



Company:	Baker Hughes, a GE Company	Long:	104° 45' 28.4544" W	GT:	9.800 (m/s2)
Customer/Operator:	Enerplus Resources	Lat:	40° 36' 46.4508" N	BT:	52218 (nT)
Date Range:	1/18/2020 - 1/22/2020	Ref North:	True	DIP:	66.94 (deg)
Rig Name:	Cyclone 37	Mag Declination:	7.88 (deg) E	Nominal Mag Ref:	IFR1
Rig Elv/Dat:	5020.00 (ft) / MSL	True to Grid Conv:	NA	Non-Mag Spacing:	Short
Well:	Lloydminster 7-66-3-10-2N	TAC:	7.88 (deg)	MagCorr:	OFF
Wellbore:	Lloydminster 7-66-3-10-2N	Ver.Sec.Az:	192.87 (deg)		

Scribeline
Run1: NA

Tie/ Proj	Survey Date/ Time	Measured Depth (ft)	Inclination (deg)	Azimuth (deg)	Temperature (degF)	True Vertical Depth (ft)	True Vertical Depth Subsea (ft)	Northing (ft)	Easting (ft)	DLS (deg/100ft)	Vertical Section (ft)	Tool Type	Closure Distance (ft)	Course Length (ft)	Build Rate (deg/100ft)	Turn Rate (deg/100ft)
	Jan-18- 2020 20:09:17	0.00	1.49	128.01												
	Jan-18- 2020 20:09:17	138.30	1.49	128.01		138.25	-4881.75	-2.21	2.83	0.00	1.53		3.60	138.30	0.00	0.00
	Jan-18- 2020 20:09:17	225.30	0.31	156.32		225.24	-4794.76	-3.13	3.82	1.41	2.20		4.94	87.00	-1.36	32.54
	Jan-18- 2020 20:09:17	312.30	0.31	182.34		312.24	-4707.76	-3.58	3.90	0.16	2.62		5.30	87.00	0.00	29.91
	Jan-18- 2020 20:09:17	399.30	0.13	135.93		399.24	-4620.76	-3.88	3.96	0.28	2.90		5.55	87.00	-0.21	-53.34
	Jan-18- 2020 20:09:17	487.30	0.53	149.82		487.24	-4532.76	-4.31	4.24	0.46	3.25		6.04	88.00	0.45	15.78
	Jan-18- 2020 20:09:17	574.30	0.44	150.34		574.23	-4445.77	-4.95	4.60	0.10	3.80		6.76	87.00	-0.10	0.60
	Jan-18- 2020 20:09:17	661.30	0.62	319.01		661.23	-4358.77	-4.88	4.46	1.21	3.76		6.61	87.00	0.21	193.87
	Jan-18- 2020 20:09:17	748.30	0.88	304.50		748.23	-4271.77	-4.15	3.60	0.37	3.24		5.49	87.00	0.30	-16.68
	Jan-18- 2020 20:09:17	836.30	0.97	323.31		836.21	-4183.79	-3.17	2.60	0.36	2.51		4.10	88.00	0.10	21.37
	Jan-18- 2020 20:09:17	923.30	0.35	342.82		923.21	-4096.79	-2.32	2.08	0.75	1.80		3.12	87.00	-0.71	22.43
	Jan-18- 2020 20:09:17	1010.30	0.26	318.52		1010.21	-4009.79	-1.92	1.87	0.18	1.45		2.68	87.00	-0.10	-27.93
	Jan-18- 2020 20:09:17	1097.30	0.18	325.07		1097.21	-3922.79	-1.66	1.66	0.10	1.25		2.35	87.00	-0.09	7.53
	Jan-18- 2020 20:09:17	1185.30	0.40	65.44		1185.21	-3834.79	-1.42	1.86	0.53	0.97		2.34	88.00	0.25	114.06
	Jan-18- 2020 20:09:17	1272.30	0.66	95.24		1272.20	-3747.80	-1.34	2.64	0.43	0.72		2.96	87.00	0.30	34.25
	Jan-18- 2020 20:09:17	1359.30	0.57	67.11		1359.20	-3660.80	-1.22	3.54	0.36	0.40		3.74	87.00	-0.10	-32.33
	Jan-18- 2020 20:09:17	1447.30	0.09	229.88		1447.20	-3572.80	-1.09	3.89	0.75	0.20		4.04	88.00	-0.55	184.97
	Jan-18-	1534.30	0.26	182.42		1534.20	-	-1.33	3.83	0.24	0.45		4.05	87.00	0.20	-54.55



2020 20:09:17						3485.80										
Jan-18- 2020 20:09:17	1607.30	0.70	183.92		1607.19	- 3412.81	-1.94	3.79	0.60	1.05		4.26	73.00	0.60	2.05	
Jan-19- 2020 05:18:38	1687.00	0.62	219.15	77.03	1686.89	- 3333.11	-2.76	3.48	0.51	1.92	ATC_MWD	4.45	79.70	-0.10	44.20	
Jan-19- 2020 05:40:18	1781.00	0.11	62.77	79.73	1780.89	- 3239.11	-3.12	3.24	0.77	2.31	ATC_MWD	4.50	94.00	-0.54	-166.36	
