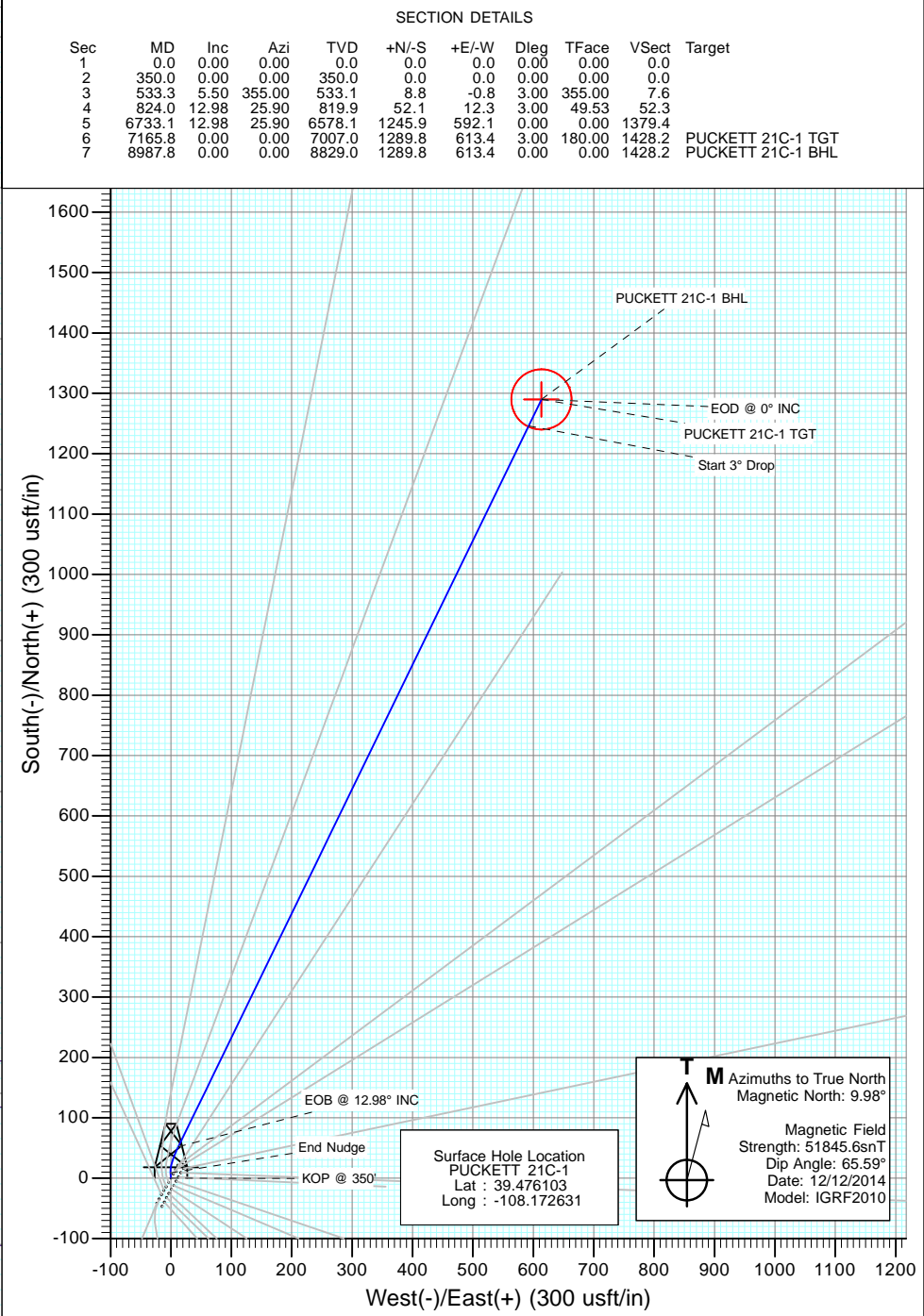
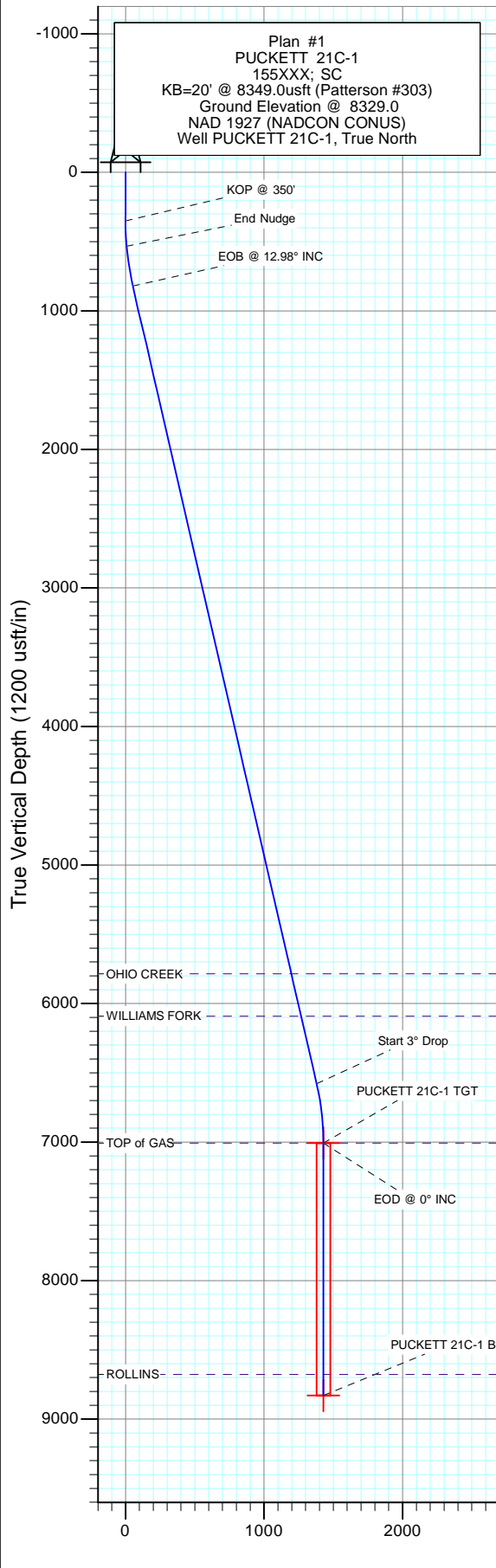
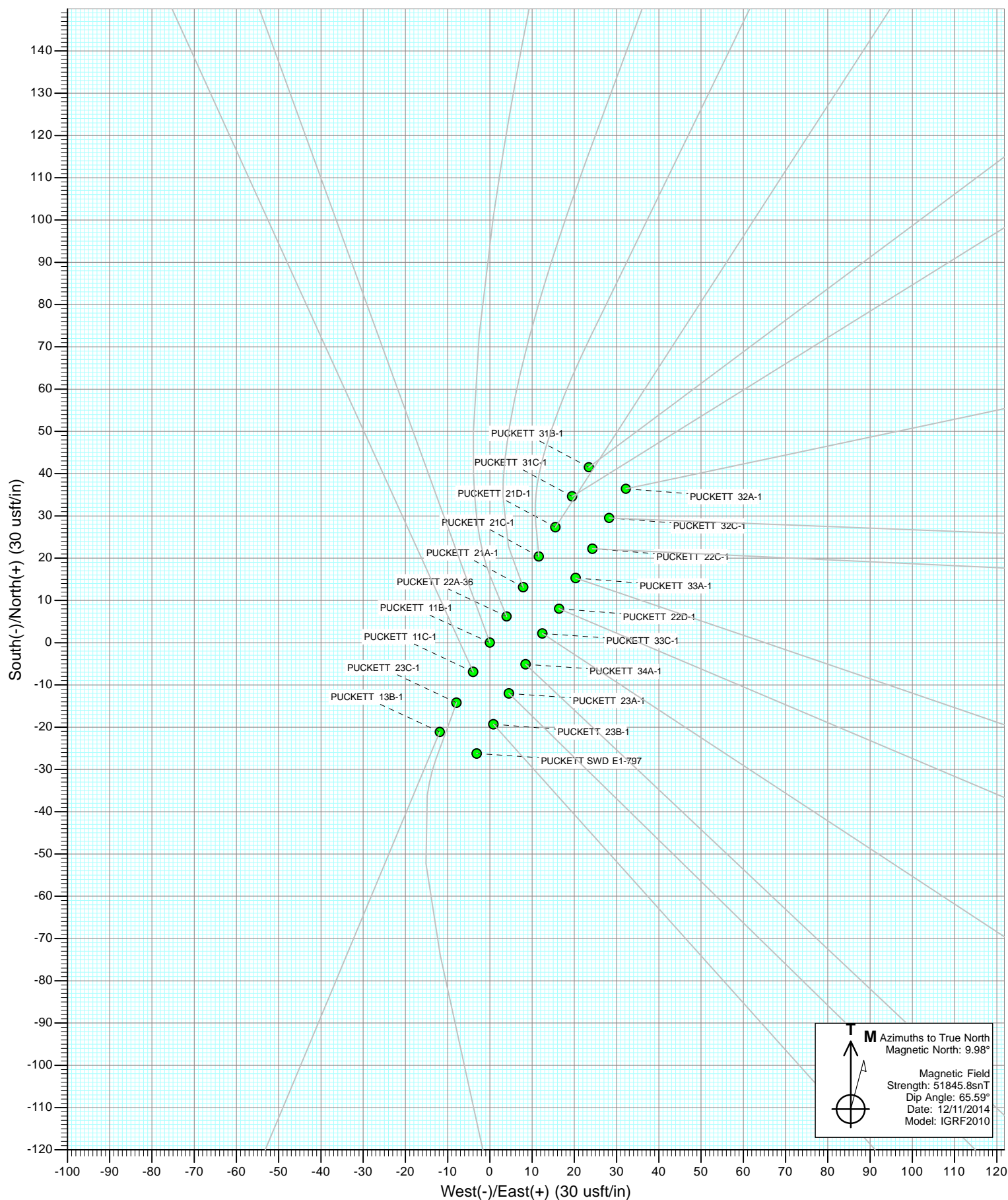


