

Submit To Appropriate District Office
Two Copies
District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-105
Revised August 1, 2011.

1. WELL API NO.
30-025-41058
2. Type of Lease
☒ STATE ☐ FEE ☐ FED/INDIAN
3. State Oil & Gas Lease No.
VO-6582/VO-5532

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

4. Reason for filing:

- ☒ **COMPLETION REPORT** (Fill in boxes #1 through #31 for State and Fee wells only)
- ☐ **C-144 CLOSURE ATTACHMENT** (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)

5. Lease Name or Unit Agreement Name
Atoka Bank BDJ State Comp

6. Well Number:
3H

MAR 28 2014

7. Type of Completion:

- ☒ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☐ OTHER

8. Name of Operator
Yates Petroleum Corporation

9. OGRID
025575

RECEIVED

10. Address of Operator
105 South Fourth Street, Artesia, NM 88210

11. Pool name or Wildcat
Triple X; Bone Spring, West (Oil)

12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	A	17	24S	33E		200	North	660	East	Lea
BH:	P	17	24S	33E		330	South	667	East	Lea

13. Date Spudded
12/3/13 RH
12/23/13 RT

14. Date T.D. Reached
1/13/14

15. Date Rig Released
1/16/14

16. Date Completed (Ready to Produce)
3/19/14

17. Elevations (DF and RKB,
RT, GR, etc.) 3,602' GR
3,627' KB

18. Total Measured Depth of Well
15,726'

19. Plug Back Measured Depth
15,645'

20. Was Directional Survey Made?
Yes (Attached)

21. Type Electric and Other Logs Run
CBL-VDL-GR-CCL

22. Producing Interval(s), of this completion - Top, Bottom, Name
11,455'-15,635' Bone Spring

CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT LB./FT.	DEPTH SET	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
20"		80'	26"	6 sx redi-mix to surface	
13-3/8"	48#	1,303'	17-1/2"	760sx (circ)	
9-5/8"	36#, 40#	5,217'	12-1/4"	1325sx (circ)	
5-1/2"	17#	15,687'	8-1/2"	1485sx (TOC 7,760' CBL)	

24. LINER RECORD					25. TUBING RECORD		
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN	SIZE	DEPTH SET	PACKER SET

26. Perforation record (interval, size, and number)
11,455'-15,635' (468)

27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.
DEPTH INTERVAL
11,455'-15,635'
AMOUNT AND KIND MATERIAL USED
Acidized with 65,000 gals 15% HCL acid, frac with
a total of 4,259,606# 30/50 Econoprop & 20/40
Super DC sand.

PRODUCTION

Date First Production 3/20/14		Production Method (Flowing, gas lift, pumping - Size and type pump) Flowing				Well Status (Prod. or Shut-in) Producing	
Date of Test 3/24/14	Hours Tested 24	Choke Size NA	Prod'n For Test Period	Oil - Bbl 329	Gas - MCF 284	Water - Bbl. 1280	Gas - Oil Ratio NA
Flow Tubing Press. NA	Casing Pressure 1800 psi	Calculated 24- Hour Rate	Oil - Bbl. 329	Gas - MCF 284	Water - Bbl. 1280	Oil Gravity - API - (Corr.) NA	

29. Disposition of Gas (Sold, used for fuel, vented, etc.)
Sold

30. Test Witnessed By
J. Fitzer

31. List Attachments
Logs, Surveys

32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.

33. If an on-site burial was used at the well, report the exact location of the on-site burial:

Latitude

Longitude

NAD 1927 1983

I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief

Signature Laura Watts Printed Name Laura Watts Title Regulatory Reporting Technician Date March 27, 2014

E-mail Address: laura@yatespetroleum.com

APR 21 2014

INSTRUCTIONS

This form is to be filed with the appropriate District Office of the Division not later than 20 days after the completion of any newly-drilled or deepened well and not later than 60 days after completion of closure. When submitted as a completion report, this shall be accompanied by one copy of all electrical and radio-activity logs run on the well and a summary of all special tests conducted, including drill stem tests. All depths reported shall be measured depths. In the case of directionally drilled wells, true vertical depths shall also be reported. For multiple completions, items 11, 12 and 26-31 shall be reported for each zone.

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

Southeastern New Mexico			Northwestern New Mexico		
T. Anhy	T. Canyon		T. Ojo Alamo	T. Penn A	
T. Salt 1,690'	T. Strawn		T. Kirtland	T. Penn. "B	
B. Salt 4,885'	T. Atoka		T. Fruitland	T. Penn. "C	
T. Yates	T. Miss		T. Pictured Cliffs	T. Penn. "D	
T. 7 Rivers	T. Devonian		T. Cliff House	T. Leadville	
T. Queen	T. Silurian		T. Menefee	T. Madison	
T. Grayburg	T. Montoya		T. Point Lookout	T. Elbert	
T. San Andres	T. Simpson		T. Mancos	T. McCracken	
T. Glorieta	T. McKee		T. Gallup	T. Ignacio Otzte	
T. Paddock	T. Ellenburger		Base Greenhorn	T. Granite	
T. Blinebry	T. Gr. Wash		T. Dakota		
T. Tubb	T. Bone Springs 9,106'		T. Morrison		
T. Drinkard	T. Rustler 1,245'		T. Todilto		
T. Abo	T. Lamar 5,134'		T. Entrada		
T. Wolfcamp	T. Bell Canyon 5,166'		T. Wingate		
T. Penn	T. Cherry Canyon 6,086'		T. Chinle		
T. Cisco	T. Brushy Canyon 7,562'		T. Permian		

OIL OR GAS SANDS OR ZONES

No. 1, from.....to.....

No. 2, from.....to.....

No. 3, from.....to.....

No. 4, from.....to.....

IMPORTANT WATER SANDS

Include data on rate of water inflow and elevation to which water rose in hole.

No. 1, from.....to.....feet.....
 No. 2, from.....to.....feet.....
 No. 3, from.....to.....feet.....

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology

From	To	Thickness In Feet	Lithology



3335 Pollok Drive
Conroe, Texas 77303

936.442.2500 (office)
936.442.2599 (fax)
www.msenergyservices.com

Surveyor Certification Form

HOBBS OCD

MAR 28 2014

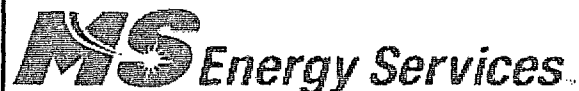
RECEIVED

Survey Company: MS ENERGY SERVICES
Surveyors Name: TREY FINCH
Survey Job Type: SRG
Customer: YATES PETROLEUM CORPORATION
Well: ATOKA BANK BDJ STATE COM 3H
API: 3002541058
Surveyed from: SURFACE TO A DEPTH OF 1300' MD
Survey Run Date: 1-1-14
Surface Location: EDDY COUNTY, NM

I certify that the data is true, correct, and complete and within the limitations of the tool set forth by MS Energy Services; that I am authorized and qualified to make this report; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by MS Energy Services.

