

US ROCKIES WATTENBERG PLANNING

WELD-NAD83-UTMFT13N

2N-65W-25 George 7-25HZ Pad

GEORGE 25-6HZ

Plan A

Plan: Permit Rev-1

SHL Latitude/Longitude: 40.110338/-104.610034

Survey Program: MWD+IFR+MSA

Standard Planning Report

18 August, 2017

FORMATION TOP DETAILS

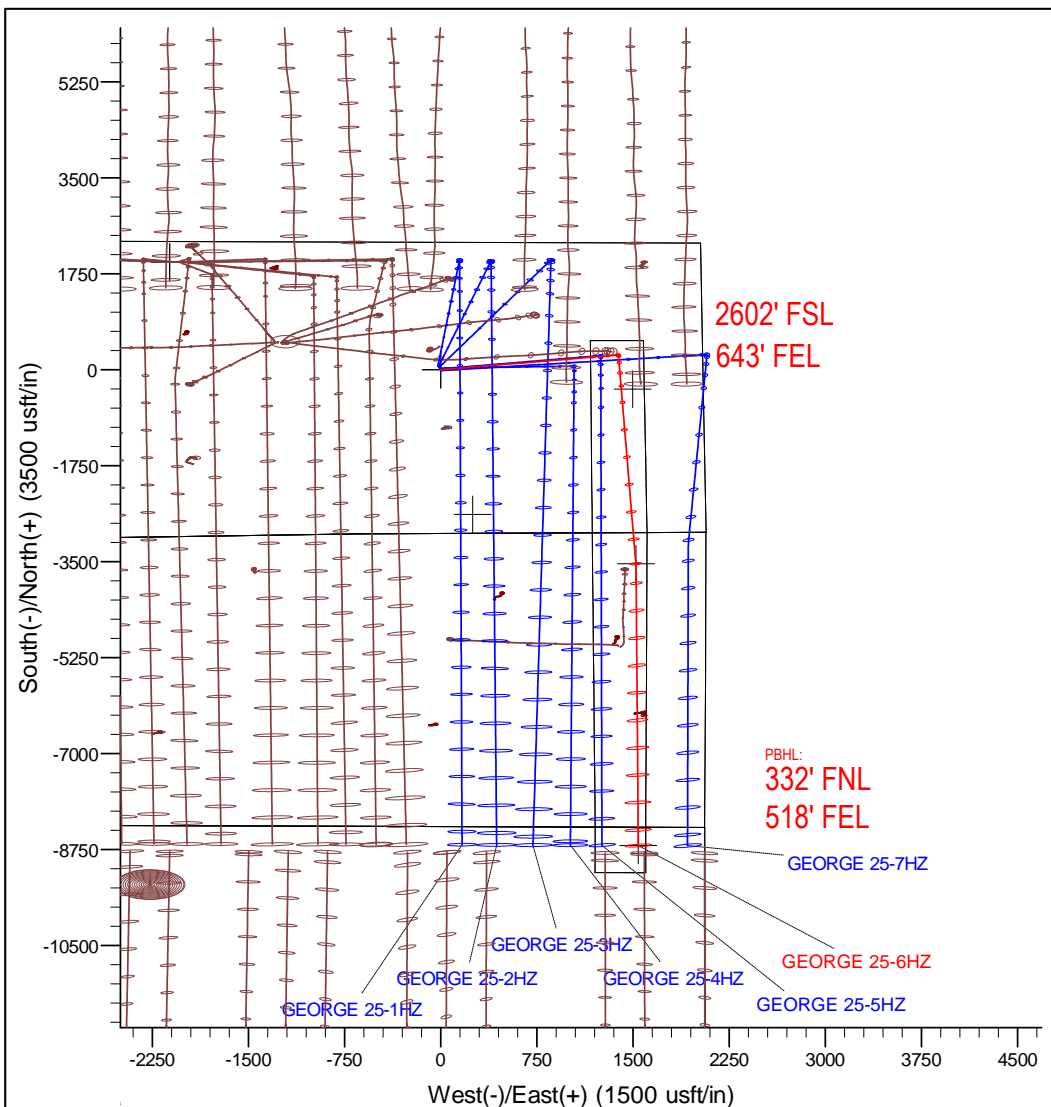
TVDPath	MDPath	Formation
1369.00	1385.66	Fox Hills
3964.00	4161.98	Parkman
4417.00	4642.01	Sussex
6847.00	7094.40	Sharon Springs
6887.00	7141.12	Niobrara
6951.00	7221.11	Nio B
7010.00	7303.32	Nio C
7137.00	7551.13	Fort Hayes
7163.00	7648.40	Codell

