

US ROCKIES WATTENBERG PLANNING

WELD-NAD83-UTMFT13N

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

LABRISA 35-1HZ

Plan A

Plan: Permit Rev-1

Standard Planning Report

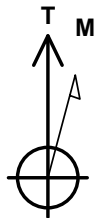
07 September, 2023

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

US ROCKIES WATTENBERG PLANNING

CASING DETAILS

TVD	MD	Name	Size
2017.00	2090.59	9 5/8"	9-5/8
7144.00	18190.87	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	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	1876.00	25.14	245.25	1822.74	-151.48	-328.60	1.50	245.25	152.57	
4	4665.00	25.14	245.25	4347.54	-647.54	-1404.61	0.00	0.00	652.19	
5	5922.00	0.00	0.00	5564.59	-761.15	-1651.06	2.00	180.00	766.62	
6	6767.21	0.00	0.00	6409.80	-761.15	-1651.06	0.00	0.00	766.62	
7	7890.96	89.90	180.19	7126.00	-1476.09	-1653.47	8.00	180.19	1481.57	
8	18190.87	89.90	180.19	7144.00	-11775.92	-1688.17	0.00	0.00	11781.46	LABRISA 35-1HZ_BHL

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	Northing	Easting	Latitude	Longitude
LABRISA 35-1HZ_SHL	0.00	14560192.78	1742933.63	40.091305	-104.633446
LABRISA 35-1HZ_LP	7126.00	14558709.89	1741286.26	40.087251	-104.639358
LABRISA 35-1HZ_BHL	7144.00	14548410.00	1741294.00	40.058967	-104.639479

WELL DETAILS: LABRISA 35-1HZ

GL = 4969'

RKB = 17' @ 4986.00usft (RIG)

FORMATION TOP DETAILS

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

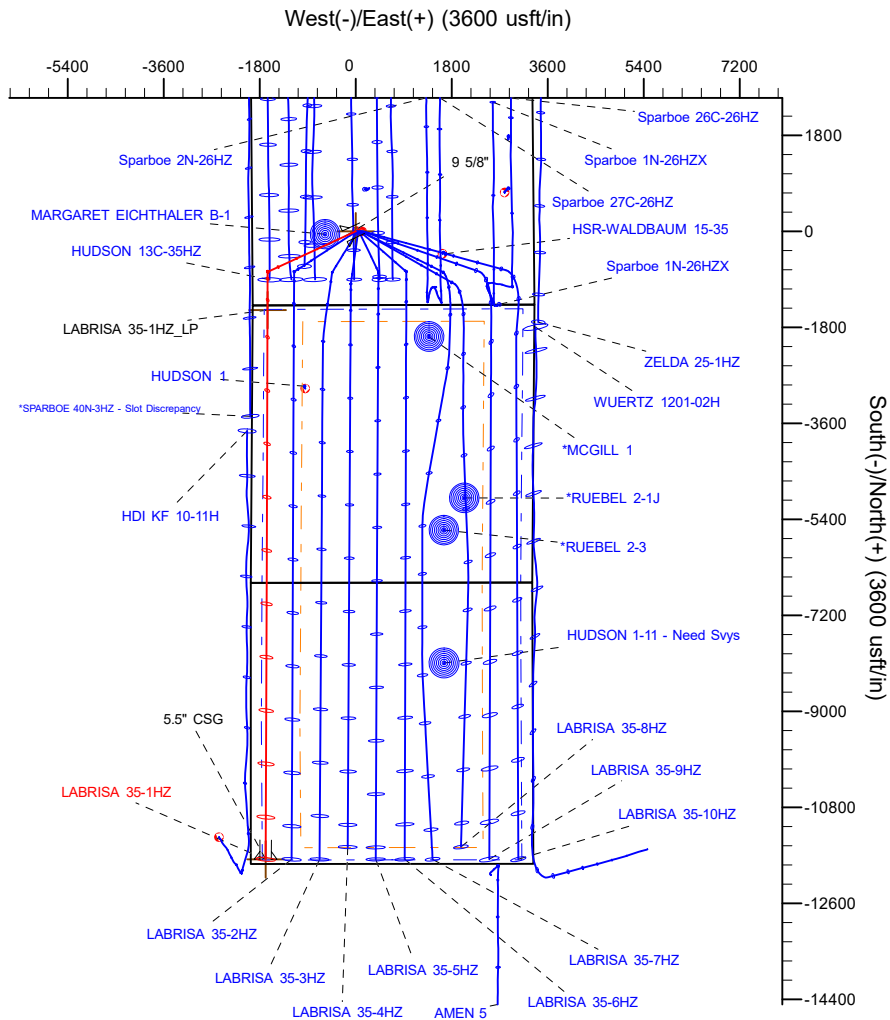
Date: 9/7/2023

TVDPath	MDPath	Formation
1479.00	1504.19	Fox Hills
4094.00	4384.93	Parkman
4444.00	4770.66	Sussex
6887.00	7289.48	Sharon Springs
6912.00	7323.75	Niobrara
7021.00	7499.49	Nio B
7091.00	7667.38	Nio C