Trey Finch

Digitally signed by Trey Finch
DN: cn=Trey Finch, o=MS Energy Services, ou=MS Survey,
email=tfinch@msenergyservices.com, c=US
Date: 2013.01.02 16:07:30 -06'00'



Job Number: SVMO-140002
 Company: Yates Petroleum Corporation
 Lease/Well: Atoka Bank BDJ State Com 3H
 Location: Eddy County, NM
 Rig Name: Cactus #124
 RKB: 25'
 G.L. or M.S.L.: GL

State/Country: New Mexico/USA
 Declination: 7.30°
 Grid: East To Grid North
 File name: S:\2014SU-1\YATES\MOI\ATOKAB~1\3H.SVY
 Date/Time: 03-Jan-14 / 08:15
 Curve Name: Surface - 1300' M.D. (SRG)

HOBBS OCD
 MAR 28 2014
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WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 179.67
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

We hereby certify that our survey data from
 Surface MD to 1300' MD is, to the best of
 our knowledge a true and accurate account of
 the well bore.
 Tracy Finch
 MS Energy Services
 1/31/14
 Date

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
100.00	.50	62.65	100.00	.20	.39	-.20	.44	62.65	.50
200.00	.60	61.06	199.99	.65	1.23	-.65	1.40	62.05	.10
300.00	.56	56.79	299.99	1.18	2.10	-1.16	2.41	60.77	.06
400.00	.43	53.56	399.99	1.67	2.81	-1.65	3.27	59.35	.13
500.00	.55	57.48	499.98	2.15	3.52	-2.13	4.12	58.61	.12
600.00	.38	71.09	599.98	2.51	4.24	-2.49	4.93	59.33	.20
700.00	.48	67.30	699.98	2.78	4.94	-2.75	5.67	60.60	.10
800.00	.17	82.63	799.97	2.96	5.47	-2.93	6.22	61.56	.32
900.00	.07	66.20	899.97	3.01	5.67	-2.97	6.42	62.08	.10

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
1000.00	.37	73.26	999.97	3.12	6.04	-3.09	6.80	62.65	.30
1100.00	.34	81.72	1099.97	3.26	6.64	-3.22	7.40	63.86	.06
1200.00	.25	66.54	1199.97	3.39	7.13	-3.35	7.90	64.59	.12
Last Survey Depth Recorded									
1300.00	.10	138.74	1299.97	3.41	7.39	-3.37	8.14	65.24	.24

Yates Petroleum

Lea County, NM (NAD-83)
Atoka Bank BDJ State Com
#3H

OH

Design: OH

Standard Survey Report

14 January, 2014

HOBBS OCD

MAR 28 2014

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Survey Report

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #3H
Project:	Lea County, NM (NAD-83)	TVD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Site:	Atoka Bank BDJ State Com	MD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston, R5000 Database

Project	Lea County, NM (NAD-83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Atoka Bank BDJ State Com				
Site Position:		Northing:	446,170.06 usft	Latitude:	32° 13' 27.839 N
From:	Map	Easting:	771,850.92 usft	Longitude:	103° 35' 16.443 W
Position Uncertainty:	2.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.40 °

Well	#3H					
Well Position	+N/-S	0.0 usft	Northing:	446,170.06 usft	Latitude:	32° 13' 27.839 N
	+E/-W	0.0 usft	Easting:	771,850.92 usft	Longitude:	103° 35' 16.443 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,602.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/29/2013	7.30	60.13	48,376

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	73.69	

Survey Program	Date: 1/14/2014			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
100.0	1,300.0	Survey #1 - Gyro Multishot (OH)	Good_gyro	Good Gyro
1,508.0	15,726.0	Survey #2 - Crescent MWD Surveys (OH)	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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.50	62.65	100.0	0.2	0.4	0.4	0.50	0.50	0.00
200.0	0.60	61.06	200.0	0.7	1.2	1.4	0.10	0.10	-1.59
300.0	0.56	56.79	300.0	1.2	2.1	2.3	0.06	-0.04	-4.27
400.0	0.43	53.56	400.0	1.7	2.8	3.2	0.13	-0.13	-3.23
500.0	0.55	57.48	500.0	2.1	3.5	4.0	0.12	0.12	3.92
600.0	0.38	71.09	600.0	2.5	4.2	4.8	0.20	-0.17	13.61
700.0	0.48	67.30	700.0	2.8	4.9	5.5	0.10	0.10	-3.79
800.0	0.17	82.63	800.0	3.0	5.5	6.1	0.32	-0.31	15.33
900.0	0.07	66.20	900.0	3.0	5.7	6.3	0.10	-0.10	-16.43

Survey Report

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #3H
Project:	Lea County, NM (NAD-83)	TVD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Site:	Atoka Bank BDJ State Com	MD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston/R5000 Database

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)
1,000.0	0.37	73.26	1,000.0	3.1	6.0	6.7	0.30	0.30	7.06
1,100.0	0.34	81.72	1,100.0	3.3	6.6	7.3	0.06	-0.03	8.46
1,200.0	0.25	66.54	1,200.0	3.4	7.1	7.8	0.12	-0.09	-15.18
1,300.0	0.10	136.74	1,300.0	3.4	7.4	8.1	0.24	-0.15	70.20
1,508.0	0.30	212.60	1,508.0	2.8	7.2	7.7	0.14	0.10	36.47
1,697.0	0.40	292.90	1,697.0	2.7	6.4	6.8	0.24	0.05	42.49
1,887.0	0.10	47.20	1,887.0	3.0	5.9	6.5	0.24	-0.16	60.16
2,077.0	0.20	302.80	2,077.0	3.3	5.7	6.4	0.13	0.05	-54.95
2,267.0	0.20	192.60	2,267.0	3.2	5.4	6.0	0.17	0.00	-58.00
2,456.0	0.30	293.20	2,456.0	3.1	4.8	5.5	0.21	0.05	53.23
2,646.0	0.10	347.90	2,646.0	3.4	4.3	5.1	0.13	-0.11	28.79
2,836.0	0.10	36.50	2,836.0	3.7	4.4	5.3	0.04	0.00	25.58
3,024.0	0.10	131.30	3,024.0	3.7	4.6	5.5	0.08	0.00	50.43
3,211.0	0.30	348.40	3,211.0	4.1	4.6	5.6	0.21	0.11	-76.42
3,401.0	0.20	343.00	3,401.0	4.9	4.4	5.6	0.05	-0.05	-2.84
3,589.0	0.40	38.40	3,589.0	5.7	4.8	6.2	0.18	0.11	29.47
3,780.0	0.20	17.10	3,780.0	6.6	5.3	6.9	0.12	-0.10	-11.15
3,970.0	0.30	59.20	3,970.0	7.1	5.8	7.6	0.11	0.05	22.16
4,160.0	0.10	145.70	4,159.9	7.3	6.3	8.1	0.16	-0.11	45.53
4,349.0	0.20	96.30	4,348.9	7.1	6.7	8.5	0.08	0.05	-26.14
4,533.0	0.80	104.60	4,532.9	6.7	8.3	9.9	0.33	0.33	4.51
4,634.0	0.50	113.70	4,633.9	6.4	9.4	10.8	0.31	-0.30	9.01
4,729.0	0.70	123.40	4,728.9	5.9	10.2	11.5	0.24	0.21	10.21
4,823.0	1.40	121.90	4,822.9	5.0	11.7	12.6	0.75	0.74	-1.60
4,918.0	0.60	133.10	4,917.9	4.0	13.1	13.7	0.86	-0.84	11.79
5,013.0	0.40	134.70	5,012.9	3.4	13.7	14.1	0.21	-0.21	1.68
5,145.0	0.20	100.30	5,144.9	3.1	14.2	14.5	0.20	-0.15	-26.06
5,314.0	0.30	135.90	5,313.9	2.7	14.8	15.0	0.11	0.06	21.07
5,504.0	0.30	98.50	5,503.9	2.3	15.6	15.7	0.10	0.00	-19.68
5,693.0	2.00	99.20	5,692.8	1.7	19.4	19.1	0.90	0.90	0.37
5,788.0	0.40	6.30	5,787.8	1.7	21.1	20.7	2.17	-1.68	-97.79
5,884.0	0.40	234.60	5,883.8	1.9	20.8	20.5	0.76	0.00	-137.19
5,978.0	1.80	233.80	5,977.8	0.8	19.4	18.8	1.49	1.49	-0.85
6,073.0	1.80	161.90	6,072.8	-1.5	18.6	17.5	2.22	0.00	-75.68
6,168.0	0.40	12.00	6,167.8	-2.6	19.2	17.7	2.27	-1.47	-157.79
6,262.0	0.50	5.90	6,261.8	-1.8	19.3	18.0	0.12	0.11	-6.49
6,356.0	0.40	353.90	6,355.7	-1.1	19.3	18.2	0.15	-0.11	-12.77
6,451.0	0.40	348.80	6,450.7	-0.5	19.2	18.3	0.04	0.00	-5.37
6,546.0	0.40	334.90	6,545.7	0.2	19.0	18.3	0.10	0.00	-14.63
6,641.0	0.40	326.20	6,640.7	0.7	18.6	18.1	0.06	0.00	-9.16
6,736.0	0.40	306.50	6,735.7	1.2	18.2	17.8	0.14	0.00	-20.74
6,832.0	0.50	310.30	6,831.7	1.7	17.6	17.4	0.11	0.10	3.96
6,927.0	0.50	292.30	6,926.7	2.1	16.9	16.8	0.16	0.00	-18.95

