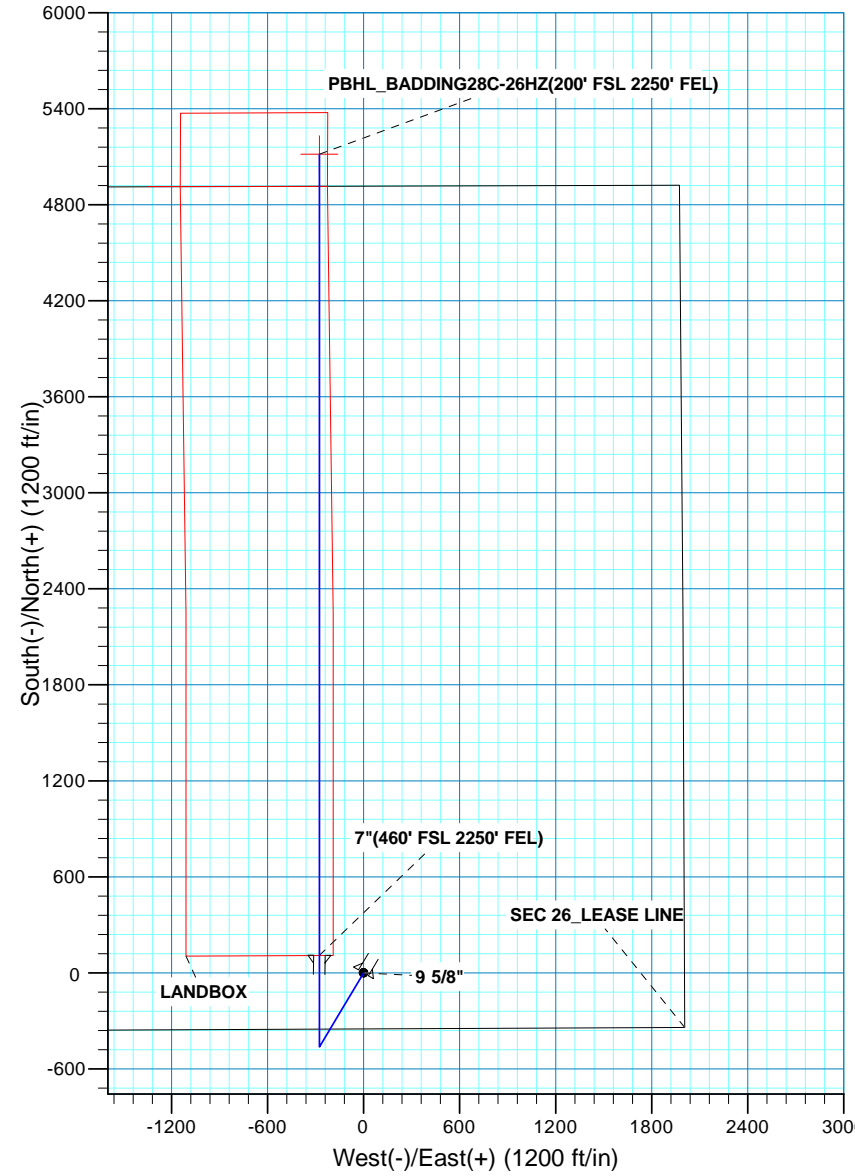
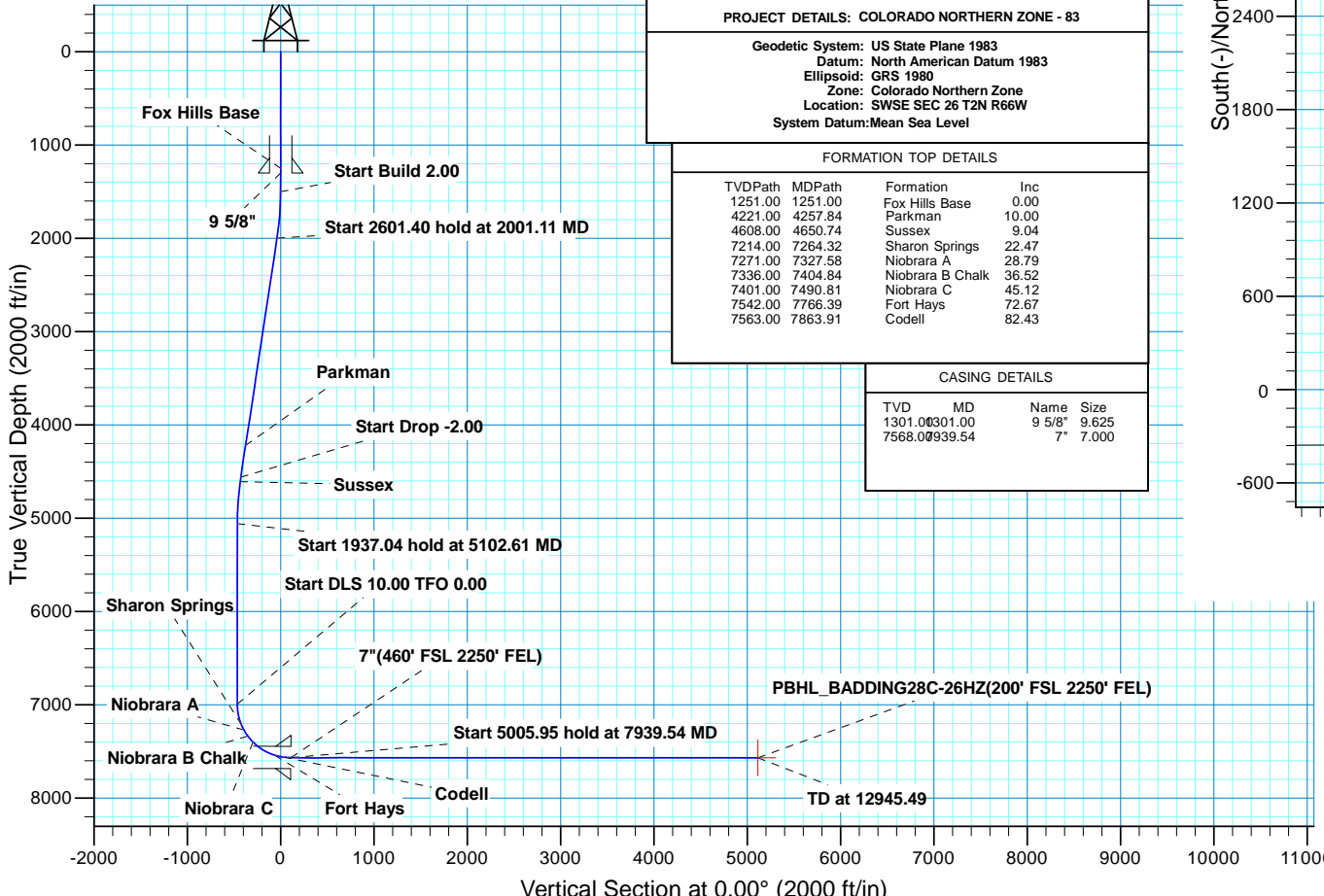


