

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

WELD_CAMP PAD

CAMP 28C-25HZ

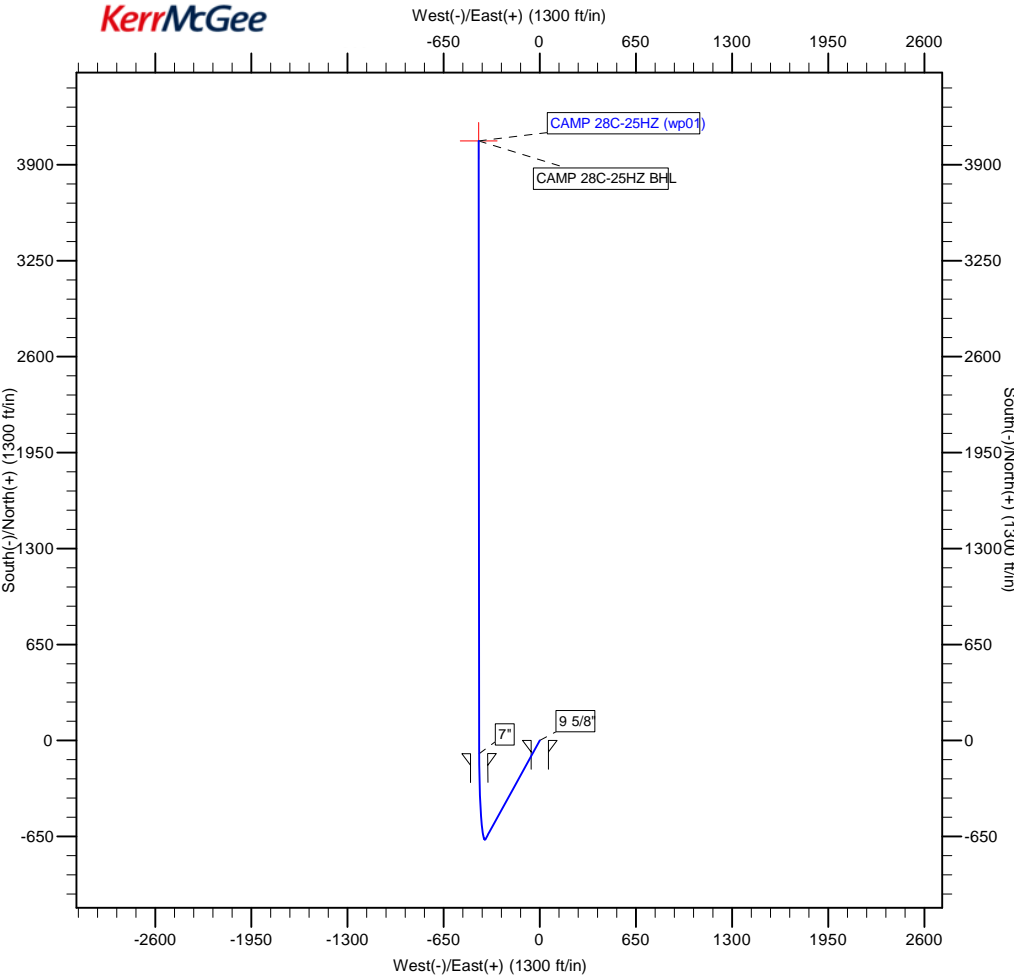
CAMP 28C-25HZ

Plan: CAMP 28C-25HZ (wp01)

