

US ROCKIES WATTENBERG PLANNING

WELD-NAD83-UTMFT13N

2N-68W-35 NELSON 28-35HZ PAD

NELSON 35-15HZ

Plan B

Plan: Permit Rev-1

SHL Lat/Long: 40.101355/-104.972602

Survey Program: MWD+IFR

Standard Planning Report

22 December, 2019

Project: WELD-NAD83-UTMFT13N
Site: 2N-68W-35 NELSON 28-35HZ PAD
Well: NELSON 35-15HZ
Wellbore: Plan B
Design: Permit Rev-1

US ROCKIES WATTENBERG PLANNING

CASING DETAILS

TVD	MD	Name	Size
1500.00	1516.08	9 5/8" Csg	9-5/8
7619.00	8177.86	Top of Production	5-1/2

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	225.00	0.00	0.00	225.00	0.00	0.00	0.00	0.00	0.00	
3	1007.00	11.73	255.20	1001.55	-20.38	-77.12	1.50	255.20	-20.34	
4	7013.74	11.73	255.20	6882.85	-332.32	-1257.78	0.00	0.00	-331.66	
5	8177.86	90.34	359.09	7619.00	384.72	-1418.46	8.00	103.54	385.46	
6	11467.04	90.34	359.09	7599.54	3673.42	-1470.63	0.00	0.00	3674.19	NELSON 35-15HZ_target
7	11565.54	90.34	0.57	7598.96	3771.92	-1470.92	1.50	89.96	3772.69	
8	16445.96	90.34	0.57	7570.00	8652.01	-1422.48	0.00	0.00	8652.75	NELSON 35-15HZ_BHL

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
NELSON 35-15HZ_SHL	0.00	0.00	0.00	40.101355	-104.972602
NELSON 35-15HZ_BHL	7570.00	8652.01	-1422.48	40.125115	-104.977691

