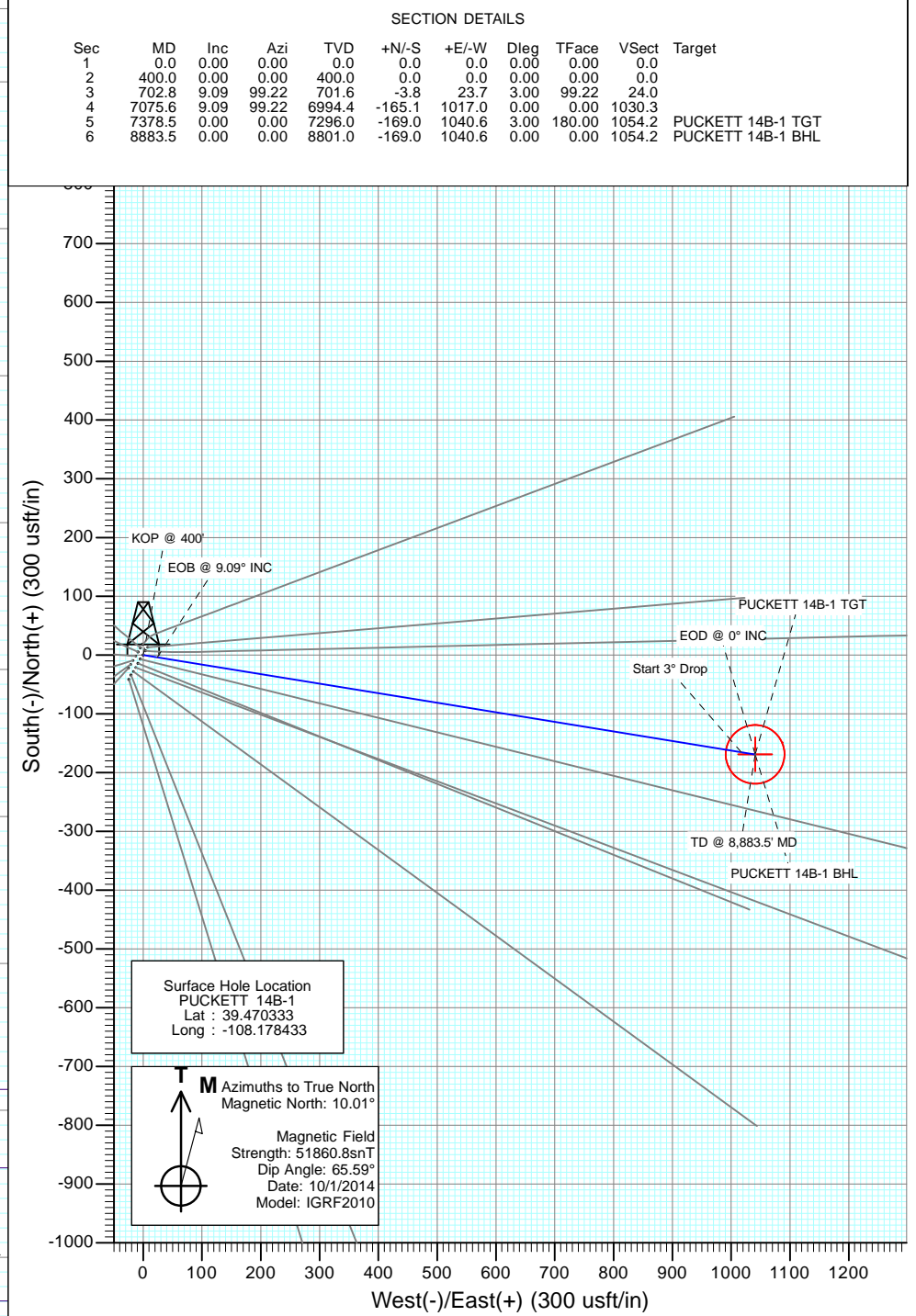
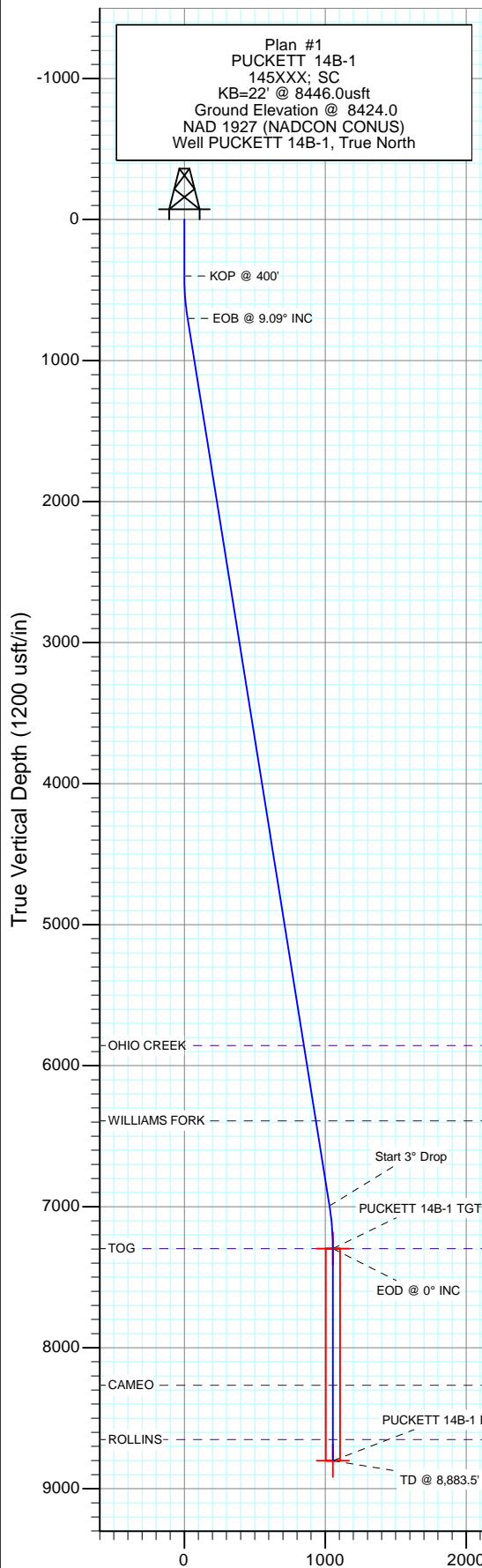


