

# **EXTRACTION OIL & GAS**

**SEC 19 T7N R65W**

**WAAG NORTH**

**WAAG 3 - Slot WAAG 3**

**Wellbore #1**

**Plan: Plan #1 01Aug14 jps**

## **Standard Planning Report - Geographic**

**13 August, 2014**

# New Tech

## Planning Report - Geographic

<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WAAG 3 - Slot WAAG 3
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	WELL @ 4918.0ft (Xtreme 7)
<b>Project:</b>	SEC 19 T7N R65W	<b>MD Reference:</b>	WELL @ 4918.0ft (Xtreme 7)
<b>Site:</b>	WAAG NORTH	<b>North Reference:</b>	True
<b>Well:</b>	WAAG 3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 01Aug14 jps		

<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 NORTH			
<b>Site Position:</b>		<b>Northing:</b>	1,450,756.94 ft	<b>Latitude:</b> 40° 34' 4.944 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,219,613.80 ft	<b>Longitude:</b> 104° 42' 34.200 W
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	"	<b>Grid Convergence:</b> 0.51 °

<b>Well</b>	WAAG 3 - Slot WAAG 3			
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>	1,450,728.22 ft
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>	3,219,661.29 ft
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	ft
			<b>Ground Level:</b>	4,902.0 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 (nT)</b>
	IGRF2010	8/1/2014	8.43	67.09	52,894

<b>Design</b>	Plan #1 01Aug14 jps			
<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) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	264.31

<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	
1,523.4	12.47	115.35	1,518.4	-28.9	61.0	2.00	2.00	0.00	115.35	
6,027.7	12.47	115.35	5,916.6	-445.3	939.8	0.00	0.00	0.00	0.00	
6,651.0	0.00	0.00	6,535.0	-474.2	1,000.8	2.00	-2.00	0.00	180.00	
6,681.0	0.00	0.00	6,565.0	-474.2	1,000.8	0.00	0.00	0.00	0.00	
7,581.0	90.00	270.79	7,138.0	-466.3	427.9	10.00	10.00	0.00	270.79	
12,065.6	90.00	270.80	7,138.0	-404.0	-4,056.2	0.00	0.00	0.00	0.00	TD / PBHL WAAG NC

# New Tech

## Planning Report - Geographic

<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WAAG 3 - Slot WAAG 3
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	WELL @ 4918.0ft (Xtreme 7)
<b>Project:</b>	SEC 19 T7N R65W	<b>MD Reference:</b>	WELL @ 4918.0ft (Xtreme 7)
<b>Site:</b>	WAAG NORTH	<b>North Reference:</b>	True
<b>Well:</b>	WAAG 3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 01Aug14 jps		

