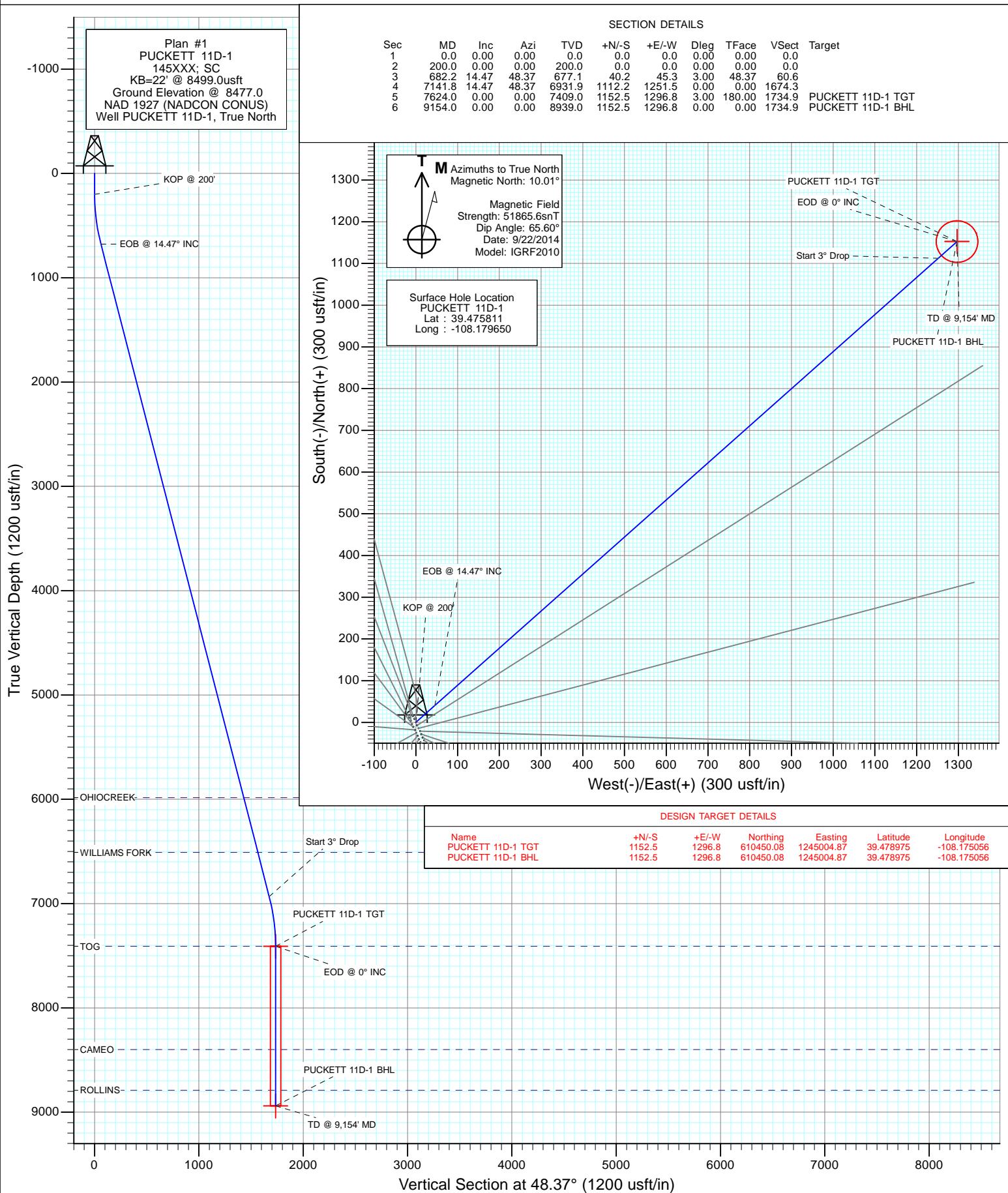
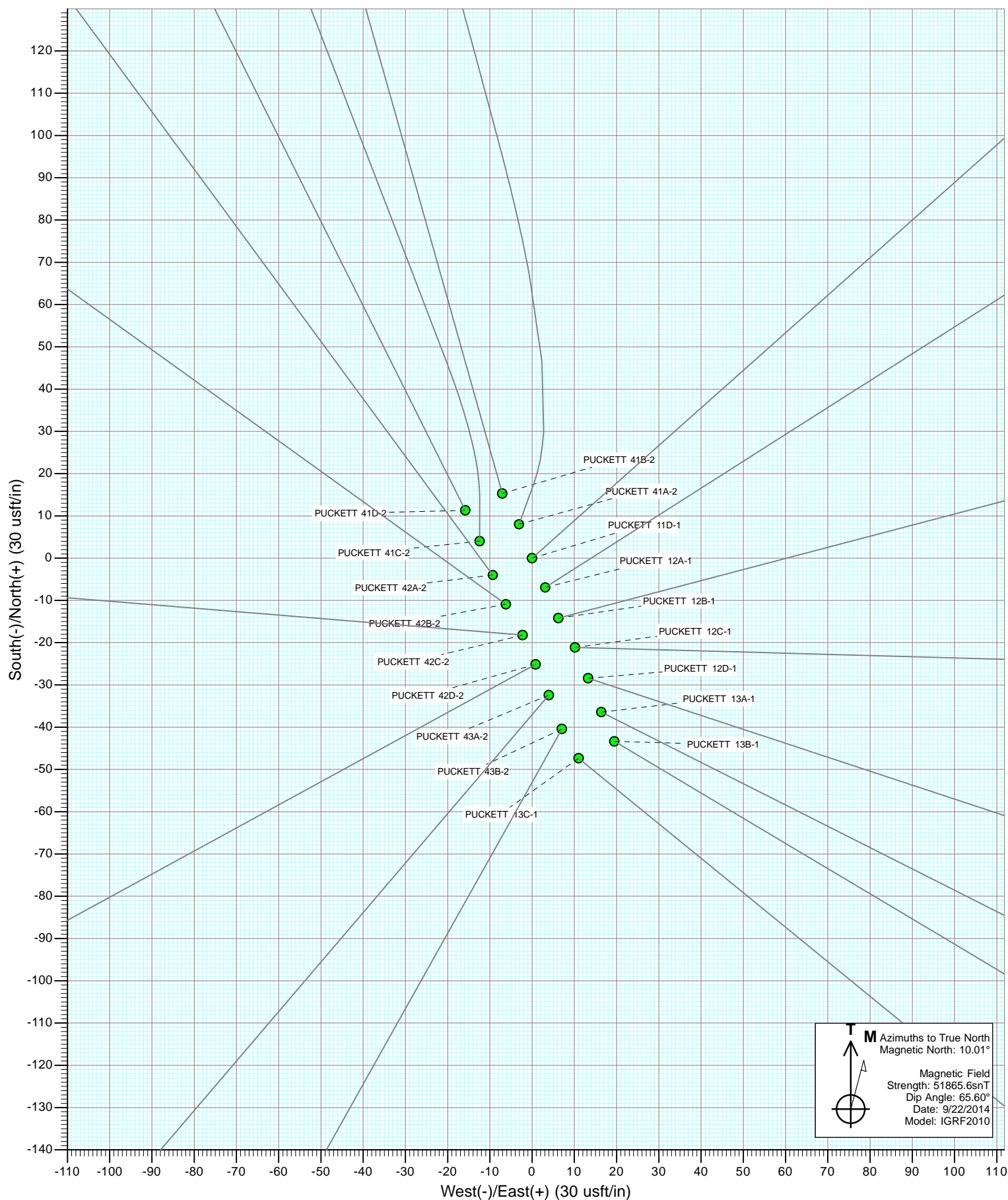
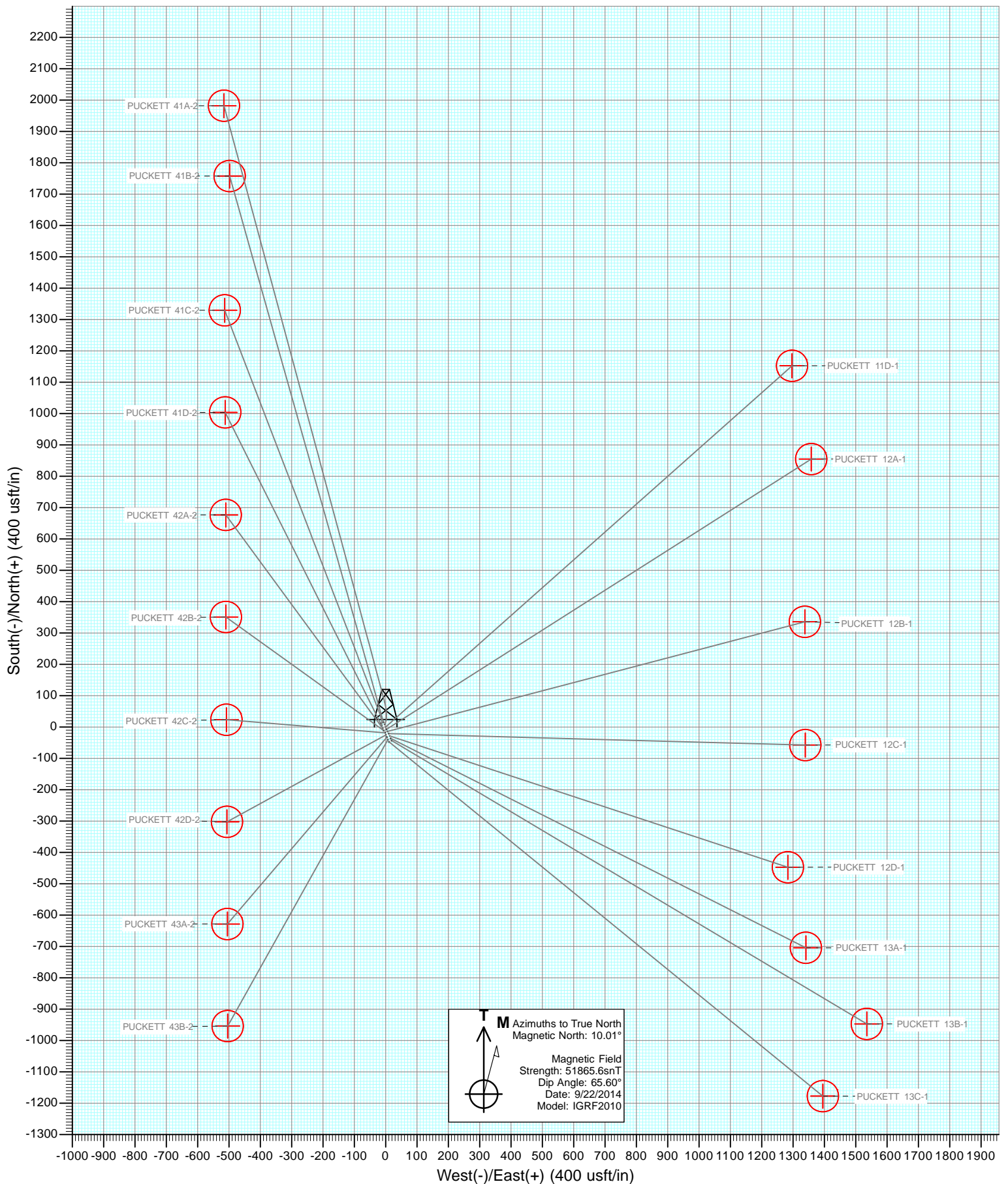




