

US ROCKIES WATTENBERG PLANNING

WELD-NAD83-UTMFT13N

2N-65W-35 LABRISA 11-35HZ PAD

LABRISA 35-3HZ

Plan A

Plan: Permit Rev-1

Standard Planning Report

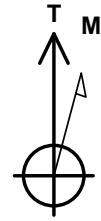
07 September, 2023

Project: WELD-NAD83-UTMFT13N
Site: 2N-65W-35 LABRISA 11-35HZ PAD
Well: LABRISA 35-3HZ
Wellbore: Plan A
Design: Permit Rev-1

US ROCKIES WATTENBERG PLANNING

CASING DETAILS

TVD	MD	Name	Size
2017.00	2053.71	9 5/8"	9-5/8
7147.00	17912.46	5.5" CSG	5-1/2



Azimuths to True North
Magnetic North: 7.63°
Magnetic Field
Strength: 51680.6nT
Dip Angle: 66.38°
Date: 8/18/2022
Model: IGRF2020

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	240.00	0.00	0.00	240.00	0.00	0.00	0.00	0.00	0.00	
3	1196.67	14.35	211.50	1186.70	-101.61	-62.27	1.50	211.50	102.42	
4	3998.00	14.35	211.50	3900.63	-693.60	-425.04	0.00	0.00	699.10	
5	4715.50	0.00	0.00	4610.65	-769.81	-471.74	2.00	180.00	775.92	
6	6485.66	0.00	0.00	6380.81	-769.81	-471.74	0.00	0.00	775.92	
7	7607.16	89.72	188.20	7097.00	-1475.22	-573.39	8.00	188.20	1482.60	
8	7857.16	89.72	188.20	7098.22	-1722.66	-609.05	0.00	0.00	1730.49	
9	8379.72	89.72	180.36	7100.77	-2243.35	-648.02	1.50	-90.00	2251.64	
10	17912.46	89.72	180.36	7147.00	-11775.79	-708.16	0.00	0.00	11784.05	LABRISA 35-3HZ_BHL

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	Northing	Easting	Latitude	Longitude
LABRISA 35-3HZ_SHL	0.00	14560192.61	1742963.62	40.091304	-104.633339
LABRISA 35-3HZ_LP	7097.00	14558715.04	1742396.32	40.087253	-104.635389
LABRISA 35-3HZ_BHL	7147.00	14548414.00	1742304.00	40.058966	-104.635870

WELL DETAILS: LABRISA 35-3HZ

GL = 4969'

RKB = 17' @ 4986.00usft (RIG)

FORMATION TOP DETAILS

Plan: Permit Rev-1 (LABRISA 35-3HZ/Plan A)

Date: 9/7/2023

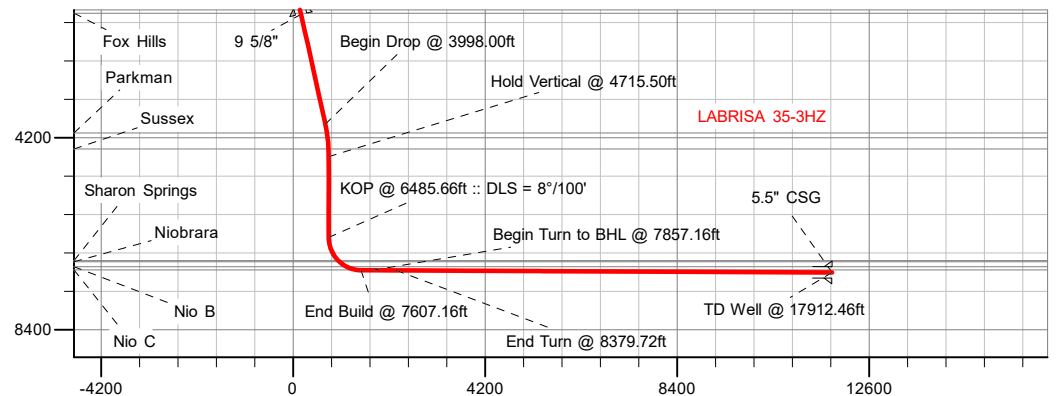
TVDPath	MDPath	Formation
1479.00	1498.38	Fox Hills
4094.00	4196.01	Parkman
4444.00	4548.76	Sussex
6887.00	7047.82	Sharon Springs
6912.00	7084.10	Niobrara
7021.00	7277.71	Nio B
7091.00	7517.83	Nio C

