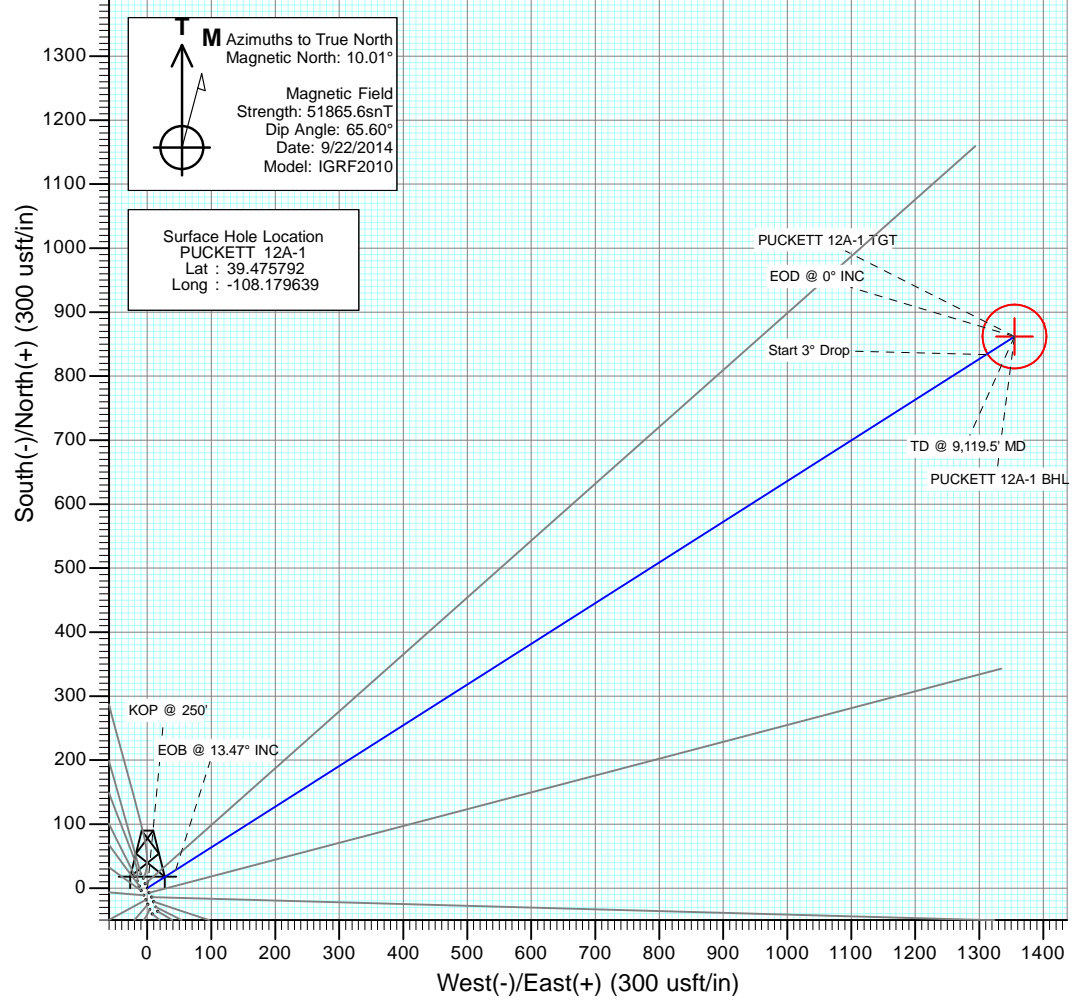


Plan #1
 PUCKETT 12A-1
 145XXX; SC
 KB=22' @ 8499.0usft
 Ground Elevation @ 8477.0
 NAD 1927 (NADCON CONUS)
 Well PUCKETT 12A-1, True North

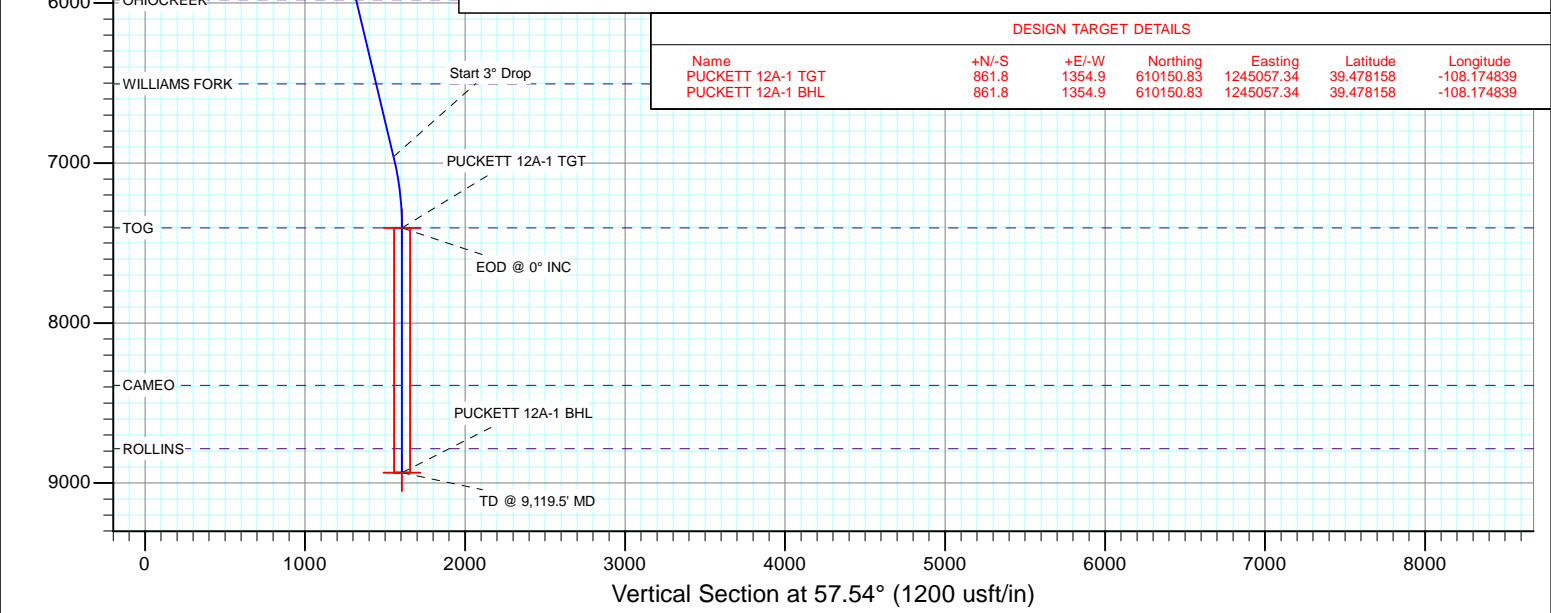
SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.0	
3	699.1	13.47	57.54	695.0	28.2	44.3	3.00	57.54	52.6	
4	7140.4	13.47	57.54	6959.0	833.6	1310.6	0.00	0.00	1553.2	
5	7589.5	0.00	0.00	7404.0	861.8	1354.9	3.00	180.00	1605.8	PUCKETT 12A-1 TGT
6	9119.5	0.00	0.00	8934.0	861.8	1354.9	0.00	0.00	1605.8	PUCKETT 12A-1 BHL



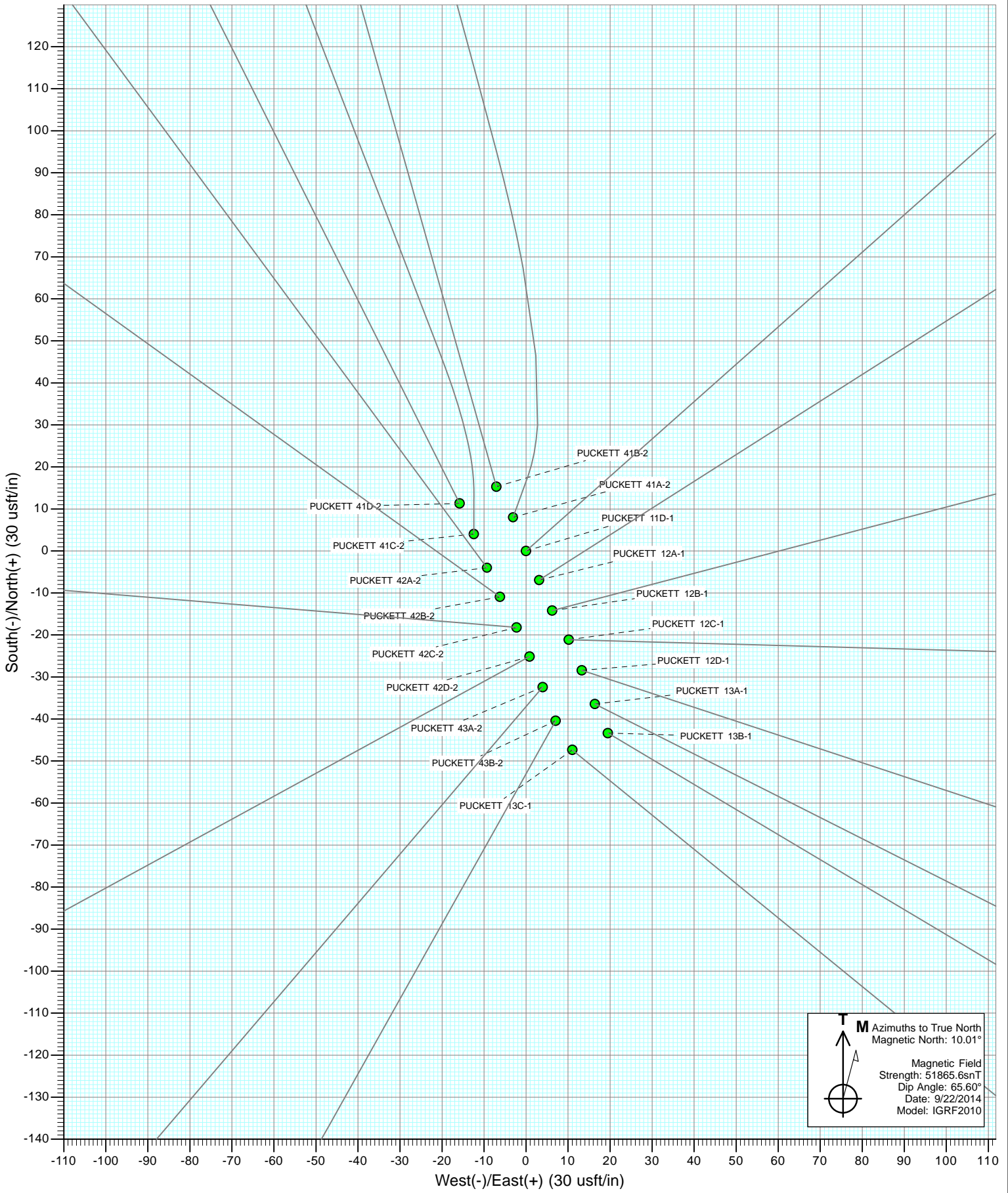
M Azimuths to True North
 Magnetic North: 10.01°
 Magnetic Field
 Strength: 51865.6snT
 Dip Angle: 65.60°
 Date: 9/22/2014
 Model: IGRF2010

