

US ROCKIES WATTENBERG PLANNING

**ADAMS-NAD83-UTMFT13N
1S-63W-01 LEWTON 27-1 Pad
Lewton 26J-36HZX**

Plan B (Sidetrack)

Plan: Permit Rev-1

Standard Planning Report

03 August, 2016



Azimuths to True North
Magnetic North: 7.96°

Magnetic Field
Strength: 52443.5snT
Dip Angle: 66.62°
Date: 5/9/2016
Model: IGRF2010

SITE: 1S-63W-01 LEWTON 27-1 Pad

Well: Lewton 26J-36HZX
Wellbore: Plan B (Sidetrack)
Design: Permit Rev-1

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1386.00	1397.02	Fox Hills
4119.00	4133.41	Sussex
6402.00	6416.41	Niobrara Top
6749.00	6765.33	Codell
6821.00	6841.29	Greenhorn
7039.00	7105.48	Graneros
7188.00	7394.63	J Sand

WELL DETAILS: Lewton 26J-36HZX

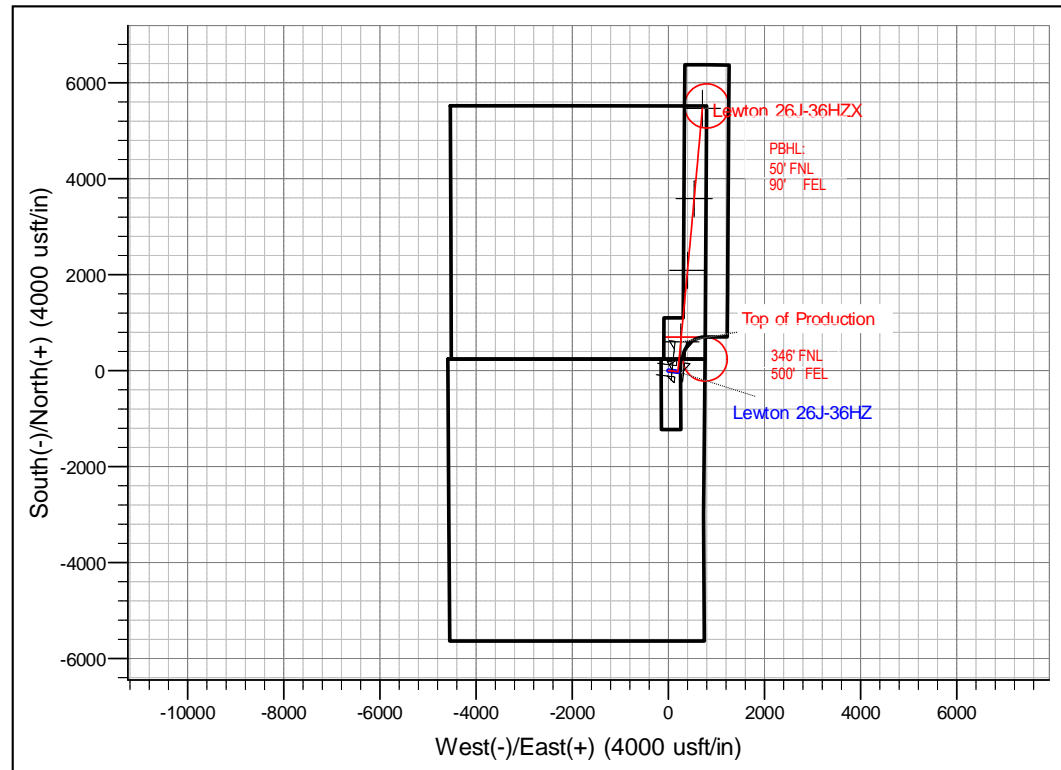
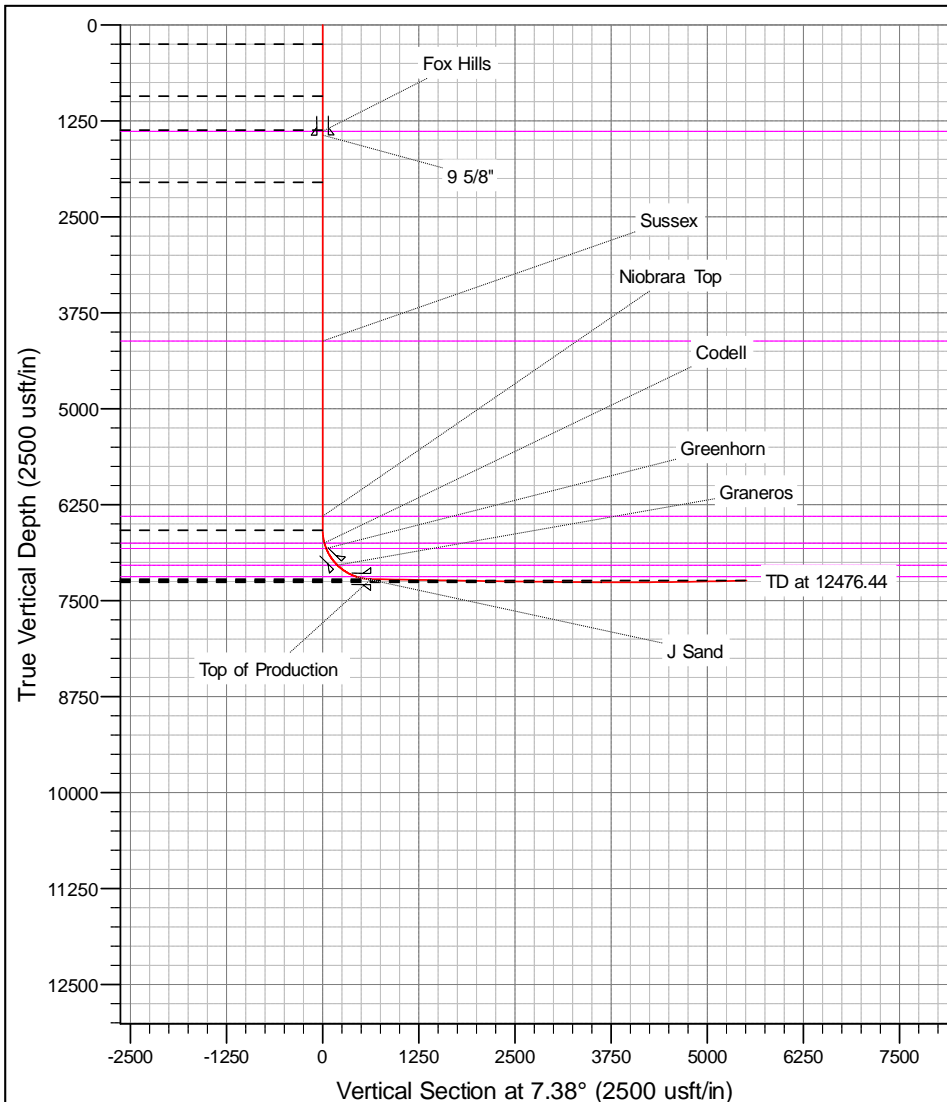
+N/-S	+E/-W	GL: 4974.00	RKB @ 4991.00usft (D Rig)	Longitude	Slot
0.00	0.00	Northing 14527346.79	Easting 1814202.54	Latitude 40.000023	-104.379451

