



APR 13 2009

30-015-36535

DIRECTIONAL SURVEY REPORT

OGX RESOURCES

CHALLENGER 1 STATE #1H

EDDY COUNTY, NEW MEXICO

PREPARED BY: FRANCISCO SINISTERRA

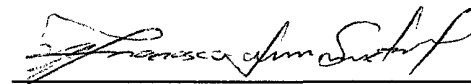
Pathfinder Energy Services, Inc.
6213 W. County Road 112 • Midland, TX • 79706
(432)681-6000

DIRECTIONAL SURVEY COMPANY REPORT:

1. NAME OF SURVEYING COMPANY: PATHFINDER ENERGY SERVICES
2. NAME OF PERSON(S) PERFORMING SURVEY:
A) JUSTIN FALLIN
3. POSITION OF SAID PERSON(S): (A-F) SURVEYORS (FIELD ENGINEERS)
4. DATE(S) ON WHICH SURVEY WAS PERFORMED: 11/12/08 TO 11/28/08
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
CHALLENGER 1 STATE #1H
EDDY COUNTY, NM
RIG: JW #1-
9. SURVEY CERTIFIED FROM: 7,630 TO 11,618 FEET MEASURED DEPTH.

THIS IS TO VERIFY THAT ATTACHED DOCUMENTS SHOWING THE WELL TO BE DISPLACED AT 3,781.80 FEET ON A BEARING OF 175.82 DEGREES FROM THE CENTER OF THE ROTARY TABLE AT A PROJECTED BIT DEPTH OF 11,685 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: 11/28/2008
Date Completed: 11/27/2008

OGX RESOURCES
CHALLENGER 1 STATE #1H
EDDY COUNTY, N.M.
Rig:JW 1
PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers:J.FALLIN

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.952.5673 N LON:103.56.38.3391 W
GRID Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 620480.8000 Y: 423821.1000
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.85° EAST TO GRID
Vertical Section Plane: 179.83
Survey Vert. Reference: 20.00' Kelly Bushing To Ground
Altitude:3100.00' Ground To MSL

Measured Depth	11685.00	(feet)
Inclination	89.52	(deg)
Azimuth	173.53	(deg)
True Vertical Depth	8230.63	(feet)
Vertical Section	3772.55	(feet)
Survey X cord	620756.36	(feet)
Survey Y cord	420049.36	(feet)
Survey Lat	32.15423091 N	(deg)
Survey Lon	103.94313679 W	(deg)
Rectangular Corr. N/S	3771.74 S	(feet)
Rectangular Corr. E/W	275.56 E	(feet)
Closure Distance	3781.80	(feet)
Direction of Closure	175.82	(deg)
Dogleg Severity	0.00	(deg/100ft)

PathFinder Energy Services, Inc.

Survey Report

OGX RESOURCES
CHALLENGER 1 STATE #1H
EDDY COUNTY, N.M.
Rig:JW 1

PathFinder Office Supervisor: FRANCISCO SINISTERRA
PathFinder Field Engineers: J.FALLIN

Page 01/05
Tie-in Date: 11/28/2008
Date Completed: 11/27/2008

Survey Horiz. Reference:WELLHEAD
Ref Coordinates: LAT:32.9.52.5673 N LON:103.56.38.3391 W
Reference:NAD27 new mexico east Transverse Mercator
Ref GRID Coord: X: 620480.8000 Y: 423821.1000
North Aligned To:GRID NORTH
Total Magnetic Correction: 7.85° EAST TO GRID
Vertical Section Plane: 179.83
Survey Vert. Reference: 20.00' Kelly Bushing To Ground
Altitude:3100.00' Ground To MSL

