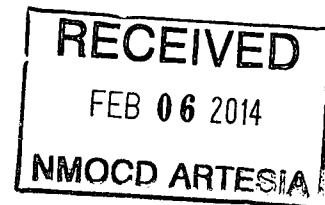


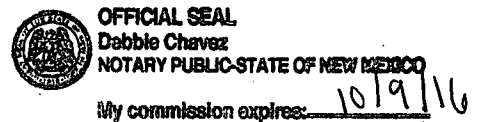
Deviation Survey
 Anthill State SWD #5
 30-015-41691
 Cactus Drilling Rig #124
 Section 2, TWN 20S-Range 29E Unit K
 TD 13,400'

Depth	Inclination	Depth	Inclination
225	1.01	7956	1.6
367	1.03	8052	1.2
502	1.3	8147	0.6
631	1.1	8242	0.2
800	1.1	8336	0.2
895	0.9	8430	1.5
1021	0.9	8525	1.4
1116	1.1	8620	1.2
1211	1.1	8714	0.1
1305	0.4	9180	1.47
1400	0.4	9746	1.88
1495	0.2	10283	2.02
1590	0.2	10764	1.54
1780	0.34	11266	2.59
2163	1.05	11483	2.9
2350	1.22	11649	3.4
2628	1.17	11657	3.1
3414	0.34	11739	2.3
3879	0.17	11834	1.5
4352	0.37	11928	1.5
4885	0.68	12022	0.7
5360	1.17	12116	0.7
5868	0.75	12211	0.5
6430	1.69	12305	0.7
6713	2.71	12489	0.98
6810	3.89	12920	1.69
6872	3.57	TD 13400	
6910	3.5		
7007	1.1		
7102	0.9		
7197	0.8		
7292	0.8		
7387	1.2		
7482	0.8		
7577	2.4		
7672	1.7		
7767	1.2		
7862	0.7		



James M. Hill

STATE OF NEW MEXICO *
 *
 COUNTY OF EDDY *



The foregoing instrument was acknowledged before me this 5th day of February, 2014 by James M. Hill.

My Commission expires:
10/9/16

Notary Public



Directional Survey Details

ANTHILL STATE SWD #5

Wellbore							
Wellbore Name	Parent Wellbore	Job	Hole Direction		VS Dir (°)	Start Depth (ftKB)	
ORIGINAL HOLE		New Drilling, SWD, Drilling, Completions & Production on 9/25/2013 06:00	VERTICAL		0.00	25.0	
Description	Date	MD Tie In (ftKB)	TVD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)	NSTie In (ft)	EW Tie In (ft)
General Rig Survey	11/3/2013 6:00:00 AM	0.00	0.00	0.00	0.00	0.00	0.00

Survey Data										
Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Method	Survey Company
11/3/2013 8:00:00 PM	225.00	1.01	0.00							
11/3/2013 11:15:00 PM	367.00	1.03	0.00							
11/6/2013 12:30:00 AM	1,780.00	0.34	0.00							
11/6/2013 11:00:00 AM	2,163.00	1.05	0.00							
11/6/2013 9:15:00 PM	2,350.00	1.22	0.00							
11/7/2013 9:00:00 AM	2,628.00	1.17	0.00							Rig Survey
11/12/2013 1:00:00 AM	3,414.00	0.34	0.00							Rig Survey
11/16/2013 10:45:00 PM	3,879.00	0.17	0.00							Rig Survey
11/17/2013 3:00:00 AM	4,352.00	0.37	0.00							Rig Survey
11/17/2013 8:45:00 AM	4,885.00	0.68	0.00							Rig Survey
11/17/2013 1:30:00 PM	5,360.00	1.17	0.00							Rig Survey
11/17/2013 6:45:00 PM	5,868.00	0.75	0.00							Rig Survey
11/18/2013 7:45:00 PM	6,430.00	1.69	0.00							Rig Survey
11/19/2013 12:45:00 AM	6,713.00	2.71	0.00							Rig Survey
11/19/2013 5:00:00 AM	6,810.00	3.89	0.00							Rig Survey
11/19/2013 12:15:00 PM	6,872.00	3.57	0.00							Rig Survey
11/23/2013 10:45:00 AM	9,180.00	1.47	0.00							Rig Survey
11/24/2013 2:30:00 AM	9,746.00	1.88	0.00							Rig Survey
11/24/2013 6:00:00 PM	10,283.00	2.02	0.00							Rig Survey
11/26/2013 3:30:00 AM	10,764.00	1.54	0.00							Rig Survey
11/27/2013 9:45:00 AM	11,266.00	2.59	0.00							Rig Survey
11/28/2013 5:30:00 PM	11,483.00	2.90	0.00							Rig Survey
11/29/2013 7:45:00 AM	11,649.00	3.40	0.00							Rig Survey
12/3/2013 12:45:00 PM	12,489.00	0.98	0.00							Rig Survey
12/13/2013 7:45:00 PM	12,920.00	1.69	0.00							Rig Survey



