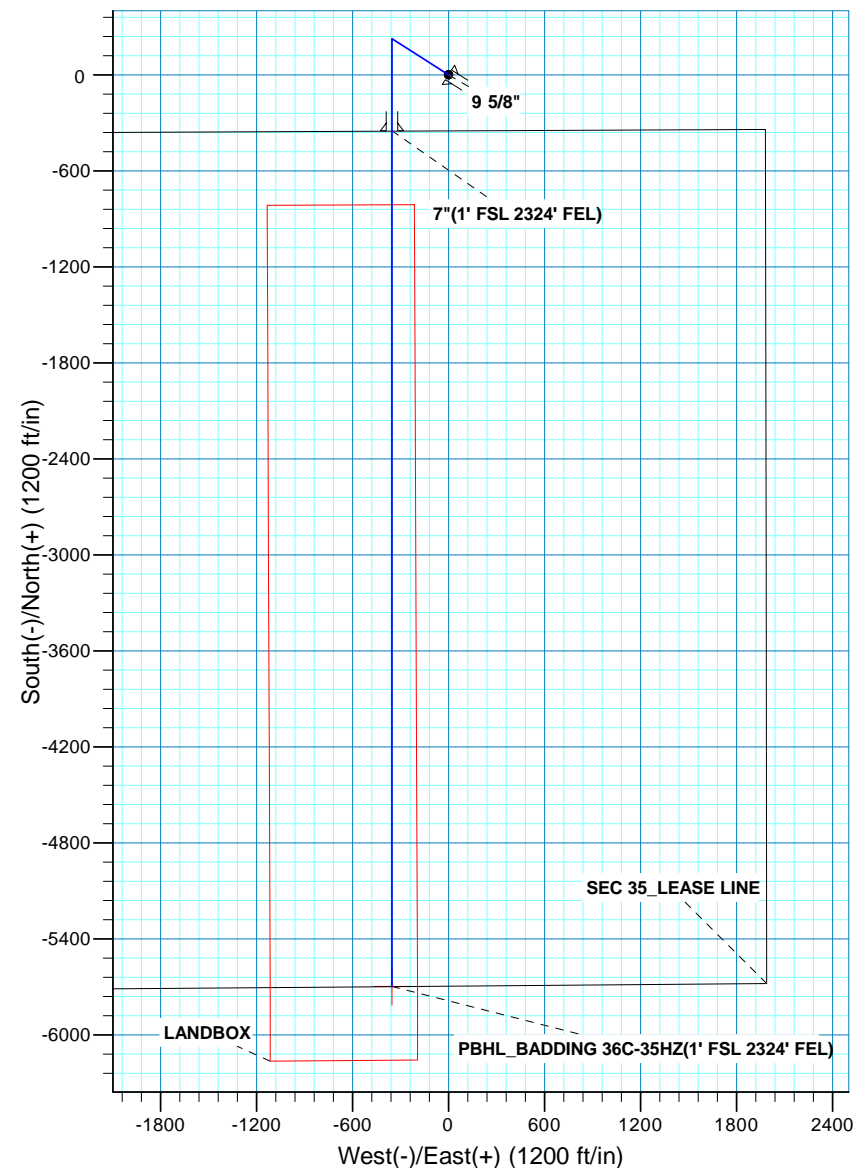
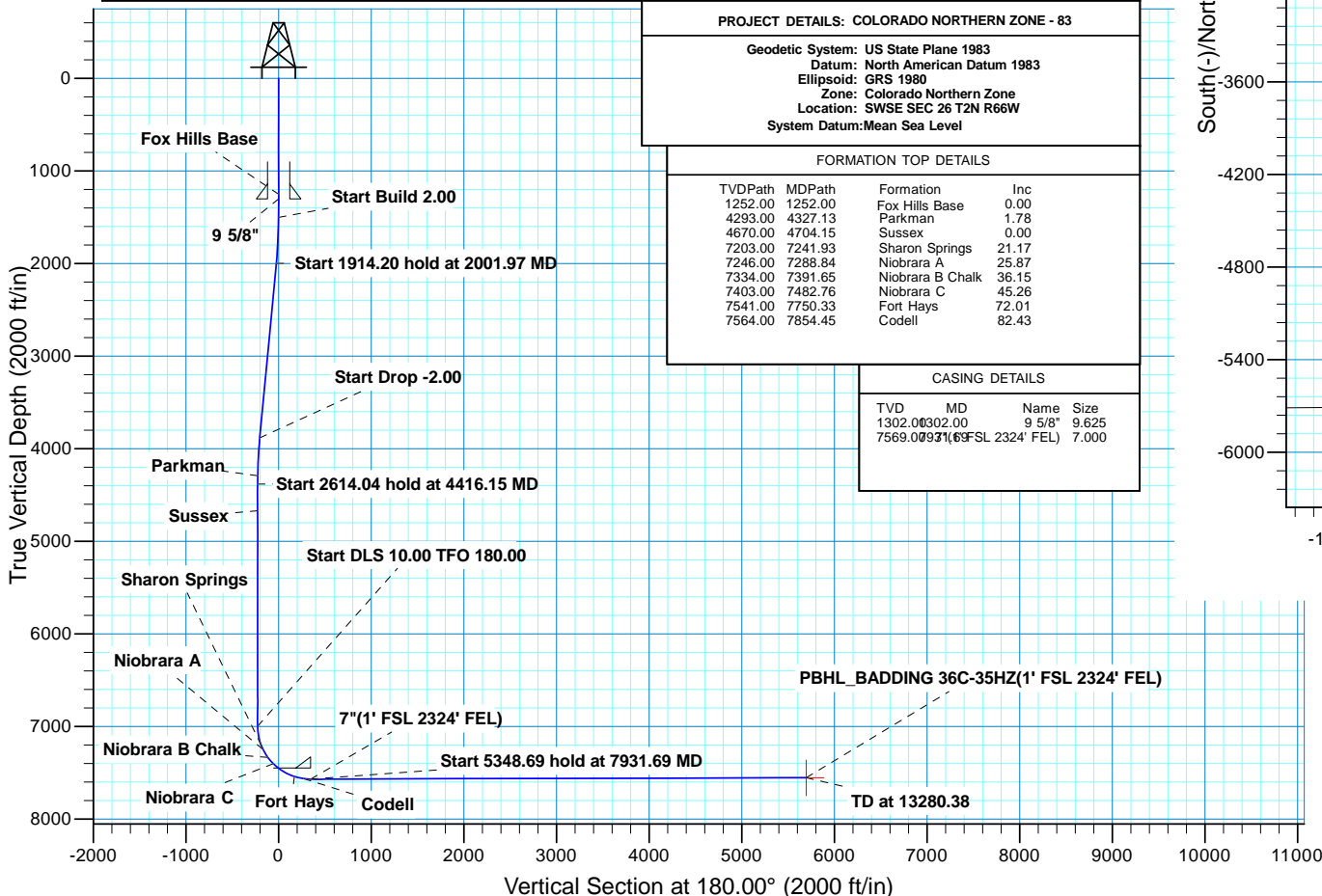


