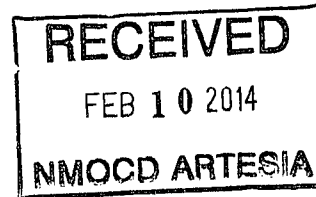




PHOENIX
TECHNOLOGY SERVICES

January 30, 2014

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



Dear District 2 - Artesia

Attention: Regulatory Department

Re: Yates Petroleum Corp.
Lola BUG #1H
Eddy County, NM
API #30-015-41604
Job No. 1311664

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	1H	2,007	7,389	12/15/13	12/21/13	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,

Dolly Bush

Dolly Bush
Operations Administrator

Certified mail receipt number: 7012 3050 0001 3227 2955

RECEIVED

FEB 10 2014

Phoenix Technology Services

SURVEY DATA CERTIFICATION

NMOCD ARTESIA


PHOENIX
TECHNOLOGY SERVICES

PHOENIX JOB NUMBER

1311664

OPERATOR

Yates Petroleum Corp.

WELL NAME

Lola BUG #1H

COUNTY & STATE

Eddy County, NM

API WELL NUMBER

30-015-41604

PROPOSED DIRECTION

272.06

TIE-IN DATA						
MEASURED	VERTICAL			N-S	E-W	DATA
DEPTH	DEPTH	INCLIN	AZIMUTH	COORD	COORD	SOURCE
1,950 ft	1,949.93 ft	.4 ft	228.49 ft	-8.12 ft	-9.92 ft	Surface

FIRST	FIRST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
15-Dec-13	2,007 ft	0.7	282.6

SURVEY INSTRUMENT

TYPE

Phoenix MWD

LAST	LAST		
SURVEY	SURVEY		
DATE	DEPTH	INCLIN	AZIMUTH
21-Dec-13	7,389 ft	92	272.4

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
21-Dec-13	7,464 ft	92	272.4

Daniel Scott

PRINT YOUR NAME ABOVE

Daniel Scott

SIGN YOUR NAME ABOVE

MAGNETIC DECLINATION OR TOTAL GRID

TOTAL CORRECTION USED	
	7.73
DECLINATION OR GRID	GRID

12/21/2013

TODAY'S DATE

MWD SUPERVISOR 1

Daniel Scott

DIRECTIONAL DRILLER 1

Brian Terrell

MWD SUPERVISOR 2

Travis LaGarce

DIRECTIONAL DRILLER 2

Dan Waggoner

1805 Brittmore Road

Houston, Texas 77043

(713)3370609 (Voice), (713)337-0599 (Fax)



Yates Petroleum Corp.

Eddy County, New Mexico (NAD83 NME)

Lola BUG

#1H

WB1/Job #1311664

Survey: Phoenix MWD Survey

Standard Survey Report

22 December, 2013





Survey Report



Company:	Yates Petroleum Corp	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County, New Mexico (NAD83 NME)	TVD Reference:	KB @ 3432.50usft (Silver Oak 11)
Site:	Lola BUG	MD Reference:	KB @ 3432.50usft (Silver Oak 11)
Well:	#1H	North Reference:	Grid
Wellbore:	WB1/Job #1311664	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Silver Oak 11)	Database:	Compass 5000 GCR DB

Project:	Eddy County, New Mexico (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:	Lola BUG		
Site Position:		Northing:	629,938.65 usft
From:	Map	Easting:	522,428.26 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 43' 54.21010 N
		Longitude:	104° 23' 41.37574 W
		Grid Convergence:	-0.03 °

Well:	#1H		
Well Position	+N-S	0.00 usft	Northing:
	+E-W	0.00 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	usft
		Latitude:	32° 43' 54.21010 N
		Longitude:	104° 23' 41.37574 W
		Ground Level:	3,414.00 usft

Wellbore:	WB1/Job #1311664				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010_14	12/03/13	7.70	60.45	48,584