SHL
1387' FSL
1974' FWL

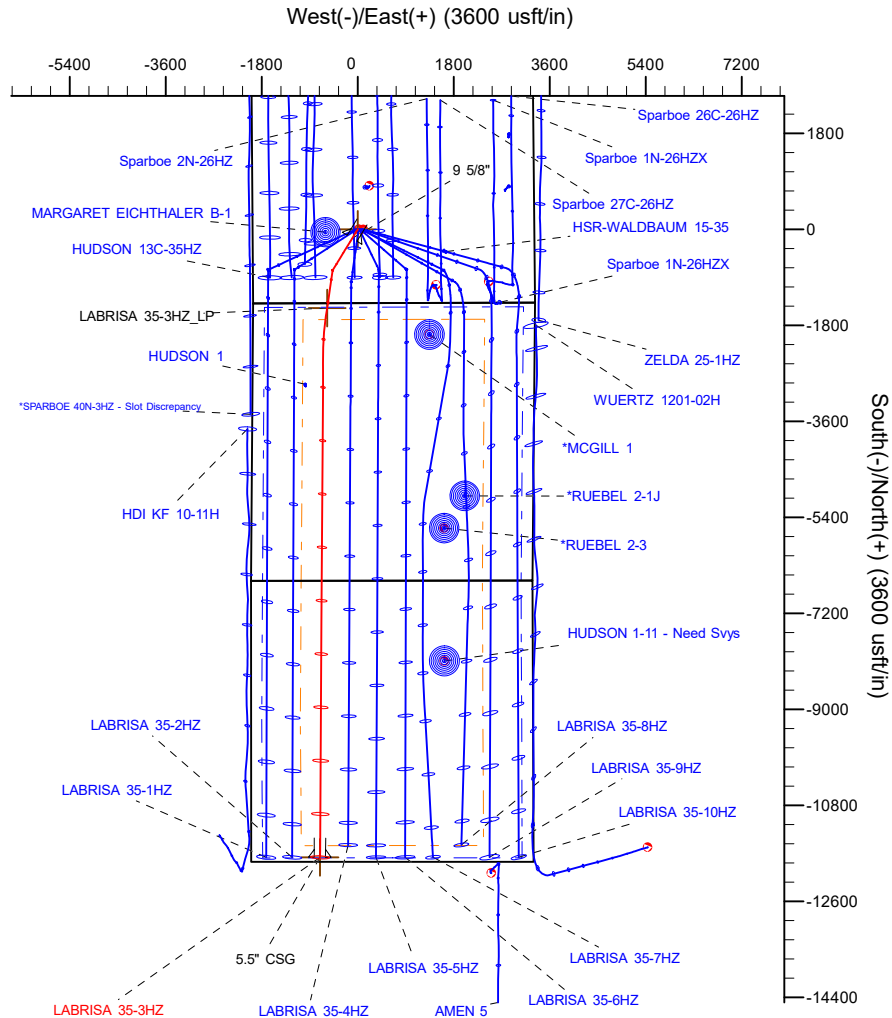
LP
87' FNL
1391' FWL

BHL
85' FSL
1291' FWL

True Vertical Depth (4200 usft/in)



Vertical Section at 180.75° (4200 usft/in)



Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-3HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4986.00usft (RIG)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4986.00usft (RIG)
Site:	2N-65W-35 LABRISA 11-35HZ PAD	North Reference:	True
Well:	LABRISA 35-3HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
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-65W-35 LABRISA 11-35HZ PAD				
Site Position:		Northing:	14,560,192.78	usft	Latitude:	40.091305
From:	Map	Easting:	1,742,933.63	usft	Longitude:	-104.633447
Position Uncertainty:		0.00	usft	Slot Radius:	13-3/16	"

Well		LABRISA 35-3HZ				
Well Position	+N/-S	0.00 usft	Northing:	14,560,192.61 usft	Latitude:	40.091304
	+E/-W	0.00 usft	Easting:	1,742,963.62 usft	Longitude:	-104.633339
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft	Ground Level:	4,969.00 usft
Grid Convergence:		0.24 °				

Wellbore	Plan A				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF202013	9/7/2023	7.52	66.33	51,569.30547874

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	180.75	

Plan Survey Tool Program	Date	9/7/2023			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	2,017.00	Permit Rev-1 (Plan A)	APC_ISCWSA REV 2 MWD+I	
				Fixed:v2:crustal field declinatio	
2	2,017.00	17,912.46	Permit Rev-1 (Plan A)	APC_ISCWSA REV 2 MWD+I	
				Fixed:v2:crustal field declinatio	

