

DRILTECH MWD SURVEY REPORT



SEP 14 2015
RECEIVED
OBBS OGD

Company: EOG Resources, Inc
Well: Thor 21 702H
Location: Lea Co., NM
Rig: H&P 260

Job Number: 2015-067-EODT-NM
Vertical Section Plane: 351.46
WELL API #: 30-025-42480
Tie Into: Surface

Calculation Method Minimum Curvature

SEP 23 2015
30-025-42480

Survey #	Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')
								N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)		
Tie In	0	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	180.00	0.40	307.00	180	180.00	0.45	0.38 N	0.50 W	0.63	307.00	0.22	0.22
2	MWD	241.00	0.40	1.70	61	241.00	0.81	0.72 N	0.67 W	0.98	317.22	0.60	0.00
3	MWD	302.00	0.50	324.00	61	302.00	1.26	1.15 N	0.82 W	1.41	324.59	0.50	0.16
4	MWD	393.00	0.40	347.10	91	392.99	1.92	1.78 N	1.12 W	2.10	327.80	0.23	-0.11
5	MWD	456.00	0.50	313.30	63	455.99	2.36	2.18 N	1.37 W	2.58	327.88	0.44	0.16
6	MWD	518.00	0.50	329.50	62	517.99	2.82	2.60 N	1.70 W	3.11	326.77	0.23	0.00
7	MWD	610.00	1.10	321.20	92	609.98	3.96	3.63 N	2.46 W	4.39	325.90	0.66	0.65
8	MWD	701.00	1.40	332.70	91	700.96	5.77	5.30 N	3.52 W	6.36	326.44	0.43	0.33
9	MWD	792.00	1.40	329.40	91	791.93	7.85	7.25 N	4.59 W	8.58	327.63	0.09	0.00
10	MWD	884.00	1.80	318.80	92	883.89	10.11	9.30 N	6.12 W	11.13	326.67	0.54	0.43
11	MWD	980.00	2.30	312.80	96	979.83	12.88	11.74 N	8.52 W	14.51	324.03	0.57	0.52
12	MWD	1083.00	2.10	313.80	103	1082.76	15.99	14.46 N	11.40 W	18.41	321.73	0.20	-0.19
13	MWD	1178.00	1.90	319.10	95	1177.70	18.70	16.85 N	13.69 W	21.71	320.91	0.29	-0.21
14	MWD	1273.00	3.30	300.10	95	1272.60	21.73	19.41 N	17.09 W	25.86	318.65	1.71	1.47
15	MWD	1368.00	5.60	301.00	95	1367.31	26.39	23.17 N	23.43 W	32.95	314.69	2.42	2.42
16	MWD	1462.00	5.50	297.70	94	1460.87	31.98	27.63 N	31.35 W	41.78	311.39	0.36	-0.11
17	MWD	1557.00	5.80	278.20	95	1555.41	36.05	30.43 N	40.13 W	50.36	307.17	2.04	0.32
18	MWD	1652.00	6.20	257.10	95	1649.91	37.04	29.97 N	49.88 W	58.19	301.00	2.35	0.42
19	MWD	1746.00	6.20	254.10	94	1743.36	36.01	27.44 N	59.71 W	65.72	294.68	0.34	0.00
20	MWD	1841.00	5.80	253.70	95	1837.84	34.70	24.69 N	69.25 W	73.52	289.62	0.42	-0.42
21	MWD	1936.00	5.60	252.70	95	1932.37	33.35	21.97 N	78.28 W	81.31	285.67	0.24	-0.21
22	MWD	2030.00	5.50	250.70	94	2025.92	31.81	19.11 N	86.92 W	88.99	282.40	0.23	-0.11
23	MWD	2125.00	5.10	250.60	95	2120.52	30.16	16.21 N	95.20 W	96.56	279.66	0.42	-0.42
24	MWD	2220.00	5.60	247.80	95	2215.10	28.27	13.05 N	103.47 W	104.29	277.19	0.59	0.53
25	MWD	2314.00	5.80	246.70	94	2308.64	25.98	9.44 N	112.08 W	112.48	274.81	0.24	0.21
26	MWD	2409.00	5.50	244.60	95	2403.18	23.44	5.59 N	120.60 W	120.73	272.65	0.38	-0.32
27	MWD	2504.00	5.50	241.40	95	2497.74	20.55	1.46 N	128.71 W	128.72	270.65	0.32	0.00
28	MWD	2599.00	5.30	241.10	95	2592.32	17.47	2.84 S	136.55 W	136.58	268.81	0.21	-0.21
29	MWD	2693.00	4.80	239.50	94	2685.95	14.48	6.94 S	143.74 W	143.90	267.24	0.55	-0.53
30	MWD	2788.00	5.60	243.00	95	2780.56	11.53	11.06 S	151.29 W	151.70	265.82	0.91	0.84
31	MWD	2883.00	5.50	242.70	95	2875.12	8.60	15.25 S	159.47 W	160.20	264.54	0.11	-0.11
32	MWD	2977.00	5.30	241.80	94	2968.70	5.69	19.37 S	167.30 W	168.41	263.40	0.23	-0.21
33	MWD	3072.00	6.50	246.50	95	3063.20	2.82	23.59 S	176.09 W	177.67	262.37	1.36	1.26
34	MWD	3167.00	6.00	248.80	95	3157.63	0.35	27.53 S	185.66 W	187.68	261.57	0.59	-0.53