Jan-19- 2020 06:00:11	1875.00	0.33	114.73	82.44	1874.89	- 3145.11	-3.19	3.57	0.29	2.31	ATC_MWD	4.78	94.00	0.23	55.28	
Jan-19- 2020 06:19:06	1970.00	0.22	152.87	82.44	1969.88	- 3050.12	-3.46	3.90	0.22	2.51	ATC_MWD	5.22	95.00	-0.12	40.15	
Jan-19- 2020 06:52:32	2064.00	0.98	258.87	90.55	2063.88	- 2956.12	-3.78	3.19	1.13	2.97	ATC_MWD	4.95	94.00	0.81	112.77	
Jan-19- 2020 07:20:07	2158.00	3.24	261.86	95.95	2157.81	- 2862.19	-4.31	-0.23	2.41	4.25	ATC_MWD	4.32	94.00	2.40	3.18	
Jan-19- 2020 07:44:16	2252.00	5.77	268.52	98.66	2251.51	- 2768.49	-4.81	-7.58	2.74	6.38	ATC_MWD	8.98	94.00	2.69	7.09	
Jan-19- 2020 08:15:04	2347.00	8.46	271.59	98.66	2345.77	- 2674.23	-4.74	-19.34	2.86	8.93	ATC_MWD	19.91	95.00	2.83	3.23	
Jan-19- 2020 08:43:56	2441.00	10.72	269.65	101.36	2438.45	- 2581.55	-4.60	-35.00	2.43	12.28	ATC_MWD	35.30	94.00	2.40	-2.06	
Jan-19- 2020 09:09:22	2536.00	14.23	266.62	101.36	2531.20	- 2488.80	-5.34	-55.50	3.76	17.57	ATC_MWD	55.75	95.00	3.69	-3.19	
Jan-19- 2020 09:32:24	2630.00	18.09	262.70	106.77	2621.47	- 2398.53	-7.88	-81.51	4.27	25.84	ATC_MWD	81.89	94.00	4.11	-4.17	
Jan-19- 2020 10:02:55	2725.00	18.96	255.12	109.47	2711.56	- 2308.44	-13.72	-111.06	2.69	38.11	ATC_MWD	111.91	95.00	0.92	-7.98	
Jan-19- 2020 10:23:14	2819.00	17.99	256.90	112.17	2800.71	- 2219.29	-20.93	-139.96	1.19	51.58	ATC_MWD	141.52	94.00	-1.03	1.89	
Jan-19- 2020 10:41:35	2913.00	18.25	256.71	112.17	2890.05	- 2129.95	-27.60	-168.43	0.28	64.42	ATC_MWD	170.67	94.00	0.28	-0.20	
Jan-19- 2020 11:05:01	3007.00	18.95	254.08	114.87	2979.14	- 2040.86	-35.17	-197.43	1.16	78.26	ATC_MWD	200.54	94.00	0.74	-2.80	
Jan-19- 2020 11:22:13	3101.00	18.20	252.69	117.58	3068.25	- 1951.75	-43.73	-226.12	0.93	93.00	ATC_MWD	230.31	94.00	-0.80	-1.48	
Jan-19- 2020 11:47:38	3196.00	18.98	249.82	117.58	3158.29	- 1861.71	-53.47	-254.79	1.27	108.88	ATC_MWD	260.34	95.00	0.82	-3.02	
Jan-19- 2020 12:11:00	3290.00	19.29	251.00	120.28	3247.10	- 1772.90	-63.80	-283.82	0.53	125.41	ATC_MWD	290.90	94.00	0.33	1.26	
Jan-19- 2020 12:31:44	3385.00	22.45	251.88	122.98	3335.85	- 1684.15	-74.55	-315.90	3.34	143.04	ATC_MWD	324.58	95.00	3.33	0.93	
Jan-19- 2020 12:51:47	3479.00	25.50	249.64	125.69	3421.74	- 1598.26	-87.18	-351.94	3.39	163.38	ATC_MWD	362.57	94.00	3.24	-2.38	
Jan-19- 2020 13:11:53	3573.00	25.33	252.64	125.69	3506.64	- 1513.36	-100.22	-390.10	1.38	184.59	ATC_MWD	402.77	94.00	-0.18	3.19	
Jan-19- 2020 13:28:00	3667.00	25.41	256.20	128.39	3591.58	- 1428.42	-111.03	-428.88	1.62	203.77	ATC_MWD	443.02	94.00	0.09	3.79	
Jan-19- 2020 13:47:37	3760.00	25.62	254.51	128.39	3675.51	- 1344.49	-121.16	-467.63	0.81	222.28	ATC_MWD	483.07	93.00	0.23	-1.82	



Jan-19-2020 14:01:14	3854.00	25.14	257.43	131.09	3760.44	-1259.56	-130.93	-506.71	1.43	240.51	ATC_MWD	523.35	94.00	-0.51	3.11
Jan-19-2020 14:16:14	3948.00	26.36	254.42	133.80	3845.11	-1174.89	-140.88	-546.30	1.90	259.03	ATC_MWD	564.18	94.00	1.30	-3.20
Jan-19-2020 14:31:18	4042.00	25.30	250.93	133.80	3929.72	-1090.28	-153.05	-585.39	1.97	279.60	ATC_MWD	605.07	94.00	-1.13	-3.71
Jan-19-2020 14:46:15	4136.00	26.87	248.00	136.50	4014.15	-1005.85	-167.57	-624.07	2.16	302.37	ATC_MWD	646.18	94.00	1.67	-3.12