WELL DETAILS: BADDING 28C-26HZ										
GL 5112' & KB 17' @ 5129.00ft (ASSUMED)										
		+N/-S	+E/-W	Northing	Easting	Latitude	Longitude			
		0.00	0.00	1281268.65	3212023.08	40.1029869	-104.7420360			
SECTION DETAILS										
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Target	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
1501.00	0.00	0.00	1501.00	0.00	0.00	0.00	0.00	0.00		Start Build 2.00
2001.11	10.00	210.81	1998.57	-37.40	-22.30	2.00	210.81	-37.40		Start 2601.40 hold at 2001.11 MD
4602.50	10.00	210.81	4560.43	-425.44	-253.74	0.00	0.00	-425.44		Start Drop -2.00
5102.61	0.00	0.00	5058.00	-462.84	-276.04	2.00	180.00	-462.84		Start 1937.04 hold at 5102.61 MD
7039.65	0.00	0.00	6995.04	-462.84	-276.04	0.00	0.00	-462.84		Start DLS 10.00 TFO 0.00
7939.54	89.99	0.00	7568.00	110.00	-276.04	10.00	0.00	110.00		Start 5005.95 hold at 7939.54 MD
12945.49	89.99	0.00	7569.00	5115.95	-276.04	0.00	0.00	5115.95	PBHL_BADDING28C-26HZ	TD at 12945.49
DESIGN TARGET DETAILS										
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape Point		
PBHL 7569.00		5115.95	-276.04	1286382.05	3211703.33	40.1170310	-104.7430230			