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Survey #	Survey Tool Type	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')
								N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)		
35	MWD	3262.00	5.50	250.20	95	3252.15	-1.63	30.86 S	194.57 W	197.00	260.99	0.55	-0.53
36	MWD	3356.00	4.90	248.10	94	3345.76	-3.44	33.89 S	202.53 W	205.35	260.50	0.67	-0.64
37	MWD	3451.00	6.50	249.90	95	3440.29	-5.45	37.25 S	211.35 W	214.60	260.00	1.69	1.68
38	MWD	3546.00	5.10	244.20	95	3534.80	-7.78	40.93 S	220.20 W	223.97	259.47	1.59	-1.47
39	MWD	3641.00	5.10	248.60	95	3629.43	-9.97	44.31 S	227.93 W	232.20	259.00	0.41	0.00
40	MWD	3735.00	6.20	253.60	94	3722.97	-11.60	47.27 S	236.69 W	241.36	258.71	1.28	1.17
41	MWD	3830.00	6.90	259.70	95	3817.35	-12.48	49.74 S	247.23 W	252.18	258.62	1.04	0.74
42	MWD	3925.00	5.10	262.20	95	3911.83	-12.60	51.33 S	257.03 W	262.10	258.71	1.91	-1.89
43	MWD	4020.00	4.60	261.60	95	4006.49	-12.53	52.46 S	264.98 W	270.12	258.80	0.53	-0.53
44	MWD	4114.00	3.90	260.20	94	4100.23	-12.59	53.56 S	271.86 W	277.08	258.86	0.75	-0.74
45	MWD	4209.00	4.00	264.10	95	4195.00	-12.51	54.45 S	278.34 W	283.61	258.93	0.30	0.11
46	MWD	4304.00	3.50	256.00	95	4289.80	-12.64	55.49 S	284.45 W	289.81	258.96	0.77	-0.53
47	MWD	4399.00	4.20	248.30	95	4384.58	-13.70	57.48 S	290.49 W	296.12	258.81	0.91	0.74
48	MWD	4494.00	5.80	262.30	95	4479.22	-14.42	59.41 S	298.48 W	304.34	258.74	2.11	1.68
49	MWD	4588.00	4.90	254.80	94	4572.81	-14.82	61.10 S	307.06 W	313.08	258.75	1.21	-0.96
50	MWD	4683.00	5.50	256.50	95	4667.42	-15.68	63.22 S	315.41 W	321.68	258.67	0.65	0.63
51	MWD	4778.00	6.70	263.20	95	4761.88	-15.91	64.94 S	325.34 W	331.75	258.71	1.47	1.26
52	MWD	4872.00	6.00	265.70	94	4855.31	-15.38	65.96 S	335.68 W	342.10	258.88	0.80	-0.74
