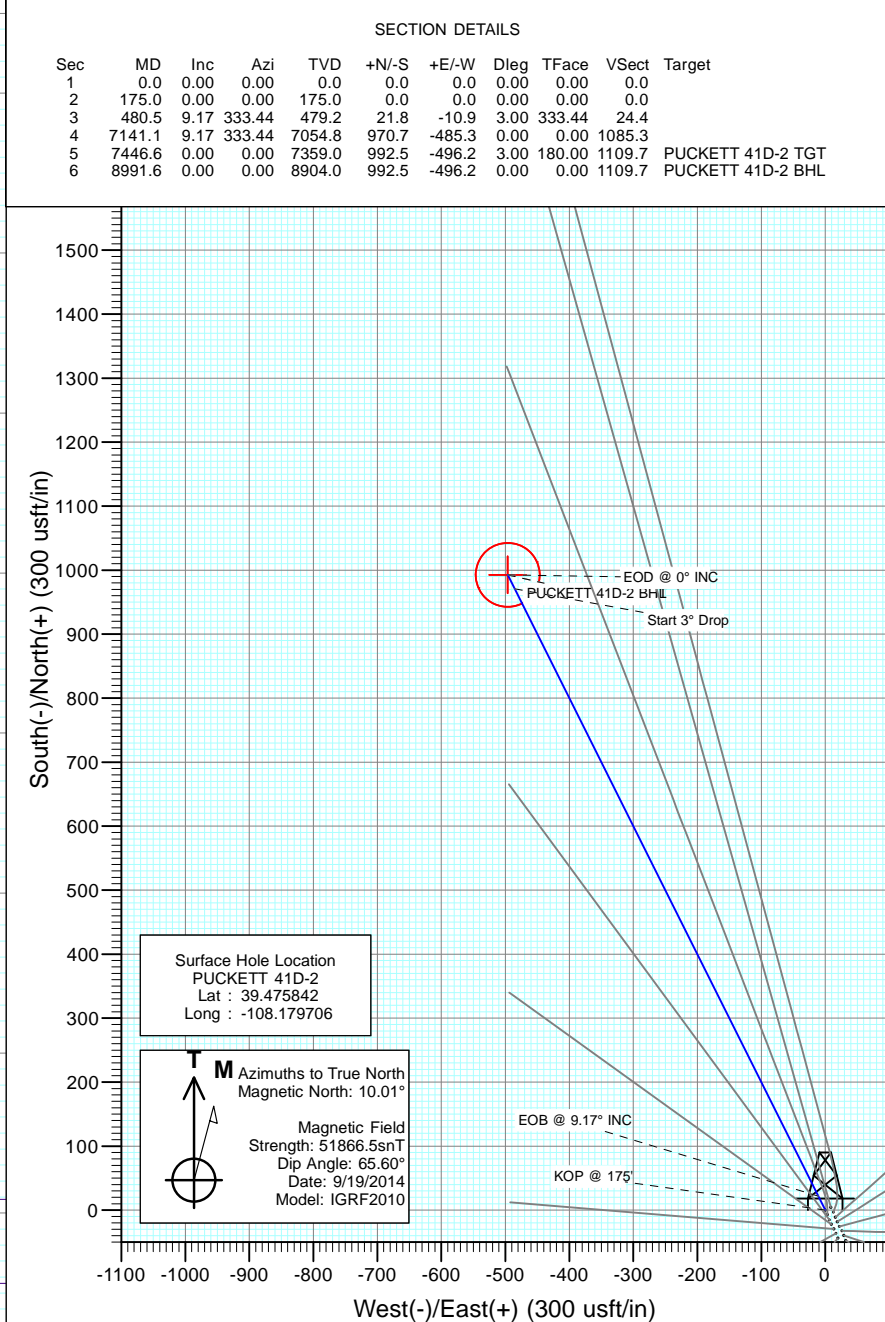
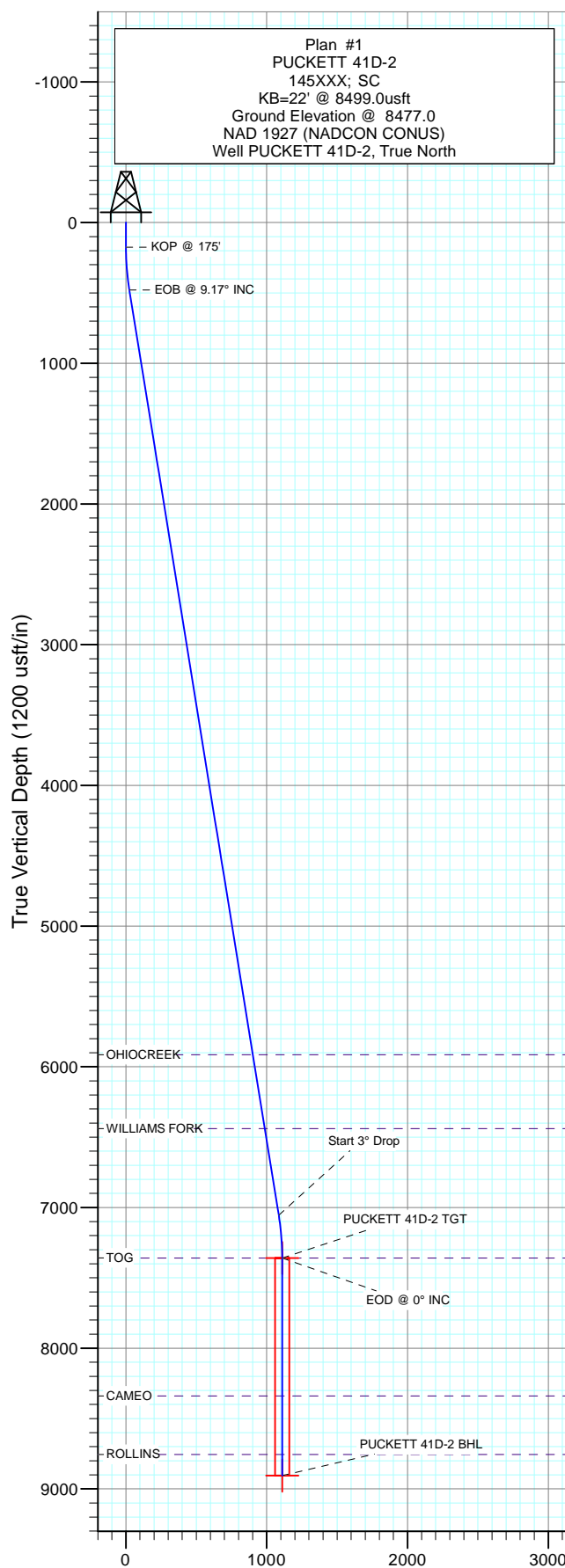




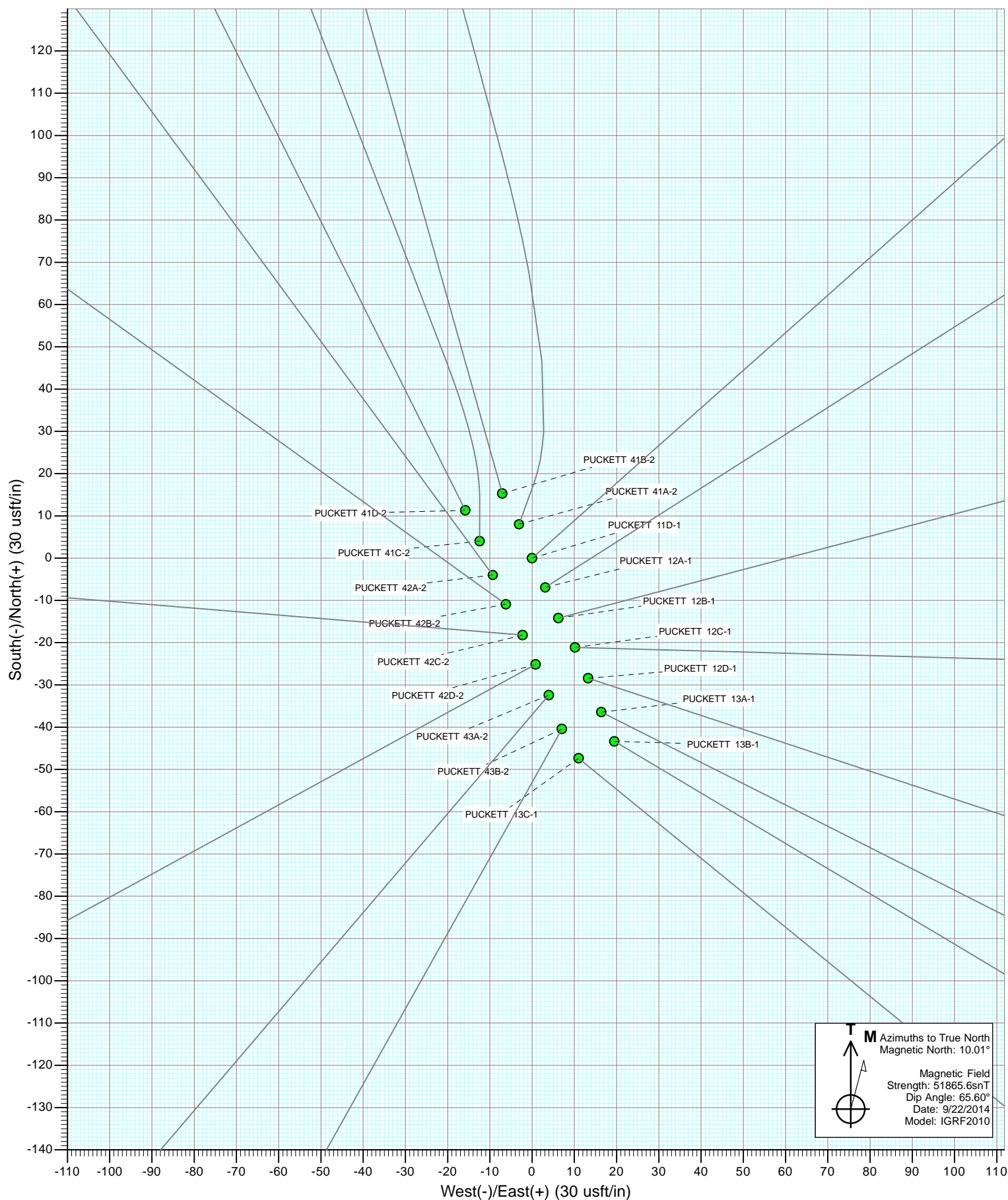
Project: Garfield County, CO
Site: S2-T7S-R97W (Puckett Pad)
Well: PUCKETT 41D-2
Wellbore: DD
Design: Plan #1

