

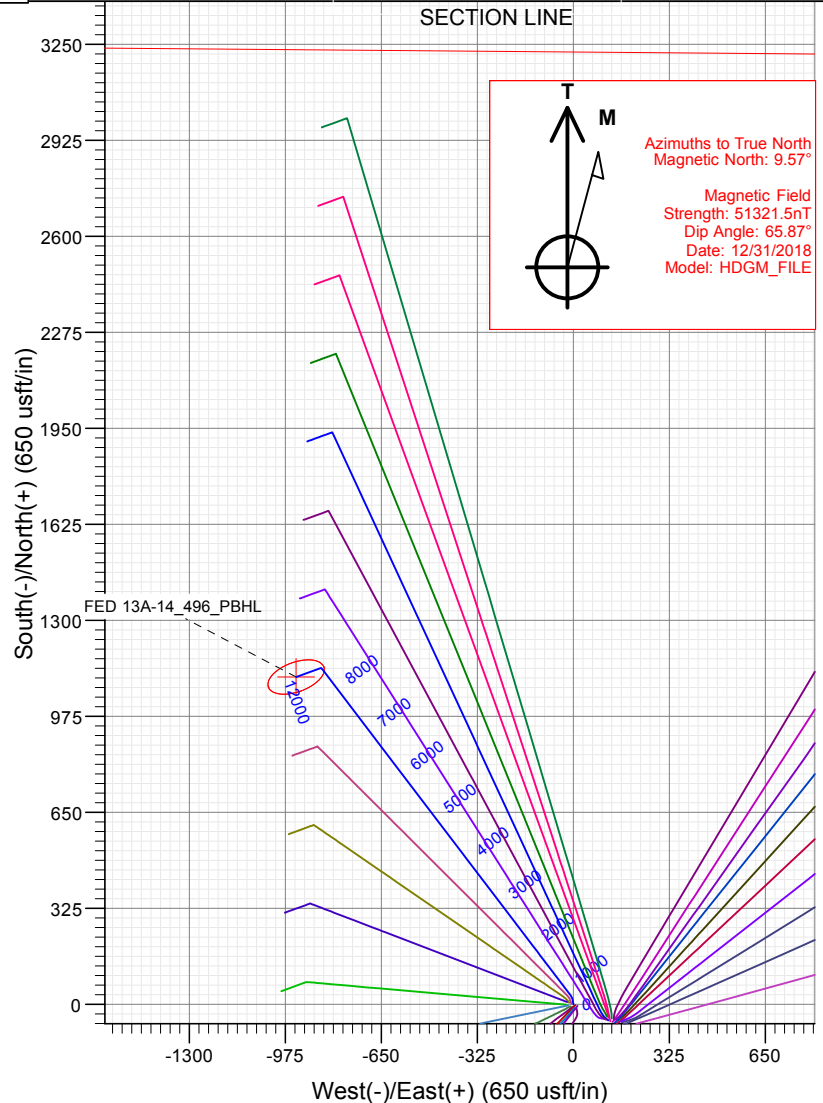
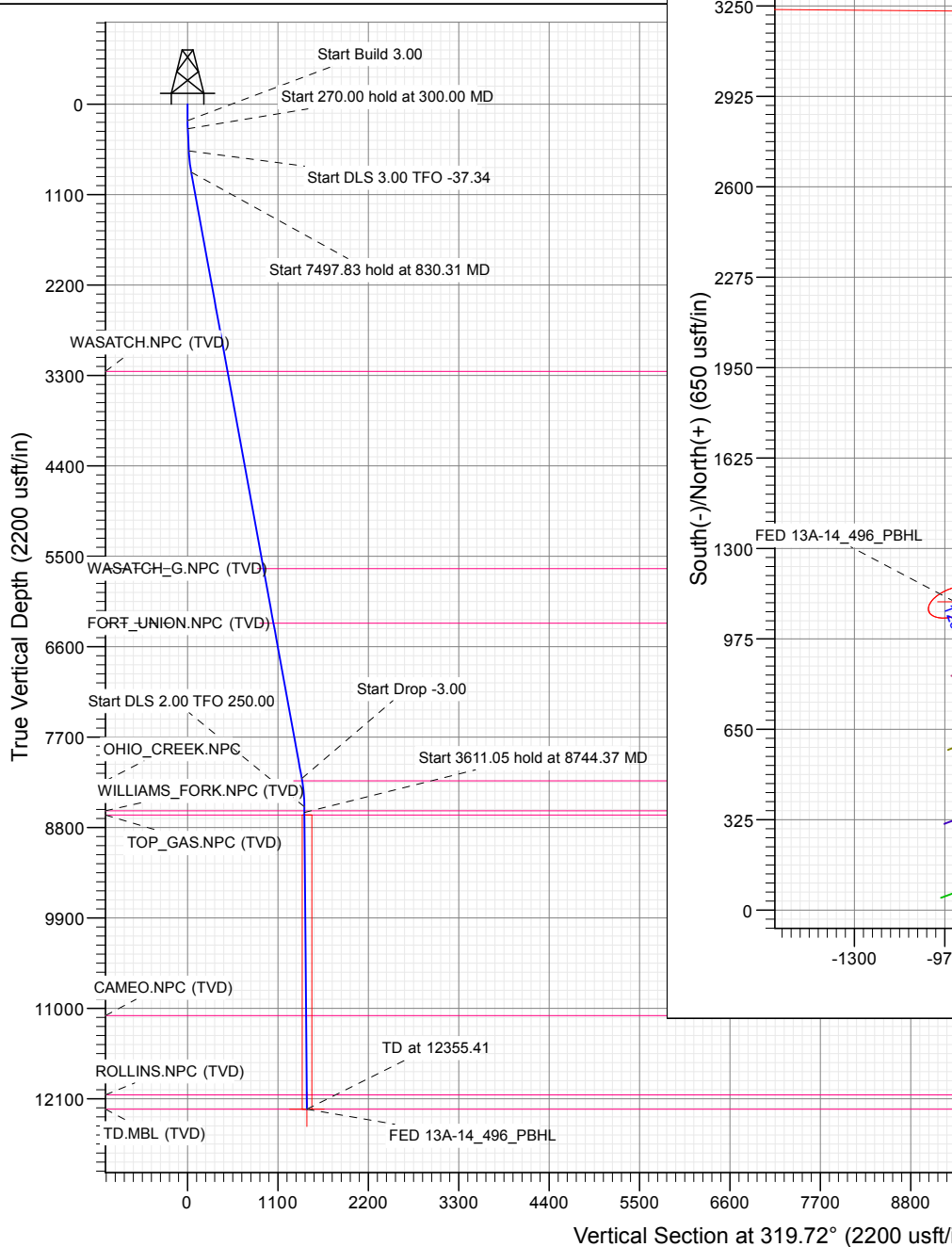


SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	300.00	3.00	350.00	299.95	2.58	-0.45	3.00	350.00	2.26	
4	570.00	3.00	350.00	569.58	16.49	-2.91	0.00	0.00	14.46	
5	830.31	10.35	322.71	828.00	41.85	-18.29	3.00	-37.34	43.75	
6	8328.15	10.35	322.71	8203.73	1113.94	-834.85	0.00	0.00	1389.58	
7	8673.30	0.00	0.00	8547.00	1138.68	-853.70	3.00	180.00	1420.64	
8	8744.37	1.42	250.00	8618.06	1138.38	-854.53	2.00	250.00	1420.94	
9	12355.41	1.42	250.00	12228.00	1107.74	-938.70	0.00	0.00	1451.98	FED 13A-14_496_PBHL

PLAN #1 FED 13A-14_496 GL +68 = 30' @ 7532.00usft Ground Level @ 7902.00 NAD 1927 - Western US Well FED 13A-14_496 - Slot WN_4, True North									
Type	Target	Azimuth	Origin	Type	N/S	E/W	From	TVD	
TD	No Target (Freehand)	319.72	Slot		0.00	0.00	TVD		
Name	FED 13A-14_496_PBHL	TVD	12228.00	N/S	1107.74	+E/-W	-938.70	Latitude	39.704016
								Longitude	-108.136830

Project: Garfield County, CO (UTM 12N)
Site: SEC 14-T4S-R96W ELU J14 496 PAD
Well: FED 13A-14_496
Wellbore: OH
Design: PLAN #1



FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3251.00	3293.43	WASATCH.NPC (TVD)
5651.00	5733.16	WASATCH_G.NPC (TVD)
6313.00	6406.12	FORT_UNION.NPC (TVD)
8233.00	8357.86	OHIO_CREEK.NPC
8597.00	8723.30	WILLIAMS_FORK.NPC (TVD)
8647.00	8773.31	TOP_GAS.NPC (TVD)
11087.00	11214.06	CAMEO.NPC (TVD)
12053.00	12180.36	ROLLINS.NPC (TVD)
12228.00	12355.41	TD.MBL (TVD)

WELL DETAILS: FED 13A-14_496

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	WN_4
0.00	0.00	14430025.90	2445914.30	39.700976	-108.136495	



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well FED 13A-14_496 - Slot WN_4
Company:	Caerus Oil & Gas	TVD Reference:	GL + KB = 30' @ 7932.00usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	GL + KB = 30' @ 7932.00usft
Site:	SEC 14-T4S-R96W ELU J14 496 PAD	North Reference:	True
Well:	FED 13A-14_496	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		SEC 14-T4S-R96W ELU J14 496 PAD			
Site Position:		Northing:	14,430,033.00 usft	Latitude:	39.700997
From:	Map	Easting:	2,445,893.00 usft	Longitude:	-108.136570
