

# **US ROCKIES REGION PLANNING**

**COLORADO NORTHERN ZONE - 83**

**WELD\_CAMP PAD**

**CAMP 4N-25HZ**

**CAMP 4N-25HZ**

**Plan: CAMP 4N-25HZ (wp01)**

## **Standard Planning Report**

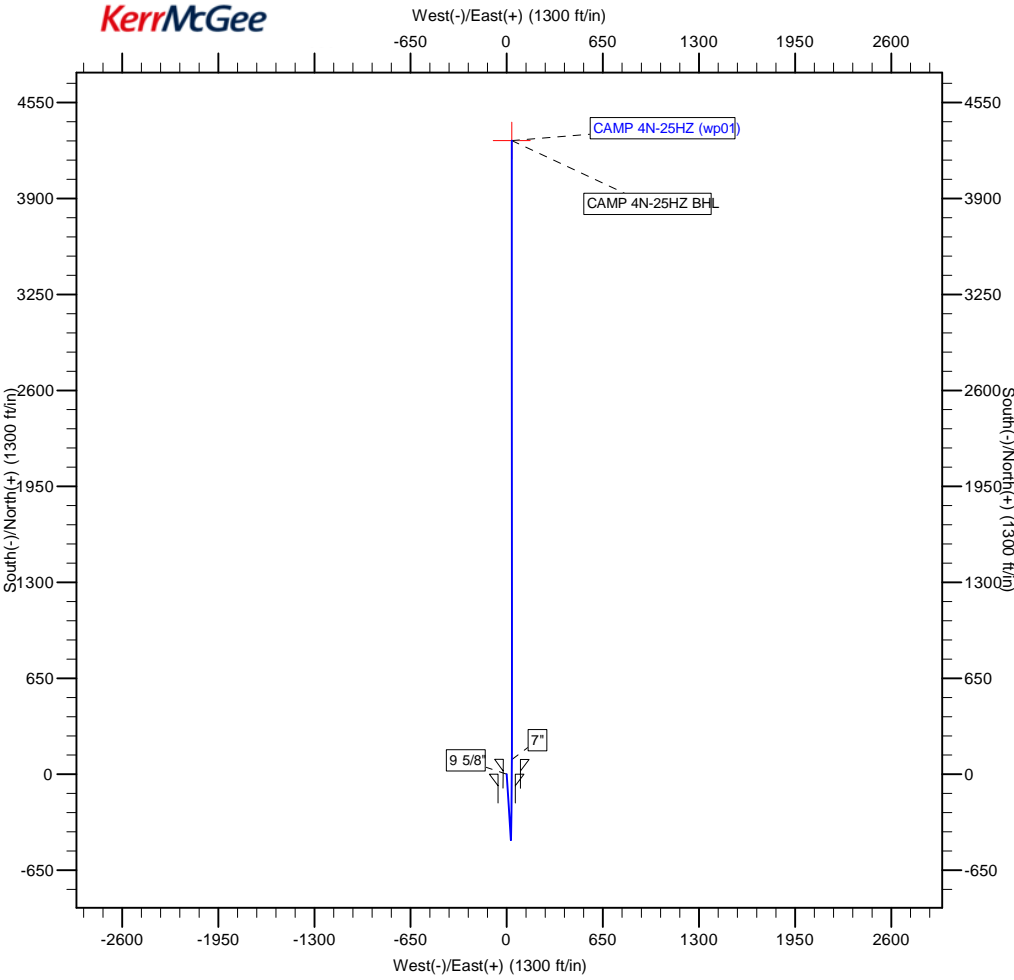
**16 August, 2011**





**Azimuths to True North**  
Magnetic North: 8.82°  
  
**Magnetic Field**  
Strength: 53013.3nT  
Dip Angle: 66.88°  
Date: 7/18/2011  
Model: IGRF2010

**Project:** COLORADO NORTHERN ZONE - 83  
**Site:** WELD\_CAMP PAD  
**Well:** CAMP 4N-25HZ  
**Wellbore:** CAMP 4N-25HZ  
**Section:** SHL:  
**Design:** CAMP 4N-25HZ (wp01)  
**Latitude:** 40.190423  
**Longitude:** -104.733154  
**GL:** 5043.00  
**KB:** 17' RKB + 5043' GL @ 5060.00ft



