

EXTRACTION OIL & GAS

WELD COUNTY, COLORADO (NAD 83)

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

MT-GLENFAIR 2-8-7

ORIGINAL WELLBORE

20 June, 2015

Plan: PROPOSAL #2





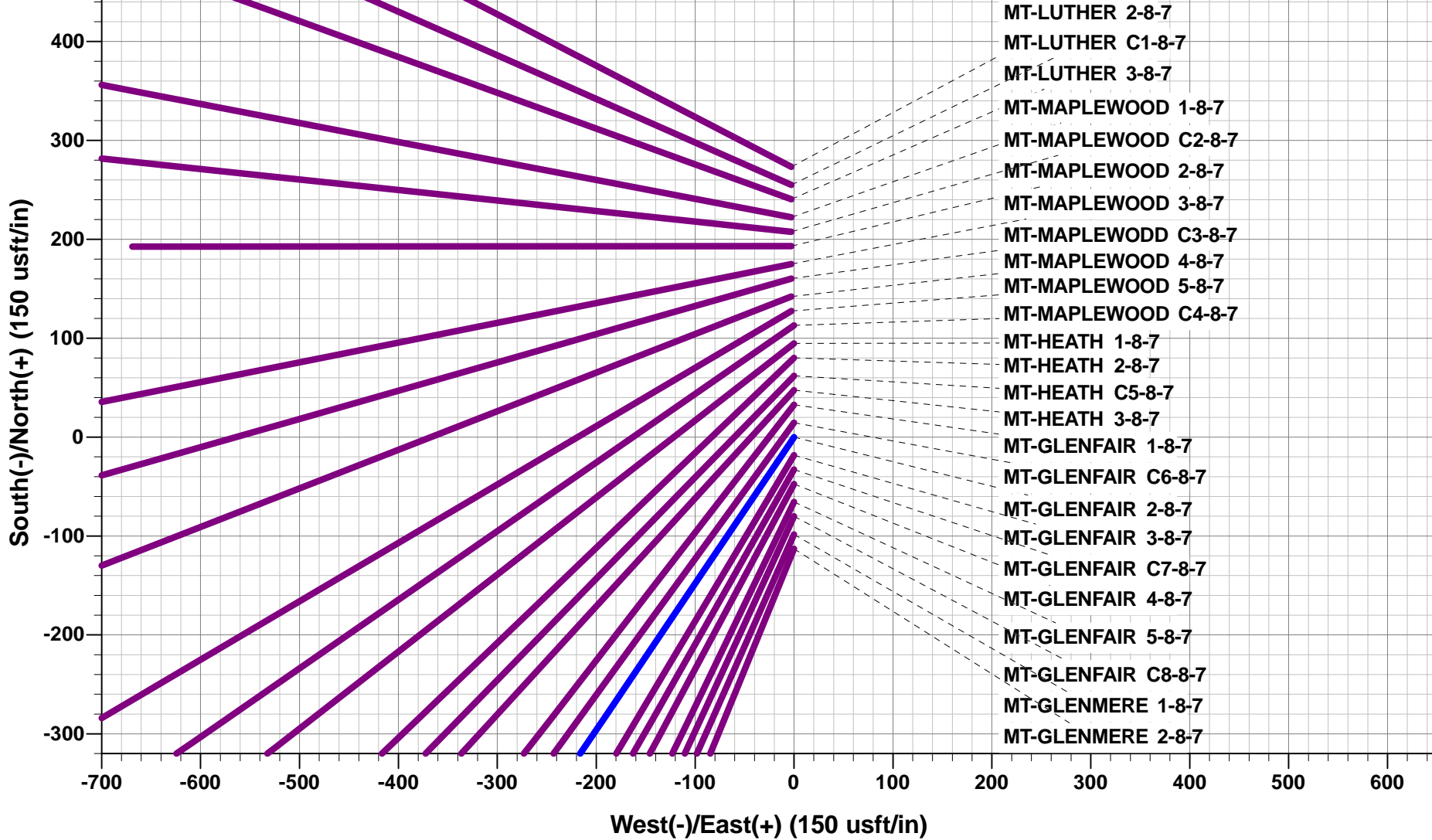
Project: WELD COUNTY, COLORADO (NAD 83)
Site: NE NW SEC. 9 T5N R65W 6th P.M.
Well: MT-GLENFAIR 2-8-7
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #2

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation
0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	SHL: 1100ft FNL & 1754ft FWL of Sec 9
800.0	800.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE - SURFACE (2°/100ft BUR)
1800.0	1821.5	20.43	214.04	-149.3	-100.9	126.8	180.2	9 5/8" SURFACE CSG
1860.9	1886.5	20.43	214.04	-168.1	-113.6	142.8	202.9	START NUDGE - MAIN (3°/100ft BUR)
2340.4	2434.8	36.88	214.04	-385.3	-260.2	327.2	464.9	EOB TO 36.88° INC
5125.9	5917.0	36.88	214.04	-2116.9	-1429.9	1797.8	2554.6	END OF TANGENT
6272.0	7146.3	0.00	0.00	-2433.6	-1643.8	2066.8	2936.7	EOD TO VERTICAL
6302.0	7176.3	0.00	0.00	-2433.6	-1643.8	2066.8	2936.7	KOP (10°/100ft BUR)
6875.0	8076.3	90.00	271.10	-2422.6	-2216.7	2627.6	3509.7	LANDING PNT: 1712ft FSL & 460ft FEL of Sec 8
6875.0	17713.2	90.00	271.10	-2237.7	-11851.8	12061.2	13146.6	BHL: 1860ft FWL & 460ft FWL of Sec 7

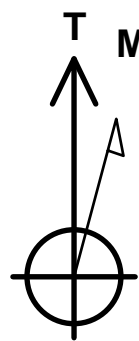
WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - MT-GLENFAIR 2-8-7	6302.0	-2433.6	-1643.8	40.411130	-104.677563
LANDING PNT - MT-GLENFAIR 2-8-7	6875.0	-2422.6	-2216.7	40.411160	-104.679620
BHL - MT-GLENFAIR 2-8-7	6875.0	-2237.7	-11851.8	40.411660	-104.714220



