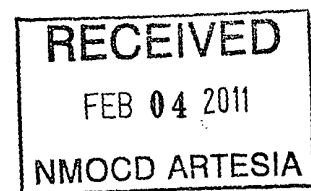


30-015-37997

DIRECTIONAL SURVEY REPORT

***YATES PETROLEUM
RUDOLPH ATX STATE COM #1H
EDDY COUNTY, NEW MEXICO***



PREPARED BY: FRANCISCO SINISTERRA

SI

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) RYAN MILLER
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 10-29-10 TO 11-03-10
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
RUDOLPH ATX STATE COM #1H
EDDY COUNTY, NM
RIG: PATTERSON #511

9. SURVEY CERTIFIED FROM: 1674 TO 4136 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE
DISPLACED AT 81.51 FEET ON A BEARING OF 72.42 DEGREES FROM THE
CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 4185 FEET,
ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.


FRANCISCO SINISTERRA
MWD COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 10/29/2010
Date Completed: 10/30/2010

YATES PETROLEUM CORPORATION
RUDOLPH "ATX"STATE COM #3H
EDDY C COUNTY, NEW MEXICO
Rig:PATTERSON 511
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers:RYAN MILLER

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.39.14.7917 N LON:103.52.50.6098 W
GRID Reference:NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 680636.1250 Y: 601992.6240
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.59° EAST TO GRID
Vertical Section Plane: 0.00
Survey Vert. Reference: 19.50' Rotary Table To Ground
Altitude:3472.00' Ground To MSL

Measured Depth	4185.00	(feet)
Inclination	1.49	(deg)
Azimuth	50.60	(deg)
True Vertical Depth	4183.38	(feet)
Vertical Section	24.62	(feet)
Survey X cord	680713.83	(feet)
Survey Y cord	602017.24	(feet)
Survey Lat	32.65417556 N	(deg)
Survey Lon	103.88047213 W	(deg)
Rectangular Corr. N/S	24.62 N	(feet)
Rectangular Corr. E/W	77.70 E	(feet)
Closure Distance	81.51	(feet)
Direction of Closure	72.42	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION

RUDOLPH "ATX" STATE COM #3H

EDDY C COUNTY, NEW MEXICO

Rig: PATTERSON 511

PathFinder Office Supervisor: FRANCISCO SINISTERRA

PathFinder Field Engineers: RYAN MILLER

Survey Horiz. Reference: WELLHEAD

Ref Coordinates: LAT: 32.39.14.7917 N LON: 103.52.50.6098 W

GRID Reference: NAD83 new mexico east Transverse Mercator

Ref GRID Coord: X: 680636.1250 Y: 601992.6240

North Aligned To: GRID NORTH

Total Magnetic Correction: 7.59° EAST TO GRID

Vertical Section Plane: 0.00

Survey Vert. Reference: 19.50' Rotary Table To Ground

Altitude: 3472.00' Ground To MSL

Survey Calculations by PathCalc v2.00 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)
TIED IN ASSUMING STRAIGHT HOLE @ 1574' MD.										
1574.00	0.00	0.00	1574.00	0.00	0.00	0.00	0.00	0.00@	0.00	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
1674.00	3.61	64.54	1673.93	100.00	1.35	1.35 N	2.84 E	3.15@	64.54	3.61
1770.00	3.43	69.38	1769.75	96.00	3.66	3.66 N	8.26 E	9.04@	66.08	0.36
1865.00	3.69	64.37	1864.57	95.00	5.99	5.99 N	13.68 E	14.93@	66.36	0.43
1961.00	3.25	60.85	1960.39	96.00	8.65	8.65 N	18.84 E	20.73@	65.34	0.51
2056.00	2.90	66.39	2055.26	95.00	10.92	10.92 N	23.39 E	25.82@	64.97	0.48
2151.00	2.37	66.39	2150.16	95.00	12.67	12.67 N	27.39 E	30.18@	65.17	0.56
2246.00	1.85	67.71	2245.09	95.00	14.04	14.04 N	30.61 E	33.68@	65.36	0.55
2341.00	1.93	72.89	2340.04	95.00	15.09	15.09 N	33.56 E	36.80@	65.78	0.20
2437.00	1.58	80.10	2435.99	96.00	15.80	15.80 N	36.41 E	39.69@	66.55	0.43
2532.00	1.76	93.20	2530.95	95.00	15.94	15.94 N	39.16 E	42.28@	67.85	0.44
2627.00	1.85	100.84	2625.91	95.00	15.57	15.57 N	42.12 E	44.90@	69.71	0.27
2722.00	2.37	115.61	2720.84	95.00	14.43	14.43 N	45.40 E	47.64@	72.36	0.79
2818.00	2.29	95.04	2816.77	96.00	13.41	13.41 N	49.10 E	50.89@	74.73	0.87
2913.00	1.32	67.71	2911.72	95.00	13.65	13.65 N	52.00 E	53.76@	75.29	1.34
3008.00	0.97	48.55	3006.70	95.00	14.60	14.60 N	53.61 E	55.57@	74.76	0.54
3104.00	0.79	87.92	3102.69	96.00	15.16	15.16 N	54.89 E	56.94@	74.56	0.64
3199.00	1.06	55.67	3197.68	95.00	15.68	15.68 N	56.27 E	58.41@	74.42	0.61
3294.00	1.41	54.52	3292.66	95.00	16.86	16.86 N	57.94 E	60.35@	73.78	0.37
3389.00	1.76	57.15	3387.62	95.00	18.33	18.33 N	60.12 E	62.85@	73.05	0.38
3485.00	1.14	95.52	3483.59	96.00	19.04	19.04 N	62.31 E	65.15@	73.01	1.17
3580.00	1.23	103.54	3578.57	95.00	18.71	18.71 N	64.24 E	66.91@	73.77	0.20