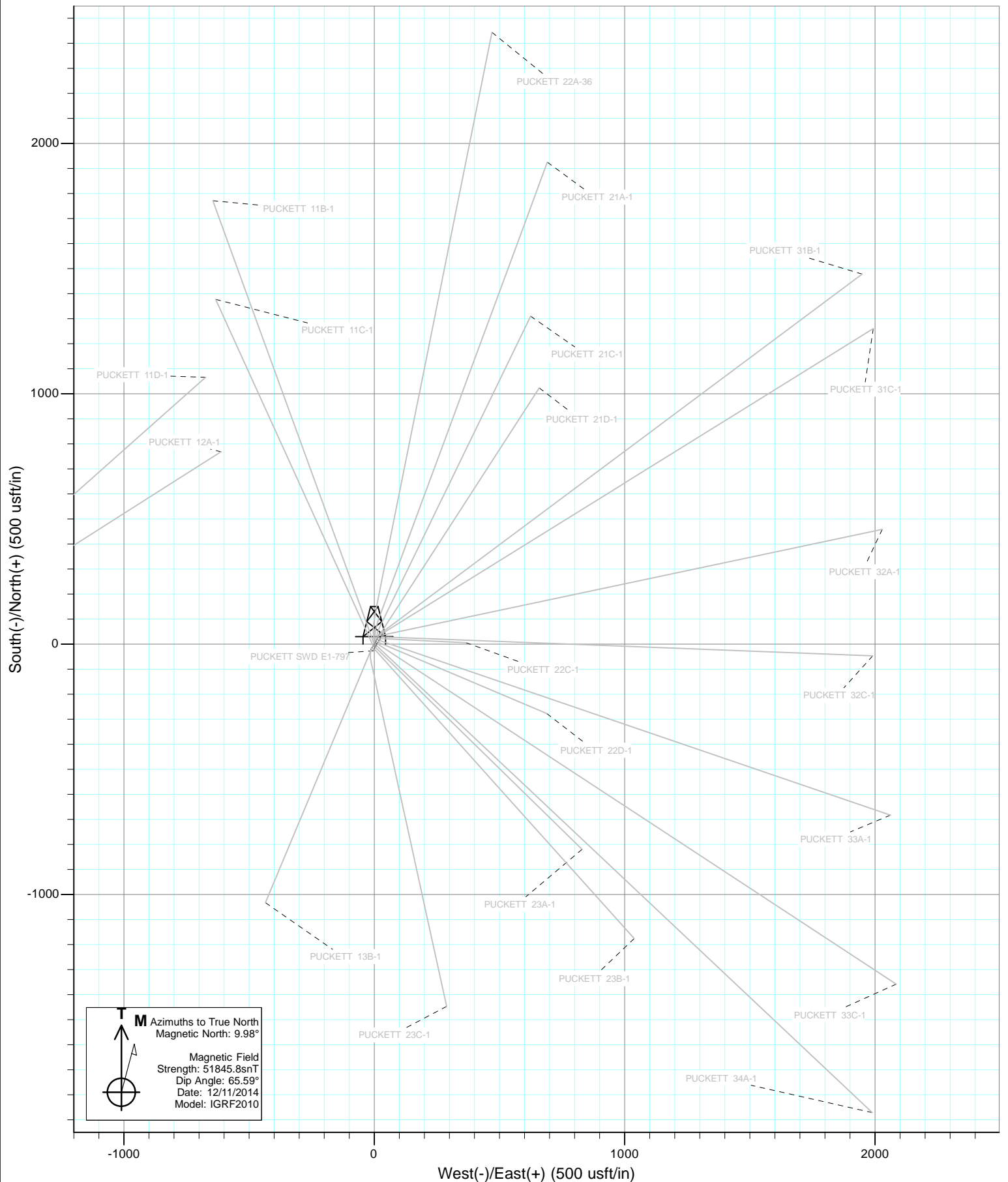


Project: Garfield County, CO
Site: S1-T7S-R97W (Mesa E1 797)
Well: PUCKETT 21C-1
Wellbore: DD
Design: Plan #1



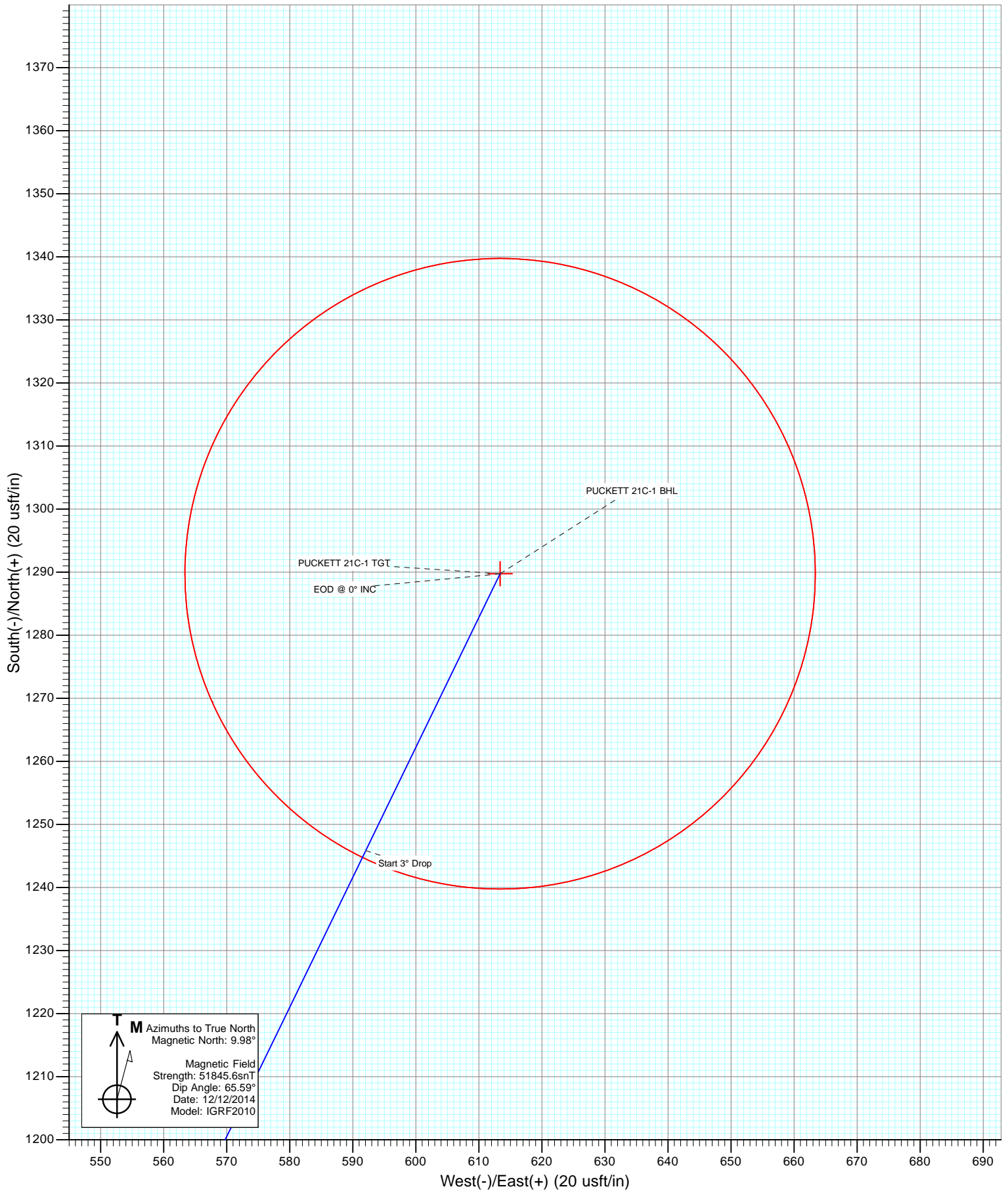
DESIGN TARGET DETAILS						
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PUCKETT 21C-1 TGT	1289.8	613.4	610655.47	1246309.37	39.479644	-108.170458
PUCKETT 21C-1 BHL	1289.8	613.4	610655.47	1246309.37	39.479644	-108.170458







Project: Garfield County, CO
Site: S1-T7S-R97W (Mesa E1 797)
Well: PUCKETT 21C-1
Wellbore: DD
Design: Plan #1



Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Project:	Garfield County, CO	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site:	S1-T7S-R97W (Mesa E1 797)	North Reference:	True
Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

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

Site		S1-T7S-R97W (Mesa E1 797)			
Site Position:		Northing:	609,370.34 usft	Latitude:	39.476064
From:	Lat/Long	Easting:	1,245,650.28 usft	Longitude:	-108.172658
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	-1.69 °

Well	PUCKETT 21C-1					
Well Position	+N/-S	0.0 usft	Northing:	609,384.31 usft	Latitude:	39.476103
	+E/-W	0.0 usft	Easting:	1,245,658.32 usft	Longitude:	-108.172631
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	8,329.0 usft

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

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.0	0.0	0.0	25.43

Plan Sections										
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Dogleg Rate	Build Rate	Turn Rate	TFO	Target
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)	(°)	
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
350.0	0.00	0.00	350.0	0.0	0.0	0.00	0.00	0.00	0.00	
533.3	5.50	355.00	533.1	8.8	-0.8	3.00	3.00	0.00	355.00	
824.0	12.98	25.90	819.9	52.1	12.3	3.00	2.57	10.63	49.53	
6,733.1	12.98	25.90	6,578.1	1,245.9	592.1	0.00	0.00	0.00	0.00	
7,165.8	0.00	0.00	7,007.0	1,289.8	613.4	3.00	-3.00	0.00	180.00	PUCKETT 21C-1 TG1
8,987.8	0.00	0.00	8,829.0	1,289.8	613.4	0.00	0.00	0.00	0.00	PUCKETT 21C-1 BHL

