

# **EXTRACTION OIL & GAS**

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

**SW SE SEC. 32 T6N R65W 6th P.M.**

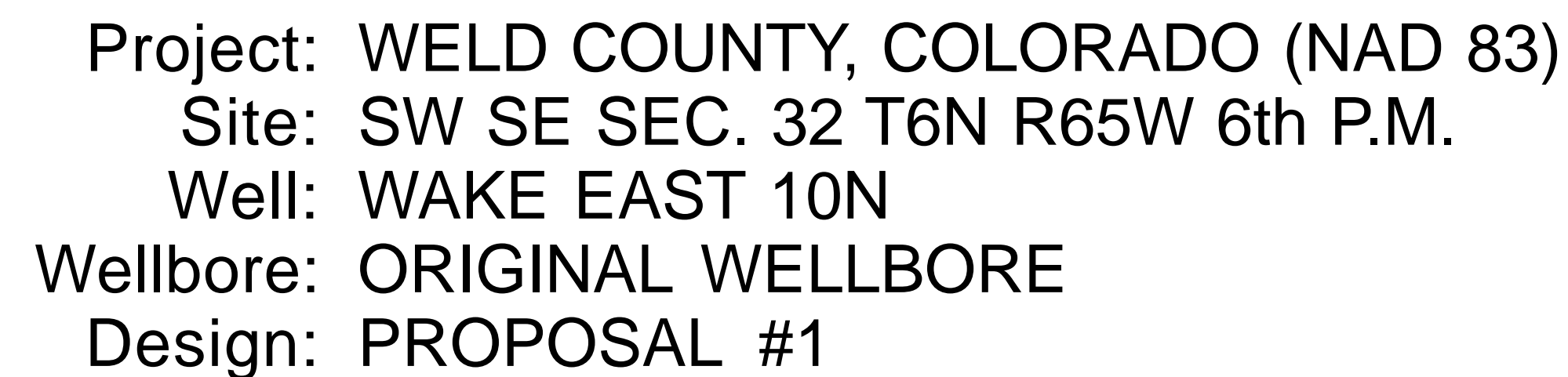
**WAKE EAST 10N**

**ORIGINAL WELLBORE**

**04 March, 2017**

**Plan: PROPOSAL #1**





**PROPOSED LOCAL COORDINATES**

**SHL: 858ft FSL & 1582ft FEL of Sec 32**

**LP: 2268ft FNL & 460ft FWL of Sec 33**

**BHL: 2311ft FNL & 460ft FEL of Sec 34**

Azimuths to True North  
Magnetic North: 8.20

Magnetic Field  
Strength: 52455.3ns  
Dip Angle: 66.9°  
Date: 04/03/2014  
Model: IGRF2014

True Vertical Depth (550 usf/in)

Vertical Section at 38.69° (550 usf/in)

START NUDGE #1 (2°/100ft BUR)

SURFACE CASING

START NUDGE #2 (2°/100ft BUR)