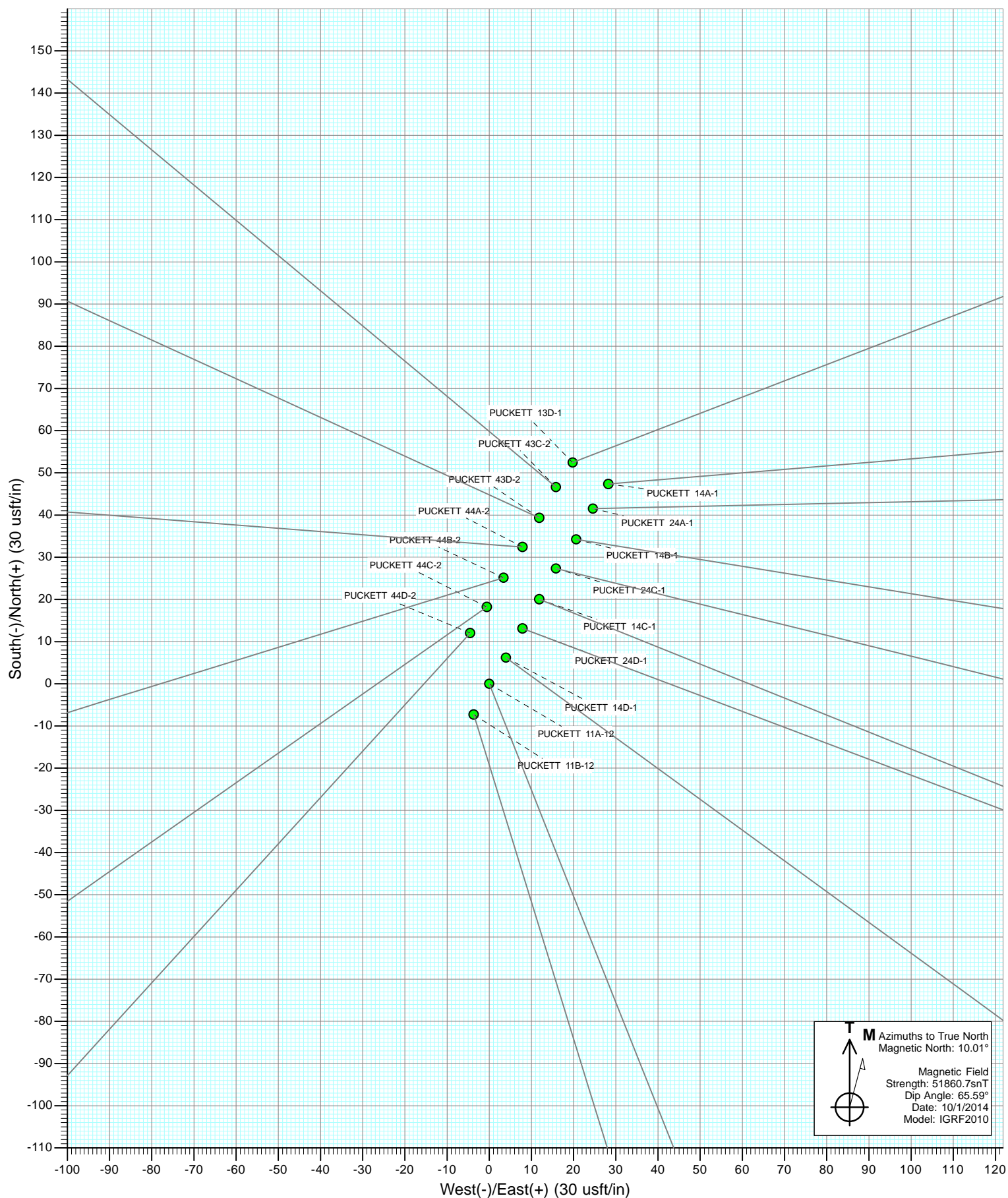


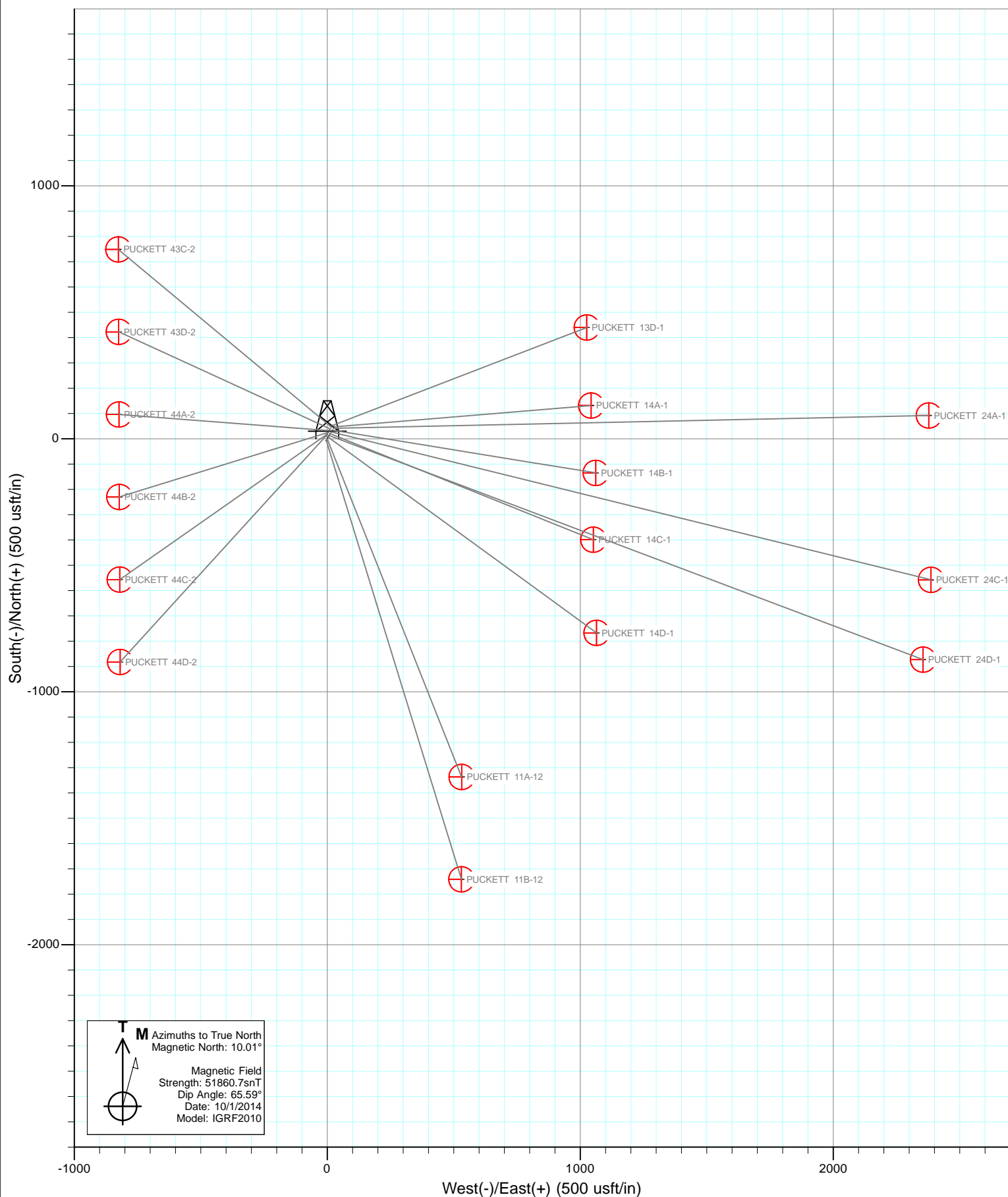
Project: Garfield County, CO
Site: S2-T7S-R97W (Puckett Pad P2)
Well: PUCKETT 14B-1
Wellbore: DD
Design: Plan #1



DESIGN TARGET DETAILS						
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PUCKETT 14B-1 TGT	-169.0	1040.6	607132.27	1244994.42	39.469869	-108.174747
PUCKETT 14B-1 BHL	-169.0	1040.6	607132.27	1244994.42	39.469869	-108.174747

Vertical Section at 99.22° (1200 usft/in)





Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=22' @ 8446.0usft
Project:	Garfield County, CO	MD Reference:	KB=22' @ 8446.0usft
Site:	S2-T7S-R97W (Puckett Pad P2)	North Reference:	True
Well:	PUCKETT 14B-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 P2)			
Site Position:		Northing:	607,291.06 usft	Latitude:	39.470219
From:	Lat/Long	Easting:	1,243,933.75 usft	Longitude:	-108.178519
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	-1.69 °

Well	PUCKETT 14B-1					
Well Position	+N/-S	0.0 usft	Northing:	607,331.84 usft	Latitude:	39.470333
	+E/-W	0.0 usft	Easting:	1,243,959.25 usft	Longitude:	-108.178433
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	8,424.0 usft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/1/2014	10.00	65.59	51,861

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	99.22	

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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
702.8	9.09	99.22	701.6	-3.8	23.7	3.00	3.00	0.00	99.22	
7,075.6	9.09	99.22	6,994.4	-165.1	1,017.0	0.00	0.00	0.00	0.00	
7,378.5	0.00	0.00	7,296.0	-169.0	1,040.6	3.00	-3.00	0.00	180.00	PUCKETT 14B-1 TG1
8,883.5	0.00	0.00	8,801.0	-169.0	1,040.6	0.00	0.00	0.00	0.00	PUCKETT 14B-1 BHL