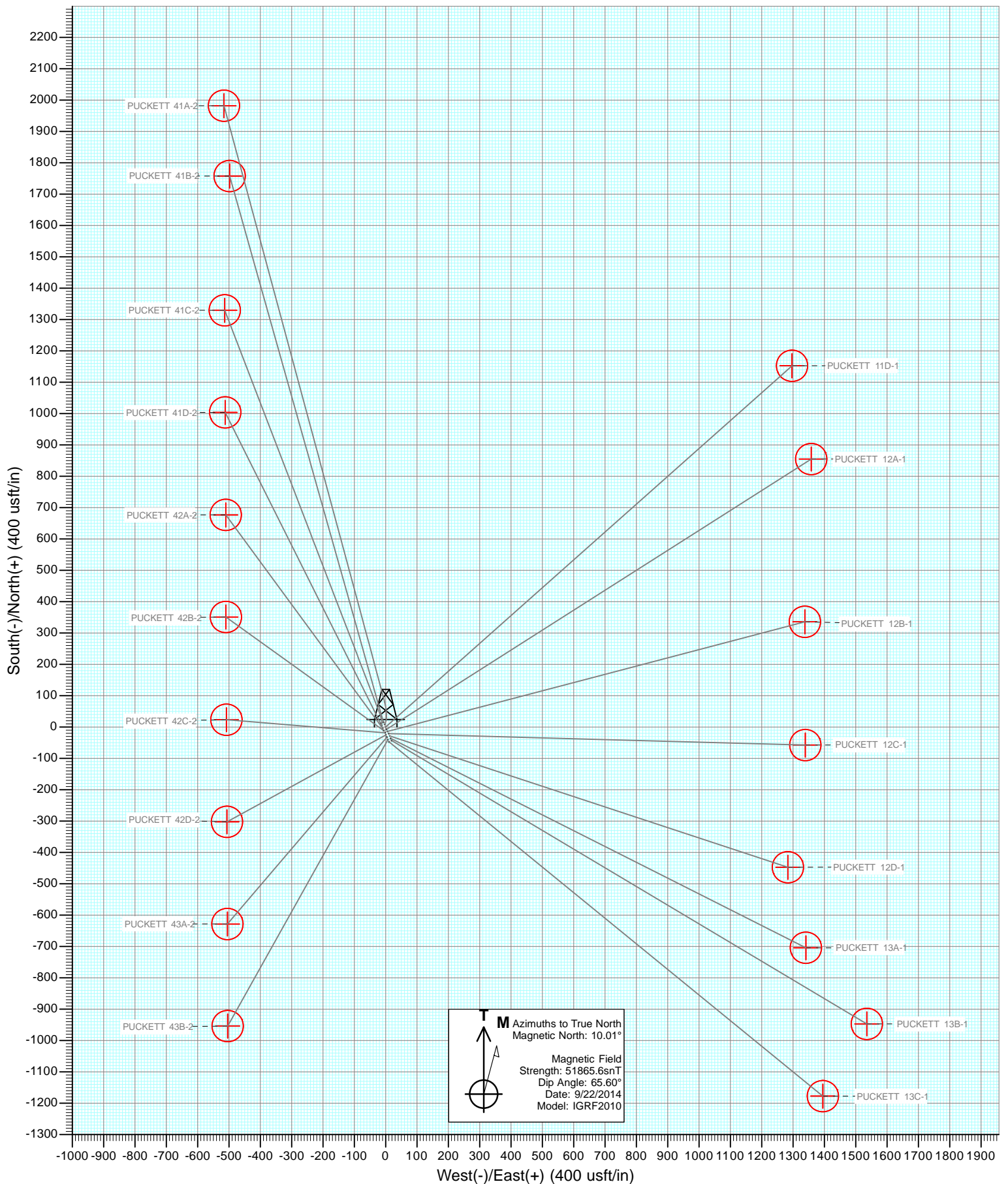


DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PUCKETT 41D-2 TGT	992.5	-496.2	610354.86	1243192.44	39.478567	-108.181464
PUCKETT 41D-2 BHL	992.5	-496.2	610354.86	1243192.44	39.478567	-108.181464

Vertical Section at 333.44° (1200 usft/in)





Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	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 41D-2					
Well Position	+N/-S	0.0 usft	Northing:	609,348.11 usft	Latitude:	39.475842
	+E/-W	0.0 usft	Easting:	1,243,659.20 usft	Longitude:	-108.179706
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	8,477.0 usft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/19/2014	10.01	65.60	51,866

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	333.44

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	
175.0	0.00	0.00	175.0	0.0	0.0	0.00	0.00	0.00	0.00	
480.5	9.17	333.44	479.2	21.8	-10.9	3.00	3.00	0.00	333.44	
7,141.1	9.17	333.44	7,054.8	970.7	-485.3	0.00	0.00	0.00	0.00	
7,446.6	0.00	0.00	7,359.0	992.5	-496.2	3.00	-3.00	0.00	180.00	PUCKETT 41D-2 TG1
8,991.6	0.00	0.00	8,904.0	992.5	-496.2	0.00	0.00	0.00	0.00	PUCKETT 41D-2 BHL

