

# **EXTRACTION OIL & GAS**

**WELD COUNTY, COLORADO (NAD 83)**

**NE SE SEC. 8 T5N R66W 6th P.M.**

**TC-COUNTRY CLUB WEST 2-9-11**

**ORIGINAL WELLBORE**

**23 July, 2015**

**Plan: PROPOSAL #1**





Project: WELD COUNTY, COLORADO (NAD 83)  
Site: NE SE SEC. 8 T5N R66W 6th P.M.  
Well: TC-COUNTRY CLUB WEST 2-9-11  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #1

ANNOTATIONS										FORMATION TOP DETAILS		
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation		TVDPath	MDPath	Formation
500.0	500.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)		3680.0	3797.6	PARKMAN
1330.9	1343.0	16.86	38.67	96.1	76.9	86.0	123.1	EOB TO 16.86° INC		4410.0	4560.4	SUSSEX
6635.0	6885.4	16.86	38.68	1351.2	1081.6	1208.6	1730.8	START BUILD & TURN		4820.0	4988.9	SHANNON
7092.0	7681.6	90.00	90.25	1457.3	1645.6	1780.3	2314.2	LANDING PNT - TC-COUNTRY CLUB WEST 2-9-11		6940.0	7248.2	SHARON SPRINGS
7092.0	20309.2	90.00	90.25	1403.1	14273.1	14341.9	14941.8	BHL - TC-COUNTRY CLUB WEST 2-9-11		6972.0	7298.5	NIOBRARA
										7092.0	7681.6	NIO B TARGET

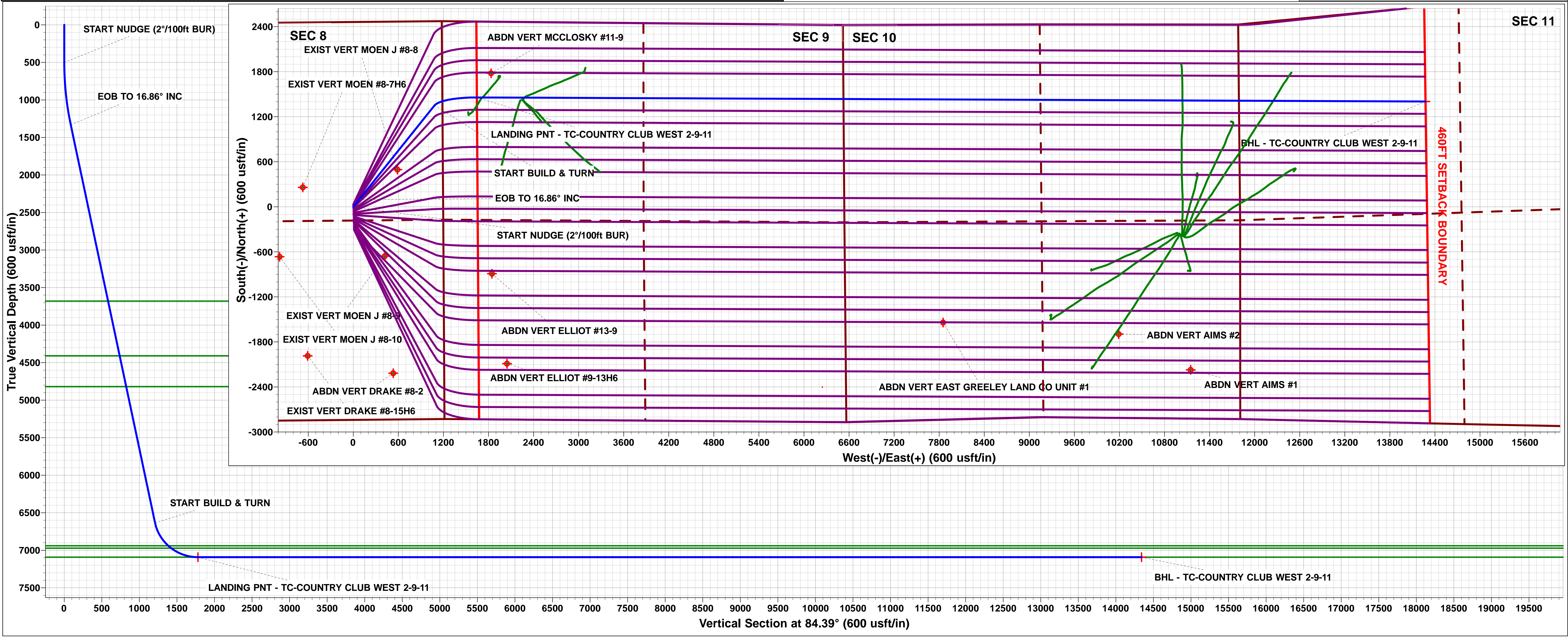
WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
LANDING PNT - TC-COUNTRY CLUB WEST 2-9-11	7092.0	1457.3	1645.6	40.418640	-104.792780
BHL - TC-COUNTRY CLUB WEST 2-9-11	7092.0	1403.1	14273.1	40.418480	-104.747430