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Project:	Garfield County, CO	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site:	S1-T7S-R97W (Mesa E1 797)	North Reference:	True
Well:	PUCKETT 21C-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	
350.0	0.00	0.00	350.0	0.0	0.0	0.0	0.00	0.00	KOP @ 350'
400.0	1.50	355.00	400.0	0.7	-0.1	0.6	3.00	3.00	
500.0	4.50	355.00	499.8	5.9	-0.5	5.1	3.00	3.00	
533.3	5.50	355.00	533.1	8.8	-0.8	7.6	3.00	3.00	End Nudge
600.0	6.97	7.64	599.3	15.9	-0.5	14.2	3.00	2.20	
700.0	9.53	18.60	698.3	29.8	2.9	28.2	3.00	2.57	
800.0	12.30	24.80	796.5	47.3	10.1	47.1	3.00	2.76	
824.0	12.98	25.90	819.9	52.1	12.3	52.3	3.00	2.83	EOB @ 12.98° INC
900.0	12.98	25.90	893.9	67.4	19.8	69.4	0.00	0.00	
1,000.0	12.98	25.90	991.4	87.6	29.6	91.8	0.00	0.00	
1,100.0	12.98	25.90	1,088.8	107.8	39.4	114.3	0.00	0.00	
1,200.0	12.98	25.90	1,186.3	128.0	49.2	136.8	0.00	0.00	
1,300.0	12.98	25.90	1,283.7	148.2	59.0	159.2	0.00	0.00	
1,400.0	12.98	25.90	1,381.2	168.4	68.8	181.7	0.00	0.00	
1,500.0	12.98	25.90	1,478.6	188.6	78.6	204.1	0.00	0.00	
1,600.0	12.98	25.90	1,576.1	208.8	88.4	226.6	0.00	0.00	
1,700.0	12.98	25.90	1,673.5	229.1	98.2	249.0	0.00	0.00	
1,800.0	12.98	25.90	1,771.0	249.3	108.1	271.5	0.00	0.00	
1,900.0	12.98	25.90	1,868.4	269.5	117.9	294.0	0.00	0.00	
2,000.0	12.98	25.90	1,965.8	289.7	127.7	316.4	0.00	0.00	
2,100.0	12.98	25.90	2,063.3	309.9	137.5	338.9	0.00	0.00	
2,200.0	12.98	25.90	2,160.7	330.1	147.3	361.3	0.00	0.00	
2,300.0	12.98	25.90	2,258.2	350.3	157.1	383.8	0.00	0.00	
2,400.0	12.98	25.90	2,355.6	370.5	166.9	406.3	0.00	0.00	
2,500.0	12.98	25.90	2,453.1	390.7	176.7	428.7	0.00	0.00	
2,600.0	12.98	25.90	2,550.5	410.9	186.6	451.2	0.00	0.00	
2,700.0	12.98	25.90	2,648.0	431.1	196.4	473.6	0.00	0.00	
2,800.0	12.98	25.90	2,745.4	451.3	206.2	496.1	0.00	0.00	
2,900.0	12.98	25.90	2,842.9	471.5	216.0	518.5	0.00	0.00	
3,000.0	12.98	25.90	2,940.3	491.7	225.8	541.0	0.00	0.00	
3,100.0	12.98	25.90	3,037.7	511.9	235.6	563.5	0.00	0.00	
3,200.0	12.98	25.90	3,135.2	532.1	245.4	585.9	0.00	0.00	
3,300.0	12.98	25.90	3,232.6	552.3	255.2	608.4	0.00	0.00	
3,400.0	12.98	25.90	3,330.1	572.5	265.0	630.8	0.00	0.00	
3,500.0	12.98	25.90	3,427.5	592.7	274.9	653.3	0.00	0.00	
3,600.0	12.98	25.90	3,525.0	612.9	284.7	675.8	0.00	0.00	
3,700.0	12.98	25.90	3,622.4	633.1	294.5	698.2	0.00	0.00	
3,800.0	12.98	25.90	3,719.9	653.3	304.3	720.7	0.00	0.00	
3,900.0	12.98	25.90	3,817.3	673.5	314.1	743.1	0.00	0.00	
4,000.0	12.98	25.90	3,914.8	693.7	323.9	765.6	0.00	0.00	
4,100.0	12.98	25.90	4,012.2	713.9	333.7	788.0	0.00	0.00	
4,200.0	12.98	25.90	4,109.6	734.1	343.5	810.5	0.00	0.00	
4,300.0	12.98	25.90	4,207.1	754.3	353.3	833.0	0.00	0.00	
4,400.0	12.98	25.90	4,304.5	774.5	363.2	855.4	0.00	0.00	
4,500.0	12.98	25.90	4,402.0	794.7	373.0	877.9	0.00	0.00	
4,600.0	12.98	25.90	4,499.4	814.9	382.8	900.3	0.00	0.00	
4,700.0	12.98	25.90	4,596.9	835.1	392.6	922.8	0.00	0.00	
4,800.0	12.98	25.90	4,694.3	855.3	402.4	945.3	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Project:	Garfield County, CO	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site:	S1-T7S-R97W (Mesa E1 797)	North Reference:	True
Well:	PUCKETT 21C-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
4,900.0	12.98	25.90	4,791.8	875.5	412.2	967.7	0.00	0.00	
5,000.0	12.98	25.90	4,889.2	895.7	422.0	990.2	0.00	0.00	
5,100.0	12.98	25.90	4,986.7	915.9	431.8	1,012.6	0.00	0.00	
5,200.0	12.98	25.90	5,084.1	936.1	441.6	1,035.1	0.00	0.00	
5,300.0	12.98	25.90	5,181.5	956.3	451.5	1,057.5	0.00	0.00	
5,400.0	12.98	25.90	5,279.0	976.5	461.3	1,080.0	0.00	0.00	
5,500.0	12.98	25.90	5,376.4	996.8	471.1	1,102.5	0.00	0.00	
5,600.0	12.98	25.90	5,473.9	1,017.0	480.9	1,124.9	0.00	0.00	
5,700.0	12.98	25.90	5,571.3	1,037.2	490.7	1,147.4	0.00	0.00	
5,800.0	12.98	25.90	5,668.8	1,057.4	500.5	1,169.8	0.00	0.00	
5,900.0	12.98	25.90	5,766.2	1,077.6	510.3	1,192.3	0.00	0.00	
5,918.2	12.98	25.90	5,784.0	1,081.2	512.1	1,196.4	0.00	0.00	OHIO CREEK
6,000.0	12.98	25.90	5,863.7	1,097.8	520.1	1,214.8	0.00	0.00	
6,100.0	12.98	25.90	5,961.1	1,118.0	529.9	1,237.2	0.00	0.00	
6,200.0	12.98	25.90	6,058.6	1,138.2	539.8	1,259.7	0.00	0.00	
6,232.3	12.98	25.90	6,090.0	1,144.7	542.9	1,266.9	0.00	0.00	WILLIAMS FORK
6,300.0	12.98	25.90	6,156.0	1,158.4	549.6	1,282.1	0.00	0.00	
6,400.0	12.98	25.90	6,253.4	1,178.6	559.4	1,304.6	0.00	0.00	
6,500.0	12.98	25.90	6,350.9	1,198.8	569.2	1,327.0	0.00	0.00	
6,600.0	12.98	25.90	6,448.3	1,219.0	579.0	1,349.5	0.00	0.00	
6,700.0	12.98	25.90	6,545.8	1,239.2	588.8	1,372.0	0.00	0.00	
6,733.1	12.98	25.90	6,578.1	1,245.9	592.1	1,379.4	0.00	0.00	Start 3° Drop
6,800.0	10.97	25.90	6,643.5	1,258.4	598.1	1,393.3	3.00	-3.00	
6,900.0	7.97	25.90	6,742.1	1,273.2	605.3	1,409.7	3.00	-3.00	
7,000.0	4.97	25.90	6,841.5	1,283.3	610.2	1,421.0	3.00	-3.00	
7,100.0	1.97	25.90	6,941.3	1,288.7	612.9	1,427.1	3.00	-3.00	
7,165.8	0.00	0.00	7,007.0	1,289.8	613.4	1,428.2	3.00	-3.00	EOD @ 0° INC - TOP of GAS
7,200.0	0.00	0.00	7,041.2	1,289.8	613.4	1,428.2	0.00	0.00	
7,300.0	0.00	0.00	7,141.2	1,289.8	613.4	1,428.2	0.00	0.00	
7,400.0	0.00	0.00	7,241.2	1,289.8	613.4	1,428.2	0.00	0.00	
7,500.0	0.00	0.00	7,341.2	1,289.8	613.4	1,428.2	0.00	0.00	
7,600.0	0.00	0.00	7,441.2	1,289.8	613.4	1,428.2	0.00	0.00	
7,700.0	0.00	0.00	7,541.2	1,289.8	613.4	1,428.2	0.00	0.00	
7,800.0	0.00	0.00	7,641.2	1,289.8	613.4	1,428.2	0.00	0.00	
7,900.0	0.00	0.00	7,741.2	1,289.8	613.4	1,428.2	0.00	0.00	
8,000.0	0.00	0.00	7,841.2	1,289.8	613.4	1,428.2	0.00	0.00	
8,100.0	0.00	0.00	7,941.2	1,289.8	613.4	1,428.2	0.00	0.00	
8,200.0	0.00	0.00	8,041.2	1,289.8	613.4	1,428.2	0.00	0.00	
8,300.0	0.00	0.00	8,141.2	1,289.8	613.4	1,428.2	0.00	0.00	
8,400.0	0.00	0.00	8,241.2	1,289.8	613.4	1,428.2	0.00	0.00	
8,500.0	0.00	0.00	8,341.2	1,289.8	613.4	1,428.2	0.00	0.00	
8,600.0	0.00	0.00	8,441.2	1,289.8	613.4	1,428.2	0.00	0.00	
8,700.0	0.00	0.00	8,541.2	1,289.8	613.4	1,428.2	0.00	0.00	
8,800.0	0.00	0.00	8,641.2	1,289.8	613.4	1,428.2	0.00	0.00	
8,835.8	0.00	0.00	8,677.0	1,289.8	613.4	1,428.2	0.00	0.00	ROLLINS
8,900.0	0.00	0.00	8,741.2	1,289.8	613.4	1,428.2	0.00	0.00	
8,987.8	0.00	0.00	8,829.0	1,289.8	613.4	1,428.2	0.00	0.00	TD @ 8,987.8' MD

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Company:	Caerus Oil & Gas (NAD 27)	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Project:	Garfield County, CO	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site:	S1-T7S-R97W (Mesa E1 797)	North Reference:	True
Well:	PUCKETT 21C-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 21C-1 TGT	0.00	0.00	7,007.0	1,289.8	613.4	610,655.47	1,246,309.37	39.479644	-108.170458
- plan hits target center									
- Point									
PUCKETT 21C-1 BHL	0.00	0.00	8,829.0	1,289.8	613.4	610,655.47	1,246,309.37	39.479644	-108.170458
- plan hits target center									
- Circle (radius 50.0)									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
5,918.2	5,784.0	OHIO CREEK				
6,232.3	6,090.0	WILLIAMS FORK				
7,165.8	7,007.0	TOP of GAS				
8,835.8	8,677.0	ROLLINS				

