

For your records



A Schlumberger Company

DIRECTIONAL SURVEY REPORT

30-015-38541

YATES PETROLEUM

SLALOM "BPZ" FEDERAL #1H

EDDY COUNTY, NEW MEXICO

RECEIVED

SEP 05 2012

NMOCD ARTESIA

PREPARED BY: JUAN ALCOCER

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) DAVID PHILLIPS
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 6-02-12 TO 6-22-12
5. STATE IN WHICH SURVEY WAS PERFORMED: NEW MEXICO
6. LOCATION OF WELL: EDDY COUNTY, NM
7. TYPE OF SURVEY(S) PERFORMED: GAMMA-RAY
8. COMPLETE IDENTIFICATION OF WELL:

YATES PETROLEUM
SLALOM "BPZ" FEDERAL #1H
EDDY COUNTY, NM
RIG: PATTERSON 511
9. SURVEY CERTIFIED FROM: 6,174 TO 12,166 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE
DISPLACED AT 4,562.58 FEET ON A BEARING OF 267.85 DEGREES FROM THE
CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 12,239 FEET,
ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.


JUAN ALCOCER
MWD COORDINATOR

PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 06/27/2012
Date Completed: 06/21/2012

YATES PETROLEUM
SLALOM "BPZ" FEDERAL #1H
EDDY COUNTY, NEW MEXICO
Rig:PATTERSON 511
PathFinder Office Supervisor: JUAN ALCOCER
PathFinder Field Engineers:DAVID PHILLIPS
JARREN EASLEY

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.44.46.1710 N LON:104.1.14.7590 W
GRID Reference:NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 637436.8500 Y: 635326.0500
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.55° EAST TO GRID
Vertical Section Plane: 267.72
Survey Vert. Reference: 18.80' Kelly Bushing To Ground
Altitude:3468.00' Ground To MSL

Measured Depth	12239.00	(feet)
Inclination	91.19	(deg)
Azimuth	266.72	(deg)
True Vertical Depth	7931.99	(feet)
Vertical Section	4562.57	(feet)
Survey X cord	632877.49	(feet)
Survey Y cord	635154.60	(feet)
Survey Lat	32.74572348 N	(deg)
Survey Lon	104.03559727 W	(deg)
Rectangular Corr. N/S	171.45 S	(feet)
Rectangular Corr. E/W	4559.36 W	(feet)
Closure Distance	4562.58	(feet)
Direction of Closure	267.85	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM
SLALOM "BPZ" FEDERAL #1H
EDDY COUNTY, NEW MEXICO
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Page 01/04
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Date Completed: 06/21/2012

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Total Magnetic Correction: 7.55° EAST TO GRID
Vertical Section Plane: 267.72
Survey Vert. Reference: 18.80' Kelly Bushing To Ground
Altitude: 3468.00' Ground To MSL

