

# **EXTRACTION OIL & GAS**

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

**SW NE SEC. 5 T6N R67W 6th P.M.**

**MICKEY 8**

**ORIGINAL WELLBORE**

**07 October, 2016**

**Plan: PROPOSAL #2**

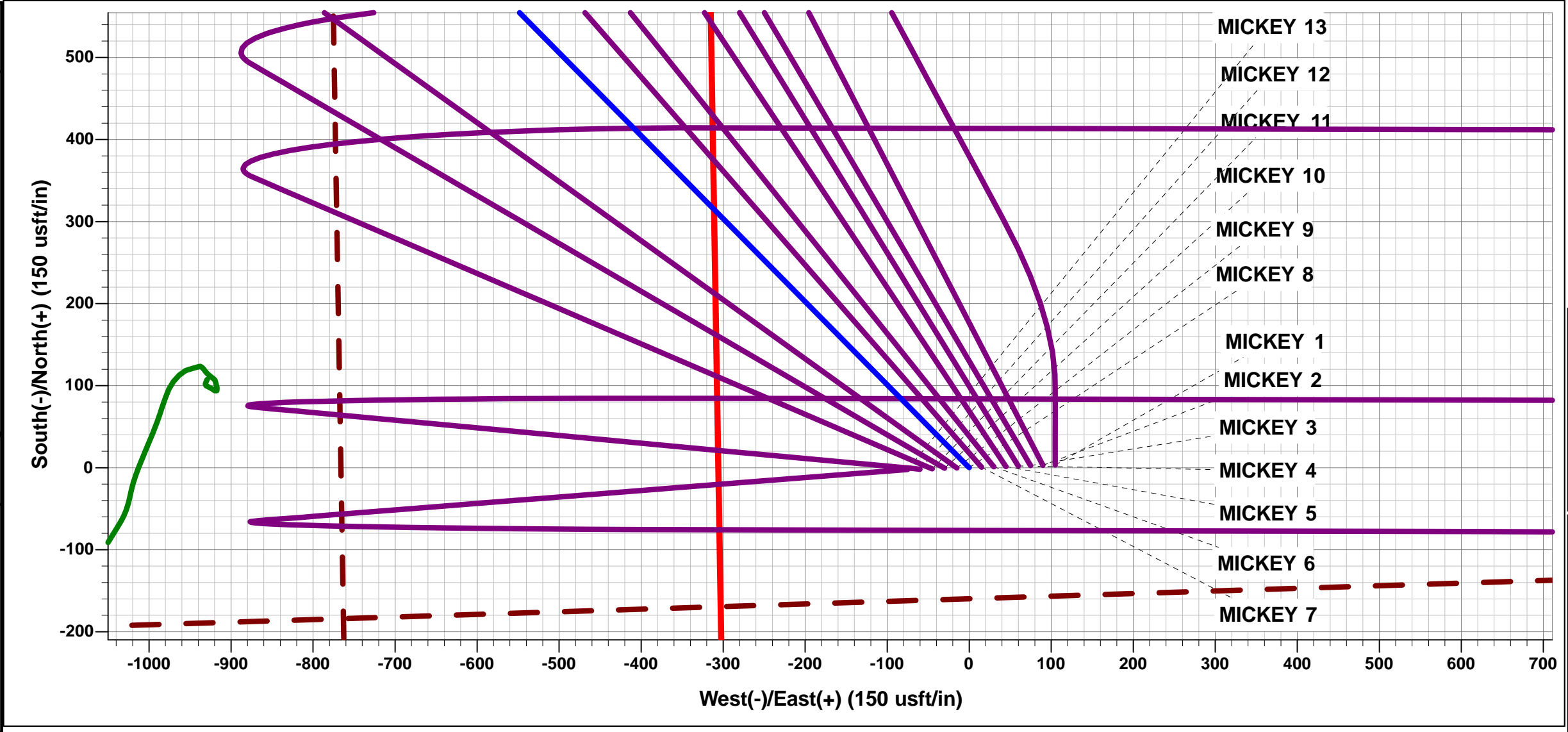




Project: WELD COUNTY, COLORADO (NAD 83)  
Site: SW NE SEC. 5 T6N R67W 6th P.M.  
Well: MICKEY 8  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #2

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Dep	Annotation	
0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	SHL: 2421ft FNL & 1873ft FEL of Sec 5	
1600.0	1600.0	0.00	0.00	0.0	0.0	0.0	0.0	9 5/8" SURFACE CASING	
2200.0	2200.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)	
3170.4	3190.0	19.80	315.33	120.5	-119.1	-105.6	169.4	EOB TO 19.8° INC	
6176.3	6384.8	19.80	315.33	890.2	-879.9	-780.3	1251.6	KOP (10°/100ft DGLG)	
6864.0	7422.9	90.00	90.13	1064.6	-323.1	-208.2	1904.6	HZ LP: 1354ft FNL & 2178ft FEL of Sec 5	
6864.0	17491.5	90.00	90.14	1041.0	9745.5	9800.9	11973.2	BHL: 1441ft FNL & 2624ft FEL of Sec 3	

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
HZ LP - MICKEY 8	6864.0	1064.5	-323.1	40.519317	-104.915741
BHL - MICKEY 8	6864.0	1041.0	9745.5	40.519247	-104.879527



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3354.0	3385.1	PARKMAN
3954.0	4022.8	SUSSEX
4364.0	4458.6	SHANNON
6709.0	6984.1	SHARON SPRINGS
6744.0	7039.1	NIOBRARA
6864.0	7422.9	NIO B TARGET

