

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO 1004-0137
Expires July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other						5 Lease Serial No NM-10266			
b Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff Resrv Other: _____						6 If Indian, Allottee or Tribe Name			
2 Name of Operator Yates Petroleum Corporation						7 Unit or CA Agreement Name and No			
3 Address 105 S. 4th Str., Artesia, NM 88210			3a Phone No (include area code) 575-748-1471			8 Lease Name and Well No Link BKT Federal Com #3H			
4 Location of Well (Report location clearly and in accordance with Federal requirements)* At Surface 1880'FSL & 300'FEL (Unit I, NESE) At top prod Interval reported below BHL 1745'FSL & 690'FWL (Unit L, NWSW)						9 API Well No 30-015-36397			
						10. Field and Pool or Exploratory Cottonwood Creek; Wolfcamp			
						11. Sec., T., R., M., on Block and Survey or Area Section 15-T16S-R25E			
						12 County or Parish Eddy		13 State New Mexico	
14 Date Spudded RH 9/5/08 RT 9/7/08		15 Date T.D. Reached 9/30/08		16 Date Completed ☐ D & A ☒ Ready to Prod 11/2/08		17 Elevations (DF, RKB, RT, GL)* 3474'GL 3457'KB			
18 Total Depth MD 9120' TVD NA		19 Plug Back T.D. MD 9120' TVD NA		20 Depth Bridge Plug Set MD NA TVD NA					
21 Type Electric & Other Mechanical Logs Run (Submit copy of each) Cement Bond Variable Density Log w/Gamma Ray/CCL				22 Was Well cored? ☒ No ☐ Yes (Submit analysis) Was DST run? ☒ No ☐ Yes (Submit report) Directional Survey? ☐ No ☒ Yes (Submit copy) (Attached)					
23 Casing and Liner Record (Report all strings set in well)									
Hole Size	Size/Grade	Wt (#/ft)	Top (MD)	Bottom(MD)	State Cementer Depth	No. of Sk & Type of Cement	Slurry Vol (BBL)	Cement Top*	Amount Pulled
	20"	Cond.	Surface	40'		Redi-mix		Surface	
17-1/2"	13-3/8"	48#	Surface	415'		550 sx		Surface	
12-1/4"	8-5/8"	24#,32#	Surface	1010'		750 sx		Surface	
7-7/8"	5-1/2"	15.5#,17#	Surface	9120'		1173 sx		Surface	
24 Tubing Record									
Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	
2-7/8"	4390'								
25 Producing Intervals					26 Perforation Record				
Formation		Top	Bottom		Perforated Interval	Size	No Holes	Perf Status	
A) Wolfcamp		5260'	9055'						
B)					SEE ATTACHED SHEET				
C)									
D)									
27 Acid, Fracture, Treatment, Cement Squeeze, Etc									
Depth Interval			Amount and Type of Material						
			SEE ATTACHED SHEET						
28 Production - Interval A									
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
11/3/08	12/22/08	24	→	0	1621	33	NA	NA	Flowing
Choke Size	Tbg Press Flwg	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
42/64"	450 psi	500 psi	→	0	1621	33	NA	Producing	
28a Production - Interval B									
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
			→						
Choke Size	Tbg Press Flwg	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

*(See instructions and spaces for additional data on page 2)

Accepted for record - NMOCD

28b Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
			→						
Choke Size	Tbg Press Flwg	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

28c Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr API	Gas Gravity	Production Method
			→						
Choke Size	Tbg Press Flwg	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

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

Sold

30 Summary of Porous Zones (Include Aquifers)

Show all important zones of porosity and contents thereof Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries

Formation	Top	Bottom	Description, Contents, etc.	Name	Top Meas Depth
Potential uphole completion or major aquifers				San Andres	650'
Horizontal well - only Gamma Ray Log				Glorieta	1980'
No cores or DST's run				Tubb	3284'
				Abo	3960'
				Wolfcamp	4926'

31 Formation (Log) Markers

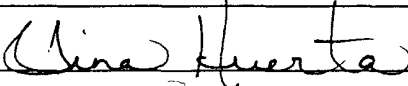
32 Additional remarks (include plugging procedure)

33 Indicate which items have been attached by placing a check in the appropriate boxes

- ☒ Electrical/Mechanical Logs (1 full set req'd)
 ☐ Geologic Report
 ☐ DST Report
 ☒ Directional Survey
 ☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☒ Other Deviation Survey

34 I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) Tina Huerta Title Regulatory Compliance Supervisor

Signature  Date December 30, 2008

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

(Continued on page 3)

(Form 3160-4, page2)

Yates Petroleum Corporation
Link BKT Federal Com #3H
Section 15-T16S-R25E
Eddy County, New Mexico
Page 3

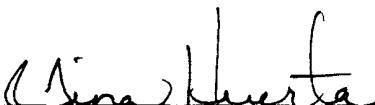
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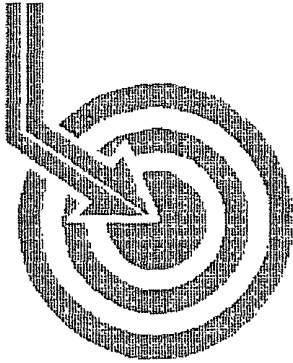
26. Perforation Record

Perforated Interval	Size	No. Holes	Perf. Status
9055'			Producing
8802'			Producing
8549'			Producing
8296'			Producing
8043'			Producing
7790'			Producing
7537'			Producing
7284'			Producing
7031'			Producing
6778'			Producing
6525'			Producing
6272'			Producing
6019'			Producing
5766'			Producing
5513'			Producing
5260'			Producing

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
8296'-9055'	Frac w/2561# 100 mesh sand and 79,403# 40/70 Jordan-Unimin and 114,453# 20/40 Jordan-Unimin
7284'-8043'	Frac w/2246# 100 mesh sand and 80,758# 40/70 Jordan-Unimin and 103,542# 20/40 Jordan-Unimin
6272'-7031'	Frac w/2223# 100 mesh sand and 79,517# 40/70 Jordan-Unimin and 103,232# 20/40 Jordan-Unimin
5260'-6019'	Frac w/2478# 100 mesh sand and 79,621# 40/70 Jordan-Unimin and 134,320# 20/40 Jordan-Unimin


Regulatory Compliance Supervisor
December 30, 2008



Scientific Drilling

YATES PETROLEUM

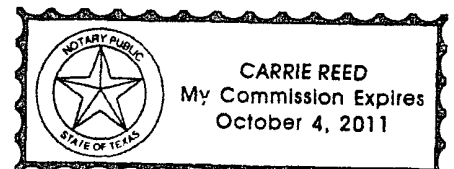
Field: Wildcat
Site: Eddy County, NM
Well: Link BKT Federal Com #3H
Wellpath: VH - Job #32K0908723
Survey: 09/18/08

This survey is correct to the best of my knowledge
and is supported by actual field data.

.....*Richardson*.....Company Representative

Notorized this date 14th of October, 2008.

Carrie Reed
Notary Signature
County of Midland
State of Texas





Scientific Drilling International Survey Report

Company: YATES PETROLEUM	Date: 10/13/2008	Time: 10:01:42	Page: 1
Field: Wildcat	Co-ordinate(NE) Reference:	Site: Eddy County, NM, Grid North	
Site: Eddy County, NM	Vertical (TVD) Reference:	SITE: 0.0	
Well: Link BKT Federal Com #3H	Section (VS) Reference:	Well: (0.00N;0.00E,271.09Azi)	
Wellpath: VH - Job #32K0908723	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey: 09/18/08	Start Date: 09/18/2008
Company: Scientific Drilling Internatio	Engineer: Melendez w/GeoGyro
Tool: Keeper;Keeper Gyro	Tied-to: From Surface

