

Well Name: Littlefield 33 Federal Com #2H
 AFE No.: TBD
 Permit No.: TBD
 API No.: TBD
 Objective: Wolfcamp "A"
 FW Depth: TBD
 Elevation: 2872'

OGX Operating, LLC

Area: Eddy Co., NM
 Survey: TBD
 Field: TBD
 Rig: TBD
 GL: TBD
 KB: TBD

Drilling Outline

Surface Loc. 2210' FSL of Sec 33, 330' FSL of Sec 33
 BH Loc. 2,310' FWL of Sec 28, 330' FNL of Sec 28

Directions: From Inters:
 Catfish road, Go east 2

SANDS/ MARKERS	DEPTHS FROM KB		CASING PROFILE	HOLE SIZE	CASING DETAILS	MUD WT. TYPE	CEMENT DETAILS	OPEN HOLE LOGGING/CORING	DIRECTIONAL
	MD	TVD							
	60	60			20" Casing Preset @ ± 60'				
Surface Casing Point	400	400		17-1/2"	13-3/8", 54.5# J 55, STC	Fresh Water	Cement to Surface 100% Excess See Cement Recommendation	None	Totco Inclination Surveys Not to Exceed 500' Drop Gyro
Base of Salt	2,490	2,490		12-1/4"	9-5/8", 36# J-55, LTC	10 ppg Brine	Cement to Surface 50% Excess See Cement Recommendation	Mud Logger 2500' to TD	Run Steerable BHA with MWD Build negative vertical section to 50' FSL
Inter. Casing Point I	2,750	2,750		8-3/4"		9.3 ppg Brine	50% Excess Top of cement to 2307' 500' overlap inside 9-5/8" Casing		See directional plan Run Steerable BHA with MWD/GR
Cherry Canyon	3,602	3,602							
Brushy Canyon	4,801	4,801							
Bone Springs	6,430	6,430							
1st Bone Springs	7,350	7,350							
2nd Bone Springs	7,860	7,860					Top of tail cement on 7" casing @ 8025'		
3rd Bone Springs	9,240	9,240							
KOP	9,560	9,560		9,440'	Top of 4-1/2" liner		Cement to top of Liner		KOP 12.0°/100' Build at 0.51° Azimuth
Wolfcamp	9,640	9,640		8-3/4"	7", 29# HCP-110, BTC	9.3 ppg - 9.5 ppg Oil Base Mud 9.5-11.0	See Cement Recommendation 25% excess See Cement Recommendation	CNL/FDC DLL/SFL	
Inter. Casing Pt II Set 7" CASING AT 60°	10,060	9,936		6-1/8"				MWD & GR Curve	Finish Curve with 12 degrees/100'
EOC	10,310	10,000							Casing Set at 60° Inc. MWD Surveys Not to Exceed 100'
				6-1/8"	4-1/2", 11.6# HCP-110, BTC	Lateral 9.5 ppg - 11.0 ppg	17093 10,000 TVD	MWD & GR Lateral	

13-3/8" SOW x 9-5/8" 3M
 9-5/8" 3M x 7" 5M
 5M x 4-1/2" 10M

NOT TO SCALE

Date: 10/3/2016
 Revised Date:

EXHIBIT 10

Project: Eddy County, New Mexico (NAD83)
 Site: Littlefield 33 Fed Com
 Well: 2H
 Wellbore: OH
 Design: Plan 3 10-04-16
 Rig: TBD



Map System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone Name: New Mexico Eastern Zone
 Local Origin: Well 2H, Grid North
 Latitude: 32° 0' 3.75467 N
 Longitude: 103° 59' 17.84273 W

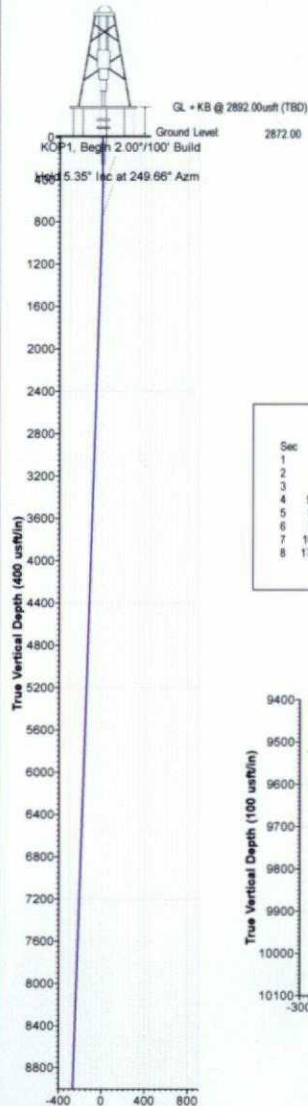
Grid East: 648296.00
 Grid North: 364289.60
 Scale Factor: 1.000