Survey Calculations by RX5 V6.04A using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)	TEMP (F)	Course Length (ft)
TIED INTO MULTI SHOT SURVEY AT 6045' MD.											
6045.00	1.56	275.57	6043.99	10.74	8.92 N	11.10 W	14.24@	308.79	0.00	0.00	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.											
6174.00	1.32	293.90	6172.95	13.81	9.69 N	14.21 W	17.20@	304.30	0.40	115.48	129.00
6365.00	1.14	259.77	6363.91	17.67	10.25 N	18.09 W	20.79@	299.53	0.39	119.09	191.00
6566.00	1.41	270.68	6564.86	22.12	9.92 N	22.53 W	24.62@	293.77	0.18	122.71	201.00
6751.00	1.49	272.38	6749.80	26.79	10.05 N	27.21 W	29.00@	290.27	0.05	122.71	185.00
6942.00	2.02	278.13	6940.71	32.57	10.63 N	33.02 W	34.69@	287.84	0.29	119.09	191.00
7133.00	0.62	18.62	7131.67	35.51	12.08 N	36.02 W	38.00@	288.54	1.16	119.09	191.00
7323.00	0.97	107.34	7321.66	33.63	12.58 N	34.16 W	36.40@	290.21	0.60	122.71	190.00
7355.00	1.06	125.99	7353.65	33.14	12.32 N	33.66 W	35.85@	290.11	1.07	115.48	32.00
7387.00	0.97	171.59	7385.65	32.88	11.88 N	33.38 W	35.43@	289.59	2.47	115.48	32.00
7419.00	2.20	230.80	7417.64	33.35	11.22 N	33.82 W	35.63@	288.36	5.93	119.09	32.00
7450.00	4.40	247.82	7448.58	34.94	10.40 N	35.38 W	36.88@	286.38	7.69	119.09	31.00
7482.00	7.47	257.75	7480.41	38.14	9.49 N	38.55 W	39.70@	283.83	10.08	119.09	32.00
7514.00	11.17	263.15	7511.98	43.28	8.68 N	43.66 W	44.52@	281.25	11.87	122.71	32.00
7546.00	15.12	264.22	7543.14	50.54	7.89 N	50.90 W	51.50@	278.81	12.37	122.71	32.00
7577.00	19.35	263.33	7572.74	59.70	6.89 N	60.02 W	60.42@	276.55	13.67	122.71	31.00
7609.00	23.74	263.70	7602.49	71.42	5.57 N	71.70 W	71.91@	274.44	13.72	122.71	32.00
7641.00	27.79	263.05	7631.31	85.29	3.95 N	85.51 W	85.60@	272.65	12.69	126.32	32.00
7673.00	31.13	262.25	7659.17	100.96	1.94 N	101.12 W	101.14@	271.10	10.51	122.71	32.00
7704.00	34.03	261.99	7685.28	117.57	0.35 S	117.65 W	117.65@	269.83	9.37	122.71	31.00
7736.00	36.58	262.59	7711.40	135.98	2.83 S	135.97 W	136.00@	268.81	8.04	122.71	32.00
7768.00	38.87	263.76	7736.71	155.50	5.15 S	155.41 W	155.50@	268.10	7.50	122.71	32.00

PathFinder Energy Services, Inc.

Survey Report

YATES PETROLEUM
SLALOM "BPZ" FEDERAL #1H
EDDY COUNTY, NEW MEXICO
RIG:PATTERSON 511

Page 02/04

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)	TEMP (F)	Course Length (ft)
7800.00	41.50	263.86	7761.15	176.09	7.38 S	175.94 W	176.10@	267.60	8.22	126.32	32.00
7831.00	44.49	263.37	7783.82	197.18	9.73 S	196.95 W	197.19@	267.17	9.70	126.32	31.00
7863.00	48.63	263.58	7805.82	220.34	12.37 S	220.03 W	220.37@	266.78	12.95	122.71	32.00
7895.00	53.29	264.85	7825.97	245.15	14.87 S	244.75 W	245.20@	266.52	14.88	122.71	32.00
7927.00	58.56	267.00	7843.90	271.63	16.73 S	271.18 W	271.69@	266.47	17.38	122.71	32.00
7959.00	61.55	268.73	7859.87	299.35	17.76 S	298.88 W	299.41@	266.60	10.45	126.32	32.00
7991.00	64.19	270.14	7874.46	327.81	18.04 S	327.35 W	327.85@	266.85	9.13	126.32	32.00
8026.00	70.26	271.36	7888.00	360.02	17.61 S	359.61 W	360.04@	267.20	17.64	129.94	35.00
8054.00	70.26	271.82	7897.46	386.32	16.87 S	385.95 W	386.32@	267.50	1.55	129.94	28.00
8086.00	71.93	273.00	7907.83	416.49	15.60 S	416.20 W	416.49@	267.85	6.28	129.94	32.00
8117.00	74.74	273.59	7916.72	446.04	13.89 S	445.84 W	446.06@	268.22	9.25	129.94	31.00
8149.00	77.65	273.70	7924.35	476.95	11.92 S	476.85 W	477.00@	268.57	9.10	129.94	32.00
8181.00	78.52	273.11	7930.96	508.10	10.06 S	508.11 W	508.21@	268.87	3.26	129.94	32.00
8213.00	79.76	273.43	7936.99	539.38	8.26 S	539.48 W	539.54@	269.12	4.00	129.94	32.00
8244.00	84.42	272.73	7941.25	569.95	6.62 S	570.13 W	570.17@	269.34	15.20	129.94	31.00
8271.00	88.64	272.58	7942.89	596.79	5.37 S	597.05 W	597.07@	269.48	15.64	119.09	27.00
8305.00	92.95	271.23	7942.41	630.69	4.24 S	631.02 W	631.03@	269.62	13.28	119.09	34.00
8366.00	91.80	269.55	7939.89	691.57	3.82 S	691.96 W	691.97@	269.68	3.34	122.71	61.00
8430.00	90.57	268.20	7938.56	755.54	5.08 S	755.93 W	755.95@	269.61	2.85	122.71	64.00
8493.00	88.81	267.83	7938.90	818.53	7.26 S	818.89 W	818.92@	269.49	2.86	122.71	63.00
8555.00	88.81	266.98	7940.19	880.52	10.07 S	880.81 W	880.87@	269.35	1.37	119.09	62.00
8619.00	88.55	266.85	7941.67	944.49	13.51 S	944.70 W	944.80@	269.18	0.45	122.71	64.00
8682.00	87.23	267.48	7943.99	1007.45	16.63 S	1007.58 W	1007.72@	269.05	2.32	122.71	63.00
8745.00	87.49	267.90	7946.89	1070.38	19.16 S	1070.46 W	1070.64@	268.97	0.78	126.32	63.00
8809.00	87.58	268.01	7949.64	1134.32	21.44 S	1134.36 W	1134.57@	268.92	0.22	126.32	64.00
8872.00	87.49	267.91	7952.35	1197.26	23.69 S	1197.27 W	1197.50@	268.87	0.21	126.32	63.00
8936.00	87.49	268.21	7955.15	1261.20	25.85 S	1261.17 W	1261.43@	268.83	0.47	126.32	64.00

