



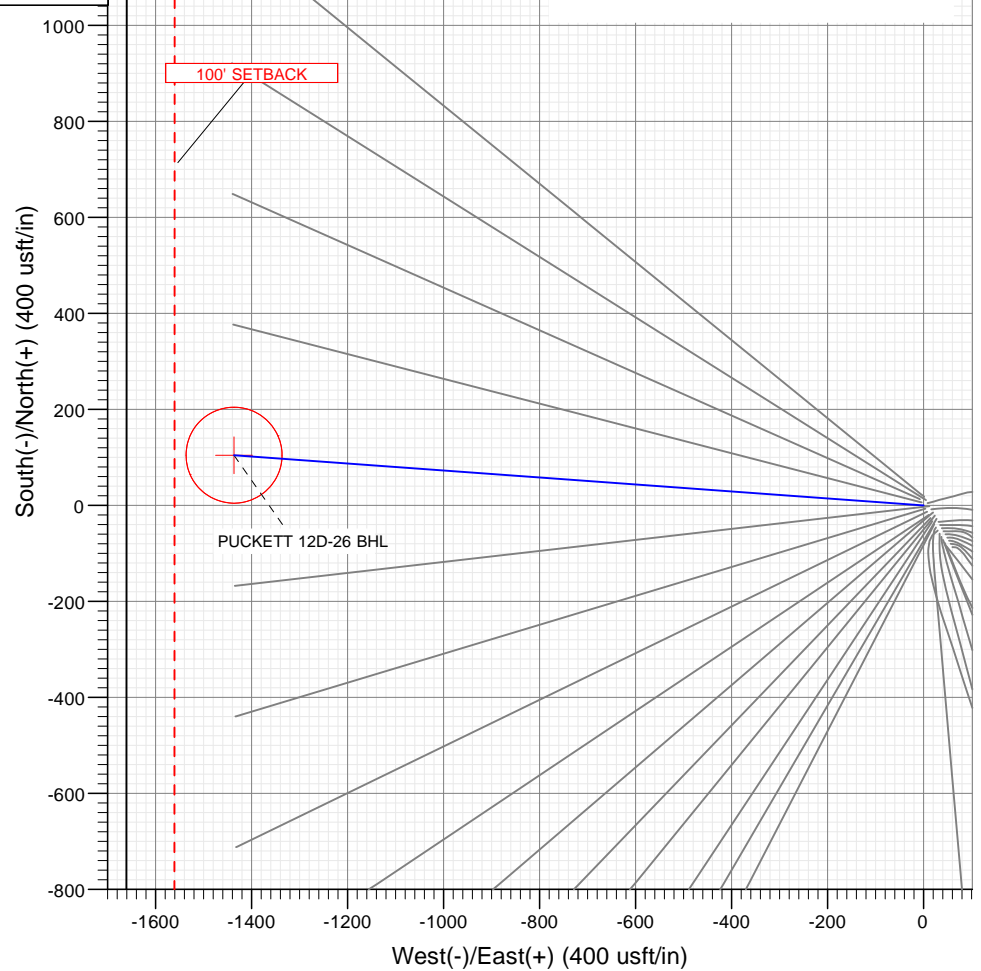
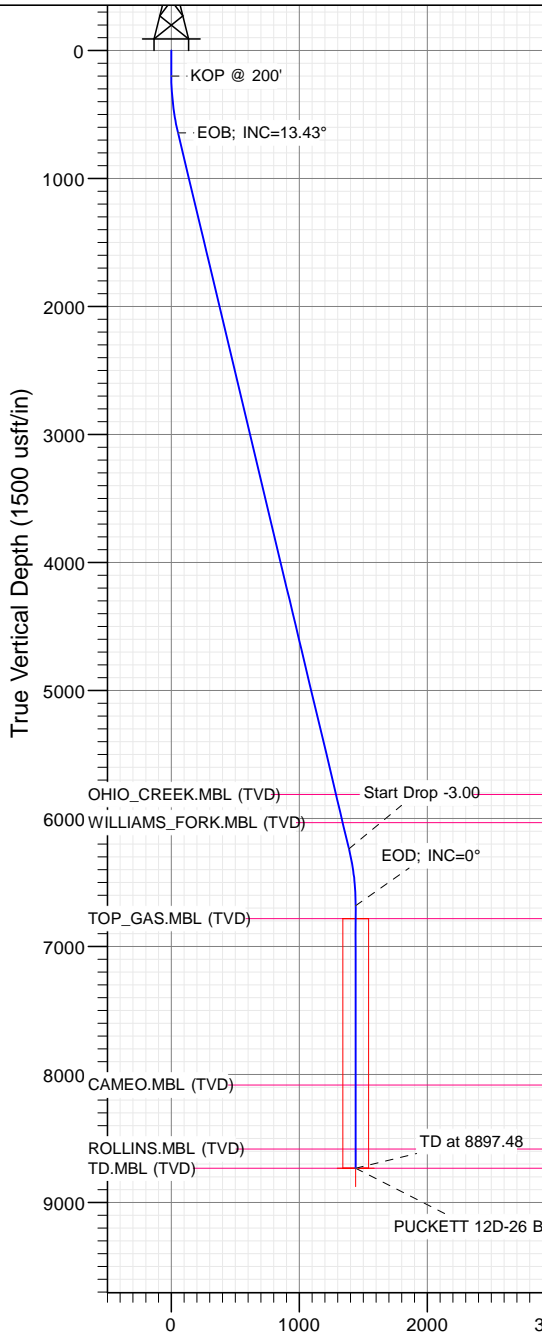
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	647.72	13.43	274.17	643.63	3.80	-52.10	3.00	274.17	52.24	
4	6398.76	13.43	274.17	6237.37	100.97	-1384.43	0.00	0.00	1388.11	
5	6846.48	0.00	0.00	6681.00	104.77	-1436.53	3.00	180.00	1440.35	
6	8897.48	0.00	0.00	8732.00	104.77	-1436.53	0.00	0.00	1440.35	PUCKETT 12D-26 BHL