Position Uncertainty:	3.28 usft	Slot Radius:	13-3/16 "	Grid Convergence:	1.83 °

Well	FED 13A-14_496 - Slot WN_4					
Well Position	+N/-S	0.00 usft	Northing:	14,430,025.90 usft	Latitude:	39.700976
	+E/-W	0.00 usft	Easting:	2,445,914.30 usft	Longitude:	-108.136495
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft	Ground Level:	7,902.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	12/31/2018	9.57	65.87	51,321.50000000

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	319.72

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	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	3.00	350.00	299.95	2.58	-0.45	3.00	3.00	0.00	350.00	
570.00	3.00	350.00	569.58	16.49	-2.91	0.00	0.00	0.00	0.00	
830.31	10.35	322.71	828.00	41.85	-18.29	3.00	2.83	-10.49	-37.34	
8,328.15	10.35	322.71	8,203.73	1,113.94	-834.85	0.00	0.00	0.00	0.00	
8,673.30	0.00	0.00	8,547.00	1,138.68	-853.70	3.00	-3.00	0.00	180.00	
8,744.37	1.42	250.00	8,618.06	1,138.38	-854.53	2.00	2.00	-154.78	250.00	
12,355.41	1.42	250.00	12,228.00	1,107.74	-938.70	0.00	0.00	0.00	0.00	FED 13A-14_496_PB

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well FED 13A-14_496 - Slot WN_4
Company:	Caerus Oil & Gas	TVD Reference:	GL + KB = 30' @ 7932.00usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	GL + KB = 30' @ 7932.00usft
Site:	SEC 14-T4S-R96W ELU J14 496 PAD	North Reference:	True
Well:	FED 13A-14_496	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	Start Build 3.00
300.00	3.00	350.00	299.95	2.58	-0.45	2.26	3.00	3.00	Start 270.00 hold at 300.00 MD
400.00	3.00	350.00	399.82	7.73	-1.36	6.78	0.00	0.00	
500.00	3.00	350.00	499.68	12.89	-2.27	11.30	0.00	0.00	
570.00	3.00	350.00	569.58	16.49	-2.91	14.46	0.00	0.00	Start DLS 3.00 TFO -37.34
600.00	3.76	341.64	599.53	18.20	-3.35	16.05	3.00	2.52	
700.00	6.54	328.77	699.12	26.18	-7.34	24.72	3.00	2.79	
800.00	9.46	323.68	798.14	37.68	-15.16	38.55	3.00	2.92	
830.31	10.35	322.71	828.00	41.85	-18.29	43.75	3.00	2.95	Start 7497.83 hold at 830.31 MD
900.00	10.35	322.71	896.55	51.82	-25.88	56.26	0.00	0.00	
1,000.00	10.35	322.71	994.92	66.12	-36.77	74.21	0.00	0.00	