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=22' @ 8446.0usft
Project:	Garfield County, CO	MD Reference:	KB=22' @ 8446.0usft
Site:	S2-T7S-R97W (Puckett Pad P2)	North Reference:	True
Well:	PUCKETT 14B-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	KOP @ 400'
500.0	3.00	99.22	500.0	-0.4	2.6	2.6	3.00	3.00	
600.0	6.00	99.22	599.6	-1.7	10.3	10.5	3.00	3.00	
702.8	9.09	99.22	701.6	-3.8	23.7	24.0	3.00	3.00	EOB @ 9.09° INC
800.0	9.09	99.22	797.5	-6.3	38.8	39.3	0.00	0.00	
900.0	9.09	99.22	896.3	-8.8	54.4	55.1	0.00	0.00	
1,000.0	9.09	99.22	995.0	-11.4	70.0	70.9	0.00	0.00	
1,100.0	9.09	99.22	1,093.7	-13.9	85.6	86.7	0.00	0.00	
1,200.0	9.09	99.22	1,192.5	-16.4	101.1	102.5	0.00	0.00	
1,300.0	9.09	99.22	1,291.2	-19.0	116.7	118.3	0.00	0.00	
1,400.0	9.09	99.22	1,390.0	-21.5	132.3	134.0	0.00	0.00	
1,500.0	9.09	99.22	1,488.7	-24.0	147.9	149.8	0.00	0.00	
1,600.0	9.09	99.22	1,587.5	-26.5	163.5	165.6	0.00	0.00	
1,700.0	9.09	99.22	1,686.2	-29.1	179.1	181.4	0.00	0.00	
1,800.0	9.09	99.22	1,785.0	-31.6	194.7	197.2	0.00	0.00	
1,900.0	9.09	99.22	1,883.7	-34.1	210.2	213.0	0.00	0.00	
2,000.0	9.09	99.22	1,982.5	-36.7	225.8	228.8	0.00	0.00	
2,100.0	9.09	99.22	2,081.2	-39.2	241.4	244.6	0.00	0.00	
2,200.0	9.09	99.22	2,179.9	-41.7	257.0	260.4	0.00	0.00	
2,300.0	9.09	99.22	2,278.7	-44.3	272.6	276.2	0.00	0.00	
2,400.0	9.09	99.22	2,377.4	-46.8	288.2	292.0	0.00	0.00	
2,500.0	9.09	99.22	2,476.2	-49.3	303.8	307.7	0.00	0.00	
2,600.0	9.09	99.22	2,574.9	-51.9	319.4	323.5	0.00	0.00	
2,700.0	9.09	99.22	2,673.7	-54.4	334.9	339.3	0.00	0.00	
2,800.0	9.09	99.22	2,772.4	-56.9	350.5	355.1	0.00	0.00	
2,900.0	9.09	99.22	2,871.2	-59.4	366.1	370.9	0.00	0.00	
3,000.0	9.09	99.22	2,969.9	-62.0	381.7	386.7	0.00	0.00	
3,100.0	9.09	99.22	3,068.7	-64.5	397.3	402.5	0.00	0.00	
3,200.0	9.09	99.22	3,167.4	-67.0	412.9	418.3	0.00	0.00	
3,300.0	9.09	99.22	3,266.1	-69.6	428.5	434.1	0.00	0.00	
3,400.0	9.09	99.22	3,364.9	-72.1	444.0	449.9	0.00	0.00	
3,500.0	9.09	99.22	3,463.6	-74.6	459.6	465.7	0.00	0.00	
3,600.0	9.09	99.22	3,562.4	-77.2	475.2	481.4	0.00	0.00	
3,700.0	9.09	99.22	3,661.1	-79.7	490.8	497.2	0.00	0.00	
3,800.0	9.09	99.22	3,759.9	-82.2	506.4	513.0	0.00	0.00	
3,900.0	9.09	99.22	3,858.6	-84.8	522.0	528.8	0.00	0.00	
4,000.0	9.09	99.22	3,957.4	-87.3	537.6	544.6	0.00	0.00	
4,100.0	9.09	99.22	4,056.1	-89.8	553.2	560.4	0.00	0.00	
4,200.0	9.09	99.22	4,154.9	-92.4	568.7	576.2	0.00	0.00	
4,300.0	9.09	99.22	4,253.6	-94.9	584.3	592.0	0.00	0.00	
4,400.0	9.09	99.22	4,352.3	-97.4	599.9	607.8	0.00	0.00	
4,500.0	9.09	99.22	4,451.1	-99.9	615.5	623.6	0.00	0.00	
4,600.0	9.09	99.22	4,549.8	-102.5	631.1	639.4	0.00	0.00	
4,700.0	9.09	99.22	4,648.6	-105.0	646.7	655.1	0.00	0.00	
4,800.0	9.09	99.22	4,747.3	-107.5	662.3	670.9	0.00	0.00	
4,900.0	9.09	99.22	4,846.1	-110.1	677.8	686.7	0.00	0.00	
5,000.0	9.09	99.22	4,944.8	-112.6	693.4	702.5	0.00	0.00	
5,100.0	9.09	99.22	5,043.6	-115.1	709.0	718.3	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=22' @ 8446.0usft
Project:	Garfield County, CO	MD Reference:	KB=22' @ 8446.0usft
Site:	S2-T7S-R97W (Puckett Pad P2)	North Reference:	True
Well:	PUCKETT 14B-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
5,200.0	9.09	99.22	5,142.3	-117.7	724.6	734.1	0.00	0.00	
5,300.0	9.09	99.22	5,241.1	-120.2	740.2	749.9	0.00	0.00	
5,400.0	9.09	99.22	5,339.8	-122.7	755.8	765.7	0.00	0.00	
5,500.0	9.09	99.22	5,438.5	-125.3	771.4	781.5	0.00	0.00	
5,600.0	9.09	99.22	5,537.3	-127.8	787.0	797.3	0.00	0.00	
5,700.0	9.09	99.22	5,636.0	-130.3	802.5	813.0	0.00	0.00	
5,800.0	9.09	99.22	5,734.8	-132.8	818.1	828.8	0.00	0.00	
5,900.0	9.09	99.22	5,833.5	-135.4	833.7	844.6	0.00	0.00	
5,922.8	9.09	99.22	5,856.0	-136.0	837.3	848.2	0.00	0.00	OHIO CREEK
6,000.0	9.09	99.22	5,932.3	-137.9	849.3	860.4	0.00	0.00	
6,100.0	9.09	99.22	6,031.0	-140.4	864.9	876.2	0.00	0.00	
6,200.0	9.09	99.22	6,129.8	-143.0	880.5	892.0	0.00	0.00	
6,300.0	9.09	99.22	6,228.5	-145.5	896.1	907.8	0.00	0.00	
6,400.0	9.09	99.22	6,327.3	-148.0	911.6	923.6	0.00	0.00	
6,464.6	9.09	99.22	6,391.0	-149.7	921.7	933.8	0.00	0.00	WILLIAMS FORK
6,500.0	9.09	99.22	6,426.0	-150.6	927.2	939.4	0.00	0.00	
6,600.0	9.09	99.22	6,524.7	-153.1	942.8	955.2	0.00	0.00	
6,700.0	9.09	99.22	6,623.5	-155.6	958.4	971.0	0.00	0.00	
6,800.0	9.09	99.22	6,722.2	-158.2	974.0	986.7	0.00	0.00	
6,900.0	9.09	99.22	6,821.0	-160.7	989.6	1,002.5	0.00	0.00	
7,000.0	9.09	99.22	6,919.7	-163.2	1,005.2	1,018.3	0.00	0.00	
7,075.6	9.09	99.22	6,994.4	-165.1	1,017.0	1,030.3	0.00	0.00	Start 3° Drop
7,100.0	8.35	99.22	7,018.5	-165.7	1,020.6	1,034.0	3.00	-3.00	
7,200.0	5.35	99.22	7,117.8	-167.6	1,032.4	1,045.9	3.00	-3.00	
7,300.0	2.35	99.22	7,217.5	-168.7	1,039.0	1,052.6	3.00	-3.00	
7,378.5	0.00	0.00	7,296.0	-169.0	1,040.6	1,054.2	3.00	-3.00	EOD @ 0° INC - TOG
7,400.0	0.00	0.00	7,317.5	-169.0	1,040.6	1,054.2	0.00	0.00	
7,500.0	0.00	0.00	7,417.5	-169.0	1,040.6	1,054.2	0.00	0.00	
7,600.0	0.00	0.00	7,517.5	-169.0	1,040.6	1,054.2	0.00	0.00	
7,700.0	0.00	0.00	7,617.5	-169.0	1,040.6	1,054.2	0.00	0.00	
7,800.0	0.00	0.00	7,717.5	-169.0	1,040.6	1,054.2	0.00	0.00	
7,900.0	0.00	0.00	7,817.5	-169.0	1,040.6	1,054.2	0.00	0.00	
8,000.0	0.00	0.00	7,917.5	-169.0	1,040.6	1,054.2	0.00	0.00	
8,100.0	0.00	0.00	8,017.5	-169.0	1,040.6	1,054.2	0.00	0.00	
8,200.0	0.00	0.00	8,117.5	-169.0	1,040.6	1,054.2	0.00	0.00	
8,300.0	0.00	0.00	8,217.5	-169.0	1,040.6	1,054.2	0.00	0.00	
8,348.5	0.00	0.00	8,266.0	-169.0	1,040.6	1,054.2	0.00	0.00	CAMEO
8,400.0	0.00	0.00	8,317.5	-169.0	1,040.6	1,054.2	0.00	0.00	
8,500.0	0.00	0.00	8,417.5	-169.0	1,040.6	1,054.2	0.00	0.00	
8,600.0	0.00	0.00	8,517.5	-169.0	1,040.6	1,054.2	0.00	0.00	
8,700.0	0.00	0.00	8,617.5	-169.0	1,040.6	1,054.2	0.00	0.00	
8,733.5	0.00	0.00	8,651.0	-169.0	1,040.6	1,054.2	0.00	0.00	ROLLINS
8,800.0	0.00	0.00	8,717.5	-169.0	1,040.6	1,054.2	0.00	0.00	
8,883.5	0.00	0.00	8,801.0	-169.0	1,040.6	1,054.2	0.00	0.00	TD @ 8,883.5' MD

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=22' @ 8446.0usft
Project:	Garfield County, CO	MD Reference:	KB=22' @ 8446.0usft
Site:	S2-T7S-R97W (Puckett Pad P2)	North Reference:	True
Well:	PUCKETT 14B-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 14B-1 BHL	0.00	0.00	8,801.0	-169.0	1,040.6	607,132.27	1,244,994.42	39.469869	-108.174747
- plan hits target center									
- Circle (radius 50.0)									
PUCKETT 14B-1 TGT	0.00	0.00	7,296.0	-169.0	1,040.6	607,132.27	1,244,994.42	39.469869	-108.174747
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
5,922.8	5,856.0	OHIO CREEK				
6,464.6	6,391.0	WILLIAMS FORK				
7,378.5	7,296.0	TOG				
8,348.5	8,266.0	CAMEO				
8,733.5	8,651.0	ROLLINS				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S	+E/-W	Comment	
(usft)	(usft)	(usft)	(usft)		
400.0	400.0	0.0	0.0	KOP @ 400'	
702.8	701.6	-3.8	23.7	EOB @ 9.09° INC	
7,075.6	6,994.4	-165.1	1,017.0	Start 3° Drop	
7,378.5	7,296.0	-169.0	1,040.6	EOD @ 0° INC	
8,883.5	8,801.0	-169.0	1,040.6	TD @ 8,883.5' MD	

Caerus Oil & Gas (NAD 27)

Garfield County, CO

S2-T7S-R97W (Puckett Pad P2)

PUCKETT 14B-1

DD

Plan #1

Anticollision Report

01 October, 2014

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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	10/1/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	8,883.5	Plan #1 (DD)	ISCWSA MWD	MWD - Standard

