



JOHANNESBURG STOCK EXCHANGE

Currency Derivatives

CURRENCY FUTURES DAILY TRADE INFORMATION FOR 29-October-2018

DATE	CONTRACT		OPEN INT	MTM	PREV MTM	HIGH	LOW	DAILY VOLUME		CUMULATIVE VOLUME	
Future											
Nov 2018	DAEU	Future	37	16.6458	16.7591	0.0000	0.0000	0	0.00		
			<u>37</u>					<u>0.00</u>	<u>0.00</u>	<u>801 399.00</u>	<u>11 967 156 360.40</u>
Option											
Aug 2019	DAEU	17.01 Put	31,200	752.1080	705.8450	0.0000	0.0000	0	0.00		
Aug 2019	DAEU	19.65 Call	62,400	546.0762	583.4266	0.0000	0.0000	0	0.00		
			<u>93,600</u>					<u>0.00</u>	<u>0.00</u>	<u>1 390 587.00</u>	<u>0.00</u>
		Total	93,637					0.00	0.00	2 191 986.00	11 967 156 360.40
Future											
Nov 2018	DAGB	Future	13	18.7184	18.8703	0.0000	0.0000	0	0.00		
			<u>13</u>					<u>0.00</u>	<u>0.00</u>	<u>53 954.00</u>	<u>889 067 608.60</u>
		Total	13					0.00	0.00	261 267.00	889 067 608.60
Future											
Oct 2018	DAUS	Future	0	14.5238	14.6450	0.0000	0.0000	225	3,267,855.00		
Oct 2018	DAUS	Future	2,500	14.5375	14.6450	0.0000	0.0000	2,290	33,640,100.00		
Oct 2018	DAUS	Future	2,139	14.5375	14.6450	0.0000	0.0000	937	13,653,560.00		
Nov 2018	DAUS	Future	55	14.5375	14.6468	0.0000	0.0000	0	0.00		
Nov 2018	DAUS	Future	70	14.5592	14.6693	0.0000	0.0000	0	0.00		
Nov 2018	DAUS	Future	24	14.5628	14.6730	0.0000	0.0000	0	0.00		
Nov 2018	DAUS	Future	308	14.5646	14.6749	0.0000	0.0000	191	2,815,340.00		
Nov 2018	DAUS	Future	179	14.5755	14.6861	0.0000	0.0000	0	0.00		
Nov 2018	DAUS	Future	166	14.5864	14.6972	0.0000	0.0000	0	0.00		
Nov 2018	DAUS	Future	461	14.5882	14.6991	0.0000	0.0000	461	6,799,750.00		
Nov 2018	DAUS	Future	5,946	14.5900	14.7010	0.0000	0.0000	0	0.00		
Dec 2018	DAUS	Future	500	14.6033	14.7143	0.0000	0.0000	0	0.00		
Dec 2018	DAUS	Future	3,672	14.6128	14.7238	0.0000	0.0000	0	0.00		
Dec 2018	DAUS	Future	2,710	14.6490	14.7600	0.0000	0.0000	0	0.00		
Jan 2019	DAUS	Future	55	14.6529	14.7638	0.0000	0.0000	0	0.00		
Jan 2019	DAUS	Future	55	14.7069	14.8178	0.0000	0.0000	0	0.00		

<u>DATE</u>	<u>CONTRACT</u>		<u>OPEN INT</u>	<u>MTM</u>	<u>PREV MTM</u>	<u>HIGH</u>	<u>LOW</u>	<u>DAILY VOLUME</u>	<u>CUMULATIVE VOLUME</u>
Jan 2019	DAUS	Future	920	14.7088	14.8197	0.0000	0.0000	0	0.00
Feb 2019	DAUS	Future	70	14.7328	14.8441	0.0000	0.0000	0	0.00
Feb 2019	DAUS	Future	5,787	14.7604	14.8722	0.0000	0.0000	0	0.00
Mar 2019	DAUS	Future	3,731	14.8101	14.9229	0.0000	0.0000	0	0.00
Mar 2019	DAUS	Future	3,029	14.8138	14.9267	0.0000	0.0000	0	0.00
Apr 2019	DAUS	Future	55	14.8212	14.9342	0.0000	0.0000	0	0.00
Apr 2019	DAUS	Future	1,280	14.8728	14.9868	0.0000	0.0000	0	0.00
May 2019	DAUS	Future	55	14.9304	15.0460	0.0000	0.0000	0	0.00
Jul 2019	DAUS	Future	55	14.9880	15.1053	0.0000	0.0000	0	0.00
Aug 2019	DAUS	Future	55	15.0456	15.1647	0.0000	0.0000	0	0.00
Sep 2019	DAUS	Future	55	15.1061	15.2275	0.0000	0.0000	0	0.00
Oct 2019	DAUS	Future	55	15.1629	15.2865	0.0000	0.0000	0	0.00
Oct 2019	DAUS	Future	55	15.2178	15.3436	0.0000	0.0000	0	0.00
Dec 2019	DAUS	Future	55	15.2846	15.4109	0.0000	0.0000	0	0.00
Jan 2020	DAUS	Future	55	15.3494	15.4761	0.0000	0.0000	0	0.00
Jan 2020	DAUS	Future	55	15.4100	15.5371	0.0000	0.0000	0	0.00
Mar 2020	DAUS	Future	55	15.4747	15.6023	0.0000	0.0000	0	0.00
Apr 2020	DAUS	Future	55	15.5395	15.6675	0.0000	0.0000	0	0.00
Apr 2020	DAUS	Future	55	15.5959	15.7242	0.0000	0.0000	0	0.00
Jun 2020	DAUS	Future	1,055	15.6669	15.7957	0.0000	0.0000	0	0.00
Jul 2020	DAUS	Future	84,000	15.7839	15.9135	0.0000	0.0000	0	0.00
			<u>119,427</u>					<u>4,104.00</u>	<u>60,176,605.00</u>
									<u>10 757 067.00</u>
									<u>131 765 710 918.20</u>
Option									
Oct 2018	DAUS	13.00 Put	500	0.0038	0.0340	0.0000	0.0000	0	0.00
Oct 2018	DAUS	13.80 Put	1,000	0.4173	1.5745	0.0000	0.0000	0	0.00
Oct 2018	DAUS	13.93 Call	500	608.7530	718.3578	0.0000	0.0000	0	0.00
Oct 2018	DAUS	13.97 Put	600	1.7431	4.2269	0.0000	0.0000	0	0.00
Oct 2018	DAUS	14.25 Put	250	14.9688	19.5165	0.0000	0.0000	0	0.00
Oct 2018	DAUS	14.34 Put	171	27.6516	30.7316	0.0000	0.0000	0	0.00
Oct 2018	DAUS	14.44 Call	171	149.1684	254.5451	0.0000	0.0000	0	0.00
Oct 2018	DAUS	14.45 Call	600	142.3044	246.8806	0.0000	0.0000	0	0.00
Oct 2018	DAUS	14.67 Call	250	45.0983	107.9095	0.0000	0.0000	0	0.00
Oct 2018	DAUS	14.82 Put	114	303.4139	235.7749	0.0000	0.0000	0	0.00
Oct 2018	DAUS	14.90 Call	600	13.9805	44.3497	0.0000	0.0000	0	0.00
Oct 2018	DAUS	15.01 Call	114	8.1744	28.6698	0.0000	0.0000	0	0.00
Oct 2018	DAUS	16.47 Call	500	0.0259	0.3374	0.0000	0.0000	0	0.00
Oct 2018	DAUS	17.02 Call	500	0.0236	0.0902	0.0000	0.0000	0	0.00
Nov 2018	DAUS	14.40 Put	20,000	69.5213	61.2526	0.0000	0.0000	0	0.00
Nov 2018	DAUS	11.90 Put	1,880	0.0180	0.0208	0.0000	0.0000	0	0.00
Nov 2018	DAUS	13.86 Put	1,880	6.9755	5.3692	0.0000	0.0000	0	0.00
Nov 2018	DAUS	16.81 Call	1,880	0.1036	0.5607	0.0000	0.0000	0	0.00
Nov 2018	DAUS	14.34 Put	171	134.9581	114.6584	0.0000	0.0000	0	0.00

