

EXTRACTION OIL & GAS

WELD COUNTY, COLORADO (NAD 83)

SE NE SEC. 9 T6N R67W 6th P.M.

WINDER SOUTH 6

ORIGINAL WELLBORE

15 June, 2016

Plan: PROPOSAL #1

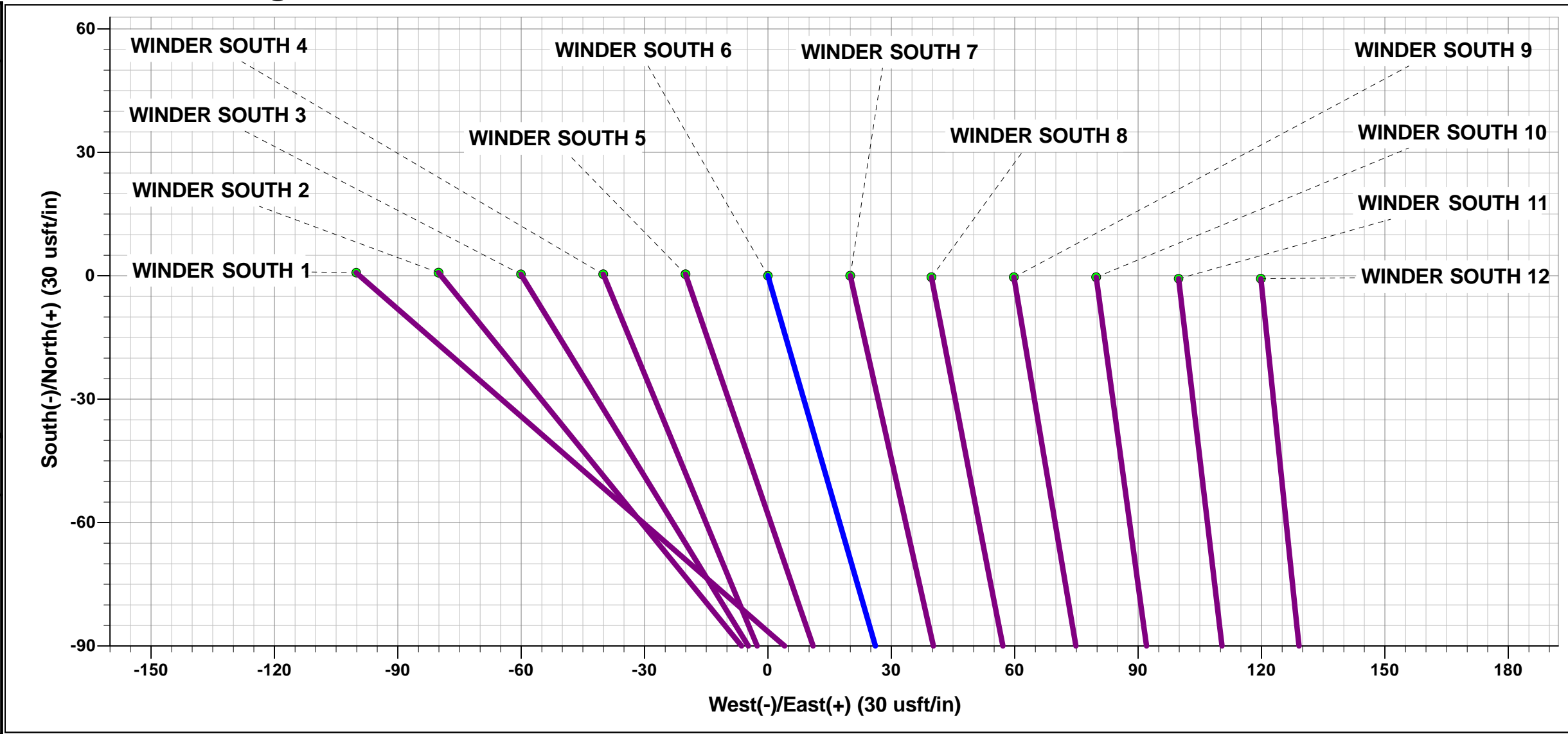




Project: WELD COUNTY, COLORADO (NAD 83)
Site: SE NE SEC. 9 T6N R67W 6th P.M.
Well: WINDER SOUTH 6
Wellbore: ORIGINAL WELLBORE
Design: PROPOSAL #1

ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	VSec	Dep	Annotation	
0.0	0.0	0.00	0.00	0.0	0.0	0.0	0.0	SHL: 2306ft FNL & 428ft FEL of Sec 9	
700.0	700.0	0.00	0.00	0.0	0.0	0.0	0.0	START NUDGE (2°/100ft BUR)	
1418.1	1425.8	14.52	163.81	-87.8	25.5	-12.0	91.5	EOB TO 14.52° INC	
6462.7	6636.8	14.52	163.81	-1342.2	389.7	-182.8	1397.6	KOP (10°/100ft DGLG)	
7058.0	7577.3	90.00	270.15	-1488.6	-182.2	404.7	2020.0	HZ LP *NEW*: 1635ft FSL & 603ft FEL of Sec 9	
7058.0	16985.9	90.00	270.15	-1463.8	-9590.8	9701.8	11428.6	BHL: 1705ft FSL & 460ft FWL of Sec 8	

WELLBORE TARGET DETAILS (LAT/LONG)					
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
HZ LP *NEW* - WINDER SOUTH 6	7058.0	-1488.6	-182.2	40.498587	-104.891066
BHL - WINDER SOUTH 6	7058.0	-1463.8	-9590.8	40.498650	-104.924896