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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 Measured Depth (usft)	Offset Measured Depth (usft)	Distance		Separation Factor	Warning
			Between Centres (usft)	Between Ellipses (usft)		
S2-T7S-R97W (Puckett Pad H2)						
PUCKETT 13C-1 - DD - Plan #1						Out of range
S2-T7S-R97W (Puckett Pad P2)						
PUCKETT 11A-12 - DD - Plan #1	233.9	233.9	40.0	39.2	51.425	CC, ES
PUCKETT 11A-12 - DD - Plan #1	600.0	592.5	64.7	62.3	26.399	SF
PUCKETT 11B-12 - DD - Plan #1	200.0	200.0	48.1	47.5	76.990	CC, ES
PUCKETT 11B-12 - DD - Plan #1	600.0	588.4	82.0	79.5	32.875	SF
PUCKETT 13D-1 - DD - Plan #1	200.0	200.0	18.2	17.6	29.162	CC, ES
PUCKETT 13D-1 - DD - Plan #1	2,500.0	2,490.9	192.3	176.5	12.142	SF
PUCKETT 14A-1 - DD - Plan #1	501.2	501.0	14.7	12.8	7.505	CC, ES
PUCKETT 14A-1 - DD - Plan #1	5,400.0	5,395.7	197.2	160.6	5.389	SF
PUCKETT 14C-1 - DD - Plan #1	422.0	422.1	16.5	14.9	10.293	CC, ES
PUCKETT 14C-1 - DD - Plan #1	5,400.0	5,396.4	196.8	159.4	5.257	SF
PUCKETT 14D-1 - DD - Plan #1	300.0	300.0	32.6	31.5	30.361	CC
PUCKETT 14D-1 - DD - Plan #1	400.0	399.7	33.0	31.5	21.831	ES
PUCKETT 14D-1 - DD - Plan #1	2,300.0	2,290.6	192.0	177.4	13.098	SF
PUCKETT 24A-1 - DD - Plan #1	300.0	300.0	8.3	7.2	7.710	CC, ES
PUCKETT 24A-1 - DD - Plan #1	400.0	399.7	9.6	8.1	6.360	SF
PUCKETT 24C-1 - DD - Plan #1	355.6	355.7	7.9	6.6	5.969	CC, ES
PUCKETT 24C-1 - DD - Plan #1	400.0	400.0	8.4	6.9	5.529	SF
PUCKETT 24D-1 - DD - Plan #1	329.9	330.0	24.3	23.0	20.064	CC, ES
PUCKETT 24D-1 - DD - Plan #1	600.0	596.9	37.7	35.2	14.828	SF
PUCKETT 43C-2 - DD - Plan #1	255.6	255.6	13.3	12.4	15.179	CC
PUCKETT 43C-2 - DD - Plan #1	300.0	299.8	13.4	12.3	12.508	ES
PUCKETT 43C-2 - DD - Plan #1	400.0	399.1	16.9	15.4	11.167	SF
PUCKETT 43D-2 - DD - Plan #1	300.0	300.0	10.1	9.1	9.428	CC, ES
PUCKETT 43D-2 - DD - Plan #1	400.0	399.6	11.6	10.1	7.631	SF
PUCKETT 44A-2 - DD - Plan #1	355.6	355.6	12.8	11.5	9.693	CC
PUCKETT 44A-2 - DD - Plan #1	400.0	399.8	13.0	11.5	8.546	ES, SF
PUCKETT 44B-2 - DD - Plan #1	300.0	300.0	19.5	18.4	18.133	CC, ES
PUCKETT 44B-2 - DD - Plan #1	400.0	399.2	20.9	19.4	13.847	SF
PUCKETT 44C-2 - DD - Plan #1	255.6	255.6	26.6	25.7	30.366	CC
PUCKETT 44C-2 - DD - Plan #1	300.0	299.7	26.7	25.7	25.014	ES
PUCKETT 44C-2 - DD - Plan #1	400.0	398.1	30.6	29.1	20.540	SF
PUCKETT 44D-2 - DD - Plan #1	200.0	200.0	33.5	32.9	53.677	CC, ES
PUCKETT 44D-2 - DD - Plan #1	500.0	493.3	54.4	52.4	27.159	SF

