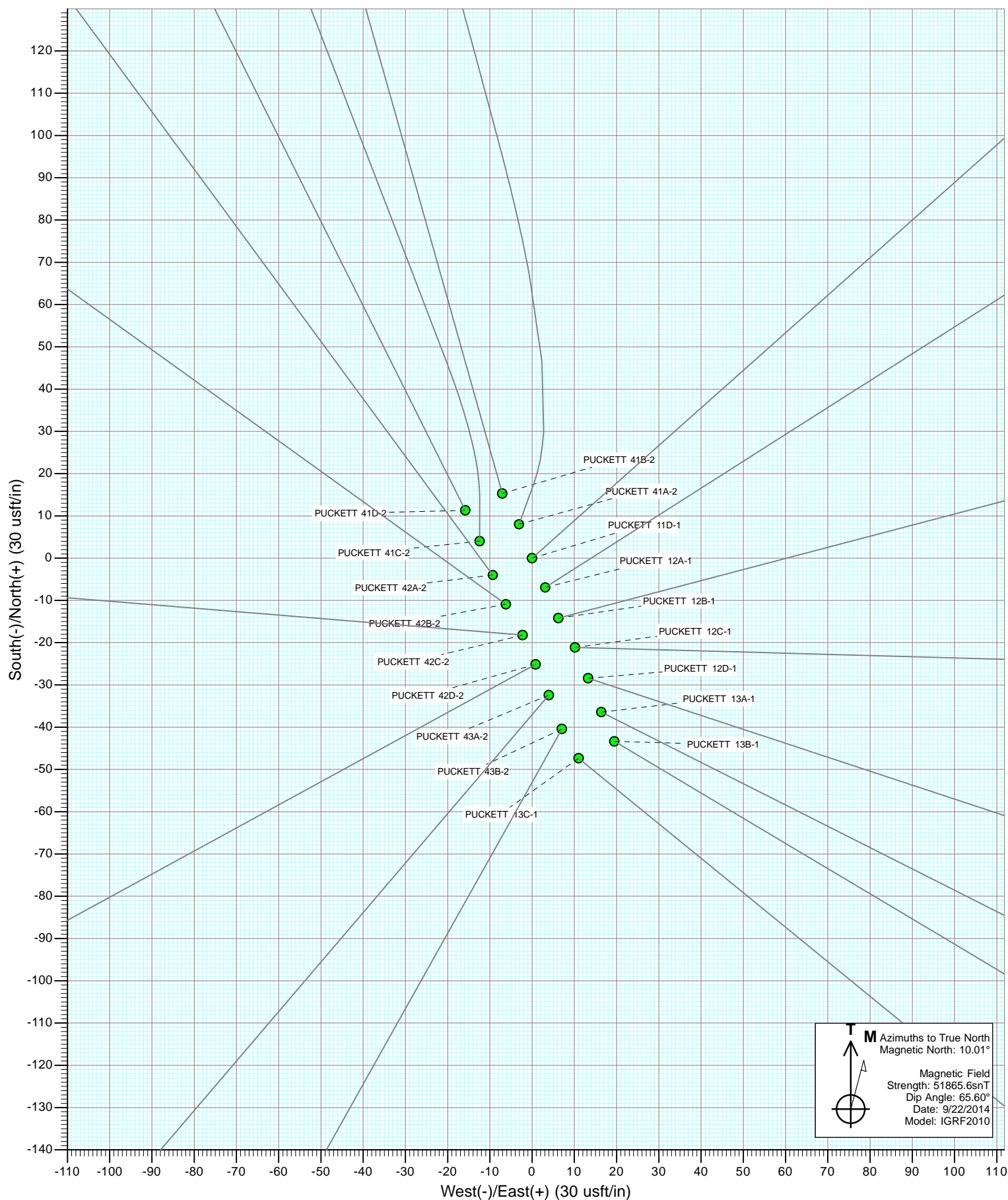
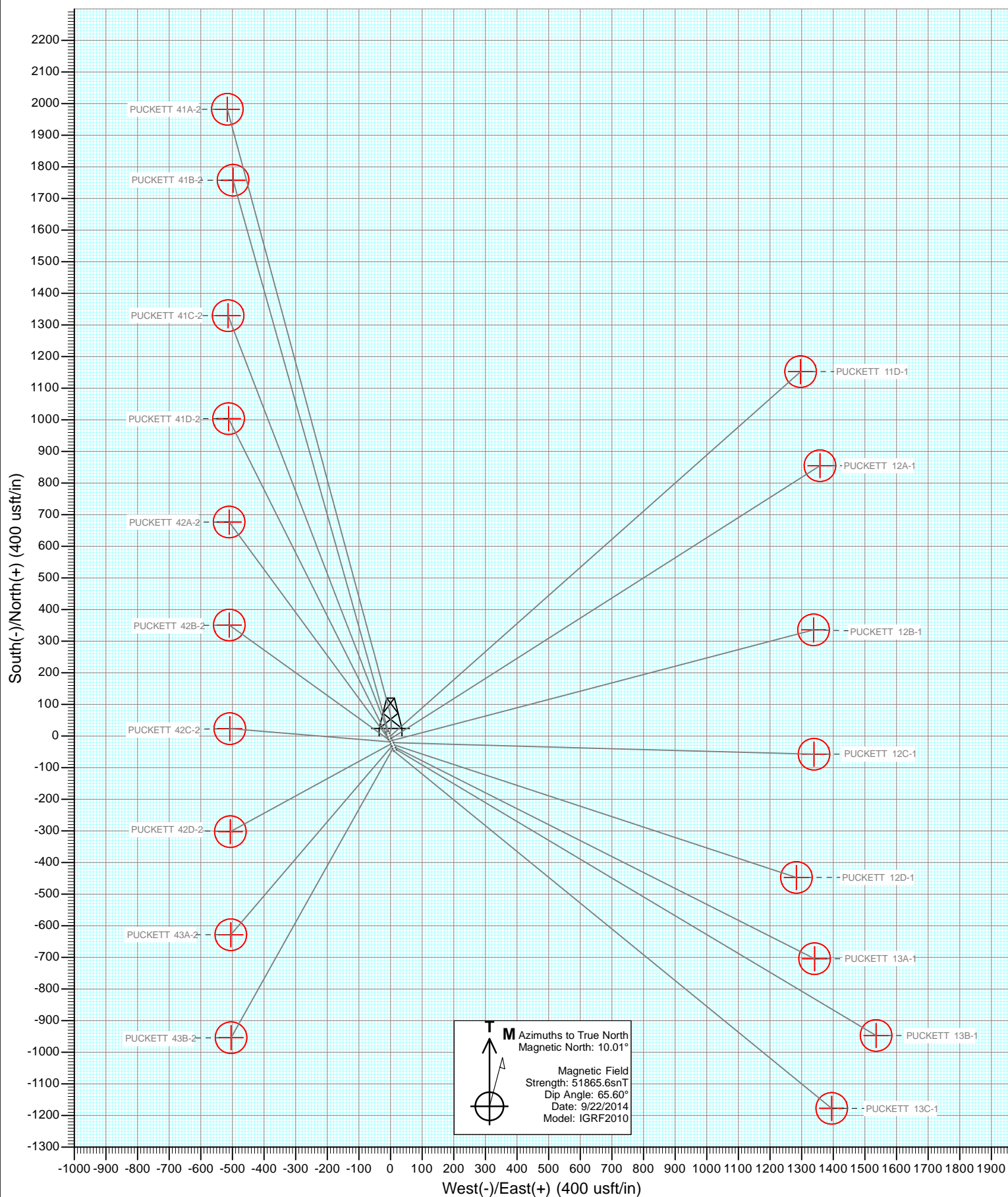


DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PUCKETT 43A-2 TGT	-595.9	-509.0	608723.24	1243151.33	39.474086	-108.181439
PUCKETT 43A-2 BHL	-595.9	-509.0	608723.24	1243151.33	39.474086	-108.181439





Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=22' @ 8499.0usft
Project:	Garfield County, CO	MD Reference:	KB=22' @ 8499.0usft
Site:	S2-T7S-R97W (Puckett Pad)	North Reference:	True
Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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

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

Well	PUCKETT 43A-2					
Well Position	+N/-S	0.0 usft	Northing:	609,303.84 usft	Latitude:	39.475722
	+E/-W	0.0 usft	Easting:	1,243,677.66 usft	Longitude:	-108.179636
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	8,477.0 usft

