



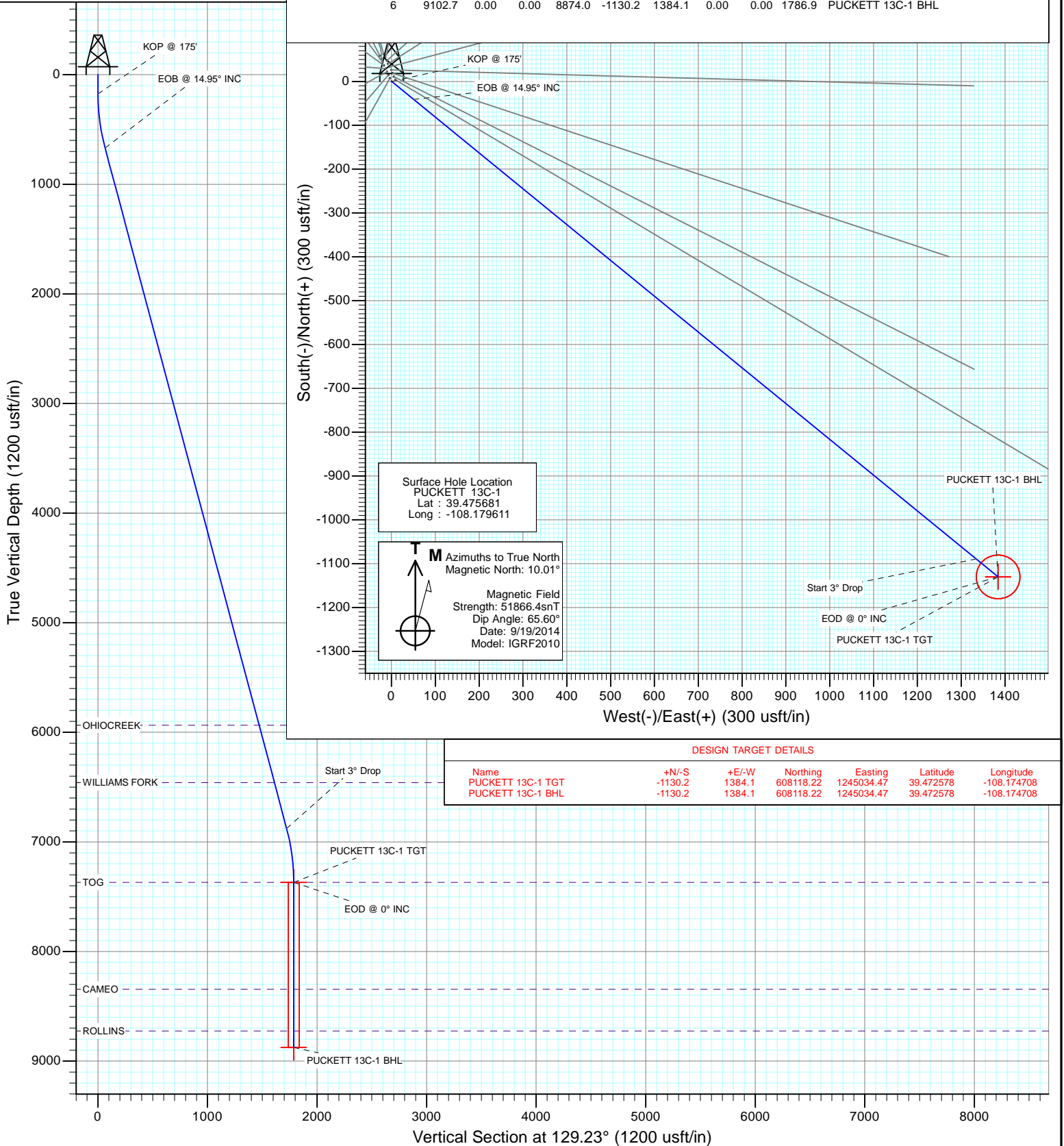
Project: Garfield County, CO
Site: S2-T7S-R97W (Puckett Pad)
Well: PUCKETT 13C-1
Wellbore: DD
Design: Plan #1