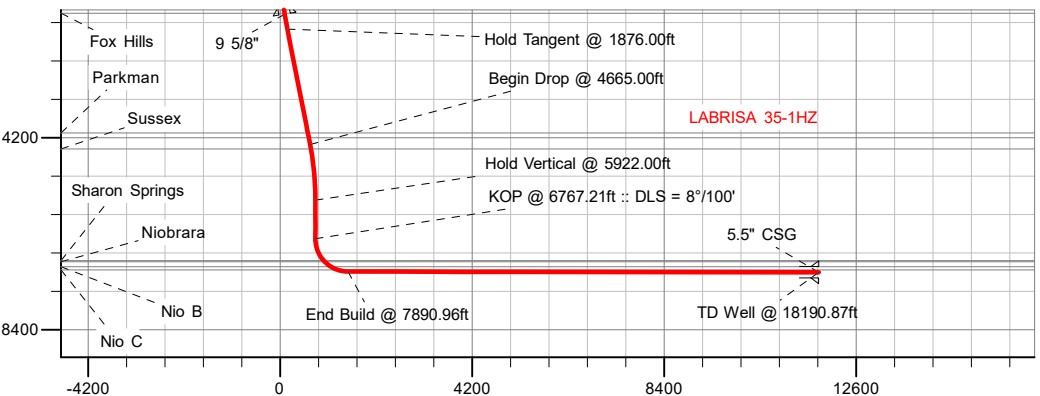
SHL
1387' FSL
1944' FWL

LP
85' FNL
280' FWL

BHL
85' FSL
280' FWL



True Vertical Depth (4200 usft/in)



Vertical Section at 180.19° (4200 usft/in)

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-1HZ
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 35-1HZ	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 35-1HZ			
Well Position	+N/-S	0.00 usft	Northing:	14,560,192.78 usft
	+E/-W	0.00 usft	Easting:	1,742,933.63 usft
Position Uncertainty		3.28 usft	Wellhead Elevation:	usft
Grid Convergence:		0.24 °	Ground Level:	4,969.00 usft

Wellbore	Plan A				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF202013	9/7/2023	7.52	66.33	51,569.29490533

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	180.19	

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	18,190.87	Permit Rev-1 (Plan A)	APC_ISCWSA REV 2 MWD+I Fixed:v2:crustal field declinatio	