South(-)/North(+) (150 usft/in)

West(-)/East(+) (150 usft/in)

Azimuths to True North  
Magnetic North: 8.43°

Magnetic Field  
Strength: 52613.7snT  
Dip Angle: 66.91°  
Date: 23/07/2015  
Model: IGRF2015



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well TC-COUNTRY CLUB WEST 2-9-11
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4803.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4803.0usft (Original Well Elev)
<b>Site:</b>	NE SE SEC. 8 T5N R66W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	TC-COUNTRY CLUB WEST 2-9-11	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

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

<b>Site</b>	NE SE SEC. 8 T5N R66W 6th P.M.		
<b>Site Position:</b>		<b>Northing:</b>	1,394,363.62 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,195,288.63 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	1.10000ft
		<b>Latitude:</b>	40.413810
		<b>Longitude:</b>	-104.798660
		<b>Grid Convergence:</b>	0.45 °

Well	TC-COUNTRY CLUB WEST 2-9-11					
Well Position	+N/-S	302.4 usft	Northing:	1,394,665.91 usfi	Latitude:	40.414640
	+E/-W	-8.4 usft	Easting:	3,195,277.88 usfi	Longitude:	-104.798690
Position Uncertainty		0.0 usft	Wellhead Elevation:	usfi	Ground Level:	4,787.0 usft

<b>Wellbore</b>	ORIGINAL WELLBORE				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	23/07/2015	8.43	66.91	52,614

<b>Design</b>	PROPOSAL #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	7,092.0	0.0	0.0	84.39

<b>Plan Sections</b>											
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	-4,803.0	0.0	0.0	0.00	0.00	0.00	0.00	
500.0	0.00	0.00	500.0	-4,303.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,343.0	16.86	38.67	1,330.9	-3,472.1	96.1	76.9	2.00	2.00	0.00	38.67	
1,343.0	16.86	38.68	1,330.9	-3,472.1	96.1	76.9	10.00	7.36	23.32	42.59	
6,885.4	16.86	38.68	6,635.0	1,832.0	1,351.2	1,081.6	0.00	0.00	0.00	0.00	
7,681.6	90.00	90.25	7,092.0	2,289.0	1,457.3	1,645.6	10.00	9.19	6.48	52.79	LANDING PNT - TC
20,309.2	90.00	90.25	7,092.0	2,289.0	1,403.1	14,273.1	0.00	0.00	0.00	0.00	BHL - TC-COUNTR

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well TC-COUNTRY CLUB WEST 2-9-11
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4803.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4803.0usft (Original Well Elev)
<b>Site:</b>	NE SE SEC. 8 T5N R66W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	TC-COUNTRY CLUB WEST 2-9-11	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