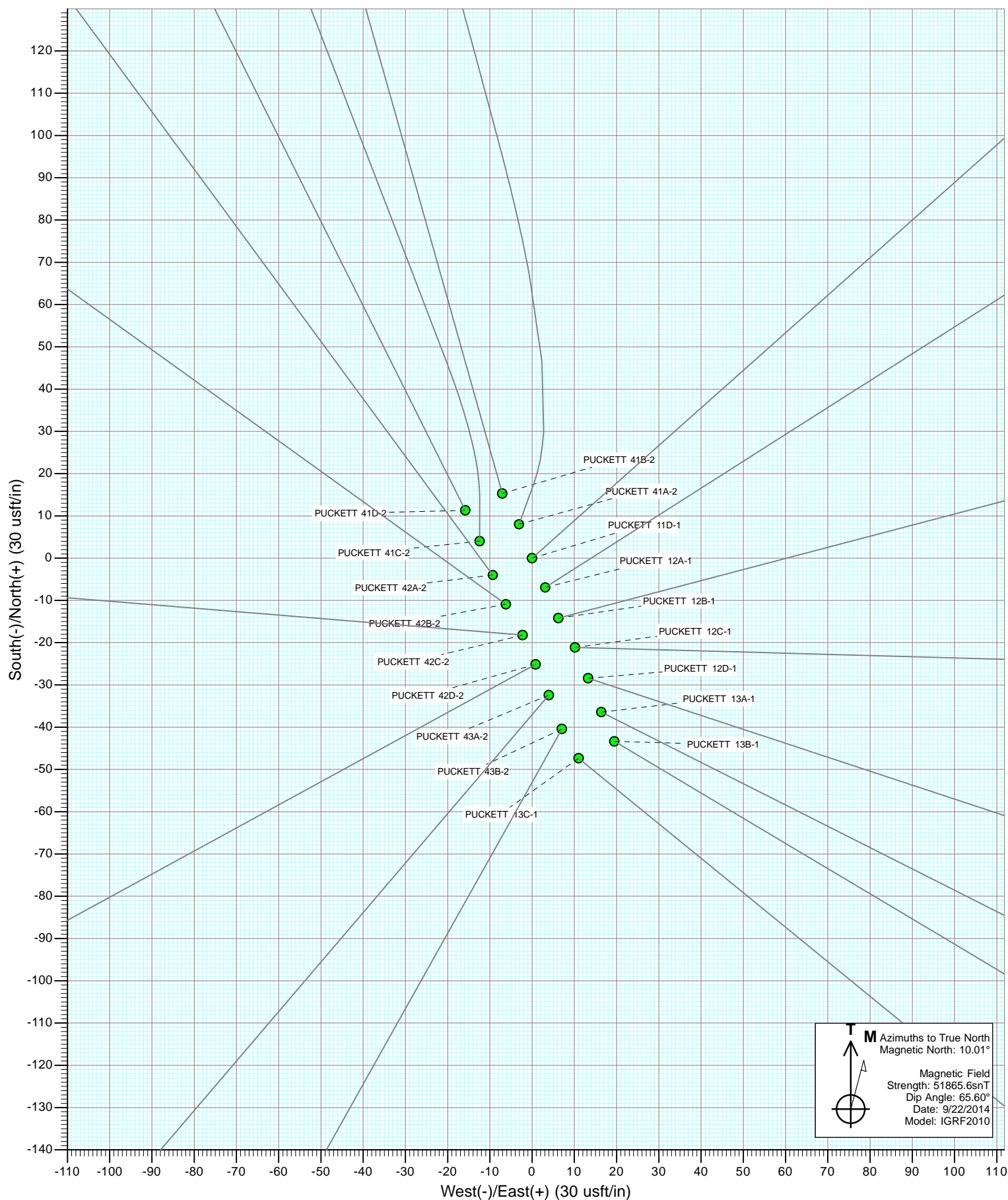


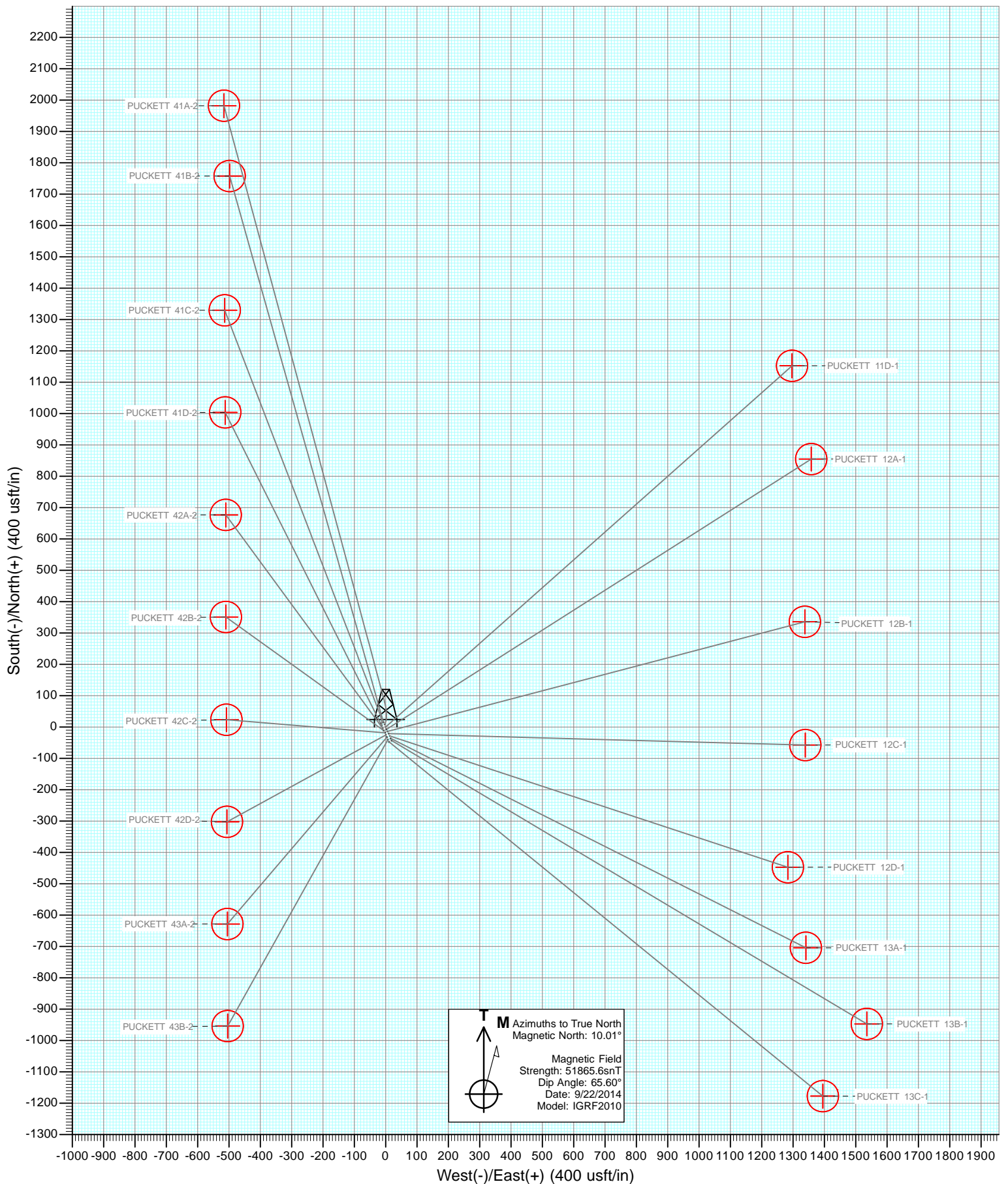
Plan #1
PUCKETT 13C-1
145XXX; SC
KB=22' @ 8499.0usft
Ground Elevation @ 8477.0
NAD 1927 (NADCON CONUS)
Well PUCKETT 13C-1, True North

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	175.0	0.00	0.00	175.0	0.0	0.0	0.00	0.00	0.0	
3	673.3	14.95	129.23	667.7	-40.9	50.1	3.00	129.23	64.6	
4	7099.5	14.95	129.23	6876.3	-1089.3	1334.1	0.00	0.00	1722.3	
5	7597.7	0.00	0.00	7369.0	-1130.2	1384.1	3.00	180.00	1786.9	PUCKETT 13C-1 TGT
6	9102.7	0.00	0.00	8874.0	-1130.2	1384.1	0.00	0.00	1786.9	PUCKETT 13C-1 BHL







Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=22' @ 8499.0usft
Project:	Garfield County, CO	MD Reference:	KB=22' @ 8499.0usft
Site:	S2-T7S-R97W (Puckett Pad)	North Reference:	True
Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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

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

Well	PUCKETT 13C-1					
Well Position	+N/-S	0.0 usft	Northing:	609,288.71 usft	Latitude:	39.475681
	+E/-W	0.0 usft	Easting:	1,243,684.28 usft	Longitude:	-108.179611
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)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	129.23

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	(°)	
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	
673.3	14.95	129.23	667.7	-40.9	50.1	3.00	3.00	0.00	129.23	
7,099.5	14.95	129.23	6,876.3	-1,089.3	1,334.1	0.00	0.00	0.00	0.00	
7,597.7	0.00	0.00	7,369.0	-1,130.2	1,384.1	3.00	-3.00	0.00	180.00	PUCKETT 13C-1 TG1
9,102.7	0.00	0.00	8,874.0	-1,130.2	1,384.1	0.00	0.00	0.00	0.00	PUCKETT 13C-1 BHL