Survey Calculations by RX5 V5.11i 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 PROVIDED BY SCIENTIFIC DRILLING CONTROLS @ 7600' MD.								
7600.00	2.65	263.11	7595.65	0.00	109.17	108.96 S 71.63 E	130.40@ 146.68	0.00
THE FOLLOWING ARE PATHFINDER MWD SURVEYS.								
7630.00	4.48	219.29	7625.60	30.00	110.16	109.95 S 70.20 E	130.45@ 147.44	10.52
7658.00	6.16	207.34	7653.47	28.00	112.33	112.13 S 68.82 E	131.56@ 148.46	7.16
7689.00	10.46	201.37	7684.14	31.00	116.43	116.23 S 67.03 E	134.17@ 150.03	14.13
7720.00	11.26	199.70	7714.59	31.00	121.89	121.70 S 64.98 E	137.96@ 151.90	2.77
7751.00	11.17	200.03	7745.00	31.00	127.56	127.37 S 62.93 E	142.07@ 153.71	0.36
7782.00	10.90	196.22	7775.42	31.00	133.19	133.01 S 61.08 E	146.36@ 155.33	2.51
7814.00	11.34	193.39	7806.82	32.00	139.15	138.97 S 59.51 E	151.18@ 156.82	2.19
7845.00	15.21	190.14	7836.99	31.00	146.12	145.94 S 58.09 E	157.08@ 158.30	12.71
7908.00	19.87	187.39	7897.04	63.00	164.87	164.71 S 55.26 E	173.73@ 161.45	7.51
7939.00	22.69	187.47	7925.93	31.00	176.02	175.86 S 53.80 E	183.91@ 162.99	9.10
7970.00	26.03	187.50	7954.16	31.00	188.69	188.54 S 52.13 E	195.61@ 164.54	10.77
8001.00	30.42	187.55	7981.47	31.00	203.22	203.07 S 50.21 E	209.19@ 166.11	14.16
8032.00	34.73	187.52	8007.59	31.00	219.75	219.61 S 48.03 E	224.80@ 167.66	13.90
8063.00	39.39	188.51	8032.32	31.00	238.24	238.10 S 45.41 E	242.40@ 169.20	15.16
8094.00	43.35	188.39	8055.58	31.00	258.49	258.37 S 42.40 E	261.82@ 170.68	12.78
8125.00	46.78	187.61	8077.47	31.00	280.21	280.10 S 39.36 E	282.85@ 172.00	11.21
8157.00	48.72	186.26	8098.99	32.00	303.71	303.61 S 36.50 E	305.79@ 173.14	6.82
8188.00	52.06	185.91	8118.75	31.00	327.45	327.35 S 33.97 E	329.11@ 174.08	10.81
8219.00	55.93	186.45	8136.97	31.00	352.37	352.28 S 31.27 E	353.66@ 174.93	12.56
8250.00	59.18	186.96	8153.60	31.00	378.34	378.26 S 28.21 E	379.31@ 175.73	10.57
8294.00	64.02	186.08	8174.52	44.00	416.77	416.70 S 23.83 E	417.38@ 176.73	11.14
8326.00	68.50	185.27	8187.40	32.00	445.90	445.84 S 20.93 E	446.33@ 177.31	14.19

PathFinder Energy Services, Inc.

