

30-015-37678

PathFinder Energy Services, Inc.

Page 01/07

Tie-in Date: 11/15/2010

Date Completed: 11/23/2010

COG OPERATING, L.L.C.

GEHRIG FEDERAL #5H

EDDY COUNTY, NM

Rig: PATRIOT 2

PathFinder Office Supervisor: FRANCISCO SINISTERRA

PathFinder Field Engineers: JOHN OVERTON

MURAD ALIYEV

Survey Report

Survey Horiz. Reference: WELLHEAD

Ref Coordinates: LAT: 32.3.2.7368 N LON: 103.58.51.6343 W

GRID Reference: NAD27 new mexico east Transverse Mercator

Ref GRID Coord: X: 609158.6000 Y: 382369.9000

North Aligned To: GRID NORTH

Total Magnetic Correction: 7.65° EAST TO GRID

Vertical Section Plane: 359.79

Survey Vert. Reference: 17.50' Kelly Bushing To Ground

Altitude: 2949.00' Ground To MSL

Survey Calculations by RX5 V6.03B using Minimum Curvature

Measured Depth	Incl	Drift	TVD	Course	Vertical	TOTAL		Closure		DLS
(ft)	(deg)	Dir. (deg)	(ft)	Length (ft)	Section (ft)	Rectangular	Offsets	Dist	Dir	(dg/100ft)
						(ft)	(ft)	(ft)	(deg)	
THE FOLLOWING ARE SCIENTIFIC DRILLING GYROSCOPIC SURVEYS.										
100.00	0.14	315.73	100.00	0.00	0.04	0.04 N	0.09 W	0.10@	295.65	0.00
200.00	0.25	300.79	200.00	100.00	0.24	0.24 N	0.36 W	0.43@	303.80	0.12
300.00	0.24	336.75	300.00	100.00	0.55	0.55 N	0.63 W	0.83@	310.86	0.15
400.00	0.34	11.13	400.00	100.00	1.03	1.03 N	0.66 W	1.22@	327.48	0.20
500.00	0.44	29.48	500.00	100.00	1.66	1.65 N	0.41 W	1.70@	346.09	0.16
600.00	0.63	21.93	599.99	100.00	2.50	2.50 N	0.02 W	2.50@	359.65	0.20
700.00	0.74	12.40	699.98	100.00	3.64	3.64 N	0.33 E	3.65@	5.16	0.16
800.00	0.76	13.08	799.98	100.00	4.91	4.92 N	0.62 E	4.95@	7.16	0.02
900.00	0.68	33.56	899.97	100.00	6.05	6.06 N	1.10 E	6.15@	10.25	0.27
1000.00	0.65	46.37	999.96	100.00	6.94	6.94 N	1.83 E	7.18@	14.80	0.15
1100.00	0.38	73.57	1099.96	100.00	7.42	7.43 N	2.56 E	7.86@	19.04	0.36
1200.00	0.38	92.20	1199.96	100.00	7.50	7.51 N	3.21 E	8.17@	23.16	0.12
1300.00	0.44	89.08	1299.95	100.00	7.49	7.50 N	3.93 E	8.47@	27.63	0.06
1400.00	0.87	79.55	1399.95	100.00	7.63	7.65 N	5.06 E	9.17@	33.48	0.44
1500.00	1.28	74.72	1499.93	100.00	8.05	8.08 N	6.88 E	10.61@	40.43	0.42
1600.00	2.18	77.42	1599.88	100.00	8.75	8.79 N	9.82 E	13.17@	48.17	0.90
1700.00	2.90	72.27	1699.78	100.00	9.92	9.97 N	14.08 E	17.25@	54.70	0.75
1800.00	3.73	69.81	1799.62	100.00	11.79	11.86 N	19.54 E	22.86@	58.74	0.84
1900.00	3.73	67.92	1899.40	100.00	14.12	14.21 N	25.61 E	29.29@	60.98	0.12
2000.00	3.63	64.93	1999.20	100.00	16.66	16.77 N	31.49 E	35.68@	61.96	0.22
2100.00	2.89	69.72	2099.03	100.00	18.85	18.99 N	36.72 E	41.34@	62.66	0.79
2200.00	2.27	68.86	2198.93	100.00	20.43	20.58 N	40.94 E	45.82@	63.31	0.62
2300.00	2.04	72.68	2298.86	100.00	21.66	21.82 N	44.48 E	49.55@	63.87	0.27
2400.00	2.12	78.43	2398.80	100.00	22.55	22.72 N	47.99 E	53.10@	64.67	0.22
2500.00	1.93	79.61	2498.73	100.00	23.21	23.40 N	51.46 E	56.53@	65.55	0.19