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	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	
175.0	0.00	0.00	175.0	0.0	0.0	0.0	0.00	0.00	KOP @ 175'
200.0	0.75	333.44	200.0	0.1	-0.1	0.2	3.00	3.00	
300.0	3.75	333.44	299.9	3.7	-1.8	4.1	3.00	3.00	
400.0	6.75	333.44	399.5	11.8	-5.9	13.2	3.00	3.00	
480.5	9.17	333.44	479.2	21.8	-10.9	24.4	3.00	3.00	EOB @ 9.17° INC
500.0	9.17	333.44	498.4	24.6	-12.3	27.5	0.00	0.00	
600.0	9.17	333.44	597.2	38.8	-19.4	43.4	0.00	0.00	
700.0	9.17	333.44	695.9	53.1	-26.5	59.3	0.00	0.00	
800.0	9.17	333.44	794.6	67.3	-33.7	75.3	0.00	0.00	
900.0	9.17	333.44	893.3	81.6	-40.8	91.2	0.00	0.00	
1,000.0	9.17	333.44	992.1	95.8	-47.9	107.1	0.00	0.00	
1,100.0	9.17	333.44	1,090.8	110.1	-55.0	123.1	0.00	0.00	
1,200.0	9.17	333.44	1,189.5	124.3	-62.2	139.0	0.00	0.00	
1,300.0	9.17	333.44	1,288.2	138.6	-69.3	154.9	0.00	0.00	
1,400.0	9.17	333.44	1,387.0	152.8	-76.4	170.8	0.00	0.00	
1,500.0	9.17	333.44	1,485.7	167.1	-83.5	186.8	0.00	0.00	
1,600.0	9.17	333.44	1,584.4	181.3	-90.6	202.7	0.00	0.00	
1,700.0	9.17	333.44	1,683.1	195.5	-97.8	218.6	0.00	0.00	
1,800.0	9.17	333.44	1,781.9	209.8	-104.9	234.6	0.00	0.00	
1,900.0	9.17	333.44	1,880.6	224.0	-112.0	250.5	0.00	0.00	
2,000.0	9.17	333.44	1,979.3	238.3	-119.1	266.4	0.00	0.00	
2,100.0	9.17	333.44	2,078.0	252.5	-126.3	282.3	0.00	0.00	
2,200.0	9.17	333.44	2,176.7	266.8	-133.4	298.3	0.00	0.00	
2,300.0	9.17	333.44	2,275.5	281.0	-140.5	314.2	0.00	0.00	
2,400.0	9.17	333.44	2,374.2	295.3	-147.6	330.1	0.00	0.00	
2,500.0	9.17	333.44	2,472.9	309.5	-154.8	346.1	0.00	0.00	
2,600.0	9.17	333.44	2,571.6	323.8	-161.9	362.0	0.00	0.00	
2,700.0	9.17	333.44	2,670.4	338.0	-169.0	377.9	0.00	0.00	
2,800.0	9.17	333.44	2,769.1	352.3	-176.1	393.8	0.00	0.00	
2,900.0	9.17	333.44	2,867.8	366.5	-183.2	409.8	0.00	0.00	
3,000.0	9.17	333.44	2,966.5	380.8	-190.4	425.7	0.00	0.00	
3,100.0	9.17	333.44	3,065.3	395.0	-197.5	441.6	0.00	0.00	
3,200.0	9.17	333.44	3,164.0	409.2	-204.6	457.5	0.00	0.00	
3,300.0	9.17	333.44	3,262.7	423.5	-211.7	473.5	0.00	0.00	
3,400.0	9.17	333.44	3,361.4	437.7	-218.9	489.4	0.00	0.00	
3,500.0	9.17	333.44	3,460.1	452.0	-226.0	505.3	0.00	0.00	
3,600.0	9.17	333.44	3,558.9	466.2	-233.1	521.3	0.00	0.00	
3,700.0	9.17	333.44	3,657.6	480.5	-240.2	537.2	0.00	0.00	
3,800.0	9.17	333.44	3,756.3	494.7	-247.4	553.1	0.00	0.00	
3,900.0	9.17	333.44	3,855.0	509.0	-254.5	569.0	0.00	0.00	
4,000.0	9.17	333.44	3,953.8	523.2	-261.6	585.0	0.00	0.00	
4,100.0	9.17	333.44	4,052.5	537.5	-268.7	600.9	0.00	0.00	
4,200.0	9.17	333.44	4,151.2	551.7	-275.8	616.8	0.00	0.00	
4,300.0	9.17	333.44	4,249.9	566.0	-283.0	632.8	0.00	0.00	
4,400.0	9.17	333.44	4,348.7	580.2	-290.1	648.7	0.00	0.00	
4,500.0	9.17	333.44	4,447.4	594.5	-297.2	664.6	0.00	0.00	
4,600.0	9.17	333.44	4,546.1	608.7	-304.3	680.5	0.00	0.00	
4,700.0	9.17	333.44	4,644.8	623.0	-311.5	696.5	0.00	0.00	
4,800.0	9.17	333.44	4,743.6	637.2	-318.6	712.4	0.00	0.00	
4,900.0	9.17	333.44	4,842.3	651.4	-325.7	728.3	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
5,000.0	9.17	333.44	4,941.0	665.7	-332.8	744.3	0.00	0.00	
5,100.0	9.17	333.44	5,039.7	679.9	-340.0	760.2	0.00	0.00	
5,200.0	9.17	333.44	5,138.4	694.2	-347.1	776.1	0.00	0.00	
5,300.0	9.17	333.44	5,237.2	708.4	-354.2	792.0	0.00	0.00	
5,400.0	9.17	333.44	5,335.9	722.7	-361.3	808.0	0.00	0.00	
5,500.0	9.17	333.44	5,434.6	736.9	-368.4	823.9	0.00	0.00	
5,600.0	9.17	333.44	5,533.3	751.2	-375.6	839.8	0.00	0.00	
5,700.0	9.17	333.44	5,632.1	765.4	-382.7	855.8	0.00	0.00	
5,800.0	9.17	333.44	5,730.8	779.7	-389.8	871.7	0.00	0.00	
5,900.0	9.17	333.44	5,829.5	793.9	-396.9	887.6	0.00	0.00	
5,985.6	9.17	333.44	5,914.0	806.1	-403.0	901.2	0.00	0.00	OHIOCREEK
6,000.0	9.17	333.44	5,928.2	808.2	-404.1	903.5	0.00	0.00	
6,100.0	9.17	333.44	6,027.0	822.4	-411.2	919.5	0.00	0.00	
6,200.0	9.17	333.44	6,125.7	836.7	-418.3	935.4	0.00	0.00	
6,300.0	9.17	333.44	6,224.4	850.9	-425.4	951.3	0.00	0.00	
6,400.0	9.17	333.44	6,323.1	865.1	-432.5	967.3	0.00	0.00	
6,500.0	9.17	333.44	6,421.8	879.4	-439.7	983.2	0.00	0.00	
6,517.4	9.17	333.44	6,439.0	881.9	-440.9	985.9	0.00	0.00	WILLIAMS FORK
6,600.0	9.17	333.44	6,520.6	893.6	-446.8	999.1	0.00	0.00	
6,700.0	9.17	333.44	6,619.3	907.9	-453.9	1,015.0	0.00	0.00	
6,800.0	9.17	333.44	6,718.0	922.1	-461.0	1,031.0	0.00	0.00	
6,900.0	9.17	333.44	6,816.7	936.4	-468.2	1,046.9	0.00	0.00	
7,000.0	9.17	333.44	6,915.5	950.6	-475.3	1,062.8	0.00	0.00	
7,100.0	9.17	333.44	7,014.2	964.9	-482.4	1,078.8	0.00	0.00	
7,141.1	9.17	333.44	7,054.8	970.7	-485.3	1,085.3	0.00	0.00	Start 3° Drop
7,200.0	7.40	333.44	7,113.0	978.3	-489.1	1,093.8	3.00	-3.00	
7,300.0	4.40	333.44	7,212.5	987.5	-493.7	1,104.1	3.00	-3.00	
7,400.0	1.40	333.44	7,312.4	992.0	-496.0	1,109.1	3.00	-3.00	
7,446.6	0.00	0.00	7,359.0	992.5	-496.2	1,109.7	3.00	-3.00	EOD @ 0° INC - TOG
7,500.0	0.00	0.00	7,412.4	992.5	-496.2	1,109.7	0.00	0.00	
7,600.0	0.00	0.00	7,512.4	992.5	-496.2	1,109.7	0.00	0.00	
7,700.0	0.00	0.00	7,612.4	992.5	-496.2	1,109.7	0.00	0.00	
7,800.0	0.00	0.00	7,712.4	992.5	-496.2	1,109.7	0.00	0.00	
7,900.0	0.00	0.00	7,812.4	992.5	-496.2	1,109.7	0.00	0.00	
8,000.0	0.00	0.00	7,912.4	992.5	-496.2	1,109.7	0.00	0.00	
8,100.0	0.00	0.00	8,012.4	992.5	-496.2	1,109.7	0.00	0.00	
8,200.0	0.00	0.00	8,112.4	992.5	-496.2	1,109.7	0.00	0.00	
8,300.0	0.00	0.00	8,212.4	992.5	-496.2	1,109.7	0.00	0.00	
8,400.0	0.00	0.00	8,312.4	992.5	-496.2	1,109.7	0.00	0.00	
8,426.6	0.00	0.00	8,339.0	992.5	-496.2	1,109.7	0.00	0.00	CAMEO
8,500.0	0.00	0.00	8,412.4	992.5	-496.2	1,109.7	0.00	0.00	
8,600.0	0.00	0.00	8,512.4	992.5	-496.2	1,109.7	0.00	0.00	
8,700.0	0.00	0.00	8,612.4	992.5	-496.2	1,109.7	0.00	0.00	
8,800.0	0.00	0.00	8,712.4	992.5	-496.2	1,109.7	0.00	0.00	
8,841.6	0.00	0.00	8,754.0	992.5	-496.2	1,109.7	0.00	0.00	ROLLINS
8,900.0	0.00	0.00	8,812.4	992.5	-496.2	1,109.7	0.00	0.00	
8,991.6	0.00	0.00	8,904.0	992.5	-496.2	1,109.7	0.00	0.00	TD @ 8,991.6' MD

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
PUCKETT 41D-2 BHL	0.00	0.00	8,904.0	992.5	-496.2	610,354.86	1,243,192.44	39.478567	-108.181464
- plan hits target center									
- Circle (radius 50.0)									
PUCKETT 41D-2 TGT	0.00	0.00	7,359.0	992.5	-496.2	610,354.86	1,243,192.44	39.478567	-108.181464
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
5,985.6	5,914.0	OHIOCREEK				
6,517.4	6,439.0	WILLIAMS FORK				
7,446.6	7,359.0	TOG				
8,426.6	8,339.0	CAMEO				
8,841.6	8,754.0	ROLLINS				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S	+E/-W	Comment	
(usft)	(usft)	(usft)	(usft)		
175.0	175.0	0.0	0.0	KOP @ 175'	
480.5	479.2	21.8	-10.9	EOB @ 9.17° INC	
7,141.1	7,054.8	970.7	-485.3	Start 3° Drop	
7,446.6	7,359.0	992.5	-496.2	EOD @ 0° INC	
8,991.6	8,904.0	992.5	-496.2	TD @ 8,991.6' MD	

Caerus Oil & Gas (NAD 27)

Garfield County, CO

S2-T7S-R97W (Puckett Pad)

PUCKETT 41D-2

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 41D-2
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 41D-2	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	8,991.3	Plan #1 (DD)	ISCWSA MWD	MWD - Standard