53	MWD	4967.00	5.30	270.30	95	4949.85	-14.34	66.31 S	345.02 W	351.33	259.12	0.88	-0.74
54	MWD	5062.00	6.30	260.90	95	5044.36	-13.72	67.11 S	354.55 W	360.85	259.28	1.45	1.05
55	MWD	5157.00	7.00	260.90	95	5138.72	-13.82	68.85 S	365.42 W	371.85	259.33	0.74	0.74
56	MWD	5252.00	6.90	262.00	95	5233.02	-13.83	70.56 S	376.78 W	383.33	259.39	0.18	-0.11
57	MWD	5346.00	6.70	262.70	94	5326.36	-13.65	72.04 S	387.81 W	394.45	259.48	0.23	-0.21
58	MWD	5441.00	6.20	264.50	95	5420.76	-13.26	73.24 S	398.42 W	405.09	259.58	0.57	-0.53
59	MWD	5536.00	5.80	261.30	95	5515.24	-13.00	74.46 S	408.27 W	415.00	259.66	0.55	-0.42
60	MWD	5630.00	5.80	260.10	94	5608.76	-13.13	75.99 S	417.64 W	424.50	259.69	0.13	0.00
61	MWD	5725.00	5.50	260.10	95	5703.30	-13.35	77.60 S	426.86 W	433.85	259.70	0.32	-0.32
62	MWD	5820.00	5.10	261.10	95	5797.89	-13.49	79.04 S	435.51 W	442.63	259.71	0.43	-0.42
63	MWD	5915.00	4.60	261.50	95	5892.55	-13.51	80.25 S	443.45 W	450.65	259.74	0.53	-0.53
64	MWD	6009.00	4.40	261.60	94	5986.26	-13.50	81.34 S	450.75 W	458.03	259.77	0.21	-0.21
65	MWD	6104.00	3.90	266.20	95	6081.01	-13.22	82.08 S	457.58 W	464.88	259.83	0.63	-0.53
66	MWD	6199.00	4.00	260.90	95	6175.79	-12.99	82.82 S	464.07 W	471.40	259.88	0.40	0.11
67	MWD	6294.00	3.90	256.70	95	6270.56	-13.29	84.09 S	470.49 W	477.94	259.87	0.32	-0.11
68	MWD	6388.00	5.30	249.00	94	6364.26	-14.49	86.38 S	477.65 W	485.40	259.75	1.62	1.49
69	MWD	6483.00	5.50	244.60	95	6458.83	-16.76	89.90 S	485.86 W	494.11	259.52	0.48	0.21
70	MWD	6578.00	5.50	244.90	95	6553.40	-19.38	93.79 S	494.10 W	502.92	259.25	0.03	0.00
71	MWD	6672.00	5.10	245.50	94	6647.00	-21.81	97.43 S	501.98 W	511.34	259.02	0.43	-0.43
72	MWD	6767.00	4.90	245.10	95	6741.63	-24.11	100.89 S	509.50 W	519.39	258.80	0.21	-0.21