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PathFinder Energy Services, Inc.

Survey Report

COG OPERATING, L.L.C.
GEHRIG FEDERAL #5H
EDDY COUNTY, NM
RIG: PATRIOT 2

Page 02/07

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)
2600.00	1.76	77.33	2598.68	100.00	23.84	24.04 N	54.62 E	59.67@	66.25	0.19
2700.00	1.56	87.90	2698.64	100.00	24.21	24.42 N	57.48 E	62.45@	66.98	0.36
2800.00	1.51	89.00	2798.60	100.00	24.28	24.50 N	60.15 E	64.95@	67.84	0.06
2900.00	1.41	90.45	2898.57	100.00	24.28	24.51 N	62.70 E	67.32@	68.65	0.11
3000.00	1.00	96.02	2998.55	100.00	24.17	24.41 N	64.80 E	69.24@	69.36	0.43
3100.00	0.88	92.33	3098.54	100.00	24.04	24.29 N	66.43 E	70.73@	69.92	0.13
3200.00	0.90	94.63	3198.52	100.00	23.94	24.19 N	67.98 E	72.16@	70.41	0.04
3300.00	0.92	90.05	3298.51	100.00	23.87	24.13 N	69.57 E	73.63@	70.87	0.08
3400.00	0.82	83.19	3398.50	100.00	23.95	24.21 N	71.08 E	75.09@	71.19	0.14
3500.00	0.76	85.52	3498.49	100.00	24.08	24.35 N	72.45 E	76.44@	71.43	0.07
3600.00	0.74	81.44	3598.48	100.00	24.23	24.50 N	73.75 E	77.72@	71.63	0.06
3700.00	0.66	90.66	3698.47	100.00	24.31	24.59 N	74.97 E	78.90@	71.84	0.14
3800.00	0.50	70.55	3798.47	100.00	24.45	24.72 N	75.96 E	79.88@	71.97	0.26
3900.00	0.50	66.35	3898.47	100.00	24.76	25.04 N	76.77 E	80.75@	71.93	0.04
4000.00	0.49	35.61	3998.46	100.00	25.28	25.57 N	77.42 E	81.53@	71.72	0.26
4100.00	0.48	40.43	4098.46	100.00	25.95	26.23 N	77.94 E	82.23@	71.40	0.04
4200.00	0.51	30.36	4198.46	100.00	26.65	26.94 N	78.43 E	82.93@	71.05	0.09
4300.00	0.57	17.68	4298.45	100.00	27.51	27.79 N	78.81 E	83.57@	70.57	0.13
4400.00	0.71	0.59	4398.44	100.00	28.60	28.89 N	78.97 E	84.08@	69.91	0.24
4500.00	0.77	0.54	4498.44	100.00	29.89	30.18 N	78.98 E	84.55@	69.09	0.06
4600.00	0.64	353.41	4598.43	100.00	31.12	31.41 N	78.92 E	84.94@	68.30	0.16
4700.00	0.44	342.87	4698.42	100.00	32.04	32.33 N	78.74 E	85.12@	67.68	0.22
4800.00	0.46	335.95	4798.42	100.00	32.77	33.06 N	78.47 E	85.15@	67.15	0.06
4900.00	0.29	349.31	4898.42	100.00	33.39	33.68 N	78.26 E	85.20@	66.72	0.19
5000.00	0.18	4.05	4998.42	100.00	33.79	34.08 N	78.22 E	85.32@	66.46	0.12
5100.00	0.15	351.16	5098.42	100.00	34.08	34.37 N	78.21 E	85.43@	66.28	0.05
5200.00	0.05	5.10	5198.42	100.00	34.25	34.54 N	78.20 E	85.49@	66.17	0.10
5300.00	0.13	174.77	5298.42	100.00	34.18	34.47 N	78.21 E	85.47@	66.21	0.18