## 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)
0.0	0.00	0.00	0.0	4,803.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,703.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,603.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,503.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,403.00	0.0	0.0	0.0	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
500.0	0.00	0.00	500.0	4,303.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	2.00	38.67	600.0	4,203.02	1.4	1.1	1.2	2.00	2.00	0.00
700.0	4.00	38.67	699.8	4,103.16	5.4	4.4	4.9	2.00	2.00	0.00
800.0	6.00	38.67	799.5	4,003.55	12.3	9.8	11.0	2.00	2.00	0.00
900.0	8.00	38.67	898.7	3,904.30	21.8	17.4	19.5	2.00	2.00	0.00
1,000.0	10.00	38.67	997.5	3,805.53	34.0	27.2	30.4	2.00	2.00	0.00
1,100.0	12.00	38.67	1,095.6	3,707.38	48.9	39.1	43.7	2.00	2.00	0.00
1,200.0	14.00	38.67	1,193.1	3,609.94	66.4	53.2	59.4	2.00	2.00	0.00
1,300.0	16.00	38.67	1,289.6	3,513.36	86.6	69.3	77.5	2.00	2.00	0.00
<b>EOB TO 16.86° INC</b>										
1,343.0	16.86	38.67	1,330.9	3,472.11	96.1	76.9	86.0	2.00	2.00	0.00
1,400.0	16.86	38.68	1,385.4	3,417.56	109.0	87.3	97.5	0.00	0.00	0.01
1,500.0	16.86	38.68	1,481.1	3,321.86	131.7	105.4	117.8	0.00	0.00	0.00
1,600.0	16.86	38.68	1,576.8	3,226.16	154.3	123.5	138.0	0.00	0.00	0.00
1,700.0	16.86	38.68	1,672.5	3,130.46	177.0	141.7	158.3	0.00	0.00	0.00
1,800.0	16.86	38.68	1,768.2	3,034.76	199.6	159.8	178.5	0.00	0.00	0.00
1,900.0	16.86	38.68	1,863.9	2,939.06	222.3	177.9	198.8	0.00	0.00	0.00
2,000.0	16.86	38.68	1,959.6	2,843.36	244.9	196.0	219.1	0.00	0.00	0.00
2,100.0	16.86	38.68	2,055.3	2,747.66	267.6	214.2	239.3	0.00	0.00	0.00
2,200.0	16.86	38.68	2,151.0	2,651.96	290.2	232.3	259.6	0.00	0.00	0.00
2,300.0	16.86	38.68	2,246.7	2,556.26	312.9	250.4	279.8	0.00	0.00	0.00
2,400.0	16.86	38.68	2,342.4	2,460.56	335.5	268.5	300.1	0.00	0.00	0.00
2,500.0	16.86	38.68	2,438.1	2,364.86	358.1	286.7	320.3	0.00	0.00	0.00
2,600.0	16.86	38.68	2,533.8	2,269.15	380.8	304.8	340.6	0.00	0.00	0.00
2,700.0	16.86	38.68	2,629.5	2,173.45	403.4	322.9	360.8	0.00	0.00	0.00
2,800.0	16.86	38.68	2,725.2	2,077.75	426.1	341.0	381.1	0.00	0.00	0.00
2,900.0	16.86	38.68	2,820.9	1,982.05	448.7	359.2	401.3	0.00	0.00	0.00
3,000.0	16.86	38.68	2,916.6	1,886.35	471.4	377.3	421.6	0.00	0.00	0.00
3,100.0	16.86	38.68	3,012.3	1,790.65	494.0	395.4	441.9	0.00	0.00	0.00
3,200.0	16.86	38.68	3,108.0	1,694.95	516.7	413.5	462.1	0.00	0.00	0.00
3,300.0	16.86	38.68	3,203.8	1,599.25	539.3	431.7	482.4	0.00	0.00	0.00
3,400.0	16.86	38.68	3,299.5	1,503.55	562.0	449.8	502.6	0.00	0.00	0.00
3,500.0	16.86	38.68	3,395.2	1,407.85	584.6	467.9	522.9	0.00	0.00	0.00
3,600.0	16.86	38.68	3,490.9	1,312.15	607.2	486.1	543.1	0.00	0.00	0.00
3,700.0	16.86	38.68	3,586.6	1,216.45	629.9	504.2	563.4	0.00	0.00	0.00
<b>PARKMAN</b>										
3,797.6	16.86	38.68	3,680.0	1,123.00	652.0	521.9	583.2	0.00	0.00	0.00
3,800.0	16.86	38.68	3,682.3	1,120.75	652.5	522.3	583.6	0.00	0.00	0.00
3,900.0	16.86	38.68	3,778.0	1,025.04	675.2	540.4	603.9	0.00	0.00	0.00
4,000.0	16.86	38.68	3,873.7	929.34	697.8	558.6	624.1	0.00	0.00	0.00
4,100.0	16.86	38.68	3,969.4	833.64	720.5	576.7	644.4	0.00	0.00	0.00
4,200.0	16.86	38.68	4,065.1	737.94	743.1	594.8	664.7	0.00	0.00	0.00
4,300.0	16.86	38.68	4,160.8	642.24	765.8	612.9	684.9	0.00	0.00	0.00
4,400.0	16.86	38.68	4,256.5	546.54	788.4	631.1	705.2	0.00	0.00	0.00
4,500.0	16.86	38.68	4,352.2	450.84	811.0	649.2	725.4	0.00	0.00	0.00
<b>SUSSEX</b>										
4,560.4	16.86	38.68	4,410.0	393.00	824.7	660.1	737.7	0.00	0.00	0.00
4,600.0	16.86	38.68	4,447.9	355.14	833.7	667.3	745.7	0.00	0.00	0.00



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<b>Site:</b>	NE SE SEC. 8 T5N R66W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	TC-COUNTRY CLUB WEST 2-9-11	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