Survey Report

OGX RESOURCES
CHALLENGER 1 STATE #1H
EDDY COUNTY, N.M.
RIG:JW 1

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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)
8357.00	73.60	184.53	8197.46	31.00	475.10	475.04 S	18.43 E	475.40@	177.78	16.61
8388.00	79.14	186.23	8204.77	31.00	505.07	505.03 S	15.60 E	505.27@	178.23	18.65
8419.00	82.31	185.56	8209.76	31.00	535.49	535.45 S	12.46 E	535.60@	178.67	10.45
8450.00	82.22	185.36	8213.93	31.00	566.06	566.03 S	9.54 E	566.11@	179.03	0.70
8482.00	81.60	184.41	8218.44	32.00	597.62	597.60 S	6.84 E	597.64@	179.34	3.52
8512.00	84.06	183.59	8222.18	30.00	627.30	627.29 S	4.77 E	627.31@	179.56	8.64
8544.00	86.44	183.93	8224.83	32.00	659.11	659.11 S	2.67 E	659.11@	179.77	7.51
8575.00	85.65	183.67	8226.97	31.00	689.96	689.97 S	0.63 E	689.97@	179.95	2.68
8608.00	85.65	184.34	8229.47	33.00	722.78	722.79 S	1.67 W	722.79@	180.13	2.02
8640.00	87.41	185.56	8231.41	32.00	754.59	754.61 S	4.43 W	754.62@	180.34	6.69
8670.00	88.46	186.86	8232.49	30.00	784.39	784.41 S	7.67 W	784.45@	180.56	5.57
8702.00	90.66	187.97	8232.74	32.00	816.10	816.14 S	11.80 W	816.23@	180.83	7.70
8733.00	89.96	187.16	8232.57	31.00	846.82	846.87 S	15.88 W	847.02@	181.07	3.45
8764.00	90.57	186.91	8232.42	31.00	877.58	877.64 S	19.68 W	877.86@	181.28	2.13
8796.00	91.63	186.51	8231.81	32.00	909.34	909.41 S	23.42 W	909.71@	181.48	3.54
8827.00	92.51	184.35	8230.69	31.00	940.17	940.25 S	26.35 W	940.62@	181.61	7.52
8858.00	92.51	182.26	8229.33	31.00	971.08	971.17 S	28.13 W	971.58@	181.66	6.74
8890.00	93.03	181.77	8227.79	32.00	1003.02	1003.11 S	29.26 W	1003.54@	181.67	2.23
8921.00	93.12	182.00	8226.12	31.00	1033.96	1034.05 S	30.28 W	1034.49@	181.68	0.80
8953.00	93.30	182.07	8224.33	32.00	1065.88	1065.98 S	31.41 W	1066.44@	181.69	0.60
8984.00	93.47	181.96	8222.50	31.00	1096.81	1096.91 S	32.50 W	1097.39@	181.70	0.65
9015.00	93.47	182.16	8220.62	31.00	1127.72	1127.83 S	33.61 W	1128.33@	181.71	0.64
9047.00	92.24	180.59	8219.03	32.00	1159.67	1159.78 S	34.38 W	1160.29@	181.70	6.23
9077.00	92.15	180.09	8217.88	30.00	1189.65	1189.76 S	34.56 W	1190.26@	181.66	1.69
9108.00	90.66	180.19	8217.12	31.00	1220.64	1220.75 S	34.63 W	1221.24@	181.63	4.82
9139.00	89.34	180.13	8217.12	31.00	1251.64	1251.75 S	34.72 W	1252.23@	181.59	4.26
9171.00	89.16	180.43	8217.54	32.00	1283.63	1283.74 S	34.87 W	1284.22@	181.56	1.09
9202.00	89.52	180.58	8217.90	31.00	1314.63	1314.74 S	35.15 W	1315.21@	181.53	1.26
9233.00	89.69	180.46	8218.11	31.00	1345.63	1345.74 S	35.43 W	1346.20@	181.51	0.67
9263.00	89.16	180.13	8218.41	30.00	1375.62	1375.73 S	35.58 W	1376.19@	181.48	2.08

