

# **EXTRACTION OIL & GAS**

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

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

**MICKEY 9**

**ORIGINAL WELLBORE**

**07 October, 2016**

**Plan: PROPOSAL #2**

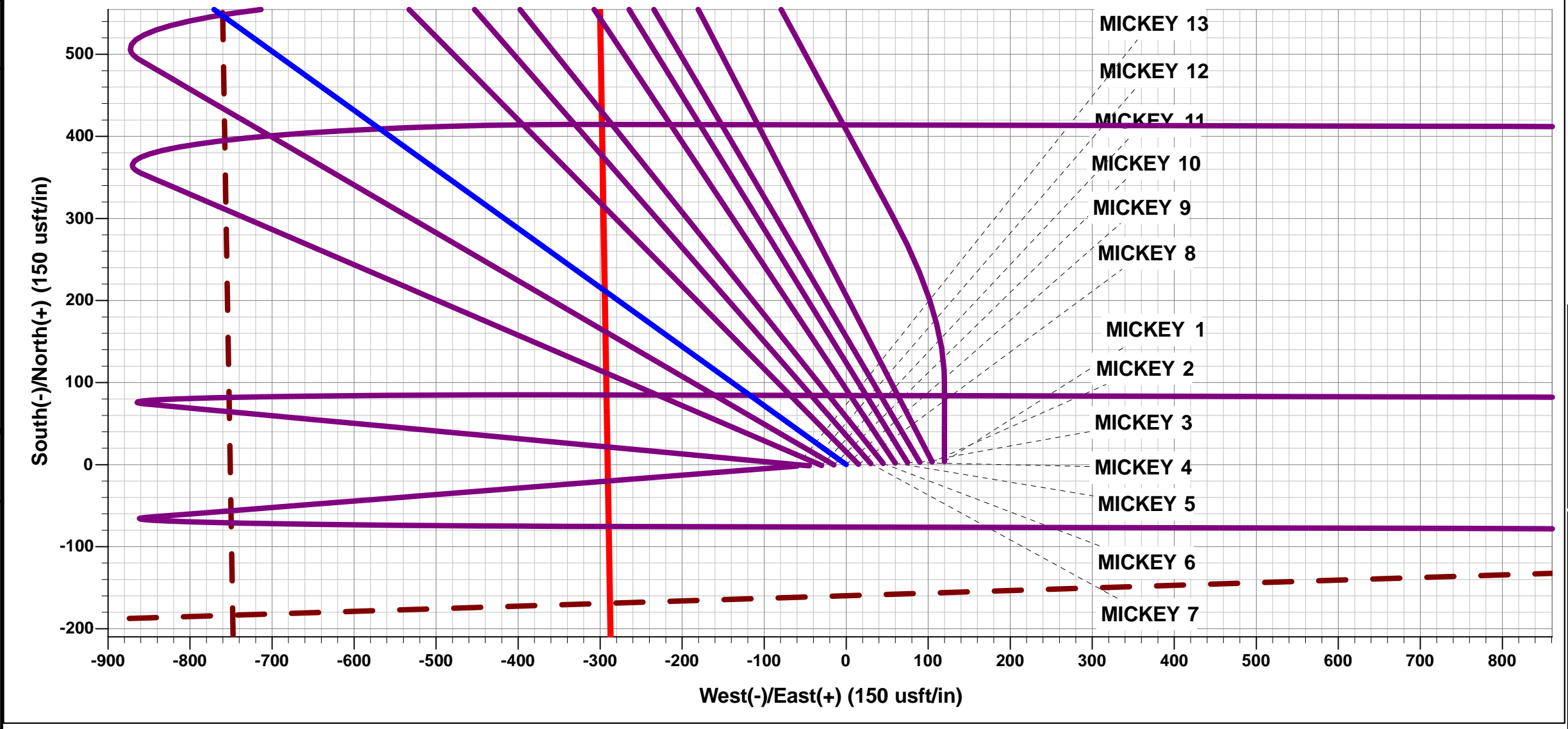




Project: WELD COUNTY, COLORADO (NAD 83)  
Site: SW NE SEC. 5 T6N R67W 6th P.M.  
Well: MICKEY 9  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #2

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: 2421ft FNL & 1888ft 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
2100.0	2100.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)
2896.4	2907.0	16.14	305.74	65.9	-91.7	-86.6	112.9	EOB TO 16.14° INC
6171.3	6316.3	16.14	305.74	619.4	-860.9	-813.6	1060.6	KOP (10°/100ft DGLG)
6864.0	7346.9	90.00	90.13	734.8	-302.5	-248.3	1682.6	HZ LP: 1684ft FNL & 2178ft FEL of Sec 5
6864.0	17412.0	90.00	90.14	711.3	9762.5	9788.4	11747.7	BHL: 1771ft FNL & 2622ft FEL of Sec 3

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
HZ LP - MICKEY 9	6864.0	734.8	-302.5	40.518411	-104.915721
BHL - MICKEY 9	6864.0	711.3	9762.6	40.518341	-104.879520



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3354.0	3383.4	PARKMAN
3954.0	4008.0	SUSSEX
4364.0	4434.8	SHANNON
6709.0	6912.2	SHARON SPRINGS
6744.0	6966.5	NIOBRARA
6864.0	7346.9	NIO B TARGET