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3580.0	3659.0	PARKMAN
4140.0	4237.5	SUSSEX
4700.0	4816.0	SHANNON
6905.0	7141.8	SHARON SPRINGS
6951.0	7215.9	NIOBRARA
7058.0	7577.3	NIO B TARGET

PROPOSED LOCAL COORDINATES		
SHL: 2306ft FNL & 428ft FEL of Sec 9		
LP *NEW*: 1635ft FSL & 603ft FEL of Sec 9		
BHL: 1705ft FSL & 460ft FWL of Sec 8		

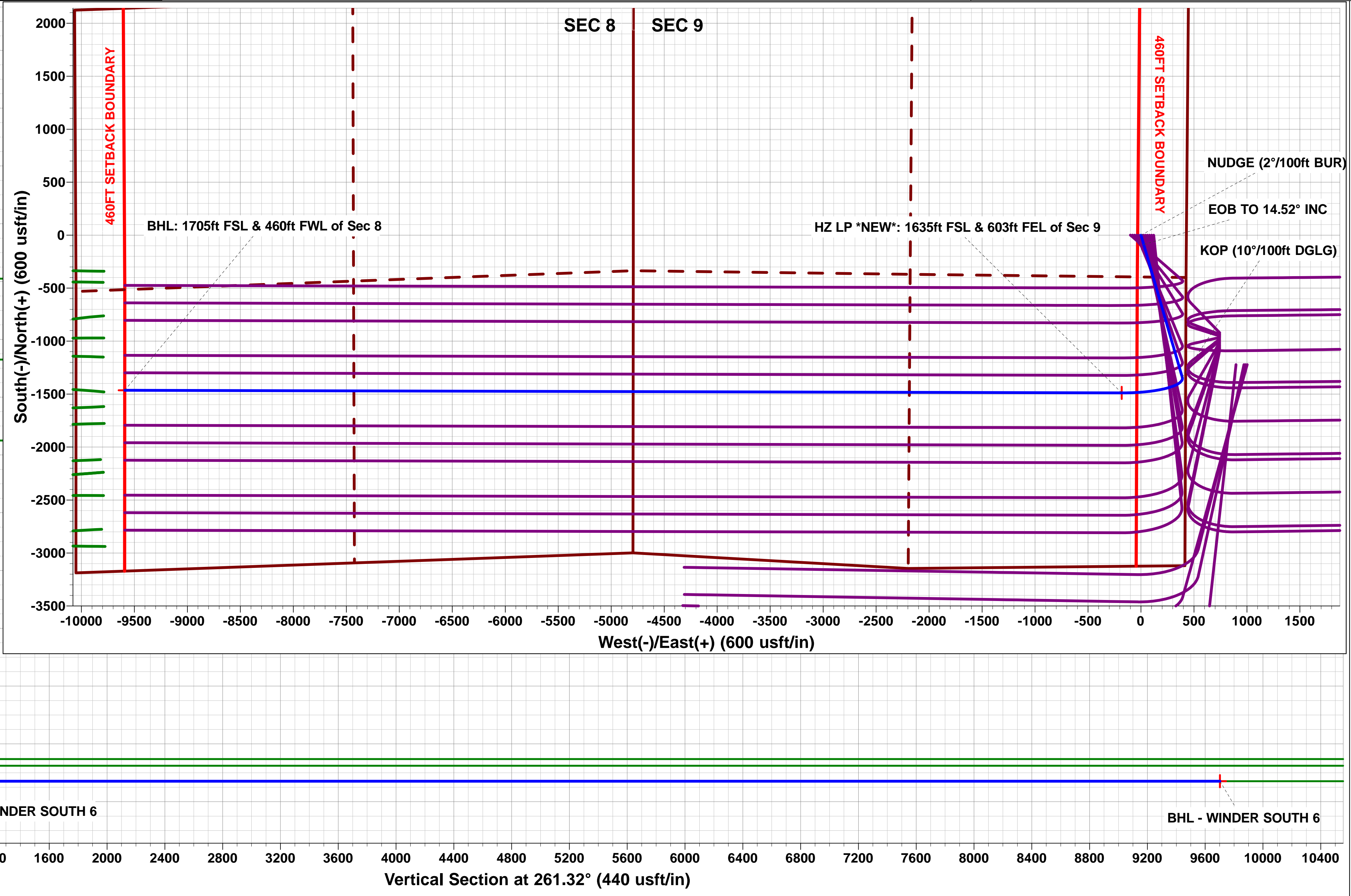
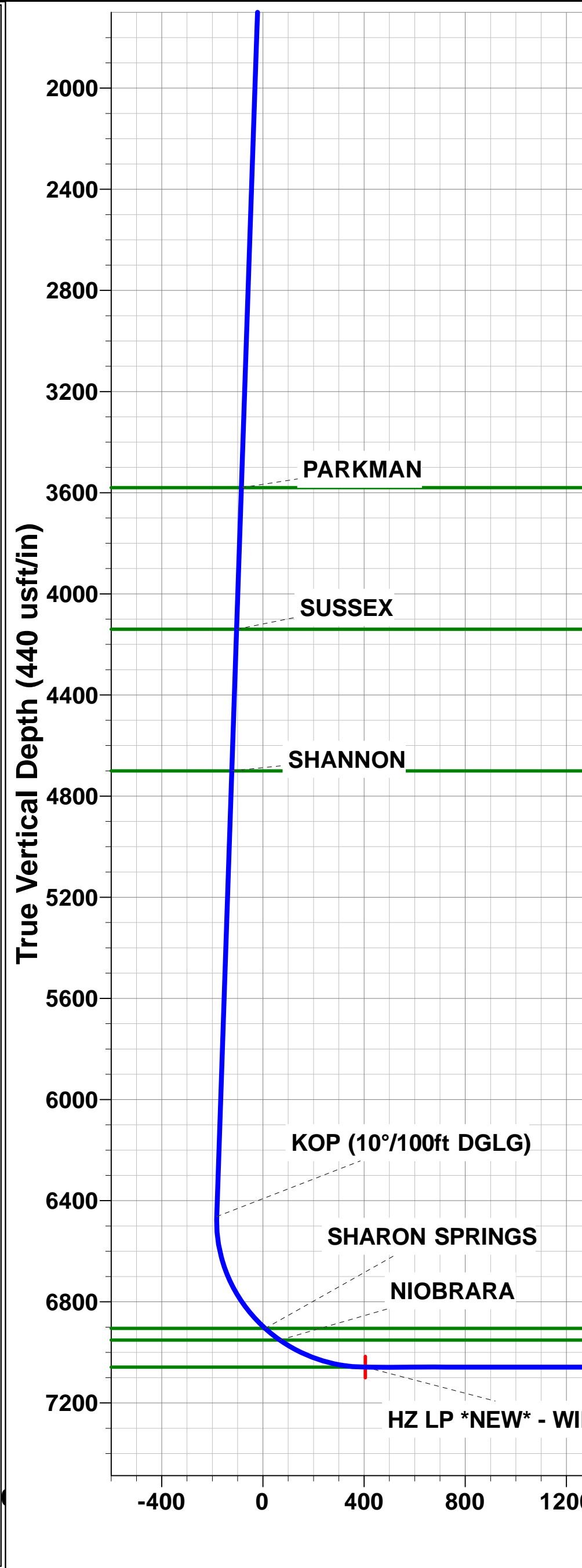
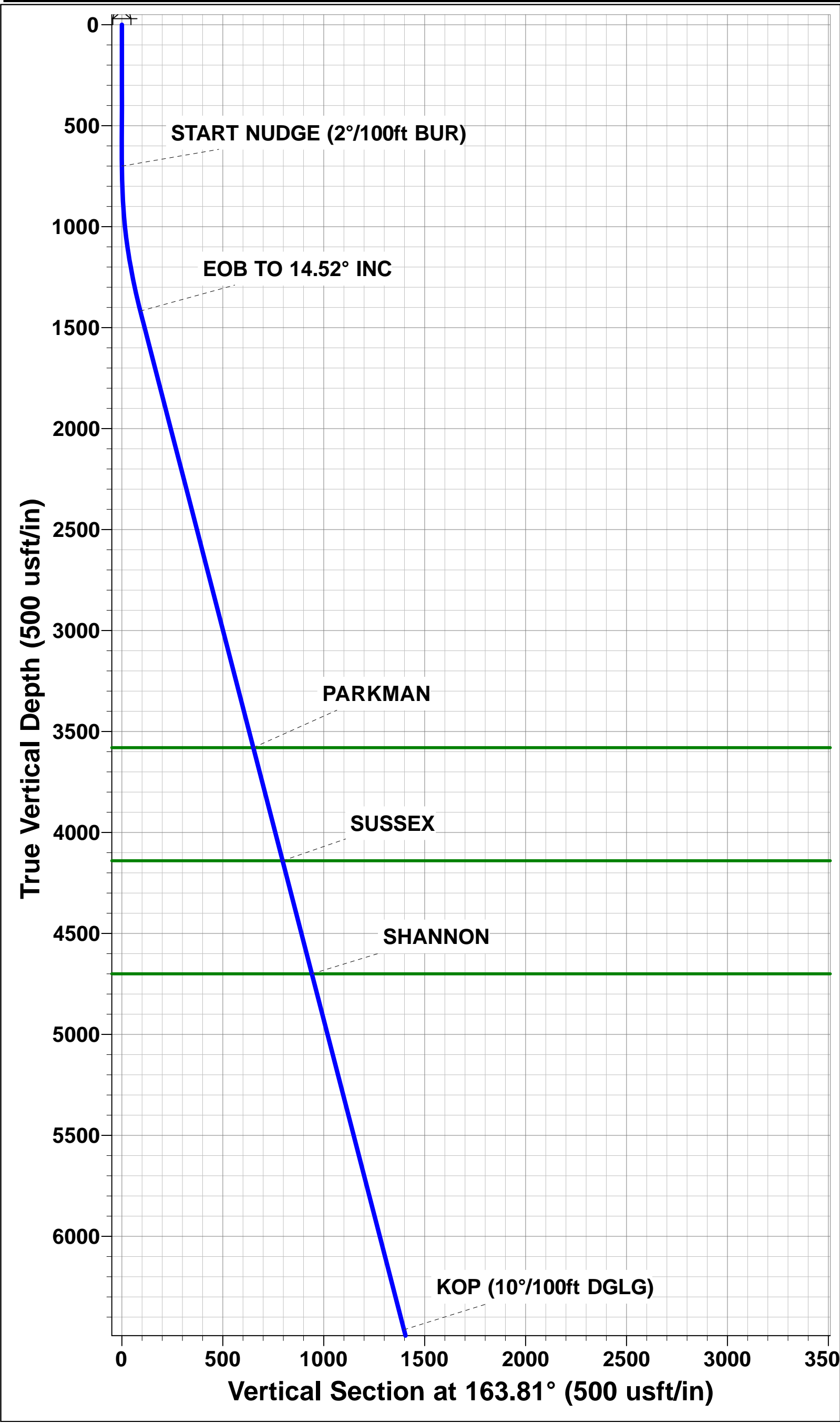
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Azimuths to True North
Magnetic North: 8.39°

Magnetic Field
Strength: 52547.0snT
Dip Angle: 66.94°
Date: 14/06/2016
Model: IGRF2015



Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well WINDER SOUTH 6
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4871.0usft
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4871.0usft
Site:	SE NE SEC. 9 T6N R67W 6th P.M.	North Reference:	True
Well:	WINDER SOUTH 6	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	SE NE SEC. 9 T6N R67W 6th P.M.		
Site Position:		Northing:	1,426,547.00 usft
From:	Lat/Long	Easting:	3,169,418.27 usft
Position Uncertainty:	0.0 usft	Slot Radius:	1.10000ft
		Latitude:	40.502675
		Longitude:	-104.890771
		Grid Convergence:	0.39 °

Well	WINDER SOUTH 6		
Well Position	+N/-S	-0.8 usft	Northing:
	+E/-W	100.1 usft	Easting:
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft
		Latitude:	40.502673
		Longitude:	-104.890411
		Ground Level:	4,855.0 usft

Wellbore	ORIGINAL WELLBORE				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	14/06/2016	8.39	66.94	52,547

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 (°)
	0.0	0.0	0.0	261.32

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	-4,871.0	0.0	0.0	0.00	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	-4,171.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,425.8	14.52	163.81	1,418.1	-3,452.9	-87.8	25.5	2.00	2.00	0.00	163.81	
6,636.8	14.52	163.81	6,462.7	1,591.7	-1,342.2	389.7	0.00	0.00	0.00	0.00	
7,577.3	90.00	270.15	7,058.0	2,187.0	-1,488.6	-182.2	10.00	8.03	11.31	105.85	HZ LP *NEW* - WIND
16,985.9	90.00	270.15	7,058.0	2,187.0	-1,463.8	-9,590.8	0.00	0.00	0.00	0.00	BHL - WINDER SO

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well WINDER SOUTH 6
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4871.0usft
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4871.0usft
Site:	SE NE SEC. 9 T6N R67W 6th P.M.	North Reference:	True
Well:	WINDER SOUTH 6	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)
SHL: 2306ft FNL & 428ft FEL of Sec 9										
0.0	0.00	0.00	0.0	4,871.00	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	4,771.00	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	4,671.00	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	4,571.00	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	4,471.00	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	4,371.00	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	4,271.00	0.0	0.0	0.0	0.00	0.00	0.00
START NUDGE (2°/100ft BUR)										
700.0	0.00	0.00	700.0	4,171.00	0.0	0.0	0.0	0.00	0.00	0.00
800.0	2.00	163.81	800.0	4,071.02	-1.7	0.5	-0.2	2.00	2.00	0.00
900.0	4.00	163.81	899.8	3,971.16	-6.7	1.9	-0.9	2.00	2.00	0.00
1,000.0	6.00	163.81	999.5	3,871.55	-15.1	4.4	-2.1	2.00	2.00	0.00
1,100.0	8.00	163.81	1,098.7	3,772.30	-26.8	7.8	-3.6	2.00	2.00	0.00
1,200.0	10.00	163.81	1,197.5	3,673.53	-41.8	12.1	-5.7	2.00	2.00	0.00
1,300.0	12.00	163.81	1,295.6	3,575.38	-60.1	17.5	-8.2	2.00	2.00	0.00
1,400.0	14.00	163.81	1,393.1	3,477.94	-81.7	23.7	-11.1	2.00	2.00	0.00
EOB TO 14.52° INC										
1,425.8	14.52	163.81	1,418.1	3,452.94	-87.8	25.5	-12.0	2.00	2.00	0.00
1,500.0	14.52	163.81	1,489.9	3,381.11	-105.7	30.7	-14.4	0.00	0.00	0.00
1,600.0	14.52	163.81	1,586.7	3,284.30	-129.8	37.7	-17.7	0.00	0.00	0.00
1,700.0	14.52	163.81	1,683.5	3,187.49	-153.8	44.7	-20.9	0.00	0.00	0.00
1,800.0	14.52	163.81	1,780.3	3,090.69	-177.9	51.7	-24.2	0.00	0.00	0.00
1,900.0	14.52	163.81	1,877.1	2,993.88	-202.0	58.6	-27.5	0.00	0.00	0.00
2,000.0	14.52	163.81	1,973.9	2,897.07	-226.0	65.6	-30.8	0.00	0.00	0.00
2,100.0	14.52	163.81	2,070.7	2,800.26	-250.1	72.6	-34.1	0.00	0.00	0.00
2,200.0	14.52	163.81	2,167.5	2,703.46	-274.2	79.6	-37.3	0.00	0.00	0.00
2,300.0	14.52	163.81	2,264.4	2,606.65	-298.3	86.6	-40.6	0.00	0.00	0.00
2,400.0	14.52	163.81	2,361.2	2,509.84	-322.3	93.6	-43.9	0.00	0.00	0.00
2,500.0	14.52	163.81	2,458.0	2,413.03	-346.4	100.6	-47.2	0.00	0.00	0.00
2,600.0	14.52	163.81	2,554.8	2,316.23	-370.5	107.6	-50.4	0.00	0.00	0.00
2,700.0	14.52	163.81	2,651.6	2,219.42	-394.5	114.6	-53.7	0.00	0.00	0.00
2,800.0	14.52	163.81	2,748.4	2,122.61	-418.6	121.5	-57.0	0.00	0.00	0.00
2,900.0	14.52	163.81	2,845.2	2,025.80	-442.7	128.5	-60.3	0.00	0.00	0.00
3,000.0	14.52	163.81	2,942.0	1,929.00	-466.8	135.5	-63.6	0.00	0.00	0.00
3,100.0	14.52	163.81	3,038.8	1,832.19	-490.8	142.5	-66.8	0.00	0.00	0.00
3,200.0	14.52	163.81	3,135.6	1,735.38	-514.9	149.5	-70.1	0.00	0.00	0.00
3,300.0	14.52	163.81	3,232.4	1,638.57	-539.0	156.5	-73.4	0.00	0.00	0.00
3,400.0	14.52	163.81	3,329.2	1,541.76	-563.0	163.5	-76.7	0.00	0.00	0.00
3,500.0	14.52	163.81	3,426.0	1,444.96	-587.1	170.5	-79.9	0.00	0.00	0.00
3,600.0	14.52	163.81	3,522.9	1,348.15	-611.2	177.5	-83.2	0.00	0.00	0.00
PARKMAN										
3,659.0	14.52	163.81	3,580.0	1,291.00	-625.4	181.6	-85.2	0.00	0.00	0.00
3,700.0	14.52	163.81	3,619.7	1,251.34	-635.3	184.5	-86.5	0.00	0.00	0.00
3,800.0	14.52	163.81	3,716.5	1,154.53	-659.3	191.4	-89.8	0.00	0.00	0.00
3,900.0	14.52	163.81	3,813.3	1,057.73	-683.4	198.4	-93.1	0.00	0.00	0.00
4,000.0	14.52	163.81	3,910.1	960.92	-707.5	205.4	-96.3	0.00	0.00	0.00
4,100.0	14.52	163.81	4,006.9	864.11	-731.5	212.4	-99.6	0.00	0.00	0.00
4,200.0	14.52	163.81	4,103.7	767.30	-755.6	219.4	-102.9	0.00	0.00	0.00
SUSSEX										
4,237.5	14.52	163.81	4,140.0	731.00	-764.6	222.0	-104.1	0.00	0.00	0.00
4,300.0	14.52	163.81	4,200.5	670.50	-779.7	226.4	-106.2	0.00	0.00	0.00
4,400.0	14.52	163.81	4,297.3	573.69	-803.8	233.4	-109.4	0.00	0.00	0.00
4,500.0	14.52	163.81	4,394.1	476.88	-827.8	240.4	-112.7	0.00	0.00	0.00