## 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)
4,700.0	16.86	38.68	4,543.6	259.44	856.3	685.4	765.9	0.00	0.00	0.00
4,800.0	16.86	38.68	4,639.3	163.74	879.0	703.6	786.2	0.00	0.00	0.00
4,900.0	16.86	38.68	4,735.0	68.04	901.6	721.7	806.4	0.00	0.00	0.00
<b>SHANNON</b>										
<b>4,988.9</b>	<b>16.86</b>	<b>38.68</b>	<b>4,820.0</b>	<b>-17.00</b>	<b>921.8</b>	<b>737.8</b>	<b>824.4</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
5,000.0	16.86	38.68	4,830.7	-27.66	924.3	739.8	826.7	0.00	0.00	0.00
5,100.0	16.86	38.68	4,926.4	-123.36	946.9	757.9	846.9	0.00	0.00	0.00
5,200.0	16.86	38.68	5,022.1	-219.07	969.6	776.1	867.2	0.00	0.00	0.00
5,300.0	16.86	38.68	5,117.8	-314.77	992.2	794.2	887.5	0.00	0.00	0.00
5,400.0	16.86	38.68	5,213.5	-410.47	1,014.9	812.3	907.7	0.00	0.00	0.00
5,500.0	16.86	38.68	5,309.2	-506.17	1,037.5	830.4	928.0	0.00	0.00	0.00
5,600.0	16.86	38.68	5,404.9	-601.87	1,060.1	848.6	948.2	0.00	0.00	0.00
5,700.0	16.86	38.68	5,500.6	-697.57	1,082.8	866.7	968.5	0.00	0.00	0.00
5,800.0	16.86	38.68	5,596.3	-793.27	1,105.4	884.8	988.7	0.00	0.00	0.00
5,900.0	16.86	38.68	5,692.0	-888.97	1,128.1	903.0	1,009.0	0.00	0.00	0.00
6,000.0	16.86	38.68	5,787.7	-984.67	1,150.7	921.1	1,029.2	0.00	0.00	0.00
6,100.0	16.86	38.68	5,883.4	-1,080.37	1,173.4	939.2	1,049.5	0.00	0.00	0.00
6,200.0	16.86	38.68	5,979.1	-1,176.07	1,196.0	957.3	1,069.7	0.00	0.00	0.00
6,300.0	16.86	38.68	6,074.8	-1,271.77	1,218.7	975.5	1,090.0	0.00	0.00	0.00
6,400.0	16.86	38.68	6,170.5	-1,367.47	1,241.3	993.6	1,110.3	0.00	0.00	0.00
6,500.0	16.86	38.68	6,266.2	-1,463.17	1,264.0	1,011.7	1,130.5	0.00	0.00	0.00
6,600.0	16.86	38.68	6,361.9	-1,558.88	1,286.6	1,029.8	1,150.8	0.00	0.00	0.00
6,700.0	16.86	38.68	6,457.6	-1,654.58	1,309.2	1,048.0	1,171.0	0.00	0.00	0.00
6,800.0	16.86	38.68	6,553.3	-1,750.28	1,331.9	1,066.1	1,191.3	0.00	0.00	0.00
<b>START BUILD &amp; TURN</b>										
<b>6,885.4</b>	<b>16.86</b>	<b>38.68</b>	<b>6,635.0</b>	<b>-1,832.01</b>	<b>1,351.2</b>	<b>1,081.6</b>	<b>1,208.6</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
6,900.0	17.78	42.48	6,648.9	-1,845.94	1,354.5	1,084.4	1,211.7	9.97	6.28	26.03
7,000.0	25.43	60.29	6,741.9	-1,938.95	1,376.5	1,113.4	1,242.8	10.00	7.65	17.81
7,100.0	34.26	69.84	6,828.6	-2,025.65	1,396.9	1,158.6	1,289.7	10.00	8.83	9.55
7,200.0	43.55	75.78	6,906.4	-2,103.41	1,415.1	1,218.6	1,351.2	10.00	9.29	5.94
<b>SHARON SPRINGS</b>										
<b>7,248.2</b>	<b>48.11</b>	<b>77.95</b>	<b>6,940.0</b>	<b>-2,137.00</b>	<b>1,422.9</b>	<b>1,252.2</b>	<b>1,385.4</b>	<b>10.00</b>	<b>9.47</b>	<b>4.50</b>
<b>NIOBRARA</b>										
<b>7,298.5</b>	<b>52.91</b>	<b>79.91</b>	<b>6,972.0</b>	<b>-2,169.00</b>	<b>1,430.3</b>	<b>1,290.4</b>	<b>1,424.1</b>	<b>10.00</b>	<b>9.54</b>	<b>3.89</b>
7,300.0	53.05	79.96	6,972.9	-2,169.88	1,430.5	1,291.5	1,425.3	10.00	9.57	3.62
7,400.0	62.67	83.20	7,026.0	-2,223.03	1,442.8	1,375.2	1,509.7	10.00	9.62	3.24
7,500.0	72.35	85.91	7,064.2	-2,261.24	1,451.5	1,467.0	1,602.0	10.00	9.68	2.72
7,600.0	82.06	88.35	7,086.4	-2,283.36	1,456.3	1,564.3	1,699.3	10.00	9.71	2.44
<b>LANDING PNT - TC-COUNTRY CLUB WEST 2-9-11 - NIO B TARGET</b>										
<b>7,681.6</b>	<b>90.00</b>	<b>90.25</b>	<b>7,092.0</b>	<b>-2,289.00</b>	<b>1,457.3</b>	<b>1,645.6</b>	<b>1,780.3</b>	<b>10.00</b>	<b>9.73</b>	<b>2.33</b>
7,700.0	90.00	90.25	7,092.0	-2,289.00	1,457.2	1,664.0	1,798.6	0.00	0.00	0.00
7,800.0	90.00	90.25	7,092.0	-2,289.00	1,456.8	1,764.0	1,898.1	0.00	0.00	0.00
7,900.0	90.00	90.25	7,092.0	-2,289.00	1,456.4	1,864.0	1,997.6	0.00	0.00	0.00
8,000.0	90.00	90.25	7,092.0	-2,289.00	1,455.9	1,964.0	2,097.0	0.00	0.00	0.00
8,100.0	90.00	90.25	7,092.0	-2,289.00	1,455.5	2,064.0	2,196.5	0.00	0.00	0.00
8,200.0	90.00	90.25	7,092.0	-2,289.00	1,455.1	2,164.0	2,296.0	0.00	0.00	0.00
8,300.0	90.00	90.25	7,092.0	-2,289.00	1,454.7	2,264.0	2,395.5	0.00	0.00	0.00
8,400.0	90.00	90.25	7,092.0	-2,289.00	1,454.2	2,364.0	2,495.0	0.00	0.00	0.00
8,500.0	90.00	90.25	7,092.0	-2,289.00	1,453.8	2,464.0	2,594.4	0.00	0.00	0.00
8,600.0	90.00	90.25	7,092.0	-2,289.00	1,453.4	2,564.0	2,693.9	0.00	0.00	0.00
8,700.0	90.00	90.25	7,092.0	-2,289.00	1,452.9	2,664.0	2,793.4	0.00	0.00	0.00
8,800.0	90.00	90.25	7,092.0	-2,289.00	1,452.5	2,764.0	2,892.9	0.00	0.00	0.00
8,900.0	90.00	90.25	7,092.0	-2,289.00	1,452.1	2,864.0	2,992.3	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well TC-COUNTRY CLUB WEST 2-9-11
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4803.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4803.0usft (Original Well Elev)
<b>Site:</b>	NE SE SEC. 8 T5N R66W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	TC-COUNTRY CLUB WEST 2-9-11	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

