

US ROCKIES WATTENBERG PLANNING

WELD-NAD83-UTMFT13N

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

LABRISA 35-7HZ

Plan A

Plan: Permit Rev-2

Standard Planning Report

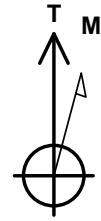
07 September, 2023

Project: WELD-NAD83-UTMFT13N
Site: 2N-65W-35 LABRISA 11-35HZ PAD
Well: LABRISA 35-7HZ
Wellbore: Plan A
Design: Permit Rev-2

US ROCKIES WATTENBERG PLANNING

CASING DETAILS

TVD	MD	Name	Size
2017.00	2062.35	9 5/8"	9-5/8
7070.00	18034.51	5.5" CSG	5-1/2



Azimuths to True North
Magnetic North: 7.62°
Magnetic Field
Strength: 51673.1nT
Dip Angle: 66.37°
Date: 9/13/2022
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	270.00	0.00	0.00	270.00	0.00	0.00	0.00	0.00	0.00	
3	1403.33	17.00	116.25	1386.78	-73.82	149.69	1.50	116.25	68.92	
4	6667.17	17.00	116.25	6420.61	-754.50	1529.98	0.00	0.00	704.44	
5	7699.60	89.75	181.00	7025.00	-1464.89	1683.97	8.00	65.79	1409.46	
6	7800.00	89.75	181.00	7025.44	-1565.27	1682.22	0.00	0.00	1509.84	
7	8399.99	89.75	190.00	7028.06	-2161.88	1624.77	1.50	90.02	2108.01	
8	9650.00	89.75	190.00	7033.52	-3392.89	1407.71	0.00	0.00	3345.41	
9	10316.75	89.75	180.00	7036.43	-4056.25	1349.68	1.50	-90.02	4010.30	
10	18034.51	89.75	180.00	7070.00	-11773.94	1349.86	0.00	0.00	11723.92	LABRISA 35-7HZ_BHL

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	Northing	Easting	Latitude	Longitude
LABRISA 35-7HZ_SHL	0.00	14560192.27	1743023.60	40.091303	-104.633125
LABRISA 35-7HZ_LP	7025.00	14558734.34	1744713.60	40.087280	-104.627104
LABRISA 35-7HZ_BHL	7070.00	14548424.00	1744422.00	40.058970	-104.628300

WELL DETAILS: LABRISA 35-7HZ

GL = 4969'

RKB = 17' @ 4986.00usft (RIG)

FORMATION TOP DETAILS

Plan: Permit Rev-2 (LABRISA 35-7HZ/Plan A)

