



SEP 10 2008
OCD-ARTESIA

DIRECTIONAL SURVEY REPORT

YATES PETROLEUM

30-015-36315

TOMBSTONE BMB STATE #1

EDDY COUNTY, NEW MEXICO

PREPARED BY: FRANCISCO SINISTERRA

Pathfinder Energy Services, Inc.
6213 W. County Road 112 • Midland, TX • 79706
(432)681-6000

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) K TABOR
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 6/23/2008 TO 6/26/2008
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY, NM
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

YATES PETROLEUM
TOMBSTONE BMB STATE #1
EDDY COUNTY, NM
RIG: SILVER OAK #6
9. SURVEY CERTIFIED FROM: 952 TO 3132 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 43.31 FEET ON A BEARING OF 40.81 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 3180 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.


FRANCISCO SINISTERRA
M/LWD SERVICE COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

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Tie-in Date: 06/23/2008
Date Completed: 06/26/2008

YATES PETROLEUM
TOMBSTONE BMB STATE #1
EDDY COUNTY, NM
Rig:SILVER OAK # 6
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers:K.TABOR

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.5.27.2300 N LON:104.2.39.7300 W
GRID Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 589488.9542 Y: 396911.9310
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.98° EAST TO GRID
Vertical Section Plane: 0.00
Survey Vert. Reference: 18.00' Kelly Bushing To Ground
Altitude:3085.00' Ground To MSL

Measured Depth	3180.00	(feet)
Inclination	0.97	(deg)
Azimuth	122.64	(deg)
True Vertical Depth	3179.35	(feet)
Vertical Section	32.78	(feet)
Survey X cord	589517.26	(feet)
Survey Y cord	396944.72	(feet)
Survey Lat	32.09098714 N	(deg)
Survey Lon	104.04427776 W	(deg)
Rectangular Corr. N/S	32.78 N	(feet)
Rectangular Corr. E/W	28.31 E	(feet)
Closure Distance	43.31	(feet)
Direction of Closure	40.81	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM
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EDDY COUNTY, NM
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Survey Calculations by RX5 V5.11i using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)	DLS (dg/100ft)	
TIE IN TO SURFACE @ 0.00' MD.										
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00@	0.00	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
952.00	0.88	36.48	951.96	952.00	5.88	5.88 N	4.35 E	7.31@	36.48	0.09
982.00	0.88	39.71	981.96	30.00	6.24	6.24 N	4.63 E	7.77@	36.58	0.17
1013.00	1.23	38.78	1012.95	31.00	6.68	6.68 N	4.99 E	8.34@	36.75	1.13
1044.00	1.06	26.97	1043.95	31.00	7.20	7.20 N	5.33 E	8.96@	36.52	0.94
1106.00	1.67	33.97	1105.93	62.00	8.46	8.46 N	6.09 E	10.43@	35.77	1.02
1169.00	1.85	31.51	1168.90	63.00	10.09	10.09 N	7.14 E	12.36@	35.29	0.31
1231.00	1.76	13.41	1230.87	62.00	11.87	11.87 N	7.88 E	14.25@	33.60	0.93
1293.00	1.93	12.17	1292.84	62.00	13.81	13.81 N	8.32 E	16.13@	31.07	0.28
1355.00	1.14	20.11	1354.81	62.00	15.41	15.41 N	8.76 E	17.73@	29.60	1.32
1418.00	1.06	11.31	1417.80	63.00	16.57	16.57 N	9.09 E	18.90@	28.73	0.30
1480.00	1.23	20.66	1479.79	62.00	17.76	17.76 N	9.43 E	20.11@	27.98	0.41
1542.00	1.14	13.82	1541.78	62.00	18.98	18.98 N	9.81 E	21.37@	27.35	0.27
1605.00	1.32	2.42	1604.76	63.00	20.31	20.31 N	10.00 E	22.64@	26.20	0.48
1666.00	1.41	10.97	1665.75	61.00	21.75	21.75 N	10.17 E	24.01@	25.05	0.36
1728.00	1.14	13.29	1727.73	62.00	23.10	23.10 N	10.45 E	25.36@	24.35	0.44
1790.00	1.06	19.17	1789.72	62.00	24.24	24.24 N	10.78 E	26.53@	23.98	0.22
1852.00	0.97	18.08	1851.71	62.00	25.28	25.28 N	11.14 E	27.63@	23.77	0.15
1945.00	0.97	16.36	1944.70	93.00	26.79	26.79 N	11.60 E	29.19@	23.42	0.03
2039.00	0.88	358.40	2038.68	94.00	28.27	28.27 N	11.81 E	30.64@	22.66	0.32
2132.00	1.14	353.19	2131.67	93.00	29.90	29.90 N	11.68 E	32.10@	21.33	0.30
2225.00	1.23	352.73	2224.65	93.00	31.81	31.81 N	11.44 E	33.81@	19.78	0.10