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

Design	Plan #1				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	220.50	

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	
275.0	0.00	0.00	275.0	0.0	0.0	0.00	0.00	0.00	0.00	
492.8	6.53	220.50	492.4	-9.4	-8.1	3.00	3.00	0.00	220.50	
7,160.4	6.53	220.50	7,116.6	-586.4	-500.9	0.00	0.00	0.00	0.00	
7,378.3	0.00	0.00	7,334.0	-595.9	-509.0	3.00	-3.00	0.00	180.00	PUCKETT 43A-2 TG1
8,903.3	0.00	0.00	8,859.0	-595.9	-509.0	0.00	0.00	0.00	0.00	PUCKETT 43A-2 BHL

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=22' @ 8499.0usft
Project:	Garfield County, CO	MD Reference:	KB=22' @ 8499.0usft
Site:	S2-T7S-R97W (Puckett Pad)	North Reference:	True
Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
275.0	0.00	0.00	275.0	0.0	0.0	0.0	0.00	0.00	KOP @ 275'
300.0	0.75	220.50	300.0	-0.1	-0.1	0.2	3.00	3.00	
400.0	3.75	220.50	399.9	-3.1	-2.7	4.1	3.00	3.00	
492.8	6.53	220.50	492.4	-9.4	-8.1	12.4	3.00	3.00	EOB @ 6.53° INC
500.0	6.53	220.50	499.5	-10.1	-8.6	13.2	0.00	0.00	
600.0	6.53	220.50	598.8	-18.7	-16.0	24.6	0.00	0.00	
700.0	6.53	220.50	698.2	-27.4	-23.4	36.0	0.00	0.00	
800.0	6.53	220.50	797.5	-36.0	-30.8	47.4	0.00	0.00	
900.0	6.53	220.50	896.9	-44.7	-38.2	58.7	0.00	0.00	
1,000.0	6.53	220.50	996.2	-53.3	-45.5	70.1	0.00	0.00	
1,100.0	6.53	220.50	1,095.6	-62.0	-52.9	81.5	0.00	0.00	
1,200.0	6.53	220.50	1,194.9	-70.6	-60.3	92.9	0.00	0.00	
1,300.0	6.53	220.50	1,294.3	-79.3	-67.7	104.3	0.00	0.00	
1,400.0	6.53	220.50	1,393.6	-87.9	-75.1	115.7	0.00	0.00	
1,500.0	6.53	220.50	1,493.0	-96.6	-82.5	127.0	0.00	0.00	
1,600.0	6.53	220.50	1,592.3	-105.2	-89.9	138.4	0.00	0.00	
1,700.0	6.53	220.50	1,691.7	-113.9	-97.3	149.8	0.00	0.00	
1,800.0	6.53	220.50	1,791.0	-122.6	-104.7	161.2	0.00	0.00	
1,900.0	6.53	220.50	1,890.4	-131.2	-112.1	172.6	0.00	0.00	
2,000.0	6.53	220.50	1,989.7	-139.9	-119.5	183.9	0.00	0.00	
2,100.0	6.53	220.50	2,089.1	-148.5	-126.9	195.3	0.00	0.00	
2,200.0	6.53	220.50	2,188.4	-157.2	-134.3	206.7	0.00	0.00	
2,300.0	6.53	220.50	2,287.8	-165.8	-141.6	218.1	0.00	0.00	
2,400.0	6.53	220.50	2,387.1	-174.5	-149.0	229.5	0.00	0.00	
2,500.0	6.53	220.50	2,486.5	-183.1	-156.4	240.8	0.00	0.00	
2,600.0	6.53	220.50	2,585.8	-191.8	-163.8	252.2	0.00	0.00	
2,700.0	6.53	220.50	2,685.2	-200.4	-171.2	263.6	0.00	0.00	
2,800.0	6.53	220.50	2,784.5	-209.1	-178.6	275.0	0.00	0.00	
2,900.0	6.53	220.50	2,883.9	-217.7	-186.0	286.4	0.00	0.00	
3,000.0	6.53	220.50	2,983.2	-226.4	-193.4	297.7	0.00	0.00	
3,100.0	6.53	220.50	3,082.6	-235.1	-200.8	309.1	0.00	0.00	
3,200.0	6.53	220.50	3,181.9	-243.7	-208.2	320.5	0.00	0.00	
3,300.0	6.53	220.50	3,281.3	-252.4	-215.6	331.9	0.00	0.00	
3,400.0	6.53	220.50	3,380.6	-261.0	-223.0	343.3	0.00	0.00	
3,500.0	6.53	220.50	3,480.0	-269.7	-230.3	354.7	0.00	0.00	
3,600.0	6.53	220.50	3,579.3	-278.3	-237.7	366.0	0.00	0.00	
3,700.0	6.53	220.50	3,678.7	-287.0	-245.1	377.4	0.00	0.00	
3,800.0	6.53	220.50	3,778.0	-295.6	-252.5	388.8	0.00	0.00	
3,900.0	6.53	220.50	3,877.4	-304.3	-259.9	400.2	0.00	0.00	
4,000.0	6.53	220.50	3,976.7	-312.9	-267.3	411.6	0.00	0.00	
4,100.0	6.53	220.50	4,076.1	-321.6	-274.7	422.9	0.00	0.00	
4,200.0	6.53	220.50	4,175.4	-330.2	-282.1	434.3	0.00	0.00	
4,300.0	6.53	220.50	4,274.8	-338.9	-289.5	445.7	0.00	0.00	
4,400.0	6.53	220.50	4,374.1	-347.6	-296.9	457.1	0.00	0.00	
4,500.0	6.53	220.50	4,473.5	-356.2	-304.3	468.5	0.00	0.00	
4,600.0	6.53	220.50	4,572.8	-364.9	-311.7	479.8	0.00	0.00	
4,700.0	6.53	220.50	4,672.2	-373.5	-319.0	491.2	0.00	0.00	
4,800.0	6.53	220.50	4,771.5	-382.2	-326.4	502.6	0.00	0.00	
4,900.0	6.53	220.50	4,870.9	-390.8	-333.8	514.0	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=22' @ 8499.0usft
Project:	Garfield County, CO	MD Reference:	KB=22' @ 8499.0usft
Site:	S2-T7S-R97W (Puckett Pad)	North Reference:	True
Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
5,000.0	6.53	220.50	4,970.2	-399.5	-341.2	525.4	0.00	0.00	
5,100.0	6.53	220.50	5,069.6	-408.1	-348.6	536.7	0.00	0.00	
5,200.0	6.53	220.50	5,168.9	-416.8	-356.0	548.1	0.00	0.00	
5,300.0	6.53	220.50	5,268.3	-425.4	-363.4	559.5	0.00	0.00	
5,400.0	6.53	220.50	5,367.6	-434.1	-370.8	570.9	0.00	0.00	
5,500.0	6.53	220.50	5,467.0	-442.7	-378.2	582.3	0.00	0.00	
5,600.0	6.53	220.50	5,566.3	-451.4	-385.6	593.7	0.00	0.00	
5,700.0	6.53	220.50	5,665.7	-460.0	-393.0	605.0	0.00	0.00	
5,800.0	6.53	220.50	5,765.0	-468.7	-400.4	616.4	0.00	0.00	
5,900.0	6.53	220.50	5,864.4	-477.4	-407.7	627.8	0.00	0.00	
5,914.7	6.53	220.50	5,879.0	-478.6	-408.8	629.5	0.00	0.00	OHIOCREEK
6,000.0	6.53	220.50	5,963.7	-486.0	-415.1	639.2	0.00	0.00	
6,100.0	6.53	220.50	6,063.1	-494.7	-422.5	650.6	0.00	0.00	
6,200.0	6.53	220.50	6,162.4	-503.3	-429.9	661.9	0.00	0.00	
6,300.0	6.53	220.50	6,261.8	-512.0	-437.3	673.3	0.00	0.00	
6,400.0	6.53	220.50	6,361.1	-520.6	-444.7	684.7	0.00	0.00	
6,443.1	6.53	220.50	6,404.0	-524.4	-447.9	689.6	0.00	0.00	WILLIAMS FORK
6,500.0	6.53	220.50	6,460.5	-529.3	-452.1	696.1	0.00	0.00	
6,600.0	6.53	220.50	6,559.8	-537.9	-459.5	707.5	0.00	0.00	
6,700.0	6.53	220.50	6,659.2	-546.6	-466.9	718.8	0.00	0.00	
6,800.0	6.53	220.50	6,758.5	-555.2	-474.3	730.2	0.00	0.00	
6,900.0	6.53	220.50	6,857.9	-563.9	-481.7	741.6	0.00	0.00	
7,000.0	6.53	220.50	6,957.2	-572.5	-489.1	753.0	0.00	0.00	
7,100.0	6.53	220.50	7,056.6	-581.2	-496.5	764.4	0.00	0.00	
7,160.4	6.53	220.50	7,116.6	-586.4	-500.9	771.2	0.00	0.00	Start 3° Drop
7,200.0	5.35	220.50	7,156.0	-589.5	-503.6	775.3	3.00	-3.00	
7,300.0	2.35	220.50	7,255.8	-594.6	-507.9	782.1	3.00	-3.00	
7,378.3	0.00	0.00	7,334.0	-595.9	-509.0	783.7	3.00	-3.00	EOD @ 0° INC - TOG
7,400.0	0.00	0.00	7,355.7	-595.9	-509.0	783.7	0.00	0.00	
7,500.0	0.00	0.00	7,455.7	-595.9	-509.0	783.7	0.00	0.00	
7,600.0	0.00	0.00	7,555.7	-595.9	-509.0	783.7	0.00	0.00	
7,700.0	0.00	0.00	7,655.7	-595.9	-509.0	783.7	0.00	0.00	
7,800.0	0.00	0.00	7,755.7	-595.9	-509.0	783.7	0.00	0.00	
7,900.0	0.00	0.00	7,855.7	-595.9	-509.0	783.7	0.00	0.00	
8,000.0	0.00	0.00	7,955.7	-595.9	-509.0	783.7	0.00	0.00	
8,100.0	0.00	0.00	8,055.7	-595.9	-509.0	783.7	0.00	0.00	
8,200.0	0.00	0.00	8,155.7	-595.9	-509.0	783.7	0.00	0.00	
8,300.0	0.00	0.00	8,255.7	-595.9	-509.0	783.7	0.00	0.00	
8,338.3	0.00	0.00	8,294.0	-595.9	-509.0	783.7	0.00	0.00	CAMEO
8,400.0	0.00	0.00	8,355.7	-595.9	-509.0	783.7	0.00	0.00	
8,500.0	0.00	0.00	8,455.7	-595.9	-509.0	783.7	0.00	0.00	
8,600.0	0.00	0.00	8,555.7	-595.9	-509.0	783.7	0.00	0.00	
8,700.0	0.00	0.00	8,655.7	-595.9	-509.0	783.7	0.00	0.00	
8,753.3	0.00	0.00	8,709.0	-595.9	-509.0	783.7	0.00	0.00	ROLLINS
8,800.0	0.00	0.00	8,755.7	-595.9	-509.0	783.7	0.00	0.00	
8,903.3	0.00	0.00	8,859.0	-595.9	-509.0	783.7	0.00	0.00	TD @ 8,903.3' MD