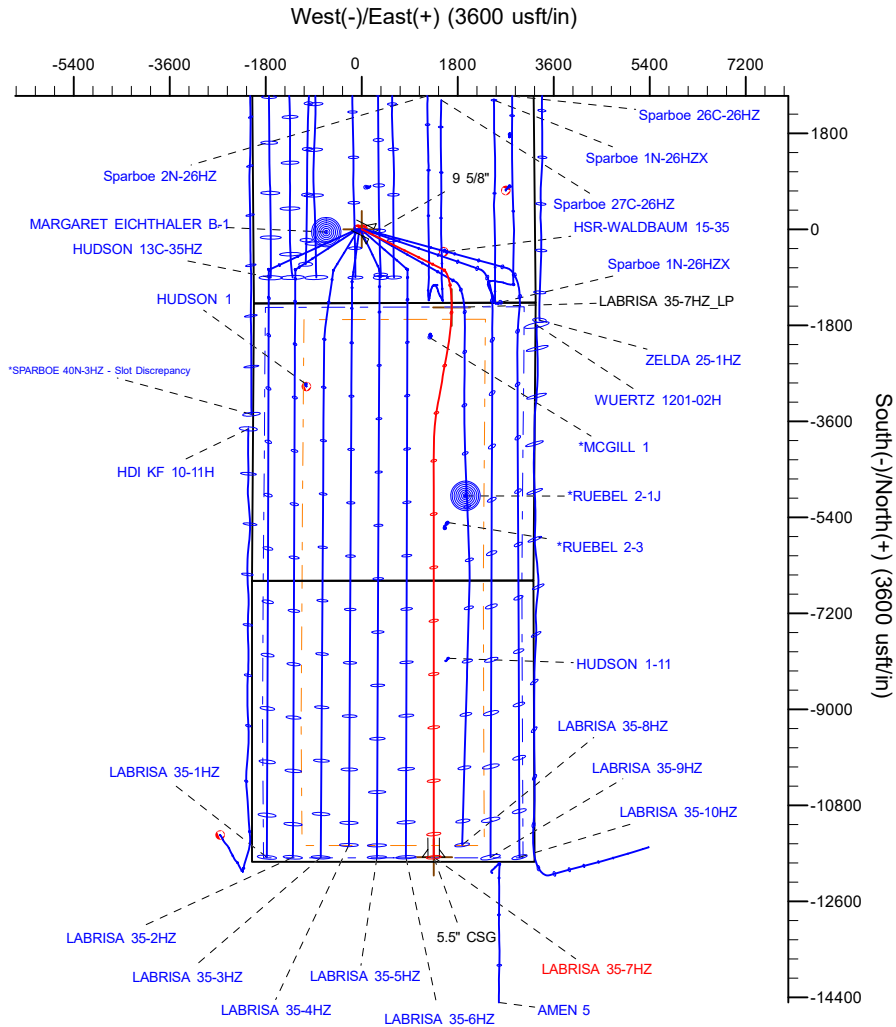
Date: 9/7/2023

TVDPATH	MDPATH	Formation
1479.00	1499.77	Fox Hills
4094.00	4234.25	Parkman
4444.00	4600.25	Sussex
6887.00	7242.05	Sharon Springs
6912.00	7287.22	Niobrara
7021.00	7625.64	Nio B

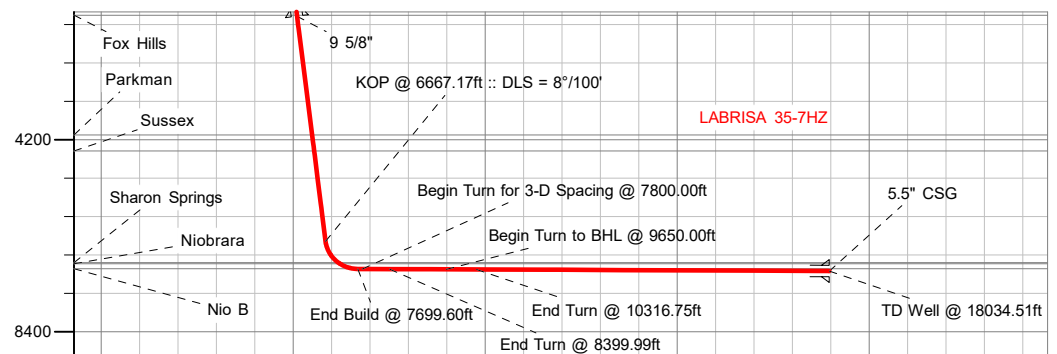
SHL
1386' FSL
2034' FWL

LP
84' FNL
1578' FEL

BHL
85' FSL
1888' FEL



True Vertical Depth (4200 usft/in)



Vertical Section at 181.86° (4200 usft/in)

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-7HZ
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 35-7HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-2		

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 35-7HZ				
Well Position	+N/-S	0.00 usft	Northing:	14,560,192.27 usft	Latitude:	40.091303
	+E/-W	0.00 usft	Easting:	1,743,023.60 usft	Longitude:	-104.633125
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	51,569.32662518

Design	Permit Rev-2				
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	181.86	

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-2 (Plan A)	APC_ISCWSA REV 2 MWD+I	
				Fixed:v2:crustal field declinatio	
2	2,017.00	18,034.51	Permit Rev-2 (Plan A)	APC_ISCWSA REV 2 MWD+I	
				Fixed:v2:Rockies, crustal dec +	

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-7HZ
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 35-7HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-2		

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	
270.00	0.00	0.00	270.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,403.33	17.00	116.25	1,386.78	-73.82	149.69	1.50	1.50	0.00	116.25	
6,667.17	17.00	116.25	6,420.61	-754.50	1,529.98	0.00	0.00	0.00	0.00	
7,699.60	89.75	181.00	7,025.00	-1,464.89	1,683.97	8.00	7.05	6.27	65.79	
7,800.00	89.75	181.00	7,025.44	-1,565.27	1,682.22	0.00	0.00	0.00	0.00	
8,399.99	89.75	190.00	7,028.06	-2,161.88	1,624.77	1.50	0.00	1.50	90.02	
9,650.00	89.75	190.00	7,033.52	-3,392.89	1,407.71	0.00	0.00	0.00	0.00	
10,316.75	89.75	180.00	7,036.43	-4,056.25	1,349.68	1.50	0.00	-1.50	-90.02	
18,034.51	89.75	180.00	7,070.00	-11,773.94	1,349.86	0.00	0.00	0.00	0.00	LABRISA 35-7HZ_BH