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								N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)		
73	MWD	6862.00	4.60	245.10	95	6836.31	-26.33	104.20 S	516.63 W	527.04	258.60	0.32	-0.32
74	MWD	6957.00	4.20	244.90	95	6931.03	-28.39	107.28 S	523.24 W	534.13	258.41	0.42	-0.42
75	MWD	7051.00	4.20	246.00	94	7024.77	-30.29	110.14 S	529.50 W	540.84	258.25	0.09	0.00
76	MWD	7146.00	3.70	244.90	95	7119.55	-32.09	112.86 S	535.46 W	547.22	258.10	0.53	-0.53
77	MWD	7241.00	3.30	244.10	95	7214.37	-33.78	115.35 S	540.69 W	552.86	257.96	0.42	-0.42
78	MWD	7336.00	3.30	236.30	95	7309.21	-35.76	118.06 S	545.43 W	558.06	257.79	0.47	0.00
79	MWD	7430.00	3.30	229.70	94	7403.06	-38.33	121.32 S	549.74 W	562.97	257.56	0.40	0.00
80	MWD	7525.00	3.70	226.00	95	7497.88	-41.55	125.21 S	554.03 W	568.00	257.26	0.48	0.42
81	MWD	7620.00	3.50	227.70	95	7592.69	-44.94	129.29 S	558.38 W	573.15	256.96	0.24	-0.21
82	MWD	7715.00	3.20	223.30	95	7687.53	-48.19	133.18 S	562.34 W	577.90	256.68	0.42	-0.32
83	MWD	7809.00	3.00	224.60	94	7781.39	-51.29	136.84 S	565.87 W	582.18	256.41	0.23	-0.21
84	MWD	7904.00	3.20	216.60	95	7876.26	-54.65	140.74 S	569.20 W	586.34	256.11	0.50	0.21
85	MWD	7999.00	4.00	216.50	95	7971.07	-58.86	145.53 S	572.75 W	590.95	255.74	0.84	0.84
86	MWD	8188.00	4.20	215.40	189	8159.58	-68.50	156.47 S	580.68 W	601.39	254.92	0.11	0.11
87	MWD	8274.00	4.20	224.00	86	8245.35	-72.69	161.30 S	584.69 W	606.53	254.58	0.73	0.00
88	MWD	8368.00	4.00	223.80	94	8339.11	-76.78	166.14 S	589.35 W	612.32	254.26	0.21	-0.21
89	MWD	8463.00	4.80	223.00	95	8433.83	-81.28	171.44 S	594.36 W	618.59	253.91	0.84	0.84
90	MWD	8558.00	4.80	227.50	95	8528.50	-85.97	177.03 S	600.00 W	625.57	253.56	0.40	0.00
91	MWD	8653.00	4.90	223.70	95	8623.16	-90.68	182.65 S	605.73 W	632.67	253.22	0.35	0.11
92	MWD	8748.00	4.60	224.90	95	8717.83	-95.43	188.28 S	611.22 W	639.56	252.88	0.33	-0.32
93	MWD	8937.00	4.40	226.80	189	8906.25	-104.07	198.62 S	621.86 W	652.80	252.29	0.13	-0.11
94	MWD	9032.00	4.20	222.60	95	9000.98	-108.32	203.67 S	626.87 W	659.12	252.00	0.39	-0.21
95	MWD	9127.00	4.20	222.80	95	9095.73	-112.68	208.78 S	631.59 W	665.20	251.71	0.02	0.00
96	MWD	9221.00	3.00	239.70	94	9189.54	-115.74	212.55 S	636.05 W	670.62	251.52	1.69	-1.28
97	MWD	9316.00	3.00	238.60	95	9284.41	-117.63	215.10 S	640.32 W	675.48	251.43	0.06	0.00
98	MWD	9411.00	2.50	249.20	95	9379.30	-119.03	217.13 S	644.38 W	679.98	251.38	0.75	-0.53
99	MWD	9506.00	2.60	243.00	95	9474.21	-120.16	218.85 S	648.23 W	684.18	251.35	0.31	0.11
100	MWD	9600.00	2.60	245.80	94	9568.11	-121.41	220.69 S	652.08 W	688.41	251.30	0.14	0.00
101	MWD	9695.00	3.50	274.50	95	9662.98	-121.33	221.34 S	656.93 W	693.22	251.38	1.84	0.95
102	MWD	9790.00	3.90	291.20	95	9757.79	-119.08	219.95 S	662.84 W	698.38	251.64	1.20	0.42
103	MWD	9884.00	3.90	293.10	94	9851.57	-115.81	217.54 S	668.76 W	703.25	251.98	0.14	0.00
104	MWD	9979.00	3.90	292.20	95	9946.35	-112.47	215.05 S	674.72 W	708.16	252.32	0.06	0.00
105	MWD	10074.00	3.70	290.10	95	10041.14	-109.35	212.77 S	680.59 W	713.08	252.64	0.26	-0.21
106	MWD	10169.00	3.20	294.20	95	10135.97	-106.44	210.63 S	685.89 W	717.50	252.93	0.59	-0.53
107	MWD	10263.00	2.80	289.40	94	10229.84	-103.95	208.80 S	690.45 W	721.33	253.17	0.50	-0.43
108	MWD	10358.00	2.60	282.40	95	10324.73	-102.09	207.56 S	694.74 W	725.08	253.37	0.41	-0.21
109	MWD	10452.00	2.30	285.90	94	10418.65	-100.55	206.59 S	698.64 W	728.54	253.53	0.36	-0.32
110	MWD	10512.00	1.60	264.50	60	10478.61	-100.01	206.34 S	700.63 W	730.38	253.59	1.66	-1.17



