

Results of Directional Survey

DD

API number:	30-025-40357		
OGRID:		Operator:	MACK ENERGY CORP
		Property:	BROOK FEDERAL # 5

surface	ULSTR:	H	30	T 17S	R 32E
				1700 FNL	10 FEL

BH Loc	ULSTR:	H	30	T 17S	R 32E
9770 MD		9742.5	TVD	1708 FNL	375 FEL

Top Perf/OH	ULSTR:	H	30	T 17S	R 32E
9480 MD		9452.5	TVD	1705 FNL	373 FEL

Bot Perf/OH	ULSTR:	H	30	T 17S	R 32E
9547 MD		9519.5	TVD	1705 FNL	374 FEL

	MD	N/S	E/W	VD
	9391	-3.09	-361.52	9363.55
TOP PERFS/OH	9480	-4.50	-362.86	9452.53
	9484	-4.56	-362.92	9456.53
	9484	-4.56	-362.92	9456.53
BOT PERFS/OH	9547	-5.37	-363.52	9519.52
	9577	-5.76	-363.80	9549.52

NEXT TO LAST	9717	-7.39	-364.32	9689.51
LAST READING	9770	-7.80	-364.54	9742.50
TD	9770	-7.80	-364.54	9742.50

Surface Location	1700 FN	10 FE
Projected BHL	1708 FN	375 FE
Location of		
Top Perfs/OH	1705 FN	373 FE
Bottom Perfs/OH	1705 FN	374 FE

SUMMARY of Subsurface Locations

Surface Location	H-30-17S-32E	1700 FN	10 FE	Vert. Depth
Top Perfs/OH	H-30-17S-32E	1705 FN	373 FE	9452.53
Bottom Perfs/OH	H-30-17S-32E	1705 FN	374 FE	9519.52
Projected TD	H-30-17S-32E	1708 FN	375 FE	9742.50

AUG 26 2013

RECEIVED

JUL 08 2013

HOBBS OCD

AUG 20 2013

RECEIVED

Archer

Archer Directional Drilling Services.
12101 Cutten Road
Houston, Texas 77066
Tel: 281-301-2600
Fax: 281-951-2795

Mack Energy Corporation
PO Box 960
Artesia, New Mexico 88211-0960

July 1, 2013

Re: Brook Federal #5
Field: Maljamer
Rig: Silver Oak Drilling 6
Lea County, New Mexico
API # 30-025-40357

Enclosed please find the original of the surveys performed on the referenced well by Archer Directional Drilling Services. Other information required by your office is as follows:

<u>Name & Title Of Surveyor</u>	<u>Wellhole Number</u>	<u>Survey Depths</u>	<u>Dates Performed</u>	<u>Type Survey</u>
Steve Doggett Field Engineer	Original Hole	772-9770	06/18/13-06/30/13	MWD

If additional information is required, please contact the undersigned at the letterhead address and phone number.



Amador Baggerly
MWD Coordinator

SCANNED



Archer Directional Drilling Services.
12101 Cutten Road
Houston, Texas 77066
Tel: 281-301-2600
Fax: 281-951-2795

MWD Survey Certification

State of New Mexico
County of Lea

I, Amador Baggerly, certify that; I am employed by Archer Directional Drilling Services; that I did on the day(s) of 06/18/13 through 06/30/13, conduct or supervise the taking of MWD survey from a depth of 772 feet to a depth of 9770 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Archer Directional Drilling Services; that I am authorized and qualified to make this report; that these surveys were conducted at the request of Mack Energy Corporation for the Brook Federal #5 (API # 30-025-40357) Well located in Lea County, New Mexico; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Archer Directional Drilling Services.

Amador Baggerly
MWD Coordinator

State of Texas
County of Harris

Before me, a notary public, on this day personally appeared Amador Baggerly, on this 8 day of July, 2013, known to me to be the person whose name is subscribed to the foregoing document and, being by me first duly sworn, declared that the statement therein contained are true and correct.

