

EXTRACTION OIL & GAS

WELD COUNTY, COLORADO (NAD 83)

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

MT-GLENFAIR 3-8-7

ORIGINAL WELLBORE

22 June, 2015

Plan: PROPOSAL #2

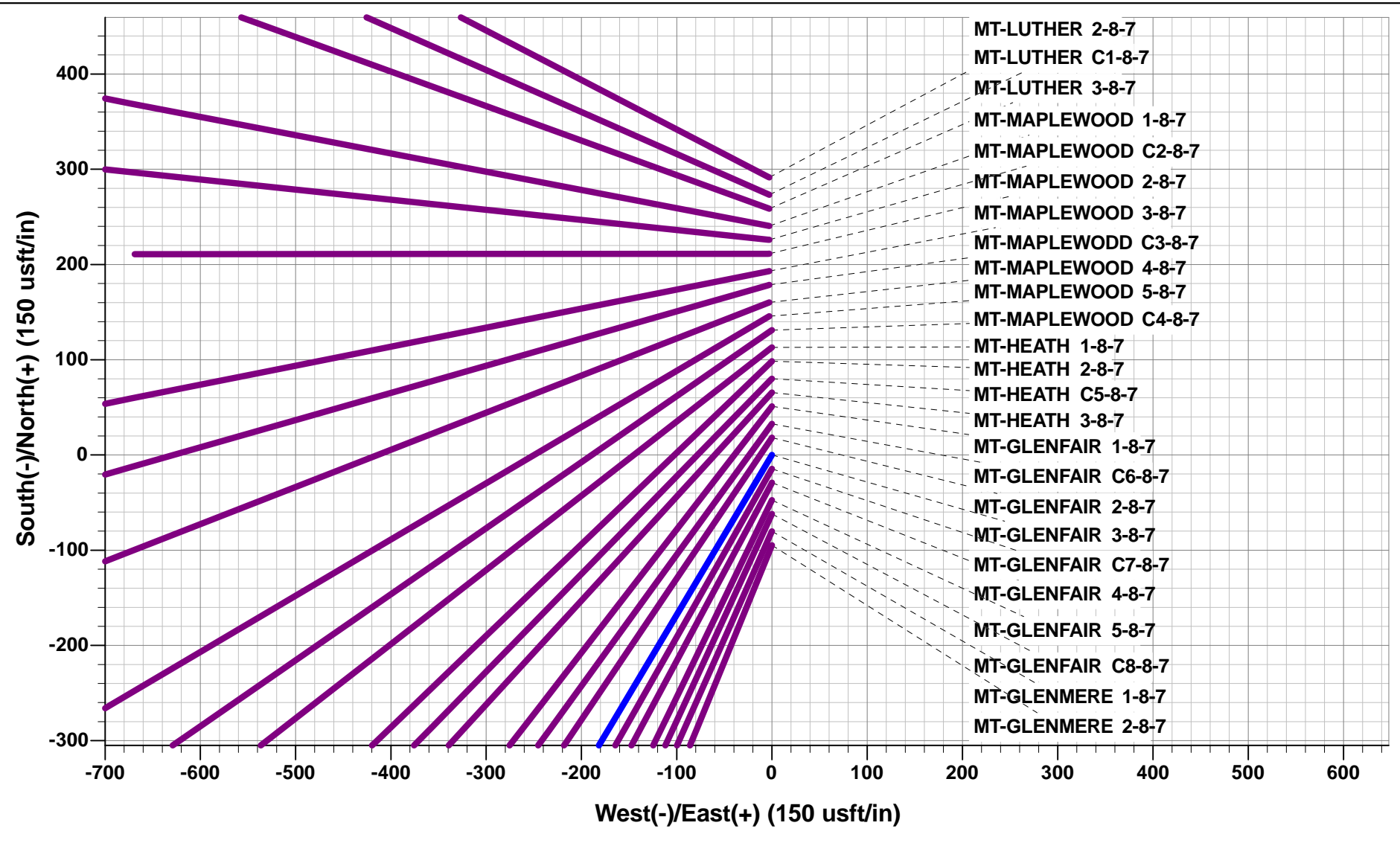




Project: WELD COUNTY, COLORADO (NAD 83)
Site: NE NW SEC. 9 T5N R65W 6th P.M.
Well: MT-GLENFAIR 3-8-7
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #2

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: 1116ft FNL & 1755ft FWL of Sec 9
700.0	700.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE - SURFACE (2°/100ft BUR)
1800.0	1829.0	22.58	210.78	-188.7	-112.4	150.1	219.6	9 5/8" SURFACE CSG
1860.0	1894.0	22.58	210.78	-210.1	-125.2	167.1	244.6	START NUDGE - MAIN (3°/100ft BUR)
2342.5	2459.3	39.54	210.78	-459.8	-273.9	365.7	535.2	EOB TO 39.54° INC
5056.1	5978.1	39.54	210.78	-2384.4	-1420.2	1896.7	2775.3	END OF TANGENT
6272.0	7296.1	0.00	210.78	-2759.9	-1643.8	2195.4	3212.3	EOD TO VERTICAL
6302.0	7326.1	0.00	0.00	-2759.9	-1643.8	2195.4	3212.3	KOP (10°/100ft BUR)
6875.0	8226.2	90.00	270.95	-2750.4	-2216.7	2753.1	3785.3	LANDING PNT: 1366ft FSL & 460ft FEL of Sec 8
6875.0	17860.0	90.00	270.95	-2591.1	-11849.2	12129.2	13419.1	BHL: 1488ft FSL & 460ft FWL of Sec 7