Directional Survey Details

ANTHILL STATE SWD #5

Wellbore										
Wellbore Name	Parent Wellbore	Job				Hole Direction			VS Dir (°)	Start Depth (ftKB)
ORIGINAL HOLE		New Drilling, SWD, Drilling, Completions & Production on 9/25/2013 06:00				VERTICAL			0.00	25.0
Description	Date	MD Tie In (ftKB)		TVD Tie In (ftKB)	Inclination Tie In (°)	Azimuth Tie In (°)		NS Tie In (ft)	EW Tie In (ft)	
MWD Survey	11/4/2013 6:30:00 AM	0.00		0.00	0.00	0.00		0.00	0.00	
Survey Data										
Date	MD (ftKB)	Incl (°)	Azm (°)	TVD (ftKB)	VS (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Method	Survey Company
11/4/2013 6:30:00 PM	502.00	1.30	25.40	501.96	5.14	5.14	2.44	0.26		Crescent Directional Drilling
11/4/2013 7:15:00 PM	562.00	1.30	27.00	561.94	6.37	6.37	3.04	0.06		Crescent Directional Drilling
11/4/2013 8:30:00 PM	631.00	1.10	68.50	630.93	7.31	7.31	4.02	1.26		Crescent Directional Drilling
11/4/2013 9:30:00 PM	800.00	1.10	303.20	799.91	8.79	8.79	4.17	1.16		Crescent Directional Drilling
11/4/2013 10:30:00 PM	895.00	0.90	180.90	894.91	8.54	8.54	3.39	1.85		Crescent Directional Drilling
11/4/2013 11:45:00 PM	1,021.00	0.90	28.90	1,020.90	8.42	8.42	3.86	1.39		Crescent Directional Drilling
11/5/2013 12:45:00 AM	1,116.00	1.10	29.00	1,115.89	9.87	9.87	4.66	0.21		Crescent Directional Drilling
11/5/2013 1:45:00 AM	1,211.00	1.10	182.90	1,210.88	9.76	9.76	5.05	2.26		Crescent Directional Drilling
11/5/2013 3:05:00 AM	1,305.00	0.40	215.40	1,304.87	8.59	8.59	4.82	0.84		Crescent Directional Drilling
11/5/2013 3:45:00 AM	1,400.00	0.40	322.80	1,399.87	8.58	8.58	4.43	0.68		Crescent Directional Drilling
11/5/2013 4:45:00 AM	1,495.00	0.20	280.60	1,494.87	8.88	8.88	4.06	0.30		Crescent Directional Drilling
11/5/2013 5:45:00 AM	1,590.00	0.20	179.10	1,589.87	8.74	8.74	3.90	0.33		Crescent Directional Drilling
11/20/2013 4:30:00 AM	6,910.00	3.50	277.60	6,906.58	20.94	20.94	-156.97	0.07		Crescent Directional Drilling
11/20/2013 7:30:00 AM	7,007.00	1.10	276.90	7,003.49	21.44	21.44	-160.83	2.47		Crescent Directional Drilling
11/20/2013 9:45:00 AM	7,102.00	0.90	280.30	7,098.48	21.68	21.68	-162.47	0.22		Crescent Directional Drilling
11/20/2013 11:15:00 AM	7,197.00	0.80	273.90	7,193.47	21.86	21.86	-163.86	0.14		Crescent Directional Drilling
11/20/2013 12:45:00 PM	7,292.00	0.80	268.40	7,288.46	21.89	21.89	-165.19	0.08		Crescent Directional Drilling
11/20/2013 3:45:00 PM	7,387.00	1.20	257.20	7,383.44	21.65	21.65	-166.82	0.47		Crescent Directional Drilling
