



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	
3	350.00	3.00	280.00	349.95	0.45	-2.58	3.00	280.00	1.88	
4	530.00	3.00	280.00	529.71	2.09	-11.85	0.00	0.00	8.65	
5	1108.11	19.28	326.31	1095.53	84.78	-80.23	3.00	53.23	115.73	
6	8622.46	19.28	326.31	8188.25	2149.64	-1456.89	0.00	0.00	2595.51	
7	9265.28	0.00	0.00	8819.00	2238.80	-1516.34	3.00	180.00	2702.59	
8	9337.19	1.44	250.00	8890.90	2238.50	-1517.19	2.00	250.00	2702.83	
9	12905.42	1.44	250.00	12458.00	2207.87	-1601.34	0.00	0.00	2727.45	FED 24A-14_PBHL

PLAN #1
FED 24A-14
GL + KB
Ground Level @ 8125.00 @ 8155.00usft
NAD 1927 - Western US
Well FED 24A-14 - Slot FED 24A-14, True North

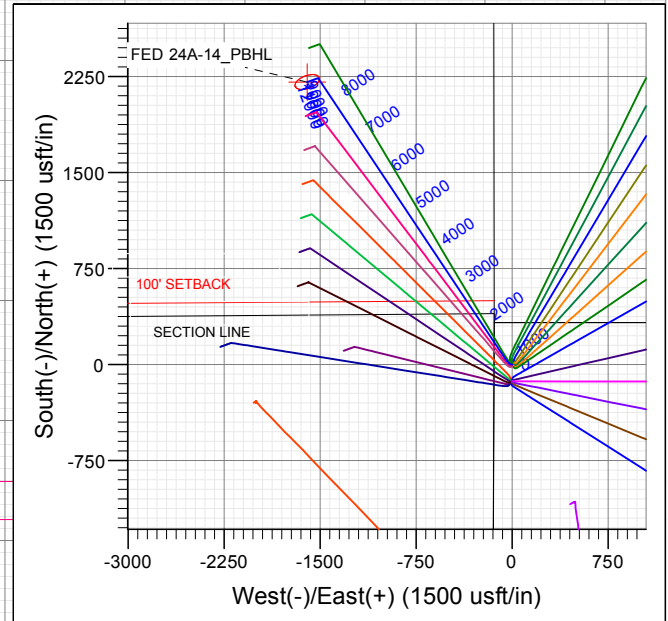
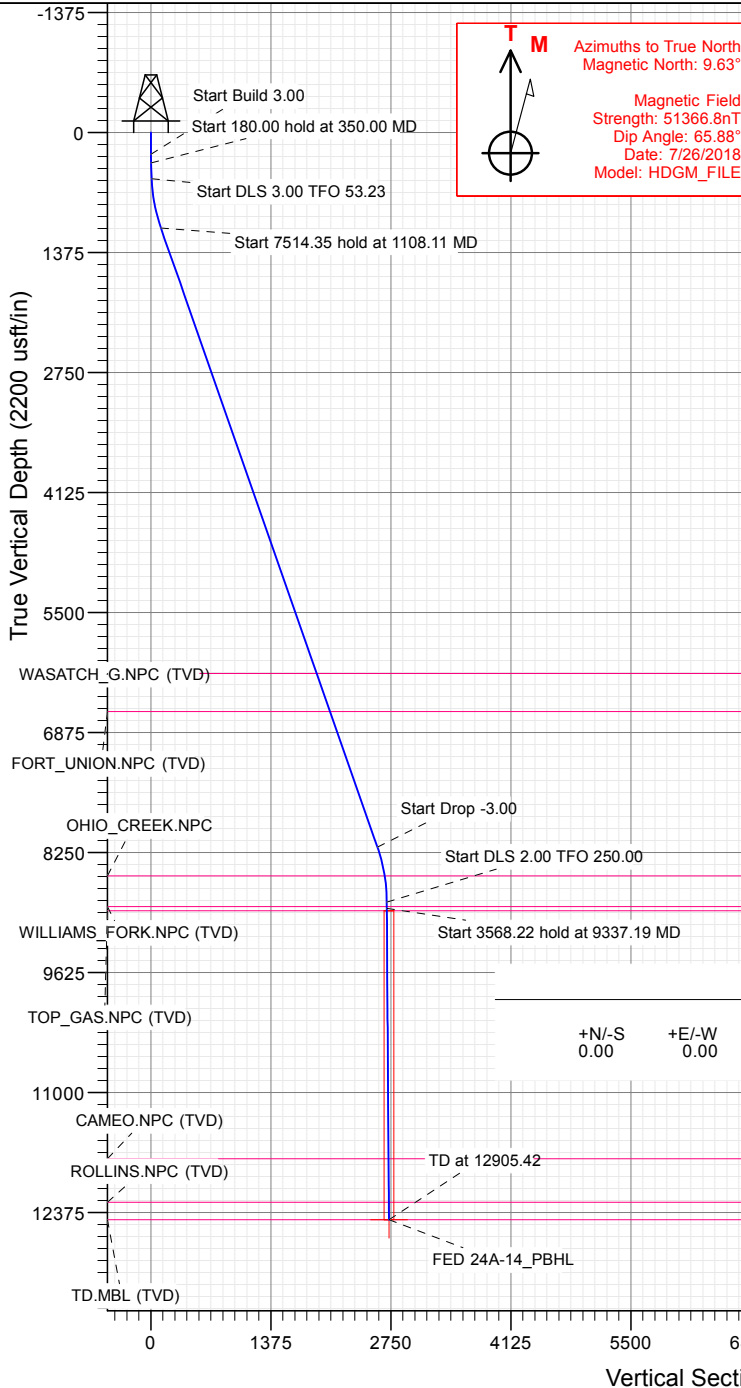
Project: Garfield County, CO (UTM 12N)
Site: S24-T4S-R96W ELU A24 496
Well: FED 24A-14
Wellbore: OH
Design: PLAN #1