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - MT-GLENFAIR 3-8-7	6302.0	-2759.9	-1643.8	40.410184	-104.677563
LANDING PNT - MT-GLENFAIR 3-8-7	6875.0	-2750.4	-2216.7	40.410210	-104.679620
BHL - MT-GLENFAIR 3-8-7	6875.0	-2591.1	-11849.2	40.410640	-104.714210



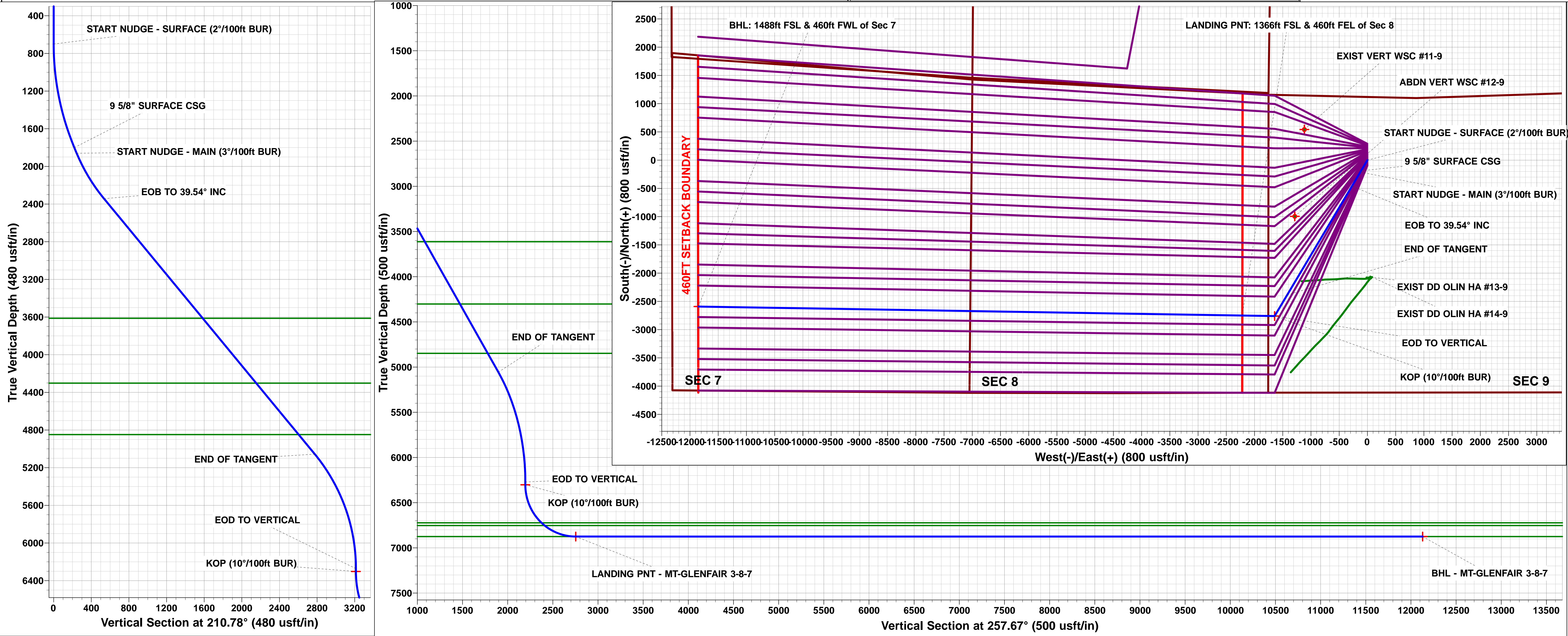
FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3613.0	4106.8	PARKMAN
4302.0	5000.2	SUSSEX
4848.0	5708.2	SHANNON
6723.0	7799.0	SHARON SPRINGS
6753.0	7845.3	NIOBRARA
6875.0	8226.2	NIO B TARGET

T

M

Azimuths to True North
Magnetic North: 8.38°

Magnetic Field
Strength: 52645.3snT
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 3-8-7
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 3-8-7	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 3-8-7					
Well Position	+N/-S	-291.5 usft	Northing:	1,396,107.55 usft	Latitude:	40.417760
	+E/-W	2.8 usft	Easting:	3,230,637.48 usft	Longitude:	-104.671660
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	4,636.0 usft

