

Well Name: Littlefield 33 Federal Com #1H
 AFE No.: TBD
 Permit No.: TBD
 API No.: 30-015-43818
 Objective: Wolfcamp "A"
 FW Depth: TBD
 Elevation: 2872'

OGX Resources

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

Drilling Outline

Surface Loc. 2130' FEL of Sec 33 330' FSL of Sec 33
 BH Loc. 2310' FEL 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
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		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							
3rd Bone Springs	9,240	9,240					Top of tail cement on 7" casing @ 8025'		
KOP	9522'	9522'		9475'	Top of 4-1/2" liner		Cement to top of Liner		KOP 12.0°/100' Build to 359.89° Azm
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"	10,025	9,937		6-1/8"				MWD & GR Curve	Finish Curve with 12 degrees/100'
EOC	10,272	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	16,766 MD TD 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: 10/24/2015
 Revised Date:

EXHIBIT

9

Project: Eddy County, New Mexico (NAD83)
 Site: Littlefield 33 Federal Com
 Well: 1H
 Wellbore: OH
 Design: Plan 1 10-20-16
 Rig: TBD



Azimuths to Grid North
 True North: -2.18°
 Magnetic North: 6.92°
Magnetic Field
 Strength: 47908.2nT
 Dip Angle: 59.78°
 Date: 10/20/2016
 Model: IGRF2010_14

Map System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone Name: New Mexico Eastern Zone
 Local Origin: Well 1H, Grid North
 Latitude: 32° 0' 3.75412 N
 Longitude: 103° 59' 16.91482 W
 Grid East: 648375.90
 Grid North: 364289.80
 Scale Factor: 1.000

Geomagnetic Model: IGRF2010_14
 Sample Date: 20-Oct-16
 Magnetic Declination: 7.10°
 Dip Angle from Horizontal: 59.78°
 Magnetic Field Strength: 47908

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

— 2H, OH, Plan 3 10-04-16 V0
 — Plan 1 10-20-16

WELL DETAILS

+N-S	+E-W	Ground Level	Latitude	Longitude
0.00	0.00	2872.00	32° 0' 3.75412 N	103° 59' 16.91482 W

DESIGN TARGET DETAILS

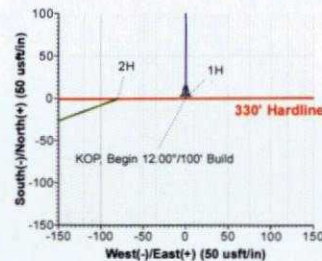
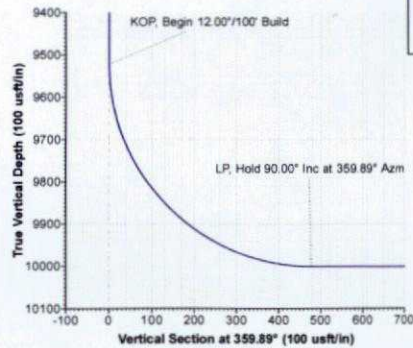
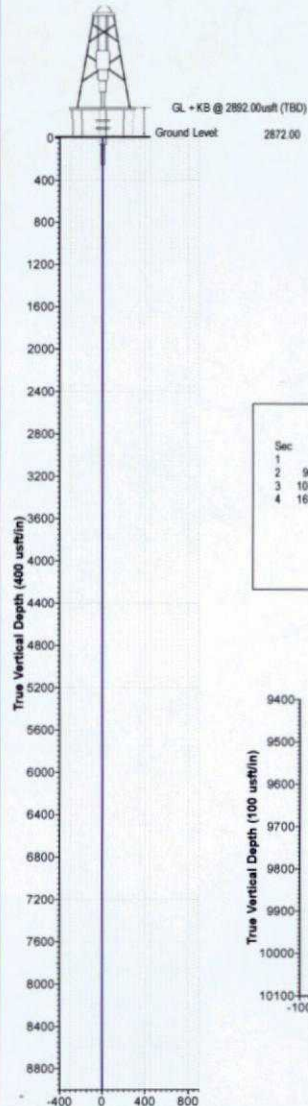
Name	TVD	+N-S	+E-W	Ground Level	Latitude	Longitude
BHL - Littlefield 33 Federal 1H	10000.00	6971.80	-13.30	371261.60	32° 1' 12.74900 N	103° 59' 16.81060 W

