

EXTRACTION OIL & GAS

WELD COUNTY, COLORADO (NAD 83)

NW SE SEC. 32 T6N R65W 6th P.M.

WAKE NORTH 14

ORIGINAL WELLBORE

29 June, 2016

Plan: PROPOSAL #1

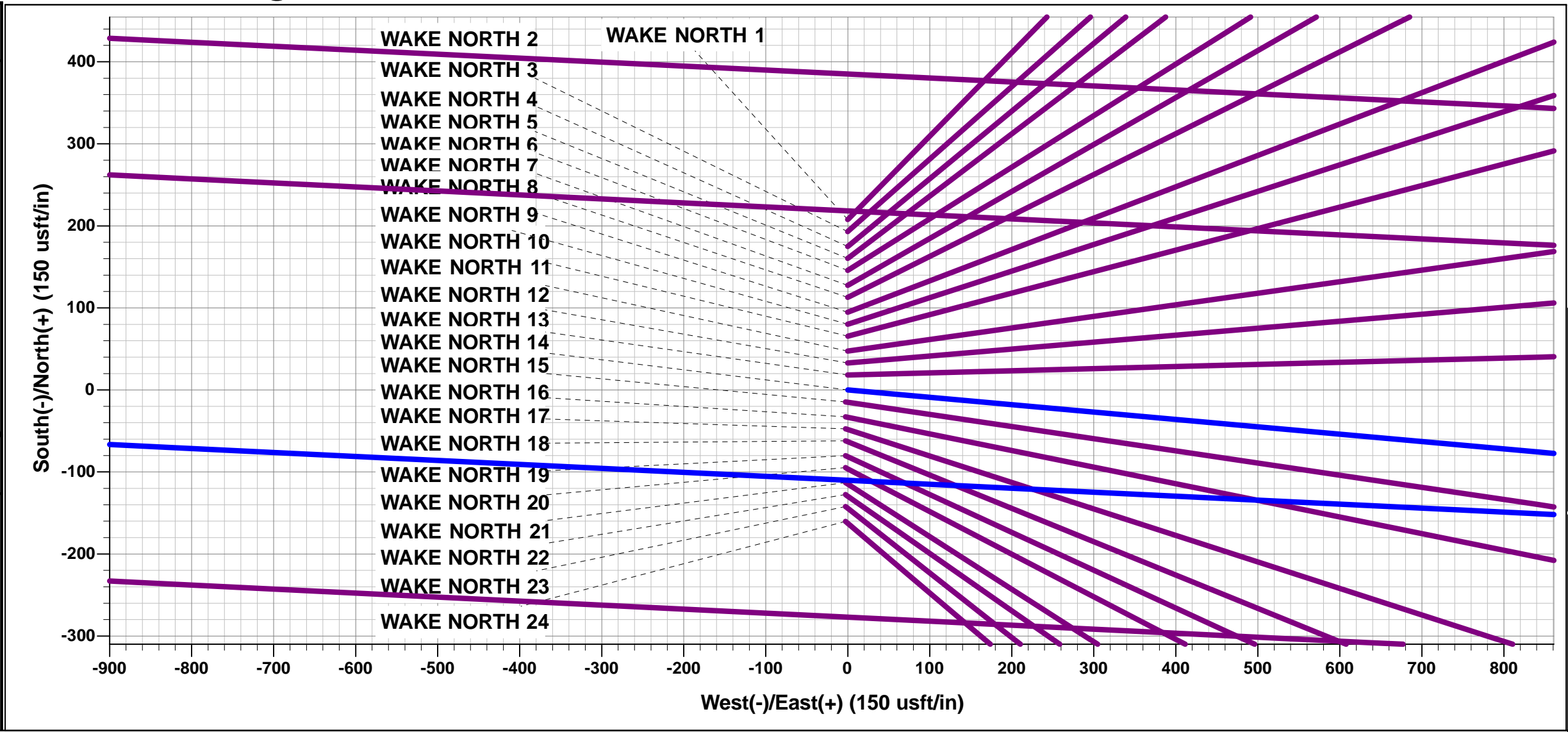




Project: WELD COUNTY, COLORADO (NAD 83)
Site: NW SE SEC. 32 T6N R65W 6th P.M.
Well: WAKE NORTH 14
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Dep	Annotation	
1100.0	1100.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE #1 (2°/100ft BUR)	
1600.0	1602.6	10.05	95.14	-3.9	43.8	-43.9	44.0	9 5/8" SURFACE CASING	
2428.7	2481.7	27.63	95.14	-29.3	325.5	-326.3	326.8	START NUDGE #2 (2°/100ft BUR)	
6061.7	6582.4	27.63	95.14	-199.5	2219.8	-2225.4	2228.8	KOP (10°/100ft DGLG)	
6900.0	7758.5	90.00	272.77	-193.0	1711.8	-1717.5	2868.8	HZ LANDING PNT - WAKE NORTH 14	
6900.0	17500.7	90.00	272.77	278.2	-8019.0	8023.8	12611.0	BHL - WAKE NORTH 14	

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
HZ LP - WAKE NORTH 14	6900.0	-193.0	1711.8	40.442510	-104.679430
BHL - WAKE NORTH 14	6900.0	278.2	-8019.0	40.443800	-104.714390



