

US ROCKIES WATTENBERG PLANNING

LARIMER-NAD83-UTMFT13N

5N-68W-25 JODSTER NORTH 8-25HZ PAD

JODSTER NORTH 25-3HZ

Plan A

Plan: Execution Rev-1

SHL Lat/Long: 40.373802/-104.949091

Survey Program: MWD+IFR+MSA

Standard Planning Report

25 September, 2019

Project: LARIMER-NAD83-UTMFT13N
Site: 5N-68W-25 JODSTER NORTH 8-25HZ PAD
Well: JODSTER NORTH 25-3HZ
Wellbore: Plan A
Design: Execution Rev-1

US ROCKIES WATTENBERG PLANNING

CASING DETAILS

TVD	MD	Size
1808.41	1845.70	9-5/8
6775.00	7370.93	5-1/2

WELL DETAILS: JODSTER NORTH 25-3HZ

GL = 4861.00
RKB = 26' @ 4887.00usft (PD 564)

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	1863.66	18.63	22.14	1825.43	282.19	122.27	0.00	0.00	121.28	
2	1888.57	18.85	21.20	1849.02	289.63	125.22	1.50	-54.37	124.21	
3	4313.23	18.85	21.20	4143.64	1020.00	408.51	0.00	0.00	404.95	
4	5255.73	0.00	0.00	5069.23	1163.25	464.07	2.00	-180.00	460.01	
5	6245.30	0.00	0.00	6058.80	1163.25	464.07	0.00	0.00	460.01	
6	7370.93	90.05	89.83	6775.00	1165.37	1180.90	8.00	89.83	1176.82	
7	10624.94	90.05	89.83	6772.14	1175.00	4434.89	0.00	0.00	4430.76	JODSTER NORTH 25-3HZ_target
8	10663.67	90.05	90.41	6772.11	1174.92	4473.63	1.50	89.99	4469.50	
9	17608.10	90.05	90.41	6766.00	1125.05	11417.87	0.00	0.00	11413.87	JODSTER NORTH 25-3HZ_BHL