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Well:	WINDER SOUTH 6	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)
4,600.0	14.52	163.81	4,490.9	380.07	-851.9	247.4	-116.0	0.00	0.00	0.00
4,700.0	14.52	163.81	4,587.7	283.27	-876.0	254.3	-119.3	0.00	0.00	0.00
4,800.0	14.52	163.81	4,684.5	186.46	-900.1	261.3	-122.6	0.00	0.00	0.00
SHANNON										
4,816.0	14.52	163.81	4,700.0	171.00	-903.9	262.5	-123.1	0.00	0.00	0.00
4,900.0	14.52	163.81	4,781.3	89.65	-924.1	268.3	-125.8	0.00	0.00	0.00
5,000.0	14.52	163.81	4,878.2	-7.16	-948.2	275.3	-129.1	0.00	0.00	0.00
5,100.0	14.52	163.81	4,975.0	-103.96	-972.3	282.3	-132.4	0.00	0.00	0.00
5,200.0	14.52	163.81	5,071.8	-200.77	-996.3	289.3	-135.7	0.00	0.00	0.00
5,300.0	14.52	163.81	5,168.6	-297.58	-1,020.4	296.3	-138.9	0.00	0.00	0.00
5,400.0	14.52	163.81	5,265.4	-394.39	-1,044.5	303.3	-142.2	0.00	0.00	0.00
5,500.0	14.52	163.81	5,362.2	-491.19	-1,068.6	310.3	-145.5	0.00	0.00	0.00
5,600.0	14.52	163.81	5,459.0	-588.00	-1,092.6	317.3	-148.8	0.00	0.00	0.00
5,700.0	14.52	163.81	5,555.8	-684.81	-1,116.7	324.2	-152.0	0.00	0.00	0.00
5,800.0	14.52	163.81	5,652.6	-781.62	-1,140.8	331.2	-155.3	0.00	0.00	0.00
5,900.0	14.52	163.81	5,749.4	-878.42	-1,164.8	338.2	-158.6	0.00	0.00	0.00
6,000.0	14.52	163.81	5,846.2	-975.23	-1,188.9	345.2	-161.9	0.00	0.00	0.00
6,100.0	14.52	163.81	5,943.0	-1,072.04	-1,213.0	352.2	-165.2	0.00	0.00	0.00
6,200.0	14.52	163.81	6,039.8	-1,168.85	-1,237.1	359.2	-168.4	0.00	0.00	0.00
6,300.0	14.52	163.81	6,136.7	-1,265.65	-1,261.1	366.2	-171.7	0.00	0.00	0.00
6,400.0	14.52	163.81	6,233.5	-1,362.46	-1,285.2	373.2	-175.0	0.00	0.00	0.00
6,500.0	14.52	163.81	6,330.3	-1,459.27	-1,309.3	380.2	-178.3	0.00	0.00	0.00
6,600.0	14.52	163.81	6,427.1	-1,556.08	-1,333.3	387.1	-181.5	0.00	0.00	0.00
KOP (10°/100ft DGLG)										
6,636.8	14.52	163.81	6,462.7	-1,591.70	-1,342.2	389.7	-182.8	0.00	0.00	0.00
6,700.0	14.13	189.50	6,524.0	-1,653.00	-1,357.4	390.7	-181.4	10.00	-0.61	40.65
6,800.0	18.50	222.21	6,620.1	-1,749.14	-1,381.3	377.9	-165.2	10.00	4.37	32.71
6,900.0	26.09	239.66	6,712.7	-1,841.70	-1,404.2	348.2	-132.4	10.00	7.59	17.46
7,000.0	34.86	249.25	6,798.9	-1,927.85	-1,425.5	302.4	-83.9	10.00	8.77	9.59
7,100.0	44.10	255.30	6,876.0	-2,004.98	-1,444.5	241.9	-21.2	10.00	9.24	6.04
SHARON SPRINGS										
7,141.8	48.04	257.24	6,905.0	-2,034.00	-1,451.6	212.6	8.8	10.00	9.42	4.66
7,200.0	53.57	259.58	6,941.7	-2,070.75	-1,460.6	168.5	53.8	10.00	9.50	4.02
NIOBRARA										
7,215.9	55.08	260.16	6,951.0	-2,080.00	-1,462.9	155.8	66.7	10.00	9.55	3.65
7,300.0	63.16	262.93	6,994.1	-2,123.15	-1,473.4	84.4	138.9	10.00	9.60	3.29
7,400.0	72.81	265.74	7,031.6	-2,160.60	-1,482.5	-7.7	231.3	10.00	9.65	2.82
7,500.0	82.50	268.28	7,053.0	-2,181.95	-1,487.5	-105.2	328.4	10.00	9.69	2.53
HZ LP *NEW*: 1635ft FSL & 603ft FEL of Sec 9 - NIO B TARGET										
7,577.3	90.00	270.15	7,058.0	-2,187.00	-1,488.6	-182.2	404.7	10.00	9.70	2.43
