



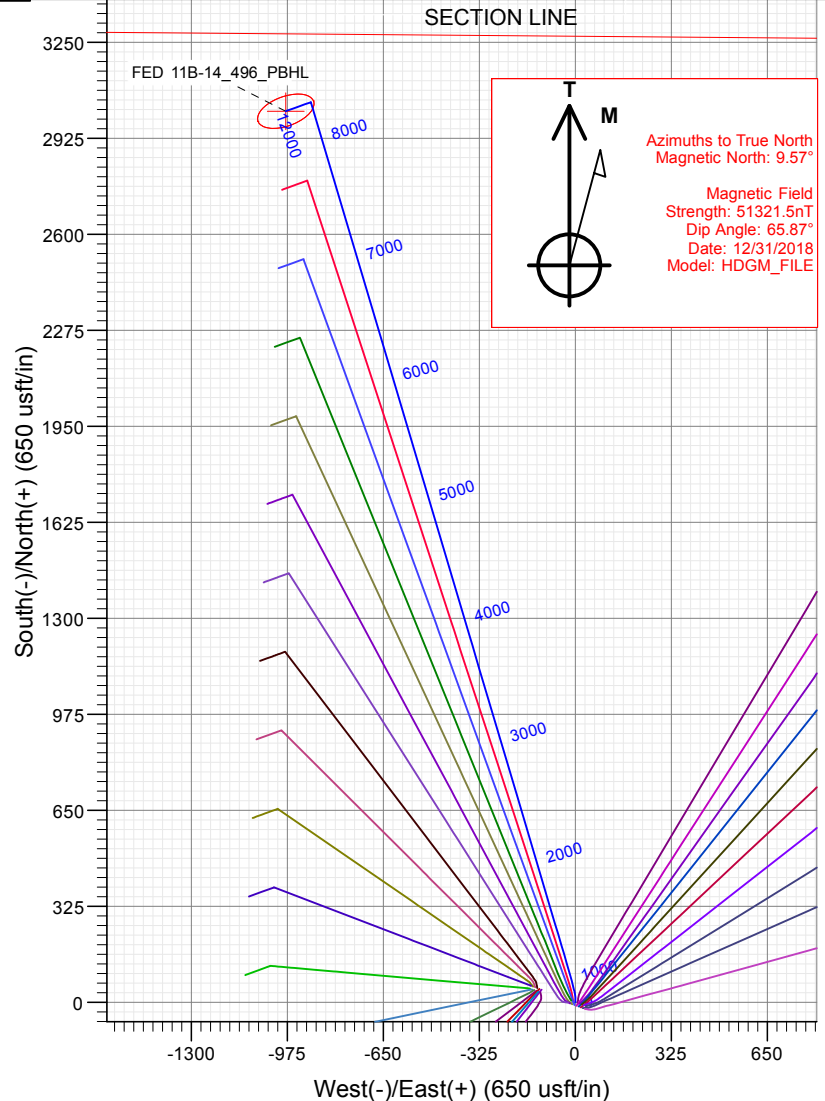