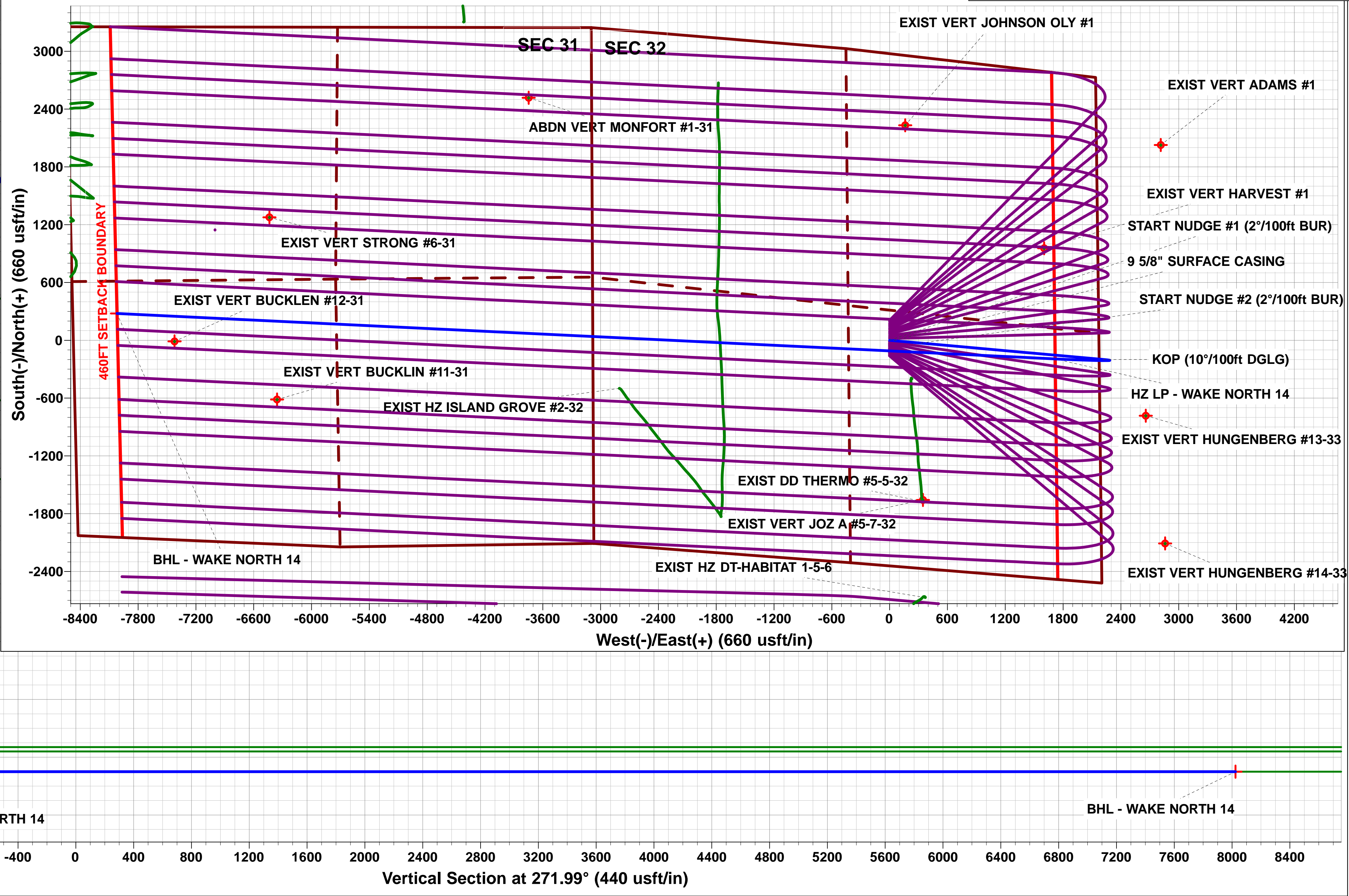
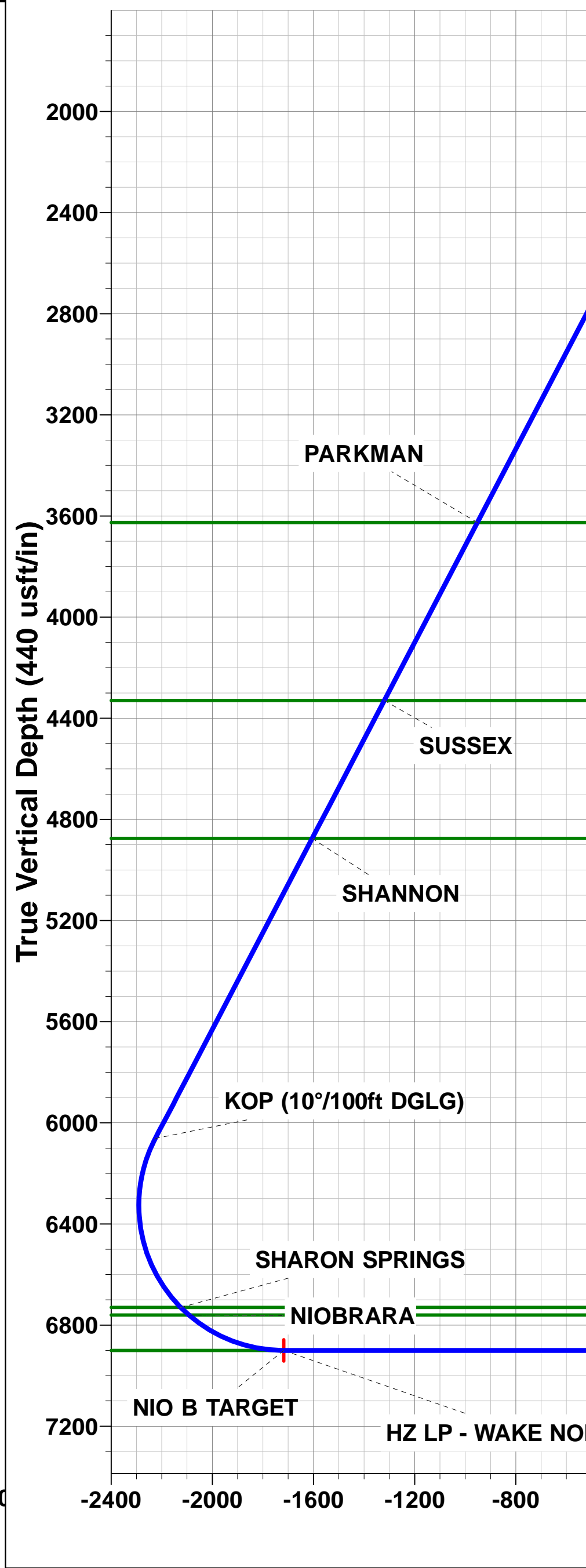
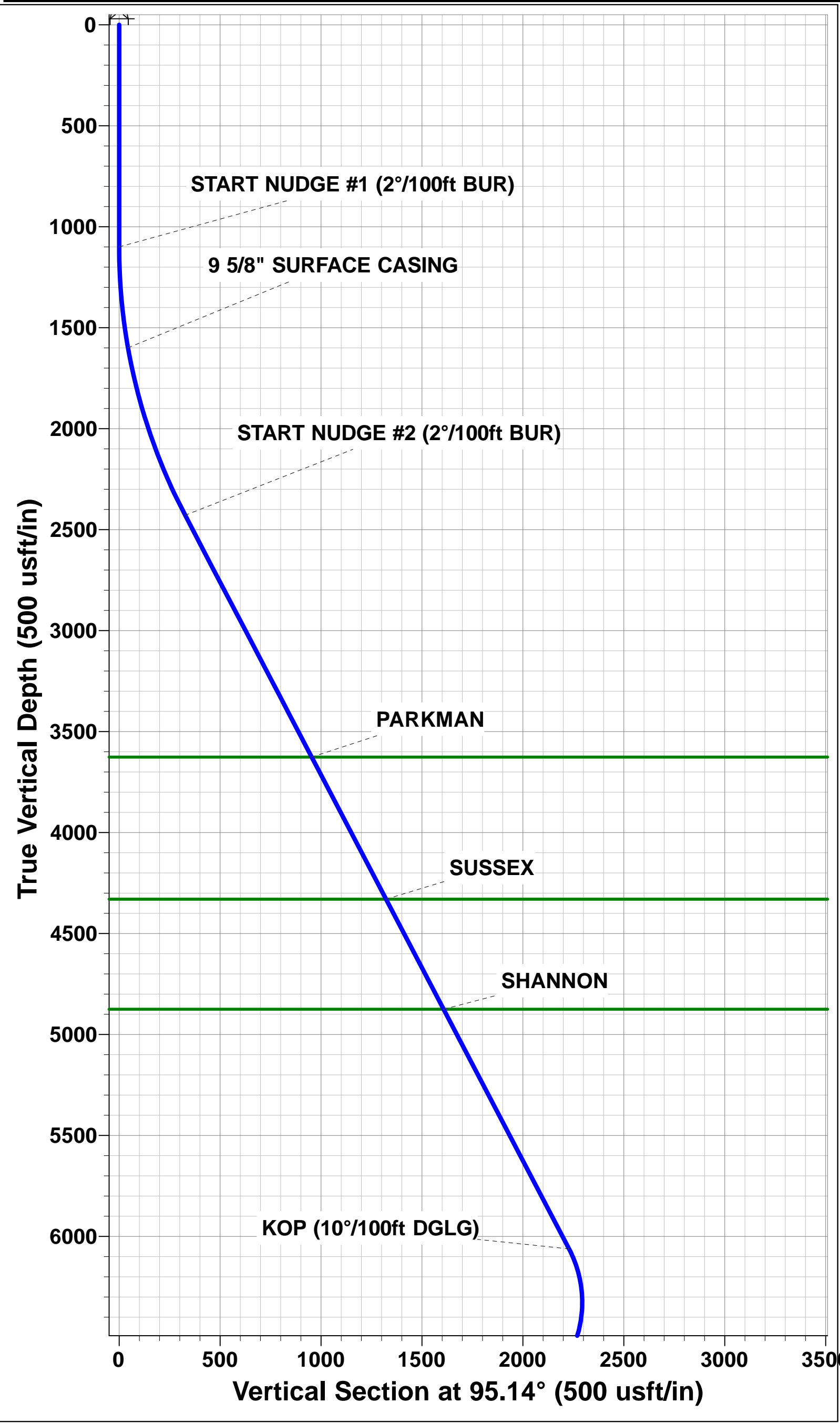
FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3626.0	3833.1	PARKMAN
4330.0	4627.7	SUSSEX
4875.0	5242.9	SHANNON
6730.0	7305.4	SHARON SPRINGS
6760.0	7349.3	NIOBRARA
6900.0	7758.5	NIO B TARGET

