



SECTION DETAILS

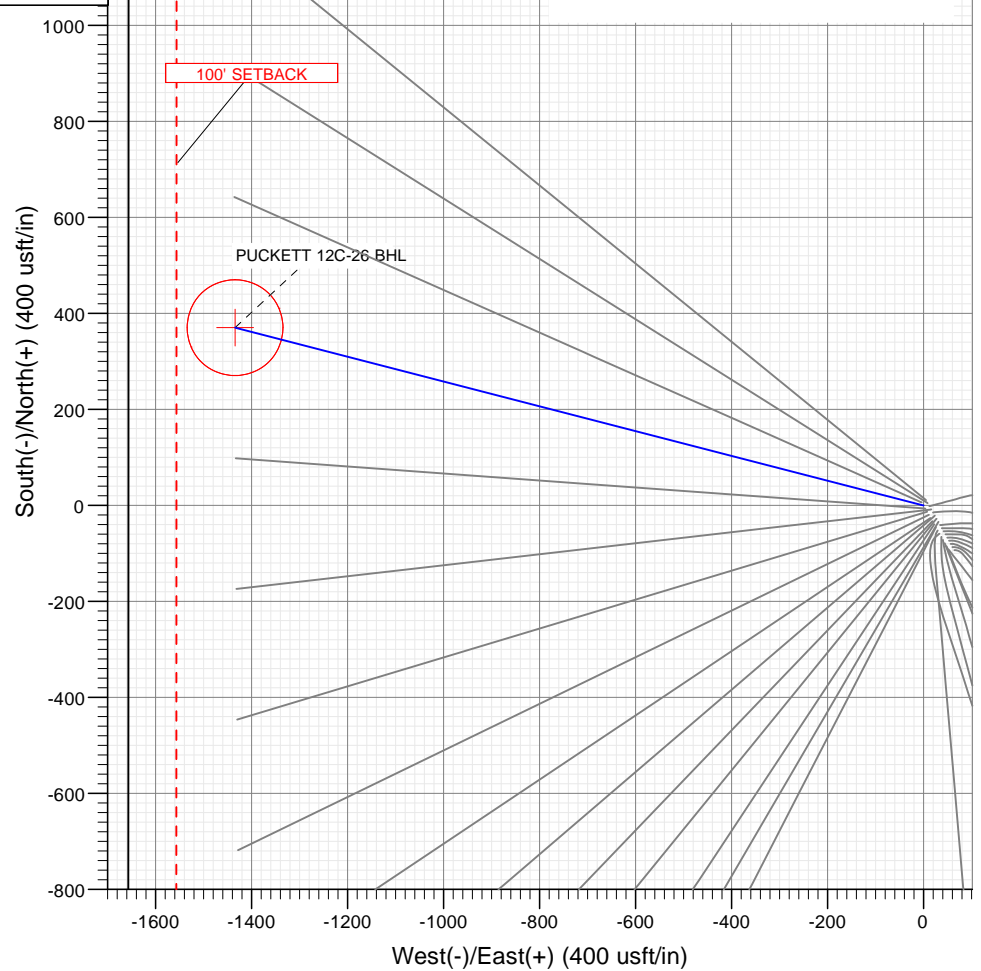
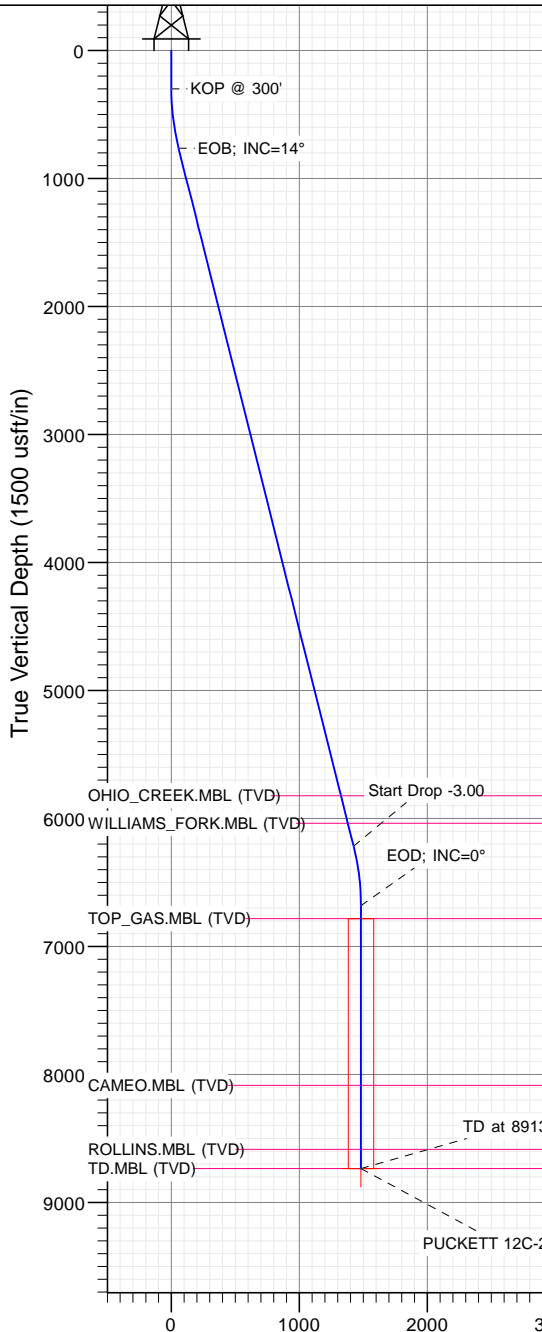
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
3	769.10	14.07	284.48	764.39	14.33	-55.50	3.00	284.48	57.32	
4	6390.01	14.07	284.48	6216.61	356.10	-1378.84	0.00	0.00	1424.08	
5	6859.11	0.00	0.00	6681.00	370.43	-1434.34	3.00	180.00	1481.40	
6	8913.11	0.00	0.00	8735.00	370.43	-1434.34	0.00	0.00	1481.40	PUCKETT 12C-26 BHL

