

US ROCKIES WATTENBERG PLANNING

WELD-NAD83-UTMFT13N

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

LABRISA 35-6HZ

Plan A

Plan: Permit Rev-1

Standard Planning Report

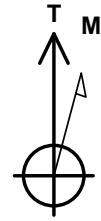
07 September, 2023

Project: WELD-NAD83-UTMFT13N
Site: 2N-65W-35 LABRISA 11-35HZ PAD
Well: LABRISA 35-6HZ
Wellbore: Plan A
Design: Permit Rev-1

US ROCKIES WATTENBERG PLANNING

CASING DETAILS

TVD	MD	Name	Size
2017.00	2063.78	9 5/8"	9-5/8
7137.00	17954.39	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	280.00	0.00	0.00	280.00	0.00	0.00	0.00	0.00	0.00	
3	1450.00	17.55	130.90	1431.79	-116.41	134.38	1.50	130.90	116.03	
4	4250.15	17.55	130.90	4101.60	-669.24	772.59	0.00	0.00	667.08	
5	5127.65	0.00	0.00	4965.45	-756.54	873.38	2.00	-180.00	754.10	
6	6528.02	0.00	0.00	6365.82	-756.54	873.38	0.00	0.00	754.10	
7	7649.20	89.69	180.16	7082.00	-1468.92	871.41	8.00	180.16	1466.48	
8	17954.39	89.69	180.16	7137.00	-11773.93	842.85	0.00	0.00	11771.53	LABRISA 35-6HZ_BHL

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	Northing	Easting	Latitude	Longitude
LABRISA 35-6HZ_SHL	0.00	14560192.35	1743008.61	40.091303	-104.633178
LABRISA 35-6HZ_LP	7082.00	14558727.04	1743886.07	40.087269	-104.630063
LABRISA 35-6HZ_BHL	7137.00	14548422.00	1743900.00	40.058970	-104.630166

WELL DETAILS: LABRISA 35-6HZ

GL = 4969'

RKB = 17' @ 4986.00usft (RIG)

FORMATION TOP DETAILS

Plan: Permit Rev-1 (LABRISA 35-6HZ/Plan A)