Standard Planning Report

16 August, 2011





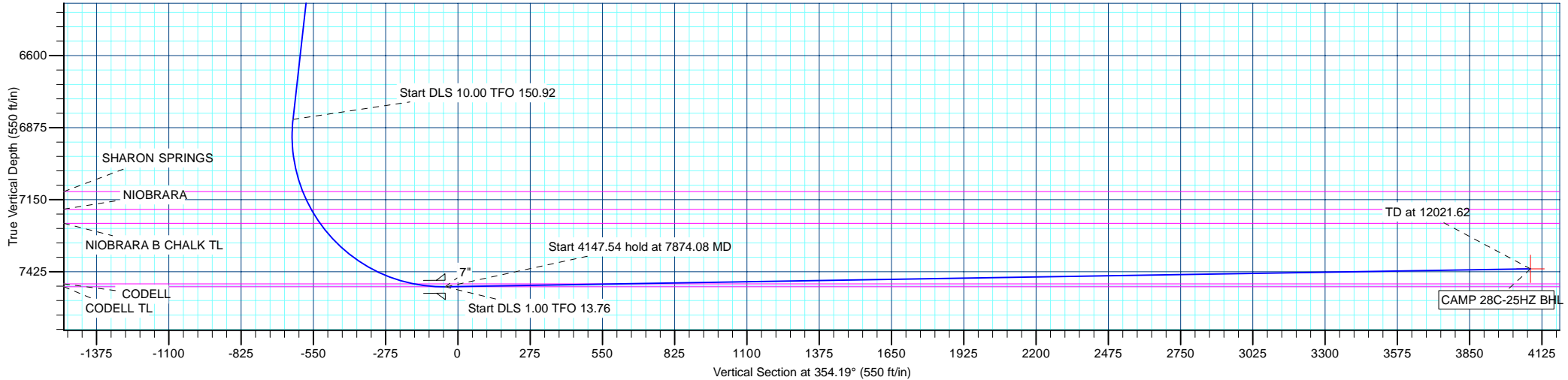
WELL DETAILS: CAMP 28C-25HZ						
+N/-S	+E/-W	Northing	Ground Level: Easting	4979.00 Latitude	40.191114 Longitude	Slot
0.00	0.00	1313416.70	3217097.83	40.191114	-104.722888	

WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)						
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
CAMP 28C-25HZ BHL	7414.00	4060.89	-413.40	40.202262	-104.724368	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	
1383.83	7.68	208.73	1382.68	-22.51	-12.34	2.00	208.73	-21.15	
6893.96	7.68	208.73	6843.43	-667.95	-366.16	0.00	0.00	-627.44	
7870.17	90.90	359.93	7482.00	-90.00	-409.00	10.00	150.92	-48.12	
7874.08	90.94	359.94	7481.94	-86.09	-409.00	1.00	13.76	-44.23	
12021.62	90.94	359.94	7414.00	4060.89	-413.40	0.00	0.00	4081.88	CAMP 28C-25HZ BHL

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3329.00	3347.75	PARKMAN
4465.00	4494.02	SUSSEX
5256.00	5292.17	SHANNON
7119.00	7175.21	SHARON SPRINGS
7187.00	7250.56	NIOBRARA
7240.00	7313.27	NIOBRARA B CHALK TL
7471.00	7748.21	CODELL
7482.00	7870.17	CODELL TL

CASING DETAILS			
TVD	MD	Name	Size
850.00	850.00	9 5/8"	9-5/8
7482.00	7870.17	7"	7



Database:	edm5000p	Local Co-ordinate Reference:	Well CAMP 28C-25HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB + 4979' GL @ 4996.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB + 4979' GL @ 4996.00ft
Site:	WELD_CAMP PAD	North Reference:	True
Well:	CAMP 28C-25HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	CAMP 28C-25HZ		
Design:	CAMP 28C-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 28C-25HZ					
Well Position	+N/-S	238.97 ft	Northing:	1,313,416.70 ft	Latitude:	40.191114
	+E/-W	-1,317.78 ft	Easting:	3,217,097.83 ft	Longitude:	-104.722888
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	4,979.00 ft

Wellbore	CAMP 28C-25HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/18/2011	8.81	66.89	53,015

Design	CAMP 28C-25HZ (wp01)			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	354.19

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	0.00	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	
1,383.83	7.68	208.73	1,382.68	-22.51	-12.34	2.00	2.00	0.00	208.73	
6,893.96	7.68	208.73	6,843.43	-667.95	-366.16	0.00	0.00	0.00	0.00	
7,870.17	90.90	359.93	7,482.00	-90.00	-409.00	10.00	8.53	15.49	150.92	
7,874.08	90.94	359.94	7,481.94	-86.09	-409.00	1.00	0.97	0.24	13.76	
12,021.62	90.94	359.94	7,414.00	4,060.89	-413.40	0.00	0.00	0.00	0.00	CAMP 28C-25HZ BHI