FORMATION TOP DETAILS

Name	Type	Target	Azimuth	Origin Type	N/S	E/W	From TVD
FED 24A-14_PBHL	TD	No Target (Freehand)	324.05	Slot	0.00	0.00	0.00

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
FED 24A-14_PBHL	12458.00	2207.87	-1601.34	39.700337	-108.130996

TVDPATH	MDPATH	FORMATION
6199.00	6514.96	WASATCH_G.NPC (TVD)
6635.00	6976.88	FORT_UNION.NPC (TVD)
8517.00	8962.01	OHIO_CREEK.NPC
8869.00	9315.29	WILLIAMS_FORK.NPC (TVD)
8919.00	9365.30	TOP_GAS.NPC (TVD)
11758.00	12205.20	CAMEO.NPC (TVD)
12258.00	12705.35	ROLLINS.NPC (TVD)
12458.00	12905.42	TD.MBL (TVD)



WELL DETAILS: FED 24A-14

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	FED 24A-14
0.00	0.00	14427687.30	2449140.20	39.694278	-108.125307	



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well FED 24A-14 - Slot FED 24A-14
Company:	Caerus Oil & Gas	TVD Reference:	GL + KB
Project:	Garfield County, CO (UTM 12N)	MD Reference:	GL + KB
Site:	S24-T4S-R96W ELU A24 496	North Reference:	True
Well:	FED 24A-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Project	Garfield County, CO (UTM 12N)		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	S24-T4S-R96W ELU A24 496, Gravity = 0.997576		
Site Position:		Northing:	14,427,694.80 usft
From:	Map	Easting:	2,449,140.90 usft
Position Uncertainty:	3.28 usft	Slot Radius:	13-3/16"
		Latitude:	39.694298
		Longitude:	-108.125304
		Grid Convergence:	1.84 °

Well	FED 24A-14 - Slot FED 24A-14					
Well Position	+N/-S	0.00 usft	Northing:	14,427,687.30 usft	Latitude:	39.694278
	+E/-W	0.00 usft	Easting:	2,449,140.20 usft	Longitude:	-108.125307
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft	Ground Level:	8,125.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	7/26/2018	9.63	65.88	51,366.80000000

