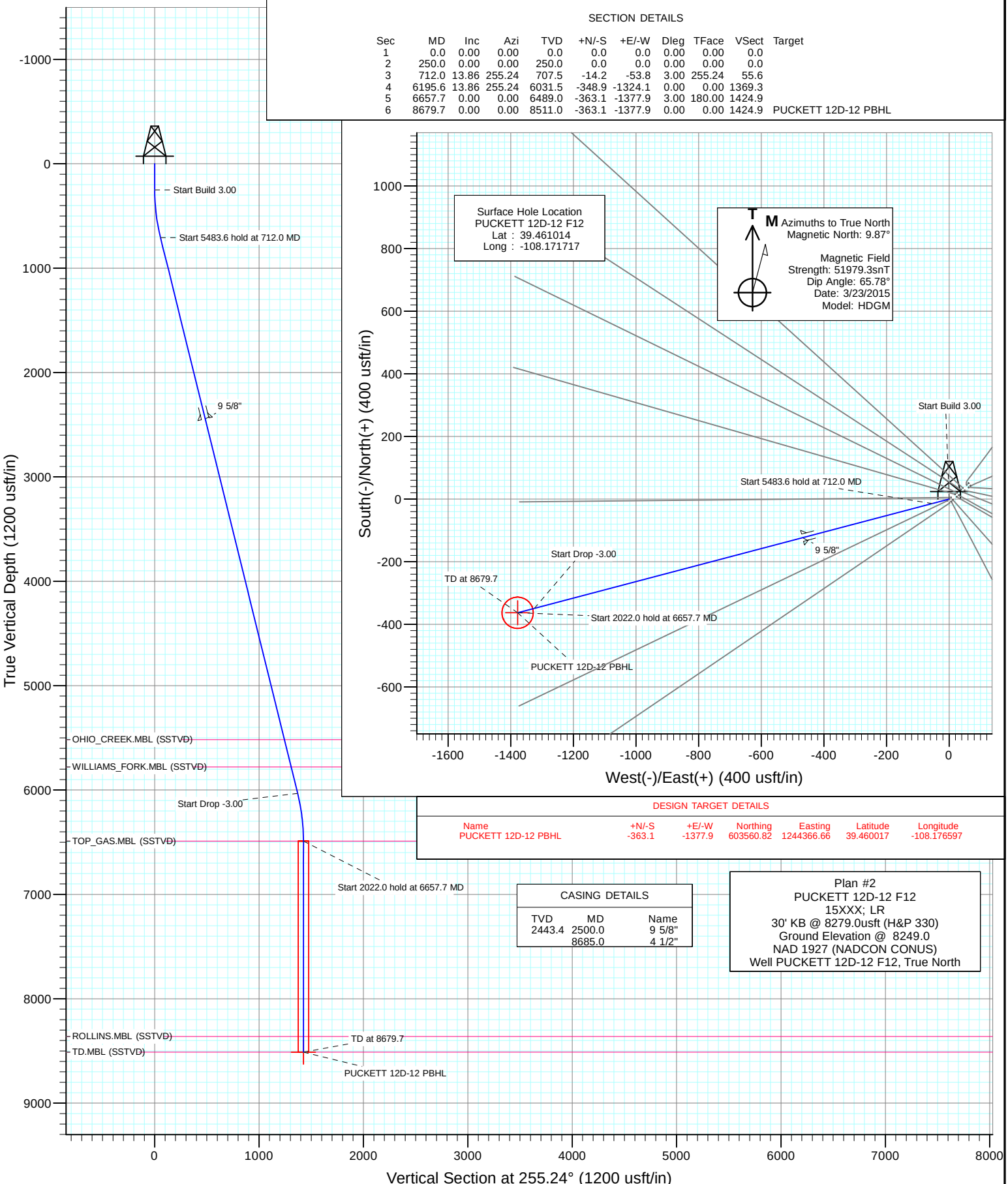
Project: Garfield County, CO
Site: S12-T7S-R97W
Well: PUCKETT 12D-12 F12
Wellbore: OH
Design: Plan #2

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.0	
3	712.0	13.86	255.24	707.5	-14.2	-53.8	3.00	255.24	55.6	
4	6195.6	13.86	255.24	6031.5	-348.9	-1324.1	0.00	0.00	1369.3	
5	6657.7	0.00	0.00	6489.0	-363.1	-1377.9	3.00	180.00	1424.9	
6	8679.7	0.00	0.00	8511.0	-363.1	-1377.9	0.00	0.00	1424.9	PUCKETT 12D-12 PBHL



DESIGN TARGET DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PUCKETT 12D-12 PBHL	-363.1	-1377.9	603560.82	1244366.66	39.460017	-108.176597

CASING DETAILS

TVD	MD	Name
2443.4	2500.0	9 5/8"
	8685.0	4 1/2"

Plan #2
PUCKETT 12D-12 F12
15XXX; LR
30' KB @ 8279.0usft (H&P 330)
Ground Elevation @ 8249.0
NAD 1927 (NADCON CONUS)
Well PUCKETT 12D-12 F12, True North

Planning Report

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Company:	Caerus Oil & Gas (NAD 27)	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Project:	Garfield County, CO	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site:	S12-T7S-R97W	**North Reference:**	True
Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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	S12-T7S-R97W				
Site Position:		**Northing:**	605,875.89 usft	**Latitude:**	39.466531
From:	Lat/Long	**Easting:**	1,246,355.53 usft	**Longitude:**	-108.169797
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	-1.68 °

Well	PUCKETT 12D-12 F12					
Well Position	**+N/-S**	0.0 usft	**Northing:**	603,883.23 usft	**Latitude:**	39.461014
	+E/-W	0.0 usft	**Easting:**	1,245,754.61 usft	**Longitude:**	-108.171717
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	0.0 usft	**Ground Level:**	8,249.0 usft

Wellbore	OH			
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	HDGM	3/23/2015	9.87	65.78	51,979

Design	Plan #2				
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	255.24	

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	
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.00	0.00	
712.0	13.86	255.24	707.5	-14.2	-53.8	3.00	3.00	0.00	255.24	
6,195.6	13.86	255.24	6,031.5	-348.9	-1,324.1	0.00	0.00	0.00	0.00	
6,657.7	0.00	0.00	6,489.0	-363.1	-1,377.9	3.00	-3.00	0.00	180.00	
8,679.7	0.00	0.00	8,511.0	-363.1	-1,377.9	0.00	0.00	0.00	0.00	PUCKETT 12D-12 PE

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Company:	Caerus Oil & Gas (NAD 27)	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Project:	Garfield County, CO	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site:	S12-T7S-R97W	**North Reference:**	True
Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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	
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	Start Build 3.00
300.0	1.50	255.24	300.0	-0.2	-0.6	0.7	3.00	3.00	
400.0	4.50	255.24	399.8	-1.5	-5.7	5.9	3.00	3.00	
500.0	7.50	255.24	499.3	-4.2	-15.8	16.3	3.00	3.00	
600.0	10.50	255.24	598.0	-8.1	-30.9	32.0	3.00	3.00	
700.0	13.50	255.24	695.8	-13.4	-51.0	52.8	3.00	3.00	
712.0	13.86	255.24	707.5	-14.2	-53.8	55.6	3.00	3.00	Start 5483.6 hold at 712.0 MD
800.0	13.86	255.24	792.9	-19.5	-74.2	76.7	0.00	0.00	
900.0	13.86	255.24	890.0	-25.6	-97.3	100.6	0.00	0.00	
1,000.0	13.86	255.24	987.1	-31.8	-120.5	124.6	0.00	0.00	
1,100.0	13.86	255.24	1,084.2	-37.9	-143.7	148.6	0.00	0.00	
1,200.0	13.86	255.24	1,181.3	-44.0	-166.8	172.5	0.00	0.00	
1,300.0	13.86	255.24	1,278.4	-50.1	-190.0	196.5	0.00	0.00	
1,400.0	13.86	255.24	1,375.5	-56.2	-213.2	220.4	0.00	0.00	
1,500.0	13.86	255.24	1,472.6	-62.3	-236.3	244.4	0.00	0.00	
1,600.0	13.86	255.24	1,569.6	-68.4	-259.5	268.3	0.00	0.00	
1,700.0	13.86	255.24	1,666.7	-74.5	-282.6	292.3	0.00	0.00	
1,800.0	13.86	255.24	1,763.8	-80.6	-305.8	316.3	0.00	0.00	
1,900.0	13.86	255.24	1,860.9	-86.7	-329.0	340.2	0.00	0.00	
2,000.0	13.86	255.24	1,958.0	-92.8	-352.1	364.2	0.00	0.00	
2,100.0	13.86	255.24	2,055.1	-98.9	-375.3	388.1	0.00	0.00	
2,200.0	13.86	255.24	2,152.2	-105.0	-398.5	412.1	0.00	0.00	
2,300.0	13.86	255.24	2,249.3	-111.1	-421.6	436.0	0.00	0.00	
2,400.0	13.86	255.24	2,346.4	-117.2	-444.8	460.0	0.00	0.00	
2,500.0	13.86	255.24	2,443.4	-123.3	-468.0	484.0	0.00	0.00	9 5/8"
2,600.0	13.86	255.24	2,540.5	-129.4	-491.1	507.9	0.00	0.00	
2,700.0	13.86	255.24	2,637.6	-135.5	-514.3	531.9	0.00	0.00	
2,800.0	13.86	255.24	2,734.7	-141.6	-537.5	555.8	0.00	0.00	
2,900.0	13.86	255.24	2,831.8	-147.7	-560.6	579.8	0.00	0.00	
3,000.0	13.86	255.24	2,928.9	-153.8	-583.8	603.7	0.00	0.00	
3,100.0	13.86	255.24	3,026.0	-159.9	-607.0	627.7	0.00	0.00	
3,200.0	13.86	255.24	3,123.1	-166.0	-630.1	651.6	0.00	0.00	
3,300.0	13.86	255.24	3,220.1	-172.2	-653.3	675.6	0.00	0.00	
3,400.0	13.86	255.24	3,317.2	-178.3	-676.5	699.6	0.00	0.00	
3,500.0	13.86	255.24	3,414.3	-184.4	-699.6	723.5	0.00	0.00	
3,600.0	13.86	255.24	3,511.4	-190.5	-722.8	747.5	0.00	0.00	
3,700.0	13.86	255.24	3,608.5	-196.6	-746.0	771.4	0.00	0.00	
3,800.0	13.86	255.24	3,705.6	-202.7	-769.1	795.4	0.00	0.00	
3,900.0	13.86	255.24	3,802.7	-208.8	-792.3	819.3	0.00	0.00	
4,000.0	13.86	255.24	3,899.8	-214.9	-815.5	843.3	0.00	0.00	
4,100.0	13.86	255.24	3,996.8	-221.0	-838.6	867.3	0.00	0.00	
4,200.0	13.86	255.24	4,093.9	-227.1	-861.8	891.2	0.00	0.00	
4,300.0	13.86	255.24	4,191.0	-233.2	-885.0	915.2	0.00	0.00	
4,400.0	13.86	255.24	4,288.1	-239.3	-908.1	939.1	0.00	0.00	
4,500.0	13.86	255.24	4,385.2	-245.4	-931.3	963.1	0.00	0.00	
4,600.0	13.86	255.24	4,482.3	-251.5	-954.5	987.0	0.00	0.00	
4,700.0	13.86	255.24	4,579.4	-257.6	-977.6	1,011.0	0.00	0.00	
4,800.0	13.86	255.24	4,676.5	-263.7	-1,000.8	1,035.0	0.00	0.00	
4,900.0	13.86	255.24	4,773.6	-269.8	-1,024.0	1,058.9	0.00	0.00	

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Company:	Caerus Oil & Gas (NAD 27)	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Project:	Garfield County, CO	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site:	S12-T7S-R97W	**North Reference:**	True
Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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	13.86	255.24	4,870.6	-275.9	-1,047.1	1,082.9	0.00	0.00	
5,100.0	13.86	255.24	4,967.7	-282.0	-1,070.3	1,106.8	0.00	0.00	
5,200.0	13.86	255.24	5,064.8	-288.1	-1,093.5	1,130.8	0.00	0.00	
5,300.0	13.86	255.24	5,161.9	-294.2	-1,116.6	1,154.7	0.00	0.00	
5,400.0	13.86	255.24	5,259.0	-300.3	-1,139.8	1,178.7	0.00	0.00	
5,500.0	13.86	255.24	5,356.1	-306.5	-1,162.9	1,202.6	0.00	0.00	
5,600.0	13.86	255.24	5,453.2	-312.6	-1,186.1	1,226.6	0.00	0.00	
5,665.7	13.86	255.24	5,517.0	-316.6	-1,201.3	1,242.4	0.00	0.00	OHIO_CREEK.MBL (SSTVD)
5,700.0	13.86	255.24	5,550.3	-318.7	-1,209.3	1,250.6	0.00	0.00	
5,800.0	13.86	255.24	5,647.3	-324.8	-1,232.4	1,274.5	0.00	0.00	
5,900.0	13.86	255.24	5,744.4	-330.9	-1,255.6	1,298.5	0.00	0.00	
5,935.6	13.86	255.24	5,779.0	-333.0	-1,263.9	1,307.0	0.00	0.00	WILLIAMS_FORK.MBL (SSTVD)
6,000.0	13.86	255.24	5,841.5	-337.0	-1,278.8	1,322.4	0.00	0.00	
6,100.0	13.86	255.24	5,938.6	-343.1	-1,301.9	1,346.4	0.00	0.00	
6,195.6	13.86	255.24	6,031.5	-348.9	-1,324.1	1,369.3	0.00	0.00	Start Drop -3.00
6,200.0	13.73	255.24	6,035.7	-349.2	-1,325.1	1,370.3	3.00	-3.00	
6,300.0	10.73	255.24	6,133.4	-354.6	-1,345.6	1,391.5	3.00	-3.00	
6,400.0	7.73	255.24	6,232.1	-358.7	-1,361.1	1,407.6	3.00	-3.00	
6,500.0	4.73	255.24	6,331.5	-361.4	-1,371.6	1,418.4	3.00	-3.00	
6,600.0	1.73	255.24	6,431.3	-362.9	-1,377.0	1,424.0	3.00	-3.00	
6,657.7	0.00	0.00	6,489.0	-363.1	-1,377.9	1,424.9	3.00	-3.00	Start 2022.0 hold at 6657.7 MD - TOP_GAS.ME
6,700.0	0.00	0.00	6,531.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
6,800.0	0.00	0.00	6,631.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
6,900.0	0.00	0.00	6,731.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
7,000.0	0.00	0.00	6,831.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
7,100.0	0.00	0.00	6,931.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
7,200.0	0.00	0.00	7,031.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
7,300.0	0.00	0.00	7,131.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
7,400.0	0.00	0.00	7,231.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
7,500.0	0.00	0.00	7,331.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
7,600.0	0.00	0.00	7,431.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
7,700.0	0.00	0.00	7,531.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
7,800.0	0.00	0.00	7,631.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
7,900.0	0.00	0.00	7,731.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
8,000.0	0.00	0.00	7,831.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
8,100.0	0.00	0.00	7,931.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
8,200.0	0.00	0.00	8,031.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
8,300.0	0.00	0.00	8,131.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
8,400.0	0.00	0.00	8,231.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
8,500.0	0.00	0.00	8,331.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
8,529.7	0.00	0.00	8,361.0	-363.1	-1,377.9	1,424.9	0.00	0.00	ROLLINS.MBL (SSTVD)
8,600.0	0.00	0.00	8,431.3	-363.1	-1,377.9	1,424.9	0.00	0.00	
8,679.7	0.00	0.00	8,511.0	-363.1	-1,377.9	1,424.9	0.00	0.00	TD at 8679.7

Database:	USA EDM 5000 Multi Users DB	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Company:	Caerus Oil & Gas (NAD 27)	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Project:	Garfield County, CO	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site:	S12-T7S-R97W	**North Reference:**	True
Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PUCKETT 12D-12 PBHl - plan hits target center - Circle (radius 50.0)	0.00	0.00	8,511.0	-363.1	-1,377.9	603,560.82	1,244,366.66	39.460017	-108.176597

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
2,500.0	2,443.4	9 5/8"	0	0
8,685.0		4 1/2"	0	0

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,665.7	5,517.0	OHIO_CREEK.MBL (SSTVD)		0.00	
5,935.6	5,779.0	WILLIAMS_FORK.MBL (SSTVD)		0.00	
6,657.7	6,489.0	TOP_GAS.MBL (SSTVD)		0.00	
8,529.7	8,361.0	ROLLINS.MBL (SSTVD)		0.00	

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
250.0	250.0	0.0	0.0	Start Build 3.00
712.0	707.5	-14.2	-53.8	Start 5483.6 hold at 712.0 MD
6,195.6	6,031.5	-348.9	-1,324.1	Start Drop -3.00
6,657.7	6,489.0	-363.1	-1,377.9	Start 2022.0 hold at 6657.7 MD
8,679.7	8,511.0	-363.1	-1,377.9	TD at 8679.7

Caerus Oil & Gas (NAD 27)

Garfield County, CO
S12-T7S-R97W
PUCKETT 12D-12 F12
OH
Plan #2

Anticollision Report

09 April, 2015

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Reference	Plan #2

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	**Error Model:**	ISCWSA
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 5,280.0usft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**		

Survey Tool Program **Date** 4/9/2015

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	8,679.7	Plan #2 (OH)	ISCWSA MWD	MWD - Standard

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
S12-T7S-R97W						
PUCKETT 11C-12 F12 - OH - Plan #2	259.3	259.5	56.3	55.5	64.521	CC, ES
PUCKETT 11C-12 F12 - OH - Plan #2	8,679.7	8,813.8	1,689.7	1,622.2	25.048	SF
PUCKETT 11D-12 F12 - OH - Plan #2	250.0	250.0	48.4	47.6	58.234	CC, ES
PUCKETT 11D-12 F12 - OH - Plan #2	8,679.7	8,751.1	1,322.2	1,255.4	19.788	SF
PUCKETT 12A-12 F12 - OH - Plan #2	287.5	288.0	31.7	30.7	31.562	CC
PUCKETT 12A-12 F12 - OH - Plan #2	300.0	300.7	31.7	30.6	29.792	ES
PUCKETT 12A-12 F12 - OH - Plan #2	8,679.7	8,714.9	1,074.5	1,008.4	16.243	SF
PUCKETT 12B-12 F12 - OH - Plan #2	250.0	250.0	24.3	23.5	29.254	CC
PUCKETT 12B-12 F12 - OH - Plan #2	300.0	300.4	24.5	23.5	23.088	ES
PUCKETT 12B-12 F12 - OH - Plan #2	8,679.7	8,689.7	783.9	718.1	11.909	SF
PUCKETT 12C-12 F12 - OH - Plan #2	250.0	250.0	8.3	7.4	9.928	CC, ES
PUCKETT 12C-12 F12 - OH - Plan #2	8,679.7	8,670.2	354.1	289.3	5.467	SF
PUCKETT 13A-12 F12 - OH - Plan #2	200.0	200.0	7.4	6.8	12.196	CC, ES
PUCKETT 13A-12 F12 - OH - Plan #2	8,679.7	8,689.0	297.9	232.7	4.575	SF
PUCKETT 13B-12 F12 - OH - Plan #2	200.0	200.0	13.1	12.5	21.651	CC, ES
PUCKETT 13B-12 F12 - OH - Plan #2	8,679.7	8,709.4	569.0	503.2	8.650	SF
PUCKETT 22B-12 F12 - OH - PLAN #1	200.0	200.0	72.5	71.9	119.513	CC
PUCKETT 22B-12 F12 - OH - PLAN #1	250.0	249.6	72.7	71.8	87.369	ES
PUCKETT 22B-12 F12 - OH - PLAN #1	600.0	587.0	120.4	117.6	42.642	SF
PUCKETT 22C-12 F12 - OH - PLAN #1	200.0	200.0	81.2	80.6	133.873	CC, ES
PUCKETT 22C-12 F12 - OH - PLAN #1	700.0	686.1	161.0	157.6	46.787	SF
PUCKETT 22D-12 F12 - OH - Plan #2	250.0	250.0	26.1	25.2	31.341	CC, ES
PUCKETT 22D-12 F12 - OH - Plan #2	400.0	398.5	34.8	33.2	21.620	SF
PUCKETT 23A-12 F12 - OH - Plan #2	200.0	200.0	13.0	12.4	21.480	CC, ES
PUCKETT 23A-12 F12 - OH - Plan #2	300.0	299.6	15.0	14.0	14.298	SF
PUCKETT 23B-12 F12 - OH - Plan #2	250.0	250.0	10.7	9.8	12.841	CC, ES
PUCKETT 23B-12 F12 - OH - Plan #2	300.0	299.8	11.4	10.4	10.928	SF
PUCKETT 32C-12 F12 - OH - PLAN #1	250.0	250.0	73.3	72.5	88.123	CC, ES
PUCKETT 32C-12 F12 - OH - PLAN #1	600.0	578.9	131.5	128.5	45.088	SF
PUCKETT 32D-12 F12 - OH - Plan #2	250.0	250.0	57.2	56.4	68.783	CC, ES
PUCKETT 32D-12 F12 - OH - Plan #2	500.0	492.7	81.4	79.2	36.465	SF
PUCKETT 33A-12 F12 - OH - Plan #2	250.0	250.0	49.3	48.5	59.320	CC, ES
PUCKETT 33A-12 F12 - OH - Plan #2	500.0	492.1	77.3	75.1	34.210	SF
PUCKETT 33B-12 F12 - OH - Plan #2	200.0	200.0	33.6	33.0	55.311	CC, ES
PUCKETT 33B-12 F12 - OH - Plan #2	400.0	396.5	46.8	45.2	28.393	SF
PUCKETT SWD F12-797 - OH - PLAN #1	250.0	250.0	80.1	79.3	96.359	CC, ES
PUCKETT SWD F12-797 - OH - PLAN #1	8,679.7	8,511.0	1,498.2	1,458.4	37.619	SF

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 11C-12 F12 - OH - Plan #2 — **Offset Site Error:** 0.0 usft

Survey Program: 0-ISCWSA MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	51.27	35.3	44.0	56.5				
100.0	100.0	100.0	100.0	0.1	0.1	51.27	35.3	44.0	56.5	56.3	0.16	358.881	
200.0	200.0	200.0	200.0	0.3	0.3	51.27	35.3	44.0	56.5	55.9	0.61	93.043	
250.0	250.0	250.2	250.2	0.4	0.4	50.60	35.8	43.6	56.4	55.5	0.83	67.642	
259.3	259.3	259.5	259.5	0.4	0.4	155.11	36.0	43.4	56.3	55.5	0.87	64.521	CC, ES
300.0	300.0	300.4	300.3	0.5	0.5	153.66	37.1	42.1	56.7	55.6	1.07	53.141	
400.0	399.8	400.4	400.0	0.7	0.8	148.41	42.4	36.3	60.7	59.1	1.61	37.819	
500.0	499.3	499.6	498.4	1.0	1.1	142.02	51.1	26.7	69.7	67.5	2.21	31.481	
600.0	598.0	597.7	594.9	1.3	1.4	135.95	63.1	13.5	84.0	81.1	2.90	28.966	
700.0	695.8	694.5	689.0	1.7	1.8	130.92	78.1	-3.1	103.6	99.9	3.69	28.089	
712.0	707.5	706.0	700.1	1.8	1.9	130.39	80.1	-5.3	106.3	102.5	3.79	28.041	
800.0	792.9	789.6	780.3	2.2	2.3	126.78	96.0	-22.8	127.1	122.5	4.53	28.023	
900.0	890.0	885.2	871.0	2.7	2.9	122.67	116.3	-45.2	152.4	146.9	5.48	27.811	
1,000.0	987.1	981.4	962.2	3.2	3.5	119.65	136.9	-67.8	178.4	171.9	6.46	27.599	
1,100.0	1,084.2	1,077.6	1,053.4	3.7	4.1	117.40	157.4	-90.5	204.7	197.3	7.47	27.424	
1,200.0	1,181.3	1,173.8	1,144.6	4.2	4.7	115.65	178.0	-113.1	231.3	222.8	8.47	27.297	
1,300.0	1,278.4	1,270.0	1,235.8	4.7	5.3	114.27	198.6	-135.8	258.0	248.5	9.49	27.199	
1,400.0	1,375.5	1,366.2	1,327.0	5.2	6.0	113.15	219.1	-158.4	284.8	274.3	10.50	27.124	
1,500.0	1,472.6	1,462.4	1,418.2	5.7	6.6	112.22	239.7	-181.1	311.7	300.2	11.52	27.067	
1,600.0	1,569.6	1,558.6	1,509.4	6.2	7.2	111.44	260.2	-203.8	338.7	326.2	12.53	27.023	
1,700.0	1,666.7	1,654.8	1,600.6	6.7	7.8	110.77	280.8	-226.4	365.7	352.2	13.55	26.988	
1,800.0	1,763.8	1,751.0	1,691.8	7.2	8.4	110.19	301.4	-249.1	392.8	378.2	14.57	26.962	
1,900.0	1,860.9	1,847.2	1,783.0	7.7	9.1	109.69	321.9	-271.7	419.9	404.3	15.59	26.941	
2,000.0	1,958.0	1,943.4	1,874.2	8.3	9.7	109.25	342.5	-294.4	447.0	430.4	16.60	26.925	
2,100.0	2,055.1	2,039.6	1,965.4	8.8	10.3	108.86	363.0	-317.0	474.2	456.5	17.62	26.912	
2,200.0	2,152.2	2,135.8	2,056.6	9.3	10.9	108.51	383.6	-339.7	501.3	482.7	18.63	26.903	
2,300.0	2,249.3	2,232.0	2,147.8	9.8	11.6	108.20	404.2	-362.3	528.5	508.9	19.65	26.896	
2,400.0	2,346.4	2,328.2	2,239.0	10.3	12.2	107.92	424.7	-385.0	555.7	535.0	20.66	26.892	
2,500.0	2,443.4	2,424.4	2,330.2	10.8	12.8	107.66	445.3	-407.7	582.9	561.2	21.68	26.889	
2,600.0	2,540.5	2,520.6	2,421.4	11.3	13.4	107.43	465.9	-430.3	610.1	587.4	22.69	26.887	
2,700.0	2,637.6	2,616.8	2,512.6	11.9	14.1	107.22	486.4	-453.0	637.3	613.6	23.70	26.886	
2,800.0	2,734.7	2,713.0	2,603.8	12.4	14.7	107.02	507.0	-475.6	664.6	639.8	24.72	26.887	
2,900.0	2,831.8	2,809.2	2,695.0	12.9	15.3	106.84	527.5	-498.3	691.8	666.1	25.73	26.888	
3,000.0	2,928.9	2,905.4	2,786.2	13.4	16.0	106.68	548.1	-520.9	719.0	692.3	26.74	26.890	
3,100.0	3,026.0	3,001.6	2,877.5	13.9	16.6	106.52	568.7	-543.6	746.3	718.5	27.75	26.893	
3,200.0	3,123.1	3,097.8	2,968.7	14.4	17.2	106.38	589.2	-566.2	773.5	744.8	28.76	26.896	
3,300.0	3,220.1	3,193.9	3,059.9	15.0	17.8	106.24	609.8	-588.9	800.8	771.0	29.77	26.900	
3,400.0	3,317.2	3,290.1	3,151.1	15.5	18.5	106.12	630.4	-611.5	828.1	797.3	30.78	26.905	
3,500.0	3,414.3	3,386.3	3,242.3	16.0	19.1	106.00	650.9	-634.2	855.3	823.5	31.79	26.909	
3,600.0	3,511.4	3,482.5	3,333.5	16.5	19.7	105.89	671.5	-656.9	882.6	849.8	32.79	26.914	
3,700.0	3,608.5	3,578.7	3,424.7	17.0	20.3	105.79	692.0	-679.5	909.9	876.1	33.80	26.919	
3,800.0	3,705.6	3,674.9	3,515.9	17.5	21.0	105.69	712.6	-702.2	937.1	902.3	34.81	26.925	
3,900.0	3,802.7	3,771.1	3,607.1	18.1	21.6	105.60	733.2	-724.8	964.4	928.6	35.81	26.931	
4,000.0	3,899.8	3,867.3	3,698.3	18.6	22.2	105.51	753.7	-747.5	991.7	954.9	36.81	26.937	
4,100.0	3,996.8	3,963.5	3,789.5	19.1	22.8	105.43	774.3	-770.1	1,019.0	981.1	37.82	26.943	
4,200.0	4,093.9	4,059.7	3,880.7	19.6	23.5	105.35	794.8	-792.8	1,046.2	1,007.4	38.82	26.949	
4,300.0	4,191.0	4,155.9	3,971.9	20.1	24.1	105.28	815.4	-815.4	1,073.5	1,033.7	39.82	26.956	
4,400.0	4,288.1	4,252.1	4,063.1	20.6	24.7	105.21	836.0	-838.1	1,100.8	1,060.0	40.83	26.962	
4,500.0	4,385.2	4,348.3	4,154.3	21.2	25.4	105.14	856.5	-860.7	1,128.1	1,086.2	41.83	26.969	
4,600.0	4,482.3	4,444.5	4,245.5	21.7	26.0	105.08	877.1	-883.4	1,155.4	1,112.5	42.83	26.976	
4,700.0	4,579.4	4,540.7	4,336.7	22.2	26.6	105.02	897.7	-906.1	1,182.7	1,138.8	43.83	26.983	
4,800.0	4,676.5	4,636.9	4,427.9	22.7	27.2	104.96	918.2	-928.7	1,209.9	1,165.1	44.83	26.990	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 11C-12 F12 - OH - Plan #2

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
4,900.0	4,773.6	4,733.1	4,519.1	23.2	27.9	104.91	938.8	-951.4	1,237.2	1,191.4	45.83	26.997	
5,000.0	4,870.6	4,829.3	4,610.3	23.7	28.5	104.85	959.3	-974.0	1,264.5	1,217.7	46.83	27.005	
5,100.0	4,967.7	4,925.5	4,701.5	24.3	29.1	104.80	979.9	-996.7	1,291.8	1,244.0	47.82	27.012	
5,200.0	5,064.8	5,021.7	4,792.7	24.8	29.7	104.75	1,000.5	-1,019.3	1,319.1	1,270.3	48.82	27.020	
5,300.0	5,161.9	5,117.9	4,883.9	25.3	30.4	104.71	1,021.0	-1,042.0	1,346.4	1,296.6	49.82	27.027	
5,400.0	5,259.0	5,214.1	4,975.1	25.8	31.0	104.66	1,041.6	-1,064.6	1,373.7	1,322.9	50.81	27.035	
5,500.0	5,356.1	5,310.3	5,066.3	26.3	31.6	104.62	1,062.1	-1,087.3	1,401.0	1,349.2	51.81	27.042	
5,600.0	5,453.2	5,406.5	5,157.5	26.8	32.3	104.58	1,082.7	-1,109.9	1,428.3	1,375.5	52.80	27.050	
5,700.0	5,550.3	5,502.7	5,248.7	27.4	32.9	104.54	1,103.3	-1,132.6	1,455.6	1,401.8	53.80	27.058	
5,800.0	5,647.3	5,598.9	5,339.9	27.9	33.5	104.50	1,123.8	-1,155.3	1,482.9	1,428.1	54.79	27.065	
5,900.0	5,744.4	5,695.1	5,431.1	28.4	34.1	104.46	1,144.4	-1,177.9	1,510.2	1,454.4	55.78	27.073	
6,000.0	5,841.5	5,791.3	5,522.3	28.9	34.8	104.43	1,165.0	-1,200.6	1,537.5	1,480.7	56.77	27.081	
6,100.0	5,938.6	5,887.5	5,613.5	29.4	35.4	104.39	1,185.5	-1,223.2	1,564.8	1,507.0	57.76	27.089	
6,195.6	6,031.5	5,979.5	5,700.8	29.9	36.0	104.36	1,205.2	-1,244.9	1,590.9	1,532.2	58.71	27.097	
6,200.0	6,035.7	5,983.7	5,704.7	29.9	36.0	104.40	1,206.1	-1,245.9	1,592.1	1,533.3	58.76	27.093	
6,300.0	6,133.4	6,080.0	5,796.1	30.3	36.7	105.06	1,226.7	-1,268.6	1,618.7	1,558.8	59.86	27.040	
6,400.0	6,232.1	6,176.3	5,887.4	30.6	37.3	105.51	1,247.3	-1,291.2	1,644.0	1,583.1	60.85	27.018	
6,500.0	6,331.5	6,323.5	6,027.6	30.8	38.1	105.51	1,277.4	-1,324.5	1,667.5	1,605.6	61.84	26.963	
6,600.0	6,431.3	6,560.5	6,258.9	30.9	39.0	105.10	1,311.5	-1,362.0	1,683.3	1,620.6	62.66	26.863	
6,657.7	6,489.0	6,701.0	6,398.4	31.0	39.3	0.13	1,322.5	-1,374.1	1,688.0	1,625.0	62.97	26.808	
6,700.0	6,531.3	6,805.2	6,502.5	31.0	39.4	-0.01	1,326.2	-1,378.2	1,689.5	1,626.4	63.10	26.774	
6,800.0	6,631.3	6,934.1	6,631.3	31.1	39.5	-0.03	1,326.6	-1,378.6	1,689.7	1,626.3	63.31	26.688	
6,900.0	6,731.3	7,034.1	6,731.3	31.2	39.6	-0.03	1,326.6	-1,378.6	1,689.7	1,626.1	63.51	26.604	
7,000.0	6,831.3	7,134.1	6,831.3	31.3	39.7	-0.03	1,326.6	-1,378.6	1,689.7	1,625.9	63.71	26.520	
7,100.0	6,931.3	7,234.1	6,931.3	31.4	39.8	-0.03	1,326.6	-1,378.6	1,689.7	1,625.7	63.92	26.435	
7,200.0	7,031.3	7,334.1	7,031.3	31.5	39.9	-0.03	1,326.6	-1,378.6	1,689.7	1,625.5	64.12	26.350	
7,300.0	7,131.3	7,434.1	7,131.3	31.6	40.0	-0.03	1,326.6	-1,378.6	1,689.7	1,625.3	64.33	26.265	
7,400.0	7,231.3	7,534.1	7,231.3	31.7	40.0	-0.03	1,326.6	-1,378.6	1,689.7	1,625.1	64.54	26.179	
7,500.0	7,331.3	7,634.1	7,331.3	31.8	40.1	-0.03	1,326.6	-1,378.6	1,689.7	1,624.9	64.76	26.092	
7,600.0	7,431.3	7,734.1	7,431.3	31.9	40.2	-0.03	1,326.6	-1,378.6	1,689.7	1,624.7	64.97	26.005	
7,700.0	7,531.3	7,834.1	7,531.3	32.0	40.3	-0.03	1,326.6	-1,378.6	1,689.7	1,624.5	65.19	25.918	
7,800.0	7,631.3	7,934.1	7,631.3	32.1	40.4	-0.03	1,326.6	-1,378.6	1,689.7	1,624.2	65.41	25.831	
7,900.0	7,731.3	8,034.1	7,731.3	32.2	40.5	-0.03	1,326.6	-1,378.6	1,689.7	1,624.0	65.64	25.743	
8,000.0	7,831.3	8,134.1	7,831.3	32.3	40.6	-0.03	1,326.6	-1,378.6	1,689.7	1,623.8	65.86	25.654	
8,100.0	7,931.3	8,234.1	7,931.3	32.4	40.7	-0.03	1,326.6	-1,378.6	1,689.7	1,623.6	66.09	25.566	
8,200.0	8,031.3	8,334.1	8,031.3	32.6	40.8	-0.03	1,326.6	-1,378.6	1,689.7	1,623.3	66.32	25.477	
8,300.0	8,131.3	8,434.1	8,131.3	32.7	40.9	-0.03	1,326.6	-1,378.6	1,689.7	1,623.1	66.55	25.388	
8,400.0	8,231.3	8,534.1	8,231.3	32.8	41.0	-0.03	1,326.6	-1,378.6	1,689.7	1,622.9	66.79	25.299	
8,500.0	8,331.3	8,634.1	8,331.3	32.9	41.1	-0.03	1,326.6	-1,378.6	1,689.7	1,622.6	67.03	25.209	
8,600.0	8,431.3	8,734.1	8,431.3	33.0	41.2	-0.03	1,326.6	-1,378.6	1,689.7	1,622.4	67.26	25.120	
8,679.7	8,511.0	8,813.8	8,511.0	33.1	41.2	-0.03	1,326.6	-1,378.6	1,689.7	1,622.2	67.46	25.048	SF