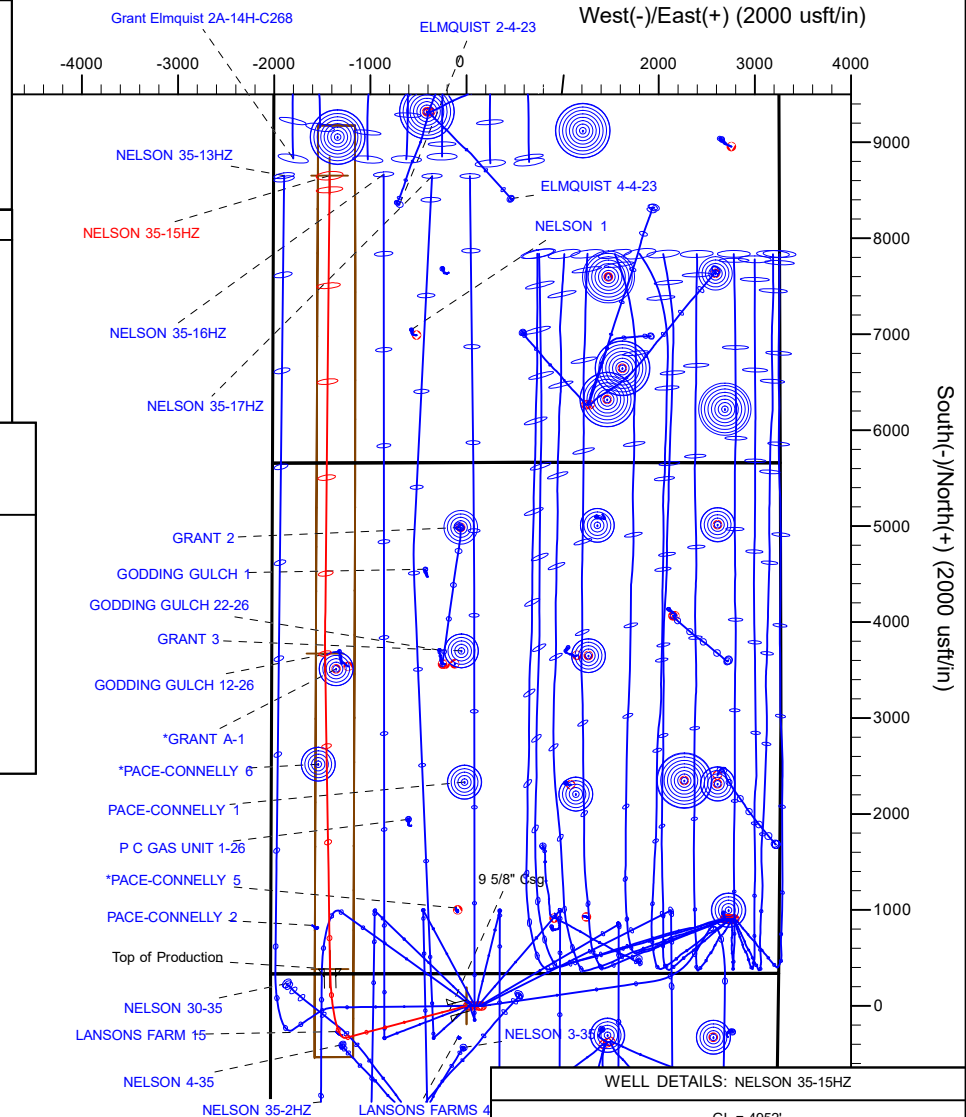
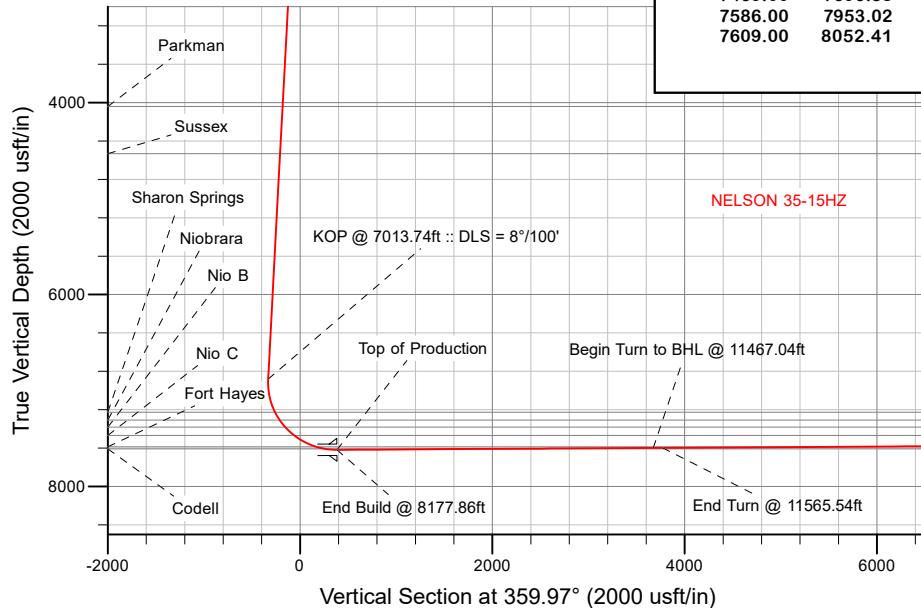
FORMATION TOP DETAILS

TVDPath	MDPath	Formation
980.00	985.00	Fox Hills
4040.00	4110.26	Parkman
4532.00	4612.75	Sussex
7227.00	7376.14	Sharon Springs
7309.00	7472.88	Niobrara
7382.00	7567.08	Nio B
7469.00	7696.58	Nio C
7586.00	7953.02	Fort Hayes
7609.00	8052.41	Codell

SHL
336' FNL
2039' FWL

HEEL
50' FSL
620' FWL

BHL
2311' FNL
584' FWL



WELL DETAILS: NELSON 35-15HZ

GL = 4952'

RKB = 17" @ 4969.00usft (Drilling Rig)

Plan: Permit Rev-1 (NELSON 35-15HZ/Plan B)

Date: 12/22/2019

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well NELSON 35-15HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4969.00usft (Drilling Rig)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4969.00usft (Drilling Rig)
Site:	2N-68W-35 NELSON 28-35HZ PAD	North Reference:	True
Well:	NELSON 35-15HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
Design:	Permit Rev-1		

Project	WELD-NAD83-UTMFT13N		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Zone 13N (108 W to 102 W)		

Site		2N-68W-35 NELSON 28-35HZ PAD			
Site Position:		Northing:	14,563,661.77 usft	Latitude:	40.101408
From:	Lat/Long	Easting:	1,648,208.17 usft	Longitude:	-104.972137
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.02 °

