

# **EXTRACTION OIL & GAS**

**SEC 19 T7N R65W**

**WAAG MIDDLE**

**WAAG 8 - Slot WAAG 8**

**Wellbore #1**

**Plan: Plan #1 07Aug14 mab**

## **Standard Planning Report - Geographic**

**11 August, 2014**

**New Tech**  
Planning Report - Geographic

<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WAAG 8 - Slot WAAG 8
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	WELL @ 4902.0ft (Xtreme 7)
<b>Project:</b>	SEC 19 T7N R65W	<b>MD Reference:</b>	WELL @ 4902.0ft (Xtreme 7)
<b>Site:</b>	WAAG MIDDLE	<b>North Reference:</b>	True
<b>Well:</b>	WAAG 8	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 07Aug14 mab		

<b>Project</b>	SEC 19 T7N R65W, Weld County, CO		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

<b>Site</b>	WAAG MIDDLE				
<b>Site Position:</b>		<b>Northing:</b>	1,448,275.07 ft	<b>Latitude:</b>	40° 33' 40.356 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,220,338.91 ft	<b>Longitude:</b>	104° 42' 25.092 W
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"	<b>Grid Convergence:</b>	0.51 °

<b>Well</b>	WAAG 8 - Slot WAAG 8					
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>	1,448,388.02 ft	<b>Latitude:</b>	40° 33' 41.472 N
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>	3,220,340.68 ft	<b>Longitude:</b>	104° 42' 25.056 W
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b>	4,886.0 ft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>	<b>Dip Angle</b>	<b>Field Strength</b>
			(°)	(°)	(nT)
	IGRF2010	8/7/2014	8.42	67.08	52,890

<b>Design</b>	Plan #1 07Aug14 mab			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	281.41

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,422.2	10.44	20.76	1,419.3	44.4	16.8	2.00	2.00	0.00	20.76	
6,096.0	10.44	20.76	6,015.7	836.5	317.2	0.00	0.00	0.00	0.00	
6,618.2	0.00	0.00	6,535.0	880.9	334.0	2.00	-2.00	0.00	180.00	
6,648.2	0.00	0.00	6,565.0	880.9	334.0	0.00	0.00	0.00	0.00	
7,548.2	90.00	270.80	7,138.0	888.9	-238.9	10.00	10.00	0.00	270.80	
12,021.8	90.00	270.80	7,138.0	951.3	-4,712.1	0.00	0.00	0.00	0.00	TD / PBHL WAAG MI