1,100.00	10.35	322.71	1,093.29	80.41	-47.66	92.16	0.00	0.00	
1,200.00	10.35	322.71	1,191.67	94.71	-58.55	110.11	0.00	0.00	
1,300.00	10.35	322.71	1,290.04	109.01	-69.44	128.06	0.00	0.00	
1,400.00	10.35	322.71	1,388.41	123.31	-80.33	146.01	0.00	0.00	
1,500.00	10.35	322.71	1,486.78	137.61	-91.22	163.96	0.00	0.00	
1,600.00	10.35	322.71	1,585.15	151.91	-102.11	181.91	0.00	0.00	
1,700.00	10.35	322.71	1,683.52	166.21	-113.00	199.86	0.00	0.00	
1,800.00	10.35	322.71	1,781.89	180.50	-123.90	217.81	0.00	0.00	
1,900.00	10.35	322.71	1,880.27	194.80	-134.79	235.76	0.00	0.00	
2,000.00	10.35	322.71	1,978.64	209.10	-145.68	253.71	0.00	0.00	
2,100.00	10.35	322.71	2,077.01	223.40	-156.57	271.66	0.00	0.00	
2,200.00	10.35	322.71	2,175.38	237.70	-167.46	289.61	0.00	0.00	
2,300.00	10.35	322.71	2,273.75	252.00	-178.35	307.56	0.00	0.00	
2,400.00	10.35	322.71	2,372.12	266.30	-189.24	325.50	0.00	0.00	
2,500.00	10.35	322.71	2,470.49	280.59	-200.13	343.45	0.00	0.00	
2,600.00	10.35	322.71	2,568.87	294.89	-211.02	361.40	0.00	0.00	
2,700.00	10.35	322.71	2,667.24	309.19	-221.91	379.35	0.00	0.00	
2,800.00	10.35	322.71	2,765.61	323.49	-232.80	397.30	0.00	0.00	
2,900.00	10.35	322.71	2,863.98	337.79	-243.69	415.25	0.00	0.00	
3,000.00	10.35	322.71	2,962.35	352.09	-254.58	433.20	0.00	0.00	
3,100.00	10.35	322.71	3,060.72	366.39	-265.47	451.15	0.00	0.00	
3,200.00	10.35	322.71	3,159.09	380.69	-276.36	469.10	0.00	0.00	
3,293.43	10.35	322.71	3,251.00	394.04	-286.54	485.87	0.00	0.00	WASATCH.NPC (TVD)
3,300.00	10.35	322.71	3,257.47	394.98	-287.26	487.05	0.00	0.00	
3,400.00	10.35	322.71	3,355.84	409.28	-298.15	505.00	0.00	0.00	
3,500.00	10.35	322.71	3,454.21	423.58	-309.04	522.95	0.00	0.00	
3,600.00	10.35	322.71	3,552.58	437.88	-319.93	540.90	0.00	0.00	
3,700.00	10.35	322.71	3,650.95	452.18	-330.82	558.85	0.00	0.00	
3,800.00	10.35	322.71	3,749.32	466.48	-341.71	576.80	0.00	0.00	
3,900.00	10.35	322.71	3,847.69	480.78	-352.60	594.75	0.00	0.00	
4,000.00	10.35	322.71	3,946.07	495.07	-363.49	612.70	0.00	0.00	
4,100.00	10.35	322.71	4,044.44	509.37	-374.38	630.65	0.00	0.00	
4,200.00	10.35	322.71	4,142.81	523.67	-385.27	648.60	0.00	0.00	