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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 P2) - PUCKETT 11A-12 - 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	-148.95	-34.2	-20.6	40.0					
100.0	100.0	100.0	100.0	0.1	0.1	-148.95	-34.2	-20.6	40.0	39.8	0.18	227.938		
200.0	200.0	200.0	200.0	0.3	0.3	-148.95	-34.2	-20.6	40.0	39.3	0.62	63.954		
233.9	233.9	233.9	233.9	0.4	0.4	-148.95	-34.2	-20.6	40.0	39.2	0.78	51.425 CC, ES		
300.0	300.0	299.4	299.4	0.5	0.5	-149.68	-34.8	-20.4	40.4	39.3	1.06	38.026		
400.0	400.0	397.8	397.7	0.8	0.7	-154.94	-39.6	-18.5	43.7	42.2	1.49	29.381		
500.0	500.0	495.6	495.0	1.0	1.0	100.19	-48.9	-14.8	51.7	49.8	1.95	26.530		
600.0	599.6	592.5	590.7	1.2	1.3	97.73	-62.7	-9.3	64.7	62.3	2.45	26.399 SF		
700.0	698.8	689.0	685.2	1.5	1.6	97.41	-80.7	-2.1	82.1	79.1	3.04	27.005		
800.0	797.5	787.2	781.2	1.8	2.1	98.67	-100.2	5.6	100.9	97.2	3.68	27.385		
900.0	896.3	885.4	877.1	2.1	2.5	99.54	-119.6	13.3	119.7	115.3	4.36	27.439		
1,000.0	995.0	983.6	973.1	2.4	2.9	100.18	-139.0	21.0	138.5	133.4	5.06	27.363		
1,100.0	1,093.7	1,081.9	1,069.0	2.8	3.4	100.66	-158.5	28.7	157.3	151.5	5.77	27.243		
1,200.0	1,192.5	1,180.1	1,165.0	3.1	3.8	101.05	-177.9	36.5	176.1	169.6	6.50	27.108		
1,300.0	1,291.2	1,278.3	1,260.9	3.5	4.3	101.35	-197.3	44.2	194.9	187.7	7.22	26.981		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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 P2) - PUCKETT 11B-12 - 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	-149.69	-41.5	-24.3	48.1					
100.0	100.0	100.0	100.0	0.1	0.1	-149.69	-41.5	-24.3	48.1	47.9	0.18	274.401		
200.0	200.0	200.0	200.0	0.3	0.3	-149.69	-41.5	-24.3	48.1	47.5	0.62	76.990 CC, ES		
300.0	300.0	298.2	298.2	0.5	0.5	-151.83	-43.9	-23.5	49.9	48.8	1.05	47.402		
400.0	400.0	396.0	395.6	0.8	0.7	-157.36	-51.1	-21.3	55.6	54.1	1.50	37.043		
500.0	500.0	492.8	491.6	1.0	1.0	98.35	-62.9	-17.7	66.2	64.3	1.98	33.432		
600.0	599.6	588.4	585.8	1.2	1.3	96.27	-79.2	-12.7	82.0	79.5	2.49	32.875 SF		
700.0	698.8	682.5	677.4	1.5	1.8	95.99	-99.5	-6.4	102.4	99.4	3.09	33.186		
800.0	797.5	778.0	769.5	1.8	2.2	96.49	-123.6	1.0	126.4	122.6	3.76	33.651		
900.0	896.3	875.0	863.0	2.1	2.8	96.78	-148.4	8.6	150.6	146.2	4.44	33.882		
1,000.0	995.0	972.0	956.5	2.4	3.3	96.99	-173.2	16.3	174.8	169.7	5.16	33.901		
1,100.0	1,093.7	1,069.1	1,049.9	2.8	3.8	97.15	-198.0	23.9	199.0	193.2	5.88	33.829		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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 P2) - PUCKETT 13D-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	-2.66	18.2	-0.8	18.2					
100.0	100.0	100.0	100.0	0.1	0.1	-2.66	18.2	-0.8	18.2	18.0	0.18	103.937		
200.0	200.0	200.0	200.0	0.3	0.3	-2.66	18.2	-0.8	18.2	17.6	0.62	29.162 CC, ES		
300.0	300.0	299.4	299.4	0.5	0.5	0.25	19.3	0.1	19.3	18.2	1.07	18.012		
400.0	400.0	398.3	398.1	0.8	0.8	9.85	24.2	4.2	24.7	23.1	1.53	16.128		
500.0	500.0	497.6	496.7	1.0	1.0	-82.45	31.6	12.1	33.6	31.6	2.01	16.719		
600.0	599.6	597.1	595.3	1.2	1.3	-78.50	37.7	24.8	42.2	39.7	2.48	17.009		
700.0	698.8	696.8	693.7	1.5	1.6	-79.32	43.3	39.5	50.0	47.0	3.04	16.449		
800.0	797.5	796.5	792.1	1.8	2.0	-82.80	48.8	54.2	57.5	53.8	3.67	15.668		
900.0	896.3	896.1	890.5	2.1	2.3	-85.48	54.3	68.9	65.1	60.7	4.33	15.016		
1,000.0	995.0	995.8	989.0	2.4	2.7	-87.60	59.8	83.7	72.8	67.7	5.02	14.495		
1,100.0	1,093.7	1,095.5	1,087.4	2.8	3.1	-89.32	65.4	98.4	80.5	74.8	5.72	14.080		
1,200.0	1,192.5	1,195.1	1,185.8	3.1	3.4	-90.73	70.9	113.1	88.4	81.9	6.43	13.746		
1,300.0	1,291.2	1,294.8	1,284.2	3.5	3.8	-91.91	76.4	127.8	96.3	89.1	7.14	13.475		
1,400.0	1,390.0	1,394.5	1,382.7	3.9	4.1	-92.91	81.9	142.5	104.2	96.3	7.86	13.251		
1,500.0	1,488.7	1,494.2	1,481.1	4.2	4.5	-93.77	87.5	157.2	112.1	103.5	8.58	13.064		
1,600.0	1,587.5	1,593.8	1,579.5	4.6	4.9	-94.51	93.0	171.9	120.1	110.8	9.31	12.905		
1,700.0	1,686.2	1,693.5	1,677.9	5.0	5.2	-95.17	98.5	186.6	128.1	118.0	10.03	12.770		
1,800.0	1,785.0	1,793.2	1,776.4	5.3	5.6	-95.74	104.0	201.4	136.1	125.3	10.75	12.653		
1,900.0	1,883.7	1,892.8	1,874.8	5.7	6.0	-96.26	109.5	216.1	144.1	132.6	11.48	12.551		
2,000.0	1,982.5	1,992.5	1,973.2	6.1	6.3	-96.71	115.1	230.8	152.1	139.9	12.21	12.462		
2,100.0	2,081.2	2,092.2	2,071.6	6.4	6.7	-97.13	120.6	245.5	160.1	147.2	12.93	12.383		
2,200.0	2,179.9	2,191.9	2,170.1	6.8	7.1	-97.50	126.1	260.2	168.2	154.5	13.66	12.312		
2,300.0	2,278.7	2,291.5	2,268.5	7.2	7.4	-97.84	131.6	274.9	176.2	161.8	14.38	12.249		
2,400.0	2,377.4	2,391.2	2,366.9	7.5	7.8	-98.15	137.2	289.6	184.3	169.1	15.11	12.193		
2,500.0	2,476.2	2,490.9	2,465.3	7.9	8.2	-98.43	142.7	304.3	192.3	176.5	15.84	12.142 SF		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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 P2) - PUCKETT 14A-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	30.18	13.1	7.6	15.2					
100.0	100.0	100.0	100.0	0.1	0.1	30.18	13.1	7.6	15.2	15.0	0.18	86.488		
200.0	200.0	200.0	200.0	0.3	0.3	30.18	13.1	7.6	15.2	14.5	0.62	24.266		
300.0	300.0	300.0	300.0	0.5	0.5	30.18	13.1	7.6	15.2	14.1	1.07	14.113		
400.0	400.0	400.0	400.0	0.8	0.8	30.18	13.1	7.6	15.2	13.6	1.52	9.950		
500.0	500.0	499.8	499.8	1.0	1.0	-76.49	13.2	8.3	14.7	12.8	1.96	7.525		
501.2	501.2	501.0	501.0	1.0	1.0	-76.62	13.2	8.3	14.7	12.8	1.96	7.505 CC, ES		
600.0	599.6	599.4	599.3	1.2	1.2	-87.56	13.6	13.4	15.6	13.2	2.39	6.532		
700.0	698.8	699.2	698.5	1.5	1.4	-97.14	14.4	23.8	18.2	15.3	2.89	6.297		
800.0	797.5	799.1	797.3	1.8	1.7	-99.63	15.7	38.6	22.0	18.5	3.49	6.303		
900.0	896.3	899.0	896.0	2.1	2.0	-100.21	16.9	53.8	25.8	21.7	4.13	6.248		
1,000.0	995.0	998.9	994.8	2.4	2.4	-100.64	18.2	69.1	29.6	24.8	4.79	6.173		
1,100.0	1,093.7	1,098.9	1,093.5	2.8	2.7	-100.98	19.5	84.4	33.4	27.9	5.48	6.098		
1,200.0	1,192.5	1,198.8	1,192.2	3.1	3.0	-101.25	20.7	99.7	37.2	31.0	6.17	6.029		
1,300.0	1,291.2	1,298.7	1,291.0	3.5	3.4	-101.46	22.0	115.0	41.0	34.1	6.87	5.967		
1,400.0	1,390.0	1,398.6	1,389.7	3.9	3.7	-101.64	23.3	130.3	44.8	37.2	7.58	5.912		
1,500.0	1,488.7	1,498.6	1,488.5	4.2	4.1	-101.79	24.5	145.6	48.6	40.3	8.29	5.864		
1,600.0	1,587.5	1,598.5	1,587.2	4.6	4.4	-101.92	25.8	160.8	52.4	43.4	9.01	5.821		
1,700.0	1,686.2	1,698.4	1,686.0	5.0	4.8	-102.04	27.1	176.1	56.2	46.5	9.72	5.784		
1,800.0	1,785.0	1,798.4	1,784.7	5.3	5.2	-102.13	28.4	191.4	60.0	49.6	10.44	5.750		
1,900.0	1,883.7	1,898.3	1,883.4	5.7	5.5	-102.22	29.6	206.7	63.9	52.7	11.16	5.720		
2,000.0	1,982.5	1,998.2	1,982.2	6.1	5.9	-102.30	30.9	222.0	67.7	55.8	11.89	5.693		
2,100.0	2,081.2	2,098.1	2,080.9	6.4	6.2	-102.37	32.2	237.3	71.5	58.9	12.61	5.669		
2,200.0	2,179.9	2,198.1	2,179.7	6.8	6.6	-102.43	33.4	252.6	75.3	62.0	13.33	5.647		
2,300.0	2,278.7	2,298.0	2,278.4	7.2	7.0	-102.48	34.7	267.8	79.1	65.0	14.06	5.627		
2,400.0	2,377.4	2,397.9	2,377.2	7.5	7.3	-102.53	36.0	283.1	82.9	68.1	14.78	5.609		
2,500.0	2,476.2	2,497.8	2,475.9	7.9	7.7	-102.58	37.2	298.4	86.7	71.2	15.51	5.592		
2,600.0	2,574.9	2,597.8	2,574.6	8.3	8.0	-102.62	38.5	313.7	90.5	74.3	16.23	5.577		
2,700.0	2,673.7	2,697.7	2,673.4	8.7	8.4	-102.66	39.8	329.0	94.3	77.4	16.96	5.563		
2,800.0	2,772.4	2,797.6	2,772.1	9.0	8.8	-102.70	41.0	344.3	98.1	80.5	17.69	5.550		
2,900.0	2,871.2	2,897.6	2,870.9	9.4	9.1	-102.73	42.3	359.6	102.0	83.5	18.41	5.537		
3,000.0	2,969.9	2,997.5	2,969.6	9.8	9.5	-102.76	43.6	374.8	105.8	86.6	19.14	5.526		
3,100.0	3,068.7	3,097.4	3,068.4	10.1	9.9	-102.79	44.8	390.1	109.6	89.7	19.87	5.516		
3,200.0	3,167.4	3,197.3	3,167.1	10.5	10.2	-102.81	46.1	405.4	113.4	92.8	20.59	5.506		
3,300.0	3,266.1	3,297.3	3,265.8	10.9	10.6	-102.84	47.4	420.7	117.2	95.9	21.32	5.497		
3,400.0	3,364.9	3,397.2	3,364.6	11.3	10.9	-102.86	48.6	436.0	121.0	99.0	22.05	5.488		
3,500.0	3,463.6	3,497.1	3,463.3	11.6	11.3	-102.88	49.9	451.3	124.8	102.0	22.77	5.480		
3,600.0	3,562.4	3,597.0	3,562.1	12.0	11.7	-102.91	51.2	466.6	128.6	105.1	23.50	5.473		
3,700.0	3,661.1	3,697.0	3,660.8	12.4	12.0	-102.92	52.4	481.8	132.4	108.2	24.23	5.466		
3,800.0	3,759.9	3,796.9	3,759.6	12.8	12.4	-102.94	53.7	497.1	136.2	111.3	24.96	5.459		
3,900.0	3,858.6	3,896.8	3,858.3	13.1	12.8	-102.96	55.0	512.4	140.1	114.4	25.68	5.453		
4,000.0	3,957.4	3,996.8	3,957.1	13.5	13.1	-102.98	56.2	527.7	143.9	117.5	26.41	5.447		
4,100.0	4,056.1	4,096.7	4,055.8	13.9	13.5	-102.99	57.5	543.0	147.7	120.5	27.14	5.441		
4,200.0	4,154.9	4,196.6	4,154.5	14.2	13.8	-103.01	58.8	558.3	151.5	123.6	27.87	5.436		
4,300.0	4,253.6	4,296.5	4,253.3	14.6	14.2	-103.02	60.0	573.6	155.3	126.7	28.59	5.431		
4,400.0	4,352.3	4,396.5	4,352.0	15.0	14.6	-103.03	61.3	588.8	159.1	129.8	29.32	5.426		
4,500.0	4,451.1	4,496.4	4,450.8	15.4	14.9	-103.05	62.6	604.1	162.9	132.9	30.05	5.422		
4,600.0	4,549.8	4,596.3	4,549.5	15.7	15.3	-103.06	63.8	619.4	166.7	136.0	30.78	5.417		
4,700.0	4,648.6	4,696.2	4,648.3	16.1	15.7	-103.07	65.1	634.7	170.5	139.0	31.50	5.413		
4,800.0	4,747.3	4,796.2	4,747.0	16.5	16.0	-103.08	66.4	650.0	174.4	142.1	32.23	5.409		
4,900.0	4,846.1	4,896.1	4,845.7	16.8	16.4	-103.09	67.6	665.3	178.2	145.2	32.96	5.406		
5,000.0	4,944.8	4,996.0	4,944.5	17.2	16.8	-103.10	68.9	680.6	182.0	148.3	33.69	5.402		