SHL
1548' FNL
1092' FEL

HEEL
371' FNL
75' FWL

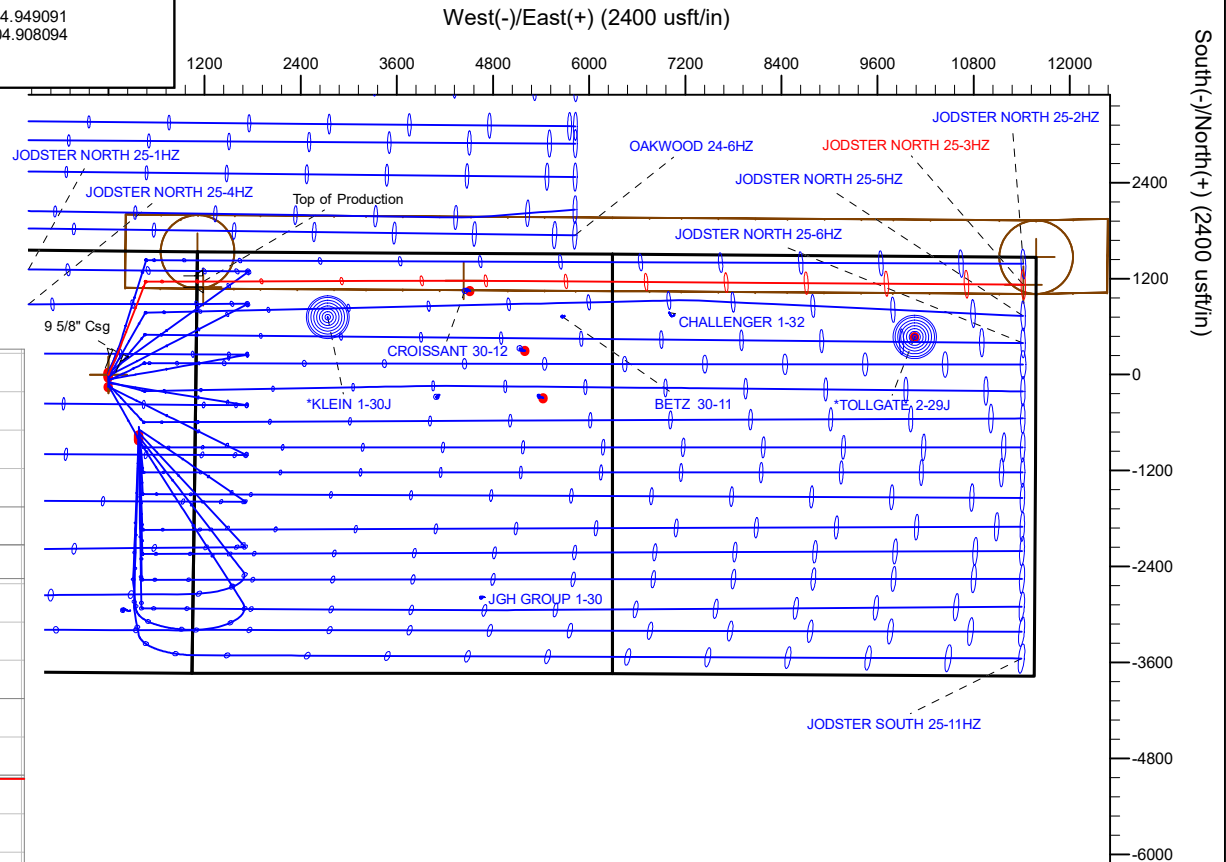
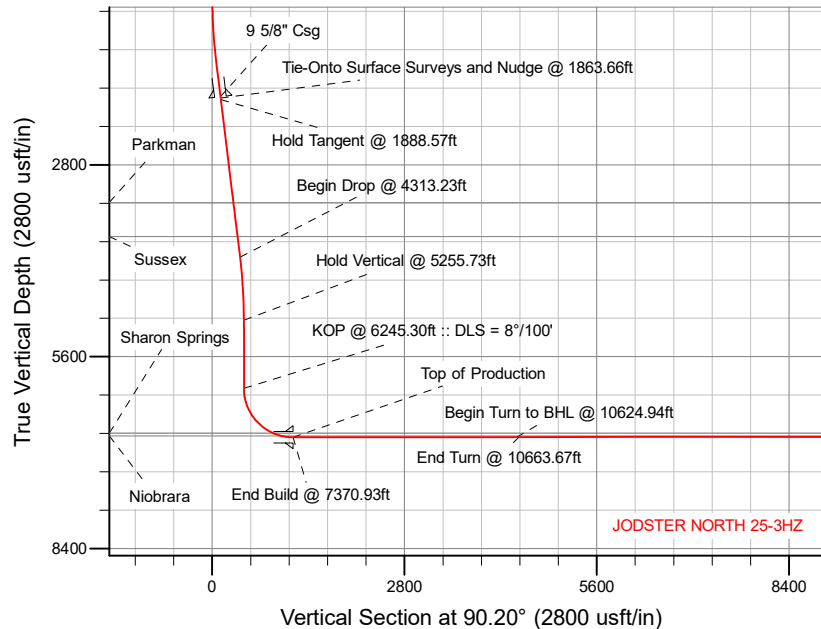
TOE
345' FNL
160' FEL

WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
JODSTER NORTH 25-3HZ_SHL	0.00	0.00	0.00	40.373802	-104.949091
JODSTER NORTH 25-3HZ_BHL	6766.00	1125.05	11417.87	40.376884	-104.908094

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1304.00	1318.01	Fox Hills
3351.00	3475.67	Parkman
3846.00	3998.72	Sussex
6714.00	7072.57	Sharon Springs
6757.00	7209.40	Niobrara



Plan: Execution Rev-1 (JODSTER NORTH 25-3HZ/Plan A)

Date: 9/25/2019

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well JODSTER NORTH 25-3HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 26' @ 4887.00usft (PD 564)
Project:	LARIMER-NAD83-UTMFT13N	MD Reference:	RKB = 26' @ 4887.00usft (PD 564)
Site:	5N-68W-25 JODSTER NORTH 8-25HZ PAD	North Reference:	True
Well:	JODSTER NORTH 25-3HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Execution Rev-1		

Project	LARIMER-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	5N-68W-25 JODSTER NORTH 8-25HZ PAD			
Site Position:		Northing:	14,662,888.23 usft	Latitude: 40.373884
From:	Lat/Long	Easting:	1,654,595.99 usft	Longitude: -104.949090
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.03 °

Well	JODSTER NORTH 25-3HZ			
Well Position	+N/-S	-29.86 usft	Northing:	14,662,858.37 usft
	+E/-W	-0.28 usft	Easting:	1,654,595.73 usft
Position Uncertainty		3.28 usft	Wellhead Elevation:	Ground Level: 4,861.00 usft