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111	MWD	10577.00	1.80	264.50	65	10543.58	-99.91	206.52 S	702.55 W	732.27	253.62	0.31	0.31
112	MWD	10765.00	2.30	118.90	188	10731.54	-102.04	208.63 S	702.18 W	732.52	253.45	2.08	0.27
113	MWD	10860.00	1.90	108.20	95	10826.47	-103.91	210.04 S	699.02 W	729.89	253.28	0.59	-0.42
114	MWD	10954.00	1.60	113.30	94	10920.43	-105.30	211.05 S	696.33 W	727.61	253.14	0.36	-0.32
115	MWD	11049.00	1.20	115.00	95	11015.40	-106.55	211.99 S	694.21 W	725.86	253.02	0.42	-0.42
116	MWD	11143.00	1.40	114.90	94	11109.38	-107.73	212.89 S	692.28 W	724.28	252.91	0.21	0.21
117	MWD	11238.00	0.70	139.10	95	11204.36	-108.86	213.82 S	690.85 W	723.18	252.80	0.86	-0.74
118	MWD	11332.00	1.20	338.80	94	11298.35	-108.38	213.34 S	690.83 W	723.02	252.84	1.99	0.53
119	MWD	11425.00	1.40	348.10	93	11391.33	-106.30	211.32 S	691.41 W	722.99	253.01	0.31	0.22
120	MWD	11518.00	1.20	345.50	93	11484.31	-104.20	209.26 S	691.89 W	722.84	253.17	0.22	-0.22
121	MWD	11612.00	1.20	351.30	94	11578.29	-102.23	207.34 S	692.29 W	722.67	253.33	0.13	0.00
122	MWD	11706.00	0.50	331.60	94	11672.27	-100.86	206.00 S	692.63 W	722.62	253.44	0.80	-0.74
123	MWD	11738.00	0.50	357.10	32	11704.27	-100.59	205.74 S	692.70 W	722.61	253.46	0.69	0.00
124	MWD	11800.00	0.70	1.00	62	11766.27	-99.95	205.09 S	692.71 W	722.43	253.51	0.33	0.32
125	MWD	11847.00	3.00	359.60	47	11813.24	-98.45	203.58 S	692.71 W	722.01	253.62	4.89	4.89
126	MWD	11894.00	9.00	3.20	47	11859.96	-93.63	198.67 S	692.52 W	720.45	253.99	12.78	12.77
127	MWD	11941.00	16.70	6.20	47	11905.75	-83.48	188.27 S	691.58 W	716.75	254.77	16.44	16.38
128	MWD	11988.00	24.60	6.20	47	11949.70	-67.47	171.81 S	689.79 W	710.87	256.01	16.81	16.81
129	MWD	12034.00	31.10	2.20	46	11990.35	-46.51	150.39 S	688.30 W	704.54	257.67	14.70	14.13
130	MWD	12081.00	34.70	1.50	47	12029.81	-21.40	124.88 S	687.48 W	698.73	259.70	7.70	7.66
131	MWD	12127.00	38.90	0.80	46	12066.63	5.75	97.34 S	686.94 W	693.80	261.94	9.18	9.13
132	MWD	12174.00	42.40	1.30	47	12102.29	35.94	66.73 S	686.37 W	689.61	264.45	7.48	7.45
133	MWD	12220.00	45.70	0.80	46	12135.34	67.47	34.76 S	685.79 W	686.67	267.10	7.21	7.17
134	MWD	12267.00	48.00	357.40	47	12167.49	101.45	0.48 S	686.35 W	686.35	269.96	7.20	4.89
135	MWD	12314.00	50.30	356.90	47	12198.23	136.82	35.02 N	688.12 W	689.01	272.91	4.96	4.89
136	MWD	12361.00	51.60	358.00	47	12227.84	173.12	71.48 N	689.74 W	693.44	275.92	3.31	2.77
137	MWD	12407.00	54.90	358.30	46	12255.36	209.72	108.32 N	690.93 W	699.37	278.91	7.19	7.17
138	MWD	12454.00	60.90	358.10	47	12280.32	249.24	148.09 N	692.18 W	707.85	282.08	12.77	12.77
139	MWD	12502.00	63.30	358.30	48	12302.78	291.37	190.49 N	693.51 W	719.20	285.36	5.01	5.00
140	MWD	12549.00	66.20	358.50	47	12322.83	333.56	232.98 N	694.70 W	732.72	288.54	6.18	6.17
141	MWD	12595.00	70.70	358.10	46	12339.72	376.03	275.73 N	695.97 W	748.60	291.61	9.82	9.78
142	MWD	12642.00	78.30	357.60	47	12352.27	421.00	320.96 N	697.67 W	767.96	294.70	16.20	16.17
143	MWD	12687.00	82.30	355.90	45	12359.85	465.16	365.23 N	700.19 W	789.72	297.55	9.64	8.89
144	MWD	12743.00	91.50	354.60	56	12362.88	520.90	420.90 N	704.82 W	820.93	300.84	16.59	16.43
145	MWD	12774.00	92.40	354.50	31	12361.82	551.83	451.74 N	707.76 W	839.64	302.55	2.92	2.90
146	MWD	12869.00	89.40	356.40	95	12360.33	646.58	546.41 N	715.29 W	900.12	307.38	3.74	-3.16
147	MWD	12963.00	91.50	356.90	94	12359.59	740.18	640.24 N	720.79 W	964.08	311.61	2.30	2.23
148	MWD	13057.00	91.10	359.60	94	12357.46	833.49	734.17 N	723.66 W	1030.86	315.41	2.90	-0.43