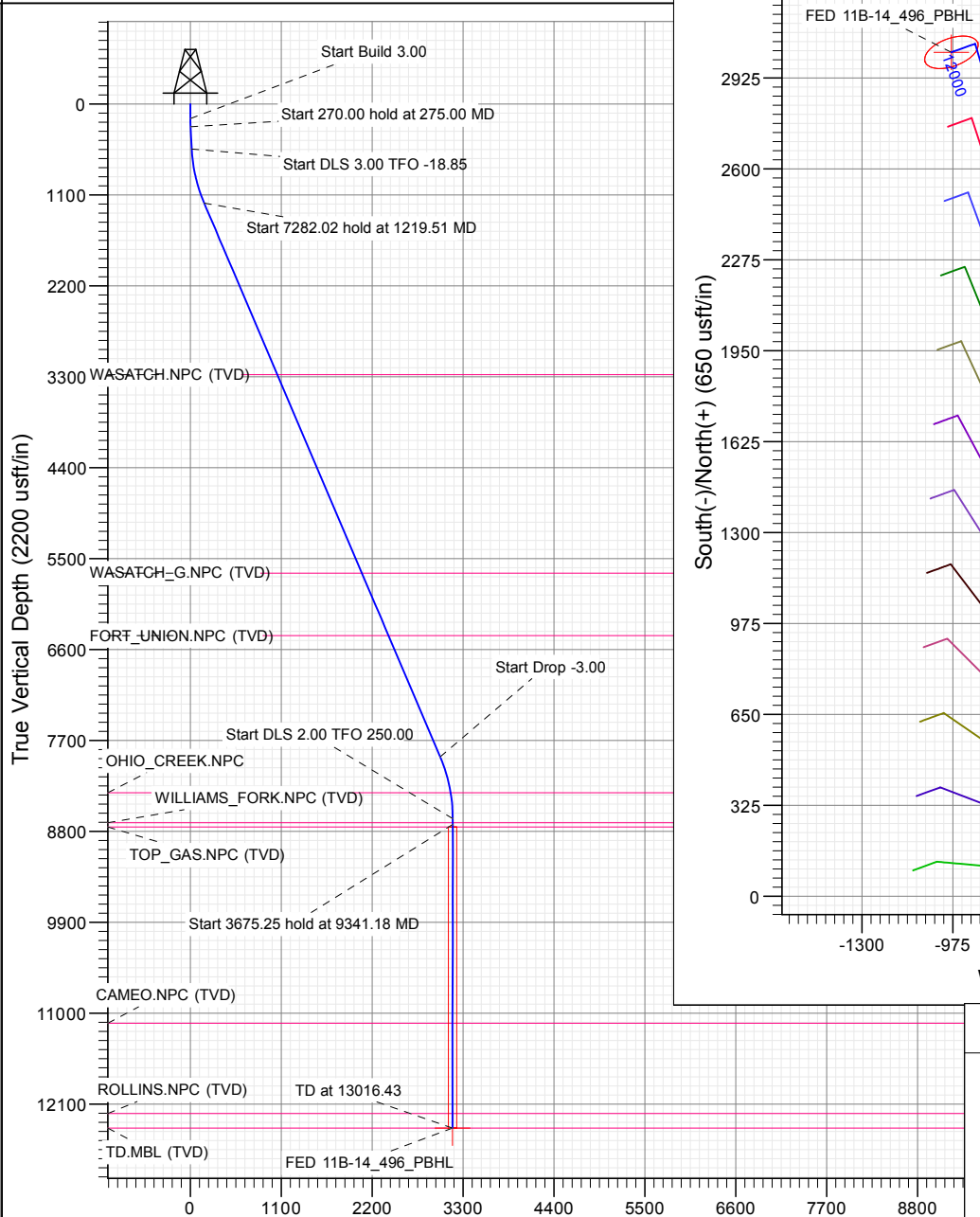
## SECTION DETAILS

