

# **US ROCKIES WATTENBERG PLANNING**

**WELD-NAD83-UTMFT13N  
2N-65W-25 Zelda 29-25HZ Pad  
ZELDA 25-9HZ**

**Plan A**

**Plan: Permit Rev-1**

SHL Latitude/Longitude: 40.115728/-104.617171  
Survey Program: MWD+IFR+MSA

## **Standard Planning Report**

**21 August, 2017**

Project: WELD-NAD83-UTMFT13N  
 Site: 2N-65W-25 Zelda 29-25HZ Pad  
 Well: ZELDA 25-9HZ  
 Wellbore: Plan A  
 Design: Permit Rev-1

# US ROCKIES WATTENBERG PLANNING

### CASING DETAILS

TVD	MD	Size
1500.00	1523.23	9-5/8
6971.00	7510.92	5-1/2

WELL DETAILS: ZELDA 25-9HZ

GL = 4903'

RKB = 17' @ 4920.00usft (Drilling Rig)

### SECTION DETAILS

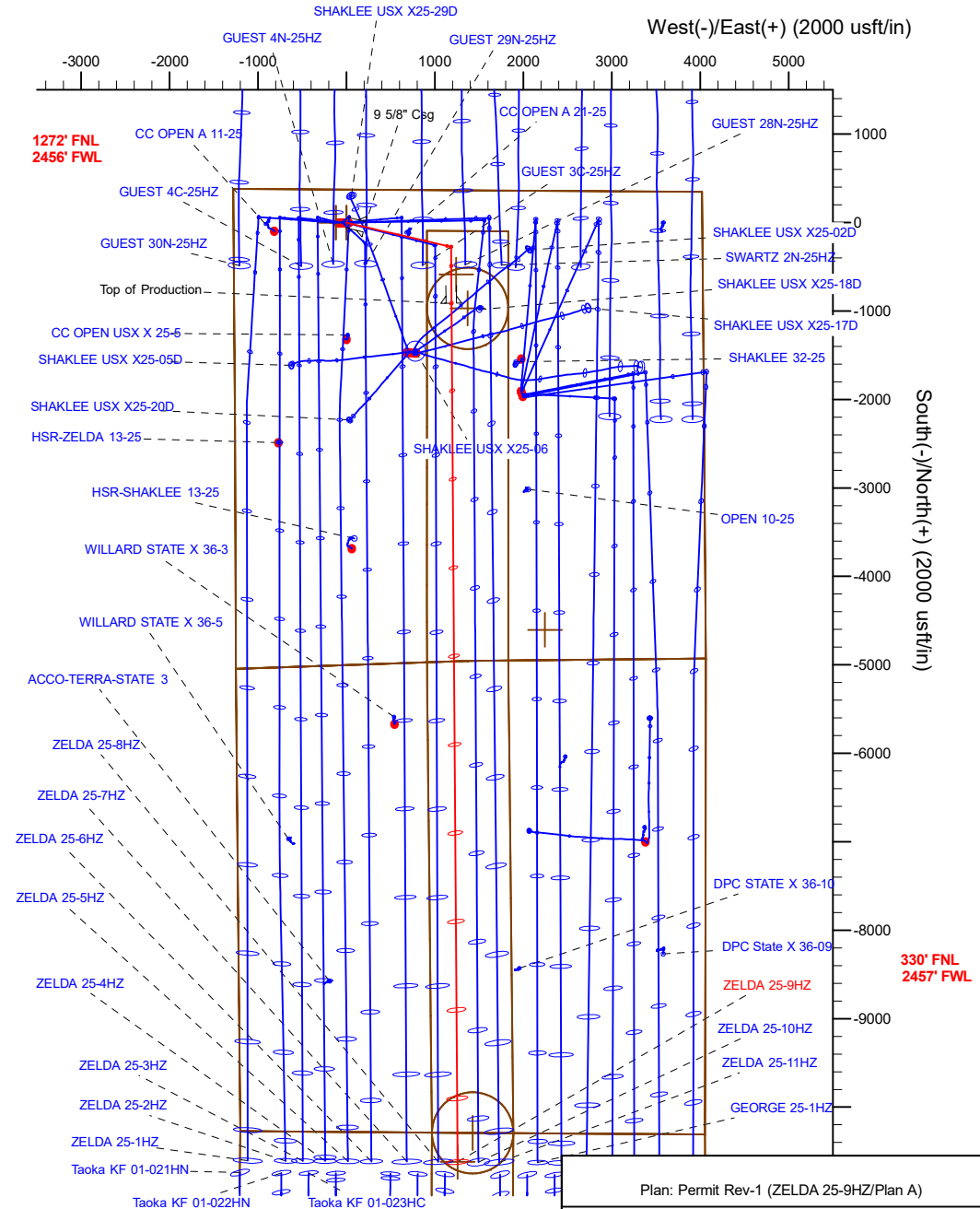
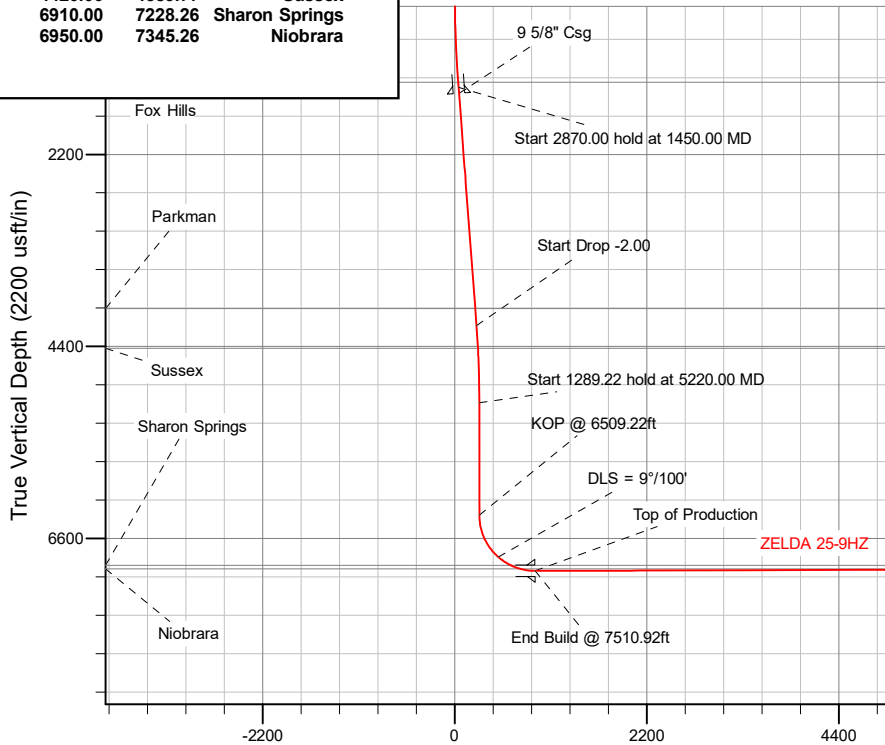
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	
3	1450.00	18.00	103.00	1430.36	-42.05	182.16	1.50	103.00	43.36	
4	4320.00	18.00	103.00	4159.89	-241.56	1046.31	0.00	0.00	249.04	
5	5220.00	0.00	0.00	5045.16	-273.10	1182.93	2.00	180.00	281.56	
6	6509.22	0.00	0.00	6334.38	-273.10	1182.93	0.00	0.00	281.56	
7	7510.92	90.15	179.59	6971.00	-911.41	1187.50	9.00	179.59	919.88	
8	17218.85	90.15	179.59	6945.00	-10619.04	1257.07	0.00	0.00	10627.77	ZELDA 25-9HZ_BHL

### WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
ZELDA 25-9HZ_SHL	0.00	0.00	0.00	40.115728	-104.617171
ZELDA 25-9HZ_BHL	6945.00	-10619.04	1257.07	40.086567	-104.612677

### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1372.00	1388.80	Fox Hills
3967.00	4117.18	Parkman
4420.00	4589.77	Sussex
6910.00	7228.26	Sharon Springs
6950.00	7345.26	Niobrara



Plan: Permit Rev-1 (ZELDA 25-9HZ/Plan A)

Created By: \_\_\_\_\_ Date: 8/21/2017  
 Reviewed: \_\_\_\_\_ Date: \_\_\_\_\_

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well ZELDA 25-9HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 4920.00usft (Drilling Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 4920.00usft (Drilling Rig)
<b>Site:</b>	2N-65W-25 Zelda 29-25HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	ZELDA 25-9HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-1		

<b>Project</b>	WELD-NAD83-UTMFT13N		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Zone 13N (108 W to 102 W)		

<b>Site</b>	2N-65W-25 Zelda 29-25HZ Pad				
<b>Site Position:</b>		<b>Northing:</b>	14,569,106.11 usft	<b>Latitude:</b>	40.115731
<b>From:</b>	Lat/Long	<b>Easting:</b>	1,747,327.27 usft	<b>Longitude:</b>	-104.617600
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	0.25 °

<b>Well</b>	ZELDA 25-9HZ					
<b>Well Position</b>	<b>+N-S</b>	-1.09 usft	<b>Northing:</b>	14,569,105.53 usft	<b>Latitude:</b>	40.115728
	<b>+E-W</b>	119.94 usft	<b>Easting:</b>	1,747,447.22 usft	<b>Longitude:</b>	-104.617171
<b>Position Uncertainty</b>		3.28 usft	<b>Wellhead Elevation:</b>		<b>Ground Level:</b>	4,903.00 usft