PLAN #1
PUCKETT 12D-26
XXX16; LR
30' KB @ 8322.00usft
Ground Level @ 8322.00
NAD 1927 - Western US
Well PUCKETT 12D-26, True North

Type	Target	Azimuth	Origin Type	N/S	E/W	From TVD
TD	No Target (Freehand)	274.17	Slot	0.00	0.00	0.00
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	
PUCKETT 12D-26 BHL	8732.00	104.77	-1436.53	39.495337	-108.195307	

Project: Garfield County, CO (UTM 12N)
Site: S26-T6S-R97W (MESA F26)
Well: PUCKETT 12D-26
Wellbore: OH
Design: PLAN #1



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
5813.00	5962.46	OHIO_CREEK.MBL (TVD)
6032.00	6187.62	WILLIAMS_FORK.MBL (TVD)
6781.00	6946.48	TOP_GAS.MBL (TVD)
8082.00	8247.48	CAMEO.MBL (TVD)
8582.00	8747.48	ROLLINS.MBL (TVD)
8732.00	8897.48	TD.MBL (TVD)



Azimuths to True North
Magnetic North: 9.78°
Magnetic Field
Strength: 51819.5snT
Dip Angle: 65.83°
Date: 9/23/2016
Model: HDGM

Vertical Section at 274.17° (1500 usft/in)

WELL DETAILS: PUCKETT 12D-26

+N/-S	+E/-W	Northing	Ground Level:	8322.00	Latitude	Longitude
0.00	0.00	14354551.10	Easting	2433145.80	39.495050	-108.190219

CATHEDRAL



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 12D-26
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8352.00usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8352.00usft
Site:	S26-T6S-R97W (MESA F26)	North Reference:	True
Well:	PUCKETT 12D-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Project	Garfield County, CO (UTM 12N)		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		
Map Zone:	Zone 12N (114 W to 108 W)		

Site		S26-T6S-R97W (MESA F26)			
Site Position:		Northing:	14,354,512.70 usft	Latitude:	39.494943
From:	Map	Easting:	2,433,169.20 usft	Longitude:	-108.190140
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	1.79 °

Well	PUCKETT 12D-26					
Well Position	+N/-S	0.00 usft	Northing:	14,354,551.10 usft	Latitude:	39.495050
	+E/-W	0.00 usft	Easting:	2,433,145.80 usft	Longitude:	-108.190219
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	8,322.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	HDGM	9/23/2016	9.78	65.83	51,820

Design	PLAN #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.00	0.00	0.00	274.17