Project: Garfield County, CO
Site: S2-T7S-R97W (Puckett Pad)
Well: PUCKETT 11D-1
Wellbore: DD
Design: Plan #1







Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=22' @ 8499.0usft
Project:	Garfield County, CO	MD Reference:	KB=22' @ 8499.0usft
Site:	S2-T7S-R97W (Puckett Pad)	North Reference:	True
Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Project	Garfield County, CO		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Colorado Central 502		

Site		S2-T7S-R97W (Puckett Pad)			
Site Position:		Northing:	609,295.75 usft	Latitude:	39.475700
From:	Lat/Long	Easting:	1,243,680.53 usft	Longitude:	-108.179625
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	-1.69 °

Well	PUCKETT 11D-1					
Well Position	+N/-S	0.0 usft	Northing:	609,336.36 usft	Latitude:	39.475811
	+E/-W	0.0 usft	Easting:	1,243,674.67 usft	Longitude:	-108.179650
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	8,477.0 usft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/22/2014	10.01	65.60	51,866

Design	Plan #1				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	48.37	

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
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
682.2	14.47	48.37	677.1	40.2	45.3	3.00	3.00	0.00	48.37	
7,141.8	14.47	48.37	6,931.9	1,112.2	1,251.5	0.00	0.00	0.00	0.00	
7,624.0	0.00	0.00	7,409.0	1,152.5	1,296.8	3.00	-3.00	0.00	180.00	PUCKETT 11D-1 TG1
9,154.0	0.00	0.00	8,939.0	1,152.5	1,296.8	0.00	0.00	0.00	0.00	PUCKETT 11D-1 BHL

