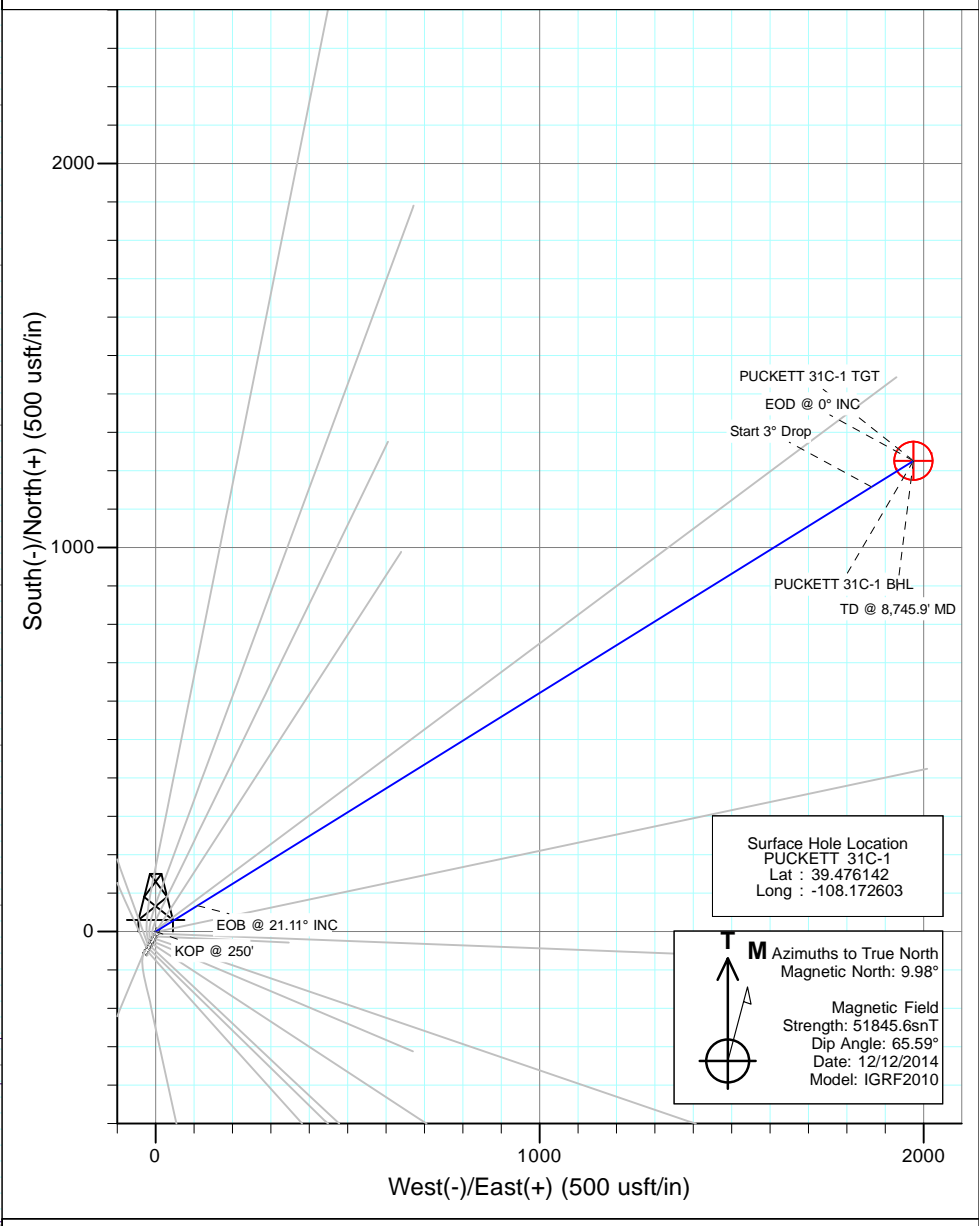
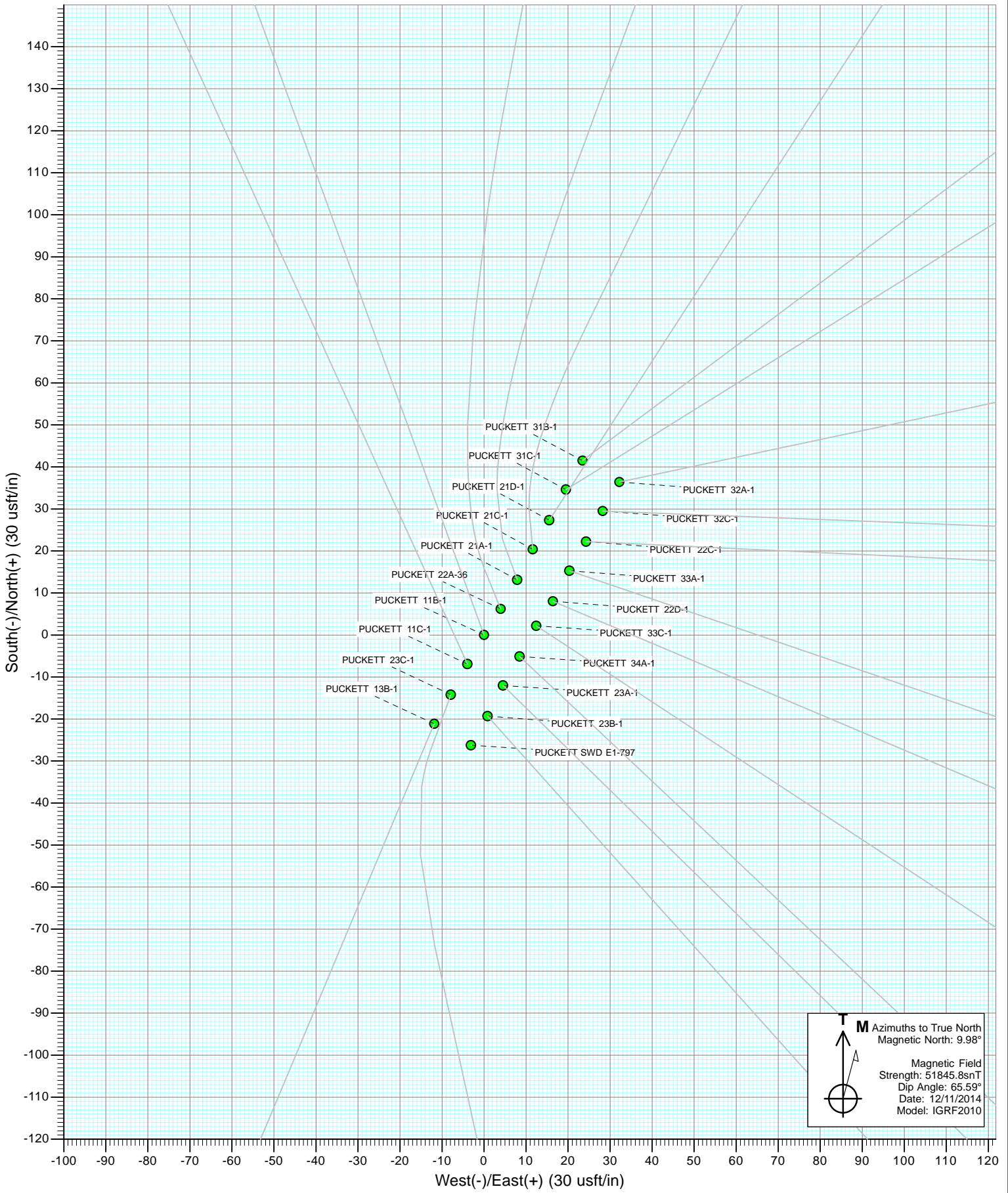
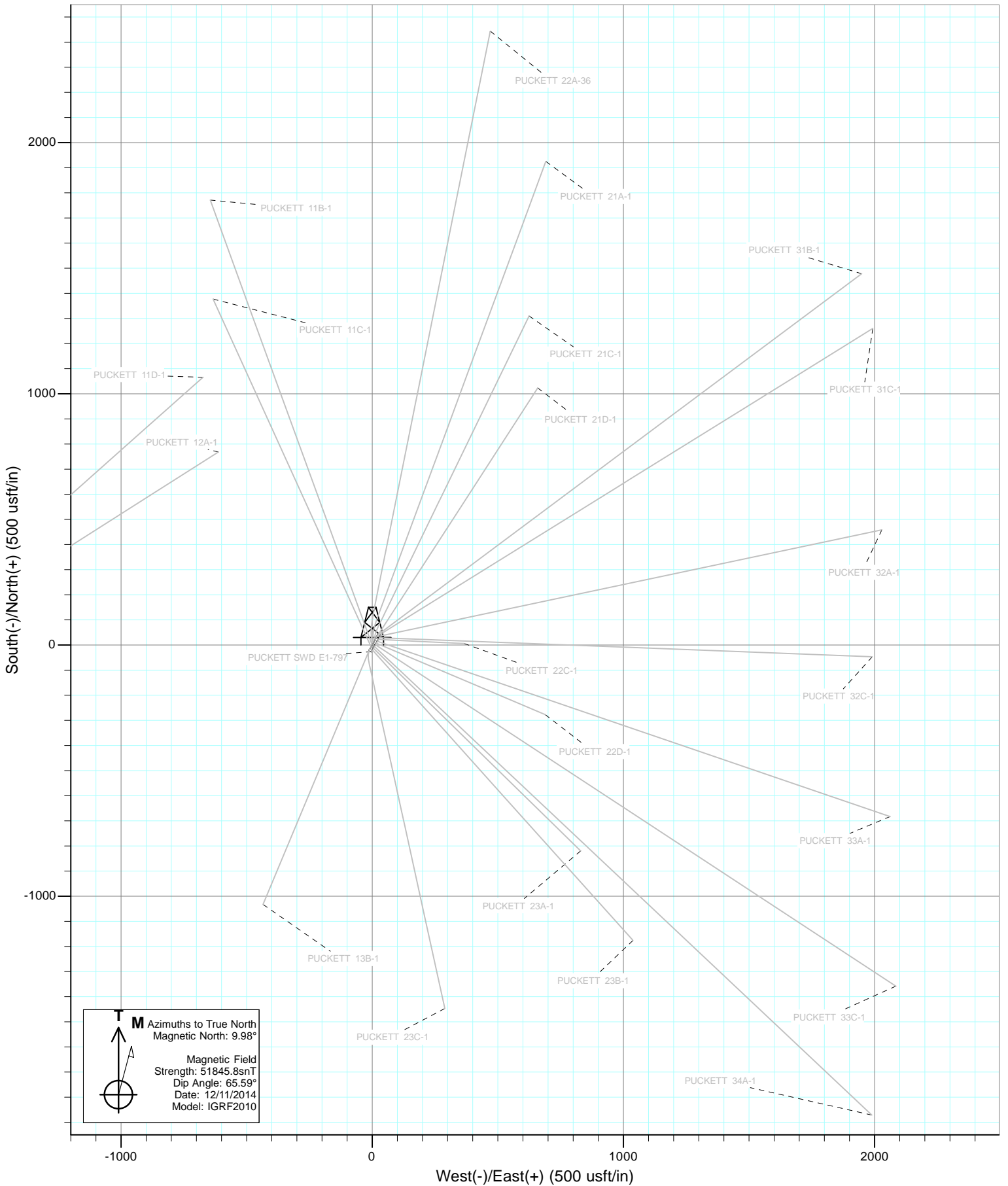


SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.0	
3	953.8	21.11	58.15	938.0	67.7	108.9	3.00	58.15	128.2	
4	6692.1	21.11	58.15	6291.0	1158.4	1864.7	0.00	0.00	2195.3	PUCKETT 31C-1 TGT
5	7395.9	0.00	0.00	6979.0	1226.1	1973.7	3.00	180.00	2323.5	PUCKETT 31C-1 BHL
6	8745.9	0.00	0.00	8329.0	1226.1	1973.7	0.00	0.00	2323.5	



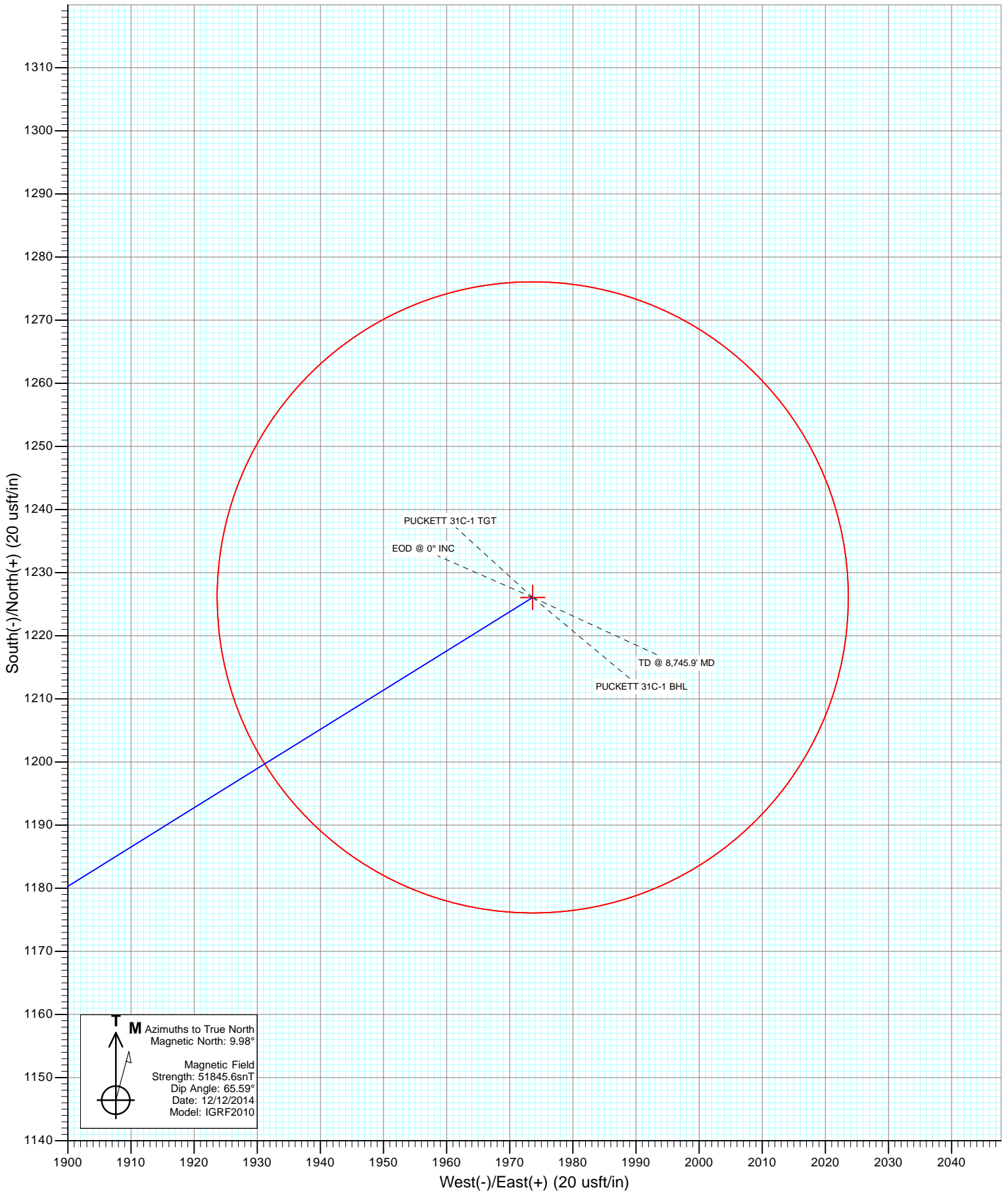
DESIGN TARGET DETAILS						
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PUCKETT 31C-1 TGT	1226.1	1973.7	610565.78	1247675.51	39.479508	-108.165611
PUCKETT 31C-1 BHL	1226.1	1973.7	610565.78	1247675.51	39.479508	-108.165611







Project: Garfield County, CO
Site: S1-T7S-R97W (Mesa E1 797)
Well: PUCKETT 31C-1
Wellbore: DD
Design: Plan #1



Cathedral Energy Services

Planning Report

Database: USA EDM 5000 Multi Users DB	Local Co-ordinate Reference: Well PUCKETT 31C-1
Company: Caerus Oil & Gas (NAD 27)	TVD Reference: KB=20' @ 8349.0usft (Patterson #303)
Project: Garfield County, CO	MD Reference: KB=20' @ 8349.0usft (Patterson #303)
Site: S1-T7S-R97W (Mesa E1 797)	North Reference: True
Well: PUCKETT 31C-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 S1-T7S-R97W (Mesa E1 797)					
Site Position:		Northing:	609,370.34 usft	Latitude:	39.476064
From: Lat/Long		Easting:	1,245,650.28 usft	Longitude:	-108.172658
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	-1.69 °

Well PUCKETT 31C-1					
Well Position	+N/-S	0.0 usft	Northing:	609,398.27 usft	Latitude: 39.476142
	+E/-W	0.0 usft	Easting:	1,245,666.64 usft	Longitude: -108.172603
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level: 8,329.0 usft

Wellbore DD					
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF2010	12/12/2014	(°)	(°)	(nT)
			9.98	65.59	51,846

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	58.15	

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		
953.8	21.11	58.15	938.0	67.7	108.9	3.00	3.00	0.00	58.15		
6,692.1	21.11	58.15	6,291.0	1,158.4	1,864.7	0.00	0.00	0.00	0.00		
7,395.9	0.00	0.00	6,979.0	1,226.1	1,973.7	3.00	-3.00	0.00	180.00	PUCKETT 31C-1 TG1	
8,745.9	0.00	0.00	8,329.0	1,226.1	1,973.7	0.00	0.00	0.00	0.00	PUCKETT 31C-1 BHL	

Cathedral Energy Services

Planning Report

Database: USA EDM 5000 Multi Users DB
Company: Caerus Oil & Gas (NAD 27)
Project: Garfield County, CO
Site: S1-T7S-R97W (Mesa E1 797)
Well: PUCKETT 31C-1
Wellbore: DD
Design: Plan #1

Local Co-ordinate Reference: Well PUCKETT 31C-1
TVD Reference: KB=20' @ 8349.0usft (Patterson #303)
MD Reference: KB=20' @ 8349.0usft (Patterson #303)
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
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	58.15	300.0	0.3	0.6	0.7	3.00	3.00	
400.0	4.50	58.15	399.8	3.1	5.0	5.9	3.00	3.00	
500.0	7.50	58.15	499.3	8.6	13.9	16.3	3.00	3.00	
600.0	10.50	58.15	598.0	16.9	27.2	32.0	3.00	3.00	
700.0	13.50	58.15	695.8	27.8	44.8	52.8	3.00	3.00	
800.0	16.50	58.15	792.4	41.5	66.8	78.6	3.00	3.00	
900.0	19.50	58.15	887.5	57.8	93.1	109.5	3.00	3.00	
953.8	21.11	58.15	938.0	67.7	108.9	128.2	3.00	3.00	EOB @ 21.11° INC
1,000.0	21.11	58.15	981.1	76.4	123.0	144.9	0.00	0.00	
1,100.0	21.11	58.15	1,074.4	95.5	153.6	180.9	0.00	0.00	
1,200.0	21.11	58.15	1,167.7	114.5	184.2	216.9	0.00	0.00	
1,300.0	21.11	58.15	1,260.9	133.5	214.8	252.9	0.00	0.00	
1,400.0	21.11	58.15	1,354.2	152.5	245.4	288.9	0.00	0.00	
1,500.0	21.11	58.15	1,447.5	171.5	276.0	325.0	0.00	0.00	
1,600.0	21.11	58.15	1,540.8	190.5	306.6	361.0	0.00	0.00	
1,700.0	21.11	58.15	1,634.1	209.5	337.2	397.0	0.00	0.00	
1,800.0	21.11	58.15	1,727.4	228.5	367.8	433.0	0.00	0.00	
1,900.0	21.11	58.15	1,820.7	247.5	398.4	469.1	0.00	0.00	
2,000.0	21.11	58.15	1,913.9	266.5	429.0	505.1	0.00	0.00	
2,100.0	21.11	58.15	2,007.2	285.5	459.6	541.1	0.00	0.00	
2,200.0	21.11	58.15	2,100.5	304.5	490.2	577.1	0.00	0.00	
2,300.0	21.11	58.15	2,193.8	323.6	520.8	613.2	0.00	0.00	
2,400.0	21.11	58.15	2,287.1	342.6	551.4	649.2	0.00	0.00	
2,500.0	21.11	58.15	2,380.4	361.6	582.0	685.2	0.00	0.00	
2,600.0	21.11	58.15	2,473.7	380.6	612.6	721.2	0.00	0.00	
2,700.0	21.11	58.15	2,566.9	399.6	643.2	757.2	0.00	0.00	
2,800.0	21.11	58.15	2,660.2	418.6	673.8	793.3	0.00	0.00	
2,900.0	21.11	58.15	2,753.5	437.6	704.4	829.3	0.00	0.00	
3,000.0	21.11	58.15	2,846.8	456.6	735.0	865.3	0.00	0.00	
3,100.0	21.11	58.15	2,940.1	475.6	765.6	901.3	0.00	0.00	
3,200.0	21.11	58.15	3,033.4	494.6	796.2	937.4	0.00	0.00	
3,300.0	21.11	58.15	3,126.7	513.6	826.8	973.4	0.00	0.00	
3,400.0	21.11	58.15	3,220.0	532.7	857.4	1,009.4	0.00	0.00	
3,500.0	21.11	58.15	3,313.2	551.7	888.0	1,045.4	0.00	0.00	
3,600.0	21.11	58.15	3,406.5	570.7	918.6	1,081.4	0.00	0.00	
3,700.0	21.11	58.15	3,499.8	589.7	949.2	1,117.5	0.00	0.00	
3,800.0	21.11	58.15	3,593.1	608.7	979.8	1,153.5	0.00	0.00	
3,900.0	21.11	58.15	3,686.4	627.7	1,010.4	1,189.5	0.00	0.00	
4,000.0	21.11	58.15	3,779.7	646.7	1,041.0	1,225.5	0.00	0.00	
4,100.0	21.11	58.15	3,873.0	665.7	1,071.6	1,261.6	0.00	0.00	
4,200.0	21.11	58.15	3,966.2	684.7	1,102.2	1,297.6	0.00	0.00	
4,300.0	21.11	58.15	4,059.5	703.7	1,132.8	1,333.6	0.00	0.00	
4,400.0	21.11	58.15	4,152.8	722.7	1,163.4	1,369.6	0.00	0.00	
4,500.0	21.11	58.15	4,246.1	741.7	1,194.0	1,405.6	0.00	0.00	
4,600.0	21.11	58.15	4,339.4	760.8	1,224.6	1,441.7	0.00	0.00	
4,700.0	21.11	58.15	4,432.7	779.8	1,255.2	1,477.7	0.00	0.00	
4,800.0	21.11	58.15	4,526.0	798.8	1,285.8	1,513.7	0.00	0.00	
4,900.0	21.11	58.15	4,619.3	817.8	1,316.4	1,549.7	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: S1-T7S-R97W (Mesa E1 797)
Well: PUCKETT 31C-1
Wellbore: DD
Design: Plan #1