Wellbore	Plan A				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	9/25/2019	8.07	66.75	52,099.70236314

Design	Execution Rev-1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	1,863.66
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	90.20

Plan Survey Tool Program	Date	9/25/2019		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	136.00	1,863.66	Total MWD+IFR Surface (Plan A)	APC_ISCWSA REV 2 MWD+II Fixed:v2:crustal field declination
2	1,863.66	17,608.10	Execution Rev-1 (Plan A)	APC_ISCWSA REV 2 MWD+II Fixed:v2:Rockies, crustal dec +

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Project:	LARIMER-NAD83-UTMFT13N	MD Reference:	RKB = 26' @ 4887.00usft (PD 564)
Site:	5N-68W-25 JODSTER NORTH 8-25HZ PAD	North Reference:	True
Well:	JODSTER NORTH 25-3HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Execution 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
1,863.66	18.63	22.14	1,825.43	282.19	122.27	0.00	0.00	0.00	0.00	
1,888.57	18.85	21.20	1,849.02	289.63	125.22	1.50	0.88	-3.77	-54.37	
4,313.23	18.85	21.20	4,143.64	1,020.00	408.51	0.00	0.00	0.00	0.00	
5,255.73	0.00	0.00	5,069.23	1,163.25	464.07	2.00	-2.00	-2.25	-180.00	
6,245.30	0.00	0.00	6,058.80	1,163.25	464.07	0.00	0.00	0.00	0.00	
7,370.93	90.05	89.83	6,775.00	1,165.37	1,180.90	8.00	8.00	7.98	89.83	
10,624.94	90.05	89.83	6,772.14	1,175.00	4,434.89	0.00	0.00	0.00	0.00	JODSTER NORTH 25
10,663.67	90.05	90.41	6,772.11	1,174.92	4,473.63	1.50	0.00	1.50	89.99	
17,608.10	90.05	90.41	6,766.00	1,125.05	11,417.87	0.00	0.00	0.00	0.00	JODSTER NORTH 25