PROJECT DETAILS: COLORADO NORTHERN ZONE - 83
Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
Location: SWSE SEC 26 T2N R66W
System Datum: Mean Sea Level

FORMATION TOP DETAILS			
TVDPATH	MDPATH	FORMATION	INC
1251.00	1251.00	Fox Hills Base	0.00
4221.00	4257.84	Parkman	10.00
4608.00	4650.74	Sussex	9.04
7214.00	7264.32	Sharon Springs	22.47
7271.00	7327.58	Niobrara A	28.79
7336.00	7404.84	Niobrara B Chalk	36.52
7401.00	7490.81	Niobrara C	45.12
7542.00	7766.39	Fort Hays	72.67
7563.00	7863.91	Codell	82.43

CASING DETAILS			
TVD	MD	Name	Size
1301.00	0301.00	9 5/8"	9.625
7568.00	0939.54	7"	7.000





Scientific Drilling

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

BADDING 15-26HZ

BADDING 28C-26HZ

OH

Plan: PLAN #1 PRELIMINARY

Standard Planning Report

24 September, 2013

Database:	Denver Sales Office	Local Co-ordinate Reference:	Well BADDING 28C-26HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5112' & KB 17' @ 5129.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5112' & KB 17' @ 5129.00ft (ASSUMED)
Site:	BADDING 15-26HZ	North Reference:	True
Well:	BADDING 28C-26HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

Project	COLORADO NORTHERN ZONE - 83, KERR MCGEE OIL & GAS ONSHORE LP		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	BADDING 15-26HZ, SWSE SEC 26 T2N R66W				
Site Position:	Northing:	1,281,268.67 usft	Latitude:	40.1029870	
From:	Lat/Long	Easting:	3,212,023.08 usft	Longitude:	-104.7420360
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.49 °

Well	BADDING 28C-26HZ, 350 FSL 2005 FEL					
Well Position	+N/-S	-0.02 ft	Northing:	1,281,268.65 usft	Latitude:	40.1029870
	+E/-W	0.00 ft	Easting:	3,212,023.08 usft	Longitude:	-104.7420360
Position Uncertainty		0.00 ft	Wellhead Elevation:		Ground Level:	5,112.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2013	7/29/2013	8.57	66.73	52,682

Design	PLAN #1 PRELIMINARY			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	0.00

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	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	
1,501.00	0.00	0.00	1,501.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,001.11	10.00	210.81	1,998.57	-37.40	-22.30	2.00	2.00	0.00	210.81	
4,602.50	10.00	210.81	4,560.43	-425.44	-253.74	0.00	0.00	0.00	0.00	
5,102.61	0.00	0.00	5,058.00	-462.84	-276.04	2.00	-2.00	0.00	180.00	
7,039.65	0.00	0.00	6,995.04	-462.84	-276.04	0.00	0.00	0.00	0.00	
7,939.54	89.99	0.00	7,568.00	110.00	-276.04	10.00	10.00	0.00	0.00	
12,945.49	89.99	0.00	7,569.00	5,115.95	-276.04	0.00	0.00	0.00	0.00	PBHL_BADDING28C