Local Co-ordinate Reference: Well PUCKETT 31C-1
TVD Reference: KB=20' @ 8349.0usft (Patterson #303)
MD Reference: KB=20' @ 8349.0usft (Patterson #303)
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
5,000.0	21.11	58.15	4,712.5	836.8	1,347.0	1,585.8	0.00	0.00	
5,100.0	21.11	58.15	4,805.8	855.8	1,377.6	1,621.8	0.00	0.00	
5,200.0	21.11	58.15	4,899.1	874.8	1,408.2	1,657.8	0.00	0.00	
5,300.0	21.11	58.15	4,992.4	893.8	1,438.8	1,693.8	0.00	0.00	
5,400.0	21.11	58.15	5,085.7	912.8	1,469.4	1,729.8	0.00	0.00	
5,500.0	21.11	58.15	5,179.0	931.8	1,500.0	1,765.9	0.00	0.00	
5,600.0	21.11	58.15	5,272.3	950.8	1,530.6	1,801.9	0.00	0.00	
5,700.0	21.11	58.15	5,365.5	969.9	1,561.2	1,837.9	0.00	0.00	
5,800.0	21.11	58.15	5,458.8	988.9	1,591.8	1,873.9	0.00	0.00	
5,900.0	21.11	58.15	5,552.1	1,007.9	1,622.4	1,910.0	0.00	0.00	
6,000.0	21.11	58.15	5,645.4	1,026.9	1,653.0	1,946.0	0.00	0.00	
6,100.0	21.11	58.15	5,738.7	1,045.9	1,683.6	1,982.0	0.00	0.00	
6,200.0	21.11	58.15	5,832.0	1,064.9	1,714.2	2,018.0	0.00	0.00	
6,202.2	21.11	58.15	5,834.0	1,065.3	1,714.8	2,018.8	0.00	0.00	OHIO CREEK
6,300.0	21.11	58.15	5,925.3	1,083.9	1,744.8	2,054.0	0.00	0.00	
6,400.0	21.11	58.15	6,018.6	1,102.9	1,775.4	2,090.1	0.00	0.00	
6,500.0	21.11	58.15	6,111.8	1,121.9	1,806.0	2,126.1	0.00	0.00	
6,505.5	21.11	58.15	6,117.0	1,123.0	1,807.7	2,128.1	0.00	0.00	WILLIAMS FORK
6,600.0	21.11	58.15	6,205.1	1,140.9	1,836.6	2,162.1	0.00	0.00	
6,692.1	21.11	58.15	6,291.0	1,158.4	1,864.7	2,195.3	0.00	0.00	Start 3° Drop
6,700.0	20.88	58.15	6,298.4	1,159.9	1,867.2	2,198.1	3.00	-3.00	
6,800.0	17.88	58.15	6,392.7	1,177.4	1,895.3	2,231.3	3.00	-3.00	
6,900.0	14.88	58.15	6,488.7	1,192.3	1,919.3	2,259.5	3.00	-3.00	
7,000.0	11.88	58.15	6,586.0	1,204.5	1,938.9	2,282.6	3.00	-3.00	
7,100.0	8.88	58.15	6,684.3	1,214.0	1,954.2	2,300.6	3.00	-3.00	
7,200.0	5.88	58.15	6,783.5	1,220.8	1,965.1	2,313.5	3.00	-3.00	
7,300.0	2.88	58.15	6,883.2	1,224.8	1,971.6	2,321.1	3.00	-3.00	
7,395.9	0.00	0.00	6,979.0	1,226.1	1,973.7	2,323.5	3.00	-3.00	EOD @ 0° INC - TOP of GAS
7,400.0	0.00	0.00	6,983.1	1,226.1	1,973.7	2,323.5	0.00	0.00	
7,500.0	0.00	0.00	7,083.1	1,226.1	1,973.7	2,323.5	0.00	0.00	
7,600.0	0.00	0.00	7,183.1	1,226.1	1,973.7	2,323.5	0.00	0.00	
7,700.0	0.00	0.00	7,283.1	1,226.1	1,973.7	2,323.5	0.00	0.00	
7,800.0	0.00	0.00	7,383.1	1,226.1	1,973.7	2,323.5	0.00	0.00	
7,900.0	0.00	0.00	7,483.1	1,226.1	1,973.7	2,323.5	0.00	0.00	
8,000.0	0.00	0.00	7,583.1	1,226.1	1,973.7	2,323.5	0.00	0.00	
8,100.0	0.00	0.00	7,683.1	1,226.1	1,973.7	2,323.5	0.00	0.00	
8,200.0	0.00	0.00	7,783.1	1,226.1	1,973.7	2,323.5	0.00	0.00	
8,300.0	0.00	0.00	7,883.1	1,226.1	1,973.7	2,323.5	0.00	0.00	
8,400.0	0.00	0.00	7,983.1	1,226.1	1,973.7	2,323.5	0.00	0.00	
8,500.0	0.00	0.00	8,083.1	1,226.1	1,973.7	2,323.5	0.00	0.00	
8,600.0	0.00	0.00	8,183.1	1,226.1	1,973.7	2,323.5	0.00	0.00	
8,700.0	0.00	0.00	8,283.1	1,226.1	1,973.7	2,323.5	0.00	0.00	
8,745.9	0.00	0.00	8,329.0	1,226.1	1,973.7	2,323.5	0.00	0.00	TD @ 8,745.9' MD

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 31C-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Project:	Garfield County, CO	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site:	S1-T7S-R97W (Mesa E1 797)	North Reference:	True
Well:	PUCKETT 31C-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 31C-1 BHL - plan hits target center - Circle (radius 50.0)	0.00	0.00	8,329.0	1,226.1	1,973.7	610,565.78	1,247,675.51	39.479508	-108.165611
PUCKETT 31C-1 TGT - plan hits target center - Point	0.00	0.00	6,979.0	1,226.1	1,973.7	610,565.78	1,247,675.51	39.479508	-108.165611

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(usft)	(usft)			(°)	(°)
6,202.2	5,834.0	OHIO CREEK			
6,505.5	6,117.0	WILLIAMS FORK			
7,395.9	6,979.0	TOP of GAS			

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'	
953.8	938.0	67.7	108.9	EOB @ 21.11° INC	
6,692.1	6,291.0	1,158.4	1,864.7	Start 3° Drop	
7,395.9	6,979.0	1,226.1	1,973.7	EOD @ 0° INC	
8,745.9	8,329.0	1,226.1	1,973.7	TD @ 8,745.9' MD	

Caerus Oil & Gas (NAD 27)

Garfield County, CO

S1-T7S-R97W (Mesa E1 797)