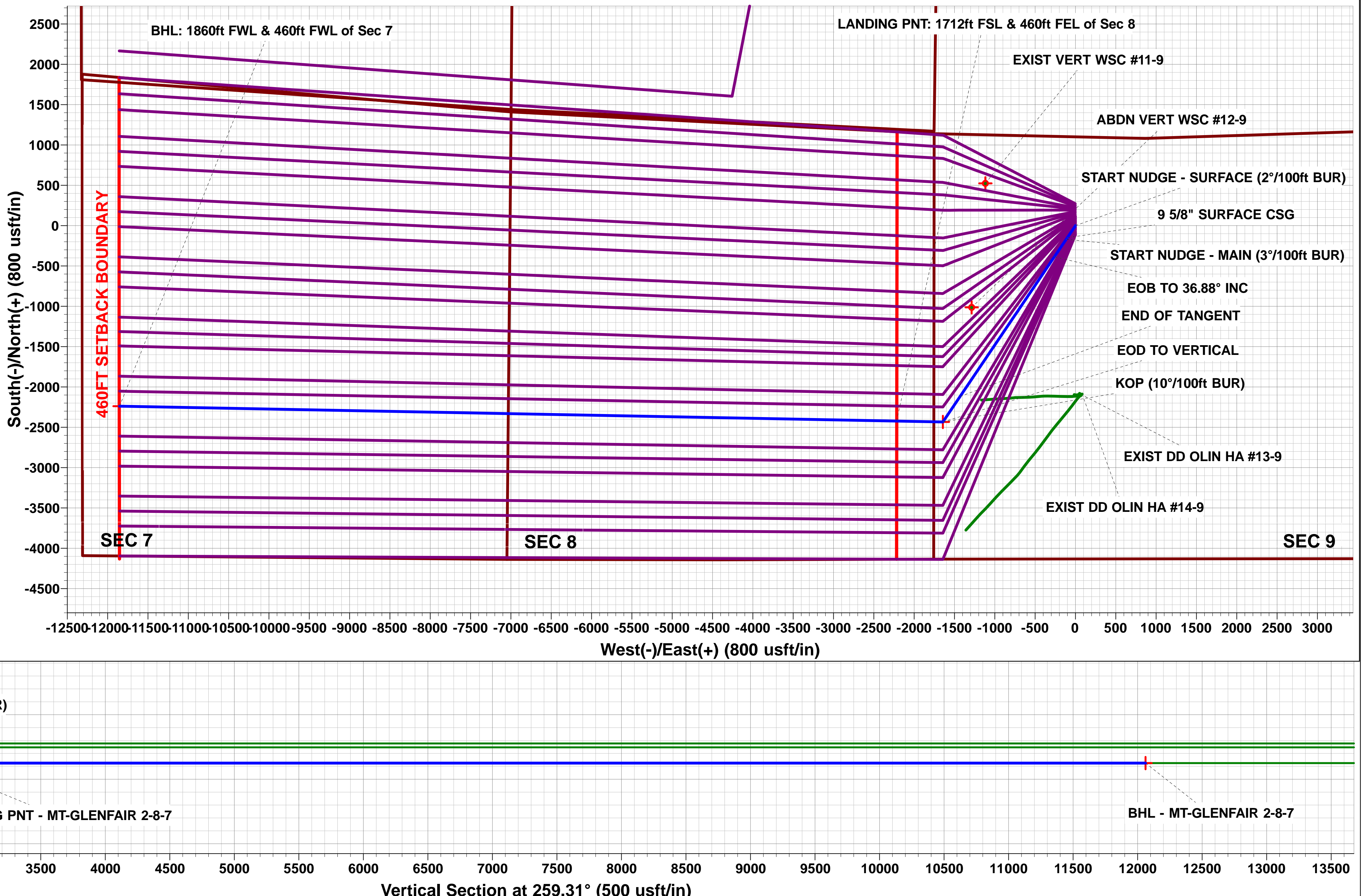
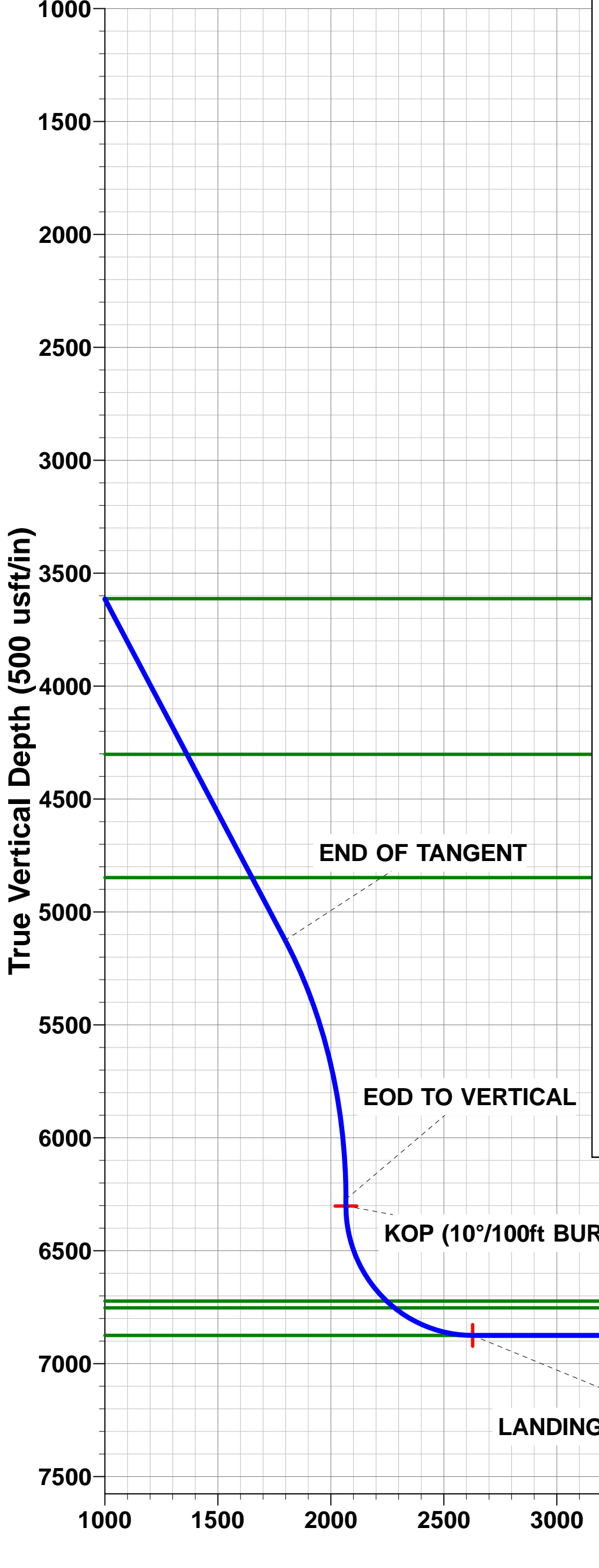
