

OPERATOR
WELL/LEASE
COUNTY

Yates Petroleum Corporation
Boots State Unit #3
Lea RIG 497

STATE OF NEW MEXICO
DEVIATION REPORT

192	1.00
378	1.00
853	0.75
1,451	0.75
2,468	1.00
2,945	1.00
3,418	1.00
3,893	0.75
3,937	0.75
4,206	0.75
4,250	0.75
4,697	0.50
5,746	0.25
6,222	0.75
7,207	1.00
7,715	0.75
8,226	1.00
8,861	2.25
9,143	1.75
9,270	1.75
9,432	2.00
9,714	1.75
9,999	0.75
10,476	1.25

RECEIVED

JUN 19 2008

HOBBS OCD

RECEIVED

JUN 18 2008

HOBBS OCD

RECEIVED

JUN 18 2008

HOBBS OCD

SUR: N-17-11s-35e, 660/S & 2310/W
BHL: N-17-11s-35e, 660/S & 2042/W
API # 30-025-38752

BY.

Steve Moon

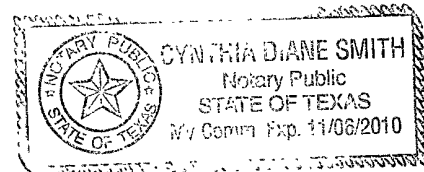
STATE OF TEXAS

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me on
Moore on behalf of Patterson-UTL Drilling Company LLC

Cynthia Diane Smith
Notary Public for Midland County, Texas
My Commission Expires: 11/06/2010

May 16th, 2008, by Steve





SUR: N-17-11s-35e, 660/S & 2310/W
BHL: N-17-11s-35e, 660/S & 2042/W
API # 30-025-38752

DIRECTIONAL SURVEY REPORT

YATES PETROLEUM
BOOTS STATE UNIT 3
LEA COUNTY, NEW MEXICO

PREPARED BY: CODY MEBANE

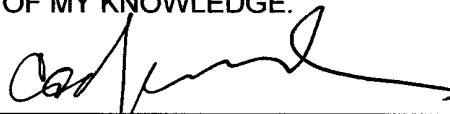
Pathfinder Energy Services, Inc.
6213 W. County Road 112 • Midland, TX • 79706
(432)681-6000

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) CHRIS CARSON
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 4/29/08 TO 5/10/08
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: LEA COUNTY, NM
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

YATES PETROLEUM
BOOTS STATE UNIT 3
LEA COUNTY, NM
RIG: PATTERSON 497
9. SURVEY CERTIFIED FROM: 7636 TO 9342 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 267.70 FEET ON A BEARING OF 269.94 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 9400 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.



CODY MCBANE
M/LWD SERVICE COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 04/26/2008
Date Completed: 05/10/2008

YATES PETROLEUM CORPORATION
BOOTS STATE UNIT #3
LEA COUNTY, NM
Rig:Patterson 497
PathFinder Office Supervisor: Cody Mebane
PathFinder Field Engineers:Chris Carson

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:33.23.8.4436 N LON:103.26.5.7040 W
GRID Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 774239.1000 Y: 869016.0000
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.48° EAST TO GRID
Vertical Section Plane: 279.90
Survey Vert. Reference: 35.00' Rotary Table To Ground
Altitude:4139.00' Ground To MSL

Measured Depth	9400.00	(feet)
Inclination	8.88	(deg)
Azimuth	277.48	(deg)
True Vertical Depth	9380.02	(feet)
Vertical Section	263.67	(feet)
Survey X cord	773971.37	(feet)
Survey Y cord	869015.69	(feet)
Survey Lat	33.38568426 N	(deg)
Survey Lon	103.43579476 W	(deg)
Rectangular Corr. N/S	0.28 S	(feet)
Rectangular Corr. E/W	267.70 W	(feet)
Closure Distance	267.70	(feet)
Direction of Closure	269.94	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
BOOTS STATE UNIT #3
LEA COUNTY, NM
Rig:Patterson 497
PathFinder Office Supervisor: Cody Mebane
PathFinder Field Engineers: Chris Carson

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Altitude:4139.00' Ground To MSL

