DRILTECH MWD SURVEY REPORT

Company:	EOG Resources, Inc.	Job Number:	2015-062-EODT-NM
Well:	Hawk 35 Fed #10H	Vertical Section Plane:	2.78
Location:	Lea County, NM	WELL API #:	30-025-42413
Rig:	H&P 415	Tie Into:	Surface

Calculation Method

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)	Coordinates E/W (ft)	Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')
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
1	MWD	200.00	1.20	9.40	200	199.99	2.08	2.07 N	0.34 E	2.09	9.40	0.60
2	MWD	324.00	0.90	5.20	124	323.96	4.34	4.32 N	0.64 E	4.36	8.46	0.25
3	MWD	510.00	1.10	19.20	186	509.94	7.52	7.46 N	1.36 E	7.58	10.35	0.17
4	MWD	694.00	1.40	48.60	184	693.89	10.78	10.61 N	3.63 E	11.22	18.88	0.38
5	MWD	879.00	1.20	46.70	185	878.85	13.75	13.44 N	6.73 E	15.03	26.62	0.11
6	MWD	974.00	1.10	44.90	95	973.83	15.14	14.76 N	8.10 E	16.84	28.76	0.11
7	MWD	1166.00	0.70	27.00	192	1165.80	17.58	17.11 N	9.93 E	19.79	30.14	0.25
8	MWD	1271.00	1.10	52.60	105	1270.79	18.81	18.30 N	11.03 E	21.36	31.07	0.53
9	MWD	1363.00	1.60	129.10	92	1362.77	18.62	18.02 N	12.73 E	22.06	35.22	1.87
10	MWD	1457.00	1.90	81.60	94	1456.73	18.14	17.42 N	15.29 E	23.18	41.26	1.53
11	MWD	1551.00	2.10	77.60	94	1550.67	18.90	18.02 N	18.51 E	25.83	45.76	0.26
12	MWD	1646.00	2.10	77.90	95	1645.61	19.80	18.76 N	21.91 E	28.84	49.43	0.01
13	MWD	1740.00	2.10	80.80	94	1739.55	20.60	19.40 N	25.29 E	31.88	52.52	0.11
14	MWD	1835.00	2.10	80.80	95	1834.48	21.32	19.95 N	28.73 E	34.98	55.22	0.00
15	MWD	2023.00	1.90	80.20	188	2022.37	22.72	21.03 N	35.20 E	41.01	59.14	0.11
16	MWD	2118.00	1.90	77.20	95	2117.32	23.48	21.65 N	38.29 E	43.99	60.51	0.10
17	MWD	2212.00	1.90	68.10	94	2211.27	24.55	22.58 N	41.26 E	47.03	61.31	0.32
18	MWD	2307.00	1.80	63.20	95	2306.22	25.95	23.84 N	44.05 E	50.09	61.58	0.20
19	MWD	2402.00	1.90	73.00	95	2401.17	27.22	24.97 N	46.89 E	53.12	61.96	0.35
20	MWD	2496.00	1.90	86.90	94	2495.12	27.90	25.51 N	49.93 E	56.07	62.94	0.49
21	MWD	2590.00	1.90	81.50	94	2589.06	28.37	25.83 N	53.03 E	58.98	64.03	0.19
22	MWD	2685.00	1.90	84.30	95	2684.01	28.91	26.21 N	56.15 E	61.97	64.98	0.10
23	MWD	2779.00	1.90	86.20	94	2777.96	29.32	26.47 N	59.26 E	64.90	65.93	0.07
24	MWD	2873.00	1.90	82.00	94	2871.91	29.79	26.79 N	62.36 E	67.87	66.75	0.15
25	MWD	2968.00	2.10	77.40	95	2966.85	30.54	27.39 N	65.62 E	71.10	67.34	0.27
26	MWD	3062.00	1.80	79.00	94	3060.80	31.35	28.05 N	68.75 E	74.25	67.80	0.32
27	MWD	3157.00	1.90	80.20	95	3155.75	32.05	28.60 N	71.76 E	77.25	68.27	0.11
28	MWD	3251.00	2.10	72.00	94	3249.69	33.00	29.40 N	74.94 E	80.50	68.58	0.37
29	MWD	3346.00	2.10	71.10	95	3344.63	34.26	30.50 N	78.24 E	83.97	68.70	0.03
30	MWD	3440.00	1.90	71.80	94	3438.57	35.45	31.55 N	81.35 E	87.25	68.80	0.21