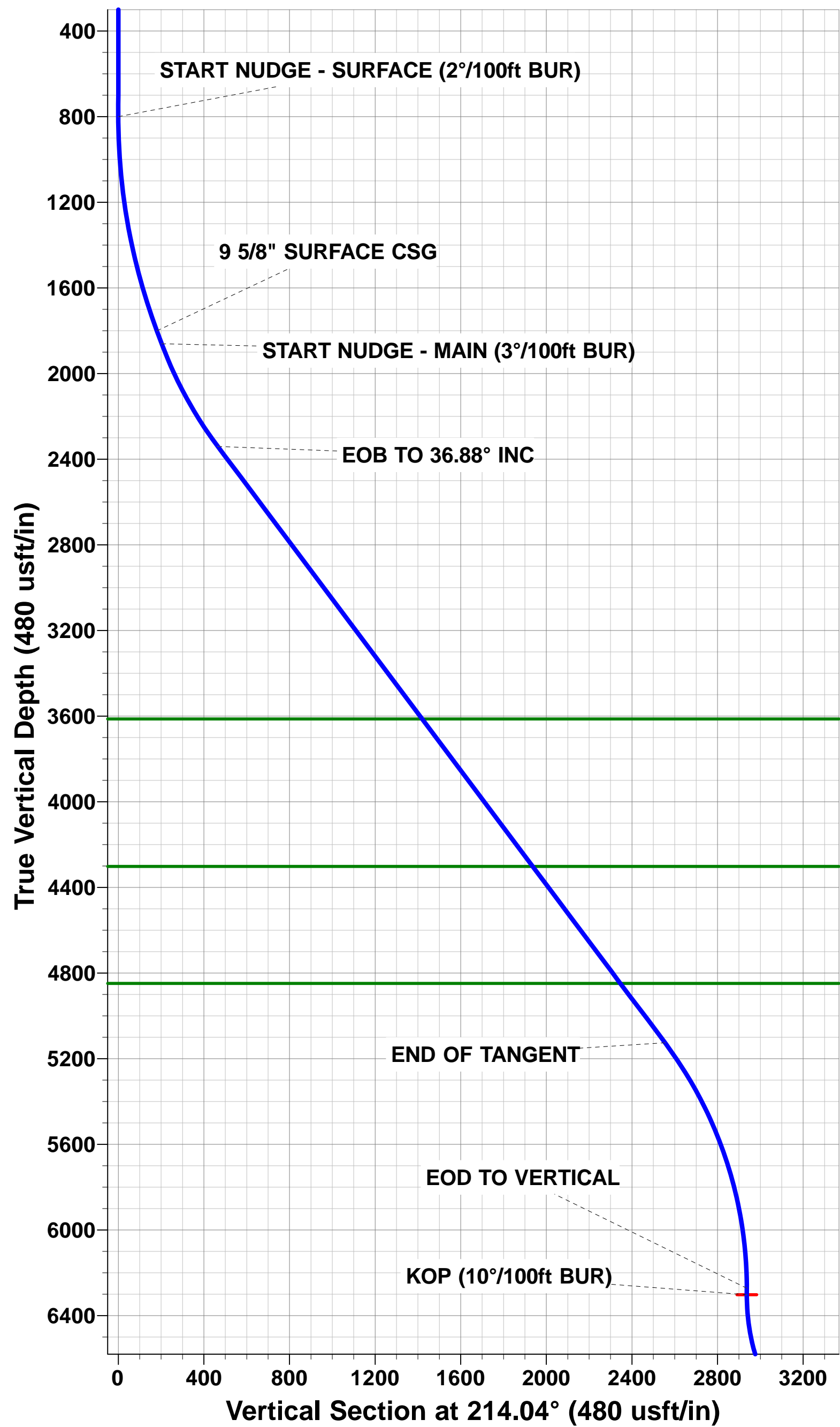
FORMATION TOP DETAILS