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=22' @ 8499.0usft
Project:	Garfield County, CO	MD Reference:	KB=22' @ 8499.0usft
Site:	S2-T7S-R97W (Puckett Pad)	North Reference:	True
Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
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
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	KOP @ 200'
300.0	3.00	48.37	300.0	1.7	2.0	2.6	3.00	3.00	
400.0	6.00	48.37	399.6	7.0	7.8	10.5	3.00	3.00	
500.0	9.00	48.37	498.8	15.6	17.6	23.5	3.00	3.00	
600.0	12.00	48.37	597.1	27.7	31.2	41.7	3.00	3.00	
682.2	14.47	48.37	677.1	40.2	45.3	60.6	3.00	3.00	EOB @ 14.47° INC
700.0	14.47	48.37	694.3	43.2	48.6	65.0	0.00	0.00	
800.0	14.47	48.37	791.2	59.8	67.3	90.0	0.00	0.00	
900.0	14.47	48.37	888.0	76.4	85.9	115.0	0.00	0.00	
1,000.0	14.47	48.37	984.8	93.0	104.6	139.9	0.00	0.00	
1,100.0	14.47	48.37	1,081.6	109.6	123.3	164.9	0.00	0.00	
1,200.0	14.47	48.37	1,178.5	126.2	142.0	189.9	0.00	0.00	
1,300.0	14.47	48.37	1,275.3	142.8	160.6	214.9	0.00	0.00	
1,400.0	14.47	48.37	1,372.1	159.3	179.3	239.9	0.00	0.00	
1,500.0	14.47	48.37	1,469.0	175.9	198.0	264.9	0.00	0.00	
1,600.0	14.47	48.37	1,565.8	192.5	216.6	289.8	0.00	0.00	
1,700.0	14.47	48.37	1,662.6	209.1	235.3	314.8	0.00	0.00	
1,800.0	14.47	48.37	1,759.4	225.7	254.0	339.8	0.00	0.00	
1,900.0	14.47	48.37	1,856.3	242.3	272.7	364.8	0.00	0.00	
2,000.0	14.47	48.37	1,953.1	258.9	291.3	389.8	0.00	0.00	
2,100.0	14.47	48.37	2,049.9	275.5	310.0	414.8	0.00	0.00	
2,200.0	14.47	48.37	2,146.8	292.1	328.7	439.7	0.00	0.00	
2,300.0	14.47	48.37	2,243.6	308.7	347.4	464.7	0.00	0.00	
2,400.0	14.47	48.37	2,340.4	325.3	366.0	489.7	0.00	0.00	
2,500.0	14.47	48.37	2,437.3	341.9	384.7	514.7	0.00	0.00	
2,600.0	14.47	48.37	2,534.1	358.5	403.4	539.7	0.00	0.00	
2,700.0	14.47	48.37	2,630.9	375.1	422.1	564.6	0.00	0.00	
2,800.0	14.47	48.37	2,727.7	391.7	440.7	589.6	0.00	0.00	
2,900.0	14.47	48.37	2,824.6	408.3	459.4	614.6	0.00	0.00	
3,000.0	14.47	48.37	2,921.4	424.9	478.1	639.6	0.00	0.00	
3,100.0	14.47	48.37	3,018.2	441.5	496.8	664.6	0.00	0.00	
3,200.0	14.47	48.37	3,115.1	458.1	515.4	689.6	0.00	0.00	
3,300.0	14.47	48.37	3,211.9	474.7	534.1	714.5	0.00	0.00	
3,400.0	14.47	48.37	3,308.7	491.3	552.8	739.5	0.00	0.00	
3,500.0	14.47	48.37	3,405.5	507.9	571.4	764.5	0.00	0.00	
3,600.0	14.47	48.37	3,502.4	524.5	590.1	789.5	0.00	0.00	
3,700.0	14.47	48.37	3,599.2	541.0	608.8	814.5	0.00	0.00	
3,800.0	14.47	48.37	3,696.0	557.6	627.5	839.5	0.00	0.00	
3,900.0	14.47	48.37	3,792.9	574.2	646.1	864.4	0.00	0.00	
4,000.0	14.47	48.37	3,889.7	590.8	664.8	889.4	0.00	0.00	
4,100.0	14.47	48.37	3,986.5	607.4	683.5	914.4	0.00	0.00	
4,200.0	14.47	48.37	4,083.3	624.0	702.2	939.4	0.00	0.00	
4,300.0	14.47	48.37	4,180.2	640.6	720.8	964.4	0.00	0.00	
4,400.0	14.47	48.37	4,277.0	657.2	739.5	989.3	0.00	0.00	
4,500.0	14.47	48.37	4,373.8	673.8	758.2	1,014.3	0.00	0.00	
4,600.0	14.47	48.37	4,470.7	690.4	776.9	1,039.3	0.00	0.00	
4,700.0	14.47	48.37	4,567.5	707.0	795.5	1,064.3	0.00	0.00	
4,800.0	14.47	48.37	4,664.3	723.6	814.2	1,089.3	0.00	0.00	
4,900.0	14.47	48.37	4,761.2	740.2	832.9	1,114.3	0.00	0.00	
5,000.0	14.47	48.37	4,858.0	756.8	851.6	1,139.2	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=22' @ 8499.0usft
Project:	Garfield County, CO	MD Reference:	KB=22' @ 8499.0usft
Site:	S2-T7S-R97W (Puckett Pad)	North Reference:	True
Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
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
5,100.0	14.47	48.37	4,954.8	773.4	870.2	1,164.2	0.00	0.00	
5,200.0	14.47	48.37	5,051.6	790.0	888.9	1,189.2	0.00	0.00	
5,300.0	14.47	48.37	5,148.5	806.6	907.6	1,214.2	0.00	0.00	
5,400.0	14.47	48.37	5,245.3	823.2	926.2	1,239.2	0.00	0.00	
5,500.0	14.47	48.37	5,342.1	839.8	944.9	1,264.2	0.00	0.00	
5,600.0	14.47	48.37	5,439.0	856.4	963.6	1,289.1	0.00	0.00	
5,700.0	14.47	48.37	5,535.8	873.0	982.3	1,314.1	0.00	0.00	
5,800.0	14.47	48.37	5,632.6	889.6	1,000.9	1,339.1	0.00	0.00	
5,900.0	14.47	48.37	5,729.4	906.2	1,019.6	1,364.1	0.00	0.00	
6,000.0	14.47	48.37	5,826.3	922.7	1,038.3	1,389.1	0.00	0.00	
6,100.0	14.47	48.37	5,923.1	939.3	1,057.0	1,414.1	0.00	0.00	
6,162.9	14.47	48.37	5,984.0	949.8	1,068.7	1,429.8	0.00	0.00	OHIOCREEK
6,200.0	14.47	48.37	6,019.9	955.9	1,075.6	1,439.0	0.00	0.00	
6,300.0	14.47	48.37	6,116.8	972.5	1,094.3	1,464.0	0.00	0.00	
6,400.0	14.47	48.37	6,213.6	989.1	1,113.0	1,489.0	0.00	0.00	
6,500.0	14.47	48.37	6,310.4	1,005.7	1,131.7	1,514.0	0.00	0.00	
6,600.0	14.47	48.37	6,407.2	1,022.3	1,150.3	1,539.0	0.00	0.00	
6,700.0	14.47	48.37	6,504.1	1,038.9	1,169.0	1,563.9	0.00	0.00	
6,705.1	14.47	48.37	6,509.0	1,039.8	1,170.0	1,565.2	0.00	0.00	WILLIAMS FORK
6,800.0	14.47	48.37	6,600.9	1,055.5	1,187.7	1,588.9	0.00	0.00	
6,900.0	14.47	48.37	6,697.7	1,072.1	1,206.4	1,613.9	0.00	0.00	
7,000.0	14.47	48.37	6,794.6	1,088.7	1,225.0	1,638.9	0.00	0.00	
7,100.0	14.47	48.37	6,891.4	1,105.3	1,243.7	1,663.9	0.00	0.00	
7,141.8	14.47	48.37	6,931.9	1,112.2	1,251.5	1,674.3	0.00	0.00	Start 3° Drop
7,200.0	12.72	48.37	6,988.4	1,121.3	1,261.7	1,688.0	3.00	-3.00	
7,300.0	9.72	48.37	7,086.5	1,134.3	1,276.3	1,707.5	3.00	-3.00	
7,400.0	6.72	48.37	7,185.5	1,143.7	1,287.0	1,721.8	3.00	-3.00	
7,500.0	3.72	48.37	7,285.0	1,149.8	1,293.8	1,730.9	3.00	-3.00	
7,600.0	0.72	48.37	7,385.0	1,152.4	1,296.7	1,734.7	3.00	-3.00	
7,624.0	0.00	0.00	7,409.0	1,152.5	1,296.8	1,734.9	3.00	-3.00	EOD @ 0° INC - TOG
7,700.0	0.00	0.00	7,485.0	1,152.5	1,296.8	1,734.9	0.00	0.00	
7,800.0	0.00	0.00	7,585.0	1,152.5	1,296.8	1,734.9	0.00	0.00	
7,900.0	0.00	0.00	7,685.0	1,152.5	1,296.8	1,734.9	0.00	0.00	
8,000.0	0.00	0.00	7,785.0	1,152.5	1,296.8	1,734.9	0.00	0.00	
8,100.0	0.00	0.00	7,885.0	1,152.5	1,296.8	1,734.9	0.00	0.00	
8,200.0	0.00	0.00	7,985.0	1,152.5	1,296.8	1,734.9	0.00	0.00	
8,300.0	0.00	0.00	8,085.0	1,152.5	1,296.8	1,734.9	0.00	0.00	
8,400.0	0.00	0.00	8,185.0	1,152.5	1,296.8	1,734.9	0.00	0.00	
8,500.0	0.00	0.00	8,285.0	1,152.5	1,296.8	1,734.9	0.00	0.00	
8,600.0	0.00	0.00	8,385.0	1,152.5	1,296.8	1,734.9	0.00	0.00	
8,614.0	0.00	0.00	8,399.0	1,152.5	1,296.8	1,734.9	0.00	0.00	CAMEO
8,700.0	0.00	0.00	8,485.0	1,152.5	1,296.8	1,734.9	0.00	0.00	
8,800.0	0.00	0.00	8,585.0	1,152.5	1,296.8	1,734.9	0.00	0.00	
8,900.0	0.00	0.00	8,685.0	1,152.5	1,296.8	1,734.9	0.00	0.00	
9,000.0	0.00	0.00	8,785.0	1,152.5	1,296.8	1,734.9	0.00	0.00	
9,004.0	0.00	0.00	8,789.0	1,152.5	1,296.8	1,734.9	0.00	0.00	ROLLINS
9,100.0	0.00	0.00	8,885.0	1,152.5	1,296.8	1,734.9	0.00	0.00	
9,154.0	0.00	0.00	8,939.0	1,152.5	1,296.8	1,734.9	0.00	0.00	TD @ 9,154' MD

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=22' @ 8499.0usft
Project:	Garfield County, CO	MD Reference:	KB=22' @ 8499.0usft
Site:	S2-T7S-R97W (Puckett Pad)	North Reference:	True
Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
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 11D-1 BHL	0.00	0.00	8,939.0	1,152.5	1,296.8	610,450.08	1,245,004.87	39.478975	-108.175056
- plan hits target center									
- Circle (radius 50.0)									
PUCKETT 11D-1 TGT	0.00	0.00	7,409.0	1,152.5	1,296.8	610,450.08	1,245,004.87	39.478975	-108.175056
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
6,162.9	5,984.0	OHIOCREEK				
6,705.1	6,509.0	WILLIAMS FORK				
7,624.0	7,409.0	TOG				
8,614.0	8,399.0	CAMEO				
9,004.0	8,789.0	ROLLINS				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S	+E/-W	Comment	
(usft)	(usft)	(usft)	(usft)		
200.0	200.0	0.0	0.0	KOP @ 200'	
682.2	677.1	40.2	45.3	EOB @ 14.47° INC	
7,141.8	6,931.9	1,112.2	1,251.5	Start 3° Drop	
7,624.0	7,409.0	1,152.5	1,296.8	EOD @ 0° INC	
9,154.0	8,939.0	1,152.5	1,296.8	TD @ 9,154' MD	

Caerus Oil & Gas (NAD 27)

Garfield County, CO

S2-T7S-R97W (Puckett Pad)