Design	PLAN #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	324.05

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	
350.00	3.00	280.00	349.95	0.45	-2.58	3.00	3.00	0.00	280.00	
530.00	3.00	280.00	529.71	2.09	-11.85	0.00	0.00	0.00	0.00	
1,108.11	19.28	326.31	1,095.53	84.78	-80.23	3.00	2.82	8.01	53.23	
8,622.46	19.28	326.31	8,188.25	2,149.64	-1,456.89	0.00	0.00	0.00	0.00	
9,265.28	0.00	0.00	8,819.00	2,238.80	-1,516.34	3.00	-3.00	0.00	180.00	
9,337.19	1.44	250.00	8,890.90	2,238.50	-1,517.19	2.00	2.00	-152.97	250.00	
12,905.42	1.44	250.00	12,458.00	2,207.87	-1,601.34	0.00	0.00	0.00	0.00	FED 24A-14_PBHL

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well FED 24A-14 - Slot FED 24A-14
Company:	Caerus Oil & Gas	TVD Reference:	GL + KB
Project:	Garfield County, CO (UTM 12N)	MD Reference:	GL + KB
Site:	S24-T4S-R96W ELU A24 496	North Reference:	True
Well:	FED 24A-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	Start Build 3.00
300.00	1.50	280.00	299.99	0.11	-0.64	0.47	3.00	3.00	
350.00	3.00	280.00	349.95	0.45	-2.58	1.88	3.00	3.00	Start 180.00 hold at 350.00 MD
400.00	3.00	280.00	399.89	0.91	-5.15	3.76	0.00	0.00	
500.00	3.00	280.00	499.75	1.82	-10.31	7.52	0.00	0.00	
530.00	3.00	280.00	529.71	2.09	-11.85	8.65	0.00	0.00	Start DLS 3.00 TFO 53.23
600.00	4.58	301.58	599.56	3.87	-16.04	12.55	3.00	2.25	
700.00	7.30	314.08	699.01	10.38	-24.00	22.50	3.00	2.72	
800.00	10.18	319.68	797.84	21.55	-34.29	37.57	3.00	2.88	
900.00	13.11	322.82	895.77	37.33	-46.87	57.73	3.00	2.93	
1,000.00	16.07	324.82	992.54	57.69	-61.70	82.92	3.00	2.96	
1,100.00	19.04	326.21	1,087.87	82.56	-78.75	113.07	3.00	2.97	
1,108.11	19.28	326.31	1,095.53	84.78	-80.23	115.73	3.00	2.98	Start 7514.35 hold at 1108.11 MD
1,200.00	19.28	326.31	1,182.26	110.03	-97.07	146.06	0.00	0.00	
1,300.00	19.28	326.31	1,276.65	137.51	-115.39	179.06	0.00	0.00	
1,400.00	19.28	326.31	1,371.04	164.99	-133.71	212.06	0.00	0.00	
1,500.00	19.28	326.31	1,465.43	192.47	-152.03	245.06	0.00	0.00	
1,600.00	19.28	326.31	1,559.82	219.94	-170.35	278.06	0.00	0.00	
1,700.00	19.28	326.31	1,654.21	247.42	-188.67	311.06	0.00	0.00	
1,800.00	19.28	326.31	1,748.60	274.90	-206.99	344.06	0.00	0.00	
1,900.00	19.28	326.31	1,842.99	302.38	-225.31	377.06	0.00	0.00	
2,000.00	19.28	326.31	1,937.37	329.86	-243.63	410.06	0.00	0.00	
2,100.00	19.28	326.31	2,031.76	357.34	-261.95	443.06	0.00	0.00	
2,200.00	19.28	326.31	2,126.15	384.82	-280.27	476.06	0.00	0.00	
2,300.00	19.28	326.31	2,220.54	412.30	-298.59	509.06	0.00	0.00	
2,400.00	19.28	326.31	2,314.93	439.78	-316.91	542.06	0.00	0.00	
2,500.00	19.28	326.31	2,409.32	467.25	-335.23	575.06	0.00	0.00	
2,600.00	19.28	326.31	2,503.71	494.73	-353.55	608.06	0.00	0.00	