**New Tech**  
 Planning Report - Geographic

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<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	WELL @ 4902.0ft (Xtreme 7)
<b>Project:</b>	SEC 19 T7N R65W	<b>MD Reference:</b>	WELL @ 4902.0ft (Xtreme 7)
<b>Site:</b>	WAAG MIDDLE	<b>North Reference:</b>	True
<b>Well:</b>	WAAG 8	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 07Aug14 mab		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude	
0.0	0.00	0.00	0.0	0.0	0.0	1,448,388.02	3,220,340.68	40° 33' 41.472 N	104° 42' 25.056 W	
100.0	0.00	0.00	100.0	0.0	0.0	1,448,388.02	3,220,340.68	40° 33' 41.472 N	104° 42' 25.056 W	
200.0	0.00	0.00	200.0	0.0	0.0	1,448,388.02	3,220,340.68	40° 33' 41.472 N	104° 42' 25.056 W	
300.0	0.00	0.00	300.0	0.0	0.0	1,448,388.02	3,220,340.68	40° 33' 41.472 N	104° 42' 25.056 W	
400.0	0.00	0.00	400.0	0.0	0.0	1,448,388.02	3,220,340.68	40° 33' 41.472 N	104° 42' 25.056 W	
500.0	0.00	0.00	500.0	0.0	0.0	1,448,388.02	3,220,340.68	40° 33' 41.472 N	104° 42' 25.056 W	
600.0	0.00	0.00	600.0	0.0	0.0	1,448,388.02	3,220,340.68	40° 33' 41.472 N	104° 42' 25.056 W	
700.0	0.00	0.00	700.0	0.0	0.0	1,448,388.02	3,220,340.68	40° 33' 41.472 N	104° 42' 25.056 W	
800.0	0.00	0.00	800.0	0.0	0.0	1,448,388.02	3,220,340.68	40° 33' 41.472 N	104° 42' 25.056 W	
850.0	0.00	0.00	850.0	0.0	0.0	1,448,388.02	3,220,340.68	40° 33' 41.472 N	104° 42' 25.056 W	
<b>9 5/8"</b>										
900.0	0.00	0.00	900.0	0.0	0.0	1,448,388.02	3,220,340.68	40° 33' 41.472 N	104° 42' 25.056 W	
<b>Start Build 2.00</b>										
1,000.0	2.00	20.76	1,000.0	1.6	0.6	1,448,389.66	3,220,341.28	40° 33' 41.488 N	104° 42' 25.048 W	
1,100.0	4.00	20.76	1,099.8	6.5	2.5	1,448,394.57	3,220,343.09	40° 33' 41.536 N	104° 42' 25.024 W	
1,200.0	6.00	20.76	1,199.5	14.7	5.6	1,448,402.75	3,220,346.11	40° 33' 41.617 N	104° 42' 24.984 W	
1,300.0	8.00	20.76	1,298.7	26.1	9.9	1,448,414.18	3,220,350.33	40° 33' 41.730 N	104° 42' 24.928 W	
1,400.0	10.00	20.76	1,397.5	40.7	15.4	1,448,428.86	3,220,355.74	40° 33' 41.874 N	104° 42' 24.856 W	
1,422.2	10.44	20.76	1,419.3	44.4	16.8	1,448,432.55	3,220,357.10	40° 33' 41.910 N	104° 42' 24.838 W	
<b>Hold 10.44° Inc, 20.76° Az</b>										
1,500.0	10.44	20.76	1,495.8	57.6	21.8	1,448,445.78	3,220,361.99	40° 33' 42.041 N	104° 42' 24.773 W	
1,600.0	10.44	20.76	1,594.2	74.5	28.3	1,448,462.79	3,220,368.26	40° 33' 42.208 N	104° 42' 24.690 W	
1,700.0	10.44	20.76	1,692.5	91.5	34.7	1,448,479.79	3,220,374.53	40° 33' 42.376 N	104° 42' 24.607 W	
1,800.0	10.44	20.76	1,790.9	108.4	41.1	1,448,496.80	3,220,380.81	40° 33' 42.543 N	104° 42' 24.523 W	
1,900.0	10.44	20.76	1,889.2	125.4	47.5	1,448,513.80	3,220,387.08	40° 33' 42.711 N	104° 42' 24.440 W	
