



An Operating Unit of Smith International, Inc.

30-014 37949

DIRECTIONAL SURVEY REPORT

OGX RESOURCES, LLC.

MESCAL 22 FED #2H

EDDY COUNTY, NEW MEXICO

RECEIVED

FEB 17 2011

NMOCD ARTESIA

PREPARED BY: FRANCISCO SINISTERRA

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

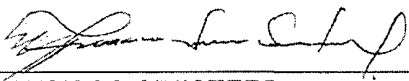
DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY: A) DEREK BOYD
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 08-18-10 TO 08-26-10
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:

OGX RESOURCES, LLC.
MESCAL 22 FED #2H
EDDY COUNTY, NM
RIG: SILVER OAK #6

9. SURVEY CERTIFIED FROM: 7081 TO 11137 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE
DISPLACED AT 3783.23 FEET ON A BEARING OF 266.26 DEGREES FROM THE
CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 11216 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: 08/19/2010
Date Completed: 08/26/2010

OGX RESOURCES, LLC.
MESCAL 22 FED #2H
EDDY COUNTY, NM
Rig: Silver Oak #6
PathFinder Office Supervisor: Francisco Sinisterra
PathFinder Field Engineers: D. Boyd
R. Miller

Survey Horiz. Reference: WELLHEAD
Ref Coordinates: LAT: 32.6382429 N LON: 103.57558871 W
GRID Reference: NAD83 new mexico east Transverse Mercator
Ref GRID Coord: X: 655217.1780 Y: 404175.3020
North Aligned To: GRID NORTH
Total Magnetic Correction: 7.67° EAST TO GRID
Vertical Section Plane: 266.82
Survey Vert. Reference: 17.00' Kelly Bushing To Ground
Altitude: 3071.00' Ground To MSL

Measured Depth	11216.00	(feet)
Inclination	83.19	(deg)
Azimuth	264.09	(deg)
True Vertical Depth	7537.11	(feet)
Vertical Section	3783.05	(feet)
Survey X cord	651442.02	(feet)
Survey Y cord	403928.28	(feet)
Survey Lat	32.10997880 N	(deg)
Survey Lon	103.97771967 W	(deg)
Rectangular Corr. N/S	247.02 S	(feet)
Rectangular Corr. E/W	3775.16 W	(feet)
Closure Distance	3783.23	(feet)
Direction of Closure	266.26	(deg)
Dogleg Severity	0.00	(deg/100ft)

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Survey Report

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Page 01/06
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Vertical Section Plane: 266.82
Survey Vert. Reference: 17.00' Kelly Bushing To Ground
Altitude: 3071.00' Ground To MSL

