

# **EXTRACTION OIL & GAS**

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

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

**DT-FORBES C7-5-6**

**ORIGINAL WELLBORE**

**04 August, 2015**

**Plan: PROPOSAL #3**

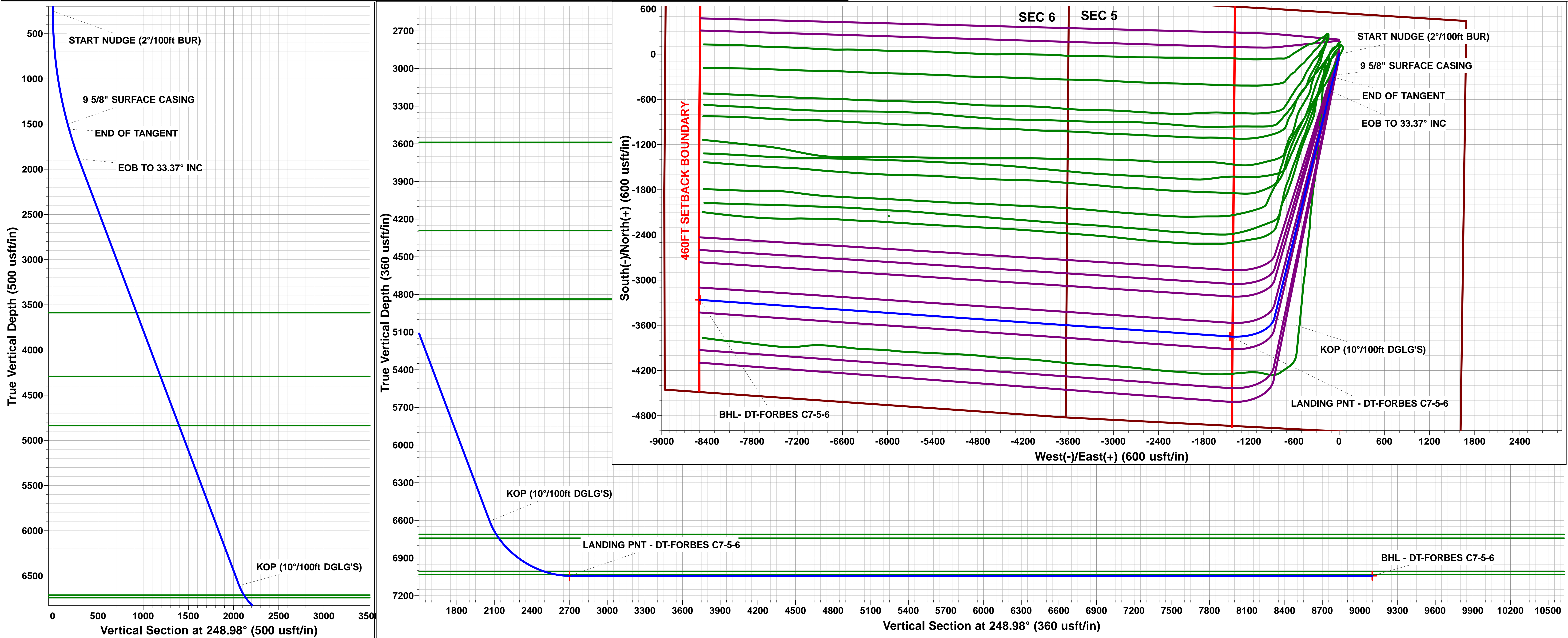
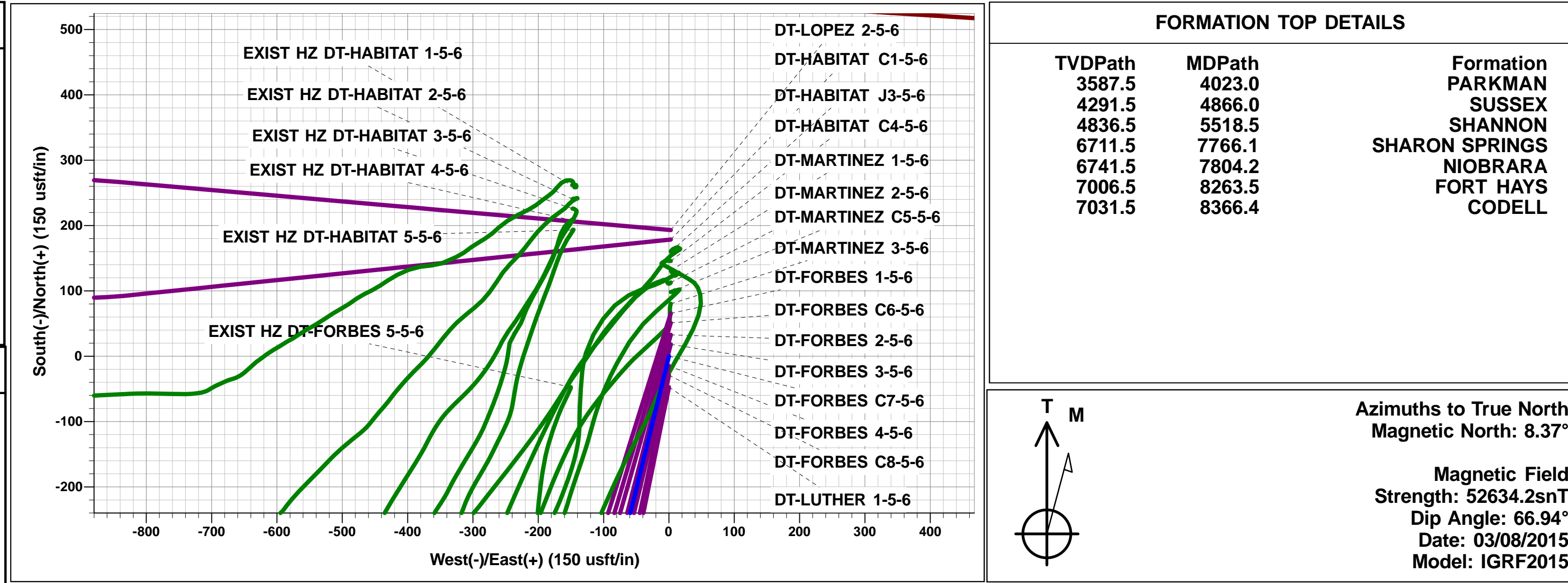