Jan-19-2020 15:10:01	4230.00	26.44	251.84	139.20	4098.17	-921.83	-182.05	-663.66	1.89	325.30	ATC_MWD	688.18	94.00	-0.46	4.09
Jan-19-2020 15:23:55	4325.00	25.84	245.23	139.20	4183.47	-836.53	-197.32	-702.56	3.13	348.86	ATC_MWD	729.75	95.00	-0.63	-6.96
Jan-19-2020 15:38:09	4419.00	27.00	250.63	139.20	4267.66	-752.34	-212.99	-741.30	2.84	372.75	ATC_MWD	771.29	94.00	1.23	5.74
Jan-19-2020 15:54:43	4514.00	25.63	250.82	141.91	4352.81	-667.19	-226.89	-781.05	1.44	395.16	ATC_MWD	813.34	95.00	-1.44	0.20
Jan-19-2020 16:12:44	4608.00	25.70	250.05	141.91	4437.54	-582.46	-240.52	-819.41	0.36	417.00	ATC_MWD	853.98	94.00	0.07	-0.82
Jan-19-2020 16:28:03	4703.00	25.78	251.24	90.55	4523.11	-496.89	-254.20	-858.34	0.55	439.00	ATC_MWD	895.18	95.00	0.08	1.25
Jan-19-2020 16:43:09	4797.00	25.12	251.46	147.31	4607.99	-412.01	-267.11	-896.61	0.71	460.11	ATC_MWD	935.55	94.00	-0.70	0.23
Jan-19-2020 17:00:39	4892.00	25.11	250.34	147.31	4694.01	-325.99	-280.31	-934.71	0.50	481.46	ATC_MWD	975.83	95.00	-0.01	-1.18
Jan-19-2020 17:16:47	4986.00	26.79	250.58	150.02	4778.53	-241.47	-294.06	-973.47	1.79	503.51	ATC_MWD	1016.92	94.00	1.79	0.26
Jan-19-2020 17:38:02	5080.00	26.27	250.45	150.02	4862.63	-157.37	-308.07	-1013.05	0.56	525.97	ATC_MWD	1058.86	94.00	-0.55	-0.14
Jan-19-2020 18:01:00	5175.00	25.80	255.77	150.02	4948.00	-72.00	-320.19	-1052.91	2.51	546.67	ATC_MWD	1100.52	95.00	-0.49	5.60
Jan-19-2020 18:18:41	5267.00	25.21	253.12	152.72	5031.04	11.04	-330.80	-1091.07	1.40	565.51	ATC_MWD	1140.11	92.00	-0.64	-2.88
Jan-19-2020 18:38:58	5361.00	25.79	253.17	152.72	5115.88	95.88	-342.53	-1129.80	0.62	585.58	ATC_MWD	1180.58	94.00	0.62	0.05
Jan-19-2020 18:57:58	5456.00	26.15	252.49	155.42	5201.29	181.29	-354.81	-1169.54	0.49	606.40	ATC_MWD	1222.18	95.00	0.38	-0.72
Jan-19-2020 19:17:28	5550.00	26.15	252.94	158.12	5285.67	265.67	-367.12	-1209.10	0.21	627.21	ATC_MWD	1263.60	94.00	0.00	0.48
Jan-19-2020 19:35:34	5644.00	25.85	253.65	158.12	5370.16	350.16	-378.97	-1248.57	0.46	647.55	ATC_MWD	1304.81	94.00	-0.32	0.76
Jan-19-2020 19:59:16	5738.00	24.48	254.81	158.12	5455.23	435.23	-389.84	-1287.03	1.55	666.72	ATC_MWD	1344.77	94.00	-1.46	1.23
Jan-19-2020 20:19:53	5833.00	24.38	254.52	160.83	5541.73	521.73	-400.23	-1324.92	0.16	685.29	ATC_MWD	1384.05	95.00	-0.11	-0.31
Jan-19-2020 20:39:02	5927.00	24.33	255.99	160.83	5627.36	607.36	-410.10	-1362.40	0.65	703.25	ATC_MWD	1422.79	94.00	-0.05	1.56
Jan-19-2020 20:56:46	6021.00	24.45	258.67	163.53	5712.98	692.98	-418.61	-1400.27	1.18	719.98	ATC_MWD	1461.50	94.00	0.13	2.85
Jan-19-2020	6115.00	25.93	260.48	163.53	5798.04	778.04	-425.83	-1439.61	1.77	735.79	ATC_MWD	1501.27	94.00	1.57	1.93



	21:14:41															
	Jan-19-2020 21:31:22	6210.00	25.36	255.95	166.23	5883.69	863.69	-434.20	-1479.84	2.15	752.91	ATC_MWD	1542.22	95.00	-0.60	-4.77
	Jan-19-2020 21:50:04	6304.00	25.42	257.95	166.23	5968.61	948.61	-443.30	-1519.10	0.91	770.53	ATC_MWD	1582.46	94.00	0.06	2.13
	Jan-19-2020 22:14:20	6399.00	25.52	254.31	168.94	6054.38	1034.38	-453.09	-1558.74	1.65	788.90	ATC_MWD	1623.26	95.00	0.11	-3.83