Survey Calculations by RX5 V6.03A using Minimum Curvature

Measured Depth (ft)	Incl (deg)	Drift Dir. (deg)	TVD (ft)	Course Length (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft) (ft)		Closure Dist Dir (ft) (deg)		DLS (dg/100ft)
TIE-IN TO SCIENTIFIC DRILLING GYRO @ 7044'MD.										
7044.00	1.03	227.46	7042.48	0.00	7.51	41.63 S	5.21 W	41.95@	187.13	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS:										
7081.00	0.88	254.57	7079.48	37.00	8.05	41.93 S	5.73 W	42.32@	187.78	1.27
7112.00	0.79	253.58	7110.47	31.00	8.49	42.05 S	6.16 W	42.50@	188.34	0.29
7143.00	0.70	245.86	7141.47	31.00	8.87	42.19 S	6.54 W	42.70@	188.81	0.43
7174.00	2.90	258.99	7172.45	31.00	9.83	42.42 S	7.48 W	43.07@	190.01	7.17
7205.00	6.86	263.16	7203.33	31.00	12.45	42.79 S	10.09 W	43.96@	193.27	12.82
7236.00	10.55	261.81	7233.97	31.00	17.13	43.41 S	14.74 W	45.85@	198.76	11.92
7267.00	14.07	262.16	7264.25	31.00	23.71	44.33 S	21.29 W	49.18@	205.65	11.36
7298.00	17.24	262.16	7294.10	31.00	32.05	45.47 S	29.57 W	54.24@	213.04	10.23
7329.00	20.05	263.73	7323.47	31.00	41.94	46.68 S	39.41 W	61.09@	220.17	9.21
7361.00	22.86	263.87	7353.25	32.00	53.62	47.94 S	51.04 W	70.03@	226.79	8.78
7392.00	25.50	265.18	7381.53	31.00	66.31	49.15 S	63.68 W	80.44@	232.34	8.69
7423.00	28.05	265.56	7409.20	31.00	80.27	50.27 S	77.60 W	92.46@	237.06	8.24
7454.00	31.04	265.87	7436.17	31.00	95.55	51.41 S	92.84 W	106.13@	241.02	9.66
7485.00	34.91	267.18	7462.17	31.00	112.42	52.43 S	109.68 W	121.56@	244.45	12.69
7516.00	39.66	269.10	7486.83	31.00	131.18	53.02 S	128.44 W	138.95@	247.57	15.77
7547.00	44.05	268.73	7509.91	31.00	151.85	53.41 S	149.12 W	158.39@	250.29	14.18
7579.00	48.72	267.45	7531.98	32.00	175.01	54.19 S	172.26 W	180.59@	252.54	14.88
7610.00	53.82	265.96	7551.37	31.00	199.18	55.60 S	196.40 W	204.12@	254.19	16.87
7641.00	59.09	265.45	7568.49	31.00	225.00	57.53 S	222.15 W	229.48@	255.48	17.06
7660.00	61.73	265.41	7577.88	19.00	241.52	58.85 S	238.62 W	245.77@	256.15	13.90
7691.00	66.74	265.57	7591.35	31.00	269.42	61.04 S	266.44 W	273.35@	257.10	16.17
7722.00	69.03	266.04	7603.02	31.00	298.13	63.14 S	295.08 W	301.76@	257.92	7.52
7754.00	71.40	265.92	7613.85	32.00	328.24	65.25 S	325.12 W	331.60@	258.65	7.42

PathFinder Energy Services, Inc.

Survey Report

OGX RESOURCES, LLC.
MESCAL 22 FED #2H
EDDY COUNTY, NM
RIG:Silver Oak #6

Page 02/06

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)
7785.00	74.39	265.92	7622.96	31.00	357.86	67.36 S	354.67 W	361.01@	259.25	9.65
7816.00	77.47	265.95	7630.50	31.00	387.92	69.49 S	384.66 W	390.89@	259.76	9.94
7847.00	80.99	265.96	7636.29	31.00	418.37	71.64 S	415.03 W	421.17@	260.21	11.35
7878.00	83.62	266.33	7640.44	31.00	449.08	73.71 S	445.68 W	451.74@	260.61	8.57
7909.00	85.03	266.67	7643.51	31.00	479.93	75.59 S	476.47 W	482.43@	260.99	4.68
7940.00	86.26	267.00	7645.86	31.00	510.84	77.30 S	507.33 W	513.19@	261.34	4.11
7971.00	88.46	266.74	7647.29	31.00	541.81	78.99 S	538.25 W	544.02@	261.65	7.15
8003.00	91.54	266.87	7647.29	32.00	573.80	80.77 S	570.20 W	575.89@	261.94	9.63
8034.00	92.68	266.83	7646.15	31.00	604.78	82.47 S	601.13 W	606.76@	262.19	3.68
8065.00	92.51	266.88	7644.74	31.00	635.75	84.17 S	632.05 W	637.63@	262.41	0.57
8096.00	92.51	267.15	7643.39	31.00	666.72	85.78 S	662.98 W	668.51@	262.63	0.87
8127.00	92.33	267.19	7642.08	31.00	697.69	87.31 S	693.92 W	699.39@	262.83	0.60
8158.00	91.80	267.13	7640.96	31.00	728.67	88.85 S	724.86 W	730.28@	263.01	1.72
8190.00	90.75	267.39	7640.25	32.00	760.66	90.38 S	756.81 W	762.19@	263.19	3.38
8221.00	90.57	267.07	7639.89	31.00	791.66	91.88 S	787.77 W	793.11@	263.35	1.18
8252.00	90.40	266.72	7639.63	31.00	822.66	93.55 S	818.73 W	824.05@	263.48	1.26
8283.00	90.75	266.52	7639.32	31.00	853.65	95.38 S	849.67 W	855.01@	263.59	1.30
8314.00	91.10	266.67	7638.82	31.00	884.65	97.22 S	880.61 W	885.96@	263.70	1.23
8345.00	91.45	266.73	7638.13	31.00	915.64	99.01 S	911.55 W	916.91@	263.80	1.15
8376.00	91.10	267.02	7637.44	31.00	946.64	100.70 S	942.50 W	947.86@	263.90	1.47
8407.00	91.01	266.78	7636.87	31.00	977.63	102.37 S	973.45 W	978.82@	264.00	0.83
8438.00	91.01	267.52	7636.32	31.00	1008.62	103.91 S	1004.41 W	1009.77@	264.09	2.39
8470.00	90.92	267.20	7635.78	32.00	1040.62	105.39 S	1036.37 W	1041.71@	264.19	1.04
8501.00	91.36	266.64	7635.16	31.00	1071.61	107.05 S	1067.32 W	1072.67@	264.27	2.30
8533.00	91.54	266.13	7634.35	32.00	1103.60	109.07 S	1099.24 W	1104.64@	264.33	1.69
8563.00	91.36	266.33	7633.60	30.00	1133.59	111.04 S	1129.17 W	1134.61@	264.38	0.90