<u>DATE</u>	<u>CONTRACT</u>		<u>OPEN INT</u>	<u>MTM</u>	<u>PREV MTM</u>	<u>HIGH</u>	<u>LOW</u>	<u>DAILY VOLUME</u>	<u>CUMULATIVE VOLUME</u>
Nov 2018	DAUS	14.50 Call	171	268.8989	348.5190	0.0000	0.0000	0	0.00
Nov 2018	DAUS	10.83 Put	51,000	0.0194	0.0000	0.0000	0.0000	0	0.00
Nov 2018	DAUS	11.67 Put	51,000	0.0371	0.0342	0.0000	0.0000	0	0.00
Nov 2018	DAUS	13.22 Call	51,000	1349.1930	1459.7979	0.0000	0.0000	0	0.00
Nov 2018	DAUS	14.32 Call	15,000	378.2620	468.4134	0.0000	0.0000	0	0.00
Nov 2018	DAUS	14.72 Call	5,000	185.7010	248.0958	0.0000	0.0000	0	0.00
Nov 2018	DAUS	14.74 Call	5,000	178.8899	239.9563	0.0000	0.0000	0	0.00
Nov 2018	DAUS	14.78 Call	30,000	165.9264	224.3583	0.0000	0.0000	0	0.00
Nov 2018	DAUS	14.89 Call	5,000	134.5032	185.9155	0.0000	0.0000	0	0.00
Nov 2018	DAUS	14.89 Put	15,000	459.9032	401.0155	0.0000	0.0000	0	0.00
Nov 2018	DAUS	14.76 Call	4,000	243.9413	302.9889	0.0000	0.0000	0	0.00
Nov 2018	DAUS	13.00 Put	500	4.3060	3.7842	0.0000	0.0000	0	0.00
Nov 2018	DAUS	13.80 Put	1,000	50.5776	43.3709	0.0000	0.0000	0	0.00
Nov 2018	DAUS	13.85 Put	600	57.9260	50.1236	0.0000	0.0000	0	0.00
Nov 2018	DAUS	14.08 Call	500	621.1006	715.4827	0.0000	0.0000	0	0.00
Nov 2018	DAUS	14.25 Put	250	166.8502	143.1176	0.0000	0.0000	0	0.00
Nov 2018	DAUS	14.30 Call	600	476.0850	561.0478	0.0000	0.0000	0	0.00
Nov 2018	DAUS	14.80 Call	600	243.1135	300.1848	0.0000	0.0000	0	0.00
Nov 2018	DAUS	14.82 Call	250	236.5189	292.5619	0.0000	0.0000	0	0.00
Nov 2018	DAUS	16.70 Call	500	12.2939	18.7499	0.0000	0.0000	0	0.00
Nov 2018	DAUS	17.31 Call	500	3.7074	6.1340	0.0000	0.0000	0	0.00
Dec 2018	DAUS	15.45 Put	23,000	966.2726	886.7289	0.0000	0.0000	0	0.00
Dec 2018	DAUS	13.90 Put	30,000	81.9269	69.6705	0.0000	0.0000	0	0.00
Dec 2018	DAUS	14.30 Put	30,000	206.5670	178.9816	0.0000	0.0000	0	0.00
Dec 2018	DAUS	14.90 Put	30,000	540.9070	482.6089	0.0000	0.0000	0	0.00
Dec 2018	DAUS	15.30 Put	30,000	844.4645	769.7577	0.0000	0.0000	0	0.00
Dec 2018	DAUS	13.65 Put	20,000	47.3066	40.8483	0.0000	0.0000	0	0.00
Dec 2018	DAUS	13.86 Put	7,500	84.0906	72.2113	0.0000	0.0000	0	0.00
Dec 2018	DAUS	15.08 Call	7,500	214.9401	260.6131	0.0000	0.0000	0	0.00
Dec 2018	DAUS	15.69 Call	20,000	102.9526	129.2194	0.0000	0.0000	0	0.00
Dec 2018	DAUS	13.90 Put	35,000	113.4098	98.8967	0.0000	0.0000	0	0.00
Dec 2018	DAUS	14.30 Put	35,000	248.7996	218.5306	0.0000	0.0000	0	0.00
Dec 2018	DAUS	14.90 Put	35,000	580.1256	523.2476	0.0000	0.0000	0	0.00
Dec 2018	DAUS	15.30 Put	35,000	873.6207	802.1321	0.0000	0.0000	0	0.00
Dec 2018	DAUS	13.20 Put	1,000	18.3466	18.8427	0.0000	0.0000	0	0.00
Dec 2018	DAUS	13.30 Put	1,000	25.1368	22.0627	0.0000	0.0000	0	0.00
Dec 2018	DAUS	14.66 Call	1,000	401.4702	467.1089	0.0000	0.0000	0	0.00
Dec 2018	DAUS	14.75 Call	1,000	365.9486	426.2056	0.0000	0.0000	0	0.00
Dec 2018	DAUS	13.00 Put	500	18.8874	18.8234	0.0000	0.0000	0	0.00
Dec 2018	DAUS	13.80 Put	1,000	109.6599	96.5290	0.0000	0.0000	0	0.00
Dec 2018	DAUS	14.22 Call	500	669.5121	752.4533	0.0000	0.0000	0	0.00
Dec 2018	DAUS	14.25 Put	250	252.5924	223.4527	0.0000	0.0000	0	0.00