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
350.0	350.0	0.0	0.0	KOP @ 350'
533.3	533.1	8.8	-0.8	End Nudge
824.0	819.9	52.1	12.3	EOB @ 12.98° INC
6,733.1	6,578.1	1,245.9	592.1	Start 3° Drop
7,165.8	7,007.0	1,289.8	613.4	EOD @ 0° INC
8,987.8	8,829.0	1,289.8	613.4	TD @ 8,987.8' MD

Caerus Oil & Gas (NAD 27)

Garfield County, CO

S1-T7S-R97W (Mesa E1 797)

PUCKETT 21C-1

DD

Plan #1

Anticollision Report

16 December, 2014

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

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

Survey Tool Program		Date	12/12/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
0.0	8,987.1	Plan #1 (DD)	ISCWSA MWD	MWD - Standard	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-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)		
Puckett 241-1						
Puckett 241-1 - STK - Plan #1						Out of range
S1-T7S-R97W (Mesa E1 797)						
PUCKETT 11B-1 - DD - Plan #1	433.9	434.8	18.5	16.8	10.710	CC, ES
PUCKETT 11B-1 - DD - Plan #1	500.0	500.7	19.6	17.5	9.489	SF
PUCKETT 11C-1 - DD - Plan #1	409.4	410.2	31.1	29.5	19.584	CC, ES
PUCKETT 11C-1 - DD - Plan #1	700.0	702.2	41.1	37.9	12.765	SF
PUCKETT 13B-1 - DD - Plan #1	200.0	200.0	47.7	47.0	75.756	CC, ES
PUCKETT 13B-1 - DD - Plan #1	500.0	489.6	75.4	73.3	35.779	SF
PUCKETT 21A-1 - HZ - Plan #1	432.7	433.0	6.9	5.3	4.101	CC, ES
PUCKETT 21A-1 - HZ - Plan #1	700.0	700.9	9.9	6.8	3.195	SF
PUCKETT 21D-1 - DD - Plan #1	473.3	473.0	6.5	4.7	3.472	CC, ES
PUCKETT 21D-1 - DD - Plan #1	500.0	499.6	6.7	4.7	3.368	SF
PUCKETT 22A-36 - DD - Plan #1	449.5	450.2	14.0	12.2	7.854	CC, ES
PUCKETT 22A-36 - DD - Plan #1	700.0	701.5	18.4	15.2	5.820	SF
PUCKETT 22C-1 - DD - Plan #1	402.0	401.9	12.8	11.3	8.337	CC, ES
PUCKETT 22C-1 - DD - Plan #1	500.0	499.8	13.8	11.8	6.926	SF
PUCKETT 22D-1 - DD - Plan #1	300.0	300.0	13.3	12.2	12.310	CC
PUCKETT 22D-1 - DD - Plan #1	327.9	327.9	13.4	12.2	11.092	ES
PUCKETT 22D-1 - DD - Plan #1	400.0	400.0	13.9	12.4	9.010	SF
PUCKETT 23A-1 - DD - Plan #1	300.0	300.0	33.2	32.1	30.750	CC
PUCKETT 23A-1 - DD - Plan #1	327.8	327.8	33.3	32.1	27.590	ES
PUCKETT 23A-1 - DD - Plan #1	500.0	499.8	38.8	36.8	18.658	SF
PUCKETT 23B-1 - DD - Plan #1	300.0	300.0	41.1	40.1	38.122	CC
PUCKETT 23B-1 - DD - Plan #1	327.8	327.8	41.2	40.0	34.184	ES
PUCKETT 23B-1 - DD - Plan #1	500.0	498.4	48.2	46.2	23.352	SF
PUCKETT 23C-1 - DD - Plan #1	300.0	300.0	39.7	38.6	36.808	CC, ES
PUCKETT 23C-1 - DD - Plan #1	500.0	494.6	54.9	52.8	26.658	SF
PUCKETT 31B-1 - DD - Plan #1	200.0	200.0	24.2	23.6	38.486	CC, ES
PUCKETT 31B-1 - DD - Plan #1	500.0	494.5	42.5	40.4	20.632	SF
PUCKETT 31C-1 - DD - Plan #1	233.7	233.7	16.3	15.5	20.818	CC, ES
PUCKETT 31C-1 - DD - Plan #1	400.0	398.6	21.1	19.5	13.689	SF
PUCKETT 32A-1 - DD - Plan #1	200.0	200.0	26.1	25.5	41.467	CC, ES
PUCKETT 32A-1 - DD - Plan #1	500.0	494.8	42.6	40.6	21.127	SF
PUCKETT 32C-1 - DD - Plan #1	300.0	300.0	19.0	17.9	17.592	CC, ES
PUCKETT 32C-1 - DD - Plan #1	400.0	399.1	21.0	19.5	13.834	SF
PUCKETT 33A-1 - DD - Plan #1	300.0	300.0	10.1	9.1	9.390	CC, ES
PUCKETT 33A-1 - DD - Plan #1	400.0	399.6	11.9	10.4	7.828	SF
PUCKETT 33C-1 - DD - Plan #1	234.5	234.5	18.2	17.5	23.243	CC, ES
PUCKETT 33C-1 - DD - Plan #1	400.0	398.8	22.8	21.3	14.928	SF
PUCKETT 34A-1 - DD - Plan #1	300.0	300.0	25.7	24.6	23.815	CC
PUCKETT 34A-1 - DD - Plan #1	327.8	327.8	25.8	24.6	21.388	ES
PUCKETT 34A-1 - DD - Plan #1	500.0	498.7	33.1	31.1	15.982	SF
PUCKETT SWD E1-797 - VH - Plan #1	300.0	300.0	48.9	47.8	45.308	CC
PUCKETT SWD E1-797 - VH - Plan #1	327.8	327.8	49.0	47.8	40.613	ES
PUCKETT SWD E1-797 - VH - Plan #1	600.0	599.3	64.2	61.5	24.390	SF

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT 11B-1 - DD - Plan #1												Offset Site Error: 0.0 usft	
Survey Program: 0-ISCSWA MWD												Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-150.43	-20.4	-11.6	23.5				
100.0	100.0	100.0	100.0	0.1	0.1	-150.43	-20.4	-11.6	23.5	23.3	0.18	130.423	
200.0	200.0	200.0	200.0	0.3	0.3	-150.43	-20.4	-11.6	23.5	22.8	0.63	37.264	
300.0	300.0	300.7	300.7	0.5	0.5	-145.12	-17.9	-12.5	21.8	20.8	1.08	20.164	
400.0	400.0	400.9	400.6	0.8	0.8	-121.36	-10.5	-15.2	18.8	17.2	1.55	12.094	
433.9	433.9	434.8	434.2	0.8	0.9	-113.01	-6.8	-16.5	18.5	16.8	1.73	10.710	CC, ES
500.0	499.8	500.7	499.4	1.0	1.1	-96.89	1.8	-19.6	19.6	17.5	2.06	9.489	SF
600.0	599.3	600.0	597.1	1.2	1.4	-90.56	18.8	-25.8	25.6	23.0	2.63	9.720	
700.0	698.3	698.0	692.3	1.5	1.8	-91.14	40.3	-33.6	38.5	35.2	3.27	11.789	
800.0	796.5	795.1	785.6	1.9	2.3	-93.05	65.9	-43.0	57.2	53.2	3.99	14.324	
900.0	893.9	892.9	879.0	2.2	2.9	-93.96	92.8	-52.8	78.3	73.5	4.81	16.285	
1,000.0	991.4	990.6	972.5	2.7	3.4	-94.04	119.7	-62.6	99.4	93.7	5.66	17.556	
1,100.0	1,088.8	1,088.3	1,065.9	3.1	4.0	-94.08	146.7	-72.4	120.5	114.0	6.54	18.430	
1,200.0	1,186.3	1,186.1	1,159.4	3.5	4.6	-94.12	173.6	-82.2	141.6	134.2	7.43	19.060	
1,300.0	1,283.7	1,283.8	1,252.8	4.0	5.1	-94.14	200.5	-92.0	162.7	154.4	8.33	19.531	
1,400.0	1,381.2	1,381.6	1,346.3	4.4	5.7	-94.16	227.5	-101.8	183.9	174.6	9.24	19.896	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT 11C-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
0.0	0.0	0.0	0.0	0.0	0.0	-150.39	-27.3	-15.5	31.4				
100.0	100.0	100.0	100.0	0.1	0.1	-150.39	-27.3	-15.5	31.4	31.2	0.18	174.743	
200.0	200.0	200.0	200.0	0.3	0.3	-150.39	-27.3	-15.5	31.4	30.8	0.63	49.927	
300.0	300.0	300.0	300.0	0.5	0.5	-150.39	-27.3	-15.5	31.4	30.3	1.08	29.124	
400.0	400.0	400.7	400.7	0.8	0.8	-143.85	-26.0	-16.1	31.1	29.6	1.54	20.204	
409.4	409.4	410.2	410.2	0.8	0.8	-143.53	-25.6	-16.3	31.1	29.5	1.59	19.584	CC, ES
500.0	499.8	501.6	501.3	1.0	1.0	-139.53	-19.9	-18.9	31.7	29.6	2.04	15.495	
600.0	599.3	602.2	601.2	1.2	1.3	-144.63	-9.0	-23.8	34.2	31.6	2.60	13.174	
700.0	698.3	702.2	699.7	1.5	1.6	-143.01	6.5	-30.9	41.1	37.9	3.22	12.765	SF
800.0	796.5	801.0	796.1	1.9	2.0	-136.84	26.4	-39.9	54.2	50.3	3.93	13.780	
900.0	893.9	899.0	891.3	2.2	2.4	-130.56	47.8	-49.7	72.2	67.5	4.66	15.487	
1,000.0	991.4	997.1	986.4	2.7	2.9	-126.26	69.3	-59.4	91.0	85.6	5.44	16.743	
1,100.0	1,088.8	1,095.1	1,081.6	3.1	3.3	-123.44	90.7	-69.2	110.1	103.9	6.24	17.635	
1,200.0	1,186.3	1,193.1	1,176.7	3.5	3.8	-121.46	112.2	-78.9	129.4	122.4	7.08	18.293	
1,300.0	1,283.7	1,291.2	1,271.9	4.0	4.3	-119.99	133.7	-88.7	148.9	140.9	7.92	18.793	
1,400.0	1,381.2	1,389.2	1,367.0	4.4	4.7	-118.86	155.1	-98.4	168.4	159.6	8.78	19.184	
1,500.0	1,478.6	1,487.2	1,462.2	4.9	5.2	-117.96	176.6	-108.2	187.9	178.3	9.64	19.498	

