

PATHFINDER

30 015 36924
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APR 26 2010

NMOCD ARTESIA

September 10, 2009

BOPCO, L.P.
P.O. BOX 2760
MIDLAND TX 79702

RE: BOPCO, L.P.
POKER LAKE UNIT # 301H
EDDY COUNTY, NM
RIG: MCVAY 5
PES FILE NO.: 101008727-WT-WT

To whom it may concern:

We hereby certify that the enclosed Original Field Survey Data contained in this report represents to the best of our knowledge, a true and accurate survey of the well at the time the survey was run.

DIRECTIONAL SURVEY DATA

- 1 - Original survey report
- 2 - Survey report copies

We appreciate the opportunity to work with you and we look forward to your business support. If you have any questions, I can be reached at (432) 687-1647

Sincerely,


FRANCISCO SINISTERRA
M/LWD Service Coordinator
PathFinder Energy Services

ML:sh

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SMITH



An Operating Unit of Smith International, Inc.

DIRECTIONAL SURVEY REPORT

BOPCO, L.P.

POKER LAKE UNIT # 301H

EDDY COUNTY, NEW MEXICO

PREPARED BY: FRANCISCO SINISTERRA

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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) JASON WALKER
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 8/10/09 TO 8/27/09
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, LP
POKER LAKE UNIT # 301H
EDDY COUNTY, NM
RIG: MCVAY 5

9. SURVEY CERTIFIED FROM 7125 TO 11795 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 4284.72 FEET ON A BEARING OF 324.62 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 11890 FEET, ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.



FRANCISCO SINISTERRA
M/LWD SERVICE COORDINATOR

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BOPCO WTD PRODUCTION



PathFinder Energy Services, Inc.

BHL Report

Page 01/01
Tie-in Date: 08/10/2009
Date Completed: 08/27/2009

BOPCO, L.P.
POKER LAKE UNIT #301H
EDDY COUNTY, NM
Rig:MCVAY #5
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers: JASON WALKER
SEAN RENARD
BRIAN McMANUS

Survey Horiz. Reference: WELLHEAD
Ref Coordinates: LAT: 32.11.21.0381 N LON: 103.52.10.6732 W
GRID Reference: NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 643449.8930 Y: 432852.0500
North Aligned To: GRID NORTH
Total Magnetic Correction: 7.68° EAST TO GRID
Vertical Section Plane: 325.71
Survey Vert. Reference: 19.00' Rotary Table To Ground
Altitude: 3345.00' Ground To MSL

Measured Depth	11890.00	(feet)
Inclination	92.68	(deg)
Azimuth	308.63	(deg)
True Vertical Depth	7592.58	(feet)
Vertical Section	4283.94	(feet)
Survey X cord	640968.82	(feet)
Survey Y cord	436345.34	(feet)
Survey Lat	32.19880918 N	(deg)
Survey Lon	103.87760343 W	(deg)
Rectangular Corr. N/S	3493.29 N	(feet)
Rectangular Corr. E/W	2481.07 W	(feet)
Closure Distance	4284.72	(feet)
Direction of Closure	324.62	(deg)
Dogleg Severity	0.00	(deg/100ft)

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PathFinder Energy Services, Inc.

Survey Report

BOPCO, L.P.
POKER LAKE UNIT #301H
EDDY COUNTY, NM
Rig:MCVAY #5
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers: JASON WALKER
SEAN RENARD
BRIAN McMANUS
Survey Calculations by RX5 V5.11i using Minimum Curvature

Page 01/09
Tie-in Date: 08/10/2009
Date Completed: 08/27/2009

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.11.21.0381 N LON:103.52.10.6732 W
Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 643449.8930 Y: 432852.0500
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.68° EAST TO GRID
Vertical Section Plane: 325.71
Survey Vert. Reference: 19.00' Rotary Table To Ground
Altitude:3345.00' 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)
THE FOLLOWING ARE GYRODATA DIRECTIONAL SURVEYS.										
100.00	0.09	140.63	100.00	0.00	-0.08	0.06 S	0.05 E	0.08@	142.43	0.00
200.00	0.21	101.97	200.00	100.00	-0.29	0.16 S	0.28 E	0.32@	120.26	0.15
300.00	0.10	178.78	300.00	100.00	-0.50	0.29 S	0.46 E	0.54@	122.05	0.21
400.00	0.07	104.13	400.00	100.00	-0.61	0.39 S	0.52 E	0.65@	126.83	0.11
500.00	0.15	192.44	500.00	100.00	-0.75	0.53 S	0.55 E	0.77@	134.00	0.16
600.00	0.17	227.28	600.00	100.00	-0.86	0.76 S	0.41 E	0.87@	151.45	0.10
700.00	0.41	236.10	700.00	100.00	-0.88	1.06 S	0.01 E	1.06@	179.57	0.24
800.00	0.26	233.75	800.00	100.00	-0.89	1.39 S	0.47 W	1.47@	198.70	0.15
900.00	0.48	138.20	900.00	100.00	-1.31	1.84 S	0.38 W	1.88@	191.53	0.57
1000.00	0.91	108.36	999.99	100.00	-2.36	2.40 S	0.66 E	2.49@	164.71	0.55
1100.00	1.00	97.10	1099.98	100.00	-3.56	2.76 S	2.28 E	3.58@	140.50	0.21
1200.00	1.09	92.41	1199.96	100.00	-4.71	2.91 S	4.09 E	5.02@	125.41	0.12
1300.00	1.28	91.84	1299.94	100.00	-5.94	2.99 S	6.16 E	6.84@	115.86	0.19
1400.00	1.40	91.52	1399.91	100.00	-7.31	3.05 S	8.50 E	9.03@	109.77	0.12
1500.00	1.39	93.98	1499.88	100.00	-8.78	3.17 S	10.93 E	11.38@	106.18	0.06
1600.00	1.31	94.86	1599.85	100.00	-10.25	3.35 S	13.28 E	13.69@	104.17	0.08
1700.00	1.44	99.82	1699.82	100.00	-11.85	3.66 S	15.65 E	16.08@	103.17	0.18
1800.00	1.61	109.89	1799.79	100.00	-13.86	4.35 S	18.21 E	18.73@	103.45	0.32
1900.00	1.75	120.47	1899.75	100.00	-16.38	5.61 S	20.85 E	21.59@	105.05	0.34
2000.00	1.99	123.04	1999.69	100.00	-19.36	7.33 S	23.62 E	24.73@	107.23	0.25
2100.00	2.31	118.92	2099.62	100.00	-22.76	9.25 S	26.84 E	28.39@	109.01	0.35
2200.00	2.45	112.32	2199.54	100.00	-26.35	11.04 S	30.58 E	32.51@	109.84	0.31
2300.00	2.30	108.31	2299.45	100.00	-29.73	12.48 S	34.47 E	36.65@	109.90	0.22
2400.00	2.06	108.23	2399.38	100.00	-32.75	13.67 S	38.08 E	40.46@	109.75	0.24
2500.00	1.99	125.79	2499.32	100.00	-35.80	15.25 S	41.19 E	43.92@	110.31	0.62

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BOPCO WTD PRODUCTION

PathFinder Energy Services, Inc.