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Page 03/04

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8999.00	87.58	268.12	7957.86	1324.14	27.87 S	1324.08 W	1324.37@	268.79	0.20	126.32	63.00
9063.00	87.49	267.79	7960.61	1388.08	30.15 S	1387.98 W	1388.30@	268.76	0.53	126.32	64.00
9127.00	87.67	268.08	7963.32	1452.02	32.45 S	1451.88 W	1452.24@	268.72	0.53	126.32	64.00
9190.00	87.85	268.50	7965.78	1514.97	34.33 S	1514.80 W	1515.19@	268.70	0.72	129.94	63.00
9254.00	87.93	268.57	7968.14	1578.92	35.96 S	1578.74 W	1579.15@	268.69	0.17	129.94	64.00
9317.00	88.11	268.77	7970.31	1641.87	37.43 S	1641.68 W	1642.11@	268.69	0.43	129.94	63.00
9381.00	88.72	268.35	7972.08	1705.84	39.03 S	1705.64 W	1706.08@	268.69	1.16	129.94	64.00
9444.00	88.81	267.88	7973.44	1768.82	41.11 S	1768.59 W	1769.07@	268.67	0.76	129.94	63.00
9508.00	88.81	268.18	7974.77	1832.81	43.31 S	1832.54 W	1833.05@	268.65	0.47	129.94	64.00
9572.00	88.90	268.39	7976.05	1896.79	45.22 S	1896.50 W	1897.04@	268.63	0.36	129.94	64.00
9635.00	88.99	268.04	7977.21	1959.78	47.18 S	1959.45 W	1960.02@	268.62	0.57	129.94	63.00
9699.00	89.43	268.49	7978.09	2023.77	49.12 S	2023.42 W	2024.01@	268.61	0.98	129.94	64.00
9762.00	88.99	266.97	7978.96	2086.76	51.61 S	2086.36 W	2087.00@	268.58	2.51	129.94	63.00
9826.00	89.08	267.23	7980.04	2150.75	54.85 S	2150.27 W	2150.97@	268.54	0.43	129.94	64.00
9889.00	89.08	266.94	7981.05	2213.74	58.06 S	2213.18 W	2213.94@	268.50	0.46	129.94	63.00
9953.00	89.43	267.20	7981.88	2277.73	61.33 S	2277.09 W	2277.92@	268.46	0.68	133.55	64.00
10016.00	88.99	266.72	7982.75	2340.72	64.67 S	2340.00 W	2340.89@	268.42	1.03	133.55	63.00
10080.00	89.25	266.88	7983.73	2404.70	68.24 S	2403.89 W	2404.86@	268.37	0.48	133.55	64.00
10144.00	89.16	266.85	7984.62	2468.69	71.74 S	2467.79 W	2468.83@	268.33	0.15	133.55	64.00
10207.00	89.43	267.19	7985.40	2531.68	75.01 S	2530.70 W	2531.81@	268.30	0.69	133.55	63.00
10270.00	89.60	266.87	7985.93	2594.67	78.28 S	2593.61 W	2594.79@	268.27	0.57	133.55	63.00
10334.00	89.16	267.66	7986.62	2658.66	81.33 S	2657.53 W	2658.78@	268.25	1.41	133.55	64.00
10397.00	89.08	267.18	7987.59	2721.66	84.17 S	2720.46 W	2721.76@	268.23	0.77	133.55	63.00
10461.00	90.48	266.70	7987.84	2785.65	87.58 S	2784.37 W	2785.74@	268.20	2.31	133.55	64.00
10525.00	92.24	267.31	7986.32	2849.62	90.93 S	2848.26 W	2849.71@	268.17	2.91	133.55	64.00
10588.00	92.51	267.57	7983.71	2912.57	93.74 S	2911.14 W	2912.65@	268.16	0.60	133.55	63.00
10652.00	92.42	267.52	7980.95	2976.51	96.48 S	2975.02 W	2976.59@	268.14	0.16	137.17	64.00