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Location:	Lea County, NM	WELL API #:	30-025-42413
Rig:	H&P 415	Tie Into:	Surface

Calculation Method

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)		Coordinates E/W (ft)		Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')
31	MWD	3628.00	2.60	111.20	188	3626.43	35.22	30.98	N	88.28	E	93.56	70.67	0.88
32	MWD	3723.00	2.50	100.30	95	3721.34	34.27	29.83	N	92.33	E	97.03	72.10	0.52
33	MWD	3818.00	2.10	103.60	95	3816.26	33.67	29.05	N	96.06	E	100.36	73.18	0.44
34	MWD	3912.00	1.90	103.40	94	3910.20	33.06	28.28	N	99.25	E	103.20	74.10	0.21
35	MWD	4007.00	1.90	109.60	95	4005.15	32.32	27.39	N	102.27	E	105.87	75.01	0.22
36	MWD	4101.00	1.80	109.80	94	4099.10	31.43	26.37	N	105.12	E	108.38	75.92	0.11
37	MWD	4196.00	1.40	102.70	95	4194.07	30.80	25.60	N	107.66	E	110.66	76.62	0.47
38	MWD	4290.00	1.40	106.40	94	4288.04	30.33	25.03	N	109.88	E	112.70	77.17	0.10
39	MWD	4384.00	1.40	106.40	94	4382.01	29.79	24.38	N	112.09	E	114.71	77.73	0.00
40	MWD	4478.00	1.60	96.00	94	4475.98	29.44	23.92	N	114.49	E	116.96	78.20	0.36
41	MWD	4573.00	1.90	103.10	95	4570.93	29.09	23.42	N	117.35	E	119.66	78.71	0.39
42	MWD	4667.00	1.90	106.10	94	4664.88	28.45	22.64	N	120.36	E	122.47	79.35	0.11
43	MWD	4762.00	1.90	103.80	95	4759.83	27.78	21.82	N	123.40	E	125.32	79.97	0.08
44	MWD	4951.00	2.80	121.20	189	4948.67	24.99	18.69	N	130.39	E	131.73	81.84	0.60
45	MWD	5088.00	2.80	112.20	137	5085.51	22.28	15.69	N	136.35	E	137.25	83.44	0.32
46	MWD	5210.00	2.60	111.20	122	5207.37	20.42	13.56	N	141.69	E	142.34	84.53	0.17
47	MWD	5304.00	2.60	111.70	94	5301.28	19.05	12.00	N	145.66	E	146.16	85.29	0.02
48	MWD	5398.00	2.50	112.40	94	5395.18	17.67	10.43	N	149.54	E	149.90	86.01	0.11
49	MWD	5493.00	2.60	110.50	95	5490.09	16.32	8.89	N	153.47	E	153.73	86.69	0.14
50	MWD	5588.00	2.50	110.50	95	5584.99	15.04	7.41	N	157.43	E	157.61	87.31	0.11
51	MWD	5682.00	2.60	111.70	94	5678.90	13.72	5.90	N	161.33	E	161.44	87.90	0.12
52	MWD	5776.00	2.50	109.90	94	5772.81	12.43	4.42	N	165.24	E	165.30	88.47	0.14
53	MWD	5871.00	2.50	108.90	95	5867.72	11.24	3.04	N	169.15	E	169.18	88.97	0.05
54	MWD	5965.00	2.60	108.00	94	5961.62	10.11	1.72	N	173.12	E	173.13	89.43	0.11
55	MWD	6059.00	2.50	108.40	94	6055.53	9.00	0.41	N	177.09	E	177.09	89.87	0.11
56	MWD	6154.00	2.50	108.70	95	6150.44	7.87	0.91	S	181.02	E	181.02	90.29	0.01
57	MWD	6248.00	2.30	108.40	94	6244.36	6.80	2.16	S	184.75	E	184.76	90.67	0.21
58	MWD	6343.00	2.30	105.20	95	6339.28	5.88	3.26	S	188.40	E	188.43	90.99	0.14
59	MWD	6438.00	2.30	103.40	95	6434.21	5.12	4.20	S	192.09	E	192.14	91.25	0.08
60	MWD	6532.00	2.30	105.00	94	6528.13	4.37	5.13	S	195.75	E	195.82	91.50	0.07
61	MWD	6626.00	2.10	104.30	94	6622.06	3.63	6.04	S	199.24	E	199.33	91.74	0.21
62	MWD	6721.00	2.30	107.50	95	6716.99	2.80	7.05	S	202.75	E	202.87	91.99	0.25
63	MWD	6816.00	2.30	104.50	95	6811.91	1.92	8.10	S	206.41	E	206.57	92.25	0.13

