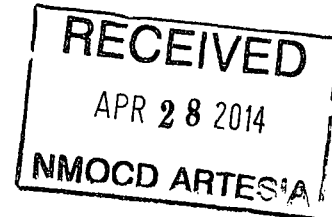




PHOENIX
TECHNOLOGY SERVICES

April 23, 2014

Oil Conservation Division
State of New Mexico
811 S. First St.
District 2- Artesia
Artesia, New Mexico 88210



Attention: Regulatory Department

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

Enclosed please find the Survey Data Certification, and the original Plat and one copy of the Survey Report performed on the above referenced well by Phoenix Technology Services, Inc. (P-5 No. 664171). Other information required by your office is as follows:

Name & Title 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

A certified plat on which the bottom hole location is oriented both to the surface location and to the lease lines (or unit lines in case of pooling) is attached to the survey report. If any other information is required, please contact the undersigned at the letterhead address and phone number.

Best Regards,

Dana Robinson

Dana Robinson
Operations Administrator

Certified mail receipt number: 7011 1570 0001 4365 1790

Phoenix Technology Services SURVEY DATA CERTIFICATION

RECEIVED

APR 28 2014

NMOCD ARTESIA



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

SURVEY INSTRUMENT

TYPE

Phoenix MWD

LAST SURVEY DATE	LAST SURVEY 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 TD SURVEY DATE	PROJECTED TD SURVEY 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

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone (575) 748-1283 Fax: (575) 748-0720

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone (505) 476-3480 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

RECEIVED

APR 28 2014

Form C-102
Revised August 1, 2011

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-41786	Pool Code	Pool Name
Property Code	Property Name CUTTER APC	Well Number 2H
OGRID No. 025575	Operator Name YATES PETROLEUM CORPORATION	Elevation 3515

Surface Location

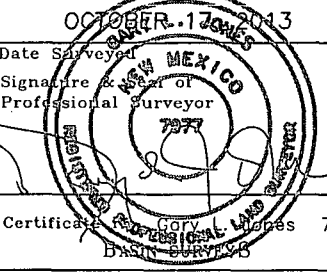
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	21	19 S	25 E		551	SOUTH	95	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	21	19 S	25 E		400	SOUTH	330	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
-----------------	-----------------	--------------------	-----------

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

N: 601645.0 E: 490543.1 (NAD83)	N: 601628.3 E: 493188.3 (NAD83)	N: 601611.7 E: 495833.6 (NAD83)
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 undivided mineral interest in the land including the proposed bottom hole location 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. Signature _____ Date _____ Printed Name _____ Email Address _____		
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. OCTOBER 1 2013 Date Surveyed Signature & Seal of Professional Surveyor  Certificate No. 7977 BRAIN SURVEYING 0' 1000' 2000' 3000' 4000' SCALE: 1" = 2000' WO Num.: 29606		
SURFACE LOCATION Lat - N 32°38'26.35" Long - W 104°29'52.96" NMSPC - N 596840.6 E 490636.7 (NAD-83) 95' S.L.		PROPOSED BOTTOM HOLE LOCATION Lot - N 32°38'24.82" Long - W 104°28'55.95" NMSPC - N 596678.3 E 495511.2 (NAD-83) 330' B.H.
N: 596289.6 E: 490540.5 (NAD83)		N: 596277.6 E: 495842.1 (NAD83)

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

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

Project: Eddy County, NM (NAD83 NME)

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

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
 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	2,147.68	-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: 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

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
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 Survey Calculation Method: Minimum Curvature
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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	- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
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: _____