

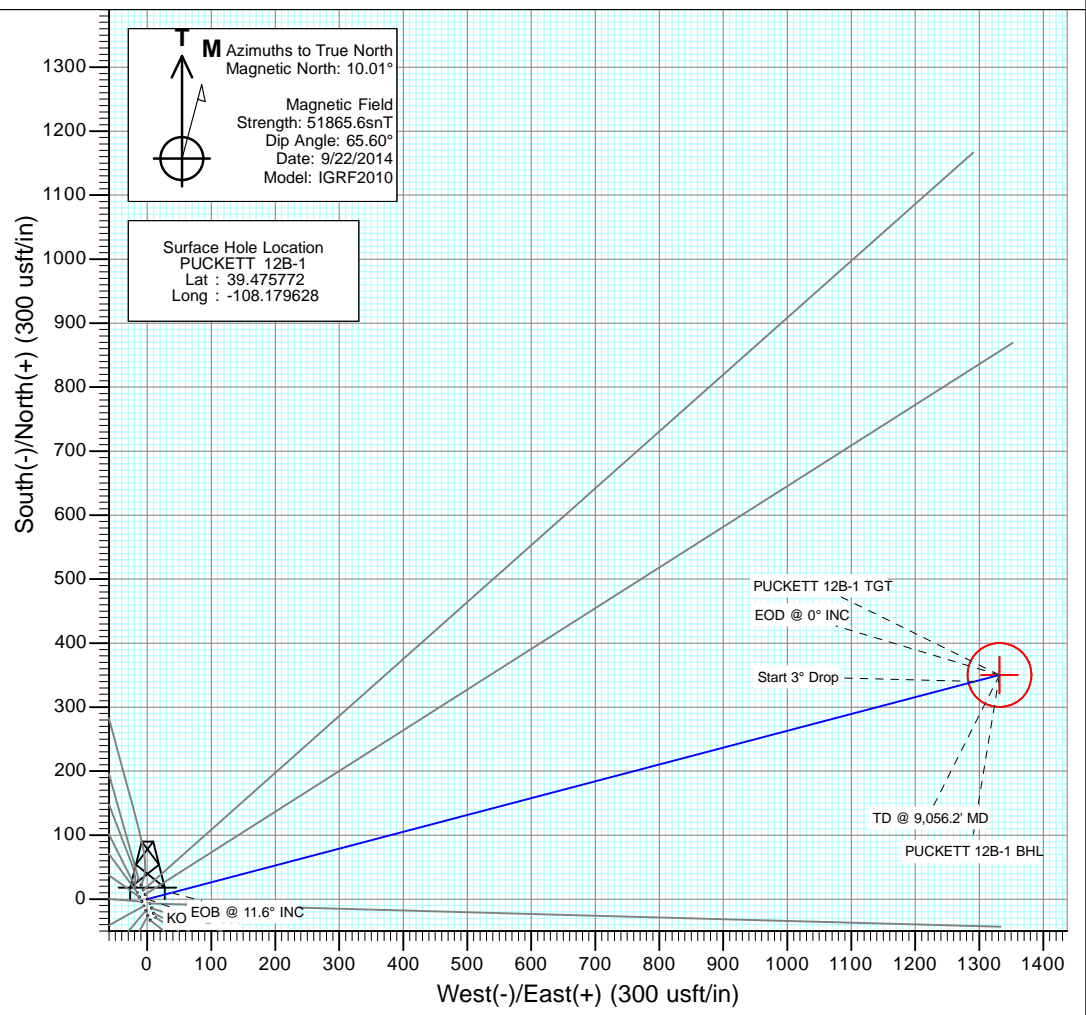
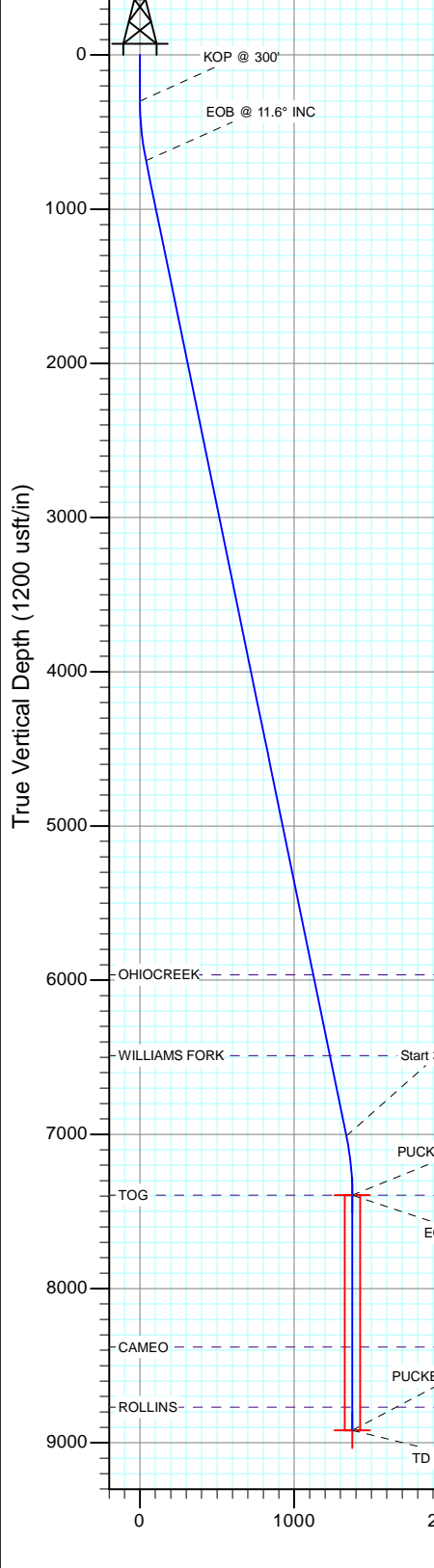


Project: Garfield County, CO
 Site: S2-T7S-R97W (Puckett Pad)
 Well: PUCKETT 12B-1
 Wellbore: DD
 Design: Plan #1

