

EXTRACTION OIL & GAS

SEC 19 T7N R65W

WAAG SOUTH

WAAG 24 - Slot WAAG 24

Wellbore #1

Plan: Plan #1 03Aug14 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 24 - Slot WAAG 24
Company:	EXTRACTION OIL & GAS	TVD Reference:	WELL @ 4883.0ft (Xtreme 7)
Project:	SEC 19 T7N R65W	MD Reference:	WELL @ 4883.0ft (Xtreme 7)
Site:	WAAG SOUTH	North Reference:	True
Well:	WAAG 24	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1 03Aug14 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 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 24 - Slot WAAG 24					
Well Position	+N/-S	0.0 ft	Northing:	1,445,723.65 ft	Latitude:	40° 33' 15.156 N
	+E/-W	0.0 ft	Easting:	3,220,211.67 ft	Longitude:	104° 42' 27.036 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,867.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/3/2014	8.42	67.08	52,887

Design	Plan #1 03Aug14 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	269.36

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	
1,148.3	4.97	102.91	1,148.0	-2.4	10.5	2.00	2.00	0.00	102.91	
6,306.7	4.97	102.91	6,287.0	-102.2	445.7	0.00	0.00	0.00	0.00	
6,555.0	0.00	0.00	6,535.0	-104.6	456.2	2.00	-2.00	0.00	180.00	
6,585.0	0.00	0.00	6,565.0	-104.6	456.2	0.00	0.00	0.00	0.00	
7,485.0	90.00	270.62	7,138.0	-98.4	-116.7	10.00	10.00	0.00	270.62	
11,911.8	90.00	270.62	7,138.0	-50.6	-4,543.3	0.00	0.00	0.00	0.00	TD / PBHL WAAG SC

New Tech

Planning Report - Geographic

Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well WAAG 24 - Slot WAAG 24
Company:	EXTRACTION OIL & GAS	TVD Reference:	WELL @ 4883.0ft (Xtreme 7)
Project:	SEC 19 T7N R65W	MD Reference:	WELL @ 4883.0ft (Xtreme 7)
Site:	WAAG SOUTH	North Reference:	True
Well:	WAAG 24	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	1,445,723.65	3,220,211.67	40° 33' 15.156 N	104° 42' 27.036 W
100.0	0.00	0.00	100.0	0.0	0.0	1,445,723.65	3,220,211.67	40° 33' 15.156 N	104° 42' 27.036 W
200.0	0.00	0.00	200.0	0.0	0.0	1,445,723.65	3,220,211.67	40° 33' 15.156 N	104° 42' 27.036 W
300.0	0.00	0.00	300.0	0.0	0.0	1,445,723.65	3,220,211.67	40° 33' 15.156 N	104° 42' 27.036 W
400.0	0.00	0.00	400.0	0.0	0.0	1,445,723.65	3,220,211.67	40° 33' 15.156 N	104° 42' 27.036 W
500.0	0.00	0.00	500.0	0.0	0.0	1,445,723.65	3,220,211.67	40° 33' 15.156 N	104° 42' 27.036 W
600.0	0.00	0.00	600.0	0.0	0.0	1,445,723.65	3,220,211.67	40° 33' 15.156 N	104° 42' 27.036 W
700.0	0.00	0.00	700.0	0.0	0.0	1,445,723.65	3,220,211.67	40° 33' 15.156 N	104° 42' 27.036 W
800.0	0.00	0.00	800.0	0.0	0.0	1,445,723.65	3,220,211.67	40° 33' 15.156 N	104° 42' 27.036 W
850.0	0.00	0.00	850.0	0.0	0.0	1,445,723.65	3,220,211.67	40° 33' 15.156 N	104° 42' 27.036 W
9 5/8"									
900.0	0.00	0.00	900.0	0.0	0.0	1,445,723.65	3,220,211.67	40° 33' 15.156 N	104° 42' 27.036 W
Start Build 2.00									
1,000.0	2.00	102.91	1,000.0	-0.4	1.7	1,445,723.28	3,220,213.37	40° 33' 15.152 N	104° 42' 27.014 W
1,100.0	4.00	102.91	1,099.8	-1.6	6.8	1,445,722.15	3,220,218.48	40° 33' 15.141 N	104° 42' 26.948 W
1,148.3	4.97	102.91	1,148.0	-2.4	10.5	1,445,721.34	3,220,222.17	40° 33' 15.132 N	104° 42' 26.900 W
Hold 4.97° Inc, 102.91° Az									
1,200.0	4.97	102.91	1,199.5	-3.4	14.8	1,445,720.38	3,220,226.54	40° 33' 15.122 N	104° 42' 26.844 W
1,300.0	4.97	102.91	1,299.1	-5.3	23.3	1,445,718.52	3,220,234.99	40° 33' 15.103 N	104° 42' 26.734 W
1,400.0	4.97	102.91	1,398.7	-7.3	31.7	1,445,716.66	3,220,243.45	40° 33' 15.084 N	104° 42' 26.625 W
1,500.0	4.97	102.91	1,498.4	-9.2	40.2	1,445,714.80	3,220,251.90	40° 33' 15.065 N	104° 42' 26.516 W
1,600.0	4.97	102.91	1,598.0	-11.1	48.6	1,445,712.95	3,220,260.36	40° 33' 15.046 N	104° 42' 26.406 W
1,700.0	4.97	102.91	1,697.6	-13.1	57.0	1,445,711.09	3,220,268.81	40° 33' 15.027 N	104° 42' 26.297 W
1,800.0	4.97	102.91	1,797.2	-15.0	65.5	1,445,709.23	3,220,277.27	40° 33' 15.008 N	104° 42' 26.188 W
1,900.0	4.97	102.91	1,896.9	-16.9	73.9	1,445,707.37	3,220,285.72	40° 33' 14.988 N	104° 42' 26.079 W
2,000.0	4.97	102.91	1,996.5	-18.9	82.3	1,445,705.51	3,220,294.17	40° 33' 14.969 N	104° 42' 25.969 W
2,100.0	4.97	102.91	2,096.1	-20.8	90.8	1,445,703.65	3,220,302.63	40° 33' 14.950 N	104° 42' 25.860 W
2,200.0	4.97	102.91	2,195.7	-22.7	99.2	1,445,701.79	3,220,311.08	40° 33' 14.931 N	104° 42' 25.751 W
2,300.0	4.97	102.91	2,295.4	-24.7	107.7	1,445,699.93	3,220,319.54	40° 33' 14.912 N	104° 42' 25.641 W
2,400.0	4.97	102.91	2,395.0	-26.6	116.1	1,445,698.07	3,220,327.99	40° 33' 14.893 N	104° 42' 25.532 W
2,500.0	4.97	102.91	2,494.6	-28.6	124.5	1,445,696.21	3,220,336.45	40° 33' 14.874 N	104° 42' 25.423 W
2,600.0	4.97	102.91	2,594.2	-30.5	133.0	1,445,694.36	3,220,344.90	40° 33' 14.855 N	104° 42' 25.313 W
2,700.0	4.97	102.91	2,693.9	-32.4	141.4	1,445,692.50	3,220,353.36	40° 33' 14.836 N	104° 42' 25.204 W
2,800.0	4.97	102.91	2,793.5	-34.4	149.8	1,445,690.64	3,220,361.81	40° 33' 14.816 N	104° 42' 25.095 W
2,900.0	4.97	102.91	2,893.1	-36.3	158.3	1,445,688.78	3,220,370.26	40° 33' 14.797 N	104° 42' 24.985 W
3,000.0	4.97	102.91	2,992.7	-38.2	166.7	1,445,686.92	3,220,378.72	40° 33' 14.778 N	104° 42' 24.876 W
3,100.0	4.97	102.91	3,092.4	-40.2	175.2	1,445,685.06	3,220,387.17	40° 33' 14.759 N	104° 42' 24.767 W
3,200.0	4.97	102.91	3,192.0	-42.1	183.6	1,445,683.20	3,220,395.63	40° 33' 14.740 N	104° 42' 24.657 W
3,300.0	4.97	102.91	3,291.6	-44.0	192.0	1,445,681.34	3,220,404.08	40° 33' 14.721 N	104° 42' 24.548 W
3,400.0	4.97	102.91	3,391.2	-46.0	200.5	1,445,679.48	3,220,412.54	40° 33' 14.702 N	104° 42' 24.439 W
3,500.0	4.97	102.91	3,490.9	-47.9	208.9	1,445,677.62	3,220,420.99	40° 33' 14.683 N	104° 42' 24.330 W
3,600.0	4.97	102.91	3,590.5	-49.8	217.3	1,445,675.77	3,220,429.44	40° 33' 14.663 N	104° 42' 24.220 W
3,619.6	4.97	102.91	3,610.0	-50.2	219.0	1,445,675.40	3,220,431.10	40° 33' 14.660 N	104° 42' 24.199 W
PARKMAN									
3,700.0	4.97	102.91	3,690.1	-51.8	225.8	1,445,673.91	3,220,437.90	40° 33' 14.644 N	104° 42' 24.111 W
3,800.0	4.97	102.91	3,789.7	-53.7	234.2	1,445,672.05	3,220,446.35	40° 33' 14.625 N	104° 42' 24.002 W
3,900.0	4.97	102.91	3,889.4	-55.6	242.7	1,445,670.19	3,220,454.81	40° 33' 14.606 N	104° 42' 23.892 W
4,000.0	4.97	102.91	3,989.0	-57.6	251.1	1,445,668.33	3,220,463.26	40° 33' 14.587 N	104° 42' 23.783 W
4,100.0	4.97	102.91	4,088.6	-59.5	259.5	1,445,666.47	3,220,471.72	40° 33' 14.568 N	104° 42' 23.674 W
4,200.0	4.97	102.91	4,188.2	-61.4	268.0	1,445,664.61	3,220,480.17	40° 33' 14.549 N	104° 42' 23.564 W
4,300.0	4.97	102.91	4,287.9	-63.4	276.4	1,445,662.75	3,220,488.63	40° 33' 14.530 N	104° 42' 23.455 W
4,349.3	4.97	102.91	4,337.0	-64.3	280.6	1,445,661.83	3,220,492.80	40° 33' 14.520 N	104° 42' 23.401 W
SUSSEX									

New Tech

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Project:	SEC 19 T7N R65W	MD Reference:	WELL @ 4883.0ft (Xtreme 7)
Site:	WAAG SOUTH	North Reference:	True
Well:	WAAG 24	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	4.97	102.91	4,387.5	-65.3	284.8	1,445,660.89	3,220,497.08	40° 33' 14.511 N	104° 42' 23.346 W
4,500.0	4.97	102.91	4,487.1	-67.2	293.3	1,445,659.03	3,220,505.53	40° 33' 14.491 N	104° 42' 23.236 W
4,600.0	4.97	102.91	4,586.7	-69.2	301.7	1,445,657.17	3,220,513.99	40° 33' 14.472 N	104° 42' 23.127 W
4,700.0	4.97	102.91	4,686.4	-71.1	310.2	1,445,655.32	3,220,522.44	40° 33' 14.453 N	104° 42' 23.018 W
4,743.8	4.97	102.91	4,730.0	-72.0	313.9	1,445,654.50	3,220,526.15	40° 33' 14.445 N	104° 42' 22.970 W
SHANNON									
4,800.0	4.97	102.91	4,786.0	-73.0	318.6	1,445,653.46	3,220,530.90	40° 33' 14.434 N	104° 42' 22.909 W
4,900.0	4.97	102.91	4,885.6	-75.0	327.0	1,445,651.60	3,220,539.35	40° 33' 14.415 N	104° 42' 22.799 W
5,000.0	4.97	102.91	4,985.2	-76.9	335.5	1,445,649.74	3,220,547.81	40° 33' 14.396 N	104° 42' 22.690 W
5,100.0	4.97	102.91	5,084.9	-78.8	343.9	1,445,647.88	3,220,556.26	40° 33' 14.377 N	104° 42' 22.581 W
5,200.0	4.97	102.91	5,184.5	-80.8	352.3	1,445,646.02	3,220,564.72	40° 33' 14.358 N	104° 42' 22.471 W
5,300.0	4.97	102.91	5,284.1	-82.7	360.8	1,445,644.16	3,220,573.17	40° 33' 14.338 N	104° 42' 22.362 W
5,400.0	4.97	102.91	5,383.7	-84.7	369.2	1,445,642.30	3,220,581.62	40° 33' 14.319 N	104° 42' 22.253 W
5,500.0	4.97	102.91	5,483.4	-86.6	377.7	1,445,640.44	3,220,590.08	40° 33' 14.300 N	104° 42' 22.143 W
5,600.0	4.97	102.91	5,583.0	-88.5	386.1	1,445,638.58	3,220,598.53	40° 33' 14.281 N	104° 42' 22.034 W
5,700.0	4.97	102.91	5,682.6	-90.5	394.5	1,445,636.73	3,220,606.99	40° 33' 14.262 N	104° 42' 21.925 W
5,800.0	4.97	102.91	5,782.2	-92.4	403.0	1,445,634.87	3,220,615.44	40° 33' 14.243 N	104° 42' 21.815 W
5,900.0	4.97	102.91	5,881.9	-94.3	411.4	1,445,633.01	3,220,623.90	40° 33' 14.224 N	104° 42' 21.706 W
6,000.0	4.97	102.91	5,981.5	-96.3	419.8	1,445,631.15	3,220,632.35	40° 33' 14.205 N	104° 42' 21.597 W
6,100.0	4.97	102.91	6,081.1	-98.2	428.3	1,445,629.29	3,220,640.81	40° 33' 14.186 N	104° 42' 21.488 W
6,200.0	4.97	102.91	6,180.7	-100.1	436.7	1,445,627.43	3,220,649.26	40° 33' 14.166 N	104° 42' 21.378 W
6,300.0	4.97	102.91	6,280.4	-102.1	445.2	1,445,625.57	3,220,657.71	40° 33' 14.147 N	104° 42' 21.269 W
6,306.7	4.97	102.91	6,287.0	-102.2	445.7	1,445,625.45	3,220,658.28	40° 33' 14.146 N	104° 42' 21.262 W
Start Drop -2.00									
6,400.0	3.10	102.91	6,380.1	-103.7	452.1	1,445,624.04	3,220,664.69	40° 33' 14.132 N	104° 42' 21.179 W
6,500.0	1.10	102.91	6,480.0	-104.5	455.7	1,445,623.25	3,220,668.27	40° 33' 14.123 N	104° 42' 21.132 W
6,555.0	0.00	0.00	6,535.0	-104.6	456.2	1,445,623.14	3,220,668.78	40° 33' 14.122 N	104° 42' 21.126 W
Vertical									
6,585.0	0.00	0.00	6,565.0	-104.6	456.2	1,445,623.14	3,220,668.78	40° 33' 14.122 N	104° 42' 21.126 W
KOP 10°/100									
6,600.0	1.50	270.62	6,580.0	-104.6	456.0	1,445,623.14	3,220,668.59	40° 33' 14.122 N	104° 42' 21.128 W
6,700.0	11.50	270.62	6,679.2	-104.5	444.7	1,445,623.16	3,220,657.28	40° 33' 14.124 N	104° 42' 21.275 W
6,800.0	21.50	270.62	6,775.0	-104.2	416.3	1,445,623.21	3,220,628.91	40° 33' 14.127 N	104° 42' 21.642 W
6,900.0	31.50	270.62	6,864.4	-103.7	371.8	1,445,623.30	3,220,584.34	40° 33' 14.131 N	104° 42' 22.220 W
7,000.0	41.50	270.62	6,944.7	-103.0	312.4	1,445,623.41	3,220,524.93	40° 33' 14.138 N	104° 42' 22.989 W
7,091.4	50.64	270.62	7,008.0	-102.3	246.6	1,445,623.53	3,220,459.19	40° 33' 14.145 N	104° 42' 23.841 W
NIOBRARA									
7,100.0	51.50	270.62	7,013.4	-102.3	239.9	1,445,623.55	3,220,452.49	40° 33' 14.145 N	104° 42' 23.928 W
7,200.0	61.50	270.62	7,068.5	-101.4	156.6	1,445,623.70	3,220,369.20	40° 33' 14.154 N	104° 42' 25.007 W
7,300.0	71.50	270.62	7,108.4	-100.4	65.1	1,445,623.87	3,220,277.61	40° 33' 14.164 N	104° 42' 26.193 W
7,400.0	81.50	270.62	7,131.7	-99.3	-32.1	1,445,624.06	3,220,180.50	40° 33' 14.175 N	104° 42' 27.451 W
7,485.0	90.00	270.62	7,138.0	-98.4	-116.7	1,445,624.22	3,220,095.83	40° 33' 14.184 N	104° 42' 28.548 W
Landing Pt 90° Inc, 270.62° Az - 7"									
7,500.0	90.00	270.62	7,138.0	-98.2	-131.7	1,445,624.25	3,220,080.81	40° 33' 14.185 N	104° 42' 28.743 W
7,600.0	90.00	270.62	7,138.0	-97.2	-231.7	1,445,624.43	3,219,980.81	40° 33' 14.196 N	104° 42' 30.038 W
7,700.0	90.00	270.62	7,138.0	-96.1	-331.7	1,445,624.62	3,219,880.81	40° 33' 14.207 N	104° 42' 31.334 W
7,800.0	90.00	270.62	7,138.0	-95.0	-431.7	1,445,624.81	3,219,780.81	40° 33' 14.217 N	104° 42' 32.629 W
7,900.0	90.00	270.62	7,138.0	-93.9	-531.7	1,445,625.00	3,219,680.81	40° 33' 14.228 N	104° 42' 33.925 W
8,000.0	90.00	270.62	7,138.0	-92.8	-631.7	1,445,625.19	3,219,580.81	40° 33' 14.239 N	104° 42' 35.220 W
8,100.0	90.00	270.62	7,138.0	-91.7	-731.7	1,445,625.38	3,219,480.81	40° 33' 14.249 N	104° 42' 36.515 W
8,200.0	90.00	270.62	7,138.0	-90.7	-831.7	1,445,625.56	3,219,380.81	40° 33' 14.260 N	104° 42' 37.811 W
8,300.0	90.00	270.62	7,138.0	-89.6	-931.7	1,445,625.75	3,219,280.81	40° 33' 14.271 N	104° 42' 39.106 W
8,400.0	90.00	270.62	7,138.0	-88.5	-1,031.7	1,445,625.94	3,219,180.81	40° 33' 14.281 N	104° 42' 40.402 W

New Tech

Planning Report - Geographic

Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well WAAG 24 - Slot WAAG 24
Company:	EXTRACTION OIL & GAS	TVD Reference:	WELL @ 4883.0ft (Xtreme 7)
Project:	SEC 19 T7N R65W	MD Reference:	WELL @ 4883.0ft (Xtreme 7)
Site:	WAAG SOUTH	North Reference:	True
Well:	WAAG 24	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	7,138.0	-87.4	-1,131.7	1,445,626.13	3,219,080.81	40° 33' 14.292 N	104° 42' 41.697 W	
8,600.0	90.00	270.62	7,138.0	-86.3	-1,231.7	1,445,626.32	3,218,980.81	40° 33' 14.303 N	104° 42' 42.993 W	
8,700.0	90.00	270.62	7,138.0	-85.2	-1,331.7	1,445,626.51	3,218,880.81	40° 33' 14.313 N	104° 42' 44.288 W	
8,800.0	90.00	270.62	7,137.9	-84.2	-1,431.7	1,445,626.69	3,218,780.81	40° 33' 14.324 N	104° 42' 45.584 W	
8,900.0	90.00	270.62	7,137.9	-83.1	-1,531.7	1,445,626.88	3,218,680.81	40° 33' 14.334 N	104° 42' 46.879 W	
9,000.0	90.00	270.62	7,137.9	-82.0	-1,631.7	1,445,627.07	3,218,580.81	40° 33' 14.345 N	104° 42' 48.175 W	
9,100.0	90.00	270.62	7,137.9	-80.9	-1,731.6	1,445,627.26	3,218,480.81	40° 33' 14.356 N	104° 42' 49.470 W	
9,200.0	90.00	270.62	7,137.9	-79.8	-1,831.6	1,445,627.45	3,218,380.81	40° 33' 14.366 N	104° 42' 50.766 W	
9,300.0	90.00	270.62	7,137.9	-78.8	-1,931.6	1,445,627.64	3,218,280.81	40° 33' 14.377 N	104° 42' 52.061 W	
9,400.0	90.00	270.62	7,137.9	-77.7	-2,031.6	1,445,627.82	3,218,180.81	40° 33' 14.388 N	104° 42' 53.356 W	
9,500.0	90.00	270.62	7,137.9	-76.6	-2,131.6	1,445,628.01	3,218,080.81	40° 33' 14.398 N	104° 42' 54.652 W	
9,600.0	90.00	270.62	7,137.9	-75.5	-2,231.6	1,445,628.20	3,217,980.81	40° 33' 14.409 N	104° 42' 55.947 W	
9,700.0	90.00	270.62	7,137.9	-74.4	-2,331.6	1,445,628.39	3,217,880.81	40° 33' 14.419 N	104° 42' 57.243 W	
9,800.0	90.00	270.62	7,137.9	-73.3	-2,431.6	1,445,628.58	3,217,780.81	40° 33' 14.430 N	104° 42' 58.538 W	
9,900.0	90.00	270.62	7,137.9	-72.3	-2,531.6	1,445,628.77	3,217,680.81	40° 33' 14.441 N	104° 42' 59.834 W	
10,000.0	90.00	270.62	7,137.9	-71.2	-2,631.6	1,445,628.96	3,217,580.81	40° 33' 14.451 N	104° 43' 1.129 W	
10,100.0	90.00	270.62	7,137.9	-70.1	-2,731.6	1,445,629.14	3,217,480.81	40° 33' 14.462 N	104° 43' 2.425 W	
10,200.0	90.00	270.62	7,137.9	-69.0	-2,831.6	1,445,629.33	3,217,380.81	40° 33' 14.472 N	104° 43' 3.720 W	
10,300.0	90.00	270.62	7,137.9	-67.9	-2,931.6	1,445,629.52	3,217,280.81	40° 33' 14.483 N	104° 43' 5.016 W	
10,400.0	90.00	270.62	7,137.9	-66.9	-3,031.6	1,445,629.71	3,217,180.81	40° 33' 14.493 N	104° 43' 6.311 W	
10,500.0	90.00	270.62	7,137.9	-65.8	-3,131.6	1,445,629.90	3,217,080.82	40° 33' 14.504 N	104° 43' 7.606 W	
10,600.0	90.00	270.62	7,137.9	-64.7	-3,231.6	1,445,630.09	3,216,980.82	40° 33' 14.515 N	104° 43' 8.902 W	
10,700.0	90.00	270.62	7,137.9	-63.6	-3,331.6	1,445,630.27	3,216,880.82	40° 33' 14.525 N	104° 43' 10.197 W	
10,800.0	90.00	270.62	7,137.9	-62.5	-3,431.5	1,445,630.46	3,216,780.82	40° 33' 14.536 N	104° 43' 11.493 W	
10,900.0	90.00	270.62	7,137.9	-61.4	-3,531.5	1,445,630.65	3,216,680.82	40° 33' 14.546 N	104° 43' 12.788 W	
11,000.0	90.00	270.62	7,137.9	-60.4	-3,631.5	1,445,630.84	3,216,580.82	40° 33' 14.557 N	104° 43' 14.084 W	
11,100.0	90.00	270.62	7,137.9	-59.3	-3,731.5	1,445,631.03	3,216,480.82	40° 33' 14.567 N	104° 43' 15.379 W	
11,200.0	90.00	270.62	7,137.9	-58.2	-3,831.5	1,445,631.22	3,216,380.82	40° 33' 14.578 N	104° 43' 16.675 W	
11,300.0	90.00	270.62	7,137.9	-57.1	-3,931.5	1,445,631.40	3,216,280.82	40° 33' 14.588 N	104° 43' 17.970 W	
11,400.0	90.00	270.62	7,137.9	-56.0	-4,031.5	1,445,631.59	3,216,180.82	40° 33' 14.599 N	104° 43' 19.266 W	
11,500.0	90.00	270.62	7,137.9	-55.0	-4,131.5	1,445,631.78	3,216,080.82	40° 33' 14.609 N	104° 43' 20.561 W	
11,600.0	90.00	270.62	7,137.9	-53.9	-4,231.5	1,445,631.97	3,215,980.82	40° 33' 14.620 N	104° 43' 21.857 W	
11,700.0	90.00	270.62	7,137.9	-52.8	-4,331.5	1,445,632.16	3,215,880.82	40° 33' 14.631 N	104° 43' 23.152 W	
11,800.0	90.00	270.62	7,137.9	-51.7	-4,431.5	1,445,632.35	3,215,780.82	40° 33' 14.641 N	104° 43' 24.447 W	
11,900.0	90.00	270.62	7,137.9	-50.6	-4,531.5	1,445,632.53	3,215,680.82	40° 33' 14.652 N	104° 43' 25.743 W	
11,911.8	90.00	270.62	7,138.0	-50.6	-4,543.3	1,445,632.47	3,215,669.00	40° 33' 14.652 N	104° 43' 25.896 W	
TD at 11911.8 - TD / PBHL WAAG SOUTH 24										

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 SOUTH 24	0.00	0.00	7,138.0	-50.6	-4,543.3	1,445,632.47	3,215,669.00	40° 33' 14.652 N	104° 43' 25.896 W	
- plan hits target										
- Point										
LP WAAG SOUTH 24	0.00	0.00	7,138.0	-98.4	-116.7	1,445,624.25	3,220,095.84	40° 33' 14.184 N	104° 42' 28.548 W	
- plan hits target										
- Point										

New Tech
Planning Report - Geographic

Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well WAAG 24 - Slot WAAG 24
Company:	EXTRACTION OIL & GAS	TVD Reference:	WELL @ 4883.0ft (Xtreme 7)
Project:	SEC 19 T7N R65W	MD Reference:	WELL @ 4883.0ft (Xtreme 7)
Site:	WAAG SOUTH	North Reference:	True
Well:	WAAG 24	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	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	
7,485.0	7,138.0	7"	0	0	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3619.60	3610.00	PARKMAN			
4349.30	4337.00	SUSSEX			
4743.80	4730.00	SHANNON			
7091.40	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			
		+N/-S (ft)	+E/-W (ft)	Comment	
900.0	900.0	0.0	0.0	Start Build 2.00	
1,148.3	1,148.0	-2.4	10.5	Hold 4.97° Inc, 102.91° Az	
6,306.7	6,287.0	-102.2	445.7	Start Drop -2.00	
6,555.0	6,535.0	-104.6	456.2	Vertical	
6,585.0	6,565.0	-104.6	456.2	KOP 10°/100	
7,485.0	7,138.0	-98.4	-116.7	Landing Pt 90° Inc, 270.62° Az	
11,911.8	7,138.0	-50.6	-4,543.3	TD at 11911.8	