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=22' @ 8499.0usft
Project:	Garfield County, CO	MD Reference:	KB=22' @ 8499.0usft
Site:	S2-T7S-R97W (Puckett Pad)	North Reference:	True
Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
PUCKETT 43A-2 BHL	0.00	0.00	8,859.0	-595.9	-509.0	608,723.24	1,243,151.33	39.474086	-108.181439
- plan hits target center									
- Circle (radius 50.0)									
PUCKETT 43A-2 TGT	0.00	0.00	7,334.0	-595.9	-509.0	608,723.24	1,243,151.33	39.474086	-108.181439
- plan hits target center									
- Point									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
5,914.7	5,879.0	OHIOCREEK				
6,443.1	6,404.0	WILLIAMS FORK				
7,378.3	7,334.0	TOG				
8,338.3	8,294.0	CAMEO				
8,753.3	8,709.0	ROLLINS				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	Comment	
275.0	275.0	0.0	0.0	KOP @ 275'	
492.8	492.4	-9.4	-8.1	EOB @ 6.53° INC	
7,160.4	7,116.6	-586.4	-500.9	Start 3° Drop	
7,378.3	7,334.0	-595.9	-509.0	EOD @ 0° INC	
8,903.3	8,859.0	-595.9	-509.0	TD @ 8,903.3' MD	

Caerus Oil & Gas (NAD 27)

Garfield County, CO

S2-T7S-R97W (Puckett Pad)

PUCKETT 43A-2

DD

Plan #1

Anticollision Report

22 September, 2014

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

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

Survey Tool Program	Date	9/22/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	8,903.3	Plan #1 (DD)	ISCWSA MWD	MWD - Standard

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
S2-T7S-R97W (Puckett Pad)						
PUCKETT 11D-1 - DD - Plan #1	200.0	200.0	32.7	32.0	52.263	CC, ES
PUCKETT 11D-1 - DD - Plan #1	400.0	396.9	42.9	41.3	26.673	SF
PUCKETT 12A-1 - DD - Plan #1	200.0	200.0	25.5	24.9	40.826	CC
PUCKETT 12A-1 - DD - Plan #1	239.9	239.9	25.6	24.8	31.875	ES
PUCKETT 12A-1 - DD - Plan #1	400.0	398.3	32.4	30.9	20.471	SF
PUCKETT 12B-1 - DD - Plan #1	200.0	200.0	18.4	17.7	29.369	CC
PUCKETT 12B-1 - DD - Plan #1	300.0	300.0	18.5	17.4	17.236	ES
PUCKETT 12B-1 - DD - Plan #1	400.0	399.3	23.2	21.6	14.704	SF
PUCKETT 12C-1 - DD - Plan #1	200.0	200.0	12.9	12.3	20.623	CC
PUCKETT 12C-1 - DD - Plan #1	300.0	300.0	13.0	12.0	12.145	ES
PUCKETT 12C-1 - DD - Plan #1	400.0	399.7	17.2	15.7	10.871	SF
PUCKETT 12D-1 - DD - Plan #1	200.0	200.0	10.1	9.5	16.229	CC
PUCKETT 12D-1 - DD - Plan #1	300.0	300.0	10.3	9.2	9.585	ES, SF
PUCKETT 13A-1 - DD - Plan #1	200.0	200.0	13.1	12.4	20.887	CC
PUCKETT 13A-1 - DD - Plan #1	232.9	232.9	13.1	12.3	16.969	ES
PUCKETT 13A-1 - DD - Plan #1	300.0	299.7	13.8	12.7	12.957	SF
PUCKETT 13B-1 - DD - Plan #1	200.0	200.0	19.0	18.4	30.384	CC, ES
PUCKETT 13B-1 - DD - Plan #1	400.0	397.2	30.1	28.6	19.967	SF
PUCKETT 13C-1 - DD - Plan #1	155.6	155.6	16.5	16.1	38.852	CC
PUCKETT 13C-1 - DD - Plan #1	200.0	199.8	16.7	16.0	26.896	ES
PUCKETT 13C-1 - DD - Plan #1	400.0	397.2	28.3	26.8	18.849	SF
PUCKETT 41A-2 - DD - Plan #1	200.0	200.0	41.0	40.4	65.681	CC, ES
PUCKETT 41A-2 - DD - Plan #1	500.0	490.5	72.1	69.9	32.968	SF
PUCKETT 41B-2 - DD - Plan #1	144.4	144.4	49.0	48.6	130.544	CC, ES
PUCKETT 41B-2 - DD - Plan #1	500.0	486.5	86.4	84.2	39.799	SF
PUCKETT 41C-2 - DD - Plan #1	200.0	200.0	39.9	39.3	63.909	CC, ES
PUCKETT 41C-2 - DD - Plan #1	500.0	491.6	65.9	63.8	30.981	SF
PUCKETT 41D-2 - DD - Plan #1	155.6	155.6	48.0	47.5	112.848	CC
PUCKETT 41D-2 - DD - Plan #1	200.0	199.4	48.1	47.5	77.188	ES
PUCKETT 41D-2 - DD - Plan #1	500.0	488.2	80.9	78.8	38.021	SF
PUCKETT 42A-2 - DD - Plan #1	200.0	200.0	31.4	30.7	50.181	CC
PUCKETT 42A-2 - DD - Plan #1	300.0	299.6	31.6	30.5	29.552	ES
PUCKETT 42A-2 - DD - Plan #1	500.0	494.6	50.4	48.3	24.334	SF
PUCKETT 42B-2 - DD - Plan #1	200.0	200.0	23.8	23.1	38.043	CC
PUCKETT 42B-2 - DD - Plan #1	300.0	300.0	23.8	22.8	22.294	ES
PUCKETT 42B-2 - DD - Plan #1	400.0	399.1	26.9	25.4	17.723	SF
PUCKETT 42C-2 - DD - Plan #1	200.0	200.0	15.5	14.9	24.811	CC
PUCKETT 42C-2 - DD - Plan #1	300.0	300.0	15.6	14.5	14.563	ES
PUCKETT 42C-2 - DD - Plan #1	400.0	399.8	17.7	16.2	11.622	SF
PUCKETT 42D-2 - DD - Plan #1	200.0	200.0	7.9	7.3	12.673	CC
PUCKETT 42D-2 - DD - Plan #1	300.0	300.0	8.0	6.9	7.473	ES
PUCKETT 42D-2 - DD - Plan #1	400.0	400.1	9.8	8.3	6.492	SF
PUCKETT 43B-2 - DD - Plan #1	200.0	200.0	8.6	8.0	13.746	CC, ES
PUCKETT 43B-2 - DD - Plan #1	500.0	498.7	15.3	13.3	7.589	SF
SESE Sec 2-T7S-R97W						
Puckett 43D-2D - DD - Plan #1						Out of range