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-7HZ
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 35-7HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-2		

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
270.00	0.00	0.00	270.00	0.00	0.00	0.00	0.00	0.00	0.00
Begin Nudge @ 270.00ft									
300.00	0.45	116.25	300.00	-0.05	0.11	0.05	1.50	1.50	0.00
400.00	1.95	116.25	399.97	-0.98	1.98	0.91	1.50	1.50	0.00
500.00	3.45	116.25	499.86	-3.06	6.21	2.86	1.50	1.50	0.00
600.00	4.95	116.25	599.59	-6.30	12.78	5.88	1.50	1.50	0.00
700.00	6.45	116.25	699.09	-10.69	21.68	9.98	1.50	1.50	0.00
800.00	7.95	116.25	798.30	-16.24	32.92	15.16	1.50	1.50	0.00
900.00	9.45	116.25	897.15	-22.93	46.49	21.41	1.50	1.50	0.00
1,000.00	10.95	116.25	995.56	-30.76	62.37	28.72	1.50	1.50	0.00
1,100.00	12.45	116.25	1,093.48	-39.73	80.56	37.09	1.50	1.50	0.00
1,200.00	13.95	116.25	1,190.84	-49.83	101.04	46.52	1.50	1.50	0.00
1,300.00	15.45	116.25	1,287.56	-61.05	123.80	57.00	1.50	1.50	0.00
1,403.33	17.00	116.25	1,386.78	-73.82	149.69	68.92	1.50	1.50	0.00
Hold Tangent @ 1403.33ft									
1,499.77	17.00	116.25	1,479.00	-86.29	174.98	80.57	0.00	0.00	0.00
Fox Hills									
1,500.00	17.00	116.25	1,479.22	-86.32	175.04	80.59	0.00	0.00	0.00
1,600.00	17.00	116.25	1,574.85	-99.25	201.26	92.67	0.00	0.00	0.00
1,700.00	17.00	116.25	1,670.48	-112.18	227.48	104.74	0.00	0.00	0.00
1,800.00	17.00	116.25	1,766.11	-125.11	253.71	116.81	0.00	0.00	0.00
1,900.00	17.00	116.25	1,861.74	-138.04	279.93	128.89	0.00	0.00	0.00
2,000.00	17.00	116.25	1,957.37	-150.98	306.15	140.96	0.00	0.00	0.00
2,062.35	17.00	116.25	2,017.00	-159.04	322.50	148.49	0.00	0.00	0.00
9 5/8"									
2,100.00	17.00	116.25	2,053.00	-163.91	332.37	153.03	0.00	0.00	0.00
2,200.00	17.00	116.25	2,148.63	-176.84	358.59	165.11	0.00	0.00	0.00
2,300.00	17.00	116.25	2,244.26	-189.77	384.82	177.18	0.00	0.00	0.00
2,400.00	17.00	116.25	2,339.89	-202.70	411.04	189.25	0.00	0.00	0.00
2,500.00	17.00	116.25	2,435.53	-215.63	437.26	201.33	0.00	0.00	0.00
2,600.00	17.00	116.25	2,531.16	-228.56	463.48	213.40	0.00	0.00	0.00
2,700.00	17.00	116.25	2,626.79	-241.50	489.70	225.47	0.00	0.00	0.00
2,800.00	17.00	116.25	2,722.42	-254.43	515.93	237.55	0.00	0.00	0.00
2,900.00	17.00	116.25	2,818.05	-267.36	542.15	249.62	0.00	0.00	0.00
3,000.00	17.00	116.25	2,913.68	-280.29	568.37	261.69	0.00	0.00	0.00
3,100.00	17.00	116.25	3,009.31	-293.22	594.59	273.77	0.00	0.00	0.00
3,200.00	17.00	116.25	3,104.94	-306.15	620.81	285.84	0.00	0.00	0.00
3,300.00	17.00	116.25	3,200.57	-319.08	647.04	297.91	0.00	0.00	0.00
3,400.00	17.00	116.25	3,296.20	-332.01	673.26	309.99	0.00	0.00	0.00
3,500.00	17.00	116.25	3,391.83	-344.95	699.48	322.06	0.00	0.00	0.00
3,600.00	17.00	116.25	3,487.46	-357.88	725.70	334.13	0.00	0.00	0.00
3,700.00	17.00	116.25	3,583.09	-370.81	751.92	346.21	0.00	0.00	0.00
3,800.00	17.00	116.25	3,678.72	-383.74	778.15	358.28	0.00	0.00	0.00
3,900.00	17.00	116.25	3,774.35	-396.67	804.37	370.35	0.00	0.00	0.00
4,000.00	17.00	116.25	3,869.98	-409.60	830.59	382.43	0.00	0.00	0.00
4,100.00	17.00	116.25	3,965.61	-422.53	856.81	394.50	0.00	0.00	0.00
4,200.00	17.00	116.25	4,061.24	-435.46	883.03	406.57	0.00	0.00	0.00
4,234.25	17.00	116.25	4,094.00	-439.89	892.02	410.71	0.00	0.00	0.00
Parkman									
4,300.00	17.00	116.25	4,156.87	-448.40	909.26	418.65	0.00	0.00	0.00
4,400.00	17.00	116.25	4,252.50	-461.33	935.48	430.72	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-7HZ
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 35-7HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-2		