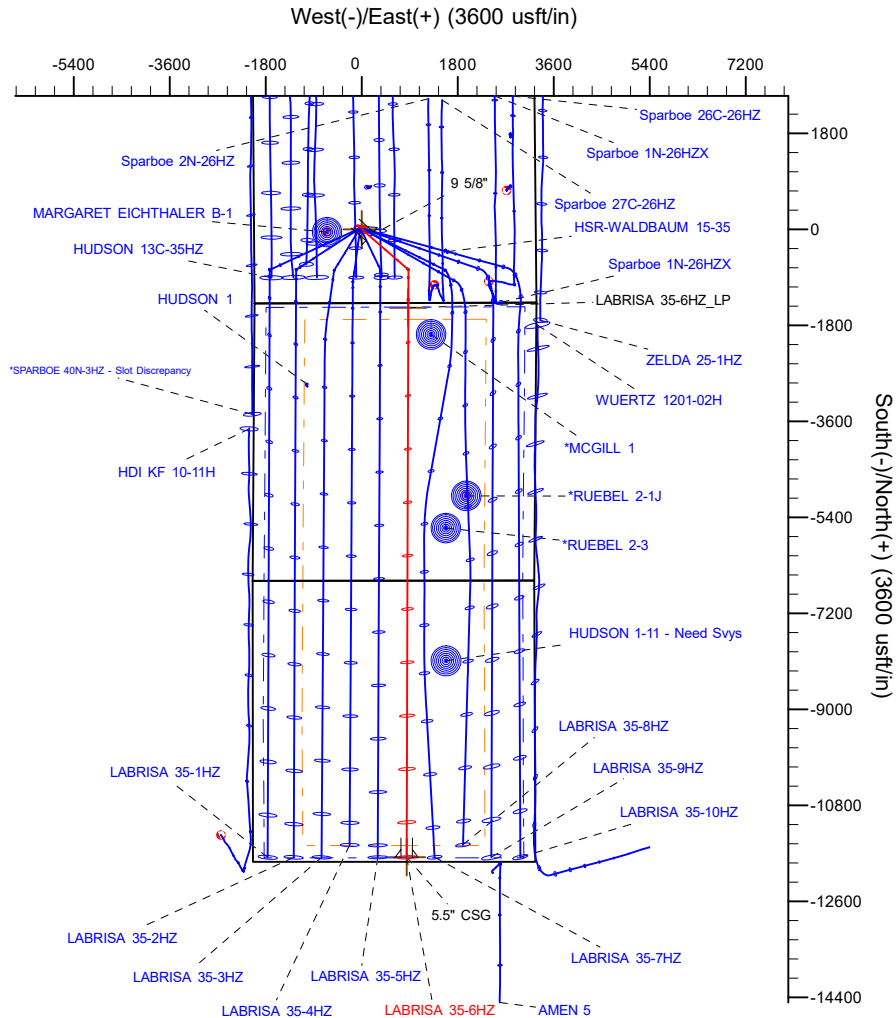
Date: 9/7/2023

TVDPath	MDPath	Formation
1479.00	1499.51	Fox Hills
4094.00	4242.17	Parkman
4444.00	4603.28	Sussex
6887.00	7111.70	Sharon Springs
6912.00	7149.21	Niobrara
7021.00	7355.25	Nio B
7091.00	9334.79	Nio C

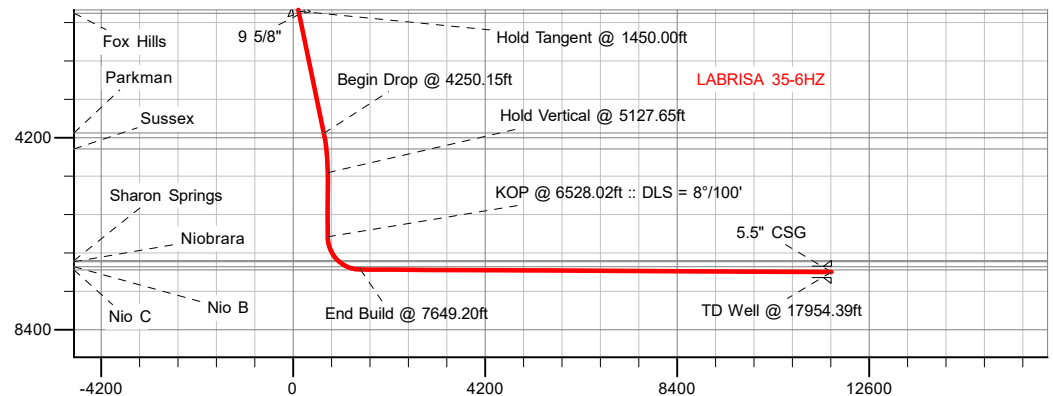
SHL
1387' FSL
2019' FWL

LP
85' FNL
2406' FEL

BHL
85' FSL
2411' FEL



True Vertical Depth (4200 usft/in)



Vertical Section at 180.16° (4200 usft/in)

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-6HZ
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 35-6HZ	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 35-6HZ				
Well Position	+N/-S	0.00 usft	Northing:	14,560,192.35 usft	Latitude:	40.091303
	+E/-W	0.00 usft	Easting:	1,743,008.61 usft	Longitude:	-104.633179
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	8/7/2023	7.53	66.34	51,578.28183840

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	180.16	

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	17,954.39	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 35-6HZ	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	
280.00	0.00	0.00	280.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,450.00	17.55	130.90	1,431.79	-116.41	134.38	1.50	1.50	0.00	130.90	
4,250.15	17.55	130.90	4,101.60	-669.24	772.59	0.00	0.00	0.00	0.00	
5,127.65	0.00	0.00	4,965.45	-756.54	873.38	2.00	-2.00	-14.92	-180.00	
6,528.02	0.00	0.00	6,365.82	-756.54	873.38	0.00	0.00	0.00	0.00	
7,649.20	89.69	180.16	7,082.00	-1,468.92	871.41	8.00	8.00	-16.04	180.16	
17,954.39	89.69	180.16	7,137.00	-11,773.93	842.85	0.00	0.00	0.00	0.00	LABRISA 35-6HZ_BH