Planning Report

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Site:	2N-65W-35 LABRISA 11-35HZ PAD	North Reference:	True
Well:	LABRISA 35-1HZ	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	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,876.00	25.14	245.25	1,822.74	-151.48	-328.60	1.50	1.50	0.00	245.25	
4,665.00	25.14	245.25	4,347.54	-647.54	-1,404.61	0.00	0.00	0.00	0.00	
5,922.00	0.00	0.00	5,564.59	-761.15	-1,651.06	2.00	-2.00	9.13	180.00	
6,767.21	0.00	0.00	6,409.80	-761.15	-1,651.06	0.00	0.00	0.00	0.00	
7,890.96	89.90	180.19	7,126.00	-1,476.09	-1,653.47	8.00	8.00	-16.00	180.19	
18,190.87	89.90	180.19	7,144.00	-11,775.92	-1,688.17	0.00	0.00	0.00	0.00	LABRISA 35-1HZ_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 35-1HZ	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
Begin Nudge @ 200.00ft									
300.00	1.50	245.25	299.99	-0.55	-1.19	0.55	1.50	1.50	0.00
400.00	3.00	245.25	399.91	-2.19	-4.75	2.21	1.50	1.50	0.00
500.00	4.50	245.25	499.69	-4.93	-10.69	4.97	1.50	1.50	0.00
600.00	6.00	245.25	599.27	-8.76	-19.00	8.82	1.50	1.50	0.00
700.00	7.50	245.25	698.57	-13.68	-29.68	13.78	1.50	1.50	0.00
800.00	9.00	245.25	797.54	-19.69	-42.71	19.83	1.50	1.50	0.00
900.00	10.50	245.25	896.09	-26.78	-58.09	26.97	1.50	1.50	0.00
1,000.00	12.00	245.25	994.16	-34.95	-75.80	35.20	1.50	1.50	0.00
1,100.00	13.50	245.25	1,091.70	-44.18	-95.84	44.50	1.50	1.50	0.00
1,200.00	15.00	245.25	1,188.62	-54.49	-118.20	54.88	1.50	1.50	0.00
1,300.00	16.50	245.25	1,284.86	-65.85	-142.85	66.33	1.50	1.50	0.00
1,400.00	18.00	245.25	1,380.36	-78.27	-169.78	78.83	1.50	1.50	0.00
1,500.00	19.50	245.25	1,475.05	-91.73	-198.97	92.38	1.50	1.50	0.00
1,504.19	19.56	245.25	1,479.00	-92.31	-200.24	92.98	1.50	1.50	0.00
Fox Hills									
1,600.00	21.00	245.25	1,568.86	-106.22	-230.40	106.98	1.50	1.50	0.00
1,700.00	22.50	245.25	1,661.74	-121.73	-264.05	122.60	1.50	1.50	0.00
1,800.00	24.00	245.25	1,753.62	-138.25	-299.90	139.25	1.50	1.50	0.00
1,876.00	25.14	245.25	1,822.74	-151.48	-328.60	152.57	1.50	1.50	0.00
Hold Tangent @ 1876.00ft									
1,900.00	25.14	245.25	1,844.46	-155.75	-337.86	156.87	0.00	0.00	0.00
2,000.00	25.14	245.25	1,934.99	-173.54	-376.44	174.79	0.00	0.00	0.00
2,090.59	25.14	245.25	2,017.00	-189.65	-411.39	191.02	0.00	0.00	0.00
9 5/8"									
2,100.00	25.14	245.25	2,025.52	-191.33	-415.02	192.70	0.00	0.00	0.00
2,200.00	25.14	245.25	2,116.05	-209.11	-453.60	210.61	0.00	0.00	0.00
2,300.00	25.14	245.25	2,206.57	-226.90	-492.18	228.53	0.00	0.00	0.00
2,400.00	25.14	245.25	2,297.10	-244.68	-530.76	246.44	0.00	0.00	0.00
2,500.00	25.14	245.25	2,387.63	-262.47	-569.34	264.36	0.00	0.00	0.00
2,600.00	25.14	245.25	2,478.15	-280.26	-607.92	282.27	0.00	0.00	0.00
2,700.00	25.14	245.25	2,568.68	-298.04	-646.50	300.18	0.00	0.00	0.00
2,800.00	25.14	245.25	2,659.21	-315.83	-685.08	318.10	0.00	0.00	0.00
2,900.00	25.14	245.25	2,749.74	-333.61	-723.66	336.01	0.00	0.00	0.00
3,000.00	25.14	245.25	2,840.26	-351.40	-762.24	353.93	0.00	0.00	0.00
3,100.00	25.14	245.25	2,930.79	-369.19	-800.82	371.84	0.00	0.00	0.00
3,200.00	25.14	245.25	3,021.32	-386.97	-839.41	389.75	0.00	0.00	0.00
3,300.00	25.14	245.25	3,111.84	-404.76	-877.99	407.67	0.00	0.00	0.00
3,400.00	25.14	245.25	3,202.37	-422.54	-916.57	425.58	0.00	0.00	0.00
3,500.00	25.14	245.25	3,292.90	-440.33	-955.15	443.49	0.00	0.00	0.00
3,600.00	25.14	245.25	3,383.43	-458.12	-993.73	461.41	0.00	0.00	0.00
3,700.00	25.14	245.25	3,473.95	-475.90	-1,032.31	479.32	0.00	0.00	0.00
3,800.00	25.14	245.25	3,564.48	-493.69	-1,070.89	497.24	0.00	0.00	0.00
3,900.00	25.14	245.25	3,655.01	-511.47	-1,109.47	515.15	0.00	0.00	0.00
4,000.00	25.14	245.25	3,745.54	-529.26	-1,148.05	533.06	0.00	0.00	0.00
4,100.00	25.14	245.25	3,836.06	-547.05	-1,186.63	550.98	0.00	0.00	0.00
4,200.00	25.14	245.25	3,926.59	-564.83	-1,225.21	568.89	0.00	0.00	0.00
4,300.00	25.14	245.25	4,017.12	-582.62	-1,263.79	586.80	0.00	0.00	0.00
4,384.93	25.14	245.25	4,094.00	-597.72	-1,296.56	602.02	0.00	0.00	0.00
Parkman									
4,400.00	25.14	245.25	4,107.64	-600.40	-1,302.37	604.72	0.00	0.00	0.00