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=22' @ 8499.0usft
Project:	Garfield County, CO	MD Reference:	KB=22' @ 8499.0usft
Site:	S2-T7S-R97W (Puckett Pad)	North Reference:	True
Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
175.0	0.00	0.00	175.0	0.0	0.0	0.0	0.00	0.00	KOP @ 175'
200.0	0.75	129.23	200.0	-0.1	0.1	0.2	3.00	3.00	
300.0	3.75	129.23	299.9	-2.6	3.2	4.1	3.00	3.00	
400.0	6.75	129.23	399.5	-8.4	10.3	13.2	3.00	3.00	
500.0	9.75	129.23	498.4	-17.4	21.4	27.6	3.00	3.00	
600.0	12.75	129.23	596.5	-29.8	36.5	47.1	3.00	3.00	
673.3	14.95	129.23	667.7	-40.9	50.1	64.6	3.00	3.00	EOB @ 14.95° INC
700.0	14.95	129.23	693.5	-45.2	55.4	71.5	0.00	0.00	
800.0	14.95	129.23	790.1	-61.6	75.4	97.3	0.00	0.00	
900.0	14.95	129.23	886.7	-77.9	95.4	123.1	0.00	0.00	
1,000.0	14.95	129.23	983.3	-94.2	115.3	148.9	0.00	0.00	
1,100.0	14.95	129.23	1,079.9	-110.5	135.3	174.7	0.00	0.00	
1,200.0	14.95	129.23	1,176.5	-126.8	155.3	200.5	0.00	0.00	
1,300.0	14.95	129.23	1,273.2	-143.1	175.3	226.3	0.00	0.00	
1,400.0	14.95	129.23	1,369.8	-159.4	195.3	252.1	0.00	0.00	
1,500.0	14.95	129.23	1,466.4	-175.8	215.2	277.9	0.00	0.00	
1,600.0	14.95	129.23	1,563.0	-192.1	235.2	303.7	0.00	0.00	
1,700.0	14.95	129.23	1,659.6	-208.4	255.2	329.5	0.00	0.00	
1,800.0	14.95	129.23	1,756.2	-224.7	275.2	355.3	0.00	0.00	
1,900.0	14.95	129.23	1,852.9	-241.0	295.2	381.1	0.00	0.00	
2,000.0	14.95	129.23	1,949.5	-257.3	315.2	406.9	0.00	0.00	
2,100.0	14.95	129.23	2,046.1	-273.6	335.1	432.7	0.00	0.00	
2,200.0	14.95	129.23	2,142.7	-290.0	355.1	458.5	0.00	0.00	
2,300.0	14.95	129.23	2,239.3	-306.3	375.1	484.2	0.00	0.00	
2,400.0	14.95	129.23	2,335.9	-322.6	395.1	510.0	0.00	0.00	
2,500.0	14.95	129.23	2,432.5	-338.9	415.1	535.8	0.00	0.00	
2,600.0	14.95	129.23	2,529.2	-355.2	435.0	561.6	0.00	0.00	
2,700.0	14.95	129.23	2,625.8	-371.5	455.0	587.4	0.00	0.00	
2,800.0	14.95	129.23	2,722.4	-387.8	475.0	613.2	0.00	0.00	
2,900.0	14.95	129.23	2,819.0	-404.2	495.0	639.0	0.00	0.00	
3,000.0	14.95	129.23	2,915.6	-420.5	515.0	664.8	0.00	0.00	
3,100.0	14.95	129.23	3,012.2	-436.8	534.9	690.6	0.00	0.00	
3,200.0	14.95	129.23	3,108.9	-453.1	554.9	716.4	0.00	0.00	
3,300.0	14.95	129.23	3,205.5	-469.4	574.9	742.2	0.00	0.00	
3,400.0	14.95	129.23	3,302.1	-485.7	594.9	768.0	0.00	0.00	
3,500.0	14.95	129.23	3,398.7	-502.0	614.9	793.8	0.00	0.00	
3,600.0	14.95	129.23	3,495.3	-518.4	634.8	819.6	0.00	0.00	
3,700.0	14.95	129.23	3,591.9	-534.7	654.8	845.4	0.00	0.00	
3,800.0	14.95	129.23	3,688.6	-551.0	674.8	871.2	0.00	0.00	
3,900.0	14.95	129.23	3,785.2	-567.3	694.8	897.0	0.00	0.00	
4,000.0	14.95	129.23	3,881.8	-583.6	714.8	922.8	0.00	0.00	
4,100.0	14.95	129.23	3,978.4	-599.9	734.7	948.6	0.00	0.00	
4,200.0	14.95	129.23	4,075.0	-616.2	754.7	974.4	0.00	0.00	
4,300.0	14.95	129.23	4,171.6	-632.6	774.7	1,000.2	0.00	0.00	
4,400.0	14.95	129.23	4,268.2	-648.9	794.7	1,025.9	0.00	0.00	
4,500.0	14.95	129.23	4,364.9	-665.2	814.7	1,051.7	0.00	0.00	
4,600.0	14.95	129.23	4,461.5	-681.5	834.7	1,077.5	0.00	0.00	
4,700.0	14.95	129.23	4,558.1	-697.8	854.6	1,103.3	0.00	0.00	
4,800.0	14.95	129.23	4,654.7	-714.1	874.6	1,129.1	0.00	0.00	
4,900.0	14.95	129.23	4,751.3	-730.4	894.6	1,154.9	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=22' @ 8499.0usft
Project:	Garfield County, CO	MD Reference:	KB=22' @ 8499.0usft
Site:	S2-T7S-R97W (Puckett Pad)	North Reference:	True
Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
5,000.0	14.95	129.23	4,847.9	-746.8	914.6	1,180.7	0.00	0.00	
5,100.0	14.95	129.23	4,944.6	-763.1	934.6	1,206.5	0.00	0.00	
5,200.0	14.95	129.23	5,041.2	-779.4	954.5	1,232.3	0.00	0.00	
5,300.0	14.95	129.23	5,137.8	-795.7	974.5	1,258.1	0.00	0.00	
5,400.0	14.95	129.23	5,234.4	-812.0	994.5	1,283.9	0.00	0.00	
5,500.0	14.95	129.23	5,331.0	-828.3	1,014.5	1,309.7	0.00	0.00	
5,600.0	14.95	129.23	5,427.6	-844.7	1,034.5	1,335.5	0.00	0.00	
5,700.0	14.95	129.23	5,524.3	-861.0	1,054.4	1,361.3	0.00	0.00	
5,800.0	14.95	129.23	5,620.9	-877.3	1,074.4	1,387.1	0.00	0.00	
5,900.0	14.95	129.23	5,717.5	-893.6	1,094.4	1,412.9	0.00	0.00	
6,000.0	14.95	129.23	5,814.1	-909.9	1,114.4	1,438.7	0.00	0.00	
6,100.0	14.95	129.23	5,910.7	-926.2	1,134.4	1,464.5	0.00	0.00	
6,124.1	14.95	129.23	5,934.0	-930.2	1,139.2	1,470.7	0.00	0.00	OHIOCREEK
6,200.0	14.95	129.23	6,007.3	-942.5	1,154.3	1,490.3	0.00	0.00	
6,300.0	14.95	129.23	6,103.9	-958.9	1,174.3	1,516.1	0.00	0.00	
6,400.0	14.95	129.23	6,200.6	-975.2	1,194.3	1,541.9	0.00	0.00	
6,500.0	14.95	129.23	6,297.2	-991.5	1,214.3	1,567.6	0.00	0.00	
6,600.0	14.95	129.23	6,393.8	-1,007.8	1,234.3	1,593.4	0.00	0.00	
6,667.5	14.95	129.23	6,459.0	-1,018.8	1,247.8	1,610.9	0.00	0.00	WILLIAMS FORK
6,700.0	14.95	129.23	6,490.4	-1,024.1	1,254.2	1,619.2	0.00	0.00	
6,800.0	14.95	129.23	6,587.0	-1,040.4	1,274.2	1,645.0	0.00	0.00	
6,900.0	14.95	129.23	6,683.6	-1,056.7	1,294.2	1,670.8	0.00	0.00	
7,000.0	14.95	129.23	6,780.3	-1,073.1	1,314.2	1,696.6	0.00	0.00	
7,099.5	14.95	129.23	6,876.3	-1,089.3	1,334.1	1,722.3	0.00	0.00	Start 3° Drop
7,200.0	11.93	129.23	6,974.1	-1,104.1	1,352.2	1,745.6	3.00	-3.00	
7,300.0	8.93	129.23	7,072.5	-1,115.5	1,366.2	1,763.8	3.00	-3.00	
7,400.0	5.93	129.23	7,171.6	-1,123.7	1,376.2	1,776.7	3.00	-3.00	
7,500.0	2.93	129.23	7,271.3	-1,128.6	1,382.2	1,784.4	3.00	-3.00	
7,597.7	0.00	0.00	7,369.0	-1,130.2	1,384.1	1,786.9	3.00	-3.00	EOD @ 0° INC - TOG
7,600.0	0.00	0.00	7,371.3	-1,130.2	1,384.1	1,786.9	0.00	0.00	
7,700.0	0.00	0.00	7,471.3	-1,130.2	1,384.1	1,786.9	0.00	0.00	
7,800.0	0.00	0.00	7,571.3	-1,130.2	1,384.1	1,786.9	0.00	0.00	
7,900.0	0.00	0.00	7,671.3	-1,130.2	1,384.1	1,786.9	0.00	0.00	
8,000.0	0.00	0.00	7,771.3	-1,130.2	1,384.1	1,786.9	0.00	0.00	
8,100.0	0.00	0.00	7,871.3	-1,130.2	1,384.1	1,786.9	0.00	0.00	
8,200.0	0.00	0.00	7,971.3	-1,130.2	1,384.1	1,786.9	0.00	0.00	
8,300.0	0.00	0.00	8,071.3	-1,130.2	1,384.1	1,786.9	0.00	0.00	
8,400.0	0.00	0.00	8,171.3	-1,130.2	1,384.1	1,786.9	0.00	0.00	
8,500.0	0.00	0.00	8,271.3	-1,130.2	1,384.1	1,786.9	0.00	0.00	
8,572.7	0.00	0.00	8,344.0	-1,130.2	1,384.1	1,786.9	0.00	0.00	CAMEO
8,600.0	0.00	0.00	8,371.3	-1,130.2	1,384.1	1,786.9	0.00	0.00	
8,700.0	0.00	0.00	8,471.3	-1,130.2	1,384.1	1,786.9	0.00	0.00	
8,800.0	0.00	0.00	8,571.3	-1,130.2	1,384.1	1,786.9	0.00	0.00	
8,900.0	0.00	0.00	8,671.3	-1,130.2	1,384.1	1,786.9	0.00	0.00	
8,952.7	0.00	0.00	8,724.0	-1,130.2	1,384.1	1,786.9	0.00	0.00	ROLLINS
9,000.0	0.00	0.00	8,771.3	-1,130.2	1,384.1	1,786.9	0.00	0.00	
9,102.7	0.00	0.00	8,874.0	-1,130.2	1,384.1	1,786.9	0.00	0.00	TD @ 9,102.7' MD

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=22' @ 8499.0usft
Project:	Garfield County, CO	MD Reference:	KB=22' @ 8499.0usft
Site:	S2-T7S-R97W (Puckett Pad)	North Reference:	True
Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
PUCKETT 13C-1 TGT	0.00	0.00	7,369.0	-1,130.2	1,384.1	608,118.22	1,245,034.47	39.472578	-108.174708
- plan hits target center									
- Point									
PUCKETT 13C-1 BHL	0.00	0.00	8,874.0	-1,130.2	1,384.1	608,118.22	1,245,034.47	39.472578	-108.174708
- plan hits target center									
- Circle (radius 50.0)									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
6,124.1	5,934.0	OHIOCREEK				
6,667.5	6,459.0	WILLIAMS FORK				
7,597.7	7,369.0	TOG				
8,572.7	8,344.0	CAMEO				
8,952.7	8,724.0	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'	
673.3	667.7	-40.9	50.1	EOB @ 14.95° INC	
7,099.5	6,876.3	-1,089.3	1,334.1	Start 3° Drop	
7,597.7	7,369.0	-1,130.2	1,384.1	EOD @ 0° INC	
9,102.7	8,874.0	-1,130.2	1,384.1	TD @ 9,102.7' MD	

Caerus Oil & Gas (NAD 27)

Garfield County, CO

S2-T7S-R97W (Puckett Pad)

PUCKETT 13C-1

DD

Plan #1

Anticollision Report

22 September, 2014

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

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

Survey Tool Program	Date	9/22/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	9,101.9	Plan #1 (DD)	ISCWSA MWD	MWD - Standard