Geomagnetic Model: HDGM
 Sample Date: 08-Aug-16
 Magnetic Declination: 7.10°
 Dip Angle from Horizontal: 59.73°
 Magnetic Field Strength: 48087

To convert a Magnetic Direction to a Grid Direction, Add 6.92°
 To convert a Magnetic Direction to a True Direction, Add 7.10° East
 To convert a True Direction to a Grid Direction, Subtract 0.18°

LEGEND

Plan 3 10-04-16



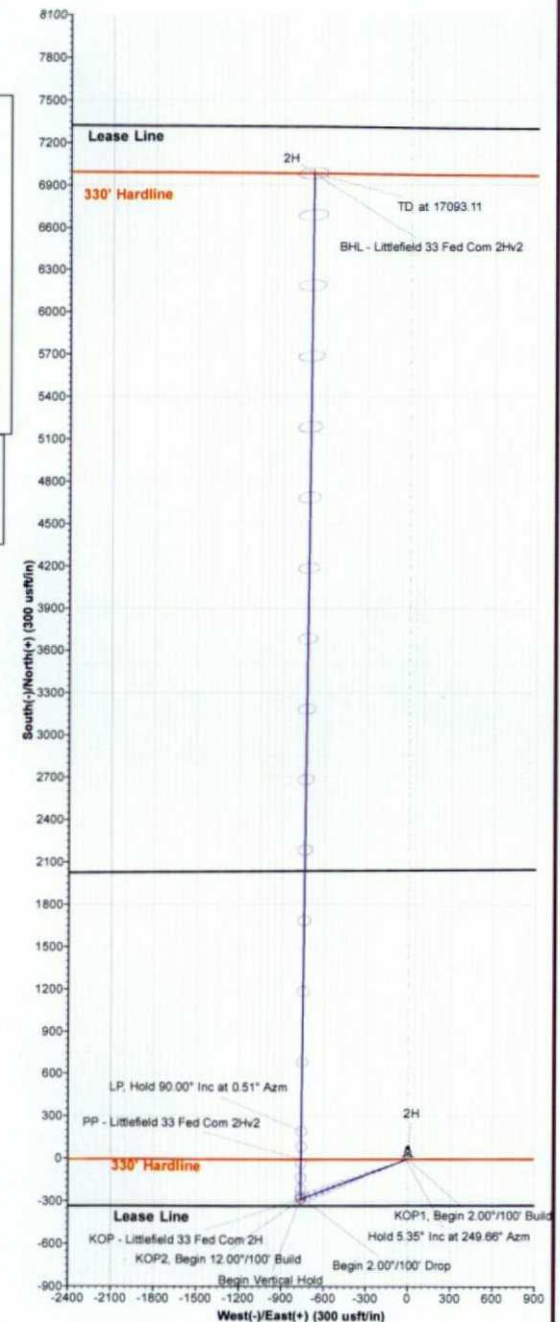
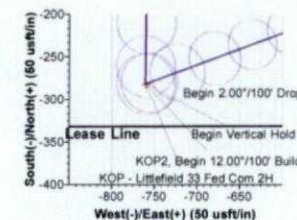
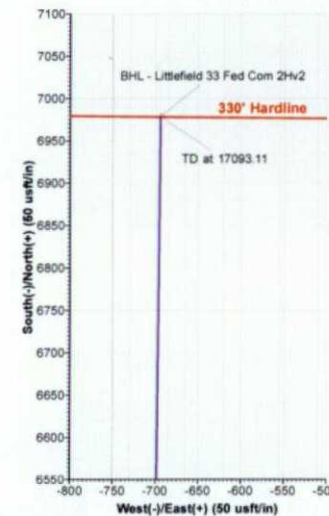
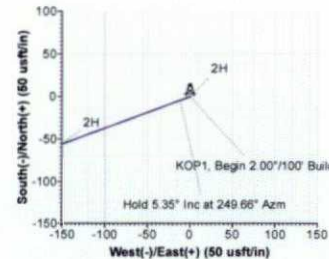
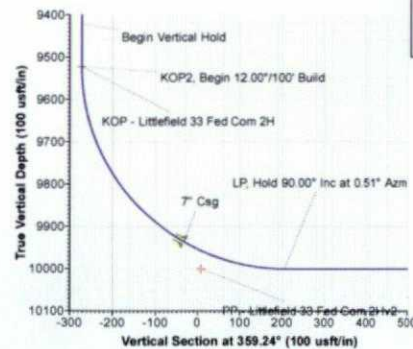
WELL DETAILS					
		Ground Level	2872.00		
		North	East	Latitude	Longitude
-N-S	-E-W	364289.60	648296.00	32° 0' 3.75467 N	103° 59' 17.84273 W