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	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
647.72	13.43	274.17	643.63	3.80	-52.10	3.00	3.00	0.00	274.17	
6,398.76	13.43	274.17	6,237.37	100.97	-1,384.43	0.00	0.00	0.00	0.00	
6,846.48	0.00	0.00	6,681.00	104.77	-1,436.53	3.00	-3.00	0.00	180.00	
8,897.48	0.00	0.00	8,732.00	104.77	-1,436.53	0.00	0.00	0.00	0.00	PUCKETT 12D-26 BH

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 12D-26
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8352.00usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8352.00usft
Site:	S26-T6S-R97W (MESA F26)	North Reference:	True
Well:	PUCKETT 12D-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	KOP @ 200'
300.00	3.00	274.17	299.95	0.19	-2.61	2.62	3.00	3.00	
400.00	6.00	274.17	399.63	0.76	-10.43	10.46	3.00	3.00	
500.00	9.00	274.17	498.77	1.71	-23.45	23.51	3.00	3.00	
600.00	12.00	274.17	597.08	3.04	-41.62	41.74	3.00	3.00	
647.72	13.43	274.17	643.63	3.80	-52.10	52.24	3.00	3.00	EOB; INC=13.43°
700.00	13.43	274.17	694.48	4.68	-64.21	64.38	0.00	0.00	
800.00	13.43	274.17	791.75	6.37	-87.38	87.61	0.00	0.00	
900.00	13.43	274.17	889.01	8.06	-110.55	110.84	0.00	0.00	
1,000.00	13.43	274.17	986.28	9.75	-133.71	134.07	0.00	0.00	
1,100.00	13.43	274.17	1,083.54	11.44	-156.88	157.30	0.00	0.00	
1,200.00	13.43	274.17	1,180.80	13.13	-180.05	180.52	0.00	0.00	
1,300.00	13.43	274.17	1,278.07	14.82	-203.21	203.75	0.00	0.00	
1,400.00	13.43	274.17	1,375.33	16.51	-226.38	226.98	0.00	0.00	
1,500.00	13.43	274.17	1,472.60	18.20	-249.55	250.21	0.00	0.00	
1,600.00	13.43	274.17	1,569.86	19.89	-272.71	273.44	0.00	0.00	
1,700.00	13.43	274.17	1,667.13	21.58	-295.88	296.67	0.00	0.00	
1,800.00	13.43	274.17	1,764.39	23.27	-319.05	319.89	0.00	0.00	
1,900.00	13.43	274.17	1,861.66	24.96	-342.21	343.12	0.00	0.00	
2,000.00	13.43	274.17	1,958.92	26.65	-365.38	366.35	0.00	0.00	
2,100.00	13.43	274.17	2,056.19	28.34	-388.55	389.58	0.00	0.00	
2,200.00	13.43	274.17	2,153.45	30.03	-411.71	412.81	0.00	0.00	
2,300.00	13.43	274.17	2,250.72	31.72	-434.88	436.04	0.00	0.00	
2,400.00	13.43	274.17	2,347.98	33.41	-458.05	459.26	0.00	0.00	
2,500.00	13.43	274.17	2,445.25	35.10	-481.21	482.49	0.00	0.00	
2,600.00	13.43	274.17	2,542.51	36.79	-504.38	505.72	0.00	0.00	
2,700.00	13.43	274.17	2,639.78	38.48	-527.55	528.95	0.00	0.00	
2,800.00	13.43	274.17	2,737.04	40.17	-550.71	552.18	0.00	0.00	
2,900.00	13.43	274.17	2,834.31	41.86	-573.88	575.40	0.00	0.00	
3,000.00	13.43	274.17	2,931.57	43.55	-597.05	598.63	0.00	0.00	
3,100.00	13.43	274.17	3,028.84	45.24	-620.21	621.86	0.00	0.00	
3,200.00	13.43	274.17	3,126.10	46.93	-643.38	645.09	0.00	0.00	
3,300.00	13.43	274.17	3,223.37	48.61	-666.55	668.32	0.00	0.00	
3,400.00	13.43	274.17	3,320.63	50.30	-689.71	691.55	0.00	0.00	
3,500.00	13.43	274.17	3,417.90	51.99	-712.88	714.77	0.00	0.00	
3,600.00	13.43	274.17	3,515.16	53.68	-736.05	738.00	0.00	0.00	
3,700.00	13.43	274.17	3,612.43	55.37	-759.21	761.23	0.00	0.00	
3,800.00	13.43	274.17	3,709.69	57.06	-782.38	784.46	0.00	0.00	
3,900.00	13.43	274.17	3,806.95	58.75	-805.55	807.69	0.00	0.00	
4,000.00	13.43	274.17	3,904.22	60.44	-828.72	830.92	0.00	0.00	
4,100.00	13.43	274.17	4,001.48	62.13	-851.88	854.14	0.00	0.00	
4,200.00	13.43	274.17	4,098.75	63.82	-875.05	877.37	0.00	0.00	
4,300.00	13.43	274.17	4,196.01	65.51	-898.22	900.60	0.00	0.00	
4,400.00	13.43	274.17	4,293.28	67.20	-921.38	923.83	0.00	0.00	
4,500.00	13.43	274.17	4,390.54	68.89	-944.55	947.06	0.00	0.00	
4,600.00	13.43	274.17	4,487.81	70.58	-967.72	970.29	0.00	0.00	
4,700.00	13.43	274.17	4,585.07	72.27	-990.88	993.51	0.00	0.00	
4,800.00	13.43	274.17	4,682.34	73.96	-1,014.05	1,016.74	0.00	0.00	