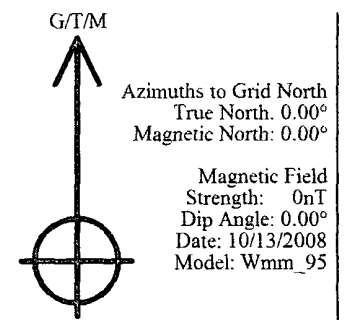
Survey

MD ft	Incl deg	Azim deg	TVD ft	VS ft	N/S ft	E/W ft	DLS deg/100ft	ClsD ft	ClsA deg
0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.12	259.83	100.00	0.10	-0.02	-0.10	0.12	0.10	259.83
200.00	0.05	309.39	200.00	0.24	-0.01	-0.24	0.10	0.24	267.78
300.00	0.27	225.51	300.00	0.44	-0.15	-0.44	0.27	0.47	251.62
400.00	0.54	203.94	400.00	0.79	-0.74	-0.80	0.31	1.09	227.17
500.00	0.64	207.85	499.99	1.22	-1.67	-1.25	0.11	2.09	216.93
600.00	0.83	200.06	599.98	1.71	-2.84	-1.76	0.21	3.34	211.81
700.00	0.98	237.71	699.97	2.66	-3.98	-2.73	0.60	4.83	214.50
800.00	1.73	235.00	799.94	4.59	-5.30	-4.69	0.75	7.08	221.52
900.00	2.43	213.80	899.88	6.96	-7.93	-7.11	1.03	10.65	221.88
1000.00	2.51	209.00	999.79	9.13	-11.61	-9.35	0.22	14.90	218.86
1100.00	2.44	207.51	1099.69	11.10	-15.41	-11.39	0.10	19.16	216.48
1200.00	2.43	205.44	1199.60	12.92	-19.21	-13.29	0.09	23.36	214.67
1300.00	2.40	208.07	1299.51	14.74	-22.97	-15.18	0.11	27.54	213.46
1400.00	2.08	213.09	1399.44	16.66	-26.34	-17.16	0.38	31.44	213.08
1500.00	2.24	207.51	1499.37	18.49	-29.59	-19.05	0.26	35.20	212.78
1600.00	2.12	208.81	1599.29	20.22	-32.95	-20.85	0.13	38.99	212.32
1700.00	1.76	202.05	1699.24	21.63	-35.99	-22.32	0.43	42.35	211.80
1800.00	1.57	196.92	1799.19	22.55	-38.73	-23.29	0.24	45.19	211.02
1900.00	1.40	202.27	1899.16	23.37	-41.17	-24.15	0.22	47.73	210.40
2000.00	1.21	205.39	1999.13	24.24	-43.25	-25.07	0.20	49.99	210.10
2100.00	0.83	198.10	2099.12	24.89	-44.89	-25.75	0.40	51.75	209.83
2200.00	0.77	207.08	2199.11	25.39	-46.18	-26.28	0.14	53.13	209.64
2300.00	0.48	211.42	2299.10	25.90	-47.14	-26.80	0.29	54.22	209.62
2400.00	0.43	255.52	2399.10	26.47	-47.59	-27.38	0.34	54.90	209.92
2500.00	0.56	255.51	2499.10	27.31	-47.80	-28.22	0.13	55.51	210.55
2600.00	0.57	265.47	2599.09	28.27	-47.97	-29.19	0.10	56.15	211.32
2700.00	0.37	264.34	2699.09	29.09	-48.04	-30.01	0.20	56.64	211.99
2800.00	0.46	275.25	2799.08	29.81	-48.03	-30.73	0.12	57.02	212.61
2900.00	0.56	282.99	2899.08	30.69	-47.89	-31.60	0.12	57.37	213.42
3000.00	0.72	282.27	2999.07	31.78	-47.64	-32.69	0.16	57.78	214.46
3100.00	0.72	275.32	3099.07	33.02	-47.45	-33.93	0.09	58.33	215.57
3200.00	0.54	287.47	3199.06	34.10	-47.25	-35.01	0.22	58.81	216.53
3300.00	0.69	290.09	3299.05	35.12	-46.90	-36.02	0.15	59.14	217.53
3400.00	0.81	297.50	3399.05	36.33	-46.37	-37.21	0.15	59.46	218.75
3500.00	0.50	317.20	3499.04	37.26	-45.72	-38.14	0.38	59.54	219.83
3600.00	0.56	332.82	3599.04	37.80	-44.97	-38.66	0.16	59.30	220.69
3700.00	0.56	345.62	3699.03	38.16	-44.06	-39.00	0.12	58.84	221.52
3800.00	0.43	1.31	3799.03	38.29	-43.21	-39.12	0.19	58.29	222.15
3900.00	0.53	34.08	3899.02	38.03	-42.45	-38.85	0.29	57.54	222.46
4000.00	1.00	43.95	3999.01	37.19	-41.44	-37.98	0.49	56.21	222.51
4100.00	1.26	46.48	4098.99	35.81	-40.06	-36.58	0.26	54.25	222.40
4200.00	1.75	49.37	4198.96	33.89	-38.30	-34.62	0.50	51.63	222.11
4300.00	2.30	46.99	4298.90	31.31	-35.94	-32.00	0.56	48.12	221.68
4400.00	2.92	50.13	4398.79	27.94	-32.94	-28.58	0.64	43.61	220.94
4420.00	2.70	50.20	4418.77	27.20	-32.31	-27.82	1.10	42.64	220.73



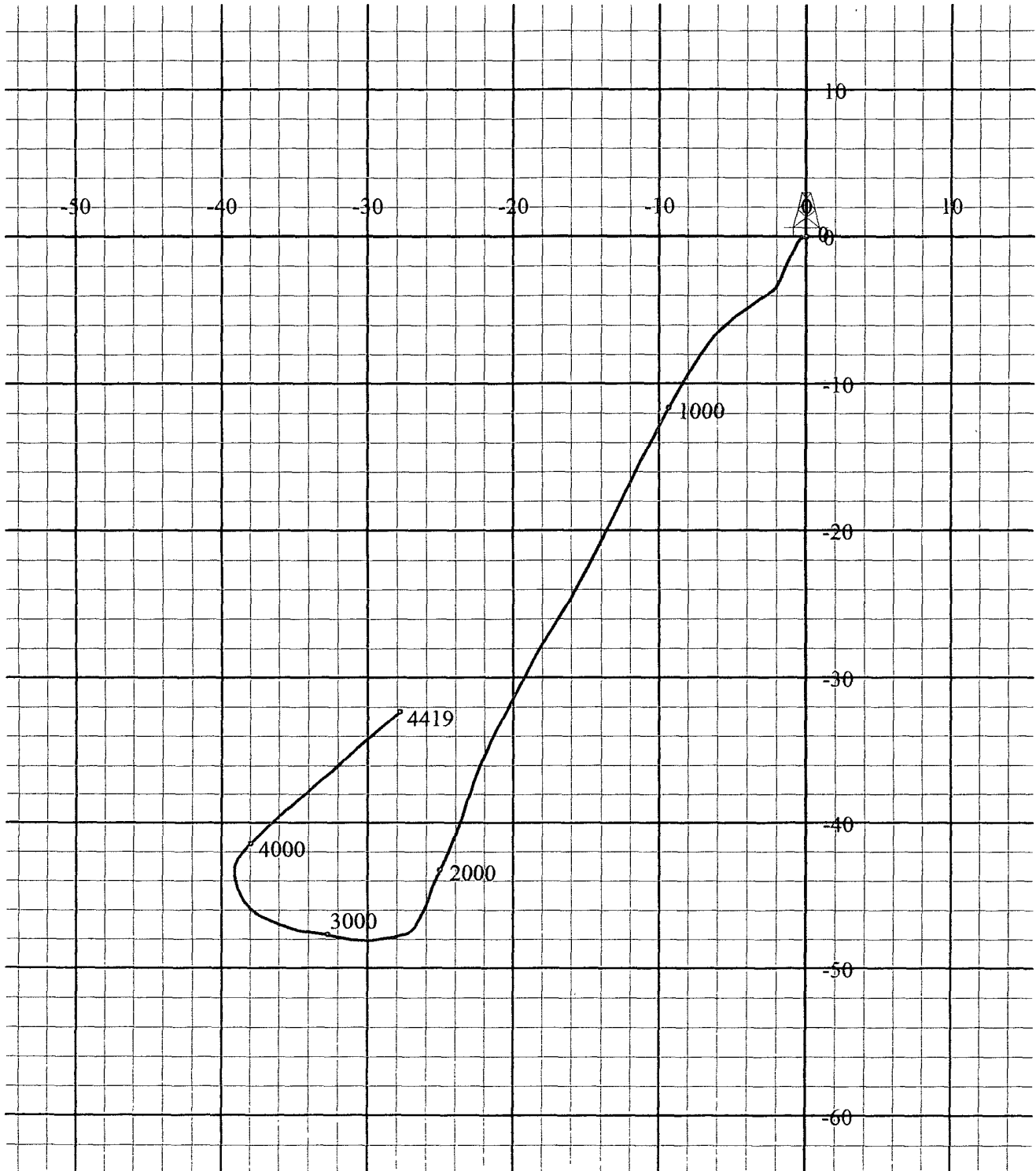
Scientific
Drilling

Field: Wildcat
Site: Eddy County, NM
Well: Link BKT Federal Com #3H
Wellpath: VH - Job #32K0908723
Survey: 09/18/08



West(-)/East(+) [10ft/in]

South(-)/North(+) [10ft/in]





Yates Petroleum Corp.