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Well:	LABRISA 35-3HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
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	
240.00	0.00	0.00	240.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,196.67	14.35	211.50	1,186.70	-101.61	-62.27	1.50	1.50	0.00	211.50	
3,998.00	14.35	211.50	3,900.63	-693.60	-425.04	0.00	0.00	0.00	0.00	
4,715.50	0.00	0.00	4,610.65	-769.81	-471.74	2.00	-2.00	0.00	180.00	
6,485.66	0.00	0.00	6,380.81	-769.81	-471.74	0.00	0.00	0.00	0.00	
7,607.16	89.72	188.20	7,097.00	-1,475.22	-573.39	8.00	8.00	0.00	188.20	
7,857.16	89.72	188.20	7,098.22	-1,722.66	-609.05	0.00	0.00	0.00	0.00	
8,379.72	89.72	180.36	7,100.77	-2,243.35	-648.02	1.50	0.00	-1.50	-90.00	
17,912.46	89.72	180.36	7,147.00	-11,775.79	-708.16	0.00	0.00	0.00	0.00	LABRISA 35-3HZ_BH

Planning Report

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Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4986.00usft (RIG)
Site:	2N-65W-35 LABRISA 11-35HZ PAD	North Reference:	True
Well:	LABRISA 35-3HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
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
240.00	0.00	0.00	240.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 240.00ft									
300.00	0.90	211.50	300.00	-0.40	-0.25	0.40	1.50	1.50	0.00
400.00	2.40	211.50	399.95	-2.86	-1.75	2.88	1.50	1.50	0.00
500.00	3.90	211.50	499.80	-7.54	-4.62	7.60	1.50	1.50	0.00
600.00	5.40	211.50	599.47	-14.45	-8.86	14.57	1.50	1.50	0.00
700.00	6.90	211.50	698.89	-23.59	-14.45	23.78	1.50	1.50	0.00
800.00	8.40	211.50	798.00	-34.94	-21.41	35.22	1.50	1.50	0.00
900.00	9.90	211.50	896.72	-48.50	-29.72	48.88	1.50	1.50	0.00
1,000.00	11.40	211.50	995.00	-64.25	-39.37	64.76	1.50	1.50	0.00
1,100.00	12.90	211.50	1,092.75	-82.20	-50.37	82.85	1.50	1.50	0.00
1,196.67	14.35	211.50	1,186.70	-101.61	-62.27	102.42	1.50	1.50	0.00
Hold Tangent @ 1196.67ft									
1,200.00	14.35	211.50	1,189.93	-102.32	-62.70	103.13	0.00	0.00	0.00
1,300.00	14.35	211.50	1,286.81	-123.45	-75.65	124.43	0.00	0.00	0.00
1,400.00	14.35	211.50	1,383.69	-144.58	-88.60	145.73	0.00	0.00	0.00
1,498.38	14.35	211.50	1,479.00	-165.37	-101.34	166.69	0.00	0.00	0.00
Fox Hills									
1,500.00	14.35	211.50	1,480.57	-165.72	-101.55	167.03	0.00	0.00	0.00
1,600.00	14.35	211.50	1,577.45	-186.85	-114.50	188.33	0.00	0.00	0.00
1,700.00	14.35	211.50	1,674.33	-207.98	-127.45	209.63	0.00	0.00	0.00
1,800.00	14.35	211.50	1,771.21	-229.11	-140.40	230.93	0.00	0.00	0.00
1,900.00	14.35	211.50	1,868.09	-250.24	-153.35	252.23	0.00	0.00	0.00
2,000.00	14.35	211.50	1,964.97	-271.38	-166.30	273.53	0.00	0.00	0.00
2,053.71	14.35	211.50	2,017.00	-282.73	-173.26	284.97	0.00	0.00	0.00
9 5/8"									
2,100.00	14.35	211.50	2,061.85	-292.51	-179.25	294.83	0.00	0.00	0.00
2,200.00	14.35	211.50	2,158.73	-313.64	-192.20	316.13	0.00	0.00	0.00
2,300.00	14.35	211.50	2,255.61	-334.77	-205.15	337.43	0.00	0.00	0.00
2,400.00	14.35	211.50	2,352.49	-355.91	-218.10	358.73	0.00	0.00	0.00
2,500.00	14.35	211.50	2,449.37	-377.04	-231.05	380.03	0.00	0.00	0.00
2,600.00	14.35	211.50	2,546.25	-398.17	-244.00	401.33	0.00	0.00	0.00
2,700.00	14.35	211.50	2,643.13	-419.30	-256.95	422.63	0.00	0.00	0.00
2,800.00	14.35	211.50	2,740.01	-440.43	-269.90	443.93	0.00	0.00	0.00
2,900.00	14.35	211.50	2,836.89	-461.57	-282.85	465.23	0.00	0.00	0.00
3,000.00	14.35	211.50	2,933.77	-482.70	-295.80	486.53	0.00	0.00	0.00
3,100.00	14.35	211.50	3,030.65	-503.83	-308.75	507.83	0.00	0.00	0.00
3,200.00	14.35	211.50	3,127.53	-524.96	-321.70	529.13	0.00	0.00	0.00
3,300.00	14.35	211.50	3,224.41	-546.10	-334.65	550.43	0.00	0.00	0.00
3,400.00	14.35	211.50	3,321.29	-567.23	-347.60	571.73	0.00	0.00	0.00
3,500.00	14.35	211.50	3,418.17	-588.36	-360.55	593.03	0.00	0.00	0.00
3,600.00	14.35	211.50	3,515.05	-609.49	-373.50	614.33	0.00	0.00	0.00
3,700.00	14.35	211.50	3,611.93	-630.62	-386.45	635.63	0.00	0.00	0.00
3,800.00	14.35	211.50	3,708.81	-651.76	-399.40	656.93	0.00	0.00	0.00
3,900.00	14.35	211.50	3,805.69	-672.89	-412.35	678.23	0.00	0.00	0.00
3,998.00	14.35	211.50	3,900.63	-693.60	-425.04	699.10	0.00	0.00	0.00
Begin Drop @ 3998.00ft									
4,000.00	14.31	211.50	3,902.57	-694.02	-425.30	699.53	2.00	-2.00	0.00
4,100.00	12.31	211.50	3,999.87	-713.65	-437.32	719.31	2.00	-2.00	0.00
4,196.01	10.39	211.50	4,094.00	-729.76	-447.20	735.55	2.00	-2.00	0.00