PROPOSED LOCAL COORDINATES	
SHL: 2421ft FNL & 1888ft FEL of Sec 5	
LP: 1684ft FNL & 2178ft FEL of Sec 5	
BHL: 1771ft FNL & 2622ft FEL of Sec 3	

T

M

Azimuths to True North

Magnetic North: 8.39°

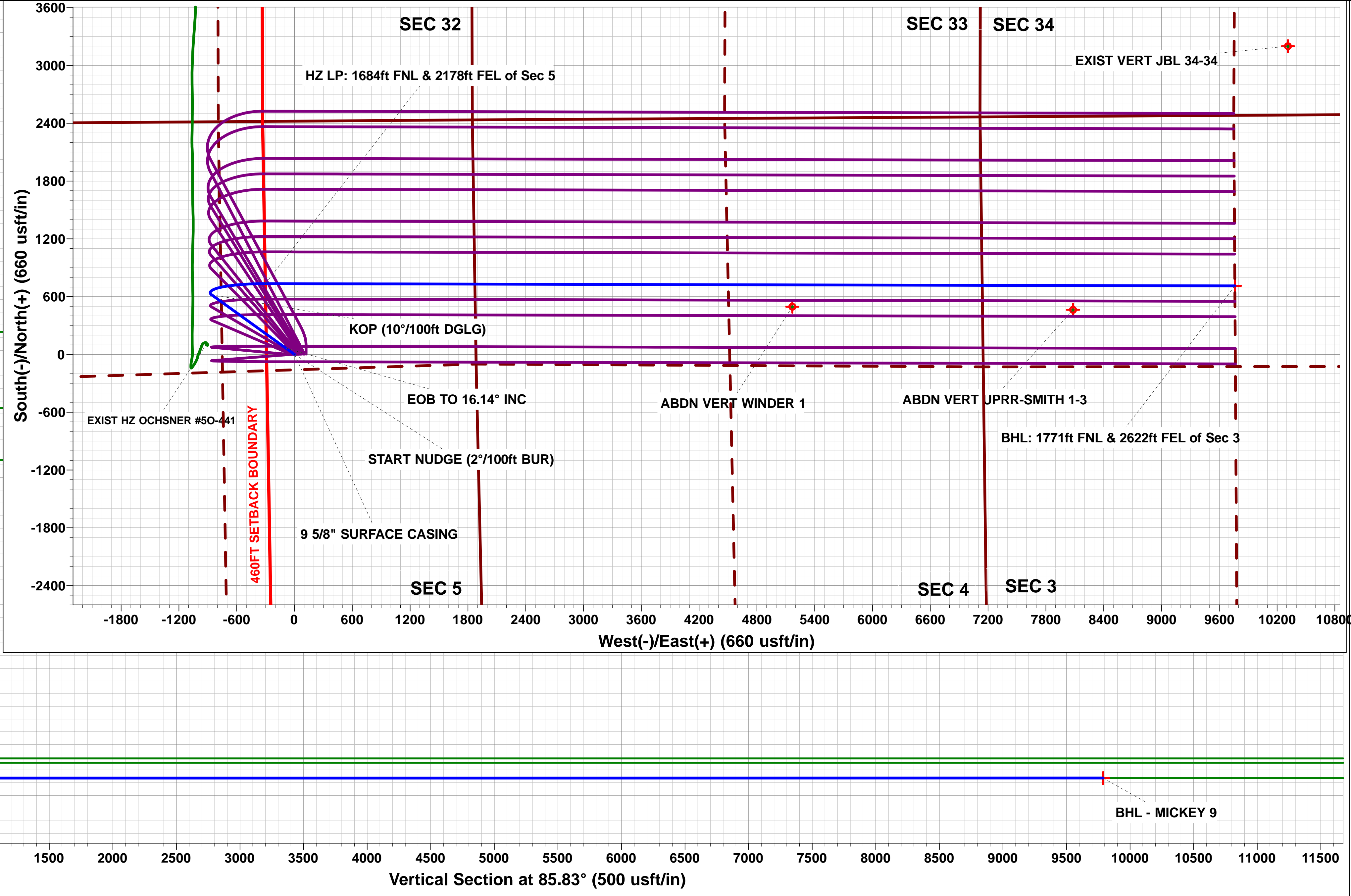
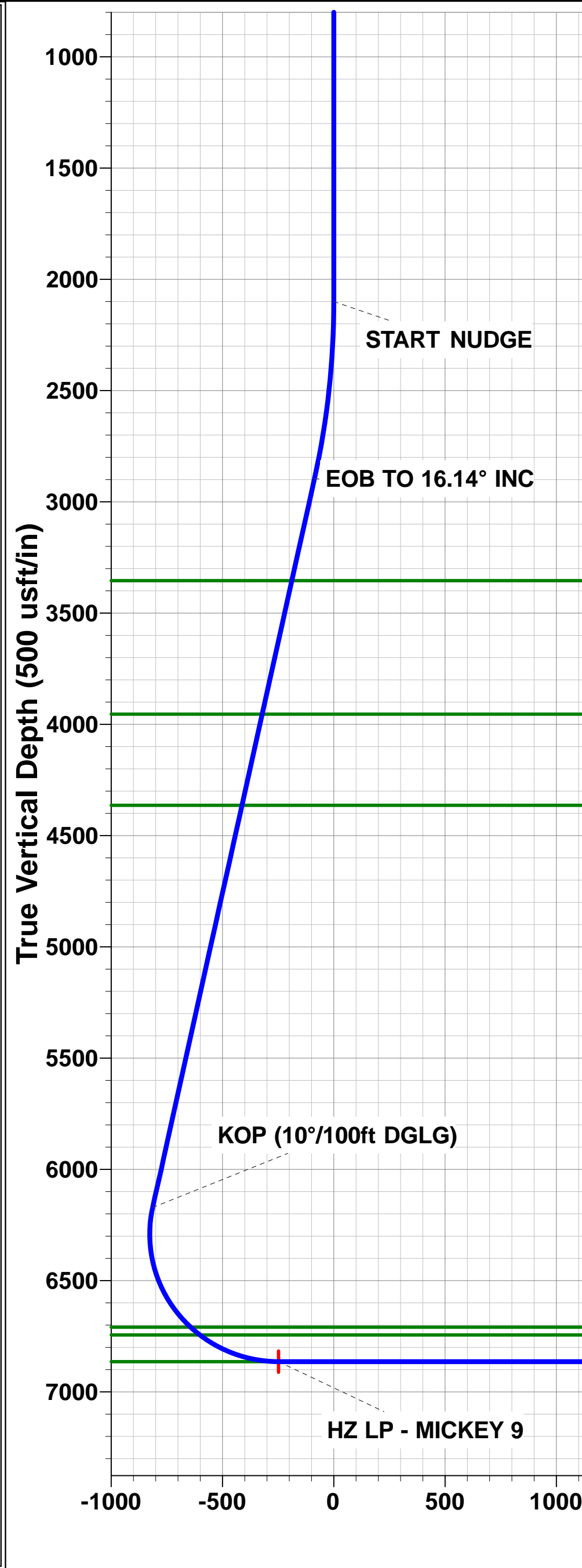
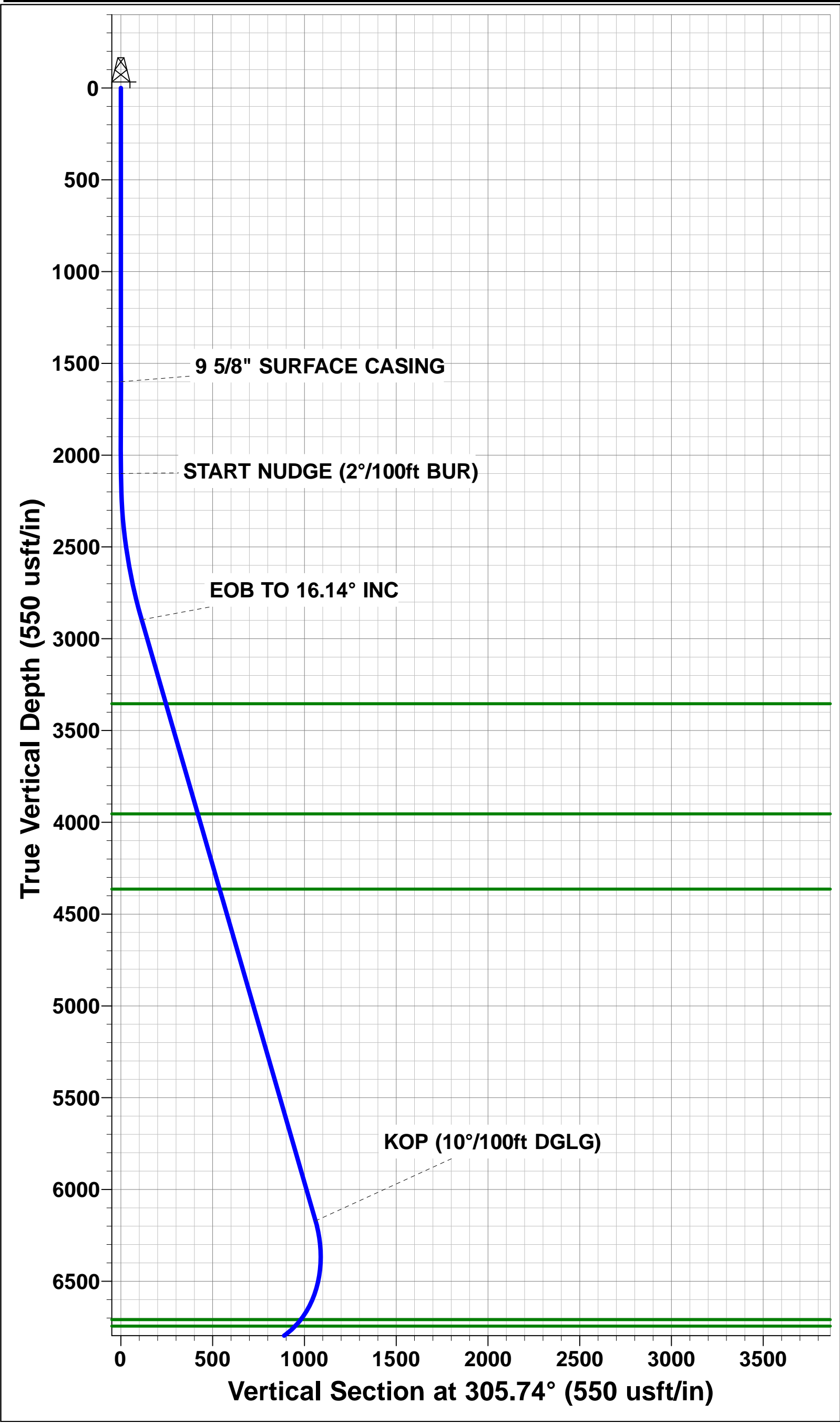
Magnetic Field

