

Submit To Appropriate District Office Two Copies District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, 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 July 17, 2008																													
		1. WELL API NO. 30-015-37500																													
		2. Type of Lease ☒ STATE ☐ FEE ☐ FED/INDIAN																													
		3. State Oil & Gas Lease No. V-7318																													
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 Jericho BJK State Com 6. Well Number: 2H																													
7. Type of Completion: ☒ NEW WELL ☐ WORKOVER ☐ DEEPENING ☐ PLUGBACK ☐ DIFFERENT RESERVOIR ☐ OTHER		RECEIVED OCT 18 2010 NMOCD ARTESIA																													
8. Name of Operator Yates Petroleum Corporation																															
10. Address of Operator 105 South Fourth Street, Artesia, NM 88210		11. Pool name or Wildcat Wildcat: Bone Spring (Oil)																													
12. Location <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Unit Ltr</th> <th>Section</th> <th>Township</th> <th>Range</th> <th>Lot</th> <th>Feet from the</th> </tr> <tr> <td>Surface: A</td> <td>15</td> <td>25S</td> <td>27E</td> <td></td> <td>660</td> </tr> <tr> <td>BH: D</td> <td>15</td> <td>25S</td> <td>27E</td> <td></td> <td>703</td> </tr> </table>	Unit Ltr	Section	Township	Range	Lot	Feet from the	Surface: A	15	25S	27E		660	BH: D	15	25S	27E		703	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>N/S Line</th> <th>Feet from the</th> <th>E/W Line</th> <th>County</th> </tr> <tr> <td>North</td> <td>330</td> <td>East</td> <td>Eddy</td> </tr> <tr> <td>North</td> <td>4518</td> <td>East</td> <td>Eddy</td> </tr> </table>	N/S Line	Feet from the	E/W Line	County	North	330	East	Eddy	North	4518	East	Eddy
Unit Ltr	Section	Township	Range	Lot	Feet from the																										
Surface: A	15	25S	27E		660																										
BH: D	15	25S	27E		703																										
N/S Line	Feet from the	E/W Line	County																												
North	330	East	Eddy																												
North	4518	East	Eddy																												
13. Date Spudded RH 2/1/10 RT 6/18/10	14. Date T.D. Reached 7/11/10	15. Date Rig Released 7/14/10																													
16. Date Completed (Ready to Produce) 9/20/10		17. Elevations (DF and RKB, RT, GR, etc.) 3172'GR 3191'KB																													
18. Total Measured Depth of Well 10,495'		19. Plug Back Measured Depth 10,440'																													
20. Was Directional Survey Made? Yes (Attached)		21. Type Electric and Other Logs Run CNL, Hi-Res Laterolog Array, CBL																													
22. Producing Interval(s), of this completion - Top, Bottom, Name 6384' - 10,434' Bone Spring																															
23. CASING RECORD (Report all strings set in well)																															
CASING SIZE	WEIGHT LB./FT.	DEPTH SET																													
20"	Conductor	40'																													
13-3/8"	48#	470'																													
9-5/8"	36#	2232'																													
5-1/2"	17#	10,490'																													
24. LINER RECORD																															
SIZE	TOP	BOTTOM																													
2-7/8"	5600'	5600'																													
25. TUBING RECORD																															
SIZE	DEPTH SET	PACKER SET																													
2-7/8"	5600'	5600'																													
26. Perforation record (interval, size, and number) SEE ATTACHED SHEET																															
27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC. <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>DEPTH INTERVAL</th> <th>AMOUNT AND KIND MATERIAL USED</th> </tr> <tr> <td colspan="2" style="text-align: center; padding: 10px;">SEE ATTACHED SHEET</td> </tr> </table>			DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED	SEE ATTACHED SHEET																										
DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED																														
SEE ATTACHED SHEET																															
28. PRODUCTION																															
Date First Production 9/21/10	Production Method (Flowing, gas lift, pumping - Size and type pump) Pumping																														
Well Status (Prod. or Shut-in) Producing																															
Date of Test 10/7/10	Hours Tested 24 hrs	Choke Size NA																													
Flow Tubing Press. 200 psi	Casing Pressure 760 psi	Calculated 24-Hour Rate 81																													
Oil - Bbl 81		Gas - MCF 4729																													
Water - Bbl. 818		Oil Gravity - API - (Corr.) NA																													
29. Disposition of Gas (Sold, used for fuel, vented, etc.) Sold		30. Test Witnessed By R. Smith																													
31. List Attachments Logs, Directional and Deviation 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 <u>Tina Huerta</u>	Printed Name <u>Tina Huerta</u>	Title <u>Regulatory Compliance Supervisor</u> Date <u>October 15, 2010</u>																													
E-mail Address <u>tinah@yatespetroleum.com</u>																															

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 completion 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 734'	T. Strawn		T. Kirtland	T. Penn. "B
B. Salt 2117'	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. Castile 460'		T. Morrison	
T. Drinkard	T. Bell Canyon 2358'		T. Todilto	
T. Abo	T. Cherry Canyon 3174'		T. Entrada	
T. Wolfcamp	T. Brushy Canyon 4250'		T. Wingate	
T. Penn	T. Bone Spring 5828'		T. Chinle	
T. Cisco	T		T. Permian	

OIL OR GAS SANI 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

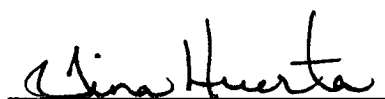
Form C-105 continued:

26. Perforation Record (interval, size and number)

10,434' (9)	8334' (9)
10,284' (9)	8184' (9)
10,134' (9)	8034' (9)
9984' (9)	7884' (9)
9834' (9)	7734' (9)
9684' (9)	7584' (9)
9534' (9)	7434' (9)
9384' (9)	7284' (9)
9234' (9)	7134' (9)
9084' (9)	6984' (9)
8934' (9)	6834' (9)
8734' (9)	6684' (9)
8634' (9)	6534' (9)
8484' (9)	6384' (9)