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 11D-12 F12 - OH - Plan #2 — **Offset Site Error:** 0.0 usft

Survey Program: 0-ISCWSA MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	51.37	30.2	37.8	48.4				
100.0	100.0	100.0	100.0	0.1	0.1	51.37	30.2	37.8	48.4	48.3	0.16	307.806	
200.0	200.0	200.0	200.0	0.3	0.3	51.37	30.2	37.8	48.4	47.8	0.61	79.802	
250.0	250.0	250.0	250.0	0.4	0.4	51.37	30.2	37.8	48.4	47.6	0.83	58.234	CC, ES
300.0	300.0	300.4	300.4	0.5	0.5	155.70	30.6	37.3	48.8	47.8	1.07	45.808	
400.0	399.8	401.0	400.9	0.7	0.8	152.49	33.5	32.8	52.1	50.5	1.59	32.739	
500.0	499.3	501.3	500.6	1.0	1.0	147.15	39.2	24.0	58.9	56.7	2.17	27.134	
600.0	598.0	600.9	598.9	1.3	1.3	141.17	47.8	10.9	69.8	67.0	2.82	24.767	
700.0	695.8	699.5	695.4	1.7	1.7	135.62	59.0	-6.3	85.1	81.6	3.57	23.821	
712.0	707.5	711.3	706.8	1.8	1.8	135.00	60.5	-8.6	87.3	83.6	3.68	23.731	
800.0	792.9	797.1	789.7	2.2	2.2	130.48	72.7	-27.4	103.5	99.1	4.39	23.551	
900.0	890.0	894.7	883.2	2.7	2.7	125.65	87.9	-50.7	123.0	117.6	5.33	23.080	
1,000.0	987.1	992.3	976.8	3.2	3.3	122.14	103.1	-74.0	143.0	136.7	6.31	22.681	
1,100.0	1,084.2	1,090.0	1,070.4	3.7	3.8	119.50	118.3	-97.4	163.5	156.2	7.31	22.375	
1,200.0	1,181.3	1,187.6	1,163.9	4.2	4.4	117.44	133.6	-120.7	184.2	175.9	8.32	22.145	
1,300.0	1,278.4	1,285.3	1,257.5	4.7	4.9	115.81	148.8	-144.1	205.1	195.8	9.34	21.970	
1,400.0	1,375.5	1,382.9	1,351.1	5.2	5.5	114.47	164.0	-167.4	226.2	215.8	10.36	21.836	
1,500.0	1,472.6	1,480.5	1,444.7	5.7	6.1	113.37	179.2	-190.7	247.3	235.9	11.38	21.732	
1,600.0	1,569.6	1,578.2	1,538.3	6.2	6.7	112.43	194.4	-214.1	268.5	256.1	12.40	21.650	
1,700.0	1,666.7	1,675.8	1,631.8	6.7	7.2	111.64	209.6	-237.4	289.8	276.4	13.43	21.584	
1,800.0	1,763.8	1,773.5	1,725.4	7.2	7.8	110.95	224.8	-260.8	311.1	296.6	14.45	21.531	
1,900.0	1,860.9	1,871.1	1,819.0	7.7	8.4	110.35	240.0	-284.1	332.4	317.0	15.47	21.488	
2,000.0	1,958.0	1,968.7	1,912.6	8.3	9.0	109.82	255.2	-307.4	353.8	337.3	16.49	21.452	
2,100.0	2,055.1	2,066.4	2,006.2	8.8	9.5	109.36	270.5	-330.8	375.2	357.7	17.52	21.423	
2,200.0	2,152.2	2,164.0	2,099.7	9.3	10.1	108.94	285.7	-354.1	396.7	378.1	18.54	21.398	
2,300.0	2,249.3	2,261.7	2,193.3	9.8	10.7	108.56	300.9	-377.4	418.1	398.5	19.56	21.378	
2,400.0	2,346.4	2,359.3	2,286.9	10.3	11.3	108.23	316.1	-400.8	439.6	419.0	20.58	21.361	
2,500.0	2,443.4	2,456.9	2,380.5	10.8	11.8	107.92	331.3	-424.1	461.0	439.4	21.60	21.346	
2,600.0	2,540.5	2,554.6	2,474.1	11.3	12.4	107.64	346.5	-447.5	482.5	459.9	22.62	21.334	
2,700.0	2,637.6	2,652.2	2,567.6	11.9	13.0	107.39	361.7	-470.8	504.0	480.4	23.64	21.324	
2,800.0	2,734.7	2,749.8	2,661.2	12.4	13.6	107.15	376.9	-494.1	525.5	500.9	24.65	21.316	
2,900.0	2,831.8	2,847.5	2,754.8	12.9	14.1	106.94	392.1	-517.5	547.0	521.4	25.67	21.309	
3,000.0	2,928.9	2,945.1	2,848.4	13.4	14.7	106.74	407.3	-540.8	568.6	541.9	26.69	21.303	
3,100.0	3,026.0	3,042.8	2,942.0	13.9	15.3	106.55	422.6	-564.2	590.1	562.4	27.70	21.299	
3,200.0	3,123.1	3,140.4	3,035.5	14.4	15.9	106.38	437.8	-587.5	611.6	582.9	28.72	21.295	
3,300.0	3,220.1	3,238.0	3,129.1	15.0	16.5	106.22	453.0	-610.8	633.1	603.4	29.74	21.292	
3,400.0	3,317.2	3,335.7	3,222.7	15.5	17.0	106.07	468.2	-634.2	654.7	623.9	30.75	21.290	
3,500.0	3,414.3	3,433.3	3,316.3	16.0	17.6	105.93	483.4	-657.5	676.2	644.5	31.76	21.289	
3,600.0	3,511.4	3,531.0	3,409.9	16.5	18.2	105.80	498.6	-680.9	697.8	665.0	32.78	21.288	
3,700.0	3,608.5	3,628.6	3,503.4	17.0	18.8	105.68	513.8	-704.2	719.3	685.5	33.79	21.287	
3,800.0	3,705.6	3,726.2	3,597.0	17.5	19.3	105.56	529.0	-727.5	740.9	706.1	34.80	21.287	
3,900.0	3,802.7	3,823.9	3,690.6	18.1	19.9	105.45	544.2	-750.9	762.4	726.6	35.82	21.288	
4,000.0	3,899.8	3,921.5	3,784.2	18.6	20.5	105.35	559.4	-774.2	784.0	747.2	36.83	21.289	
4,100.0	3,996.8	4,019.2	3,877.8	19.1	21.1	105.25	574.7	-797.6	805.6	767.7	37.84	21.290	
4,200.0	4,093.9	4,116.8	3,971.3	19.6	21.7	105.15	589.9	-820.9	827.1	788.3	38.85	21.291	
4,300.0	4,191.0	4,214.4	4,064.9	20.1	22.2	105.07	605.1	-844.2	848.7	808.8	39.86	21.293	
4,400.0	4,288.1	4,312.1	4,158.5	20.6	22.8	104.98	620.3	-867.6	870.3	829.4	40.87	21.295	
4,500.0	4,385.2	4,409.7	4,252.1	21.2	23.4	104.90	635.5	-890.9	891.8	849.9	41.88	21.297	
4,600.0	4,482.3	4,507.3	4,345.7	21.7	24.0	104.83	650.7	-914.3	913.4	870.5	42.88	21.299	
4,700.0	4,579.4	4,605.0	4,439.2	22.2	24.6	104.75	665.9	-937.6	935.0	891.1	43.89	21.302	
4,800.0	4,676.5	4,702.6	4,532.8	22.7	25.1	104.68	681.1	-960.9	956.5	911.6	44.90	21.305	
4,900.0	4,773.6	4,800.3	4,626.4	23.2	25.7	104.62	696.3	-984.3	978.1	932.2	45.90	21.308	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 11D-12 F12 - OH - Plan #2

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,870.6	4,897.9	4,720.0	23.7	26.3	104.55	711.6	-1,007.6	999.7	952.8	46.91	21.311	
5,100.0	4,967.7	4,995.5	4,813.6	24.3	26.9	104.49	726.8	-1,031.0	1,021.3	973.4	47.92	21.314	
5,200.0	5,064.8	5,093.2	4,907.1	24.8	27.4	104.43	742.0	-1,054.3	1,042.8	993.9	48.92	21.317	
5,300.0	5,161.9	5,190.8	5,000.7	25.3	28.0	104.38	757.2	-1,077.6	1,064.4	1,014.5	49.92	21.321	
5,400.0	5,259.0	5,288.5	5,094.3	25.8	28.6	104.33	772.4	-1,101.0	1,086.0	1,035.1	50.93	21.324	
5,500.0	5,356.1	5,386.1	5,187.9	26.3	29.2	104.27	787.6	-1,124.3	1,107.6	1,055.7	51.93	21.328	
5,600.0	5,453.2	5,483.7	5,281.5	26.8	29.8	104.22	802.8	-1,147.7	1,129.2	1,076.2	52.93	21.331	
5,700.0	5,550.3	5,581.4	5,375.0	27.4	30.3	104.18	818.0	-1,171.0	1,150.7	1,096.8	53.94	21.335	
5,800.0	5,647.3	5,679.0	5,468.6	27.9	30.9	104.13	833.2	-1,194.3	1,172.3	1,117.4	54.94	21.339	
5,900.0	5,744.4	5,776.7	5,562.2	28.4	31.5	104.09	848.4	-1,217.7	1,193.9	1,138.0	55.94	21.343	
6,000.0	5,841.5	5,874.3	5,655.8	28.9	32.1	104.04	863.7	-1,241.0	1,215.5	1,158.6	56.94	21.347	
6,100.0	5,938.6	5,971.9	5,749.4	29.4	32.7	104.00	878.9	-1,264.4	1,237.1	1,179.1	57.94	21.351	
6,195.6	6,031.5	6,065.3	5,838.9	29.9	33.2	103.96	893.4	-1,286.7	1,257.7	1,198.8	58.90	21.355	
6,200.0	6,035.7	6,069.6	5,843.0	29.9	33.2	103.99	894.1	-1,287.7	1,258.7	1,199.7	58.94	21.354	
6,300.0	6,133.4	6,167.3	5,936.6	30.3	33.8	104.45	909.3	-1,311.0	1,279.6	1,219.6	59.94	21.347	
6,400.0	6,232.1	6,298.1	6,062.6	30.6	34.5	104.56	928.6	-1,340.6	1,298.5	1,237.6	60.92	21.315	
6,500.0	6,331.5	6,455.9	6,217.1	30.8	35.0	104.51	945.8	-1,367.0	1,312.2	1,250.6	61.65	21.284	
6,600.0	6,431.3	6,616.2	6,376.2	30.9	35.4	104.44	956.1	-1,382.8	1,320.1	1,257.9	62.16	21.239	
6,657.7	6,489.0	6,709.3	6,469.2	31.0	35.5	-0.39	958.7	-1,386.8	1,321.9	1,259.6	62.34	21.205	
6,700.0	6,531.3	6,771.4	6,531.3	31.0	35.6	-0.41	959.1	-1,387.4	1,322.2	1,259.8	62.43	21.177	
6,800.0	6,631.3	6,871.4	6,631.3	31.1	35.7	-0.41	959.1	-1,387.4	1,322.2	1,259.6	62.63	21.111	
6,900.0	6,731.3	6,971.4	6,731.3	31.2	35.8	-0.41	959.1	-1,387.4	1,322.2	1,259.4	62.83	21.044	
7,000.0	6,831.3	7,071.4	6,831.3	31.3	35.9	-0.41	959.1	-1,387.4	1,322.2	1,259.2	63.03	20.976	
7,100.0	6,931.3	7,171.4	6,931.3	31.4	35.9	-0.41	959.1	-1,387.4	1,322.2	1,258.9	63.24	20.907	
7,200.0	7,031.3	7,271.4	7,031.3	31.5	36.0	-0.41	959.1	-1,387.4	1,322.2	1,258.7	63.45	20.839	
7,300.0	7,131.3	7,371.4	7,131.3	31.6	36.1	-0.41	959.1	-1,387.4	1,322.2	1,258.5	63.66	20.769	
7,400.0	7,231.3	7,471.4	7,231.3	31.7	36.2	-0.41	959.1	-1,387.4	1,322.2	1,258.3	63.87	20.700	
7,500.0	7,331.3	7,571.4	7,331.3	31.8	36.3	-0.41	959.1	-1,387.4	1,322.2	1,258.1	64.09	20.630	
7,600.0	7,431.3	7,671.4	7,431.3	31.9	36.4	-0.41	959.1	-1,387.4	1,322.2	1,257.9	64.31	20.560	
7,700.0	7,531.3	7,771.4	7,531.3	32.0	36.5	-0.41	959.1	-1,387.4	1,322.2	1,257.7	64.53	20.490	
7,800.0	7,631.3	7,871.4	7,631.3	32.1	36.6	-0.41	959.1	-1,387.4	1,322.2	1,257.4	64.75	20.419	
7,900.0	7,731.3	7,971.4	7,731.3	32.2	36.7	-0.41	959.1	-1,387.4	1,322.2	1,257.2	64.98	20.348	
8,000.0	7,831.3	8,071.4	7,831.3	32.3	36.8	-0.41	959.1	-1,387.4	1,322.2	1,257.0	65.21	20.277	
8,100.0	7,931.3	8,171.4	7,931.3	32.4	36.9	-0.41	959.1	-1,387.4	1,322.2	1,256.8	65.44	20.206	
8,200.0	8,031.3	8,271.4	8,031.3	32.6	37.0	-0.41	959.1	-1,387.4	1,322.2	1,256.5	65.67	20.134	
8,300.0	8,131.3	8,371.4	8,131.3	32.7	37.2	-0.41	959.1	-1,387.4	1,322.2	1,256.3	65.90	20.062	
8,400.0	8,231.3	8,471.4	8,231.3	32.8	37.3	-0.41	959.1	-1,387.4	1,322.2	1,256.0	66.14	19.990	
8,500.0	8,331.3	8,571.4	8,331.3	32.9	37.4	-0.41	959.1	-1,387.4	1,322.2	1,255.8	66.38	19.918	
8,600.0	8,431.3	8,671.4	8,431.3	33.0	37.5	-0.41	959.1	-1,387.4	1,322.2	1,255.6	66.62	19.846	
8,679.7	8,511.0	8,751.1	8,511.0	33.1	37.6	-0.41	959.1	-1,387.4	1,322.2	1,255.4	66.82	19.788	SF

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 12A-12 F12 - OH - Plan #2

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	51.44	20.0	25.1	32.1				
100.0	100.0	100.0	100.0	0.1	0.1	51.44	20.0	25.1	32.1	32.0	0.16	204.255	
200.0	200.0	200.0	200.0	0.3	0.3	51.44	20.0	25.1	32.1	31.5	0.61	52.955	
250.0	250.0	250.4	250.3	0.4	0.4	50.36	20.3	24.5	31.9	31.0	0.83	38.299	
287.5	287.5	288.0	288.0	0.5	0.5	153.15	20.9	23.3	31.7	30.7	1.00	31.562	CC
300.0	300.0	300.7	300.6	0.5	0.5	152.35	21.2	22.7	31.7	30.6	1.06	29.792	ES
400.0	399.8	401.0	400.7	0.7	0.8	143.91	24.7	15.6	33.8	32.2	1.59	21.288	
500.0	499.3	500.9	499.7	1.0	1.1	134.20	30.4	3.9	39.8	37.6	2.17	18.307	
600.0	598.0	600.2	597.2	1.3	1.4	125.88	38.4	-12.4	50.1	47.3	2.85	17.554	
700.0	695.8	698.5	692.9	1.7	1.9	119.77	48.5	-33.0	64.6	60.9	3.67	17.578	
712.0	707.5	710.3	704.3	1.8	1.9	119.18	49.8	-35.7	66.6	62.8	3.78	17.621	
800.0	792.9	796.9	787.9	2.2	2.4	116.09	59.8	-56.1	81.6	77.0	4.57	17.831	
900.0	890.0	895.4	882.8	2.7	2.9	113.72	71.2	-79.3	98.8	93.2	5.52	17.884	
1,000.0	987.1	993.8	977.8	3.2	3.4	112.05	82.6	-102.5	116.1	109.6	6.50	17.868	
1,100.0	1,084.2	1,092.3	1,072.8	3.7	3.9	110.82	93.9	-125.7	133.5	126.0	7.48	17.831	
1,200.0	1,181.3	1,190.7	1,167.8	4.2	4.5	109.87	105.3	-148.9	150.9	142.4	8.48	17.792	
1,300.0	1,278.4	1,289.1	1,262.8	4.7	5.0	109.12	116.6	-172.1	168.4	158.9	9.48	17.754	
1,400.0	1,375.5	1,387.6	1,357.8	5.2	5.5	108.51	128.0	-195.3	185.9	175.4	10.49	17.719	
1,500.0	1,472.6	1,486.0	1,452.8	5.7	6.1	108.00	139.3	-218.5	203.4	191.9	11.50	17.689	
1,600.0	1,569.6	1,584.5	1,547.8	6.2	6.6	107.58	150.7	-241.7	220.9	208.4	12.51	17.662	
1,700.0	1,666.7	1,682.9	1,642.8	6.7	7.1	107.21	162.1	-264.9	238.4	224.9	13.52	17.639	
1,800.0	1,763.8	1,781.3	1,737.8	7.2	7.7	106.90	173.4	-288.1	256.0	241.4	14.53	17.618	
1,900.0	1,860.9	1,879.8	1,832.8	7.7	8.2	106.63	184.8	-311.3	273.5	258.0	15.54	17.601	
2,000.0	1,958.0	1,978.2	1,927.8	8.3	8.8	106.39	196.1	-334.5	291.0	274.5	16.55	17.585	
2,100.0	2,055.1	2,076.7	2,022.8	8.8	9.3	106.18	207.5	-357.7	308.6	291.0	17.56	17.571	
2,200.0	2,152.2	2,175.1	2,117.8	9.3	9.8	105.99	218.8	-380.8	326.2	307.6	18.57	17.559	
2,300.0	2,249.3	2,273.6	2,212.8	9.8	10.4	105.82	230.2	-404.0	343.7	324.1	19.59	17.548	
2,400.0	2,346.4	2,372.0	2,307.7	10.3	10.9	105.66	241.6	-427.2	361.3	340.7	20.60	17.539	
2,500.0	2,443.4	2,470.4	2,402.7	10.8	11.5	105.52	252.9	-450.4	378.8	357.2	21.61	17.531	
2,600.0	2,540.5	2,568.9	2,497.7	11.3	12.0	105.40	264.3	-473.6	396.4	373.8	22.62	17.523	
2,700.0	2,637.6	2,667.3	2,592.7	11.9	12.6	105.28	275.6	-496.8	414.0	390.3	23.63	17.517	
2,800.0	2,734.7	2,765.8	2,687.7	12.4	13.1	105.17	287.0	-520.0	431.6	406.9	24.64	17.511	
2,900.0	2,831.8	2,864.2	2,782.7	12.9	13.6	105.07	298.4	-543.2	449.1	423.5	25.66	17.506	
3,000.0	2,928.9	2,962.6	2,877.7	13.4	14.2	104.98	309.7	-566.4	466.7	440.0	26.67	17.502	
3,100.0	3,026.0	3,061.1	2,972.7	13.9	14.7	104.90	321.1	-589.6	484.3	456.6	27.68	17.498	
3,200.0	3,123.1	3,159.5	3,067.7	14.4	15.3	104.82	332.4	-612.8	501.8	473.2	28.69	17.495	
3,300.0	3,220.1	3,258.0	3,162.7	15.0	15.8	104.75	343.8	-636.0	519.4	489.7	29.70	17.492	
3,400.0	3,317.2	3,356.4	3,257.7	15.5	16.4	104.68	355.1	-659.2	537.0	506.3	30.70	17.489	
3,500.0	3,414.3	3,454.8	3,352.7	16.0	16.9	104.61	366.5	-682.4	554.6	522.9	31.71	17.487	
3,600.0	3,511.4	3,553.3	3,447.7	16.5	17.4	104.55	377.9	-705.5	572.2	539.4	32.72	17.485	
3,700.0	3,608.5	3,651.7	3,542.7	17.0	18.0	104.50	389.2	-728.7	589.7	556.0	33.73	17.484	
3,800.0	3,705.6	3,750.2	3,637.7	17.5	18.5	104.44	400.6	-751.9	607.3	572.6	34.74	17.483	
3,900.0	3,802.7	3,848.6	3,732.6	18.1	19.1	104.39	411.9	-775.1	624.9	589.2	35.75	17.482	
4,000.0	3,899.8	3,947.1	3,827.6	18.6	19.6	104.35	423.3	-798.3	642.5	605.7	36.75	17.481	
4,100.0	3,996.8	4,045.5	3,922.6	19.1	20.1	104.30	434.7	-821.5	660.1	622.3	37.76	17.481	
4,200.0	4,093.9	4,143.9	4,017.6	19.6	20.7	104.26	446.0	-844.7	677.6	638.9	38.76	17.481	
4,300.0	4,191.0	4,242.4	4,112.6	20.1	21.2	104.22	457.4	-867.9	695.2	655.4	39.77	17.481	
4,400.0	4,288.1	4,340.8	4,207.6	20.6	21.8	104.18	468.7	-891.1	712.8	672.0	40.78	17.481	
4,500.0	4,385.2	4,439.3	4,302.6	21.2	22.3	104.14	480.1	-914.3	730.4	688.6	41.78	17.481	
4,600.0	4,482.3	4,537.7	4,397.6	21.7	22.9	104.11	491.4	-937.5	748.0	705.2	42.79	17.482	
4,700.0	4,579.4	4,636.1	4,492.6	22.2	23.4	104.07	502.8	-960.7	765.5	721.8	43.79	17.483	
4,800.0	4,676.5	4,734.6	4,587.6	22.7	23.9	104.04	514.2	-983.9	783.1	738.3	44.79	17.483	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 12A-12 F12 - OH - Plan #2

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
4,900.0	4,773.6	4,833.0	4,682.6	23.2	24.5	104.01	525.5	-1,007.1	800.7	754.9	45.80	17.484	
5,000.0	4,870.6	4,931.5	4,777.6	23.7	25.0	103.98	536.9	-1,030.2	818.3	771.5	46.80	17.485	
5,100.0	4,967.7	5,029.9	4,872.6	24.3	25.6	103.95	548.2	-1,053.4	835.9	788.1	47.80	17.487	
5,200.0	5,064.8	5,128.3	4,967.6	24.8	26.1	103.93	559.6	-1,076.6	853.5	804.7	48.80	17.488	
5,300.0	5,161.9	5,226.8	5,062.6	25.3	26.7	103.90	571.0	-1,099.8	871.0	821.2	49.80	17.489	
5,400.0	5,259.0	5,325.2	5,157.5	25.8	27.2	103.88	582.3	-1,123.0	888.6	837.8	50.81	17.491	
5,500.0	5,356.1	5,423.7	5,252.5	26.3	27.7	103.85	593.7	-1,146.2	906.2	854.4	51.81	17.492	
5,600.0	5,453.2	5,522.1	5,347.5	26.8	28.3	103.83	605.0	-1,169.4	923.8	871.0	52.81	17.494	
5,700.0	5,550.3	5,620.6	5,442.5	27.4	28.8	103.81	616.4	-1,192.6	941.4	887.6	53.81	17.496	
5,800.0	5,647.3	5,719.0	5,537.5	27.9	29.4	103.79	627.7	-1,215.8	959.0	904.2	54.81	17.497	
5,900.0	5,744.4	5,817.4	5,632.5	28.4	29.9	103.77	639.1	-1,239.0	976.6	920.7	55.81	17.499	
6,000.0	5,841.5	5,915.9	5,727.5	28.9	30.5	103.75	650.5	-1,262.2	994.1	937.3	56.80	17.501	
6,100.0	5,938.6	6,014.3	5,822.5	29.4	31.0	103.73	661.8	-1,285.4	1,011.7	953.9	57.80	17.503	
6,195.6	6,031.5	6,108.5	5,913.4	29.9	31.5	103.71	672.7	-1,307.5	1,028.5	969.8	58.76	17.505	
6,200.0	6,035.7	6,112.8	5,917.5	29.9	31.5	103.73	673.2	-1,308.6	1,029.3	970.5	58.80	17.505	
6,300.0	6,133.4	6,218.4	6,019.5	30.3	32.1	104.05	685.3	-1,333.2	1,046.1	986.4	59.74	17.512	
6,400.0	6,232.1	6,349.3	6,147.3	30.6	32.6	104.18	697.6	-1,358.4	1,059.7	999.1	60.51	17.511	
6,500.0	6,331.5	6,481.6	6,278.2	30.8	32.9	104.26	706.1	-1,375.8	1,068.9	1,007.8	61.11	17.492	
6,600.0	6,431.3	6,614.8	6,411.0	30.9	33.1	104.30	710.6	-1,385.0	1,073.7	1,012.2	61.50	17.458	
6,657.7	6,489.0	6,691.9	6,488.0	31.0	33.2	-0.46	711.4	-1,386.6	1,074.5	1,012.9	61.65	17.428	
6,700.0	6,531.3	6,735.2	6,531.3	31.0	33.3	-0.46	711.4	-1,386.6	1,074.5	1,012.8	61.74	17.405	
6,800.0	6,631.3	6,835.2	6,631.3	31.1	33.4	-0.46	711.4	-1,386.6	1,074.5	1,012.6	61.94	17.349	
6,900.0	6,731.3	6,935.2	6,731.3	31.2	33.5	-0.46	711.4	-1,386.6	1,074.5	1,012.4	62.14	17.292	
7,000.0	6,831.3	7,035.2	6,831.3	31.3	33.6	-0.46	711.4	-1,386.6	1,074.5	1,012.2	62.34	17.235	
7,100.0	6,931.3	7,135.2	6,931.3	31.4	33.7	-0.46	711.4	-1,386.6	1,074.5	1,012.0	62.55	17.178	
7,200.0	7,031.3	7,235.2	7,031.3	31.5	33.8	-0.46	711.4	-1,386.6	1,074.5	1,011.8	62.76	17.121	
7,300.0	7,131.3	7,335.2	7,131.3	31.6	33.9	-0.46	711.4	-1,386.6	1,074.5	1,011.5	62.97	17.063	
7,400.0	7,231.3	7,435.2	7,231.3	31.7	34.0	-0.46	711.4	-1,386.6	1,074.5	1,011.3	63.19	17.005	
7,500.0	7,331.3	7,535.2	7,331.3	31.8	34.1	-0.46	711.4	-1,386.6	1,074.5	1,011.1	63.41	16.946	
7,600.0	7,431.3	7,635.2	7,431.3	31.9	34.2	-0.46	711.4	-1,386.6	1,074.5	1,010.9	63.63	16.888	
7,700.0	7,531.3	7,735.2	7,531.3	32.0	34.3	-0.46	711.4	-1,386.6	1,074.5	1,010.7	63.85	16.829	
7,800.0	7,631.3	7,835.2	7,631.3	32.1	34.4	-0.46	711.4	-1,386.6	1,074.5	1,010.4	64.07	16.770	
7,900.0	7,731.3	7,935.2	7,731.3	32.2	34.5	-0.46	711.4	-1,386.6	1,074.5	1,010.2	64.30	16.710	
8,000.0	7,831.3	8,035.2	7,831.3	32.3	34.6	-0.46	711.4	-1,386.6	1,074.5	1,010.0	64.53	16.651	
8,100.0	7,931.3	8,135.2	7,931.3	32.4	34.7	-0.46	711.4	-1,386.6	1,074.5	1,009.7	64.76	16.591	
8,200.0	8,031.3	8,235.2	8,031.3	32.6	34.8	-0.46	711.4	-1,386.6	1,074.5	1,009.5	65.00	16.532	
8,300.0	8,131.3	8,335.2	8,131.3	32.7	34.9	-0.46	711.4	-1,386.6	1,074.5	1,009.3	65.23	16.472	
8,400.0	8,231.3	8,435.2	8,231.3	32.8	35.1	-0.46	711.4	-1,386.6	1,074.5	1,009.0	65.47	16.412	
8,500.0	8,331.3	8,535.2	8,331.3	32.9	35.2	-0.46	711.4	-1,386.6	1,074.5	1,008.8	65.71	16.351	
8,600.0	8,431.3	8,635.2	8,431.3	33.0	35.3	-0.46	711.4	-1,386.6	1,074.5	1,008.6	65.96	16.291	
8,679.7	8,511.0	8,714.9	8,511.0	33.1	35.4	-0.46	711.4	-1,386.6	1,074.5	1,008.4	66.15	16.243	SF