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Survey Report

COG OPERATING, L.L.C.
 GEHRIG FEDERAL #5H
 EDDY COUNTY, NM
 RIG: PATRIOT 2

Page 03/07

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)
5400.00	0.10	184.91	5398.42	100.00	33.98	34.27 N	78.21 E	85.39@	66.34	0.04
5500.00	0.36	178.47	5498.42	100.00	33.58	33.87 N	78.21 E	85.23@	66.59	0.26
5600.00	0.32	201.56	5598.41	100.00	33.01	33.30 N	78.12 E	84.92@	66.92	0.14
5700.00	0.36	208.39	5698.41	100.00	32.47	32.76 N	77.87 E	84.48@	67.18	0.06
5800.00	0.39	222.88	5798.41	100.00	31.95	32.23 N	77.49 E	83.92@	67.41	0.10
5900.00	0.25	167.40	5898.41	100.00	31.49	31.77 N	77.30 E	83.58@	67.66	0.32
6000.00	0.37	145.44	5998.41	100.00	31.01	31.29 N	77.53 E	83.61@	68.02	0.17
6100.00	0.24	135.52	6098.41	100.00	30.59	30.88 N	77.86 E	83.76@	68.37	0.14
6200.00	0.39	146.25	6198.41	100.00	30.16	30.45 N	78.20 E	83.92@	68.73	0.16
6300.00	0.35	166.84	6298.40	100.00	29.58	29.87 N	78.46 E	83.95@	69.16	0.14
6400.00	0.30	179.87	6398.40	100.00	29.02	29.31 N	78.53 E	83.82@	69.53	0.09
6500.00	0.42	187.38	6498.40	100.00	28.39	28.68 N	78.48 E	83.56@	69.93	0.13
6600.00	0.61	189.49	6598.39	100.00	27.51	27.79 N	78.35 E	83.13@	70.47	0.19
6700.00	0.74	199.29	6698.39	100.00	26.37	26.66 N	78.05 E	82.47@	71.14	0.17
6800.00	1.15	180.54	6798.37	100.00	24.76	25.04 N	77.82 E	81.75@	72.16	0.51
** TIED INTO SCIENTIFIC DRILLING GYROSCOPIC SURVEY AT 6828'MD.										
6828.00	0.90	193.29	6826.37	28.00	24.26	24.55 N	77.77 E	81.55@	72.48	1.20
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.										
6901.00	0.53	221.40	6899.36	73.00	23.45	23.74 N	77.41 E	80.97@	72.95	0.68
6932.00	0.44	289.43	6930.36	31.00	23.39	23.67 N	77.21 E	80.75@	72.96	1.77
6964.00	4.22	350.34	6962.33	32.00	24.59	24.87 N	76.89 E	80.82@	72.08	12.58
6995.00	8.79	348.14	6993.12	31.00	28.04	28.32 N	76.22 E	81.31@	69.62	14.76
7026.00	12.66	349.55	7023.58	31.00	33.70	33.98 N	75.11 E	82.44@	65.66	12.51
7058.00	16.62	351.04	7054.53	32.00	41.68	41.95 N	73.76 E	84.86@	60.37	12.43
7090.00	20.40	350.60	7084.87	32.00	51.71	51.98 N	72.14 E	88.91@	54.23	11.82
7121.00	24.09	347.61	7113.56	31.00	63.23	63.49 N	69.90 E	94.43@	47.75	12.45
7153.00	27.17	347.88	7142.41	32.00	76.77	77.02 N	66.96 E	102.06@	41.01	9.63
7184.00	30.51	348.14	7169.56	31.00	91.41	91.64 N	63.86 E	111.70@	34.87	10.78
7216.00	34.29	347.52	7196.57	32.00	108.18	108.40 N	60.24 E	124.01@	29.06	11.86