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	1,450,728.22	3,219,661.29	40° 34' 4.656 N	104° 42' 33.588 W
100.0	0.00	0.00	100.0	0.0	0.0	1,450,728.22	3,219,661.29	40° 34' 4.656 N	104° 42' 33.588 W
200.0	0.00	0.00	200.0	0.0	0.0	1,450,728.22	3,219,661.29	40° 34' 4.656 N	104° 42' 33.588 W
300.0	0.00	0.00	300.0	0.0	0.0	1,450,728.22	3,219,661.29	40° 34' 4.656 N	104° 42' 33.588 W
400.0	0.00	0.00	400.0	0.0	0.0	1,450,728.22	3,219,661.29	40° 34' 4.656 N	104° 42' 33.588 W
500.0	0.00	0.00	500.0	0.0	0.0	1,450,728.22	3,219,661.29	40° 34' 4.656 N	104° 42' 33.588 W
600.0	0.00	0.00	600.0	0.0	0.0	1,450,728.22	3,219,661.29	40° 34' 4.656 N	104° 42' 33.588 W
700.0	0.00	0.00	700.0	0.0	0.0	1,450,728.22	3,219,661.29	40° 34' 4.656 N	104° 42' 33.588 W
800.0	0.00	0.00	800.0	0.0	0.0	1,450,728.22	3,219,661.29	40° 34' 4.656 N	104° 42' 33.588 W
850.0	0.00	0.00	850.0	0.0	0.0	1,450,728.22	3,219,661.29	40° 34' 4.656 N	104° 42' 33.588 W
<b>9 5/8"</b>									
900.0	0.00	0.00	900.0	0.0	0.0	1,450,728.22	3,219,661.29	40° 34' 4.656 N	104° 42' 33.588 W
<b>Start Build 2.00</b>									
1,000.0	2.00	115.35	1,000.0	-0.7	1.6	1,450,727.48	3,219,662.87	40° 34' 4.649 N	104° 42' 33.568 W
1,100.0	4.00	115.35	1,099.8	-3.0	6.3	1,450,725.29	3,219,667.62	40° 34' 4.626 N	104° 42' 33.506 W
1,200.0	6.00	115.35	1,199.5	-6.7	14.2	1,450,721.62	3,219,675.53	40° 34' 4.590 N	104° 42' 33.404 W
1,300.0	8.00	115.35	1,298.7	-11.9	25.2	1,450,716.50	3,219,686.59	40° 34' 4.538 N	104° 42' 33.262 W
1,400.0	10.00	115.35	1,397.5	-18.6	39.3	1,450,709.93	3,219,700.78	40° 34' 4.472 N	104° 42' 33.078 W
1,500.0	12.00	115.35	1,495.6	-26.8	56.6	1,450,701.92	3,219,718.09	40° 34' 4.391 N	104° 42' 32.855 W
1,523.4	12.47	115.35	1,518.4	-28.9	61.0	1,450,699.84	3,219,722.59	40° 34' 4.370 N	104° 42' 32.797 W
<b>Hold 12.47° Inc, 115.35° Az</b>									
1,600.0	12.47	115.35	1,593.3	-36.0	76.0	1,450,692.88	3,219,737.60	40° 34' 4.300 N	104° 42' 32.603 W
1,700.0	12.47	115.35	1,690.9	-45.3	95.5	1,450,683.81	3,219,757.19	40° 34' 4.209 N	104° 42' 32.350 W
1,800.0	12.47	115.35	1,788.6	-54.5	115.0	1,450,674.74	3,219,776.78	40° 34' 4.117 N	104° 42' 32.098 W
1,900.0	12.47	115.35	1,886.2	-63.7	134.5	1,450,665.67	3,219,796.37	40° 34' 4.026 N	104° 42' 31.845 W
2,000.0	12.47	115.35	1,983.9	-73.0	154.0	1,450,656.61	3,219,815.96	40° 34' 3.935 N	104° 42' 31.592 W
2,100.0	12.47	115.35	2,081.5	-82.2	173.5	1,450,647.54	3,219,835.55	40° 34' 3.843 N	104° 42' 31.339 W