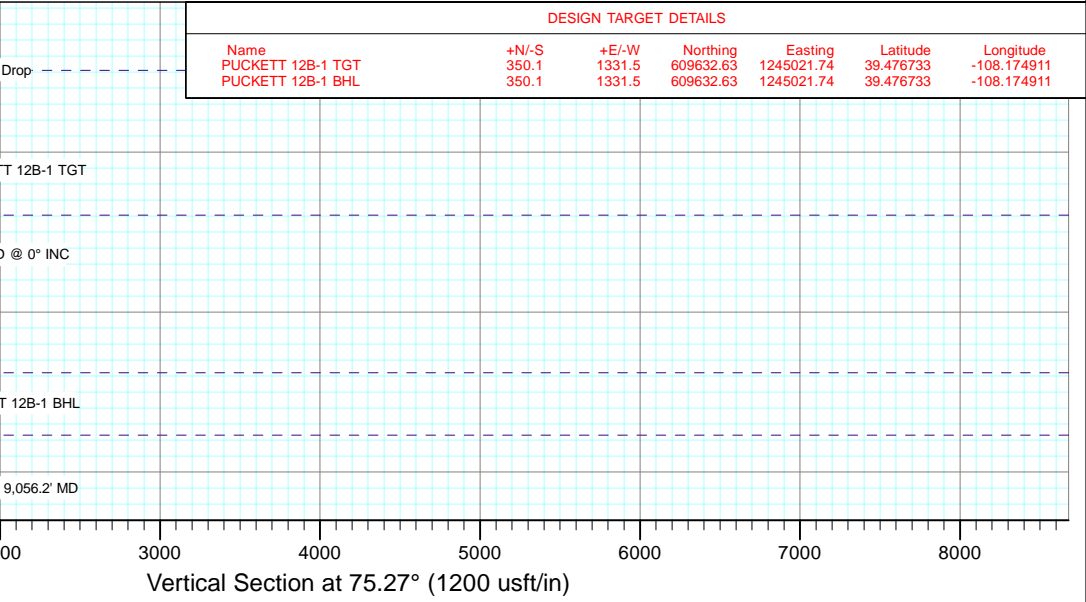


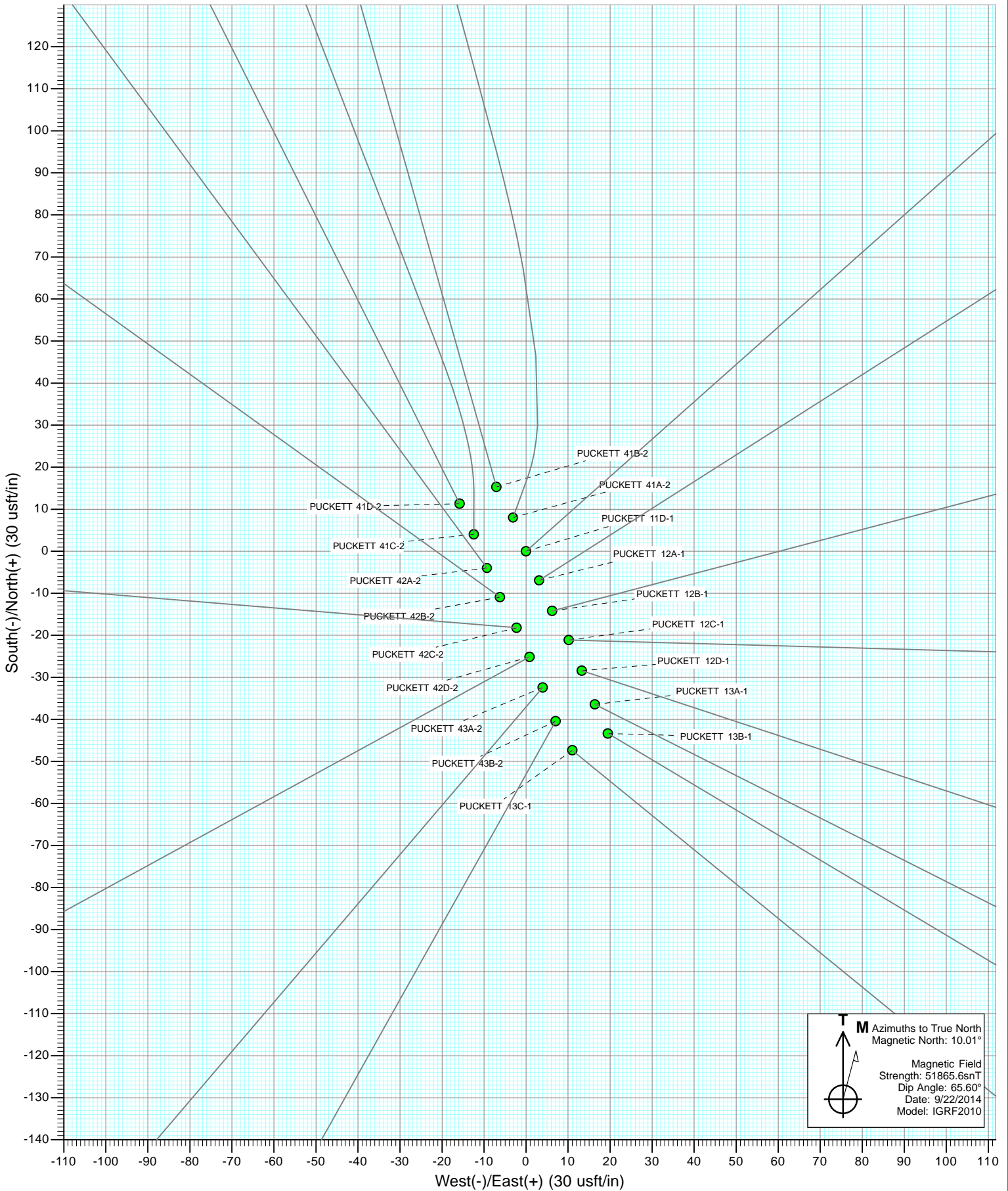
Plan #1
 PUCKETT 12B-1
 145XXX; SC
 KB=22' @ 8499.0usft
 Ground Elevation @ 8477.0
 NAD 1927 (NADCON CONUS)
 Well PUCKETT 12B-1, True North

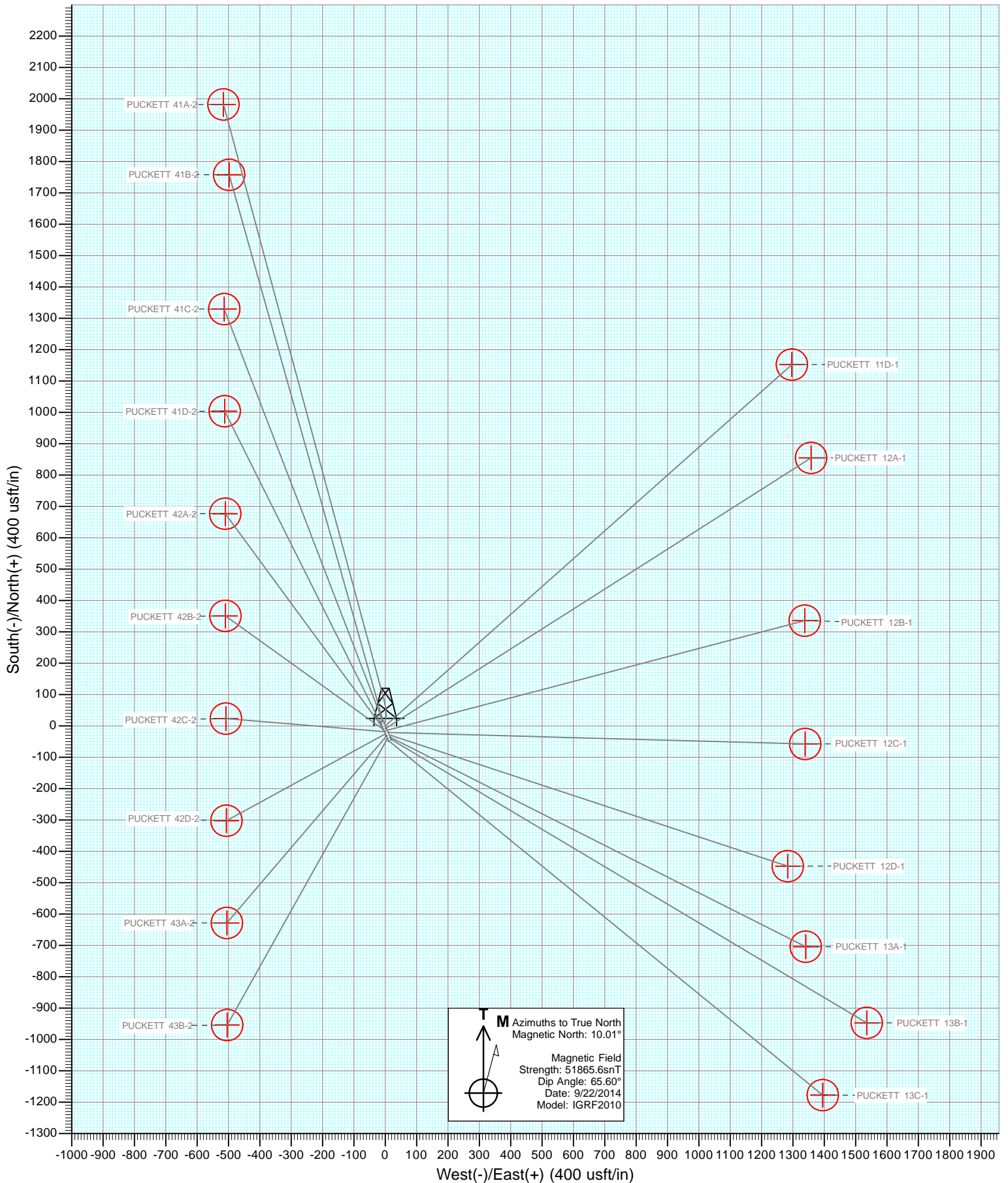
SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.0	
3	686.7	11.60	75.27	684.1	9.9	37.7	3.00	75.27	39.0	
4	7144.5	11.60	75.27	7009.9	340.1	1293.8	0.00	0.00	1337.8	PUCKETT 12B-1 TGT
5	7531.2	0.00	0.00	7394.0	350.1	1331.5	3.00	180.00	1376.8	PUCKETT 12B-1 BHL
6	9056.2	0.00	0.00	8919.0	350.1	1331.5	0.00	0.00	1376.8	



DESIGN TARGET DETAILS						
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PUCKETT 12B-1 TGT	350.1	1331.5	609632.63	1245021.74	39.476733	-108.174911
PUCKETT 12B-1 BHL	350.1	1331.5	609632.63	1245021.74	39.476733	-108.174911







Cathedral Energy Services

Planning Report

Database: USA EDM 5000 Multi Users DB	Local Co-ordinate Reference: Well PUCKETT 12B-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 12B-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 12B-1				
Well Position	+N/-S	0.0 usft	Northing: 609,321.98 usft	Latitude: 39.475772
	+E/-W	0.0 usft	Easting: 1,243,680.46 usft	Longitude: -108.179628
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	75.27

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	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
686.7	11.60	75.27	684.1	9.9	37.7	3.00	3.00	0.00	75.27	
7,144.5	11.60	75.27	7,009.9	340.1	1,293.8	0.00	0.00	0.00	0.00	
7,531.2	0.00	0.00	7,394.0	350.1	1,331.5	3.00	-3.00	0.00	180.00	PUCKETT 12B-1 TG1
9,056.2	0.00	0.00	8,919.0	350.1	1,331.5	0.00	0.00	0.00	0.00	PUCKETT 12B-1 BHL