Well		NELSON 35-15HZ				
Well Position	+N/-S	-19.30 usft	Northing:	14,563,642.43 usft	Latitude:	40.101355
	+E/-W	-130.03 usft	Easting:	1,648,078.14 usft	Longitude:	-104.972602
Position Uncertainty	3.28 usft		Wellhead Elevation:		Ground Level:	4,952.00 usft

Wellbore	Plan B				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	1/15/2019	8.13	66.54	52,033.88587864

Design	Permit Rev-1				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	359.97	

Plan Survey Tool Program		Date	12/22/2019		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	1,500.00	Permit Rev-1 (Plan B)	APC_ISCWSA REV 2 MWD+II Fixed:v2:crustal field declinatio	
2	1,500.00	16,445.96	Permit Rev-1 (Plan B)	APC_ISCWSA REV 2 MWD+II Fixed:v2:crustal field declinatio	

Corporate
Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well NELSON 35-15HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4969.00usft (Drilling Rig)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4969.00usft (Drilling Rig)
Site:	2N-68W-35 NELSON 28-35HZ PAD	North Reference:	True
Well:	NELSON 35-15HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
Design:	Permit Rev-1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
225.00	0.00	0.00	225.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,007.00	11.73	255.20	1,001.55	-20.38	-77.12	1.50	1.50	0.00	255.20	
7,013.74	11.73	255.20	6,882.85	-332.32	-1,257.78	0.00	0.00	0.00	0.00	
8,177.86	90.34	359.09	7,619.00	384.72	-1,418.46	8.00	6.75	8.92	103.54	
11,467.04	90.34	359.09	7,599.54	3,673.42	-1,470.63	0.00	0.00	0.00	0.00	NELSON 35-15HZ_ta
11,565.54	90.34	0.57	7,598.96	3,771.92	-1,470.92	1.50	0.00	1.50	89.96	
16,445.96	90.34	0.57	7,570.00	8,652.01	-1,422.48	0.00	0.00	0.00	0.00	NELSON 35-15HZ_BI