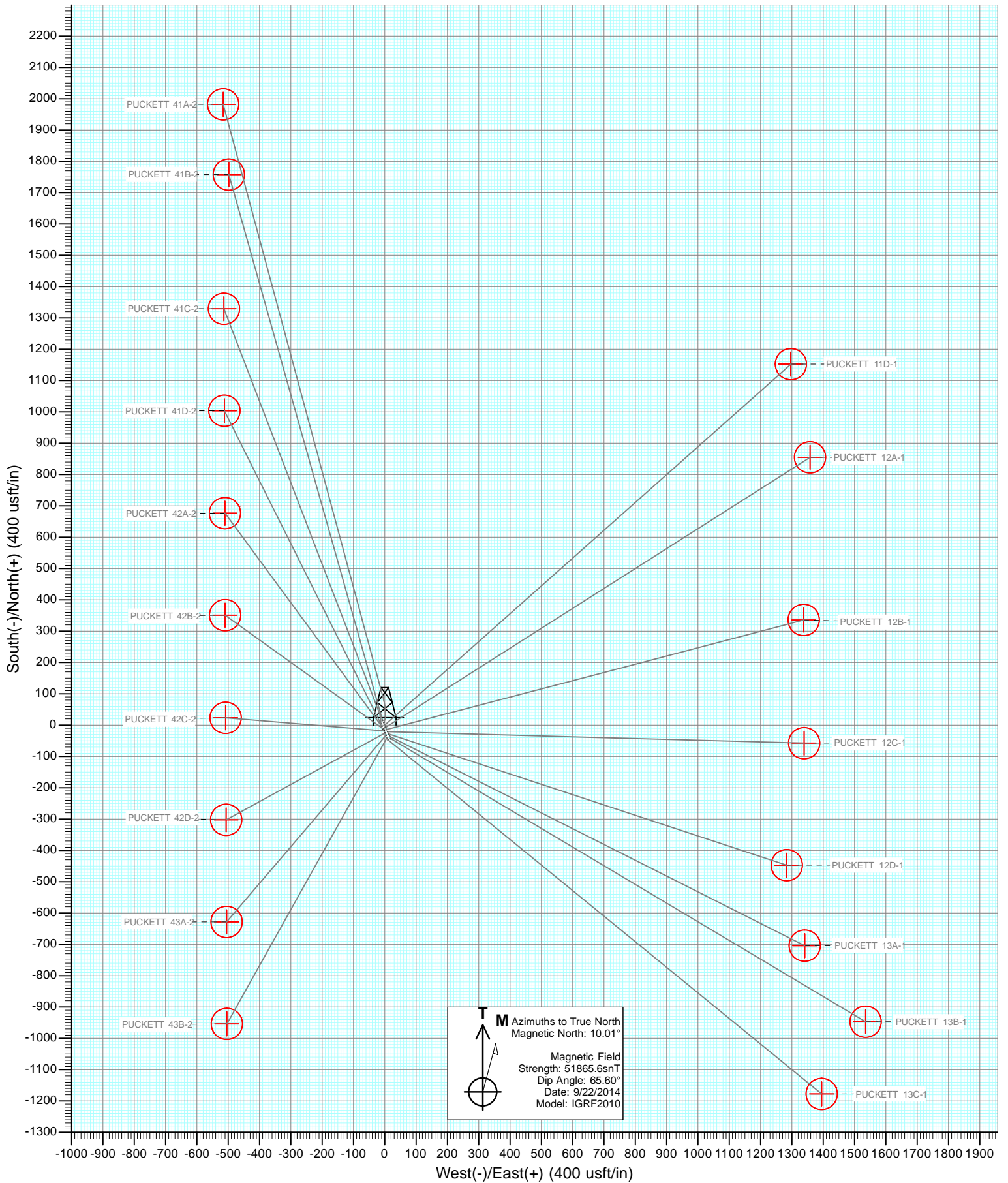
Surface Hole Location
 PUCKETT 12A-1
 Lat : 39.475792
 Long : -108.179639

DESIGN TARGET DETAILS						
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PUCKETT 12A-1 TGT	861.8	1354.9	610150.83	1245057.34	39.478158	-108.174839
PUCKETT 12A-1 BHL	861.8	1354.9	610150.83	1245057.34	39.478158	-108.174839



Start 3° Drop
 PUCKETT 12A-1 TGT
 EOD @ 0° INC
 PUCKETT 12A-1 BHL
 TD @ 9,119.5' MD





Cathedral Energy Services

Planning Report

Database: USA EDM 5000 Multi Users DB	Local Co-ordinate Reference: Well PUCKETT 12A-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 12A-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 12A-1				
Well Position	+N/-S	0.0 usft	Northing: 609,329.35 usft	Latitude: 39.475792
	+E/-W	0.0 usft	Easting: 1,243,677.57 usft	Longitude: -108.179639
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
	IGRF2010	9/22/2014	(°) 10.01	(°) 65.60	(nT) 51,866

Design Plan #1				
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	57.54

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	
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.00	0.00	
699.1	13.47	57.54	695.0	28.2	44.3	3.00	3.00	0.00	57.54	
7,140.4	13.47	57.54	6,959.0	833.6	1,310.6	0.00	0.00	0.00	0.00	
7,589.5	0.00	0.00	7,404.0	861.8	1,354.9	3.00	-3.00	0.00	180.00	PUCKETT 12A-1 TG1
9,119.5	0.00	0.00	8,934.0	861.8	1,354.9	0.00	0.00	0.00	0.00	PUCKETT 12A-1 BHL

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 12A-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 12A-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	
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	KOP @ 250'
300.0	1.50	57.54	300.0	0.4	0.6	0.7	3.00	3.00	
400.0	4.50	57.54	399.8	3.2	5.0	5.9	3.00	3.00	
500.0	7.50	57.54	499.3	8.8	13.8	16.3	3.00	3.00	
600.0	10.50	57.54	598.0	17.2	27.0	32.0	3.00	3.00	
699.1	13.47	57.54	695.0	28.2	44.3	52.6	3.00	3.00	EOB @ 13.47° INC
800.0	13.47	57.54	793.1	40.8	64.2	76.1	0.00	0.00	
900.0	13.47	57.54	890.3	53.3	83.8	99.4	0.00	0.00	
1,000.0	13.47	57.54	987.6	65.8	103.5	122.7	0.00	0.00	
1,100.0	13.47	57.54	1,084.8	78.3	123.2	146.0	0.00	0.00	
1,200.0	13.47	57.54	1,182.1	90.8	142.8	169.3	0.00	0.00	
1,300.0	13.47	57.54	1,279.3	103.3	162.5	192.6	0.00	0.00	
1,400.0	13.47	57.54	1,376.6	115.8	182.1	215.9	0.00	0.00	
1,500.0	13.47	57.54	1,473.8	128.4	201.8	239.2	0.00	0.00	
1,600.0	13.47	57.54	1,571.1	140.9	221.4	262.4	0.00	0.00	
1,700.0	13.47	57.54	1,668.3	153.4	241.1	285.7	0.00	0.00	
1,800.0	13.47	57.54	1,765.6	165.9	260.8	309.0	0.00	0.00	
1,900.0	13.47	57.54	1,862.8	178.4	280.4	332.3	0.00	0.00	
2,000.0	13.47	57.54	1,960.1	190.9	300.1	355.6	0.00	0.00	
2,100.0	13.47	57.54	2,057.3	203.4	319.7	378.9	0.00	0.00	
2,200.0	13.47	57.54	2,154.6	215.9	339.4	402.2	0.00	0.00	
2,300.0	13.47	57.54	2,251.8	228.4	359.1	425.5	0.00	0.00	
2,400.0	13.47	57.54	2,349.1	240.9	378.7	448.8	0.00	0.00	
2,500.0	13.47	57.54	2,446.3	253.4	398.4	472.1	0.00	0.00	
2,600.0	13.47	57.54	2,543.6	265.9	418.0	495.4	0.00	0.00	
2,700.0	13.47	57.54	2,640.8	278.4	437.7	518.7	0.00	0.00	
2,800.0	13.47	57.54	2,738.1	290.9	457.3	542.0	0.00	0.00	
2,900.0	13.47	57.54	2,835.3	303.4	477.0	565.3	0.00	0.00	
3,000.0	13.47	57.54	2,932.6	315.9	496.7	588.6	0.00	0.00	
3,100.0	13.47	57.54	3,029.8	328.4	516.3	611.9	0.00	0.00	
3,200.0	13.47	57.54	3,127.1	340.9	536.0	635.2	0.00	0.00	
3,300.0	13.47	57.54	3,224.3	353.4	555.6	658.5	0.00	0.00	
3,400.0	13.47	57.54	3,321.5	365.9	575.3	681.8	0.00	0.00	
3,500.0	13.47	57.54	3,418.8	378.4	595.0	705.1	0.00	0.00	
3,600.0	13.47	57.54	3,516.0	390.9	614.6	728.4	0.00	0.00	
3,700.0	13.47	57.54	3,613.3	403.4	634.3	751.7	0.00	0.00	
3,800.0	13.47	57.54	3,710.5	415.9	653.9	775.0	0.00	0.00	
3,900.0	13.47	57.54	3,807.8	428.4	673.6	798.3	0.00	0.00	
4,000.0	13.47	57.54	3,905.0	440.9	693.2	821.6	0.00	0.00	
4,100.0	13.47	57.54	4,002.3	453.4	712.9	844.9	0.00	0.00	
4,200.0	13.47	57.54	4,099.5	465.9	732.6	868.2	0.00	0.00	
4,300.0	13.47	57.54	4,196.8	478.5	752.2	891.5	0.00	0.00	
4,400.0	13.47	57.54	4,294.0	491.0	771.9	914.8	0.00	0.00	
4,500.0	13.47	57.54	4,391.3	503.5	791.5	938.1	0.00	0.00	
4,600.0	13.47	57.54	4,488.5	516.0	811.2	961.4	0.00	0.00	
4,700.0	13.47	57.54	4,585.8	528.5	830.9	984.7	0.00	0.00	
4,800.0	13.47	57.54	4,683.0	541.0	850.5	1,008.0	0.00	0.00	
4,900.0	13.47	57.54	4,780.3	553.5	870.2	1,031.3	0.00	0.00	
5,000.0	13.47	57.54	4,877.5	566.0	889.8	1,054.6	0.00	0.00	