7,600.0	90.00	270.15	7,058.0	-2,187.00	-1,488.5	-204.9	427.2	0.00	0.00	0.00
7,700.0	90.00	270.15	7,058.0	-2,187.00	-1,488.3	-304.9	526.0	0.00	0.00	0.00
7,800.0	90.00	270.15	7,058.0	-2,187.00	-1,488.0	-404.9	624.8	0.00	0.00	0.00
7,900.0	90.00	270.15	7,058.0	-2,187.00	-1,487.7	-504.9	723.6	0.00	0.00	0.00
8,000.0	90.00	270.15	7,058.0	-2,187.00	-1,487.5	-604.9	822.4	0.00	0.00	0.00
8,100.0	90.00	270.15	7,058.0	-2,187.00	-1,487.2	-704.9	921.2	0.00	0.00	0.00
8,200.0	90.00	270.15	7,058.0	-2,187.00	-1,487.0	-804.9	1,020.1	0.00	0.00	0.00
8,300.0	90.00	270.15	7,058.0	-2,187.00	-1,486.7	-904.9	1,118.9	0.00	0.00	0.00
8,400.0	90.00	270.15	7,058.0	-2,187.00	-1,486.4	-1,004.9	1,217.7	0.00	0.00	0.00
8,500.0	90.00	270.15	7,058.0	-2,187.00	-1,486.2	-1,104.9	1,316.5	0.00	0.00	0.00
8,600.0	90.00	270.15	7,058.0	-2,187.00	-1,485.9	-1,204.9	1,415.3	0.00	0.00	0.00
8,700.0	90.00	270.15	7,058.0	-2,187.00	-1,485.6	-1,304.9	1,514.1	0.00	0.00	0.00
8,800.0	90.00	270.15	7,058.0	-2,187.00	-1,485.4	-1,404.9	1,612.9	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well WINDER SOUTH 6
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4871.0usft
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4871.0usft
Site:	SE NE SEC. 9 T6N R67W 6th P.M.	North Reference:	True
Well:	WINDER SOUTH 6	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)
8,900.0	90.00	270.15	7,058.0	-2,187.00	-1,485.1	-1,504.9	1,711.8	0.00	0.00	0.00
9,000.0	90.00	270.15	7,058.0	-2,187.00	-1,484.8	-1,604.9	1,810.6	0.00	0.00	0.00
9,100.0	90.00	270.15	7,058.0	-2,187.00	-1,484.6	-1,704.9	1,909.4	0.00	0.00	0.00
9,200.0	90.00	270.15	7,058.0	-2,187.00	-1,484.3	-1,804.9	2,008.2	0.00	0.00	0.00
9,300.0	90.00	270.15	7,058.0	-2,187.00	-1,484.1	-1,904.9	2,107.0	0.00	0.00	0.00
9,400.0	90.00	270.15	7,058.0	-2,187.00	-1,483.8	-2,004.9	2,205.8	0.00	0.00	0.00
9,500.0	90.00	270.15	7,058.0	-2,187.00	-1,483.5	-2,104.9	2,304.6	0.00	0.00	0.00
9,600.0	90.00	270.15	7,058.0	-2,187.00	-1,483.3	-2,204.9	2,403.5	0.00	0.00	0.00
9,700.0	90.00	270.15	7,058.0	-2,187.00	-1,483.0	-2,304.9	2,502.3	0.00	0.00	0.00
9,800.0	90.00	270.15	7,058.0	-2,187.00	-1,482.7	-2,404.9	2,601.1	0.00	0.00	0.00
9,900.0	90.00	270.15	7,058.0	-2,187.00	-1,482.5	-2,504.9	2,699.9	0.00	0.00	0.00
10,000.0	90.00	270.15	7,058.0	-2,187.00	-1,482.2	-2,604.9	2,798.7	0.00	0.00	0.00
10,100.0	90.00	270.15	7,058.0	-2,187.00	-1,481.9	-2,704.9	2,897.5	0.00	0.00	0.00
10,200.0	90.00	270.15	7,058.0	-2,187.00	-1,481.7	-2,804.9	2,996.4	0.00	0.00	0.00
10,300.0	90.00	270.15	7,058.0	-2,187.00	-1,481.4	-2,904.9	3,095.2	0.00	0.00	0.00
10,400.0	90.00	270.15	7,058.0	-2,187.00	-1,481.1	-3,004.9	3,194.0	0.00	0.00	0.00
10,500.0	90.00	270.15	7,058.0	-2,187.00	-1,480.9	-3,104.9	3,292.8	0.00	0.00	0.00
10,600.0	90.00	270.15	7,058.0	-2,187.00	-1,480.6	-3,204.9	3,391.6	0.00	0.00	0.00
10,700.0	90.00	270.15	7,058.0	-2,187.00	-1,480.4	-3,304.9	3,490.4	0.00	0.00	0.00