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 35-6HZ	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
280.00	0.00	0.00	280.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 280.00ft									
300.00	0.30	130.90	300.00	-0.03	0.04	0.03	1.50	1.50	0.00
400.00	1.80	130.90	399.98	-1.23	1.42	1.23	1.50	1.50	0.00
500.00	3.30	130.90	499.88	-4.15	4.79	4.13	1.50	1.50	0.00
600.00	4.80	130.90	599.63	-8.77	10.13	8.74	1.50	1.50	0.00
700.00	6.30	130.90	699.15	-15.10	17.44	15.05	1.50	1.50	0.00
800.00	7.80	130.90	798.40	-23.14	26.71	23.06	1.50	1.50	0.00
900.00	9.30	130.90	897.28	-32.87	37.95	32.77	1.50	1.50	0.00
1,000.00	10.80	130.90	995.74	-44.30	51.14	44.16	1.50	1.50	0.00
1,100.00	12.30	130.90	1,093.72	-57.41	66.27	57.22	1.50	1.50	0.00
1,200.00	13.80	130.90	1,191.13	-72.19	83.34	71.96	1.50	1.50	0.00
1,300.00	15.30	130.90	1,287.92	-88.64	102.33	88.35	1.50	1.50	0.00
1,400.00	16.80	130.90	1,384.02	-106.74	123.22	106.40	1.50	1.50	0.00
1,450.00	17.55	130.90	1,431.79	-116.41	134.38	116.03	1.50	1.50	0.00
Hold Tangent @ 1450.00ft									
1,499.51	17.55	130.90	1,479.00	-126.18	145.67	125.78	0.00	0.00	0.00
Fox Hills									
1,500.00	17.55	130.90	1,479.46	-126.28	145.78	125.87	0.00	0.00	0.00
1,600.00	17.55	130.90	1,574.81	-146.02	168.57	145.55	0.00	0.00	0.00
1,700.00	17.55	130.90	1,670.15	-165.76	191.36	165.23	0.00	0.00	0.00
1,800.00	17.55	130.90	1,765.50	-185.51	214.16	184.91	0.00	0.00	0.00
1,900.00	17.55	130.90	1,860.84	-205.25	236.95	204.59	0.00	0.00	0.00
2,000.00	17.55	130.90	1,956.19	-224.99	259.74	224.27	0.00	0.00	0.00
2,063.78	17.55	130.90	2,017.00	-237.59	274.28	236.82	0.00	0.00	0.00
9 5/8"									
2,100.00	17.55	130.90	2,051.54	-244.74	282.53	243.95	0.00	0.00	0.00
2,200.00	17.55	130.90	2,146.88	-264.48	305.32	263.63	0.00	0.00	0.00
2,300.00	17.55	130.90	2,242.23	-284.22	328.12	283.31	0.00	0.00	0.00
2,400.00	17.55	130.90	2,337.57	-303.97	350.91	302.98	0.00	0.00	0.00
2,500.00	17.55	130.90	2,432.92	-323.71	373.70	322.66	0.00	0.00	0.00
2,600.00	17.55	130.90	2,528.26	-343.45	396.49	342.34	0.00	0.00	0.00
2,700.00	17.55	130.90	2,623.61	-363.19	419.28	362.02	0.00	0.00	0.00
2,800.00	17.55	130.90	2,718.95	-382.94	442.07	381.70	0.00	0.00	0.00
2,900.00	17.55	130.90	2,814.30	-402.68	464.87	401.38	0.00	0.00	0.00
3,000.00	17.55	130.90	2,909.64	-422.42	487.66	421.06	0.00	0.00	0.00
3,100.00	17.55	130.90	3,004.99	-442.17	510.45	440.74	0.00	0.00	0.00
3,200.00	17.55	130.90	3,100.34	-461.91	533.24	460.42	0.00	0.00	0.00
3,300.00	17.55	130.90	3,195.68	-481.65	556.03	480.10	0.00	0.00	0.00
3,400.00	17.55	130.90	3,291.03	-501.39	578.83	499.78	0.00	0.00	0.00
3,500.00	17.55	130.90	3,386.37	-521.14	601.62	519.46	0.00	0.00	0.00
3,600.00	17.55	130.90	3,481.72	-540.88	624.41	539.13	0.00	0.00	0.00
3,700.00	17.55	130.90	3,577.06	-560.62	647.20	558.81	0.00	0.00	0.00
3,800.00	17.55	130.90	3,672.41	-580.37	669.99	578.49	0.00	0.00	0.00
3,900.00	17.55	130.90	3,767.75	-600.11	692.79	598.17	0.00	0.00	0.00
4,000.00	17.55	130.90	3,863.10	-619.85	715.58	617.85	0.00	0.00	0.00
4,100.00	17.55	130.90	3,958.44	-639.60	738.37	637.53	0.00	0.00	0.00
4,200.00	17.55	130.90	4,053.79	-659.34	761.16	657.21	0.00	0.00	0.00
4,242.17	17.55	130.90	4,094.00	-667.66	770.77	665.51	0.00	0.00	0.00
Parkman									
4,250.15	17.55	130.90	4,101.60	-669.24	772.59	667.08	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-6HZ