TVDPath	MDPath	Formation
3613.0	4025.7	PARKMAN
4302.0	4887.1	SUSSEX
4848.0	5569.6	SHANNON
6723.0	7649.1	SHARON SPRINGS
6753.0	7695.4	NIOBRARA
6875.0	8076.3	NIO B TARGET



Azimuths to True North
Magnetic North: 8.38°

Magnetic Field
Strength: 52645.4nT
Dip Angle: 66.93°
Date: 04/06/2015
Model: IGRF2015



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MT-GLENFAIR 2-8-7
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4651.0usft (SAV 802)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4651.0usft (SAV 802)
Site:	NE NW SEC. 9 T5N R65W 6th P.M.	North Reference:	True
Well:	MT-GLENFAIR 2-8-7	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 2-8-7		
Well Position	+N/-S	-273.2 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	259.31

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	-4,651.0	0.0	0.0	0.00	0.00	0.00	0.00	
800.0	0.00	0.00	800.0	-3,851.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,821.5	20.43	214.04	1,800.0	-2,851.0	-149.3	-100.9	2.00	2.00	0.00	214.04	
1,886.5	20.43	214.04	1,860.9	-2,790.1	-168.1	-113.6	0.00	0.00	0.00	0.00	
2,434.8	36.88	214.04	2,340.4	-2,310.6	-385.2	-260.2	3.00	3.00	0.00	0.00	
5,917.0	36.88	214.04	5,125.9	474.9	-2,116.9	-1,429.9	0.00	0.00	0.00	0.00	
7,146.3	0.00	0.00	6,272.0	1,621.0	-2,433.6	-1,643.8	3.00	-3.00	0.00	180.00	
7,176.3	0.00	0.00	6,302.0	1,651.0	-2,433.6	-1,643.8	0.00	0.00	0.00	0.00	KOP - MT-GLENFA
8,076.3	90.00	271.10	6,875.0	2,224.0	-2,422.6	-2,216.7	10.00	10.00	-9.88	271.10	LANDING PNT - M
17,713.2	90.00	271.10	6,875.0	2,224.0	-2,237.7	-11,851.8	0.00	0.00	0.00	-51.61	BHL - MT-GLENFA