11/20/2013 8:00:00 PM	7,482.00	0.80	182.70	7,478.43	20.77	20.77	-167.82	1.32		Crescent Directional Drilling
11/20/2013 11:30:00 PM	7,577.00	2.40	197.70	7,573.39	18.21	18.21	-168.46	1.73		Crescent Directional Drilling
11/21/2013 3:15:00 AM	7,672.00	1.70	217.00	7,668.33	15.19	15.19	-169.91	1.03		Crescent Directional Drilling
11/21/2013 6:15:00 AM	7,767.00	1.20	192.00	7,763.30	13.09	13.09	-170.96	0.84		Crescent Directional Drilling
11/21/2013 10:00:00 AM	7,862.00	0.70	226.10	7,858.29	11.72	11.72	-171.59	0.77		Crescent Directional Drilling
11/21/2013 11:30:00 AM	7,956.00	1.60	193.30	7,952.27	10.04	10.04	-172.30	1.15		Crescent Directional Drilling
11/21/2013 1:45:00 PM	8,052.00	1.20	201.10	8,048.24	7.80	7.80	-172.97	0.46		Crescent Directional Drilling
11/21/2013 4:15:00 PM	8,147.00	0.60	357.80	8,143.24	7.37	7.37	-173.35	1.86		Crescent Directional Drilling
11/21/2013 6:30:00 PM	8,242.00	0.20	344.70	8,238.23	8.02	8.02	-173.41	0.43		Crescent Directional Drilling
11/21/2013 9:45:00 PM	8,336.00	0.20	356.60	8,332.23	8.35	8.35	-173.47	0.04		Crescent Directional Drilling
11/22/2013 12:45:00 AM	8,430.00	1.50	276.10	8,426.22	8.64	8.64	-174.70	1.57		Crescent Directional Drilling
11/22/2013 3:45:00 AM	8,525.00	1.40	313.30	8,521.19	9.57	9.57	-176.78	0.98		Crescent Directional Drilling
11/22/2013 7:15:00 AM	8,620.00	1.20	312.60	8,616.17	11.04	11.04	-178.36	0.21		Crescent Directional Drilling
11/23/2013 10:45:00 AM	8,714.00	0.10	314.80	8,710.16	11.76	11.76	-179.14	1.17		Crescent Directional Drilling
11/30/2013 10:45:00 AM	11,657.00	3.10	303.60	11,651.68	57.62	57.62	-247.26	0.10		Crescent Directional Drilling
11/30/2013 3:30:00 PM	11,739.00	2.30	289.20	11,733.59	59.39	59.39	-250.66	1.27		Crescent Directional Drilling
11/30/2013 7:30:00 PM	11,834.00	1.50	293.10	11,828.53	60.50	60.50	-253.61	0.85		Crescent Directional Drilling
12/1/2013 12:45:00 AM	11,928.00	1.50	284.30	11,922.50	61.29	61.29	-255.93	0.24		Crescent Directional Drilling
12/1/2013 6:30:00 AM	12,022.00	0.70	262.10	12,016.49	61.51	61.51	-257.69	0.95		Crescent Directional Drilling
12/1/2013 10:45:00 AM	12,116.00	0.70	299.40	12,110.48	61.72	61.72	-258.76	0.48		Crescent Directional Drilling
12/1/2013 1:30:00 PM	12,211.00	0.50	114.10	12,205.48	61.83	61.83	-258.89	1.26		Crescent Directional Drilling
12/1/2013 6:45:00 PM	12,305.00	0.70	242.11	12,299.47	61.40	61.40	-259.02	1.15		Crescent Directional Drilling