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 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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 P2) - PUCKETT 14A-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						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,100.0	5,043.6	5,096.0	5,043.2	17.6	17.1	-103.11	70.2	695.8	185.8	151.4	34.41	5.399	
5,200.0	5,142.3	5,195.9	5,142.0	18.0	17.5	-103.12	71.5	711.1	189.6	154.5	35.14	5.395	
5,300.0	5,241.1	5,295.8	5,240.7	18.3	17.8	-103.13	72.7	726.4	193.4	157.5	35.87	5.392	
5,400.0	5,339.8	5,395.7	5,339.5	18.7	18.2	-103.14	74.0	741.7	197.2	160.6	36.59	5.389 SF	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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 P2) - PUCKETT 14C-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	-148.36	-14.2	-8.8	16.7					
100.0	100.0	100.0	100.0	0.1	0.1	-148.36	-14.2	-8.8	16.7	16.5	0.18	95.167		
200.0	200.0	200.0	200.0	0.3	0.3	-148.36	-14.2	-8.8	16.7	16.1	0.62	26.702		
300.0	300.0	300.0	300.0	0.5	0.5	-148.36	-14.2	-8.8	16.7	15.6	1.07	15.529		
400.0	400.0	400.1	400.1	0.8	0.8	-150.60	-14.5	-8.1	16.6	15.1	1.52	10.938		
422.0	422.0	422.1	422.0	0.8	0.8	108.18	-14.7	-7.5	16.5	14.9	1.61	10.293 CC, ES		
500.0	500.0	500.1	499.9	1.0	1.0	100.91	-16.4	-3.3	17.0	15.1	1.93	8.805		
600.0	599.6	599.9	599.2	1.2	1.2	92.55	-20.3	6.4	19.0	16.6	2.40	7.948		
700.0	698.8	699.7	697.8	1.5	1.5	86.96	-26.0	20.7	22.4	19.5	2.96	7.596		
800.0	797.5	799.6	796.3	1.8	1.8	86.26	-32.3	36.1	26.1	22.6	3.59	7.277		
900.0	896.3	899.5	894.8	2.1	2.2	85.73	-38.5	51.6	29.9	25.6	4.27	6.994		
1,000.0	995.0	999.5	993.3	2.4	2.6	85.33	-44.8	67.1	33.6	28.6	4.96	6.760		
1,100.0	1,093.7	1,099.4	1,091.9	2.8	2.9	85.00	-51.0	82.6	37.3	31.6	5.67	6.569		
1,200.0	1,192.5	1,199.3	1,190.4	3.1	3.3	84.74	-57.2	98.0	41.0	34.6	6.39	6.412		
1,300.0	1,291.2	1,299.3	1,288.9	3.5	3.7	84.51	-63.5	113.5	44.7	37.6	7.11	6.281		
1,400.0	1,390.0	1,399.2	1,387.5	3.9	4.1	84.33	-69.7	129.0	48.4	40.5	7.84	6.172		
1,500.0	1,488.7	1,499.1	1,486.0	4.2	4.4	84.17	-75.9	144.5	52.1	43.5	8.57	6.079		
1,600.0	1,587.5	1,599.1	1,584.5	4.6	4.8	84.03	-82.2	159.9	55.8	46.5	9.30	5.999		
1,700.0	1,686.2	1,699.0	1,683.0	5.0	5.2	83.90	-88.4	175.4	59.5	49.5	10.04	5.929		
1,800.0	1,785.0	1,798.9	1,781.6	5.3	5.6	83.80	-94.6	190.9	63.2	52.4	10.77	5.869		
1,900.0	1,883.7	1,898.8	1,880.1	5.7	6.0	83.70	-100.9	206.4	66.9	55.4	11.51	5.815		
2,000.0	1,982.5	1,998.8	1,978.6	6.1	6.4	83.61	-107.1	221.8	70.6	58.4	12.25	5.768		
2,100.0	2,081.2	2,098.7	2,077.2	6.4	6.8	83.54	-113.3	237.3	74.3	61.4	12.99	5.725		
2,200.0	2,179.9	2,198.6	2,175.7	6.8	7.1	83.47	-119.6	252.8	78.1	64.3	13.72	5.687		
2,300.0	2,278.7	2,298.6	2,274.2	7.2	7.5	83.40	-125.8	268.3	81.8	67.3	14.46	5.653		
2,400.0	2,377.4	2,398.5	2,372.7	7.5	7.9	83.34	-132.0	283.7	85.5	70.3	15.20	5.622		
2,500.0	2,476.2	2,498.4	2,471.3	7.9	8.3	83.29	-138.3	299.2	89.2	73.2	15.94	5.594		
2,600.0	2,574.9	2,598.4	2,569.8	8.3	8.7	83.24	-144.5	314.7	92.9	76.2	16.68	5.568		
2,700.0	2,673.7	2,698.3	2,668.3	8.7	9.1	83.20	-150.7	330.2	96.6	79.2	17.42	5.544		
2,800.0	2,772.4	2,798.2	2,766.9	9.0	9.5	83.15	-157.0	345.6	100.3	82.1	18.17	5.522		
2,900.0	2,871.2	2,898.2	2,865.4	9.4	9.8	83.12	-163.2	361.1	104.0	85.1	18.91	5.502		
3,000.0	2,969.9	2,998.1	2,963.9	9.8	10.2	83.08	-169.4	376.6	107.7	88.1	19.65	5.484		
3,100.0	3,068.7	3,098.0	3,062.4	10.1	10.6	83.05	-175.7	392.1	111.4	91.1	20.39	5.466		
3,200.0	3,167.4	3,197.9	3,161.0	10.5	11.0	83.01	-181.9	407.5	115.2	94.0	21.13	5.450		
3,300.0	3,266.1	3,297.9	3,259.5	10.9	11.4	82.98	-188.1	423.0	118.9	97.0	21.87	5.435		
3,400.0	3,364.9	3,397.8	3,358.0	11.3	11.8	82.96	-194.4	438.5	122.6	100.0	22.61	5.421		
3,500.0	3,463.6	3,497.7	3,456.6	11.6	12.2	82.93	-200.6	454.0	126.3	102.9	23.35	5.408		
3,600.0	3,562.4	3,597.7	3,555.1	12.0	12.6	82.90	-206.8	469.4	130.0	105.9	24.09	5.395		
3,700.0	3,661.1	3,697.6	3,653.6	12.4	13.0	82.88	-213.1	484.9	133.7	108.9	24.84	5.384		
3,800.0	3,759.9	3,797.5	3,752.1	12.8	13.3	82.86	-219.3	500.4	137.4	111.8	25.58	5.373		
3,900.0	3,858.6	3,897.5	3,850.7	13.1	13.7	82.84	-225.5	515.9	141.1	114.8	26.32	5.362		
4,000.0	3,957.4	3,997.4	3,949.2	13.5	14.1	82.82	-231.8	531.3	144.8	117.8	27.06	5.353		
4,100.0	4,056.1	4,097.3	4,047.7	13.9	14.5	82.80	-238.0	546.8	148.6	120.7	27.80	5.343		
4,200.0	4,154.9	4,197.3	4,146.3	14.2	14.9	82.78	-244.2	562.3	152.3	123.7	28.54	5.335		
4,300.0	4,253.6	4,297.2	4,244.8	14.6	15.3	82.76	-250.5	577.8	156.0	126.7	29.28	5.326		
4,400.0	4,352.3	4,397.1	4,343.3	15.0	15.7	82.75	-256.7	593.2	159.7	129.7	30.02	5.318		
4,500.0	4,451.1	4,497.1	4,441.8	15.4	16.1	82.73	-262.9	608.7	163.4	132.6	30.77	5.311		
4,600.0	4,549.8	4,597.0	4,540.4	15.7	16.5	82.72	-269.2	624.2	167.1	135.6	31.51	5.304		
4,700.0	4,648.6	4,696.9	4,638.9	16.1	16.8	82.70	-275.4	639.7	170.8	138.6	32.25	5.297		
4,800.0	4,747.3	4,796.8	4,737.4	16.5	17.2	82.69	-281.6	655.2	174.5	141.5	32.99	5.290		
4,900.0	4,846.1	4,896.8	4,836.0	16.8	17.6	82.68	-287.9	670.6	178.2	144.5	33.73	5.284		
5,000.0	4,944.8	4,996.7	4,934.5	17.2	18.0	82.66	-294.1	686.1	181.9	147.5	34.47	5.278		

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

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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 P2) - PUCKETT 14C-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	5,043.6	5,096.6	5,033.0	17.6	18.4	82.65	-300.3	701.6	185.7	150.4	35.21	5.273					
5,200.0	5,142.3	5,196.6	5,131.5	18.0	18.8	82.64	-306.6	717.1	189.4	153.4	35.95	5.267					
5,300.0	5,241.1	5,296.5	5,230.1	18.3	19.2	82.63	-312.8	732.5	193.1	156.4	36.69	5.262					
5,400.0	5,339.8	5,396.4	5,328.6	18.7	19.6	82.62	-319.0	748.0	196.8	159.4	37.43	5.257 SF					