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

<u>Depth Interval</u>	<u>Amount and Kind Material Used</u>
9984'-10,434'	Frac with a 30# borate gel, pumped 66,508# Ottawa 40/70, 73,044# Super LC 20/40, 38,655# into formation
9854'	Spotted 1500g 7-1/2% HCL acid
9384'-9834'	Frac with a 30# borate gel, pumped 1500g 7-1/2% HCL acid, 59,417# Ottawa 40/70, 120,000# Ottawa 20/40, 80,000# Super LC 20/40
9250'	Spotted 1500g 7-1/2% HCL acid
8734'-9234'	Frac with a 30# borate gel, pumped 1500g 7-1/2% HCL acid, 65,013# 40/70, 124,965# Ottawa 20/40, 78,743# Super LC 20/40
8654'	Spotted 1500g 7-1/2% HCL acid
8184'-8634'	Frac with a 30# borate gel, pumped 1500g 7-1/2% HCL acid, 64,803# Ottawa 40/70, 122,448# Ottawa 20/40, 81,814# Super LC 20/40
8054'	Spotted 1500g 7-1/2% HCL acid
7584'-8034'	Frac with a 30# borate gel, pumped 1500g 7-1/2% HCL acid, 62,996# Ottawa 40/70, 118,657# Ottawa 20/40, 81,550# Super LC 20/40
7454'	Spotted 1500g 7-1/2% HCL acid
6984'-7434'	Frac with a 30# borate gel, pumped 1500g 7-1/2% HCL acid, 62,528# Ottawa 40/70, 118,125# Ottawa 20/40, 82,525# Super LC 20/40
6854'	Spotted 1500g 7-1/2% HCL acid
6384'-6834'	Frac with a 30# borate gel, pumped 1500g 7-1/2% HCL acid, 23,248# Ottawa 40/70, 91,828# Ottawa 20/40, 71,106# Super LC 20/40



Regulatory Compliance Supervisor
October 15, 2010



PO Box 1370
Artesia, NM 88211-1370
(505) 748-1288

July 15, 2010

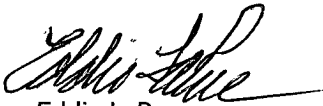
Yates Petroleum Corporation
105 S. 4th
Artesia, NM 88211-1395

RE: Jericho BKJ St Com #2H
660' F2L & 330' FEL
Sec. 15, T25S, R27E
Eddy County, New Mexico

Dear Sir,

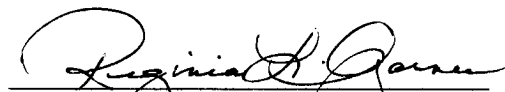
The attached is the Deviation Survey for the above captioned well.

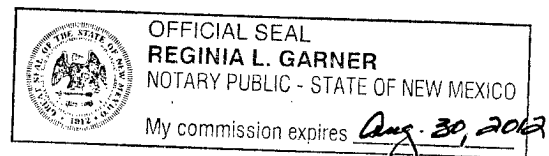
Very truly yours,


Eddie LaRue
Operations Manager

State of New Mexico }
County of Eddy }

The foregoing was acknowledged before me this 15th day of July, 2010.


Notary Public



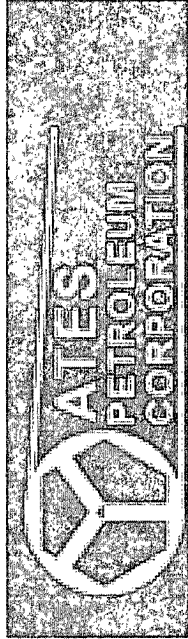
Pason DataHub Deviation Survey
Well Dossier 1276840811 - JERICHO BKJ STATE COM
#

# Date	Depth	Deviation	Direction	TVD	Horiz
6/18/2010	214	0.80	0.00	0.00	0.00
6/20/2010	420	1.60	0.00	0.00	0.00
6/20/2010	522	1.23	279.05	0.00	0.00
6/20/2010	706	2.29	283.15	0.00	0.00
6/20/2010	890	1.23	0.00	0.00	0.00
6/20/2010	1074	1.49	0.00	0.00	0.00
6/20/2010	1259	2.10	280.64	0.00	0.00
6/21/2010	1449	2.55	272.64	0.00	0.00
6/21/2010	1544	2.20	269.43	0.00	0.00
6/21/2010	1639	0.62	220.50	0.00	0.00
6/21/2010	1830	1.41	119.44	0.00	0.00
6/21/2010	2019	3.34	103.74	0.00	0.00
6/21/2010	2178	2.46	82.33	0.00	0.00
6/23/2010	2284	2.20	75.53	0.00	0.00
6/23/2010	2537	0.88	356.49	0.00	0.00
6/23/2010	3012	0.79	20.18	0.00	0.00
6/23/2010	3488	0.26	42.72	0.00	0.00
6/23/2010	3964	0.18	218.12	0.00	0.00
6/24/2010	4439	0.79	185.89	0.00	0.00
6/24/2010	4915	0.97	81.76	0.00	0.00
6/24/2010	5390	0.97	96.81	0.00	0.00
6/25/2010	5869	0.79	197.15	0.00	0.00
6/25/2010	6336	0.44	85.98	0.00	0.00
6/26/2010	6800	1.32	203.05	0.00	0.00
6/27/2010	7267	0.79	288.38	0.00	0.00
6/27/2010	7735	5.80	31.06	0.00	0.00
6/27/2010	7922	3.52	60.81	0.00	0.00
6/28/2010	8295	1.85	68.51	0.00	0.00
6/28/2010	8453	0.70	49.36	0.00	0.00
7/3/2010	5641	1.06	130.28	0.00	0.00
7/3/2010	5672	0.79	141.99	5670.00	2.42
7/3/2010	5704	1.14	241.40	5702.00	2.56
7/3/2010	5736	3.96	268.53	5734.00	3.95
7/4/2010	5767	8.18	272.15	5765.00	7.20
7/4/2010	5799	12.75	273.49	5797.00	13.00
7/4/2010	5831	17.59	274.15	5828.00	15.13
7/4/2010	5862	22.42	274.20	5857.00	31.96
7/4/2010	5894	27.08	272.81	5886.00	45.33
7/4/2010	5926	30.86	270.80	59.14	60.80
7/4/2010	5958	33.94	269.82	0.00	0.00
7/4/2010	5989	37.02	269.03	5966.00	95.95
7/4/2010	6026	41.33	268.15	5995.00	119.00
7/4/2010	6057	45.99	267.30	6017.00	140.00
7/5/2010	6088	50.65	266.73	6038.00	163.00
7/5/2010	6119	55.49	267.02	6056.00	188.00
7/5/2010	6150	59.18	267.24	6073.00	214.00
7/5/2010	6181	61.99	269.95	6088.00	241.00
7/5/2010	6213	64.98	270.90	6103.00	270.00
7/5/2010	6224	67.97	272.00	6115.00	298.00

Pason DataHub Deviation Survey
 # Well Dossier 1276840811 - JERICO BKJ STATE COM
 #