Cathedral Energy Services

Planning Report

Database: USA EDM 5000 Multi Users DB
Company: Caerus Oil & Gas (NAD 27)
Project: Garfield County, CO
Site: S2-T7S-R97W (Puckett Pad)
Well: PUCKETT 12A-1
Wellbore: DD
Design: Plan #1

Local Co-ordinate Reference: Well PUCKETT 12A-1
TVD Reference: KB=22' @ 8499.0usft
MD Reference: KB=22' @ 8499.0usft
North Reference: True
Survey Calculation Method: Minimum Curvature

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	13.47	57.54	4,974.8	578.5	909.5	1,077.9	0.00	0.00	
5,200.0	13.47	57.54	5,072.0	591.0	929.1	1,101.2	0.00	0.00	
5,300.0	13.47	57.54	5,169.3	603.5	948.8	1,124.5	0.00	0.00	
5,400.0	13.47	57.54	5,266.5	616.0	968.5	1,147.8	0.00	0.00	
5,500.0	13.47	57.54	5,363.8	628.5	988.1	1,171.1	0.00	0.00	
5,600.0	13.47	57.54	5,461.0	641.0	1,007.8	1,194.4	0.00	0.00	
5,700.0	13.47	57.54	5,558.3	653.5	1,027.4	1,217.7	0.00	0.00	
5,800.0	13.47	57.54	5,655.5	666.0	1,047.1	1,241.0	0.00	0.00	
5,900.0	13.47	57.54	5,752.8	678.5	1,066.8	1,264.3	0.00	0.00	
6,000.0	13.47	57.54	5,850.0	691.0	1,086.4	1,287.6	0.00	0.00	
6,100.0	13.47	57.54	5,947.3	703.5	1,106.1	1,310.8	0.00	0.00	
6,132.6	13.47	57.54	5,979.0	707.6	1,112.5	1,318.5	0.00	0.00	OHIOCREEK
6,200.0	13.47	57.54	6,044.5	716.0	1,125.7	1,334.1	0.00	0.00	
6,300.0	13.47	57.54	6,141.7	728.5	1,145.4	1,357.4	0.00	0.00	
6,400.0	13.47	57.54	6,239.0	741.0	1,165.0	1,380.7	0.00	0.00	
6,500.0	13.47	57.54	6,336.2	753.5	1,184.7	1,404.0	0.00	0.00	
6,600.0	13.47	57.54	6,433.5	766.0	1,204.4	1,427.3	0.00	0.00	
6,672.5	13.47	57.54	6,504.0	775.1	1,218.6	1,444.2	0.00	0.00	WILLIAMS FORK
6,700.0	13.47	57.54	6,530.7	778.5	1,224.0	1,450.6	0.00	0.00	
6,800.0	13.47	57.54	6,628.0	791.0	1,243.7	1,473.9	0.00	0.00	
6,900.0	13.47	57.54	6,725.2	803.5	1,263.3	1,497.2	0.00	0.00	
7,000.0	13.47	57.54	6,822.5	816.1	1,283.0	1,520.5	0.00	0.00	
7,100.0	13.47	57.54	6,919.7	828.6	1,302.6	1,543.8	0.00	0.00	
7,140.4	13.47	57.54	6,959.0	833.6	1,310.6	1,553.2	0.00	0.00	Start 3° Drop
7,200.0	11.69	57.54	7,017.2	840.6	1,321.5	1,566.2	3.00	-3.00	
7,300.0	8.69	57.54	7,115.6	850.1	1,336.5	1,583.9	3.00	-3.00	
7,400.0	5.69	57.54	7,214.8	856.8	1,347.0	1,596.4	3.00	-3.00	
7,500.0	2.69	57.54	7,314.5	860.7	1,353.2	1,603.7	3.00	-3.00	
7,589.5	0.00	0.00	7,404.0	861.8	1,354.9	1,605.8	3.00	-3.00	EOD @ 0° INC - TOG
7,600.0	0.00	0.00	7,414.5	861.8	1,354.9	1,605.8	0.00	0.00	
7,700.0	0.00	0.00	7,514.5	861.8	1,354.9	1,605.8	0.00	0.00	
7,800.0	0.00	0.00	7,614.5	861.8	1,354.9	1,605.8	0.00	0.00	
7,900.0	0.00	0.00	7,714.5	861.8	1,354.9	1,605.8	0.00	0.00	
8,000.0	0.00	0.00	7,814.5	861.8	1,354.9	1,605.8	0.00	0.00	
8,100.0	0.00	0.00	7,914.5	861.8	1,354.9	1,605.8	0.00	0.00	
8,200.0	0.00	0.00	8,014.5	861.8	1,354.9	1,605.8	0.00	0.00	
8,300.0	0.00	0.00	8,114.5	861.8	1,354.9	1,605.8	0.00	0.00	
8,400.0	0.00	0.00	8,214.5	861.8	1,354.9	1,605.8	0.00	0.00	
8,500.0	0.00	0.00	8,314.5	861.8	1,354.9	1,605.8	0.00	0.00	
8,574.5	0.00	0.00	8,389.0	861.8	1,354.9	1,605.8	0.00	0.00	CAMEO
8,600.0	0.00	0.00	8,414.5	861.8	1,354.9	1,605.8	0.00	0.00	
8,700.0	0.00	0.00	8,514.5	861.8	1,354.9	1,605.8	0.00	0.00	
8,800.0	0.00	0.00	8,614.5	861.8	1,354.9	1,605.8	0.00	0.00	
8,900.0	0.00	0.00	8,714.5	861.8	1,354.9	1,605.8	0.00	0.00	
8,969.5	0.00	0.00	8,784.0	861.8	1,354.9	1,605.8	0.00	0.00	ROLLINS
9,000.0	0.00	0.00	8,814.5	861.8	1,354.9	1,605.8	0.00	0.00	
9,100.0	0.00	0.00	8,914.5	861.8	1,354.9	1,605.8	0.00	0.00	
9,119.5	0.00	0.00	8,934.0	861.8	1,354.9	1,605.8	0.00	0.00	TD @ 9,119.5' MD

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 12A-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 12A-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
PUCKETT 12A-1 TGT - plan hits target center - Point	0.00	0.00	7,404.0	861.8	1,354.9	610,150.83	1,245,057.34	39.478158	-108.174839
PUCKETT 12A-1 BHL - plan hits target center - Circle (radius 50.0)	0.00	0.00	8,934.0	861.8	1,354.9	610,150.83	1,245,057.34	39.478158	-108.174839

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
6,132.6	5,979.0	OHIOCREEK				
6,672.5	6,504.0	WILLIAMS FORK				
7,589.5	7,404.0	TOG				
8,574.5	8,389.0	CAMEO				
8,969.5	8,784.0	ROLLINS				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(usft)	(usft)	+N/-S	+E/-W		
		(usft)	(usft)		
250.0	250.0	0.0	0.0	KOP @ 250'	
699.1	695.0	28.2	44.3	EOB @ 13.47° INC	
7,140.4	6,959.0	833.6	1,310.6	Start 3° Drop	
7,589.5	7,404.0	861.8	1,354.9	EOD @ 0° INC	
9,119.5	8,934.0	861.8	1,354.9	TD @ 9,119.5' MD	

Caerus Oil & Gas (NAD 27)

Garfield County, CO

S2-T7S-R97W (Puckett Pad)