EOB TO 27.61° INC

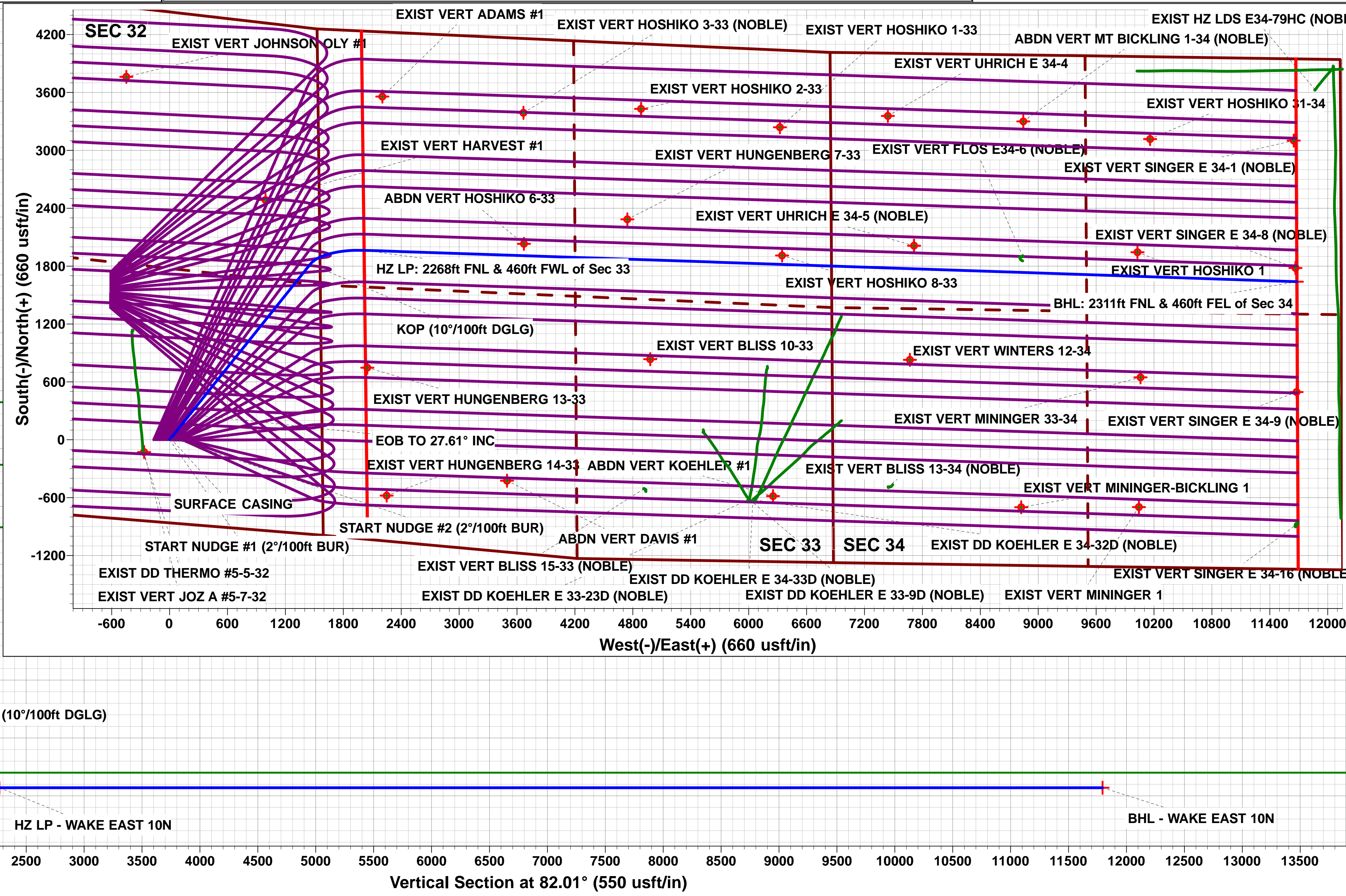
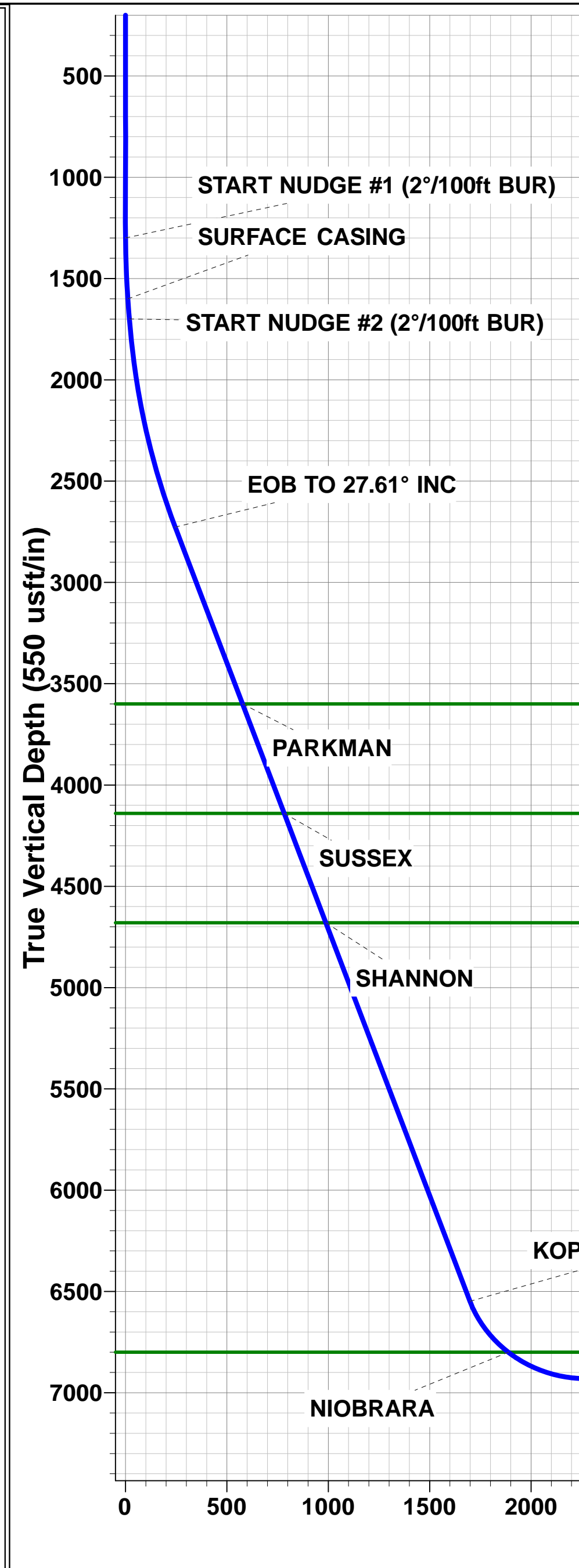
PARKMAN