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10715.00	91.28	267.03	7978.92	3039.47	99.47 S	3037.92 W	3039.55@	268.12	1.97	137.17	63.00
10779.00	91.36	267.27	7977.44	3103.45	102.65 S	3101.82 W	3103.52@	268.10	0.39	137.17	64.00
10842.00	91.54	267.42	7975.85	3166.43	105.57 S	3164.74 W	3166.50@	268.09	0.37	137.17	63.00
10906.00	91.63	267.48	7974.08	3230.40	108.42 S	3228.65 W	3230.47@	268.08	0.17	137.17	64.00
10969.00	91.63	267.50	7972.29	3293.38	111.17 S	3291.56 W	3293.44@	268.07	0.03	137.17	63.00
11028.00	91.63	268.10	7970.61	3352.35	113.44 S	3350.49 W	3352.41@	268.06	1.02	133.55	59.00
11091.00	92.15	268.14	7968.53	3415.32	115.50 S	3413.43 W	3415.38@	268.06	0.83	133.55	63.00
11154.00	91.89	268.66	7966.31	3478.27	117.26 S	3476.36 W	3478.34@	268.07	0.92	133.55	63.00
11218.00	91.89	268.35	7964.20	3542.23	118.93 S	3540.30 W	3542.30@	268.08	0.48	133.55	64.00
11281.00	92.33	267.66	7961.88	3605.19	121.12 S	3603.22 W	3605.26@	268.07	1.30	137.17	63.00
11345.00	91.89	267.53	7959.52	3669.15	123.81 S	3667.12 W	3669.21@	268.07	0.72	137.17	64.00
11408.00	91.71	267.80	7957.55	3732.11	126.37 S	3730.04 W	3732.18@	268.06	0.52	137.17	63.00
11472.00	92.24	267.86	7955.34	3796.08	128.79 S	3793.96 W	3796.14@	268.06	0.83	137.17	64.00
11536.00	91.89	267.77	7953.03	3860.03	131.23 S	3857.87 W	3860.10@	268.05	0.56	137.17	64.00
11599.00	91.63	267.72	7951.10	3923.00	133.71 S	3920.79 W	3923.07@	268.05	0.42	137.17	63.00
11662.00	91.80	267.09	7949.21	3985.98	136.56 S	3983.70 W	3986.04@	268.04	1.04	137.17	63.00
11725.00	91.19	266.68	7947.57	4048.95	139.98 S	4046.58 W	4049.00@	268.02	1.17	137.17	63.00
11788.00	92.42	265.83	7945.59	4111.89	144.10 S	4109.41 W	4111.94@	267.99	2.37	140.78	63.00
11850.00	91.80	265.66	7943.30	4173.81	148.69 S	4171.20 W	4173.85@	267.96	1.04	140.78	62.00
11914.00	91.54	266.32	7941.44	4237.76	153.17 S	4235.02 W	4237.79@	267.93	1.11	140.78	64.00
11977.00	92.42	266.78	7939.26	4300.71	156.95 S	4297.86 W	4300.73@	267.91	1.58	140.78	63.00
12040.00	91.98	267.04	7936.84	4363.65	160.35 S	4360.73 W	4363.67@	267.89	0.81	140.78	63.00
12103.00	91.45	266.82	7934.96	4426.62	163.72 S	4423.61 W	4426.64@	267.88	0.91	140.78	63.00
12166.00	91.19	266.72	7933.51	4489.59	167.27 S	4486.49 W	4489.61@	267.86	0.44	137.17	63.00
STRAIT LINE PROJECTION TO BIT AT 12239'MD.											
12239.00	91.19	266.72	7931.99	4562.57	171.45 S	4559.36 W	4562.58@	267.85	0.00	0.00	73.00