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	257.67

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	
700.0	0.00	0.00	700.0	-3,952.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,829.0	22.58	210.78	1,800.0	-2,852.0	-188.7	-112.4	2.00	2.00	0.00	210.78	
1,894.0	22.58	210.78	1,860.0	-2,792.0	-210.1	-125.2	0.00	0.00	0.00	0.00	
2,459.3	39.54	210.78	2,342.5	-2,309.5	-459.8	-273.9	3.00	3.00	0.00	0.00	
5,978.1	39.54	210.78	5,056.1	404.1	-2,384.4	-1,420.2	0.00	0.00	0.00	0.00	
7,296.1	0.00	0.00	6,272.0	1,620.0	-2,759.9	-1,643.8	3.00	-3.00	0.00	180.00	
7,326.1	0.00	0.00	6,302.0	1,650.0	-2,759.9	-1,643.8	0.00	0.00	0.00	0.00	KOP - MT-GLENFA
8,226.2	90.00	270.95	6,875.0	2,223.0	-2,750.4	-2,216.7	10.00	10.00	-9.89	270.95	LANDING PNT - M
17,860.0	90.00	270.95	6,875.0	2,223.0	-2,591.1	-11,849.2	0.00	0.00	0.00	47.33	BHL - MT-GLENFA

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MT-GLENFAIR 3-8-7
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 3-8-7	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: 1116ft 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
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	0.00	0.00	400.0	4,252.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,152.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,052.00	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE - SURFACE (2°/100ft BUR)										
700.0	0.00	0.00	700.0	3,952.00	0.0	0.0	0.0	0.00	0.00	0.00
800.0	2.00	210.78	800.0	3,852.02	-1.5	-0.9	1.2	2.00	2.00	0.00
900.0	4.00	210.78	899.8	3,752.16	-6.0	-3.6	4.8	2.00	2.00	0.00
1,000.0	6.00	210.78	999.5	3,652.55	-13.5	-8.0	10.7	2.00	2.00	0.00
1,100.0	8.00	210.78	1,098.7	3,553.30	-24.0	-14.3	19.1	2.00	2.00	0.00
1,200.0	10.00	210.78	1,197.5	3,454.53	-37.4	-22.3	29.7	2.00	2.00	0.00
1,300.0	12.00	210.78	1,295.6	3,356.38	-53.8	-32.0	42.8	2.00	2.00	0.00
1,400.0	14.00	210.78	1,393.1	3,258.94	-73.1	-43.5	58.2	2.00	2.00	0.00
1,500.0	16.00	210.78	1,489.6	3,162.36	-95.3	-56.8	75.8	2.00	2.00	0.00
1,600.0	18.00	210.78	1,585.3	3,066.73	-120.5	-71.8	95.8	2.00	2.00	0.00
1,700.0	20.00	210.78	1,679.8	2,972.18	-148.4	-88.4	118.1	2.00	2.00	0.00
1,800.0	22.00	210.78	1,773.2	2,878.83	-179.2	-106.8	142.6	2.00	2.00	0.00
9 5/8" SURFACE CSG										
1,829.0	22.58	210.78	1,800.0	2,852.00	-188.7	-112.4	150.1	2.00	2.00	0.00
START NUDGE - MAIN (3°/100ft BUR)										
1,894.0	22.58	210.78	1,860.0	2,791.98	-210.1	-125.2	167.1	0.00	0.00	0.00
1,900.0	22.76	210.78	1,865.6	2,786.44	-212.1	-126.3	168.7	3.00	3.00	0.00
2,000.0	25.76	210.78	1,956.7	2,695.29	-247.4	-147.4	196.8	3.00	3.00	0.00
2,100.0	28.76	210.78	2,045.6	2,606.40	-286.7	-170.8	228.1	3.00	3.00	0.00
2,200.0	31.76	210.78	2,132.0	2,520.04	-330.0	-196.6	262.5	3.00	3.00	0.00
2,300.0	34.76	210.78	2,215.6	2,436.43	-377.1	-224.6	300.0	3.00	3.00	0.00
2,400.0	37.76	210.78	2,296.2	2,355.80	-428.0	-254.9	340.4	3.00	3.00	0.00
EOB TO 39.54° INC										
2,459.3	39.54	210.78	2,342.5	2,309.49	-459.8	-273.9	365.7	3.00	3.00	0.00
2,500.0	39.54	210.78	2,373.9	2,278.11	-482.0	-287.1	383.5	0.00	0.00	0.00
2,600.0	39.54	210.78	2,451.0	2,200.99	-536.7	-319.7	427.0	0.00	0.00	0.00
2,700.0	39.54	210.78	2,528.1	2,123.87	-591.4	-352.3	470.5	0.00	0.00	0.00
2,800.0	39.54	210.78	2,605.2	2,046.75	-646.1	-384.8	514.0	0.00	0.00	0.00
2,900.0	39.54	210.78	2,682.4	1,969.64	-700.8	-417.4	557.5	0.00	0.00	0.00
3,000.0	39.54	210.78	2,759.5	1,892.52	-755.5	-450.0	601.0	0.00	0.00	0.00
3,100.0	39.54	210.78	2,836.6	1,815.40	-810.2	-482.6	644.5	0.00	0.00	0.00
3,200.0	39.54	210.78	2,913.7	1,738.28	-864.9	-515.1	688.0	0.00	0.00	0.00
3,300.0	39.54	210.78	2,990.8	1,661.17	-919.6	-547.7	731.5	0.00	0.00	0.00
3,400.0	39.54	210.78	3,068.0	1,584.05	-974.3	-580.3	775.0	0.00	0.00	0.00
3,500.0	39.54	210.78	3,145.1	1,506.93	-1,029.0	-612.9	818.5	0.00	0.00	0.00
3,600.0	39.54	210.78	3,222.2	1,429.81	-1,083.7	-645.5	862.1	0.00	0.00	0.00
3,700.0	39.54	210.78	3,299.3	1,352.70	-1,138.4	-678.0	905.6	0.00	0.00	0.00
3,800.0	39.54	210.78	3,376.4	1,275.58	-1,193.1	-710.6	949.1	0.00	0.00	0.00
3,900.0	39.54	210.78	3,453.5	1,198.46	-1,247.8	-743.2	992.6	0.00	0.00	0.00
4,000.0	39.54	210.78	3,530.7	1,121.34	-1,302.5	-775.8	1,036.1	0.00	0.00	0.00
4,100.0	39.54	210.78	3,607.8	1,044.23	-1,357.2	-808.3	1,079.6	0.00	0.00	0.00
PARKMAN										
4,106.8	39.54	210.78	3,613.0	1,039.00	-1,360.9	-810.5	1,082.5	0.00	0.00	0.00
4,200.0	39.54	210.78	3,684.9	967.11	-1,411.9	-840.9	1,123.1	0.00	0.00	0.00

