM	22.905	22.915			N/A
6/26/2019	CHFDKK	9:30:00 AM	6.728	6.731			N/A
6/26/2019	CHFDKK	11:30:00 AM	6.736	6.739			N/A
6/26/2019	CHFDKK	1:30:00 PM	6.717	6.719			N/A
6/26/2019	CHFDKK	3:30:00 PM	6.718	6.719			N/A
6/26/2019	CHFDKK.fx	9:30:00 AM	6.7265	6.7324			N/A
6/26/2019	CHFDKK.fx	11:30:00 AM	6.7347	6.7401			N/A
6/26/2019	CHFDKK.fx	1:30:00 PM	6.7155	6.7208			N/A
6/26/2019	CHFDKK.fx	3:30:00 PM	6.7151	6.72			N/A
6/26/2019	CHFHKD	9:30:00 AM	7.9938	7.9977			N/A
6/26/2019	CHFHKD	11:30:00 AM	8.0033	8.0063			N/A
6/26/2019	CHFHKD	1:30:00 PM	7.9815	7.9812			N/A
6/26/2019	CHFHKD	3:30:00 PM	7.9854	7.9843			N/A
6/26/2019	CHFHUF	9:30:00 AM	291.21	291.58			N/A
6/26/2019	CHFHUF	11:30:00 AM	291.8	291.95			N/A
6/26/2019	CHFHUF	1:30:00 PM	290.81	291.14			N/A
6/26/2019	CHFHUF	3:30:00 PM	290.72	291			N/A
6/26/2019	CHFJPY	9:30:00 AM	109.927	109.977			N/A
6/26/2019	CHFJPY	11:30:00 AM	110.112	110.146			N/A
6/26/2019	CHFJPY	1:30:00 PM	110.065	110.107			N/A
6/26/2019	CHFJPY	3:30:00 PM	110.135	110.134			N/A
6/26/2019	CHFJPY.fx	9:30:00 AM	109.96	109.943			N/A
6/26/2019	CHFJPY.fx	11:30:00 AM	110.145	110.113			N/A
6/26/2019	CHFJPY.fx	1:30:00 PM	110.098	110.074			N/A
6/26/2019	CHFJPY.fx	3:30:00 PM	110.163	110.1			N/A

6/26/2019	CHF MXN	9:30:00 AM	19.6709	19.6871			N/A
6/26/2019	CHF MXN	11:30:00 AM	19.669	19.68			N/A
6/26/2019	CHF MXN	1:30:00 PM	19.604	19.6086			N/A
6/26/2019	CHF MXN	3:30:00 PM	19.6112	19.6136			N/A
6/26/2019	CHF NOK	9:30:00 AM	8.7294	8.7367			N/A
6/26/2019	CHF NOK	11:30:00 AM	8.7251	8.7309			N/A
6/26/2019	CHF NOK	1:30:00 PM	8.6937	8.6997			N/A
6/26/2019	CHF NOK	3:30:00 PM	8.7064	8.7081			N/A
6/26/2019	CHF NOK.fx	9:30:00 AM	8.73268	8.73347			N/A
6/26/2019	CHF NOK.fx	11:30:00 AM	8.72864	8.72764			N/A
6/26/2019	CHF NOK.fx	1:30:00 PM	8.69698	8.69638			N/A
6/26/2019	CHF NOK.fx	3:30:00 PM	8.70773	8.70444			N/A
6/26/2019	CHF PLN	9:30:00 AM	3.8352	3.838			N/A
6/26/2019	CHF PLN	11:30:00 AM	3.8471	3.8484			N/A
6/26/2019	CHF PLN	1:30:00 PM	3.835	3.8373			N/A
6/26/2019	CHF PLN	3:30:00 PM	3.8345	3.8366			N/A
6/26/2019	CHF PLN.fx	9:30:00 AM	3.83274	3.84045			N/A
6/26/2019	CHF PLN.fx	11:30:00 AM	3.84458	3.85081			N/A
6/26/2019	CHF PLN.fx	1:30:00 PM	3.83254	3.83967			N/A
6/26/2019	CHF PLN.fx	3:30:00 PM	3.83136	3.83901			N/A
6/26/2019	CHF SEK	9:30:00 AM	9.5105	9.5135			N/A
6/26/2019	CHF SEK	11:30:00 AM	9.5002	9.5023			N/A
6/26/2019	CHF SEK	1:30:00 PM	9.4733	9.4747			N/A
6/26/2019	CHF SEK	3:30:00 PM	9.488	9.4884			N/A
6/26/2019	CHF SGD	9:30:00 AM	1.3872	1.3875			N/A
6/26/2019	CHF SGD	11:30:00 AM	1.3885	1.3887			N/A
6/26/2019	CHF SGD	1:30:00 PM	1.3846	1.3846			N/A
6/26/2019	CHF SGD	3:30:00 PM	1.3848	1.3846			N/A
6/26/2019	CHF SGD.fx	9:30:00 AM	1.38733	1.38729			N/A
6/26/2019	CHF SGD.fx	11:30:00 AM	1.38871	1.38854			N/A
6/26/2019	CHF SGD.fx	1:30:00 PM	1.38474	1.38437			N/A
6/26/2019	CHF SGD.fx	3:30:00 PM	1.3849	1.38438			N/A
6/26/2019	CHF ZAR	9:30:00 AM	14.6774	14.6871			N/A
6/26/2019	CHF ZAR	11:30:00 AM	14.6816	14.6794			N/A

6/26/2019	CHFZAR	1:30:00 PM	14.6603	14.6686			N/A
6/26/2019	CHFZAR	3:30:00 PM	14.6345	14.6405			N/A
6/26/2019	CZKJPY	9:30:00 AM	4.794	4.797			N/A
6/26/2019	CZKJPY	11:30:00 AM	4.79	4.793			N/A
6/26/2019	CZKJPY	1:30:00 PM	4.799	4.802			N/A
6/26/2019	CZKJPY	3:30:00 PM	4.808	4.81			N/A
6/26/2019	DAX30.i	9:30:00 AM	12191.27	12191.27			N/A
6/26/2019	DAX30.i	11:30:00 AM	12208.77	12207.02			N/A
6/26/2019	DAX30.i	1:30:00 PM	12297.92	12294.52			N/A
6/26/2019	DAX30.i	3:30:00 PM	12273.77	12268.52			N/A
6/26/2019	DJ30.i	9:30:00 AM					N/A
6/26/2019	DJ30.i	11:30:00 AM					N/A
6/26/2019	DJ30.i	1:30:00 PM					N/A
6/26/2019	DJ30.i	3:30:00 PM					N/A
6/26/2019	DKKJPY	9:30:00 AM					N/A
6/26/2019	DKKJPY	11:30:00 AM	16.35	16.37			N/A
6/26/2019	DKKJPY	1:30:00 PM	16.39	16.4			N/A
6/26/2019	DKKJPY	3:30:00 PM	16.41	16.42			N/A
6/26/2019	EURAUD	9:30:00 AM	1.6279	1.62835			N/A
6/26/2019	EURAUD	11:30:00 AM	1.62646	1.62671			N/A
6/26/2019	EURAUD	1:30:00 PM	1.62615	1.6259			N/A
6/26/2019	EURAUD	3:30:00 PM	1.62662	1.62642			N/A
6/26/2019	EURAUD.fx	9:30:00 AM	1.6281	1.62813			N/A
6/26/2019	EURAUD.fx	11:30:00 AM	1.62666	1.62649			N/A
6/26/2019	EURAUD.fx	1:30:00 PM	1.62637	1.62569			N/A
6/26/2019	EURAUD.fx	3:30:00 PM	1.62677	1.62622			N/A
6/26/2019	EURCAD	9:30:00 AM	1.49584	1.4967			N/A
6/26/2019	EURCAD	11:30:00 AM	1.49481	1.49542			N/A
6/26/2019	EURCAD	1:30:00 PM	1.4946	1.49492			N/A
6/26/2019	EURCAD	3:30:00 PM	1.49421	1.49438			N/A
6/26/2019	EURCAD.fx	9:30:00 AM	1.49624	1.49629			N/A
6/26/2019	EURCAD.fx	11:30:00 AM	1.49523	1.49501			N/A
6/26/2019	EURCAD.fx	1:30:00 PM	1.49502	1.49451			N/A
6/26/2019	EURCAD.fx	3:30:00 PM	1.49456	1.49396			N/A

6/26/2019	EURCHF	9:30:00 AM	1.1094	1.10942			N/A
6/26/2019	EURCHF	11:30:00 AM	1.10815	1.1081			N/A
6/26/2019	EURCHF	1:30:00 PM	1.11121	1.11113			N/A
6/26/2019	EURCHF	3:30:00 PM	1.1113	1.11121			N/A
6/26/2019	EURCHF.fx	9:30:00 AM	1.10946	1.10937			N/A
6/26/2019	EURCHF.fx	11:30:00 AM	1.10821	1.10804			N/A
6/26/2019	EURCHF.fx	1:30:00 PM	1.11127	1.11106			N/A
6/26/2019	EURCHF.fx	3:30:00 PM	1.11135	1.11119			N/A
6/26/2019	EURCZK	9:30:00 AM	25.416	25.456			N/A
6/26/2019	EURCZK	11:30:00 AM	25.451	25.489			N/A
6/26/2019	EURCZK	1:30:00 PM	25.464	25.502			N/A
6/26/2019	EURCZK	3:30:00 PM	25.435	25.469			N/A
6/26/2019	EURDKK	9:30:00 AM	7.4641	7.4654			N/A
6/26/2019	EURDKK	11:30:00 AM	7.4635	7.4648			N/A
6/26/2019	EURDKK	1:30:00 PM	7.4633	7.4645			N/A
6/26/2019	EURDKK	3:30:00 PM	7.4631	7.4644			N/A
6/26/2019	EURGBP	9:30:00 AM	0.89656	0.89649			N/A
6/26/2019	EURGBP	11:30:00 AM	0.89605	0.89606			N/A
6/26/2019	EURGBP	1:30:00 PM	0.8943	0.89431		10	N/A
6/26/2019	EURGBP	3:30:00 PM	0.89609	0.89591			N/A
6/26/2019	EURGBP.fx	9:30:00 AM	0.89659	0.89644			N/A
6/26/2019	EURGBP.fx	11:30:00 AM	0.89608	0.89601			N/A
6/26/2019	EURGBP.fx	1:30:00 PM	0.89434	0.89426			N/A
6/26/2019	EURGBP.fx	3:30:00 PM	0.89612	0.896			N/A
6/26/2019	EURHKD	9:30:00 AM	8.8683	8.8732			N/A
6/26/2019	EURHKD	11:30:00 AM	8.8696	8.8727			N/A
6/26/2019	EURHKD	1:30:00 PM	8.8693	8.8705			N/A
6/26/2019	EURHKD	3:30:00 PM	8.8724	8.8741			N/A
6/26/2019	EURHKD.fx	9:30:00 AM	8.87096	8.87049			N/A
6/26/2019	EURHKD.fx	11:30:00 AM	8.87228	8.87004			N/A
6/26/2019	EURHKD.fx	1:30:00 PM	8.87183	8.8679			N/A
6/26/2019	EURHKD.fx	3:30:00 PM	8.87496	8.87127			N/A
6/26/2019	EURHUF	9:30:00 AM	323.02	323.73			N/A
6/26/2019	EURHUF	11:30:00 AM	323.31	323.65			N/A

6/26/2019	EURHUF	1:30:00 PM	323.03	323.64			N/A
6/26/2019	EURHUF	3:30:00 PM	323.15	323.52			N/A
6/26/2019	EURHUF.fx	9:30:00 AM	323.281	323.47			N/A
6/26/2019	EURHUF.fx	11:30:00 AM	323.575	323.668			N/A
6/26/2019	EURHUF.fx	1:30:00 PM	323.299	323.48			N/A
6/26/2019	EURHUF.fx	3:30:00 PM	323.38	323.58			N/A
6/26/2019	EURJPY	9:30:00 AM	121.981	121.966			N/A
6/26/2019	EURJPY	11:30:00 AM	122.059	122.025			N/A
6/26/2019	EURJPY	1:30:00 PM	122.337	122.307			N/A
6/26/2019	EURJPY	3:30:00 PM	122.412	122.364			N/A
6/26/2019	EURJPY.fx	9:30:00 AM	121.983	121.963			N/A
6/26/2019	EURJPY.fx	11:30:00 AM	122.061	122.021			N/A
6/26/2019	EURJPY.fx	1:30:00 PM	122.339	122.303			N/A
6/26/2019	EURJPY.fx	3:30:00 PM	122.41	122.361			N/A
6/26/2019	EURMXN	9:30:00 AM	21.8251	21.8441			N/A
6/26/2019	EURMXN	11:30:00 AM	21.7986	21.8152			N/A
6/26/2019	EURMXN	1:30:00 PM	21.7863	21.7958			N/A
6/26/2019	EURMXN	3:30:00 PM	21.7902	21.8019			N/A
6/26/2019	EURMXN.fx	9:30:00 AM	21.8332	21.8358			N/A
6/26/2019	EURMXN.fx	11:30:00 AM	21.8068	21.8067			N/A
6/26/2019	EURMXN.fx	1:30:00 PM	21.7949	21.7874			N/A
6/26/2019	EURMXN.fx	3:30:00 PM	21.7983	21.7924			N/A
6/26/2019	EURNOK	9:30:00 AM	9.6821	9.6942			N/A
6/26/2019	EURNOK	11:30:00 AM	9.6664	9.6769			N/A
6/26/2019	EURNOK	1:30:00 PM	9.6574	9.6684			N/A
6/26/2019	EURNOK	3:30:00 PM	9.6699	9.6798			N/A
6/26/2019	EURNOK.fx	9:30:00 AM	9.68741	9.68884			N/A
6/26/2019	EURNOK.fx	11:30:00 AM	9.67163	9.67152			N/A
6/26/2019	EURNOK.fx	1:30:00 PM	9.6627	9.66303			N/A
6/26/2019	EURNOK.fx	3:30:00 PM	9.6756	9.67409			N/A
6/26/2019	EURNZD	9:30:00 AM	1.70525	1.70601			N/A
6/26/2019	EURNZD	11:30:00 AM	1.70256	1.70322			N/A
6/26/2019	EURNZD	1:30:00 PM	1.70154	1.70191			N/A
6/26/2019	EURNZD	3:30:00 PM	1.70057	1.70042			N/A



6/26/2019	EURNZD.fx	9:30:00 AM	1.70566	1.70559			N/A
6/26/2019	EURNZD.fx	11:30:00 AM	1.70297	1.7028			N/A
6/26/2019	EURNZD.fx	1:30:00 PM	1.70194	1.70147			N/A
6/26/2019	EURNZD.fx	3:30:00 PM	1.70092	1.69997			N/A
6/26/2019	EURPLN	9:30:00 AM	4.2547	4.2579			N/A
6/26/2019	EURPLN	11:30:00 AM	4.2627	4.2647			N/A
6/26/2019	EURPLN	1:30:00 PM	4.261	4.2641			N/A
6/26/2019	EURPLN	3:30:00 PM	4.2605	4.2637			N/A
6/26/2019	EURPLN.fx	9:30:00 AM	4.25397	4.25862			N/A
6/26/2019	EURPLN.fx	11:30:00 AM	4.26227	4.26536			N/A
6/26/2019	EURPLN.fx	1:30:00 PM	4.26041	4.26469			N/A
6/26/2019	EURPLN.fx	3:30:00 PM	4.25986	4.26433			N/A
6/26/2019	EURRUB	9:30:00 AM					N/A
6/26/2019	EURRUB	11:30:00 AM	71.07	71.496			N/A
6/26/2019	EURRUB	1:30:00 PM	71.453	71.86			N/A
6/26/2019	EURRUB	3:30:00 PM	71.28	71.685			N/A
6/26/2019	EURSEK	9:30:00 AM	10.5523	10.5544			N/A
6/26/2019	EURSEK	11:30:00 AM	10.5291	10.5316			N/A
6/26/2019	EURSEK	1:30:00 PM	10.5265	10.5291			N/A
6/26/2019	EURSEK	3:30:00 PM	10.5447	10.5475			N/A
6/26/2019	EURSEK.fx	9:30:00 AM	10.55407	10.55269			N/A
6/26/2019	EURSEK.fx	11:30:00 AM	10.53134	10.53005			N/A
6/26/2019	EURSEK.fx	1:30:00 PM	10.528	10.52735			N/A
6/26/2019	EURSEK.fx	3:30:00 PM	10.54526	10.54603			N/A
6/26/2019	EURSGD	9:30:00 AM	1.5387	1.5396			N/A
6/26/2019	EURSGD	11:30:00 AM	1.5384	1.5391			N/A
6/26/2019	EURSGD	1:30:00 PM	1.5383	1.5387			N/A
6/26/2019	EURSGD	3:30:00 PM	1.5385	1.5389			N/A
6/26/2019	EURSGD.fx	9:30:00 AM	1.53904	1.53915			N/A
6/26/2019	EURSGD.fx	11:30:00 AM	1.53888	1.53867			N/A
6/26/2019	EURSGD.fx	1:30:00 PM	1.53872	1.53826			N/A
6/26/2019	EURSGD.fx	3:30:00 PM	1.53882	1.53848			N/A
6/26/2019	EURUSD	9:30:00 AM	1.13578	1.13583			N/A
6/26/2019	EURUSD	11:30:00 AM	1.13589	1.13573			N/A

6/26/2019	EURUSD	1:30:00 PM	1.13608	1.13565			N/A
6/26/2019	EURUSD	3:30:00 PM	1.13635	1.13597			N/A
6/26/2019	EURUSD.fx	9:30:00 AM	1.13598	1.13592			N/A
6/26/2019	EURUSD.fx	11:30:00 AM	1.1361	1.13582			N/A
6/26/2019	EURUSD.fx	1:30:00 PM	1.13629	1.13574			N/A
6/26/2019	EURUSD.fx	3:30:00 PM	1.13653	1.13608			N/A
6/26/2019	EURZAR	9:30:00 AM	16.2848	16.3001			N/A
6/26/2019	EURZAR	11:30:00 AM	16.2758	16.2783			N/A
6/26/2019	EURZAR	1:30:00 PM	16.292	16.3049			N/A
6/26/2019	EURZAR	3:30:00 PM	16.2653	16.2817			N/A
6/26/2019	EURZAR.fx	9:30:00 AM	16.28369	16.30069			N/A
6/26/2019	EURZAR.fx	11:30:00 AM	16.27531	16.27931			N/A
6/26/2019	EURZAR.fx	1:30:00 PM	16.29173	16.30557			N/A
6/26/2019	EURZAR.fx	3:30:00 PM	16.26439	16.28259			N/A
6/26/2019	GBPAUD	9:30:00 AM	1.81649	1.81691			N/A
6/26/2019	GBPAUD	11:30:00 AM	1.81558	1.8163			N/A
6/26/2019	GBPAUD	1:30:00 PM	1.81871	1.81904			N/A
6/26/2019	GBPAUD	3:30:00 PM	1.81584	1.81576			N/A
6/26/2019	GBPAUD.fx	9:30:00 AM	1.81686	1.81652			N/A
6/26/2019	GBPAUD.fx	11:30:00 AM	1.81596	1.81589			N/A
6/26/2019	GBPAUD.fx	1:30:00 PM	1.81911	1.81862			N/A
6/26/2019	GBPAUD.fx	3:30:00 PM	1.81618	1.8154			N/A
6/26/2019	GBPCAD	9:30:00 AM	1.66874	1.66923			N/A
6/26/2019	GBPCAD	11:30:00 AM	1.66824	1.66891			N/A
6/26/2019	GBPCAD	1:30:00 PM	1.67118	1.67164			N/A
6/26/2019	GBPCAD	3:30:00 PM	1.6677	1.66751			N/A
6/26/2019	GBPCAD.fx	9:30:00 AM	1.66911	1.66883			N/A
6/26/2019	GBPCAD.fx	11:30:00 AM	1.66863	1.66852			N/A
6/26/2019	GBPCAD.fx	1:30:00 PM	1.67155	1.67125			N/A
6/26/2019	GBPCAD.fx	3:30:00 PM	1.66798	1.66712			N/A
6/26/2019	GBPCHF	9:30:00 AM	1.2374	1.23749			N/A
6/26/2019	GBPCHF	11:30:00 AM	1.23652	1.23672			N/A
6/26/2019	GBPCHF	1:30:00 PM	1.24243	1.24265			N/A
6/26/2019	GBPCHF	3:30:00 PM	1.24005	1.24035			N/A

6/26/2019	GBPCHF.fx	9:30:00 AM	1.23758	1.2373			N/A
6/26/2019	GBPCHF.fx	11:30:00 AM	1.23672	1.23652			N/A
6/26/2019	GBPCHF.fx	1:30:00 PM	1.24262	1.24245			N/A
6/26/2019	GBPCHF.fx	3:30:00 PM	1.24021	1.24019			N/A
6/26/2019	GBPCZK	9:30:00 AM	28.361	28.381			N/A
6/26/2019	GBPCZK	11:30:00 AM	28.414	28.432			N/A
6/26/2019	GBPCZK	1:30:00 PM	28.485	28.504			N/A
6/26/2019	GBPCZK	3:30:00 PM	28.396	28.414			N/A
6/26/2019	GBPDKK	9:30:00 AM	8.323	8.334			N/A
6/26/2019	GBPDKK	11:30:00 AM	8.327	8.338			N/A
6/26/2019	GBPDKK	1:30:00 PM	8.343	8.353			N/A
6/26/2019	GBPDKK	3:30:00 PM	8.327	8.337			N/A
6/26/2019	GBPDKK.fx	9:30:00 AM	8.3213	8.3333			N/A
6/26/2019	GBPDKK.fx	11:30:00 AM	8.3255	8.338			N/A
6/26/2019	GBPDKK.fx	1:30:00 PM	8.341	8.3534			N/A
6/26/2019	GBPDKK.fx	3:30:00 PM	8.3252	8.3368			N/A
6/26/2019	GBPHKD	9:30:00 AM	9.8903	9.8936			N/A
6/26/2019	GBPHKD	11:30:00 AM	9.8952	9.8999			N/A
6/26/2019	GBPHKD	1:30:00 PM	9.9136	9.9167			N/A
6/26/2019	GBPHKD	3:30:00 PM	9.8988	9.9			N/A
6/26/2019	GBPHUF	9:30:00 AM	360.32	360.69			N/A
6/26/2019	GBPHUF	11:30:00 AM	360.81	360.98			N/A
6/26/2019	GBPHUF	1:30:00 PM	361.25	361.67			N/A
6/26/2019	GBPHUF	3:30:00 PM	360.41	360.83			N/A
6/26/2019	GBPJPY	9:30:00 AM	136.06	136.048			N/A
6/26/2019	GBPJPY	11:30:00 AM	136.196	136.202			N/A
6/26/2019	GBPJPY	1:30:00 PM	136.764	136.792			N/A
6/26/2019	GBPJPY	3:30:00 PM	136.601	136.564			N/A
6/26/2019	GBPJPY.fx	9:30:00 AM	136.078	136.03			N/A
6/26/2019	GBPJPY.fx	11:30:00 AM	136.217	136.182			N/A
6/26/2019	GBPJPY.fx	1:30:00 PM	136.783	136.774			N/A
6/26/2019	GBPJPY.fx	3:30:00 PM	136.614	136.547			N/A
6/26/2019	GBPMXN	9:30:00 AM	24.3418	24.3519			N/A
6/26/2019	GBPMXN	11:30:00 AM	24.3215	24.3311			N/A