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Survey Report

OGX RESOURCES
CHALLENGER 1 STATE #1H
EDDY COUNTY, N.M.
RIG:JW 1

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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)
9294.00	88.99	180.04	8218.91	31.00	1406.62	1406.73 S	35.63 W	1407.18@	181.45	0.62
9325.00	89.16	179.70	8219.41	31.00	1437.61	1437.73 S	35.56 W	1438.17@	181.42	1.23
9356.00	89.78	179.11	8219.70	31.00	1468.61	1468.72 S	35.24 W	1469.15@	181.37	2.76
9387.00	89.69	177.71	8219.84	31.00	1499.60	1499.71 S	34.38 W	1500.10@	181.31	4.52
9418.00	89.78	178.34	8219.99	31.00	1530.59	1530.69 S	33.31 W	1531.05@	181.25	2.05
9449.00	89.87	177.84	8220.08	31.00	1561.57	1561.67 S	32.28 W	1562.01@	181.18	1.64
9479.00	90.31	177.59	8220.03	30.00	1591.55	1591.65 S	31.08 W	1591.95@	181.12	1.69
9510.00	91.28	177.37	8219.60	31.00	1622.52	1622.62 S	29.72 W	1622.89@	181.05	3.21
9541.00	91.71	177.04	8218.79	31.00	1653.48	1653.57 S	28.21 W	1653.81@	180.98	1.75
9572.00	92.07	174.35	8217.77	31.00	1684.38	1684.46 S	25.88 W	1684.66@	180.88	8.75
9603.00	92.42	176.89	8216.56	31.00	1715.27	1715.34 S	23.51 W	1715.51@	180.79	8.27
9634.00	92.95	176.86	8215.11	31.00	1746.19	1746.26 S	21.83 W	1746.40@	180.72	1.71
9665.00	92.42	176.57	8213.65	31.00	1777.11	1777.18 S	20.05 W	1777.29@	180.65	1.95
9696.00	90.22	176.11	8212.94	31.00	1808.04	1808.11 S	18.07 W	1808.20@	180.57	7.25
9727.00	88.20	175.76	8213.37	31.00	1838.97	1839.02 S	15.88 W	1839.09@	180.49	6.61
9757.00	87.85	175.32	8214.40	30.00	1868.87	1868.91 S	13.55 W	1868.96@	180.42	1.87
9788.00	88.11	175.61	8215.49	31.00	1899.76	1899.80 S	11.10 W	1899.83@	180.33	1.26
9819.00	88.29	174.99	8216.47	31.00	1930.65	1930.68 S	8.56 W	1930.70@	180.25	2.08
9849.00	89.34	175.68	8217.09	30.00	1960.55	1960.57 S	6.12 W	1960.58@	180.18	4.19
9880.00	89.87	175.27	8217.30	31.00	1991.46	1991.48 S	3.67 W	1991.48@	180.11	2.16
9910.00	90.22	175.48	8217.28	30.00	2021.36	2021.38 S	1.25 W	2021.38@	180.04	1.36
9941.00	90.66	175.50	8217.04	31.00	2052.27	2052.28 S	1.18 E	2052.28@	179.97	1.42
9972.00	91.36	175.20	8216.49	31.00	2083.18	2083.17 S	3.70 E	2083.18@	179.90	2.46
10003.00	90.66	173.95	8215.95	31.00	2114.04	2114.03 S	6.63 E	2114.04@	179.82	4.62
10035.00	89.87	173.79	8215.80	32.00	2145.87	2145.85 S	10.04 E	2145.87@	179.73	2.52
10065.00	89.78	173.73	8215.89	30.00	2175.70	2175.67 S	13.31 E	2175.71@	179.65	0.36
10095.00	87.58	173.56	8216.58	30.00	2205.51	2205.47 S	16.63 E	2205.54@	179.57	7.36
10125.00	87.32	173.28	8217.92	30.00	2235.30	2235.25 S	20.06 E	2235.34@	179.49	1.27
10156.00	87.32	173.47	8219.37	31.00	2266.07	2266.01 S	23.63 E	2266.13@	179.40	0.61
10187.00	87.67	172.76	8220.72	31.00	2296.82	2296.75 S	27.34 E	2296.91@	179.32	2.55

PathFinder Energy Services, Inc.