PUCKETT 12A-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 12A-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 12A-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	9,119.5	Plan #1 (DD)	ISCWSA MWD	MWD - Standard	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 12A-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 12A-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 Offset Well - Wellbore - Design	Reference	Offset	Distance		Separation Factor	Warning
	Measured Depth (usft)	Measured Depth (usft)	Between Centres (usft)	Between Ellipses (usft)		
S2-T7S-R97W (Puckett Pad)						
PUCKETT 11D-1 - DD - Plan #1	200.0	200.0	7.6	7.0	12.139	CC, ES
PUCKETT 11D-1 - DD - Plan #1	4,900.0	4,893.9	198.6	156.0	4.655	SF
PUCKETT 12B-1 - DD - Plan #1	200.0	200.0	7.9	7.3	12.673	CC
PUCKETT 12B-1 - DD - Plan #1	300.0	300.0	8.1	7.0	7.502	ES
PUCKETT 12B-1 - DD - Plan #1	400.0	400.0	9.8	8.3	6.326	SF
PUCKETT 12C-1 - DD - Plan #1	200.0	200.0	15.9	15.2	25.384	CC
PUCKETT 12C-1 - DD - Plan #1	300.0	300.0	15.9	14.9	14.870	ES
PUCKETT 12C-1 - DD - Plan #1	500.0	499.5	23.2	21.1	11.119	SF
PUCKETT 12D-1 - DD - Plan #1	200.0	200.0	23.8	23.1	38.043	CC
PUCKETT 12D-1 - DD - Plan #1	300.0	300.0	23.9	22.8	22.253	ES
PUCKETT 12D-1 - DD - Plan #1	500.0	497.9	34.1	32.0	16.667	SF
PUCKETT 13A-1 - DD - Plan #1	200.0	200.0	32.3	31.7	51.770	CC
PUCKETT 13A-1 - DD - Plan #1	227.9	227.9	32.4	31.6	43.175	ES
PUCKETT 13A-1 - DD - Plan #1	500.0	495.8	47.6	45.5	23.313	SF
PUCKETT 13B-1 - DD - Plan #1	200.0	200.0	39.9	39.3	63.909	CC, ES
PUCKETT 13B-1 - DD - Plan #1	600.0	588.8	78.3	75.6	29.074	SF
PUCKETT 13C-1 - DD - Plan #1	155.6	155.6	41.2	40.8	96.901	CC
PUCKETT 13C-1 - DD - Plan #1	200.0	199.6	41.3	40.7	66.722	ES
PUCKETT 13C-1 - DD - Plan #1	600.0	586.8	88.1	85.3	31.903	SF
PUCKETT 41A-2 - DD - Plan #1	200.0	200.0	16.2	15.5	25.884	CC, ES
PUCKETT 41A-2 - DD - Plan #1	400.0	398.4	22.8	21.3	14.725	SF
PUCKETT 41B-2 - DD - Plan #1	144.5	144.5	24.4	24.1	65.128	CC, ES
PUCKETT 41B-2 - DD - Plan #1	400.0	395.9	38.4	36.9	24.485	SF
PUCKETT 41C-2 - DD - Plan #1	200.0	200.0	19.0	18.4	30.384	CC, ES
PUCKETT 41C-2 - DD - Plan #1	400.0	398.7	25.8	24.3	16.575	SF
PUCKETT 41D-2 - DD - Plan #1	155.6	155.6	26.3	25.8	61.767	CC
PUCKETT 41D-2 - DD - Plan #1	200.0	199.7	26.4	25.8	42.335	ES
PUCKETT 41D-2 - DD - Plan #1	400.0	396.0	39.9	38.4	25.289	SF
PUCKETT 42A-2 - DD - Plan #1	200.0	200.0	12.8	12.1	20.418	CC
PUCKETT 42A-2 - DD - Plan #1	237.8	237.8	12.9	12.1	16.186	ES
PUCKETT 42A-2 - DD - Plan #1	300.0	299.9	13.3	12.3	12.305	SF
PUCKETT 42B-2 - DD - Plan #1	200.0	200.0	10.1	9.5	16.229	CC
PUCKETT 42B-2 - DD - Plan #1	227.8	227.8	10.2	9.5	13.612	ES
PUCKETT 42B-2 - DD - Plan #1	300.0	300.0	10.8	9.7	9.845	SF
PUCKETT 42C-2 - DD - Plan #1	200.0	200.0	12.5	11.9	20.005	CC
PUCKETT 42C-2 - DD - Plan #1	228.3	228.3	12.6	11.8	16.701	ES
PUCKETT 42C-2 - DD - Plan #1	400.0	399.7	17.8	16.2	10.852	SF
PUCKETT 42D-2 - DD - Plan #1	200.0	200.0	18.4	17.7	29.369	CC
PUCKETT 42D-2 - DD - Plan #1	228.8	228.8	18.4	17.7	24.397	ES
PUCKETT 42D-2 - DD - Plan #1	400.0	399.2	23.6	22.0	14.685	SF
PUCKETT 43A-2 - DD - Plan #1	200.0	200.0	25.5	24.9	40.826	CC
PUCKETT 43A-2 - DD - Plan #1	239.8	239.8	25.6	24.8	31.839	ES
PUCKETT 43A-2 - DD - Plan #1	400.0	398.1	32.4	30.8	20.562	SF
PUCKETT 43B-2 - DD - Plan #1	200.0	200.0	33.7	33.1	53.992	CC, ES
PUCKETT 43B-2 - DD - Plan #1	400.0	396.5	43.8	42.2	27.763	SF

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

Cathedral Energy Services

Anticollision Report

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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 12A-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 11D-1 - DD - Plan #1													Offset Well Error:	0.0 usft
Survey Program: 0-ISWCWSA MWD														
Reference		Offset		Semi Major Axis			Distance							
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	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-24.17	6.9	-3.1	7.6					
100.0	100.0	100.0	100.0	0.1	0.1	-24.17	6.9	-3.1	7.6	7.4	0.18	43.265		
200.0	200.0	200.0	200.0	0.3	0.3	-24.17	6.9	-3.1	7.6	7.0	0.62	12.139	CC, ES	
300.0	300.0	299.8	299.8	0.5	0.5	-69.14	8.7	-1.2	8.5	7.4	1.07	7.891		
400.0	399.8	399.5	399.1	0.8	0.8	-58.93	13.8	4.7	10.7	9.1	1.57	6.809		
500.0	499.3	499.0	497.8	1.0	1.1	-54.72	22.4	14.4	13.8	11.6	2.14	6.432		
600.0	598.0	598.4	595.5	1.3	1.4	-53.91	34.4	27.8	17.5	14.7	2.78	6.283		
700.0	695.8	697.7	692.1	1.7	1.8	-54.95	49.7	45.0	21.7	18.2	3.52	6.175		
800.0	793.1	797.6	788.8	2.2	2.3	-57.43	66.3	63.7	25.8	21.5	4.30	6.013		
900.0	890.3	897.5	885.6	2.6	2.8	-59.23	82.9	82.4	30.0	24.8	5.13	5.839		
1,000.0	987.6	997.4	982.3	3.1	3.3	-60.59	99.5	101.0	34.1	28.1	6.00	5.685		
1,100.0	1,084.8	1,097.3	1,079.1	3.6	3.8	-61.66	116.0	119.7	38.3	31.4	6.89	5.555		
1,200.0	1,182.1	1,197.2	1,175.8	4.0	4.3	-62.52	132.6	138.3	42.5	34.7	7.80	5.446		
1,300.0	1,279.3	1,297.1	1,272.5	4.5	4.8	-63.22	149.2	157.0	46.7	38.0	8.72	5.355		
1,400.0	1,376.6	1,397.1	1,369.3	5.0	5.3	-63.81	165.8	175.6	50.9	41.2	9.64	5.278		
1,500.0	1,473.8	1,497.0	1,466.0	5.5	5.9	-64.30	182.4	194.3	55.1	44.5	10.57	5.212		
1,600.0	1,571.1	1,596.9	1,562.8	6.0	6.4	-64.73	198.9	213.0	59.3	47.8	11.50	5.156		
1,700.0	1,668.3	1,696.8	1,659.5	6.5	6.9	-65.10	215.5	231.6	63.5	51.1	12.43	5.107		
1,800.0	1,765.6	1,796.7	1,756.2	7.0	7.4	-65.42	232.1	250.3	67.7	54.3	13.37	5.064		
1,900.0	1,862.8	1,896.6	1,853.0	7.4	7.9	-65.71	248.7	268.9	71.9	57.6	14.31	5.026		
2,000.0	1,960.1	1,996.5	1,949.7	7.9	8.4	-65.97	265.3	287.6	76.1	60.9	15.25	4.993		
2,100.0	2,057.3	2,096.4	2,046.5	8.4	8.9	-66.19	281.8	306.2	80.4	64.2	16.19	4.963		
2,200.0	2,154.6	2,196.3	2,143.2	8.9	9.5	-66.40	298.4	324.9	84.6	67.4	17.13	4.937		
2,300.0	2,251.8	2,296.2	2,240.0	9.4	10.0	-66.58	315.0	343.6	88.8	70.7	18.07	4.913		
2,400.0	2,349.1	2,396.2	2,336.7	9.9	10.5	-66.75	331.6	362.2	93.0	74.0	19.02	4.891		
2,500.0	2,446.3	2,496.1	2,433.4	10.4	11.0	-66.91	348.2	380.9	97.2	77.3	19.96	4.871		
2,600.0	2,543.6	2,596.0	2,530.2	10.9	11.5	-67.05	364.7	399.5	101.5	80.6	20.91	4.853		
2,700.0	2,640.8	2,695.9	2,626.9	11.3	12.0	-67.18	381.3	418.2	105.7	83.8	21.85	4.837		
2,800.0	2,738.1	2,795.8	2,723.7	11.8	12.6	-67.30	397.9	436.8	109.9	87.1	22.80	4.821		
2,900.0	2,835.3	2,895.7	2,820.4	12.3	13.1	-67.41	414.5	455.5	114.1	90.4	23.74	4.807		
3,000.0	2,932.6	2,995.6	2,917.2	12.8	13.6	-67.51	431.1	474.2	118.4	93.7	24.69	4.794		
3,100.0	3,029.8	3,095.5	3,013.9	13.3	14.1	-67.61	447.7	492.8	122.6	96.9	25.63	4.782		
3,200.0	3,127.1	3,195.4	3,110.6	13.8	14.6	-67.70	464.2	511.5	126.8	100.2	26.58	4.771		
3,300.0	3,224.3	3,295.4	3,207.4	14.3	15.1	-67.78	480.8	530.1	131.0	103.5	27.52	4.761		
3,400.0	3,321.5	3,395.3	3,304.1	14.8	15.6	-67.86	497.4	548.8	135.2	106.8	28.47	4.751		
3,500.0	3,418.8	3,495.2	3,400.9	15.3	16.2	-67.93	514.0	567.4	139.5	110.1	29.41	4.742		
3,600.0	3,516.0	3,595.1	3,497.6	15.8	16.7	-68.00	530.6	586.1	143.7	113.3	30.36	4.733		
3,700.0	3,613.3	3,695.0	3,594.4	16.2	17.2	-68.07	547.1	604.8	147.9	116.6	31.31	4.725		
3,800.0	3,710.5	3,794.9	3,691.1	16.7	17.7	-68.13	563.7	623.4	152.1	119.9	32.25	4.717		
3,900.0	3,807.8	3,894.8	3,787.8	17.2	18.2	-68.19	580.3	642.1	156.4	123.2	33.20	4.710		
4,000.0	3,905.0	3,994.7	3,884.6	17.7	18.7	-68.25	596.9	660.7	160.6	126.5	34.14	4.704		
4,100.0	4,002.3	4,094.6	3,981.3	18.2	19.3	-68.30	613.5	679.4	164.8	129.7	35.09	4.697		
4,200.0	4,099.5	4,194.5	4,078.1	18.7	19.8	-68.35	630.0	698.0	169.1	133.0	36.04	4.691		
4,300.0	4,196.8	4,294.5	4,174.8	19.2	20.3	-68.40	646.6	716.7	173.3	136.3	36.98	4.685		
4,400.0	4,294.0	4,394.4	4,271.6	19.7	20.8	-68.44	663.2	735.4	177.5	139.6	37.93	4.680		
4,500.0	4,391.3	4,494.3	4,368.3	20.2	21.3	-68.48	679.8	754.0	181.7	142.9	38.88	4.675		
4,600.0	4,488.5	4,594.2	4,465.0	20.7	21.8	-68.53	696.4	772.7	186.0	146.1	39.82	4.669		
4,700.0	4,585.8	4,694.1	4,561.8	21.2	22.4	-68.57	712.9	791.3	190.2	149.4	40.77	4.665		
4,800.0	4,683.0	4,794.0	4,658.5	21.6	22.9	-68.60	729.5	810.0	194.4	152.7	41.72	4.660		
4,900.0	4,780.3	4,893.9	4,755.3	22.1	23.4	-68.64	746.1	828.6	198.6	156.0	42.67	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