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 12B-12 F12 - OH - Plan #2

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	51.04	15.3	18.9	24.3				
100.0	100.0	100.0	100.0	0.1	0.1	51.04	15.3	18.9	24.3	24.2	0.16	154.628	
200.0	200.0	200.0	200.0	0.3	0.3	51.04	15.3	18.9	24.3	23.7	0.61	40.089	
250.0	250.0	250.0	250.0	0.4	0.4	51.04	15.3	18.9	24.3	23.5	0.83	29.254	CC
300.0	300.0	300.4	300.4	0.5	0.5	155.16	15.5	18.3	24.5	23.5	1.06	23.088	ES
400.0	399.8	401.0	400.9	0.7	0.8	150.43	16.9	13.2	26.4	24.8	1.58	16.766	
500.0	499.3	501.5	500.8	1.0	1.0	142.82	19.9	3.0	30.6	28.4	2.14	14.310	
600.0	598.0	601.7	599.7	1.3	1.3	134.77	24.2	-12.1	37.5	34.7	2.77	13.538	
700.0	695.8	701.5	697.3	1.7	1.7	127.83	30.0	-32.1	47.4	43.8	3.53	13.424	
712.0	707.5	713.5	709.0	1.8	1.8	127.09	30.8	-34.9	48.8	45.1	3.63	13.427	
800.0	792.9	800.8	793.6	2.2	2.2	122.46	36.7	-55.5	59.3	54.9	4.39	13.511	
900.0	890.0	899.9	889.7	2.7	2.7	118.83	43.5	-79.0	71.5	66.2	5.31	13.452	
1,000.0	987.1	999.1	985.8	3.2	3.2	116.27	50.2	-102.5	83.9	77.6	6.28	13.363	
1,100.0	1,084.2	1,098.3	1,081.9	3.7	3.7	114.37	57.0	-126.0	96.5	89.2	7.27	13.278	
1,200.0	1,181.3	1,197.4	1,178.0	4.2	4.2	112.91	63.7	-149.5	109.1	100.9	8.26	13.206	
1,300.0	1,278.4	1,296.6	1,274.1	4.7	4.7	111.75	70.5	-173.0	121.8	112.5	9.27	13.146	
1,400.0	1,375.5	1,395.8	1,370.2	5.2	5.2	110.81	77.2	-196.4	134.5	124.3	10.27	13.096	
1,500.0	1,472.6	1,494.9	1,466.3	5.7	5.7	110.04	84.0	-219.9	147.3	136.0	11.28	13.055	
1,600.0	1,569.6	1,594.1	1,562.4	6.2	6.2	109.39	90.7	-243.4	160.1	147.8	12.29	13.020	
1,700.0	1,666.7	1,693.3	1,658.5	6.7	6.7	108.83	97.5	-266.9	172.9	159.6	13.31	12.991	
1,800.0	1,763.8	1,792.4	1,754.6	7.2	7.3	108.35	104.2	-290.4	185.7	171.4	14.32	12.967	
1,900.0	1,860.9	1,891.6	1,850.7	7.7	7.8	107.93	111.0	-313.9	198.5	183.2	15.34	12.945	
2,000.0	1,958.0	1,990.7	1,946.8	8.3	8.3	107.57	117.7	-337.4	211.4	195.0	16.35	12.927	
2,100.0	2,055.1	2,089.9	2,042.9	8.8	8.8	107.24	124.5	-360.9	224.2	206.8	17.36	12.911	
2,200.0	2,152.2	2,189.1	2,139.0	9.3	9.3	106.95	131.3	-384.4	237.0	218.7	18.38	12.897	
2,300.0	2,249.3	2,288.2	2,235.1	9.8	9.9	106.69	138.0	-407.9	249.9	230.5	19.39	12.885	
2,400.0	2,346.4	2,387.4	2,331.2	10.3	10.4	106.46	144.8	-431.3	262.8	242.3	20.41	12.874	
2,500.0	2,443.4	2,486.6	2,427.3	10.8	10.9	106.25	151.5	-454.8	275.6	254.2	21.42	12.865	
2,600.0	2,540.5	2,585.7	2,523.4	11.3	11.4	106.05	158.3	-478.3	288.5	266.0	22.44	12.856	
2,700.0	2,637.6	2,684.9	2,619.5	11.9	11.9	105.88	165.0	-501.8	301.4	277.9	23.45	12.849	
2,800.0	2,734.7	2,784.1	2,715.7	12.4	12.4	105.71	171.8	-525.3	314.2	289.8	24.47	12.842	
2,900.0	2,831.8	2,883.2	2,811.8	12.9	13.0	105.56	178.5	-548.8	327.1	301.6	25.48	12.836	
3,000.0	2,928.9	2,982.4	2,907.9	13.4	13.5	105.43	185.3	-572.3	340.0	313.5	26.50	12.831	
3,100.0	3,026.0	3,081.6	3,004.0	13.9	14.0	105.30	192.0	-595.8	352.9	325.3	27.51	12.826	
3,200.0	3,123.1	3,180.7	3,100.1	14.4	14.5	105.18	198.8	-619.3	365.7	337.2	28.52	12.822	
3,300.0	3,220.1	3,279.9	3,196.2	15.0	15.0	105.07	205.6	-642.8	378.6	349.1	29.54	12.818	
3,400.0	3,317.2	3,379.0	3,292.3	15.5	15.6	104.96	212.3	-666.2	391.5	360.9	30.55	12.815	
3,500.0	3,414.3	3,478.2	3,388.4	16.0	16.1	104.87	219.1	-689.7	404.4	372.8	31.56	12.812	
3,600.0	3,511.4	3,577.4	3,484.5	16.5	16.6	104.78	225.8	-713.2	417.3	384.7	32.57	12.810	
3,700.0	3,608.5	3,676.5	3,580.6	17.0	17.1	104.69	232.6	-736.7	430.1	396.6	33.59	12.807	
3,800.0	3,705.6	3,775.7	3,676.7	17.5	17.6	104.61	239.3	-760.2	443.0	408.4	34.60	12.805	
3,900.0	3,802.7	3,874.9	3,772.8	18.1	18.2	104.53	246.1	-783.7	455.9	420.3	35.61	12.803	
4,000.0	3,899.8	3,974.0	3,868.9	18.6	18.7	104.46	252.8	-807.2	468.8	432.2	36.62	12.802	
4,100.0	3,996.8	4,073.2	3,965.0	19.1	19.2	104.39	259.6	-830.7	481.7	444.1	37.63	12.800	
4,200.0	4,093.9	4,172.4	4,061.1	19.6	19.7	104.33	266.3	-854.2	494.6	455.9	38.64	12.799	
4,300.0	4,191.0	4,271.5	4,157.2	20.1	20.2	104.27	273.1	-877.7	507.5	467.8	39.65	12.798	
4,400.0	4,288.1	4,370.7	4,253.3	20.6	20.8	104.21	279.8	-901.1	520.4	479.7	40.66	12.797	
4,500.0	4,385.2	4,469.9	4,349.4	21.2	21.3	104.15	286.6	-924.6	533.3	491.6	41.67	12.796	
4,600.0	4,482.3	4,569.0	4,445.5	21.7	21.8	104.10	293.4	-948.1	546.1	503.5	42.68	12.796	
4,700.0	4,579.4	4,668.2	4,541.6	22.2	22.3	104.05	300.1	-971.6	559.0	515.3	43.69	12.795	
4,800.0	4,676.5	4,767.3	4,637.8	22.7	22.8	104.00	306.9	-995.1	571.9	527.2	44.70	12.795	
4,900.0	4,773.6	4,866.5	4,733.9	23.2	23.4	103.96	313.6	-1,018.6	584.8	539.1	45.71	12.795	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 12B-12 F12 - OH - Plan #2

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,870.6	4,965.7	4,830.0	23.7	23.9	103.91	320.4	-1,042.1	597.7	551.0	46.72	12.795	
5,100.0	4,967.7	5,064.8	4,926.1	24.3	24.4	103.87	327.1	-1,065.6	610.6	562.9	47.72	12.794	
5,200.0	5,064.8	5,164.0	5,022.2	24.8	24.9	103.83	333.9	-1,089.1	623.5	574.8	48.73	12.795	
5,300.0	5,161.9	5,263.2	5,118.3	25.3	25.4	103.79	340.6	-1,112.6	636.4	586.7	49.74	12.795	
5,400.0	5,259.0	5,362.3	5,214.4	25.8	25.9	103.75	347.4	-1,136.0	649.3	598.5	50.75	12.795	
5,500.0	5,356.1	5,461.5	5,310.5	26.3	26.5	103.72	354.1	-1,159.5	662.2	610.4	51.75	12.795	
5,600.0	5,453.2	5,560.7	5,406.6	26.8	27.0	103.68	360.9	-1,183.0	675.1	622.3	52.76	12.796	
5,700.0	5,550.3	5,659.8	5,502.7	27.4	27.5	103.65	367.7	-1,206.5	688.0	634.2	53.76	12.796	
5,800.0	5,647.3	5,759.0	5,598.8	27.9	28.0	103.62	374.4	-1,230.0	700.9	646.1	54.77	12.797	
5,900.0	5,744.4	5,858.2	5,694.9	28.4	28.5	103.59	381.2	-1,253.5	713.8	658.0	55.77	12.797	
6,000.0	5,841.5	5,957.3	5,791.0	28.9	29.1	103.56	387.9	-1,277.0	726.7	669.9	56.78	12.798	
6,100.0	5,938.6	6,056.5	5,887.1	29.4	29.6	103.53	394.7	-1,300.5	739.5	681.8	57.78	12.798	
6,195.6	6,031.5	6,151.3	5,979.0	29.9	30.1	103.50	401.1	-1,322.9	751.9	693.1	58.74	12.799	
6,200.0	6,035.7	6,155.6	5,983.2	29.9	30.1	103.52	401.4	-1,324.0	752.4	693.7	58.79	12.799	
6,300.0	6,133.4	6,261.9	6,086.5	30.3	30.6	103.68	408.4	-1,348.2	764.4	704.8	59.66	12.813	
6,400.0	6,232.1	6,374.5	6,197.0	30.6	31.0	103.76	414.2	-1,368.3	773.7	713.3	60.35	12.820	
6,500.0	6,331.5	6,487.6	6,309.2	30.8	31.3	103.80	418.2	-1,382.2	780.0	719.1	60.85	12.818	
6,600.0	6,431.3	6,601.1	6,422.4	30.9	31.4	103.81	420.3	-1,389.7	783.4	722.2	61.20	12.800	
6,657.7	6,489.0	6,666.6	6,487.9	31.0	31.5	-0.97	420.7	-1,391.1	783.9	722.6	61.33	12.782	
6,700.0	6,531.3	6,710.0	6,531.3	31.0	31.6	-0.97	420.7	-1,391.1	783.9	722.5	61.41	12.765	
6,800.0	6,631.3	6,810.0	6,631.3	31.1	31.7	-0.97	420.7	-1,391.1	783.9	722.3	61.61	12.724	
6,900.0	6,731.3	6,910.0	6,731.3	31.2	31.8	-0.97	420.7	-1,391.1	783.9	722.1	61.81	12.682	
7,000.0	6,831.3	7,010.0	6,831.3	31.3	31.9	-0.97	420.7	-1,391.1	783.9	721.9	62.02	12.640	
7,100.0	6,931.3	7,110.0	6,931.3	31.4	32.0	-0.97	420.7	-1,391.1	783.9	721.7	62.23	12.598	
7,200.0	7,031.3	7,210.0	7,031.3	31.5	32.1	-0.97	420.7	-1,391.1	783.9	721.5	62.44	12.556	
7,300.0	7,131.3	7,310.0	7,131.3	31.6	32.2	-0.97	420.7	-1,391.1	783.9	721.3	62.65	12.513	
7,400.0	7,231.3	7,410.0	7,231.3	31.7	32.3	-0.97	420.7	-1,391.1	783.9	721.1	62.86	12.470	
7,500.0	7,331.3	7,510.0	7,331.3	31.8	32.4	-0.97	420.7	-1,391.1	783.9	720.9	63.08	12.427	
7,600.0	7,431.3	7,610.0	7,431.3	31.9	32.5	-0.97	420.7	-1,391.1	783.9	720.6	63.30	12.384	
7,700.0	7,531.3	7,710.0	7,531.3	32.0	32.6	-0.97	420.7	-1,391.1	783.9	720.4	63.52	12.341	
7,800.0	7,631.3	7,810.0	7,631.3	32.1	32.7	-0.97	420.7	-1,391.1	783.9	720.2	63.75	12.297	
7,900.0	7,731.3	7,910.0	7,731.3	32.2	32.8	-0.97	420.7	-1,391.1	783.9	720.0	63.97	12.254	
8,000.0	7,831.3	8,010.0	7,831.3	32.3	33.0	-0.97	420.7	-1,391.1	783.9	719.7	64.20	12.210	
8,100.0	7,931.3	8,110.0	7,931.3	32.4	33.1	-0.97	420.7	-1,391.1	783.9	719.5	64.44	12.166	
8,200.0	8,031.3	8,210.0	8,031.3	32.6	33.2	-0.97	420.7	-1,391.1	783.9	719.3	64.67	12.122	
8,300.0	8,131.3	8,310.0	8,131.3	32.7	33.3	-0.97	420.7	-1,391.1	783.9	719.0	64.91	12.078	
8,400.0	8,231.3	8,410.0	8,231.3	32.8	33.4	-0.97	420.7	-1,391.1	783.9	718.8	65.15	12.034	
8,500.0	8,331.3	8,510.0	8,331.3	32.9	33.5	-0.97	420.7	-1,391.1	783.9	718.5	65.39	11.989	
8,600.0	8,431.3	8,610.0	8,431.3	33.0	33.7	-0.97	420.7	-1,391.1	783.9	718.3	65.63	11.945	
8,679.7	8,511.0	8,689.7	8,511.0	33.1	33.8	-0.97	420.7	-1,391.1	783.9	718.1	65.82	11.909	SF

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 12C-12 F12 - OH - Plan #2

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	51.86	5.1	6.5	8.3				
100.0	100.0	100.0	100.0	0.1	0.1	51.86	5.1	6.5	8.3	8.1	0.16	52.478	
200.0	200.0	200.0	200.0	0.3	0.3	51.86	5.1	6.5	8.3	7.6	0.61	13.606	
250.0	250.0	250.0	250.0	0.4	0.4	51.86	5.1	6.5	8.3	7.4	0.83	9.928	CC, ES
300.0	300.0	300.0	300.0	0.5	0.5	158.30	5.1	6.5	8.9	7.8	1.07	8.287	
400.0	399.8	400.4	400.4	0.7	0.7	160.23	5.1	3.9	11.6	10.0	1.59	7.300	
500.0	499.3	500.9	500.5	1.0	1.0	156.88	5.0	-4.1	14.9	12.8	2.14	6.992	
600.0	598.0	601.5	600.2	1.3	1.3	151.38	4.9	-17.3	19.0	16.3	2.72	6.992	
700.0	695.8	702.1	699.2	1.7	1.6	145.36	4.7	-35.7	24.0	20.6	3.37	7.115	
712.0	707.5	714.2	711.0	1.8	1.7	144.64	4.6	-38.3	24.6	21.2	3.46	7.129	
800.0	792.9	802.4	796.8	2.2	2.0	138.28	4.4	-58.5	28.9	24.8	4.06	7.113	
900.0	890.0	902.2	893.8	2.7	2.5	132.48	4.2	-81.9	33.8	28.9	4.88	6.925	
1,000.0	987.1	1,002.0	990.9	3.2	3.0	128.19	4.0	-105.2	39.0	33.2	5.79	6.742	
1,100.0	1,084.2	1,101.9	1,087.9	3.7	3.5	124.92	3.7	-128.5	44.4	37.7	6.74	6.590	
1,200.0	1,181.3	1,201.7	1,185.0	4.2	3.9	122.37	3.5	-151.9	49.9	42.2	7.71	6.469	
1,300.0	1,278.4	1,301.5	1,282.1	4.7	4.4	120.32	3.2	-175.2	55.4	46.7	8.70	6.373	
1,400.0	1,375.5	1,401.3	1,379.1	5.2	4.9	118.65	3.0	-198.6	61.0	51.4	9.69	6.297	
1,500.0	1,472.6	1,501.2	1,476.2	5.7	5.4	117.26	2.8	-221.9	66.7	56.0	10.70	6.236	
1,600.0	1,569.6	1,601.0	1,573.3	6.2	5.9	116.08	2.5	-245.2	72.4	60.7	11.70	6.186	
1,700.0	1,666.7	1,700.8	1,670.3	6.7	6.4	115.08	2.3	-268.6	78.1	65.4	12.71	6.146	
1,800.0	1,763.8	1,800.6	1,767.4	7.2	6.9	114.22	2.0	-291.9	83.9	70.1	13.72	6.111	
1,900.0	1,860.9	1,900.5	1,864.4	7.7	7.4	113.47	1.8	-315.3	89.6	74.9	14.73	6.083	
2,000.0	1,958.0	2,000.3	1,961.5	8.3	7.9	112.80	1.6	-338.6	95.4	79.6	15.74	6.058	
2,100.0	2,055.1	2,100.1	2,058.6	8.8	8.4	112.22	1.3	-361.9	101.2	84.4	16.76	6.037	
2,200.0	2,152.2	2,200.0	2,155.6	9.3	8.9	111.69	1.1	-385.3	107.0	89.2	17.77	6.019	
2,300.0	2,249.3	2,299.8	2,252.7	9.8	9.4	111.22	0.8	-408.6	112.8	94.0	18.78	6.003	
2,400.0	2,346.4	2,399.6	2,349.7	10.3	9.9	110.80	0.6	-431.9	118.6	98.8	19.80	5.989	
2,500.0	2,443.4	2,499.4	2,446.8	10.8	10.4	110.42	0.4	-455.3	124.4	103.6	20.81	5.977	
2,600.0	2,540.5	2,599.3	2,543.9	11.3	10.9	110.07	0.1	-478.6	130.2	108.4	21.82	5.966	
2,700.0	2,637.6	2,699.1	2,640.9	11.9	11.4	109.75	-0.1	-502.0	136.0	113.2	22.83	5.956	
2,800.0	2,734.7	2,798.9	2,738.0	12.4	11.9	109.45	-0.4	-525.3	141.8	118.0	23.85	5.947	
2,900.0	2,831.8	2,898.8	2,835.0	12.9	12.4	109.18	-0.6	-548.6	147.7	122.8	24.86	5.939	
3,000.0	2,928.9	2,998.6	2,932.1	13.4	12.9	108.93	-0.8	-572.0	153.5	127.6	25.87	5.932	
3,100.0	3,026.0	3,098.4	3,029.2	13.9	13.4	108.70	-1.1	-595.3	159.3	132.4	26.89	5.926	
3,200.0	3,123.1	3,198.2	3,126.2	14.4	13.9	108.49	-1.3	-618.7	165.2	137.3	27.90	5.920	
3,300.0	3,220.1	3,298.1	3,223.3	15.0	14.4	108.29	-1.6	-642.0	171.0	142.1	28.91	5.915	
3,400.0	3,317.2	3,397.9	3,320.3	15.5	14.9	108.10	-1.8	-665.3	176.8	146.9	29.92	5.910	
3,500.0	3,414.3	3,497.7	3,417.4	16.0	15.4	107.92	-2.0	-688.7	182.7	151.7	30.93	5.905	
3,600.0	3,511.4	3,597.5	3,514.5	16.5	15.9	107.76	-2.3	-712.0	188.5	156.6	31.95	5.901	
3,700.0	3,608.5	3,697.4	3,611.5	17.0	16.4	107.60	-2.5	-735.4	194.4	161.4	32.96	5.897	
3,800.0	3,705.6	3,797.2	3,708.6	17.5	17.0	107.46	-2.8	-758.7	200.2	166.2	33.97	5.894	
3,900.0	3,802.7	3,897.0	3,805.6	18.1	17.5	107.32	-3.0	-782.0	206.1	171.1	34.98	5.890	
4,000.0	3,899.8	3,996.9	3,902.7	18.6	18.0	107.19	-3.2	-805.4	211.9	175.9	35.99	5.887	
4,100.0	3,996.8	4,096.7	3,999.8	19.1	18.5	107.07	-3.5	-828.7	217.8	180.7	37.00	5.885	
4,200.0	4,093.9	4,196.5	4,096.8	19.6	19.0	106.95	-3.7	-852.1	223.6	185.6	38.01	5.882	
4,300.0	4,191.0	4,296.3	4,193.9	20.1	19.5	106.84	-4.0	-875.4	229.5	190.4	39.03	5.880	
4,400.0	4,288.1	4,396.2	4,291.0	20.6	20.0	106.74	-4.2	-898.7	235.3	195.3	40.04	5.877	
4,500.0	4,385.2	4,496.0	4,388.0	21.2	20.5	106.64	-4.4	-922.1	241.2	200.1	41.05	5.875	
4,600.0	4,482.3	4,595.8	4,485.1	21.7	21.0	106.54	-4.7	-945.4	247.0	205.0	42.06	5.873	
4,700.0	4,579.4	4,695.7	4,582.1	22.2	21.5	106.45	-4.9	-968.8	252.9	209.8	43.07	5.871	
4,800.0	4,676.5	4,795.5	4,679.2	22.7	22.0	106.37	-5.2	-992.1	258.7	214.6	44.08	5.870	
4,900.0	4,773.6	4,895.3	4,776.3	23.2	22.5	106.28	-5.4	-1,015.4	264.6	219.5	45.09	5.868	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 12C-12 F12 - OH - Plan #2

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,870.6	4,995.1	4,873.3	23.7	23.0	106.20	-5.6	-1,038.8	270.4	224.3	46.10	5.867	
5,100.0	4,967.7	5,095.0	4,970.4	24.3	23.5	106.13	-5.9	-1,062.1	276.3	229.2	47.11	5.865	
5,200.0	5,064.8	5,194.8	5,067.4	24.8	24.0	106.06	-6.1	-1,085.5	282.1	234.0	48.12	5.864	
5,300.0	5,161.9	5,294.6	5,164.5	25.3	24.5	105.99	-6.4	-1,108.8	288.0	238.9	49.13	5.863	
5,400.0	5,259.0	5,394.4	5,261.6	25.8	25.0	105.92	-6.6	-1,132.1	293.9	243.7	50.13	5.861	
5,500.0	5,356.1	5,494.3	5,358.6	26.3	25.5	105.86	-6.8	-1,155.5	299.7	248.6	51.14	5.860	
5,600.0	5,453.2	5,594.1	5,455.7	26.8	26.0	105.79	-7.1	-1,178.8	305.6	253.4	52.15	5.859	
5,700.0	5,550.3	5,693.9	5,552.7	27.4	26.5	105.73	-7.3	-1,202.2	311.4	258.3	53.16	5.858	
5,800.0	5,647.3	5,793.8	5,649.8	27.9	27.0	105.68	-7.6	-1,225.5	317.3	263.1	54.17	5.858	
5,900.0	5,744.4	5,893.6	5,746.9	28.4	27.5	105.62	-7.8	-1,248.8	323.2	268.0	55.18	5.857	
6,000.0	5,841.5	5,993.4	5,843.9	28.9	28.0	105.57	-8.0	-1,272.2	329.0	272.8	56.19	5.856	
6,100.0	5,938.6	6,093.2	5,941.0	29.4	28.5	105.52	-8.3	-1,295.5	334.9	277.7	57.19	5.855	
6,195.6	6,031.5	6,188.7	6,033.8	29.9	29.0	105.47	-8.5	-1,317.8	340.5	282.3	58.16	5.854	
6,200.0	6,035.7	6,193.1	6,038.0	29.9	29.0	105.47	-8.5	-1,318.9	340.7	282.5	58.20	5.855	
6,300.0	6,133.4	6,292.4	6,135.2	30.3	29.4	105.56	-8.7	-1,339.5	345.9	287.0	58.90	5.873	
6,400.0	6,232.1	6,391.8	6,233.4	30.6	29.6	105.63	-8.9	-1,355.1	349.8	290.4	59.46	5.884	
6,500.0	6,331.5	6,491.3	6,332.3	30.8	29.9	105.69	-9.0	-1,365.6	352.5	292.6	59.88	5.887	
6,600.0	6,431.3	6,590.8	6,431.6	30.9	30.0	105.75	-9.1	-1,370.9	353.9	293.7	60.17	5.882	
6,657.7	6,489.0	6,648.2	6,489.0	31.0	30.1	1.01	-9.1	-1,371.6	354.1	293.8	60.28	5.874	
6,700.0	6,531.3	6,690.5	6,531.3	31.0	30.1	1.01	-9.1	-1,371.6	354.1	293.7	60.36	5.866	
6,800.0	6,631.3	6,790.5	6,631.3	31.1	30.2	1.01	-9.1	-1,371.6	354.1	293.5	60.56	5.847	
6,900.0	6,731.3	6,890.5	6,731.3	31.2	30.3	1.01	-9.1	-1,371.6	354.1	293.3	60.76	5.828	
7,000.0	6,831.3	6,990.5	6,831.3	31.3	30.4	1.01	-9.1	-1,371.6	354.1	293.1	60.96	5.808	
7,100.0	6,931.3	7,090.5	6,931.3	31.4	30.5	1.01	-9.1	-1,371.6	354.1	292.9	61.17	5.788	
7,200.0	7,031.3	7,190.5	7,031.3	31.5	30.6	1.01	-9.1	-1,371.6	354.1	292.7	61.38	5.769	
7,300.0	7,131.3	7,290.5	7,131.3	31.6	30.7	1.01	-9.1	-1,371.6	354.1	292.5	61.59	5.749	
7,400.0	7,231.3	7,390.5	7,231.3	31.7	30.8	1.01	-9.1	-1,371.6	354.1	292.3	61.81	5.729	
7,500.0	7,331.3	7,490.5	7,331.3	31.8	30.9	1.01	-9.1	-1,371.6	354.1	292.1	62.03	5.709	
7,600.0	7,431.3	7,590.5	7,431.3	31.9	31.1	1.01	-9.1	-1,371.6	354.1	291.8	62.25	5.689	
7,700.0	7,531.3	7,690.5	7,531.3	32.0	31.2	1.01	-9.1	-1,371.6	354.1	291.6	62.47	5.668	
7,800.0	7,631.3	7,790.5	7,631.3	32.1	31.3	1.01	-9.1	-1,371.6	354.1	291.4	62.69	5.648	
7,900.0	7,731.3	7,890.5	7,731.3	32.2	31.4	1.01	-9.1	-1,371.6	354.1	291.2	62.92	5.628	
8,000.0	7,831.3	7,990.5	7,831.3	32.3	31.5	1.01	-9.1	-1,371.6	354.1	290.9	63.15	5.607	
8,100.0	7,931.3	8,090.5	7,931.3	32.4	31.6	1.01	-9.1	-1,371.6	354.1	290.7	63.38	5.587	
8,200.0	8,031.3	8,190.5	8,031.3	32.6	31.8	1.01	-9.1	-1,371.6	354.1	290.5	63.62	5.566	
8,300.0	8,131.3	8,290.5	8,131.3	32.7	31.9	1.01	-9.1	-1,371.6	354.1	290.2	63.85	5.545	
8,400.0	8,231.3	8,390.5	8,231.3	32.8	32.0	1.01	-9.1	-1,371.6	354.1	290.0	64.09	5.525	
8,500.0	8,331.3	8,490.5	8,331.3	32.9	32.1	1.01	-9.1	-1,371.6	354.1	289.8	64.33	5.504	
8,600.0	8,431.3	8,590.5	8,431.3	33.0	32.2	1.01	-9.1	-1,371.6	354.1	289.5	64.57	5.483	
8,679.7	8,511.0	8,670.2	8,511.0	33.1	32.3	1.01	-9.1	-1,371.6	354.1	289.3	64.77	5.467	SF

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 13A-12 F12 - OH - Plan #2 — **Offset Site Error:** 0.0 usft

Survey Program: 0-ISCWSA MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-133.55	-5.1	-5.4	7.4				
100.0	100.0	100.0	100.0	0.1	0.1	-133.55	-5.1	-5.4	7.4	7.2	0.16	47.042	
200.0	200.0	200.0	200.0	0.3	0.3	-133.55	-5.1	-5.4	7.4	6.8	0.61	12.196	CC, ES
250.0	250.0	249.8	249.8	0.4	0.4	-132.12	-5.4	-6.0	8.0	7.2	0.82	9.727	
300.0	300.0	299.6	299.5	0.5	0.5	-25.78	-6.2	-7.7	9.3	8.3	1.05	8.850	
400.0	399.8	399.0	398.6	0.7	0.8	-26.97	-9.6	-14.7	12.2	10.6	1.56	7.781	
500.0	499.3	498.3	497.0	1.0	1.0	-31.10	-15.1	-26.3	15.4	13.3	2.11	7.270	
600.0	598.0	597.4	594.5	1.3	1.4	-36.38	-22.9	-42.5	19.1	16.4	2.71	7.048	
700.0	695.8	696.3	690.8	1.7	1.8	-41.90	-32.8	-63.2	23.4	20.0	3.39	6.910	
712.0	707.5	708.4	702.4	1.8	1.9	-42.66	-34.1	-65.9	23.9	20.4	3.48	6.871	
800.0	792.9	796.2	787.4	2.2	2.3	-47.86	-43.7	-86.0	27.5	23.4	4.12	6.672	
900.0	890.0	896.1	884.0	2.7	2.9	-52.31	-54.7	-108.8	31.8	26.8	4.96	6.412	
1,000.0	987.1	996.0	980.7	3.2	3.4	-55.69	-65.6	-131.7	36.2	30.4	5.86	6.180	
1,100.0	1,084.2	1,095.9	1,077.3	3.7	3.9	-58.32	-76.6	-154.5	40.8	34.0	6.81	5.988	
1,200.0	1,181.3	1,195.8	1,173.9	4.2	4.5	-60.42	-87.5	-177.3	45.4	37.6	7.78	5.834	
1,300.0	1,278.4	1,295.6	1,270.5	4.7	5.0	-62.14	-98.4	-200.1	50.0	41.3	8.76	5.710	
1,400.0	1,375.5	1,395.5	1,367.1	5.2	5.5	-63.56	-109.4	-222.9	54.7	45.0	9.76	5.609	
1,500.0	1,472.6	1,495.4	1,463.8	5.7	6.1	-64.75	-120.3	-245.8	59.4	48.7	10.76	5.525	
1,600.0	1,569.6	1,595.3	1,560.4	6.2	6.6	-65.77	-131.2	-268.6	64.2	52.4	11.76	5.456	
1,700.0	1,666.7	1,695.2	1,657.0	6.7	7.1	-66.65	-142.2	-291.4	68.9	56.2	12.77	5.397	
1,800.0	1,763.8	1,795.0	1,753.6	7.2	7.7	-67.42	-153.1	-314.2	73.7	59.9	13.79	5.347	
1,900.0	1,860.9	1,894.9	1,850.3	7.7	8.2	-68.09	-164.0	-337.0	78.5	63.7	14.80	5.304	
2,000.0	1,958.0	1,994.8	1,946.9	8.3	8.7	-68.69	-175.0	-359.9	83.3	67.5	15.82	5.266	
2,100.0	2,055.1	2,094.7	2,043.5	8.8	9.3	-69.22	-185.9	-382.7	88.1	71.3	16.83	5.234	
2,200.0	2,152.2	2,194.6	2,140.1	9.3	9.8	-69.69	-196.9	-405.5	92.9	75.1	17.85	5.205	
2,300.0	2,249.3	2,294.5	2,236.7	9.8	10.4	-70.12	-207.8	-428.3	97.7	78.8	18.87	5.179	
2,400.0	2,346.4	2,394.3	2,333.4	10.3	10.9	-70.51	-218.7	-451.1	102.5	82.6	19.88	5.156	
2,500.0	2,443.4	2,494.2	2,430.0	10.8	11.4	-70.86	-229.7	-474.0	107.4	86.5	20.90	5.136	
2,600.0	2,540.5	2,594.1	2,526.6	11.3	12.0	-71.19	-240.6	-496.8	112.2	90.3	21.92	5.117	
2,700.0	2,637.6	2,694.0	2,623.2	11.9	12.5	-71.48	-251.5	-519.6	117.0	94.1	22.94	5.101	
2,800.0	2,734.7	2,793.9	2,719.9	12.4	13.1	-71.75	-262.5	-542.4	121.8	97.9	23.96	5.085	
2,900.0	2,831.8	2,893.7	2,816.5	12.9	13.6	-72.01	-273.4	-565.3	126.7	101.7	24.98	5.071	
3,000.0	2,928.9	2,993.6	2,913.1	13.4	14.2	-72.24	-284.3	-588.1	131.5	105.5	26.00	5.059	
3,100.0	3,026.0	3,093.5	3,009.7	13.9	14.7	-72.46	-295.3	-610.9	136.4	109.3	27.02	5.047	
3,200.0	3,123.1	3,193.4	3,106.3	14.4	15.2	-72.66	-306.2	-633.7	141.2	113.2	28.04	5.036	
3,300.0	3,220.1	3,293.3	3,203.0	15.0	15.8	-72.85	-317.1	-656.5	146.0	117.0	29.06	5.026	
3,400.0	3,317.2	3,393.1	3,299.6	15.5	16.3	-73.02	-328.1	-679.4	150.9	120.8	30.08	5.017	
3,500.0	3,414.3	3,493.0	3,396.2	16.0	16.9	-73.19	-339.0	-702.2	155.7	124.6	31.09	5.008	
3,600.0	3,511.4	3,592.9	3,492.8	16.5	17.4	-73.35	-350.0	-725.0	160.6	128.5	32.11	5.000	
3,700.0	3,608.5	3,692.8	3,589.5	17.0	17.9	-73.49	-360.9	-747.8	165.4	132.3	33.13	4.993	
3,800.0	3,705.6	3,792.7	3,686.1	17.5	18.5	-73.63	-371.8	-770.6	170.3	136.1	34.15	4.986	
3,900.0	3,802.7	3,892.6	3,782.7	18.1	19.0	-73.76	-382.8	-793.5	175.1	140.0	35.17	4.979	
4,000.0	3,899.8	3,992.4	3,879.3	18.6	19.6	-73.88	-393.7	-816.3	180.0	143.8	36.19	4.973	
4,100.0	3,996.8	4,092.3	3,976.0	19.1	20.1	-74.00	-404.6	-839.1	184.8	147.6	37.21	4.967	
4,200.0	4,093.9	4,192.2	4,072.6	19.6	20.6	-74.11	-415.6	-861.9	189.7	151.5	38.23	4.962	
4,300.0	4,191.0	4,292.1	4,169.2	20.1	21.2	-74.22	-426.5	-884.7	194.5	155.3	39.25	4.957	
4,400.0	4,288.1	4,392.0	4,265.8	20.6	21.7	-74.32	-437.4	-907.6	199.4	159.1	40.27	4.952	
4,500.0	4,385.2	4,491.8	4,362.4	21.2	22.3	-74.41	-448.4	-930.4	204.2	163.0	41.28	4.947	
4,600.0	4,482.3	4,591.7	4,459.1	21.7	22.8	-74.50	-459.3	-953.2	209.1	166.8	42.30	4.943	
4,700.0	4,579.4	4,691.6	4,555.7	22.2	23.3	-74.59	-470.3	-976.0	214.0	170.6	43.32	4.939	
4,800.0	4,676.5	4,791.5	4,652.3	22.7	23.9	-74.67	-481.2	-998.8	218.8	174.5	44.34	4.935	
4,900.0	4,773.6	4,891.4	4,748.9	23.2	24.4	-74.75	-492.1	-1,021.7	223.7	178.3	45.36	4.931	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 13A-12 F12 - OH - Plan #2

