

Steward Saul Godman 2H Per Record API # 30-025-45129

Stage	Pump Times				Perforations				
	Start Date	Start Time	End Time	Pump Time	Top Perf	Bottom Perf	SPF	Perf Clusters	Perfs
1	11/18/18	1:33 PM	5:43 PM	2:35	13,011.0	13,197.0	2	4	24
2	11/18/18	8:40 PM	10:14 PM	1:33	12,768.0	12,954.0	2	4	24
3	11/19/18	12:51 AM	2:20 AM	1:28	12,525.0	12,711.0	2	4	24
4	11/19/18	7:03 AM	7:21 PM	12:15	12,282.0	12,468.0	2	4	24
5	11/20/18	3:00 AM	4:33 AM	1:32	12,039.0	12,225.0	2	4	24
6	11/20/18	4:13 PM	5:52 PM	1:38	11,796.0	11,982.0	2	4	24
7	11/20/18	8:16 PM	9:42 PM	1:25	11,553.0	11,739.0	2	4	24
8	11/21/18	1:10 AM	2:36 AM	1:25	11,310.0	11,496.0	2	4	24
9	11/21/18	6:29 AM	7:50 AM	1:20	11,067.0	11,253.0	2	4	24
10	11/21/18	10:43 AM	12:06 PM	1:21	10,824.0	11,010.0	2	4	24
11	11/21/18	2:35 PM	4:21 PM	1:27	10,581.0	10,767.0	2	4	24
12	11/21/18	6:27 PM	7:06 AM	1:43	10,338.0	10,524.0	2	4	24
13	11/22/18	9:58 AM	11:20 AM	1:21	10,095.0	10,281.0	2	4	24
14	11/22/18	1:18 PM	2:43 PM	1:24	9,852.0	10,038.0	2	4	24
15	11/22/18	5:25 PM	6:55 PM	1:29	9,609.0	9,795.0	2	4	24
16	11/22/18	9:17 PM	10:38 PM	1:20	9,366.0	9,552.0	2	4	24
17	11/23/18	12:28 AM	1:52 AM	1:23	9,123.0	9,309.0	2	4	24
18	11/23/18	3:50 AM	5:11 AM	1:21	8,880.0	9,066.0	2	4	24
19	11/23/18	9:19 AM	10:46 AM	1:25	8,637.0	8,823.0	2	4	24
20	11/23/18	12:52 PM	2:16 PM	1:22	8,394.0	8,580.0	2	4	24
21	11/23/18	4:02 PM	5:22 PM	1:20	8,151.0	8,337.0	2	4	24
22	11/23/18	7:37 PM	9:00 PM	1:21	7,908.0	8,094.0	2	4	24
23	11/23/18	11:33 PM	1:00 AM	1:26	7,665.0	7,851.0	2	4	24
24	11/24/18	2:45 AM	4:03 AM	1:18	7,422.0	7,608.0	2	4	24
25	11/24/18	6:05 AM	7:23 AM	1:17	7,179.0	7,365.0	2	4	24
26	11/24/18	10:13 AM	11:29 AM	1:15	6,936.0	7,122.0	2	4	24
27	11/24/18	1:32 PM	2:49 PM	1:16	6,693.0	6,879.0	2	4	24
28	11/24/18	4:35 PM	5:49 PM	1:13	6,450.0	6,636.0	2	4	24
29	11/24/18	9:03 PM	10:24 PM	1:20	6,207.0	6,393.0	2	4	24
30	11/25/18	12:31 AM	1:59 AM	1:27	5,964.0	6,150.0	2	4	24

HOBBS OCD
JAN 23 2019
RECEIVED



Company: Steward Energy II, LLC
Well: Saul Goodman Fee #2H
Location: Lea County, NM
Rig: Norton 4

Job Number: DM-2018-177-SEDT-NM
Vertical Section Plane: 0.3
Well API Number: 30-025-45128
Tie Into: Surface

All Azimuths
Corrected To: Grid North

Calculation Method: Minimum Curvature

Survey #	Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates N(+) / S(-) (ft)	E(+) / W(-) (ft)	Closure Distance (ft)	Dogleg Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')	Special Notes
