

# **EXTRACTION OIL & GAS**

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

**NW NE SEC. 5 T5N R65W 6th P.M.**

**DT-FORBES C8-5-6**

**ORIGINAL WELLBORE**

**17 November, 2014**

**Plan: PROPOSAL #2**

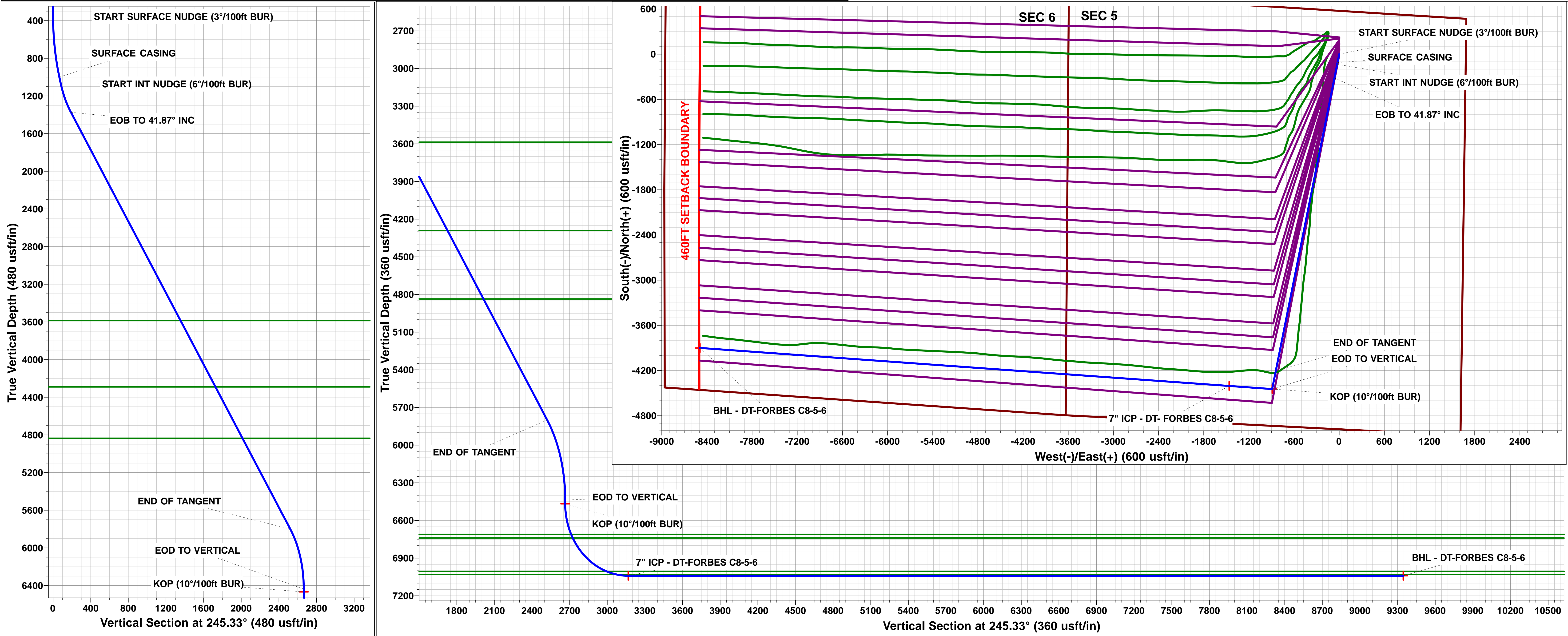
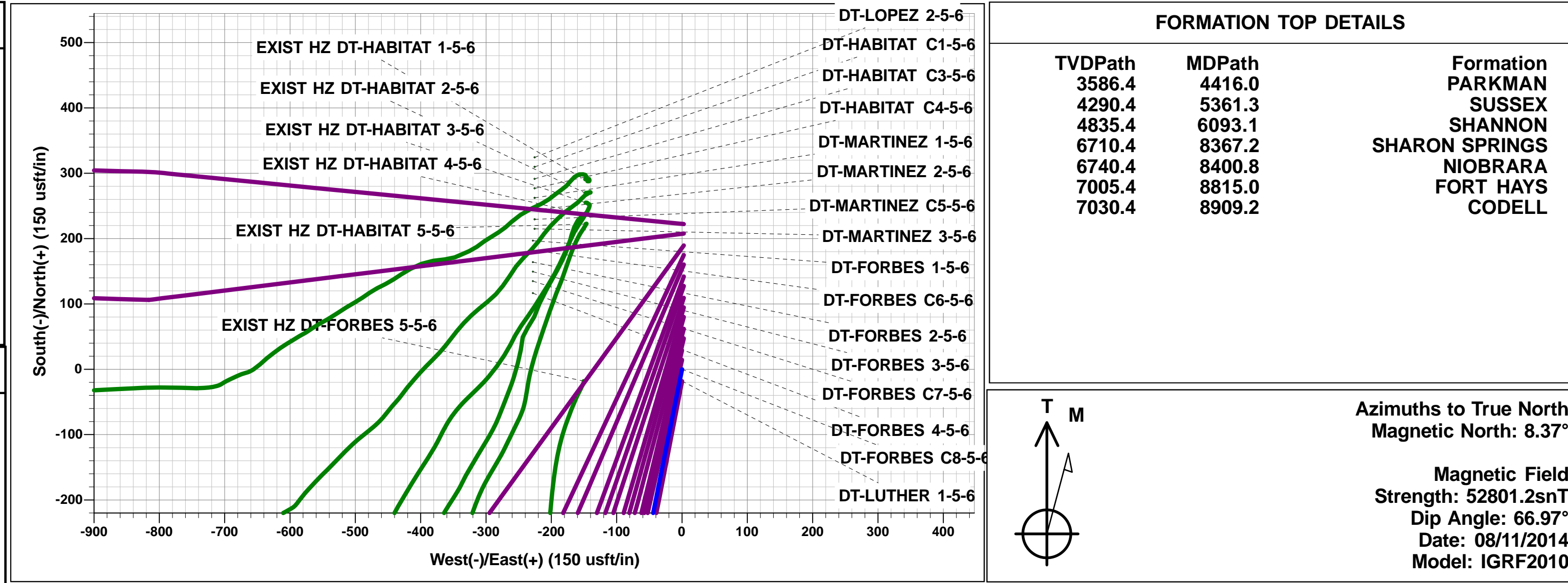