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Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 12A-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	
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft	
Reference				Offset				Semi Major Axis			Distance		Total Uncertainty Axis	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)					
0.0	0.0	0.0	0.0	0.0	0.0	156.91	-7.3	3.1	7.9						
100.0	100.0	100.0	100.0	0.1	0.1	156.91	-7.3	3.1	7.9	7.7	0.18	45.168			
200.0	200.0	200.0	200.0	0.3	0.3	156.91	-7.3	3.1	7.9	7.3	0.62	12.673 CC			
237.0	237.0	237.0	237.0	0.4	0.4	100.65	-7.3	3.1	8.0	7.2	0.79	10.055			
300.0	300.0	300.0	300.0	0.5	0.5	103.97	-7.3	3.1	8.1	7.0	1.07	7.502 ES			
400.0	399.8	400.0	399.9	0.8	0.8	118.51	-6.6	5.6	9.8	8.3	1.55	6.326 SF			
500.0	499.3	500.1	499.7	1.0	1.0	124.80	-4.6	13.2	13.4	11.3	2.09	6.412			
600.0	598.0	600.2	599.0	1.3	1.3	125.86	-1.3	25.9	18.5	15.8	2.71	6.844			
700.0	695.8	700.3	697.4	1.7	1.6	124.78	3.3	43.5	25.1	21.6	3.42	7.329			
800.0	793.1	800.0	795.0	2.2	2.0	124.69	8.4	62.9	32.5	28.3	4.16	7.801			
900.0	890.3	899.7	892.7	2.6	2.4	124.64	13.5	82.3	39.9	35.0	4.95	8.062			
1,000.0	987.6	999.4	990.4	3.1	2.8	124.60	18.6	101.7	47.3	41.6	5.76	8.216			
1,100.0	1,084.8	1,099.2	1,088.1	3.6	3.2	124.57	23.7	121.1	54.7	48.2	6.59	8.314			
1,200.0	1,182.1	1,198.9	1,185.8	4.0	3.7	124.55	28.8	140.5	62.2	54.7	7.42	8.378			
1,300.0	1,279.3	1,298.6	1,283.5	4.5	4.1	124.53	33.9	159.9	69.6	61.3	8.26	8.422			
1,400.0	1,376.6	1,398.3	1,381.2	5.0	4.5	124.52	39.0	179.3	77.0	67.9	9.11	8.453			
1,500.0	1,473.8	1,498.1	1,478.9	5.5	5.0	124.51	44.1	198.7	84.4	74.5	9.96	8.476			
1,600.0	1,571.1	1,597.8	1,576.5	6.0	5.4	124.50	49.2	218.0	91.9	81.0	10.82	8.493			
1,700.0	1,668.3	1,697.5	1,674.2	6.5	5.8	124.49	54.3	237.4	99.3	87.6	11.67	8.506			
1,800.0	1,765.6	1,797.2	1,771.9	7.0	6.3	124.49	59.4	256.8	106.7	94.2	12.53	8.516			
1,900.0	1,862.8	1,897.0	1,869.6	7.4	6.7	124.48	64.5	276.2	114.1	100.7	13.39	8.524			
2,000.0	1,960.1	1,996.7	1,967.3	7.9	7.1	124.48	69.6	295.6	121.5	107.3	14.25	8.531			
2,100.0	2,057.3	2,096.4	2,065.0	8.4	7.6	124.47	74.7	315.0	129.0	113.9	15.11	8.536			
2,200.0	2,154.6	2,196.1	2,162.7	8.9	8.0	124.47	79.8	334.4	136.4	120.4	15.97	8.540			
2,300.0	2,251.8	2,295.9	2,260.3	9.4	8.4	124.46	84.9	353.8	143.8	127.0	16.83	8.544			
2,400.0	2,349.1	2,395.6	2,358.0	9.9	8.9	124.46	90.0	373.2	151.2	133.5	17.69	8.547			
2,500.0	2,446.3	2,495.3	2,455.7	10.4	9.3	124.46	95.1	392.6	158.6	140.1	18.56	8.550			
2,600.0	2,543.6	2,595.0	2,553.4	10.9	9.7	124.45	100.2	412.0	166.1	146.7	19.42	8.552			
2,700.0	2,640.8	2,694.8	2,651.1	11.3	10.2	124.45	105.3	431.4	173.5	153.2	20.28	8.554			
2,800.0	2,738.1	2,794.5	2,748.8	11.8	10.6	124.45	110.4	450.8	180.9	159.8	21.14	8.556			
2,900.0	2,835.3	2,894.2	2,846.5	12.3	11.1	124.45	115.5	470.2	188.3	166.3	22.01	8.558			
3,000.0	2,932.6	2,993.9	2,944.2	12.8	11.5	124.45	120.6	489.6	195.8	172.9	22.87	8.559			

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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 12C-1 - DD - Plan #1													Offset Well Error:	0.0 usft
Survey Program: 0-ISCSWA 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	153.58	-14.2	7.1	15.9					
100.0	100.0	100.0	100.0	0.1	0.1	153.58	-14.2	7.1	15.9	15.7	0.18	90.473		
200.0	200.0	200.0	200.0	0.3	0.3	153.58	-14.2	7.1	15.9	15.2	0.62	25.384	CC	
235.9	235.9	235.9	235.9	0.4	0.4	96.64	-14.2	7.1	15.9	15.1	0.79	20.218		
300.0	300.0	300.0	300.0	0.5	0.5	98.38	-14.2	7.1	15.9	14.9	1.07	14.870	ES	
400.0	399.8	399.8	399.8	0.8	0.8	113.42	-14.2	7.7	17.6	16.1	1.54	11.416		
500.0	499.3	499.5	499.3	1.0	1.0	124.43	-14.4	12.9	23.2	21.1	2.08	11.119	SF	
600.0	598.0	599.1	598.4	1.3	1.2	128.73	-14.6	23.3	32.0	29.3	2.69	11.885		
700.0	695.8	698.6	696.7	1.7	1.5	129.42	-15.1	38.8	43.8	40.4	3.39	12.921		
800.0	793.1	797.8	794.0	2.2	1.9	128.12	-15.6	58.0	56.8	52.7	4.09	13.880		
900.0	890.3	897.0	891.3	2.6	2.3	127.14	-16.1	77.4	69.8	64.9	4.85	14.373		
1,000.0	987.6	996.1	988.5	3.1	2.7	126.46	-16.7	96.8	82.8	77.1	5.65	14.645		
1,100.0	1,084.8	1,095.3	1,085.7	3.6	3.1	125.97	-17.2	116.2	95.8	89.3	6.47	14.803		
1,200.0	1,182.1	1,194.4	1,182.9	4.0	3.5	125.60	-17.7	135.6	108.8	101.5	7.30	14.898		
1,300.0	1,279.3	1,293.6	1,280.2	4.5	3.9	125.30	-18.3	155.0	121.8	113.7	8.15	14.957		
1,400.0	1,376.6	1,392.7	1,377.4	5.0	4.3	125.07	-18.8	174.4	134.9	125.9	8.99	14.995		
1,500.0	1,473.8	1,491.9	1,474.6	5.5	4.7	124.87	-19.3	193.8	147.9	138.0	9.85	15.019		
1,600.0	1,571.1	1,591.0	1,571.9	6.0	5.2	124.71	-19.8	213.2	160.9	150.2	10.70	15.035		
1,700.0	1,668.3	1,690.2	1,669.1	6.5	5.6	124.57	-20.4	232.6	173.9	162.4	11.56	15.045		
1,800.0	1,765.6	1,789.3	1,766.3	7.0	6.0	124.45	-20.9	252.0	187.0	174.6	12.42	15.051		