6/26/2019	GBPMXN	1:30:00 PM	24.3539	24.3595			N/A
6/26/2019	GBPMXN	3:30:00 PM	24.3131	24.3171			N/A
6/26/2019	GBPNOK	9:30:00 AM	10.8018	10.8113			N/A
6/26/2019	GBPNOK	11:30:00 AM	10.7889	10.7979			N/A
6/26/2019	GBPNOK	1:30:00 PM	10.8007	10.8094			N/A
6/26/2019	GBPNOK	3:30:00 PM	10.794	10.8007			N/A
6/26/2019	GBPNOK.fx	9:30:00 AM	10.80647	10.8065			N/A
6/26/2019	GBPNOK.fx	11:30:00 AM	10.79367	10.79326			N/A
6/26/2019	GBPNOK.fx	1:30:00 PM	10.80569	10.80446			N/A
6/26/2019	GBPNOK.fx	3:30:00 PM	10.79817	10.79575			N/A
6/26/2019	GBPNZD	9:30:00 AM	1.90237	1.90269			N/A
6/26/2019	GBPNZD	11:30:00 AM	1.90015	1.90082			N/A
6/26/2019	GBPNZD	1:30:00 PM	1.9026	1.90317			N/A
6/26/2019	GBPNZD	3:30:00 PM	1.89793	1.8975			N/A
6/26/2019	GBPNZD.fx	9:30:00 AM	1.90275	1.90229			N/A
6/26/2019	GBPNZD.fx	11:30:00 AM	1.90052	1.90046			N/A
6/26/2019	GBPNZD.fx	1:30:00 PM	1.90296	1.90281			N/A
6/26/2019	GBPNZD.fx	3:30:00 PM	1.89821	1.89711			N/A
6/26/2019	GBPPLN	9:30:00 AM	4.747	4.7484			N/A
6/26/2019	GBPPLN	11:30:00 AM	4.7583	4.7582			N/A
6/26/2019	GBPPLN	1:30:00 PM	4.7658	4.7668			N/A
6/26/2019	GBPPLN	3:30:00 PM	4.7559	4.7572			N/A
6/26/2019	GBPPLN.fx	9:30:00 AM	4.74464	4.75056			N/A
6/26/2019	GBPPLN.fx	11:30:00 AM	4.75614	4.76046			N/A
6/26/2019	GBPPLN.fx	1:30:00 PM	4.76355	4.76904			N/A
6/26/2019	GBPPLN.fx	3:30:00 PM	4.75345	4.75938			N/A
6/26/2019	GBPSEK	9:30:00 AM	11.7688	11.776			N/A
6/26/2019	GBPSEK	11:30:00 AM	11.7488	11.7545			N/A
6/26/2019	GBPSEK	1:30:00 PM	11.7694	11.7747			N/A
6/26/2019	GBPSEK	3:30:00 PM	11.7697	11.7729			N/A
6/26/2019	GBPSEK.fx	9:30:00 AM	11.76491	11.77985			N/A
6/26/2019	GBPSEK.fx	11:30:00 AM	11.74465	11.75847			N/A
6/26/2019	GBPSEK.fx	1:30:00 PM	11.76563	11.7782			N/A
6/26/2019	GBPSEK.fx	3:30:00 PM	11.76126	11.77694			N/A

6/26/2019	GBPSGD	9:30:00 AM	1.7166	1.7171			N/A
6/26/2019	GBPSGD	11:30:00 AM	1.717	1.7176			N/A
6/26/2019	GBPSGD	1:30:00 PM	1.7201	1.7206			N/A
6/26/2019	GBPSGD	3:30:00 PM	1.7171	1.7172			N/A
6/26/2019	GBPSGD.fx	9:30:00 AM	1.71467	1.71883			N/A
6/26/2019	GBPSGD.fx	11:30:00 AM	1.71514	1.7194			N/A
6/26/2019	GBPSGD.fx	1:30:00 PM	1.71823	1.72241			N/A
6/26/2019	GBPSGD.fx	3:30:00 PM	1.71523	1.71898			N/A
6/26/2019	GBPUSD	9:30:00 AM	1.2672	1.26698			N/A
6/26/2019	GBPUSD	11:30:00 AM	1.26781	1.26769			N/A
6/26/2019	GBPUSD	1:30:00 PM	1.27044	1.27014			N/A
6/26/2019	GBPUSD	3:30:00 PM	1.26841	1.26776	1100	1100	N/A
6/26/2019	GBPUSD.fx	9:30:00 AM	1.26724	1.26693			N/A
6/26/2019	GBPUSD.fx	11:30:00 AM	1.26786	1.26764			N/A
6/26/2019	GBPUSD.fx	1:30:00 PM	1.27049	1.27009			N/A
6/26/2019	GBPUSD.fx	3:30:00 PM	1.26843	1.26772			N/A
6/26/2019	GBPZAR	9:30:00 AM	18.1596	18.1867			N/A
6/26/2019	GBPZAR	11:30:00 AM	18.1594	18.1703			N/A
6/26/2019	GBPZAR	1:30:00 PM	18.2129	18.2365			N/A
6/26/2019	GBPZAR	3:30:00 PM	18.1504	18.1727			N/A
6/26/2019	GBPZAR.fx	9:30:00 AM	18.1666	18.1801			N/A
6/26/2019	GBPZAR.fx	11:30:00 AM	18.1674	18.1633			N/A
6/26/2019	GBPZAR.fx	1:30:00 PM	18.2201	18.2292			N/A
6/26/2019	GBPZAR.fx	3:30:00 PM	18.1563	18.1653			N/A
6/26/2019	GOLD	9:30:00 AM	1408.61	1408.53			N/A
6/26/2019	GOLD	11:30:00 AM	1412.36	1412.4			N/A
6/26/2019	GOLD	1:30:00 PM	1406.68	1406.04			N/A
6/26/2019	GOLD	3:30:00 PM	1410.19	1409.62			N/A
6/26/2019	HKDJPY	9:30:00 AM	13.75	13.76			N/A
6/26/2019	HKDJPY	11:30:00 AM	13.76	13.76			N/A
6/26/2019	HKDJPY	1:30:00 PM	13.79	13.8			N/A
6/26/2019	HKDJPY	3:30:00 PM	13.79	13.8			N/A
6/26/2019	HKDJPY.fx	9:30:00 AM	13.746	13.752			N/A
6/26/2019	HKDJPY.fx	11:30:00 AM	13.754	13.758			N/A

6/26/2019	HKDJPY.fx	1:30:00 PM	13.789	13.793			N/A
6/26/2019	HKDJPY.fx	3:30:00 PM	13.788	13.793			N/A
6/26/2019	HUFJPY	9:30:00 AM	0.3776	0.3779			N/A
6/26/2019	HUFJPY	11:30:00 AM	0.3776	0.3779			N/A
6/26/2019	HUFJPY	1:30:00 PM	0.3783	0.3787			N/A
6/26/2019	HUFJPY	3:30:00 PM	0.3787	0.379			N/A
6/26/2019	JP225.i	9:30:00 AM	21052.73	21067.73			N/A
6/26/2019	JP225.i	11:30:00 AM	21046.07	21065.23			N/A
6/26/2019	JP225.i	1:30:00 PM	21225.23	21237.73			N/A
6/26/2019	JP225.i	3:30:00 PM	21192.73	21202.73			N/A
6/26/2019	MXNJPY	9:30:00 AM	5.59	5.6			N/A
6/26/2019	MXNJPY	11:30:00 AM	5.6	5.6			N/A
6/26/2019	MXNJPY	1:30:00 PM	5.61	5.62			N/A
6/26/2019	MXNJPY	3:30:00 PM	5.61	5.62			N/A
6/26/2019	NASDAQ.i	9:30:00 AM					N/A
6/26/2019	NASDAQ.i	11:30:00 AM					N/A
6/26/2019	NASDAQ.i	1:30:00 PM					N/A
6/26/2019	NASDAQ.i	3:30:00 PM					N/A
6/26/2019	NOKJPY	9:30:00 AM	12.58	12.61			N/A
6/26/2019	NOKJPY	11:30:00 AM	12.61	12.63			N/A
6/26/2019	NOKJPY	1:30:00 PM	12.65	12.68			N/A
6/26/2019	NOKJPY	3:30:00 PM	12.64	12.67			N/A
6/26/2019	NOKJPY.fx	9:30:00 AM	12.586	12.593			N/A
6/26/2019	NOKJPY.fx	11:30:00 AM	12.618	12.619			N/A
6/26/2019	NOKJPY.fx	1:30:00 PM	12.656	12.66			N/A
6/26/2019	NOKJPY.fx	3:30:00 PM	12.645	12.652			N/A
6/26/2019	NZDCAD	9:30:00 AM	0.8769	0.87758			N/A
6/26/2019	NZDCAD	11:30:00 AM	0.8776	0.87828			N/A
6/26/2019	NZDCAD	1:30:00 PM	0.87806	0.87861			N/A
6/26/2019	NZDCAD	3:30:00 PM	0.87844	0.87894			N/A
6/26/2019	NZDCAD.fx	9:30:00 AM	0.87723	0.87724			N/A
6/26/2019	NZDCAD.fx	11:30:00 AM	0.87795	0.87791			N/A
6/26/2019	NZDCAD.fx	1:30:00 PM	0.87839	0.87829			N/A
6/26/2019	NZDCAD.fx	3:30:00 PM	0.87875	0.87864			N/A

6/26/2019	NZDCHF	9:30:00 AM	0.65009	0.65076			N/A
6/26/2019	NZDCHF	11:30:00 AM	0.65043	0.65104			N/A
6/26/2019	NZDCHF	1:30:00 PM	0.65269	0.65323			N/A
6/26/2019	NZDCHF	3:30:00 PM	0.65337	0.65361			N/A
6/26/2019	NZDCHF.fx	9:30:00 AM	0.65043	0.65039			N/A
6/26/2019	NZDCHF.fx	11:30:00 AM	0.65077	0.65069			N/A
6/26/2019	NZDCHF.fx	1:30:00 PM	0.65302	0.65288			N/A
6/26/2019	NZDCHF.fx	3:30:00 PM	0.65371	0.6533			N/A
6/26/2019	NZDCZK	9:30:00 AM	14.905	14.918			N/A
6/26/2019	NZDCZK	11:30:00 AM	14.951	14.962			N/A
6/26/2019	NZDCZK	1:30:00 PM	14.97	14.979			N/A
6/26/2019	NZDCZK	3:30:00 PM	14.965	14.968			N/A
6/26/2019	NZDDKK	9:30:00 AM	4.375	4.378			N/A
6/26/2019	NZDDKK	11:30:00 AM	4.382	4.385			N/A
6/26/2019	NZDDKK	1:30:00 PM	4.385	4.388			N/A
6/26/2019	NZDDKK	3:30:00 PM	4.387	4.39			N/A
6/26/2019	NZDHKD	9:30:00 AM	5.1975	5.1999			N/A
6/26/2019	NZDHKD	11:30:00 AM	5.2059	5.2087			N/A
6/26/2019	NZDHKD	1:30:00 PM	5.2088	5.2106			N/A
6/26/2019	NZDHKD	3:30:00 PM	5.215	5.2165			N/A
6/26/2019	NZDHUF	9:30:00 AM	189.34	189.62			N/A
6/26/2019	NZDHUF	11:30:00 AM	189.82	189.96			N/A
6/26/2019	NZDHUF	1:30:00 PM	189.83	190.07			N/A
6/26/2019	NZDHUF	3:30:00 PM	189.91	190.09			N/A
6/26/2019	NZDJPY	9:30:00 AM	71.479	71.545			N/A
6/26/2019	NZDJPY	11:30:00 AM	71.637	71.695			N/A
6/26/2019	NZDJPY	1:30:00 PM	71.854	71.912			N/A
6/26/2019	NZDJPY	3:30:00 PM	71.942	72.002			N/A
6/26/2019	NZDJPY.fx	9:30:00 AM	71.511	71.513			N/A
6/26/2019	NZDJPY.fx	11:30:00 AM	71.669	71.662			N/A
6/26/2019	NZDJPY.fx	1:30:00 PM	71.885	71.88			N/A
6/26/2019	NZDJPY.fx	3:30:00 PM	71.974	71.974			N/A
6/26/2019	NZDMXN	9:30:00 AM	12.793	12.7987			N/A
6/26/2019	NZDMXN	11:30:00 AM	12.7975	12.8002			N/A

6/26/2019	NZDMXN	1:30:00 PM	12.7971	12.7995			N/A
6/26/2019	NZDMXN	3:30:00 PM	12.8095	12.8109			N/A
6/26/2019	NZDNOK	9:30:00 AM	5.6753	5.6792			N/A
6/26/2019	NZDNOK	11:30:00 AM	5.6757	5.6766			N/A
6/26/2019	NZDNOK	1:30:00 PM	5.6753	5.6774			N/A
6/26/2019	NZDNOK	3:30:00 PM	5.6844	5.6855			N/A
6/26/2019	NZDPLN	9:30:00 AM	2.4936	2.4948			N/A
6/26/2019	NZDPLN	11:30:00 AM	2.5024	2.5029			N/A
6/26/2019	NZDPLN	1:30:00 PM	2.5038	2.5046			N/A
6/26/2019	NZDPLN	3:30:00 PM	2.5046	2.5045			N/A
6/26/2019	NZDSEK	9:30:00 AM	6.1819	6.1876			N/A
6/26/2019	NZDSEK	11:30:00 AM	6.1784	6.1835			N/A
6/26/2019	NZDSEK	1:30:00 PM	6.1822	6.1863			N/A
6/26/2019	NZDSEK	3:30:00 PM	6.1972	6.1983			N/A
6/26/2019	NZDSGD	9:30:00 AM	0.902	0.9022			N/A
6/26/2019	NZDSGD	11:30:00 AM	0.9033	0.9039			N/A
6/26/2019	NZDSGD	1:30:00 PM	0.9038	0.9044			N/A
6/26/2019	NZDSGD	3:30:00 PM	0.9047	0.9051			N/A
6/26/2019	NZDSGD.fx	9:30:00 AM	0.90208	0.90268			N/A
6/26/2019	NZDSGD.fx	11:30:00 AM	0.90329	0.90388			N/A
6/26/2019	NZDSGD.fx	1:30:00 PM	0.90378	0.9043			N/A
6/26/2019	NZDSGD.fx	3:30:00 PM	0.90468	0.90501			N/A
6/26/2019	NZDUSD	9:30:00 AM	0.6659	0.66602			N/A
6/26/2019	NZDUSD	11:30:00 AM	0.66697	0.66704			N/A
6/26/2019	NZDUSD	1:30:00 PM	0.66749	0.66748			N/A
6/26/2019	NZDUSD	3:30:00 PM	0.66821	0.6682			N/A
6/26/2019	NZDUSD.fx	9:30:00 AM	0.66597	0.66603			N/A
6/26/2019	NZDUSD.fx	11:30:00 AM	0.66704	0.66705			N/A
6/26/2019	NZDUSD.fx	1:30:00 PM	0.66757	0.6675			N/A
6/26/2019	NZDUSD.fx	3:30:00 PM	0.66828	0.66823			N/A
6/26/2019	NZDZAR	9:30:00 AM	9.5392	9.5543			N/A
6/26/2019	NZDZAR	11:30:00 AM	9.5476	9.5557			N/A
6/26/2019	NZDZAR	1:30:00 PM	9.5669	9.5795			N/A
6/26/2019	NZDZAR	3:30:00 PM	9.5536	9.5665			N/A



6/26/2019	SEKJPY	9:30:00 AM	11.56	11.57			N/A
6/26/2019	SEKJPY	11:30:00 AM	11.58	11.6			N/A
6/26/2019	SEKJPY	1:30:00 PM	11.62	11.63			N/A
6/26/2019	SEKJPY	3:30:00 PM	11.61	11.61			N/A
6/26/2019	SEKJPY.fx	9:30:00 AM	11.55	11.565			N/A
6/26/2019	SEKJPY.fx	11:30:00 AM	11.583	11.595			N/A
6/26/2019	SEKJPY.fx	1:30:00 PM	11.612	11.626			N/A
6/26/2019	SEKJPY.fx	3:30:00 PM	11.595	11.611			N/A
6/26/2019	SGDJPY	9:30:00 AM	79.22	79.24			N/A
6/26/2019	SGDJPY	11:30:00 AM	79.32	79.3			N/A
6/26/2019	SGDJPY	1:30:00 PM	79.5	79.5			N/A
6/26/2019	SGDJPY	3:30:00 PM	79.51	79.53			N/A
6/26/2019	SILVER	9:30:00 AM	15.04	15.41			N/A
6/26/2019	SILVER	11:30:00 AM	15.14	15.5			N/A
6/26/2019	SILVER	1:30:00 PM	15.11	15.48			N/A
6/26/2019	SILVER	3:30:00 PM	15.14	15.5			N/A
6/26/2019	SPX500.i	9:30:00 AM	2920.46	2921.26			N/A
6/26/2019	SPX500.i	11:30:00 AM	2921.46	2922.51			N/A
6/26/2019	SPX500.i	1:30:00 PM	2935.19	2935.51			N/A
6/26/2019	SPX500.i	3:30:00 PM	2930.96	2931.01			N/A
6/26/2019	UK100.i	9:30:00 AM	7418.84	7419.51			N/A
6/26/2019	UK100.i	11:30:00 AM	7428.09	7428.92			N/A
6/26/2019	UK100.i	1:30:00 PM	7437.42	7437.42			N/A
6/26/2019	UK100.i	3:30:00 PM	7439.76	7440.42			N/A
6/26/2019	USDCAD	9:30:00 AM	1.31718	1.31725			N/A
6/26/2019	USDCAD	11:30:00 AM	1.31614	1.31623			N/A
6/26/2019	USDCAD	1:30:00 PM	1.3158	1.31579			N/A
6/26/2019	USDCAD	3:30:00 PM	1.31511	1.31501			N/A
6/26/2019	USDCAD.fx	9:30:00 AM	1.31721	1.31721			N/A
6/26/2019	USDCAD.fx	11:30:00 AM	1.31617	1.3162			N/A
6/26/2019	USDCAD.fx	1:30:00 PM	1.31583	1.31575			N/A
6/26/2019	USDCAD.fx	3:30:00 PM	1.31513	1.31499			N/A
6/26/2019	USDCHF	9:30:00 AM	0.97656	0.97661			N/A
6/26/2019	USDCHF	11:30:00 AM	0.97554	0.97549			N/A

6/26/2019	USDCHF	1:30:00 PM	0.97837	0.97797			N/A
6/26/2019	USDCHF	3:30:00 PM	0.9782	0.97772			N/A
6/26/2019	USDCHF.fx	9:30:00 AM	0.9766	0.97655			N/A
6/26/2019	USDCHF.fx	11:30:00 AM	0.97558	0.97543			N/A
6/26/2019	USDCHF.fx	1:30:00 PM	0.97841	0.97791			N/A
6/26/2019	USDCHF.fx	3:30:00 PM	0.97823	0.97768			N/A
6/26/2019	USDCZK	9:30:00 AM	22.4	22.422			N/A
6/26/2019	USDCZK	11:30:00 AM	22.433	22.452			N/A
6/26/2019	USDCZK	1:30:00 PM	22.445	22.458			N/A
6/26/2019	USDCZK	3:30:00 PM	22.413	22.428			N/A
6/26/2019	USDCZK.fx	9:30:00 AM	22.4076	22.4137			N/A
6/26/2019	USDCZK.fx	11:30:00 AM	22.4416	22.4421			N/A
6/26/2019	USDCZK.fx	1:30:00 PM	22.4537	22.4492			N/A
6/26/2019	USDCZK.fx	3:30:00 PM	22.4217	22.4205			N/A
6/26/2019	USDDKK	9:30:00 AM	6.5711	6.5748			N/A
6/26/2019	USDDKK	11:30:00 AM	6.5715	6.5742			N/A
6/26/2019	USDDKK	1:30:00 PM	6.5715	6.5726			N/A
6/26/2019	USDDKK	3:30:00 PM	6.5698	6.571			N/A
6/26/2019	USDDKK.fx	9:30:00 AM	6.57147	6.57283			N/A
6/26/2019	USDDKK.fx	11:30:00 AM	6.57215	6.57212			N/A
6/26/2019	USDDKK.fx	1:30:00 PM	6.57193	6.57049			N/A
6/26/2019	USDDKK.fx	3:30:00 PM	6.57025	6.56897			N/A
6/26/2019	USDHKD	9:30:00 AM	7.8089	7.8092			N/A
6/26/2019	USDHKD	11:30:00 AM	7.8093	7.8096			N/A
6/26/2019	USDHKD	1:30:00 PM	7.8076	7.8079			N/A
6/26/2019	USDHKD	3:30:00 PM	7.8086	7.8084			N/A
6/26/2019	USDHKD.fx	9:30:00 AM	7.80894	7.80924			N/A
6/26/2019	USDHKD.fx	11:30:00 AM	7.80921	7.80968			N/A
6/26/2019	USDHKD.fx	1:30:00 PM	7.80754	7.80811			N/A
6/26/2019	USDHKD.fx	3:30:00 PM	7.80857	7.80901			N/A
6/26/2019	USDHUF	9:30:00 AM	284.43	284.9			N/A
6/26/2019	USDHUF	11:30:00 AM	284.73	285.06			N/A
6/26/2019	USDHUF	1:30:00 PM	284.52	284.84			N/A
6/26/2019	USDHUF	3:30:00 PM	284.48	284.82			N/A

6/26/2019	USDHUF.fx	9:30:00 AM	284.605	284.725			N/A
6/26/2019	USDHUF.fx	11:30:00 AM	284.935	284.855			N/A
6/26/2019	USDHUF.fx	1:30:00 PM	284.708	284.645			N/A
6/26/2019	USDHUF.fx	3:30:00 PM	284.674	284.626			N/A
6/26/2019	USDINR	9:30:00 AM	64.32	74.31			N/A
6/26/2019	USDINR	11:30:00 AM	64.28	74.27			N/A
6/26/2019	USDINR	1:30:00 PM					N/A
6/26/2019	USDINR	3:30:00 PM					N/A
6/26/2019	USDJPY	9:30:00 AM	107.377	107.372			N/A
6/26/2019	USDJPY	11:30:00 AM	107.437	107.429			N/A
6/26/2019	USDJPY	1:30:00 PM	107.697	107.672			N/A
6/26/2019	USDJPY	3:30:00 PM	107.704	107.692			N/A
6/26/2019	USDJPY.fx	9:30:00 AM	107.383	107.365			N/A
6/26/2019	USDJPY.fx	11:30:00 AM	107.443	107.421			N/A
6/26/2019	USDJPY.fx	1:30:00 PM	107.702	107.664			N/A
6/26/2019	USDJPY.fx	3:30:00 PM	107.707	107.686			N/A
6/26/2019	USDMXN	9:30:00 AM	19.217	19.225			N/A
6/26/2019	USDMXN	11:30:00 AM	19.195	19.196			N/A
6/26/2019	USDMXN	1:30:00 PM	19.178	19.184			N/A
6/26/2019	USDMXN	3:30:00 PM	19.179	19.185			N/A
6/26/2019	USDMXN.f	9:30:00 AM					N/A
6/26/2019	USDMXN.f	11:30:00 AM					N/A
6/26/2019	USDMXN.f	1:30:00 PM					N/A
6/26/2019	USDMXN.f	3:30:00 PM					N/A
6/26/2019	USDNOK	9:30:00 AM	8.5248	8.5334			N/A
6/26/2019	USDNOK	11:30:00 AM	8.5114	8.5171			N/A
6/26/2019	USDNOK	1:30:00 PM	8.5043	8.5081			N/A
6/26/2019	USDNOK	3:30:00 PM	8.5119	8.518			N/A
6/26/2019	USDNOK.fx	9:30:00 AM	8.52853	8.52904			N/A
6/26/2019	USDNOK.fx	11:30:00 AM	8.51517	8.51282			N/A
6/26/2019	USDNOK.fx	1:30:00 PM	8.50807	8.50367			N/A
6/26/2019	USDNOK.fx	3:30:00 PM	8.5161	8.51355			N/A
6/26/2019	USDPLN	9:30:00 AM	3.7462	3.7476			N/A
6/26/2019	USDPLN	11:30:00 AM	3.7535	3.7531			N/A