	Jan-19-2020 22:43:41	6493.00	24.04	255.93	171.64	6139.72	1119.72	-463.22	-1596.81	1.73	807.26	ATC_MWD	1662.64	94.00	-1.57	1.72
	Jan-19-2020 23:24:39	6681.00	25.60	258.27	393.30	6310.36	1290.36	-480.79	-1673.73	0.98	841.52	ATC_MWD	1741.41	188.00	0.83	1.24
	Jan-19-2020 23:45:28	6775.00	25.84	260.22	177.05	6395.04	1375.04	-488.40	-1713.80	0.94	857.86	ATC_MWD	1782.03	94.00	0.26	2.07
	Jan-20-2020 00:07:17	6870.00	25.71	256.68	177.05	6480.60	1460.60	-496.67	-1754.26	1.63	874.93	ATC_MWD	1823.21	95.00	-0.14	-3.73
	Jan-20-2020 00:35:00	6964.00	26.06	252.81	177.05	6565.17	1545.17	-507.47	-1793.83	1.84	894.27	ATC_MWD	1864.22	94.00	0.37	-4.12
	Jan-20-2020 00:58:48	7058.00	25.63	252.56	177.05	6649.77	1629.77	-519.66	-1832.95	0.47	914.88	ATC_MWD	1905.19	94.00	-0.46	-0.27
	Jan-20-2020 01:27:15	7153.00	24.34	253.03	177.05	6735.88	1715.88	-531.53	-1871.28	1.37	934.99	ATC_MWD	1945.30	95.00	-1.36	0.49
	Jan-20-2020 01:54:02	7247.00	24.32	252.44	179.75	6821.53	1801.53	-543.03	-1908.26	0.26	954.43	ATC_MWD	1984.02	94.00	-0.02	-0.63
	Jan-20-2020 02:17:42	7342.00	23.88	258.18	179.75	6908.26	1888.26	-552.87	-1945.73	2.51	972.37	ATC_MWD	2022.76	95.00	-0.46	6.04
	Jan-20-2020 02:45:47	7436.00	25.61	265.11	179.75	6993.65	1973.65	-558.50	-1984.61	3.59	986.52	ATC_MWD	2061.70	94.00	1.84	7.37
	Jan-20-2020 03:32:44	7530.00	25.00	259.29	179.75	7078.64	2058.64	-563.92	-2024.38	2.72	1000.67	ATC_MWD	2101.45	94.00	-0.65	-6.19
	Jan-20-2020 04:21:45	7625.00	29.34	242.87	182.45	7163.26	2143.26	-578.30	-2064.89	9.08	1023.70	ATC_MWD	2144.34	95.00	4.57	-17.28
	Jan-20-2020 04:49:29	7718.00	34.23	233.71	182.45	7242.33	2222.33	-604.20	-2106.30	7.37	1058.18	ATC_MWD	2191.25	93.00	5.26	-9.85
	Jan-20-2020 06:21:24	7812.00	38.46	222.42	179.75	7318.11	2298.11	-641.49	-2147.40	8.41	1103.68	ATC_MWD	2241.16	94.00	4.50	-12.01
	Jan-20-2020 08:16:14	7907.00	46.67	213.59	179.75	7388.08	2368.08	-692.21	-2186.54	10.67	1161.85	ATC_MWD	2293.50	95.00	8.64	-9.29
	Jan-20-2020 10:12:16	8001.00	55.07	207.40	182.45	7447.39	2427.39	-755.05	-2223.28	10.29	1231.29	ATC_MWD	2347.99	94.00	8.94	-6.59
	Jan-20-2020 12:07:37	8096.00	64.04	200.26	182.45	7495.52	2475.52	-829.91	-2256.09	11.44	1311.58	ATC_MWD	2403.89	95.00	9.44	-7.52
	Jan-20-2020 14:04:19	8190.00	71.75	194.39	185.16	7530.90	2510.90	-912.98	-2281.87	10.03	1398.31	ATC_MWD	2457.74	94.00	8.20	-6.24
	Jan-20-2020 16:09:39	8285.00	80.54	187.21	179.75	7553.65	2533.65	-1003.45	-2299.02	11.80	1490.32	ATC_MWD	2508.46	95.00	9.25	-7.56
	Jan-20-2020 17:23:23	8379.00	90.83	179.66	185.16	7560.72	2540.72	-1096.82	-2304.58	13.56	1582.59	ATC_MWD	2552.27	94.00	10.95	-8.03
	Jan-20-2020 17:52:29	8474.00	90.55	178.39	185.16	7559.58	2539.58	-1191.80	-2302.96	1.37	1674.82	ATC_MWD	2593.07	95.00	-0.29	-1.34
	Jan-20-	8568.00	90.89	178.17	190.56	7558.40	2538.40	-1285.75	-	0.43	1765.78	ATC_MWD	2635.11	94.00	0.36	-0.23



2020 18:13:08								2300.14								
Jan-20- 2020 18:39:53	8663.00	90.83	179.71	195.97	7556.97	2536.97	-1380.72	- 2298.38	1.62	1857.97	ATC_MWD	2681.22	95.00	-0.06	1.62	
Jan-20- 2020 19:00:43	8757.00	91.69	178.71	198.67	7554.91	2534.91	-1474.68	- 2297.09	1.40	1949.29	ATC_MWD	2729.71	94.00	0.91	-1.06	
