

# **EXTRACTION OIL & GAS**

**SEC 19 T7N R65W**

**WAAG SOUTH**

**WAAG 21 - Slot WAAG 21**

**Wellbore #1**

**Plan: Plan #1 03Aug14 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 21 - Slot WAAG 21
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	WELL @ 4884.0ft (Xtreme 7)
<b>Project:</b>	SEC 19 T7N R65W	<b>MD Reference:</b>	WELL @ 4884.0ft (Xtreme 7)
<b>Site:</b>	WAAG SOUTH	<b>North Reference:</b>	True
<b>Well:</b>	WAAG 21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 03Aug14 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		

Site		WAAG SOUTH			
Site Position:		Northing:	1,445,760.46 ft	Latitude:	40° 33' 15.516 N
From:	Lat/Long	Easting:	3,220,253.02 ft	Longitude:	104° 42' 26.496 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.51 °

Well	WAAG 21 - Slot WAAG 21					
Well Position	+N/-S	0.0 ft	Northing:	1,445,782.49 ft	Latitude:	40° 33' 15.732 N
	+E/-W	0.0 ft	Easting:	3,220,272.27 ft	Longitude:	104° 42' 26.244 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,868.0 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	8/3/2014	8.42	67.08	52,887

<b>Design</b>	Plan #1 03Aug14 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	276.81

<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	
1,243.8	6.88	38.90	1,242.9	16.0	12.9	2.00	2.00	0.00	38.90	
6,228.7	6.88	38.90	6,192.1	480.5	387.7	0.00	0.00	0.00	0.00	
6,572.5	0.00	0.00	6,535.0	496.5	400.6	2.00	-2.00	0.00	180.00	
6,602.5	0.00	0.00	6,565.0	496.5	400.6	0.00	0.00	0.00	0.00	
7,502.5	90.00	270.62	7,138.0	502.7	-172.3	10.00	10.00	0.00	270.62	
11,937.5	90.00	270.62	7,138.0	550.5	-4,607.1	0.00	0.00	0.00	0.00	TD / PBHL WAAG SC

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## Planning Report - Geographic