4,300.00	10.35	322.71	4,241.18	537.97	-396.16	666.54	0.00	0.00	
4,400.00	10.35	322.71	4,339.55	552.27	-407.05	684.49	0.00	0.00	
4,500.00	10.35	322.71	4,437.92	566.57	-417.94	702.44	0.00	0.00	
4,600.00	10.35	322.71	4,536.30	580.87	-428.83	720.39	0.00	0.00	
4,700.00	10.35	322.71	4,634.67	595.17	-439.72	738.34	0.00	0.00	
4,800.00	10.35	322.71	4,733.04	609.46	-450.62	756.29	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well FED 13A-14_496 - Slot WN_4
Company:	Caerus Oil & Gas	TVD Reference:	GL + KB = 30' @ 7932.00usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	GL + KB = 30' @ 7932.00usft
Site:	SEC 14-T4S-R96W ELU J14 496 PAD	North Reference:	True
Well:	FED 13A-14_496	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
4,900.00	10.35	322.71	4,831.41	623.76	-461.51	774.24	0.00	0.00	
5,000.00	10.35	322.71	4,929.78	638.06	-472.40	792.19	0.00	0.00	
5,100.00	10.35	322.71	5,028.15	652.36	-483.29	810.14	0.00	0.00	
5,200.00	10.35	322.71	5,126.52	666.66	-494.18	828.09	0.00	0.00	
5,300.00	10.35	322.71	5,224.90	680.96	-505.07	846.04	0.00	0.00	
5,400.00	10.35	322.71	5,323.27	695.26	-515.96	863.99	0.00	0.00	
5,500.00	10.35	322.71	5,421.64	709.55	-526.85	881.94	0.00	0.00	
5,600.00	10.35	322.71	5,520.01	723.85	-537.74	899.89	0.00	0.00	
5,700.00	10.35	322.71	5,618.38	738.15	-548.63	917.84	0.00	0.00	
5,733.16	10.35	322.71	5,651.00	742.89	-552.24	923.79	0.00	0.00	WASATCH_G.NPC (TVD)
5,800.00	10.35	322.71	5,716.75	752.45	-559.52	935.79	0.00	0.00	
5,900.00	10.35	322.71	5,815.12	766.75	-570.41	953.74	0.00	0.00	
6,000.00	10.35	322.71	5,913.50	781.05	-581.30	971.69	0.00	0.00	
6,100.00	10.35	322.71	6,011.87	795.35	-592.19	989.64	0.00	0.00	
6,200.00	10.35	322.71	6,110.24	809.65	-603.08	1,007.58	0.00	0.00	
6,300.00	10.35	322.71	6,208.61	823.94	-613.98	1,025.53	0.00	0.00	
6,400.00	10.35	322.71	6,306.98	838.24	-624.87	1,043.48	0.00	0.00	
6,406.12	10.35	322.71	6,313.00	839.12	-625.53	1,044.58	0.00	0.00	FORT_UNION.NPC (TVD)
6,500.00	10.35	322.71	6,405.35	852.54	-635.76	1,061.43	0.00	0.00	
6,600.00	10.35	322.71	6,503.72	866.84	-646.65	1,079.38	0.00	0.00	
6,700.00	10.35	322.71	6,602.10	881.14	-657.54	1,097.33	0.00	0.00	