Database:	Denver Sales Office	Local Co-ordinate Reference:	Well BADDING 28C-26HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5112' & KB 17' @ 5129.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5112' & KB 17' @ 5129.00ft (ASSUMED)
Site:	BADDING 15-26HZ	North Reference:	True
Well:	BADDING 28C-26HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	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
300.00	0.00	0.00	300.00	0.00	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	0.00
500.00	0.00	0.00	500.00	0.00	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	0.00
700.00	0.00	0.00	700.00	0.00	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	0.00
900.00	0.00	0.00	900.00	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	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,251.00	0.00	0.00	1,251.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fox Hills Base										
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,301.00	0.00	0.00	1,301.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9 5/8"										
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1,501.00	0.00	0.00	1,501.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00										
1,600.00	1.98	210.81	1,599.98	-1.47	-0.88	-1.47	2.00	2.00	0.00	0.00
1,700.00	3.98	210.81	1,699.84	-5.93	-3.54	-5.93	2.00	2.00	0.00	0.00
1,800.00	5.98	210.81	1,799.46	-13.39	-7.99	-13.39	2.00	2.00	0.00	0.00
1,900.00	7.98	210.81	1,898.71	-23.83	-14.21	-23.83	2.00	2.00	0.00	0.00
2,000.00	9.98	210.81	1,997.48	-37.23	-22.20	-37.23	2.00	2.00	0.00	0.00
2,001.11	10.00	210.81	1,998.57	-37.40	-22.30	-37.40	2.00	2.00	0.00	0.00
Start 2601.40 hold at 2001.11 MD										
2,100.00	10.00	210.81	2,095.96	-52.15	-31.10	-52.15	0.00	0.00	0.00	0.00
2,200.00	10.00	210.81	2,194.44	-67.06	-40.00	-67.06	0.00	0.00	0.00	0.00
2,300.00	10.00	210.81	2,292.92	-81.98	-48.89	-81.98	0.00	0.00	0.00	0.00
2,400.00	10.00	210.81	2,391.40	-96.90	-57.79	-96.90	0.00	0.00	0.00	0.00
2,500.00	10.00	210.81	2,489.88	-111.82	-66.69	-111.82	0.00	0.00	0.00	0.00
2,600.00	10.00	210.81	2,588.36	-126.73	-75.58	-126.73	0.00	0.00	0.00	0.00
2,700.00	10.00	210.81	2,686.84	-141.65	-84.48	-141.65	0.00	0.00	0.00	0.00
2,800.00	10.00	210.81	2,785.32	-156.57	-93.38	-156.57	0.00	0.00	0.00	0.00
2,900.00	10.00	210.81	2,883.80	-171.48	-102.27	-171.48	0.00	0.00	0.00	0.00
3,000.00	10.00	210.81	2,982.28	-186.40	-111.17	-186.40	0.00	0.00	0.00	0.00
3,100.00	10.00	210.81	3,080.76	-201.32	-120.07	-201.32	0.00	0.00	0.00	0.00
3,200.00	10.00	210.81	3,179.24	-216.23	-128.96	-216.23	0.00	0.00	0.00	0.00
3,300.00	10.00	210.81	3,277.72	-231.15	-137.86	-231.15	0.00	0.00	0.00	0.00
3,400.00	10.00	210.81	3,376.20	-246.07	-146.75	-246.07	0.00	0.00	0.00	0.00
3,500.00	10.00	210.81	3,474.68	-260.98	-155.65	-260.98	0.00	0.00	0.00	0.00
3,600.00	10.00	210.81	3,573.16	-275.90	-164.55	-275.90	0.00	0.00	0.00	0.00
3,700.00	10.00	210.81	3,671.64	-290.82	-173.44	-290.82	0.00	0.00	0.00	0.00
3,800.00	10.00	210.81	3,770.12	-305.74	-182.34	-305.74	0.00	0.00	0.00	0.00
3,900.00	10.00	210.81	3,868.60	-320.65	-191.24	-320.65	0.00	0.00	0.00	0.00
4,000.00	10.00	210.81	3,967.08	-335.57	-200.13	-335.57	0.00	0.00	0.00	0.00
4,100.00	10.00	210.81	4,065.56	-350.49	-209.03	-350.49	0.00	0.00	0.00	0.00
4,200.00	10.00	210.81	4,164.04	-365.40	-217.93	-365.40	0.00	0.00	0.00	0.00
4,257.84	10.00	210.81	4,221.00	-374.03	-223.07	-374.03	0.00	0.00	0.00	0.00
Parkman										
4,300.00	10.00	210.81	4,262.52	-380.32	-226.82	-380.32	0.00	0.00	0.00	0.00