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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 P2) - PUCKETT 14D-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	-149.29	-28.0	-16.7	32.6					
100.0	100.0	100.0	100.0	0.1	0.1	-149.29	-28.0	-16.7	32.6	32.4	0.18	186.056		
200.0	200.0	200.0	200.0	0.3	0.3	-149.29	-28.0	-16.7	32.6	32.0	0.62	52.203		
300.0	300.0	300.0	300.0	0.5	0.5	-149.29	-28.0	-16.7	32.6	31.5	1.07	30.361 CC		
400.0	400.0	399.7	399.7	0.8	0.7	-153.80	-29.6	-14.6	33.0	31.5	1.51	21.831 ES		
500.0	500.0	499.2	498.8	1.0	1.0	98.51	-34.2	-8.3	35.5	33.5	1.94	18.300		
600.0	599.6	598.2	597.0	1.2	1.2	91.96	-41.7	2.1	41.0	38.6	2.42	16.913		
700.0	698.8	697.0	694.2	1.5	1.6	87.89	-52.2	16.5	49.1	46.1	3.01	16.328		
800.0	797.5	796.6	791.9	1.8	2.0	86.56	-63.6	32.1	58.0	54.3	3.67	15.820		
900.0	896.3	896.2	889.6	2.1	2.4	85.59	-75.0	47.8	66.9	62.5	4.36	15.354		
1,000.0	995.0	995.8	987.3	2.4	2.8	84.85	-86.5	63.5	75.8	70.7	5.06	14.964		
1,100.0	1,093.7	1,095.4	1,085.0	2.8	3.2	84.26	-97.9	79.1	84.7	78.9	5.79	14.643		
1,200.0	1,192.5	1,195.0	1,182.6	3.1	3.6	83.79	-109.3	94.8	93.6	87.1	6.51	14.378		
1,300.0	1,291.2	1,294.6	1,280.3	3.5	4.0	83.40	-120.8	110.5	102.6	95.3	7.25	14.157		
1,400.0	1,390.0	1,394.2	1,378.0	3.9	4.5	83.07	-132.2	126.2	111.5	103.5	7.98	13.972		
1,500.0	1,488.7	1,493.8	1,475.7	4.2	4.9	82.79	-143.6	141.8	120.5	111.7	8.72	13.814		
1,600.0	1,587.5	1,593.4	1,573.4	4.6	5.3	82.55	-155.0	157.5	129.4	119.9	9.46	13.679		
1,700.0	1,686.2	1,693.0	1,671.1	5.0	5.8	82.34	-166.5	173.2	138.3	128.1	10.20	13.562		
1,800.0	1,785.0	1,792.6	1,768.8	5.3	6.2	82.15	-177.9	188.8	147.3	136.3	10.94	13.460		
1,900.0	1,883.7	1,892.2	1,866.5	5.7	6.6	81.99	-189.3	204.5	156.2	144.5	11.69	13.370		
2,000.0	1,982.5	1,991.8	1,964.2	6.1	7.0	81.84	-200.7	220.2	165.2	152.8	12.43	13.290		
2,100.0	2,081.2	2,091.4	2,061.9	6.4	7.5	81.71	-212.2	235.8	174.1	161.0	13.17	13.219		
2,200.0	2,179.9	2,191.0	2,159.6	6.8	7.9	81.59	-223.6	251.5	183.1	169.2	13.92	13.155		
2,300.0	2,278.7	2,290.6	2,257.2	7.2	8.3	81.49	-235.0	267.2	192.0	177.4	14.66	13.098 SF		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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 P2) - PUCKETT 24A-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	28.50	7.3	4.0	8.3					
100.0	100.0	100.0	100.0	0.1	0.1	28.50	7.3	4.0	8.3	8.1	0.18	47.250		
200.0	200.0	200.0	200.0	0.3	0.3	28.50	7.3	4.0	8.3	7.7	0.62	13.257		
300.0	300.0	300.0	300.0	0.5	0.5	28.50	7.3	4.0	8.3	7.2	1.07	7.710 CC, ES		
400.0	400.0	399.7	399.7	0.8	0.8	42.86	7.1	6.5	9.6	8.1	1.51	6.360 SF		
500.0	500.0	499.2	498.8	1.0	1.0	-39.24	6.4	14.3	13.6	11.6	1.98	6.866		
600.0	599.6	598.3	597.0	1.2	1.2	-32.48	5.6	27.1	18.5	16.0	2.50	7.399		
700.0	698.8	697.1	694.2	1.5	1.6	-31.20	5.3	44.9	24.0	20.9	3.07	7.805		
800.0	797.5	795.4	789.9	1.8	2.0	-30.20	5.2	67.6	32.0	28.4	3.59	8.900		
900.0	896.3	892.7	883.2	2.1	2.5	-27.76	5.5	94.9	44.9	40.8	4.14	10.838		
1,000.0	995.0	988.5	973.8	2.4	3.1	-25.36	6.2	126.3	62.7	58.0	4.71	13.323		
1,100.0	1,093.7	1,086.4	1,065.5	2.8	3.8	-23.68	7.0	160.7	82.9	77.6	5.28	15.698		
1,200.0	1,192.5	1,184.3	1,157.2	3.1	4.4	-22.65	7.8	195.0	103.1	97.3	5.86	17.615		
1,300.0	1,291.2	1,282.3	1,248.9	3.5	5.1	-21.96	8.5	229.3	123.4	116.9	6.44	19.162		
1,400.0	1,390.0	1,380.2	1,340.6	3.9	5.8	-21.47	9.3	263.6	143.6	136.6	7.03	20.434		
1,500.0	1,488.7	1,478.1	1,432.3	4.2	6.5	-21.10	10.1	297.9	163.9	156.3	7.62	21.497		
1,600.0	1,587.5	1,576.0	1,524.0	4.6	7.2	-20.80	10.9	332.3	184.2	175.9	8.22	22.396		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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 P2) - PUCKETT 24C-1 - DD - Plan #1													Offset Site Error: 0.0 usft	
Survey Program: 0-ISCSWA MWD													Offset Well Error: 0.0 usft	
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	-145.26	-6.9	-4.8	8.4					
100.0	100.0	100.0	100.0	0.1	0.1	-145.26	-6.9	-4.8	8.4	8.2	0.18	48.037		
200.0	200.0	200.0	200.0	0.3	0.3	-145.26	-6.9	-4.8	8.4	7.8	0.62	13.478		
300.0	300.0	300.1	300.1	0.5	0.5	-149.54	-7.1	-4.2	8.2	7.1	1.07	7.684		
355.6	355.6	355.7	355.7	0.7	0.7	-165.58	-7.6	-2.0	7.9	6.6	1.32	5.969 CC, ES		
400.0	400.0	400.0	399.8	0.8	0.7	173.72	-8.3	0.9	8.4	6.9	1.52	5.529 SF		
500.0	500.0	499.3	498.6	1.0	1.0	41.70	-10.8	11.0	13.4	11.4	1.98	6.775		
600.0	599.6	598.2	596.3	1.2	1.3	29.83	-14.5	25.9	20.5	18.0	2.51	8.155		
700.0	698.8	696.7	692.7	1.5	1.7	24.97	-19.4	45.7	28.0	25.0	3.09	9.089		
800.0	797.5	794.6	787.3	1.8	2.2	21.49	-25.4	70.1	38.1	34.5	3.58	10.620		
900.0	896.3	891.2	879.3	2.1	2.7	18.09	-32.5	98.7	53.1	49.0	4.10	12.947		
1,000.0	995.0	987.2	969.2	2.4	3.4	15.43	-40.5	131.4	72.8	68.1	4.63	15.708		
1,100.0	1,093.7	1,085.0	1,060.3	2.8	4.1	13.76	-49.0	165.7	93.7	88.5	5.17	18.132		
1,200.0	1,192.5	1,182.8	1,151.4	3.1	4.8	12.70	-57.5	200.1	114.7	109.0	5.70	20.103		
1,300.0	1,291.2	1,280.5	1,242.6	3.5	5.5	11.97	-65.9	234.4	135.7	129.4	6.26	21.677		
1,400.0	1,390.0	1,378.3	1,333.7	3.9	6.2	11.43	-74.4	268.7	156.7	149.9	6.82	22.984		
1,500.0	1,488.7	1,476.0	1,424.9	4.2	7.0	11.02	-82.9	303.0	177.8	170.4	7.38	24.080		
1,600.0	1,587.5	1,573.8	1,516.0	4.6	7.7	10.70	-91.3	337.3	198.8	190.8	7.95	25.009		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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 P2) - PUCKETT 24D-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	-148.98	-21.1	-12.7	24.7					
100.0	100.0	100.0	100.0	0.1	0.1	-148.98	-21.1	-12.7	24.7	24.5	0.18	140.608		
200.0	200.0	200.0	200.0	0.3	0.3	-148.98	-21.1	-12.7	24.7	24.0	0.62	39.451		
300.0	300.0	300.1	300.1	0.5	0.5	-155.07	-22.1	-10.2	24.3	23.2	1.07	22.760		
329.9	329.9	330.0	329.9	0.6	0.6	-159.32	-22.7	-8.6	24.3	23.0	1.21	20.064	CC, ES	
400.0	400.0	399.7	399.4	0.8	0.8	-173.24	-24.8	-2.9	25.0	23.5	1.54	16.267		
500.0	500.0	498.6	497.4	1.0	1.0	67.89	-29.4	9.1	29.8	27.8	2.01	14.839		
600.0	599.6	596.9	594.1	1.2	1.4	55.77	-35.6	25.7	37.7	35.2	2.54	14.828	SF	
700.0	698.8	694.7	689.2	1.5	1.8	48.99	-43.6	46.9	47.3	44.2	3.15	15.041		
800.0	797.5	791.6	782.2	1.8	2.4	43.91	-53.2	72.3	59.7	55.9	3.74	15.969		
900.0	896.3	887.0	872.3	2.1	3.0	38.81	-64.3	101.6	76.7	72.4	4.32	17.748		
1,000.0	995.0	983.8	962.5	2.4	3.7	34.66	-76.7	134.4	97.3	92.4	4.90	19.872		
1,100.0	1,093.7	1,081.4	1,053.5	2.8	4.4	31.91	-89.2	167.6	118.4	112.9	5.47	21.646		
1,200.0	1,192.5	1,179.0	1,144.4	3.1	5.1	29.99	-101.7	200.7	139.7	133.6	6.04	23.116		
1,300.0	1,291.2	1,276.7	1,235.4	3.5	5.8	28.58	-114.2	233.9	161.0	154.4	6.62	24.316		
1,400.0	1,390.0	1,374.3	1,326.4	3.9	6.6	27.50	-126.7	267.1	182.4	175.2	7.20	25.323		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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 P2) - PUCKETT 43C-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	-21.19	12.4	-4.8	13.3					
100.0	100.0	100.0	100.0	0.1	0.1	-21.19	12.4	-4.8	13.3	13.1	0.18	75.731		