DESIGN TARGET DETAILS					
Name	TVD	-N-S	-E-W	North	East
KOP - Littlefield 33 Fed Com 2H	9522.54	-281.60	-759.60	364008.00	647536.40
BHL - Littlefield 33 Fed Com 2Hv2	10000.00	-697.70	-694.50	371268.30	647601.50
PP - Littlefield 33 Fed Com 2Hv2	10000.00	-1.60	-758.10	364288.00	647537.90

Sec	MD	Inc	Azi	TVD	-N-S	-E-W	Dieg	TFace	VSec	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00		KOP1, Begin 2.00°/100' Build
3	767.37	5.35	249.66	766.98	-4.33	-11.69	2.00	249.66	-4.18		Hold 5.35° Inc at 249.66° Azm
4	9192.61	5.35	249.66	9195.96	-277.27	-747.91	0.00	0.00	-267.32		Begin 2.00°/100' Drop
5	9459.98	0.00	0.00	9422.54	-281.60	-759.60	2.00	180.00	-271.50		Begin Vertical Hold
6	9559.98	0.00	0.00	9522.54	-281.60	-759.60	0.00	0.00	-271.50		KOP2, Begin 12.00°/100' Build
7	10309.98	90.00	0.51	10000.00	195.85	-755.32	12.00	0.51	205.85		LP, Hold 90.00° Inc at 0.51° Azm
8	17093.11	90.00	0.51	10000.00	697.70	-694.50	0.00	0.00	6987.30		BHL - Littlefield 33 Fed Com 2Hv2

FORMATION TOP DETAILS

No formation data is available



OGX Operating LLC

Eddy County, New Mexico (NAD83)

Littlefield 33 Fed Com

2H

OH

Plan: Plan 3 10-04-16

Standard Planning Report

04 October, 2016



Phoenix Technology Services LP
Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well 2H
Company:	OGX Operating LLC	TVD Reference:	GL + KB @ 2892.00usft (TBD)
Project:	Eddy County, New Mexico (NAD83)	MD Reference:	GL + KB @ 2892.00usft (TBD)
Site:	Littlefield 33 Fed Com	North Reference:	Grid
Well:	2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3 10-04-16		

Project			
Eddy County, New Mexico (NAD83)			
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Littlefield 33 Fed Com			
Site Position:		Northing:	364,289.60 usft	Latitude:	32° 0' 3.75467 N
From:	Map	Easting:	648,296.00 usft	Longitude:	103° 59' 17.84273 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.18 °

Well	2H					
Well Position	+N/-S	0.00 usft	Northing:	364,289.60 usft	Latitude:	32° 0' 3.75467 N
	+E/-W	0.00 usft	Easting:	648,296.00 usft	Longitude:	103° 59' 17.84273 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	2,872.00 usft

Wellbore	OH
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	8/8/2016	7.10	59.73	48,087

Design	Plan 3 10-04-16
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Audit Notes:	
Version:	Phase: PLAN Tie On Depth: 0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	359.24

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
767.37	5.35	249.66	766.98	-4.33	-11.69	2.00	2.00	0.00	249.66	
9,192.61	5.35	249.66	9,155.56	-277.27	-747.91	0.00	0.00	0.00	0.00	
9,459.98	0.00	0.00	9,422.54	-281.60	-759.60	2.00	-2.00	0.00	180.00	
9,559.98	0.00	0.00	9,522.54	-281.60	-759.60	0.00	0.00	0.00	0.00	
10,309.98	90.00	0.51	10,000.01	195.85	-755.32	12.00	12.00	0.07	0.51	
17,093.11	90.00	0.51	10,000.00	6,978.70	-694.50	0.00	0.00	0.00	0.00	BHL - Littlefield 33 Fe