CASING DETAILS

TVD	MD	Name	Size
1500.00	1523.46	9 5/8" Csg	9-5/8
7175.00	7774.28	Top of Production	5-1/2

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
GEORGE 25-6HZ_target	64.65	-3538.69	1521.68	14563619.46	1750988.36	40.100620	-104.604592
GEORGE 25-6HZ_BHL	7148.00	-8675.28	1540.79	14558483.00	1751030.00	40.086515	-104.604525



Azimuths to True North
Magnetic North: 7.93°

Magnetic Field
Strength: 52345.2snT
Dip Angle: 66.63°
Date: 8/16/2017
Model: IGRF2010

SITE: 2N-65W-25 George 7-25HZ Pad

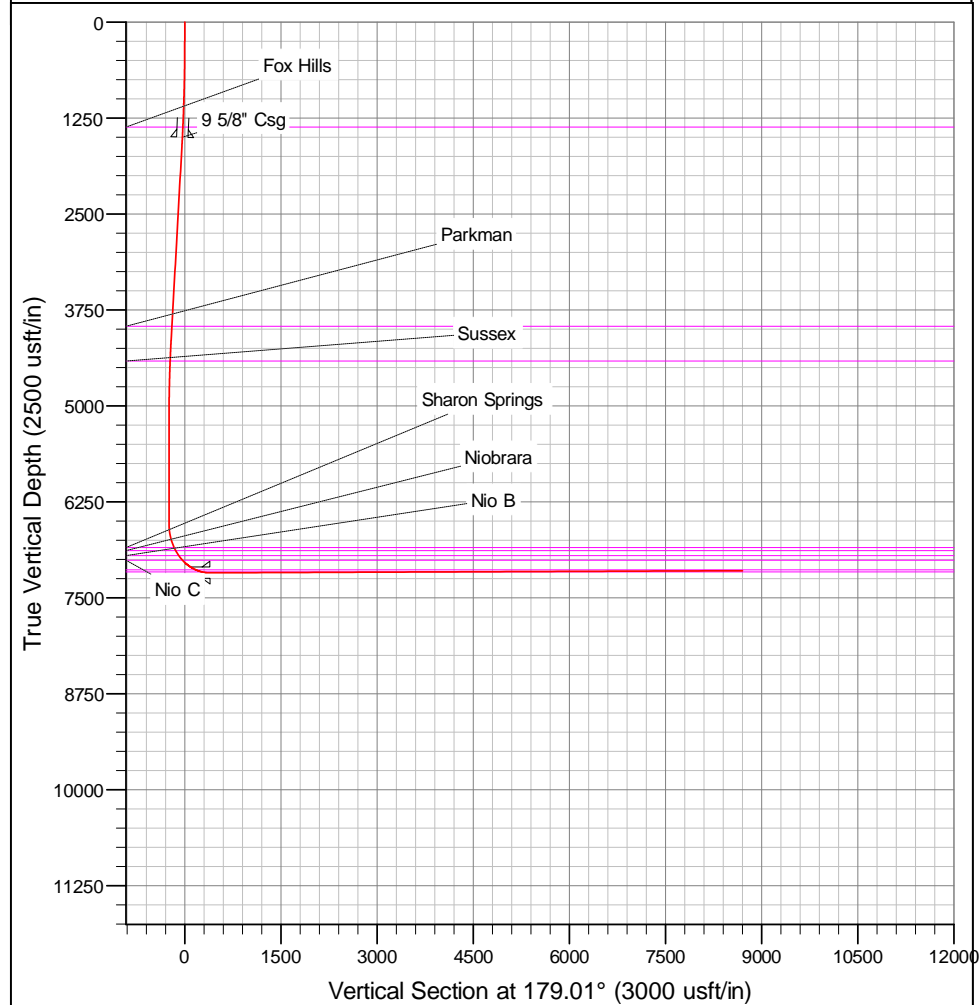
Well: GEORGE 25-6HZ
Wellbore: Plan A
Design: Permit Rev-1

WELL DETAILS: GEORGE 25-6HZ

+N/-S	+E/-W	GL: 4900.00 Northing	RKB = 17' @ 4917.00usft (Drilling Rig) Easting	Latitude	Longitude	Slot
0.00	0.00	14567151.44	1749451.18	40.110338	-104.610034	