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-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		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	48.6	48.4	277.285	CC
PUCKETT 11D-1 - DD - Plan #1	200.0	200.0	48.7	48.1	77.823	ES
PUCKETT 11D-1 - DD - Plan #1	600.0	587.8	105.4	102.3	34.200	SF
PUCKETT 12A-1 - DD - Plan #1	100.0	100.0	41.2	41.0	234.973	CC
PUCKETT 12A-1 - DD - Plan #1	200.0	200.0	41.3	40.7	66.013	ES
PUCKETT 12A-1 - DD - Plan #1	500.0	496.2	68.3	66.0	29.130	SF
PUCKETT 12B-1 - DD - Plan #1	100.0	100.0	33.5	33.3	191.028	CC
PUCKETT 12B-1 - DD - Plan #1	200.0	200.0	33.6	33.0	53.741	ES
PUCKETT 12B-1 - DD - Plan #1	500.0	499.0	55.6	53.3	23.969	SF
PUCKETT 12C-1 - DD - Plan #1	100.0	100.0	26.2	26.1	149.661	CC
PUCKETT 12C-1 - DD - Plan #1	200.0	200.0	26.3	25.7	42.206	ES
PUCKETT 12C-1 - DD - Plan #1	500.0	500.0	46.5	44.2	20.084	SF
PUCKETT 12D-1 - DD - Plan #1	100.0	100.0	19.1	18.9	108.798	CC
PUCKETT 12D-1 - DD - Plan #1	200.0	200.0	19.2	18.5	30.775	ES
PUCKETT 12D-1 - DD - Plan #1	2,100.0	2,094.5	197.9	183.5	13.683	SF
PUCKETT 13A-1 - DD - Plan #1	100.0	100.0	12.2	12.0	69.430	CC
PUCKETT 13A-1 - DD - Plan #1	200.0	200.0	12.2	11.6	19.693	ES
PUCKETT 13A-1 - DD - Plan #1	3,100.0	3,096.0	193.7	170.2	8.242	SF
PUCKETT 13B-1 - DD - Plan #1	262.2	262.1	9.1	8.2	10.269	CC
PUCKETT 13B-1 - DD - Plan #1	300.0	299.8	9.2	8.1	8.789	ES
PUCKETT 13B-1 - DD - Plan #1	5,500.0	5,495.9	199.9	143.9	3.572	SF
PUCKETT 41A-2 - DD - Plan #1	100.0	100.0	57.1	57.0	325.888	CC
PUCKETT 41A-2 - DD - Plan #1	200.0	200.0	57.3	56.6	91.400	ES
PUCKETT 41A-2 - DD - Plan #1	500.0	486.9	98.3	95.9	40.695	SF
PUCKETT 41B-2 - DD - Plan #1	100.0	100.0	65.2	65.0	371.900	CC
PUCKETT 41B-2 - DD - Plan #1	143.3	143.3	65.3	64.9	176.350	ES
PUCKETT 41B-2 - DD - Plan #1	500.0	480.5	117.4	114.9	47.244	SF
PUCKETT 41C-2 - DD - Plan #1	100.0	100.0	56.4	56.3	321.980	CC
PUCKETT 41C-2 - DD - Plan #1	200.0	200.0	56.6	56.0	90.086	ES
PUCKETT 41C-2 - DD - Plan #1	500.0	487.0	98.5	96.0	39.920	SF
PUCKETT 41D-2 - DD - Plan #1	100.0	100.0	64.5	64.3	367.802	CC
PUCKETT 41D-2 - DD - Plan #1	200.0	199.2	64.8	64.2	103.144	ES
PUCKETT 41D-2 - DD - Plan #1	500.0	481.3	116.0	113.4	46.075	SF
PUCKETT 42A-2 - DD - Plan #1	100.0	100.0	47.9	47.7	273.060	CC
PUCKETT 42A-2 - DD - Plan #1	200.0	200.0	48.0	47.4	76.425	ES
PUCKETT 42A-2 - DD - Plan #1	500.0	489.2	86.3	83.8	34.957	SF
PUCKETT 42B-2 - DD - Plan #1	100.0	100.0	40.3	40.1	229.802	CC
PUCKETT 42B-2 - DD - Plan #1	200.0	200.0	40.4	39.8	64.352	ES
PUCKETT 42B-2 - DD - Plan #1	500.0	492.5	73.5	71.1	29.981	SF
PUCKETT 42C-2 - DD - Plan #1	100.0	100.0	32.0	31.8	182.622	CC
PUCKETT 42C-2 - DD - Plan #1	200.0	200.0	32.2	31.5	51.196	ES
PUCKETT 42C-2 - DD - Plan #1	400.0	399.1	44.4	42.6	24.896	SF
PUCKETT 42D-2 - DD - Plan #1	100.0	100.0	24.4	24.3	139.358	CC
PUCKETT 42D-2 - DD - Plan #1	200.0	200.0	24.6	24.0	39.122	ES
PUCKETT 42D-2 - DD - Plan #1	400.0	399.3	36.9	35.2	20.716	SF
PUCKETT 43A-2 - DD - Plan #1	100.0	100.0	16.5	16.3	94.212	CC
PUCKETT 43A-2 - DD - Plan #1	200.0	200.0	16.7	16.0	26.521	ES
PUCKETT 43A-2 - DD - Plan #1	400.0	399.7	28.4	26.6	15.981	SF
PUCKETT 43B-2 - DD - Plan #1	100.0	100.0	8.0	7.8	45.479	CC
PUCKETT 43B-2 - DD - Plan #1	200.0	200.0	8.1	7.5	12.919	ES
PUCKETT 43B-2 - DD - Plan #1	300.0	300.1	11.4	10.2	9.667	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 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 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			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)	Offset Wellbore Centre +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	-13.09	47.3	-11.0	48.6					
100.0	100.0	100.0	100.0	0.1	0.1	-13.09	47.3	-11.0	48.6	48.4	0.18	277.285 CC		
155.6	155.6	155.6	155.6	0.2	0.2	-142.47	47.3	-11.0	48.8	48.3	0.43	114.649		
200.0	200.0	200.0	200.0	0.3	0.3	-142.44	47.3	-11.0	48.7	48.1	0.63	77.823 ES		
300.0	299.9	298.7	298.6	0.5	0.5	-142.49	49.0	-9.1	53.1	51.9	1.15	46.224		
400.0	399.5	396.6	396.3	0.8	0.8	-141.21	54.1	-3.5	64.0	62.3	1.74	36.783		
500.0	498.4	493.2	492.0	1.1	1.0	-139.38	62.3	5.8	81.5	79.1	2.38	34.229		
600.0	596.5	587.8	585.2	1.5	1.4	-137.56	73.4	18.3	105.4	102.3	3.08	34.200 SF		
700.0	693.5	680.0	675.0	2.0	1.8	-136.06	87.2	33.8	135.5	131.6	3.82	35.437		
800.0	790.1	774.5	766.5	2.5	2.2	-135.00	102.9	51.5	167.8	163.3	4.55	36.875		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 12A-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-11.06	40.4	-7.9	41.2					
100.0	100.0	100.0	100.0	0.1	0.1	-11.06	40.4	-7.9	41.2	41.0	0.18	234.973 CC		
155.6	155.6	155.6	155.6	0.2	0.2	-140.47	40.4	-7.9	41.4	40.9	0.43	97.238		
200.0	200.0	200.0	200.0	0.3	0.3	-140.44	40.4	-7.9	41.3	40.7	0.63	66.013 ES		
300.0	299.9	299.5	299.5	0.5	0.5	-142.80	40.8	-7.4	44.6	43.5	1.14	39.001		
400.0	399.5	398.3	398.2	0.8	0.8	-143.32	43.5	-3.0	53.6	51.9	1.72	31.126		
500.0	498.4	496.2	495.6	1.1	1.0	-142.04	48.9	5.5	68.3	66.0	2.35	29.130 SF		
600.0	596.5	592.7	590.9	1.5	1.3	-140.06	56.9	18.0	88.8	85.8	3.03	29.316		
700.0	693.5	687.4	683.6	2.0	1.7	-138.08	67.2	34.2	114.8	111.1	3.76	30.543		
800.0	790.1	783.0	776.5	2.5	2.1	-136.33	79.1	52.9	143.1	138.6	4.48	31.909		
900.0	886.7	878.8	869.7	3.0	2.5	-135.14	91.1	71.8	171.5	166.2	5.26	32.595		
1,000.0	983.3	974.7	962.9	3.5	3.0	-134.29	103.1	90.6	199.9	193.8	6.07	32.942		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 12B-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-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	-8.24	33.1	-4.8	33.5					
100.0	100.0	100.0	100.0	0.1	0.1	-8.24	33.1	-4.8	33.5	33.3	0.18	191.028 CC		
155.6	155.6	155.6	155.6	0.2	0.2	-137.70	33.1	-4.8	33.6	33.2	0.43	79.147		
200.0	200.0	200.0	200.0	0.3	0.3	-137.66	33.1	-4.8	33.6	33.0	0.63	53.741 ES		
300.0	299.9	299.9	299.9	0.5	0.5	-141.74	33.1	-4.8	36.6	35.5	1.14	32.041		