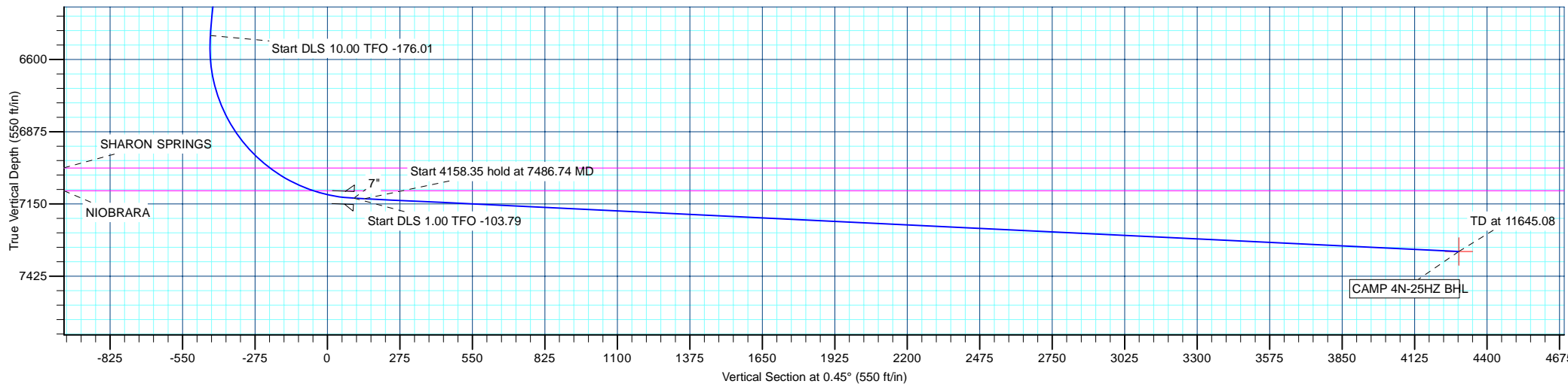
WELL DETAILS: CAMP 4N-25HZ						
+N/-S	+E/-W	Northing	Ground Level: Easting	5043.00 Latitude	Longitude	Slot
0.00	0.00	1313140.04	3214232.12	40.190423	-104.733154	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)						
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
CAMP 4N-25HZ BHL	7331.00	4293.01	34.05	40.202208	-104.733032	Point

SECTION DETAILS									
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1000.00	0.00	0.00	1000.00	0.00	0.00	0.00	0.00	0.00	
1236.01	4.72	176.38	1235.75	-9.70	0.61	2.00	176.38	-9.69	
6526.85	4.72	176.38	6508.64	-444.22	28.09	0.00	0.00	-443.98	
7447.16	87.32	0.37	7128.00	100.00	35.00	10.00	-176.01	100.28	
7486.74	87.23	359.99	7129.88	139.53	35.12	1.00	-103.79	139.81	
11645.08	87.23	359.99	7331.00	4293.01	34.05	0.00	0.00	4293.15	CAMP 4N-25HZ BHL

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
4404.00	4415.05	PARKMAN
4610.00	4621.75	SUSSEX
5380.00	5394.37	SHANNON
7013.00	7103.52	SHARON SPRINGS
7100.00	7292.06	NIOBRARA

CASING DETAILS			
TVD	MD	Name	Size
850.00	850.00	9 5/8"	9-5/8
7128.00	7447.16	7"	7