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well NELSON 35-15HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4969.00usft (Drilling Rig)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4969.00usft (Drilling Rig)
Site:	2N-68W-35 NELSON 28-35HZ PAD	North Reference:	True
Well:	NELSON 35-15HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
Design:	Permit Rev-1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
225.00	0.00	0.00	225.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 225.00ft									
300.00	1.13	255.20	300.00	-0.19	-0.71	-0.19	1.50	1.50	0.00
400.00	2.63	255.20	399.94	-1.02	-3.88	-1.02	1.50	1.50	0.00
500.00	4.13	255.20	499.76	-2.53	-9.57	-2.52	1.50	1.50	0.00
600.00	5.63	255.20	599.40	-4.70	-17.78	-4.69	1.50	1.50	0.00
700.00	7.13	255.20	698.78	-7.53	-28.52	-7.52	1.50	1.50	0.00
800.00	8.63	255.20	797.83	-11.03	-41.76	-11.01	1.50	1.50	0.00
900.00	10.13	255.20	896.49	-15.20	-57.51	-15.17	1.50	1.50	0.00
985.00	11.40	255.20	980.00	-19.25	-72.86	-19.21	1.50	1.50	0.00
Fox Hills									
1,000.00	11.63	255.20	994.69	-20.01	-75.75	-19.98	1.50	1.50	0.00
1,007.00	11.73	255.20	1,001.55	-20.38	-77.12	-20.34	1.50	1.50	0.00
Hold Tangent @ 1007.00ft									
1,100.00	11.73	255.20	1,092.61	-25.21	-95.40	-25.16	0.00	0.00	0.00
1,200.00	11.73	255.20	1,190.52	-30.40	-115.06	-30.34	0.00	0.00	0.00
1,300.00	11.73	255.20	1,288.43	-35.59	-134.71	-35.52	0.00	0.00	0.00
1,400.00	11.73	255.20	1,386.34	-40.79	-154.37	-40.71	0.00	0.00	0.00
1,500.00	11.73	255.20	1,484.25	-45.98	-174.02	-45.89	0.00	0.00	0.00
1,516.08	11.73	255.20	1,500.00	-46.81	-177.19	-46.72	0.00	0.00	0.00
9 5/8" Csg									
1,600.00	11.73	255.20	1,582.16	-51.17	-193.68	-51.07	0.00	0.00	0.00
1,700.00	11.73	255.20	1,680.08	-56.37	-213.34	-56.25	0.00	0.00	0.00
1,800.00	11.73	255.20	1,777.99	-61.56	-232.99	-61.44	0.00	0.00	0.00
1,900.00	11.73	255.20	1,875.90	-66.75	-252.65	-66.62	0.00	0.00	0.00
2,000.00	11.73	255.20	1,973.81	-71.95	-272.30	-71.80	0.00	0.00	0.00
2,100.00	11.73	255.20	2,071.72	-77.14	-291.96	-76.99	0.00	0.00	0.00
2,200.00	11.73	255.20	2,169.63	-82.33	-311.61	-82.17	0.00	0.00	0.00
2,300.00	11.73	255.20	2,267.55	-87.52	-331.27	-87.35	0.00	0.00	0.00
2,400.00	11.73	255.20	2,365.46	-92.72	-350.92	-92.53	0.00	0.00	0.00
2,500.00	11.73	255.20	2,463.37	-97.91	-370.58	-97.72	0.00	0.00	0.00
2,600.00	11.73	255.20	2,561.28	-103.10	-390.24	-102.90	0.00	0.00	0.00
2,700.00	11.73	255.20	2,659.19	-108.30	-409.89	-108.08	0.00	0.00	0.00
2,800.00	11.73	255.20	2,757.10	-113.49	-429.55	-113.27	0.00	0.00	0.00
2,900.00	11.73	255.20	2,855.02	-118.68	-449.20	-118.45	0.00	0.00	0.00
3,000.00	11.73	255.20	2,952.93	-123.88	-468.86	-123.63	0.00	0.00	0.00
3,100.00	11.73	255.20	3,050.84	-129.07	-488.51	-128.81	0.00	0.00	0.00
3,200.00	11.73	255.20	3,148.75	-134.26	-508.17	-134.00	0.00	0.00	0.00
3,300.00	11.73	255.20	3,246.66	-139.46	-527.82	-139.18	0.00	0.00	0.00
3,400.00	11.73	255.20	3,344.57	-144.65	-547.48	-144.36	0.00	0.00	0.00
3,500.00	11.73	255.20	3,442.49	-149.84	-567.13	-149.55	0.00	0.00	0.00
3,600.00	11.73	255.20	3,540.40	-155.04	-586.79	-154.73	0.00	0.00	0.00
3,700.00	11.73	255.20	3,638.31	-160.23	-606.45	-159.91	0.00	0.00	0.00
3,800.00	11.73	255.20	3,736.22	-165.42	-626.10	-165.10	0.00	0.00	0.00
3,900.00	11.73	255.20	3,834.13	-170.62	-645.76	-170.28	0.00	0.00	0.00
4,000.00	11.73	255.20	3,932.04	-175.81	-665.41	-175.46	0.00	0.00	0.00
4,100.00	11.73	255.20	4,029.96	-181.00	-685.07	-180.64	0.00	0.00	0.00
4,110.26	11.73	255.20	4,040.00	-181.54	-687.08	-181.18	0.00	0.00	0.00
Parkman									
4,200.00	11.73	255.20	4,127.87	-186.20	-704.72	-185.83	0.00	0.00	0.00
4,300.00	11.73	255.20	4,225.78	-191.39	-724.38	-191.01	0.00	0.00	0.00

Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well NELSON 35-15HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4969.00usft (Drilling Rig)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4969.00usft (Drilling Rig)
Site:	2N-68W-35 NELSON 28-35HZ PAD	North Reference:	True
Well:	NELSON 35-15HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
Design:	Permit Rev-1		