Survey Report

BOPCO, L.P.
POKER LAKE UNIT #301H
EDDY COUNTY, NM
RIG:MCVAY #5

Page 02/09

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)
2600.00	2.21	134.48	2599.25	100.00	-39.33	17.61 S	43.98 E	47.37@	111.83	0.39
2700.00	1.95	128.17	2699.18	100.00	-42.84	20.02 S	46.69 E	50.80@	113.21	0.35
2800.00	1.75	123.00	2799.13	100.00	-45.87	21.90 S	49.31 E	53.95@	113.95	0.26
2900.00	1.66	120.24	2899.09	100.00	-48.59	23.46 S	51.84 E	56.90@	114.35	0.12
3000.00	1.40	113.75	2999.05	100.00	-50.93	24.68 S	54.21 E	59.56@	114.48	0.31
3100.00	1.72	105.81	3099.01	100.00	-53.12	25.58 S	56.77 E	62.27@	114.26	0.39
3200.00	2.05	111.11	3198.96	100.00	-55.74	26.64 S	59.88 E	65.54@	113.98	0.37
3300.00	2.59	117.86	3298.88	100.00	-59.21	28.34 S	63.55 E	69.58@	114.03	0.60
3400.00	2.69	119.67	3398.77	100.00	-63.32	30.55 S	67.59 E	74.17@	114.33	0.13
3500.00	3.08	127.47	3498.65	100.00	-67.98	33.35 S	71.76 E	79.13@	114.93	0.55
3600.00	3.26	129.43	3598.49	100.00	-73.26	36.79 S	76.09 E	84.51@	115.80	0.21
3700.00	2.80	117.15	3698.35	100.00	-78.14	39.71 S	80.46 E	89.72@	116.27	0.79
3800.00	2.37	115.29	3798.25	100.00	-82.06	41.71 S	84.50 E	94.23@	116.27	0.44
3900.00	1.67	124.42	3898.19	100.00	-85.20	43.41 S	87.57 E	97.74@	116.37	0.77
4000.00	1.57	118.23	3998.15	100.00	-87.78	44.89 S	89.98 E	100.55@	116.51	0.20
4100.00	1.29	124.65	4098.12	100.00	-90.04	46.17 S	92.11 E	103.04@	116.62	0.32
4200.00	1.35	119.60	4198.09	100.00	-92.15	47.40 S	94.06 E	105.33@	116.74	0.13
4300.00	1.25	126.39	4298.07	100.00	-94.24	48.63 S	95.97 E	107.58@	116.87	0.18
4400.00	1.31	135.35	4398.04	100.00	-96.39	50.09 S	97.65 E	109.74@	117.15	0.21
4500.00	1.33	133.43	4498.01	100.00	-98.65	51.70 S	99.29 E	111.94@	117.50	0.05
4600.00	1.13	145.42	4597.99	100.00	-100.77	53.31 S	100.70 E	113.93@	117.90	0.32
4700.00	1.01	143.15	4697.97	100.00	-102.64	54.82 S	101.78 E	115.61@	118.31	0.13
4800.00	0.87	148.45	4797.96	100.00	-104.28	56.18 S	102.71 E	117.07@	118.68	0.16
4900.00	0.77	168.31	4897.95	100.00	-105.66	57.48 S	103.24 E	118.17@	119.11	0.30
5000.00	0.77	164.14	4997.94	100.00	-106.91	58.79 S	103.56 E	119.08@	119.58	0.06
5100.00	0.57	161.81	5097.93	100.00	-108.03	59.90 S	103.90 E	119.93@	119.97	0.20

PathFinder Energy Services, Inc.

Survey Report

BOPCO, L.P.
POKER LAKE UNIT #301H
EDDY COUNTY, NM
RIG:MCVAY #5

Page 03/09

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)
5200.00	0.56	171.77	5197.93	100.00	-108.95	60.86 S	104.13 E	120.61@	120.31	0.10
5300.00	0.43	175.96	5297.93	100.00	-109.71	61.72 S	104.22 E	121.13@	120.63	0.13
5400.00	0.45	213.62	5397.92	100.00	-110.18	62.42 S	104.03 E	121.32@	120.96	0.28
5500.00	0.49	223.97	5497.92	100.00	-110.42	63.05 S	103.52 E	121.21@	121.35	0.09
5600.00	0.49	225.15	5597.92	100.00	-110.58	63.66 S	102.92 E	121.02@	121.74	0.01
5700.00	0.51	220.76	5697.91	100.00	-110.77	64.30 S	102.32 E	120.85@	122.15	0.04
5800.00	0.60	212.55	5797.91	100.00	-111.09	65.08 S	101.75 E	120.78@	122.60	0.12
5900.00	0.64	209.28	5897.90	100.00	-111.55	66.01 S	101.20 E	120.82@	123.12	0.05
6000.00	0.60	202.99	5997.90	100.00	-112.08	66.98 S	100.72 E	120.96@	123.62	0.08
6100.00	0.73	191.49	6097.89	100.00	-112.81	68.08 S	100.39 E	121.30@	124.15	0.19
6200.00	0.75	192.95	6197.88	100.00	-113.70	69.35 S	100.11 E	121.79@	124.71	0.03
6300.00	1.05	191.75	6297.87	100.00	-114.78	70.88 S	99.78 E	122.39@	125.39	0.30
6400.00	0.95	188.76	6397.85	100.00	-116.02	72.60 S	99.47 E	123.14@	126.12	0.11
6500.00	0.88	189.19	6497.84	100.00	-117.18	74.18 S	99.22 E	123.88@	126.78	0.07
6600.00	0.88	192.61	6597.83	100.00	-118.26	75.68 S	98.93 E	124.56@	127.42	0.05
6700.00	0.91	189.64	6697.82	100.00	-119.36	77.22 S	98.63 E	125.26@	128.06	0.06
6800.00	0.89	183.26	6797.80	100.00	-120.55	78.77 S	98.45 E	126.09@	128.66	0.10
6900.00	0.94	172.15	6897.79	100.00	-121.90	80.36 S	98.52 E	127.14@	129.20	0.18
7000.00	0.76	178.54	6997.78	100.00	-123.19	81.84 S	98.65 E	128.17@	129.68	0.20
** TIED INTO GYRODATA DIRECTIONAL SURVEY @ 7076'MD.										
7076.00	1.08	172.02	7073.77	76.00	-124.26	83.05 S	98.76 E	129.04@	130.06	0.44
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
7125.00	1.06	176.14	7122.76	49.00	-125.06	83.96 S	98.85 E	129.70@	130.34	0.16
7156.00	0.09	242.19	7153.76	31.00	-125.30	84.26 S	98.85 E	129.89@	130.44	3.31
7187.00	3.52	343.36	7184.74	31.00	-124.39	83.36 S	98.56 E	129.08@	130.22	11.41
7218.00	7.03	342.81	7215.60	31.00	-121.67	80.63 S	97.72 E	126.69@	129.53	11.32
7250.00	10.82	342.65	7247.21	32.00	-116.93	75.89 S	96.25 E	122.57@	128.26	11.84

PathFinder Energy Services, Inc.