Planning Report



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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	39.54	210.78	3,762.0	889.99	-1,466.6	-873.5	1,166.6	0.00	0.00	0.00
4,400.0	39.54	210.78	3,839.1	812.87	-1,521.3	-906.1	1,210.1	0.00	0.00	0.00
4,500.0	39.54	210.78	3,916.2	735.76	-1,576.0	-938.6	1,253.6	0.00	0.00	0.00
4,600.0	39.54	210.78	3,993.4	658.64	-1,630.6	-971.2	1,297.1	0.00	0.00	0.00
4,700.0	39.54	210.78	4,070.5	581.52	-1,685.3	-1,003.8	1,340.7	0.00	0.00	0.00
4,800.0	39.54	210.78	4,147.6	504.40	-1,740.0	-1,036.4	1,384.2	0.00	0.00	0.00
4,900.0	39.54	210.78	4,224.7	427.29	-1,794.7	-1,069.0	1,427.7	0.00	0.00	0.00
5,000.0	39.54	210.78	4,301.8	350.17	-1,849.4	-1,101.5	1,471.2	0.00	0.00	0.00
SUSSEX										
5,000.2	39.54	210.78	4,302.0	350.00	-1,849.6	-1,101.6	1,471.3	0.00	0.00	0.00
5,100.0	39.54	210.78	4,379.0	273.05	-1,904.1	-1,134.1	1,514.7	0.00	0.00	0.00
5,200.0	39.54	210.78	4,456.1	195.93	-1,958.8	-1,166.7	1,558.2	0.00	0.00	0.00
5,300.0	39.54	210.78	4,533.2	118.81	-2,013.5	-1,199.3	1,601.7	0.00	0.00	0.00
5,400.0	39.54	210.78	4,610.3	41.70	-2,068.2	-1,231.8	1,645.2	0.00	0.00	0.00
5,500.0	39.54	210.78	4,687.4	-35.42	-2,122.9	-1,264.4	1,688.7	0.00	0.00	0.00
5,600.0	39.54	210.78	4,764.5	-112.54	-2,177.6	-1,297.0	1,732.2	0.00	0.00	0.00
5,700.0	39.54	210.78	4,841.7	-189.66	-2,232.3	-1,329.6	1,775.7	0.00	0.00	0.00
SHANNON										
5,708.2	39.54	210.78	4,848.0	-196.00	-2,236.8	-1,332.2	1,779.3	0.00	0.00	0.00
5,800.0	39.54	210.78	4,918.8	-266.77	-2,287.0	-1,362.1	1,819.3	0.00	0.00	0.00
5,900.0	39.54	210.78	4,995.9	-343.89	-2,341.7	-1,394.7	1,862.8	0.00	0.00	0.00
END OF TANGENT										
5,978.1	39.54	210.78	5,056.1	-404.12	-2,384.4	-1,420.2	1,896.7	0.00	0.00	0.00
6,000.0	38.88	210.78	5,073.1	-421.09	-2,396.3	-1,427.2	1,906.2	3.00	-3.00	0.00
6,100.0	35.88	210.78	5,152.5	-500.54	-2,448.5	-1,458.3	1,947.7	3.00	-3.00	0.00
6,200.0	32.88	210.78	5,235.1	-583.05	-2,497.0	-1,487.2	1,986.3	3.00	-3.00	0.00
6,300.0	29.88	210.78	5,320.4	-668.41	-2,541.7	-1,513.9	2,021.9	3.00	-3.00	0.00
6,400.0	26.88	210.78	5,408.4	-756.38	-2,582.6	-1,538.2	2,054.4	3.00	-3.00	0.00
6,500.0	23.88	210.78	5,498.7	-846.72	-2,619.4	-1,560.1	2,083.7	3.00	-3.00	0.00
6,600.0	20.88	210.78	5,591.2	-939.17	-2,652.1	-1,579.6	2,109.7	3.00	-3.00	0.00
6,700.0	17.88	210.78	5,685.5	-1,033.49	-2,680.6	-1,596.6	2,132.4	3.00	-3.00	0.00
6,800.0	14.88	210.78	5,781.4	-1,129.42	-2,704.8	-1,611.0	2,151.6	3.00	-3.00	0.00
6,900.0	11.88	210.78	5,878.7	-1,226.69	-2,724.7	-1,622.9	2,167.5	3.00	-3.00	0.00
7,000.0	8.88	210.78	5,977.0	-1,325.04	-2,740.2	-1,632.1	2,179.8	3.00	-3.00	0.00
7,100.0	5.88	210.78	6,076.2	-1,424.20	-2,751.3	-1,638.7	2,188.6	3.00	-3.00	0.00
7,200.0	2.88	210.78	6,175.9	-1,523.90	-2,757.8	-1,642.6	2,193.8	3.00	-3.00	0.00
EOD TO VERTICAL										
7,296.1	0.00	210.78	6,272.0	-1,619.96	-2,759.9	-1,643.8	2,195.4	3.00	-3.00	0.00
7,300.0	0.00	0.00	6,275.9	-1,623.86	-2,759.9	-1,643.8	2,195.4	0.03	-0.03	0.00
KOP (10°/100ft BUR)										
7,326.1	0.00	0.00	6,302.0	-1,649.96	-2,759.9	-1,643.8	2,195.4	0.00	0.00	0.00
7,400.0	7.39	270.95	6,375.7	-1,723.65	-2,759.8	-1,648.6	2,200.1	9.99	9.99	0.00