Survey Report

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #3H
Project:	Lea County, NM (NAD-83)	TVD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Site:	Aloka Bank BDJ State Com	MD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

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)
7,023.0	0.40	281.20	7,022.7	2.3	16.2	16.2	0.14	-0.10	-11.56
7,118.0	0.40	266.90	7,117.7	2.4	15.5	15.6	0.10	0.00	-15.05
7,212.0	0.40	264.20	7,211.7	2.3	14.9	14.9	0.02	0.00	-2.87
7,307.0	0.40	252.00	7,306.7	2.2	14.2	14.3	0.09	0.00	-12.84
7,403.0	0.20	238.10	7,402.7	2.0	13.8	13.8	0.22	-0.21	-14.48
7,498.0	0.30	254.00	7,497.7	1.8	13.4	13.4	0.13	0.11	16.74
7,592.0	0.40	227.00	7,591.7	1.6	12.9	12.8	0.20	0.11	-28.72
7,687.0	0.40	226.90	7,686.7	1.1	12.4	12.2	0.00	0.00	-0.11
7,782.0	0.40	247.20	7,781.7	0.7	11.9	11.6	0.15	0.00	21.37
7,875.0	0.40	233.50	7,874.7	0.4	11.3	11.0	0.10	0.00	-14.73
7,970.0	0.40	235.60	7,969.7	0.0	10.8	10.4	0.02	0.00	2.21
8,066.0	0.20	205.70	8,065.7	-0.3	10.4	9.9	0.26	-0.21	-31.15
8,161.0	0.20	189.30	8,160.7	-0.6	10.3	9.7	0.06	0.00	-17.26
8,256.0	0.10	181.20	8,255.7	-0.9	10.3	9.7	0.11	-0.11	-8.53
8,351.0	0.40	233.10	8,350.7	-1.1	10.0	9.3	0.37	0.32	54.63
8,447.0	0.40	195.60	8,446.7	-1.7	9.7	8.8	0.27	0.00	-39.06
8,542.0	0.90	275.70	8,541.7	-1.9	8.8	8.0	0.97	0.53	84.32
8,635.0	0.70	255.70	8,634.7	-2.0	7.6	6.7	0.37	-0.22	-21.51
8,730.0	0.70	270.20	8,729.7	-2.1	6.4	5.6	0.19	0.00	15.26
8,825.0	0.70	263.30	8,824.7	-2.2	5.3	4.4	0.09	0.00	-7.26
8,919.0	0.90	298.90	8,918.7	-1.9	4.1	3.4	0.56	0.21	37.87
9,014.0	0.80	271.90	9,013.7	-1.5	2.7	2.2	0.43	-0.11	-28.42
9,110.0	0.70	271.40	9,109.6	-1.5	1.5	1.0	0.10	-0.10	-0.52
9,204.0	0.70	257.10	9,203.6	-1.6	0.4	-0.1	0.19	0.00	-15.21
9,299.0	0.60	279.90	9,298.6	-1.6	-0.7	-1.1	0.29	-0.11	24.00
9,394.0	0.90	292.90	9,393.6	-1.3	-1.9	-2.2	0.36	0.32	13.68
9,488.0	1.10	306.50	9,487.6	-0.4	-3.3	-3.3	0.33	0.21	14.47
9,582.0	2.50	330.30	9,581.6	1.9	-5.0	-4.3	1.66	1.49	25.32
9,646.0	1.70	326.30	9,645.5	3.9	-6.2	-4.9	1.27	-1.25	-6.25
9,678.0	1.60	311.90	9,677.5	4.6	-6.8	-5.3	1.33	-0.31	-45.00
9,772.0	1.00	315.10	9,771.5	6.0	-8.4	-6.4	0.64	-0.64	3.40
9,866.0	0.30	35.30	9,865.5	6.8	-8.8	-6.6	1.06	-0.74	85.32
9,960.0	0.60	321.80	9,959.5	7.4	-9.0	-6.6	0.63	0.32	-78.19
10,055.0	1.10	304.20	10,054.5	8.3	-10.1	-7.3	0.59	0.53	-18.53
10,150.0	1.00	253.00	10,149.5	8.6	-11.6	-8.7	0.96	-0.11	-53.89
10,244.0	0.20	242.30	10,243.4	8.3	-12.5	-9.7	0.86	-0.85	-11.38
10,339.0	0.40	241.90	10,338.4	8.0	-13.0	-10.2	0.21	0.21	-0.42
10,433.0	0.80	237.90	10,432.4	7.5	-13.8	-11.2	0.43	0.43	-4.26
10,527.0	0.30	231.80	10,526.4	7.0	-14.6	-12.0	0.53	-0.53	-6.49
10,622.0	0.30	237.30	10,621.4	6.7	-15.0	-12.5	0.03	0.00	5.79
10,645.0	0.40	273.40	10,644.4	6.7	-15.1	-12.6	1.03	0.43	156.96
10,676.0	0.40	254.70	10,675.4	6.7	-15.3	-12.8	0.42	0.00	-60.32
10,690.0	1.74	188.80	10,689.4	6.5	-15.4	-13.0	11.57	9.58	-470.71

Survey Report

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #3H
Project:	Lea County, NM (NAD-83)	TVD Reference:	WELL @ 3627.0usft (Cactus #124 - 25'KB)
Site:	Atoka Bank BDU State Com	MD Reference:	WELL @ 3627.0usft (Cactus #124 - 25'KB)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