2,700.00	19.28	326.31	2,598.10	522.21	-371.87	641.07	0.00	0.00	
2,800.00	19.28	326.31	2,692.49	549.69	-390.19	674.07	0.00	0.00	
2,900.00	19.28	326.31	2,786.88	577.17	-408.51	707.07	0.00	0.00	
3,000.00	19.28	326.31	2,881.26	604.65	-426.83	740.07	0.00	0.00	
3,100.00	19.28	326.31	2,975.65	632.13	-445.15	773.07	0.00	0.00	
3,200.00	19.28	326.31	3,070.04	659.61	-463.48	806.07	0.00	0.00	
3,300.00	19.28	326.31	3,164.43	687.09	-481.80	839.07	0.00	0.00	
3,400.00	19.28	326.31	3,258.82	714.57	-500.12	872.07	0.00	0.00	
3,500.00	19.28	326.31	3,353.21	742.04	-518.44	905.07	0.00	0.00	
3,600.00	19.28	326.31	3,447.60	769.52	-536.76	938.07	0.00	0.00	
3,700.00	19.28	326.31	3,541.99	797.00	-555.08	971.07	0.00	0.00	
3,800.00	19.28	326.31	3,636.38	824.48	-573.40	1,004.07	0.00	0.00	
3,900.00	19.28	326.31	3,730.76	851.96	-591.72	1,037.07	0.00	0.00	
4,000.00	19.28	326.31	3,825.15	879.44	-610.04	1,070.07	0.00	0.00	
4,100.00	19.28	326.31	3,919.54	906.92	-628.36	1,103.07	0.00	0.00	
4,200.00	19.28	326.31	4,013.93	934.40	-646.68	1,136.07	0.00	0.00	
4,300.00	19.28	326.31	4,108.32	961.88	-665.00	1,169.07	0.00	0.00	
4,400.00	19.28	326.31	4,202.71	989.35	-683.32	1,202.07	0.00	0.00	
4,500.00	19.28	326.31	4,297.10	1,016.83	-701.64	1,235.07	0.00	0.00	
4,600.00	19.28	326.31	4,391.49	1,044.31	-719.96	1,268.07	0.00	0.00	
4,700.00	19.28	326.31	4,485.88	1,071.79	-738.28	1,301.07	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well FED 24A-14 - Slot FED 24A-14
Company:	Caerus Oil & Gas	TVD Reference:	GL + KB
Project:	Garfield County, CO (UTM 12N)	MD Reference:	GL + KB
Site:	S24-T4S-R96W ELU A24 496	North Reference:	True
Well:	FED 24A-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
4,800.00	19.28	326.31	4,580.27	1,099.27	-756.60	1,334.08	0.00	0.00	
4,900.00	19.28	326.31	4,674.65	1,126.75	-774.92	1,367.08	0.00	0.00	
5,000.00	19.28	326.31	4,769.04	1,154.23	-793.24	1,400.08	0.00	0.00	
5,100.00	19.28	326.31	4,863.43	1,181.71	-811.56	1,433.08	0.00	0.00	
5,200.00	19.28	326.31	4,957.82	1,209.19	-829.88	1,466.08	0.00	0.00	
5,300.00	19.28	326.31	5,052.21	1,236.66	-848.20	1,499.08	0.00	0.00	
5,400.00	19.28	326.31	5,146.60	1,264.14	-866.52	1,532.08	0.00	0.00	
5,500.00	19.28	326.31	5,240.99	1,291.62	-884.85	1,565.08	0.00	0.00	
5,600.00	19.28	326.31	5,335.38	1,319.10	-903.17	1,598.08	0.00	0.00	
5,700.00	19.28	326.31	5,429.77	1,346.58	-921.49	1,631.08	0.00	0.00	
5,800.00	19.28	326.31	5,524.15	1,374.06	-939.81	1,664.08	0.00	0.00	
5,900.00	19.28	326.31	5,618.54	1,401.54	-958.13	1,697.08	0.00	0.00	
6,000.00	19.28	326.31	5,712.93	1,429.02	-976.45	1,730.08	0.00	0.00	
6,100.00	19.28	326.31	5,807.32	1,456.50	-994.77	1,763.08	0.00	0.00	
6,200.00	19.28	326.31	5,901.71	1,483.97	-1,013.09	1,796.08	0.00	0.00	