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 35-6HZ	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)
Begin Drop @ 4250.15ft									
4,300.00	16.55	130.90	4,149.26	-678.81	783.64	676.62	2.00	-2.00	0.00
4,400.00	14.55	130.90	4,245.60	-696.36	803.90	694.12	2.00	-2.00	0.00
4,500.00	12.55	130.90	4,342.81	-711.71	821.62	709.41	2.00	-2.00	0.00
4,600.00	10.55	130.90	4,440.78	-724.82	836.75	722.48	2.00	-2.00	0.00
4,603.28	10.49	130.90	4,444.00	-725.21	837.21	722.87	2.00	-2.00	0.00
Sussex									
4,700.00	8.55	130.90	4,539.38	-735.68	849.30	733.31	2.00	-2.00	0.00
4,800.00	6.55	130.90	4,638.51	-744.29	859.23	741.89	2.00	-2.00	0.00
4,900.00	4.55	130.90	4,738.04	-750.63	866.55	748.20	2.00	-2.00	0.00
5,000.00	2.55	130.90	4,837.84	-754.68	871.23	752.25	2.00	-2.00	0.00
5,100.00	0.55	130.90	4,937.80	-756.46	873.28	754.02	2.00	-2.00	0.00
5,127.65	0.00	0.00	4,965.45	-756.54	873.38	754.10	2.00	-2.00	-473.42
Hold Vertical @ 5127.65ft									
5,200.00	0.00	0.00	5,037.80	-756.54	873.38	754.10	0.00	0.00	0.00
5,300.00	0.00	0.00	5,137.80	-756.54	873.38	754.10	0.00	0.00	0.00
5,400.00	0.00	0.00	5,237.80	-756.54	873.38	754.10	0.00	0.00	0.00
5,500.00	0.00	0.00	5,337.80	-756.54	873.38	754.10	0.00	0.00	0.00
5,600.00	0.00	0.00	5,437.80	-756.54	873.38	754.10	0.00	0.00	0.00
5,700.00	0.00	0.00	5,537.80	-756.54	873.38	754.10	0.00	0.00	0.00
5,800.00	0.00	0.00	5,637.80	-756.54	873.38	754.10	0.00	0.00	0.00
5,900.00	0.00	0.00	5,737.80	-756.54	873.38	754.10	0.00	0.00	0.00
6,000.00	0.00	0.00	5,837.80	-756.54	873.38	754.10	0.00	0.00	0.00
6,100.00	0.00	0.00	5,937.80	-756.54	873.38	754.10	0.00	0.00	0.00
6,200.00	0.00	0.00	6,037.80	-756.54	873.38	754.10	0.00	0.00	0.00
6,300.00	0.00	0.00	6,137.80	-756.54	873.38	754.10	0.00	0.00	0.00
6,400.00	0.00	0.00	6,237.80	-756.54	873.38	754.10	0.00	0.00	0.00
6,500.00	0.00	0.00	6,337.80	-756.54	873.38	754.10	0.00	0.00	0.00
6,528.02	0.00	0.00	6,365.82	-756.54	873.38	754.10	0.00	0.00	0.00
KOP @ 6528.02ft :: DLS = 8°/100'									
6,550.00	1.76	180.16	6,387.79	-756.88	873.38	754.44	8.00	8.00	-818.20
6,600.00	5.76	180.16	6,437.68	-760.16	873.37	757.72	8.00	8.00	0.00
6,650.00	9.76	180.16	6,487.21	-766.91	873.35	764.47	8.00	8.00	0.00
6,700.00	13.76	180.16	6,536.15	-777.09	873.32	774.65	8.00	8.00	0.00
6,750.00	17.76	180.16	6,584.26	-790.67	873.28	788.23	8.00	8.00	0.00
6,800.00	21.76	180.16	6,631.31	-807.57	873.24	805.13	8.00	8.00	0.00
6,850.00	25.76	180.16	6,677.06	-827.71	873.18	825.27	8.00	8.00	0.00
6,900.00	29.76	180.16	6,721.30	-850.99	873.12	848.55	8.00	8.00	0.00
6,950.00	33.76	180.16	6,763.80	-877.30	873.04	874.86	8.00	8.00	0.00
7,000.00	37.76	180.16	6,804.37	-906.52	872.96	904.07	8.00	8.00	0.00
7,050.00	41.76	180.16	6,842.80	-938.49	872.88	936.05	8.00	8.00	0.00
7,100.00	45.76	180.16	6,878.90	-973.06	872.78	970.62	8.00	8.00	0.00
7,111.70	46.69	180.16	6,887.00	-981.51	872.76	979.07	8.00	8.00	0.00
Sharon Springs									
7,149.21	49.70	180.16	6,912.00	-1,009.47	872.68	1,007.03	8.00	8.00	0.00
Niobrara									
7,150.00	49.76	180.16	6,912.51	-1,010.07	872.68	1,007.63	8.00	8.00	0.00
7,200.00	53.76	180.16	6,943.45	-1,049.33	872.57	1,046.89	8.00	8.00	0.00
7,250.00	57.76	180.16	6,971.58	-1,090.66	872.45	1,088.22	8.00	8.00	0.00
7,300.00	61.76	180.16	6,996.76	-1,133.84	872.33	1,131.40	8.00	8.00	0.00
7,350.00	65.76	180.16	7,018.86	-1,178.68	872.21	1,176.24	8.00	8.00	0.00
7,355.25	66.18	180.16	7,021.00	-1,183.48	872.20	1,181.03	8.00	8.00	0.00
Nio B									