PROPOSED LOCAL COORDINATES		
SHL: 2336ft FSL & 2172ft FEL of Sec 32		
LP: 2281ft FSL & 460ft FEL of Sec 32		
BHL: 2321ft FSL & 460ft FWL of Sec 31		

T M

Azimuths to True North
Magnetic North: 8.28°

Magnetic Field
Strength: 52534.7snT
Dip Angle: 66.93°
Date: 29/06/2016
Model: IGRF2015



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well WAKE NORTH 14
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4666.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4666.0usft (Original Well Elev)
Site:	NW SE SEC. 32 T6N R65W 6th P.M.	North Reference:	True
Well:	WAKE NORTH 14	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

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

Site	NW SE SEC. 32 T6N R65W 6th P.M.		
Site Position:		Northing:	1,405,488.40 usft
From:	Lat/Long	Easting:	3,226,675.31 usft
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft
		Latitude:	40.443610
		Longitude:	-104.685580
		Grid Convergence:	0.53 °

Well	WAKE NORTH 14		
Well Position	+N/-S	-207.7 usft	Northing:
	+E/-W	0.0 usft	Easting:
Position Uncertainty	0.0 usft		Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	29/06/2016	8.28	66.93	52,535

Design	PROPOSAL #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	6,900.0	0.0	0.0	271.99

Plan Sections											
MD (usft)	Inc (°)	Azi (°)	Vertical Depth	SS (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	-4,666.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	-3,566.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,602.6	10.05	95.14	1,600.0	-3,066.0	-3.9	43.8	2.00	2.00	0.00	95.14	
2,481.7	27.63	95.14	2,428.7	-2,237.3	-29.3	325.5	2.00	2.00	0.00	-0.01	
6,582.4	27.63	95.14	6,061.7	1,395.7	-199.5	2,219.8	0.00	0.00	0.00	0.00	
7,758.5	90.00	272.77	6,900.0	2,234.0	-193.0	1,711.8	10.00	5.30	15.10	177.33	HZ LP - WAKE NOI
17,500.7	90.00	272.77	6,900.0	2,234.0	278.2	-8,019.0	0.00	0.00	0.00	0.00	BHL - WAKE NOR1

Planning Report



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Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4666.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4666.0usft (Original Well Elev)
Site:	NW SE SEC. 32 T6N R65W 6th P.M.	North Reference:	True
Well:	WAKE NORTH 14	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	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)
0.0	0.00	0.00	0.0	4,666.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,566.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,466.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,366.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,266.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,166.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,066.00	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	3,966.00	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	3,866.00	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	3,766.00	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	3,666.00	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE #1 (2°/100ft BUR)										
1,100.0	0.00	0.00	1,100.0	3,566.00	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	2.00	95.14	1,200.0	3,466.02	-0.2	1.7	-1.7	2.00	2.00	0.00
1,300.0	4.00	95.14	1,299.8	3,366.16	-0.6	7.0	-7.0	2.00	2.00	0.00
1,400.0	6.00	95.14	1,399.5	3,266.55	-1.4	15.6	-15.7	2.00	2.00	0.00
1,500.0	8.00	95.14	1,498.7	3,167.30	-2.5	27.8	-27.8	2.00	2.00	0.00
1,600.0	10.00	95.14	1,597.5	3,068.53	-3.9	43.3	-43.5	2.00	2.00	0.00
9 5/8" SURFACE CASING										
1,602.6	10.05	95.14	1,600.0	3,066.00	-3.9	43.8	-43.9	2.00	2.00	0.00
1,700.0	12.00	95.14	1,695.6	2,970.38	-5.6	62.4	-62.5	2.00	2.00	0.00
1,800.0	14.00	95.14	1,793.1	2,872.94	-7.6	84.8	-85.0	2.00	2.00	0.00
1,900.0	16.00	95.14	1,889.6	2,776.36	-9.9	110.5	-110.8	2.00	2.00	0.00
2,000.0	18.00	95.14	1,985.3	2,680.73	-12.6	139.6	-140.0	2.00	2.00	0.00
2,100.0	20.00	95.14	2,079.8	2,586.18	-15.5	172.1	-172.5	2.00	2.00	0.00
2,200.0	22.00	95.14	2,173.2	2,492.83	-18.7	207.8	-208.3	2.00	2.00	0.00
2,300.0	24.00	95.14	2,265.2	2,400.79	-22.2	246.7	-247.3	2.00	2.00	0.00
2,400.0	26.00	95.14	2,355.8	2,310.16	-26.0	288.8	-289.5	2.00	2.00	0.00
START NUDGE #2 (2°/100ft BUR)										
2,481.7	27.63	95.14	2,428.7	2,237.26	-29.3	325.5	-326.3	2.00	2.00	0.00
2,500.0	27.63	95.14	2,445.0	2,221.04	-30.0	333.9	-334.8	0.00	0.00	0.00
2,600.0	27.63	95.14	2,533.6	2,132.44	-34.2	380.1	-381.1	0.00	0.00	0.00
2,700.0	27.63	95.14	2,622.2	2,043.85	-38.3	426.3	-427.4	0.00	0.00	0.00
2,800.0	27.63	95.14	2,710.7	1,955.26	-42.5	472.5	-473.7	0.00	0.00	0.00
2,900.0	27.63	95.14	2,799.3	1,866.66	-46.6	518.7	-520.0	0.00	0.00	0.00
3,000.0	27.63	95.14	2,887.9	1,778.07	-50.8	564.9	-566.3	0.00	0.00	0.00
3,100.0	27.63	95.14	2,976.5	1,689.48	-54.9	611.1	-612.6	0.00	0.00	0.00
3,200.0	27.63	95.14	3,065.1	1,600.88	-59.1	657.3	-659.0	0.00	0.00	0.00
3,300.0	27.63	95.14	3,153.7	1,512.29	-63.2	703.5	-705.3	0.00	0.00	0.00
3,400.0	27.63	95.14	3,242.3	1,423.70	-67.4	749.7	-751.6	0.00	0.00	0.00
3,500.0	27.63	95.14	3,330.9	1,335.10	-71.5	795.9	-797.9	0.00	0.00	0.00
3,600.0	27.63	95.14	3,419.5	1,246.51	-75.7	842.1	-844.2	0.00	0.00	0.00
3,700.0	27.63	95.14	3,508.1	1,157.92	-79.8	888.3	-890.5	0.00	0.00	0.00
3,800.0	27.63	95.14	3,596.7	1,069.33	-84.0	934.5	-936.8	0.00	0.00	0.00
PARKMAN										
3,833.1	27.63	95.14	3,626.0	1,040.00	-85.4	949.8	-952.2	0.00	0.00	0.00
3,900.0	27.63	95.14	3,685.3	980.73	-88.1	980.7	-983.1	0.00	0.00	0.00
4,000.0	27.63	95.14	3,773.9	892.14	-92.3	1,026.9	-1,029.4	0.00	0.00	0.00
4,100.0	27.63	95.14	3,862.5	803.55	-96.4	1,073.1	-1,075.8	0.00	0.00	0.00
4,200.0	27.63	95.14	3,951.0	714.95	-100.6	1,119.3	-1,122.1	0.00	0.00	0.00
4,300.0	27.63	95.14	4,039.6	626.36	-104.7	1,165.5	-1,168.4	0.00	0.00	0.00
4,400.0	27.63	95.14	4,128.2	537.77	-108.9	1,211.6	-1,214.7	0.00	0.00	0.00
4,500.0	27.63	95.14	4,216.8	449.17	-113.1	1,257.8	-1,261.0	0.00	0.00	0.00
4,600.0	27.63	95.14	4,305.4	360.58	-117.2	1,304.0	-1,307.3	0.00	0.00	0.00