Corporate
Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well JODSTER NORTH 25-3HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 26' @ 4887.00usft (PD 564)
Project:	LARIMER-NAD83-UTMFT13N	MD Reference:	RKB = 26' @ 4887.00usft (PD 564)
Site:	5N-68W-25 JODSTER NORTH 8-25HZ PAD	North Reference:	True
Well:	JODSTER NORTH 25-3HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Execution 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)
1,863.66	18.63	22.14	1,825.43	282.19	122.27	121.28	0.00	0.00	0.00
Tie-Onto Surface Surveys and Nudge @ 1863.66ft									
1,888.57	18.85	21.20	1,849.02	289.63	125.22	124.21	1.50	0.88	-3.77
Hold Tangent @ 1888.57ft									
1,900.00	18.85	21.20	1,859.84	293.07	126.56	125.53	0.00	0.00	0.00
2,000.00	18.85	21.20	1,954.47	323.19	138.24	137.11	0.00	0.00	0.00
2,100.00	18.85	21.20	2,049.11	353.32	149.92	148.69	0.00	0.00	0.00
2,200.00	18.85	21.20	2,143.75	383.44	161.61	160.27	0.00	0.00	0.00
2,300.00	18.85	21.20	2,238.38	413.56	173.29	171.85	0.00	0.00	0.00
2,400.00	18.85	21.20	2,333.02	443.68	184.97	183.42	0.00	0.00	0.00
2,500.00	18.85	21.20	2,427.66	473.81	196.66	195.00	0.00	0.00	0.00
2,600.00	18.85	21.20	2,522.29	503.93	208.34	206.58	0.00	0.00	0.00
2,700.00	18.85	21.20	2,616.93	534.05	220.03	218.16	0.00	0.00	0.00
2,800.00	18.85	21.20	2,711.57	564.17	231.71	229.74	0.00	0.00	0.00
2,900.00	18.85	21.20	2,806.21	594.30	243.39	241.32	0.00	0.00	0.00
3,000.00	18.85	21.20	2,900.84	624.42	255.08	252.90	0.00	0.00	0.00
3,100.00	18.85	21.20	2,995.48	654.54	266.76	264.47	0.00	0.00	0.00
3,200.00	18.85	21.20	3,090.12	684.66	278.44	276.05	0.00	0.00	0.00
3,300.00	18.85	21.20	3,184.75	714.79	290.13	287.63	0.00	0.00	0.00
3,400.00	18.85	21.20	3,279.39	744.91	301.81	299.21	0.00	0.00	0.00
3,475.67	18.85	21.20	3,351.00	767.70	310.65	307.97	0.00	0.00	0.00
Parkman									
3,500.00	18.85	21.20	3,374.03	775.03	313.50	310.79	0.00	0.00	0.00
3,600.00	18.85	21.20	3,468.66	805.15	325.18	322.37	0.00	0.00	0.00
3,700.00	18.85	21.20	3,563.30	835.28	336.86	333.95	0.00	0.00	0.00
3,800.00	18.85	21.20	3,657.94	865.40	348.55	345.52	0.00	0.00	0.00
3,900.00	18.85	21.20	3,752.57	895.52	360.23	357.10	0.00	0.00	0.00
3,998.72	18.85	21.20	3,846.00	925.26	371.77	368.53	0.00	0.00	0.00
Sussex									
4,000.00	18.85	21.20	3,847.21	925.65	371.92	368.68	0.00	0.00	0.00
4,100.00	18.85	21.20	3,941.85	955.77	383.60	380.26	0.00	0.00	0.00
4,200.00	18.85	21.20	4,036.48	985.89	395.28	391.84	0.00	0.00	0.00
4,300.00	18.85	21.20	4,131.12	1,016.01	406.97	403.42	0.00	0.00	0.00
4,313.23	18.85	21.20	4,143.64	1,020.00	408.51	404.95	0.00	0.00	0.00
Begin Drop @ 4313.23ft									
4,400.00	17.11	21.20	4,226.17	1,044.97	418.20	414.55	2.00	-2.00	0.00
4,500.00	15.11	21.20	4,322.23	1,070.85	428.24	424.50	2.00	-2.00	0.00
4,600.00	13.11	21.20	4,419.21	1,093.58	437.05	433.23	2.00	-2.00	0.00
4,700.00	11.11	21.20	4,516.98	1,113.15	444.64	440.75	2.00	-2.00	0.00
4,800.00	9.11	21.20	4,615.42	1,129.52	450.99	447.05	2.00	-2.00	0.00
4,900.00	7.11	21.20	4,714.41	1,142.68	456.10	452.11	2.00	-2.00	0.00
5,000.00	5.11	21.20	4,813.84	1,152.61	459.95	455.92	2.00	-2.00	0.00
5,100.00	3.11	21.20	4,913.58	1,159.30	462.54	458.49	2.00	-2.00	0.00
5,200.00	1.11	21.20	5,013.50	1,162.74	463.88	459.82	2.00	-2.00	0.00
5,255.73	0.00	0.00	5,069.23	1,163.25	464.07	460.01	2.00	-2.00	-38.04
Hold Vertical @ 5255.73ft									
5,300.00	0.00	0.00	5,113.50	1,163.25	464.07	460.01	0.00	0.00	0.00
5,400.00	0.00	0.00	5,213.50	1,163.25	464.07	460.01	0.00	0.00	0.00
5,500.00	0.00	0.00	5,313.50	1,163.25	464.07	460.01	0.00	0.00	0.00
5,600.00	0.00	0.00	5,413.50	1,163.25	464.07	460.01	0.00	0.00	0.00
5,700.00	0.00	0.00	5,513.50	1,163.25	464.07	460.01	0.00	0.00	0.00
5,800.00	0.00	0.00	5,613.50	1,163.25	464.07	460.01	0.00	0.00	0.00
5,900.00	0.00	0.00	5,713.50	1,163.25	464.07	460.01	0.00	0.00	0.00