Project: WELD COUNTY, COLORADO (NAD 83)  
Site: NW NE SEC. 5 T5N R65W 6th P.M.  
Well: DT-FORBES C8-5-6  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #2

ANNOTATIONS										
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation		
350.0	350.0	0.00	0.00	0.0	0.0	0.0	0.0	START SURFACE NUDGE (3°/100ft BUR)		
1000.0	1013.3	19.90	191.32	-111.8	-22.4	67.0	114.0	SURFACE CASING		
1061.1	1078.3	19.90	191.32	-133.5	-26.7	80.0	136.1	START INT NUDGE (6°/100ft BUR)		
1373.4	1444.4	41.87	191.32	-316.6	-63.4	189.8	322.9	EOB TO 41.87° INC		
5800.1	7388.5	41.87	191.32	-4206.4	-842.3	2521.2	4290.0	END OF TANGENT		
6437.4	8086.3	0.00	0.00	-4445.5	-890.2	2664.4	4533.7	EOD TO VERTICAL		
6467.4	8116.3	0.00	0.00	-4445.5	-890.2	2664.4	4533.7	KOP (10°/100ft BUR)		
7040.4	9016.4	90.00	274.10	-4404.5	-1461.7	3166.7	5106.7	7" ICP - DT- FORBES C8-5-6		
7040.4	16064.5	90.00	274.10	-3900.3	-8491.9	9344.7	12154.9	BHL - DT-FORBES C8-5-6		

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
KOP - DT-FORBES C8-5-6	6467.4	-4445.5	-890.2	40.422718	-104.686937
7" ICP - DT-FORBES C8-5-6	7040.4	-4404.5	-1461.7	40.422830	-104.688990
BHL - DT-FORBES C8-5-6	7040.4	-3900.3	-8491.9	40.424210	-104.714240



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well DT-FORBES C8-5-6
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4656.4usft (SAV 802)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4656.4usft (SAV 802)
<b>Site:</b>	NW NE SEC. 5 T5N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	DT-FORBES C8-5-6	<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>	NW NE SEC. 5 T5N R65W 6th P.M.		
<b>Site Position:</b>		<b>Northing:</b>	1,402,409.16usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,226,987.53usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	1.10000ft
		<b>Latitude:</b>	40.435150
		<b>Longitude:</b>	-104.684560
		<b>Grid Convergence:</b>	0.53 °

<b>Well</b>	DT-FORBES C8-5-6		
<b>Well Position</b>	<b>+N-S</b>	-83.8 usft	<b>Northing:</b>
	<b>+E-W</b>	228.3 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>
	IGRF2010	08/11/2014	8.37	66.97	52,801