6,300.00	19.28	326.31	5,996.10	1,511.45	-1,031.41	1,829.08	0.00	0.00	
6,400.00	19.28	326.31	6,090.49	1,538.93	-1,049.73	1,862.08	0.00	0.00	
6,500.00	19.28	326.31	6,184.88	1,566.41	-1,068.05	1,895.08	0.00	0.00	
6,514.96	19.28	326.31	6,199.00	1,570.52	-1,070.79	1,900.02	0.00	0.00	WASATCH_G.NPC (TVD)
6,600.00	19.28	326.31	6,279.27	1,593.89	-1,086.37	1,928.08	0.00	0.00	
6,700.00	19.28	326.31	6,373.65	1,621.37	-1,104.69	1,961.08	0.00	0.00	
6,800.00	19.28	326.31	6,468.04	1,648.85	-1,123.01	1,994.08	0.00	0.00	
6,900.00	19.28	326.31	6,562.43	1,676.33	-1,141.33	2,027.09	0.00	0.00	
6,976.88	19.28	326.31	6,635.00	1,697.45	-1,155.42	2,052.46	0.00	0.00	FORT_UNION.NPC (TVD)
7,000.00	19.28	326.31	6,656.82	1,703.81	-1,159.65	2,060.09	0.00	0.00	
7,100.00	19.28	326.31	6,751.21	1,731.29	-1,177.97	2,093.09	0.00	0.00	
7,200.00	19.28	326.31	6,845.60	1,758.76	-1,196.29	2,126.09	0.00	0.00	
7,300.00	19.28	326.31	6,939.99	1,786.24	-1,214.61	2,159.09	0.00	0.00	
7,400.00	19.28	326.31	7,034.38	1,813.72	-1,232.93	2,192.09	0.00	0.00	
7,500.00	19.28	326.31	7,128.77	1,841.20	-1,251.25	2,225.09	0.00	0.00	
7,600.00	19.28	326.31	7,223.16	1,868.68	-1,269.57	2,258.09	0.00	0.00	
7,700.00	19.28	326.31	7,317.54	1,896.16	-1,287.89	2,291.09	0.00	0.00	
7,800.00	19.28	326.31	7,411.93	1,923.64	-1,306.22	2,324.09	0.00	0.00	
7,900.00	19.28	326.31	7,506.32	1,951.12	-1,324.54	2,357.09	0.00	0.00	
8,000.00	19.28	326.31	7,600.71	1,978.60	-1,342.86	2,390.09	0.00	0.00	
8,100.00	19.28	326.31	7,695.10	2,006.07	-1,361.18	2,423.09	0.00	0.00	
8,200.00	19.28	326.31	7,789.49	2,033.55	-1,379.50	2,456.09	0.00	0.00	
8,300.00	19.28	326.31	7,883.88	2,061.03	-1,397.82	2,489.09	0.00	0.00	
8,400.00	19.28	326.31	7,978.27	2,088.51	-1,416.14	2,522.09	0.00	0.00	
8,500.00	19.28	326.31	8,072.66	2,115.99	-1,434.46	2,555.09	0.00	0.00	
8,600.00	19.28	326.31	8,167.04	2,143.47	-1,452.78	2,588.09	0.00	0.00	
8,622.46	19.28	326.31	8,188.25	2,149.64	-1,456.89	2,595.51	0.00	0.00	Start Drop -3.00
8,700.00	16.96	326.31	8,261.93	2,169.71	-1,470.27	2,619.60	3.00	-3.00	
8,800.00	13.96	326.31	8,358.30	2,191.88	-1,485.06	2,646.23	3.00	-3.00	
8,900.00	10.96	326.31	8,455.94	2,209.83	-1,497.02	2,667.79	3.00	-3.00	
8,962.01	9.10	326.31	8,517.00	2,218.81	-1,503.01	2,678.58	3.00	-3.00	OHIO_CREEK.NPC
9,000.00	7.96	326.31	8,554.57	2,223.50	-1,506.14	2,684.21	3.00	-3.00	
9,100.00	4.96	326.31	8,653.92	2,232.86	-1,512.38	2,695.44	3.00	-3.00	
9,200.00	1.96	326.31	8,753.73	2,237.88	-1,515.72	2,701.47	3.00	-3.00	
9,265.28	0.00	0.00	8,819.00	2,238.80	-1,516.34	2,702.59	3.00	-3.00	Start DLS 2.00 TFO 250.00
9,300.00	0.69	250.00	8,853.71	2,238.73	-1,516.54	2,702.64	2.00	2.00	
9,315.29	1.00	250.00	8,869.00	2,238.66	-1,516.75	2,702.71	2.00	2.00	WILLIAMS_FORK.NPC (TVD)