Phoenix Technology Services LP
Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well 2H
Company:	OGX Operating LLC	TVD Reference:	GL + KB @ 2892.00usft (TBD)
Project:	Eddy County, New Mexico (NAD83)	MD Reference:	GL + KB @ 2892.00usft (TBD)
Site:	Littlefield 33 Fed Com	North Reference:	Grid
Well:	2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3 10-04-16		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
KOP1, Begin 2.00°/100' Build									
600.00	2.00	249.66	599.98	-0.61	-1.64	-0.58	2.00	2.00	0.00
700.00	4.00	249.66	699.84	-2.43	-6.54	-2.34	2.00	2.00	0.00
767.37	5.35	249.66	766.98	-4.33	-11.69	-4.18	2.00	2.00	0.00
Hold 5.35° Inc at 249.66° Azm									
800.00	5.35	249.66	799.47	-5.39	-14.54	-5.20	0.00	0.00	0.00
900.00	5.35	249.66	899.03	-8.63	-23.28	-8.32	0.00	0.00	0.00
1,000.00	5.35	249.66	998.60	-11.87	-32.02	-11.44	0.00	0.00	0.00
1,100.00	5.35	249.66	1,098.16	-15.11	-40.76	-14.57	0.00	0.00	0.00
1,200.00	5.35	249.66	1,197.73	-18.35	-49.49	-17.69	0.00	0.00	0.00
1,300.00	5.35	249.66	1,297.29	-21.59	-58.23	-20.81	0.00	0.00	0.00
1,400.00	5.35	249.66	1,396.86	-24.83	-66.97	-23.94	0.00	0.00	0.00
1,500.00	5.35	249.66	1,496.42	-28.07	-75.71	-27.06	0.00	0.00	0.00
1,600.00	5.35	249.66	1,595.99	-31.31	-84.45	-30.18	0.00	0.00	0.00
1,700.00	5.35	249.66	1,695.55	-34.55	-93.19	-33.31	0.00	0.00	0.00
1,800.00	5.35	249.66	1,795.12	-37.79	-101.92	-36.43	0.00	0.00	0.00
1,900.00	5.35	249.66	1,894.68	-41.02	-110.66	-39.55	0.00	0.00	0.00
2,000.00	5.35	249.66	1,994.25	-44.26	-119.40	-42.68	0.00	0.00	0.00
2,100.00	5.35	249.66	2,093.81	-47.50	-128.14	-45.80	0.00	0.00	0.00
2,200.00	5.35	249.66	2,193.38	-50.74	-136.88	-48.92	0.00	0.00	0.00
2,300.00	5.35	249.66	2,292.94	-53.98	-145.62	-52.05	0.00	0.00	0.00
2,400.00	5.35	249.66	2,392.51	-57.22	-154.35	-55.17	0.00	0.00	0.00
2,500.00	5.35	249.66	2,492.07	-60.46	-163.09	-58.29	0.00	0.00	0.00
2,600.00	5.35	249.66	2,591.64	-63.70	-171.83	-61.42	0.00	0.00	0.00
2,700.00	5.35	249.66	2,691.20	-66.94	-180.57	-64.54	0.00	0.00	0.00
2,800.00	5.35	249.66	2,790.77	-70.18	-189.31	-67.66	0.00	0.00	0.00
2,900.00	5.35	249.66	2,890.33	-73.42	-198.04	-70.79	0.00	0.00	0.00
3,000.00	5.35	249.66	2,989.90	-76.66	-206.78	-73.91	0.00	0.00	0.00
3,100.00	5.35	249.66	3,089.46	-79.90	-215.52	-77.03	0.00	0.00	0.00
3,200.00	5.35	249.66	3,189.03	-83.14	-224.26	-80.16	0.00	0.00	0.00
3,300.00	5.35	249.66	3,288.59	-86.38	-233.00	-83.28	0.00	0.00	0.00
3,400.00	5.35	249.66	3,388.15	-89.62	-241.74	-86.40	0.00	0.00	0.00
3,500.00	5.35	249.66	3,487.72	-92.86	-250.47	-89.53	0.00	0.00	0.00
3,600.00	5.35	249.66	3,587.28	-96.10	-259.21	-92.65	0.00	0.00	0.00
3,700.00	5.35	249.66	3,686.85	-99.34	-267.95	-95.77	0.00	0.00	0.00
3,800.00	5.35	249.66	3,786.41	-102.57	-276.69	-98.90	0.00	0.00	0.00
3,900.00	5.35	249.66	3,885.98	-105.81	-285.43	-102.02	0.00	0.00	0.00
4,000.00	5.35	249.66	3,985.54	-109.05	-294.17	-105.14	0.00	0.00	0.00
4,100.00	5.35	249.66	4,085.11	-112.29	-302.90	-108.27	0.00	0.00	0.00
4,200.00	5.35	249.66	4,184.67	-115.53	-311.64	-111.39	0.00	0.00	0.00
4,300.00	5.35	249.66	4,284.24	-118.77	-320.38	-114.51	0.00	0.00	0.00
4,400.00	5.35	249.66	4,383.80	-122.01	-329.12	-117.64	0.00	0.00	0.00
4,500.00	5.35	249.66	4,483.37	-125.25	-337.86	-120.76	0.00	0.00	0.00
4,600.00	5.35	249.66	4,582.93	-128.49	-346.60	-123.88	0.00	0.00	0.00
4,700.00	5.35	249.66	4,682.50	-131.73	-355.33	-127.01	0.00	0.00	0.00
4,800.00	5.35	249.66	4,782.06	-134.97	-364.07	-130.13	0.00	0.00	0.00
4,900.00	5.35	249.66	4,881.63	-138.21	-372.81	-133.25	0.00	0.00	0.00
5,000.00	5.35	249.66	4,981.19	-141.45	-381.55	-136.37	0.00	0.00	0.00
5,100.00	5.35	249.66	5,080.76	-144.69	-390.29	-139.50	0.00	0.00	0.00
5,200.00	5.35	249.66	5,180.32	-147.93	-399.02	-142.62	0.00	0.00	0.00
5,300.00	5.35	249.66	5,279.89	-151.17	-407.76	-145.74	0.00	0.00	0.00
5,400.00	5.35	249.66	5,379.45	-154.41	-416.50	-148.87	0.00	0.00	0.00