Planning Report

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Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4986.00usft (RIG)
Site:	2N-65W-35 LABRISA 11-35HZ PAD	North Reference:	True
Well:	LABRISA 35-3HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
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)
Parkman									
4,200.00	10.31	211.50	4,097.93	-730.37	-447.57	736.17	2.00	-2.00	0.00
4,300.00	8.31	211.50	4,196.61	-744.16	-456.02	750.07	2.00	-2.00	0.00
4,400.00	6.31	211.50	4,295.79	-755.01	-462.67	761.00	2.00	-2.00	0.00
4,500.00	4.31	211.50	4,395.35	-762.90	-467.51	768.96	2.00	-2.00	0.00
4,548.76	3.33	211.50	4,444.00	-765.67	-469.20	771.75	2.00	-2.00	0.00
Sussex									
4,600.00	2.31	211.50	4,495.18	-767.82	-470.52	773.92	2.00	-2.00	0.00
4,700.00	0.31	211.50	4,595.15	-769.77	-471.72	775.88	2.00	-2.00	0.00
4,715.50	0.00	0.00	4,610.65	-769.81	-471.74	775.92	2.00	-2.00	0.00
Hold Vertical @ 4715.50ft									
4,800.00	0.00	0.00	4,695.15	-769.81	-471.74	775.92	0.00	0.00	0.00
4,900.00	0.00	0.00	4,795.15	-769.81	-471.74	775.92	0.00	0.00	0.00
5,000.00	0.00	0.00	4,895.15	-769.81	-471.74	775.92	0.00	0.00	0.00
5,100.00	0.00	0.00	4,995.15	-769.81	-471.74	775.92	0.00	0.00	0.00
5,200.00	0.00	0.00	5,095.15	-769.81	-471.74	775.92	0.00	0.00	0.00
5,300.00	0.00	0.00	5,195.15	-769.81	-471.74	775.92	0.00	0.00	0.00
5,400.00	0.00	0.00	5,295.15	-769.81	-471.74	775.92	0.00	0.00	0.00
5,500.00	0.00	0.00	5,395.15	-769.81	-471.74	775.92	0.00	0.00	0.00
5,600.00	0.00	0.00	5,495.15	-769.81	-471.74	775.92	0.00	0.00	0.00
5,700.00	0.00	0.00	5,595.15	-769.81	-471.74	775.92	0.00	0.00	0.00
5,800.00	0.00	0.00	5,695.15	-769.81	-471.74	775.92	0.00	0.00	0.00
5,900.00	0.00	0.00	5,795.15	-769.81	-471.74	775.92	0.00	0.00	0.00
6,000.00	0.00	0.00	5,895.15	-769.81	-471.74	775.92	0.00	0.00	0.00
6,100.00	0.00	0.00	5,995.15	-769.81	-471.74	775.92	0.00	0.00	0.00
6,200.00	0.00	0.00	6,095.15	-769.81	-471.74	775.92	0.00	0.00	0.00
6,300.00	0.00	0.00	6,195.15	-769.81	-471.74	775.92	0.00	0.00	0.00
6,400.00	0.00	0.00	6,295.15	-769.81	-471.74	775.92	0.00	0.00	0.00
6,485.66	0.00	0.00	6,380.81	-769.81	-471.74	775.92	0.00	0.00	0.00
KOP @ 6485.66ft :: DLS = 8°/100'									
6,500.00	1.15	188.20	6,395.15	-769.95	-471.76	776.06	8.00	8.00	0.00
6,550.00	5.15	188.20	6,445.06	-772.67	-472.15	778.78	8.00	8.00	0.00
6,600.00	9.15	188.20	6,494.67	-778.82	-473.04	784.95	8.00	8.00	0.00
6,650.00	13.15	188.20	6,543.71	-788.39	-474.42	794.53	8.00	8.00	0.00
6,700.00	17.15	188.20	6,591.96	-801.32	-476.28	807.48	8.00	8.00	0.00
6,750.00	21.15	188.20	6,639.19	-817.55	-478.62	823.74	8.00	8.00	0.00
6,800.00	25.15	188.20	6,685.15	-837.00	-481.42	843.23	8.00	8.00	0.00
6,850.00	29.15	188.20	6,729.64	-859.57	-484.67	865.84	8.00	8.00	0.00
6,900.00	33.15	188.20	6,772.42	-885.17	-488.36	891.48	8.00	8.00	0.00
6,950.00	37.15	188.20	6,813.30	-913.65	-492.47	920.02	8.00	8.00	0.00