Corporate Planning Report

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Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 26' @ 4887.00usft (PD 564)
Project:	LARIMER-NAD83-UTMFT13N	MD Reference:	RKB = 26' @ 4887.00usft (PD 564)
Site:	5N-68W-25 JODSTER NORTH 8-25HZ PAD	North Reference:	True
Well:	JODSTER NORTH 25-3HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Execution 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)
6,000.00	0.00	0.00	5,813.50	1,163.25	464.07	460.01	0.00	0.00	0.00
6,100.00	0.00	0.00	5,913.50	1,163.25	464.07	460.01	0.00	0.00	0.00
6,200.00	0.00	0.00	6,013.50	1,163.25	464.07	460.01	0.00	0.00	0.00
6,245.30	0.00	0.00	6,058.80	1,163.25	464.07	460.01	0.00	0.00	0.00
KOP @ 6245.30ft :: DLS = 8°/100'									
6,300.00	4.38	89.83	6,113.45	1,163.25	466.16	462.10	8.00	8.00	164.22
6,400.00	12.38	89.83	6,212.30	1,163.29	480.72	476.65	8.00	8.00	0.00
6,500.00	20.38	89.83	6,308.17	1,163.38	508.89	504.82	8.00	8.00	0.00
6,600.00	28.38	89.83	6,399.18	1,163.50	550.13	546.06	8.00	8.00	0.00
6,700.00	36.38	89.83	6,483.56	1,163.66	603.63	599.56	8.00	8.00	0.00
6,800.00	44.38	89.83	6,559.68	1,163.85	668.36	664.29	8.00	8.00	0.00
6,900.00	52.38	89.83	6,626.05	1,164.07	743.05	738.98	8.00	8.00	0.00
7,000.00	60.38	89.83	6,681.38	1,164.32	826.25	822.18	8.00	8.00	0.00
7,072.57	66.18	89.83	6,714.00	1,164.51	891.04	886.97	8.00	8.00	0.00
Sharon Springs									
7,100.00	68.38	89.83	6,724.59	1,164.58	916.34	912.27	8.00	8.00	0.00
7,200.00	76.38	89.83	6,754.85	1,164.87	1,011.57	1,007.50	8.00	8.00	0.00
7,209.40	77.13	89.83	6,757.00	1,164.89	1,020.72	1,016.65	8.00	8.00	0.00
Niobrara									
7,300.00	84.38	89.83	6,771.55	1,165.16	1,110.08	1,106.01	8.00	8.00	0.00
7,370.93	90.05	89.83	6,775.00	1,165.37	1,180.90	1,176.82	8.00	8.00	0.00
End Build @ 7370.93ft - Top of Production									
7,400.00	90.05	89.83	6,774.97	1,165.45	1,209.97	1,205.89	0.00	0.00	0.00
7,500.00	90.05	89.83	6,774.88	1,165.75	1,309.97	1,305.89	0.00	0.00	0.00
7,600.00	90.05	89.83	6,774.80	1,166.05	1,409.97	1,405.89	0.00	0.00	0.00
7,700.00	90.05	89.83	6,774.71	1,166.34	1,509.97	1,505.89	0.00	0.00	0.00
7,800.00	90.05	89.83	6,774.62	1,166.64	1,609.97	1,605.88	0.00	0.00	0.00
7,900.00	90.05	89.83	6,774.53	1,166.93	1,709.97	1,705.88	0.00	0.00	0.00
8,000.00	90.05	89.83	6,774.44	1,167.23	1,809.97	1,805.88	0.00	0.00	0.00
8,100.00	90.05	89.83	6,774.36	1,167.53	1,909.96	1,905.88	0.00	0.00	0.00
8,200.00	90.05	89.83	6,774.27	1,167.82	2,009.96	2,005.88	0.00	0.00	0.00
8,300.00	90.05	89.83	6,774.18	1,168.12	2,109.96	2,105.87	0.00	0.00	0.00
8,400.00	90.05	89.83	6,774.09	1,168.41	2,209.96	2,205.87	0.00	0.00	0.00
8,500.00	90.05	89.83	6,774.01	1,168.71	2,309.96	2,305.87	0.00	0.00	0.00
8,600.00	90.05	89.83	6,773.92	1,169.01	2,409.96	2,405.87	0.00	0.00	0.00
8,700.00	90.05	89.83	6,773.83	1,169.30	2,509.96	2,505.87	0.00	0.00	0.00
8,800.00	90.05	89.83	6,773.74	1,169.60	2,609.96	2,605.86	0.00	0.00	0.00
8,900.00	90.05	89.83	6,773.65	1,169.89	2,709.96	2,705.86	0.00	0.00	0.00
9,000.00	90.05	89.83	6,773.57	1,170.19	2,809.96	2,805.86	0.00	0.00	0.00
9,100.00	90.05	89.83	6,773.48	1,170.49	2,909.96	2,905.86	0.00	0.00	0.00
9,200.00	90.05	89.83	6,773.39	1,170.78	3,009.96	3,005.85	0.00	0.00	0.00
9,300.00	90.05	89.83	6,773.30	1,171.08	3,109.96	3,105.85	0.00	0.00	0.00
9,400.00	90.05	89.83	6,773.22	1,171.37	3,209.96	3,205.85	0.00	0.00	0.00
9,500.00	90.05	89.83	6,773.13	1,171.67	3,309.96	3,305.85	0.00	0.00	0.00
9,600.00	90.05	89.83	6,773.04	1,171.97	3,409.96	3,405.85	0.00	0.00	0.00
9,700.00	90.05	89.83	6,772.95	1,172.26	3,509.96	3,505.84	0.00	0.00	0.00
9,800.00	90.05	89.83	6,772.86	1,172.56	3,609.96	3,605.84	0.00	0.00	0.00
9,900.00	90.05	89.83	6,772.78	1,172.85	3,709.96	3,705.84	0.00	0.00	0.00
10,000.00	90.05	89.83	6,772.69	1,173.15	3,809.96	3,805.84	0.00	0.00	0.00
10,100.00	90.05	89.83	6,772.60	1,173.45	3,909.96	3,905.84	0.00	0.00	0.00
10,200.00	90.05	89.83	6,772.51	1,173.74	4,009.95	4,005.83	0.00	0.00	0.00
10,300.00	90.05	89.83	6,772.43	1,174.04	4,109.95	4,105.83	0.00	0.00	0.00
10,400.00	90.05	89.83	6,772.34	1,174.33	4,209.95	4,205.83	0.00	0.00	0.00