2,200.0	12.47	115.35	2,179.1	-91.5	193.0	1,450,638.47	3,219,855.14	40° 34' 3.752 N	104° 42' 31.086 W
2,300.0	12.47	115.35	2,276.8	-100.7	212.6	1,450,629.40	3,219,874.73	40° 34' 3.661 N	104° 42' 30.834 W
2,400.0	12.47	115.35	2,374.4	-110.0	232.1	1,450,620.33	3,219,894.32	40° 34' 3.569 N	104° 42' 30.581 W
2,500.0	12.47	115.35	2,472.1	-119.2	251.6	1,450,611.26	3,219,913.91	40° 34' 3.478 N	104° 42' 30.328 W
2,600.0	12.47	115.35	2,569.7	-128.5	271.1	1,450,602.19	3,219,933.50	40° 34' 3.387 N	104° 42' 30.075 W
2,700.0	12.47	115.35	2,667.3	-137.7	290.6	1,450,593.12	3,219,953.09	40° 34' 3.295 N	104° 42' 29.823 W
2,800.0	12.47	115.35	2,765.0	-146.9	310.1	1,450,584.05	3,219,972.68	40° 34' 3.204 N	104° 42' 29.570 W
2,900.0	12.47	115.35	2,862.6	-156.2	329.6	1,450,574.98	3,219,992.27	40° 34' 3.113 N	104° 42' 29.317 W
3,000.0	12.47	115.35	2,960.3	-165.4	349.1	1,450,565.91	3,220,011.86	40° 34' 3.021 N	104° 42' 29.064 W
3,100.0	12.47	115.35	3,057.9	-174.7	368.6	1,450,556.84	3,220,031.45	40° 34' 2.930 N	104° 42' 28.811 W
3,200.0	12.47	115.35	3,155.6	-183.9	388.1	1,450,547.77	3,220,051.04	40° 34' 2.838 N	104° 42' 28.559 W
3,300.0	12.47	115.35	3,253.2	-193.2	407.6	1,450,538.70	3,220,070.63	40° 34' 2.747 N	104° 42' 28.306 W
3,400.0	12.47	115.35	3,350.8	-202.4	427.1	1,450,529.63	3,220,090.22	40° 34' 2.656 N	104° 42' 28.053 W
3,500.0	12.47	115.35	3,448.5	-211.7	446.7	1,450,520.56	3,220,109.81	40° 34' 2.564 N	104° 42' 27.800 W
3,600.0	12.47	115.35	3,546.1	-220.9	466.2	1,450,511.49	3,220,129.40	40° 34' 2.473 N	104° 42' 27.547 W
3,665.4	12.47	115.35	3,610.0	-226.9	478.9	1,450,505.55	3,220,142.22	40° 34' 2.413 N	104° 42' 27.382 W
<b>PARKMAN</b>									
3,700.0	12.47	115.35	3,643.8	-230.1	485.7	1,450,502.42	3,220,148.99	40° 34' 2.382 N	104° 42' 27.295 W
3,800.0	12.47	115.35	3,741.4	-239.4	505.2	1,450,493.35	3,220,168.58	40° 34' 2.290 N	104° 42' 27.042 W
3,900.0	12.47	115.35	3,839.1	-248.6	524.7	1,450,484.28	3,220,188.17	40° 34' 2.199 N	104° 42' 26.789 W
4,000.0	12.47	115.35	3,936.7	-257.9	544.2	1,450,475.21	3,220,207.76	40° 34' 2.108 N	104° 42' 26.536 W
4,100.0	12.47	115.35	4,034.3	-267.1	563.7	1,450,466.14	3,220,227.35	40° 34' 2.016 N	104° 42' 26.284 W
4,200.0	12.47	115.35	4,132.0	-276.4	583.2	1,450,457.07	3,220,246.94	40° 34' 1.925 N	104° 42' 26.031 W
4,300.0	12.47	115.35	4,229.6	-285.6	602.7	1,450,448.00	3,220,266.53	40° 34' 1.834 N	104° 42' 25.778 W
4,400.0	12.47	115.35	4,327.3	-294.9	622.2	1,450,438.93	3,220,286.12	40° 34' 1.742 N	104° 42' 25.525 W

