



VLT

An Operating Unit of Smith International, Inc.

30.015.37062

DIRECTIONAL SURVEY REPORT

BOPCO, L.P.

JAMES RANCH UNIT # 107H

EDDY COUNTY, NEW MEXICO

PREPARED BY: FRANCISCO SINISTERRA

Pathfinder Energy Services, Inc.
6213 W. Interstate 20 • Midland, TX • 79706
(432) 681-6000

A handwritten signature in the bottom right corner of the page, appearing to be "F. Sinisterra".

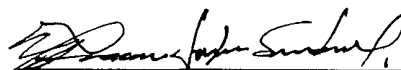
DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) BRECK ENOCH
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 05/20/09 TO 05/06/09
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:

BOPCO, L.P.
JAMES RANCH UNIT # 107H
EDDY COUNTY, NM
RIG: MCVAY # 5

9. SURVEY CERTIFIED FROM: 6748 TO 12347 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 5358.11 FEET ON A BEARING OF 267.16 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 12424 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: 05/20/2009
Date Completed: 06/06/2009

BOPCO, L.P.
JAMES RANCH UNIT #107H
EDDY COUNTY, NEW MEXICO
Rig:McVAY #5
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers: BRECK ENOCH
JUSTIN HAWKINS
PAUL FOREMAN

Survey Horiz. Reference: WELLHEAD
Ref Coordinates: LAT: 32.20.37.2950 N LON: 103.50.23.0741 W
GRID Reference: NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 693771.9790 Y: 489118.7650
North Aligned To: GRID NORTH
Total Magnetic Correction: 7.69° EAST TO GRID
Vertical Section Plane: 267.75
Survey Vert. Reference: 19.00' Kelly Bushing To Ground
Altitude: 3301.50' Ground To MSL

Measured Depth	12424.00	(feet)
Inclination	90.75	(deg)
Azimuth	262.26	(deg)
True Vertical Depth	7241.97	(feet)
Vertical Section	5357.83	(feet)
Survey X cord	688420.39	(feet)
Survey Y cord	488853.32	(feet)
Survey Lat	32.34303002 N	(deg)
Survey Lon	103.85707482 W	(deg)
Rectangular Corr. N/S	265.42 S	(feet)
Rectangular Corr. E/W	5351.53 W	(feet)
Closure Distance	5358.11	(feet)
Direction of Closure	267.16	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

BOPCO, L.P.
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Survey Calculations by RX5 V5.11i using Minimum Curvature

Page 01/04
Tie-in Date: 05/20/2009
Date Completed: 06/06/2009

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.20.37.2950 N LON:103.50.23.0741 W
Reference:NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 693771.9790 Y: 489118.7650
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.69° EAST TO GRID
Vertical Section Plane: 267.75
Survey Vert. Reference: 19.00' Kelly Bushing To Ground
Altitude:3301.50' Ground To MSL