<u>DATE</u>	<u>CONTRACT</u>		<u>OPEN INT</u>	<u>MTM</u>	<u>PREV MTM</u>	<u>HIGH</u>	<u>LOW</u>	<u>DAILY VOLUME</u>	<u>CUMULATIVE VOLUME</u>
Dec 2018	DAUS	14.96 Put	250	642.8792	584.9965	0.0000	0.0000	0	0.00
Dec 2018	DAUS	16.93 Call	500	48.3596	59.9640	0.0000	0.0000	0	0.00
Dec 2018	DAUS	17.58 Call	500	26.1842	32.8984	0.0000	0.0000	0	0.00
Jan 2019	DAUS	12.66 Put	263	19.2150	18.5414	0.0000	0.0000	0	0.00
Jan 2019	DAUS	14.88 Call	4,000	472.7952	533.2485	0.0000	0.0000	0	0.00
Jan 2019	DAUS	13.00 Put	500	40.1532	37.8363	0.0000	0.0000	0	0.00
Jan 2019	DAUS	14.20 Put	250	293.2210	265.9125	0.0000	0.0000	0	0.00
Jan 2019	DAUS	14.25 Put	250	314.0960	285.2587	0.0000	0.0000	0	0.00
Jan 2019	DAUS	14.38 Call	500	701.0524	779.0516	0.0000	0.0000	0	0.00
Jan 2019	DAUS	15.13 Call	250	393.6675	446.3131	0.0000	0.0000	0	0.00
Jan 2019	DAUS	15.47 Call	250	303.4746	346.5191	0.0000	0.0000	0	0.00
Feb 2019	DAUS	13.00 Put	500	59.3802	54.9103	0.0000	0.0000	0	0.00
Feb 2019	DAUS	14.20 Put	250	341.9922	312.2703	0.0000	0.0000	0	0.00
Feb 2019	DAUS	14.25 Put	250	363.5888	332.4419	0.0000	0.0000	0	0.00
Feb 2019	DAUS	14.52 Call	500	733.2873	806.0895	0.0000	0.0000	0	0.00
Feb 2019	DAUS	15.27 Call	250	447.9081	498.5708	0.0000	0.0000	0	0.00
Feb 2019	DAUS	15.63 Call	250	354.7618	396.6050	0.0000	0.0000	0	0.00
Mar 2019	DAUS	14.00 Put	65,000	302.2371	278.4787	0.0000	0.0000	0	0.00
Mar 2019	DAUS	13.00 Put	500	77.6792	72.1036	0.0000	0.0000	0	0.00
Mar 2019	DAUS	14.20 Put	250	385.5970	353.3156	0.0000	0.0000	0	0.00
Mar 2019	DAUS	14.25 Put	250	407.6565	374.0772	0.0000	0.0000	0	0.00
Mar 2019	DAUS	14.67 Call	500	762.7702	831.0973	0.0000	0.0000	0	0.00
Mar 2019	DAUS	15.43 Call	250	491.9206	540.8827	0.0000	0.0000	0	0.00
Mar 2019	DAUS	15.79 Call	250	401.8096	442.7597	0.0000	0.0000	0	0.00
Apr 2019	DAUS	15.04 Call	4,000	700.6955	760.4298	0.0000	0.0000	0	0.00
Apr 2019	DAUS	13.00 Put	3,000	96.0940	86.6627	0.0000	0.0000	0	0.00
Apr 2019	DAUS	13.49 Call	2,500	1571.9689	1671.0369	0.0000	0.0000	0	0.00
Apr 2019	DAUS	14.20 Put	250	425.2315	393.1107	0.0000	0.0000	0	0.00
Apr 2019	DAUS	14.25 Put	250	447.6047	412.8712	0.0000	0.0000	0	0.00
Apr 2019	DAUS	14.84 Call	500	789.5950	854.4265	0.0000	0.0000	0	0.00
Apr 2019	DAUS	15.61 Call	250	531.7665	579.3088	0.0000	0.0000	0	0.00
Apr 2019	DAUS	15.96 Call	250	447.4432	487.8434	0.0000	0.0000	0	0.00
May 2019	DAUS	13.00 Put	500	111.2348	98.5807	0.0000	0.0000	0	0.00
May 2019	DAUS	14.20 Put	250	459.6787	428.6685	0.0000	0.0000	0	0.00
May 2019	DAUS	14.25 Put	250	482.3852	448.7963	0.0000	0.0000	0	0.00
May 2019	DAUS	15.01 Call	500	815.6787	878.8514	0.0000	0.0000	0	0.00
May 2019	DAUS	15.79 Call	250	569.3400	616.4901	0.0000	0.0000	0	0.00
May 2019	DAUS	16.15 Call	250	485.8560	526.6613	0.0000	0.0000	0	0.00
Jun 2019	DAUS	14.72 Put	20,000	744.5257	698.0024	0.0000	0.0000	0	0.00
Jun 2019	DAUS	17.22 Call	20,000	343.8586	373.9763	0.0000	0.0000	0	0.00
Jun 2019	DAUS	13.00 Put	500	122.1233	107.0352	0.0000	0.0000	0	0.00
Jun 2019	DAUS	14.20 Put	250	489.6283	458.0364	0.0000	0.0000	0	0.00