PUCKETT 31C-1

DD

Plan #1

Anticollision Report

16 December, 2014

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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	12/12/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	8,745.9	Plan #1 (DD)	ISCWSA MWD	MWD - Standard	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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)		
S1-T7S-R97W (Mesa E1 797)						
PUCKETT 11B-1 - DD - Plan #1	330.4	332.0	38.5	37.2	30.458	CC, ES
PUCKETT 11B-1 - DD - Plan #1	500.0	501.4	46.5	44.1	20.086	SF
PUCKETT 11C-1 - DD - Plan #1	200.0	200.0	47.7	47.0	75.750	CC
PUCKETT 11C-1 - DD - Plan #1	227.9	227.9	47.8	47.0	63.138	ES
PUCKETT 11C-1 - DD - Plan #1	600.0	600.8	71.3	68.4	24.703	SF
PUCKETT 13B-1 - DD - Plan #1	200.0	200.0	63.9	63.3	101.579	CC, ES
PUCKETT 13B-1 - DD - Plan #1	500.0	485.6	100.6	98.4	44.212	SF
PUCKETT 21A-1 - HZ - Plan #1	200.0	200.0	24.4	23.8	38.777	CC
PUCKETT 21A-1 - HZ - Plan #1	228.0	228.0	24.5	23.7	32.356	ES
PUCKETT 21A-1 - HZ - Plan #1	500.0	500.8	35.4	33.1	15.686	SF
PUCKETT 21C-1 - DD - Plan #1	200.0	200.0	16.3	15.6	25.824	CC
PUCKETT 21C-1 - DD - Plan #1	228.1	228.1	16.3	15.6	21.576	ES
PUCKETT 21C-1 - DD - Plan #1	500.0	500.6	28.0	25.8	12.467	SF
PUCKETT 21D-1 - DD - Plan #1	200.0	200.0	8.3	7.7	13.162	CC
PUCKETT 21D-1 - DD - Plan #1	228.4	228.4	8.4	7.6	11.038	ES
PUCKETT 21D-1 - DD - Plan #1	300.0	300.0	8.9	7.8	8.089	SF
PUCKETT 22A-36 - DD - Plan #1	200.0	200.0	32.4	31.7	51.430	CC
PUCKETT 22A-36 - DD - Plan #1	202.9	202.9	32.4	31.7	50.345	ES
PUCKETT 22A-36 - DD - Plan #1	600.0	601.9	53.7	50.8	18.533	SF
PUCKETT 22C-1 - DD - Plan #1	200.0	200.0	13.3	12.6	21.096	CC
PUCKETT 22C-1 - DD - Plan #1	300.0	300.0	13.4	12.3	12.448	ES
PUCKETT 22C-1 - DD - Plan #1	400.0	399.8	15.5	13.9	9.866	SF
PUCKETT 22D-1 - DD - Plan #1	200.0	200.0	26.8	26.1	42.528	CC
PUCKETT 22D-1 - DD - Plan #1	228.5	228.5	26.8	26.1	35.388	ES
PUCKETT 22D-1 - DD - Plan #1	500.0	499.3	39.1	36.9	17.786	SF
PUCKETT 23A-1 - DD - Plan #1	200.0	200.0	49.0	48.3	77.793	CC
PUCKETT 23A-1 - DD - Plan #1	228.0	228.0	49.0	48.3	64.825	ES
PUCKETT 23A-1 - DD - Plan #1	600.0	597.2	76.7	73.9	27.357	SF
PUCKETT 23B-1 - DD - Plan #1	200.0	200.0	57.0	56.4	90.626	CC
PUCKETT 23B-1 - DD - Plan #1	228.0	228.0	57.1	56.4	75.518	ES
PUCKETT 23B-1 - DD - Plan #1	600.0	595.1	87.5	84.7	31.525	SF
PUCKETT 23C-1 - DD - Plan #1	200.0	200.0	56.0	55.3	88.923	CC
PUCKETT 23C-1 - DD - Plan #1	227.9	227.9	56.1	55.3	74.105	ES
PUCKETT 23C-1 - DD - Plan #1	500.0	491.8	80.4	78.2	36.087	SF
PUCKETT 31B-1 - DD - Plan #1	200.0	200.0	8.0	7.3	12.663	CC, ES
PUCKETT 31B-1 - DD - Plan #1	6,400.0	6,390.8	197.7	116.1	2.421	SF
PUCKETT 32A-1 - DD - Plan #1	200.0	200.0	12.8	12.2	20.389	CC, ES
PUCKETT 32A-1 - DD - Plan #1	1,200.0	1,190.3	77.0	67.6	8.160	SF
PUCKETT 32C-1 - DD - Plan #1	334.5	334.4	9.6	8.4	7.816	CC, ES
PUCKETT 32C-1 - DD - Plan #1	400.0	399.5	10.5	8.9	6.896	SF
PUCKETT 33A-1 - DD - Plan #1	200.0	200.0	19.3	18.7	30.703	CC
PUCKETT 33A-1 - DD - Plan #1	300.0	300.0	19.7	18.6	18.150	ES
PUCKETT 33A-1 - DD - Plan #1	400.0	399.7	23.1	21.5	14.651	SF
PUCKETT 33C-1 - DD - Plan #1	200.0	200.0	33.2	32.5	52.715	CC
PUCKETT 33C-1 - DD - Plan #1	227.8	227.8	33.2	32.5	44.023	ES
PUCKETT 33C-1 - DD - Plan #1	500.0	497.2	50.5	48.3	23.611	SF
PUCKETT 34A-1 - DD - Plan #1	200.0	200.0	41.2	40.6	65.471	CC
PUCKETT 34A-1 - DD - Plan #1	228.1	228.1	41.3	40.5	54.552	ES
PUCKETT 34A-1 - DD - Plan #1	500.0	498.4	55.1	52.9	25.304	SF
PUCKETT SWD E1-797 - VH - Plan #1	200.0	200.0	64.9	64.3	103.097	CC
PUCKETT SWD E1-797 - VH - Plan #1	227.9	227.9	65.0	64.2	85.907	ES
PUCKETT SWD E1-797 - VH - Plan #1	700.0	695.8	111.4	107.9	32.195	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 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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 S1-T7S-R97W (Mesa E1 797) - PUCKETT 11B-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	-150.62	-34.6	-19.5	39.7					
100.0	100.0	100.0	100.0	0.1	0.1	-150.62	-34.6	-19.5	39.7	39.5	0.18	220.804		
200.0	200.0	200.0	200.0	0.3	0.3	-150.62	-34.6	-19.5	39.7	39.1	0.63	63.087		
300.0	300.0	301.3	301.2	0.5	0.5	154.74	-32.1	-20.4	38.6	37.5	1.10	35.182		
330.4	330.4	332.0	331.9	0.6	0.6	157.63	-30.3	-21.0	38.5	37.2	1.26	30.458	CC, ES	
400.0	399.8	402.0	401.6	0.8	0.8	167.32	-24.6	-23.1	39.5	37.8	1.66	23.763		
500.0	499.3	501.4	500.2	1.0	1.1	-174.88	-12.3	-27.6	46.5	44.1	2.31	20.086	SF	
600.0	598.0	599.0	596.1	1.3	1.4	-159.28	4.4	-33.7	62.1	59.1	2.99	20.769		
700.0	695.8	694.2	688.7	1.7	1.8	-148.65	25.2	-41.2	86.4	82.7	3.70	23.361		
800.0	792.4	787.1	777.9	2.2	2.3	-141.83	49.4	-50.1	118.0	113.6	4.46	26.456		
900.0	887.5	879.8	866.6	2.8	2.8	-138.25	75.0	-59.4	154.8	149.5	5.29	29.240		
1,000.0	981.1	971.4	954.1	3.4	3.3	-137.07	100.2	-68.5	194.9	188.8	6.16	31.644		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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	-150.56	-41.5	-23.4	47.7						
100.0	100.0	100.0	100.0	0.1	0.1	-150.56	-41.5	-23.4	47.7	47.5	0.18	265.123			
200.0	200.0	200.0	200.0	0.3	0.3	-150.56	-41.5	-23.4	47.7	47.0	0.63	75.750 CC			
227.9	227.9	227.9	227.9	0.4	0.4	151.35	-41.5	-23.4	47.8	47.0	0.76	63.138 ES			
300.0	300.0	300.0	300.0	0.5	0.5	151.65	-41.5	-23.4	48.2	47.2	1.09	44.069			
400.0	399.8	401.0	400.9	0.8	0.8	155.72	-40.1	-24.1	52.1	50.5	1.64	31.794			
500.0	499.3	501.6	501.3	1.0	1.0	165.40	-34.1	-26.8	59.0	56.8	2.24	26.323			
600.0	598.0	600.8	599.8	1.3	1.3	177.40	-23.4	-31.7	71.3	68.4	2.89	24.703 SF			
700.0	695.8	697.9	695.6	1.7	1.6	-171.48	-8.5	-38.4	90.8	87.3	3.56	25.550			
800.0	792.4	792.5	787.8	2.2	1.9	-162.62	10.3	-47.0	118.1	113.8	4.25	27.758			
900.0	887.5	885.7	878.3	2.8	2.3	-156.77	30.7	-56.3	152.0	147.0	4.99	30.478			
1,000.0	981.1	977.6	967.5	3.4	2.8	-153.68	50.8	-65.4	190.7	185.0	5.70	33.465			

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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	-150.65	-55.7	-31.3	63.9					
100.0	100.0	100.0	100.0	0.1	0.1	-150.65	-55.7	-31.3	63.9	63.7	0.18	355.527		
200.0	200.0	200.0	200.0	0.3	0.3	-150.65	-55.7	-31.3	63.9	63.3	0.63	101.579	CC, ES	
300.0	300.0	296.7	296.6	0.5	0.5	151.18	-58.0	-32.3	67.0	65.9	1.08	62.061		
400.0	399.8	392.3	392.0	0.8	0.7	152.16	-64.6	-35.1	79.1	77.5	1.65	48.011		
500.0	499.3	485.6	484.5	1.0	1.0	153.61	-75.4	-39.5	100.6	98.4	2.28	44.212	SF	
600.0	598.0	575.3	572.9	1.3	1.3	154.92	-89.6	-45.5	131.4	128.4	2.93	44.829		
700.0	695.8	662.9	658.4	1.7	1.7	155.89	-107.2	-52.9	170.9	167.2	3.61	47.275		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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 S1-T7S-R97W (Mesa E1 797) - PUCKETT 21A-1 - HZ - 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					Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-151.69	-21.5	-11.6	24.4					
100.0	100.0	100.0	100.0	0.1	0.1	-151.69	-21.5	-11.6	24.4	24.2	0.18	135.719		
200.0	200.0	200.0	200.0	0.3	0.3	-151.69	-21.5	-11.6	24.4	23.8	0.63	38.777 CC		
228.0	228.0	228.0	228.0	0.4	0.4	150.28	-21.5	-11.6	24.5	23.7	0.76	32.356 ES		
300.0	300.0	300.0	300.0	0.5	0.5	150.90	-21.5	-11.6	25.0	23.9	1.09	22.816		
400.0	399.8	400.7	400.6	0.8	0.8	160.18	-19.0	-12.5	28.2	26.5	1.64	17.146		
500.0	499.3	500.8	500.5	1.0	1.0	176.96	-11.6	-15.1	35.4	33.1	2.25	15.686 SF		
600.0	598.0	601.6	600.5	1.3	1.3	-168.72	0.5	-16.4	46.6	43.8	2.87	16.241		
700.0	695.8	702.3	699.8	1.7	1.6	-158.39	16.8	-14.8	60.7	57.2	3.51	17.322		
800.0	792.4	802.9	798.1	2.2	2.0	-150.68	37.5	-10.2	77.3	73.1	4.21	18.341		
900.0	887.5	903.3	895.2	2.8	2.4	-144.70	62.4	-2.6	96.1	91.1	5.04	19.063		
1,000.0	981.1	1,002.8	989.9	3.4	2.9	-140.03	91.1	7.6	116.7	110.8	5.98	19.527		
1,100.0	1,074.4	1,100.3	1,082.3	4.1	3.5	-136.67	120.1	18.3	137.8	130.8	7.01	19.661		
1,200.0	1,167.7	1,197.8	1,174.7	4.8	4.1	-134.21	149.2	29.1	159.2	151.1	8.11	19.623		
1,300.0	1,260.9	1,295.3	1,267.2	5.5	4.6	-132.33	178.3	39.8	180.8	171.6	9.26	19.528		

