

DRILTECH MWD SURVEY REPORT



Company: EOG Resources, Inc
 Well: Brown Bear 36 State #703H
 Location: Lea Co., NM
 Rig: H&P 260

Job Number: M-2015-080-EODT-NM
 Vertical Section Plane: 359.39
 WELL API #: 30-025-42539
 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 Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')
								N/S (ft)	E/W (ft)				
Tie In	Surf	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	178.00	1.80	125.40	178	177.97	-1.64	1.62	2.28	2.80	125.40	1.01	1.01
2	MWD	267.00	2.10	114.10	89	266.92	-3.15	3.10	4.91	5.80	122.24	0.55	0.34
3	MWD	387.00	0.90	80.00	120	386.88	-3.91	3.83	7.84	8.73	116.03	1.20	-1.00
4	MWD	512.00	1.10	68.10	125	511.86	-3.32	3.21	9.92	10.43	107.93	0.23	0.16
5	MWD	695.00	0.90	51.50	183	694.83	-1.80	1.66	12.68	12.79	97.47	0.19	-0.11
6	MWD	879.00	0.40	87.20	184	878.82	-0.88	0.73	14.45	14.47	92.89	0.34	-0.27
7	MWD	974.00	0.90	52.20	95	973.81	-0.42	0.26	15.37	15.37	90.96	0.65	0.53
8	MWD	1030.00	0.90	48.70	56	1029.81	0.13	0.30	16.05	16.05	88.92	0.10	0.00
9	MWD	1158.00	0.70	51.50	128	1157.79	1.27	1.45	17.41	17.48	85.23	0.16	-0.16
10	MWD	1251.00	1.80	136.60	93	1250.78	0.54	0.75	18.86	18.88	87.74	2.02	1.18
11	MWD	1344.00	2.60	172.50	93	1343.71	-2.62	2.41	20.14	20.29	96.82	1.67	0.86
12	MWD	1438.00	2.60	173.70	94	1437.61	-6.86	6.64	20.65	21.70	107.82	0.06	0.00
13	MWD	1531.00	2.80	195.30	93	1530.51	-11.14	10.93	20.29	23.04	118.31	1.11	0.22
14	MWD	1625.00	2.80	197.10	94	1624.40	-15.54	15.34	19.01	24.42	128.90	0.09	0.00
15	MWD	1718.00	2.60	198.80	93	1717.30	-19.69	19.51	17.66	26.31	137.85	0.23	-0.22
16	MWD	1811.00	2.60	199.50	93	1810.20	-23.66	23.49	16.27	28.58	145.29	0.03	0.00
17	MWD	1905.00	2.50	198.80	94	1904.11	-27.60	27.44	14.90	31.23	151.50	0.11	-0.11
18	MWD	1998.00	2.60	198.10	93	1997.02	-31.51	31.37	13.59	34.18	156.57	0.11	0.11
19	MWD	2091.00	2.60	195.70	93	2089.92	-35.53	35.40	12.37	37.50	160.74	0.12	0.00
20	MWD	2185.00	2.50	197.40	94	2183.83	-39.53	39.41	11.18	40.96	164.17	0.13	-0.11
21	MWD	2279.00	2.30	199.00	94	2277.75	-43.25	43.15	9.95	44.28	167.02	0.22	-0.21
22	MWD	2374.00	2.10	198.00	95	2372.67	-46.70	46.61	8.79	47.43	169.32	0.21	-0.21
23	MWD	2468.00	1.80	194.10	94	2466.62	-49.76	49.68	7.90	50.30	170.97	0.35	-0.32
24	MWD	2562.00	1.60	190.20	94	2560.58	-52.48	52.40	7.31	52.91	172.06	0.25	-0.21
25	MWD	2656.00	1.40	183.20	94	2654.55	-54.91	54.84	7.01	55.29	172.71	0.29	-0.21
26	MWD	2751.00	2.50	184.80	95	2749.49	-58.13	58.06	6.77	58.46	173.35	1.16	1.16
27	MWD	2845.00	2.80	185.10	94	2843.39	-62.46	62.39	6.40	62.72	174.15	0.32	0.32
28	MWD	2939.00	2.50	177.20	94	2937.29	-66.79	66.73	6.29	67.02	174.61	0.50	-0.32
29	MWD	3034.00	3.20	178.30	95	3032.17	-71.51	71.45	6.47	71.74	174.82	0.74	0.74
30	MWD	3128.00	3.30	171.10	94	3126.02	-76.81	76.74	6.97	77.06	174.81	0.45	0.11
31	MWD	3223.00	3.30	165.80	95	3220.86	-82.18	82.09	8.06	82.49	174.39	0.32	0.00
32	MWD	3317.00	4.00	182.70	94	3314.67	-88.08	87.99	8.57	88.41	174.44	1.36	0.74
33	MWD	3411.00	3.90	176.50	94	3408.45	-94.54	94.46	8.61	94.85	174.79	0.47	-0.11
34	MWD	3506.00	3.70	168.40	95	3503.24	-100.78	100.69	9.43	101.13	174.65	0.60	-0.21