Database:	Denver Sales Office	Local Co-ordinate Reference:	Well BADDING 28C-26HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5112' & KB 17' @ 5129.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5112' & KB 17' @ 5129.00ft (ASSUMED)
Site:	BADDING 15-26HZ	North Reference:	True
Well:	BADDING 28C-26HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,400.00	10.00	210.81	4,361.00	-395.24	-235.72	-395.24	0.00	0.00	0.00
4,500.00	10.00	210.81	4,459.48	-410.15	-244.62	-410.15	0.00	0.00	0.00
4,600.00	10.00	210.81	4,557.96	-425.07	-253.51	-425.07	0.00	0.00	0.00
4,602.50	10.00	210.81	4,560.43	-425.44	-253.74	-425.44	0.00	0.00	0.00
Start Drop -2.00									
4,650.74	9.04	210.81	4,608.00	-432.30	-257.82	-432.30	2.00	-2.00	0.00
Sussex									
4,700.00	8.05	210.81	4,656.71	-438.58	-261.57	-438.58	2.00	-2.00	0.00
4,800.00	6.05	210.81	4,755.95	-449.13	-267.86	-449.13	2.00	-2.00	0.00
4,900.00	4.05	210.81	4,855.56	-456.69	-272.37	-456.69	2.00	-2.00	0.00
5,000.00	2.05	210.81	4,955.41	-461.26	-275.10	-461.26	2.00	-2.00	0.00
5,100.00	0.05	210.81	5,055.39	-462.84	-276.04	-462.84	2.00	-2.00	0.00
5,102.61	0.00	0.00	5,058.00	-462.84	-276.04	-462.84	2.00	-2.00	0.00
Start 1937.04 hold at 5102.61 MD									
5,200.00	0.00	0.00	5,155.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
5,300.00	0.00	0.00	5,255.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
5,400.00	0.00	0.00	5,355.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
5,500.00	0.00	0.00	5,455.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
5,600.00	0.00	0.00	5,555.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
5,700.00	0.00	0.00	5,655.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
5,800.00	0.00	0.00	5,755.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
5,900.00	0.00	0.00	5,855.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
6,000.00	0.00	0.00	5,955.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
6,100.00	0.00	0.00	6,055.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
6,200.00	0.00	0.00	6,155.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
6,300.00	0.00	0.00	6,255.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
6,400.00	0.00	0.00	6,355.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
6,500.00	0.00	0.00	6,455.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
6,600.00	0.00	0.00	6,555.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
6,700.00	0.00	0.00	6,655.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
6,800.00	0.00	0.00	6,755.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
6,900.00	0.00	0.00	6,855.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
7,000.00	0.00	0.00	6,955.39	-462.84	-276.04	-462.84	0.00	0.00	0.00
7,039.65	0.00	0.00	6,995.04	-462.84	-276.04	-462.84	0.00	0.00	0.00
Start DLS 10.00 TFO 0.00									
7,100.00	6.03	0.00	7,055.28	-459.66	-276.04	-459.66	10.00	10.00	0.00
7,200.00	16.03	0.00	7,153.30	-440.55	-276.04	-440.55	10.00	10.00	0.00
7,264.32	22.47	0.00	7,214.00	-419.35	-276.04	-419.35	10.00	10.00	0.00
Sharon Springs									
7,300.00	26.03	0.00	7,246.52	-404.70	-276.04	-404.70	10.00	10.00	0.00
7,327.58	28.79	0.00	7,271.00	-392.00	-276.04	-392.00	10.00	10.00	0.00
Niobrara A									
7,400.00	36.03	0.00	7,332.10	-353.21	-276.04	-353.21	10.00	10.00	0.00
7,404.84	36.52	0.00	7,336.00	-350.35	-276.04	-350.35	10.00	10.00	0.00
Niobrara B Chalk									
7,490.81	45.12	0.00	7,401.00	-294.21	-276.04	-294.21	10.00	10.00	0.00
Niobrara C									
7,500.00	46.03	0.00	7,407.43	-287.64	-276.04	-287.64	10.00	10.00	0.00
7,600.00	56.03	0.00	7,470.24	-209.99	-276.04	-209.99	10.00	10.00	0.00
7,700.00	66.03	0.00	7,518.61	-122.61	-276.04	-122.61	10.00	10.00	0.00
7,766.39	72.67	0.00	7,542.00	-60.52	-276.04	-60.52	10.00	10.00	0.00
Fort Hays									
7,800.00	76.03	0.00	7,551.06	-28.15	-276.04	-28.15	10.00	10.00	0.00