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	175.00	0.00	0.00	175.00	0.00	0.00	0.00	0.00	0.00	
3	275.00	3.00	0.00	274.95	2.62	0.00	3.00	0.00	2.49	
4	545.00	3.00	0.00	544.58	16.75	0.00	0.00	0.00	15.93	
5	1219.51	23.09	343.45	1198.42	162.72	-38.08	3.00	-18.85	166.53	
6	8501.53	23.09	343.45	7896.87	2900.69	-851.75	0.00	0.00	3021.91	
7	9271.33	0.00	0.00	8646.00	3047.39	-895.35	3.00	180.00	3174.92	
8	9341.18	1.40	250.00	8715.84	3047.10	-896.15	2.00	250.00	3174.89	
9	13016.43	1.40	250.00	12390.00	3016.45	-980.35	0.00	0.00	3171.76	FED 11B-14_496_PBHL

PLAN #1  
FED 11B-14\_496  
GL +68 = 30' @ 7532.00usft  
Ground Level @ 7902.00  
NAD 1927 - Western US  
Well FED 11B-14\_496 - Slot EN\_3, True North

Type	Target	Azimuth	Origin	Type	N/S	E/W	From	TVD
TD	No Target (Freehand)	342.00	Slot		0.00	0.00	TVD	0.00
Name	FED 11B-14_496_PBHL	TVD		N/S	+E/-W	Latitude	Longitude	
		12390.00		3016.45	-980.35	39.709123	-108.136037	

Project: Garfield County, CO (UTM 12N)  
Site: SEC 14-T4S-R96W ELU J14 496 PAD  
Well: FED 11B-14\_496  
Wellbore: OH  
Design: PLAN #1



## FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3276.00	3478.09	WASATCH.NPC (TVD)
5676.00	6087.18	WASATCH_G.NPC (TVD)
6432.00	6909.04	FORT_UNION.NPC (TVD)
8334.00	8957.93	OHIO_CREEK.NPC
8696.00	9321.34	WILLIAMS_FORK.NPC (TVD)
8746.00	9371.35	TOP_GAS.NPC (TVD)
11120.00	11746.05	CAMEO.NPC (TVD)
12215.00	12841.38	ROLLINS.NPC (TVD)
12390.00	13016.43	TD.MBL (TVD)

## WELL DETAILS: FED 11B-14\_496

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	EN_3
0.00	0.00	14429982.20	2446044.70	39.700845	-108.136037	EN_3



## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well FED 11B-14_496 - Slot EN_3
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	GL + KB = 30' @ 7932.00usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	GL + KB = 30' @ 7932.00usft
<b>Site:</b>	SEC 14-T4S-R96W ELU J14 496 PAD	<b>North Reference:</b>	True
<b>Well:</b>	FED 11B-14_496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

<b>Project</b>	Garfield County, CO (UTM 12N)		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		
<b>Map Zone:</b>	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 11B-14_496 - Slot EN_3					
Well Position	+N/-S	0.00 usft	Northing:	14,429,982.20 usft	Latitude:	39.700845
	+E/-W	0.00 usft	Easting:	2,446,044.70 usft	Longitude:	-108.136037
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft	Ground Level:	7,902.00 usft

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

<b>Design</b>	PLAN #1				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00	
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	342.00	

<b>Plan Sections</b>										
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	
175.00	0.00	0.00	175.00	0.00	0.00	0.00	0.00	0.00	0.00	
275.00	3.00	0.00	274.95	2.62	0.00	3.00	3.00	0.00	0.00	
545.00	3.00	0.00	544.58	16.75	0.00	0.00	0.00	0.00	0.00	
1,219.51	23.09	343.45	1,198.42	162.72	-38.08	3.00	2.98	-2.45	-18.85	
8,501.53	23.09	343.45	7,896.87	2,900.69	-851.75	0.00	0.00	0.00	0.00	
9,271.33	0.00	0.00	8,646.00	3,047.39	-895.35	3.00	-3.00	0.00	180.00	
9,341.18	1.40	250.00	8,715.84	3,047.10	-896.15	2.00	2.00	-157.48	250.00	
13,016.43	1.40	250.00	12,390.00	3,016.45	-980.35	0.00	0.00	0.00	0.00	FED 11B-14_496_PB