<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WAAG 21 - Slot WAAG 21
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	WELL @ 4884.0ft (Xtreme 7)
<b>Project:</b>	SEC 19 T7N R65W	<b>MD Reference:</b>	WELL @ 4884.0ft (Xtreme 7)
<b>Site:</b>	WAAG SOUTH	<b>North Reference:</b>	True
<b>Well:</b>	WAAG 21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 03Aug14 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	1,445,782.49	3,220,272.27	40° 33' 15.732 N	104° 42' 26.244 W
100.0	0.00	0.00	100.0	0.0	0.0	1,445,782.49	3,220,272.27	40° 33' 15.732 N	104° 42' 26.244 W
200.0	0.00	0.00	200.0	0.0	0.0	1,445,782.49	3,220,272.27	40° 33' 15.732 N	104° 42' 26.244 W
300.0	0.00	0.00	300.0	0.0	0.0	1,445,782.49	3,220,272.27	40° 33' 15.732 N	104° 42' 26.244 W
400.0	0.00	0.00	400.0	0.0	0.0	1,445,782.49	3,220,272.27	40° 33' 15.732 N	104° 42' 26.244 W
500.0	0.00	0.00	500.0	0.0	0.0	1,445,782.49	3,220,272.27	40° 33' 15.732 N	104° 42' 26.244 W
600.0	0.00	0.00	600.0	0.0	0.0	1,445,782.49	3,220,272.27	40° 33' 15.732 N	104° 42' 26.244 W
700.0	0.00	0.00	700.0	0.0	0.0	1,445,782.49	3,220,272.27	40° 33' 15.732 N	104° 42' 26.244 W
800.0	0.00	0.00	800.0	0.0	0.0	1,445,782.49	3,220,272.27	40° 33' 15.732 N	104° 42' 26.244 W
850.0	0.00	0.00	850.0	0.0	0.0	1,445,782.49	3,220,272.27	40° 33' 15.732 N	104° 42' 26.244 W
<b>9 5/8"</b>									
900.0	0.00	0.00	900.0	0.0	0.0	1,445,782.49	3,220,272.27	40° 33' 15.732 N	104° 42' 26.244 W
<b>Start Build 2.00</b>									
1,000.0	2.00	38.90	1,000.0	1.4	1.1	1,445,783.86	3,220,273.36	40° 33' 15.745 N	104° 42' 26.230 W
1,100.0	4.00	38.90	1,099.8	5.4	4.4	1,445,787.96	3,220,276.61	40° 33' 15.786 N	104° 42' 26.187 W
1,200.0	6.00	38.90	1,199.5	12.2	9.9	1,445,794.79	3,220,282.02	40° 33' 15.853 N	104° 42' 26.116 W
1,243.8	6.88	38.90	1,242.9	16.0	12.9	1,445,798.64	3,220,285.07	40° 33' 15.890 N	104° 42' 26.076 W
<b>Hold 6.88° Inc, 38.90° Az</b>									
1,300.0	6.88	38.90	1,298.8	21.3	17.2	1,445,803.91	3,220,289.25	40° 33' 15.942 N	104° 42' 26.022 W
1,400.0	6.88	38.90	1,398.1	30.6	24.7	1,445,813.30	3,220,296.68	40° 33' 16.034 N	104° 42' 25.924 W
1,500.0	6.88	38.90	1,497.3	39.9	32.2	1,445,822.68	3,220,304.11	40° 33' 16.126 N	104° 42' 25.827 W
1,600.0	6.88	38.90	1,596.6	49.2	39.7	1,445,832.07	3,220,311.55	40° 33' 16.218 N	104° 42' 25.729 W
1,700.0	6.88	38.90	1,695.9	58.5	47.2	1,445,841.45	3,220,318.98	40° 33' 16.310 N	104° 42' 25.632 W
1,800.0	6.88	38.90	1,795.2	67.9	54.7	1,445,850.83	3,220,326.42	40° 33' 16.402 N	104° 42' 25.535 W
1,900.0	6.88	38.90	1,894.5	77.2	62.3	1,445,860.22	3,220,333.85	40° 33' 16.495 N	104° 42' 25.437 W
