

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_CAMP PAD

CAMP 28N-25HZ

CAMP 28N-25HZ

Plan: CAMP 28N-25HZ (wp01)

Standard Planning Report

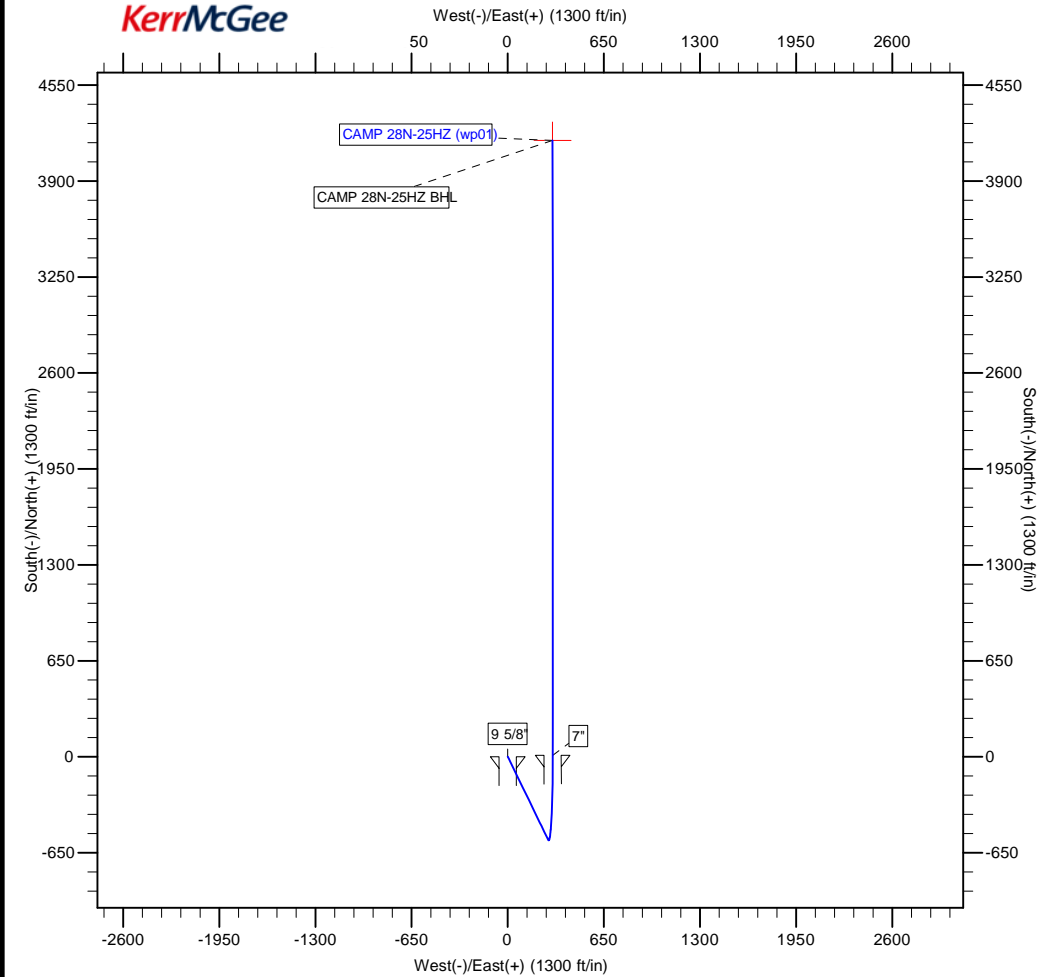
16 August, 2011





Azimuths to True North
 Magnetic North: 8.81°
 Magnetic Field
 Strength: 53014.5nT
 Dip Angle: 66.88°
 Date: 7/18/2011
 Model: IGRF2010

Project: COLORADO NORTHERN ZONE - 83
Site: WELD_CAMP PAD
Well: CAMP 28N-25HZ
Wellbore: CAMP 28N-25HZ
Section:
SHL:
Design: CAMP 28N-25HZ (wp01)
Latitude: 40.190778
Longitude: -104.727583
GL: 5002.00
KB: 17' RKB +5002' GL @ 5019.00ft



WELL DETAILS: CAMP 28N-25HZ						
+N-S	+E-W	Northing	Ground Level: Easting	5002.00 Latitude	Longitude	Slot
-0.01	0.00	1313282.84	3215787.31	40.190778	-104.727583	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)						
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
CAMP 28N-25HZ BHL	7199.00	4175.87	302.95	40.202241	-104.726498	Point