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 9
<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 9	<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 9		
<b>Well Position</b>	<b>+N/-S</b>	343.5 usft	<b>Northing:</b>
	<b>+E/-W</b>	580.3 usft	<b>Easting:</b>
<b>Position Uncertainty</b>	0.0 usft		<b>Wellhead Elevation:</b>
			<b>Latitude:</b>
			<b>Longitude:</b>
			<b>Ground Level:</b>

<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>
	0.0	0.0	0.0	85.83

<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	
2,100.0	0.00	0.00	2,100.0	-2,796.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,907.0	16.14	305.74	2,896.3	-1,999.7	65.9	-91.6	2.00	2.00	0.00	305.74	
6,316.3	16.14	305.74	6,171.3	1,275.3	619.4	-860.9	0.00	0.00	0.00	0.00	
7,346.9	90.00	90.13	6,864.0	1,968.0	734.8	-302.5	10.00	7.17	14.01	143.30	HZ LP - MICKEY 9
17,412.0	90.00	90.14	6,864.0	1,968.0	711.3	9,762.6	0.00	0.00	0.00	90.00	BHL - MICKEY 9

## Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well MICKEY 9
<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 9	<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; 1888ft 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
<b>START NUDGE (2°/100ft BUR)</b>										
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
2,200.0	2.00	305.74	2,200.0	2,696.02	1.0	-1.4	-1.3	2.00	2.00	0.00
2,300.0	4.00	305.74	2,299.8	2,596.16	4.1	-5.7	-5.4	2.00	2.00	0.00
2,400.0	6.00	305.74	2,399.5	2,496.55	9.2	-12.7	-12.0	2.00	2.00	0.00
2,500.0	8.00	305.74	2,498.7	2,397.30	16.3	-22.6	-21.4	2.00	2.00	0.00
2,600.0	10.00	305.74	2,597.5	2,298.53	25.4	-35.3	-33.4	2.00	2.00	0.00
2,700.0	12.00	305.74	2,695.6	2,200.38	36.6	-50.8	-48.0	2.00	2.00	0.00
2,800.0	14.00	305.74	2,793.1	2,102.94	49.7	-69.1	-65.3	2.00	2.00	0.00
2,900.0	16.00	305.74	2,889.6	2,006.36	64.8	-90.1	-85.1	2.00	2.00	0.00
<b>EOB TO 16.14° INC</b>										
2,907.0	16.14	305.74	2,896.4	1,999.63	65.9	-91.7	-86.6	1.99	1.99	0.00
3,000.0	16.14	305.74	2,985.7	1,910.30	81.0	-112.6	-106.5	0.00	0.00	0.00
3,100.0	16.14	305.74	3,081.8	1,814.24	97.3	-135.2	-127.8	0.00	0.00	0.00
3,200.0	16.14	305.74	3,177.8	1,718.18	113.5	-157.8	-149.1	0.00	0.00	0.00
3,300.0	16.14	305.74	3,273.9	1,622.12	129.8	-180.3	-170.4	0.00	0.00	0.00
<b>PARKMAN</b>										
3,383.4	16.14	305.74	3,354.0	1,542.00	143.3	-199.1	-188.2	0.00	0.00	0.00
3,400.0	16.14	305.74	3,369.9	1,526.06	146.0	-202.9	-191.7	0.00	0.00	0.00
3,500.0	16.14	305.74	3,466.0	1,430.00	162.2	-225.5	-213.1	0.00	0.00	0.00
3,600.0	16.14	305.74	3,562.1	1,333.94	178.5	-248.0	-234.4	0.00	0.00	0.00
3,700.0	16.14	305.74	3,658.1	1,237.88	194.7	-270.6	-255.7	0.00	0.00	0.00
3,800.0	16.14	305.74	3,754.2	1,141.82	210.9	-293.1	-277.0	0.00	0.00	0.00
3,900.0	16.14	305.74	3,850.2	1,045.76	227.2	-315.7	-298.4	0.00	0.00	0.00
4,000.0	16.14	305.74	3,946.3	949.71	243.4	-338.3	-319.7	0.00	0.00	0.00
<b>SUSSEX</b>										
4,008.0	16.14	305.74	3,954.0	942.00	244.7	-340.1	-321.4	0.00	0.00	0.00
4,100.0	16.14	305.74	4,042.4	853.65	259.6	-360.8	-341.0	0.00	0.00	0.00
4,200.0	16.14	305.74	4,138.4	757.59	275.9	-383.4	-362.3	0.00	0.00	0.00
4,300.0	16.14	305.74	4,234.5	661.53	292.1	-406.0	-383.7	0.00	0.00	0.00