2,000.0	6.88	38.90	1,993.7	86.5	69.8	1,445,869.60	3,220,341.28	40° 33' 16.587 N	104° 42' 25.340 W
2,100.0	6.88	38.90	2,093.0	95.8	77.3	1,445,878.98	3,220,348.72	40° 33' 16.679 N	104° 42' 25.243 W
2,200.0	6.88	38.90	2,192.3	105.1	84.8	1,445,888.37	3,220,356.15	40° 33' 16.771 N	104° 42' 25.145 W
2,300.0	6.88	38.90	2,291.6	114.4	92.3	1,445,897.75	3,220,363.58	40° 33' 16.863 N	104° 42' 25.048 W
2,400.0	6.88	38.90	2,390.9	123.8	99.9	1,445,907.13	3,220,371.02	40° 33' 16.955 N	104° 42' 24.950 W
2,500.0	6.88	38.90	2,490.1	133.1	107.4	1,445,916.52	3,220,378.45	40° 33' 17.047 N	104° 42' 24.853 W
2,600.0	6.88	38.90	2,589.4	142.4	114.9	1,445,925.90	3,220,385.88	40° 33' 17.139 N	104° 42' 24.756 W
2,700.0	6.88	38.90	2,688.7	151.7	122.4	1,445,935.28	3,220,393.32	40° 33' 17.231 N	104° 42' 24.658 W
2,800.0	6.88	38.90	2,788.0	161.0	129.9	1,445,944.67	3,220,400.75	40° 33' 17.323 N	104° 42' 24.561 W
2,900.0	6.88	38.90	2,887.3	170.3	137.4	1,445,954.05	3,220,408.18	40° 33' 17.415 N	104° 42' 24.463 W
3,000.0	6.88	38.90	2,986.5	179.7	145.0	1,445,963.43	3,220,415.62	40° 33' 17.507 N	104° 42' 24.366 W
3,100.0	6.88	38.90	3,085.8	189.0	152.5	1,445,972.82	3,220,423.05	40° 33' 17.599 N	104° 42' 24.269 W
3,200.0	6.88	38.90	3,185.1	198.3	160.0	1,445,982.20	3,220,430.49	40° 33' 17.691 N	104° 42' 24.171 W
3,300.0	6.88	38.90	3,284.4	207.6	167.5	1,445,991.59	3,220,437.92	40° 33' 17.783 N	104° 42' 24.074 W
3,400.0	6.88	38.90	3,383.7	216.9	175.0	1,446,000.97	3,220,445.35	40° 33' 17.876 N	104° 42' 23.976 W
3,500.0	6.88	38.90	3,483.0	226.2	182.5	1,446,010.35	3,220,452.79	40° 33' 17.968 N	104° 42' 23.879 W
3,600.0	6.88	38.90	3,582.2	235.6	190.1	1,446,019.74	3,220,460.22	40° 33' 18.060 N	104° 42' 23.782 W
3,628.0	6.88	38.90	3,610.0	238.2	192.2	1,446,022.36	3,220,462.30	40° 33' 18.085 N	104° 42' 23.754 W
<b>PARKMAN</b>									
3,700.0	6.88	38.90	3,681.5	244.9	197.6	1,446,029.12	3,220,467.65	40° 33' 18.152 N	104° 42' 23.684 W
3,800.0	6.88	38.90	3,780.8	254.2	205.1	1,446,038.50	3,220,475.09	40° 33' 18.244 N	104° 42' 23.587 W
3,900.0	6.88	38.90	3,880.1	263.5	212.6	1,446,047.89	3,220,482.52	40° 33' 18.336 N	104° 42' 23.490 W
4,000.0	6.88	38.90	3,979.4	272.8	220.1	1,446,057.27	3,220,489.95	40° 33' 18.428 N	104° 42' 23.392 W
4,100.0	6.88	38.90	4,078.6	282.1	227.6	1,446,066.65	3,220,497.39	40° 33' 18.520 N	104° 42' 23.295 W
4,200.0	6.88	38.90	4,177.9	291.5	235.2	1,446,076.04	3,220,504.82	40° 33' 18.612 N	104° 42' 23.197 W
4,300.0	6.88	38.90	4,277.2	300.8	242.7	1,446,085.42	3,220,512.25	40° 33' 18.704 N	104° 42' 23.100 W
4,360.2	6.88	38.90	4,337.0	306.4	247.2	1,446,091.07	3,220,516.73	40° 33' 18.760 N	104° 42' 23.041 W
<b>SUSSEX</b>									

