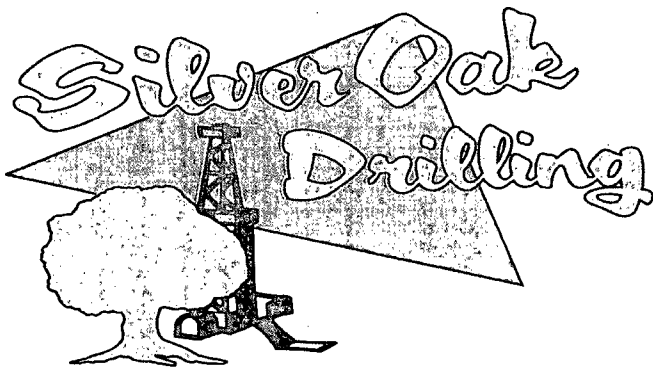




PO Box 1370
Artesia, NM 88211-1370
(505) 748-1288

3001541786

March 31, 2014

Yates Petroleum Corporation
105 S. 4th
Artesia, NM 88211-1395

RE: Cutter APC #2H
551' FSL & 95' FWL
Sec. 21, T19S, R25E
Eddy 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 that reads "Chris Graham".

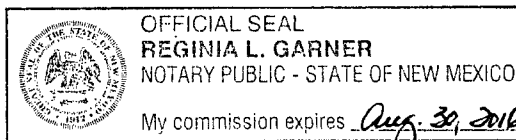
Chris Graham
Drilling Superintendent

State of New Mexico }
County of Eddy }

The foregoing was acknowledged before me this 31st day of March, 2014.

A handwritten signature in cursive script that reads "Regina L. Garner".

Notary Public



CUTTER APC #2H

Depth	Incl(deg)	Azm(deg)	TVD(ftKB)	500' test
163	0.70	64.90	163.00	
194	0.70	102.80	193.77	31
225	0.60	75.10	224.99	31
318	0.60	126.50	317.99	93
412	0.70	93.50	411.98	94
505	0.70	909.00	0.00	93
599	0.30	121.30	0.00	94
692	0.60	128.00	691.99	93
786	0.50	93.10	785.98	94
879	0.40	146.10	878.98	93
956	0.70	138.10	955.98	77
1056	0.90	154.30	1055.97	100
1087	0.80	170.60	1086.96	31
1149	0.90	169.70	1148.96	62
1244	0.80	162.10	1243.95	95
1338	0.80	159.90	1337.94	94
1431	0.80	159.90	1430.91	93
1524	1.00	158.30	1523.91	93
1618	1.00	154.50	1617.90	94
1711	1.00	155.70	1710.89	93
1805	0.80	153.50	1804.87	94
1898	0.80	149.90	1897.87	93
1961	0.80	153.10	1960.86	63
1992	2.60	78.90	1991.85	31
2023	7.70	76.90	2022.71	31
2054	13.30	73.70	2053.18	31
2085	17.90	74.20	2083.03	31
2117	21.50	75.10	2113.15	32
2148	24.40	76.00	2141.70	31
2179	28.20	78.50	2169.48	31
2210	31.90	81.30	2196.31	31
2241	35.60	84.00	2222.09	31
2272	38.70	86.50	2246.79	31
2304	41.80	89.30	2271.21	32
2335	44.80	92.10	2293.78	31
2366	48.00	93.90	2315.15	31
2398	51.00	94.30	2335.93	32
2429	54.40	94.20	2354.71	31
2460	57.40	94.30	2372.09	31
2491	61.30	94.40	2387.89	31
2522	63.70	94.70	2402.21	31
2553	67.30	94.40	2415.06	31
2585	70.20	93.90	2426.66	32

