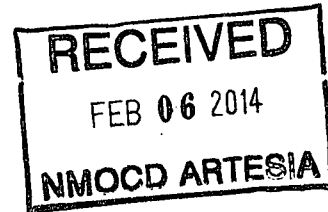
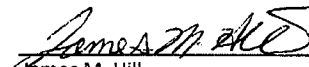


Deviation Survey
Anthill State SWD #5
30-015-41691
Cactus Drilling Rig #124
Section 2, TWN 20S-Range 29E Unit K
TD 13,400'

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 *

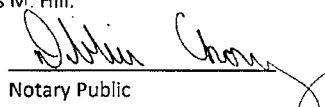


OFFICIAL SEAL
Debbie Chavez
NOTARY PUBLIC-STATE OF NEW MEXICO
My commission expires: 10/9/16

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 (°)	NS Tie 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
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		Job	Hole Direction			VS Dir (°)	Start Depth (ft)			
Wellbore Name	Parent Wellbore	New Drilling, SWD, Drilling, Completions & Production on 9/25/2013 08:00	VERTICAL			0.00	25.0			
ORIGINAL HOLE										
Description	Date	MD Tie In (ft)	TVD Tie In (ft)	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 (ft)	Incl (°)	Azm (°)	TVD (ft)	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	7,856.29	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