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,870.6	4,991.3	4,845.6	23.7	25.0	-74.83	-503.1	-1,044.5	228.5	182.2	46.37	4.928	
5,100.0	4,967.7	5,091.1	4,942.2	24.3	25.5	-74.90	-514.0	-1,067.3	233.4	186.0	47.39	4.924	
5,200.0	5,064.8	5,191.0	5,038.8	24.8	26.1	-74.97	-524.9	-1,090.1	238.2	189.8	48.41	4.921	
5,300.0	5,161.9	5,290.9	5,135.4	25.3	26.6	-75.04	-535.9	-1,113.0	243.1	193.7	49.43	4.918	
5,400.0	5,259.0	5,390.8	5,232.0	25.8	27.1	-75.10	-546.8	-1,135.8	248.0	197.5	50.45	4.915	
5,500.0	5,356.1	5,490.7	5,328.7	26.3	27.7	-75.17	-557.7	-1,158.6	252.8	201.4	51.46	4.913	
5,600.0	5,453.2	5,590.5	5,425.3	26.8	28.2	-75.23	-568.7	-1,181.4	257.7	205.2	52.48	4.910	
5,700.0	5,550.3	5,690.4	5,521.9	27.4	28.8	-75.28	-579.6	-1,204.2	262.5	209.0	53.50	4.907	
5,800.0	5,647.3	5,790.3	5,618.5	27.9	29.3	-75.34	-590.5	-1,227.1	267.4	212.9	54.51	4.905	
5,900.0	5,744.4	5,890.2	5,715.2	28.4	29.8	-75.39	-601.5	-1,249.9	272.3	216.7	55.53	4.903	
6,000.0	5,841.5	5,990.1	5,811.8	28.9	30.4	-75.44	-612.4	-1,272.7	277.1	220.6	56.55	4.900	
6,100.0	5,938.6	6,090.0	5,908.4	29.4	30.9	-75.49	-623.4	-1,295.5	282.0	224.4	57.57	4.898	
6,195.6	6,031.5	6,185.5	6,000.9	29.9	31.4	-75.54	-633.8	-1,317.4	286.6	228.1	58.54	4.896	
6,200.0	6,035.7	6,190.2	6,005.4	29.9	31.5	-75.55	-634.3	-1,318.4	286.8	228.3	58.58	4.897	
6,300.0	6,133.4	6,296.9	6,109.4	30.3	31.8	-75.73	-644.6	-1,339.9	291.1	231.8	59.32	4.907	
6,400.0	6,232.1	6,403.7	6,214.7	30.6	32.2	-75.88	-652.4	-1,356.2	294.3	234.4	59.91	4.912	
6,500.0	6,331.5	6,510.7	6,320.9	30.8	32.4	-75.99	-657.6	-1,367.1	296.4	236.1	60.36	4.911	
6,600.0	6,431.3	6,617.6	6,427.7	30.9	32.5	-76.07	-660.3	-1,372.6	297.5	236.8	60.67	4.904	
6,657.7	6,489.0	6,679.0	6,489.0	31.0	32.6	179.13	-660.7	-1,373.4	297.6	236.8	60.79	4.896	
6,700.0	6,531.3	6,721.3	6,531.3	31.0	32.6	179.13	-660.7	-1,373.4	297.6	236.7	60.87	4.889	
6,800.0	6,631.3	6,821.3	6,631.3	31.1	32.7	179.13	-660.7	-1,373.4	297.6	236.6	61.06	4.874	
6,900.0	6,731.3	6,921.3	6,731.3	31.2	32.8	179.13	-660.7	-1,373.4	297.6	236.4	61.25	4.859	
7,000.0	6,831.3	7,021.3	6,831.3	31.3	32.9	179.13	-660.7	-1,373.4	297.6	236.2	61.45	4.843	
7,100.0	6,931.3	7,121.3	6,931.3	31.4	33.0	179.13	-660.7	-1,373.4	297.6	236.0	61.65	4.828	
7,200.0	7,031.3	7,221.3	7,031.3	31.5	33.1	179.13	-660.7	-1,373.4	297.6	235.8	61.85	4.812	
7,300.0	7,131.3	7,321.3	7,131.3	31.6	33.2	179.13	-660.7	-1,373.4	297.6	235.6	62.05	4.796	
7,400.0	7,231.3	7,421.3	7,231.3	31.7	33.3	179.13	-660.7	-1,373.4	297.6	235.3	62.26	4.780	
7,500.0	7,331.3	7,521.3	7,331.3	31.8	33.4	179.13	-660.7	-1,373.4	297.6	235.1	62.47	4.764	
7,600.0	7,431.3	7,621.3	7,431.3	31.9	33.5	179.13	-660.7	-1,373.4	297.6	234.9	62.68	4.748	
7,700.0	7,531.3	7,721.3	7,531.3	32.0	33.6	179.13	-660.7	-1,373.4	297.6	234.7	62.90	4.732	
7,800.0	7,631.3	7,821.3	7,631.3	32.1	33.7	179.13	-660.7	-1,373.4	297.6	234.5	63.11	4.716	
7,900.0	7,731.3	7,921.3	7,731.3	32.2	33.8	179.13	-660.7	-1,373.4	297.6	234.3	63.33	4.699	
8,000.0	7,831.3	8,021.3	7,831.3	32.3	33.9	179.13	-660.7	-1,373.4	297.6	234.1	63.55	4.683	
8,100.0	7,931.3	8,121.3	7,931.3	32.4	34.0	179.13	-660.7	-1,373.4	297.6	233.8	63.78	4.666	
8,200.0	8,031.3	8,221.3	8,031.3	32.6	34.1	179.13	-660.7	-1,373.4	297.6	233.6	64.00	4.650	
8,300.0	8,131.3	8,321.3	8,131.3	32.7	34.2	179.13	-660.7	-1,373.4	297.6	233.4	64.23	4.633	
8,400.0	8,231.3	8,421.3	8,231.3	32.8	34.3	179.13	-660.7	-1,373.4	297.6	233.1	64.46	4.617	
8,500.0	8,331.3	8,521.3	8,331.3	32.9	34.4	179.13	-660.7	-1,373.4	297.6	232.9	64.70	4.600	
8,600.0	8,431.3	8,621.3	8,431.3	33.0	34.5	179.13	-660.7	-1,373.4	297.6	232.7	64.93	4.583	
8,648.4	8,479.7	8,669.7	8,479.7	33.1	34.5	179.13	-660.7	-1,373.4	297.6	232.6	65.05	4.575	
8,679.7	8,511.0	8,689.0	8,499.0	33.1	34.6	179.13	-660.7	-1,373.4	297.9	232.7	65.11	4.575	SF

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 13B-12 F12 - OH - Plan #2 — **Offset Site Error:** 0.0 usft

Survey Program: 0-ISCWSA MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	176.30	-13.1	0.8	13.1				
100.0	100.0	100.0	100.0	0.1	0.1	176.30	-13.1	0.8	13.1	13.0	0.16	83.513	
200.0	200.0	200.0	200.0	0.3	0.3	176.30	-13.1	0.8	13.1	12.5	0.61	21.651	CC, ES
250.0	250.0	249.8	249.8	0.4	0.4	178.68	-13.5	0.3	13.5	12.7	0.83	16.334	
300.0	300.0	299.6	299.5	0.5	0.5	-72.55	-14.6	-1.3	14.4	13.4	1.04	13.926	
400.0	399.8	399.0	398.6	0.7	0.7	-68.39	-18.9	-7.7	17.6	16.1	1.49	11.797	
500.0	499.3	498.2	497.0	1.0	1.0	-68.05	-26.2	-18.4	22.3	20.3	2.03	10.985	
600.0	598.0	597.2	594.3	1.3	1.4	-69.66	-36.3	-33.2	28.4	25.8	2.67	10.647	
700.0	695.8	695.8	690.3	1.7	1.8	-72.00	-49.1	-52.1	36.1	32.7	3.46	10.436	
712.0	707.5	707.7	701.7	1.8	1.9	-72.30	-50.8	-54.6	37.1	33.6	3.57	10.412	
800.0	792.9	795.0	785.8	2.2	2.4	-73.42	-64.2	-74.3	45.2	40.9	4.37	10.351	
900.0	890.0	894.6	881.6	2.7	2.9	-74.18	-79.5	-96.7	54.5	49.2	5.32	10.248	
1,000.0	987.1	994.2	977.4	3.2	3.5	-74.72	-94.8	-119.2	63.8	57.5	6.29	10.137	
1,100.0	1,084.2	1,093.7	1,073.1	3.7	4.0	-75.12	-110.1	-141.7	73.1	65.8	7.28	10.036	
1,200.0	1,181.3	1,193.3	1,168.9	4.2	4.6	-75.43	-125.4	-164.2	82.4	74.1	8.28	9.949	
1,300.0	1,278.4	1,292.9	1,264.7	4.7	5.2	-75.68	-140.7	-186.7	91.7	82.4	9.29	9.874	
1,400.0	1,375.5	1,392.4	1,360.5	5.2	5.7	-75.88	-156.0	-209.2	101.0	90.7	10.30	9.810	
1,500.0	1,472.6	1,492.0	1,456.3	5.7	6.3	-76.05	-171.3	-231.6	110.3	99.0	11.31	9.755	
1,600.0	1,569.6	1,591.6	1,552.0	6.2	6.9	-76.19	-186.6	-254.1	119.6	107.3	12.32	9.707	
1,700.0	1,666.7	1,691.1	1,647.8	6.7	7.4	-76.31	-201.9	-276.6	128.9	115.6	13.34	9.665	
1,800.0	1,763.8	1,790.7	1,743.6	7.2	8.0	-76.42	-217.2	-299.1	138.2	123.9	14.36	9.629	
1,900.0	1,860.9	1,890.3	1,839.4	7.7	8.6	-76.51	-232.5	-321.6	147.5	132.2	15.37	9.596	
2,000.0	1,958.0	1,989.8	1,935.2	8.3	9.1	-76.59	-247.8	-344.1	156.8	140.4	16.39	9.567	
2,100.0	2,055.1	2,089.4	2,030.9	8.8	9.7	-76.66	-263.0	-366.5	166.1	148.7	17.41	9.542	
2,200.0	2,152.2	2,189.0	2,126.7	9.3	10.3	-76.73	-278.3	-389.0	175.5	157.0	18.43	9.519	
2,300.0	2,249.3	2,288.5	2,222.5	9.8	10.9	-76.79	-293.6	-411.5	184.8	165.3	19.45	9.498	
2,400.0	2,346.4	2,388.1	2,318.3	10.3	11.4	-76.84	-308.9	-434.0	194.1	173.6	20.47	9.479	
2,500.0	2,443.4	2,487.7	2,414.1	10.8	12.0	-76.89	-324.2	-456.5	203.4	181.9	21.49	9.462	
2,600.0	2,540.5	2,587.2	2,509.8	11.3	12.6	-76.93	-339.5	-479.0	212.7	190.2	22.52	9.446	
2,700.0	2,637.6	2,686.8	2,605.6	11.9	13.2	-76.97	-354.8	-501.4	222.0	198.5	23.54	9.432	
2,800.0	2,734.7	2,786.4	2,701.4	12.4	13.7	-77.01	-370.1	-523.9	231.3	206.7	24.56	9.419	
2,900.0	2,831.8	2,885.9	2,797.2	12.9	14.3	-77.04	-385.4	-546.4	240.6	215.0	25.58	9.407	
3,000.0	2,928.9	2,985.5	2,893.0	13.4	14.9	-77.07	-400.7	-568.9	249.9	223.3	26.60	9.396	
3,100.0	3,026.0	3,085.1	2,988.7	13.9	15.4	-77.10	-416.0	-591.4	259.2	231.6	27.62	9.385	
3,200.0	3,123.1	3,184.6	3,084.5	14.4	16.0	-77.13	-431.3	-613.9	268.5	239.9	28.64	9.376	
3,300.0	3,220.1	3,284.2	3,180.3	15.0	16.6	-77.15	-446.6	-636.3	277.8	248.2	29.66	9.367	
3,400.0	3,317.2	3,383.7	3,276.1	15.5	17.2	-77.18	-461.9	-658.8	287.1	256.5	30.68	9.359	
3,500.0	3,414.3	3,483.3	3,371.9	16.0	17.7	-77.20	-477.2	-681.3	296.5	264.8	31.70	9.351	
3,600.0	3,511.4	3,582.9	3,467.6	16.5	18.3	-77.22	-492.5	-703.8	305.8	273.0	32.72	9.344	
3,700.0	3,608.5	3,682.4	3,563.4	17.0	18.9	-77.24	-507.8	-726.3	315.1	281.3	33.74	9.337	
3,800.0	3,705.6	3,782.0	3,659.2	17.5	19.5	-77.26	-523.1	-748.8	324.4	289.6	34.76	9.331	
3,900.0	3,802.7	3,881.6	3,755.0	18.1	20.0	-77.27	-538.4	-771.2	333.7	297.9	35.78	9.325	
4,000.0	3,899.8	3,981.1	3,850.8	18.6	20.6	-77.29	-553.7	-793.7	343.0	306.2	36.80	9.320	
4,100.0	3,996.8	4,080.7	3,946.5	19.1	21.2	-77.31	-569.0	-816.2	352.3	314.5	37.82	9.315	
4,200.0	4,093.9	4,180.3	4,042.3	19.6	21.8	-77.32	-584.3	-838.7	361.6	322.8	38.84	9.310	
4,300.0	4,191.0	4,279.8	4,138.1	20.1	22.3	-77.33	-599.6	-861.2	370.9	331.1	39.86	9.305	
4,400.0	4,288.1	4,379.4	4,233.9	20.6	22.9	-77.35	-614.8	-883.7	380.2	339.3	40.88	9.301	
4,500.0	4,385.2	4,479.0	4,329.7	21.2	23.5	-77.36	-630.1	-906.1	389.5	347.6	41.90	9.297	
4,600.0	4,482.3	4,578.5	4,425.4	21.7	24.1	-77.37	-645.4	-928.6	398.8	355.9	42.92	9.293	
4,700.0	4,579.4	4,678.1	4,521.2	22.2	24.6	-77.38	-660.7	-951.1	408.2	364.2	43.94	9.290	
4,800.0	4,676.5	4,777.7	4,617.0	22.7	25.2	-77.39	-676.0	-973.6	417.5	372.5	44.95	9.286	
4,900.0	4,773.6	4,877.2	4,712.8	23.2	25.8	-77.41	-691.3	-996.1	426.8	380.8	45.97	9.283	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 13B-12 F12 - OH - Plan #2

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,870.6	4,976.8	4,808.6	23.7	26.3	-77.42	-706.6	-1,018.6	436.1	389.1	46.99	9.280	
5,100.0	4,967.7	5,076.4	4,904.3	24.3	26.9	-77.42	-721.9	-1,041.0	445.4	397.4	48.01	9.277	
5,200.0	5,064.8	5,175.9	5,000.1	24.8	27.5	-77.43	-737.2	-1,063.5	454.7	405.7	49.03	9.275	
5,300.0	5,161.9	5,275.5	5,095.9	25.3	28.1	-77.44	-752.5	-1,086.0	464.0	414.0	50.04	9.272	
5,400.0	5,259.0	5,375.1	5,191.7	25.8	28.6	-77.45	-767.8	-1,108.5	473.3	422.3	51.06	9.270	
5,500.0	5,356.1	5,474.6	5,287.5	26.3	29.2	-77.46	-783.1	-1,131.0	482.6	430.5	52.08	9.268	
5,600.0	5,453.2	5,574.2	5,383.3	26.8	29.8	-77.47	-798.4	-1,153.5	491.9	438.8	53.09	9.265	
5,700.0	5,550.3	5,673.8	5,479.0	27.4	30.4	-77.48	-813.7	-1,175.9	501.2	447.1	54.11	9.263	
5,800.0	5,647.3	5,773.3	5,574.8	27.9	30.9	-77.48	-829.0	-1,198.4	510.5	455.4	55.13	9.262	
5,900.0	5,744.4	5,872.9	5,670.6	28.4	31.5	-77.49	-844.3	-1,220.9	519.9	463.7	56.14	9.260	
6,000.0	5,841.5	5,972.5	5,766.4	28.9	32.1	-77.50	-859.6	-1,243.4	529.2	472.0	57.16	9.258	
6,100.0	5,938.6	6,072.0	5,862.2	29.4	32.7	-77.50	-874.9	-1,265.9	538.5	480.3	58.17	9.256	
6,195.6	6,031.5	6,167.2	5,953.8	29.9	33.2	-77.51	-889.5	-1,287.4	547.4	488.2	59.14	9.255	
6,200.0	6,035.7	6,171.7	5,958.0	29.9	33.2	-77.52	-890.2	-1,288.4	547.8	488.6	59.19	9.255	
6,300.0	6,133.4	6,289.0	6,071.8	30.3	33.7	-77.76	-906.2	-1,311.9	556.1	496.1	59.99	9.269	
6,400.0	6,232.1	6,406.7	6,187.5	30.6	34.1	-77.94	-918.3	-1,329.8	562.3	501.7	60.63	9.274	
6,500.0	6,331.5	6,524.7	6,304.6	30.8	34.3	-78.09	-926.4	-1,341.7	566.4	505.3	61.11	9.269	
6,600.0	6,431.3	6,643.0	6,422.6	30.9	34.5	-78.19	-930.5	-1,347.6	568.4	507.0	61.44	9.252	
6,657.7	6,489.0	6,709.4	6,489.0	31.0	34.6	177.01	-930.9	-1,348.3	568.6	507.0	61.57	9.236	
6,700.0	6,531.3	6,751.7	6,531.3	31.0	34.6	177.01	-930.9	-1,348.3	568.6	507.0	61.64	9.224	
6,800.0	6,631.3	6,851.7	6,631.3	31.1	34.7	177.01	-930.9	-1,348.3	568.6	506.8	61.83	9.196	
6,900.0	6,731.3	6,951.7	6,731.3	31.2	34.8	177.01	-930.9	-1,348.3	568.6	506.6	62.02	9.168	
7,000.0	6,831.3	7,051.7	6,831.3	31.3	34.8	177.01	-930.9	-1,348.3	568.6	506.4	62.21	9.140	
7,100.0	6,931.3	7,151.7	6,931.3	31.4	34.9	177.01	-930.9	-1,348.3	568.6	506.2	62.41	9.111	
7,200.0	7,031.3	7,251.7	7,031.3	31.5	35.0	177.01	-930.9	-1,348.3	568.6	506.0	62.60	9.083	
7,300.0	7,131.3	7,351.7	7,131.3	31.6	35.1	177.01	-930.9	-1,348.3	568.6	505.8	62.80	9.054	
7,400.0	7,231.3	7,451.7	7,231.3	31.7	35.2	177.01	-930.9	-1,348.3	568.6	505.6	63.00	9.025	
7,500.0	7,331.3	7,551.7	7,331.3	31.8	35.3	177.01	-930.9	-1,348.3	568.6	505.4	63.21	8.996	
7,600.0	7,431.3	7,651.7	7,431.3	31.9	35.3	177.01	-930.9	-1,348.3	568.6	505.2	63.42	8.966	
7,700.0	7,531.3	7,751.7	7,531.3	32.0	35.4	177.01	-930.9	-1,348.3	568.6	505.0	63.63	8.937	
7,800.0	7,631.3	7,851.7	7,631.3	32.1	35.5	177.01	-930.9	-1,348.3	568.6	504.8	63.84	8.907	
7,900.0	7,731.3	7,951.7	7,731.3	32.2	35.6	177.01	-930.9	-1,348.3	568.6	504.6	64.05	8.877	
8,000.0	7,831.3	8,051.7	7,831.3	32.3	35.7	177.01	-930.9	-1,348.3	568.6	504.3	64.27	8.847	
8,100.0	7,931.3	8,151.7	7,931.3	32.4	35.8	177.01	-930.9	-1,348.3	568.6	504.1	64.49	8.817	
8,200.0	8,031.3	8,251.7	8,031.3	32.6	35.9	177.01	-930.9	-1,348.3	568.6	503.9	64.71	8.787	
8,300.0	8,131.3	8,351.7	8,131.3	32.7	36.0	177.01	-930.9	-1,348.3	568.6	503.7	64.94	8.756	
8,400.0	8,231.3	8,451.7	8,231.3	32.8	36.1	177.01	-930.9	-1,348.3	568.6	503.4	65.16	8.726	
8,500.0	8,331.3	8,551.7	8,331.3	32.9	36.2	177.01	-930.9	-1,348.3	568.6	503.2	65.39	8.695	
8,600.0	8,431.3	8,651.7	8,431.3	33.0	36.3	177.01	-930.9	-1,348.3	568.6	503.0	65.62	8.665	
8,643.0	8,474.3	8,694.7	8,474.3	33.1	36.3	177.01	-930.9	-1,348.3	568.6	502.9	65.72	8.652	
8,679.7	8,511.0	8,709.4	8,489.0	33.1	36.4	177.01	-930.9	-1,348.3	569.0	503.2	65.78	8.650	SF

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 22B-12 F12 - OH - PLAN #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-ISCWSA MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	51.13	45.5	56.5	72.5				
100.0	100.0	100.0	100.0	0.1	0.1	51.13	45.5	56.5	72.5	72.4	0.16	460.978	
200.0	200.0	200.0	200.0	0.3	0.3	51.13	45.5	56.5	72.5	71.9	0.61	119.513	CC
250.0	250.0	249.6	249.6	0.4	0.4	50.81	45.9	56.3	72.7	71.8	0.83	87.369	ES
300.0	300.0	299.1	299.1	0.5	0.5	154.82	47.1	55.9	73.7	72.6	1.07	68.973	
400.0	399.8	396.6	396.4	0.7	0.8	153.28	51.7	54.8	80.7	79.0	1.61	50.105	
500.0	499.3	491.1	490.7	1.0	1.0	153.87	58.1	57.4	96.5	94.3	2.20	43.955	
600.0	598.0	587.0	586.1	1.3	1.2	155.75	66.0	63.2	120.4	117.6	2.82	42.642	SF
700.0	695.8	682.6	681.2	1.7	1.5	157.70	73.8	69.1	149.2	145.8	3.43	43.449	
712.0	707.5	694.0	692.5	1.8	1.5	157.93	74.8	69.8	153.0	149.5	3.51	43.619	
800.0	792.9	777.3	775.4	2.2	1.7	159.59	81.6	74.9	181.0	177.1	3.89	46.472	
900.0	890.0	871.9	869.5	2.7	2.0	160.95	89.4	80.8	213.0	208.6	4.35	48.948	
1,000.0	987.1	966.5	963.6	3.2	2.3	161.96	97.2	86.6	245.0	240.2	4.82	50.833	
1,100.0	1,084.2	1,061.2	1,057.8	3.7	2.5	162.73	104.9	92.4	277.2	271.9	5.30	52.298	
1,200.0	1,181.3	1,155.8	1,151.9	4.2	2.8	163.34	112.7	98.3	309.3	303.5	5.79	53.451	
1,300.0	1,278.4	1,250.5	1,246.1	4.7	3.1	163.84	120.5	104.1	341.5	335.2	6.28	54.363	
1,400.0	1,375.5	1,345.1	1,340.2	5.2	3.3	164.25	128.3	109.9	373.7	366.9	6.78	55.124	
1,500.0	1,472.6	1,439.8	1,434.4	5.7	3.6	164.60	136.0	115.8	405.9	398.6	7.28	55.752	
1,600.0	1,569.6	1,534.4	1,528.5	6.2	3.9	164.89	143.8	121.6	438.1	430.3	7.78	56.280	
1,700.0	1,666.7	1,629.1	1,622.7	6.7	4.2	165.15	151.6	127.4	470.3	462.0	8.29	56.730	
1,800.0	1,763.8	1,723.7	1,716.8	7.2	4.4	165.37	159.4	133.3	502.6	493.8	8.80	57.118	
1,900.0	1,860.9	1,818.4	1,810.9	7.7	4.7	165.57	167.1	139.1	534.8	525.5	9.31	57.455	
2,000.0	1,958.0	1,913.0	1,905.1	8.3	5.0	165.74	174.9	144.9	567.1	557.2	9.82	57.752	
2,100.0	2,055.1	2,007.6	1,999.2	8.8	5.3	165.90	182.7	150.8	599.3	589.0	10.33	58.016	
2,200.0	2,152.2	2,102.3	2,093.4	9.3	5.5	166.03	190.5	156.6	631.6	620.7	10.84	58.252	
2,300.0	2,249.3	2,196.9	2,187.5	9.8	5.8	166.16	198.2	162.4	663.8	652.5	11.35	58.466	
2,400.0	2,346.4	2,291.6	2,281.7	10.3	6.1	166.27	206.0	168.3	696.1	684.2	11.87	58.660	
2,500.0	2,443.4	2,386.2	2,375.8	10.8	6.4	166.38	213.8	174.1	728.3	716.0	12.38	58.837	
2,600.0	2,540.5	2,480.9	2,470.0	11.3	6.6	166.47	221.6	179.9	760.6	747.7	12.89	59.001	
2,700.0	2,637.6	2,575.5	2,564.1	11.9	6.9	166.56	229.3	185.8	792.9	779.5	13.40	59.152	
2,800.0	2,734.7	2,670.2	2,658.2	12.4	7.2	166.64	237.1	191.6	825.1	811.2	13.92	59.293	
2,900.0	2,831.8	2,764.8	2,752.4	12.9	7.5	166.71	244.9	197.4	857.4	843.0	14.43	59.425	
3,000.0	2,928.9	2,859.4	2,846.5	13.4	7.7	166.78	252.7	203.3	889.7	874.7	14.94	59.549	
3,100.0	3,026.0	2,954.1	2,940.7	13.9	8.0	166.85	260.4	209.1	921.9	906.5	15.45	59.667	
3,200.0	3,123.1	3,048.7	3,034.8	14.4	8.3	166.91	268.2	214.9	954.2	938.3	15.96	59.778	
3,300.0	3,220.1	3,143.4	3,129.0	15.0	8.6	166.96	276.0	220.8	986.5	970.0	16.47	59.883	
3,400.0	3,317.2	3,238.0	3,223.1	15.5	8.8	167.01	283.8	226.6	1,018.8	1,001.8	16.98	59.984	
3,500.0	3,414.3	3,332.7	3,317.3	16.0	9.1	167.06	291.6	232.4	1,051.0	1,033.5	17.49	60.081	
3,600.0	3,511.4	3,427.3	3,411.4	16.5	9.4	167.11	299.3	238.3	1,083.3	1,065.3	18.00	60.174	
3,700.0	3,608.5	3,522.0	3,505.5	17.0	9.7	167.15	307.1	244.1	1,115.6	1,097.1	18.51	60.264	
3,800.0	3,705.6	3,616.6	3,599.7	17.5	9.9	167.19	314.9	249.9	1,147.9	1,128.8	19.02	60.350	
3,900.0	3,802.7	3,711.3	3,693.8	18.1	10.2	167.23	322.7	255.8	1,180.1	1,160.6	19.53	60.434	
4,000.0	3,899.8	3,805.9	3,788.0	18.6	10.5	167.27	330.4	261.6	1,212.4	1,192.4	20.04	60.515	
4,100.0	3,996.8	3,900.5	3,882.1	19.1	10.8	167.31	338.2	267.4	1,244.7	1,224.2	20.54	60.594	
4,200.0	4,093.9	3,995.2	3,976.3	19.6	11.0	167.34	346.0	273.3	1,277.0	1,255.9	21.05	60.671	
4,300.0	4,191.0	4,089.8	4,070.4	20.1	11.3	167.37	353.8	279.1	1,309.2	1,287.7	21.55	60.746	
4,400.0	4,288.1	4,184.5	4,164.6	20.6	11.6	167.40	361.5	284.9	1,341.5	1,319.5	22.06	60.819	
4,500.0	4,385.2	4,279.1	4,258.7	21.2	11.9	167.43	369.3	290.8	1,373.8	1,351.2	22.56	60.891	
4,600.0	4,482.3	4,373.8	4,352.8	21.7	12.1	167.46	377.1	296.6	1,406.1	1,383.0	23.07	60.961	
4,700.0	4,579.4	4,468.4	4,447.0	22.2	12.4	167.48	384.9	302.5	1,438.4	1,414.8	23.57	61.030	
4,800.0	4,676.5	4,563.1	4,541.1	22.7	12.7	167.51	392.6	308.3	1,470.6	1,446.6	24.07	61.098	
4,900.0	4,773.6	4,657.7	4,635.3	23.2	13.0	167.53	400.4	314.1	1,502.9	1,478.4	24.57	61.165	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 22B-12 F12 - OH - PLAN #1

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,870.6	4,752.3	4,729.4	23.7	13.2	167.55	408.2	320.0	1,535.2	1,510.1	25.07	61.230	
5,100.0	4,967.7	4,847.0	4,823.6	24.3	13.5	167.57	416.0	325.8	1,567.5	1,541.9	25.57	61.295	
5,200.0	5,064.8	4,941.6	4,917.7	24.8	13.8	167.60	423.7	331.6	1,599.8	1,573.7	26.07	61.359	
5,300.0	5,161.9	5,036.3	5,011.9	25.3	14.1	167.62	431.5	337.5	1,632.0	1,605.5	26.57	61.422	
5,400.0	5,259.0	5,130.9	5,106.0	25.8	14.3	167.63	439.3	343.3	1,664.3	1,637.3	27.07	61.484	
5,500.0	5,356.1	5,225.6	5,200.1	26.3	14.6	167.65	447.1	349.1	1,696.6	1,669.0	27.57	61.546	
5,600.0	5,453.2	5,320.2	5,294.3	26.8	14.9	167.67	454.8	355.0	1,728.9	1,700.8	28.06	61.607	
5,700.0	5,550.3	5,414.9	5,388.4	27.4	15.2	167.69	462.6	360.8	1,761.2	1,732.6	28.56	61.667	
5,800.0	5,647.3	5,509.5	5,482.6	27.9	15.4	167.71	470.4	366.6	1,793.5	1,764.4	29.05	61.727	
5,900.0	5,744.4	5,604.1	5,576.7	28.4	15.7	167.72	478.2	372.5	1,825.7	1,796.2	29.55	61.786	
6,000.0	5,841.5	5,698.8	5,670.9	28.9	16.0	167.74	486.0	378.3	1,858.0	1,828.0	30.04	61.845	
6,100.0	5,938.6	5,793.4	5,765.0	29.4	16.3	167.75	493.7	384.1	1,890.3	1,859.8	30.54	61.903	
6,195.6	6,031.5	5,884.0	5,855.0	29.9	16.5	167.77	501.2	389.7	1,921.2	1,890.2	31.01	61.959	
6,200.0	6,035.7	5,888.1	5,859.2	29.9	16.5	167.78	501.5	390.0	1,922.6	1,891.5	31.04	61.945	
6,300.0	6,133.4	5,983.6	5,954.1	30.3	16.8	167.97	509.3	395.8	1,952.2	1,920.6	31.66	61.670	
6,400.0	6,232.1	6,080.5	6,050.5	30.6	17.1	168.09	517.3	401.8	1,976.9	1,944.7	32.20	61.401	
6,500.0	6,331.5	6,178.5	6,148.0	30.8	17.4	168.14	525.4	407.9	1,996.6	1,964.0	32.66	61.138	
6,600.0	6,431.3	6,277.3	6,246.3	30.9	17.7	168.14	533.5	414.0	2,011.3	1,978.3	33.02	60.908	
6,657.7	6,489.0	6,334.6	6,303.3	31.0	17.8	63.34	538.2	417.5	2,017.5	1,984.3	33.19	60.779	
6,700.0	6,531.3	6,376.7	6,345.2	31.0	18.0	63.29	541.6	420.1	2,021.4	1,988.0	33.37	60.581	
6,800.0	6,631.3	6,663.2	6,631.3	31.1	18.5	63.15	550.4	426.6	2,022.5	1,988.5	34.06	59.386	
6,900.0	6,731.3	6,763.2	6,731.3	31.2	18.7	63.15	550.4	426.6	2,022.5	1,988.1	34.41	58.778	
7,000.0	6,831.3	6,863.2	6,831.3	31.3	18.8	63.15	550.4	426.6	2,022.5	1,987.8	34.76	58.178	
7,100.0	6,931.3	6,963.2	6,931.3	31.4	19.0	63.15	550.4	426.6	2,022.5	1,987.4	35.12	57.588	
7,200.0	7,031.3	7,063.2	7,031.3	31.5	19.2	63.15	550.4	426.6	2,022.5	1,987.0	35.48	57.006	
7,300.0	7,131.3	7,163.2	7,131.3	31.6	19.4	63.15	550.4	426.6	2,022.5	1,986.7	35.84	56.432	
7,400.0	7,231.3	7,263.2	7,231.3	31.7	19.5	63.15	550.4	426.6	2,022.5	1,986.3	36.20	55.867	
7,500.0	7,331.3	7,363.2	7,331.3	31.8	19.7	63.15	550.4	426.6	2,022.5	1,986.0	36.57	55.311	
7,600.0	7,431.3	7,463.2	7,431.3	31.9	19.9	63.15	550.4	426.6	2,022.5	1,985.6	36.93	54.762	
7,700.0	7,531.3	7,563.2	7,531.3	32.0	20.1	63.15	550.4	426.6	2,022.5	1,985.2	37.30	54.222	
7,800.0	7,631.3	7,663.2	7,631.3	32.1	20.3	63.15	550.4	426.6	2,022.5	1,984.9	37.67	53.690	
7,900.0	7,731.3	7,763.2	7,731.3	32.2	20.4	63.15	550.4	426.6	2,022.5	1,984.5	38.04	53.166	
8,000.0	7,831.3	7,863.2	7,831.3	32.3	20.6	63.15	550.4	426.6	2,022.5	1,984.1	38.41	52.650	
8,100.0	7,931.3	7,963.2	7,931.3	32.4	20.8	63.15	550.4	426.6	2,022.5	1,983.7	38.79	52.142	
8,200.0	8,031.3	8,063.2	8,031.3	32.6	21.0	63.15	550.4	426.6	2,022.5	1,983.4	39.16	51.642	
8,300.0	8,131.3	8,163.2	8,131.3	32.7	21.2	63.15	550.4	426.6	2,022.5	1,983.0	39.54	51.149	
8,400.0	8,231.3	8,263.2	8,231.3	32.8	21.4	63.15	550.4	426.6	2,022.5	1,982.6	39.92	50.664	
8,500.0	8,331.3	8,363.2	8,331.3	32.9	21.5	63.15	550.4	426.6	2,022.5	1,982.2	40.30	50.186	
8,600.0	8,431.3	8,463.2	8,431.3	33.0	21.7	63.15	550.4	426.6	2,022.5	1,981.8	40.68	49.715	
8,679.7	8,511.0	8,542.9	8,511.0	33.1	21.9	63.15	550.4	426.6	2,022.5	1,981.5	40.99	49.345	