Survey Report

BOPCO, L.P.
POKER LAKE UNIT #301H
EDDY COUNTY, NM
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)
7280.00	12.57	341.56	7276.59	30.00	-111.09	70.11 S	94.38 E	117.57@	126.61	5.88
7313.00	15.12	338.41	7308.63	33.00	-103.44	62.70 S	91.66 E	111.05@	124.37	8.05
7344.00	19.26	338.46	7338.23	31.00	-94.50	54.18 S	88.29 E	103.59@	121.53	13.35
7375.00	23.30	335.67	7367.12	31.00	-83.47	43.83 S	83.89 E	94.65@	117.59	13.43
7407.00	27.00	333.86	7396.08	32.00	-70.04	31.54 S	78.08 E	84.21@	112.00	11.81
7438.00	30.07	331.46	7423.31	31.00	-55.35	18.40 S	71.26 E	73.60@	104.47	10.57
7468.00	32.36	328.15	7448.97	30.00	-39.85	4.97 S	63.43 E	63.63@	94.48	9.54
7500.00	36.14	325.47	7475.41	32.00	-21.85	10.08 N	53.56 E	54.50@	79.34	12.72
7535.00	40.54	323.47	7502.86	35.00	-0.15	27.74 N	40.94 E	49.45@	55.88	13.06
7566.00	43.88	322.50	7525.82	31.00	20.65	44.36 N	28.39 E	52.67@	32.62	10.98
7597.00	47.75	321.98	7547.42	31.00	42.84	61.93 N	14.78 E	63.67@	13.42	12.54
7629.00	52.50	321.71	7567.93	32.00	67.33	81.23 N	0.39 W	81.23@	359.73	14.86
7660.00	56.81	323.52	7585.86	31.00	92.58	101.33 N	15.73 W	102.54@	351.18	14.70
7692.00	61.64	324.02	7602.23	32.00	120.04	123.50 N	31.97 W	127.57@	345.49	15.15
7723.00	66.57	324.61	7615.76	31.00	147.92	146.14 N	48.23 W	153.90@	341.74	16.00
7754.00	71.67	324.38	7626.81	31.00	176.86	169.71 N	65.05 W	181.75@	339.03	16.47
7786.00	77.03	323.85	7635.44	32.00	207.65	194.67 N	83.10 W	211.67@	336.88	16.83
7817.00	82.31	324.40	7641.00	31.00	238.13	219.37 N	100.97 W	241.49@	335.29	17.12
7848.00	89.69	325.21	7643.16	31.00	269.03	244.63 N	118.78 W	271.94@	334.10	23.95
7880.00	91.54	323.59	7642.81	32.00	301.01	270.64 N	137.40 W	303.52@	333.08	7.68
7911.00	88.90	322.81	7642.69	31.00	331.98	295.46 N	155.97 W	334.10@	332.17	8.88
7942.00	88.20	323.27	7643.48	31.00	362.94	320.23 N	174.60 W	364.73@	331.40	2.70
7973.00	89.34	323.36	7644.14	31.00	393.90	345.08 N	193.12 W	395.44@	330.77	3.69
8005.00	90.84	323.81	7644.09	32.00	425.88	370.83 N	212.12 W	427.21@	330.23	4.89
8036.00	91.71	323.59	7643.40	31.00	456.85	395.81 N	230.46 W	458.01@	329.79	2.90
8067.00	91.10	322.57	7642.64	31.00	487.81	420.58 N	249.08 W	488.80@	329.37	3.83

PathFinder Energy Services, Inc.

Survey Report

BOPCO, L.P.
POKER LAKE UNIT #301H
EDDY COUNTY, NM
RIG:MCVAY #5

Page 05/09

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets		Closure Dist Dir		DLS (dg/100ft)
						(ft)	(ft)	(ft)	(deg)	
8099.00	90.04	321.15	7642.33	32.00	519.74	445.75 N	268.84 W	520.54@	328.91	5.54
8130.00	90.31	320.98	7642.23	31.00	550.63	469.86 N	288.32 W	551.27@	328.47	1.03
8161.00	91.19	321.11	7641.83	31.00	581.53	493.97 N	307.81 W	582.02@	328.07	2.87
8193.00	90.48	320.16	7641.36	32.00	613.40	518.70 N	328.10 W	613.76@	327.68	3.71
8224.00	88.99	319.15	7641.50	31.00	644.22	542.33 N	348.17 W	644.47@	327.30	5.81
8255.00	90.57	319.18	7641.62	31.00	675.02	565.78 N	368.44 W	675.17@	326.93	5.10
8287.00	91.71	318.62	7640.98	32.00	706.79	589.89 N	389.47 W	706.87@	326.57	3.97
8318.00	92.33	318.69	7639.89	31.00	737.53	613.15 N	409.94 W	737.57@	326.23	2.01
8350.00	92.15	317.95	7638.64	32.00	769.24	637.03 N	431.20 W	769.25@	325.91	2.38
8380.00	91.63	316.55	7637.65	30.00	798.90	659.05 N	451.55 W	798.90@	325.58	4.98
8411.00	91.28	318.45	7636.86	31.00	829.57	681.90 N	472.49 W	829.59@	325.28	6.23
8443.00	91.19	319.99	7636.18	32.00	861.36	706.12 N	493.38 W	861.41@	325.06	4.82
8474.00	91.71	320.87	7635.39	31.00	892.22	730.01 N	513.12 W	892.31@	324.90	3.30
8506.00	90.57	320.98	7634.75	32.00	924.10	754.85 N	533.29 W	924.22@	324.76	3.58
8535.00	89.25	322.27	7634.80	29.00	953.02	777.58 N	551.29 W	953.18@	324.66	6.36
8566.00	88.90	322.49	7635.30	31.00	983.97	802.13 N	570.21 W	984.15@	324.59	1.33
8598.00	90.92	323.30	7635.35	32.00	1015.93	827.65 N	589.52 W	1016.14@	324.54	6.80
8629.00	92.59	323.58	7634.40	31.00	1046.89	852.54 N	607.97 W	1047.12@	324.51	5.46
8660.00	92.51	324.31	7633.02	31.00	1077.84	877.58 N	626.20 W	1078.08@	324.49	2.37
8692.00	91.36	324.15	7631.94	32.00	1109.81	903.52 N	644.90 W	1110.07@	324.48	3.63
8723.00	91.10	324.04	7631.28	31.00	1140.79	928.63 N	663.07 W	1141.06@	324.47	0.91
8755.00	91.54	323.69	7630.54	32.00	1172.77	954.46 N	681.94 W	1173.05@	324.46	1.76
8786.00	89.96	323.48	7630.13	31.00	1203.74	979.41 N	700.34 W	1204.04@	324.43	5.14
8818.00	88.46	323.95	7630.57	32.00	1235.72	1005.20 N	719.27 W	1236.03@	324.41	4.91
8850.00	87.85	324.37	7631.60	32.00	1267.69	1031.13 N	738.00 W	1268.02@	324.41	2.31
8881.00	89.34	324.86	7632.36	31.00	1298.67	1056.39 N	755.94 W	1299.01@	324.41	5.06

PathFinder Energy Services, Inc.