<u>DATE</u>	<u>CONTRACT</u>		<u>OPEN INT</u>	<u>MTM</u>	<u>PREV MTM</u>	<u>HIGH</u>	<u>LOW</u>	<u>DAILY VOLUME</u>	<u>CUMULATIVE VOLUME</u>
Jun 2019	DAUS	14.25 Put	250	511.0478	478.4279	0.0000	0.0000	0	0.00
Jun 2019	DAUS	15.17 Call	500	836.0622	898.1576	0.0000	0.0000	0	0.00
Jun 2019	DAUS	15.96 Call	250	598.7370	645.6598	0.0000	0.0000	0	0.00
Jun 2019	DAUS	16.32 Call	250	517.9118	559.2171	0.0000	0.0000	0	0.00
Jul 2019	DAUS	13.45 Put	39,250	234.0154	212.6979	0.0000	0.0000	0	0.00
Jul 2019	DAUS	16.44 Call	39,250	505.2521	545.3142	0.0000	0.0000	0	0.00
Jul 2019	DAUS	13.00 Put	500	132.7084	118.2142	0.0000	0.0000	0	0.00
Jul 2019	DAUS	14.20 Put	250	521.3074	489.0806	0.0000	0.0000	0	0.00
Jul 2019	DAUS	14.25 Put	250	542.8549	509.6722	0.0000	0.0000	0	0.00
Jul 2019	DAUS	15.34 Call	500	865.2191	926.5434	0.0000	0.0000	0	0.00
Jul 2019	DAUS	16.14 Call	250	635.2807	682.5723	0.0000	0.0000	0	0.00
Jul 2019	DAUS	16.50 Call	250	556.5806	598.6907	0.0000	0.0000	0	0.00
Aug 2019	DAUS	14.48 Put	3,147	665.2368	623.6922	0.0000	0.0000	0	0.00
Aug 2019	DAUS	16.35 Call	3,147	617.4556	663.0496	0.0000	0.0000	0	0.00
Aug 2019	DAUS	13.00 Put	500	146.6842	131.6186	0.0000	0.0000	0	0.00
Aug 2019	DAUS	14.20 Put	250	548.3107	515.2063	0.0000	0.0000	0	0.00
Aug 2019	DAUS	14.25 Put	250	569.9684	535.9674	0.0000	0.0000	0	0.00
Aug 2019	DAUS	15.52 Call	500	883.4327	944.3260	0.0000	0.0000	0	0.00
Aug 2019	DAUS	16.33 Call	250	661.5068	709.0624	0.0000	0.0000	0	0.00
Aug 2019	DAUS	16.70 Call	250	582.6260	626.0510	0.0000	0.0000	0	0.00
Sep 2019	DAUS	19.00 Call	20,000	309.9629	327.5138	0.0000	0.0000	0	0.00
Sep 2019	DAUS	13.00 Put	500	158.8440	146.5511	0.0000	0.0000	0	0.00
Sep 2019	DAUS	14.20 Put	250	572.4804	539.2387	0.0000	0.0000	0	0.00
Sep 2019	DAUS	14.25 Put	250	594.2632	560.2396	0.0000	0.0000	0	0.00
Sep 2019	DAUS	15.68 Call	500	908.7885	969.5737	0.0000	0.0000	0	0.00
Sep 2019	DAUS	16.50 Call	250	691.8100	739.9539	0.0000	0.0000	0	0.00
Sep 2019	DAUS	16.89 Call	250	609.7252	654.6446	0.0000	0.0000	0	0.00
Oct 2019	DAUS	13.00 Put	500	172.6328	160.0417	0.0000	0.0000	0	0.00
Oct 2019	DAUS	14.20 Put	250	596.2087	562.2711	0.0000	0.0000	0	0.00
Oct 2019	DAUS	14.25 Put	250	618.1132	583.4312	0.0000	0.0000	0	0.00
Oct 2019	DAUS	15.87 Call	500	926.2004	986.6590	0.0000	0.0000	0	0.00
Oct 2019	DAUS	16.70 Call	250	716.0300	764.4841	0.0000	0.0000	0	0.00
Oct 2019	DAUS	17.09 Call	250	635.8067	680.9477	0.0000	0.0000	0	0.00
Nov 2019	DAUS	13.00 Put	500	191.1494	173.5493	0.0000	0.0000	0	0.00
Nov 2019	DAUS	14.20 Put	250	618.6482	583.0482	0.0000	0.0000	0	0.00
Nov 2019	DAUS	14.25 Put	250	640.9030	604.4698	0.0000	0.0000	0	0.00
Nov 2019	DAUS	16.03 Call	500	955.6804	1014.7039	0.0000	0.0000	0	0.00
Nov 2019	DAUS	16.87 Call	250	748.8873	796.7383	0.0000	0.0000	0	0.00
Nov 2019	DAUS	17.26 Call	250	670.4181	714.2872	0.0000	0.0000	0	0.00
Dec 2019	DAUS	13.00 Put	500	208.4079	190.2226	0.0000	0.0000	0	0.00
Dec 2019	DAUS	14.20 Put	250	639.7470	603.3672	0.0000	0.0000	0	0.00
Dec 2019	DAUS	14.25 Put	250	662.2159	624.9966	0.0000	0.0000	0	0.00