6/26/2019	USDPLN	1:30:00 PM	3.7524	3.752			N/A
6/26/2019	USDPLN	3:30:00 PM	3.7509	3.7509			N/A
6/26/2019	USDPLN.fx	9:30:00 AM	3.74538	3.74841			N/A
6/26/2019	USDPLN.fx	11:30:00 AM	3.75273	3.75391			N/A
6/26/2019	USDPLN.fx	1:30:00 PM	3.7516	3.75276			N/A
6/26/2019	USDPLN.fx	3:30:00 PM	3.75007	3.75172			N/A
6/26/2019	USDRUB	9:30:00 AM					N/A
6/26/2019	USDRUB	11:30:00 AM	62.681	63.048			N/A
6/26/2019	USDRUB	1:30:00 PM	62.992	63.386			N/A
6/26/2019	USDRUB	3:30:00 PM	62.838	63.223			N/A
6/26/2019	USDSEK	9:30:00 AM	9.2894	9.2908			N/A
6/26/2019	USDSEK	11:30:00 AM	9.2692	9.2697			N/A
6/26/2019	USDSEK	1:30:00 PM	9.2674	9.2657			N/A
6/26/2019	USDSEK	3:30:00 PM	9.2795	9.28			N/A
6/26/2019	USDSEK.fx	9:30:00 AM	9.2921	9.28877			N/A
6/26/2019	USDSEK.fx	11:30:00 AM	9.27174	9.26781			N/A
6/26/2019	USDSEK.fx	1:30:00 PM	9.27019	9.26387			N/A
6/26/2019	USDSEK.fx	3:30:00 PM	9.28258	9.27862			N/A
6/26/2019	USDSGD	9:30:00 AM	1.3547	1.355			N/A
6/26/2019	USDSGD	11:30:00 AM	1.3545	1.3548			N/A
6/26/2019	USDSGD	1:30:00 PM	1.3542	1.3544			N/A
6/26/2019	USDSGD	3:30:00 PM	1.354	1.3543			N/A
6/26/2019	USDSGD.fx	9:30:00 AM	1.35466	1.35512			N/A
6/26/2019	USDSGD.fx	11:30:00 AM	1.35439	1.35478			N/A
6/26/2019	USDSGD.fx	1:30:00 PM	1.35413	1.35442			N/A
6/26/2019	USDSGD.fx	3:30:00 PM	1.35391	1.35427			N/A
6/26/2019	USDZAR	9:30:00 AM	14.3353	14.3488			N/A
6/26/2019	USDZAR	11:30:00 AM	14.3286	14.3291			N/A
6/26/2019	USDZAR	1:30:00 PM	14.3431	14.3554			N/A
6/26/2019	USDZAR	3:30:00 PM	14.3133	14.3284			N/A
6/26/2019	USDZAR.fx	9:30:00 AM	14.3411	14.34345			N/A
6/26/2019	USDZAR.fx	11:30:00 AM	14.33287	14.32292			N/A
6/26/2019	USDZAR.fx	1:30:00 PM	14.34837	14.35052			N/A
6/26/2019	USDZAR.fx	3:30:00 PM	14.31947	14.32263			N/A

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6/26/2019	XAUUSD	11:30:00 AM	1412.36	1412.4			N/A
6/26/2019	XAUUSD	1:30:00 PM	1406.66	1406.05			N/A
6/26/2019	XAUUSD	3:30:00 PM	1410.2	1409.63			N/A
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6/26/2019	ZARJPY.fx	1:30:00 PM	7.503	7.507			N/A
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6/27/2019	#PG	3:30:00 PM					N/A
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6/27/2019	#POT	3:30:00 PM					N/A
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6/27/2019	#QCOM	1:30:00 PM					N/A
6/27/2019	#QCOM	3:30:00 PM					N/A
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6/27/2019	#QQQ	1:30:00 PM					N/A
6/27/2019	#QQQ	3:30:00 PM					N/A
6/27/2019	#Ripple	9:30:00 AM	0.4299	0.4254			N/A
6/27/2019	#Ripple	11:30:00 AM	0.4244	0.4279			N/A
6/27/2019	#Ripple	1:30:00 PM	0.4214	0.4253			N/A
6/27/2019	#Ripple	3:30:00 PM	0.4236	0.4278			N/A
6/27/2019	#S	9:30:00 AM					N/A
6/27/2019	#S	11:30:00 AM					N/A
6/27/2019	#S	1:30:00 PM					N/A
6/27/2019	#S	3:30:00 PM					N/A
6/27/2019	#SBUX	9:30:00 AM					N/A
6/27/2019	#SBUX	11:30:00 AM					N/A
6/27/2019	#SBUX	1:30:00 PM					N/A
6/27/2019	#SBUX	3:30:00 PM					N/A
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6/27/2019	#SNE	3:30:00 PM					N/A
6/27/2019	#SPY	9:30:00 AM					N/A
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6/27/2019	#SPY	1:30:00 PM					N/A
6/27/2019	#SPY	3:30:00 PM					N/A
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6/27/2019	#T	11:30:00 AM					N/A
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6/27/2019	#TRV	1:30:00 PM					N/A
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6/27/2019	#TSCO	1:30:00 PM					N/A
6/27/2019	#TSCO	3:30:00 PM					N/A
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6/27/2019	#TSLA	11:30:00 AM					N/A
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6/27/2019	#UBS	11:30:00 AM					N/A
6/27/2019	#UBS	1:30:00 PM					N/A
6/27/2019	#UBS	3:30:00 PM					N/A



6/27/2019	#UL	9:30:00 AM					N/A
6/27/2019	#UL	11:30:00 AM					N/A
6/27/2019	#UL	1:30:00 PM					N/A
6/27/2019	#UL	3:30:00 PM					N/A
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6/27/2019	#UTX	1:30:00 PM					N/A
6/27/2019	#UTX	3:30:00 PM					N/A
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6/27/2019	#V	11:30:00 AM					N/A
6/27/2019	#V	1:30:00 PM					N/A
6/27/2019	#V	3:30:00 PM					N/A
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6/27/2019	#VOD	11:30:00 AM					N/A
6/27/2019	#VOD	1:30:00 PM					N/A
6/27/2019	#VOD	3:30:00 PM					N/A
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6/27/2019	#VZ	11:30:00 AM					N/A
6/27/2019	#VZ	1:30:00 PM					N/A
6/27/2019	#VZ	3:30:00 PM					N/A
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6/27/2019	#WDC	3:30:00 PM					N/A
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6/27/2019	#WFC	1:30:00 PM					N/A
6/27/2019	#WFC	3:30:00 PM					N/A
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6/27/2019	#WMT	11:30:00 AM					N/A

6/27/2019	#WMT	1:30:00 PM					N/A
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6/27/2019	#XOM	9:30:00 AM					N/A
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6/27/2019	#YHOO	3:30:00 PM					N/A
6/27/2019	#ZNGA	9:30:00 AM					N/A
6/27/2019	#ZNGA	11:30:00 AM					N/A
6/27/2019	#ZNGA	1:30:00 PM					N/A
6/27/2019	#ZNGA	3:30:00 PM					N/A
6/27/2019	AUDCAD	9:30:00 AM	0.91745	0.9179			N/A
6/27/2019	AUDCAD	11:30:00 AM	0.91773	0.91838			N/A
6/27/2019	AUDCAD	1:30:00 PM	0.91775	0.91843			N/A
6/27/2019	AUDCAD	3:30:00 PM	0.91791	0.91842			N/A
6/27/2019	AUDCAD.fx	9:30:00 AM	0.9178	0.91756			N/A
6/27/2019	AUDCAD.fx	11:30:00 AM	0.91806	0.91804			N/A
6/27/2019	AUDCAD.fx	1:30:00 PM	0.91807	0.91808			N/A
6/27/2019	AUDCAD.fx	3:30:00 PM	0.91822	0.9181			N/A
6/27/2019	AUDCHF	9:30:00 AM	0.68502	0.68569			N/A
6/27/2019	AUDCHF	11:30:00 AM	0.68459	0.68524			N/A
6/27/2019	AUDCHF	1:30:00 PM	0.68326	0.68385			N/A
6/27/2019	AUDCHF	3:30:00 PM	0.68419	0.68477			N/A
6/27/2019	AUDCHF.fx	9:30:00 AM	0.68536	0.68534			N/A
6/27/2019	AUDCHF.fx	11:30:00 AM	0.68493	0.68489			N/A
6/27/2019	AUDCHF.fx	1:30:00 PM	0.68361	0.68351			N/A
6/27/2019	AUDCHF.fx	3:30:00 PM	0.68453	0.68444			N/A
6/27/2019	AUDCZK	9:30:00 AM	15.626	15.643			N/A
6/27/2019	AUDCZK	11:30:00 AM	15.627	15.643			N/A
6/27/2019	AUDCZK	1:30:00 PM	15.62	15.633			N/A
6/27/2019	AUDCZK	3:30:00 PM	15.632	15.645			N/A

6/27/2019	AUDDKK	9:30:00 AM	4.5925	4.5971			N/A
6/27/2019	AUDDKK	11:30:00 AM	4.59	4.5945			N/A
6/27/2019	AUDDKK	1:30:00 PM	4.5881	4.5924			N/A
6/27/2019	AUDDKK	3:30:00 PM	4.5914	4.5957			N/A
6/27/2019	AUDHKD	9:30:00 AM	5.4577	5.4607			N/A
6/27/2019	AUDHKD	11:30:00 AM	5.462	5.4658			N/A
6/27/2019	AUDHKD	1:30:00 PM	5.4604	5.4639			N/A
6/27/2019	AUDHKD	3:30:00 PM	5.4643	5.4682			N/A
6/27/2019	AUDHUF	9:30:00 AM	198.95	199.19			N/A
6/27/2019	AUDHUF	11:30:00 AM	198.76	199			N/A
6/27/2019	AUDHUF	1:30:00 PM	198.78	198.99			N/A
6/27/2019	AUDHUF	3:30:00 PM	198.99	199.12			N/A
6/27/2019	AUDJPY	9:30:00 AM	75.521	75.584			N/A
6/27/2019	AUDJPY	11:30:00 AM	75.505	75.569			N/A
6/27/2019	AUDJPY	1:30:00 PM	75.394	75.459			N/A
6/27/2019	AUDJPY	3:30:00 PM	75.49	75.528			N/A
6/27/2019	AUDJPY.fx	9:30:00 AM	75.554	75.548			N/A
6/27/2019	AUDJPY.fx	11:30:00 AM	75.538	75.534			N/A
6/27/2019	AUDJPY.fx	1:30:00 PM	75.428	75.424			N/A
6/27/2019	AUDJPY.fx	3:30:00 PM	75.523	75.497			N/A
6/27/2019	AUDMXN	9:30:00 AM	13.3667	13.3761			N/A
6/27/2019	AUDMXN	11:30:00 AM	13.3654	13.3757			N/A
6/27/2019	AUDMXN	1:30:00 PM	13.3546	13.3643			N/A
6/27/2019	AUDMXN	3:30:00 PM	13.357	13.3638			N/A
6/27/2019	AUDNOK	9:30:00 AM	5.9428	5.9473			N/A
6/27/2019	AUDNOK	11:30:00 AM	5.9504	5.9541			N/A
6/27/2019	AUDNOK	1:30:00 PM	5.9541	5.9587			N/A
6/27/2019	AUDNOK	3:30:00 PM	5.9571	5.9604			N/A
6/27/2019	AUDNOK.f	9:30:00 AM	5.9441	5.9458			N/A
6/27/2019	AUDNOK.f	11:30:00 AM	5.9518	5.9524			N/A
6/27/2019	AUDNOK.f	1:30:00 PM	5.9555	5.9572			N/A
6/27/2019	AUDNOK.f	3:30:00 PM	5.9584	5.9601			N/A
6/27/2019	AUDNZD	9:30:00 AM	1.04672	1.04763			N/A
6/27/2019	AUDNZD	11:30:00 AM	1.04567	1.04656			N/A

6/27/2019	AUDNZD	1:30:00 PM	1.04478	1.04566			N/A
6/27/2019	AUDNZD	3:30:00 PM	1.04513	1.04593			N/A
6/27/2019	AUDNZD.fx	9:30:00 AM	1.04716	1.04719			N/A
6/27/2019	AUDNZD.fx	11:30:00 AM	1.04612	1.0461			N/A
6/27/2019	AUDNZD.fx	1:30:00 PM	1.04522	1.0452			N/A
6/27/2019	AUDNZD.fx	3:30:00 PM	1.04551	1.04548			N/A
6/27/2019	AUDPLN	9:30:00 AM	2.6206	2.6237			N/A
6/27/2019	AUDPLN	11:30:00 AM	2.6174	2.6205			N/A
6/27/2019	AUDPLN	1:30:00 PM	2.6157	2.6187			N/A
6/27/2019	AUDPLN	3:30:00 PM	2.615	2.6177			N/A
6/27/2019	AUDSEK	9:30:00 AM	6.4818	6.4846			N/A
6/27/2019	AUDSEK	11:30:00 AM	6.4867	6.4893			N/A
6/27/2019	AUDSEK	1:30:00 PM	6.4856	6.4884			N/A
6/27/2019	AUDSEK	3:30:00 PM	6.4935	6.4961			N/A
6/27/2019	AUDSEK.fx	9:30:00 AM	6.4769	6.4896			N/A
6/27/2019	AUDSEK.fx	11:30:00 AM	6.4819	6.4939			N/A
6/27/2019	AUDSEK.fx	1:30:00 PM	6.481	6.4929			N/A
6/27/2019	AUDSEK.fx	3:30:00 PM	6.4888	6.5006			N/A
6/27/2019	AUDSGD	9:30:00 AM	0.9471	0.9474			N/A
6/27/2019	AUDSGD	11:30:00 AM	0.9475	0.9475			N/A
6/27/2019	AUDSGD	1:30:00 PM	0.9471	0.9473			N/A
6/27/2019	AUDSGD	3:30:00 PM	0.9472	0.9474			N/A
6/27/2019	AUDSGD.fx	9:30:00 AM	0.94722	0.94727			N/A
6/27/2019	AUDSGD.fx	11:30:00 AM	0.94761	0.94771			N/A
6/27/2019	AUDSGD.fx	1:30:00 PM	0.9472	0.94722			N/A
6/27/2019	AUDSGD.fx	3:30:00 PM	0.9473	0.9473			N/A
6/27/2019	AUDUSD	9:30:00 AM	0.69895	0.6989			N/A
6/27/2019	AUDUSD	11:30:00 AM	0.69945	0.69954			N/A
6/27/2019	AUDUSD	1:30:00 PM	0.69924	0.69932			N/A
6/27/2019	AUDUSD	3:30:00 PM	0.69981	0.69981			N/A
6/27/2019	AUDUSD.fx	9:30:00 AM	0.699	0.69884			N/A
6/27/2019	AUDUSD.fx	11:30:00 AM	0.6995	0.69949			N/A
6/27/2019	AUDUSD.fx	1:30:00 PM	0.69929	0.69926			N/A
6/27/2019	AUDUSD.fx	3:30:00 PM	0.69985	0.69977			N/A

6/27/2019	AUDZAR	9:30:00 AM	9.9563	9.9689			N/A
6/27/2019	AUDZAR	11:30:00 AM	9.9125	9.9255			N/A
6/27/2019	AUDZAR	1:30:00 PM	9.8887	9.9038			N/A
6/27/2019	AUDZAR	3:30:00 PM	9.8813	9.8923			N/A
6/27/2019	AUS200.i	9:30:00 AM	6662.3	6664.7			N/A
6/27/2019	AUS200.i	11:30:00 AM	6667.22	6670.72			N/A
6/27/2019	AUS200.i	1:30:00 PM	6651.72	6654.22			N/A
6/27/2019	AUS200.i	3:30:00 PM	6653.22	6656.52			N/A
6/27/2019	BCHUSD	9:30:00 AM	468.02	465.87			N/A
6/27/2019	BCHUSD	11:30:00 AM	452.24	453.29			N/A
6/27/2019	BCHUSD	1:30:00 PM	431.82	432.37			N/A
6/27/2019	BCHUSD	3:30:00 PM	437.65	437.81			N/A
6/27/2019	CADCHF	9:30:00 AM	0.74654	0.74703			N/A
6/27/2019	CADCHF	11:30:00 AM	0.74567	0.74633			N/A
6/27/2019	CADCHF	1:30:00 PM	0.74423	0.74481			N/A
6/27/2019	CADCHF	3:30:00 PM	0.74522	0.74568			N/A
6/27/2019	CADCHF.fx	9:30:00 AM	0.74687	0.74668			N/A
6/27/2019	CADCHF.fx	11:30:00 AM	0.746	0.74598			N/A
6/27/2019	CADCHF.fx	1:30:00 PM	0.74457	0.74446			N/A
6/27/2019	CADCHF.fx	3:30:00 PM	0.74555	0.7454			N/A
6/27/2019	CADCZK	9:30:00 AM	17.032	17.045			N/A
6/27/2019	CADCZK	11:30:00 AM	17.023	17.039			N/A
6/27/2019	CADCZK	1:30:00 PM	17.016	17.028			N/A
6/27/2019	CADCZK	3:30:00 PM	17.028	17.041			N/A
6/27/2019	CADDKK	9:30:00 AM	5.005	5.009			N/A
6/27/2019	CADDKK	11:30:00 AM					N/A
6/27/2019	CADDKK	1:30:00 PM					N/A
6/27/2019	CADDKK	3:30:00 PM	5.002	5.003			N/A
6/27/2019	CADHKD	9:30:00 AM	5.9471	5.9509			N/A
6/27/2019	CADHKD	11:30:00 AM	5.9505	5.9545			N/A
6/27/2019	CADHKD	1:30:00 PM	5.9483	5.9517			N/A
6/27/2019	CADHKD	3:30:00 PM	5.9527	5.9558			N/A
6/27/2019	CADHUF	9:30:00 AM	216.88	216.99			N/A
6/27/2019	CADHUF	11:30:00 AM	216.55	216.72			N/A

6/27/2019	CADHUF	1:30:00 PM	216.57	216.72			N/A
6/27/2019	CADHUF	3:30:00 PM	216.79	216.83			N/A
6/27/2019	CADJPY	9:30:00 AM	82.304	82.351			N/A
6/27/2019	CADJPY	11:30:00 AM	82.238	82.304			N/A
6/27/2019	CADJPY	1:30:00 PM	82.116	82.185			N/A
6/27/2019	CADJPY	3:30:00 PM	82.218	82.253			N/A
6/27/2019	CADJPY.fx	9:30:00 AM	82.337	82.316			N/A
6/27/2019	CADJPY.fx	11:30:00 AM	82.271	82.27			N/A
6/27/2019	CADJPY.fx	1:30:00 PM	82.149	82.151			N/A
6/27/2019	CADJPY.fx	3:30:00 PM	82.251	82.227			N/A
6/27/2019	CADMXN	9:30:00 AM	14.5664	14.5775			N/A
6/27/2019	CADMXN	11:30:00 AM	14.5588	14.5711			N/A
6/27/2019	CADMXN	1:30:00 PM	14.5466	14.5585			N/A
6/27/2019	CADMXN	3:30:00 PM	14.5485	14.5563			N/A
6/27/2019	CADNOK	9:30:00 AM	6.4739	6.4788			N/A
6/27/2019	CADNOK	11:30:00 AM	6.4787	6.4836			N/A
6/27/2019	CADNOK	1:30:00 PM	6.4842	6.4882			N/A
6/27/2019	CADNOK	3:30:00 PM	6.4872	6.4877			N/A
6/27/2019	CADPLN	9:30:00 AM	2.8553	2.8571			N/A
6/27/2019	CADPLN	11:30:00 AM	2.8514	2.8533			N/A
6/27/2019	CADPLN	1:30:00 PM	2.8494	2.8509			N/A
6/27/2019	CADPLN	3:30:00 PM	2.8488	2.8483			N/A
6/27/2019	CADSEK	9:30:00 AM	7.0611	7.0638			N/A
6/27/2019	CADSEK	11:30:00 AM	7.0633	7.0672			N/A
6/27/2019	CADSEK	1:30:00 PM	7.0621	7.065			N/A
6/27/2019	CADSEK	3:30:00 PM	7.07	7.072			N/A
6/27/2019	CADSGD	9:30:00 AM	1.0313	1.0316			N/A
6/27/2019	CADSGD	11:30:00 AM	1.0315	1.0318			N/A
6/27/2019	CADSGD	1:30:00 PM	1.0308	1.0311			N/A
6/27/2019	CADSGD	3:30:00 PM	1.031	1.0313			N/A
6/27/2019	CADZAR	9:30:00 AM	10.8489	10.8623			N/A
6/27/2019	CADZAR	11:30:00 AM	10.7971	10.8126			N/A
6/27/2019	CADZAR	1:30:00 PM	10.7713	10.7887			N/A
6/27/2019	CADZAR	3:30:00 PM	10.7641	10.7742			N/A

6/27/2019	CHFCZK	9:30:00 AM	22.81	22.827			N/A
6/27/2019	CHFCZK	11:30:00 AM	22.824	22.84			N/A
6/27/2019	CHFCZK	1:30:00 PM	22.859	22.873			N/A
6/27/2019	CHFCZK	3:30:00 PM	22.846	22.859			N/A
6/27/2019	CHFDKK	9:30:00 AM	6.703	6.706			N/A
6/27/2019	CHFDKK	11:30:00 AM	6.704	6.706			N/A
6/27/2019	CHFDKK	1:30:00 PM	6.714	6.717			N/A
6/27/2019	CHFDKK	3:30:00 PM	6.71	6.712			N/A
6/27/2019	CHFDKK.fx	9:30:00 AM	6.7014	6.7074			N/A
6/27/2019	CHFDKK.fx	11:30:00 AM	6.702	6.7077			N/A
6/27/2019	CHFDKK.fx	1:30:00 PM	6.7122	6.7177			N/A
6/27/2019	CHFDKK.fx	3:30:00 PM	6.7077	6.7132			N/A
6/27/2019	CHFHKD	9:30:00 AM	7.9664	7.9679			N/A
6/27/2019	CHFHKD	11:30:00 AM	7.978	7.9817			N/A
6/27/2019	CHFHKD	1:30:00 PM	7.9916	7.9934			N/A
6/27/2019	CHFHKD	3:30:00 PM	7.987	7.9891			N/A
6/27/2019	CHFHUF	9:30:00 AM	290.32	290.71			N/A
6/27/2019	CHFHUF	11:30:00 AM	290.23	290.61			N/A
6/27/2019	CHFHUF	1:30:00 PM	290.84	291.2			N/A
6/27/2019	CHFHUF	3:30:00 PM	290.73	290.99			N/A
6/27/2019	CHFJPY	9:30:00 AM	110.213	110.272			N/A
6/27/2019	CHFJPY	11:30:00 AM	110.259	110.315			N/A
6/27/2019	CHFJPY	1:30:00 PM	110.312	110.366			N/A
6/27/2019	CHFJPY	3:30:00 PM	110.295	110.336			N/A
6/27/2019	CHFJPY.fx	9:30:00 AM	110.244	110.236			N/A
6/27/2019	CHFJPY.fx	11:30:00 AM	110.292	110.281			N/A
6/27/2019	CHFJPY.fx	1:30:00 PM	110.346	110.331			N/A
6/27/2019	CHFJPY.fx	3:30:00 PM	110.326	110.304			N/A
6/27/2019	CHFMXN	9:30:00 AM	19.5084	19.5227			N/A
6/27/2019	CHFMXN	11:30:00 AM	19.5189	19.5338			N/A
6/27/2019	CHFMXN	1:30:00 PM	19.5421	19.5544			N/A
6/27/2019	CHFMXN	3:30:00 PM	19.5184	19.5295			N/A
6/27/2019	CHFNOK	9:30:00 AM	8.6714	8.6781			N/A
6/27/2019	CHFNOK	11:30:00 AM	8.6871	8.6931			N/A