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 12A-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 12A-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-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	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)				
0.0	0.0	0.0	0.0	0.0	0.0	154.69	-21.5	10.2	23.8					
100.0	100.0	100.0	100.0	0.1	0.1	154.69	-21.5	10.2	23.8	23.6	0.18	135.590		
200.0	200.0	200.0	200.0	0.3	0.3	154.69	-21.5	10.2	23.8	23.1	0.62	38.043 CC		
233.2	233.2	233.2	233.2	0.4	0.4	97.49	-21.5	10.2	23.8	23.0	0.77	30.757		
300.0	300.0	300.0	300.0	0.5	0.5	98.71	-21.5	10.2	23.9	22.8	1.07	22.253 ES		
400.0	399.8	399.1	399.1	0.8	0.7	105.59	-22.3	12.6	26.6	25.1	1.52	17.459		
500.0	499.3	497.9	497.6	1.0	1.0	111.60	-24.7	19.9	34.1	32.0	2.04	16.667 SF		
600.0	598.0	596.3	595.1	1.3	1.2	115.29	-28.7	31.9	46.2	43.5	2.66	17.344		
700.0	695.8	694.0	691.2	1.7	1.6	117.22	-34.1	48.5	62.8	59.4	3.40	18.483		
800.0	793.1	792.2	787.5	2.2	1.9	119.11	-40.2	66.8	81.2	77.1	4.15	19.560		
900.0	890.3	890.5	883.9	2.6	2.3	120.29	-46.2	85.1	99.7	94.8	4.94	20.195		
1,000.0	987.6	988.7	980.2	3.1	2.7	121.10	-52.2	103.3	118.3	112.5	5.74	20.590		
1,100.0	1,084.8	1,087.0	1,076.6	3.6	3.2	121.70	-58.2	121.6	136.8	130.3	6.56	20.850		
1,200.0	1,182.1	1,185.2	1,173.0	4.0	3.6	122.15	-64.3	139.9	155.4	148.0	7.39	21.029		
1,300.0	1,279.3	1,283.5	1,269.3	4.5	4.0	122.50	-70.3	158.1	174.0	165.7	8.22	21.156		
1,400.0	1,376.6	1,381.7	1,365.7	5.0	4.4	122.79	-76.3	176.4	192.5	183.5	9.06	21.253		

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 12A-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 12A-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-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	155.79	-29.5	13.3	32.3					
100.0	100.0	100.0	100.0	0.1	0.1	155.79	-29.5	13.3	32.3	32.2	0.18	184.515		
200.0	200.0	200.0	200.0	0.3	0.3	155.79	-29.5	13.3	32.3	31.7	0.62	51.770 CC		
227.9	227.9	227.9	227.9	0.4	0.4	98.42	-29.5	13.3	32.4	31.6	0.75	43.175 ES		
300.0	300.0	299.3	299.3	0.5	0.5	98.64	-29.8	13.8	32.9	31.9	1.06	30.982		
400.0	399.8	397.8	397.7	0.8	0.7	101.34	-32.1	18.4	37.8	36.3	1.51	24.990		
500.0	499.3	495.8	495.1	1.0	1.0	105.03	-36.6	27.4	47.6	45.5	2.04	23.313 SF		
600.0	598.0	592.7	590.9	1.3	1.3	108.27	-43.3	40.7	62.4	59.7	2.67	23.380		
700.0	695.8	689.0	685.2	1.7	1.7	110.73	-52.1	58.0	82.2	78.8	3.42	24.044		
800.0	793.1	786.5	780.4	2.2	2.1	113.30	-61.5	76.8	103.9	99.7	4.20	24.714		
900.0	890.3	884.1	875.6	2.6	2.5	114.97	-71.0	95.6	125.8	120.7	5.02	25.074		
1,000.0	987.6	981.6	970.9	3.1	3.0	116.15	-80.5	114.4	147.7	141.8	5.84	25.270		
1,100.0	1,084.8	1,079.1	1,066.1	3.6	3.4	117.03	-90.0	133.2	169.6	163.0	6.68	25.383		
1,200.0	1,182.1	1,176.7	1,161.3	4.0	3.9	117.70	-99.4	152.0	191.6	184.1	7.53	25.444		

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 12A-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 12A-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		
Survey Program: 0-ISWWSA MWD													Offset Well Error:	0.0 usft		
Reference																
Offset				Semi Major Axis			Distance									
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	Warning			
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	298.2	298.2	0.5	0.5	97.10	-37.7	18.5	42.1	41.1	1.06	39.794				
400.0	399.8	396.1	395.7	0.8	0.8	97.92	-41.6	25.0	49.2	47.7	1.52	32.293				
500.0	499.3	493.0	491.9	1.0	1.0	100.38	-47.9	35.6	61.2	59.1	2.06	29.725				
600.0	598.0	588.8	586.1	1.3	1.4	103.15	-56.6	50.2	78.3	75.6	2.69	29.074	SF			
700.0	695.8	683.0	677.8	1.7	1.8	105.56	-67.5	68.5	100.4	97.0	3.44	29.162				
800.0	793.1	779.3	770.9	2.2	2.3	107.76	-80.1	89.7	125.6	121.3	4.27	29.436				
900.0	890.3	876.0	864.4	2.6	2.8	109.22	-92.8	110.9	150.8	145.7	5.11	29.541				
1,000.0	987.6	972.7	957.9	3.1	3.3	110.26	-105.4	132.1	176.1	170.2	5.97	29.523				

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 12A-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 12A-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 13C-1 - DD - Plan #1													Offset Well Error:	0.0 usft
Survey Program: 0-ISWWSA MWD														
Reference		Offset		Semi Major Axis			Distance							
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	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	168.94	-40.4	7.9	41.2					
100.0	100.0	100.0	100.0	0.1	0.1	168.94	-40.4	7.9	41.2	41.0	0.18	234.973		
155.6	155.6	155.6	155.6	0.2	0.2	168.94	-40.4	7.9	41.2	40.8	0.43	96.901 CC		
200.0	200.0	199.6	199.6	0.3	0.3	168.80	-40.5	8.0	41.3	40.7	0.62	66.722 ES		
300.0	300.0	297.8	297.7	0.5	0.5	108.86	-42.9	11.0	44.6	43.5	1.06	42.167		
400.0	399.8	395.4	394.9	0.8	0.8	108.11	-48.5	17.7	53.4	51.9	1.55	34.423		
500.0	499.3	491.9	490.4	1.0	1.1	109.00	-57.0	28.2	67.9	65.8	2.11	32.153		
600.0	598.0	586.8	583.6	1.3	1.4	110.43	-68.4	42.2	88.1	85.3	2.76	31.903 SF		
700.0	695.8	680.0	674.1	1.7	1.9	111.83	-82.4	59.3	113.8	110.3	3.52	32.355		
800.0	793.1	775.8	766.7	2.2	2.3	113.63	-98.0	78.5	142.1	137.8	4.31	32.956		
900.0	890.3	871.6	859.3	2.6	2.9	114.84	-113.7	97.6	170.4	165.3	5.13	33.250		
1,000.0	987.6	967.5	951.9	3.1	3.4	115.70	-129.3	116.8	198.8	192.9	5.96	33.360		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 12A-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 12A-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 41A-2 - DD - Plan #1														
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	-22.58	14.9	-6.2	16.2					
100.0	100.0	100.0	100.0	0.1	0.1	-22.58	14.9	-6.2	16.2	16.0	0.18	92.252		
200.0	200.0	200.0	200.0	0.3	0.3	-22.58	14.9	-6.2	16.2	15.5	0.62	25.884	CC, ES	
300.0	300.0	299.3	299.3	0.5	0.5	-76.56	17.4	-5.3	18.0	16.9	1.08	16.735		
400.0	399.8	398.4	398.0	0.8	0.8	-76.88	24.6	-2.7	22.8	21.3	1.55	14.725	SF	
500.0	499.3	496.6	495.5	1.0	1.0	-83.92	36.3	-0.4	31.3	29.2	2.07	15.121		
600.0	598.0	593.4	591.0	1.3	1.4	-94.13	52.2	-0.7	45.1	42.5	2.67	16.890		
700.0	695.8	688.2	683.8	1.7	1.7	-102.54	71.6	-3.3	65.7	62.3	3.40	19.328		
800.0	793.1	780.8	773.3	2.2	2.2	-107.68	94.5	-8.2	92.3	88.1	4.18	22.093		
900.0	890.3	873.6	862.1	2.6	2.6	-109.77	120.6	-15.1	123.0	118.0	4.99	24.667		
1,000.0	987.6	968.6	952.8	3.1	3.2	-110.97	147.8	-22.5	154.3	148.5	5.80	26.625		
1,100.0	1,084.8	1,063.5	1,043.4	3.6	3.7	-111.77	175.1	-29.8	185.7	179.0	6.62	28.046		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 12A-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 12A-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 41B-2 - DD - Plan #1														
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							
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	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-24.58	22.2	-10.2	24.4					
100.0	100.0	100.0	100.0	0.1	0.1	-24.58	22.2	-10.2	24.4	24.3	0.18	139.358		
144.5	144.5	144.5	144.5	0.2	0.2	-24.58	22.2	-10.2	24.4	24.1	0.38	65.128	CC, ES	
200.0	200.0	199.5	199.5	0.3	0.3	-24.43	22.6	-10.3	24.8	24.2	0.62	39.820		
300.0	300.0	298.0	297.9	0.5	0.6	-81.79	27.0	-11.5	29.3	28.3	1.09	26.969		
400.0	399.8	395.9	395.3	0.8	0.8	-86.99	36.2	-14.1	38.4	36.9	1.57	24.485	SF	
500.0	499.3	492.5	490.8	1.0	1.1	-93.90	50.0	-18.0	52.7	50.6	2.10	25.097		
600.0	598.0	587.4	583.8	1.3	1.5	-99.82	68.1	-23.1	72.8	70.1	2.72	26.807		
700.0	695.8	680.8	674.4	1.7	1.9	-104.27	90.1	-29.3	98.6	95.2	3.43	28.715		
800.0	793.1	776.4	766.7	2.2	2.4	-108.13	114.1	-36.0	126.9	122.7	4.19	30.316		
900.0	890.3	872.1	859.0	2.6	2.9	-110.59	138.1	-42.8	155.6	150.6	4.96	31.377		
1,000.0	987.6	967.7	951.4	3.1	3.3	-112.28	162.1	-49.6	184.4	178.7	5.75	32.076		