Planned Survey

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
4,400.00	11.73	255.20	4,323.69	-196.58	-744.03	-196.19	0.00	0.00	0.00
4,500.00	11.73	255.20	4,421.60	-201.78	-763.69	-201.38	0.00	0.00	0.00
4,600.00	11.73	255.20	4,519.51	-206.97	-783.35	-206.56	0.00	0.00	0.00
4,612.75	11.73	255.20	4,532.00	-207.63	-785.85	-207.22	0.00	0.00	0.00
Sussex									
4,700.00	11.73	255.20	4,617.43	-212.16	-803.00	-211.74	0.00	0.00	0.00
4,800.00	11.73	255.20	4,715.34	-217.36	-822.66	-216.92	0.00	0.00	0.00
4,900.00	11.73	255.20	4,813.25	-222.55	-842.31	-222.11	0.00	0.00	0.00
5,000.00	11.73	255.20	4,911.16	-227.74	-861.97	-227.29	0.00	0.00	0.00
5,100.00	11.73	255.20	5,009.07	-232.93	-881.62	-232.47	0.00	0.00	0.00
5,200.00	11.73	255.20	5,106.98	-238.13	-901.28	-237.66	0.00	0.00	0.00
5,300.00	11.73	255.20	5,204.90	-243.32	-920.93	-242.84	0.00	0.00	0.00
5,400.00	11.73	255.20	5,302.81	-248.51	-940.59	-248.02	0.00	0.00	0.00
5,500.00	11.73	255.20	5,400.72	-253.71	-960.25	-253.20	0.00	0.00	0.00
5,600.00	11.73	255.20	5,498.63	-258.90	-979.90	-258.39	0.00	0.00	0.00
5,700.00	11.73	255.20	5,596.54	-264.09	-999.56	-263.57	0.00	0.00	0.00
5,800.00	11.73	255.20	5,694.45	-269.29	-1,019.21	-268.75	0.00	0.00	0.00
5,900.00	11.73	255.20	5,792.37	-274.48	-1,038.87	-273.94	0.00	0.00	0.00
6,000.00	11.73	255.20	5,890.28	-279.67	-1,058.52	-279.12	0.00	0.00	0.00
6,100.00	11.73	255.20	5,988.19	-284.87	-1,078.18	-284.30	0.00	0.00	0.00
6,200.00	11.73	255.20	6,086.10	-290.06	-1,097.83	-289.49	0.00	0.00	0.00
6,300.00	11.73	255.20	6,184.01	-295.25	-1,117.49	-294.67	0.00	0.00	0.00
6,400.00	11.73	255.20	6,281.92	-300.45	-1,137.14	-299.85	0.00	0.00	0.00
6,500.00	11.73	255.20	6,379.84	-305.64	-1,156.80	-305.03	0.00	0.00	0.00
6,600.00	11.73	255.20	6,477.75	-310.83	-1,176.46	-310.22	0.00	0.00	0.00
6,700.00	11.73	255.20	6,575.66	-316.03	-1,196.11	-315.40	0.00	0.00	0.00
6,800.00	11.73	255.20	6,673.57	-321.22	-1,215.77	-320.58	0.00	0.00	0.00
6,900.00	11.73	255.20	6,771.48	-326.41	-1,235.42	-325.77	0.00	0.00	0.00
7,000.00	11.73	255.20	6,869.39	-331.61	-1,255.08	-330.95	0.00	0.00	0.00
7,013.74	11.73	255.20	6,882.85	-332.32	-1,257.78	-331.66	0.00	0.00	0.00
KOP @ 7013.74ft :: DLS = 8°/100'									
7,100.00	12.11	289.03	6,967.35	-331.61	-1,274.83	-330.94	8.00	0.44	39.22
7,200.00	16.58	316.39	7,064.32	-317.84	-1,294.62	-317.16	8.00	4.47	27.36
7,300.00	23.00	330.67	7,158.41	-290.43	-1,314.06	-289.74	8.00	6.43	14.28
7,376.14	28.42	337.15	7,227.00	-260.73	-1,328.40	-260.04	8.00	7.11	8.50
Sharon Springs									
7,400.00	30.16	338.72	7,247.81	-249.91	-1,332.78	-249.22	8.00	7.32	6.61