2,000.0	10.44	20.76	1,987.5	142.3	54.0	1,448,530.81	3,220,393.36	40° 33' 42.878 N	104° 42' 24.357 W	
2,100.0	10.44	20.76	2,085.9	159.3	60.4	1,448,547.82	3,220,399.63	40° 33' 43.046 N	104° 42' 24.274 W	
2,200.0	10.44	20.76	2,184.2	176.2	66.8	1,448,564.82	3,220,405.91	40° 33' 43.213 N	104° 42' 24.190 W	
2,300.0	10.44	20.76	2,282.6	193.2	73.2	1,448,581.83	3,220,412.18	40° 33' 43.381 N	104° 42' 24.107 W	
2,400.0	10.44	20.76	2,380.9	210.1	79.7	1,448,598.83	3,220,418.45	40° 33' 43.548 N	104° 42' 24.024 W	
2,500.0	10.44	20.76	2,479.3	227.1	86.1	1,448,615.84	3,220,424.73	40° 33' 43.716 N	104° 42' 23.941 W	
2,600.0	10.44	20.76	2,577.6	244.0	92.5	1,448,632.84	3,220,431.00	40° 33' 43.883 N	104° 42' 23.857 W	
2,700.0	10.44	20.76	2,675.9	260.9	98.9	1,448,649.85	3,220,437.28	40° 33' 44.051 N	104° 42' 23.774 W	
2,800.0	10.44	20.76	2,774.3	277.9	105.4	1,448,666.85	3,220,443.55	40° 33' 44.218 N	104° 42' 23.691 W	
2,900.0	10.44	20.76	2,872.6	294.8	111.8	1,448,683.86	3,220,449.83	40° 33' 44.385 N	104° 42' 23.608 W	
3,000.0	10.44	20.76	2,971.0	311.8	118.2	1,448,700.86	3,220,456.10	40° 33' 44.553 N	104° 42' 23.524 W	
3,100.0	10.44	20.76	3,069.3	328.7	124.6	1,448,717.87	3,220,462.38	40° 33' 44.720 N	104° 42' 23.441 W	
3,200.0	10.44	20.76	3,167.7	345.7	131.1	1,448,734.88	3,220,468.65	40° 33' 44.888 N	104° 42' 23.358 W	
3,300.0	10.44	20.76	3,266.0	362.6	137.5	1,448,751.88	3,220,474.92	40° 33' 45.055 N	104° 42' 23.274 W	
3,400.0	10.44	20.76	3,364.4	379.6	143.9	1,448,768.89	3,220,481.20	40° 33' 45.223 N	104° 42' 23.191 W	
3,500.0	10.44	20.76	3,462.7	396.5	150.3	1,448,785.89	3,220,487.47	40° 33' 45.390 N	104° 42' 23.108 W	
3,600.0	10.44	20.76	3,561.0	413.5	156.8	1,448,802.90	3,220,493.75	40° 33' 45.558 N	104° 42' 23.025 W	
3,649.8	10.44	20.76	3,610.0	421.9	160.0	1,448,811.36	3,220,496.87	40° 33' 45.641 N	104° 42' 22.983 W	
<b>PARKMAN</b>										
3,700.0	10.44	20.76	3,659.4	430.4	163.2	1,448,819.90	3,220,500.02	40° 33' 45.725 N	104° 42' 22.941 W	
3,800.0	10.44	20.76	3,757.7	447.4	169.6	1,448,836.91	3,220,506.30	40° 33' 45.893 N	104° 42' 22.858 W	
3,900.0	10.44	20.76	3,856.1	464.3	176.1	1,448,853.91	3,220,512.57	40° 33' 46.060 N	104° 42' 22.775 W	
4,000.0	10.44	20.76	3,954.4	481.3	182.5	1,448,870.92	3,220,518.84	40° 33' 46.228 N	104° 42' 22.692 W	
4,100.0	10.44	20.76	4,052.8	498.2	188.9	1,448,887.92	3,220,525.12	40° 33' 46.395 N	104° 42' 22.608 W	
4,200.0	10.44	20.76	4,151.1	515.2	195.3	1,448,904.93	3,220,531.39	40° 33' 46.563 N	104° 42' 22.525 W	
4,300.0	10.44	20.76	4,249.4	532.1	201.8	1,448,921.94	3,220,537.67	40° 33' 46.730 N	104° 42' 22.442 W	
4,389.0	10.44	20.76	4,337.0	547.2	207.5	1,448,937.08	3,220,543.25	40° 33' 46.879 N	104° 42' 22.368 W	
<b>SUSSEX</b>										