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference	Offset	Distance		Separation Factor	Warning
	Measured Depth (usft)	Measured Depth (usft)	Between Centres (usft)	Between Ellipses (usft)		
S2-T7S-R97W (Puckett Pad)						
PUCKETT 11D-1 - DD - Plan #1	100.0	100.0	19.4	19.3	110.807	CC
PUCKETT 11D-1 - DD - Plan #1	200.0	200.0	19.6	18.9	30.916	ES
PUCKETT 11D-1 - DD - Plan #1	400.0	398.7	33.7	31.9	18.973	SF
PUCKETT 12A-1 - DD - Plan #1	100.0	100.0	26.3	26.1	149.762	CC
PUCKETT 12A-1 - DD - Plan #1	200.0	200.0	26.4	25.8	41.644	ES
PUCKETT 12A-1 - DD - Plan #1	400.0	398.8	40.1	38.3	22.199	SF
PUCKETT 12B-1 - DD - Plan #1	100.0	100.0	33.7	33.5	192.153	CC
PUCKETT 12B-1 - DD - Plan #1	200.0	200.0	33.8	33.2	53.323	ES
PUCKETT 12B-1 - DD - Plan #1	400.0	398.5	47.7	45.8	26.101	SF
PUCKETT 12C-1 - DD - Plan #1	100.0	100.0	41.5	41.4	236.923	CC
PUCKETT 12C-1 - DD - Plan #1	200.0	200.0	41.7	41.1	65.672	ES
PUCKETT 12C-1 - DD - Plan #1	500.0	495.1	72.1	69.7	29.927	SF
PUCKETT 12D-1 - DD - Plan #1	100.0	100.0	49.2	49.0	280.688	CC
PUCKETT 12D-1 - DD - Plan #1	200.0	200.0	49.4	48.7	77.737	ES
PUCKETT 12D-1 - DD - Plan #1	500.0	491.8	84.4	82.0	34.781	SF
PUCKETT 13A-1 - DD - Plan #1	100.0	100.0	57.6	57.4	328.274	CC
PUCKETT 13A-1 - DD - Plan #1	200.0	200.0	57.7	57.1	90.857	ES
PUCKETT 13A-1 - DD - Plan #1	500.0	488.2	98.4	96.0	40.185	SF
PUCKETT 13B-1 - DD - Plan #1	100.0	100.0	65.0	64.9	370.977	CC
PUCKETT 13B-1 - DD - Plan #1	200.0	200.0	65.2	64.6	102.635	ES
PUCKETT 13B-1 - DD - Plan #1	500.0	484.1	112.5	110.0	45.353	SF
PUCKETT 13C-1 - DD - Plan #1	100.0	100.0	64.5	64.3	367.802	CC
PUCKETT 13C-1 - DD - Plan #1	200.0	199.3	64.8	64.2	102.766	ES
PUCKETT 13C-1 - DD - Plan #1	500.0	482.3	116.0	113.5	46.206	SF
PUCKETT 41A-2 - DD - Plan #1	100.0	100.0	13.1	12.9	74.831	CC
PUCKETT 41A-2 - DD - Plan #1	200.0	200.0	13.2	12.6	21.019	ES
PUCKETT 41A-2 - DD - Plan #1	900.0	900.9	51.5	46.3	9.931	SF
PUCKETT 41B-2 - DD - Plan #1	100.0	100.0	9.6	9.4	54.898	CC
PUCKETT 41B-2 - DD - Plan #1	200.0	200.0	9.7	9.1	15.535	ES
PUCKETT 41B-2 - DD - Plan #1	600.0	598.9	20.0	17.0	6.819	SF
PUCKETT 41C-2 - DD - Plan #1	100.0	100.0	8.0	7.9	45.824	CC
PUCKETT 41C-2 - DD - Plan #1	200.0	200.0	8.2	7.6	12.901	ES
PUCKETT 41C-2 - DD - Plan #1	1,000.0	1,002.4	18.9	13.1	3.226	SF
PUCKETT 42A-2 - DD - Plan #1	100.0	100.0	16.6	16.4	94.791	CC
PUCKETT 42A-2 - DD - Plan #1	200.0	200.0	16.8	16.1	26.412	ES
PUCKETT 42A-2 - DD - Plan #1	4,300.0	4,299.0	196.7	173.9	8.617	SF
PUCKETT 42B-2 - DD - Plan #1	100.0	100.0	24.2	24.0	138.049	CC
PUCKETT 42B-2 - DD - Plan #1	200.0	200.0	24.4	23.7	38.348	ES
PUCKETT 42B-2 - DD - Plan #1	2,200.0	2,195.1	195.8	184.6	17.502	SF
PUCKETT 42C-2 - DD - Plan #1	100.0	100.0	32.5	32.3	185.181	CC
PUCKETT 42C-2 - DD - Plan #1	200.0	200.0	32.6	32.0	51.351	ES
PUCKETT 42C-2 - DD - Plan #1	500.0	500.3	58.0	55.6	24.201	SF
PUCKETT 42D-2 - DD - Plan #1	100.0	100.0	40.1	39.9	228.444	CC
PUCKETT 42D-2 - DD - Plan #1	200.0	200.0	40.2	39.6	63.288	ES
PUCKETT 42D-2 - DD - Plan #1	500.0	497.7	68.4	66.0	28.463	SF
PUCKETT 43A-2 - DD - Plan #1	100.0	100.0	48.0	47.8	273.600	CC
PUCKETT 43A-2 - DD - Plan #1	200.0	200.0	48.1	47.5	75.748	ES
PUCKETT 43A-2 - DD - Plan #1	500.0	493.9	81.6	79.1	33.645	SF
PUCKETT 43B-2 - DD - Plan #1	100.0	100.0	56.5	56.4	322.531	CC
PUCKETT 43B-2 - DD - Plan #1	200.0	200.0	56.7	56.1	89.249	ES
PUCKETT 43B-2 - DD - Plan #1	500.0	489.8	96.4	94.0	39.252	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 41D-2
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 41D-2	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 11D-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference	Offset		Between Centres (usft)	Between Ellipses (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	125.54	-11.3	15.8	19.4					
100.0	100.0	100.0	100.0	0.1	0.1	125.54	-11.3	15.8	19.4	19.3	0.18	110.807	CC	
155.6	155.6	155.6	155.6	0.2	0.2	152.38	-11.3	15.8	19.6	19.2	0.43	45.695		
200.0	200.0	200.0	200.0	0.3	0.3	152.32	-11.3	15.8	19.6	18.9	0.63	30.916	ES	
300.0	299.9	299.7	299.6	0.5	0.5	150.52	-9.6	17.8	23.6	22.4	1.19	19.908		
400.0	399.5	398.7	398.3	0.8	0.8	145.17	-4.4	23.5	33.7	31.9	1.77	18.973	SF	
500.0	498.4	496.5	495.3	1.1	1.1	140.32	4.0	33.0	49.8	47.5	2.36	21.102		
600.0	597.2	593.0	590.2	1.4	1.4	135.22	15.5	45.9	69.7	66.8	2.90	24.058		
700.0	695.9	688.1	682.8	1.8	1.8	129.83	29.9	62.2	92.6	89.1	3.52	26.328		
800.0	794.6	784.7	776.3	2.1	2.3	125.67	45.9	80.2	117.3	113.1	4.18	28.075		
900.0	893.3	881.3	869.9	2.5	2.7	122.96	62.0	98.2	142.4	137.5	4.85	29.340		
1,000.0	992.1	977.9	963.5	2.9	3.2	121.06	78.0	116.3	167.6	162.1	5.54	30.274		
1,100.0	1,090.8	1,074.6	1,057.0	3.2	3.7	119.66	94.0	134.3	193.0	186.8	6.23	30.988		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 12A-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-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	133.92	-18.2	18.9	26.3					
100.0	100.0	100.0	100.0	0.1	0.1	133.92	-18.2	18.9	26.3	26.1	0.18	149.762 CC		
155.6	155.6	155.6	155.6	0.2	0.2	160.63	-18.2	18.9	26.4	26.0	0.43	61.566		
200.0	200.0	200.0	200.0	0.3	0.3	160.60	-18.2	18.9	26.4	25.8	0.63	41.644 ES		
300.0	299.9	299.7	299.7	0.5	0.5	161.83	-17.9	19.5	30.3	29.1	1.20	25.124		
400.0	399.5	398.8	398.7	0.8	0.8	158.57	-15.1	23.8	40.1	38.3	1.81	22.199 SF		
500.0	498.4	496.6	495.9	1.1	1.0	153.61	-9.7	32.3	56.3	53.9	2.39	23.577		
600.0	597.2	593.1	591.3	1.4	1.3	148.11	-1.7	44.9	76.2	73.4	2.87	26.593		
700.0	695.9	688.0	684.2	1.8	1.7	142.43	8.6	61.1	99.0	95.5	3.43	28.891		
800.0	794.6	784.1	777.7	2.1	2.1	137.68	20.6	80.0	124.0	120.0	4.04	30.699		
900.0	893.3	880.5	871.4	2.5	2.5	134.51	32.7	98.9	149.6	145.0	4.67	32.011		
1,000.0	992.1	976.9	965.1	2.9	3.0	132.27	44.7	117.9	175.6	170.2	5.32	32.985		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 12B-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-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	139.19	-25.5	22.0	33.7					
100.0	100.0	100.0	100.0	0.1	0.1	139.19	-25.5	22.0	33.7	33.5	0.18	192.153 CC		
155.6	155.6	155.6	155.6	0.2	0.2	165.83	-25.5	22.0	33.9	33.5	0.43	78.833		
200.0	200.0	200.0	200.0	0.3	0.3	165.82	-25.5	22.0	33.8	33.2	0.63	53.323 ES		
300.0	299.9	299.9	299.9	0.5	0.5	167.25	-25.5	22.0	37.7	36.5	1.21	31.050		
400.0	399.5	398.5	398.4	0.8	0.8	166.80	-24.9	24.5	47.7	45.8	1.83	26.101 SF		
500.0	498.4	495.7	495.3	1.1	1.0	163.45	-23.0	31.7	64.8	62.4	2.41	26.936		