10,800.0	90.00	270.15	7,058.0	-2,187.00	-1,480.1	-3,404.9	3,589.2	0.00	0.00	0.00
10,900.0	90.00	270.15	7,058.0	-2,187.00	-1,479.8	-3,504.9	3,688.1	0.00	0.00	0.00
11,000.0	90.00	270.15	7,058.0	-2,187.00	-1,479.6	-3,604.9	3,786.9	0.00	0.00	0.00
11,100.0	90.00	270.15	7,058.0	-2,187.00	-1,479.3	-3,704.9	3,885.7	0.00	0.00	0.00
11,200.0	90.00	270.15	7,058.0	-2,187.00	-1,479.0	-3,804.9	3,984.5	0.00	0.00	0.00
11,300.0	90.00	270.15	7,058.0	-2,187.00	-1,478.8	-3,904.9	4,083.3	0.00	0.00	0.00
11,400.0	90.00	270.15	7,058.0	-2,187.00	-1,478.5	-4,004.9	4,182.1	0.00	0.00	0.00
11,500.0	90.00	270.15	7,058.0	-2,187.00	-1,478.2	-4,104.9	4,281.0	0.00	0.00	0.00
11,600.0	90.00	270.15	7,058.0	-2,187.00	-1,478.0	-4,204.9	4,379.8	0.00	0.00	0.00
11,700.0	90.00	270.15	7,058.0	-2,187.00	-1,477.7	-4,304.9	4,478.6	0.00	0.00	0.00
11,800.0	90.00	270.15	7,058.0	-2,187.00	-1,477.4	-4,404.9	4,577.4	0.00	0.00	0.00
11,900.0	90.00	270.15	7,058.0	-2,187.00	-1,477.2	-4,504.9	4,676.2	0.00	0.00	0.00
12,000.0	90.00	270.15	7,058.0	-2,187.00	-1,476.9	-4,604.9	4,775.0	0.00	0.00	0.00
12,100.0	90.00	270.15	7,058.0	-2,187.00	-1,476.7	-4,704.9	4,873.8	0.00	0.00	0.00
12,200.0	90.00	270.15	7,058.0	-2,187.00	-1,476.4	-4,804.9	4,972.7	0.00	0.00	0.00
12,300.0	90.00	270.15	7,058.0	-2,187.00	-1,476.1	-4,904.9	5,071.5	0.00	0.00	0.00
12,400.0	90.00	270.15	7,058.0	-2,187.00	-1,475.9	-5,004.9	5,170.3	0.00	0.00	0.00
12,500.0	90.00	270.15	7,058.0	-2,187.00	-1,475.6	-5,104.9	5,269.1	0.00	0.00	0.00
12,600.0	90.00	270.15	7,058.0	-2,187.00	-1,475.3	-5,204.9	5,367.9	0.00	0.00	0.00
12,700.0	90.00	270.15	7,058.0	-2,187.00	-1,475.1	-5,304.9	5,466.7	0.00	0.00	0.00
12,800.0	90.00	270.15	7,058.0	-2,187.00	-1,474.8	-5,404.9	5,565.5	0.00	0.00	0.00
12,900.0	90.00	270.15	7,058.0	-2,187.00	-1,474.5	-5,504.9	5,664.4	0.00	0.00	0.00
13,000.0	90.00	270.15	7,058.0	-2,187.00	-1,474.3	-5,604.9	5,763.2	0.00	0.00	0.00
13,100.0	90.00	270.15	7,058.0	-2,187.00	-1,474.0	-5,704.9	5,862.0	0.00	0.00	0.00
13,200.0	90.00	270.15	7,058.0	-2,187.00	-1,473.8	-5,804.9	5,960.8	0.00	0.00	0.00
13,300.0	90.00	270.15	7,058.0	-2,187.00	-1,473.5	-5,904.9	6,059.6	0.00	0.00	0.00
13,400.0	90.00	270.15	7,058.0	-2,187.00	-1,473.2	-6,004.9	6,158.4	0.00	0.00	0.00
13,500.0	90.00	270.15	7,058.0	-2,187.00	-1,473.0	-6,104.9	6,257.3	0.00	0.00	0.00
13,600.0	90.00	270.15	7,058.0	-2,187.00	-1,472.7	-6,204.9	6,356.1	0.00	0.00	0.00
13,700.0	90.00	270.15	7,058.0	-2,187.00	-1,472.4	-6,304.9	6,454.9	0.00	0.00	0.00
13,800.0	90.00	270.15	7,058.0	-2,187.00	-1,472.2	-6,404.9	6,553.7	0.00	0.00	0.00
13,900.0	90.00	270.15	7,058.0	-2,187.00	-1,471.9	-6,504.9	6,652.5	0.00	0.00	0.00
14,000.0	90.00	270.15	7,058.0	-2,187.00	-1,471.6	-6,604.9	6,751.3	0.00	0.00	0.00
14,100.0	90.00	270.15	7,058.0	-2,187.00	-1,471.4	-6,704.9	6,850.1	0.00	0.00	0.00
14,200.0	90.00	270.15	7,058.0	-2,187.00	-1,471.1	-6,804.9	6,949.0	0.00	0.00	0.00