Project: WELD COUNTY, COLORADO (NAD 83)  
Site: NW NE SEC. 5 T5N R65W 6th P.M.  
Well: DT-FORBES C7-5-6  
Wellbore: ORIGINAL WELLBORE  
Design: PROPOSAL #3

ANNOTATIONS										
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Dep	Annotation		
250.0	250.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)		
1500.0	1543.5	25.87	193.81	-278.8	-68.5	164.0	287.1	9 5/8" SURFACE CASING		
1558.5	1608.5	25.87	193.81	-306.3	-75.3	180.2	315.5	END OF TANGENT		
1884.3	1983.5	33.37	193.81	-486.2	-119.5	285.9	500.7	EOB TO 33.37° INC		
6606.2	7637.5	33.37	193.81	-3506.2	-862.1	2062.3	3610.6	KOP (10°/100ft DGLG'S)		
7041.5	8483.5	90.00	273.95	-3748.7	-1450.6	2698.6	4325.4	LANDING PNT - DT-FORBES C7-5-6		
7041.5	15541.3	90.00	273.95	-3262.8	-8491.6	9096.9	11383.2	BHL- DT-FORBES C7-5-6		

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
LANDING PNT - DT-FORBES C7-5-6	7041.5	-3748.7	-1450.6	40.424710	-104.688950
BHL - DT-FORBES C7-5-6	7041.5	-3262.8	-8491.6	40.426040	-104.714240



# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well DT-FORBES C7-5-6
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4657.5usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4657.5usft
<b>Site:</b>	NW NE SEC. 5 T5N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	DT-FORBES C7-5-6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #3		

<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 C7-5-6		
<b>Well Position</b>	<b>+N/-S</b>	-54.7 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>
	IGRF2015	03/08/2015	8.37	66.94	52,634

<b>Design</b>	PROPOSAL #3			
<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	248.98

<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	-4,657.5	0.0	0.0	0.00	0.00	0.00	0.00	
250.0	0.00	0.00	250.0	-4,407.5	0.0	0.0	0.00	0.00	0.00	0.00	
1,543.5	25.87	193.81	1,500.0	-3,157.5	-278.8	-68.5	2.00	2.00	0.00	193.81	
1,608.5	25.87	193.81	1,558.5	-3,099.0	-306.3	-75.3	0.00	0.00	0.00	0.00	
1,983.5	33.37	193.81	1,884.2	-2,773.3	-486.2	-119.5	2.00	2.00	0.00	0.00	
1,983.5	33.37	193.81	1,884.3	-2,773.2	-486.2	-119.5	10.00	-1.41	17.99	98.13	
7,637.5	33.37	193.81	6,606.2	1,948.7	-3,506.2	-862.1	0.00	0.00	0.00	0.00	
8,483.5	90.00	273.95	7,041.5	2,384.0	-3,748.7	-1,450.6	10.00	6.69	9.47	81.74	LANDING PNT - D1
15,541.3	90.00	273.95	7,041.5	2,384.0	-3,262.8	-8,491.6	0.00	0.00	0.00	0.00	BHL - DT-FORBES