Survey Report

OGX RESOURCES
CHALLENGER 1 STATE #1H
EDDY COUNTY, N.M.
RIG:JW 1

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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)
10218.00	87.67	172.23	8221.98	31.00	2327.54	2327.46 S	31.39 E	2327.67@	179.23	1.71
10250.00	87.76	171.95	8223.26	32.00	2359.23	2359.13 S	35.79 E	2359.40@	179.13	0.92
10281.00	88.11	171.93	8224.37	31.00	2389.91	2389.80 S	40.13 E	2390.14@	179.04	1.13
10313.00	88.11	171.56	8225.43	32.00	2421.58	2421.46 S	44.73 E	2421.87@	178.94	1.16
10343.00	88.90	171.21	8226.21	30.00	2451.24	2451.11 S	49.22 E	2451.60@	178.85	2.88
10375.00	90.13	170.36	8226.48	32.00	2482.84	2482.69 S	54.34 E	2483.29@	178.75	4.67
10406.00	91.45	169.81	8226.06	31.00	2513.39	2513.23 S	59.68 E	2513.93@	178.64	4.61
10437.00	92.07	169.48	8225.10	31.00	2543.89	2543.71 S	65.25 E	2544.54@	178.53	2.27
10468.00	92.86	169.64	8223.77	31.00	2574.36	2574.17 S	70.86 E	2575.14@	178.42	2.60
10500.00	93.65	169.46	8221.95	32.00	2605.80	2605.58 S	76.66 E	2606.71@	178.31	2.53
10531.00	94.26	168.87	8219.82	31.00	2636.19	2635.96 S	82.47 E	2637.25@	178.21	2.73
10562.00	92.77	168.59	8217.91	31.00	2666.55	2666.30 S	88.52 E	2667.77@	178.10	4.89
10593.00	92.95	168.81	8216.37	31.00	2696.93	2696.66 S	94.58 E	2698.32@	177.99	0.92
10624.00	93.74	168.62	8214.56	31.00	2727.30	2727.01 S	100.64 E	2728.87@	177.89	2.62
10655.00	94.35	168.72	8212.37	31.00	2757.64	2757.33 S	106.71 E	2759.40@	177.78	1.99
10686.00	93.30	168.59	8210.30	31.00	2787.98	2787.66 S	112.80 E	2789.94@	177.68	3.41
10717.00	93.12	168.66	8208.57	31.00	2818.34	2818.00 S	118.90 E	2820.51@	177.58	0.62
10748.00	91.45	168.47	8207.33	31.00	2848.72	2848.36 S	125.04 E	2851.10@	177.49	5.42
10779.00	91.54	168.14	8206.52	31.00	2879.08	2878.71 S	131.33 E	2881.70@	177.39	1.10
10810.00	92.42	168.68	8205.45	31.00	2909.45	2909.06 S	137.55 E	2912.31@	177.29	3.33
10840.00	90.92	168.93	8204.58	30.00	2938.88	2938.47 S	143.37 E	2941.97@	177.21	5.07
10871.00	92.15	168.83	8203.75	31.00	2969.31	2968.88 S	149.35 E	2972.63@	177.12	3.98
10903.00	92.77	168.78	8202.37	32.00	3000.69	3000.24 S	155.56 E	3004.27@	177.03	1.94
10934.00	90.57	169.07	8201.47	31.00	3031.11	3030.65 S	161.51 E	3034.95@	176.95	7.16
10965.00	90.13	169.55	8201.28	31.00	3061.59	3061.11 S	167.26 E	3065.68@	176.87	2.10
10996.00	89.52	171.20	8201.38	31.00	3092.17	3091.67 S	172.44 E	3096.48@	176.81	5.67
11027.00	86.88	169.65	8202.35	31.00	3122.73	3122.22 S	177.59 E	3127.27@	176.74	9.87
11058.00	86.00	169.62	8204.27	31.00	3153.19	3152.66 S	183.16 E	3157.97@	176.68	2.84
11090.00	85.56	169.97	8206.63	32.00	3184.61	3184.06 S	188.81 E	3189.66@	176.61	1.76
11120.00	84.94	169.99	8209.11	30.00	3214.07	3213.50 S	194.02 E	3219.36@	176.54	2.07

PathFinder Energy Services, Inc.