7,000.00	41.15	188.20	6,852.06	-944.89	-496.97	951.31	8.00	8.00	0.00
7,047.82	44.97	188.20	6,887.00	-977.20	-501.62	983.68	8.00	8.00	0.00
Sharon Springs									
7,050.00	45.15	188.20	6,888.54	-978.72	-501.84	985.21	8.00	8.00	0.00
7,084.10	47.87	188.20	6,912.00	-1,003.20	-505.37	1,009.73	8.00	8.00	0.00
Niobrara									
7,100.00	49.15	188.20	6,922.54	-1,015.00	-507.07	1,021.55	8.00	8.00	0.00
7,150.00	53.15	188.20	6,953.90	-1,053.53	-512.62	1,060.15	8.00	8.00	0.00
7,200.00	57.15	188.20	6,982.46	-1,094.13	-518.48	1,100.82	8.00	8.00	0.00
7,250.00	61.15	188.20	7,008.10	-1,136.61	-524.60	1,143.38	8.00	8.00	0.00
7,277.71	63.36	188.20	7,021.00	-1,160.88	-528.09	1,167.70	8.00	8.00	0.00
Nio B									
7,300.00	65.15	188.20	7,030.68	-1,180.75	-530.96	1,187.60	8.00	8.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-3HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4986.00usft (RIG)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4986.00usft (RIG)
Site:	2N-65W-35 LABRISA 11-35HZ PAD	North Reference:	True
Well:	LABRISA 35-3HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
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)
7,350.00	69.15	188.20	7,050.10	-1,226.35	-537.53	1,233.28	8.00	8.00	0.00
7,400.00	73.15	188.20	7,066.25	-1,273.17	-544.28	1,280.19	8.00	8.00	0.00
7,450.00	77.15	188.20	7,079.06	-1,321.00	-551.17	1,328.10	8.00	8.00	0.00
7,500.00	81.15	188.20	7,088.48	-1,369.59	-558.17	1,376.78	8.00	8.00	0.00
7,517.83	82.57	188.20	7,091.00	-1,387.06	-560.69	1,394.28	8.00	8.00	0.00
Nio C									
7,550.00	85.15	188.20	7,094.44	-1,418.72	-565.25	1,425.99	8.00	8.00	0.00
7,600.00	89.15	188.20	7,096.93	-1,468.13	-572.37	1,475.50	8.00	8.00	0.00
7,607.16	89.72	188.20	7,097.00	-1,475.22	-573.39	1,482.60	8.00	8.00	0.00
End Build @ 7607.16ft									
7,700.00	89.72	188.20	7,097.45	-1,567.11	-586.63	1,574.65	0.00	0.00	0.00
7,800.00	89.72	188.20	7,097.94	-1,666.09	-600.89	1,673.81	0.00	0.00	0.00
7,857.16	89.72	188.20	7,098.22	-1,722.66	-609.05	1,730.49	0.00	0.00	0.00
Begin Turn to BHL @ 7857.16ft									
7,900.00	89.72	187.56	7,098.43	-1,765.10	-614.92	1,772.99	1.50	0.00	-1.50
8,000.00	89.72	186.06	7,098.92	-1,864.39	-626.77	1,872.43	1.50	0.00	-1.50
8,100.00	89.72	184.56	7,099.41	-1,963.95	-636.02	1,972.11	1.50	0.00	-1.50
8,200.00	89.72	183.06	7,099.89	-2,063.73	-642.66	2,071.96	1.50	0.00	-1.50
8,300.00	89.72	181.56	7,100.38	-2,163.64	-646.69	2,171.92	1.50	0.00	-1.50
8,379.72	89.72	180.36	7,100.77	-2,243.35	-648.02	2,251.64	1.50	0.00	-1.50
End Turn @ 8379.72ft									
8,400.00	89.72	180.36	7,100.87	-2,263.63	-648.15	2,271.92	0.00	0.00	0.00
8,500.00	89.72	180.36	7,101.35	-2,363.63	-648.78	2,371.92	0.00	0.00	0.00
8,600.00	89.72	180.36	7,101.84	-2,463.62	-649.41	2,471.91	0.00	0.00	0.00
8,700.00	89.72	180.36	7,102.32	-2,563.62	-650.04	2,571.91	0.00	0.00	0.00
8,800.00	89.72	180.36	7,102.81	-2,663.62	-650.67	2,671.91	0.00	0.00	0.00