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Vertical Section Plane: 359.39
WELL API #: 30-025-42539
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)				
35	MWD	3600.00	4.60	170.20	94	3597.00	-107.48	107.37	S	10.68	E	107.90	174.32	0.97	0.96
36	MWD	3694.00	4.60	165.10	94	3690.69	-114.85	114.73	S	12.29	E	115.38	173.89	0.43	0.00
37	MWD	3789.00	4.40	177.00	95	3785.40	-122.19	122.05	S	13.46	E	122.79	173.71	1.00	-0.21
38	MWD	3883.00	4.80	199.20	94	3879.11	-129.49	129.36	S	12.35	E	129.95	174.54	1.93	0.43
39	MWD	3977.00	4.00	201.30	94	3972.83	-136.23	136.13	S	9.87	E	136.49	175.85	0.87	-0.85
40	MWD	4072.00	4.60	182.50	95	4067.57	-143.11	143.03	S	8.50	E	143.28	176.60	1.60	0.63
41	MWD	4165.00	4.60	186.40	93	4160.27	-150.53	150.46	S	7.92	E	150.67	176.99	0.34	0.00
42	MWD	4260.00	4.00	192.00	95	4255.00	-157.55	157.48	S	6.81	E	157.63	177.52	0.77	-0.63
43	MWD	4354.00	3.30	196.60	94	4348.81	-163.33	163.28	S	5.35	E	163.37	178.12	0.81	-0.74
44	MWD	4449.00	2.80	197.80	95	4443.67	-168.15	168.11	S	3.86	E	168.16	178.68	0.53	-0.53
45	MWD	4543.00	2.60	179.50	94	4537.57	-172.46	172.43	S	3.18	E	172.46	178.94	0.94	-0.21
46	MWD	4637.00	2.30	179.20	94	4631.49	-176.47	176.45	S	3.22	E	176.48	178.95	0.32	-0.32
47	MWD	4732.00	2.30	172.80	95	4726.41	-180.27	180.25	S	3.49	E	180.28	178.89	0.27	0.00
48	MWD	4825.00	3.20	160.00	93	4819.30	-184.58	184.54	S	4.61	E	184.60	178.57	1.17	0.97
49	MWD	4919.00	3.20	165.80	94	4913.16	-189.60	189.55	S	6.15	E	189.65	178.14	0.34	0.00
50	MWD	5012.00	2.30	200.60	93	5006.05	-193.87	193.81	S	6.13	E	193.91	178.19	1.99	-0.97
51	MWD	5106.00	1.80	208.70	94	5099.99	-196.91	196.87	S	4.76	E	196.93	178.61	0.61	-0.53
52	MWD	5199.00	1.60	213.60	93	5192.95	-199.26	199.23	S	3.34	E	199.26	179.04	0.27	-0.22
53	MWD	5294.00	1.60	211.00	95	5287.92	-201.48	201.48	S	1.92	E	201.48	179.45	0.08	0.00
54	MWD	5388.00	2.10	231.20	94	5381.87	-203.67	203.68	S	0.09	W	203.68	180.03	0.87	0.53
55	MWD	5483.00	2.50	241.60	95	5476.79	-205.71	205.76	S	3.27	W	205.78	180.91	0.61	0.42
56	MWD	5578.00	2.10	239.10	95	5571.71	-207.55	207.64	S	6.59	W	207.74	181.82	0.43	-0.42
57	MWD	5672.00	2.10	237.00	94	5665.65	-209.34	209.46	S	9.51	W	209.67	182.60	0.08	0.00
58	MWD	5765.00	0.90	225.20	93	5758.62	-210.77	210.90	S	11.46	W	211.21	183.11	1.33	-1.29
59	MWD	5859.00	0.40	267.70	94	5852.61	-211.29	211.43	S	12.31	W	211.79	183.33	0.70	-0.53
60	MWD	5953.00	0.90	15.70	94	5946.61	-210.59	210.74	S	12.44	W	211.10	183.38	1.16	0.53
61	MWD	6047.00	1.20	6.70	94	6040.59	-208.91	209.05	S	12.12	W	209.40	183.32	0.36	0.32
62	MWD	6141.00	1.10	2.70	94	6134.57	-207.03	207.17	S	11.97	W	207.51	183.31	0.14	-0.11
63	MWD	6234.00	1.10	0.40	93	6227.56	-205.25	205.38	S	11.92	W	205.73	183.32	0.05	0.00
64	MWD	6329.00	1.10	359.70	95	6322.54	-203.42	203.56	S	11.92	W	203.91	183.35	0.01	0.00
65	MWD	6422.00	1.10	1.80	93	6415.52	-201.64	201.78	S	11.89	W	202.13	183.37	0.04	0.00
66	MWD	6517.00	1.10	359.20	95	6510.50	-199.81	199.95	S	11.88	W	200.31	183.40	0.05	0.00
67	MWD	6611.00	0.90	356.20	94	6604.49	-198.18	198.31	S	11.94	W	198.67	183.45	0.22	-0.21
68	MWD	6706.00	0.90	353.20	95	6699.48	-196.69	196.83	S	12.08	W	197.20	183.51	0.05	0.00
69	MWD	6800.00	0.90	351.40	94	6793.47	-195.22	195.37	S	12.28	W	195.75	183.60	0.03	0.00
70	MWD	6894.00	0.90	351.40	94	6887.45	-193.76	193.91	S	12.50	W	194.31	183.69	0.00	0.00
71	MWD	6989.00	0.90	351.10	95	6982.44	-192.28	192.43	S	12.72	W	192.85	183.78	0.00	0.00
72	MWD	7083.00	0.90	350.70	94	7076.43	-190.82	190.97	S	12.96	W	191.41	183.88	0.01	0.00