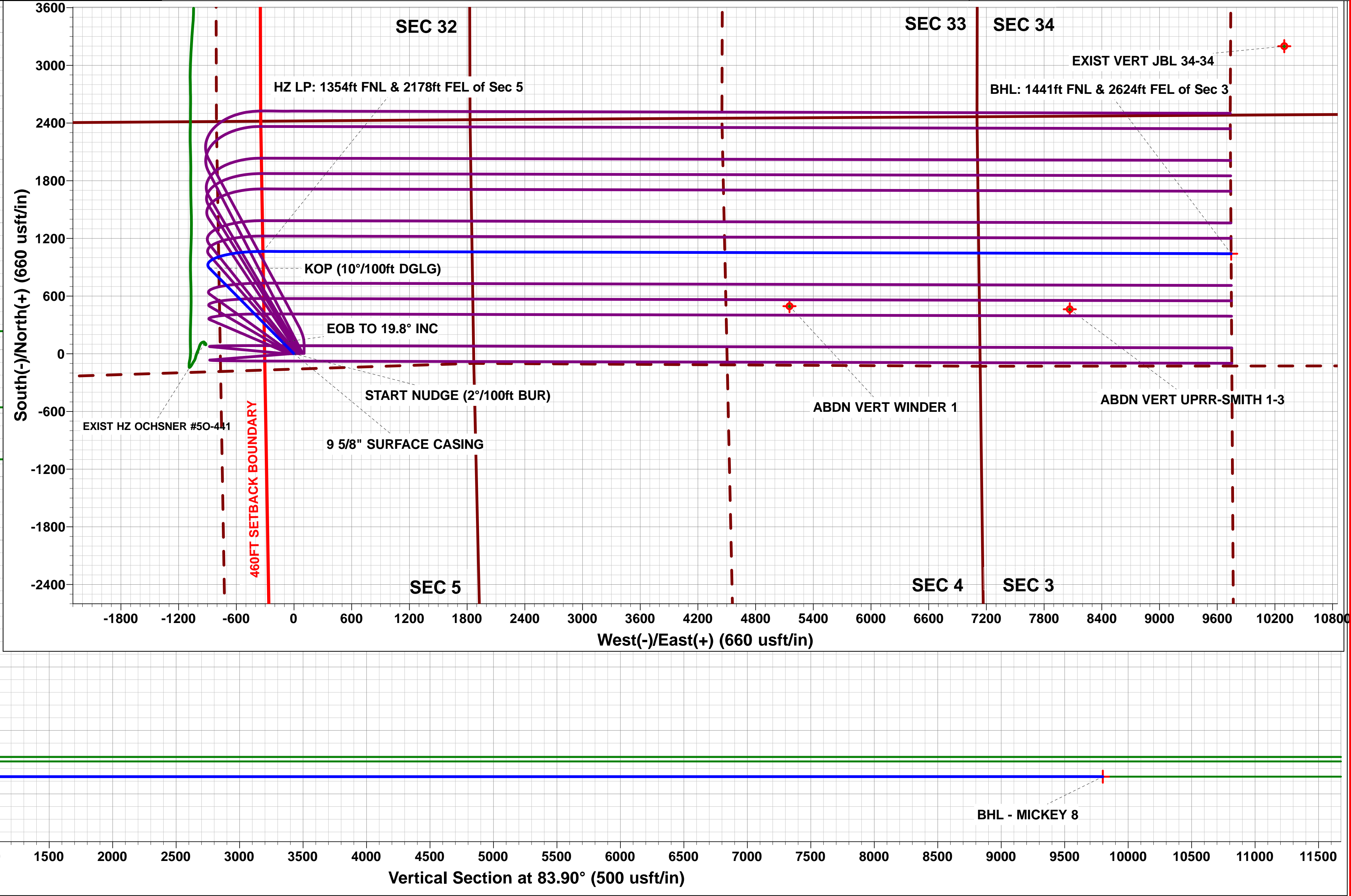
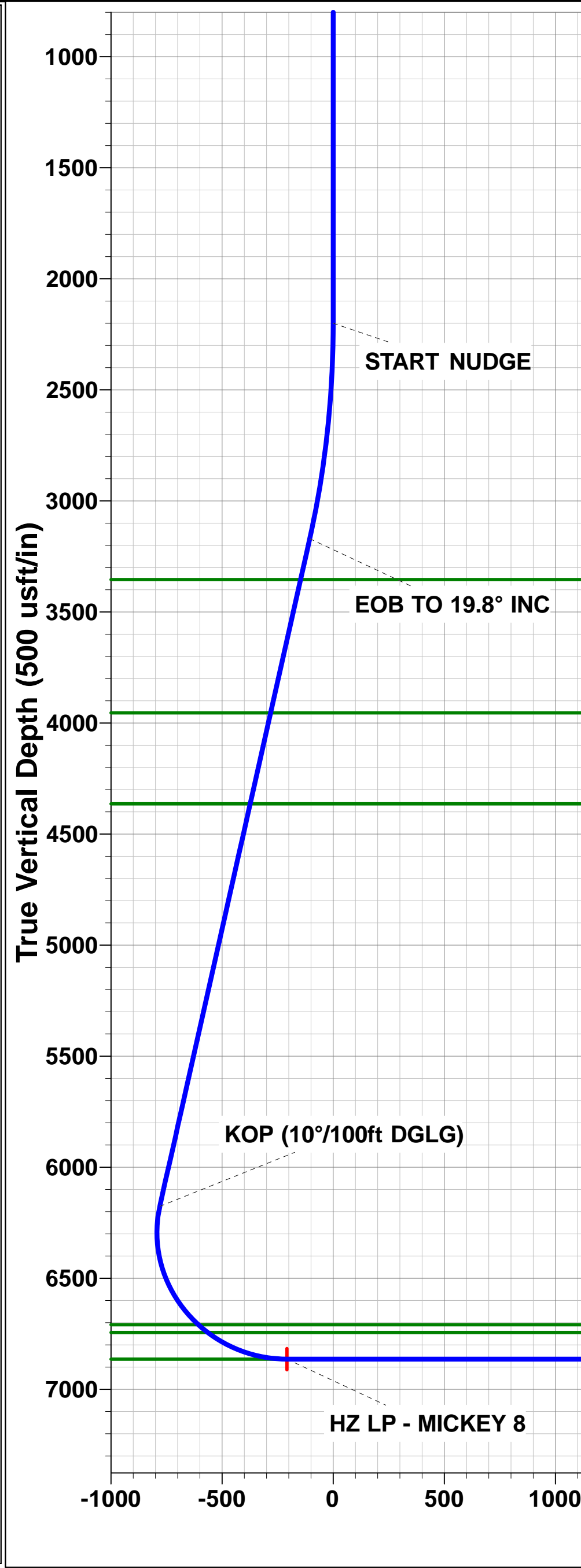
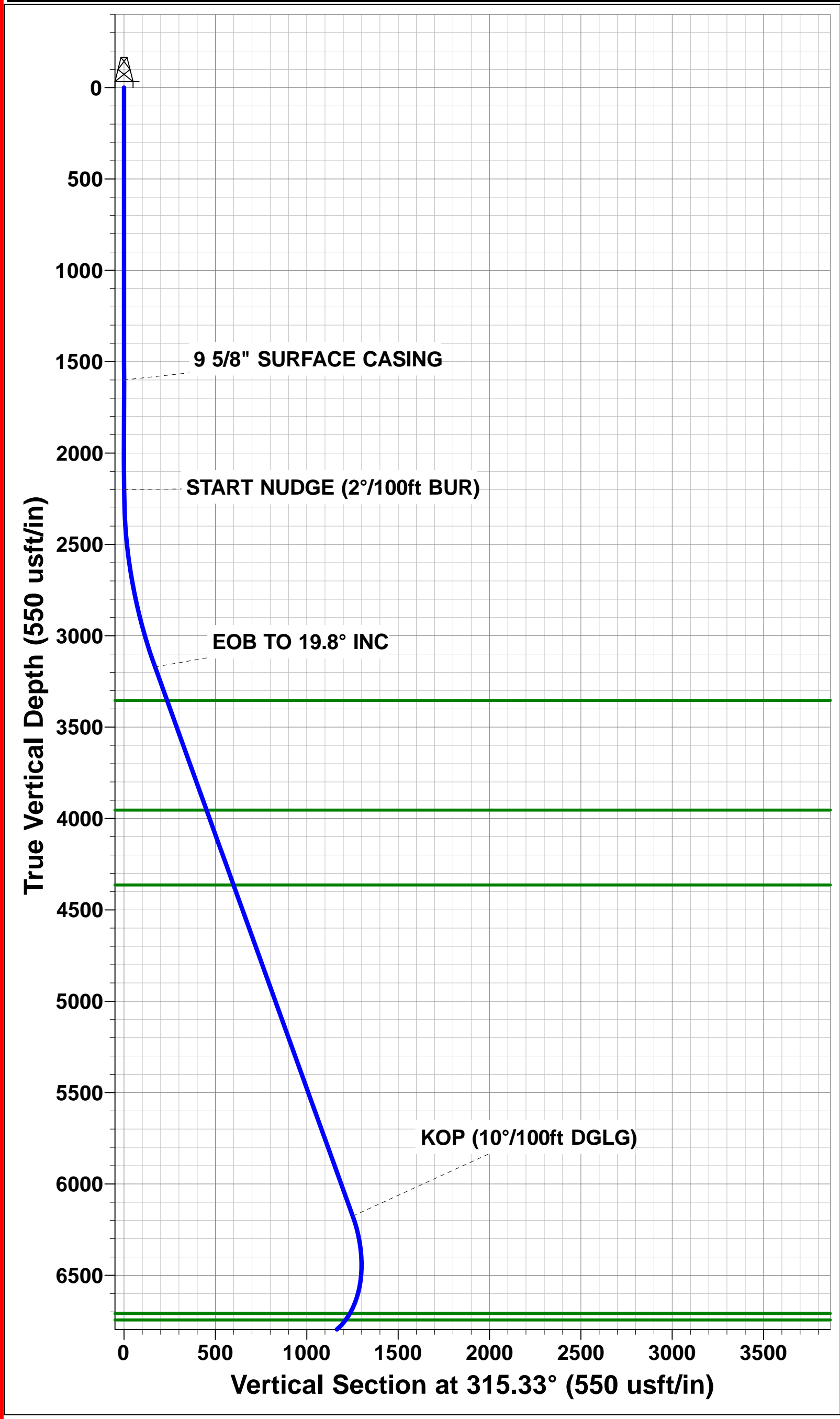
PROPOSED LOCAL COORDINATES	
SHL: 2421ft FNL & 1873ft FEL of Sec 5	
LP: 1354ft FNL & 2178ft FEL of Sec 5	
BHL: 1441ft FNL & 2624ft FEL of Sec 3	