PathFinder Energy Services, Inc.

Survey Report

OGX RESOURCES, LLC.
MESCAL 22 FED #2H
EDDY COUNTY, NM
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Page 03/06

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8594.00	90.66	266.09	7633.05	31.00	1164.58	113.09 S	1160.10 W	1165.59@	264.43	2.39
8626.00	90.31	267.17	7632.78	32.00	1196.58	114.97 S	1192.04 W	1197.57@	264.49	3.55
8657.00	90.04	267.49	7632.68	31.00	1227.58	116.42 S	1223.00 W	1228.53@	264.56	1.35
8688.00	90.04	267.15	7632.66	31.00	1258.58	117.86 S	1253.97 W	1259.50@	264.63	1.10
8719.00	89.78	266.97	7632.71	31.00	1289.58	119.45 S	1284.93 W	1290.47@	264.69	1.02
8750.00	90.75	267.61	7632.57	31.00	1320.58	120.92 S	1315.89 W	1321.44@	264.75	3.75
8781.00	90.92	267.24	7632.12	31.00	1351.57	122.31 S	1346.86 W	1352.40@	264.81	1.31
8813.00	91.28	266.70	7631.50	32.00	1383.56	124.00 S	1378.81 W	1384.37@	264.86	2.03
8844.00	92.42	267.64	7630.50	31.00	1414.55	125.53 S	1409.75 W	1415.33@	264.91	4.77
8875.00	92.68	267.08	7629.12	31.00	1445.51	126.96 S	1440.69 W	1446.27@	264.96	1.99
8906.00	92.86	267.26	7627.62	31.00	1476.48	128.49 S	1471.62 W	1477.21@	265.01	0.82
8937.00	93.39	267.98	7625.93	31.00	1507.43	129.77 S	1502.54 W	1508.14@	265.06	2.88
8968.00	93.74	268.25	7624.01	31.00	1538.36	130.79 S	1533.47 W	1539.03@	265.12	1.43
8999.00	93.74	267.64	7621.98	31.00	1569.29	131.90 S	1564.38 W	1569.93@	265.18	1.96
9030.00	93.74	267.50	7619.96	31.00	1600.22	133.21 S	1595.29 W	1600.84@	265.23	0.45
9062.00	93.74	267.68	7617.87	32.00	1632.15	134.56 S	1627.19 W	1632.74@	265.27	0.56
9093.00	93.74	267.65	7615.85	31.00	1663.08	135.82 S	1658.10 W	1663.65@	265.32	0.10
9124.00	93.74	267.77	7613.83	31.00	1694.01	137.05 S	1689.01 W	1694.56@	265.36	0.39
9155.00	92.51	266.63	7612.14	31.00	1724.96	138.56 S	1719.92 W	1725.50@	265.39	5.41
9186.00	91.89	266.54	7610.95	31.00	1755.94	140.41 S	1750.85 W	1756.47@	265.41	2.02
9217.00	91.89	266.87	7609.93	31.00	1786.92	142.19 S	1781.78 W	1787.44@	265.44	1.06
9248.00	91.80	266.41	7608.93	31.00	1817.90	144.01 S	1812.71 W	1818.42@	265.46	1.51
9279.00	92.07	266.49	7607.88	31.00	1848.89	145.93 S	1843.63 W	1849.40@	265.47	0.91
9310.00	92.33	267.07	7606.69	31.00	1879.86	147.67 S	1874.56 W	1880.37@	265.50	2.05
9341.00	92.77	267.42	7605.31	31.00	1910.83	149.15 S	1905.49 W	1911.32@	265.52	1.81
9373.00	92.77	266.64	7603.77	32.00	1942.79	150.81 S	1937.41 W	1943.27@	265.55	2.43