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well NELSON 35-15HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4969.00usft (Drilling Rig)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4969.00usft (Drilling Rig)
Site:	2N-68W-35 NELSON 28-35HZ PAD	North Reference:	True
Well:	NELSON 35-15HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
Design:	Permit Rev-1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,100.00	84.23	357.86	7,615.32	307.01	-1,416.39	307.75	8.00	7.84	1.61
8,177.86	90.34	359.09	7,619.00	384.72	-1,418.46	385.46	8.00	7.84	1.59
End Build @ 8177.86ft - Top of Production									
8,200.00	90.34	359.09	7,618.87	406.85	-1,418.81	407.59	0.00	0.00	0.00
8,300.00	90.34	359.09	7,618.28	506.84	-1,420.39	507.58	0.00	0.00	0.00
8,400.00	90.34	359.09	7,617.69	606.82	-1,421.98	607.57	0.00	0.00	0.00
8,500.00	90.34	359.09	7,617.10	706.81	-1,423.57	707.55	0.00	0.00	0.00
8,600.00	90.34	359.09	7,616.51	806.79	-1,425.15	807.54	0.00	0.00	0.00
8,700.00	90.34	359.09	7,615.91	906.78	-1,426.74	907.53	0.00	0.00	0.00
8,800.00	90.34	359.09	7,615.32	1,006.77	-1,428.33	1,007.51	0.00	0.00	0.00
8,900.00	90.34	359.09	7,614.73	1,106.75	-1,429.91	1,107.50	0.00	0.00	0.00
9,000.00	90.34	359.09	7,614.14	1,206.74	-1,431.50	1,207.49	0.00	0.00	0.00
9,100.00	90.34	359.09	7,613.55	1,306.72	-1,433.08	1,307.47	0.00	0.00	0.00
9,200.00	90.34	359.09	7,612.96	1,406.71	-1,434.67	1,407.46	0.00	0.00	0.00
9,300.00	90.34	359.09	7,612.36	1,506.69	-1,436.26	1,507.45	0.00	0.00	0.00
9,400.00	90.34	359.09	7,611.77	1,606.68	-1,437.84	1,607.43	0.00	0.00	0.00
9,500.00	90.34	359.09	7,611.18	1,706.67	-1,439.43	1,707.42	0.00	0.00	0.00
9,600.00	90.34	359.09	7,610.59	1,806.65	-1,441.02	1,807.41	0.00	0.00	0.00
9,700.00	90.34	359.09	7,610.00	1,906.64	-1,442.60	1,907.39	0.00	0.00	0.00
9,800.00	90.34	359.09	7,609.41	2,006.62	-1,444.19	2,007.38	0.00	0.00	0.00
9,900.00	90.34	359.09	7,608.81	2,106.61	-1,445.77	2,107.37	0.00	0.00	0.00
10,000.00	90.34	359.09	7,608.22	2,206.59	-1,447.36	2,207.35	0.00	0.00	0.00
10,100.00	90.34	359.09	7,607.63	2,306.58	-1,448.95	2,307.34	0.00	0.00	0.00
10,200.00	90.34	359.09	7,607.04	2,406.57	-1,450.53	2,407.32	0.00	0.00	0.00
10,300.00	90.34	359.09	7,606.45	2,506.55	-1,452.12	2,507.31	0.00	0.00	0.00
10,400.00	90.34	359.09	7,605.85	2,606.54	-1,453.71	2,607.30	0.00	0.00	0.00
10,500.00	90.34	359.09	7,605.26	2,706.52	-1,455.29	2,707.28	0.00	0.00	0.00
10,600.00	90.34	359.09	7,604.67	2,806.51	-1,456.88	2,807.27	0.00	0.00	0.00
10,700.00	90.34	359.09	7,604.08	2,906.49	-1,458.46	2,907.26	0.00	0.00	0.00
10,800.00	90.34	359.09	7,603.49	3,006.48	-1,460.05	3,007.24	0.00	0.00	0.00
10,900.00	90.34	359.09	7,602.90	3,106.47	-1,461.64	3,107.23	0.00	0.00	0.00
11,000.00	90.34	359.09	7,602.30	3,206.45	-1,463.22	3,207.22	0.00	0.00	0.00
11,100.00	90.34	359.09	7,601.71	3,306.44	-1,464.81	3,307.20	0.00	0.00	0.00
11,200.00	90.34	359.09	7,601.12	3,406.42	-1,466.40	3,407.19	0.00	0.00	0.00
11,300.00	90.34	359.09	7,600.53	3,506.41	-1,467.98	3,507.18	0.00	0.00	0.00
11,400.00	90.34	359.09	7,599.94	3,606.39	-1,469.57	3,607.16	0.00	0.00	0.00
11,467.04	90.34	359.09	7,599.54	3,673.42	-1,470.63	3,674.19	0.00	0.00	0.00
Begin Turn to BHL @ 11467.04ft									
11,500.00	90.34	359.59	7,599.35	3,706.38	-1,471.01	3,707.15	1.50	0.00	1.50
11,565.54	90.34	0.57	7,598.96	3,771.92	-1,470.92	3,772.69	1.50	0.00	1.50
End Turn @ 11565.54ft									
11,600.00	90.34	0.57	7,598.75	3,806.38	-1,470.58	3,807.15	0.00	0.00	0.00
11,700.00	90.34	0.57	7,598.16	3,906.37	-1,469.59	3,907.14	0.00	0.00	0.00
11,800.00	90.34	0.57	7,597.57	4,006.36	-1,468.60	4,007.13	0.00	0.00	0.00
11,900.00	90.34	0.57	7,596.97	4,106.36	-1,467.60	4,107.12	0.00	0.00	0.00
12,000.00	90.34	0.57	7,596.38	4,206.35	-1,466.61	4,207.12	0.00	0.00	0.00
12,100.00	90.34	0.57	7,595.79	4,306.34	-1,465.62	4,307.11	0.00	0.00	0.00
12,200.00	90.34	0.57	7,595.19	4,406.34	-1,464.63	4,407.10	0.00	0.00	0.00
12,300.00	90.34	0.57	7,594.60	4,506.33	-1,463.63	4,507.10	0.00	0.00	0.00
12,400.00	90.34	0.57	7,594.01	4,606.32	-1,462.64	4,607.09	0.00	0.00	0.00
12,500.00	90.34	0.57	7,593.41	4,706.32	-1,461.65	4,707.08	0.00	0.00	0.00
12,600.00	90.34	0.57	7,592.82	4,806.31	-1,460.66	4,807.07	0.00	0.00	0.00
12,700.00	90.34	0.57	7,592.23	4,906.30	-1,459.66	4,907.07	0.00	0.00	0.00