8,900.00	89.72	180.36	7,103.29	-2,763.61	-651.30	2,771.90	0.00	0.00	0.00
9,000.00	89.72	180.36	7,103.78	-2,863.61	-651.94	2,871.90	0.00	0.00	0.00
9,100.00	89.72	180.36	7,104.26	-2,963.61	-652.57	2,971.90	0.00	0.00	0.00
9,200.00	89.72	180.36	7,104.75	-3,063.60	-653.20	3,071.89	0.00	0.00	0.00
9,300.00	89.72	180.36	7,105.23	-3,163.60	-653.83	3,171.89	0.00	0.00	0.00
9,400.00	89.72	180.36	7,105.72	-3,263.60	-654.46	3,271.89	0.00	0.00	0.00
9,500.00	89.72	180.36	7,106.20	-3,363.60	-655.09	3,371.88	0.00	0.00	0.00
9,600.00	89.72	180.36	7,106.69	-3,463.59	-655.72	3,471.88	0.00	0.00	0.00
9,700.00	89.72	180.36	7,107.17	-3,563.59	-656.35	3,571.87	0.00	0.00	0.00
9,800.00	89.72	180.36	7,107.66	-3,663.59	-656.98	3,671.87	0.00	0.00	0.00
9,900.00	89.72	180.36	7,108.14	-3,763.58	-657.61	3,771.87	0.00	0.00	0.00
10,000.00	89.72	180.36	7,108.63	-3,863.58	-658.24	3,871.86	0.00	0.00	0.00
10,100.00	89.72	180.36	7,109.11	-3,963.58	-658.87	3,971.86	0.00	0.00	0.00
10,200.00	89.72	180.36	7,109.60	-4,063.57	-659.51	4,071.86	0.00	0.00	0.00
10,300.00	89.72	180.36	7,110.08	-4,163.57	-660.14	4,171.85	0.00	0.00	0.00
10,400.00	89.72	180.36	7,110.57	-4,263.57	-660.77	4,271.85	0.00	0.00	0.00
10,500.00	89.72	180.36	7,111.05	-4,363.56	-661.40	4,371.85	0.00	0.00	0.00
10,600.00	89.72	180.36	7,111.54	-4,463.56	-662.03	4,471.84	0.00	0.00	0.00
10,700.00	89.72	180.36	7,112.02	-4,563.56	-662.66	4,571.84	0.00	0.00	0.00
10,800.00	89.72	180.36	7,112.51	-4,663.55	-663.29	4,671.84	0.00	0.00	0.00
10,900.00	89.72	180.36	7,112.99	-4,763.55	-663.92	4,771.83	0.00	0.00	0.00
11,000.00	89.72	180.36	7,113.48	-4,863.55	-664.55	4,871.83	0.00	0.00	0.00
11,100.00	89.72	180.36	7,113.96	-4,963.54	-665.18	4,971.83	0.00	0.00	0.00
11,200.00	89.72	180.36	7,114.45	-5,063.54	-665.81	5,071.82	0.00	0.00	0.00
11,300.00	89.72	180.36	7,114.93	-5,163.54	-666.45	5,171.82	0.00	0.00	0.00
11,400.00	89.72	180.36	7,115.42	-5,263.53	-667.08	5,271.82	0.00	0.00	0.00
11,500.00	89.72	180.36	7,115.90	-5,363.53	-667.71	5,371.81	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-3HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4986.00usft (RIG)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4986.00usft (RIG)
Site:	2N-65W-35 LABRISA 11-35HZ PAD	North Reference:	True
Well:	LABRISA 35-3HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
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)
11,600.00	89.72	180.36	7,116.39	-5,463.53	-668.34	5,471.81	0.00	0.00	0.00
11,700.00	89.72	180.36	7,116.87	-5,563.53	-668.97	5,571.81	0.00	0.00	0.00
11,800.00	89.72	180.36	7,117.36	-5,663.52	-669.60	5,671.80	0.00	0.00	0.00
11,900.00	89.72	180.36	7,117.84	-5,763.52	-670.23	5,771.80	0.00	0.00	0.00
12,000.00	89.72	180.36	7,118.33	-5,863.52	-670.86	5,871.79	0.00	0.00	0.00
12,100.00	89.72	180.36	7,118.81	-5,963.51	-671.49	5,971.79	0.00	0.00	0.00
12,200.00	89.72	180.36	7,119.30	-6,063.51	-672.12	6,071.79	0.00	0.00	0.00