Planning Report

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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 35-1HZ	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)
4,500.00	25.14	245.25	4,198.17	-618.19	-1,340.96	622.63	0.00	0.00	0.00
4,600.00	25.14	245.25	4,288.70	-635.98	-1,379.54	640.55	0.00	0.00	0.00
4,665.00	25.14	245.25	4,347.54	-647.54	-1,404.61	652.19	0.00	0.00	0.00
Begin Drop @ 4665.00ft									
4,700.00	24.44	245.25	4,379.32	-653.68	-1,417.94	658.38	2.00	-2.00	0.00
4,770.66	23.03	245.25	4,444.00	-665.59	-1,443.77	670.37	2.00	-2.00	0.00
Sussex									
4,800.00	22.44	245.25	4,471.06	-670.33	-1,454.06	675.15	2.00	-2.00	0.00
4,900.00	20.44	245.25	4,564.13	-685.64	-1,487.26	690.56	2.00	-2.00	0.00
5,000.00	18.44	245.25	4,658.43	-699.57	-1,517.48	704.60	2.00	-2.00	0.00
5,100.00	16.44	245.25	4,753.83	-712.12	-1,544.70	717.23	2.00	-2.00	0.00
5,200.00	14.44	245.25	4,850.21	-723.26	-1,568.87	728.46	2.00	-2.00	0.00
5,300.00	12.44	245.25	4,947.47	-732.99	-1,589.98	738.26	2.00	-2.00	0.00
5,400.00	10.44	245.25	5,045.48	-741.29	-1,607.99	746.62	2.00	-2.00	0.00
5,500.00	8.44	245.25	5,144.12	-748.16	-1,622.89	753.54	2.00	-2.00	0.00
5,600.00	6.44	245.25	5,243.27	-753.58	-1,634.64	759.00	2.00	-2.00	0.00
5,700.00	4.44	245.25	5,342.82	-757.55	-1,643.25	763.00	2.00	-2.00	0.00
5,800.00	2.44	245.25	5,442.63	-760.06	-1,648.70	765.53	2.00	-2.00	0.00
5,900.00	0.44	245.25	5,542.59	-761.11	-1,650.98	766.58	2.00	-2.00	0.00
5,922.00	0.00	0.00	5,564.59	-761.15	-1,651.06	766.62	2.00	-2.00	521.59
Hold Vertical @ 5922.00ft									
6,000.00	0.00	0.00	5,642.59	-761.15	-1,651.06	766.62	0.00	0.00	0.00
6,100.00	0.00	0.00	5,742.59	-761.15	-1,651.06	766.62	0.00	0.00	0.00
6,200.00	0.00	0.00	5,842.59	-761.15	-1,651.06	766.62	0.00	0.00	0.00
6,300.00	0.00	0.00	5,942.59	-761.15	-1,651.06	766.62	0.00	0.00	0.00
6,400.00	0.00	0.00	6,042.59	-761.15	-1,651.06	766.62	0.00	0.00	0.00
6,500.00	0.00	0.00	6,142.59	-761.15	-1,651.06	766.62	0.00	0.00	0.00
6,600.00	0.00	0.00	6,242.59	-761.15	-1,651.06	766.62	0.00	0.00	0.00
6,700.00	0.00	0.00	6,342.59	-761.15	-1,651.06	766.62	0.00	0.00	0.00
6,767.21	0.00	0.00	6,409.80	-761.15	-1,651.06	766.62	0.00	0.00	0.00
KOP @ 6767.21ft :: DLS = 8°/100'									
6,800.00	2.62	180.19	6,442.58	-761.90	-1,651.06	767.37	8.00	8.00	-548.36
6,850.00	6.62	180.19	6,492.41	-765.93	-1,651.08	771.40	8.00	8.00	0.00
6,900.00	10.62	180.19	6,541.84	-773.42	-1,651.10	778.90	8.00	8.00	0.00
6,950.00	14.62	180.19	6,590.62	-784.35	-1,651.14	789.82	8.00	8.00	0.00
7,000.00	18.62	180.19	6,638.52	-798.65	-1,651.19	804.12	8.00	8.00	0.00
7,050.00	22.62	180.19	6,685.30	-816.26	-1,651.25	821.73	8.00	8.00	0.00
7,100.00	26.62	180.19	6,730.75	-837.09	-1,651.32	842.56	8.00	8.00	0.00
7,150.00	30.62	180.19	6,774.63	-861.03	-1,651.40	866.50	8.00	8.00	0.00
7,200.00	34.62	180.19	6,816.73	-887.98	-1,651.49	893.45	8.00	8.00	0.00
7,250.00	38.62	180.19	6,856.85	-917.80	-1,651.59	923.28	8.00	8.00	0.00
7,289.48	41.78	180.19	6,887.00	-943.28	-1,651.67	948.76	8.00	8.00	0.00
Sharon Springs									