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well FED 11B-14_496 - Slot EN_3
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	GL + KB = 30' @ 7932.00usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	GL + KB = 30' @ 7932.00usft
<b>Site:</b>	SEC 14-T4S-R96W ELU J14 496 PAD	<b>North Reference:</b>	True
<b>Well:</b>	FED 11B-14_496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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	
175.00	0.00	0.00	175.00	0.00	0.00	0.00	0.00	0.00	Start Build 3.00
200.00	0.75	0.00	200.00	0.16	0.00	0.16	3.00	3.00	
275.00	3.00	0.00	274.95	2.62	0.00	2.49	3.00	3.00	Start 270.00 hold at 275.00 MD
300.00	3.00	0.00	299.92	3.93	0.00	3.73	0.00	0.00	
400.00	3.00	0.00	399.78	9.16	0.00	8.71	0.00	0.00	
500.00	3.00	0.00	499.65	14.39	0.00	13.69	0.00	0.00	
545.00	3.00	0.00	544.58	16.75	0.00	15.93	0.00	0.00	Start DLS 3.00 TFO -18.85
600.00	4.59	353.33	599.46	20.37	-0.26	19.46	3.00	2.90	
700.00	7.55	348.50	698.89	30.79	-2.03	29.91	3.00	2.96	
800.00	10.53	346.39	797.64	46.12	-5.49	45.56	3.00	2.98	
900.00	13.52	345.21	895.43	66.31	-10.63	66.35	3.00	2.99	
1,000.00	16.52	344.45	992.00	91.32	-17.43	92.23	3.00	2.99	
1,100.00	19.51	343.91	1,087.09	121.06	-25.87	123.13	3.00	3.00	
1,200.00	22.51	343.51	1,180.43	155.47	-35.93	158.97	3.00	3.00	
1,219.51	23.09	343.45	1,198.42	162.72	-38.08	166.53	3.00	3.00	Start 7282.02 hold at 1219.51 MD
1,300.00	23.09	343.45	1,272.46	192.99	-47.07	198.09	0.00	0.00	
1,400.00	23.09	343.45	1,364.44	230.59	-58.25	237.30	0.00	0.00	
1,500.00	23.09	343.45	1,456.43	268.18	-69.42	276.51	0.00	0.00	
1,600.00	23.09	343.45	1,548.41	305.78	-80.60	315.72	0.00	0.00	
1,700.00	23.09	343.45	1,640.40	343.38	-91.77	354.93	0.00	0.00	
1,800.00	23.09	343.45	1,732.39	380.98	-102.94	394.14	0.00	0.00	
1,900.00	23.09	343.45	1,824.37	418.58	-114.12	433.36	0.00	0.00	
2,000.00	23.09	343.45	1,916.36	456.18	-125.29	472.57	0.00	0.00	
2,100.00	23.09	343.45	2,008.35	493.78	-136.46	511.78	0.00	0.00	
2,200.00	23.09	343.45	2,100.33	531.38	-147.64	550.99	0.00	0.00	
2,300.00	23.09	343.45	2,192.32	568.98	-158.81	590.20	0.00	0.00	
2,400.00	23.09	343.45	2,284.30	606.57	-169.98	629.41	0.00	0.00	
2,500.00	23.09	343.45	2,376.29	644.17	-181.16	668.62	0.00	0.00	
2,600.00	23.09	343.45	2,468.28	681.77	-192.33	707.84	0.00	0.00	
2,700.00	23.09	343.45	2,560.26	719.37	-203.51	747.05	0.00	0.00	
2,800.00	23.09	343.45	2,652.25	756.97	-214.68	786.26	0.00	0.00	
2,900.00	23.09	343.45	2,744.24	794.57	-225.85	825.47	0.00	0.00	
3,000.00	23.09	343.45	2,836.22	832.17	-237.03	864.68	0.00	0.00	
3,100.00	23.09	343.45	2,928.21	869.77	-248.20	903.89	0.00	0.00	
3,200.00	23.09	343.45	3,020.19	907.37	-259.37	943.10	0.00	0.00	
3,300.00	23.09	343.45	3,112.18	944.96	-270.55	982.32	0.00	0.00	
3,400.00	23.09	343.45	3,204.17	982.56	-281.72	1,021.53	0.00	0.00	
3,478.09	23.09	343.45	3,276.00	1,011.93	-290.45	1,052.15	0.00	0.00	WASATCH.NPC (TVD)
3,500.00	23.09	343.45	3,296.15	1,020.16	-292.90	1,060.74	0.00	0.00	
3,600.00	23.09	343.45	3,388.14	1,057.76	-304.07	1,099.95	0.00	0.00	
3,700.00	23.09	343.45	3,480.13	1,095.36	-315.24	1,139.16	0.00	0.00	
3,800.00	23.09	343.45	3,572.11	1,132.96	-326.42	1,178.37	0.00	0.00	
3,900.00	23.09	343.45	3,664.10	1,170.56	-337.59	1,217.59	0.00	0.00	
4,000.00	23.09	343.45	3,756.08	1,208.16	-348.76	1,256.80	0.00	0.00	
4,100.00	23.09	343.45	3,848.07	1,245.76	-359.94	1,296.01	0.00	0.00	
4,200.00	23.09	343.45	3,940.06	1,283.36	-371.11	1,335.22	0.00	0.00	
4,300.00	23.09	343.45	4,032.04	1,320.95	-382.28	1,374.43	0.00	0.00	
4,400.00	23.09	343.45	4,124.03	1,358.55	-393.46	1,413.64	0.00	0.00	
4,500.00	23.09	343.45	4,216.02	1,396.15	-404.63	1,452.85	0.00	0.00	
4,600.00	23.09	343.45	4,308.00	1,433.75	-415.81	1,492.07	0.00	0.00	

# Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well FED 11B-14_496 - Slot EN_3
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	GL + KB = 30' @ 7932.00usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	GL + KB = 30' @ 7932.00usft
<b>Site:</b>	SEC 14-T4S-R96W ELU J14 496 PAD	<b>North Reference:</b>	True
<b>Well:</b>	FED 11B-14_496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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
4,700.00	23.09	343.45	4,399.99	1,471.35	-426.98	1,531.28	0.00	0.00	
4,800.00	23.09	343.45	4,491.97	1,508.95	-438.15	1,570.49	0.00	0.00	
4,900.00	23.09	343.45	4,583.96	1,546.55	-449.33	1,609.70	0.00	0.00	
5,000.00	23.09	343.45	4,675.95	1,584.15	-460.50	1,648.91	0.00	0.00	
5,100.00	23.09	343.45	4,767.93	1,621.75	-471.67	1,688.12	0.00	0.00	
5,200.00	23.09	343.45	4,859.92	1,659.34	-482.85	1,727.33	0.00	0.00	
5,300.00	23.09	343.45	4,951.91	1,696.94	-494.02	1,766.55	0.00	0.00	
5,400.00	23.09	343.45	5,043.89	1,734.54	-505.20	1,805.76	0.00	0.00	
5,500.00	23.09	343.45	5,135.88	1,772.14	-516.37	1,844.97	0.00	0.00	
5,600.00	23.09	343.45	5,227.86	1,809.74	-527.54	1,884.18	0.00	0.00	
5,700.00	23.09	343.45	5,319.85	1,847.34	-538.72	1,923.39	0.00	0.00	
5,800.00	23.09	343.45	5,411.84	1,884.94	-549.89	1,962.60	0.00	0.00	
5,900.00	23.09	343.45	5,503.82	1,922.54	-561.06	2,001.81	0.00	0.00	
6,000.00	23.09	343.45	5,595.81	1,960.14	-572.24	2,041.03	0.00	0.00	
6,087.18	23.09	343.45	5,676.00	1,992.91	-581.98	2,075.21	0.00	0.00	WASATCH_G.NPC (TVD)
6,100.00	23.09	343.45	5,687.80	1,997.73	-583.41	2,080.24	0.00	0.00	
6,200.00	23.09	343.45	5,779.78	2,035.33	-594.58	2,119.45	0.00	0.00	
6,300.00	23.09	343.45	5,871.77	2,072.93	-605.76	2,158.66	0.00	0.00	
6,400.00	23.09	343.45	5,963.75	2,110.53	-616.93	2,197.87	0.00	0.00	
6,500.00	23.09	343.45	6,055.74	2,148.13	-628.11	2,237.08	0.00	0.00	
6,600.00	23.09	343.45	6,147.73	2,185.73	-639.28	2,276.30	0.00	0.00	
6,700.00	23.09	343.45	6,239.71	2,223.33	-650.45	2,315.51	0.00	0.00	
6,800.00	23.09	343.45	6,331.70	2,260.93	-661.63	2,354.72	0.00	0.00	