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00
932.81	10.24	97.16	929.18	-7.59	60.39	1.50	0.23
1381.61	10.24	97.16	1370.82	-17.54	139.57	0.00	0.53
2064.41	0.00	0.00	2050.00	-25.13	199.96	1.50	0.76
6598.00	0.00	0.00	6583.59	-25.13	199.96	0.00	0.76
7587.44	89.05	5.38	7220.12	598.18	258.68	9.00	626.44
9088.09	89.05	5.38	7245.00	2092.00	399.40	0.00	2125.97
10586.61	89.73	5.23	7261.00	3584.00	538.00	0.05	3623.41
12476.44	91.67	5.08	7238.00	5465.95	707.87	0.10	5511.59

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Lewton 26J-36HZ_PHL	7220.12	598.17	258.68	14527946.75	1814457.05	40.01666	-104.378527
Lewton 26J-36HZ_PBHL	7238.00	5465.95	707.87	14532817.54	1814872.34	40.015033	-104.376923
Lewton 26J-36HZ_PITL1	7245.00	2092.00	399.40	14529441.52	1814567.37	40.005768	-104.379025
Lewton 26J-36HZ_PITL2	7261.00	3984.00	538.00	14530934.45	1814715.58	40.009865	-104.377530



Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well Lewton 26J-36HZX
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB @ 4991.00usft (D Rig)
Project:	ADAMS-NAD83-UTMFT13N	MD Reference:	RKB @ 4991.00usft (D Rig)
Site:	1S-63W-01 LEWTON 27-1 Pad	North Reference:	True
Well:	Lewton 26J-36HZX	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B (Sidetrack)		
Design:	Permit Rev-1		

Project	ADAMS-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		1S-63W-01 LEWTON 27-1 Pad			
Site Position:		Northing:	14,527,346.80 usft	Latitude:	40.000023
From:	Lat/Long	Easting:	1,814,202.54 usft	Longitude:	-104.379451
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.40 °

Well	Lewton 26J-36HZX					
Well Position	+N/-S	0.00 usft	Northing:	14,527,346.80 usft	Latitude:	40.000023
	+E/-W	0.00 usft	Easting:	1,814,202.54 usft	Longitude:	-104.379451
Position Uncertainty		3.28 usft	Wellhead Elevation:	0.00 usft	Ground Level:	4,974.00 usft

Wellbore	Plan B (Sidetrack)				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/9/2016	7.96	66.62	52,443

Design	Permit Rev-1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	250.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	7.38

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
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	
932.81	10.24	97.16	929.18	-7.59	60.39	1.50	1.50	0.00	97.16	
1,381.61	10.24	97.16	1,370.82	-17.54	139.57	0.00	0.00	0.00	0.00	
2,064.41	0.00	0.00	2,050.00	-25.13	199.96	1.50	-1.50	0.00	180.00	
6,598.00	0.00	0.00	6,583.59	-25.13	199.96	0.00	0.00	0.00	0.00	
7,587.44	89.05	5.38	7,220.12	598.18	258.68	9.00	9.00	0.00	5.38	
9,088.09	89.05	5.38	7,245.00	2,092.00	399.40	0.00	0.00	0.00	0.00	Lewton 26J-36HZ_F
10,586.61	89.73	5.23	7,261.00	3,584.00	538.00	0.05	0.05	-0.01	-12.38	Lewton 26J-36HZ_F
12,476.44	91.67	5.08	7,238.00	5,465.95	707.87	0.10	0.10	-0.01	-4.44	Lewton 26J-36HZ_F