# Date	Depth	Deviation	Direction	TVD	Horiz
7/5/2010	6275	71.84	272.79	6126.00	327.00
7/5/2010	6306	76.41	272.22	6134.00	357.00
7/5/2010	6337	81.25	271.56	6140.00	387.87
7/5/2010	6368	85.03	270.74	6144.00	418.00
7/6/2010	6451	90.04	270.82	6147.00	501.00
7/6/2010	6547	89.43	271.70	6148.00	597.00
7/6/2010	6733	88.64	271.75	6152.00	783.00
7/6/2010	6827	89.52	271.45	6153.00	877.00
7/7/2010	6920	88.99	271.40	6155.00	970.00
7/7/2010	7013	89.96	271.65	6155.00	1063.00
7/7/2010	7106	90.13	270.94	6155.00	1156.00
7/7/2010	7199	89.52	271.09	6156.00	1249.00
7/7/2010	7292	91.19	271.30	6155.00	1342.00
7/7/2010	7386	91.89	271.66	6153.00	1436.00
7/7/2010	7479	91.63	271.93	6150.00	1529.00
7/7/2010	7573	90.66	272.03	6148.00	1623.00
7/7/2010	7668	89.43	271.83	6148.00	1718.00
7/7/2010	7763	88.20	271.27	6150.00	1813.00
7/8/2010	7881	90.57	270.40	6151.00	1930.00
7/8/2010	7975	90.48	270.57	6150.00	2024.00
7/8/2010	8068	90.22	271.10	6149.00	2117.00
7/9/2010	8161	89.43	271.02	6150.00	2210.00
7/9/2010	8255	88.90	270.24	6151.64	2304.96
7/9/2010	8348	90.22	268.86	6152.00	2397.00
7/9/2010	8441	89.43	268.08	6152.00	2490.00
7/9/2010	8534	88.37	267.99	6154.00	2585.00
7/9/2010	8629	89.16	268.07	6159.00	2678.00
7/9/2010	8721	89.34	267.43	6157.00	2770.00
7/9/2010	8813	89.87	266.89	6158.00	2862.00
7/9/2010	8902	93.83	266.07	6155.00	2956.00
7/10/2010	8999	92.95	266.70	6149.00	3047.00
7/10/2010	9093	92.51	267.10	6145.00	3141.00
7/10/2010	9186	91.89	267.43	6141.00	3234.00
7/10/2010	9280	90.75	267.09	6139.00	3328.00
7/10/2010	9373	89.78	267.76	6139.00	3421.00
7/10/2010	9467	92.51	268.30	6137.00	3514.00
7/10/2010	9562	92.95	268.14	6132.00	3609.00
7/11/2010	9655	90.31	267.01	6130.00	3702.00
7/11/2010	9748	88.90	266.28	6130.00	3795.00
7/11/2010	9841	87.32	266.89	6133.00	3888.00
7/11/2010	9936	88.02	268.63	6137.00	3983.00
7/11/2010	10029	92.77	270.54	6137.00	4075.00
7/11/2010	10122	93.74	270.34	61.32	4168.00
7/11/2010	10216	94.09	270.32	6125.00	4262.00
7/12/2010	10310	90.75	269.90	6121.00	4356.00
7/12/2010	10414	88.55	269.19	6122.00	4460.00

EOF



Yates Petroleum Corp.

**Eddy County
Jericho "BKJ" State Com
#2H
OH**

Survey: MWD #1

Pathfinder X & Y Survey Report

12 July, 2010

PATHFINDER



Pathfinder

Pathfinder X & Y Survey Report



Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County	TVD Reference:	WELL @ 3190.50ft (Original Well Elev)
Site:	Jericho "BKJ" State Corn	MD Reference:	WELL @ 3190.50ft (Original Well Elev)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Midland Database

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

Site	Jericho "BKJ" State Corn	Northings:	413,080.221 ft	Latitude:	32° 8' 7.915 N
Site Position:		Easting:	591,679.342 ft	Longitude:	104° 10' 14.500 W
From:	Map	Slot Radius:	"	Grid Convergence:	0.09 °
Position Uncertainty:	0.00 ft				

Well	#2H	Northings:	413,080.221 ft	Latitude:	32° 8' 7.915 N
Well Position	+N/-S	Easting:	591,679.342 ft	Longitude:	104° 10' 14.500 W
Position Uncertainty	+E/-W	Wellhead Elevation:	ft	Ground Level:	3,172.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	06/22/2010	7.97	60.02	48,594

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	270.31	

Survey Program	Date	07/12/2010			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
5,641.00	10,495.00	MWD #1 (OH)	MWD	MWD - Standard	



Pathfinder

Pathfinder X & Y Survey Report



Company: Yates Petroleum Corp.
Project: Eddy County
Site: Jericho "BKJ" State Com
Well: #2H
Wellbore: OH
Design: OH

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well #2H
WELL @ 3190.50ft (Original Well Elev)
WELL @ 3190.50ft (Original Well Elev)
Grid
Minimum Curvature
Midland Database

Survey	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
	5,600.00	0.75	99.63	5,598.94	2,408.44	9.13	-3.28	3.33	0.00	413,089.35	591,676.06
	5,641.00	1.06	130.38	5,639.94	2,449.44	8.84	-2.73	2.77	1.38	413,089.06	591,676.62
	5,672.00	0.79	141.99	5,670.93	2,480.43	8.48	-2.38	2.42	1.06	413,088.71	591,676.97
	5,704.00	1.14	241.40	5,702.93	2,512.43	8.16	-2.52	2.56	4.65	413,088.38	591,676.82
	5,736.00	3.96	268.53	5,734.90	2,544.40	7.98	-3.90	3.95	9.35	413,088.20	591,675.44
	5,767.00	8.18	272.15	5,765.72	2,575.22	8.03	-7.18	7.22	13.66	413,088.25	591,672.16
	5,799.00	12.75	273.49	5,797.18	2,606.68	8.33	-12.98	13.03	14.30	413,088.55	591,666.36
	5,831.00	17.59	274.15	5,828.05	2,637.55	8.90	-21.34	21.38	15.13	413,089.12	591,658.01
	5,862.00	22.42	274.20	5,857.17	2,666.67	9.67	-31.91	31.96	15.58	413,089.89	591,647.43
	5,894.00	27.08	272.81	5,886.23	2,695.73	10.47	-45.28	45.33	14.67	413,090.70	591,634.06
	5,926.00	30.86	270.80	5,914.22	2,723.72	10.95	-60.76	60.82	12.20	413,091.17	591,618.58
	5,958.00	33.95	269.82	5,941.23	2,750.73	11.03	-77.91	77.97	9.79	413,091.25	591,601.43
	5,989.00	37.02	269.03	5,966.47	2,775.97	10.85	-95.90	95.96	10.01	413,091.07	591,583.44
	6,026.00	41.33	268.15	5,995.15	2,804.65	10.26	-119.26	119.32	11.74	413,090.49	591,560.08
	6,057.00	45.99	267.30	6,017.57	2,827.07	9.41	-140.64	140.69	15.15	413,089.63	591,538.70
	6,088.00	50.65	266.73	6,038.18	2,847.68	8.20	-163.75	163.80	15.09	413,088.42	591,515.59
	6,119.00	55.49	267.02	6,056.80	2,866.30	6.85	-188.49	188.53	15.63	413,087.07	591,490.85
	6,150.00	59.18	267.24	6,073.53	2,883.03	5.55	-214.55	214.58	11.92	413,085.77	591,464.79
	6,181.00	61.99	269.95	6,088.75	2,898.25	4.89	-241.54	241.56	11.84	413,085.11	591,437.80
	6,213.00	64.98	270.99	6,103.04	2,912.54	5.13	-270.17	270.19	9.79	413,085.35	591,409.17
	6,244.00	67.97	272.02	6,115.41	2,924.91	5.88	-298.58	298.61	10.11	413,086.10	591,380.76
	6,275.00	71.84	272.79	6,126.06	2,935.56	7.10	-327.66	327.69	12.70	413,087.32	591,351.68
	6,306.00	76.41	272.22	6,134.53	2,944.03	8.40	-357.44	357.48	14.85	413,088.63	591,321.90
	6,337.00	81.25	271.56	6,140.54	2,950.04	9.41	-387.83	387.87	15.75	413,089.63	591,291.51
	6,368.00	85.03	270.74	6,144.24	2,953.74	10.02	-418.60	418.64	12.47	413,090.24	591,260.75
	6,451.00	90.04	270.82	6,147.81	2,957.31	11.15	-501.48	501.54	6.04	413,091.37	591,177.86
	6,547.00	89.43	271.70	6,148.25	2,957.75	13.26	-597.46	597.52	1.12	413,093.48	591,081.88