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well NELSON 35-15HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4969.00usft (Drilling Rig)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4969.00usft (Drilling Rig)
Site:	2N-68W-35 NELSON 28-35HZ PAD	North Reference:	True
Well:	NELSON 35-15HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
Design:	Permit Rev-1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,800.00	90.34	0.57	7,591.63	5,006.30	-1,458.67	5,007.06	0.00	0.00	0.00
12,900.00	90.34	0.57	7,591.04	5,106.29	-1,457.68	5,107.05	0.00	0.00	0.00
13,000.00	90.34	0.57	7,590.45	5,206.28	-1,456.69	5,207.05	0.00	0.00	0.00
13,100.00	90.34	0.57	7,589.85	5,306.28	-1,455.69	5,307.04	0.00	0.00	0.00
13,200.00	90.34	0.57	7,589.26	5,406.27	-1,454.70	5,407.03	0.00	0.00	0.00
13,300.00	90.34	0.57	7,588.67	5,506.26	-1,453.71	5,507.02	0.00	0.00	0.00
13,400.00	90.34	0.57	7,588.07	5,606.26	-1,452.71	5,607.02	0.00	0.00	0.00
13,500.00	90.34	0.57	7,587.48	5,706.25	-1,451.72	5,707.01	0.00	0.00	0.00
13,600.00	90.34	0.57	7,586.89	5,806.24	-1,450.73	5,807.00	0.00	0.00	0.00
13,700.00	90.34	0.57	7,586.29	5,906.24	-1,449.74	5,906.99	0.00	0.00	0.00
13,800.00	90.34	0.57	7,585.70	6,006.23	-1,448.74	6,006.99	0.00	0.00	0.00
13,900.00	90.34	0.57	7,585.11	6,106.22	-1,447.75	6,106.98	0.00	0.00	0.00
14,000.00	90.34	0.57	7,584.51	6,206.22	-1,446.76	6,206.97	0.00	0.00	0.00
14,100.00	90.34	0.57	7,583.92	6,306.21	-1,445.77	6,306.97	0.00	0.00	0.00
14,200.00	90.34	0.57	7,583.33	6,406.20	-1,444.77	6,406.96	0.00	0.00	0.00
14,300.00	90.34	0.57	7,582.73	6,506.20	-1,443.78	6,506.95	0.00	0.00	0.00
14,400.00	90.34	0.57	7,582.14	6,606.19	-1,442.79	6,606.94	0.00	0.00	0.00
14,500.00	90.34	0.57	7,581.55	6,706.18	-1,441.80	6,706.94	0.00	0.00	0.00
14,600.00	90.34	0.57	7,580.95	6,806.18	-1,440.80	6,806.93	0.00	0.00	0.00
14,700.00	90.34	0.57	7,580.36	6,906.17	-1,439.81	6,906.92	0.00	0.00	0.00
14,800.00	90.34	0.57	7,579.77	7,006.16	-1,438.82	7,006.92	0.00	0.00	0.00
14,900.00	90.34	0.57	7,579.17	7,106.16	-1,437.83	7,106.91	0.00	0.00	0.00
15,000.00	90.34	0.57	7,578.58	7,206.15	-1,436.83	7,206.90	0.00	0.00	0.00
15,100.00	90.34	0.57	7,577.99	7,306.14	-1,435.84	7,306.89	0.00	0.00	0.00
15,200.00	90.34	0.57	7,577.39	7,406.14	-1,434.85	7,406.89	0.00	0.00	0.00
15,300.00	90.34	0.57	7,576.80	7,506.13	-1,433.86	7,506.88	0.00	0.00	0.00
15,400.00	90.34	0.57	7,576.21	7,606.12	-1,432.86	7,606.87	0.00	0.00	0.00
15,500.00	90.34	0.57	7,575.61	7,706.12	-1,431.87	7,706.86	0.00	0.00	0.00
15,600.00	90.34	0.57	7,575.02	7,806.11	-1,430.88	7,806.86	0.00	0.00	0.00
15,700.00	90.34	0.57	7,574.43	7,906.10	-1,429.89	7,906.85	0.00	0.00	0.00
15,800.00	90.34	0.57	7,573.83	8,006.10	-1,428.89	8,006.84	0.00	0.00	0.00
15,900.00	90.34	0.57	7,573.24	8,106.09	-1,427.90	8,106.84	0.00	0.00	0.00
16,000.00	90.34	0.57	7,572.65	8,206.08	-1,426.91	8,206.83	0.00	0.00	0.00
16,100.00	90.34	0.57	7,572.05	8,306.08	-1,425.92	8,306.82	0.00	0.00	0.00
16,200.00	90.34	0.57	7,571.46	8,406.07	-1,424.92	8,406.81	0.00	0.00	0.00
16,300.00	90.34	0.57	7,570.87	8,506.06	-1,423.93	8,506.81	0.00	0.00	0.00
16,400.00	90.34	0.57	7,570.27	8,606.06	-1,422.94	8,606.80	0.00	0.00	0.00
16,445.96	90.34	0.57	7,570.00	8,652.01	-1,422.48	8,652.75	0.00	0.00	0.00
TD Well @ 16445.96ft									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,516.08	1,500.00	9 5/8" Csg	9-5/8	13-1/2	
8,177.86	7,619.00	Top of Production	5-1/2	7-7/8	