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well Lewton 26J-36HZX
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB @ 4991.00usft (D Rig)
Project:	ADAMS-NAD83-UTMFT13N	MD Reference:	RKB @ 4991.00usft (D Rig)
Site:	1S-63W-01 LEWTON 27-1 Pad	North Reference:	True
Well:	Lewton 26J-36HZX	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B (Sidetrack)		
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)
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.75	97.16	300.00	-0.04	0.32	0.00	1.50	1.50	0.00
400.00	2.25	97.16	399.96	-0.37	2.92	0.01	1.50	1.50	0.00
500.00	3.75	97.16	499.82	-1.02	8.11	0.03	1.50	1.50	0.00
600.00	5.25	97.16	599.51	-2.00	15.90	0.06	1.50	1.50	0.00
700.00	6.75	97.16	698.96	-3.30	26.27	0.10	1.50	1.50	0.00
800.00	8.25	97.16	798.10	-4.93	39.22	0.15	1.50	1.50	0.00
900.00	9.75	97.16	896.87	-6.88	54.74	0.21	1.50	1.50	0.00
932.81	10.24	97.16	929.18	-7.59	60.39	0.23	1.50	1.50	0.00
1,000.00	10.24	97.16	995.30	-9.08	72.25	0.27	0.00	0.00	0.00
1,100.00	10.24	97.16	1,093.71	-11.30	89.89	0.34	0.00	0.00	0.00
1,200.00	10.24	97.16	1,192.11	-13.51	107.53	0.41	0.00	0.00	0.00
1,300.00	10.24	97.16	1,290.52	-15.73	125.17	0.48	0.00	0.00	0.00
1,381.61	10.24	97.16	1,370.82	-17.54	139.57	0.53	0.00	0.00	0.00
1,397.02	10.01	97.16	1,386.00	-17.88	142.26	0.54	1.50	-1.50	0.00
Fox Hills									
1,400.00	9.97	97.16	1,388.93	-17.94	142.77	0.54	1.50	-1.50	0.00
1,447.74	9.25	97.16	1,436.00	-18.94	150.68	0.57	1.50	-1.50	0.00
9 5/8"									
1,500.00	8.47	97.16	1,487.64	-19.94	158.66	0.60	1.50	-1.50	0.00
1,600.00	6.97	97.16	1,586.73	-21.61	171.98	0.65	1.50	-1.50	0.00
1,700.00	5.47	97.16	1,686.14	-22.96	182.73	0.69	1.50	-1.50	0.00
1,800.00	3.97	97.16	1,785.80	-23.99	190.88	0.73	1.50	-1.50	0.00
1,900.00	2.47	97.16	1,885.64	-24.69	196.45	0.75	1.50	-1.50	0.00
2,000.00	0.97	97.16	1,985.59	-25.06	199.42	0.76	1.50	-1.50	0.00
2,064.41	0.00	0.00	2,050.00	-25.13	199.96	0.76	1.50	-1.50	0.00
2,100.00	0.00	0.00	2,085.59	-25.13	199.96	0.76	0.00	0.00	0.00
2,200.00	0.00	0.00	2,185.59	-25.13	199.96	0.76	0.00	0.00	0.00
2,300.00	0.00	0.00	2,285.59	-25.13	199.96	0.76	0.00	0.00	0.00
2,400.00	0.00	0.00	2,385.59	-25.13	199.96	0.76	0.00	0.00	0.00
2,500.00	0.00	0.00	2,485.59	-25.13	199.96	0.76	0.00	0.00	0.00
2,600.00	0.00	0.00	2,585.59	-25.13	199.96	0.76	0.00	0.00	0.00
2,700.00	0.00	0.00	2,685.59	-25.13	199.96	0.76	0.00	0.00	0.00
2,800.00	0.00	0.00	2,785.59	-25.13	199.96	0.76	0.00	0.00	0.00
2,900.00	0.00	0.00	2,885.59	-25.13	199.96	0.76	0.00	0.00	0.00
3,000.00	0.00	0.00	2,985.59	-25.13	199.96	0.76	0.00	0.00	0.00
3,100.00	0.00	0.00	3,085.59	-25.13	199.96	0.76	0.00	0.00	0.00
3,200.00	0.00	0.00	3,185.59	-25.13	199.96	0.76	0.00	0.00	0.00
3,300.00	0.00	0.00	3,285.59	-25.13	199.96	0.76	0.00	0.00	0.00
3,400.00	0.00	0.00	3,385.59	-25.13	199.96	0.76	0.00	0.00	0.00
3,500.00	0.00	0.00	3,485.59	-25.13	199.96	0.76	0.00	0.00	0.00
3,600.00	0.00	0.00	3,585.59	-25.13	199.96	0.76	0.00	0.00	0.00
3,700.00	0.00	0.00	3,685.59	-25.13	199.96	0.76	0.00	0.00	0.00
3,800.00	0.00	0.00	3,785.59	-25.13	199.96	0.76	0.00	0.00	0.00
3,900.00	0.00	0.00	3,885.59	-25.13	199.96	0.76	0.00	0.00	0.00
4,000.00	0.00	0.00	3,985.59	-25.13	199.96	0.76	0.00	0.00	0.00
4,100.00	0.00	0.00	4,085.59	-25.13	199.96	0.76	0.00	0.00	0.00
4,133.41	0.00	0.00	4,119.00	-25.13	199.96	0.76	0.00	0.00	0.00
Sussex									
4,200.00	0.00	0.00	4,185.59	-25.13	199.96	0.76	0.00	0.00	0.00
4,300.00	0.00	0.00	4,285.59	-25.13	199.96	0.76	0.00	0.00	0.00
4,400.00	0.00	0.00	4,385.59	-25.13	199.96	0.76	0.00	0.00	0.00
4,500.00	0.00	0.00	4,485.59	-25.13	199.96	0.76	0.00	0.00	0.00