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Well:	WAKE NORTH 14	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	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)
SUSSEX										
4,627.7	27.63	95.14	4,330.0	336.00	-118.4	1,316.9	-1,320.2	0.00	0.00	0.00
4,700.0	27.63	95.14	4,394.0	271.99	-121.4	1,350.2	-1,353.6	0.00	0.00	0.00
4,800.0	27.63	95.14	4,482.6	183.39	-125.5	1,396.4	-1,399.9	0.00	0.00	0.00
4,900.0	27.63	95.14	4,571.2	94.80	-129.7	1,442.6	-1,446.3	0.00	0.00	0.00
5,000.0	27.63	95.14	4,659.8	6.21	-133.8	1,488.8	-1,492.6	0.00	0.00	0.00
5,100.0	27.63	95.14	4,748.4	-82.39	-138.0	1,535.0	-1,538.9	0.00	0.00	0.00
5,200.0	27.63	95.14	4,837.0	-170.98	-142.1	1,581.2	-1,585.2	0.00	0.00	0.00
SHANNON										
5,242.9	27.63	95.14	4,875.0	-209.00	-143.9	1,601.0	-1,605.1	0.00	0.00	0.00
5,300.0	27.63	95.14	4,925.6	-259.57	-146.3	1,627.4	-1,631.5	0.00	0.00	0.00
5,400.0	27.63	95.14	5,014.2	-348.17	-150.4	1,673.6	-1,677.8	0.00	0.00	0.00
5,500.0	27.63	95.14	5,102.8	-436.76	-154.6	1,719.8	-1,724.1	0.00	0.00	0.00
5,600.0	27.63	95.14	5,191.4	-525.35	-158.7	1,766.0	-1,770.4	0.00	0.00	0.00
5,700.0	27.63	95.14	5,279.9	-613.94	-162.9	1,812.2	-1,816.7	0.00	0.00	0.00
5,800.0	27.63	95.14	5,368.5	-702.54	-167.0	1,858.4	-1,863.1	0.00	0.00	0.00
5,900.0	27.63	95.14	5,457.1	-791.13	-171.2	1,904.6	-1,909.4	0.00	0.00	0.00
6,000.0	27.63	95.14	5,545.7	-879.72	-175.3	1,950.8	-1,955.7	0.00	0.00	0.00
6,100.0	27.63	95.14	5,634.3	-968.32	-179.5	1,997.0	-2,002.0	0.00	0.00	0.00
6,200.0	27.63	95.14	5,722.9	-1,056.91	-183.6	2,043.2	-2,048.3	0.00	0.00	0.00
6,300.0	27.63	95.14	5,811.5	-1,145.50	-187.8	2,089.4	-2,094.6	0.00	0.00	0.00
6,400.0	27.63	95.14	5,900.1	-1,234.10	-191.9	2,135.6	-2,140.9	0.00	0.00	0.00
6,500.0	27.63	95.14	5,988.7	-1,322.69	-196.1	2,181.8	-2,187.2	0.00	0.00	0.00
KOP (10°/100ft DGLG)										
6,582.4	27.63	95.14	6,061.7	-1,395.72	-199.5	2,219.8	-2,225.4	0.00	0.00	0.00
6,600.0	25.88	95.32	6,077.4	-1,411.41	-200.2	2,227.7	-2,233.3	10.00	-9.99	1.07
6,700.0	15.90	97.12	6,170.7	-1,504.72	-204.0	2,263.1	-2,268.8	10.00	-9.98	1.80
6,800.0	5.98	104.66	6,268.8	-1,602.78	-207.0	2,281.8	-2,287.6	10.00	-9.92	7.55
6,900.0	4.33	256.20	6,368.6	-1,702.62	-209.2	2,283.2	-2,289.1	10.00	-1.65	151.54
7,000.0	14.20	267.88	6,467.2	-1,801.20	-210.6	2,267.2	-2,273.1	10.00	9.87	11.67
7,100.0	24.18	270.02	6,561.5	-1,895.52	-211.0	2,234.4	-2,240.4	10.00	9.98	2.14
7,200.0	34.17	270.95	6,648.7	-1,982.73	-210.5	2,185.7	-2,191.7	10.00	9.99	0.93
7,300.0	44.16	271.50	6,726.2	-2,060.16	-209.2	2,122.6	-2,128.6	10.00	9.99	0.55
SHARON SPRINGS										
7,305.4	44.70	271.52	6,730.0	-2,064.00	-209.1	2,118.9	-2,124.9	10.00	10.00	0.44
NIOBRARA										
7,349.3	49.09	271.70	6,760.0	-2,094.00	-208.2	2,086.8	-2,092.8	10.00	10.00	0.41
7,400.0	54.16	271.88	6,791.5	-2,125.47	-206.9	2,047.1	-2,053.1	10.00	10.00	0.35
7,500.0	64.16	272.17	6,842.7	-2,176.68	-203.9	1,961.4	-1,967.3	10.00	10.00	0.29
7,600.0	74.15	272.42	6,878.2	-2,212.22	-200.1	1,868.2	-1,874.0	10.00	10.00	0.25
7,700.0	84.15	272.65	6,897.0	-2,231.02	-195.8	1,770.2	-1,775.9	10.00	10.00	0.22
HZ LANDING PNT - WAKE NORTH 14 - NIO B TARGET										
7,758.5	90.00	272.77	6,900.0	-2,234.00	-193.0	1,711.8	-1,717.5	10.00	10.00	0.22
7,800.0	90.00	272.77	6,900.0	-2,234.00	-191.0	1,670.4	-1,676.0	0.00	0.00	0.00
7,900.0	90.00	272.77	6,900.0	-2,234.00	-186.2	1,570.5	-1,576.0	0.00	0.00	0.00
8,000.0	90.00	272.77	6,900.0	-2,234.00	-181.3	1,470.6	-1,476.0	0.00	0.00	0.00
8,100.0	90.00	272.77	6,900.0	-2,234.00	-176.5	1,370.7	-1,376.0	0.00	0.00	0.00
8,200.0	90.00	272.77	6,900.0	-2,234.00	-171.7	1,270.9	-1,276.0	0.00	0.00	0.00
8,300.0	90.00	272.77	6,900.0	-2,234.00	-166.8	1,171.0	-1,176.1	0.00	0.00	0.00
8,400.0	90.00	272.77	6,900.0	-2,234.00	-162.0	1,071.1	-1,076.1	0.00	0.00	0.00
8,500.0	90.00	272.77	6,900.0	-2,234.00	-157.2	971.2	-976.1	0.00	0.00	0.00
8,600.0	90.00	272.77	6,900.0	-2,234.00	-152.3	871.3	-876.1	0.00	0.00	0.00
8,700.0	90.00	272.77	6,900.0	-2,234.00	-147.5	771.4	-776.1	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well WAKE NORTH 14
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4666.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4666.0usft (Original Well Elev)
Site:	NW SE SEC. 32 T6N R65W 6th P.M.	North Reference:	True