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-6HZ
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 35-6HZ	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)
7,400.00	69.76	180.16	7,037.78	-1,224.95	872.08	1,222.51	8.00	8.00	0.00
7,450.00	73.76	180.16	7,053.43	-1,272.43	871.95	1,269.99	8.00	8.00	0.00
7,500.00	77.76	180.16	7,065.73	-1,320.88	871.82	1,318.44	8.00	8.00	0.00
7,550.00	81.76	180.16	7,074.62	-1,370.07	871.68	1,367.64	8.00	8.00	0.00
7,600.00	85.76	180.16	7,080.05	-1,419.77	871.54	1,417.33	8.00	8.00	0.00
7,649.20	89.69	180.16	7,082.00	-1,468.92	871.41	1,466.48	8.00	8.00	0.00
End Build @ 7649.20ft									
7,700.00	89.69	180.16	7,082.28	-1,519.72	871.26	1,517.28	0.00	0.00	0.00
7,800.00	89.69	180.16	7,082.81	-1,619.72	870.99	1,617.28	0.00	0.00	0.00
7,900.00	89.69	180.16	7,083.34	-1,719.71	870.71	1,717.28	0.00	0.00	0.00
8,000.00	89.69	180.16	7,083.88	-1,819.71	870.43	1,817.28	0.00	0.00	0.00
8,100.00	89.69	180.16	7,084.41	-1,919.71	870.16	1,917.27	0.00	0.00	0.00
8,200.00	89.69	180.16	7,084.94	-2,019.71	869.88	2,017.27	0.00	0.00	0.00
8,300.00	89.69	180.16	7,085.48	-2,119.71	869.60	2,117.27	0.00	0.00	0.00
8,400.00	89.69	180.16	7,086.01	-2,219.71	869.32	2,217.27	0.00	0.00	0.00
8,500.00	89.69	180.16	7,086.55	-2,319.70	869.05	2,317.27	0.00	0.00	0.00
8,600.00	89.69	180.16	7,087.08	-2,419.70	868.77	2,417.27	0.00	0.00	0.00
8,700.00	89.69	180.16	7,087.61	-2,519.70	868.49	2,517.27	0.00	0.00	0.00
8,800.00	89.69	180.16	7,088.15	-2,619.70	868.22	2,617.26	0.00	0.00	0.00
8,900.00	89.69	180.16	7,088.68	-2,719.70	867.94	2,717.26	0.00	0.00	0.00
9,000.00	89.69	180.16	7,089.21	-2,819.69	867.66	2,817.26	0.00	0.00	0.00
9,100.00	89.69	180.16	7,089.75	-2,919.69	867.38	2,917.26	0.00	0.00	0.00
9,200.00	89.69	180.16	7,090.28	-3,019.69	867.11	3,017.26	0.00	0.00	0.00
9,300.00	89.69	180.16	7,090.81	-3,119.69	866.83	3,117.26	0.00	0.00	0.00
9,334.79	89.69	180.16	7,091.00	-3,154.48	866.73	3,152.04	0.00	0.00	0.00
Nio C									
9,400.00	89.69	180.16	7,091.35	-3,219.69	866.55	3,217.26	0.00	0.00	0.00
9,500.00	89.69	180.16	7,091.88	-3,319.69	866.28	3,317.25	0.00	0.00	0.00
9,600.00	89.69	180.16	7,092.42	-3,419.68	866.00	3,417.25	0.00	0.00	0.00
9,700.00	89.69	180.16	7,092.95	-3,519.68	865.72	3,517.25	0.00	0.00	0.00
9,800.00	89.69	180.16	7,093.48	-3,619.68	865.45	3,617.25	0.00	0.00	0.00
9,900.00	89.69	180.16	7,094.02	-3,719.68	865.17	3,717.25	0.00	0.00	0.00
10,000.00	89.69	180.16	7,094.55	-3,819.68	864.89	3,817.25	0.00	0.00	0.00
10,100.00	89.69	180.16	7,095.08	-3,919.68	864.61	3,917.25	0.00	0.00	0.00
10,200.00	89.69	180.16	7,095.62	-4,019.67	864.34	4,017.24	0.00	0.00	0.00
10,300.00	89.69	180.16	7,096.15	-4,119.67	864.06	4,117.24	0.00	0.00	0.00
10,400.00	89.69	180.16	7,096.68	-4,219.67	863.78	4,217.24	0.00	0.00	0.00