SECTION DETAILS

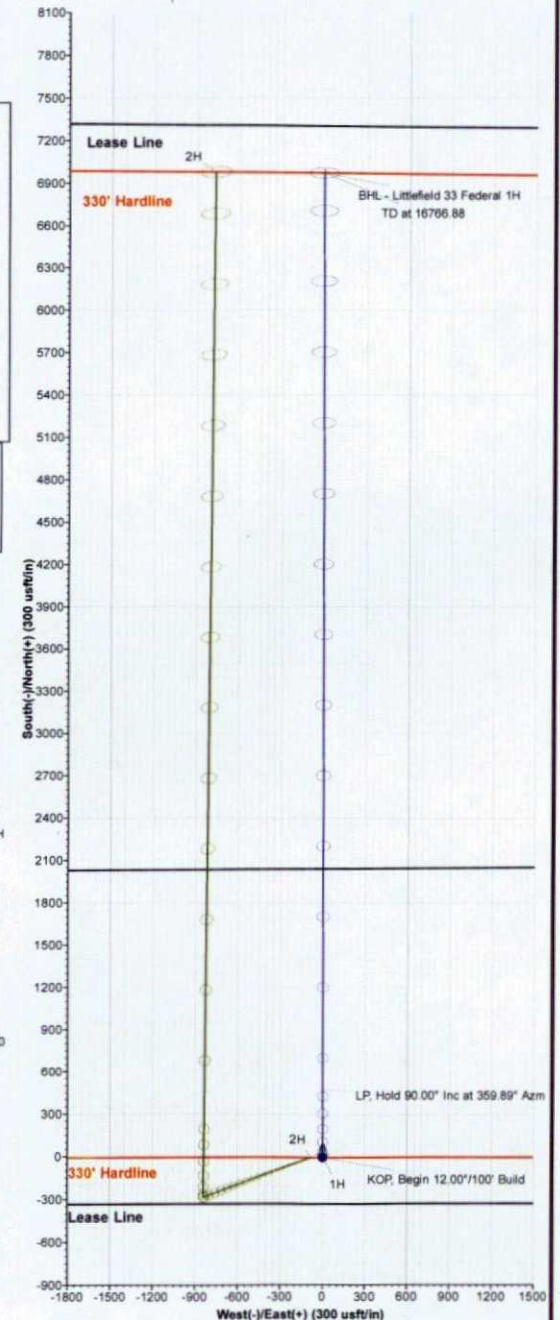
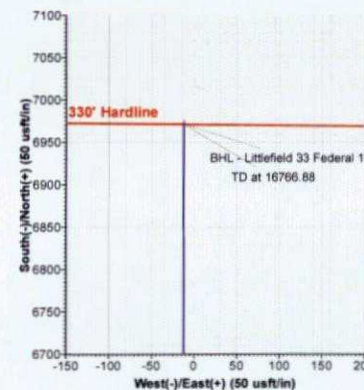
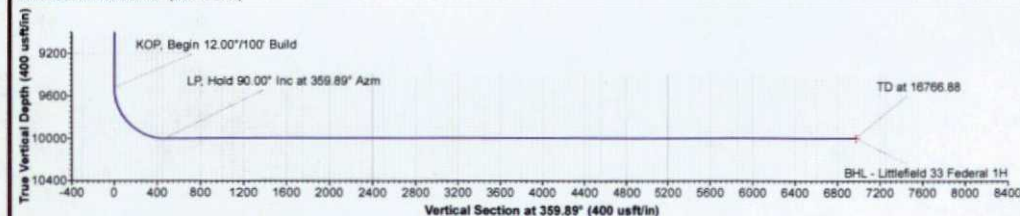
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Diag	TFace	VSeal	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	9522.54	0.00	0.00	9522.54	0.00	0.00	0.00	0.00	0.00		KOP, Begin 12.00°/100' Build
3	10272.54	90.00	359.89	10000.00	477.46	-0.91	12.00	359.89	477.46		LP, Hold 90.00° Inc at 359.89° Azm
4	16766.88	90.00	359.89	10000.00	6971.80	-13.30	0.00	6971.81			BHL - Littlefield 33 Federal 1H TD at 16766.88