Survey Report

OGX RESOURCES
CHALLENGER 1 STATE #1H
EDDY COUNTY, N.M.
RIG:JW 1

Page 05/05

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)
11151.00	84.15	169.59	8212.06	31.00	3244.45	3243.88 S	199.49 E	3250.00@	176.48	2.85
11182.00	85.21	169.91	8214.94	31.00	3274.84	3274.25 S	204.98 E	3280.66@	176.42	3.57
11213.00	86.88	169.16	8217.07	31.00	3305.27	3304.66 S	210.60 E	3311.36@	176.35	5.90
11244.00	86.53	169.81	8218.86	31.00	3335.71	3335.09 S	216.24 E	3342.09@	176.29	2.38
11275.00	86.61	170.00	8220.71	31.00	3366.20	3365.55 S	221.67 E	3372.85@	176.23	0.66
11307.00	87.23	170.76	8222.43	32.00	3397.72	3397.06 S	227.01 E	3404.63@	176.18	3.06
11338.00	87.14	170.86	8223.95	31.00	3428.30	3427.62 S	231.95 E	3435.46@	176.13	0.43
11369.00	87.05	171.51	8225.52	31.00	3458.90	3458.22 S	236.70 E	3466.31@	176.08	2.11
11400.00	88.64	172.02	8226.69	31.00	3489.57	3488.87 S	241.13 E	3497.20@	176.05	5.39
11432.00	89.25	172.07	8227.28	32.00	3521.27	3520.56 S	245.56 E	3529.11@	176.01	1.91
11462.00	89.25	172.47	8227.67	30.00	3551.01	3550.29 S	249.60 E	3559.05@	175.98	1.33
11493.00	88.99	173.07	8228.15	31.00	3581.77	3581.04 S	253.50 E	3590.00@	175.95	2.11
11525.00	89.08	173.22	8228.69	32.00	3613.55	3612.80 S	257.32 E	3621.95@	175.93	0.55
11556.00	88.72	173.58	8229.28	31.00	3644.35	3643.59 S	260.88 E	3652.92@	175.90	1.64
11587.00	89.43	173.24	8229.78	31.00	3675.15	3674.38 S	264.44 E	3683.88@	175.88	2.54
11618.00	89.52	173.53	8230.06	31.00	3705.95	3705.17 S	268.01 E	3714.85@	175.86	0.98
STRAIGHT LINE PROJECTION TO BIT @ 11685' MD.										
11685.00	89.52	173.53	8230.63	67.00	3772.55	3771.74 S	275.56 E	3781.80@	175.82	0.00



ENERGY SERVICES

TIE-IN SURVEY INFORMATION SHEET

CLIENT INFORMATION

CLIENT:	OGX RESOURCES		
LEASE / WELL No.:	CHALLENGER 1 STATE	#1H	
WELL LOCATION:	EDDY COUNTY		
COUNTY / STATE / COUNTRY:	EDDY	N.M.	U.S.A.
RIG:	JW #1		
API WELL No:	30-015-36535		
JOB No:	101007994-WT-WT		
P.O. / AFE No.	0106-0001245-000 / 8015010		
DIRECTIONAL COMPANY:	PATHFINDER ENERGY		

WELL SITE INFORMATION

MAGNETIC DECLINATION:			
On Wall Plat:	LWD Calculated:	7.846036	Agreed Upon: 7.846036
X = 620480.800000	Feet	Y = 423821.100000	Feet
SITE LATITUDE:	32.164602 N	SITE LONGITUDE:	103.943983 W
GRID SYSTEM:	TRUE ☐ UTM ☐ LAMBERT ☒	ZONE:	179.83
PROPOSED DRIFT DIRECTION:	179.83		
KELLY BUSHING ELEVATION:	20'		
ALTITUDE:	3100	Feet	WATER DEPTH: 0 Feet

TIE-IN SURVEY

MEASURED DEPTH:	7600
DRIFT ANGLE:	2.65
DRIFT DIRECTION:	263.11
TRUE VERTICAL DEPTH:	7595.65
VERTICAL SECTION:	109.17
RECTANGULAR COORDINATE (N / S) :	-108.96
RECTANGULAR COORDINATE (E / W) :	71.63
CLOSURE DISTANCE / DIRECTION:	
SURVEY CALCULATION METHOD:	AA ☐ MC ☒ RC ☐ BT ☐
SOURCE OF TIE-IN DATA (COMPANY):	SCIENTIFIC DRILLING CONTROLS.
COPY OF TIE-IN SURVEY REPORT	☐ YES ☒ NO

WELL PLAN

KICKOFF DEPTH:	7620	TOTAL DEPTH:	11685
KICKOFF ANGLE:	2.56	MAX ANGLE:	94

PES Engineers:

**Signature of both field engineers required if applicable

Directional Driller:

DATE: 11/10/08

PathFinder Energy Services, Inc.