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 12B-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 12B-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	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	KOP @ 300'
400.0	3.00	75.27	400.0	0.7	2.5	2.6	3.00	3.00	
500.0	6.00	75.27	499.6	2.7	10.1	10.5	3.00	3.00	
600.0	9.00	75.27	598.8	6.0	22.7	23.5	3.00	3.00	
686.7	11.60	75.27	684.1	9.9	37.7	39.0	3.00	3.00	EOB @ 11.6° INC
700.0	11.60	75.27	697.1	10.6	40.3	41.7	0.00	0.00	
800.0	11.60	75.27	795.0	15.7	59.8	61.8	0.00	0.00	
900.0	11.60	75.27	893.0	20.8	79.2	81.9	0.00	0.00	
1,000.0	11.60	75.27	991.0	25.9	98.7	102.0	0.00	0.00	
1,100.0	11.60	75.27	1,088.9	31.1	118.1	122.1	0.00	0.00	
1,200.0	11.60	75.27	1,186.9	36.2	137.6	142.2	0.00	0.00	
1,300.0	11.60	75.27	1,284.8	41.3	157.0	162.4	0.00	0.00	
1,400.0	11.60	75.27	1,382.8	46.4	176.5	182.5	0.00	0.00	
1,500.0	11.60	75.27	1,480.7	51.5	195.9	202.6	0.00	0.00	
1,600.0	11.60	75.27	1,578.7	56.6	215.4	222.7	0.00	0.00	
1,700.0	11.60	75.27	1,676.7	61.7	234.8	242.8	0.00	0.00	
1,800.0	11.60	75.27	1,774.6	66.9	254.3	262.9	0.00	0.00	
1,900.0	11.60	75.27	1,872.6	72.0	273.7	283.0	0.00	0.00	
2,000.0	11.60	75.27	1,970.5	77.1	293.2	303.1	0.00	0.00	
2,100.0	11.60	75.27	2,068.5	82.2	312.6	323.2	0.00	0.00	
2,200.0	11.60	75.27	2,166.4	87.3	332.1	343.4	0.00	0.00	
2,300.0	11.60	75.27	2,264.4	92.4	351.5	363.5	0.00	0.00	
2,400.0	11.60	75.27	2,362.4	97.5	371.0	383.6	0.00	0.00	
2,500.0	11.60	75.27	2,460.3	102.6	390.4	403.7	0.00	0.00	
2,600.0	11.60	75.27	2,558.3	107.8	409.9	423.8	0.00	0.00	
2,700.0	11.60	75.27	2,656.2	112.9	429.3	443.9	0.00	0.00	
2,800.0	11.60	75.27	2,754.2	118.0	448.8	464.0	0.00	0.00	
2,900.0	11.60	75.27	2,852.1	123.1	468.2	484.1	0.00	0.00	
3,000.0	11.60	75.27	2,950.1	128.2	487.7	504.3	0.00	0.00	
3,100.0	11.60	75.27	3,048.1	133.3	507.1	524.4	0.00	0.00	
3,200.0	11.60	75.27	3,146.0	138.4	526.6	544.5	0.00	0.00	
3,300.0	11.60	75.27	3,244.0	143.6	546.0	564.6	0.00	0.00	
3,400.0	11.60	75.27	3,341.9	148.7	565.5	584.7	0.00	0.00	
3,500.0	11.60	75.27	3,439.9	153.8	584.9	604.8	0.00	0.00	
3,600.0	11.60	75.27	3,537.8	158.9	604.4	624.9	0.00	0.00	
3,700.0	11.60	75.27	3,635.8	164.0	623.8	645.0	0.00	0.00	
3,800.0	11.60	75.27	3,733.8	169.1	643.3	665.1	0.00	0.00	
3,900.0	11.60	75.27	3,831.7	174.2	662.7	685.3	0.00	0.00	
4,000.0	11.60	75.27	3,929.7	179.4	682.2	705.4	0.00	0.00	
4,100.0	11.60	75.27	4,027.6	184.5	701.6	725.5	0.00	0.00	
4,200.0	11.60	75.27	4,125.6	189.6	721.1	745.6	0.00	0.00	
4,300.0	11.60	75.27	4,223.5	194.7	740.5	765.7	0.00	0.00	
4,400.0	11.60	75.27	4,321.5	199.8	760.0	785.8	0.00	0.00	
4,500.0	11.60	75.27	4,419.4	204.9	779.4	805.9	0.00	0.00	
4,600.0	11.60	75.27	4,517.4	210.0	798.9	826.0	0.00	0.00	
4,700.0	11.60	75.27	4,615.4	215.1	818.3	846.1	0.00	0.00	
4,800.0	11.60	75.27	4,713.3	220.3	837.8	866.3	0.00	0.00	
4,900.0	11.60	75.27	4,811.3	225.4	857.2	886.4	0.00	0.00	
5,000.0	11.60	75.27	4,909.2	230.5	876.7	906.5	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 12B-1
Wellbore: DD
Design: Plan #1

Local Co-ordinate Reference: Well PUCKETT 12B-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	11.60	75.27	5,007.2	235.6	896.1	926.6	0.00	0.00	
5,200.0	11.60	75.27	5,105.1	240.7	915.6	946.7	0.00	0.00	
5,300.0	11.60	75.27	5,203.1	245.8	935.0	966.8	0.00	0.00	
5,400.0	11.60	75.27	5,301.1	250.9	954.5	986.9	0.00	0.00	
5,500.0	11.60	75.27	5,399.0	256.1	973.9	1,007.0	0.00	0.00	
5,600.0	11.60	75.27	5,497.0	261.2	993.4	1,027.1	0.00	0.00	
5,700.0	11.60	75.27	5,594.9	266.3	1,012.8	1,047.3	0.00	0.00	
5,800.0	11.60	75.27	5,692.9	271.4	1,032.3	1,067.4	0.00	0.00	
5,900.0	11.60	75.27	5,790.8	276.5	1,051.7	1,087.5	0.00	0.00	
6,000.0	11.60	75.27	5,888.8	281.6	1,071.2	1,107.6	0.00	0.00	
6,076.8	11.60	75.27	5,964.0	285.5	1,086.1	1,123.0	0.00	0.00	OHIOCREEK
6,100.0	11.60	75.27	5,986.8	286.7	1,090.6	1,127.7	0.00	0.00	
6,200.0	11.60	75.27	6,084.7	291.9	1,110.1	1,147.8	0.00	0.00	
6,300.0	11.60	75.27	6,182.7	297.0	1,129.5	1,167.9	0.00	0.00	
6,400.0	11.60	75.27	6,280.6	302.1	1,149.0	1,188.0	0.00	0.00	
6,500.0	11.60	75.27	6,378.6	307.2	1,168.4	1,208.2	0.00	0.00	
6,600.0	11.60	75.27	6,476.5	312.3	1,187.9	1,228.3	0.00	0.00	
6,612.7	11.60	75.27	6,489.0	313.0	1,190.4	1,230.8	0.00	0.00	WILLIAMS FORK
6,700.0	11.60	75.27	6,574.5	317.4	1,207.3	1,248.4	0.00	0.00	
6,800.0	11.60	75.27	6,672.5	322.5	1,226.8	1,268.5	0.00	0.00	
6,900.0	11.60	75.27	6,770.4	327.6	1,246.2	1,288.6	0.00	0.00	
7,000.0	11.60	75.27	6,868.4	332.8	1,265.7	1,308.7	0.00	0.00	
7,100.0	11.60	75.27	6,966.3	337.9	1,285.1	1,328.8	0.00	0.00	
7,144.5	11.60	75.27	7,009.9	340.1	1,293.8	1,337.8	0.00	0.00	Start 3° Drop
7,200.0	9.94	75.27	7,064.4	342.8	1,303.8	1,348.1	3.00	-3.00	
7,300.0	6.94	75.27	7,163.3	346.5	1,318.0	1,362.8	3.00	-3.00	
7,400.0	3.94	75.27	7,262.9	348.9	1,327.2	1,372.3	3.00	-3.00	
7,500.0	0.94	75.27	7,362.8	350.0	1,331.3	1,376.5	3.00	-3.00	
7,531.2	0.00	0.00	7,394.0	350.1	1,331.5	1,376.8	3.00	-3.00	EOD @ 0° INC - TOG
7,600.0	0.00	0.00	7,462.8	350.1	1,331.5	1,376.8	0.00	0.00	
7,700.0	0.00	0.00	7,562.8	350.1	1,331.5	1,376.8	0.00	0.00	
7,800.0	0.00	0.00	7,662.8	350.1	1,331.5	1,376.8	0.00	0.00	
7,900.0	0.00	0.00	7,762.8	350.1	1,331.5	1,376.8	0.00	0.00	
8,000.0	0.00	0.00	7,862.8	350.1	1,331.5	1,376.8	0.00	0.00	
8,100.0	0.00	0.00	7,962.8	350.1	1,331.5	1,376.8	0.00	0.00	
8,200.0	0.00	0.00	8,062.8	350.1	1,331.5	1,376.8	0.00	0.00	
8,300.0	0.00	0.00	8,162.8	350.1	1,331.5	1,376.8	0.00	0.00	
8,400.0	0.00	0.00	8,262.8	350.1	1,331.5	1,376.8	0.00	0.00	
8,500.0	0.00	0.00	8,362.8	350.1	1,331.5	1,376.8	0.00	0.00	
8,516.2	0.00	0.00	8,379.0	350.1	1,331.5	1,376.8	0.00	0.00	CAMEO
8,600.0	0.00	0.00	8,462.8	350.1	1,331.5	1,376.8	0.00	0.00	
8,700.0	0.00	0.00	8,562.8	350.1	1,331.5	1,376.8	0.00	0.00	
8,800.0	0.00	0.00	8,662.8	350.1	1,331.5	1,376.8	0.00	0.00	
8,900.0	0.00	0.00	8,762.8	350.1	1,331.5	1,376.8	0.00	0.00	
8,906.2	0.00	0.00	8,769.0	350.1	1,331.5	1,376.8	0.00	0.00	ROLLINS
9,000.0	0.00	0.00	8,862.8	350.1	1,331.5	1,376.8	0.00	0.00	
9,056.2	0.00	0.00	8,919.0	350.1	1,331.5	1,376.8	0.00	0.00	TD @ 9,056.2' MD

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 12B-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 12B-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 12B-1 TGT - plan hits target center - Point	0.00	0.00	7,394.0	350.1	1,331.5	609,632.63	1,245,021.74	39.476733	-108.174911
PUCKETT 12B-1 BHL - plan hits target center - Circle (radius 50.0)	0.00	0.00	8,919.0	350.1	1,331.5	609,632.63	1,245,021.74	39.476733	-108.174911