Jan-20- 2020 19:51:05	8850.00	90.77	177.89	193.27	7552.91	2532.91	-1567.62	- 2294.33	1.33	2039.28	ATC_MWD	2778.74	93.00	-0.99	-0.88	
Jan-20- 2020 20:09:35	8943.00	89.35	179.52	193.27	7552.81	2532.81	-1660.59	- 2292.23	2.32	2129.44	ATC_MWD	2830.53	93.00	-1.53	1.75	
Jan-20- 2020 20:35:50	9038.00	89.38	179.73	198.67	7553.86	2533.86	-1755.58	- 2291.61	0.22	2221.91	ATC_MWD	2886.79	95.00	0.03	0.22	
Jan-20- 2020 21:08:23	9131.00	90.49	179.04	201.37	7553.97	2533.97	-1848.58	- 2290.61	1.41	2312.35	ATC_MWD	2943.49	93.00	1.19	-0.74	
Jan-20- 2020 21:27:15	9226.00	90.25	179.17	201.37	7553.36	2533.36	-1943.56	- 2289.12	0.29	2404.61	ATC_MWD	3002.92	95.00	-0.25	0.14	
Jan-20- 2020 21:53:09	9320.00	89.54	178.43	206.78	7553.53	2533.53	-2037.54	- 2287.16	1.09	2495.79	ATC_MWD	3063.11	94.00	-0.76	-0.79	
Jan-20- 2020 22:12:54	9414.00	89.45	178.30	206.78	7554.36	2534.36	-2131.50	- 2284.47	0.17	2586.79	ATC_MWD	3124.44	94.00	-0.10	-0.14	
Jan-20- 2020 22:37:35	9509.00	89.78	178.92	209.48	7555.00	2535.00	-2226.47	- 2282.17	0.74	2678.86	ATC_MWD	3188.33	95.00	0.35	0.65	
Jan-20- 2020 23:01:29	9603.00	88.31	179.66	209.48	7556.56	2536.56	-2320.44	- 2281.01	1.75	2770.22	ATC_MWD	3253.84	94.00	-1.56	0.79	
Jan-20- 2020 23:28:52	9697.00	89.54	180.24	209.48	7558.33	2538.33	-2414.43	- 2280.92	1.45	2861.82	ATC_MWD	3321.45	94.00	1.31	0.62	
Jan-21- 2020 00:14:04	9885.00	90.06	179.50	214.89	7558.98	2538.98	-2602.42	- 2280.50	0.48	3045.00	ATC_MWD	3460.24	188.00	0.28	-0.39	
Jan-21- 2020 00:35:18	9980.00	90.22	180.21	214.89	7558.75	2538.75	-2697.42	- 2280.26	0.77	3137.56	ATC_MWD	3532.09	95.00	0.17	0.75	
Jan-21- 2020 00:56:08	10074.00	90.43	180.15	214.89	7558.22	2538.22	-2791.42	- 2280.55	0.23	3229.26	ATC_MWD	3604.57	94.00	0.22	-0.06	
Jan-21- 2020 01:15:09	10168.00	90.06	181.05	217.59	7557.81	2537.81	-2885.41	- 2281.54	1.04	3321.11	ATC_MWD	3678.45	94.00	-0.39	0.96	
Jan-21- 2020 01:35:14	10263.00	90.12	181.16	217.59	7557.67	2537.67	-2980.39	- 2283.37	0.13	3414.12	ATC_MWD	3754.53	95.00	0.06	0.12	
Jan-21- 2020 01:53:38	10357.00	89.63	179.10	217.59	7557.87	2537.87	-3074.39	- 2283.58	2.25	3505.80	ATC_MWD	3829.70	94.00	-0.52	-2.19	
Jan-21- 2020 03:14:48	10492.00	89.57	179.74	217.59	7558.81	2538.81	-3209.38	- 2282.21	0.48	3637.09	ATC_MWD	3938.10	135.00	-0.04	0.47	
Jan-21- 2020 03:35:01	10587.00	90.09	180.96	217.59	7559.09	2539.09	-3304.37	- 2282.80	1.40	3729.83	ATC_MWD	4016.22	95.00	0.55	1.28	
Jan-21- 2020 03:54:08	10681.00	89.60	181.06	220.30	7559.35	2539.35	-3398.36	- 2284.45	0.53	3821.82	ATC_MWD	4094.82	94.00	-0.52	0.11	
Jan-21- 2020 04:21:18	10775.00	90.43	181.32	220.30	7559.32	2539.32	-3492.34	- 2286.40	0.93	3913.87	ATC_MWD	4174.21	94.00	0.88	0.28	
Jan-21- 2020 05:31:33	10963.00	90.15	180.59	223.00	7558.37	2538.37	-3680.31	- 2289.54	0.42	4097.82	ATC_MWD	4334.36	188.00	-0.15	-0.39	
Jan-21- 2020 05:57:48	11056.00	90.62	180.05	223.00	7557.75	2537.75	-3773.30	- 2290.06	0.77	4188.60	ATC_MWD	4413.86	93.00	0.51	-0.58	



Jan-21-2020 06:22:32	11149.00	90.18	179.81	225.70	7557.10	2537.10	-3866.30	-2289.94	0.54	4279.23	ATC_MWD	4493.56	93.00	-0.47	-0.26