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	272.06	

Survey Program	Date 12/22/13			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.00	1,950.00	MS Gyro Survey (WB1/Job #1311664)	CB-GYRO-MS	Camera based gyro multishot
2,007.00	7,464.00	Phoenix MWD Survey (WB1/Job #131166)	MWD	MWD - Standard

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)
1,950.00	0.40	228.49	1,949.93	-8.12	-9.92	9.63	0.00	0.00	0.00
2,007.00	0.70	282.60	2,006.93	-8.17	-10.41	10.11	1.00	0.53	94.93
First Phoenix MWD Survey									
2,038.00	3.00	279.60	2,037.91	-8.00	-11.40	11.10	7.42	7.42	-9.68
2,069.00	6.30	278.10	2,068.80	-7.62	-13.88	13.60	10.65	10.65	-4.84
2,100.00	10.00	277.80	2,099.49	-7.02	-18.23	17.97	11.94	11.94	-0.97
2,132.00	13.70	278.30	2,130.80	-6.09	-24.74	24.50	11.57	11.56	1.56
2,163.00	17.40	278.50	2,160.66	-4.88	-32.96	32.76	11.94	11.94	0.65
2,194.00	20.90	278.40	2,189.94	-3.38	-43.02	42.87	11.29	11.29	-0.32
2,225.00	24.40	277.50	2,218.54	-1.74	-54.84	54.74	11.35	11.29	-2.90



Survey Report



Company:	Yates Petroleum Corp	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County, New Mexico (NAD83 NME)	TVD Reference:	KB @ 3432.50usft (Silver Oak 11)
Site:	Lola BUG	MD Reference:	KB @ 3432.50usft (Silver Oak 11)
Well:	#1H	North Reference:	Grid
Wellbore:	VB1/Job #1311664	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Silver Oak 11)	Database:	Compass 5000 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)
2,257.00	27.70	275.50	2,247.29	-0.16	-68.80	68.75	10.67	10.31	-6.25
2,288.00	30.90	273.10	2,274.32	0.96	-83.92	83.90	10.99	10.32	-7.74
2,319.00	34.10	271.60	2,300.46	1.63	-100.56	100.56	10.64	10.32	-4.84
2,350.00	37.40	271.00	2,325.62	2.04	-118.67	118.66	10.70	10.65	-1.94
2,381.00	40.40	271.00	2,349.74	2.38	-138.13	138.12	9.68	9.68	0.00
2,413.00	43.30	270.90	2,373.58	2.73	-159.47	159.47	9.06	9.06	-0.31
2,444.00	46.20	271.00	2,395.59	3.10	-181.29	181.29	9.36	9.35	0.32
2,475.00	49.30	270.80	2,416.43	3.45	-204.23	204.23	10.01	10.00	-0.65
2,506.00	52.40	270.90	2,436.00	3.81	-228.27	228.26	10.00	10.00	0.32
2,538.00	55.50	271.50	2,454.83	4.36	-254.13	254.12	9.81	9.69	1.88
2,569.00	58.00	271.90	2,471.82	5.13	-280.04	280.05	8.14	8.06	1.29