<b>Wellbore</b>	Plan A				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	8/16/2017	7.93	66.63	52,347.25452938

<b>Design</b>	Permit Rev-1				
<b>Audit Notes:</b>					
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00	
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N-S (usft)</b>	<b>+E-W (usft)</b>	<b>Direction (°)</b>	
	0.00	0.00	0.00	179.59	

<b>Plan Survey Tool Program</b>		<b>Date</b>	8/21/2017		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>	
1	0.00	1,500.00	Permit Rev-1 (Plan A)	APC_ISCWSA REV 2 MWD+II Fixed:v2:crustal field declinatio	
2	1,500.00	17,218.85	Permit Rev-1 (Plan A)	APC_ISCWSA REV 2 MWD+II Fixed:v2:Rockies, crustal dec +	

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well ZELDA 25-9HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 4920.00usft (Drilling Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 4920.00usft (Drilling Rig)
<b>Site:</b>	2N-65W-25 Zelda 29-25HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	ZELDA 25-9HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	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	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,450.00	18.00	103.00	1,430.36	-42.05	182.16	1.50	1.50	0.00	103.00	
4,320.00	18.00	103.00	4,159.89	-241.56	1,046.31	0.00	0.00	0.00	0.00	
5,220.00	0.00	0.00	5,045.16	-273.10	1,182.93	2.00	-2.00	0.00	180.00	
6,509.22	0.00	0.00	6,334.38	-273.10	1,182.93	0.00	0.00	0.00	0.00	
7,510.92	90.15	179.59	6,971.00	-911.41	1,187.50	9.00	9.00	17.93	179.59	
17,218.85	90.15	179.59	6,945.00	-10,619.04	1,257.07	0.00	0.00	0.00	0.00	ZELDA 25-9HZ_BHL