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well JODSTER NORTH 25-3HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 26' @ 4887.00usft (PD 564)
Project:	LARIMER-NAD83-UTMFT13N	MD Reference:	RKB = 26' @ 4887.00usft (PD 564)
Site:	5N-68W-25 JODSTER NORTH 8-25HZ PAD	North Reference:	True
Well:	JODSTER NORTH 25-3HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Execution 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)
10,500.00	90.05	89.83	6,772.25	1,174.63	4,309.95	4,305.83	0.00	0.00	0.00
10,600.00	90.05	89.83	6,772.16	1,174.93	4,409.95	4,405.82	0.00	0.00	0.00
10,624.94	90.05	89.83	6,772.14	1,175.00	4,434.89	4,430.76	0.00	0.00	0.00
Begin Turn to BHL @ 10624.94ft									
10,663.67	90.05	90.41	6,772.11	1,174.92	4,473.63	4,469.50	1.50	0.00	1.50
End Turn @ 10663.67ft									
10,700.00	90.05	90.41	6,772.07	1,174.66	4,509.95	4,505.82	0.00	0.00	0.00
10,800.00	90.05	90.41	6,771.99	1,173.94	4,609.95	4,605.82	0.00	0.00	0.00
10,900.00	90.05	90.41	6,771.90	1,173.22	4,709.95	4,705.82	0.00	0.00	0.00
11,000.00	90.05	90.41	6,771.81	1,172.50	4,809.94	4,805.82	0.00	0.00	0.00
11,100.00	90.05	90.41	6,771.72	1,171.78	4,909.94	4,905.82	0.00	0.00	0.00
11,200.00	90.05	90.41	6,771.63	1,171.07	5,009.94	5,005.82	0.00	0.00	0.00
11,300.00	90.05	90.41	6,771.55	1,170.35	5,109.94	5,105.82	0.00	0.00	0.00
11,400.00	90.05	90.41	6,771.46	1,169.63	5,209.93	5,205.82	0.00	0.00	0.00
11,500.00	90.05	90.41	6,771.37	1,168.91	5,309.93	5,305.82	0.00	0.00	0.00
11,600.00	90.05	90.41	6,771.28	1,168.19	5,409.93	5,405.82	0.00	0.00	0.00
11,700.00	90.05	90.41	6,771.19	1,167.48	5,509.93	5,505.82	0.00	0.00	0.00
11,800.00	90.05	90.41	6,771.11	1,166.76	5,609.92	5,605.82	0.00	0.00	0.00
11,900.00	90.05	90.41	6,771.02	1,166.04	5,709.92	5,705.82	0.00	0.00	0.00
12,000.00	90.05	90.41	6,770.93	1,165.32	5,809.92	5,805.81	0.00	0.00	0.00
12,100.00	90.05	90.41	6,770.84	1,164.60	5,909.92	5,905.81	0.00	0.00	0.00
12,200.00	90.05	90.41	6,770.76	1,163.89	6,009.91	6,005.81	0.00	0.00	0.00
12,300.00	90.05	90.41	6,770.67	1,163.17	6,109.91	6,105.81	0.00	0.00	0.00
12,400.00	90.05	90.41	6,770.58	1,162.45	6,209.91	6,205.81	0.00	0.00	0.00
12,500.00	90.05	90.41	6,770.49	1,161.73	6,309.90	6,305.81	0.00	0.00	0.00
12,600.00	90.05	90.41	6,770.40	1,161.01	6,409.90	6,405.81	0.00	0.00	0.00
12,700.00	90.05	90.41	6,770.32	1,160.30	6,509.90	6,505.81	0.00	0.00	0.00
12,800.00	90.05	90.41	6,770.23	1,159.58	6,609.90	6,605.81	0.00	0.00	0.00
12,900.00	90.05	90.41	6,770.14	1,158.86	6,709.89	6,705.81	0.00	0.00	0.00
13,000.00	90.05	90.41	6,770.05	1,158.14	6,809.89	6,805.81	0.00	0.00	0.00
13,100.00	90.05	90.41	6,769.96	1,157.42	6,909.89	6,905.81	0.00	0.00	0.00
13,200.00	90.05	90.41	6,769.88	1,156.70	7,009.89	7,005.81	0.00	0.00	0.00
13,300.00	90.05	90.41	6,769.79	1,155.99	7,109.88	7,105.81	0.00	0.00	0.00
13,400.00	90.05	90.41	6,769.70	1,155.27	7,209.88	7,205.80	0.00	0.00	0.00
13,500.00	90.05	90.41	6,769.61	1,154.55	7,309.88	7,305.80	0.00	0.00	0.00
13,600.00	90.05	90.41	6,769.52	1,153.83	7,409.88	7,405.80	0.00	0.00	0.00
13,700.00	90.05	90.41	6,769.44	1,153.11	7,509.87	7,505.80	0.00	0.00	0.00
13,800.00	90.05	90.41	6,769.35	1,152.40	7,609.87	7,605.80	0.00	0.00	0.00
13,900.00	90.05	90.41	6,769.26	1,151.68	7,709.87	7,705.80	0.00	0.00	0.00
14,000.00	90.05	90.41	6,769.17	1,150.96	7,809.87	7,805.80	0.00	0.00	0.00
14,100.00	90.05	90.41	6,769.08	1,150.24	7,909.86	7,905.80	0.00	0.00	0.00
14,200.00	90.05	90.41	6,769.00	1,149.52	8,009.86	8,005.80	0.00	0.00	0.00
14,300.00	90.05	90.41	6,768.91	1,148.81	8,109.86	8,105.80	0.00	0.00	0.00
14,400.00	90.05	90.41	6,768.82	1,148.09	8,209.85	8,205.80	0.00	0.00	0.00
14,500.00	90.05	90.41	6,768.73	1,147.37	8,309.85	8,305.80	0.00	0.00	0.00
14,600.00	90.05	90.41	6,768.65	1,146.65	8,409.85	8,405.80	0.00	0.00	0.00
14,700.00	90.05	90.41	6,768.56	1,145.93	8,509.85	8,505.80	0.00	0.00	0.00
14,800.00	90.05	90.41	6,768.47	1,145.22	8,609.84	8,605.79	0.00	0.00	0.00
14,900.00	90.05	90.41	6,768.38	1,144.50	8,709.84	8,705.79	0.00	0.00	0.00
15,000.00	90.05	90.41	6,768.29	1,143.78	8,809.84	8,805.79	0.00	0.00	0.00
15,100.00	90.05	90.41	6,768.21	1,143.06	8,909.84	8,905.79	0.00	0.00	0.00
15,200.00	90.05	90.41	6,768.12	1,142.34	9,009.83	9,005.79	0.00	0.00	0.00
15,300.00	90.05	90.41	6,768.03	1,141.62	9,109.83	9,105.79	0.00	0.00	0.00
15,400.00	90.05	90.41	6,767.94	1,140.91	9,209.83	9,205.79	0.00	0.00	0.00