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 22C-12 F12 - OH - PLAN #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-ISCWSA MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	58.37	42.6	69.2	81.2				
100.0	100.0	100.0	100.0	0.1	0.1	58.37	42.6	69.2	81.2	81.1	0.16	516.366	
200.0	200.0	200.0	200.0	0.3	0.3	58.37	42.6	69.2	81.2	80.6	0.61	133.873	CC, ES
250.0	250.0	248.0	248.0	0.4	0.4	58.43	42.9	69.7	81.9	81.0	0.83	99.189	
300.0	300.0	295.8	295.8	0.5	0.5	163.45	43.6	71.4	84.4	83.3	1.07	78.862	
400.0	399.8	393.8	393.5	0.7	0.7	164.73	46.1	77.1	95.7	94.1	1.65	58.100	
500.0	499.3	492.3	491.9	1.0	1.0	166.37	48.8	83.1	112.4	110.1	2.24	50.255	
600.0	598.0	589.8	589.2	1.3	1.2	168.01	51.4	89.0	134.2	131.3	2.84	47.292	
700.0	695.8	686.1	685.2	1.7	1.5	169.50	54.0	94.8	161.0	157.6	3.44	46.787	SF
712.0	707.5	697.5	696.6	1.8	1.5	169.66	54.3	95.5	164.6	161.1	3.51	46.837	
800.0	792.9	781.4	780.3	2.2	1.7	170.82	56.6	100.6	191.0	187.1	3.88	49.279	
900.0	890.0	876.7	875.4	2.7	1.9	171.80	59.1	106.4	221.1	216.8	4.31	51.345	
1,000.0	987.1	972.0	970.5	3.2	2.2	172.55	61.7	112.1	251.2	246.5	4.75	52.880	
1,100.0	1,084.2	1,067.3	1,065.6	3.7	2.4	173.13	64.3	117.9	281.4	276.2	5.21	54.025	
1,200.0	1,181.3	1,162.6	1,160.7	4.2	2.7	173.60	66.8	123.7	311.6	305.9	5.67	54.923	
1,300.0	1,278.4	1,257.9	1,255.8	4.7	2.9	173.99	69.4	129.5	341.8	335.7	6.14	55.625	
1,400.0	1,375.5	1,353.2	1,350.8	5.2	3.2	174.32	72.0	135.2	372.0	365.4	6.62	56.186	
1,500.0	1,472.6	1,448.5	1,445.9	5.7	3.4	174.59	74.5	141.0	402.3	395.2	7.10	56.641	
1,600.0	1,569.6	1,543.8	1,541.0	6.2	3.6	174.83	77.1	146.8	432.5	424.9	7.59	57.015	
1,700.0	1,666.7	1,639.1	1,636.1	6.7	3.9	175.04	79.7	152.6	462.7	454.7	8.07	57.328	
1,800.0	1,763.8	1,734.4	1,731.2	7.2	4.1	175.22	82.2	158.4	493.0	484.4	8.56	57.594	
1,900.0	1,860.9	1,829.7	1,826.3	7.7	4.4	175.38	84.8	164.1	523.2	514.2	9.05	57.821	
2,000.0	1,958.0	1,925.0	1,921.4	8.3	4.6	175.52	87.4	169.9	553.5	543.9	9.54	58.019	
2,100.0	2,055.1	2,020.3	2,016.5	8.8	4.9	175.65	89.9	175.7	583.7	573.7	10.03	58.192	
2,200.0	2,152.2	2,115.6	2,111.6	9.3	5.1	175.77	92.5	181.5	614.0	603.5	10.52	58.345	
2,300.0	2,249.3	2,210.9	2,206.7	9.8	5.3	175.87	95.1	187.2	644.3	633.2	11.02	58.483	
2,400.0	2,346.4	2,306.3	2,301.8	10.3	5.6	175.97	97.6	193.0	674.5	663.0	11.51	58.607	
2,500.0	2,443.4	2,401.6	2,396.9	10.8	5.8	176.05	100.2	198.8	704.8	692.8	12.00	58.720	
2,600.0	2,540.5	2,496.9	2,492.0	11.3	6.1	176.13	102.8	204.6	735.0	722.6	12.50	58.824	
2,700.0	2,637.6	2,592.2	2,587.1	11.9	6.3	176.21	105.3	210.4	765.3	752.3	12.99	58.920	
2,800.0	2,734.7	2,687.5	2,682.2	12.4	6.6	176.28	107.9	216.1	795.6	782.1	13.48	59.010	
2,900.0	2,831.8	2,782.8	2,777.3	12.9	6.8	176.34	110.5	221.9	825.9	811.9	13.98	59.094	
3,000.0	2,928.9	2,878.1	2,872.4	13.4	7.0	176.40	113.0	227.7	856.1	841.7	14.47	59.173	
3,100.0	3,026.0	2,973.4	2,967.5	13.9	7.3	176.45	115.6	233.5	886.4	871.4	14.96	59.248	
3,200.0	3,123.1	3,068.7	3,062.6	14.4	7.5	176.50	118.2	239.3	916.7	901.2	15.45	59.320	
3,300.0	3,220.1	3,164.0	3,157.7	15.0	7.8	176.55	120.7	245.0	946.9	931.0	15.94	59.388	
3,400.0	3,317.2	3,259.3	3,252.8	15.5	8.0	176.60	123.3	250.8	977.2	960.8	16.44	59.454	
3,500.0	3,414.3	3,354.6	3,347.8	16.0	8.2	176.64	125.9	256.6	1,007.5	990.5	16.93	59.517	
3,600.0	3,511.4	3,449.9	3,442.9	16.5	8.5	176.68	128.4	262.4	1,037.7	1,020.3	17.42	59.579	
3,700.0	3,608.5	3,545.2	3,538.0	17.0	8.7	176.71	131.0	268.1	1,068.0	1,050.1	17.91	59.638	
3,800.0	3,705.6	3,640.5	3,633.1	17.5	9.0	176.75	133.6	273.9	1,098.3	1,079.9	18.40	59.696	
3,900.0	3,802.7	3,735.8	3,728.2	18.1	9.2	176.78	136.1	279.7	1,128.6	1,109.7	18.89	59.753	
4,000.0	3,899.8	3,831.1	3,823.3	18.6	9.5	176.82	138.7	285.5	1,158.8	1,139.5	19.38	59.808	
4,100.0	3,996.8	3,926.4	3,918.4	19.1	9.7	176.85	141.3	291.3	1,189.1	1,169.3	19.86	59.862	
4,200.0	4,093.9	4,021.7	4,013.5	19.6	9.9	176.87	143.8	297.0	1,219.4	1,199.0	20.35	59.916	
4,300.0	4,191.0	4,117.1	4,108.6	20.1	10.2	176.90	146.4	302.8	1,249.7	1,228.8	20.84	59.968	
4,400.0	4,288.1	4,212.4	4,203.7	20.6	10.4	176.93	149.0	308.6	1,279.9	1,258.6	21.33	60.020	
4,500.0	4,385.2	4,307.7	4,298.8	21.2	10.7	176.95	151.5	314.4	1,310.2	1,288.4	21.81	60.071	
4,600.0	4,482.3	4,403.0	4,393.9	21.7	10.9	176.97	154.1	320.1	1,340.5	1,318.2	22.30	60.121	
4,700.0	4,579.4	4,498.3	4,489.0	22.2	11.2	177.00	156.7	325.9	1,370.8	1,348.0	22.78	60.171	
4,800.0	4,676.5	4,593.6	4,584.1	22.7	11.4	177.02	159.2	331.7	1,401.0	1,377.8	23.27	60.220	
4,900.0	4,773.6	4,688.9	4,679.2	23.2	11.6	177.04	161.8	337.5	1,431.3	1,407.6	23.75	60.269	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 22C-12 F12 - OH - PLAN #1

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,870.6	4,784.2	4,774.3	23.7	11.9	177.06	164.4	343.3	1,461.6	1,437.4	24.23	60.318	
5,100.0	4,967.7	4,879.5	4,869.4	24.3	12.1	177.08	166.9	349.0	1,491.9	1,467.2	24.71	60.366	
5,200.0	5,064.8	4,974.8	4,964.5	24.8	12.4	177.10	169.5	354.8	1,522.2	1,497.0	25.20	60.414	
5,300.0	5,161.9	5,070.1	5,059.6	25.3	12.6	177.11	172.1	360.6	1,552.4	1,526.8	25.68	60.462	
5,400.0	5,259.0	5,165.4	5,154.7	25.8	12.9	177.13	174.6	366.4	1,582.7	1,556.6	26.16	60.510	
5,500.0	5,356.1	5,260.7	5,249.8	26.3	13.1	177.15	177.2	372.1	1,613.0	1,586.4	26.64	60.557	
5,600.0	5,453.2	5,356.0	5,344.9	26.8	13.3	177.16	179.8	377.9	1,643.3	1,616.1	27.11	60.604	
5,700.0	5,550.3	5,451.3	5,439.9	27.4	13.6	177.18	182.3	383.7	1,673.5	1,645.9	27.59	60.651	
5,800.0	5,647.3	5,546.6	5,535.0	27.9	13.8	177.19	184.9	389.5	1,703.8	1,675.7	28.07	60.698	
5,900.0	5,744.4	5,641.9	5,630.1	28.4	14.1	177.21	187.4	395.3	1,734.1	1,705.6	28.55	60.744	
6,000.0	5,841.5	5,737.2	5,725.2	28.9	14.3	177.22	190.0	401.0	1,764.4	1,735.4	29.02	60.791	
6,100.0	5,938.6	5,832.5	5,820.3	29.4	14.6	177.23	192.6	406.8	1,794.7	1,765.2	29.50	60.837	
6,195.6	6,031.5	5,923.7	5,911.3	29.9	14.8	177.25	195.0	412.3	1,823.6	1,793.7	29.95	60.881	
6,200.0	6,035.7	5,927.9	5,915.4	29.9	14.8	177.25	195.1	412.6	1,824.9	1,794.9	29.98	60.867	
6,300.0	6,133.4	6,024.0	6,011.3	30.3	15.1	177.30	197.7	418.4	1,852.5	1,821.9	30.57	60.596	
6,400.0	6,232.1	6,121.4	6,108.5	30.6	15.3	177.33	200.4	424.3	1,875.0	1,843.9	31.07	60.351	
6,500.0	6,331.5	6,219.9	6,206.8	30.8	15.5	177.35	203.0	430.3	1,892.3	1,860.9	31.47	60.134	
6,600.0	6,431.3	6,319.1	6,305.8	30.9	15.8	177.35	205.7	436.3	1,904.5	1,872.8	31.77	59.947	
6,657.7	6,489.0	6,376.6	6,363.2	31.0	15.9	72.58	207.2	439.8	1,909.2	1,877.3	31.90	59.840	
6,700.0	6,531.3	6,418.8	6,405.3	31.0	16.1	72.57	208.4	442.4	1,912.0	1,879.9	32.07	59.624	
6,800.0	6,631.3	6,645.0	6,631.3	31.1	16.5	72.55	210.5	447.2	1,913.1	1,880.5	32.66	58.578	
6,900.0	6,731.3	6,745.0	6,731.3	31.2	16.7	72.55	210.5	447.2	1,913.1	1,880.1	33.02	57.936	
7,000.0	6,831.3	6,845.0	6,831.3	31.3	16.9	72.55	210.5	447.2	1,913.1	1,879.8	33.39	57.304	
7,100.0	6,931.3	6,945.0	6,931.3	31.4	17.1	72.55	210.5	447.2	1,913.1	1,879.4	33.75	56.683	
7,200.0	7,031.3	7,045.0	7,031.3	31.5	17.2	72.55	210.5	447.2	1,913.1	1,879.0	34.12	56.071	
7,300.0	7,131.3	7,145.0	7,131.3	31.6	17.4	72.55	210.5	447.2	1,913.1	1,878.6	34.49	55.470	
7,400.0	7,231.3	7,245.0	7,231.3	31.7	17.6	72.55	210.5	447.2	1,913.1	1,878.3	34.86	54.879	
7,500.0	7,331.3	7,345.0	7,331.3	31.8	17.8	72.55	210.5	447.2	1,913.1	1,877.9	35.23	54.297	
7,600.0	7,431.3	7,445.0	7,431.3	31.9	18.0	72.55	210.5	447.2	1,913.1	1,877.5	35.61	53.725	
7,700.0	7,531.3	7,545.0	7,531.3	32.0	18.2	72.55	210.5	447.2	1,913.1	1,877.1	35.99	53.163	
7,800.0	7,631.3	7,645.0	7,631.3	32.1	18.4	72.55	210.5	447.2	1,913.1	1,876.8	36.36	52.610	
7,900.0	7,731.3	7,745.0	7,731.3	32.2	18.6	72.55	210.5	447.2	1,913.1	1,876.4	36.74	52.066	
8,000.0	7,831.3	7,845.0	7,831.3	32.3	18.8	72.55	210.5	447.2	1,913.1	1,876.0	37.13	51.532	
8,100.0	7,931.3	7,945.0	7,931.3	32.4	19.0	72.55	210.5	447.2	1,913.1	1,875.6	37.51	51.006	
8,200.0	8,031.3	8,045.0	8,031.3	32.6	19.2	72.55	210.5	447.2	1,913.1	1,875.2	37.89	50.489	
8,300.0	8,131.3	8,145.0	8,131.3	32.7	19.4	72.55	210.5	447.2	1,913.1	1,874.9	38.28	49.980	
8,400.0	8,231.3	8,245.0	8,231.3	32.8	19.6	72.55	210.5	447.2	1,913.1	1,874.5	38.66	49.480	
8,500.0	8,331.3	8,345.0	8,331.3	32.9	19.8	72.55	210.5	447.2	1,913.1	1,874.1	39.05	48.989	
8,600.0	8,431.3	8,445.0	8,431.3	33.0	20.0	72.55	210.5	447.2	1,913.1	1,873.7	39.44	48.505	
8,679.7	8,511.0	8,524.6	8,511.0	33.1	20.2	72.55	210.5	447.2	1,913.1	1,873.4	39.75	48.125	

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 22D-12 F12 - OH - Plan #2 — **Offset Site Error:** 0.0 usft

Survey Program: 0-ISCWSA MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	74.60	6.9	25.1	26.1				
100.0	100.0	100.0	100.0	0.1	0.1	74.60	6.9	25.1	26.1	25.9	0.16	165.661	
200.0	200.0	200.0	200.0	0.3	0.3	74.60	6.9	25.1	26.1	25.5	0.61	42.949	
250.0	250.0	250.0	250.0	0.4	0.4	74.60	6.9	25.1	26.1	25.2	0.83	31.341	CC, ES
300.0	300.0	299.7	299.7	0.5	0.5	-179.97	6.7	25.5	27.0	26.0	1.06	25.391	
400.0	399.8	398.5	398.5	0.7	0.7	-175.98	5.0	28.5	34.8	33.2	1.61	21.620	SF
500.0	499.3	496.4	496.2	1.0	0.9	-171.76	1.7	34.2	50.4	48.2	2.23	22.659	
600.0	598.0	594.0	593.5	1.3	1.2	-169.77	-2.1	40.8	72.1	69.2	2.84	25.399	
700.0	695.8	690.4	689.5	1.7	1.4	-169.21	-5.8	47.2	98.7	95.3	3.46	28.548	
712.0	707.5	701.9	701.0	1.8	1.5	-169.20	-6.3	48.0	102.3	98.7	3.53	28.944	
800.0	792.9	785.9	784.7	2.2	1.7	-169.24	-9.5	53.6	128.4	124.5	3.92	32.791	
900.0	890.0	881.4	879.9	2.7	1.9	-169.28	-13.2	60.0	158.2	153.8	4.38	36.146	
1,000.0	987.1	976.9	975.1	3.2	2.2	-169.30	-16.9	66.4	187.9	183.0	4.85	38.718	
1,100.0	1,084.2	1,072.3	1,070.3	3.7	2.4	-169.32	-20.6	72.8	217.6	212.3	5.34	40.733	
1,200.0	1,181.3	1,167.8	1,165.5	4.2	2.7	-169.33	-24.3	79.2	247.3	241.5	5.85	42.315	
1,300.0	1,278.4	1,263.3	1,260.7	4.7	2.9	-169.34	-28.0	85.6	277.1	270.7	6.35	43.624	
1,400.0	1,375.5	1,358.8	1,355.9	5.2	3.2	-169.35	-31.7	92.0	306.8	299.9	6.86	44.694	
1,500.0	1,472.6	1,454.3	1,451.1	5.7	3.5	-169.36	-35.4	98.4	336.5	329.1	7.38	45.588	
1,600.0	1,569.6	1,549.7	1,546.3	6.2	3.7	-169.36	-39.1	104.8	366.2	358.3	7.90	46.345	
1,700.0	1,666.7	1,645.2	1,641.5	6.7	4.0	-169.37	-42.8	111.2	396.0	387.5	8.43	46.993	
1,800.0	1,763.8	1,740.7	1,736.7	7.2	4.2	-169.37	-46.5	117.6	425.7	416.7	8.95	47.556	
1,900.0	1,860.9	1,836.2	1,831.9	7.7	4.5	-169.38	-50.2	124.0	455.4	445.9	9.48	48.047	
2,000.0	1,958.0	1,931.7	1,927.1	8.3	4.7	-169.38	-53.9	130.4	485.1	475.1	10.01	48.481	
2,100.0	2,055.1	2,027.1	2,022.3	8.8	5.0	-169.38	-57.6	136.8	514.9	504.3	10.54	48.867	
2,200.0	2,152.2	2,122.6	2,117.4	9.3	5.2	-169.39	-61.3	143.2	544.6	533.5	11.07	49.213	
2,300.0	2,249.3	2,218.1	2,212.6	9.8	5.5	-169.39	-65.0	149.6	574.3	562.7	11.60	49.526	
2,400.0	2,346.4	2,313.6	2,307.8	10.3	5.8	-169.39	-68.7	156.0	604.0	591.9	12.13	49.809	
2,500.0	2,443.4	2,409.1	2,403.0	10.8	6.0	-169.39	-72.4	162.5	633.8	621.1	12.66	50.068	
2,600.0	2,540.5	2,504.5	2,498.2	11.3	6.3	-169.39	-76.1	168.9	663.5	650.3	13.19	50.306	
2,700.0	2,637.6	2,600.0	2,593.4	11.9	6.5	-169.40	-79.8	175.3	693.2	679.5	13.72	50.525	
2,800.0	2,734.7	2,695.5	2,688.6	12.4	6.8	-169.40	-83.5	181.7	722.9	708.7	14.25	50.729	
2,900.0	2,831.8	2,791.0	2,783.8	12.9	7.0	-169.40	-87.2	188.1	752.7	737.9	14.78	50.918	
3,000.0	2,928.9	2,886.5	2,879.0	13.4	7.3	-169.40	-90.9	194.5	782.4	767.1	15.31	51.095	
3,100.0	3,026.0	2,981.9	2,974.2	13.9	7.6	-169.40	-94.6	200.9	812.1	796.3	15.84	51.261	
3,200.0	3,123.1	3,077.4	3,069.4	14.4	7.8	-169.40	-98.3	207.3	841.9	825.5	16.37	51.417	
3,300.0	3,220.1	3,172.9	3,164.6	15.0	8.1	-169.40	-102.0	213.7	871.6	854.7	16.90	51.564	
3,400.0	3,317.2	3,268.4	3,259.8	15.5	8.3	-169.40	-105.7	220.1	901.3	883.9	17.43	51.704	
3,500.0	3,414.3	3,363.9	3,355.0	16.0	8.6	-169.40	-109.4	226.5	931.0	913.1	17.96	51.836	
3,600.0	3,511.4	3,459.3	3,450.1	16.5	8.8	-169.40	-113.1	232.9	960.8	942.3	18.49	51.962	
3,700.0	3,608.5	3,554.8	3,545.3	17.0	9.1	-169.41	-116.8	239.3	990.5	971.5	19.02	52.083	
3,800.0	3,705.6	3,650.3	3,640.5	17.5	9.3	-169.41	-120.5	245.7	1,020.2	1,000.7	19.55	52.198	
3,900.0	3,802.7	3,745.8	3,735.7	18.1	9.6	-169.41	-124.2	252.1	1,049.9	1,029.9	20.07	52.308	
4,000.0	3,899.8	3,841.3	3,830.9	18.6	9.9	-169.41	-127.9	258.5	1,079.7	1,059.1	20.60	52.414	
4,100.0	3,996.8	3,936.7	3,926.1	19.1	10.1	-169.41	-131.5	264.9	1,109.4	1,088.3	21.12	52.516	
4,200.0	4,093.9	4,032.2	4,021.3	19.6	10.4	-169.41	-135.2	271.3	1,139.1	1,117.5	21.65	52.615	
4,300.0	4,191.0	4,127.7	4,116.5	20.1	10.6	-169.41	-138.9	277.7	1,168.8	1,146.7	22.17	52.710	
4,400.0	4,288.1	4,223.2	4,211.7	20.6	10.9	-169.41	-142.6	284.1	1,198.6	1,175.9	22.70	52.802	
4,500.0	4,385.2	4,318.7	4,306.9	21.2	11.1	-169.41	-146.3	290.5	1,228.3	1,205.1	23.22	52.891	
4,600.0	4,482.3	4,414.1	4,402.1	21.7	11.4	-169.41	-150.0	296.9	1,258.0	1,234.3	23.75	52.978	
4,700.0	4,579.4	4,509.6	4,497.3	22.2	11.7	-169.41	-153.7	303.3	1,287.7	1,263.5	24.27	53.062	
4,800.0	4,676.5	4,605.1	4,592.5	22.7	11.9	-169.41	-157.4	309.7	1,317.5	1,292.7	24.79	53.144	
4,900.0	4,773.6	4,700.6	4,687.7	23.2	12.2	-169.41	-161.1	316.1	1,347.2	1,321.9	25.31	53.224	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 22D-12 F12 - OH - Plan #2

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,870.6	4,796.1	4,782.8	23.7	12.4	-169.41	-164.8	322.5	1,376.9	1,351.1	25.83	53.302	
5,100.0	4,967.7	4,891.5	4,878.0	24.3	12.7	-169.41	-168.5	328.9	1,406.6	1,380.3	26.35	53.378	
5,200.0	5,064.8	4,987.0	4,973.2	24.8	12.9	-169.41	-172.2	335.3	1,436.4	1,409.5	26.87	53.453	
5,300.0	5,161.9	5,082.5	5,068.4	25.3	13.2	-169.41	-175.9	341.7	1,466.1	1,438.7	27.39	53.526	
5,400.0	5,259.0	5,178.0	5,163.6	25.8	13.5	-169.41	-179.6	348.1	1,495.8	1,467.9	27.91	53.597	
5,500.0	5,356.1	5,273.5	5,258.8	26.3	13.7	-169.41	-183.3	354.5	1,525.5	1,497.1	28.43	53.667	
5,600.0	5,453.2	5,368.9	5,354.0	26.8	14.0	-169.41	-187.0	360.9	1,555.3	1,526.3	28.94	53.736	
5,700.0	5,550.3	5,464.4	5,449.2	27.4	14.2	-169.41	-190.7	367.3	1,585.0	1,555.5	29.46	53.804	
5,800.0	5,647.3	5,559.9	5,544.4	27.9	14.5	-169.41	-194.4	373.7	1,614.7	1,584.7	29.97	53.870	
5,900.0	5,744.4	5,655.4	5,639.6	28.4	14.7	-169.41	-198.1	380.1	1,644.4	1,614.0	30.49	53.936	
6,000.0	5,841.5	5,750.9	5,734.8	28.9	15.0	-169.42	-201.8	386.5	1,674.2	1,643.2	31.00	54.000	
6,100.0	5,938.6	5,846.3	5,830.0	29.4	15.3	-169.42	-205.5	392.9	1,703.9	1,672.4	31.52	54.063	
6,195.6	6,031.5	5,937.6	5,921.0	29.9	15.5	-169.42	-209.0	399.0	1,732.3	1,700.3	32.01	54.123	
6,200.0	6,035.7	5,941.8	5,925.2	29.9	15.5	-169.42	-209.2	399.3	1,733.6	1,701.6	32.04	54.114	
6,300.0	6,133.4	6,038.1	6,021.1	30.3	15.8	-169.56	-212.9	405.8	1,760.7	1,728.0	32.64	53.941	
6,400.0	6,232.1	6,135.6	6,118.4	30.6	16.0	-169.63	-216.7	412.3	1,782.7	1,749.6	33.16	53.768	
6,500.0	6,331.5	6,234.1	6,216.6	30.8	16.3	-169.65	-220.5	418.9	1,799.7	1,766.1	33.58	53.597	
6,600.0	6,431.3	6,333.3	6,315.5	30.9	16.6	-169.61	-224.4	425.6	1,811.6	1,777.7	33.91	53.429	
6,657.7	6,489.0	6,452.1	6,434.0	31.0	16.8	85.72	-227.8	431.5	1,815.2	1,781.1	34.15	53.158	
6,700.0	6,531.3	6,540.9	6,522.9	31.0	17.0	85.76	-228.7	433.1	1,816.0	1,781.6	34.37	52.840	
6,800.0	6,631.3	6,649.4	6,631.3	31.1	17.1	85.76	-228.7	433.1	1,816.0	1,781.3	34.71	52.323	
6,900.0	6,731.3	6,749.4	6,731.3	31.2	17.3	85.76	-228.7	433.1	1,816.0	1,781.0	35.03	51.843	
7,000.0	6,831.3	6,849.4	6,831.3	31.3	17.5	85.76	-228.7	433.1	1,816.0	1,780.6	35.35	51.368	
7,100.0	6,931.3	6,949.4	6,931.3	31.4	17.6	85.76	-228.7	433.1	1,816.0	1,780.3	35.68	50.897	
7,200.0	7,031.3	7,049.4	7,031.3	31.5	17.8	85.76	-228.7	433.1	1,816.0	1,780.0	36.01	50.431	
7,300.0	7,131.3	7,149.4	7,131.3	31.6	17.9	85.76	-228.7	433.1	1,816.0	1,779.6	36.34	49.970	
7,400.0	7,231.3	7,249.4	7,231.3	31.7	18.1	85.76	-228.7	433.1	1,816.0	1,779.3	36.68	49.514	
7,500.0	7,331.3	7,349.4	7,331.3	31.8	18.3	85.76	-228.7	433.1	1,816.0	1,779.0	37.01	49.063	
7,600.0	7,431.3	7,449.4	7,431.3	31.9	18.5	85.76	-228.7	433.1	1,816.0	1,778.6	37.35	48.617	
7,700.0	7,531.3	7,549.4	7,531.3	32.0	18.6	85.76	-228.7	433.1	1,816.0	1,778.3	37.69	48.176	
7,800.0	7,631.3	7,649.4	7,631.3	32.1	18.8	85.76	-228.7	433.1	1,816.0	1,777.9	38.04	47.740	
7,900.0	7,731.3	7,749.4	7,731.3	32.2	19.0	85.76	-228.7	433.1	1,816.0	1,777.6	38.39	47.309	
8,000.0	7,831.3	7,849.4	7,831.3	32.3	19.1	85.76	-228.7	433.1	1,816.0	1,777.2	38.73	46.884	
8,100.0	7,931.3	7,949.4	7,931.3	32.4	19.3	85.76	-228.7	433.1	1,816.0	1,776.9	39.08	46.463	
8,200.0	8,031.3	8,049.4	8,031.3	32.6	19.5	85.76	-228.7	433.1	1,816.0	1,776.5	39.44	46.048	
8,300.0	8,131.3	8,149.4	8,131.3	32.7	19.7	85.76	-228.7	433.1	1,816.0	1,776.2	39.79	45.637	
8,400.0	8,231.3	8,249.4	8,231.3	32.8	19.9	85.76	-228.7	433.1	1,816.0	1,775.8	40.15	45.232	
8,500.0	8,331.3	8,349.4	8,331.3	32.9	20.0	85.76	-228.7	433.1	1,816.0	1,775.5	40.51	44.832	
8,600.0	8,431.3	8,449.4	8,431.3	33.0	20.2	85.76	-228.7	433.1	1,816.0	1,775.1	40.87	44.437	
8,679.7	8,511.0	8,529.0	8,511.0	33.1	20.3	85.76	-228.7	433.1	1,816.0	1,774.9	41.13	44.155	