Jan-21-2020 07:05:43	11243.00	89.91	180.21	225.70	7557.02	2537.02	-3960.30	-2289.96	0.51	4370.87	ATC_MWD	4574.70	94.00	-0.29	0.43
Jan-21-2020 07:35:59	11338.00	89.35	179.12	225.70	7557.64	2537.64	-4055.29	-2289.40	1.29	4463.36	ATC_MWD	4656.91	95.00	-0.59	-1.15
Jan-21-2020 08:05:04	11432.00	90.09	181.85	225.70	7558.10	2538.10	-4149.28	-2290.20	3.01	4555.16	ATC_MWD	4739.36	94.00	0.79	2.90
Jan-21-2020 08:36:35	11526.00	90.34	181.84	228.41	7557.75	2537.75	-4243.23	-2293.23	0.27	4647.42	ATC_MWD	4823.27	94.00	0.27	-0.01
Jan-21-2020 09:17:41	11621.00	90.77	181.83	228.41	7556.82	2536.82	-4338.18	-2296.27	0.45	4740.66	ATC_MWD	4908.42	95.00	0.45	-0.01
Jan-21-2020 09:46:08	11715.00	90.95	181.06	228.41	7555.41	2535.41	-4432.14	-2298.64	0.84	4832.79	ATC_MWD	4992.75	94.00	0.19	-0.82
Jan-21-2020 10:14:06	11810.00	91.66	182.28	231.11	7553.25	2533.25	-4527.07	-2301.41	1.49	4925.95	ATC_MWD	5078.47	95.00	0.75	1.28
Jan-21-2020 10:35:50	11904.00	91.69	182.01	233.81	7550.50	2530.50	-4620.96	-2304.92	0.29	5018.27	ATC_MWD	5163.91	94.00	0.03	-0.29
Jan-21-2020 11:32:27	11999.00	88.09	181.43	233.81	7550.69	2530.69	-4715.90	-2307.77	3.84	5111.46	ATC_MWD	5250.29	95.00	-3.79	-0.61
Jan-21-2020 12:03:31	12093.00	88.74	182.75	233.81	7553.29	2533.29	-4809.80	-2311.20	1.56	5203.77	ATC_MWD	5336.28	94.00	0.69	1.40
Jan-21-2020 12:35:21	12187.00	89.26	181.33	277.06	7554.93	2534.93	-4903.73	-2314.55	1.61	5296.07	ATC_MWD	5422.51	94.00	0.55	-1.51
Jan-21-2020 13:07:07	12282.00	89.54	182.49	239.22	7555.92	2535.92	-4998.67	-2317.71	1.26	5389.34	ATC_MWD	5509.85	95.00	0.29	1.22
Jan-21-2020 13:38:30	12376.00	89.75	182.45	239.22	7556.50	2536.50	-5092.58	-2321.76	0.23	5481.79	ATC_MWD	5596.87	94.00	0.22	-0.04
Jan-21-2020 14:13:54	12470.00	90.52	182.47	239.22	7556.28	2536.28	-5186.49	-2325.80	0.82	5574.24	ATC_MWD	5684.10	94.00	0.82	0.02
Jan-21-2020 14:45:22	12565.00	90.34	181.55	241.92	7555.57	2535.57	-5281.43	-2329.13	0.99	5667.54	ATC_MWD	5772.20	95.00	-0.19	-0.97
Jan-21-2020 15:25:54	12659.00	90.25	182.61	241.92	7555.08	2535.08	-5375.36	-2332.54	1.13	5759.87	ATC_MWD	5859.63	94.00	-0.10	1.13
Jan-21-2020 16:00:24	12753.00	90.52	182.39	241.92	7554.45	2534.45	-5469.27	-2336.64	0.37	5852.33	ATC_MWD	5947.50	94.00	0.29	-0.23
Jan-21-2020 16:38:31	12848.00	90.86	182.37	244.62	7553.31	2533.31	-5564.18	-2340.59	0.36	5945.74	ATC_MWD	6036.43	95.00	0.36	-0.02
Jan-21-2020 17:21:37	12942.00	91.69	182.87	244.62	7551.22	2531.22	-5658.06	-2344.88	1.03	6038.21	ATC_MWD	6124.71	94.00	0.88	0.53
Jan-21-2020 17:57:43	13035.00	91.35	182.32	244.62	7548.75	2528.75	-5750.93	-2349.09	0.70	6129.69	ATC_MWD	6212.20	93.00	-0.37	-0.59
Jan-21-2020 18:25:10	13129.00	91.57	181.93	244.62	7546.36	2526.36	-5844.83	-2352.58	0.48	6222.01	ATC_MWD	6300.53	94.00	0.23	-0.41
Jan-21-2020 18:53:21	13223.00	91.48	181.15	244.62	7543.85	2523.85	-5938.77	-2355.10	0.84	6314.15	ATC_MWD	6388.70	94.00	-0.10	-0.83
Jan-21-2020 19:19:06	13318.00	91.20	180.41	244.62	7541.63	2521.63	-6033.73	-2356.39	0.83	6407.01	ATC_MWD	6477.54	95.00	-0.29	-0.78
Jan-21-2020	13412.00	90.34	181.84	247.33	7540.37	2520.37	-6127.70	-2358.24	1.78	6499.03	ATC_MWD	6565.82	94.00	-0.91	1.52