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect
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
1650.00	21.00	79.00	1618.86	48.41	249.04	1.50	-44.10
4350.00	21.00	79.00	4139.53	233.03	1198.86	0.00	-212.29
5400.00	0.00	0.00	5166.18	269.34	1385.64	2.00	-245.36
6772.20	0.00	0.00	6538.38	269.34	1385.64	0.00	-245.36
7774.28	90.19	177.95	7175.00	-368.95	1408.44	9.00	393.23
10946.06	90.19	177.95	7164.65	-3538.69	1521.68	0.00	3564.45
11038.53	90.19	179.80	7164.35	-3631.14	1523.49	2.00	3656.92
16082.73	90.19	179.80	7148.00	-8675.28	1540.79	0.00	8700.61



Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well GEORGE 25-6HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4917.00usft (Drilling Rig)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4917.00usft (Drilling Rig)
Site:	2N-65W-25 George 7-25HZ Pad	North Reference:	True
Well:	GEORGE 25-6HZ	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-25 George 7-25HZ Pad				
Site Position:		Northing:	14,567,222.71 usft	Latitude:	40.110534
From:	Lat/Long	Easting:	1,749,428.22 usft	Longitude:	-104.610115
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.25

Well	GEORGE 25-6HZ					
Well Position	+N/-S	-71.37 usft	Northing:	14,567,151.44 usft	Latitude:	40.110338
	+E/-W	22.65 usft	Easting:	1,749,451.18 usft	Longitude:	-104.610034
Position Uncertainty		3.28 usft	Wellhead Elevation:		Ground Level:	4,900.00 usft

Wellbore	Plan A				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/16/2017	7.93	66.63	52,345.16864993

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 (°)	
	7,148.00	0.00	0.00	179.01	

Plan Survey Tool Program		Date	8/18/2017		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
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	16,082.73	Permit Rev-1 (Plan A)	APC_ISCWSA REV 2 MWD+II Fixed:v2:Rockies, crustal dec +	

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well GEORGE 25-6HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4917.00usft (Drilling Rig)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4917.00usft (Drilling Rig)
Site:	2N-65W-25 George 7-25HZ Pad	North Reference:	True
Well:	GEORGE 25-6HZ	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	
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,650.00	21.00	79.00	1,618.86	48.41	249.04	1.50	1.50	0.00	79.00	
4,350.00	21.00	79.00	4,139.53	233.03	1,198.86	0.00	0.00	0.00	0.00	
5,400.00	0.00	0.00	5,166.18	269.34	1,385.64	2.00	-2.00	0.00	180.00	
6,772.20	0.00	0.00	6,538.38	269.34	1,385.64	0.00	0.00	0.00	0.00	
7,774.28	90.19	177.95	7,175.00	-368.95	1,408.44	9.00	9.00	17.76	177.95	
10,946.06	90.19	177.95	7,164.65	-3,538.69	1,521.68	0.00	0.00	0.00	0.00	GEORGE 25-6HZ_tar
11,038.53	90.19	179.80	7,164.35	-3,631.14	1,523.49	2.00	0.00	2.00	90.03	
16,082.73	90.19	179.80	7,148.00	-8,675.28	1,540.79	0.00	0.00	0.00	0.00	GEORGE 25-6HZ_BH