6,800.00	10.35	322.71	6,700.47	895.44	-668.43	1,115.28	0.00	0.00	
6,900.00	10.35	322.71	6,798.84	909.74	-679.32	1,133.23	0.00	0.00	
7,000.00	10.35	322.71	6,897.21	924.03	-690.21	1,151.18	0.00	0.00	
7,100.00	10.35	322.71	6,995.58	938.33	-701.10	1,169.13	0.00	0.00	
7,200.00	10.35	322.71	7,093.95	952.63	-711.99	1,187.08	0.00	0.00	
7,300.00	10.35	322.71	7,192.32	966.93	-722.88	1,205.03	0.00	0.00	
7,400.00	10.35	322.71	7,290.70	981.23	-733.77	1,222.98	0.00	0.00	
7,500.00	10.35	322.71	7,389.07	995.53	-744.66	1,240.93	0.00	0.00	
7,600.00	10.35	322.71	7,487.44	1,009.83	-755.55	1,258.88	0.00	0.00	
7,700.00	10.35	322.71	7,585.81	1,024.13	-766.44	1,276.83	0.00	0.00	
7,800.00	10.35	322.71	7,684.18	1,038.42	-777.34	1,294.78	0.00	0.00	
7,900.00	10.35	322.71	7,782.55	1,052.72	-788.23	1,312.73	0.00	0.00	
8,000.00	10.35	322.71	7,880.92	1,067.02	-799.12	1,330.68	0.00	0.00	
8,100.00	10.35	322.71	7,979.30	1,081.32	-810.01	1,348.62	0.00	0.00	
8,200.00	10.35	322.71	8,077.67	1,095.62	-820.90	1,366.57	0.00	0.00	
8,300.00	10.35	322.71	8,176.04	1,109.92	-831.79	1,384.52	0.00	0.00	
8,328.14	10.35	322.71	8,203.73	1,113.94	-834.85	1,389.58	0.00	0.00	Start Drop -3.00
8,357.86	9.46	322.71	8,233.00	1,118.01	-837.95	1,394.68	3.00	-3.00	OHIO_CREEK.NPC
8,400.00	8.20	322.71	8,274.64	1,123.16	-841.87	1,401.14	3.00	-3.00	
8,500.00	5.20	322.71	8,373.94	1,132.43	-848.94	1,412.79	3.00	-3.00	
8,600.00	2.20	322.71	8,473.72	1,137.57	-852.85	1,419.23	3.00	-3.00	
8,673.30	0.00	0.00	8,547.00	1,138.68	-853.70	1,420.64	3.00	-3.00	Start DLS 2.00 TFO 250.00
8,700.00	0.53	250.00	8,573.70	1,138.64	-853.82	1,420.68	2.00	2.00	
8,723.30	1.00	250.00	8,597.00	1,138.54	-854.11	1,420.79	2.00	2.00	WILLIAMS_FORK.NPC (TVD)
8,744.37	1.42	250.00	8,618.06	1,138.38	-854.53	1,420.94	2.00	2.00	Start 3611.05 hold at 8744.37 MD
8,773.31	1.42	250.00	8,647.00	1,138.14	-855.20	1,421.19	0.00	0.00	TOP_GAS.NPC (TVD)
8,800.00	1.42	250.00	8,673.68	1,137.91	-855.83	1,421.42	0.00	0.00	
8,900.00	1.42	250.00	8,773.65	1,137.06	-858.16	1,422.28	0.00	0.00	
9,000.00	1.42	250.00	8,873.62	1,136.21	-860.49	1,423.14	0.00	0.00	
9,100.00	1.42	250.00	8,973.59	1,135.37	-862.82	1,424.00	0.00	0.00	