DRILTECH MWD SURVEY REPORT

Company: EOG Resources, Inc
Well: Thor 21 702H
Location: Lea Co., NM
Rig: H&P 260

Job Number: 2015-067-EODT-NM
Vertical Section Plane: 351.46
WELL API #: 30-025-42480
Tie Into: Surface

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		Closure		Dogleg Severity (d/100')	Build Rate (d/100')
								N/S (ft)	E/W (ft)	Distance (ft)	Angle (deg)		
149	MWD	13152.00	89.40	359.90	95	12357.05	927.49	829.16 N	724.07 W	1100.81	318.87	1.82	-1.79
150	MWD	13246.00	91.00	0.60	94	12356.72	1020.39	923.16 N	723.66 W	1172.99	321.91	1.86	1.70
151	MWD	13341.00	92.60	1.30	95	12353.73	1114.04	1018.09 N	722.09 W	1248.17	324.65	1.84	1.68
152	MWD	13436.00	89.00	0.80	95	12352.41	1207.68	1113.05 N	720.35 W	1325.81	327.09	3.83	-3.79
153	MWD	13530.00	90.80	1.30	94	12352.57	1300.36	1207.03 N	718.62 W	1404.76	329.23	1.99	1.91
154	MWD	13623.00	92.60	2.50	93	12349.81	1391.78	1299.94 N	715.54 W	1483.86	331.17	2.33	1.94
155	MWD	13717.00	91.30	1.00	94	12346.61	1484.21	1393.83 N	712.67 W	1565.46	332.92	2.11	-1.38
156	MWD	13811.00	89.90	359.60	94	12345.63	1577.08	1487.82 N	712.18 W	1649.49	334.42	2.11	-1.49
157	MWD	13906.00	91.50	359.70	95	12344.47	1671.10	1582.81 N	712.76 W	1735.89	335.76	1.69	1.68
158	MWD	14000.00	91.80	0.40	94	12341.76	1764.01	1676.77 N	712.68 W	1821.94	336.97	0.81	0.32
159	MWD	14094.00	91.30	359.60	94	12339.22	1856.93	1770.73 N	712.68 W	1908.77	338.08	1.00	-0.53
160	MWD	14188.00	89.20	359.70	94	12338.81	1949.97	1864.73 N	713.25 W	1996.48	339.07	2.24	-2.23
161	MWD	14282.00	89.40	0.40	94	12339.96	2042.91	1958.72 N	713.17 W	2084.51	339.99	0.77	0.21
162	MWD	14377.00	91.10	1.10	95	12339.54	2136.66	2053.71 N	711.93 W	2173.60	340.88	1.94	1.79
163	MWD	14471.00	92.90	1.00	94	12336.26	2229.28	2147.63 N	710.21 W	2262.01	341.70	1.92	1.91
164	MWD	14565.00	91.50	0.60	94	12332.66	2321.96	2241.55 N	708.90 W	2350.97	342.45	1.55	-1.49
165	MWD	14659.00	93.10	1.80	94	12328.88	2414.53	2335.45 N	706.93 W	2440.09	343.16	2.13	1.70