10,500.00	89.69	180.16	7,097.22	-4,319.67	863.51	4,317.24	0.00	0.00	0.00
10,600.00	89.69	180.16	7,097.75	-4,419.67	863.23	4,417.24	0.00	0.00	0.00
10,700.00	89.69	180.16	7,098.29	-4,519.66	862.95	4,517.24	0.00	0.00	0.00
10,800.00	89.69	180.16	7,098.82	-4,619.66	862.67	4,617.24	0.00	0.00	0.00
10,900.00	89.69	180.16	7,099.35	-4,719.66	862.40	4,717.23	0.00	0.00	0.00
11,000.00	89.69	180.16	7,099.89	-4,819.66	862.12	4,817.23	0.00	0.00	0.00
11,100.00	89.69	180.16	7,100.42	-4,919.66	861.84	4,917.23	0.00	0.00	0.00
11,200.00	89.69	180.16	7,100.95	-5,019.66	861.57	5,017.23	0.00	0.00	0.00
11,300.00	89.69	180.16	7,101.49	-5,119.65	861.29	5,117.23	0.00	0.00	0.00
11,400.00	89.69	180.16	7,102.02	-5,219.65	861.01	5,217.23	0.00	0.00	0.00
11,500.00	89.69	180.16	7,102.56	-5,319.65	860.73	5,317.23	0.00	0.00	0.00
11,600.00	89.69	180.16	7,103.09	-5,419.65	860.46	5,417.22	0.00	0.00	0.00
11,700.00	89.69	180.16	7,103.62	-5,519.65	860.18	5,517.22	0.00	0.00	0.00
11,800.00	89.69	180.16	7,104.16	-5,619.64	859.90	5,617.22	0.00	0.00	0.00
11,900.00	89.69	180.16	7,104.69	-5,719.64	859.63	5,717.22	0.00	0.00	0.00
12,000.00	89.69	180.16	7,105.22	-5,819.64	859.35	5,817.22	0.00	0.00	0.00
12,100.00	89.69	180.16	7,105.76	-5,919.64	859.07	5,917.22	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-6HZ
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 35-6HZ	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)	
12,200.00	89.69	180.16	7,106.29	-6,019.64	858.79	6,017.22	0.00	0.00	0.00	
12,300.00	89.69	180.16	7,106.82	-6,119.64	858.52	6,117.21	0.00	0.00	0.00	
12,400.00	89.69	180.16	7,107.36	-6,219.63	858.24	6,217.21	0.00	0.00	0.00	
12,500.00	89.69	180.16	7,107.89	-6,319.63	857.96	6,317.21	0.00	0.00	0.00	
12,600.00	89.69	180.16	7,108.43	-6,419.63	857.69	6,417.21	0.00	0.00	0.00	
12,700.00	89.69	180.16	7,108.96	-6,519.63	857.41	6,517.21	0.00	0.00	0.00	
12,800.00	89.69	180.16	7,109.49	-6,619.63	857.13	6,617.21	0.00	0.00	0.00	
12,900.00	89.69	180.16	7,110.03	-6,719.62	856.85	6,717.21	0.00	0.00	0.00	
13,000.00	89.69	180.16	7,110.56	-6,819.62	856.58	6,817.20	0.00	0.00	0.00	
13,100.00	89.69	180.16	7,111.09	-6,919.62	856.30	6,917.20	0.00	0.00	0.00	
13,200.00	89.69	180.16	7,111.63	-7,019.62	856.02	7,017.20	0.00	0.00	0.00	
13,300.00	89.69	180.16	7,112.16	-7,119.62	855.75	7,117.20	0.00	0.00	0.00	
13,400.00	89.69	180.16	7,112.69	-7,219.62	855.47	7,217.20	0.00	0.00	0.00	
13,500.00	89.69	180.16	7,113.23	-7,319.61	855.19	7,317.20	0.00	0.00	0.00	
13,600.00	89.69	180.16	7,113.76	-7,419.61	854.92	7,417.20	0.00	0.00	0.00	
13,700.00	89.69	180.16	7,114.30	-7,519.61	854.64	7,517.19	0.00	0.00	0.00	
13,800.00	89.69	180.16	7,114.83	-7,619.61	854.36	7,617.19	0.00	0.00	0.00	
13,900.00	89.69	180.16	7,115.36	-7,719.61	854.08	7,717.19	0.00	0.00	0.00	