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
6,076.8	5,964.0	OHIOCREEK				
6,612.7	6,489.0	WILLIAMS FORK				
7,531.2	7,394.0	TOG				
8,516.2	8,379.0	CAMEO				
8,906.2	8,769.0	ROLLINS				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(usft)	(usft)	+N/-S	+E/-W		
		(usft)	(usft)		
300.0	300.0	0.0	0.0	KOP @ 300'	
686.7	684.1	9.9	37.7	EOB @ 11.6° INC	
7,144.5	7,009.9	340.1	1,293.8	Start 3° Drop	
7,531.2	7,394.0	350.1	1,331.5	EOD @ 0° INC	
9,056.2	8,919.0	350.1	1,331.5	TD @ 9,056.2' MD	

Caerus Oil & Gas (NAD 27)

Garfield County, CO

S2-T7S-R97W (Puckett Pad)

PUCKETT 12B-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 12B-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 12B-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	9,056.2	Plan #1 (DD)	ISCWSA MWD	MWD - Standard	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 12B-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 12B-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 Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
S2-T7S-R97W (Puckett Pad)						
PUCKETT 11D-1 - DD - Plan #1	200.0	200.0	15.5	14.9	24.811	CC, ES
PUCKETT 11D-1 - DD - Plan #1	500.0	497.9	27.1	25.1	13.159	SF
PUCKETT 12A-1 - DD - Plan #1	242.6	242.6	7.9	7.1	9.701	CC
PUCKETT 12A-1 - DD - Plan #1	300.0	300.0	8.1	7.0	7.508	ES
PUCKETT 12A-1 - DD - Plan #1	400.0	399.7	9.8	8.3	6.446	SF
PUCKETT 12C-1 - DD - Plan #1	370.4	370.4	7.8	6.4	5.618	CC
PUCKETT 12C-1 - DD - Plan #1	400.0	399.9	7.9	6.4	5.216	ES
PUCKETT 12C-1 - DD - Plan #1	500.0	499.8	9.7	7.8	4.936	SF
PUCKETT 12D-1 - DD - Plan #1	300.0	300.0	15.9	14.8	14.763	CC, ES
PUCKETT 12D-1 - DD - Plan #1	500.0	498.7	21.2	19.3	10.832	SF
PUCKETT 13A-1 - DD - Plan #1	233.7	233.7	24.4	23.7	31.463	CC, ES
PUCKETT 13A-1 - DD - Plan #1	1,600.0	1,582.5	189.8	179.1	17.718	SF
PUCKETT 13B-1 - DD - Plan #1	200.0	200.0	32.0	31.4	51.239	CC, ES
PUCKETT 13B-1 - DD - Plan #1	1,300.0	1,276.6	186.3	178.0	22.600	SF
PUCKETT 13C-1 - DD - Plan #1	155.6	155.6	33.5	33.1	78.773	CC
PUCKETT 13C-1 - DD - Plan #1	200.0	199.7	33.6	33.0	54.271	ES
PUCKETT 13C-1 - DD - Plan #1	1,200.0	1,173.5	195.9	188.5	26.336	SF
PUCKETT 41A-2 - DD - Plan #1	200.0	200.0	24.1	23.5	38.556	CC, ES
PUCKETT 41A-2 - DD - Plan #1	400.0	397.6	32.4	30.8	20.903	SF
PUCKETT 41B-2 - DD - Plan #1	144.4	144.4	32.3	32.0	86.234	CC, ES
PUCKETT 41B-2 - DD - Plan #1	400.0	394.8	47.4	45.8	30.096	SF
PUCKETT 41C-2 - DD - Plan #1	200.0	200.0	26.1	25.4	41.695	CC, ES
PUCKETT 41C-2 - DD - Plan #1	400.0	397.9	33.1	31.6	21.317	SF
PUCKETT 41D-2 - DD - Plan #1	155.6	155.6	33.7	33.3	79.253	CC
PUCKETT 41D-2 - DD - Plan #1	200.0	199.6	33.8	33.2	54.279	ES
PUCKETT 41D-2 - DD - Plan #1	400.0	395.1	47.4	45.8	30.023	SF
PUCKETT 42A-2 - DD - Plan #1	255.6	255.6	18.6	17.7	21.239	CC
PUCKETT 42A-2 - DD - Plan #1	300.0	299.8	18.7	17.7	17.451	ES
PUCKETT 42A-2 - DD - Plan #1	400.0	398.6	24.1	22.6	15.471	SF
PUCKETT 42B-2 - DD - Plan #1	300.0	300.0	12.8	11.8	11.957	CC, ES
PUCKETT 42B-2 - DD - Plan #1	400.0	399.4	16.5	14.9	10.496	SF
PUCKETT 42C-2 - DD - Plan #1	300.0	300.0	9.4	8.3	8.720	CC, ES
PUCKETT 42C-2 - DD - Plan #1	400.0	399.8	12.1	10.5	7.650	SF
PUCKETT 42D-2 - DD - Plan #1	300.0	300.0	12.2	11.1	11.330	CC, ES
PUCKETT 42D-2 - DD - Plan #1	400.0	399.4	15.3	13.8	9.883	SF
PUCKETT 43A-2 - DD - Plan #1	255.6	255.6	18.4	17.5	20.980	CC
PUCKETT 43A-2 - DD - Plan #1	300.0	299.8	18.5	17.4	17.313	ES
PUCKETT 43A-2 - DD - Plan #1	400.0	398.6	23.2	21.7	15.283	SF
PUCKETT 43B-2 - DD - Plan #1	200.0	200.0	26.2	25.6	41.984	CC, ES
PUCKETT 43B-2 - DD - Plan #1	400.0	397.3	34.2	32.7	22.552	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 12B-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 12B-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-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	-23.61	14.2	-6.2	15.5					
100.0	100.0	100.0	100.0	0.1	0.1	-23.61	14.2	-6.2	15.5	15.3	0.18	88.429		
200.0	200.0	200.0	200.0	0.3	0.3	-23.61	14.2	-6.2	15.5	14.9	0.62	24.811	CC, ES	
300.0	300.0	299.7	299.6	0.5	0.5	-14.99	15.9	-4.3	16.5	15.4	1.07	15.368		
400.0	400.0	399.0	398.6	0.8	0.8	-77.90	21.1	1.5	20.5	18.9	1.54	13.273		
500.0	499.6	497.9	496.7	1.0	1.1	-72.60	29.6	11.1	27.1	25.1	2.06	13.159	SF	
600.0	598.8	596.4	593.5	1.3	1.4	-71.50	41.4	24.4	35.9	33.2	2.66	13.493		
700.0	697.1	694.5	689.0	1.6	1.8	-72.36	56.5	41.4	46.6	43.2	3.37	13.844		
800.0	795.0	793.9	785.2	2.0	2.3	-73.53	73.0	59.9	58.1	53.9	4.14	14.037		
900.0	893.0	893.2	881.4	2.4	2.8	-74.31	89.4	78.4	69.6	64.6	4.95	14.070		
1,000.0	991.0	992.5	977.6	2.8	3.3	-74.87	105.9	97.0	81.1	75.3	5.78	14.042		
1,100.0	1,088.9	1,091.9	1,073.8	3.2	3.8	-75.29	122.4	115.5	92.6	86.0	6.62	13.994		
1,200.0	1,186.9	1,191.2	1,169.9	3.7	4.3	-75.62	138.9	134.1	104.2	96.7	7.47	13.940		
1,300.0	1,284.8	1,290.5	1,266.1	4.1	4.8	-75.88	155.4	152.6	115.7	107.4	8.33	13.887		
1,400.0	1,382.8	1,389.8	1,362.3	4.5	5.3	-76.10	171.9	171.2	127.2	118.0	9.19	13.838		
1,500.0	1,480.7	1,489.2	1,458.5	5.0	5.8	-76.28	188.4	189.7	138.8	128.7	10.06	13.794		
1,600.0	1,578.7	1,588.5	1,554.7	5.4	6.3	-76.43	204.8	208.3	150.3	139.4	10.93	13.754		
1,700.0	1,676.7	1,687.8	1,650.8	5.8	6.8	-76.56	221.3	226.8	161.9	150.1	11.80	13.718		
1,800.0	1,774.6	1,787.2	1,747.0	6.3	7.3	-76.67	237.8	245.4	173.4	160.7	12.67	13.685		
1,900.0	1,872.6	1,886.5	1,843.2	6.7	7.9	-76.77	254.3	263.9	184.9	171.4	13.54	13.656		
2,000.0	1,970.5	1,985.8	1,939.4	7.1	8.4	-76.86	270.8	282.5	196.5	182.1	14.42	13.630		