FORMATION TOP DETAILS

No formation data is available



Vertical Section at 359.89° (400 usft/in)



OGX Operating LLC

Eddy County, New Mexico (NAD83)

Littlefield 33 Federal Com

1H

OH

Plan: Plan 1 10-20-16

Standard Planning Report

20 October, 2016



Phoenix Technology Services LP

Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well 1H
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 Federal Corn	North Reference:	Grid
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 10-20-16		

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 Federal Corn		
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	1H		
Well Position	+N/-S	0.20 usft	Northing: 364,289.80 usft
	+E/-W	79.90 usft	Easting: 648,375.90 usft
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)
	IGRF2010_14	10/20/2016	7.10	59.78	47,908

Design	Plan 1 10-20-16		
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Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	359.89

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	
9,522.54	0.00	0.00	9,522.54	0.00	0.00	0.00	0.00	0.00	0.00	
10,272.54	90.00	359.89	10,000.00	477.46	-0.91	12.00	12.00	0.00	359.89	
16,766.88	90.00	359.89	10,000.00	6,971.80	-13.30	0.00	0.00	0.00	0.00	BHL - Littlefield 33 I

Phoenix Technology Services LP

Planning Report



Database:	Compass 5000 GCR	Local Co-ordinate Reference:	Well 1H
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 Federal Corn	North Reference:	Grid
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 10-20-16		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Bulld 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
9,522.54	0.00	0.00	9,522.54	0.00	0.00	0.00	0.00	0.00	0.00
KOP, Begin 12.00°/100' Build									
9,600.00	9.30	359.89	9,599.66	6.27	-0.01	6.27	12.00	12.00	0.00
9,700.00	21.30	359.89	9,695.94	32.60	-0.06	32.60	12.00	12.00	0.00
9,800.00	33.30	359.89	9,784.65	78.38	-0.15	78.38	12.00	12.00	0.00
9,900.00	45.30	359.89	9,861.89	141.59	-0.27	141.59	12.00	12.00	0.00
10,000.00	57.30	359.89	9,924.31	219.49	-0.42	219.49	12.00	12.00	0.00
10,100.00	69.30	359.89	9,969.16	308.66	-0.59	308.66	12.00	12.00	0.00
10,200.00	81.30	359.89	9,994.50	405.21	-0.77	405.21	12.00	12.00	0.00
10,272.54	90.00	359.89	10,000.00	477.46	-0.91	477.46	12.00	12.00	0.00
LP, Hold 90.00° Inc at 359.89° Azm									
10,300.00	90.00	359.89	10,000.00	504.93	-0.96	504.93	0.00	0.00	0.00
10,400.00	90.00	359.89	10,000.00	604.93	-1.15	604.93	0.00	0.00	0.00
10,500.00	90.00	359.89	10,000.00	704.93	-1.34	704.93	0.00	0.00	0.00
10,600.00	90.00	359.89	10,000.00	804.93	-1.54	804.93	0.00	0.00	0.00
10,700.00	90.00	359.89	10,000.00	904.93	-1.73	904.93	0.00	0.00	0.00
