

EXTRACTION OIL & GAS

SEC 19 T7N R65W

WAAG MIDDLE

WAAG 17 - Slot WAAG 17

Wellbore #1

Plan: Plan #1 09Aug14 mab

Standard Planning Report - Geographic

11 August, 2014

New Tech

Planning Report - Geographic

Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well WAAG 17 - Slot WAAG 17
Company:	EXTRACTION OIL & GAS	TVD Reference:	WELL @ 4899.0ft (Xtreme 7)
Project:	SEC 19 T7N R65W	MD Reference:	WELL @ 4899.0ft (Xtreme 7)
Site:	WAAG MIDDLE	North Reference:	True
Well:	WAAG 17	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 09Aug14 mab		

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

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

Well	WAAG 17 - Slot WAAG 17					
Well Position	+N/-S	0.0 ft	Northing:	1,448,136.64 ft	Latitude:	40° 33' 38.988 N
	+E/-W	0.0 ft	Easting:	3,220,340.14 ft	Longitude:	104° 42' 25.092 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,883.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/9/2014	8.42	67.08	52,889

Design	Plan #1 09Aug14 mab			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	260.20

Plan Sections										
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	
1,410.8	10.22	159.72	1,408.1	-42.6	15.7	2.00	2.00	0.00	159.72	
6,104.0	10.22	159.72	6,026.9	-823.4	304.3	0.00	0.00	0.00	0.00	
6,614.8	0.00	0.00	6,535.0	-866.0	320.0	2.00	-2.00	0.00	180.00	
6,644.8	0.00	0.00	6,565.0	-866.0	320.0	0.00	0.00	0.00	0.00	
7,544.8	90.00	270.62	7,138.0	-859.8	-252.9	10.00	10.00	0.00	270.62	
11,993.5	90.00	270.61	7,138.0	-812.0	-4,701.4	0.00	0.00	0.00	0.00	TD / PBHL WAAG MI