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well GEORGE 25-6HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4917.00usft (Drilling Rig)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4917.00usft (Drilling Rig)
Site:	2N-65W-25 George 7-25HZ Pad	North Reference:	True
Well:	GEORGE 25-6HZ	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
250.00	0.00	0.00	250.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 1.50									
300.00	0.75	79.00	300.00	0.06	0.32	-0.06	1.50	1.50	0.00
400.00	2.25	79.00	399.96	0.56	2.89	-0.51	1.50	1.50	0.00
500.00	3.75	79.00	499.82	1.56	8.03	-1.42	1.50	1.50	0.00
600.00	5.25	79.00	599.51	3.06	15.73	-2.79	1.50	1.50	0.00
700.00	6.75	79.00	698.96	5.05	25.99	-4.60	1.50	1.50	0.00
800.00	8.25	79.00	798.10	7.54	38.80	-6.87	1.50	1.50	0.00
900.00	9.75	79.00	896.87	10.53	54.16	-9.59	1.50	1.50	0.00
1,000.00	11.25	79.00	995.19	14.00	72.05	-12.76	1.50	1.50	0.00
1,100.00	12.75	79.00	1,093.00	17.97	92.45	-16.37	1.50	1.50	0.00
1,200.00	14.25	79.00	1,190.24	22.43	115.37	-20.43	1.50	1.50	0.00
1,300.00	15.75	79.00	1,286.83	27.36	140.78	-24.93	1.50	1.50	0.00
1,385.66	17.03	79.00	1,369.00	31.98	164.50	-29.13	1.50	1.50	0.00
Fox Hills									
1,400.00	17.25	79.00	1,382.71	32.78	168.65	-29.86	1.50	1.50	0.00
1,500.00	18.75	79.00	1,477.81	38.68	198.99	-35.24	1.50	1.50	0.00
1,523.46	19.10	79.00	1,500.00	40.13	206.46	-36.56	1.50	1.50	0.00
9 5/8" Csg									
1,600.00	20.25	79.00	1,572.07	45.05	231.75	-41.04	1.50	1.50	0.00
1,650.00	21.00	79.00	1,618.86	48.41	249.04	-44.10	1.50	1.50	0.00
Start 2700.00 hold at 1650.00 MD									
1,700.00	21.00	79.00	1,665.54	51.83	266.63	-47.21	0.00	0.00	0.00
1,800.00	21.00	79.00	1,758.90	58.67	301.81	-53.44	0.00	0.00	0.00
1,900.00	21.00	79.00	1,852.26	65.50	336.99	-59.67	0.00	0.00	0.00
2,000.00	21.00	79.00	1,945.62	72.34	372.17	-65.90	0.00	0.00	0.00
2,100.00	21.00	79.00	2,038.98	79.18	407.35	-72.13	0.00	0.00	0.00
2,200.00	21.00	79.00	2,132.33	86.02	442.52	-78.36	0.00	0.00	0.00
2,300.00	21.00	79.00	2,225.69	92.86	477.70	-84.59	0.00	0.00	0.00
2,400.00	21.00	79.00	2,319.05	99.69	512.88	-90.82	0.00	0.00	0.00
2,500.00	21.00	79.00	2,412.41	106.53	548.06	-97.05	0.00	0.00	0.00
2,600.00	21.00	79.00	2,505.77	113.37	583.24	-103.28	0.00	0.00	0.00
2,700.00	21.00	79.00	2,599.12	120.21	618.42	-109.50	0.00	0.00	0.00
2,800.00	21.00	79.00	2,692.48	127.05	653.59	-115.73	0.00	0.00	0.00
2,900.00	21.00	79.00	2,785.84	133.88	688.77	-121.96	0.00	0.00	0.00
3,000.00	21.00	79.00	2,879.20	140.72	723.95	-128.19	0.00	0.00	0.00
3,100.00	21.00	79.00	2,972.56	147.56	759.13	-134.42	0.00	0.00	0.00
3,200.00	21.00	79.00	3,065.91	154.40	794.31	-140.65	0.00	0.00	0.00
3,300.00	21.00	79.00	3,159.27	161.24	829.49	-146.88	0.00	0.00	0.00
3,400.00	21.00	79.00	3,252.63	168.07	864.66	-153.11	0.00	0.00	0.00
3,500.00	21.00	79.00	3,345.99	174.91	899.84	-159.34	0.00	0.00	0.00
3,600.00	21.00	79.00	3,439.35	181.75	935.02	-165.57	0.00	0.00	0.00
3,700.00	21.00	79.00	3,532.70	188.59	970.20	-171.80	0.00	0.00	0.00
3,800.00	21.00	79.00	3,626.06	195.43	1,005.38	-178.03	0.00	0.00	0.00
3,900.00	21.00	79.00	3,719.42	202.26	1,040.56	-184.25	0.00	0.00	0.00
4,000.00	21.00	79.00	3,812.78	209.10	1,075.73	-190.48	0.00	0.00	0.00
4,100.00	21.00	79.00	3,906.14	215.94	1,110.91	-196.71	0.00	0.00	0.00
4,161.98	21.00	79.00	3,964.00	220.18	1,132.72	-200.57	0.00	0.00	0.00
Parkman									
4,200.00	21.00	79.00	3,999.49	222.78	1,146.09	-202.94	0.00	0.00	0.00
4,300.00	21.00	79.00	4,092.85	229.62	1,181.27	-209.17	0.00	0.00	0.00