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73	MWD	7177.00	0.70	338.90	94	7170.42	-189.56	189.71	S 13.28	W 190.17	184.01	0.27	-0.21
74	MWD	7271.00	0.90	333.10	94	7264.41	-188.36	188.51	S 13.82	W 189.02	184.19	0.23	0.21
75	MWD	7366.00	0.70	328.70	95	7359.40	-187.19	187.35	S 14.46	W 187.91	184.41	0.22	-0.21
76	MWD	7460.00	0.50	319.60	94	7453.40	-186.38	186.55	S 15.03	W 187.15	184.61	0.24	-0.21
77	MWD	7554.00	0.50	325.60	94	7547.39	-185.72	185.90	S 15.52	W 186.55	184.77	0.06	0.00
78	MWD	7648.00	0.50	316.30	94	7641.39	-185.08	185.26	S 16.04	W 185.96	184.95	0.09	0.00
79	MWD	7741.00	0.40	324.50	93	7734.39	-184.52	184.71	S 16.51	W 185.44	185.11	0.13	-0.11
80	MWD	7836.00	0.50	302.50	95	7829.38	-184.02	184.21	S 17.05	W 185.00	185.29	0.21	0.11
81	MWD	7930.00	0.50	299.70	94	7923.38	-183.59	183.79	S 17.75	W 184.65	185.52	0.03	0.00
82	MWD	8024.00	0.50	262.80	94	8017.38	-183.43	183.64	S 18.52	W 184.57	185.76	0.34	0.00
83	MWD	8119.00	0.50	244.20	95	8112.37	-183.66	183.87	S 19.30	W 184.88	185.99	0.17	0.00
84	MWD	8213.00	0.70	232.10	94	8206.37	-184.18	184.40	S 20.12	W 185.50	186.23	0.25	0.21
85	MWD	8307.00	0.70	220.10	94	8300.36	-184.96	185.19	S 20.95	W 186.38	186.45	0.16	0.00
86	MWD	8401.00	0.50	208.70	94	8394.36	-185.75	185.99	S 21.51	W 187.23	186.60	0.25	-0.21
87	MWD	8483.00	0.70	226.60	82	8476.35	-186.41	186.65	S 22.05	W 187.95	186.74	0.33	0.24
88	MWD	8578.00	0.50	206.60	95	8571.35	-187.17	187.42	S 22.66	W 188.79	186.89	0.30	-0.21
89	MWD	8672.00	0.70	214.30	94	8665.34	-188.00	188.26	S 23.16	W 189.68	187.01	0.23	0.21
90	MWD	8766.00	0.50	210.80	94	8759.34	-188.83	189.09	S 23.70	W 190.57	187.14	0.22	-0.21
91	MWD	8860.00	0.70	215.90	94	8853.33	-189.64	189.91	S 24.24	W 191.45	187.27	0.22	0.21
92	MWD	8955.00	0.90	234.90	95	8948.32	-190.53	190.81	S 25.19	W 192.46	187.52	0.35	0.21
93	MWD	9049.00	1.10	230.70	94	9042.31	-191.51	191.80	S 26.50	W 193.62	187.87	0.23	0.21
94	MWD	9143.00	1.10	224.20	94	9136.29	-192.71	193.02	S 27.82	W 195.01	188.20	0.13	0.00
95	MWD	9237.00	1.20	224.90	94	9230.27	-194.04	194.36	S 29.15	W 196.54	188.53	0.11	0.11
96	MWD	9331.00	1.20	242.10	94	9324.25	-195.18	195.52	S 30.71	W 197.92	188.93	0.38	0.00
97	MWD	9424.00	0.90	251.20	93	9417.23	-195.86	196.21	S 32.26	W 198.85	189.34	0.37	-0.32
98	MWD	9518.00	0.70	255.80	94	9511.23	-196.22	196.59	S 33.52	W 199.43	189.68	0.22	-0.21
99	MWD	9612.00	0.70	266.90	94	9605.22	-196.38	196.76	S 34.65	W 199.79	189.99	0.14	0.00
100	MWD	9706.00	0.50	262.10	94	9699.21	-196.46	196.85	S 35.63	W 200.05	190.26	0.22	-0.21
101	MWD	9800.00	0.90	221.20	94	9793.21	-197.06	197.46	S 36.52	W 200.81	190.48	0.66	0.43
102	MWD	9894.00	1.40	215.00	94	9887.19	-198.55	198.96	S 37.67	W 202.49	190.72	0.55	0.53
103	MWD	9923.00	1.40	223.10	29	9916.18	-199.09	199.51	S 38.11	W 203.11	190.81	0.68	0.00
104	MWD	10017.00	1.40	225.60	94	10010.15	-200.72	201.15	S 39.72	W 205.03	191.17	0.06	0.00
105	MWD	10111.00	1.20	221.90	94	10104.13	-202.24	202.69	S 41.19	W 206.83	191.49	0.23	-0.21
106	MWD	10206.00	1.40	247.40	95	10199.10	-203.40	203.87	S 42.93	W 208.34	191.89	0.64	0.21
107	MWD	10300.00	1.40	255.40	94	10293.07	-204.11	204.60	S 45.10	W 209.51	192.43	0.21	0.00
108	MWD	10395.00	1.20	243.70	95	10388.05	-204.82	205.34	S 47.12	W 210.67	192.92	0.35	-0.21
109	MWD	10481.00	1.20	234.70	86	10474.03	-205.73	206.26	S 48.66	W 211.92	193.27	0.22	0.00
110	MWD	10575.00	1.80	224.50	94	10568.00	-207.33	207.88	S 50.50	W 213.92	193.65	0.70	0.64