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Location:	Lea County, NM	WELL API #:	30-025-42413
Rig:	H&P 415	Tie Into:	Surface

Calculation Method

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)		Coordinates E/W (ft)		Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')
64	MWD	6910.00	2.30	101.80	94	6905.84	1.25	8.95	S	210.08	E	210.27	92.44	0.12
65	MWD	7004.00	2.10	101.10	94	6999.77	0.70	9.67	S	213.62	E	213.84	92.59	0.21
66	MWD	7098.00	2.30	102.60	94	7093.70	0.13	10.41	S	217.15	E	217.40	92.75	0.22
67	MWD	7193.00	2.30	103.40	95	7188.62	-0.55	11.27	S	220.86	E	221.15	92.92	0.03
68	MWD	7288.00	2.10	100.40	95	7283.55	-1.13	12.03	S	224.43	E	224.75	93.07	0.24
69	MWD	7382.00	2.10	97.60	94	7377.49	-1.50	12.57	S	227.83	E	228.18	93.16	0.11
70	MWD	7477.00	2.10	96.00	95	7472.43	-1.75	12.98	S	231.29	E	231.65	93.21	0.06
71	MWD	7571.00	2.10	92.20	94	7566.36	-1.82	13.22	S	234.72	E	235.09	93.22	0.15
72	MWD	7666.00	2.10	96.80	95	7661.30	-1.93	13.50	S	238.19	E	238.57	93.24	0.18
73	MWD	7760.00	1.90	94.80	94	7755.24	-2.10	13.83	S	241.45	E	241.85	93.28	0.23
74	MWD	7855.00	1.80	90.10	95	7850.19	-2.09	13.97	S	244.51	E	244.91	93.27	0.19
75	MWD	7949.00	1.60	87.10	94	7944.15	-1.89	13.90	S	247.30	E	247.69	93.22	0.23
76	MWD	8044.00	1.80	85.50	95	8039.11	-1.57	13.72	S	250.11	E	250.49	93.14	0.22
77	MWD	8138.00	1.80	89.20	94	8133.06	-1.29	13.58	S	253.06	E	253.42	93.07	0.12
78	MWD	8232.00	1.80	93.40	94	8227.02	-1.22	13.65	S	256.01	E	256.37	93.05	0.14
79	MWD	8327.00	1.60	100.30	95	8321.97	-1.41	13.97	S	258.80	E	259.18	93.09	0.30
80	MWD	8421.00	1.20	101.80	94	8415.95	-1.73	14.41	S	261.06	E	261.46	93.16	0.43
81	MWD	8515.00	1.20	98.30	94	8509.92	-1.98	14.75	S	263.00	E	263.41	93.21	0.08
82	MWD	8610.00	1.10	90.20	95	8604.91	-2.04	14.90	S	264.89	E	265.31	93.22	0.20
83	MWD	8704.00	1.10	85.30	94	8698.89	-1.88	14.83	S	266.69	E	267.11	93.18	0.10
84	MWD	8744.00	1.10	75.00	40	8738.88	-1.71	14.70	S	267.45	E	267.85	93.15	0.49
85	MWD	8806.00	0.90	35.40	62	8800.87	-1.12	14.15	S	268.30	E	268.68	93.02	1.13
86	MWD	8853.00	5.60	355.70	47	8847.79	1.47	11.56	S	268.35	E	268.59	92.47	10.51
87	MWD	8901.00	10.90	353.20	48	8895.27	8.27	4.71	S	267.63	E	267.67	91.01	11.06
88	MWD	8948.00	16.40	355.90	47	8940.93	19.25	6.33	N	266.63	E	266.71	88.64	11.78
89	MWD	8995.00	19.00	2.00	47	8985.70	33.49	20.59	N	266.42	E	267.22	85.58	6.79
90	MWD	9042.00	23.80	6.20	47	9029.45	50.62	37.68	N	267.72	E	270.35	81.99	10.71
91	MWD	9090.00	28.20	3.10	48	9072.59	71.64	58.64	N	269.38	E	275.69	77.72	9.59
92	MWD	9137.00	31.80	2.40	47	9113.28	95.14	82.11	N	270.50	E	282.68	73.11	7.70
93	MWD	9184.00	35.20	3.10	47	9152.47	121.07	108.02	N	271.75	E	292.43	68.32	7.28
94	MWD	9231.00	38.50	2.50	47	9190.07	149.26	136.17	N	273.12	E	305.18	63.50	7.06
95	MWD	9279.00	42.90	0.80	48	9226.46	180.54	167.45	N	274.00	E	321.11	58.57	9.45
96	MWD	9326.00	47.50	0.80	47	9259.57	213.86	200.79	N	274.46	E	340.07	53.81	9.79