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<b>Project:</b>	SEC 19 T7N R65W	<b>MD Reference:</b>	WELL @ 4902.0ft (Xtreme 7)
<b>Site:</b>	WAAG MIDDLE	<b>North Reference:</b>	True
<b>Well:</b>	WAAG 8	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 07Aug14 mab		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude	
4,400.0	10.44	20.76	4,347.8	549.1	208.2	1,448,938.94	3,220,543.94	40° 33' 46.898 N	104° 42' 22.359 W	
4,500.0	10.44	20.76	4,446.1	566.0	214.6	1,448,955.95	3,220,550.22	40° 33' 47.065 N	104° 42' 22.275 W	
4,600.0	10.44	20.76	4,544.5	583.0	221.0	1,448,972.95	3,220,556.49	40° 33' 47.233 N	104° 42' 22.192 W	
4,700.0	10.44	20.76	4,642.8	599.9	227.5	1,448,989.96	3,220,562.76	40° 33' 47.400 N	104° 42' 22.109 W	
4,788.7	10.44	20.76	4,730.0	614.9	233.2	1,449,005.03	3,220,568.33	40° 33' 47.549 N	104° 42' 22.035 W	
<b>SHANNON</b>										
4,800.0	10.44	20.76	4,741.2	616.9	233.9	1,449,006.96	3,220,569.04	40° 33' 47.568 N	104° 42' 22.025 W	
4,900.0	10.44	20.76	4,839.5	633.8	240.3	1,449,023.97	3,220,575.31	40° 33' 47.735 N	104° 42' 21.942 W	
5,000.0	10.44	20.76	4,937.8	650.8	246.7	1,449,040.97	3,220,581.59	40° 33' 47.903 N	104° 42' 21.859 W	
5,100.0	10.44	20.76	5,036.2	667.7	253.2	1,449,057.98	3,220,587.86	40° 33' 48.070 N	104° 42' 21.776 W	
5,200.0	10.44	20.76	5,134.5	684.7	259.6	1,449,074.98	3,220,594.14	40° 33' 48.238 N	104° 42' 21.692 W	
5,300.0	10.44	20.76	5,232.9	701.6	266.0	1,449,091.99	3,220,600.41	40° 33' 48.405 N	104° 42' 21.609 W	
5,400.0	10.44	20.76	5,331.2	718.6	272.4	1,449,109.00	3,220,606.69	40° 33' 48.572 N	104° 42' 21.526 W	
5,500.0	10.44	20.76	5,429.6	735.5	278.9	1,449,126.00	3,220,612.96	40° 33' 48.740 N	104° 42' 21.443 W	
5,600.0	10.44	20.76	5,527.9	752.5	285.3	1,449,143.01	3,220,619.23	40° 33' 48.907 N	104° 42' 21.359 W	
5,700.0	10.44	20.76	5,626.3	769.4	291.7	1,449,160.01	3,220,625.51	40° 33' 49.075 N	104° 42' 21.276 W	
5,800.0	10.44	20.76	5,724.6	786.4	298.2	1,449,177.02	3,220,631.78	40° 33' 49.242 N	104° 42' 21.193 W	
5,900.0	10.44	20.76	5,822.9	803.3	304.6	1,449,194.02	3,220,638.06	40° 33' 49.410 N	104° 42' 21.110 W	
6,000.0	10.44	20.76	5,921.3	820.3	311.0	1,449,211.03	3,220,644.33	40° 33' 49.577 N	104° 42' 21.026 W	
6,096.0	10.44	20.76	6,015.7	836.5	317.2	1,449,227.36	3,220,650.36	40° 33' 49.738 N	104° 42' 20.946 W	
<b>Start Drop -2.00</b>										
6,100.0	10.36	20.76	6,019.6	837.2	317.4	1,449,228.03	3,220,650.60	40° 33' 49.745 N	104° 42' 20.943 W	
6,200.0	8.36	20.76	6,118.3	852.4	323.2	1,449,243.29	3,220,656.24	40° 33' 49.895 N	104° 42' 20.868 W	
6,300.0	6.36	20.76	6,217.5	864.4	327.7	1,449,255.32	3,220,660.67	40° 33' 50.014 N	104° 42' 20.809 W	