Magnetic & Grid Calculations

OGX RESOURCES
CHALLENGER 1 STATE #1H
EDDY COUNTY, NM
Rig:JW 1

Tue Oct 28 14:21:44 2008

Coordinates

Latitude: 32.164602 N (32 deg. 9 min. 52.5673 sec.)
Longitude: 103.943983 W (-103 deg. 56 min. 38.3391 sec.)
Elevation: 3100.00 feet.
Calculation Date: Oct/28/2008

Magnetic Calculations

Model: IGRF2005
Dip Angle: 60.1438 degrees
Total Magnetic Field: 0.48830 gauss
Magnetic Declination: 8.053311 degrees
Horizontal Intensity: 0.243087 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 8.053311 Degr

Transverse Mercator Grid Calculations NAD27

Grid System: Transverse Mercator: new mexico east
Ellipsoid: Clarke 1866
X: 620480.8000 feet
Y: 423821.1000 feet
True to Grid: (convergence) -0.207274 degrees
Magnetic to Grid: 7.846036 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.846036 Degr.

FIELD CALCULATION

PathFinder Energy Services, Inc. Magnetic & Grid Calculations

OGX RESOURCES
CHALLENGER 1 STATE #1H
PIERCE CROSSING EAST-BONE SPRING

Wed Nov 12 16:00:58 2008

Coordinates

Latitude: 32.164602 N (32 deg. 9 min. 52.5673 sec.)
Longitude: 103.943983 W (-103 deg. 56 min. 38.3391 sec.)
Elevation: 3100.00 feet.
Calculation Date: Nov/12/2008

Magnetic Calculations

Model: IGRF2005
Dip Angle: 60.1430 degrees
Total Magnetic Field: 0.48826 gauss
Magnetic Declination: 8.048447 degrees
Horizontal Intensity: 0.243074 gauss
To Convert a Magnetic Dir. to a TRUE North Dir. Add 8.048447 Degr

Transverse Mercator Grid Calculations NAD27

Grid System: Transverse Mercator: new mexico east
Ellipsoid: Clarke 1866
X: 620480.8000 feet
Y: 423821.1000 feet
True to Grid: (convergence) -0.207274 degrees
Magnetic to Grid: 7.841173 degrees
To Convert a Magnetic Dir. to a GRID dir. Add 7.841173 Degr.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Form C-101
June 16, 2008

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

AUG 12 2008
Submitted to appropriate District Office

OCD-ARTESIA
RECEIVED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address OGX RESOURCES, LLC. P.O. BOX 2064 MIDLAND, TEXAS 79702		OGRID Number 217955 API Number 30 - 015-365 35
Property Code 37322	Property Name CHALLENGER "1" STATE	Well No. 1H
Proposed Pool 1 PIERCE CROSSING EAST-BONE SPRING (96473)		Proposed Pool 2

Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D D	1	25S	29E		660'	North	660'	West	Eddy

Proposed 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	1	25S	29E		350'	South	660'	West	Eddy

Additional Well Information

Work Type Code N	Well Type Code O	Cable/Rotary ROTARY	Lease Type Code S	Ground Level Elevation 3100'
Multiple NO	Proposed Depth TVD-7550, MD-11627	Formation BONE SPRING	Contractor Patriot Rig 5	Spud Date WHEN APPROVED

Proposed Casing and Cement Program

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
26"	20"	Conductor	40'	Redi-mix	Surface
17 1/2"	13 3/8"	54.5#	525'	380 Sx.	Surface
12 1/4"	9 5/8"	36#	2700'	600 Sx.	Surface
8 3/4"	5 1/2"	17 & 20#	MD-11,627'	2085 Sx.	2500' from surface
			TVD-7550'		

Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone.
Describe the blowout prevention program, if any Use additional sheets if necessary.

NOTE: NEW PIT RULE

19-15-17 NMAC PART 17

A form C-144 must be approved
before starting drilling operations.