200.0	200.0	200.0	200.0	0.3	0.3	-21.19	12.4	-4.8	13.3	12.7	0.62	21.248		
255.6	255.6	255.6	255.6	0.4	0.4	-21.19	12.4	-4.8	13.3	12.4	0.87	15.179 CC		
300.0	300.0	299.8	299.8	0.5	0.5	-21.53	12.5	-4.9	13.4	12.3	1.07	12.508 ES		
400.0	400.0	399.1	399.0	0.8	0.8	-27.82	15.0	-7.9	16.9	15.4	1.52	11.167 SF		
500.0	500.0	497.3	496.8	1.0	1.0	-138.35	20.7	-14.7	27.5	25.4	2.04	13.490		
600.0	599.6	593.4	591.9	1.2	1.3	-147.38	29.3	-25.1	47.7	45.1	2.62	18.239		
700.0	698.8	689.4	686.7	1.5	1.6	-152.72	39.3	-37.0	75.0	71.8	3.19	23.518		
800.0	797.5	784.7	780.7	1.8	1.9	-156.05	49.1	-48.9	105.1	101.4	3.63	28.940		
900.0	896.3	879.9	874.7	2.1	2.3	-157.91	59.0	-60.7	135.3	131.2	4.08	33.157		
1,000.0	995.0	975.2	968.7	2.4	2.6	-159.08	68.9	-72.5	165.6	161.1	4.54	36.465		
1,100.0	1,093.7	1,070.4	1,062.7	2.8	3.0	-159.90	78.7	-84.3	196.0	191.0	5.01	39.109		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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 P2) - PUCKETT 43D-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							
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-59.77	5.1	-8.8	10.1				
100.0	100.0	100.0	100.0	0.1	0.1	-59.77	5.1	-8.8	10.1	10.0	0.18	57.774	
200.0	200.0	200.0	200.0	0.3	0.3	-59.77	5.1	-8.8	10.1	9.5	0.62	16.210	
300.0	300.0	300.0	300.0	0.5	0.5	-59.77	5.1	-8.8	10.1	9.1	1.07	9.428	CC, ES
400.0	400.0	399.6	399.5	0.8	0.8	-60.47	5.7	-10.1	11.6	10.1	1.52	7.631	SF
500.0	500.0	498.3	498.1	1.0	1.0	-163.67	8.4	-15.9	20.6	18.5	2.03	10.136	
600.0	599.6	595.1	594.2	1.2	1.2	-166.94	13.0	-26.1	39.6	37.0	2.62	15.147	
700.0	698.8	691.6	689.8	1.5	1.5	-168.84	18.5	-38.0	65.8	62.6	3.19	20.622	
800.0	797.5	787.4	784.7	1.8	1.8	-170.04	24.0	-49.9	94.6	91.0	3.61	26.217	
900.0	896.3	883.1	879.5	2.1	2.1	-170.68	29.4	-61.7	123.4	119.4	4.04	30.548	
1,000.0	995.0	978.9	974.4	2.4	2.4	-171.08	34.9	-73.6	152.2	147.7	4.48	33.946	
1,100.0	1,093.7	1,074.6	1,069.3	2.8	2.7	-171.35	40.3	-85.5	181.1	176.1	4.94	36.665	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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 P2) - PUCKETT 44A-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	-98.18	-1.8	-12.7	12.8					
100.0	100.0	100.0	100.0	0.1	0.1	-98.18	-1.8	-12.7	12.8	12.7	0.18	73.207		
200.0	200.0	200.0	200.0	0.3	0.3	-98.18	-1.8	-12.7	12.8	12.2	0.62	20.540		
300.0	300.0	300.0	300.0	0.5	0.5	-98.18	-1.8	-12.7	12.8	11.8	1.07	11.946		
355.6	355.6	355.6	355.6	0.7	0.7	-98.18	-1.8	-12.7	12.8	11.5	1.32	9.693 CC		
400.0	400.0	399.8	399.8	0.8	0.8	-98.02	-1.8	-12.9	13.0	11.5	1.52	8.546 ES, SF		
500.0	500.0	498.8	498.7	1.0	1.0	167.46	-1.5	-16.7	19.4	17.4	2.00	9.665		
600.0	599.6	596.0	595.5	1.2	1.2	171.96	-0.8	-25.4	36.0	33.4	2.57	13.997		
700.0	698.8	692.4	691.2	1.5	1.5	174.21	0.1	-37.3	61.1	57.9	3.17	19.282		
800.0	797.5	788.4	786.4	1.8	1.7	175.35	1.0	-49.2	89.0	85.4	3.59	24.808		
900.0	896.3	884.4	881.7	2.1	2.0	175.95	1.9	-61.1	116.9	112.9	4.02	29.089		
1,000.0	995.0	980.5	977.0	2.4	2.3	176.31	2.8	-73.0	144.8	140.4	4.46	32.447		
1,100.0	1,093.7	1,076.5	1,072.3	2.8	2.6	176.56	3.7	-84.9	172.7	167.8	4.92	35.129		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design												Offset Site Error:	0.0 usft
S2-T7S-R97W (Puckett Pad P2) - PUCKETT 44B-2 - DD - Plan #1												Offset Well Error:	0.0 usft
Survey Program: 0-ISCWSA MWD													
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-117.88	-9.1	-17.2	19.5				
100.0	100.0	100.0	100.0	0.1	0.1	-117.88	-9.1	-17.2	19.5	19.3	0.18	111.126	
200.0	200.0	200.0	200.0	0.3	0.3	-117.88	-9.1	-17.2	19.5	18.9	0.62	31.179	
300.0	300.0	300.0	300.0	0.5	0.5	-117.88	-9.1	-17.2	19.5	18.4	1.07	18.133 CC, ES	
400.0	400.0	399.2	399.2	0.8	0.7	-117.15	-9.5	-18.6	20.9	19.4	1.51	13.847 SF	
500.0	500.0	497.5	497.3	1.0	1.0	148.63	-11.4	-24.7	29.5	27.5	2.00	14.777	
600.0	599.6	594.4	593.5	1.2	1.2	154.40	-14.7	-35.2	47.7	45.2	2.57	18.573	
700.0	698.8	691.2	689.5	1.5	1.5	158.41	-18.3	-47.0	72.3	69.2	3.14	23.006	
800.0	797.5	787.3	784.9	1.8	1.8	161.07	-22.0	-58.8	99.6	96.1	3.59	27.781	
900.0	896.3	883.5	880.2	2.1	2.1	162.59	-25.6	-70.6	127.1	123.0	4.04	31.451	
1,000.0	995.0	979.6	975.5	2.4	2.4	163.57	-29.2	-82.3	154.6	150.1	4.51	34.301	
1,100.0	1,093.7	1,075.7	1,070.9	2.8	2.7	164.25	-32.9	-94.1	182.1	177.1	4.98	36.556	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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 P2) - PUCKETT 44C-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	-127.13	-16.0	-21.2	26.6				
100.0	100.0	100.0	100.0	0.1	0.1	-127.13	-16.0	-21.2	26.6	26.4	0.18	151.481	
200.0	200.0	200.0	200.0	0.3	0.3	-127.13	-16.0	-21.2	26.6	25.9	0.62	42.502	
255.6	255.6	255.6	255.6	0.4	0.4	-127.13	-16.0	-21.2	26.6	25.7	0.87	30.366 CC	
300.0	300.0	299.7	299.7	0.5	0.5	-127.12	-16.1	-21.3	26.7	25.7	1.07	25.014 ES	
400.0	400.0	398.1	398.0	0.8	0.7	-126.86	-18.3	-24.4	30.6	29.1	1.49	20.540 SF	
500.0	500.0	495.7	495.2	1.0	1.0	136.65	-23.3	-31.6	41.4	39.4	1.99	20.810	
600.0	599.6	592.1	590.7	1.2	1.2	141.05	-30.9	-42.4	61.0	58.4	2.55	23.877	
700.0	698.8	688.7	686.3	1.5	1.6	145.11	-39.1	-54.1	86.0	82.8	3.13	27.472	
800.0	797.5	784.7	781.2	1.8	1.9	148.35	-47.3	-65.8	113.5	109.9	3.61	31.424	
900.0	896.3	880.7	876.1	2.1	2.2	150.34	-55.4	-77.4	141.2	137.1	4.10	34.405	
1,000.0	995.0	976.7	971.1	2.4	2.5	151.67	-63.6	-89.0	169.0	164.4	4.61	36.679	
1,100.0	1,093.7	1,072.7	1,066.0	2.8	2.9	152.63	-71.7	-100.6	196.9	191.8	5.12	38.455	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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 P2) - PUCKETT 44D-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	-131.49	-22.2	-25.1	33.5					
100.0	100.0	100.0	100.0	0.1	0.1	-131.49	-22.2	-25.1	33.5	33.4	0.18	191.311		
200.0	200.0	200.0	200.0	0.3	0.3	-131.49	-22.2	-25.1	33.5	32.9	0.62	53.677 CC, ES		
300.0	300.0	298.7	298.7	0.5	0.5	-131.74	-23.3	-26.1	35.0	33.9	1.06	33.132		
400.0	400.0	396.5	396.3	0.8	0.7	-132.64	-27.9	-30.3	41.4	39.9	1.49	27.777		
500.0	500.0	493.3	492.4	1.0	1.0	128.92	-36.1	-37.8	54.4	52.4	2.00	27.159 SF		
600.0	599.6	588.5	586.3	1.2	1.3	131.71	-47.6	-48.3	75.6	73.1	2.56	29.538		
700.0	698.8	684.8	681.1	1.5	1.7	135.04	-60.3	-59.8	102.0	98.9	3.14	32.520		
800.0	797.5	780.4	775.2	1.8	2.0	138.19	-72.9	-71.3	130.6	126.9	3.65	35.736		
900.0	896.3	876.1	869.3	2.1	2.4	140.22	-85.5	-82.7	159.4	155.2	4.19	38.068		
1,000.0	995.0	971.7	963.4	2.4	2.8	141.62	-98.1	-94.2	188.3	183.6	4.73	39.791		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 14B-1
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8446.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad P2)	MD Reference:	KB=22' @ 8446.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 14B-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' @ 8446.0usft
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: PUCKETT 14B-1
Coordinate System is US State Plane 1927 (Exact solution), Colorado Central 502
Grid Convergence at Surface is: -1.69°