Database:	Denver Sales Office	Local Co-ordinate Reference:	Well BADDING 28C-26HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5112' & KB 17' @ 5129.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5112' & KB 17' @ 5129.00ft (ASSUMED)
Site:	BADDING 15-26HZ	North Reference:	True
Well:	BADDING 28C-26HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,863.91	82.43	0.00	7,563.00	34.60	-276.04	34.60	10.00	10.00	0.00
Codell									
7,900.00	86.03	0.00	7,566.63	70.50	-276.04	70.50	10.00	10.00	0.00
7,939.54	89.99	0.00	7,568.00	110.01	-276.04	110.01	10.00	10.00	0.00
Start 5005.95 hold at 7939.54 MD - 7"(460' FSL 2250' FEL)									
8,000.00	89.99	0.00	7,568.01	170.47	-276.04	170.47	0.00	0.00	0.00
8,100.00	89.99	0.00	7,568.03	270.47	-276.04	270.47	0.00	0.00	0.00
8,200.00	89.99	0.00	7,568.05	370.47	-276.04	370.47	0.00	0.00	0.00
8,300.00	89.99	0.00	7,568.07	470.47	-276.04	470.47	0.00	0.00	0.00
8,400.00	89.99	0.00	7,568.09	570.47	-276.04	570.47	0.00	0.00	0.00
8,500.00	89.99	0.00	7,568.11	670.47	-276.04	670.47	0.00	0.00	0.00
8,600.00	89.99	0.00	7,568.13	770.47	-276.04	770.47	0.00	0.00	0.00
8,700.00	89.99	0.00	7,568.15	870.47	-276.04	870.47	0.00	0.00	0.00
8,800.00	89.99	0.00	7,568.17	970.47	-276.04	970.47	0.00	0.00	0.00
8,900.00	89.99	0.00	7,568.19	1,070.47	-276.04	1,070.47	0.00	0.00	0.00
9,000.00	89.99	0.00	7,568.21	1,170.47	-276.04	1,170.47	0.00	0.00	0.00
9,100.00	89.99	0.00	7,568.23	1,270.47	-276.04	1,270.47	0.00	0.00	0.00
9,200.00	89.99	0.00	7,568.25	1,370.47	-276.04	1,370.47	0.00	0.00	0.00
9,300.00	89.99	0.00	7,568.27	1,470.47	-276.04	1,470.47	0.00	0.00	0.00
9,400.00	89.99	0.00	7,568.29	1,570.47	-276.04	1,570.47	0.00	0.00	0.00
9,500.00	89.99	0.00	7,568.31	1,670.47	-276.04	1,670.47	0.00	0.00	0.00
9,600.00	89.99	0.00	7,568.33	1,770.47	-276.04	1,770.47	0.00	0.00	0.00
9,700.00	89.99	0.00	7,568.35	1,870.47	-276.04	1,870.47	0.00	0.00	0.00
9,800.00	89.99	0.00	7,568.37	1,970.47	-276.04	1,970.47	0.00	0.00	0.00
9,900.00	89.99	0.00	7,568.39	2,070.47	-276.04	2,070.47	0.00	0.00	0.00
10,000.00	89.99	0.00	7,568.41	2,170.47	-276.04	2,170.47	0.00	0.00	0.00
10,100.00	89.99	0.00	7,568.43	2,270.47	-276.04	2,270.47	0.00	0.00	0.00
10,200.00	89.99	0.00	7,568.45	2,370.47	-276.04	2,370.47	0.00	0.00	0.00
10,300.00	89.99	0.00	7,568.47	2,470.47	-276.04	2,470.47	0.00	0.00	0.00
10,400.00	89.99	0.00	7,568.49	2,570.47	-276.04	2,570.47	0.00	0.00	0.00
10,500.00	89.99	0.00	7,568.51	2,670.47	-276.04	2,670.47	0.00	0.00	0.00
10,600.00	89.99	0.00	7,568.53	2,770.47	-276.04	2,770.47	0.00	0.00	0.00
10,700.00	89.99	0.00	7,568.55	2,870.47	-276.04	2,870.47	0.00	0.00	0.00
10,800.00	89.99	0.00	7,568.57	2,970.47	-276.04	2,970.47	0.00	0.00	0.00
10,900.00	89.99	0.00	7,568.59	3,070.47	-276.04	3,070.47	0.00	0.00	0.00
11,000.00	89.99	0.00	7,568.61	3,170.47	-276.04	3,170.47	0.00	0.00	0.00
11,100.00	89.99	0.00	7,568.63	3,270.47	-276.04	3,270.47	0.00	0.00	0.00
11,200.00	89.99	0.00	7,568.65	3,370.47	-276.04	3,370.47	0.00	0.00	0.00
11,300.00	89.99	0.00	7,568.67	3,470.47	-276.04	3,470.47	0.00	0.00	0.00
11,400.00	89.99	0.00	7,568.69	3,570.47	-276.04	3,570.47	0.00	0.00	0.00
11,500.00	89.99	0.00	7,568.71	3,670.47	-276.04	3,670.47	0.00	0.00	0.00
11,600.00	89.99	0.00	7,568.73	3,770.47	-276.04	3,770.47	0.00	0.00	0.00
11,700.00	89.99	0.00	7,568.75	3,870.47	-276.04	3,870.47	0.00	0.00	0.00
11,800.00	89.99	0.00	7,568.77	3,970.47	-276.04	3,970.47	0.00	0.00	0.00
11,900.00	89.99	0.00	7,568.79	4,070.47	-276.04	4,070.47	0.00	0.00	0.00
12,000.00	89.99	0.00	7,568.81	4,170.47	-276.04	4,170.47	0.00	0.00	0.00
12,100.00	89.99	0.00	7,568.83	4,270.47	-276.04	4,270.47	0.00	0.00	0.00
12,200.00	89.99	0.00	7,568.85	4,370.47	-276.04	4,370.47	0.00	0.00	0.00
12,300.00	89.99	0.00	7,568.87	4,470.47	-276.04	4,470.47	0.00	0.00	0.00
12,400.00	89.99	0.00	7,568.89	4,570.47	-276.04	4,570.47	0.00	0.00	0.00
12,500.00	89.99	0.00	7,568.91	4,670.47	-276.04	4,670.47	0.00	0.00	0.00
12,600.00	89.99	0.00	7,568.93	4,770.47	-276.04	4,770.47	0.00	0.00	0.00
12,700.00	89.99	0.00	7,568.95	4,870.47	-276.04	4,870.47	0.00	0.00	0.00
12,800.00	89.99	0.00	7,568.97	4,970.47	-276.04	4,970.47	0.00	0.00	0.00