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 12A-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 12A-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	
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	-54.86	10.9	-15.5	19.0						
100.0	100.0	100.0	100.0	0.1	0.1	-54.86	10.9	-15.5	19.0	18.8	0.18	108.292			
200.0	200.0	200.0	200.0	0.3	0.3	-54.86	10.9	-15.5	19.0	18.4	0.62	30.384	CC, ES		
300.0	300.0	299.5	299.5	0.5	0.5	-110.70	12.4	-15.5	20.1	19.0	1.08	18.658			
400.0	399.8	398.7	398.4	0.8	0.8	-109.87	18.8	-15.5	25.8	24.3	1.56	16.575	SF		
500.0	499.3	496.6	495.7	1.0	1.0	-111.69	29.9	-16.4	37.0	34.9	2.10	17.597			
600.0	598.0	592.7	590.6	1.3	1.3	-115.77	44.5	-20.2	55.1	52.3	2.73	20.179			
700.0	695.8	687.8	683.8	1.7	1.7	-119.59	62.2	-26.8	79.9	76.4	3.44	23.193			
800.0	793.1	783.9	777.8	2.2	2.1	-123.02	80.7	-33.9	107.0	102.8	4.12	25.943			
900.0	890.3	880.0	871.9	2.6	2.5	-125.05	99.2	-41.0	134.3	129.5	4.82	27.872			
1,000.0	987.6	976.1	965.9	3.1	2.9	-126.40	117.7	-48.1	161.7	156.2	5.53	29.259			
1,100.0	1,084.8	1,072.2	1,060.0	3.6	3.3	-127.36	136.2	-55.2	189.2	182.9	6.25	30.278			

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 12A-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 12A-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 41D-2 - DD - Plan #1														
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							
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	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-46.08	18.2	-18.9	26.3					
100.0	100.0	100.0	100.0	0.1	0.1	-46.08	18.2	-18.9	26.3	26.1	0.18	149.762		
155.6	155.6	155.6	155.6	0.2	0.2	-46.08	18.2	-18.9	26.3	25.8	0.43	61.767 CC		
200.0	200.0	199.7	199.7	0.3	0.3	-45.97	18.4	-19.0	26.4	25.8	0.62	42.335 ES		
300.0	300.0	298.2	298.1	0.5	0.5	-102.22	21.8	-20.7	30.2	29.1	1.08	27.878		
400.0	399.8	396.0	395.6	0.8	0.8	-105.21	29.6	-24.6	39.9	38.4	1.58	25.289 SF		
500.0	499.3	492.8	491.3	1.0	1.1	-109.79	41.8	-30.7	56.0	53.8	2.14	26.136		
600.0	598.0	590.5	587.8	1.3	1.4	-115.07	55.7	-37.7	75.9	73.2	2.74	27.710		
700.0	695.8	687.4	683.5	1.7	1.7	-120.55	69.5	-44.6	98.9	95.5	3.41	28.983		
800.0	793.1	783.8	778.6	2.2	2.1	-125.34	83.2	-51.4	124.0	119.9	4.07	30.493		
900.0	890.3	880.2	873.8	2.6	2.4	-128.51	97.0	-58.3	149.6	144.9	4.72	31.691		
1,000.0	987.6	976.6	968.9	3.1	2.8	-130.76	110.7	-65.2	175.5	170.1	5.38	32.639		

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 12A-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 12A-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	
Survey Program: 0-ISCSWA MWD													Offset Well Error:		0.0 usft
Reference															
Offset				Semi Major Axis			Distance								
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	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	-76.80	2.9	-12.4	12.8						
100.0	100.0	100.0	100.0	0.1	0.1	-76.80	2.9	-12.4	12.8	12.6	0.18	72.770			
200.0	200.0	200.0	200.0	0.3	0.3	-76.80	2.9	-12.4	12.8	12.1	0.62	20.418	CC		
237.8	237.8	237.8	237.8	0.4	0.4	-134.93	2.9	-12.4	12.9	12.1	0.80	16.186	ES		
300.0	300.0	299.9	299.9	0.5	0.5	-135.88	3.0	-12.5	13.3	12.3	1.08	12.305	SF		
400.0	399.8	399.0	398.9	0.8	0.8	-138.70	6.2	-14.8	20.0	18.4	1.61	12.424			
500.0	499.3	497.0	496.5	1.0	1.0	-139.28	13.3	-20.1	34.3	32.1	2.20	15.606			
600.0	598.0	594.7	593.5	1.3	1.3	-140.45	22.9	-27.1	54.6	51.8	2.81	19.410			
700.0	695.8	691.6	689.7	1.7	1.6	-143.12	32.5	-34.2	79.1	75.6	3.46	22.876			
800.0	793.1	788.0	785.3	2.2	1.8	-145.61	42.0	-41.2	105.7	101.7	3.98	26.526			
900.0	890.3	884.3	880.9	2.6	2.1	-147.09	51.5	-48.2	132.4	127.8	4.53	29.247			
1,000.0	987.6	980.6	976.5	3.1	2.4	-148.07	61.0	-55.2	159.1	154.1	5.08	31.315			
1,100.0	1,084.8	1,076.9	1,072.1	3.6	2.7	-148.78	70.5	-62.2	185.9	180.3	5.65	32.923			

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 12A-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 12A-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	
Survey Program: 0-ISCSWA MWD													Offset Well Error:		0.0 usft
Reference: S2-T7S-R97W (Puckett Pad) - PUCKETT 42B-2 - DD - Plan #1															
Offset				Semi Major Axis			Distance								
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning		
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			
227.8	227.8	227.8	227.8	0.4	0.4	-170.90	-4.0	-9.3	10.2	9.5	0.75	13.612 ES			
300.0	300.0	300.0	300.0	0.5	0.5	-171.37	-4.0	-9.3	10.8	9.7	1.10	9.845 SF			
400.0	399.8	399.5	399.5	0.8	0.8	-169.72	-3.2	-10.5	16.7	15.0	1.66	10.069			
500.0	499.3	497.8	497.6	1.0	1.0	-162.87	0.6	-15.7	30.6	28.4	2.26	13.534			
600.0	598.0	595.6	595.0	1.3	1.2	-159.98	5.7	-22.8	51.2	48.3	2.87	17.819			
700.0	695.8	692.3	691.3	1.7	1.5	-160.01	10.8	-29.9	76.6	73.1	3.49	21.963			
800.0	793.1	788.4	787.0	2.2	1.7	-160.66	15.8	-36.9	104.3	100.4	3.93	26.530			
900.0	890.3	884.5	882.7	2.6	2.0	-161.04	20.9	-44.0	132.1	127.7	4.40	30.008			
1,000.0	987.6	980.5	978.3	3.1	2.3	-161.28	26.0	-51.0	159.8	154.9	4.89	32.704			
1,100.0	1,084.8	1,076.6	1,074.0	3.6	2.5	-161.46	31.0	-58.0	187.6	182.2	5.39	34.832			