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well DT-FORBES C7-5-6
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4657.5usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4657.5usft
<b>Site:</b>	NW NE SEC. 5 T5N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	DT-FORBES C7-5-6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #3		

## 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	4,657.50	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,557.50	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,457.50	0.0	0.0	0.0	0.00	0.00	0.00
<b>START NUDGE (2°/100ft BUR)</b>										
250.0	0.00	0.00	250.0	4,407.50	0.0	0.0	0.0	0.00	0.00	0.00
300.0	1.00	193.81	300.0	4,357.50	-0.4	-0.1	0.2	2.00	2.00	0.00
400.0	3.00	193.81	399.9	4,257.57	-3.8	-0.9	2.2	2.00	2.00	0.00
500.0	5.00	193.81	499.7	4,157.82	-10.6	-2.6	6.2	2.00	2.00	0.00
600.0	7.00	193.81	599.1	4,058.37	-20.7	-5.1	12.2	2.00	2.00	0.00
700.0	9.00	193.81	698.2	3,959.35	-34.3	-8.4	20.1	2.00	2.00	0.00
800.0	11.00	193.81	796.6	3,860.87	-51.1	-12.6	30.1	2.00	2.00	0.00
900.0	13.00	193.81	894.4	3,763.06	-71.3	-17.5	41.9	2.00	2.00	0.00
1,000.0	15.00	193.81	991.5	3,666.04	-94.8	-23.3	55.8	2.00	2.00	0.00
1,100.0	17.00	193.81	1,087.6	3,569.92	-121.6	-29.9	71.5	2.00	2.00	0.00
1,200.0	19.00	193.81	1,182.7	3,474.82	-151.6	-37.3	89.1	2.00	2.00	0.00
1,300.0	21.00	193.81	1,276.6	3,380.85	-184.8	-45.4	108.7	2.00	2.00	0.00
1,400.0	23.00	193.81	1,369.4	3,288.14	-221.2	-54.4	130.1	2.00	2.00	0.00
1,500.0	25.00	193.81	1,460.7	3,196.79	-260.6	-64.1	153.3	2.00	2.00	0.00
<b>9 5/8" SURFACE CASING</b>										
1,543.5	25.87	193.81	1,500.0	3,157.50	-278.8	-68.5	164.0	2.00	2.00	0.00
1,600.0	25.87	193.81	1,550.8	3,106.67	-302.7	-74.4	178.0	0.00	0.00	0.00
<b>END OF TANGENT</b>										
1,608.5	25.87	193.81	1,558.5	3,099.01	-306.3	-75.3	180.2	0.00	0.00	0.00
1,700.0	27.70	193.81	1,640.2	3,017.34	-346.4	-85.1	203.7	2.00	2.00	0.00
1,800.0	29.70	193.81	1,727.9	2,929.63	-393.0	-96.6	231.1	2.00	2.00	0.00
1,900.0	31.70	193.81	1,813.9	2,843.65	-442.6	-108.8	260.3	2.00	2.00	0.00
<b>EOB TO 33.37° INC</b>										
1,983.5	33.37	193.81	1,884.3	2,773.24	-486.2	-119.5	285.9	2.00	2.00	0.00
2,000.0	33.37	193.81	1,898.0	2,759.48	-495.0	-121.7	291.1	0.01	0.00	0.02
2,100.0	33.37	193.81	1,981.5	2,675.96	-548.4	-134.8	322.5	0.00	0.00	0.00
2,200.0	33.37	193.81	2,065.1	2,592.45	-601.8	-147.9	354.0	0.00	0.00	0.00
2,300.0	33.37	193.81	2,148.6	2,508.93	-655.2	-161.1	385.4	0.00	0.00	0.00
2,400.0	33.37	193.81	2,232.1	2,425.42	-708.7	-174.2	416.8	0.00	0.00	0.00
2,500.0	33.37	193.81	2,315.6	2,341.91	-762.1	-187.3	448.2	0.00	0.00	0.00
2,600.0	33.37	193.81	2,399.1	2,258.39	-815.5	-200.5	479.6	0.00	0.00	0.00
2,700.0	33.37	193.81	2,482.6	2,174.88	-868.9	-213.6	511.0	0.00	0.00	0.00
2,800.0	33.37	193.81	2,566.1	2,091.36	-922.3	-226.7	542.5	0.00	0.00	0.00
2,900.0	33.37	193.81	2,649.6	2,007.85	-975.7	-239.9	573.9	0.00	0.00	0.00
3,000.0	33.37	193.81	2,733.2	1,924.34	-1,029.1	-253.0	605.3	0.00	0.00	0.00
3,100.0	33.37	193.81	2,816.7	1,840.82	-1,082.5	-266.1	636.7	0.00	0.00	0.00
3,200.0	33.37	193.81	2,900.2	1,757.31	-1,136.0	-279.3	668.1	0.00	0.00	0.00
3,300.0	33.37	193.81	2,983.7	1,673.80	-1,189.4	-292.4	699.5	0.00	0.00	0.00
3,400.0	33.37	193.81	3,067.2	1,590.28	-1,242.8	-305.5	731.0	0.00	0.00	0.00
3,500.0	33.37	193.81	3,150.7	1,506.77	-1,296.2	-318.7	762.4	0.00	0.00	0.00
3,600.0	33.37	193.81	3,234.2	1,423.25	-1,349.6	-331.8	793.8	0.00	0.00	0.00
3,700.0	33.37	193.81	3,317.8	1,339.74	-1,403.0	-344.9	825.2	0.00	0.00	0.00
3,800.0	33.37	193.81	3,401.3	1,256.23	-1,456.4	-358.1	856.6	0.00	0.00	0.00
3,900.0	33.37	193.81	3,484.8	1,172.71	-1,509.9	-371.2	888.0	0.00	0.00	0.00
4,000.0	33.37	193.81	3,568.3	1,089.20	-1,563.3	-384.3	919.5	0.00	0.00	0.00
<b>PARKMAN</b>										
4,023.0	33.37	193.81	3,587.5	1,070.00	-1,575.5	-387.4	926.7	0.00	0.00	0.00
4,100.0	33.37	193.81	3,651.8	1,005.68	-1,616.7	-397.5	950.9	0.00	0.00	0.00
4,200.0	33.37	193.81	3,735.3	922.17	-1,670.1	-410.6	982.3	0.00	0.00	0.00
4,300.0	33.37	193.81	3,818.8	838.66	-1,723.5	-423.7	1,013.7	0.00	0.00	0.00