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well Lewton 26J-36HZX
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB @ 4991.00usft (D Rig)
Project:	ADAMS-NAD83-UTMFT13N	MD Reference:	RKB @ 4991.00usft (D Rig)
Site:	1S-63W-01 LEWTON 27-1 Pad	North Reference:	True
Well:	Lewton 26J-36HZX	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B (Sidetrack)		
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)
4,600.00	0.00	0.00	4,585.59	-25.13	199.96	0.76	0.00	0.00	0.00
4,700.00	0.00	0.00	4,685.59	-25.13	199.96	0.76	0.00	0.00	0.00
4,800.00	0.00	0.00	4,785.59	-25.13	199.96	0.76	0.00	0.00	0.00
4,900.00	0.00	0.00	4,885.59	-25.13	199.96	0.76	0.00	0.00	0.00
5,000.00	0.00	0.00	4,985.59	-25.13	199.96	0.76	0.00	0.00	0.00
5,100.00	0.00	0.00	5,085.59	-25.13	199.96	0.76	0.00	0.00	0.00
5,200.00	0.00	0.00	5,185.59	-25.13	199.96	0.76	0.00	0.00	0.00
5,300.00	0.00	0.00	5,285.59	-25.13	199.96	0.76	0.00	0.00	0.00
5,400.00	0.00	0.00	5,385.59	-25.13	199.96	0.76	0.00	0.00	0.00
5,500.00	0.00	0.00	5,485.59	-25.13	199.96	0.76	0.00	0.00	0.00
5,600.00	0.00	0.00	5,585.59	-25.13	199.96	0.76	0.00	0.00	0.00
5,700.00	0.00	0.00	5,685.59	-25.13	199.96	0.76	0.00	0.00	0.00
5,800.00	0.00	0.00	5,785.59	-25.13	199.96	0.76	0.00	0.00	0.00
5,900.00	0.00	0.00	5,885.59	-25.13	199.96	0.76	0.00	0.00	0.00
6,000.00	0.00	0.00	5,985.59	-25.13	199.96	0.76	0.00	0.00	0.00
6,100.00	0.00	0.00	6,085.59	-25.13	199.96	0.76	0.00	0.00	0.00
6,200.00	0.00	0.00	6,185.59	-25.13	199.96	0.76	0.00	0.00	0.00
6,300.00	0.00	0.00	6,285.59	-25.13	199.96	0.76	0.00	0.00	0.00
6,400.00	0.00	0.00	6,385.59	-25.13	199.96	0.76	0.00	0.00	0.00
6,416.41	0.00	0.00	6,402.00	-25.13	199.96	0.76	0.00	0.00	0.00
Niobrara Top									
6,500.00	0.00	0.00	6,485.59	-25.13	199.96	0.76	0.00	0.00	0.00
6,598.00	0.00	0.00	6,583.59	-25.13	199.96	0.76	0.00	0.00	0.00
6,600.00	0.18	5.38	6,585.59	-25.13	199.96	0.76	9.00	9.00	0.00
6,700.00	9.18	5.38	6,685.15	-17.01	200.72	8.91	9.00	9.00	0.00
6,765.33	15.06	5.38	6,749.00	-3.36	202.01	22.61	9.00	9.00	0.00
Codell									
6,800.00	18.18	5.38	6,782.21	6.51	202.94	32.52	9.00	9.00	0.00
6,841.29	21.90	5.38	6,821.00	20.59	204.27	46.66	9.00	9.00	0.00
Greenhorn									
6,900.00	27.18	5.38	6,874.39	44.86	206.55	71.01	9.00	9.00	0.00
7,000.00	36.18	5.38	6,959.40	97.09	211.47	123.45	9.00	9.00	0.00
7,100.00	45.18	5.38	7,035.16	161.92	217.58	188.52	9.00	9.00	0.00
7,105.48	45.67	5.38	7,039.00	165.81	217.95	192.42	9.00	9.00	0.00
Graneros - 7"									
7,200.00	54.18	5.38	7,099.80	237.75	224.72	264.64	9.00	9.00	0.00
7,300.00	63.18	5.38	7,151.72	322.71	232.73	349.93	9.00	9.00	0.00
7,394.63	71.70	5.38	7,188.00	409.64	240.92	437.19	9.00	9.00	0.00
J Sand									
7,400.00	72.18	5.38	7,189.66	414.72	241.40	442.29	9.00	9.00	0.00
7,500.00	81.18	5.38	7,212.68	511.50	250.51	539.44	9.00	9.00	0.00
7,587.44	89.05	5.38	7,220.12	598.17	258.68	626.44	9.00	9.00	0.00
Top of Production - Lewton 26J-36HZ_PHL									
7,600.00	89.05	5.38	7,220.33	610.67	259.85	638.99	0.00	0.00	0.00
7,700.00	89.05	5.38	7,221.99	710.22	269.23	738.92	0.00	0.00	0.00
7,800.00	89.05	5.38	7,223.64	809.76	278.61	838.84	0.00	0.00	0.00
7,900.00	89.05	5.38	7,225.30	909.31	287.99	938.77	0.00	0.00	0.00
8,000.00	89.05	5.38	7,226.96	1,008.86	297.36	1,038.69	0.00	0.00	0.00
8,100.00	89.05	5.38	7,228.62	1,108.40	306.74	1,138.62	0.00	0.00	0.00
8,200.00	89.05	5.38	7,230.28	1,207.95	316.12	1,238.54	0.00	0.00	0.00
8,300.00	89.05	5.38	7,231.93	1,307.49	325.50	1,338.47	0.00	0.00	0.00
8,400.00	89.05	5.38	7,233.59	1,407.04	334.87	1,438.39	0.00	0.00	0.00
8,500.00	89.05	5.38	7,235.25	1,506.58	344.25	1,538.32	0.00	0.00	0.00