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT 13B-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	-150.57	-41.5	-23.4	47.7					
100.0	100.0	100.0	100.0	0.1	0.1	-150.57	-41.5	-23.4	47.7	47.5	0.18	265.146		
200.0	200.0	200.0	200.0	0.3	0.3	-150.57	-41.5	-23.4	47.7	47.0	0.63	75.756 CC, ES		
300.0	300.0	297.5	297.5	0.5	0.5	-150.90	-43.8	-24.4	50.2	49.2	1.06	47.372		
400.0	400.0	394.4	394.1	0.8	0.7	-146.99	-50.6	-27.2	58.4	56.8	1.54	37.997		
500.0	499.8	489.6	488.5	1.0	1.0	-149.69	-61.7	-31.9	75.4	73.3	2.11	35.779 SF		
600.0	599.3	581.6	579.1	1.2	1.3	-165.08	-76.6	-38.1	101.9	99.2	2.72	37.466		
700.0	698.3	670.0	665.3	1.5	1.7	-177.12	-94.6	-45.6	137.6	134.2	3.34	41.170		
800.0	796.5	760.8	753.4	1.9	2.1	176.50	-114.7	-54.0	179.5	175.6	3.92	45.734		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT 21A-1 - HZ - Plan #1													Offset Site Error: 0.0 usft	
Survey Program: 0-ISCSWA MWD													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance							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	-153.26	-7.3	-3.7	8.2					
100.0	100.0	100.0	100.0	0.1	0.1	-153.26	-7.3	-3.7	8.2	8.0	0.18	45.362		
200.0	200.0	200.0	200.0	0.3	0.3	-153.26	-7.3	-3.7	8.2	7.5	0.63	12.961		
300.0	300.0	300.0	300.0	0.5	0.5	-153.26	-7.3	-3.7	8.2	7.1	1.08	7.560		
400.0	400.0	400.2	400.2	0.8	0.8	-135.48	-4.8	-4.6	7.1	5.6	1.54	4.614		
432.7	432.7	433.0	432.9	0.8	0.8	-127.83	-2.9	-5.3	6.9	5.3	1.69	4.101	CC, ES	
500.0	499.8	500.3	500.0	1.0	1.0	-111.26	2.6	-7.2	7.4	5.4	2.01	3.714		
600.0	599.3	600.6	599.5	1.2	1.3	-107.80	14.5	-8.5	8.1	5.6	2.52	3.236		
700.0	698.3	700.9	698.4	1.5	1.6	-102.89	30.8	-6.9	9.9	6.8	3.10	3.195	SF	
800.0	796.5	801.0	796.3	1.9	1.9	-96.76	51.3	-2.4	13.0	9.3	3.78	3.449		
900.0	893.9	901.0	892.9	2.2	2.4	-85.00	76.0	5.1	17.1	12.5	4.56	3.736		
1,000.0	991.4	1,000.6	987.7	2.7	2.9	-64.78	104.6	15.2	22.5	17.2	5.26	4.273		
1,100.0	1,088.8	1,100.1	1,082.1	3.1	3.5	-50.84	134.3	26.2	30.3	24.5	5.85	5.180		
1,200.0	1,186.3	1,199.5	1,176.4	3.5	4.1	-42.86	164.0	37.2	39.2	32.7	6.42	6.097		
1,300.0	1,283.7	1,299.0	1,270.7	4.0	4.7	-37.88	193.6	48.1	48.5	41.5	7.00	6.925		
1,400.0	1,381.2	1,398.5	1,365.0	4.4	5.3	-34.52	223.3	59.1	58.0	50.5	7.59	7.649		
1,500.0	1,478.6	1,498.0	1,459.4	4.9	5.9	-32.12	253.0	70.0	67.8	59.6	8.19	8.277		
1,600.0	1,576.1	1,597.5	1,553.7	5.4	6.5	-30.32	282.7	81.0	77.5	68.8	8.79	8.823		
1,700.0	1,673.5	1,697.0	1,648.0	5.8	7.1	-28.93	312.4	92.0	87.4	78.0	9.40	9.299		
1,800.0	1,771.0	1,796.5	1,742.3	6.3	7.7	-27.81	342.1	102.9	97.3	87.3	10.01	9.716		
1,900.0	1,868.4	1,896.0	1,836.7	6.7	8.3	-26.91	371.8	113.9	107.2	96.6	10.63	10.085		
2,000.0	1,965.8	1,995.5	1,931.0	7.2	8.9	-26.16	401.5	124.9	117.2	105.9	11.25	10.412		
2,100.0	2,063.3	2,095.0	2,025.3	7.7	9.5	-25.52	431.2	135.8	127.1	115.3	11.88	10.705		
2,200.0	2,160.7	2,194.5	2,119.6	8.1	10.2	-24.98	460.9	146.8	137.1	124.6	12.50	10.968		
2,300.0	2,258.2	2,294.0	2,213.9	8.6	10.8	-24.51	490.6	157.7	147.1	134.0	13.13	11.205		
2,400.0	2,355.6	2,393.5	2,308.3	9.1	11.4	-24.10	520.3	168.7	157.1	143.3	13.76	11.420		
2,500.0	2,453.1	2,493.0	2,402.6	9.5	12.0	-23.74	549.9	179.7	167.1	152.7	14.39	11.615		
2,600.0	2,550.5	2,592.4	2,496.9	10.0	12.6	-23.42	579.6	190.6	177.1	162.1	15.02	11.795		
2,700.0	2,648.0	2,691.9	2,591.2	10.5	13.3	-23.14	609.3	201.6	187.1	171.5	15.65	11.959		
2,800.0	2,745.4	2,791.4	2,685.6	10.9	13.9	-22.88	639.0	212.6	197.2	180.9	16.28	12.110		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT 21D-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		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	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	29.73	6.9	4.0	8.0					
100.0	100.0	100.0	100.0	0.1	0.1	29.73	6.9	4.0	8.0	7.8	0.18	44.320		
200.0	200.0	200.0	200.0	0.3	0.3	29.73	6.9	4.0	8.0	7.3	0.63	12.663		
300.0	300.0	300.0	300.0	0.5	0.5	29.73	6.9	4.0	8.0	6.9	1.08	7.387		
400.0	400.0	400.0	400.0	0.8	0.8	37.61	6.9	4.0	7.4	5.9	1.54	4.837		
473.3	473.2	473.0	472.9	0.9	0.9	55.70	8.1	4.7	6.5	4.7	1.88	3.472 CC, ES		
500.0	499.8	499.6	499.5	1.0	1.0	66.03	9.1	5.4	6.7	4.7	1.99	3.368 SF		
600.0	599.3	599.1	598.8	1.2	1.2	83.82	15.6	9.6	10.1	7.7	2.46	4.113		
700.0	698.3	698.8	697.6	1.5	1.5	84.57	26.5	16.6	14.1	11.1	3.00	4.696		
800.0	796.5	798.6	795.8	1.9	1.8	84.97	41.4	26.2	17.2	13.6	3.65	4.727		
900.0	893.9	898.5	893.9	2.2	2.2	95.85	57.1	36.4	19.6	15.2	4.39	4.455		
1,000.0	991.4	998.4	992.0	2.7	2.5	105.36	72.8	46.5	22.5	17.4	5.15	4.373		
1,100.0	1,088.8	1,098.3	1,090.2	3.1	2.9	112.51	88.5	56.6	26.0	20.1	5.90	4.406		
1,200.0	1,186.3	1,198.1	1,188.3	3.5	3.3	117.93	104.1	66.8	29.7	23.1	6.62	4.493		
1,300.0	1,283.7	1,298.0	1,286.4	4.0	3.7	122.10	119.8	76.9	33.7	26.4	7.32	4.603		
1,400.0	1,381.2	1,397.9	1,384.6	4.4	4.1	125.39	135.5	87.0	37.8	29.8	8.01	4.719		
1,500.0	1,478.6	1,497.8	1,482.7	4.9	4.5	128.02	151.2	97.2	42.0	33.3	8.69	4.834		
1,600.0	1,576.1	1,597.7	1,580.8	5.4	4.9	130.17	166.9	107.3	46.2	36.9	9.36	4.942		
1,700.0	1,673.5	1,697.6	1,679.0	5.8	5.3	131.96	182.6	117.4	50.6	40.5	10.03	5.044		
1,800.0	1,771.0	1,797.5	1,777.1	6.3	5.7	133.46	198.3	127.6	54.9	44.2	10.69	5.138		
1,900.0	1,868.4	1,897.4	1,875.2	6.7	6.1	134.75	214.0	137.7	59.3	48.0	11.35	5.225		
2,000.0	1,965.8	1,997.3	1,973.4	7.2	6.5	135.85	229.6	147.9	63.8	51.7	12.02	5.306		
2,100.0	2,063.3	2,097.2	2,071.5	7.7	6.9	136.81	245.3	158.0	68.2	55.5	12.68	5.380		
2,200.0	2,160.7	2,197.1	2,169.6	8.1	7.3	137.66	261.0	168.1	72.7	59.3	13.34	5.448		
2,300.0	2,258.2	2,297.0	2,267.8	8.6	7.7	138.40	276.7	178.3	77.1	63.1	14.00	5.511		
2,400.0	2,355.6	2,396.9	2,365.9	9.1	8.1	139.07	292.4	188.4	81.6	67.0	14.65	5.569		
2,500.0	2,453.1	2,496.8	2,464.0	9.5	8.5	139.66	308.1	198.5	86.1	70.8	15.31	5.624		
2,600.0	2,550.5	2,596.7	2,562.2	10.0	8.9	140.20	323.8	208.7	90.6	74.6	15.97	5.674		
2,700.0	2,648.0	2,696.6	2,660.3	10.5	9.3	140.68	339.5	218.8	95.1	78.5	16.63	5.721		
2,800.0	2,745.4	2,796.5	2,758.4	10.9	9.7	141.12	355.2	228.9	99.6	82.4	17.29	5.765		
2,900.0	2,842.9	2,896.4	2,856.6	11.4	10.1	141.52	370.8	239.1	104.2	86.2	17.94	5.805		
3,000.0	2,940.3	2,996.3	2,954.7	11.9	10.5	141.89	386.5	249.2	108.7	90.1	18.60	5.844		
3,100.0	3,037.7	3,096.2	3,052.8	12.3	11.0	142.23	402.2	259.4	113.2	94.0	19.26	5.880		
3,200.0	3,135.2	3,196.0	3,151.0	12.8	11.4	142.55	417.9	269.5	117.8	97.8	19.91	5.913		
3,300.0	3,232.6	3,295.9	3,249.1	13.3	11.8	142.84	433.6	279.6	122.3	101.7	20.57	5.945		
3,400.0	3,330.1	3,395.8	3,347.2	13.7	12.2	143.11	449.3	289.8	126.8	105.6	21.23	5.975		
3,500.0	3,427.5	3,495.7	3,445.4	14.2	12.6	143.36	465.0	299.9	131.4	109.5	21.88	6.004		
3,600.0	3,525.0	3,595.6	3,543.5	14.7	13.0	143.59	480.7	310.0	135.9	113.4	22.54	6.030		
3,700.0	3,622.4	3,695.5	3,641.6	15.1	13.4	143.81	496.3	320.2	140.5	117.3	23.20	6.056		
3,800.0	3,719.9	3,795.4	3,739.8	15.6	13.8	144.02	512.0	330.3	145.0	121.2	23.85	6.080		
3,900.0	3,817.3	3,895.3	3,837.9	16.1	14.2	144.21	527.7	340.4	149.6	125.1	24.51	6.103		
4,000.0	3,914.8	3,995.2	3,936.0	16.5	14.6	144.39	543.4	350.6	154.1	129.0	25.16	6.125		
4,100.0	4,012.2	4,095.1	4,034.2	17.0	15.0	144.56	559.1	360.7	158.7	132.9	25.82	6.146		
4,200.0	4,109.6	4,195.0	4,132.3	17.5	15.4	144.72	574.8	370.8	163.2	136.8	26.48	6.165		
4,300.0	4,207.1	4,294.9	4,230.4	17.9	15.8	144.87	590.5	381.0	167.8	140.7	27.13	6.184		
4,400.0	4,304.5	4,394.8	4,328.6	18.4	16.3	145.02	606.2	391.1	172.3	144.6	27.79	6.202		
4,500.0	4,402.0	4,494.7	4,426.7	18.9	16.7	145.16	621.8	401.3	176.9	148.5	28.44	6.220		
4,600.0	4,499.4	4,594.6	4,524.8	19.3	17.1	145.29	637.5	411.4	181.5	152.4	29.10	6.236		
4,700.0	4,596.9	4,694.5	4,623.0	19.8	17.5	145.41	653.2	421.5	186.0	156.3	29.75	6.252		
4,800.0	4,694.3	4,794.4	4,721.1	20.3	17.9	145.53	668.9	431.7	190.6	160.2	30.41	6.268		
4,900.0	4,791.8	4,894.3	4,819.2	20.7	18.3	145.64	684.6	441.8	195.2	164.1	31.06	6.282		
5,000.0	4,889.2	4,994.2	4,917.4	21.2	18.7	145.75	700.3	451.9	199.7	168.0	31.72	6.296		