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well DT-FORBES C7-5-6
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4657.5usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4657.5usft
<b>Site:</b>	NW NE SEC. 5 T5N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	DT-FORBES C7-5-6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #3		

## 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	33.37	193.81	3,902.4	755.14	-1,776.9	-436.9	1,045.1	0.00	0.00	0.00
4,500.0	33.37	193.81	3,985.9	671.63	-1,830.3	-450.0	1,076.5	0.00	0.00	0.00
4,600.0	33.37	193.81	4,069.4	588.11	-1,883.7	-463.1	1,108.0	0.00	0.00	0.00
4,700.0	33.37	193.81	4,152.9	504.60	-1,937.2	-476.3	1,139.4	0.00	0.00	0.00
4,800.0	33.37	193.81	4,236.4	421.09	-1,990.6	-489.4	1,170.8	0.00	0.00	0.00
<b>SUSSEX</b>										
<b>4,866.0</b>	<b>33.37</b>	<b>193.81</b>	<b>4,291.5</b>	<b>366.00</b>	<b>-2,025.8</b>	<b>-498.1</b>	<b>1,191.5</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
4,900.0	33.37	193.81	4,319.9	337.57	-2,044.0	-502.5	1,202.2	0.00	0.00	0.00
5,000.0	33.37	193.81	4,403.4	254.06	-2,097.4	-515.7	1,233.6	0.00	0.00	0.00
5,100.0	33.37	193.81	4,487.0	170.55	-2,150.8	-528.8	1,265.0	0.00	0.00	0.00
5,200.0	33.37	193.81	4,570.5	87.03	-2,204.2	-541.9	1,296.5	0.00	0.00	0.00
5,300.0	33.37	193.81	4,654.0	3.52	-2,257.6	-555.1	1,327.9	0.00	0.00	0.00
5,400.0	33.37	193.81	4,737.5	-80.00	-2,311.0	-568.2	1,359.3	0.00	0.00	0.00
5,500.0	33.37	193.81	4,821.0	-163.51	-2,364.5	-581.3	1,390.7	0.00	0.00	0.00
<b>SHANNON</b>										
<b>5,518.5</b>	<b>33.37</b>	<b>193.81</b>	<b>4,836.5</b>	<b>-179.00</b>	<b>-2,374.4</b>	<b>-583.8</b>	<b>1,396.5</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
5,600.0	33.37	193.81	4,904.5	-247.02	-2,417.9	-594.5	1,422.1	0.00	0.00	0.00
5,700.0	33.37	193.81	4,988.0	-330.54	-2,471.3	-607.6	1,453.5	0.00	0.00	0.00
5,800.0	33.37	193.81	5,071.6	-414.05	-2,524.7	-620.7	1,485.0	0.00	0.00	0.00
5,900.0	33.37	193.81	5,155.1	-497.57	-2,578.1	-633.9	1,516.4	0.00	0.00	0.00
6,000.0	33.37	193.81	5,238.6	-581.08	-2,631.5	-647.0	1,547.8	0.00	0.00	0.00
6,100.0	33.37	193.81	5,322.1	-664.59	-2,684.9	-660.1	1,579.2	0.00	0.00	0.00
6,200.0	33.37	193.81	5,405.6	-748.11	-2,738.4	-673.3	1,610.6	0.00	0.00	0.00
6,300.0	33.37	193.81	5,489.1	-831.62	-2,791.8	-686.4	1,642.0	0.00	0.00	0.00