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
TIE IN TO SCIENTIFIC GYRO SURVEY @ 6717'MD.										
6717.00	0.61	209.33	6716.08	0.00	-9.36	61.15 S	11.77 E	62.27@	169.11	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
6748.00	0.53	180.68	6747.08	31.00	-9.27	61.44 S	11.69 E	62.54@	169.23	0.94
6779.00	0.53	177.93	6778.08	31.00	-9.26	61.72 S	11.69 E	62.82@	169.27	0.08
6811.00	1.76	264.16	6810.07	32.00	-8.77	61.92 S	11.21 E	62.93@	169.74	5.64
6842.00	6.86	267.42	6840.97	31.00	-6.44	62.05 S	8.88 E	62.69@	171.85	16.46
6873.00	13.37	263.92	6871.48	31.00	-1.01	62.52 S	3.46 E	62.61@	176.83	21.08
6903.00	20.22	262.48	6900.18	30.00	7.63	63.56 S	5.14 W	63.77@	184.62	22.87
6935.00	24.97	262.16	6929.71	32.00	19.86	65.21 S	17.32 W	67.47@	194.87	14.85
6966.00	28.14	262.73	6957.44	31.00	33.66	67.03 S	31.05 W	73.87@	204.86	10.26
6997.00	30.78	263.01	6984.43	31.00	48.85	68.92 S	46.18 W	82.96@	213.82	8.53
7029.00	33.15	262.69	7011.58	32.00	65.73	71.03 S	62.99 W	94.93@	221.57	7.43
7060.00	35.44	264.54	7037.19	31.00	83.15	72.96 S	80.34 W	108.53@	227.76	8.12
7091.00	37.81	265.74	7062.06	31.00	101.62	74.52 S	98.77 W	123.73@	232.96	7.99
7122.00	41.33	265.41	7085.96	31.00	121.35	76.05 S	118.46 W	140.77@	237.30	11.37
7154.00	44.32	266.27	7109.42	32.00	143.09	77.62 S	140.15 W	160.21@	241.02	9.52
7186.00	46.60	268.49	7131.87	32.00	165.89	78.66 S	162.93 W	180.92@	244.23	8.67
7217.00	50.91	270.47	7152.30	31.00	189.18	78.85 S	186.23 W	202.24@	247.05	14.71
7249.00	54.61	271.34	7171.66	32.00	214.61	78.45 S	211.70 W	225.76@	249.67	11.76
7281.00	57.16	271.14	7189.61	32.00	241.06	77.88 S	238.18 W	250.59@	251.89	7.99
7313.00	60.06	270.08	7206.28	32.00	268.33	77.59 S	265.49 W	276.60@	253.71	9.49
7344.00	61.55	269.23	7221.40	31.00	295.38	77.75 S	292.55 W	302.71@	255.12	5.37
7376.00	62.87	268.66	7236.32	32.00	323.68	78.27 S	320.86 W	330.27@	256.29	4.42

PathFinder Energy Services, Inc.

Survey Report

BOPCO, L.P.
JAMES RANCH UNIT #107H
EDDY COUNTY, NEW MEXICO
RIG:McVAY #5

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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)
7408.00	65.77	268.44	7250.18	32.00	352.52	79.01 S	349.68 W	358.50@ 257.27	9.08
7440.00	70.96	268.75	7261.98	32.00	382.25	79.73 S	379.41 W	387.70@ 258.13	16.24
7470.00	74.74	269.35	7270.82	30.00	410.90	80.21 S	408.07 W	415.87@ 258.88	12.74
7501.00	78.44	270.79	7278.01	31.00	441.03	80.17 S	438.22 W	445.49@ 259.63	12.76
7533.00	81.60	271.25	7283.55	32.00	472.49	79.61 S	469.72 W	476.42@ 260.38	9.98
7563.00	86.09	272.19	7286.77	30.00	502.23	78.71 S	499.53 W	505.69@ 261.05	15.29
7595.00	89.25	271.71	7288.07	32.00	534.12	77.62 S	531.48 W	537.12@ 261.69	9.99
7707.00	92.77	272.67	7286.10	112.00	645.74	73.34 S	643.36 W	647.53@ 263.50	3.26
7801.00	92.77	271.38	7281.55	94.00	739.37	70.03 S	737.19 W	740.51@ 264.57	1.37
7897.00	92.24	271.33	7277.36	96.00	835.09	67.76 S	833.07 W	835.82@ 265.35	0.56
7992.00	90.48	270.95	7275.10	95.00	929.89	65.87 S	928.02 W	930.36@ 265.94	1.89
8088.00	90.13	271.31	7274.59	96.00	1025.72	63.98 S	1024.00 W	1026.00@ 266.43	0.52
8152.00	89.34	272.45	7274.89	64.00	1089.56	61.88 S	1087.97 W	1089.72@ 266.74	2.17
8246.00	91.71	271.27	7274.03	94.00	1183.30	58.83 S	1181.90 W	1183.37@ 267.15	2.82
8278.00	92.51	270.64	7272.85	32.00	1215.23	58.29 S	1213.88 W	1215.28@ 267.25	3.18
8373.00	89.60	267.64	7271.10	95.00	1310.16	59.72 S	1308.83 W	1310.19@ 267.39	4.40
8437.00	91.10	269.25	7270.71	64.00	1374.15	61.46 S	1372.80 W	1374.18@ 267.44	3.44
8531.00	91.01	269.87	7268.98	94.00	1468.09	62.18 S	1466.78 W	1468.10@ 267.57	0.67
8627.00	90.31	267.00	7267.87	96.00	1564.07	64.80 S	1562.73 W	1564.07@ 267.63	3.08
8722.00	91.36	267.61	7266.49	95.00	1659.05	69.26 S	1657.61 W	1659.06@ 267.61	1.28
8818.00	90.04	266.60	7265.32	96.00	1755.04	74.11 S	1753.48 W	1755.04@ 267.58	1.73
8913.00	89.52	266.46	7265.68	95.00	1850.01	79.86 S	1848.30 W	1850.03@ 267.53	0.57
9009.00	90.04	267.00	7266.05	96.00	1946.00	85.34 S	1944.15 W	1946.02@ 267.49	0.78
9103.00	91.45	268.20	7264.83	94.00	2039.99	89.27 S	2038.05 W	2040.01@ 267.49	1.97
9199.00	90.48	267.11	7263.21	96.00	2135.97	93.20 S	2133.95 W	2135.99@ 267.50	1.52
9295.00	90.22	266.70	7262.62	96.00	2231.96	98.39 S	2229.81 W	2231.98@ 267.47	0.51
9389.00	91.01	267.47	7261.61	94.00	2325.94	103.17 S	2323.68 W	2325.97@ 267.46	1.17