6/27/2019	CHFNOK	1:30:00 PM	8.7107	8.7164			N/A
6/27/2019	CHFNOK	3:30:00 PM	8.7028	8.7087			N/A
6/27/2019	CHFNOK.fx	9:30:00 AM	8.6748	8.67455			N/A
6/27/2019	CHFNOK.fx	11:30:00 AM	8.69048	8.68973			N/A
6/27/2019	CHFNOK.fx	1:30:00 PM	8.71406	8.7129			N/A
6/27/2019	CHFNOK.fx	3:30:00 PM	8.70489	8.70563			N/A
6/27/2019	CHFPLN	9:30:00 AM	3.8246	3.8275			N/A
6/27/2019	CHFPLN	11:30:00 AM	3.8224	3.825			N/A
6/27/2019	CHFPLN	1:30:00 PM	3.8273	3.83			N/A
6/27/2019	CHFPLN	3:30:00 PM	3.8214	3.823			N/A
6/27/2019	CHFPLN.fx	9:30:00 AM	3.82214	3.82985			N/A
6/27/2019	CHFPLN.fx	11:30:00 AM	3.81994	3.82735			N/A
6/27/2019	CHFPLN.fx	1:30:00 PM	3.82485	3.83237			N/A
6/27/2019	CHFPLN.fx	3:30:00 PM	3.81811	3.82583			N/A
6/27/2019	CHFSEK	9:30:00 AM	9.4569	9.46			N/A
6/27/2019	CHFSEK	11:30:00 AM	9.4694	9.4736			N/A
6/27/2019	CHFSEK	1:30:00 PM	9.487	9.4894			N/A
6/27/2019	CHFSEK	3:30:00 PM	9.486	9.4879			N/A
6/27/2019	CHFSGD	9:30:00 AM	1.3821	1.3823			N/A
6/27/2019	CHFSGD	11:30:00 AM	1.3834	1.3837			N/A
6/27/2019	CHFSGD	1:30:00 PM	1.3855	1.3858			N/A
6/27/2019	CHFSGD	3:30:00 PM	1.3841	1.384			N/A
6/27/2019	CHFSGD.fx	9:30:00 AM	1.38223	1.38207			N/A
6/27/2019	CHFSGD.fx	11:30:00 AM	1.38362	1.38355			N/A
6/27/2019	CHFSGD.fx	1:30:00 PM	1.38573	1.38554			N/A
6/27/2019	CHFSGD.fx	3:30:00 PM	1.38405	1.38378			N/A
6/27/2019	CHFZAR	9:30:00 AM	14.5354	14.5459			N/A
6/27/2019	CHFZAR	11:30:00 AM	14.4788	14.4917			N/A
6/27/2019	CHFZAR	1:30:00 PM	14.4748	14.4865			N/A
6/27/2019	CHFZAR	3:30:00 PM	14.4465	14.4509			N/A
6/27/2019	CZKJPY	9:30:00 AM	4.831	4.834			N/A
6/27/2019	CZKJPY	11:30:00 AM					N/A
6/27/2019	CZKJPY	1:30:00 PM	4.826	4.828			N/A
6/27/2019	CZKJPY	3:30:00 PM	4.827	4.831			N/A



6/27/2019	DAX30.i	9:30:00 AM	12302.72	12296.97			N/A
6/27/2019	DAX30.i	11:30:00 AM	12324.37	12323.72			N/A
6/27/2019	DAX30.i	1:30:00 PM	12236.97	12233.47			N/A
6/27/2019	DAX30.i	3:30:00 PM	12266.72	12264.47			N/A
6/27/2019	DJ30.i	9:30:00 AM					N/A
6/27/2019	DJ30.i	11:30:00 AM					N/A
6/27/2019	DJ30.i	1:30:00 PM					N/A
6/27/2019	DJ30.i	3:30:00 PM					N/A
6/27/2019	DKKJPY	9:30:00 AM					N/A
6/27/2019	DKKJPY	11:30:00 AM					N/A
6/27/2019	DKKJPY	1:30:00 PM					N/A
6/27/2019	DKKJPY	3:30:00 PM	16.45	16.46			N/A
6/27/2019	EURAUD	9:30:00 AM	1.62386	1.62423			N/A
6/27/2019	EURAUD	11:30:00 AM	1.62462	1.62497			N/A
6/27/2019	EURAUD	1:30:00 PM	1.62529	1.62553			N/A
6/27/2019	EURAUD	3:30:00 PM	1.62422	1.62441			N/A
6/27/2019	EURAUD.fx	9:30:00 AM	1.62407	1.62402			N/A
6/27/2019	EURAUD.fx	11:30:00 AM	1.62486	1.62475			N/A
6/27/2019	EURAUD.fx	1:30:00 PM	1.62549	1.62531			N/A
6/27/2019	EURAUD.fx	3:30:00 PM	1.62438	1.62419			N/A
6/27/2019	EURCAD	9:30:00 AM	1.49077	1.49119			N/A
6/27/2019	EURCAD	11:30:00 AM	1.49193	1.49274			N/A
6/27/2019	EURCAD	1:30:00 PM	1.49252	1.49326			N/A
6/27/2019	EURCAD	3:30:00 PM	1.49177	1.49226			N/A
6/27/2019	EURCAD.fx	9:30:00 AM	1.49119	1.49076			N/A
6/27/2019	EURCAD.fx	11:30:00 AM	1.49235	1.49231			N/A
6/27/2019	EURCAD.fx	1:30:00 PM	1.49294	1.49284			N/A
6/27/2019	EURCAD.fx	3:30:00 PM	1.49216	1.49186			N/A
6/27/2019	EURCHF	9:30:00 AM	1.11341	1.11347			N/A
6/27/2019	EURCHF	11:30:00 AM	1.11328	1.1133			N/A
6/27/2019	EURCHF	1:30:00 PM	1.11149	1.11149			N/A
6/27/2019	EURCHF	3:30:00 PM	1.11228	1.11219			N/A
6/27/2019	EURCHF.fx	9:30:00 AM	1.11347	1.11341			N/A
6/27/2019	EURCHF.fx	11:30:00 AM	1.11333	1.11324			N/A

6/27/2019	EURCHF.fx	1:30:00 PM	1.11154	1.11144			N/A
6/27/2019	EURCHF.fx	3:30:00 PM	1.11232	1.11215			N/A
6/27/2019	EURCZK	9:30:00 AM					N/A
6/27/2019	EURCZK	11:30:00 AM	25.396	25.435			N/A
6/27/2019	EURCZK	1:30:00 PM	25.393	25.429			N/A
6/27/2019	EURCZK	3:30:00 PM	25.394	25.433			N/A
6/27/2019	EURDKK	9:30:00 AM					N/A
6/27/2019	EURDKK	11:30:00 AM	7.4628	7.4641			N/A
6/27/2019	EURDKK	1:30:00 PM	7.4621	7.4633			N/A
6/27/2019	EURDKK	3:30:00 PM	7.4621	7.4634			N/A
6/27/2019	EURGBP	9:30:00 AM	0.89559	0.89559			N/A
6/27/2019	EURGBP	11:30:00 AM	0.89586	0.89594			N/A
6/27/2019	EURGBP	1:30:00 PM	0.89448	0.89432			N/A
6/27/2019	EURGBP	3:30:00 PM	0.89482	0.89483			N/A
6/27/2019	EURGBP.fx	9:30:00 AM	0.89562	0.89553			N/A
6/27/2019	EURGBP.fx	11:30:00 AM	0.89589	0.8959			N/A
6/27/2019	EURGBP.fx	1:30:00 PM	0.89452	0.89426			N/A
6/27/2019	EURGBP.fx	3:30:00 PM	0.89481	0.89479			N/A
6/27/2019	EURHKD	9:30:00 AM	8.8709	8.8734			N/A
6/27/2019	EURHKD	11:30:00 AM	8.8827	8.8866			N/A
6/27/2019	EURHKD	1:30:00 PM	8.8826	8.887			N/A
6/27/2019	EURHKD	3:30:00 PM	8.8836	8.8874			N/A
6/27/2019	EURHKD.fx	9:30:00 AM	8.87366	8.87071			N/A
6/27/2019	EURHKD.fx	11:30:00 AM	8.88538	8.88382			N/A
6/27/2019	EURHKD.fx	1:30:00 PM	8.8853	8.88431			N/A
6/27/2019	EURHKD.fx	3:30:00 PM	8.88622	8.88487			N/A
6/27/2019	EURHUF	9:30:00 AM	323.26	323.8			N/A
6/27/2019	EURHUF	11:30:00 AM	323.07	323.79			N/A
6/27/2019	EURHUF	1:30:00 PM	323.18	323.79			N/A
6/27/2019	EURHUF	3:30:00 PM	323.37	324.08			N/A
6/27/2019	EURHUF.fx	9:30:00 AM	323.521	323.738			N/A
6/27/2019	EURHUF.fx	11:30:00 AM	323.353	323.508			N/A
6/27/2019	EURHUF.fx	1:30:00 PM	323.467	323.65			N/A
6/27/2019	EURHUF.fx	3:30:00 PM	323.634	323.801			N/A

6/27/2019	EURJPY	9:30:00 AM	122.743	122.749			N/A
6/27/2019	EURJPY	11:30:00 AM	122.783	122.769			N/A
6/27/2019	EURJPY	1:30:00 PM	122.642	122.643			N/A
6/27/2019	EURJPY	3:30:00 PM	122.719	122.673			N/A
6/27/2019	EURJPY.fx	9:30:00 AM	122.745	122.745			N/A
6/27/2019	EURJPY.fx	11:30:00 AM	122.785	122.765			N/A
6/27/2019	EURJPY.fx	1:30:00 PM	122.644	122.639			N/A
6/27/2019	EURJPY.fx	3:30:00 PM	122.72	122.674			N/A
6/27/2019	EURMXN	9:30:00 AM	21.7236	21.7392			N/A
6/27/2019	EURMXN	11:30:00 AM	21.7311	21.7489			N/A
6/27/2019	EURMXN	1:30:00 PM	21.7209	21.7391			N/A
6/27/2019	EURMXN	3:30:00 PM	21.7097	21.7261			N/A
6/27/2019	EURMXN.fx	9:30:00 AM	21.7317	21.7307			N/A
6/27/2019	EURMXN.fx	11:30:00 AM	21.7393	21.7408			N/A
6/27/2019	EURMXN.fx	1:30:00 PM	21.7295	21.7302			N/A
6/27/2019	EURMXN.fx	3:30:00 PM	21.7184	21.717			N/A
6/27/2019	EURNOK	9:30:00 AM	9.6533	9.6641			N/A
6/27/2019	EURNOK	11:30:00 AM	9.6692	9.6796			N/A
6/27/2019	EURNOK	1:30:00 PM	9.6797	9.6908			N/A
6/27/2019	EURNOK	3:30:00 PM	9.6787	9.6898			N/A
6/27/2019	EURNOK.fx	9:30:00 AM	9.65864	9.6587			N/A
6/27/2019	EURNOK.fx	11:30:00 AM	9.67459	9.6742			N/A
6/27/2019	EURNOK.fx	1:30:00 PM	9.68514	9.68544			N/A
6/27/2019	EURNOK.fx	3:30:00 PM	9.68418	9.6839			N/A
6/27/2019	EURNZD	9:30:00 AM	1.70095	1.70165			N/A
6/27/2019	EURNZD	11:30:00 AM	1.70001	1.70063			N/A
6/27/2019	EURNZD	1:30:00 PM	1.69919	1.69975			N/A
6/27/2019	EURNZD	3:30:00 PM	1.6987	1.69912			N/A
6/27/2019	EURNZD.fx	9:30:00 AM	1.70136	1.70124			N/A
6/27/2019	EURNZD.fx	11:30:00 AM	1.70042	1.7002			N/A
6/27/2019	EURNZD.fx	1:30:00 PM	1.69964	1.6993			N/A
6/27/2019	EURNZD.fx	3:30:00 PM	1.69888	1.69869			N/A
6/27/2019	EURPLN	9:30:00 AM	4.2583	4.2615			N/A
6/27/2019	EURPLN	11:30:00 AM	4.2552	4.2583			N/A

6/27/2019	EURPLN	1:30:00 PM	4.254	4.2572			N/A
6/27/2019	EURPLN	3:30:00 PM	4.2505	4.2526			N/A
6/27/2019	EURPLN.fx	9:30:00 AM	4.25757	4.26232			N/A
6/27/2019	EURPLN.fx	11:30:00 AM	4.25457	4.25882			N/A
6/27/2019	EURPLN.fx	1:30:00 PM	4.25337	4.25772			N/A
6/27/2019	EURPLN.fx	3:30:00 PM	4.2491	4.25318			N/A
6/27/2019	EURRUB	9:30:00 AM					N/A
6/27/2019	EURRUB	11:30:00 AM	71.23	71.656			N/A
6/27/2019	EURRUB	1:30:00 PM	71.326	71.754			N/A
6/27/2019	EURRUB	3:30:00 PM	71.306	71.736			N/A
6/27/2019	EURSEK	9:30:00 AM	10.5315	10.5344			N/A
6/27/2019	EURSEK	11:30:00 AM	10.5431	10.548			N/A
6/27/2019	EURSEK	1:30:00 PM	10.5455	10.5495			N/A
6/27/2019	EURSEK	3:30:00 PM	10.5517	10.5558			N/A
6/27/2019	EURSEK.fx	9:30:00 AM	10.53322	10.53264			N/A
6/27/2019	EURSEK.fx	11:30:00 AM	10.54472	10.54632			N/A
6/27/2019	EURSEK.fx	1:30:00 PM	10.54703	10.5479			N/A
6/27/2019	EURSEK.fx	3:30:00 PM	10.55287	10.55415			N/A
6/27/2019	EURSGD	9:30:00 AM	1.5387	1.5393			N/A
6/27/2019	EURSGD	11:30:00 AM	1.5399	1.5407			N/A
6/27/2019	EURSGD	1:30:00 PM	1.5398	1.5406			N/A
6/27/2019	EURSGD	3:30:00 PM	1.5391	1.5396			N/A
6/27/2019	EURSGD.fx	9:30:00 AM	1.53903	1.53887			N/A
6/27/2019	EURSGD.fx	11:30:00 AM	1.54035	1.54029			N/A
6/27/2019	EURSGD.fx	1:30:00 PM	1.54016	1.5401			N/A
6/27/2019	EURSGD.fx	3:30:00 PM	1.53937	1.53922			N/A
6/27/2019	EURUSD	9:30:00 AM	1.13548	1.13523			N/A
6/27/2019	EURUSD	11:30:00 AM	1.13683	1.13678			N/A
6/27/2019	EURUSD	1:30:00 PM	1.13684	1.13689			N/A
6/27/2019	EURUSD	3:30:00 PM	1.13702	1.13693			N/A
6/27/2019	EURUSD.fx	9:30:00 AM	1.13568	1.13532			N/A
6/27/2019	EURUSD.fx	11:30:00 AM	1.13703	1.13687			N/A
6/27/2019	EURUSD.fx	1:30:00 PM	1.13705	1.13698			N/A
6/27/2019	EURUSD.fx	3:30:00 PM	1.13721	1.13703			N/A

6/27/2019	EURZAR	9:30:00 AM	16.186	16.2			N/A
6/27/2019	EURZAR	11:30:00 AM	16.1221	16.1391			N/A
6/27/2019	EURZAR	1:30:00 PM	16.0891	16.1089			N/A
6/27/2019	EURZAR	3:30:00 PM	16.0734	16.0859			N/A
6/27/2019	EURZAR.fx	9:30:00 AM	16.18498	16.20132			N/A
6/27/2019	EURZAR.fx	11:30:00 AM	16.12131	16.13996			N/A
6/27/2019	EURZAR.fx	1:30:00 PM	16.08832	16.1095			N/A
6/27/2019	EURZAR.fx	3:30:00 PM	16.07287	16.08663			N/A
6/27/2019	GBPAUD	9:30:00 AM	1.81366	1.81439			N/A
6/27/2019	GBPAUD	11:30:00 AM	1.81398	1.81464			N/A
6/27/2019	GBPAUD	1:30:00 PM	1.81771	1.81815			N/A
6/27/2019	GBPAUD	3:30:00 PM	1.81577	1.81628			N/A
6/27/2019	GBPAUD.fx	9:30:00 AM	1.81406	1.81399			N/A
6/27/2019	GBPAUD.fx	11:30:00 AM	1.81438	1.81424			N/A
6/27/2019	GBPAUD.fx	1:30:00 PM	1.81811	1.81776			N/A
6/27/2019	GBPAUD.fx	3:30:00 PM	1.81601	1.81587			N/A
6/27/2019	GBPCAD	9:30:00 AM	1.66455	1.66495			N/A
6/27/2019	GBPCAD	11:30:00 AM	1.66532	1.66609			N/A
6/27/2019	GBPCAD	1:30:00 PM	1.66888	1.66923			N/A
6/27/2019	GBPCAD	3:30:00 PM	1.66722	1.66768			N/A
6/27/2019	GBPCAD.fx	9:30:00 AM	1.66494	1.66456			N/A
6/27/2019	GBPCAD.fx	11:30:00 AM	1.66573	1.66571			N/A
6/27/2019	GBPCAD.fx	1:30:00 PM	1.66926	1.66884			N/A
6/27/2019	GBPCAD.fx	3:30:00 PM	1.66749	1.6673			N/A
6/27/2019	GBPCHF	9:30:00 AM	1.24308	1.24343			N/A
6/27/2019	GBPCHF	11:30:00 AM	1.24247	1.24282			N/A
6/27/2019	GBPCHF	1:30:00 PM	1.24264	1.24269			N/A
6/27/2019	GBPCHF	3:30:00 PM	1.24288	1.24312			N/A
6/27/2019	GBPCHF.fx	9:30:00 AM	1.24326	1.24321			N/A
6/27/2019	GBPCHF.fx	11:30:00 AM	1.24266	1.24262			N/A
6/27/2019	GBPCHF.fx	1:30:00 PM	1.24286	1.24249			N/A
6/27/2019	GBPCHF.fx	3:30:00 PM	1.24307	1.24305			N/A
6/27/2019	GBPCZK	9:30:00 AM	28.354	28.374			N/A
6/27/2019	GBPCZK	11:30:00 AM	28.358	28.379			N/A

6/27/2019	GBPCZK	1:30:00 PM	28.403	28.415			N/A
6/27/2019	GBPCZK	3:30:00 PM	28.391	28.409			N/A
6/27/2019	GBPDKK	9:30:00 AM	8.33	8.341			N/A
6/27/2019	GBPDKK	11:30:00 AM	8.327	8.338			N/A
6/27/2019	GBPDKK	1:30:00 PM	8.341	8.35			N/A
6/27/2019	GBPDKK	3:30:00 PM	8.337	8.347			N/A
6/27/2019	GBPDKK.fx	9:30:00 AM	8.329	8.3414			N/A
6/27/2019	GBPDKK.fx	11:30:00 AM	8.3255	8.3384			N/A
6/27/2019	GBPDKK.fx	1:30:00 PM	8.3398	8.3502			N/A
6/27/2019	GBPDKK.fx	3:30:00 PM	8.3356	8.3478			N/A
6/27/2019	GBPHKD	9:30:00 AM	9.9018	9.9048			N/A
6/27/2019	GBPHKD	11:30:00 AM	9.9111	9.917			N/A
6/27/2019	GBPHKD	1:30:00 PM	9.9295	9.9315			N/A
6/27/2019	GBPHKD	3:30:00 PM	9.9243	9.9285			N/A
6/27/2019	GBPHUF	9:30:00 AM	360.89	361.33			N/A
6/27/2019	GBPHUF	11:30:00 AM	360.59	361.05			N/A
6/27/2019	GBPHUF	1:30:00 PM	361.39	361.77			N/A
6/27/2019	GBPHUF	3:30:00 PM	361.33	361.62			N/A
6/27/2019	GBPJPY	9:30:00 AM	137.042	137.076			N/A
6/27/2019	GBPJPY	11:30:00 AM	137.03	137.06			N/A
6/27/2019	GBPJPY	1:30:00 PM	137.125	137.124			N/A
6/27/2019	GBPJPY	3:30:00 PM	137.116	137.116			N/A
6/27/2019	GBPJPY.fx	9:30:00 AM	137.06	137.056			N/A
6/27/2019	GBPJPY.fx	11:30:00 AM	137.048	137.04			N/A
6/27/2019	GBPJPY.fx	1:30:00 PM	137.143	137.105			N/A
6/27/2019	GBPJPY.fx	3:30:00 PM	137.134	137.111			N/A
6/27/2019	GBPMXN	9:30:00 AM	24.2507	24.264			N/A
6/27/2019	GBPMXN	11:30:00 AM	24.2514	24.2666			N/A
6/27/2019	GBPMXN	1:30:00 PM	24.2848	24.2923			N/A
6/27/2019	GBPMXN	3:30:00 PM	24.2572	24.2686			N/A
6/27/2019	GBPNOK	9:30:00 AM	10.7789	10.7899			N/A
6/27/2019	GBPNOK	11:30:00 AM	10.7937	10.8035			N/A
6/27/2019	GBPNOK	1:30:00 PM	10.824	10.8319			N/A
6/27/2019	GBPNOK	3:30:00 PM	10.8165	10.8272			N/A