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well Lewton 26J-36HZX
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB @ 4991.00usft (D Rig)
Project:	ADAMS-NAD83-UTMFT13N	MD Reference:	RKB @ 4991.00usft (D Rig)
Site:	1S-63W-01 LEWTON 27-1 Pad	North Reference:	True
Well:	Lewton 26J-36HZX	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B (Sidetrack)		
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)	
8,600.00	89.05	5.38	7,236.91	1,606.13	353.63	1,638.24	0.00	0.00	0.00	
8,700.00	89.05	5.38	7,238.57	1,705.67	363.01	1,738.17	0.00	0.00	0.00	
8,800.00	89.05	5.38	7,240.22	1,805.22	372.38	1,838.10	0.00	0.00	0.00	
8,900.00	89.05	5.38	7,241.88	1,904.77	381.76	1,938.02	0.00	0.00	0.00	
9,000.00	89.05	5.38	7,243.54	2,004.31	391.14	2,037.95	0.00	0.00	0.00	
9,088.09	89.05	5.38	7,245.00	2,092.00	399.40	2,125.97	0.00	0.00	0.00	
Lewton 26J-36HZ_PITL1										
9,100.00	89.06	5.38	7,245.20	2,103.86	400.52	2,137.87	0.05	0.05	-0.01	
9,200.00	89.10	5.37	7,246.81	2,203.40	409.88	2,237.80	0.05	0.05	-0.01	
9,300.00	89.15	5.36	7,248.34	2,302.95	419.23	2,337.72	0.05	0.05	-0.01	
9,400.00	89.19	5.35	7,249.79	2,402.51	428.57	2,437.65	0.05	0.05	-0.01	
9,500.00	89.24	5.34	7,251.16	2,502.06	437.88	2,537.58	0.05	0.05	-0.01	
9,600.00	89.28	5.33	7,252.46	2,601.62	447.18	2,637.51	0.05	0.05	-0.01	
9,700.00	89.33	5.32	7,253.67	2,701.18	456.46	2,737.44	0.05	0.05	-0.01	
9,800.00	89.37	5.31	7,254.81	2,800.75	465.73	2,837.36	0.05	0.05	-0.01	
9,900.00	89.42	5.30	7,255.87	2,900.31	474.97	2,937.29	0.05	0.05	-0.01	
10,000.00	89.46	5.29	7,256.84	2,999.88	484.20	3,037.22	0.05	0.05	-0.01	
10,100.00	89.51	5.28	7,257.74	3,099.45	493.42	3,137.15	0.05	0.05	-0.01	
10,200.00	89.55	5.27	7,258.57	3,199.02	502.61	3,237.08	0.05	0.05	-0.01	
10,300.00	89.60	5.26	7,259.31	3,298.60	511.79	3,337.01	0.05	0.05	-0.01	
10,400.00	89.64	5.25	7,259.97	3,398.18	520.95	3,436.94	0.05	0.05	-0.01	
10,500.00	89.69	5.24	7,260.56	3,497.76	530.09	3,536.87	0.05	0.05	-0.01	
10,586.61	89.73	5.23	7,261.00	3,584.00	538.00	3,623.42	0.05	0.05	-0.01	
Lewton 26J-36HZ_PITL2										
10,600.00	89.74	5.23	7,261.06	3,597.34	539.22	3,636.80	0.10	0.10	-0.01	
10,700.00	89.84	5.22	7,261.43	3,696.92	548.33	3,736.73	0.10	0.10	-0.01	
10,800.00	89.95	5.22	7,261.61	3,796.50	557.43	3,836.66	0.10	0.10	-0.01	
10,900.00	90.05	5.21	7,261.62	3,896.09	566.52	3,936.58	0.10	0.10	-0.01	
11,000.00	90.15	5.20	7,261.44	3,995.68	575.59	4,036.51	0.10	0.10	-0.01	
11,100.00	90.25	5.19	7,261.09	4,095.27	584.64	4,136.44	0.10	0.10	-0.01	
11,200.00	90.36	5.18	7,260.55	4,194.86	593.68	4,236.36	0.10	0.10	-0.01	
11,300.00	90.46	5.18	7,259.84	4,294.45	602.71	4,336.29	0.10	0.10	-0.01	
11,400.00	90.56	5.17	7,258.95	4,394.03	611.73	4,436.21	0.10	0.10	-0.01	
11,500.00	90.66	5.16	7,257.88	4,493.62	620.73	4,536.13	0.10	0.10	-0.01	
11,600.00	90.77	5.15	7,256.63	4,593.21	629.71	4,636.05	0.10	0.10	-0.01	
11,700.00	90.87	5.14	7,255.20	4,692.80	638.69	4,735.96	0.10	0.10	-0.01	
11,800.00	90.97	5.14	7,253.59	4,792.38	647.65	4,835.87	0.10	0.10	-0.01	
11,900.00	91.08	5.13	7,251.80	4,891.96	656.59	4,935.78	0.10	0.10	-0.01	
12,000.00	91.18	5.12	7,249.84	4,991.55	665.52	5,035.68	0.10	0.10	-0.01	
12,100.00	91.28	5.11	7,247.69	5,091.12	674.44	5,135.58	0.10	0.10	-0.01	
12,200.00	91.38	5.10	7,245.36	5,190.70	683.34	5,235.47	0.10	0.10	-0.01	
12,300.00	91.49	5.10	7,242.86	5,290.27	692.22	5,335.36	0.10	0.10	-0.01	
12,400.00	91.59	5.09	7,240.17	5,389.84	701.10	5,435.25	0.10	0.10	-0.01	
12,476.44	91.67	5.08	7,238.00	5,465.95	707.87	5,511.59	0.10	0.10	-0.01	
Lewton 26J-36HZ_PBHL										