	19:41:54															
	Jan-21-2020 20:06:30	13506.00	89.14	181.57	247.33	7540.80	2520.80	-6221.66	-2361.04	1.31	6591.25	ATC_MWD	6654.59	94.00	-1.28	-0.29
	Jan-21-2020 20:31:55	13599.00	90.22	181.11	247.33	7541.31	2521.31	-6314.63	-2363.21	1.26	6682.37	ATC_MWD	6742.35	93.00	1.16	-0.49
	Jan-21-2020 20:53:32	13694.00	90.37	181.15	247.33	7540.83	2520.83	-6409.61	-2365.08	0.16	6775.38	ATC_MWD	6832.04	95.00	0.16	0.04
	Jan-21-2020 21:15:08	13787.00	90.65	181.76	250.03	7540.00	2520.00	-6502.57	-2367.45	0.72	6866.54	ATC_MWD	6920.14	93.00	0.30	0.66
	Jan-21-2020 21:36:41	13882.00	90.06	181.97	250.03	7539.41	2519.41	-6597.52	-2370.54	0.66	6959.79	ATC_MWD	7010.47	95.00	-0.62	0.22
	Jan-21-2020 22:10:13	13976.00	89.32	181.19	247.33	7539.92	2519.92	-6691.48	-2373.13	1.14	7051.97	ATC_MWD	7099.84	94.00	-0.79	-0.83
	Jan-21-2020 22:36:52	14071.00	89.57	180.04	247.33	7540.84	2520.84	-6786.47	-2374.15	1.24	7144.80	ATC_MWD	7189.77	95.00	0.26	-1.21
	Jan-21-2020 22:59:27	14165.00	90.09	180.45	250.03	7541.12	2521.12	-6880.47	-2374.55	0.70	7236.53	ATC_MWD	7278.69	94.00	0.55	0.44
	Jan-21-2020 23:26:04	14260.00	89.54	180.53	250.03	7541.42	2521.42	-6975.47	-2375.36	0.59	7329.32	ATC_MWD	7368.82	95.00	-0.58	0.08
	Jan-21-2020 23:58:23	14354.00	90.09	180.27	250.03	7541.73	2521.73	-7069.46	-2376.02	0.65	7421.10	ATC_MWD	7458.07	94.00	0.59	-0.28
	Jan-22-2020 00:24:09	14448.00	90.22	180.16	250.03	7541.47	2521.47	-7163.46	-2376.37	0.18	7512.81	ATC_MWD	7547.34	94.00	0.14	-0.12
	Jan-22-2020 00:49:25	14541.00	90.28	179.91	250.03	7541.07	2521.07	-7256.46	-2376.43	0.28	7603.49	ATC_MWD	7635.68	93.00	0.06	-0.27
	Jan-22-2020 01:13:30	14636.00	90.77	179.97	250.03	7540.20	2520.20	-7351.46	-2376.33	0.52	7696.08	ATC_MWD	7725.99	95.00	0.52	0.06
	Jan-22-2020 01:40:23	14730.00	90.52	180.53	252.73	7539.14	2519.14	-7445.45	-2376.74	0.65	7787.80	ATC_MWD	7815.60	94.00	-0.27	0.60
	Jan-22-2020 02:01:07	14825.00	89.20	181.01	250.03	7539.37	2519.37	-7540.44	-2378.02	1.48	7880.68	ATC_MWD	7906.53	95.00	-1.39	0.51
	Jan-22-2020 02:24:05	14919.00	89.48	179.32	252.73	7540.45	2520.45	-7634.43	-2378.29	1.82	7972.37	ATC_MWD	7996.29	94.00	0.30	-1.80
	Jan-22-2020 02:46:15	15013.00	90.22	179.95	252.73	7540.70	2520.70	-7728.42	-2377.69	1.03	8063.88	ATC_MWD	8085.91	94.00	0.79	0.67
	Jan-22-2020 03:08:26	15108.00	89.82	181.18	252.73	7540.67	2520.67	-7823.42	-2378.62	1.36	8156.69	ATC_MWD	8177.02	95.00	-0.42	1.29
	Jan-22-2020 03:33:40	15202.00	89.29	179.60	252.73	7541.40	2521.40	-7917.41	-2379.26	1.77	8248.46	ATC_MWD	8267.18	94.00	-0.56	-1.68
	Jan-22-2020 04:38:38	15391.00	90.09	179.28	252.73	7542.42	2522.42	-8106.40	-2377.42	0.46	8432.29	ATC_MWD	8447.83	189.00	0.42	-0.17
	Jan-22-2020 05:03:56	15485.00	89.75	180.32	252.73	7542.55	2522.55	-8200.39	-2377.09	1.16	8523.85	ATC_MWD	8537.97	94.00	-0.36	1.11
	Jan-22-2020 05:26:18	15580.00	89.54	180.25	252.73	7543.14	2523.14	-8295.39	-2377.56	0.23	8616.57	ATC_MWD	8629.39	95.00	-0.22	-0.07
	Jan-22-2020 05:49:47	15674.00	89.29	180.29	252.73	7544.10	2524.10	-8389.38	-2378.00	0.27	8708.30	ATC_MWD	8719.90	94.00	-0.27	0.04