<b>Database:</b>	edm5000p	<b>Local Co-ordinate Reference:</b>	Well CAMP 4N-25HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	17' RKB + 5043' GL @ 5060.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	17' RKB + 5043' GL @ 5060.00ft
<b>Site:</b>	WELD_CAMP PAD	<b>North Reference:</b>	True
<b>Well:</b>	CAMP 4N-25HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	CAMP 4N-25HZ		
<b>Design:</b>	CAMP 4N-25HZ (wp01)		

<b>Project</b>	COLORADO NORTHERN ZONE - 83		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Northern Zone		

<b>Site</b>	WELD_CAMP PAD			
<b>Site Position:</b>		<b>Northing:</b>	1,313,189.35 ft	<b>Latitude:</b> 40.190458
<b>From:</b>	Lat/Long	<b>Easting:</b>	3,218,417.67 ft	<b>Longitude:</b> -104.718171
<b>Position Uncertainty:</b>	0.00 ft	<b>Slot Radius:</b>	0 "	<b>Grid Convergence:</b> 0.51 °

<b>Well</b>	CAMP 4N-25HZ			
<b>Well Position</b>	<b>+N/-S</b>	-12.41 ft	<b>Northing:</b>	1,313,140.03 ft
	<b>+E/-W</b>	-4,185.82 ft	<b>Easting:</b>	3,214,232.12 ft
<b>Position Uncertainty</b>		0.00 ft	<b>Wellhead Elevation:</b>	<b>Ground Level:</b> 5,043.00 ft

<b>Wellbore</b>	CAMP 4N-25HZ				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	7/18/2011	8.82	66.88	53,013

<b>Design</b>	CAMP 4N-25HZ (wp01)			
<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) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	0.45

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,236.01	4.72	176.38	1,235.75	-9.70	0.61	2.00	2.00	0.00	176.38	
6,526.85	4.72	176.38	6,508.64	-444.22	28.09	0.00	0.00	0.00	0.00	
7,447.16	87.32	0.37	7,128.00	100.00	35.00	10.00	8.98	-19.13	-176.01	
7,486.74	87.23	359.99	7,129.88	139.53	35.12	1.00	-0.24	-0.97	-103.79	
11,645.09	87.23	359.99	7,331.00	4,293.01	34.05	0.00	0.00	0.00	0.00	CAMP 4N-25HZ BHL