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 23A-12 F12 - OH - Plan #2

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	102.92	-2.9	12.7	13.0				
100.0	100.0	100.0	100.0	0.1	0.1	102.92	-2.9	12.7	13.0	12.9	0.16	82.851	
200.0	200.0	200.0	200.0	0.3	0.3	102.92	-2.9	12.7	13.0	12.4	0.61	21.480	CC, ES
250.0	250.0	249.8	249.8	0.4	0.4	104.00	-3.2	13.0	13.4	12.6	0.82	16.291	
300.0	300.0	299.6	299.6	0.5	0.5	-149.61	-4.2	13.9	15.0	14.0	1.05	14.298	SF
400.0	399.8	398.6	398.4	0.7	0.7	-149.06	-8.1	17.3	23.9	22.3	1.59	15.090	
500.0	499.3	496.4	495.8	1.0	1.0	-149.88	-14.4	22.9	40.1	37.9	2.19	18.341	
600.0	598.0	593.4	592.3	1.3	1.2	-151.14	-22.5	30.0	62.8	60.0	2.83	22.206	
700.0	695.8	689.5	687.8	1.7	1.5	-153.08	-30.5	37.1	90.2	86.7	3.49	25.864	
712.0	707.5	701.0	699.2	1.8	1.5	-153.31	-31.5	38.0	93.8	90.2	3.57	26.290	
800.0	792.9	784.8	782.5	2.2	1.8	-154.96	-38.5	44.2	120.3	116.3	4.02	29.955	
900.0	890.0	880.1	877.1	2.7	2.1	-156.13	-46.6	51.3	150.6	146.1	4.55	33.124	
1,000.0	987.1	975.4	971.8	3.2	2.4	-156.91	-54.6	58.4	181.0	175.9	5.09	35.532	
1,100.0	1,084.2	1,070.6	1,066.5	3.7	2.7	-157.46	-62.6	65.5	211.3	205.7	5.65	37.407	
1,200.0	1,181.3	1,165.9	1,161.1	4.2	3.0	-157.87	-70.6	72.5	241.7	235.5	6.22	38.874	
1,300.0	1,278.4	1,261.2	1,255.8	4.7	3.3	-158.19	-78.6	79.6	272.0	265.3	6.79	40.074	
1,400.0	1,375.5	1,356.4	1,350.5	5.2	3.6	-158.45	-86.6	86.7	302.4	295.1	7.37	41.058	
1,500.0	1,472.6	1,451.7	1,445.1	5.7	3.8	-158.66	-94.6	93.8	332.8	324.9	7.95	41.879	
1,600.0	1,569.6	1,547.0	1,539.8	6.2	4.1	-158.84	-102.6	100.9	363.2	354.7	8.53	42.573	
1,700.0	1,666.7	1,642.2	1,634.5	6.7	4.4	-158.98	-110.6	107.9	393.6	384.5	9.12	43.167	
1,800.0	1,763.8	1,737.5	1,729.1	7.2	4.7	-159.11	-118.6	115.0	424.0	414.3	9.71	43.682	
1,900.0	1,860.9	1,832.8	1,823.8	7.7	5.0	-159.22	-126.6	122.1	454.4	444.1	10.30	44.133	
2,000.0	1,958.0	1,928.0	1,918.5	8.3	5.3	-159.32	-134.6	129.2	484.7	473.9	10.89	44.530	
2,100.0	2,055.1	2,023.3	2,013.1	8.8	5.6	-159.40	-142.6	136.3	515.1	503.7	11.48	44.884	
2,200.0	2,152.2	2,118.6	2,107.8	9.3	5.9	-159.48	-150.7	143.3	545.5	533.5	12.07	45.201	
2,300.0	2,249.3	2,213.8	2,202.5	9.8	6.2	-159.54	-158.7	150.4	575.9	563.3	12.66	45.487	
2,400.0	2,346.4	2,309.1	2,297.1	10.3	6.5	-159.61	-166.7	157.5	606.3	593.1	13.25	45.747	
2,500.0	2,443.4	2,404.4	2,391.8	10.8	6.8	-159.66	-174.7	164.6	636.7	622.9	13.85	45.984	
2,600.0	2,540.5	2,499.6	2,486.5	11.3	7.1	-159.71	-182.7	171.6	667.1	652.7	14.44	46.202	
2,700.0	2,637.6	2,594.9	2,581.1	11.9	7.4	-159.76	-190.7	178.7	697.5	682.5	15.03	46.403	
2,800.0	2,734.7	2,690.2	2,675.8	12.4	7.7	-159.80	-198.7	185.8	727.9	712.3	15.62	46.590	
2,900.0	2,831.8	2,785.4	2,770.4	12.9	8.0	-159.84	-206.7	192.9	758.3	742.1	16.22	46.763	
3,000.0	2,928.9	2,880.7	2,865.1	13.4	8.3	-159.87	-214.7	200.0	788.7	771.9	16.81	46.925	
3,100.0	3,026.0	2,976.0	2,959.8	13.9	8.6	-159.90	-222.7	207.0	819.1	801.7	17.40	47.077	
3,200.0	3,123.1	3,071.2	3,054.4	14.4	8.9	-159.93	-230.7	214.1	849.5	831.5	17.99	47.219	
3,300.0	3,220.1	3,166.5	3,149.1	15.0	9.2	-159.96	-238.7	221.2	879.9	861.3	18.58	47.354	
3,400.0	3,317.2	3,261.8	3,243.8	15.5	9.5	-159.99	-246.7	228.3	910.3	891.1	19.17	47.482	
3,500.0	3,414.3	3,357.0	3,338.4	16.0	9.8	-160.01	-254.8	235.4	940.7	921.0	19.76	47.603	
3,600.0	3,511.4	3,452.3	3,433.1	16.5	10.1	-160.04	-262.8	242.4	971.1	950.8	20.35	47.718	
3,700.0	3,608.5	3,547.5	3,527.8	17.0	10.4	-160.06	-270.8	249.5	1,001.5	980.6	20.94	47.827	
3,800.0	3,705.6	3,642.8	3,622.4	17.5	10.7	-160.08	-278.8	256.6	1,031.9	1,010.4	21.53	47.932	
3,900.0	3,802.7	3,738.1	3,717.1	18.1	11.0	-160.10	-286.8	263.7	1,062.3	1,040.2	22.12	48.033	
4,000.0	3,899.8	3,833.3	3,811.8	18.6	11.3	-160.12	-294.8	270.8	1,092.7	1,070.0	22.70	48.129	
4,100.0	3,996.8	3,928.6	3,906.4	19.1	11.6	-160.13	-302.8	277.8	1,123.1	1,099.8	23.29	48.222	
4,200.0	4,093.9	4,023.9	4,001.1	19.6	11.9	-160.15	-310.8	284.9	1,153.5	1,129.6	23.88	48.311	
4,300.0	4,191.0	4,119.1	4,095.8	20.1	12.2	-160.17	-318.8	292.0	1,183.9	1,159.5	24.46	48.398	
4,400.0	4,288.1	4,214.4	4,190.4	20.6	12.5	-160.18	-326.8	299.1	1,214.3	1,189.3	25.05	48.481	
4,500.0	4,385.2	4,309.7	4,285.1	21.2	12.8	-160.19	-334.8	306.2	1,244.7	1,219.1	25.63	48.562	
4,600.0	4,482.3	4,404.9	4,379.8	21.7	13.0	-160.21	-342.8	313.2	1,275.1	1,248.9	26.22	48.640	
4,700.0	4,579.4	4,500.2	4,474.4	22.2	13.3	-160.22	-350.8	320.3	1,305.5	1,278.7	26.80	48.716	
4,800.0	4,676.5	4,595.5	4,569.1	22.7	13.6	-160.23	-358.9	327.4	1,335.9	1,308.5	27.38	48.790	
4,900.0	4,773.6	4,690.7	4,663.7	23.2	13.9	-160.24	-366.9	334.5	1,366.3	1,338.4	27.96	48.862	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 23A-12 F12 - OH - Plan #2

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,870.6	4,786.0	4,758.4	23.7	14.2	-160.25	-374.9	341.6	1,396.7	1,368.2	28.54	48.933	
5,100.0	4,967.7	4,881.3	4,853.1	24.3	14.5	-160.27	-382.9	348.6	1,427.1	1,398.0	29.12	49.001	
5,200.0	5,064.8	4,976.5	4,947.7	24.8	14.8	-160.28	-390.9	355.7	1,457.5	1,427.8	29.70	49.068	
5,300.0	5,161.9	5,071.8	5,042.4	25.3	15.1	-160.29	-398.9	362.8	1,487.9	1,457.6	30.28	49.133	
5,400.0	5,259.0	5,167.1	5,137.1	25.8	15.4	-160.29	-406.9	369.9	1,518.3	1,487.5	30.86	49.197	
5,500.0	5,356.1	5,262.3	5,231.7	26.3	15.7	-160.30	-414.9	377.0	1,548.7	1,517.3	31.44	49.260	
5,600.0	5,453.2	5,357.6	5,326.4	26.8	16.0	-160.31	-422.9	384.0	1,579.1	1,547.1	32.02	49.322	
5,700.0	5,550.3	5,452.9	5,421.1	27.4	16.3	-160.32	-430.9	391.1	1,609.5	1,576.9	32.59	49.382	
5,800.0	5,647.3	5,548.1	5,515.7	27.9	16.6	-160.33	-438.9	398.2	1,639.9	1,606.8	33.17	49.441	
5,900.0	5,744.4	5,643.4	5,610.4	28.4	16.9	-160.34	-446.9	405.3	1,670.3	1,636.6	33.74	49.499	
6,000.0	5,841.5	5,738.7	5,705.1	28.9	17.2	-160.34	-454.9	412.4	1,700.7	1,666.4	34.32	49.557	
6,100.0	5,938.6	5,833.9	5,799.7	29.4	17.5	-160.35	-462.9	419.4	1,731.1	1,696.2	34.89	49.613	
6,195.6	6,031.5	5,925.1	5,890.3	29.9	17.8	-160.36	-470.6	426.2	1,760.2	1,724.8	35.44	49.666	
6,200.0	6,035.7	5,929.2	5,894.4	29.9	17.8	-160.37	-471.0	426.5	1,761.5	1,726.1	35.47	49.659	
6,300.0	6,133.4	6,025.2	5,989.8	30.3	18.1	-160.64	-479.0	433.7	1,789.4	1,753.2	36.12	49.535	
6,400.0	6,232.1	6,122.5	6,086.5	30.6	18.4	-160.79	-487.2	440.9	1,812.4	1,775.7	36.69	49.398	
6,500.0	6,331.5	6,220.7	6,184.1	30.8	18.7	-160.84	-495.5	448.2	1,830.7	1,793.5	37.17	49.250	
6,600.0	6,431.3	6,384.6	6,347.2	30.9	19.1	-160.72	-506.7	458.1	1,842.7	1,805.1	37.64	48.960	
6,657.7	6,489.0	6,491.9	6,454.4	31.0	19.3	94.58	-510.3	461.3	1,845.4	1,807.5	37.84	48.768	
6,700.0	6,531.3	6,568.8	6,531.3	31.0	19.4	94.60	-511.0	461.9	1,845.7	1,807.7	38.03	48.535	
6,800.0	6,631.3	6,668.8	6,631.3	31.1	19.5	94.60	-511.0	461.9	1,845.7	1,807.4	38.32	48.169	
6,900.0	6,731.3	6,768.8	6,731.3	31.2	19.7	94.60	-511.0	461.9	1,845.7	1,807.1	38.60	47.813	
7,000.0	6,831.3	6,868.8	6,831.3	31.3	19.8	94.60	-511.0	461.9	1,845.7	1,806.9	38.89	47.457	
7,100.0	6,931.3	6,968.8	6,931.3	31.4	19.9	94.60	-511.0	461.9	1,845.7	1,806.6	39.19	47.103	
7,200.0	7,031.3	7,068.8	7,031.3	31.5	20.1	94.60	-511.0	461.9	1,845.7	1,806.3	39.48	46.751	
7,300.0	7,131.3	7,168.8	7,131.3	31.6	20.2	94.60	-511.0	461.9	1,845.7	1,806.0	39.78	46.400	
7,400.0	7,231.3	7,268.8	7,231.3	31.7	20.4	94.60	-511.0	461.9	1,845.7	1,805.7	40.08	46.051	
7,500.0	7,331.3	7,368.8	7,331.3	31.8	20.5	94.60	-511.0	461.9	1,845.7	1,805.4	40.38	45.705	
7,600.0	7,431.3	7,468.8	7,431.3	31.9	20.6	94.60	-511.0	461.9	1,845.7	1,805.1	40.69	45.360	
7,700.0	7,531.3	7,568.8	7,531.3	32.0	20.8	94.60	-511.0	461.9	1,845.7	1,804.7	41.00	45.018	
7,800.0	7,631.3	7,668.8	7,631.3	32.1	20.9	94.60	-511.0	461.9	1,845.7	1,804.4	41.31	44.677	
7,900.0	7,731.3	7,768.8	7,731.3	32.2	21.1	94.60	-511.0	461.9	1,845.7	1,804.1	41.63	44.340	
8,000.0	7,831.3	7,868.8	7,831.3	32.3	21.2	94.60	-511.0	461.9	1,845.7	1,803.8	41.94	44.004	
8,100.0	7,931.3	7,968.8	7,931.3	32.4	21.4	94.60	-511.0	461.9	1,845.7	1,803.5	42.26	43.671	
8,200.0	8,031.3	8,068.8	8,031.3	32.6	21.5	94.60	-511.0	461.9	1,845.7	1,803.2	42.59	43.341	
8,300.0	8,131.3	8,168.8	8,131.3	32.7	21.7	94.60	-511.0	461.9	1,845.7	1,802.8	42.91	43.013	
8,400.0	8,231.3	8,268.8	8,231.3	32.8	21.9	94.60	-511.0	461.9	1,845.7	1,802.5	43.24	42.688	
8,500.0	8,331.3	8,368.8	8,331.3	32.9	22.0	94.60	-511.0	461.9	1,845.7	1,802.2	43.57	42.366	
8,600.0	8,431.3	8,468.8	8,431.3	33.0	22.2	94.60	-511.0	461.9	1,845.7	1,801.8	43.90	42.046	
8,679.7	8,511.0	8,548.5	8,511.0	33.1	22.3	94.60	-511.0	461.9	1,845.7	1,801.6	44.16	41.793	

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 23B-12 F12 - OH - Plan #2 — **Offset Site Error:** 0.0 usft

Survey Program: 0-ISCWSA MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	138.62	-8.0	7.1	10.7				
100.0	100.0	100.0	100.0	0.1	0.1	138.62	-8.0	7.1	10.7	10.5	0.16	67.872	
200.0	200.0	200.0	200.0	0.3	0.3	138.62	-8.0	7.1	10.7	10.1	0.61	17.596	
250.0	250.0	250.0	250.0	0.4	0.4	138.62	-8.0	7.1	10.7	9.8	0.83	12.841	CC, ES
300.0	300.0	299.8	299.8	0.5	0.5	-119.01	-8.4	7.3	11.4	10.4	1.04	10.928	SF
400.0	399.8	399.1	399.0	0.7	0.7	-130.65	-11.4	8.9	17.6	16.1	1.52	11.579	
500.0	499.3	497.5	497.1	1.0	0.9	-139.10	-17.5	12.0	30.9	28.8	2.11	14.623	
600.0	598.0	594.3	593.4	1.3	1.2	-143.33	-26.3	16.7	51.1	48.4	2.76	18.519	
700.0	695.8	689.0	687.2	1.7	1.5	-145.41	-37.7	22.7	78.1	74.6	3.46	22.594	
712.0	707.5	700.2	698.3	1.8	1.5	-145.57	-39.3	23.5	81.7	78.2	3.54	23.091	
800.0	792.9	783.7	780.8	2.2	1.8	-146.79	-50.9	29.6	109.1	105.0	4.05	26.906	
900.0	890.0	878.7	874.6	2.7	2.1	-147.59	-64.2	36.6	140.2	135.5	4.66	30.111	
1,000.0	987.1	973.7	968.5	3.2	2.5	-148.10	-77.5	43.6	171.3	166.0	5.28	32.459	
1,100.0	1,084.2	1,068.8	1,062.3	3.7	2.8	-148.46	-90.8	50.5	202.5	196.5	5.92	34.221	
1,200.0	1,181.3	1,163.8	1,156.1	4.2	3.2	-148.72	-104.0	57.5	233.6	227.0	6.57	35.567	
1,300.0	1,278.4	1,258.8	1,249.9	4.7	3.5	-148.92	-117.3	64.5	264.7	257.5	7.23	36.637	
1,400.0	1,375.5	1,353.8	1,343.8	5.2	3.9	-149.07	-130.6	71.5	295.9	288.0	7.89	37.498	
1,500.0	1,472.6	1,448.8	1,437.6	5.7	4.2	-149.20	-143.9	78.4	327.0	318.5	8.56	38.203	
1,600.0	1,569.6	1,543.9	1,531.4	6.2	4.6	-149.31	-157.2	85.4	358.2	349.0	9.23	38.791	
1,700.0	1,666.7	1,638.9	1,625.3	6.7	4.9	-149.40	-170.4	92.4	389.3	379.4	9.91	39.287	
1,800.0	1,763.8	1,733.9	1,719.1	7.2	5.3	-149.47	-183.7	99.4	420.5	409.9	10.59	39.713	
1,900.0	1,860.9	1,828.9	1,812.9	7.7	5.6	-149.54	-197.0	106.4	451.6	440.4	11.27	40.081	
2,000.0	1,958.0	1,924.0	1,906.8	8.3	6.0	-149.59	-210.3	113.3	482.8	470.8	11.95	40.404	
2,100.0	2,055.1	2,019.0	2,000.6	8.8	6.4	-149.64	-223.6	120.3	513.9	501.3	12.63	40.689	
2,200.0	2,152.2	2,114.0	2,094.4	9.3	6.7	-149.69	-236.8	127.3	545.1	531.8	13.31	40.942	
2,300.0	2,249.3	2,209.0	2,188.3	9.8	7.1	-149.72	-250.1	134.3	576.3	562.3	14.00	41.170	
2,400.0	2,346.4	2,304.1	2,282.1	10.3	7.4	-149.76	-263.4	141.2	607.4	592.7	14.68	41.375	
2,500.0	2,443.4	2,399.1	2,375.9	10.8	7.8	-149.79	-276.7	148.2	638.6	623.2	15.36	41.562	
2,600.0	2,540.5	2,494.1	2,469.8	11.3	8.1	-149.82	-289.9	155.2	669.7	653.7	16.05	41.733	
2,700.0	2,637.6	2,589.1	2,563.6	11.9	8.5	-149.85	-303.2	162.2	700.9	684.1	16.73	41.891	
2,800.0	2,734.7	2,684.1	2,657.4	12.4	8.9	-149.87	-316.5	169.1	732.0	714.6	17.41	42.036	
2,900.0	2,831.8	2,779.2	2,751.2	12.9	9.2	-149.89	-329.8	176.1	763.2	745.1	18.10	42.171	
3,000.0	2,928.9	2,874.2	2,845.1	13.4	9.6	-149.91	-343.1	183.1	794.3	775.6	18.78	42.296	
3,100.0	3,026.0	2,969.2	2,938.9	13.9	9.9	-149.93	-356.3	190.1	825.5	806.0	19.46	42.414	
3,200.0	3,123.1	3,064.2	3,032.7	14.4	10.3	-149.95	-369.6	197.0	856.6	836.5	20.14	42.524	
3,300.0	3,220.1	3,159.3	3,126.6	15.0	10.7	-149.97	-382.9	204.0	887.8	867.0	20.83	42.628	
3,400.0	3,317.2	3,254.3	3,220.4	15.5	11.0	-149.98	-396.2	211.0	918.9	897.4	21.51	42.726	
3,500.0	3,414.3	3,349.3	3,314.2	16.0	11.4	-149.99	-409.5	218.0	950.1	927.9	22.19	42.819	
3,600.0	3,511.4	3,444.3	3,408.1	16.5	11.7	-150.01	-422.7	225.0	981.3	958.4	22.87	42.907	
3,700.0	3,608.5	3,539.3	3,501.9	17.0	12.1	-150.02	-436.0	231.9	1,012.4	988.9	23.55	42.991	
3,800.0	3,705.6	3,634.4	3,595.7	17.5	12.4	-150.03	-449.3	238.9	1,043.6	1,019.3	24.23	43.072	
3,900.0	3,802.7	3,729.4	3,689.6	18.1	12.8	-150.04	-462.6	245.9	1,074.7	1,049.8	24.91	43.149	
4,000.0	3,899.8	3,824.4	3,783.4	18.6	13.2	-150.05	-475.9	252.9	1,105.9	1,080.3	25.59	43.222	
4,100.0	3,996.8	3,919.4	3,877.2	19.1	13.5	-150.06	-489.1	259.8	1,137.0	1,110.8	26.26	43.293	
4,200.0	4,093.9	4,014.5	3,971.1	19.6	13.9	-150.07	-502.4	266.8	1,168.2	1,141.2	26.94	43.362	
4,300.0	4,191.0	4,109.5	4,064.9	20.1	14.2	-150.08	-515.7	273.8	1,199.3	1,171.7	27.62	43.428	
4,400.0	4,288.1	4,204.5	4,158.7	20.6	14.6	-150.09	-529.0	280.8	1,230.5	1,202.2	28.29	43.491	
4,500.0	4,385.2	4,299.5	4,252.6	21.2	15.0	-150.10	-542.2	287.7	1,261.7	1,232.7	28.97	43.553	
4,600.0	4,482.3	4,394.6	4,346.4	21.7	15.3	-150.10	-555.5	294.7	1,292.8	1,263.2	29.64	43.613	
4,700.0	4,579.4	4,489.6	4,440.2	22.2	15.7	-150.11	-568.8	301.7	1,324.0	1,293.6	30.32	43.671	
4,800.0	4,676.5	4,584.6	4,534.0	22.7	16.0	-150.12	-582.1	308.7	1,355.1	1,324.1	30.99	43.727	
4,900.0	4,773.6	4,679.6	4,627.9	23.2	16.4	-150.13	-595.4	315.7	1,386.3	1,354.6	31.66	43.782	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 23B-12 F12 - OH - Plan #2

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,870.6	4,774.6	4,721.7	23.7	16.8	-150.13	-608.6	322.6	1,417.4	1,385.1	32.33	43.836	
5,100.0	4,967.7	4,869.7	4,815.5	24.3	17.1	-150.14	-621.9	329.6	1,448.6	1,415.6	33.01	43.888	
5,200.0	5,064.8	4,964.7	4,909.4	24.8	17.5	-150.14	-635.2	336.6	1,479.7	1,446.1	33.68	43.939	
5,300.0	5,161.9	5,059.7	5,003.2	25.3	17.8	-150.15	-648.5	343.6	1,510.9	1,476.5	34.35	43.989	
5,400.0	5,259.0	5,154.7	5,097.0	25.8	18.2	-150.15	-661.8	350.5	1,542.0	1,507.0	35.02	44.038	
5,500.0	5,356.1	5,249.8	5,190.9	26.3	18.6	-150.16	-675.0	357.5	1,573.2	1,537.5	35.68	44.086	
5,600.0	5,453.2	5,344.8	5,284.7	26.8	18.9	-150.16	-688.3	364.5	1,604.4	1,568.0	36.35	44.133	
5,700.0	5,550.3	5,439.8	5,378.5	27.4	19.3	-150.17	-701.6	371.5	1,635.5	1,598.5	37.02	44.179	
5,800.0	5,647.3	5,534.8	5,472.4	27.9	19.6	-150.17	-714.9	378.4	1,666.7	1,629.0	37.69	44.224	
5,900.0	5,744.4	5,629.9	5,566.2	28.4	20.0	-150.18	-728.2	385.4	1,697.8	1,659.5	38.35	44.269	
6,000.0	5,841.5	5,724.9	5,660.0	28.9	20.4	-150.18	-741.4	392.4	1,729.0	1,690.0	39.02	44.312	
6,100.0	5,938.6	5,819.9	5,753.9	29.4	20.7	-150.19	-754.7	399.4	1,760.1	1,720.4	39.68	44.355	
6,195.6	6,031.5	5,910.8	5,843.6	29.9	21.1	-150.19	-767.4	406.0	1,789.9	1,749.6	40.32	44.396	
6,200.0	6,035.7	5,914.9	5,847.7	29.9	21.1	-150.21	-768.0	406.4	1,791.3	1,750.9	40.35	44.391	
6,300.0	6,133.4	6,010.7	5,942.2	30.3	21.4	-150.61	-781.4	413.4	1,820.1	1,779.0	41.08	44.304	
6,400.0	6,232.1	6,107.6	6,037.9	30.6	21.8	-150.86	-794.9	420.5	1,844.5	1,802.7	41.73	44.201	
6,500.0	6,331.5	6,258.2	6,187.0	30.8	22.2	-150.89	-813.7	430.4	1,863.5	1,821.1	42.36	43.989	
6,600.0	6,431.3	6,434.7	6,362.8	30.9	22.6	-150.85	-827.0	437.4	1,874.1	1,831.3	42.83	43.760	
6,657.7	6,489.0	6,537.4	6,465.5	31.0	22.7	104.42	-830.4	439.1	1,876.3	1,833.2	43.03	43.605	
6,700.0	6,531.3	6,603.2	6,531.3	31.0	22.8	104.43	-830.8	439.3	1,876.4	1,833.3	43.18	43.455	
6,800.0	6,631.3	6,703.2	6,631.3	31.1	22.9	104.43	-830.8	439.3	1,876.4	1,833.0	43.43	43.207	
6,900.0	6,731.3	6,803.2	6,731.3	31.2	23.0	104.43	-830.8	439.3	1,876.4	1,832.8	43.68	42.960	
7,000.0	6,831.3	6,903.2	6,831.3	31.3	23.2	104.43	-830.8	439.3	1,876.4	1,832.5	43.93	42.711	
7,100.0	6,931.3	7,003.2	6,931.3	31.4	23.3	104.43	-830.8	439.3	1,876.4	1,832.3	44.19	42.463	
7,200.0	7,031.3	7,103.2	7,031.3	31.5	23.4	104.43	-830.8	439.3	1,876.4	1,832.0	44.45	42.214	
7,300.0	7,131.3	7,203.2	7,131.3	31.6	23.5	104.43	-830.8	439.3	1,876.4	1,831.7	44.71	41.966	
7,400.0	7,231.3	7,303.2	7,231.3	31.7	23.6	104.43	-830.8	439.3	1,876.4	1,831.5	44.98	41.717	
7,500.0	7,331.3	7,403.2	7,331.3	31.8	23.7	104.43	-830.8	439.3	1,876.4	1,831.2	45.25	41.469	
7,600.0	7,431.3	7,503.2	7,431.3	31.9	23.9	104.43	-830.8	439.3	1,876.4	1,830.9	45.52	41.221	
7,700.0	7,531.3	7,603.2	7,531.3	32.0	24.0	104.43	-830.8	439.3	1,876.4	1,830.7	45.80	40.973	
7,800.0	7,631.3	7,703.2	7,631.3	32.1	24.1	104.43	-830.8	439.3	1,876.4	1,830.4	46.08	40.726	
7,900.0	7,731.3	7,803.2	7,731.3	32.2	24.2	104.43	-830.8	439.3	1,876.4	1,830.1	46.36	40.479	
8,000.0	7,831.3	7,903.2	7,831.3	32.3	24.4	104.43	-830.8	439.3	1,876.4	1,829.8	46.64	40.233	
8,100.0	7,931.3	8,003.2	7,931.3	32.4	24.5	104.43	-830.8	439.3	1,876.4	1,829.5	46.93	39.987	
8,200.0	8,031.3	8,103.2	8,031.3	32.6	24.6	104.43	-830.8	439.3	1,876.4	1,829.2	47.22	39.743	
8,300.0	8,131.3	8,203.2	8,131.3	32.7	24.8	104.43	-830.8	439.3	1,876.4	1,828.9	47.51	39.499	
8,400.0	8,231.3	8,303.2	8,231.3	32.8	24.9	104.43	-830.8	439.3	1,876.4	1,828.6	47.80	39.256	
8,500.0	8,331.3	8,403.2	8,331.3	32.9	25.0	104.43	-830.8	439.3	1,876.4	1,828.4	48.10	39.014	
8,600.0	8,431.3	8,503.2	8,431.3	33.0	25.2	104.43	-830.8	439.3	1,876.4	1,828.1	48.40	38.773	
8,679.7	8,511.0	8,582.9	8,511.0	33.1	25.3	104.43	-830.8	439.3	1,876.4	1,827.8	48.64	38.581	

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 32C-12 F12 - OH - PLAN #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-ISCWSA MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	59.22	37.5	63.0	73.3				
100.0	100.0	100.0	100.0	0.1	0.1	59.22	37.5	63.0	73.3	73.1	0.16	465.790	
200.0	200.0	200.0	200.0	0.3	0.3	59.22	37.5	63.0	73.3	72.7	0.61	120.760	
250.0	250.0	250.0	250.0	0.4	0.4	59.22	37.5	63.0	73.3	72.5	0.83	88.123	CC, ES
300.0	300.0	298.4	298.4	0.5	0.5	164.37	37.5	63.6	74.4	73.4	1.07	69.894	
400.0	399.8	394.5	394.4	0.7	0.7	167.09	37.2	68.4	83.8	82.2	1.62	51.659	
500.0	499.3	488.5	487.8	1.0	1.0	170.99	36.7	77.8	102.8	100.5	2.26	45.532	
600.0	598.0	578.9	577.3	1.3	1.2	174.67	35.9	91.2	131.5	128.5	2.92	45.088	SF
700.0	695.8	664.7	661.5	1.7	1.6	177.61	35.0	107.7	169.5	165.9	3.57	47.423	
712.0	707.5	674.7	671.2	1.8	1.6	177.91	34.9	109.9	174.7	171.1	3.65	47.826	
800.0	792.9	746.0	740.4	2.2	1.9	179.85	33.9	126.9	214.6	210.5	4.05	52.984	
900.0	890.0	827.1	818.4	2.7	2.3	-178.40	32.7	149.1	263.2	258.7	4.54	58.028	
1,000.0	987.1	913.8	901.6	3.2	2.8	-177.06	31.3	173.6	312.7	307.7	5.00	62.500	
1,100.0	1,084.2	1,000.4	984.7	3.7	3.3	-176.08	30.0	198.1	362.4	356.9	5.49	66.010	
1,200.0	1,181.3	1,087.1	1,067.8	4.2	3.8	-175.34	28.6	222.6	412.0	406.1	5.99	68.830	
1,300.0	1,278.4	1,173.8	1,151.0	4.7	4.3	-174.76	27.2	247.1	461.8	455.3	6.51	70.981	
1,400.0	1,375.5	1,260.5	1,234.1	5.2	4.8	-174.29	25.9	271.5	511.5	504.5	7.02	72.900	
1,500.0	1,472.6	1,347.1	1,317.2	5.7	5.3	-173.90	24.5	296.0	561.3	553.7	7.54	74.438	
1,600.0	1,569.6	1,433.8	1,400.4	6.2	5.8	-173.58	23.2	320.5	611.1	603.0	8.07	75.727	
1,700.0	1,666.7	1,520.5	1,483.5	6.7	6.3	-173.30	21.8	345.0	660.9	652.3	8.60	76.820	
1,800.0	1,763.8	1,607.2	1,566.6	7.2	6.8	-173.07	20.4	369.5	710.7	701.6	9.14	77.759	
1,900.0	1,860.9	1,693.9	1,649.8	7.7	7.3	-172.86	19.1	393.9	760.5	750.8	9.68	78.571	
2,000.0	1,958.0	1,780.5	1,732.9	8.3	7.9	-172.68	17.7	418.4	810.3	800.1	10.22	79.282	
2,100.0	2,055.1	1,867.2	1,816.0	8.8	8.4	-172.52	16.3	442.9	860.2	849.4	10.76	79.910	
2,200.0	2,152.2	1,953.9	1,899.2	9.3	8.9	-172.38	15.0	467.4	910.0	898.7	11.31	80.469	
2,300.0	2,249.3	2,040.6	1,982.3	9.8	9.4	-172.25	13.6	491.9	959.8	948.0	11.85	80.970	
2,400.0	2,346.4	2,127.2	2,065.5	10.3	9.9	-172.14	12.3	516.3	1,009.7	997.3	12.40	81.422	
2,500.0	2,443.4	2,213.9	2,148.6	10.8	10.4	-172.03	10.9	540.8	1,059.5	1,046.6	12.95	81.834	
2,600.0	2,540.5	2,300.6	2,231.7	11.3	10.9	-171.94	9.5	565.3	1,109.4	1,095.9	13.49	82.209	
2,700.0	2,637.6	2,387.3	2,314.9	11.9	11.4	-171.85	8.2	589.8	1,159.2	1,145.2	14.04	82.555	
2,800.0	2,734.7	2,473.9	2,398.0	12.4	11.9	-171.77	6.8	614.3	1,209.1	1,194.5	14.59	82.875	
2,900.0	2,831.8	2,560.6	2,481.1	12.9	12.5	-171.70	5.4	638.7	1,258.9	1,243.8	15.14	83.172	
3,000.0	2,928.9	2,647.3	2,564.3	13.4	13.0	-171.63	4.1	663.2	1,308.8	1,293.1	15.68	83.449	
3,100.0	3,026.0	2,734.0	2,647.4	13.9	13.5	-171.57	2.7	687.7	1,358.7	1,342.4	16.23	83.708	
3,200.0	3,123.1	2,820.6	2,730.5	14.4	14.0	-171.51	1.3	712.2	1,408.5	1,391.7	16.78	83.952	
3,300.0	3,220.1	2,907.3	2,813.7	15.0	14.5	-171.46	0.0	736.7	1,458.4	1,441.0	17.32	84.183	
3,400.0	3,317.2	2,994.0	2,896.8	15.5	15.0	-171.41	-1.4	761.1	1,508.2	1,490.4	17.87	84.401	
3,500.0	3,414.3	3,080.7	2,980.0	16.0	15.5	-171.36	-2.7	785.6	1,558.1	1,539.7	18.42	84.609	
3,600.0	3,511.4	3,167.3	3,063.1	16.5	16.1	-171.32	-4.1	810.1	1,608.0	1,589.0	18.96	84.807	
3,700.0	3,608.5	3,254.0	3,146.2	17.0	16.6	-171.28	-5.5	834.6	1,657.8	1,638.3	19.50	84.997	
3,800.0	3,705.6	3,340.7	3,229.4	17.5	17.1	-171.24	-6.8	859.1	1,707.7	1,687.6	20.05	85.178	
3,900.0	3,802.7	3,427.4	3,312.5	18.1	17.6	-171.20	-8.2	883.5	1,757.5	1,736.9	20.59	85.353	
4,000.0	3,899.8	3,514.1	3,395.6	18.6	18.1	-171.16	-9.6	908.0	1,807.4	1,786.3	21.13	85.521	
4,100.0	3,996.8	3,600.7	3,478.8	19.1	18.6	-171.13	-10.9	932.5	1,857.3	1,835.6	21.68	85.683	
4,200.0	4,093.9	3,687.4	3,561.9	19.6	19.1	-171.10	-12.3	957.0	1,907.1	1,884.9	22.22	85.841	
4,300.0	4,191.0	3,774.1	3,645.0	20.1	19.6	-171.07	-13.7	981.5	1,957.0	1,934.2	22.76	85.993	
4,400.0	4,288.1	3,860.8	3,728.2	20.6	20.2	-171.04	-15.0	1,005.9	2,006.9	1,983.6	23.30	86.141	
4,500.0	4,385.2	3,947.4	3,811.3	21.2	20.7	-171.02	-16.4	1,030.4	2,056.7	2,032.9	23.84	86.285	
4,600.0	4,482.3	4,034.1	3,894.4	21.7	21.2	-170.99	-17.7	1,054.9	2,106.6	2,082.2	24.37	86.426	
4,700.0	4,579.4	4,120.8	3,977.6	22.2	21.7	-170.97	-19.1	1,079.4	2,156.5	2,131.5	24.91	86.563	
4,800.0	4,676.5	4,207.5	4,060.7	22.7	22.2	-170.94	-20.5	1,103.9	2,206.3	2,180.9	25.45	86.696	
4,900.0	4,773.6	4,294.1	4,143.9	23.2	22.7	-170.92	-21.8	1,128.3	2,256.2	2,230.2	25.98	86.827	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 32C-12 F12 - OH - PLAN #1