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well JODSTER NORTH 25-3HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 26' @ 4887.00usft (PD 564)
Project:	LARIMER-NAD83-UTMFT13N	MD Reference:	RKB = 26' @ 4887.00usft (PD 564)
Site:	5N-68W-25 JODSTER NORTH 8-25HZ PAD	North Reference:	True
Well:	JODSTER NORTH 25-3HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Execution 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)	
15,500.00	90.05	90.41	6,767.85	1,140.19	9,309.83	9,305.79	0.00	0.00	0.00	
15,600.00	90.05	90.41	6,767.77	1,139.47	9,409.82	9,405.79	0.00	0.00	0.00	
15,700.00	90.05	90.41	6,767.68	1,138.75	9,509.82	9,505.79	0.00	0.00	0.00	
15,800.00	90.05	90.41	6,767.59	1,138.03	9,609.82	9,605.79	0.00	0.00	0.00	
15,900.00	90.05	90.41	6,767.50	1,137.32	9,709.82	9,705.79	0.00	0.00	0.00	
16,000.00	90.05	90.41	6,767.41	1,136.60	9,809.81	9,805.79	0.00	0.00	0.00	
16,100.00	90.05	90.41	6,767.33	1,135.88	9,909.81	9,905.79	0.00	0.00	0.00	
16,200.00	90.05	90.41	6,767.24	1,135.16	10,009.81	10,005.78	0.00	0.00	0.00	
16,300.00	90.05	90.41	6,767.15	1,134.44	10,109.81	10,105.78	0.00	0.00	0.00	
16,400.00	90.05	90.41	6,767.06	1,133.73	10,209.80	10,205.78	0.00	0.00	0.00	
16,500.00	90.05	90.41	6,766.97	1,133.01	10,309.80	10,305.78	0.00	0.00	0.00	
16,600.00	90.05	90.41	6,766.89	1,132.29	10,409.80	10,405.78	0.00	0.00	0.00	
16,700.00	90.05	90.41	6,766.80	1,131.57	10,509.79	10,505.78	0.00	0.00	0.00	
16,800.00	90.05	90.41	6,766.71	1,130.85	10,609.79	10,605.78	0.00	0.00	0.00	
16,900.00	90.05	90.41	6,766.62	1,130.13	10,709.79	10,705.78	0.00	0.00	0.00	
17,000.00	90.05	90.41	6,766.53	1,129.42	10,809.79	10,805.78	0.00	0.00	0.00	
17,100.00	90.05	90.41	6,766.45	1,128.70	10,909.78	10,905.78	0.00	0.00	0.00	
17,200.00	90.05	90.41	6,766.36	1,127.98	11,009.78	11,005.78	0.00	0.00	0.00	
17,300.00	90.05	90.41	6,766.27	1,127.26	11,109.78	11,105.78	0.00	0.00	0.00	
17,400.00	90.05	90.41	6,766.18	1,126.54	11,209.78	11,205.78	0.00	0.00	0.00	
17,500.00	90.05	90.41	6,766.10	1,125.83	11,309.77	11,305.78	0.00	0.00	0.00	
17,600.00	90.05	90.41	6,766.01	1,125.11	11,409.77	11,405.77	0.00	0.00	0.00	
17,608.10	90.05	90.41	6,766.00	1,125.05	11,417.87	11,413.87	0.00	0.00	0.00	
TD Well @ 17608.10ft										