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well FED 24A-14 - Slot FED 24A-14
Company:	Caerus Oil & Gas	TVD Reference:	GL + KB
Project:	Garfield County, CO (UTM 12N)	MD Reference:	GL + KB
Site:	S24-T4S-R96W ELU A24 496	North Reference:	True
Well:	FED 24A-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100u)	Comments / Formations
9,337.19	1.44	250.00	8,890.90	2,238.50	-1,517.19	2,702.83	2.00	2.00	Start 3568.22 hold at 9337.19 MD
9,365.30	1.44	250.00	8,919.00	2,238.26	-1,517.85	2,703.03	0.00	0.00	TOP_GAS.NPC (TVD)
9,400.00	1.44	250.00	8,953.69	2,237.96	-1,518.67	2,703.27	0.00	0.00	
9,500.00	1.44	250.00	9,053.66	2,237.10	-1,521.03	2,703.96	0.00	0.00	
9,600.00	1.44	250.00	9,153.63	2,236.24	-1,523.39	2,704.65	0.00	0.00	
9,700.00	1.44	250.00	9,253.59	2,235.38	-1,525.74	2,705.34	0.00	0.00	
9,800.00	1.44	250.00	9,353.56	2,234.52	-1,528.10	2,706.03	0.00	0.00	
9,900.00	1.44	250.00	9,453.53	2,233.67	-1,530.46	2,706.72	0.00	0.00	
10,000.00	1.44	250.00	9,553.50	2,232.81	-1,532.82	2,707.41	0.00	0.00	
10,100.00	1.44	250.00	9,653.47	2,231.95	-1,535.18	2,708.10	0.00	0.00	
10,200.00	1.44	250.00	9,753.44	2,231.09	-1,537.54	2,708.79	0.00	0.00	
10,300.00	1.44	250.00	9,853.40	2,230.23	-1,539.90	2,709.48	0.00	0.00	
10,400.00	1.44	250.00	9,953.37	2,229.37	-1,542.25	2,710.17	0.00	0.00	
10,500.00	1.44	250.00	10,053.34	2,228.52	-1,544.61	2,710.86	0.00	0.00	
10,600.00	1.44	250.00	10,153.31	2,227.66	-1,546.97	2,711.55	0.00	0.00	
10,700.00	1.44	250.00	10,253.28	2,226.80	-1,549.33	2,712.24	0.00	0.00	
10,800.00	1.44	250.00	10,353.25	2,225.94	-1,551.69	2,712.93	0.00	0.00	
10,900.00	1.44	250.00	10,453.22	2,225.08	-1,554.05	2,713.62	0.00	0.00	
11,000.00	1.44	250.00	10,553.18	2,224.22	-1,556.41	2,714.31	0.00	0.00	
11,100.00	1.44	250.00	10,653.15	2,223.37	-1,558.76	2,715.00	0.00	0.00	
11,200.00	1.44	250.00	10,753.12	2,222.51	-1,561.12	2,715.69	0.00	0.00	
11,300.00	1.44	250.00	10,853.09	2,221.65	-1,563.48	2,716.38	0.00	0.00	
11,400.00	1.44	250.00	10,953.06	2,220.79	-1,565.84	2,717.07	0.00	0.00	
11,500.00	1.44	250.00	11,053.03	2,219.93	-1,568.20	2,717.76	0.00	0.00	
11,600.00	1.44	250.00	11,153.00	2,219.07	-1,570.56	2,718.45	0.00	0.00	
11,700.00	1.44	250.00	11,252.96	2,218.22	-1,572.91	2,719.14	0.00	0.00	
11,800.00	1.44	250.00	11,352.93	2,217.36	-1,575.27	2,719.83	0.00	0.00	
11,900.00	1.44	250.00	11,452.90	2,216.50	-1,577.63	2,720.52	0.00	0.00	
12,000.00	1.44	250.00	11,552.87	2,215.64	-1,579.99	2,721.21	0.00	0.00	
12,100.00	1.44	250.00	11,652.84	2,214.78	-1,582.35	2,721.90	0.00	0.00	
12,200.00	1.44	250.00	11,752.81	2,213.92	-1,584.71	2,722.58	0.00	0.00	
12,205.20	1.44	250.00	11,758.00	2,213.88	-1,584.83	2,722.62	0.00	0.00	CAMEO.NPC (TVD)
12,300.00	1.44	250.00	11,852.77	2,213.07	-1,587.07	2,723.27	0.00	0.00	
12,400.00	1.44	250.00	11,952.74	2,212.21	-1,589.42	2,723.96	0.00	0.00	
12,500.00	1.44	250.00	12,052.71	2,211.35	-1,591.78	2,724.65	0.00	0.00	
12,600.00	1.44	250.00	12,152.68	2,210.49	-1,594.14	2,725.34	0.00	0.00	
12,700.00	1.44	250.00	12,252.65	2,209.63	-1,596.50	2,726.03	0.00	0.00	
12,705.35	1.44	250.00	12,258.00	2,209.59	-1,596.63	2,726.07	0.00	0.00	ROLLINS.NPC (TVD)
12,800.00	1.44	250.00	12,352.62	2,208.77	-1,598.86	2,726.72	0.00	0.00	
12,900.00	1.44	250.00	12,452.59	2,207.92	-1,601.22	2,727.41	0.00	0.00	
12,905.42	1.44	250.00	12,458.00	2,207.87	-1,601.34	2,727.45	0.00	0.00	TD at 12905.42 - TD.MBL (TVD) - FED 24A-14_