400.0	399.5	399.6	399.6	0.8	0.8	-145.61	33.8	-2.3	44.0	42.3	1.72	25.608		
500.0	498.4	499.0	498.7	1.1	1.0	-145.74	35.8	5.2	55.6	53.3	2.32	23.969 SF		
600.0	596.5	597.8	596.6	1.5	1.3	-143.89	39.0	17.6	71.4	68.4	2.98	23.981		
700.0	693.5	695.8	692.9	2.0	1.6	-141.35	43.5	34.7	91.2	87.5	3.68	24.782		
800.0	790.1	793.5	788.6	2.5	2.0	-139.28	48.5	53.7	112.2	107.8	4.38	25.635		
900.0	886.7	891.1	884.3	3.0	2.4	-137.86	53.5	72.7	133.3	128.2	5.14	25.965		
1,000.0	983.3	988.8	980.0	3.5	2.8	-136.83	58.5	91.7	154.6	148.6	5.93	26.061		
1,100.0	1,079.9	1,086.5	1,075.7	4.1	3.2	-136.05	63.5	110.7	175.8	169.0	6.75	26.050		
1,200.0	1,176.5	1,184.2	1,171.4	4.6	3.6	-135.44	68.5	129.7	197.1	189.5	7.58	25.996		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 12C-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-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	-1.85	26.2	-0.8	26.2					
100.0	100.0	100.0	100.0	0.1	0.1	-1.85	26.2	-0.8	26.2	26.1	0.18	149.661 CC		
155.6	155.6	155.6	155.6	0.2	0.2	-131.41	26.2	-0.8	26.4	25.9	0.42	62.119		
200.0	200.0	200.0	200.0	0.3	0.3	-131.35	26.2	-0.8	26.3	25.7	0.62	42.206 ES		
300.0	299.9	299.9	299.9	0.5	0.5	-137.10	26.2	-0.8	29.1	28.0	1.13	25.715		
400.0	399.5	399.8	399.8	0.8	0.8	-145.90	26.2	-0.2	36.1	34.4	1.72	21.031		
500.0	498.4	500.0	499.8	1.1	1.0	-149.59	26.1	5.0	46.5	44.2	2.32	20.084 SF		
600.0	596.5	600.2	599.5	1.5	1.2	-149.61	25.8	15.5	59.5	56.5	2.94	20.218		
700.0	693.5	700.3	698.3	2.0	1.5	-147.81	25.3	31.2	74.8	71.2	3.58	20.863		
800.0	790.1	799.4	795.5	2.5	1.9	-144.97	24.8	50.4	90.1	85.9	4.22	21.350		
900.0	886.7	898.1	892.4	3.0	2.3	-142.87	24.3	69.7	105.5	100.5	4.94	21.360		
1,000.0	983.3	996.9	989.2	3.5	2.7	-141.31	23.8	89.0	121.0	115.3	5.71	21.206		
1,100.0	1,079.9	1,095.6	1,086.0	4.1	3.1	-140.10	23.2	108.3	136.6	130.1	6.50	20.999		
1,200.0	1,176.5	1,194.4	1,182.9	4.6	3.5	-139.14	22.7	127.7	152.2	144.9	7.32	20.787		
1,300.0	1,273.2	1,293.1	1,279.7	5.2	3.9	-138.36	22.2	147.0	167.8	159.7	8.15	20.585		
1,400.0	1,369.8	1,391.8	1,376.5	5.7	4.3	-137.71	21.6	166.3	183.5	174.5	8.99	20.402		
1,500.0	1,466.4	1,490.6	1,473.4	6.3	4.7	-137.17	21.1	185.6	199.2	189.4	9.84	20.237		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 12D-1 - DD - Plan #1													Offset Site Error: 0.0 usft	
Survey Program: 0-ISCSWA MWD													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance							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	6.80	18.9	2.3	19.1					
100.0	100.0	100.0	100.0	0.1	0.1	6.80	18.9	2.3	19.1	18.9	0.18	108.798 CC		
155.6	155.6	155.6	155.6	0.2	0.2	-122.94	18.9	2.3	19.2	18.8	0.42	45.246		
200.0	200.0	200.0	200.0	0.3	0.3	-122.84	18.9	2.3	19.2	18.5	0.62	30.775 ES		
300.0	299.9	299.9	299.9	0.5	0.5	-131.59	18.9	2.3	21.5	20.4	1.12	19.282		
400.0	399.5	400.2	400.2	0.8	0.8	-140.88	18.1	4.8	27.1	25.4	1.68	16.067		
500.0	498.4	500.8	500.4	1.1	1.0	-144.54	15.6	12.3	34.4	32.1	2.28	15.098		
600.0	596.5	601.6	600.3	1.5	1.3	-144.98	11.5	24.8	43.1	40.2	2.92	14.771		
700.0	693.5	702.1	699.2	2.0	1.6	-143.82	5.8	42.1	53.0	49.4	3.59	14.781		
800.0	790.1	801.6	796.7	2.5	2.0	-142.78	-0.3	60.6	63.3	59.1	4.24	14.930		
900.0	886.7	901.0	894.2	3.0	2.4	-142.03	-6.4	79.1	73.7	68.7	4.95	14.884		
1,000.0	983.3	1,000.5	991.8	3.5	2.8	-141.47	-12.5	97.6	84.0	78.3	5.69	14.765		
1,100.0	1,079.9	1,099.9	1,089.3	4.1	3.2	-141.03	-18.6	116.1	94.4	87.9	6.45	14.626		
1,200.0	1,176.5	1,199.4	1,186.8	4.6	3.6	-140.68	-24.7	134.6	104.7	97.5	7.23	14.487		
1,300.0	1,273.2	1,298.9	1,284.4	5.2	4.1	-140.39	-30.8	153.1	115.1	107.0	8.01	14.357		
1,400.0	1,369.8	1,398.3	1,381.9	5.7	4.5	-140.14	-36.9	171.6	125.4	116.6	8.81	14.239		
1,500.0	1,466.4	1,497.8	1,479.5	6.3	4.9	-139.94	-43.0	190.1	135.8	126.2	9.61	14.132		
1,600.0	1,563.0	1,597.2	1,577.0	6.8	5.3	-139.76	-49.1	208.5	146.1	135.7	10.41	14.036		
1,700.0	1,659.6	1,696.7	1,674.5	7.4	5.8	-139.61	-55.2	227.0	156.5	145.3	11.22	13.950		
1,800.0	1,756.2	1,796.2	1,772.1	7.9	6.2	-139.48	-61.3	245.5	166.9	154.8	12.03	13.873		
1,900.0	1,852.9	1,895.6	1,869.6	8.4	6.6	-139.36	-67.4	264.0	177.2	164.4	12.84	13.803		
2,000.0	1,949.5	1,995.1	1,967.1	9.0	7.1	-139.26	-73.5	282.5	187.6	173.9	13.65	13.740		
2,100.0	2,046.1	2,094.5	2,064.7	9.5	7.5	-139.16	-79.6	301.0	197.9	183.5	14.47	13.683 SF		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 13A-1 - DD - Plan #1													Offset Site Error: 0.0 usft	
Survey Program: 0-ISCSWA MWD													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	26.14	10.9	5.4	12.2					
100.0	100.0	100.0	100.0	0.1	0.1	26.14	10.9	5.4	12.2	12.0	0.18	69.430 CC		
155.9	155.9	155.9	155.9	0.2	0.2	-104.02	10.9	5.4	12.2	11.8	0.42	28.816		
200.0	200.0	200.0	200.0	0.3	0.3	-103.83	10.9	5.4	12.2	11.6	0.62	19.693 ES		
300.0	299.9	300.0	300.0	0.5	0.5	-117.32	10.6	5.9	13.5	12.4	1.07	12.580		
400.0	399.5	400.2	400.0	0.8	0.7	-127.91	8.3	10.6	16.7	15.0	1.61	10.357		
500.0	498.4	500.6	499.8	1.1	1.0	-132.97	3.5	20.0	21.1	18.9	2.22	9.508		
600.0	596.5	601.1	599.1	1.5	1.3	-134.60	-3.6	34.1	26.5	23.6	2.90	9.138		
700.0	693.5	701.4	697.3	2.0	1.7	-134.64	-12.8	52.5	32.8	29.1	3.64	9.003		
800.0	790.1	801.2	794.7	2.5	2.1	-134.85	-22.5	71.7	39.5	35.1	4.38	9.018		
900.0	886.7	900.9	892.1	3.0	2.6	-135.01	-32.2	91.0	46.2	41.0	5.15	8.968		
1,000.0	983.3	1,000.7	989.5	3.5	3.0	-135.12	-41.9	110.2	52.9	46.9	5.94	8.899		
1,100.0	1,079.9	1,100.5	1,086.9	4.1	3.5	-135.21	-51.6	129.4	59.6	52.8	6.75	8.829		
1,200.0	1,176.5	1,200.3	1,184.4	4.6	4.0	-135.28	-61.3	148.7	66.3	58.7	7.57	8.762		
1,300.0	1,273.2	1,300.0	1,281.8	5.2	4.4	-135.33	-71.0	167.9	73.0	64.6	8.39	8.702		
1,400.0	1,369.8	1,399.8	1,379.2	5.7	4.9	-135.38	-80.7	187.2	79.7	70.5	9.22	8.648		
1,500.0	1,466.4	1,499.6	1,476.6	6.3	5.4	-135.42	-90.4	206.4	86.4	76.4	10.05	8.600		
1,600.0	1,563.0	1,599.4	1,574.1	6.8	5.8	-135.45	-100.1	225.6	93.1	82.2	10.88	8.557		