14,000.00	89.69	180.16	7,115.90	-7,819.60	853.81	7,817.19	0.00	0.00	0.00	
14,100.00	89.69	180.16	7,116.43	-7,919.60	853.53	7,917.19	0.00	0.00	0.00	
14,200.00	89.69	180.16	7,116.96	-8,019.60	853.25	8,017.19	0.00	0.00	0.00	
14,300.00	89.69	180.16	7,117.50	-8,119.60	852.98	8,117.19	0.00	0.00	0.00	
14,400.00	89.69	180.16	7,118.03	-8,219.60	852.70	8,217.18	0.00	0.00	0.00	
14,500.00	89.69	180.16	7,118.57	-8,319.60	852.42	8,317.18	0.00	0.00	0.00	
14,600.00	89.69	180.16	7,119.10	-8,419.59	852.14	8,417.18	0.00	0.00	0.00	
14,700.00	89.69	180.16	7,119.63	-8,519.59	851.87	8,517.18	0.00	0.00	0.00	
14,800.00	89.69	180.16	7,120.17	-8,619.59	851.59	8,617.18	0.00	0.00	0.00	
14,900.00	89.69	180.16	7,120.70	-8,719.59	851.31	8,717.18	0.00	0.00	0.00	
15,000.00	89.69	180.16	7,121.23	-8,819.59	851.04	8,817.18	0.00	0.00	0.00	
15,100.00	89.69	180.16	7,121.77	-8,919.58	850.76	8,917.17	0.00	0.00	0.00	
15,200.00	89.69	180.16	7,122.30	-9,019.58	850.48	9,017.17	0.00	0.00	0.00	
15,300.00	89.69	180.16	7,122.83	-9,119.58	850.20	9,117.17	0.00	0.00	0.00	
15,400.00	89.69	180.16	7,123.37	-9,219.58	849.93	9,217.17	0.00	0.00	0.00	
15,500.00	89.69	180.16	7,123.90	-9,319.58	849.65	9,317.17	0.00	0.00	0.00	
15,600.00	89.69	180.16	7,124.44	-9,419.58	849.37	9,417.17	0.00	0.00	0.00	
15,700.00	89.69	180.16	7,124.97	-9,519.57	849.10	9,517.17	0.00	0.00	0.00	
15,800.00	89.69	180.16	7,125.50	-9,619.57	848.82	9,617.16	0.00	0.00	0.00	
15,900.00	89.69	180.16	7,126.04	-9,719.57	848.54	9,717.16	0.00	0.00	0.00	
16,000.00	89.69	180.16	7,126.57	-9,819.57	848.26	9,817.16	0.00	0.00	0.00	
16,100.00	89.69	180.16	7,127.10	-9,919.57	847.99	9,917.16	0.00	0.00	0.00	
16,200.00	89.69	180.16	7,127.64	-10,019.56	847.71	10,017.16	0.00	0.00	0.00	
16,300.00	89.69	180.16	7,128.17	-10,119.56	847.43	10,117.16	0.00	0.00	0.00	
16,400.00	89.69	180.16	7,128.70	-10,219.56	847.16	10,217.16	0.00	0.00	0.00	
16,500.00	89.69	180.16	7,129.24	-10,319.56	846.88	10,317.15	0.00	0.00	0.00	
16,600.00	89.69	180.16	7,129.77	-10,419.56	846.60	10,417.15	0.00	0.00	0.00	
16,700.00	89.69	180.16	7,130.31	-10,519.56	846.33	10,517.15	0.00	0.00	0.00	
16,800.00	89.69	180.16	7,130.84	-10,619.55	846.05	10,617.15	0.00	0.00	0.00	
16,900.00	89.69	180.16	7,131.37	-10,719.55	845.77	10,717.15	0.00	0.00	0.00	
17,000.00	89.69	180.16	7,131.91	-10,819.55	845.49	10,817.15	0.00	0.00	0.00	
17,100.00	89.69	180.16	7,132.44	-10,919.55	845.22	10,917.15	0.00	0.00	0.00	
17,200.00	89.69	180.16	7,132.97	-11,019.55	844.94	11,017.14	0.00	0.00	0.00	
17,300.00	89.69	180.16	7,133.51	-11,119.55	844.66	11,117.14	0.00	0.00	0.00	
17,400.00	89.69	180.16	7,134.04	-11,219.54	844.39	11,217.14	0.00	0.00	0.00	
17,500.00	89.69	180.16	7,134.58	-11,319.54	844.11	11,317.14	0.00	0.00	0.00	