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,870.6	4,380.8	4,227.0	23.7	23.2	-170.90	-23.2	1,152.8	2,306.1	2,279.5	26.52	86.956	
5,100.0	4,967.7	4,467.5	4,310.1	24.3	23.8	-170.88	-24.6	1,177.3	2,355.9	2,328.9	27.05	87.082	
5,200.0	5,064.8	4,554.2	4,393.3	24.8	24.3	-170.86	-25.9	1,201.8	2,405.8	2,378.2	27.59	87.206	
5,300.0	5,161.9	4,640.8	4,476.4	25.3	24.8	-170.84	-27.3	1,226.3	2,455.7	2,427.5	28.12	87.327	
5,400.0	5,259.0	4,727.5	4,559.5	25.8	25.3	-170.82	-28.7	1,250.7	2,505.5	2,476.9	28.65	87.447	
5,500.0	5,356.1	4,814.2	4,642.7	26.3	25.8	-170.80	-30.0	1,275.2	2,555.4	2,526.2	29.18	87.564	
5,600.0	5,453.2	4,900.9	4,725.8	26.8	26.3	-170.79	-31.4	1,299.7	2,605.3	2,575.6	29.71	87.680	
5,700.0	5,550.3	4,987.5	4,808.9	27.4	26.8	-170.77	-32.7	1,324.2	2,655.1	2,624.9	30.24	87.795	
5,800.0	5,647.3	5,074.2	4,892.1	27.9	27.4	-170.76	-34.1	1,348.7	2,705.0	2,674.2	30.77	87.908	
5,900.0	5,744.4	5,160.9	4,975.2	28.4	27.9	-170.74	-35.5	1,373.1	2,754.9	2,723.6	31.30	88.020	
6,000.0	5,841.5	5,247.6	5,058.4	28.9	28.4	-170.73	-36.8	1,397.6	2,804.7	2,772.9	31.82	88.130	
6,100.0	5,938.6	5,334.2	5,141.5	29.4	28.9	-170.71	-38.2	1,422.1	2,854.6	2,822.3	32.35	88.239	
6,195.6	6,031.5	5,417.1	5,221.0	29.9	29.4	-170.70	-39.5	1,445.5	2,902.3	2,869.5	32.85	88.343	
6,200.0	6,035.7	5,420.9	5,224.6	29.9	29.4	-170.71	-39.6	1,446.6	2,904.5	2,871.6	32.89	88.303	
6,300.0	6,133.4	5,509.0	5,309.1	30.3	29.9	-170.95	-40.9	1,471.4	2,951.9	2,918.2	33.72	87.533	
6,400.0	6,232.1	5,599.3	5,395.7	30.6	30.5	-171.13	-42.4	1,497.0	2,994.7	2,960.2	34.46	86.902	
6,500.0	6,331.5	5,691.7	5,484.4	30.8	31.0	-171.26	-43.8	1,523.1	3,032.7	2,997.7	35.10	86.404	
6,600.0	6,431.3	5,786.0	5,574.8	30.9	31.6	-171.35	-45.3	1,549.7	3,066.0	3,030.4	35.64	86.036	
6,657.7	6,489.0	5,841.0	5,627.6	31.0	31.9	83.85	-46.2	1,565.2	3,082.9	3,047.0	35.91	85.863	
6,700.0	6,531.3	5,881.6	5,666.5	31.0	32.1	83.89	-46.8	1,576.7	3,094.8	3,058.7	36.09	85.749	
6,800.0	6,631.3	5,977.5	5,758.5	31.1	32.7	83.97	-48.3	1,603.8	3,122.7	3,086.2	36.52	85.499	
6,900.0	6,731.3	6,968.5	6,731.3	31.2	35.9	84.42	-56.8	1,755.4	3,148.2	3,109.5	38.72	81.305	
7,000.0	6,831.3	7,068.5	6,831.3	31.3	36.0	84.42	-56.8	1,755.4	3,148.2	3,109.2	39.02	80.678	
7,100.0	6,931.3	7,168.5	6,931.3	31.4	36.1	84.42	-56.8	1,755.4	3,148.2	3,108.9	39.33	80.055	
7,200.0	7,031.3	7,268.5	7,031.3	31.5	36.2	84.42	-56.8	1,755.4	3,148.2	3,108.5	39.63	79.436	
7,300.0	7,131.3	7,368.5	7,131.3	31.6	36.2	84.42	-56.8	1,755.4	3,148.2	3,108.2	39.94	78.820	
7,400.0	7,231.3	7,468.5	7,231.3	31.7	36.3	84.42	-56.8	1,755.4	3,148.2	3,107.9	40.25	78.209	
7,500.0	7,331.3	7,568.5	7,331.3	31.8	36.4	84.42	-56.8	1,755.4	3,148.2	3,107.6	40.57	77.603	
7,600.0	7,431.3	7,668.5	7,431.3	31.9	36.5	84.42	-56.8	1,755.4	3,148.2	3,107.3	40.89	77.000	
7,700.0	7,531.3	7,768.5	7,531.3	32.0	36.6	84.42	-56.8	1,755.4	3,148.2	3,107.0	41.21	76.403	
7,800.0	7,631.3	7,868.5	7,631.3	32.1	36.7	84.42	-56.8	1,755.4	3,148.2	3,106.7	41.53	75.810	
7,900.0	7,731.3	7,968.5	7,731.3	32.2	36.8	84.42	-56.8	1,755.4	3,148.2	3,106.3	41.85	75.222	
8,000.0	7,831.3	8,068.5	7,831.3	32.3	36.9	84.42	-56.8	1,755.4	3,148.2	3,106.0	42.18	74.638	
8,100.0	7,931.3	8,168.5	7,931.3	32.4	37.0	84.42	-56.8	1,755.4	3,148.2	3,105.7	42.51	74.060	
8,200.0	8,031.3	8,268.5	8,031.3	32.6	37.1	84.42	-56.8	1,755.4	3,148.2	3,105.3	42.84	73.487	
8,300.0	8,131.3	8,368.5	8,131.3	32.7	37.2	84.42	-56.8	1,755.4	3,148.2	3,105.0	43.17	72.918	
8,400.0	8,231.3	8,468.5	8,231.3	32.8	37.3	84.42	-56.8	1,755.4	3,148.2	3,104.7	43.51	72.355	
8,500.0	8,331.3	8,568.5	8,331.3	32.9	37.4	84.42	-56.8	1,755.4	3,148.2	3,104.3	43.85	71.797	
8,600.0	8,431.3	8,668.5	8,431.3	33.0	37.5	84.42	-56.8	1,755.4	3,148.2	3,104.0	44.19	71.245	
8,679.7	8,511.0	8,748.2	8,511.0	33.1	37.6	84.42	-56.8	1,755.4	3,148.2	3,103.7	44.46	70.808	

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 32D-12 F12 - OH - Plan #2 — **Offset Site Error:** 0.0 usft

Survey Program: 0-ISCWSA MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	61.47	27.3	50.3	57.2				
100.0	100.0	100.0	100.0	0.1	0.1	61.47	27.3	50.3	57.2	57.0	0.16	363.566	
200.0	200.0	200.0	200.0	0.3	0.3	61.47	27.3	50.3	57.2	56.6	0.61	94.258	
250.0	250.0	250.0	250.0	0.4	0.4	61.47	27.3	50.3	57.2	56.4	0.83	68.783	CC, ES
300.0	300.0	300.0	300.0	0.5	0.5	166.39	27.3	50.3	57.8	56.8	1.07	53.993	
400.0	399.8	397.3	397.2	0.7	0.7	168.82	26.8	52.7	64.9	63.3	1.61	40.228	
500.0	499.3	492.7	492.4	1.0	1.0	173.31	25.3	59.8	81.4	79.2	2.23	36.465	SF
600.0	598.0	585.0	584.0	1.3	1.2	177.69	23.0	71.0	107.5	104.7	2.88	37.291	
700.0	695.8	673.1	670.7	1.7	1.5	-178.86	19.9	85.8	143.1	139.5	3.54	40.372	
712.0	707.5	683.3	680.7	1.8	1.5	-178.51	19.5	87.8	148.0	144.3	3.62	40.844	
800.0	792.9	756.7	752.3	2.2	1.8	-176.32	16.2	103.5	185.7	181.7	4.03	46.112	
900.0	890.0	836.8	829.8	2.7	2.2	-174.39	12.0	123.6	232.1	227.6	4.51	51.442	
1,000.0	987.1	920.2	909.6	3.2	2.7	-172.80	7.1	147.2	281.4	276.4	5.02	56.026	
1,100.0	1,084.2	1,006.8	992.4	3.7	3.2	-171.61	2.0	172.0	331.1	325.6	5.53	59.877	
1,200.0	1,181.3	1,093.4	1,075.2	4.2	3.7	-170.73	-3.2	196.7	380.9	374.8	6.05	62.929	
1,300.0	1,278.4	1,180.0	1,158.1	4.7	4.2	-170.05	-8.3	221.5	430.7	424.1	6.59	65.341	
1,400.0	1,375.5	1,266.6	1,240.9	5.2	4.7	-169.52	-13.5	246.2	480.6	473.4	7.13	67.365	
1,500.0	1,472.6	1,353.2	1,323.8	5.7	5.2	-169.08	-18.6	271.0	530.5	522.8	7.68	69.030	
1,600.0	1,569.6	1,439.8	1,406.6	6.2	5.7	-168.72	-23.8	295.7	580.4	572.1	8.24	70.420	
1,700.0	1,666.7	1,526.4	1,489.4	6.7	6.2	-168.42	-28.9	320.4	630.3	621.5	8.80	71.598	
1,800.0	1,763.8	1,613.0	1,572.3	7.2	6.8	-168.16	-34.1	345.2	680.2	670.8	9.37	72.607	
1,900.0	1,860.9	1,699.6	1,655.1	7.7	7.3	-167.94	-39.2	369.9	730.1	720.2	9.94	73.480	
2,000.0	1,958.0	1,786.2	1,737.9	8.3	7.8	-167.74	-44.4	394.7	780.1	769.6	10.51	74.241	
2,100.0	2,055.1	1,872.9	1,820.8	8.8	8.3	-167.57	-49.6	419.4	830.0	818.9	11.08	74.914	
2,200.0	2,152.2	1,959.5	1,903.6	9.3	8.9	-167.42	-54.7	444.2	880.0	868.3	11.65	75.511	
2,300.0	2,249.3	2,046.1	1,986.5	9.8	9.4	-167.28	-59.9	468.9	929.9	917.7	12.23	76.046	
2,400.0	2,346.4	2,132.7	2,069.3	10.3	9.9	-167.16	-65.0	493.6	979.9	967.1	12.80	76.529	
2,500.0	2,443.4	2,219.3	2,152.1	10.8	10.5	-167.05	-70.2	518.4	1,029.9	1,016.5	13.38	76.967	
2,600.0	2,540.5	2,305.9	2,235.0	11.3	11.0	-166.95	-75.3	543.1	1,079.8	1,065.9	13.96	77.366	
2,700.0	2,637.6	2,392.5	2,317.8	11.9	11.5	-166.86	-80.5	567.9	1,129.8	1,115.3	14.53	77.733	
2,800.0	2,734.7	2,479.1	2,400.6	12.4	12.0	-166.77	-85.6	592.6	1,179.8	1,164.7	15.11	78.071	
2,900.0	2,831.8	2,565.7	2,483.5	12.9	12.6	-166.70	-90.8	617.4	1,229.7	1,214.1	15.69	78.385	
3,000.0	2,928.9	2,652.3	2,566.3	13.4	13.1	-166.63	-95.9	642.1	1,279.7	1,263.4	16.27	78.678	
3,100.0	3,026.0	2,738.9	2,649.1	13.9	13.6	-166.56	-101.1	666.8	1,329.7	1,312.8	16.84	78.951	
3,200.0	3,123.1	2,825.5	2,732.0	14.4	14.2	-166.50	-106.2	691.6	1,379.7	1,362.2	17.42	79.207	
3,300.0	3,220.1	2,912.1	2,814.8	15.0	14.7	-166.44	-111.4	716.3	1,429.6	1,411.7	17.99	79.448	
3,400.0	3,317.2	2,998.7	2,897.7	15.5	15.2	-166.39	-116.5	741.1	1,479.6	1,461.1	18.57	79.677	
3,500.0	3,414.3	3,085.3	2,980.5	16.0	15.7	-166.34	-121.7	765.8	1,529.6	1,510.5	19.15	79.893	
3,600.0	3,511.4	3,172.0	3,063.3	16.5	16.3	-166.30	-126.8	790.6	1,579.6	1,559.9	19.72	80.100	
3,700.0	3,608.5	3,258.6	3,146.2	17.0	16.8	-166.25	-132.0	815.3	1,629.6	1,609.3	20.29	80.296	
3,800.0	3,705.6	3,345.2	3,229.0	17.5	17.3	-166.21	-137.1	840.0	1,679.5	1,658.7	20.87	80.484	
3,900.0	3,802.7	3,431.8	3,311.8	18.1	17.9	-166.17	-142.3	864.8	1,729.5	1,708.1	21.44	80.664	
4,000.0	3,899.8	3,518.4	3,394.7	18.6	18.4	-166.14	-147.4	889.5	1,779.5	1,757.5	22.01	80.837	
4,100.0	3,996.8	3,605.0	3,477.5	19.1	18.9	-166.10	-152.6	914.3	1,829.5	1,806.9	22.59	81.004	
4,200.0	4,093.9	3,691.6	3,560.4	19.6	19.5	-166.07	-157.7	939.0	1,879.5	1,856.3	23.16	81.165	
4,300.0	4,191.0	3,778.2	3,643.2	20.1	20.0	-166.04	-162.9	963.8	1,929.5	1,905.7	23.73	81.321	
4,400.0	4,288.1	3,864.8	3,726.0	20.6	20.5	-166.01	-168.1	988.5	1,979.5	1,955.2	24.30	81.472	
4,500.0	4,385.2	3,951.4	3,808.9	21.2	21.0	-165.98	-173.2	1,013.3	2,029.4	2,004.6	24.87	81.618	
4,600.0	4,482.3	4,038.0	3,891.7	21.7	21.6	-165.96	-178.4	1,038.0	2,079.4	2,054.0	25.43	81.760	
4,700.0	4,579.4	4,124.6	3,974.5	22.2	22.1	-165.93	-183.5	1,062.7	2,129.4	2,103.4	26.00	81.899	
4,800.0	4,676.5	4,211.2	4,057.4	22.7	22.6	-165.91	-188.7	1,087.5	2,179.4	2,152.8	26.57	82.033	
4,900.0	4,773.6	4,297.8	4,140.2	23.2	23.2	-165.89	-193.8	1,112.2	2,229.4	2,202.3	27.13	82.165	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 32D-12 F12 - OH - Plan #2

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,870.6	4,384.4	4,223.1	23.7	23.7	-165.86	-199.0	1,137.0	2,279.4	2,251.7	27.70	82.294	
5,100.0	4,967.7	4,471.1	4,305.9	24.3	24.2	-165.84	-204.1	1,161.7	2,329.4	2,301.1	28.26	82.420	
5,200.0	5,064.8	4,557.7	4,388.7	24.8	24.8	-165.82	-209.3	1,186.5	2,379.3	2,350.5	28.83	82.543	
5,300.0	5,161.9	4,644.3	4,471.6	25.3	25.3	-165.80	-214.4	1,211.2	2,429.3	2,399.9	29.39	82.664	
5,400.0	5,259.0	4,730.9	4,554.4	25.8	25.8	-165.79	-219.6	1,235.9	2,479.3	2,449.4	29.95	82.783	
5,500.0	5,356.1	4,817.5	4,637.2	26.3	26.3	-165.77	-224.7	1,260.7	2,529.3	2,498.8	30.51	82.900	
5,600.0	5,453.2	4,904.1	4,720.1	26.8	26.9	-165.75	-229.9	1,285.4	2,579.3	2,548.2	31.07	83.014	
5,700.0	5,550.3	4,990.7	4,802.9	27.4	27.4	-165.73	-235.0	1,310.2	2,629.3	2,597.7	31.63	83.127	
5,800.0	5,647.3	5,077.3	4,885.7	27.9	27.9	-165.72	-240.2	1,334.9	2,679.3	2,647.1	32.19	83.239	
5,900.0	5,744.4	5,163.9	4,968.6	28.4	28.5	-165.70	-245.3	1,359.7	2,729.3	2,696.5	32.75	83.348	
6,000.0	5,841.5	5,250.5	5,051.4	28.9	29.0	-165.69	-250.5	1,384.4	2,779.3	2,745.9	33.30	83.457	
6,100.0	5,938.6	5,337.1	5,134.3	29.4	29.5	-165.68	-255.6	1,409.1	2,829.2	2,795.4	33.86	83.563	
6,195.6	6,031.5	5,420.0	5,213.5	29.9	30.0	-165.66	-260.6	1,432.8	2,877.0	2,842.7	34.39	83.664	
6,200.0	6,035.7	5,423.7	5,217.1	29.9	30.1	-165.68	-260.8	1,433.9	2,879.2	2,844.8	34.43	83.627	
6,300.0	6,133.4	5,511.7	5,301.2	30.3	30.6	-166.05	-266.0	1,459.0	2,926.8	2,891.5	35.30	82.914	
6,400.0	6,232.1	5,601.9	5,387.5	30.6	31.2	-166.33	-271.4	1,484.8	2,969.8	2,933.8	36.07	82.330	
6,500.0	6,331.5	5,694.1	5,475.7	30.8	31.7	-166.55	-276.9	1,511.1	3,008.3	2,971.5	36.74	81.871	
6,600.0	6,431.3	5,788.1	5,565.6	30.9	32.3	-166.69	-282.5	1,538.0	3,041.9	3,004.6	37.31	81.535	
6,657.7	6,489.0	5,843.1	5,618.2	31.0	32.6	88.49	-285.7	1,553.7	3,059.1	3,021.6	37.59	81.380	
6,700.0	6,531.3	5,883.5	5,656.9	31.0	32.9	88.54	-288.1	1,565.2	3,071.2	3,033.4	37.78	81.290	
6,800.0	6,631.3	5,979.2	5,748.4	31.1	33.5	88.66	-293.8	1,592.6	3,099.7	3,061.5	38.22	81.092	
6,900.0	6,731.3	6,981.4	6,731.3	31.2	36.7	89.32	-325.9	1,746.6	3,124.7	3,084.3	40.47	77.202	
7,000.0	6,831.3	7,081.4	6,831.3	31.3	36.8	89.32	-325.9	1,746.6	3,124.7	3,084.0	40.76	76.659	
7,100.0	6,931.3	7,181.4	6,931.3	31.4	36.9	89.32	-325.9	1,746.6	3,124.7	3,083.7	41.05	76.118	
7,200.0	7,031.3	7,281.4	7,031.3	31.5	37.0	89.32	-325.9	1,746.6	3,124.7	3,083.4	41.34	75.579	
7,300.0	7,131.3	7,381.4	7,131.3	31.6	37.1	89.32	-325.9	1,746.6	3,124.7	3,083.1	41.64	75.043	
7,400.0	7,231.3	7,481.4	7,231.3	31.7	37.2	89.32	-325.9	1,746.6	3,124.7	3,082.8	41.94	74.509	
7,500.0	7,331.3	7,581.4	7,331.3	31.8	37.2	89.32	-325.9	1,746.6	3,124.7	3,082.5	42.24	73.978	
7,600.0	7,431.3	7,681.4	7,431.3	31.9	37.3	89.32	-325.9	1,746.6	3,124.7	3,082.2	42.54	73.449	
7,700.0	7,531.3	7,781.4	7,531.3	32.0	37.4	89.32	-325.9	1,746.6	3,124.7	3,081.9	42.85	72.924	
7,800.0	7,631.3	7,881.4	7,631.3	32.1	37.5	89.32	-325.9	1,746.6	3,124.7	3,081.6	43.16	72.401	
7,900.0	7,731.3	7,981.4	7,731.3	32.2	37.6	89.32	-325.9	1,746.6	3,124.7	3,081.3	43.47	71.882	
8,000.0	7,831.3	8,081.4	7,831.3	32.3	37.7	89.32	-325.9	1,746.6	3,124.7	3,080.9	43.78	71.367	
8,100.0	7,931.3	8,181.4	7,931.3	32.4	37.8	89.32	-325.9	1,746.6	3,124.7	3,080.6	44.10	70.854	
8,200.0	8,031.3	8,281.4	8,031.3	32.6	37.9	89.32	-325.9	1,746.6	3,124.7	3,080.3	44.42	70.346	
8,300.0	8,131.3	8,381.4	8,131.3	32.7	38.0	89.32	-325.9	1,746.6	3,124.7	3,080.0	44.74	69.840	
8,400.0	8,231.3	8,481.4	8,231.3	32.8	38.1	89.32	-325.9	1,746.6	3,124.7	3,079.7	45.06	69.339	
8,500.0	8,331.3	8,581.4	8,331.3	32.9	38.2	89.32	-325.9	1,746.6	3,124.7	3,079.3	45.39	68.841	
8,600.0	8,431.3	8,681.4	8,431.3	33.0	38.3	89.32	-325.9	1,746.6	3,124.7	3,079.0	45.72	68.348	
8,679.7	8,511.0	8,761.1	8,511.0	33.1	38.4	89.32	-325.9	1,746.6	3,124.7	3,078.7	45.98	67.957	

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 33A-12 F12 - OH - Plan #2 — **Offset Site Error:** 0.0 usft

Survey Program: 0-ISCWSA MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	63.23	22.2	44.0	49.3				
100.0	100.0	100.0	100.0	0.1	0.1	63.23	22.2	44.0	49.3	49.2	0.16	313.549	
200.0	200.0	200.0	200.0	0.3	0.3	63.23	22.2	44.0	49.3	48.7	0.61	81.291	
250.0	250.0	250.0	250.0	0.4	0.4	63.23	22.2	44.0	49.3	48.5	0.83	59.320	CC, ES
300.0	300.0	299.1	299.1	0.5	0.5	168.68	22.0	44.6	50.4	49.3	1.06	47.351	
400.0	399.8	396.7	396.5	0.7	0.7	173.23	20.1	49.3	59.2	57.5	1.62	36.513	
500.0	499.3	492.1	491.5	1.0	1.0	179.12	16.6	58.3	77.3	75.1	2.26	34.210	SF
600.0	598.0	584.3	582.6	1.3	1.3	-175.92	11.4	71.2	105.1	102.2	2.93	35.902	
700.0	695.8	672.0	668.5	1.7	1.6	-172.30	5.1	87.2	142.1	138.5	3.60	39.448	
712.0	707.5	682.2	678.5	1.8	1.6	-171.95	4.2	89.3	147.1	143.5	3.68	39.956	
800.0	792.9	755.2	749.4	2.2	2.0	-169.82	-2.3	105.8	185.9	181.8	4.11	45.219	
900.0	890.0	835.7	826.6	2.7	2.4	-167.89	-10.7	126.8	233.4	228.8	4.64	50.285	
1,000.0	987.1	922.6	909.5	3.2	2.9	-166.34	-20.3	151.0	282.6	277.4	5.18	54.563	
1,100.0	1,084.2	1,009.5	992.4	3.7	3.4	-165.25	-29.9	175.1	331.8	326.1	5.73	57.910	
1,200.0	1,181.3	1,096.4	1,075.3	4.2	3.9	-164.44	-39.5	199.2	381.1	374.8	6.30	60.502	
1,300.0	1,278.4	1,183.3	1,158.3	4.7	4.5	-163.81	-49.1	223.3	430.4	423.5	6.89	62.512	
1,400.0	1,375.5	1,270.2	1,241.2	5.2	5.0	-163.31	-58.7	247.5	479.8	472.3	7.47	64.219	
1,500.0	1,472.6	1,357.1	1,324.1	5.7	5.5	-162.91	-68.3	271.6	529.2	521.1	8.07	65.589	
1,600.0	1,569.6	1,444.0	1,407.0	6.2	6.1	-162.57	-77.9	295.7	578.6	569.9	8.67	66.729	
1,700.0	1,666.7	1,530.9	1,490.0	6.7	6.6	-162.29	-87.5	319.8	628.0	618.7	9.28	67.689	
1,800.0	1,763.8	1,617.8	1,572.9	7.2	7.2	-162.05	-97.1	343.9	677.4	667.5	9.89	68.508	
1,900.0	1,860.9	1,704.6	1,655.8	7.7	7.7	-161.84	-106.7	368.1	726.9	716.4	10.50	69.214	
2,000.0	1,958.0	1,791.5	1,738.8	8.3	8.2	-161.66	-116.2	392.2	776.3	765.2	11.12	69.830	
2,100.0	2,055.1	1,878.4	1,821.7	8.8	8.8	-161.50	-125.8	416.3	825.8	814.0	11.73	70.371	
2,200.0	2,152.2	1,965.3	1,904.6	9.3	9.3	-161.35	-135.4	440.4	875.2	862.9	12.35	70.852	
2,300.0	2,249.3	2,052.2	1,987.5	9.8	9.9	-161.23	-145.0	464.6	924.7	911.7	12.97	71.282	
2,400.0	2,346.4	2,139.1	2,070.5	10.3	10.4	-161.11	-154.6	488.7	974.1	960.5	13.59	71.669	
2,500.0	2,443.4	2,226.0	2,153.4	10.8	11.0	-161.01	-164.2	512.8	1,023.6	1,009.4	14.21	72.021	
2,600.0	2,540.5	2,312.9	2,236.3	11.3	11.5	-160.92	-173.8	536.9	1,073.1	1,058.2	14.83	72.342	
2,700.0	2,637.6	2,399.8	2,319.2	11.9	12.1	-160.83	-183.4	561.1	1,122.5	1,107.1	15.45	72.636	
2,800.0	2,734.7	2,486.7	2,402.2	12.4	12.6	-160.75	-193.0	585.2	1,172.0	1,155.9	16.08	72.908	
2,900.0	2,831.8	2,573.6	2,485.1	12.9	13.1	-160.68	-202.6	609.3	1,221.5	1,204.8	16.70	73.160	
3,000.0	2,928.9	2,660.5	2,568.0	13.4	13.7	-160.62	-212.2	633.4	1,270.9	1,253.6	17.32	73.395	
3,100.0	3,026.0	2,747.4	2,651.0	13.9	14.2	-160.55	-221.8	657.6	1,320.4	1,302.5	17.94	73.615	
3,200.0	3,123.1	2,834.3	2,733.9	14.4	14.8	-160.50	-231.4	681.7	1,369.9	1,351.3	18.56	73.821	
3,300.0	3,220.1	2,921.2	2,816.8	15.0	15.3	-160.44	-241.0	705.8	1,419.4	1,400.2	19.18	74.016	
3,400.0	3,317.2	3,008.1	2,899.7	15.5	15.9	-160.39	-250.6	729.9	1,468.8	1,449.0	19.80	74.200	
3,500.0	3,414.3	3,095.0	2,982.7	16.0	16.4	-160.35	-260.2	754.1	1,518.3	1,497.9	20.41	74.375	
3,600.0	3,511.4	3,181.9	3,065.6	16.5	17.0	-160.31	-269.8	778.2	1,567.8	1,546.8	21.03	74.542	
3,700.0	3,608.5	3,268.8	3,148.5	17.0	17.5	-160.27	-279.4	802.3	1,617.3	1,595.6	21.65	74.701	
3,800.0	3,705.6	3,355.7	3,231.4	17.5	18.1	-160.23	-289.0	826.4	1,666.8	1,644.5	22.27	74.854	
3,900.0	3,802.7	3,442.6	3,314.4	18.1	18.6	-160.19	-298.5	850.6	1,716.2	1,693.4	22.88	75.000	
4,000.0	3,899.8	3,529.5	3,397.3	18.6	19.1	-160.16	-308.1	874.7	1,765.7	1,742.2	23.50	75.141	
4,100.0	3,996.8	3,616.4	3,480.2	19.1	19.7	-160.12	-317.7	898.8	1,815.2	1,791.1	24.11	75.276	
4,200.0	4,093.9	3,703.3	3,563.2	19.6	20.2	-160.09	-327.3	922.9	1,864.7	1,839.9	24.73	75.407	
4,300.0	4,191.0	3,790.2	3,646.1	20.1	20.8	-160.07	-336.9	947.1	1,914.2	1,888.8	25.34	75.534	
4,400.0	4,288.1	3,877.1	3,729.0	20.6	21.3	-160.04	-346.5	971.2	1,963.6	1,937.7	25.95	75.657	
4,500.0	4,385.2	3,964.0	3,811.9	21.2	21.9	-160.01	-356.1	995.3	2,013.1	1,986.6	26.57	75.777	
4,600.0	4,482.3	4,050.8	3,894.9	21.7	22.4	-159.99	-365.7	1,019.4	2,062.6	2,035.4	27.18	75.893	
4,700.0	4,579.4	4,137.7	3,977.8	22.2	23.0	-159.96	-375.3	1,043.5	2,112.1	2,084.3	27.79	76.007	
4,800.0	4,676.5	4,224.6	4,060.7	22.7	23.5	-159.94	-384.9	1,067.7	2,161.6	2,133.2	28.40	76.117	
4,900.0	4,773.6	4,311.5	4,143.6	23.2	24.1	-159.92	-394.5	1,091.8	2,211.0	2,182.0	29.01	76.225	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 33A-12 F12 - OH - Plan #2