1,700.0	1,659.6	1,699.1	1,671.5	7.4	6.3	-135.48	-109.8	244.9	99.8	88.1	11.72	8.519		
1,800.0	1,756.2	1,798.9	1,768.9	7.9	6.8	-135.51	-119.5	264.1	106.5	94.0	12.56	8.485		
1,900.0	1,852.9	1,898.7	1,866.3	8.4	7.2	-135.53	-129.2	283.4	113.2	99.8	13.39	8.454		
2,000.0	1,949.5	1,998.5	1,963.7	9.0	7.7	-135.55	-138.9	302.6	120.0	105.7	14.23	8.427		
2,100.0	2,046.1	2,098.2	2,061.2	9.5	8.2	-135.57	-148.6	321.8	126.7	111.6	15.08	8.402		
2,200.0	2,142.7	2,198.0	2,158.6	10.1	8.6	-135.59	-158.3	341.1	133.4	117.4	15.92	8.379		
2,300.0	2,239.3	2,297.8	2,256.0	10.6	9.1	-135.60	-168.0	360.3	140.1	123.3	16.76	8.358		
2,400.0	2,335.9	2,397.6	2,353.4	11.2	9.6	-135.62	-177.7	379.6	146.8	129.2	17.60	8.339		
2,500.0	2,432.5	2,497.3	2,450.8	11.7	10.0	-135.63	-187.4	398.8	153.5	135.0	18.44	8.322		
2,600.0	2,529.2	2,597.1	2,548.3	12.3	10.5	-135.64	-197.1	418.0	160.2	140.9	19.29	8.306		
2,700.0	2,625.8	2,696.9	2,645.7	12.8	11.0	-135.65	-206.8	437.3	166.9	146.8	20.13	8.291		
2,800.0	2,722.4	2,796.7	2,743.1	13.4	11.5	-135.66	-216.5	456.5	173.6	152.6	20.97	8.278		
2,900.0	2,819.0	2,896.4	2,840.5	13.9	11.9	-135.67	-226.2	475.8	180.3	158.5	21.82	8.265		
3,000.0	2,915.6	2,996.2	2,937.9	14.5	12.4	-135.68	-235.9	495.0	187.0	164.4	22.66	8.253		
3,100.0	3,012.2	3,096.0	3,035.4	15.0	12.9	-135.68	-245.6	514.2	193.7	170.2	23.50	8.242 SF		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 13B-1 - DD - Plan #1													Offset Site Error: 0.0 usft	
Survey Program: 0-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	64.68	4.0	8.5	9.4					
100.0	100.0	100.0	100.0	0.1	0.1	64.68	4.0	8.5	9.4	9.2	0.18	53.438		
200.0	200.0	200.0	200.0	0.3	0.3	-65.46	4.0	8.5	9.3	8.7	0.62	14.970		
262.2	262.2	262.1	262.1	0.4	0.4	-70.58	3.5	9.3	9.1	8.2	0.89	10.269 CC		
300.0	299.9	299.8	299.7	0.5	0.5	-74.09	2.7	10.7	9.2	8.1	1.05	8.789 ES		
400.0	399.5	399.6	399.2	0.8	0.8	-83.62	-1.3	17.4	10.1	8.5	1.52	6.605		
500.0	498.4	499.4	498.2	1.1	1.0	-91.66	-8.0	28.6	11.9	9.8	2.12	5.605		
600.0	596.5	599.4	596.5	1.5	1.4	-97.27	-17.3	44.2	14.7	11.8	2.89	5.088		
700.0	693.5	699.3	693.6	2.0	1.9	-100.24	-29.2	64.2	18.3	14.5	3.82	4.790		
800.0	790.1	799.2	790.2	2.5	2.4	-99.83	-42.3	86.1	22.1	17.2	4.84	4.562		
900.0	886.7	899.2	886.9	3.0	2.9	-99.55	-55.4	108.1	25.8	20.0	5.88	4.394		
1,000.0	983.3	999.1	983.5	3.5	3.4	-99.34	-68.4	130.0	29.6	22.7	6.94	4.267		
1,100.0	1,079.9	1,099.0	1,080.1	4.1	3.9	-99.18	-81.5	151.9	33.4	25.4	8.01	4.169		
1,200.0	1,176.5	1,198.9	1,176.7	4.6	4.5	-99.05	-94.6	173.9	37.2	28.1	9.09	4.091		
1,300.0	1,273.2	1,298.9	1,273.3	5.2	5.0	-98.94	-107.7	195.8	41.0	30.8	10.17	4.029		
1,400.0	1,369.8	1,398.8	1,369.9	5.7	5.6	-98.85	-120.7	217.7	44.8	33.5	11.25	3.977		
1,500.0	1,466.4	1,498.7	1,466.5	6.3	6.1	-98.78	-133.8	239.7	48.5	36.2	12.34	3.934		
1,600.0	1,563.0	1,598.7	1,563.1	6.8	6.6	-98.71	-146.9	261.6	52.3	38.9	13.42	3.898		
1,700.0	1,659.6	1,698.6	1,659.7	7.4	7.2	-98.66	-159.9	283.5	56.1	41.6	14.51	3.866		
1,800.0	1,756.2	1,798.5	1,756.4	7.9	7.7	-98.61	-173.0	305.5	59.9	44.3	15.60	3.839		
1,900.0	1,852.9	1,898.4	1,853.0	8.4	8.3	-98.57	-186.1	327.4	63.7	47.0	16.69	3.815		
2,000.0	1,949.5	1,998.4	1,949.6	9.0	8.8	-98.53	-199.2	349.3	67.5	49.7	17.78	3.794		
2,100.0	2,046.1	2,098.3	2,046.2	9.5	9.3	-98.50	-212.2	371.3	71.2	52.4	18.87	3.776		
2,200.0	2,142.7	2,198.2	2,142.8	10.1	9.9	-98.46	-225.3	393.2	75.0	55.1	19.96	3.759		
2,300.0	2,239.3	2,298.2	2,239.4	10.6	10.4	-98.44	-238.4	415.1	78.8	57.8	21.05	3.744		
2,400.0	2,335.9	2,398.1	2,336.0	11.2	11.0	-98.41	-251.5	437.1	82.6	60.5	22.14	3.730		
2,500.0	2,432.5	2,498.0	2,432.6	11.7	11.5	-98.39	-264.5	459.0	86.4	63.1	23.23	3.718		
2,600.0	2,529.2	2,597.9	2,529.2	12.3	12.1	-98.37	-277.6	480.9	90.2	65.8	24.32	3.707		
2,700.0	2,625.8	2,697.9	2,625.9	12.8	12.6	-98.35	-290.7	502.8	93.9	68.5	25.41	3.696		
2,800.0	2,722.4	2,797.8	2,722.5	13.4	13.2	-98.33	-303.7	524.8	97.7	71.2	26.51	3.687		
2,900.0	2,819.0	2,897.7	2,819.1	13.9	13.7	-98.32	-316.8	546.7	101.5	73.9	27.60	3.678		
3,000.0	2,915.6	2,997.7	2,915.7	14.5	14.2	-98.30	-329.9	568.6	105.3	76.6	28.69	3.670		
3,100.0	3,012.2	3,097.6	3,012.3	15.0	14.8	-98.29	-343.0	590.6	109.1	79.3	29.78	3.663		
3,200.0	3,108.9	3,197.5	3,108.9	15.6	15.3	-98.27	-356.0	612.5	112.9	82.0	30.87	3.656		
3,300.0	3,205.5	3,297.4	3,205.5	16.1	15.9	-98.26	-369.1	634.4	116.6	84.7	31.96	3.649		
3,400.0	3,302.1	3,397.4	3,302.1	16.7	16.4	-98.25	-382.2	656.4	120.4	87.4	33.05	3.643		
3,500.0	3,398.7	3,497.3	3,398.8	17.2	17.0	-98.24	-395.3	678.3	124.2	90.1	34.14	3.638		
3,600.0	3,495.3	3,597.2	3,495.4	17.8	17.5	-98.23	-408.3	700.2	128.0	92.8	35.24	3.632		
3,700.0	3,591.9	3,697.1	3,592.0	18.3	18.1	-98.22	-421.4	722.2	131.8	95.5	36.33	3.628		
3,800.0	3,688.6	3,797.1	3,688.6	18.9	18.6	-98.21	-434.5	744.1	135.6	98.1	37.42	3.623		
3,900.0	3,785.2	3,897.0	3,785.2	19.4	19.1	-98.20	-447.6	766.0	139.3	100.8	38.51	3.618		
4,000.0	3,881.8	3,996.9	3,881.8	20.0	19.7	-98.19	-460.6	788.0	143.1	103.5	39.60	3.614		
4,100.0	3,978.4	4,096.9	3,978.4	20.5	20.2	-98.19	-473.7	809.9	146.9	106.2	40.69	3.610		
4,200.0	4,075.0	4,196.8	4,075.0	21.1	20.8	-98.18	-486.8	831.8	150.7	108.9	41.78	3.607		
4,300.0	4,171.6	4,296.7	4,171.6	21.6	21.3	-98.17	-499.8	853.8	154.5	111.6	42.87	3.603		
4,400.0	4,268.2	4,396.6	4,268.3	22.2	21.9	-98.17	-512.9	875.7	158.3	114.3	43.97	3.600		
4,500.0	4,364.9	4,496.6	4,364.9	22.7	22.4	-98.16	-526.0	897.6	162.0	117.0	45.06	3.597		
4,600.0	4,461.5	4,596.5	4,461.5	23.3	23.0	-98.15	-539.1	919.6	165.8	119.7	46.15	3.594		
4,700.0	4,558.1	4,696.4	4,558.1	23.8	23.5	-98.15	-552.1	941.5	169.6	122.4	47.24	3.591		
4,800.0	4,654.7	4,796.4	4,654.7	24.4	24.0	-98.14	-565.2	963.4	173.4	125.1	48.33	3.588		
4,900.0	4,751.3	4,896.3	4,751.3	24.9	24.6	-98.14	-578.3	985.4	177.2	127.8	49.42	3.585		
5,000.0	4,847.9	4,996.2	4,847.9	25.5	25.1	-98.13	-591.4	1,007.3	181.0	130.5	50.51	3.583		