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	17.00	116.25	4,348.13	-474.26	961.70	442.79	0.00	0.00	0.00
4,600.00	17.00	116.25	4,443.77	-487.19	987.92	454.87	0.00	0.00	0.00
4,600.25	17.00	116.25	4,444.00	-487.22	987.99	454.90	0.00	0.00	0.00
Sussex									
4,700.00	17.00	116.25	4,539.40	-500.12	1,014.14	466.94	0.00	0.00	0.00
4,800.00	17.00	116.25	4,635.03	-513.05	1,040.37	479.01	0.00	0.00	0.00
4,900.00	17.00	116.25	4,730.66	-525.98	1,066.59	491.09	0.00	0.00	0.00
5,000.00	17.00	116.25	4,826.29	-538.91	1,092.81	503.16	0.00	0.00	0.00
5,100.00	17.00	116.25	4,921.92	-551.85	1,119.03	515.23	0.00	0.00	0.00
5,200.00	17.00	116.25	5,017.55	-564.78	1,145.25	527.31	0.00	0.00	0.00
5,300.00	17.00	116.25	5,113.18	-577.71	1,171.48	539.38	0.00	0.00	0.00
5,400.00	17.00	116.25	5,208.81	-590.64	1,197.70	551.45	0.00	0.00	0.00
5,500.00	17.00	116.25	5,304.44	-603.57	1,223.92	563.53	0.00	0.00	0.00
5,600.00	17.00	116.25	5,400.07	-616.50	1,250.14	575.60	0.00	0.00	0.00
5,700.00	17.00	116.25	5,495.70	-629.43	1,276.36	587.67	0.00	0.00	0.00
5,800.00	17.00	116.25	5,591.33	-642.36	1,302.59	599.75	0.00	0.00	0.00
5,900.00	17.00	116.25	5,686.96	-655.30	1,328.81	611.82	0.00	0.00	0.00
6,000.00	17.00	116.25	5,782.59	-668.23	1,355.03	623.89	0.00	0.00	0.00
6,100.00	17.00	116.25	5,878.22	-681.16	1,381.25	635.97	0.00	0.00	0.00
6,200.00	17.00	116.25	5,973.85	-694.09	1,407.47	648.04	0.00	0.00	0.00
6,300.00	17.00	116.25	6,069.48	-707.02	1,433.70	660.11	0.00	0.00	0.00
6,400.00	17.00	116.25	6,165.11	-719.95	1,459.92	672.19	0.00	0.00	0.00
6,500.00	17.00	116.25	6,260.74	-732.88	1,486.14	684.26	0.00	0.00	0.00
6,600.00	17.00	116.25	6,356.37	-745.81	1,512.36	696.33	0.00	0.00	0.00
6,667.17	17.00	116.25	6,420.61	-754.50	1,529.98	704.44	0.00	0.00	0.00
KOP @ 6667.17ft :: DLS = 8°/100'									
6,700.00	18.23	123.93	6,451.90	-759.49	1,538.54	709.15	8.00	3.75	23.39
6,750.00	20.60	133.66	6,499.07	-769.93	1,551.40	719.17	8.00	4.73	19.46
6,800.00	23.39	141.31	6,545.44	-783.76	1,563.97	732.58	8.00	5.60	15.31
6,850.00	26.49	147.34	6,590.78	-800.90	1,576.20	749.32	8.00	6.19	12.06
6,900.00	29.78	152.16	6,634.87	-821.27	1,588.02	769.30	8.00	6.59	9.63
6,950.00	33.22	156.08	6,677.50	-844.78	1,599.38	792.43	8.00	6.88	7.84
7,000.00	36.76	159.33	6,718.46	-871.31	1,610.22	818.59	8.00	7.08	6.50
7,050.00	40.37	162.08	6,757.55	-900.73	1,620.49	847.66	8.00	7.23	5.50
7,100.00	44.05	164.45	6,794.58	-932.90	1,630.13	879.50	8.00	7.34	4.73
7,150.00	47.76	166.52	6,829.37	-967.65	1,639.11	913.94	8.00	7.43	4.14
7,200.00	51.51	168.36	6,861.75	-1,004.83	1,647.38	950.83	8.00	7.49	3.68
7,242.05	54.68	169.76	6,887.00	-1,037.84	1,653.75	983.62	8.00	7.54	3.34
Sharon Springs									
7,250.00	55.28	170.01	6,891.56	-1,044.25	1,654.89	989.98	8.00	7.56	3.18
7,287.22	58.10	171.15	6,912.00	-1,074.93	1,659.98	1,020.48	8.00	7.58	3.06
Niobrara									
7,300.00	59.07	171.53	6,918.66	-1,085.71	1,661.62	1,031.21	8.00	7.60	2.93
7,350.00	62.88	172.92	6,942.92	-1,129.02	1,667.52	1,074.30	8.00	7.62	2.79
7,400.00	66.70	174.23	6,964.21	-1,173.97	1,672.58	1,119.06	8.00	7.64	2.61
7,450.00	70.53	175.46	6,982.44	-1,220.33	1,676.75	1,165.26	8.00	7.66	2.46
7,500.00	74.38	176.63	6,997.51	-1,267.88	1,680.04	1,212.68	8.00	7.68	2.35
7,550.00	78.22	177.76	7,009.35	-1,316.39	1,682.41	1,261.09	8.00	7.69	2.26
7,600.00	82.07	178.86	7,017.90	-1,365.62	1,683.86	1,310.25	8.00	7.70	2.20
7,625.64	84.05	179.42	7,021.00	-1,391.06	1,684.24	1,335.67	8.00	7.71	2.17
Nio B									
7,650.00	85.93	179.94	7,023.13	-1,415.33	1,684.37	1,359.92	8.00	7.71	2.15
7,699.60	89.75	181.00	7,025.00	-1,464.89	1,683.97	1,409.46	8.00	7.71	2.14