9,200.00	1.42	250.00	9,073.56	1,134.52	-865.15	1,424.86	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well FED 13A-14_496 - Slot WN_4
Company:	Caerus Oil & Gas	TVD Reference:	GL + KB = 30' @ 7932.00usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	GL + KB = 30' @ 7932.00usft
Site:	SEC 14-T4S-R96W ELU J14 496 PAD	North Reference:	True
Well:	FED 13A-14_496	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
9,300.00	1.42	250.00	9,173.53	1,133.67	-867.48	1,425.72	0.00	0.00	
9,400.00	1.42	250.00	9,273.50	1,132.82	-869.81	1,426.58	0.00	0.00	
9,500.00	1.42	250.00	9,373.46	1,131.97	-872.14	1,427.44	0.00	0.00	
9,600.00	1.42	250.00	9,473.43	1,131.12	-874.47	1,428.30	0.00	0.00	
9,700.00	1.42	250.00	9,573.40	1,130.28	-876.80	1,429.16	0.00	0.00	
9,800.00	1.42	250.00	9,673.37	1,129.43	-879.13	1,430.02	0.00	0.00	
9,900.00	1.42	250.00	9,773.34	1,128.58	-881.47	1,430.88	0.00	0.00	
10,000.00	1.42	250.00	9,873.31	1,127.73	-883.80	1,431.74	0.00	0.00	
10,100.00	1.42	250.00	9,973.28	1,126.88	-886.13	1,432.60	0.00	0.00	
10,200.00	1.42	250.00	10,073.25	1,126.03	-888.46	1,433.45	0.00	0.00	
10,300.00	1.42	250.00	10,173.22	1,125.18	-890.79	1,434.31	0.00	0.00	
10,400.00	1.42	250.00	10,273.19	1,124.34	-893.12	1,435.17	0.00	0.00	
10,500.00	1.42	250.00	10,373.16	1,123.49	-895.45	1,436.03	0.00	0.00	
10,600.00	1.42	250.00	10,473.13	1,122.64	-897.78	1,436.89	0.00	0.00	
10,700.00	1.42	250.00	10,573.10	1,121.79	-900.11	1,437.75	0.00	0.00	
10,800.00	1.42	250.00	10,673.06	1,120.94	-902.44	1,438.61	0.00	0.00	
10,900.00	1.42	250.00	10,773.03	1,120.09	-904.78	1,439.47	0.00	0.00	
11,000.00	1.42	250.00	10,873.00	1,119.24	-907.11	1,440.33	0.00	0.00	
11,100.00	1.42	250.00	10,972.97	1,118.40	-909.44	1,441.19	0.00	0.00	
11,200.00	1.42	250.00	11,072.94	1,117.55	-911.77	1,442.05	0.00	0.00	
11,214.06	1.42	250.00	11,087.00	1,117.43	-912.10	1,442.17	0.00	0.00	CAMEO.NPC (TVD)
11,300.00	1.42	250.00	11,172.91	1,116.70	-914.10	1,442.91	0.00	0.00	
11,400.00	1.42	250.00	11,272.88	1,115.85	-916.43	1,443.77	0.00	0.00	
11,500.00	1.42	250.00	11,372.85	1,115.00	-918.76	1,444.63	0.00	0.00	