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 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 13B-1 - DD - Plan #1													Offset Site Error: 0.0 usft
Survey Program: 0-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	
5,100.0	4,944.6	5,096.1	4,944.5	26.0	25.7	-98.13	-604.4	1,029.2	184.7	133.1	51.60	3.580	
5,200.0	5,041.2	5,196.1	5,041.1	26.6	26.2	-98.12	-617.5	1,051.2	188.5	135.8	52.69	3.578	
5,300.0	5,137.8	5,296.0	5,137.8	27.1	26.8	-98.12	-630.6	1,073.1	192.3	138.5	53.78	3.576	
5,400.0	5,234.4	5,395.9	5,234.4	27.7	27.3	-98.11	-643.6	1,095.0	196.1	141.2	54.87	3.574	
5,500.0	5,331.0	5,495.9	5,331.0	28.2	27.9	-98.11	-656.7	1,116.9	199.9	143.9	55.96	3.572 SF	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 41A-2 - DD - Plan #1													Offset Site Error: 0.0 usft	
Survey Program: 0-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	-14.30	55.4	-14.1	57.1					
100.0	100.0	100.0	100.0	0.1	0.1	-14.30	55.4	-14.1	57.1	57.0	0.18	325.888 CC		
155.6	155.6	155.6	155.6	0.2	0.2	-143.65	55.4	-14.1	57.3	56.9	0.43	134.656		
200.0	200.0	200.0	200.0	0.3	0.3	-143.63	55.4	-14.1	57.3	56.6	0.63	91.400 ES		
300.0	299.9	297.3	297.3	0.5	0.5	-144.33	57.7	-13.3	62.5	61.4	1.16	53.979		
400.0	399.5	393.6	393.2	0.8	0.8	-144.80	64.6	-10.8	76.2	74.4	1.77	43.007		
500.0	498.4	486.9	485.9	1.1	1.0	-145.93	75.4	-8.4	98.3	95.9	2.42	40.695 SF		
600.0	596.5	576.6	574.5	1.5	1.3	-148.02	89.5	-8.4	129.4	126.3	3.09	41.882		
700.0	693.5	661.7	657.9	2.0	1.6	-150.23	106.2	-10.3	168.9	165.1	3.72	45.358		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 41B-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-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	-16.09	62.6	-18.1	65.2					
100.0	100.0	100.0	100.0	0.1	0.1	-16.09	62.6	-18.1	65.2	65.0	0.18	371.900 CC		
143.3	143.3	143.3	143.3	0.2	0.2	-145.38	62.6	-18.1	65.3	64.9	0.37	176.350 ES		
200.0	200.0	198.7	198.7	0.3	0.3	-145.39	63.0	-18.2	65.7	65.1	0.63	104.744		
300.0	299.9	294.8	294.7	0.5	0.5	-146.91	67.2	-19.4	73.5	72.4	1.18	62.100		
400.0	399.5	389.2	388.7	0.8	0.8	-149.47	75.9	-21.8	90.8	89.0	1.82	49.837		
500.0	498.4	480.5	479.0	1.1	1.1	-151.92	88.5	-25.3	117.4	114.9	2.48	47.244 SF		
600.0	596.5	567.7	564.6	1.5	1.4	-153.77	104.4	-29.8	153.0	149.9	3.15	48.534		
700.0	693.5	650.0	644.6	2.0	1.7	-155.17	122.8	-35.0	197.0	193.2	3.77	52.183		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 41C-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISWWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-24.52	51.4	-23.4	56.4					
100.0	100.0	100.0	100.0	0.1	0.1	-24.52	51.4	-23.4	56.4	56.3	0.18	321.980 CC		
155.6	155.6	155.6	155.6	0.2	0.2	-153.85	51.4	-23.4	56.6	56.2	0.43	132.840		
200.0	200.0	200.0	200.0	0.3	0.3	-153.83	51.4	-23.4	56.6	56.0	0.63	90.086 ES		
300.0	299.9	297.8	297.8	0.5	0.5	-154.80	52.7	-23.4	61.4	60.2	1.18	52.118		
400.0	399.5	393.7	393.5	0.8	0.8	-155.49	58.8	-23.4	75.4	73.6	1.81	41.722		
500.0	498.4	487.0	486.2	1.1	1.0	-156.14	69.1	-24.1	98.5	96.0	2.47	39.920 SF		
600.0	596.5	576.3	574.5	1.5	1.3	-157.55	82.2	-27.3	130.7	127.6	3.13	41.827		
700.0	693.5	662.1	658.7	2.0	1.6	-159.16	97.7	-32.8	171.5	167.8	3.75	45.792		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 41D-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-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	-24.58	58.6	-26.8	64.5					
100.0	100.0	100.0	100.0	0.1	0.1	-24.58	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	-153.87	58.6	-26.8	64.6	64.2	0.40	161.144		
200.0	200.0	199.2	199.2	0.3	0.3	-153.87	58.8	-26.9	64.8	64.2	0.63	103.144 ES		
300.0	299.9	295.4	295.4	0.5	0.5	-155.20	62.0	-28.5	72.1	70.9	1.19	60.394		
400.0	399.5	389.9	389.5	0.8	0.8	-157.42	69.4	-32.2	89.2	87.4	1.84	48.400		
500.0	498.4	481.3	480.0	1.1	1.0	-159.52	80.6	-37.8	116.0	113.4	2.52	46.075 SF		
600.0	596.5	575.3	572.8	1.5	1.4	-161.35	94.0	-44.5	149.8	146.6	3.17	47.299		
700.0	693.5	667.5	663.8	2.0	1.7	-162.94	107.1	-51.0	188.2	184.5	3.73	50.409		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 42A-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISWWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-25.12	43.3	-20.3	47.9					
100.0	100.0	100.0	100.0	0.1	0.1	-25.12	43.3	-20.3	47.9	47.7	0.18	273.060 CC		
155.6	155.6	155.6	155.6	0.2	0.2	-154.46	43.3	-20.3	48.1	47.6	0.43	112.712		
200.0	200.0	200.0	200.0	0.3	0.3	-154.44	43.3	-20.3	48.0	47.4	0.63	76.425 ES		
300.0	299.9	299.3	299.3	0.5	0.5	-156.28	43.5	-20.4	51.7	50.6	1.18	44.030		
400.0	399.5	395.5	395.5	0.8	0.8	-159.90	46.4	-22.6	64.0	62.2	1.80	35.535		
500.0	498.4	489.2	488.8	1.1	1.0	-163.40	53.0	-27.4	86.3	83.8	2.47	34.957 SF		
600.0	596.5	583.3	582.2	1.5	1.2	-166.06	62.2	-34.2	116.9	113.8	3.13	37.315		
700.0	693.5	676.7	674.8	2.0	1.5	-168.03	71.4	-41.0	152.5	148.8	3.70	41.195		
800.0	790.1	769.5	766.9	2.5	1.8	-169.45	80.6	-47.7	189.5	185.4	4.11	46.068		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 42B-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-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	-25.30	36.4	-17.2	40.3					