7,500.0	17.38	270.95	6,473.2	-1,821.20	-2,759.5	-1,670.0	2,220.9	10.00	10.00	0.00
7,600.0	27.38	270.95	6,565.6	-1,913.55	-2,758.8	-1,708.0	2,257.9	10.00	10.00	0.00
7,700.0	37.38	270.95	6,649.9	-1,997.89	-2,758.0	-1,761.5	2,310.0	10.00	10.00	0.00
SHARON SPRINGS										
7,799.0	47.28	270.95	6,723.0	-2,071.00	-2,756.9	-1,828.1	2,374.8	10.00	10.00	0.00
7,800.0	47.38	270.95	6,723.7	-2,071.66	-2,756.8	-1,828.8	2,375.5	10.00	10.00	0.00
NIOBRARA										
7,845.3	51.91	270.95	6,753.0	-2,101.00	-2,756.3	-1,863.3	2,409.1	10.00	10.00	0.00
7,900.0	57.38	270.95	6,784.6	-2,132.63	-2,755.5	-1,907.9	2,452.5	10.00	10.00	0.00
8,000.0	67.38	270.95	6,830.9	-2,178.93	-2,754.1	-1,996.4	2,538.6	10.00	10.00	0.00
8,100.0	77.38	270.95	6,861.2	-2,209.16	-2,752.5	-2,091.5	2,631.3	10.00	10.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MT-GLENFAIR 3-8-7
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 3-8-7	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	87.38	270.95	6,874.4	-2,222.40	-2,750.9	-2,190.5	2,727.6	10.00	10.00	0.00
LANDING PNT: 1366ft FSL & 460ft FEL of Sec 8 - NIO B TARGET										
8,226.2	90.00	270.95	6,875.0	-2,223.00	-2,750.4	-2,216.7	2,753.1	10.00	10.00	0.00
8,300.0	90.00	270.95	6,875.0	-2,223.00	-2,749.2	-2,290.5	2,824.9	0.00	0.00	0.00
8,400.0	90.00	270.95	6,875.0	-2,223.01	-2,747.6	-2,390.5	2,922.3	0.00	0.00	0.00
8,500.0	90.00	270.95	6,875.0	-2,223.01	-2,745.9	-2,490.5	3,019.6	0.00	0.00	0.00
8,600.0	90.00	270.95	6,875.0	-2,223.02	-2,744.3	-2,590.5	3,116.9	0.00	0.00	0.00
8,700.0	90.00	270.95	6,875.0	-2,223.02	-2,742.6	-2,690.4	3,214.2	0.00	0.00	0.00
8,800.0	90.00	270.95	6,875.0	-2,223.03	-2,741.0	-2,790.4	3,311.6	0.00	0.00	0.00
8,900.0	90.00	270.95	6,875.0	-2,223.03	-2,739.3	-2,890.4	3,408.9	0.00	0.00	0.00
9,000.0	90.00	270.95	6,875.0	-2,223.03	-2,737.7	-2,990.4	3,506.2	0.00	0.00	0.00
9,100.0	90.00	270.95	6,875.0	-2,223.04	-2,736.0	-3,090.4	3,603.5	0.00	0.00	0.00
9,200.0	90.00	270.95	6,875.0	-2,223.04	-2,734.4	-3,190.4	3,700.9	0.00	0.00	0.00
9,300.0	90.00	270.95	6,875.0	-2,223.05	-2,732.7	-3,290.4	3,798.2	0.00	0.00	0.00
9,400.0	90.00	270.95	6,875.0	-2,223.05	-2,731.1	-3,390.4	3,895.5	0.00	0.00	0.00
9,500.0	90.00	270.95	6,875.1	-2,223.05	-2,729.4	-3,490.3	3,992.8	0.00	0.00	0.00
9,600.0	90.00	270.95	6,875.1	-2,223.06	-2,727.8	-3,590.3	4,090.2	0.00	0.00	0.00
9,700.0	90.00	270.95	6,875.1	-2,223.06	-2,726.1	-3,690.3	4,187.5	0.00	0.00	0.00
9,800.0	90.00	270.95	6,875.1	-2,223.06	-2,724.5	-3,790.3	4,284.8	0.00	0.00	0.00
9,900.0	90.00	270.95	6,875.1	-2,223.07	-2,722.8	-3,890.3	4,382.1	0.00	0.00	0.00
10,000.0	90.00	270.95	6,875.1	-2,223.07	-2,721.2	-3,990.3	4,479.5	0.00	0.00	0.00
10,100.0	90.00	270.95	6,875.1	-2,223.07	-2,719.5	-4,090.3	4,576.8	0.00	0.00	0.00
10,200.0	90.00	270.95	6,875.1	-2,223.07	-2,717.9	-4,190.2	4,674.1	0.00	0.00	0.00
10,300.0	90.00	270.95	6,875.1	-2,223.08	-2,716.2	-4,290.2	4,771.4	0.00	0.00	0.00
10,400.0	90.00	270.95	6,875.1	-2,223.08	-2,714.6	-4,390.2	4,868.8	0.00	0.00	0.00
10,500.0	90.00	270.95	6,875.1	-2,223.08	-2,712.9	-4,490.2	4,966.1	0.00	0.00	0.00
10,600.0	90.00	270.95	6,875.1	-2,223.09	-2,711.3	-4,590.2	5,063.4	0.00	0.00	0.00
10,700.0	90.00	270.95	6,875.1	-2,223.09	-2,709.6	-4,690.2	5,160.7	0.00	0.00	0.00