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Site:	Littlefield 33 Fed Com	North Reference:	Grid
Well:	2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3 10-04-16		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,500.00	5.35	249.66	5,479.02	-157.65	-425.24	-151.99	0.00	0.00	0.00
5,600.00	5.35	249.66	5,578.58	-160.88	-433.98	-155.11	0.00	0.00	0.00
5,700.00	5.35	249.66	5,678.15	-164.12	-442.72	-158.24	0.00	0.00	0.00
5,800.00	5.35	249.66	5,777.71	-167.36	-451.45	-161.36	0.00	0.00	0.00
5,900.00	5.35	249.66	5,877.27	-170.60	-460.19	-164.48	0.00	0.00	0.00
6,000.00	5.35	249.66	5,976.84	-173.84	-468.93	-167.61	0.00	0.00	0.00
6,100.00	5.35	249.66	6,076.40	-177.08	-477.67	-170.73	0.00	0.00	0.00
6,200.00	5.35	249.66	6,175.97	-180.32	-486.41	-173.85	0.00	0.00	0.00
6,300.00	5.35	249.66	6,275.53	-183.56	-495.15	-176.98	0.00	0.00	0.00
6,400.00	5.35	249.66	6,375.10	-186.80	-503.88	-180.10	0.00	0.00	0.00
6,500.00	5.35	249.66	6,474.66	-190.04	-512.62	-183.22	0.00	0.00	0.00
6,600.00	5.35	249.66	6,574.23	-193.28	-521.36	-186.35	0.00	0.00	0.00
6,700.00	5.35	249.66	6,673.79	-196.52	-530.10	-189.47	0.00	0.00	0.00
6,800.00	5.35	249.66	6,773.36	-199.76	-538.84	-192.59	0.00	0.00	0.00
6,900.00	5.35	249.66	6,872.92	-203.00	-547.58	-195.72	0.00	0.00	0.00
7,000.00	5.35	249.66	6,972.49	-206.24	-556.31	-198.84	0.00	0.00	0.00
7,100.00	5.35	249.66	7,072.05	-209.48	-565.05	-201.96	0.00	0.00	0.00
7,200.00	5.35	249.66	7,171.62	-212.72	-573.79	-205.09	0.00	0.00	0.00
7,300.00	5.35	249.66	7,271.18	-215.96	-582.53	-208.21	0.00	0.00	0.00
7,400.00	5.35	249.66	7,370.75	-219.20	-591.27	-211.33	0.00	0.00	0.00
7,500.00	5.35	249.66	7,470.31	-222.43	-600.00	-214.46	0.00	0.00	0.00
7,600.00	5.35	249.66	7,569.88	-225.67	-608.74	-217.58	0.00	0.00	0.00
7,700.00	5.35	249.66	7,669.44	-228.91	-617.48	-220.70	0.00	0.00	0.00
7,800.00	5.35	249.66	7,769.01	-232.15	-626.22	-223.83	0.00	0.00	0.00
7,900.00	5.35	249.66	7,868.57	-235.39	-634.96	-226.95	0.00	0.00	0.00
8,000.00	5.35	249.66	7,968.14	-238.63	-643.70	-230.07	0.00	0.00	0.00
8,100.00	5.35	249.66	8,067.70	-241.87	-652.43	-233.20	0.00	0.00	0.00
8,200.00	5.35	249.66	8,167.27	-245.11	-661.17	-236.32	0.00	0.00	0.00
8,300.00	5.35	249.66	8,266.83	-248.35	-669.91	-239.44	0.00	0.00	0.00
8,400.00	5.35	249.66	8,366.39	-251.59	-678.65	-242.57	0.00	0.00	0.00
8,500.00	5.35	249.66	8,465.96	-254.83	-687.39	-245.69	0.00	0.00	0.00
8,600.00	5.35	249.66	8,565.52	-258.07	-696.13	-248.81	0.00	0.00	0.00
8,700.00	5.35	249.66	8,665.09	-261.31	-704.86	-251.94	0.00	0.00	0.00
8,800.00	5.35	249.66	8,764.65	-264.55	-713.60	-255.06	0.00	0.00	0.00
8,900.00	5.35	249.66	8,864.22	-267.79	-722.34	-258.18	0.00	0.00	0.00
9,000.00	5.35	249.66	8,963.78	-271.03	-731.08	-261.31	0.00	0.00	0.00
9,100.00	5.35	249.66	9,063.35	-274.27	-739.82	-264.43	0.00	0.00	0.00
9,192.61	5.35	249.66	9,155.56	-277.27	-747.91	-267.32	0.00	0.00	0.00
Begin 2.00°/100' Drop									
9,200.00	5.20	249.66	9,162.91	-277.50	-748.55	-267.55	2.00	-2.00	0.00
9,300.00	3.20	249.66	9,262.64	-280.05	-755.41	-270.00	2.00	-2.00	0.00
9,400.00	1.20	249.66	9,362.56	-281.38	-759.01	-271.29	2.00	-2.00	0.00
9,459.98	0.00	0.00	9,422.54	-281.60	-759.60	-271.50	2.00	-2.00	183.96
Begin Vertical Hold									
9,559.98	0.00	0.00	9,522.54	-281.60	-759.60	-271.50	0.00	0.00	0.00
KOP2, Begin 12.00°/100' Build									
9,600.00	4.80	0.51	9,562.51	-279.92	-759.58	-269.82	12.00	12.00	0.00
9,700.00	16.80	0.51	9,660.56	-261.22	-759.42	-251.12	12.00	12.00	0.00
9,800.00	28.80	0.51	9,752.58	-222.53	-759.07	-212.45	12.00	12.00	0.00
9,900.00	40.80	0.51	9,834.54	-165.57	-758.56	-155.49	12.00	12.00	0.00
10,000.00	52.80	0.51	9,902.87	-92.80	-757.91	-82.74	12.00	12.00	0.00
10,059.98	60.00	0.51	9,936.04	-42.88	-757.46	-32.83	12.00	12.00	0.00
7" Csg									