PUCKETT 11D-1

DD

Plan #1

Anticollision Report

22 September, 2014

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference	Plan #1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 200.0usft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	9/22/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	9,154.0	Plan #1 (DD)	ISCWSA MWD	MWD - Standard

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Summary

Site Name	Reference	Offset	Distance		Separation	Warning
	Measured Depth (usft)	Measured Depth (usft)	Between Centres (usft)	Between Ellipses (usft)		
Offset Well - Wellbore - Design						
S2-T7S-R97W (Puckett Pad)						
PUCKETT 12A-1 - DD - Plan #1	200.0	200.0	7.6	7.0	12.139	CC, ES
PUCKETT 12A-1 - DD - Plan #1	4,900.0	4,897.7	198.7	156.0	4.655	SF
PUCKETT 12B-1 - DD - Plan #1	200.0	200.0	15.5	14.9	24.811	CC, ES
PUCKETT 12B-1 - DD - Plan #1	500.0	500.0	27.2	25.0	12.230	SF
PUCKETT 12C-1 - DD - Plan #1	200.0	200.0	23.4	22.8	37.517	CC, ES
PUCKETT 12C-1 - DD - Plan #1	500.0	499.0	36.9	34.7	16.651	SF
PUCKETT 12D-1 - DD - Plan #1	200.0	200.0	31.4	30.7	50.181	CC, ES
PUCKETT 12D-1 - DD - Plan #1	500.0	497.1	47.6	45.4	21.821	SF
PUCKETT 13A-1 - DD - Plan #1	200.0	200.0	39.9	39.3	63.909	CC, ES
PUCKETT 13A-1 - DD - Plan #1	600.0	590.6	79.2	76.3	27.798	SF
PUCKETT 13B-1 - DD - Plan #1	200.0	200.0	47.5	46.9	76.049	CC, ES
PUCKETT 13B-1 - DD - Plan #1	600.0	586.3	94.5	91.7	32.989	SF
PUCKETT 13C-1 - DD - Plan #1	155.6	155.6	48.6	48.2	114.355	CC
PUCKETT 13C-1 - DD - Plan #1	200.0	199.5	48.7	48.1	78.721	ES
PUCKETT 13C-1 - DD - Plan #1	600.0	583.8	104.8	101.9	35.711	SF
PUCKETT 41A-2 - DD - Plan #1	200.0	200.0	8.6	8.0	13.753	CC, ES
PUCKETT 41A-2 - DD - Plan #1	400.0	399.2	13.1	11.6	8.393	SF
PUCKETT 41B-2 - DD - Plan #1	144.5	144.5	16.8	16.5	44.907	CC, ES
PUCKETT 41B-2 - DD - Plan #1	400.0	396.9	29.5	27.9	18.624	SF
PUCKETT 41C-2 - DD - Plan #1	200.0	200.0	13.1	12.4	20.886	CC, ES
PUCKETT 41C-2 - DD - Plan #1	400.0	399.4	20.9	19.2	12.806	SF
PUCKETT 41D-2 - DD - Plan #1	155.6	155.6	19.4	19.0	45.696	CC
PUCKETT 41D-2 - DD - Plan #1	200.0	199.8	19.6	18.9	31.361	ES
PUCKETT 41D-2 - DD - Plan #1	400.0	396.9	33.5	31.9	20.776	SF
PUCKETT 42A-2 - DD - Plan #1	200.0	200.0	10.1	9.5	16.229	CC, ES
PUCKETT 42A-2 - DD - Plan #1	300.0	299.9	12.7	11.5	10.923	SF
PUCKETT 42B-2 - DD - Plan #1	200.0	200.0	12.6	11.9	20.114	CC, ES
PUCKETT 42B-2 - DD - Plan #1	400.0	399.6	22.8	21.1	12.895	SF
PUCKETT 42C-2 - DD - Plan #1	200.0	200.0	18.4	17.7	29.369	CC, ES
PUCKETT 42C-2 - DD - Plan #1	400.0	399.5	27.2	25.4	15.671	SF
PUCKETT 42D-2 - DD - Plan #1	200.0	200.0	25.1	24.5	40.244	CC, ES
PUCKETT 42D-2 - DD - Plan #1	400.0	398.8	33.8	32.1	19.857	SF
PUCKETT 43A-2 - DD - Plan #1	200.0	200.0	32.7	32.0	52.263	CC, ES
PUCKETT 43A-2 - DD - Plan #1	400.0	397.4	42.9	41.2	25.649	SF
PUCKETT 43B-2 - DD - Plan #1	200.0	200.0	41.0	40.4	65.674	CC, ES
PUCKETT 43B-2 - DD - Plan #1	500.0	489.5	75.3	72.9	31.973	SF