6,400.0	33.37	193.81	5,572.6	-915.14	-2,845.2	-699.5	1,673.5	0.00	0.00	0.00
6,500.0	33.37	193.81	5,656.1	-998.65	-2,898.6	-712.7	1,704.9	0.00	0.00	0.00
6,600.0	33.37	193.81	5,739.7	-1,082.16	-2,952.0	-725.8	1,736.3	0.00	0.00	0.00
6,700.0	33.37	193.81	5,823.2	-1,165.68	-3,005.4	-738.9	1,767.7	0.00	0.00	0.00
6,800.0	33.37	193.81	5,906.7	-1,249.19	-3,058.8	-752.1	1,799.1	0.00	0.00	0.00
6,900.0	33.37	193.81	5,990.2	-1,332.70	-3,112.2	-765.2	1,830.6	0.00	0.00	0.00
7,000.0	33.37	193.81	6,073.7	-1,416.22	-3,165.7	-778.3	1,862.0	0.00	0.00	0.00
7,100.0	33.37	193.81	6,157.2	-1,499.73	-3,219.1	-791.5	1,893.4	0.00	0.00	0.00
7,200.0	33.37	193.81	6,240.7	-1,583.25	-3,272.5	-804.6	1,924.8	0.00	0.00	0.00
7,300.0	33.37	193.81	6,324.3	-1,666.76	-3,325.9	-817.7	1,956.2	0.00	0.00	0.00
7,400.0	33.37	193.81	6,407.8	-1,750.27	-3,379.3	-830.9	1,987.6	0.00	0.00	0.00
7,500.0	33.37	193.81	6,491.3	-1,833.79	-3,432.7	-844.0	2,019.1	0.00	0.00	0.00
7,600.0	33.37	193.81	6,574.8	-1,917.30	-3,486.1	-857.1	2,050.5	0.00	0.00	0.00
<b>KOP (10°/100ft DGLG'S)</b>										
<b>7,637.5</b>	<b>33.37</b>	<b>193.81</b>	<b>6,606.2</b>	<b>-1,948.66</b>	<b>-3,506.2</b>	<b>-862.1</b>	<b>2,062.3</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
7,700.0	34.76	204.70	6,657.9	-2,000.44	-3,539.1	-873.6	2,084.8	10.00	2.22	17.43
<b>SHARON SPRINGS</b>										
<b>7,766.1</b>	<b>37.19</b>	<b>215.18</b>	<b>6,711.5</b>	<b>-2,054.00</b>	<b>-3,572.6</b>	<b>-893.0</b>	<b>2,115.0</b>	<b>10.00</b>	<b>3.68</b>	<b>15.85</b>
7,800.0	38.77	220.05	6,738.2	-2,080.71	-3,589.1	-905.8	2,132.8	10.00	4.65	14.39
<b>NIOBRARA</b>										
<b>7,804.2</b>	<b>38.98</b>	<b>220.64</b>	<b>6,741.5</b>	<b>-2,084.00</b>	<b>-3,591.1</b>	<b>-907.5</b>	<b>2,135.1</b>	<b>10.00</b>	<b>4.98</b>	<b>13.82</b>
7,900.0	44.43	232.50	6,813.1	-2,155.59	-3,634.4	-953.8	2,193.9	10.00	5.69	12.39
8,000.0	51.19	242.48	6,880.3	-2,222.80	-3,673.9	-1,016.3	2,266.4	10.00	6.75	9.98
8,100.0	58.64	250.65	6,937.8	-2,280.31	-3,706.1	-1,091.3	2,347.9	10.00	7.45	8.17
8,200.0	66.53	257.58	6,983.9	-2,326.37	-3,730.2	-1,176.6	2,436.2	10.00	7.89	6.93
<b>FORT HAYS</b>										
<b>8,263.5</b>	<b>71.68</b>	<b>261.54</b>	<b>7,006.5</b>	<b>-2,349.00</b>	<b>-3,740.8</b>	<b>-1,234.9</b>	<b>2,494.4</b>	<b>10.00</b>	<b>8.12</b>	<b>6.24</b>
8,300.0	74.69	263.72	7,017.1	-2,359.57	-3,745.3	-1,269.6	2,528.4	10.00	8.23	5.94
<b>CODELL</b>										