<b>Database:</b>	edm5000p	<b>Local Co-ordinate Reference:</b>	Well CAMP 4N-25HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	17' RKB + 5043' GL @ 5060.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	17' RKB + 5043' GL @ 5060.00ft
<b>Site:</b>	WELD_CAMP PAD	<b>North Reference:</b>	True
<b>Well:</b>	CAMP 4N-25HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	CAMP 4N-25HZ		
<b>Design:</b>	CAMP 4N-25HZ (wp01)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
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
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
850.00	0.00	0.00	850.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"									
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
1,100.00	2.00	176.38	1,099.98	-1.74	0.11	-1.74	2.00	2.00	0.00
1,200.00	4.00	176.38	1,199.84	-6.96	0.44	-6.96	2.00	2.00	0.00
1,236.01	4.72	176.38	1,235.75	-9.70	0.61	-9.69	2.00	2.00	0.00
Start 5290.84 hold at 1236.01 MD									
1,300.00	4.72	176.38	1,299.52	-14.95	0.95	-14.94	0.00	0.00	0.00
1,400.00	4.72	176.38	1,399.18	-23.16	1.46	-23.15	0.00	0.00	0.00
1,500.00	4.72	176.38	1,498.84	-31.38	1.98	-31.36	0.00	0.00	0.00
1,600.00	4.72	176.38	1,598.50	-39.59	2.50	-39.57	0.00	0.00	0.00
1,700.00	4.72	176.38	1,698.16	-47.80	3.02	-47.78	0.00	0.00	0.00
1,800.00	4.72	176.38	1,797.82	-56.02	3.54	-55.99	0.00	0.00	0.00
1,900.00	4.72	176.38	1,897.48	-64.23	4.06	-64.19	0.00	0.00	0.00
2,000.00	4.72	176.38	1,997.14	-72.44	4.58	-72.40	0.00	0.00	0.00
2,100.00	4.72	176.38	2,096.80	-80.65	5.10	-80.61	0.00	0.00	0.00
2,200.00	4.72	176.38	2,196.46	-88.87	5.62	-88.82	0.00	0.00	0.00
2,300.00	4.72	176.38	2,296.12	-97.08	6.14	-97.03	0.00	0.00	0.00
2,400.00	4.72	176.38	2,395.79	-105.29	6.66	-105.24	0.00	0.00	0.00
2,500.00	4.72	176.38	2,495.45	-113.50	7.18	-113.44	0.00	0.00	0.00
2,600.00	4.72	176.38	2,595.11	-121.72	7.70	-121.65	0.00	0.00	0.00
2,700.00	4.72	176.38	2,694.77	-129.93	8.22	-129.86	0.00	0.00	0.00
2,800.00	4.72	176.38	2,794.43	-138.14	8.73	-138.07	0.00	0.00	0.00
2,900.00	4.72	176.38	2,894.09	-146.36	9.25	-146.28	0.00	0.00	0.00
3,000.00	4.72	176.38	2,993.75	-154.57	9.77	-154.49	0.00	0.00	0.00
3,100.00	4.72	176.38	3,093.41	-162.78	10.29	-162.69	0.00	0.00	0.00
3,200.00	4.72	176.38	3,193.07	-170.99	10.81	-170.90	0.00	0.00	0.00
3,300.00	4.72	176.38	3,292.73	-179.21	11.33	-179.11	0.00	0.00	0.00
3,400.00	4.72	176.38	3,392.39	-187.42	11.85	-187.32	0.00	0.00	0.00
3,500.00	4.72	176.38	3,492.05	-195.63	12.37	-195.53	0.00	0.00	0.00
3,600.00	4.72	176.38	3,591.72	-203.84	12.89	-203.74	0.00	0.00	0.00
3,700.00	4.72	176.38	3,691.38	-212.06	13.41	-211.94	0.00	0.00	0.00
3,800.00	4.72	176.38	3,791.04	-220.27	13.93	-220.15	0.00	0.00	0.00
3,900.00	4.72	176.38	3,890.70	-228.48	14.45	-228.36	0.00	0.00	0.00
4,000.00	4.72	176.38	3,990.36	-236.69	14.97	-236.57	0.00	0.00	0.00
4,100.00	4.72	176.38	4,090.02	-244.91	15.49	-244.78	0.00	0.00	0.00
4,200.00	4.72	176.38	4,189.68	-253.12	16.00	-252.99	0.00	0.00	0.00
4,300.00	4.72	176.38	4,289.34	-261.33	16.52	-261.19	0.00	0.00	0.00
4,400.00	4.72	176.38	4,389.00	-269.55	17.04	-269.40	0.00	0.00	0.00
4,415.05	4.72	176.38	4,404.00	-270.78	17.12	-270.64	0.00	0.00	0.00
PARKMAN									
4,500.00	4.72	176.38	4,488.66	-277.76	17.56	-277.61	0.00	0.00	0.00
4,600.00	4.72	176.38	4,588.32	-285.97	18.08	-285.82	0.00	0.00	0.00