Pathfinder

Pathfinder X & Y Survey Report



Company:	Yates Petroleum Corp.	Well #2H	Local Co-ordinate Reference:
Project:	Eddy County	WELL @ 3190.50ft (Original Well Elev)	TVD Reference:
Site:	Jericho "BKJ" State Com	WELL @ 3190.50ft (Original Well Elev)	MD Reference:
Well:	#2H	Grid	North Reference:
Wellbore:	OH	Minimum Curvature	Survey Calculation Method:
Design:	OH	Midland Database	Database:

Survey	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	D Leg (°/100ft)	Northing (ft)	Easting (ft)
	6,640.00	88.46	271.79	6,149.97	2,959.47	16.09	-690.40	690.48	1.05	413,096.31	590,988.94
	6,733.00	88.64	271.75	6,152.32	2,961.82	18.97	-783.32	783.42	0.20	413,099.19	590,896.02
	6,827.00	89.52	271.45	6,153.83	2,963.33	21.59	-877.27	877.38	0.99	413,101.81	590,802.07
	6,920.00	88.99	271.40	6,155.04	2,964.54	23.90	-970.24	970.35	0.57	413,104.12	590,709.10
	7,013.00	89.96	271.65	6,155.89	2,965.39	26.38	-1,063.20	1,063.33	1.08	413,106.60	590,616.14
	7,106.00	90.13	270.94	6,155.82	2,965.32	28.48	-1,156.18	1,156.31	0.79	413,108.70	590,523.17
	7,199.00	89.52	271.09	6,156.10	2,965.60	30.13	-1,249.16	1,249.30	0.68	413,110.35	590,430.18
	7,292.00	91.19	271.30	6,155.52	2,965.02	32.07	-1,342.13	1,342.29	1.81	413,112.29	590,337.21
	7,386.00	91.89	271.66	6,153.00	2,962.50	34.49	-1,436.07	1,436.23	0.84	413,114.71	590,243.27
	7,479.00	91.63	271.93	6,150.14	2,959.64	37.40	-1,528.98	1,529.16	0.40	413,117.63	590,150.36
	7,573.00	90.66	272.03	6,148.26	2,957.76	40.65	-1,622.90	1,623.10	1.04	413,120.87	590,056.44
	7,668.00	89.43	271.83	6,148.19	2,957.69	43.85	-1,717.85	1,718.06	1.31	413,124.07	589,961.50
	7,763.00	88.20	271.27	6,150.15	2,959.65	46.42	-1,812.79	1,813.01	1.42	413,126.64	589,866.55
	7,861.00	90.57	270.40	6,151.42	2,960.92	48.14	-1,930.76	1,930.99	2.14	413,128.36	589,748.58
	7,975.00	90.48	270.57	6,150.56	2,960.06	48.93	-2,024.75	2,024.99	0.20	413,129.16	589,654.59
	8,068.00	90.22	271.10	6,149.99	2,959.49	50.29	-2,117.74	2,117.98	0.63	413,130.51	589,561.60
	8,161.00	89.43	271.02	6,150.27	2,959.77	52.01	-2,210.72	2,210.97	0.85	413,132.23	589,468.62
	8,255.00	88.90	270.24	6,151.64	2,961.14	53.04	-2,304.71	2,304.96	1.00	413,133.26	589,374.63
	8,348.00	90.22	268.86	6,152.36	2,961.86	52.31	-2,397.70	2,397.95	2.05	413,132.53	589,281.64
	8,441.00	89.43	268.08	6,152.64	2,962.14	49.83	-2,490.66	2,490.90	1.19	413,130.05	589,188.68
	8,535.00	88.37	267.99	6,154.45	2,963.95	46.61	-2,584.59	2,584.80	1.13	413,126.83	589,094.75
	8,629.00	89.16	268.07	6,156.47	2,965.97	43.38	-2,678.51	2,678.71	0.84	413,123.60	589,000.83
	8,721.00	89.34	267.43	6,157.68	2,967.18	39.77	-2,770.43	2,770.61	0.72	413,119.99	588,908.91
	8,813.00	89.87	266.89	6,158.31	2,967.81	35.21	-2,862.32	2,862.46	0.82	413,115.43	588,817.03
	8,907.00	93.83	266.07	6,155.28	2,964.78	29.44	-2,956.07	2,956.19	4.30	413,109.66	588,723.27
	8,999.00	92.95	266.70	6,149.84	2,959.34	23.65	-3,047.72	3,047.81	1.18	413,103.87	588,631.62
	9,093.00	92.51	267.10	6,145.36	2,954.86	18.57	-3,141.48	3,141.53	0.63	413,098.79	588,537.86



Pathfinder

Pathfinder X & Y Survey Report



Company: Yates Petroleum Corp.
Project: Eddy County
Site: Jericho "BKJ" State Com
Well: #2H
Wellbore: OH
Design: OH

Local Co-ordinate Reference:
TVD Reference: WELL @ 3190.50ft (Original Well Elev)
MD Reference: WELL @ 3190.50ft (Original Well Elev)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: Midland Database