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MT-GLENFAIR 2-8-7
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4651.0usft (SAV 802)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4651.0usft (SAV 802)
Site:	NE NW SEC. 9 T5N R65W 6th P.M.	North Reference:	True
Well:	MT-GLENFAIR 2-8-7	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: 1100ft FNL & 1754ft FWL of Sec 9										
0.0	0.00	0.00	0.0	4,651.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,551.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,451.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,351.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,251.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,151.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,051.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	3,951.00	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE - SURFACE (2°/100ft BUR)										
800.0	0.00	0.00	800.0	3,851.00	0.0	0.0	0.0	0.00	0.00	0.00
900.0	2.00	214.04	900.0	3,751.02	-1.4	-1.0	1.2	2.00	2.00	0.00
1,000.0	4.00	214.04	999.8	3,651.16	-5.8	-3.9	4.9	2.00	2.00	0.00
1,100.0	6.00	214.04	1,099.5	3,551.55	-13.0	-8.8	11.0	2.00	2.00	0.00
1,200.0	8.00	214.04	1,198.7	3,452.30	-23.1	-15.6	19.6	2.00	2.00	0.00
1,300.0	10.00	214.04	1,297.5	3,353.53	-36.1	-24.4	30.6	2.00	2.00	0.00
1,400.0	12.00	214.04	1,395.6	3,255.38	-51.9	-35.0	44.1	2.00	2.00	0.00
1,500.0	14.00	214.04	1,493.1	3,157.94	-70.5	-47.6	59.9	2.00	2.00	0.00
1,600.0	16.00	214.04	1,589.6	3,061.36	-92.0	-62.1	78.1	2.00	2.00	0.00
1,700.0	18.00	214.04	1,685.3	2,965.73	-116.2	-78.5	98.7	2.00	2.00	0.00
1,800.0	20.00	214.04	1,779.8	2,871.18	-143.2	-96.7	121.6	2.00	2.00	0.00
9 5/8" SURFACE CSG										
1,821.5	20.43	214.04	1,800.0	2,851.00	-149.3	-100.9	126.8	2.00	2.00	0.00
START NUDGE - MAIN (3°/100ft BUR)										
1,886.5	20.43	214.04	1,860.9	2,790.10	-168.1	-113.6	142.8	0.00	0.00	0.00
1,900.0	20.83	214.04	1,873.5	2,777.46	-172.1	-116.2	146.1	3.00	3.00	-0.02
2,000.0	23.83	214.04	1,966.0	2,684.98	-203.6	-137.5	172.9	3.00	3.00	0.00
2,100.0	26.83	214.04	2,056.4	2,594.60	-239.0	-161.4	203.0	3.00	3.00	0.00
2,200.0	29.83	214.04	2,144.4	2,506.60	-278.3	-188.0	236.4	3.00	3.00	0.00
2,300.0	32.83	214.04	2,229.8	2,421.19	-321.4	-217.1	273.0	3.00	3.00	0.00
2,400.0	35.83	214.04	2,312.4	2,338.62	-368.2	-248.7	312.7	3.00	3.00	0.00
EOB TO 36.88° INC										
2,434.8	36.88	214.04	2,340.4	2,310.60	-385.3	-260.2	327.2	3.00	3.00	0.00
2,500.0	36.88	214.04	2,392.6	2,258.44	-417.7	-282.1	354.7	0.00	0.00	0.00
2,600.0	36.88	214.04	2,472.5	2,178.45	-467.4	-315.7	397.0	0.00	0.00	0.00
2,700.0	36.88	214.04	2,552.5	2,098.46	-517.1	-349.3	439.2	0.00	0.00	0.00
2,800.0	36.88	214.04	2,632.5	2,018.47	-566.9	-382.9	481.4	0.00	0.00	0.00
2,900.0	36.88	214.04	2,712.5	1,938.48	-616.6	-416.5	523.7	0.00	0.00	0.00
3,000.0	36.88	214.04	2,792.5	1,858.49	-666.3	-450.1	565.9	0.00	0.00	0.00
3,100.0	36.88	214.04	2,872.5	1,778.49	-716.1	-483.7	608.1	0.00	0.00	0.00
3,200.0	36.88	214.04	2,952.5	1,698.50	-765.8	-517.3	650.4	0.00	0.00	0.00
3,300.0	36.88	214.04	3,032.5	1,618.51	-815.5	-550.9	692.6	0.00	0.00	0.00
3,400.0	36.88	214.04	3,112.5	1,538.52	-865.2	-584.4	734.8	0.00	0.00	0.00
3,500.0	36.88	214.04	3,192.5	1,458.53	-915.0	-618.0	777.1	0.00	0.00	0.00
3,600.0	36.88	214.04	3,272.5	1,378.54	-964.7	-651.6	819.3	0.00	0.00	0.00
3,700.0	36.88	214.04	3,352.5	1,298.54	-1,014.4	-685.2	861.5	0.00	0.00	0.00
3,800.0	36.88	214.04	3,432.4	1,218.55	-1,064.2	-718.8	903.8	0.00	0.00	0.00
3,900.0	36.88	214.04	3,512.4	1,138.56	-1,113.9	-752.4	946.0	0.00	0.00	0.00
4,000.0	36.88	214.04	3,592.4	1,058.57	-1,163.6	-786.0	988.2	0.00	0.00	0.00
PARKMAN										
4,025.7	36.88	214.04	3,613.0	1,038.00	-1,176.4	-794.6	999.1	0.00	0.00	0.00
4,100.0	36.88	214.04	3,672.4	978.58	-1,213.3	-819.6	1,030.5	0.00	0.00	0.00
4,200.0	36.88	214.04	3,752.4	898.59	-1,263.1	-853.2	1,072.7	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MT-GLENFAIR 2-8-7
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4651.0usft (SAV 802)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4651.0usft (SAV 802)