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-7HZ
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 35-7HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-2		

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)
End Build @ 7699.60ft									
7,800.00	89.75	181.00	7,025.44	-1,565.27	1,682.22	1,509.84	0.00	0.00	0.00
Begin Turn for 3-D Spacing @ 7800.00ft									
7,900.00	89.75	182.50	7,025.88	-1,665.22	1,679.16	1,609.84	1.50	0.00	1.50
8,000.00	89.75	184.00	7,026.31	-1,765.05	1,673.49	1,709.81	1.50	0.00	1.50
8,100.00	89.75	185.50	7,026.75	-1,864.71	1,665.21	1,809.68	1.50	0.00	1.50
8,200.00	89.75	187.00	7,027.19	-1,964.11	1,654.33	1,909.38	1.50	0.00	1.50
8,300.00	89.75	188.50	7,027.62	-2,063.19	1,640.84	2,008.85	1.50	0.00	1.50
8,399.99	89.75	190.00	7,028.06	-2,161.88	1,624.77	2,108.01	1.50	0.00	1.50
End Turn @ 8399.99ft									
8,500.00	89.75	190.00	7,028.50	-2,260.37	1,607.40	2,207.00	0.00	0.00	0.00
8,600.00	89.75	190.00	7,028.93	-2,358.85	1,590.04	2,306.00	0.00	0.00	0.00
8,700.00	89.75	190.00	7,029.37	-2,457.33	1,572.67	2,404.99	0.00	0.00	0.00
8,800.00	89.75	190.00	7,029.81	-2,555.81	1,555.31	2,503.98	0.00	0.00	0.00
8,900.00	89.75	190.00	7,030.24	-2,654.29	1,537.94	2,602.97	0.00	0.00	0.00
9,000.00	89.75	190.00	7,030.68	-2,752.77	1,520.58	2,701.96	0.00	0.00	0.00
9,100.00	89.75	190.00	7,031.12	-2,851.25	1,503.21	2,800.95	0.00	0.00	0.00
9,200.00	89.75	190.00	7,031.55	-2,949.73	1,485.85	2,899.95	0.00	0.00	0.00
9,300.00	89.75	190.00	7,031.99	-3,048.21	1,468.49	2,998.94	0.00	0.00	0.00
9,400.00	89.75	190.00	7,032.42	-3,146.69	1,451.12	3,097.93	0.00	0.00	0.00
9,500.00	89.75	190.00	7,032.86	-3,245.17	1,433.76	3,196.92	0.00	0.00	0.00
9,600.00	89.75	190.00	7,033.30	-3,343.65	1,416.39	3,295.91	0.00	0.00	0.00
9,650.00	89.75	190.00	7,033.52	-3,392.89	1,407.71	3,345.41	0.00	0.00	0.00
Begin Turn to BHL @ 9650.00ft									
9,700.00	89.75	189.25	7,033.73	-3,442.18	1,399.35	3,394.95	1.50	0.00	-1.50
9,800.00	89.75	187.75	7,034.17	-3,541.08	1,384.57	3,494.27	1.50	0.00	-1.50
9,900.00	89.75	186.25	7,034.61	-3,640.33	1,372.38	3,593.87	1.50	0.00	-1.50
10,000.00	89.75	184.75	7,035.05	-3,739.87	1,362.80	3,693.66	1.50	0.00	-1.50
10,100.00	89.75	183.25	7,035.48	-3,839.62	1,355.82	3,793.59	1.50	0.00	-1.50
10,200.00	89.75	181.75	7,035.92	-3,939.52	1,351.46	3,893.58	1.50	0.00	-1.50
10,300.00	89.75	180.25	7,036.36	-4,039.50	1,349.72	3,993.56	1.50	0.00	-1.50
10,316.75	89.75	180.00	7,036.43	-4,056.25	1,349.68	4,010.30	1.50	0.00	-1.50
End Turn @ 10316.75ft									
10,400.00	89.75	180.00	7,036.79	-4,139.50	1,349.68	4,093.51	0.00	0.00	0.00
10,500.00	89.75	180.00	7,037.23	-4,239.50	1,349.68	4,193.46	0.00	0.00	0.00
10,600.00	89.75	180.00	7,037.66	-4,339.50	1,349.69	4,293.40	0.00	0.00	0.00
10,700.00	89.75	180.00	7,038.10	-4,439.50	1,349.69	4,393.35	0.00	0.00	0.00
10,800.00	89.75	180.00	7,038.53	-4,539.50	1,349.69	4,493.30	0.00	0.00	0.00
10,900.00	89.75	180.00	7,038.97	-4,639.49	1,349.69	4,593.24	0.00	0.00	0.00
11,000.00	89.75	180.00	7,039.40	-4,739.49	1,349.70	4,693.19	0.00	0.00	0.00
11,100.00	89.75	180.00	7,039.84	-4,839.49	1,349.70	4,793.14	0.00	0.00	0.00
11,200.00	89.75	180.00	7,040.27	-4,939.49	1,349.70	4,893.08	0.00	0.00	0.00
11,300.00	89.75	180.00	7,040.71	-5,039.49	1,349.70	4,993.03	0.00	0.00	0.00
11,400.00	89.75	180.00	7,041.14	-5,139.49	1,349.70	5,092.97	0.00	0.00	0.00
11,500.00	89.75	180.00	7,041.58	-5,239.49	1,349.71	5,192.92	0.00	0.00	0.00
11,600.00	89.75	180.00	7,042.01	-5,339.49	1,349.71	5,292.87	0.00	0.00	0.00
11,700.00	89.75	180.00	7,042.45	-5,439.49	1,349.71	5,392.81	0.00	0.00	0.00
11,800.00	89.75	180.00	7,042.88	-5,539.49	1,349.71	5,492.76	0.00	0.00	0.00
11,900.00	89.75	180.00	7,043.32	-5,639.49	1,349.72	5,592.71	0.00	0.00	0.00
12,000.00	89.75	180.00	7,043.75	-5,739.48	1,349.72	5,692.65	0.00	0.00	0.00
12,100.00	89.75	180.00	7,044.19	-5,839.48	1,349.72	5,792.60	0.00	0.00	0.00
12,200.00	89.75	180.00	7,044.62	-5,939.48	1,349.72	5,892.54	0.00	0.00	0.00
12,300.00	89.75	180.00	7,045.06	-6,039.48	1,349.73	5,992.49	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-7HZ
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 35-7HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-2		