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)
9,000.0	90.00	90.25	7,092.0	-2,289.00	1,451.7	2,964.0	3,091.8	0.00	0.00	0.00
9,100.0	90.00	90.25	7,092.0	-2,289.00	1,451.2	3,064.0	3,191.3	0.00	0.00	0.00
9,200.0	90.00	90.25	7,092.0	-2,289.00	1,450.8	3,164.0	3,290.8	0.00	0.00	0.00
9,300.0	90.00	90.25	7,092.0	-2,289.00	1,450.4	3,264.0	3,390.3	0.00	0.00	0.00
9,400.0	90.00	90.25	7,092.0	-2,289.00	1,449.9	3,364.0	3,489.7	0.00	0.00	0.00
9,500.0	90.00	90.25	7,092.0	-2,289.00	1,449.5	3,464.0	3,589.2	0.00	0.00	0.00
9,600.0	90.00	90.25	7,092.0	-2,289.00	1,449.1	3,564.0	3,688.7	0.00	0.00	0.00
9,700.0	90.00	90.25	7,092.0	-2,289.00	1,448.6	3,664.0	3,788.2	0.00	0.00	0.00
9,800.0	90.00	90.25	7,092.0	-2,289.00	1,448.2	3,764.0	3,887.6	0.00	0.00	0.00
9,900.0	90.00	90.25	7,092.0	-2,289.00	1,447.8	3,864.0	3,987.1	0.00	0.00	0.00
10,000.0	90.00	90.25	7,092.0	-2,289.00	1,447.4	3,964.0	4,086.6	0.00	0.00	0.00
10,100.0	90.00	90.25	7,092.0	-2,289.00	1,446.9	4,064.0	4,186.1	0.00	0.00	0.00
10,200.0	90.00	90.25	7,092.0	-2,289.00	1,446.5	4,164.0	4,285.5	0.00	0.00	0.00
10,300.0	90.00	90.25	7,092.0	-2,289.00	1,446.1	4,264.0	4,385.0	0.00	0.00	0.00
10,400.0	90.00	90.25	7,092.0	-2,289.00	1,445.6	4,364.0	4,484.5	0.00	0.00	0.00
10,500.0	90.00	90.25	7,092.0	-2,289.00	1,445.2	4,464.0	4,584.0	0.00	0.00	0.00
10,600.0	90.00	90.25	7,092.0	-2,289.00	1,444.8	4,564.0	4,683.5	0.00	0.00	0.00
10,700.0	90.00	90.25	7,092.0	-2,289.00	1,444.4	4,664.0	4,782.9	0.00	0.00	0.00
10,800.0	90.00	90.25	7,092.0	-2,289.00	1,443.9	4,764.0	4,882.4	0.00	0.00	0.00
10,900.0	90.00	90.25	7,092.0	-2,289.00	1,443.5	4,864.0	4,981.9	0.00	0.00	0.00
11,000.0	90.00	90.25	7,092.0	-2,289.00	1,443.1	4,964.0	5,081.4	0.00	0.00	0.00
11,100.0	90.00	90.25	7,092.0	-2,289.00	1,442.6	5,064.0	5,180.8	0.00	0.00	0.00
11,200.0	90.00	90.25	7,092.0	-2,289.00	1,442.2	5,164.0	5,280.3	0.00	0.00	0.00
11,300.0	90.00	90.25	7,092.0	-2,289.00	1,441.8	5,264.0	5,379.8	0.00	0.00	0.00
11,400.0	90.00	90.25	7,092.0	-2,289.00	1,441.3	5,364.0	5,479.3	0.00	0.00	0.00
11,500.0	90.00	90.25	7,092.0	-2,289.00	1,440.9	5,464.0	5,578.8	0.00	0.00	0.00
11,600.0	90.00	90.25	7,092.0	-2,289.00	1,440.5	5,564.0	5,678.2	0.00	0.00	0.00
11,700.0	90.00	90.25	7,092.0	-2,289.00	1,440.1	5,664.0	5,777.7	0.00	0.00	0.00
11,800.0	90.00	90.25	7,092.0	-2,289.00	1,439.6	5,764.0	5,877.2	0.00	0.00	0.00
11,900.0	90.00	90.25	7,092.0	-2,289.00	1,439.2	5,864.0	5,976.7	0.00	0.00	0.00
12,000.0	90.00	90.25	7,092.0	-2,289.00	1,438.8	5,964.0	6,076.1	0.00	0.00	0.00
12,100.0	90.00	90.25	7,092.0	-2,289.00	1,438.3	6,064.0	6,175.6	0.00	0.00	0.00
12,200.0	90.00	90.25	7,092.0	-2,289.00	1,437.9	6,164.0	6,275.1	0.00	0.00	0.00
12,300.0	90.00	90.25	7,092.0	-2,289.00	1,437.5	6,264.0	6,374.6	0.00	0.00	0.00
12,400.0	90.00	90.25	7,092.0	-2,289.00	1,437.1	6,364.0	6,474.1	0.00	0.00	0.00
12,500.0	90.00	90.25	7,092.0	-2,289.00	1,436.6	6,464.0	6,573.5	0.00	0.00	0.00
12,600.0	90.00	90.25	7,092.0	-2,289.00	1,436.2	6,564.0	6,673.0	0.00	0.00	0.00
12,700.0	90.00	90.25	7,092.0	-2,289.00	1,435.8	6,664.0	6,772.5	0.00	0.00	0.00
12,800.0	90.00	90.25	7,092.0	-2,289.00	1,435.3	6,764.0	6,872.0	0.00	0.00	0.00
12,900.0	90.00	90.25	7,092.0	-2,289.00	1,434.9	6,864.0	6,971.4	0.00	0.00	0.00
13,000.0	90.00	90.25	7,092.0	-2,289.00	1,434.5	6,964.0	7,070.9	0.00	0.00	0.00
13,100.0	90.00	90.25	7,092.0	-2,289.00	1,434.0	7,064.0	7,170.4	0.00	0.00	0.00
13,200.0	90.00	90.25	7,092.0	-2,289.00	1,433.6	7,164.0	7,269.9	0.00	0.00	0.00
13,300.0	90.00	90.25	7,092.0	-2,289.00	1,433.2	7,264.0	7,369.3	0.00	0.00	0.00
13,400.0	90.00	90.25	7,092.0	-2,289.00	1,432.8	7,364.0	7,468.8	0.00	0.00	0.00
13,500.0	90.00	90.25	7,092.0	-2,289.00	1,432.3	7,464.0	7,568.3	0.00	0.00	0.00
13,600.0	90.00	90.25	7,092.0	-2,289.00	1,431.9	7,564.0	7,667.8	0.00	0.00	0.00
13,700.0	90.00	90.25	7,092.0	-2,289.00	1,431.5	7,664.0	7,767.3	0.00	0.00	0.00
13,800.0	90.00	90.25	7,092.0	-2,289.00	1,431.0	7,764.0	7,866.7	0.00	0.00	0.00
13,900.0	90.00	90.25	7,092.0	-2,289.00	1,430.6	7,864.0	7,966.2	0.00	0.00	0.00
14,000.0	90.00	90.25	7,092.0	-2,289.00	1,430.2	7,964.0	8,065.7	0.00	0.00	0.00
14,100.0	90.00	90.25	7,092.0	-2,289.00	1,429.8	8,064.0	8,165.2	0.00	0.00	0.00
14,200.0	90.00	90.25	7,092.0	-2,289.00	1,429.3	8,164.0	8,264.6	0.00	0.00	0.00
14,300.0	90.00	90.25	7,092.0	-2,289.00	1,428.9	8,264.0	8,364.1	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well TC-COUNTRY CLUB WEST 2-9-11
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4803.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4803.0usft (Original Well Elev)
<b>Site:</b>	NE SE SEC. 8 T5N R66W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	TC-COUNTRY CLUB WEST 2-9-11	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