Survey Report

BOPCO, L.P.
POKER LAKE UNIT #301H
EDDY COUNTY, NM
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)
8912.00	90.22	325.34	7632.48	31.00	1329.67	1081.82 N	773.68 W	1330.00@	324.43	3.23
8944.00	91.19	325.80	7632.09	32.00	1361.67	1108.21 N	791.77 W	1361.99@	324.46	3.35
8975.00	92.24	326.03	7631.16	31.00	1392.65	1133.87 N	809.14 W	1392.97@	324.49	3.47
9007.00	91.28	324.73	7630.18	32.00	1424.64	1160.19 N	827.31 W	1424.95@	324.51	5.05
9038.00	89.69	324.97	7629.92	31.00	1455.63	1185.54 N	845.15 W	1455.95@	324.52	5.19
9069.00	90.66	325.35	7629.82	31.00	1486.63	1210.98 N	862.86 W	1486.95@	324.53	3.36
9101.00	91.71	325.59	7629.16	32.00	1518.62	1237.34 N	881.00 W	1518.93@	324.55	3.37
9131.00	91.19	327.04	7628.40	30.00	1548.61	1262.29 N	897.63 W	1548.91@	324.58	5.13
9163.00	89.60	326.88	7628.18	32.00	1580.60	1289.11 N	915.08 W	1580.88@	324.63	4.99
9195.00	88.81	326.27	7628.62	32.00	1612.59	1315.82 N	932.70 W	1612.86@	324.67	3.12
9226.00	88.55	327.19	7629.34	31.00	1643.58	1341.73 N	949.70 W	1643.83@	324.71	3.08
9258.00	86.44	327.96	7630.74	32.00	1675.53	1368.71 N	966.84 W	1675.76@	324.76	7.02
9289.00	85.30	328.50	7632.97	31.00	1706.42	1395.00 N	983.12 W	1706.62@	324.83	4.07
9320.00	84.94	328.37	7635.61	31.00	1737.27	1421.32 N	999.29 W	1737.45@	324.89	1.23
9352.00	84.24	328.34	7638.62	32.00	1769.09	1448.44 N	1016.01 W	1769.25@	324.95	2.19
9383.00	84.24	328.21	7641.73	31.00	1799.91	1474.67 N	1032.23 W	1800.04@	325.01	0.42
9414.00	85.74	328.28	7644.44	31.00	1830.76	1500.93 N	1048.48 W	1830.87@	325.06	4.84
9446.00	87.05	328.44	7646.45	32.00	1862.66	1528.12 N	1065.23 W	1862.76@	325.12	4.12
9477.00	88.20	328.00	7647.74	31.00	1893.60	1554.45 N	1081.54 W	1893.69@	325.17	3.97
9508.00	88.81	327.33	7648.55	31.00	1924.57	1580.63 N	1098.12 W	1924.65@	325.21	2.92
9539.00	91.01	327.69	7648.60	31.00	1955.56	1606.78 N	1114.77 W	1955.62@	325.25	7.19
9571.00	92.42	327.51	7647.64	32.00	1987.52	1633.79 N	1131.91 W	1987.58@	325.29	4.44
9603.00	93.12	327.49	7646.09	32.00	2019.47	1660.74 N	1149.08 W	2019.52@	325.32	2.19
9634.00	94.00	327.70	7644.17	31.00	2050.39	1686.86 N	1165.66 W	2050.43@	325.35	2.92
9665.00	94.26	327.72	7641.93	31.00	2081.29	1713.00 N	1182.18 W	2081.33@	325.39	0.84
9697.00	93.65	328.03	7639.73	32.00	2113.19	1740.04 N	1199.15 W	2113.22@	325.43	2.14

PathFinder Energy Services, Inc.

Survey Report

BOPCO, L.P.
POKER LAKE UNIT #301H
EDDY COUNTY, NM
RIG:MCVAY #5

Page 07/09

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)
9728.00	91.10	326.90	7638.44	31.00	2144.15	1766.15 N	1215.81 W	2144.17@ 325.46	9.00
9759.00	90.31	326.91	7638.06	31.00	2175.14	1792.12 N	1232.74 W	2175.16@ 325.48	2.55
9791.00	90.48	327.28	7637.84	32.00	2207.13	1818.98 N	1250.12 W	2207.15@ 325.50	1.27
9822.00	91.63	328.30	7637.27	31.00	2238.10	1845.21 N	1266.64 W	2238.12@ 325.53	4.96
9853.00	91.89	328.87	7636.32	31.00	2269.05	1871.65 N	1282.79 W	2269.06@ 325.57	2.02
9884.00	91.36	328.83	7635.44	31.00	2299.99	1898.17 N	1298.82 W	2299.99@ 325.62	1.71
9916.00	90.84	328.72	7634.82	32.00	2331.94	1925.53 N	1315.40 W	2331.94@ 325.66	1.66
9945.00	90.40	328.94	7634.51	29.00	2360.90	1950.34 N	1330.41 W	2360.90@ 325.70	1.70
9977.00	91.28	328.97	7634.04	32.00	2392.84	1977.75 N	1346.91 W	2392.84@ 325.74	2.75
10008.00	92.15	329.55	7633.11	31.00	2423.77	2004.39 N	1362.75 W	2423.77@ 325.79	3.37
10039.00	91.63	330.05	7632.09	31.00	2454.67	2031.16 N	1378.34 W	2454.68@ 325.84	2.33
10071.00	91.01	330.35	7631.35	32.00	2486.56	2058.92 N	1394.24 W	2486.58@ 325.90	2.15
10102.00	90.57	330.54	7630.93	31.00	2517.45	2085.89 N	1409.53 W	2517.48@ 325.95	1.55
10133.00	90.04	330.54	7630.76	31.00	2548.34	2112.88 N	1424.77 W	2548.38@ 326.01	1.71
10165.00	92.95	332.40	7629.93	32.00	2580.17	2140.98 N	1440.05 W	2580.22@ 326.07	10.79
10197.00	93.83	332.79	7628.03	32.00	2611.88	2169.34 N	1454.75 W	2611.96@ 326.15	3.01
10228.00	93.12	331.64	7626.16	31.00	2642.62	2196.71 N	1469.18 W	2642.73@ 326.23	4.35
10259.00	91.19	331.28	7624.99	31.00	2673.44	2223.92 N	1483.98 W	2673.58@ 326.29	6.33
10290.00	89.25	329.91	7624.87	31.00	2704.33	2250.93 N	1499.19 W	2704.49@ 326.34	7.66
10322.00	90.31	329.38	7624.99	32.00	2736.25	2278.54 N	1515.37 W	2736.44@ 326.37	3.70
10353.00	90.22	329.27	7624.85	31.00	2767.19	2305.20 N	1531.18 W	2767.40@ 326.41	0.46
10385.00	90.31	329.50	7624.70	32.00	2799.12	2332.74 N	1547.48 W	2799.35@ 326.44	0.77
10415.00	91.45	330.46	7624.24	30.00	2829.04	2358.71 N	1562.48 W	2829.29@ 326.48	4.97
10447.00	91.10	330.49	7623.53	32.00	2860.92	2386.55 N	1578.25 W	2861.21@ 326.52	1.10
10478.00	89.60	329.79	7623.34	31.00	2891.82	2413.44 N	1593.68 W	2892.14@ 326.56	5.34
10509.00	88.46	329.22	7623.86	31.00	2922.75	2440.14 N	1609.41 W	2923.10@ 326.59	4.11

PathFinder Energy Services, Inc.