2,600.00	60.60	272.00	2,487.65	6.03	-306.68	306.70	8.39	8.39	0.32
2,631.00	63.20	272.30	2,502.25	7.06	-334.00	334.04	8.43	8.39	0.97
2,662.00	65.70	272.50	2,515.62	8.23	-361.95	362.01	8.09	8.06	0.65
2,693.00	68.10	272.60	2,527.78	9.50	-390.43	390.52	7.75	7.74	0.32
2,725.00	69.90	272.30	2,539.25	10.78	-420.28	420.39	5.69	5.63	-0.94
2,756.00	71.70	272.20	2,549.44	11.93	-449.53	449.67	5.81	5.81	-0.32
2,787.00	73.60	272.00	2,558.69	13.01	-479.10	479.25	6.16	6.13	-0.65
2,816.97	76.02	271.81	2,566.54	13.97	-508.00	508.18	8.09	8.06	-0.65
330' Hardline									
2,818.00	76.10	271.80	2,566.79	14.00	-509.00	509.17	8.09	8.06	-0.64
2,849.00	78.10	271.80	2,573.71	14.95	-539.20	539.39	6.45	6.45	0.00
2,880.00	80.30	272.00	2,579.52	15.96	-569.63	569.84	7.13	7.10	0.65
2,911.00	82.60	272.30	2,584.13	17.11	-600.27	600.49	7.48	7.42	0.97
2,942.00	84.80	272.40	2,587.53	18.37	-631.05	631.30	7.10	7.10	0.32
2,965.00	86.50	272.00	2,589.27	19.25	-653.97	654.24	7.59	7.39	-1.74
2,996.00	89.10	272.30	2,590.46	20.42	-684.92	685.21	8.44	8.39	0.97
3,027.00	90.20	272.50	2,590.65	21.71	-715.89	716.21	3.61	3.55	0.65
3,121.00	92.10	272.00	2,588.76	25.40	-809.80	810.18	2.09	2.02	-0.53
3,214.00	91.60	272.50	2,585.76	29.05	-902.67	903.14	0.76	-0.54	0.54
3,308.00	90.90	272.50	2,583.71	33.15	-996.56	997.11	0.74	-0.74	0.00
3,401.00	92.20	271.60	2,581.20	36.48	-1,089.47	1,090.07	1.70	1.40	-0.97
3,495.00	91.70	271.00	2,578.00	38.61	-1,183.39	1,184.01	0.83	-0.53	-0.64
3,589.00	89.70	270.50	2,576.85	39.84	-1,277.37	1,277.97	2.19	-2.13	-0.53
3,682.00	90.60	269.80	2,576.61	40.08	-1,370.36	1,370.92	1.23	0.97	-0.75
3,775.00	90.70	271.80	2,575.55	41.38	-1,463.34	1,463.89	2.15	0.11	2.15
3,869.00	89.60	272.30	2,575.30	44.74	-1,557.28	1,557.88	1.29	-1.17	0.53
3,962.00	90.90	271.80	2,574.90	48.07	-1,650.22	1,650.88	1.50	1.40	-0.54
4,056.00	89.80	272.00	2,574.32	51.19	-1,744.16	1,744.88	1.19	-1.17	0.21
4,149.00	90.60	271.80	2,574.00	54.27	-1,837.11	1,837.88	0.89	0.86	-0.22
4,243.00	90.40	272.50	2,573.18	57.80	-1,931.04	1,931.87	0.77	-0.21	0.74
4,336.00	89.60	273.60	2,573.18	62.75	-2,023.91	2,024.85	1.46	-0.86	1.18
4,430.00	90.60	273.20	2,573.01	68.32	-2,117.74	2,118.83	1.15	1.06	-0.43