600.0	597.2	591.2	590.1	1.4	1.2	159.08	-19.9	43.5	86.3	83.5	2.85	30.318		
700.0	695.9	685.1	682.5	1.8	1.6	154.44	-15.7	59.4	110.9	107.5	3.34	33.162		
800.0	794.6	781.1	776.5	2.1	1.9	150.59	-10.8	78.1	137.5	133.7	3.88	35.409		
900.0	893.3	877.1	870.6	2.5	2.3	147.99	-5.8	96.8	164.6	160.1	4.44	37.061		
1,000.0	992.1	973.2	964.7	2.9	2.7	146.12	-0.9	115.5	191.8	186.8	5.01	38.265		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 12C-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISWWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	141.30	-32.4	26.0	41.5					
100.0	100.0	100.0	100.0	0.1	0.1	141.30	-32.4	26.0	41.5	41.4	0.18	236.923	CC	
155.6	155.6	155.6	155.6	0.2	0.2	167.92	-32.4	26.0	41.7	41.3	0.43	97.079		
200.0	200.0	200.0	200.0	0.3	0.3	167.91	-32.4	26.0	41.7	41.1	0.63	65.672	ES	
300.0	299.9	299.9	299.9	0.5	0.5	168.92	-32.4	26.0	45.5	44.3	1.21	37.493		
400.0	399.5	398.6	398.6	0.8	0.8	170.19	-32.4	26.6	54.9	53.1	1.83	29.997		
500.0	498.4	495.1	495.0	1.1	1.0	168.89	-32.6	31.5	72.1	69.7	2.41	29.927	SF	
600.0	597.2	589.9	589.3	1.4	1.2	166.07	-32.8	41.0	94.1	91.2	2.83	33.252		
700.0	695.9	682.8	681.2	1.8	1.5	162.68	-33.2	54.9	119.6	116.3	3.29	36.326		
800.0	794.6	776.2	772.9	2.1	1.8	159.37	-33.7	72.7	148.3	144.5	3.79	39.095		
900.0	893.3	871.6	866.4	2.5	2.2	156.98	-34.2	91.3	177.7	173.4	4.30	41.327		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 12D-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance							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	143.78	-39.7	29.1	49.2					
100.0	100.0	100.0	100.0	0.1	0.1	143.78	-39.7	29.1	49.2	49.0	0.18	280.688 CC		
155.6	155.6	155.6	155.6	0.2	0.2	170.39	-39.7	29.1	49.4	49.0	0.43	114.909		
200.0	200.0	200.0	200.0	0.3	0.3	170.38	-39.7	29.1	49.4	48.7	0.64	77.737 ES		
300.0	299.9	299.9	299.9	0.5	0.5	171.07	-39.7	29.1	53.2	52.0	1.22	43.769		
400.0	399.5	396.9	396.8	0.8	0.7	170.95	-40.5	31.4	64.3	62.5	1.83	35.083		
500.0	498.4	491.8	491.5	1.1	1.0	169.40	-42.7	38.2	84.4	82.0	2.43	34.781 SF		
600.0	597.2	584.5	583.4	1.4	1.2	167.31	-46.3	49.2	110.2	107.3	2.86	38.589		
700.0	695.9	676.3	673.8	1.8	1.5	165.01	-51.3	64.2	140.0	136.7	3.32	42.166		
800.0	794.6	769.3	765.0	2.1	1.9	163.09	-57.0	81.4	172.0	168.2	3.79	45.347		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 13A-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	146.00	-47.7	32.2	57.6					
100.0	100.0	100.0	100.0	0.1	0.1	146.00	-47.7	32.2	57.6	57.4	0.18	328.274 CC		
155.6	155.6	155.6	155.6	0.2	0.2	172.59	-47.7	32.2	57.8	57.3	0.43	134.295		
200.0	200.0	200.0	200.0	0.3	0.3	172.59	-47.7	32.2	57.7	57.1	0.64	90.857 ES		
300.0	299.9	298.5	298.5	0.5	0.5	172.75	-48.0	32.7	62.2	60.9	1.21	51.187		
400.0	399.5	394.6	394.5	0.8	0.7	171.72	-50.2	37.1	75.6	73.8	1.84	41.061		
500.0	498.4	488.2	487.5	1.1	1.0	170.11	-54.4	45.4	98.4	96.0	2.45	40.185 SF		
600.0	597.2	579.1	577.5	1.4	1.2	168.39	-60.4	57.4	127.1	124.2	2.88	44.084		
700.0	695.9	667.5	664.2	1.8	1.6	166.65	-68.2	72.8	159.9	156.6	3.35	47.759		
800.0	794.6	761.2	755.6	2.1	2.0	165.18	-77.3	90.8	194.7	190.9	3.82	51.017		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	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-ISCWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	147.14	-54.6	35.3	65.0					
100.0	100.0	100.0	100.0	0.1	0.1	147.14	-54.6	35.3	65.0	64.9	0.18	370.977	CC	
155.6	155.6	155.6	155.6	0.2	0.2	173.73	-54.6	35.3	65.2	64.8	0.43	151.696		
200.0	200.0	200.0	200.0	0.3	0.3	173.72	-54.6	35.3	65.2	64.6	0.64	102.635	ES	
300.0	299.9	296.7	296.7	0.5	0.5	173.16	-55.9	37.4	71.4	70.2	1.22	58.708		
400.0	399.5	391.8	391.5	0.8	0.7	171.70	-59.6	43.6	87.2	85.4	1.86	46.778		
500.0	498.4	484.1	483.1	1.1	1.0	170.10	-65.4	53.4	112.5	110.0	2.48	45.353	SF	
600.0	597.2	573.5	571.2	1.4	1.3	168.60	-73.3	66.6	143.7	140.7	2.92	49.271		
700.0	695.9	660.2	655.7	1.8	1.7	167.16	-82.9	82.7	179.0	175.6	3.38	53.000		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	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-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	155.42	-58.6	26.8	64.5					
100.0	100.0	100.0	100.0	0.1	0.1	155.42	-58.6	26.8	64.5	64.3	0.18	367.802 CC		
150.0	150.0	150.0	150.0	0.2	0.2	-178.02	-58.6	26.8	64.6	64.2	0.40	159.814		
200.0	200.0	199.3	199.3	0.3	0.3	-178.08	-58.7	26.9	64.8	64.2	0.63	102.766 ES		
300.0	299.9	295.8	295.8	0.5	0.5	-179.46	-61.1	29.8	72.1	70.9	1.22	59.156		
400.0	399.5	390.6	390.2	0.8	0.7	178.19	-66.3	36.2	89.3	87.4	1.88	47.380		
500.0	498.4	482.3	481.0	1.1	1.0	175.91	-74.2	45.9	116.0	113.5	2.51	46.206 SF		
600.0	597.2	570.9	568.1	1.4	1.4	174.02	-84.5	58.5	148.8	145.8	2.95	50.485		
700.0	695.9	656.6	651.5	1.8	1.7	172.43	-96.8	73.6	185.7	182.3	3.41	54.488		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 41A-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							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	104.47	-3.3	12.7	13.1					
100.0	100.0	100.0	100.0	0.1	0.1	104.47	-3.3	12.7	13.1	12.9	0.18	74.831 CC		
155.6	155.6	155.6	155.6	0.2	0.2	131.69	-3.3	12.7	13.3	12.8	0.43	31.000		
200.0	200.0	200.0	200.0	0.3	0.3	131.57	-3.3	12.7	13.2	12.6	0.63	21.019 ES		
300.0	299.9	299.9	299.9	0.5	0.5	132.69	-0.8	13.6	16.1	14.9	1.14	14.036		
400.0	399.5	399.6	399.2	0.8	0.8	129.81	6.5	16.3	22.8	21.1	1.69	13.469		
500.0	498.4	500.2	499.0	1.1	1.1	127.25	18.6	18.5	31.4	29.1	2.27	13.831		
600.0	597.2	601.1	598.5	1.4	1.4	121.80	35.4	18.1	37.7	34.9	2.85	13.218		
700.0	695.9	701.8	697.0	1.8	1.8	111.75	56.5	15.0	41.7	38.1	3.56	11.703		
800.0	794.6	801.9	793.6	2.1	2.3	97.40	82.0	9.3	45.4	41.0	4.38	10.354		
900.0	893.3	900.9	888.2	2.5	2.8	81.73	110.2	1.7	51.5	46.3	5.18	9.931 SF		
1,000.0	992.1	999.8	982.6	2.9	3.3	69.86	138.6	-6.0	60.6	54.8	5.89	10.305		
1,100.0	1,090.8	1,098.7	1,077.1	3.2	3.9	61.34	167.0	-13.6	71.7	65.2	6.51	11.005		
1,200.0	1,189.5	1,197.6	1,171.5	3.6	4.5	55.18	195.3	-21.3	83.9	76.8	7.11	11.798		
1,300.0	1,288.2	1,296.5	1,265.9	4.0	5.0	50.61	223.7	-28.9	96.8	89.1	7.69	12.583		
1,400.0	1,387.0	1,395.4	1,360.4	4.3	5.6	47.12	252.0	-36.6	110.2	101.9	8.27	13.321		
1,500.0	1,485.7	1,494.3	1,454.8	4.7	6.2	44.40	280.4	-44.2	123.9	115.0	8.85	13.998		
1,600.0	1,584.4	1,593.3	1,549.3	5.1	6.8	42.22	308.8	-51.9	137.8	128.4	9.43	14.612		
1,700.0	1,683.1	1,692.2	1,643.7	5.4	7.4	40.44	337.1	-59.5	151.9	141.9	10.01	15.168		
1,800.0	1,781.9	1,791.1	1,738.1	5.8	7.9	38.97	365.5	-67.2	166.1	155.5	10.60	15.672		
1,900.0	1,880.6	1,890.0	1,832.6	6.2	8.5	37.72	393.9	-74.8	180.3	169.2	11.18	16.128		