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well GEORGE 25-6HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4917.00usft (Drilling Rig)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4917.00usft (Drilling Rig)
Site:	2N-65W-25 George 7-25HZ Pad	North Reference:	True
Well:	GEORGE 25-6HZ	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)
4,350.00	21.00	79.00	4,139.53	233.03	1,198.86	-212.29	0.00	0.00	0.00
Start Drop -2.00									
4,400.00	20.00	79.00	4,186.36	236.38	1,216.05	-215.33	2.00	-2.00	0.00
4,500.00	18.00	79.00	4,280.91	242.59	1,248.00	-220.99	2.00	-2.00	0.00
4,600.00	16.00	79.00	4,376.54	248.17	1,276.70	-226.07	2.00	-2.00	0.00
4,642.01	15.16	79.00	4,417.00	250.32	1,287.78	-228.03	2.00	-2.00	0.00
Sussex									
4,700.00	14.00	79.00	4,473.13	253.10	1,302.11	-230.57	2.00	-2.00	0.00
4,800.00	12.00	79.00	4,570.56	257.40	1,324.19	-234.48	2.00	-2.00	0.00
4,900.00	10.00	79.00	4,668.72	261.04	1,342.92	-237.80	2.00	-2.00	0.00
5,000.00	8.00	79.00	4,767.48	264.02	1,358.27	-240.51	2.00	-2.00	0.00
5,100.00	6.00	79.00	4,866.73	266.35	1,370.24	-242.63	2.00	-2.00	0.00
5,200.00	4.00	79.00	4,966.34	268.01	1,378.79	-244.15	2.00	-2.00	0.00
5,300.00	2.00	79.00	5,066.20	269.01	1,383.93	-245.06	2.00	-2.00	0.00
5,400.00	0.00	0.00	5,166.18	269.34	1,385.64	-245.36	2.00	-2.00	0.00
Start 1372.20 hold at 5400.00 MD									
5,500.00	0.00	0.00	5,266.18	269.34	1,385.64	-245.36	0.00	0.00	0.00
5,600.00	0.00	0.00	5,366.18	269.34	1,385.64	-245.36	0.00	0.00	0.00
5,700.00	0.00	0.00	5,466.18	269.34	1,385.64	-245.36	0.00	0.00	0.00
5,800.00	0.00	0.00	5,566.18	269.34	1,385.64	-245.36	0.00	0.00	0.00
5,900.00	0.00	0.00	5,666.18	269.34	1,385.64	-245.36	0.00	0.00	0.00
6,000.00	0.00	0.00	5,766.18	269.34	1,385.64	-245.36	0.00	0.00	0.00
6,100.00	0.00	0.00	5,866.18	269.34	1,385.64	-245.36	0.00	0.00	0.00
6,200.00	0.00	0.00	5,966.18	269.34	1,385.64	-245.36	0.00	0.00	0.00
6,300.00	0.00	0.00	6,066.18	269.34	1,385.64	-245.36	0.00	0.00	0.00
6,400.00	0.00	0.00	6,166.18	269.34	1,385.64	-245.36	0.00	0.00	0.00
6,500.00	0.00	0.00	6,266.18	269.34	1,385.64	-245.36	0.00	0.00	0.00
6,600.00	0.00	0.00	6,366.18	269.34	1,385.64	-245.36	0.00	0.00	0.00
6,700.00	0.00	0.00	6,466.18	269.34	1,385.64	-245.36	0.00	0.00	0.00
6,772.20	0.00	0.00	6,538.38	269.34	1,385.64	-245.36	0.00	0.00	0.00
KOP @ 6772.20ft									
6,800.00	2.50	177.95	6,566.17	268.73	1,385.66	-244.75	9.00	9.00	0.00
6,900.00	11.50	177.95	6,665.32	256.56	1,386.10	-232.58	9.00	9.00	0.00
7,000.00	20.50	177.95	6,761.35	229.04	1,387.08	-205.04	9.00	9.00	0.00
7,100.00	29.50	177.95	6,851.89	186.85	1,388.59	-162.83	9.00	9.00	0.00
7,170.25	35.82	177.95	6,911.00	148.98	1,389.94	-124.94	9.00	9.00	0.00
Sharon Springs									
7,200.00	38.50	177.95	6,934.70	131.02	1,390.58	-106.97	9.00	9.00	0.00
7,221.11	40.40	177.95	6,951.00	117.62	1,391.06	-93.56	9.00	9.00	0.00
Niobrara									
7,300.00	47.50	177.95	7,007.76	62.93	1,393.01	-38.85	9.00	9.00	0.00
7,303.32	47.80	177.95	7,010.00	60.48	1,393.10	-36.40	9.00	9.00	0.00
Nio B									
7,350.00	52.00	177.95	7,040.06	24.80	1,394.38	-0.71	9.00	9.00	0.00
DLS = 9°/100'									
7,400.00	56.50	177.95	7,069.26	-15.74	1,395.83	39.86	9.00	9.00	0.00
7,500.00	65.50	177.95	7,117.69	-103.06	1,398.94	127.21	9.00	9.00	0.00
7,600.00	74.50	177.95	7,151.85	-196.87	1,402.30	221.07	9.00	9.00	0.00
7,648.40	78.86	177.95	7,163.00	-243.93	1,403.98	268.15	9.00	9.00	0.00
Nio C									
7,700.00	83.50	177.95	7,170.91	-294.87	1,405.80	319.12	9.00	9.00	0.00
7,774.28	90.19	177.95	7,175.00	-368.95	1,408.44	393.23	9.00	9.00	0.00