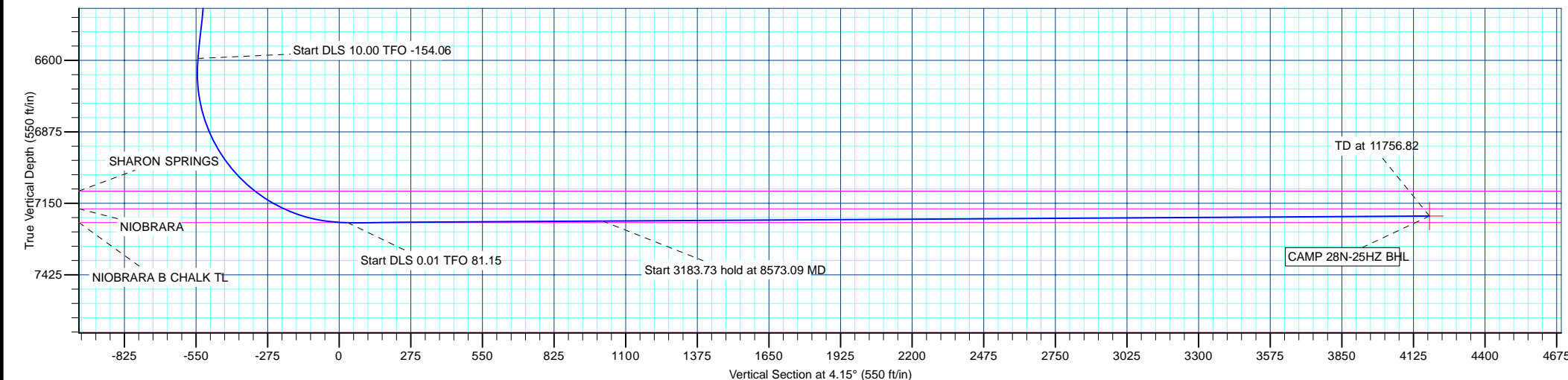
SECTION DETAILS										Target
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect		
0.00	0.00	0.00	0.00	-0.01	0.00	0.00	0.00	0.00		
1000.00	0.00	0.00	1000.00	-0.01	0.00	0.00	0.00	0.00		
1328.93	6.58	154.13	1328.20	-16.98	8.23	2.00	154.13	-16.33		
6628.36	6.58	154.13	6592.74	-563.26	273.16	0.00	0.00	-542.01		
7590.88	90.33	359.90	7224.00	10.00	304.00	10.00	-154.06	31.98		
8573.09	90.35	360.00	7218.20	992.20	303.12	0.01	81.15	1011.54		
11756.82	90.35	360.00	7199.00	4175.87	302.95	0.00	0.00	4186.85	CAMP 28N-25HZ BH	

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3301.00	3314.80	PARKMAN
4424.00	4445.24	SUSSEX
5241.00	5267.66	SHANNON
7103.00	7208.05	SHARON SPRINGS
7171.00	7339.00	NIOBRARA
7224.00	7590.88	NIOBRARA B CHALK TL

CASING DETAILS			
TVD	MD	Name	Size
850.00	850.00	9 5/8"	9-5/8
7224.00	7590.80	7"	7



Weatherford®



Database:	edm5000p	Local Co-ordinate Reference:	Well CAMP 28N-25HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB +5002' GL @ 5019.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB +5002' GL @ 5019.00ft
Site:	WELD_CAMP PAD	North Reference:	True
Well:	CAMP 28N-25HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	CAMP 28N-25HZ		
Design:	CAMP 28N-25HZ (wp01)		

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

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

Well	CAMP 28N-25HZ			
Well Position	+N/-S	116.67 ft	Northing:	1,313,282.84 ft
	+E/-W	-2,629.43 ft	Easting:	3,215,787.31 ft
Position Uncertainty		0.00 ft	Wellhead Elevation:	Latitude: 40.190778
				Longitude: -104.727583
				Ground Level: 5,002.00 ft

Wellbore	CAMP 28N-25HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/18/2011	8.81	66.88	53,014

Design	CAMP 28N-25HZ (wp01)			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	-87.00	-0.01	0.00	4.15