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Survey Report

COG OPERATING, L.L.C.
GEHRIG FEDERAL #5H
EDDY COUNTY, NM
RIG:PATRIOT 2

Page 04/07

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)
7248.00	37.99	347.26	7222.41	32.00	126.61	126.81 N	56.12 E	138.67@	23.87	11.57
7279.00	41.77	346.56	7246.20	31.00	145.98	146.17 N	51.61 E	155.01@	19.45	12.28
7310.00	45.46	346.03	7268.64	31.00	166.77	166.94 N	46.54 E	173.30@	15.58	11.96
7342.00	48.36	345.85	7290.50	32.00	189.45	189.60 N	40.87 E	193.96@	12.16	9.07
7374.00	51.53	345.24	7311.09	32.00	213.19	213.32 N	34.75 E	216.13@	9.25	10.01
7405.00	55.05	345.06	7329.61	31.00	237.23	237.34 N	28.38 E	239.03@	6.82	11.36
7436.00	58.12	344.62	7346.68	31.00	262.23	262.31 N	21.61 E	263.20@	4.71	9.97
7468.00	60.32	344.45	7363.06	32.00	288.75	288.80 N	14.28 E	289.16@	2.83	6.89
7499.00	62.43	344.71	7377.91	31.00	315.00	315.03 N	7.05 E	315.11@	1.28	6.85
7530.00	65.25	344.45	7391.57	31.00	341.85	341.85 N	0.35 W	341.85@	359.94	9.13
7562.00	68.94	345.06	7404.03	32.00	370.31	370.29 N	8.10 W	370.38@	358.75	11.66
7594.00	71.84	345.94	7414.76	32.00	399.52	399.47 N	15.64 W	399.77@	357.76	9.43
7625.00	75.45	346.47	7423.49	31.00	428.43	428.35 N	22.73 W	428.96@	356.96	11.76
7656.00	77.73	346.64	7430.68	31.00	457.78	457.68 N	29.74 W	458.64@	356.28	7.37
7687.00	80.28	346.82	7436.59	31.00	487.43	487.29 N	36.73 W	488.68@	355.69	8.25
7722.00	82.57	347.52	7441.81	35.00	521.20	521.04 N	44.41 W	522.93@	355.13	6.84
7754.00	84.06	348.05	7445.54	32.00	552.28	552.10 N	51.14 W	554.46@	354.71	4.94
7785.00	85.65	348.67	7448.32	31.00	582.54	582.34 N	57.36 W	585.16@	354.37	5.50
7816.00	87.05	349.11	7450.29	31.00	612.92	612.69 N	63.33 W	615.96@	354.10	4.73
7848.00	88.37	349.02	7451.57	32.00	644.34	644.09 N	69.39 W	647.81@	353.85	4.14
7879.00	90.84	349.28	7451.78	31.00	674.80	674.53 N	75.23 W	678.71@	353.64	8.01
7911.00	90.84	349.37	7451.31	32.00	706.27	705.97 N	81.15 W	710.62@	353.44	0.28
7943.00	89.96	349.28	7451.09	32.00	737.73	737.42 N	87.08 W	742.54@	353.27	2.76
7974.00	89.16	348.67	7451.33	31.00	768.18	767.84 N	93.01 W	773.46@	353.09	3.24
8006.00	88.90	349.81	7451.87	32.00	799.63	799.28 N	98.98 W	805.38@	352.94	3.65
8037.00	88.72	351.13	7452.51	31.00	830.22	829.84 N	104.11 W	836.35@	352.85	4.30
8069.00	88.90	352.45	7453.18	32.00	861.90	861.51 N	108.68 W	868.33@	352.81	4.16
8100.00	88.46	353.76	7453.89	31.00	892.68	892.27 N	112.40 W	899.32@	352.82	4.46