# Planning Report



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<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 9	<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	16.14	305.74	4,330.5	565.47	308.3	-428.5	-405.0	0.00	0.00	0.00
<b>SHANNON</b>										
<b>4,434.8</b>	<b>16.14</b>	<b>305.74</b>	<b>4,364.0</b>	<b>532.00</b>	<b>314.0</b>	<b>-436.4</b>	<b>-412.4</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
4,500.0	16.14	305.74	4,426.6	469.41	324.6	-451.1	-426.3	0.00	0.00	0.00
4,600.0	16.14	305.74	4,522.6	373.35	340.8	-473.6	-447.6	0.00	0.00	0.00
4,700.0	16.14	305.74	4,618.7	277.29	357.0	-496.2	-469.0	0.00	0.00	0.00
4,800.0	16.14	305.74	4,714.8	181.23	373.3	-518.8	-490.3	0.00	0.00	0.00
4,900.0	16.14	305.74	4,810.8	85.18	389.5	-541.3	-511.6	0.00	0.00	0.00
5,000.0	16.14	305.74	4,906.9	-10.88	405.7	-563.9	-532.9	0.00	0.00	0.00
5,100.0	16.14	305.74	5,002.9	-106.94	422.0	-586.5	-554.3	0.00	0.00	0.00
5,200.0	16.14	305.74	5,099.0	-203.00	438.2	-609.0	-575.6	0.00	0.00	0.00
5,300.0	16.14	305.74	5,195.1	-299.06	454.5	-631.6	-596.9	0.00	0.00	0.00
5,400.0	16.14	305.74	5,291.1	-395.12	470.7	-654.2	-618.2	0.00	0.00	0.00
5,500.0	16.14	305.74	5,387.2	-491.18	486.9	-676.7	-639.5	0.00	0.00	0.00
5,600.0	16.14	305.74	5,483.2	-587.24	503.2	-699.3	-660.9	0.00	0.00	0.00
5,700.0	16.14	305.74	5,579.3	-683.30	519.4	-721.8	-682.2	0.00	0.00	0.00
5,800.0	16.14	305.74	5,675.4	-779.36	535.6	-744.4	-703.5	0.00	0.00	0.00
5,900.0	16.14	305.74	5,771.4	-875.41	551.9	-767.0	-724.8	0.00	0.00	0.00
6,000.0	16.14	305.74	5,867.5	-971.47	568.1	-789.5	-746.2	0.00	0.00	0.00
6,100.0	16.14	305.74	5,963.5	-1,067.53	584.3	-812.1	-767.5	0.00	0.00	0.00
6,200.0	16.14	305.74	6,059.6	-1,163.59	600.6	-834.7	-788.8	0.00	0.00	0.00
6,300.0	16.14	305.74	6,155.7	-1,259.65	616.8	-857.2	-810.1	0.00	0.00	0.00
<b>KOP (10°/100ft DGLG)</b>										
<b>6,316.3</b>	<b>16.14</b>	<b>305.74</b>	<b>6,171.3</b>	<b>-1,275.31</b>	<b>619.4</b>	<b>-860.9</b>	<b>-813.6</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
6,400.0	10.64	333.84	6,252.8	-1,356.78	633.2	-873.8	-825.5	10.00	-6.57	33.58
6,500.0	10.92	29.35	6,351.3	-1,455.27	649.8	-873.2	-823.7	10.00	0.28	55.51
6,600.0	17.99	58.88	6,448.2	-1,552.16	666.1	-855.3	-804.6	10.00	7.06	29.53
6,700.0	26.94	70.78	6,540.5	-1,644.53	681.6	-820.6	-768.9	10.00	8.95	11.90
6,800.0	36.42	76.93	6,625.6	-1,729.55	695.8	-770.2	-717.6	10.00	9.47	6.16
6,900.0	46.09	80.80	6,700.7	-1,804.66	708.3	-705.5	-652.2	10.00	9.67	3.87
<b>SHARON SPRINGS</b>										
<b>6,912.2</b>	<b>47.27</b>	<b>81.18</b>	<b>6,709.0</b>	<b>-1,813.00</b>	<b>709.6</b>	<b>-696.8</b>	<b>-643.4</b>	<b>10.00</b>	<b>9.74</b>	<b>3.14</b>
<b>NIOBRARA</b>										
<b>6,966.5</b>	<b>52.58</b>	<b>82.73</b>	<b>6,744.0</b>	<b>-1,848.00</b>	<b>715.4</b>	<b>-655.6</b>	<b>-601.9</b>	<b>10.00</b>	<b>9.76</b>	<b>2.84</b>
7,000.0	55.86	83.57	6,763.6	-1,867.56	718.7	-628.6	-574.8	10.00	9.79	2.53
7,100.0	65.67	85.77	6,812.3	-1,916.34	726.7	-541.9	-487.6	10.00	9.82	2.19
7,200.0	75.52	87.64	6,845.5	-1,949.53	732.1	-447.8	-393.4	10.00	9.84	1.87