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well ZELDA 25-9HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 4920.00usft (Drilling Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 4920.00usft (Drilling Rig)
<b>Site:</b>	2N-65W-25 Zelda 29-25HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	ZELDA 25-9HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	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	0.00
100.00	0.00	0.00	100.00	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	0.00
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 1.50</b>										
300.00	0.75	103.00	300.00	-0.07	0.32	0.08	1.50	1.50	0.00	0.00
400.00	2.25	103.00	399.96	-0.66	2.87	0.68	1.50	1.50	0.00	0.00
500.00	3.75	103.00	499.82	-1.84	7.97	1.90	1.50	1.50	0.00	0.00
600.00	5.25	103.00	599.51	-3.60	15.61	3.72	1.50	1.50	0.00	0.00
700.00	6.75	103.00	698.96	-5.96	25.80	6.14	1.50	1.50	0.00	0.00
800.00	8.25	103.00	798.10	-8.89	38.52	9.17	1.50	1.50	0.00	0.00
900.00	9.75	103.00	896.87	-12.41	53.76	12.80	1.50	1.50	0.00	0.00
1,000.00	11.25	103.00	995.19	-16.51	71.51	17.02	1.50	1.50	0.00	0.00
1,100.00	12.75	103.00	1,093.00	-21.19	91.77	21.84	1.50	1.50	0.00	0.00
1,200.00	14.25	103.00	1,190.24	-26.44	114.52	27.26	1.50	1.50	0.00	0.00
1,300.00	15.75	103.00	1,286.83	-32.26	139.73	33.26	1.50	1.50	0.00	0.00
1,388.80	17.08	103.00	1,372.00	-37.91	164.19	39.08	1.50	1.50	0.00	0.00
<b>Fox Hills</b>										
1,400.00	17.25	103.00	1,382.71	-38.65	167.41	39.85	1.50	1.50	0.00	0.00
1,450.00	18.00	103.00	1,430.36	-42.05	182.16	43.36	1.50	1.50	0.00	0.00
<b>Start 2870.00 hold at 1450.00 MD</b>										
1,500.00	18.00	103.00	1,477.91	-45.53	197.21	46.94	0.00	0.00	0.00	0.00
1,523.23	18.00	103.00	1,500.00	-47.14	204.21	48.60	0.00	0.00	0.00	0.00
<b>9 5/8" Csg</b>										
1,600.00	18.00	103.00	1,573.02	-52.48	227.32	54.11	0.00	0.00	0.00	0.00
1,700.00	18.00	103.00	1,668.12	-59.43	257.43	61.27	0.00	0.00	0.00	0.00
1,800.00	18.00	103.00	1,763.23	-66.38	287.54	68.44	0.00	0.00	0.00	0.00
1,900.00	18.00	103.00	1,858.33	-73.34	317.65	75.61	0.00	0.00	0.00	0.00
2,000.00	18.00	103.00	1,953.44	-80.29	347.76	82.77	0.00	0.00	0.00	0.00
2,100.00	18.00	103.00	2,048.54	-87.24	377.87	89.94	0.00	0.00	0.00	0.00
2,200.00	18.00	103.00	2,143.65	-94.19	407.98	97.11	0.00	0.00	0.00	0.00
2,300.00	18.00	103.00	2,238.76	-101.14	438.09	104.27	0.00	0.00	0.00	0.00
2,400.00	18.00	103.00	2,333.86	-108.09	468.20	111.44	0.00	0.00	0.00	0.00
2,500.00	18.00	103.00	2,428.97	-115.04	498.31	118.61	0.00	0.00	0.00	0.00
2,600.00	18.00	103.00	2,524.07	-122.00	528.42	125.77	0.00	0.00	0.00	0.00
2,700.00	18.00	103.00	2,619.18	-128.95	558.53	132.94	0.00	0.00	0.00	0.00
2,800.00	18.00	103.00	2,714.28	-135.90	588.64	140.11	0.00	0.00	0.00	0.00
2,900.00	18.00	103.00	2,809.39	-142.85	618.75	147.27	0.00	0.00	0.00	0.00
3,000.00	18.00	103.00	2,904.50	-149.80	648.86	154.44	0.00	0.00	0.00	0.00
3,100.00	18.00	103.00	2,999.60	-156.75	678.97	161.61	0.00	0.00	0.00	0.00
3,200.00	18.00	103.00	3,094.71	-163.70	709.08	168.77	0.00	0.00	0.00	0.00
3,300.00	18.00	103.00	3,189.81	-170.66	739.19	175.94	0.00	0.00	0.00	0.00
3,400.00	18.00	103.00	3,284.92	-177.61	769.30	183.11	0.00	0.00	0.00	0.00
3,500.00	18.00	103.00	3,380.02	-184.56	799.41	190.27	0.00	0.00	0.00	0.00
3,600.00	18.00	103.00	3,475.13	-191.51	829.52	197.44	0.00	0.00	0.00	0.00
3,700.00	18.00	103.00	3,570.24	-198.46	859.63	204.61	0.00	0.00	0.00	0.00
3,800.00	18.00	103.00	3,665.34	-205.41	889.74	211.77	0.00	0.00	0.00	0.00
3,900.00	18.00	103.00	3,760.45	-212.36	919.85	218.94	0.00	0.00	0.00	0.00
4,000.00	18.00	103.00	3,855.55	-219.31	949.96	226.11	0.00	0.00	0.00	0.00
4,100.00	18.00	103.00	3,950.66	-226.27	980.07	233.27	0.00	0.00	0.00	0.00
4,117.18	18.00	103.00	3,967.00	-227.46	985.24	234.50	0.00	0.00	0.00	0.00
<b>Parkman</b>										
4,200.00	18.00	103.00	4,045.76	-233.22	1,010.18	240.44	0.00	0.00	0.00	0.00
4,300.00	18.00	103.00	4,140.87	-240.17	1,040.29	247.61	0.00	0.00	0.00	0.00