4,900.00	13.43	274.17	4,779.60	75.65	-1,037.22	1,039.97	0.00	0.00	
5,000.00	13.43	274.17	4,876.87	77.34	-1,060.38	1,063.20	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 12D-26
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8352.00usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8352.00usft
Site:	S26-T6S-R97W (MESA F26)	North Reference:	True
Well:	PUCKETT 12D-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
5,100.00	13.43	274.17	4,974.13	79.03	-1,083.55	1,086.43	0.00	0.00	
5,200.00	13.43	274.17	5,071.40	80.72	-1,106.72	1,109.66	0.00	0.00	
5,300.00	13.43	274.17	5,168.66	82.41	-1,129.88	1,132.88	0.00	0.00	
5,400.00	13.43	274.17	5,265.93	84.10	-1,153.05	1,156.11	0.00	0.00	
5,500.00	13.43	274.17	5,363.19	85.79	-1,176.22	1,179.34	0.00	0.00	
5,600.00	13.43	274.17	5,460.46	87.48	-1,199.38	1,202.57	0.00	0.00	
5,700.00	13.43	274.17	5,557.72	89.17	-1,222.55	1,225.80	0.00	0.00	
5,800.00	13.43	274.17	5,654.99	90.86	-1,245.72	1,249.03	0.00	0.00	
5,900.00	13.43	274.17	5,752.25	92.55	-1,268.88	1,272.25	0.00	0.00	
5,962.46	13.43	274.17	5,813.00	93.60	-1,283.35	1,286.76	0.00	0.00	OHIO_CREEK.MBL (TVD)
6,000.00	13.43	274.17	5,849.52	94.24	-1,292.05	1,295.48	0.00	0.00	
6,100.00	13.43	274.17	5,946.78	95.93	-1,315.22	1,318.71	0.00	0.00	
6,187.62	13.43	274.17	6,032.00	97.41	-1,335.51	1,339.06	0.00	0.00	WILLIAMS_FORK.MBL (TVD)
6,200.00	13.43	274.17	6,044.05	97.62	-1,338.38	1,341.94	0.00	0.00	
6,300.00	13.43	274.17	6,141.31	99.30	-1,361.55	1,365.17	0.00	0.00	
6,398.76	13.43	274.17	6,237.37	100.97	-1,384.43	1,388.11	0.00	0.00	Start Drop -3.00
6,400.00	13.39	274.17	6,238.58	100.99	-1,384.72	1,388.40	3.00	-3.00	
6,500.00	10.39	274.17	6,336.42	102.49	-1,405.27	1,409.00	3.00	-3.00	
6,600.00	7.39	274.17	6,435.20	103.62	-1,420.69	1,424.46	3.00	-3.00	
6,700.00	4.39	274.17	6,534.66	104.37	-1,430.93	1,434.73	3.00	-3.00	
6,800.00	1.39	274.17	6,634.52	104.73	-1,435.97	1,439.78	3.00	-3.00	
6,846.48	0.00	0.00	6,681.00	104.77	-1,436.53	1,440.35	3.00	-3.00	EOD; INC=0°
6,900.00	0.00	0.00	6,734.52	104.77	-1,436.53	1,440.35	0.00	0.00	
6,946.48	0.00	0.00	6,781.00	104.77	-1,436.53	1,440.35	0.00	0.00	TOP_GAS.MBL (TVD)
7,000.00	0.00	0.00	6,834.52	104.77	-1,436.53	1,440.35	0.00	0.00	
7,100.00	0.00	0.00	6,934.52	104.77	-1,436.53	1,440.35	0.00	0.00	
7,200.00	0.00	0.00	7,034.52	104.77	-1,436.53	1,440.35	0.00	0.00	
7,300.00	0.00	0.00	7,134.52	104.77	-1,436.53	1,440.35	0.00	0.00	
7,400.00	0.00	0.00	7,234.52	104.77	-1,436.53	1,440.35	0.00	0.00	
7,500.00	0.00	0.00	7,334.52	104.77	-1,436.53	1,440.35	0.00	0.00	
7,600.00	0.00	0.00	7,434.52	104.77	-1,436.53	1,440.35	0.00	0.00	
7,700.00	0.00	0.00	7,534.52	104.77	-1,436.53	1,440.35	0.00	0.00	
7,800.00	0.00	0.00	7,634.52	104.77	-1,436.53	1,440.35	0.00	0.00	
7,900.00	0.00	0.00	7,734.52	104.77	-1,436.53	1,440.35	0.00	0.00	
8,000.00	0.00	0.00	7,834.52	104.77	-1,436.53	1,440.35	0.00	0.00	
8,100.00	0.00	0.00	7,934.52	104.77	-1,436.53	1,440.35	0.00	0.00	
8,200.00	0.00	0.00	8,034.52	104.77	-1,436.53	1,440.35	0.00	0.00	
8,247.48	0.00	0.00	8,082.00	104.77	-1,436.53	1,440.35	0.00	0.00	CAMEO.MBL (TVD)
8,300.00	0.00	0.00	8,134.52	104.77	-1,436.53	1,440.35	0.00	0.00	
8,400.00	0.00	0.00	8,234.52	104.77	-1,436.53	1,440.35	0.00	0.00	
8,500.00	0.00	0.00	8,334.52	104.77	-1,436.53	1,440.35	0.00	0.00	
8,600.00	0.00	0.00	8,434.52	104.77	-1,436.53	1,440.35	0.00	0.00	
8,700.00	0.00	0.00	8,534.52	104.77	-1,436.53	1,440.35	0.00	0.00	
8,747.48	0.00	0.00	8,582.00	104.77	-1,436.53	1,440.35	0.00	0.00	ROLLINS.MBL (TVD)
8,800.00	0.00	0.00	8,634.52	104.77	-1,436.53	1,440.35	0.00	0.00	
8,897.48	0.00	0.00	8,732.00	104.77	-1,436.53	1,440.35	0.00	0.00	TD at 8897.48 - TD.MBL (TVD)