<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	245.33

<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	-4,656.4	0.0	0.0	0.00	0.00	0.00	0.00	
350.0	0.00	0.00	350.0	-4,306.4	0.0	0.0	0.00	0.00	0.00	0.00	
1,013.3	19.90	191.32	1,000.0	-3,656.4	-111.8	-22.4	3.00	3.00	0.00	191.32	
1,078.3	19.90	191.32	1,061.1	-3,595.3	-133.5	-26.7	0.00	0.00	0.00	0.00	
1,444.4	41.87	191.32	1,373.4	-3,283.0	-316.6	-63.4	6.00	6.00	0.00	0.00	
7,388.5	41.87	191.32	5,800.1	1,143.7	-4,206.4	-842.3	0.00	0.00	0.00	0.00	
8,086.3	0.00	0.00	6,437.4	1,781.0	-4,445.5	-890.2	6.00	-6.00	0.00	180.00	
8,116.3	0.00	0.00	6,467.4	1,811.0	-4,445.5	-890.2	0.00	0.00	0.00	0.00	KOP - DT-FORBES
9,016.4	90.00	274.10	7,040.4	2,384.0	-4,404.5	-1,461.7	10.00	10.00	-9.54	274.10	7" ICP - DT-FORBE
16,064.5	90.00	274.10	7,040.4	2,384.0	-3,900.3	-8,491.9	0.00	0.00	0.00	0.00	BHL - DT-FORBES

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well DT-FORBES C8-5-6
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4656.4usft (SAV 802)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4656.4usft (SAV 802)
<b>Site:</b>	NW NE SEC. 5 T5N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	DT-FORBES C8-5-6	<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)
0.0	0.00	0.00	0.0	4,656.40	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,556.40	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,456.40	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,356.40	0.0	0.0	0.0	0.00	0.00	0.00
<b>START SURFACE NUDGE (3°/100ft BUR)</b>										
350.0	0.00	0.00	350.0	4,306.40	0.0	0.0	0.0	0.00	0.00	0.00
400.0	1.50	191.32	400.0	4,256.41	-0.6	-0.1	0.4	3.00	3.00	0.00
500.0	4.50	191.32	499.8	4,156.55	-5.8	-1.2	3.5	3.00	3.00	0.00
600.0	7.50	191.32	599.3	4,057.11	-16.0	-3.2	9.6	3.00	3.00	0.00
700.0	10.50	191.32	698.0	3,958.36	-31.4	-6.3	18.8	3.00	3.00	0.00
800.0	13.50	191.32	795.8	3,860.55	-51.7	-10.4	31.0	3.00	3.00	0.00
900.0	16.50	191.32	892.4	3,763.97	-77.1	-15.4	46.2	3.00	3.00	0.00
1,000.0	19.50	191.32	987.5	3,668.88	-107.4	-21.5	64.4	3.00	3.00	0.00
<b>SURFACE CASING</b>										
1,013.3	19.90	191.32	1,000.0	3,656.40	-111.8	-22.4	67.0	3.00	3.00	0.00
<b>START INT NUDGE (6°/100ft BUR)</b>										
1,078.3	19.90	191.32	1,061.1	3,595.28	-133.5	-26.7	80.0	0.00	0.00	0.01
1,100.0	21.20	191.32	1,081.5	3,574.92	-141.0	-28.2	84.5	6.00	6.00	0.00
1,200.0	27.20	191.32	1,172.7	3,483.75	-181.2	-36.3	108.6	6.00	6.00	0.00
1,300.0	33.20	191.32	1,259.0	3,397.36	-230.5	-46.1	138.1	6.00	6.00	0.00