Plan Sections										
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	-0.01	0.00	0.00	0.00	0.00	0.00	
1,000.00	0.00	0.00	1,000.00	-0.01	0.00	0.00	0.00	0.00	0.00	
1,328.93	6.58	154.13	1,328.20	-16.98	8.23	2.00	2.00	0.00	154.13	
6,628.36	6.58	154.13	6,592.74	-563.26	273.16	0.00	0.00	0.00	0.00	
7,590.88	90.33	359.90	7,224.00	10.00	304.00	10.00	8.70	-16.02	-154.06	
8,573.09	90.35	360.00	7,218.20	992.20	303.12	0.01	0.00	0.01	81.15	
11,756.82	90.35	360.00	7,199.00	4,175.87	302.95	0.00	0.00	0.00	0.00	CAMP 28N-25HZ BHI

Database:	edm5000p	Local Co-ordinate Reference:	Well CAMP 28N-25HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB +5002' GL @ 5019.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB +5002' GL @ 5019.00ft
Site:	WELD_CAMP PAD	North Reference:	True
Well:	CAMP 28N-25HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	CAMP 28N-25HZ		
Design:	CAMP 28N-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	-0.01	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	-0.01	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	-0.01	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	-0.01	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	-0.01	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	-0.01	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	-0.01	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	-0.01	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	-0.01	0.00	0.00	0.00	0.00	0.00
850.00	0.00	0.00	850.00	-0.01	0.00	0.00	0.00	0.00	0.00
9 5/8"									
900.00	0.00	0.00	900.00	-0.01	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	-0.01	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
1,100.00	2.00	154.13	1,099.98	-1.58	0.76	-1.51	2.00	2.00	0.00
1,200.00	4.00	154.13	1,199.84	-6.29	3.05	-6.04	2.00	2.00	0.00
1,300.00	6.00	154.13	1,299.45	-14.13	6.85	-13.59	2.00	2.00	0.00
1,328.93	6.58	154.13	1,328.20	-16.98	8.23	-16.33	2.00	2.00	0.00
Start 5299.43 hold at 1328.93 MD									
1,400.00	6.58	154.13	1,398.81	-24.31	11.78	-23.38	0.00	0.00	0.00
1,500.00	6.58	154.13	1,498.15	-34.61	16.78	-33.30	0.00	0.00	0.00
1,600.00	6.58	154.13	1,597.49	-44.92	21.78	-43.22	0.00	0.00	0.00
1,700.00	6.58	154.13	1,696.83	-55.23	26.78	-53.14	0.00	0.00	0.00
1,800.00	6.58	154.13	1,796.18	-65.54	31.78	-63.06	0.00	0.00	0.00
1,900.00	6.58	154.13	1,895.52	-75.85	36.78	-72.98	0.00	0.00	0.00
2,000.00	6.58	154.13	1,994.86	-86.16	41.78	-82.90	0.00	0.00	0.00
2,100.00	6.58	154.13	2,094.20	-96.46	46.78	-92.82	0.00	0.00	0.00
2,200.00	6.58	154.13	2,193.54	-106.77	51.78	-102.74	0.00	0.00	0.00
2,300.00	6.58	154.13	2,292.88	-117.08	56.78	-112.66	0.00	0.00	0.00
2,400.00	6.58	154.13	2,392.23	-127.39	61.78	-122.58	0.00	0.00	0.00
2,500.00	6.58	154.13	2,491.57	-137.70	66.78	-132.50	0.00	0.00	0.00
2,600.00	6.58	154.13	2,590.91	-148.00	71.78	-142.42	0.00	0.00	0.00
2,700.00	6.58	154.13	2,690.25	-158.31	76.77	-152.33	0.00	0.00	0.00
2,800.00	6.58	154.13	2,789.59	-168.62	81.77	-162.25	0.00	0.00	0.00
2,900.00	6.58	154.13	2,888.93	-178.93	86.77	-172.17	0.00	0.00	0.00
3,000.00	6.58	154.13	2,988.28	-189.24	91.77	-182.09	0.00	0.00	0.00
3,100.00	6.58	154.13	3,087.62	-199.55	96.77	-192.01	0.00	0.00	0.00
3,200.00	6.58	154.13	3,186.96	-209.85	101.77	-201.93	0.00	0.00	0.00
3,300.00	6.58	154.13	3,286.30	-220.16	106.77	-211.85	0.00	0.00	0.00
3,314.80	6.58	154.13	3,301.00	-221.69	107.51	-213.32	0.00	0.00	0.00
PARKMAN									
3,400.00	6.58	154.13	3,385.64	-230.47	111.77	-221.77	0.00	0.00	0.00
3,500.00	6.58	154.13	3,484.98	-240.78	116.77	-231.69	0.00	0.00	0.00
3,600.00	6.58	154.13	3,584.32	-251.09	121.77	-241.61	0.00	0.00	0.00
3,700.00	6.58	154.13	3,683.67	-261.40	126.77	-251.53	0.00	0.00	0.00
3,800.00	6.58	154.13	3,783.01	-271.70	131.77	-261.45	0.00	0.00	0.00
3,900.00	6.58	154.13	3,882.35	-282.01	136.77	-271.37	0.00	0.00	0.00
4,000.00	6.58	154.13	3,981.69	-292.32	141.76	-281.29	0.00	0.00	0.00
4,100.00	6.58	154.13	4,081.03	-302.63	146.76	-291.21	0.00	0.00	0.00
4,200.00	6.58	154.13	4,180.37	-312.94	151.76	-301.13	0.00	0.00	0.00
4,300.00	6.58	154.13	4,279.72	-323.24	156.76	-311.05	0.00	0.00	0.00
4,400.00	6.58	154.13	4,379.06	-333.55	161.76	-320.97	0.00	0.00	0.00
4,445.24	6.58	154.13	4,424.00	-338.22	164.02	-325.45	0.00	0.00	0.00
SUSSEX									