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## Planning Report - Geographic

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<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	WELL @ 4918.0ft (Xtreme 7)
<b>Project:</b>	SEC 19 T7N R65W	<b>MD Reference:</b>	WELL @ 4918.0ft (Xtreme 7)
<b>Site:</b>	WAAG NORTH	<b>North Reference:</b>	True
<b>Well:</b>	WAAG 3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 01Aug14 jps		

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
4,410.0	12.47	115.35	4,337.0	-295.8	624.2	1,450,438.02	3,220,288.08	40° 34' 1.733 N	104° 42' 25.500 W
<b>SUSSEX</b>									
4,500.0	12.47	115.35	4,424.9	-304.1	641.7	1,450,429.86	3,220,305.71	40° 34' 1.651 N	104° 42' 25.272 W
4,600.0	12.47	115.35	4,522.5	-313.3	661.3	1,450,420.79	3,220,325.30	40° 34' 1.560 N	104° 42' 25.020 W
4,700.0	12.47	115.35	4,620.2	-322.6	680.8	1,450,411.72	3,220,344.89	40° 34' 1.468 N	104° 42' 24.767 W
4,800.0	12.47	115.35	4,717.8	-331.8	700.3	1,450,402.65	3,220,364.48	40° 34' 1.377 N	104° 42' 24.514 W
4,812.5	12.47	115.35	4,730.0	-333.0	702.7	1,450,401.52	3,220,366.92	40° 34' 1.365 N	104° 42' 24.483 W
<b>SHANNON</b>									
4,900.0	12.47	115.35	4,815.5	-341.1	719.8	1,450,393.58	3,220,384.07	40° 34' 1.285 N	104° 42' 24.261 W
5,000.0	12.47	115.35	4,913.1	-350.3	739.3	1,450,384.51	3,220,403.66	40° 34' 1.194 N	104° 42' 24.008 W
5,100.0	12.47	115.35	5,010.8	-359.6	758.8	1,450,375.44	3,220,423.25	40° 34' 1.103 N	104° 42' 23.756 W
5,200.0	12.47	115.35	5,108.4	-368.8	778.3	1,450,366.37	3,220,442.84	40° 34' 1.011 N	104° 42' 23.503 W
5,300.0	12.47	115.35	5,206.0	-378.0	797.8	1,450,357.30	3,220,462.43	40° 34' 0.920 N	104° 42' 23.250 W
5,400.0	12.47	115.35	5,303.7	-387.3	817.3	1,450,348.23	3,220,482.02	40° 34' 0.829 N	104° 42' 22.997 W
5,500.0	12.47	115.35	5,401.3	-396.5	836.8	1,450,339.16	3,220,501.61	40° 34' 0.737 N	104° 42' 22.745 W
5,600.0	12.47	115.35	5,499.0	-405.8	856.3	1,450,330.09	3,220,521.20	40° 34' 0.646 N	104° 42' 22.492 W
5,700.0	12.47	115.35	5,596.6	-415.0	875.8	1,450,321.02	3,220,540.79	40° 34' 0.555 N	104° 42' 22.239 W
5,800.0	12.47	115.35	5,694.3	-424.3	895.4	1,450,311.95	3,220,560.38	40° 34' 0.463 N	104° 42' 21.986 W
5,900.0	12.47	115.35	5,791.9	-433.5	914.9	1,450,302.88	3,220,579.97	40° 34' 0.372 N	104° 42' 21.733 W
6,000.0	12.47	115.35	5,889.5	-442.8	934.4	1,450,293.81	3,220,599.56	40° 34' 0.281 N	104° 42' 21.481 W
6,027.7	12.47	115.35	5,916.6	-445.3	939.8	1,450,291.30	3,220,604.99	40° 34' 0.255 N	104° 42' 21.411 W
<b>Start Drop -2.00</b>									
6,100.0	11.02	115.35	5,987.4	-451.6	953.1	1,450,285.11	3,220,618.34	40° 34' 0.193 N	104° 42' 21.238 W
6,200.0	9.02	115.35	6,085.8	-459.1	968.8	1,450,277.80	3,220,634.13	40° 34' 0.119 N	104° 42' 21.035 W