1,400.0	39.20	191.32	1,339.7	3,316.71	-288.3	-57.7	172.8	6.00	6.00	0.00
<b>EOB TO 41.87° INC</b>										
1,444.4	41.87	191.32	1,373.4	3,282.97	-316.6	-63.4	189.8	6.00	6.00	0.00
1,500.0	41.87	191.32	1,414.8	3,241.56	-353.0	-70.7	211.6	0.00	0.00	0.00
1,600.0	41.87	191.32	1,489.3	3,167.09	-418.5	-83.8	250.8	0.00	0.00	0.00
1,700.0	41.87	191.32	1,563.8	3,092.62	-483.9	-96.9	290.0	0.00	0.00	0.00
1,800.0	41.87	191.32	1,638.3	3,018.14	-549.3	-110.0	329.2	0.00	0.00	0.00
1,900.0	41.87	191.32	1,712.7	2,943.67	-614.8	-123.1	368.5	0.00	0.00	0.00
2,000.0	41.87	191.32	1,787.2	2,869.20	-680.2	-136.2	407.7	0.00	0.00	0.00
2,100.0	41.87	191.32	1,861.7	2,794.73	-745.7	-149.3	446.9	0.00	0.00	0.00
2,200.0	41.87	191.32	1,936.1	2,720.26	-811.1	-162.4	486.1	0.00	0.00	0.00
2,300.0	41.87	191.32	2,010.6	2,645.79	-876.5	-175.5	525.4	0.00	0.00	0.00
2,400.0	41.87	191.32	2,085.1	2,571.32	-942.0	-188.6	564.6	0.00	0.00	0.00
2,500.0	41.87	191.32	2,159.6	2,496.85	-1,007.4	-201.7	603.8	0.00	0.00	0.00
2,600.0	41.87	191.32	2,234.0	2,422.38	-1,072.9	-214.8	643.0	0.00	0.00	0.00
2,700.0	41.87	191.32	2,308.5	2,347.90	-1,138.3	-227.9	682.2	0.00	0.00	0.00
2,800.0	41.87	191.32	2,383.0	2,273.43	-1,203.7	-241.0	721.5	0.00	0.00	0.00
2,900.0	41.87	191.32	2,457.4	2,198.96	-1,269.2	-254.1	760.7	0.00	0.00	0.00
3,000.0	41.87	191.32	2,531.9	2,124.49	-1,334.6	-267.3	799.9	0.00	0.00	0.00
3,100.0	41.87	191.32	2,606.4	2,050.02	-1,400.1	-280.4	839.1	0.00	0.00	0.00
3,200.0	41.87	191.32	2,680.9	1,975.55	-1,465.5	-293.5	878.3	0.00	0.00	0.00
3,300.0	41.87	191.32	2,755.3	1,901.08	-1,530.9	-306.6	917.6	0.00	0.00	0.00
3,400.0	41.87	191.32	2,829.8	1,826.61	-1,596.4	-319.7	956.8	0.00	0.00	0.00
3,500.0	41.87	191.32	2,904.3	1,752.14	-1,661.8	-332.8	996.0	0.00	0.00	0.00
3,600.0	41.87	191.32	2,978.7	1,677.67	-1,727.3	-345.9	1,035.2	0.00	0.00	0.00
3,700.0	41.87	191.32	3,053.2	1,603.19	-1,792.7	-359.0	1,074.5	0.00	0.00	0.00
3,800.0	41.87	191.32	3,127.7	1,528.72	-1,858.1	-372.1	1,113.7	0.00	0.00	0.00
3,900.0	41.87	191.32	3,202.1	1,454.25	-1,923.6	-385.2	1,152.9	0.00	0.00	0.00
4,000.0	41.87	191.32	3,276.6	1,379.78	-1,989.0	-398.3	1,192.1	0.00	0.00	0.00
4,100.0	41.87	191.32	3,351.1	1,305.31	-2,054.4	-411.4	1,231.3	0.00	0.00	0.00
4,200.0	41.87	191.32	3,425.6	1,230.84	-2,119.9	-424.5	1,270.6	0.00	0.00	0.00
4,300.0	41.87	191.32	3,500.0	1,156.37	-2,185.3	-437.6	1,309.8	0.00	0.00	0.00
4,400.0	41.87	191.32	3,574.5	1,081.90	-2,250.8	-450.7	1,349.0	0.00	0.00	0.00
<b>PARKMAN</b>										