Type	Target	MD	Inc	Azi	Origin Type	N/S	E/W	From TVD
TD	No Target (Freehand)	8735.00	0.00	370.43	0.00	0.00	0.00	0.00

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
PUCKETT 12C-26 BHL	8735.00	370.43	-1434.34	39.496084	-108.190232

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

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



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
5821.00	5982.16	OHIO_CREEK.MBL (TVD)
6037.00	6204.85	WILLIAMS_FORK.MBL (TVD)
6781.00	6959.11	TOP_GAS.MBL (TVD)
8085.00	8263.11	CAMEO.MBL (TVD)
8585.00	8763.11	ROLLINS.MBL (TVD)
8735.00	8913.11	TD.MBL (TVD)



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

Vertical Section at 284.48° (1500 usft/in)

WELL DETAILS: PUCKETT 12C-26

+N/-S	+E/-W	Northing	Ground Level:	8322.00	Latitude	Longitude
0.00	0.00	14354557.50	Easting	2433141.90	39.495068	-108.190232

CATHEDRAL



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 12C-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 12C-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 12C-26					
Well Position	+N/-S	0.00 usft	Northing:	14,354,557.50 usft	Latitude:	39.495068
	+E/-W	0.00 usft	Easting:	2,433,141.90 usft	Longitude:	-108.190232
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	284.48

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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
769.10	14.07	284.48	764.39	14.33	-55.50	3.00	3.00	0.00	284.48	
6,390.01	14.07	284.48	6,216.61	356.10	-1,378.84	0.00	0.00	0.00	0.00	
6,859.11	0.00	0.00	6,681.00	370.43	-1,434.34	3.00	-3.00	0.00	180.00	
8,913.11	0.00	0.00	8,735.00	370.43	-1,434.34	0.00	0.00	0.00	0.00	PUCKETT 12C-26 BH