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM
TOMBSTONE BMB STATE #1
EDDY COUNTY, NM
RIG:SILVER OAK # 6

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Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
2319.00	1.14	359.45	2318.63	94.00	33.75	33.75 N	11.30 E	35.59@	18.52	0.18
2413.00	0.88	342.99	2412.62	94.00	35.37	35.37 N	11.08 E	37.07@	17.40	0.41
2506.00	0.70	53.54	2505.61	93.00	36.39	36.39 N	11.33 E	38.12@	17.29	0.99
2599.00	1.32	90.01	2598.59	93.00	36.73	36.73 N	12.86 E	38.92@	19.29	0.93
2692.00	1.14	95.40	2691.57	93.00	36.64	36.64 N	14.85 E	39.54@	22.06	0.23
2786.00	2.37	106.49	2785.53	94.00	36.01	36.01 N	17.65 E	40.10@	26.11	1.35
2848.00	2.64	101.20	2847.47	62.00	35.36	35.36 N	20.28 E	40.76@	29.83	0.57
2879.00	2.46	101.53	2878.44	31.00	35.09	35.09 N	21.63 E	41.22@	31.65	0.58
2910.00	2.11	104.64	2909.41	31.00	34.82	34.82 N	22.83 E	41.63@	33.26	1.20
2941.00	1.58	104.84	2940.40	31.00	34.56	34.56 N	23.80 E	41.96@	34.55	1.71
2972.00	1.32	104.38	2971.39	31.00	34.36	34.36 N	24.56 E	42.24@	35.55	0.84
3003.00	1.23	112.41	3002.38	31.00	34.15	34.15 N	25.21 E	42.45@	36.44	0.64
3035.00	1.06	104.24	3034.37	32.00	33.94	33.94 N	25.81 E	42.64@	37.25	0.74
3066.00	1.32	112.94	3065.37	31.00	33.73	33.73 N	26.42 E	42.85@	38.07	1.02
3097.00	1.14	108.84	3096.36	31.00	33.50	33.50 N	27.04 E	43.05@	38.92	0.65
3132.00	0.97	122.64	3131.35	35.00	33.22	33.22 N	27.62 E	43.21@	39.74	0.87
STRAIGHT LINE PROJECTION TO BIT @ 3180' MD.										
3180.00	0.97	122.64	3179.35	48.00	32.78	32.78 N	28.31 E	43.31@	40.81	0.00

District I

1625 N. French Dr., Hobbs, NM 88240
 Phone (505) 393-6161 Fax (505) 393-0720

District II

1301 W. Grand Ave., Artesia, NM 88210
 Phone (505) 748-1283 Fax (505) 748-9720

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) 476-3470 Fax (505) 476-3462

State of New Mexico**Energy, Minerals and Natural Resources**

Form C-102
 Permit 74592

Oil Conservation Division**1220 S. St Francis Dr.****Santa Fe, NM 87505****WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-015-36315	2. Pool Code 96473	3. Pool Name PIERCE CROSSING, BONE SPRING, EAST
4. Property Code 37157	5. Property Name TOMBSTONE BMB STATE	6. Well No 001
7. OGRID No 25575	8. Operator Name YATES PETROLEUM CORPORATION	9. Elevation 3085

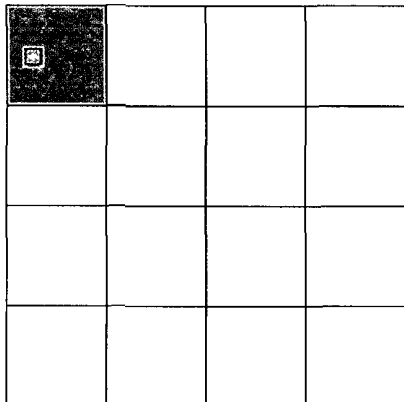
10. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
D	12	25S	29E		660	N	330	W	EDDY

11. Bottom Hole Location If Different From Surface

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
12. Dedicated Acres 40.00	13. Joint or Infill	14. Consolidation Code	15. 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

**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 unleased mineral interest in the land including the proposed bottom hole location(s) 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.

E-Signed By Month Sanders

Title

Date 5/17/2008

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

Surveyed By Gary L. Jones

Date of Survey 5/15/2008

Certificate Number 7977

Oil Conservation Division

1220 S. St Francis Dr.

Santa Fe, NM 87505

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1 Operator Name and Address YATES PETROLEUM CORPORATION 105 S 4TH ST ARTESIA, NM 88210		2 OGRID Number 25575
		3 API Number 30-015-36315
4 Property Code 37157	5 Property Name TOMBSTONE BMB STATE	6 Well No 001

7. Surface Location

UL - Lot D	Section 12	Township 25S	Range 29E	Lot Ldn D	Feet From 660	N/S Line N	Feet From 330	E/W Line W	County EDDY
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8. Pool Information

PIERCE CROSSING, BONE SPRING, EAST	96473
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Additional Well Information

9 Work Type New Well	10 Well Type OIL	11 Cable/Rotary	12 Lease Type State	13 Ground Level Elevation 3085
14 Multiple N	15 Proposed Depth 9200	16 Formation Bone Spring	17 Contractor	18 Spud Date
Depth to Ground water 50		Distance from nearest fresh water well > 1000		Distance to nearest surface water > 1000
Pit Liner: Synthetic ☐ mals thick Clay ☒ Pit Volume 24000 bbls Drilling Method: Closed Loop System ☐ Fresh Water ☒ Brine ☐ Diesel/Oil-based ☐ Gas/Air ☐				

19. Proposed Casing and Cement Program

Type	Hole Size	Casing Type	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17 5	13 375	48	600	625	
Int1	11	8 625	32	3150	875	
Prod	7 875	5 5	17	9200	1275	2650

Casing/Cement Program: Additional Comments

Yates Petroleum Corporation proposed to drill and test the Delaware and intermediate formations. Approximately 600' of surface casing will be set and cement circulated to surface. Yates will run intermediate casing to approximately 3150' and cement circulated to surface. If commercial, production casing will be ran to TD and cemented in two stages with the top of cement being approximately 2650'.

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
DoubleRam	3000	3000	

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOC guidelines ☐ a general permit ☒ or an (attached) alternative OCD-approved plan ☐	OIL CONSERVATION DIVISION	
	Approved By Tim Gum	
	Title: District Supervisor	
	Approved Date 5/12/2008	Expiration Date 5/12/2010
	Email Address montis@ypcnm.com	
Date 5/7/2008	Phone 575-748-4244	