A Schlumberger Company

TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	Yates Petroleum		
LEASE / WELL No.	Slalom "BPZ" Federal #1H		
WELL LOCATION:	Eddy County		
COUNTY / STATE / COUNTRY:	Eddy County	NM	USA
RIG:	Patterson #511		
API WELL No:	30-015-38541		
JOB No:	12MLD0189		
P.O. / AFE No.			
DIRECTIONAL COMPANY:	Pathfinder		

WELL SITE INFORMATION

TOTAL MAGNETIC CORRECTION (TMC):			
On Wall Plat:	7.55	LWD Calculated:	7.55
		Agreed Upon:	7.55
X =	637436.850000	Feet	Y = 635326.050000
			Feet
SITE LATITUDE:	32.746159 N	SITE LONGITUDE:	104.020766 W
GRID SYSTEM:	TRUE ☐ UTM ☐ LAMBERT ☒	ZONE:	NAD83
PROPOSED DRIFT DIRECTION:	267.72		
KELLY BUSHING ELEVATION:	18.8		
ALTITUDE:	3468	Feet	WATER DEPTH:
			Feet

TIE-IN SURVEY

MEASURED DEPTH:	6045		
DRIFT ANGLE:	1.56		
DRIFT DIRECTION:	275.57		
TRUE VERTICAL DEPTH:	6043.99		
VERTICAL SECTION:			
RECTANGULAR COORDINATE (N / S) :	8.92		
RECTANGULAR COORDINATE (E / W) :	-11.1		
CLOSURE DISTANCE / DIRECTION:			
SURVEY CALCULATION METHOD:	AA ☐	MC ☒	RC ☐ BT ☐
SOURCE OF TIE-IN DATA (COMPANY):	MS Survey		
COPY OF TIE-IN SURVEY REPORT	☒ YES		☐ NO

WELL PLAN

KICKOFF DEPTH:	TOTAL DEPTH:
KICKOFF ANGLE:	MAX ANGLE:

PES Engineers: David Phillipd
Jarren Easley

**Signature of both field engineers required if applicable

Directional Driller: Many cervantes

DATE: 2-Jun-2012

Survey

Company:	YATES PETROLEUM CORPORATION	Operator:	JOSHUA SMITH
Lease / Well:	SLALOM BPZ FEDERAL #1H	Job Number:	SVCO-120782
County/Parish:	EDDY COUNTY	Probe Serial #	123
State:	NEW MEXICO	Proposed Direction:	287.72
Date:	6/2/2012	Mag. Declination:	7.55 EAST TO GRID
API#:	30-015-38541	Rig / RKB:	PATTERSON 511 / RKB 22 FEET
Dir. Company:	PATHEINDER	Tie-In From:	N / A
FIELD USE ONLY, DEFINITIVE SURVEY WILL COME FROM MS Survey OFFICES			