DATE	CONTRACT		OPEN INT	MTM	PREV MTM	HIGH	LOW	DAILY VOLUME	CUMULATIVE VOLUME	
Dec 2019	DAUS	16.21	Call	500	985.1816	1042.6115	0.0000	0.0000	0	0.00
Dec 2019	DAUS	17.05	Call	250	783.6246	830.9362	0.0000	0.0000	0	0.00
Dec 2019	DAUS	17.44	Call	250	707.1512	750.2055	0.0000	0.0000	0	0.00
				861,709				0.00	0.00	21 098 416.00
	Total			981,136				4,104.00	60,176,605.00	31 855 483.00 131 765 710 918.20
Future										
Dec 2018	EUUS		Future	40	1.1422	1.1413	0.0000	0.0000	0	0.00
				40				0.00	0.00	744 445.00
	Total			40				0.00	0.00	744 445.00 8 445 126 755.00
Future										
Dec 2018	GBUS		Future	250	1.2838	1.2844	0.0000	0.0000	0	0.00
				250				0.00	0.00	169 671.00
	Total			250				0.00	0.00	169 671.00 2 183 289 974.00
Future										
Dec 2018	ZAAD		Future	33,972	10.3214	10.3995	10.3900	10.3871	165	1,713,915.00
Mar 2019	ZAAD		Future	420	10.4609	10.5398	0.0000	0.0000	0	0.00
Jun 2019	ZAAD		Future	4,929	10.5945	10.6748	0.0000	0.0000	0	0.00
				39,321					165.00	1,713,915.00
	Total			39,321					165.00	1,713,915.00
Future										
Dec 2018	ZACA		Future	500	11.1485	11.2368	11.1770	11.1375	450	5,021,860.00
Mar 2019	ZACA		Future	400	11.3033	11.3930	0.0000	0.0000	0	0.00
				900					450.00	5,021,860.00
	Total			900					450.00	5,021,860.00
Future										
Dec 2018	ZADK		Future	240	2.2381	2.2526	0.0000	0.0000	0	0.00
				240					0.00	0.00
	Total			240					0.00	0.00
Future										
Dec 2018	ZAEU		Future	106,053	16.6956	16.8088	16.7064	16.6997	788	13,165,527.50
Mar 2019	ZAEU		Future	36,313	17.0494	17.1634	0.0000	0.0000	0	0.00
Jun 2019	ZAEU		Future	4,906	17.3762	17.4940	0.0000	0.0000	0	0.00
Sep 2019	ZAEU		Future	8,262	17.7385	17.8620	0.0000	0.0000	0	0.00
				155,534					788.00	13,165,527.50
	Total			155,534					788.00	13,165,527.50
Option										
										15 601 053.00 224 357 902 891.30

DATE	CONTRACT		OPEN INT	MTM	PREV MTM	HIGH	LOW	DAILY VOLUME	CUMULATIVE VOLUME	
Mar 2019	ZAEU	15.60 Put	462	147.8187	135.5540	0.0000	0.0000	0	0.00	
Mar 2019	ZAEU	16.00 Call	650	1297.3768	1391.5193	0.0000	0.0000	0	0.00	
Mar 2019	ZAEU	17.33 Put	462	893.1409	836.9419	0.0000	0.0000	0	0.00	
Mar 2019	ZAEU	19.65 Call	462	169.4903	191.3051	0.0000	0.0000	0	0.00	
			2,036					0.00	0.00	10 794 964.00
		Total	157,570					788.00	13,165,527.50	26 396 017.00 224 357 902 891.30
Future										
Dec 2018	ZAFR	Future	1,666	14.6730	14.8183	14.6813	14.6813	82	1,203,866.60	
Jun 2019	ZAFR	Future	150	15.3033	15.4554	0.0000	0.0000	0	0.00	
			1,816					82.00	1,203,866.60	620 658.00 6 669 112 028.20
		Total	1,816					82.00	1,203,866.60	620 658.00 6 669 112 028.20
Future										
Dec 2018	ZAGB	Future	437,890	18.7650	18.9167	18.8243	18.7150	2,834	53,225,860.00	
Mar 2019	ZAGB	Future	8,145	19.0921	19.2449	0.0000	0.0000	0	0.00	
Jun 2019	ZAGB	Future	5,506	19.3918	19.5486	0.0000	0.0000	0	0.00	
Sep 2019	ZAGB	Future	10,363	19.7205	19.8840	0.0000	0.0000	0	0.00	
			461,904					2,834.00	53,225,860.00	12 837 981.00 218 449 613 488.60
Option										
Dec 2018	ZAGB	19.30 Call	200	267.9143	330.6163	0.0000	0.0000	0	0.00	
Mar 2019	ZAGB	18.00 Put	500	354.7951	323.4238	0.0000	0.0000	0	0.00	
Mar 2019	ZAGB	19.19 Put	1,000	871.6629	801.5304	0.0000	0.0000	0	0.00	
Mar 2019	ZAGB	20.00 Call	500	489.2346	547.2127	0.0000	0.0000	0	0.00	
Mar 2019	ZAGB	20.18 Call	1,500	441.4097	493.6917	0.0000	0.0000	0	0.00	
Mar 2019	ZAGB	21.44 Call	500	213.2312	240.8175	0.0000	0.0000	0	0.00	
			4,200					0.00	0.00	1 779 113.00 0.00
		Total	466,104					2,834.00	53,225,860.00	14 617 094.00 218 449 613 488.60
Future										
Dec 2018	ZAJY	Future	6,905	0.1304	0.1326	0.0000	0.0000	0	0.00	
			6,905					0.00	0.00	1 021 902.00 11 470 576 312.50
		Total	6,905					0.00	0.00	1 021 902.00 11 470 576 312.50
Future										
Jun 2019	ZAKS	Future	2,166	0.1428	0.1424	0.0000	0.0000	0	0.00	
			2,166					0.00	0.00	38 066.00 515 662 000.00
		Total	2,166					0.00	0.00	38 066.00 515 662 000.00
Future										
Dec 2018	ZATR	Future	6,000	2.5750	2.5516	0.0000	0.0000	0	0.00	