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)
12,400.00	89.75	180.00	7,045.49	-6,139.48	1,349.73	6,092.44	0.00	0.00	0.00
12,500.00	89.75	180.00	7,045.93	-6,239.48	1,349.73	6,192.38	0.00	0.00	0.00
12,600.00	89.75	180.00	7,046.36	-6,339.48	1,349.73	6,292.33	0.00	0.00	0.00
12,700.00	89.75	180.00	7,046.80	-6,439.48	1,349.73	6,392.28	0.00	0.00	0.00
12,800.00	89.75	180.00	7,047.23	-6,539.48	1,349.74	6,492.22	0.00	0.00	0.00
12,900.00	89.75	180.00	7,047.67	-6,639.48	1,349.74	6,592.17	0.00	0.00	0.00
13,000.00	89.75	180.00	7,048.10	-6,739.47	1,349.74	6,692.11	0.00	0.00	0.00
13,100.00	89.75	180.00	7,048.54	-6,839.47	1,349.74	6,792.06	0.00	0.00	0.00
13,200.00	89.75	180.00	7,048.97	-6,939.47	1,349.75	6,892.01	0.00	0.00	0.00
13,300.00	89.75	180.00	7,049.41	-7,039.47	1,349.75	6,991.95	0.00	0.00	0.00
13,400.00	89.75	180.00	7,049.84	-7,139.47	1,349.75	7,091.90	0.00	0.00	0.00
13,500.00	89.75	180.00	7,050.28	-7,239.47	1,349.75	7,191.85	0.00	0.00	0.00
13,600.00	89.75	180.00	7,050.71	-7,339.47	1,349.76	7,291.79	0.00	0.00	0.00
13,700.00	89.75	180.00	7,051.15	-7,439.47	1,349.76	7,391.74	0.00	0.00	0.00
13,800.00	89.75	180.00	7,051.58	-7,539.47	1,349.76	7,491.69	0.00	0.00	0.00
13,900.00	89.75	180.00	7,052.02	-7,639.47	1,349.76	7,591.63	0.00	0.00	0.00
14,000.00	89.75	180.00	7,052.45	-7,739.47	1,349.76	7,691.58	0.00	0.00	0.00
14,100.00	89.75	180.00	7,052.89	-7,839.46	1,349.77	7,791.52	0.00	0.00	0.00
14,200.00	89.75	180.00	7,053.32	-7,939.46	1,349.77	7,891.47	0.00	0.00	0.00
14,300.00	89.75	180.00	7,053.76	-8,039.46	1,349.77	7,991.42	0.00	0.00	0.00
14,400.00	89.75	180.00	7,054.19	-8,139.46	1,349.77	8,091.36	0.00	0.00	0.00
14,500.00	89.75	180.00	7,054.63	-8,239.46	1,349.78	8,191.31	0.00	0.00	0.00
14,600.00	89.75	180.00	7,055.06	-8,339.46	1,349.78	8,291.26	0.00	0.00	0.00
14,700.00	89.75	180.00	7,055.50	-8,439.46	1,349.78	8,391.20	0.00	0.00	0.00
14,800.00	89.75	180.00	7,055.93	-8,539.46	1,349.78	8,491.15	0.00	0.00	0.00
14,900.00	89.75	180.00	7,056.37	-8,639.46	1,349.78	8,591.09	0.00	0.00	0.00
15,000.00	89.75	180.00	7,056.80	-8,739.46	1,349.79	8,691.04	0.00	0.00	0.00
15,100.00	89.75	180.00	7,057.24	-8,839.46	1,349.79	8,790.99	0.00	0.00	0.00