TIE-IN Survey					
Measured Depth (ft.)	Inclination	Azimuth Bearing	Vertical Depth	Coordinates	
				(+N/-S)	(+E/-W)
0	0.00	0.00	0.00	0.00	0.00

Rate Gyro Survey Report									
Measured Depth (ft.)	Inclination	Azimuth Bearing	Vertical Depth	Vertical Section	Coordinates (+N/-S)	Coordinates (+E/-W)	Dog-Leg / 100 ft.	Closure Distance	Closure Direction
200	1.86	184.53	199.96	0.38	-3.24	-0.26	0.93	3.25	184.53°
400	1.99	188.40	399.85	1.41	-9.91	-1.02	0.09	9.96	185.88°
600	1.46	168.64	599.76	1.65	-15.84	-1.03	0.39	15.87	183.70°
800	0.72	133.66	799.73	-0.38	-19.21	0.39	0.48	19.21	178.85°
1000	1.87	89.16	999.68	-3.76	-20.03	4.56	0.72	20.54	167.18°
1200	2.07	95.03	1199.56	-10.60	-20.29	11.42	0.14	23.29	150.64°
1400	1.08	108.58	1399.48	-15.95	-21.21	16.80	0.53	27.06	141.61°
1600	0.62	157.18	1599.46	-18.09	-22.81	19.01	0.41	29.69	140.19°
1800	0.27	171.95	1799.45	-18.51	-24.27	19.50	0.18	31.13	141.23°
2000	0.13	194.74	1999.45	-18.50	-24.96	19.50	0.08	31.68	142.00°
2200	0.11	183.52	2199.45	-18.41	-25.37	19.43	0.02	31.96	142.55°
2400	0.23	213.30	2399.45	-18.16	-25.90	19.20	0.07	32.24	143.44°
2600	0.09	221.66	2599.45	-17.81	-26.35	18.88	0.07	32.41	144.38°
2800	0.10	149.27	2799.45	-17.79	-26.62	18.86	0.06	32.62	144.68°
3000	0.16	352.76	2999.45	-17.85	-26.49	18.92	0.13	32.55	144.47°
3200	0.23	4.60	3199.45	-17.87	-25.81	18.91	0.04	32.00	143.77°
3400	0.87	326.74	3399.44	-17.14	-24.14	18.11	0.35	30.18	143.12°
3600	0.78	340.70	3599.42	-15.96	-21.59	16.83	0.11	27.37	142.06°
3800	0.94	331.00	3799.40	-14.82	-18.87	15.58	0.11	24.47	140.45°
4000	0.96	334.50	3999.37	-13.42	-15.92	14.07	0.03	21.25	138.54°
4200	1.02	337.76	4199.34	-12.16	-12.76	12.67	0.04	17.99	135.20°
4400	1.12	328.68	4399.30	-10.60	-9.45	10.98	0.10	14.49	130.70°
4600	0.83	313.82	4599.27	-8.65	-6.77	8.92	0.19	11.20	127.20°
4800	1.04	341.01	4799.25	-7.12	-4.05	7.29	0.24	8.34	119.09°
5000	1.30	344.95	4999.21	-6.10	-0.15	6.11	0.14	6.11	91.37°
5200	0.97	339.35	5199.17	-5.06	3.63	4.92	0.17	6.11	53.59°
5400	1.25	290.70	5399.13	-2.52	5.98	2.28	0.47	6.40	20.88°
5600	1.32	277.39	5599.08	1.76	7.05	-2.04	0.15	7.34	343.84°
5800	1.09	283.97	5799.04	5.86	7.81	-6.17	0.13	9.95	321.67°
6000	1.19	283.47	5999.00	9.68	8.75	-10.04	0.05	13.32	311.08°
6045	1.56	275.57	6043.99	10.74	8.92	-11.10	0.92	14.24	308.77°



A Schlumberger Company

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

Yates Petroleum
Slalom BPZ Federal #1H
Eddy County, Nm
Rig:Patterson 511

Thu May 31 17:31:44 2012

Coordinates

Latitude: 32.746159 N (32 deg. 44 min. 46.1710 sec.)
Longitude: 104.020766 W (-104 deg. 1 min. 14.7590 sec.)
Elevation: 3486.80 feet.
Calculation Date: May/31/2012

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.5686 degrees
Total Magnetic Field: 0.48785 gauss
Magnetic Declination: 7.714996 degrees
Horizontal Intensity: 0.239718 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.714996 Degs

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 637436.8500 feet
Y: 635326.0500 feet
True to Grid: (convergence) -0.169074 degrees
Magnetic to Grid: 7.545922 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.545922 Degs.