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well ZELDA 25-9HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 4920.00usft (Drilling Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 4920.00usft (Drilling Rig)
<b>Site:</b>	2N-65W-25 Zelda 29-25HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	ZELDA 25-9HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	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)
4,320.00	18.00	103.00	4,159.89	-241.56	1,046.31	249.04	0.00	0.00	0.00
<b>Start Drop -2.00</b>									
4,400.00	16.40	103.00	4,236.31	-246.88	1,069.36	254.53	2.00	-2.00	0.00
4,500.00	14.40	103.00	4,332.71	-252.85	1,095.23	260.68	2.00	-2.00	0.00
4,589.77	12.60	103.00	4,420.00	-257.57	1,115.65	265.55	2.00	-2.00	0.00
<b>Sussex</b>									
4,600.00	12.40	103.00	4,429.99	-258.07	1,117.81	266.06	2.00	-2.00	0.00
4,700.00	10.40	103.00	4,528.01	-262.51	1,137.07	270.64	2.00	-2.00	0.00
4,800.00	8.40	103.00	4,626.66	-266.19	1,152.98	274.43	2.00	-2.00	0.00
4,900.00	6.40	103.00	4,725.82	-269.08	1,165.53	277.42	2.00	-2.00	0.00
5,000.00	4.40	103.00	4,825.37	-271.20	1,174.70	279.60	2.00	-2.00	0.00
5,100.00	2.40	103.00	4,925.19	-272.53	1,180.48	280.97	2.00	-2.00	0.00
5,200.00	0.40	103.00	5,025.16	-273.08	1,182.86	281.54	2.00	-2.00	0.00
5,220.00	0.00	0.00	5,045.16	-273.10	1,182.93	281.56	2.00	-2.00	0.00
<b>Start 1289.22 hold at 5220.00 MD</b>									
5,300.00	0.00	0.00	5,125.16	-273.10	1,182.93	281.56	0.00	0.00	0.00
5,400.00	0.00	0.00	5,225.16	-273.10	1,182.93	281.56	0.00	0.00	0.00
5,500.00	0.00	0.00	5,325.16	-273.10	1,182.93	281.56	0.00	0.00	0.00
5,600.00	0.00	0.00	5,425.16	-273.10	1,182.93	281.56	0.00	0.00	0.00
5,700.00	0.00	0.00	5,525.16	-273.10	1,182.93	281.56	0.00	0.00	0.00
5,800.00	0.00	0.00	5,625.16	-273.10	1,182.93	281.56	0.00	0.00	0.00
5,900.00	0.00	0.00	5,725.16	-273.10	1,182.93	281.56	0.00	0.00	0.00
6,000.00	0.00	0.00	5,825.16	-273.10	1,182.93	281.56	0.00	0.00	0.00
6,100.00	0.00	0.00	5,925.16	-273.10	1,182.93	281.56	0.00	0.00	0.00
6,200.00	0.00	0.00	6,025.16	-273.10	1,182.93	281.56	0.00	0.00	0.00
6,300.00	0.00	0.00	6,125.16	-273.10	1,182.93	281.56	0.00	0.00	0.00
6,400.00	0.00	0.00	6,225.16	-273.10	1,182.93	281.56	0.00	0.00	0.00
6,500.00	0.00	0.00	6,325.16	-273.10	1,182.93	281.56	0.00	0.00	0.00
6,509.22	0.00	0.00	6,334.38	-273.10	1,182.93	281.56	0.00	0.00	0.00
<b>KOP @ 6509.22ft</b>									
6,600.00	8.17	179.59	6,424.85	-279.56	1,182.97	288.02	9.00	9.00	0.00
6,700.00	17.17	179.59	6,522.32	-301.47	1,183.13	309.93	9.00	9.00	0.00
6,800.00	26.17	179.59	6,615.15	-338.36	1,183.39	346.82	9.00	9.00	0.00
6,900.00	35.17	179.59	6,701.08	-389.32	1,183.76	397.78	9.00	9.00	0.00
7,000.00	44.17	179.59	6,777.97	-453.08	1,184.22	461.55	9.00	9.00	0.00
7,050.00	48.67	179.59	6,812.43	-489.30	1,184.48	497.76	9.00	9.00	0.00
<b>DLS = 9°/100'</b>									
7,100.00	53.17	179.59	6,843.94	-528.10	1,184.75	536.56	9.00	9.00	0.00
7,200.00	62.17	179.59	6,897.37	-612.51	1,185.36	620.97	9.00	9.00	0.00
7,228.26	64.71	179.59	6,910.00	-637.78	1,185.54	646.25	9.00	9.00	0.00
<b>Sharon Springs</b>									
7,300.00	71.17	179.59	6,936.93	-704.23	1,186.02	712.70	9.00	9.00	0.00
7,345.26	75.24	179.59	6,950.00	-747.55	1,186.33	756.02	9.00	9.00	0.00
<b>Niobrara</b>									
7,400.00	80.17	179.59	6,961.65	-801.02	1,186.71	809.49	9.00	9.00	0.00
7,500.00	89.17	179.59	6,970.93	-900.48	1,187.42	908.96	9.00	9.00	0.00
7,510.92	90.15	179.59	6,971.00	-911.40	1,187.50	919.88	9.00	9.00	0.00
<b>End Build @ 7510.92ft - Top of Production</b>									
7,600.00	90.15	179.59	6,970.76	-1,000.48	1,188.14	1,008.96	0.00	0.00	0.00
7,700.00	90.15	179.59	6,970.49	-1,100.48	1,188.86	1,108.96	0.00	0.00	0.00
7,800.00	90.15	179.59	6,970.22	-1,200.47	1,189.57	1,208.96	0.00	0.00	0.00
7,900.00	90.15	179.59	6,969.95	-1,300.47	1,190.29	1,308.96	0.00	0.00	0.00
8,000.00	90.15	179.59	6,969.69	-1,400.47	1,191.01	1,408.96	0.00	0.00	0.00