Survey Calculations by RX4 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 GYRO SURVEY @ 7616'MD.										
7616.00	0.33	277.41	7615.81	0.00	8.19	40.86 S	15.45 W	43.68@	200.71	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
7636.00	0.35	284.78	7635.81	20.00	8.31	40.84 S	15.57 W	43.70@	200.87	0.24
7668.00	0.88	277.83	7667.81	32.00	8.66	40.78 S	15.90 W	43.77@	201.31	1.67
7732.00	5.98	263.95	7731.67	64.00	12.36	41.06 S	19.71 W	45.55@	205.64	8.02
7795.00	6.95	271.59	7794.27	63.00	19.28	41.30 S	26.78 W	49.23@	212.96	2.06
7859.00	6.95	278.98	7857.80	64.00	26.99	40.59 S	34.48 W	53.26@	220.34	1.40
7922.00	6.77	283.02	7920.35	63.00	34.50	39.16 S	41.86 W	57.32@	226.91	0.82
7986.00	6.86	285.48	7983.90	64.00	42.08	37.29 S	49.22 W	61.75@	232.85	0.48
8080.00	6.60	280.12	8077.25	94.00	53.07	34.84 S	59.95 W	69.34@	239.83	0.72
8176.00	6.68	282.32	8172.61	96.00	64.16	32.68 S	70.83 W	78.01@	245.23	0.28
8239.00	8.00	280.38	8235.09	63.00	72.21	31.11 S	78.73 W	84.65@	248.44	2.13
8303.00	10.99	277.39	8298.21	64.00	82.76	29.52 S	89.16 W	93.92@	251.68	4.73
8366.00	11.26	280.56	8360.03	63.00	94.91	27.62 S	101.16 W	104.86@	254.73	1.06
8430.00	10.82	283.02	8422.84	64.00	107.15	25.12 S	113.16 W	115.91@	257.48	1.01
8494.00	10.55	283.19	8485.73	64.00	119.00	22.43 S	124.71 W	126.72@	259.80	0.42
8557.00	10.29	283.72	8547.69	63.00	130.37	19.78 S	135.80 W	137.23@	261.71	0.44
8637.00	9.67	283.11	8626.48	80.00	144.21	16.56 S	149.28 W	150.20@	263.67	0.79
8716.00	9.15	281.09	8704.42	79.00	157.11	13.85 S	161.91 W	162.50@	265.11	0.78
8779.00	9.06	283.19	8766.62	63.00	167.07	11.76 S	171.65 W	172.05@	266.08	0.55
8843.00	8.35	281.96	8829.89	64.00	176.75	9.64 S	181.10 W	181.36@	266.95	1.15
8907.00	8.62	278.01	8893.19	64.00	186.19	8.01 S	190.40 W	190.57@	267.59	1.00
8969.00	9.23	275.90	8954.44	62.00	195.79	6.85 S	199.95 W	200.06@	268.04	1.12

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
BOOTS STATE UNIT #3
LEA COUNTY, NM
RIG:Patterson 497

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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)
9032.00	9.23	274.76	9016.62	63.00	205.86	5.91 S	210.01 W	210.09@	268.39	0.29
9095.00	9.15	274.67	9078.81	63.00	215.88	5.09 S	220.04 W	220.09@	268.68	0.13
9160.00	9.32	274.41	9142.97	65.00	226.27	4.26 S	230.43 W	230.47@	268.94	0.27
9224.00	9.06	274.76	9206.15	64.00	236.45	3.45 S	240.62 W	240.65@	269.18	0.42
9287.00	8.88	276.51	9268.38	63.00	246.24	2.48 S	250.40 W	250.41@	269.43	0.52
9342.00	8.88	277.48	9322.72	55.00	254.72	1.45 S	258.82 W	258.83@	269.68	0.27
STRAIGHT LINE PROJECTION TO BIT @ 9400' MD (9380' TVD).										
9400.00	8.88	277.48	9380.02	58.00	263.67	0.28 S	267.70 W	267.70@	269.94	0.00

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

OFFICE

YATES PETROLEUM
BOOTS STATE UNIT #3
LEA COUNTY, NM
Rig: PATTERSON 497

Sat Apr 26 18:15:46 2008

Coordinates

Latitude: 33.385679 N (33 deg. 23 min. 8.4436 sec.)
Longitude: 103.434918 W (-103 deg. 26 min. 5.7040 sec.)
Elevation: 4139.00 feet.
Calculation Date: Apr/26/2008

Magnetic Calculations

Model: IGRF2005
Dip Angle: 61.3747 degrees
Total Magnetic Field: 0.49666 gauss
Magnetic Declination: 7.975455 degrees
Horizontal Intensity: 0.237938 gauss

To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.975455 Degr.

Transverse Mercator Grid Calculations NAD27

Grid System: Transverse Mercator: new mexico east
Ellipsoid: Clarke 1866
X: 774239.1000 feet
Y: 869016.0000 feet
True to Grid: (convergence) -0.494402 degrees
Magnetic to Grid: 7.481054 degrees

To Convert a Magnetic Dir. to a GRID dir. Add 7.481054 Degr.