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 12B-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 12B-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 12A-1 - 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)	+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	-23.09	7.3	-3.1	7.9					
100.0	100.0	100.0	100.0	0.1	0.1	-23.09	7.3	-3.1	7.9	7.7	0.18	45.168		
200.0	200.0	200.0	200.0	0.3	0.3	-23.09	7.3	-3.1	7.9	7.3	0.62	12.673		
242.6	242.6	242.6	242.6	0.4	0.4	-23.09	7.3	-3.1	7.9	7.1	0.82	9.701 CC		
300.0	300.0	300.0	299.9	0.5	0.5	-18.49	7.6	-2.6	8.1	7.0	1.07	7.508 ES		
400.0	400.0	399.7	399.6	0.8	0.8	-79.19	10.4	1.8	9.8	8.3	1.52	6.446 SF		
500.0	499.6	499.3	498.6	1.0	1.0	-72.82	16.0	10.6	13.4	11.4	2.02	6.630		
600.0	598.8	598.7	596.8	1.3	1.3	-71.61	24.3	23.7	18.5	15.9	2.60	7.099		
700.0	697.1	697.9	693.8	1.6	1.7	-72.53	35.3	41.0	25.0	21.7	3.30	7.575		
800.0	795.0	797.6	790.8	2.0	2.1	-72.62	47.8	60.6	32.4	28.3	4.07	7.965		
900.0	893.0	897.3	887.7	2.4	2.6	-72.68	60.3	80.2	39.8	34.9	4.87	8.178		
1,000.0	991.0	997.0	984.7	2.8	3.1	-72.71	72.7	99.8	47.2	41.5	5.69	8.301		
1,100.0	1,088.9	1,096.8	1,081.7	3.2	3.5	-72.74	85.2	119.4	54.7	48.1	6.52	8.378		
1,200.0	1,186.9	1,196.5	1,178.7	3.7	4.0	-72.76	97.7	139.0	62.1	54.7	7.37	8.427		
1,300.0	1,284.8	1,296.2	1,275.7	4.1	4.5	-72.78	110.2	158.6	69.5	61.3	8.21	8.461		
1,400.0	1,382.8	1,395.9	1,372.6	4.5	5.0	-72.79	122.6	178.2	76.9	67.9	9.07	8.485		
1,500.0	1,480.7	1,495.7	1,469.6	5.0	5.5	-72.80	135.1	197.8	84.3	74.4	9.92	8.502		
1,600.0	1,578.7	1,595.4	1,566.6	5.4	6.0	-72.81	147.6	217.4	91.8	81.0	10.78	8.515		
1,700.0	1,676.7	1,695.1	1,663.6	5.8	6.4	-72.82	160.0	237.0	99.2	87.6	11.64	8.525		
1,800.0	1,774.6	1,794.8	1,760.6	6.3	6.9	-72.83	172.5	256.6	106.6	94.1	12.49	8.532		
1,900.0	1,872.6	1,894.6	1,857.5	6.7	7.4	-72.83	185.0	276.2	114.0	100.7	13.36	8.538		
2,000.0	1,970.5	1,994.3	1,954.5	7.1	7.9	-72.84	197.4	295.9	121.5	107.2	14.22	8.543		
2,100.0	2,068.5	2,094.0	2,051.5	7.6	8.4	-72.84	209.9	315.5	128.9	113.8	15.08	8.547		
2,200.0	2,166.4	2,193.7	2,148.5	8.0	8.9	-72.85	222.4	335.1	136.3	120.4	15.94	8.550		
2,300.0	2,264.4	2,293.5	2,245.5	8.5	9.4	-72.85	234.8	354.7	143.7	126.9	16.80	8.553		
2,400.0	2,362.4	2,393.2	2,342.4	8.9	9.8	-72.85	247.3	374.3	151.1	133.5	17.67	8.555		
2,500.0	2,460.3	2,492.9	2,439.4	9.3	10.3	-72.86	259.8	393.9	158.6	140.0	18.53	8.557		
2,600.0	2,558.3	2,592.6	2,536.4	9.8	10.8	-72.86	272.3	413.5	166.0	146.6	19.39	8.559		
2,700.0	2,656.2	2,692.4	2,633.4	10.2	11.3	-72.86	284.7	433.1	173.4	153.1	20.26	8.560		
2,800.0	2,754.2	2,792.1	2,730.4	10.6	11.8	-72.87	297.2	452.7	180.8	159.7	21.12	8.561		
2,900.0	2,852.1	2,891.8	2,827.3	11.1	12.3	-72.87	309.7	472.3	188.2	166.3	21.98	8.563		
3,000.0	2,950.1	2,991.5	2,924.3	11.5	12.8	-72.87	322.1	491.9	195.7	172.8	22.85	8.564		

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 12B-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 12B-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 12C-1 - 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)	+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	150.27	-6.9	4.0	8.0					
100.0	100.0	100.0	100.0	0.1	0.1	150.27	-6.9	4.0	8.0	7.8	0.18	45.457		
200.0	200.0	200.0	200.0	0.3	0.3	150.27	-6.9	4.0	8.0	7.3	0.62	12.754		
300.0	300.0	300.0	300.0	0.5	0.5	150.27	-6.9	4.0	8.0	6.9	1.07	7.418		
370.4	370.4	370.4	370.4	0.7	0.7	83.58	-6.9	4.1	7.8	6.4	1.38	5.618 CC		
400.0	400.0	399.9	399.9	0.8	0.8	89.46	-6.9	4.6	7.9	6.4	1.51	5.216 ES		
500.0	499.6	499.8	499.6	1.0	1.0	106.40	-7.1	9.8	9.7	7.8	1.97	4.936 SF		
600.0	598.8	599.8	599.0	1.3	1.2	115.18	-7.4	20.3	13.6	11.0	2.54	5.353		
700.0	697.1	699.8	697.8	1.6	1.5	118.20	-7.8	35.9	18.9	15.7	3.19	5.930		
800.0	795.0	799.7	795.8	2.0	1.9	115.27	-8.3	55.2	24.5	20.6	3.90	6.270		
900.0	893.0	899.5	893.7	2.4	2.3	113.07	-8.9	74.8	30.0	25.4	4.67	6.425		
1,000.0	991.0	999.3	991.6	2.8	2.7	111.56	-9.4	94.3	35.6	30.1	5.48	6.502		
1,100.0	1,088.9	1,099.2	1,089.5	3.2	3.1	110.47	-9.9	113.8	41.2	34.9	6.30	6.543		
1,200.0	1,186.9	1,199.0	1,187.5	3.7	3.5	109.63	-10.5	133.4	46.8	39.7	7.13	6.565		
1,300.0	1,284.8	1,298.9	1,285.4	4.1	3.9	108.97	-11.0	152.9	52.4	44.5	7.97	6.577		
1,400.0	1,382.8	1,398.7	1,383.3	4.5	4.3	108.44	-11.5	172.4	58.1	49.3	8.82	6.584		
1,500.0	1,480.7	1,498.6	1,481.2	5.0	4.8	108.01	-12.1	192.0	63.7	54.0	9.67	6.587		
1,600.0	1,578.7	1,598.4	1,579.1	5.4	5.2	107.64	-12.6	211.5	69.3	58.8	10.52	6.588		
1,700.0	1,676.7	1,698.2	1,677.0	5.8	5.6	107.33	-13.1	231.0	75.0	63.6	11.38	6.588		
1,800.0	1,774.6	1,798.1	1,774.9	6.3	6.0	107.06	-13.7	250.6	80.6	68.4	12.24	6.587		
1,900.0	1,872.6	1,897.9	1,872.8	6.7	6.5	106.83	-14.2	270.1	86.2	73.2	13.10	6.586		
2,000.0	1,970.5	1,997.8	1,970.7	7.1	6.9	106.63	-14.7	289.6	91.9	77.9	13.96	6.584		
2,100.0	2,068.5	2,097.6	2,068.6	7.6	7.3	106.45	-15.3	309.2	97.5	82.7	14.82	6.583		
2,200.0	2,166.4	2,197.4	2,166.6	8.0	7.8	106.29	-15.8	328.7	103.2	87.5	15.68	6.581		
2,300.0	2,264.4	2,297.3	2,264.5	8.5	8.2	106.14	-16.3	348.2	108.8	92.3	16.54	6.580		
2,400.0	2,362.4	2,397.1	2,362.4	8.9	8.6	106.02	-16.9	367.8	114.5	97.1	17.40	6.578		
2,500.0	2,460.3	2,497.0	2,460.3	9.3	9.0	105.90	-17.4	387.3	120.1	101.8	18.26	6.577		
2,600.0	2,558.3	2,596.8	2,558.2	9.8	9.5	105.79	-17.9	406.8	125.7	106.6	19.12	6.575		
2,700.0	2,656.2	2,696.6	2,656.1	10.2	9.9	105.69	-18.5	426.4	131.4	111.4	19.99	6.574		
2,800.0	2,754.2	2,796.5	2,754.0	10.6	10.3	105.60	-19.0	445.9	137.0	116.2	20.85	6.573		
2,900.0	2,852.1	2,896.3	2,851.9	11.1	10.8	105.52	-19.6	465.4	142.7	121.0	21.71	6.571		
3,000.0	2,950.1	2,996.2	2,949.8	11.5	11.2	105.45	-20.1	485.0	148.3	125.8	22.58	6.570		
3,100.0	3,048.1	3,096.0	3,047.7	12.0	11.6	105.37	-20.6	504.5	154.0	130.5	23.44	6.569		
3,200.0	3,146.0	3,195.8	3,145.6	12.4	12.1	105.31	-21.2	524.0	159.6	135.3	24.30	6.568		
3,300.0	3,244.0	3,295.7	3,243.6	12.8	12.5	105.25	-21.7	543.6	165.3	140.1	25.17	6.567		
3,400.0	3,341.9	3,395.5	3,341.5	13.3	12.9	105.19	-22.2	563.1	170.9	144.9	26.03	6.566		
3,500.0	3,439.9	3,495.4	3,439.4	13.7	13.4	105.14	-22.8	582.6	176.6	149.7	26.89	6.566		
3,600.0	3,537.8	3,595.2	3,537.3	14.2	13.8	105.09	-23.3	602.2	182.2	154.5	27.75	6.565		
3,700.0	3,635.8	3,695.0	3,635.2	14.6	14.2	105.04	-23.8	621.7	187.9	159.2	28.62	6.564		
3,800.0	3,733.8	3,794.9	3,733.1	15.0	14.7	105.00	-24.4	641.2	193.5	164.0	29.48	6.564		
3,900.0	3,831.7	3,894.7	3,831.0	15.5	15.1	104.95	-24.9	660.8	199.1	168.8	30.34	6.563		