10,800.0	90.00	270.95	6,875.1	-2,223.09	-2,708.0	-4,790.2	5,258.1	0.00	0.00	0.00
10,900.0	90.00	270.95	6,875.1	-2,223.09	-2,706.3	-4,890.1	5,355.4	0.00	0.00	0.00
11,000.0	90.00	270.95	6,875.1	-2,223.09	-2,704.7	-4,990.1	5,452.7	0.00	0.00	0.00
11,100.0	90.00	270.95	6,875.1	-2,223.10	-2,703.0	-5,090.1	5,550.0	0.00	0.00	0.00
11,200.0	90.00	270.95	6,875.1	-2,223.10	-2,701.4	-5,190.1	5,647.4	0.00	0.00	0.00
11,300.0	90.00	270.95	6,875.1	-2,223.10	-2,699.7	-5,290.1	5,744.7	0.00	0.00	0.00
11,400.0	90.00	270.95	6,875.1	-2,223.10	-2,698.0	-5,390.1	5,842.0	0.00	0.00	0.00
11,500.0	90.00	270.95	6,875.1	-2,223.10	-2,696.4	-5,490.1	5,939.3	0.00	0.00	0.00
11,600.0	90.00	270.95	6,875.1	-2,223.10	-2,694.7	-5,590.1	6,036.7	0.00	0.00	0.00
11,700.0	90.00	270.95	6,875.1	-2,223.11	-2,693.1	-5,690.0	6,134.0	0.00	0.00	0.00
11,800.0	90.00	270.95	6,875.1	-2,223.11	-2,691.4	-5,790.0	6,231.3	0.00	0.00	0.00
11,900.0	90.00	270.95	6,875.1	-2,223.11	-2,689.8	-5,890.0	6,328.6	0.00	0.00	0.00
12,000.0	90.00	270.95	6,875.1	-2,223.11	-2,688.1	-5,990.0	6,426.0	0.00	0.00	0.00
12,100.0	90.00	270.95	6,875.1	-2,223.11	-2,686.5	-6,090.0	6,523.3	0.00	0.00	0.00
12,200.0	90.00	270.95	6,875.1	-2,223.11	-2,684.8	-6,190.0	6,620.6	0.00	0.00	0.00
12,300.0	90.00	270.95	6,875.1	-2,223.11	-2,683.2	-6,290.0	6,717.9	0.00	0.00	0.00
12,400.0	90.00	270.95	6,875.1	-2,223.11	-2,681.5	-6,389.9	6,815.3	0.00	0.00	0.00
12,500.0	90.00	270.95	6,875.1	-2,223.11	-2,679.9	-6,489.9	6,912.6	0.00	0.00	0.00
12,600.0	90.00	270.95	6,875.1	-2,223.11	-2,678.2	-6,589.9	7,009.9	0.00	0.00	0.00
12,700.0	90.00	270.95	6,875.1	-2,223.11	-2,676.6	-6,689.9	7,107.2	0.00	0.00	0.00
12,800.0	90.00	270.95	6,875.1	-2,223.11	-2,674.9	-6,789.9	7,204.6	0.00	0.00	0.00
12,900.0	90.00	270.95	6,875.1	-2,223.11	-2,673.2	-6,889.9	7,301.9	0.00	0.00	0.00
13,000.0	90.00	270.95	6,875.1	-2,223.11	-2,671.6	-6,989.9	7,399.2	0.00	0.00	0.00
13,100.0	90.00	270.95	6,875.1	-2,223.11	-2,669.9	-7,089.8	7,496.5	0.00	0.00	0.00
13,200.0	90.00	270.95	6,875.1	-2,223.11	-2,668.3	-7,189.8	7,593.9	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MT-GLENFAIR 3-8-7
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 3-8-7	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)
13,300.0	90.00	270.95	6,875.1	-2,223.11	-2,666.6	-7,289.8	7,691.2	0.00	0.00	0.00
13,400.0	90.00	270.95	6,875.1	-2,223.11	-2,665.0	-7,389.8	7,788.5	0.00	0.00	0.00
13,500.0	90.00	270.95	6,875.1	-2,223.11	-2,663.3	-7,489.8	7,885.8	0.00	0.00	0.00
13,600.0	90.00	270.95	6,875.1	-2,223.11	-2,661.7	-7,589.8	7,983.2	0.00	0.00	0.00
13,700.0	90.00	270.95	6,875.1	-2,223.11	-2,660.0	-7,689.8	8,080.5	0.00	0.00	0.00
13,800.0	90.00	270.95	6,875.1	-2,223.11	-2,658.3	-7,789.8	8,177.8	0.00	0.00	0.00
13,900.0	90.00	270.95	6,875.1	-2,223.11	-2,656.7	-7,889.7	8,275.1	0.00	0.00	0.00
14,000.0	90.00	270.95	6,875.1	-2,223.11	-2,655.0	-7,989.7	8,372.5	0.00	0.00	0.00
14,100.0	90.00	270.95	6,875.1	-2,223.11	-2,653.4	-8,089.7	8,469.8	0.00	0.00	0.00
14,200.0	90.00	270.95	6,875.1	-2,223.11	-2,651.7	-8,189.7	8,567.1	0.00	0.00	0.00
14,300.0	90.00	270.95	6,875.1	-2,223.11	-2,650.1	-8,289.7	8,664.4	0.00	0.00	0.00