7,300.0	85.37	89.35	6,862.1	-1,966.11	734.6	-349.4	-295.1	10.00	9.86	1.71
<b>HZ LP: 1684ft FNL &amp; 2178ft FEL of Sec 5 - NIO B TARGET</b>										
<b>7,346.9</b>	<b>90.00</b>	<b>90.13</b>	<b>6,864.0</b>	<b>-1,968.00</b>	<b>734.8</b>	<b>-302.5</b>	<b>-248.3</b>	<b>10.00</b>	<b>9.86</b>	<b>1.66</b>
7,400.0	90.00	90.13	6,864.0	-1,968.00	734.7	-249.4	-195.4	0.00	0.00	0.00
7,500.0	90.00	90.13	6,864.0	-1,968.00	734.5	-149.4	-95.7	0.00	0.00	0.00
7,600.0	90.00	90.13	6,864.0	-1,968.00	734.3	-49.4	4.1	0.00	0.00	0.00
7,700.0	90.00	90.13	6,864.0	-1,968.00	734.0	50.6	103.8	0.00	0.00	0.00
7,800.0	90.00	90.13	6,864.0	-1,968.00	733.8	150.6	203.5	0.00	0.00	0.00
7,900.0	90.00	90.13	6,864.0	-1,968.00	733.6	250.6	303.2	0.00	0.00	0.00
8,000.0	90.00	90.13	6,864.0	-1,968.00	733.3	350.6	402.9	0.00	0.00	0.00
8,100.0	90.00	90.13	6,864.0	-1,968.00	733.1	450.6	502.7	0.00	0.00	0.00
8,200.0	90.00	90.13	6,864.0	-1,968.00	732.9	550.6	602.4	0.00	0.00	0.00
8,300.0	90.00	90.13	6,864.0	-1,968.00	732.6	650.6	702.1	0.00	0.00	0.00
8,400.0	90.00	90.13	6,864.0	-1,968.00	732.4	750.6	801.8	0.00	0.00	0.00
8,500.0	90.00	90.13	6,864.0	-1,968.00	732.2	850.6	901.5	0.00	0.00	0.00
8,600.0	90.00	90.13	6,864.0	-1,968.00	731.9	950.6	1,001.2	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 9
<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 9	<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	731.7	1,050.6	1,101.0	0.00	0.00	0.00
8,800.0	90.00	90.13	6,864.0	-1,968.00	731.5	1,150.6	1,200.7	0.00	0.00	0.00
8,900.0	90.00	90.13	6,864.0	-1,968.00	731.2	1,250.6	1,300.4	0.00	0.00	0.00
9,000.0	90.00	90.13	6,864.0	-1,968.00	731.0	1,350.6	1,400.1	0.00	0.00	0.00
9,100.0	90.00	90.13	6,864.0	-1,968.00	730.8	1,450.6	1,499.8	0.00	0.00	0.00
9,200.0	90.00	90.13	6,864.0	-1,968.00	730.5	1,550.6	1,599.6	0.00	0.00	0.00
9,300.0	90.00	90.13	6,864.0	-1,968.00	730.3	1,650.6	1,699.3	0.00	0.00	0.00
9,400.0	90.00	90.13	6,864.0	-1,968.00	730.1	1,750.6	1,799.0	0.00	0.00	0.00
9,500.0	90.00	90.13	6,864.0	-1,968.00	729.8	1,850.6	1,898.7	0.00	0.00	0.00
9,600.0	90.00	90.13	6,864.0	-1,968.00	729.6	1,950.6	1,998.4	0.00	0.00	0.00
9,700.0	90.00	90.13	6,864.0	-1,968.00	729.4	2,050.6	2,098.1	0.00	0.00	0.00
9,800.0	90.00	90.13	6,864.0	-1,968.00	729.1	2,150.6	2,197.9	0.00	0.00	0.00
9,900.0	90.00	90.13	6,864.0	-1,968.00	728.9	2,250.6	2,297.6	0.00	0.00	0.00
10,000.0	90.00	90.13	6,864.0	-1,968.00	728.7	2,350.6	2,397.3	0.00	0.00	0.00
10,100.0	90.00	90.13	6,864.0	-1,968.00	728.4	2,450.6	2,497.0	0.00	0.00	0.00
10,200.0	90.00	90.13	6,864.0	-1,968.00	728.2	2,550.6	2,596.7	0.00	0.00	0.00
10,300.0	90.00	90.13	6,864.0	-1,968.00	728.0	2,650.6	2,696.5	0.00	0.00	0.00
10,400.0	90.00	90.13	6,864.0	-1,968.00	727.7	2,750.6	2,796.2	0.00	0.00	0.00
10,500.0	90.00	90.13	6,864.0	-1,968.00	727.5	2,850.6	2,895.9	0.00	0.00	0.00
10,600.0	90.00	90.13	6,864.0	-1,968.00	727.3	2,950.6	2,995.6	0.00	0.00	0.00
10,700.0	90.00	90.13	6,864.0	-1,968.00	727.0	3,050.6	3,095.3	0.00	0.00	0.00
10,800.0	90.00	90.13	6,864.0	-1,968.00	726.8	3,150.6	3,195.1	0.00	0.00	0.00
10,900.0	90.00	90.13	6,864.0	-1,968.00	726.6	3,250.6	3,294.8	0.00	0.00	0.00