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well DT-FORBES C8-5-6
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4656.4usft (SAV 802)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4656.4usft (SAV 802)
<b>Site:</b>	NW NE SEC. 5 T5N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	DT-FORBES C8-5-6	<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>4,416.0</b>	<b>41.87</b>	<b>191.32</b>	<b>3,586.4</b>	<b>1,070.00</b>	<b>-2,261.2</b>	<b>-452.8</b>	<b>1,355.3</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
4,500.0	41.87	191.32	3,649.0	1,007.43	-2,316.2	-463.8	1,388.2	0.00	0.00	0.00
4,600.0	41.87	191.32	3,723.4	932.95	-2,381.6	-476.9	1,427.5	0.00	0.00	0.00
4,700.0	41.87	191.32	3,797.9	858.48	-2,447.1	-490.0	1,466.7	0.00	0.00	0.00
4,800.0	41.87	191.32	3,872.4	784.01	-2,512.5	-503.1	1,505.9	0.00	0.00	0.00
4,900.0	41.87	191.32	3,946.9	709.54	-2,578.0	-516.2	1,545.1	0.00	0.00	0.00
5,000.0	41.87	191.32	4,021.3	635.07	-2,643.4	-529.3	1,584.3	0.00	0.00	0.00
5,100.0	41.87	191.32	4,095.8	560.60	-2,708.8	-542.4	1,623.6	0.00	0.00	0.00
5,200.0	41.87	191.32	4,170.3	486.13	-2,774.3	-555.5	1,662.8	0.00	0.00	0.00
5,300.0	41.87	191.32	4,244.7	411.66	-2,839.7	-568.7	1,702.0	0.00	0.00	0.00
<b>SUSSEX</b>										
<b>5,361.3</b>	<b>41.87</b>	<b>191.32</b>	<b>4,290.4</b>	<b>366.00</b>	<b>-2,879.8</b>	<b>-576.7</b>	<b>1,726.0</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
5,400.0	41.87	191.32	4,319.2	337.19	-2,905.2	-581.8	1,741.2	0.00	0.00	0.00
5,500.0	41.87	191.32	4,393.7	262.72	-2,970.6	-594.9	1,780.4	0.00	0.00	0.00
5,600.0	41.87	191.32	4,468.2	188.24	-3,036.0	-608.0	1,819.7	0.00	0.00	0.00
5,700.0	41.87	191.32	4,542.6	113.77	-3,101.5	-621.1	1,858.9	0.00	0.00	0.00
5,800.0	41.87	191.32	4,617.1	39.30	-3,166.9	-634.2	1,898.1	0.00	0.00	0.00
5,900.0	41.87	191.32	4,691.6	-35.17	-3,232.4	-647.3	1,937.3	0.00	0.00	0.00
6,000.0	41.87	191.32	4,766.0	-109.64	-3,297.8	-660.4	1,976.6	0.00	0.00	0.00
<b>SHANNON</b>										
<b>6,093.1</b>	<b>41.87</b>	<b>191.32</b>	<b>4,835.4</b>	<b>-179.00</b>	<b>-3,358.7</b>	<b>-672.6</b>	<b>2,013.1</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
6,100.0	41.87	191.32	4,840.5	-184.11	-3,363.2	-673.5	2,015.8	0.00	0.00	0.00
6,200.0	41.87	191.32	4,915.0	-258.58	-3,428.7	-686.6	2,055.0	0.00	0.00	0.00
6,300.0	41.87	191.32	4,989.5	-333.05	-3,494.1	-699.7	2,094.2	0.00	0.00	0.00
6,400.0	41.87	191.32	5,063.9	-407.52	-3,559.6	-712.8	2,133.4	0.00	0.00	0.00
6,500.0	41.87	191.32	5,138.4	-482.00	-3,625.0	-725.9	2,172.7	0.00	0.00	0.00
6,600.0	41.87	191.32	5,212.9	-556.47	-3,690.4	-739.0	2,211.9	0.00	0.00	0.00
6,700.0	41.87	191.32	5,287.3	-630.94	-3,755.9	-752.1	2,251.1	0.00	0.00	0.00
6,800.0	41.87	191.32	5,361.8	-705.41	-3,821.3	-765.2	2,290.3	0.00	0.00	0.00
6,900.0	41.87	191.32	5,436.3	-779.88	-3,886.8	-778.3	2,329.5	0.00	0.00	0.00
7,000.0	41.87	191.32	5,510.8	-854.35	-3,952.2	-791.4	2,368.8	0.00	0.00	0.00
7,100.0	41.87	191.32	5,585.2	-928.82	-4,017.6	-804.5	2,408.0	0.00	0.00	0.00
7,200.0	41.87	191.32	5,659.7	-1,003.29	-4,083.1	-817.6	2,447.2	0.00	0.00	0.00
7,300.0	41.87	191.32	5,734.2	-1,077.76	-4,148.5	-830.7	2,486.4	0.00	0.00	0.00
<b>END OF TANGENT</b>										
<b>7,388.5</b>	<b>41.87</b>	<b>191.32</b>	<b>5,800.1</b>	<b>-1,143.69</b>	<b>-4,206.4</b>	<b>-842.3</b>	<b>2,521.2</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