Survey	MD (ft)	Inc (°)	Azi (°)	TVD (ft)	TVDSS (ft)	N/S (ft)	E/W (ft)	V. Sec (ft)	DLeg (°/100ft)	Northing (ft)	Easting (ft)
	9,186.00	91.89	267.43	6,141.79	2,951.29	14.14	-3,234.31	3,234.33	0.76	413,094.36	588,445.04
	9,280.00	90.75	267.09	6,139.62	2,949.12	9.65	-3,328.17	3,328.17	1.27	413,089.87	588,351.17
	9,373.00	89.78	267.76	6,139.19	2,948.69	5.47	-3,421.07	3,421.05	1.27	413,085.69	588,258.27
	9,467.00	92.51	268.30	6,137.32	2,946.82	2.24	-3,514.99	3,514.95	2.96	413,082.46	588,164.35
	9,562.00	92.95	268.14	6,132.79	2,942.29	-0.71	-3,609.84	3,609.78	0.49	413,079.51	588,069.50
	9,655.00	90.31	267.01	6,130.15	2,939.65	-4.64	-3,702.71	3,702.63	3.09	413,075.58	587,976.64
	9,748.00	88.90	266.28	6,130.79	2,940.29	-10.09	-3,795.54	3,795.43	1.71	413,070.14	587,883.80
	9,841.00	87.32	266.89	6,133.85	2,943.35	-15.62	-3,888.32	3,888.18	1.82	413,064.60	587,791.02
	9,936.00	88.02	268.63	6,137.72	2,947.22	-19.33	-3,983.17	3,983.00	1.97	413,060.89	587,696.17
	10,029.00	92.77	270.54	6,137.08	2,946.58	-20.01	-4,076.13	4,075.96	5.50	413,060.22	587,603.21
	10,122.00	93.74	270.34	6,131.80	2,941.30	-19.29	-4,168.98	4,168.81	1.06	413,060.93	587,510.36
	10,216.00	94.09	270.32	6,125.38	2,934.88	-18.75	-4,262.76	4,262.59	0.37	413,061.47	587,416.59
	10,310.00	90.75	269.80	6,121.41	2,930.91	-18.65	-4,356.66	4,356.49	3.60	413,061.57	587,322.68
	10,414.00	88.55	269.19	6,122.04	2,931.54	-19.57	-4,460.65	4,460.48	2.20	413,060.65	587,218.70
	10,495.00	88.55	269.19	6,124.09	2,933.59	-20.72	-4,541.61	4,541.43	0.00	413,059.51	587,137.73
BHL-10495.00' MD, 88.55° INC, 269.19° AZI, 6124.09' TVD, 4541.43' VS, -20.72° N, -4541.61° E											

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/S (ft)	+E/W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL(JSC#2H)	0.00	0.00	6,150.00	25.06	-4,644.06	413,105.285	587,035.283	32° 8' 8.229 N	104° 11' 8.512 W
- survey misses target center by 115.16ft at 10495.00ft MD (6124.09 TVD, -20.72 N, -4541.61 E)									
- Point									



Pathfinder
Pathfinder X & Y Survey Report



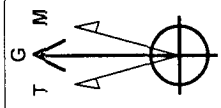
Company:	Yates Petroleum Corp.	Local Co-ordinate Reference:	Well #2H
Project:	Eddy County	TVD Reference:	WELL @ 3190.50ft (Original Well Elev)
Site:	Jericho "BKJ" State Com	MD Reference:	WELL @ 3190.50ft (Original Well Elev)
Well:	#2H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Midland Database

Survey Annotations			
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)
10,495.00	6,124.09	-20.72	-4,541.61
BHL-10495.00'MD, 88.55°INC, 269.19°AZI, 6124.09'TVD, 4541.43'VS, -;			

Checked By: _____	Approved By: _____	Date: _____
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PATHFINDER

Azimuths to Grid North
True North: -0.09°
Magnetic North: 7.88°
Magnetic Field
Strength: 48594.4nT
Dip Angle: 60.02°
Date: 06/22/2010
Model: IGRF2010



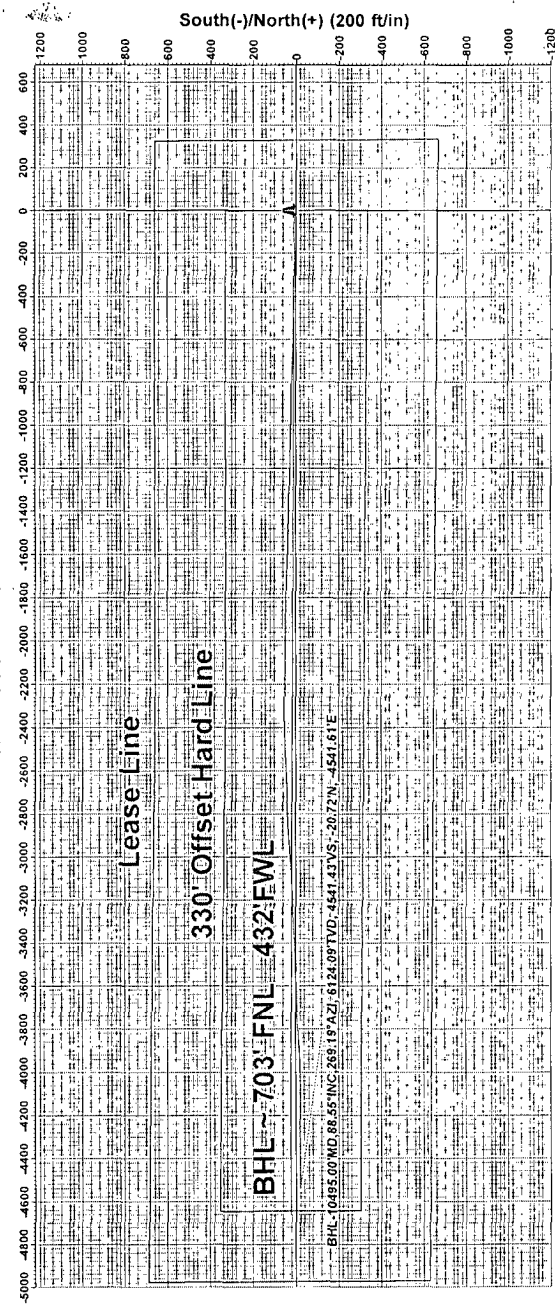
Project: Eddy County
Site: Jericho "BKJ" State Com
Well: #2H
Wellbore: OH
Plan: Plan #2 (#2H/OH)