Site:	NE NW SEC. 9 T5N R65W 6th P.M.	North Reference:	True
Well:	MT-GLENFAIR 2-8-7	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	36.88	214.04	3,832.4	818.60	-1,312.8	-886.8	1,114.9	0.00	0.00	0.00
4,400.0	36.88	214.04	3,912.4	738.60	-1,362.5	-920.3	1,157.2	0.00	0.00	0.00
4,500.0	36.88	214.04	3,992.4	658.61	-1,412.3	-953.9	1,199.4	0.00	0.00	0.00
4,600.0	36.88	214.04	4,072.4	578.62	-1,462.0	-987.5	1,241.6	0.00	0.00	0.00
4,700.0	36.88	214.04	4,152.4	498.63	-1,511.7	-1,021.1	1,283.9	0.00	0.00	0.00
4,800.0	36.88	214.04	4,232.4	418.64	-1,561.5	-1,054.7	1,326.1	0.00	0.00	0.00
SUSSEX										
4,887.1	36.88	214.04	4,302.0	349.00	-1,604.7	-1,083.9	1,362.9	0.00	0.00	0.00
4,900.0	36.88	214.04	4,312.4	338.65	-1,611.2	-1,088.3	1,368.3	0.00	0.00	0.00
5,000.0	36.88	214.04	4,392.3	258.65	-1,660.9	-1,121.9	1,410.6	0.00	0.00	0.00
5,100.0	36.88	214.04	4,472.3	178.66	-1,710.6	-1,155.5	1,452.8	0.00	0.00	0.00
5,200.0	36.88	214.04	4,552.3	98.67	-1,760.4	-1,189.1	1,495.0	0.00	0.00	0.00
5,300.0	36.88	214.04	4,632.3	18.68	-1,810.1	-1,222.7	1,537.3	0.00	0.00	0.00
5,400.0	36.88	214.04	4,712.3	-61.31	-1,859.8	-1,256.2	1,579.5	0.00	0.00	0.00
5,500.0	36.88	214.04	4,792.3	-141.30	-1,909.6	-1,289.8	1,621.7	0.00	0.00	0.00
SHANNON										
5,569.6	36.88	214.04	4,848.0	-197.00	-1,944.2	-1,313.2	1,651.1	0.00	0.00	0.00
5,600.0	36.88	214.04	4,872.3	-221.30	-1,959.3	-1,323.4	1,664.0	0.00	0.00	0.00
5,700.0	36.88	214.04	4,952.3	-301.29	-2,009.0	-1,357.0	1,706.2	0.00	0.00	0.00
5,800.0	36.88	214.04	5,032.3	-381.28	-2,058.8	-1,390.6	1,748.4	0.00	0.00	0.00
5,900.0	36.88	214.04	5,112.3	-461.27	-2,108.5	-1,424.2	1,790.7	0.00	0.00	0.00
END OF TANGENT										
5,917.0	36.88	214.04	5,125.9	-474.87	-2,116.9	-1,429.9	1,797.8	0.00	0.00	0.00
6,000.0	34.39	214.04	5,193.3	-542.32	-2,157.0	-1,457.0	1,831.9	3.00	-3.00	0.00
6,100.0	31.39	214.04	5,277.3	-626.29	-2,202.0	-1,487.4	1,870.1	3.00	-3.00	0.00
6,200.0	28.39	214.04	5,364.0	-712.98	-2,243.3	-1,515.3	1,905.1	3.00	-3.00	0.00
6,300.0	25.39	214.04	5,453.2	-802.16	-2,280.8	-1,540.6	1,937.0	3.00	-3.00	0.00
6,400.0	22.39	214.04	5,544.6	-893.58	-2,314.3	-1,563.2	1,965.5	3.00	-3.00	0.00
6,500.0	19.39	214.04	5,638.0	-987.00	-2,343.9	-1,583.2	1,990.5	3.00	-3.00	0.00
6,600.0	16.39	214.04	5,733.2	-1,082.15	-2,369.3	-1,600.4	2,012.2	3.00	-3.00	0.00
6,700.0	13.39	214.04	5,829.8	-1,178.79	-2,390.6	-1,614.7	2,030.2	3.00	-3.00	0.00
6,800.0	10.39	214.04	5,927.6	-1,276.63	-2,407.7	-1,626.3	2,044.7	3.00	-3.00	0.00
6,900.0	7.39	214.04	6,026.4	-1,375.42	-2,420.5	-1,634.9	2,055.6	3.00	-3.00	0.00
7,000.0	4.39	214.04	6,125.9	-1,474.88	-2,429.0	-1,640.7	2,062.8	3.00	-3.00	0.00
7,100.0	1.39	214.04	6,225.7	-1,574.74	-2,433.1	-1,643.5	2,066.4	3.00	-3.00	0.00
EOD TO VERTICAL										
7,146.3	0.00	0.00	6,272.0	-1,621.04	-2,433.6	-1,643.8	2,066.8	3.00	-3.00	0.00
KOP (10°/100ft BUR)										
7,176.3	0.00	0.00	6,302.0	-1,651.04	-2,433.6	-1,643.8	2,066.8	0.00	0.00	0.00
7,200.0	2.37	271.10	6,325.7	-1,674.73	-2,433.6	-1,644.3	2,067.2	10.01	10.01	0.00
7,300.0	12.37	271.10	6,424.8	-1,773.78	-2,433.3	-1,657.1	2,079.8	10.00	10.00	0.00
7,400.0	22.37	271.10	6,520.1	-1,869.09	-2,432.8	-1,686.9	2,109.0	10.00	10.00	0.00
7,500.0	32.37	271.10	6,608.8	-1,957.79	-2,431.9	-1,732.8	2,153.9	10.00	10.00	0.00
7,600.0	42.37	271.10	6,688.2	-2,037.16	-2,430.7	-1,793.4	2,213.3	10.00	10.00	0.00
SHARON SPRINGS										
7,649.1	47.28	271.10	6,723.0	-2,072.00	-2,430.1	-1,828.1	2,247.2	10.00	10.00	0.00
NIOBRARA										
7,695.4	51.91	271.10	6,753.0	-2,102.00	-2,429.4	-1,863.3	2,281.7	10.00	10.00	0.00
7,700.0	52.37	271.10	6,755.8	-2,104.80	-2,429.3	-1,866.9	2,285.2	10.00	10.00	0.00
7,800.0	62.37	271.10	6,809.7	-2,158.65	-2,427.7	-1,951.0	2,367.5	10.00	10.00	0.00
7,900.0	72.37	271.10	6,848.1	-2,197.08	-2,425.9	-2,043.2	2,457.8	10.00	10.00	0.00
8,000.0	82.37	271.10	6,869.9	-2,218.92	-2,424.0	-2,140.6	2,553.2	10.00	10.00	0.00
LANDING PNT: 1712ft FSL & 460ft FEL of Sec 8 - NIO B TARGET										