Eddy County
Link "BKT" Federal Com
#3H
OH

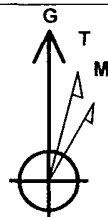
Survey: MWD #1

Pathfinder X & Y Survey Report

30 September, 2008

PATHFINDER
ENERGY SERVICES

Yates Petroleum Corporation

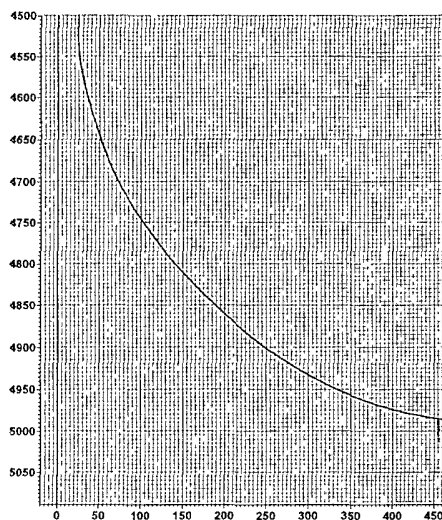


Azimuths to Grid North
True North: 0.07°
Magnetic North: 8.45°

Magnetic Field
Strength: 49244.3snT
Dip Angle: 60.76°
Date: 2008/08/06
Model: IGRF200510

PATHFINDER ENERGY SERVICES

EOW



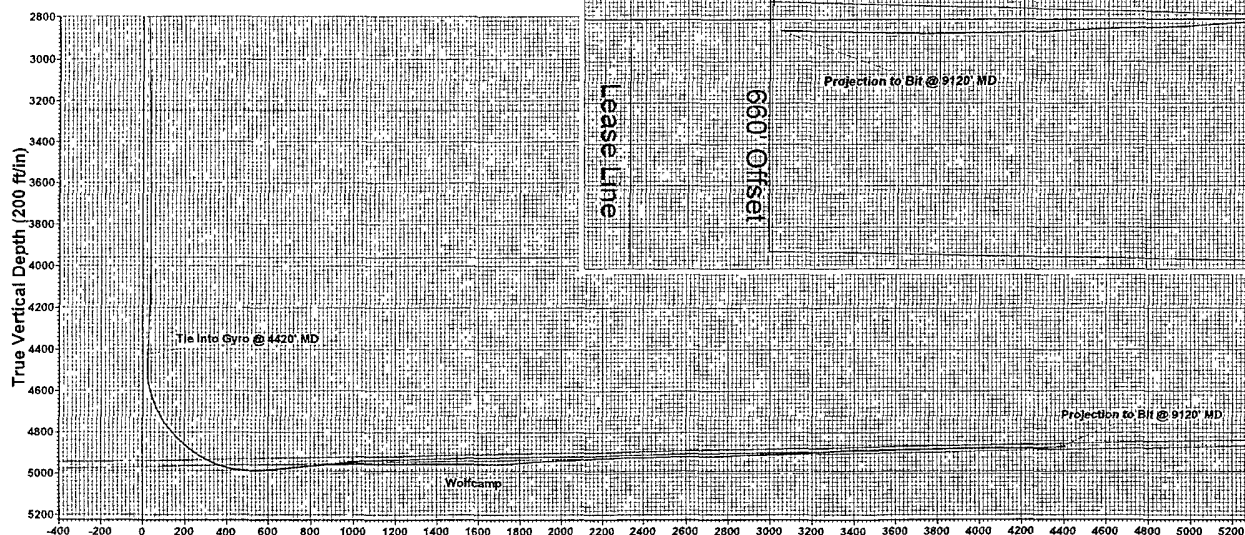
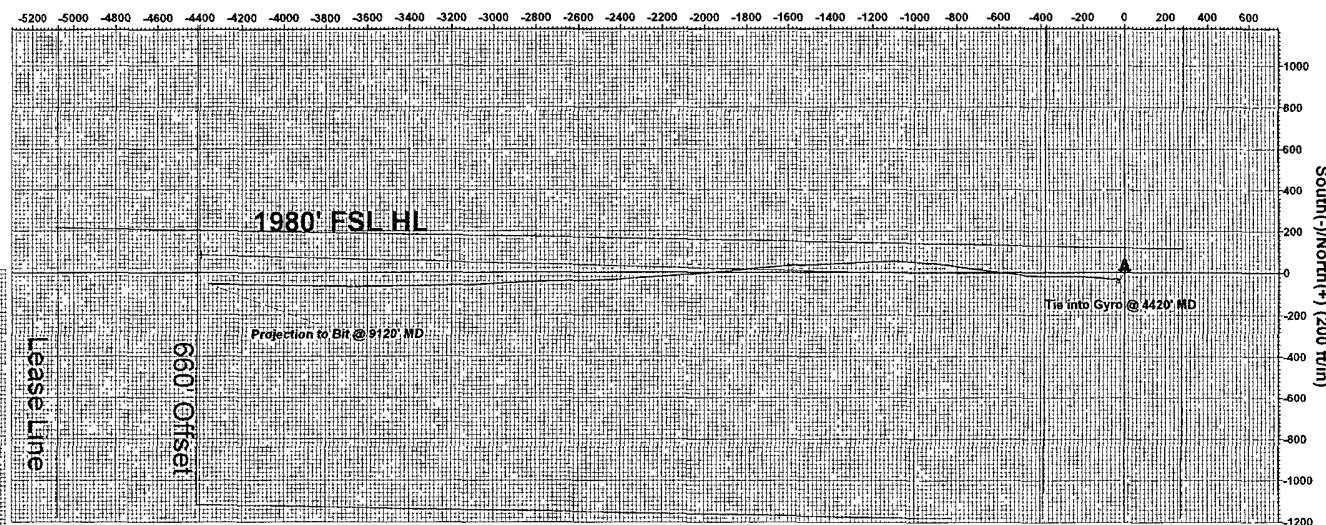
WELL DETAILS- #3H						
Ground Elevation: 3472.00						
RKB Elevation: WELL @ 3473.00ft (Original Well Elev)						
Rig Name: Original Well Elev						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	698704.334	500857.276	32° 55' 14.458 N	104° 27' 54.918 W	

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	5254.00	87.67	276.66	4989.92	-9.76	-505.20	0.00	0.00	504.93	
2	5328.85	95.92	270.19	4987.58	-5.28	-579.78	14.00	-38.04	579.57	
3	5351.96	95.92	270.19	4985.20	-5.21	-602.77	0.00	0.00	602.56	
4	5751.33	95.92	270.19	4944.00	-3.88	-1000.00	0.00	0.00	999.75	TGT 1 (#3) @ 1000'VS
5	5916.76	91.13	271.50	4933.83	-1.44	-1165.05	3.00	164.65	1164.81	
6	9144.71	91.13	271.50	4870.00	83.17	-4391.26	0.00	0.00	4392.04	PBHL OH (3H)

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)						
Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PBHL OH (3H)	4870.00	83.17	-4391.26	698787.508	496466.019	Point
Tgt 2(#3) @ 1500' VS4928.00	7.85	-1500.00	698712.184	499357.276	Point	
TGT 1 (#3) @ 1000'VS944.00	-3.88	-1000.00	698700.454	499857.276	Point	

Project: Eddy County
Site: Link "BKT" Federal Com
Well: #3H
Wellbore: OH
Plan: Plan #4 (#3H/OH)

West(-)/East(+) (200 ft/in)



Vertical Section at 271.09° (200 ft/in)

PROJECT DETAILS: Eddy County
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: New Mexico Eastern Zone
System Datum: Mean Sea Level
Local North: Grid

Plan: Plan #4 (#3H/OH)

Created By: Nate Bingham Date: 13:54, September 30 2008

Checked: _____ Date: _____



Pathfinder Energy Services

Pathfinder X & Y Survey Report



Company: Yates Petroleum Corp.
Project: Eddy County
Site: Link "BKT" Federal Com
Well: #3H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #3H
TVD Reference: WELL @ 3472.00ft (Original Well Elev)
MD Reference: WELL @ 3472.00ft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Single User Db