Survey Report

BOPCO, L.P.
POKER LAKE UNIT #301H
EDDY COUNTY, NM
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		Closure Dist	Dir	DLS
						(ft)	(ft)	(ft)	(deg)	(dg/100ft)
10541.00	88.55	329.51	7624.70	32.00	2954.68	2467.67 N	1625.71 W	2955.05@	326.62	0.95
10572.00	90.92	331.12	7624.84	31.00	2985.57	2494.60 N	1641.06 W	2985.98@	326.66	9.24
10603.00	91.89	331.34	7624.08	31.00	3016.42	2521.76 N	1655.98 W	3016.88@	326.71	3.21
10634.00	91.98	330.62	7623.04	31.00	3047.27	2548.85 N	1671.01 W	3047.77@	326.75	2.34
10666.00	92.07	330.54	7621.91	32.00	3079.13	2576.71 N	1686.72 W	3079.68@	326.79	0.38
10698.00	90.48	329.04	7621.19	32.00	3111.04	2604.35 N	1702.81 W	3111.63@	326.82	6.83
10729.00	90.40	328.95	7620.96	31.00	3141.99	2630.92 N	1718.78 W	3142.61@	326.84	0.39
10760.00	90.75	328.79	7620.64	31.00	3172.94	2657.46 N	1734.81 W	3173.59@	326.86	1.24
10792.00	90.92	328.51	7620.18	32.00	3204.90	2684.78 N	1751.45 W	3205.57@	326.88	1.02
10823.00	91.36	330.05	7619.56	31.00	3235.83	2711.43 N	1767.29 W	3236.53@	326.90	5.17
10853.00	91.80	330.15	7618.73	30.00	3265.73	2737.42 N	1782.24 W	3266.47@	326.93	1.50
10885.00	91.45	328.91	7617.83	32.00	3297.65	2764.99 N	1798.46 W	3298.43@	326.96	4.03
10916.00	91.36	327.55	7617.07	31.00	3328.61	2791.34 N	1814.77 W	3329.41@	326.97	4.40
10948.00	91.89	327.41	7616.16	32.00	3360.58	2818.31 N	1831.97 W	3361.40@	326.98	1.71
10979.00	92.33	327.56	7615.02	31.00	3391.54	2844.43 N	1848.62 W	3392.37@	326.98	1.50
11010.00	91.98	326.98	7613.85	31.00	3422.51	2870.49 N	1865.37 W	3423.35@	326.98	2.18
11042.00	91.28	324.33	7612.94	32.00	3454.49	2896.90 N	1883.41 W	3455.33@	326.97	8.56
11074.00	90.13	322.36	7612.55	32.00	3486.46	2922.57 N	1902.52 W	3487.26@	326.94	7.13
11105.00	90.13	321.96	7612.48	31.00	3517.40	2947.05 N	1921.53 W	3518.15@	326.89	1.29
11137.00	90.40	321.96	7612.33	32.00	3549.33	2972.25 N	1941.25 W	3550.03@	326.85	0.84
11168.00	90.66	321.83	7612.04	31.00	3580.26	2996.65 N	1960.38 W	3580.92@	326.81	0.94
11199.00	91.28	321.76	7611.52	31.00	3611.18	3021.00 N	1979.55 W	3611.80@	326.76	2.01
11231.00	91.71	321.61	7610.68	32.00	3643.09	3046.10 N	1999.38 W	3643.66@	326.72	1.42
11262.00	91.89	321.34	7609.71	31.00	3673.99	3070.34 N	2018.68 W	3674.52@	326.68	1.05
11293.00	91.54	319.36	7608.78	31.00	3704.84	3094.20 N	2038.45 W	3705.31@	326.62	6.48
11325.00	91.01	317.31	7608.07	32.00	3736.57	3118.10 N	2059.72 W	3736.97@	326.55	6.62

PathFinder Energy Services, Inc.

Survey Report

BOPCO, L.P.
POKER LAKE UNIT #301H
EDDY COUNTY, NM
RIG:MCVAY #5

Page 09/09

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets		Closure Dist Dir		DLS (dg/100ft)
						(ft)	(ft)	(ft)	(deg)	
11356.00	90.75	316.28	7607.59	31.00	3767.19	3140.69 N	2080.94 W	3767.52@	326.47	3.43
11387.00	90.40	315.15	7607.28	31.00	3797.72	3162.88 N	2102.58 W	3797.98@	326.39	3.82
11419.00	90.84	314.79	7606.94	32.00	3829.16	3185.49 N	2125.22 W	3829.35@	326.29	1.78
11450.00	90.75	313.77	7606.51	31.00	3859.54	3207.14 N	2147.41 W	3859.68@	326.19	3.30
11482.00	90.40	312.82	7606.18	32.00	3890.79	3229.08 N	2170.70 W	3890.87@	326.09	3.16
11513.00	90.57	312.59	7605.92	31.00	3920.99	3250.10 N	2193.48 W	3921.04@	325.98	0.92
11545.00	90.75	312.49	7605.55	32.00	3952.15	3271.74 N	2217.06 W	3952.16@	325.88	0.64
11576.00	91.63	312.06	7604.91	31.00	3982.29	3292.58 N	2239.99 W	3982.29@	325.77	3.16
11608.00	91.36	310.98	7604.07	32.00	4013.30	3313.79 N	2263.94 W	4013.31@	325.66	3.48
11639.00	91.10	310.42	7603.41	31.00	4043.24	3334.00 N	2287.44 W	4043.26@	325.55	1.99
11670.00	91.80	310.39	7602.63	31.00	4073.13	3354.09 N	2311.04 W	4073.18@	325.43	2.26
11701.00	92.33	310.42	7601.51	31.00	4103.01	3374.17 N	2334.63 W	4103.11@	325.32	1.71
11733.00	93.12	310.09	7599.99	32.00	4133.82	3394.82 N	2359.02 W	4133.98@	325.21	2.68
11764.00	92.59	309.25	7598.44	31.00	4163.58	3414.59 N	2382.85 W	4163.82@	325.09	3.20
11795.00	92.68	308.63	7597.02	31.00	4193.23	3434.05 N	2406.94 W	4193.57@	324.97	2.02
STRAIGHT LINE PROJECTION TO BIT DEPTH @ 11890'MD.										
11890.00	92.68	308.63	7592.58	95.00	4283.94	3493.29 N	2481.07 W	4284.72@	324.62	0.00

** The survey data at tie-in point was furnished by a recognized survey company and entered as submitted. Survey stations above the tie-in point represent recalculated data by PathFinder Energy Services, Inc. and may reflect minor changes due to rounding differences between survey programs. Only survey stations taken by qualified PathFinder personnel are subject to certification.

TIE-IN SURVEY INFORMATION SHEET**CLIENT INFORMATION**

CLIENT:	BOPCO, L.P.		
LEASE / WELL No.:	POKER LAKE UNIT #301H		
WELL LOCATION:	EDDY COUNTY, NM		
COUNTY / STATE / COUNTRY:	EDDY	NM	USA
RIG:	MCVAY # 5		
API WELL No:	30-015-36924		
JOB No:	101008727-WT-WT		
P.O. / AFE No.			
DIRECTIONAL COMPANY:	PATHFINDER ENERGY SERVICES		

WELL SITE INFORMATION

TOTAL MAGNETIC CORRECTION (TMC):			
On Wall Plat:	7.69	LWD Calculated:	7.68
Agreed Upon:		7.68	
X =	643449.893000	Feet	Y = 432852.050000
		Feet	
SITE LATITUDE:	32° 11' 21" N	SITE LONGITUDE:	103° 52' 10" W
GRID SYSTEM:	TRUE ☐ UTM ☒ LAMBERT ☐	ZONE:	New Mexico East
PROPOSED DRIFT DIRECTION:	325.46°		
KELLY BUSHING ELEVATION:	19'		
ALTITUDE:	3345	Feet	WATER DEPTH: 0
		Feet	