PathFinder Energy Services, Inc.

Survey Report

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RIG:McVAY #5

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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)
9484.00	89.96	266.76	7260.81	95.00	2420.93	107.95 S	2418.56 W	2420.97@	267.44	1.33
9580.00	89.08	265.66	7261.61	96.00	2516.89	114.29 S	2514.34 W	2516.94@	267.40	1.47
9674.00	90.13	267.30	7262.26	94.00	2610.86	120.06 S	2608.16 W	2610.92@	267.36	2.07
9770.00	90.57	268.57	7261.68	96.00	2706.86	123.52 S	2704.09 W	2706.91@	267.38	1.40
9865.00	90.04	268.40	7261.17	95.00	2801.85	126.03 S	2799.06 W	2801.89@	267.42	0.59
9961.00	90.57	269.06	7260.66	96.00	2897.83	128.16 S	2895.03 W	2897.87@	267.47	0.88
10056.00	91.28	269.41	7259.13	95.00	2992.79	129.43 S	2990.01 W	2992.81@	267.52	0.83
10151.00	92.07	270.32	7256.35	95.00	3087.68	129.65 S	3084.97 W	3087.69@	267.59	1.27
10247.00	89.52	269.29	7255.02	96.00	3183.60	129.98 S	3180.95 W	3183.60@	267.66	2.86
10343.00	89.69	269.68	7255.68	96.00	3279.55	130.84 S	3276.94 W	3279.55@	267.71	0.44
10438.00	89.08	269.53	7256.70	95.00	3374.50	131.50 S	3371.93 W	3374.50@	267.77	0.66
10533.00	89.87	267.77	7257.57	95.00	3469.48	133.74 S	3466.90 W	3469.48@	267.79	2.03
10629.00	89.52	266.79	7258.08	96.00	3565.47	138.29 S	3562.79 W	3565.47@	267.78	1.08
10724.00	89.43	265.51	7258.95	95.00	3660.43	144.67 S	3657.57 W	3660.43@	267.73	1.35
10820.00	89.16	265.98	7260.13	96.00	3756.36	151.79 S	3753.30 W	3756.36@	267.68	0.56
10915.00	90.40	268.03	7260.50	95.00	3851.35	156.76 S	3848.16 W	3851.35@	267.67	2.52
11011.00	91.54	268.77	7258.87	96.00	3947.32	159.44 S	3944.10 W	3947.33@	267.69	1.42
11106.00	91.80	269.09	7256.10	95.00	4042.26	161.21 S	4039.05 W	4042.26@	267.71	0.43
11202.00	92.07	269.26	7252.86	96.00	4138.18	162.59 S	4134.98 W	4138.18@	267.75	0.33
11297.00	91.01	268.06	7250.31	95.00	4233.13	164.81 S	4229.92 W	4233.13@	267.77	1.69
11392.00	91.89	268.00	7247.90	95.00	4328.10	168.08 S	4324.83 W	4328.10@	267.77	0.93
11488.00	92.07	266.25	7244.59	96.00	4424.03	172.89 S	4420.65 W	4424.03@	267.76	1.83
11584.00	92.59	266.75	7240.68	96.00	4519.93	178.74 S	4516.39 W	4519.93@	267.73	0.75
11679.00	90.13	266.11	7238.43	95.00	4614.87	184.66 S	4611.17 W	4614.87@	267.71	2.68
11775.00	89.69	266.12	7238.58	96.00	4710.83	191.16 S	4706.95 W	4710.83@	267.67	0.46
11870.00	89.69	264.87	7239.09	95.00	4805.75	198.62 S	4801.65 W	4805.76@	267.63	1.32
11965.00	89.43	263.41	7239.82	95.00	4900.56	208.32 S	4896.15 W	4900.58@	267.56	1.56