Project: Eddy County
Map System: US State Plane 1983
Geo Datum: North American Datum 1983
Map Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

Site: Link "BKT" Federal Com

Site Position:
From: Map
Position Uncertainty: 0.00 ft
Northing: 697,709.859 ft
Easting: 484,983.100 ft
Slot Radius: "
Latitude: 32° 55' 4.383 N
Longitude: 104° 31' 1.134 W
Grid Convergence: -0.10 °

Well: #3H
Well Position **+N-S** 0.00 ft
+E-W 0.00 ft
Position Uncertainty 0.00 ft
Northing: 698,704.334 ft
Easting: 500,857.276 ft
Wellhead Elevation: ft
Latitude: 32° 55' 14.458 N
Longitude: 104° 27' 54.918 W
Ground Level: 3,472.00ft

Wellbore: OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	2008/08/06	8.38	60.76	49,244

Design: OH

Audit Notes:

Version: 1.0
Phase: ACTUAL
Tie On Depth: 0.00

Vertical Section:	Depth From (TVD) (ft)	+N-S (ft)	+E-W (ft)	Direction (°)
	0.00	0.00	0.00	271.09



Pathfinder Energy Services
Pathfinder X & Y Survey Report



Company: Yates Petroleum Corp.
Project: Eddy County
Site: Link "BKT" Federal Com
Well: #3H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #3H
TVD Reference: WELL @ 3472.00ft (Original Well Elev)
MD Reference: WELL @ 3472.00ft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Single User Db

Survey Program: Date 2008/09/30

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
100.00	4,420.00	Gyro (OH)	CB-GYRO-MS	Camera based gyro multishot
4,481.00	9,120.00	MWD #1 (OH)	MWD	MWD - Standard

Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
4,420.00	2.70	50.20	4,418.77	-946.77	-32.31	-27.82	27.20	0.00	698,672.02	500,829.45
Tie into Gyro @ 4420' MD										
4,481.00	2.81	49.60	4,479.70	-1,007.70	-30.42	-25.58	25.00	0.19	698,673.91	500,831.70
4,512.00	1.41	4.71	4,510.68	-1,038.68	-29.55	-24.97	24.40	6.67	698,674.78	500,832.31
4,543.00	4.84	279.40	4,541.64	-1,069.64	-28.96	-26.23	25.67	15.90	698,675.38	500,831.05
4,573.00	10.02	270.45	4,571.38	-1,099.38	-28.73	-30.09	29.54	17.64	698,675.61	500,827.19
4,604.00	14.77	266.12	4,601.65	-1,129.65	-28.98	-36.73	36.18	15.60	698,675.36	500,820.54
4,635.00	18.55	266.15	4,631.34	-1,159.34	-29.57	-45.60	45.03	12.19	698,674.76	500,811.68
4,666.00	20.75	270.17	4,660.53	-1,188.53	-29.89	-56.01	55.43	8.33	698,674.45	500,801.26
4,697.00	24.97	273.98	4,689.09	-1,217.09	-29.42	-68.04	67.47	14.42	698,674.92	500,789.24
4,728.00	29.63	275.33	4,716.63	-1,244.63	-28.25	-82.20	81.65	15.16	698,676.08	500,775.07
4,759.00	33.50	274.80	4,743.04	-1,271.04	-26.82	-98.36	97.84	12.52	698,677.51	500,758.91
4,790.00	36.49	274.68	4,768.43	-1,296.43	-25.35	-116.08	115.58	9.65	698,678.98	500,741.20
4,821.00	39.13	274.92	4,792.92	-1,320.92	-23.76	-135.02	134.54	8.53	698,680.57	500,722.26
4,852.00	43.09	274.73	4,816.28	-1,344.28	-22.05	-155.32	154.88	12.78	698,682.28	500,701.95
4,883.00	45.55	274.83	4,838.45	-1,366.45	-20.25	-176.90	176.49	7.94	698,684.09	500,680.37
4,914.00	47.57	273.94	4,859.77	-1,387.77	-18.53	-199.35	198.96	6.84	698,685.81	500,657.93
4,945.00	50.12	272.34	4,880.17	-1,408.17	-17.26	-222.65	222.28	9.10	698,687.08	500,634.63
4,975.00	54.08	269.86	4,898.59	-1,426.59	-16.82	-246.31	245.95	14.72	698,687.52	500,610.97
5,006.00	57.77	269.11	4,915.96	-1,443.96	-17.05	-271.98	271.61	12.07	698,687.28	500,585.29
5,037.00	60.23	269.94	4,931.93	-1,459.93	-17.27	-298.55	298.17	8.26	698,687.07	500,558.73



Pathfinder Energy Services

Pathfinder X & Y Survey Report



Company: Yates Petroleum Corp.
Project: Eddy County
Site: Link "BKT" Federal Com
Well: #3H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #3H
TVD Reference: WELL @ 3472.00ft (Original Well Elev)
MD Reference: WELL @ 3472.00ft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Single User Db

Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
5,068.00	64.37	270.20	4,946.33	-1,474.33	-17.23	-325.99	325.60	13.38	698,687.10	500,531.28
5,099.00	68.41	270.46	4,958.75	-1,486.75	-17.07	-354.39	354.00	13.05	698,687.27	500,502.89
5,130.00	72.46	270.11	4,969.12	-1,497.12	-16.92	-383.59	383.20	13.11	698,687.41	500,473.68
5,161.00	76.77	271.86	4,977.35	-1,505.35	-16.41	-413.47	413.08	14.93	698,687.93	500,443.81
5,192.00	80.37	273.15	4,983.49	-1,511.49	-15.08	-443.82	443.45	12.31	698,689.26	500,413.46
5,223.00	84.06	274.99	4,987.69	-1,515.69	-12.89	-474.45	474.12	13.28	698,691.44	500,382.83
5,254.00	87.67	276.66	4,989.92	-1,517.92	-9.76	-505.20	504.93	12.82	698,694.58	500,352.07
5,322.00	95.41	277.18	4,988.10	-1,516.10	-1.57	-572.63	572.50	11.41	698,702.76	500,284.64
5,386.00	95.85	276.87	4,981.82	-1,509.82	6.22	-635.85	635.85	0.84	698,710.55	500,221.43
5,449.00	95.76	276.93	4,975.45	-1,503.45	13.75	-698.07	698.20	0.17	698,718.08	500,159.21
5,482.00	95.94	278.41	4,972.08	-1,500.08	18.13	-730.60	730.81	4.49	698,722.46	500,126.67
5,513.00	95.23	279.26	4,969.07	-1,497.07	22.87	-761.09	761.39	3.56	698,727.20	500,096.19
5,576.00	94.09	278.69	4,963.95	-1,491.95	32.66	-823.11	823.58	2.02	698,737.00	500,034.17
5,608.00	93.56	277.41	4,961.81	-1,489.81	37.13	-854.72	855.27	4.32	698,741.47	500,002.55
5,640.00	91.71	276.02	4,960.34	-1,488.34	40.87	-886.47	887.08	7.23	698,745.20	499,970.81
5,671.00	90.48	274.74	4,959.75	-1,487.75	43.78	-917.32	917.99	5.73	698,748.11	499,939.95
5,703.00	90.48	273.58	4,959.48	-1,487.48	46.10	-949.24	949.94	3.62	698,750.43	499,908.04
5,735.00	91.71	273.61	4,958.87	-1,486.87	48.10	-981.17	981.91	3.84	698,752.44	499,876.11
5,798.00	90.75	270.69	4,957.52	-1,485.52	50.47	-1,044.10	1,044.87	4.88	698,754.80	499,813.17
5,830.00	90.75	271.06	4,957.10	-1,485.10	50.95	-1,076.10	1,076.87	1.16	698,755.29	499,781.18
5,894.00	89.60	269.68	4,956.90	-1,484.90	51.37	-1,140.09	1,140.86	2.81	698,755.70	499,717.18
5,957.00	90.31	267.81	4,956.95	-1,484.95	49.99	-1,203.07	1,203.81	3.17	698,754.32	499,654.20
6,020.00	91.80	267.82	4,955.79	-1,483.79	47.59	-1,266.02	1,266.69	2.37	698,751.92	499,591.26
6,115.00	89.34	266.77	4,954.85	-1,482.85	43.10	-1,360.90	1,361.47	2.82	698,747.44	499,496.38
6,179.00	89.60	266.95	4,955.44	-1,483.44	39.60	-1,424.80	1,425.29	0.49	698,743.93	499,432.48
6,242.00	90.40	267.80	4,955.44	-1,483.44	36.71	-1,487.73	1,488.16	1.85	698,741.05	499,369.55
6,305.00	90.40	268.22	4,955.00	-1,483.00	34.53	-1,550.69	1,551.07	0.67	698,738.86	499,306.59