Notary Public's Signature

SCANNED

Archer

Company: Mack Energy Corporation

Job Number: 04304-433-21

Calculation Method

Minimum Curvature

Well: Brook Federal #5

Mag Decl.: 7.27

Proposed Azimuth

273.9

Location: Lea County, New Mexico

Dir Driller: Kolby

Depth Reference

KBG

Rig: Silver Oak Drilling 6

MWD Eng: Steve Doggett

Tie Into: Gyro Survey

Job Date: 06/18/13 - 06/30/13

SCANNED

Survey Number	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')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Direction Azimuth			
Tie In	708.00	0.7	31	0	707.94	-2.35	8.55 N	2.94 E					
1	772	1.5	19.0	64	771.93	-2.74	9.68 N	3.41 E	10.26	19.43	1.29	1.25	-18.75
2	834	2.0	7.9	62	833.90	-3.03	11.52 N	3.83 E	12.14	18.38	0.97	0.81	-17.90
3	897	1.7	355.6	63	896.87	-2.97	13.54 N	3.91 E	14.09	16.10	0.79	-0.48	551.90
4	959	2.0	350.9	62	958.83	-2.59	15.52 N	3.66 E	15.95	13.28	0.54	0.48	-7.58
5	1022	1.9	344.6	63	1021.80	-2.00	17.61 N	3.21 E	17.91	10.34	0.38	-0.16	-10.00
6	1084	2.0	342.2	62	1083.76	-1.25	19.64 N	2.61 E	19.81	7.57	0.21	0.16	-3.87
7	1178	2.1	358.1	94	1177.70	-0.47	22.92 N	2.05 E	23.01	5.11	0.61	0.11	16.91
8	1240	1.3	351.9	62	1239.67	-0.21	24.75 N	1.91 E	24.82	4.42	1.32	-1.29	-10.00
9	1302	1.6	1.9	62	1301.65	-0.03	26.31 N	1.84 E	26.38	4.01	0.63	0.48	-564.52
10	1365	1.4	4.2	63	1364.63	0.00	27.96 N	1.93 E	28.02	3.95	0.33	-0.32	3.65
11	1427	1.8	12.5	62	1426.61	-0.15	29.66 N	2.20 E	29.75	4.23	0.74	0.65	13.39
12	1489	2.0	7.5	62	1488.57	-0.36	31.69 N	2.55 E	31.79	4.60	0.42	0.32	-8.06
13	1552	2.2	13.0	63	1551.53	-0.62	33.96 N	2.96 E	34.08	4.99	0.45	0.32	8.73
14	1614	2.5	17.2	62	1613.48	-1.12	36.41 N	3.63 E	36.59	5.70	0.56	0.48	6.77
15	1645	2.5	23.3	31	1644.45	-1.50	37.67 N	4.10 E	37.90	6.21	0.86	0.00	19.68
16	1676	2.5	23.1	31	1675.42	-1.95	38.92 N	4.63 E	39.19	6.79	0.03	0.00	-0.65
17	1708	2.7	11.9	32	1707.39	-2.28	40.30 N	5.06 E	40.61	7.16	1.70	0.63	-35.00
18	1739	2.8	10.0	31	1738.35	-2.46	41.76 N	5.34 E	42.10	7.29	0.44	0.32	-6.13
19	1770	2.5	14.1	31	1769.32	-2.66	43.16 N	5.64 E	43.52	7.44	1.14	-0.97	13.23
20	1801	2.9	11.7	31	1800.28	-2.88	44.58 N	5.96 E	44.98	7.62	1.34	1.29	-7.74
21	1832	2.5	17.7	31	1831.25	-3.15	45.99 N	6.33 E	46.43	7.83	1.58	-1.29	19.35
22	1863	2.6	6.6	31	1862.22	-3.34	47.34 N	6.61 E	47.80	7.95	1.62	0.32	-35.81
23	1895	2.3	16.1	32	1894.19	-3.51	48.67 N	6.87 E	49.16	8.04	1.57	-0.94	29.69
24	1926	2.0	15.8	31	1925.17	-3.76	49.79 N	7.19 E	50.31	8.22	0.97	-0.97	-0.97
25	1957	1.9	8.2	31	1956.15	-3.91	50.82 N	7.41 E	51.36	8.30	0.89	-0.32	-24.52
26	2034	2.3	10.7	77	2033.10	-4.18	53.60 N	7.88 E	54.18	8.37	0.53	0.52	3.25
27	2098	2.5	1.2	64	2097.04	-4.27	56.26 N	8.15 E	56.85	8.24	0.69	0.31	-14.84
28	2161	2.0	340.3	63	2160.00	-3.76	58.67 N	7.81 E	59.19	7.58	1.51	-0.79	538.25
29	2223	2.9	296.3	62	2221.94	-1.88	60.38 N	6.04 E	60.68	5.71	3.25	1.45	-70.97
30	2285	2.9	292.5	62	2283.86	1.06	61.68 N	3.18 E	61.76	2.96	0.31	0.00	-6.13
31	2348	3.0	294.7	63	2346.78	4.11	62.98 N	0.21 E	62.98	0.19	0.24	0.16	3.49
32	2410	2.5	302.4	62	2408.71	6.82	64.38 N	2.40 W	64.42	357.86	1.00	-0.81	12.42
33	2472	2.5	277.5	62	2470.65	9.36	65.28 N	4.88 W	65.46	355.72	1.74	0.00	-40.16
34	2534	3.4	268.4	62	2532.57	12.54	65.40 N	8.06 W	65.90	352.97	1.63	1.45	-14.68
35	2597	5.6	264.4	63	2595.37	17.43	65.05 N	12.99 W	66.34	348.71	3.53	3.49	-6.35
36	2690	7.6	260.6	93	2687.75	27.89	63.61 N	23.57 W	67.83	339.66	2.20	2.15	-4.09