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)
KOP: 10690.0' MD, 10689.4' TVD									
10,708.0	3.80	181.70	10,707.4	5.6	-15.5	-13.3	11.57	11.44	-39.45
10,740.0	7.90	180.50	10,739.2	2.3	-15.5	-14.2	12.82	12.81	-3.75
10,771.0	12.70	176.60	10,769.7	-3.2	-15.3	-15.6	15.64	15.48	-12.58
10,802.0	17.10	173.40	10,799.7	-11.1	-14.6	-17.1	14.43	14.19	-10.32
10,834.0	20.70	173.40	10,829.9	-21.4	-13.4	-18.9	11.25	11.25	0.00
10,866.0	24.10	173.40	10,859.5	-33.5	-12.0	-20.9	10.63	10.63	0.00
10,897.0	28.00	173.60	10,887.4	-47.1	-10.5	-23.3	12.58	12.58	0.65
10,929.0	31.40	173.70	10,915.2	-62.8	-8.7	-26.0	10.63	10.63	0.31
10,961.0	34.10	174.80	10,942.1	-80.0	-7.0	-29.2	8.64	8.44	3.44
10,992.0	36.60	178.10	10,967.4	-97.9	-5.9	-33.2	10.14	8.06	10.65
11,024.0	39.90	180.70	10,992.5	-117.7	-5.7	-38.5	11.47	10.31	8.13
11,042.0	41.93	180.58	11,006.1	-129.5	-5.8	-42.0	11.30	11.29	-0.66
Cross into 330' Lease: 11042.0' MD, 41.93° INC, 180.58° AZ									
11,055.0	43.40	180.50	11,015.7	-138.3	-5.9	-44.5	11.30	11.29	-0.62
11,087.0	47.00	179.20	11,038.2	-161.0	-5.8	-50.8	11.61	11.25	-4.06
11,119.0	49.90	178.00	11,059.4	-185.0	-5.3	-57.0	9.49	9.06	-3.75
11,150.0	53.20	177.20	11,078.7	-209.2	-4.2	-62.8	10.84	10.65	-2.58
11,182.0	56.90	177.30	11,097.0	-235.4	-3.0	-69.0	11.57	11.56	0.31
11,214.0	61.20	176.50	11,113.5	-262.8	-1.5	-75.2	13.61	13.44	-2.50
11,245.0	64.50	176.80	11,127.6	-290.3	0.1	-81.4	10.68	10.65	0.97
11,277.0	68.40	177.70	11,140.4	-319.6	1.5	-88.3	12.46	12.19	2.81
11,309.0	72.50	178.60	11,151.1	-349.8	2.5	-95.8	13.08	12.81	2.81
11,332.0	76.50	178.80	11,157.3	-371.9	3.0	-101.6	17.41	17.39	0.87
11,364.0	80.90	178.80	11,163.5	-403.3	3.7	-109.7	13.75	13.75	0.00
11,395.0	82.90	178.90	11,167.9	-434.0	4.3	-117.8	6.46	6.45	0.32
11,427.0	86.10	178.90	11,171.0	-465.8	4.9	-126.1	10.00	10.00	0.00
11,459.0	87.80	178.80	11,172.7	-497.8	5.5	-134.5	5.32	5.31	-0.31
11,523.0	89.20	178.90	11,174.3	-561.7	6.8	-151.2	2.19	2.19	0.16
EOC: 11523.0' MD, 11174.3' TVD, 89.20° INC, 178.90° AZ, -151.8° VS									
11,618.0	89.80	178.90	11,175.2	-656.7	8.6	-176.1	0.63	0.63	0.00
11,713.0	89.20	179.80	11,176.0	-751.7	9.7	-201.8	1.14	-0.63	0.95
11,808.0	90.30	180.40	11,176.4	-846.7	9.5	-228.6	1.32	1.16	0.63
11,903.0	89.30	180.20	11,176.7	-941.7	9.0	-255.7	1.07	-1.05	-0.21
11,998.0	90.60	180.20	11,176.8	-1,036.7	8.7	-282.7	1.37	1.37	0.00
12,093.0	89.60	179.80	11,176.7	-1,131.7	8.7	-309.4	1.13	-1.05	-0.42
12,188.0	91.30	180.30	11,175.9	-1,226.7	8.6	-336.2	1.87	1.79	0.53
12,284.0	91.30	179.90	11,173.7	-1,322.7	8.5	-363.3	0.42	0.00	-0.42
12,378.0	90.00	180.30	11,172.7	-1,416.6	8.3	-389.8	1.45	-1.38	0.43
12,474.0	90.90	179.70	11,171.9	-1,512.6	8.3	-416.8	1.13	0.94	-0.63
12,569.0	90.30	179.80	11,170.9	-1,607.6	8.7	-443.0	0.64	-0.63	0.11
12,663.0	91.20	179.40	11,169.7	-1,701.6	9.4	-468.8	1.05	0.96	-0.43
12,758.0	90.30	179.40	11,168.4	-1,796.6	10.4	-494.5	0.95	-0.95	0.00
12,853.0	91.40	179.20	11,167.0	-1,891.6	11.5	-520.1	1.18	1.16	-0.21

Survey Report

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #3H
Project:	Lea County, NM (NAD-83)	TVD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Site:	Atoka Bank BDJ State Com	MD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

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)
12,948.0	91.00	179.10	11,165.0	-1,986.6	12.9	-545.4	0.43	-0.42	-0.11
13,044.0	90.90	179.50	11,163.5	-2,082.5	14.1	-571.2	0.43	-0.10	0.42
13,139.0	90.60	179.10	11,162.2	-2,177.5	15.3	-596.8	0.53	-0.32	-0.42
13,234.0	90.60	179.50	11,161.2	-2,272.5	16.4	-622.3	0.42	0.00	0.42
13,329.0	90.00	179.00	11,160.7	-2,367.5	17.7	-647.8	0.82	-0.63	-0.53
13,424.0	89.50	178.90	11,161.1	-2,462.5	19.4	-672.8	0.54	-0.53	-0.11
13,519.0	90.40	179.40	11,161.2	-2,557.5	20.8	-698.1	1.08	0.95	0.53
13,614.0	89.60	178.20	11,161.2	-2,652.4	22.8	-722.9	1.52	-0.84	-1.26
13,709.0	90.70	179.20	11,161.0	-2,747.4	25.0	-747.5	1.56	1.16	1.05
13,804.0	90.20	179.00	11,160.2	-2,842.4	26.5	-772.7	0.57	-0.53	-0.21
13,898.0	91.20	180.00	11,159.1	-2,936.4	27.3	-798.3	1.50	1.06	1.06
13,992.0	91.30	180.20	11,157.0	-3,030.4	27.1	-824.9	0.24	0.11	0.21
14,087.0	90.90	180.80	11,155.2	-3,125.3	26.3	-852.3	0.76	-0.42	0.63
14,182.0	89.90	181.10	11,154.5	-3,220.3	24.7	-880.5	1.10	-1.05	0.32
14,277.0	89.70	181.00	11,154.9	-3,315.3	23.0	-908.9	0.24	-0.21	-0.11
14,371.0	89.20	180.90	11,155.8	-3,409.3	21.4	-936.7	0.54	-0.53	-0.11
14,466.0	89.70	179.60	11,156.7	-3,504.3	21.0	-963.8	1.47	0.53	-1.37
14,561.0	89.40	178.70	11,157.4	-3,599.3	22.4	-989.1	1.00	-0.32	-0.95
14,654.0	90.80	178.80	11,157.3	-3,692.3	24.4	-1,013.3	1.51	1.51	0.11
14,756.0	90.70	179.70	11,155.9	-3,794.2	25.8	-1,040.7	0.89	-0.10	0.88
14,852.0	91.80	179.60	11,153.8	-3,890.2	26.4	-1,067.0	1.15	1.15	-0.10
14,946.0	91.40	180.30	11,151.2	-3,984.2	26.4	-1,093.3	0.86	-0.43	0.74
15,042.0	91.40	180.00	11,148.9	-4,080.1	26.2	-1,120.5	0.31	0.00	-0.31
15,136.0	89.00	179.90	11,148.5	-4,174.1	26.3	-1,146.8	2.56	-2.55	-0.11
15,229.0	89.90	179.40	11,149.4	-4,267.1	26.8	-1,172.4	1.11	0.97	-0.54
15,324.0	90.20	179.50	11,149.3	-4,362.1	27.7	-1,198.2	0.33	0.32	0.11
15,420.0	90.50	178.20	11,148.8	-4,458.1	29.7	-1,223.3	1.39	0.31	-1.35
15,515.0	90.30	179.10	11,148.1	-4,553.1	31.9	-1,247.8	0.97	-0.21	0.95
15,610.0	90.00	179.40	11,147.8	-4,648.1	33.2	-1,273.3	0.45	-0.32	0.32
15,668.0	90.90	178.60	11,147.4	-4,706.0	34.2	-1,288.6	2.08	1.55	-1.38
15,726.0	90.90	178.60	11,146.5	-4,764.0	35.6	-1,303.5	0.00	0.00	0.00
Northing: 441405.79 / Easting: 771885.95 - BHL: 15726.0' MD, 11146.5' TVD, 90.90° INC, 178.60° AZ, -4764.3' +N/-S, 35.0' +E/-W, -1304.1' V									

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									
330' Lease Crossing	0.00	0.00	0.0	-130.1	-5.6	446,039.98	771,845.29	32° 13' 26.552 N	103° 35' 16.519 W
- actual wellpath misses target center by 130.2usft at 0.0usft MD (0.0 TVD, 0.0 N, 0.0 E)									
- Point									

