

EXTRACTION OIL & GAS

SEC 19 T7N R65W

WAAG SOUTH

WAAG 23 - Slot WAAG 23

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 23 - Slot WAAG 23
Company:	EXTRACTION OIL & GAS	TVD Reference:	WELL @ 4884.0ft (Xtreme 7)
Project:	SEC 19 T7N R65W	MD Reference:	WELL @ 4884.0ft (Xtreme 7)
Site:	WAAG SOUTH	North Reference:	True
Well:	WAAG 23	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 23 - Slot WAAG 23			
Well Position	+N/-S	0.0 ft	Northing:	1,445,742.04 ft
	+E/-W	0.0 ft	Easting:	3,220,230.95 ft
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft	Ground Level: 4,868.0 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	273.29

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	
1,158.5	5.17	64.60	1,158.2	5.0	10.5	2.00	2.00	0.00	64.60	
6,298.1	5.17	64.60	6,276.8	203.7	429.0	0.00	0.00	0.00	0.00	
6,556.6	0.00	0.00	6,535.0	208.7	439.5	2.00	-2.00	0.00	180.00	
6,586.6	0.00	0.00	6,565.0	208.7	439.5	0.00	0.00	0.00	0.00	
7,486.6	90.00	270.62	7,138.0	214.9	-133.4	10.00	10.00	0.00	270.62	
11,918.9	90.00	270.62	7,138.0	262.7	-4,565.5	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 23 - Slot WAAG 23
Company:	EXTRACTION OIL & GAS	TVD Reference:	WELL @ 4884.0ft (Xtreme 7)
Project:	SEC 19 T7N R65W	MD Reference:	WELL @ 4884.0ft (Xtreme 7)
Site:	WAAG SOUTH	North Reference:	True
Well:	WAAG 23	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	1,445,742.04	3,220,230.95	40° 33' 15.336 N	104° 42' 26.784 W
100.0	0.00	0.00	100.0	0.0	0.0	1,445,742.04	3,220,230.95	40° 33' 15.336 N	104° 42' 26.784 W
200.0	0.00	0.00	200.0	0.0	0.0	1,445,742.04	3,220,230.95	40° 33' 15.336 N	104° 42' 26.784 W
300.0	0.00	0.00	300.0	0.0	0.0	1,445,742.04	3,220,230.95	40° 33' 15.336 N	104° 42' 26.784 W
400.0	0.00	0.00	400.0	0.0	0.0	1,445,742.04	3,220,230.95	40° 33' 15.336 N	104° 42' 26.784 W
500.0	0.00	0.00	500.0	0.0	0.0	1,445,742.04	3,220,230.95	40° 33' 15.336 N	104° 42' 26.784 W
600.0	0.00	0.00	600.0	0.0	0.0	1,445,742.04	3,220,230.95	40° 33' 15.336 N	104° 42' 26.784 W
700.0	0.00	0.00	700.0	0.0	0.0	1,445,742.04	3,220,230.95	40° 33' 15.336 N	104° 42' 26.784 W
800.0	0.00	0.00	800.0	0.0	0.0	1,445,742.04	3,220,230.95	40° 33' 15.336 N	104° 42' 26.784 W
850.0	0.00	0.00	850.0	0.0	0.0	1,445,742.04	3,220,230.95	40° 33' 15.336 N	104° 42' 26.784 W
9 5/8"									
900.0	0.00	0.00	900.0	0.0	0.0	1,445,742.04	3,220,230.95	40° 33' 15.336 N	104° 42' 26.784 W
Start Build 2.00									
1,000.0	2.00	64.60	1,000.0	0.7	1.6	1,445,742.81	3,220,232.52	40° 33' 15.343 N	104° 42' 26.764 W
1,100.0	4.00	64.60	1,099.8	3.0	6.3	1,445,745.09	3,220,237.23	40° 33' 15.366 N	104° 42' 26.702 W
1,158.5	5.17	64.60	1,158.2	5.0	10.5	1,445,747.14	3,220,241.44	40° 33' 15.385 N	104° 42' 26.648 W
Hold 5.17° Inc, 64.60° Az									
1,200.0	5.17	64.60	1,199.5	6.6	13.9	1,445,748.77	3,220,244.80	40° 33' 15.401 N	104° 42' 26.604 W
1,300.0	5.17	64.60	1,299.1	10.5	22.0	1,445,752.71	3,220,252.91	40° 33' 15.439 N	104° 42' 26.498 W
1,400.0	5.17	64.60	1,398.7	14.3	30.2	1,445,756.65	3,220,261.01	40° 33' 15.478 N	104° 42' 26.393 W
1,500.0	5.17	64.60	1,498.3	18.2	38.3	1,445,760.59	3,220,269.12	40° 33' 15.516 N	104° 42' 26.287 W
1,600.0	5.17	64.60	1,597.9	22.1	46.5	1,445,764.53	3,220,277.23	40° 33' 15.554 N	104° 42' 26.182 W
1,700.0	5.17	64.60	1,697.4	25.9	54.6	1,445,768.47	3,220,285.33	40° 33' 15.592 N	104° 42' 26.076 W
1,800.0	5.17	64.60	1,797.0	29.8	62.8	1,445,772.40	3,220,293.44	40° 33' 15.630 N	104° 42' 25.971 W
1,900.0	5.17	64.60	1,896.6	33.7	70.9	1,445,776.34	3,220,301.55	40° 33' 15.669 N	104° 42' 25.865 W
2,000.0	5.17	64.60	1,996.2	37.5	79.0	1,445,780.28	3,220,309.65	40° 33' 15.707 N	104° 42' 25.760 W
2,100.0	5.17	64.60	2,095.8	41.4	87.2	1,445,784.22	3,220,317.76	40° 33' 15.745 N	104° 42' 25.655 W
2,200.0	5.17	64.60	2,195.4	45.3	95.3	1,445,788.16	3,220,325.87	40° 33' 15.783 N	104° 42' 25.549 W
2,300.0	5.17	64.60	2,295.0	49.1	103.5	1,445,792.10	3,220,333.97	40° 33' 15.821 N	104° 42' 25.444 W
2,400.0	5.17	64.60	2,394.6	53.0	111.6	1,445,796.04	3,220,342.08	40° 33' 15.860 N	104° 42' 25.338 W
2,500.0	5.17	64.60	2,494.2	56.9	119.7	1,445,799.98	3,220,350.19	40° 33' 15.898 N	104° 42' 25.233 W
2,600.0	5.17	64.60	2,593.8	60.7	127.9	1,445,803.91	3,220,358.29	40° 33' 15.936 N	104° 42' 25.127 W
2,700.0	5.17	64.60	2,693.4	64.6	136.0	1,445,807.85	3,220,366.40	40° 33' 15.974 N	104° 42' 25.022 W
2,800.0	5.17	64.60	2,793.0	68.5	144.2	1,445,811.79	3,220,374.51	40° 33' 16.012 N	104° 42' 24.916 W
2,900.0	5.17	64.60	2,892.6	72.3	152.3	1,445,815.73	3,220,382.61	40° 33' 16.051 N	104° 42' 24.811 W
3,000.0	5.17	64.60	2,992.2	76.2	160.5	1,445,819.67	3,220,390.72	40° 33' 16.089 N	104° 42' 24.705 W
3,100.0	5.17	64.60	3,091.7	80.1	168.6	1,445,823.61	3,220,398.83	40° 33' 16.127 N	104° 42' 24.600 W
3,200.0	5.17	64.60	3,191.3	83.9	176.7	1,445,827.55	3,220,406.93	40° 33' 16.165 N	104° 42' 24.494 W
3,300.0	5.17	64.60	3,290.9	87.8	184.9	1,445,831.49	3,220,415.04	40° 33' 16.203 N	104° 42' 24.389 W
3,400.0	5.17	64.60	3,390.5	91.7	193.0	1,445,835.42	3,220,423.15	40° 33' 16.242 N	104° 42' 24.283 W
3,500.0	5.17	64.60	3,490.1	95.5	201.2	1,445,839.36	3,220,431.25	40° 33' 16.280 N	104° 42' 24.178 W
3,600.0	5.17	64.60	3,589.7	99.4	209.3	1,445,843.30	3,220,439.36	40° 33' 16.318 N	104° 42' 24.072 W
3,620.4	5.17	64.60	3,610.0	100.2	211.0	1,445,844.10	3,220,441.01	40° 33' 16.326 N	104° 42' 24.051 W
PARKMAN									
3,700.0	5.17	64.60	3,689.3	103.3	217.4	1,445,847.24	3,220,447.47	40° 33' 16.356 N	104° 42' 23.967 W
3,800.0	5.17	64.60	3,788.9	107.1	225.6	1,445,851.18	3,220,455.57	40° 33' 16.394 N	104° 42' 23.861 W
3,900.0	5.17	64.60	3,888.5	111.0	233.7	1,445,855.12	3,220,463.68	40° 33' 16.433 N	104° 42' 23.756 W
4,000.0	5.17	64.60	3,988.1	114.9	241.9	1,445,859.06	3,220,471.79	40° 33' 16.471 N	104° 42' 23.650 W
4,100.0	5.17	64.60	4,087.7	118.7	250.0	1,445,862.99	3,220,479.89	40° 33' 16.509 N	104° 42' 23.545 W
4,200.0	5.17	64.60	4,187.3	122.6	258.2	1,445,866.93	3,220,488.00	40° 33' 16.547 N	104° 42' 23.440 W
4,300.0	5.17	64.60	4,286.9	126.5	266.3	1,445,870.87	3,220,496.11	40° 33' 16.586 N	104° 42' 23.334 W
4,350.3	5.17	64.60	4,337.0	128.4	270.4	1,445,872.85	3,220,500.19	40° 33' 16.605 N	104° 42' 23.281 W
SUSSEX									

New Tech

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Project:	SEC 19 T7N R65W	MD Reference:	WELL @ 4884.0ft (Xtreme 7)
Site:	WAAG SOUTH	North Reference:	True
Well:	WAAG 23	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	5.17	64.60	4,386.5	130.3	274.4	1,445,874.81	3,220,504.21	40° 33' 16.624 N	104° 42' 23.229 W
4,500.0	5.17	64.60	4,486.0	134.2	282.6	1,445,878.75	3,220,512.32	40° 33' 16.662 N	104° 42' 23.123 W
4,600.0	5.17	64.60	4,585.6	138.1	290.7	1,445,882.69	3,220,520.43	40° 33' 16.700 N	104° 42' 23.018 W
4,700.0	5.17	64.60	4,685.2	141.9	298.9	1,445,886.63	3,220,528.53	40° 33' 16.738 N	104° 42' 22.912 W
4,744.9	5.17	64.60	4,730.0	143.7	302.5	1,445,888.40	3,220,532.18	40° 33' 16.755 N	104° 42' 22.865 W
SHANNON									
4,800.0	5.17	64.60	4,784.8	145.8	307.0	1,445,890.57	3,220,536.64	40° 33' 16.777 N	104° 42' 22.807 W
4,900.0	5.17	64.60	4,884.4	149.6	315.1	1,445,894.50	3,220,544.75	40° 33' 16.815 N	104° 42' 22.701 W
5,000.0	5.17	64.60	4,984.0	153.5	323.3	1,445,898.44	3,220,552.85	40° 33' 16.853 N	104° 42' 22.596 W
5,100.0	5.17	64.60	5,083.6	157.4	331.4	1,445,902.38	3,220,560.96	40° 33' 16.891 N	104° 42' 22.490 W
5,200.0	5.17	64.60	5,183.2	161.2	339.6	1,445,906.32	3,220,569.07	40° 33' 16.929 N	104° 42' 22.385 W
5,300.0	5.17	64.60	5,282.8	165.1	347.7	1,445,910.26	3,220,577.17	40° 33' 16.968 N	104° 42' 22.279 W
5,400.0	5.17	64.60	5,382.4	169.0	355.9	1,445,914.20	3,220,585.28	40° 33' 17.006 N	104° 42' 22.174 W
5,500.0	5.17	64.60	5,482.0	172.8	364.0	1,445,918.14	3,220,593.39	40° 33' 17.044 N	104° 42' 22.068 W
5,600.0	5.17	64.60	5,581.6	176.7	372.1	1,445,922.07	3,220,601.49	40° 33' 17.082 N	104° 42' 21.963 W
5,700.0	5.17	64.60	5,681.2	180.6	380.3	1,445,926.01	3,220,609.60	40° 33' 17.120 N	104° 42' 21.857 W
5,800.0	5.17	64.60	5,780.8	184.4	388.4	1,445,929.95	3,220,617.71	40° 33' 17.159 N	104° 42' 21.752 W
5,900.0	5.17	64.60	5,880.4	188.3	396.6	1,445,933.89	3,220,625.81	40° 33' 17.197 N	104° 42' 21.646 W
6,000.0	5.17	64.60	5,979.9	192.2	404.7	1,445,937.83	3,220,633.92	40° 33' 17.235 N	104° 42' 21.541 W
6,100.0	5.17	64.60	6,079.5	196.0	412.8	1,445,941.77	3,220,642.03	40° 33' 17.273 N	104° 42' 21.435 W
6,200.0	5.17	64.60	6,179.1	199.9	421.0	1,445,945.71	3,220,650.13	40° 33' 17.311 N	104° 42' 21.330 W
6,298.1	5.17	64.60	6,276.8	203.7	429.0	1,445,949.57	3,220,658.08	40° 33' 17.349 N	104° 42' 21.227 W
Start Drop -2.00									
6,300.0	5.13	64.60	6,278.7	203.8	429.1	1,445,949.65	3,220,658.24	40° 33' 17.350 N	104° 42' 21.224 W
6,400.0	3.13	64.60	6,378.5	206.9	435.6	1,445,952.79	3,220,664.72	40° 33' 17.380 N	104° 42' 21.140 W
6,500.0	1.13	64.60	6,478.4	208.5	439.0	1,445,954.42	3,220,668.07	40° 33' 17.396 N	104° 42' 21.097 W
6,556.6	0.00	0.00	6,535.0	208.7	439.5	1,445,954.66	3,220,668.57	40° 33' 17.398 N	104° 42' 21.090 W
Vertical									
6,586.6	0.00	0.00	6,565.0	208.7	439.5	1,445,954.66	3,220,668.57	40° 33' 17.398 N	104° 42' 21.090 W
KOP 10°/100									
6,600.0	1.34	270.62	6,578.4	208.7	439.3	1,445,954.67	3,220,668.41	40° 33' 17.398 N	104° 42' 21.092 W
6,700.0	11.34	270.62	6,677.6	208.8	428.3	1,445,954.69	3,220,657.39	40° 33' 17.399 N	104° 42' 21.235 W
6,800.0	21.34	270.62	6,773.5	209.1	400.2	1,445,954.74	3,220,629.29	40° 33' 17.402 N	104° 42' 21.599 W
6,900.0	31.34	270.62	6,863.0	209.6	355.9	1,445,954.82	3,220,584.98	40° 33' 17.407 N	104° 42' 22.173 W
7,000.0	41.34	270.62	6,943.4	210.2	296.7	1,445,954.93	3,220,525.80	40° 33' 17.414 N	104° 42' 22.940 W
7,093.0	50.64	270.62	7,008.0	211.0	229.9	1,445,955.06	3,220,458.97	40° 33' 17.421 N	104° 42' 23.805 W
NIOBRARA									
7,100.0	51.34	270.62	7,012.4	211.0	224.5	1,445,955.07	3,220,453.55	40° 33' 17.421 N	104° 42' 23.876 W
7,200.0	61.34	270.62	7,067.8	211.9	141.4	1,445,955.23	3,220,370.43	40° 33' 17.430 N	104° 42' 24.952 W
7,300.0	71.34	270.62	7,107.8	212.9	49.9	1,445,955.40	3,220,278.95	40° 33' 17.440 N	104° 42' 26.138 W
7,400.0	81.34	270.62	7,131.4	214.0	-47.1	1,445,955.58	3,220,181.90	40° 33' 17.450 N	104° 42' 27.395 W
7,486.6	90.00	270.62	7,138.0	214.9	-133.4	1,445,955.74	3,220,095.61	40° 33' 17.460 N	104° 42' 28.513 W
Landing Pt 90° Inc, 270.62° Az - 7"									
7,500.0	90.00	270.62	7,138.0	215.0	-146.8	1,445,955.77	3,220,082.23	40° 33' 17.461 N	104° 42' 28.686 W
7,600.0	90.00	270.62	7,138.0	216.1	-246.8	1,445,955.96	3,219,982.23	40° 33' 17.472 N	104° 42' 29.981 W
7,700.0	90.00	270.62	7,138.0	217.2	-346.8	1,445,956.15	3,219,882.23	40° 33' 17.482 N	104° 42' 31.277 W
7,800.0	90.00	270.62	7,138.0	218.3	-446.8	1,445,956.33	3,219,782.23	40° 33' 17.493 N	104° 42' 32.572 W
7,900.0	90.00	270.62	7,138.0	219.4	-546.8	1,445,956.52	3,219,682.23	40° 33' 17.504 N	104° 42' 33.868 W
8,000.0	90.00	270.62	7,138.0	220.5	-646.8	1,445,956.71	3,219,582.23	40° 33' 17.514 N	104° 42' 35.163 W
8,100.0	90.00	270.62	7,138.0	221.5	-746.8	1,445,956.90	3,219,482.23	40° 33' 17.525 N	104° 42' 36.459 W
8,200.0	90.00	270.62	7,138.0	222.6	-846.8	1,445,957.09	3,219,382.23	40° 33' 17.536 N	104° 42' 37.754 W
8,300.0	90.00	270.62	7,138.0	223.7	-946.8	1,445,957.28	3,219,282.23	40° 33' 17.546 N	104° 42' 39.050 W
8,400.0	90.00	270.62	7,138.0	224.8	-1,046.8	1,445,957.46	3,219,182.23	40° 33' 17.557 N	104° 42' 40.345 W

New Tech

Planning Report - Geographic

Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well WAAG 23 - Slot WAAG 23
Company:	EXTRACTION OIL & GAS	TVD Reference:	WELL @ 4884.0ft (Xtreme 7)
Project:	SEC 19 T7N R65W	MD Reference:	WELL @ 4884.0ft (Xtreme 7)
Site:	WAAG SOUTH	North Reference:	True
Well:	WAAG 23	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	225.9	-1,146.7	1,445,957.65	3,219,082.23	40° 33' 17.568 N	104° 42' 41.641 W	
8,600.0	90.00	270.62	7,137.9	226.9	-1,246.7	1,445,957.84	3,218,982.23	40° 33' 17.578 N	104° 42' 42.936 W	
8,700.0	90.00	270.62	7,137.9	228.0	-1,346.7	1,445,958.03	3,218,882.23	40° 33' 17.589 N	104° 42' 44.232 W	
8,800.0	90.00	270.62	7,137.9	229.1	-1,446.7	1,445,958.22	3,218,782.23	40° 33' 17.600 N	104° 42' 45.527 W	
8,900.0	90.00	270.62	7,137.9	230.2	-1,546.7	1,445,958.41	3,218,682.23	40° 33' 17.610 N	104° 42' 46.823 W	
9,000.0	90.00	270.62	7,137.9	231.3	-1,646.7	1,445,958.59	3,218,582.23	40° 33' 17.621 N	104° 42' 48.118 W	
9,100.0	90.00	270.62	7,137.9	232.4	-1,746.7	1,445,958.78	3,218,482.24	40° 33' 17.631 N	104° 42' 49.414 W	
9,200.0	90.00	270.62	7,137.9	233.4	-1,846.7	1,445,958.97	3,218,382.24	40° 33' 17.642 N	104° 42' 50.709 W	
9,300.0	90.00	270.62	7,137.9	234.5	-1,946.7	1,445,959.16	3,218,282.24	40° 33' 17.653 N	104° 42' 52.004 W	
9,400.0	90.00	270.62	7,137.9	235.6	-2,046.7	1,445,959.35	3,218,182.24	40° 33' 17.663 N	104° 42' 53.300 W	
9,500.0	90.00	270.62	7,137.9	236.7	-2,146.7	1,445,959.54	3,218,082.24	40° 33' 17.674 N	104° 42' 54.595 W	
9,600.0	90.00	270.62	7,137.9	237.8	-2,246.7	1,445,959.72	3,217,982.24	40° 33' 17.684 N	104° 42' 55.891 W	
9,700.0	90.00	270.62	7,137.9	238.9	-2,346.7	1,445,959.91	3,217,882.24	40° 33' 17.695 N	104° 42' 57.186 W	
9,800.0	90.00	270.62	7,137.9	239.9	-2,446.7	1,445,960.10	3,217,782.24	40° 33' 17.706 N	104° 42' 58.482 W	
9,900.0	90.00	270.62	7,137.9	241.0	-2,546.7	1,445,960.29	3,217,682.24	40° 33' 17.716 N	104° 42' 59.777 W	
10,000.0	90.00	270.62	7,137.9	242.1	-2,646.7	1,445,960.48	3,217,582.24	40° 33' 17.727 N	104° 43' 1.073 W	
10,100.0	90.00	270.62	7,137.9	243.2	-2,746.7	1,445,960.67	3,217,482.24	40° 33' 17.737 N	104° 43' 2.368 W	
10,200.0	90.00	270.62	7,137.9	244.3	-2,846.6	1,445,960.85	3,217,382.24	40° 33' 17.748 N	104° 43' 3.664 W	
10,300.0	90.00	270.62	7,137.9	245.3	-2,946.6	1,445,961.04	3,217,282.24	40° 33' 17.759 N	104° 43' 4.959 W	
10,400.0	90.00	270.62	7,137.9	246.4	-3,046.6	1,445,961.23	3,217,182.24	40° 33' 17.769 N	104° 43' 6.255 W	
10,500.0	90.00	270.62	7,137.9	247.5	-3,146.6	1,445,961.42	3,217,082.24	40° 33' 17.780 N	104° 43' 7.550 W	
10,600.0	90.00	270.62	7,137.9	248.6	-3,246.6	1,445,961.61	3,216,982.24	40° 33' 17.790 N	104° 43' 8.846 W	
10,700.0	90.00	270.62	7,137.9	249.7	-3,346.6	1,445,961.80	3,216,882.24	40° 33' 17.801 N	104° 43' 10.141 W	
10,800.0	90.00	270.62	7,137.9	250.8	-3,446.6	1,445,961.98	3,216,782.24	40° 33' 17.811 N	104° 43' 11.437 W	
10,900.0	90.00	270.62	7,137.9	251.8	-3,546.6	1,445,962.17	3,216,682.24	40° 33' 17.822 N	104° 43' 12.732 W	
11,000.0	90.00	270.62	7,137.9	252.9	-3,646.6	1,445,962.36	3,216,582.24	40° 33' 17.833 N	104° 43' 14.028 W	
11,100.0	90.00	270.62	7,137.9	254.0	-3,746.6	1,445,962.55	3,216,482.24	40° 33' 17.843 N	104° 43' 15.323 W	
11,200.0	90.00	270.62	7,137.9	255.1	-3,846.6	1,445,962.74	3,216,382.24	40° 33' 17.854 N	104° 43' 16.619 W	
11,300.0	90.00	270.62	7,137.9	256.2	-3,946.6	1,445,962.93	3,216,282.24	40° 33' 17.864 N	104° 43' 17.914 W	
11,400.0	90.00	270.62	7,137.8	257.2	-4,046.6	1,445,963.11	3,216,182.24	40° 33' 17.875 N	104° 43' 19.210 W	
11,500.0	90.00	270.62	7,137.8	258.3	-4,146.6	1,445,963.30	3,216,082.24	40° 33' 17.885 N	104° 43' 20.505 W	
11,600.0	90.00	270.62	7,137.8	259.4	-4,246.6	1,445,963.49	3,215,982.24	40° 33' 17.896 N	104° 43' 21.800 W	
11,700.0	90.00	270.62	7,137.8	260.5	-4,346.6	1,445,963.68	3,215,882.24	40° 33' 17.906 N	104° 43' 23.096 W	
11,800.0	90.00	270.62	7,137.8	261.6	-4,446.6	1,445,963.87	3,215,782.24	40° 33' 17.917 N	104° 43' 24.391 W	
11,900.0	90.00	270.62	7,137.8	262.7	-4,546.5	1,445,964.06	3,215,682.24	40° 33' 17.927 N	104° 43' 25.687 W	
11,918.9	90.00	270.62	7,138.0	262.7	-4,565.5	1,445,963.96	3,215,663.32	40° 33' 17.928 N	104° 43' 25.932 W	
TD at 11918.9 - TD / PBHL WAAG SOUTH 23										

Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
LP WAAG SOUTH 23 - hit/miss target - Shape	0.00	0.00	7,138.0	214.9	-133.4	1,445,955.79	3,220,095.66	40° 33' 17.460 N	104° 42' 28.512 W	
TD / PBHL WAAG SOUTH 23 - plan hits target - Point	0.00	0.00	7,138.0	262.7	-4,565.5	1,445,963.96	3,215,663.32	40° 33' 17.928 N	104° 43' 25.932 W	

New Tech

Planning Report - Geographic

Database:	EDM 2003.16 Single User Db	Local Co-ordinate Reference:	Well WAAG 23 - Slot WAAG 23
Company:	EXTRACTION OIL & GAS	TVD Reference:	WELL @ 4884.0ft (Xtreme 7)
Project:	SEC 19 T7N R65W	MD Reference:	WELL @ 4884.0ft (Xtreme 7)
Site:	WAAG SOUTH	North Reference:	True
Well:	WAAG 23	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	
7,486.6	7,138.0	7"	0	0	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3620.40	3610.00	PARKMAN			
4350.30	4337.00	SUSSEX			
4744.90	4730.00	SHANNON			
7093.00	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	
1,158.5	1,158.2	5.0	10.5	Hold 5.17° Inc, 64.60° Az	
6,298.1	6,276.8	203.7	429.0	Start Drop -2.00	
6,556.6	6,535.0	208.7	439.5	Vertical	
6,586.6	6,565.0	208.7	439.5	KOP 10°/100	
7,486.6	7,138.0	214.9	-133.4	Landing Pt 90° Inc, 270.62° Az	
11,918.9	7,138.0	262.7	-4,565.5	TD at 11918.9	