Archer

Company: Mack Energy Corporation

Well: Brook Federal #5

Location: Lea County, New Mexico

Rig: Silver Oak Drilling 6

Job Date: 06/18/13 - 06/30/13

Job Number:

Mag Decl.:

Dir Driller:

MWD Eng:

04304-433-21

7.27

Kolby

Steve Doggett

Calculation Method

Proposed Azimuth

Depth Reference

Tie Into: Gyro Survey

Minimum Curvature

273.9

KBG

SCANNED

Survey Number	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')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Direction Azimuth			
37	2752	7.3	261.6	62	2749.23	35.73	62.36 N	31.52 W	69.87	333.19	0.53	-0.48	1.61
38	2815	8.2	260.9	63	2811.65	44.01	61.07 N	39.91 W	72.95	326.83	1.44	1.43	-1.11
39	2877	7.4	263.7	62	2873.08	52.25	59.93 N	48.25 W	76.94	321.16	1.43	-1.29	4.52
40	2970	8.1	264.7	93	2965.23	64.61	58.67 N	60.72 W	84.43	314.01	0.77	0.75	1.08
41	3063	9.3	263.7	93	3057.16	78.47	57.24 N	74.72 W	94.12	307.45	1.30	1.29	-1.08
42	3125	8.6	264.3	62	3118.40	87.97	56.23 N	84.31 W	101.34	303.70	1.14	-1.13	0.97
43	3187	7.9	266.1	62	3179.76	96.76	55.47 N	93.17 W	108.44	300.77	1.20	-1.13	2.90
44	3250	7.6	264.3	63	3242.18	105.16	54.77 N	101.64 W	115.45	298.32	0.61	-0.48	-2.86
45	3312	9.0	257.9	62	3303.53	113.86	53.34 N	110.46 W	122.67	295.78	2.70	2.26	-10.32
46	3374	9.4	255.4	62	3364.74	123.33	51.05 N	120.10 W	130.50	293.03	0.91	0.65	-4.03
47	3468	9.1	255.2	94	3457.51	137.64	47.22 N	134.72 W	142.75	289.31	0.32	-0.32	-0.21
48	3561	8.7	255.2	93	3549.39	151.27	43.54 N	148.63 W	154.87	286.33	0.43	-0.43	0.00
49	3654	8.6	256.4	93	3641.34	164.56	40.11 N	162.19 W	167.07	283.89	0.22	-0.11	1.29
50	3747	8.5	256.9	93	3733.30	177.76	36.92 N	175.64 W	179.48	281.87	0.13	-0.11	0.54
51	3841	8.1	255.7	94	3826.32	190.69	33.71 N	188.82 W	191.81	280.12	0.46	-0.43	-1.28
52	3903	8.7	260.2	62	3887.65	199.40	31.83 N	197.68 W	200.22	279.15	1.43	0.97	7.26
53	3965	9.5	265.5	62	3948.87	209.01	30.63 N	207.40 W	209.65	278.40	1.87	1.29	8.55