Survey Report

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #3H
Project:	Lea County, NM (NAD-83)	TVD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Site:	Atoka Bank BDJ State Com	MD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,690.0	10,689.4	6.5	-15.4	KOP: 10690.0' MD, 10689.4' TVD
11,042.0	11,006.1	-129.5	-5.8	Cross into 330' Lease: 11042.0' MD, 41.93° INC, 180.58° AZ
11,523.0	11,174.3	-561.7	6.8	EOC: 11523.0' MD, 11174.3' TVD, 89.20° INC, 178.90° AZ, -151.8' VS
15,726.0	11,146.5	-4,764.0	35.6	Northing: 441405.79 / Easting: 771885.95
15,726.0	11,146.5	-4,764.0	35.6	BHL: 15726.0' MD, 11146.5' TVD, 90.90° INC, 178.60° AZ, -4764.3' +N/-S, 35.0

Checked By: _____ Approved By: _____ Date: _____

Yates Petroleum

Lea County, NM (NAD-83)
Atoka Bank BDJ State Com
#3H

OH

Design: OH

Survey Report - Geographic

14 January, 2014

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MAR 28 2014

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Survey Report - Geographic

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #3H
Project:	Lea County, NM (NAD-83)	TVD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Site:	Atoka Bank BDJ State Com	MD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

Project	Lea County, NM (NAD-83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Atoka Bank BDJ State Com			
Site Position:		Northing:	446,170.06 usft	Latitude:	32° 13' 27.839 N
From:	Map	Easting:	771,850.92 usft	Longitude:	103° 35' 16.443 W
Position Uncertainty:	2.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.40 °

Well	#3H					
Well Position	+N/-S	0.0 usft	Northing:	446,170.06 usft	Latitude:	32° 13' 27.839 N
	+E/-W	0.0 usft	Easting:	771,850.92 usft	Longitude:	103° 35' 16.443 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,602.0 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	10/29/2013	7.30	60.13	48,376

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	73.69	

Survey Program	Date 1/14/2014			
From	To	Survey (Wellbore)	Tool Name	Description
(usft)	(usft)			
100.0	1,300.0	Survey #1 - Gyro Multishot (OH)	Good_gyro	Good Gyro
1,508.0	15,726.0	Survey #2 - Crescent MWD Surveys (OH)	MWD	MWD - Standard

Survey										
Measured	Vertical	Map	Map	Latitude	Longitude					
Depth	Depth	Northing	Easting							
(usft)	(usft)	(usft)	(usft)							
0.0	0.0	446,170.06	771,850.92	32° 13' 27.839 N	103° 35' 16.443 W					
100.0	0.50	446,170.26	771,851.31	32° 13' 27.841 N	103° 35' 16.439 W					
200.0	0.60	446,170.72	771,852.16	32° 13' 27.845 N	103° 35' 16.429 W					
300.0	0.56	446,171.24	771,853.02	32° 13' 27.851 N	103° 35' 16.419 W					
400.0	0.43	446,171.73	771,853.73	32° 13' 27.855 N	103° 35' 16.410 W					
500.0	0.55	446,172.21	771,854.44	32° 13' 27.860 N	103° 35' 16.402 W					
600.0	0.38	446,172.57	771,855.16	32° 13' 27.864 N	103° 35' 16.394 W					
700.0	0.48	446,172.84	771,855.86	32° 13' 27.866 N	103° 35' 16.386 W					
800.0	0.17	446,173.02	771,856.39	32° 13' 27.868 N	103° 35' 16.379 W					
900.0	0.07	446,173.07	771,856.60	32° 13' 27.868 N	103° 35' 16.377 W					
1,000.0	0.37	446,173.18	771,856.96	32° 13' 27.870 N	103° 35' 16.373 W					