6/27/2019	GBPNOK.fx	9:30:00 AM	10.78368	10.78534			N/A
6/27/2019	GBPNOK.fx	11:30:00 AM	10.79865	10.79856			N/A
6/27/2019	GBPNOK.fx	1:30:00 PM	10.82908	10.82689			N/A
6/27/2019	GBPNOK.fx	3:30:00 PM	10.82098	10.82252			N/A
6/27/2019	GBPNZD	9:30:00 AM	1.89929	1.90005			N/A
6/27/2019	GBPNZD	11:30:00 AM	1.89761	1.89825			N/A
6/27/2019	GBPNZD	1:30:00 PM	1.89986	1.9003			N/A
6/27/2019	GBPNZD	3:30:00 PM	1.89859	1.89887			N/A
6/27/2019	GBPNZD.fx	9:30:00 AM	1.89964	1.89968			N/A
6/27/2019	GBPNZD.fx	11:30:00 AM	1.89797	1.89787			N/A
6/27/2019	GBPNZD.fx	1:30:00 PM	1.90025	1.89988			N/A
6/27/2019	GBPNZD.fx	3:30:00 PM	1.89851	1.89851			N/A
6/27/2019	GBPPLN	9:30:00 AM	4.7559	4.7573			N/A
6/27/2019	GBPPLN	11:30:00 AM	4.7506	4.7523			N/A
6/27/2019	GBPPLN	1:30:00 PM	4.7575	4.7583			N/A
6/27/2019	GBPPLN	3:30:00 PM	4.7505	4.7513			N/A
6/27/2019	GBPPLN.fx	9:30:00 AM	4.75364	4.7595			N/A
6/27/2019	GBPPLN.fx	11:30:00 AM	4.74854	4.75454			N/A
6/27/2019	GBPPLN.fx	1:30:00 PM	4.75548	4.76054			N/A
6/27/2019	GBPPLN.fx	3:30:00 PM	4.74796	4.75361			N/A
6/27/2019	GBPSEK	9:30:00 AM	11.7565	11.7653			N/A
6/27/2019	GBPSEK	11:30:00 AM	11.7664	11.7756			N/A
6/27/2019	GBPSEK	1:30:00 PM	11.7903	11.7954			N/A
6/27/2019	GBPSEK	3:30:00 PM	11.7899	11.7985			N/A
6/27/2019	GBPSEK.fx	9:30:00 AM	11.75303	11.7692			N/A
6/27/2019	GBPSEK.fx	11:30:00 AM	11.76276	11.7792			N/A
6/27/2019	GBPSEK.fx	1:30:00 PM	11.78679	11.79891			N/A
6/27/2019	GBPSEK.fx	3:30:00 PM	11.78647	11.80227			N/A
6/27/2019	GBPSGD	9:30:00 AM	1.7181	1.7187			N/A
6/27/2019	GBPSGD	11:30:00 AM	1.719	1.7197			N/A
6/27/2019	GBPSGD	1:30:00 PM	1.722	1.7222			N/A
6/27/2019	GBPSGD	3:30:00 PM	1.7201	1.7205			N/A
6/27/2019	GBPSGD.fx	9:30:00 AM	1.71623	1.72054			N/A
6/27/2019	GBPSGD.fx	11:30:00 AM	1.71712	1.72156			N/A

6/27/2019	GBPSGD.fx	1:30:00 PM	1.72012	1.72391			N/A
6/27/2019	GBPSGD.fx	3:30:00 PM	1.71823	1.72227			N/A
6/27/2019	GBPUSD	9:30:00 AM	1.26801	1.26778			N/A
6/27/2019	GBPUSD	11:30:00 AM	1.26908	1.26907			N/A
6/27/2019	GBPUSD	1:30:00 PM	1.27143	1.27105			N/A
6/27/2019	GBPUSD	3:30:00 PM	1.27094	1.27066			N/A
6/27/2019	GBPUSD.fx	9:30:00 AM	1.26807	1.26772			N/A
6/27/2019	GBPUSD.fx	11:30:00 AM	1.26914	1.26902			N/A
6/27/2019	GBPUSD.fx	1:30:00 PM	1.27149	1.27099			N/A
6/27/2019	GBPUSD.fx	3:30:00 PM	1.27098	1.27061			N/A
6/27/2019	GBPZAR	9:30:00 AM	18.0697	18.0921			N/A
6/27/2019	GBPZAR	11:30:00 AM	17.9909	18.0179			N/A
6/27/2019	GBPZAR	1:30:00 PM	17.9891	18.012			N/A
6/27/2019	GBPZAR	3:30:00 PM	17.9618	17.9799			N/A
6/27/2019	GBPZAR.fx	9:30:00 AM	18.0763	18.0849			N/A
6/27/2019	GBPZAR.fx	11:30:00 AM	17.9981	18.0107			N/A
6/27/2019	GBPZAR.fx	1:30:00 PM	17.9959	18.0052			N/A
6/27/2019	GBPZAR.fx	3:30:00 PM	17.9653	17.9731			N/A
6/27/2019	GOLD	9:30:00 AM	1404.82	1404.28			N/A
6/27/2019	GOLD	11:30:00 AM	1403.57	1403.72			N/A
6/27/2019	GOLD	1:30:00 PM	1404.69	1404.99			N/A
6/27/2019	GOLD	3:30:00 PM	1406.21	1405.3			N/A
6/27/2019	HKDJPY	9:30:00 AM	13.84	13.84			N/A
6/27/2019	HKDJPY	11:30:00 AM	13.82	13.83			N/A
6/27/2019	HKDJPY	1:30:00 PM	13.8	13.81			N/A
6/27/2019	HKDJPY	3:30:00 PM	13.81	13.81			N/A
6/27/2019	HKDJPY.fx	9:30:00 AM	13.833	13.837			N/A
6/27/2019	HKDJPY.fx	11:30:00 AM	13.814	13.821			N/A
6/27/2019	HKDJPY.fx	1:30:00 PM	13.799	13.806			N/A
6/27/2019	HKDJPY.fx	3:30:00 PM	13.808	13.808			N/A
6/27/2019	HUFJPY	9:30:00 AM	0.3796	0.3799			N/A
6/27/2019	HUFJPY	11:30:00 AM	0.3799	0.3802			N/A
6/27/2019	HUFJPY	1:30:00 PM	0.3792	0.3795			N/A
6/27/2019	HUFJPY	3:30:00 PM	0.3793	0.3796			N/A



6/27/2019	JP225.i	9:30:00 AM	21297.58	21312.58			N/A
6/27/2019	JP225.i	11:30:00 AM	21292.58	21307.58			N/A
6/27/2019	JP225.i	1:30:00 PM	21202.58	21212.93			N/A
6/27/2019	JP225.i	3:30:00 PM	21212.58	21223.41			N/A
6/27/2019	MXNJPY	9:30:00 AM	5.65	5.66			N/A
6/27/2019	MXNJPY	11:30:00 AM	5.65	5.66			N/A
6/27/2019	MXNJPY	1:30:00 PM	5.63	5.65			N/A
6/27/2019	MXNJPY	3:30:00 PM	5.65	5.66			N/A
6/27/2019	NASDAQ.i	9:30:00 AM					N/A
6/27/2019	NASDAQ.i	11:30:00 AM					N/A
6/27/2019	NASDAQ.i	1:30:00 PM					N/A
6/27/2019	NASDAQ.i	3:30:00 PM					N/A
6/27/2019	NOKJPY	9:30:00 AM	12.7	12.73			N/A
6/27/2019	NOKJPY	11:30:00 AM	12.69	12.71			N/A
6/27/2019	NOKJPY	1:30:00 PM	12.66	12.68			N/A
6/27/2019	NOKJPY	3:30:00 PM	12.66	12.69			N/A
6/27/2019	NOKJPY.fx	9:30:00 AM	12.706	12.712			N/A
6/27/2019	NOKJPY.fx	11:30:00 AM	12.688	12.693			N/A
6/27/2019	NOKJPY.fx	1:30:00 PM	12.66	12.666			N/A
6/27/2019	NOKJPY.fx	3:30:00 PM	12.669	12.676			N/A
6/27/2019	NZDCAD	9:30:00 AM	0.87606	0.87659			N/A
6/27/2019	NZDCAD	11:30:00 AM	0.87728	0.87796			N/A
6/27/2019	NZDCAD	1:30:00 PM	0.87806	0.8787			N/A
6/27/2019	NZDCAD	3:30:00 PM	0.87793	0.87846			N/A
6/27/2019	NZDCAD.fx	9:30:00 AM	0.87639	0.87625			N/A
6/27/2019	NZDCAD.fx	11:30:00 AM	0.87762	0.87763			N/A
6/27/2019	NZDCAD.fx	1:30:00 PM	0.87839	0.87835			N/A
6/27/2019	NZDCAD.fx	3:30:00 PM	0.87822	0.8782			N/A
6/27/2019	NZDCHF	9:30:00 AM	0.65414	0.65481			N/A
6/27/2019	NZDCHF	11:30:00 AM	0.6544	0.65505			N/A
6/27/2019	NZDCHF	1:30:00 PM	0.65373	0.6543			N/A
6/27/2019	NZDCHF	3:30:00 PM	0.65442	0.6548			N/A
6/27/2019	NZDCHF.fx	9:30:00 AM	0.65447	0.65446			N/A
6/27/2019	NZDCHF.fx	11:30:00 AM	0.65474	0.6547			N/A

6/27/2019	NZDCHF.fx	1:30:00 PM	0.65407	0.65394			N/A
6/27/2019	NZDCHF.fx	3:30:00 PM	0.65475	0.65469			N/A
6/27/2019	NZDCZK	9:30:00 AM	14.925	14.936			N/A
6/27/2019	NZDCZK	11:30:00 AM	14.941	14.951			N/A
6/27/2019	NZDCZK	1:30:00 PM	14.947	14.955			N/A
6/27/2019	NZDCZK	3:30:00 PM	14.954	14.962			N/A
6/27/2019	NZDDKK	9:30:00 AM	4.385	4.389			N/A
6/27/2019	NZDDKK	11:30:00 AM	4.388	4.392			N/A
6/27/2019	NZDDKK	1:30:00 PM	4.39	4.393			N/A
6/27/2019	NZDDKK	3:30:00 PM	4.391	4.395			N/A
6/27/2019	NZDHKD	9:30:00 AM	5.2118	5.214			N/A
6/27/2019	NZDHKD	11:30:00 AM	5.2215	5.2241			N/A
6/27/2019	NZDHKD	1:30:00 PM	5.2243	5.227			N/A
6/27/2019	NZDHKD	3:30:00 PM	5.2265	5.2291			N/A
6/27/2019	NZDHUF	9:30:00 AM	189.94	190.22			N/A
6/27/2019	NZDHUF	11:30:00 AM	189.97	190.24			N/A
6/27/2019	NZDHUF	1:30:00 PM	190.14	190.42			N/A
6/27/2019	NZDHUF	3:30:00 PM	190.28	190.48			N/A
6/27/2019	NZDJPY	9:30:00 AM	72.116	72.179			N/A
6/27/2019	NZDJPY	11:30:00 AM	72.172	72.243			N/A
6/27/2019	NZDJPY	1:30:00 PM	72.134	72.196			N/A
6/27/2019	NZDJPY	3:30:00 PM	72.2	72.24			N/A
6/27/2019	NZDJPY.fx	9:30:00 AM	72.147	72.146			N/A
6/27/2019	NZDJPY.fx	11:30:00 AM	72.203	72.21			N/A
6/27/2019	NZDJPY.fx	1:30:00 PM	72.165	72.163			N/A
6/27/2019	NZDJPY.fx	3:30:00 PM	72.232	72.214			N/A
6/27/2019	NZDMXN	9:30:00 AM	12.7654	12.7712			N/A
6/27/2019	NZDMXN	11:30:00 AM	12.777	12.7837			N/A
6/27/2019	NZDMXN	1:30:00 PM	12.7783	12.7842			N/A
6/27/2019	NZDMXN	3:30:00 PM	12.7764	12.7791			N/A
6/27/2019	NZDNOK	9:30:00 AM	5.6735	5.6766			N/A
6/27/2019	NZDNOK	11:30:00 AM	5.6862	5.6886			N/A
6/27/2019	NZDNOK	1:30:00 PM	5.695	5.698			N/A
6/27/2019	NZDNOK	3:30:00 PM	5.6959	5.6967			N/A

6/27/2019	NZDPLN	9:30:00 AM	2.5023	2.5037			N/A
6/27/2019	NZDPLN	11:30:00 AM	2.502	2.5034			N/A
6/27/2019	NZDPLN	1:30:00 PM	2.5026	2.5036			N/A
6/27/2019	NZDPLN	3:30:00 PM	2.5008	2.5013			N/A
6/27/2019	NZDSEK	9:30:00 AM	6.1849	6.1918			N/A
6/27/2019	NZDSEK	11:30:00 AM	6.1961	6.2022			N/A
6/27/2019	NZDSEK	1:30:00 PM	6.2005	6.2065			N/A
6/27/2019	NZDSEK	3:30:00 PM	6.2057	6.2106			N/A
6/27/2019	NZDSGD	9:30:00 AM	0.9043	0.9049			N/A
6/27/2019	NZDSGD	11:30:00 AM	0.9056	0.9063			N/A
6/27/2019	NZDSGD	1:30:00 PM	0.906	0.9066			N/A
6/27/2019	NZDSGD	3:30:00 PM	0.9059	0.9063			N/A
6/27/2019	NZDSGD.fx	9:30:00 AM	0.90429	0.90486			N/A
6/27/2019	NZDSGD.fx	11:30:00 AM	0.90558	0.90619			N/A
6/27/2019	NZDSGD.fx	1:30:00 PM	0.90601	0.90651			N/A
6/27/2019	NZDSGD.fx	3:30:00 PM	0.90587	0.90628			N/A
6/27/2019	NZDUSD	9:30:00 AM	0.6674	0.66739			N/A
6/27/2019	NZDUSD	11:30:00 AM	0.66856	0.66866			N/A
6/27/2019	NZDUSD	1:30:00 PM	0.66898	0.66905			N/A
6/27/2019	NZDUSD	3:30:00 PM	0.6693	0.66921			N/A
6/27/2019	NZDUSD.fx	9:30:00 AM	0.66747	0.6674			N/A
6/27/2019	NZDUSD.fx	11:30:00 AM	0.66862	0.66868			N/A
6/27/2019	NZDUSD.fx	1:30:00 PM	0.66905	0.66906			N/A
6/27/2019	NZDUSD.fx	3:30:00 PM	0.66938	0.66929			N/A
6/27/2019	NZDZAR	9:30:00 AM	9.5058	9.5204			N/A
6/27/2019	NZDZAR	11:30:00 AM	9.4736	9.4888			N/A
6/27/2019	NZDZAR	1:30:00 PM	9.4589	9.4766			N/A
6/27/2019	NZDZAR	3:30:00 PM	9.4508	9.4626			N/A
6/27/2019	SEKJPY	9:30:00 AM	11.65	11.66			N/A
6/27/2019	SEKJPY	11:30:00 AM	11.65	11.65			N/A
6/27/2019	SEKJPY	1:30:00 PM	11.63	11.64			N/A
6/27/2019	SEKJPY	3:30:00 PM	11.62	11.63			N/A
6/27/2019	SEKJPY.fx	9:30:00 AM	11.645	11.662			N/A
6/27/2019	SEKJPY.fx	11:30:00 AM	11.633	11.651			N/A

6/27/2019	SEKJPY.fx	1:30:00 PM	11.618	11.636			N/A
6/27/2019	SEKJPY.fx	3:30:00 PM	11.619	11.635			N/A
6/27/2019	SGDJPY	9:30:00 AM	79.74	79.76			N/A
6/27/2019	SGDJPY	11:30:00 AM	79.69	79.7			N/A
6/27/2019	SGDJPY	1:30:00 PM	79.6	79.63			N/A
6/27/2019	SGDJPY	3:30:00 PM	79.7	79.68			N/A
6/27/2019	SILVER	9:30:00 AM	15.02	15.39			N/A
6/27/2019	SILVER	11:30:00 AM	15.05	15.43			N/A
6/27/2019	SILVER	1:30:00 PM	15.05	15.42			N/A
6/27/2019	SILVER	3:30:00 PM	15.07	15.44			N/A
6/27/2019	SPX500.i	9:30:00 AM	2927.11	2927.16			N/A
6/27/2019	SPX500.i	11:30:00 AM	2929.36	2930.16			N/A
6/27/2019	SPX500.i	1:30:00 PM	2919.61	2920.41			N/A
6/27/2019	SPX500.i	3:30:00 PM	2922.61	2923.16			N/A
6/27/2019	UK100.i	9:30:00 AM	7435.55	7435.97			N/A
6/27/2019	UK100.i	11:30:00 AM	7439.47	7439.97			N/A
6/27/2019	UK100.i	1:30:00 PM	7397.39	7395.97			N/A
6/27/2019	UK100.i	3:30:00 PM	7408.14	7408.97			N/A
6/27/2019	USDCAD	9:30:00 AM	1.31313	1.3132			N/A
6/27/2019	USDCAD	11:30:00 AM	1.31267	1.31273			N/A
6/27/2019	USDCAD	1:30:00 PM	1.3131	1.31311			N/A
6/27/2019	USDCAD	3:30:00 PM	1.31229	1.31204			N/A
6/27/2019	USDCAD.fx	9:30:00 AM	1.31316	1.31315			N/A
6/27/2019	USDCAD.fx	11:30:00 AM	1.3127	1.31268			N/A
6/27/2019	USDCAD.fx	1:30:00 PM	1.31313	1.31308			N/A
6/27/2019	USDCAD.fx	3:30:00 PM	1.3123	1.31201			N/A
6/27/2019	USDCHF	9:30:00 AM	0.98068	0.98049			N/A
6/27/2019	USDCHF	11:30:00 AM	0.97923	0.97922			N/A
6/27/2019	USDCHF	1:30:00 PM	0.97763	0.97752			N/A
6/27/2019	USDCHF	3:30:00 PM	0.97821	0.97796			N/A
6/27/2019	USDCHF.fx	9:30:00 AM	0.98073	0.98042			N/A
6/27/2019	USDCHF.fx	11:30:00 AM	0.97927	0.97917			N/A
6/27/2019	USDCHF.fx	1:30:00 PM	0.97768	0.97746			N/A
6/27/2019	USDCHF.fx	3:30:00 PM	0.97825	0.97792			N/A

6/27/2019	USDCZK	9:30:00 AM	22.383	22.4			N/A
6/27/2019	USDCZK	11:30:00 AM	22.363	22.382			N/A
6/27/2019	USDCZK	1:30:00 PM	22.358	22.379			N/A
6/27/2019	USDCZK	3:30:00 PM	22.359	22.379			N/A
6/27/2019	USDCZK.fx	9:30:00 AM	22.392	22.3916			N/A
6/27/2019	USDCZK.fx	11:30:00 AM	22.3711	22.373			N/A
6/27/2019	USDCZK.fx	1:30:00 PM	22.3671	22.37			N/A
6/27/2019	USDCZK.fx	3:30:00 PM	22.3681	22.3707			N/A
6/27/2019	USDDKK	9:30:00 AM	6.5739	6.5759			N/A
6/27/2019	USDDKK	11:30:00 AM	6.5647	6.5676			N/A
6/27/2019	USDDKK	1:30:00 PM	6.5634	6.5671			N/A
6/27/2019	USDDKK	3:30:00 PM	6.5633	6.5662			N/A
6/27/2019	USDDKK.fx	9:30:00 AM	6.57437	6.57382			N/A
6/27/2019	USDDKK.fx	11:30:00 AM	6.565	6.56558			N/A
6/27/2019	USDDKK.fx	1:30:00 PM	6.56381	6.56483			N/A
6/27/2019	USDDKK.fx	3:30:00 PM	6.56378	6.5642			N/A
6/27/2019	USDHKD	9:30:00 AM	7.8126	7.8128			N/A
6/27/2019	USDHKD	11:30:00 AM	7.814	7.814			N/A
6/27/2019	USDHKD	1:30:00 PM	7.8135	7.8137			N/A
6/27/2019	USDHKD	3:30:00 PM	7.8132	7.8136			N/A
6/27/2019	USDHKD.fx	9:30:00 AM	7.81251	7.81298			N/A
6/27/2019	USDHKD.fx	11:30:00 AM	7.81396	7.81396			N/A
6/27/2019	USDHKD.fx	1:30:00 PM	7.81341	7.81397			N/A
6/27/2019	USDHKD.fx	3:30:00 PM	7.81303	7.81364			N/A
6/27/2019	USDHUF	9:30:00 AM	284.79	285.18			N/A
6/27/2019	USDHUF	11:30:00 AM	284.26	284.69			N/A
6/27/2019	USDHUF	1:30:00 PM	284.34	284.8			N/A
6/27/2019	USDHUF	3:30:00 PM	284.45	284.88			N/A
6/27/2019	USDHUF.fx	9:30:00 AM	284.995	284.981			N/A
6/27/2019	USDHUF.fx	11:30:00 AM	284.462	284.477			N/A
6/27/2019	USDHUF.fx	1:30:00 PM	284.545	284.598			N/A
6/27/2019	USDHUF.fx	3:30:00 PM	284.654	284.688			N/A
6/27/2019	USDINR	9:30:00 AM	64.22	74.21			N/A
6/27/2019	USDINR	11:30:00 AM	64.13	74.12			N/A

6/27/2019	USDINR	1:30:00 PM					N/A
6/27/2019	USDINR	3:30:00 PM					N/A
6/27/2019	USDJPY	9:30:00 AM	108.113	108.09			N/A
6/27/2019	USDJPY	11:30:00 AM	107.987	107.993			N/A
6/27/2019	USDJPY	1:30:00 PM	107.862	107.865			N/A
6/27/2019	USDJPY	3:30:00 PM	107.927	107.872			N/A
6/27/2019	USDJPY.fx	9:30:00 AM	108.118	108.083			N/A
6/27/2019	USDJPY.fx	11:30:00 AM	107.993	107.986			N/A
6/27/2019	USDJPY.fx	1:30:00 PM	107.869	107.858			N/A
6/27/2019	USDJPY.fx	3:30:00 PM	107.931	107.869			N/A
6/27/2019	USDMXN	9:30:00 AM	19.135	19.141			N/A
6/27/2019	USDMXN	11:30:00 AM	19.118	19.125			N/A
6/27/2019	USDMXN	1:30:00 PM	19.107	19.116			N/A
6/27/2019	USDMXN	3:30:00 PM	19.094	19.103			N/A
6/27/2019	USDMXN.f	9:30:00 AM					N/A
6/27/2019	USDMXN.f	11:30:00 AM					N/A
6/27/2019	USDMXN.f	1:30:00 PM					N/A
6/27/2019	USDMXN.f	3:30:00 PM					N/A
6/27/2019	USDNOK	9:30:00 AM	8.5026	8.5101			N/A
6/27/2019	USDNOK	11:30:00 AM	8.5063	8.5131			N/A
6/27/2019	USDNOK	1:30:00 PM	8.5148	8.5223			N/A
6/27/2019	USDNOK	3:30:00 PM	8.512	8.5196			N/A
6/27/2019	USDNOK.fx	9:30:00 AM	8.50648	8.50582			N/A
6/27/2019	USDNOK.fx	11:30:00 AM	8.51048	8.5086			N/A
6/27/2019	USDNOK.fx	1:30:00 PM	8.51876	8.51794			N/A
6/27/2019	USDNOK.fx	3:30:00 PM	8.51607	8.51482			N/A
6/27/2019	USDPLN	9:30:00 AM	3.7514	3.7519			N/A
6/27/2019	USDPLN	11:30:00 AM	3.7435	3.7445			N/A
6/27/2019	USDPLN	1:30:00 PM	3.742	3.7435			N/A
6/27/2019	USDPLN	3:30:00 PM	3.738	3.739			N/A
6/27/2019	USDPLN.fx	9:30:00 AM	3.75058	3.75259			N/A
6/27/2019	USDPLN.fx	11:30:00 AM	3.74266	3.7453			N/A
6/27/2019	USDPLN.fx	1:30:00 PM	3.74128	3.74423			N/A
6/27/2019	USDPLN.fx	3:30:00 PM	3.73705	3.73984			N/A