PathFinder Energy Services, Inc.

Survey Report

BOPCO, L.P.
JAMES RANCH UNIT #107H
EDDY COUNTY, NEW MEXICO
RIG:McVAY #5

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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)
12061.00	89.52	263.64	7240.70	96.00	4996.29	219.15 S	4991.54 W	4996.34@	267.49	0.26
12156.00	90.13	263.20	7240.99	95.00	5091.02	230.03 S	5085.91 W	5091.11@	267.41	0.79
12252.00	88.37	262.21	7242.25	96.00	5186.63	242.22 S	5181.12 W	5186.78@	267.32	2.10
12347.00	90.75	262.26	7242.98	95.00	5281.18	✓255.06 S	✓5275.24 W	5281.40@	267.23	2.51
STRAIGHT LINE PROJECTION TO BIT AT 12424'MD.										
✓12424.00	90.75	262.26	✓7241.97	77.00	5357.83	✓265.42 S	✓5351.53 W	5358.11@	267.16	0.00

$$MD = 72,424 \quad 12347$$

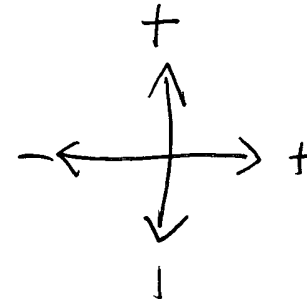
$$TVD = 7241.97$$

$$860 - 206 = 654 \quad 5255 \quad 605 \quad FSL$$

$$990 + 5352 = 63422 - 5280 = 1062$$

$$990 - 5352 = -4362 + 5280 = 918 \quad FWL$$

$$5275 - 4285 = 990$$



TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	Bobco, L.P.		
LEASE / WELL No.:	James Ranch	Unit #107H	
WELL LOCATION:	Eddy County		
COUNTY / STATE / COUNTRY:	Eddy County	NM	USA
RIG:	McVay # 5		
API WELL No:	30-015-37062		
JOB No:	101008522 WT-WT		
P.O. / AFE No.			
DIRECTIONAL COMPANY:	Pathfinder Energy		

WELL SITE INFORMATION

TOTAL MAGNETIC CORRECTION (TMC):			
On Wall Plat:	7.69	LWD Calculated:	7.691539
		Agreed Upon:	7.69
X =	693771.979000	Feet	Y = 489118.765000
			Feet
SITE LATITUDE:	32° 20' 37"	SITE LONGITUDE:	103° 50' 23"
GRID SYSTEM:	TRUE ☐ UTM ☒ LAMBERT ☐	ZONE:	New Mexico East
PROPOSED DRIFT DIRECTION:	267.75		
KELLY BUSHING ELEVATION:	19'		
ALTITUDE:	3301.5	Feet	WATER DEPTH:
			Feet