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 12C-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 12C-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	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	KOP @ 300'
400.00	3.00	284.48	399.95	0.65	-2.53	2.62	3.00	3.00	
500.00	6.00	284.48	499.63	2.62	-10.13	10.46	3.00	3.00	
600.00	9.00	284.48	598.77	5.88	-22.77	23.51	3.00	3.00	
700.00	12.00	284.48	697.08	10.44	-40.41	41.74	3.00	3.00	
769.10	14.07	284.48	764.39	14.33	-55.50	57.32	3.00	3.00	EOB; INC=14°
800.00	14.07	284.48	794.37	16.21	-62.77	64.83	0.00	0.00	
900.00	14.07	284.48	891.37	22.29	-86.32	89.15	0.00	0.00	
1,000.00	14.07	284.48	988.37	28.37	-109.86	113.47	0.00	0.00	
1,100.00	14.07	284.48	1,085.37	34.45	-133.40	137.78	0.00	0.00	
1,200.00	14.07	284.48	1,182.36	40.53	-156.95	162.10	0.00	0.00	
1,300.00	14.07	284.48	1,279.36	46.61	-180.49	186.41	0.00	0.00	
1,400.00	14.07	284.48	1,376.36	52.69	-204.03	210.73	0.00	0.00	
1,500.00	14.07	284.48	1,473.36	58.77	-227.58	235.04	0.00	0.00	
1,600.00	14.07	284.48	1,570.36	64.85	-251.12	259.36	0.00	0.00	
1,700.00	14.07	284.48	1,667.36	70.93	-274.66	283.68	0.00	0.00	
1,800.00	14.07	284.48	1,764.36	77.02	-298.21	307.99	0.00	0.00	
1,900.00	14.07	284.48	1,861.36	83.10	-321.75	332.31	0.00	0.00	
2,000.00	14.07	284.48	1,958.35	89.18	-345.29	356.62	0.00	0.00	
2,100.00	14.07	284.48	2,055.35	95.26	-368.84	380.94	0.00	0.00	
2,200.00	14.07	284.48	2,152.35	101.34	-392.38	405.25	0.00	0.00	
2,300.00	14.07	284.48	2,249.35	107.42	-415.92	429.57	0.00	0.00	
2,400.00	14.07	284.48	2,346.35	113.50	-439.47	453.89	0.00	0.00	
2,500.00	14.07	284.48	2,443.35	119.58	-463.01	478.20	0.00	0.00	
2,600.00	14.07	284.48	2,540.35	125.66	-486.55	502.52	0.00	0.00	
2,700.00	14.07	284.48	2,637.35	131.74	-510.10	526.83	0.00	0.00	
2,800.00	14.07	284.48	2,734.34	137.82	-533.64	551.15	0.00	0.00	
2,900.00	14.07	284.48	2,831.34	143.90	-557.18	575.46	0.00	0.00	
3,000.00	14.07	284.48	2,928.34	149.98	-580.72	599.78	0.00	0.00	
3,100.00	14.07	284.48	3,025.34	156.06	-604.27	624.09	0.00	0.00	
3,200.00	14.07	284.48	3,122.34	162.14	-627.81	648.41	0.00	0.00	
3,300.00	14.07	284.48	3,219.34	168.22	-651.35	672.73	0.00	0.00	
3,400.00	14.07	284.48	3,316.34	174.30	-674.90	697.04	0.00	0.00	
3,500.00	14.07	284.48	3,413.34	180.38	-698.44	721.36	0.00	0.00	
3,600.00	14.07	284.48	3,510.33	186.46	-721.98	745.67	0.00	0.00	
3,700.00	14.07	284.48	3,607.33	192.54	-745.53	769.99	0.00	0.00	
3,800.00	14.07	284.48	3,704.33	198.62	-769.07	794.30	0.00	0.00	
3,900.00	14.07	284.48	3,801.33	204.70	-792.61	818.62	0.00	0.00	