11,000.0	90.00	90.13	6,864.0	-1,968.00	726.3	3,350.6	3,394.5	0.00	0.00	0.00
11,100.0	90.00	90.13	6,864.0	-1,968.00	726.1	3,450.6	3,494.2	0.00	0.00	0.00
11,200.0	90.00	90.13	6,864.0	-1,968.00	725.9	3,550.6	3,593.9	0.00	0.00	0.00
11,300.0	90.00	90.13	6,864.0	-1,968.00	725.6	3,650.6	3,693.6	0.00	0.00	0.00
11,400.0	90.00	90.13	6,864.0	-1,968.00	725.4	3,750.6	3,793.4	0.00	0.00	0.00
11,500.0	90.00	90.13	6,864.0	-1,968.00	725.2	3,850.6	3,893.1	0.00	0.00	0.00
11,600.0	90.00	90.13	6,864.0	-1,968.00	724.9	3,950.6	3,992.8	0.00	0.00	0.00
11,700.0	90.00	90.13	6,864.0	-1,968.00	724.7	4,050.6	4,092.5	0.00	0.00	0.00
11,800.0	90.00	90.13	6,864.0	-1,968.00	724.5	4,150.6	4,192.2	0.00	0.00	0.00
11,900.0	90.00	90.13	6,864.0	-1,968.00	724.2	4,250.6	4,292.0	0.00	0.00	0.00
12,000.0	90.00	90.13	6,864.0	-1,968.00	724.0	4,350.6	4,391.7	0.00	0.00	0.00
12,100.0	90.00	90.13	6,864.0	-1,968.00	723.8	4,450.6	4,491.4	0.00	0.00	0.00
12,200.0	90.00	90.13	6,864.0	-1,968.00	723.5	4,550.6	4,591.1	0.00	0.00	0.00
12,300.0	90.00	90.13	6,864.0	-1,968.00	723.3	4,650.6	4,690.8	0.00	0.00	0.00
12,400.0	90.00	90.13	6,864.0	-1,968.00	723.1	4,750.6	4,790.5	0.00	0.00	0.00
12,500.0	90.00	90.13	6,864.0	-1,968.00	722.8	4,850.6	4,890.3	0.00	0.00	0.00
12,600.0	90.00	90.13	6,864.0	-1,968.00	722.6	4,950.6	4,990.0	0.00	0.00	0.00
12,700.0	90.00	90.13	6,864.0	-1,968.00	722.3	5,050.6	5,089.7	0.00	0.00	0.00
12,800.0	90.00	90.13	6,864.0	-1,968.00	722.1	5,150.6	5,189.4	0.00	0.00	0.00
12,900.0	90.00	90.13	6,864.0	-1,968.00	721.9	5,250.6	5,289.1	0.00	0.00	0.00
13,000.0	90.00	90.13	6,864.0	-1,968.00	721.6	5,350.6	5,388.9	0.00	0.00	0.00
13,100.0	90.00	90.13	6,864.0	-1,968.00	721.4	5,450.6	5,488.6	0.00	0.00	0.00
13,200.0	90.00	90.13	6,864.0	-1,968.00	721.2	5,550.6	5,588.3	0.00	0.00	0.00
13,300.0	90.00	90.13	6,864.0	-1,968.00	720.9	5,650.6	5,688.0	0.00	0.00	0.00
13,400.0	90.00	90.13	6,864.0	-1,968.00	720.7	5,750.6	5,787.7	0.00	0.00	0.00
13,500.0	90.00	90.13	6,864.0	-1,968.00	720.5	5,850.6	5,887.4	0.00	0.00	0.00
13,600.0	90.00	90.13	6,864.0	-1,968.00	720.2	5,950.6	5,987.2	0.00	0.00	0.00
13,700.0	90.00	90.13	6,864.0	-1,968.00	720.0	6,050.6	6,086.9	0.00	0.00	0.00
13,800.0	90.00	90.13	6,864.0	-1,968.00	719.8	6,150.6	6,186.6	0.00	0.00	0.00
13,900.0	90.00	90.13	6,864.0	-1,968.00	719.5	6,250.6	6,286.3	0.00	0.00	0.00
14,000.0	90.00	90.13	6,864.0	-1,968.00	719.3	6,350.6	6,386.0	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 9
<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 9	<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	719.1	6,450.6	6,485.8	0.00	0.00	0.00
14,200.0	90.00	90.13	6,864.0	-1,968.00	718.8	6,550.6	6,585.5	0.00	0.00	0.00
14,300.0	90.00	90.13	6,864.0	-1,968.00	718.6	6,650.6	6,685.2	0.00	0.00	0.00
14,400.0	90.00	90.13	6,864.0	-1,968.00	718.4	6,750.6	6,784.9	0.00	0.00	0.00
14,500.0	90.00	90.13	6,864.0	-1,968.00	718.1	6,850.6	6,884.6	0.00	0.00	0.00
14,600.0	90.00	90.13	6,864.0	-1,968.00	717.9	6,950.6	6,984.3	0.00	0.00	0.00
14,700.0	90.00	90.13	6,864.0	-1,968.00	717.7	7,050.6	7,084.1	0.00	0.00	0.00