Phoenix Technology Services LP
Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well 2H
Company:	OGX Operating LLC	TVD Reference:	GL + KB @ 2892.00usft (TBD)
Project:	Eddy County, New Mexico (NAD83)	MD Reference:	GL + KB @ 2892.00usft (TBD)
Site:	Littlefield 33 Fed Com	North Reference:	Grid
Well:	2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3 10-04-16		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,100.00	64.80	0.51	9,954.57	-7.43	-757.14	2.62	12.00	12.00	0.00
10,200.00	76.80	0.51	9,987.39	86.84	-756.30	96.86	12.00	12.00	0.00
10,300.00	88.80	0.51	9,999.90	185.86	-755.41	195.87	12.00	12.00	0.00
10,309.98	90.00	0.51	10,000.01	195.84	-755.32	205.84	12.00	12.00	0.00
LP, Hold 90.00° Inc at 0.51° Azm									
10,400.00	90.00	0.51	10,000.00	285.86	-754.51	295.84	0.00	0.00	0.00
10,500.00	90.00	0.51	10,000.00	385.86	-753.62	395.82	0.00	0.00	0.00
10,600.00	90.00	0.51	10,000.00	485.85	-752.72	495.79	0.00	0.00	0.00
10,700.00	90.00	0.51	10,000.00	585.85	-751.82	595.77	0.00	0.00	0.00
10,800.00	90.00	0.51	10,000.00	685.84	-750.93	695.74	0.00	0.00	0.00
10,900.00	90.00	0.51	10,000.00	785.84	-750.03	795.72	0.00	0.00	0.00
11,000.00	90.00	0.51	10,000.00	885.84	-749.13	895.69	0.00	0.00	0.00
11,100.00	90.00	0.51	10,000.00	985.83	-748.24	995.67	0.00	0.00	0.00
11,200.00	90.00	0.51	10,000.00	1,085.83	-747.34	1,095.64	0.00	0.00	0.00
11,300.00	90.00	0.51	10,000.00	1,185.82	-746.44	1,195.62	0.00	0.00	0.00
11,400.00	90.00	0.51	10,000.00	1,285.82	-745.55	1,295.59	0.00	0.00	0.00
11,500.00	90.00	0.51	10,000.00	1,385.81	-744.65	1,395.57	0.00	0.00	0.00
11,600.00	90.00	0.51	10,000.00	1,485.81	-743.75	1,495.55	0.00	0.00	0.00
11,700.00	90.00	0.51	10,000.00	1,585.81	-742.86	1,595.52	0.00	0.00	0.00
11,800.00	90.00	0.51	10,000.00	1,685.80	-741.96	1,695.50	0.00	0.00	0.00
11,900.00	90.00	0.51	10,000.00	1,785.80	-741.06	1,795.47	0.00	0.00	0.00
12,000.00	90.00	0.51	10,000.00	1,885.79	-740.17	1,895.45	0.00	0.00	0.00
12,100.00	90.00	0.51	10,000.00	1,985.79	-739.27	1,995.42	0.00	0.00	0.00
12,200.00	90.00	0.51	10,000.00	2,085.79	-738.37	2,095.40	0.00	0.00	0.00
12,300.00	90.00	0.51	10,000.00	2,185.78	-737.48	2,195.37	0.00	0.00	0.00
12,400.00	90.00	0.51	10,000.00	2,285.78	-736.58	2,295.35	0.00	0.00	0.00
12,500.00	90.00	0.51	10,000.00	2,385.77	-735.68	2,395.32	0.00	0.00	0.00
12,600.00	90.00	0.51	10,000.00	2,485.77	-734.79	2,495.30	0.00	0.00	0.00
12,700.00	90.00	0.51	10,000.00	2,585.77	-733.89	2,595.27	0.00	0.00	0.00
12,800.00	90.00	0.51	10,000.00	2,685.76	-732.99	2,695.25	0.00	0.00	0.00
12,900.00	90.00	0.51	10,000.00	2,785.76	-732.10	2,795.22	0.00	0.00	0.00
13,000.00	90.00	0.51	10,000.00	2,885.75	-731.20	2,895.20	0.00	0.00	0.00
13,100.00	90.00	0.51	10,000.00	2,985.75	-730.30	2,995.17	0.00	0.00	0.00
13,200.00	90.00	0.51	10,000.00	3,085.75	-729.41	3,095.15	0.00	0.00	0.00
13,300.00	90.00	0.51	10,000.00	3,185.74	-728.51	3,195.13	0.00	0.00	0.00
13,400.00	90.00	0.51	10,000.00	3,285.74	-727.61	3,295.10	0.00	0.00	0.00
13,500.00	90.00	0.51	10,000.00	3,385.73	-726.72	3,395.08	0.00	0.00	0.00
13,600.00	90.00	0.51	10,000.00	3,485.73	-725.82	3,495.05	0.00	0.00	0.00
13,700.00	90.00	0.51	10,000.00	3,585.73	-724.92	3,595.03	0.00	0.00	0.00
13,800.00	90.00	0.51	10,000.00	3,685.72	-724.03	3,695.00	0.00	0.00	0.00
13,900.00	90.00	0.51	10,000.00	3,785.72	-723.13	3,794.98	0.00	0.00	0.00
14,000.00	90.00	0.51	10,000.00	3,885.71	-722.23	3,894.95	0.00	0.00	0.00
14,100.00	90.00	0.51	10,000.00	3,985.71	-721.34	3,994.93	0.00	0.00	0.00
14,200.00	90.00	0.51	10,000.00	4,085.71	-720.44	4,094.90	0.00	0.00	0.00
14,300.00	90.00	0.51	10,000.00	4,185.70	-719.54	4,194.88	0.00	0.00	0.00
14,400.00	90.00	0.51	10,000.00	4,285.70	-718.65	4,294.85	0.00	0.00	0.00
14,500.00	90.00	0.51	10,000.00	4,385.69	-717.75	4,394.83	0.00	0.00	0.00
14,600.00	90.00	0.51	10,000.00	4,485.69	-716.85	4,494.80	0.00	0.00	0.00
14,700.00	90.00	0.51	10,000.00	4,585.69	-715.96	4,594.78	0.00	0.00	0.00
14,800.00	90.00	0.51	10,000.00	4,685.68	-715.06	4,694.75	0.00	0.00	0.00
14,900.00	90.00	0.51	10,000.00	4,785.68	-714.16	4,794.73	0.00	0.00	0.00
15,000.00	90.00	0.51	10,000.00	4,885.67	-713.27	4,894.71	0.00	0.00	0.00
15,100.00	90.00	0.51	10,000.00	4,985.67	-712.37	4,994.68	0.00	0.00	0.00
15,200.00	90.00	0.51	10,000.00	5,085.67	-711.47	5,094.66	0.00	0.00	0.00