SUSSEX

SHANNON

KOP (10°/100ft DGLG)

NIOBRARA





# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WAKE EAST 10N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4660.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4660.0usft (Original Well Elev)
<b>Site:</b>	SW SE SEC. 32 T6N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	WAKE EAST 10N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

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

<b>Site</b>	SW SE SEC. 32 T6N R65W 6th P.M.		
<b>Site Position:</b>		<b>Northing:</b>	1,403,754.85 usft
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,227,136.61 usft
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	1.10000ft
		<b>Latitude:</b>	40.438840
		<b>Longitude:</b>	-104.683980
		<b>Grid Convergence:</b>	0.53 °

<b>Well</b>	WAKE EAST 10N		
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>
	<b>+E/-W</b>	164.2 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	04/03/2017	8.20	66.91	52,455

<b>Design</b>	PROPOSAL #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	6,930.0	0.0	0.0	82.01

<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	-4,660.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	-3,360.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,600.6	6.01	38.69	1,600.0	-3,060.0	12.3	9.8	2.00	2.00	0.00	38.69	
1,700.6	6.01	38.69	1,699.5	-2,960.5	20.5	16.4	0.00	0.00	0.00	0.00	
2,780.3	27.61	38.69	2,727.0	-1,933.0	262.7	210.4	2.00	2.00	0.00	0.00	
7,092.4	27.61	38.69	6,548.1	1,888.1	1,822.4	1,459.6	0.00	0.00	0.00	0.00	
7,831.4	90.00	91.93	6,930.0	2,270.0	1,963.7	2,015.2	10.00	8.44	7.20	56.49	HZ LP - WAKE EAST
17,500.9	90.00	91.93	6,930.0	2,270.0	1,638.5	11,679.3	0.00	0.00	0.00	0.00	BHL - WAKE EAST

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WAKE EAST 10N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4660.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4660.0usft (Original Well Elev)
<b>Site:</b>	SW SE SEC. 32 T6N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	WAKE EAST 10N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

## Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
<b>SHL: 858ft FSL &amp; 1582ft FEL of Sec 32</b>										
0.0	0.00	0.00	0.0	4,660.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,560.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,460.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,360.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,260.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,160.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,060.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	3,960.00	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	3,860.00	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	3,760.00	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,660.00	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	3,560.00	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	3,460.00	0.0	0.0	0.0	0.00	0.00	0.00
<b>START NUDGE #1 (2°/100ft BUR)</b>										
1,300.0	0.00	0.00	1,300.0	3,360.00	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	2.00	38.69	1,400.0	3,260.02	1.4	1.1	1.3	2.00	2.00	0.00
1,500.0	4.00	38.69	1,499.8	3,160.16	5.4	4.4	5.1	2.00	2.00	0.00
1,600.0	6.00	38.69	1,599.5	3,060.55	12.2	9.8	11.4	2.00	2.00	0.00
<b>SURFACE CASING</b>										
1,600.6	6.01	38.69	1,600.0	3,060.00	12.3	9.8	11.5	2.00	2.00	0.00
1,700.0	6.01	38.69	1,698.9	2,961.10	20.4	16.4	19.0	0.00	0.00	0.00
<b>START NUDGE #2 (2°/100ft BUR)</b>										
1,700.6	6.01	38.69	1,699.5	2,960.55	20.5	16.4	19.1	0.00	0.00	0.00
1,800.0	8.00	38.69	1,798.2	2,861.85	29.9	24.0	27.9	2.00	2.00	0.00
1,900.0	10.00	38.69	1,896.9	2,763.08	42.1	33.8	39.3	2.00	2.00	0.00
2,000.0	12.00	38.69	1,995.1	2,664.93	57.0	45.7	53.2	2.00	2.00	0.00
2,100.0	14.00	38.69	2,092.5	2,567.49	74.6	59.7	69.5	2.00	2.00	0.00
2,200.0	16.00	38.69	2,189.1	2,470.91	94.8	75.9	88.4	2.00	2.00	0.00
2,300.0	18.00	38.69	2,284.7	2,375.28	117.6	94.2	109.6	2.00	2.00	0.00
2,400.0	20.00	38.69	2,379.3	2,280.73	143.0	114.5	133.3	2.00	2.00	0.00
2,500.0	22.00	38.69	2,472.6	2,187.38	171.0	137.0	159.4	2.00	2.00	0.00
2,600.0	24.00	38.69	2,564.7	2,095.34	201.5	161.4	187.8	2.00	2.00	0.00
2,700.0	26.00	38.69	2,655.3	2,004.71	234.5	187.8	218.5	2.00	2.00	0.00
<b>EOB TO 27.61° INC</b>										
2,780.3	27.61	38.69	2,727.0	1,933.00	262.7	210.4	244.9	2.00	2.00	0.00
2,800.0	27.61	38.69	2,744.4	1,915.58	269.9	216.1	251.5	0.00	0.00	0.00
2,900.0	27.61	38.69	2,833.0	1,826.97	306.0	245.1	285.2	0.00	0.00	0.00
3,000.0	27.61	38.69	2,921.6	1,738.35	342.2	274.1	319.0	0.00	0.00	0.00
3,100.0	27.61	38.69	3,010.3	1,649.74	378.4	303.0	352.7	0.00	0.00	0.00
3,200.0	27.61	38.69	3,098.9	1,561.12	414.5	332.0	386.4	0.00	0.00	0.00
3,300.0	27.61	38.69	3,187.5	1,472.51	450.7	361.0	420.1	0.00	0.00	0.00
3,400.0	27.61	38.69	3,276.1	1,383.89	486.9	390.0	453.8	0.00	0.00	0.00
3,500.0	27.61	38.69	3,364.7	1,295.28	523.0	418.9	487.5	0.00	0.00	0.00
3,600.0	27.61	38.69	3,453.3	1,206.66	559.2	447.9	521.2	0.00	0.00	0.00
3,700.0	27.61	38.69	3,542.0	1,118.05	595.4	476.9	555.0	0.00	0.00	0.00
<b>PARKMAN</b>										
3,765.5	27.61	38.69	3,600.0	1,060.00	619.1	495.8	577.0	0.00	0.00	0.00
3,800.0	27.61	38.69	3,630.6	1,029.43	631.5	505.8	588.7	0.00	0.00	0.00
3,900.0	27.61	38.69	3,719.2	940.82	667.7	534.8	622.4	0.00	0.00	0.00
4,000.0	27.61	38.69	3,807.8	852.20	703.9	563.8	656.1	0.00	0.00	0.00
4,100.0	27.61	38.69	3,896.4	763.59	740.1	592.7	689.8	0.00	0.00	0.00
4,200.0	27.61	38.69	3,985.0	674.97	776.2	621.7	723.5	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WAKE EAST 10N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4660.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4660.0usft (Original Well Elev)
<b>Site:</b>	SW SE SEC. 32 T6N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	WAKE EAST 10N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

## Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,300.0	27.61	38.69	4,073.6	586.36	812.4	650.7	757.2	0.00	0.00	0.00
<b>SUSSEX</b>										
<b>4,374.9</b>	<b>27.61</b>	<b>38.69</b>	<b>4,140.0</b>	<b>520.00</b>	<b>839.5</b>	<b>672.4</b>	<b>782.5</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
4,400.0	27.61	38.69	4,162.3	497.75	848.6	679.7	791.0	0.00	0.00	0.00
4,500.0	27.61	38.69	4,250.9	409.13	884.7	708.6	824.7	0.00	0.00	0.00
4,600.0	27.61	38.69	4,339.5	320.52	920.9	737.6	858.4	0.00	0.00	0.00
4,700.0	27.61	38.69	4,428.1	231.90	957.1	766.6	892.1	0.00	0.00	0.00
4,800.0	27.61	38.69	4,516.7	143.29	993.2	795.5	925.8	0.00	0.00	0.00
4,900.0	27.61	38.69	4,605.3	54.67	1,029.4	824.5	959.5	0.00	0.00	0.00
<b>SHANNON</b>										
<b>4,984.3</b>	<b>27.61</b>	<b>38.69</b>	<b>4,680.0</b>	<b>-20.00</b>	<b>1,059.9</b>	<b>848.9</b>	<b>987.9</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
5,000.0	27.61	38.69	4,693.9	-33.94	1,065.6	853.5	993.2	0.00	0.00	0.00
5,100.0	27.61	38.69	4,782.6	-122.56	1,101.7	882.4	1,027.0	0.00	0.00	0.00
5,200.0	27.61	38.69	4,871.2	-211.17	1,137.9	911.4	1,060.7	0.00	0.00	0.00
5,300.0	27.61	38.69	4,959.8	-299.79	1,174.1	940.4	1,094.4	0.00	0.00	0.00
5,400.0	27.61	38.69	5,048.4	-388.40	1,210.2	969.3	1,128.1	0.00	0.00	0.00
5,500.0	27.61	38.69	5,137.0	-477.02	1,246.4	998.3	1,161.8	0.00	0.00	0.00
5,600.0	27.61	38.69	5,225.6	-565.63	1,282.6	1,027.3	1,195.5	0.00	0.00	0.00
5,700.0	27.61	38.69	5,314.2	-654.25	1,318.8	1,056.3	1,229.2	0.00	0.00	0.00
5,800.0	27.61	38.69	5,402.9	-742.86	1,354.9	1,085.2	1,262.9	0.00	0.00	0.00
5,900.0	27.61	38.69	5,491.5	-831.48	1,391.1	1,114.2	1,296.7	0.00	0.00	0.00
6,000.0	27.61	38.69	5,580.1	-920.09	1,427.3	1,143.2	1,330.4	0.00	0.00	0.00
6,100.0	27.61	38.69	5,668.7	-1,008.71	1,463.4	1,172.1	1,364.1	0.00	0.00	0.00
6,200.0	27.61	38.69	5,757.3	-1,097.32	1,499.6	1,201.1	1,397.8	0.00	0.00	0.00
6,300.0	27.61	38.69	5,845.9	-1,185.94	1,535.8	1,230.1	1,431.5	0.00	0.00	0.00
6,400.0	27.61	38.69	5,934.5	-1,274.55	1,571.9	1,259.0	1,465.2	0.00	0.00	0.00
6,500.0	27.61	38.69	6,023.2	-1,363.16	1,608.1	1,288.0	1,498.9	0.00	0.00	0.00