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Survey Report

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Page 04/06

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9404.00	92.33	267.08	7602.39	31.00	1973.76	152.51 S	1968.33 W	1974.23@	265.57	2.01
9435.00	92.51	266.64	7601.08	31.00	2004.74	154.20 S	1999.26 W	2005.20@	265.59	1.53
9466.00	92.07	267.61	7599.84	31.00	2035.71	155.76 S	2030.20 W	2036.16@	265.61	3.43
9497.00	92.33	268.05	7598.65	31.00	2066.68	156.93 S	2061.15 W	2067.12@	265.65	1.65
9528.00	92.42	267.77	7597.36	31.00	2097.65	158.06 S	2092.10 W	2098.06@	265.68	0.95
9559.00	91.71	266.66	7596.25	31.00	2128.63	159.56 S	2123.05 W	2129.03@	265.70	4.25
9591.00	91.01	266.47	7595.49	32.00	2160.62	161.48 S	2154.98 W	2161.02@	265.71	2.27
9622.00	91.63	267.19	7594.77	31.00	2191.61	163.19 S	2185.92 W	2192.01@	265.73	3.06
9653.00	91.89	266.95	7593.82	31.00	2222.59	164.78 S	2216.87 W	2222.98@	265.75	1.14
9684.00	92.42	267.78	7592.66	31.00	2253.57	166.20 S	2247.81 W	2253.95@	265.77	3.17
9715.00	92.77	267.36	7591.25	31.00	2284.54	167.52 S	2278.75 W	2284.90@	265.80	1.76
9746.00	92.86	267.29	7589.73	31.00	2315.50	168.96 S	2309.68 W	2315.85@	265.82	0.37
9777.00	92.77	267.61	7588.21	31.00	2346.46	170.34 S	2340.61 W	2346.80@	265.84	1.07
9809.00	92.86	267.25	7586.64	32.00	2378.42	171.77 S	2372.54 W	2378.75@	265.86	1.16
9840.00	92.95	267.46	7585.07	31.00	2409.38	173.20 S	2403.47 W	2409.70@	265.88	0.74
9871.00	93.21	267.74	7583.40	31.00	2440.33	174.50 S	2434.40 W	2440.64@	265.90	1.23
9902.00	93.39	267.65	7581.62	31.00	2471.27	175.74 S	2465.32 W	2471.58@	265.92	0.65
9933.00	93.30	267.65	7579.81	31.00	2502.22	177.01 S	2496.24 W	2502.51@	265.94	0.29
9964.00	93.39	267.40	7578.00	31.00	2533.16	178.35 S	2527.16 W	2533.45@	265.96	0.86
9995.00	93.39	267.54	7576.17	31.00	2564.11	179.71 S	2558.08 W	2564.38@	265.98	0.45
10026.00	93.56	267.28	7574.29	31.00	2595.05	181.11 S	2588.99 W	2595.32@	266.00	1.00
10058.00	93.83	267.32	7572.22	32.00	2626.98	182.61 S	2620.89 W	2627.24@	266.01	0.85
10089.00	93.56	267.01	7570.23	31.00	2657.92	184.15 S	2651.78 W	2658.17@	266.03	1.32
10120.00	93.03	267.09	7568.44	31.00	2688.86	185.74 S	2682.69 W	2689.11@	266.04	1.73
10151.00	92.95	267.23	7566.83	31.00	2719.82	187.27 S	2713.61 W	2720.06@	266.05	0.52
10182.00	92.86	267.23	7565.26	31.00	2750.78	188.77 S	2744.53 W	2751.02@	266.07	0.29