SEE ATTACHED SHEET FOR DETAIL

I hereby certify that the information given above is true and complete to the best of my knowledge and belief.		OIL CONSERVATION DIVISION	
Signature: Joe T. Janica		Approved by: Jim W. Groom	
Printed Name: Joe T. Janica		Title: District II Supervisor	
Title: Permit Eng.		Approval Date: 8/20/08	Expiration Date: 8/20/10
E-mail Address: joejanica@valornet.com			
Date: 08/11/08	Phone: 575-391-8503	Conditions of Approval Attached ☐	

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

AUG 14 2008

OCD-ARTESIA

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	Pool Code 96473	Pool Name PIERCE CROSSING EAST-BONE SPRING
Property Code	Property Name CHALLENGER 1 STATE	Well Number 1H
OGRID No. 217955	Operator Name OGX RESOURCES	Elevation 3100'

Surface Location

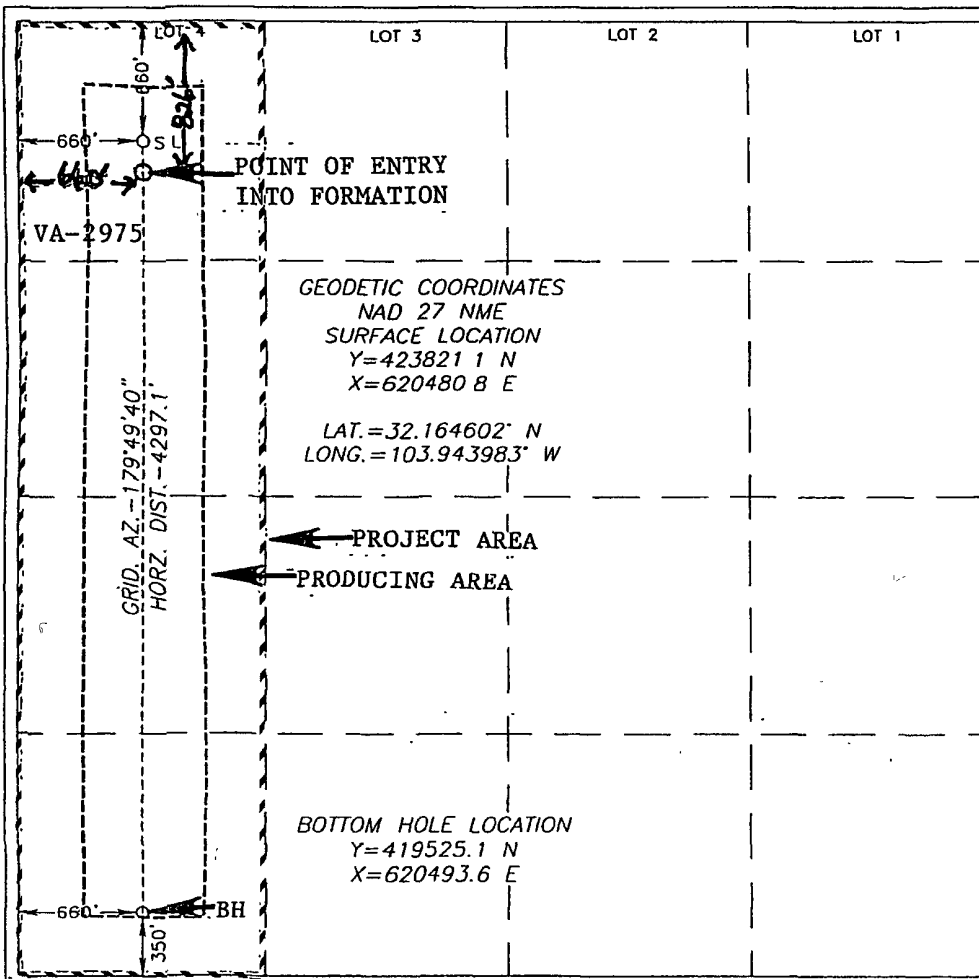
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	1	25-S	29-E		660	NORTH	660	WEST	EDDY

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	1	25-S	29-E		350	SOUTH	660	WEST	EDDY

Dedicated Acres 160	Joint or Infill	Consolidation Code	Order No.
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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 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 or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Signature: <i>Joe T. Janica</i> Date: 08/13/08 Printed Name: Joe T. Janica SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date Surveyed: AUGUST 5, 2008 Signature & Seal of Professional Surveyor: <i>Ronald J. Eidson</i> Certificate No. GARY EIDSON 12641 RONALD EIDSON 3239
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