Targets									
Target Name									
- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- Shape									
FED 24A-14_PBHL	0.00	0.00	12,458.00	2,207.87	-1,601.34	14,429,842.70	2,447,468.90	39.700337	-108.130996
- plan hits target center									
- Ellipse (radii L100.00 W50.00 on 250.00 azi)									

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well FED 24A-14 - Slot FED 24A-14
Company:	Caerus Oil & Gas	TVD Reference:	GL + KB
Project:	Garfield County, CO (UTM 12N)	MD Reference:	GL + KB
Site:	S24-T4S-R96W ELU A24 496	North Reference:	True
Well:	FED 24A-14	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
6,514.96	6,199.00	WASATCH_G.NPC (TVD)				
6,976.88	6,635.00	FORT_UNION.NPC (TVD)				
8,962.01	8,517.00	OHIO_CREEK.NPC				
9,315.29	8,869.00	WILLIAMS_FORK.NPC (TVD)				
9,365.30	8,919.00	TOP_GAS.NPC (TVD)				
12,205.20	11,758.00	CAMEO.NPC (TVD)				
12,705.35	12,258.00	ROLLINS.NPC (TVD)				
12,905.42	12,458.00	TD.MBL (TVD)				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
250.00	250.00	0.00	0.00	Start Build 3.00	
350.00	349.95	0.45	-2.58	Start 180.00 hold at 350.00 MD	
530.00	529.71	2.09	-11.85	Start DLS 3.00 TFO 53.23	
1,108.11	1,095.53	84.78	-80.23	Start 7514.35 hold at 1108.11 MD	
8,622.46	8,188.25	2,149.64	-1,456.89	Start Drop -3.00	
9,265.28	8,819.00	2,238.80	-1,516.34	Start DLS 2.00 TFO 250.00	
9,337.19	8,890.90	2,238.50	-1,517.19	Start 3568.22 hold at 9337.19 MD	
12,905.42	12,458.00	2,207.87	-1,601.34	TD at 12905.42	