11,600.00	1.42	250.00	11,472.82	1,114.15	-921.09	1,445.49	0.00	0.00	
11,700.00	1.42	250.00	11,572.79	1,113.31	-923.42	1,446.35	0.00	0.00	
11,800.00	1.42	250.00	11,672.76	1,112.46	-925.75	1,447.21	0.00	0.00	
11,900.00	1.42	250.00	11,772.73	1,111.61	-928.09	1,448.07	0.00	0.00	
12,000.00	1.42	250.00	11,872.70	1,110.76	-930.42	1,448.93	0.00	0.00	
12,100.00	1.42	250.00	11,972.66	1,109.91	-932.75	1,449.79	0.00	0.00	
12,180.36	1.42	250.00	12,053.00	1,109.23	-934.62	1,450.48	0.00	0.00	ROLLINS.NPC (TVD)
12,200.00	1.42	250.00	12,072.63	1,109.06	-935.08	1,450.65	0.00	0.00	
12,300.00	1.42	250.00	12,172.60	1,108.21	-937.41	1,451.51	0.00	0.00	
12,355.41	1.42	250.00	12,228.00	1,107.74	-938.70	1,451.98	0.00	0.00	TD at 12355.41 - TD.MBL (TVD) - FED 13A-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
FED 13A-14_496_PBHL	0.00	0.00	12,228.00	1,107.74	-938.70	14,431,103.10	2,444,940.70	39.704016	-108.139830
- 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 13A-14_496 - Slot WN_4
Company:	Caerus Oil & Gas	TVD Reference:	GL + KB = 30' @ 7932.00usft
Project:	Garfield County, CO (UTM 12N)	MD Reference:	GL + KB = 30' @ 7932.00usft
Site:	SEC 14-T4S-R96W ELU J14 496 PAD	North Reference:	True
Well:	FED 13A-14_496	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,293.43	3,251.00	WASATCH.NPC (TVD)				
5,733.16	5,651.00	WASATCH_G.NPC (TVD)				
6,406.12	6,313.00	FORT_UNION.NPC (TVD)				
8,357.86	8,233.00	OHIO_CREEK.NPC				
8,723.30	8,597.00	WILLIAMS_FORK.NPC (TVD)				
8,773.31	8,647.00	TOP_GAS.NPC (TVD)				
11,214.06	11,087.00	CAMEO.NPC (TVD)				
12,180.36	12,053.00	ROLLINS.NPC (TVD)				
12,355.41	12,228.00	TD.MBL (TVD)				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
200.00	200.00	0.00	0.00	Start Build 3.00	
300.00	299.95	2.58	-0.45	Start 270.00 hold at 300.00 MD	
570.00	569.58	16.49	-2.91	Start DLS 3.00 TFO -37.34	
830.31	828.00	41.85	-18.29	Start 7497.83 hold at 830.31 MD	
8,328.14	8,203.73	1,113.94	-834.85	Start Drop -3.00	
8,673.30	8,547.00	1,138.68	-853.70	Start DLS 2.00 TFO 250.00	
8,744.37	8,618.06	1,138.38	-854.53	Start 3611.05 hold at 8744.37 MD	
12,355.41	12,228.00	1,107.74	-938.70	TD at 12355.41	