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well ZELDA 25-9HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 4920.00usft (Drilling Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 4920.00usft (Drilling Rig)
<b>Site:</b>	2N-65W-25 Zelda 29-25HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	ZELDA 25-9HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	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)
8,100.00	90.15	179.59	6,969.42	-1,500.47	1,191.72	1,508.96	0.00	0.00	0.00
8,200.00	90.15	179.59	6,969.15	-1,600.46	1,192.44	1,608.96	0.00	0.00	0.00
8,300.00	90.15	179.59	6,968.88	-1,700.46	1,193.16	1,708.95	0.00	0.00	0.00
8,400.00	90.15	179.59	6,968.62	-1,800.46	1,193.87	1,808.95	0.00	0.00	0.00
8,500.00	90.15	179.59	6,968.35	-1,900.45	1,194.59	1,908.95	0.00	0.00	0.00
8,600.00	90.15	179.59	6,968.08	-2,000.45	1,195.31	2,008.95	0.00	0.00	0.00
8,700.00	90.15	179.59	6,967.81	-2,100.45	1,196.02	2,108.95	0.00	0.00	0.00
8,800.00	90.15	179.59	6,967.54	-2,200.45	1,196.74	2,208.95	0.00	0.00	0.00
8,900.00	90.15	179.59	6,967.28	-2,300.44	1,197.46	2,308.95	0.00	0.00	0.00
9,000.00	90.15	179.59	6,967.01	-2,400.44	1,198.17	2,408.95	0.00	0.00	0.00
9,100.00	90.15	179.59	6,966.74	-2,500.44	1,198.89	2,508.95	0.00	0.00	0.00
9,200.00	90.15	179.59	6,966.47	-2,600.43	1,199.61	2,608.95	0.00	0.00	0.00
9,300.00	90.15	179.59	6,966.21	-2,700.43	1,200.32	2,708.95	0.00	0.00	0.00
9,400.00	90.15	179.59	6,965.94	-2,800.43	1,201.04	2,808.95	0.00	0.00	0.00
9,500.00	90.15	179.59	6,965.67	-2,900.43	1,201.76	2,908.95	0.00	0.00	0.00
9,600.00	90.15	179.59	6,965.40	-3,000.42	1,202.47	3,008.95	0.00	0.00	0.00
9,700.00	90.15	179.59	6,965.13	-3,100.42	1,203.19	3,108.95	0.00	0.00	0.00
9,800.00	90.15	179.59	6,964.87	-3,200.42	1,203.91	3,208.95	0.00	0.00	0.00
9,900.00	90.15	179.59	6,964.60	-3,300.41	1,204.62	3,308.95	0.00	0.00	0.00
10,000.00	90.15	179.59	6,964.33	-3,400.41	1,205.34	3,408.95	0.00	0.00	0.00
10,100.00	90.15	179.59	6,964.06	-3,500.41	1,206.06	3,508.95	0.00	0.00	0.00
10,200.00	90.15	179.59	6,963.80	-3,600.40	1,206.77	3,608.95	0.00	0.00	0.00
10,300.00	90.15	179.59	6,963.53	-3,700.40	1,207.49	3,708.95	0.00	0.00	0.00
10,400.00	90.15	179.59	6,963.26	-3,800.40	1,208.21	3,808.95	0.00	0.00	0.00
10,500.00	90.15	179.59	6,962.99	-3,900.40	1,208.92	3,908.95	0.00	0.00	0.00
10,600.00	90.15	179.59	6,962.72	-4,000.39	1,209.64	4,008.95	0.00	0.00	0.00
10,700.00	90.15	179.59	6,962.46	-4,100.39	1,210.36	4,108.95	0.00	0.00	0.00
10,800.00	90.15	179.59	6,962.19	-4,200.39	1,211.07	4,208.95	0.00	0.00	0.00
10,900.00	90.15	179.59	6,961.92	-4,300.38	1,211.79	4,308.95	0.00	0.00	0.00
11,000.00	90.15	179.59	6,961.65	-4,400.38	1,212.51	4,408.95	0.00	0.00	0.00
11,100.00	90.15	179.59	6,961.39	-4,500.38	1,213.22	4,508.94	0.00	0.00	0.00
11,200.00	90.15	179.59	6,961.12	-4,600.38	1,213.94	4,608.94	0.00	0.00	0.00
11,300.00	90.15	179.59	6,960.85	-4,700.37	1,214.66	4,708.94	0.00	0.00	0.00
11,400.00	90.15	179.59	6,960.58	-4,800.37	1,215.37	4,808.94	0.00	0.00	0.00
11,500.00	90.15	179.59	6,960.31	-4,900.37	1,216.09	4,908.94	0.00	0.00	0.00
11,600.00	90.15	179.59	6,960.05	-5,000.36	1,216.81	5,008.94	0.00	0.00	0.00
11,700.00	90.15	179.59	6,959.78	-5,100.36	1,217.52	5,108.94	0.00	0.00	0.00
11,800.00	90.15	179.59	6,959.51	-5,200.36	1,218.24	5,208.94	0.00	0.00	0.00
11,900.00	90.15	179.59	6,959.24	-5,300.36	1,218.96	5,308.94	0.00	0.00	0.00
12,000.00	90.15	179.59	6,958.98	-5,400.35	1,219.67	5,408.94	0.00	0.00	0.00
12,100.00	90.15	179.59	6,958.71	-5,500.35	1,220.39	5,508.94	0.00	0.00	0.00
12,200.00	90.15	179.59	6,958.44	-5,600.35	1,221.11	5,608.94	0.00	0.00	0.00
12,300.00	90.15	179.59	6,958.17	-5,700.34	1,221.82	5,708.94	0.00	0.00	0.00
12,400.00	90.15	179.59	6,957.90	-5,800.34	1,222.54	5,808.94	0.00	0.00	0.00
12,500.00	90.15	179.59	6,957.64	-5,900.34	1,223.26	5,908.94	0.00	0.00	0.00
12,600.00	90.15	179.59	6,957.37	-6,000.33	1,223.97	6,008.94	0.00	0.00	0.00
12,700.00	90.15	179.59	6,957.10	-6,100.33	1,224.69	6,108.94	0.00	0.00	0.00
12,800.00	90.15	179.59	6,956.83	-6,200.33	1,225.41	6,208.94	0.00	0.00	0.00
12,900.00	90.15	179.59	6,956.57	-6,300.33	1,226.12	6,308.94	0.00	0.00	0.00
13,000.00	90.15	179.59	6,956.30	-6,400.32	1,226.84	6,408.94	0.00	0.00	0.00
13,100.00	90.15	179.59	6,956.03	-6,500.32	1,227.56	6,508.94	0.00	0.00	0.00
13,200.00	90.15	179.59	6,955.76	-6,600.32	1,228.27	6,608.94	0.00	0.00	0.00
13,300.00	90.15	179.59	6,955.49	-6,700.31	1,228.99	6,708.94	0.00	0.00	0.00
13,400.00	90.15	179.59	6,955.23	-6,800.31	1,229.71	6,808.94	0.00	0.00	0.00