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,845.70	1,808.41	9 5/8" Csg	9-5/8	13-1/2	
7,370.93	6,775.00	Top of Production	5-1/2	7-7/8	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,475.67	3,351.00	Parkman				
3,998.72	3,846.00	Sussex				
7,072.57	6,714.00	Sharon Springs				
7,209.40	6,757.00	Niobrara				

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well JODSTER NORTH 25-3HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 26' @ 4887.00usft (PD 564)
Project:	LARIMER-NAD83-UTMFT13N	MD Reference:	RKB = 26' @ 4887.00usft (PD 564)
Site:	5N-68W-25 JODSTER NORTH 8-25HZ PAD	North Reference:	True
Well:	JODSTER NORTH 25-3HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Execution Rev-1		

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,863.66	1,825.43	282.19	122.27	Tie-onto Surface Surveys and Nudge @ 1863.66ft
1,888.57	1,849.02	289.63	125.22	Hold Tangent @ 1888.57ft
4,313.23	4,143.64	1,020.00	408.51	Begin Drop @ 4313.23ft
5,255.73	5,069.23	1,163.25	464.07	Hold Vertical @ 5255.73ft
6,245.30	6,058.80	1,163.25	464.07	KOP @ 6245.30ft :: DLS = 8"/100'
7,370.93	6,775.00	1,165.37	1,180.90	End Build @ 7370.93ft
10,624.94	6,772.14	1,175.00	4,434.89	Begin Turn to BHL @ 10624.94ft
10,663.67	6,772.11	1,174.92	4,473.63	End Turn @ 10663.67ft
17,608.10	6,766.00	1,125.05	11,417.87	TD Well @ 17608.10ft