15,200.00	89.75	180.00	7,057.67	-8,939.45	1,349.79	8,890.93	0.00	0.00	0.00
15,300.00	89.75	180.00	7,058.11	-9,039.45	1,349.79	8,990.88	0.00	0.00	0.00
15,400.00	89.75	180.00	7,058.54	-9,139.45	1,349.80	9,090.83	0.00	0.00	0.00
15,500.00	89.75	180.00	7,058.98	-9,239.45	1,349.80	9,190.77	0.00	0.00	0.00
15,600.00	89.75	180.00	7,059.41	-9,339.45	1,349.80	9,290.72	0.00	0.00	0.00
15,700.00	89.75	180.00	7,059.85	-9,439.45	1,349.80	9,390.66	0.00	0.00	0.00
15,800.00	89.75	180.00	7,060.28	-9,539.45	1,349.81	9,490.61	0.00	0.00	0.00
15,900.00	89.75	180.00	7,060.72	-9,639.45	1,349.81	9,590.56	0.00	0.00	0.00
16,000.00	89.75	180.00	7,061.15	-9,739.45	1,349.81	9,690.50	0.00	0.00	0.00
16,100.00	89.75	180.00	7,061.59	-9,839.45	1,349.81	9,790.45	0.00	0.00	0.00
16,200.00	89.75	180.00	7,062.02	-9,939.44	1,349.81	9,890.40	0.00	0.00	0.00
16,300.00	89.75	180.00	7,062.46	-10,039.44	1,349.82	9,990.34	0.00	0.00	0.00
16,400.00	89.75	180.00	7,062.89	-10,139.44	1,349.82	10,090.29	0.00	0.00	0.00
16,500.00	89.75	180.00	7,063.33	-10,239.44	1,349.82	10,190.24	0.00	0.00	0.00
16,600.00	89.75	180.00	7,063.76	-10,339.44	1,349.82	10,290.18	0.00	0.00	0.00
16,700.00	89.75	180.00	7,064.20	-10,439.44	1,349.83	10,390.13	0.00	0.00	0.00
16,800.00	89.75	180.00	7,064.63	-10,539.44	1,349.83	10,490.07	0.00	0.00	0.00
16,900.00	89.75	180.00	7,065.07	-10,639.44	1,349.83	10,590.02	0.00	0.00	0.00
17,000.00	89.75	180.00	7,065.50	-10,739.44	1,349.83	10,689.97	0.00	0.00	0.00
17,100.00	89.75	180.00	7,065.94	-10,839.44	1,349.83	10,789.91	0.00	0.00	0.00
17,200.00	89.75	180.00	7,066.37	-10,939.44	1,349.84	10,889.86	0.00	0.00	0.00
17,300.00	89.75	180.00	7,066.81	-11,039.43	1,349.84	10,989.81	0.00	0.00	0.00
17,400.00	89.75	180.00	7,067.24	-11,139.43	1,349.84	11,089.75	0.00	0.00	0.00
17,500.00	89.75	180.00	7,067.68	-11,239.43	1,349.84	11,189.70	0.00	0.00	0.00
17,600.00	89.75	180.00	7,068.11	-11,339.43	1,349.85	11,289.64	0.00	0.00	0.00
17,700.00	89.75	180.00	7,068.55	-11,439.43	1,349.85	11,389.59	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.16 Single User Db	Local Co-ordinate Reference:	Well LABRISA 35-7HZ
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 35-7HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-2		