Survey Report - Geographic

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #3H
Project:	Lea County, NM (NAD-83)	TVD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Site:	Atoka Bank BDJ State Com	MD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
1,100.0	0.34	81.72	1,100.0	3.3	6.6	446,173.32	771,857.56	32° 13' 27.871 N	103° 35' 16.366 W
1,200.0	0.25	66.54	1,200.0	3.4	7.1	446,173.45	771,858.06	32° 13' 27.872 N	103° 35' 16.360 W
1,300.0	0.10	136.74	1,300.0	3.4	7.4	446,173.47	771,858.32	32° 13' 27.872 N	103° 35' 16.357 W
1,508.0	0.30	212.60	1,508.0	2.8	7.2	446,172.88	771,858.15	32° 13' 27.866 N	103° 35' 16.359 W
1,697.0	0.40	292.90	1,697.0	2.7	6.4	446,172.72	771,857.27	32° 13' 27.865 N	103° 35' 16.369 W
1,887.0	0.10	47.20	1,887.0	3.0	5.9	446,173.09	771,856.79	32° 13' 27.869 N	103° 35' 16.375 W
2,077.0	0.20	302.80	2,077.0	3.3	5.7	446,173.38	771,856.63	32° 13' 27.872 N	103° 35' 16.377 W
2,267.0	0.20	192.60	2,267.0	3.2	5.4	446,173.24	771,856.28	32° 13' 27.870 N	103° 35' 16.381 W
2,456.0	0.30	293.20	2,456.0	3.1	4.8	446,173.11	771,855.75	32° 13' 27.869 N	103° 35' 16.387 W
2,646.0	0.10	347.90	2,646.0	3.4	4.3	446,173.47	771,855.26	32° 13' 27.872 N	103° 35' 16.393 W
2,836.0	0.10	36.50	2,836.0	3.7	4.4	446,173.77	771,855.32	32° 13' 27.875 N	103° 35' 16.392 W
3,024.0	0.10	131.30	3,024.0	3.7	4.6	446,173.79	771,855.54	32° 13' 27.876 N	103° 35' 16.389 W
3,211.0	0.30	348.40	3,211.0	4.1	4.6	446,174.16	771,855.57	32° 13' 27.879 N	103° 35' 16.389 W
3,401.0	0.20	343.00	3,401.0	4.9	4.4	446,174.97	771,855.37	32° 13' 27.887 N	103° 35' 16.391 W
3,589.0	0.40	38.40	3,589.0	5.7	4.8	446,175.80	771,855.68	32° 13' 27.895 N	103° 35' 16.387 W
3,780.0	0.20	17.10	3,780.0	6.6	5.3	446,176.64	771,856.19	32° 13' 27.904 N	103° 35' 16.381 W
3,970.0	0.30	59.20	3,970.0	7.1	5.8	446,177.21	771,856.72	32° 13' 27.909 N	103° 35' 16.375 W
4,160.0	0.10	145.70	4,159.9	7.3	6.3	446,177.33	771,857.24	32° 13' 27.910 N	103° 35' 16.369 W
4,349.0	0.20	96.30	4,348.9	7.1	6.7	446,177.15	771,857.66	32° 13' 27.909 N	103° 35' 16.364 W
4,533.0	0.80	104.60	4,532.9	6.7	8.3	446,176.79	771,859.22	32° 13' 27.905 N	103° 35' 16.346 W
4,634.0	0.50	113.70	4,633.9	6.4	9.4	446,176.44	771,860.31	32° 13' 27.902 N	103° 35' 16.334 W
4,729.0	0.70	123.40	4,728.9	5.9	10.2	446,175.95	771,861.17	32° 13' 27.897 N	103° 35' 16.323 W
4,823.0	1.40	121.90	4,822.9	5.0	11.7	446,175.03	771,862.63	32° 13' 27.887 N	103° 35' 16.307 W
4,918.0	0.60	133.10	4,917.9	4.0	13.1	446,174.08	771,863.98	32° 13' 27.878 N	103° 35' 16.291 W
5,013.0	0.40	134.70	5,012.9	3.4	13.7	446,173.50	771,864.57	32° 13' 27.872 N	103° 35' 16.284 W
5,145.0	0.20	100.30	5,144.9	3.1	14.2	446,173.14	771,865.13	32° 13' 27.869 N	103° 35' 16.278 W
5,314.0	0.30	135.90	5,313.9	2.7	14.8	446,172.77	771,865.73	32° 13' 27.865 N	103° 35' 16.271 W
5,504.0	0.30	98.50	5,503.9	2.3	15.6	446,172.34	771,866.56	32° 13' 27.860 N	103° 35' 16.261 W
5,693.0	2.00	99.20	5,692.8	1.7	19.4	446,171.74	771,870.31	32° 13' 27.854 N	103° 35' 16.217 W
5,788.0	0.40	6.30	5,787.8	1.7	21.1	446,171.80	771,871.98	32° 13' 27.855 N	103° 35' 16.198 W
5,884.0	0.40	234.60	5,883.8	1.9	20.8	446,171.94	771,871.75	32° 13' 27.856 N	103° 35' 16.201 W
5,978.0	1.80	233.80	5,977.8	0.8	19.4	446,170.88	771,870.29	32° 13' 27.846 N	103° 35' 16.218 W
6,073.0	1.80	161.90	6,072.8	-1.5	18.6	446,168.58	771,869.55	32° 13' 27.823 N	103° 35' 16.227 W
6,168.0	0.40	12.00	6,167.8	-2.6	19.2	446,167.49	771,870.08	32° 13' 27.812 N	103° 35' 16.220 W
6,262.0	0.50	5.90	6,261.8	-1.8	19.3	446,168.21	771,870.19	32° 13' 27.819 N	103° 35' 16.219 W
6,356.0	0.40	353.90	6,355.7	-1.1	19.3	446,168.95	771,870.20	32° 13' 27.827 N	103° 35' 16.219 W
6,451.0	0.40	348.80	6,450.7	-0.5	19.2	446,169.60	771,870.10	32° 13' 27.833 N	103° 35' 16.220 W
6,546.0	0.40	334.90	6,545.7	0.2	19.0	446,170.23	771,869.89	32° 13' 27.839 N	103° 35' 16.222 W
6,641.0	0.40	326.20	6,640.7	0.7	18.6	446,170.80	771,869.57	32° 13' 27.845 N	103° 35' 16.226 W
6,736.0	0.40	306.50	6,735.7	1.2	18.2	446,171.28	771,869.12	32° 13' 27.850 N	103° 35' 16.231 W
6,832.0	0.50	310.30	6,831.7	1.7	17.6	446,171.75	771,868.53	32° 13' 27.855 N	103° 35' 16.238 W
6,927.0	0.50	292.30	6,926.7	2.1	16.9	446,172.17	771,867.83	32° 13' 27.859 N	103° 35' 16.246 W
7,023.0	0.40	281.20	7,022.7	2.3	16.2	446,172.40	771,867.11	32° 13' 27.861 N	103° 35' 16.255 W
7,118.0	0.40	266.90	7,117.7	2.4	15.5	446,172.44	771,866.45	32° 13' 27.862 N	103° 35' 16.262 W
7,212.0	0.40	264.20	7,211.7	2.3	14.9	446,172.39	771,865.80	32° 13' 27.861 N	103° 35' 16.270 W
7,307.0	0.40	252.00	7,306.7	2.2	14.2	446,172.26	771,865.16	32° 13' 27.860 N	103° 35' 16.277 W
7,403.0	0.20	238.10	7,402.7	2.0	13.8	446,172.06	771,864.69	32° 13' 27.858 N	103° 35' 16.283 W
7,498.0	0.30	254.00	7,497.7	1.8	13.4	446,171.91	771,864.31	32° 13' 27.856 N	103° 35' 16.287 W
7,592.0	0.40	227.00	7,591.7	1.6	12.9	446,171.62	771,863.84	32° 13' 27.854 N	103° 35' 16.293 W
7,687.0	0.40	226.90	7,686.7	1.1	12.4	446,171.16	771,863.35	32° 13' 27.849 N	103° 35' 16.298 W
7,782.0	0.40	247.20	7,781.7	0.7	11.9	446,170.81	771,862.81	32° 13' 27.846 N	103° 35' 16.305 W
7,875.0	0.40	233.50	7,874.7	0.4	11.3	446,170.49	771,862.25	32° 13' 27.842 N	103° 35' 16.311 W
7,970.0	0.40	235.60	7,969.7	0.0	10.8	446,170.11	771,861.71	32° 13' 27.839 N	103° 35' 16.318 W
8,066.0	0.20	205.70	8,065.7	-0.3	10.4	446,169.77	771,861.36	32° 13' 27.835 N	103° 35' 16.322 W
8,161.0	0.20	189.30	8,160.7	-0.6	10.3	446,169.45	771,861.26	32° 13' 27.832 N	103° 35' 16.323 W