100.0	100.0	100.0	100.0	0.1	0.1	-25.30	36.4	-17.2	40.3	40.1	0.18	229.802 CC		
155.6	155.6	155.6	155.6	0.2	0.2	-154.66	36.4	-17.2	40.5	40.0	0.43	94.921		
200.0	200.0	200.0	200.0	0.3	0.3	-154.63	36.4	-17.2	40.4	39.8	0.63	64.352 ES		
300.0	299.9	299.9	299.9	0.5	0.5	-156.78	36.4	-17.2	44.0	42.8	1.17	37.481		
400.0	399.5	397.6	397.6	0.8	0.8	-161.12	37.2	-18.3	53.9	52.1	1.79	30.102		
500.0	498.4	492.5	492.3	1.1	1.0	-166.30	40.7	-23.2	73.5	71.1	2.45	29.981 SF		
600.0	596.5	588.2	587.6	1.5	1.2	-170.24	45.7	-30.2	101.1	98.0	3.11	32.486		
700.0	693.5	682.6	681.6	2.0	1.5	-172.77	50.7	-37.1	133.8	130.1	3.68	36.369		
800.0	790.1	776.5	775.1	2.5	1.7	-174.44	55.7	-44.0	167.9	163.9	4.09	41.089		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 42C-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-24.48	29.1	-13.3	32.0					
100.0	100.0	100.0	100.0	0.1	0.1	-24.48	29.1	-13.3	32.0	31.8	0.18	182.622 CC		
155.6	155.6	155.6	155.6	0.2	0.2	-153.87	29.1	-13.3	32.2	31.8	0.43	75.526		
200.0	200.0	200.0	200.0	0.3	0.3	-153.84	29.1	-13.3	32.2	31.5	0.63	51.196 ES		
300.0	299.9	299.9	299.9	0.5	0.5	-156.57	29.1	-13.3	35.7	34.6	1.17	30.434		
400.0	399.5	399.1	399.1	0.8	0.8	-161.34	29.2	-13.4	44.4	42.6	1.78	24.896 SF		
500.0	498.4	495.8	495.8	1.1	1.0	-168.32	29.5	-17.1	60.7	58.3	2.42	25.065		
600.0	596.5	592.0	591.7	1.5	1.2	-174.37	30.0	-24.1	85.2	82.2	3.08	27.633		
700.0	693.5	687.2	686.6	2.0	1.4	-177.89	30.6	-31.1	115.2	111.6	3.66	31.510		
800.0	790.1	782.0	781.1	2.5	1.6	-179.98	31.2	-38.1	146.8	142.8	4.07	36.043		
900.0	886.7	876.7	875.6	3.0	1.9	178.67	31.8	-45.1	178.5	174.0	4.51	39.544		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 42D-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISWWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-24.58	22.2	-10.2	24.4					
100.0	100.0	100.0	100.0	0.1	0.1	-24.58	22.2	-10.2	24.4	24.3	0.18	139.358 CC		
155.6	155.6	155.6	155.6	0.2	0.2	-154.02	22.2	-10.2	24.6	24.2	0.43	57.732		
200.0	200.0	200.0	200.0	0.3	0.3	-153.98	22.2	-10.2	24.6	24.0	0.63	39.122 ES		
300.0	299.9	299.9	299.9	0.5	0.5	-157.44	22.2	-10.2	28.2	27.0	1.18	23.955		
400.0	399.5	399.3	399.3	0.8	0.7	-165.08	21.5	-11.4	36.9	35.2	1.78	20.716 SF		
500.0	498.4	497.3	497.1	1.1	1.0	-175.97	18.5	-16.9	52.6	50.1	2.43	21.628		
600.0	596.5	594.4	593.8	1.5	1.2	176.89	14.6	-24.1	75.2	72.1	3.08	24.397		
700.0	693.5	690.2	689.3	2.0	1.4	173.36	10.7	-31.2	103.2	99.5	3.67	28.122		
800.0	790.1	785.7	784.4	2.5	1.7	171.46	6.9	-38.2	132.7	128.6	4.12	32.248		
900.0	886.7	881.1	879.6	3.0	1.9	170.25	3.0	-45.3	162.4	157.8	4.60	35.334		
1,000.0	983.3	976.6	974.7	3.5	2.2	169.41	-0.8	-52.3	192.1	187.0	5.10	37.671		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 43A-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance					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	-25.29	14.9	-7.1	16.5					
100.0	100.0	100.0	100.0	0.1	0.1	-25.29	14.9	-7.1	16.5	16.3	0.18	94.212 CC		
155.6	155.6	155.6	155.6	0.2	0.2	-154.82	14.9	-7.1	16.7	16.3	0.43	39.163		
200.0	200.0	200.0	200.0	0.3	0.3	-154.77	14.9	-7.1	16.7	16.0	0.63	26.521 ES		
300.0	299.9	300.0	300.0	0.5	0.5	-159.90	14.8	-7.2	20.2	19.1	1.17	17.247		
400.0	399.5	399.7	399.6	0.8	0.7	-173.83	11.8	-9.7	28.4	26.6	1.78	15.981 SF		
500.0	498.4	498.2	497.6	1.1	1.0	172.00	5.0	-15.5	43.2	40.8	2.43	17.785		
600.0	596.5	595.5	594.4	1.5	1.2	164.32	-3.4	-22.7	64.8	61.7	3.10	20.945		
700.0	693.5	691.8	690.0	2.0	1.5	161.47	-11.7	-29.8	91.6	87.9	3.73	24.576		
800.0	790.1	787.7	785.3	2.5	1.8	160.25	-20.0	-36.9	119.8	115.6	4.25	28.186		
900.0	886.7	883.7	880.6	3.0	2.1	159.49	-28.3	-44.0	148.0	143.2	4.81	30.773		
1,000.0	983.3	979.6	975.9	3.5	2.4	158.97	-36.6	-51.1	176.3	170.9	5.40	32.670		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 43B-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-29.71	6.9	-4.0	8.0					
100.0	100.0	100.0	100.0	0.1	0.1	-29.71	6.9	-4.0	8.0	7.8	0.18	45.479 CC		
155.6	155.6	155.6	155.6	0.2	0.2	-159.45	6.9	-4.0	8.2	7.7	0.43	19.127		
200.0	200.0	200.0	200.0	0.3	0.3	-159.36	6.9	-4.0	8.1	7.5	0.63	12.919 ES		
300.0	299.9	300.1	300.0	0.5	0.5	-172.85	5.6	-4.7	11.4	10.2	1.18	9.667 SF		
400.0	399.5	399.6	399.3	0.8	0.7	165.40	0.0	-7.8	19.9	18.2	1.78	11.221		
500.0	498.4	497.8	496.9	1.1	1.0	152.22	-10.1	-13.5	35.6	33.2	2.41	14.797		
600.0	596.5	595.2	593.1	1.5	1.3	146.60	-22.9	-20.6	57.6	54.5	3.11	18.558		
700.0	693.5	691.7	688.5	2.0	1.6	145.93	-35.7	-27.8	83.9	80.1	3.81	21.989		
800.0	790.1	787.8	783.6	2.5	2.0	146.17	-48.4	-34.9	111.3	106.8	4.46	24.970		
900.0	886.7	884.0	878.6	3.0	2.3	146.31	-61.2	-42.1	138.7	133.5	5.13	27.033		
1,000.0	983.3	980.2	973.7	3.5	2.7	146.41	-73.9	-49.2	166.1	160.2	5.82	28.514		
1,100.0	1,079.9	1,076.4	1,068.7	4.1	3.0	146.48	-86.7	-56.3	193.5	186.9	6.53	29.611		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 13C-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 13C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

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

Coordinates are relative to: PUCKETT 13C-1
Coordinate System is US State Plane 1927 (Exact solution), Colorado Central 502
Grid Convergence at Surface is: -1.69°