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well GEORGE 25-6HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4917.00usft (Drilling Rig)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4917.00usft (Drilling Rig)
Site:	2N-65W-25 George 7-25HZ Pad	North Reference:	True
Well:	GEORGE 25-6HZ	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)
End Build @ 7774.28ft - Top of Production									
7,800.00	90.19	177.95	7,174.91	-394.65	1,409.36	418.95	0.00	0.00	0.00
7,900.00	90.19	177.95	7,174.59	-494.59	1,412.93	518.93	0.00	0.00	0.00
8,000.00	90.19	177.95	7,174.26	-594.53	1,416.50	618.91	0.00	0.00	0.00
8,100.00	90.19	177.95	7,173.93	-694.46	1,420.07	718.89	0.00	0.00	0.00
8,200.00	90.19	177.95	7,173.61	-794.40	1,423.64	818.88	0.00	0.00	0.00
8,300.00	90.19	177.95	7,173.28	-894.33	1,427.21	918.86	0.00	0.00	0.00
8,400.00	90.19	177.95	7,172.96	-994.27	1,430.78	1,018.84	0.00	0.00	0.00
8,500.00	90.19	177.95	7,172.63	-1,094.20	1,434.35	1,118.82	0.00	0.00	0.00
8,600.00	90.19	177.95	7,172.30	-1,194.14	1,437.92	1,218.81	0.00	0.00	0.00
8,700.00	90.19	177.95	7,171.98	-1,294.08	1,441.49	1,318.79	0.00	0.00	0.00
8,800.00	90.19	177.95	7,171.65	-1,394.01	1,445.06	1,418.77	0.00	0.00	0.00
8,900.00	90.19	177.95	7,171.32	-1,493.95	1,448.63	1,518.75	0.00	0.00	0.00
9,000.00	90.19	177.95	7,171.00	-1,593.88	1,452.20	1,618.74	0.00	0.00	0.00
9,100.00	90.19	177.95	7,170.67	-1,693.82	1,455.77	1,718.72	0.00	0.00	0.00
9,200.00	90.19	177.95	7,170.35	-1,793.75	1,459.34	1,818.70	0.00	0.00	0.00
9,300.00	90.19	177.95	7,170.02	-1,893.69	1,462.91	1,918.68	0.00	0.00	0.00
9,400.00	90.19	177.95	7,169.69	-1,993.63	1,466.48	2,018.67	0.00	0.00	0.00
9,500.00	90.19	177.95	7,169.37	-2,093.56	1,470.05	2,118.65	0.00	0.00	0.00
9,600.00	90.19	177.95	7,169.04	-2,193.50	1,473.62	2,218.63	0.00	0.00	0.00
9,700.00	90.19	177.95	7,168.71	-2,293.43	1,477.19	2,318.61	0.00	0.00	0.00
9,800.00	90.19	177.95	7,168.39	-2,393.37	1,480.76	2,418.60	0.00	0.00	0.00
9,900.00	90.19	177.95	7,168.06	-2,493.30	1,484.33	2,518.58	0.00	0.00	0.00
10,000.00	90.19	177.95	7,167.74	-2,593.24	1,487.90	2,618.56	0.00	0.00	0.00
10,100.00	90.19	177.95	7,167.41	-2,693.18	1,491.47	2,718.54	0.00	0.00	0.00
10,200.00	90.19	177.95	7,167.08	-2,793.11	1,495.04	2,818.53	0.00	0.00	0.00
10,300.00	90.19	177.95	7,166.76	-2,893.05	1,498.61	2,918.51	0.00	0.00	0.00
10,400.00	90.19	177.95	7,166.43	-2,992.98	1,502.19	3,018.49	0.00	0.00	0.00
10,500.00	90.19	177.95	7,166.11	-3,092.92	1,505.76	3,118.47	0.00	0.00	0.00
10,600.00	90.19	177.95	7,165.78	-3,192.85	1,509.33	3,218.46	0.00	0.00	0.00
10,700.00	90.19	177.95	7,165.45	-3,292.79	1,512.90	3,318.44	0.00	0.00	0.00
10,800.00	90.19	177.95	7,165.13	-3,392.73	1,516.47	3,418.42	0.00	0.00	0.00
10,900.00	90.19	177.95	7,164.80	-3,492.66	1,520.04	3,518.40	0.00	0.00	0.00
10,946.06	90.19	177.95	7,164.65	-3,538.69	1,521.68	3,564.46	0.00	0.00	0.00
Begin Turn to BHL @ 10946.06ft									
11,000.00	90.19	179.03	7,164.47	-3,592.61	1,523.10	3,618.39	2.00	0.00	2.00
11,038.53	90.19	179.80	7,164.35	-3,631.14	1,523.49	3,656.92	2.00	0.00	2.00
End Turn @ 11038.53ft									
11,100.00	90.19	179.80	7,164.15	-3,692.61	1,523.70	3,718.38	0.00	0.00	0.00
11,200.00	90.19	179.80	7,163.83	-3,792.61	1,524.04	3,818.37	0.00	0.00	0.00
11,300.00	90.19	179.80	7,163.50	-3,892.61	1,524.39	3,918.36	0.00	0.00	0.00
11,400.00	90.19	179.80	7,163.18	-3,992.61	1,524.73	4,018.35	0.00	0.00	0.00
11,500.00	90.19	179.80	7,162.85	-4,092.61	1,525.07	4,118.34	0.00	0.00	0.00
11,600.00	90.19	179.80	7,162.53	-4,192.60	1,525.42	4,218.33	0.00	0.00	0.00
11,700.00	90.19	179.80	7,162.21	-4,292.60	1,525.76	4,318.32	0.00	0.00	0.00
11,800.00	90.19	179.80	7,161.88	-4,392.60	1,526.10	4,418.31	0.00	0.00	0.00
11,900.00	90.19	179.80	7,161.56	-4,492.60	1,526.44	4,518.30	0.00	0.00	0.00
12,000.00	90.19	179.80	7,161.23	-4,592.60	1,526.79	4,618.29	0.00	0.00	0.00
12,100.00	90.19	179.80	7,160.91	-4,692.60	1,527.13	4,718.28	0.00	0.00	0.00
12,200.00	90.19	179.80	7,160.58	-4,792.60	1,527.47	4,818.27	0.00	0.00	0.00
12,300.00	90.19	179.80	7,160.26	-4,892.60	1,527.82	4,918.26	0.00	0.00	0.00
12,400.00	90.19	179.80	7,159.94	-4,992.60	1,528.16	5,018.25	0.00	0.00	0.00
12,500.00	90.19	179.80	7,159.61	-5,092.59	1,528.50	5,118.24	0.00	0.00	0.00