54	4058	9.2	266.4	93	4040.64	223.97	29.56 N	222.47 W	224.42	277.57	0.36	-0.32	0.97
55	4151	9.3	266.5	93	4132.43	238.80	28.63 N	237.39 W	239.11	276.88	0.11	0.11	0.11
56	4246	9.5	266.7	95	4226.15	254.18	27.71 N	252.88 W	254.39	276.25	0.21	0.21	0.21
57	4339	9.2	262.9	93	4317.92	269.09	26.35 N	267.92 W	269.21	275.62	0.74	-0.32	-4.09
58	4433	9.3	268.0	94	4410.70	284.03	25.16 N	282.97 W	284.08	275.08	0.88	0.11	5.43
59	4526	9.5	267.2	93	4502.45	299.12	24.52 N	298.14 W	299.15	274.70	0.26	0.22	-0.86
60	4651	8.2	268.0	125	4625.96	318.23	23.71 N	317.35 W	318.24	274.27	1.04	-1.04	0.64
61	4744	5.6	256.0	93	4718.28	329.15	22.38 N	328.39 W	329.15	273.90	3.18	-2.80	-12.90
62	4805	5.3	256.5	61	4779.00	334.67	21.00 N	334.01 W	334.67	273.60	0.50	-0.49	0.82
63	4869	3.6	260.0	64	4842.81	339.44	19.96 N	338.87 W	339.46	273.37	2.69	-2.66	5.47
64	4931	2.5	256.0	62	4904.72	342.61	19.30 N	342.10 W	342.64	273.23	1.81	-1.77	-6.45
65	5024	0.8	225.7	93	4997.68	344.98	18.35 N	344.53 W	345.02	273.05	1.99	-1.83	-32.58
66	5118	0.8	210.5	94	5091.67	345.71	17.33 N	345.33 W	345.77	272.87	0.23	0.00	-16.17
67	5218	0.4	216.0	100	5191.67	346.20	16.44 N	345.89 W	346.28	272.72	0.40	-0.40	5.50
68	5312	0.6	229.1	94	5285.66	346.73	15.86 N	346.46 W	346.82	272.62	0.24	0.21	13.94
69	5405	0.7	225.7	93	5378.66	347.45	15.14 N	347.23 W	347.56	272.50	0.12	0.11	-3.66
70	5499	0.7	211.6	94	5472.65	348.10	14.25 N	347.94 W	348.23	272.35	0.18	0.00	-15.00
71	5592	0.9	199.8	93	5565.64	348.56	13.08 N	348.49 W	348.73	272.15	0.28	0.22	-12.69
72	5685	0.8	201.6	93	5658.63	348.96	11.79 N	348.97 W	349.17	271.93	0.11	-0.11	1.94
73	5779	0.9	211.4	94	5752.62	349.50	10.55 N	349.60 W	349.76	271.73	0.19	0.11	10.43
74	5872	1.0	206.2	93	5845.61	350.14	9.20 N	350.34 W	350.46	271.50	0.14	0.11	-5.59

Archer

Company: Mack Energy Corporation

Well: Brook Federal #5

Location: Lea County, New Mexico

Rig: Silver Oak Drilling 6

Job Date: 06/18/13 - 06/30/13

Job Number:

Mag Decl.:

Dir Driller:

MWD Eng:

04304-433-21

7.27

Kolby

Steve Doggett

Calculation Method

Proposed Azimuth

Depth Reference

Tie Into: Gyro Survey

Minimum Curvature

273.9

KBG

SCANNED

Survey Number	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')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Direction Azimuth			
75	5966	0.5	185.3	94	5939.60	350.46	8.05 N	350.74 W	350.83	271.32	0.60	-0.53	-22.23
76	6059	0.2	197.9	93	6032.60	350.51	7.49 N	350.83 W	350.91	271.22	0.33	-0.32	13.55
77	6152	0.2	133.7	93	6125.60	350.43	7.23 N	350.76 W	350.83	271.18	0.23	0.00	-69.03
78	6245	0.7	19.0	93	6218.59	350.15	7.65 N	350.46 W	350.54	271.25	0.86	0.54	-123.33
79	6339	1.5	7.4	94	6312.58	349.93	9.42 N	350.11 W	350.24	271.54	0.88	0.85	-12.34
80	6432	2.6	8.1	93	6405.51	349.70	12.71 N	349.66 W	349.89	272.08	1.18	1.18	0.75
81	6526	1.5	21.4	94	6499.45	349.18	15.97 N	348.91 W	349.27	272.62	1.27	-1.17	14.15
82	6588	2.2	22.2	62	6561.42	348.56	17.83 N	348.16 W	348.62	272.93	1.13	1.13	1.29
83	6681	1.5	93.8	93	6654.38	346.79	19.40 N	346.27 W	346.82	273.21	2.41	-0.75	76.99
84	6744	1.9	78.2	63	6717.35	344.96	19.56 N	344.43 W	344.98	273.25	0.97	0.63	-24.76
85	6837	1.9	339.9	93	6810.32	344.10	21.32 N	343.45 W	344.11	273.55	3.09	0.00	281.40
86	6900	1.5	354.2	63	6873.30	344.67	23.12 N	343.89 W	344.67	273.85	0.92	-0.63	22.70
87	6962	1.6	12.5	62	6935.27	344.68	24.77 N	343.79 W	344.68	274.12	0.81	0.16	-551.13
88	7024	2.0	12.6	62	6997.24	344.38	26.67 N	343.36 W	344.40	274.44	0.65	0.65	0.16
89	7118	1.1	157.3	94	7091.23	343.73	27.44 N	342.66 W	343.75	274.58	3.16	-0.96	153.94
90	7180	1.1	160.0	62	7153.21	343.22	26.33 N	342.22 W	343.23	274.40	0.08	0.00	4.35
91	7242	0.9	151.4	62	7215.20	342.72	25.35 N	341.79 W	342.73	274.24	0.40	-0.32	-13.87
92	7336	1.1	143.1	94	7309.19	341.73	23.98 N	340.89 W	341.73	274.02	0.26	0.21	-8.83
93	7616	1.2	120.9	280	7589.14	337.36	20.32 N	336.76 W	337.37	273.45	0.16	0.04	-7.93
94	7710	1.6	111.6	94	7683.11	335.23	19.33 N	334.70 W	335.26	273.31	0.49	0.43	-9.89
95	7803	1.7	104.5	93	7776.07	332.64	18.51 N	332.15 W	332.67	273.19	0.24	0.11	-7.63
96	7896	0.4	188.2	93	7869.05	331.31	17.84 N	330.87 W	331.35	273.09	1.83	-1.40	90.00
97	7990	1.0	227.7	94	7963.05	331.90	16.97 N	331.52 W	331.95	272.93	0.78	0.64	42.02
98	8177	1.2	232.7	187	8150.01	334.50	14.68 N	334.28 W	334.61	272.52	0.12	0.11	2.67
99	8270	1.4	240.1	93	8242.99	336.18	13.53 N	336.04 W	336.31	272.31	0.28	0.22	7.96
100	8363	1.7	238.5	93	8335.95	338.25	12.24 N	338.20 W	338.43	272.07	0.33	0.32	-1.72
101	8457	1.7	241.3	94	8429.91	340.56	10.84 N	340.62 W	340.79	271.82	0.09	0.00	2.98
102	8550	1.5	244.0	93	8522.88	342.77	9.65 N	342.92 W	343.06	271.61	0.23	-0.22	2.90
103	8643	1.5	242.4	93	8615.84	344.86	8.55 N	345.09 W	345.20	271.42	0.05	0.00	-1.72
104	8737	1.5	242.7	94	8709.81	346.96	7.41 N	347.28 W	347.36	271.22	0.01	0.00	0.32
105	8830	1.6	247.9	93	8802.78	349.17	6.37 N	349.56 W	349.62	271.04	0.19	0.11	5.59
106	8924	1.7	247.8	94	8896.74	351.60	5.35 N	352.07 W	352.11	270.87	0.11	0.11	-0.11
107	9017	2.0	253.8	93	8989.69	354.36	4.37 N	354.90 W	354.93	270.71	0.38	0.32	6.45
108	9111	1.6	216.8	94	9083.65	356.62	2.86 N	357.26 W	357.28	270.46	1.28	-0.43	-39.36
109	9205	1.5	211.6	94	9177.61	357.90	0.77 N	358.70 W	358.70	270.12	0.18	-0.11	-5.53
110	9297	1.5	217.0	92	9269.58	359.12	1.22 S	360.05 W	360.05	269.81	0.15	0.00	5.87
111	9391	1.4	219.6	94	9363.55	360.46	3.09 S	361.52 W	361.54	269.51	0.13	-0.11	2.77
112	9484	1.1	228.5	93	9456.53	361.75	4.56 S	362.92 W	362.94	269.28	0.38	-0.32	9.57