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 12A-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	155.83	-6.9	3.1	7.6					
100.0	100.0	100.0	100.0	0.1	0.1	155.83	-6.9	3.1	7.6	7.4	0.18	43.265		
200.0	200.0	200.0	200.0	0.3	0.3	155.83	-6.9	3.1	7.6	7.0	0.62	12.139 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	120.04	-6.6	3.7	8.5	7.4	1.09	7.745		
400.0	399.6	400.2	400.1	0.8	0.8	130.23	-3.8	8.1	10.7	9.1	1.63	6.559		
500.0	498.8	500.5	499.8	1.1	1.0	134.37	1.9	16.9	13.8	11.6	2.23	6.178		
600.0	597.1	600.9	599.0	1.4	1.3	135.08	10.3	30.2	17.5	14.6	2.89	6.058		
700.0	694.3	701.4	697.2	1.9	1.7	133.90	21.6	47.9	21.8	18.2	3.62	6.016		
800.0	791.2	801.3	794.4	2.3	2.2	131.43	34.1	67.6	25.9	21.5	4.38	5.916		
900.0	888.0	901.3	891.6	2.8	2.6	129.64	46.6	87.2	30.0	24.8	5.20	5.776		
1,000.0	984.8	1,001.2	988.7	3.3	3.1	128.28	59.1	106.8	34.2	28.1	6.06	5.642		
1,100.0	1,081.6	1,101.1	1,085.9	3.8	3.6	127.22	71.5	126.5	38.4	31.4	6.95	5.524		
1,200.0	1,178.5	1,201.0	1,183.0	4.3	4.0	126.37	84.0	146.1	42.6	34.7	7.85	5.423		
1,300.0	1,275.3	1,300.9	1,280.2	4.8	4.5	125.67	96.5	165.8	46.8	38.0	8.76	5.337		
1,400.0	1,372.1	1,400.8	1,377.4	5.4	5.0	125.08	109.0	185.4	51.0	41.3	9.68	5.264		
1,500.0	1,469.0	1,500.7	1,474.5	5.9	5.5	124.59	121.5	205.0	55.2	44.6	10.61	5.201		
1,600.0	1,565.8	1,600.6	1,571.7	6.4	6.0	124.16	134.0	224.7	59.4	47.8	11.53	5.147		
1,700.0	1,662.6	1,700.5	1,668.9	6.9	6.5	123.79	146.5	244.3	63.6	51.1	12.47	5.100		
1,800.0	1,759.4	1,800.4	1,766.0	7.4	7.0	123.47	159.0	264.0	67.8	54.4	13.40	5.058		
1,900.0	1,856.3	1,900.4	1,863.2	7.9	7.4	123.18	171.5	283.6	72.0	57.7	14.34	5.022		
2,000.0	1,953.1	2,000.3	1,960.3	8.4	7.9	122.93	184.0	303.2	76.2	60.9	15.28	4.989		
2,100.0	2,049.9	2,100.2	2,057.5	9.0	8.4	122.70	196.5	322.9	80.4	64.2	16.22	4.960		
2,200.0	2,146.8	2,200.1	2,154.7	9.5	8.9	122.50	209.0	342.5	84.7	67.5	17.16	4.934		
2,300.0	2,243.6	2,300.0	2,251.8	10.0	9.4	122.31	221.5	362.2	88.9	70.8	18.10	4.910		
2,400.0	2,340.4	2,399.9	2,349.0	10.5	9.9	122.14	234.0	381.8	93.1	74.1	19.04	4.889		
2,500.0	2,437.3	2,499.8	2,446.1	11.0	10.4	121.99	246.4	401.4	97.3	77.3	19.99	4.869		
2,600.0	2,534.1	2,599.7	2,543.3	11.5	10.9	121.85	258.9	421.1	101.5	80.6	20.93	4.851		
2,700.0	2,630.9	2,699.6	2,640.5	12.1	11.3	121.72	271.4	440.7	105.8	83.9	21.87	4.835		
2,800.0	2,727.7	2,799.6	2,737.6	12.6	11.8	121.60	283.9	460.4	110.0	87.2	22.82	4.820		
2,900.0	2,824.6	2,899.5	2,834.8	13.1	12.3	121.49	296.4	480.0	114.2	90.4	23.76	4.806		
3,000.0	2,921.4	2,999.4	2,931.9	13.6	12.8	121.39	308.9	499.6	118.4	93.7	24.71	4.793		
3,100.0	3,018.2	3,099.3	3,029.1	14.1	13.3	121.29	321.4	519.3	122.7	97.0	25.65	4.781		
3,200.0	3,115.1	3,199.2	3,126.3	14.6	13.8	121.20	333.9	538.9	126.9	100.3	26.60	4.770		
3,300.0	3,211.9	3,299.1	3,223.4	15.2	14.3	121.12	346.4	558.6	131.1	103.6	27.54	4.760		
3,400.0	3,308.7	3,399.0	3,320.6	15.7	14.8	121.04	358.9	578.2	135.3	106.8	28.49	4.750		
3,500.0	3,405.5	3,498.9	3,417.8	16.2	15.3	120.96	371.4	597.8	139.6	110.1	29.44	4.741		
3,600.0	3,502.4	3,598.8	3,514.9	16.7	15.8	120.89	383.9	617.5	143.8	113.4	30.38	4.732		
3,700.0	3,599.2	3,698.7	3,612.1	17.2	16.2	120.83	396.4	637.1	148.0	116.7	31.33	4.724		
3,800.0	3,696.0	3,798.7	3,709.2	17.7	16.7	120.77	408.8	656.8	152.2	120.0	32.27	4.717		
3,900.0	3,792.9	3,898.6	3,806.4	18.3	17.2	120.71	421.3	676.4	156.5	123.2	33.22	4.710		
4,000.0	3,889.7	3,998.5	3,903.6	18.8	17.7	120.65	433.8	696.1	160.7	126.5	34.17	4.703		
4,100.0	3,986.5	4,098.4	4,000.7	19.3	18.2	120.60	446.3	715.7	164.9	129.8	35.11	4.697		
4,200.0	4,083.3	4,198.3	4,097.9	19.8	18.7	120.55	458.8	735.3	169.1	133.1	36.06	4.691		
4,300.0	4,180.2	4,298.2	4,195.0	20.3	19.2	120.50	471.3	755.0	173.4	136.4	37.00	4.685		
4,400.0	4,277.0	4,398.1	4,292.2	20.8	19.7	120.46	483.8	774.6	177.6	139.6	37.95	4.680		
4,500.0	4,373.8	4,498.0	4,389.4	21.4	20.2	120.41	496.3	794.3	181.8	142.9	38.89	4.674		
4,600.0	4,470.7	4,597.9	4,486.5	21.9	20.7	120.37	508.8	813.9	186.0	146.2	39.84	4.670		
4,700.0	4,567.5	4,697.9	4,583.7	22.4	21.1	120.33	521.3	833.5	190.3	149.5	40.79	4.665		
4,800.0	4,664.3	4,797.8	4,680.9	22.9	21.6	120.30	533.8	853.2	194.5	152.8	41.74	4.660		
4,900.0	4,761.2	4,897.7	4,778.0	23.4	22.1	120.26	546.3	872.8	198.7	156.0	42.69	4.655 SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 12B-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	156.39	-14.2	6.2	15.5					
100.0	100.0	100.0	100.0	0.1	0.1	156.39	-14.2	6.2	15.5	15.3	0.18	88.429		
200.0	200.0	200.0	200.0	0.3	0.3	156.39	-14.2	6.2	15.5	14.9	0.62	24.811	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	116.66	-14.2	6.2	16.5	15.4	1.09	15.087		
400.0	399.6	399.9	399.9	0.8	0.8	128.96	-13.5	8.7	20.5	18.9	1.63	12.560		
500.0	498.8	500.0	499.6	1.1	1.0	134.11	-11.5	16.3	27.2	25.0	2.22	12.230	SF	
600.0	597.1	600.1	598.9	1.4	1.3	134.97	-8.2	29.0	36.1	33.2	2.87	12.545		
700.0	694.3	700.1	697.2	1.9	1.6	133.84	-3.6	46.5	46.9	43.3	3.59	13.061		
800.0	791.2	799.4	794.5	2.3	2.0	132.68	1.5	65.9	58.4	54.1	4.32	13.524		
900.0	888.0	898.7	891.8	2.8	2.4	131.91	6.6	85.2	69.9	64.8	5.10	13.716		
1,000.0	984.8	998.1	989.1	3.3	2.8	131.35	11.6	104.5	81.4	75.5	5.91	13.787		
1,100.0	1,081.6	1,097.4	1,086.4	3.8	3.2	130.93	16.7	123.8	93.0	86.2	6.74	13.803		
1,200.0	1,178.5	1,196.7	1,183.7	4.3	3.7	130.61	21.8	143.1	104.5	96.9	7.58	13.793		
1,300.0	1,275.3	1,296.1	1,281.0	4.8	4.1	130.35	26.9	162.5	116.0	107.6	8.43	13.771		
1,400.0	1,372.1	1,395.4	1,378.3	5.4	4.5	130.13	32.0	181.8	127.6	118.3	9.28	13.744		
1,500.0	1,469.0	1,494.7	1,475.6	5.9	4.9	129.96	37.0	201.1	139.1	129.0	10.14	13.716		
1,600.0	1,565.8	1,594.1	1,572.9	6.4	5.4	129.81	42.1	220.4	150.6	139.6	11.00	13.689		
1,700.0	1,662.6	1,693.4	1,670.2	6.9	5.8	129.68	47.2	239.8	162.2	150.3	11.87	13.662		
1,800.0	1,759.4	1,792.7	1,767.5	7.4	6.2	129.56	52.3	259.1	173.7	161.0	12.74	13.637		
1,900.0	1,856.3	1,892.1	1,864.8	7.9	6.7	129.47	57.4	278.4	185.3	171.6	13.61	13.614		
2,000.0	1,953.1	1,991.4	1,962.1	8.4	7.1	129.38	62.4	297.7	196.8	182.3	14.48	13.592		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 12C-1 - DD - Plan #1												Offset Site Error: 0.0 usft	
Survey Program: 0-ISWWSA MWD												Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis				Distance				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis		Separation Factor
0.0	0.0	0.0	0.0	0.0	0.0	154.31	-21.1	10.2	23.4				
100.0	100.0	100.0	100.0	0.1	0.1	154.31	-21.1	10.2	23.4	23.3	0.18	133.715	
200.0	200.0	200.0	200.0	0.3	0.3	154.31	-21.1	10.2	23.4	22.8	0.62	37.517 CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	111.86	-21.1	10.2	24.3	23.2	1.09	22.337	
400.0	399.6	399.5	399.5	0.8	0.8	125.40	-21.1	10.8	28.3	26.6	1.62	17.416	
500.0	498.8	499.0	498.8	1.1	1.0	133.78	-21.3	16.0	36.9	34.7	2.22	16.651 SF	
600.0	597.1	598.2	597.5	1.4	1.2	136.78	-21.6	26.3	49.5	46.7	2.86	17.292	
700.0	694.3	697.2	695.3	1.9	1.5	136.95	-22.0	41.6	65.5	62.0	3.56	18.422	
800.0	791.2	795.8	792.0	2.3	1.9	135.37	-22.5	60.7	82.5	78.3	4.24	19.465	