<b>Database:</b>	edm5000p	<b>Local Co-ordinate Reference:</b>	Well CAMP 4N-25HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	17' RKB + 5043' GL @ 5060.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	17' RKB + 5043' GL @ 5060.00ft
<b>Site:</b>	WELD_CAMP PAD	<b>North Reference:</b>	True
<b>Well:</b>	CAMP 4N-25HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	CAMP 4N-25HZ		
<b>Design:</b>	CAMP 4N-25HZ (wp01)		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,621.75	4.72	176.38	4,610.00	-287.76	18.19	-287.60	0.00	0.00	0.00
<b>SUSSEX</b>									
4,700.00	4.72	176.38	4,687.98	-294.18	18.60	-294.03	0.00	0.00	0.00
4,800.00	4.72	176.38	4,787.65	-302.40	19.12	-302.23	0.00	0.00	0.00
4,900.00	4.72	176.38	4,887.31	-310.61	19.64	-310.44	0.00	0.00	0.00
5,000.00	4.72	176.38	4,986.97	-318.82	20.16	-318.65	0.00	0.00	0.00
5,100.00	4.72	176.38	5,086.63	-327.03	20.68	-326.86	0.00	0.00	0.00
5,200.00	4.72	176.38	5,186.29	-335.25	21.20	-335.07	0.00	0.00	0.00
5,300.00	4.72	176.38	5,285.95	-343.46	21.72	-343.28	0.00	0.00	0.00
5,394.37	4.72	176.38	5,380.00	-351.21	22.21	-351.02	0.00	0.00	0.00
<b>SHANNON</b>									
5,400.00	4.72	176.38	5,385.61	-351.67	22.24	-351.48	0.00	0.00	0.00
5,500.00	4.72	176.38	5,485.27	-359.88	22.76	-359.69	0.00	0.00	0.00
5,600.00	4.72	176.38	5,584.93	-368.10	23.27	-367.90	0.00	0.00	0.00
5,700.00	4.72	176.38	5,684.59	-376.31	23.79	-376.11	0.00	0.00	0.00
5,800.00	4.72	176.38	5,784.25	-384.52	24.31	-384.32	0.00	0.00	0.00
5,900.00	4.72	176.38	5,883.91	-392.74	24.83	-392.53	0.00	0.00	0.00
6,000.00	4.72	176.38	5,983.58	-400.95	25.35	-400.73	0.00	0.00	0.00
6,100.00	4.72	176.38	6,083.24	-409.16	25.87	-408.94	0.00	0.00	0.00
6,200.00	4.72	176.38	6,182.90	-417.37	26.39	-417.15	0.00	0.00	0.00
6,300.00	4.72	176.38	6,282.56	-425.59	26.91	-425.36	0.00	0.00	0.00
6,400.00	4.72	176.38	6,382.22	-433.80	27.43	-433.57	0.00	0.00	0.00
6,500.00	4.72	176.38	6,481.88	-442.01	27.95	-441.78	0.00	0.00	0.00
6,526.85	4.72	176.38	6,508.64	-444.22	28.09	-443.98	0.00	0.00	0.00
<b>Start DLS 10.00 TFO -176.01</b>									
6,600.00	2.63	7.52	6,581.73	-445.56	28.50	-445.32	10.00	-2.86	-230.86
6,700.00	12.61	1.82	6,680.72	-432.35	29.15	-432.10	10.00	9.98	-5.70
6,800.00	22.61	1.14	6,775.91	-402.14	29.88	-401.89	10.00	10.00	-0.68
6,900.00	32.61	0.87	6,864.41	-355.87	30.67	-355.61	10.00	10.00	-0.27
7,000.00	42.61	0.71	6,943.53	-294.93	31.50	-294.67	10.00	10.00	-0.16
7,100.00	52.61	0.61	7,010.87	-221.17	32.34	-220.91	10.00	10.00	-0.11
7,103.52	52.96	0.60	7,013.00	-218.37	32.37	-218.10	10.00	10.00	-0.09
<b>SHARON SPRINGS</b>									
7,200.00	62.61	0.52	7,064.38	-136.84	33.17	-136.58	10.00	10.00	-0.08
7,292.06	71.81	0.46	7,100.00	-52.06	33.90	-51.79	10.00	10.00	-0.07
<b>NIOBRARA</b>									
7,300.00	72.61	0.46	7,102.43	-44.51	33.96	-44.23	10.00	10.00	-0.06
7,400.00	82.61	0.40	7,123.86	53.04	34.69	53.31	10.00	10.00	-0.06
7,447.16	87.32	0.37	7,128.00	100.00	35.00	100.28	10.00	10.00	-0.06
<b>Start DLS 1.00 TFO -103.79 - 7"</b>									
7,486.74	87.23	359.99	7,129.88	139.53	35.12	139.81	1.00	-0.24	-0.97
<b>Start 4158.35 hold at 7486.74 MD</b>									
7,500.00	87.23	359.99	7,130.52	152.78	35.12	153.05	0.00	0.00	0.00
7,600.00	87.23	359.99	7,135.36	252.66	35.09	252.93	0.00	0.00	0.00
7,700.00	87.23	359.99	7,140.20	352.55	35.07	352.81	0.00	0.00	0.00
7,800.00	87.23	359.99	7,145.03	452.43	35.04	452.69	0.00	0.00	0.00
7,900.00	87.23	359.99	7,149.87	552.31	35.02	552.57	0.00	0.00	0.00
8,000.00	87.23	359.99	7,154.71	652.20	34.99	652.45	0.00	0.00	0.00
8,100.00	87.23	359.99	7,159.54	752.08	34.96	752.33	0.00	0.00	0.00
8,200.00	87.23	359.99	7,164.38	851.96	34.94	852.21	0.00	0.00	0.00
8,300.00	87.23	359.99	7,169.22	951.84	34.91	952.09	0.00	0.00	0.00
8,400.00	87.23	359.99	7,174.05	1,051.73	34.89	1,051.97	0.00	0.00	0.00
8,500.00	87.23	359.99	7,178.89	1,151.61	34.86	1,151.85	0.00	0.00	0.00