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Rig:	H&P 415	Tie Into:	Surface

Calculation Method

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)		Coordinates E/W (ft)		Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')
97	MWD	9373.00	52.80	2.70	47	9289.67	249.92	236.83	N	275.59	E	363.37	49.32	11.69
98	MWD	9420.00	57.90	2.00	47	9316.39	288.57	275.45	N	277.17	E	390.76	45.18	10.92
99	MWD	9467.00	60.70	0.60	47	9340.38	328.97	315.85	N	278.08	E	420.82	41.36	6.48
100	MWD	9514.00	63.30	0.10	47	9362.44	370.42	357.34	N	278.33	E	452.95	37.91	5.61
101	MWD	9562.00	69.30	0.60	48	9381.73	414.32	401.28	N	278.60	E	488.51	34.77	12.54
102	MWD	9609.00	75.80	0.60	47	9395.82	459.10	446.09	N	279.07	E	526.19	32.03	13.83
103	MWD	9656.00	80.10	1.50	47	9405.63	505.03	492.03	N	279.91	E	566.08	29.64	9.34
104	MWD	9703.00	81.60	1.70	47	9413.10	551.42	538.41	N	281.21	E	607.43	27.58	3.22
105	MWD	9751.00	83.40	1.70	48	9419.36	599.00	585.98	N	282.62	E	650.57	25.75	3.75
106	MWD	9798.00	86.60	2.40	47	9423.46	645.81	632.77	N	284.30	E	693.70	24.19	6.97
107	MWD	9878.00	91.30	3.10	80	9424.93	725.77	712.64	N	288.13	E	768.68	22.01	5.94
108	MWD	9972.00	89.60	1.50	94	9424.19	819.76	806.55	N	291.91	E	857.75	19.90	2.48
109	MWD	10066.00	91.00	1.80	94	9423.70	913.74	900.51	N	294.61	E	947.48	18.12	1.52
110	MWD	10161.00	89.70	0.80	95	9423.12	1008.70	995.48	N	296.77	E	1038.77	16.60	1.73
111	MWD	10254.00	88.70	0.10	93	9424.41	1101.61	1088.47	N	297.50	E	1128.39	15.29	1.31
112	MWD	10350.00	88.20	0.60	96	9427.01	1197.49	1184.43	N	298.08	E	1221.36	14.13	0.74