6,900.00	23.09	343.45	6,423.69	2,298.53	-672.80	2,393.93	0.00	0.00	
6,909.04	23.09	343.45	6,432.00	2,301.92	-673.81	2,397.47	0.00	0.00	FORT_UNION.NPC (TVD)
7,000.00	23.09	343.45	6,515.67	2,336.13	-683.97	2,433.14	0.00	0.00	
7,100.00	23.09	343.45	6,607.66	2,373.72	-695.15	2,472.35	0.00	0.00	
7,200.00	23.09	343.45	6,699.64	2,411.32	-706.32	2,511.56	0.00	0.00	
7,300.00	23.09	343.45	6,791.63	2,448.92	-717.50	2,550.78	0.00	0.00	
7,400.00	23.09	343.45	6,883.62	2,486.52	-728.67	2,589.99	0.00	0.00	
7,500.00	23.09	343.45	6,975.60	2,524.12	-739.84	2,629.20	0.00	0.00	
7,600.00	23.09	343.45	7,067.59	2,561.72	-751.02	2,668.41	0.00	0.00	
7,700.00	23.09	343.45	7,159.58	2,599.32	-762.19	2,707.62	0.00	0.00	
7,800.00	23.09	343.45	7,251.56	2,636.92	-773.36	2,746.83	0.00	0.00	
7,900.00	23.09	343.45	7,343.55	2,674.52	-784.54	2,786.04	0.00	0.00	
8,000.00	23.09	343.45	7,435.53	2,712.11	-795.71	2,825.26	0.00	0.00	
8,100.00	23.09	343.45	7,527.52	2,749.71	-806.88	2,864.47	0.00	0.00	
8,200.00	23.09	343.45	7,619.51	2,787.31	-818.06	2,903.68	0.00	0.00	
8,300.00	23.09	343.45	7,711.49	2,824.91	-829.23	2,942.89	0.00	0.00	
8,400.00	23.09	343.45	7,803.48	2,862.51	-840.41	2,982.10	0.00	0.00	
8,500.00	23.09	343.45	7,895.47	2,900.11	-851.58	3,021.31	0.00	0.00	
8,501.53	23.09	343.45	7,896.87	2,900.69	-851.75	3,021.91	0.00	0.00	Start Drop -3.00
8,600.00	20.14	343.45	7,988.41	2,935.45	-862.08	3,058.17	3.00	-3.00	
8,700.00	17.14	343.45	8,083.15	2,966.09	-871.19	3,090.12	3.00	-3.00	
8,800.00	14.14	343.45	8,179.44	2,991.93	-878.87	3,117.07	3.00	-3.00	
8,900.00	11.14	343.45	8,277.00	3,012.90	-885.10	3,138.94	3.00	-3.00	
8,957.93	9.40	343.45	8,334.00	3,022.80	-888.04	3,149.27	3.00	-3.00	OHIO_CREEK.NPC
9,000.00	8.14	343.45	8,375.58	3,028.95	-889.87	3,155.68	3.00	-3.00	
9,100.00	5.14	343.45	8,474.90	3,040.03	-893.16	3,167.24	3.00	-3.00	
9,200.00	2.14	343.45	8,574.68	3,046.12	-894.97	3,173.59	3.00	-3.00	
9,271.33	0.00	0.00	8,646.00	3,047.39	-895.35	3,174.92	3.00	-3.00	Start DLS 2.00 TFO 250.00
9,300.00	0.57	250.00	8,674.67	3,047.35	-895.48	3,174.91	2.00	2.00	