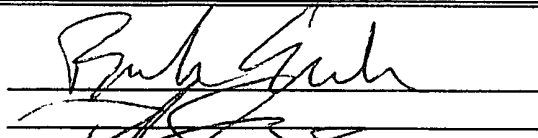
TIE-IN SURVEY

MEASURED DEPTH:	6717		
DRIFT ANGLE:	0.61		
DRIFT DIRECTION:	209.33		
TRUE VERTICAL DEPTH:	6716.08		
VERTICAL SECTION:	-9.36		
RECTANGULAR COORDINATE (N / S) :	-61.15		
RECTANGULAR COORDINATE (E / W) :	11.77		
CLOSURE DISTANCE / DIRECTION:	62.28	169.1	
SURVEY CALCULATION METHOD:	AA ☐	MC ☒	RC ☐ BT ☐
SOURCE OF TIE-IN DATA (COMPANY):	Scientific		
COPY OF TIE-IN SURVEY REPORT	☒ YES ☐ NO		

WELL PLAN

KICKOFF DEPTH:	6811	TOTAL DEPTH:	12448
KICKOFF ANGLE:	0	MAX ANGLE:	90

PES Engineers:



**Signature of both field engineers required if applicable

Directional Driller:



DATE: _____



Survey Report

Well Name: JAMES RANCH UNIT 107H
Survey: FINAL GYRO SURVEY
Survey Date: 5/26/2009

MD ft	Inc deg	Azim deg	TVD ft	VS ft	Northing ft	Easting ft	DLS deg/100ft	Closure Distance ft	Closure Angle deg
3900.00	0.75	155.48	3899.20	-13.57	-40.08	15.16	0.07	42.85	159.29
4000.00	0.66	155.35	3999.20	-14.04	-41.20	15.67	0.09	44.08	159.18
4100.00	0.70	138.30	4099.19	-14.65	-42.18	16.31	0.20	45.23	158.85
4200.00	0.53	136.09	4199.18	-15.34	-42.97	17.04	0.17	46.22	158.37
4300.00	0.56	131.21	4299.18	-16.00	-43.62	17.72	0.05	47.08	157.89
4400.00	0.52	130.46	4399.18	-16.68	-44.23	18.43	0.04	47.92	157.38
4500.00	0.81	137.09	4499.17	-17.36	-44.92	19.14	0.11	48.83	158.92
4600.00	0.49	150.13	4599.17	-17.91	-45.68	19.72	0.17	49.75	156.65
4700.00	0.51	186.51	4699.16	-18.04	-46.50	19.88	0.31	50.57	156.85
4800.00	0.50	192.70	4799.16	-17.86	-47.36	19.74	0.06	51.31	157.38
4900.00	0.43	225.39	4899.16	-17.47	-48.05	19.37	0.27	51.81	158.04
5000.00	0.61	229.64	4999.15	-16.77	-48.66	18.70	0.18	52.13	158.98
5100.00	0.47	229.97	5099.15	-16.03	-49.27	17.98	0.14	52.45	159.95
5200.00	0.48	241.02	5199.14	-15.34	-49.73	17.31	0.09	52.66	160.81
5300.00	0.46	253.01	5299.14	-14.58	-50.05	16.56	0.10	52.72	161.69
5400.00	0.46	220.78	5399.14	-13.93	-50.47	15.92	0.25	52.92	162.49
5500.00	0.46	206.71	5499.13	-13.46	-51.13	15.48	0.11	53.42	163.15
5600.00	0.47	199.60	5599.13	-13.12	-51.87	15.16	0.06	54.04	163.70
5700.00	0.48	196.08	5699.13	-12.83	-52.66	14.91	0.03	54.73	164.19
5800.00	0.61	197.31	5799.12	-12.52	-53.57	14.64	0.13	55.54	164.72
5900.00	0.58	195.38	5899.12	-12.19	-54.57	14.34	0.04	56.43	165.27
6000.00	0.74	184.11	5999.11	-11.96	-55.71	14.16	0.21	57.48	165.74
6100.00	0.59	185.87	6099.10	-11.82	-56.87	14.06	0.15	58.58	166.11
6200.00	0.41	203.63	6199.10	-11.59	-57.71	13.87	0.24	59.35	166.49
6300.00	0.35	223.36	6299.10	-11.21	-58.27	13.51	0.14	59.81	166.95
6400.00	0.45	215.06	6399.10	-10.75	-58.81	13.07	0.11	60.25	167.47
6500.00	0.37	203.86	6499.09	-10.38	-59.42	12.72	0.11	60.77	167.92
6600.00	0.53	209.15	6599.09	-9.99	-60.12	12.36	0.17	61.38	168.38
6700.00	0.62	210.18	6699.08	-9.46	-61.00	11.87	0.09	62.14	168.99
6717.00	0.61	209.33	6716.08	-9.36	-61.15	11.77	0.11	62.28	169.10