Database:	edm5000p	Local Co-ordinate Reference:	Well CAMP 28C-25HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB + 4979' GL @ 4996.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB + 4979' GL @ 4996.00ft
Site:	WELD_CAMP PAD	North Reference:	True
Well:	CAMP 28C-25HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	CAMP 28C-25HZ		
Design:	CAMP 28C-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	208.73	1,099.98	-1.53	-0.84	-1.44	2.00	2.00	0.00
1,200.00	4.00	208.73	1,199.84	-6.12	-3.35	-5.75	2.00	2.00	0.00
1,300.00	6.00	208.73	1,299.45	-13.76	-7.54	-12.93	2.00	2.00	0.00
1,383.83	7.68	208.73	1,382.68	-22.51	-12.34	-21.15	2.00	2.00	0.00
Start 5510.13 hold at 1383.83 MD									
1,400.00	7.68	208.73	1,398.71	-24.41	-13.38	-22.93	0.00	0.00	0.00
1,500.00	7.68	208.73	1,497.81	-36.12	-19.80	-33.93	0.00	0.00	0.00
1,600.00	7.68	208.73	1,596.92	-47.84	-26.22	-44.93	0.00	0.00	0.00
1,700.00	7.68	208.73	1,696.02	-59.55	-32.64	-55.94	0.00	0.00	0.00
1,800.00	7.68	208.73	1,795.12	-71.26	-39.06	-66.94	0.00	0.00	0.00
1,900.00	7.68	208.73	1,894.23	-82.98	-45.49	-77.94	0.00	0.00	0.00
2,000.00	7.68	208.73	1,993.33	-94.69	-51.91	-88.95	0.00	0.00	0.00
2,100.00	7.68	208.73	2,092.43	-106.40	-58.33	-99.95	0.00	0.00	0.00
2,200.00	7.68	208.73	2,191.54	-118.12	-64.75	-110.95	0.00	0.00	0.00
2,300.00	7.68	208.73	2,290.64	-129.83	-71.17	-121.96	0.00	0.00	0.00
2,400.00	7.68	208.73	2,389.75	-141.54	-77.59	-132.96	0.00	0.00	0.00
2,500.00	7.68	208.73	2,488.85	-153.26	-84.01	-143.96	0.00	0.00	0.00
2,600.00	7.68	208.73	2,587.95	-164.97	-90.43	-154.96	0.00	0.00	0.00
2,700.00	7.68	208.73	2,687.06	-176.69	-96.86	-165.97	0.00	0.00	0.00
2,800.00	7.68	208.73	2,786.16	-188.40	-103.28	-176.97	0.00	0.00	0.00
2,900.00	7.68	208.73	2,885.26	-200.11	-109.70	-187.97	0.00	0.00	0.00
3,000.00	7.68	208.73	2,984.37	-211.83	-116.12	-198.98	0.00	0.00	0.00
3,100.00	7.68	208.73	3,083.47	-223.54	-122.54	-209.98	0.00	0.00	0.00
3,200.00	7.68	208.73	3,182.58	-235.25	-128.96	-220.98	0.00	0.00	0.00
3,300.00	7.68	208.73	3,281.68	-246.97	-135.38	-231.99	0.00	0.00	0.00
3,347.75	7.68	208.73	3,329.00	-252.56	-138.45	-237.24	0.00	0.00	0.00
PARKMAN									
3,400.00	7.68	208.73	3,380.78	-258.68	-141.80	-242.99	0.00	0.00	0.00
3,500.00	7.68	208.73	3,479.89	-270.40	-148.23	-253.99	0.00	0.00	0.00
3,600.00	7.68	208.73	3,578.99	-282.11	-154.65	-265.00	0.00	0.00	0.00
3,700.00	7.68	208.73	3,678.09	-293.82	-161.07	-276.00	0.00	0.00	0.00
3,800.00	7.68	208.73	3,777.20	-305.54	-167.49	-287.00	0.00	0.00	0.00
3,900.00	7.68	208.73	3,876.30	-317.25	-173.91	-298.01	0.00	0.00	0.00
4,000.00	7.68	208.73	3,975.41	-328.96	-180.33	-309.01	0.00	0.00	0.00
4,100.00	7.68	208.73	4,074.51	-340.68	-186.75	-320.01	0.00	0.00	0.00
4,200.00	7.68	208.73	4,173.61	-352.39	-193.17	-331.02	0.00	0.00	0.00
4,300.00	7.68	208.73	4,272.72	-364.10	-199.60	-342.02	0.00	0.00	0.00
4,400.00	7.68	208.73	4,371.82	-375.82	-206.02	-353.02	0.00	0.00	0.00
4,494.02	7.68	208.73	4,465.00	-386.83	-212.05	-363.37	0.00	0.00	0.00
SUSSEX									