T

M

Azimuths to True North  
Magnetic North: 8.39°

Magnetic Field  
Strength: 52533.0snT  
Dip Angle: 66.95°  
Date: 12/08/2016  
Model: IGRF2015



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well MICKEY 8
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4896.0usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4896.0usft
<b>Site:</b>	SW NE SEC. 5 T6N R67W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	MICKEY 8	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

<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>	SW NE SEC. 5 T6N R67W 6th P.M.		
<b>Site Position:</b>		<b>Northing:</b>	1,431,152.83 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,162,171.69 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	1.10000ft
		<b>Latitude:</b>	40.515451
		<b>Longitude:</b>	-104.916720
		<b>Grid Convergence:</b>	0.38 °

<b>Well</b>	MICKEY 8		
<b>Well Position</b>	<b>+N-S</b>	343.8 usft	<b>Northing:</b> 1,431,500.57 usft
	<b>+E-W</b>	595.3 usft	<b>Easting:</b> 3,162,764.69 usft
<b>Position Uncertainty</b>	0.0 usft	<b>Wellhead Elevation:</b>	usft
		<b>Latitude:</b>	40.516395
		<b>Longitude:</b>	-104.914579
		<b>Ground Level:</b>	4,880.0 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	12/08/2016	8.39	66.95	52,533

<b>Design</b>	PROPOSAL #2			
<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>
	4.0	0.0	0.0	83.90

<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	-4,896.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,200.0	0.00	0.00	2,200.0	-2,696.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,190.0	19.80	315.33	3,170.5	-1,725.5	120.5	-119.1	2.00	2.00	0.00	315.33	
6,384.8	19.80	315.33	6,176.4	1,280.4	890.2	-879.9	0.00	0.00	0.00	0.00	
7,422.9	90.00	90.13	6,864.0	1,968.0	1,064.5	-323.1	10.00	6.76	12.99	133.06	HZ LP - MICKEY 8
17,491.5	90.00	90.14	6,864.0	1,968.0	1,041.0	9,745.5	0.00	0.00	0.00	90.00	BHL - MICKEY 8