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well Lewton 26J-36HZX
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB @ 4991.00usft (D Rig)
Project:	ADAMS-NAD83-UTMFT13N	MD Reference:	RKB @ 4991.00usft (D Rig)
Site:	1S-63W-01 LEWTON 27-1 Pad	North Reference:	True
Well:	Lewton 26J-36HZX	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan B (Sidetrack)		
Design:	Permit Rev-1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
Lewton 26J-36HZ_PHI - plan hits target center - Point	0.00	0.00	7,220.12	598.17	258.68	14,527,946.76	1,814,457.05	40.001666	-104.378528
Lewton 26J-36HZ_PBI - plan hits target center - Point	0.00	0.00	7,238.00	5,465.95	707.87	14,532,817.54	1,814,872.34	40.015033	-104.376923
Lewton 26J-36HZ_PIT - plan hits target center - Point	0.00	0.00	7,245.00	2,092.00	399.40	14,529,441.53	1,814,587.37	40.005768	-104.378025
Lewton 26J-36HZ_PIT - plan hits target center - Point	0.00	0.00	7,261.00	3,584.00	538.00	14,530,934.46	1,814,715.58	40.009865	-104.377530

Casing Points					
	Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
	1,447.74	1,436.00	9 5/8"	9-5/8	13-1/2
	7,105.48	7,039.00	7"	7	8-3/4
	7,587.44	7,220.12	Top of Production	4-1/2	6-1/8

Formations						
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
	1,397.02	1,386.00	Fox Hills			
	4,133.41	4,119.00	Sussex			
	6,416.41	6,402.00	Niobrara Top			
	6,765.33	6,749.00	Codell			
	6,841.29	6,821.00	Greenhorn			
	7,105.48	7,039.00	Graneros			
	7,394.63	7,188.00	J Sand			