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 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT 22A-36 - DD - Plan #1													Offset Site Error: 0.0 usft	
Survey Program: 0-ISCSWA MWD													Offset Well Error: 0.0 usft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-151.78	-14.2	-7.6	16.1					
100.0	100.0	100.0	100.0	0.1	0.1	-151.78	-14.2	-7.6	16.1	15.9	0.18	89.629		
200.0	200.0	200.0	200.0	0.3	0.3	-151.78	-14.2	-7.6	16.1	15.5	0.63	25.608		
300.0	300.0	300.1	300.1	0.5	0.5	-151.32	-14.0	-7.7	16.0	14.9	1.08	14.839		
400.0	400.0	400.5	400.4	0.8	0.8	-135.47	-10.4	-9.2	14.3	12.8	1.54	9.304		
449.5	449.5	450.2	449.9	0.9	0.9	-126.95	-6.8	-10.6	14.0	12.2	1.78	7.854 CC, ES		
500.0	499.8	500.8	500.3	1.0	1.0	-117.80	-1.8	-12.5	14.2	12.2	2.02	7.040		
600.0	599.3	601.3	599.8	1.2	1.3	-114.45	11.6	-15.0	15.1	12.5	2.56	5.903		
700.0	698.3	701.5	698.4	1.5	1.6	-108.30	29.8	-15.5	18.4	15.2	3.16	5.820 SF		
800.0	796.5	801.5	795.6	1.9	2.0	-101.35	52.8	-14.1	24.7	20.9	3.87	6.389		
900.0	893.9	901.1	891.3	2.2	2.5	-91.85	80.3	-10.7	33.2	28.5	4.68	7.102		
1,000.0	991.4	1,000.0	984.8	2.7	3.1	-79.17	112.2	-5.6	43.4	37.9	5.49	7.898		
1,100.0	1,088.8	1,097.8	1,075.5	3.1	3.7	-66.95	148.0	1.4	56.9	50.7	6.24	9.122		
1,200.0	1,186.3	1,196.0	1,166.1	3.5	4.4	-58.55	185.2	8.8	72.9	65.9	6.93	10.513		
1,300.0	1,283.7	1,294.3	1,256.8	4.0	5.1	-53.21	222.5	16.3	89.8	82.2	7.62	11.789		
1,400.0	1,381.2	1,392.6	1,347.4	4.4	5.8	-49.59	259.7	23.8	107.2	98.9	8.31	12.909		
1,500.0	1,478.6	1,490.9	1,438.0	4.9	6.5	-46.98	297.0	31.3	125.0	116.0	9.00	13.881		
1,600.0	1,576.1	1,589.1	1,528.7	5.4	7.3	-45.02	334.2	38.8	142.9	133.2	9.71	14.724		
1,700.0	1,673.5	1,687.4	1,619.3	5.8	8.0	-43.50	371.4	46.2	161.0	150.6	10.41	15.458		
1,800.0	1,771.0	1,785.7	1,709.9	6.3	8.7	-42.28	408.7	53.7	179.1	168.0	11.13	16.101		
1,900.0	1,868.4	1,884.0	1,800.6	6.7	9.4	-41.29	445.9	61.2	197.4	185.5	11.84	16.667		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT 22C-1 - DD - Plan #1													Offset Site Error: 0.0 usft	
Survey Program: 0-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	81.84	1.8	12.7	12.8					
100.0	100.0	100.0	100.0	0.1	0.1	81.84	1.8	12.7	12.8	12.7	0.18	71.368		
200.0	200.0	200.0	200.0	0.3	0.3	81.84	1.8	12.7	12.8	12.2	0.63	20.391		
300.0	300.0	300.0	300.0	0.5	0.5	81.84	1.8	12.7	12.8	11.8	1.08	11.895		
400.0	400.0	400.0	400.0	0.8	0.8	89.76	1.8	12.7	12.8	11.3	1.53	8.385		
402.0	401.9	401.9	401.9	0.8	0.8	90.00	1.8	12.7	12.8	11.3	1.54	8.337 CC, ES		
500.0	499.8	499.8	499.8	1.0	1.0	111.95	1.8	12.7	13.8	11.8	2.00	6.926 SF		
600.0	599.3	599.3	599.3	1.2	1.2	129.07	1.8	12.7	19.3	16.8	2.52	7.663		
700.0	698.3	697.6	697.6	1.5	1.4	137.31	1.7	15.2	30.7	27.6	3.07	9.994		
800.0	796.5	796.0	795.8	1.9	1.6	141.53	1.5	20.6	47.1	43.4	3.63	12.961		
900.0	893.9	893.8	893.4	2.2	1.8	148.07	1.2	25.9	66.5	62.4	4.15	16.023		
1,000.0	991.4	991.6	991.1	2.7	2.1	152.34	1.0	31.3	86.7	82.1	4.64	18.679		
1,100.0	1,088.8	1,089.3	1,088.7	3.1	2.3	155.00	0.7	36.6	107.2	102.0	5.13	20.874		
1,200.0	1,186.3	1,187.1	1,186.4	3.5	2.5	156.80	0.5	42.0	127.8	122.2	5.63	22.691		
1,300.0	1,283.7	1,284.9	1,284.0	4.0	2.7	158.10	0.2	47.3	148.5	142.4	6.13	24.206		
1,400.0	1,381.2	1,382.7	1,381.6	4.4	3.0	159.08	0.0	52.7	169.3	162.6	6.64	25.481		
1,500.0	1,478.6	1,480.5	1,479.3	4.9	3.2	159.85	-0.3	58.0	190.1	182.9	7.15	26.565		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT 22D-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		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			
0.0	0.0	0.0	0.0	0.0	0.0	158.82	-12.4	4.8	13.3					
100.0	100.0	100.0	100.0	0.1	0.1	158.82	-12.4	4.8	13.3	13.1	0.18	73.861		
200.0	200.0	200.0	200.0	0.3	0.3	158.82	-12.4	4.8	13.3	12.7	0.63	21.103		
300.0	300.0	300.0	300.0	0.5	0.5	158.82	-12.4	4.8	13.3	12.2	1.08	12.310 CC		
327.9	327.9	327.9	327.9	0.6	0.6	163.94	-12.4	4.8	13.4	12.2	1.21	11.092 ES		
400.0	400.0	400.0	400.0	0.8	0.8	164.56	-12.4	4.8	13.9	12.4	1.54	9.010 SF		
500.0	499.8	499.8	499.8	1.0	1.0	168.74	-12.4	4.8	19.0	16.9	2.08	9.122		
600.0	599.3	598.4	598.4	1.2	1.2	157.52	-13.4	7.1	30.3	27.7	2.60	11.677		
700.0	698.3	695.7	695.4	1.5	1.4	147.21	-16.3	14.0	47.5	44.4	3.10	15.303		
800.0	796.5	792.8	791.8	1.9	1.6	142.23	-20.6	24.3	69.6	65.9	3.66	19.021		
900.0	893.9	889.7	888.1	2.2	1.9	143.74	-25.0	34.7	93.9	89.7	4.19	22.402		
1,000.0	991.4	986.7	984.4	2.7	2.2	145.41	-29.4	45.1	118.3	113.6	4.73	25.040		
1,100.0	1,088.8	1,083.6	1,080.6	3.1	2.4	146.51	-33.9	55.5	142.8	137.6	5.28	27.063		
1,200.0	1,186.3	1,180.5	1,176.9	3.5	2.7	147.28	-38.3	65.9	167.4	161.6	5.85	28.641		
1,300.0	1,283.7	1,277.4	1,273.1	4.0	3.0	147.86	-42.7	76.3	192.0	185.6	6.42	29.895		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT 23A-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance					Warning		
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-167.72	-32.4	-7.1	33.2					
100.0	100.0	100.0	100.0	0.1	0.1	-167.72	-32.4	-7.1	33.2	33.0	0.18	184.502		
200.0	200.0	200.0	200.0	0.3	0.3	-167.72	-32.4	-7.1	33.2	32.5	0.63	52.715		
300.0	300.0	300.0	300.0	0.5	0.5	-167.72	-32.4	-7.1	33.2	32.1	1.08	30.750 CC		
327.8	327.8	327.8	327.8	0.6	0.6	-162.77	-32.4	-7.1	33.3	32.1	1.21	27.590 ES		
400.0	400.0	400.0	400.0	0.8	0.8	-163.04	-32.4	-7.1	33.8	32.3	1.54	21.896		
500.0	499.8	499.8	499.8	1.0	1.0	-165.26	-32.4	-7.1	38.8	36.8	2.08	18.658 SF		
600.0	599.3	597.7	597.7	1.2	1.2	177.76	-34.2	-5.3	50.4	47.7	2.62	19.239		
700.0	698.3	693.9	693.6	1.5	1.4	163.46	-39.3	0.0	69.3	66.2	3.15	22.027		
800.0	796.5	787.7	786.6	1.9	1.6	155.15	-47.5	8.4	95.4	91.7	3.70	25.763		
900.0	893.9	879.8	877.3	2.2	1.9	152.72	-58.6	19.8	127.2	122.9	4.22	30.143		
1,000.0	991.4	974.2	970.1	2.7	2.2	151.67	-70.9	32.3	160.0	155.2	4.73	33.789		
1,100.0	1,088.8	1,068.6	1,062.9	3.1	2.6	150.99	-83.2	44.8	192.8	187.5	5.28	36.526		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT 23B-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	-164.88	-39.7	-10.7	41.1					
100.0	100.0	100.0	100.0	0.1	0.1	-164.88	-39.7	-10.7	41.1	40.9	0.18	228.733		
200.0	200.0	200.0	200.0	0.3	0.3	-164.88	-39.7	-10.7	41.1	40.5	0.63	65.352		
300.0	300.0	300.0	300.0	0.5	0.5	-164.88	-39.7	-10.7	41.1	40.1	1.08	38.122 CC		
327.8	327.8	327.8	327.8	0.6	0.6	-159.93	-39.7	-10.7	41.2	40.0	1.21	34.184 ES		
400.0	400.0	400.0	400.0	0.8	0.8	-160.18	-39.7	-10.7	41.7	40.2	1.54	27.050		
500.0	499.8	498.4	498.3	1.0	1.0	-164.74	-41.6	-9.0	48.2	46.2	2.07	23.352 SF		
600.0	599.3	595.1	594.8	1.2	1.2	175.52	-47.1	-4.1	63.3	60.7	2.62	24.197		
700.0	698.3	689.5	688.4	1.5	1.4	160.14	-56.0	3.9	86.4	83.2	3.17	27.267		
800.0	796.5	781.0	778.5	1.9	1.7	151.48	-67.9	14.6	116.7	113.0	3.74	31.192		
900.0	893.9	869.4	864.7	2.2	2.0	149.16	-82.4	27.6	152.9	148.6	4.28	35.712		
1,000.0	991.4	961.6	954.1	2.7	2.5	148.06	-99.2	42.7	191.0	186.1	4.84	39.494		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT 23C-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-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	-150.63	-34.6	-19.5	39.7					
100.0	100.0	100.0	100.0	0.1	0.1	-150.63	-34.6	-19.5	39.7	39.5	0.18	220.848		
200.0	200.0	200.0	200.0	0.3	0.3	-150.63	-34.6	-19.5	39.7	39.1	0.63	63.100		
300.0	300.0	300.0	300.0	0.5	0.5	-150.63	-34.6	-19.5	39.7	38.6	1.08	36.808	CC, ES	
400.0	400.0	397.9	397.8	0.8	0.7	-146.62	-37.0	-20.3	42.8	41.3	1.52	28.114		
500.0	499.8	494.6	494.3	1.0	0.9	-150.52	-43.9	-22.9	54.9	52.8	2.06	26.658	SF	
600.0	599.3	589.9	588.9	1.2	1.2	-167.49	-55.1	-26.2	76.3	73.6	2.66	28.701		
700.0	698.3	683.1	680.9	1.5	1.5	178.01	-69.7	-26.9	105.3	102.1	3.23	32.585		
800.0	796.5	772.9	768.9	1.9	1.8	169.05	-86.9	-24.8	141.4	137.6	3.81	37.156		
900.0	893.9	862.2	856.0	2.2	2.2	166.16	-106.7	-20.6	182.7	178.4	4.28	42.698		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT 31B-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	29.31	21.1	11.9	24.2					
100.0	100.0	100.0	100.0	0.1	0.1	29.31	21.1	11.9	24.2	24.0	0.18	134.701		