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Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB + 4979' GL @ 4996.00ft
Site:	WELD_CAMP PAD	North Reference:	True
Well:	CAMP 28C-25HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	CAMP 28C-25HZ		
Design:	CAMP 28C-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	7.68	208.73	4,470.92	-387.53	-212.44	-364.02	0.00	0.00	0.00
4,600.00	7.68	208.73	4,570.03	-399.25	-218.86	-375.03	0.00	0.00	0.00
4,700.00	7.68	208.73	4,669.13	-410.96	-225.28	-386.03	0.00	0.00	0.00
4,800.00	7.68	208.73	4,768.24	-422.67	-231.70	-397.03	0.00	0.00	0.00
4,900.00	7.68	208.73	4,867.34	-434.39	-238.12	-408.04	0.00	0.00	0.00
5,000.00	7.68	208.73	4,966.44	-446.10	-244.54	-419.04	0.00	0.00	0.00
5,100.00	7.68	208.73	5,065.55	-457.81	-250.96	-430.04	0.00	0.00	0.00
5,200.00	7.68	208.73	5,164.65	-469.53	-257.39	-441.05	0.00	0.00	0.00
5,292.18	7.68	208.73	5,256.00	-480.32	-263.30	-451.19	0.00	0.00	0.00
SHANNON									
5,300.00	7.68	208.73	5,263.76	-481.24	-263.81	-452.05	0.00	0.00	0.00
5,400.00	7.68	208.73	5,362.86	-492.96	-270.23	-463.05	0.00	0.00	0.00
5,500.00	7.68	208.73	5,461.96	-504.67	-276.65	-474.06	0.00	0.00	0.00
5,600.00	7.68	208.73	5,561.07	-516.38	-283.07	-485.06	0.00	0.00	0.00
5,700.00	7.68	208.73	5,660.17	-528.10	-289.49	-496.06	0.00	0.00	0.00
5,800.00	7.68	208.73	5,759.27	-539.81	-295.91	-507.07	0.00	0.00	0.00
5,900.00	7.68	208.73	5,858.38	-551.52	-302.33	-518.07	0.00	0.00	0.00
6,000.00	7.68	208.73	5,957.48	-563.24	-308.76	-529.07	0.00	0.00	0.00
6,100.00	7.68	208.73	6,056.59	-574.95	-315.18	-540.07	0.00	0.00	0.00
6,200.00	7.68	208.73	6,155.69	-586.66	-321.60	-551.08	0.00	0.00	0.00
6,300.00	7.68	208.73	6,254.79	-598.38	-328.02	-562.08	0.00	0.00	0.00
6,400.00	7.68	208.73	6,353.90	-610.09	-334.44	-573.08	0.00	0.00	0.00
6,500.00	7.68	208.73	6,453.00	-621.81	-340.86	-584.09	0.00	0.00	0.00
6,600.00	7.68	208.73	6,552.10	-633.52	-347.28	-595.09	0.00	0.00	0.00
6,700.00	7.68	208.73	6,651.21	-645.23	-353.70	-606.09	0.00	0.00	0.00
6,800.00	7.68	208.73	6,750.31	-656.95	-360.13	-617.10	0.00	0.00	0.00
6,893.96	7.68	208.73	6,843.43	-667.95	-366.16	-627.44	0.00	0.00	0.00
Start DLS 10.00 TFO 150.92									
6,900.00	7.15	211.09	6,849.42	-668.63	-366.55	-628.07	10.00	-8.64	39.03
7,000.00	5.38	316.16	6,949.06	-670.59	-373.03	-629.36	10.00	-1.78	105.08
7,100.00	14.37	345.16	7,047.53	-655.17	-379.47	-613.38	10.00	8.99	28.99
7,175.21	21.71	350.47	7,119.00	-632.40	-384.17	-590.24	10.00	9.77	7.06
SHARON SPRINGS									
7,200.00	24.16	351.53	7,141.83	-622.86	-385.67	-580.60	10.00	9.86	4.29
7,250.56	29.16	353.18	7,187.00	-600.38	-388.66	-557.93	10.00	9.89	3.25
NIOBRARA									
7,300.00	34.06	354.35	7,229.09	-574.63	-391.46	-532.03	10.00	9.92	2.38
7,313.27	35.38	354.62	7,240.00	-567.10	-392.19	-524.47	10.00	9.93	2.00
NIOBRARA B CHALK TL									
7,400.00	44.01	356.01	7,306.67	-511.95	-396.65	-469.14	10.00	9.95	1.61
7,500.00	53.97	357.16	7,372.20	-436.71	-401.08	-393.85	10.00	9.96	1.15
7,600.00	63.94	358.05	7,423.70	-351.21	-404.62	-308.43	10.00	9.97	0.89
7,700.00	73.92	358.80	7,459.61	-258.05	-407.17	-215.49	10.00	9.98	0.75
7,748.21	78.73	359.13	7,471.00	-211.23	-408.01	-168.82	10.00	9.98	0.69
CODELL									
7,800.00	83.90	359.47	7,478.82	-160.06	-408.64	-117.85	10.00	9.98	0.66
7,870.17	90.90	359.93	7,482.00	-90.00	-409.00	-48.12	10.00	9.98	0.65
Start DLS 1.00 TFO 13.76 - CODELL TL - 7"									
7,874.08	90.94	359.94	7,481.94	-86.09	-409.00	-44.23	1.01	0.98	0.24
Start 4147.54 hold at 7874.08 MD									
7,900.00	90.94	359.94	7,481.51	-60.18	-409.03	-18.44	0.00	0.00	0.00
8,000.00	90.94	359.94	7,479.87	39.81	-409.14	81.04	0.00	0.00	0.00
8,100.00	90.94	359.94	7,478.24	139.80	-409.24	180.52	0.00	0.00	0.00