7,300.00	42.62	180.19	6,894.79	-950.35	-1,651.70	955.82	8.00	8.00	0.00
7,323.75	44.52	180.19	6,912.00	-966.72	-1,651.75	972.19	8.00	8.00	0.00
Niobrara									
7,350.00	46.62	180.19	6,930.37	-985.47	-1,651.82	990.94	8.00	8.00	0.00
7,400.00	50.62	180.19	6,963.42	-1,022.98	-1,651.94	1,028.45	8.00	8.00	0.00
7,450.00	54.62	180.19	6,993.76	-1,062.70	-1,652.08	1,068.17	8.00	8.00	0.00
7,499.49	58.58	180.19	7,021.00	-1,104.01	-1,652.22	1,109.48	8.00	8.00	0.00
Nio B									
7,500.00	58.62	180.19	7,021.27	-1,104.45	-1,652.22	1,109.92	8.00	8.00	0.00
7,550.00	62.62	180.19	7,045.79	-1,148.01	-1,652.36	1,153.48	8.00	8.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-1HZ
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 35-1HZ	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)
7,600.00	66.62	180.19	7,067.21	-1,193.17	-1,652.52	1,198.65	8.00	8.00	0.00
7,650.00	70.62	180.19	7,085.43	-1,239.72	-1,652.67	1,245.20	8.00	8.00	0.00
7,667.38	72.01	180.19	7,091.00	-1,256.19	-1,652.73	1,261.66	8.00	8.00	0.00
Nio C									
7,700.00	74.62	180.19	7,100.36	-1,287.43	-1,652.83	1,292.91	8.00	8.00	0.00
7,750.00	78.62	180.19	7,111.93	-1,336.07	-1,653.00	1,341.54	8.00	8.00	0.00
7,800.00	82.62	180.19	7,120.07	-1,385.39	-1,653.16	1,390.86	8.00	8.00	0.00
7,850.00	86.62	180.19	7,124.76	-1,435.16	-1,653.33	1,440.63	8.00	8.00	0.00
7,890.96	89.90	180.19	7,126.00	-1,476.09	-1,653.47	1,481.57	8.00	8.00	0.00
End Build @ 7890.96ft									
7,900.00	89.90	180.19	7,126.02	-1,485.13	-1,653.50	1,490.61	0.00	0.00	0.00
8,000.00	89.90	180.19	7,126.19	-1,585.13	-1,653.84	1,590.61	0.00	0.00	0.00
8,100.00	89.90	180.19	7,126.37	-1,685.13	-1,654.17	1,690.61	0.00	0.00	0.00
8,200.00	89.90	180.19	7,126.54	-1,785.13	-1,654.51	1,790.61	0.00	0.00	0.00
8,300.00	89.90	180.19	7,126.72	-1,885.13	-1,654.85	1,890.61	0.00	0.00	0.00
8,400.00	89.90	180.19	7,126.89	-1,985.13	-1,655.18	1,990.61	0.00	0.00	0.00
8,500.00	89.90	180.19	7,127.07	-2,085.13	-1,655.52	2,090.61	0.00	0.00	0.00
8,600.00	89.90	180.19	7,127.24	-2,185.13	-1,655.86	2,190.61	0.00	0.00	0.00
8,700.00	89.90	180.19	7,127.41	-2,285.13	-1,656.19	2,290.61	0.00	0.00	0.00
8,800.00	89.90	180.19	7,127.59	-2,385.13	-1,656.53	2,390.61	0.00	0.00	0.00
8,900.00	89.90	180.19	7,127.76	-2,485.13	-1,656.87	2,490.61	0.00	0.00	0.00
9,000.00	89.90	180.19	7,127.94	-2,585.12	-1,657.21	2,590.61	0.00	0.00	0.00
9,100.00	89.90	180.19	7,128.11	-2,685.12	-1,657.54	2,690.61	0.00	0.00	0.00
9,200.00	89.90	180.19	7,128.29	-2,785.12	-1,657.88	2,790.61	0.00	0.00	0.00
9,300.00	89.90	180.19	7,128.46	-2,885.12	-1,658.22	2,890.61	0.00	0.00	0.00
9,400.00	89.90	180.19	7,128.64	-2,985.12	-1,658.55	2,990.61	0.00	0.00	0.00
9,500.00	89.90	180.19	7,128.81	-3,085.12	-1,658.89	3,090.61	0.00	0.00	0.00
9,600.00	89.90	180.19	7,128.99	-3,185.12	-1,659.23	3,190.61	0.00	0.00	0.00
9,700.00	89.90	180.19	7,129.16	-3,285.12	-1,659.56	3,290.60	0.00	0.00	0.00
9,800.00	89.90	180.19	7,129.34	-3,385.12	-1,659.90	3,390.60	0.00	0.00	0.00
9,900.00	89.90	180.19	7,129.51	-3,485.12	-1,660.24	3,490.60	0.00	0.00	0.00