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM CORPORATION
 RUDOLPH "ATX" STATE COM #3H
 EDDY C COUNTY, NEW MEXICO
 RIG: PATTERSON 511

Page 02/02

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets		Closure Dist Dir		DLS
						(ft)	(ft)	(ft)	(deg)	(dg/100ft)
3675.00	1.41	87.06	3673.55	95.00	18.53	18.53 N	66.40 E	68.94@	74.41	0.44
3770.00	1.58	71.52	3768.51	95.00	19.00	19.00 N	68.81 E	71.38@	74.56	0.46
3865.00	1.49	54.06	3863.48	95.00	20.14	20.14 N	71.05 E	73.85@	74.17	0.50
3961.00	1.32	59.98	3959.45	96.00	21.43	21.43 N	73.02 E	76.10@	73.65	0.23
4056.00	1.49	58.94	4054.42	95.00	22.61	22.61 N	75.02 E	78.36@	73.23	0.18
4136.00	1.49	50.60	4134.40	80.00	23.81	23.81 N	76.72 E	80.33@	72.76	0.27
STRAIGHT LINE PROJECTION TO BIT @ 4185' MD.										
4185.00	1.49	50.60	4183.38	49.00	24.62	24.62 N	77.70 E	81.51@	72.42	0.00

FINDER

ENERGY SERVICES

TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	YATES PETROLEUM CORPORATION		
LEASE / WELL No.:	RUDOLPH "ATX" STATE COM	#3H	
WELL LOCATION:	EDDY CO, NM		
COUNTY / STATE / COUNTRY:	EDDY	NM	USA
RIG:	PATTERSON 511		
API WELL No:	30-015-37997		
JOB No:	700000703 WT-WT		
P.O. / AFE No.			
DIRECTIONAL COMPANY:	PATHFINDER ENERGY SERVICES INC.		

WELL SITE INFORMATION

MAGNETIC DECLINATION:			
On Wall Plat:	7.59	LWD Calculated:	7.59
		Agreed Upon:	7.59
X =	680636.125000	Feet	Y = 601992.624000
			Feet
SITE LATITUDE:	32.654109	SITE LONGITUDE:	103.880725
GRID SYSTEM:	TRUE ☐ UTM ☒ LAMBERT ☒	ZONE:	LUSK; BONE SPRINGS, WEST
PROPOSED DRIFT DIRECTION:	0 NEW MEXICO EAST		
KELLY BUSHING ELEVATION:	19.8'		
ALTITUDE:	3490	Feet	WATER DEPTH: N/A
			Feet

TIE-IN SURVEY

MEASURED DEPTH:	0 1574		
DRIFT ANGLE:	0		
DRIFT DIRECTION:	0		
TRUE VERTICAL DEPTH:	0 1574		
VERTICAL SECTION:	0		
RECTANGULAR COORDINATE (N / S):	0		
RECTANGULAR COORDINATE (E / W):	0		
CLOSURE DISTANCE / DIRECTION:	0	0	
SURVEY CALCULATION METHOD:	AA ☐	MC ☒	RC ☐ BT ☐
SOURCE OF TIE-IN DATA (COMPANY):	NONE (NO TIE IN)		
COPY OF TIE-IN SURVEY REPORT	☐ YES ☒ NO		

WELL PLAN

KICKOFF DEPTH:	N/A	TOTAL DEPTH:	4185
KICKOFF ANGLE:	N/A	MAX ANGLE:	3.61

PES Engineers:

**Signature of both field engineers required if applicable

Directional Driller:

DATE: 10/30/10

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

YATES PETROLEUM
RUDOLPH "ATX" STATE COM #3H
EDDY COUNTY, NEW MEXICO
Rig:PATTERSON 511

Thu Oct 28 10:37:44 2010

Coordinates

Latitude: 32.654109 N (32 deg. 39 min. 14.7917 sec.)
Longitude: 103.880725 W (-103 deg. 52 min. 50.6098 sec.)
Elevation: 3490.00 feet.
Calculation Date: Oct/28/2010

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.5474 degrees
Total Magnetic Field: 0.48904 gauss
Magnetic Declination: 7.838130 degrees
Horizontal Intensity: 0.240463 gauss
To Convert a Magnetic Dir. to a TRUE/North Dir. Add 7.838130 Degr

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 680636.1250 feet
Y: 601992.6240 feet
True to Grid: (convergence) -0.244216 degrees
Magnetic to Grid: 7.593914 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.593914 Degr.

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

YATES PETROLEUM CORPORATION
RUDOLPH "ATX"STATE COM #3H
LUSK; BONESPRING, WEST

Fri Oct 29 12:17:41 2010

Coordinates

Latitude:	32.654109 N (32 deg. 39 min. 14.7917 sec.)
Longitude:	103.880725 W (-103 deg. 52 min. 50.6098 sec.)
Elevation:	3490.00 feet.
Calculation Date:	Oct/29/2010

Magnetic Calculations

Model:	IGRF2010
Dip Angle:	60.5474 degrees
Total Magnetic Field:	0.48904 gauss
Magnetic Declination:	7.837795 degrees
Horizontal Intensity:	0.240463 gauss

To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.837795 Degs

Transverse Mercator Grid Calculations NAD83

Grid System:	Transverse Mercator: new mexico east
Ellipsoid:	GRS80
X:	680636.1250 feet
Y:	601992.6240 feet
True to Grid: (convergence)	-0.244216 degrees
Magnetic to Grid:	7.593580 degrees

To Convert a Magnetic Dir. to a GRID dir. Add 7.593580 Degs.