Depth	Incl(deg)	Azm(deg)	TVD(ftKB)	500' test
2616	73.70	93.60	2436.26	31
2647	77.40	92.90	2443.99	31
2679	80.40	90.80	2450.16	32
2710	83.20	90.10	2454.58	31
2735	86.10	90.10	2456.91	25
2766	89.60	90.00	2458.07	31
2861	90.70	92.00	2457.82	95
2954	90.60	92.00	2456.77	93
3048	90.60	91.60	2455.78	94
3141	90.20	92.70	2455.13	93
3234	90.10	93.00	2454.89	93
3328	90.10	93.40	2454.72	94
3421	89.80	93.20	2454.81	93
3515	89.80	93.50	2455.13	94
3609	89.30	92.40	2455.87	94
3702	89.30	92.20	2457.01	93
3796	88.70	91.70	2458.65	94
3890	88.40	91.60	2461.03	94
3983	89.30	91.90	2462.89	93
4077	89.10	91.60	2464.21	94
4171	88.60	91.50	2466.09	94
4264	89.50	91.90	2467.64	93
4357	90.40	91.40	2467.72	93
4451	90.70	91.50	2466.81	94
4545	91.10	91.60	2465.34	94
4638	91.30	91.30	2463.39	93
4732	90.20	91.70	2462.16	94
4825	89.80	91.30	2462.16	93
4919	89.90	92.40	2462.41	94
5012	89.60	92.40	2462.81	93
5105	89.40	92.50	2463.62	93
5199	89.30	92.60	2464.69	94
5293	89.00	93.00	2466.08	94
5386	90.10	92.70	2466.81	93
5480	90.30	93.00	2466.49	94
5573	90.00	92.50	2466.24	93
5667	89.90	90.90	2466.32	94
5761	89.20	90.50	2467.06	94
5855	90.20	91.40	2467.56	94
5948	90.60	91.40	2466.91	93
6042	90.80	91.50	2465.76	94
6136	91.00	91.30	2464.28	94
6230	91.00	90.90	2462.64	94
6417	90.00	91.80	2461.01	187
6510	90.00	91.60	2461.01	93

Depth	Incl(deg)	Azm(deg)	TVD(ftKB)	500' test
6604	90.20	91.60	2460.84	94
6697	89.30	91.90	2461.25	93
6790	89.10	91.70	2462.55	93
6884	88.80	91.30	2464.27	94
6978	88.90	91.50	2466.16	94
7072	88.70	91.60	2468.13	94

EOF

Yates Petroleum Corp.

Eddy County, NM (NAD83 NME)

Cutter APC

#2H

WB1/Job #1410303

Design: Surveys (Silver Oak 11)

Standard Survey Report

02 April, 2014

NM OIL CONSERVATION
ARTESIA DISTRICT
SEP 09 2014
RECEIVED

Phoenix Technology Services

Survey Report

Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County, NM (NAD83 NME)	TVD Reference:	KB @ 3533.50usft (Silver Oak 11)
Site:	Cutter APC	MD Reference:	KB @ 3533.50usft (Silver Oak 11)
Well:	#2H	North Reference:	Grid
Wellbore:	WB1/Job #1410303	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Silver Oak 11)	Database:	GCR DB

Project: Eddy County, NM (NAD83 NME)

Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site: Cutter APC

Site Position:		Northing:	596,840.60 usft	Latitude:	32° 38' 26.35904 N
From:	Map	Easting:	490,636.70 usft	Longitude:	104° 29' 52.96590 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.09 °

Well: #2H

Well Position	+N/-S	0.00 usft	Northing:	596,840.60 usft	Latitude:	32° 38' 26.35904 N
	+E/-W	0.00 usft	Easting:	490,636.70 usft	Longitude:	104° 29' 52.96590 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,515.00 usft

Wellbore WB1/Job #1410303

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010_14	03/18/14	7.70	60.35	48,488

Design Surveys (Silver Oak 11)

Audit Notes:

Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
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Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	91.91

Survey Program Date 04/02/14

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
163.00	7,163.00	Phoenix MWD Surveys (WB1/Job #14103)	MWD	MWD - Standard