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well DT-FORBES C7-5-6
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4657.5usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4657.5usft
<b>Site:</b>	NW NE SEC. 5 T5N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	DT-FORBES C7-5-6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #3		

## 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)
8,366.4	80.20	267.51	7,031.5	-2,374.00	-3,750.3	-1,334.1	2,590.5	10.00	8.30	5.72
8,400.0	83.01	269.38	7,036.4	-2,378.91	-3,751.2	-1,367.4	2,621.8	10.00	8.35	5.56
<b>LANDING PNT - DT-FORBES C7-5-6</b>										
8,483.5	90.00	273.95	7,041.5	-2,384.00	-3,748.7	-1,450.6	2,698.6	10.00	8.38	5.47
8,500.0	90.00	273.95	7,041.5	-2,384.00	-3,747.6	-1,467.1	2,713.6	0.00	0.00	0.00
8,600.0	90.00	273.95	7,041.5	-2,384.00	-3,740.7	-1,566.8	2,804.2	0.00	0.00	0.00
8,700.0	90.00	273.95	7,041.5	-2,384.00	-3,733.8	-1,666.6	2,894.9	0.00	0.00	0.00
8,800.0	90.00	273.95	7,041.5	-2,384.00	-3,726.9	-1,766.3	2,985.6	0.00	0.00	0.00
8,900.0	90.00	273.95	7,041.5	-2,384.00	-3,720.0	-1,866.1	3,076.2	0.00	0.00	0.00
9,000.0	90.00	273.95	7,041.5	-2,384.00	-3,713.2	-1,965.9	3,166.9	0.00	0.00	0.00
9,100.0	90.00	273.95	7,041.5	-2,384.00	-3,706.3	-2,065.6	3,257.5	0.00	0.00	0.00
9,200.0	90.00	273.95	7,041.5	-2,384.00	-3,699.4	-2,165.4	3,348.2	0.00	0.00	0.00
9,300.0	90.00	273.95	7,041.5	-2,384.00	-3,692.5	-2,265.2	3,438.8	0.00	0.00	0.00
9,400.0	90.00	273.95	7,041.5	-2,384.00	-3,685.6	-2,364.9	3,529.5	0.00	0.00	0.00
9,500.0	90.00	273.95	7,041.5	-2,384.00	-3,678.7	-2,464.7	3,620.1	0.00	0.00	0.00
9,600.0	90.00	273.95	7,041.5	-2,384.00	-3,671.9	-2,564.4	3,710.8	0.00	0.00	0.00
9,700.0	90.00	273.95	7,041.5	-2,384.00	-3,665.0	-2,664.2	3,801.5	0.00	0.00	0.00
9,800.0	90.00	273.95	7,041.5	-2,384.00	-3,658.1	-2,764.0	3,892.1	0.00	0.00	0.00
9,900.0	90.00	273.95	7,041.5	-2,384.00	-3,651.2	-2,863.7	3,982.8	0.00	0.00	0.00
10,000.0	90.00	273.95	7,041.5	-2,384.00	-3,644.3	-2,963.5	4,073.4	0.00	0.00	0.00
10,100.0	90.00	273.95	7,041.5	-2,384.00	-3,637.4	-3,063.3	4,164.1	0.00	0.00	0.00
10,200.0	90.00	273.95	7,041.5	-2,384.00	-3,630.5	-3,163.0	4,254.7	0.00	0.00	0.00
10,300.0	90.00	273.95	7,041.5	-2,384.00	-3,623.7	-3,262.8	4,345.4	0.00	0.00	0.00
10,400.0	90.00	273.95	7,041.5	-2,384.00	-3,616.8	-3,362.5	4,436.0	0.00	0.00	0.00
10,500.0	90.00	273.95	7,041.5	-2,384.00	-3,609.9	-3,462.3	4,526.7	0.00	0.00	0.00
10,600.0	90.00	273.95	7,041.5	-2,384.00	-3,603.0	-3,562.1	4,617.4	0.00	0.00	0.00
10,700.0	90.00	273.95	7,041.5	-2,384.00	-3,596.1	-3,661.8	4,708.0	0.00	0.00	0.00