New Tech

Planning Report - Geographic

Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well WAAG 17 - Slot WAAG 17
Company:	EXTRACTION OIL & GAS	TVD Reference:	WELL @ 4899.0ft (Xtreme 7)
Project:	SEC 19 T7N R65W	MD Reference:	WELL @ 4899.0ft (Xtreme 7)
Site:	WAAG MIDDLE	North Reference:	True
Well:	WAAG 17	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 09Aug14 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	1,448,136.64	3,220,340.14	40° 33' 38.988 N	104° 42' 25.092 W
100.0	0.00	0.00	100.0	0.0	0.0	1,448,136.64	3,220,340.14	40° 33' 38.988 N	104° 42' 25.092 W
200.0	0.00	0.00	200.0	0.0	0.0	1,448,136.64	3,220,340.14	40° 33' 38.988 N	104° 42' 25.092 W
300.0	0.00	0.00	300.0	0.0	0.0	1,448,136.64	3,220,340.14	40° 33' 38.988 N	104° 42' 25.092 W
400.0	0.00	0.00	400.0	0.0	0.0	1,448,136.64	3,220,340.14	40° 33' 38.988 N	104° 42' 25.092 W
500.0	0.00	0.00	500.0	0.0	0.0	1,448,136.64	3,220,340.14	40° 33' 38.988 N	104° 42' 25.092 W
600.0	0.00	0.00	600.0	0.0	0.0	1,448,136.64	3,220,340.14	40° 33' 38.988 N	104° 42' 25.092 W
700.0	0.00	0.00	700.0	0.0	0.0	1,448,136.64	3,220,340.14	40° 33' 38.988 N	104° 42' 25.092 W
800.0	0.00	0.00	800.0	0.0	0.0	1,448,136.64	3,220,340.14	40° 33' 38.988 N	104° 42' 25.092 W
850.0	0.00	0.00	850.0	0.0	0.0	1,448,136.64	3,220,340.14	40° 33' 38.988 N	104° 42' 25.092 W
9 5/8"									
900.0	0.00	0.00	900.0	0.0	0.0	1,448,136.64	3,220,340.14	40° 33' 38.988 N	104° 42' 25.092 W
Start Build 2.00									
1,000.0	2.00	159.72	1,000.0	-1.6	0.6	1,448,135.01	3,220,340.76	40° 33' 38.972 N	104° 42' 25.084 W
1,100.0	4.00	159.72	1,099.8	-6.5	2.4	1,448,130.12	3,220,342.62	40° 33' 38.923 N	104° 42' 25.061 W
1,200.0	6.00	159.72	1,199.5	-14.7	5.4	1,448,121.97	3,220,345.72	40° 33' 38.842 N	104° 42' 25.022 W
1,300.0	8.00	159.72	1,298.7	-26.2	9.7	1,448,110.57	3,220,350.04	40° 33' 38.730 N	104° 42' 24.967 W
1,400.0	10.00	159.72	1,397.5	-40.8	15.1	1,448,095.95	3,220,355.59	40° 33' 38.585 N	104° 42' 24.897 W
1,410.8	10.22	159.72	1,408.1	-42.6	15.7	1,448,094.18	3,220,356.27	40° 33' 38.567 N	104° 42' 24.888 W
Hold 10.22° Inc, 159.72° Az									
1,500.0	10.22	159.72	1,495.9	-57.4	21.2	1,448,079.39	3,220,361.88	40° 33' 38.420 N	104° 42' 24.817 W
1,600.0	10.22	159.72	1,594.3	-74.1	27.4	1,448,062.81	3,220,368.18	40° 33' 38.256 N	104° 42' 24.737 W
1,700.0	10.22	159.72	1,692.7	-90.7	33.5	1,448,046.23	3,220,374.48	40° 33' 38.092 N	104° 42' 24.658 W
1,800.0	10.22	159.72	1,791.1	-107.4	39.7	1,448,029.65	3,220,380.77	40° 33' 37.927 N	104° 42' 24.578 W
1,900.0	10.22	159.72	1,889.5	-124.0	45.8	1,448,013.06	3,220,387.07	40° 33' 37.763 N	104° 42' 24.498 W
2,000.0	10.22	159.72	1,988.0	-140.6	52.0	1,447,996.48	3,220,393.36	40° 33' 37.598 N	104° 42' 24.419 W