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well GEORGE 25-6HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4917.00usft (Drilling Rig)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4917.00usft (Drilling Rig)
Site:	2N-65W-25 George 7-25HZ Pad	North Reference:	True
Well:	GEORGE 25-6HZ	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)
12,600.00	90.19	179.80	7,159.29	-5,192.59	1,528.85	5,218.23	0.00	0.00	0.00
12,700.00	90.19	179.80	7,158.96	-5,292.59	1,529.19	5,318.22	0.00	0.00	0.00
12,800.00	90.19	179.80	7,158.64	-5,392.59	1,529.53	5,418.21	0.00	0.00	0.00
12,900.00	90.19	179.80	7,158.32	-5,492.59	1,529.88	5,518.20	0.00	0.00	0.00
13,000.00	90.19	179.80	7,157.99	-5,592.59	1,530.22	5,618.19	0.00	0.00	0.00
13,100.00	90.19	179.80	7,157.67	-5,692.59	1,530.56	5,718.18	0.00	0.00	0.00
13,200.00	90.19	179.80	7,157.34	-5,792.59	1,530.90	5,818.17	0.00	0.00	0.00
13,300.00	90.19	179.80	7,157.02	-5,892.59	1,531.25	5,918.16	0.00	0.00	0.00
13,400.00	90.19	179.80	7,156.70	-5,992.58	1,531.59	6,018.15	0.00	0.00	0.00
13,500.00	90.19	179.80	7,156.37	-6,092.58	1,531.93	6,118.14	0.00	0.00	0.00
13,600.00	90.19	179.80	7,156.05	-6,192.58	1,532.28	6,218.13	0.00	0.00	0.00
13,700.00	90.19	179.80	7,155.72	-6,292.58	1,532.62	6,318.12	0.00	0.00	0.00
13,800.00	90.19	179.80	7,155.40	-6,392.58	1,532.96	6,418.11	0.00	0.00	0.00
13,900.00	90.19	179.80	7,155.07	-6,492.58	1,533.31	6,518.10	0.00	0.00	0.00
14,000.00	90.19	179.80	7,154.75	-6,592.58	1,533.65	6,618.09	0.00	0.00	0.00
14,100.00	90.19	179.80	7,154.43	-6,692.58	1,533.99	6,718.08	0.00	0.00	0.00
14,200.00	90.19	179.80	7,154.10	-6,792.58	1,534.34	6,818.07	0.00	0.00	0.00
14,300.00	90.19	179.80	7,153.78	-6,892.57	1,534.68	6,918.06	0.00	0.00	0.00
14,400.00	90.19	179.80	7,153.45	-6,992.57	1,535.02	7,018.05	0.00	0.00	0.00
14,500.00	90.19	179.80	7,153.13	-7,092.57	1,535.36	7,118.04	0.00	0.00	0.00
14,600.00	90.19	179.80	7,152.81	-7,192.57	1,535.71	7,218.03	0.00	0.00	0.00
14,700.00	90.19	179.80	7,152.48	-7,292.57	1,536.05	7,318.02	0.00	0.00	0.00
14,800.00	90.19	179.80	7,152.16	-7,392.57	1,536.39	7,418.01	0.00	0.00	0.00
14,900.00	90.19	179.80	7,151.83	-7,492.57	1,536.74	7,518.00	0.00	0.00	0.00
15,000.00	90.19	179.80	7,151.51	-7,592.57	1,537.08	7,617.99	0.00	0.00	0.00
15,100.00	90.19	179.80	7,151.19	-7,692.57	1,537.42	7,717.98	0.00	0.00	0.00
15,200.00	90.19	179.80	7,150.86	-7,792.56	1,537.77	7,817.97	0.00	0.00	0.00
15,300.00	90.19	179.80	7,150.54	-7,892.56	1,538.11	7,917.96	0.00	0.00	0.00
15,400.00	90.19	179.80	7,150.21	-7,992.56	1,538.45	8,017.95	0.00	0.00	0.00
15,500.00	90.19	179.80	7,149.89	-8,092.56	1,538.79	8,117.94	0.00	0.00	0.00
15,600.00	90.19	179.80	7,149.56	-8,192.56	1,539.14	8,217.93	0.00	0.00	0.00
15,700.00	90.19	179.80	7,149.24	-8,292.56	1,539.48	8,317.92	0.00	0.00	0.00
15,800.00	90.19	179.80	7,148.92	-8,392.56	1,539.82	8,417.91	0.00	0.00	0.00
15,900.00	90.19	179.80	7,148.59	-8,492.56	1,540.17	8,517.90	0.00	0.00	0.00
16,000.00	90.19	179.80	7,148.27	-8,592.56	1,540.51	8,617.89	0.00	0.00	0.00
16,082.73	90.19	179.80	7,148.00	-8,675.28	1,540.79	8,700.61	0.00	0.00	0.00
TD Well @ 16082.73ft									