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6/27/2019	USDRUB	11:30:00 AM	62.78	63.157			N/A
6/27/2019	USDRUB	1:30:00 PM	62.855	63.24			N/A
6/27/2019	USDRUB	3:30:00 PM	62.826	63.192			N/A
6/27/2019	USDSEK	9:30:00 AM	9.2748	9.2777			N/A
6/27/2019	USDSEK	11:30:00 AM	9.2733	9.2766			N/A
6/27/2019	USDSEK	1:30:00 PM	9.2742	9.2786			N/A
6/27/2019	USDSEK	3:30:00 PM	9.2787	9.2821			N/A
6/27/2019	USDSEK.fx	9:30:00 AM	9.27741	9.27569			N/A
6/27/2019	USDSEK.fx	11:30:00 AM	9.27592	9.27469			N/A
6/27/2019	USDSEK.fx	1:30:00 PM	9.2769	9.27671			N/A
6/27/2019	USDSEK.fx	3:30:00 PM	9.28138	9.28024			N/A
6/27/2019	USDSGD	9:30:00 AM	1.3552	1.3553			N/A
6/27/2019	USDSGD	11:30:00 AM	1.3546	1.3549			N/A
6/27/2019	USDSGD	1:30:00 PM	1.3544	1.3547			N/A
6/27/2019	USDSGD	3:30:00 PM	1.3535	1.3538			N/A
6/27/2019	USDSGD.fx	9:30:00 AM	1.35517	1.35546			N/A
6/27/2019	USDSGD.fx	11:30:00 AM	1.35455	1.35501			N/A
6/27/2019	USDSGD.fx	1:30:00 PM	1.35432	1.35482			N/A
6/27/2019	USDSGD.fx	3:30:00 PM	1.35342	1.3539			N/A
6/27/2019	USDZAR	9:30:00 AM	14.2534	14.268			N/A
6/27/2019	USDZAR	11:30:00 AM	14.1793	14.1948			N/A
6/27/2019	USDZAR	1:30:00 PM	14.1498	14.1691			N/A
6/27/2019	USDZAR	3:30:00 PM	14.1352	14.1466			N/A
6/27/2019	USDZAR.fx	9:30:00 AM	14.25897	14.26242			N/A
6/27/2019	USDZAR.fx	11:30:00 AM	14.18507	14.1892			N/A
6/27/2019	USDZAR.fx	1:30:00 PM	14.15572	14.16328			N/A
6/27/2019	USDZAR.fx	3:30:00 PM	14.13846	14.14092			N/A
6/27/2019	XAUUSD	9:30:00 AM	1404.82	1404.26			N/A
6/27/2019	XAUUSD	11:30:00 AM	1403.61	1403.73			N/A
6/27/2019	XAUUSD	1:30:00 PM	1404.68	1404.97			N/A
6/27/2019	XAUUSD	3:30:00 PM	1406.2	1405.31			N/A
6/27/2019	ZARJPY	9:30:00 AM					N/A
6/27/2019	ZARJPY	11:30:00 AM	7.59	7.61			N/A

6/27/2019	ZARJPY	1:30:00 PM	7.6	7.62			N/A
6/27/2019	ZARJPY	3:30:00 PM	7.61	7.63			N/A
6/27/2019	ZARJPY.fx	9:30:00 AM	7.579	7.581			N/A
6/27/2019	ZARJPY.fx	11:30:00 AM	7.61	7.613			N/A
6/27/2019	ZARJPY.fx	1:30:00 PM	7.615	7.62			N/A
6/27/2019	ZARJPY.fx	3:30:00 PM	7.63	7.63			N/A
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6/28/2019	#Bitcoin	9:30:00 AM	11324.65	11410.65			N/A
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6/28/2019	#KO	1:30:00 PM					N/A
6/28/2019	#KO	3:30:00 PM					N/A
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6/28/2019	#Litecoin	11:30:00 AM	118.33	118.74			N/A
6/28/2019	#Litecoin	1:30:00 PM	117.38	117.75			N/A
6/28/2019	#Litecoin	3:30:00 PM	117.76	118.31			N/A

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6/28/2019	#NG.f	1:30:00 PM					N/A
6/28/2019	#NG.f	3:30:00 PM	2.299	2.316			N/A
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6/28/2019	#QQQ	3:30:00 PM					N/A
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6/28/2019	#Ripple	1:30:00 PM	0.4099	0.4146			N/A
6/28/2019	#Ripple	3:30:00 PM	0.4068	0.4109			N/A
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6/28/2019	#SBUX	3:30:00 PM					N/A
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6/28/2019	#TRV	11:30:00 AM					N/A
6/28/2019	#TRV	1:30:00 PM					N/A
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6/28/2019	#YHOO	3:30:00 PM					N/A
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6/28/2019	#ZNGA	1:30:00 PM					N/A
6/28/2019	#ZNGA	3:30:00 PM					N/A
6/28/2019	AUDCAD	9:30:00 AM	0.91788	0.91846			N/A
6/28/2019	AUDCAD	11:30:00 AM	0.91773	0.91833			N/A
6/28/2019	AUDCAD	1:30:00 PM	0.91732	0.91799			N/A
6/28/2019	AUDCAD	3:30:00 PM	0.91639	0.91603			N/A
6/28/2019	AUDCAD.fx	9:30:00 AM	0.91822	0.91811			N/A
6/28/2019	AUDCAD.fx	11:30:00 AM	0.91806	0.91798			N/A
6/28/2019	AUDCAD.fx	1:30:00 PM	0.91767	0.91764			N/A
6/28/2019	AUDCAD.fx	3:30:00 PM	0.9165	0.91577			N/A
6/28/2019	AUDCHF	9:30:00 AM	0.68349	0.68418			N/A
6/28/2019	AUDCHF	11:30:00 AM	0.6829	0.68354			N/A
6/28/2019	AUDCHF	1:30:00 PM	0.68305	0.68372			N/A
6/28/2019	AUDCHF	3:30:00 PM	0.68309	0.68372			N/A
6/28/2019	AUDCHF.fx	9:30:00 AM	0.68384	0.68384			N/A
6/28/2019	AUDCHF.fx	11:30:00 AM	0.68324	0.68321			N/A
6/28/2019	AUDCHF.fx	1:30:00 PM	0.68339	0.68338			N/A
6/28/2019	AUDCHF.fx	3:30:00 PM	0.68344	0.68338			N/A
6/28/2019	AUDCZK	9:30:00 AM	15.674	15.684			N/A
6/28/2019	AUDCZK	11:30:00 AM	15.64	15.654			N/A
6/28/2019	AUDCZK	1:30:00 PM	15.64	15.654			N/A
6/28/2019	AUDCZK	3:30:00 PM	15.634	15.649			N/A
6/28/2019	AUDDKK	9:30:00 AM	4.6018	4.6065			N/A
6/28/2019	AUDDKK	11:30:00 AM	4.5948	4.599			N/A
6/28/2019	AUDDKK	1:30:00 PM	4.5938	4.5981			N/A
6/28/2019	AUDDKK	3:30:00 PM	4.5912	4.5953			N/A
6/28/2019	AUDHKD	9:30:00 AM	5.4732	5.4772			N/A
6/28/2019	AUDHKD	11:30:00 AM	5.4703	5.4742			N/A

6/28/2019	AUDHKD	1:30:00 PM	5.4693	5.4727			N/A
6/28/2019	AUDHKD	3:30:00 PM	5.4662	5.4699			N/A
6/28/2019	AUDHUF	9:30:00 AM	199.61	199.83			N/A
6/28/2019	AUDHUF	11:30:00 AM	199.1	199.33			N/A
6/28/2019	AUDHUF	1:30:00 PM	199.03	199.26			N/A
6/28/2019	AUDHUF	3:30:00 PM	198.76	198.9			N/A
6/28/2019	AUDJPY	9:30:00 AM	75.524	75.561			N/A
6/28/2019	AUDJPY	11:30:00 AM	75.469	75.529			N/A
6/28/2019	AUDJPY	1:30:00 PM	75.412	75.485			N/A
6/28/2019	AUDJPY	3:30:00 PM	75.442	75.499			N/A
6/28/2019	AUDJPY.fx	9:30:00 AM	75.558	75.526			N/A
6/28/2019	AUDJPY.fx	11:30:00 AM	75.502	75.494			N/A
6/28/2019	AUDJPY.fx	1:30:00 PM	75.447	75.449			N/A
6/28/2019	AUDJPY.fx	3:30:00 PM	75.475	75.466			N/A
6/28/2019	AUDMXN	9:30:00 AM	13.4429	13.4521			N/A
6/28/2019	AUDMXN	11:30:00 AM	13.4367	13.4472			N/A
6/28/2019	AUDMXN	1:30:00 PM	13.4617	13.471			N/A
6/28/2019	AUDMXN	3:30:00 PM	13.4131	13.4172			N/A
6/28/2019	AUDNOK	9:30:00 AM	5.9672	5.9723			N/A
6/28/2019	AUDNOK	11:30:00 AM	5.9687	5.9723			N/A
6/28/2019	AUDNOK	1:30:00 PM	5.9653	5.9698			N/A
6/28/2019	AUDNOK	3:30:00 PM	5.9651	5.9696			N/A
6/28/2019	AUDNOK.fx	9:30:00 AM	5.9684	5.9707			N/A
6/28/2019	AUDNOK.fx	11:30:00 AM	5.9702	5.9709			N/A
6/28/2019	AUDNOK.fx	1:30:00 PM	5.9666	5.9682			N/A
6/28/2019	AUDNOK.fx	3:30:00 PM	5.9664	5.9682			N/A
6/28/2019	AUDNZD	9:30:00 AM	1.04576	1.04646			N/A
6/28/2019	AUDNZD	11:30:00 AM	1.04536	1.0462			N/A
6/28/2019	AUDNZD	1:30:00 PM	1.04439	1.04527			N/A
6/28/2019	AUDNZD	3:30:00 PM	1.04345	1.04426			N/A
6/28/2019	AUDNZD.fx	9:30:00 AM	1.04621	1.04601			N/A
6/28/2019	AUDNZD.fx	11:30:00 AM	1.0458	1.04575			N/A
6/28/2019	AUDNZD.fx	1:30:00 PM	1.04484	1.04481			N/A
6/28/2019	AUDNZD.fx	3:30:00 PM	1.04387	1.04379			N/A

6/28/2019	AUDPLN	9:30:00 AM	2.6212	2.6244			N/A
6/28/2019	AUDPLN	11:30:00 AM	2.6184	2.6212			N/A
6/28/2019	AUDPLN	1:30:00 PM	2.6164	2.6194			N/A
6/28/2019	AUDPLN	3:30:00 PM	2.615	2.6166			N/A
6/28/2019	AUDSEK	9:30:00 AM	6.5023	6.5054			N/A
6/28/2019	AUDSEK	11:30:00 AM	6.4957	6.4983			N/A
6/28/2019	AUDSEK	1:30:00 PM	6.4904	6.4926			N/A
6/28/2019	AUDSEK	3:30:00 PM	6.5034	6.5056			N/A
6/28/2019	AUDSEK.fx	9:30:00 AM	6.4973	6.5104			N/A
6/28/2019	AUDSEK.fx	11:30:00 AM	6.491	6.5029			N/A
6/28/2019	AUDSEK.fx	1:30:00 PM	6.4857	6.4972			N/A
6/28/2019	AUDSEK.fx	3:30:00 PM	6.4983	6.5102			N/A
6/28/2019	AUDSGD	9:30:00 AM	0.9489	0.9491			N/A
6/28/2019	AUDSGD	11:30:00 AM	0.9485	0.9487			N/A
6/28/2019	AUDSGD	1:30:00 PM	0.9481	0.9483			N/A
6/28/2019	AUDSGD	3:30:00 PM	0.9475	0.9477			N/A
6/28/2019	AUDSGD.fx	9:30:00 AM	0.94904	0.94903			N/A
6/28/2019	AUDSGD.fx	11:30:00 AM	0.94854	0.94848			N/A
6/28/2019	AUDSGD.fx	1:30:00 PM	0.94813	0.94818			N/A
6/28/2019	AUDSGD.fx	3:30:00 PM	0.94756	0.94756			N/A
6/28/2019	AUDUSD	9:30:00 AM	0.7013	0.7014			N/A
6/28/2019	AUDUSD	11:30:00 AM	0.70125	0.70126			N/A
6/28/2019	AUDUSD	1:30:00 PM	0.70085	0.70094			N/A
6/28/2019	AUDUSD	3:30:00 PM	0.70047	0.7005			N/A
6/28/2019	AUDUSD.fx	9:30:00 AM	0.70135	0.70134			N/A
6/28/2019	AUDUSD.fx	11:30:00 AM	0.7013	0.70121			N/A
6/28/2019	AUDUSD.fx	1:30:00 PM	0.7009	0.70089			N/A
6/28/2019	AUDUSD.fx	3:30:00 PM	0.70051	0.70044			N/A
6/28/2019	AUDZAR	9:30:00 AM	9.8959	9.9115			N/A
6/28/2019	AUDZAR	11:30:00 AM	9.9056	9.921			N/A
6/28/2019	AUDZAR	1:30:00 PM	9.9244	9.9384			N/A
6/28/2019	AUDZAR	3:30:00 PM	9.9116	9.9248			N/A
6/28/2019	AUS200.i	9:30:00 AM	6618.5	6621			N/A
6/28/2019	AUS200.i	11:30:00 AM	6635.51	6636.31			N/A

6/28/2019	AUS200.i	1:30:00 PM	6633.31	6636.91			N/A
6/28/2019	AUS200.i	3:30:00 PM					N/A
6/28/2019	BCHUSD	9:30:00 AM	416.24	417.6			N/A
6/28/2019	BCHUSD	11:30:00 AM	441.14	435.96			N/A
6/28/2019	BCHUSD	1:30:00 PM	432.4	433.38			N/A
6/28/2019	BCHUSD	3:30:00 PM	424.82	425.17			N/A
6/28/2019	CADCHF	9:30:00 AM	0.74445	0.74509			N/A
6/28/2019	CADCHF	11:30:00 AM	0.74392	0.74458			N/A
6/28/2019	CADCHF	1:30:00 PM	0.74439	0.74502			N/A
6/28/2019	CADCHF	3:30:00 PM	0.74613	0.74578			N/A
6/28/2019	CADCHF.fx	9:30:00 AM	0.74478	0.74475			N/A
6/28/2019	CADCHF.fx	11:30:00 AM	0.74426	0.74424			N/A
6/28/2019	CADCHF.fx	1:30:00 PM	0.74474	0.74465			N/A
6/28/2019	CADCHF.fx	3:30:00 PM	0.74643	0.74557			N/A
6/28/2019	CADCZK	9:30:00 AM	17.075	17.085			N/A
6/28/2019	CADCZK	11:30:00 AM	17.041	17.054			N/A
6/28/2019	CADCZK	1:30:00 PM	17.048	17.062			N/A
6/28/2019	CADCZK	3:30:00 PM	17.08	17.076			N/A
6/28/2019	CADDKK	9:30:00 AM					N/A
6/28/2019	CADDKK	11:30:00 AM	5.004	5.008			N/A
6/28/2019	CADDKK	1:30:00 PM	5.007	5.011			N/A
6/28/2019	CADDKK	3:30:00 PM	5.014	5.012			N/A
6/28/2019	CADHKD	9:30:00 AM	5.9622	5.9661			N/A
6/28/2019	CADHKD	11:30:00 AM	5.9607	5.9647			N/A
6/28/2019	CADHKD	1:30:00 PM	5.9616	5.9646			N/A
6/28/2019	CADHKD	3:30:00 PM	5.9719	5.9682			N/A
6/28/2019	CADHUF	9:30:00 AM	217.49	217.61			N/A
6/28/2019	CADHUF	11:30:00 AM	216.99	217.1			N/A
6/28/2019	CADHUF	1:30:00 PM	217	217.13			N/A
6/28/2019	CADHUF	3:30:00 PM	217.12	217			N/A
6/28/2019	CADJPY	9:30:00 AM	82.251	82.287			N/A
6/28/2019	CADJPY	11:30:00 AM	82.21	82.273			N/A
6/28/2019	CADJPY	1:30:00 PM	82.185	82.251			N/A
6/28/2019	CADJPY	3:30:00 PM	82.384	82.343			N/A



6/28/2019	CADJPY.fx	9:30:00 AM	82.284	82.252			N/A
6/28/2019	CADJPY.fx	11:30:00 AM	82.243	82.24			N/A
6/28/2019	CADJPY.fx	1:30:00 PM	82.219	82.216			N/A
6/28/2019	CADJPY.fx	3:30:00 PM	82.41	82.326			N/A
6/28/2019	CADMXN	9:30:00 AM	14.6426	14.6543			N/A
6/28/2019	CADMXN	11:30:00 AM	14.6403	14.6516			N/A
6/28/2019	CADMXN	1:30:00 PM	14.673	14.6833			N/A
6/28/2019	CADMXN	3:30:00 PM	14.6472	14.6423			N/A
6/28/2019	CADNOK	9:30:00 AM	6.4984	6.5032			N/A
6/28/2019	CADNOK	11:30:00 AM	6.4991	6.5017			N/A
6/28/2019	CADNOK	1:30:00 PM	6.5008	6.5043			N/A
6/28/2019	CADNOK	3:30:00 PM	6.5112	6.5081			N/A
6/28/2019	CADPLN	9:30:00 AM	2.8551	2.8571			N/A
6/28/2019	CADPLN	11:30:00 AM	2.8514	2.8533			N/A
6/28/2019	CADPLN	1:30:00 PM	2.8522	2.8535			N/A
6/28/2019	CADPLN	3:30:00 PM	2.8545	2.8527			N/A
6/28/2019	CADSEK	9:30:00 AM	7.0807	7.0845			N/A
6/28/2019	CADSEK	11:30:00 AM	7.0745	7.0771			N/A
6/28/2019	CADSEK	1:30:00 PM	7.072	7.0745			N/A
6/28/2019	CADSEK	3:30:00 PM	7.1003	7.0956			N/A
6/28/2019	CADSGD	9:30:00 AM	1.0328	1.0331			N/A
6/28/2019	CADSGD	11:30:00 AM	1.0326	1.0329			N/A
6/28/2019	CADSGD	1:30:00 PM	1.0326	1.0328			N/A
6/28/2019	CADSGD	3:30:00 PM	1.0335	1.0338			N/A
6/28/2019	CADZAR	9:30:00 AM	10.7804	10.7966			N/A
6/28/2019	CADZAR	11:30:00 AM	10.7931	10.81			N/A
6/28/2019	CADZAR	1:30:00 PM	10.8171	10.8324			N/A
6/28/2019	CADZAR	3:30:00 PM	10.8267	10.8307			N/A
6/28/2019	CHFCZK	9:30:00 AM	22.932	22.937			N/A
6/28/2019	CHFCZK	11:30:00 AM	22.901	22.913			N/A
6/28/2019	CHFCZK	1:30:00 PM	22.894	22.907			N/A
6/28/2019	CHFCZK	3:30:00 PM	22.886	22.902			N/A
6/28/2019	CHFDKK	9:30:00 AM	6.731	6.734			N/A
6/28/2019	CHFDKK	11:30:00 AM	6.727	6.729			N/A

6/28/2019	CHFDKK	1:30:00 PM	6.724	6.727			N/A
6/28/2019	CHFDKK	3:30:00 PM	6.719	6.721			N/A
6/28/2019	CHFDKK.fx	9:30:00 AM	6.7297	6.7357			N/A
6/28/2019	CHFDKK.fx	11:30:00 AM	6.7254	6.7302			N/A
6/28/2019	CHFDKK.fx	1:30:00 PM	6.722	6.728			N/A
6/28/2019	CHFDKK.fx	3:30:00 PM	6.7177	6.7237			N/A
6/28/2019	CHFHKD	9:30:00 AM	8.007	8.0109			N/A
6/28/2019	CHFHKD	11:30:00 AM	8.0097	8.0135			N/A
6/28/2019	CHFHKD	1:30:00 PM	8.0056	8.0088			N/A
6/28/2019	CHFHKD	3:30:00 PM	8.0011	8.0048			N/A
6/28/2019	CHFHUF	9:30:00 AM	291.94	292.31			N/A
6/28/2019	CHFHUF	11:30:00 AM	291.48	291.79			N/A
6/28/2019	CHFHUF	1:30:00 PM	291.28	291.64			N/A
6/28/2019	CHFHUF	3:30:00 PM	290.89	291.15			N/A
6/28/2019	CHFJPY	9:30:00 AM	110.454	110.486			N/A
6/28/2019	CHFJPY	11:30:00 AM	110.469	110.538			N/A
6/28/2019	CHFJPY	1:30:00 PM	110.373	110.434			N/A
6/28/2019	CHFJPY	3:30:00 PM	110.407	110.457			N/A
6/28/2019	CHFJPY.fx	9:30:00 AM	110.487	110.454			N/A
6/28/2019	CHFJPY.fx	11:30:00 AM	110.503	110.505			N/A
6/28/2019	CHFJPY.fx	1:30:00 PM	110.406	110.399			N/A
6/28/2019	CHFJPY.fx	3:30:00 PM	110.44	110.423			N/A
6/28/2019	CHFMXN	9:30:00 AM	19.6615	19.6779			N/A
6/28/2019	CHFMXN	11:30:00 AM	19.672	19.6864			N/A
6/28/2019	CHFMXN	1:30:00 PM	19.7025	19.7166			N/A
6/28/2019	CHFMXN	3:30:00 PM	19.6314	19.6373			N/A
6/28/2019	CHFNOK	9:30:00 AM	8.7261	8.7338			N/A
6/28/2019	CHFNOK	11:30:00 AM	8.7368	8.7406			N/A
6/28/2019	CHFNOK	1:30:00 PM	8.7282	8.736			N/A
6/28/2019	CHFNOK	3:30:00 PM	8.7276	8.7351			N/A
6/28/2019	CHFNOK.fx	9:30:00 AM	8.72943	8.73022			N/A
6/28/2019	CHFNOK.fx	11:30:00 AM	8.74018	8.73725			N/A
6/28/2019	CHFNOK.fx	1:30:00 PM	8.73158	8.73238			N/A
6/28/2019	CHFNOK.fx	3:30:00 PM	8.73094	8.73182			N/A