Phoenix Technology Services LP
Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well 2H
Company:	OGX Operating LLC	TVD Reference:	GL + KB @ 2892.00usft (TBD)
Project:	Eddy County, New Mexico (NAD83)	MD Reference:	GL + KB @ 2892.00usft (TBD)
Site:	Littlefield 33 Fed Com	North Reference:	Grid
Well:	2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3 10-04-16		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,300.00	90.00	0.51	10,000.00	5,185.66	-710.58	5,194.63	0.00	0.00	0.00
15,400.00	90.00	0.51	10,000.00	5,285.66	-709.68	5,294.61	0.00	0.00	0.00
15,500.00	90.00	0.51	10,000.00	5,385.65	-708.78	5,394.58	0.00	0.00	0.00
15,600.00	90.00	0.51	10,000.00	5,485.65	-707.89	5,494.56	0.00	0.00	0.00
15,700.00	90.00	0.51	10,000.00	5,585.65	-706.99	5,594.53	0.00	0.00	0.00
15,800.00	90.00	0.51	10,000.00	5,685.64	-706.09	5,694.51	0.00	0.00	0.00
15,900.00	90.00	0.51	10,000.00	5,785.64	-705.20	5,794.48	0.00	0.00	0.00
16,000.00	90.00	0.51	10,000.00	5,885.63	-704.30	5,894.46	0.00	0.00	0.00
16,100.00	90.00	0.51	10,000.00	5,985.63	-703.40	5,994.43	0.00	0.00	0.00
16,200.00	90.00	0.51	10,000.00	6,085.63	-702.51	6,094.41	0.00	0.00	0.00
16,300.00	90.00	0.51	10,000.00	6,185.62	-701.61	6,194.38	0.00	0.00	0.00
16,400.00	90.00	0.51	10,000.00	6,285.62	-700.71	6,294.36	0.00	0.00	0.00
16,500.00	90.00	0.51	10,000.00	6,385.61	-699.82	6,394.33	0.00	0.00	0.00
16,600.00	90.00	0.51	10,000.00	6,485.61	-698.92	6,494.31	0.00	0.00	0.00
16,700.00	90.00	0.51	10,000.00	6,585.61	-698.02	6,594.29	0.00	0.00	0.00
16,800.00	90.00	0.51	10,000.00	6,685.60	-697.13	6,694.26	0.00	0.00	0.00
16,900.00	90.00	0.51	10,000.00	6,785.60	-696.23	6,794.24	0.00	0.00	0.00
17,000.00	90.00	0.51	10,000.00	6,885.59	-695.33	6,894.21	0.00	0.00	0.00
17,093.11	90.00	0.51	10,000.00	6,978.70	-694.50	6,987.30	0.00	0.00	0.00