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 11D-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCWSA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			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	-6.95	32.4	-4.0	32.7					
100.0	100.0	100.0	100.0	0.1	0.1	-6.95	32.4	-4.0	32.7	32.5	0.18	186.271		
200.0	200.0	200.0	200.0	0.3	0.3	-6.95	32.4	-4.0	32.7	32.0	0.62	52.263 CC, ES		
300.0	300.0	298.9	298.9	0.5	0.5	136.25	34.1	-2.0	34.3	33.2	1.07	31.976		
400.0	399.9	396.9	396.5	0.7	0.8	147.74	39.2	3.6	42.9	41.3	1.61	26.673 SF		
500.0	499.5	492.3	491.2	1.0	1.0	159.47	47.2	12.7	61.7	59.5	2.24	27.494		
600.0	598.8	584.8	582.2	1.2	1.4	167.18	58.1	24.9	88.6	85.9	2.73	32.435		
700.0	698.2	674.4	669.6	1.5	1.7	171.86	71.4	39.9	120.7	117.5	3.22	37.494		
800.0	797.5	767.3	759.5	1.8	2.2	174.94	86.8	57.2	155.8	152.1	3.70	42.063		
900.0	896.9	860.7	849.9	2.1	2.6	176.90	102.3	74.6	191.1	186.9	4.17	45.839		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 12A-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-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	-1.90	25.5	-0.8	25.5					
100.0	100.0	100.0	100.0	0.1	0.1	-1.90	25.5	-0.8	25.5	25.3	0.18	145.508		
200.0	200.0	200.0	200.0	0.3	0.3	-1.90	25.5	-0.8	25.5	24.9	0.62	40.826 CC		
239.9	239.9	239.9	239.9	0.4	0.4	137.75	25.5	-0.8	25.6	24.8	0.80	31.875 ES		
300.0	300.0	299.6	299.6	0.5	0.5	139.05	25.8	-0.3	26.0	24.9	1.07	24.274		
400.0	399.9	398.3	398.1	0.7	0.8	151.22	28.6	4.0	32.4	30.9	1.58	20.471 SF		
500.0	499.5	494.8	494.2	1.0	1.0	164.71	33.9	12.4	49.0	46.8	2.22	22.116		
600.0	598.8	588.7	586.9	1.2	1.3	173.16	41.6	24.4	73.5	70.8	2.69	27.292		
700.0	698.2	679.9	676.3	1.5	1.6	178.19	51.4	39.8	103.3	100.1	3.18	32.504		
800.0	797.5	773.0	766.9	1.8	2.0	-178.56	62.9	58.0	136.5	132.8	3.66	37.268		
900.0	896.9	867.1	858.4	2.1	2.5	-176.54	74.7	76.5	170.0	165.8	4.14	41.081		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 12B-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-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	7.07	18.2	2.3	18.4					
100.0	100.0	100.0	100.0	0.1	0.1	7.07	18.2	2.3	18.4	18.2	0.18	104.673		
200.0	200.0	200.0	200.0	0.3	0.3	7.07	18.2	2.3	18.4	17.7	0.62	29.369 CC		
255.6	255.6	255.6	255.6	0.4	0.4	146.91	18.2	2.3	18.5	17.6	0.87	21.213		
300.0	300.0	300.0	300.0	0.5	0.5	146.84	18.2	2.3	18.5	17.4	1.07	17.236 ES		
400.0	399.9	399.3	399.2	0.7	0.8	158.05	18.9	4.8	23.2	21.6	1.58	14.704 SF		
500.0	499.5	497.0	496.6	1.0	1.0	173.21	20.8	12.1	37.2	35.0	2.19	17.006		
600.0	598.8	592.4	591.2	1.2	1.2	-177.37	23.9	23.9	58.8	56.2	2.65	22.174		
700.0	698.2	686.7	684.1	1.5	1.6	-171.50	28.1	40.0	85.4	82.3	3.14	27.168		
800.0	797.5	780.8	776.2	1.8	1.9	-167.92	32.9	58.3	114.6	111.0	3.63	31.557		
900.0	896.9	876.2	869.7	2.1	2.3	-165.76	37.8	76.9	144.1	140.0	4.12	35.003		
1,000.0	996.2	971.7	963.2	2.4	2.7	-164.33	42.7	95.4	173.7	169.1	4.61	37.664		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 12C-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-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	28.81	11.3	6.2	12.9					
100.0	100.0	100.0	100.0	0.1	0.1	28.81	11.3	6.2	12.9	12.7	0.18	73.503		
200.0	200.0	200.0	200.0	0.3	0.3	28.81	11.3	6.2	12.9	12.3	0.62	20.623 CC		
255.6	255.6	255.6	255.6	0.4	0.4	168.49	11.3	6.2	13.1	12.2	0.87	14.977		
300.0	300.0	300.0	300.0	0.5	0.5	168.45	11.3	6.2	13.0	12.0	1.07	12.145 ES		
400.0	399.9	399.7	399.7	0.7	0.8	172.95	11.3	6.9	17.2	15.7	1.59	10.871 SF		
500.0	499.5	498.1	497.9	1.0	1.0	-176.36	11.1	11.9	29.5	27.4	2.16	13.674		
600.0	598.8	594.7	594.1	1.2	1.2	-168.30	10.9	21.9	48.3	45.7	2.60	18.536		
700.0	698.2	689.4	687.7	1.5	1.5	-162.48	10.5	36.3	71.4	68.3	3.09	23.119		
800.0	797.5	784.3	780.8	1.8	1.8	-158.30	10.0	54.5	98.3	94.7	3.61	27.265		
900.0	896.9	880.4	874.9	2.1	2.2	-155.79	9.5	73.3	125.8	121.7	4.11	30.577		
1,000.0	996.2	976.4	969.1	2.4	2.6	-154.19	8.9	92.1	153.5	148.8	4.63	33.115		
1,100.0	1,095.6	1,072.4	1,063.3	2.7	3.0	-153.08	8.4	110.9	181.2	176.0	5.16	35.098		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 12D-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	66.73	4.0	9.3	10.1					
100.0	100.0	100.0	100.0	0.1	0.1	66.73	4.0	9.3	10.1	10.0	0.18	57.841		
200.0	200.0	200.0	200.0	0.3	0.3	66.73	4.0	9.3	10.1	9.5	0.62	16.229 CC		
255.6	255.6	255.6	255.6	0.4	0.4	-154.27	4.0	9.3	10.3	9.4	0.87	11.820		
300.0	300.0	300.0	300.0	0.5	0.5	-154.18	4.0	9.3	10.3	9.2	1.07	9.585 ES, SF		
400.0	399.9	399.3	399.3	0.7	0.7	-154.01	3.2	11.8	15.8	14.2	1.57	10.048		
500.0	499.5	497.5	497.1	1.0	1.0	-151.60	0.8	19.0	29.7	27.6	2.13	13.942		
600.0	598.8	593.9	592.7	1.2	1.2	-148.43	-3.1	30.7	49.7	47.1	2.60	19.069		
700.0	698.2	688.8	686.1	1.5	1.5	-144.90	-8.3	46.7	73.6	70.5	3.13	23.523		
800.0	797.5	785.3	780.8	1.8	1.9	-142.49	-14.2	64.7	99.3	95.7	3.66	27.128		
900.0	896.9	881.9	875.5	2.1	2.3	-141.08	-20.2	82.6	125.1	120.9	4.20	29.756		
1,000.0	996.2	978.5	970.2	2.4	2.7	-140.15	-26.1	100.6	150.9	146.2	4.76	31.711		
1,100.0	1,095.6	1,075.1	1,065.0	2.7	3.1	-139.49	-32.0	118.5	176.8	171.4	5.32	33.212		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 13A-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-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	107.88	-4.0	12.4	13.1					