10,800.00	90.00	359.89	10,000.00	1,004.93	-1.92	1,004.93	0.00	0.00	0.00
10,900.00	90.00	359.89	10,000.00	1,104.93	-2.11	1,104.93	0.00	0.00	0.00
11,000.00	90.00	359.89	10,000.00	1,204.93	-2.30	1,204.93	0.00	0.00	0.00
11,100.00	90.00	359.89	10,000.00	1,304.93	-2.49	1,304.93	0.00	0.00	0.00
11,200.00	90.00	359.89	10,000.00	1,404.93	-2.68	1,404.93	0.00	0.00	0.00
11,300.00	90.00	359.89	10,000.00	1,504.93	-2.87	1,504.93	0.00	0.00	0.00
11,400.00	90.00	359.89	10,000.00	1,604.93	-3.06	1,604.93	0.00	0.00	0.00
11,500.00	90.00	359.89	10,000.00	1,704.93	-3.25	1,704.93	0.00	0.00	0.00
11,600.00	90.00	359.89	10,000.00	1,804.93	-3.44	1,804.93	0.00	0.00	0.00
11,700.00	90.00	359.89	10,000.00	1,904.93	-3.63	1,904.93	0.00	0.00	0.00
11,800.00	90.00	359.89	10,000.00	2,004.93	-3.82	2,004.93	0.00	0.00	0.00
11,900.00	90.00	359.89	10,000.00	2,104.93	-4.02	2,104.93	0.00	0.00	0.00
12,000.00	90.00	359.89	10,000.00	2,204.93	-4.21	2,204.93	0.00	0.00	0.00
12,100.00	90.00	359.89	10,000.00	2,304.93	-4.40	2,304.93	0.00	0.00	0.00
12,200.00	90.00	359.89	10,000.00	2,404.93	-4.59	2,404.93	0.00	0.00	0.00
12,300.00	90.00	359.89	10,000.00	2,504.93	-4.78	2,504.93	0.00	0.00	0.00
12,400.00	90.00	359.89	10,000.00	2,604.92	-4.97	2,604.93	0.00	0.00	0.00
12,500.00	90.00	359.89	10,000.00	2,704.92	-5.16	2,704.93	0.00	0.00	0.00
12,600.00	90.00	359.89	10,000.00	2,804.92	-5.35	2,804.93	0.00	0.00	0.00
12,700.00	90.00	359.89	10,000.00	2,904.92	-5.54	2,904.93	0.00	0.00	0.00
12,800.00	90.00	359.89	10,000.00	3,004.92	-5.73	3,004.93	0.00	0.00	0.00
12,900.00	90.00	359.89	10,000.00	3,104.92	-5.92	3,104.93	0.00	0.00	0.00
13,000.00	90.00	359.89	10,000.00	3,204.92	-6.11	3,204.93	0.00	0.00	0.00
13,100.00	90.00	359.89	10,000.00	3,304.92	-6.30	3,304.93	0.00	0.00	0.00
13,200.00	90.00	359.89	10,000.00	3,404.92	-6.50	3,404.93	0.00	0.00	0.00
13,300.00	90.00	359.89	10,000.00	3,504.92	-6.69	3,504.93	0.00	0.00	0.00
13,400.00	90.00	359.89	10,000.00	3,604.92	-6.88	3,604.93	0.00	0.00	0.00
13,500.00	90.00	359.89	10,000.00	3,704.92	-7.07	3,704.93	0.00	0.00	0.00
13,600.00	90.00	359.89	10,000.00	3,804.92	-7.26	3,804.93	0.00	0.00	0.00
13,700.00	90.00	359.89	10,000.00	3,904.92	-7.45	3,904.93	0.00	0.00	0.00
13,800.00	90.00	359.89	10,000.00	4,004.92	-7.64	4,004.93	0.00	0.00	0.00
13,900.00	90.00	359.89	10,000.00	4,104.92	-7.83	4,104.93	0.00	0.00	0.00
14,000.00	90.00	359.89	10,000.00	4,204.92	-8.02	4,204.93	0.00	0.00	0.00
14,100.00	90.00	359.89	10,000.00	4,304.92	-8.21	4,304.93	0.00	0.00	0.00
14,200.00	90.00	359.89	10,000.00	4,404.92	-8.40	4,404.93	0.00	0.00	0.00
14,300.00	90.00	359.89	10,000.00	4,504.92	-8.59	4,504.93	0.00	0.00	0.00
14,400.00	90.00	359.89	10,000.00	4,604.92	-8.78	4,604.93	0.00	0.00	0.00