TD at 17093.11

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
KOP - Littlefield 33 Fed C	0.00	0.00	9,522.54	-281.60	-759.60	364,008.00	647,536.40	32° 0' 0.99179 N	103° 59' 26.67453 W
- plan hits target center									
- Point									
PP - Littlefield 33 Fed C	0.00	0.01	10,000.00	-1.60	-758.10	364,288.00	647,537.90	32° 0' 3.76269 N	103° 59' 26.64681 W
- plan misses target center by 39.30usft at 10120.47usft MD (9962.89 TVD, 11.28 N, -756.97 E)									
- Point									
BHL - Littlefield 33 Fed C	0.00	0.00	10,000.00	6,978.70	-694.50	371,268.30	647,601.50	32° 1' 12.83929 N	103° 59' 25.65106 W
- plan hits target center									
- Point									

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
10,059.98	9,936.04	7" Csg	7	7-1/2

Phoenix Technology Services LP
Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well 2H
Company:	OGX Operating LLC	TVD Reference:	GL + KB @ 2892.00usft (TBD)
Project:	Eddy County, New Mexico (NAD83)	MD Reference:	GL + KB @ 2892.00usft (TBD)
Site:	Littlefield 33 Fed Com	North Reference:	Grid
Well:	2H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 3 10-04-16		

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
500.00	500.00	0.00	0.00	KOP1, Begin 2.00"/100' Build
767.37	766.98	-4.33	-11.69	Hold 5.35° Inc at 249.66° Azm
9,192.61	9,155.56	-277.27	-747.91	Begin 2.00"/100' Drop
9,459.98	9,422.54	-281.60	-759.60	Begin Vertical Hold
9,559.98	9,522.54	-281.60	-759.60	KOP2, Begin 12.00"/100' Build
10,309.98	10,000.01	195.84	-755.32	LP, Hold 90.00° Inc at 0.51° Azm
17,093.11	10,000.00	6,978.70	-694.50	TD at 17093.11