200.0	200.0	200.0	200.0	0.3	0.3	29.31	21.1	11.9	24.2	23.6	0.63	38.486	CC, ES	
300.0	300.0	298.8	298.7	0.5	0.5	31.54	22.6	13.9	26.6	25.5	1.08	24.614		
400.0	400.0	397.0	396.7	0.8	0.8	41.98	27.2	20.0	33.4	31.9	1.56	21.470		
500.0	499.8	494.5	493.4	1.0	1.1	51.21	34.7	30.0	42.5	40.4	2.06	20.632	SF	
600.0	599.3	591.1	588.3	1.2	1.4	48.27	45.0	43.8	54.1	51.5	2.58	20.940		
700.0	698.3	686.9	681.7	1.5	1.8	44.29	58.0	61.3	67.0	63.8	3.16	21.182		
800.0	796.5	782.2	773.2	1.9	2.3	43.24	73.8	82.4	80.5	76.7	3.80	21.165		
900.0	893.9	876.7	862.6	2.2	2.9	45.82	92.1	106.9	95.9	91.4	4.46	21.473		
1,000.0	991.4	972.6	952.0	2.7	3.5	47.81	112.9	134.9	115.2	110.1	5.18	22.250		
1,100.0	1,088.8	1,070.5	1,043.0	3.1	4.2	49.18	134.5	163.8	135.2	129.3	5.93	22.793		
1,200.0	1,186.3	1,168.5	1,134.1	3.5	4.9	50.19	156.1	192.7	155.3	148.5	6.70	23.157		
1,300.0	1,283.7	1,266.4	1,225.1	4.0	5.6	50.97	177.6	221.6	175.3	167.8	7.50	23.362		
1,400.0	1,381.2	1,364.4	1,316.2	4.4	6.3	51.59	199.2	250.5	195.4	187.1	8.32	23.494		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT 31C-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		Total		Separation		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			
0.0	0.0	0.0	0.0	0.0	0.0	29.10	14.2	7.9	16.3					
100.0	100.0	100.0	100.0	0.1	0.1	29.10	14.2	7.9	16.3	16.1	0.18	90.382		
200.0	200.0	200.0	200.0	0.3	0.3	29.10	14.2	7.9	16.3	15.6	0.63	25.824		
233.7	233.7	233.7	233.7	0.4	0.4	29.10	14.2	7.9	16.3	15.5	0.78	20.818 CC, ES		
300.0	300.0	299.6	299.6	0.5	0.5	30.17	14.5	8.5	16.8	15.7	1.08	15.618		
400.0	400.0	398.6	398.5	0.8	0.8	42.73	17.2	12.8	21.1	19.5	1.54	13.689 SF		
500.0	499.8	497.0	496.3	1.0	1.0	57.26	22.6	21.4	27.8	25.8	2.03	13.741		
600.0	599.3	594.4	592.5	1.2	1.3	58.67	30.5	34.2	38.3	35.7	2.53	15.097		
700.0	698.3	691.2	687.3	1.5	1.7	56.91	41.0	51.0	50.5	47.5	3.10	16.314		
800.0	796.5	787.4	780.3	1.9	2.1	57.08	53.8	71.7	64.1	60.3	3.75	17.091		
900.0	893.9	882.9	871.3	2.2	2.7	60.18	69.0	96.2	79.7	75.2	4.46	17.850		
1,000.0	991.4	978.0	960.6	2.7	3.3	61.66	86.5	124.2	99.6	94.3	5.24	18.997		
1,100.0	1,088.8	1,075.8	1,051.8	3.1	3.9	62.34	105.0	154.1	120.6	114.6	6.05	19.936		
1,200.0	1,186.3	1,173.5	1,143.0	3.5	4.6	62.82	123.6	184.0	141.7	134.8	6.88	20.605		
1,300.0	1,283.7	1,271.3	1,234.1	4.0	5.3	63.18	142.2	214.0	162.8	155.1	7.73	21.068		
1,400.0	1,381.2	1,369.0	1,325.3	4.4	6.0	63.45	160.8	243.9	183.9	175.3	8.59	21.409		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT 32A-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	52.15	16.0	20.6	26.1					
100.0	100.0	100.0	100.0	0.1	0.1	52.15	16.0	20.6	26.1	25.9	0.18	145.133		
200.0	200.0	200.0	200.0	0.3	0.3	52.15	16.0	20.6	26.1	25.5	0.63	41.467	CC, ES	
300.0	300.0	299.1	299.0	0.5	0.5	53.46	16.3	22.0	27.4	26.3	1.07	25.510		
400.0	400.0	397.4	397.2	0.8	0.8	63.92	17.6	28.2	33.1	31.6	1.53	21.566		
500.0	499.8	494.8	493.9	1.0	1.0	74.92	19.9	39.2	42.6	40.6	2.02	21.127	SF	
600.0	599.3	590.8	588.5	1.2	1.3	73.66	23.2	54.8	56.8	54.3	2.52	22.546		
700.0	698.3	685.6	681.1	1.5	1.7	71.36	27.4	74.7	73.8	70.7	3.07	24.023		
800.0	796.5	779.2	771.5	1.9	2.2	71.78	32.5	98.7	93.3	89.6	3.71	25.148		
900.0	893.9	873.3	861.1	2.2	2.7	75.77	38.5	126.9	115.8	111.3	4.45	26.039		
1,000.0	991.4	970.1	952.9	2.7	3.3	79.25	44.8	156.8	139.7	134.5	5.24	26.677		
1,100.0	1,088.8	1,067.0	1,044.8	3.1	3.9	81.71	51.1	186.7	163.9	157.9	6.07	27.018		
1,200.0	1,186.3	1,163.8	1,136.6	3.5	4.5	83.53	57.5	216.7	188.4	181.5	6.92	27.209		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT 32C-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-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	61.35	9.1	16.7	19.0					
100.0	100.0	100.0	100.0	0.1	0.1	61.35	9.1	16.7	19.0	18.8	0.18	105.551		
200.0	200.0	200.0	200.0	0.3	0.3	61.35	9.1	16.7	19.0	18.4	0.63	30.157		
300.0	300.0	300.0	300.0	0.5	0.5	61.35	9.1	16.7	19.0	17.9	1.08	17.592 CC, ES		
400.0	400.0	399.1	399.0	0.8	0.8	71.52	9.0	19.2	21.0	19.5	1.52	13.834 SF		
500.0	499.8	497.4	497.0	1.0	1.0	88.61	8.7	26.8	27.6	25.7	1.98	13.958		
600.0	599.3	594.3	593.1	1.2	1.2	92.26	8.2	39.3	41.0	38.5	2.48	16.559		
700.0	698.3	689.8	687.1	1.5	1.6	92.15	7.6	56.3	58.9	55.8	3.02	19.520		
800.0	796.5	783.8	778.6	1.9	2.0	93.31	6.7	77.6	80.8	77.1	3.64	22.178		
900.0	893.9	876.1	867.4	2.2	2.4	97.14	5.8	102.8	106.8	102.4	4.37	24.442		
1,000.0	991.4	970.8	957.6	2.7	3.0	99.60	4.6	131.7	135.9	130.7	5.15	26.386		
1,100.0	1,088.8	1,066.3	1,048.5	3.1	3.5	101.19	3.5	160.9	165.2	159.2	5.95	27.766		
1,200.0	1,186.3	1,161.8	1,139.5	3.5	4.1	102.31	2.4	190.1	194.5	187.8	6.77	28.726		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT 33A-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-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	120.25	-5.1	8.8	10.1					
100.0	100.0	100.0	100.0	0.1	0.1	120.25	-5.1	8.8	10.1	10.0	0.18	56.339		
200.0	200.0	200.0	200.0	0.3	0.3	120.25	-5.1	8.8	10.1	9.5	0.63	16.097		
300.0	300.0	300.0	300.0	0.5	0.5	120.25	-5.1	8.8	10.1	9.1	1.08	9.390 CC, ES		
400.0	400.0	399.6	399.5	0.8	0.8	126.38	-5.6	10.1	11.9	10.4	1.53	7.828 SF		
500.0	499.8	498.2	498.0	1.0	1.0	133.61	-7.6	16.2	21.6	19.5	2.03	10.606		
600.0	599.3	595.3	594.4	1.2	1.2	126.33	-11.3	26.8	38.9	36.3	2.54	15.301		
700.0	698.3	690.5	688.3	1.5	1.5	119.65	-16.4	41.7	61.2	58.1	3.07	19.894		
800.0	796.5	783.6	779.2	1.9	1.9	116.67	-22.8	60.6	88.2	84.5	3.68	23.952		
900.0	893.9	874.4	866.9	2.2	2.3	117.92	-30.5	83.0	119.7	115.3	4.36	27.466		
1,000.0	991.4	963.0	951.2	2.7	2.8	118.44	-39.3	108.6	154.8	149.8	5.07	30.544		
1,100.0	1,088.8	1,054.5	1,037.4	3.1	3.4	118.20	-49.2	137.7	192.3	186.5	5.82	33.031		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT 33C-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-ISCSWA MWD													Offset Well Error:	0.0 usft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (usft)	Vertical Depth (usft)	Measured Depth (usft)	Vertical Depth (usft)	Reference (usft)	Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	+E/-W (usft)	Between Centres (usft)	Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	177.34	-18.2	0.8	18.2					
100.0	100.0	100.0	100.0	0.1	0.1	177.34	-18.2	0.8	18.2	18.1	0.18	101.415		
200.0	200.0	200.0	200.0	0.3	0.3	177.34	-18.2	0.8	18.2	17.6	0.63	28.976		
234.5	234.5	234.5	234.5	0.4	0.4	177.34	-18.2	0.8	18.2	17.5	0.78	23.243 CC, ES		
300.0	300.0	299.7	299.7	0.5	0.5	175.73	-18.6	1.4	18.6	17.6	1.07	17.422		
400.0	400.0	398.8	398.7	0.8	0.7	170.37	-21.4	5.7	22.8	21.3	1.53	14.928 SF		
500.0	499.8	496.6	495.9	1.0	1.0	160.71	-26.9	14.1	36.1	34.0	2.10	17.188		
600.0	599.3	592.0	590.2	1.2	1.3	143.66	-35.0	26.4	58.3	55.7	2.65	22.043		
700.0	698.3	684.9	681.2	1.5	1.6	132.04	-45.3	42.1	86.4	83.2	3.19	27.104		
800.0	796.5	774.9	768.3	1.9	2.1	126.33	-57.5	60.8	119.8	116.1	3.79	31.640		
900.0	893.9	861.8	851.4	2.2	2.6	126.28	-71.5	82.1	158.1	153.7	4.43	35.675		
1,000.0	991.4	945.9	930.6	2.7	3.1	126.48	-87.0	105.7	200.0	194.9	5.10	39.193		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT 34A-1 - DD - Plan #1													Offset Site Error:	0.0 usft
Survey Program: 0-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	-173.06	-25.5	-3.1	25.7					
100.0	100.0	100.0	100.0	0.1	0.1	-173.06	-25.5	-3.1	25.7	25.5	0.18	142.891		
200.0	200.0	200.0	200.0	0.3	0.3	-173.06	-25.5	-3.1	25.7	25.1	0.63	40.826		
300.0	300.0	300.0	300.0	0.5	0.5	-173.06	-25.5	-3.1	25.7	24.6	1.08	23.815 CC		
327.8	327.8	327.8	327.8	0.6	0.6	-168.10	-25.5	-3.1	25.8	24.6	1.21	21.388 ES		
400.0	400.0	400.0	400.0	0.8	0.8	-168.35	-25.5	-3.1	26.3	24.8	1.54	17.051		
500.0	499.8	498.7	498.7	1.0	1.0	-173.69	-27.3	-1.2	33.1	31.1	2.07	15.982 SF		
600.0	599.3	595.9	595.6	1.2	1.2	166.57	-32.4	4.2	48.7	46.1	2.61	18.635		
700.0	698.3	690.9	689.8	1.5	1.4	152.44	-40.7	13.0	71.7	68.5	3.15	22.757		
800.0	796.5	783.0	780.5	1.9	1.7	145.00	-51.8	24.8	101.4	97.7	3.72	27.257		
900.0	893.9	872.2	867.4	2.2	2.1	143.54	-65.3	39.2	136.8	132.5	4.28	31.966		
1,000.0	991.4	958.7	950.8	2.7	2.5	142.62	-81.1	56.0	175.6	170.7	4.86	36.145		