2,000.0	1,979.3	1,988.9	1,927.0	6.5	9.1	36.66	422.2	-82.5	194.7	182.9	11.77	16.542		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 41B-2 - DD - Plan #1													Offset Site Error: 0.0 usft	
Survey Program: 0-ISCWSA MWD													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	65.40	4.0	8.8	9.6					
100.0	100.0	100.0	100.0	0.1	0.1	65.40	4.0	8.8	9.6	9.4	0.18	54.898 CC		
140.8	140.8	140.8	140.8	0.2	0.2	92.61	4.0	8.8	9.6	9.3	0.36	26.868		
200.0	200.0	200.0	200.0	0.3	0.3	90.49	4.4	8.6	9.7	9.1	0.62	15.535 ES		
300.0	299.9	299.8	299.7	0.5	0.6	86.65	8.9	7.4	10.6	9.5	1.08	9.786		
400.0	399.5	399.7	399.0	0.8	0.8	84.37	18.5	4.7	12.5	10.9	1.60	7.812		
500.0	498.4	499.4	497.6	1.1	1.1	83.15	33.0	0.6	15.4	13.2	2.22	6.932		
600.0	597.2	598.9	595.1	1.4	1.5	72.97	52.3	-4.9	20.0	17.0	2.93	6.819 SF		
700.0	695.9	698.0	691.0	1.8	2.0	58.42	76.2	-11.6	28.0	24.3	3.61	7.734		
800.0	794.6	797.4	786.9	2.1	2.5	49.49	101.1	-18.6	37.8	33.6	4.23	8.932		
900.0	893.3	896.8	882.9	2.5	3.0	44.31	126.1	-25.6	48.2	43.3	4.82	9.983		
1,000.0	992.1	996.2	978.8	2.9	3.5	40.98	151.0	-32.7	58.8	53.4	5.41	10.861		
1,100.0	1,090.8	1,095.5	1,074.8	3.2	4.0	38.67	176.0	-39.7	69.5	63.5	6.00	11.593		
1,200.0	1,189.5	1,194.9	1,170.7	3.6	4.5	36.99	200.9	-46.7	80.4	73.8	6.59	12.202		
1,300.0	1,288.2	1,294.3	1,266.7	4.0	5.1	35.70	225.9	-53.7	91.2	84.1	7.18	12.717		
1,400.0	1,387.0	1,393.7	1,362.6	4.3	5.6	34.69	250.8	-60.8	102.2	94.4	7.77	13.156		
1,500.0	1,485.7	1,493.1	1,458.6	4.7	6.1	33.88	275.7	-67.8	113.1	104.8	8.36	13.535		
1,600.0	1,584.4	1,592.5	1,554.5	5.1	6.6	33.20	300.7	-74.8	124.1	115.1	8.95	13.864		
1,700.0	1,683.1	1,691.9	1,650.5	5.4	7.2	32.64	325.6	-81.9	135.1	125.5	9.54	14.152		
1,800.0	1,781.9	1,791.3	1,746.4	5.8	7.7	32.16	350.6	-88.9	146.1	135.9	10.14	14.407		
1,900.0	1,880.6	1,890.6	1,842.4	6.2	8.2	31.75	375.5	-95.9	157.1	146.3	10.73	14.634		
2,000.0	1,979.3	1,990.0	1,938.3	6.5	8.7	31.40	400.5	-102.9	168.1	156.7	11.33	14.837		
2,100.0	2,078.0	2,089.4	2,034.3	6.9	9.3	31.08	425.4	-110.0	179.1	167.2	11.92	15.020		
2,200.0	2,176.7	2,188.8	2,130.2	7.3	9.8	30.81	450.4	-117.0	190.1	177.6	12.52	15.185		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	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 41C-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	155.06	-7.3	3.4	8.0					
100.0	100.0	100.0	100.0	0.1	0.1	155.06	-7.3	3.4	8.0	7.9	0.18	45.824 CC		
155.6	155.6	155.6	155.6	0.2	0.2	-178.42	-7.3	3.4	8.2	7.8	0.43	19.146		
200.0	200.0	200.0	200.0	0.3	0.3	-178.41	-7.3	3.4	8.2	7.6	0.64	12.901 ES		
300.0	299.9	300.3	300.3	0.5	0.5	177.69	-5.8	3.4	10.8	9.6	1.21	8.914		
400.0	399.5	400.7	400.5	0.8	0.8	166.46	0.8	3.4	14.5	12.7	1.81	8.017		
500.0	498.4	501.4	500.5	1.1	1.0	156.49	12.3	2.4	19.2	16.9	2.35	8.178		
600.0	597.2	602.4	600.2	1.4	1.4	148.64	28.0	-1.9	20.8	18.0	2.82	7.388		
700.0	695.9	702.7	698.4	1.8	1.7	136.40	46.9	-9.0	18.8	15.4	3.42	5.487		
800.0	794.6	802.6	796.2	2.1	2.1	120.91	66.1	-16.4	17.4	13.2	4.20	4.152		
846.8	840.8	849.4	841.9	2.3	2.3	113.09	75.1	-19.8	17.3	12.7	4.59	3.756		
900.0	893.3	902.5	893.9	2.5	2.6	104.21	85.3	-23.7	17.5	12.4	5.06	3.453		
1,000.0	992.1	1,002.4	991.6	2.9	3.0	88.88	104.6	-31.1	18.9	13.1	5.87	3.226 SF		
1,100.0	1,090.8	1,102.2	1,089.3	3.2	3.4	76.47	123.8	-38.5	21.5	14.9	6.56	3.279		
1,200.0	1,189.5	1,202.1	1,187.1	3.6	3.8	67.06	143.0	-45.9	24.9	17.7	7.16	3.473		
1,300.0	1,288.2	1,302.0	1,284.8	4.0	4.3	60.02	162.2	-53.3	28.7	21.0	7.72	3.724		
1,400.0	1,387.0	1,401.8	1,382.5	4.3	4.7	54.72	181.4	-60.7	32.9	24.7	8.25	3.991		
1,500.0	1,485.7	1,501.7	1,480.3	4.7	5.2	50.63	200.6	-68.1	37.3	28.6	8.78	4.253		
1,600.0	1,584.4	1,601.6	1,578.0	5.1	5.6	47.43	219.8	-75.4	41.9	32.6	9.31	4.501		
1,700.0	1,683.1	1,701.5	1,675.7	5.4	6.0	44.86	239.0	-82.8	46.6	36.7	9.84	4.732		
1,800.0	1,781.9	1,801.3	1,773.4	5.8	6.5	42.76	258.2	-90.2	51.3	40.9	10.38	4.945		
1,900.0	1,880.6	1,901.2	1,871.2	6.2	6.9	41.01	277.5	-97.6	56.1	45.2	10.92	5.142		
2,000.0	1,979.3	2,001.1	1,968.9	6.5	7.3	39.55	296.7	-105.0	61.0	49.5	11.46	5.322		
2,100.0	2,078.0	2,100.9	2,066.6	6.9	7.8	38.30	315.9	-112.4	65.8	53.8	12.00	5.487		
2,200.0	2,176.7	2,200.8	2,164.3	7.3	8.2	37.22	335.1	-119.7	70.8	58.2	12.55	5.639		
2,300.0	2,275.5	2,300.7	2,262.1	7.6	8.7	36.28	354.3	-127.1	75.7	62.6	13.09	5.780		
2,400.0	2,374.2	2,400.6	2,359.8	8.0	9.1	35.46	373.5	-134.5	80.6	67.0	13.64	5.909		
2,500.0	2,472.9	2,500.4	2,457.5	8.4	9.5	34.73	392.7	-141.9	85.6	71.4	14.20	6.029		
2,600.0	2,571.6	2,600.3	2,555.3	8.7	10.0	34.08	411.9	-149.3	90.6	75.8	14.75	6.140		
2,700.0	2,670.4	2,700.2	2,653.0	9.1	10.4	33.50	431.2	-156.7	95.5	80.2	15.30	6.244		
2,800.0	2,769.1	2,800.0	2,750.7	9.5	10.9	32.98	450.4	-164.1	100.5	84.7	15.86	6.340		
2,900.0	2,867.8	2,899.9	2,848.4	9.9	11.3	32.51	469.6	-171.4	105.5	89.1	16.41	6.430		
3,000.0	2,966.5	2,999.8	2,946.2	10.2	11.7	32.08	488.8	-178.8	110.5	93.6	16.97	6.514		
3,100.0	3,065.3	3,099.7	3,043.9	10.6	12.2	31.69	508.0	-186.2	115.6	98.0	17.53	6.593		
3,200.0	3,164.0	3,199.5	3,141.6	11.0	12.6	31.33	527.2	-193.6	120.6	102.5	18.08	6.667		
3,300.0	3,262.7	3,299.4	3,239.3	11.3	13.1	30.99	546.4	-201.0	125.6	106.9	18.64	6.737		
3,400.0	3,361.4	3,399.3	3,337.1	11.7	13.5	30.69	565.6	-208.4	130.6	111.4	19.20	6.803		
3,500.0	3,460.1	3,499.1	3,434.8	12.1	13.9	30.40	584.8	-215.8	135.6	115.9	19.76	6.865		
3,600.0	3,558.9	3,599.0	3,532.5	12.4	14.4	30.14	604.1	-223.1	140.7	120.4	20.32	6.923		
3,700.0	3,657.6	3,698.9	3,630.3	12.8	14.8	29.90	623.3	-230.5	145.7	124.8	20.88	6.979		
3,800.0	3,756.3	3,798.8	3,728.0	13.2	15.3	29.67	642.5	-237.9	150.7	129.3	21.44	7.031		
3,900.0	3,855.0	3,898.6	3,825.7	13.5	15.7	29.45	661.7	-245.3	155.8	133.8	22.00	7.082		
4,000.0	3,953.8	3,998.5	3,923.4	13.9	16.1	29.25	680.9	-252.7	160.8	138.3	22.56	7.129		
4,100.0	4,052.5	4,098.4	4,021.2	14.3	16.6	29.07	700.1	-260.1	165.9	142.7	23.12	7.174		
4,200.0	4,151.2	4,198.2	4,118.9	14.6	17.0	28.89	719.3	-267.5	170.9	147.2	23.68	7.218		
4,300.0	4,249.9	4,298.1	4,216.6	15.0	17.5	28.72	738.5	-274.8	176.0	151.7	24.24	7.259		
4,400.0	4,348.7	4,398.0	4,314.4	15.4	17.9	28.56	757.8	-282.2	181.0	156.2	24.80	7.298		
4,500.0	4,447.4	4,497.9	4,412.1	15.8	18.3	28.42	777.0	-289.6	186.0	160.7	25.36	7.336		
4,600.0	4,546.1	4,597.7	4,509.8	16.1	18.8	28.27	796.2	-297.0	191.1	165.2	25.92	7.372		
4,700.0	4,644.8	4,697.6	4,607.5	16.5	19.2	28.14	815.4	-304.4	196.1	169.7	26.48	7.407		