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Page 05/06

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10213.00	92.59	266.94	7563.78	31.00	2781.74	190.34 S	2775.46 W	2781.98@	266.08	1.28
10244.00	92.07	267.28	7562.52	31.00	2812.72	191.90 S	2806.39 W	2812.95@	266.09	2.00
10275.00	92.24	267.11	7561.36	31.00	2843.70	193.42 S	2837.34 W	2843.92@	266.10	0.78
10307.00	92.33	267.20	7560.08	32.00	2875.67	195.01 S	2869.27 W	2875.89@	266.11	0.40
10327.00	92.24	266.91	7559.28	20.00	2895.65	196.03 S	2889.23 W	2895.87@	266.12	1.52
10358.00	92.24	266.27	7558.07	31.00	2926.63	197.88 S	2920.15 W	2926.85@	266.12	2.06
10390.00	92.24	266.64	7556.82	32.00	2958.61	199.85 S	2952.06 W	2958.82@	266.13	1.16
10421.00	92.51	266.99	7555.54	31.00	2989.58	201.57 S	2982.99 W	2989.79@	266.13	1.43
10452.00	92.77	267.38	7554.11	31.00	3020.54	203.10 S	3013.92 W	3020.75@	266.14	1.51
10483.00	93.21	267.84	7552.49	31.00	3051.50	204.39 S	3044.85 W	3051.70@	266.16	2.05
10514.00	92.42	267.99	7550.97	31.00	3082.46	205.51 S	3075.79 W	3082.65@	266.18	2.59
10545.00	92.24	267.55	7549.71	31.00	3113.43	206.72 S	3106.74 W	3113.61@	266.19	1.53
10576.00	92.07	267.97	7548.54	31.00	3144.40	207.93 S	3137.70 W	3144.58@	266.21	1.46
10608.00	91.98	267.55	7547.41	32.00	3176.38	209.18 S	3169.65 W	3176.55@	266.22	1.34
10639.00	92.07	267.28	7546.32	31.00	3207.35	210.58 S	3200.60 W	3207.52@	266.24	0.92
10670.00	91.89	267.57	7545.25	31.00	3238.33	211.97 S	3231.55 W	3238.50@	266.25	1.10
10701.00	91.89	267.59	7544.22	31.00	3269.31	213.28 S	3262.51 W	3269.47@	266.26	0.06
10732.00	92.15	267.49	7543.13	31.00	3300.29	214.61 S	3293.46 W	3300.44@	266.27	0.90
10764.00	92.24	267.45	7541.90	32.00	3332.27	216.02 S	3325.40 W	3332.41@	266.28	0.31
10794.00	92.33	267.08	7540.71	30.00	3362.24	217.45 S	3355.35 W	3362.39@	266.29	1.27
10825.00	92.77	267.04	7539.33	31.00	3393.21	219.04 S	3386.28 W	3393.35@	266.30	1.43
10857.00	93.39	266.94	7537.61	32.00	3425.16	220.71 S	3418.18 W	3425.30@	266.31	1.96
10888.00	93.91	266.39	7535.64	31.00	3456.10	222.51 S	3449.07 W	3456.24@	266.31	2.44
10919.00	94.09	266.72	7533.47	31.00	3487.03	224.37 S	3479.94 W	3487.16@	266.31	1.21
10950.00	93.65	266.27	7531.38	31.00	3517.95	226.26 S	3510.81 W	3518.09@	266.31	2.03
10981.00	92.95	266.15	7529.60	31.00	3548.90	228.31 S	3541.69 W	3549.04@	266.31	2.29

PathFinder Energy Services, Inc.

Survey Report

OGX RESOURCES, LLC.
MESCAL 22 FED #2H
EDDY COUNTY, NM
RIG:Silver Oak #6

Page 06/06

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)
11012.00	92.42	266.59	7528.15	31.00	3579.87	230.27 S	3572.59 W	3580.01@	266.31	2.22
11044.00	91.98	266.49	7526.92	32.00	3611.84	232.20 S	3604.51 W	3611.98@	266.31	1.41
11075.00	92.33	266.69	7525.75	31.00	3642.82	234.04 S	3635.43 W	3642.96@	266.32	1.30
11106.00	88.55	265.52	7525.51	31.00	3673.81	236.15 S	3666.36 W	3673.95@	266.31	12.76
11137.00	83.19	264.09	7527.74	31.00	3704.70	238.94 S	3697.14 W	3704.85@	266.30	17.89
STRAIGHT-LINE PROJECTION TO BIT @ 11216' MD.										
11216.00	83.19	264.09	7537.11	79.00	3783.05	247.02 S	3775.16 W	3783.23@	266.26	0.00



TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	OGX RESOURCES		
LEASE / WELL No.:	MESCAL 22 FED.	#2H	
WELL LOCATION:	EDDY COUNTY, NEW MEXICO		
COUNTY / STATE / COUNTRY:	EDDY	NM	USA
RIG:	SILVER OAK #6		
API WELL No:	30-015-37949		
JOB No:	101011175-WT-WT		
P.O. / AFE No.			
DIRECTIONAL COMPANY:	PATHFINDER ENERGY SERVICES		

WELL SITE INFORMATION

TOTAL MAGNETIC CORRECTION (TMC):			
On Wall Plat:	7.67°	LWD Calculated:	7.67°
		Agreed Upon:	7.67°
X =	655217.178000	Feet	Y = 404175.302000
			Feet
SITE LATITUDE:	32.110623N	SITE LONGITUDE:	103.965524
GRID SYSTEM:	TRUE ☐ UTM ☒	LAMBERT ☐	ZONE: NEW MEXICO EAST
PROPOSED DRIFT DIRECTION:	266.82		
KELLY BUSHING ELEVATION:	17		
ALTITUDE:	3071	Feet	WATER DEPTH: N/A
			Feet

TIE-IN SURVEY

MEASURED DEPTH:	7044		
DRIFT ANGLE:	1.03		
DRIFT DIRECTION:	227.46		
TRUE VERTICAL DEPTH:	7042.48		
VERTICAL SECTION:	7.51		
RECTANGULAR COORDINATE (N / S) :	-41.63		
RECTANGULAR COORDINATE (E / W) :	-5.21		
CLOSURE DISTANCE / DIRECTION:	41.95	187.13	
SURVEY CALCULATION METHOD:	AA ☐	MC ☒	RC ☐ BT ☐
SOURCE OF TIE-IN DATA (COMPANY):	SCIENTIFIC DRILLING		
COPY OF TIE-IN SURVEY REPORT	☒ YES ☐ NO		

WELL PLAN

KICKOFF DEPTH:	7041.63	TOTAL DEPTH:	11725.34
KICKOFF ANGLE:	0°	MAX ANGLE:	90°

PES Engineers: _____

**Signature of both field engineers required if applicable

Directional Driller: _____

DATE: _____



Scientific Drilling

Gyroscopic Survey Report
for
OGX

Well Location	EDDY COUNTY, NEW MEXICO
Well Name	MESCAL 22 FED #2H
Rig Name	SILVER OAK #6
Survey Date	8/17/2010
Latitude	32.11 deg
North Reference	Grid North
Grid Correction	-0.20 deg
Depth Reference	RKB
Calculation Method	Minimum Curvature
Section (VS) Ref	0.00N (ft), 0.00E (ft), 266.82Azim (deg)
Definitive Survey	FINAL OUTRUN SURVEY
Operator	A.MADRID