6,600.0	27.61	38.69	6,111.8	-1,451.78	1,644.3	1,317.0	1,532.7	0.00	0.00	0.00
6,700.0	27.61	38.69	6,200.4	-1,540.39	1,680.4	1,346.0	1,566.4	0.00	0.00	0.00
6,800.0	27.61	38.69	6,289.0	-1,629.01	1,716.6	1,374.9	1,600.1	0.00	0.00	0.00
6,900.0	27.61	38.69	6,377.6	-1,717.62	1,752.8	1,403.9	1,633.8	0.00	0.00	0.00
7,000.0	27.61	38.69	6,466.2	-1,806.24	1,788.9	1,432.9	1,667.5	0.00	0.00	0.00
<b>KOP (10°/100ft DGLG)</b>										
<b>7,092.4</b>	<b>27.61</b>	<b>38.69</b>	<b>6,548.1</b>	<b>-1,888.12</b>	<b>1,822.4</b>	<b>1,459.6</b>	<b>1,698.7</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
7,100.0	28.03	40.04	6,554.8	-1,894.84	1,825.1	1,461.9	1,701.3	10.00	5.61	17.74
7,200.0	34.63	54.59	6,640.3	-1,980.33	1,859.7	1,500.3	1,744.1	10.00	6.60	14.55
7,300.0	42.44	64.66	6,718.6	-2,058.57	1,890.6	1,554.0	1,801.7	10.00	7.81	10.07
7,400.0	50.90	72.03	6,787.2	-2,127.17	1,917.1	1,621.6	1,872.3	10.00	8.46	7.36
<b>NIOBRARA</b>										
<b>7,420.8</b>	<b>52.71</b>	<b>73.32</b>	<b>6,800.0</b>	<b>-2,140.00</b>	<b>1,922.0</b>	<b>1,637.2</b>	<b>1,888.3</b>	<b>10.00</b>	<b>8.71</b>	<b>6.26</b>
7,500.0	59.72	77.77	6,844.1	-2,184.06	1,938.3	1,700.9	1,953.7	10.00	8.85	5.61
7,600.0	68.75	82.55	6,887.5	-2,227.50	1,953.5	1,789.6	2,043.6	10.00	9.03	4.78
7,700.0	77.90	86.77	6,916.2	-2,256.17	1,962.3	1,884.8	2,139.2	10.00	9.15	4.22
7,800.0	87.11	90.71	6,929.2	-2,269.21	1,964.5	1,983.8	2,237.5	10.00	9.21	3.94
<b>HZ LP: 2268ft FNL &amp; 460ft FWL of Sec 33</b>										
<b>7,831.4</b>	<b>90.00</b>	<b>91.93</b>	<b>6,930.0</b>	<b>-2,270.00</b>	<b>1,963.7</b>	<b>2,015.2</b>	<b>2,268.5</b>	<b>10.00</b>	<b>9.22</b>	<b>3.87</b>
7,900.0	90.00	91.93	6,930.0	-2,270.00	1,961.4	2,083.8	2,336.1	0.00	0.00	0.00
8,000.0	90.00	91.93	6,930.0	-2,270.00	1,958.1	2,183.7	2,434.6	0.00	0.00	0.00
8,100.0	90.00	91.93	6,930.0	-2,270.00	1,954.7	2,283.7	2,533.1	0.00	0.00	0.00
8,200.0	90.00	91.93	6,930.0	-2,270.00	1,951.3	2,383.6	2,631.6	0.00	0.00	0.00
8,300.0	90.00	91.93	6,930.0	-2,270.00	1,948.0	2,483.5	2,730.1	0.00	0.00	0.00
8,400.0	90.00	91.93	6,930.0	-2,270.00	1,944.6	2,583.5	2,828.6	0.00	0.00	0.00
8,500.0	90.00	91.93	6,930.0	-2,270.00	1,941.3	2,683.4	2,927.1	0.00	0.00	0.00