TIE-IN SURVEY

MEASURED DEPTH:	7076'		
DRIFT ANGLE:	1.08°		
DRIFT DIRECTION:	172.02°		
TRUE VERTICAL DEPTH:	7073.77'		
VERTICAL SECTION:	-124.3'		
RECTANGULAR COORDINATE (N / S):	-83.05' S		
RECTANGULAR COORDINATE (E / W):	98.76' E		
CLOSURE DISTANCE / DIRECTION:	129.0'	130.1°	
SURVEY CALCULATION METHOD:	AA ☐	MC ☒	RC ☐ BT ☐
SOURCE OF TIE-IN DATA (COMPANY):	Gyrodata Directional		
COPY OF TIE-IN SURVEY REPORT	☒ YES		☐ NO

WELL PLAN

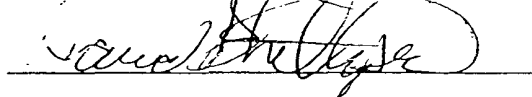
KICKOFF DEPTH:	7,150'	TOTAL DEPTH:	12370.40'
KICKOFF ANGLE:	0.76°	MAX ANGLE:	90°

PES Engineers:



**Signature of both field engineers required if applicable

Directional Driller:



DATE: 10-Aug-2009

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

BOPCO, L.P.
POKER LAKE UNIT #300H
EDDY COUNTY, NEW MEXICO
Rig:McVAY 5

Fri Jul 17 15:04:19 2009

Coordinates

Latitude: 32.189177 N (32 deg. 11 min. 21.0381 sec.)
Longitude: 103.869631 W (-103 deg. 52 min. 10.6732 sec.)
Elevation: 3364.00 feet.
Calculation Date: Jul/17/2009

Magnetic Calculations

Model: IGRF2005
Dip Angle: 60.1654 degrees
Total Magnetic Field: 0.48808 gauss
Magnetic Declination: 7.938142 degrees
Horizontal Intensity: 0.242818 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.938142 Degr

Transverse Mercator Grid Calculations NAD27

Grid System: Transverse Mercator: new mexico east
Ellipsoid: Clarke 1866
X: 643449.8930 feet
Y: 432852.0500 feet
True to Grid: (convergence) -0.247026 degrees
Magnetic to Grid: 7.691116 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.691116 Degr.

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

Field

BOPCO, L.P.
POKER LAKE UNIT #301
EDDY, COUNTY
Rig:MCVAY #5

Mon Aug 10 07:41:32 2009

Coordinates

Latitude: 32.189177 N (32 deg. 11 min. 21.0381 sec.)
Longitude: 103.869631 W (-103 deg. 52 min. 10.6732 sec.)
Elevation: 3364.00 feet.
Calculation Date: Aug/10/2009

Magnetic Calculations

Model: IGRF2005
Dip Angle: 60.1641 degrees
Total Magnetic Field: 0.48802 gauss
Magnetic Declination: 7.930354 degrees
Horizontal Intensity: 0.242796 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.930354 Degr

Transverse Mercator Grid Calculations NAD27

Grid System: Transverse Mercator: new mexico east
Ellipsoid: Clarke 1866
X: 643449.8930 feet
Y: 432852.0500 feet
True to Grid: (convergence) -0.247026 degrees
Magnetic to Grid: 7.683328 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.683328 Degr.

A Gyrodata Directional Survey

Field Copy Only, not definitive

for

BASS ENTERPRISE

Location: MCVAY #5, EDDY COUNTY, NEW MEXICO
Lease: POKER LAKE Well: #301H, 4-1/2" DRILLPIPE

Job Number: MD0809G_176

Run Date: 10 Aug 2009

Surveyor: JASON SOLOMON, AJ EATON

Calculation Method: MINIMUM CURVATURE

Survey surface coordinates obtained from: Directional Drilling Company

Survey Latitude: 32.189389 deg. N Longitude: 103.869583 deg. W

Azimuth Correction:

Gyro: -0.25000 deg to Grid North

Proposed Well Direction: 325.710 deg

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location

RECEIVED
OCT 20 2009
BOPCO WTD PRODUCTION

A Gyrodata Directional Survey

BASS ENTERPRISE

Location: MCVAY #5, EDDY COUNTY, NEW MEXICO

Lease: POKER LAKE Well: #301H, 4-1/2" DRILLPIPE

Job Number: MD0809G_176

MEASURED DEPTH feet	I N C L deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
0.00	0.00	0.00	0.0	0.00	0.00	0.0 0.0	0.00 N 0.00 E

0 TO 7076 FT. RATE GYROSCOPIC MULTISHOT SURVEY RUN INSIDE 4-1/2" DRILLPIPE							
ALL MEASURED DEPTHS AND COORDINATES REFERENCED TO MCVAY #5 21 FT R.K.B.							

100.00	0.09	140.63	-0.1	0.09	100.00	0.1 140.6	0.06 S 0.05 E
200.00	0.21	101.97	-0.3	0.15	200.00	0.3 119.8	0.16 S 0.28 E
300.00	0.10	178.78	-0.5	0.21	300.00	0.5 121.8	0.28 S 0.46 E
400.00	0.07	104.13	-0.6	0.11	400.00	0.6 126.6	0.39 S 0.52 E
500.00	0.15	192.44	-0.8	0.16	500.00	0.8 133.8	0.53 S 0.55 E
600.00	0.17	227.28	-0.9	0.10	600.00	0.9 151.3	0.76 S 0.41 E
700.00	0.41	236.10	-0.9	0.24	700.00	1.1 179.5	1.06 S 0.01 E
800.00	0.26	233.75	-0.9	0.15	800.00	1.5 198.7	1.39 S 0.47 W
900.00	0.48	138.20	-1.3	0.57	899.99	1.9 191.5	1.84 S 0.37 W
1000.00	0.91	108.36	-2.4	0.55	999.99	2.5 164.7	2.40 S 0.66 E
1100.00	1.00	97.10	-3.6	0.21	1099.97	3.6 140.5	2.76 S 2.28 E
1200.00	1.09	92.41	-4.7	0.12	1199.96	5.0 125.4	2.91 S 4.09 E
1300.00	1.28	91.84	-5.9	0.19	1299.94	6.8 115.8	2.98 S 6.16 E
1400.00	1.40	91.52	-7.3	0.12	1399.91	9.0 109.7	3.05 S 8.50 E
1500.00	1.39	93.98	-8.8	0.06	1499.88	11.4 106.2	3.17 S 10.93 E
1600.00	1.31	94.86	-10.3	0.08	1599.85	13.7 104.2	3.35 S 13.28 E
1700.00	1.44	99.82	-11.8	0.18	1699.82	16.1 103.2	3.66 S 15.66 E
1800.00	1.61	109.89	-13.9	0.32	1799.79	18.7 103.4	4.35 S 18.21 E
1900.00	1.75	120.47	-16.4	0.34	1899.74	21.6 105.0	5.60 S 20.85 E