6/28/2019	CHFPLN	9:30:00 AM	3.834	3.837			N/A
6/28/2019	CHFPLN	11:30:00 AM	3.8329	3.8353			N/A
6/28/2019	CHFPLN	1:30:00 PM	3.8293	3.8323			N/A
6/28/2019	CHFPLN	3:30:00 PM	3.8273	3.828			N/A
6/28/2019	CHFPLN.fx	9:30:00 AM	3.83146	3.83945			N/A
6/28/2019	CHFPLN.fx	11:30:00 AM	3.83036	3.83783			N/A
6/28/2019	CHFPLN.fx	1:30:00 PM	3.82696	3.83465			N/A
6/28/2019	CHFPLN.fx	3:30:00 PM	3.82252	3.83075			N/A
6/28/2019	CHFSEK	9:30:00 AM	9.508	9.5122			N/A
6/28/2019	CHFSEK	11:30:00 AM	9.5065	9.5091			N/A
6/28/2019	CHFSEK	1:30:00 PM	9.4958	9.4995			N/A
6/28/2019	CHFSEK	3:30:00 PM	9.5131	9.5164			N/A
6/28/2019	CHFSGD	9:30:00 AM	1.3877	1.3881			N/A
6/28/2019	CHFSGD	11:30:00 AM	1.3881	1.3885			N/A
6/28/2019	CHFSGD	1:30:00 PM	1.3872	1.3875			N/A
6/28/2019	CHFSGD	3:30:00 PM	1.3864	1.3867			N/A
6/28/2019	CHFSGD.fx	9:30:00 AM	1.38783	1.38787			N/A
6/28/2019	CHFSGD.fx	11:30:00 AM	1.38832	1.3883			N/A
6/28/2019	CHFSGD.fx	1:30:00 PM	1.38739	1.38727			N/A
6/28/2019	CHFSGD.fx	3:30:00 PM	1.38658	1.38649			N/A
6/28/2019	CHFZAR	9:30:00 AM	14.4787	14.4944			N/A
6/28/2019	CHFZAR	11:30:00 AM	14.507	14.5209			N/A
6/28/2019	CHFZAR	1:30:00 PM	14.5304	14.5417			N/A
6/28/2019	CHFZAR	3:30:00 PM	14.5113	14.5224			N/A
6/28/2019	CZKJPY	9:30:00 AM	4.818	4.82			N/A
6/28/2019	CZKJPY	11:30:00 AM	4.823	4.827			N/A
6/28/2019	CZKJPY	1:30:00 PM	4.82	4.823			N/A
6/28/2019	CZKJPY	3:30:00 PM	4.823	4.827			N/A
6/28/2019	DAX30.i	9:30:00 AM	12284.32	12283.32			N/A
6/28/2019	DAX30.i	11:30:00 AM	12334.57	12318.82			N/A
6/28/2019	DAX30.i	1:30:00 PM	12317.32	12317.82			N/A
6/28/2019	DAX30.i	3:30:00 PM	12325.57	12324.82			N/A
6/28/2019	DJ30.i	9:30:00 AM					N/A
6/28/2019	DJ30.i	11:30:00 AM					N/A

6/28/2019	DJ30.i	1:30:00 PM					N/A
6/28/2019	DJ30.i	3:30:00 PM					N/A
6/28/2019	DKKJPY	9:30:00 AM					N/A
6/28/2019	DKKJPY	11:30:00 AM					N/A
6/28/2019	DKKJPY	1:30:00 PM	16.42	16.43			N/A
6/28/2019	DKKJPY	3:30:00 PM	16.44	16.45			N/A
6/28/2019	EURAUD	9:30:00 AM	1.62041	1.62075			N/A
6/28/2019	EURAUD	11:30:00 AM	1.62296	1.62317			N/A
6/28/2019	EURAUD	1:30:00 PM	1.62327	1.62343			N/A
6/28/2019	EURAUD	3:30:00 PM	1.62427	1.62447			N/A
6/28/2019	EURAUD.fx	9:30:00 AM	1.62062	1.62052			N/A
6/28/2019	EURAUD.fx	11:30:00 AM	1.62316	1.62296			N/A
6/28/2019	EURAUD.fx	1:30:00 PM	1.62347	1.62322			N/A
6/28/2019	EURAUD.fx	3:30:00 PM	1.62447	1.62429			N/A
6/28/2019	EURCAD	9:30:00 AM	1.48817	1.48887			N/A
6/28/2019	EURCAD	11:30:00 AM	1.49034	1.49088			N/A
6/28/2019	EURCAD	1:30:00 PM	1.48996	1.49048			N/A
6/28/2019	EURCAD	3:30:00 PM	1.48928	1.4882			N/A
6/28/2019	EURCAD.fx	9:30:00 AM	1.48861	1.48846			N/A
6/28/2019	EURCAD.fx	11:30:00 AM	1.49076	1.49045			N/A
6/28/2019	EURCAD.fx	1:30:00 PM	1.49038	1.49006			N/A
6/28/2019	EURCAD.fx	3:30:00 PM	1.48953	1.48787			N/A
6/28/2019	EURCHF	9:30:00 AM	1.10852	1.10863			N/A
6/28/2019	EURCHF	11:30:00 AM	1.10941	1.10933			N/A
6/28/2019	EURCHF	1:30:00 PM	1.10978	1.10982			N/A
6/28/2019	EURCHF	3:30:00 PM	1.11042	1.11054			N/A
6/28/2019	EURCHF.fx	9:30:00 AM	1.10857	1.10857			N/A
6/28/2019	EURCHF.fx	11:30:00 AM	1.10946	1.10928			N/A
6/28/2019	EURCHF.fx	1:30:00 PM	1.10983	1.10976			N/A
6/28/2019	EURCHF.fx	3:30:00 PM	1.11047	1.11048			N/A
6/28/2019	EURCZK	9:30:00 AM	25.401	25.435			N/A
6/28/2019	EURCZK	11:30:00 AM					N/A
6/28/2019	EURCZK	1:30:00 PM	25.394	25.431			N/A
6/28/2019	EURCZK	3:30:00 PM	25.401	25.439			N/A

6/28/2019	EURDKK	9:30:00 AM	7.4626	7.4639			N/A
6/28/2019	EURDKK	11:30:00 AM	7.463	7.4643			N/A
6/28/2019	EURDKK	1:30:00 PM					N/A
6/28/2019	EURDKK	3:30:00 PM	7.4614	7.4627			N/A
6/28/2019	EURGBP	9:30:00 AM	0.89722	0.89725			N/A
6/28/2019	EURGBP	11:30:00 AM	0.89867	0.89805			N/A
6/28/2019	EURGBP	1:30:00 PM	0.89788	0.89798			N/A
6/28/2019	EURGBP	3:30:00 PM	0.89674	0.89669			N/A
6/28/2019	EURGBP.fx	9:30:00 AM	0.89725	0.8972			N/A
6/28/2019	EURGBP.fx	11:30:00 AM	0.89869	0.89801			N/A
6/28/2019	EURGBP.fx	1:30:00 PM	0.89792	0.89792			N/A
6/28/2019	EURGBP.fx	3:30:00 PM	0.89678	0.89666			N/A
6/28/2019	EURHKD	9:30:00 AM	8.8774	8.882			N/A
6/28/2019	EURHKD	11:30:00 AM	8.8886	8.8914			N/A
6/28/2019	EURHKD	1:30:00 PM	8.8862	8.8905			N/A
6/28/2019	EURHKD	3:30:00 PM	8.8866	8.8907			N/A
6/28/2019	EURHKD.fx	9:30:00 AM	8.87989	8.87938			N/A
6/28/2019	EURHKD.fx	11:30:00 AM	8.89126	8.88863			N/A
6/28/2019	EURHKD.fx	1:30:00 PM	8.88887	8.88761			N/A
6/28/2019	EURHKD.fx	3:30:00 PM	8.88931	8.88803			N/A
6/28/2019	EURHUF	9:30:00 AM	323.6	324.24			N/A
6/28/2019	EURHUF	11:30:00 AM	323.45	323.87			N/A
6/28/2019	EURHUF	1:30:00 PM	323.22	323.8			N/A
6/28/2019	EURHUF	3:30:00 PM	322.98	323.69			N/A
6/28/2019	EURHUF.fx	9:30:00 AM	323.869	324.056			N/A
6/28/2019	EURHUF.fx	11:30:00 AM	323.712	323.849			N/A
6/28/2019	EURHUF.fx	1:30:00 PM	323.499	323.665			N/A
6/28/2019	EURHUF.fx	3:30:00 PM	323.267	323.42			N/A
6/28/2019	EURJPY	9:30:00 AM	122.484	122.449			N/A
6/28/2019	EURJPY	11:30:00 AM	122.598	122.579			N/A
6/28/2019	EURJPY	1:30:00 PM	122.528	122.519			N/A
6/28/2019	EURJPY	3:30:00 PM	122.641	122.627			N/A
6/28/2019	EURJPY.fx	9:30:00 AM	122.487	122.445			N/A
6/28/2019	EURJPY.fx	11:30:00 AM	122.601	122.577			N/A

6/28/2019	EURJPY.fx	1:30:00 PM	122.53	122.515			N/A
6/28/2019	EURJPY.fx	3:30:00 PM	122.643	122.626			N/A
6/28/2019	EURMXN	9:30:00 AM	21.8002	21.8182			N/A
6/28/2019	EURMXN	11:30:00 AM	21.8264	21.8436			N/A
6/28/2019	EURMXN	1:30:00 PM	21.8681	21.8856			N/A
6/28/2019	EURMXN	3:30:00 PM	21.8055	21.8138			N/A
6/28/2019	EURMXN.fx	9:30:00 AM	21.8091	21.8093			N/A
6/28/2019	EURMXN.fx	11:30:00 AM	21.8344	21.8353			N/A
6/28/2019	EURMXN.fx	1:30:00 PM	21.8762	21.8767			N/A
6/28/2019	EURMXN.fx	3:30:00 PM	21.8145	21.8043			N/A
6/28/2019	EURNOK	9:30:00 AM	9.672	9.6839			N/A
6/28/2019	EURNOK	11:30:00 AM	9.6897	9.699			N/A
6/28/2019	EURNOK	1:30:00 PM	9.6849	9.6973			N/A
6/28/2019	EURNOK	3:30:00 PM	9.6906	9.7022			N/A
6/28/2019	EURNOK.fx	9:30:00 AM	9.67731	9.67838			N/A
6/28/2019	EURNOK.fx	11:30:00 AM	9.69508	9.69378			N/A
6/28/2019	EURNOK.fx	1:30:00 PM	9.69043	9.69176			N/A
6/28/2019	EURNOK.fx	3:30:00 PM	9.69611	9.69678			N/A
6/28/2019	EURNZD	9:30:00 AM	1.69568	1.69621			N/A
6/28/2019	EURNZD	11:30:00 AM	1.69769	1.69819			N/A
6/28/2019	EURNZD	1:30:00 PM	1.69652	1.69694			N/A
6/28/2019	EURNZD	3:30:00 PM	1.69588	1.6965			N/A
6/28/2019	EURNZD.fx	9:30:00 AM	1.69611	1.69579			N/A
6/28/2019	EURNZD.fx	11:30:00 AM	1.69809	1.69777			N/A
6/28/2019	EURNZD.fx	1:30:00 PM	1.69695	1.69649			N/A
6/28/2019	EURNZD.fx	3:30:00 PM	1.69629	1.69605			N/A
6/28/2019	EURPLN	9:30:00 AM	4.2504	4.2536			N/A
6/28/2019	EURPLN	11:30:00 AM	4.2519	4.2552			N/A
6/28/2019	EURPLN	1:30:00 PM	4.2499	4.2532			N/A
6/28/2019	EURPLN	3:30:00 PM	4.2502	4.2511			N/A
6/28/2019	EURPLN.fx	9:30:00 AM	4.24967	4.25432			N/A
6/28/2019	EURPLN.fx	11:30:00 AM	4.25128	4.25572			N/A
6/28/2019	EURPLN.fx	1:30:00 PM	4.24913	4.25386			N/A
6/28/2019	EURPLN.fx	3:30:00 PM	4.24877	4.25176			N/A

6/28/2019	EURRUB	9:30:00 AM					N/A
6/28/2019	EURRUB	11:30:00 AM	71.518	71.948			N/A
6/28/2019	EURRUB	1:30:00 PM	71.43	71.861			N/A
6/28/2019	EURRUB	3:30:00 PM	71.251	71.672			N/A
6/28/2019	EURSEK	9:30:00 AM	10.5417	10.5464			N/A
6/28/2019	EURSEK	11:30:00 AM	10.5476	10.5513			N/A
6/28/2019	EURSEK	1:30:00 PM	10.5392	10.5445			N/A
6/28/2019	EURSEK	3:30:00 PM	10.567	10.5715			N/A
6/28/2019	EURSEK.fx	9:30:00 AM	10.54313	10.54485			N/A
6/28/2019	EURSEK.fx	11:30:00 AM	10.54915	10.54964			N/A
6/28/2019	EURSEK.fx	1:30:00 PM	10.54096	10.54262			N/A
6/28/2019	EURSEK.fx	3:30:00 PM	10.56867	10.56995			N/A
6/28/2019	EURSGD	9:30:00 AM	1.5382	1.5389			N/A
6/28/2019	EURSGD	11:30:00 AM	1.5399	1.5404			N/A
6/28/2019	EURSGD	1:30:00 PM	1.5395	1.5402			N/A
6/28/2019	EURSGD	3:30:00 PM	1.5395	1.5401			N/A
6/28/2019	EURSGD.fx	9:30:00 AM	1.53858	1.53851			N/A
6/28/2019	EURSGD.fx	11:30:00 AM	1.54032	1.53998			N/A
6/28/2019	EURSGD.fx	1:30:00 PM	1.5398	1.53976			N/A
6/28/2019	EURSGD.fx	3:30:00 PM	1.53986	1.53966			N/A
6/28/2019	EURUSD	9:30:00 AM	1.13685	1.13688			N/A
6/28/2019	EURUSD	11:30:00 AM	1.13859	1.13838			N/A
6/28/2019	EURUSD	1:30:00 PM	1.1381	1.13809			N/A
6/28/2019	EURUSD	3:30:00 PM	1.13808	1.13808			N/A
6/28/2019	EURUSD.fx	9:30:00 AM	1.13705	1.13697			N/A
6/28/2019	EURUSD.fx	11:30:00 AM	1.13879	1.13847			N/A
6/28/2019	EURUSD.fx	1:30:00 PM	1.1383	1.13818			N/A
6/28/2019	EURUSD.fx	3:30:00 PM	1.13828	1.13814			N/A
6/28/2019	EURZAR	9:30:00 AM	16.0542	16.0734			N/A
6/28/2019	EURZAR	11:30:00 AM	16.1004	16.1183			N/A
6/28/2019	EURZAR	1:30:00 PM	16.1304	16.1444			N/A
6/28/2019	EURZAR	3:30:00 PM	16.1189	16.138			N/A
6/28/2019	EURZAR.fx	9:30:00 AM	16.0536	16.07393			N/A
6/28/2019	EURZAR.fx	11:30:00 AM	16.09976	16.11894			N/A

6/28/2019	EURZAR.fx	1:30:00 PM	16.12989	16.14563			N/A
6/28/2019	EURZAR.fx	3:30:00 PM	16.11793	16.13901			N/A
6/28/2019	GBPAUD	9:30:00 AM	1.80653	1.80723			N/A
6/28/2019	GBPAUD	11:30:00 AM	1.8078	1.80718			N/A
6/28/2019	GBPAUD	1:30:00 PM	1.80833	1.80881			N/A
6/28/2019	GBPAUD	3:30:00 PM	1.81178	1.81233			N/A
6/28/2019	GBPAUD.fx	9:30:00 AM	1.80692	1.80681			N/A
6/28/2019	GBPAUD.fx	11:30:00 AM	1.80821	1.80678			N/A
6/28/2019	GBPAUD.fx	1:30:00 PM	1.80871	1.80843			N/A
6/28/2019	GBPAUD.fx	3:30:00 PM	1.81218	1.81194			N/A
6/28/2019	GBPCAD	9:30:00 AM	1.65875	1.65939			N/A
6/28/2019	GBPCAD	11:30:00 AM	1.65972	1.65897			N/A
6/28/2019	GBPCAD	1:30:00 PM	1.65942	1.65989			N/A
6/28/2019	GBPCAD	3:30:00 PM	1.66086	1.65964			N/A
6/28/2019	GBPCAD.fx	9:30:00 AM	1.65914	1.65898			N/A
6/28/2019	GBPCAD.fx	11:30:00 AM	1.66013	1.65856		2000	N/A
6/28/2019	GBPCAD.fx	1:30:00 PM	1.65981	1.65949			N/A
6/28/2019	GBPCAD.fx	3:30:00 PM	1.66097	1.65934			N/A
6/28/2019	GBPCHF	9:30:00 AM	1.23537	1.23579			N/A
6/28/2019	GBPCHF	11:30:00 AM	1.23528	1.23456			N/A
6/28/2019	GBPCHF	1:30:00 PM	1.23576	1.2362			N/A
6/28/2019	GBPCHF	3:30:00 PM	1.23826	1.23857			N/A
6/28/2019	GBPCHF.fx	9:30:00 AM	1.23556	1.23557			N/A
6/28/2019	GBPCHF.fx	11:30:00 AM	1.23547	1.23435			N/A
6/28/2019	GBPCHF.fx	1:30:00 PM	1.23597	1.23599			N/A
6/28/2019	GBPCHF.fx	3:30:00 PM	1.23835	1.23835			N/A
6/28/2019	GBPCZK	9:30:00 AM	28.319	28.335			N/A
6/28/2019	GBPCZK	11:30:00 AM	28.282	28.281			N/A
6/28/2019	GBPCZK	1:30:00 PM	28.289	28.31			N/A
6/28/2019	GBPCZK	3:30:00 PM	28.34	28.354			N/A
6/28/2019	GBPDKK	9:30:00 AM	8.314	8.325			N/A
6/28/2019	GBPDKK	11:30:00 AM	8.306	8.311			N/A
6/28/2019	GBPDKK	1:30:00 PM	8.307	8.318			N/A
6/28/2019	GBPDKK	3:30:00 PM	8.319	8.329			N/A



6/28/2019	GBPDKK.fx	9:30:00 AM	8.3124	8.325			N/A
6/28/2019	GBPDKK.fx	11:30:00 AM	8.3052	8.3114			N/A
6/28/2019	GBPDKK.fx	1:30:00 PM	8.3056	8.3185			N/A
6/28/2019	GBPDKK.fx	3:30:00 PM	8.317	8.3292			N/A
6/28/2019	GBPHKD	9:30:00 AM	9.8913	9.8962			N/A
6/28/2019	GBPHKD	11:30:00 AM	9.8937	9.8897			N/A
6/28/2019	GBPHKD	1:30:00 PM	9.8925	9.8971			N/A
6/28/2019	GBPHKD	3:30:00 PM	9.9072	9.9106			N/A
6/28/2019	GBPHUF	9:30:00 AM	360.66	361.11			N/A
6/28/2019	GBPHUF	11:30:00 AM	359.97	360.17			N/A
6/28/2019	GBPHUF	1:30:00 PM	359.93	360.41			N/A
6/28/2019	GBPHUF	3:30:00 PM	360.16	360.44			N/A
6/28/2019	GBPJPY	9:30:00 AM	136.497	136.499	500	400	N/A
6/28/2019	GBPJPY	11:30:00 AM	136.506	136.419			N/A
6/28/2019	GBPJPY	1:30:00 PM	136.441	136.465			N/A
6/28/2019	GBPJPY	3:30:00 PM	136.747	136.768			N/A
6/28/2019	GBPJPY.fx	9:30:00 AM	136.517	136.479			N/A
6/28/2019	GBPJPY.fx	11:30:00 AM	136.526	136.4			N/A
6/28/2019	GBPJPY.fx	1:30:00 PM	136.462	136.446			N/A
6/28/2019	GBPJPY.fx	3:30:00 PM	136.767	136.751			N/A
6/28/2019	GBPMXN	9:30:00 AM	24.2919	24.3058			N/A
6/28/2019	GBPMXN	11:30:00 AM	24.2984	24.2942			N/A
6/28/2019	GBPMXN	1:30:00 PM	24.3487	24.3625			N/A
6/28/2019	GBPMXN	3:30:00 PM	24.3079	24.3107			N/A
6/28/2019	GBPNOK	9:30:00 AM	10.7813	10.7922			N/A
6/28/2019	GBPNOK	11:30:00 AM	10.7883	10.7944			N/A
6/28/2019	GBPNOK	1:30:00 PM	10.7871	10.7984			N/A
6/28/2019	GBPNOK	3:30:00 PM	10.8075	10.8183			N/A
6/28/2019	GBPNOK.fx	9:30:00 AM	10.78615	10.78707			N/A
6/28/2019	GBPNOK.fx	11:30:00 AM	10.79299	10.7893			N/A
6/28/2019	GBPNOK.fx	1:30:00 PM	10.79211	10.79355			N/A
6/28/2019	GBPNOK.fx	3:30:00 PM	10.81209	10.81399			N/A
6/28/2019	GBPNZD	9:30:00 AM	1.88996	1.89046			N/A
6/28/2019	GBPNZD	11:30:00 AM	1.8907	1.88976			N/A

6/28/2019	GBPNZD	1:30:00 PM	1.88938	1.88982			N/A
6/28/2019	GBPNZD	3:30:00 PM	1.89122	1.89183			N/A
6/28/2019	GBPNZD.fx	9:30:00 AM	1.89033	1.89011			N/A
6/28/2019	GBPNZD.fx	11:30:00 AM	1.89104	1.8894			N/A
6/28/2019	GBPNZD.fx	1:30:00 PM	1.88976	1.88942			N/A
6/28/2019	GBPNZD.fx	3:30:00 PM	1.89149	1.89148			N/A
6/28/2019	GBPPLN	9:30:00 AM	4.7381	4.7398			N/A
6/28/2019	GBPPLN	11:30:00 AM	4.7356	4.7338			N/A
6/28/2019	GBPPLN	1:30:00 PM	4.7339	4.7358			N/A
6/28/2019	GBPPLN	3:30:00 PM	4.7409	4.7395			N/A
6/28/2019	GBPPLN.fx	9:30:00 AM	4.73571	4.74214			N/A
6/28/2019	GBPPLN.fx	11:30:00 AM	4.7335	4.73595			N/A
6/28/2019	GBPPLN.fx	1:30:00 PM	4.73164	4.73804			N/A
6/28/2019	GBPPLN.fx	3:30:00 PM	4.73683	4.74209			N/A
6/28/2019	GBPSEK	9:30:00 AM	11.7474	11.7561			N/A
6/28/2019	GBPSEK	11:30:00 AM	11.7421	11.7433			N/A
6/28/2019	GBPSEK	1:30:00 PM	11.7351	11.745			N/A
6/28/2019	GBPSEK	3:30:00 PM	11.7822	11.7908			N/A
6/28/2019	GBPSEK.fx	9:30:00 AM	11.74345	11.76004			N/A
6/28/2019	GBPSEK.fx	11:30:00 AM	11.73829	11.74688			N/A
6/28/2019	GBPSEK.fx	1:30:00 PM	11.73186	11.74857			N/A
6/28/2019	GBPSEK.fx	3:30:00 PM	11.77808	11.79452			N/A
6/28/2019	GBPSGD	9:30:00 AM	1.7145	1.7151			N/A
6/28/2019	GBPSGD	11:30:00 AM	1.715	1.7139			N/A
6/28/2019	GBPSGD	1:30:00 PM	1.7145	1.7151			N/A
6/28/2019	GBPSGD	3:30:00 PM	1.7171	1.7175			N/A
6/28/2019	GBPSGD.fx	9:30:00 AM	1.71265	1.71688			N/A
6/28/2019	GBPSGD.fx	11:30:00 AM	1.71314	1.71577			N/A
6/28/2019	GBPSGD.fx	1:30:00 PM	1.71264	1.71694			N/A
6/28/2019	GBPSGD.fx	3:30:00 PM	1.71493	1.71928			N/A
6/28/2019	GBPUSD	9:30:00 AM	1.26732	1.26723			N/A
6/28/2019	GBPUSD	11:30:00 AM	1.26817	1.2669		10000	N/A
6/28/2019	GBPUSD	1:30:00 PM	1.26763	1.26759			N/A
6/28/2019	GBPUSD	3:30:00 PM	1.26949	1.26924			N/A