100.0	100.0	100.0	100.0	0.1	0.1	107.88	-4.0	12.4	13.1	12.9	0.18	74.442		
200.0	200.0	200.0	200.0	0.3	0.3	107.88	-4.0	12.4	13.1	12.4	0.62	20.887 CC		
232.9	232.9	232.9	232.9	0.4	0.4	-112.91	-4.0	12.4	13.1	12.3	0.77	16.969 ES		
300.0	300.0	299.7	299.6	0.5	0.5	-112.82	-4.3	13.0	13.8	12.7	1.06	12.957 SF		
400.0	399.9	398.5	398.4	0.7	0.7	-120.41	-6.6	17.6	20.6	19.1	1.51	13.623		
500.0	499.5	496.0	495.4	1.0	1.0	-127.97	-11.1	26.6	35.4	33.3	2.07	17.082		
600.0	598.8	591.7	589.9	1.2	1.3	-130.53	-17.7	39.7	56.3	53.7	2.60	21.665		
700.0	698.2	686.2	682.5	1.5	1.6	-130.11	-26.3	56.6	81.5	78.4	3.17	25.752		
800.0	797.5	782.7	776.6	1.8	2.1	-129.52	-35.7	75.2	108.0	104.3	3.73	28.995		
900.0	896.9	879.1	870.8	2.1	2.5	-129.16	-45.0	93.8	134.5	130.2	4.30	31.302		
1,000.0	996.2	975.5	964.9	2.4	2.9	-128.92	-54.4	112.4	161.0	156.1	4.88	32.987		
1,100.0	1,095.6	1,071.9	1,059.1	2.7	3.4	-128.75	-63.8	131.0	187.5	182.1	5.47	34.268		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 13B-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-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	125.14	-10.9	15.5	19.0					
100.0	100.0	100.0	100.0	0.1	0.1	125.14	-10.9	15.5	19.0	18.8	0.18	108.292		
200.0	200.0	200.0	200.0	0.3	0.3	125.14	-10.9	15.5	19.0	18.4	0.62	30.384	CC, ES	
300.0	300.0	298.9	298.9	0.5	0.5	-96.28	-12.2	17.7	21.6	20.5	1.06	20.402		
400.0	399.9	397.2	396.8	0.7	0.8	-104.28	-16.1	24.3	30.1	28.6	1.51	19.967	SF	
500.0	499.5	493.9	492.7	1.0	1.0	-113.52	-22.5	34.9	45.7	43.7	2.05	22.318		
600.0	598.8	588.6	585.9	1.2	1.4	-118.49	-31.1	49.4	67.8	65.1	2.61	25.965		
700.0	698.2	681.3	676.2	1.5	1.8	-119.93	-41.8	67.3	94.4	91.3	3.19	29.588		
800.0	797.5	776.3	768.1	1.8	2.2	-120.25	-54.2	88.2	123.9	120.1	3.79	32.665		
900.0	896.9	871.9	860.5	2.1	2.7	-120.44	-66.7	109.1	153.3	148.9	4.39	34.960		
1,000.0	996.2	967.4	952.9	2.4	3.2	-120.57	-79.2	130.1	182.8	177.8	4.99	36.611		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 13C-1 - DD - Plan #1												Offset Site Error:	0.0 usft
Survey Program: 0-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	154.71	-14.9	7.1	16.5				
100.0	100.0	100.0	100.0	0.1	0.1	154.71	-14.9	7.1	16.5	16.3	0.18	94.212	
155.6	155.6	155.6	155.6	0.2	0.2	154.71	-14.9	7.1	16.5	16.1	0.43	38.852 CC	
200.0	200.0	199.8	199.8	0.3	0.3	154.47	-15.0	7.2	16.7	16.0	0.62	26.896 ES	
300.0	300.0	298.9	298.8	0.5	0.5	-71.09	-17.5	10.2	20.2	19.1	1.05	19.197	
400.0	399.9	397.2	396.6	0.7	0.8	-84.68	-23.1	17.1	28.3	26.8	1.50	18.849 SF	
500.0	499.5	493.9	492.4	1.0	1.1	-98.47	-31.7	27.6	42.8	40.8	2.03	21.117	
600.0	598.8	588.8	585.6	1.2	1.4	-106.07	-43.2	41.6	64.0	61.4	2.61	24.524	
700.0	698.2	682.1	676.1	1.5	1.9	-108.86	-57.2	58.9	90.2	87.0	3.22	28.021	
800.0	797.5	778.0	768.8	1.8	2.4	-110.12	-72.9	78.0	118.4	114.6	3.83	30.932	
900.0	896.9	873.9	861.5	2.1	2.9	-110.90	-88.5	97.2	146.6	142.2	4.44	33.017	
1,000.0	996.2	969.8	954.2	2.4	3.4	-111.42	-104.2	116.4	174.9	169.8	5.07	34.515	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 41A-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-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	-9.90	40.4	-7.1	41.0					
100.0	100.0	100.0	100.0	0.1	0.1	-9.90	40.4	-7.1	41.0	40.9	0.18	234.095		
200.0	200.0	200.0	200.0	0.3	0.3	-9.90	40.4	-7.1	41.0	40.4	0.62	65.681 CC, ES		
300.0	300.0	298.1	298.0	0.5	0.5	131.39	42.8	-6.2	43.4	42.3	1.08	40.337		
400.0	399.9	395.2	394.8	0.7	0.8	138.12	49.8	-3.6	53.2	51.6	1.60	33.319		
500.0	499.5	490.5	489.4	1.0	1.0	144.62	61.0	-1.3	72.1	69.9	2.19	32.968 SF		
600.0	598.8	583.9	581.7	1.2	1.3	147.47	75.9	-1.4	97.3	94.6	2.66	36.580		
700.0	698.2	675.5	671.4	1.5	1.7	147.76	94.3	-3.7	126.1	123.0	3.14	40.110		
800.0	797.5	764.9	758.0	1.8	2.1	146.91	115.8	-8.1	158.5	154.8	3.65	43.398		
900.0	896.9	853.8	843.2	2.1	2.5	145.56	140.4	-14.4	194.2	190.0	4.19	46.370		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 41B-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-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	-12.99	47.7	-11.0	49.0					
100.0	100.0	100.0	100.0	0.1	0.1	-12.99	47.7	-11.0	49.0	48.8	0.18	279.309		
144.4	144.4	144.4	144.4	0.2	0.2	-12.99	47.7	-11.0	49.0	48.6	0.38	130.544	CC, ES	
200.0	200.0	199.0	199.0	0.3	0.3	-13.01	48.1	-11.1	49.4	48.8	0.62	79.204		
300.0	300.0	296.3	296.1	0.5	0.5	126.35	52.4	-12.3	54.1	53.0	1.09	49.697		
400.0	399.9	392.5	391.9	0.7	0.8	128.37	61.3	-14.8	66.1	64.5	1.60	41.352		
500.0	499.5	486.5	485.0	1.0	1.1	131.75	74.5	-18.6	86.4	84.2	2.17	39.799	SF	
600.0	598.8	578.1	574.8	1.2	1.4	134.46	91.6	-23.4	113.1	110.5	2.68	42.159		
700.0	698.2	667.4	661.5	1.5	1.8	135.73	112.2	-29.2	144.4	141.2	3.22	44.872		
800.0	797.5	761.7	752.5	1.8	2.3	136.44	135.9	-35.8	177.8	174.0	3.75	47.440		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 41C-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-24.20	36.4	-16.4	39.9					
100.0	100.0	100.0	100.0	0.1	0.1	-24.20	36.4	-16.4	39.9	39.8	0.18	227.780		
200.0	200.0	200.0	200.0	0.3	0.3	-24.20	36.4	-16.4	39.9	39.3	0.62	63.909 CC, ES		
300.0	300.0	298.6	298.5	0.5	0.5	116.28	37.8	-16.4	41.3	40.3	1.07	38.568		
400.0	399.9	395.9	395.7	0.7	0.8	122.96	44.1	-16.4	49.3	47.8	1.55	31.753		
500.0	499.5	491.6	490.7	1.0	1.0	131.15	54.7	-17.1	65.9	63.8	2.13	30.981 SF		