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
1,523.46	1,500.00	9 5/8" Csg	9-5/8	13-1/2	
7,774.28	7,175.00	Top of Production	5-1/2	7-7/8	

Corporate Planning Report

Database:	PLANNING	Local Co-ordinate Reference:	Well GEORGE 25-6HZ
Company:	US ROCKIES WATTENBERG PLANNING	TVD Reference:	RKB = 17' @ 4917.00usft (Drilling Rig)
Project:	WELD-NAD83-UTMFT13N	MD Reference:	RKB = 17' @ 4917.00usft (Drilling Rig)
Site:	2N-65W-25 George 7-25HZ Pad	North Reference:	True
Well:	GEORGE 25-6HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	Plan A		
Design:	Permit Rev-1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,385.66	1,369.00	Fox Hills				
4,161.98	3,964.00	Parkman				
4,642.01	4,417.00	Sussex				
7,170.25	6,911.00	Sharon Springs				
7,221.11	6,951.00	Niobrara				
7,303.32	7,010.00	Nio B				
7,648.40	7,163.00	Nio C				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
250.00	250.00	0.00	0.00	Start Build 1.50	
1,650.00	1,618.86	48.41	249.04	Start 2700.00 hold at 1650.00 MD	
4,350.00	4,139.53	233.03	1,198.86	Start Drop -2.00	
5,400.00	5,166.18	269.34	1,385.64	Start 1372.20 hold at 5400.00 MD	
6,772.20	6,538.38	269.34	1,385.64	KOP @ 6772.20ft	
7,350.00	7,040.06	24.80	1,394.38	DLS = 9°/100'	
7,774.28	7,175.00	-368.95	1,408.44	End Build @ 7774.28ft	
10,946.06	7,164.65	-3,538.69	1,521.68	Begin Turn to BHL @ 10946.06ft	
11,038.53	7,164.35	-3,631.14	1,523.49	End Turn @ 11038.53ft	
16,082.73	7,148.00	-8,675.28	1,540.79	TD Well @ 16082.73ft	