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well ZELDA 25-9HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 4920.00usft (Drilling Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 4920.00usft (Drilling Rig)
<b>Site:</b>	2N-65W-25 Zelda 29-25HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	ZELDA 25-9HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	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)
13,500.00	90.15	179.59	6,954.96	-6,900.31	1,230.42	6,908.94	0.00	0.00	0.00
13,600.00	90.15	179.59	6,954.69	-7,000.31	1,231.14	7,008.94	0.00	0.00	0.00
13,700.00	90.15	179.59	6,954.42	-7,100.30	1,231.86	7,108.94	0.00	0.00	0.00
13,800.00	90.15	179.59	6,954.16	-7,200.30	1,232.57	7,208.94	0.00	0.00	0.00
13,900.00	90.15	179.59	6,953.89	-7,300.30	1,233.29	7,308.93	0.00	0.00	0.00
14,000.00	90.15	179.59	6,953.62	-7,400.29	1,234.01	7,408.93	0.00	0.00	0.00
14,100.00	90.15	179.59	6,953.35	-7,500.29	1,234.72	7,508.93	0.00	0.00	0.00
14,200.00	90.15	179.59	6,953.08	-7,600.29	1,235.44	7,608.93	0.00	0.00	0.00
14,300.00	90.15	179.59	6,952.82	-7,700.28	1,236.16	7,708.93	0.00	0.00	0.00
14,400.00	90.15	179.59	6,952.55	-7,800.28	1,236.87	7,808.93	0.00	0.00	0.00
14,500.00	90.15	179.59	6,952.28	-7,900.28	1,237.59	7,908.93	0.00	0.00	0.00
14,600.00	90.15	179.59	6,952.01	-8,000.28	1,238.31	8,008.93	0.00	0.00	0.00
14,700.00	90.15	179.59	6,951.75	-8,100.27	1,239.02	8,108.93	0.00	0.00	0.00
14,800.00	90.15	179.59	6,951.48	-8,200.27	1,239.74	8,208.93	0.00	0.00	0.00
14,900.00	90.15	179.59	6,951.21	-8,300.27	1,240.46	8,308.93	0.00	0.00	0.00
15,000.00	90.15	179.59	6,950.94	-8,400.26	1,241.17	8,408.93	0.00	0.00	0.00
15,100.00	90.15	179.59	6,950.67	-8,500.26	1,241.89	8,508.93	0.00	0.00	0.00
15,200.00	90.15	179.59	6,950.41	-8,600.26	1,242.61	8,608.93	0.00	0.00	0.00
15,300.00	90.15	179.59	6,950.14	-8,700.26	1,243.32	8,708.93	0.00	0.00	0.00
15,400.00	90.15	179.59	6,949.87	-8,800.25	1,244.04	8,808.93	0.00	0.00	0.00
15,500.00	90.15	179.59	6,949.60	-8,900.25	1,244.76	8,908.93	0.00	0.00	0.00
15,600.00	90.15	179.59	6,949.34	-9,000.25	1,245.47	9,008.93	0.00	0.00	0.00
15,700.00	90.15	179.59	6,949.07	-9,100.24	1,246.19	9,108.93	0.00	0.00	0.00
15,800.00	90.15	179.59	6,948.80	-9,200.24	1,246.91	9,208.93	0.00	0.00	0.00
15,900.00	90.15	179.59	6,948.53	-9,300.24	1,247.62	9,308.93	0.00	0.00	0.00
16,000.00	90.15	179.59	6,948.26	-9,400.24	1,248.34	9,408.93	0.00	0.00	0.00
16,100.00	90.15	179.59	6,948.00	-9,500.23	1,249.06	9,508.93	0.00	0.00	0.00
16,200.00	90.15	179.59	6,947.73	-9,600.23	1,249.77	9,608.93	0.00	0.00	0.00
16,300.00	90.15	179.59	6,947.46	-9,700.23	1,250.49	9,708.93	0.00	0.00	0.00
16,400.00	90.15	179.59	6,947.19	-9,800.22	1,251.21	9,808.93	0.00	0.00	0.00
16,500.00	90.15	179.59	6,946.93	-9,900.22	1,251.92	9,908.93	0.00	0.00	0.00
16,600.00	90.15	179.59	6,946.66	-10,000.22	1,252.64	10,008.93	0.00	0.00	0.00
16,700.00	90.15	179.59	6,946.39	-10,100.21	1,253.36	10,108.92	0.00	0.00	0.00
16,800.00	90.15	179.59	6,946.12	-10,200.21	1,254.07	10,208.92	0.00	0.00	0.00
16,900.00	90.15	179.59	6,945.85	-10,300.21	1,254.79	10,308.92	0.00	0.00	0.00
17,000.00	90.15	179.59	6,945.59	-10,400.21	1,255.51	10,408.92	0.00	0.00	0.00
17,100.00	90.15	179.59	6,945.32	-10,500.20	1,256.22	10,508.92	0.00	0.00	0.00
17,200.00	90.15	179.59	6,945.05	-10,600.20	1,256.94	10,608.92	0.00	0.00	0.00
17,218.85	90.15	179.59	6,945.00	-10,619.04	1,257.07	10,627.77	0.00	0.00	0.00
<b>TD Well @ 17218.85ft</b>									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,523.23	1,500.00	9 5/8" Csg	9-5/8	13-1/2	
7,510.92	6,971.00	Top of Production	5-1/2	7-7/8	