14,400.0	90.00	270.95	6,875.1	-2,223.11	-2,648.4	-8,389.7	8,761.8	0.00	0.00	0.00
14,500.0	90.00	270.95	6,875.1	-2,223.10	-2,646.8	-8,489.7	8,859.1	0.00	0.00	0.00
14,600.0	90.00	270.95	6,875.1	-2,223.10	-2,645.1	-8,589.6	8,956.4	0.00	0.00	0.00
14,700.0	90.00	270.95	6,875.1	-2,223.10	-2,643.4	-8,689.6	9,053.7	0.00	0.00	0.00
14,800.0	90.00	270.95	6,875.1	-2,223.10	-2,641.8	-8,789.6	9,151.1	0.00	0.00	0.00
14,900.0	90.00	270.95	6,875.1	-2,223.10	-2,640.1	-8,889.6	9,248.4	0.00	0.00	0.00
15,000.0	90.00	270.95	6,875.1	-2,223.10	-2,638.5	-8,989.6	9,345.7	0.00	0.00	0.00
15,100.0	90.00	270.95	6,875.1	-2,223.09	-2,636.8	-9,089.6	9,443.0	0.00	0.00	0.00
15,200.0	90.00	270.95	6,875.1	-2,223.09	-2,635.2	-9,189.6	9,540.4	0.00	0.00	0.00
15,300.0	90.00	270.95	6,875.1	-2,223.09	-2,633.5	-9,289.5	9,637.7	0.00	0.00	0.00
15,400.0	90.00	270.95	6,875.1	-2,223.09	-2,631.8	-9,389.5	9,735.0	0.00	0.00	0.00
15,500.0	90.00	270.95	6,875.1	-2,223.08	-2,630.2	-9,489.5	9,832.3	0.00	0.00	0.00
15,600.0	90.00	270.95	6,875.1	-2,223.08	-2,628.5	-9,589.5	9,929.7	0.00	0.00	0.00
15,700.0	90.00	270.95	6,875.1	-2,223.08	-2,626.9	-9,689.5	10,027.0	0.00	0.00	0.00
15,800.0	90.00	270.95	6,875.1	-2,223.08	-2,625.2	-9,789.5	10,124.3	0.00	0.00	0.00
15,900.0	90.00	270.95	6,875.1	-2,223.07	-2,623.6	-9,889.5	10,221.6	0.00	0.00	0.00
16,000.0	90.00	270.95	6,875.1	-2,223.07	-2,621.9	-9,989.5	10,319.0	0.00	0.00	0.00
16,100.0	90.00	270.95	6,875.1	-2,223.07	-2,620.2	-10,089.4	10,416.3	0.00	0.00	0.00
16,200.0	90.00	270.95	6,875.1	-2,223.07	-2,618.6	-10,189.4	10,513.6	0.00	0.00	0.00
16,300.0	90.00	270.95	6,875.1	-2,223.06	-2,616.9	-10,289.4	10,610.9	0.00	0.00	0.00
16,400.0	90.00	270.95	6,875.1	-2,223.06	-2,615.3	-10,389.4	10,708.3	0.00	0.00	0.00
16,500.0	90.00	270.95	6,875.1	-2,223.06	-2,613.6	-10,489.4	10,805.6	0.00	0.00	0.00
16,600.0	90.00	270.95	6,875.1	-2,223.05	-2,612.0	-10,589.4	10,902.9	0.00	0.00	0.00
16,700.0	90.00	270.95	6,875.0	-2,223.05	-2,610.3	-10,689.4	11,000.2	0.00	0.00	0.00
16,800.0	90.00	270.95	6,875.0	-2,223.04	-2,608.6	-10,789.3	11,097.5	0.00	0.00	0.00
16,900.0	90.00	270.95	6,875.0	-2,223.04	-2,607.0	-10,889.3	11,194.9	0.00	0.00	0.00
17,000.0	90.00	270.95	6,875.0	-2,223.04	-2,605.3	-10,989.3	11,292.2	0.00	0.00	0.00
17,100.0	90.00	270.95	6,875.0	-2,223.03	-2,603.7	-11,089.3	11,389.5	0.00	0.00	0.00
17,200.0	90.00	270.95	6,875.0	-2,223.03	-2,602.0	-11,189.3	11,486.8	0.00	0.00	0.00
17,300.0	90.00	270.95	6,875.0	-2,223.03	-2,600.3	-11,289.3	11,584.2	0.00	0.00	0.00
17,400.0	90.00	270.95	6,875.0	-2,223.02	-2,598.7	-11,389.3	11,681.5	0.00	0.00	0.00
17,500.0	90.00	270.95	6,875.0	-2,223.02	-2,597.0	-11,489.2	11,778.8	0.00	0.00	0.00
17,600.0	90.00	270.95	6,875.0	-2,223.01	-2,595.4	-11,589.2	11,876.1	0.00	0.00	0.00
17,700.0	90.00	270.95	6,875.0	-2,223.01	-2,593.7	-11,689.2	11,973.5	0.00	0.00	0.00
17,800.0	90.00	270.95	6,875.0	-2,223.00	-2,592.0	-11,789.2	12,070.8	0.00	0.00	0.00
BHL: 1488ft FSL & 460ft FWL of Sec 7										
17,860.0	90.00	270.95	6,875.0	-2,223.00	-2,591.1	-11,849.2	12,129.2	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well MT-GLENFAIR 3-8-7
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 3-8-7	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #2		