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well MICKEY 8
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4896.0usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4896.0usft
<b>Site:</b>	SW NE SEC. 5 T6N R67W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	MICKEY 8	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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)
<b>SHL: 2421ft FNL &amp; 1873ft FEL of Sec 5</b>										
0.0	0.00	0.00	0.0	4,896.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,796.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,696.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,596.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,496.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,396.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,296.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	4,196.00	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	4,096.00	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	3,996.00	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,896.00	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,796.00	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	3,696.00	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	3,596.00	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	3,496.00	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	3,396.00	0.0	0.0	0.0	0.00	0.00	0.00
<b>9 5/8" SURFACE CASING</b>										
1,600.0	0.00	0.00	1,600.0	3,296.00	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	3,196.00	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	3,096.00	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	2,996.00	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	2,896.00	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	2,796.00	0.0	0.0	0.0	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
2,200.0	0.00	0.00	2,200.0	2,696.00	0.0	0.0	0.0	0.00	0.00	0.00
2,300.0	2.00	315.33	2,300.0	2,596.02	1.2	-1.2	-1.1	2.00	2.00	0.00
2,400.0	4.00	315.33	2,399.8	2,496.16	5.0	-4.9	-4.4	2.00	2.00	0.00
2,500.0	6.00	315.33	2,499.5	2,396.55	11.2	-11.0	-9.8	2.00	2.00	0.00
2,600.0	8.00	315.33	2,598.7	2,297.30	19.8	-19.6	-17.4	2.00	2.00	0.00
2,700.0	10.00	315.33	2,697.5	2,198.53	31.0	-30.6	-27.1	2.00	2.00	0.00
2,800.0	12.00	315.33	2,795.6	2,100.38	44.5	-44.0	-39.0	2.00	2.00	0.00
2,900.0	14.00	315.33	2,893.1	2,002.94	60.5	-59.8	-53.1	2.00	2.00	0.00
3,000.0	16.00	315.33	2,989.6	1,906.36	78.9	-78.0	-69.2	2.00	2.00	0.00
3,100.0	18.00	315.33	3,085.3	1,810.73	99.7	-98.6	-87.4	2.00	2.00	0.00
<b>EOB TO 19.8° INC</b>										
3,190.0	19.80	315.33	3,170.4	1,725.59	120.5	-119.1	-105.6	2.00	2.00	0.00
3,200.0	19.80	315.33	3,179.8	1,716.18	122.9	-121.4	-107.7	0.01	0.01	0.00
3,300.0	19.80	315.33	3,273.9	1,622.09	147.0	-145.3	-128.8	0.00	0.00	0.00
<b>PARKMAN</b>										
3,385.1	19.80	315.33	3,354.0	1,542.00	167.5	-165.5	-146.8	0.00	0.00	0.00
3,400.0	19.80	315.33	3,368.0	1,528.00	171.0	-169.1	-149.9	0.00	0.00	0.00
3,500.0	19.80	315.33	3,462.1	1,433.92	195.1	-192.9	-171.1	0.00	0.00	0.00
3,600.0	19.80	315.33	3,556.2	1,339.83	219.2	-216.7	-192.2	0.00	0.00	0.00
3,700.0	19.80	315.33	3,650.3	1,245.74	243.3	-240.5	-213.3	0.00	0.00	0.00
3,800.0	19.80	315.33	3,744.3	1,151.65	267.4	-264.3	-234.4	0.00	0.00	0.00
3,900.0	19.80	315.33	3,838.4	1,057.57	291.5	-288.1	-255.5	0.00	0.00	0.00
4,000.0	19.80	315.33	3,932.5	963.48	315.6	-312.0	-276.7	0.00	0.00	0.00
<b>SUSSEX</b>										
4,022.8	19.80	315.33	3,954.0	942.00	321.1	-317.4	-281.5	0.00	0.00	0.00
4,100.0	19.80	315.33	4,026.6	869.39	339.7	-335.8	-297.8	0.00	0.00	0.00
4,200.0	19.80	315.33	4,120.7	775.30	363.8	-359.6	-318.9	0.00	0.00	0.00
4,300.0	19.80	315.33	4,214.8	681.22	387.9	-383.4	-340.0	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well MICKEY 8
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4896.0usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4896.0usft
<b>Site:</b>	SW NE SEC. 5 T6N R67W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	MICKEY 8	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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)