Tie In	Surface	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1	MWD	127.00	0.44	356.36	127	127.00	0.49	0.49	-0.03	0.49	-3.64	0.35	0.35	280.60	
2	MWD	218.00	1.06	38.81	91	217.99	1.49	1.49	0.47	1.56	17.65	0.87	0.68	-348.96	
3	MWD	310.00	0.97	346.25	92	309.98	2.92	2.91	0.82	3.02	15.78	0.98	-0.10	334.17	
4	MWD	402.00	0.62	281.83	92	401.97	3.77	3.77	0.15	3.77	2.28	0.98	-0.38	-70.02	
5	MWD	493.00	1.41	251.68	91	492.96	3.51	3.52	-1.39	3.78	-21.62	1.02	0.87	-33.13	
6	MWD	585.00	1.93	248.34	92	584.92	2.57	2.59	-3.91	4.69	-56.46	0.57	0.57	-3.63	
7	MWD	677.00	2.37	241.93	92	676.85	1.09	1.12	-7.03	7.12	-80.91	0.54	0.48	-6.97	
8	MWD	769.00	4.04	245.88	92	768.71	-1.16	-1.10	-11.66	11.72	264.63	1.83	1.82	4.29	
9	MWD	860.00	5.54	241.05	91	859.39	-4.63	-4.53	-18.43	18.98	256.19	1.71	1.65	-5.31	
10	MWD	952.00	6.60	235.95	92	950.87	-9.78	-9.64	-26.70	28.39	250.14	1.29	1.15	-5.54	
11	MWD	1044.00	8.00	234.90	92	1042.12	-16.47	-16.28	-36.32	39.80	245.85	1.53	1.52	-1.14	
12	MWD	1138.00	9.23	236.74	94	1135.06	-24.43	-24.18	-47.98	53.72	243.25	1.34	1.31	1.96	
13	MWD	1232.00	10.46	237.62	94	1227.67	-33.21	-32.88	-61.49	69.73	241.86	1.32	1.31	0.94	
14	MWD	1325.00	11.70	237.18	93	1318.94	-42.92	-42.52	-76.54	87.56	240.95	1.34	1.33	-0.47	
15	MWD	1419.00	13.01	236.83	94	1410.76	-53.96	-53.47	-93.41	107.63	240.21	1.40	1.39	-0.37	
16	MWD	1511.00	13.19	235.95	92	1500.36	-65.59	-65.01	-110.77	128.44	239.59	0.29	0.20	-0.96	
17	MWD	1605.00	12.31	235.42	94	1592.05	-77.38	-76.71	-127.91	149.15	239.05	0.94	-0.94	-0.56	
18	MWD	1700.00	11.52	234.54	95	1685.00	-88.71	-87.96	-143.97	168.72	238.58	0.85	-0.83	-0.93	
19	MWD	1794.00	11.52	234.81	94	1777.10	-99.65	-98.81	-159.29	187.45	238.19	0.06	0.00	0.29	
20	MWD	1888.00	11.96	238.94	94	1869.14	-110.16	-109.25	-175.30	206.56	238.07	1.01	0.47	4.39	
21	MWD	1982.00	12.57	241.14	94	1960.99	-120.22	-119.21	-192.61	226.51	238.25	0.82	0.65	2.34	
22	MWD	2077.00	12.40	243.33	95	2053.75	-129.88	-128.78	-210.77	247.00	238.58	0.53	-0.18	2.31	
23	MWD	2171.00	12.13	247.73	94	2145.60	-138.25	-137.05	-228.93	266.82	239.09	1.03	-0.29	4.68	
24	MWD	2265.00	11.70	248.61	94	2237.58	-145.56	-144.27	-246.95	286.00	239.71	0.50	-0.46	0.94	
25	MWD	2359.00	11.96	254.49	94	2329.59	-151.74	-150.35	-265.21	304.86	240.45	1.31	0.28	6.26	
26	MWD	2478.00	12.13	255.90	119	2445.97	-158.21	-156.69	-289.21	328.93	241.55	0.29	0.14	1.18	
27	MWD	2571.00	12.49	259.33	93	2536.83	-162.55	-160.94	-308.57	348.02	242.46	0.88	0.39	3.69	