DATE	CONTRACT		OPEN INT	MTM	PREV MTM	HIGH	LOW	DAILY VOLUME	CUMULATIVE VOLUME		
			6,000					0.00	0.00		
		Total	6,000					0.00	0.00		
Future											
	Dec 2018	ZAUM	Future	307	14.6167	14.7276	14.6530	14.5571	30	43,841,200.00	
	Mar 2019	ZAUM	Future	15	14.7936	14.9060	14.8179	14.7349	20	29,541,750.00	
				322					50.00	73,382,950.00	
		Total	322					50.00	73,382,950.00	153 440.00	177 471 432 810.00
Future											
	Dec 2018	ZAUS	Future	824,436	14.6167	14.7276	14.6820	14.5272	38,838	567,204,660.70	
	Mar 2019	ZAUS	Future	52,824	14.7936	14.9060	14.8300	14.7278	1,670	24,646,587.70	
	Jun 2019	ZAUS	Future	19,376	14.9564	15.0728	0.0000	0.0000	0	0.00	
	Sep 2019	ZAUS	Future	18,444	15.1326	15.2550	0.0000	0.0000	0	0.00	
	Dec 2019	ZAUS	Future	2,200	15.3076	15.4340	0.0000	0.0000	0	0.00	
	Mar 2020	ZAUS	Future	3,966	15.5040	15.6317	0.0000	0.0000	0	0.00	
				921,246					40,508.00	591,851,248.40	
										188 535 413.00	2 260 285 655 278.60
Option											
	Dec 2018	ZAUS	11.64 Put	2,764	1.2668	1.2075	0.0000	0.0000	392	0.00	
	Dec 2018	ZAUS	11.75 Put	228,616	1.5518	1.5780	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	11.90 Put	11,300	1.8544	2.0402	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	12.00 Put	174,530	2.0921	2.3415	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	12.02 Put	5,500	2.1436	2.4072	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	12.10 Put	8,580	2.3642	2.6903	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	12.20 Put	7,300	2.6767	3.0950	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	12.25 Put	3,300	2.8501	3.3213	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	12.38 Put	39,589	3.3642	3.9967	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	12.50 Call	228,616	2120.6343	2232.3526	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	12.50 Put	26,400	3.9343	4.7526	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	12.63 Put	39,589	4.6816	5.7496	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	12.68 Put	10,000	5.0118	6.1916	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	12.75 Put	1,000	5.5207	6.8736	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	12.95 Put	500	7.3427	9.3166	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	13.00 Call	6,000	1624.6030	1737.6663	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	13.00 Put	177,520	7.9030	10.0663	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	13.05 Put	1,500	8.5146	10.8826	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	13.10 Put	11,300	9.1823	11.7717	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	13.20 Call	7,100	1428.7589	1541.3998	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	13.22 Put	5,500	13.0198	14.2496	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	13.25 Call	10,000	1381.2764	1492.5554	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	13.25 Put	17,800	14.5764	14.9554	0.0000	0.0000	0	0.00	
	Dec 2018	ZAUS	13.32 Put	13,650	18.7978	17.3369	0.0000	0.0000	0	0.00	

<u>DATE</u>	<u>CONTRACT</u>		<u>OPEN INT</u>	<u>MTM</u>	<u>PREV MTM</u>	<u>HIGH</u>	<u>LOW</u>	<u>DAILY VOLUME</u>	<u>CUMULATIVE VOLUME</u>
Dec 2018	ZAUS	13.33 Put	135,000	19.4733	17.9207	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	13.45 Call	500	1195.8807	1303.8496	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	13.45 Put	4,080	29.1807	26.2496	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	13.50 Call	228,616	1150.8951	1258.1226	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	13.50 Put	29,800	34.1951	30.5226	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	13.60 Put	66,000	46.1883	40.7045	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	13.68 Put	13,150	57.8752	50.6029	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	13.70 Put	7,300	61.1120	53.3435	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	13.75 Put	700	69.7841	60.6874	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	13.79 Put	10,000	77.3425	67.0908	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	13.80 Call	3,068	896.0196	996.3679	0.0000	0.0000	96	0.00
Dec 2018	ZAUS	13.80 Put	500	79.3196	68.7679	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	13.90 Put	35,000	101.4248	87.2931	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	13.95 Call	39,589	780.7918	875.4109	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.00 Call	20,200	744.4883	836.8111	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.00 Put	58,250	127.7883	109.2111	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.10 Put	1,867	158.3688	136.3632	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.12 Put	4,372	165.0048	142.2863	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.13 Call	20,000	655.0895	742.9092	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.15 Put	236,970	175.2892	151.4820	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.16 Put	36,200	178.8043	154.6305	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.20 Call	51,000	610.0112	695.2475	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.20 Put	13,650	193.3112	167.6475	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.24 Put	24,570	208.5294	181.3440	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.25 Call	51,000	579.1463	662.4763	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.30 Put	35,000	232.6945	203.1742	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.33 Call	100	532.0802	612.2702	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.33 Put	31,047	245.3802	214.6702	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.35 Call	500	520.7594	600.1505	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.35 Put	4,428	254.0594	222.5505	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.39 Put	1,000	271.9508	238.8269	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.40 Call	100,000	493.2333	570.6033	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.44 Call	11,300	472.0083	547.7416	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.50 Call	1,200	441.4833	514.7372	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.50 Put	15,500	324.7833	287.1372	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.51 Put	3,388	329.8486	291.7873	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.60 Call	84,900	394.0474	463.1250	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.60 Put	3,500	377.3474	335.5250	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.61 Call	1,500	389.7477	458.1958	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.62 Call	5,500	385.4874	453.3060	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.67 Put	3,000	418.1100	371.8789	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.70 Call	70,000	352.8875	415.6693	0.0000	0.0000	0	0.00