6,400.0	4.36	20.76	6,317.0	873.1	331.1	1,449,264.09	3,220,663.91	40° 33' 50.100 N	104° 42' 20.766 W	
6,500.0	2.36	20.76	6,416.8	878.6	333.1	1,449,269.59	3,220,665.94	40° 33' 50.154 N	104° 42' 20.739 W	
6,600.0	0.36	20.76	6,516.8	880.9	334.0	1,449,271.83	3,220,666.78	40° 33' 50.176 N	104° 42' 20.729 W	
6,618.2	0.00	0.00	6,535.0	880.9	334.0	1,449,271.88	3,220,666.78	40° 33' 50.177 N	104° 42' 20.728 W	
<b>Vertical</b>										
6,648.2	0.00	0.00	6,565.0	880.9	334.0	1,449,271.88	3,220,666.78	40° 33' 50.177 N	104° 42' 20.728 W	
<b>KOP 10°/100</b>										
6,700.0	5.18	270.80	6,616.7	880.9	331.7	1,449,271.89	3,220,664.44	40° 33' 50.177 N	104° 42' 20.759 W	
6,800.0	15.18	270.80	6,715.0	881.2	314.0	1,449,271.98	3,220,646.79	40° 33' 50.179 N	104° 42' 20.987 W	
6,900.0	25.18	270.80	6,808.8	881.7	279.6	1,449,272.15	3,220,612.34	40° 33' 50.184 N	104° 42' 21.434 W	
7,000.0	35.18	270.80	6,895.1	882.4	229.4	1,449,272.41	3,220,562.13	40° 33' 50.191 N	104° 42' 22.084 W	
7,100.0	45.18	270.80	6,971.4	883.3	164.9	1,449,272.73	3,220,497.69	40° 33' 50.200 N	104° 42' 22.919 W	
7,154.6	50.64	270.80	7,008.0	883.8	124.4	1,449,272.93	3,220,457.19	40° 33' 50.206 N	104° 42' 23.444 W	
<b>NIORRARA</b>										
7,200.0	55.18	270.80	7,035.4	884.3	88.2	1,449,273.11	3,220,420.98	40° 33' 50.211 N	104° 42' 23.913 W	
7,300.0	65.18	270.80	7,085.0	885.5	1.6	1,449,273.55	3,220,334.34	40° 33' 50.223 N	104° 42' 25.036 W	
7,400.0	75.18	270.80	7,118.9	886.9	-92.4	1,449,274.02	3,220,240.38	40° 33' 50.236 N	104° 42' 26.253 W	
7,500.0	85.18	270.80	7,135.9	888.2	-190.8	1,449,274.51	3,220,141.97	40° 33' 50.249 N	104° 42' 27.528 W	
7,548.2	90.00	270.80	7,138.0	888.9	-238.9	1,449,274.76	3,220,093.83	40° 33' 50.256 N	104° 42' 28.152 W	
<b>Landing Pt 90° Inc, 270.80° Az - 7"</b>										
7,600.0	90.00	270.80	7,138.0	889.6	-290.7	1,449,275.02	3,220,042.03	40° 33' 50.263 N	104° 42' 28.823 W	
7,700.0	90.00	270.80	7,138.0	891.0	-390.7	1,449,275.52	3,219,942.03	40° 33' 50.277 N	104° 42' 30.118 W	
7,800.0	90.00	270.80	7,138.0	892.4	-490.7	1,449,276.02	3,219,842.03	40° 33' 50.290 N	104° 42' 31.414 W	
7,900.0	90.00	270.80	7,138.0	893.8	-590.7	1,449,276.52	3,219,742.03	40° 33' 50.304 N	104° 42' 32.709 W	
8,000.0	90.00	270.80	7,138.0	895.2	-690.7	1,449,277.02	3,219,642.03	40° 33' 50.318 N	104° 42' 34.005 W	
8,100.0	90.00	270.80	7,138.0	896.6	-790.7	1,449,277.53	3,219,542.03	40° 33' 50.332 N	104° 42' 35.301 W	
8,200.0	90.00	270.80	7,138.0	898.0	-890.6	1,449,278.03	3,219,442.04	40° 33' 50.346 N	104° 42' 36.596 W	
8,300.0	90.00	270.80	7,138.0	899.4	-990.6	1,449,278.53	3,219,342.04	40° 33' 50.359 N	104° 42' 37.892 W	
8,400.0	90.00	270.80	7,138.0	900.8	-1,090.6	1,449,279.03	3,219,242.04	40° 33' 50.373 N	104° 42' 39.187 W	