## Corporate Planning Report

<b>Database:</b>	PLANNING	<b>Local Co-ordinate Reference:</b>	Well ZELDA 25-9HZ
<b>Company:</b>	US ROCKIES WATTENBERG PLANNING	<b>TVD Reference:</b>	RKB = 17' @ 4920.00usft (Drilling Rig)
<b>Project:</b>	WELD-NAD83-UTMFT13N	<b>MD Reference:</b>	RKB = 17' @ 4920.00usft (Drilling Rig)
<b>Site:</b>	2N-65W-25 Zelda 29-25HZ Pad	<b>North Reference:</b>	True
<b>Well:</b>	ZELDA 25-9HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Plan A		
<b>Design:</b>	Permit Rev-1		

Formations						
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
	1,388.80	1,372.00	Fox Hills			
	4,117.18	3,967.00	Parkman			
	4,589.77	4,420.00	Sussex			
	7,228.26	6,910.00	Sharon Springs			
	7,345.26	6,950.00	Niobrara			

Plan Annotations					
	Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
			+N/-S (usft)	+E/-W (usft)	
	250.00	250.00	0.00	0.00	Start Build 1.50
	1,450.00	1,430.36	-42.05	182.16	Start 2870.00 hold at 1450.00 MD
	4,320.00	4,159.89	-241.56	1,046.31	Start Drop -2.00
	5,220.00	5,045.16	-273.10	1,182.93	Start 1289.22 hold at 5220.00 MD
	6,509.22	6,334.38	-273.10	1,182.93	KOP @ 6509.22ft
	7,050.00	6,812.43	-489.30	1,184.48	DLS = 9°/100'
	7,510.92	6,971.00	-911.40	1,187.50	End Build @ 7510.92ft
	17,218.85	6,945.00	-10,619.04	1,257.07	TD Well @ 17218.85ft