113	MWD	10444.00	90.10	1.10	94	9428.40	1291.42	1278.40	N	299.48	E	1313.01	13.18	2.09
114	MWD	10538.00	89.90	359.50	94	9428.40	1385.33	1372.40	N	299.97	E	1404.80	12.33	1.72
115	MWD	10632.00	88.50	359.00	94	9429.72	1479.14	1466.38	N	298.74	E	1496.50	11.52	1.58
116	MWD	10727.00	88.70	358.70	95	9432.04	1573.89	1561.33	N	296.83	E	1589.30	10.76	0.38
117	MWD	10821.00	88.70	358.70	94	9434.17	1667.63	1655.28	N	294.70	E	1681.31	10.09	0.00
118	MWD	10916.00	88.20	359.20	95	9436.74	1762.38	1750.23	N	292.96	E	1774.58	9.50	0.74
119	MWD	11011.00	89.60	359.40	95	9438.56	1857.19	1845.20	N	291.80	E	1868.13	8.99	1.49
120	MWD	11105.00	90.80	0.40	94	9438.24	1951.06	1939.20	N	291.64	E	1961.01	8.55	1.66
121	MWD	11199.00	90.80	0.40	94	9436.92	2044.97	2033.19	N	292.29	E	2054.09	8.18	0.00
122	MWD	11293.00	91.00	0.60	94	9435.45	2138.89	2127.17	N	293.11	E	2147.27	7.85	0.30
123	MWD	11388.00	90.30	359.50	95	9434.37	2233.77	2222.17	N	293.20	E	2241.42	7.52	1.37
124	MWD	11482.00	89.90	359.70	94	9434.21	2327.63	2316.16	N	292.54	E	2334.56	7.20	0.48
125	MWD	11577.00	89.40	359.50	95	9434.79	2422.48	2411.16	N	291.88	E	2428.76	6.90	0.57
126	MWD	11671.00	89.00	359.90	94	9436.10	2516.33	2505.15	N	291.38	E	2522.04	6.63	0.60
127	MWD	11766.00	89.60	359.90	95	9437.26	2611.20	2600.14	N	291.22	E	2616.40	6.39	0.63
128	MWD	11860.00	89.00	359.90	94	9438.41	2705.08	2694.13	N	291.05	E	2709.81	6.17	0.64
129	MWD	11955.00	89.40	0.20	95	9439.73	2799.96	2789.12	N	291.14	E	2804.28	5.96	0.53

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Location:	Lea County, NM	WELL API #:	30-025-42413
Rig:	H&P 415	Tie Into:	Surface