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 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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 S1-T7S-R97W (Mesa E1 797) - PUCKETT 21C-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					Separation Factor	Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-150.90	-14.2	-7.9	16.3					
100.0	100.0	100.0	100.0	0.1	0.1	-150.90	-14.2	-7.9	16.3	16.1	0.18	90.382		
200.0	200.0	200.0	200.0	0.3	0.3	-150.90	-14.2	-7.9	16.3	15.6	0.63	25.824 CC		
228.1	228.1	228.1	228.1	0.4	0.4	151.13	-14.2	-7.9	16.3	15.6	0.76	21.576 ES		
300.0	300.0	300.0	300.0	0.5	0.5	152.02	-14.2	-7.9	16.8	15.7	1.09	15.368		
400.0	399.8	400.3	400.3	0.8	0.8	159.73	-13.5	-8.0	21.1	19.5	1.64	12.831		
500.0	499.3	500.6	500.5	1.0	1.0	174.66	-8.3	-8.4	28.0	25.8	2.25	12.467 SF		
600.0	598.0	601.1	600.5	1.3	1.2	-170.96	1.9	-8.4	38.7	35.8	2.85	13.580		
700.0	695.8	702.2	700.5	1.7	1.5	-161.52	16.0	-4.8	51.3	47.8	3.46	14.833		
800.0	792.4	803.5	799.9	2.2	1.9	-154.85	33.8	2.5	65.2	61.1	4.12	15.816		
900.0	887.5	902.6	896.5	2.8	2.3	-150.64	53.8	12.1	81.5	76.7	4.88	16.722		
1,000.0	981.1	1,000.5	991.9	3.4	2.7	-149.22	73.5	21.7	102.0	96.3	5.64	18.078		
1,100.0	1,074.4	1,098.2	1,087.1	4.1	3.1	-148.57	93.3	31.3	123.0	116.6	6.39	19.240		
1,200.0	1,167.7	1,196.0	1,182.4	4.8	3.5	-148.11	113.0	40.9	144.1	136.9	7.19	20.056		
1,300.0	1,260.9	1,293.7	1,277.6	5.5	4.0	-147.76	132.8	50.5	165.2	157.2	8.00	20.640		
1,400.0	1,354.2	1,391.5	1,372.9	6.2	4.4	-147.50	152.5	60.1	186.3	177.5	8.85	21.059		

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 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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 S1-T7S-R97W (Mesa E1 797) - PUCKETT 21D-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	-151.50	-7.3	-4.0	8.3					
100.0	100.0	100.0	100.0	0.1	0.1	-151.50	-7.3	-4.0	8.3	8.1	0.18	46.068		
200.0	200.0	200.0	200.0	0.3	0.3	-151.50	-7.3	-4.0	8.3	7.7	0.63	13.162	CC	
228.4	228.4	228.4	228.4	0.4	0.4	150.70	-7.3	-4.0	8.4	7.6	0.76	11.038	ES	
300.0	300.0	300.0	300.0	0.5	0.5	152.43	-7.3	-4.0	8.9	7.8	1.10	8.089	SF	
400.0	399.8	399.8	399.8	0.8	0.8	162.56	-7.3	-4.0	13.7	12.1	1.65	8.301		
500.0	499.3	500.4	500.4	1.0	1.0	171.99	-5.1	-2.5	21.4	19.1	2.24	9.533		
600.0	598.0	601.2	600.9	1.3	1.2	-179.18	1.6	1.8	29.7	26.9	2.83	10.502		
700.0	695.8	702.2	701.0	1.7	1.5	-171.01	12.8	9.0	39.2	35.8	3.42	11.448		
800.0	792.4	802.5	799.6	2.2	1.8	-164.07	27.8	18.7	50.5	46.5	4.05	12.484		
900.0	887.5	901.1	896.5	2.8	2.2	-160.70	43.3	28.7	66.6	61.8	4.72	14.088		
1,000.0	981.1	999.0	992.6	3.4	2.5	-159.75	58.7	38.7	87.0	81.7	5.37	16.219		
1,100.0	1,074.4	1,096.7	1,088.6	4.1	2.9	-159.38	74.0	48.6	108.2	102.2	5.97	18.129		
1,200.0	1,167.7	1,194.4	1,184.7	4.8	3.3	-159.13	89.4	58.5	129.4	122.8	6.60	19.601		
1,300.0	1,260.9	1,292.2	1,280.7	5.5	3.7	-158.95	104.7	68.4	150.5	143.3	7.25	20.759		
1,400.0	1,354.2	1,389.9	1,376.7	6.2	4.0	-158.81	120.1	78.3	171.7	163.8	7.92	21.676		
1,500.0	1,447.5	1,487.6	1,472.7	6.9	4.4	-158.71	135.4	88.2	192.9	184.3	8.60	22.421		

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 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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 S1-T7S-R97W (Mesa E1 797) - PUCKETT 22A-36 - 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	-151.34	-28.4	-15.5	32.4					
100.0	100.0	100.0	100.0	0.1	0.1	-151.34	-28.4	-15.5	32.4	32.2	0.18	180.007		
200.0	200.0	200.0	200.0	0.3	0.3	-151.34	-28.4	-15.5	32.4	31.7	0.63	51.430 CC		
202.9	202.9	202.9	202.9	0.3	0.3	150.51	-28.4	-15.5	32.4	31.7	0.64	50.345 ES		
300.0	300.0	300.3	300.3	0.5	0.5	151.30	-28.2	-15.6	32.8	31.7	1.09	30.008		
400.0	399.8	401.1	401.0	0.8	0.8	160.46	-24.5	-17.1	35.4	33.8	1.64	21.544		
500.0	499.3	501.4	500.8	1.0	1.0	176.18	-16.0	-20.4	42.2	40.0	2.26	18.679		
600.0	598.0	601.9	600.4	1.3	1.3	-169.24	-2.5	-22.9	53.7	50.8	2.90	18.533 SF		
700.0	695.8	701.9	698.7	1.7	1.6	-157.89	15.7	-23.4	69.3	65.8	3.56	19.496		
800.0	792.4	801.2	795.4	2.2	2.0	-149.30	38.5	-22.0	88.9	84.6	4.29	20.721		
900.0	887.5	899.8	890.0	2.8	2.5	-142.73	65.8	-18.7	112.1	106.9	5.14	21.796		
1,000.0	981.1	997.5	982.4	3.4	3.1	-137.69	97.2	-13.6	138.2	132.1	6.12	22.593		
1,100.0	1,074.4	1,094.4	1,072.4	4.1	3.7	-132.96	132.5	-6.8	164.7	157.5	7.24	22.749		
1,200.0	1,167.7	1,190.0	1,160.5	4.8	4.4	-129.11	168.7	0.5	191.8	183.3	8.46	22.668		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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 S1-T7S-R97W (Mesa E1 797) - PUCKETT 22C-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	158.81	-12.4	4.8	13.3					
100.0	100.0	100.0	100.0	0.1	0.1	158.81	-12.4	4.8	13.3	13.1	0.18	73.837		
200.0	200.0	200.0	200.0	0.3	0.3	158.81	-12.4	4.8	13.3	12.6	0.63	21.096 CC		
233.9	233.9	233.9	233.9	0.4	0.4	101.30	-12.4	4.8	13.3	12.5	0.78	17.037		
300.0	300.0	300.0	300.0	0.5	0.5	103.40	-12.4	4.8	13.4	12.3	1.08	12.448 ES		
400.0	399.8	399.8	399.8	0.8	0.8	122.52	-12.4	4.8	15.5	13.9	1.57	9.866 SF		
500.0	499.3	499.3	499.3	1.0	1.0	145.00	-12.4	4.8	22.9	20.7	2.19	10.454		
600.0	598.0	598.0	598.0	1.3	1.2	158.93	-12.4	4.8	36.8	34.0	2.84	12.969		
700.0	695.8	697.7	697.7	1.7	1.4	164.49	-12.5	7.3	55.1	51.7	3.45	15.958		
800.0	792.4	795.4	795.3	2.2	1.6	166.41	-12.7	12.6	76.7	72.7	4.06	18.908		
900.0	887.5	891.8	891.5	2.8	1.8	168.04	-13.0	17.9	103.3	98.6	4.68	22.084		
1,000.0	981.1	986.8	986.3	3.4	2.1	169.40	-13.2	23.1	134.4	129.1	5.23	25.710		
1,100.0	1,074.4	1,081.6	1,081.0	4.1	2.3	170.36	-13.5	28.3	166.2	160.5	5.70	29.155		
1,200.0	1,167.7	1,176.4	1,175.6	4.8	2.5	171.01	-13.7	33.5	198.0	191.8	6.19	31.986		

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 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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 S1-T7S-R97W (Mesa E1 797) - PUCKETT 22D-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	-173.34	-26.6	-3.1	26.8					
100.0	100.0	100.0	100.0	0.1	0.1	-173.34	-26.6	-3.1	26.8	26.6	0.18	148.849		
200.0	200.0	200.0	200.0	0.3	0.3	-173.34	-26.6	-3.1	26.8	26.1	0.63	42.528 CC		
228.5	228.5	228.5	228.5	0.4	0.4	128.69	-26.6	-3.1	26.8	26.1	0.76	35.388 ES		
300.0	300.0	300.0	300.0	0.5	0.5	129.58	-26.6	-3.1	27.2	26.1	1.09	25.022		
400.0	399.8	399.8	399.8	0.8	0.8	137.03	-26.6	-3.1	30.8	29.2	1.60	19.194		
500.0	499.3	499.3	499.3	1.0	1.0	147.38	-26.6	-3.1	39.1	36.9	2.20	17.786 SF		
600.0	598.0	598.5	598.5	1.3	1.2	153.65	-27.6	-0.8	52.5	49.7	2.81	18.713		
700.0	695.8	697.5	697.2	1.7	1.4	154.76	-30.6	6.3	70.0	66.6	3.41	20.497		
800.0	792.4	795.4	794.4	2.2	1.6	154.34	-34.9	16.6	91.5	87.4	4.07	22.495		
900.0	887.5	891.9	890.2	2.8	1.9	154.97	-39.3	27.0	117.5	112.7	4.76	24.679		
1,000.0	981.1	987.2	984.9	3.4	2.2	156.17	-43.7	37.3	147.7	142.2	5.41	27.274		
1,100.0	1,074.4	1,082.2	1,079.3	4.1	2.4	157.19	-48.0	47.5	178.5	172.5	6.01	29.703		