Pathfinder Energy Services

Pathfinder X & Y Survey Report



Company: Yates Petroleum Corp.
Project: Eddy County
Site: Link "BKT" Federal Com
Well: #3H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #3H
TVD Reference: WELL @ 3472.00ft (Original Well Elev)
MD Reference: WELL @ 3472.00ft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Single User Db

Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
6,368.00	88.20	266.40	4,955.77	-1,483.77	31.57	-1,613.61	1,613.92	4.53	698,735.90	499,243.67
6,432.00	89.52	265.46	4,957.04	-1,485.04	27.03	-1,677.43	1,677.64	2.53	698,731.36	499,179.84
6,495.00	94.44	264.55	4,954.87	-1,482.87	21.55	-1,740.14	1,740.23	7.94	698,725.88	499,117.14
6,558.00	93.91	263.85	4,950.28	-1,478.28	15.20	-1,802.65	1,802.61	1.39	698,719.53	499,054.63
6,622.00	93.21	263.82	4,946.31	-1,474.31	8.34	-1,866.15	1,865.98	1.09	698,712.67	498,991.12
6,685.00	93.83	265.12	4,942.44	-1,470.44	2.28	-1,928.74	1,928.44	2.28	698,706.61	498,928.54
6,749.00	92.95	264.90	4,938.65	-1,466.65	-3.28	-1,992.39	1,991.96	1.42	698,701.06	498,864.89
6,812.00	92.68	265.45	4,935.56	-1,463.56	-8.57	-2,055.09	2,054.55	0.97	698,695.76	498,802.19
6,876.00	93.12	266.12	4,932.32	-1,460.32	-13.27	-2,118.83	2,118.20	1.25	698,691.07	498,738.44
6,939.00	93.12	266.40	4,928.89	-1,456.89	-17.37	-2,181.60	2,180.88	0.44	698,686.96	498,675.67
7,003.00	91.98	266.25	4,926.05	-1,454.05	-21.47	-2,245.41	2,244.59	1.80	698,682.86	498,611.87
7,066.00	91.19	266.17	4,924.30	-1,452.30	-25.63	-2,308.25	2,307.34	1.26	698,678.70	498,549.03
7,129.00	90.75	266.32	4,923.24	-1,451.24	-29.76	-2,371.10	2,370.11	0.74	698,674.58	498,486.17
7,193.00	91.28	267.52	4,922.10	-1,450.10	-33.20	-2,435.00	2,433.93	2.05	698,671.14	498,422.28
7,256.00	91.45	267.94	4,920.60	-1,448.60	-35.69	-2,497.93	2,496.80	0.72	698,668.64	498,359.35
7,320.00	91.01	268.25	4,919.23	-1,447.23	-37.82	-2,561.88	2,560.70	0.84	698,666.52	498,295.40
7,383.00	90.22	268.50	4,918.55	-1,446.55	-39.60	-2,624.85	2,623.62	1.32	698,664.73	498,232.43
7,447.00	90.04	269.05	4,918.41	-1,446.41	-40.97	-2,688.84	2,687.57	0.90	698,663.36	498,168.44
7,478.00	91.45	268.84	4,918.00	-1,446.00	-41.54	-2,719.83	2,718.54	4.60	698,662.79	498,137.45
7,574.00	93.03	267.93	4,914.25	-1,442.25	-44.25	-2,815.71	2,814.36	1.90	698,660.09	498,041.57
7,669.00	92.33	268.06	4,909.81	-1,437.81	-47.57	-2,910.55	2,909.12	0.75	698,656.77	497,946.73
7,764.00	90.57	267.06	4,907.41	-1,435.41	-51.61	-3,005.43	3,003.90	2.13	698,652.72	497,851.85
7,827.00	91.71	267.44	4,906.15	-1,434.15	-54.63	-3,068.34	3,066.75	1.91	698,649.70	497,788.94
7,859.00	93.12	267.19	4,904.80	-1,432.80	-56.13	-3,100.28	3,098.65	4.47	698,648.20	497,757.00
7,954.00	93.83	268.85	4,899.05	-1,427.05	-59.41	-3,195.04	3,193.33	1.90	698,644.93	497,662.23
8,018.00	93.39	268.53	4,895.02	-1,423.02	-60.87	-3,258.90	3,257.15	0.85	698,643.47	497,598.38
8,081.00	93.74	269.74	4,891.10	-1,419.10	-61.82	-3,321.77	3,319.99	2.00	698,642.52	497,535.51



Pathfinder Energy Services
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Project: Eddy County
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Wellbore: OH
Design: OH

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North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Single User Db

Survey

MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
8,145.00	91.89	269.29	4,887.96	-1,415.96	-62.36	-3,385.68	3,383.89	2.97	698,641.98	497,471.59
8,208.00	89.69	268.45	4,887.09	-1,415.09	-63.60	-3,448.66	3,446.83	3.74	698,640.73	497,408.61
8,272.00	90.22	268.95	4,887.14	-1,415.14	-65.05	-3,512.64	3,510.77	1.14	698,639.28	497,344.63
8,335.00	91.98	270.07	4,885.93	-1,413.93	-65.59	-3,575.63	3,573.73	3.31	698,638.74	497,281.65
8,430.00	90.40	269.63	4,883.95	-1,411.95	-65.84	-3,670.60	3,668.69	1.73	698,638.50	497,186.67
8,494.00	92.15	271.22	4,882.53	-1,410.53	-65.36	-3,734.58	3,732.66	3.69	698,638.97	497,122.69
8,589.00	91.19	271.03	4,879.76	-1,407.76	-63.50	-3,829.52	3,827.62	1.03	698,640.83	497,027.75
8,652.00	92.42	271.39	4,877.78	-1,405.78	-62.17	-3,892.47	3,890.59	2.03	698,642.16	496,964.80
8,747.00	90.57	270.55	4,875.30	-1,403.30	-60.56	-3,987.42	3,985.55	2.14	698,643.77	496,869.85
8,811.00	90.22	271.25	4,874.86	-1,402.86	-59.56	-4,051.41	4,049.55	1.22	698,644.78	496,805.86
8,906.00	89.08	270.93	4,875.44	-1,403.44	-57.75	-4,146.39	4,144.54	1.25	698,646.58	496,710.88
8,970.00	88.29	270.93	4,876.91	-1,404.91	-56.71	-4,210.37	4,208.53	1.23	698,647.62	496,646.91
9,069.00	88.20	271.66	4,879.94	-1,407.94	-54.48	-4,309.30	4,307.48	0.74	698,649.86	496,547.98
9,120.00	88.20	271.66	4,881.54	-1,409.54	-53.00	-4,360.25	4,358.45	0.00	698,651.33	496,497.03

Projection to Bit @ 9120' MD @ 1745' FSL, 690' FWL



Pathfinder Energy Services

Pathfinder X & Y Survey Report



Company: Yates Petroleum Corp.
Project: Eddy County
Site: Link "BKT" Federal Com
Well: #3H
Wellbore: OH
Design: OH

Local Co-ordinate Reference: Well #3H
TVD Reference: WELL @ 3472.00ft (Original Well Elev)
MD Reference: WELL @ 3472.00ft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: EDM 2003.16 Single User Db

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL OH (3H)	0.00	0.00	4,870.00	83.17	-4,391.26	698,787.508	496,466.019	32° 55' 15.224 N	104° 28' 46.437 W
- survey misses by 140.14ft at 9120.00ft MD (4881.54 TVD, -53.00 N, -4360.25 E)									
- Point									
TGT 1 (#3) @ 1000'V:	0.00	360.00	4,944.00	-3.88	-1,000.00	698,700.454	499,857.276	32° 55' 14.407 N	104° 28' 6.650 W
- survey misses by 54.89ft at 5752.19ft MD (4958.40 TVD, 49.07 N, -998.32 E)									
- Point									
Tgt 2(#3) @ 1500' VS	0.00	0.00	4,928.00	7.85	-1,500.00	698,712.184	499,357.276	32° 55' 14.517 N	104° 28' 12.516 W
- survey misses by 39.41ft at 6255.46ft MD (4955.35 TVD, 36.21 N, -1501.18 E)									
- Point									

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
4,420.00	4,418.77	-32.31	-27.82	Tie into Gyro @ 4420' MD
9,120.00	4,881.54	-53.00	-4,360.25	Projection to Bit @ 9120' MD @ 1745' FSL, 690' FWL

Checked By: _____ Approved By: _____ Date: _____

DIRECTIONAL SURVEY REPORT

YATES PETROLEUM
LINK BKT FED COM #3H
EDDY, NEW MEXICO

PREPARED BY: FRANCISCO SINISTERRA

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) DEREK BOYD
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 9/18/08 TO 10/1/08
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
LINK BKT FED COM #3H
EDDY COUNTY, NM
RIG: JW #4
9. SURVEY CERTIFIED FROM: 4481 TO 9069 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 4360.57 FEET ON A BEARING OF 269.30 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 9120.00 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.