2,100.0	10.22	159.72	2,086.4	-157.3	58.1	1,447,979.90	3,220,399.66	40° 33' 37.434 N	104° 42' 24.339 W
2,200.0	10.22	159.72	2,184.8	-173.9	64.3	1,447,963.32	3,220,405.96	40° 33' 37.270 N	104° 42' 24.259 W
2,300.0	10.22	159.72	2,283.2	-190.5	70.4	1,447,946.74	3,220,412.25	40° 33' 37.105 N	104° 42' 24.180 W
2,400.0	10.22	159.72	2,381.6	-207.2	76.6	1,447,930.16	3,220,418.55	40° 33' 36.941 N	104° 42' 24.100 W
2,500.0	10.22	159.72	2,480.0	-223.8	82.7	1,447,913.58	3,220,424.84	40° 33' 36.776 N	104° 42' 24.020 W
2,600.0	10.22	159.72	2,578.4	-240.4	88.8	1,447,897.00	3,220,431.14	40° 33' 36.612 N	104° 42' 23.941 W
2,700.0	10.22	159.72	2,676.9	-257.1	95.0	1,447,880.42	3,220,437.44	40° 33' 36.448 N	104° 42' 23.861 W
2,800.0	10.22	159.72	2,775.3	-273.7	101.1	1,447,863.84	3,220,443.73	40° 33' 36.283 N	104° 42' 23.782 W
2,900.0	10.22	159.72	2,873.7	-290.4	107.3	1,447,847.25	3,220,450.03	40° 33' 36.119 N	104° 42' 23.702 W
3,000.0	10.22	159.72	2,972.1	-307.0	113.4	1,447,830.67	3,220,456.32	40° 33' 35.954 N	104° 42' 23.622 W
3,100.0	10.22	159.72	3,070.5	-323.6	119.6	1,447,814.09	3,220,462.62	40° 33' 35.790 N	104° 42' 23.543 W
3,200.0	10.22	159.72	3,168.9	-340.3	125.7	1,447,797.51	3,220,468.92	40° 33' 35.626 N	104° 42' 23.463 W
3,300.0	10.22	159.72	3,267.3	-356.9	131.9	1,447,780.93	3,220,475.21	40° 33' 35.461 N	104° 42' 23.383 W
3,400.0	10.22	159.72	3,365.8	-373.5	138.0	1,447,764.35	3,220,481.51	40° 33' 35.297 N	104° 42' 23.304 W
3,500.0	10.22	159.72	3,464.2	-390.2	144.2	1,447,747.77	3,220,487.80	40° 33' 35.132 N	104° 42' 23.224 W
3,600.0	10.22	159.72	3,562.6	-406.8	150.3	1,447,731.19	3,220,494.10	40° 33' 34.968 N	104° 42' 23.144 W
3,648.2	10.22	159.72	3,610.0	-414.8	153.3	1,447,723.20	3,220,497.13	40° 33' 34.889 N	104° 42' 23.106 W
PARKMAN									
3,700.0	10.22	159.72	3,661.0	-423.4	156.5	1,447,714.61	3,220,500.40	40° 33' 34.804 N	104° 42' 23.065 W
3,800.0	10.22	159.72	3,759.4	-440.1	162.6	1,447,698.02	3,220,506.69	40° 33' 34.639 N	104° 42' 22.985 W
3,900.0	10.22	159.72	3,857.8	-456.7	168.8	1,447,681.44	3,220,512.99	40° 33' 34.475 N	104° 42' 22.905 W
4,000.0	10.22	159.72	3,956.2	-473.4	174.9	1,447,664.86	3,220,519.28	40° 33' 34.310 N	104° 42' 22.826 W
4,100.0	10.22	159.72	4,054.7	-490.0	181.1	1,447,648.28	3,220,525.58	40° 33' 34.146 N	104° 42' 22.746 W
4,200.0	10.22	159.72	4,153.1	-506.6	187.2	1,447,631.70	3,220,531.88	40° 33' 33.982 N	104° 42' 22.666 W
4,300.0	10.22	159.72	4,251.5	-523.3	193.4	1,447,615.12	3,220,538.17	40° 33' 33.817 N	104° 42' 22.587 W
4,386.9	10.22	159.72	4,337.0	-537.7	198.7	1,447,600.71	3,220,543.64	40° 33' 33.674 N	104° 42' 22.518 W
SUSSEX									

New Tech

Planning Report - Geographic

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Company:	EXTRACTION OIL & GAS	TVD Reference:	WELL @ 4899.0ft (Xtreme 7)
Project:	SEC 19 T7N R65W	MD Reference:	WELL @ 4899.0ft (Xtreme 7)
Site:	WAAG MIDDLE	North Reference:	True
Well:	WAAG 17	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 09Aug14 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	10.22	159.72	4,349.9	-539.9	199.5	1,447,598.54	3,220,544.47	40° 33' 33.653 N	104° 42' 22.507 W
4,500.0	10.22	159.72	4,448.3	-556.5	205.7	1,447,581.96	3,220,550.76	40° 33' 33.488 N	104° 42' 22.428 W
4,600.0	10.22	159.72	4,546.7	-573.2	211.8	1,447,565.38	3,220,557.06	40° 33' 33.324 N	104° 42' 22.348 W
4,700.0	10.22	159.72	4,645.1	-589.8	217.9	1,447,548.80	3,220,563.36	40° 33' 33.160 N	104° 42' 22.268 W
4,786.2	10.22	159.72	4,730.0	-604.2	223.2	1,447,534.50	3,220,568.78	40° 33' 33.018 N	104° 42' 22.200 W
SHANNON									
4,800.0	10.22	159.72	4,743.6	-606.5	224.1	1,447,532.21	3,220,569.65	40° 33' 32.995 N	104° 42' 22.189 W
4,900.0	10.22	159.72	4,842.0	-623.1	230.2	1,447,515.63	3,220,575.95	40° 33' 32.831 N	104° 42' 22.109 W
5,000.0	10.22	159.72	4,940.4	-639.7	236.4	1,447,499.05	3,220,582.24	40° 33' 32.666 N	104° 42' 22.029 W
5,100.0	10.22	159.72	5,038.8	-656.4	242.5	1,447,482.47	3,220,588.54	40° 33' 32.502 N	104° 42' 21.950 W
5,200.0	10.22	159.72	5,137.2	-673.0	248.7	1,447,465.89	3,220,594.84	40° 33' 32.338 N	104° 42' 21.870 W
5,300.0	10.22	159.72	5,235.6	-689.6	254.8	1,447,449.31	3,220,601.13	40° 33' 32.173 N	104° 42' 21.790 W
5,400.0	10.22	159.72	5,334.1	-706.3	261.0	1,447,432.73	3,220,607.43	40° 33' 32.009 N	104° 42' 21.711 W
5,500.0	10.22	159.72	5,432.5	-722.9	267.1	1,447,416.15	3,220,613.73	40° 33' 31.844 N	104° 42' 21.631 W
5,600.0	10.22	159.72	5,530.9	-739.5	273.3	1,447,399.57	3,220,620.02	40° 33' 31.680 N	104° 42' 21.551 W
5,700.0	10.22	159.72	5,629.3	-756.2	279.4	1,447,382.98	3,220,626.32	40° 33' 31.516 N	104° 42' 21.472 W
5,800.0	10.22	159.72	5,727.7	-772.8	285.6	1,447,366.40	3,220,632.61	40° 33' 31.351 N	104° 42' 21.392 W
5,900.0	10.22	159.72	5,826.1	-789.5	291.7	1,447,349.82	3,220,638.91	40° 33' 31.187 N	104° 42' 21.312 W
6,000.0	10.22	159.72	5,924.5	-806.1	297.9	1,447,333.24	3,220,645.21	40° 33' 31.022 N	104° 42' 21.233 W
6,100.0	10.22	159.72	6,023.0	-822.7	304.0	1,447,316.66	3,220,651.50	40° 33' 30.858 N	104° 42' 21.153 W
6,104.0	10.22	159.72	6,026.9	-823.4	304.3	1,447,316.00	3,220,651.75	40° 33' 30.851 N	104° 42' 21.150 W
Start Drop -2.00									
6,200.0	8.30	159.72	6,121.6	-837.9	309.6	1,447,301.56	3,220,657.23	40° 33' 30.708 N	104° 42' 21.081 W
6,300.0	6.30	159.72	6,220.8	-849.8	314.0	1,447,289.69	3,220,661.74	40° 33' 30.591 N	104° 42' 21.024 W
6,400.0	4.30	159.72	6,320.4	-858.4	317.2	1,447,281.06	3,220,665.02	40° 33' 30.505 N	104° 42' 20.982 W
6,500.0	2.30	159.72	6,420.2	-863.8	319.2	1,447,275.69	3,220,667.06	40° 33' 30.452 N	104° 42' 20.956 W
6,600.0	0.30	159.72	6,520.2	-866.0	320.0	1,447,273.57	3,220,667.86	40° 33' 30.431 N	104° 42' 20.946 W
6,614.8	0.00	0.00	6,535.0	-866.0	320.0	1,447,273.54	3,220,667.88	40° 33' 30.430 N	104° 42' 20.946 W
Vertical									
6,644.8	0.00	0.00	6,565.0	-866.0	320.0	1,447,273.54	3,220,667.88	40° 33' 30.430 N	104° 42' 20.946 W
KOP 10°/100									
6,700.0	5.52	270.62	6,620.1	-866.0	317.3	1,447,273.54	3,220,665.22	40° 33' 30.431 N	104° 42' 20.980 W
6,800.0	15.52	270.62	6,718.3	-865.8	299.1	1,447,273.57	3,220,646.99	40° 33' 30.433 N	104° 42' 21.217 W
6,900.0	25.52	270.62	6,811.8	-865.4	264.1	1,447,273.64	3,220,611.98	40° 33' 30.436 N	104° 42' 21.670 W
7,000.0	35.52	270.62	6,897.9	-864.8	213.4	1,447,273.74	3,220,561.26	40° 33' 30.442 N	104° 42' 22.327 W
7,100.0	45.52	270.62	6,973.8	-864.1	148.5	1,447,273.86	3,220,496.38	40° 33' 30.449 N	104° 42' 23.168 W
7,151.2	50.64	270.62	7,008.0	-863.7	110.4	1,447,273.93	3,220,458.28	40° 33' 30.453 N	104° 42' 23.661 W
NIOBRARA									
7,200.0	55.52	270.62	7,037.3	-863.3	71.4	1,447,274.00	3,220,419.29	40° 33' 30.457 N	104° 42' 24.167 W
7,300.0	65.52	270.62	7,086.4	-862.4	-15.5	1,447,274.17	3,220,332.35	40° 33' 30.466 N	104° 42' 25.293 W
7,400.0	75.52	270.62	7,119.8	-861.4	-109.7	1,447,274.34	3,220,238.19	40° 33' 30.476 N	104° 42' 26.513 W
7,500.0	85.52	270.62	7,136.2	-860.3	-208.2	1,447,274.53	3,220,139.69	40° 33' 30.487 N	104° 42' 27.789 W
7,544.8	90.00	270.62	7,138.0	-859.8	-252.9	1,447,274.61	3,220,094.92	40° 33' 30.492 N	104° 42' 28.369 W
Landing Pt 90° Inc, 270.62° Az - 7"									
7,600.0	90.00	270.62	7,138.0	-859.2	-308.1	1,447,274.72	3,220,039.73	40° 33' 30.498 N	104° 42' 29.084 W
7,700.0	90.00	270.62	7,138.0	-858.1	-408.1	1,447,274.90	3,219,939.73	40° 33' 30.508 N	104° 42' 30.379 W
7,800.0	90.00	270.62	7,138.0	-857.0	-508.1	1,447,275.09	3,219,839.73	40° 33' 30.519 N	104° 42' 31.675 W
7,900.0	90.00	270.62	7,138.0	-856.0	-608.1	1,447,275.28	3,219,739.73	40° 33' 30.530 N	104° 42' 32.971 W
8,000.0	90.00	270.62	7,138.0	-854.9	-708.1	1,447,275.47	3,219,639.73	40° 33' 30.540 N	104° 42' 34.266 W
8,100.0	90.00	270.62	7,138.0	-853.8	-808.1	1,447,275.65	3,219,539.73	40° 33' 30.551 N	104° 42' 35.562 W
8,200.0	90.00	270.62	7,138.0	-852.7	-908.1	1,447,275.84	3,219,439.73	40° 33' 30.562 N	104° 42' 36.857 W
8,300.0	90.00	270.62	7,137.9	-851.6	-1,008.1	1,447,276.03	3,219,339.73	40° 33' 30.572 N	104° 42' 38.153 W
8,400.0	90.00	270.62	7,137.9	-850.5	-1,108.1	1,447,276.22	3,219,239.73	40° 33' 30.583 N	104° 42' 39.448 W