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 12B-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 12B-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 12D-1 - 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)	+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	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		
300.0	300.0	300.0	300.0	0.5	0.5	153.58	-14.2	7.1	15.9	14.8	1.07	14.763	CC, ES	
400.0	400.0	399.4	399.4	0.8	0.7	80.64	-15.0	9.5	17.2	15.7	1.50	11.412		
500.0	499.6	498.7	498.3	1.0	1.0	85.83	-17.4	16.9	21.2	19.3	1.96	10.832	SF	
600.0	598.8	597.7	596.5	1.3	1.2	91.04	-21.5	29.0	28.2	25.7	2.51	11.260		
700.0	697.1	696.5	693.7	1.6	1.6	95.13	-27.0	45.9	38.2	35.0	3.19	11.975		
800.0	795.0	795.9	791.1	2.0	2.0	98.24	-33.1	64.4	49.2	45.2	3.95	12.457		
900.0	893.0	895.2	888.6	2.4	2.4	100.21	-39.2	82.8	60.3	55.6	4.74	12.713		
1,000.0	991.0	994.6	986.0	2.8	2.8	101.57	-45.3	101.3	71.4	65.9	5.56	12.861		
1,100.0	1,088.9	1,094.0	1,083.5	3.2	3.2	102.56	-51.4	119.8	82.6	76.2	6.38	12.952		
1,200.0	1,186.9	1,193.3	1,180.9	3.7	3.6	103.31	-57.5	138.3	93.8	86.6	7.21	13.012		
1,300.0	1,284.8	1,292.7	1,278.3	4.1	4.0	103.90	-63.6	156.7	105.0	97.0	8.05	13.052		
1,400.0	1,382.8	1,392.1	1,375.8	4.5	4.5	104.38	-69.6	175.2	116.3	107.4	8.89	13.081		
1,500.0	1,480.7	1,491.4	1,473.2	5.0	4.9	104.78	-75.7	193.7	127.5	117.8	9.73	13.102		
1,600.0	1,578.7	1,590.8	1,570.7	5.4	5.3	105.11	-81.8	212.1	138.7	128.1	10.57	13.118		
1,700.0	1,676.7	1,690.1	1,668.1	5.8	5.7	105.39	-87.9	230.6	150.0	138.5	11.42	13.130		
1,800.0	1,774.6	1,789.5	1,765.5	6.3	6.2	105.63	-94.0	249.1	161.2	148.9	12.27	13.140		
1,900.0	1,872.6	1,888.9	1,863.0	6.7	6.6	105.84	-100.1	267.6	172.4	159.3	13.12	13.148		
2,000.0	1,970.5	1,988.2	1,960.4	7.1	7.0	106.03	-106.2	286.0	183.7	169.7	13.96	13.154		
2,100.0	2,068.5	2,087.6	2,057.9	7.6	7.5	106.19	-112.3	304.5	194.9	180.1	14.81	13.160		

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 12B-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 12B-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 13A-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	155.42	-22.2	10.2	24.4					
100.0	100.0	100.0	100.0	0.1	0.1	155.42	-22.2	10.2	24.4	24.3	0.18	139.358		
200.0	200.0	200.0	200.0	0.3	0.3	155.42	-22.2	10.2	24.4	23.8	0.62	39.100		
233.7	233.7	233.7	233.7	0.4	0.4	155.42	-22.2	10.2	24.4	23.7	0.78	31.463	CC, ES	
300.0	300.0	299.5	299.5	0.5	0.5	154.50	-22.5	10.7	24.9	23.9	1.07	23.411		
400.0	400.0	398.3	398.2	0.8	0.7	77.94	-24.8	15.3	28.6	27.1	1.50	19.077		
500.0	499.6	496.8	496.1	1.0	1.0	80.19	-29.4	24.4	35.3	33.3	1.97	17.868		
600.0	598.8	594.7	592.8	1.3	1.3	83.88	-36.2	37.9	45.2	42.7	2.53	17.848		
700.0	697.1	692.4	688.5	1.6	1.7	87.73	-45.1	55.6	58.4	55.2	3.22	18.150		
800.0	795.0	791.3	785.1	2.0	2.1	91.17	-54.7	74.6	72.7	68.7	3.98	18.245		
900.0	893.0	890.2	881.7	2.4	2.5	93.46	-64.3	93.7	87.1	82.3	4.79	18.205		
1,000.0	991.0	989.1	978.2	2.8	3.0	95.11	-73.9	112.8	101.7	96.1	5.61	18.124		
1,100.0	1,088.9	1,088.0	1,074.8	3.2	3.4	96.34	-83.5	131.8	116.3	109.8	6.45	18.038		
1,200.0	1,186.9	1,186.9	1,171.4	3.7	3.9	97.30	-93.2	150.9	130.9	123.6	7.29	17.957		
1,300.0	1,284.8	1,285.8	1,267.9	4.1	4.4	98.06	-102.8	170.0	145.6	137.5	8.14	17.885		
1,400.0	1,382.8	1,384.7	1,364.5	4.5	4.8	98.68	-112.4	189.1	160.3	151.3	9.00	17.822		
1,500.0	1,480.7	1,483.6	1,461.1	5.0	5.3	99.20	-122.0	208.1	175.0	165.2	9.85	17.767		
1,600.0	1,578.7	1,582.5	1,557.6	5.4	5.7	99.64	-131.6	227.2	189.8	179.1	10.71	17.718	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 12B-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 12B-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-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	155.52	-29.1	13.3	32.0					
100.0	100.0	100.0	100.0	0.1	0.1	155.52	-29.1	13.3	32.0	31.8	0.18	182.622		
200.0	200.0	200.0	200.0	0.3	0.3	155.52	-29.1	13.3	32.0	31.4	0.62	51.239 CC, ES		
300.0	300.0	298.6	298.5	0.5	0.5	153.09	-30.4	15.5	34.2	33.1	1.06	32.214		
400.0	400.0	396.7	396.4	0.8	0.8	75.44	-34.3	22.0	40.2	38.7	1.51	26.590		
500.0	499.6	494.3	493.2	1.0	1.0	76.52	-40.7	32.7	49.3	47.3	2.00	24.656		
600.0	598.8	591.2	588.4	1.3	1.4	79.28	-49.6	47.6	61.7	59.1	2.57	24.033		
700.0	697.1	687.0	681.7	1.6	1.8	82.51	-60.8	66.3	77.5	74.2	3.25	23.832		
800.0	795.0	785.1	776.6	2.0	2.3	85.07	-73.6	87.8	95.4	91.4	4.03	23.687		
900.0	893.0	883.4	871.6	2.4	2.8	86.82	-86.4	109.4	113.5	108.6	4.84	23.466		
1,000.0	991.0	981.7	966.7	2.8	3.3	88.09	-99.3	131.0	131.6	125.9	5.67	23.216		
1,100.0	1,088.9	1,080.0	1,061.7	3.2	3.8	89.06	-112.2	152.6	149.8	143.3	6.52	22.983		
1,200.0	1,186.9	1,178.3	1,156.8	3.7	4.4	89.81	-125.0	174.1	168.0	160.6	7.38	22.778		
1,300.0	1,284.8	1,276.6	1,251.8	4.1	4.9	90.41	-137.9	195.7	186.3	178.0	8.24	22.600 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 12B-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 12B-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	171.76	-33.1	4.8	33.5					
100.0	100.0	100.0	100.0	0.1	0.1	171.76	-33.1	4.8	33.5	33.3	0.18	191.028		
155.6	155.6	155.6	155.6	0.2	0.2	171.76	-33.1	4.8	33.5	33.1	0.43	78.773 CC		
200.0	200.0	199.7	199.7	0.3	0.3	171.58	-33.2	4.9	33.6	33.0	0.62	54.271 ES		
300.0	300.0	298.2	298.1	0.5	0.5	167.54	-35.7	7.9	36.6	35.5	1.06	34.611		
400.0	400.0	396.3	395.8	0.8	0.8	88.23	-41.2	14.7	43.8	42.3	1.52	28.806		
500.0	499.6	493.5	492.1	1.0	1.1	87.77	-49.9	25.3	55.2	53.2	2.03	27.234		
600.0	598.8	589.7	586.5	1.3	1.4	89.16	-61.5	39.5	70.6	68.0	2.62	27.009		
700.0	697.1	685.0	679.0	1.6	1.9	91.25	-75.9	57.2	90.0	86.7	3.32	27.102		
800.0	795.0	782.7	773.4	2.0	2.4	93.37	-91.9	76.7	111.1	107.0	4.10	27.077		
900.0	893.0	880.4	867.8	2.4	2.9	94.81	-107.8	96.2	132.2	127.3	4.91	26.919		
1,000.0	991.0	978.1	962.1	2.8	3.4	95.86	-123.8	115.8	153.4	147.7	5.74	26.717		
1,100.0	1,088.9	1,075.8	1,056.5	3.2	3.9	96.65	-139.7	135.3	174.6	168.0	6.59	26.516		
1,200.0	1,186.9	1,173.5	1,150.9	3.7	4.5	97.27	-155.6	154.8	195.9	188.5	7.44	26.336 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 12B-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 12B-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)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)					
0.0	0.0	0.0	0.0	0.0	0.0	-22.75	22.2	-9.3	24.1						
100.0	100.0	100.0	100.0	0.1	0.1	-22.75	22.2	-9.3	24.1	23.9	0.18	137.419			
200.0	200.0	200.0	200.0	0.3	0.3	-22.75	22.2	-9.3	24.1	23.5	0.62	38.556 CC, ES			
300.0	300.0	299.0	298.9	0.5	0.5	-18.91	24.6	-8.4	26.1	25.0	1.07	24.288			
400.0	400.0	397.6	397.2	0.8	0.8	-90.03	31.8	-5.8	32.4	30.8	1.55	20.903 SF			
500.0	499.6	495.1	494.0	1.0	1.0	-92.98	43.4	-3.5	43.4	41.3	2.04	21.222			
600.0	598.8	590.8	588.5	1.3	1.4	-100.15	59.0	-3.7	60.1	57.5	2.61	23.060			
700.0	697.1	684.0	679.7	1.6	1.7	-107.21	78.0	-6.3	83.8	80.5	3.26	25.694			
800.0	795.0	774.5	767.3	2.0	2.1	-112.07	100.1	-10.9	113.5	109.6	3.94	28.826			
900.0	893.0	864.9	853.8	2.4	2.6	-114.67	125.4	-17.6	147.8	143.1	4.64	31.869			
1,000.0	991.0	958.4	943.0	2.8	3.1	-116.30	152.2	-24.8	183.0	177.7	5.32	34.366			