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

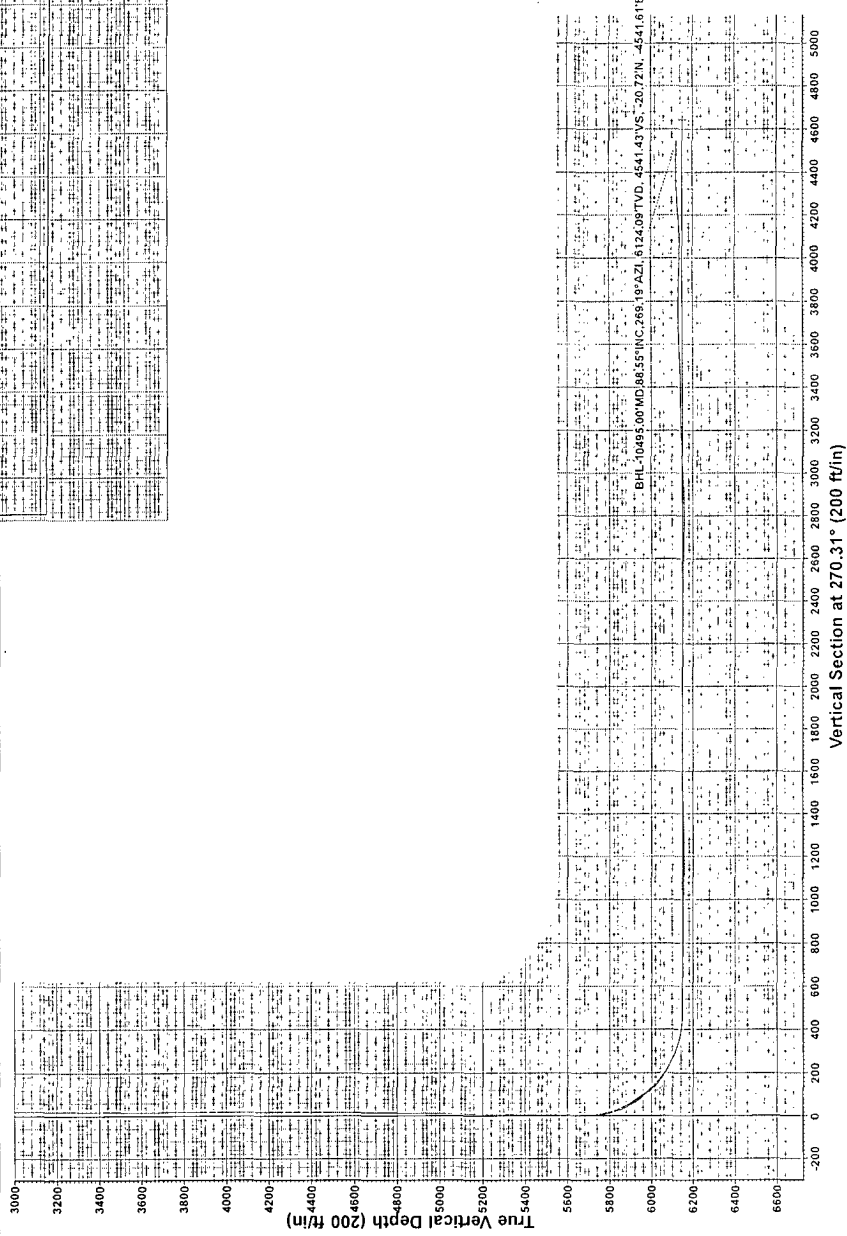
SECTION DETAILS									
Sec	MD	Inc	Azi	TVD	+N/S	+E/W	Dleg	Tface	VSec Target
1	5669.00	0.64	108.28	5667.84	8.93	-2.47	0.00	0.00	2.52
2	6423.33	90.00	270.22	6150.00	9.09	-479.43	12.01	161.93	479.47
3	10587.99	90.00	270.22	6150.00	25.08	-4644.06	0.00	0.00	4644.13

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



WELL DETAILS: #2H									
Ground Elevation: 3172.00									
RKB Elevation: WELL @ 3190.50R (Original Well Elev)									
Rig Name: Original Well Elev									
+N/S	+E/W	Northing	Easting	Latitude	Longitude	Slot			
0.00	0.00	413080.221	591679.342	32° 8' 7.915 N	104° 10' 14.500 W				

WELLBORE TARGET DETAILS (MAP COORDINATES)					
Name	TVD	+N/S	+E/W	Northing	Easting
PBHLJSC#2H	6150.00	25.06	-4644.06	413105.285	587035.283
					Point



Vertical Section at 270.31° (200 ft/in)



An Operating Unit of Smith International, Inc.

DIRECTIONAL SURVEY REPORT

YATES PETROLEUM
JERICO "BKJ" STATE COM #2H
EDDY COUNTY, NEW MEXICO

PREPARED BY: FRANCISCO SINISTERRA

Pathfinder Energy Services, Inc.
6213 W. Interstate 20 • 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) BRYANT BLAKEMORE
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 06-19-10 TO 06-21-10
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

YATES PETROLEUM
JERICO "BKJ" STATE COM #2H
EDDY COUNTY, NM
RIG: SILVER OAK 10

9. SURVEY CERTIFIED FROM: 522 TO 2178 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE
DISPLACED AT 15.73 FEET ON A BEARING OF 270.20 DEGREES FROM THE
CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 2232 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: 06/19/2010
Date Completed: 06/21/2010

YATES PETROLEUM
JERICHO BKJ STATE COM #2H - STRAIGHT HOLE CONTROL
EDDY COUNTY, NEW MEXICO
Rig:SILVER OAK 10
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers:BRYANT BLAKEMORE
GABE GARCIA

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.8.7.9146 N LON:104.10.14.5000 W
GRID Reference:NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 591679.3420 Y: 413080.2210
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.88° EAST TO GRID
Vertical Section Plane: 0.00
Survey Vert. Reference: 18.00' Kelly Bushing To Ground
Altitude:3172.00' Ground To MSL

Measured Depth	2232.00	(feet)
Inclination	2.46	(deg)
Azimuth	82.33	(deg)
True Vertical Depth	2230.99	(feet)
Vertical Section	0.06	(feet)
Survey X cord	591663.61	(feet)
Survey Y cord	413080.28	(feet)
Survey Lat	32.13553206 N	(deg)
Survey Lon	104.17074526 W	(deg)
Rectangular Corr. N/S	0.06 N	(feet)
Rectangular Corr. E/W	15.73 W	(feet)
Closure Distance	15.73	(feet)
Direction of Closure	270.20	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM
JERICHO BKJ STATE COM #2H - STRAIGHT HOLE CONTROL
EDDY COUNTY, NEW MEXICO
Rig:SILVER OAK 10
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers: BRYANT BLAKEMORE
GABE GARCIA