14,800.0	90.00	90.13	6,864.0	-1,968.00	717.4	7,150.6	7,183.8	0.00	0.00	0.00
14,900.0	90.00	90.13	6,864.0	-1,968.00	717.2	7,250.6	7,283.5	0.00	0.00	0.00
15,000.0	90.00	90.13	6,864.0	-1,968.00	716.9	7,350.6	7,383.2	0.00	0.00	0.00
15,100.0	90.00	90.13	6,864.0	-1,968.00	716.7	7,450.6	7,482.9	0.00	0.00	0.00
15,200.0	90.00	90.13	6,864.0	-1,968.00	716.5	7,550.6	7,582.7	0.00	0.00	0.00
15,300.0	90.00	90.13	6,864.0	-1,968.00	716.2	7,650.6	7,682.4	0.00	0.00	0.00
15,400.0	90.00	90.13	6,864.0	-1,968.00	716.0	7,750.6	7,782.1	0.00	0.00	0.00
15,500.0	90.00	90.13	6,864.0	-1,968.00	715.8	7,850.6	7,881.8	0.00	0.00	0.00
15,600.0	90.00	90.13	6,864.0	-1,968.00	715.5	7,950.6	7,981.5	0.00	0.00	0.00
15,700.0	90.00	90.13	6,864.0	-1,968.00	715.3	8,050.6	8,081.2	0.00	0.00	0.00
15,800.0	90.00	90.13	6,864.0	-1,968.00	715.1	8,150.6	8,181.0	0.00	0.00	0.00
15,900.0	90.00	90.13	6,864.0	-1,968.00	714.8	8,250.6	8,280.7	0.00	0.00	0.00
16,000.0	90.00	90.13	6,864.0	-1,968.00	714.6	8,350.6	8,380.4	0.00	0.00	0.00
16,100.0	90.00	90.13	6,864.0	-1,968.00	714.4	8,450.6	8,480.1	0.00	0.00	0.00
16,200.0	90.00	90.13	6,864.0	-1,968.00	714.1	8,550.6	8,579.8	0.00	0.00	0.00
16,300.0	90.00	90.13	6,864.0	-1,968.00	713.9	8,650.6	8,679.6	0.00	0.00	0.00
16,400.0	90.00	90.13	6,864.0	-1,968.00	713.7	8,750.6	8,779.3	0.00	0.00	0.00
16,500.0	90.00	90.13	6,864.0	-1,968.00	713.4	8,850.6	8,879.0	0.00	0.00	0.00
16,600.0	90.00	90.13	6,864.0	-1,968.00	713.2	8,950.6	8,978.7	0.00	0.00	0.00
16,700.0	90.00	90.14	6,864.0	-1,968.00	712.9	9,050.6	9,078.4	0.00	0.00	0.00
16,800.0	90.00	90.14	6,864.0	-1,968.00	712.7	9,150.6	9,178.2	0.00	0.00	0.00
16,900.0	90.00	90.14	6,864.0	-1,968.00	712.5	9,250.6	9,277.9	0.00	0.00	0.00
17,000.0	90.00	90.14	6,864.0	-1,968.00	712.2	9,350.6	9,377.6	0.00	0.00	0.00
17,100.0	90.00	90.14	6,864.0	-1,968.00	712.0	9,450.6	9,477.3	0.00	0.00	0.00
17,200.0	90.00	90.14	6,864.0	-1,968.00	711.8	9,550.6	9,577.0	0.00	0.00	0.00
17,300.0	90.00	90.14	6,864.0	-1,968.00	711.5	9,650.5	9,676.7	0.00	0.00	0.00
17,400.0	90.00	90.14	6,864.0	-1,968.00	711.3	9,750.5	9,776.5	0.00	0.00	0.00
<b>BHL: 1771ft FNL &amp; 2622ft FEL of Sec 3</b>										
<b>17,412.0</b>	<b>90.00</b>	<b>90.14</b>	<b>6,864.0</b>	<b>-1,968.00</b>	<b>711.3</b>	<b>9,762.5</b>	<b>9,788.4</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Formations						
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,383.4	3,354.0	PARKMAN				
4,008.0	3,954.0	SUSSEX				
4,434.8	4,364.0	SHANNON				
6,912.2	6,709.0	SHARON SPRINGS				
6,966.5	6,744.0	NIOBRARA				
7,346.9	6,864.0	NIO B TARGET				

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well MICKEY 9
<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 9	<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 & 1888ft FEL of Sec 5
1,600.0	1,600.0	0.0	0.0	9 5/8" SURFACE CASING
2,100.0	2,100.0	0.0	0.0	START NUDGE (2°/100ft BUR)
2,907.0	2,896.4	65.9	-91.7	EOB TO 16.14° INC
6,316.3	6,171.3	619.4	-860.9	KOP (10°/100ft DGLG)
7,346.9	6,864.0	734.8	-302.5	HZ LP: 1684ft FNL & 2178ft FEL of Sec 5
17,412.0	6,864.0	711.3	9,762.5	BHL: 1771ft FNL & 2622ft FEL of Sec 3