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
163.00	0.70	69.90	163.00	0.34	0.94	0.92	0.43	0.43	0.00
First Phoenix MWD Survey									
194.00	0.70	102.80	193.99	0.37	1.30	1.28	1.28	0.00	106.13
225.00	0.60	75.10	224.99	0.37	1.64	1.63	1.05	-0.32	-89.35
318.00	0.60	126.50	317.99	0.20	2.50	2.49	0.56	0.00	55.27
412.00	0.70	93.50	411.98	-0.13	3.47	3.47	0.41	0.11	-35.11
506.00	0.70	90.90	505.97	-0.17	4.62	4.62	0.03	0.00	-2.77
599.00	0.30	121.30	598.97	-0.31	5.39	5.40	0.50	-0.43	32.69
692.00	0.60	128.00	691.97	-0.73	5.98	6.01	0.33	0.32	7.20
786.00	0.50	93.10	785.96	-1.06	6.78	6.81	0.37	-0.11	-37.13

Phoenix Technology Services

Survey Report

Company: Yates Petroleum Corp.
 Project: Eddy County, NM (NAD83 NME)
 Site: Cutter APC
 Well: #2H
 Wellbore: WB1/Job #1410303
 Design: Surveys (Silver Oak 11)

Local Co-ordinate Reference: Well #2H
 TVD Reference: KB @ 3533.50usft (Silver Oak 11)
 MD Reference: KB @ 3533.50usft (Silver Oak 11)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: GCR DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
879.00	0.40	146.10	878.96	-1.35	7.37	7.41	0.44	-0.11	56.99
956.00	0.70	138.10	955.96	-1.92	7.83	7.89	0.40	0.39	-10.39
1,087.00	0.80	170.60	1,086.95	-3.42	8.52	8.63	0.33	0.08	24.81
1,149.00	0.90	169.70	1,148.94	-4.33	8.67	8.81	0.16	0.16	-1.45
1,244.00	0.80	162.10	1,243.93	-5.69	9.01	9.20	0.16	-0.11	-8.00
1,338.00	0.80	159.90	1,337.92	-6.93	9.44	9.66	0.03	0.00	-2.34
1,431.00	0.80	159.90	1,430.91	-8.15	9.88	10.15	0.00	0.00	0.00
1,524.00	1.00	158.30	1,523.90	-9.52	10.41	10.72	0.22	0.22	-1.72
1,618.00	1.00	154.50	1,617.89	-11.02	11.06	11.43	0.07	0.00	-4.04
1,711.00	1.00	155.70	1,710.87	-12.49	11.75	12.16	0.02	0.00	1.29
1,805.00	0.80	153.50	1,804.86	-13.83	12.38	12.83	0.22	-0.21	-2.34
1,898.00	0.80	149.90	1,897.85	-14.97	12.99	13.49	0.05	0.00	-3.87
1,961.00	0.80	153.10	1,960.84	-15.74	13.41	13.93	0.07	0.00	5.08
1,992.00	2.60	78.90	1,991.83	-15.80	14.20	14.72	8.08	5.81	-239.35