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-6HZ
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 35-6HZ	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)	
17,600.00	89.69	180.16	7,135.11	-11,419.54	843.83	11,417.14	0.00	0.00	0.00	
17,700.00	89.69	180.16	7,135.64	-11,519.54	843.55	11,517.14	0.00	0.00	0.00	
17,800.00	89.69	180.16	7,136.18	-11,619.54	843.28	11,617.14	0.00	0.00	0.00	
17,900.00	89.69	180.16	7,136.71	-11,719.53	843.00	11,717.13	0.00	0.00	0.00	
17,954.39	89.69	180.16	7,137.00	-11,773.92	842.85	11,771.52	0.00	0.00	0.00	
TD Well @ 17954.39ft - 5.5" CSG										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
2,063.78	2,017.00	9 5/8"	9-5/8	13-1/2	
17,954.39	7,137.00	5.5" CSG	5-1/2	7-7/8	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,499.51	1,479.00	Fox Hills				
4,242.17	4,094.00	Parkman				
4,603.28	4,444.00	Sussex				
7,111.70	6,887.00	Sharon Springs				
7,149.21	6,912.00	Niobrara				
7,355.25	7,021.00	Nio B				
9,334.79	7,091.00	Nio C				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
280.00	280.00	0.00	0.00	Begin Nudge @ 280.00ft	
1,450.00	1,431.79	-116.41	134.38	Hold Tangent @ 1450.00ft	
4,250.15	4,101.60	-669.24	772.59	Begin Drop @ 4250.15ft	
5,127.65	4,965.45	-756.54	873.38	Hold Vertical @ 5127.65ft	
6,528.02	6,365.82	-756.54	873.38	KOP @ 6528.02ft :: DLS = 8°/100'	
7,649.20	7,082.00	-1,468.92	871.41	End Build @ 7649.20ft	
17,954.39	7,137.00	-11,773.93	842.85	TD Well @ 17954.39ft	