28	MWD	2666.00	12.84	259.42	95	2629.52	-166.50	-164.78	-329.05	368.00	243.40	0.37	0.37	0.09	
29	MWD	2760.00	13.45	260.30	94	2721.05	-170.37	-168.54	-350.09	388.54	244.29	0.68	0.65	0.94	
30	MWD	2855.00	13.28	262.84	95	2813.48	-173.70	-171.76	-371.81	409.56	245.21	0.64	-0.18	2.67	
31	MWD	2949.00	13.19	261.09	94	2904.99	-176.82	-174.76	-393.11	430.21	246.03	0.44	-0.10	-1.86	
32	MWD	3043.00	12.75	256.87	94	2996.59	-180.95	-178.78	-413.81	450.78	246.63	1.11	-0.47	-4.49	
33	MWD	3137.00	11.52	260.30	94	3088.49	-184.99	-182.72	-433.17	470.13	247.13	1.52	-1.31	3.65	
34	MWD	3230.00	10.90	262.23	93	3179.71	-187.83	-185.47	-451.03	487.68	247.65	0.78	-0.67	2.08	
35	MWD	3324.00	11.87	262.58	94	3271.86	-190.38	-187.92	-469.42	505.64	248.18	1.03	1.03	0.37	
36	MWD	3416.00	11.43	264.78	92	3361.97	-192.53	-189.97	-487.89	523.57	248.72	0.68	-0.48	2.39	
37	MWD	3511.00	11.61	262.23	95	3455.06	-194.77	-192.12	-506.73	541.93	249.24	0.57	0.19	-2.68	
38	MWD	3605.00	11.34	264.95	94	3547.18	-196.96	-194.22	-525.31	560.06	249.71	0.64	-0.29	2.89	
39	MWD	3699.00	12.13	266.89	94	3639.21	-198.41	-195.56	-544.38	578.44	250.24	0.94	0.84	2.06	
40	MWD	3794.00	12.05	268.03	95	3732.10	-199.40	-196.45	-564.25	597.47	250.80	0.27	-0.08	1.20	
41	MWD	3888.00	11.08	273.22	94	3824.20	-199.33	-196.28	-583.08	615.23	251.40	1.51	-1.03	5.52	
42	MWD	3981.00	10.64	279.63	93	3915.54	-197.48	-194.34	-600.47	631.13	252.07	1.38	-0.47	6.89	
43	MWD	4076.00	9.58	283.67	95	4009.06	-194.23	-191.00	-616.80	645.69	252.79	1.34	-1.12	4.25	
44	MWD	4170.00	8.97	284.64	94	4101.83	-190.61	-187.30	-631.49	658.68	253.48	0.67	-0.65	1.03	
45	MWD	4264.00	8.09	294.13	94	4194.79	-186.12	-182.75	-644.61	670.02	254.17	1.76	-0.94	10.10	
46	MWD	4358.00	7.91	300.99	94	4287.88	-180.15	-176.71	-656.19	679.57	254.93	1.03	-0.19	7.30	
47	MWD	4453.00	7.30	309.25	95	4382.05	-173.01	-169.53	-666.47	687.70	255.73	1.32	-0.64	8.69	
48	MWD	4547.00	7.21	324.81	94	4475.31	-164.46	-160.93	-674.50	693.43	256.58	2.09	-0.10	16.55	
49	MWD	4642.00	7.12	336.08	95	4569.57	-154.23	-150.67	-680.32	696.81	257.51	1.48	-0.09	11.84	
50	MWD	4705.00	8.53	339.75	63	4631.98	-146.30	-142.72	-683.52	698.27	258.21	2.37	2.24	5.86	
51	MWD	4737.00	10.99	341.77	32	4663.51	-141.18	-137.60	-685.30	698.98	258.65	7.76	7.69	6.31	
52	MWD	4788.00	13.45	341.95	31	4693.81	-134.96	-131.36	-687.34	699.78	259.18	7.94	7.94	0.58	
53	MWD	4800.00	15.92	342.12	32	4724.76	-127.26	-123.64	-689.84	700.84	259.84	7.72	7.72	0.53	