Archer

Company: Mack Energy Corporation

Job Number: 04304-433-21

Calculation Method

Minimum Curvature

Well: Brook Federal #5

Mag Decl.: 7.27

Proposed Azimuth

273.9

Location: Lea County, New Mexico

Dir Driller: Kolby

Depth Reference

KBG

Rig: Silver Oak Drilling 6

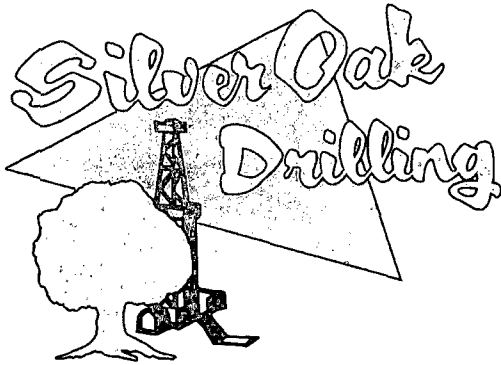
MWD Eng: Steve Doggett

Tie Into: Gyro Survey

Job Date: 06/18/13 - 06/30/13

Survey Number	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')	Walk Rate (d/100')
							N/S (ft)	E/W (ft)	Distance (ft)	Direction Azimuth			
113	9577	0.8	199.7	93	9549.52	362.55	5.76 S	363.80 W	363.85	269.09	0.60	-0.32	-30.97
114	9673	0.7	193.2	96	9645.51	362.82	6.96 S	364.16 W	364.23	268.90	0.14	-0.10	-6.77
115	9717	0.5	208.9	44	9689.51	362.95	7.39 S	364.32 W	364.39	268.84	0.58	-0.45	35.68
Proj.	9770	0.5	208.9	53	9742.50	363.14	7.80 S	364.54 W	364.62	268.77	0.00	0.00	0.00

SCANNED



PO Box 1370
Artesia, NM 88211-1370
(575) 748-1288

HOBBS OCD

AUG 20 2013

RECEIVED

July 8, 2013

Mack Energy Corporation
PO Box 960
Artesia, NM 88211-0960

RE: Brook Federal #5
1650' FNL & 330' FEL
Sec. 30, T17S, R32E
Lea County, New Mexico

Dear Sir,

The attached is the Deviation Survey for the above captioned well.

Very truly yours,

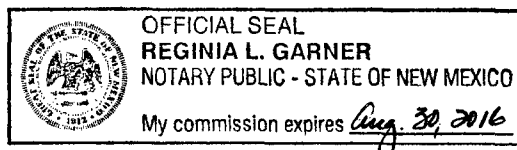
A handwritten signature in cursive script, appearing to read "Graham".

Chris Graham
Drilling Superintendent

State of New Mexico }
County of Eddy }

The foregoing was acknowledged before me this 8th day of July, 2013.

A handwritten signature in cursive script, appearing to read "Regina L. Garner".