2,023.00	7.70	76.90	2,022.70	-15.19	16.92	17.41	16.46	16.45	-6.45
2,054.00	13.30	73.70	2,053.17	-13.72	22.37	22.81	18.16	18.06	-10.32
2,085.00	17.90	74.20	2,083.02	-11.42	30.38	30.74	14.84	14.84	1.61
2,117.00	21.50	75.10	2,113.14	-8.57	40.78	41.04	11.29	11.25	2.81
2,148.00	24.40	76.00	2,141.68	-5.56	52.48	52.64	9.42	9.35	2.90
2,179.00	28.20	78.50	2,169.47	-2.55	65.88	65.93	12.77	12.26	8.06
2,210.00	31.90	81.30	2,196.30	0.15	81.16	81.11	12.76	11.94	9.03
2,241.00	35.60	84.00	2,222.07	2.33	98.24	98.10	12.88	11.94	8.71
2,272.00	38.70	86.50	2,246.78	3.87	116.89	116.69	11.12	10.00	8.06
2,304.00	41.80	89.30	2,271.20	4.61	137.54	137.31	11.21	9.69	8.75
2,335.00	44.80	92.10	2,293.76	4.33	158.80	158.56	11.49	9.68	9.03
2,366.00	48.00	93.90	2,315.14	3.15	181.21	181.00	11.15	10.32	5.81
2,398.00	51.00	94.30	2,335.92	1.41	205.48	205.32	9.42	9.38	1.25
2,429.00	54.40	94.20	2,354.70	-0.42	230.07	229.95	10.97	10.97	-0.32
2,433.84	54.87	94.22	2,357.50	-0.71	234.00	233.89	9.68	9.68	0.33
2433.84' MD, 330' Crossing Toe Point									
2,460.00	57.40	94.30	2,372.08	-2.32	255.66	255.60	9.68	9.68	0.32
2,491.00	61.30	94.40	2,387.88	-4.34	282.25	282.24	12.58	12.58	0.32
2,522.00	63.70	94.70	2,402.19	-6.53	309.66	309.70	7.79	7.74	0.97
2,553.00	67.30	94.40	2,415.05	-8.76	337.77	337.88	11.65	11.61	-0.97
2,585.00	70.20	93.90	2,426.64	-10.92	367.52	367.68	9.18	9.06	-1.56
2,616.00	73.70	93.60	2,436.25	-12.84	396.92	397.13	11.33	11.29	-0.97
2,647.00	77.40	92.90	2,443.98	-14.54	426.89	427.14	12.13	11.94	-2.26
2,679.00	80.40	90.80	2,450.14	-15.56	458.27	458.53	11.37	9.38	-6.56
2,710.00	83.20	90.10	2,454.56	-15.80	488.95	489.20	9.30	9.03	-2.26
2,735.00	86.10	90.10	2,456.89	-15.84	513.83	514.08	11.60	11.60	0.00
2,766.00	89.60	90.00	2,458.06	-15.87	544.81	545.03	11.29	11.29	-0.32
2,861.00	90.70	92.00	2,457.81	-17.52	639.79	640.02	2.40	1.16	2.11
2,954.00	90.60	92.00	2,456.75	-20.77	732.72	733.01	0.11	-0.11	0.00