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

BOPCO, L.P.
JAMES RANCH UNIT #107H
EDDY COUNTY, NEW MEXICO
Rig:McVAY 5

Fri May 15 14:31:51 2009

Coordinates

Latitude: 32.343693 N (32 deg. 20 min. 37.2950 sec.)
Longitude: 103.839743 W (-103 deg. 50 min. 23.0741 sec.)
Elevation: 3301.50 feet.
Calculation Date: May/15/2009

Magnetic Calculations

Model: IGRF2005
Dip Angle: 60.3186 degrees
Total Magnetic Field: 0.48896 gauss
Magnetic Declination: 7.955613 degrees
Horizontal Intensity: 0.242124 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.955613 Degr

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 693771.9790 feet
Y: 489118.7650 feet
True to Grid: (convergence) -0.264074 degrees
Magnetic to Grid: 7.691539 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.691539 Degr.

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

BOPCO, L.P.
JAMES RANCH UNIT #107H
EDDY COUNTY, NEW MEXICO
Rig:McVAY #5

Tue Jun 09 17:06:48 2009

Coordinates

Latitude: 32.343693 N (32 deg. 20 min. 37.2950 sec.)
Longitude: 103.839743 W (-103 deg. 50 min. 23.0741 sec.)
Elevation: 3320.50 feet.
Calculation Date: May/20/2009

Magnetic Calculations

Model: IGRF2005
Dip Angle: 60.3183 degrees
Total Magnetic Field: 0.48895 gauss
Magnetic Declination: 7.953978 degrees
Horizontal Intensity: 0.242119 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.953978 Degs

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 693771.9790 feet
Y: 489118.7650 feet
True to Grid: (convergence) -0.264074 degrees
Magnetic to Grid: 7.689904 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.689904 Degs.

DISTRICT I

1625 N. French Dr., Hobbs, NM 88240

DISTRICT II

1501 W. Grand Avenue, Artesia, NM 88210

DISTRICT III

1000 Rio Braxos Rd., Artec, NM 87410

DISTRICT IV

1820 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 October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-37062	Pool Code 50443	Pool Name Quahada Ridge, SE (Delaware)
Property Code 306407	Property Name JAMES RANCH UNIT	Well Number 107H
OGRID No. 260737	Operator Name BOPCO, L.P.	Elevation 3283'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	36	22 S	30 E		860	SOUTH	990	WEST	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
M	35	22 S	30 E		660	SOUTH	990	WEST	EDDY
Dedicated Acres 200	Joint or Infill N	Consolidation Code	Order No.						

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 unleased mineral interest in the land including the proposed bottom hole 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. <i>Gary E. Gerhard</i> 1/14/09 Signature Date Gary E. Gerhard Printed Name
BOTTOM HOLE LOCATION LAT - N32°20'35.45" LONG - W103°51'25.49" SPC- N.: 488908.176 E.: 688418.331 (NAD-83)		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. DECEMBER 8, 2008 Date Surveyed <i>Gary L. Jones</i> Signature Professional Surveyor 7977 W.J. Jones & Sons Certificate No. Gary L. Jones 7977 Basin Surveys

SCALE - 1" = 2000'