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Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB +5002' GL @ 5019.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB +5002' GL @ 5019.00ft
Site:	WELD_CAMP PAD	North Reference:	True
Well:	CAMP 28N-25HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	CAMP 28N-25HZ		
Design:	CAMP 28N-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)
4,500.00	6.58	154.13	4,478.40	-343.86	166.76	-330.88	0.00	0.00	0.00
4,600.00	6.58	154.13	4,577.74	-354.17	171.76	-340.80	0.00	0.00	0.00
4,700.00	6.58	154.13	4,677.08	-364.48	176.76	-350.72	0.00	0.00	0.00
4,800.00	6.58	154.13	4,776.42	-374.79	181.76	-360.64	0.00	0.00	0.00
4,900.00	6.58	154.13	4,875.77	-385.09	186.76	-370.56	0.00	0.00	0.00
5,000.00	6.58	154.13	4,975.11	-395.40	191.76	-380.48	0.00	0.00	0.00
5,100.00	6.58	154.13	5,074.45	-405.71	196.76	-390.40	0.00	0.00	0.00
5,200.00	6.58	154.13	5,173.79	-416.02	201.76	-400.32	0.00	0.00	0.00
5,267.66	6.58	154.13	5,241.00	-422.99	205.14	-407.03	0.00	0.00	0.00
SHANNON									
5,300.00	6.58	154.13	5,273.13	-426.33	206.75	-410.24	0.00	0.00	0.00
5,400.00	6.58	154.13	5,372.47	-436.63	211.75	-420.16	0.00	0.00	0.00
5,500.00	6.58	154.13	5,471.81	-446.94	216.75	-430.08	0.00	0.00	0.00
5,600.00	6.58	154.13	5,571.16	-457.25	221.75	-440.00	0.00	0.00	0.00
5,700.00	6.58	154.13	5,670.50	-467.56	226.75	-449.92	0.00	0.00	0.00
5,800.00	6.58	154.13	5,769.84	-477.87	231.75	-459.84	0.00	0.00	0.00
5,900.00	6.58	154.13	5,869.18	-488.18	236.75	-469.76	0.00	0.00	0.00
6,000.00	6.58	154.13	5,968.52	-498.48	241.75	-479.68	0.00	0.00	0.00
6,100.00	6.58	154.13	6,067.86	-508.79	246.75	-489.60	0.00	0.00	0.00
6,200.00	6.58	154.13	6,167.21	-519.10	251.75	-499.51	0.00	0.00	0.00
6,300.00	6.58	154.13	6,266.55	-529.41	256.75	-509.43	0.00	0.00	0.00
6,400.00	6.58	154.13	6,365.89	-539.72	261.75	-519.35	0.00	0.00	0.00
6,500.00	6.58	154.13	6,465.23	-550.02	266.75	-529.27	0.00	0.00	0.00
6,600.00	6.58	154.13	6,564.57	-560.33	271.75	-539.19	0.00	0.00	0.00
6,628.36	6.58	154.13	6,592.74	-563.26	273.16	-542.01	0.00	0.00	0.00
Start DLS 10.00 TFO -154.06									
6,700.00	3.13	66.50	6,664.19	-566.17	276.75	-544.65	10.00	-4.81	-122.32
6,800.00	11.60	14.06	6,763.34	-555.30	281.71	-533.46	10.00	8.47	-52.43
6,900.00	21.43	7.26	6,859.11	-527.36	286.47	-505.24	10.00	9.83	-6.80
7,000.00	31.36	4.64	6,948.58	-483.19	290.90	-460.87	10.00	9.93	-2.62
7,100.00	41.33	3.19	7,029.02	-424.14	294.85	-401.68	10.00	9.96	-1.45
7,200.00	51.30	2.22	7,098.01	-352.00	298.21	-329.49	10.00	9.98	-0.97
7,208.05	52.10	2.15	7,103.00	-345.68	298.45	-323.17	10.00	9.98	-0.81
SHARON SPRINGS									
7,300.00	61.28	1.49	7,153.44	-268.96	300.87	-246.47	10.00	9.98	-0.72
7,339.00	65.18	1.25	7,171.00	-234.15	301.70	-211.70	10.00	9.98	-0.63
NIOBRARA									
7,400.00	71.27	0.89	7,193.62	-177.55	302.75	-155.17	10.00	9.99	-0.58
7,500.00	81.25	0.36	7,217.34	-80.54	303.80	-58.33	10.00	9.99	-0.53
7,590.80	90.32	359.90	7,224.00	9.92	304.00	31.90	10.00	9.99	-0.50
7"									
7,590.88	90.33	359.90	7,224.00	10.00	304.00	31.98	10.00	9.99	-0.50
Start DLS 0.01 TFO 81.15 - NIOBRARA B CHALK TL									
7,600.00	90.33	359.90	7,223.95	19.12	303.98	41.08	0.01	0.00	0.01
7,700.00	90.33	359.91	7,223.37	119.12	303.82	140.80	0.01	0.00	0.01
7,800.00	90.33	359.92	7,222.79	219.12	303.67	240.53	0.01	0.00	0.01
7,900.00	90.34	359.93	7,222.20	319.12	303.54	340.25	0.01	0.00	0.01
8,000.00	90.34	359.94	7,221.62	419.12	303.43	439.98	0.01	0.00	0.01
8,100.00	90.34	359.95	7,221.03	519.12	303.33	539.71	0.01	0.00	0.01
8,200.00	90.34	359.96	7,220.44	619.11	303.26	639.44	0.01	0.00	0.01
8,300.00	90.34	359.97	7,219.84	719.11	303.20	739.17	0.01	0.00	0.01
8,400.00	90.34	359.98	7,219.24	819.11	303.15	838.91	0.01	0.00	0.01
8,500.00	90.34	359.99	7,218.64	919.11	303.13	938.64	0.01	0.00	0.01