<b>Database:</b>	edm5000p	<b>Local Co-ordinate Reference:</b>	Well CAMP 4N-25HZ
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<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	17' RKB + 5043' GL @ 5060.00ft
<b>Site:</b>	WELD_CAMP PAD	<b>North Reference:</b>	True
<b>Well:</b>	CAMP 4N-25HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	CAMP 4N-25HZ		
<b>Design:</b>	CAMP 4N-25HZ (wp01)		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
8,600.00	87.23	359.99	7,183.72	1,251.49	34.84	1,251.73	0.00	0.00	0.00	
8,700.00	87.23	359.99	7,188.56	1,351.38	34.81	1,351.61	0.00	0.00	0.00	
8,800.00	87.23	359.99	7,193.40	1,451.26	34.78	1,451.49	0.00	0.00	0.00	
8,900.00	87.23	359.99	7,198.23	1,551.14	34.76	1,551.37	0.00	0.00	0.00	
9,000.00	87.23	359.99	7,203.07	1,651.03	34.73	1,651.25	0.00	0.00	0.00	
9,100.00	87.23	359.99	7,207.91	1,750.91	34.71	1,751.13	0.00	0.00	0.00	
9,200.00	87.23	359.99	7,212.74	1,850.79	34.68	1,851.01	0.00	0.00	0.00	
9,300.00	87.23	359.99	7,217.58	1,950.67	34.65	1,950.89	0.00	0.00	0.00	
9,400.00	87.23	359.99	7,222.42	2,050.56	34.63	2,050.77	0.00	0.00	0.00	
9,500.00	87.23	359.99	7,227.25	2,150.44	34.60	2,150.65	0.00	0.00	0.00	
9,600.00	87.23	359.99	7,232.09	2,250.32	34.58	2,250.53	0.00	0.00	0.00	
9,700.00	87.23	359.99	7,236.93	2,350.21	34.55	2,350.41	0.00	0.00	0.00	
9,800.00	87.23	359.99	7,241.76	2,450.09	34.53	2,450.29	0.00	0.00	0.00	
9,900.00	87.23	359.99	7,246.60	2,549.97	34.50	2,550.17	0.00	0.00	0.00	
10,000.00	87.23	359.99	7,251.44	2,649.86	34.47	2,650.05	0.00	0.00	0.00	
10,100.00	87.23	359.99	7,256.27	2,749.74	34.45	2,749.92	0.00	0.00	0.00	
10,200.00	87.23	359.99	7,261.11	2,849.62	34.42	2,849.80	0.00	0.00	0.00	
10,300.00	87.23	359.99	7,265.95	2,949.50	34.40	2,949.68	0.00	0.00	0.00	
10,400.00	87.23	359.99	7,270.78	3,049.39	34.37	3,049.56	0.00	0.00	0.00	
10,500.00	87.23	359.99	7,275.62	3,149.27	34.34	3,149.44	0.00	0.00	0.00	
10,600.00	87.23	359.99	7,280.45	3,249.15	34.32	3,249.32	0.00	0.00	0.00	
10,700.00	87.23	359.99	7,285.29	3,349.04	34.29	3,349.20	0.00	0.00	0.00	
10,800.00	87.23	359.99	7,290.13	3,448.92	34.27	3,449.08	0.00	0.00	0.00	
10,900.00	87.23	359.99	7,294.96	3,548.80	34.24	3,548.96	0.00	0.00	0.00	
11,000.00	87.23	359.99	7,299.80	3,648.68	34.22	3,648.84	0.00	0.00	0.00	
11,100.00	87.23	359.99	7,304.64	3,748.57	34.19	3,748.72	0.00	0.00	0.00	
11,200.00	87.23	359.99	7,309.47	3,848.45	34.16	3,848.60	0.00	0.00	0.00	
11,300.00	87.23	359.99	7,314.31	3,948.33	34.14	3,948.48	0.00	0.00	0.00	
11,400.00	87.23	359.99	7,319.15	4,048.22	34.11	4,048.36	0.00	0.00	0.00	
11,500.00	87.23	359.99	7,323.98	4,148.10	34.09	4,148.24	0.00	0.00	0.00	
11,600.00	87.23	359.99	7,328.82	4,247.98	34.06	4,248.12	0.00	0.00	0.00	
11,645.09	87.23	359.99	7,331.00	4,293.01	34.05	4,293.15	0.00	0.00	0.00	
TD at 11645.08 - CAMP 4N-25HZ BHL										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
- hit/miss target										
- Shape										
CAMP 4N-25HZ BHL	0.00	0.00	7,331.00	4,293.01	34.05	1,317,433.18	3,214,229.04	40.202208	-104.733032	
- plan hits target center										
- Point										