# Planning Report



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WAKE EAST 10N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4660.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4660.0usft (Original Well Elev)
<b>Site:</b>	SW SE SEC. 32 T6N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	WAKE EAST 10N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

Planned Survey										
MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,600.0	90.00	91.93	6,930.0	-2,270.00	1,937.9	2,783.4	3,025.6	0.00	0.00	0.00
8,700.0	90.00	91.93	6,930.0	-2,270.00	1,934.5	2,883.3	3,124.1	0.00	0.00	0.00
8,800.0	90.00	91.93	6,930.0	-2,270.00	1,931.2	2,983.3	3,222.6	0.00	0.00	0.00
8,900.0	90.00	91.93	6,930.0	-2,270.00	1,927.8	3,083.2	3,321.1	0.00	0.00	0.00
9,000.0	90.00	91.93	6,930.0	-2,270.00	1,924.4	3,183.1	3,419.6	0.00	0.00	0.00
9,100.0	90.00	91.93	6,930.0	-2,270.00	1,921.1	3,283.1	3,518.2	0.00	0.00	0.00
9,200.0	90.00	91.93	6,930.0	-2,270.00	1,917.7	3,383.0	3,616.7	0.00	0.00	0.00
9,300.0	90.00	91.93	6,930.0	-2,270.00	1,914.4	3,483.0	3,715.2	0.00	0.00	0.00
9,400.0	90.00	91.93	6,930.0	-2,270.00	1,911.0	3,582.9	3,813.7	0.00	0.00	0.00
9,500.0	90.00	91.93	6,930.0	-2,270.00	1,907.6	3,682.9	3,912.2	0.00	0.00	0.00
9,600.0	90.00	91.93	6,930.0	-2,270.00	1,904.3	3,782.8	4,010.7	0.00	0.00	0.00
9,700.0	90.00	91.93	6,930.0	-2,270.00	1,900.9	3,882.8	4,109.2	0.00	0.00	0.00
9,800.0	90.00	91.93	6,930.0	-2,270.00	1,897.5	3,982.7	4,207.7	0.00	0.00	0.00
9,900.0	90.00	91.93	6,930.0	-2,270.00	1,894.2	4,082.6	4,306.2	0.00	0.00	0.00
10,000.0	90.00	91.93	6,930.0	-2,270.00	1,890.8	4,182.6	4,404.7	0.00	0.00	0.00
10,100.0	90.00	91.93	6,930.0	-2,270.00	1,887.4	4,282.5	4,503.2	0.00	0.00	0.00
10,200.0	90.00	91.93	6,930.0	-2,270.00	1,884.1	4,382.5	4,601.7	0.00	0.00	0.00
10,300.0	90.00	91.93	6,930.0	-2,270.00	1,880.7	4,482.4	4,700.2	0.00	0.00	0.00
10,400.0	90.00	91.93	6,930.0	-2,270.00	1,877.4	4,582.4	4,798.7	0.00	0.00	0.00
10,500.0	90.00	91.93	6,930.0	-2,270.00	1,874.0	4,682.3	4,897.2	0.00	0.00	0.00
10,600.0	90.00	91.93	6,930.0	-2,270.00	1,870.6	4,782.2	4,995.8	0.00	0.00	0.00
10,700.0	90.00	91.93	6,930.0	-2,270.00	1,867.3	4,882.2	5,094.3	0.00	0.00	0.00
10,800.0	90.00	91.93	6,930.0	-2,270.00	1,863.9	4,982.1	5,192.8	0.00	0.00	0.00
10,900.0	90.00	91.93	6,930.0	-2,270.00	1,860.5	5,082.1	5,291.3	0.00	0.00	0.00