54	MWD	4831.00	18.55	343.18	31	4754.37	-118.50	-114.88	-692.58	702.04	260.58	8.54	8.48	3.42	
55	MWD	4862.00	20.75	343.53	31	4783.56	-108.53	-104.89	-695.56	703.42	261.42	7.11	7.10	1.13	
56	MWD	4893.00	22.95	344.14	31	4812.33	-97.47	-93.81	-698.77	705.04	262.35	7.13	7.10	1.97	
57	MWD	4925.00	25.24	344.06	32	4841.54	-84.92	-81.24	-702.35	707.03	263.40	7.16	7.16	-0.25	
58	MWD	4957.00	27.79	343.88	32	4870.17	-71.21	-67.52	-706.29	709.51	264.54	7.97	7.97	-0.56	
59	MWD	4988.00	29.99	343.62	31	4897.31	-56.86	-53.14	-710.49	712.47	265.72	7.11	7.10	-0.84	
60	MWD	5020.00	32.18	344.14	32	4924.72	-41.01	-37.27	-715.07	716.04	267.02	6.89	6.84	1.62	
61	MWD	5052.00	34.38	344.58	32	4951.47	-24.13	-20.36	-719.80	720.09	268.38	6.92	6.88	1.37	
62	MWD	5083.00	37.11	344.76	31	4976.63	-6.69	-2.89	-724.59	724.59	269.77	8.81	8.81	0.58	
63	MWD	5115.00	39.92	344.83	32	5001.66	12.52	16.34	-729.80	729.98	270.98	8.79	8.78	0.53	
64	MWD	5146.00	42.82	344.67	31	5024.92	32.26	36.11	-735.17	736.05	271.99	9.37	9.35	-0.84	
65	MWD	5177.00	45.81	344.32	31	5047.10	53.09	56.97	-740.96	743.15	273.05	9.68	9.65	-1.13	
66	MWD	5209.00	48.54	343.79	32	5068.85	75.62	79.54	-747.41	751.63	274.15	8.62	8.53	-1.66	
67	MWD	5241.00	51.53	343.53	32	5089.40	99.12	103.07	-754.31	761.32	275.22	9.36	9.34	-0.81	
68	MWD	5272.00	54.17	343.44	31	5108.12	122.77	126.76	-761.33	771.81	276.31	8.52	8.52	-0.29	
69	MWD	5304.00	56.54	343.18	32	5126.31	147.94	151.97	-768.89	783.77	277.42	7.44	7.41	-0.81	
70	MWD	5335.00	58.83	342.91	31	5142.88	172.96	177.03	-776.53	796.46	278.57	7.42	7.39	-0.87	
71	MWD	5367.00	60.15	342.65	32	5159.13	199.25	203.36	-784.70	810.62	279.75	4.18	4.13	-0.81	Start of Tangent @ 5359'
72	MWD	5399.00	60.76	342.74	32	5174.91	225.79	229.94	-792.98	825.64	280.97	1.92	1.91	0.28	
73	MWD	5430.00	61.11	342.74	31	5189.97	251.62	255.82	-801.02	840.87	282.22	1.13	1.13	0.00	
74	MWD	5462.00	61.55	342.65	32	5205.32	278.38	282.62	-809.37	857.29	283.50	1.40	1.37	-0.28	
75	MWD	5491.00	61.91	342.82	29	5219.06	302.73	307.01	-816.95	872.73	284.73	1.34	1.24	0.59	
76	MWD	5523.00	62.34	342.47	32	5234.02	329.69	334.01	-825.39	890.41	285.97	1.66	1.34	-1.09	
77	MWD	5554.00	63.14	343.18	31	5248.22	355.97	360.34	-833.52	908.08	287.22	3.29	2.58	2.29	End of

91	MWD	5993.00	88.99	358.73	31	5361.06	771.46	776.06	-876.40	1170.61	-48.47	2.28	2.26	-0.29
92	MWD	6025.00	89.69	358.29	32	5361.43	803.44	808.05	-877.23	1192.67	-47.35	2.58	2.19	-1.37
93	MWD	6056.00	90.75	358.56	31	5361.31	834.43	839.03	-878.08	1214.50	-46.30	3.53	3.42	0.87