Survey Report



Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County, New Mexico (NAD83 NME)	TVD Reference:	KB @ 3432.50usft (Silver Oak 11)
Site:	Lola.BUG	MD Reference:	KB @ 3432.50usft (Silver Oak 11)
Well:	#1H	North Reference:	Grid
Wellbore:	WVB1/Job #1311664	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Silver Oak 11)	Database:	Compass 5000 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)
4,524.00	91.00	272.00	2,571.70	72.58	-2,211.63	2,212.81	1.35	0.43	-1.28
4,618.00	89.10	271.80	2,571.62	75.70	-2,305.58	2,306.81	2.03	-2.02	-0.21
4,711.00	90.00	271.60	2,572.35	78.46	-2,398.53	2,399.80	0.99	0.97	-0.22
4,805.00	91.60	271.30	2,571.04	80.84	-2,492.49	2,493.78	1.73	1.70	-0.32
4,898.00	90.50	272.60	2,569.33	84.00	-2,585.42	2,586.77	1.83	-1.18	1.40
4,992.00	89.10	272.60	2,569.66	88.27	-2,679.32	2,680.76	1.49	-1.49	0.00
5,086.00	89.90	272.90	2,570.48	92.78	-2,773.20	2,774.75	0.91	0.85	0.32
5,180.00	91.00	273.20	2,569.74	97.78	-2,867.07	2,868.73	1.21	1.17	0.32
5,274.00	89.60	273.60	2,569.25	103.35	-2,960.90	2,962.70	1.55	-1.49	0.43
5,367.00	89.60	272.90	2,569.90	108.62	-3,053.74	3,055.68	0.75	0.00	-0.75
5,461.00	90.80	272.60	2,569.57	113.13	-3,147.63	3,149.67	1.32	1.28	-0.32
5,554.00	91.90	272.30	2,567.38	117.11	-3,240.52	3,242.64	1.23	1.18	-0.32
5,648.00	90.80	271.50	2,565.17	120.22	-3,334.44	3,336.61	1.45	-1.17	-0.85
5,741.00	89.40	271.00	2,565.01	122.25	-3,427.42	3,429.60	1.60	-1.51	-0.54
5,834.00	90.50	270.90	2,565.09	123.79	-3,520.40	3,522.58	1.19	1.18	-0.11
5,928.00	91.80	270.70	2,563.20	125.11	-3,614.37	3,616.53	1.40	1.38	-0.21
6,021.00	91.50	271.70	2,560.52	127.05	-3,707.31	3,709.48	1.12	-0.32	1.08
6,114.00	90.40	272.50	2,558.98	130.46	-3,800.23	3,802.47	1.46	-1.18	0.86
6,208.00	91.20	272.90	2,557.67	134.89	-3,894.12	3,896.45	0.95	0.85	0.43
6,302.00	90.50	271.80	2,556.27	138.74	-3,988.03	3,990.44	1.39	-0.74	-1.17
6,395.00	91.00	271.00	2,555.06	141.01	-4,080.99	4,083.42	1.01	0.54	-0.86
6,489.00	90.60	271.00	2,553.74	142.65	-4,174.97	4,177.40	0.43	-0.43	0.00
6,582.00	89.40	271.70	2,553.74	144.84	-4,267.94	4,270.39	1.49	-1.29	0.75
6,676.00	90.20	271.30	2,554.07	147.31	-4,361.91	4,364.38	0.95	0.85	-0.43
6,770.00	91.30	271.20	2,552.84	149.36	-4,455.87	4,458.36	1.18	1.17	-0.11
6,864.00	90.60	272.50	2,551.28	152.39	-4,549.81	4,552.35	1.57	-0.74	1.38
6,957.00	91.70	272.80	2,549.42	156.69	-4,642.69	4,645.32	1.23	1.18	0.32
7,051.00	91.00	272.40	2,547.20	160.95	-4,736.57	4,739.29	0.86	-0.74	-0.43
7,144.00	89.60	273.00	2,546.71	165.33	-4,829.46	4,832.28	1.64	-1.51	0.65
7,238.00	90.20	273.30	2,546.88	170.50	-4,923.32	4,926.26	0.71	0.64	0.32
7,331.00	91.20	272.20	2,545.74	174.96	-5,016.20	5,019.25	1.60	1.08	-1.18
7,389.00	92.00	272.40	2,544.12	177.29	-5,074.13	5,077.22	1.42	1.38	0.34
Last Phoenix MWD Survey									
7,464.00	92.00	272.40	2,541.51	180.42	-5,149.02	5,152.18	0.00	0.00	0.00
Projection to TD									

Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
2,007.00	2,006.93	-8.17	-10.41	First Phoenix MWD Survey
2,816.97	2,566.54	13.97	-508.00	330' Hardline
7,389.00	2,544.12	177.29	-5,074.13	Last Phoenix MWD Survey
7,464.00	2,541.51	180.42	-5,149.02	Projection to TD



Survey Report



Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #1H
Project:	Eddy County New Mexico (NAD83 NME)	TVD Reference:	KB @ 3432.50usft (Silver Oak 11)
Site:	Lola BUG	MD Reference:	KB @ 3432.50usft (Silver Oak 11)
Well:	#1H	North Reference:	Grid
Wellbore:	WB1/Job #1311664	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Silver Oak 11)	Database:	Compass 5000 GCR DB

Checked By: _____ Approved By: _____ Date: _____