7,400.0	41.18	191.32	5,808.7	-1,152.28	-4,213.9	-843.8	2,525.6	6.00	-6.00	0.00
7,500.0	35.18	191.32	5,887.3	-1,230.85	-4,274.5	-856.0	2,561.9	6.00	-6.00	0.00
7,600.0	29.18	191.32	5,971.9	-1,315.46	-4,326.7	-866.4	2,593.2	6.00	-6.00	0.00
7,700.0	23.18	191.32	6,061.6	-1,405.16	-4,369.9	-875.1	2,619.1	6.00	-6.00	0.00
7,800.0	17.18	191.32	6,155.4	-1,498.98	-4,403.7	-881.8	2,639.4	6.00	-6.00	0.00
7,900.0	11.18	191.32	6,252.3	-1,595.89	-4,427.7	-886.7	2,653.8	6.00	-6.00	0.00
8,000.0	5.18	191.32	6,351.2	-1,694.83	-4,441.7	-889.4	2,662.1	6.00	-6.00	0.00
<b>EOD TO VERTICAL</b>										
<b>8,086.3</b>	<b>0.00</b>	<b>0.00</b>	<b>6,437.4</b>	<b>-1,781.00</b>	<b>-4,445.5</b>	<b>-890.2</b>	<b>2,664.4</b>	<b>6.00</b>	<b>-6.00</b>	<b>0.00</b>
8,100.0	0.00	0.00	6,451.1	-1,794.71	-4,445.5	-890.2	2,664.4	0.00	0.00	0.00
<b>KOP (10°/100ft BUR)</b>										
<b>8,116.3</b>	<b>0.00</b>	<b>0.00</b>	<b>6,467.4</b>	<b>-1,811.00</b>	<b>-4,445.5</b>	<b>-890.2</b>	<b>2,664.4</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
8,200.0	8.37	274.10	6,550.8	-1,894.41	-4,445.0	-896.3	2,669.8	10.00	10.00	0.00
8,300.0	18.37	274.10	6,648.0	-1,991.58	-4,443.4	-919.3	2,690.0	10.00	10.00	0.00
<b>SHARON SPRINGS</b>										
<b>8,367.2</b>	<b>25.09</b>	<b>274.10</b>	<b>6,710.4</b>	<b>-2,054.00</b>	<b>-4,441.6</b>	<b>-944.2</b>	<b>2,711.8</b>	<b>10.00</b>	<b>10.00</b>	<b>0.00</b>
8,400.0	28.37	274.10	6,739.7	-2,083.26	-4,440.6	-958.8	2,724.7	10.00	10.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well DT-FORBES C8-5-6
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4656.4usft (SAV 802)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4656.4usft (SAV 802)
<b>Site:</b>	NW NE SEC. 5 T5N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	DT-FORBES C8-5-6	<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>NIOBRARA</b>										
8,400.8	28.45	274.10	6,740.4	-2,084.00	-4,440.5	-959.2	2,725.1	10.00	10.00	0.00
8,500.0	38.37	274.10	6,823.1	-2,166.67	-4,436.6	-1,013.6	2,772.9	10.00	10.00	0.00
8,600.0	48.37	274.10	6,895.7	-2,239.27	-4,431.7	-1,082.0	2,833.0	10.00	10.00	0.00
8,700.0	58.37	274.10	6,955.3	-2,298.86	-4,426.0	-1,162.0	2,903.3	10.00	10.00	0.00
8,800.0	68.37	274.10	7,000.0	-2,343.64	-4,419.6	-1,251.0	2,981.5	10.00	10.00	0.00
<b>FORT HAYS</b>										
8,815.0	69.87	274.10	7,005.4	-2,349.00	-4,418.6	-1,265.1	2,993.8	10.00	10.00	0.00
8,900.0	78.37	274.10	7,028.6	-2,372.23	-4,412.8	-1,346.5	3,065.4	10.00	10.00	0.00
<b>CODELL</b>										
8,909.2	79.28	274.10	7,030.4	-2,374.00	-4,412.1	-1,355.4	3,073.3	10.00	10.00	0.00
9,000.0	88.36	274.10	7,040.2	-2,383.77	-4,405.7	-1,445.4	3,152.4	10.00	10.00	0.00
<b>7" ICP - DT-FORBES C8-5-6</b>										
9,016.4	90.00	274.10	7,040.4	-2,384.00	-4,404.5	-1,461.7	3,166.7	10.00	10.00	0.00
9,100.0	90.00	274.10	7,040.4	-2,384.00	-4,398.5	-1,545.2	3,240.0	0.00	0.00	0.00
9,200.0	90.00	274.10	7,040.4	-2,384.00	-4,391.4	-1,644.9	3,327.7	0.00	0.00	0.00
9,300.0	90.00	274.10	7,040.4	-2,384.00	-4,384.2	-1,744.7	3,415.3	0.00	0.00	0.00
9,400.0	90.00	274.10	7,040.4	-2,384.00	-4,377.0	-1,844.4	3,503.0	0.00	0.00	0.00
9,500.0	90.00	274.10	7,040.4	-2,384.00	-4,369.9	-1,944.1	3,590.6	0.00	0.00	0.00
9,600.0	90.00	274.10	7,040.4	-2,384.00	-4,362.7	-2,043.9	3,678.3	0.00	0.00	0.00
9,700.0	90.00	274.10	7,040.4	-2,384.00	-4,355.6	-2,143.6	3,765.9	0.00	0.00	0.00
9,800.0	90.00	274.10	7,040.4	-2,384.00	-4,348.4	-2,243.4	3,853.6	0.00	0.00	0.00