4,000.00	14.07	284.48	3,898.33	210.78	-816.16	842.94	0.00	0.00	
4,100.00	14.07	284.48	3,995.33	216.86	-839.70	867.25	0.00	0.00	
4,200.00	14.07	284.48	4,092.33	222.94	-863.24	891.57	0.00	0.00	
4,300.00	14.07	284.48	4,189.32	229.02	-886.79	915.88	0.00	0.00	
4,400.00	14.07	284.48	4,286.32	235.10	-910.33	940.20	0.00	0.00	
4,500.00	14.07	284.48	4,383.32	241.18	-933.87	964.51	0.00	0.00	
4,600.00	14.07	284.48	4,480.32	247.26	-957.42	988.83	0.00	0.00	
4,700.00	14.07	284.48	4,577.32	253.34	-980.96	1,013.15	0.00	0.00	
4,800.00	14.07	284.48	4,674.32	259.42	-1,004.50	1,037.46	0.00	0.00	
4,900.00	14.07	284.48	4,771.32	265.50	-1,028.05	1,061.78	0.00	0.00	
5,000.00	14.07	284.48	4,868.32	271.58	-1,051.59	1,086.09	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 12C-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 12C-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	14.07	284.48	4,965.31	277.66	-1,075.13	1,110.41	0.00	0.00	
5,200.00	14.07	284.48	5,062.31	283.75	-1,098.67	1,134.72	0.00	0.00	
5,300.00	14.07	284.48	5,159.31	289.83	-1,122.22	1,159.04	0.00	0.00	
5,400.00	14.07	284.48	5,256.31	295.91	-1,145.76	1,183.36	0.00	0.00	
5,500.00	14.07	284.48	5,353.31	301.99	-1,169.30	1,207.67	0.00	0.00	
5,600.00	14.07	284.48	5,450.31	308.07	-1,192.85	1,231.99	0.00	0.00	
5,700.00	14.07	284.48	5,547.31	314.15	-1,216.39	1,256.30	0.00	0.00	
5,800.00	14.07	284.48	5,644.31	320.23	-1,239.93	1,280.62	0.00	0.00	
5,900.00	14.07	284.48	5,741.30	326.31	-1,263.48	1,304.93	0.00	0.00	
5,982.16	14.07	284.48	5,821.00	331.30	-1,282.82	1,324.91	0.00	0.00	OHIO_CREEK.MBL (TVD)
6,000.00	14.07	284.48	5,838.30	332.39	-1,287.02	1,329.25	0.00	0.00	
6,100.00	14.07	284.48	5,935.30	338.47	-1,310.56	1,353.56	0.00	0.00	
6,200.00	14.07	284.48	6,032.30	344.55	-1,334.11	1,377.88	0.00	0.00	
6,204.85	14.07	284.48	6,037.00	344.84	-1,335.25	1,379.06	0.00	0.00	WILLIAMS_FORK.MBL (TVD)
6,300.00	14.07	284.48	6,129.30	350.63	-1,357.65	1,402.20	0.00	0.00	
6,390.01	14.07	284.48	6,216.61	356.10	-1,378.84	1,424.08	0.00	0.00	Start Drop -3.00
6,400.00	13.77	284.48	6,226.30	356.70	-1,381.17	1,426.49	3.00	-3.00	
6,500.00	10.77	284.48	6,324.01	362.02	-1,401.75	1,447.74	3.00	-3.00	
6,600.00	7.77	284.48	6,422.69	366.05	-1,417.35	1,463.85	3.00	-3.00	
6,700.00	4.77	284.48	6,522.08	368.78	-1,427.93	1,474.78	3.00	-3.00	
6,800.00	1.77	284.48	6,621.90	370.21	-1,433.45	1,480.49	3.00	-3.00	
6,859.11	0.00	0.00	6,681.00	370.43	-1,434.34	1,481.40	3.00	-3.00	EOD; INC=0°
6,900.00	0.00	0.00	6,721.89	370.43	-1,434.34	1,481.40	0.00	0.00	