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111	MWD	10668.00	0.90	130.10	93	10660.98	-208.83	209.39	S	50.96	W	215.50	193.68	-0.97
112	MWD	10762.00	1.10	97.40	94	10754.97	-209.44	209.98	S	49.50	W	215.74	193.27	0.21
113	MWD	10857.00	1.40	91.80	95	10849.94	-209.62	210.13	S	47.44	W	215.42	192.72	0.32
114	MWD	10951.00	1.80	90.60	94	10943.91	-209.70	210.19	S	44.81	W	214.91	192.04	0.43
115	MWD	11046.00	1.80	79.80	95	11038.86	-209.48	209.94	S	41.85	W	214.07	191.27	0.00
116	MWD	11140.00	1.20	110.80	94	11132.83	-209.59	210.03	S	39.48	W	213.70	190.65	-0.64
117	MWD	11234.00	1.20	117.80	94	11226.81	-210.42	210.83	S	37.69	W	214.18	190.14	0.00
118	MWD	11328.00	1.10	106.20	94	11320.79	-211.15	211.55	S	35.95	W	214.58	189.65	-0.11
119	MWD	11423.00	0.40	49.10	95	11415.78	-211.20	211.58	S	34.83	W	214.43	189.35	-0.74
120	MWD	11517.00	0.90	291.30	94	11509.78	-210.71	211.10	S	35.27	W	214.03	189.48	0.53
121	MWD	11612.00	2.50	285.00	95	11604.73	-209.88	210.29	S	37.96	W	213.69	190.23	1.68
122	MWD	11706.00	1.10	326.10	94	11698.69	-208.57	209.01	S	40.45	W	212.89	190.95	-1.49
123	MWD	11800.00	1.20	318.50	94	11792.67	-207.07	207.53	S	41.60	W	211.66	191.34	0.11
124	MWD	11894.00	1.90	318.90	94	11886.63	-205.14	205.62	S	43.28	W	210.12	191.89	0.74
125	MWD	11988.00	3.70	344.70	94	11980.52	-201.02	201.51	S	45.10	W	206.50	192.62	1.91
126	MWD	12035.00	12.00	5.10	47	12027.05	-194.68	195.17	S	45.07	W	200.31	193.00	17.66
127	MWD	12082.00	18.70	7.80	47	12072.34	-182.35	182.83	S	43.61	W	187.96	193.42	14.26
128	MWD	12129.00	21.10	8.10	47	12116.54	-166.54	166.99	S	41.40	W	172.04	193.92	5.11
129	MWD	12177.00	24.80	8.50	48	12160.73	-148.05	148.47	S	38.69	W	153.43	194.61	7.71
130	MWD	12224.00	29.60	7.20	47	12202.52	-126.80	127.19	S	35.78	W	132.13	195.71	10.21
131	MWD	12271.00	32.60	3.90	47	12242.76	-102.67	103.04	S	33.46	W	108.33	197.99	6.38
132	MWD	12318.00	35.50	0.90	47	12281.70	-76.40	76.75	S	32.38	W	83.30	202.88	6.17
133	MWD	12366.00	41.70	1.10	48	12319.20	-46.48	46.83	S	31.86	W	56.63	214.23	12.92
134	MWD	12413.00	47.70	4.80	47	12352.59	-13.52	13.84	S	30.10	W	33.13	245.31	12.77
135	MWD	12460.00	48.90	5.10	47	12383.86	21.41	21.12	N	27.07	W	34.34	307.96	2.55
136	MWD	12507.00	52.40	2.10	47	12413.66	57.64	57.38	N	24.81	W	62.52	336.61	7.45
137	MWD	12555.00	58.40	359.90	48	12440.91	97.12	96.87	N	24.15	W	99.83	346.00	12.50
138	MWD	12602.00	59.80	359.00	47	12465.04	137.44	137.19	N	24.54	W	139.37	349.86	2.98
139	MWD	12649.00	63.70	359.70	47	12487.28	178.84	178.58	N	25.01	W	180.32	352.03	8.30
140	MWD	12696.00	71.60	359.20	47	12505.14	222.27	222.01	N	25.43	W	223.47	353.47	16.81
141	MWD	12743.00	76.50	359.20	47	12518.05	267.45	267.19	N	26.06	W	268.45	354.43	10.43
142	MWD	12790.00	77.20	359.70	47	12528.75	313.22	312.95	N	26.50	W	314.07	355.16	1.49
143	MWD	12837.00	78.80	0.40	47	12538.52	359.18	358.92	N	26.46	W	359.90	355.78	3.40
144	MWD	12884.00	82.90	1.30	47	12545.99	405.56	405.31	N	25.77	W	406.13	356.36	8.72
145	MWD	12932.00	88.90	2.80	48	12549.42	453.36	453.13	N	24.05	W	453.77	356.96	12.50
146	MWD	13025.00	89.60	2.50	93	12550.64	546.20	546.02	N	19.75	W	546.38	357.93	0.75
147	MWD	13118.00	89.60	1.60	93	12551.29	639.10	638.96	N	16.43	W	639.17	358.53	0.00
148	MWD	13212.00	90.40	1.80	94	12551.29	733.02	732.92	N	13.64	W	733.05	358.93	0.85