10,000.00	89.90	180.19	7,129.69	-3,585.12	-1,660.57	3,590.60	0.00	0.00	0.00
10,100.00	89.90	180.19	7,129.86	-3,685.12	-1,660.91	3,690.60	0.00	0.00	0.00
10,200.00	89.90	180.19	7,130.04	-3,785.12	-1,661.25	3,790.60	0.00	0.00	0.00
10,300.00	89.90	180.19	7,130.21	-3,885.12	-1,661.58	3,890.60	0.00	0.00	0.00
10,400.00	89.90	180.19	7,130.39	-3,985.11	-1,661.92	3,990.60	0.00	0.00	0.00
10,500.00	89.90	180.19	7,130.56	-4,085.11	-1,662.26	4,090.60	0.00	0.00	0.00
10,600.00	89.90	180.19	7,130.73	-4,185.11	-1,662.59	4,190.60	0.00	0.00	0.00
10,700.00	89.90	180.19	7,130.91	-4,285.11	-1,662.93	4,290.60	0.00	0.00	0.00
10,800.00	89.90	180.19	7,131.08	-4,385.11	-1,663.27	4,390.60	0.00	0.00	0.00
10,900.00	89.90	180.19	7,131.26	-4,485.11	-1,663.61	4,490.60	0.00	0.00	0.00
11,000.00	89.90	180.19	7,131.43	-4,585.11	-1,663.94	4,590.60	0.00	0.00	0.00
11,100.00	89.90	180.19	7,131.61	-4,685.11	-1,664.28	4,690.60	0.00	0.00	0.00
11,200.00	89.90	180.19	7,131.78	-4,785.11	-1,664.62	4,790.60	0.00	0.00	0.00
11,300.00	89.90	180.19	7,131.96	-4,885.11	-1,664.95	4,890.60	0.00	0.00	0.00
11,400.00	89.90	180.19	7,132.13	-4,985.11	-1,665.29	4,990.60	0.00	0.00	0.00
11,500.00	89.90	180.19	7,132.31	-5,085.11	-1,665.63	5,090.60	0.00	0.00	0.00
11,600.00	89.90	180.19	7,132.48	-5,185.11	-1,665.96	5,190.60	0.00	0.00	0.00
11,700.00	89.90	180.19	7,132.66	-5,285.11	-1,666.30	5,290.60	0.00	0.00	0.00
11,800.00	89.90	180.19	7,132.83	-5,385.10	-1,666.64	5,390.60	0.00	0.00	0.00
11,900.00	89.90	180.19	7,133.01	-5,485.10	-1,666.97	5,490.60	0.00	0.00	0.00
12,000.00	89.90	180.19	7,133.18	-5,585.10	-1,667.31	5,590.60	0.00	0.00	0.00
12,100.00	89.90	180.19	7,133.36	-5,685.10	-1,667.65	5,690.60	0.00	0.00	0.00
12,200.00	89.90	180.19	7,133.53	-5,785.10	-1,667.98	5,790.60	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-1HZ
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 35-1HZ	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)	
12,300.00	89.90	180.19	7,133.71	-5,885.10	-1,668.32	5,890.60	0.00	0.00	0.00	
12,400.00	89.90	180.19	7,133.88	-5,985.10	-1,668.66	5,990.60	0.00	0.00	0.00	
12,500.00	89.90	180.19	7,134.06	-6,085.10	-1,669.00	6,090.60	0.00	0.00	0.00	
12,600.00	89.90	180.19	7,134.23	-6,185.10	-1,669.33	6,190.60	0.00	0.00	0.00	
12,700.00	89.90	180.19	7,134.40	-6,285.10	-1,669.67	6,290.60	0.00	0.00	0.00	
12,800.00	89.90	180.19	7,134.58	-6,385.10	-1,670.01	6,390.60	0.00	0.00	0.00	
12,900.00	89.90	180.19	7,134.75	-6,485.10	-1,670.34	6,490.60	0.00	0.00	0.00	
13,000.00	89.90	180.19	7,134.93	-6,585.10	-1,670.68	6,590.60	0.00	0.00	0.00	
13,100.00	89.90	180.19	7,135.10	-6,685.10	-1,671.02	6,690.60	0.00	0.00	0.00	
13,200.00	89.90	180.19	7,135.28	-6,785.09	-1,671.35	6,790.60	0.00	0.00	0.00	
13,300.00	89.90	180.19	7,135.45	-6,885.09	-1,671.69	6,890.60	0.00	0.00	0.00	
13,400.00	89.90	180.19	7,135.63	-6,985.09	-1,672.03	6,990.60	0.00	0.00	0.00	
13,500.00	89.90	180.19	7,135.80	-7,085.09	-1,672.36	7,090.60	0.00	0.00	0.00	
13,600.00	89.90	180.19	7,135.98	-7,185.09	-1,672.70	7,190.60	0.00	0.00	0.00	
13,700.00	89.90	180.19	7,136.15	-7,285.09	-1,673.04	7,290.60	0.00	0.00	0.00	