# New Tech

## Planning Report - Geographic

<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WAAG 21 - Slot WAAG 21
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	WELL @ 4884.0ft (Xtreme 7)
<b>Project:</b>	SEC 19 T7N R65W	<b>MD Reference:</b>	WELL @ 4884.0ft (Xtreme 7)
<b>Site:</b>	WAAG SOUTH	<b>North Reference:</b>	True
<b>Well:</b>	WAAG 21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 03Aug14 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	6.88	38.90	4,376.5	310.1	250.2	1,446,094.80	3,220,519.69	40° 33' 18.796 N	104° 42' 23.003 W
4,500.0	6.88	38.90	4,475.8	319.4	257.7	1,446,104.19	3,220,527.12	40° 33' 18.888 N	104° 42' 22.905 W
4,600.0	6.88	38.90	4,575.0	328.7	265.2	1,446,113.57	3,220,534.56	40° 33' 18.980 N	104° 42' 22.808 W
4,700.0	6.88	38.90	4,674.3	338.0	272.7	1,446,122.95	3,220,541.99	40° 33' 19.072 N	104° 42' 22.710 W
4,756.1	6.88	38.90	4,730.0	343.3	277.0	1,446,128.22	3,220,546.16	40° 33' 19.124 N	104° 42' 22.656 W
<b>SHANNON</b>									
4,800.0	6.88	38.90	4,773.6	347.4	280.3	1,446,132.34	3,220,549.42	40° 33' 19.164 N	104° 42' 22.613 W
4,900.0	6.88	38.90	4,872.9	356.7	287.8	1,446,141.72	3,220,556.86	40° 33' 19.256 N	104° 42' 22.516 W
5,000.0	6.88	38.90	4,972.2	366.0	295.3	1,446,151.11	3,220,564.29	40° 33' 19.349 N	104° 42' 22.418 W
5,100.0	6.88	38.90	5,071.4	375.3	302.8	1,446,160.49	3,220,571.72	40° 33' 19.441 N	104° 42' 22.321 W
5,200.0	6.88	38.90	5,170.7	384.6	310.3	1,446,169.87	3,220,579.16	40° 33' 19.533 N	104° 42' 22.223 W
5,300.0	6.88	38.90	5,270.0	393.9	317.8	1,446,179.26	3,220,586.59	40° 33' 19.625 N	104° 42' 22.126 W
5,400.0	6.88	38.90	5,369.3	403.3	325.4	1,446,188.64	3,220,594.02	40° 33' 19.717 N	104° 42' 22.029 W
5,500.0	6.88	38.90	5,468.6	412.6	332.9	1,446,198.02	3,220,601.46	40° 33' 19.809 N	104° 42' 21.931 W
5,600.0	6.88	38.90	5,567.8	421.9	340.4	1,446,207.41	3,220,608.89	40° 33' 19.901 N	104° 42' 21.834 W
5,700.0	6.88	38.90	5,667.1	431.2	347.9	1,446,216.79	3,220,616.32	40° 33' 19.993 N	104° 42' 21.736 W
5,800.0	6.88	38.90	5,766.4	440.5	355.4	1,446,226.17	3,220,623.76	40° 33' 20.085 N	104° 42' 21.639 W
5,900.0	6.88	38.90	5,865.7	449.8	363.0	1,446,235.56	3,220,631.19	40° 33' 20.177 N	104° 42' 21.542 W
6,000.0	6.88	38.90	5,965.0	459.2	370.5	1,446,244.94	3,220,638.63	40° 33' 20.269 N	104° 42' 21.444 W
6,100.0	6.88	38.90	6,064.3	468.5	378.0	1,446,254.32	3,220,646.06	40° 33' 20.361 N	104° 42' 21.347 W
6,200.0	6.88	38.90	6,163.5	477.8	385.5	1,446,263.71	3,220,653.49	40° 33' 20.453 N	104° 42' 21.250 W
6,228.7	6.88	38.90	6,192.1	480.5	387.7	1,446,266.40	3,220,655.63	40° 33' 20.480 N	104° 42' 21.222 W
<b>Start Drop -2.00</b>									
6,300.0	5.45	38.90	6,262.9	486.4	392.5	1,446,272.40	3,220,660.38	40° 33' 20.539 N	104° 42' 21.159 W