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Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB +5002' GL @ 5019.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB +5002' GL @ 5019.00ft
Site:	WELD_CAMP PAD	North Reference:	True
Well:	CAMP 28N-25HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	CAMP 28N-25HZ		
Design:	CAMP 28N-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)
8,573.09	90.35	360.00	7,218.20	992.20	303.12	1,011.54	0.01	0.00	0.01
Start 3183.73 hold at 8573.09 MD									
8,600.00	90.35	360.00	7,218.04	1,019.11	303.12	1,038.38	0.00	0.00	0.00
8,700.00	90.35	360.00	7,217.44	1,119.10	303.11	1,138.11	0.00	0.00	0.00
8,800.00	90.35	360.00	7,216.84	1,219.10	303.11	1,237.85	0.00	0.00	0.00
8,900.00	90.35	360.00	7,216.23	1,319.10	303.10	1,337.58	0.00	0.00	0.00
9,000.00	90.35	360.00	7,215.63	1,419.10	303.10	1,437.32	0.00	0.00	0.00
9,100.00	90.35	360.00	7,215.03	1,519.10	303.09	1,537.05	0.00	0.00	0.00
9,200.00	90.35	360.00	7,214.42	1,619.10	303.09	1,636.79	0.00	0.00	0.00
9,300.00	90.35	360.00	7,213.82	1,719.09	303.08	1,736.53	0.00	0.00	0.00
9,400.00	90.35	360.00	7,213.22	1,819.09	303.07	1,836.26	0.00	0.00	0.00
9,500.00	90.35	360.00	7,212.61	1,919.09	303.07	1,936.00	0.00	0.00	0.00
9,600.00	90.35	360.00	7,212.01	2,019.09	303.06	2,035.73	0.00	0.00	0.00
9,700.00	90.35	360.00	7,211.41	2,119.09	303.06	2,135.47	0.00	0.00	0.00
9,800.00	90.35	360.00	7,210.80	2,219.08	303.05	2,235.20	0.00	0.00	0.00
9,900.00	90.35	360.00	7,210.20	2,319.08	303.05	2,334.94	0.00	0.00	0.00
10,000.00	90.35	360.00	7,209.60	2,419.08	303.04	2,434.68	0.00	0.00	0.00
10,100.00	90.35	360.00	7,208.99	2,519.08	303.04	2,534.41	0.00	0.00	0.00
10,200.00	90.35	360.00	7,208.39	2,619.08	303.03	2,634.15	0.00	0.00	0.00
10,300.00	90.35	360.00	7,207.79	2,719.08	303.03	2,733.88	0.00	0.00	0.00
10,400.00	90.35	360.00	7,207.18	2,819.07	303.02	2,833.62	0.00	0.00	0.00
10,500.00	90.35	360.00	7,206.58	2,919.07	303.02	2,933.35	0.00	0.00	0.00
10,600.00	90.35	360.00	7,205.98	3,019.07	303.01	3,033.09	0.00	0.00	0.00
10,700.00	90.35	360.00	7,205.38	3,119.07	303.01	3,132.83	0.00	0.00	0.00
10,800.00	90.35	360.00	7,204.77	3,219.07	303.00	3,232.56	0.00	0.00	0.00
10,900.00	90.35	360.00	7,204.17	3,319.06	303.00	3,332.30	0.00	0.00	0.00
11,000.00	90.35	360.00	7,203.57	3,419.06	302.99	3,432.03	0.00	0.00	0.00
11,100.00	90.35	360.00	7,202.96	3,519.06	302.99	3,531.77	0.00	0.00	0.00
11,200.00	90.35	360.00	7,202.36	3,619.06	302.98	3,631.50	0.00	0.00	0.00
11,300.00	90.35	360.00	7,201.76	3,719.06	302.98	3,731.24	0.00	0.00	0.00
11,400.00	90.35	360.00	7,201.15	3,819.06	302.97	3,830.98	0.00	0.00	0.00
11,500.00	90.35	360.00	7,200.55	3,919.05	302.97	3,930.71	0.00	0.00	0.00
11,600.00	90.35	360.00	7,199.95	4,019.05	302.96	4,030.45	0.00	0.00	0.00
11,700.00	90.35	360.00	7,199.34	4,119.05	302.96	4,130.18	0.00	0.00	0.00
11,756.82	90.35	360.00	7,199.00	4,175.87	302.95	4,186.85	0.00	0.00	0.00
TD at 11756.82 - CAMP 28N-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 28N-25HZ BHL	0.00	0.00	7,199.00	4,175.87	302.95	1,317,461.19	3,216,053.88	40.202241	-104.726499
- plan hits target center									
- Point									