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Survey Report

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RIG:PATRIOT 2

Page 05/07

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)
8132.00	89.16	354.73	7454.56	32.00	924.52	924.10 N	115.61 W	931.31@	352.87	3.74
8163.00	88.46	355.43	7455.20	31.00	955.41	954.98 N	118.27 W	962.28@	352.94	3.19
8195.00	88.64	356.52	7456.01	32.00	987.33	986.89 N	120.51 W	994.22@	353.04	3.45
8227.00	88.55	358.11	7456.80	32.00	1019.29	1018.85 N	122.01 W	1026.13@	353.17	4.98
8258.00	89.16	359.22	7457.42	31.00	1050.28	1049.83 N	122.73 W	1056.98@	353.33	4.08
8289.00	89.69	359.23	7457.73	31.00	1081.27	1080.83 N	123.15 W	1087.82@	353.50	1.71
8320.00	90.22	359.63	7457.75	31.00	1112.27	1111.83 N	123.46 W	1118.66@	353.66	2.14
8352.00	90.48	359.43	7457.56	32.00	1144.27	1143.83 N	123.72 W	1150.50@	353.83	1.03
8415.00	90.66	359.33	7456.93	63.00	1207.27	1206.82 N	124.41 W	1213.21@	354.11	0.33
8478.00	91.01	359.07	7456.01	63.00	1270.26	1269.81 N	125.29 W	1275.97@	354.37	0.69
8541.00	92.33	0.03	7454.17	63.00	1333.23	1332.77 N	125.78 W	1338.70@	354.61	2.59
8604.00	92.33	0.80	7451.61	63.00	1396.17	1395.72 N	125.32 W	1401.34@	354.87	1.22
8667.00	89.69	359.96	7450.50	63.00	1459.15	1458.70 N	124.91 W	1464.04@	355.11	4.40
8729.00	86.44	359.05	7452.60	62.00	1521.11	1520.66 N	125.44 W	1525.82@	355.28	5.44
8761.00	87.67	359.97	7454.24	32.00	1553.06	1552.61 N	125.71 W	1557.69@	355.37	4.80
8824.00	88.81	3.34	7456.18	63.00	1615.99	1615.55 N	123.90 W	1620.29@	355.61	5.64
8887.00	89.87	3.43	7456.90	63.00	1678.86	1678.43 N	120.18 W	1682.73@	355.90	1.69
8949.00	91.01	3.25	7456.42	62.00	1740.74	1740.32 N	116.56 W	1744.22@	356.17	1.86
9012.00	88.99	2.51	7456.42	63.00	1803.64	1803.24 N	113.40 W	1806.80@	356.40	3.41
9074.00	89.96	2.39	7456.99	62.00	1865.57	1865.18 N	110.75 W	1868.46@	356.60	1.58
9138.00	90.57	2.18	7456.70	64.00	1929.51	1929.13 N	108.20 W	1932.16@	356.79	1.01
9201.00	90.40	2.22	7456.16	63.00	1992.45	1992.08 N	105.78 W	1994.89@	356.96	0.28
9264.00	89.16	1.97	7456.41	63.00	2055.40	2055.03 N	103.48 W	2057.64@	357.12	2.01
9327.00	92.07	3.51	7455.73	63.00	2118.30	2117.95 N	100.46 W	2120.33@	357.28	5.23
9389.00	88.11	2.68	7455.63	62.00	2180.19	2179.85 N	97.12 W	2182.01@	357.45	6.53
9452.00	86.00	1.34	7458.87	63.00	2243.05	2242.72 N	94.91 W	2244.73@	357.58	3.97
9515.00	86.70	1.43	7462.88	63.00	2305.90	2305.57 N	93.39 W	2307.46@	357.68	1.12
9578.00	88.20	1.75	7465.68	63.00	2368.80	2368.48 N	91.64 W	2370.26@	357.78	2.43