DRILTECH MWD SURVEY REPORT

Company:

EOG Resources, Inc

Job Number:

M-2015-080-EODT-NM

Well:

Brown Bear 36 State #703H

Vertical Section Plane:

359.39

Location:

Lea Co., NM

WELL API #:

30-025-42539

Rig:

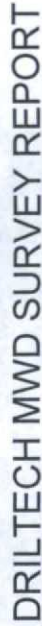
H&P 260

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 Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')	Build Rate (d/100')
149	MWD	13306.00	90.80	1.10	94	12550.30	826.96	826.88	N 11.26	W 826.96	359.22	0.86	0.43
150	MWD	13399.00	89.20	2.30	93	12550.30	919.88	919.84	N 8.50	W 919.88	359.47	2.15	-1.72
151	MWD	13493.00	89.20	2.00	94	12551.62	1013.76	1013.76	N 4.98	W 1013.77	359.72	0.32	0.00
152	MWD	13586.00	90.40	2.10	93	12551.94	1106.66	1106.70	N 1.65	W 1106.70	359.91	1.29	1.29
153	MWD	13679.00	90.60	1.80	93	12551.13	1199.56	1199.64	N 1.52	E 1199.64	0.07	0.39	0.22
154	MWD	13772.00	87.30	359.20	93	12552.83	1292.51	1292.60	N 2.33	E 1292.61	0.10	4.52	-3.55
155	MWD	13866.00	88.00	359.50	94	12556.69	1386.43	1386.52	N 1.26	E 1386.52	0.05	0.81	0.74
156	MWD	13960.00	86.00	357.60	94	12561.61	1480.28	1480.35	N 1.11	W 1480.35	359.96	2.93	-2.13
157	MWD	14054.00	90.40	358.10	94	12564.56	1574.17	1574.21	N 4.63	W 1574.22	359.83	4.71	4.68
158	MWD	14148.00	91.10	357.20	94	12563.33	1668.12	1668.12	N 8.49	W 1668.15	359.71	1.21	0.74
159	MWD	14243.00	90.10	358.60	95	12562.33	1763.08	1763.05	N 11.97	W 1763.09	359.61	1.81	-1.05
160	MWD	14337.00	91.10	357.70	94	12561.35	1857.05	1857.00	N 15.00	W 1857.06	359.54	1.43	1.06
161	MWD	14431.00	90.80	355.50	94	12559.79	1950.92	1950.81	N 20.58	W 1950.92	359.40	2.36	-0.32
162	MWD	14525.00	90.40	357.40	94	12558.81	2044.79	2044.62	N 26.40	W 2044.79	359.26	2.07	-0.43
163	MWD	14619.00	91.50	359.70	94	12557.25	2138.76	2138.57	N 28.78	W 2138.76	359.23	2.71	1.17
164	MWD	14713.00	92.20	359.90	94	12554.21	2232.70	2232.52	N 29.10	W 2232.71	359.25	0.77	0.74
165	MWD	14808.00	95.00	0.60	95	12548.25	2327.50	2327.32	N 28.69	W 2327.50	359.29	3.04	2.95