11,000.0	90.00	91.93	6,930.0	-2,270.00	1,857.2	5,182.0	5,389.8	0.00	0.00	0.00
11,100.0	90.00	91.93	6,930.0	-2,270.00	1,853.8	5,282.0	5,488.3	0.00	0.00	0.00
11,200.0	90.00	91.93	6,930.0	-2,270.00	1,850.5	5,381.9	5,586.8	0.00	0.00	0.00
11,300.0	90.00	91.93	6,930.0	-2,270.00	1,847.1	5,481.8	5,685.3	0.00	0.00	0.00
11,400.0	90.00	91.93	6,930.0	-2,270.00	1,843.7	5,581.8	5,783.8	0.00	0.00	0.00
11,500.0	90.00	91.93	6,930.0	-2,270.00	1,840.4	5,681.7	5,882.3	0.00	0.00	0.00
11,600.0	90.00	91.93	6,930.0	-2,270.00	1,837.0	5,781.7	5,980.8	0.00	0.00	0.00
11,700.0	90.00	91.93	6,930.0	-2,270.00	1,833.6	5,881.6	6,079.3	0.00	0.00	0.00
11,800.0	90.00	91.93	6,930.0	-2,270.00	1,830.3	5,981.6	6,177.8	0.00	0.00	0.00
11,900.0	90.00	91.93	6,930.0	-2,270.00	1,826.9	6,081.5	6,276.3	0.00	0.00	0.00
12,000.0	90.00	91.93	6,930.0	-2,270.00	1,823.5	6,181.4	6,374.9	0.00	0.00	0.00
12,100.0	90.00	91.93	6,930.0	-2,270.00	1,820.2	6,281.4	6,473.4	0.00	0.00	0.00
12,200.0	90.00	91.93	6,930.0	-2,270.00	1,816.8	6,381.3	6,571.9	0.00	0.00	0.00
12,300.0	90.00	91.93	6,930.0	-2,270.00	1,813.5	6,481.3	6,670.4	0.00	0.00	0.00
12,400.0	90.00	91.93	6,930.0	-2,270.00	1,810.1	6,581.2	6,768.9	0.00	0.00	0.00
12,500.0	90.00	91.93	6,930.0	-2,270.00	1,806.7	6,681.2	6,867.4	0.00	0.00	0.00
12,600.0	90.00	91.93	6,930.0	-2,270.00	1,803.4	6,781.1	6,965.9	0.00	0.00	0.00
12,700.0	90.00	91.93	6,930.0	-2,270.00	1,800.0	6,881.1	7,064.4	0.00	0.00	0.00
12,800.0	90.00	91.93	6,930.0	-2,270.00	1,796.6	6,981.0	7,162.9	0.00	0.00	0.00
12,900.0	90.00	91.93	6,930.0	-2,270.00	1,793.3	7,080.9	7,261.4	0.00	0.00	0.00
13,000.0	90.00	91.93	6,930.0	-2,270.00	1,789.9	7,180.9	7,359.9	0.00	0.00	0.00
13,100.0	90.00	91.93	6,930.0	-2,270.00	1,786.6	7,280.8	7,458.4	0.00	0.00	0.00
13,200.0	90.00	91.93	6,930.0	-2,270.00	1,783.2	7,380.8	7,556.9	0.00	0.00	0.00
13,300.0	90.00	91.93	6,930.0	-2,270.00	1,779.8	7,480.7	7,655.4	0.00	0.00	0.00
13,400.0	90.00	91.93	6,930.0	-2,270.00	1,776.5	7,580.7	7,753.9	0.00	0.00	0.00
13,500.0	90.00	91.93	6,930.0	-2,270.00	1,773.1	7,680.6	7,852.5	0.00	0.00	0.00
13,600.0	90.00	91.93	6,930.0	-2,270.00	1,769.7	7,780.5	7,951.0	0.00	0.00	0.00
13,700.0	90.00	91.93	6,930.0	-2,270.00	1,766.4	7,880.5	8,049.5	0.00	0.00	0.00
13,800.0	90.00	91.93	6,930.0	-2,270.00	1,763.0	7,980.4	8,148.0	0.00	0.00	0.00
13,900.0	90.00	91.93	6,930.0	-2,270.00	1,759.6	8,080.4	8,246.5	0.00	0.00	0.00