Survey Report - Geographic

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #3H
Project:	Lea County, NM (NAD-83)	TVD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Site:	Atoka Bank BDJ State Com	MD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
8,256.0	0.10	181.20	8,255.7	-0.9	10.3	446,169.21	771,861.23	32° 13' 27.830 N	103° 35' 16.323 W
8,351.0	0.40	233.10	8,350.7	-1.1	10.0	446,168.92	771,860.96	32° 13' 27.827 N	103° 35' 16.327 W
8,447.0	0.40	195.60	8,446.7	-1.7	9.7	446,168.40	771,860.60	32° 13' 27.822 N	103° 35' 16.331 W
8,542.0	0.90	275.70	8,541.7	-1.9	8.8	446,168.15	771,859.77	32° 13' 27.820 N	103° 35' 16.340 W
8,635.0	0.70	255.70	8,634.7	-2.0	7.6	446,168.09	771,858.50	32° 13' 27.819 N	103° 35' 16.355 W
8,730.0	0.70	270.20	8,729.7	-2.1	6.4	446,167.95	771,857.35	32° 13' 27.818 N	103° 35' 16.369 W
8,825.0	0.70	263.30	8,824.7	-2.2	5.3	446,167.88	771,856.20	32° 13' 27.817 N	103° 35' 16.382 W
8,919.0	0.90	298.90	8,918.7	-1.9	4.1	446,168.17	771,854.98	32° 13' 27.820 N	103° 35' 16.396 W
9,014.0	0.80	271.90	9,013.7	-1.5	2.7	446,168.55	771,853.66	32° 13' 27.824 N	103° 35' 16.411 W
9,110.0	0.70	271.40	9,109.6	-1.5	1.5	446,168.59	771,852.41	32° 13' 27.824 N	103° 35' 16.426 W
9,204.0	0.70	257.10	9,203.6	-1.6	0.4	446,168.47	771,851.27	32° 13' 27.823 N	103° 35' 16.439 W
9,299.0	0.60	279.90	9,298.6	-1.6	-0.7	446,168.43	771,850.22	32° 13' 27.823 N	103° 35' 16.452 W
9,394.0	0.90	292.90	9,393.6	-1.3	-1.9	446,168.81	771,849.04	32° 13' 27.827 N	103° 35' 16.465 W
9,488.0	1.10	306.50	9,487.6	-0.4	-3.3	446,169.63	771,847.64	32° 13' 27.835 N	103° 35' 16.482 W
9,582.0	2.50	330.30	9,581.6	1.9	-5.0	446,171.95	771,845.89	32° 13' 27.858 N	103° 35' 16.502 W
9,646.0	1.70	326.30	9,645.5	3.9	-6.2	446,173.95	771,844.68	32° 13' 27.878 N	103° 35' 16.516 W
9,678.0	1.60	311.90	9,677.5	4.6	-6.8	446,174.64	771,844.08	32° 13' 27.885 N	103° 35' 16.523 W
9,772.0	1.00	315.10	9,771.5	6.0	-8.4	446,176.10	771,842.52	32° 13' 27.899 N	103° 35' 16.541 W
9,866.0	0.30	35.30	9,865.5	6.8	-8.8	446,176.88	771,842.09	32° 13' 27.907 N	103° 35' 16.546 W
9,960.0	0.60	321.80	9,959.5	7.4	-9.0	446,177.47	771,841.92	32° 13' 27.913 N	103° 35' 16.547 W
10,055.0	1.10	304.20	10,054.5	8.3	-10.1	446,178.37	771,840.86	32° 13' 27.922 N	103° 35' 16.560 W
10,150.0	1.00	253.00	10,149.5	8.6	-11.6	446,178.64	771,839.32	32° 13' 27.925 N	103° 35' 16.578 W
10,244.0	0.20	242.30	10,243.4	8.3	-12.5	446,178.33	771,838.39	32° 13' 27.922 N	103° 35' 16.589 W
10,339.0	0.40	241.90	10,338.4	8.0	-13.0	446,178.09	771,837.95	32° 13' 27.919 N	103° 35' 16.594 W
10,433.0	0.80	237.90	10,432.4	7.5	-13.8	446,177.59	771,837.10	32° 13' 27.914 N	103° 35' 16.604 W
10,527.0	0.30	231.80	10,526.4	7.0	-14.6	446,177.09	771,836.35	32° 13' 27.910 N	103° 35' 16.612 W
10,622.0	0.30	237.30	10,621.4	6.7	-15.0	446,176.80	771,835.95	32° 13' 27.907 N	103° 35' 16.617 W
10,645.0	0.40	273.40	10,644.4	6.7	-15.1	446,176.77	771,835.82	32° 13' 27.906 N	103° 35' 16.619 W
10,676.0	0.40	254.70	10,675.4	6.7	-15.3	446,176.75	771,835.60	32° 13' 27.906 N	103° 35' 16.621 W
10,690.0	1.74	188.80	10,689.4	6.5	-15.4	446,176.53	771,835.52	32° 13' 27.904 N	103° 35' 16.622 W
KOP: 10690.0' MD: 10689.4' TVD									
10,708.0	3.80	181.70	10,707.4	5.6	-15.5	446,175.66	771,835.47	32° 13' 27.896 N	103° 35' 16.623 W
10,740.0	7.90	180.50	10,739.2	2.3	-15.5	446,172.40	771,835.41	32° 13' 27.863 N	103° 35' 16.624 W
10,771.0	12.70	176.60	10,769.7	-3.2	-15.3	446,166.87	771,835.60	32° 13' 27.808 N	103° 35' 16.622 W
10,802.0	17.10	173.40	10,799.7	-11.1	-14.6	446,158.93	771,836.32	32° 13' 27.730 N	103° 35' 16.614 W
10,834.0	20.70	173.40	10,829.9	-21.4	-13.4	446,148.64	771,837.52	32° 13' 27.628 N	103° 35' 16.601 W
10,866.0	24.10	173.40	10,859.5	-33.5	-12.0	446,136.53	771,838.92	32° 13' 27.508 N	103° 35' 16.586 W
10,897.0	28.00	173.60	10,887.4	-47.1	-10.5	446,123.00	771,840.46	32° 13' 27.374 N	103° 35' 16.569 W
10,929.0	31.40	173.70	10,915.2	-62.8	-8.7	446,107.25	771,842.21	32° 13' 27.218 N	103° 35' 16.550 W
10,961.0	34.10	174.80	10,942.1	-80.0	-7.0	446,090.03	771,843.94	32° 13' 27.048 N	103° 35' 16.531 W
10,992.0	36.60	178.10	10,967.4	-97.9	-5.9	446,072.13	771,845.03	32° 13' 26.870 N	103° 35' 16.520 W
11,024.0	39.90	180.70	10,992.5	-117.7	-5.7	446,052.33	771,845.22	32° 13' 26.674 N	103° 35' 16.519 W
11,042.0	41.93	180.58	11,006.1	-129.5	-5.8	446,040.54	771,845.09	32° 13' 26.558 N	103° 35' 16.522 W
Cross into 330' Lease: 11042.0' MD: 41.93' INC: 180.58' AZ									
11,055.0	43.40	180.50	11,015.7	-138.3	-5.9	446,031.73	771,845.01	32° 13' 26.471 N	103° 35' 16.523 W
11,087.0	47.00	179.20	11,038.2	-161.0	-5.8	446,009.03	771,845.08	32° 13' 26.246 N	103° 35' 16.524 W
11,119.0	49.90	178.00	11,059.4	-185.0	-5.3	445,985.09	771,845.67	32° 13' 26.009 N	103° 35' 16.519 W
11,150.0	53.20	177.20	11,078.7	-209.2	-4.2	445,960.84	771,846.69	32° 13' 25.769 N	103° 35' 16.509 W
11,182.0	56.90	177.30	11,097.0	-235.4	-3.0	445,934.64	771,847.94	32° 13' 25.510 N	103° 35' 16.497 W
11,214.0	61.20	176.50	11,113.5	-262.8	-1.5	445,907.25	771,849.43	32° 13' 25.239 N	103° 35' 16.482 W
11,245.0	64.50	176.80	11,127.6	-290.3	0.1	445,879.71	771,851.04	32° 13' 24.966 N	103° 35' 16.465 W
11,277.0	68.40	177.70	11,140.4	-319.6	1.5	445,850.42	771,852.45	32° 13' 24.676 N	103° 35' 16.451 W
11,309.0	72.50	178.60	11,151.1	-349.8	2.5	445,820.29	771,853.42	32° 13' 24.378 N	103° 35' 16.442 W
11,332.0	76.50	178.80	11,157.3	-371.9	3.0	445,798.13	771,853.92	32° 13' 24.159 N	103° 35' 16.438 W
11,364.0	80.90	178.80	11,163.5	-403.3	3.7	445,766.77	771,854.58	32° 13' 23.848 N	103° 35' 16.433 W