6/28/2019	GBPUSD.fx	9:30:00 AM	1.26737	1.26717			N/A
6/28/2019	GBPUSD.fx	11:30:00 AM	1.26822	1.26684			N/A
6/28/2019	GBPUSD.fx	1:30:00 PM	1.26768	1.26754			N/A
6/28/2019	GBPUSD.fx	3:30:00 PM	1.26951	1.26918			N/A
6/28/2019	GBPZAR	9:30:00 AM	17.8886	17.9182			N/A
6/28/2019	GBPZAR	11:30:00 AM	17.9271	17.9406			N/A
6/28/2019	GBPZAR	1:30:00 PM	17.9605	17.9837			N/A
6/28/2019	GBPZAR	3:30:00 PM	17.9744	17.9994			N/A
6/28/2019	GBPZAR.fx	9:30:00 AM	17.8956	17.9115			N/A
6/28/2019	GBPZAR.fx	11:30:00 AM	17.9342	17.9333			N/A
6/28/2019	GBPZAR.fx	1:30:00 PM	17.9681	17.9769			N/A
6/28/2019	GBPZAR.fx	3:30:00 PM	17.9796	17.9925			N/A
6/28/2019	GOLD	9:30:00 AM	1415.67	1415.14			N/A
6/28/2019	GOLD	11:30:00 AM	1413.88	1413.85			N/A
6/28/2019	GOLD	1:30:00 PM	1413.36	1413.51			N/A
6/28/2019	GOLD	3:30:00 PM	1414.51	1413.16			N/A
6/28/2019	HKDJPY	9:30:00 AM	13.8	13.8			N/A
6/28/2019	HKDJPY	11:30:00 AM	13.79	13.8			N/A
6/28/2019	HKDJPY	1:30:00 PM	13.79	13.79			N/A
6/28/2019	HKDJPY	3:30:00 PM	13.8	13.8			N/A
6/28/2019	HKDJPY.fx	9:30:00 AM	13.79	13.791			N/A
6/28/2019	HKDJPY.fx	11:30:00 AM	13.786	13.792			N/A
6/28/2019	HKDJPY.fx	1:30:00 PM	13.78	13.788			N/A
6/28/2019	HKDJPY.fx	3:30:00 PM	13.794	13.798			N/A
6/28/2019	HUFJPY	9:30:00 AM	0.3782	0.3785			N/A
6/28/2019	HUFJPY	11:30:00 AM	0.3789	0.3791			N/A
6/28/2019	HUFJPY	1:30:00 PM	0.3789	0.3792			N/A
6/28/2019	HUFJPY	3:30:00 PM	0.3795	0.3798			N/A
6/28/2019	JP225.i	9:30:00 AM	21242.64	21252.64			N/A
6/28/2019	JP225.i	11:30:00 AM	21267.64	21274.31			N/A
6/28/2019	JP225.i	1:30:00 PM					N/A
6/28/2019	JP225.i	3:30:00 PM	21265.14	21282.64			N/A
6/28/2019	MXNJPY	9:30:00 AM	5.62	5.62			N/A
6/28/2019	MXNJPY	11:30:00 AM	5.62	5.62			N/A

6/28/2019	MXNJPY	1:30:00 PM					N/A
6/28/2019	MXNJPY	3:30:00 PM	5.63	5.63			N/A
6/28/2019	NASDAQ.i	9:30:00 AM					N/A
6/28/2019	NASDAQ.i	11:30:00 AM					N/A
6/28/2019	NASDAQ.i	1:30:00 PM					N/A
6/28/2019	NASDAQ.i	3:30:00 PM					N/A
6/28/2019	NOKJPY	9:30:00 AM	12.64	12.67			N/A
6/28/2019	NOKJPY	11:30:00 AM	12.63	12.66			N/A
6/28/2019	NOKJPY	1:30:00 PM	12.63	12.66			N/A
6/28/2019	NOKJPY	3:30:00 PM	12.64	12.67			N/A
6/28/2019	NOKJPY.fx	9:30:00 AM	12.654	12.656			N/A
6/28/2019	NOKJPY.fx	11:30:00 AM	12.644	12.646			N/A
6/28/2019	NOKJPY.fx	1:30:00 PM	12.64	12.648			N/A
6/28/2019	NOKJPY.fx	3:30:00 PM	12.644	12.652			N/A
6/28/2019	NZDCAD	9:30:00 AM	0.87745	0.87796			N/A
6/28/2019	NZDCAD	11:30:00 AM	0.8775	0.87818			N/A
6/28/2019	NZDCAD	1:30:00 PM	0.87797	0.87861			N/A
6/28/2019	NZDCAD	3:30:00 PM	0.87776	0.87752			N/A
6/28/2019	NZDCAD.fx	9:30:00 AM	0.87778	0.87761			N/A
6/28/2019	NZDCAD.fx	11:30:00 AM	0.87784	0.87784			N/A
6/28/2019	NZDCAD.fx	1:30:00 PM	0.87832	0.87827			N/A
6/28/2019	NZDCAD.fx	3:30:00 PM	0.87808	0.87724			N/A
6/28/2019	NZDCHF	9:30:00 AM	0.65337	0.65398			N/A
6/28/2019	NZDCHF	11:30:00 AM	0.65301	0.65367			N/A
6/28/2019	NZDCHF	1:30:00 PM	0.65376	0.65438			N/A
6/28/2019	NZDCHF	3:30:00 PM	0.65439	0.65505			N/A
6/28/2019	NZDCHF.fx	9:30:00 AM	0.65371	0.65363			N/A
6/28/2019	NZDCHF.fx	11:30:00 AM	0.65335	0.65333			N/A
6/28/2019	NZDCHF.fx	1:30:00 PM	0.6541	0.65402			N/A
6/28/2019	NZDCHF.fx	3:30:00 PM	0.65471	0.6547			N/A
6/28/2019	NZDCZK	9:30:00 AM	14.987	14.991			N/A
6/28/2019	NZDCZK	11:30:00 AM	14.958	14.968			N/A
6/28/2019	NZDCZK	1:30:00 PM	14.973	14.981			N/A
6/28/2019	NZDCZK	3:30:00 PM	14.98	14.991			N/A

6/28/2019	NZDDKK	9:30:00 AM	4.399	4.403			N/A
6/28/2019	NZDDKK	11:30:00 AM					N/A
6/28/2019	NZDDKK	1:30:00 PM	4.397	4.4			N/A
6/28/2019	NZDDKK	3:30:00 PM	4.398	4.401			N/A
6/28/2019	NZDHKD	9:30:00 AM	5.233	5.235			N/A
6/28/2019	NZDHKD	11:30:00 AM	5.2312	5.2342			N/A
6/28/2019	NZDHKD	1:30:00 PM	5.2351	5.2372			N/A
6/28/2019	NZDHKD	3:30:00 PM	5.2369	5.2397			N/A
6/28/2019	NZDHUF	9:30:00 AM	190.77	191.05			N/A
6/28/2019	NZDHUF	11:30:00 AM	190.36	190.62			N/A
6/28/2019	NZDHUF	1:30:00 PM	190.47	190.73			N/A
6/28/2019	NZDHUF	3:30:00 PM	190.38	190.58			N/A
6/28/2019	NZDJPY	9:30:00 AM	72.184	72.242			N/A
6/28/2019	NZDJPY	11:30:00 AM	72.163	72.227			N/A
6/28/2019	NZDJPY	1:30:00 PM	72.175	72.244			N/A
6/28/2019	NZDJPY	3:30:00 PM	72.273	72.33			N/A
6/28/2019	NZDJPY.fx	9:30:00 AM	72.215	72.21			N/A
6/28/2019	NZDJPY.fx	11:30:00 AM	72.195	72.195			N/A
6/28/2019	NZDJPY.fx	1:30:00 PM	72.207	72.21			N/A
6/28/2019	NZDJPY.fx	3:30:00 PM	72.304	72.298			N/A
6/28/2019	NZDMXN	9:30:00 AM	12.8517	12.8554			N/A
6/28/2019	NZDMXN	11:30:00 AM	12.8502	12.8559			N/A
6/28/2019	NZDMXN	1:30:00 PM	12.8858	12.8907			N/A
6/28/2019	NZDMXN	3:30:00 PM	12.8509	12.8517			N/A
6/28/2019	NZDNOK	9:30:00 AM	5.7034	5.7059			N/A
6/28/2019	NZDNOK	11:30:00 AM	5.7033	5.7059			N/A
6/28/2019	NZDNOK	1:30:00 PM	5.7085	5.7109			N/A
6/28/2019	NZDNOK	3:30:00 PM	5.7122	5.7142			N/A
6/28/2019	NZDPLN	9:30:00 AM	2.5063	2.5074			N/A
6/28/2019	NZDPLN	11:30:00 AM	2.503	2.5038			N/A
6/28/2019	NZDPLN	1:30:00 PM	2.5046	2.5054			N/A
6/28/2019	NZDPLN	3:30:00 PM	2.5029	2.5044			N/A
6/28/2019	NZDSEK	9:30:00 AM	6.212	6.2177			N/A
6/28/2019	NZDSEK	11:30:00 AM	6.2066	6.2126			N/A

6/28/2019	NZDSEK	1:30:00 PM	6.2082	6.2136			N/A
6/28/2019	NZDSEK	3:30:00 PM	6.2247	6.2309			N/A
6/28/2019	NZDSGD	9:30:00 AM	0.907	0.9075			N/A
6/28/2019	NZDSGD	11:30:00 AM	0.9068	0.9073			N/A
6/28/2019	NZDSGD	1:30:00 PM	0.9072	0.9078			N/A
6/28/2019	NZDSGD	3:30:00 PM	0.9076	0.9081			N/A
6/28/2019	NZDSGD.fx	9:30:00 AM	0.90698	0.90741			N/A
6/28/2019	NZDSGD.fx	11:30:00 AM	0.90679	0.90722			N/A
6/28/2019	NZDSGD.fx	1:30:00 PM	0.90724	0.90769			N/A
6/28/2019	NZDSGD.fx	3:30:00 PM	0.90751	0.90809			N/A
6/28/2019	NZDUSD	9:30:00 AM	0.6704	0.67038			N/A
6/28/2019	NZDUSD	11:30:00 AM	0.67048	0.67055			N/A
6/28/2019	NZDUSD	1:30:00 PM	0.67076	0.67079			N/A
6/28/2019	NZDUSD	3:30:00 PM	0.67099	0.67106			N/A
6/28/2019	NZDUSD.fx	9:30:00 AM	0.67047	0.67038			N/A
6/28/2019	NZDUSD.fx	11:30:00 AM	0.67055	0.67057			N/A
6/28/2019	NZDUSD.fx	1:30:00 PM	0.67084	0.6708			N/A
6/28/2019	NZDUSD.fx	3:30:00 PM	0.67104	0.67106			N/A
6/28/2019	NZDZAR	9:30:00 AM	9.4581	9.4748			N/A
6/28/2019	NZDZAR	11:30:00 AM	9.4701	9.4879			N/A
6/28/2019	NZDZAR	1:30:00 PM	9.4975	9.5129			N/A
6/28/2019	NZDZAR	3:30:00 PM	9.4936	9.5091			N/A
6/28/2019	SEKJPY	9:30:00 AM	11.62	11.62			N/A
6/28/2019	SEKJPY	11:30:00 AM	11.62	11.63			N/A
6/28/2019	SEKJPY	1:30:00 PM	11.62	11.63			N/A
6/28/2019	SEKJPY	3:30:00 PM	11.61	11.61			N/A
6/28/2019	SEKJPY.fx	9:30:00 AM	11.607	11.622			N/A
6/28/2019	SEKJPY.fx	11:30:00 AM	11.612	11.627			N/A
6/28/2019	SEKJPY.fx	1:30:00 PM	11.613	11.631			N/A
6/28/2019	SEKJPY.fx	3:30:00 PM	11.594	11.612			N/A
6/28/2019	SGDJPY	9:30:00 AM	79.59	79.58			N/A
6/28/2019	SGDJPY	11:30:00 AM	79.61	79.59			N/A
6/28/2019	SGDJPY	1:30:00 PM	79.56	79.58			N/A
6/28/2019	SGDJPY	3:30:00 PM	79.62	79.63			N/A

6/28/2019	SILVER	9:30:00 AM	15.08	15.44			N/A
6/28/2019	SILVER	11:30:00 AM	15.03	15.4			N/A
6/28/2019	SILVER	1:30:00 PM	15.02	15.4			N/A
6/28/2019	SILVER	3:30:00 PM	15.09	15.45			N/A
6/28/2019	SPX500.i	9:30:00 AM	2931.17	2931.72			N/A
6/28/2019	SPX500.i	11:30:00 AM	2936.17	2936.72			N/A
6/28/2019	SPX500.i	1:30:00 PM					N/A
6/28/2019	SPX500.i	3:30:00 PM	2934.92	2935.72			N/A
6/28/2019	UK100.i	9:30:00 AM	7410.9	7412.15			N/A
6/28/2019	UK100.i	11:30:00 AM	7436.07	7433.65			N/A
6/28/2019	UK100.i	1:30:00 PM	7434.9	7436.65			N/A
6/28/2019	UK100.i	3:30:00 PM	7434.4	7436.65			N/A
6/28/2019	USDCAD	9:30:00 AM	1.30919	1.30915			N/A
6/28/2019	USDCAD	11:30:00 AM	1.3091	1.30915			N/A
6/28/2019	USDCAD	1:30:00 PM	1.30928	1.30924			N/A
6/28/2019	USDCAD	3:30:00 PM	1.30879	1.307	30000	30000	N/A
6/28/2019	USDCAD.fx	9:30:00 AM	1.30922	1.30911			N/A
6/28/2019	USDCAD.fx	11:30:00 AM	1.30912	1.30911			N/A
6/28/2019	USDCAD.fx	1:30:00 PM	1.30933	1.30921			N/A
6/28/2019	USDCAD.fx	3:30:00 PM	1.30875	1.30704			N/A
6/28/2019	USDCHF	9:30:00 AM	0.97497	0.97503			N/A
6/28/2019	USDCHF	11:30:00 AM	0.9743	0.97431			N/A
6/28/2019	USDCHF	1:30:00 PM	0.97506	0.97502			N/A
6/28/2019	USDCHF	3:30:00 PM	0.97564	0.97567			N/A
6/28/2019	USDCHF.fx	9:30:00 AM	0.97501	0.97496			N/A
6/28/2019	USDCHF.fx	11:30:00 AM	0.97435	0.97425			N/A
6/28/2019	USDCHF.fx	1:30:00 PM	0.97511	0.97496			N/A
6/28/2019	USDCHF.fx	3:30:00 PM	0.97569	0.97561			N/A
6/28/2019	USDCZK	9:30:00 AM	22.371	22.385			N/A
6/28/2019	USDCZK	11:30:00 AM	22.327	22.345			N/A
6/28/2019	USDCZK	1:30:00 PM	22.334	22.356			N/A
6/28/2019	USDCZK	3:30:00 PM	22.344	22.365			N/A
6/28/2019	USDCZK.fx	9:30:00 AM	22.3776	22.3759			N/A
6/28/2019	USDCZK.fx	11:30:00 AM	22.3361	22.3359			N/A

6/28/2019	USDCZK.fx	1:30:00 PM	22.3427	22.347			N/A
6/28/2019	USDCZK.fx	3:30:00 PM	22.353	22.3552			N/A
6/28/2019	USDDKK	9:30:00 AM	6.5634	6.5673			N/A
6/28/2019	USDDKK	11:30:00 AM	6.5548	6.557			N/A
6/28/2019	USDDKK	1:30:00 PM	6.5563	6.5596			N/A
6/28/2019	USDDKK	3:30:00 PM	6.5565	6.5597			N/A
6/28/2019	USDDKK.fx	9:30:00 AM	6.56403	6.56521			N/A
6/28/2019	USDDKK.fx	11:30:00 AM	6.55524	6.55492			N/A
6/28/2019	USDDKK.fx	1:30:00 PM	6.55678	6.55756			N/A
6/28/2019	USDDKK.fx	3:30:00 PM	6.55688	6.55759			N/A
6/28/2019	USDHKD	9:30:00 AM	7.8087	7.8092			N/A
6/28/2019	USDHKD	11:30:00 AM	7.8067	7.8068			N/A
6/28/2019	USDHKD	1:30:00 PM	7.8079	7.8083			N/A
6/28/2019	USDHKD	3:30:00 PM	7.8086	7.808			N/A
6/28/2019	USDHKD.fx	9:30:00 AM	7.80865	7.80923			N/A
6/28/2019	USDHKD.fx	11:30:00 AM	7.80658	7.80717			N/A
6/28/2019	USDHKD.fx	1:30:00 PM	7.80788	7.80838			N/A
6/28/2019	USDHKD.fx	3:30:00 PM	7.80846	7.8088			N/A
6/28/2019	USDHUF	9:30:00 AM	284.69	285.12			N/A
6/28/2019	USDHUF	11:30:00 AM	284.18	284.53			N/A
6/28/2019	USDHUF	1:30:00 PM	284.05	284.51			N/A
6/28/2019	USDHUF	3:30:00 PM	283.87	284.3			N/A
6/28/2019	USDHUF.fx	9:30:00 AM	284.875	284.95			N/A
6/28/2019	USDHUF.fx	11:30:00 AM	284.375	284.315			N/A
6/28/2019	USDHUF.fx	1:30:00 PM	284.253	284.306			N/A
6/28/2019	USDHUF.fx	3:30:00 PM	284.082	284.107			N/A
6/28/2019	USDINR	9:30:00 AM	63.92	73.92			N/A
6/28/2019	USDINR	11:30:00 AM	63.93	73.93			N/A
6/28/2019	USDINR	1:30:00 PM					N/A
6/28/2019	USDINR	3:30:00 PM					N/A
6/28/2019	USDJPY	9:30:00 AM	107.726	107.69			N/A
6/28/2019	USDJPY	11:30:00 AM	107.664	107.666			N/A
6/28/2019	USDJPY	1:30:00 PM	107.642	107.648			N/A
6/28/2019	USDJPY	3:30:00 PM	107.752	107.732			N/A



6/28/2019	USDJPY.fx	9:30:00 AM	107.731	107.683			N/A
6/28/2019	USDJPY.fx	11:30:00 AM	107.67	107.658			N/A
6/28/2019	USDJPY.fx	1:30:00 PM	107.648	107.641			N/A
6/28/2019	USDJPY.fx	3:30:00 PM	107.757	107.726			N/A
6/28/2019	USDMXN	9:30:00 AM	19.178	19.185			N/A
6/28/2019	USDMXN	11:30:00 AM	19.175	19.179			N/A
6/28/2019	USDMXN	1:30:00 PM	19.216	19.224			N/A
6/28/2019	USDMXN	3:30:00 PM	19.162	19.162			N/A
6/28/2019	USDMXN.f	9:30:00 AM					N/A
6/28/2019	USDMXN.f	11:30:00 AM					N/A
6/28/2019	USDMXN.f	1:30:00 PM					N/A
6/28/2019	USDMXN.f	3:30:00 PM					N/A
6/28/2019	USDNOK	9:30:00 AM	8.5079	8.5159			N/A
6/28/2019	USDNOK	11:30:00 AM	8.5121	8.5166			N/A
6/28/2019	USDNOK	1:30:00 PM	8.5102	8.5184			N/A
6/28/2019	USDNOK	3:30:00 PM	8.5156	8.5232			N/A
6/28/2019	USDNOK.fx	9:30:00 AM	8.5118	8.51141			N/A
6/28/2019	USDNOK.fx	11:30:00 AM	8.5161	8.51199			N/A
6/28/2019	USDNOK.fx	1:30:00 PM	8.51417	8.51371			N/A
6/28/2019	USDNOK.fx	3:30:00 PM	8.51962	8.51878			N/A
6/28/2019	USDPLN	9:30:00 AM	3.7389	3.7403			N/A
6/28/2019	USDPLN	11:30:00 AM	3.7352	3.7359			N/A
6/28/2019	USDPLN	1:30:00 PM	3.7345	3.7358			N/A
6/28/2019	USDPLN	3:30:00 PM	3.7343	3.7341			N/A
6/28/2019	USDPLN.fx	9:30:00 AM	3.73808	3.74122			N/A
6/28/2019	USDPLN.fx	11:30:00 AM	3.73444	3.73671			N/A
6/28/2019	USDPLN.fx	1:30:00 PM	3.73368	3.73661			N/A
6/28/2019	USDPLN.fx	3:30:00 PM	3.73268	3.73489			N/A
6/28/2019	USDRUB	9:30:00 AM					N/A
6/28/2019	USDRUB	11:30:00 AM	62.927	63.302			N/A
6/28/2019	USDRUB	1:30:00 PM	62.863	63.251			N/A
6/28/2019	USDRUB	3:30:00 PM	62.712	63.096			N/A
6/28/2019	USDSEK	9:30:00 AM	9.271	9.2752			N/A
6/28/2019	USDSEK	11:30:00 AM	9.2637	9.265			N/A

6/28/2019	USDSEK	1:30:00 PM	9.2594	9.263			N/A
6/28/2019	USDSEK	3:30:00 PM	9.2837	9.287			N/A
6/28/2019	USDSEK.fx	9:30:00 AM	9.27347	9.27356			N/A
6/28/2019	USDSEK.fx	11:30:00 AM	9.26635	9.26312			N/A
6/28/2019	USDSEK.fx	1:30:00 PM	9.26199	9.26108			N/A
6/28/2019	USDSEK.fx	3:30:00 PM	9.28618	9.28506			N/A
6/28/2019	USDSGD	9:30:00 AM	1.3531	1.3534			N/A
6/28/2019	USDSGD	11:30:00 AM	1.3525	1.3528			N/A
6/28/2019	USDSGD	1:30:00 PM	1.3526	1.353			N/A
6/28/2019	USDSGD	3:30:00 PM	1.3527	1.353			N/A
6/28/2019	USDSGD.fx	9:30:00 AM	1.35298	1.35336			N/A
6/28/2019	USDSGD.fx	11:30:00 AM	1.35248	1.35284			N/A
6/28/2019	USDSGD.fx	1:30:00 PM	1.35252	1.35301			N/A
6/28/2019	USDSGD.fx	3:30:00 PM	1.35258	1.35303			N/A
6/28/2019	USDZAR	9:30:00 AM	14.1189	14.1367			N/A
6/28/2019	USDZAR	11:30:00 AM	14.1401	14.1577			N/A
6/28/2019	USDZAR	1:30:00 PM	14.1706	14.1855			N/A
6/28/2019	USDZAR	3:30:00 PM	14.1599	14.1792			N/A
6/28/2019	USDZAR.fx	9:30:00 AM	14.12447	14.1313			N/A
6/28/2019	USDZAR.fx	11:30:00 AM	14.14614	14.15162			N/A
6/28/2019	USDZAR.fx	1:30:00 PM	14.17619	14.17982			N/A
6/28/2019	USDZAR.fx	3:30:00 PM	14.16623	14.17352			N/A
6/28/2019	XAUUSD	9:30:00 AM	1415.7	1415.14			N/A
6/28/2019	XAUUSD	11:30:00 AM	1413.88	1413.85			N/A
6/28/2019	XAUUSD	1:30:00 PM	1413.36	1413.51			N/A
6/28/2019	XAUUSD	3:30:00 PM	1414.52	1413.15			N/A
6/28/2019	ZARJPY	9:30:00 AM	7.61	7.63			N/A
6/28/2019	ZARJPY	11:30:00 AM	7.59	7.61			N/A
6/28/2019	ZARJPY	1:30:00 PM	7.58	7.59			N/A
6/28/2019	ZARJPY	3:30:00 PM	7.59	7.61			N/A
6/28/2019	ZARJPY.fx	9:30:00 AM	7.621	7.626			N/A
6/28/2019	ZARJPY.fx	11:30:00 AM	7.607	7.612			N/A
6/28/2019	ZARJPY.fx	1:30:00 PM	7.591	7.594			N/A
6/28/2019	ZARJPY.fx	3:30:00 PM	7.601	7.606			N/A