6,300.0	7.02	115.35	6,184.9	-465.0	981.4	1,450,271.94	3,220,646.79	40° 34' 0.060 N	104° 42' 20.871 W
6,400.0	5.02	115.35	6,284.3	-469.5	990.9	1,450,267.54	3,220,656.31	40° 34' 0.016 N	104° 42' 20.748 W
6,500.0	3.02	115.35	6,384.0	-472.5	997.2	1,450,264.59	3,220,662.67	40° 33' 59.986 N	104° 42' 20.666 W
6,600.0	1.02	115.35	6,484.0	-474.0	1,000.4	1,450,263.11	3,220,665.87	40° 33' 59.971 N	104° 42' 20.625 W
6,651.0	0.00	0.00	6,535.0	-474.2	1,000.8	1,450,262.92	3,220,666.29	40° 33' 59.969 N	104° 42' 20.620 W
<b>Vertical</b>									
6,681.0	0.00	0.00	6,565.0	-474.2	1,000.8	1,450,262.92	3,220,666.29	40° 33' 59.969 N	104° 42' 20.620 W
<b>KOP 10°/100</b>									
6,700.0	1.90	270.79	6,584.0	-474.2	1,000.5	1,450,262.92	3,220,665.97	40° 33' 59.969 N	104° 42' 20.624 W
6,800.0	11.90	270.79	6,683.1	-474.1	988.5	1,450,262.98	3,220,653.98	40° 33' 59.971 N	104° 42' 20.779 W
6,900.0	21.90	270.79	6,778.7	-473.7	959.5	1,450,263.12	3,220,624.95	40° 33' 59.975 N	104° 42' 21.155 W
7,000.0	31.90	270.79	6,867.8	-473.0	914.3	1,450,263.34	3,220,579.77	40° 33' 59.981 N	104° 42' 21.741 W
7,100.0	41.90	270.79	6,947.6	-472.2	854.3	1,450,263.63	3,220,519.81	40° 33' 59.989 N	104° 42' 22.518 W
7,187.4	50.64	270.79	7,008.0	-471.3	791.2	1,450,263.94	3,220,456.69	40° 33' 59.998 N	104° 42' 23.335 W
<b>NIORARA</b>									
7,200.0	51.90	270.79	7,015.9	-471.2	781.4	1,450,263.99	3,220,446.89	40° 33' 59.999 N	104° 42' 23.462 W
7,300.0	61.90	270.79	7,070.4	-470.1	697.8	1,450,264.40	3,220,363.22	40° 34' 0.011 N	104° 42' 24.546 W
7,400.0	71.90	270.79	7,109.6	-468.8	605.9	1,450,264.85	3,220,271.36	40° 34' 0.023 N	104° 42' 25.737 W
7,500.0	81.90	270.79	7,132.2	-467.4	508.7	1,450,265.32	3,220,174.09	40° 34' 0.037 N	104° 42' 26.997 W
7,581.0	90.00	270.79	7,138.0	-466.3	427.9	1,450,265.72	3,220,093.33	40° 34' 0.048 N	104° 42' 28.043 W
<b>Landing Pt 90° Inc, 270.79° Az - 7"</b>									
7,600.0	90.00	270.79	7,138.0	-466.1	408.9	1,450,265.81	3,220,074.36	40° 34' 0.050 N	104° 42' 28.289 W
7,700.0	90.00	270.79	7,138.0	-464.7	308.9	1,450,266.30	3,219,974.36	40° 34' 0.064 N	104° 42' 29.585 W
7,800.0	90.00	270.79	7,138.0	-463.3	209.0	1,450,266.79	3,219,874.36	40° 34' 0.078 N	104° 42' 30.880 W
7,900.0	90.00	270.79	7,138.0	-461.9	109.0	1,450,267.28	3,219,774.36	40° 34' 0.091 N	104° 42' 32.176 W
8,000.0	90.00	270.79	7,138.0	-460.6	9.0	1,450,267.76	3,219,674.36	40° 34' 0.105 N	104° 42' 33.472 W
8,100.0	90.00	270.79	7,138.0	-459.2	-91.0	1,450,268.25	3,219,574.37	40° 34' 0.119 N	104° 42' 34.767 W
8,200.0	90.00	270.79	7,138.0	-457.8	-191.0	1,450,268.74	3,219,474.37	40° 34' 0.132 N	104° 42' 36.063 W
8,300.0	90.00	270.79	7,137.9	-456.4	-291.0	1,450,269.23	3,219,374.37	40° 34' 0.146 N	104° 42' 37.359 W