13,800.00	89.90	180.19	7,136.33	-7,385.09	-1,673.37	7,390.60	0.00	0.00	0.00	
13,900.00	89.90	180.19	7,136.50	-7,485.09	-1,673.71	7,490.60	0.00	0.00	0.00	
14,000.00	89.90	180.19	7,136.68	-7,585.09	-1,674.05	7,590.60	0.00	0.00	0.00	
14,100.00	89.90	180.19	7,136.85	-7,685.09	-1,674.38	7,690.60	0.00	0.00	0.00	
14,200.00	89.90	180.19	7,137.03	-7,785.09	-1,674.72	7,790.60	0.00	0.00	0.00	
14,300.00	89.90	180.19	7,137.20	-7,885.09	-1,675.06	7,890.60	0.00	0.00	0.00	
14,400.00	89.90	180.19	7,137.38	-7,985.09	-1,675.40	7,990.60	0.00	0.00	0.00	
14,500.00	89.90	180.19	7,137.55	-8,085.09	-1,675.73	8,090.60	0.00	0.00	0.00	
14,600.00	89.90	180.19	7,137.72	-8,185.08	-1,676.07	8,190.60	0.00	0.00	0.00	
14,700.00	89.90	180.19	7,137.90	-8,285.08	-1,676.41	8,290.60	0.00	0.00	0.00	
14,800.00	89.90	180.19	7,138.07	-8,385.08	-1,676.74	8,390.60	0.00	0.00	0.00	
14,900.00	89.90	180.19	7,138.25	-8,485.08	-1,677.08	8,490.60	0.00	0.00	0.00	
15,000.00	89.90	180.19	7,138.42	-8,585.08	-1,677.42	8,590.60	0.00	0.00	0.00	
15,100.00	89.90	180.19	7,138.60	-8,685.08	-1,677.75	8,690.60	0.00	0.00	0.00	
15,200.00	89.90	180.19	7,138.77	-8,785.08	-1,678.09	8,790.60	0.00	0.00	0.00	
15,300.00	89.90	180.19	7,138.95	-8,885.08	-1,678.43	8,890.60	0.00	0.00	0.00	
15,400.00	89.90	180.19	7,139.12	-8,985.08	-1,678.76	8,990.60	0.00	0.00	0.00	
15,500.00	89.90	180.19	7,139.30	-9,085.08	-1,679.10	9,090.60	0.00	0.00	0.00	
15,600.00	89.90	180.19	7,139.47	-9,185.08	-1,679.44	9,190.60	0.00	0.00	0.00	
15,700.00	89.90	180.19	7,139.65	-9,285.08	-1,679.77	9,290.60	0.00	0.00	0.00	
15,800.00	89.90	180.19	7,139.82	-9,385.08	-1,680.11	9,390.60	0.00	0.00	0.00	
15,900.00	89.90	180.19	7,140.00	-9,485.08	-1,680.45	9,490.60	0.00	0.00	0.00	
16,000.00	89.90	180.19	7,140.17	-9,585.07	-1,680.79	9,590.60	0.00	0.00	0.00	
16,100.00	89.90	180.19	7,140.35	-9,685.07	-1,681.12	9,690.60	0.00	0.00	0.00	
16,200.00	89.90	180.19	7,140.52	-9,785.07	-1,681.46	9,790.60	0.00	0.00	0.00	
16,300.00	89.90	180.19	7,140.70	-9,885.07	-1,681.80	9,890.59	0.00	0.00	0.00	
16,400.00	89.90	180.19	7,140.87	-9,985.07	-1,682.13	9,990.59	0.00	0.00	0.00	
16,500.00	89.90	180.19	7,141.05	-10,085.07	-1,682.47	10,090.59	0.00	0.00	0.00	
16,600.00	89.90	180.19	7,141.22	-10,185.07	-1,682.81	10,190.59	0.00	0.00	0.00	
16,700.00	89.90	180.19	7,141.39	-10,285.07	-1,683.14	10,290.59	0.00	0.00	0.00	
16,800.00	89.90	180.19	7,141.57	-10,385.07	-1,683.48	10,390.59	0.00	0.00	0.00	
16,900.00	89.90	180.19	7,141.74	-10,485.07	-1,683.82	10,490.59	0.00	0.00	0.00	
17,000.00	89.90	180.19	7,141.92	-10,585.07	-1,684.15	10,590.59	0.00	0.00	0.00	
17,100.00	89.90	180.19	7,142.09	-10,685.07	-1,684.49	10,690.59	0.00	0.00	0.00	
17,200.00	89.90	180.19	7,142.27	-10,785.07	-1,684.83	10,790.59	0.00	0.00	0.00	
17,300.00	89.90	180.19	7,142.44	-10,885.07	-1,685.16	10,890.59	0.00	0.00	0.00	
17,400.00	89.90	180.19	7,142.62	-10,985.06	-1,685.50	10,990.59	0.00	0.00	0.00	
17,500.00	89.90	180.19	7,142.79	-11,085.06	-1,685.84	11,090.59	0.00	0.00	0.00	
17,600.00	89.90	180.19	7,142.97	-11,185.06	-1,686.17	11,190.59	0.00	0.00	0.00	