94	MWD	6150.00	91.01	357.68	94	5359.86	928.34	932.97	-881.16	1283.31	-43.36	0.98	0.28	-0.94
95	MWD	6245.00	90.13	359.96	95	5358.92	1023.30	1027.94	-883.12	1355.20	-40.67	2.57	-0.93	2.40
96	MWD	6339.00	90.75	358.12	94	5358.20	1117.27	1121.92	-884.69	1428.77	-38.26	2.07	0.66	-1.96
97	MWD	6433.00	90.84	358.73	94	5356.89	1211.21	1215.87	-887.28	1505.19	-36.12	0.66	0.10	0.65
98	MWD	6527.00	91.63	0.93	94	5354.86	1305.18	1309.85	-887.56	1582.23	-34.12	2.49	0.84	-380.64
99	MWD	6621.00	90.40	1.55	94	5353.20	1399.15	1403.81	-885.52	1659.77	-32.24	1.47	0.13	0.66
100	MWD	6716.00	90.40	1.55	95	5352.54	1494.13	1498.77	-882.95	1739.52	-30.50	0.00	0.00	0.00
101	MWD	6810.00	91.19	1.90	94	5351.23	1588.09	1592.72	-880.12	1819.72	-28.92	0.92	0.84	0.37
102	MWD	6904.00	88.29	1.19	94	5351.66	1682.05	1686.67	-877.59	1901.32	-27.49	3.18	-3.09	-0.76
103	MWD	6998.00	91.28	1.90	94	5352.01	1776.02	1780.62	-875.06	1984.02	-26.17	3.27	3.18	0.76
104	MWD	7084.00	91.19	359.96	96	5349.94	1871.99	1876.59	-873.50	2069.92	-24.96	2.02	-0.09	372.98
105	MWD	7188.00	90.57	358.82	94	5348.50	1965.96	1970.57	-874.50	2155.89	-23.93	1.38	-0.66	-1.21
106	MWD	7281.00	91.45	358.65	93	5346.86	2058.91	2063.53	-876.55	2241.98	-23.01	0.96	0.95	-0.18
107	MWD	7376.00	86.70	356.54	95	5348.39	2153.76	2158.40	-880.53	2331.10	-22.19	5.47	-5.00	-2.22
108	MWD	7470.00	88.99	358.03	94	5351.93	2247.55	2252.22	-884.98	2419.85	-21.45	2.91	2.44	1.59
109	MWD	7565.00	90.40	357.33	95	5352.43	2342.45	2347.14	-888.83	2509.79	-20.74	1.66	1.48	-0.74
110	MWD	7659.00	89.34	358.12	94	5352.65	2436.35	2441.06	-892.56	2599.12	-20.08	1.41	-1.13	0.84
111	MWD	7753.00	90.57	0.84	94	5352.72	2530.33	2535.05	-893.41	2687.87	-19.41	3.18	1.31	-380.09
112	MWD	7847.00	88.81	0.84	94	5353.23	2624.32	2629.03	-892.03	2776.24	-18.74	1.87	-1.87	0.00
113	MWD	7941.00	90.22	3.74	94	5354.02	2718.25	2722.94	-888.28	2864.17	-18.07	3.43	1.50	3.09
114	MWD	8051.00	89.96	2.86	110	5353.85	2828.10	2832.76	-881.95	2956.87	-17.29	0.83	-0.24	-0.80
115	MWD	8147.00	89.34	3.04	96	5354.44	2923.99	2928.63	-877.01	3057.12	-16.67	0.67	-0.65	0.19
116	MWD	8240.00	90.48	3.57	93	5354.58	3016.87	3021.47	-871.65	3144.69	-16.09	1.35	1.23	0.57
117	MWD	8335.00	90.66	2.60	95	5353.64	3111.75	3116.33	-866.53	3234.56	-15.54	1.04	0.19	-1.02
118	MWD	8430.00	90.22	2.25	95	5352.91	3206.68	3211.24	-862.51	3325.05	-15.03	0.59	-0.46	-0.37
119	MWD	8524.00	90.13	3.65	94	5352.62	3300.58	3305.11	-857.68	3414.58	-14.55	1.49	-0.10	1.49