10,800.0	90.00	273.95	7,041.5	-2,384.00	-3,589.2	-3,761.6	4,798.7	0.00	0.00	0.00
10,900.0	90.00	273.95	7,041.5	-2,384.00	-3,582.3	-3,861.4	4,889.3	0.00	0.00	0.00
11,000.0	90.00	273.95	7,041.5	-2,384.00	-3,575.5	-3,961.1	4,980.0	0.00	0.00	0.00
11,100.0	90.00	273.95	7,041.5	-2,384.00	-3,568.6	-4,060.9	5,070.6	0.00	0.00	0.00
11,200.0	90.00	273.95	7,041.5	-2,384.00	-3,561.7	-4,160.6	5,161.3	0.00	0.00	0.00
11,300.0	90.00	273.95	7,041.5	-2,384.00	-3,554.8	-4,260.4	5,251.9	0.00	0.00	0.00
11,400.0	90.00	273.95	7,041.5	-2,384.00	-3,547.9	-4,360.2	5,342.6	0.00	0.00	0.00
11,500.0	90.00	273.95	7,041.5	-2,384.00	-3,541.0	-4,459.9	5,433.3	0.00	0.00	0.00
11,600.0	90.00	273.95	7,041.5	-2,384.00	-3,534.1	-4,559.7	5,523.9	0.00	0.00	0.00
11,700.0	90.00	273.95	7,041.5	-2,384.00	-3,527.3	-4,659.5	5,614.6	0.00	0.00	0.00
11,800.0	90.00	273.95	7,041.5	-2,384.00	-3,520.4	-4,759.2	5,705.2	0.00	0.00	0.00
11,900.0	90.00	273.95	7,041.5	-2,384.00	-3,513.5	-4,859.0	5,795.9	0.00	0.00	0.00
12,000.0	90.00	273.95	7,041.5	-2,384.00	-3,506.6	-4,958.8	5,886.5	0.00	0.00	0.00
12,100.0	90.00	273.95	7,041.5	-2,384.00	-3,499.7	-5,058.5	5,977.2	0.00	0.00	0.00
12,200.0	90.00	273.95	7,041.5	-2,384.00	-3,492.8	-5,158.3	6,067.8	0.00	0.00	0.00
12,300.0	90.00	273.95	7,041.5	-2,384.00	-3,485.9	-5,258.0	6,158.5	0.00	0.00	0.00
12,400.0	90.00	273.95	7,041.5	-2,384.00	-3,479.1	-5,357.8	6,249.2	0.00	0.00	0.00
12,500.0	90.00	273.95	7,041.5	-2,384.00	-3,472.2	-5,457.6	6,339.8	0.00	0.00	0.00
12,600.0	90.00	273.95	7,041.5	-2,384.00	-3,465.3	-5,557.3	6,430.5	0.00	0.00	0.00
12,700.0	90.00	273.95	7,041.5	-2,384.00	-3,458.4	-5,657.1	6,521.1	0.00	0.00	0.00
12,800.0	90.00	273.95	7,041.5	-2,384.00	-3,451.5	-5,756.9	6,611.8	0.00	0.00	0.00
12,900.0	90.00	273.95	7,041.5	-2,384.00	-3,444.6	-5,856.6	6,702.4	0.00	0.00	0.00
13,000.0	90.00	273.95	7,041.5	-2,384.00	-3,437.7	-5,956.4	6,793.1	0.00	0.00	0.00
13,100.0	90.00	273.95	7,041.5	-2,384.00	-3,430.9	-6,056.1	6,883.7	0.00	0.00	0.00
13,200.0	90.00	273.95	7,041.5	-2,384.00	-3,424.0	-6,155.9	6,974.4	0.00	0.00	0.00
13,300.0	90.00	273.95	7,041.5	-2,384.00	-3,417.1	-6,255.7	7,065.0	0.00	0.00	0.00
13,400.0	90.00	273.95	7,041.5	-2,384.00	-3,410.2	-6,355.4	7,155.7	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 C7-5-6
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4657.5usft
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4657.5usft
<b>Site:</b>	NW NE SEC. 5 T5N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	DT-FORBES C7-5-6	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #3		