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Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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 S1-T7S-R97W (Mesa E1 797) - PUCKETT 23A-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	-162.21	-46.6	-15.0	49.0					
100.0	100.0	100.0	100.0	0.1	0.1	-162.21	-46.6	-15.0	49.0	48.8	0.18	272.277		
200.0	200.0	200.0	200.0	0.3	0.3	-162.21	-46.6	-15.0	49.0	48.3	0.63	77.793 CC		
228.0	228.0	228.0	228.0	0.4	0.4	139.72	-46.6	-15.0	49.0	48.3	0.76	64.825 ES		
300.0	300.0	300.0	300.0	0.5	0.5	140.12	-46.6	-15.0	49.5	48.4	1.09	45.356		
400.0	399.8	399.8	399.8	0.8	0.8	143.64	-46.6	-15.0	53.6	52.0	1.62	33.105		
500.0	499.3	499.3	499.3	1.0	1.0	149.20	-46.6	-15.0	62.3	60.1	2.20	28.270		
600.0	598.0	597.2	597.2	1.3	1.2	153.16	-48.3	-13.2	76.7	73.9	2.80	27.357 SF		
700.0	695.8	694.2	693.9	1.7	1.4	154.05	-53.5	-7.9	97.0	93.6	3.42	28.373		
800.0	792.4	789.7	788.6	2.2	1.6	153.23	-61.9	0.7	122.8	118.7	4.08	30.123		
900.0	887.5	883.6	881.1	2.8	1.9	151.68	-73.3	12.4	154.1	149.3	4.81	32.072		
1,000.0	981.1	977.1	973.0	3.4	2.2	151.01	-85.5	24.8	189.6	184.1	5.53	34.295		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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	-160.93	-53.9	-18.6	57.0									
100.0	100.0	100.0	100.0	0.1	0.1	-160.93	-53.9	-18.6	57.0	56.9	0.18	317.190						
200.0	200.0	200.0	200.0	0.3	0.3	-160.93	-53.9	-18.6	57.0	56.4	0.63	90.626 CC						
228.0	228.0	228.0	228.0	0.4	0.4	140.98	-53.9	-18.6	57.1	56.4	0.76	75.518 ES						
300.0	300.0	300.0	300.0	0.5	0.5	141.32	-53.9	-18.6	57.5	56.5	1.09	52.747						
400.0	399.8	399.8	399.8	0.8	0.8	144.28	-53.9	-18.6	61.7	60.1	1.62	38.098						
500.0	499.3	497.9	497.9	1.0	1.0	147.13	-55.8	-17.0	71.4	69.2	2.18	32.742						
600.0	598.0	595.1	594.8	1.3	1.2	147.80	-61.3	-12.0	87.5	84.7	2.78	31.525 SF						
700.0	695.8	690.7	689.6	1.7	1.4	147.09	-70.3	-3.9	109.8	106.4	3.42	32.066						
800.0	792.4	784.3	781.7	2.2	1.7	145.71	-82.6	7.1	138.1	134.0	4.14	33.358						
900.0	887.5	875.4	870.5	2.8	2.1	144.08	-97.7	20.7	172.4	167.4	4.94	34.911						

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Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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 S1-T7S-R97W (Mesa E1 797) - PUCKETT 23C-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	-150.71	-48.8	-27.4	56.0					
100.0	100.0	100.0	100.0	0.1	0.1	-150.71	-48.8	-27.4	56.0	55.8	0.18	311.230		
200.0	200.0	200.0	200.0	0.3	0.3	-150.71	-48.8	-27.4	56.0	55.3	0.63	88.923 CC		
227.9	227.9	227.9	227.9	0.4	0.4	151.19	-48.8	-27.4	56.1	55.3	0.76	74.105 ES		
300.0	300.0	300.0	300.0	0.5	0.5	151.45	-48.8	-27.4	56.5	55.4	1.09	51.644		
400.0	399.8	396.7	396.7	0.8	0.7	153.18	-51.1	-28.2	63.7	62.0	1.63	39.157		
500.0	499.3	491.8	491.5	1.0	0.9	155.19	-57.8	-30.7	80.4	78.2	2.23	36.087 SF		
600.0	598.0	585.8	584.8	1.3	1.2	156.50	-68.8	-34.0	106.0	103.2	2.87	36.915		
700.0	695.8	679.0	676.9	1.7	1.5	156.17	-83.1	-34.8	137.9	134.4	3.50	39.354		
800.0	792.4	769.7	765.8	2.2	1.8	154.94	-100.5	-32.8	175.5	171.3	4.17	42.033		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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													S1-T7S-R97W (Mesa E1 797) - PUCKETT 31B-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	29.73	6.9	4.0	8.0							
100.0	100.0	100.0	100.0	0.1	0.1	29.73	6.9	4.0	8.0	7.8	0.18	44.320				
200.0	200.0	200.0	200.0	0.3	0.3	29.73	6.9	4.0	8.0	7.3	0.63	12.663 CC, ES				
300.0	300.0	299.6	299.5	0.5	0.5	-24.16	8.5	6.0	9.8	8.7	1.09	8.973				
400.0	399.8	399.0	398.6	0.8	0.8	-22.12	13.1	12.3	12.4	10.8	1.63	7.596				
500.0	499.3	498.3	497.0	1.0	1.1	-22.40	20.8	22.6	15.1	12.9	2.21	6.841				
600.0	598.0	597.4	594.5	1.3	1.4	-23.93	31.6	37.0	18.0	15.2	2.82	6.375				
700.0	695.8	696.4	690.8	1.7	1.8	-26.17	45.3	55.4	21.0	17.5	3.48	6.039				
800.0	792.4	795.3	785.7	2.2	2.4	-28.81	62.0	77.7	24.1	19.9	4.20	5.752				
900.0	887.5	894.0	878.8	2.8	3.0	-31.64	81.5	103.9	27.5	22.5	5.02	5.474				
1,000.0	981.1	993.6	971.5	3.4	3.7	-35.32	103.3	133.2	30.3	24.3	5.95	5.090				
1,100.0	1,074.4	1,093.5	1,064.4	4.1	4.4	-39.04	125.4	162.7	32.8	25.8	6.99	4.693				
1,200.0	1,167.7	1,193.5	1,157.3	4.8	5.1	-42.23	147.4	192.2	35.4	27.3	8.13	4.353				
1,300.0	1,260.9	1,293.4	1,250.3	5.5	5.8	-44.97	169.4	221.7	38.1	28.7	9.35	4.074				
1,400.0	1,354.2	1,393.4	1,343.2	6.2	6.5	-47.34	191.4	251.2	40.9	30.2	10.63	3.846				
1,500.0	1,447.5	1,493.3	1,436.1	6.9	7.3	-49.40	213.4	280.7	43.7	31.8	11.94	3.660				
1,600.0	1,540.8	1,593.3	1,529.0	7.7	8.0	-51.22	235.4	310.2	46.6	33.3	13.29	3.507				
1,700.0	1,634.1	1,693.2	1,621.9	8.4	8.7	-52.82	257.5	339.7	49.5	34.9	14.65	3.380				
1,800.0	1,727.4	1,793.2	1,714.9	9.1	9.5	-54.24	279.5	369.2	52.5	36.5	16.03	3.274				
1,900.0	1,820.7	1,893.1	1,807.8	9.8	10.2	-55.51	301.5	398.7	55.5	38.1	17.42	3.184				
2,000.0	1,913.9	1,993.1	1,900.7	10.6	10.9	-56.64	323.5	428.2	58.5	39.7	18.83	3.107				
2,100.0	2,007.2	2,093.0	1,993.6	11.3	11.7	-57.67	345.5	457.7	61.5	41.3	20.23	3.041				
2,200.0	2,100.5	2,193.0	2,086.6	12.0	12.4	-58.60	367.5	487.2	64.6	42.9	21.65	2.984				
2,300.0	2,193.8	2,292.9	2,179.5	12.7	13.1	-59.44	389.6	516.7	67.7	44.6	23.06	2.934				
2,400.0	2,287.1	2,392.9	2,272.4	13.5	13.9	-60.21	411.6	546.2	70.7	46.3	24.48	2.889				
2,500.0	2,380.4	2,492.8	2,365.3	14.2	14.6	-60.92	433.6	575.7	73.8	47.9	25.91	2.850				
2,600.0	2,473.7	2,592.8	2,458.2	14.9	15.4	-61.57	455.6	605.2	76.9	49.6	27.33	2.815				
2,700.0	2,566.9	2,692.7	2,551.2	15.6	16.1	-62.17	477.6	634.7	80.1	51.3	28.76	2.784				
2,800.0	2,660.2	2,792.7	2,644.1	16.4	16.8	-62.73	499.6	664.2	83.2	53.0	30.18	2.756				
2,900.0	2,753.5	2,892.6	2,737.0	17.1	17.6	-63.24	521.6	693.7	86.3	54.7	31.61	2.730				
3,000.0	2,846.8	2,992.6	2,829.9	17.8	18.3	-63.72	543.7	723.2	89.5	56.4	33.04	2.707				
3,100.0	2,940.1	3,092.5	2,922.9	18.5	19.0	-64.16	565.7	752.7	92.6	58.1	34.47	2.686				
3,200.0	3,033.4	3,192.5	3,015.8	19.3	19.8	-64.58	587.7	782.2	95.7	59.8	35.90	2.667				
3,300.0	3,126.7	3,292.4	3,108.7	20.0	20.5	-64.97	609.7	811.7	98.9	61.6	37.33	2.649				
3,400.0	3,220.0	3,392.4	3,201.6	20.7	21.3	-65.34	631.7	841.2	102.1	63.3	38.76	2.633				
3,500.0	3,313.2	3,492.3	3,294.5	21.4	22.0	-65.68	653.7	870.7	105.2	65.0	40.19	2.618				
3,600.0	3,406.5	3,592.2	3,387.5	22.2	22.7	-66.00	675.8	900.2	108.4	66.8	41.62	2.604				
3,700.0	3,499.8	3,692.2	3,480.4	22.9	23.5	-66.31	697.8	929.8	111.5	68.5	43.05	2.591				
3,800.0	3,593.1	3,792.1	3,573.3	23.6	24.2	-66.60	719.8	959.3	114.7	70.2	44.48	2.579				
3,900.0	3,686.4	3,892.1	3,666.2	24.4	25.0	-66.87	741.8	988.8	117.9	72.0	45.91	2.568				
4,000.0	3,779.7	3,992.0	3,759.1	25.1	25.7	-67.13	763.8	1,018.3	121.1	73.7	47.35	2.557				
4,100.0	3,873.0	4,092.0	3,852.1	25.8	26.4	-67.38	785.8	1,047.8	124.2	75.5	48.78	2.547				
4,200.0	3,966.2	4,191.9	3,945.0	26.5	27.2	-67.61	807.9	1,077.3	127.4	77.2	50.21	2.538				
4,300.0	4,059.5	4,291.9	4,037.9	27.3	27.9	-67.83	829.9	1,106.8	130.6	79.0	51.64	2.529				
4,400.0	4,152.8	4,391.8	4,130.8	28.0	28.7	-68.04	851.9	1,136.3	133.8	80.7	53.07	2.521				
4,500.0	4,246.1	4,491.8	4,223.8	28.7	29.4	-68.24	873.9	1,165.8	137.0	82.5	54.50	2.513				
4,600.0	4,339.4	4,591.7	4,316.7	29.4	30.1	-68.44	895.9	1,195.3	140.2	84.2	55.93	2.506				
4,700.0	4,432.7	4,691.7	4,409.6	30.2	30.9	-68.62	917.9	1,224.8	143.4	86.0	57.36	2.499				
4,800.0	4,526.0	4,791.6	4,502.5	30.9	31.6	-68.80	940.0	1,254.3	146.5	87.8	58.79	2.493				
4,900.0	4,619.3	4,891.6	4,595.4	31.6	32.3	-68.96	962.0	1,283.8	149.7	89.5	60.22	2.486				
5,000.0	4,712.5	4,991.5	4,688.4	32.4	33.1	-69.13	984.0	1,313.3	152.9	91.3	61.65	2.480				
5,100.0	4,805.8	5,091.5	4,781.3	33.1	33.8	-69.28	1,006.0	1,342.8	156.1	93.0	63.09	2.475				