12,300.00	89.72	180.36	7,119.78	-6,163.51	-672.75	6,171.78	0.00	0.00	0.00
12,400.00	89.72	180.36	7,120.27	-6,263.50	-673.38	6,271.78	0.00	0.00	0.00
12,500.00	89.72	180.36	7,120.75	-6,363.50	-674.02	6,371.78	0.00	0.00	0.00
12,600.00	89.72	180.36	7,121.24	-6,463.50	-674.65	6,471.77	0.00	0.00	0.00
12,700.00	89.72	180.36	7,121.72	-6,563.49	-675.28	6,571.77	0.00	0.00	0.00
12,800.00	89.72	180.36	7,122.21	-6,663.49	-675.91	6,671.77	0.00	0.00	0.00
12,900.00	89.72	180.36	7,122.69	-6,763.49	-676.54	6,771.76	0.00	0.00	0.00
13,000.00	89.72	180.36	7,123.18	-6,863.48	-677.17	6,871.76	0.00	0.00	0.00
13,100.00	89.72	180.36	7,123.66	-6,963.48	-677.80	6,971.76	0.00	0.00	0.00
13,200.00	89.72	180.36	7,124.15	-7,063.48	-678.43	7,071.75	0.00	0.00	0.00
13,300.00	89.72	180.36	7,124.63	-7,163.47	-679.06	7,171.75	0.00	0.00	0.00
13,400.00	89.72	180.36	7,125.12	-7,263.47	-679.69	7,271.75	0.00	0.00	0.00
13,500.00	89.72	180.36	7,125.60	-7,363.47	-680.32	7,371.74	0.00	0.00	0.00
13,600.00	89.72	180.36	7,126.09	-7,463.47	-680.96	7,471.74	0.00	0.00	0.00
13,700.00	89.72	180.36	7,126.57	-7,563.46	-681.59	7,571.74	0.00	0.00	0.00
13,800.00	89.72	180.36	7,127.06	-7,663.46	-682.22	7,671.73	0.00	0.00	0.00
13,900.00	89.72	180.36	7,127.54	-7,763.46	-682.85	7,771.73	0.00	0.00	0.00
14,000.00	89.72	180.36	7,128.03	-7,863.45	-683.48	7,871.73	0.00	0.00	0.00
14,100.00	89.72	180.36	7,128.51	-7,963.45	-684.11	7,971.72	0.00	0.00	0.00
14,200.00	89.72	180.36	7,129.00	-8,063.45	-684.74	8,071.72	0.00	0.00	0.00
14,300.00	89.72	180.36	7,129.48	-8,163.44	-685.37	8,171.71	0.00	0.00	0.00
14,400.00	89.72	180.36	7,129.97	-8,263.44	-686.00	8,271.71	0.00	0.00	0.00
14,500.00	89.72	180.36	7,130.45	-8,363.44	-686.63	8,371.71	0.00	0.00	0.00
14,600.00	89.72	180.36	7,130.94	-8,463.43	-687.26	8,471.70	0.00	0.00	0.00
14,700.00	89.72	180.36	7,131.42	-8,563.43	-687.89	8,571.70	0.00	0.00	0.00
14,800.00	89.72	180.36	7,131.91	-8,663.43	-688.53	8,671.70	0.00	0.00	0.00
14,900.00	89.72	180.36	7,132.39	-8,763.42	-689.16	8,771.69	0.00	0.00	0.00
15,000.00	89.72	180.36	7,132.88	-8,863.42	-689.79	8,871.69	0.00	0.00	0.00
15,100.00	89.72	180.36	7,133.36	-8,963.42	-690.42	8,971.69	0.00	0.00	0.00
15,200.00	89.72	180.36	7,133.85	-9,063.41	-691.05	9,071.68	0.00	0.00	0.00
15,300.00	89.72	180.36	7,134.33	-9,163.41	-691.68	9,171.68	0.00	0.00	0.00
15,400.00	89.72	180.36	7,134.82	-9,263.41	-692.31	9,271.68	0.00	0.00	0.00
15,500.00	89.72	180.36	7,135.30	-9,363.41	-692.94	9,371.67	0.00	0.00	0.00
15,600.00	89.72	180.36	7,135.79	-9,463.40	-693.57	9,471.67	0.00	0.00	0.00
15,700.00	89.72	180.36	7,136.27	-9,563.40	-694.20	9,571.67	0.00	0.00	0.00
15,800.00	89.72	180.36	7,136.76	-9,663.40	-694.83	9,671.66	0.00	0.00	0.00
15,900.00	89.72	180.36	7,137.24	-9,763.39	-695.46	9,771.66	0.00	0.00	0.00
16,000.00	89.72	180.36	7,137.73	-9,863.39	-696.10	9,871.66	0.00	0.00	0.00
16,100.00	89.72	180.36	7,138.21	-9,963.39	-696.73	9,971.65	0.00	0.00	0.00