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 12A-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 12A-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 42C-2 - DD - Plan #1													Offset Well Error:	0.0 usft
Survey Program: 0-ISCSWA MWD														
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	-154.59	-11.3	-5.4	12.5					
100.0	100.0	100.0	100.0	0.1	0.1	-154.59	-11.3	-5.4	12.5	12.3	0.18	71.301		
200.0	200.0	200.0	200.0	0.3	0.3	-154.59	-11.3	-5.4	12.5	11.9	0.62	20.005 CC		
228.3	228.3	228.3	228.3	0.4	0.4	148.12	-11.3	-5.4	12.6	11.8	0.75	16.701 ES		
300.0	300.0	300.0	300.0	0.5	0.5	149.39	-11.3	-5.4	13.1	12.0	1.09	11.979		
400.0	399.8	399.7	399.7	0.8	0.8	158.39	-11.3	-5.5	17.8	16.2	1.64	10.852 SF		
500.0	499.3	498.0	497.9	1.0	1.0	171.83	-11.0	-9.3	30.4	28.1	2.26	13.448		
600.0	598.0	595.3	595.0	1.3	1.2	-179.95	-10.4	-16.4	51.5	48.6	2.90	17.772		
700.0	695.8	691.6	691.0	1.7	1.4	-176.66	-9.8	-23.5	78.2	74.6	3.51	22.294		
800.0	793.1	787.3	786.4	2.2	1.7	-175.17	-9.2	-30.6	107.4	103.5	3.91	27.460		
900.0	890.3	882.9	881.7	2.6	1.9	-174.33	-8.6	-37.7	136.7	132.3	4.34	31.491		
1,000.0	987.6	978.5	977.1	3.1	2.1	-173.78	-8.1	-44.7	166.0	161.2	4.79	34.674		
1,100.0	1,084.8	1,074.1	1,072.4	3.6	2.4	-173.39	-7.5	-51.8	195.3	190.0	5.25	37.225		

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 12A-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 12A-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
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference														
Offset				Semi Major Axis			Distance							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning	
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		
228.8	228.8	228.8	228.8	0.4	0.4	129.79	-18.2	-2.3	18.4	17.7	0.76	24.397 ES		
300.0	300.0	300.0	300.0	0.5	0.5	131.06	-18.2	-2.3	18.8	17.7	1.08	17.341		
400.0	399.8	399.2	399.1	0.8	0.7	143.34	-18.9	-3.5	23.6	22.0	1.61	14.685 SF		
500.0	499.3	496.6	496.4	1.0	1.0	158.69	-21.9	-9.0	38.3	36.0	2.26	16.951		
600.0	598.0	593.7	593.1	1.3	1.2	167.18	-25.8	-16.2	61.1	58.2	2.89	21.119		
700.0	695.8	689.4	688.5	1.7	1.4	171.50	-29.7	-23.2	89.5	86.0	3.51	25.491		
800.0	793.1	784.3	783.1	2.2	1.7	173.97	-33.5	-30.2	120.6	116.6	3.92	30.770		
900.0	890.3	879.3	877.7	2.6	1.9	175.42	-37.3	-37.2	151.8	147.4	4.34	34.937		
1,000.0	987.6	974.2	972.3	3.1	2.2	176.38	-41.1	-44.2	183.0	178.2	4.78	38.252		

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 12A-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 12A-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
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference														
Offset				Semi Major Axis			Distance							
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	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	178.10	-25.5	0.8	25.5					
100.0	100.0	100.0	100.0	0.1	0.1	178.10	-25.5	0.8	25.5	25.3	0.18	145.508		
200.0	200.0	200.0	200.0	0.3	0.3	178.10	-25.5	0.8	25.5	24.9	0.62	40.826 CC		
239.8	239.8	239.8	239.8	0.4	0.4	120.96	-25.5	0.8	25.6	24.8	0.80	31.839 ES		
300.0	300.0	299.7	299.7	0.5	0.5	122.02	-25.6	0.7	26.0	24.9	1.07	24.197		
400.0	399.8	398.1	398.0	0.8	0.7	134.13	-28.5	-1.7	32.4	30.8	1.58	20.562 SF		
500.0	499.3	494.4	493.9	1.0	1.0	147.51	-35.1	-7.3	49.0	46.7	2.23	21.974		
600.0	598.0	590.8	589.7	1.3	1.2	155.99	-43.4	-14.5	73.9	71.0	2.89	25.582		
700.0	695.8	685.7	684.0	1.7	1.5	161.01	-51.6	-21.5	104.3	100.8	3.52	29.624		
800.0	793.1	779.8	777.4	2.2	1.8	164.27	-59.8	-28.4	137.6	133.7	3.96	34.750		
900.0	890.3	873.9	870.9	2.6	2.0	166.25	-67.9	-35.4	171.1	166.7	4.41	38.818		

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 12A-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 12A-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	
Survey Program: 0-ISCSWA MWD													Offset Well Error:		0.0 usft
Reference: S2-T7S-R97W (Puckett Pad) - PUCKETT 43B-2 - DD - Plan #1															
Offset				Semi Major Axis			Distance								
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	Warning		
0.0	0.0	0.0	0.0	0.0	0.0	173.27	-33.5	4.0	33.7						
100.0	100.0	100.0	100.0	0.1	0.1	173.27	-33.5	4.0	33.7	33.6	0.18	192.433			
200.0	200.0	200.0	200.0	0.3	0.3	173.27	-33.5	4.0	33.7	33.1	0.62	53.992	CC, ES		
300.0	300.0	298.9	298.9	0.5	0.5	118.01	-34.8	3.3	35.2	34.2	1.06	33.120			
400.0	399.8	396.5	396.2	0.8	0.7	128.36	-40.2	0.2	43.8	42.2	1.58	27.763	SF		
500.0	499.3	491.7	490.8	1.0	1.0	139.46	-49.7	-5.1	62.1	59.8	2.21	28.044			
600.0	598.0	586.4	584.5	1.3	1.3	147.37	-62.1	-12.1	89.4	86.6	2.89	30.932			
700.0	695.8	680.3	677.3	1.7	1.6	152.56	-74.6	-19.0	122.4	118.8	3.54	34.561			
800.0	793.1	773.3	769.2	2.2	1.9	156.25	-86.9	-25.9	158.1	154.1	4.02	39.386			
900.0	890.3	866.3	861.1	2.6	2.2	158.58	-99.2	-32.8	194.3	189.8	4.50	43.222			

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

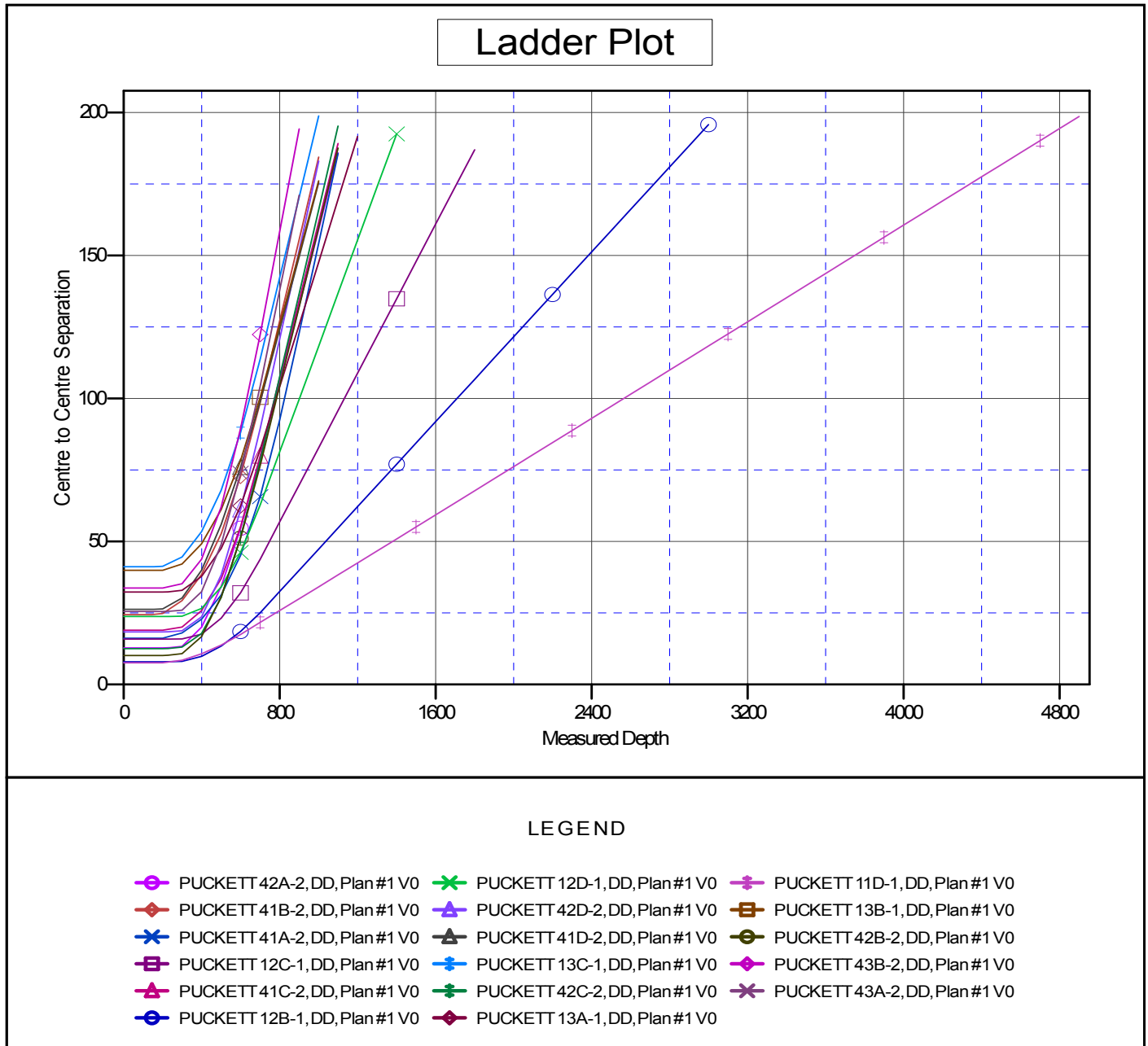
Cathedral Energy Services

Anticollision Report

Company: Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference: Well PUCKETT 12A-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 12A-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 12A-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