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Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB + 4979' GL @ 4996.00ft
Site:	WELD_CAMP PAD	North Reference:	True
Well:	CAMP 28C-25HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	CAMP 28C-25HZ		
Design:	CAMP 28C-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)
8,200.00	90.94	359.94	7,476.60	239.78	-409.35	280.01	0.00	0.00	0.00
8,300.00	90.94	359.94	7,474.96	339.77	-409.46	379.49	0.00	0.00	0.00
8,400.00	90.94	359.94	7,473.32	439.76	-409.56	478.97	0.00	0.00	0.00
8,500.00	90.94	359.94	7,471.68	539.74	-409.67	578.46	0.00	0.00	0.00
8,600.00	90.94	359.94	7,470.05	639.73	-409.77	677.94	0.00	0.00	0.00
8,700.00	90.94	359.94	7,468.41	739.72	-409.88	777.42	0.00	0.00	0.00
8,800.00	90.94	359.94	7,466.77	839.70	-409.99	876.91	0.00	0.00	0.00
8,900.00	90.94	359.94	7,465.13	939.69	-410.09	976.39	0.00	0.00	0.00
9,000.00	90.94	359.94	7,463.49	1,039.68	-410.20	1,075.87	0.00	0.00	0.00
9,100.00	90.94	359.94	7,461.86	1,139.66	-410.30	1,175.36	0.00	0.00	0.00
9,200.00	90.94	359.94	7,460.22	1,239.65	-410.41	1,274.84	0.00	0.00	0.00
9,300.00	90.94	359.94	7,458.58	1,339.63	-410.51	1,374.32	0.00	0.00	0.00
9,400.00	90.94	359.94	7,456.94	1,439.62	-410.62	1,473.81	0.00	0.00	0.00
9,500.00	90.94	359.94	7,455.30	1,539.61	-410.73	1,573.29	0.00	0.00	0.00
9,600.00	90.94	359.94	7,453.67	1,639.59	-410.83	1,672.77	0.00	0.00	0.00
9,700.00	90.94	359.94	7,452.03	1,739.58	-410.94	1,772.25	0.00	0.00	0.00
9,800.00	90.94	359.94	7,450.39	1,839.57	-411.04	1,871.74	0.00	0.00	0.00
9,900.00	90.94	359.94	7,448.75	1,939.55	-411.15	1,971.22	0.00	0.00	0.00
10,000.00	90.94	359.94	7,447.11	2,039.54	-411.26	2,070.70	0.00	0.00	0.00
10,100.00	90.94	359.94	7,445.48	2,139.53	-411.36	2,170.19	0.00	0.00	0.00
10,200.00	90.94	359.94	7,443.84	2,239.51	-411.47	2,269.67	0.00	0.00	0.00
10,300.00	90.94	359.94	7,442.20	2,339.50	-411.57	2,369.15	0.00	0.00	0.00
10,400.00	90.94	359.94	7,440.56	2,439.49	-411.68	2,468.64	0.00	0.00	0.00
10,500.00	90.94	359.94	7,438.92	2,539.47	-411.79	2,568.12	0.00	0.00	0.00
10,600.00	90.94	359.94	7,437.29	2,639.46	-411.89	2,667.60	0.00	0.00	0.00
10,700.00	90.94	359.94	7,435.65	2,739.45	-412.00	2,767.09	0.00	0.00	0.00
10,800.00	90.94	359.94	7,434.01	2,839.43	-412.10	2,866.57	0.00	0.00	0.00
10,900.00	90.94	359.94	7,432.37	2,939.42	-412.21	2,966.05	0.00	0.00	0.00
11,000.00	90.94	359.94	7,430.73	3,039.41	-412.32	3,065.54	0.00	0.00	0.00
11,100.00	90.94	359.94	7,429.10	3,139.39	-412.42	3,165.02	0.00	0.00	0.00
11,200.00	90.94	359.94	7,427.46	3,239.38	-412.53	3,264.50	0.00	0.00	0.00
11,300.00	90.94	359.94	7,425.82	3,339.37	-412.63	3,363.99	0.00	0.00	0.00
11,400.00	90.94	359.94	7,424.18	3,439.35	-412.74	3,463.47	0.00	0.00	0.00
11,500.00	90.94	359.94	7,422.54	3,539.34	-412.85	3,562.95	0.00	0.00	0.00
11,600.00	90.94	359.94	7,420.91	3,639.33	-412.95	3,662.44	0.00	0.00	0.00
11,700.00	90.94	359.94	7,419.27	3,739.31	-413.06	3,761.92	0.00	0.00	0.00
11,800.00	90.94	359.94	7,417.63	3,839.30	-413.16	3,861.40	0.00	0.00	0.00
11,900.00	90.94	359.94	7,415.99	3,939.28	-413.27	3,960.88	0.00	0.00	0.00
12,000.00	90.94	359.94	7,414.35	4,039.27	-413.37	4,060.37	0.00	0.00	0.00
12,021.62	90.94	359.94	7,414.00	4,060.89	-413.40	4,081.88	0.00	0.00	0.00
TD at 12021.62 - CAMP 28C-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 28C-25HZ BHL	0.00	0.00	7,414.00	4,060.89	-413.40	1,317,473.81	3,216,648.86	40.202262	-104.724368
- plan hits target center									
- Point									