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WAKE EAST 10N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4660.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4660.0usft (Original Well Elev)
<b>Site:</b>	SW SE SEC. 32 T6N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	WAKE EAST 10N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

## Planned Survey

MD (usft)	Inc (°)	Azi (°)	TVD (usft)	SS (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,000.0	90.00	91.93	6,930.0	-2,270.00	1,756.3	8,180.3	8,345.0	0.00	0.00	0.00
14,100.0	90.00	91.93	6,930.0	-2,270.00	1,752.9	8,280.3	8,443.5	0.00	0.00	0.00
14,200.0	90.00	91.93	6,930.0	-2,270.00	1,749.6	8,380.2	8,542.0	0.00	0.00	0.00
14,300.0	90.00	91.93	6,930.0	-2,270.00	1,746.2	8,480.1	8,640.5	0.00	0.00	0.00
14,400.0	90.00	91.93	6,930.0	-2,270.00	1,742.8	8,580.1	8,739.0	0.00	0.00	0.00
14,500.0	90.00	91.93	6,930.0	-2,270.00	1,739.5	8,680.0	8,837.5	0.00	0.00	0.00
14,600.0	90.00	91.93	6,930.0	-2,270.00	1,736.1	8,780.0	8,936.0	0.00	0.00	0.00
14,700.0	90.00	91.93	6,930.0	-2,270.00	1,732.7	8,879.9	9,034.5	0.00	0.00	0.00
14,800.0	90.00	91.93	6,930.0	-2,270.00	1,729.4	8,979.9	9,133.0	0.00	0.00	0.00
14,900.0	90.00	91.93	6,930.0	-2,270.00	1,726.0	9,079.8	9,231.6	0.00	0.00	0.00
15,000.0	90.00	91.93	6,930.0	-2,270.00	1,722.7	9,179.8	9,330.1	0.00	0.00	0.00
15,100.0	90.00	91.93	6,930.0	-2,270.00	1,719.3	9,279.7	9,428.6	0.00	0.00	0.00
15,200.0	90.00	91.93	6,930.0	-2,270.00	1,715.9	9,379.6	9,527.1	0.00	0.00	0.00
15,300.0	90.00	91.93	6,930.0	-2,270.00	1,712.6	9,479.6	9,625.6	0.00	0.00	0.00
15,400.0	90.00	91.93	6,930.0	-2,270.00	1,709.2	9,579.5	9,724.1	0.00	0.00	0.00
15,500.0	90.00	91.93	6,930.0	-2,270.00	1,705.8	9,679.5	9,822.6	0.00	0.00	0.00
15,600.0	90.00	91.93	6,930.0	-2,270.00	1,702.5	9,779.4	9,921.1	0.00	0.00	0.00
15,700.0	90.00	91.93	6,930.0	-2,270.00	1,699.1	9,879.4	10,019.6	0.00	0.00	0.00
15,800.0	90.00	91.93	6,930.0	-2,270.00	1,695.7	9,979.3	10,118.1	0.00	0.00	0.00
15,900.0	90.00	91.93	6,930.0	-2,270.00	1,692.4	10,079.2	10,216.6	0.00	0.00	0.00
16,000.0	90.00	91.93	6,930.0	-2,270.00	1,689.0	10,179.2	10,315.1	0.00	0.00	0.00
16,100.0	90.00	91.93	6,930.0	-2,270.00	1,685.7	10,279.1	10,413.6	0.00	0.00	0.00
16,200.0	90.00	91.93	6,930.0	-2,270.00	1,682.3	10,379.1	10,512.1	0.00	0.00	0.00
16,300.0	90.00	91.93	6,930.0	-2,270.00	1,678.9	10,479.0	10,610.6	0.00	0.00	0.00
16,400.0	90.00	91.93	6,930.0	-2,270.00	1,675.6	10,579.0	10,709.2	0.00	0.00	0.00
16,500.0	90.00	91.93	6,930.0	-2,270.00	1,672.2	10,678.9	10,807.7	0.00	0.00	0.00
16,600.0	90.00	91.93	6,930.0	-2,270.00	1,668.8	10,778.8	10,906.2	0.00	0.00	0.00
16,700.0	90.00	91.93	6,930.0	-2,270.00	1,665.5	10,878.8	11,004.7	0.00	0.00	0.00
16,800.0	90.00	91.93	6,930.0	-2,270.00	1,662.1	10,978.7	11,103.2	0.00	0.00	0.00
16,900.0	90.00	91.93	6,930.0	-2,270.00	1,658.8	11,078.7	11,201.7	0.00	0.00	0.00
17,000.0	90.00	91.93	6,930.0	-2,270.00	1,655.4	11,178.6	11,300.2	0.00	0.00	0.00
17,100.0	90.00	91.93	6,930.0	-2,270.00	1,652.0	11,278.6	11,398.7	0.00	0.00	0.00
17,200.0	90.00	91.93	6,930.0	-2,270.00	1,648.7	11,378.5	11,497.2	0.00	0.00	0.00
17,300.0	90.00	91.93	6,930.0	-2,270.00	1,645.3	11,478.5	11,595.7	0.00	0.00	0.00
17,400.0	90.00	91.93	6,930.0	-2,270.00	1,641.9	11,578.4	11,694.2	0.00	0.00	0.00
17,500.0	90.00	91.93	6,930.0	-2,270.00	1,638.6	11,678.3	11,792.7	0.00	0.00	0.00
<b>BHL: 2311ft FNL &amp; 460ft FEL of Sec 34</b>										
17,500.9	90.00	91.93	6,930.0	-2,270.00	1,638.5	11,679.3	11,793.6	0.00	0.00	0.00

## Formations

MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,765.5	3,600.0	PARKMAN			
4,374.9	4,140.0	SUSSEX			
4,984.3	4,680.0	SHANNON			
7,420.8	6,800.0	NIOBRARA			

<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well WAKE EAST 10N
<b>Company:</b>	EXTRACTION OIL & GAS	<b>TVD Reference:</b>	KB-EST @ 4660.0usft (Original Well Elev)
<b>Project:</b>	WELD COUNTY, COLORADO (NAD 83)	<b>MD Reference:</b>	KB-EST @ 4660.0usft (Original Well Elev)
<b>Site:</b>	SW SE SEC. 32 T6N R65W 6th P.M.	<b>North Reference:</b>	True
<b>Well:</b>	WAKE EAST 10N	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	ORIGINAL WELLBORE		
<b>Design:</b>	PROPOSAL #1		

## Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
0.0	0.0	0.0	0.0	SHL: 858ft FSL & 1582ft FEL of Sec 32
1,300.0	1,300.0	0.0	0.0	START NUDGE #1 (2°/100ft BUR)
1,600.6	1,600.0	12.3	9.8	SURFACE CASING
1,700.6	1,699.5	20.5	16.4	START NUDGE #2 (2°/100ft BUR)
2,780.3	2,727.0	262.7	210.4	EOB TO 27.61° INC
7,092.4	6,548.1	1,822.4	1,459.6	KOP (10°/100ft DGLG)
7,831.4	6,930.0	1,963.7	2,015.2	HZ LP: 2268ft FNL & 460ft FWL of Sec 33
17,500.9	6,930.0	1,638.5	11,679.3	BHL: 2311ft FNL & 460ft FEL of Sec 34