Phoenix Technology Services

Survey Report

Company: Yates Petroleum Corp.
 Project: Eddy County, NM (NAD83 NME)
 Site: Cutter APC
 Well: #2H
 Wellbore: WB1/Job #1410303
 Design: Surveys (Silver Oak 11)

Local Co-ordinate Reference
 TVD Reference: KB @ 3533.50usft (Silver Oak 11)
 MD Reference: KB @ 3533.50usft (Silver Oak 11)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: GCR DB

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	N/S (usft)	E/W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,048.00	90.60	91.60	2,455.77	-23.72	826.67	827.00	0.43	0.00	-0.43
3,141.00	90.20	92.70	2,455.12	-27.21	919.60	920.00	1.26	-0.43	1.18
3,234.00	90.10	93.00	2,454.87	-31.83	1,012.49	1,012.99	0.34	-0.11	0.32
3,328.00	90.10	93.40	2,454.71	-37.08	1,106.34	1,106.96	0.43	0.00	0.43
3,421.00	89.80	93.20	2,454.79	-42.44	1,199.19	1,199.93	0.39	-0.32	-0.22
3,515.00	89.80	93.50	2,455.12	-47.93	1,293.03	1,293.90	0.32	0.00	0.32
3,609.00	89.30	92.40	2,455.86	-52.77	1,386.90	1,387.88	1.29	-0.53	-1.17
3,702.00	89.30	92.20	2,456.99	-56.50	1,479.81	1,480.88	0.22	0.00	-0.22
3,796.00	88.70	91.70	2,458.63	-59.70	1,573.74	1,574.86	0.83	-0.64	-0.53
3,890.00	88.40	91.60	2,461.01	-62.40	1,667.68	1,668.83	0.34	-0.32	-0.11
3,983.00	89.30	91.90	2,462.88	-65.24	1,760.61	1,761.81	1.02	0.97	0.32
4,077.00	89.10	91.60	2,464.19	-68.11	1,854.56	1,855.80	0.38	-0.21	-0.32
4,171.00	88.60	91.50	2,466.08	-70.65	1,948.51	1,949.78	0.54	-0.53	-0.11
4,264.00	89.50	91.90	2,467.62	-73.41	2,041.45	2,042.76	1.06	0.97	0.43
4,357.00	90.40	91.40	2,467.70	-76.09	2,134.41	2,135.76	1.11	0.97	-0.54
4,451.00	90.70	91.50	2,466.80	-78.47	2,228.38	2,229.75	0.34	0.32	0.11
4,545.00	91.10	91.60	2,465.32	-81.01	2,322.33	2,323.74	0.44	0.43	0.11
4,638.00	91.30	91.30	2,463.38	-83.36	2,415.28	2,416.72	0.39	0.22	-0.32
4,732.00	90.20	91.70	2,462.15	-85.82	2,509.24	2,510.70	1.25	-1.17	0.43
4,825.00	89.80	91.30	2,462.15	-88.26	2,602.21	2,603.70	0.61	-0.43	-0.43
4,919.00	89.90	92.40	2,462.39	-91.29	2,696.15	2,697.70	1.18	0.11	1.17
5,012.00	89.60	92.40	2,462.80	-95.19	2,789.07	2,790.70	0.32	-0.32	0.00
5,105.00	89.40	92.50	2,463.61	-99.16	2,881.98	2,883.69	0.24	-0.22	0.11
5,199.00	89.30	92.60	2,464.68	-103.34	2,975.88	2,977.68	0.15	-0.11	0.11
5,293.00	89.00	93.00	2,466.07	-107.94	3,069.76	3,071.65	0.53	-0.32	0.43
5,386.00	90.10	92.70	2,466.80	-112.56	3,162.64	3,164.64	1.23	1.18	-0.32
5,480.00	90.30	93.00	2,466.47	-117.23	3,256.53	3,258.62	0.38	0.21	0.32
5,573.00	90.00	92.50	2,466.23	-121.70	3,349.42	3,351.61	0.63	-0.32	-0.54
5,667.00	89.90	90.90	2,466.31	-124.48	3,443.37	3,445.61	1.71	-0.11	-1.70
5,761.00	89.20	90.50	2,467.05	-125.63	3,537.36	3,539.58	0.86	-0.74	-0.43
5,855.00	90.20	91.40	2,467.54	-127.19	3,631.35	3,633.57	1.43	1.06	0.96
5,948.00	90.60	91.40	2,466.89	-129.46	3,724.32	3,726.56	0.43	0.43	0.00
6,042.00	90.80	91.50	2,465.74	-131.84	3,818.28	3,820.55	0.24	0.21	0.11
6,136.00	91.00	91.30	2,464.27	-134.14	3,912.24	3,914.54	0.30	0.21	-0.21
6,230.00	91.00	90.90	2,462.63	-135.94	4,006.21	4,008.51	0.43	0.00	-0.43
6,323.00	91.00	90.90	2,461.00	-137.40	4,099.18	4,101.48	0.00	0.00	0.00
6,417.00	90.00	91.80	2,460.18	-139.62	4,193.15	4,195.47	1.43	-1.06	0.96
6,510.00	90.00	91.60	2,460.18	-142.38	4,286.11	4,288.47	0.22	0.00	-0.22
6,604.00	90.20	91.60	2,460.02	-145.00	4,380.07	4,382.47	0.21	0.21	0.00
6,697.00	89.30	91.90	2,460.42	-147.84	4,473.03	4,475.47	1.02	-0.97	0.32
6,790.00	89.10	91.70	2,461.72	-150.76	4,565.97	4,568.46	0.30	-0.22	-0.22
6,884.00	88.80	91.30	2,463.45	-153.22	4,659.92	4,662.44	0.53	-0.32	-0.43
6,978.00	88.90	91.50	2,465.33	-155.52	4,753.88	4,756.42	0.24	0.11	0.21

Phoenix Technology Services

Survey Report

Company: Yates Petroleum Corp.
 Project: Eddy County, NM (NAD83 NME)
 Site: Cutter APC
 Well: #2H
 Wellbore: WB1/Job #1410303
 Design: Surveys (Silver Oak 11)