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well NELSON 35-15HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4969.00usft (Drilling Rig)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4969.00usft (Drilling Rig)
Site:	2N-68W-35 NELSON 28-35HZ PAD	North Reference:	True
Well:	NELSON 35-15HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B		
Design:	Permit Rev-1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
985.00	980.00	Fox Hills				
4,110.26	4,040.00	Parkman				
4,612.75	4,532.00	Sussex				
7,376.14	7,227.00	Sharon Springs				
7,472.88	7,309.00	Niobrara				
7,567.08	7,382.00	Nio B				
7,696.58	7,469.00	Nio C				
7,953.02	7,586.00	Fort Hayes				
8,052.41	7,609.00	Codell				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
225.00	225.00	0.00	0.00	Begin Nudge @ 225.00ft	
1,007.00	1,001.55	-20.38	-77.12	Hold Tangent @ 1007.00ft	
7,013.74	6,882.85	-332.32	-1,257.78	KOP @ 7013.74ft :: DLS = 8°/100'	
8,177.86	7,619.00	384.72	-1,418.46	End Build @ 8177.86ft	
11,467.04	7,599.54	3,673.42	-1,470.63	Begin Turn to BHL @ 11467.04ft	
11,565.54	7,598.96	3,771.92	-1,470.92	End Turn @ 11565.54ft	
16,445.96	7,570.00	8,652.01	-1,422.48	TD Well @ 16445.96ft	