4,400.0	19.80	315.33	4,308.9	587.13	412.0	-407.2	-361.1	0.00	0.00	0.00
<b>SHANNON</b>										
<b>4,458.6</b>	<b>19.80</b>	<b>315.33</b>	<b>4,364.0</b>	<b>532.00</b>	<b>426.1</b>	<b>-421.2</b>	<b>-373.5</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
4,500.0	19.80	315.33	4,403.0	493.04	436.1	-431.0	-382.3	0.00	0.00	0.00
4,600.0	19.80	315.33	4,497.0	398.95	460.2	-454.8	-403.4	0.00	0.00	0.00
4,700.0	19.80	315.33	4,591.1	304.87	484.2	-478.6	-424.5	0.00	0.00	0.00
4,800.0	19.80	315.33	4,685.2	210.78	508.3	-502.5	-445.6	0.00	0.00	0.00
4,900.0	19.80	315.33	4,779.3	116.69	532.4	-526.3	-466.7	0.00	0.00	0.00
5,000.0	19.80	315.33	4,873.4	22.60	556.5	-550.1	-487.9	0.00	0.00	0.00
5,100.0	19.80	315.33	4,967.5	-71.48	580.6	-573.9	-509.0	0.00	0.00	0.00
5,200.0	19.80	315.33	5,061.6	-165.57	604.7	-597.7	-530.1	0.00	0.00	0.00
5,300.0	19.80	315.33	5,155.7	-259.66	628.8	-621.5	-551.2	0.00	0.00	0.00
5,400.0	19.80	315.33	5,249.7	-353.75	652.9	-645.3	-572.3	0.00	0.00	0.00
5,500.0	19.80	315.33	5,343.8	-447.83	677.0	-669.2	-593.5	0.00	0.00	0.00
5,600.0	19.80	315.33	5,437.9	-541.92	701.1	-693.0	-614.6	0.00	0.00	0.00
5,700.0	19.80	315.33	5,532.0	-636.01	725.2	-716.8	-635.7	0.00	0.00	0.00
5,800.0	19.80	315.33	5,626.1	-730.10	749.3	-740.6	-656.8	0.00	0.00	0.00
5,900.0	19.80	315.33	5,720.2	-824.18	773.4	-764.4	-677.9	0.00	0.00	0.00
6,000.0	19.80	315.33	5,814.3	-918.27	797.5	-788.2	-699.1	0.00	0.00	0.00
6,100.0	19.80	315.33	5,908.4	-1,012.36	821.5	-812.0	-720.2	0.00	0.00	0.00
6,200.0	19.80	315.33	6,002.4	-1,106.45	845.6	-835.9	-741.3	0.00	0.00	0.00
6,300.0	19.80	315.33	6,096.5	-1,200.53	869.7	-859.7	-762.4	0.00	0.00	0.00
<b>KOP (10°/100ft DGLG)</b>										
<b>6,384.8</b>	<b>19.80</b>	<b>315.33</b>	<b>6,176.3</b>	<b>-1,280.32</b>	<b>890.2</b>	<b>-879.9</b>	<b>-780.3</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
6,400.0	18.80	318.77	6,190.7	-1,294.67	893.8	-883.3	-783.4	9.97	-6.60	22.62
6,500.0	14.51	350.94	6,286.6	-1,390.65	918.4	-895.9	-793.3	10.00	-4.29	32.17
6,600.0	16.23	28.80	6,383.3	-1,487.31	943.1	-891.1	-785.9	10.00	1.72	37.86
6,700.0	22.63	52.35	6,477.7	-1,581.70	967.1	-869.1	-761.5	10.00	6.40	23.55
6,800.0	30.93	64.90	6,567.0	-1,670.97	989.8	-830.5	-720.7	10.00	8.30	12.55
6,900.0	39.96	72.38	6,648.4	-1,752.39	1,010.5	-776.5	-664.8	10.00	9.03	7.48
<b>SHARON SPRINGS</b>										
<b>6,984.1</b>	<b>47.81</b>	<b>76.74</b>	<b>6,709.0</b>	<b>-1,813.00</b>	<b>1,025.9</b>	<b>-720.3</b>	<b>-607.3</b>	<b>10.00</b>	<b>9.34</b>	<b>5.19</b>
7,000.0	49.31	77.44	6,719.5	-1,823.50	1,028.5	-708.7	-595.5	10.00	9.44	4.41
<b>NIOBRARA</b>										
<b>7,039.1</b>	<b>53.01</b>	<b>79.04</b>	<b>6,744.0</b>	<b>-1,848.00</b>	<b>1,034.7</b>	<b>-678.9</b>	<b>-565.2</b>	<b>10.00</b>	<b>9.48</b>	<b>4.08</b>
7,100.0	58.83	81.24	6,778.1	-1,882.13	1,043.3	-629.2	-514.9	10.00	9.54	3.62
7,200.0	68.43	84.34	6,822.5	-1,926.50	1,054.5	-540.5	-425.4	10.00	9.61	3.10
7,300.0	78.09	87.05	6,851.3	-1,955.27	1,061.6	-445.1	-329.8	10.00	9.66	2.71
7,400.0	87.78	89.56	6,863.6	-1,967.56	1,064.5	-346.0	-231.0	10.00	9.68	2.52
<b>HZ LP: 1354ft FNL &amp; 2178ft FEL of Sec 5 - NIO B TARGET</b>										
<b>7,422.9</b>	<b>90.00</b>	<b>90.13</b>	<b>6,864.0</b>	<b>-1,968.00</b>	<b>1,064.5</b>	<b>-323.1</b>	<b>-208.2</b>	<b>10.00</b>	<b>9.69</b>	<b>2.48</b>
7,500.0	90.00	90.13	6,864.0	-1,968.00	1,064.4	-246.0	-131.6	0.00	0.00	0.00
7,600.0	90.00	90.13	6,864.0	-1,968.00	1,064.1	-146.0	-32.2	0.00	0.00	0.00
7,700.0	90.00	90.13	6,864.0	-1,968.00	1,063.9	-46.0	67.2	0.00	0.00	0.00
7,800.0	90.00	90.13	6,864.0	-1,968.00	1,063.7	54.0	166.7	0.00	0.00	0.00
7,900.0	90.00	90.13	6,864.0	-1,968.00	1,063.4	154.0	266.1	0.00	0.00	0.00
8,000.0	90.00	90.13	6,864.0	-1,968.00	1,063.2	254.0	365.5	0.00	0.00	0.00
8,100.0	90.00	90.13	6,864.0	-1,968.00	1,063.0	354.0	464.9	0.00	0.00	0.00
8,200.0	90.00	90.13	6,864.0	-1,968.00	1,062.7	454.0	564.3	0.00	0.00	0.00
8,300.0	90.00	90.13	6,864.0	-1,968.00	1,062.5	554.0	663.7	0.00	0.00	0.00
8,400.0	90.00	90.13	6,864.0	-1,968.00	1,062.3	654.0	763.1	0.00	0.00	0.00
8,500.0	90.00	90.13	6,864.0	-1,968.00	1,062.0	754.0	862.5	0.00	0.00	0.00
8,600.0	90.00	90.13	6,864.0	-1,968.00	1,061.8	854.0	961.9	0.00	0.00	0.00