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 41D-2
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 41D-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 42A-2 - DD - Plan #1												Offset Site Error: 0.0 usft	
Survey Program: 0-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	157.00	-15.3	6.5	16.6				
100.0	100.0	100.0	100.0	0.1	0.1	157.00	-15.3	6.5	16.6	16.4	0.18	94.791	CC
155.6	155.6	155.6	155.6	0.2	0.2	-176.48	-15.3	6.5	16.8	16.4	0.43	39.105	
200.0	200.0	200.0	200.0	0.3	0.3	-176.47	-15.3	6.5	16.8	16.1	0.64	26.412	ES
300.0	299.9	300.2	300.2	0.5	0.5	-177.03	-15.2	6.4	20.5	19.3	1.22	16.886	
400.0	399.5	401.2	401.1	0.8	0.8	-176.13	-11.9	4.0	25.8	24.0	1.82	14.186	
500.0	498.4	502.5	502.0	1.1	1.0	-173.84	-4.4	-1.5	31.1	28.7	2.39	13.043	
600.0	597.2	602.6	601.3	1.4	1.3	-171.15	5.5	-8.8	35.3	32.5	2.80	12.584	
700.0	695.9	702.5	700.4	1.8	1.6	-169.03	15.3	-16.1	39.4	36.2	3.25	12.117	
800.0	794.6	802.4	799.6	2.1	1.9	-167.31	25.2	-23.3	43.7	39.9	3.73	11.702	
900.0	893.3	902.3	898.7	2.5	2.2	-165.90	35.1	-30.6	47.9	43.7	4.22	11.345	
1,000.0	992.1	1,002.2	997.9	2.9	2.5	-164.72	44.9	-37.8	52.2	47.5	4.73	11.037	
1,100.0	1,090.8	1,102.1	1,097.0	3.2	2.8	-163.72	54.8	-45.1	56.5	51.3	5.25	10.774	
1,200.0	1,189.5	1,202.0	1,196.2	3.6	3.1	-162.86	64.6	-52.3	60.8	55.1	5.77	10.547	
1,300.0	1,288.2	1,301.9	1,295.3	4.0	3.4	-162.12	74.5	-59.6	65.2	58.9	6.30	10.350	
1,400.0	1,387.0	1,401.8	1,394.5	4.3	3.8	-161.46	84.4	-66.9	69.5	62.7	6.83	10.178	
1,500.0	1,485.7	1,501.7	1,493.6	4.7	4.1	-160.89	94.2	-74.1	73.9	66.5	7.37	10.027	
1,600.0	1,584.4	1,601.6	1,592.8	5.1	4.4	-160.38	104.1	-81.4	78.2	70.3	7.91	9.894	
1,700.0	1,683.1	1,701.5	1,691.9	5.4	4.7	-159.92	114.0	-88.6	82.6	74.1	8.45	9.775	
1,800.0	1,781.9	1,801.4	1,791.1	5.8	5.0	-159.51	123.8	-95.9	86.9	77.9	8.99	9.669	
1,900.0	1,880.6	1,901.3	1,890.2	6.2	5.3	-159.14	133.7	-103.2	91.3	81.8	9.54	9.574	
2,000.0	1,979.3	2,001.2	1,989.4	6.5	5.6	-158.80	143.5	-110.4	95.7	85.6	10.08	9.488	
2,100.0	2,078.0	2,101.1	2,088.5	6.9	6.0	-158.49	153.4	-117.7	100.1	89.4	10.63	9.410	
2,200.0	2,176.7	2,201.0	2,187.7	7.3	6.3	-158.21	163.3	-124.9	104.4	93.3	11.18	9.339	
2,300.0	2,275.5	2,300.9	2,286.8	7.6	6.6	-157.95	173.1	-132.2	108.8	97.1	11.73	9.274	
2,400.0	2,374.2	2,400.8	2,386.0	8.0	6.9	-157.71	183.0	-139.4	113.2	100.9	12.28	9.215	
2,500.0	2,472.9	2,500.7	2,485.1	8.4	7.2	-157.49	192.9	-146.7	117.6	104.7	12.84	9.160	
2,600.0	2,571.6	2,600.6	2,584.3	8.7	7.5	-157.28	202.7	-154.0	122.0	108.6	13.39	9.110	
2,700.0	2,670.4	2,700.5	2,683.4	9.1	7.9	-157.09	212.6	-161.2	126.4	112.4	13.94	9.063	
2,800.0	2,769.1	2,800.4	2,782.6	9.5	8.2	-156.91	222.4	-168.5	130.7	116.2	14.50	9.020	
2,900.0	2,867.8	2,900.3	2,881.7	9.9	8.5	-156.74	232.3	-175.7	135.1	120.1	15.05	8.979	
3,000.0	2,966.5	3,000.2	2,980.9	10.2	8.8	-156.59	242.2	-183.0	139.5	123.9	15.60	8.942	
3,100.0	3,065.3	3,100.1	3,080.0	10.6	9.1	-156.44	252.0	-190.3	143.9	127.8	16.16	8.907	
3,200.0	3,164.0	3,200.0	3,179.2	11.0	9.4	-156.30	261.9	-197.5	148.3	131.6	16.71	8.874	
3,300.0	3,262.7	3,299.9	3,278.3	11.3	9.8	-156.17	271.7	-204.8	152.7	135.4	17.27	8.843	
3,400.0	3,361.4	3,399.8	3,377.5	11.7	10.1	-156.05	281.6	-212.0	157.1	139.3	17.82	8.814	
3,500.0	3,460.1	3,499.7	3,476.6	12.1	10.4	-155.93	291.5	-219.3	161.5	143.1	18.38	8.787	
3,600.0	3,558.9	3,599.6	3,575.8	12.4	10.7	-155.82	301.3	-226.6	165.9	147.0	18.93	8.761	
3,700.0	3,657.6	3,699.5	3,674.9	12.8	11.0	-155.72	311.2	-233.8	170.3	150.8	19.49	8.737	
3,800.0	3,756.3	3,799.5	3,774.1	13.2	11.3	-155.62	321.1	-241.1	174.7	154.6	20.05	8.714	
3,900.0	3,855.0	3,899.4	3,873.2	13.5	11.7	-155.52	330.9	-248.3	179.1	158.5	20.60	8.693	
4,000.0	3,953.8	3,999.3	3,972.4	13.9	12.0	-155.43	340.8	-255.6	183.5	162.3	21.16	8.672	
4,100.0	4,052.5	4,099.2	4,071.5	14.3	12.3	-155.35	350.6	-262.8	187.9	166.2	21.71	8.653	
4,200.0	4,151.2	4,199.1	4,170.7	14.6	12.6	-155.27	360.5	-270.1	192.3	170.0	22.27	8.634	
4,300.0	4,249.9	4,299.0	4,269.8	15.0	12.9	-155.19	370.4	-277.4	196.7	173.9	22.83	8.617	SF