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-1HZ
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 35-1HZ	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)	
17,700.00	89.90	180.19	7,143.14	-11,285.06	-1,686.51	11,290.59	0.00	0.00	0.00	
17,800.00	89.90	180.19	7,143.32	-11,385.06	-1,686.85	11,390.59	0.00	0.00	0.00	
17,900.00	89.90	180.19	7,143.49	-11,485.06	-1,687.19	11,490.59	0.00	0.00	0.00	
18,000.00	89.90	180.19	7,143.67	-11,585.06	-1,687.52	11,590.59	0.00	0.00	0.00	
18,100.00	89.90	180.19	7,143.84	-11,685.06	-1,687.86	11,690.59	0.00	0.00	0.00	
18,190.87	89.90	180.19	7,144.00	-11,775.92	-1,688.17	11,781.46	0.00	0.00	0.00	
TD Well @ 18190.87ft										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
2,090.59	2,017.00	9 5/8"	9-5/8	13-1/2	
18,190.87	7,144.00	5.5" CSG	5-1/2	7-7/8	

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,504.19	1,479.00	Fox Hills			
4,384.93	4,094.00	Parkman			
4,770.66	4,444.00	Sussex			
7,289.48	6,887.00	Sharon Springs			
7,323.75	6,912.00	Niobrara			
7,499.49	7,021.00	Nio B			
7,667.38	7,091.00	Nio C			

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
200.00	200.00	0.00	0.00	Begin Nudge @ 200.00ft	
1,876.00	1,822.74	-151.48	-328.60	Hold Tangent @ 1876.00ft	
4,665.00	4,347.54	-647.54	-1,404.61	Begin Drop @ 4665.00ft	
5,922.00	5,564.59	-761.15	-1,651.06	Hold Vertical @ 5922.00ft	
6,767.21	6,409.80	-761.15	-1,651.06	KOP @ 6767.21ft :: DLS = 8°/100'	
7,890.96	7,126.00	-1,476.09	-1,653.47	End Build @ 7890.96ft	
18,190.87	7,144.00	-11,775.92	-1,688.17	TD Well @ 18190.87ft	