Calculation Method

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)	Coordinates E/W (ft)	Closure Distance (ft)	Closure Angle (deg)	Dogleg Severity (d/100')
130	MWD	12050.00	88.70	359.90	95	9441.31	2894.84	2884.11 N	291.22 E	2898.77	5.77	0.80
131	MWD	12144.00	90.10	0.80	94	9442.29	2988.75	2978.10 N	291.79 E	2992.36	5.60	1.77
132	MWD	12238.00	91.70	1.30	94	9440.82	3082.69	3072.07 N	293.52 E	3086.06	5.46	1.78
133	MWD	12333.00	90.40	359.70	95	9439.08	3177.59	3167.04 N	294.35 E	3180.69	5.31	2.17
134	MWD	12428.00	90.10	359.50	95	9438.66	3272.45	3262.04 N	293.68 E	3275.23	5.14	0.38
135	MWD	12522.00	89.40	358.70	94	9439.07	3366.25	3356.03 N	292.21 E	3368.72	4.98	1.13
136	MWD	12617.00	90.80	359.50	95	9438.91	3461.05	3451.01 N	290.71 E	3463.23	4.82	1.70
137	MWD	12711.00	91.10	0.10	94	9437.35	3554.91	3545.00 N	290.39 E	3556.87	4.68	0.71
138	MWD	12806.00	89.90	359.50	95	9436.52	3649.78	3639.99 N	290.05 E	3651.53	4.56	1.41
139	MWD	12901.00	89.60	359.40	95	9436.93	3744.61	3734.99 N	289.14 E	3746.16	4.43	0.33
140	MWD	12994.00	90.40	359.90	93	9436.93	3837.47	3827.98 N	288.57 E	3838.84	4.31	1.01
141	MWD	13089.00	90.60	359.40	95	9436.10	3932.33	3922.98 N	287.99 E	3933.53	4.20	0.57
142	MWD	13183.00	90.40	359.00	94	9435.28	4026.14	4016.96 N	286.68 E	4027.18	4.08	0.48
143	MWD	13277.00	88.50	357.60	94	9436.19	4119.84	4110.91 N	283.89 E	4120.70	3.95	2.51
144	MWD	13372.00	89.20	357.40	95	9438.09	4214.42	4205.80 N	279.75 E	4215.10	3.81	0.77
145	MWD	13466.00	90.60	358.30	94	9438.26	4308.07	4299.73 N	276.22 E	4308.60	3.68	1.77
146	MWD	13560.00	89.90	357.60	94	9437.85	4401.73	4393.67 N	272.86 E	4402.13	3.55	1.05
147	MWD	13655.00	89.70	357.80	95	9438.18	4496.36	4488.59 N	269.05 E	4496.65	3.43	0.30
148	MWD	13749.00	90.60	359.90	94	9437.93	4590.13	4582.57 N	267.16 E	4590.35	3.34	2.43
149	MWD	13844.00	91.70	0.40	95	9436.03	4685.01	4677.55 N	267.41 E	4685.18	3.27	1.27
150	MWD	13938.00	89.20	0.20	94	9435.29	4778.91	4771.53 N	267.90 E	4779.05	3.21	2.67
151	MWD	14033.00	88.90	0.80	95	9436.86	4873.82	4866.52 N	268.73 E	4873.93	3.16	0.71
152	MWD	14127.00	91.50	1.80	94	9436.53	4967.78	4960.48 N	270.86 E	4967.87	3.13	2.96
153	MWD	14221.00	91.10	0.40	94	9434.40	5061.72	5054.44 N	272.67 E	5061.79	3.09	1.55
154	MWD	14316.00	91.30	0.40	95	9432.41	5156.61	5149.42 N	273.33 E	5156.66	3.04	0.21
155	MWD	14410.00	90.80	0.20	94	9430.69	5250.51	5243.40 N	273.82 E	5250.54	2.99	0.57
156	MWD	14505.00	90.10	0.80	95	9429.94	5345.43	5338.39 N	274.65 E	5345.45	2.95	0.97
157	MWD	14599.00	88.50	0.90	94	9431.09	5439.37	5432.37 N	276.05 E	5439.38	2.91	1.71
158	PROJ	14721.00	88.50	0.90	122	9434.28	5561.26	5554.31 N	277.96 E	5561.26	2.86	0.00

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District IV
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Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

Form C-102
August 1, 2011

Permit 209591

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number	2. Pool Code	3. Pool Name
30-025-000-1	59900	TRIPLE X;BONE SPRING
4. Property Code	**5. Property Name**	**6. Well No.**
30884	THISTLE UNIT	096H
7. OGRID No.	**8. Operator Name**	**9. Elevation**
6137	DEVON ENERGY PRODUCTION COMPANY, LP	3706