600.0	598.8	585.6	583.6	1.2	1.3	135.44	68.8	-20.7	89.0	86.3	2.62	33.931		
700.0	698.2	679.4	675.6	1.5	1.7	136.58	86.1	-27.0	115.8	112.6	3.14	36.905		
800.0	797.5	775.5	769.6	1.8	2.0	137.06	104.6	-34.1	143.4	139.8	3.65	39.336		
900.0	896.9	871.6	863.7	2.1	2.4	137.39	123.1	-41.2	171.1	166.9	4.17	41.052		
1,000.0	996.2	967.7	957.7	2.4	2.8	137.62	141.6	-48.3	198.7	194.0	4.70	42.287		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 41D-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	-24.33	43.7	-19.8	48.0					
100.0	100.0	100.0	100.0	0.1	0.1	-24.33	43.7	-19.8	48.0	47.8	0.18	273.600		
155.6	155.6	155.6	155.6	0.2	0.2	-24.33	43.7	-19.8	48.0	47.5	0.43	112.848 CC		
200.0	200.0	199.4	199.4	0.3	0.3	-24.33	43.8	-19.8	48.1	47.5	0.62	77.188 ES		
300.0	300.0	296.8	296.7	0.5	0.5	115.12	47.2	-21.5	52.0	50.9	1.08	48.195		
400.0	399.9	393.3	392.8	0.7	0.8	117.70	54.9	-25.3	62.6	61.1	1.57	40.012		
500.0	499.5	488.2	486.8	1.0	1.1	122.01	66.6	-31.2	80.9	78.8	2.13	38.021 SF		
600.0	598.8	585.6	582.9	1.2	1.4	125.89	80.5	-38.1	102.9	100.2	2.63	39.062		
700.0	698.2	682.9	679.1	1.5	1.7	128.41	94.4	-45.1	125.1	122.0	3.14	39.818		
800.0	797.5	780.3	775.2	1.8	2.1	130.16	108.2	-52.0	147.5	143.8	3.66	40.267		
900.0	896.9	877.7	871.3	2.1	2.4	131.46	122.1	-59.0	170.0	165.8	4.19	40.546		
1,000.0	996.2	975.1	967.4	2.4	2.8	132.45	136.0	-65.9	192.6	187.8	4.73	40.726		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 42A-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-25.03	28.4	-13.3	31.4					
100.0	100.0	100.0	100.0	0.1	0.1	-25.03	28.4	-13.3	31.4	31.2	0.18	178.849		
200.0	200.0	200.0	200.0	0.3	0.3	-25.03	28.4	-13.3	31.4	30.7	0.62	50.181 CC		
250.0	250.0	250.0	250.0	0.4	0.4	114.74	28.4	-13.3	31.4	30.6	0.85	37.100		
300.0	300.0	299.6	299.6	0.5	0.5	114.67	28.5	-13.4	31.6	30.5	1.07	29.552 ES		
400.0	399.9	397.7	397.6	0.7	0.8	118.78	31.6	-15.6	37.1	35.6	1.52	24.335		
500.0	499.5	494.6	494.1	1.0	1.0	124.71	38.6	-20.7	50.4	48.3	2.07	24.334 SF		
600.0	598.8	592.5	591.3	1.2	1.3	128.71	48.2	-27.8	68.4	65.8	2.58	26.451		
700.0	698.2	690.8	688.9	1.5	1.6	131.03	57.9	-35.0	86.5	83.5	3.09	28.015		
800.0	797.5	789.1	786.4	1.8	1.9	132.55	67.6	-42.1	104.8	101.2	3.60	29.078		
900.0	896.9	887.4	883.9	2.1	2.2	133.61	77.3	-49.2	123.1	119.0	4.13	29.826		
1,000.0	996.2	985.7	981.5	2.4	2.5	134.40	87.0	-56.4	141.5	136.9	4.66	30.375		
1,100.0	1,095.6	1,083.9	1,079.0	2.7	2.8	135.01	96.7	-63.5	159.9	154.7	5.19	30.792		
1,200.0	1,194.9	1,182.2	1,176.6	3.0	3.1	135.49	106.4	-70.7	178.3	172.6	5.73	31.115		
1,300.0	1,294.3	1,280.5	1,274.1	3.4	3.4	135.89	116.1	-77.8	196.7	190.4	6.27	31.377		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 42B-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			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	-25.31	21.5	-10.2	23.8					
100.0	100.0	100.0	100.0	0.1	0.1	-25.31	21.5	-10.2	23.8	23.6	0.18	135.590		
200.0	200.0	200.0	200.0	0.3	0.3	-25.31	21.5	-10.2	23.8	23.1	0.62	38.043 CC		
255.7	255.7	255.7	255.7	0.4	0.4	114.63	21.5	-10.2	23.9	23.0	0.87	27.354		
300.0	300.0	300.0	300.0	0.5	0.5	114.54	21.5	-10.2	23.8	22.8	1.07	22.294 ES		
400.0	399.9	399.1	399.1	0.7	0.8	120.51	22.3	-11.3	26.9	25.4	1.52	17.723 SF		
500.0	499.5	497.4	497.2	1.0	1.0	126.66	26.0	-16.5	37.0	35.0	2.05	18.056		
600.0	598.8	596.3	595.6	1.2	1.2	130.19	31.2	-23.7	50.6	48.1	2.55	19.885		
700.0	698.2	695.3	694.3	1.5	1.5	132.23	36.4	-31.0	64.4	61.3	3.05	21.120		
800.0	797.5	794.3	792.9	1.8	1.7	133.55	41.7	-38.2	78.2	74.6	3.56	21.949		
900.0	896.9	893.4	891.5	2.1	2.0	134.47	46.9	-45.5	92.0	87.9	4.08	22.534		
1,000.0	996.2	992.4	990.1	2.4	2.3	135.16	52.1	-52.7	105.8	101.2	4.61	22.964		
1,100.0	1,095.6	1,091.4	1,088.8	2.7	2.6	135.68	57.3	-60.0	119.7	114.5	5.14	23.292		
1,200.0	1,194.9	1,190.4	1,187.4	3.0	2.8	136.10	62.5	-67.2	133.5	127.9	5.67	23.547		
1,300.0	1,294.3	1,289.5	1,286.0	3.4	3.1	136.43	67.7	-74.5	147.4	141.2	6.20	23.754		
1,400.0	1,393.6	1,388.5	1,384.6	3.7	3.4	136.71	72.9	-81.7	161.3	154.5	6.74	23.924		
1,500.0	1,493.0	1,487.5	1,483.3	4.0	3.6	136.95	78.1	-89.0	175.1	167.8	7.28	24.066		
1,600.0	1,592.3	1,586.6	1,581.9	4.3	3.9	137.15	83.4	-96.2	189.0	181.2	7.81	24.186		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 42C-2 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance				Total		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)	Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-23.61	14.2	-6.2	15.5					
100.0	100.0	100.0	100.0	0.1	0.1	-23.61	14.2	-6.2	15.5	15.3	0.18	88.429		
200.0	200.0	200.0	200.0	0.3	0.3	-23.61	14.2	-6.2	15.5	14.9	0.62	24.811 CC		
255.7	255.7	255.7	255.7	0.4	0.4	116.55	14.2	-6.2	15.6	14.7	0.87	17.875		
300.0	300.0	300.0	300.0	0.5	0.5	116.42	14.2	-6.2	15.6	14.5	1.07	14.563 ES		
400.0	399.9	399.8	399.8	0.7	0.8	127.32	14.2	-6.4	17.7	16.2	1.52	11.622 SF		
500.0	499.5	499.3	499.2	1.0	1.0	135.42	14.5	-10.2	24.6	22.6	2.04	12.057		
600.0	598.8	598.9	598.5	1.2	1.2	136.67	15.1	-17.5	33.9	31.4	2.51	13.505		
700.0	698.2	698.4	697.8	1.5	1.4	137.28	15.7	-24.9	43.1	40.1	3.00	14.393		
800.0	797.5	798.0	797.1	1.8	1.7	137.67	16.3	-32.2	52.4	48.9	3.50	14.965		
900.0	896.9	897.6	896.4	2.1	1.9	137.94	16.9	-39.6	61.6	57.6	4.01	15.357		
1,000.0	996.2	997.2	995.7	2.4	2.2	138.15	17.5	-46.9	70.9	66.4	4.53	15.637		