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)
14,400.0	90.00	90.25	7,092.0	-2,289.00	1,428.5	8,364.0	8,463.6	0.00	0.00	0.00
14,500.0	90.00	90.25	7,092.0	-2,289.00	1,428.0	8,464.0	8,563.1	0.00	0.00	0.00
14,600.0	90.00	90.25	7,092.0	-2,289.00	1,427.6	8,564.0	8,662.6	0.00	0.00	0.00
14,700.0	90.00	90.25	7,092.0	-2,289.00	1,427.2	8,664.0	8,762.0	0.00	0.00	0.00
14,800.0	90.00	90.25	7,092.0	-2,289.00	1,426.7	8,764.0	8,861.5	0.00	0.00	0.00
14,900.0	90.00	90.25	7,092.0	-2,289.00	1,426.3	8,864.0	8,961.0	0.00	0.00	0.00
15,000.0	90.00	90.25	7,092.0	-2,289.00	1,425.9	8,964.0	9,060.5	0.00	0.00	0.00
15,100.0	90.00	90.25	7,092.0	-2,289.00	1,425.5	9,064.0	9,159.9	0.00	0.00	0.00
15,200.0	90.00	90.25	7,092.0	-2,289.00	1,425.0	9,164.0	9,259.4	0.00	0.00	0.00
15,300.0	90.00	90.25	7,092.0	-2,289.00	1,424.6	9,264.0	9,358.9	0.00	0.00	0.00
15,400.0	90.00	90.25	7,092.0	-2,289.00	1,424.2	9,364.0	9,458.4	0.00	0.00	0.00
15,500.0	90.00	90.25	7,092.0	-2,289.00	1,423.7	9,464.0	9,557.8	0.00	0.00	0.00
15,600.0	90.00	90.25	7,092.0	-2,289.00	1,423.3	9,564.0	9,657.3	0.00	0.00	0.00
15,700.0	90.00	90.25	7,092.0	-2,289.00	1,422.9	9,664.0	9,756.8	0.00	0.00	0.00
15,800.0	90.00	90.25	7,092.0	-2,289.00	1,422.5	9,764.0	9,856.3	0.00	0.00	0.00
15,900.0	90.00	90.25	7,092.0	-2,289.00	1,422.0	9,864.0	9,955.8	0.00	0.00	0.00
16,000.0	90.00	90.25	7,092.0	-2,289.00	1,421.6	9,964.0	10,055.2	0.00	0.00	0.00
16,100.0	90.00	90.25	7,092.0	-2,289.00	1,421.2	10,064.0	10,154.7	0.00	0.00	0.00
16,200.0	90.00	90.25	7,092.0	-2,289.00	1,420.7	10,164.0	10,254.2	0.00	0.00	0.00
16,300.0	90.00	90.25	7,092.0	-2,289.00	1,420.3	10,264.0	10,353.7	0.00	0.00	0.00
16,400.0	90.00	90.25	7,092.0	-2,289.00	1,419.9	10,364.0	10,453.1	0.00	0.00	0.00
16,500.0	90.00	90.25	7,092.0	-2,289.00	1,419.4	10,464.0	10,552.6	0.00	0.00	0.00
16,600.0	90.00	90.25	7,092.0	-2,289.00	1,419.0	10,564.0	10,652.1	0.00	0.00	0.00
16,700.0	90.00	90.25	7,092.0	-2,289.00	1,418.6	10,664.0	10,751.6	0.00	0.00	0.00
16,800.0	90.00	90.25	7,092.0	-2,289.00	1,418.2	10,763.9	10,851.1	0.00	0.00	0.00
16,900.0	90.00	90.25	7,092.0	-2,289.00	1,417.7	10,863.9	10,950.5	0.00	0.00	0.00
17,000.0	90.00	90.25	7,092.0	-2,289.00	1,417.3	10,963.9	11,050.0	0.00	0.00	0.00
17,100.0	90.00	90.25	7,092.0	-2,289.00	1,416.9	11,063.9	11,149.5	0.00	0.00	0.00
17,200.0	90.00	90.25	7,092.0	-2,289.00	1,416.4	11,163.9	11,249.0	0.00	0.00	0.00