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Survey Report

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GEHRIG FEDERAL #5H,
EDDY COUNTY, NM
RIG: PATRIOT 2

Page 06/07

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)
9641.00	89.87	2.47	7466.74	63.00	2431.74	2431.43 N	89.33 W	2433.07@	357.90	2.89
9704.00	90.75	3.10	7466.40	63.00	2494.65	2494.35 N	86.26 W	2495.85@	358.02	1.72
9768.00	90.90	2.36	7465.48	64.00	2558.56	2558.27 N	83.22 W	2559.63@	358.14	1.18
9831.00	90.75	2.37	7464.57	63.00	2621.49	2621.21 N	80.62 W	2622.45@	358.24	0.24
9893.00	90.92	2.31	7463.67	62.00	2683.42	2683.16 N	78.09 W	2684.29@	358.33	0.29
9957.00	91.10	2.02	7462.54	64.00	2747.36	2747.10 N	75.67 W	2748.14@	358.42	0.53
10020.00	91.45	2.14	7461.14	63.00	2810.29	2810.04 N	73.38 W	2811.00@	358.50	0.59
10084.00	91.80	1.76	7459.33	64.00	2874.22	2873.98 N	71.21 W	2874.86@	358.58	0.81
10147.00	91.80	1.06	7457.35	63.00	2937.17	2936.93 N	69.66 W	2937.76@	358.64	1.11
10210.00	92.24	1.66	7455.13	63.00	3000.10	2999.87 N	68.16 W	3000.65@	358.70	1.18
10273.00	92.24	1.96	7452.66	63.00	3063.01	3062.79 N	66.17 W	3063.51@	358.76	0.48
10336.00	91.80	2.09	7450.44	63.00	3125.93	3125.71 N	63.95 W	3126.37@	358.83	0.73
10398.00	90.92	2.02	7448.97	62.00	3187.86	3187.66 N	61.73 W	3188.25@	358.89	1.42
10461.00	90.40	0.78	7448.25	63.00	3250.83	3250.63 N	60.19 W	3251.19@	358.94	2.13
10524.00	89.69	1.62	7448.20	63.00	3313.81	3313.62 N	58.87 W	3314.14@	358.98	1.75
10619.00	89.43	2.14	7448.93	95.00	3408.74	3408.56 N	55.75 W	3409.02@	359.06	0.61
10713.00	89.52	1.63	7449.79	94.00	3502.68	3502.51 N	52.66 W	3502.90@	359.14	0.55
10807.00	89.96	1.17	7450.21	94.00	3596.64	3596.48 N	50.36 W	3596.83@	359.20	0.68
10902.00	89.87	1.91	7450.35	95.00	3691.59	3691.44 N	47.81 W	3691.75@	359.26	0.78
10997.00	90.13	2.10	7450.35	95.00	3786.52	3786.38 N	44.49 W	3786.65@	359.33	0.34
11091.00	90.31	2.30	7449.99	94.00	3880.44	3880.31 N	40.88 W	3880.53@	359.40	0.29
11185.00	90.40	1.80	7449.41	94.00	3974.36	3974.25 N	37.52 W	3974.43@	359.46	0.54
11280.00	89.87	1.43	7449.19	95.00	4069.31	4069.21 N	34.84 W	4069.36@	359.51	0.68
11375.00	90.13	2.12	7449.19	95.00	4164.26	4164.17 N	31.90 W	4164.29@	359.56	0.78
11470.00	90.22	1.49	7448.90	95.00	4259.20	4259.12 N	28.90 W	4259.22@	359.61	0.67
11565.00	90.66	1.90	7448.17	95.00	4354.14	4354.07 N	26.09 W	4354.15@	359.66	0.63
11659.00	90.48	1.96	7447.23	94.00	4448.07	4448.02 N	22.93 W	4448.08@	359.70	0.20
11719.00	90.84	1.64	7446.54	60.00	4508.03	4507.98 N	21.04 W	4508.03@	359.73	0.80

PathFinder Energy Services, Inc.

Survey Report

COG OPERATING, L.L.C.
GEHRIG FEDERAL #5H
EDDY COUNTY, NM
RIG:PATRIOT 2

Page 07/07

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)
STRAIGHT LINE PROJECTION TO BIT AT 11773.94'MD.								
11773.94	90.84	1.64	7445.74	54.94	4562.94	4562.89 N 19.47 W	4562.94@ 359.76	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.