<u>DATE</u>	<u>CONTRACT</u>		<u>OPEN INT</u>	<u>MTM</u>	<u>PREV MTM</u>	<u>HIGH</u>	<u>LOW</u>	<u>DAILY VOLUME</u>	<u>CUMULATIVE VOLUME</u>
Dec 2018	ZAUS	14.74 Put	13,150	460.8430	410.2214	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.75 Call	127,100	333.8041	393.4573	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.75 Put	700	467.1041	415.8573	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.80 Call	400	315.6746	373.1328	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.80 Put	135,000	498.9746	445.5328	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.84 Call	1,000	301.8347	357.5625	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.85 Call	50,000	298.4632	353.7648	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	14.90 Put	35,000	565.4394	507.7211	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.00 Call	101,333	252.0082	301.0921	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.00 Put	25,700	635.3082	573.4921	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.01 Call	10,000	249.1723	297.8572	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.09 Call	500	227.5735	273.1371	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.10 Call	500	225.0066	270.1901	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.15 Call	27,030	212.5916	255.9048	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.20 Call	4,050	200.8592	242.3576	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.20 Put	50	784.1592	714.7576	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.25 Put	500	823.0751	751.9150	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.30 Put	35,000	862.6059	789.7462	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.37 Call	4,372	165.5153	201.3836	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.46 Call	1,867	148.9960	182.5830	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.48 Call	29,600	145.5549	178.6531	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.50 Call	5,000	142.1921	174.8043	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.50 Put	600	1025.4921	947.2043	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.51 Call	24,570	140.5416	172.8502	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.59 Call	31,047	128.0083	157.9753	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.60 Call	500	126.5244	156.2080	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.61 Call	4,428	125.0565	154.4604	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.70 Call	7,500	112.6084	139.5862	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.73 Call	135,000	108.7472	134.9562	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.84 Put	2,000	1319.0218	1231.6711	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.85 Call	20,300	94.6217	117.9408	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	15.91 Call	121,970	88.2882	110.2715	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	16.00 Call	5,050	79.6100	99.7206	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	16.11 Call	38,250	69.7315	88.2311	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	16.14 Call	10,000	67.1557	85.3449	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	16.20 Call	2,000	62.2830	79.8664	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	16.24 Call	750	59.2318	76.4201	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	16.56 Call	13,650	39.6463	51.9168	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	16.80 Call	13,150	29.3866	38.8219	0.0000	0.0000	0	0.00
Dec 2018	ZAUS	17.00 Call	3,700	22.9428	30.5013	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	10.33 Put	1,000	2.8421	2.0778	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	11.74 Put	1,000	9.1488	8.7914	0.0000	0.0000	0	0.00

<u>DATE</u>	<u>CONTRACT</u>		<u>OPEN INT</u>	<u>MTM</u>	<u>PREV MTM</u>	<u>HIGH</u>	<u>LOW</u>	<u>DAILY VOLUME</u>	<u>CUMULATIVE VOLUME</u>
Mar 2019	ZAUS	12.47 Put	721	30.6345	28.5694	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	12.51 Put	720	32.7418	30.5519	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	12.90 Put	16,000	60.5870	56.7752	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	12.92 Put	139,342	62.4299	58.5111	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.00 Put	14,028	70.2746	65.9056	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.05 Put	1,155	75.5772	70.9049	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.12 Put	138,000	83.5510	78.4239	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.15 Put	10,125	87.1719	81.8381	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.25 Put	224,707	100.1778	94.1039	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.33 Put	135,043	112.6971	104.9467	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.36 Put	134,750	118.3198	109.2636	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.40 Put	900	126.1262	115.2498	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.46 Put	20,000	138.5058	126.6215	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.50 Put	50	147.2176	134.6308	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.55 Put	10,000	158.6370	145.1397	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.60 Put	4,000	170.6511	156.2077	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.68 Put	14,200	191.1450	175.1158	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.70 Put	2,500	196.5158	180.0767	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.72 Put	10,000	201.9871	185.1327	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.75 Put	17,981	210.3833	192.8989	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.79 Put	262,812	221.9375	203.5887	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.86 Put	721	243.1428	223.2415	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	13.90 Put	720	255.8319	235.0155	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.00 Put	16,000	289.3981	266.2186	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.04 Put	7,100	303.5652	279.4099	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.20 Put	2,000	368.6686	337.6512	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.28 Put	7,028	404.0680	370.8599	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.30 Call	250	906.7963	985.4388	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.35 Put	139,342	436.5062	401.3706	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.42 Put	900	470.2971	433.2170	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.44 Put	7,000	480.1981	442.5597	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.45 Put	1,000	485.1873	447.2715	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.48 Call	1,000	813.9196	887.5675	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.50 Call	224,707	804.1390	877.2317	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.50 Put	10,050	510.5390	471.2317	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.53 Put	108	526.0707	485.9270	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.56 Put	138,000	541.8357	500.8632	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.65 Put	10,000	590.5383	547.0677	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.74 Put	24,326	641.2982	595.3420	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.81 Put	135,043	682.2048	634.2882	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.82 Put	4,145	688.1913	639.9493	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.83 Put	10,010	694.2016	645.6345	0.0000	0.0000	0	0.00

<u>DATE</u>	<u>CONTRACT</u>		<u>OPEN INT</u>	<u>MTM</u>	<u>PREV MTM</u>	<u>HIGH</u>	<u>LOW</u>	<u>DAILY VOLUME</u>	<u>CUMULATIVE VOLUME</u>
Mar 2019	ZAUS	14.84 Put	134,750	700.2356	651.3439	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	14.99 Call	100	597.1305	656.2771	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	15.04 Put	77,255	825.7491	771.1734	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	15.10 Put	1,000	865.1225	808.9823	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	15.12 Put	99,824	878.4194	821.7608	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	15.13 Put	7,100	885.0973	828.1785	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	15.17 Call	720	535.6140	590.0766	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	15.19 Put	41,300	925.5941	867.1481	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	15.20 Put	2,500	932.4142	873.7169	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	15.32 Put	262,812	1015.7834	954.1172	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	15.45 Call	20,000	452.7300	500.3726	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	15.46 Call	108	450.0346	497.4463	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	15.50 Call	224,757	439.4283	485.9174	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	15.52 Call	1	434.2251	480.2614	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	15.54 Call	721	429.0887	474.6719	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	15.66 Call	139,342	399.7468	442.5895	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	15.81 Call	10	366.1680	405.8912	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	15.83 Call	135,043	361.9334	401.2547	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	15.89 Call	4,145	349.5613	387.7009	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	15.98 Call	900	331.8953	368.3172	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	16.00 Call	10,000	328.1081	364.1605	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	16.13 Call	138,000	304.6792	338.3928	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	16.30 Call	10,000	276.9146	307.7857	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	16.38 Call	134,750	264.0027	294.4974	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	16.58 Call	10,000	234.4972	262.1440	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	16.60 Call	50	231.7514	259.1065	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	16.96 Call	12,600	188.0120	210.5670	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	16.97 Call	63,500	186.9394	209.3725	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	17.02 Call	262,812	181.6705	203.5082	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	17.08 Call	7,028	175.5719	196.7121	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	17.09 Call	106,824	174.5777	195.6057	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	17.10 Call	2,500	173.5899	194.5038	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	17.23 Call	41,300	161.3221	180.8201	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	17.30 Call	10,125	155.1333	173.9070	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	17.50 Call	16,000	138.9169	155.7666	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	18.00 Call	14,200	110.1206	120.8440	0.0000	0.0000	0	0.00
Mar 2019	ZAUS	18.40 Call	7,100	95.3653	104.1400	0.0000	0.0000	0	0.00
Jun 2019	ZAUS	10.69 Put	1,000	7.2633	7.3191	0.0000	0.0000	0	0.00
Jun 2019	ZAUS	12.28 Put	1,000	31.8677	25.5997	0.0000	0.0000	0	0.00
Jun 2019	ZAUS	12.75 Put	1,000	78.8743	67.9661	0.0000	0.0000	0	0.00
Jun 2019	ZAUS	12.98 Put	911	114.6379	101.2212	0.0000	0.0000	0	0.00
Jun 2019	ZAUS	13.00 Put	8,203	118.2061	104.5674	0.0000	0.0000	0	0.00