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 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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				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)					
5,200.0	4,899.1	5,191.4	4,874.2	33.8	34.6	-69.43	1,028.0	1,372.3	159.3	94.8	64.52	2.469			
5,300.0	4,992.4	5,291.4	4,967.1	34.5	35.3	-69.57	1,050.0	1,401.8	162.5	96.6	65.95	2.464			
5,400.0	5,085.7	5,391.3	5,060.1	35.3	36.0	-69.71	1,072.0	1,431.3	165.7	98.3	67.38	2.459			
5,500.0	5,179.0	5,491.3	5,153.0	36.0	36.8	-69.84	1,094.1	1,460.8	168.9	100.1	68.81	2.455			
5,600.0	5,272.3	5,591.2	5,245.9	36.7	37.5	-69.97	1,116.1	1,490.3	172.1	101.9	70.24	2.450			
5,700.0	5,365.5	5,691.2	5,338.8	37.5	38.3	-70.09	1,138.1	1,519.8	175.3	103.6	71.67	2.446			
5,800.0	5,458.8	5,791.1	5,431.7	38.2	39.0	-70.21	1,160.1	1,549.3	178.5	105.4	73.10	2.442			
5,900.0	5,552.1	5,891.1	5,524.7	38.9	39.7	-70.32	1,182.1	1,578.8	181.7	107.2	74.53	2.438			
6,000.0	5,645.4	5,991.0	5,617.6	39.6	40.5	-70.43	1,204.1	1,608.3	184.9	109.0	75.96	2.434			
6,100.0	5,738.7	6,091.0	5,710.5	40.4	41.2	-70.54	1,226.2	1,637.8	188.1	110.7	77.39	2.431			
6,200.0	5,832.0	6,190.9	5,803.4	41.1	42.0	-70.64	1,248.2	1,667.3	191.3	112.5	78.82	2.427			
6,300.0	5,925.3	6,290.8	5,896.4	41.8	42.7	-70.74	1,270.2	1,696.8	194.5	114.3	80.25	2.424			
6,400.0	6,018.6	6,390.8	5,989.3	42.5	43.4	-70.84	1,292.2	1,726.3	197.7	116.1	81.68	2.421 SF			

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Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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
S1-T7S-R97W (Mesa E1 797) - PUCKETT 32A-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	81.88	1.8	12.7	12.8					
100.0	100.0	100.0	100.0	0.1	0.1	81.88	1.8	12.7	12.8	12.7	0.18	71.360		
200.0	200.0	200.0	200.0	0.3	0.3	81.88	1.8	12.7	12.8	12.2	0.63	20.389 CC, ES		
300.0	300.0	299.5	299.5	0.5	0.5	24.41	2.1	14.1	13.7	12.6	1.09	12.597		
400.0	399.8	398.7	398.5	0.8	0.8	30.47	3.4	20.4	15.5	13.9	1.60	9.676		
500.0	499.3	497.8	496.9	1.0	1.0	40.31	5.8	31.7	18.2	16.1	2.13	8.573		
600.0	598.0	596.7	594.3	1.3	1.4	51.03	9.3	48.0	22.5	19.8	2.69	8.363		
700.0	695.8	695.4	690.6	1.7	1.8	60.52	13.7	69.1	28.5	25.2	3.37	8.470		
800.0	792.4	793.8	785.4	2.2	2.3	68.03	19.2	95.0	36.6	32.3	4.25	8.609		
900.0	887.5	892.6	879.3	2.8	2.8	74.51	25.6	125.0	46.1	40.8	5.35	8.616		
1,000.0	981.1	991.9	973.5	3.4	3.5	83.05	32.0	155.7	55.6	48.9	6.68	8.323		
1,100.0	1,074.4	1,091.1	1,067.7	4.1	4.1	89.77	38.5	186.3	66.0	57.9	8.06	8.182		
1,200.0	1,167.7	1,190.3	1,161.8	4.8	4.7	94.63	45.0	216.9	77.0	67.6	9.44	8.160 SF		
1,300.0	1,260.9	1,289.5	1,255.9	5.5	5.3	98.26	51.5	247.6	88.4	77.6	10.79	8.195		
1,400.0	1,354.2	1,388.7	1,350.1	6.2	6.0	101.05	57.9	278.2	100.1	88.0	12.13	8.254		
1,500.0	1,447.5	1,487.9	1,444.2	6.9	6.6	103.25	64.4	308.9	112.0	98.6	13.46	8.322		
1,600.0	1,540.8	1,587.1	1,538.3	7.7	7.3	105.03	70.9	339.5	124.0	109.3	14.78	8.392		
1,700.0	1,634.1	1,686.3	1,632.5	8.4	7.9	106.49	77.4	370.2	136.2	120.1	16.10	8.460		
1,800.0	1,727.4	1,785.5	1,726.6	9.1	8.5	107.72	83.9	400.8	148.4	131.0	17.40	8.524		
1,900.0	1,820.7	1,884.7	1,820.7	9.8	9.2	108.76	90.3	431.4	160.6	141.9	18.71	8.585		
2,000.0	1,913.9	1,983.9	1,914.9	10.6	9.8	109.65	96.8	462.1	172.9	152.9	20.01	8.641		
2,100.0	2,007.2	2,083.2	2,009.0	11.3	10.5	110.42	103.3	492.7	185.2	163.9	21.31	8.693		
2,200.0	2,100.5	2,182.4	2,103.1	12.0	11.1	111.09	109.8	523.4	197.6	175.0	22.61	8.741		

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

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Reference Well:	PUCKETT 31C-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 S1-T7S-R97W (Mesa E1 797) - PUCKETT 32C-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	120.23	-5.1	8.8	10.1					
100.0	100.0	100.0	100.0	0.1	0.1	120.23	-5.1	8.8	10.1	9.9	0.18	56.326		
200.0	200.0	200.0	200.0	0.3	0.3	120.23	-5.1	8.8	10.1	9.5	0.63	16.093		
300.0	300.0	300.0	300.0	0.5	0.5	65.46	-5.1	8.8	9.8	8.8	1.08	9.111		
334.5	334.5	334.4	334.3	0.6	0.6	71.05	-5.1	9.1	9.6	8.4	1.23	7.816 CC, ES		
400.0	399.8	399.5	399.5	0.8	0.8	84.36	-5.2	11.3	10.5	8.9	1.52	6.896 SF		
500.0	499.3	499.0	498.7	1.0	1.0	101.15	-5.5	19.1	15.1	13.1	2.02	7.459		
600.0	598.0	598.4	597.1	1.3	1.3	109.25	-6.0	32.0	23.4	20.8	2.64	8.853		
700.0	695.8	697.4	694.5	1.7	1.6	112.42	-6.7	49.9	34.9	31.6	3.39	10.320		
800.0	792.4	795.9	790.4	2.2	2.0	113.43	-7.6	72.7	49.5	45.2	4.27	11.593		
900.0	887.5	894.0	884.5	2.8	2.5	113.51	-8.6	100.3	66.9	61.6	5.31	12.608		
1,000.0	981.1	991.9	977.7	3.4	3.1	114.75	-9.8	130.3	86.6	80.1	6.47	13.379		
1,100.0	1,074.4	1,089.9	1,070.9	4.1	3.7	116.09	-11.0	160.2	106.7	99.0	7.67	13.912		
1,200.0	1,167.7	1,187.8	1,164.2	4.8	4.3	117.00	-12.1	190.2	126.8	117.9	8.88	14.274		
1,300.0	1,260.9	1,285.7	1,257.4	5.5	4.9	117.66	-13.3	220.1	146.9	136.8	10.11	14.534		
1,400.0	1,354.2	1,383.7	1,350.7	6.2	5.5	118.17	-14.4	250.1	167.0	155.7	11.34	14.727		
1,500.0	1,447.5	1,481.6	1,443.9	6.9	6.1	118.56	-15.6	280.0	187.2	174.6	12.58	14.876		

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 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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 S1-T7S-R97W (Mesa E1 797) - PUCKETT 33A-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	177.49	-19.3	0.8	19.3					
100.0	100.0	100.0	100.0	0.1	0.1	177.49	-19.3	0.8	19.3	19.1	0.18	107.460		
200.0	200.0	200.0	200.0	0.3	0.3	177.49	-19.3	0.8	19.3	18.7	0.63	30.703 CC		
229.3	229.3	229.3	229.3	0.4	0.4	119.63	-19.3	0.8	19.4	18.6	0.76	25.449		
300.0	300.0	300.0	300.0	0.5	0.5	120.99	-19.3	0.8	19.7	18.6	1.08	18.150 ES		
400.0	399.8	399.7	399.7	0.8	0.8	128.64	-19.8	2.2	23.1	21.5	1.57	14.651 SF		
500.0	499.3	499.1	498.9	1.0	1.0	131.80	-21.9	8.4	31.0	28.9	2.12	14.653		
600.0	598.0	598.1	597.1	1.3	1.2	131.71	-25.6	19.3	43.2	40.5	2.72	15.862		
700.0	695.8	696.3	694.0	1.7	1.5	130.32	-30.9	34.9	59.7	56.2	3.42	17.418		
800.0	792.4	793.5	788.8	2.2	1.9	128.59	-37.8	54.9	80.3	76.0	4.24	18.920		
900.0	887.5	889.5	881.3	2.8	2.4	126.86	-46.1	79.2	105.0	99.8	5.20	20.204		
1,000.0	981.1	984.1	971.1	3.4	3.0	125.38	-55.7	107.4	133.5	127.2	6.27	21.285		
1,100.0	1,074.4	1,079.6	1,061.0	4.1	3.6	124.11	-66.1	137.8	162.9	155.5	7.42	21.955		
1,200.0	1,167.7	1,175.1	1,151.0	4.8	4.2	123.22	-76.5	168.2	192.4	183.8	8.61	22.348		