900.0	888.0	894.3	888.6	2.8	2.2	134.20	-23.0	80.0	99.6	94.6	4.99	19.958	
1,000.0	984.8	992.8	985.2	3.3	2.6	133.38	-23.6	99.2	116.7	110.9	5.78	20.196	
1,100.0	1,081.6	1,091.4	1,081.9	3.8	3.0	132.76	-24.1	118.5	133.7	127.2	6.59	20.307	
1,200.0	1,178.5	1,189.9	1,178.5	4.3	3.5	132.29	-24.6	137.8	150.8	143.4	7.41	20.353	
1,300.0	1,275.3	1,288.4	1,275.1	4.8	3.9	131.91	-25.1	157.1	167.9	159.7	8.25	20.366	
1,400.0	1,372.1	1,386.9	1,371.7	5.4	4.3	131.60	-25.7	176.3	185.0	176.0	9.09	20.361	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 12D-1 - DD - Plan #1													Offset Site Error: 0.0 usft	
Survey Program: 0-ISCWSA MWD													Offset Well Error: 0.0 usft	
Reference				Offset			Semi Major Axis		Distance				Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	154.97	-28.4	13.3	31.4					
100.0	100.0	100.0	100.0	0.1	0.1	154.97	-28.4	13.3	31.4	31.2	0.18	178.849		
200.0	200.0	200.0	200.0	0.3	0.3	154.97	-28.4	13.3	31.4	30.7	0.62	50.181	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	111.04	-28.4	13.3	32.2	31.1	1.09	29.637		
400.0	399.6	398.7	398.7	0.8	0.7	119.08	-29.2	15.7	37.0	35.4	1.59	23.224		
500.0	498.8	497.1	496.7	1.1	1.0	124.52	-31.6	22.9	47.6	45.4	2.18	21.821	SF	
600.0	597.1	594.6	593.5	1.4	1.2	127.20	-35.5	34.8	63.4	60.6	2.85	22.299		
700.0	694.3	691.3	688.6	1.9	1.6	128.20	-40.9	51.2	84.3	80.7	3.59	23.517		
800.0	791.2	788.7	784.1	2.3	1.9	128.90	-46.9	69.3	106.9	102.6	4.31	24.793		
900.0	888.0	886.1	879.6	2.8	2.3	129.36	-52.8	87.4	129.5	124.4	5.07	25.527		
1,000.0	984.8	983.5	975.2	3.3	2.7	129.68	-58.8	105.5	152.1	146.2	5.86	25.965		
1,100.0	1,081.6	1,080.9	1,070.7	3.8	3.1	129.91	-64.8	123.6	174.7	168.0	6.66	26.239		
1,200.0	1,178.5	1,178.4	1,166.2	4.3	3.5	130.10	-70.8	141.7	197.3	189.8	7.47	26.418		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 13A-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISWWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	155.80	-36.4	16.4	39.9					
100.0	100.0	100.0	100.0	0.1	0.1	155.80	-36.4	16.4	39.9	39.8	0.18	227.780		
200.0	200.0	200.0	200.0	0.3	0.3	155.80	-36.4	16.4	39.9	39.3	0.62	63.909	CC, ES	
300.0	300.0	299.2	299.2	0.5	0.5	110.26	-36.7	16.9	41.3	40.2	1.08	38.294		
400.0	399.6	397.2	397.1	0.8	0.7	114.70	-39.0	21.4	48.0	46.4	1.58	30.453		
500.0	498.8	494.5	493.9	1.1	1.0	118.50	-43.5	30.3	60.6	58.5	2.17	27.992		
600.0	597.1	590.6	588.8	1.4	1.3	121.04	-50.1	43.4	79.2	76.3	2.85	27.798	SF	
700.0	694.3	685.6	681.9	1.9	1.6	122.64	-58.6	60.4	103.3	99.6	3.62	28.559		
800.0	791.2	782.1	776.1	2.3	2.1	124.07	-68.0	79.1	129.2	124.8	4.37	29.536		
900.0	888.0	878.7	870.4	2.8	2.5	125.02	-77.4	97.7	155.2	150.1	5.16	30.079		
1,000.0	984.8	975.2	964.6	3.3	2.9	125.70	-86.8	116.3	181.3	175.3	5.97	30.381		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 13B-1 - DD - Plan #1													Offset Site Error: 0.0 usft	
Survey Program: 0-ISCSWA MWD													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	155.80	-43.3	19.5	47.5					
100.0	100.0	100.0	100.0	0.1	0.1	155.80	-43.3	19.5	47.5	47.3	0.18	271.044		
200.0	200.0	200.0	200.0	0.3	0.3	155.80	-43.3	19.5	47.5	46.9	0.62	76.049	CC, ES	
300.0	300.0	297.9	297.9	0.5	0.5	108.49	-44.6	21.6	50.4	49.3	1.07	47.007		
400.0	399.6	395.3	394.9	0.8	0.7	111.02	-48.5	28.0	59.2	57.6	1.58	37.421		
500.0	498.8	491.6	490.5	1.1	1.0	113.81	-54.7	38.6	73.9	71.7	2.18	33.951		
600.0	597.1	586.3	583.7	1.4	1.4	116.14	-63.3	52.9	94.5	91.7	2.87	32.989	SF	
700.0	694.3	679.1	674.1	1.9	1.8	117.90	-73.9	70.8	120.9	117.3	3.65	33.169		
800.0	791.2	774.0	765.9	2.3	2.2	119.19	-86.3	91.6	150.3	145.8	4.45	33.780		
900.0	888.0	869.5	858.2	2.8	2.7	120.04	-98.8	112.6	179.7	174.4	5.27	34.107		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 13C-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	166.91	-47.3	11.0	48.6					
100.0	100.0	100.0	100.0	0.1	0.1	166.91	-47.3	11.0	48.6	48.4	0.18	277.285		
155.6	155.6	155.6	155.6	0.2	0.2	166.91	-47.3	11.0	48.6	48.2	0.43	114.355 CC		
200.0	200.0	199.5	199.5	0.3	0.3	166.80	-47.4	11.1	48.7	48.1	0.62	78.721 ES		
300.0	300.0	297.3	297.3	0.5	0.5	118.27	-49.8	14.0	53.0	51.9	1.08	48.985		
400.0	399.6	394.4	393.9	0.8	0.8	119.28	-55.3	20.8	63.8	62.2	1.63	39.282		
500.0	498.8	490.1	488.7	1.1	1.0	120.67	-63.8	31.1	81.1	78.9	2.24	36.217		
600.0	597.1	583.8	580.7	1.4	1.4	121.90	-74.9	44.8	104.8	101.9	2.94	35.711 SF		
700.0	694.3	675.1	669.4	1.9	1.8	122.89	-88.5	61.4	134.7	130.9	3.71	36.331		
800.0	791.2	769.7	760.8	2.3	2.3	123.96	-104.0	80.3	167.0	162.6	4.48	37.325		
900.0	888.0	864.3	852.2	2.8	2.8	124.68	-119.4	99.2	199.4	194.2	5.26	37.894		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 41A-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance					Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-21.18	8.0	-3.1	8.6					
100.0	100.0	100.0	100.0	0.1	0.1	-21.18	8.0	-3.1	8.6	8.4	0.18	49.018		
200.0	200.0	200.0	200.0	0.3	0.3	-21.18	8.0	-3.1	8.6	8.0	0.62	13.753 CC, ES		
300.0	300.0	299.6	299.6	0.5	0.5	-73.87	10.5	-2.2	9.7	8.6	1.08	8.946		
400.0	399.6	399.2	398.8	0.8	0.8	-82.34	17.8	0.4	13.1	11.6	1.56	8.393 SF		
500.0	498.8	498.0	496.9	1.1	1.1	-94.20	29.6	2.7	20.5	18.4	2.12	9.671		
600.0	597.1	595.7	593.2	1.4	1.4	-104.83	45.6	2.4	34.1	31.3	2.81	12.135		
700.0	694.3	691.6	687.0	1.9	1.7	-111.37	65.5	-0.4	54.3	50.7	3.61	15.039		
800.0	791.2	785.7	778.0	2.3	2.2	-113.62	88.9	-5.4	79.4	75.0	4.44	17.891		
900.0	888.0	880.1	868.2	2.8	2.7	-113.48	115.5	-12.5	107.8	102.5	5.31	20.311		
1,000.0	984.8	975.8	959.7	3.3	3.2	-113.27	143.0	-19.9	136.5	130.4	6.19	22.067		
1,100.0	1,081.6	1,071.6	1,051.2	3.8	3.7	-113.14	170.5	-27.3	165.3	158.2	7.08	23.333		
1,200.0	1,178.5	1,167.4	1,142.6	4.3	4.3	-113.04	197.9	-34.7	194.1	186.1	7.99	24.275		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 41B-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-24.77	15.3	-7.1	16.8					
100.0	100.0	100.0	100.0	0.1	0.1	-24.77	15.3	-7.1	16.8	16.7	0.18	96.094		
144.5	144.5	144.5	144.5	0.2	0.2	-24.77	15.3	-7.1	16.8	16.5	0.38	44.907 CC, ES		
200.0	200.0	199.6	199.6	0.3	0.3	-24.55	15.7	-7.2	17.3	16.6	0.62	27.635		
300.0	300.0	298.6	298.5	0.5	0.6	-77.61	20.1	-8.4	21.2	20.1	1.09	19.431		
400.0	399.6	396.9	396.3	0.8	0.8	-87.70	29.4	-11.0	29.5	27.9	1.59	18.624 SF		
500.0	498.8	494.2	492.5	1.1	1.1	-96.51	43.4	-15.0	43.2	41.1	2.16	20.016		
600.0	597.1	590.0	586.4	1.4	1.5	-102.54	61.7	-20.1	62.5	59.6	2.84	22.000		
700.0	694.3	684.7	678.2	1.9	1.9	-106.56	84.1	-26.5	87.0	83.4	3.63	23.966		
800.0	791.2	781.1	771.2	2.3	2.4	-109.52	108.3	-33.3	113.4	109.0	4.45	25.489		
900.0	888.0	877.4	864.2	2.8	2.9	-111.36	132.5	-40.1	140.0	134.7	5.30	26.436		
1,000.0	984.8	973.7	957.2	3.3	3.4	-112.61	156.7	-46.9	166.6	160.5	6.16	27.068		
1,100.0	1,081.6	1,070.0	1,050.2	3.8	3.9	-113.52	180.8	-53.7	193.4	186.3	7.03	27.502		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
S2-T7S-R97W (Puckett Pad) - PUCKETT 41C-2 - DD - Plan #1												Offset Well Error:	0.0 usft
Survey Program: 0-ISCWSA MWD													