Well:	WAKE NORTH 14	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	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)
8,800.0	90.00	272.77	6,900.0	-2,234.00	-142.6	671.6	-676.1	0.00	0.00	0.00
8,900.0	90.00	272.77	6,900.0	-2,234.00	-137.8	571.7	-576.1	0.00	0.00	0.00
9,000.0	90.00	272.77	6,900.0	-2,234.00	-133.0	471.8	-476.1	0.00	0.00	0.00
9,100.0	90.00	272.77	6,900.0	-2,234.00	-128.1	371.9	-376.1	0.00	0.00	0.00
9,200.0	90.00	272.77	6,900.0	-2,234.00	-123.3	272.0	-276.1	0.00	0.00	0.00
9,300.0	90.00	272.77	6,900.0	-2,234.00	-118.5	172.1	-176.1	0.00	0.00	0.00
9,400.0	90.00	272.77	6,900.0	-2,234.00	-113.6	72.3	-76.2	0.00	0.00	0.00
9,500.0	90.00	272.77	6,900.0	-2,234.00	-108.8	-27.6	23.8	0.00	0.00	0.00
9,600.0	90.00	272.77	6,900.0	-2,234.00	-104.0	-127.5	123.8	0.00	0.00	0.00
9,700.0	90.00	272.77	6,900.0	-2,234.00	-99.1	-227.4	223.8	0.00	0.00	0.00
9,800.0	90.00	272.77	6,900.0	-2,234.00	-94.3	-327.3	323.8	0.00	0.00	0.00
9,900.0	90.00	272.77	6,900.0	-2,234.00	-89.4	-427.2	423.8	0.00	0.00	0.00
10,000.0	90.00	272.77	6,900.0	-2,234.00	-84.6	-527.0	523.8	0.00	0.00	0.00
10,100.0	90.00	272.77	6,900.0	-2,234.00	-79.8	-626.9	623.8	0.00	0.00	0.00
10,200.0	90.00	272.77	6,900.0	-2,234.00	-74.9	-726.8	723.8	0.00	0.00	0.00
10,300.0	90.00	272.77	6,900.0	-2,234.00	-70.1	-826.7	823.8	0.00	0.00	0.00
10,400.0	90.00	272.77	6,900.0	-2,234.00	-65.3	-926.6	923.7	0.00	0.00	0.00
10,500.0	90.00	272.77	6,900.0	-2,234.00	-60.4	-1,026.5	1,023.7	0.00	0.00	0.00
10,600.0	90.00	272.77	6,900.0	-2,234.00	-55.6	-1,126.3	1,123.7	0.00	0.00	0.00
10,700.0	90.00	272.77	6,900.0	-2,234.00	-50.7	-1,226.2	1,223.7	0.00	0.00	0.00
10,800.0	90.00	272.77	6,900.0	-2,234.00	-45.9	-1,326.1	1,323.7	0.00	0.00	0.00
10,900.0	90.00	272.77	6,900.0	-2,234.00	-41.1	-1,426.0	1,423.7	0.00	0.00	0.00
11,000.0	90.00	272.77	6,900.0	-2,234.00	-36.2	-1,525.9	1,523.7	0.00	0.00	0.00
11,100.0	90.00	272.77	6,900.0	-2,234.00	-31.4	-1,625.7	1,623.7	0.00	0.00	0.00
11,200.0	90.00	272.77	6,900.0	-2,234.00	-26.6	-1,725.6	1,723.7	0.00	0.00	0.00
11,300.0	90.00	272.77	6,900.0	-2,234.00	-21.7	-1,825.5	1,823.7	0.00	0.00	0.00
11,400.0	90.00	272.77	6,900.0	-2,234.00	-16.9	-1,925.4	1,923.7	0.00	0.00	0.00
11,500.0	90.00	272.77	6,900.0	-2,234.00	-12.1	-2,025.3	2,023.6	0.00	0.00	0.00
11,600.0	90.00	272.77	6,900.0	-2,234.00	-7.2	-2,125.2	2,123.6	0.00	0.00	0.00
11,700.0	90.00	272.77	6,900.0	-2,234.00	-2.4	-2,225.0	2,223.6	0.00	0.00	0.00
11,800.0	90.00	272.77	6,900.0	-2,234.00	2.5	-2,324.9	2,323.6	0.00	0.00	0.00
11,900.0	90.00	272.77	6,900.0	-2,234.00	7.3	-2,424.8	2,423.6	0.00	0.00	0.00
12,000.0	90.00	272.77	6,900.0	-2,234.00	12.1	-2,524.7	2,523.6	0.00	0.00	0.00
12,100.0	90.00	272.77	6,900.0	-2,234.00	17.0	-2,624.6	2,623.6	0.00	0.00	0.00
12,200.0	90.00	272.77	6,900.0	-2,234.00	21.8	-2,724.5	2,723.6	0.00	0.00	0.00
12,300.0	90.00	272.77	6,900.0	-2,234.00	26.6	-2,824.3	2,823.6	0.00	0.00	0.00
12,400.0	90.00	272.77	6,900.0	-2,234.00	31.5	-2,924.2	2,923.6	0.00	0.00	0.00
12,500.0	90.00	272.77	6,900.0	-2,234.00	36.3	-3,024.1	3,023.6	0.00	0.00	0.00
12,600.0	90.00	272.77	6,900.0	-2,234.00	41.2	-3,124.0	3,123.5	0.00	0.00	0.00
12,700.0	90.00	272.77	6,900.0	-2,234.00	46.0	-3,223.9	3,223.5	0.00	0.00	0.00
12,800.0	90.00	272.77	6,900.0	-2,234.00	50.8	-3,323.8	3,323.5	0.00	0.00	0.00
12,900.0	90.00	272.77	6,900.0	-2,234.00	55.7	-3,423.6	3,423.5	0.00	0.00	0.00
13,000.0	90.00	272.77	6,900.0	-2,234.00	60.5	-3,523.5	3,523.5	0.00	0.00	0.00
13,100.0	90.00	272.77	6,900.0	-2,234.00	65.3	-3,623.4	3,623.5	0.00	0.00	0.00
13,200.0	90.00	272.77	6,900.0	-2,234.00	70.2	-3,723.3	3,723.5	0.00	0.00	0.00
13,300.0	90.00	272.77	6,900.0	-2,234.00	75.0	-3,823.2	3,823.5	0.00	0.00	0.00
13,400.0	90.00	272.77	6,900.0	-2,234.00	79.8	-3,923.1	3,923.5	0.00	0.00	0.00
13,500.0	90.00	272.77	6,900.0	-2,234.00	84.7	-4,022.9	4,023.5	0.00	0.00	0.00
13,600.0	90.00	272.77	6,900.0	-2,234.00	89.5	-4,122.8	4,123.4	0.00	0.00	0.00
13,700.0	90.00	272.77	6,900.0	-2,234.00	94.4	-4,222.7	4,223.4	0.00	0.00	0.00
13,800.0	90.00	272.77	6,900.0	-2,234.00	99.2	-4,322.6	4,323.4	0.00	0.00	0.00
13,900.0	90.00	272.77	6,900.0	-2,234.00	104.0	-4,422.5	4,423.4	0.00	0.00	0.00
14,000.0	90.00	272.77	6,900.0	-2,234.00	108.9	-4,522.4	4,523.4	0.00	0.00	0.00
14,100.0	90.00	272.77	6,900.0	-2,234.00	113.7	-4,622.2	4,623.4	0.00	0.00	0.00