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.8.7.9146 N LON:104.10.14.5000 W
GRID Reference:NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 591679.3420 Y: 413080.2210
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.88° EAST TO GRID
Vertical Section Plane: 0.00
Survey Vert. Reference: 18.00' Kelly Bushing To Ground
Altitude:3172.00' 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)	Rectangular Offsets (ft)	TOTAL Angular Offsets (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
ASSUMING VERTICAL DEPTH @ 422' MD.									
422.00	0.00	0.00	422.00	0.00	0.00	0.00	0.00	0.00@	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.									
522.00	1.23	279.05	521.99	100.00	0.17	0.17 N	1.06 W	1.07@	279.05 1.23
706.00	2.29	283.15	705.90	184.00	1.32	1.32 N	6.59 W	6.72@	281.29 0.58
890.00	1.23	282.19	889.81	184.00	2.57	2.57 N	12.10 W	12.37@	281.99 0.58
1074.00	1.49	281.00	1073.76	184.00	3.44	3.44 N	16.38 W	16.74@	281.87 0.14
1257.00	2.11	280.64	1256.67	183.00	4.52	4.52 N	22.03 W	22.48@	281.59 0.34
1449.00	2.55	272.64	1448.51	192.00	5.37	5.37 N	29.77 W	30.25@	280.22 0.28
1639.00	0.62	220.50	1638.44	190.00	4.78	4.78 N	34.66 W	34.98@	277.85 1.17
1830.00	1.41	119.44	1829.41	191.00	2.84	2.84 N	33.28 W	33.40@	274.88 0.86
2019.00	3.34	103.73	2018.24	189.00	0.39	0.39 N	25.91 W	25.91@	270.86 1.07
2178.00	2.46	82.33	2177.04	159.00	-0.25	0.25 S	18.03 W	18.03@	269.19 0.87
STRAIGHT LINE PROJECTION TO THE BIT @ 2232' MD.									
2232.00	2.46	82.33	2230.99	54.00	0.06	0.06 N	15.73 W	15.73@	270.20 0.00



TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	YATES PETROLEUM		
LEASE / WELL No.:	JERICO BKJ	STATE COM #2	
WELL LOCATION:	EDDY COUNTY, NEW MEXICO		
COUNTY / STATE / COUNTRY:	EDDY COUNTY	NEW MEXICO	USA
RIG:	SILVER OAK 10		
API WELL No:	30-015-37500		
JOB No:	101010753 WT-WT		
P.O. / AFE No.			
DIRECTIONAL COMPANY:	PATHFINDER ENERGY		

WELL SITE INFORMATION

MAGNETIC DECLINATION:			
On Wall Plat:	7.89	LWD Calculated:	7.88
		Agreed Upon:	7.88
X =	591679.342000	Feet	Y = 413080.221000
			Feet
SITE LATITUDE:	32.135532 N	SITE LONGITUDE:	104.170694 W
GRID SYSTEM:	TRUE ☐ UTM ☒ LAMBERT ☐	ZONE:	new mexico east
PROPOSED DRIFT DIRECTION:	0		
KELLY BUSHING ELEVATION:	18		
ALTITUDE:	3172	Feet	WATER DEPTH: N/A
			Feet

TIE-IN SURVEY

MEASURED DEPTH:	520		
DRIFT ANGLE:	0		
DRIFT DIRECTION:	0		
TRUE VERTICAL DEPTH:	520		
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):	N/A		
COPY OF TIE-IN SURVEY REPORT	☐ YES ☒ NO		

WELL PLAN

KICKOFF DEPTH:	520	TOTAL DEPTH:	2400
KICKOFF ANGLE:	0	MAX ANGLE:	0

PES Engineers: BRYANT BLAKEMORE
GABE GARCIA

**Signature of both field engineers required if applicable

Directional Driller: RICHARD HILL

DATE: 20-Jun-2010

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

YATES PETROLEUM
JERICHO BKJ STATE COM #2H
EDDY COUNTY, NEW MEXICO
Rig:SILVER OAK #10

Wed Jun 16 11:35:15 2010

Coordinates

Latitude: 32.135532 N (32 deg. 8 min. 7.9146 sec.)
Longitude: 104.170694 W (-104 deg. 10 min. 14.5000 sec.)
Elevation: 3190.00 feet.
Calculation Date: Jun/16/2010

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.0225 degrees
Total Magnetic Field: 0.48596 gauss
Magnetic Declination: 7.971997 degrees
Horizontal Intensity: 0.242813 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.971997 Degr

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 591679.3420 feet
Y: 413080.2210 feet
True to Grid: (convergence) -0.086512 degrees
Magnetic to Grid: 7.885485 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.885485 Degr.

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

Field
Calculations

YATES PETROLEUM
JERICHO BKJ STATE COM #2H
EDDY COUNTY, NEW MEXICO
Rig:SILVER OAK 10

Straight
Hole

Sat Jun 19 19:08:43 2010

Coordinates

Latitude: 32.135532 N (32 deg. 8 min. 7.9146 sec.)
Longitude: 104.170694 W (-104 deg. 10 min. 14.5000 sec.)
Elevation: 3190.00 feet.
Calculation Date: Jun/19/2010

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.0223 degrees
Total Magnetic Field: 0.48595 gauss
Magnetic Declination: 7.971005 degrees
Horizontal Intensity: 0.242810 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.971005 Degs

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 591679.3420 feet
Y: 413080.2210 feet
True to Grid: (convergence) -0.086512 degrees
Magnetic to Grid: 7.884493 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.884493 Degs.



An Operating Unit of Smith International, Inc.

DIRECTIONAL SURVEY REPORT

YATES PETROLEUM

***JERICO "BKJ" STATE COM #2H- PILOT
HOLE***

EDDY COUNTY, 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) BRYANT BLAKEMORE
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 06-20-10 TO 06-28-10
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY
7. TYPE OF SURVEY(S) PERFORMED: MWD
8. COMPLETE IDENTIFICATION OF WELL:

YATES PETROLEUM
JERICHO "BKJ" STATE COM #2H- PILOT HOLE
EDDY COUNTY, NM
RIG: SILVER OAK 10

9. SURVEY CERTIFIED FROM: 522 TO 8453 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE
DISPLACED AT 54.60 FEET ON A BEARING OF 50.98 DEGREES FROM THE
CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 8500 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: 06/19/2010
Date Completed: 06/28/2010

YATES PETROLEUM
JERICO BKJ STATE COM #2H - PILOT HOLE
EDDY COUNTY, NEW MEXICO
Rig:SILVER OAK # 10
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers:BRYANT BLAKEMORE
GABE GARCIA

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.8.7.9146 N LON:104.10.14.5000 W
GRID Reference:NAD83 new mexico east Transverse Mercator
Ref GRID Coor: X: 591679.3420 Y: 413080.2210
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.88° EAST TO GRID
Vertical Section Plane: 270.31
Survey Vert. Reference: 18.00' Kelly Bushing To Ground
Altitude:3172.00' Ground To MSL