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-72.12	4.0	-12.4	13.1				
100.0	100.0	100.0	100.0	0.1	0.1	-72.12	4.0	-12.4	13.1	12.9	0.18	74.441	
200.0	200.0	200.0	200.0	0.3	0.3	-72.12	4.0	-12.4	13.1	12.4	0.62	20.886 CC, ES	
300.0	300.0	299.8	299.8	0.5	0.5	-123.75	5.5	-12.4	14.9	13.8	1.10	13.463	
400.0	399.6	399.4	399.2	0.8	0.8	-124.20	12.0	-12.4	20.9	19.2	1.63	12.806 SF	
500.0	498.8	497.9	497.0	1.1	1.0	-123.92	23.1	-13.3	31.8	29.6	2.22	14.365	
600.0	597.1	594.6	592.5	1.4	1.3	-124.95	37.9	-17.2	49.7	46.8	2.89	17.203	
700.0	694.3	690.4	686.4	1.9	1.7	-126.30	55.8	-23.9	74.0	70.3	3.63	20.369	
800.0	791.2	787.0	780.9	2.3	2.1	-127.81	74.4	-31.0	99.9	95.5	4.33	23.042	
900.0	888.0	883.5	875.3	2.8	2.5	-128.69	93.0	-38.1	125.8	120.8	5.06	24.847	
1,000.0	984.8	980.1	969.8	3.3	2.9	-129.27	111.6	-45.3	151.8	146.0	5.82	26.099	
1,100.0	1,081.6	1,076.7	1,064.3	3.8	3.3	-129.68	130.1	-52.4	177.8	171.2	6.58	27.010	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 41D-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-54.46	11.3	-15.8	19.4					
100.0	100.0	100.0	100.0	0.1	0.1	-54.46	11.3	-15.8	19.4	19.3	0.18	110.807		
155.6	155.6	155.6	155.6	0.2	0.2	-54.46	11.3	-15.8	19.4	19.0	0.43	45.696 CC		
200.0	200.0	199.8	199.8	0.3	0.3	-54.24	11.4	-15.9	19.6	18.9	0.62	31.361 ES		
300.0	300.0	298.7	298.6	0.5	0.5	-104.30	14.9	-17.6	23.6	22.5	1.09	21.637		
400.0	399.6	396.9	396.4	0.8	0.8	-109.37	22.8	-21.6	33.5	31.9	1.61	20.776 SF		
500.0	498.8	494.2	492.7	1.1	1.1	-113.86	35.0	-27.7	49.6	47.4	2.22	22.348		
600.0	597.1	592.0	589.3	1.4	1.4	-118.74	49.0	-34.7	69.6	66.8	2.88	24.196		
700.0	694.3	689.0	685.0	1.9	1.8	-124.00	62.8	-41.6	92.7	89.1	3.60	25.786		
800.0	791.2	785.6	780.4	2.3	2.1	-128.16	76.6	-48.4	117.4	113.1	4.28	27.444		
900.0	888.0	882.2	875.8	2.8	2.4	-130.86	90.3	-55.3	142.5	137.5	4.96	28.722		
1,000.0	984.8	978.8	971.2	3.3	2.8	-132.76	104.1	-62.2	167.7	162.1	5.65	29.714		
1,100.0	1,081.6	1,075.5	1,066.6	3.8	3.1	-134.16	117.9	-69.1	193.1	186.8	6.33	30.490		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 42A-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISWWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-113.27	-4.0	-9.3	10.1					
100.0	100.0	100.0	100.0	0.1	0.1	-113.27	-4.0	-9.3	10.1	10.0	0.18	57.841		
200.0	200.0	200.0	200.0	0.3	0.3	-113.27	-4.0	-9.3	10.1	9.5	0.62	16.229 CC, ES		
300.0	300.0	299.9	299.9	0.5	0.5	-164.63	-3.9	-9.4	12.7	11.5	1.16	10.923 SF		
400.0	399.6	399.4	399.3	0.8	0.8	-159.74	-0.7	-11.7	21.0	19.3	1.75	12.005		
500.0	498.8	497.7	497.2	1.1	1.0	-152.77	6.4	-17.0	35.8	33.5	2.35	15.224		
600.0	597.1	595.4	594.2	1.4	1.3	-149.43	16.1	-24.1	56.6	53.6	2.98	18.967		
700.0	694.3	692.2	690.2	1.9	1.6	-149.64	25.6	-31.1	81.7	78.1	3.61	22.618		
800.0	791.2	788.6	785.9	2.3	1.8	-150.40	35.1	-38.1	108.3	104.2	4.14	26.191		
900.0	888.0	885.0	881.5	2.8	2.1	-150.87	44.6	-45.1	135.0	130.3	4.69	28.803		
1,000.0	984.8	981.3	977.2	3.3	2.4	-151.18	54.2	-52.1	161.6	156.4	5.25	30.759		
1,100.0	1,081.6	1,077.7	1,072.9	3.8	2.7	-151.40	63.7	-59.1	188.3	182.5	5.84	32.263		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 42B-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-150.39	-10.9	-6.2	12.6					
100.0	100.0	100.0	100.0	0.1	0.1	-150.39	-10.9	-6.2	12.6	12.4	0.18	71.690		
200.0	200.0	200.0	200.0	0.3	0.3	-150.39	-10.9	-6.2	12.6	11.9	0.62	20.114	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	164.42	-10.9	-6.2	15.1	13.9	1.16	12.972		
400.0	399.6	399.6	399.5	0.8	0.8	173.37	-10.1	-7.4	22.8	21.1	1.77	12.895	SF	
500.0	498.8	498.0	497.7	1.1	1.0	-174.38	-6.4	-12.6	37.3	34.9	2.40	15.544		
600.0	597.1	595.5	594.9	1.4	1.2	-167.64	-1.2	-19.7	58.6	55.6	3.03	19.354		
700.0	694.3	691.9	690.9	1.9	1.5	-165.34	3.8	-26.8	85.1	81.4	3.62	23.510		
800.0	791.2	787.8	786.4	2.3	1.7	-164.47	8.9	-33.8	113.2	109.2	4.06	27.877		
900.0	888.0	883.8	882.0	2.8	2.0	-163.94	13.9	-40.8	141.4	136.9	4.53	31.183		
1,000.0	984.8	979.7	977.5	3.3	2.2	-163.59	19.0	-47.8	169.6	164.6	5.03	33.728		
1,100.0	1,081.6	1,075.7	1,073.1	3.8	2.5	-163.34	24.0	-54.9	197.8	192.2	5.54	35.723		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 42C-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-172.93	-18.2	-2.3	18.4					
100.0	100.0	100.0	100.0	0.1	0.1	-172.93	-18.2	-2.3	18.4	18.2	0.18	104.673		
200.0	200.0	200.0	200.0	0.3	0.3	-172.93	-18.2	-2.3	18.4	17.7	0.62	29.369 CC, ES		
300.0	300.0	300.0	300.0	0.5	0.5	143.52	-18.2	-2.3	20.4	19.3	1.14	17.944		
400.0	399.6	399.5	399.5	0.8	0.8	153.64	-18.2	-2.4	27.2	25.4	1.73	15.671 SF		
500.0	498.8	497.5	497.4	1.1	1.0	166.73	-17.9	-6.2	41.1	38.7	2.38	17.276		
600.0	597.1	594.4	594.1	1.4	1.2	176.12	-17.3	-13.2	63.3	60.3	3.03	20.869		
700.0	694.3	690.2	689.6	1.9	1.4	-179.35	-16.7	-20.3	91.4	87.8	3.62	25.259		
800.0	791.2	785.5	784.6	2.3	1.7	-176.98	-16.2	-27.4	121.5	117.5	4.03	30.159		
900.0	888.0	880.8	879.6	2.8	1.9	-175.55	-15.6	-34.4	151.7	147.2	4.46	33.995		
1,000.0	984.8	976.0	974.7	3.3	2.1	-174.60	-15.0	-41.4	181.9	177.0	4.91	37.023		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 42D-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISWWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	178.07	-25.1	0.8	25.1					
100.0	100.0	100.0	100.0	0.1	0.1	178.07	-25.1	0.8	25.1	25.0	0.18	143.432		
200.0	200.0	200.0	200.0	0.3	0.3	178.07	-25.1	0.8	25.1	24.5	0.62	40.244	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	133.95	-25.1	0.8	26.9	25.8	1.12	23.993		
400.0	399.6	398.8	398.7	0.8	0.7	145.48	-25.8	-0.4	33.8	32.1	1.70	19.857	SF	
500.0	498.8	495.5	495.2	1.1	1.0	158.94	-28.8	-5.8	50.3	47.9	2.38	21.121		
600.0	597.1	591.9	591.4	1.4	1.2	167.31	-32.7	-12.9	75.0	72.0	3.03	24.710		
700.0	694.3	686.9	686.0	1.9	1.4	171.91	-36.5	-19.9	105.4	101.8	3.62	29.074		
800.0	791.2	781.4	780.1	2.3	1.7	174.61	-40.3	-26.9	137.8	133.8	4.03	34.177		
900.0	888.0	875.8	874.2	2.8	1.9	176.27	-44.1	-33.9	170.4	166.0	4.46	38.229		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design													S2-T7S-R97W (Puckett Pad) - PUCKETT 43A-2 - DD - Plan #1		Offset Site Error:		0.0 usft
Survey Program:													0-ISWWSA MWD		Offset Well Error:		0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor					
0.0	0.0	0.0	0.0	0.0	0.0	173.05	-32.4	4.0	32.7								
100.0	100.0	100.0	100.0	0.1	0.1	173.05	-32.4	4.0	32.7	32.5	0.18	186.271					
200.0	200.0	200.0	200.0	0.3	0.3	173.05	-32.4	4.0	32.7	32.0	0.62	52.263	CC, ES				
300.0	300.0	299.6	299.6	0.5	0.5	128.41	-32.5	3.8	34.3	33.2	1.11	31.013					
400.0	399.6	397.4	397.3	0.8	0.7	139.88	-35.4	1.4	42.9	41.2	1.67	25.649	SF				
500.0	498.8	492.8	492.4	1.1	0.9	151.56	-41.9	-4.1	61.8	59.4	2.36	26.189					
600.0	597.1	588.2	587.2	1.4	1.2	159.29	-50.1	-11.2	89.2	86.1	3.04	29.323					
700.0	694.3	682.2	680.5	1.9	1.5	164.03	-58.2	-18.1	122.2	118.5	3.65	33.509					
800.0	791.2	775.6	773.3	2.3	1.7	167.06	-66.3	-25.0	157.3	153.2	4.07	38.610					
900.0	888.0	869.0	866.1	2.8	2.0	168.98	-74.4	-31.9	192.6	188.1	4.51	42.686					