Phoenix Technology Services LP

Planning Report



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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 Federal Com	North Reference:	Grid
Well:	1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1 10-20-16		

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)
14,500.00	90.00	359.89	10,000.00	4,704.92	-8.98	4,704.93	0.00	0.00	0.00
14,600.00	90.00	359.89	10,000.00	4,804.92	-9.17	4,804.93	0.00	0.00	0.00
14,700.00	90.00	359.89	10,000.00	4,904.92	-9.36	4,904.93	0.00	0.00	0.00
14,800.00	90.00	359.89	10,000.00	5,004.92	-9.55	5,004.93	0.00	0.00	0.00
14,900.00	90.00	359.89	10,000.00	5,104.92	-9.74	5,104.93	0.00	0.00	0.00
15,000.00	90.00	359.89	10,000.00	5,204.92	-9.93	5,204.93	0.00	0.00	0.00
15,100.00	90.00	359.89	10,000.00	5,304.92	-10.12	5,304.93	0.00	0.00	0.00
15,200.00	90.00	359.89	10,000.00	5,404.92	-10.31	5,404.93	0.00	0.00	0.00
15,300.00	90.00	359.89	10,000.00	5,504.92	-10.50	5,504.93	0.00	0.00	0.00
15,400.00	90.00	359.89	10,000.00	5,604.92	-10.69	5,604.93	0.00	0.00	0.00
15,500.00	90.00	359.89	10,000.00	5,704.92	-10.88	5,704.93	0.00	0.00	0.00
15,600.00	90.00	359.89	10,000.00	5,804.92	-11.07	5,804.93	0.00	0.00	0.00
15,700.00	90.00	359.89	10,000.00	5,904.92	-11.26	5,904.93	0.00	0.00	0.00
15,800.00	90.00	359.89	10,000.00	6,004.92	-11.46	6,004.93	0.00	0.00	0.00
15,900.00	90.00	359.89	10,000.00	6,104.92	-11.65	6,104.93	0.00	0.00	0.00
16,000.00	90.00	359.89	10,000.00	6,204.92	-11.84	6,204.93	0.00	0.00	0.00
16,100.00	90.00	359.89	10,000.00	6,304.92	-12.03	6,304.93	0.00	0.00	0.00
16,200.00	90.00	359.89	10,000.00	6,404.92	-12.22	6,404.93	0.00	0.00	0.00
16,300.00	90.00	359.89	10,000.00	6,504.92	-12.41	6,504.93	0.00	0.00	0.00
16,400.00	90.00	359.89	10,000.00	6,604.92	-12.60	6,604.93	0.00	0.00	0.00
16,500.00	90.00	359.89	10,000.00	6,704.92	-12.79	6,704.93	0.00	0.00	0.00
16,600.00	90.00	359.89	10,000.00	6,804.92	-12.98	6,804.93	0.00	0.00	0.00
16,700.00	90.00	359.89	10,000.00	6,904.92	-13.17	6,904.93	0.00	0.00	0.00
16,766.88	90.00	359.89	10,000.00	6,971.80	-13.30	6,971.81	0.00	0.00	0.00
TD at 16766.88									

Design Targets

Target Name

- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
BHL - Littlefield 33 Fe	0.00	0.00	10,000.00	6,971.80	-13.30	371,261.60	648,362.60	32° 1' 12.74900 N	03° 59' 16.81060 W
- plan hits target center									
- Point									

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
9,522.54	9,522.54	0.00	0.00	KOP, Begin 12.00°/100' Build
10,272.54	10,000.00	477.46	-0.91	LP, Hold 90.00° Inc at 359.89° Azm
16,766.88	10,000.00	6,971.80	-13.30	TD at 16766.88