Casing Points						
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")		
850.00	850.00	9 5/8"	9-5/8	12-1/4		
7,447.16	7,128.00	7"	7	8-3/4		

<b>Database:</b>	edm5000p	<b>Local Co-ordinate Reference:</b>	Well CAMP 4N-25HZ
<b>Company:</b>	US ROCKIES REGION PLANNING	<b>TVD Reference:</b>	17' RKB + 5043' GL @ 5060.00ft
<b>Project:</b>	COLORADO NORTHERN ZONE - 83	<b>MD Reference:</b>	17' RKB + 5043' GL @ 5060.00ft
<b>Site:</b>	WELD_CAMP PAD	<b>North Reference:</b>	True
<b>Well:</b>	CAMP 4N-25HZ	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	CAMP 4N-25HZ		
<b>Design:</b>	CAMP 4N-25HZ (wp01)		

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
4,415.05	4,404.00	PARKMAN		0.00	
4,621.75	4,610.00	SUSSEX		0.00	
5,394.37	5,380.00	SHANNON		0.00	
7,103.52	7,013.00	SHARON SPRINGS		0.00	
7,292.06	7,100.00	NIOBRARA		0.00	

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
1,000.00	1,000.00	0.00	0.00	Start Build 2.00	
1,236.01	1,235.75	-9.70	0.61	Start 5290.84 hold at 1236.01 MD	
6,526.85	6,508.64	-444.22	28.09	Start DLS 10.00 TFO -176.01	
7,447.16	7,128.00	100.00	35.00	Start DLS 1.00 TFO -103.79	
7,486.74	7,129.88	139.53	35.12	Start 4158.35 hold at 7486.74 MD	
11,645.09	7,331.00	4,293.01	34.05	TD at 11645.08	