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 43B-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	170.10	-40.4	7.1	41.0					
100.0	100.0	100.0	100.0	0.1	0.1	170.10	-40.4	7.1	41.0	40.9	0.18	234.069		
200.0	200.0	200.0	200.0	0.3	0.3	170.10	-40.4	7.1	41.0	40.4	0.62	65.674 CC, ES		
300.0	300.0	298.6	298.6	0.5	0.5	125.71	-41.7	6.4	43.6	42.6	1.10	39.824		
400.0	399.6	395.4	395.2	0.8	0.7	135.87	-47.1	3.3	54.4	52.7	1.67	32.490		
500.0	498.8	489.5	488.7	1.1	1.0	145.73	-56.4	-1.9	75.3	72.9	2.35	31.973 SF		
600.0	597.1	583.1	581.2	1.4	1.3	152.79	-68.6	-8.7	105.5	102.4	3.06	34.529		
700.0	694.3	675.9	672.9	1.9	1.6	157.49	-80.9	-15.6	141.4	137.7	3.68	38.452		
800.0	791.2	768.0	763.9	2.3	1.9	160.73	-93.1	-22.4	179.3	175.2	4.13	43.436		

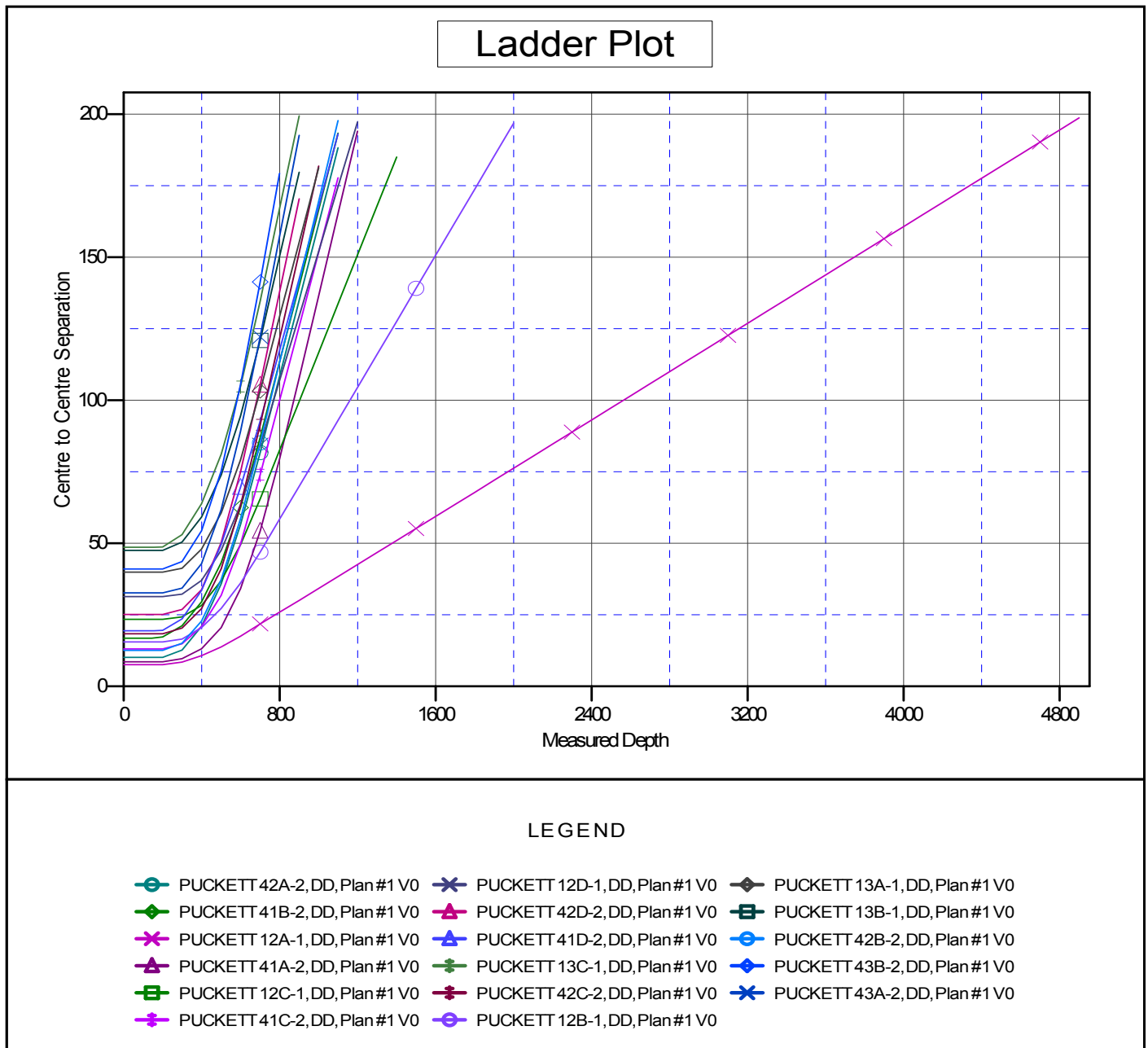
Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 11D-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 11D-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Reference Depths are relative to KB=22' @ 8499.0usft
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: PUCKETT 11D-1
Coordinate System is US State Plane 1927 (Exact solution), Colorado Central 502
Grid Convergence at Surface is: -1.69°



CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation