

EXTRACTION OIL & GAS

WELD COUNTY, COLORADO (NAD 83)

NE NW SEC. 9 T5N R65W 6th P.M.

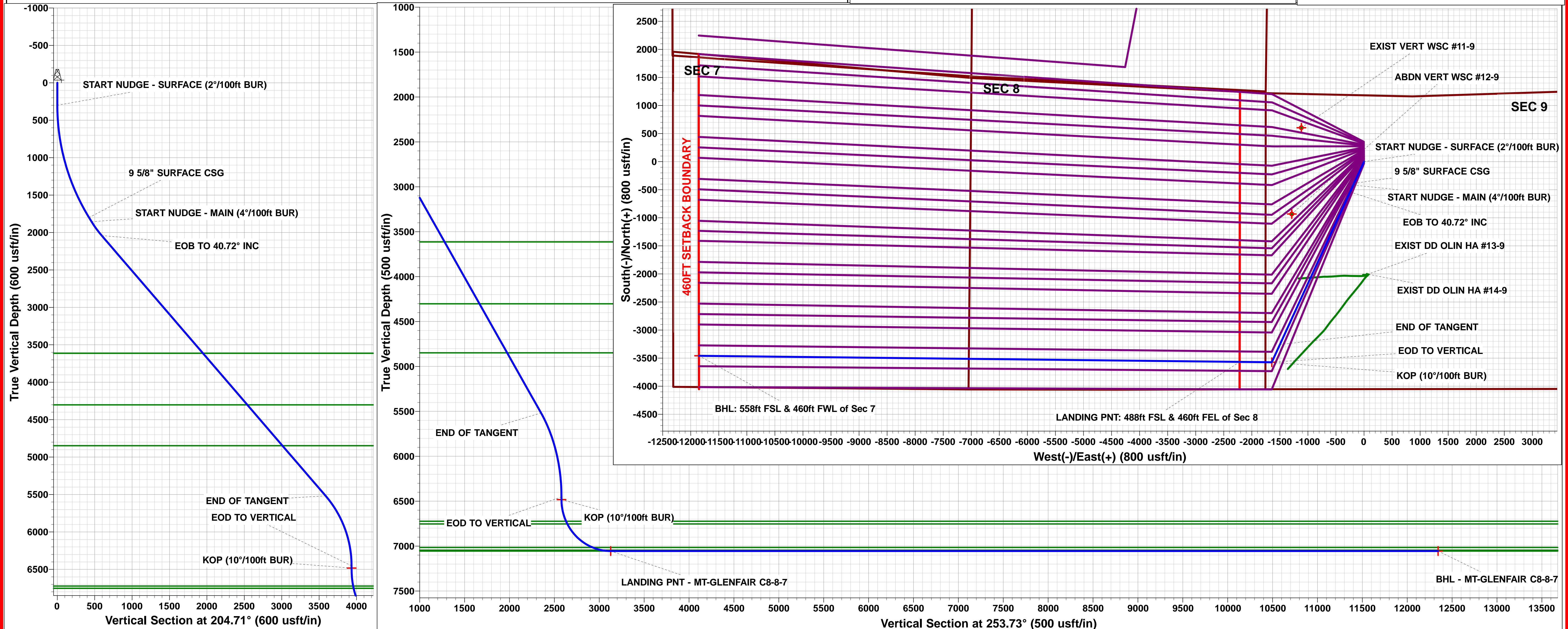
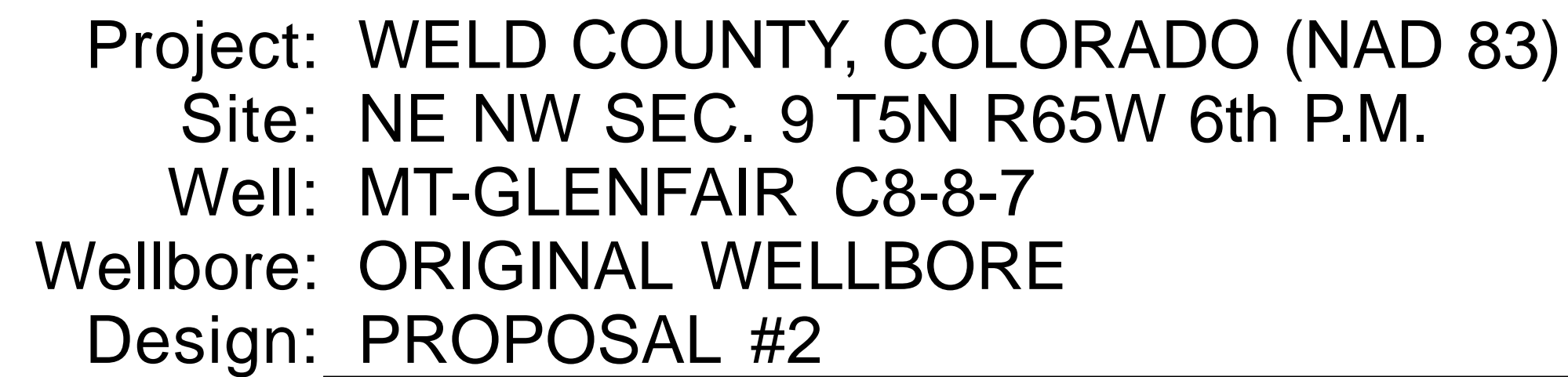
MT-GLENFAIR C8-8-7

ORIGINAL WELLBORE

20 June, 2015

Plan: PROPOSAL #2





Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MT-GLENFAIR C8-8-7
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4652.0usft (SAV 802)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4652.0usft (SAV 802)
Site:	NE NW SEC. 9 T5N R65W 6th P.M.	North Reference:	True
Well:	MT-GLENFAIR C8-8-7	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Project	WELD COUNTY, COLORADO (NAD 83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	NE NW SEC. 9 T5N R65W 6th P.M.		
Site Position:		Northing:	1,396,398.95 usft
From:	Lat/Long	Easting:	3,230,631.97 usft
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft
		Latitude:	40.418560
		Longitude:	-104.671670
		Grid Convergence:	0.54 °

Well	MT-GLENFAIR C8-8-7		
Well Position	+N/-S	-353.4 usft	Northing:
	+E/-W	2.8 usft	Easting:
Position Uncertainty		0.0 usft	Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	04/06/2015	8.38	66.93	52,645

Design	PROPOSAL #2			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	253.73

Plan Sections											
MD (usft)	Inc (°)	Azi (°)	Vertical Depth	SS (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100usf)	Turn Rate (°/100usf)	TFO (°)	Target
0.0	0.00	0.00	0.0	-4,652.0	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	-4,352.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,878.7	31.57	204.71	1,800.0	-2,852.0	-385.3	-177.3	2.00	2.00	0.00	204.71	
1,943.7	31.57	204.71	1,855.4	-2,796.6	-416.2	-191.5	0.00	0.00	0.00	0.00	
2,172.3	40.72	204.71	2,039.8	-2,612.2	-538.5	-247.8	4.00	4.00	0.00	0.00	
6,761.0	40.72	204.71	5,517.7	865.7	-3,257.9	-1,499.0	0.00	0.00	0.00	0.00	
7,779.0	0.00	0.00	6,452.1	1,800.1	-3,572.9	-1,643.9	4.00	-4.00	0.00	180.00	
7,809.0	0.00	0.00	6,482.1	1,830.1	-3,572.9	-1,643.9	0.00	0.00	0.00	0.00	KOP - MT-GLENFA
8,708.9	90.00	270.64	7,055.0	2,403.0	-3,566.5	-2,216.8	10.00	10.00	-9.93	270.64	LANDING PNT - M
18,342.4	90.00	270.65	7,055.0	2,403.0	-3,458.1	-11,849.7	0.00	0.00	0.00	99.79	BHL - MT-GLENFA

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MT-GLENFAIR C8-8-7
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4652.0usft (SAV 802)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4652.0usft (SAV 802)
Site:	NE NW SEC. 9 T5N R65W 6th P.M.	North Reference:	True
Well:	MT-GLENFAIR C8-8-7	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
SHL: 1180ft FNL & 1755ft FWL of Sec 9										
0.0	0.00	0.00	0.0	4,652.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,552.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,452.00	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE - SURFACE (2°/100ft BUR)										
300.0	0.00	0.00	300.0	4,352.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	2.00	204.71	400.0	4,252.02	-1.6	-0.7	1.1	2.00	2.00	0.00
500.0	4.00	204.71	499.8	4,152.16	-6.3	-2.9	4.6	2.00	2.00	0.00
600.0	6.00	204.71	599.5	4,052.55	-14.3	-6.6	10.3	2.00	2.00	0.00
700.0	8.00	204.71	698.7	3,953.30	-25.3	-11.7	18.3	2.00	2.00	0.00
800.0	10.00	204.71	797.5	3,854.53	-39.5	-18.2	28.5	2.00	2.00	0.00
900.0	12.00	204.71	895.6	3,756.38	-56.9	-26.2	41.1	2.00	2.00	0.00
1,000.0	14.00	204.71	993.1	3,658.94	-77.3	-35.6	55.8	2.00	2.00	0.00
1,100.0	16.00	204.71	1,089.6	3,562.36	-100.8	-46.4	72.8	2.00	2.00	0.00
1,200.0	18.00	204.71	1,185.3	3,466.73	-127.4	-58.6	91.9	2.00	2.00	0.00
1,300.0	20.00	204.71	1,279.8	3,372.18	-156.9	-72.2	113.3	2.00	2.00	0.00
1,400.0	22.00	204.71	1,373.2	3,278.83	-189.5	-87.2	136.8	2.00	2.00	0.00
1,500.0	24.00	204.71	1,465.2	3,186.79	-225.0	-103.5	162.4	2.00	2.00	0.00
1,600.0	26.00	204.71	1,555.8	3,096.16	-263.4	-121.2	190.1	2.00	2.00	0.00
1,700.0	28.00	204.71	1,644.9	3,007.06	-304.6	-140.2	219.9	2.00	2.00	0.00
1,800.0	30.00	204.71	1,732.4	2,919.61	-348.7	-160.4	251.7	2.00	2.00	0.00
9 5/8" SURFACE CSG										
1,878.7	31.57	204.71	1,800.0	2,852.00	-385.3	-177.3	278.1	2.00	2.00	0.00
1,900.0	31.57	204.71	1,818.1	2,833.85	-395.4	-181.9	285.4	0.00	0.00	0.00
START NUDGE - MAIN (4°/100ft BUR)										
1,943.7	31.57	204.71	1,855.4	2,796.62	-416.2	-191.5	300.4	0.00	0.00	-0.01
2,000.0	33.83	204.71	1,902.8	2,749.25	-443.8	-204.2	320.4	4.00	4.00	0.00
2,100.0	37.83	204.71	1,983.8	2,668.18	-497.0	-228.7	358.7	4.00	4.00	0.00
EOB TO 40.72° INC										
2,172.3	40.72	204.71	2,039.8	2,612.22	-538.5	-247.8	388.8	4.00	4.00	0.00
2,200.0	40.72	204.71	2,060.8	2,591.22	-555.0	-255.4	400.6	0.00	0.00	0.00
2,300.0	40.72	204.71	2,136.6	2,515.43	-614.2	-282.6	443.4	0.00	0.00	0.00
2,400.0	40.72	204.71	2,212.4	2,439.64	-673.5	-309.9	486.2	0.00	0.00	0.00
2,500.0	40.72	204.71	2,288.2	2,363.84	-732.7	-337.2	528.9	0.00	0.00	0.00
2,600.0	40.72	204.71	2,363.9	2,288.05	-792.0	-364.4	571.7	0.00	0.00	0.00
2,700.0	40.72	204.71	2,439.7	2,212.26	-851.3	-391.7	614.5	0.00	0.00	0.00
2,800.0	40.72	204.71	2,515.5	2,136.47	-910.5	-419.0	657.3	0.00	0.00	0.00
2,900.0	40.72	204.71	2,591.3	2,060.67	-969.8	-446.2	700.0	0.00	0.00	0.00
3,000.0	40.72	204.71	2,667.1	1,984.88	-1,029.1	-473.5	742.8	0.00	0.00	0.00
3,100.0	40.72	204.71	2,742.9	1,909.09	-1,088.3	-500.8	785.6	0.00	0.00	0.00
3,200.0	40.72	204.71	2,818.7	1,833.29	-1,147.6	-528.0	828.4	0.00	0.00	0.00
3,300.0	40.72	204.71	2,894.5	1,757.50	-1,206.8	-555.3	871.1	0.00	0.00	0.00
3,400.0	40.72	204.71	2,970.3	1,681.71	-1,266.1	-582.6	913.9	0.00	0.00	0.00
3,500.0	40.72	204.71	3,046.1	1,605.92	-1,325.4	-609.8	956.7	0.00	0.00	0.00
3,600.0	40.72	204.71	3,121.9	1,530.12	-1,384.6	-637.1	999.5	0.00	0.00	0.00
3,700.0	40.72	204.71	3,197.7	1,454.33	-1,443.9	-664.4	1,042.2	0.00	0.00	0.00
3,800.0	40.72	204.71	3,273.5	1,378.54	-1,503.1	-691.6	1,085.0	0.00	0.00	0.00
3,900.0	40.72	204.71	3,349.3	1,302.74	-1,562.4	-718.9	1,127.8	0.00	0.00	0.00
4,000.0	40.72	204.71	3,425.0	1,226.95	-1,621.7	-746.1	1,170.6	0.00	0.00	0.00
4,100.0	40.72	204.71	3,500.8	1,151.16	-1,680.9	-773.4	1,213.4	0.00	0.00	0.00
4,200.0	40.72	204.71	3,576.6	1,075.36	-1,740.2	-800.7	1,256.1	0.00	0.00	0.00
PARKMAN										
4,248.0	40.72	204.71	3,613.0	1,039.00	-1,768.6	-813.8	1,276.7	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MT-GLENFAIR C8-8-7
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4652.0usft (SAV 802)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4652.0usft (SAV 802)
Site:	NE NW SEC. 9 T5N R65W 6th P.M.	North Reference:	True
Well:	MT-GLENFAIR C8-8-7	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,300.0	40.72	204.71	3,652.4	999.57	-1,799.5	-827.9	1,298.9	0.00	0.00	0.00
4,400.0	40.72	204.71	3,728.2	923.78	-1,858.7	-855.2	1,341.7	0.00	0.00	0.00
4,500.0	40.72	204.71	3,804.0	847.99	-1,918.0	-882.5	1,384.5	0.00	0.00	0.00
4,600.0	40.72	204.71	3,879.8	772.19	-1,977.2	-909.7	1,427.2	0.00	0.00	0.00
4,700.0	40.72	204.71	3,955.6	696.40	-2,036.5	-937.0	1,470.0	0.00	0.00	0.00
4,800.0	40.72	204.71	4,031.4	620.61	-2,095.8	-964.3	1,512.8	0.00	0.00	0.00
4,900.0	40.72	204.71	4,107.2	544.81	-2,155.0	-991.5	1,555.6	0.00	0.00	0.00
5,000.0	40.72	204.71	4,183.0	469.02	-2,214.3	-1,018.8	1,598.3	0.00	0.00	0.00
5,100.0	40.72	204.71	4,258.8	393.23	-2,273.6	-1,046.1	1,641.1	0.00	0.00	0.00
SUSSEX										
5,157.0	40.72	204.71	4,302.0	350.00	-2,307.4	-1,061.6	1,665.5	0.00	0.00	0.00
5,200.0	40.72	204.71	4,334.6	317.44	-2,332.8	-1,073.3	1,683.9	0.00	0.00	0.00
5,300.0	40.72	204.71	4,410.4	241.64	-2,392.1	-1,100.6	1,726.7	0.00	0.00	0.00
5,400.0	40.72	204.71	4,486.2	165.85	-2,451.3	-1,127.9	1,769.4	0.00	0.00	0.00
5,500.0	40.72	204.71	4,561.9	90.06	-2,510.6	-1,155.1	1,812.2	0.00	0.00	0.00
5,600.0	40.72	204.71	4,637.7	14.26	-2,569.9	-1,182.4	1,855.0	0.00	0.00	0.00
5,700.0	40.72	204.71	4,713.5	-61.53	-2,629.1	-1,209.7	1,897.8	0.00	0.00	0.00
5,800.0	40.72	204.71	4,789.3	-137.32	-2,688.4	-1,236.9	1,940.6	0.00	0.00	0.00
SHANNON										
5,877.4	40.72	204.71	4,848.0	-196.00	-2,734.3	-1,258.0	1,973.7	0.00	0.00	0.00
5,900.0	40.72	204.71	4,865.1	-213.12	-2,747.7	-1,264.2	1,983.3	0.00	0.00	0.00
6,000.0	40.72	204.71	4,940.9	-288.91	-2,806.9	-1,291.5	2,026.1	0.00	0.00	0.00
6,100.0	40.72	204.71	5,016.7	-364.70	-2,866.2	-1,318.7	2,068.9	0.00	0.00	0.00
6,200.0	40.72	204.71	5,092.5	-440.49	-2,925.4	-1,346.0	2,111.7	0.00	0.00	0.00
6,300.0	40.72	204.71	5,168.3	-516.29	-2,984.7	-1,373.3	2,154.4	0.00	0.00	0.00
6,400.0	40.72	204.71	5,244.1	-592.08	-3,044.0	-1,400.5	2,197.2	0.00	0.00	0.00
6,500.0	40.72	204.71	5,319.9	-667.87	-3,103.2	-1,427.8	2,240.0	0.00	0.00	0.00
6,600.0	40.72	204.71	5,395.7	-743.67	-3,162.5	-1,455.1	2,282.8	0.00	0.00	0.00
6,700.0	40.72	204.71	5,471.5	-819.46	-3,221.7	-1,482.3	2,325.5	0.00	0.00	0.00
END OF TANGENT										
6,761.0	40.72	204.71	5,517.7	-865.69	-3,257.9	-1,499.0	2,351.6	0.00	0.00	0.00
6,800.0	39.16	204.71	5,547.6	-895.59	-3,280.6	-1,509.4	2,368.1	4.00	-4.00	0.00
6,900.0	35.16	204.71	5,627.3	-975.28	-3,335.5	-1,534.7	2,407.7	4.00	-4.00	0.00
7,000.0	31.16	204.71	5,711.0	-1,058.97	-3,385.2	-1,557.5	2,443.5	4.00	-4.00	0.00
7,100.0	27.16	204.71	5,798.3	-1,146.28	-3,429.4	-1,577.9	2,475.5	4.00	-4.00	0.00
7,200.0	23.16	204.71	5,888.8	-1,236.78	-3,468.0	-1,595.7	2,503.3	4.00	-4.00	0.00
7,300.0	19.16	204.71	5,982.0	-1,330.02	-3,500.8	-1,610.7	2,527.0	4.00	-4.00	0.00
7,400.0	15.16	204.71	6,077.5	-1,425.55	-3,527.6	-1,623.1	2,546.3	4.00	-4.00	0.00
7,500.0	11.16	204.71	6,174.9	-1,522.90	-3,548.3	-1,632.6	2,561.3	4.00	-4.00	0.00
7,600.0	7.16	204.71	6,273.6	-1,621.61	-3,562.8	-1,639.2	2,571.7	4.00	-4.00	0.00
7,700.0	3.16	204.71	6,373.2	-1,721.18	-3,570.9	-1,643.0	2,577.6	4.00	-4.00	0.00
EOD TO VERTICAL										
7,779.0	0.00	0.00	6,452.1	-1,800.14	-3,572.9	-1,643.9	2,579.0	4.00	-4.00	0.00
7,800.0	0.00	0.00	6,473.1	-1,821.14	-3,572.9	-1,643.9	2,579.0	0.00	0.00	0.00
KOP (10°/100ft BUR)										
7,809.0	0.00	0.00	6,482.1	-1,830.14	-3,572.9	-1,643.9	2,579.0	0.00	0.00	0.00
7,900.0	9.11	270.64	6,572.8	-1,920.76	-3,572.8	-1,651.1	2,585.9	10.01	10.01	0.00
8,000.0	19.11	270.64	6,669.6	-2,017.62	-3,572.5	-1,675.5	2,609.2	10.00	10.00	0.00
SHARON SPRINGS										
8,057.6	24.87	270.64	6,723.0	-2,071.00	-3,572.3	-1,697.0	2,629.8	10.00	10.00	0.00
NIORARA										
8,091.1	28.22	270.64	6,753.0	-2,101.00	-3,572.1	-1,712.0	2,644.2	10.00	10.00	0.00
8,100.0	29.11	270.64	6,760.8	-2,108.79	-3,572.1	-1,716.2	2,648.2	10.00	10.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MT-GLENFAIR C8-8-7
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4652.0usft (SAV 802)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4652.0usft (SAV 802)
Site:	NE NW SEC. 9 T5N R65W 6th P.M.	North Reference:	True
Well:	MT-GLENFAIR C8-8-7	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,200.0	39.11	270.64	6,843.5	-2,191.48	-3,571.5	-1,772.2	2,701.8	10.00	10.00	0.00
8,300.0	49.11	270.64	6,915.2	-2,263.19	-3,570.7	-1,841.8	2,768.3	10.00	10.00	0.00
8,400.0	59.11	270.64	6,973.7	-2,321.74	-3,569.8	-1,922.7	2,845.7	10.00	10.00	0.00
FORT HAYS										
8,493.5	68.46	270.64	7,015.0	-2,363.00	-3,568.9	-2,006.5	2,925.9	10.00	10.00	0.00
8,500.0	69.11	270.64	7,017.3	-2,365.35	-3,568.8	-2,012.5	2,931.7	10.00	10.00	0.00
8,600.0	79.11	270.64	7,044.7	-2,392.69	-3,567.7	-2,108.6	3,023.6	10.00	10.00	0.00
CODELL										
8,601.7	79.28	270.64	7,045.0	-2,393.00	-3,567.7	-2,110.2	3,025.2	10.00	10.00	0.00
8,700.0	89.11	270.64	7,054.9	-2,402.93	-3,566.6	-2,207.9	3,118.7	10.00	10.00	0.00
LANDING PNT: 488ft FSL & 460ft FEL of Sec 8 - CODELL TARGET										
8,708.9	90.00	270.64	7,055.0	-2,403.00	-3,566.5	-2,216.8	3,127.2	10.00	10.00	0.00
8,800.0	90.00	270.64	7,055.0	-2,403.00	-3,565.5	-2,307.9	3,214.3	0.00	0.00	0.00
8,900.0	90.00	270.64	7,055.0	-2,403.00	-3,564.4	-2,407.9	3,310.0	0.00	0.00	0.00
9,000.0	90.00	270.64	7,055.0	-2,403.00	-3,563.3	-2,507.9	3,405.7	0.00	0.00	0.00
9,100.0	90.00	270.64	7,055.0	-2,402.99	-3,562.1	-2,607.9	3,501.4	0.00	0.00	0.00
9,200.0	90.00	270.64	7,055.0	-2,402.99	-3,561.0	-2,707.9	3,597.0	0.00	0.00	0.00
9,300.0	90.00	270.64	7,055.0	-2,402.99	-3,559.9	-2,807.9	3,692.7	0.00	0.00	0.00
9,400.0	90.00	270.64	7,055.0	-2,402.99	-3,558.8	-2,907.9	3,788.4	0.00	0.00	0.00
9,500.0	90.00	270.64	7,055.0	-2,402.99	-3,557.7	-3,007.9	3,884.1	0.00	0.00	0.00
9,600.0	90.00	270.64	7,055.0	-2,402.99	-3,556.6	-3,107.8	3,979.8	0.00	0.00	0.00
9,700.0	90.00	270.64	7,055.0	-2,402.99	-3,555.4	-3,207.8	4,075.4	0.00	0.00	0.00
9,800.0	90.00	270.64	7,055.0	-2,402.98	-3,554.3	-3,307.8	4,171.1	0.00	0.00	0.00
9,900.0	90.00	270.64	7,055.0	-2,402.98	-3,553.2	-3,407.8	4,266.8	0.00	0.00	0.00
10,000.0	90.00	270.64	7,055.0	-2,402.98	-3,552.1	-3,507.8	4,362.5	0.00	0.00	0.00
10,100.0	90.00	270.64	7,055.0	-2,402.98	-3,551.0	-3,607.8	4,458.1	0.00	0.00	0.00
10,200.0	90.00	270.64	7,055.0	-2,402.98	-3,549.8	-3,707.8	4,553.8	0.00	0.00	0.00
10,300.0	90.00	270.64	7,055.0	-2,402.98	-3,548.7	-3,807.8	4,649.5	0.00	0.00	0.00
10,400.0	90.00	270.64	7,055.0	-2,402.98	-3,547.6	-3,907.8	4,745.2	0.00	0.00	0.00
10,500.0	90.00	270.64	7,055.0	-2,402.98	-3,546.5	-4,007.8	4,840.8	0.00	0.00	0.00
10,600.0	90.00	270.64	7,055.0	-2,402.98	-3,545.4	-4,107.8	4,936.5	0.00	0.00	0.00
10,700.0	90.00	270.64	7,055.0	-2,402.97	-3,544.3	-4,207.8	5,032.2	0.00	0.00	0.00
10,800.0	90.00	270.64	7,055.0	-2,402.97	-3,543.1	-4,307.8	5,127.9	0.00	0.00	0.00
10,900.0	90.00	270.64	7,055.0	-2,402.97	-3,542.0	-4,407.8	5,223.5	0.00	0.00	0.00
11,000.0	90.00	270.64	7,055.0	-2,402.97	-3,540.9	-4,507.8	5,319.2	0.00	0.00	0.00
11,100.0	90.00	270.64	7,055.0	-2,402.97	-3,539.8	-4,607.8	5,414.9	0.00	0.00	0.00
11,200.0	90.00	270.64	7,055.0	-2,402.97	-3,538.7	-4,707.7	5,510.6	0.00	0.00	0.00
11,300.0	90.00	270.64	7,055.0	-2,402.97	-3,537.5	-4,807.7	5,606.2	0.00	0.00	0.00
11,400.0	90.00	270.64	7,055.0	-2,402.97	-3,536.4	-4,907.7	5,701.9	0.00	0.00	0.00
11,500.0	90.00	270.64	7,055.0	-2,402.97	-3,535.3	-5,007.7	5,797.6	0.00	0.00	0.00
11,600.0	90.00	270.64	7,055.0	-2,402.97	-3,534.2	-5,107.7	5,893.3	0.00	0.00	0.00
11,700.0	90.00	270.64	7,055.0	-2,402.97	-3,533.0	-5,207.7	5,989.0	0.00	0.00	0.00
11,800.0	90.00	270.64	7,055.0	-2,402.97	-3,531.9	-5,307.7	6,084.6	0.00	0.00	0.00
11,900.0	90.00	270.64	7,055.0	-2,402.97	-3,530.8	-5,407.7	6,180.3	0.00	0.00	0.00
12,000.0	90.00	270.64	7,055.0	-2,402.96	-3,529.7	-5,507.7	6,276.0	0.00	0.00	0.00
12,100.0	90.00	270.64	7,055.0	-2,402.96	-3,528.6	-5,607.7	6,371.7	0.00	0.00	0.00
12,200.0	90.00	270.64	7,055.0	-2,402.96	-3,527.4	-5,707.7	6,467.3	0.00	0.00	0.00
12,300.0	90.00	270.64	7,055.0	-2,402.96	-3,526.3	-5,807.7	6,563.0	0.00	0.00	0.00
12,400.0	90.00	270.64	7,055.0	-2,402.96	-3,525.2	-5,907.7	6,658.7	0.00	0.00	0.00
12,500.0	90.00	270.64	7,055.0	-2,402.96	-3,524.1	-6,007.7	6,754.4	0.00	0.00	0.00
12,600.0	90.00	270.64	7,055.0	-2,402.96	-3,522.9	-6,107.7	6,850.0	0.00	0.00	0.00
12,700.0	90.00	270.64	7,055.0	-2,402.96	-3,521.8	-6,207.6	6,945.7	0.00	0.00	0.00
12,800.0	90.00	270.64	7,055.0	-2,402.96	-3,520.7	-6,307.6	7,041.4	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MT-GLENFAIR C8-8-7
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4652.0usft (SAV 802)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4652.0usft (SAV 802)
Site:	NE NW SEC. 9 T5N R65W 6th P.M.	North Reference:	True
Well:	MT-GLENFAIR C8-8-7	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Planned Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,900.0	90.00	270.64	7,055.0	-2,402.96	-3,519.6	-6,407.6	7,137.1	0.00	0.00	0.00
13,000.0	90.00	270.64	7,055.0	-2,402.96	-3,518.4	-6,507.6	7,232.7	0.00	0.00	0.00
13,100.0	90.00	270.64	7,055.0	-2,402.96	-3,517.3	-6,607.6	7,328.4	0.00	0.00	0.00
13,200.0	90.00	270.64	7,055.0	-2,402.96	-3,516.2	-6,707.6	7,424.1	0.00	0.00	0.00
13,300.0	90.00	270.64	7,055.0	-2,402.96	-3,515.1	-6,807.6	7,519.8	0.00	0.00	0.00
13,400.0	90.00	270.64	7,055.0	-2,402.96	-3,514.0	-6,907.6	7,615.4	0.00	0.00	0.00
13,500.0	90.00	270.64	7,055.0	-2,402.96	-3,512.8	-7,007.6	7,711.1	0.00	0.00	0.00
13,600.0	90.00	270.64	7,055.0	-2,402.96	-3,511.7	-7,107.6	7,806.8	0.00	0.00	0.00
13,700.0	90.00	270.64	7,055.0	-2,402.96	-3,510.6	-7,207.6	7,902.4	0.00	0.00	0.00
13,800.0	90.00	270.64	7,055.0	-2,402.96	-3,509.4	-7,307.6	7,998.1	0.00	0.00	0.00
13,900.0	90.00	270.65	7,055.0	-2,402.96	-3,508.3	-7,407.6	8,093.8	0.00	0.00	0.00
14,000.0	90.00	270.65	7,055.0	-2,402.96	-3,507.2	-7,507.6	8,189.5	0.00	0.00	0.00
14,100.0	90.00	270.65	7,055.0	-2,402.96	-3,506.1	-7,607.6	8,285.1	0.00	0.00	0.00
14,200.0	90.00	270.65	7,055.0	-2,402.96	-3,504.9	-7,707.6	8,380.8	0.00	0.00	0.00
14,300.0	90.00	270.65	7,055.0	-2,402.96	-3,503.8	-7,807.5	8,476.5	0.00	0.00	0.00
14,400.0	90.00	270.65	7,055.0	-2,402.96	-3,502.7	-7,907.5	8,572.2	0.00	0.00	0.00
14,500.0	90.00	270.65	7,055.0	-2,402.96	-3,501.6	-8,007.5	8,667.8	0.00	0.00	0.00
14,600.0	90.00	270.65	7,055.0	-2,402.96	-3,500.4	-8,107.5	8,763.5	0.00	0.00	0.00
14,700.0	90.00	270.65	7,055.0	-2,402.96	-3,499.3	-8,207.5	8,859.2	0.00	0.00	0.00
14,800.0	90.00	270.65	7,055.0	-2,402.96	-3,498.2	-8,307.5	8,954.9	0.00	0.00	0.00
14,900.0	90.00	270.65	7,055.0	-2,402.96	-3,497.1	-8,407.5	9,050.5	0.00	0.00	0.00
15,000.0	90.00	270.65	7,055.0	-2,402.96	-3,495.9	-8,507.5	9,146.2	0.00	0.00	0.00
15,100.0	90.00	270.65	7,055.0	-2,402.97	-3,494.8	-8,607.5	9,241.9	0.00	0.00	0.00
15,200.0	90.00	270.65	7,055.0	-2,402.97	-3,493.7	-8,707.5	9,337.6	0.00	0.00	0.00
15,300.0	90.00	270.65	7,055.0	-2,402.97	-3,492.5	-8,807.5	9,433.2	0.00	0.00	0.00
15,400.0	90.00	270.65	7,055.0	-2,402.97	-3,491.4	-8,907.5	9,528.9	0.00	0.00	0.00
15,500.0	90.00	270.65	7,055.0	-2,402.97	-3,490.3	-9,007.5	9,624.6	0.00	0.00	0.00
15,600.0	90.00	270.65	7,055.0	-2,402.97	-3,489.2	-9,107.5	9,720.3	0.00	0.00	0.00
15,700.0	90.00	270.65	7,055.0	-2,402.97	-3,488.0	-9,207.5	9,815.9	0.00	0.00	0.00
15,800.0	90.00	270.65	7,055.0	-2,402.97	-3,486.9	-9,307.5	9,911.6	0.00	0.00	0.00
15,900.0	90.00	270.65	7,055.0	-2,402.97	-3,485.8	-9,407.4	10,007.3	0.00	0.00	0.00
16,000.0	90.00	270.65	7,055.0	-2,402.97	-3,484.6	-9,507.4	10,102.9	0.00	0.00	0.00
16,100.0	90.00	270.65	7,055.0	-2,402.97	-3,483.5	-9,607.4	10,198.6	0.00	0.00	0.00
16,200.0	90.00	270.65	7,055.0	-2,402.97	-3,482.4	-9,707.4	10,294.3	0.00	0.00	0.00
16,300.0	90.00	270.65	7,055.0	-2,402.97	-3,481.2	-9,807.4	10,390.0	0.00	0.00	0.00
16,400.0	90.00	270.65	7,055.0	-2,402.97	-3,480.1	-9,907.4	10,485.6	0.00	0.00	0.00
16,500.0	90.00	270.65	7,055.0	-2,402.98	-3,479.0	-10,007.4	10,581.3	0.00	0.00	0.00
16,600.0	90.00	270.65	7,055.0	-2,402.98	-3,477.9	-10,107.4	10,677.0	0.00	0.00	0.00
16,700.0	90.00	270.65	7,055.0	-2,402.98	-3,476.7	-10,207.4	10,772.7	0.00	0.00	0.00
16,800.0	90.00	270.65	7,055.0	-2,402.98	-3,475.6	-10,307.4	10,868.3	0.00	0.00	0.00
16,900.0	90.00	270.65	7,055.0	-2,402.98	-3,474.5	-10,407.4	10,964.0	0.00	0.00	0.00
17,000.0	90.00	270.65	7,055.0	-2,402.98	-3,473.3	-10,507.4	11,059.7	0.00	0.00	0.00
17,100.0	90.00	270.65	7,055.0	-2,402.98	-3,472.2	-10,607.4	11,155.3	0.00	0.00	0.00
17,200.0	90.00	270.65	7,055.0	-2,402.98	-3,471.1	-10,707.4	11,251.0	0.00	0.00	0.00
17,300.0	90.00	270.65	7,055.0	-2,402.98	-3,469.9	-10,807.4	11,346.7	0.00	0.00	0.00
17,400.0	90.00	270.65	7,055.0	-2,402.99	-3,468.8	-10,907.4	11,442.4	0.00	0.00	0.00
17,500.0	90.00	270.65	7,055.0	-2,402.99	-3,467.7	-11,007.3	11,538.0	0.00	0.00	0.00
17,600.0	90.00	270.65	7,055.0	-2,402.99	-3,466.5	-11,107.3	11,633.7	0.00	0.00	0.00
17,700.0	90.00	270.65	7,055.0	-2,402.99	-3,465.4	-11,207.3	11,729.4	0.00	0.00	0.00
17,800.0	90.00	270.65	7,055.0	-2,402.99	-3,464.3	-11,307.3	11,825.0	0.00	0.00	0.00
17,900.0	90.00	270.65	7,055.0	-2,402.99	-3,463.1	-11,407.3	11,920.7	0.00	0.00	0.00
18,000.0	90.00	270.65	7,055.0	-2,402.99	-3,462.0	-11,507.3	12,016.4	0.00	0.00	0.00
18,100.0	90.00	270.65	7,055.0	-2,403.00	-3,460.9	-11,607.3	12,112.1	0.00	0.00	0.00
18,200.0	90.00	270.65	7,055.0	-2,403.00	-3,459.7	-11,707.3	12,207.7	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MT-GLENFAIR C8-8-7
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4652.0usft (SAV 802)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4652.0usft (SAV 802)
Site:	NE NW SEC. 9 T5N R65W 6th P.M.	North Reference:	True
Well:	MT-GLENFAIR C8-8-7	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
18,300.0	90.00	270.65	7,055.0	-2,403.00	-3,458.6	-11,807.3	12,303.4	0.00	0.00	0.00
BHL: 558ft FSL & 460ft FWL of Sec 7										
18,342.4	90.00	270.65	7,055.0	-2,403.00	-3,458.1	-11,849.7	12,343.9	0.00	0.00	0.00

Formations

MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,248.0	3,613.0	PARKMAN			
5,157.0	4,302.0	SUSSEX			
5,877.4	4,848.0	SHANNON			
8,057.6	6,723.0	SHARON SPRINGS			
8,091.1	6,753.0	NIOBRARA			
8,493.5	7,015.0	FORT HAYS			
8,601.7	7,045.0	CODELL			
8,708.9	7,055.0	CODELL TARGET			

Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.0	0.0	0.0	0.0	SHL: 1180ft FNL & 1755ft FWL of Sec 9
300.0	300.0	0.0	0.0	START NUDGE - SURFACE (2°/100ft BUR)
1,878.7	1,800.0	-385.3	-177.3	9 5/8" SURFACE CSG
1,943.7	1,855.4	-416.2	-191.5	START NUDGE - MAIN (4°/100ft BUR)
2,172.3	2,039.8	-538.5	-247.8	EOB TO 40.72° INC
6,761.0	5,517.7	-3,257.9	-1,499.0	END OF TANGENT
7,779.0	6,452.1	-3,572.9	-1,643.9	EOD TO VERTICAL
7,809.0	6,482.1	-3,572.9	-1,643.9	KOP (10°/100ft BUR)
8,708.9	7,055.0	-3,566.5	-2,216.8	LANDING PNT: 488ft FSL & 460ft FEL of Sec 8
18,342.4	7,055.0	-3,458.1	-11,849.7	BHL: 558ft FSL & 460ft FWL of Sec 7