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well MICKEY 8
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4896.0usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4896.0usft
<b>Site:</b>	SW NE SEC. 5 T6N R67W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	MICKEY 8	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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)
8,700.0	90.00	90.13	6,864.0	-1,968.00	1,061.6	954.0	1,061.3	0.00	0.00	0.00
8,800.0	90.00	90.13	6,864.0	-1,968.00	1,061.3	1,054.0	1,160.7	0.00	0.00	0.00
8,900.0	90.00	90.13	6,864.0	-1,968.00	1,061.1	1,154.0	1,260.2	0.00	0.00	0.00
9,000.0	90.00	90.13	6,864.0	-1,968.00	1,060.9	1,254.0	1,359.6	0.00	0.00	0.00
9,100.0	90.00	90.13	6,864.0	-1,968.00	1,060.6	1,354.0	1,459.0	0.00	0.00	0.00
9,200.0	90.00	90.13	6,864.0	-1,968.00	1,060.4	1,454.0	1,558.4	0.00	0.00	0.00
9,300.0	90.00	90.13	6,864.0	-1,968.00	1,060.2	1,554.0	1,657.8	0.00	0.00	0.00
9,400.0	90.00	90.13	6,864.0	-1,968.00	1,059.9	1,654.0	1,757.2	0.00	0.00	0.00
9,500.0	90.00	90.13	6,864.0	-1,968.00	1,059.7	1,754.0	1,856.6	0.00	0.00	0.00
9,600.0	90.00	90.13	6,864.0	-1,968.00	1,059.5	1,854.0	1,956.0	0.00	0.00	0.00
9,700.0	90.00	90.13	6,864.0	-1,968.00	1,059.3	1,954.0	2,055.4	0.00	0.00	0.00
9,800.0	90.00	90.13	6,864.0	-1,968.00	1,059.0	2,054.0	2,154.8	0.00	0.00	0.00
9,900.0	90.00	90.13	6,864.0	-1,968.00	1,058.8	2,154.0	2,254.3	0.00	0.00	0.00
10,000.0	90.00	90.13	6,864.0	-1,968.00	1,058.6	2,254.0	2,353.7	0.00	0.00	0.00
10,100.0	90.00	90.13	6,864.0	-1,968.00	1,058.3	2,354.0	2,453.1	0.00	0.00	0.00
10,200.0	90.00	90.13	6,864.0	-1,968.00	1,058.1	2,454.0	2,552.5	0.00	0.00	0.00
10,300.0	90.00	90.13	6,864.0	-1,968.00	1,057.9	2,554.0	2,651.9	0.00	0.00	0.00
10,400.0	90.00	90.13	6,864.0	-1,968.00	1,057.6	2,654.0	2,751.3	0.00	0.00	0.00
10,500.0	90.00	90.13	6,864.0	-1,968.00	1,057.4	2,754.0	2,850.7	0.00	0.00	0.00
10,600.0	90.00	90.13	6,864.0	-1,968.00	1,057.2	2,854.0	2,950.1	0.00	0.00	0.00
10,700.0	90.00	90.13	6,864.0	-1,968.00	1,056.9	2,954.0	3,049.5	0.00	0.00	0.00
10,800.0	90.00	90.13	6,864.0	-1,968.00	1,056.7	3,054.0	3,148.9	0.00	0.00	0.00
10,900.0	90.00	90.13	6,864.0	-1,968.00	1,056.4	3,154.0	3,248.3	0.00	0.00	0.00
11,000.0	90.00	90.13	6,864.0	-1,968.00	1,056.2	3,254.0	3,347.8	0.00	0.00	0.00
11,100.0	90.00	90.13	6,864.0	-1,968.00	1,056.0	3,354.0	3,447.2	0.00	0.00	0.00
11,200.0	90.00	90.13	6,864.0	-1,968.00	1,055.7	3,454.0	3,546.6	0.00	0.00	0.00
11,300.0	90.00	90.13	6,864.0	-1,968.00	1,055.5	3,554.0	3,646.0	0.00	0.00	0.00
11,400.0	90.00	90.13	6,864.0	-1,968.00	1,055.3	3,654.0	3,745.4	0.00	0.00	0.00
11,500.0	90.00	90.13	6,864.0	-1,968.00	1,055.0	3,754.0	3,844.8	0.00	0.00	0.00
11,600.0	90.00	90.13	6,864.0	-1,968.00	1,054.8	3,854.0	3,944.2	0.00	0.00	0.00
11,700.0	90.00	90.13	6,864.0	-1,968.00	1,054.6	3,954.0	4,043.6	0.00	0.00	0.00
11,800.0	90.00	90.13	6,864.0	-1,968.00	1,054.3	4,054.0	4,143.0	0.00	0.00	0.00
11,900.0	90.00	90.13	6,864.0	-1,968.00	1,054.1	4,154.0	4,242.4	0.00	0.00	0.00
12,000.0	90.00	90.13	6,864.0	-1,968.00	1,053.9	4,254.0	4,341.8	0.00	0.00	0.00
12,100.0	90.00	90.13	6,864.0	-1,968.00	1,053.6	4,354.0	4,441.3	0.00	0.00	0.00
12,200.0	90.00	90.13	6,864.0	-1,968.00	1,053.4	4,454.0	4,540.7	0.00	0.00	0.00
12,300.0	90.00	90.13	6,864.0	-1,968.00	1,053.2	4,554.0	4,640.1	0.00	0.00	0.00
12,400.0	90.00	90.13	6,864.0	-1,968.00	1,052.9	4,654.0	4,739.5	0.00	0.00	0.00
12,500.0	90.00	90.13	6,864.0	-1,968.00	1,052.7	4,754.0	4,838.9	0.00	0.00	0.00
12,600.0	90.00	90.13	6,864.0	-1,968.00	1,052.5	4,854.0	4,938.3	0.00	0.00	0.00
12,700.0	90.00	90.13	6,864.0	-1,968.00	1,052.2	4,954.0	5,037.7	0.00	0.00	0.00
12,800.0	90.00	90.13	6,864.0	-1,968.00	1,052.0	5,054.0	5,137.1	0.00	0.00	0.00
12,900.0	90.00	90.13	6,864.0	-1,968.00	1,051.8	5,154.0	5,236.5	0.00	0.00	0.00
13,000.0	90.00	90.13	6,864.0	-1,968.00	1,051.5	5,254.0	5,335.9	0.00	0.00	0.00
13,100.0	90.00	90.13	6,864.0	-1,968.00	1,051.3	5,354.0	5,435.3	0.00	0.00	0.00
13,200.0	90.00	90.13	6,864.0	-1,968.00	1,051.1	5,454.0	5,534.8	0.00	0.00	0.00
13,300.0	90.00	90.13	6,864.0	-1,968.00	1,050.8	5,554.0	5,634.2	0.00	0.00	0.00
13,400.0	90.00	90.13	6,864.0	-1,968.00	1,050.6	5,654.0	5,733.6	0.00	0.00	0.00
13,500.0	90.00	90.13	6,864.0	-1,968.00	1,050.4	5,754.0	5,833.0	0.00	0.00	0.00
13,600.0	90.00	90.13	6,864.0	-1,968.00	1,050.1	5,854.0	5,932.4	0.00	0.00	0.00
13,700.0	90.00	90.13	6,864.0	-1,968.00	1,049.9	5,954.0	6,031.8	0.00	0.00	0.00
13,800.0	90.00	90.13	6,864.0	-1,968.00	1,049.7	6,054.0	6,131.2	0.00	0.00	0.00