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 12B-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 12B-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	-24.21	29.5	-13.3	32.3					
100.0	100.0	100.0	100.0	0.1	0.1	-24.21	29.5	-13.3	32.3	32.2	0.18	184.515		
144.4	144.4	144.4	144.4	0.2	0.2	-24.21	29.5	-13.3	32.3	32.0	0.38	86.234	CC, ES	
200.0	200.0	199.3	199.3	0.3	0.3	-24.11	29.9	-13.4	32.8	32.1	0.62	52.571		
300.0	300.0	297.5	297.3	0.5	0.5	-23.09	34.3	-14.6	37.3	36.3	1.07	34.788		
400.0	400.0	394.8	394.2	0.8	0.8	-99.66	43.4	-17.2	47.4	45.8	1.57	30.096	SF	
500.0	499.6	490.7	489.0	1.0	1.1	-104.02	57.0	-21.0	63.5	61.4	2.09	30.397		
600.0	598.8	584.3	580.8	1.3	1.4	-108.58	74.7	-26.0	86.1	83.5	2.66	32.332		
700.0	697.1	675.8	669.6	1.6	1.9	-112.42	96.1	-32.0	115.3	112.0	3.31	34.813		
800.0	795.0	770.3	760.8	2.0	2.3	-115.69	119.8	-38.7	147.3	143.4	3.96	37.238		
900.0	893.0	864.8	852.0	2.4	2.8	-117.79	143.5	-45.4	179.6	175.0	4.61	38.929		

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 12B-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 12B-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				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	-45.65	18.2	-18.6	26.1					
100.0	100.0	100.0	100.0	0.1	0.1	-45.65	18.2	-18.6	26.1	25.9	0.18	148.606		
200.0	200.0	200.0	200.0	0.3	0.3	-45.65	18.2	-18.6	26.1	25.4	0.62	41.695 CC, ES		
300.0	300.0	299.3	299.2	0.5	0.5	-43.47	19.7	-18.6	27.1	26.0	1.07	25.240		
400.0	400.0	397.9	397.7	0.8	0.8	-114.89	26.0	-18.6	33.1	31.6	1.55	21.317 SF		
500.0	499.6	495.2	494.3	1.0	1.0	-115.25	37.0	-19.5	45.6	43.6	2.08	21.987		
600.0	598.8	590.4	588.3	1.3	1.3	-119.01	51.4	-23.2	65.5	62.8	2.66	24.636		
700.0	697.1	684.3	680.4	1.6	1.7	-123.13	68.9	-29.6	92.6	89.2	3.31	27.985		
800.0	795.0	779.7	773.7	2.0	2.1	-126.48	87.2	-36.7	121.9	118.0	3.90	31.239		
900.0	893.0	875.1	867.1	2.4	2.5	-128.53	105.6	-43.7	151.6	147.0	4.51	33.586		
1,000.0	991.0	970.5	960.4	2.8	2.9	-129.91	123.9	-50.8	181.3	176.2	5.14	35.302		

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 12B-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 12B-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)	Offset Wellbore Centre +E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	-40.81	25.5	-22.0	33.7							
100.0	100.0	100.0	100.0	0.1	0.1	-40.81	25.5	-22.0	33.7	33.5	0.18	192.153				
155.6	155.6	155.6	155.6	0.2	0.2	-40.81	25.5	-22.0	33.7	33.3	0.43	79.253 CC				
200.0	200.0	199.6	199.6	0.3	0.3	-40.75	25.6	-22.1	33.8	33.2	0.62	54.279 ES				
300.0	300.0	297.7	297.6	0.5	0.5	-39.33	29.0	-23.8	37.6	36.5	1.07	35.104				
400.0	400.0	395.1	394.6	0.8	0.8	-114.81	36.8	-27.7	47.4	45.8	1.58	30.023 SF				
500.0	499.6	491.2	489.8	1.0	1.1	-117.81	48.8	-33.7	64.4	62.3	2.12	30.324				
600.0	598.8	588.7	586.0	1.3	1.4	-121.96	62.7	-40.6	86.0	83.3	2.68	32.035				
700.0	697.1	685.2	681.3	1.6	1.7	-126.48	76.5	-47.5	110.9	107.6	3.29	33.740				
800.0	795.0	781.2	776.1	2.0	2.1	-130.33	90.1	-54.3	137.6	133.7	3.86	35.674				
900.0	893.0	877.3	870.9	2.4	2.4	-132.93	103.8	-61.2	164.6	160.2	4.43	37.126				
1,000.0	991.0	973.3	965.7	2.8	2.8	-134.80	117.5	-68.0	191.9	186.8	5.02	38.236				

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 12B-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 12B-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 42A-2 - 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	-56.70	10.2	-15.5	18.6					
100.0	100.0	100.0	100.0	0.1	0.1	-56.70	10.2	-15.5	18.6	18.4	0.18	105.955		
200.0	200.0	200.0	200.0	0.3	0.3	-56.70	10.2	-15.5	18.6	18.0	0.62	29.728		
255.6	255.6	255.6	255.6	0.4	0.4	-56.70	10.2	-15.5	18.6	17.7	0.87	21.239 CC		
300.0	300.0	299.8	299.8	0.5	0.5	-56.53	10.3	-15.6	18.7	17.7	1.07	17.451 ES		
400.0	400.0	398.6	398.5	0.8	0.8	-133.12	13.4	-17.9	24.1	22.6	1.56	15.471 SF		
500.0	499.6	496.2	495.7	1.0	1.0	-136.45	20.5	-23.1	37.9	35.8	2.12	17.928		
600.0	598.8	593.7	592.5	1.3	1.3	-139.79	30.1	-30.2	58.5	55.8	2.71	21.574		
700.0	697.1	690.5	688.5	1.6	1.6	-143.45	39.6	-37.2	83.2	79.9	3.30	25.204		
800.0	795.0	786.8	784.1	2.0	1.8	-146.25	49.2	-44.2	109.8	106.0	3.80	28.916		
900.0	893.0	883.1	879.7	2.4	2.1	-147.96	58.7	-51.2	136.4	132.1	4.30	31.714		
1,000.0	991.0	979.4	975.3	2.8	2.4	-149.11	68.2	-58.2	163.2	158.4	4.82	33.862		
1,100.0	1,088.9	1,075.7	1,070.9	3.2	2.7	-149.94	77.7	-65.2	190.0	184.7	5.35	35.547		

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 12B-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 12B-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-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	-75.22	3.3	-12.4	12.8					
100.0	100.0	100.0	100.0	0.1	0.1	-75.22	3.3	-12.4	12.8	12.7	0.18	73.273		
200.0	200.0	200.0	200.0	0.3	0.3	-75.22	3.3	-12.4	12.8	12.2	0.62	20.559		
300.0	300.0	300.0	300.0	0.5	0.5	-75.22	3.3	-12.4	12.8	11.8	1.07	11.957	CC, ES	
400.0	400.0	399.4	399.4	0.8	0.8	-153.09	4.1	-13.6	16.5	14.9	1.57	10.496	SF	
500.0	499.6	497.5	497.2	1.0	1.0	-154.80	7.8	-18.7	29.4	27.3	2.15	13.695		
600.0	598.8	595.5	594.8	1.3	1.2	-156.54	13.0	-25.9	49.3	46.6	2.75	17.953		
700.0	697.1	692.3	691.3	1.6	1.5	-158.72	18.1	-33.0	73.9	70.6	3.32	22.254		
800.0	795.0	788.7	787.3	2.0	1.7	-160.34	23.1	-40.1	100.4	96.6	3.76	26.705		
900.0	893.0	885.1	883.3	2.4	2.0	-161.28	28.2	-47.1	126.9	122.7	4.21	30.118		
1,000.0	991.0	981.5	979.3	2.8	2.3	-161.90	33.3	-54.2	153.5	148.8	4.68	32.780		
1,100.0	1,088.9	1,077.9	1,075.3	3.2	2.5	-162.33	38.4	-61.2	180.0	174.9	5.16	34.897		