Local Co-ordinate Reference: Well #2H
 TVD Reference: KB @ 3533.50usft (Silver Oak 11)
 MD Reference: KB @ 3533.50usft (Silver Oak 11)
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature
 Database: GCR DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,072.00	88.70	91.60	2,467.30	-158.06	4,847.82	4,850.40	0.24	-0.21	0.11
Last Pheonix MWD Survey									
7,099.20	88.70	91.60	2,467.92	-158.82	4,875.00	4,877.59	0.00	0.00	0.00
7099.20' MD, 330' Crossing Toe Point									
7,163.00	88.70	91.60	2,469.37	-160.60	4,938.76	4,941.37	0.00	0.00	0.00
Projection to TD									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Interp @ 2467.92 (#2H \	0.00	360.00	2,467.92	-158.82	4,875.00	596,681.78	495,511.70	32° 38' 24.85867 N	104° 28' 55.94842 W
- actual wellpath hits target center									
- Point									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
163.00	163.00	0.34	0.94	First Pheonix MWD Survey
2,433.84	2,357.50	-0.71	234.00	2433.84' MD, 330' Crossing Toe Point
7,072.00	2,467.30	-158.06	4,847.82	Last Pheonix MWD Survey
7,099.20	2,467.92	-158.82	4,875.00	7099.20' MD, 330' Crossing Toe Point
7,163.00	2,469.37	-160.60	4,938.76	Projection to TD

Checked By: _____

Approved By: _____

Date: _____



Project: Eddy County, NM (NAD83 NME)
Site: Cutter APC
Well: #2H
Wellbore: WB1/Job #1410303
Design: Plan #3 03-23-14
Rig: Silver Oak 11



Azimuths to Grid North
True North: 0.09°
Magnetic North: 7.79°
Magnetic Field
Strength: 48488.0nT
Dip Angle: 60.35°
Date: 03/16/2014
Model: IGRF2010_14

WELL DETAILS

+N/-S	+E/-W	Northing	Ground Level	Easting	Latitude	Longitude
0.00	0.00	596840.60	3515.00	490636.70	32° 38' 26.35904 N	104° 29' 52.96589 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSeal	Target	Annotation
1	1858.30	0.80	149.90	1897.85	-14.97	12.99	0.00	0.00	13.48		Plan 3 Tie-in
2	1974.00	0.80	149.90	1973.84	-15.89	13.53	0.00	0.00	14.05		PTB/ Hold Inc and Azi for 11'
3	1985.00	0.80	149.90	1984.84	-16.02	13.60	0.00	0.00	14.13		KOP, 12'100' Build-Turn
4	2730.37	89.87	91.66	2458.76	-35.41	469.57	12.00	-58.25	490.48		LP, 89.87° Inc, 91.66° Azi
5	7117.15	89.87	91.66	2469.07	-162.30	4874.50	0.00	0.00	4877.20	PBHL-Cutter APC #2H	Planned BHL at 7117.15 MD
6	7217.15	89.87	91.66	2469.30	-165.19	4974.46	0.00	0.00	4977.20		TD at 7217.15 MD 100' Past Hardline

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
PBHL-Cutter APC #2H	2469.07	-162.30	4874.50	596878.30	495511.20	32° 38' 24.82422 N	104° 28' 55.95421 W	Point
plan hits target center								

Map System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS' 1980
Zone Name: New Mexico Eastern Zone

Local Origin: Well #2H, Grid North

Latitude: 32° 38' 26.35904 N
Longitude: 104° 29' 52.96589 W

Grid East: 490636.70

Grid North: 596840.60

Scale Factor: 1.000

Geomagnetic Model: IGRF2010_14

Sample Date: 18-Mar-14

Magnetic Declination: 7.70°

Dip Angle from Horizontal: 60.35°

Magnetic Field Strength: 48488

To convert a Magnetic Direction to a Grid Direction, Add 7.79°
To convert a Magnetic Direction to a True Direction, Add 7.70° East
To convert a True Direction to a Grid Direction, Add 0.09°

FORMATION TOP DETAILS

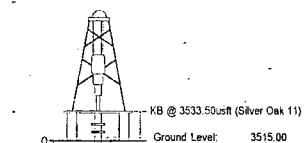
TVDPath	MDPath	Formation	DipAngle	DipDir
2303.32	2334.89	Glorieta	0.13	91.91
2383.53	2459.80	Yeso	0.13	91.91
2468.95	7067.87	TL2458' TVD @ 0 VZ, 89.87° Inc	0.13	91.91