Database:	Denver Sales Office	Local Co-ordinate Reference:	Well BADDING 28C-26HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5112' & KB 17' @ 5129.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5112' & KB 17' @ 5129.00ft (ASSUMED)
Site:	BADDING 15-26HZ	North Reference:	True
Well:	BADDING 28C-26HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,900.00	89.99	0.00	7,568.99	5,070.47	-276.04	5,070.47	0.00	0.00	0.00
12,945.49	89.99	0.00	7,569.00	5,115.95	-276.04	5,115.95	0.00	0.00	0.00
TD at 12945.49 - PBHL_BADDING28C-26HZ(200' FSL 2250' FEL)									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL_BADDING28C-26 - hit/miss target - Shape - Point	0.00	0.00	7,569.00	5,115.95	-276.04	1,286,382.05	3,211,703.33	40.1170310	-104.7430230

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,301.00	1,301.00	9 5/8"	9.625	12.250	
7,939.54	7,568.00	7"(460' FSL 2250' FEL)	7.000	7.500	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,251.00	1,251.00	Fox Hills Base				
4,257.84	4,221.00	Parkman				
4,650.74	4,608.00	Sussex				
7,264.32	7,214.00	Sharon Springs				
7,327.58	7,271.00	Niobrara A				
7,404.84	7,336.00	Niobrara B Chalk				
7,490.81	7,401.00	Niobrara C				
7,766.39	7,542.00	Fort Hays				
7,863.91	7,563.00	Codell				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment	
1,501.00	1,501.00	0.00	0.00	Start Build 2.00	
2,001.11	1,998.57	-37.40	-22.30	Start 2601.40 hold at 2001.11 MD	
4,602.50	4,560.43	-425.44	-253.74	Start Drop -2.00	
5,102.61	5,058.00	-462.84	-276.04	Start 1937.04 hold at 5102.61 MD	
7,039.65	6,995.04	-462.84	-276.04	Start DLS 10.00 TFO 0.00	
7,939.54	7,568.00	110.00	-276.04	Start 5005.95 hold at 7939.54 MD	
12,945.49	7,569.00	5,115.95	-276.04	TD at 12945.49	