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)
13,500.0	90.00	273.95	7,041.5	-2,384.00	-3,403.3	-6,455.2	7,246.4	0.00	0.00	0.00
13,600.0	90.00	273.95	7,041.5	-2,384.00	-3,396.4	-6,555.0	7,337.0	0.00	0.00	0.00
13,700.0	90.00	273.95	7,041.5	-2,384.00	-3,389.6	-6,654.7	7,427.7	0.00	0.00	0.00
13,800.0	90.00	273.95	7,041.5	-2,384.00	-3,382.7	-6,754.5	7,518.3	0.00	0.00	0.00
13,900.0	90.00	273.95	7,041.5	-2,384.00	-3,375.8	-6,854.2	7,609.0	0.00	0.00	0.00
14,000.0	90.00	273.95	7,041.5	-2,384.00	-3,368.9	-6,954.0	7,699.6	0.00	0.00	0.00
14,100.0	90.00	273.95	7,041.5	-2,384.00	-3,362.0	-7,053.8	7,790.3	0.00	0.00	0.00
14,200.0	90.00	273.95	7,041.5	-2,384.00	-3,355.1	-7,153.5	7,880.9	0.00	0.00	0.00
14,300.0	90.00	273.95	7,041.5	-2,384.00	-3,348.2	-7,253.3	7,971.6	0.00	0.00	0.00
14,400.0	90.00	273.95	7,041.5	-2,384.00	-3,341.4	-7,353.1	8,062.3	0.00	0.00	0.00
14,500.0	90.00	273.95	7,041.5	-2,384.00	-3,334.5	-7,452.8	8,152.9	0.00	0.00	0.00
14,600.0	90.00	273.95	7,041.5	-2,384.00	-3,327.6	-7,552.6	8,243.6	0.00	0.00	0.00
14,700.0	90.00	273.95	7,041.5	-2,384.00	-3,320.7	-7,652.3	8,334.2	0.00	0.00	0.00
14,800.0	90.00	273.95	7,041.5	-2,384.00	-3,313.8	-7,752.1	8,424.9	0.00	0.00	0.00
14,900.0	90.00	273.95	7,041.5	-2,384.00	-3,306.9	-7,851.9	8,515.5	0.00	0.00	0.00
15,000.0	90.00	273.95	7,041.5	-2,384.00	-3,300.0	-7,951.6	8,606.2	0.00	0.00	0.00
15,100.0	90.00	273.95	7,041.5	-2,384.00	-3,293.2	-8,051.4	8,696.8	0.00	0.00	0.00
15,200.0	90.00	273.95	7,041.5	-2,384.00	-3,286.3	-8,151.2	8,787.5	0.00	0.00	0.00
15,300.0	90.00	273.95	7,041.5	-2,384.00	-3,279.4	-8,250.9	8,878.2	0.00	0.00	0.00
15,400.0	90.00	273.95	7,041.5	-2,384.00	-3,272.5	-8,350.7	8,968.8	0.00	0.00	0.00
15,500.0	90.00	273.95	7,041.5	-2,384.00	-3,265.6	-8,450.4	9,059.5	0.00	0.00	0.00
<b>BHL- DT-FORBES C7-5-6</b>										
<b>15,541.3</b>	<b>90.00</b>	<b>273.95</b>	<b>7,041.5</b>	<b>-2,384.00</b>	<b>-3,262.8</b>	<b>-8,491.6</b>	<b>9,096.9</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Formations						
MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,023.0	3,587.5	PARKMAN				
4,866.0	4,291.5	SUSSEX				
5,518.5	4,836.5	SHANNON				
7,766.1	6,711.5	SHARON SPRINGS				
7,804.2	6,741.5	NIOBRARA				
8,263.5	7,006.5	FORT HAYS				
8,366.4	7,031.5	CODELL				

Plan Annotations				
MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
250.0	250.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1,543.5	1,500.0	-278.8	-68.5	9 5/8" SURFACE CASING
1,608.5	1,558.5	-306.3	-75.3	END OF TANGENT
1,983.5	1,884.3	-486.2	-119.5	EOB TO 33.37° INC
7,637.5	6,606.2	-3,506.2	-862.1	KOP (10°/100ft DGLG'S)
8,483.5	7,041.5	-3,748.7	-1,450.6	LANDING PNT - DT-FORBES C7-5-6
15,541.3	7,041.5	-3,262.8	-8,491.6	BHL- DT-FORBES C7-5-6