17,300.0	90.00	90.25	7,092.0	-2,289.00	1,416.0	11,263.9	11,348.4	0.00	0.00	0.00
17,400.0	90.00	90.25	7,092.0	-2,289.00	1,415.6	11,363.9	11,447.9	0.00	0.00	0.00
17,500.0	90.00	90.25	7,092.0	-2,289.00	1,415.2	11,463.9	11,547.4	0.00	0.00	0.00
17,600.0	90.00	90.25	7,092.0	-2,289.00	1,414.7	11,563.9	11,646.9	0.00	0.00	0.00
17,700.0	90.00	90.25	7,092.0	-2,289.00	1,414.3	11,663.9	11,746.4	0.00	0.00	0.00
17,800.0	90.00	90.25	7,092.0	-2,289.00	1,413.9	11,763.9	11,845.8	0.00	0.00	0.00
17,900.0	90.00	90.25	7,092.0	-2,289.00	1,413.4	11,863.9	11,945.3	0.00	0.00	0.00
18,000.0	90.00	90.25	7,092.0	-2,289.00	1,413.0	11,963.9	12,044.8	0.00	0.00	0.00
18,100.0	90.00	90.25	7,092.0	-2,289.00	1,412.6	12,063.9	12,144.3	0.00	0.00	0.00
18,200.0	90.00	90.25	7,092.0	-2,289.00	1,412.1	12,163.9	12,243.7	0.00	0.00	0.00
18,300.0	90.00	90.25	7,092.0	-2,289.00	1,411.7	12,263.9	12,343.2	0.00	0.00	0.00
18,400.0	90.00	90.25	7,092.0	-2,289.00	1,411.3	12,363.9	12,442.7	0.00	0.00	0.00
18,500.0	90.00	90.25	7,092.0	-2,289.00	1,410.9	12,463.9	12,542.2	0.00	0.00	0.00
18,600.0	90.00	90.25	7,092.0	-2,289.00	1,410.4	12,563.9	12,641.6	0.00	0.00	0.00
18,700.0	90.00	90.25	7,092.0	-2,289.00	1,410.0	12,663.9	12,741.1	0.00	0.00	0.00
18,800.0	90.00	90.25	7,092.0	-2,289.00	1,409.6	12,763.9	12,840.6	0.00	0.00	0.00
18,900.0	90.00	90.25	7,092.0	-2,289.00	1,409.1	12,863.9	12,940.1	0.00	0.00	0.00
19,000.0	90.00	90.25	7,092.0	-2,289.00	1,408.7	12,963.9	13,039.6	0.00	0.00	0.00
19,100.0	90.00	90.25	7,092.0	-2,289.00	1,408.3	13,063.9	13,139.0	0.00	0.00	0.00
19,200.0	90.00	90.25	7,092.0	-2,289.00	1,407.9	13,163.9	13,238.5	0.00	0.00	0.00
19,300.0	90.00	90.25	7,092.0	-2,289.00	1,407.4	13,263.9	13,338.0	0.00	0.00	0.00
19,400.0	90.00	90.25	7,092.0	-2,289.00	1,407.0	13,363.9	13,437.5	0.00	0.00	0.00
19,500.0	90.00	90.25	7,092.0	-2,289.00	1,406.6	13,463.9	13,536.9	0.00	0.00	0.00
19,600.0	90.00	90.25	7,092.0	-2,289.00	1,406.1	13,563.9	13,636.4	0.00	0.00	0.00
19,700.0	90.00	90.25	7,092.0	-2,289.00	1,405.7	13,663.9	13,735.9	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well TC-COUNTRY CLUB WEST 2-9-11
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4803.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4803.0usft (Original Well Elev)
<b>Site:</b>	NE SE SEC. 8 T5N R66W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	TC-COUNTRY CLUB WEST 2-9-11	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