FRANCISCO SINISTERRA
M/LWD SERVICE COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 09/19/2008
Date Completed: 09/30/2008

YATES PETROLEUM
LINK BKT FED COM #3H
EDDY COUNTY, NM
Rig:JW4

PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers:HAFA DONARUMMA
DEREK BOYD

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.55.14.4582 N LON:104.27.54.9177 W
GRID Reference:NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 500857.2760 Y: 698704.3340
North Aligned To:GRID NORTH
Total Magnetic Correction: 8.44° EAST TO GRID
Vertical Section Plane: 271.09
Survey Vert. Reference: 14.00' Kelly Bushing To Ground
Altitude:3485.00' Ground To MSL

Measured Depth	9120.00	(feet)
Inclination	88.20	(deg)
Azimuth	271.66	(deg)
True Vertical Depth	4881.53	(feet)
Vertical Section	4358.45	(feet)
Survey X cord	496497.03	(feet)
Survey Y cord	698651.34	(feet)
Survey Lat	32.92052136 N	(deg)
Survey Lon	104.47946429 W	(deg)
Rectangular Corr. N/S	53.00 S	(feet)
Rectangular Corr. E/W	4360.25 W	(feet)
Closure Distance	4360.57	(feet)
Direction of Closure	269.30	(deg)
Dogleg Severity	0.01	(deg/100ft)

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 09/19/2008
Date Completed: 09/30/2008

YATES PETROLEUM
LINK BKT FED COM #3H
EDDY COUNTY, NM
Rig:JW4
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers:HAFA DONARUMMA
DEREK BOYD

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.55.14.4582 N LON:104.27.54.9177 W
GRID Reference:NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 500857.2760 Y: 698704.3340
North Aligned To:GRID NORTH
Total Magnetic Correction: 8.44° EAST TO GRID
Vertical Section Plane: 271.09
Survey Vert. Reference: 14.00' Kelly Bushing To Ground
Altitude:3485.00' Ground To MSL

Measured Depth	9120.00	(feet)
Inclination	88.20	(deg)
Azimuth	271.66	(deg)
True Vertical Depth	4881.53	(feet)
Vertical Section	4358.45	(feet)
Survey X cord	496497.03	(feet)
Survey Y cord	698651.34	(feet)
Survey Lat	32.92052136 N	(deg)
Survey Lon	104.47946429 W	(deg)
Rectangular Corr. N/S	53.00 S	(feet)
Rectangular Corr. E/W	4360.25 W	(feet)
Closure Distance	4360.57	(feet)
Direction of Closure	269.30	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM
 LINK BKT FED COM #3H
 EDDY COUNTY, NM
 Rig:JW4
 PathFinder Office Supervisor: FRANCISCO SINISTERRA
 PathFinder Field Engineers: HAFA DONARUMMA
 DEREK BOYD

Page 01/04
 Tie-in Date: 09/19/2008
 Date Completed: 09/30/2008

Survey Horiz. Reference:WELLHEAD
 Ref Coordinates: LAT:32.55.14.4582 N LON:104.27.54.9177 W
 Reference:NAD83 new mexico east Transverse Mercator
 Ref GRID Coord: X: 500857.2760 Y: 698704.3340
 North Aligned To:GRID NORTH
 Total Magnetic Correction: 8.44° EAST TO GRID
 Vertical Section Plane: 271.09
 Survey Vert. Reference: 14.00' Kelly Bushing To Ground
 Altitude:3485.00' Ground To MSL

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		Closure		DLS
						Rectangular Offsets (ft)	(ft)	Dist (ft)	Dir (deg)	
TIE IN TO SCIENTIFIC GYRO @ 4420' MD.										
4420.00	2.70	50.20	4418.76	0.00	27.20	32.31 S	27.82 W	42.64@	220.73	0.00
THE FOLLOWING ARE PATHFINDER ENERGY SURVEYS.										
4481.00	2.81	49.60	4479.69	61.00	24.99	30.42 S	25.58 W	39.74@	220.06	0.19
4512.00	1.41	4.71	4510.67	31.00	24.40	29.55 S	24.97 W	38.68@	220.20	6.67
4543.00	4.84	279.40	4541.63	31.00	25.67	28.95 S	26.23 W	39.07@	222.17	15.90
4573.00	10.02	270.45	4571.37	30.00	29.54	28.73 S	30.09 W	41.60@	226.33	17.64
4604.00	14.77	266.12	4601.64	31.00	36.17	28.97 S	36.73 W	46.78@	231.73	15.60
4635.00	18.55	266.15	4631.33	31.00	45.03	29.57 S	45.60 W	54.35@	237.03	12.19
4666.00	20.75	270.17	4660.52	31.00	55.43	29.89 S	56.01 W	63.49@	241.92	8.32
4697.00	24.97	273.98	4689.08	31.00	67.46	29.42 S	68.04 W	74.12@	246.62	14.42
4728.00	29.63	275.33	4716.62	31.00	81.65	28.25 S	82.20 W	86.92@	251.03	15.16
4759.00	33.50	274.80	4743.03	31.00	97.83	26.82 S	98.36 W	101.95@	254.75	12.52
4790.00	36.49	274.68	4768.43	31.00	115.57	25.35 S	116.08 W	118.81@	257.68	9.65
4821.00	39.13	274.92	4792.92	31.00	134.54	23.76 S	135.01 W	137.09@	260.02	8.53
4852.00	43.09	274.73	4816.27	31.00	154.87	22.05 S	155.32 W	156.88@	261.92	12.78
4883.00	45.55	274.83	4838.44	31.00	176.48	20.24 S	176.90 W	178.06@	263.47	7.94
4914.00	47.57	273.94	4859.76	31.00	198.96	18.53 S	199.34 W	200.20@	264.69	6.84
4945.00	50.12	272.34	4880.16	31.00	222.28	17.25 S	222.65 W	223.31@	265.57	9.10
4975.00	54.08	269.86	4898.59	30.00	245.94	16.81 S	246.31 W	246.88@	266.09	14.72
5006.00	57.77	269.11	4915.95	31.00	271.60	17.05 S	271.98 W	272.51@	266.41	12.07
5037.00	60.23	269.94	4931.92	31.00	298.17	17.27 S	298.55 W	299.05@	266.69	8.26
5068.00	64.37	270.20	4946.32	31.00	325.60	17.23 S	325.99 W	326.44@	266.97	13.38
5099.00	68.41	270.46	4958.74	31.00	354.00	17.07 S	354.39 W	354.80@	267.24	13.05

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM
LINK BKT FED COM #3H
EDDY COUNTY, NM
RIG:JW4