1,100.0	1,095.6	1,096.7	1,095.0	2.7	2.4	138.30	18.2	-54.3	80.1	75.1	5.06	15.845		
1,200.0	1,194.9	1,196.3	1,194.3	3.0	2.7	138.43	18.8	-61.7	89.4	83.8	5.59	16.006		
1,300.0	1,294.3	1,295.9	1,293.6	3.4	3.0	138.53	19.4	-69.0	98.7	92.5	6.12	16.132		
1,400.0	1,393.6	1,395.4	1,392.9	3.7	3.2	138.61	20.0	-76.4	107.9	101.3	6.65	16.235		
1,500.0	1,493.0	1,495.0	1,492.2	4.0	3.5	138.68	20.6	-83.7	117.2	110.0	7.18	16.319		
1,600.0	1,592.3	1,594.6	1,591.5	4.3	3.7	138.74	21.2	-91.1	126.4	118.7	7.71	16.389		
1,700.0	1,691.7	1,694.1	1,690.8	4.6	4.0	138.79	21.8	-98.4	135.7	127.4	8.25	16.449		
1,800.0	1,791.0	1,793.7	1,790.1	4.9	4.3	138.84	22.4	-105.8	144.9	136.2	8.78	16.501		
1,900.0	1,890.4	1,893.3	1,889.4	5.2	4.5	138.88	23.0	-113.2	154.2	144.9	9.32	16.546		
2,000.0	1,989.7	1,992.9	1,988.7	5.5	4.8	138.91	23.6	-120.5	163.5	153.6	9.86	16.586		
2,100.0	2,089.1	2,092.4	2,088.0	5.9	5.1	138.95	24.2	-127.9	172.7	162.3	10.39	16.621		
2,200.0	2,188.4	2,192.0	2,187.3	6.2	5.3	138.97	24.8	-135.2	182.0	171.0	10.93	16.653		
2,300.0	2,287.8	2,291.6	2,286.6	6.5	5.6	139.00	25.4	-142.6	191.2	179.8	11.46	16.681		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 42D-2 - DD - Plan #1														Offset Site Error:	0.0 usft
Survey Program: 0-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		
0.0	0.0	0.0	0.0	0.0	0.0	-23.09	7.3	-3.1	7.9						
100.0	100.0	100.0	100.0	0.1	0.1	-23.09	7.3	-3.1	7.9	7.7	0.18	45.168			
200.0	200.0	200.0	200.0	0.3	0.3	-23.09	7.3	-3.1	7.9	7.3	0.62	12.673 CC			
255.8	255.8	255.8	255.8	0.4	0.4	117.72	7.3	-3.1	8.0	7.1	0.87	9.178			
300.0	300.0	300.0	300.0	0.5	0.5	117.46	7.3	-3.1	8.0	6.9	1.07	7.473 ES			
400.0	399.9	400.1	400.0	0.7	0.8	129.27	6.6	-4.4	9.8	8.3	1.52	6.492 SF			
500.0	499.5	500.2	499.9	1.0	1.0	133.08	3.5	-10.1	13.6	11.6	2.01	6.760			
600.0	598.8	600.0	599.5	1.2	1.2	134.78	-0.6	-17.5	18.2	15.7	2.48	7.339			
700.0	698.2	699.9	699.0	1.5	1.4	135.79	-4.6	-24.8	22.8	19.9	2.98	7.676			
800.0	797.5	799.8	798.5	1.8	1.7	136.47	-8.6	-32.2	27.5	24.0	3.48	7.886			
900.0	896.9	899.7	898.1	2.1	2.0	136.94	-12.6	-39.6	32.1	28.1	4.00	8.026			
1,000.0	996.2	999.6	997.6	2.4	2.2	137.30	-16.7	-46.9	36.7	32.2	4.52	8.124			
1,100.0	1,095.6	1,099.5	1,097.2	2.7	2.5	137.58	-20.7	-54.3	41.3	36.3	5.04	8.195			
1,200.0	1,194.9	1,199.4	1,196.7	3.0	2.8	137.80	-24.7	-61.7	46.0	40.4	5.57	8.249			
1,300.0	1,294.3	1,299.3	1,296.2	3.4	3.1	137.98	-28.7	-69.0	50.6	44.5	6.10	8.290			
1,400.0	1,393.6	1,399.2	1,395.8	3.7	3.3	138.13	-32.8	-76.4	55.2	48.6	6.64	8.323			
1,500.0	1,493.0	1,499.1	1,495.3	4.0	3.6	138.26	-36.8	-83.8	59.9	52.7	7.17	8.350			
1,600.0	1,592.3	1,599.0	1,594.8	4.3	3.9	138.37	-40.8	-91.1	64.5	56.8	7.70	8.372			
1,700.0	1,691.7	1,698.9	1,694.4	4.6	4.2	138.46	-44.8	-98.5	69.1	60.9	8.24	8.391			
1,800.0	1,791.0	1,798.8	1,793.9	4.9	4.4	138.55	-48.9	-105.9	73.7	65.0	8.77	8.407			
1,900.0	1,890.4	1,898.7	1,893.5	5.2	4.7	138.62	-52.9	-113.3	78.4	69.1	9.31	8.420			
2,000.0	1,989.7	1,998.5	1,993.0	5.5	5.0	138.69	-56.9	-120.6	83.0	73.2	9.84	8.432			
2,100.0	2,089.1	2,098.4	2,092.5	5.9	5.3	138.74	-60.9	-128.0	87.6	77.3	10.38	8.442			
2,200.0	2,188.4	2,198.3	2,192.1	6.2	5.5	138.80	-65.0	-135.4	92.3	81.4	10.92	8.452			
2,300.0	2,287.8	2,298.2	2,291.6	6.5	5.8	138.84	-69.0	-142.7	96.9	85.4	11.45	8.460			
2,400.0	2,387.1	2,398.1	2,391.2	6.8	6.1	138.88	-73.0	-150.1	101.5	89.5	11.99	8.467			
2,500.0	2,486.5	2,498.0	2,490.7	7.1	6.4	138.92	-77.1	-157.5	106.2	93.6	12.53	8.474			
2,600.0	2,585.8	2,597.9	2,590.2	7.4	6.6	138.96	-81.1	-164.8	110.8	97.7	13.07	8.480			
2,700.0	2,685.2	2,697.8	2,689.8	7.7	6.9	138.99	-85.1	-172.2	115.4	101.8	13.60	8.485			
2,800.0	2,784.5	2,797.7	2,789.3	8.1	7.2	139.02	-89.1	-179.6	120.1	105.9	14.14	8.490			
2,900.0	2,883.9	2,897.6	2,888.9	8.4	7.5	139.05	-93.2	-186.9	124.7	110.0	14.68	8.495			
3,000.0	2,983.2	2,997.5	2,988.4	8.7	7.7	139.08	-97.2	-194.3	129.3	114.1	15.22	8.500			
3,100.0	3,082.6	3,097.4	3,087.9	9.0	8.0	139.10	-101.2	-201.7	134.0	118.2	15.75	8.504			
3,200.0	3,181.9	3,197.3	3,187.5	9.3	8.3	139.12	-105.2	-209.0	138.6	122.3	16.29	8.508			
3,300.0	3,281.3	3,297.2	3,287.0	9.6	8.6	139.15	-109.3	-216.4	143.2	126.4	16.83	8.511			
3,400.0	3,380.6	3,397.0	3,386.6	9.9	8.8	139.17	-113.3	-223.8	147.9	130.5	17.36	8.515			
3,500.0	3,480.0	3,496.9	3,486.1	10.3	9.1	139.18	-117.3	-231.1	152.5	134.6	17.90	8.518			
3,600.0	3,579.3	3,596.8	3,585.6	10.6	9.4	139.20	-121.3	-238.5	157.1	138.7	18.44	8.521			
3,700.0	3,678.7	3,696.7	3,685.2	10.9	9.7	139.22	-125.4	-245.9	161.7	142.8	18.98	8.524			
3,800.0	3,778.0	3,796.6	3,784.7	11.2	10.0	139.23	-129.4	-253.2	166.4	146.9	19.51	8.527			
3,900.0	3,877.4	3,896.5	3,884.2	11.5	10.2	139.25	-133.4	-260.6	171.0	151.0	20.05	8.529			
4,000.0	3,976.7	3,996.4	3,983.8	11.8	10.5	139.26	-137.4	-268.0	175.6	155.1	20.59	8.532			
4,100.0	4,076.1	4,096.3	4,083.3	12.1	10.8	139.28	-141.5	-275.3	180.3	159.2	21.12	8.534			
4,200.0	4,175.4	4,196.2	4,182.9	12.5	11.1	139.29	-145.5	-282.7	184.9	163.2	21.66	8.537			
4,300.0	4,274.8	4,296.1	4,282.4	12.8	11.3	139.30	-149.5	-290.1	189.5	167.3	22.20	8.539			
4,400.0	4,374.1	4,396.0	4,381.9	13.1	11.6	139.31	-153.5	-297.5	194.2	171.4	22.73	8.541			
4,500.0	4,473.5	4,495.9	4,481.5	13.4	11.9	139.32	-157.6	-304.8	198.8	175.5	23.27	8.544			