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 12B-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 12B-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	-115.32	-4.0	-8.5	9.4						
100.0	100.0	100.0	100.0	0.1	0.1	-115.32	-4.0	-8.5	9.4	9.2	0.18	53.438			
200.0	200.0	200.0	200.0	0.3	0.3	-115.32	-4.0	-8.5	9.4	8.7	0.62	14.993			
300.0	300.0	300.0	300.0	0.5	0.5	-115.32	-4.0	-8.5	9.4	8.3	1.07	8.720	CC, ES		
400.0	400.0	399.8	399.8	0.8	0.8	172.06	-4.0	-8.6	12.1	10.5	1.58	7.650	SF		
500.0	499.6	498.3	498.2	1.0	1.0	179.01	-3.7	-12.4	23.5	21.3	2.16	10.887			
600.0	598.8	596.0	595.7	1.3	1.2	-177.31	-3.1	-19.6	43.4	40.6	2.77	15.665			
700.0	697.1	692.8	692.2	1.6	1.4	-176.20	-2.5	-26.7	68.5	65.1	3.34	20.521			
800.0	795.0	789.1	788.2	2.0	1.7	-175.79	-1.9	-33.8	95.5	91.8	3.74	25.503			
900.0	893.0	885.4	884.2	2.4	1.9	-175.57	-1.3	-40.9	122.5	118.3	4.17	29.366			
1,000.0	991.0	981.7	980.3	2.8	2.2	-175.42	-0.8	-48.1	149.5	144.9	4.61	32.409			
1,100.0	1,088.9	1,077.9	1,076.3	3.2	2.4	-175.32	-0.2	-55.2	176.5	171.5	5.07	34.849			

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 12B-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 12B-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	-153.86	-10.9	-5.4	12.2						
100.0	100.0	100.0	100.0	0.1	0.1	-153.86	-10.9	-5.4	12.2	12.0	0.18	69.430			
200.0	200.0	200.0	200.0	0.3	0.3	-153.86	-10.9	-5.4	12.2	11.5	0.62	19.480			
300.0	300.0	300.0	300.0	0.5	0.5	-153.86	-10.9	-5.4	12.2	11.1	1.07	11.330	CC, ES		
400.0	400.0	399.4	399.4	0.8	0.7	141.35	-11.6	-6.6	15.3	13.8	1.55	9.883	SF		
500.0	499.6	497.5	497.3	1.0	1.0	156.59	-14.6	-12.2	28.3	26.2	2.15	13.156			
600.0	598.8	595.2	594.7	1.3	1.2	164.09	-18.6	-19.4	48.9	46.2	2.75	17.762			
700.0	697.1	691.7	690.8	1.6	1.4	167.95	-22.5	-26.5	74.8	71.5	3.34	22.430			
800.0	795.0	787.7	786.4	2.0	1.7	170.11	-26.3	-33.6	102.7	99.0	3.76	27.356			
900.0	893.0	883.7	882.1	2.4	1.9	171.35	-30.2	-40.6	130.7	126.5	4.19	31.189			
1,000.0	991.0	979.6	977.7	2.8	2.2	172.15	-34.1	-47.7	158.8	154.1	4.64	34.211			
1,100.0	1,088.9	1,075.6	1,073.3	3.2	2.4	172.71	-37.9	-54.8	186.8	181.7	5.10	36.632			

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 12B-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 12B-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-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		
255.6	255.6	255.6	255.6	0.4	0.4	-172.93	-18.2	-2.3	18.4	17.5	0.87	20.980 CC		
300.0	300.0	299.8	299.8	0.5	0.5	-172.66	-18.3	-2.4	18.5	17.4	1.07	17.313 ES		
400.0	400.0	398.6	398.6	0.8	0.7	123.17	-21.3	-4.9	23.2	21.7	1.52	15.283 SF		
500.0	499.6	495.9	495.4	1.0	1.0	138.17	-27.9	-10.5	37.1	35.0	2.11	17.642		
600.0	598.8	593.2	592.1	1.3	1.2	147.59	-36.3	-17.7	58.9	56.2	2.73	21.605		
700.0	697.1	689.2	687.4	1.6	1.5	153.38	-44.6	-24.8	86.0	82.6	3.33	25.777		
800.0	795.0	784.6	782.3	2.0	1.8	156.98	-52.9	-31.9	115.2	111.4	3.80	30.294		
900.0	893.0	880.1	877.1	2.4	2.1	159.13	-61.2	-38.9	144.7	140.4	4.28	33.821		
1,000.0	991.0	975.5	971.9	2.8	2.4	160.55	-69.4	-46.0	174.3	169.6	4.76	36.596		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 12B-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 12B-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	178.15	-26.2	0.8	26.2									
100.0	100.0	100.0	100.0	0.1	0.1	178.15	-26.2	0.8	26.2	26.1	0.18	149.635						
200.0	200.0	200.0	200.0	0.3	0.3	178.15	-26.2	0.8	26.2	25.6	0.62	41.984	CC, ES					
300.0	300.0	299.1	299.1	0.5	0.5	179.70	-27.5	0.1	27.5	26.4	1.06	26.054						
400.0	400.0	397.3	397.1	0.8	0.7	113.71	-33.0	-2.9	34.2	32.7	1.52	22.552	SF					
500.0	499.6	493.6	492.8	1.0	1.0	126.08	-42.7	-8.4	49.4	47.4	2.08	23.791						
600.0	598.8	589.7	587.7	1.3	1.3	135.32	-55.3	-15.4	73.0	70.3	2.71	26.913						
700.0	697.1	684.9	681.8	1.6	1.6	141.72	-67.9	-22.5	101.7	98.4	3.34	30.463						
800.0	795.0	779.6	775.4	2.0	1.9	146.09	-80.5	-29.5	132.7	128.8	3.86	34.392						
900.0	893.0	874.3	869.1	2.4	2.3	148.80	-93.0	-36.5	164.1	159.7	4.38	37.464						
1,000.0	991.0	969.0	962.7	2.8	2.6	150.64	-105.6	-43.6	195.8	190.9	4.91	39.874						

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

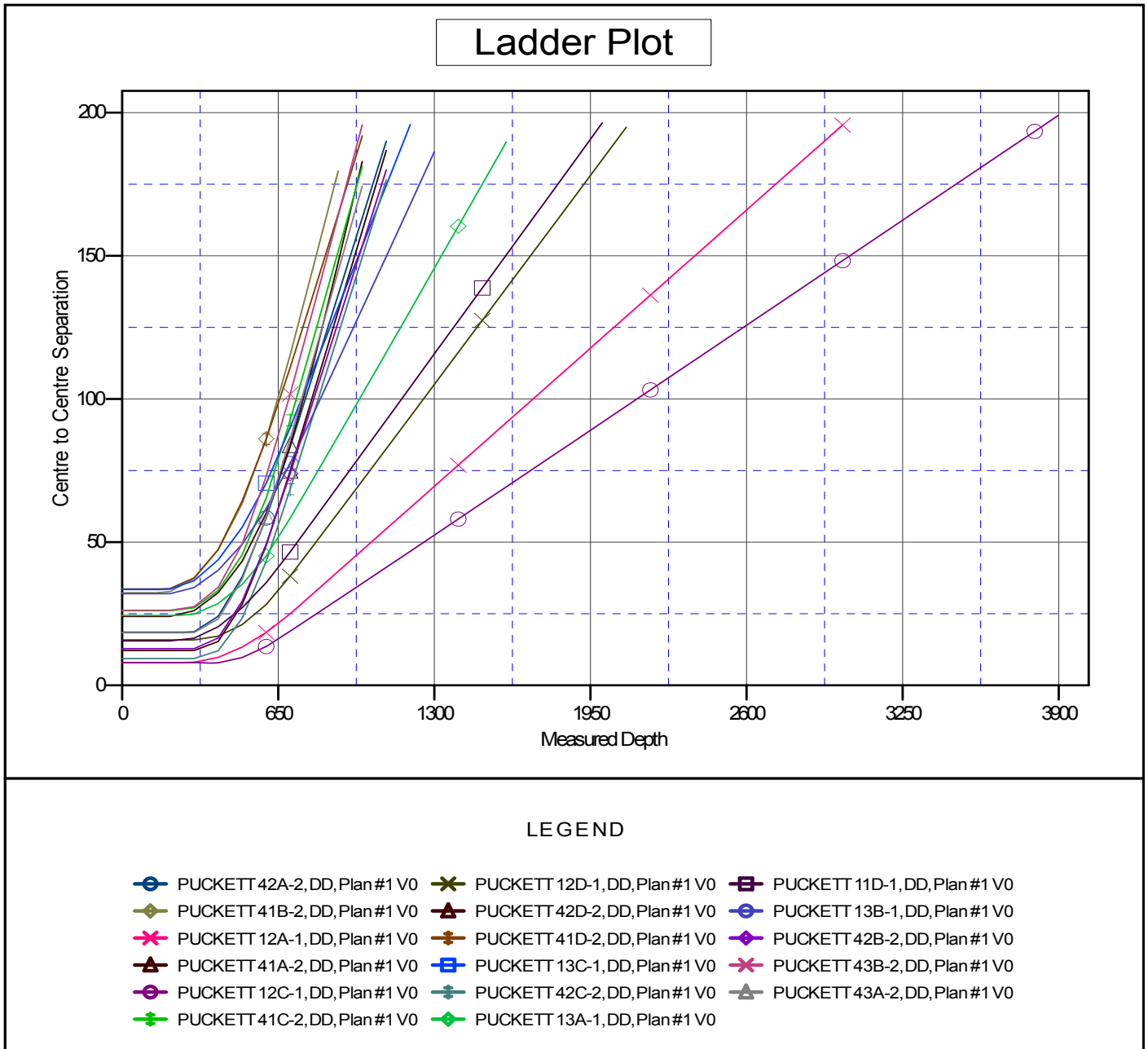
Cathedral Energy Services

Anticollision Report

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