120	MWD	8618.00	90.13	2.86	94	5352.41	3394.45	3398.96	-852.34	3504.20	-14.08	0.84	0.00	-0.84
121	MWD	8712.00	89.78	2.51	94	5352.48	3488.37	3492.86	-847.94	3594.31	-13.65	0.53	-0.37	-0.37
122	MWD	8804.00	90.22	1.37	92	5352.48	3580.33	3584.80	-844.82	3683.00	-13.26	1.33	0.48	-1.24
123	MWD	8896.00	90.04	359.88	92	5352.27	3672.32	3676.79	-843.82	3772.38	-12.93	1.63	-0.20	389.68
124	MWD	8987.00	89.96	0.49	91	5352.27	3763.32	3767.79	-843.52	3861.06	-12.62	0.68	-0.09	-394.93
125	MWD	9079.00	90.84	1.46	92	5351.63	3855.31	3859.77	-841.96	3950.54	-12.31	1.42	0.96	1.05
126	MWD	9170.00	90.40	1.37	91	5350.65	3946.29	3950.74	-839.71	4038.99	-12.00	0.49	-0.48	-0.10
127	MWD	9262.00	89.87	1.11	92	5350.43	4038.28	4042.72	-837.72	4128.60	-11.71	0.64	-0.58	-0.28
128	MWD	9354.00	90.66	1.02	92	5350.00	4130.27	4134.70	-836.01	4218.37	-11.43	0.86	0.86	-0.10
129	MWD	9446.00	90.92	0.93	92	5348.74	4222.25	4226.68	-834.44	4308.26	-11.17	0.30	0.28	-0.10
130	MWD	9538.00	90.57	0.84	92	5347.54	4314.24	4318.66	-833.02	4398.27	-10.92	0.39	-0.38	-0.10
131	MWD	9630.00	91.19	0.58	92	5346.13	4406.22	4410.64	-831.88	4488.41	-10.68	0.73	0.67	-0.28
132	MWD	9725.00	89.87	1.02	95	5345.25	4501.21	4505.63	-830.56	4581.54	-10.44	1.46	-1.39	0.46
133	MWD	9820.00	90.31	1.37	95	5345.10	4596.20	4600.60	-828.58	4674.62	-10.21	0.59	0.46	0.37
134	MWD	9914.00	91.80	1.11	94	5343.37	4690.17	4694.56	-826.54	4766.77	-9.99	1.61	1.59	-0.28
135	MWD	10009.00	91.28	2.60	95	5340.82	4785.12	4789.50	-824.05	4859.87	-9.76	1.00	-0.55	0.83
136	MWD	10103.00	91.63	2.60	94	5338.43	4879.03	4883.39	-820.36	4951.82	-9.54	0.83	0.37	0.74
137	MWD	10197.00	89.87	359.96	94	5337.20	4973.00	4977.35	-818.26	5044.16	-9.34	3.38	-1.87	380.17
138	MWD	10293.00	89.60	359.35	96	5337.64	5068.99	5073.35	-818.84	5139.00	-9.17	0.69	-0.28	-0.64
139	MWD	10388.00	90.48	359.52	95	5337.58	5163.98	5168.34	-819.78	5232.95	-9.01	0.94	0.93	0.18
140	MWD	10482.00	90.13	359.35	94	5337.08	5257.96	5262.33	-820.70	5325.95	-8.86	0.41	-0.37	-0.18
141	MWD	10577.00	90.57	0.75	95	5336.49	5352.96	5357.33	-820.62	5419.81	-8.71	1.54	0.46	-377.47
142	MWD	10671.00	88.81	0.32	94	5337.00	5446.95	5451.32	-819.74	5512.61	-8.55	1.93	-1.87	-0.46
143	MWD	10765.00	88.37	0.05	94	5339.32	5540.92	5545.29	-819.44	5605.51	-8.41	0.55	-0.47	-0.29
144	MWD	10860.00	89.60	359.61	95	5341.00	5635.90	5640.27	-819.72	5699.53	-8.27	1.38	1.29	378.48