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well FED 11B-14_496 - Slot EN_3
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	GL + KB = 30' @ 7932.00usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	GL + KB = 30' @ 7932.00usft
<b>Site:</b>	SEC 14-T4S-R96W ELU J14 496 PAD	<b>North Reference:</b>	True
<b>Well:</b>	FED 11B-14_496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	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
9,321.34	1.00	250.00	8,696.00	3,047.25	-895.76	3,174.90	2.00	2.00	WILLIAMS_FORK.NPC (TVD)
9,341.18	1.40	250.00	8,715.84	3,047.10	-896.15	3,174.89	2.00	2.00	Start 3675.25 hold at 9341.18 MD
9,371.35	1.40	250.00	8,746.00	3,046.85	-896.84	3,174.86	0.00	0.00	TOP_GAS.NPC (TVD)
9,400.00	1.40	250.00	8,774.64	3,046.61	-897.50	3,174.84	0.00	0.00	
9,500.00	1.40	250.00	8,874.61	3,045.78	-899.79	3,174.75	0.00	0.00	
9,600.00	1.40	250.00	8,974.58	3,044.95	-902.08	3,174.67	0.00	0.00	
9,700.00	1.40	250.00	9,074.55	3,044.11	-904.37	3,174.58	0.00	0.00	
9,800.00	1.40	250.00	9,174.52	3,043.28	-906.66	3,174.50	0.00	0.00	
9,900.00	1.40	250.00	9,274.49	3,042.44	-908.95	3,174.41	0.00	0.00	
10,000.00	1.40	250.00	9,374.46	3,041.61	-911.24	3,174.33	0.00	0.00	
10,100.00	1.40	250.00	9,474.43	3,040.78	-913.53	3,174.24	0.00	0.00	
10,200.00	1.40	250.00	9,574.40	3,039.94	-915.83	3,174.16	0.00	0.00	
10,300.00	1.40	250.00	9,674.38	3,039.11	-918.12	3,174.07	0.00	0.00	
10,400.00	1.40	250.00	9,774.35	3,038.27	-920.41	3,173.99	0.00	0.00	
10,500.00	1.40	250.00	9,874.32	3,037.44	-922.70	3,173.90	0.00	0.00	
10,600.00	1.40	250.00	9,974.29	3,036.61	-924.99	3,173.82	0.00	0.00	
10,700.00	1.40	250.00	10,074.26	3,035.77	-927.28	3,173.73	0.00	0.00	
10,800.00	1.40	250.00	10,174.23	3,034.94	-929.57	3,173.65	0.00	0.00	
10,900.00	1.40	250.00	10,274.20	3,034.10	-931.86	3,173.56	0.00	0.00	
11,000.00	1.40	250.00	10,374.17	3,033.27	-934.15	3,173.48	0.00	0.00	
11,100.00	1.40	250.00	10,474.14	3,032.44	-936.44	3,173.39	0.00	0.00	
11,200.00	1.40	250.00	10,574.11	3,031.60	-938.73	3,173.31	0.00	0.00	
11,300.00	1.40	250.00	10,674.08	3,030.77	-941.03	3,173.22	0.00	0.00	
11,400.00	1.40	250.00	10,774.05	3,029.93	-943.32	3,173.14	0.00	0.00	
11,500.00	1.40	250.00	10,874.02	3,029.10	-945.61	3,173.05	0.00	0.00	
11,600.00	1.40	250.00	10,973.99	3,028.27	-947.90	3,172.97	0.00	0.00	
11,700.00	1.40	250.00	11,073.96	3,027.43	-950.19	3,172.88	0.00	0.00	
11,746.05	1.40	250.00	11,120.00	3,027.05	-951.24	3,172.84	0.00	0.00	CAMEO.NPC (TVD)
11,800.00	1.40	250.00	11,173.93	3,026.60	-952.48	3,172.80	0.00	0.00	
11,900.00	1.40	250.00	11,273.90	3,025.76	-954.77	3,172.71	0.00	0.00	
12,000.00	1.40	250.00	11,373.87	3,024.93	-957.06	3,172.63	0.00	0.00	
12,100.00	1.40	250.00	11,473.84	3,024.10	-959.35	3,172.54	0.00	0.00	
12,200.00	1.40	250.00	11,573.81	3,023.26	-961.64	3,172.46	0.00	0.00	
12,300.00	1.40	250.00	11,673.78	3,022.43	-963.94	3,172.37	0.00	0.00	
12,400.00	1.40	250.00	11,773.75	3,021.59	-966.23	3,172.29	0.00	0.00	
12,500.00	1.40	250.00	11,873.72	3,020.76	-968.52	3,172.20	0.00	0.00	
12,600.00	1.40	250.00	11,973.69	3,019.93	-970.81	3,172.12	0.00	0.00	
12,700.00	1.40	250.00	12,073.66	3,019.09	-973.10	3,172.03	0.00	0.00	
12,800.00	1.40	250.00	12,173.63	3,018.26	-975.39	3,171.95	0.00	0.00	
12,841.38	1.40	250.00	12,215.00	3,017.91	-976.34	3,171.91	0.00	0.00	ROLLINS.NPC (TVD)
12,900.00	1.40	250.00	12,273.60	3,017.42	-977.68	3,171.86	0.00	0.00	
13,000.00	1.40	250.00	12,373.57	3,016.59	-979.97	3,171.78	0.00	0.00	
13,016.43	1.40	250.00	12,390.00	3,016.45	-980.35	3,171.76	0.00	0.00	TD at 13016.43 - TD.MBL (TVD) - FED 11B-14_