Survey Report - Geographic

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well #3H
Project:	Lea County, NM (NAD-83)	TVD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Site:	Atoka Bank BDJ State Com	MD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
11,395.0	82.90	178.90	11,167.9	-434.0	4.3	445,736.09	771,855.19	32° 13' 23.544 N	103° 35' 16.429 W
11,427.0	86.10	178.90	11,171.0	-465.8	4.9	445,704.24	771,855.80	32° 13' 23.229 N	103° 35' 16.424 W
11,459.0	87.80	178.80	11,172.7	-497.8	5.5	445,672.30	771,856.44	32° 13' 22.913 N	103° 35' 16.419 W
11,523.0	89.20	178.90	11,174.3	-561.7	6.8	445,608.33	771,857.73	32° 13' 22.280 N	103° 35' 16.409 W
EOC: 11523.0' MD, 11174.3' TVD, 89.20° INC, 178.90° AZ, 151.8' VS									
11,618.0	89.80	178.90	11,175.2	-656.7	8.6	445,513.35	771,859.55	32° 13' 21.340 N	103° 35' 16.396 W
11,713.0	89.20	179.80	11,176.0	-751.7	9.7	445,418.36	771,860.63	32° 13' 20.400 N	103° 35' 16.391 W
11,808.0	90.30	180.40	11,176.4	-846.7	9.5	445,323.37	771,860.46	32° 13' 19.460 N	103° 35' 16.401 W
11,903.0	89.30	180.20	11,176.7	-941.7	9.0	445,228.37	771,859.97	32° 13' 18.520 N	103° 35' 16.414 W
11,998.0	90.60	180.20	11,176.8	-1,036.7	8.7	445,133.37	771,859.63	32° 13' 17.580 N	103° 35' 16.426 W
12,093.0	89.60	179.80	11,176.7	-1,131.7	8.7	445,038.37	771,859.64	32° 13' 16.640 N	103° 35' 16.433 W
12,188.0	91.30	180.30	11,175.9	-1,226.7	8.6	444,943.38	771,859.55	32° 13' 15.700 N	103° 35' 16.442 W
12,284.0	91.30	179.90	11,173.7	-1,322.7	8.5	444,847.41	771,859.38	32° 13' 14.750 N	103° 35' 16.452 W
12,378.0	90.00	180.30	11,172.7	-1,416.6	8.3	444,753.42	771,859.22	32° 13' 13.820 N	103° 35' 16.461 W
12,474.0	90.90	179.70	11,171.9	-1,512.6	8.3	444,657.42	771,859.22	32° 13' 12.871 N	103° 35' 16.469 W
12,569.0	90.30	179.80	11,170.9	-1,607.6	8.7	444,562.43	771,859.64	32° 13' 11.931 N	103° 35' 16.472 W
12,663.0	91.20	179.40	11,169.7	-1,701.6	9.4	444,468.44	771,860.29	32° 13' 11.000 N	103° 35' 16.472 W
12,758.0	90.30	179.40	11,168.4	-1,796.6	10.4	444,373.45	771,861.29	32° 13' 10.060 N	103° 35' 16.468 W
12,853.0	91.40	179.20	11,167.0	-1,891.6	11.5	444,278.47	771,862.45	32° 13' 9.121 N	103° 35' 16.462 W
12,948.0	91.00	179.10	11,165.0	-1,986.6	12.9	444,183.50	771,863.86	32° 13' 8.181 N	103° 35' 16.453 W
13,044.0	90.90	179.50	11,163.5	-2,082.5	14.1	444,087.52	771,865.03	32° 13' 7.231 N	103° 35' 16.447 W
13,139.0	90.60	179.10	11,162.2	-2,177.5	15.3	443,992.54	771,866.19	32° 13' 6.291 N	103° 35' 16.441 W
13,234.0	90.60	179.50	11,161.2	-2,272.5	16.4	443,897.55	771,867.35	32° 13' 5.351 N	103° 35' 16.436 W
13,329.0	90.00	179.00	11,160.7	-2,367.5	17.7	443,802.56	771,868.59	32° 13' 4.411 N	103° 35' 16.429 W
13,424.0	89.50	178.90	11,161.1	-2,462.5	19.4	443,707.58	771,870.33	32° 13' 3.471 N	103° 35' 16.416 W
13,519.0	90.40	179.40	11,161.2	-2,557.5	20.8	443,612.59	771,871.74	32° 13' 2.531 N	103° 35' 16.407 W
13,614.0	89.60	178.20	11,161.2	-2,652.4	22.8	443,517.61	771,873.73	32° 13' 1.591 N	103° 35' 16.392 W
13,709.0	90.70	179.20	11,161.0	-2,747.4	25.0	443,422.64	771,875.89	32° 13' 0.651 N	103° 35' 16.375 W
13,804.0	90.20	179.00	11,160.2	-2,842.4	26.5	443,327.66	771,877.38	32° 12' 59.711 N	103° 35' 16.365 W
13,898.0	91.20	180.00	11,159.1	-2,936.4	27.3	443,233.67	771,878.20	32° 12' 58.781 N	103° 35' 16.363 W
13,992.0	91.30	180.20	11,157.0	-3,030.4	27.1	443,139.69	771,878.04	32° 12' 57.851 N	103° 35' 16.372 W
14,087.0	90.90	180.80	11,155.2	-3,125.3	26.3	443,044.71	771,877.21	32° 12' 56.911 N	103° 35' 16.390 W
14,182.0	89.90	181.10	11,154.5	-3,220.3	24.7	442,949.73	771,875.63	32° 12' 55.971 N	103° 35' 16.416 W
14,277.0	89.70	181.00	11,154.9	-3,315.3	23.0	442,854.75	771,873.89	32° 12' 55.032 N	103° 35' 16.444 W
14,371.0	89.20	180.90	11,155.8	-3,409.3	21.4	442,760.76	771,872.33	32° 12' 54.102 N	103° 35' 16.469 W
14,466.0	89.70	179.60	11,156.7	-3,504.3	21.0	442,665.77	771,871.92	32° 12' 53.162 N	103° 35' 16.482 W
14,561.0	89.40	178.70	11,157.4	-3,599.3	22.4	442,570.79	771,873.33	32° 12' 52.222 N	103° 35' 16.473 W
14,654.0	90.80	178.80	11,157.3	-3,692.3	24.4	442,477.81	771,875.36	32° 12' 51.302 N	103° 35' 16.457 W
14,756.0	90.70	179.70	11,155.9	-3,794.2	25.8	442,375.83	771,876.69	32° 12' 50.292 N	103° 35' 16.450 W
14,852.0	91.80	179.60	11,153.8	-3,890.2	26.4	442,279.86	771,877.28	32° 12' 49.343 N	103° 35' 16.451 W
14,946.0	91.40	180.30	11,151.2	-3,984.2	26.4	442,185.89	771,877.36	32° 12' 48.413 N	103° 35' 16.457 W
15,042.0	91.40	180.00	11,148.9	-4,080.1	26.2	442,089.92	771,877.11	32° 12' 47.463 N	103° 35' 16.468 W
15,136.0	89.00	179.90	11,148.5	-4,174.1	26.3	441,995.93	771,877.19	32° 12' 46.533 N	103° 35' 16.475 W
15,229.0	89.90	179.40	11,149.4	-4,267.1	26.8	441,902.94	771,877.76	32° 12' 45.613 N	103° 35' 16.475 W
15,324.0	90.20	179.50	11,149.3	-4,362.1	27.7	441,807.94	771,878.67	32° 12' 44.673 N	103° 35' 16.473 W
15,420.0	90.50	178.20	11,148.8	-4,458.1	29.7	441,711.96	771,880.60	32° 12' 43.723 N	103° 35' 16.458 W
15,515.0	90.30	179.10	11,148.1	-4,553.1	31.9	441,616.99	771,882.83	32° 12' 42.783 N	103° 35' 16.439 W
15,610.0	90.00	179.40	11,147.8	-4,648.1	33.2	441,522.00	771,884.08	32° 12' 41.843 N	103° 35' 16.433 W
15,668.0	90.90	178.60	11,147.4	-4,706.0	34.2	441,464.01	771,885.09	32° 12' 41.269 N	103° 35' 16.426 W
15,726.0	90.90	178.60	11,146.5	-4,764.0	35.6	441,406.04	771,886.51	32° 12' 40.695 N	103° 35' 16.414 W
Northing: 441405.79 / Easting: 771885.95 - BHL: 15726.0' MD, 11146.5' TVD, 90.90° INC, 178.60° AZ, 4764.3' +N/-S, 35.0' +E/-W, 1304.1' VS									

Survey Report - Geographic

Company:	Yates Petroleum	Local Co-ordinate Reference:	Well: #3H
Project:	Lea County, NM (NAD-83)	TVD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Site:	Atoka Bank BDU State Com	MD Reference:	WELL @ 3627.0usft (Cactus #124 - 25' KB)
Well:	#3H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Houston R5000 Database

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
330' Lease Crossing	0.00	0.00	0.0	-130.1	-5.6	446,039.98	771,845.29	32° 13' 26.552 N	103° 35' 16.519 W
- actual wellpath misses target center by 130.2usft at 0.0usft MD (0.0 TVD, 0.0 N, 0.0 E)									
- Point									

Design Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S	+E/-W		
(usft)	(usft)	(usft)	(usft)	Comment	
10,690.0	10,689.4	6.5	-15.4	KOP: 10690.0' MD, 10689.4' TVD	
11,042.0	11,006.1	-129.5	-5.8	Cross into 330' Lease: 11042.0' MD, 41.93° INC, 180.58° AZ	
11,523.0	11,174.3	-561.7	6.8	EOC: 11523.0' MD, 11174.3' TVD, 89.20° INC, 178.90° AZ, -151.8' VS	
15,726.0	11,146.5	-4,764.0	35.6	Northing: 441405.79 / Easting: 771885.95	
15,726.0	11,146.5	-4,764.0	35.6	BHL: 15726.0' MD, 11146.5' TVD, 90.90° INC, 178.60° AZ, -4764.3' +N/-S, 35.0	

Checked By: _____	Approved By: _____	Date: _____
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