Comments



Well Name:		MESCAL 22 FED #2H							
Survey:		FINAL OUTFUN SURVEY							
Survey Date:		8/17/2010							
MD	Inc	Azim	TVD	VS	Northing	Easting	DLS	Closure Distance	Closure Angle
ft	deg	deg	ft	ft	ft	ft	deg/100ft	ft	deg
0.00	0.00	0.00	0.00	0.00	0.00	0.00	Invalid	0.00	0.00
100.00	0.22	15.95	100.00	-0.06	0.18	0.05	0.22	0.19	15.95
200.00	0.24	302.60	200.00	0.05	0.48	-0.07	0.28	0.49	351.28
300.00	0.54	270.27	300.00	0.69	0.60	-0.72	0.35	0.94	309.73
400.00	1.00	269.21	399.99	2.02	0.59	-2.05	0.46	2.14	285.98
500.00	1.15	261.35	499.97	3.89	0.43	-3.92	0.21	3.94	276.20
600.00	1.10	266.81	599.95	5.85	0.22	-5.87	0.12	5.87	272.16
700.00	1.38	246.90	699.93	7.94	-0.31	-7.94	0.51	7.95	267.79
800.00	1.50	239.84	799.90	10.24	-1.44	-10.18	0.21	10.28	261.97
900.00	1.44	221.45	899.86	12.29	-3.04	-12.14	0.47	12.51	255.96
1000.00	1.44	223.97	999.83	14.09	-4.88	-13.85	0.06	14.68	250.58
1100.00	1.44	229.76	1099.80	16.02	-6.60	-15.68	0.15	17.01	247.17
1200.00	1.58	252.64	1199.77	18.36	-7.82	-17.96	0.61	19.59	246.46
1300.00	1.51	265.83	1299.73	21.02	-8.33	-20.59	0.36	22.21	247.97
1400.00	1.54	277.07	1399.70	23.66	-8.26	-23.23	0.30	24.66	250.42
1500.00	1.81	285.09	1499.66	26.31	-7.73	-25.92	0.23	27.05	253.39
1600.00	1.50	283.89	1599.62	28.89	-7.05	-28.55	0.12	29.41	256.12
1700.00	1.30	280.45	1699.59	31.24	-6.53	-30.93	0.22	31.61	258.07
1800.00	1.28	278.69	1799.57	33.43	-6.16	-33.14	0.04	33.71	259.47
1900.00	1.16	268.35	1899.54	35.54	-6.02	-35.26	0.25	35.77	260.31
2000.00	1.19	268.82	1999.52	37.58	-6.07	-37.30	0.04	37.79	260.76
2100.00	0.95	261.80	2099.51	39.44	-6.21	-39.16	0.27	39.65	260.99
2200.00	0.88	266.46	2199.49	41.04	-6.38	-40.75	0.10	41.24	261.11
2300.00	0.93	260.88	2299.48	42.61	-6.55	-42.31	0.10	42.82	261.20
2400.00	0.46	252.12	2399.47	43.80	-6.80	-43.49	0.48	44.02	261.11
2500.00	0.97	119.34	2499.47	43.48	-7.34	-43.14	1.32	43.76	260.35
2600.00	1.95	121.59	2599.43	41.37	-8.64	-40.95	0.99	41.85	258.09
2700.00	2.37	117.44	2699.36	38.20	-10.48	-37.67	0.44	39.10	254.45
2800.00	3.50	112.45	2799.23	33.67	-12.60	-33.02	1.16	35.34	249.12
2900.00	4.01	114.13	2899.02	27.81	-15.19	-27.01	0.52	30.99	240.64
3000.00	3.33	113.01	2998.81	22.10	-17.76	-21.15	0.69	27.62	229.99
3100.00	2.15	114.30	3098.70	17.84	-19.66	-16.77	1.18	25.84	220.46
3200.00	1.15	115.33	3198.65	15.29	-20.86	-14.15	1.00	25.21	214.15
3300.00	1.16	118.66	3298.63	13.54	-21.78	-12.35	0.07	25.04	209.56
3400.00	1.13	116.48	3398.61	11.82	-22.71	-10.58	0.05	25.05	204.99
3500.00	1.02	111.88	3498.59	10.16	-23.48	-8.87	0.14	25.10	200.71
3600.00	0.79	112.63	3598.58	8.74	-24.07	-7.41	0.23	25.19	197.11
3700.00	0.54	98.98	3698.58	7.65	-24.41	-6.31	0.30	25.22	194.49
3800.00	0.48	91.41	3798.57	6.78	-24.50	-5.43	0.09	25.09	192.50