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well WAKE NORTH 14
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4666.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4666.0usft (Original Well Elev)
Site:	NW SE SEC. 32 T6N R65W 6th P.M.	North Reference:	True
Well:	WAKE NORTH 14	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	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)
14,200.0	90.00	272.77	6,900.0	-2,234.00	118.5	-4,722.1	4,723.4	0.00	0.00	0.00
14,300.0	90.00	272.77	6,900.0	-2,234.00	123.4	-4,822.0	4,823.4	0.00	0.00	0.00
14,400.0	90.00	272.77	6,900.0	-2,234.00	128.2	-4,921.9	4,923.4	0.00	0.00	0.00
14,500.0	90.00	272.77	6,900.0	-2,234.00	133.1	-5,021.8	5,023.4	0.00	0.00	0.00
14,600.0	90.00	272.77	6,900.0	-2,234.00	137.9	-5,121.7	5,123.4	0.00	0.00	0.00
14,700.0	90.00	272.77	6,900.0	-2,234.00	142.7	-5,221.5	5,223.3	0.00	0.00	0.00
14,800.0	90.00	272.77	6,900.0	-2,234.00	147.6	-5,321.4	5,323.3	0.00	0.00	0.00
14,900.0	90.00	272.77	6,900.0	-2,234.00	152.4	-5,421.3	5,423.3	0.00	0.00	0.00
15,000.0	90.00	272.77	6,900.0	-2,234.00	157.2	-5,521.2	5,523.3	0.00	0.00	0.00
15,100.0	90.00	272.77	6,900.0	-2,234.00	162.1	-5,621.1	5,623.3	0.00	0.00	0.00
15,200.0	90.00	272.77	6,900.0	-2,234.00	166.9	-5,721.0	5,723.3	0.00	0.00	0.00
15,300.0	90.00	272.77	6,900.0	-2,234.00	171.7	-5,820.8	5,823.3	0.00	0.00	0.00
15,400.0	90.00	272.77	6,900.0	-2,234.00	176.6	-5,920.7	5,923.3	0.00	0.00	0.00
15,500.0	90.00	272.77	6,900.0	-2,234.00	181.4	-6,020.6	6,023.3	0.00	0.00	0.00
15,600.0	90.00	272.77	6,900.0	-2,234.00	186.3	-6,120.5	6,123.3	0.00	0.00	0.00
15,700.0	90.00	272.77	6,900.0	-2,234.00	191.1	-6,220.4	6,223.3	0.00	0.00	0.00
15,800.0	90.00	272.77	6,900.0	-2,234.00	195.9	-6,320.2	6,323.2	0.00	0.00	0.00
15,900.0	90.00	272.77	6,900.0	-2,234.00	200.8	-6,420.1	6,423.2	0.00	0.00	0.00
16,000.0	90.00	272.77	6,900.0	-2,234.00	205.6	-6,520.0	6,523.2	0.00	0.00	0.00
16,100.0	90.00	272.77	6,900.0	-2,234.00	210.4	-6,619.9	6,623.2	0.00	0.00	0.00
16,200.0	90.00	272.77	6,900.0	-2,234.00	215.3	-6,719.8	6,723.2	0.00	0.00	0.00
16,300.0	90.00	272.77	6,900.0	-2,234.00	220.1	-6,819.7	6,823.2	0.00	0.00	0.00
16,400.0	90.00	272.77	6,900.0	-2,234.00	224.9	-6,919.5	6,923.2	0.00	0.00	0.00
16,500.0	90.00	272.77	6,900.0	-2,234.00	229.8	-7,019.4	7,023.2	0.00	0.00	0.00
16,600.0	90.00	272.77	6,900.0	-2,234.00	234.6	-7,119.3	7,123.2	0.00	0.00	0.00
16,700.0	90.00	272.77	6,900.0	-2,234.00	239.5	-7,219.2	7,223.2	0.00	0.00	0.00
16,800.0	90.00	272.77	6,900.0	-2,234.00	244.3	-7,319.1	7,323.1	0.00	0.00	0.00
16,900.0	90.00	272.77	6,900.0	-2,234.00	249.1	-7,419.0	7,423.1	0.00	0.00	0.00
17,000.0	90.00	272.77	6,900.0	-2,234.00	254.0	-7,518.8	7,523.1	0.00	0.00	0.00
17,100.0	90.00	272.77	6,900.0	-2,234.00	258.8	-7,618.7	7,623.1	0.00	0.00	0.00
17,200.0	90.00	272.77	6,900.0	-2,234.00	263.6	-7,718.6	7,723.1	0.00	0.00	0.00
17,300.0	90.00	272.77	6,900.0	-2,234.00	268.5	-7,818.5	7,823.1	0.00	0.00	0.00
17,400.0	90.00	272.77	6,900.0	-2,234.00	273.3	-7,918.4	7,923.1	0.00	0.00	0.00
17,500.0	90.00	272.77	6,900.0	-2,234.00	278.2	-8,018.3	8,023.1	0.00	0.00	0.00
BHL - WAKE NORTH 14										
17,500.7	90.00	272.77	6,900.0	-2,234.00	278.2	-8,019.0	8,023.8	0.00	0.00	0.00