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)
17,800.00	89.75	180.00	7,068.98	-11,539.43	1,349.85	11,489.54	0.00	0.00	0.00
17,900.00	89.75	180.00	7,069.42	-11,639.43	1,349.85	11,589.48	0.00	0.00	0.00
18,000.00	89.75	180.00	7,069.85	-11,739.43	1,349.86	11,689.43	0.00	0.00	0.00
18,034.51	89.75	180.00	7,070.00	-11,773.94	1,349.86	11,723.92	0.00	0.00	0.00
TD Well @ 18034.51ft									

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
2,062.35	2,017.00	9 5/8"	9-5/8	13-1/2
18,034.51	7,070.00	5.5" CSG	5-1/2	7-7/8

Formations				
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)
1,499.77	1,479.00	Fox Hills		
4,234.25	4,094.00	Parkman		
4,600.25	4,444.00	Sussex		
7,242.05	6,887.00	Sharon Springs		
7,287.22	6,912.00	Niobrara		
7,625.64	7,021.00	Nio B		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
270.00	270.00	0.00	0.00	Begin Nudge @ 270.00ft
1,403.33	1,386.78	-73.82	149.69	Hold Tangent @ 1403.33ft
6,667.17	6,420.61	-754.50	1,529.98	KOP @ 6667.17ft :: DLS = 8°/100'
7,699.60	7,025.00	-1,464.89	1,683.97	End Build @ 7699.60ft
7,800.00	7,025.44	-1,565.27	1,682.22	Begin Turn for 3-D Spacing @ 7800.00ft
8,399.99	7,028.06	-2,161.88	1,624.77	End Turn @ 8399.99ft
9,650.00	7,033.52	-3,392.89	1,407.71	Begin Turn to BHL @ 9650.00ft
10,316.75	7,036.43	-4,056.25	1,349.68	End Turn @ 10316.75ft
18,034.51	7,070.00	-11,773.94	1,349.86	TD Well @ 18034.51ft