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	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		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)		Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)						
0.0	0.0	0.0	0.0	0.0	0.0	156.64	-22.2	9.6	24.2					
100.0	100.0	100.0	100.0	0.1	0.1	156.64	-22.2	9.6	24.2	24.0	0.18	138.049 CC		
155.6	155.6	155.6	155.6	0.2	0.2	-176.83	-22.2	9.6	24.4	24.0	0.43	56.737		
200.0	200.0	200.0	200.0	0.3	0.3	-176.82	-22.2	9.6	24.4	23.7	0.64	38.348 ES		
300.0	299.9	299.9	299.9	0.5	0.5	-177.26	-22.2	9.6	28.3	27.1	1.22	23.186		
400.0	399.5	400.7	400.7	0.8	0.8	-176.74	-21.3	8.4	36.2	34.3	1.83	19.752		
500.0	498.4	502.0	501.8	1.1	1.0	-173.36	-17.4	2.9	44.8	42.4	2.38	18.809		
600.0	597.2	601.6	601.0	1.4	1.2	-169.88	-12.2	-4.3	53.3	50.5	2.80	19.025		
700.0	695.9	701.2	700.2	1.8	1.5	-167.36	-7.0	-11.6	62.0	58.7	3.26	19.024		
800.0	794.6	800.8	799.4	2.1	1.8	-165.46	-1.7	-18.9	70.7	67.0	3.74	18.922		
900.0	893.3	900.4	898.5	2.5	2.0	-163.98	3.5	-26.2	79.6	75.3	4.24	18.781		
1,000.0	992.1	1,000.0	997.7	2.9	2.3	-162.80	8.8	-33.5	88.4	83.7	4.75	18.631		
1,100.0	1,090.8	1,099.6	1,096.9	3.2	2.6	-161.83	14.0	-40.8	97.3	92.0	5.26	18.485		
1,200.0	1,189.5	1,199.2	1,196.1	3.6	2.9	-161.02	19.3	-48.1	106.2	100.4	5.79	18.348		
1,300.0	1,288.2	1,298.8	1,295.3	4.0	3.1	-160.34	24.5	-55.4	115.1	108.8	6.32	18.222		
1,400.0	1,387.0	1,398.4	1,394.5	4.3	3.4	-159.76	29.7	-62.7	124.1	117.2	6.85	18.107		
1,500.0	1,485.7	1,498.0	1,493.7	4.7	3.7	-159.25	35.0	-70.0	133.0	125.6	7.39	18.003		
1,600.0	1,584.4	1,597.6	1,592.8	5.1	4.0	-158.81	40.2	-77.3	142.0	134.0	7.93	17.909		
1,700.0	1,683.1	1,697.2	1,692.0	5.4	4.2	-158.42	45.5	-84.5	150.9	142.5	8.47	17.824		
1,800.0	1,781.9	1,796.7	1,791.2	5.8	4.5	-158.08	50.7	-91.8	159.9	150.9	9.01	17.747		
1,900.0	1,880.6	1,896.3	1,890.4	6.2	4.8	-157.77	55.9	-99.1	168.9	159.3	9.55	17.677		
2,000.0	1,979.3	1,995.9	1,989.6	6.5	5.1	-157.49	61.2	-106.4	177.9	167.8	10.10	17.613		
2,100.0	2,078.0	2,095.5	2,088.8	6.9	5.3	-157.24	66.4	-113.7	186.8	176.2	10.64	17.555		
2,200.0	2,176.7	2,195.1	2,188.0	7.3	5.6	-157.01	71.7	-121.0	195.8	184.6	11.19	17.502 SF		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 42C-2 - DD - Plan #1													Offset Site Error: 0.0 usft	
Survey Program: 0-ISCSWA MWD													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	155.33	-29.5	13.5	32.5					
100.0	100.0	100.0	100.0	0.1	0.1	155.33	-29.5	13.5	32.5	32.3	0.18	185.181	CC	
155.6	155.6	155.6	155.6	0.2	0.2	-178.12	-29.5	13.5	32.7	32.2	0.43	75.946		
200.0	200.0	200.0	200.0	0.3	0.3	-178.11	-29.5	13.5	32.6	32.0	0.64	51.351	ES	
300.0	299.9	299.9	299.9	0.5	0.5	-178.31	-29.5	13.5	36.6	35.3	1.22	29.959		
400.0	399.5	399.8	399.8	0.8	0.8	-178.47	-29.5	13.4	45.6	43.8	1.84	24.822		
500.0	498.4	500.3	500.2	1.1	1.0	-175.43	-29.2	9.5	58.0	55.6	2.40	24.201	SF	
600.0	597.2	599.5	599.2	1.4	1.2	-171.14	-28.6	2.2	70.8	68.0	2.80	25.281		
700.0	695.9	698.6	698.0	1.8	1.4	-168.13	-28.0	-5.1	83.9	80.6	3.25	25.792		
800.0	794.6	797.7	796.8	2.1	1.7	-165.94	-27.4	-12.4	97.1	93.3	3.73	26.037		
900.0	893.3	896.7	895.6	2.5	1.9	-164.27	-26.8	-19.8	110.4	106.2	4.22	26.138		
1,000.0	992.1	995.8	994.4	2.9	2.2	-162.97	-26.2	-27.1	123.8	119.0	4.73	26.162		
1,100.0	1,090.8	1,094.9	1,093.1	3.2	2.4	-161.91	-25.6	-34.4	137.2	132.0	5.25	26.145		
1,200.0	1,189.5	1,193.9	1,191.9	3.6	2.7	-161.05	-25.0	-41.7	150.7	144.9	5.77	26.107		
1,300.0	1,288.2	1,293.0	1,290.7	4.0	3.0	-160.33	-24.4	-49.0	164.2	157.9	6.30	26.059		
1,400.0	1,387.0	1,392.1	1,389.5	4.3	3.2	-159.72	-23.8	-56.4	177.7	170.9	6.83	26.008		
1,500.0	1,485.7	1,491.1	1,488.3	4.7	3.5	-159.19	-23.2	-63.7	191.3	183.9	7.37	25.956		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 42D-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	155.43	-36.4	16.7	40.1					
100.0	100.0	100.0	100.0	0.1	0.1	155.43	-36.4	16.7	40.1	39.9	0.18	228.444	CC	
155.6	155.6	155.6	155.6	0.2	0.2	-178.02	-36.4	16.7	40.3	39.8	0.43	93.580		
200.0	200.0	200.0	200.0	0.3	0.3	-178.02	-36.4	16.7	40.2	39.6	0.64	63.288	ES	
300.0	299.9	299.9	299.9	0.5	0.5	-178.19	-36.4	16.7	44.1	42.9	1.22	36.176		
400.0	399.5	399.3	399.3	0.8	0.7	-176.93	-37.1	15.4	53.4	51.6	1.83	29.156		
500.0	498.4	497.7	497.5	1.1	1.0	-172.20	-40.1	9.8	68.4	66.0	2.40	28.463	SF	
600.0	597.2	596.0	595.4	1.4	1.2	-168.11	-44.1	2.6	85.8	83.0	2.82	30.426		
700.0	695.9	694.4	693.4	1.8	1.4	-165.41	-48.1	-4.7	103.5	100.2	3.28	31.583		
800.0	794.6	792.7	791.4	2.1	1.7	-163.49	-52.0	-11.9	121.4	117.6	3.76	32.269		
900.0	893.3	891.0	889.4	2.5	2.0	-162.07	-56.0	-19.2	139.3	135.1	4.26	32.686		
1,000.0	992.1	989.3	987.4	2.9	2.2	-160.97	-60.0	-26.4	157.3	152.5	4.78	32.943		
1,100.0	1,090.8	1,087.7	1,085.3	3.2	2.5	-160.10	-63.9	-33.7	175.4	170.1	5.30	33.106		
1,200.0	1,189.5	1,186.0	1,183.3	3.6	2.7	-159.39	-67.9	-40.9	193.5	187.6	5.83	33.210		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	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	155.67	-43.7	19.8	48.0					
100.0	100.0	100.0	100.0	0.1	0.1	155.67	-43.7	19.8	48.0	47.8	0.18	273.600 CC		
155.6	155.6	155.6	155.6	0.2	0.2	-177.77	-43.7	19.8	48.2	47.7	0.43	111.985		
200.0	200.0	200.0	200.0	0.3	0.3	-177.77	-43.7	19.8	48.1	47.5	0.64	75.748 ES		
300.0	299.9	299.6	299.6	0.5	0.5	-177.78	-43.8	19.7	52.1	50.9	1.22	42.870		
400.0	399.5	397.7	397.6	0.8	0.7	-174.94	-46.7	17.2	63.0	61.1	1.82	34.546		
500.0	498.4	493.9	493.5	1.1	1.0	-170.30	-53.2	11.6	81.6	79.1	2.42	33.645 SF		
600.0	597.2	591.3	590.2	1.4	1.2	-166.47	-61.7	4.4	103.5	100.7	2.86	36.196		
700.0	695.9	688.7	686.9	1.8	1.5	-163.98	-70.1	-2.8	125.8	122.4	3.33	37.812		
800.0	794.6	786.1	783.7	2.1	1.8	-162.24	-78.5	-10.0	148.2	144.3	3.82	38.817		
900.0	893.3	883.4	880.4	2.5	2.1	-160.96	-86.9	-17.2	170.7	166.3	4.32	39.459		
1,000.0	992.1	980.8	977.2	2.9	2.4	-159.98	-95.4	-24.4	193.2	188.4	4.84	39.885		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 43B-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	156.15	-51.7	22.9	56.5					
100.0	100.0	100.0	100.0	0.1	0.1	156.15	-51.7	22.9	56.5	56.4	0.18	322.531	CC	
155.6	155.6	155.6	155.6	0.2	0.2	-177.30	-51.7	22.9	56.7	56.3	0.43	131.930		
200.0	200.0	200.0	200.0	0.3	0.3	-177.30	-51.7	22.9	56.7	56.1	0.64	89.249	ES	
300.0	299.9	298.5	298.5	0.5	0.5	-176.40	-52.9	22.2	61.5	60.3	1.21	50.805		
400.0	399.5	395.3	395.1	0.8	0.7	-173.00	-58.3	19.2	74.7	72.8	1.84	40.563		
500.0	498.4	489.8	489.0	1.1	1.0	-168.98	-67.7	13.9	96.4	94.0	2.46	39.252	SF	
600.0	597.2	585.1	583.2	1.4	1.3	-165.48	-80.2	6.9	122.7	119.8	2.91	42.119		
700.0	695.9	681.3	678.3	1.8	1.6	-163.14	-92.9	-0.2	149.4	146.0	3.38	44.145		
800.0	794.6	777.6	773.4	2.1	1.9	-161.51	-105.7	-7.3	176.3	172.4	3.88	45.428		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 41D-2
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 41D-2	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 41D-2
 Coordinate System is US State Plane 1927 (Exact solution), Colorado Central 502
 Grid Convergence at Surface is: -1.69°