166	MWD	14996.00	91.30	2.80	188	12537.92	2515.01	2514.91	N 23.12	W 2515.02	359.47	2.29	-1.97
167	MWD	15059.00	89.60	5.50	63	12537.42	2577.79	2577.74	N 18.56	W 2577.80	359.59	5.06	-2.70
168	MWD	15091.00	87.80	6.00	32	12538.15	2609.58	2609.57	N 15.35	W 2609.61	359.66	5.84	-5.62
169	MWD	15185.00	85.20	4.20	94	12543.89	2702.93	2703.01	N 7.01	W 2703.02	359.85	3.36	-2.77
170	MWD	15279.00	86.70	1.10	94	12550.53	2796.53	2796.66	N 2.68	W 2796.66	359.95	3.66	1.60
171	MWD	15374.00	89.20	358.30	95	12553.93	2891.45	2891.58	N 3.18	W 2891.58	359.94	3.95	2.63
172	MWD	15468.00	91.70	357.20	94	12553.19	2985.40	2985.49	N 6.87	W 2985.50	359.87	2.91	2.66
173	MWD	15562.00	91.50	356.90	94	12550.56	3079.28	3079.33	N 11.70	W 3079.36	359.78	0.38	-0.21
174	MWD	15657.00	91.30	354.40	95	12548.24	3174.04	3174.02	N 18.91	W 3174.08	359.66	2.64	-0.21
175	MWD	15751.00	90.40	353.90	94	12546.85	3267.64	3267.52	N 28.49	W 3267.65	359.50	1.10	-0.96
176	MWD	15845.00	90.30	354.60	94	12546.27	3361.26	3361.05	N 37.90	W 3361.26	359.35	0.75	-0.11
177	MWD	15938.00	89.20	358.40	93	12546.68	3454.12	3453.85	N 43.58	W 3454.13	359.28	4.25	-1.18
178	MWD	16032.00	89.20	358.60	94	12547.99	3548.10	3547.81	N 46.04	W 3548.11	359.26	0.21	0.00
179	MWD	16126.00	91.80	359.20	94	12547.17	3642.09	3641.78	N 47.85	W 3642.10	359.25	2.84	2.77
180	MWD	16220.00	91.80	1.60	94	12544.22	3736.02	3735.73	N 47.19	W 3736.03	359.28	2.55	0.00
181	MWD	16315.00	90.80	0.70	95	12542.06	3830.95	3830.68	N 45.28	W 3830.95	359.32	1.42	-1.05
182	MWD	16409.00	91.80	0.90	94	12539.93	3924.89	3924.65	N 43.97	W 3924.89	359.36	1.08	1.06
183	MWD	16503.00	89.60	2.30	94	12538.78	4018.81	4018.60	N 41.35	W 4018.81	359.41	2.77	-2.34
184	MWD	16598.00	90.40	2.00	95	12538.78	4113.70	4113.53	N 37.78	W 4113.70	359.47	0.90	0.84
185	MWD	16692.00	89.20	0.40	94	12539.11	4207.64	4207.50	N 35.81	W 4207.65	359.51	2.13	-1.28
186	MWD	16786.00	90.80	0.00	94	12539.11	4301.63	4301.50	N 35.49	W 4301.64	359.53	1.75	1.70