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MT-GLENFAIR 2-8-7
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4651.0usft (SAV 802)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4651.0usft (SAV 802)
Site:	NE NW SEC. 9 T5N R65W 6th P.M.	North Reference:	True
Well:	MT-GLENFAIR 2-8-7	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)
8,076.3	90.00	271.10	6,875.0	-2,224.00	-2,422.6	-2,216.7	2,627.6	10.00	10.00	0.00
8,100.0	90.00	271.10	6,875.0	-2,224.00	-2,422.1	-2,240.4	2,650.8	0.00	0.00	0.00
8,200.0	90.00	271.10	6,875.0	-2,224.01	-2,420.2	-2,340.3	2,748.7	0.00	0.00	0.00
8,300.0	90.00	271.10	6,875.0	-2,224.01	-2,418.3	-2,440.3	2,846.6	0.00	0.00	0.00
8,400.0	90.00	271.10	6,875.0	-2,224.02	-2,416.3	-2,540.3	2,944.5	0.00	0.00	0.00
8,500.0	90.00	271.10	6,875.0	-2,224.02	-2,414.4	-2,640.3	3,042.4	0.00	0.00	0.00
8,600.0	90.00	271.10	6,875.0	-2,224.03	-2,412.5	-2,740.3	3,140.3	0.00	0.00	0.00
8,700.0	90.00	271.10	6,875.0	-2,224.03	-2,410.6	-2,840.2	3,238.2	0.00	0.00	0.00
8,800.0	90.00	271.10	6,875.0	-2,224.04	-2,408.6	-2,940.2	3,336.0	0.00	0.00	0.00
8,900.0	90.00	271.10	6,875.0	-2,224.04	-2,406.7	-3,040.2	3,433.9	0.00	0.00	0.00
9,000.0	90.00	271.10	6,875.0	-2,224.04	-2,404.8	-3,140.2	3,531.8	0.00	0.00	0.00
9,100.0	90.00	271.10	6,875.0	-2,224.05	-2,402.9	-3,240.2	3,629.7	0.00	0.00	0.00
9,200.0	90.00	271.10	6,875.1	-2,224.05	-2,400.9	-3,340.2	3,727.6	0.00	0.00	0.00
9,300.0	90.00	271.10	6,875.1	-2,224.06	-2,399.0	-3,440.1	3,825.5	0.00	0.00	0.00
9,400.0	90.00	271.10	6,875.1	-2,224.06	-2,397.1	-3,540.1	3,923.4	0.00	0.00	0.00
9,500.0	90.00	271.10	6,875.1	-2,224.06	-2,395.2	-3,640.1	4,021.3	0.00	0.00	0.00
9,600.0	90.00	271.10	6,875.1	-2,224.07	-2,393.2	-3,740.1	4,119.2	0.00	0.00	0.00
9,700.0	90.00	271.10	6,875.1	-2,224.07	-2,391.3	-3,840.1	4,217.0	0.00	0.00	0.00
9,800.0	90.00	271.10	6,875.1	-2,224.07	-2,389.4	-3,940.0	4,314.9	0.00	0.00	0.00
9,900.0	90.00	271.10	6,875.1	-2,224.08	-2,387.5	-4,040.0	4,412.8	0.00	0.00	0.00
10,000.0	90.00	271.10	6,875.1	-2,224.08	-2,385.6	-4,140.0	4,510.7	0.00	0.00	0.00
10,100.0	90.00	271.10	6,875.1	-2,224.08	-2,383.6	-4,240.0	4,608.6	0.00	0.00	0.00
10,200.0	90.00	271.10	6,875.1	-2,224.09	-2,381.7	-4,340.0	4,706.5	0.00	0.00	0.00
10,300.0	90.00	271.10	6,875.1	-2,224.09	-2,379.8	-4,440.0	4,804.4	0.00	0.00	0.00
10,400.0	90.00	271.10	6,875.1	-2,224.09	-2,377.9	-4,539.9	4,902.3	0.00	0.00	0.00
10,500.0	90.00	271.10	6,875.1	-2,224.10	-2,375.9	-4,639.9	5,000.2	0.00	0.00	0.00
10,600.0	90.00	271.10	6,875.1	-2,224.10	-2,374.0	-4,739.9	5,098.1	0.00	0.00	0.00
10,700.0	90.00	271.10	6,875.1	-2,224.10	-2,372.1	-4,839.9	5,195.9	0.00	0.00	0.00
10,800.0	90.00	271.10	6,875.1	-2,224.10	-2,370.2	-4,939.9	5,293.8	0.00	0.00	0.00
10,900.0	90.00	271.10	6,875.1	-2,224.10	-2,368.3	-5,039.8	5,391.7	0.00	0.00	0.00
11,000.0	90.00	271.10	6,875.1	-2,224.11	-2,366.3	-5,139.8	5,489.6	0.00	0.00	0.00
11,100.0	90.00	271.10	6,875.1	-2,224.11	-2,364.4	-5,239.8	5,587.5	0.00	0.00	0.00
11,200.0	90.00	271.10	6,875.1	-2,224.11	-2,362.5	-5,339.8	5,685.4	0.00	0.00	0.00
11,300.0	90.00	271.10	6,875.1	-2,224.11	-2,360.6	-5,439.8	5,783.3	0.00	0.00	0.00
11,400.0	90.00	271.10	6,875.1	-2,224.11	-2,358.7	-5,539.7	5,881.2	0.00	0.00	0.00
11,500.0	90.00	271.10	6,875.1	-2,224.12	-2,356.7	-5,639.7	5,979.1	0.00	0.00	0.00
11,600.0	90.00	271.10	6,875.1	-2,224.12	-2,354.8	-5,739.7	6,076.9	0.00	0.00	0.00
11,700.0	90.00	271.10	6,875.1	-2,224.12	-2,352.9	-5,839.7	6,174.8	0.00	0.00	0.00
11,800.0	90.00	271.10	6,875.1	-2,224.12	-2,351.0	-5,939.7	6,272.7	0.00	0.00	0.00
11,900.0	90.00	271.10	6,875.1	-2,224.12	-2,349.1	-6,039.7	6,370.6	0.00	0.00	0.00
12,000.0	90.00	271.10	6,875.1	-2,224.12	-2,347.1	-6,139.6	6,468.5	0.00	0.00	0.00
12,100.0	90.00	271.10	6,875.1	-2,224.12	-2,345.2	-6,239.6	6,566.4	0.00	0.00	0.00
12,200.0	90.00	271.10	6,875.1	-2,224.12	-2,343.3	-6,339.6	6,664.3	0.00	0.00	0.00
12,300.0	90.00	271.10	6,875.1	-2,224.12	-2,341.4	-6,439.6	6,762.2	0.00	0.00	0.00
12,400.0	90.00	271.10	6,875.1	-2,224.13	-2,339.5	-6,539.6	6,860.1	0.00	0.00	0.00
12,500.0	90.00	271.10	6,875.1	-2,224.13	-2,337.5	-6,639.5	6,958.0	0.00	0.00	0.00
12,600.0	90.00	271.10	6,875.1	-2,224.13	-2,335.6	-6,739.5	7,055.8	0.00	0.00	0.00
12,700.0	90.00	271.10	6,875.1	-2,224.13	-2,333.7	-6,839.5	7,153.7	0.00	0.00	0.00
12,800.0	90.00	271.10	6,875.1	-2,224.13	-2,331.8	-6,939.5	7,251.6	0.00	0.00	0.00
12,900.0	90.00	271.10	6,875.1	-2,224.13	-2,329.9	-7,039.5	7,349.5	0.00	0.00	0.00
13,000.0	90.00	271.10	6,875.1	-2,224.13	-2,327.9	-7,139.5	7,447.4	0.00	0.00	0.00
13,100.0	90.00	271.10	6,875.1	-2,224.13	-2,326.0	-7,239.4	7,545.3	0.00	0.00	0.00
13,200.0	90.00	271.10	6,875.1	-2,224.13	-2,324.1	-7,339.4	7,643.2	0.00	0.00	0.00
13,300.0	90.00	271.10	6,875.1	-2,224.13	-2,322.2	-7,439.4	7,741.1	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MT-GLENFAIR 2-8-7
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4651.0usft (SAV 802)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4651.0usft (SAV 802)
Site:	NE NW SEC. 9 T5N R65W 6th P.M.	North Reference:	True