9,900.0	90.00	274.10	7,040.4	-2,384.00	-4,341.3	-2,343.1	3,941.2	0.00	0.00	0.00
10,000.0	90.00	274.10	7,040.4	-2,384.00	-4,334.1	-2,442.9	4,028.9	0.00	0.00	0.00
10,100.0	90.00	274.10	7,040.4	-2,384.00	-4,327.0	-2,542.6	4,116.5	0.00	0.00	0.00
10,200.0	90.00	274.10	7,040.4	-2,384.00	-4,319.8	-2,642.4	4,204.2	0.00	0.00	0.00
10,300.0	90.00	274.10	7,040.4	-2,384.00	-4,312.7	-2,742.1	4,291.9	0.00	0.00	0.00
10,400.0	90.00	274.10	7,040.4	-2,384.00	-4,305.5	-2,841.8	4,379.5	0.00	0.00	0.00
10,500.0	90.00	274.10	7,040.4	-2,384.00	-4,298.4	-2,941.6	4,467.2	0.00	0.00	0.00
10,600.0	90.00	274.10	7,040.4	-2,384.00	-4,291.2	-3,041.3	4,554.8	0.00	0.00	0.00
10,700.0	90.00	274.10	7,040.4	-2,384.00	-4,284.0	-3,141.1	4,642.5	0.00	0.00	0.00
10,800.0	90.00	274.10	7,040.4	-2,384.00	-4,276.9	-3,240.8	4,730.1	0.00	0.00	0.00
10,900.0	90.00	274.10	7,040.4	-2,384.00	-4,269.7	-3,340.6	4,817.8	0.00	0.00	0.00
11,000.0	90.00	274.10	7,040.4	-2,384.00	-4,262.6	-3,440.3	4,905.4	0.00	0.00	0.00
11,100.0	90.00	274.10	7,040.4	-2,384.00	-4,255.4	-3,540.0	4,993.1	0.00	0.00	0.00
11,200.0	90.00	274.10	7,040.4	-2,384.00	-4,248.3	-3,639.8	5,080.7	0.00	0.00	0.00
11,300.0	90.00	274.10	7,040.4	-2,384.00	-4,241.1	-3,739.5	5,168.4	0.00	0.00	0.00
11,400.0	90.00	274.10	7,040.4	-2,384.00	-4,234.0	-3,839.3	5,256.1	0.00	0.00	0.00
11,500.0	90.00	274.10	7,040.4	-2,384.00	-4,226.8	-3,939.0	5,343.7	0.00	0.00	0.00
11,600.0	90.00	274.10	7,040.4	-2,384.00	-4,219.7	-4,038.8	5,431.4	0.00	0.00	0.00
11,700.0	90.00	274.10	7,040.4	-2,384.00	-4,212.5	-4,138.5	5,519.0	0.00	0.00	0.00
11,800.0	90.00	274.10	7,040.4	-2,384.00	-4,205.4	-4,238.3	5,606.7	0.00	0.00	0.00
11,900.0	90.00	274.10	7,040.4	-2,384.00	-4,198.2	-4,338.0	5,694.3	0.00	0.00	0.00
12,000.0	90.00	274.10	7,040.4	-2,384.00	-4,191.0	-4,437.7	5,782.0	0.00	0.00	0.00
12,100.0	90.00	274.10	7,040.4	-2,384.00	-4,183.9	-4,537.5	5,869.6	0.00	0.00	0.00
12,200.0	90.00	274.10	7,040.4	-2,384.00	-4,176.7	-4,637.2	5,957.3	0.00	0.00	0.00
12,300.0	90.00	274.10	7,040.4	-2,384.00	-4,169.6	-4,737.0	6,044.9	0.00	0.00	0.00
12,400.0	90.00	274.10	7,040.4	-2,384.00	-4,162.4	-4,836.7	6,132.6	0.00	0.00	0.00
12,500.0	90.00	274.10	7,040.4	-2,384.00	-4,155.3	-4,936.5	6,220.3	0.00	0.00	0.00
12,600.0	90.00	274.10	7,040.4	-2,384.00	-4,148.1	-5,036.2	6,307.9	0.00	0.00	0.00
12,700.0	90.00	274.10	7,040.4	-2,384.00	-4,141.0	-5,135.9	6,395.6	0.00	0.00	0.00
12,800.0	90.00	274.10	7,040.4	-2,384.00	-4,133.8	-5,235.7	6,483.2	0.00	0.00	0.00
12,900.0	90.00	274.10	7,040.4	-2,384.00	-4,126.7	-5,335.4	6,570.9	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well DT-FORBES C8-5-6
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4656.4usft (SAV 802)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4656.4usft (SAV 802)
<b>Site:</b>	NW NE SEC. 5 T5N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	DT-FORBES C8-5-6	<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)
13,000.0	90.00	274.10	7,040.4	-2,384.00	-4,119.5	-5,435.2	6,658.5	0.00	0.00	0.00
13,100.0	90.00	274.10	7,040.4	-2,384.00	-4,112.4	-5,534.9	6,746.2	0.00	0.00	0.00
13,200.0	90.00	274.10	7,040.4	-2,384.00	-4,105.2	-5,634.7	6,833.8	0.00	0.00	0.00
13,300.0	90.00	274.10	7,040.4	-2,384.00	-4,098.0	-5,734.4	6,921.5	0.00	0.00	0.00
13,400.0	90.00	274.10	7,040.4	-2,384.00	-4,090.9	-5,834.2	7,009.1	0.00	0.00	0.00
13,500.0	90.00	274.10	7,040.4	-2,384.00	-4,083.7	-5,933.9	7,096.8	0.00	0.00	0.00