<u>DATE</u>	<u>CONTRACT</u>		<u>OPEN INT</u>	<u>MTM</u>	<u>PREV MTM</u>	<u>HIGH</u>	<u>LOW</u>	<u>DAILY VOLUME</u>	<u>CUMULATIVE VOLUME</u>		
Jun 2019	ZAUS	13.24 Put	30,000	167.1384	150.8346	0.0000	0.0000	0	0.00		
Jun 2019	ZAUS	13.83 Put	25,000	333.8418	310.1948	0.0000	0.0000	0	0.00		
Jun 2019	ZAUS	13.88 Put	5,035	351.1495	326.5086	0.0000	0.0000	0	0.00		
Jun 2019	ZAUS	13.98 Call	1,000	1363.7824	1453.5194	0.0000	0.0000	0	0.00		
Jun 2019	ZAUS	14.42 Call	30	1115.6880	1192.8394	0.0000	0.0000	0	0.00		
Jun 2019	ZAUS	14.58 Call	1,000	1038.4252	1111.9249	0.0000	0.0000	0	0.00		
Jun 2019	ZAUS	14.63 Put	8,203	688.9941	644.9658	0.0000	0.0000	0	0.00		
Jun 2019	ZAUS	14.82 Call	30,000	932.5408	1000.6535	0.0000	0.0000	0	0.00		
Jun 2019	ZAUS	15.10 Call	1,000	822.4790	884.9685	0.0000	0.0000	0	0.00		
Jun 2019	ZAUS	15.55 Call	25,000	673.0088	726.3941	0.0000	0.0000	0	0.00		
Jun 2019	ZAUS	15.62 Call	5,035	652.5817	704.6362	0.0000	0.0000	0	0.00		
Jun 2019	ZAUS	15.80 Call	1,000	603.5186	651.9532	0.0000	0.0000	0	0.00		
Jun 2019	ZAUS	15.92 Call	911	573.3526	619.6398	0.0000	0.0000	0	0.00		
Jun 2019	ZAUS	16.00 Call	20	554.2365	599.1291	0.0000	0.0000	0	0.00		
Jun 2019	ZAUS	17.96 Call	8,203	247.9173	269.9866	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	10.75 Put	1,000	14.0094	13.4362	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	12.50 Put	1,000	63.1572	57.6749	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	13.91 Put	81,930	444.4794	415.8549	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	13.97 Put	800	467.4440	437.7860	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	14.09 Put	33,715	515.4012	483.6638	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	14.14 Put	141,127	536.1732	503.5680	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	14.21 Put	2,700	566.0417	532.2071	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	14.33 Put	33,151	619.3493	583.3962	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	14.72 Put	1,200	820.2499	773.9261	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	15.38 Put	5,000	1220.5401	1162.7614	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	15.55 Call	30,000	915.6864	977.3101	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	15.56 Put	2,571	1339.8303	1278.8813	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	15.87 Call	1,000	817.8472	874.1032	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	17.23 Call	800	518.8439	558.0208	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	17.64 Call	5,000	455.1583	489.9812	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	17.85 Call	2,700	426.4462	459.2374	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	17.93 Call	2,571	416.1358	448.1897	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	18.29 Call	81,930	375.7984	402.5976	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	18.47 Call	1,200	360.8798	386.1964	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	18.63 Call	33,715	348.5438	372.8319	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	18.67 Call	141,127	345.5880	369.6272	0.0000	0.0000	0	0.00		
Sep 2019	ZAUS	19.32 Call	33,151	303.8625	324.3345	0.0000	0.0000	0	0.00		
Dec 2019	ZAUS	11.89 Put	1,000	46.0774	45.9035	0.0000	0.0000	0	0.00		
Dec 2019	ZAUS	13.66 Put	1,000	410.8646	378.5710	0.0000	0.0000	0	0.00		
Dec 2019	ZAUS	17.38 Call	1,000	679.2805	722.1417	0.0000	0.0000	0	0.00		
Dec 2019	ZAUS	20.00 Call	2,000	398.1968	423.7314	0.0000	0.0000	0	0.00		
			<u>8,237,116</u>					<u>488.00</u>	<u>0.00</u>	<u>60 814 121.00</u>	<u>0.00</u>

<u>DATE</u>	<u>CONTRACT</u>	<u>OPEN INT</u>	<u>MTM</u>	<u>PREV MTM</u>	<u>HIGH</u>	<u>LOW</u>	<u>DAILY VOLUME</u>	<u>CUMULATIVE VOLUME</u>		
		Total	9,158,362				40,996.00	591,851,248.40	249 349 534.00	2 260 285 655 278.60
		Grand Total	10,914,782				49,469.00	799 741 832.50	340,630,532	3,134,346,880,546.23