6,400.0	3.45	38.90	6,362.6	492.5	397.3	1,446,278.48	3,220,665.20	40° 33' 20.598 N	104° 42' 21.096 W
6,500.0	1.45	38.90	6,462.5	495.8	400.0	1,446,281.83	3,220,667.85	40° 33' 20.631 N	104° 42' 21.061 W
6,572.5	0.00	0.00	6,535.0	496.5	400.6	1,446,282.55	3,220,668.42	40° 33' 20.638 N	104° 42' 21.054 W
<b>Vertical</b>									
6,600.0	0.00	0.00	6,562.5	496.5	400.6	1,446,282.55	3,220,668.42	40° 33' 20.638 N	104° 42' 21.054 W
6,602.5	0.00	0.00	6,565.0	496.5	400.6	1,446,282.55	3,220,668.42	40° 33' 20.638 N	104° 42' 21.054 W
<b>KOP 10°/100</b>									
6,700.0	9.75	270.62	6,662.0	496.6	392.3	1,446,282.57	3,220,660.14	40° 33' 20.639 N	104° 42' 21.161 W
6,800.0	19.75	270.62	6,758.6	496.9	366.9	1,446,282.61	3,220,634.72	40° 33' 20.642 N	104° 42' 21.491 W
6,900.0	29.75	270.62	6,849.3	497.3	325.1	1,446,282.69	3,220,592.90	40° 33' 20.646 N	104° 42' 22.032 W
7,000.0	39.75	270.62	6,931.4	497.9	268.2	1,446,282.80	3,220,535.97	40° 33' 20.652 N	104° 42' 22.770 W
7,100.0	49.75	270.62	7,002.3	498.7	197.9	1,446,282.93	3,220,465.66	40° 33' 20.660 N	104° 42' 23.681 W
7,108.9	50.64	270.62	7,008.0	498.8	191.0	1,446,282.95	3,220,458.82	40° 33' 20.661 N	104° 42' 23.769 W
<b>NIOBRARA</b>									
7,200.0	59.75	270.62	7,059.9	499.6	116.3	1,446,283.09	3,220,384.10	40° 33' 20.669 N	104° 42' 24.737 W
7,300.0	69.75	270.62	7,102.5	500.6	26.0	1,446,283.26	3,220,293.77	40° 33' 20.678 N	104° 42' 25.908 W
7,400.0	79.75	270.62	7,128.8	501.6	-70.4	1,446,283.44	3,220,197.41	40° 33' 20.689 N	104° 42' 27.156 W
7,500.0	89.75	270.62	7,138.0	502.7	-169.8	1,446,283.62	3,220,097.96	40° 33' 20.699 N	104° 42' 28.444 W
7,502.5	90.00	270.62	7,138.0	502.7	-172.3	1,446,283.63	3,220,095.46	40° 33' 20.699 N	104° 42' 28.477 W
<b>Landing Pt 90° Inc, 270.62° Az - 7"</b>									
7,600.0	90.00	270.62	7,138.0	503.8	-269.8	1,446,283.81	3,219,997.96	40° 33' 20.710 N	104° 42' 29.740 W
7,700.0	90.00	270.62	7,138.0	504.8	-369.8	1,446,284.00	3,219,897.96	40° 33' 20.721 N	104° 42' 31.035 W
7,800.0	90.00	270.62	7,138.0	505.9	-469.8	1,446,284.19	3,219,797.96	40° 33' 20.731 N	104° 42' 32.331 W
7,900.0	90.00	270.62	7,138.0	507.0	-569.8	1,446,284.38	3,219,697.96	40° 33' 20.742 N	104° 42' 33.626 W
8,000.0	90.00	270.62	7,138.0	508.1	-669.8	1,446,284.57	3,219,597.96	40° 33' 20.753 N	104° 42' 34.922 W
8,100.0	90.00	270.62	7,138.0	509.2	-769.8	1,446,284.75	3,219,497.96	40° 33' 20.763 N	104° 42' 36.217 W
8,200.0	90.00	270.62	7,138.0	510.2	-869.8	1,446,284.94	3,219,397.96	40° 33' 20.774 N	104° 42' 37.513 W
8,300.0	90.00	270.62	7,138.0	511.3	-969.8	1,446,285.13	3,219,297.96	40° 33' 20.785 N	104° 42' 38.808 W
8,400.0	90.00	270.62	7,138.0	512.4	-1,069.8	1,446,285.32	3,219,197.96	40° 33' 20.795 N	104° 42' 40.104 W

# New Tech

## Planning Report - Geographic

<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WAAG 21 - Slot WAAG 21
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	WELL @ 4884.0ft (Xtreme 7)
<b>Project:</b>	SEC 19 T7N R65W	<b>MD Reference:</b>	WELL @ 4884.0ft (Xtreme 7)
<b>Site:</b>	WAAG SOUTH	<b>North Reference:</b>	True
<b>Well:</b>	WAAG 21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 03Aug14 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	270.62	7,137.9	513.5	-1,169.8	1,446,285.51	3,219,097.96	40° 33' 20.806 N	104° 42' 41.399 W	
8,600.0	90.00	270.62	7,137.9	514.6	-1,269.8	1,446,285.69	3,218,997.96	40° 33' 20.817 N	104° 42' 42.695 W	
8,700.0	90.00	270.62	7,137.9	515.7	-1,369.8	1,446,285.88	3,218,897.96	40° 33' 20.827 N	104° 42' 43.990 W	
8,800.0	90.00	270.62	7,137.9	516.7	-1,469.8	1,446,286.07	3,218,797.96	40° 33' 20.838 N	104° 42' 45.286 W	
8,900.0	90.00	270.62	7,137.9	517.8	-1,569.7	1,446,286.26	3,218,697.96	40° 33' 20.848 N	104° 42' 46.581 W	
9,000.0	90.00	270.62	7,137.9	518.9	-1,669.7	1,446,286.45	3,218,597.96	40° 33' 20.859 N	104° 42' 47.877 W	
9,100.0	90.00	270.62	7,137.9	520.0	-1,769.7	1,446,286.64	3,218,497.96	40° 33' 20.870 N	104° 42' 49.172 W	
9,200.0	90.00	270.62	7,137.9	521.1	-1,869.7	1,446,286.82	3,218,397.96	40° 33' 20.880 N	104° 42' 50.468 W	
9,300.0	90.00	270.62	7,137.9	522.2	-1,969.7	1,446,287.01	3,218,297.96	40° 33' 20.891 N	104° 42' 51.763 W	
9,400.0	90.00	270.62	7,137.9	523.2	-2,069.7	1,446,287.20	3,218,197.96	40° 33' 20.902 N	104° 42' 53.059 W	
9,500.0	90.00	270.62	7,137.9	524.3	-2,169.7	1,446,287.39	3,218,097.96	40° 33' 20.912 N	104° 42' 54.354 W	
9,600.0	90.00	270.62	7,137.9	525.4	-2,269.7	1,446,287.58	3,217,997.96	40° 33' 20.923 N	104° 42' 55.650 W	
9,700.0	90.00	270.62	7,137.9	526.5	-2,369.7	1,446,287.76	3,217,897.96	40° 33' 20.933 N	104° 42' 56.945 W	
9,800.0	90.00	270.62	7,137.9	527.6	-2,469.7	1,446,287.95	3,217,797.96	40° 33' 20.944 N	104° 42' 58.241 W	
9,900.0	90.00	270.62	7,137.9	528.6	-2,569.7	1,446,288.14	3,217,697.96	40° 33' 20.955 N	104° 42' 59.536 W	
10,000.0	90.00	270.62	7,137.9	529.7	-2,669.7	1,446,288.33	3,217,597.97	40° 33' 20.965 N	104° 43' 0.832 W	
10,100.0	90.00	270.62	7,137.9	530.8	-2,769.7	1,446,288.52	3,217,497.97	40° 33' 20.976 N	104° 43' 2.127 W	
10,200.0	90.00	270.62	7,137.9	531.9	-2,869.7	1,446,288.70	3,217,397.97	40° 33' 20.986 N	104° 43' 3.423 W	
10,300.0	90.00	270.62	7,137.9	533.0	-2,969.7	1,446,288.89	3,217,297.97	40° 33' 20.997 N	104° 43' 4.718 W	
10,400.0	90.00	270.62	7,137.9	534.1	-3,069.7	1,446,289.08	3,217,197.97	40° 33' 21.007 N	104° 43' 6.014 W	
10,500.0	90.00	270.62	7,137.9	535.1	-3,169.7	1,446,289.27	3,217,097.97	40° 33' 21.018 N	104° 43' 7.309 W	
10,600.0	90.00	270.62	7,137.9	536.2	-3,269.6	1,446,289.46	3,216,997.97	40° 33' 21.029 N	104° 43' 8.605 W	
10,700.0	90.00	270.62	7,137.9	537.3	-3,369.6	1,446,289.65	3,216,897.97	40° 33' 21.039 N	104° 43' 9.900 W	
10,800.0	90.00	270.62	7,137.9	538.4	-3,469.6	1,446,289.83	3,216,797.97	40° 33' 21.050 N	104° 43' 11.196 W	
10,900.0	90.00	270.62	7,137.9	539.5	-3,569.6	1,446,290.02	3,216,697.97	40° 33' 21.060 N	104° 43' 12.491 W	
11,000.0	90.00	270.62	7,137.9	540.5	-3,669.6	1,446,290.21	3,216,597.97	40° 33' 21.071 N	104° 43' 13.787 W	
11,100.0	90.00	270.62	7,137.9	541.6	-3,769.6	1,446,290.40	3,216,497.97	40° 33' 21.081 N	104° 43' 15.082 W	
11,200.0	90.00	270.62	7,137.8	542.7	-3,869.6	1,446,290.59	3,216,397.97	40° 33' 21.092 N	104° 43' 16.378 W	
11,300.0	90.00	270.62	7,137.8	543.8	-3,969.6	1,446,290.77	3,216,297.97	40° 33' 21.102 N	104° 43' 17.673 W	
11,400.0	90.00	270.62	7,137.8	544.9	-4,069.6	1,446,290.96	3,216,197.97	40° 33' 21.113 N	104° 43' 18.968 W	
11,500.0	90.00	270.62	7,137.8	546.0	-4,169.6	1,446,291.15	3,216,097.97	40° 33' 21.123 N	104° 43' 20.264 W	
11,600.0	90.00	270.62	7,137.8	547.0	-4,269.6	1,446,291.34	3,215,997.97	40° 33' 21.134 N	104° 43' 21.559 W	
11,700.0	90.00	270.62	7,137.8	548.1	-4,369.6	1,446,291.53	3,215,897.97	40° 33' 21.144 N	104° 43' 22.855 W	
11,800.0	90.00	270.62	7,137.8	549.2	-4,469.6	1,446,291.72	3,215,797.97	40° 33' 21.155 N	104° 43' 24.150 W	
11,900.0	90.00	270.62	7,137.8	550.3	-4,569.6	1,446,291.90	3,215,697.97	40° 33' 21.166 N	104° 43' 25.446 W	
11,937.5	90.00	270.62	7,138.0	550.5	-4,607.1	1,446,291.82	3,215,660.45	40° 33' 21.168 N	104° 43' 25.932 W	
TD at 11937.5 - TD / PBHL WAAG SOUTH 21										

Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
TD / PBHL WAAG SOUTH 21 - hit/miss target - Shape	0.00	0.00	7,138.0	550.5	-4,607.1	1,446,291.82	3,215,660.45	40° 33' 21.168 N	104° 43' 25.932 W	
LP WAAG SOUTH 21 - plan hits target - Point	0.00	0.00	7,138.0	502.7	-172.3	1,446,283.68	3,220,095.51	40° 33' 20.700 N	104° 42' 28.476 W	

**New Tech**  
Planning Report - Geographic

<b>Database:</b>	EDM 2003.16 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WAAG 21 - Slot WAAG 21
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	WELL @ 4884.0ft (Xtreme 7)
<b>Project:</b>	SEC 19 T7N R65W	<b>MD Reference:</b>	WELL @ 4884.0ft (Xtreme 7)
<b>Site:</b>	WAAG SOUTH	<b>North Reference:</b>	True
<b>Well:</b>	WAAG 21	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 03Aug14 mab		

**Casing Points**

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
850.0	850.0	9 5/8"	0	0
7,502.5	7,138.0	7"	0	0

**Formations**

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3628.00	3610.00	PARKMAN			
4360.20	4337.00	SUSSEX			
4756.10	4730.00	SHANNON			
7108.90	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
1,243.8	1,242.9	16.0	12.9	Hold 6.88° Inc, 38.90° Az
6,228.7	6,192.1	480.5	387.7	Start Drop -2.00
6,572.5	6,535.0	496.5	400.6	Vertical
6,602.5	6,565.0	496.5	400.6	KOP 10°/100
7,502.5	7,138.0	502.7	-172.3	Landing Pt 90° Inc, 270.62° Az
11,937.5	7,138.0	550.5	-4,607.1	TD at 11937.5