Notary Public

BROOK FEDERAL #5

Date	Depth	Deviation	Direction
6/16/2013	347	39.00	14.00
6/16/2013	552	0.60	35.00
6/16/2013	170	1.10	11.00
6/18/2013	772	1.50	19.00
6/18/2013	834	2.10	7.90
6/18/2013	959	2.00	0.00
6/18/2013	1084	2.00	342.20
6/18/2013	1077	2.10	358.10
6/18/2013	1303	1.60	1.90
6/19/2013	1602	2.20	13.70
6/19/2013	1727	2.50	23.10
6/19/2013	1849	2.90	11.70
6/19/2013	1832	2.50	0.00
6/19/2013	1863	2.60	0.00
6/19/2013	1895	2.30	0.00
6/19/2013	1926	2.00	0.00
6/19/2013	1957	1.90	0.00
6/21/2013	2161	2.00	0.00
6/21/2013	2223	2.90	296.30
6/21/2013	2285	3.00	292.70
6/21/2013	2348	3.00	294.70
6/21/2013	2410	2.50	302.00
6/21/2013	2535	3.40	268.40
6/21/2013	2597	5.60	264.40
6/21/2013	2690	7.60	260.60
6/21/2013	2753	7.30	261.60
6/21/2013	2815	8.20	260.90
6/21/2013	2878	7.40	263.70
6/21/2013	2990	7.40	262.00
6/22/2013	2970	8.10	264.70
6/22/2013	3063	9.30	263.70
6/22/2013	3125	8.60	264.30
6/22/2013	3189	7.90	266.10
6/22/2013	3250	7.60	264.30
6/22/2013	3312	9.00	257.90
6/22/2013	3374	9.40	255.40
6/22/2013	3468	9.10	255.20
6/22/2013	3561	8.70	255.20
6/22/2013	3654	8.60	256.40
6/22/2013	3747	8.50	256.90
6/22/2013	3841	8.10	255.70
6/22/2013	3903	8.70	260.20
6/22/2013	3965	9.50	265.50

Date	Depth	Deviation	Direction
6/22/2013	4058	9.20	266.40
6/22/2013	4151	9.30	266.50
6/22/2013	4245	9.50	266.70
6/22/2013	4339	9.20	267.90
6/23/2013	4433	9.30	268.00
6/23/2013	4527	9.50	267.20
6/23/2013	4650	8.20	268.00
6/23/2013	4744	5.60	256.00
6/23/2013	4931	2.50	256.00
6/23/2013	5118	0.80	256.00
6/24/2013	5218	0.40	216.00
6/24/2013	5312	0.60	229.10
6/24/2013	5406	0.70	145.00
6/24/2013	5500	0.70	211.60
6/24/2013	5682	0.80	201.60
6/24/2013	5872	1.00	206.20
6/24/2013	5968	0.50	185.30
6/24/2013	6061	2.00	197.90
6/24/2013	6155	0.20	133.70
6/24/2013	6247	0.70	19.00
6/25/2013	6340	1.50	7.40
6/25/2013	6433	2.60	8.10
6/25/2013	6589	2.20	22.30
6/25/2013	6744	1.90	78.20
6/25/2013	6839	1.90	339.90
6/25/2013	6964	1.60	12.50
6/26/2013	7024	2.00	12.60
6/26/2013	7118	1.10	157.30
6/26/2013	7181	1.10	160.00
6/26/2013	7243	0.90	151.40
6/26/2013	7336	1.10	143.10
6/27/2013	7712	1.60	111.60
6/27/2013	7992	1.00	227.70
6/27/2013	8085	1.10	229.50
6/27/2013	8179	1.20	232.70
6/27/2013	8272	1.40	240.10
6/27/2013	8365	1.70	238.50
6/28/2013	8552	1.50	244.00
6/28/2013	8643	1.50	242.40
6/28/2013	8737	1.50	242.70
6/29/2013	8832	1.60	247.90
6/29/2013	8926	1.70	247.80
6/29/2013	9019	2.00	253.80
6/29/2013	9111	1.60	216.80
6/29/2013	9204	1.40	211.60

Date	Depth	Deviation	Direction
6/29/2013	9297	1.50	217.00
6/30/2013	9393	1.40	219.60
6/30/2013	9486	1.10	228.50
6/30/2013	9579	0.80	199.70
6/30/2013	9673	0.70	193.20
6/30/2013	9719	0.50	208.90