145	MWD	10954.00	91.45	359.61	94	5340.14	5729.89	5734.26	-820.36	5792.65	-8.14	1.97	1.97	0.00
146	MWD	11049.00	89.43	359.79	95	5339.41	5824.88	5829.25	-820.86	5886.77	-8.02	2.13	-2.13	0.19
147	MWD	11143.00	90.48	0.40	94	5339.48	5918.87	5923.25	-820.70	5979.84	-7.89	1.29	1.12	-382.33
148	MWD	11236.00	91.89	0.93	93	5337.56	6011.85	6016.22	-819.62	6071.80	-7.76	1.62	1.52	0.57
149	MWD	11331.00	89.87	0.23	95	5336.10	6106.83	6111.20	-818.66	6165.79	-7.63	2.25	-2.13	-0.74
150	MWD	11427.00	90.48	0.49	96	5335.81	6202.83	6207.20	-818.06	6260.87	-7.51	0.69	0.64	0.27
151	MWD	11522.00	91.80	0.93	95	5333.92	6297.81	6302.17	-816.88	6354.89	-7.39	1.46	1.39	0.46
152	MWD	11616.00	92.42	0.67	94	5330.46	6391.74	6396.10	-815.57	6447.88	-7.27	0.72	0.66	-0.28
153	MWD	11710.00	91.36	0.58	94	5327.36	6485.68	6490.04	-814.54	6540.95	-7.15	1.13	-1.13	-0.10
154	MWD	11804.00	91.36	359.70	94	5325.12	6579.66	6584.01	-814.31	6634.18	-7.05	0.94	0.00	382.04
155	MWD	11898.00	90.04	358.29	94	5323.98	6673.62	6677.99	-815.96	6727.65	-6.97	2.05	-1.40	-1.50
156	MWD	11992.00	90.75	359.61	94	5323.33	6767.59	6771.96	-817.69	6821.15	-6.88	1.59	0.76	1.40
157	MWD	12087.00	91.71	0.23	95	5321.29	6862.56	6866.94	-817.82	6915.47	-6.79	1.20	1.01	-378.29
158	MWD	12181.00	90.22	359.61	94	5319.71	6956.55	6960.92	-817.95	7008.82	-6.70	1.72	-1.59	382.32
159	MWD	12274.00	90.04	358.73	93	5319.49	7049.53	7053.91	-819.30	7101.33	-6.63	0.97	-0.19	-0.95
160	MWD	12368.00	91.01	358.56	94	5318.63	7143.48	7147.88	-821.52	7194.94	-6.56	1.05	1.03	-0.18
161	MWD	12462.00	89.52	358.21	94	5318.20	7237.43	7241.84	-824.17	7288.59	-6.49	1.63	-1.59	-0.37
162	MWD	12557.00	89.08	0.05	95	5319.36	7332.39	7336.82	-825.61	7383.13	-6.42	1.99	-0.46	-377.01
163	MWD	12652.00	90.04	0.75	95	5320.09	7427.39	7431.81	-824.95	7477.46	-6.33	1.25	1.01	0.74
164	MWD	12746.00	90.92	0.49	94	5319.30	7521.38	7525.80	-823.93	7570.77	-6.25	0.98	0.94	-0.28
165	MWD	12840.00	91.98	0.75	94	5316.92	7615.35	7619.76	-822.91	7664.07	-6.16	1.16	1.13	0.28
166	MWD	12934.00	91.89	0.93	94	5313.75	7709.29	7713.70	-821.54	7757.33	-6.08	0.21	-0.10	0.19
167	MWD	13028.00	90.66	1.02	95	5311.64	7804.26	7808.66	-819.92	7851.59	-5.99	1.30	-1.29	0.09
168	MWD	13124.00	91.10	1.02	95	5310.18	7899.24	7903.64	-818.23	7945.88	-5.91	0.46	0.46	0.00
169	MWD	13218.00	90.40	1.11	94	5308.95	7993.23	7997.61	-816.48	8039.18	-5.83	0.75	-0.74	0.10
170	MWD	13253.00	90.66	1.28	35	5308.62	8028.22	8032.60	-815.75	8073.92	-5.80	0.89	0.74	0.49
171	PTB	13319.00	90.66	1.28										