-2015-080-EODT-NM

Vertical Section Plane:

30-025-42539

Tie Into:

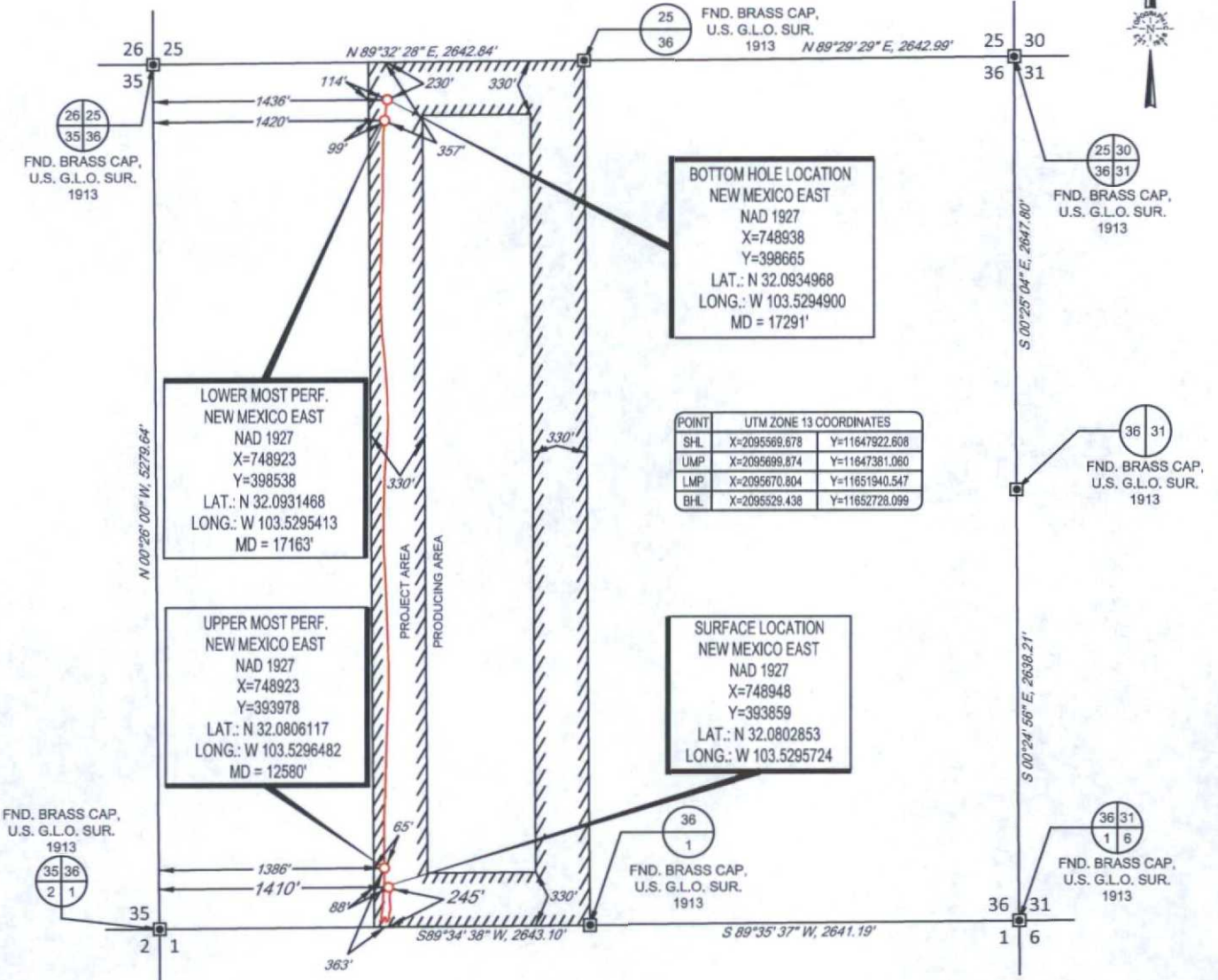
Calculation Method Minimum Curvature

[illegible]

SCALE: 1" = 1000'

0' 500' 1000'

SECTION 36, TOWNSHIP 25-S, RANGE 33-E, N.M.P.M.
LEA COUNTY, NEW MEXICO



LEASE NAME & WELL NO.: BROWN BEAR 36 STATE #703H
SECTION 36 TWP 25-S RGE 33-E SURVEY N.M.P.M.
COUNTY LEA STATE NM ELEVATION 3319'
DESCRIPTION 245' FSL & 1410' FWL



TOPOGRAPHIC
LOYALTY INNOVATION LEGACY

1400 EVERMAN PARKWAY, Ste. 197 • FT. WORTH, TEXAS 76140
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TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743
WWW.TOPOGRAPHIC.COM



Michael Blake Brown, P.S. No. 18329
AUGUST 19, 2015

eoog resources, Inc.

BROWN BEAR 36 STATE #703H AS-COMPLETED	REVISION:	
	INT	DATE
DATE: 08/19/15		
FILE:AD_BROWNBear36STATE_703H		
DRAWN BY: G.J.U.		
SHEET: 1 OF 1		

NOTES:

1. ORIGINAL DOCUMENT SIZE: 8.5" X 11"
2. ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREIN ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET, NORTH AMERICAN DATUM 1927.
3. CERTIFICATION IS MADE ONLY TO THE LOCATION OF THIS EASEMENT, IN RELATION TO THE EVIDENCE FOUND DURING A FIELD SURVEY, MADE ON THE GROUND, UNDER MY SUPERVISION, AND USING DOCUMENTATION PROVIDED BY EOG RESOURCES, INC. ONLY UTILITIES/EASEMENTS THAT WERE VISIBLE ON THE DATE OF THIS SURVEY, WITHIN/ADJOINING THIS EASEMENT, HAVE BEEN LOCATED AS SHOWN HEREON OF WHICH I HAVE KNOWLEDGE. THIS CERTIFICATION IS LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE, AND MADE FOR THIS TRANSACTION ONLY.