166	MWD	14754.00	92.00	359.90	95	12324.66	2508.16	2430.34 N	705.52 W	2530.67	343.81	2.31	-1.16
167	MWD	14848.00	92.40	0.10	94	12321.05	2601.05	2524.27 N	705.52 W	2621.01	344.38	0.48	0.43
168	MWD	14943.00	91.50	358.70	95	12317.81	2695.08	2619.20 N	706.52 W	2712.82	344.90	1.75	-0.95
169	MWD	15037.00	93.10	359.40	94	12314.04	2788.18	2713.11 N	708.07 W	2803.99	345.37	1.86	1.70
170	MWD	15132.00	91.70	358.80	95	12310.06	2882.25	2808.01 N	709.57 W	2896.28	345.82	1.60	-1.47
171	MWD	15226.00	92.90	359.60	94	12306.29	2975.32	2901.93 N	710.88 W	2987.73	346.24	1.53	1.28
172	MWD	15321.00	90.40	358.80	95	12303.56	3069.40	2996.87 N	712.20 W	3080.33	346.63	2.76	-2.63
173	MWD	15415.00	91.30	358.80	94	12302.16	3162.62	3090.84 N	714.17 W	3172.27	346.99	0.96	0.96
174	MWD	15510.00	90.30	358.30	95	12300.84	3256.88	3185.80 N	716.58 W	3265.39	347.32	1.18	-1.05
175	MWD	15604.00	91.50	359.70	94	12299.36	3350.06	3279.77 N	718.22 W	3357.48	347.65	1.96	1.28
176	MWD	15698.00	92.00	0.40	94	12296.49	3442.96	3373.72 N	718.13 W	3449.31	347.98	0.91	0.53
177	MWD	15791.00	91.70	1.10	93	12293.49	3534.69	3466.66 N	716.92 W	3540.02	348.32	0.82	-0.32
178	MWD	15884.00	90.80	0.30	93	12291.46	3626.46	3559.63 N	715.78 W	3630.89	348.63	1.29	-0.97
179	MWD	15978.00	91.70	0.60	94	12289.41	3719.28	3653.61 N	715.04 W	3722.92	348.93	1.01	0.96
180	MWD	16071.00	90.80	0.10	93	12287.38	3811.14	3746.58 N	714.48 W	3814.10	349.20	1.11	-0.97
181	MWD	16164.00	91.50	359.60	93	12285.51	3903.13	3839.56 N	714.72 W	3905.52	349.46	0.92	0.75
182	MWD	16258.00	91.30	358.00	94	12283.21	3996.32	3933.51 N	716.69 W	3998.27	349.67	1.71	-0.21
183	MWD	16351.00	91.30	357.10	93	12281.10	4088.77	4026.40 N	720.66 W	4090.38	349.85	0.97	0.00
184	MWD	16444.00	91.50	357.60	93	12278.83	4181.26	4119.27 N	724.96 W	4182.58	350.02	0.58	0.22
185	MWD	16537.00	92.20	358.50	93	12275.83	4273.59	4212.17 N	728.12 W	4274.64	350.19	1.23	0.75
186	MWD	16630.00	92.90	359.60	93	12271.69	4365.68	4305.06 N	729.66 W	4366.46	350.38	1.40	0.75