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 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S2-T7S-R97W (Puckett Pad) - PUCKETT 43B-2 - DD - Plan #1													Offset Site Error: 0.0 usft	
Survey Program: 0-ISCSWA MWD													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	158.81	-8.0	3.1	8.6					
100.0	100.0	100.0	100.0	0.1	0.1	158.81	-8.0	3.1	8.6	8.4	0.18	48.993		
200.0	200.0	200.0	200.0	0.3	0.3	158.81	-8.0	3.1	8.6	8.0	0.62	13.746	CC, ES	
300.0	300.0	299.8	299.7	0.5	0.5	-55.74	-9.3	2.4	9.5	8.4	1.05	9.010		
400.0	399.9	399.3	399.0	0.7	0.7	-49.38	-14.9	-0.8	12.0	10.5	1.50	8.031		
500.0	499.5	498.7	497.7	1.0	1.0	-48.21	-25.1	-6.5	15.3	13.3	2.01	7.589	SF	
600.0	598.8	598.5	596.4	1.2	1.3	-46.42	-38.2	-13.8	19.8	17.3	2.52	7.875		
700.0	698.2	698.3	695.1	1.5	1.7	-45.19	-51.5	-21.2	24.4	21.4	3.03	8.052		
800.0	797.5	798.2	793.8	1.8	2.0	-44.34	-64.7	-28.6	29.0	25.5	3.56	8.153		
900.0	896.9	898.1	892.6	2.1	2.4	-43.73	-78.0	-36.0	33.6	29.5	4.09	8.215		
1,000.0	996.2	998.0	991.3	2.4	2.7	-43.27	-91.2	-43.5	38.3	33.6	4.63	8.255		
1,100.0	1,095.6	1,097.9	1,090.0	2.7	3.1	-42.91	-104.4	-50.9	42.9	37.7	5.18	8.283		
1,200.0	1,194.9	1,197.8	1,188.8	3.0	3.4	-42.61	-117.7	-58.3	47.5	41.8	5.72	8.302		
1,300.0	1,294.3	1,297.7	1,287.5	3.4	3.8	-42.37	-130.9	-65.7	52.1	45.9	6.27	8.316		
1,400.0	1,393.6	1,397.6	1,386.2	3.7	4.2	-42.17	-144.2	-73.1	56.7	49.9	6.82	8.326		
1,500.0	1,493.0	1,497.5	1,485.0	4.0	4.5	-42.00	-157.4	-80.5	61.4	54.0	7.36	8.334		
1,600.0	1,592.3	1,597.4	1,583.7	4.3	4.9	-41.85	-170.6	-87.9	66.0	58.1	7.91	8.340		
1,700.0	1,691.7	1,697.3	1,682.4	4.6	5.3	-41.72	-183.9	-95.3	70.6	62.2	8.46	8.345		
1,800.0	1,791.0	1,797.2	1,781.2	4.9	5.6	-41.61	-197.1	-102.7	75.2	66.2	9.01	8.349		
1,900.0	1,890.4	1,897.1	1,879.9	5.2	6.0	-41.51	-210.4	-110.1	79.9	70.3	9.56	8.352		
2,000.0	1,989.7	1,997.0	1,978.6	5.5	6.4	-41.42	-223.6	-117.6	84.5	74.4	10.11	8.354		
2,100.0	2,089.1	2,096.8	2,077.4	5.9	6.7	-41.35	-236.8	-125.0	89.1	78.5	10.66	8.357		
2,200.0	2,188.4	2,196.7	2,176.1	6.2	7.1	-41.27	-250.1	-132.4	93.7	82.5	11.22	8.359		
2,300.0	2,287.8	2,296.6	2,274.9	6.5	7.5	-41.21	-263.3	-139.8	98.4	86.6	11.77	8.360		
2,400.0	2,387.1	2,396.5	2,373.6	6.8	7.8	-41.15	-276.6	-147.2	103.0	90.7	12.32	8.362		
2,500.0	2,486.5	2,496.4	2,472.3	7.1	8.2	-41.10	-289.8	-154.6	107.6	94.8	12.87	8.363		
2,600.0	2,585.8	2,596.3	2,571.1	7.4	8.6	-41.05	-303.0	-162.0	112.2	98.8	13.42	8.364		
2,700.0	2,685.2	2,696.2	2,669.8	7.7	8.9	-41.00	-316.3	-169.4	116.9	102.9	13.97	8.365		
2,800.0	2,784.5	2,796.1	2,768.5	8.1	9.3	-40.96	-329.5	-176.8	121.5	107.0	14.52	8.366		
2,900.0	2,883.9	2,896.0	2,867.3	8.4	9.7	-40.92	-342.8	-184.2	126.1	111.1	15.07	8.367		
3,000.0	2,983.2	2,995.9	2,966.0	8.7	10.0	-40.89	-356.0	-191.7	130.8	115.1	15.62	8.368		
3,100.0	3,082.6	3,095.8	3,064.7	9.0	10.4	-40.85	-369.2	-199.1	135.4	119.2	16.18	8.369		
3,200.0	3,181.9	3,195.7	3,163.5	9.3	10.8	-40.82	-382.5	-206.5	140.0	123.3	16.73	8.370		
3,300.0	3,281.3	3,295.6	3,262.2	9.6	11.1	-40.79	-395.7	-213.9	144.6	127.4	17.28	8.371		
3,400.0	3,380.6	3,395.5	3,360.9	9.9	11.5	-40.76	-409.0	-221.3	149.3	131.4	17.83	8.372		
3,500.0	3,480.0	3,495.3	3,459.7	10.3	11.9	-40.74	-422.2	-228.7	153.9	135.5	18.38	8.373		
3,600.0	3,579.3	3,595.2	3,558.4	10.6	12.2	-40.71	-435.4	-236.1	158.5	139.6	18.93	8.373		
3,700.0	3,678.7	3,695.1	3,657.1	10.9	12.6	-40.69	-448.7	-243.5	163.1	143.7	19.48	8.374		
3,800.0	3,778.0	3,795.0	3,755.9	11.2	13.0	-40.67	-461.9	-250.9	167.8	147.7	20.03	8.375		
3,900.0	3,877.4	3,894.9	3,854.6	11.5	13.3	-40.65	-475.2	-258.3	172.4	151.8	20.58	8.376		
4,000.0	3,976.7	3,994.8	3,953.3	11.8	13.7	-40.63	-488.4	-265.7	177.0	155.9	21.13	8.376		
4,100.0	4,076.1	4,094.7	4,052.1	12.1	14.1	-40.61	-501.6	-273.2	181.6	160.0	21.68	8.377		
4,200.0	4,175.4	4,194.6	4,150.8	12.5	14.4	-40.59	-514.9	-280.6	186.3	164.0	22.23	8.378		
4,300.0	4,274.8	4,294.5	4,249.5	12.8	14.8	-40.57	-528.1	-288.0	190.9	168.1	22.78	8.379		
4,400.0	4,374.1	4,394.4	4,348.3	13.1	15.2	-40.56	-541.4	-295.4	195.5	172.2	23.33	8.379		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 43A-2
Project:	Garfield County, CO	TVD Reference:	KB=22' @ 8499.0usft
Reference Site:	S2-T7S-R97W (Puckett Pad)	MD Reference:	KB=22' @ 8499.0usft
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 43A-2	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

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

Coordinates are relative to: PUCKETT 43A-2
Coordinate System is US State Plane 1927 (Exact solution), Colorado Central 502
Grid Convergence at Surface is: -1.69°