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 12D-26
Company:	Caerus Oil & Gas	TVD Reference:	30' KB @ 8352.00usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	30' KB @ 8352.00usft
Site:	S26-T6S-R97W (MESA F26)	North Reference:	True
Well:	PUCKETT 12D-26	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
PUCKETT 12D-26 BHL	0.00	0.00	8,732.00	104.77	-1,436.53	14,354,611.00	2,431,706.70	39.495337	-108.195307
- plan hits target center									
- Circle (radius 100.00)									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
5,962.46	5,813.00	OHIO_CREEK.MBL (TVD)				
6,187.62	6,032.00	WILLIAMS_FORK.MBL (TVD)				
6,946.48	6,781.00	TOP_GAS.MBL (TVD)				
8,247.48	8,082.00	CAMEO.MBL (TVD)				
8,747.48	8,582.00	ROLLINS.MBL (TVD)				
8,897.48	8,732.00	TD.MBL (TVD)				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S	+E/-W	Comment	
(usft)	(usft)	(usft)	(usft)		
200.00	200.00	0.00	0.00	KOP @ 200'	
647.72	643.63	3.80	-52.10	EOB; INC=13.43°	
6,398.76	6,237.37	100.97	-1,384.43	Start Drop -3.00	
6,846.48	6,681.00	104.77	-1,436.53	EOD; INC=0°	
8,897.48	8,732.00	104.77	-1,436.53	TD at 8897.48	