# New Tech

## Planning Report - Geographic

<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WAAG 3 - Slot WAAG 3
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	WELL @ 4918.0ft (Xtreme 7)
<b>Project:</b>	SEC 19 T7N R65W	<b>MD Reference:</b>	WELL @ 4918.0ft (Xtreme 7)
<b>Site:</b>	WAAG NORTH	<b>North Reference:</b>	True
<b>Well:</b>	WAAG 3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 01Aug14 jps		

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
8,400.0	90.00	270.79	7,137.9	-455.0	-391.0	1,450,269.72	3,219,274.37	40° 34' 0.159 N	104° 42' 38.654 W
8,500.0	90.00	270.79	7,137.9	-453.6	-491.0	1,450,270.21	3,219,174.37	40° 34' 0.173 N	104° 42' 39.950 W
8,600.0	90.00	270.79	7,137.9	-452.3	-591.0	1,450,270.70	3,219,074.37	40° 34' 0.187 N	104° 42' 41.246 W
8,700.0	90.00	270.79	7,137.9	-450.9	-691.0	1,450,271.19	3,218,974.37	40° 34' 0.200 N	104° 42' 42.541 W
8,800.0	90.00	270.79	7,137.9	-449.5	-791.0	1,450,271.67	3,218,874.37	40° 34' 0.214 N	104° 42' 43.837 W
8,900.0	90.00	270.79	7,137.9	-448.1	-890.9	1,450,272.16	3,218,774.38	40° 34' 0.228 N	104° 42' 45.133 W
9,000.0	90.00	270.79	7,137.9	-446.7	-990.9	1,450,272.65	3,218,674.38	40° 34' 0.241 N	104° 42' 46.428 W
9,100.0	90.00	270.79	7,137.9	-445.4	-1,090.9	1,450,273.14	3,218,574.38	40° 34' 0.255 N	104° 42' 47.724 W
9,200.0	90.00	270.79	7,137.9	-444.0	-1,190.9	1,450,273.63	3,218,474.38	40° 34' 0.268 N	104° 42' 49.020 W
9,300.0	90.00	270.79	7,137.9	-442.6	-1,290.9	1,450,274.12	3,218,374.38	40° 34' 0.282 N	104° 42' 50.315 W
9,400.0	90.00	270.79	7,137.9	-441.2	-1,390.9	1,450,274.61	3,218,274.38	40° 34' 0.295 N	104° 42' 51.611 W
9,500.0	90.00	270.79	7,137.9	-439.8	-1,490.9	1,450,275.10	3,218,174.38	40° 34' 0.309 N	104° 42' 52.907 W
9,600.0	90.00	270.79	7,137.9	-438.5	-1,590.9	1,450,275.58	3,218,074.38	40° 34' 0.323 N	104° 42' 54.202 W
9,700.0	90.00	270.79	7,137.9	-437.1	-1,690.9	1,450,276.07	3,217,974.38	40° 34' 0.336 N	104° 42' 55.498 W
9,800.0	90.00	270.79	7,137.9	-435.7	-1,790.9	1,450,276.56	3,217,874.39	40° 34' 0.350 N	104° 42' 56.794 W
9,900.0	90.01	270.79	7,137.9	-434.3	-1,890.8	1,450,277.05	3,217,774.39	40° 34' 0.363 N	104° 42' 58.089 W
10,000.0	90.01	270.79	7,137.8	-432.9	-1,990.8	1,450,277.54	3,217,674.39	40° 34' 0.377 N	104° 42' 59.385 W
10,100.0	90.01	270.79	7,137.8	-431.6	-2,090.8	1,450,278.03	3,217,574.39	40° 34' 0.390 N	104° 43' 0.680 W
10,200.0	90.01	270.79	7,137.8	-430.2	-2,190.8	1,450,278.52	3,217,474.39	40° 34' 0.404 N	104° 43' 1.976 W
10,300.0	90.01	270.79	7,137.8	-428.8	-2,290.8	1,450,279.00	3,217,374.39	40° 34' 0.418 N	104° 43' 3.272 W
10,400.0	90.01	270.79	7,137.8	-427.4	-2,390.8	1,450,279.49	3,217,274.39	40° 34' 0.431 N	104° 43' 4.567 W
10,500.0	90.01	270.79	7,137.8	-426.0	-2,490.8	1,450,279.98	3,217,174.39	40° 34' 0.445 N	104° 43' 5.863 W
10,600.0	90.01	270.79	7,137.8	-424.7	-2,590.8	1,450,280.47	3,217,074.40	40° 34' 0.458 N	104° 43' 7.159 W
10,700.0	90.01	270.79	7,137.8	-423.3	-2,690.8	1,450,280.96	3,216,974.40	40° 34' 0.472 N	104° 43' 8.454 W
10,800.0	90.01	270.79	7,137.8	-421.9	-2,790.8	1,450,281.45	3,216,874.40	40° 34' 0.485 N	104° 43' 9.750 W
10,900.0	90.01	270.79	7,137.7	-420.5	-2,890.8	1,450,281.94	3,216,774.40	40° 34' 0.499 N	104° 43' 11.046 W
11,000.0	90.01	270.79	7,137.7	-419.1	-2,990.7	1,450,282.43	3,216,674.40	40° 34' 0.512 N	104° 43' 12.341 W
11,100.0	90.01	270.79	7,137.7	-417.8	-3,090.7	1,450,282.91	3,216,574.40	40° 34' 0.526 N	104° 43' 13.637 W
11,200.0	90.01	270.79	7,137.7	-416.4	-3,190.7	1,450,283.40	3,216,474.40	40° 34' 0.539 N	104° 43' 14.933 W
11,300.0	90.01	270.79	7,137.7	-415.0	-3,290.7	1,450,283.89	3,216,374.40	40° 34' 0.553 N	104° 43' 16.228 W
11,400.0	90.01	270.79	7,137.7	-413.6	-3,390.7	1,450,284.38	3,216,274.41	40° 34' 0.566 N	104° 43' 17.524 W
11,500.0	90.01	270.79	7,137.7	-412.2	-3,490.7	1,450,284.87	3,216,174.41	40° 34' 0.580 N	104° 43' 18.820 W
11,600.0	90.01	270.79	7,137.6	-410.9	-3,590.7	1,450,285.36	3,216,074.41	40° 34' 0.593 N	104° 43' 20.115 W
11,700.0	90.01	270.79	7,137.6	-409.5	-3,690.7	1,450,285.85	3,215,974.41	40° 34' 0.607 N	104° 43' 21.411 W
11,800.0	90.01	270.79	7,137.6	-408.1	-3,790.7	1,450,286.34	3,215,874.41	40° 34' 0.620 N	104° 43' 22.707 W
11,900.0	90.01	270.79	7,137.6	-406.7	-3,890.7	1,450,286.82	3,215,774.41	40° 34' 0.634 N	104° 43' 24.002 W
12,000.0	90.01	270.79	7,137.6	-405.3	-3,990.6	1,450,287.31	3,215,674.41	40° 34' 0.647 N	104° 43' 25.298 W
12,065.6	90.00	270.80	7,137.6	-404.4	-4,056.2	1,450,287.64	3,215,608.80	40° 34' 0.656 N	104° 43' 26.148 W