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)
19,800.0	90.00	90.25	7,092.0	-2,289.00	1,405.3	13,763.9	13,835.4	0.00	0.00	0.00
19,900.0	90.00	90.25	7,092.0	-2,289.00	1,404.9	13,863.9	13,934.9	0.00	0.00	0.00
20,000.0	90.00	90.25	7,092.0	-2,289.00	1,404.4	13,963.9	14,034.3	0.00	0.00	0.00
20,100.0	90.00	90.25	7,092.0	-2,289.00	1,404.0	14,063.9	14,133.8	0.00	0.00	0.00
20,200.0	90.00	90.25	7,092.0	-2,289.00	1,403.6	14,163.9	14,233.3	0.00	0.00	0.00
20,300.0	90.00	90.25	7,092.0	-2,289.00	1,403.1	14,263.9	14,332.8	0.00	0.00	0.00
<b>BHL - TC-COUNTRY CLUB WEST 2-9-11</b>										
<b>20,309.2</b>	<b>90.00</b>	<b>90.25</b>	<b>7,092.0</b>	<b>-2,289.00</b>	<b>1,403.1</b>	<b>14,273.1</b>	<b>14,341.9</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Formations						
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,797.6	3,680.0	PARKMAN				
4,560.4	4,410.0	SUSSEX				
4,988.9	4,820.0	SHANNON				
7,248.2	6,940.0	SHARON SPRINGS				
7,298.5	6,972.0	NIOBRARA				
7,681.6	7,092.0	NIO B TARGET				

Plan Annotations				
MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
500.0	500.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1,343.0	1,330.9	96.1	76.9	EOB TO 16.86° INC
6,885.4	6,635.0	1,351.2	1,081.6	START BUILD & TURN
7,681.6	7,092.0	1,457.3	1,645.6	LANDING PNT - TC-COUNTRY CLUB WEST 2-9-11
20,309.2	7,092.0	1,403.1	14,273.1	BHL - TC-COUNTRY CLUB WEST 2-9-11