13,600.0	90.00	274.10	7,040.4	-2,384.00	-4,076.6	-6,033.6	7,184.5	0.00	0.00	0.00
13,700.0	90.00	274.10	7,040.4	-2,384.00	-4,069.4	-6,133.4	7,272.1	0.00	0.00	0.00
13,800.0	90.00	274.10	7,040.4	-2,384.00	-4,062.3	-6,233.1	7,359.8	0.00	0.00	0.00
13,900.0	90.00	274.10	7,040.4	-2,384.00	-4,055.1	-6,332.9	7,447.4	0.00	0.00	0.00
14,000.0	90.00	274.10	7,040.4	-2,384.00	-4,048.0	-6,432.6	7,535.1	0.00	0.00	0.00
14,100.0	90.00	274.10	7,040.4	-2,384.00	-4,040.8	-6,532.4	7,622.7	0.00	0.00	0.00
14,200.0	90.00	274.10	7,040.4	-2,384.00	-4,033.7	-6,632.1	7,710.4	0.00	0.00	0.00
14,300.0	90.00	274.10	7,040.4	-2,384.00	-4,026.5	-6,731.8	7,798.0	0.00	0.00	0.00
14,400.0	90.00	274.10	7,040.4	-2,384.00	-4,019.4	-6,831.6	7,885.7	0.00	0.00	0.00
14,500.0	90.00	274.10	7,040.4	-2,384.00	-4,012.2	-6,931.3	7,973.3	0.00	0.00	0.00
14,600.0	90.00	274.10	7,040.4	-2,384.00	-4,005.1	-7,031.1	8,061.0	0.00	0.00	0.00
14,700.0	90.00	274.10	7,040.4	-2,384.00	-3,997.9	-7,130.8	8,148.7	0.00	0.00	0.00
14,800.0	90.00	274.10	7,040.4	-2,384.00	-3,990.7	-7,230.6	8,236.3	0.00	0.00	0.00
14,900.0	90.00	274.10	7,040.4	-2,384.00	-3,983.6	-7,330.3	8,324.0	0.00	0.00	0.00
15,000.0	90.00	274.10	7,040.4	-2,384.00	-3,976.4	-7,430.1	8,411.6	0.00	0.00	0.00
15,100.0	90.00	274.10	7,040.4	-2,384.00	-3,969.3	-7,529.8	8,499.3	0.00	0.00	0.00
15,200.0	90.00	274.10	7,040.4	-2,384.00	-3,962.1	-7,629.5	8,586.9	0.00	0.00	0.00
15,300.0	90.00	274.10	7,040.4	-2,384.00	-3,955.0	-7,729.3	8,674.6	0.00	0.00	0.00
15,400.0	90.00	274.10	7,040.4	-2,384.00	-3,947.8	-7,829.0	8,762.2	0.00	0.00	0.00
15,500.0	90.00	274.10	7,040.4	-2,384.00	-3,940.7	-7,928.8	8,849.9	0.00	0.00	0.00
15,600.0	90.00	274.10	7,040.4	-2,384.00	-3,933.5	-8,028.5	8,937.5	0.00	0.00	0.00
15,700.0	90.00	274.10	7,040.4	-2,384.00	-3,926.4	-8,128.3	9,025.2	0.00	0.00	0.00
15,800.0	90.00	274.10	7,040.4	-2,384.00	-3,919.2	-8,228.0	9,112.8	0.00	0.00	0.00
15,900.0	90.00	274.10	7,040.4	-2,384.00	-3,912.1	-8,327.7	9,200.5	0.00	0.00	0.00
16,000.0	90.00	274.10	7,040.4	-2,384.00	-3,904.9	-8,427.5	9,288.2	0.00	0.00	0.00
<b>BHL - DT-FORBES C8-5-6</b>										
<b>16,064.5</b>	<b>90.00</b>	<b>274.10</b>	<b>7,040.4</b>	<b>-2,384.00</b>	<b>-3,900.3</b>	<b>-8,491.9</b>	<b>9,344.7</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Formations						
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,416.0	3,586.4	PARKMAN				
5,361.3	4,290.4	SUSSEX				
6,093.1	4,835.4	SHANNON				
8,367.2	6,710.4	SHARON SPRINGS				
8,400.8	6,740.4	NIOBRARA				
8,815.0	7,005.4	FORT HAYS				
8,909.2	7,030.4	CODELL				

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well DT-FORBES C8-5-6
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4656.4usft (SAV 802)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4656.4usft (SAV 802)
<b>Site:</b>	NW NE SEC. 5 T5N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	DT-FORBES C8-5-6	<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)	
350.0	350.0	0.0	0.0	START SURFACE NUDGE (3°/100ft BUR)
1,013.3	1,000.0	-111.8	-22.4	SURFACE CASING
1,078.3	1,061.1	-133.5	-26.7	START INT NUDGE (6°/100ft BUR)
1,444.4	1,373.4	-316.6	-63.4	EOB TO 41.87° INC
7,388.5	5,800.1	-4,206.4	-842.3	END OF TANGENT
8,086.3	6,437.4	-4,445.5	-890.2	EOD TO VERTICAL
8,116.3	6,467.4	-4,445.5	-890.2	KOP (10°/100ft BUR)
9,016.4	7,040.4	-4,404.5	-1,461.7	7" ICP - DT- FORBES C8-5-6
16,064.5	7,040.4	-3,900.3	-8,491.9	BHL - DT-FORBES C8-5-6