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 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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 S1-T7S-R97W (Mesa E1 797) - PUCKETT 33C-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	-167.72	-32.4	-7.1	33.2					
100.0	100.0	100.0	100.0	0.1	0.1	-167.72	-32.4	-7.1	33.2	33.0	0.18	184.502		
200.0	200.0	200.0	200.0	0.3	0.3	-167.72	-32.4	-7.1	33.2	32.5	0.63	52.715 CC		
227.8	227.8	227.8	227.8	0.4	0.4	134.26	-32.4	-7.1	33.2	32.5	0.76	44.023 ES		
300.0	300.0	299.7	299.7	0.5	0.5	133.89	-32.8	-6.5	33.9	32.8	1.08	31.396		
400.0	399.8	398.8	398.7	0.8	0.7	132.22	-35.6	-2.2	39.4	37.8	1.57	25.042		
500.0	499.3	497.2	496.6	1.0	1.0	129.94	-41.2	6.3	50.5	48.3	2.14	23.611 SF		
600.0	598.0	594.5	592.7	1.3	1.3	127.85	-49.4	18.9	67.0	64.3	2.78	24.143		
700.0	695.8	690.3	686.4	1.7	1.7	126.16	-60.1	35.2	89.0	85.5	3.51	25.347		
800.0	792.4	784.1	777.2	2.2	2.1	124.78	-73.1	55.0	116.2	111.9	4.36	26.673		
900.0	887.5	875.8	864.6	2.8	2.6	123.61	-88.2	77.9	148.5	143.2	5.32	27.901		
1,000.0	981.1	965.0	948.4	3.4	3.2	122.89	-105.0	103.5	185.4	179.0	6.39	29.015		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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 S1-T7S-R97W (Mesa E1 797) - PUCKETT 34A-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	-164.50	-39.7	-11.0	41.2					
100.0	100.0	100.0	100.0	0.1	0.1	-164.50	-39.7	-11.0	41.2	41.0	0.18	229.148		
200.0	200.0	200.0	200.0	0.3	0.3	-164.50	-39.7	-11.0	41.2	40.6	0.63	65.471 CC		
228.1	228.1	228.1	228.1	0.4	0.4	137.44	-39.7	-11.0	41.3	40.5	0.76	54.552 ES		
300.0	300.0	300.0	300.0	0.5	0.5	137.95	-39.7	-11.0	41.7	40.6	1.09	38.260		
400.0	399.8	399.8	399.8	0.8	0.8	142.27	-39.7	-11.0	45.7	44.1	1.62	28.294		
500.0	499.3	498.4	498.4	1.0	1.0	146.27	-41.4	-9.2	55.1	52.9	2.18	25.304 SF		
600.0	598.0	596.2	595.9	1.3	1.2	147.15	-46.6	-3.7	70.6	67.8	2.77	25.465		
700.0	695.8	692.7	691.5	1.7	1.4	146.26	-55.0	5.3	91.9	88.5	3.42	26.870		
800.0	792.4	787.2	784.6	2.2	1.7	144.64	-66.5	17.5	119.0	114.9	4.14	28.720		
900.0	887.5	879.5	874.5	2.8	2.1	142.79	-80.8	32.6	151.7	146.8	4.96	30.623		
1,000.0	981.1	969.1	960.7	3.4	2.5	141.20	-97.4	50.3	189.6	183.7	5.82	32.578		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 31C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 31C-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

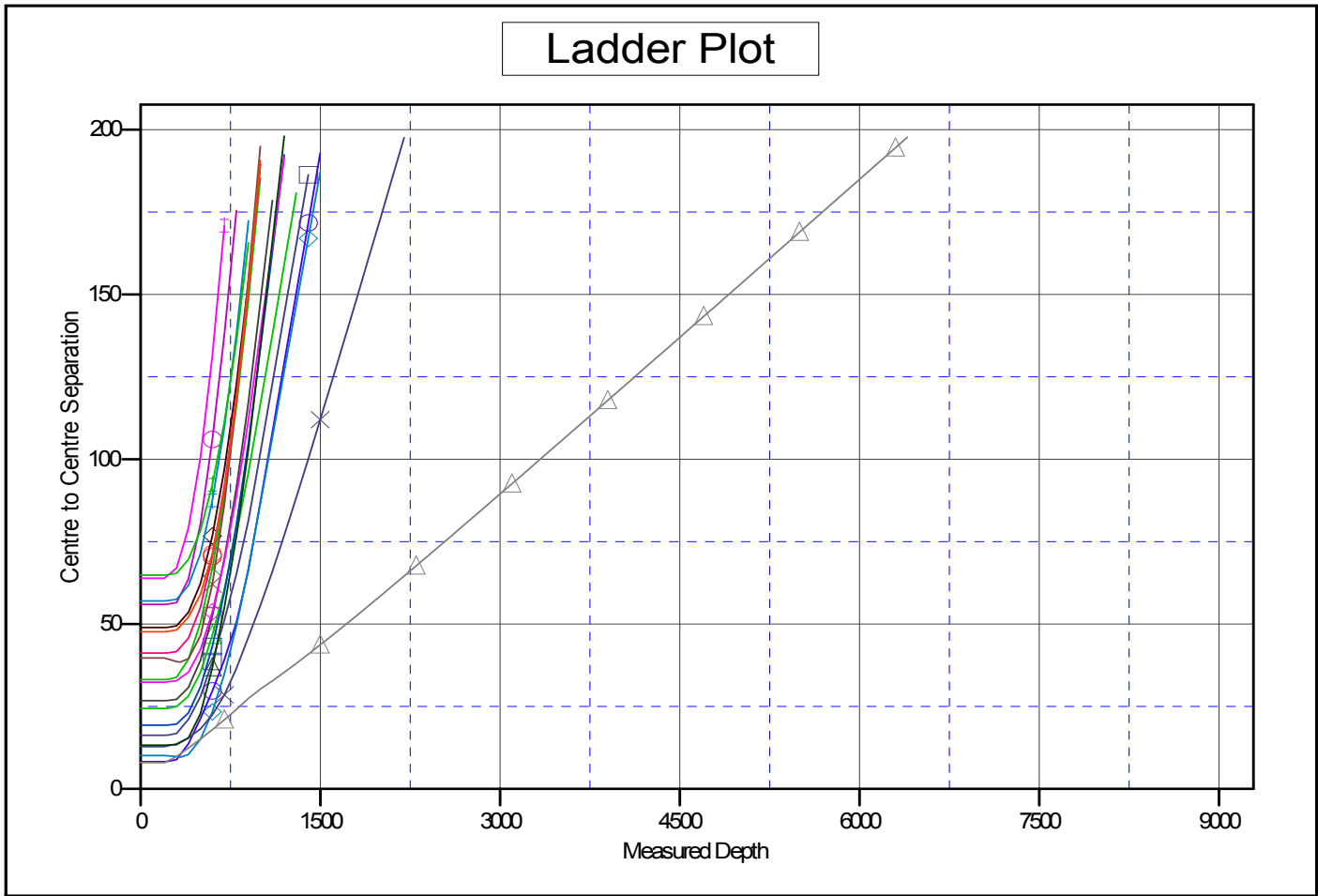
Offset Design													Offset Site Error:	0.0 usft	
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft	
Reference				Offset				Semi Major Axis			Distance		Total Uncertainty Axis	Separation Factor	Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (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	-159.63	-60.8	-22.6	64.9						
100.0	100.0	100.0	100.0	0.1	0.1	-159.63	-60.8	-22.6	64.9	64.7	0.18	360.838			
200.0	200.0	200.0	200.0	0.3	0.3	-159.63	-60.8	-22.6	64.9	64.3	0.63	103.097 CC			
227.9	227.9	227.9	227.9	0.4	0.4	142.27	-60.8	-22.6	65.0	64.2	0.76	85.907 ES			
300.0	300.0	300.0	300.0	0.5	0.5	142.56	-60.8	-22.6	65.4	64.3	1.09	59.922			
400.0	399.8	399.8	399.8	0.8	0.8	145.10	-60.8	-22.6	69.6	68.0	1.62	42.936			
500.0	499.3	499.3	499.3	1.0	1.0	149.33	-60.8	-22.6	78.4	76.2	2.20	35.578			
600.0	598.0	598.0	598.0	1.3	1.2	154.10	-60.8	-22.6	92.3	89.4	2.82	32.679			
700.0	695.8	695.8	695.8	1.7	1.4	158.55	-60.8	-22.6	111.4	107.9	3.46	32.195 SF			
800.0	792.4	792.4	792.4	2.2	1.6	162.30	-60.8	-22.6	135.9	131.8	4.10	33.141			
900.0	887.5	887.5	887.5	2.8	1.9	165.31	-60.8	-22.6	165.7	160.9	4.74	34.978			

Cathedral Energy Services

Anticollision Report

Company: Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference: Well PUCKETT 31C-1	
Project: Garfield County, CO	TVD Reference: KB=20' @ 8349.0usft (Patterson #303)	
Reference Site: S1-T7S-R97W (Mesa E1 797)	MD Reference: KB=20' @ 8349.0usft (Patterson #303)	
Site Error: 0.0usft	North Reference: True	
Reference Well: PUCKETT 31C-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=20' @ 8349.0usft (Patterson #303) Coordinates are relative to: PUCKETT 31C-1
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1927 (Exact solution), Colorado Central 502
 Central Meridian is -105.500000 ° Grid Convergence at Surface is: -1.69°



LEGEND

- | | | |
|-------------------------------|-------------------------------|-----------------------------------|
| PUCKETT 23C-1, DD, Plan #1 V0 | PUCKETT 32A-1, DD, Plan #1 V0 | PUCKETT SWDE1-797, VH, Plan #1 V0 |
| PUCKETT 23A-1, DD, Plan #1 V0 | PUCKETT 31B-1, DD, Plan #1 V0 | PUCKETT 11C-1, DD, Plan #1 V0 |
| PUCKETT 21D-1, DD, Plan #1 V0 | PUCKETT 23B-1, DD, Plan #1 V0 | PUCKETT 33A-1, DD, Plan #1 V0 |
| PUCKETT 33C-1, DD, Plan #1 V0 | PUCKETT 22D-1, DD, Plan #1 V0 | PUCKETT 22A-36, DD, Plan #1 V0 |
| PUCKETT 32C-1, DD, Plan #1 V0 | PUCKETT 13B-1, DD, Plan #1 V0 | PUCKETT 22C-1, DD, Plan #1 V0 |
| PUCKETT 11B-1, DD, Plan #1 V0 | PUCKETT 34A-1, DD, Plan #1 V0 | |
| PUCKETT 21C-1, DD, Plan #1 V0 | PUCKETT 21A-1, HZ, Plan #1 V0 | |

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