Cathedral Energy Services

Anticollision Report

Company:	Caerus Oil & Gas (NAD 27)	Local Co-ordinate Reference:	Well PUCKETT 21C-1
Project:	Garfield County, CO	TVD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Reference Site:	S1-T7S-R97W (Mesa E1 797)	MD Reference:	KB=20' @ 8349.0usft (Patterson #303)
Site Error:	0.0usft	North Reference:	True
Reference Well:	PUCKETT 21C-1	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0usft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	USA EDM 5000 Multi Users DB
Reference Design:	Plan #1	Offset TVD Reference:	Offset Datum

Offset Design S1-T7S-R97W (Mesa E1 797) - PUCKETT SWD E1-797 - VH - 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	-162.52	-46.6	-14.7	48.9					
100.0	100.0	100.0	100.0	0.1	0.1	-162.52	-46.6	-14.7	48.9	48.7	0.18	271.850		
200.0	200.0	200.0	200.0	0.3	0.3	-162.52	-46.6	-14.7	48.9	48.3	0.63	77.672		
300.0	300.0	300.0	300.0	0.5	0.5	-162.52	-46.6	-14.7	48.9	47.8	1.08	45.308 CC		
327.8	327.8	327.8	327.8	0.6	0.6	-157.57	-46.6	-14.7	49.0	47.8	1.21	40.613 ES		
400.0	400.0	400.0	400.0	0.8	0.8	-157.81	-46.6	-14.7	49.5	47.9	1.54	32.077		
500.0	499.8	499.8	499.8	1.0	1.0	-159.84	-46.6	-14.7	54.4	52.3	2.08	26.188		
600.0	599.3	599.3	599.3	1.2	1.2	-174.85	-46.6	-14.7	64.2	61.5	2.63	24.390 SF		
700.0	698.3	698.3	698.3	1.5	1.4	174.31	-46.6	-14.7	78.4	75.3	3.18	24.651		
800.0	796.5	796.5	796.5	1.9	1.7	169.71	-46.6	-14.7	97.2	93.4	3.74	25.958		
900.0	893.9	893.9	893.9	2.2	1.9	170.66	-46.6	-14.7	119.1	114.9	4.21	28.297		
1,000.0	991.4	991.4	991.4	2.7	2.1	172.14	-46.6	-14.7	141.4	136.7	4.66	30.344		
1,100.0	1,088.8	1,088.8	1,088.8	3.1	2.3	173.21	-46.6	-14.7	163.6	158.5	5.12	31.983		
1,200.0	1,186.3	1,186.3	1,186.3	3.5	2.5	174.03	-46.6	-14.7	186.0	180.4	5.58	33.315		

Cathedral Energy Services

Anticollision Report

Company: Caerus Oil & Gas (NAD 27)
Project: Garfield County, CO
Reference Site: S1-T7S-R97W (Mesa E1 797)
Site Error: 0.0usft
Reference Well: PUCKETT 21C-1
Well Error: 0.0usft
Reference Wellbore: DD
Reference Design: Plan #1

Local Co-ordinate Reference: Well PUCKETT 21C-1
TVD Reference: KB=20' @ 8349.0usft (Patterson #303)
MD Reference: KB=20' @ 8349.0usft (Patterson #303)
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: USA EDM 5000 Multi Users DB
Offset TVD Reference: Offset Datum

Reference Depths are relative to KB=20' @ 8349.0usft (Patterson #303)
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: PUCKETT 21C-1
 Coordinate System is US State Plane 1927 (Exact solution), Colorado Central 502
 Grid Convergence at Surface is: -1.69°