Well:	MT-GLENFAIR 2-8-7	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)
13,400.0	90.00	271.10	6,875.1	-2,224.12	-2,320.3	-7,539.4	7,839.0	0.00	0.00	0.00
13,500.0	90.00	271.10	6,875.1	-2,224.12	-2,318.3	-7,639.4	7,936.9	0.00	0.00	0.00
13,600.0	90.00	271.10	6,875.1	-2,224.12	-2,316.4	-7,739.3	8,034.7	0.00	0.00	0.00
13,700.0	90.00	271.10	6,875.1	-2,224.12	-2,314.5	-7,839.3	8,132.6	0.00	0.00	0.00
13,800.0	90.00	271.10	6,875.1	-2,224.12	-2,312.6	-7,939.3	8,230.5	0.00	0.00	0.00
13,900.0	90.00	271.10	6,875.1	-2,224.12	-2,310.7	-8,039.3	8,328.4	0.00	0.00	0.00
14,000.0	90.00	271.10	6,875.1	-2,224.12	-2,308.8	-8,139.3	8,426.3	0.00	0.00	0.00
14,100.0	90.00	271.10	6,875.1	-2,224.12	-2,306.8	-8,239.3	8,524.2	0.00	0.00	0.00
14,200.0	90.00	271.10	6,875.1	-2,224.12	-2,304.9	-8,339.2	8,622.1	0.00	0.00	0.00
14,300.0	90.00	271.10	6,875.1	-2,224.12	-2,303.0	-8,439.2	8,720.0	0.00	0.00	0.00
14,400.0	90.00	271.10	6,875.1	-2,224.11	-2,301.1	-8,539.2	8,817.9	0.00	0.00	0.00
14,500.0	90.00	271.10	6,875.1	-2,224.11	-2,299.2	-8,639.2	8,915.8	0.00	0.00	0.00
14,600.0	90.00	271.10	6,875.1	-2,224.11	-2,297.3	-8,739.2	9,013.6	0.00	0.00	0.00
14,700.0	90.00	271.10	6,875.1	-2,224.11	-2,295.3	-8,839.1	9,111.5	0.00	0.00	0.00
14,800.0	90.00	271.10	6,875.1	-2,224.11	-2,293.4	-8,939.1	9,209.4	0.00	0.00	0.00
14,900.0	90.00	271.10	6,875.1	-2,224.10	-2,291.5	-9,039.1	9,307.3	0.00	0.00	0.00
15,000.0	90.00	271.10	6,875.1	-2,224.10	-2,289.6	-9,139.1	9,405.2	0.00	0.00	0.00
15,100.0	90.00	271.10	6,875.1	-2,224.10	-2,287.7	-9,239.1	9,503.1	0.00	0.00	0.00
15,200.0	90.00	271.10	6,875.1	-2,224.10	-2,285.8	-9,339.0	9,601.0	0.00	0.00	0.00
15,300.0	90.00	271.10	6,875.1	-2,224.09	-2,283.9	-9,439.0	9,698.9	0.00	0.00	0.00
15,400.0	90.00	271.10	6,875.1	-2,224.09	-2,281.9	-9,539.0	9,796.8	0.00	0.00	0.00
15,500.0	90.00	271.10	6,875.1	-2,224.09	-2,280.0	-9,639.0	9,894.7	0.00	0.00	0.00
15,600.0	90.00	271.10	6,875.1	-2,224.09	-2,278.1	-9,739.0	9,992.5	0.00	0.00	0.00
15,700.0	90.00	271.10	6,875.1	-2,224.08	-2,276.2	-9,839.0	10,090.4	0.00	0.00	0.00
15,800.0	90.00	271.10	6,875.1	-2,224.08	-2,274.3	-9,938.9	10,188.3	0.00	0.00	0.00
15,900.0	90.00	271.10	6,875.1	-2,224.08	-2,272.4	-10,038.9	10,286.2	0.00	0.00	0.00
16,000.0	90.00	271.10	6,875.1	-2,224.07	-2,270.4	-10,138.9	10,384.1	0.00	0.00	0.00
16,100.0	90.00	271.10	6,875.1	-2,224.07	-2,268.5	-10,238.9	10,482.0	0.00	0.00	0.00
16,200.0	90.00	271.10	6,875.1	-2,224.07	-2,266.6	-10,338.9	10,579.9	0.00	0.00	0.00
16,300.0	90.00	271.10	6,875.1	-2,224.06	-2,264.7	-10,438.8	10,677.8	0.00	0.00	0.00
16,400.0	90.00	271.10	6,875.1	-2,224.06	-2,262.8	-10,538.8	10,775.7	0.00	0.00	0.00
16,500.0	90.00	271.10	6,875.1	-2,224.06	-2,260.9	-10,638.8	10,873.6	0.00	0.00	0.00
16,600.0	90.00	271.10	6,875.1	-2,224.05	-2,259.0	-10,738.8	10,971.5	0.00	0.00	0.00
16,700.0	90.00	271.10	6,875.0	-2,224.05	-2,257.0	-10,838.8	11,069.3	0.00	0.00	0.00
16,800.0	90.00	271.10	6,875.0	-2,224.04	-2,255.1	-10,938.8	11,167.2	0.00	0.00	0.00
16,900.0	90.00	271.10	6,875.0	-2,224.04	-2,253.2	-11,038.7	11,265.1	0.00	0.00	0.00
17,000.0	90.00	271.10	6,875.0	-2,224.03	-2,251.3	-11,138.7	11,363.0	0.00	0.00	0.00
17,100.0	90.00	271.10	6,875.0	-2,224.03	-2,249.4	-11,238.7	11,460.9	0.00	0.00	0.00
17,200.0	90.00	271.10	6,875.0	-2,224.03	-2,247.5	-11,338.7	11,558.8	0.00	0.00	0.00
17,300.0	90.00	271.10	6,875.0	-2,224.02	-2,245.6	-11,438.7	11,656.7	0.00	0.00	0.00
17,400.0	90.00	271.10	6,875.0	-2,224.02	-2,243.7	-11,538.6	11,754.6	0.00	0.00	0.00
17,500.0	90.00	271.10	6,875.0	-2,224.01	-2,241.7	-11,638.6	11,852.5	0.00	0.00	0.00
17,600.0	90.00	271.10	6,875.0	-2,224.01	-2,239.8	-11,738.6	11,950.4	0.00	0.00	0.00
17,700.0	90.00	271.10	6,875.0	-2,224.00	-2,237.9	-11,838.6	12,048.3	0.00	0.00	0.00
BHL: 1860ft FWL & 460ft FWL of Sec 7										
17,713.2	90.00	271.10	6,875.0	-2,224.00	-2,237.7	-11,851.8	12,061.2	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MT-GLENFAIR 2-8-7
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4651.0usft (SAV 802)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4651.0usft (SAV 802)
Site:	NE NW SEC. 9 T5N R65W 6th P.M.	North Reference:	True
Well:	MT-GLENFAIR 2-8-7	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Formations					
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,025.7	3,613.0	PARKMAN			
4,887.1	4,302.0	SUSSEX			
5,569.6	4,848.0	SHANNON			
7,649.1	6,723.0	SHARON SPRINGS			
7,695.4	6,753.0	NIOBRARA			
8,076.3	6,875.0	NIO B 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: 1100ft FNL & 1754ft FWL of Sec 9
800.0	800.0	0.0	0.0	START NUDGE - SURFACE (2°/100ft BUR)
1,821.5	1,800.0	-149.3	-100.9	9 5/8" SURFACE CSG
1,886.5	1,860.9	-168.1	-113.6	START NUDGE - MAIN (3°/100ft BUR)
2,434.8	2,340.4	-385.3	-260.2	EOB TO 36.88° INC
5,917.0	5,125.9	-2,116.9	-1,429.9	END OF TANGENT
7,146.3	6,272.0	-2,433.6	-1,643.8	EOD TO VERTICAL
7,176.3	6,302.0	-2,433.6	-1,643.8	KOP (10°/100ft BUR)
8,076.3	6,875.0	-2,422.6	-2,216.7	LANDING PNT: 1712ft FSL & 460ft FEL of Sec 8
17,713.2	6,875.0	-2,237.7	-11,851.8	BHL: 1860ft FWL & 460ft FWL of Sec 7