## Planning Report

<b>Database:</b>	USA EDM 5000 Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well FED 11B-14_496 - Slot EN_3
<b>Company:</b>	Caerus Oil & Gas	<b>TVD Reference:</b>	GL + KB = 30' @ 7932.00usft
<b>Project:</b>	Garfield County, CO (UTM 12N)	<b>MD Reference:</b>	GL + KB = 30' @ 7932.00usft
<b>Site:</b>	SEC 14-T4S-R96W ELU J14 496 PAD	<b>North Reference:</b>	True
<b>Well:</b>	FED 11B-14_496	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	PLAN #1		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
FED 11B-14_496_PBHL	0.00	0.00	12,390.00	3,016.45	-980.35	14,432,965.80	2,444,968.50	39.709123	-108.139520
- plan hits target center									
- Ellipse (radii L100.00 W50.00 on 250.00 azi)									

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(usft)	(usft)			(°)	(°)	
3,478.09	3,276.00	WASATCH.NPC (TVD)				
6,087.18	5,676.00	WASATCH_G.NPC (TVD)				
6,909.04	6,432.00	FORT_UNION.NPC (TVD)				
8,957.93	8,334.00	OHIO_CREEK.NPC				
9,321.34	8,696.00	WILLIAMS_FORK.NPC (TVD)				
9,371.35	8,746.00	TOP_GAS.NPC (TVD)				
11,746.05	11,120.00	CAMEO.NPC (TVD)				
12,841.38	12,215.00	ROLLINS.NPC (TVD)				
13,016.43	12,390.00	TD.MBL (TVD)				

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(usft)	(usft)	+N/-S (usft)	+E/-W (usft)	
175.00	175.00	0.00	0.00	Start Build 3.00
275.00	274.95	2.62	0.00	Start 270.00 hold at 275.00 MD
545.00	544.58	16.75	0.00	Start DLS 3.00 TFO -18.85
1,219.51	1,198.42	162.72	-38.08	Start 7282.02 hold at 1219.51 MD
8,501.53	7,896.87	2,900.69	-851.75	Start Drop -3.00
9,271.33	8,646.00	3,047.39	-895.35	Start DLS 2.00 TFO 250.00
9,341.18	8,715.84	3,047.10	-896.15	Start 3675.25 hold at 9341.18 MD
13,016.43	12,390.00	3,016.45	-980.35	TD at 13016.43