Database:	edm5000p	Local Co-ordinate Reference:	Well CAMP 28N-25HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB +5002' GL @ 5019.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB +5002' GL @ 5019.00ft
Site:	WELD_CAMP PAD	North Reference:	True
Well:	CAMP 28N-25HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	CAMP 28N-25HZ		
Design:	CAMP 28N-25HZ (wp01)		

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	
7,590.80	7,224.00	7"	7	8-3/4	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,314.80	3,301.00	PARKMAN		0.00	
4,445.24	4,424.00	SUSSEX		0.00	
5,267.66	5,241.00	SHANNON		0.00	
7,208.05	7,103.00	SHARON SPRINGS		0.00	
7,339.00	7,171.00	NIOBRARA		0.00	
7,590.88	7,224.00	NIOBRARA B CHALK TL		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	-0.01	0.00	Start Build 2.00	
1,328.93	1,328.20	-16.98	8.23	Start 5299.43 hold at 1328.93 MD	
6,628.36	6,592.74	-563.26	273.16	Start DLS 10.00 TFO -154.06	
7,590.88	7,224.00	10.00	304.00	Start DLS 0.01 TFO 81.15	
8,573.09	7,218.20	992.20	303.12	Start 3183.73 hold at 8573.09 MD	
11,756.82	7,199.00	4,175.87	302.95	TD at 11756.82	