Formations

MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,833.1	3,626.0	PARKMAN			
4,627.7	4,330.0	SUSSEX			
5,242.9	4,875.0	SHANNON			
7,305.4	6,730.0	SHARON SPRINGS			
7,349.3	6,760.0	NIOBRARA			
7,758.5	6,900.0	NIO B TARGET			

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well WAKE NORTH 14
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4666.0usft (Original Well Elev)
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4666.0usft (Original Well Elev)
Site:	NW SE SEC. 32 T6N R65W 6th P.M.	North Reference:	True
Well:	WAKE NORTH 14	Survey Calculation Method:	Minimum Curvature
Wellbore:	ORIGINAL WELLBORE		
Design:	PROPOSAL #1		

Plan Annotations

MD (usft)	TVD (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,100.0	1,100.0	0.0	0.0	START NUDGE #1 (2°/100ft BUR)
1,602.6	1,600.0	-3.9	43.8	9 5/8" SURFACE CASING
2,481.7	2,428.7	-29.3	325.5	START NUDGE #2 (2°/100ft BUR)
6,582.4	6,061.7	-199.5	2,219.8	KOP (10°/100ft DGLG)
7,758.5	6,900.0	-193.0	1,711.8	HZ LANDING PNT - WAKE NORTH 14
17,500.7	6,900.0	278.2	-8,019.0	BHL - WAKE NORTH 14