Planning Report



Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well WINDER SOUTH 6
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4871.0usft
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4871.0usft
Site:	SE NE SEC. 9 T6N R67W 6th P.M.	North Reference:	True
Well:	WINDER SOUTH 6	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)
14,300.0	90.00	270.15	7,058.0	-2,187.00	-1,470.8	-6,904.9	7,047.8	0.00	0.00	0.00
14,400.0	90.00	270.15	7,058.0	-2,187.00	-1,470.6	-7,004.9	7,146.6	0.00	0.00	0.00
14,500.0	90.00	270.15	7,058.0	-2,187.00	-1,470.3	-7,104.9	7,245.4	0.00	0.00	0.00
14,600.0	90.00	270.15	7,058.0	-2,187.00	-1,470.1	-7,204.9	7,344.2	0.00	0.00	0.00
14,700.0	90.00	270.15	7,058.0	-2,187.00	-1,469.8	-7,304.9	7,443.0	0.00	0.00	0.00
14,800.0	90.00	270.15	7,058.0	-2,187.00	-1,469.5	-7,404.9	7,541.8	0.00	0.00	0.00
14,900.0	90.00	270.15	7,058.0	-2,187.00	-1,469.3	-7,504.9	7,640.7	0.00	0.00	0.00
15,000.0	90.00	270.15	7,058.0	-2,187.00	-1,469.0	-7,604.9	7,739.5	0.00	0.00	0.00
15,100.0	90.00	270.15	7,058.0	-2,187.00	-1,468.7	-7,704.9	7,838.3	0.00	0.00	0.00
15,200.0	90.00	270.15	7,058.0	-2,187.00	-1,468.5	-7,804.9	7,937.1	0.00	0.00	0.00
15,300.0	90.00	270.15	7,058.0	-2,187.00	-1,468.2	-7,904.9	8,035.9	0.00	0.00	0.00
15,400.0	90.00	270.15	7,058.0	-2,187.00	-1,467.9	-8,004.9	8,134.7	0.00	0.00	0.00
15,500.0	90.00	270.15	7,058.0	-2,187.00	-1,467.7	-8,104.9	8,233.6	0.00	0.00	0.00
15,600.0	90.00	270.15	7,058.0	-2,187.00	-1,467.4	-8,204.9	8,332.4	0.00	0.00	0.00
15,700.0	90.00	270.15	7,058.0	-2,187.00	-1,467.1	-8,304.9	8,431.2	0.00	0.00	0.00
15,800.0	90.00	270.15	7,058.0	-2,187.00	-1,466.9	-8,404.9	8,530.0	0.00	0.00	0.00
15,900.0	90.00	270.15	7,058.0	-2,187.00	-1,466.6	-8,504.9	8,628.8	0.00	0.00	0.00
16,000.0	90.00	270.15	7,058.0	-2,187.00	-1,466.4	-8,604.9	8,727.6	0.00	0.00	0.00
16,100.0	90.00	270.15	7,058.0	-2,187.00	-1,466.1	-8,704.9	8,826.4	0.00	0.00	0.00
16,200.0	90.00	270.15	7,058.0	-2,187.00	-1,465.8	-8,804.9	8,925.3	0.00	0.00	0.00
16,300.0	90.00	270.15	7,058.0	-2,187.00	-1,465.6	-8,904.9	9,024.1	0.00	0.00	0.00
16,400.0	90.00	270.15	7,058.0	-2,187.00	-1,465.3	-9,004.9	9,122.9	0.00	0.00	0.00
16,500.0	90.00	270.15	7,058.0	-2,187.00	-1,465.0	-9,104.9	9,221.7	0.00	0.00	0.00
16,600.0	90.00	270.15	7,058.0	-2,187.00	-1,464.8	-9,204.9	9,320.5	0.00	0.00	0.00
16,700.0	90.00	270.15	7,058.0	-2,187.00	-1,464.5	-9,304.9	9,419.3	0.00	0.00	0.00
16,800.0	90.00	270.15	7,058.0	-2,187.00	-1,464.2	-9,404.9	9,518.2	0.00	0.00	0.00
16,900.0	90.00	270.15	7,058.0	-2,187.00	-1,464.0	-9,504.9	9,617.0	0.00	0.00	0.00
BHL: 1705ft FSL & 460ft FWL of Sec 8										
16,985.9	90.00	270.15	7,058.0	-2,187.00	-1,463.8	-9,590.8	9,701.8	0.00	0.00	0.00

Formations

MD (usft)	TVD (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,659.0	3,580.0	PARKMAN			
4,237.5	4,140.0	SUSSEX			
4,816.0	4,700.0	SHANNON			
7,141.8	6,905.0	SHARON SPRINGS			
7,215.9	6,951.0	NIOBRARA			
7,577.3	7,058.0	NIO B TARGET			

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well WINDER SOUTH 6
Company:	EXTRACTION OIL & GAS	TVD Reference:	KB-EST @ 4871.0usft
Project:	WELD COUNTY, COLORADO (NAD 83)	MD Reference:	KB-EST @ 4871.0usft
Site:	SE NE SEC. 9 T6N R67W 6th P.M.	North Reference:	True
Well:	WINDER SOUTH 6	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)	
0.0	0.0	0.0	0.0	SHL: 2306ft FNL & 428ft FEL of Sec 9
700.0	700.0	0.0	0.0	START NUDGE (2°/100ft BUR)
1,425.8	1,418.1	-87.8	25.5	EOB TO 14.52° INC
6,636.8	6,462.7	-1,342.2	389.7	KOP (10°/100ft DGLG)
7,577.3	7,058.0	-1,488.6	-182.2	HZ LP *NEW*: 1635ft FSL & 603ft FEL of Sec 9
16,985.9	7,058.0	-1,463.8	-9,590.8	BHL: 1705ft FSL & 460ft FWL of Sec 8