CASING DETAILS

TVD	MD	Name	Size
	78.00	20"	20
	1000.00	9 5/8"	9-5/8"

LEGEND

- #1, WB1, Inc Surveys V0
- #2H, WB1/Job #1410303, Surveys (Silver Oak 11) V0
- #1, WB1, Inc Surveys V0
- #10, WB1, Inc Surveys V0
- #5, WB1, Inc Surveys V0
- #14H, WB1/Job #1410302, Surveys (Silver Oak 11) V0
- Plan #3 03-23-14



First Phoenix MWD Survey

San Andres

True Vertical Depth (150 usft/in)

2433.84' MD, 330' Crossing Toe Point

Glorieta

Yeso

TL 2458' TVD @ 0 VZ, 89.87° Inc

2700

2500

2300

2100

1900

1700

1500

1300

1100

900

700

500

300

100

0

-100

-200

-300

-400

-500

-600

-700

-800

-900

-1000

-1100

-1200

-1300

-1400

-1500

-1600

-1700

-1800

-1900

-2000

-2100

-2200

-2300

-2400

-2500

-2600

-2700

-2800

-2900

-3000

-3100

-3200

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-4000

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-18200

-18300

-18400

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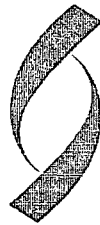
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PHOENIX
TECHNOLOGY SERVICES

RECEIVED

APR 28 2014

**YPC
MAIL ROOM**

April 23, 2014

Yates Petroleum Corp.
Attention: Regulatory Department
105 S. 4th St.
Artesia, NM 88210

Re: Yates Petroleum
Cutter APC #2H
Eddy County, NM
API #30-015- 41786
Job No. 1410303

Dear Regulatory Department;

Phoenix Technology Services, Inc. has filed the Survey Data Certification, Surveys, and Lease Plat for the above referenced well with the State of New Mexico Oil Conservation Division – District 2 via certified mail. A copy of the filing is attached for your records.

Name of Surveyor	Drain Hole Number	Surveyed Depths		Dates Performed		Type of Survey
		From	To	Start	End	
Daniel Scott	2H	163	7,072	03/19/14	03/29/14	MWD

Thank you for the opportunity to be of service. Please contact me if you have any questions or require additional information.

Best Regards,

Dana Robinson

Dana Robinson
Operations Administrator

Phoenix Technology Services SURVEY DATA CERTIFICATION



PHOENIX
TECHNOLOGY SERVICES

PHOENIX JOB NUMBER 1410303

OPERATOR Yates Petroleum Corporation

WELL NAME Cutter APC #2H

COUNTY & STATE

Eddy, New Mexico

API WELL NUMBER 30-015-41786

PROPOSED DIRECTION 91:91

TIE-IN DATA						
MEASURED	VERTICAL			N-S	E-W	DATA
DEPTH	DEPTH	INCLIN	AZIMUTH	COORD	COORD	SOURCE
ft	.00 ft	.0 ft	.0 ft	.00 ft	.00 ft	Surface

FIRST	FIRST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
19-Mar-14	163 ft	0.7	69.9

SURVEY INSTRUMENT
TYPE
Phoenix MWD

LAST	LAST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
29-Mar-14	7,072 ft	88.7	91.6

TO THE BEST OF MY KNOWLEDGE I
CERTIFY THIS SURVEY DATA TO BE
TRUE AND CORRECT.

PROJECTED	PROJECTED		
TD SURVEY	TD SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
29-Mar-14	7,163 ft	88.7	91.6

Daniel Scott

PRINT YOUR NAME ABOVE

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	
	7.79
DECLINATION OR GRID	GRID

3/29/2014

TODAY'S DATE

MWD SUPERVISOR 1

Daniel Scott

DIRECTIONAL DRILLER 1

Brian Terrell

MWD SUPERVISOR 2

Jason Bryant

DIRECTIONAL DRILLER 2

Dan Waggoner