Scientific Drilling

Survey Report

Well Name:		MESCAL 22 FED #2H							
Survey:		FINAL OUTFRAN SURVEY							
Survey Date:		8/17/2010							
MD	Inc	Azim	TVD	VS	Northing	Easting	DLS	Closure Distance	Closure Angle
ft	deg	deg	ft	ft	ft	ft	deg/100ft	ft	deg
3900.00	0.29	97.19	3898.57	6.11	-24.54	-4.76	0.19	25.00	190.98
4000.00	0.34	112.90	3998.57	5.60	-24.69	-4.24	0.10	25.05	189.74
4100.00	0.21	99.24	4098.57	5.16	-24.83	-3.79	0.14	25.12	188.67
4200.00	0.28	159.76	4198.57	4.91	-25.09	-3.52	0.26	25.34	187.99
4300.00	0.28	148.62	4298.56	4.72	-25.53	-3.31	0.06	25.74	187.39
4400.00	0.10	118.34	4398.56	4.53	-25.78	-3.11	0.19	25.96	186.87
4500.00	0.12	181.77	4498.56	4.46	-25.93	-3.03	0.12	26.10	186.66
4600.00	0.22	160.87	4598.56	4.42	-26.21	-2.97	0.11	26.38	186.46
4700.00	0.19	107.69	4698.56	4.21	-26.45	-2.75	0.19	26.59	185.93
4800.00	0.11	197.92	4798.56	4.09	-26.59	-2.62	0.22	26.72	185.62
4900.00	0.18	137.09	4898.56	4.03	-26.80	-2.54	0.16	26.92	185.42
5000.00	0.11	174.05	4998.56	3.92	-27.01	-2.43	0.11	27.12	185.14
5100.00	0.23	170.28	5098.56	3.90	-27.30	-2.39	0.11	27.41	184.99
5200.00	0.24	212.67	5198.56	4.00	-27.67	-2.47	0.17	27.78	185.09
5300.00	0.27	194.65	5298.56	4.19	-28.08	-2.64	0.09	28.20	185.37
5400.00	0.19	236.53	5398.56	4.41	-28.40	-2.83	0.18	28.54	185.70
5500.00	0.24	275.57	5498.56	4.75	-28.47	-3.18	0.15	28.65	186.37
5600.00	0.32	201.14	5598.56	5.08	-28.71	-3.49	0.34	28.92	186.93
5700.00	0.22	203.00	5698.56	5.28	-29.15	-3.66	0.10	29.37	187.17
5800.00	0.15	162.42	5798.56	5.33	-29.45	-3.70	0.14	29.68	187.16
5900.00	0.29	185.85	5898.55	5.34	-29.82	-3.69	0.17	30.05	187.05
6000.00	0.20	213.43	5998.55	5.48	-30.22	-3.81	0.15	30.46	187.18
6100.00	0.35	210.95	6098.55	5.75	-30.63	-4.06	0.15	30.89	187.55
6200.00	0.53	186.82	6198.55	6.00	-31.35	-4.27	0.26	31.64	187.76
6300.00	0.60	173.64	6298.55	6.05	-32.32	-4.27	0.15	32.60	187.52
6400.00	0.67	174.87	6398.54	6.00	-33.42	-4.16	0.07	33.68	187.09
6500.00	0.81	182.26	6498.53	6.05	-34.72	-4.13	0.17	34.96	186.79
6600.00	0.73	177.70	6598.52	6.13	-36.06	-4.14	0.10	36.30	186.54
6700.00	0.95	166.47	6698.51	5.99	-37.50	-3.92	0.27	37.71	185.96
6800.00	0.94	182.96	6798.50	5.93	-39.12	-3.77	0.27	39.30	185.50
6900.00	0.78	193.78	6898.49	6.21	-40.60	-3.97	0.23	40.79	185.58
7000.00	0.63	262.07	6998.48	6.96	-41.33	-4.68	0.80	41.59	186.46
7044.00	1.03	227.46	7042.48	7.51	-41.63	-5.21	1.42	41.95	187.13

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

OGX RESOURCES
MESCAL "22" FEDERAL #2H
EDDY COUNTY, NEW MEXICO
Rig:SILVER OAK #6

Mon Aug 09 15:12:31 2010

Coordinates

Latitude: 32.110623 N (32 deg. 6 min. 38.2429 sec.)
Longitude: 103.965524 W (-103 deg. 57 min. 55.8871 sec.)
Elevation: 3071.00 feet.
Calculation Date: Aug/09/2010

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.0326 degrees
Total Magnetic Field: 0.48614 gauss
Magnetic Declination: 7.861876 degrees
Horizontal Intensity: 0.242869 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.861876 Degr

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 655217.1780 feet
Y: 404175.3020 feet
True to Grid: (convergence) -0.195513 degrees
Magnetic to Grid: 7.666363 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.666363 Degr.

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

OGX RESOURCES
MESCAL 22 FED #2H
WILLOW LAKE;BONE SPRING, SOUTHEAST

Wed Aug 18 15:09:23 2010

Coordinates

Latitude: 32.110623 N (32 deg. 6 min. 38.2429 sec.)
Longitude: 103.965524 W (-103 deg. 57 min. 55.8871 sec.)
Elevation: 3088.00 feet.
Calculation Date: Aug/18/2010

Magnetic Calculations

Model: IGRF2010
Dip Angle: 60.0321 degrees
Total Magnetic Field: 0.48588 gauss
Magnetic Declination: 7.857318 degrees
Horizontal Intensity: 0.242705 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 7.857318 Degr

Transverse Mercator Grid Calculations NAD83

Grid System: Transverse Mercator: new mexico east
Ellipsoid: GRS80
X: 655217.1780 feet
Y: 404175.3020 feet
True to Grid: (convergence) -0.195513 degrees
Magnetic to Grid: 7.661805 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.661805 Degr.