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,870.6	4,398.4	4,226.6	23.7	24.6	-159.90	-404.1	1,115.9	2,260.5	2,230.9	29.61	76.331	
5,100.0	4,967.7	4,485.3	4,309.5	24.3	25.1	-159.88	-413.7	1,140.0	2,310.0	2,279.8	30.22	76.435	
5,200.0	5,064.8	4,572.2	4,392.4	24.8	25.7	-159.86	-423.3	1,164.2	2,359.5	2,328.7	30.83	76.537	
5,300.0	5,161.9	4,659.1	4,475.4	25.3	26.2	-159.84	-432.9	1,188.3	2,409.0	2,377.5	31.43	76.636	
5,400.0	5,259.0	4,746.0	4,558.3	25.8	26.8	-159.83	-442.5	1,212.4	2,458.5	2,426.4	32.04	76.734	
5,500.0	5,356.1	4,832.9	4,641.2	26.3	27.3	-159.81	-452.1	1,236.5	2,507.9	2,475.3	32.64	76.831	
5,600.0	5,453.2	4,919.8	4,724.1	26.8	27.9	-159.79	-461.7	1,260.7	2,557.4	2,524.2	33.25	76.925	
5,700.0	5,550.3	5,006.7	4,807.1	27.4	28.4	-159.78	-471.2	1,284.8	2,606.9	2,573.1	33.85	77.019	
5,800.0	5,647.3	5,093.6	4,890.0	27.9	29.0	-159.76	-480.8	1,308.9	2,656.4	2,622.0	34.45	77.111	
5,900.0	5,744.4	5,180.5	4,972.9	28.4	29.5	-159.75	-490.4	1,333.0	2,705.9	2,670.8	35.05	77.202	
6,000.0	5,841.5	5,267.4	5,055.8	28.9	30.1	-159.73	-500.0	1,357.2	2,755.4	2,719.7	35.65	77.292	
6,100.0	5,938.6	5,354.3	5,138.8	29.4	30.6	-159.72	-509.6	1,381.3	2,804.9	2,768.6	36.25	77.380	
6,195.6	6,031.5	5,437.4	5,218.1	29.9	31.1	-159.71	-518.8	1,404.4	2,852.2	2,815.4	36.82	77.464	
6,200.0	6,035.7	5,441.2	5,221.7	29.9	31.2	-159.73	-519.2	1,405.4	2,854.3	2,817.5	36.86	77.430	
6,300.0	6,133.4	5,529.4	5,305.8	30.3	31.7	-160.25	-529.0	1,429.9	2,901.5	2,863.7	37.79	76.778	
6,400.0	6,232.1	5,619.7	5,392.0	30.6	32.3	-160.65	-538.9	1,455.0	2,944.2	2,905.6	38.62	76.243	
6,500.0	6,331.5	5,711.9	5,480.1	30.8	32.9	-160.95	-549.1	1,480.6	2,982.4	2,943.1	39.33	75.826	
6,600.0	6,431.3	5,805.9	5,569.7	30.9	33.4	-161.16	-559.5	1,506.7	3,016.1	2,976.1	39.94	75.525	
6,657.7	6,489.0	5,860.7	5,622.0	31.0	33.8	93.99	-565.5	1,521.9	3,033.3	2,993.1	40.24	75.389	
6,700.0	6,531.3	5,901.1	5,660.6	31.0	34.0	94.07	-570.0	1,533.1	3,045.4	3,005.0	40.43	75.323	
6,800.0	6,631.3	5,996.5	5,751.6	31.1	34.6	94.23	-580.5	1,559.6	3,074.0	3,033.2	40.89	75.183	
6,900.0	6,731.3	6,995.6	6,731.3	31.2	37.9	95.10	-638.4	1,705.1	3,095.3	3,052.2	43.13	71.761	
7,000.0	6,831.3	7,095.6	6,831.3	31.3	37.9	95.10	-638.4	1,705.1	3,095.3	3,051.9	43.40	71.319	
7,100.0	6,931.3	7,195.6	6,931.3	31.4	38.0	95.10	-638.4	1,705.1	3,095.3	3,051.6	43.67	70.877	
7,200.0	7,031.3	7,295.6	7,031.3	31.5	38.1	95.10	-638.4	1,705.1	3,095.3	3,051.3	43.94	70.436	
7,300.0	7,131.3	7,395.6	7,131.3	31.6	38.2	95.10	-638.4	1,705.1	3,095.3	3,051.1	44.22	69.996	
7,400.0	7,231.3	7,495.6	7,231.3	31.7	38.3	95.10	-638.4	1,705.1	3,095.3	3,050.8	44.50	69.556	
7,500.0	7,331.3	7,595.6	7,331.3	31.8	38.4	95.10	-638.4	1,705.1	3,095.3	3,050.5	44.78	69.117	
7,600.0	7,431.3	7,695.6	7,431.3	31.9	38.4	95.10	-638.4	1,705.1	3,095.3	3,050.2	45.07	68.680	
7,700.0	7,531.3	7,795.6	7,531.3	32.0	38.5	95.10	-638.4	1,705.1	3,095.3	3,049.9	45.36	68.244	
7,800.0	7,631.3	7,895.6	7,631.3	32.1	38.6	95.10	-638.4	1,705.1	3,095.3	3,049.6	45.65	67.809	
7,900.0	7,731.3	7,995.6	7,731.3	32.2	38.7	95.10	-638.4	1,705.1	3,095.3	3,049.4	45.94	67.376	
8,000.0	7,831.3	8,095.6	7,831.3	32.3	38.8	95.10	-638.4	1,705.1	3,095.3	3,049.1	46.24	66.945	
8,100.0	7,931.3	8,195.6	7,931.3	32.4	38.9	95.10	-638.4	1,705.1	3,095.3	3,048.8	46.53	66.516	
8,200.0	8,031.3	8,295.6	8,031.3	32.6	39.0	95.10	-638.4	1,705.1	3,095.3	3,048.5	46.84	66.088	
8,300.0	8,131.3	8,395.6	8,131.3	32.7	39.1	95.10	-638.4	1,705.1	3,095.3	3,048.2	47.14	65.663	
8,400.0	8,231.3	8,495.6	8,231.3	32.8	39.2	95.10	-638.4	1,705.1	3,095.3	3,047.8	47.45	65.239	
8,500.0	8,331.3	8,595.6	8,331.3	32.9	39.3	95.10	-638.4	1,705.1	3,095.3	3,047.5	47.75	64.818	
8,600.0	8,431.3	8,695.6	8,431.3	33.0	39.4	95.10	-638.4	1,705.1	3,095.3	3,047.2	48.06	64.399	
8,679.7	8,511.0	8,775.3	8,511.0	33.1	39.5	95.10	-638.4	1,705.1	3,095.3	3,047.0	48.31	64.067	

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 33B-12 F12 - OH - Plan #2 — **Offset Site Error:** 0.0 usft

Survey Program: 0-ISCWSA MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	69.02	12.0	31.3	33.6				
100.0	100.0	100.0	100.0	0.1	0.1	69.02	12.0	31.3	33.6	33.4	0.16	213.342	
200.0	200.0	200.0	200.0	0.3	0.3	69.02	12.0	31.3	33.6	33.0	0.61	55.311	CC, ES
250.0	250.0	249.4	249.4	0.4	0.4	69.84	11.7	31.9	34.0	33.2	0.82	41.223	
300.0	300.0	298.8	298.7	0.5	0.5	177.01	10.8	33.6	35.9	34.9	1.06	33.777	
400.0	399.8	396.5	396.1	0.7	0.7	-175.85	7.1	40.2	46.8	45.2	1.65	28.393	SF
500.0	499.3	491.8	490.7	1.0	1.0	-169.62	1.2	50.8	67.4	65.1	2.30	29.310	
600.0	598.0	583.7	581.1	1.3	1.3	-165.48	-6.6	65.0	97.4	94.4	2.97	32.783	
700.0	695.8	671.0	666.3	1.7	1.7	-162.82	-16.0	81.9	136.2	132.6	3.65	37.267	
712.0	707.5	681.2	676.1	1.8	1.8	-162.57	-17.2	84.1	141.4	137.7	3.74	37.849	
800.0	792.9	753.9	746.2	2.2	2.2	-161.24	-26.6	101.1	181.6	177.4	4.20	43.248	
900.0	890.0	834.1	822.6	2.7	2.6	-159.91	-38.5	122.6	230.4	225.6	4.77	48.323	
1,000.0	987.1	920.5	904.3	3.2	3.2	-158.82	-51.9	146.9	280.6	275.3	5.34	52.508	
1,100.0	1,084.2	1,006.8	986.1	3.7	3.7	-158.06	-65.4	171.2	330.9	325.0	5.94	55.730	
1,200.0	1,181.3	1,093.2	1,067.9	4.2	4.3	-157.50	-78.8	195.5	381.3	374.7	6.55	58.172	
1,300.0	1,278.4	1,179.6	1,149.6	4.7	4.9	-157.08	-92.3	219.8	431.6	424.4	7.18	60.108	
1,400.0	1,375.5	1,265.9	1,231.4	5.2	5.4	-156.74	-105.7	244.1	482.0	474.2	7.81	61.680	
1,500.0	1,472.6	1,352.3	1,313.2	5.7	6.0	-156.46	-119.2	268.4	532.4	523.9	8.46	62.959	
1,600.0	1,569.6	1,438.6	1,394.9	6.2	6.6	-156.24	-132.6	292.7	582.8	573.7	9.10	64.018	
1,700.0	1,666.7	1,525.0	1,476.7	6.7	7.2	-156.04	-146.1	317.0	633.1	623.4	9.75	64.908	
1,800.0	1,763.8	1,611.4	1,558.5	7.2	7.7	-155.88	-159.5	341.3	683.5	673.1	10.41	65.666	
1,900.0	1,860.9	1,697.7	1,640.2	7.7	8.3	-155.74	-173.0	365.7	733.9	722.9	11.07	66.318	
2,000.0	1,958.0	1,784.1	1,722.0	8.3	8.9	-155.62	-186.4	390.0	784.3	772.6	11.73	66.886	
2,100.0	2,055.1	1,870.4	1,803.8	8.8	9.5	-155.51	-199.9	414.3	834.7	822.4	12.39	67.385	
2,200.0	2,152.2	1,956.8	1,885.5	9.3	10.1	-155.42	-213.3	438.6	885.1	872.1	13.05	67.828	
2,300.0	2,249.3	2,043.1	1,967.3	9.8	10.6	-155.33	-226.8	462.9	935.6	921.8	13.71	68.224	
2,400.0	2,346.4	2,129.5	2,049.1	10.3	11.2	-155.25	-240.2	487.2	986.0	971.6	14.38	68.581	
2,500.0	2,443.4	2,215.9	2,130.8	10.8	11.8	-155.18	-253.7	511.5	1,036.4	1,021.3	15.04	68.904	
2,600.0	2,540.5	2,302.2	2,212.6	11.3	12.4	-155.12	-267.1	535.8	1,086.8	1,071.1	15.71	69.199	
2,700.0	2,637.6	2,388.6	2,294.4	11.9	13.0	-155.07	-280.6	560.1	1,137.2	1,120.8	16.37	69.470	
2,800.0	2,734.7	2,474.9	2,376.2	12.4	13.6	-155.01	-294.0	584.4	1,187.6	1,170.6	17.03	69.720	
2,900.0	2,831.8	2,561.3	2,457.9	12.9	14.1	-154.97	-307.5	608.7	1,238.0	1,220.3	17.70	69.952	
3,000.0	2,928.9	2,647.7	2,539.7	13.4	14.7	-154.92	-320.9	633.0	1,288.4	1,270.1	18.36	70.168	
3,100.0	3,026.0	2,734.0	2,621.5	13.9	15.3	-154.88	-334.4	657.3	1,338.8	1,319.8	19.03	70.370	
3,200.0	3,123.1	2,820.4	2,703.2	14.4	15.9	-154.84	-347.8	681.6	1,389.3	1,369.6	19.69	70.560	
3,300.0	3,220.1	2,906.7	2,785.0	15.0	16.5	-154.81	-361.3	705.9	1,439.7	1,419.3	20.35	70.738	
3,400.0	3,317.2	2,993.1	2,866.8	15.5	17.0	-154.77	-374.7	730.2	1,490.1	1,469.1	21.01	70.908	
3,500.0	3,414.3	3,079.5	2,948.5	16.0	17.6	-154.74	-388.2	754.6	1,540.5	1,518.8	21.68	71.068	
3,600.0	3,511.4	3,165.8	3,030.3	16.5	18.2	-154.71	-401.6	778.9	1,590.9	1,568.6	22.34	71.221	
3,700.0	3,608.5	3,252.2	3,112.1	17.0	18.8	-154.69	-415.1	803.2	1,641.3	1,618.3	23.00	71.367	
3,800.0	3,705.6	3,338.5	3,193.8	17.5	19.4	-154.66	-428.5	827.5	1,691.8	1,668.1	23.66	71.507	
3,900.0	3,802.7	3,424.9	3,275.6	18.1	20.0	-154.64	-442.0	851.8	1,742.2	1,717.9	24.32	71.641	
4,000.0	3,899.8	3,511.2	3,357.4	18.6	20.5	-154.62	-455.4	876.1	1,792.6	1,767.6	24.98	71.770	
4,100.0	3,996.8	3,597.6	3,439.1	19.1	21.1	-154.59	-468.9	900.4	1,843.0	1,817.4	25.63	71.894	
4,200.0	4,093.9	3,684.0	3,520.9	19.6	21.7	-154.57	-482.3	924.7	1,893.4	1,867.1	26.29	72.014	
4,300.0	4,191.0	3,770.3	3,602.7	20.1	22.3	-154.55	-495.8	949.0	1,943.8	1,916.9	26.95	72.131	
4,400.0	4,288.1	3,856.7	3,684.4	20.6	22.9	-154.54	-509.2	973.3	1,994.3	1,966.7	27.60	72.243	
4,500.0	4,385.2	3,943.0	3,766.2	21.2	23.5	-154.52	-522.7	997.6	2,044.7	2,016.4	28.26	72.353	
4,600.0	4,482.3	4,029.4	3,848.0	21.7	24.0	-154.50	-536.1	1,021.9	2,095.1	2,066.2	28.91	72.459	
4,700.0	4,579.4	4,115.8	3,929.8	22.2	24.6	-154.49	-549.6	1,046.2	2,145.5	2,115.9	29.57	72.563	
4,800.0	4,676.5	4,202.1	4,011.5	22.7	25.2	-154.47	-563.0	1,070.5	2,195.9	2,165.7	30.22	72.663	
4,900.0	4,773.6	4,288.5	4,093.3	23.2	25.8	-154.46	-576.5	1,094.8	2,246.3	2,215.5	30.87	72.762	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT 33B-12 F12 - OH - Plan #2

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,870.6	4,374.8	4,175.1	23.7	26.4	-154.44	-589.9	1,119.1	2,296.8	2,265.2	31.52	72.859	
5,100.0	4,967.7	4,461.2	4,256.8	24.3	27.0	-154.43	-603.4	1,143.4	2,347.2	2,315.0	32.17	72.954	
5,200.0	5,064.8	4,547.5	4,338.6	24.8	27.5	-154.42	-616.8	1,167.8	2,397.6	2,364.8	32.82	73.046	
5,300.0	5,161.9	4,633.9	4,420.4	25.3	28.1	-154.41	-630.3	1,192.1	2,448.0	2,414.6	33.47	73.137	
5,400.0	5,259.0	4,720.3	4,502.1	25.8	28.7	-154.40	-643.7	1,216.4	2,498.4	2,464.3	34.12	73.226	
5,500.0	5,356.1	4,806.6	4,583.9	26.3	29.3	-154.38	-657.2	1,240.7	2,548.9	2,514.1	34.77	73.314	
5,600.0	5,453.2	4,893.0	4,665.7	26.8	29.9	-154.37	-670.7	1,265.0	2,599.3	2,563.9	35.41	73.400	
5,700.0	5,550.3	4,979.3	4,747.4	27.4	30.5	-154.36	-684.1	1,289.3	2,649.7	2,613.6	36.06	73.485	
5,800.0	5,647.3	5,065.7	4,829.2	27.9	31.0	-154.35	-697.6	1,313.6	2,700.1	2,663.4	36.70	73.569	
5,900.0	5,744.4	5,152.1	4,911.0	28.4	31.6	-154.34	-711.0	1,337.9	2,750.5	2,713.2	37.35	73.652	
6,000.0	5,841.5	5,238.4	4,992.7	28.9	32.2	-154.33	-724.5	1,362.2	2,801.0	2,763.0	37.99	73.733	
6,100.0	5,938.6	5,324.8	5,074.5	29.4	32.8	-154.33	-737.9	1,386.5	2,851.4	2,812.7	38.63	73.814	
6,195.6	6,031.5	5,407.4	5,152.7	29.9	33.3	-154.32	-750.8	1,409.8	2,899.6	2,860.4	39.24	73.890	
6,200.0	6,035.7	5,411.1	5,156.3	29.9	33.4	-154.35	-751.4	1,410.8	2,901.8	2,862.5	39.29	73.855	
6,300.0	6,133.4	5,498.7	5,239.2	30.3	34.0	-155.02	-765.0	1,435.5	2,950.0	2,909.7	40.30	73.200	
6,400.0	6,232.1	5,588.5	5,324.2	30.6	34.6	-155.55	-779.0	1,460.7	2,993.9	2,952.7	41.20	72.663	
6,500.0	6,331.5	5,680.0	5,410.9	30.8	35.2	-155.96	-793.2	1,486.5	3,033.6	2,991.6	41.99	72.246	
6,600.0	6,431.3	5,773.3	5,499.2	30.9	35.8	-156.25	-807.8	1,512.7	3,068.8	3,026.2	42.65	71.946	
6,657.7	6,489.0	5,827.6	5,550.7	31.0	36.2	98.86	-816.2	1,528.0	3,087.1	3,044.1	42.99	71.815	
6,700.0	6,531.3	5,867.7	5,588.6	31.0	36.4	98.95	-822.5	1,539.3	3,100.0	3,056.8	43.19	71.779	
6,800.0	6,631.3	5,962.4	5,678.3	31.1	37.1	99.15	-837.2	1,566.0	3,130.4	3,086.7	43.66	71.706	
6,900.0	6,731.3	7,040.4	6,731.3	31.2	40.8	100.29	-926.9	1,728.0	3,156.7	3,110.6	46.12	68.449	
7,000.0	6,831.3	7,140.4	6,831.3	31.3	40.9	100.29	-926.9	1,728.0	3,156.7	3,110.3	46.37	68.081	
7,100.0	6,931.3	7,240.4	6,931.3	31.4	41.0	100.29	-926.9	1,728.0	3,156.7	3,110.1	46.62	67.713	
7,200.0	7,031.3	7,340.4	7,031.3	31.5	41.0	100.29	-926.9	1,728.0	3,156.7	3,109.8	46.87	67.344	
7,300.0	7,131.3	7,440.4	7,131.3	31.6	41.1	100.29	-926.9	1,728.0	3,156.7	3,109.5	47.13	66.975	
7,400.0	7,231.3	7,540.4	7,231.3	31.7	41.2	100.29	-926.9	1,728.0	3,156.7	3,109.3	47.39	66.606	
7,500.0	7,331.3	7,640.4	7,331.3	31.8	41.3	100.29	-926.9	1,728.0	3,156.7	3,109.0	47.66	66.236	
7,600.0	7,431.3	7,740.4	7,431.3	31.9	41.3	100.29	-926.9	1,728.0	3,156.7	3,108.7	47.92	65.867	
7,700.0	7,531.3	7,840.4	7,531.3	32.0	41.4	100.29	-926.9	1,728.0	3,156.7	3,108.5	48.19	65.498	
7,800.0	7,631.3	7,940.4	7,631.3	32.1	41.5	100.29	-926.9	1,728.0	3,156.7	3,108.2	48.47	65.129	
7,900.0	7,731.3	8,040.4	7,731.3	32.2	41.6	100.29	-926.9	1,728.0	3,156.7	3,107.9	48.74	64.761	
8,000.0	7,831.3	8,140.4	7,831.3	32.3	41.7	100.29	-926.9	1,728.0	3,156.7	3,107.6	49.02	64.393	
8,100.0	7,931.3	8,240.4	7,931.3	32.4	41.8	100.29	-926.9	1,728.0	3,156.7	3,107.4	49.30	64.027	
8,200.0	8,031.3	8,340.4	8,031.3	32.6	41.8	100.29	-926.9	1,728.0	3,156.7	3,107.1	49.59	63.661	
8,300.0	8,131.3	8,440.4	8,131.3	32.7	41.9	100.29	-926.9	1,728.0	3,156.7	3,106.8	49.87	63.295	
8,400.0	8,231.3	8,540.4	8,231.3	32.8	42.0	100.29	-926.9	1,728.0	3,156.7	3,106.5	50.16	62.931	
8,500.0	8,331.3	8,640.4	8,331.3	32.9	42.1	100.29	-926.9	1,728.0	3,156.7	3,106.2	50.45	62.568	
8,600.0	8,431.3	8,740.4	8,431.3	33.0	42.2	100.29	-926.9	1,728.0	3,156.7	3,105.9	50.74	62.207	
8,679.7	8,511.0	8,820.1	8,511.0	33.1	42.3	100.29	-926.9	1,728.0	3,156.7	3,105.7	50.98	61.919	

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT SWD F12-797 - OH - PLAN #1 — **Offset Site Error:** 0.0 usft

Survey Program: 0-ISCWSA MWD — **Offset Well Error:** 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	50.82	50.6	62.1	80.1				
100.0	100.0	100.0	100.0	0.1	0.1	50.82	50.6	62.1	80.1	80.0	0.16	509.323	
200.0	200.0	200.0	200.0	0.3	0.3	50.82	50.6	62.1	80.1	79.5	0.61	132.047	
250.0	250.0	250.0	250.0	0.4	0.4	50.82	50.6	62.1	80.1	79.3	0.83	96.359	CC, ES
300.0	300.0	300.0	300.0	0.5	0.5	155.77	50.6	62.1	80.7	79.7	1.07	75.550	
400.0	399.8	399.8	399.8	0.7	0.8	157.15	50.6	62.1	85.5	83.9	1.60	53.361	
500.0	499.3	499.3	499.3	1.0	1.0	159.49	50.6	62.1	95.3	93.1	2.18	43.646	
600.0	598.0	598.0	598.0	1.3	1.2	162.20	50.6	62.1	110.1	107.3	2.78	39.550	
700.0	695.8	695.8	695.8	1.7	1.4	164.84	50.6	62.1	130.0	126.6	3.39	38.332	
712.0	707.5	707.5	707.5	1.8	1.4	165.14	50.6	62.1	132.8	129.3	3.47	38.315	
800.0	792.9	792.9	792.9	2.2	1.6	167.16	50.6	62.1	153.3	149.4	3.84	39.911	
900.0	890.0	890.0	890.0	2.7	1.9	168.88	50.6	62.1	176.7	172.5	4.28	41.288	
1,000.0	987.1	987.1	987.1	3.2	2.1	170.20	50.6	62.1	200.3	195.6	4.73	42.327	
1,100.0	1,084.2	1,084.2	1,084.2	3.7	2.3	171.24	50.6	62.1	224.0	218.8	5.19	43.124	
1,200.0	1,181.3	1,181.3	1,181.3	4.2	2.5	172.09	50.6	62.1	247.7	242.0	5.66	43.744	
1,300.0	1,278.4	1,278.4	1,278.4	4.7	2.7	172.78	50.6	62.1	271.5	265.3	6.14	44.234	
1,400.0	1,375.5	1,375.5	1,375.5	5.2	2.9	173.37	50.6	62.1	295.3	288.6	6.62	44.629	
1,500.0	1,472.6	1,472.6	1,472.6	5.7	3.2	173.86	50.6	62.1	319.1	312.0	7.10	44.951	
1,600.0	1,569.6	1,569.6	1,569.6	6.2	3.4	174.29	50.6	62.1	342.9	335.3	7.58	45.217	
1,700.0	1,666.7	1,666.7	1,666.7	6.7	3.6	174.66	50.6	62.1	366.8	358.7	8.07	45.441	
1,800.0	1,763.8	1,763.8	1,763.8	7.2	3.8	174.99	50.6	62.1	390.6	382.1	8.56	45.630	
1,900.0	1,860.9	1,860.9	1,860.9	7.7	4.0	175.28	50.6	62.1	414.5	405.5	9.05	45.793	
2,000.0	1,958.0	1,958.0	1,958.0	8.3	4.3	175.54	50.6	62.1	438.4	428.8	9.54	45.935	
2,100.0	2,055.1	2,055.1	2,055.1	8.8	4.5	175.77	50.6	62.1	462.3	452.2	10.04	46.059	
2,200.0	2,152.2	2,152.2	2,152.2	9.3	4.7	175.98	50.6	62.1	486.2	475.6	10.53	46.168	
2,300.0	2,249.3	2,249.3	2,249.3	9.8	4.9	176.16	50.6	62.1	510.1	499.1	11.02	46.267	
2,400.0	2,346.4	2,346.4	2,346.4	10.3	5.1	176.34	50.6	62.1	534.0	522.5	11.52	46.355	
2,500.0	2,443.4	2,443.4	2,443.4	10.8	5.3	176.49	50.6	62.1	557.9	545.9	12.01	46.436	
2,600.0	2,540.5	2,540.5	2,540.5	11.3	5.6	176.64	50.6	62.1	581.8	569.3	12.51	46.509	
2,700.0	2,637.6	2,637.6	2,637.6	11.9	5.8	176.77	50.6	62.1	605.7	592.7	13.00	46.577	
2,800.0	2,734.7	2,734.7	2,734.7	12.4	6.0	176.89	50.6	62.1	629.7	616.2	13.50	46.641	
2,900.0	2,831.8	2,831.8	2,831.8	12.9	6.2	177.01	50.6	62.1	653.6	639.6	14.00	46.700	
3,000.0	2,928.9	2,928.9	2,928.9	13.4	6.4	177.11	50.6	62.1	677.5	663.0	14.49	46.755	
3,100.0	3,026.0	3,026.0	3,026.0	13.9	6.7	177.21	50.6	62.1	701.4	686.5	14.99	46.807	
3,200.0	3,123.1	3,123.1	3,123.1	14.4	6.9	177.30	50.6	62.1	725.4	709.9	15.48	46.857	
3,300.0	3,220.1	3,220.1	3,220.1	15.0	7.1	177.39	50.6	62.1	749.3	733.3	15.98	46.904	
3,400.0	3,317.2	3,317.2	3,317.2	15.5	7.3	177.47	50.6	62.1	773.2	756.8	16.47	46.950	
3,500.0	3,414.3	3,414.3	3,414.3	16.0	7.5	177.55	50.6	62.1	797.2	780.2	16.96	46.993	
3,600.0	3,511.4	3,511.4	3,511.4	16.5	7.7	177.62	50.6	62.1	821.1	803.7	17.46	47.036	
3,700.0	3,608.5	3,608.5	3,608.5	17.0	8.0	177.69	50.6	62.1	845.0	827.1	17.95	47.076	
3,800.0	3,705.6	3,705.6	3,705.6	17.5	8.2	177.75	50.6	62.1	869.0	850.5	18.44	47.116	
3,900.0	3,802.7	3,802.7	3,802.7	18.1	8.4	177.81	50.6	62.1	892.9	874.0	18.94	47.154	
4,000.0	3,899.8	3,899.8	3,899.8	18.6	8.6	177.87	50.6	62.1	916.9	897.4	19.43	47.192	
4,100.0	3,996.8	3,996.8	3,996.8	19.1	8.8	177.92	50.6	62.1	940.8	920.9	19.92	47.228	
4,200.0	4,093.9	4,093.9	4,093.9	19.6	9.1	177.97	50.6	62.1	964.7	944.3	20.41	47.264	
4,300.0	4,191.0	4,191.0	4,191.0	20.1	9.3	178.02	50.6	62.1	988.7	967.8	20.90	47.300	
4,400.0	4,288.1	4,288.1	4,288.1	20.6	9.5	178.07	50.6	62.1	1,012.6	991.2	21.39	47.335	
4,500.0	4,385.2	4,385.2	4,385.2	21.2	9.7	178.11	50.6	62.1	1,036.6	1,014.7	21.88	47.369	
4,600.0	4,482.3	4,482.3	4,482.3	21.7	9.9	178.16	50.6	62.1	1,060.5	1,038.2	22.37	47.402	
4,700.0	4,579.4	4,579.4	4,579.4	22.2	10.1	178.20	50.6	62.1	1,084.5	1,061.6	22.86	47.436	
4,800.0	4,676.5	4,676.5	4,676.5	22.7	10.4	178.24	50.6	62.1	1,108.4	1,085.1	23.35	47.469	
4,900.0	4,773.6	4,773.6	4,773.6	23.2	10.6	178.27	50.6	62.1	1,132.4	1,108.5	23.84	47.501	

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

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design S12-T7S-R97W - PUCKETT SWD F12-797 - OH - PLAN #1

Offset Site Error: 0.0 usft

Survey Program: 0-ISCWSA MWD

Offset Well Error: 0.0 usft

Reference Measured Depth (usft)	Reference Vertical Depth (usft)	Offset Measured Depth (usft)	Offset Vertical Depth (usft)	Semi Major Axis Reference (usft)	Semi Major Axis Offset (usft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (usft)	Offset Wellbore Centre +E/-W (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Total Uncertainty Axis	Separation Factor	Warning
5,000.0	4,870.6	4,870.6	4,870.6	23.7	10.8	178.31	50.6	62.1	1,156.3	1,132.0	24.33	47.533	
5,100.0	4,967.7	4,967.7	4,967.7	24.3	11.0	178.34	50.6	62.1	1,180.3	1,155.4	24.81	47.565	
5,200.0	5,064.8	5,064.8	5,064.8	24.8	11.2	178.38	50.6	62.1	1,204.2	1,178.9	25.30	47.597	
5,300.0	5,161.9	5,161.9	5,161.9	25.3	11.5	178.41	50.6	62.1	1,228.1	1,202.4	25.79	47.629	
5,400.0	5,259.0	5,259.0	5,259.0	25.8	11.7	178.44	50.6	62.1	1,252.1	1,225.8	26.27	47.660	
5,500.0	5,356.1	5,356.1	5,356.1	26.3	11.9	178.47	50.6	62.1	1,276.0	1,249.3	26.76	47.691	
5,600.0	5,453.2	5,453.2	5,453.2	26.8	12.1	178.50	50.6	62.1	1,300.0	1,272.8	27.24	47.722	
5,700.0	5,550.3	5,550.3	5,550.3	27.4	12.3	178.52	50.6	62.1	1,323.9	1,296.2	27.72	47.753	
5,800.0	5,647.3	5,647.3	5,647.3	27.9	12.5	178.55	50.6	62.1	1,347.9	1,319.7	28.21	47.783	
5,900.0	5,744.4	5,744.4	5,744.4	28.4	12.8	178.57	50.6	62.1	1,371.8	1,343.2	28.69	47.814	
6,000.0	5,841.5	5,841.5	5,841.5	28.9	13.0	178.60	50.6	62.1	1,395.8	1,366.6	29.17	47.844	
6,100.0	5,938.6	5,938.6	5,938.6	29.4	13.2	178.62	50.6	62.1	1,419.7	1,390.1	29.66	47.875	
6,195.6	6,031.5	6,031.5	6,031.5	29.9	13.4	178.64	50.6	62.1	1,442.6	1,412.5	30.12	47.904	
6,200.0	6,035.7	6,035.7	6,035.7	29.9	13.4	178.65	50.6	62.1	1,443.7	1,413.5	30.14	47.895	
6,300.0	6,133.4	6,133.4	6,133.4	30.3	13.6	178.68	50.6	62.1	1,464.9	1,434.2	30.70	47.722	
6,400.0	6,232.1	6,232.1	6,232.1	30.6	13.9	178.71	50.6	62.1	1,480.9	1,449.7	31.15	47.535	
6,500.0	6,331.5	6,331.5	6,331.5	30.8	14.1	178.72	50.6	62.1	1,491.7	1,460.2	31.51	47.337	
6,600.0	6,431.3	6,431.3	6,431.3	30.9	14.3	178.73	50.6	62.1	1,497.4	1,465.6	31.77	47.128	
6,657.7	6,489.0	6,489.0	6,489.0	31.0	14.4	73.97	50.6	62.1	1,498.2	1,466.4	31.88	46.994	
6,700.0	6,531.3	6,531.3	6,531.3	31.0	14.5	73.97	50.6	62.1	1,498.2	1,466.2	32.04	46.755	
6,800.0	6,631.3	6,631.3	6,631.3	31.1	14.8	73.97	50.6	62.1	1,498.2	1,465.8	32.43	46.206	
6,900.0	6,731.3	6,731.3	6,731.3	31.2	15.0	73.97	50.6	62.1	1,498.2	1,465.4	32.81	45.667	
7,000.0	6,831.3	6,831.3	6,831.3	31.3	15.2	73.97	50.6	62.1	1,498.2	1,465.1	33.19	45.138	
7,100.0	6,931.3	6,931.3	6,931.3	31.4	15.4	73.97	50.6	62.1	1,498.2	1,464.7	33.58	44.620	
7,200.0	7,031.3	7,031.3	7,031.3	31.5	15.7	73.97	50.6	62.1	1,498.2	1,464.3	33.96	44.112	
7,300.0	7,131.3	7,131.3	7,131.3	31.6	15.9	73.97	50.6	62.1	1,498.2	1,463.9	34.35	43.613	
7,400.0	7,231.3	7,231.3	7,231.3	31.7	16.1	73.97	50.6	62.1	1,498.2	1,463.5	34.74	43.124	
7,500.0	7,331.3	7,331.3	7,331.3	31.8	16.3	73.97	50.6	62.1	1,498.2	1,463.1	35.13	42.645	
7,600.0	7,431.3	7,431.3	7,431.3	31.9	16.6	73.97	50.6	62.1	1,498.2	1,462.7	35.53	42.174	
7,700.0	7,531.3	7,531.3	7,531.3	32.0	16.8	73.97	50.6	62.1	1,498.2	1,462.3	35.92	41.713	
7,800.0	7,631.3	7,631.3	7,631.3	32.1	17.0	73.97	50.6	62.1	1,498.2	1,461.9	36.31	41.260	
7,900.0	7,731.3	7,731.3	7,731.3	32.2	17.2	73.97	50.6	62.1	1,498.2	1,461.5	36.71	40.815	
8,000.0	7,831.3	7,831.3	7,831.3	32.3	17.5	73.97	50.6	62.1	1,498.2	1,461.1	37.10	40.379	
8,100.0	7,931.3	7,931.3	7,931.3	32.4	17.7	73.97	50.6	62.1	1,498.2	1,460.7	37.50	39.951	
8,200.0	8,031.3	8,031.3	8,031.3	32.6	17.9	73.97	50.6	62.1	1,498.2	1,460.3	37.90	39.530	
8,300.0	8,131.3	8,131.3	8,131.3	32.7	18.1	73.97	50.6	62.1	1,498.2	1,459.9	38.30	39.118	
8,400.0	8,231.3	8,231.3	8,231.3	32.8	18.4	73.97	50.6	62.1	1,498.2	1,459.5	38.70	38.713	
8,500.0	8,331.3	8,331.3	8,331.3	32.9	18.6	73.97	50.6	62.1	1,498.2	1,459.1	39.10	38.315	
8,600.0	8,431.3	8,431.3	8,431.3	33.0	18.8	73.97	50.6	62.1	1,498.2	1,458.7	39.51	37.925	
8,679.7	8,511.0	8,511.0	8,511.0	33.1	19.0	73.97	50.6	62.1	1,498.2	1,458.4	39.83	37.619	SF

Company:	Caerus Oil & Gas (NAD 27)	**Local Co-ordinate Reference:**	Well PUCKETT 12D-12 F12
Project:	Garfield County, CO	**TVD Reference:**	30' KB @ 8279.0usft (H&P 330)
Reference Site:	S12-T7S-R97W	**MD Reference:**	30' KB @ 8279.0usft (H&P 330)
Site Error:	0.0usft	**North Reference:**	True
Reference Well:	PUCKETT 12D-12 F12	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0usft	**Output errors are at**	2.00 sigma
Reference Wellbore	OH	**Database:**	USA EDM 5000 Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to 30' KB @ 8279.0usft (H&P 330)
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000 °

Coordinates are relative to: PUCKETT 12D-12 F12
Coordinate System is US State Plane 1927 (Exact solution), Colorado Central 502
Grid Convergence at Surface is: -1.69°