TD at 12065.6 - TD / PBHL WAAG NORTH 3

### Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
TD / PBHL WAAG NOR - plan hits target - Point	0.00	0.50	7,138.0	-404.0	-4,056.2	1,450,288.02	3,215,608.81	40° 34' 0.660 N	104° 43' 26.148 W
LP WAAG NORTH 3 - plan hits target - Point	0.00	0.51	7,138.0	-466.3	427.9	1,450,265.74	3,220,093.28	40° 34' 0.048 N	104° 42' 28.044 W

# New Tech

## Planning Report - Geographic

<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WAAG 3 - Slot WAAG 3
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	WELL @ 4918.0ft (Xtreme 7)
<b>Project:</b>	SEC 19 T7N R65W	<b>MD Reference:</b>	WELL @ 4918.0ft (Xtreme 7)
<b>Site:</b>	WAAG NORTH	<b>North Reference:</b>	True
<b>Well:</b>	WAAG 3	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 01Aug14 jps		

### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
850.0	850.0	9 5/8"	0	0
7,581.0	7,138.0	7"	0	0

### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3665.40	3610.00	PARKMAN			
4410.00	4337.00	SUSSEX			
4812.50	4730.00	SHANNON			
7187.40	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
1,523.4	1,518.4	-28.9	61.0	Hold 12.47° Inc, 115.35° Az
6,027.7	5,916.6	-445.3	939.8	Start Drop -2.00
6,651.0	6,535.0	-474.2	1,000.8	Vertical
6,681.0	6,565.0	-474.2	1,000.8	KOP 10°/100
7,581.0	7,138.0	-466.3	427.9	Landing Pt 90° Inc, 270.79° Az
12,065.6	7,137.6	-404.4	-4,056.2	TD at 12065.6