A Gyrodata Directional Survey

BASS ENTERPRISE

Location: MCVAY #5, EDDY COUNTY, NEW MEXICO

Lease: POKER LAKE

Well: #301H, 4-1/2" DRILLPIPE

Job Number: MD0809G_176

MEASURED DEPTH feet	I N C L deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
2000.00	1.99	123.04	-19.4	0.25	1999.69	24.7 107.2	7.32 S 23.62 E
2100.00	2.31	118.92	-22.8	0.36	2099.62	28.4 109.0	9.25 S 26.84 E
2200.00	2.45	112.32	-26.4	0.31	2199.53	32.5 109.8	11.03 S 30.58 E
2300.00	2.30	108.31	-29.7	0.22	2299.45	36.7 109.9	12.47 S 34.47 E
2400.00	2.06	108.23	-32.7	0.24	2399.38	40.5 109.7	13.67 S 38.08 E
2500.00	1.99	125.79	-35.8	0.62	2499.31	43.9 110.3	15.24 S 41.19 E
2600.00	2.21	134.48	-39.3	0.39	2599.25	47.4 111.8	17.61 S 43.98 E
2700.00	1.95	128.17	-42.8	0.35	2699.18	50.8 113.2	20.01 S 46.69 E
2800.00	1.75	123.00	-45.9	0.26	2799.13	54.0 113.9	21.90 S 49.31 E
2900.00	1.66	120.24	-48.6	0.12	2899.08	56.9 114.3	23.46 S 51.84 E
3000.00	1.40	113.75	-50.9	0.31	2999.05	59.6 114.5	24.68 S 54.21 E
3100.00	1.72	105.81	-53.1	0.39	3099.01	62.3 114.3	25.58 S 56.77 E
3200.00	2.05	111.11	-55.7	0.37	3198.96	65.5 114.0	26.63 S 59.89 E
3300.00	2.59	117.86	-59.2	0.60	3298.88	69.6 114.0	28.33 S 63.55 E
3400.00	2.69	119.67	-63.3	0.13	3398.77	74.2 114.3	30.55 S 67.59 E
3500.00	3.08	127.47	-68.0	0.55	3498.64	79.1 114.9	33.35 S 71.76 E
3600.00	3.26	129.43	-73.3	0.21	3598.49	84.5 115.8	36.79 S 76.09 E
3700.00	2.80	117.15	-78.1	0.79	3698.35	89.7 116.3	39.71 S 80.46 E
3800.00	2.37	115.29	-82.1	0.44	3798.25	94.2 116.3	41.71 S 84.50 E
3900.00	1.67	124.42	-85.2	0.77	3898.19	97.7 116.4	43.41 S 87.57 E
4000.00	1.57	118.23	-87.8	0.20	3998.15	100.6 116.5	44.88 S 89.98 E
4100.00	1.29	124.65	-90.0	0.32	4098.12	103.0 116.6	46.17 S 92.11 E
4200.00	1.35	119.60	-92.2	0.13	4198.09	105.3 116.7	47.39 S 94.06 E

A Gyrodata Directional Survey

BASS ENTERPRISE

Location: MCVAY #5, EDDY COUNTY, NEW MEXICO

Lease: POKER LAKE Well: #301H, 4-1/2" DRILLPIPE

Job Number: MD0809G_176

MEASURED DEPTH feet	I N C L deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
4300.00	1.25	126.39	-94.2	0.18	4298.06	107.6 116.9	48.62 S 95.97 E
4400.00	1.31	135.35	-96.4	0.21	4398.04	109.7 117.2	50.08 S 97.65 E
4500.00	1.33	133.43	-98.7	0.05	4498.01	111.9 117.5	51.69 S 99.29 E
4600.00	1.13	145.42	-100.8	0.32	4597.99	113.9 117.9	53.30 S 100.70 E
4700.00	1.01	143.15	-102.6	0.13	4697.97	115.6 118.3	54.82 S 101.78 E
4800.00	0.87	148.45	-104.3	0.16	4797.96	117.1 118.7	56.17 S 102.71 E
4900.00	0.77	168.31	-105.7	0.30	4897.95	118.2 119.1	57.48 S 103.24 E
5000.00	0.77	164.14	-106.9	0.06	4997.94	119.1 119.6	58.78 S 103.56 E
5100.00	0.57	161.81	-108.0	0.20	5097.93	119.9 120.0	59.90 S 103.90 E
5200.00	0.56	171.77	-108.9	0.10	5197.93	120.6 120.3	60.86 S 104.13 E
5300.00	0.43	175.96	-109.7	0.13	5297.92	121.1 120.6	61.72 S 104.22 E
5400.00	0.45	213.62	-110.2	0.28	5397.92	121.3 121.0	62.42 S 104.03 E
5500.00	0.49	223.97	-110.4	0.09	5497.92	121.2 121.3	63.05 S 103.52 E
5600.00	0.49	225.15	-110.6	0.01	5597.91	121.0 121.7	63.66 S 102.92 E
5700.00	0.51	220.76	-110.8	0.04	5697.91	120.9 122.1	64.30 S 102.32 E
5800.00	0.60	212.55	-111.1	0.12	5797.91	120.8 122.6	65.08 S 101.75 E
5900.00	0.64	209.28	-111.6	0.05	5897.90	120.8 123.1	66.01 S 101.20 E
6000.00	0.60	202.99	-112.1	0.08	5997.89	121.0 123.6	66.98 S 100.72 E
6100.00	0.73	191.49	-112.8	0.19	6097.89	121.3 124.1	68.08 S 100.39 E
6200.00	0.75	192.95	-113.7	0.03	6197.88	121.8 124.7	69.34 S 100.11 E
6300.00	1.05	191.75	-114.8	0.30	6297.87	122.4 125.4	70.88 S 99.78 E
6400.00	0.95	188.76	-116.0	0.11	6397.85	123.1 126.1	72.60 S 99.47 E
6500.00	0.88	189.19	-117.2	0.07	6497.84	123.9 126.8	74.17 S 99.22 E

A Gyrodata Directional Survey

for

BASS ENTERPRISE

Lease: Poker Lake Well: 301H, 4-1/2" Drillpipe
Location: Mcvay #5, Eddy County, New Mexico

Job Number: MD0809GMS174

Run Date: 10 Aug 2009

Surveyor: Jason Solomon; Anthony Eaton

Calculation Method: MINIMUM CURVATURE

Survey surface coordinates obtained from: Directional Drilling Company

Survey Latitude: 32.189389 deg. N Longitude: 103.869583 deg. W

Azimuth Correction:

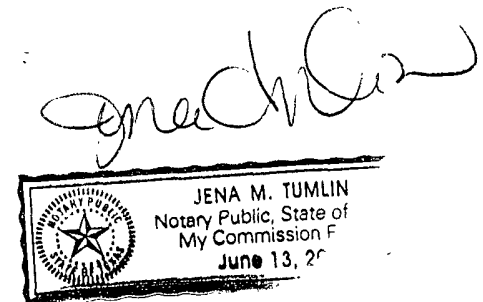
Zero: -0.25000 deg to Grid North

Proposed Well Direction: 325.710 deg

Vertical Section Calculated from Well Head Location

Closure Calculated from Well Head Location

Horizontal Coordinates Calculated from Well Head Location



JRE

A Gyrodata Directional Survey

Bass Enterprise

Lease: Poker Lake Well: 301H, 4-1/2" Drillpipe

Location: Mcvay #5, Eddy County, New Mexico

Job Number: MD0809GMS174

MEASURED DEPTH feet	INCL deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
2100.00	2.31	118.92	-22.8	0.36	2099.62	28.4 109.0	9.25 S 26.84 E
2200.00	2.45	112.32	-26.4	0.31	2199.53	32.5 109.8	11.03 S 30.58 E
2300.00	2.30	108.31	-29.7	0.22	2299.45	36.7 109.9	12.47 S 34.47 E
2400.00	2.06	108.23	-32.7	0.24	2399.38	40.5 109.7	13.67 S 38.08 E
2500.00	1.99	125.79	-35.8	0.62	2499.31	43.9 110.3	15.24 S 41.19 E
2600.00	2.21	134.48	-39.3	0.39	2599.25	47.4 111.8	17.61 S 43.98 E
2700.00	1.95	128.17	-42.8	0.35	2699.18	50.8 113.2	20.01 S 46.69 E
2800.00	1.75	123.00	-45.9	0.26	2799.13	54.0 113.9	21.90 S 49.31 E
2900.00	1.66	120.24	-48.6	0.12	2899.08	56.9 114.3	23.46 S 51.84 E
3000.00	1.40	113.75	-50.9	0.31	2999.05	59.6 114.5	24.68 S 54.21 E
3100.00	1.72	105.81	-53.1	0.39	3099.01	62.3 114.3	25.58 S 56.77 E
3200.00	2.05	111.11	-55.7	0.37	3198.96	65.5 114.0	26.63 S 59.89 E
3300.00	2.59	117.86	-59.2	0.60	3298.88	69.6 114.0	28.33 S 63.55 E
3400.00	2.69	119.67	-63.3	0.13	3398.77	74.2 114.3	30.55 S 67.59 E
3500.00	3.08	127.47	-68.0	0.55	3498.64	79.1 114.9	33.35 S 71.76 E
3600.00	3.26	129.43	-73.3	0.21	3598.49	84.5 115.8	36.79 S 76.09 E
3700.00	2.80	117.15	-78.1	0.79	3698.35	89.7 116.3	39.71 S 80.46 E
3800.00	2.37	115.29	-82.1	0.44	3798.25	94.2 116.3	41.71 S 84.50 E
3900.00	1.67	124.42	-85.2	0.77	3898.19	97.7 116.4	43.41 S 87.57 E
4000.00	1.57	118.23	-87.8	0.20	3998.15	100.6 116.5	44.88 S 89.98 E
4100.00	1.29	124.65	-90.0	0.32	4098.12	103.0 116.6	46.17 S 92.11 E
4200.00	1.35	119.60	-92.2	0.13	4198.09	105.3 116.7	47.39 S 94.06 E
4300.00	1.25	126.39	-94.2	0.18	4298.06	107.6 116.9	48.62 S 95.97 E
4400.00	1.31	135.35	-96.4	0.21	4398.04	109.7 117.2	50.08 S 97.65 E

A Gyrodata Directional Survey

Bass Enterprise
 Lease: Poker Lake Well: 301H, 4-1/2" Drillpipe
 Location: Mcvay #5, Eddy County, New Mexico
 Job Number: MD0809GMS174

MEASURED DEPTH feet	I N C L deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
4500.00	1.33	133.43	-98.7	0.05	4498.01	111.9 117.5	51.69 S 99.29 E
4600.00	1.13	145.42	-100.8	0.32	4597.99	113.9 117.9	53.30 S 100.70 E
4700.00	1.01	143.15	-102.6	0.13	4697.97	115.6 118.3	54.82 S 101.78 E
4800.00	0.87	148.45	-104.3	0.16	4797.96	117.1 118.7	56.17 S 102.71 E
4900.00	0.77	168.31	-105.7	0.30	4897.95	118.2 119.1	57.48 S 103.24 E
5000.00	0.77	164.14	-106.9	0.06	4997.94	119.1 119.6	58.78 S 103.56 E
5100.00	0.57	161.81	-108.0	0.20	5097.93	119.9 120.0	59.90 S 103.90 E
5200.00	0.56	171.77	-108.9	0.10	5197.93	120.6 120.3	60.86 S 104.13 E
5300.00	0.43	175.96	-109.7	0.13	5297.92	121.1 120.6	61.72 S 104.22 E
5400.00	0.45	213.62	-110.2	0.28	5397.92	121.3 121.0	62.42 S 104.03 E
5500.00	0.49	223.97	-110.4	0.09	5497.92	121.2 121.3	63.05 S 103.52 E
5600.00	0.49	225.15	-110.6	0.01	5597.91	121.0 121.7	63.66 S 102.92 E
5700.00	0.51	220.76	-110.8	0.04	5697.91	120.9 122.1	64.30 S 102.32 E
5800.00	0.60	212.55	-111.1	0.12	5797.91	120.8 122.6	65.08 S 101.75 E
5900.00	0.64	209.28	-111.6	0.05	5897.90	120.8 123.1	66.01 S 101.20 E
6000.00	0.60	202.99	-112.1	0.08	5997.89	121.0 123.6	66.98 S 100.72 E
6100.00	0.73	191.49	-112.8	0.19	6097.89	121.3 124.1	68.08 S 100.39 E
6200.00	0.75	192.95	-113.7	0.03	6197.88	121.8 124.7	69.34 S 100.11 E
6300.00	1.05	191.75	-114.8	0.30	6297.87	122.4 125.4	70.88 S 99.78 E
6400.00	0.95	188.76	-116.0	0.11	6397.85	123.1 126.1	72.60 S 99.47 E
6500.00	0.88	189.19	-117.2	0.07	6497.84	123.9 126.8	74.17 S 99.22 E
6600.00	0.88	192.61	-118.3	0.05	6597.83	124.6 127.4	75.68 S 98.93 E
6700.00	0.91	189.64	-119.4	0.06	6697.81	125.3 128.1	77.21 S 98.63 E
6800.00	0.89	183.26	-120.6	0.10	6797.80	126.1 128.7	78.77 S 98.45 E

A Gyrodata Directional Survey

Bass Enterprise

Lease: Poker Lake

Well: 301H, 4-1/2" Drillpipe

Location: Mcvay #5, Eddy County, New Mexico

Job Number: MD0809GMS174

MEASURED DEPTH feet	I N C L deg.	AZIMUTH deg.	VERTICAL SECTION feet	DOGLEG SEVERITY deg./ 100 ft.	VERTICAL DEPTH feet	CLOSURE DIST. AZIMUTH feet deg.	HORIZONTAL COORDINATES feet
6900.00	0.94	172.15	-121.9	0.18	6897.79	127.1 129.2	80.36 S 98.52 E
7000.00	0.76	178.54	-123.2	0.20	6997.78	128.2 129.7	81.83 S 98.65 E
7076.00	1.08	172.02	-124.3	0.44	7073.77	129.0 130.1	83.05 S 98.76 E

Final Station Closure: Distance: 129.04 ft Az: 130.06 deg.

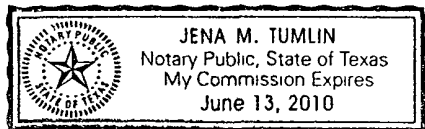


Gyrodata Incorporated
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Odessa, TX. 79765

432/561-8458
Fax: 432/563-7982

State of Texas
County of Midland

I, Jena Tumlin, certify that; I am employed by Gyrodata Inc.; that I am authorized and qualified to review the Rate Gyroscopic Multishot survey from a depth of 0 feet to a depth of 7076 feet conducted on the day(s) of 08/10/09 through 08/10/09; that this survey was conducted at the request of Bass Enterprises (Bobco) for the Poker Lake Well No. 301H in Eddy County, New Mexico; that the data is true, correct, complete, and within the limitations of the tool as set forth by Gyrodata Inc; that I am authorized and qualified to make this report; and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by Gyrodata Inc.




Jena Tumlin
Operations