13,900.0	90.00	90.13	6,864.0	-1,968.00	1,049.4	6,154.0	6,230.6	0.00	0.00	0.00
14,000.0	90.00	90.13	6,864.0	-1,968.00	1,049.2	6,254.0	6,330.0	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well MICKEY 8
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4896.0usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4896.0usft
<b>Site:</b>	SW NE SEC. 5 T6N R67W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	MICKEY 8	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	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)
14,100.0	90.00	90.13	6,864.0	-1,968.00	1,049.0	6,354.0	6,429.4	0.00	0.00	0.00
14,200.0	90.00	90.13	6,864.0	-1,968.00	1,048.7	6,454.0	6,528.8	0.00	0.00	0.00
14,300.0	90.00	90.13	6,864.0	-1,968.00	1,048.5	6,554.0	6,628.3	0.00	0.00	0.00
14,400.0	90.00	90.13	6,864.0	-1,968.00	1,048.3	6,654.0	6,727.7	0.00	0.00	0.00
14,500.0	90.00	90.13	6,864.0	-1,968.00	1,048.0	6,754.0	6,827.1	0.00	0.00	0.00
14,600.0	90.00	90.13	6,864.0	-1,968.00	1,047.8	6,854.0	6,926.5	0.00	0.00	0.00
14,700.0	90.00	90.13	6,864.0	-1,968.00	1,047.5	6,954.0	7,025.9	0.00	0.00	0.00
14,800.0	90.00	90.13	6,864.0	-1,968.00	1,047.3	7,054.0	7,125.3	0.00	0.00	0.00
14,900.0	90.00	90.13	6,864.0	-1,968.00	1,047.1	7,154.0	7,224.7	0.00	0.00	0.00
15,000.0	90.00	90.13	6,864.0	-1,968.00	1,046.8	7,254.0	7,324.1	0.00	0.00	0.00
15,100.0	90.00	90.13	6,864.0	-1,968.00	1,046.6	7,354.0	7,423.5	0.00	0.00	0.00
15,200.0	90.00	90.13	6,864.0	-1,968.00	1,046.4	7,454.0	7,522.9	0.00	0.00	0.00
15,300.0	90.00	90.13	6,864.0	-1,968.00	1,046.1	7,554.0	7,622.3	0.00	0.00	0.00
15,400.0	90.00	90.13	6,864.0	-1,968.00	1,045.9	7,654.0	7,721.8	0.00	0.00	0.00
15,500.0	90.00	90.13	6,864.0	-1,968.00	1,045.7	7,754.0	7,821.2	0.00	0.00	0.00
15,600.0	90.00	90.13	6,864.0	-1,968.00	1,045.4	7,854.0	7,920.6	0.00	0.00	0.00
15,700.0	90.00	90.13	6,864.0	-1,968.00	1,045.2	7,954.0	8,020.0	0.00	0.00	0.00
15,800.0	90.00	90.13	6,864.0	-1,968.00	1,045.0	8,054.0	8,119.4	0.00	0.00	0.00
15,900.0	90.00	90.13	6,864.0	-1,968.00	1,044.7	8,154.0	8,218.8	0.00	0.00	0.00
16,000.0	90.00	90.13	6,864.0	-1,968.00	1,044.5	8,254.0	8,318.2	0.00	0.00	0.00
16,100.0	90.00	90.13	6,864.0	-1,968.00	1,044.3	8,354.0	8,417.6	0.00	0.00	0.00
16,200.0	90.00	90.13	6,864.0	-1,968.00	1,044.0	8,454.0	8,517.0	0.00	0.00	0.00
16,300.0	90.00	90.13	6,864.0	-1,968.00	1,043.8	8,554.0	8,616.4	0.00	0.00	0.00
16,400.0	90.00	90.14	6,864.0	-1,968.00	1,043.5	8,654.0	8,715.8	0.00	0.00	0.00
16,500.0	90.00	90.14	6,864.0	-1,968.00	1,043.3	8,754.0	8,815.3	0.00	0.00	0.00
16,600.0	90.00	90.14	6,864.0	-1,968.00	1,043.1	8,854.0	8,914.7	0.00	0.00	0.00
16,700.0	90.00	90.14	6,864.0	-1,968.00	1,042.8	8,954.0	9,014.1	0.00	0.00	0.00
16,800.0	90.00	90.14	6,864.0	-1,968.00	1,042.6	9,054.0	9,113.5	0.00	0.00	0.00
16,900.0	90.00	90.14	6,864.0	-1,968.00	1,042.4	9,154.0	9,212.9	0.00	0.00	0.00
17,000.0	90.00	90.14	6,864.0	-1,968.00	1,042.1	9,254.0	9,312.3	0.00	0.00	0.00
17,100.0	90.00	90.14	6,864.0	-1,968.00	1,041.9	9,354.0	9,411.7	0.00	0.00	0.00
17,200.0	90.00	90.14	6,864.0	-1,968.00	1,041.7	9,454.0	9,511.1	0.00	0.00	0.00
17,300.0	90.00	90.14	6,864.0	-1,968.00	1,041.4	9,554.0	9,610.5	0.00	0.00	0.00
17,400.0	90.00	90.14	6,864.0	-1,968.00	1,041.2	9,654.0	9,709.9	0.00	0.00	0.00
<b>BHL: 1441ft FNL &amp; 2624ft FEL of Sec 3</b>										
<b>17,491.5</b>	<b>90.00</b>	<b>90.14</b>	<b>6,864.0</b>	<b>-1,968.00</b>	<b>1,041.0</b>	<b>9,745.5</b>	<b>9,800.9</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Formations						
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,385.1	3,354.0	PARKMAN				
4,022.8	3,954.0	SUSSEX				
4,458.6	4,364.0	SHANNON				
6,984.1	6,709.0	SHARON SPRINGS				
7,039.1	6,744.0	NIOBRARA				
7,422.9	6,864.0	NIO B TARGET				

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well MICKEY 8
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4896.0usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4896.0usft
<b>Site:</b>	SW NE SEC. 5 T6N R67W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	MICKEY 8	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #2		

## Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.0	0.0	0.0	0.0	SHL: 2421ft FNL & 1873ft FEL of Sec 5
1,600.0	1,600.0	0.0	0.0	9 5/8" SURFACE CASING
2,200.0	2,200.0	0.0	0.0	START NUDGE (2°/100ft BUR)
3,190.0	3,170.4	120.5	-119.1	EOB TO 19.8° INC
6,384.8	6,176.3	890.2	-879.9	KOP (10°/100ft DGLG)
7,422.9	6,864.0	1,064.6	-323.1	HZ LP: 1354ft FNL & 2178ft FEL of Sec 5
17,491.5	6,864.0	1,041.0	9,745.5	BHL: 1441ft FNL & 2624ft FEL of Sec 3