New Tech

Planning Report - Geographic

Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well WAAG 17 - Slot WAAG 17
Company:	EXTRACTION OIL & GAS	TVD Reference:	WELL @ 4899.0ft (Xtreme 7)
Project:	SEC 19 T7N R65W	MD Reference:	WELL @ 4899.0ft (Xtreme 7)
Site:	WAAG MIDDLE	North Reference:	True
Well:	WAAG 17	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 09Aug14 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	-849.5	-1,208.1	1,447,276.41	3,219,139.73	40° 33' 30.594 N	104° 42' 40.744 W	
8,600.0	90.00	270.62	7,137.9	-848.4	-1,308.1	1,447,276.59	3,219,039.73	40° 33' 30.604 N	104° 42' 42.039 W	
8,700.0	90.00	270.62	7,137.9	-847.3	-1,408.0	1,447,276.78	3,218,939.73	40° 33' 30.615 N	104° 42' 43.335 W	
8,800.0	90.00	270.62	7,137.9	-846.2	-1,508.0	1,447,276.97	3,218,839.73	40° 33' 30.625 N	104° 42' 44.630 W	
8,900.0	90.00	270.62	7,137.9	-845.1	-1,608.0	1,447,277.16	3,218,739.73	40° 33' 30.636 N	104° 42' 45.926 W	
9,000.0	90.00	270.62	7,137.9	-844.1	-1,708.0	1,447,277.34	3,218,639.73	40° 33' 30.647 N	104° 42' 47.222 W	
9,100.0	90.00	270.62	7,137.9	-843.0	-1,808.0	1,447,277.53	3,218,539.73	40° 33' 30.657 N	104° 42' 48.517 W	
9,200.0	90.00	270.62	7,137.9	-841.9	-1,908.0	1,447,277.72	3,218,439.73	40° 33' 30.668 N	104° 42' 49.813 W	
9,300.0	90.00	270.62	7,137.9	-840.8	-2,008.0	1,447,277.91	3,218,339.73	40° 33' 30.679 N	104° 42' 51.108 W	
9,400.0	90.00	270.62	7,137.9	-839.7	-2,108.0	1,447,278.10	3,218,239.73	40° 33' 30.689 N	104° 42' 52.404 W	
9,500.0	90.00	270.62	7,137.9	-838.6	-2,208.0	1,447,278.28	3,218,139.74	40° 33' 30.700 N	104° 42' 53.699 W	
9,600.0	90.00	270.62	7,137.9	-837.6	-2,308.0	1,447,278.47	3,218,039.74	40° 33' 30.710 N	104° 42' 54.995 W	
9,700.0	90.00	270.62	7,137.9	-836.5	-2,408.0	1,447,278.66	3,217,939.74	40° 33' 30.721 N	104° 42' 56.290 W	
9,800.0	90.00	270.62	7,137.9	-835.4	-2,508.0	1,447,278.85	3,217,839.74	40° 33' 30.732 N	104° 42' 57.586 W	
9,900.0	90.00	270.62	7,137.9	-834.3	-2,608.0	1,447,279.03	3,217,739.74	40° 33' 30.742 N	104° 42' 58.881 W	
10,000.0	90.00	270.62	7,137.9	-833.2	-2,708.0	1,447,279.22	3,217,639.74	40° 33' 30.753 N	104° 43' 0.177 W	
10,100.0	90.00	270.62	7,137.9	-832.2	-2,808.0	1,447,279.41	3,217,539.74	40° 33' 30.763 N	104° 43' 1.473 W	
10,200.0	90.00	270.62	7,137.8	-831.1	-2,908.0	1,447,279.60	3,217,439.74	40° 33' 30.774 N	104° 43' 2.768 W	
10,300.0	90.00	270.62	7,137.8	-830.0	-3,008.0	1,447,279.79	3,217,339.74	40° 33' 30.784 N	104° 43' 4.064 W	
10,400.0	90.01	270.62	7,137.8	-828.9	-3,107.9	1,447,279.97	3,217,239.74	40° 33' 30.795 N	104° 43' 5.359 W	
10,500.0	90.01	270.62	7,137.8	-827.8	-3,207.9	1,447,280.16	3,217,139.74	40° 33' 30.806 N	104° 43' 6.655 W	
10,600.0	90.01	270.62	7,137.8	-826.7	-3,307.9	1,447,280.35	3,217,039.74	40° 33' 30.816 N	104° 43' 7.950 W	
10,700.0	90.01	270.62	7,137.8	-825.7	-3,407.9	1,447,280.54	3,216,939.74	40° 33' 30.827 N	104° 43' 9.246 W	
10,800.0	90.01	270.62	7,137.8	-824.6	-3,507.9	1,447,280.72	3,216,839.74	40° 33' 30.837 N	104° 43' 10.541 W	
10,900.0	90.01	270.62	7,137.8	-823.5	-3,607.9	1,447,280.91	3,216,739.74	40° 33' 30.848 N	104° 43' 11.837 W	
11,000.0	90.01	270.62	7,137.8	-822.4	-3,707.9	1,447,281.10	3,216,639.74	40° 33' 30.858 N	104° 43' 13.132 W	
11,100.0	90.01	270.62	7,137.8	-821.3	-3,807.9	1,447,281.29	3,216,539.74	40° 33' 30.869 N	104° 43' 14.428 W	
11,200.0	90.01	270.62	7,137.8	-820.2	-3,907.9	1,447,281.48	3,216,439.74	40° 33' 30.879 N	104° 43' 15.724 W	
11,300.0	90.01	270.62	7,137.7	-819.2	-4,007.9	1,447,281.66	3,216,339.74	40° 33' 30.890 N	104° 43' 17.019 W	
11,400.0	90.01	270.62	7,137.7	-818.1	-4,107.9	1,447,281.85	3,216,239.74	40° 33' 30.901 N	104° 43' 18.315 W	
11,500.0	90.01	270.62	7,137.7	-817.0	-4,207.9	1,447,282.04	3,216,139.74	40° 33' 30.911 N	104° 43' 19.610 W	
11,600.0	90.01	270.62	7,137.7	-815.9	-4,307.9	1,447,282.23	3,216,039.74	40° 33' 30.922 N	104° 43' 20.906 W	
11,700.0	90.01	270.62	7,137.7	-814.8	-4,407.9	1,447,282.41	3,215,939.74	40° 33' 30.932 N	104° 43' 22.201 W	
11,800.0	90.01	270.62	7,137.7	-813.8	-4,507.9	1,447,282.60	3,215,839.74	40° 33' 30.943 N	104° 43' 23.497 W	
11,900.0	90.01	270.62	7,137.7	-812.7	-4,607.9	1,447,282.79	3,215,739.74	40° 33' 30.953 N	104° 43' 24.792 W	
11,993.5	90.00	270.61	7,138.0	-812.0	-4,701.4	1,447,282.66	3,215,646.22	40° 33' 30.960 N	104° 43' 26.004 W	
TD at 11993.5 - TD / PBHL WAAG MIDDLE 17										

Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
- hit/miss target										
- Shape										
TD / PBHL WAAG MIDDLE	0.00	0.00	7,138.0	-812.0	-4,701.4	1,447,282.66	3,215,646.22	40° 33' 30.960 N	104° 43' 26.004 W	
- plan hits target										
- Point										
LP WAAG MIDDLE 17	0.00	0.00	7,138.0	-859.8	-252.9	1,447,274.64	3,220,094.99	40° 33' 30.492 N	104° 42' 28.368 W	
- plan hits target										
- Point										

New Tech

Planning Report - Geographic

Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well WAAG 17 - Slot WAAG 17
Company:	EXTRACTION OIL & GAS	TVD Reference:	WELL @ 4899.0ft (Xtreme 7)
Project:	SEC 19 T7N R65W	MD Reference:	WELL @ 4899.0ft (Xtreme 7)
Site:	WAAG MIDDLE	North Reference:	True
Well:	WAAG 17	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 09Aug14 mab		

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")	
850.0	850.0	9 5/8"	0	0	
7,544.8	7,138.0	7"	0	0	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3648.20	3610.00	PARKMAN			
4386.90	4337.00	SUSSEX			
4786.20	4730.00	SHANNON			
7151.20	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			
		+N/-S (ft)	+E/-W (ft)	Comment	
900.0	900.0	0.0	0.0	Start Build 2.00	
1,410.8	1,408.1	-42.6	15.7	Hold 10.22° Inc, 159.72° Az	
6,104.0	6,026.9	-823.4	304.3	Start Drop -2.00	
6,614.8	6,535.0	-866.0	320.0	Vertical	
6,644.8	6,565.0	-866.0	320.0	KOP 10°/100	
7,544.8	7,138.0	-859.8	-252.9	Landing Pt 90° Inc, 270.62° Az	
11,993.5	7,138.0	-812.0	-4,701.4	TD at 11993.5	