Database:	edm5000p	Local Co-ordinate Reference:	Well CAMP 28C-25HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	17' RKB + 4979' GL @ 4996.00ft
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	17' RKB + 4979' GL @ 4996.00ft
Site:	WELD_CAMP PAD	North Reference:	True
Well:	CAMP 28C-25HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	CAMP 28C-25HZ		
Design:	CAMP 28C-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
7,870.17	7,482.00	7"		7	8-3/4

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,347.75	3,329.00	PARKMAN		0.00	
4,494.02	4,465.00	SUSSEX		0.00	
5,292.18	5,256.00	SHANNON		0.00	
7,175.21	7,119.00	SHARON SPRINGS		0.00	
7,250.56	7,187.00	NIOBRARA		0.00	
7,313.27	7,240.00	NIOBRARA B CHALK TL		0.00	
7,748.21	7,471.00	CODELL		0.00	
7,870.17	7,482.00	CODELL TL		0.00	

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,000.00	1,000.00	0.00	0.00	Start Build 2.00
1,383.83	1,382.68	-22.51	-12.34	Start 5510.13 hold at 1383.83 MD
6,893.96	6,843.43	-667.95	-366.16	Start DLS 10.00 TFO 150.92
7,870.17	7,482.00	-90.00	-409.00	Start DLS 1.00 TFO 13.76
7,874.08	7,481.94	-86.09	-409.00	Start 4147.54 hold at 7874.08 MD
12,021.62	7,414.00	4,060.89	-413.40	TD at 12021.62