10. Surface Location

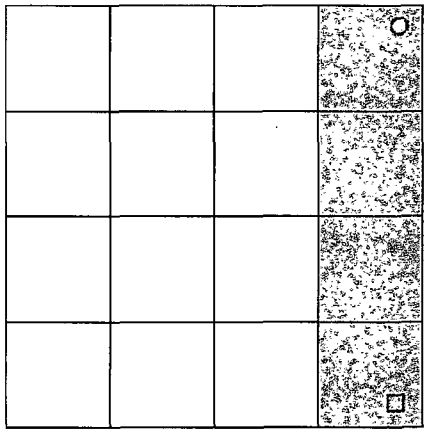
UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
A	22	23S	33E		250	N	300	E	Lea

11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
P	22	23S	33E		330	S	350	E	Lea

12. Dedicated Acres	13. Joint or Infill	14. Consolidation Code	15. Order No.
160.00			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

E-Signed By: Randy Bolles
Title: Manager, Regulatory Affairs
Date: 9/14/2015

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Surveyed By: Filimon Jaramillo
Date of Survey: 5/27/2015
Certificate Number: 12797

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State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

Form APD Conditions

Permit 209591

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
DEVON ENERGY PRODUCTION COMPANY, LP [6137] 333 W. Sheridan Avenue Oklahoma City, OK 73102	30-025-000-1

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State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

Form C-101
Revised July 18, 2013

Permit 209591

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address	2. OGRID Number
DEVON ENERGY PRODUCTION COMPANY, LP 333 W. Sheridan Avenue Oklahoma City, OK 73102	6137
	3. API Number 30-025-000-1

4. Property Code	5. Property Name	6. Well No.
30884	THISTLE UNIT	096H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
A	22	23S	33E		250	N	300	E	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
P	22	23S	33E	P	330	S	350	E	Lea

9. Pool Information

TRIPLE X;BONE SPRING	59900

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	3706
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	15182	1st Bone Spring Sand		1/28/2017
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	48	1450	1270	0
Int1	12.25	9.625	40	5200	1450	0
Prod	8.75	5.5	17	15182	1690	5000

Casing/Cement Program: Additional Comments

Intermediate csg as follows: From 0' to 4000', csg grade is J-55. From 4000' to 5200', csg grade is HCK-55. SEE DRILLING PLANS FOR ADDITIONAL CASING AND CEMENTING DETAILS.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	3000	3000	
Double Ram	3000	3000	
Annular	3000	3000	
Double Ram	3000	3000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.** Signature:			**OIL CONSERVATION DIVISION**	
Printed Name:	Electronically filed by Randy Bolles		Approved By:	
Title:	Manager, Regulatory Affairs		Title:	
Email Address:	randy.bolles@dvn.com		Approved Date:	Expiration Date:
Date:	9/14/2015	Phone: 405-228-8588	Conditions of Approval Attached	

	Well: THISTLE UNIT #096H

OCD Reviewer	Condition
pkautz	Will require a directional survey with the C-104
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
pkautz	If using a pit for drilling and completion operations, must have an approved pit from prior to spudding the well.
pkautz	1) SURFACE & INTERNEMIATE CASING - Cement must circulate to surface -- 2) PRODUCTION CASING - Cement must tie back into intermediate casing –
pkautz	If cement does not circulate to surface, must run temperature survey or other log to determine top of cement
pkautz	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water
pkautz	Must notify OCD Hobbs Office if lost circulation is encountered at 575-370-3186
pkautz	1) Must notify OCD Hobbs Office prior to running Stage Tool at 575-370-3186 2) If using Stage Tool on Surface casing, Stage Tool must be set greater than 350' from surface and a minimum of 200 feet above surface shoe. 3) When using a Stage Tool on Intermediate or Production Casing Stage must be a minimum of 50 feet below previous casing shoe.

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Santa Fe, NM 87505

Form APD Comments

Permit 209591

PERMIT COMMENTS

Operator Name and Address:	API Number:
DEVON ENERGY PRODUCTION COMPANY, LP [6137]	30-025-000-1
	Well: THISTLE UNIT #096H

Created By	Comment	Comment Date
mmoravec	C-102, Plats, Drilling Plan, Drawing and Directional Proposal being submitted via Fed-Ex.	9/9/2015