OCD-ARTESIA

Form 3160-3
(February 2005)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

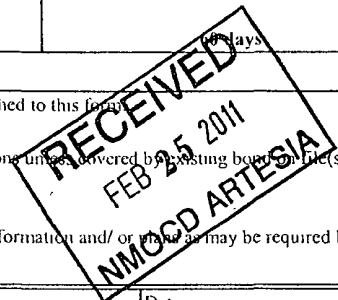
APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB NO 1004-0137
Expires March 31, 2007

1a. Type of Work: ☒ DRILL ☐ REENTER		5. Lease Serial No. NM-437522
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator Yates Petroleum Corporation 025575		7. If Unit or CA Agreement, Name and No. N/A
3a. Address 105 South Fourth Street, Artesia, NM 88210		8. Lease Name and Well No. Slalom "BPZ" Federal #1H
3b. Phone No. (include area code) 505-748-1471		9. API Well No. 30-015-38541
4. Location of well (Report location clearly and in accordance with any State requirements *) At surface 2130' FSL & 330' FEL, NESE, Section 13-T18S-29E At proposed prod. zone 1980' FSL & 330' FWL, NWSW, Section 13-T18S-R29E		10. Field and Pool, or Exploratory Wildcat Bone Spring
14. Distance in miles and direction from the nearest town or post office* Approximately 6 miles south of Loco Hills, NM		11. Sec., T., R., M., or Blk. And Survey or Area Sec. 13-18S-29E
15. Distance from proposed* location to nearest (Also to nearest dng. unit line, if any) 330'	16. No. of acres in lease 520.00	12. County or Parish Eddy
17. Spacing Unit dedicated to this well N2S2-Sec.13-18S-29E	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 7980 VD & 12397 MD	13. State NM
19. Proposed Depth 7980 VD & 12397 MD	20. BLM/ BIA Bond No. on file NATIONWIDE BOND #NMB000434	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3468 GL	22. Approximate date work will start* ASAP	23. Estimated duration 60 days
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1 shall be attached to this form:

- | | |
|---|---|
| 1. Well plat certified by a registered surveyor | 4. Bond to cover the operations unless covered by existing bond on file (see item 20 above) |
| 2. ap | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office) | 6. Such other site specific information and/or plans as may be required by the BLM |



25. Signature <i>Clifton May</i>	Name (Printed/ Typed) Clifton May	Date 11/4/2010
Title Land Regulatory Agent		
Approved By (Signature) <i>/s/ James Stovall</i>	Name (Printed/ Typed)	Date FEB 18 2011
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject land which would entitle the applicant to carry operations thereon

Conditions of approval, if any, are attached

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and wilfully 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

* (Instructions on page 2)

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Roswell Controlled Water Basin

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

129

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 Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised July 16, 2010

Submit one copy to appropriate
District Office

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-38541	Pool Code	Pool Name Wildcat; Bone Spring
Property Code 38530	Property Name SLALOM "BPZ" FEDERAL	Well Number 1H
OCRID No. 025575	Operator Name YATES PETROLEUM CORP.	Elevation 3468'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	13	18 S	29 E		2130	SOUTH	330	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	13	18 S	29 E		1980	SOUTH	330	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unEDDYsed mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <u>Cliffon May</u> Date: <u>11/3/10</u> Printed Name: <u>Cliffon May</u> Email Address: <u>cliff@yatespetroleum.com</u>
	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date Surveyed: <u>11/3/10</u> Signature & Seal of Professional Surveyor: <u>[Signature]</u> Certificate No. Gary L. Jones 7977 BASIN SURVEYS 23425