16,200.00	89.72	180.36	7,138.70	-10,063.38	-697.36	10,071.65	0.00	0.00	0.00
16,300.00	89.72	180.36	7,139.18	-10,163.38	-697.99	10,171.65	0.00	0.00	0.00
16,400.00	89.72	180.36	7,139.67	-10,263.38	-698.62	10,271.64	0.00	0.00	0.00
16,500.00	89.72	180.36	7,140.15	-10,363.37	-699.25	10,371.64	0.00	0.00	0.00
16,600.00	89.72	180.36	7,140.64	-10,463.37	-699.88	10,471.64	0.00	0.00	0.00
16,700.00	89.72	180.36	7,141.12	-10,563.37	-700.51	10,571.63	0.00	0.00	0.00
16,800.00	89.72	180.36	7,141.60	-10,663.36	-701.14	10,671.63	0.00	0.00	0.00
16,900.00	89.72	180.36	7,142.09	-10,763.36	-701.77	10,771.62	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-3HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4986.00usft (RIG)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4986.00usft (RIG)
Site:	2N-65W-35 LABRISA 11-35HZ PAD	North Reference:	True
Well:	LABRISA 35-3HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
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)	
17,000.00	89.72	180.36	7,142.57	-10,863.36	-702.40	10,871.62	0.00	0.00	0.00	
17,100.00	89.72	180.36	7,143.06	-10,963.35	-703.04	10,971.62	0.00	0.00	0.00	
17,200.00	89.72	180.36	7,143.54	-11,063.35	-703.67	11,071.61	0.00	0.00	0.00	
17,300.00	89.72	180.36	7,144.03	-11,163.35	-704.30	11,171.61	0.00	0.00	0.00	
17,400.00	89.72	180.36	7,144.51	-11,263.35	-704.93	11,271.61	0.00	0.00	0.00	
17,500.00	89.72	180.36	7,145.00	-11,363.34	-705.56	11,371.60	0.00	0.00	0.00	
17,600.00	89.72	180.36	7,145.48	-11,463.34	-706.19	11,471.60	0.00	0.00	0.00	
17,700.00	89.72	180.36	7,145.97	-11,563.34	-706.82	11,571.60	0.00	0.00	0.00	
17,800.00	89.72	180.36	7,146.45	-11,663.33	-707.45	11,671.59	0.00	0.00	0.00	
17,900.00	89.72	180.36	7,146.94	-11,763.33	-708.08	11,771.59	0.00	0.00	0.00	
17,912.46	89.72	180.36	7,147.00	-11,775.79	-708.16	11,784.05	0.00	0.00	0.00	
TD Well @ 17912.46ft - 5.5" CSG										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name		Casing Diameter (")	Hole Diameter (")
2,053.71	2,017.00	9 5/8"		9-5/8	13-1/2
17,912.46	7,147.00	5.5" CSG		5-1/2	7-7/8

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,498.38	1,479.00	Fox Hills				
4,196.01	4,094.00	Parkman				
4,548.76	4,444.00	Sussex				
7,047.82	6,887.00	Sharon Springs				
7,084.10	6,912.00	Niobrara				
7,277.71	7,021.00	Nio B				
7,517.83	7,091.00	Nio C				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
240.00	240.00	0.00	0.00	Begin Nudge @ 240.00ft	
1,196.67	1,186.70	-101.61	-62.27	Hold Tangent @ 1196.67ft	
3,998.00	3,900.63	-693.60	-425.04	Begin Drop @ 3998.00ft	
4,715.50	4,610.65	-769.81	-471.74	Hold Vertical @ 4715.50ft	
6,485.66	6,380.81	-769.81	-471.74	KOP @ 6485.66ft :: DLS = 8°/100'	
7,607.16	7,097.00	-1,475.22	-573.39	End Build @ 7607.16ft	
7,857.16	7,098.22	-1,722.66	-609.05	Begin Turn to BHL @ 7857.16ft	
8,379.72	7,100.77	-2,243.35	-648.02	End Turn @ 8379.72ft	
17,912.46	7,147.00	-11,775.79	-708.16	TD Well @ 17912.46ft	