Measured Depth	8500.00	(feet)
Inclination	0.70	(deg)
Azimuth	49.36	(deg)
True Vertical Depth	8496.69	(feet)
Vertical Section	-42.23	(feet)
Survey X cord	591721.74	(feet)
Survey Y cord	413114.58	(feet)
Survey Lat	32.13562613 N	(deg)
Survey Lon	104.17055731 W	(deg)
Rectangular Corr. N/S	34.38 N	(feet)
Rectangular Corr. E/W	42.41 E	(feet)
Closure Distance	54.60	(feet)
Direction of Closure	50.98	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM
JERICHO BKJ STATE COM #2H - PILOT HOLE
EDDY COUNTY, NEW MEXICO
Rig:SILVER OAK # 10
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers: BRYANT BLAKEMORE
GABE GARCIA

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.87.9146 N LON:104.10.14.5000 W
GRID Reference:NAD83 new mexico east Transverse Mercator
Ref GRID Coor: X: 591679.3420 Y: 413080.2210
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.88° EAST TO GRID
Vertical Section Plane: 270.31
Survey Vert. Reference: 18.00' Kelly Bushing To Ground
Altitude:3172.00' Ground To MSL

Survey Calculations by RX5 V6.03A using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	Rectangular Offsets (ft)	TOTAL (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
ASSUMING VERTICAL DEPTH @ 422' MD.									
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.									
422.00	0.00	0.00	422.00	0.00	0.00	0.00	0.00	0.00@	0.00
522.00	1.23	279.05	522.00	2.00	0.02	0.00 N	0.02 W	0.02@	61.50
706.00	2.29	283.15	705.91	184.00	5.56	1.15 N	5.55 W	5.67@	281.71
890.00	1.23	282.19	889.82	184.00	11.07	2.40 N	11.06 W	11.32@	282.26
1074.00	1.49	281.00	1073.77	184.00	15.36	3.28 N	15.34 W	15.69@	282.06
1257.00	2.11	280.64	1256.68	183.00	21.01	4.35 N	20.99 W	21.43@	281.72
1449.00	2.55	272.64	1448.52	192.00	28.75	5.20 N	28.73 W	29.19@	280.27
1639.00	0.62	220.50	1638.44	190.00	33.64	4.62 N	33.62 W	33.93@	277.82
1830.00	1.41	119.44	1829.42	191.00	32.26	2.67 N	32.24 W	32.35@	274.74
2019.00	3.34	103.73	2018.25	189.00	24.87	0.22 N	24.87 W	24.87@	270.52
2178.00	2.46	82.33	2177.05	159.00	16.98	0.42 S	16.99 W	16.99@	268.59
2284.00	2.20	75.53	2282.96	106.00	12.76	0.39 N	12.76 W	12.77@	271.76
2537.00	0.88	356.49	2535.89	253.00	8.20	3.55 N	8.18 W	8.91@	293.44
3012.00	0.79	20.18	3010.84	475.00	7.33	10.26 N	7.27 W	12.58@	324.67
3488.00	0.26	47.72	3486.82	476.00	5.42	14.07 N	5.34 W	15.05@	339.21
3964.00	0.18	218.12	3962.82	476.00	5.08	14.20 N	5.00 W	15.06@	340.60
4439.00	0.79	185.89	4437.80	475.00	5.86	10.36 N	5.80 W	11.87@	330.76
4915.00	0.97	81.76	4913.76	476.00	2.19	7.67 N	2.15 W	7.97@	344.36
5390.00	0.97	96.81	5388.70	475.00	-5.78	7.77 N	5.82 E	9.71@	36.83
5869.00	0.79	197.15	5867.66	479.00	-8.85	4.14 N	8.87 E	9.79@	65.01
6336.00	0.44	85.98	6334.65	467.00	-9.71	1.19 N	9.71 E	9.79@	83.04
6800.00	1.32	203.05	6798.61	464.00	-9.42	3.61 S	9.40 E	10.07@	110.99
7267.00	0.79	288.38	7265.55	467.00	-4.28	7.54 S	4.24 E	8.65@	150.67
7735.00	5.80	31.06	7732.76	468.00	-13.31	13.75 N	13.38 E	19.19@	44.22

PathFinder Energy Services, Inc. Survey Report

YATES PETROLEUM
JERICHO BKJ STATE COM #2H - PILOT HOLE
EDDY COUNTY, NEW MEXICO
RIG:SILVER OAK # 10

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	Closure Dist Dir (ft) (deg)	DLS (dg/100ft)
7922.00	3.52	60.81	7919.15	187.00	-23.14	24.65 N	33.90@ 43.36	1.74
8295.00	1.85	68.51	8291.73	373.00	-38.70	32.44 N	50.63@ 50.16	0.46
8453.00	0.70	49.36	8449.69	158.00	-41.79	34.00 N	54.02@ 50.99	0.77
8500.00	0.70	49.36	8496.69	47.00	-42.23	34.38 N	54.60@ 50.98	0.00

STRAIGHT LINE PROJECTION TO THE BIT @ 8500' MD.



TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	YATES PETROLEUM		
LEASE / WELL No.:	JERICO BKJ	STATE COM #2	
WELL LOCATION:	EDDY COUNTY, NEW MEXICO		
COUNTY / STATE / COUNTRY:	EDDY COUNTY	NEW MEXICO	USA
RIG:	SILVER OAK 10		
API WELL No:	30-015-37500		
JOB No:	101010753 WT-WT		
P.O. / AFE No.			
DIRECTIONAL COMPANY:	PATHFINDER ENERGY SERVICES		

WELL SITE INFORMATION

MAGNETIC DECLINATION:			
On Wall Plat:	7.89	LWD Calculated:	7.88
		Agreed Upon:	7.88
X =	591679.342000	Feet	Y = 413080.221000
			Feet
SITE LATITUDE:	32.135532 N	SITE LONGITUDE:	104.170694 W
GRID SYSTEM:	TRUE ☐ UTM ☒ LAMBERT ☐	ZONE:	new mexico east
PROPOSED DRIFT DIRECTION:	0		
KELLY BUSHING ELEVATION:	18		
ALTITUDE:	3172	Feet	WATER DEPTH: N/A
			Feet

TIE-IN SURVEY

MEASURED DEPTH:	520		
DRIFT ANGLE:	0		
DRIFT DIRECTION:	0		
TRUE VERTICAL DEPTH:	520		
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):	N / A		
COPY OF TIE-IN SURVEY REPORT	☐ YES		☒ NO

WELL PLAN

KICKOFF DEPTH:	520	TOTAL DEPTH:	2400
KICKOFF ANGLE:	0	MAX ANGLE:	0

PES Engineers: BRYANT BLAKEMORE

GABE GARCIA

**Signature of both field engineers required if applicable

Directional Driller: RICHARD HILL

DATE: 20-Jun-2010

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

YATES PETROLEUM
JERICHO BKJ STATE COM #2H
EDDY COUNTY, NEW MEXICO
Rig:SILVER OAK #10

Wed Jun 16 11:35:15 2010

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