Formations						
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,106.8	3,613.0	PARKMAN				
5,000.2	4,302.0	SUSSEX				
5,708.2	4,848.0	SHANNON				
7,799.0	6,723.0	SHARON SPRINGS				
7,845.3	6,753.0	NIOBRARA				
8,226.2	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: 1116ft FNL & 1755ft FWL of Sec 9
700.0	700.0	0.0	0.0	START NUDGE - SURFACE (2°/100ft BUR)
1,829.0	1,800.0	-188.7	-112.4	9 5/8" SURFACE CSG
1,894.0	1,860.0	-210.1	-125.2	START NUDGE - MAIN (3°/100ft BUR)
2,459.3	2,342.5	-459.8	-273.9	EOB TO 39.54° INC
5,978.1	5,056.1	-2,384.4	-1,420.2	END OF TANGENT
7,296.1	6,272.0	-2,759.9	-1,643.8	EOD TO VERTICAL
7,326.1	6,302.0	-2,759.9	-1,643.8	KOP (10°/100ft BUR)
8,226.2	6,875.0	-2,750.4	-2,216.7	LANDING PNT: 1366ft FSL & 460ft FEL of Sec 8
17,860.0	6,875.0	-2,591.1	-11,849.2	BHL: 1488ft FSL & 460ft FWL of Sec 7