	Jan-22-2020 06:14:21	15769.00	88.95	178.60	252.73	7545.56	2525.56	-8484.37	-2377.08	1.81	8800.69	ATC_MWD	8811.07	95.00	-0.36	-1.78
	Jan-22-	15863.00	89.20	179.86	255.44	7547.08	2527.08	-8578.34	-	1.37	8892.03	ATC_MWD	8901.26	94.00	0.27	1.34



	2020 06:42:12								2375.82							
	Jan-22- 2020 07:05:32	15957.00	89.91	182.06	255.44	7547.81	2527.81	-8672.32	- 2377.40	2.46	8983.99	ATC_MWD	8992.28	94.00	0.76	2.34
	Jan-22- 2020 07:30:37	16051.00	89.05	180.04	255.44	7548.66	2528.66	-8766.29	- 2379.12	2.34	9075.99	ATC_MWD	9083.40	94.00	-0.91	-2.15
	Jan-22- 2020 07:57:08	16146.00	89.75	179.25	258.14	7549.65	2529.65	-8861.29	- 2378.53	1.11	9168.47	ATC_MWD	9174.95	95.00	0.74	-0.83
	Jan-22- 2020 08:23:01	16240.00	89.05	180.03	255.44	7550.64	2530.64	-8955.28	- 2377.94	1.11	9259.96	ATC_MWD	9265.61	94.00	-0.74	0.83
	Jan-22- 2020 08:51:14	16334.00	89.05	179.79	258.14	7552.20	2532.20	-9049.26	- 2377.79	0.26	9351.56	ATC_MWD	9356.45	94.00	0.00	-0.26
	Jan-22- 2020 09:17:25	16429.00	90.03	179.91	258.14	7552.96	2532.96	-9144.26	- 2377.54	1.04	9444.11	ATC_MWD	9448.29	95.00	1.03	0.13
	Jan-22- 2020 09:42:59	16523.00	89.63	179.85	260.84	7553.24	2533.24	-9238.26	- 2377.35	0.43	9535.70	ATC_MWD	9539.25	94.00	-0.43	-0.06
	Jan-22- 2020 10:10:05	16617.00	89.82	179.23	258.14	7553.69	2533.69	-9332.25	- 2376.59	0.69	9627.17	ATC_MWD	9630.12	94.00	0.20	-0.66
	Jan-22- 2020 10:58:08	16711.00	90.22	182.37	258.14	7553.66	2533.66	-9426.23	- 2377.90	3.37	9719.08	ATC_MWD	9721.54	94.00	0.43	3.34
	Jan-22- 2020 11:49:30	16805.00	91.39	181.91	258.14	7552.34	2532.34	-9520.16	- 2381.41	1.34	9811.43	ATC_MWD	9813.49	94.00	1.24	-0.49
	Jan-22- 2020 12:16:46	16900.00	90.28	181.66	258.14	7550.95	2530.95	-9615.10	- 2384.37	1.20	9904.64	ATC_MWD	9906.33	95.00	-1.17	-0.26
	Jan-22- 2020 12:41:52	16994.00	90.49	182.37	260.84	7550.32	2530.32	-9709.04	- 2387.68	0.79	9996.96	ATC_MWD	9998.32	94.00	0.22	0.76
	Jan-22- 2020 13:07:49	17089.00	90.89	181.29	260.84	7549.18	2529.18	-9803.98	- 2390.71	1.21	10090.19	ATC_MWD	10091.26	95.00	0.42	-1.14
	Jan-22- 2020 13:40:08	17184.00	87.94	179.85	260.84	7550.15	2530.15	-9898.96	- 2391.66	3.46	10182.99	ATC_MWD	10183.78	95.00	-3.11	-1.52
	Jan-22- 2020 14:30:54	17278.00	88.61	182.11	258.14	7552.98	2532.98	-9992.90	- 2393.26	2.51	10274.93	ATC_MWD	10275.49	94.00	0.71	2.40
	Jan-22- 2020 15:40:11	17373.00	86.05	181.41	255.44	7557.40	2537.40	-10087.74	- 2396.18	2.79	10368.04	ATC_MWD	10368.42	95.00	-2.69	-0.74
	Jan-22- 2020 16:06:02	17467.00	89.63	182.51	258.14	7560.94	2540.94	-10181.60	- 2399.39	3.98	10460.26	ATC_MWD	10460.50	94.00	3.81	1.17
	Jan-22- 2020 16:32:43	17561.00	88.34	181.65	260.84	7562.61	2542.61	-10275.52	- 2402.80	1.65	10552.58	ATC_MWD	10552.72	94.00	-1.37	-0.91
	Jan-22- 2020 17:03:14	17656.00	88.74	181.49	260.84	7565.03	2545.03	-10370.45	- 2405.40	0.45	10645.71	ATC_MWD	10645.76	95.00	0.42	-0.17
	Jan-22- 2020 17:45:22	17750.00	88.83	182.01	260.84	7567.02	2547.02	-10464.39	- 2408.27	0.56	10737.92	ATC_MWD	10737.93	94.00	0.10	0.55
Proj	Jan-22- 2020 17:48:42	17830.00	88.83	182.01		7568.66		-10544.32	- 2411.08	0.00	10816.47		10816.47		0.00	0.00