6,959.11	0.00	0.00	6,781.00	370.43	-1,434.34	1,481.40	0.00	0.00	TOP_GAS.MBL (TVD)
7,000.00	0.00	0.00	6,821.89	370.43	-1,434.34	1,481.40	0.00	0.00	
7,100.00	0.00	0.00	6,921.89	370.43	-1,434.34	1,481.40	0.00	0.00	
7,200.00	0.00	0.00	7,021.89	370.43	-1,434.34	1,481.40	0.00	0.00	
7,300.00	0.00	0.00	7,121.89	370.43	-1,434.34	1,481.40	0.00	0.00	
7,400.00	0.00	0.00	7,221.89	370.43	-1,434.34	1,481.40	0.00	0.00	
7,500.00	0.00	0.00	7,321.89	370.43	-1,434.34	1,481.40	0.00	0.00	
7,600.00	0.00	0.00	7,421.89	370.43	-1,434.34	1,481.40	0.00	0.00	
7,700.00	0.00	0.00	7,521.89	370.43	-1,434.34	1,481.40	0.00	0.00	
7,800.00	0.00	0.00	7,621.89	370.43	-1,434.34	1,481.40	0.00	0.00	
7,900.00	0.00	0.00	7,721.89	370.43	-1,434.34	1,481.40	0.00	0.00	
8,000.00	0.00	0.00	7,821.89	370.43	-1,434.34	1,481.40	0.00	0.00	
8,100.00	0.00	0.00	7,921.89	370.43	-1,434.34	1,481.40	0.00	0.00	
8,200.00	0.00	0.00	8,021.89	370.43	-1,434.34	1,481.40	0.00	0.00	
8,263.11	0.00	0.00	8,085.00	370.43	-1,434.34	1,481.40	0.00	0.00	CAMEO.MBL (TVD)
8,300.00	0.00	0.00	8,121.89	370.43	-1,434.34	1,481.40	0.00	0.00	
8,400.00	0.00	0.00	8,221.89	370.43	-1,434.34	1,481.40	0.00	0.00	
8,500.00	0.00	0.00	8,321.89	370.43	-1,434.34	1,481.40	0.00	0.00	
8,600.00	0.00	0.00	8,421.89	370.43	-1,434.34	1,481.40	0.00	0.00	
8,700.00	0.00	0.00	8,521.89	370.43	-1,434.34	1,481.40	0.00	0.00	
8,763.11	0.00	0.00	8,585.00	370.43	-1,434.34	1,481.40	0.00	0.00	ROLLINS.MBL (TVD)
8,800.00	0.00	0.00	8,621.89	370.43	-1,434.34	1,481.40	0.00	0.00	
8,900.00	0.00	0.00	8,721.89	370.43	-1,434.34	1,481.40	0.00	0.00	
8,913.11	0.00	0.00	8,735.00	370.43	-1,434.34	1,481.40	0.00	0.00	TD at 8913.11 - TD.MBL (TVD)

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 12C-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 12C-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 12C-26 BHL	0.00	0.00	8,735.00	370.43	-1,434.34	14,354,883.00	2,431,696.70	39.496084	-108.195313
- plan hits target center									
- Circle (radius 100.00)									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
5,982.16	5,821.00	OHIO_CREEK.MBL (TVD)				
6,204.85	6,037.00	WILLIAMS_FORK.MBL (TVD)				
6,959.11	6,781.00	TOP_GAS.MBL (TVD)				
8,263.11	8,085.00	CAMEO.MBL (TVD)				
8,763.11	8,585.00	ROLLINS.MBL (TVD)				
8,913.11	8,735.00	TD.MBL (TVD)				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	Comment	
300.00	300.00	0.00	0.00	KOP @ 300'	
769.10	764.39	14.33	-55.50	EOB; INC=14°	
6,390.01	6,216.61	356.10	-1,378.84	Start Drop -3.00	
6,859.11	6,681.00	370.43	-1,434.34	EOD; INC=0°	
8,913.11	8,735.00	370.43	-1,434.34	TD at 8913.11	