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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)
5130.00	72.46	270.11	4969.12	31.00	383.20	16.92 S	383.59 W	383.96@	267.47	13.11
5161.00	76.77	271.86	4977.34	31.00	413.08	16.40 S	413.47 W	413.79@	267.73	14.93
5192.00	80.37	273.15	4983.48	31.00	443.45	15.07 S	443.82 W	444.07@	268.05	12.31
5223.00	84.06	274.99	4987.68	31.00	474.12	12.89 S	474.45 W	474.62@	268.44	13.28
5254.00	87.67	276.66	4989.92	31.00	504.92	9.75 S	505.20 W	505.30@	268.89	12.83
5322.00	95.41	277.18	4988.09	68.00	572.50	1.57 S	572.63 W	572.63@	269.84	11.41
5386.00	95.85	276.87	4981.81	64.00	635.85	6.22 N	635.84 W	635.87@	270.56	0.84
5449.00	95.76	276.93	4975.44	63.00	698.20	13.75 N	698.07 W	698.20@	271.13	0.17
5482.00	95.94	278.41	4972.07	33.00	730.81	18.13 N	730.60 W	730.82@	271.42	4.50
5513.00	95.23	279.26	4969.06	31.00	761.38	22.87 N	761.09 W	761.43@	271.72	3.56
5576.00	94.09	278.69	4963.94	63.00	823.58	32.66 N	823.11 W	823.76@	272.27	2.02
5608.00	93.56	277.41	4961.80	32.00	855.27	37.13 N	854.72 W	855.53@	272.49	4.32
5640.00	91.71	276.02	4960.33	32.00	887.08	40.87 N	886.47 W	887.41@	272.64	7.23
5671.00	90.48	274.74	4959.74	31.00	917.99	43.78 N	917.32 W	918.37@	272.73	5.73
5703.00	90.48	273.58	4959.47	32.00	949.94	46.10 N	949.24 W	950.35@	272.78	3.63
5735.00	91.71	273.61	4958.86	32.00	981.90	48.11 N	981.17 W	982.34@	272.81	3.85
5798.00	90.75	270.69	4957.51	63.00	1044.87	50.47 N	1044.10 W	1045.32@	272.77	4.88
5830.00	90.75	271.06	4957.09	32.00	1076.87	50.96 N	1076.09 W	1077.30@	272.71	1.16
5894.00	89.60	269.68	4956.89	64.00	1140.86	51.37 N	1140.09 W	1141.25@	272.58	2.81
5957.00	90.31	267.81	4956.94	63.00	1203.80	49.99 N	1203.07 W	1204.11@	272.38	3.17
6020.00	91.80	267.82	4955.78	63.00	1266.69	47.59 N	1266.01 W	1266.91@	272.15	2.36
6115.00	89.34	266.77	4954.84	95.00	1361.47	43.11 N	1360.89 W	1361.58@	271.81	2.82
6179.00	89.60	266.95	4955.43	64.00	1425.29	39.60 N	1424.79 W	1425.34@	271.59	0.49
6242.00	90.40	267.80	4955.43	63.00	1488.16	36.71 N	1487.73 W	1488.18@	271.41	1.85
6305.00	90.40	268.22	4954.99	63.00	1551.06	34.53 N	1550.69 W	1551.07@	271.28	0.67
6368.00	88.20	266.40	4955.76	63.00	1613.92	31.57 N	1613.61 W	1613.92@	271.12	4.53
6432.00	89.52	265.46	4957.03	64.00	1677.64	27.03 N	1677.43 W	1677.65@	270.92	2.53

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM
LINK BKT FED COM #3H
EDDY COUNTY, NM
RIG:JW4

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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)
6495.00	94.44	264.55	4954.86	63.00	1740.23	21.55 N	1740.13 W	1740.27@	270.71	7.94
6558.00	93.91	263.85	4950.27	63.00	1802.61	15.20 N	1802.64 W	1802.71@	270.48	1.39
6622.00	93.21	263.82	4946.30	64.00	1865.97	8.34 N	1866.15 W	1866.17@	270.26	1.09
6685.00	93.83	265.12	4942.43	63.00	1928.43	2.28 N	1928.74 W	1928.74@	270.07	2.28
6749.00	92.95	264.90	4938.65	64.00	1991.96	3.28 S	1992.38 W	1992.39@	269.91	1.42
6812.00	92.68	265.45	4935.55	63.00	2054.55	8.57 S	2055.08 W	2055.10@	269.76	0.97
6876.00	93.12	266.12	4932.31	64.00	2118.19	13.27 S	2118.83 W	2118.87@	269.64	1.25
6939.00	93.12	266.40	4928.88	63.00	2180.88	17.37 S	2181.60 W	2181.67@	269.54	0.44
7003.00	91.98	266.25	4926.04	64.00	2244.59	21.47 S	2245.41 W	2245.51@	269.45	1.80
7066.00	91.19	266.17	4924.29	63.00	2307.34	25.63 S	2308.24 W	2308.39@	269.36	1.26
7129.00	90.75	266.32	4923.23	63.00	2370.10	29.76 S	2371.10 W	2371.29@	269.28	0.74
7193.00	91.28	267.52	4922.09	64.00	2433.92	33.19 S	2434.99 W	2435.22@	269.22	2.05
7256.00	91.45	267.94	4920.59	63.00	2496.80	35.69 S	2497.93 W	2498.18@	269.18	0.72
7320.00	91.01	268.25	4919.22	64.00	2560.69	37.82 S	2561.88 W	2562.16@	269.15	0.84
7383.00	90.22	268.50	4918.54	63.00	2623.62	39.60 S	2624.85 W	2625.15@	269.14	1.32
7447.00	90.04	269.05	4918.40	64.00	2687.57	40.97 S	2688.83 W	2689.15@	269.13	0.90
7478.00	91.45	268.84	4918.00	31.00	2718.54	41.54 S	2719.82 W	2720.14@	269.12	4.60
7574.00	93.03	267.93	4914.24	96.00	2814.36	44.24 S	2815.71 W	2816.06@	269.10	1.90
7669.00	92.33	268.06	4909.80	95.00	2909.11	47.56 S	2910.55 W	2910.93@	269.06	0.75
7764.00	90.57	267.06	4907.40	95.00	3003.90	51.61 S	3005.42 W	3005.87@	269.02	2.13
7827.00	91.71	267.44	4906.14	63.00	3066.74	54.63 S	3068.34 W	3068.82@	268.98	1.91
7859.00	93.12	267.19	4904.80	32.00	3098.64	56.13 S	3100.27 W	3100.78@	268.96	4.47
7954.00	93.83	268.85	4899.04	95.00	3193.33	59.40 S	3195.04 W	3195.59@	268.93	1.90
8018.00	93.39	268.53	4895.01	64.00	3257.15	60.86 S	3258.89 W	3259.46@	268.93	0.85
8081.00	93.74	269.74	4891.09	63.00	3319.99	61.81 S	3321.76 W	3322.34@	268.93	2.00
8145.00	91.89	269.29	4887.95	64.00	3383.88	62.36 S	3385.68 W	3386.26@	268.94	2.97
8208.00	89.69	268.45	4887.08	63.00	3446.83	63.60 S	3448.66 W	3449.25@	268.94	3.74

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM
LINK BKT FED COM #3H
EDDY COUNTY, NM
RIG:JW4

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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)
8272.00	90.22	268.95	4887.13	64.00	3510.77	65.05 S	3512.64 W	3513.24@	268.94	1.14
8335.00	91.98	270.07	4885.92	63.00	3573.73	65.59 S	3575.62 W	3576.23@	268.95	3.31
8430.00	90.40	269.63	4883.95	95.00	3668.68	65.84 S	3670.60 W	3671.19@	268.97	1.73
8494.00	92.15	271.22	4882.52	64.00	3732.66	65.36 S	3734.58 W	3735.15@	269.00	3.69
8589.00	91.19	271.03	4879.75	95.00	3827.62	63.50 S	3829.52 W	3830.05@	269.05	1.03
8652.00	92.42	271.39	4877.77	63.00	3890.59	62.17 S	3892.47 W	3892.97@	269.08	2.03
8747.00	90.57	270.55	4875.29	95.00	3985.55	60.56 S	3987.42 W	3987.88@	269.13	2.14
8811.00	90.22	271.25	4874.85	64.00	4049.55	59.56 S	4051.41 W	4051.85@	269.16	1.22
8906.00	89.08	270.93	4875.43	95.00	4144.54	57.75 S	4146.39 W	4146.79@	269.20	1.25
8970.00	88.29	270.93	4876.90	64.00	4208.52	56.71 S	4210.36 W	4210.75@	269.23	1.23
9069.00	88.20	271.66	4879.93	99.00	4307.48	54.47 S	4309.29 W	4309.64@	269.28	0.74
STRAIGHT LINE PROJECTION TO BIT @ 9120'MD.										
9120.00	88.20	271.66	4881.53	51.00	4358.45	53.00 S	4360.25 W	4360.57@	269.30	0.00

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

YATES PETROLEUM
LINK BKT FED COM #3H
EDDY COUNTY, NM
Rig:JW 4

Fri Sep 12 14:27:52 2008

Coordinates

Latitude: 32.920683 N (32 deg. 55 min. 14.4582 sec.)
Longitude: 104.465255 W (-104 deg. 27 min. 54.9177 sec.)
Elevation: 3485.00 feet.
Calculation Date: Sep/12/2008

Magnetic Calculations

Model: IGRF2005
Dip Angle: 60.7538 degrees
Total Magnetic Field: 0.49234 gauss
Magnetic Declination: 8.365333 degrees
Horizontal Intensity: 0.240541 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 8.365333 Degr

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 500857.2760 feet
Y: 698704.3340 feet
True to Grid: (convergence) 0.071696 degrees
Magnetic to Grid: 8.437029 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 8.437029 Degr.