**New Tech**  
 Planning Report - Geographic

<b>Database:</b> EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b> Well WAAG 8 - Slot WAAG 8
<b>Company:</b> EXTRACTION OIL & GAS	<b>TVD Reference:</b> WELL @ 4902.0ft (Xtreme 7)
<b>Project:</b> SEC 19 T7N R65W	<b>MD Reference:</b> WELL @ 4902.0ft (Xtreme 7)
<b>Site:</b> WAAG MIDDLE	<b>North Reference:</b> True
<b>Well:</b> WAAG 8	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Wellbore:</b> Wellbore #1	
<b>Design:</b> Plan #1 07Aug14 mab	

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude	
8,500.0	90.00	270.80	7,138.0	902.2	-1,190.6	1,449,279.53	3,219,142.04	40° 33' 50.387 N	104° 42' 40.483 W	
8,600.0	90.00	270.80	7,138.0	903.6	-1,290.6	1,449,280.04	3,219,042.04	40° 33' 50.401 N	104° 42' 41.779 W	
8,700.0	90.00	270.80	7,138.0	905.0	-1,390.6	1,449,280.54	3,218,942.04	40° 33' 50.414 N	104° 42' 43.074 W	
8,800.0	90.00	270.80	7,138.0	906.4	-1,490.6	1,449,281.04	3,218,842.04	40° 33' 50.428 N	104° 42' 44.370 W	
8,900.0	90.00	270.80	7,138.0	907.8	-1,590.6	1,449,281.54	3,218,742.04	40° 33' 50.442 N	104° 42' 45.665 W	
9,000.0	90.00	270.80	7,138.0	909.2	-1,690.6	1,449,282.04	3,218,642.05	40° 33' 50.455 N	104° 42' 46.961 W	
9,100.0	90.00	270.80	7,137.9	910.6	-1,790.6	1,449,282.55	3,218,542.05	40° 33' 50.469 N	104° 42' 48.257 W	
9,200.0	90.00	270.80	7,137.9	912.0	-1,890.5	1,449,283.05	3,218,442.05	40° 33' 50.483 N	104° 42' 49.552 W	
9,300.0	90.00	270.80	7,137.9	913.4	-1,990.5	1,449,283.55	3,218,342.05	40° 33' 50.497 N	104° 42' 50.848 W	
9,400.0	90.00	270.80	7,137.9	914.8	-2,090.5	1,449,284.05	3,218,242.05	40° 33' 50.510 N	104° 42' 52.144 W	
9,500.0	90.00	270.80	7,137.9	916.2	-2,190.5	1,449,284.55	3,218,142.05	40° 33' 50.524 N	104° 42' 53.439 W	
9,600.0	90.00	270.80	7,137.9	917.6	-2,290.5	1,449,285.05	3,218,042.05	40° 33' 50.538 N	104° 42' 54.735 W	
9,700.0	90.00	270.80	7,137.9	918.9	-2,390.5	1,449,285.56	3,217,942.05	40° 33' 50.552 N	104° 42' 56.030 W	
9,800.0	90.00	270.80	7,137.9	920.3	-2,490.5	1,449,286.06	3,217,842.06	40° 33' 50.565 N	104° 42' 57.326 W	
9,900.0	90.00	270.80	7,137.9	921.7	-2,590.5	1,449,286.56	3,217,742.06	40° 33' 50.579 N	104° 42' 58.622 W	
10,000.0	90.00	270.80	7,137.9	923.1	-2,690.5	1,449,287.06	3,217,642.06	40° 33' 50.593 N	104° 42' 59.917 W	
10,100.0	90.00	270.80	7,137.9	924.5	-2,790.5	1,449,287.56	3,217,542.06	40° 33' 50.606 N	104° 43' 1.213 W	
10,200.0	90.00	270.80	7,137.9	925.9	-2,890.4	1,449,288.07	3,217,442.06	40° 33' 50.620 N	104° 43' 2.508 W	
10,300.0	90.00	270.80	7,137.9	927.3	-2,990.4	1,449,288.57	3,217,342.06	40° 33' 50.634 N	104° 43' 3.804 W	
10,400.0	90.00	270.80	7,137.9	928.7	-3,090.4	1,449,289.07	3,217,242.06	40° 33' 50.647 N	104° 43' 5.100 W	
10,500.0	90.00	270.80	7,137.9	930.1	-3,190.4	1,449,289.57	3,217,142.06	40° 33' 50.661 N	104° 43' 6.395 W	
10,600.0	90.00	270.80	7,137.9	931.5	-3,290.4	1,449,290.07	3,217,042.07	40° 33' 50.675 N	104° 43' 7.691 W	
10,700.0	90.00	270.80	7,137.9	932.9	-3,390.4	1,449,290.58	3,216,942.07	40° 33' 50.688 N	104° 43' 8.986 W	
10,800.0	90.00	270.80	7,137.9	934.3	-3,490.4	1,449,291.08	3,216,842.07	40° 33' 50.702 N	104° 43' 10.282 W	
10,900.0	90.00	270.80	7,137.9	935.7	-3,590.4	1,449,291.58	3,216,742.07	40° 33' 50.716 N	104° 43' 11.578 W	
11,000.0	90.00	270.80	7,137.9	937.1	-3,690.4	1,449,292.08	3,216,642.07	40° 33' 50.729 N	104° 43' 12.873 W	
11,100.0	90.00	270.80	7,137.9	938.5	-3,790.4	1,449,292.58	3,216,542.07	40° 33' 50.743 N	104° 43' 14.169 W	
11,200.0	90.00	270.80	7,137.9	939.9	-3,890.4	1,449,293.09	3,216,442.07	40° 33' 50.757 N	104° 43' 15.464 W	
11,300.0	90.00	270.80	7,137.9	941.3	-3,990.3	1,449,293.59	3,216,342.08	40° 33' 50.770 N	104° 43' 16.760 W	
11,400.0	90.00	270.80	7,137.9	942.7	-4,090.3	1,449,294.09	3,216,242.08	40° 33' 50.784 N	104° 43' 18.056 W	
11,500.0	90.00	270.80	7,137.9	944.1	-4,190.3	1,449,294.59	3,216,142.08	40° 33' 50.797 N	104° 43' 19.351 W	
11,600.0	90.00	270.80	7,137.9	945.5	-4,290.3	1,449,295.09	3,216,042.08	40° 33' 50.811 N	104° 43' 20.647 W	
11,700.0	90.00	270.80	7,137.9	946.9	-4,390.3	1,449,295.60	3,215,942.08	40° 33' 50.825 N	104° 43' 21.942 W	
11,800.0	90.00	270.80	7,137.9	948.3	-4,490.3	1,449,296.10	3,215,842.08	40° 33' 50.838 N	104° 43' 23.238 W	
11,900.0	90.00	270.80	7,137.9	949.7	-4,590.3	1,449,296.60	3,215,742.08	40° 33' 50.852 N	104° 43' 24.534 W	
12,000.0	90.00	270.80	7,137.9	951.1	-4,690.3	1,449,297.10	3,215,642.08	40° 33' 50.866 N	104° 43' 25.829 W	
12,021.8	90.00	270.80	7,138.0	951.3	-4,712.1	1,449,297.15	3,215,620.26	40° 33' 50.868 N	104° 43' 26.112 W	
<b>TD at 12021.8 - TD / PBHL WAAG MIDDLE 8</b>										

Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
TD / PBHL WAAG MIDC - hit/miss target - Shape - Point	0.00	0.00	7,138.0	951.3	-4,712.1	1,449,297.15	3,215,620.26	40° 33' 50.868 N	104° 43' 26.112 W	
LP WAAG MIDDLE 8 - plan hits target - Point	0.00	0.00	7,138.0	888.9	-238.9	1,449,274.78	3,220,093.80	40° 33' 50.256 N	104° 42' 28.152 W	

**New Tech**  
 Planning Report - Geographic

<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WAAG 8 - Slot WAAG 8
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	WELL @ 4902.0ft (Xtreme 7)
<b>Project:</b>	SEC 19 T7N R65W	<b>MD Reference:</b>	WELL @ 4902.0ft (Xtreme 7)
<b>Site:</b>	WAAG MIDDLE	<b>North Reference:</b>	True
<b>Well:</b>	WAAG 8	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 07Aug14 mab		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
850.0	850.0	9 5/8"	0	0	
7,548.2	7,138.0	7"	0	0	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3649.80	3610.00	PARKMAN			
4389.00	4337.00	SUSSEX			
4788.70	4730.00	SHANNON			
7154.60	7008.00	NIOBRARA			
	7148.00	NIO B TARGET			
	7292.00	FORT HAYS			
	7325.00	CODELL			

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
900.0	900.0	0.0	0.0	Start Build 2.00	
1,422.2	1,419.3	44.4	16.8	Hold 10.44° Inc, 20.76° Az	
6,096.0	6,015.7	836.5	317.2	Start Drop -2.00	
6,618.2	6,535.0	880.9	334.0	Vertical	
6,648.2	6,565.0	880.9	334.0	KOP 10°/100	
7,548.2	7,138.0	888.9	-238.9	Landing Pt 90° Inc, 270.80° Az	
12,021.8	7,138.0	951.3	-4,712.1	TD at 12021.8	