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

FIELD

YATES PETROLEUM
LINK BKT FED COM #3H
EDDY COUNTY, NEW MEXICO
Rig:JW4

Tue Oct 07 11:52:32 2008

Coordinates

Latitude: 32.920683 N (32 deg. 55 min. 14.4582 sec.)
Longitude: 104.465255 W (-104 deg. 27 min. 54.9177 sec.)
Elevation: 3499.00 feet.
Calculation Date: Sep/19/2008

Magnetic Calculations

Model: IGRF2005
Dip Angle: 60.7534 degrees
Total Magnetic Field: 0.49232 gauss
Magnetic Declination: 8.363048 degrees
Horizontal Intensity: 0.240535 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 8.363048 Degr

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 500857.2760 feet
Y: 698704.3340 feet
True to Grid: (convergence) 0.071696 degrees
Magnetic to Grid: 8.434744 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 8.434744 Degr.



ENERGY SERVICES

TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	YATES PETROLEUM		
LEASE / WELL No.:	LINK BKT FED COM	#3H	
WELL LOCATION:	EDDY COUNTY		
COUNTY / STATE / COUNTRY:	EDDY COUNTY	NM	USA
RIG:	JW#4		
API WELL No:	30-015-36397		
JOB No:	101007866-WT-WT		
P.O. / AFE No.			
DIRECTIONAL COMPANY:	PATHFINDER		

WELL SITE INFORMATION

MAGNETIC DECLINATION:	8.44		
On Wall Plat:	8.437	LWD Calculated:	8.437
		Agreed Upon:	8.437
X =	500857.276000	Feet	Y = 648704.334000
			Feet
SITE LATITUDE:	32.920683 N	SITE LONGITUDE:	104.465255 W
GRID SYSTEM:	TRUE ☐ UTM ☒ LAMBERT ☐	ZONE:	NEW MEXICO EAST
PROPOSED DRIFT DIRECTION:	271.09		
KELLY BUSHING ELEVATION:	14		
ALTITUDE:	3485	Feet	WATER DEPTH:
			Feet

TIE-IN SURVEY

MEASURED DEPTH:	4420
DRIFT ANGLE:	2.7
DRIFT DIRECTION:	50.2
TRUE VERTICAL DEPTH:	4418.76
VERTICAL SECTION:	27.2
RECTANGULAR COORDINATE (N / S):	32.31 S
RECTANGULAR COORDINATE (E / W):	27.82 W
CLOSURE DISTANCE / DIRECTION:	
SURVEY CALCULATION METHOD:	AA ☐ MC ☒ RC ☐ BT ☐
SOURCE OF TIE-IN DATA (COMPANY):	SCIENTIFIC GYRO
COPY OF TIE-IN SURVEY REPORT	☒ YES ☐ NO

WELL PLAN

KICKOFF DEPTH:	4420	TOTAL DEPTH:	9120
KICKOFF ANGLE:	2.7	MAX ANGLE:	9.5

PES Engineers:

DONARUMMA

**Signature of both field engineers required if applicable

Directional Driller: PEDRO A. / JOE L.

DATE: 18-Sep-2008

SCIENTIFIC DRILLING CONTROL

WATER D.P.D. SURVEY

International Geophysical Survey

1968

WATER D.P.D. SURVEY

Well Number	:	1111-11K-110000-110-111
Well Location	:	EAST COAST, NEW MEXICO
Job Number	:	1111-11K-110000-110-111
Location Latitude	:	32.520
Survey Date	:	11 SEP 1968
S.D.C. Personnel	:	VICTOR HEINDEL JR
Length Units	:	Feet
North Reference	:	GRID 1111
Grid Correction	:	0.10 Degrees
Survey Depth Zero	:	RKB
Proposed Direction	:	271.00°
Calculation Method	:	Minimum Curvature

Remarks: The WATER D.P.D. Survey will be a low depth survey.

PROPOSAL FORM

Fee

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TABLE OF INFORMATION

Model Home with 2 1/2 Bathrooms

Form # 10-81 Rev

Job No. # 3100000000

Job

Proposal # 311,000

Depth T.O.B. V.S. Top Gr. Level Elevation Elevation Elevation
 (Feet) (Feet) (Feet) (Feet) (Feet) (Feet) (Feet) (Feet)

0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00
100.00	100.00	0.10	0.10	150.00	0.00	0.10	0.10
200.00	200.00	0.14	0.05	109.00	-0.01	0.24	0.10
300.00	300.00	0.84	0.00	271.51	0.10	0.10	1.27
400.00	400.00	0.79	0.04	203.04	0.74	-0.00	0.01
500.00	500.00	1.20	0.04	207.85	1.00	1.15	0.11
600.00	600.00	1.71	0.03	200.00	2.04	-1.10	0.71
700.00	700.00	2.00	0.00	210.00	3.00	0.70	0.00
800.00	800.00	0.50	1.00	205.00	5.00	0.00	0.70
900.00	899.00	0.00	2.00	210.00	7.00	0.10	1.00
1000.00	999.78	0.10	2.51	209.00	-11.01	-0.00	0.20
1100.00	1099.00	11.10	3.01	209.00	15.01	11.00	0.10
1200.00	1199.00	12.00	2.43	208.00	19.01	15.00	0.00
1300.00	1299.51	14.74	1.00	200.00	22.90	15.10	0.11
1400.00	1399.43	16.66	2.00	210.00	26.04	-17.10	0.00
1500.00	1499.36	16.40	2.04	200.00	29.50	15.00	0.26
1600.00	1599.29	20.22	2.10	200.00	33.95	-20.00	0.10
1700.00	1699.23	21.00	1.10	200.00	35.00	0.00	0.00
1800.00	1799.19	22.00	1.00	200.00	36.00	25.00	0.00
1900.00	1899.10	23.00	1.00	200.00	41.00	21.00	0.20
2000.00	1999.10	24.00	1.00	200.00	43.00	25.00	0.00
2100.00	2099.11	24.00	0.00	199.00	44.00	25.00	0.00
2200.00	2199.11	25.00	0.00	207.00	46.00	-20.00	0.10
2300.00	2299.10	25.00	0.00	211.00	47.00	20.00	0.00
2400.00	2399.10	26.00	0.00	255.00	47.00	-20.00	0.00
2500.00	2499.00	27.00	0.00	255.00	47.00	20.00	0.00
2600.00	2599.00	28.00	0.00	265.00	47.00	20.00	0.00
2700.00	2699.00	29.00	0.00	265.00	48.00	-20.00	0.00
2800.00	2799.00	29.00	0.00	275.00	48.00	20.00	0.00
2900.00	2899.00	30.00	0.00	275.00	48.00	20.00	0.00
3000.00	2999.00	31.00	0.00	285.00	47.00	20.00	0.00
3100.00	3099.00	31.00	0.00	285.00	47.00	20.00	0.00
3200.00	3199.00	32.00	0.00	285.00	47.00	20.00	0.00
3300.00	3299.00	33.00	0.00	285.00	47.00	20.00	0.00
3400.00	3399.00	34.00	0.00	285.00	47.00	20.00	0.00
3500.00	3499.00	35.00	0.00	285.00	47.00	20.00	0.00
3600.00	3599.00	36.00	0.00	285.00	47.00	20.00	0.00
3700.00	3699.00	37.00	0.00	285.00	47.00	20.00	0.00
3800.00	3799.00	38.00	0.00	285.00	47.00	20.00	0.00
3900.00	3899.00	39.00	0.00	285.00	47.00	20.00	0.00
4000.00	3999.00	40.00	0.00	285.00	47.00	20.00	0.00