WELL DETAILS: BADDING 36C-35HZ										
GL 5113' & KB 17' @ 5130.00ft (ASSUMED)										
		+N/-S 0.00	+E/-W 0.00	Northing 1281268.88	Easting 3212049.10	Latitude 40.1029870	Longitude -104.7419430			
SECTION DETAILS										
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
1502.00	0.00	0.00	1502.00	0.00	0.00	0.00	0.00	0.00		Start Build 2.00
2001.97	10.00	302.52	1999.44	23.39	-36.70	2.00	302.52	-23.39		Start 1914.20 hold at 2001.97 MD
3916.17	10.00	302.52	3884.56	202.07	-316.97	0.00	0.00	-202.07		Start Drop -2.00
4416.15	0.00	0.00	4382.00	225.46	-353.66	2.00	180.00	-225.46		Start 2614.04 hold at 4416.15 MD
7030.19	0.00	0.00	6996.04	225.46	-353.66	0.00	0.00	-225.46		Start DLS 10.00 TFO 180.00
7931.69	90.15	180.00	7569.00	-349.00	-353.66	10.00	180.00	349.00		Start 5348.69 hold at 7931.69 MD
13280.38	90.15	180.00	7555.00	-5697.67	-353.66	0.00	0.00	5697.67	PBHL_BADDING 36C-35HZ	TD at 13280.38
DESIGN TARGET DETAILS										
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape		
PBHL	7555.00	-5697.67	-353.66	1275568.41	3211744.16	40.0873460	-104.7432070	Point		

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
1252.00	1252.00	Fox Hills Base	0.00
4293.00	4327.13	Parkman	1.78
4670.00	4704.15	Sussex	0.00
7203.00	7241.93	Sharon Springs	21.17
7246.00	7288.84	Niobrara A	25.87
7334.00	7391.65	Niobrara B Chalk	36.15
7403.00	7482.76	Niobrara C	45.26
7541.00	7750.33	Fort Hays	72.01
7564.00	7854.45	Codell	82.43
CASING DETAILS			
TVD	MD	Name	Size
1302.00	302.00	9 5/8"	9.625
7569.00	931.69	7"(1' FSL 2324' FEL)	7.000





Scientific Drilling

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

BADDING 15-26HZ

BADDING 36C-35HZ

OH

Plan: PLAN #1 PRELIMINARY

Standard Planning Report

24 September, 2013

Database:	Denver Sales Office	Local Co-ordinate Reference:	Well BADDING 36C-35HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5113' & KB 17' @ 5130.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5113' & KB 17' @ 5130.00ft (ASSUMED)
Site:	BADDING 15-26HZ	North Reference:	True
Well:	BADDING 36C-35HZ	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 36C-35HZ, 350 FSL 1979 FEL			
Well Position	+N/-S	-0.01 ft	Northing:	1,281,268.88 usft
	+E/-W	26.01 ft	Easting:	3,212,049.10 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	Ground Level: 5,113.00 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	180.00

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	
1,502.00	0.00	0.00	1,502.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,001.97	10.00	302.52	1,999.44	23.39	-36.70	2.00	2.00	0.00	302.52	
3,916.17	10.00	302.52	3,884.56	202.07	-316.97	0.00	0.00	0.00	0.00	
4,416.15	0.00	0.00	4,382.00	225.46	-353.66	2.00	-2.00	0.00	180.00	
7,030.19	0.00	0.00	6,996.04	225.46	-353.66	0.00	0.00	0.00	0.00	
7,931.69	90.15	180.00	7,569.00	-349.00	-353.66	10.00	10.00	19.97	180.00	
13,280.38	90.15	180.00	7,555.00	-5,697.67	-353.66	0.00	0.00	0.00	0.00	PBHL_BADDING 36C

Database:	Denver Sales Office	Local Co-ordinate Reference:	Well BADDING 36C-35HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5113' & KB 17' @ 5130.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5113' & KB 17' @ 5130.00ft (ASSUMED)
Site:	BADDING 15-26HZ	North Reference:	True
Well:	BADDING 36C-35HZ	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
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
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
1,100.00	0.00	0.00	1,100.00	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
1,252.00	0.00	0.00	1,252.00	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
1,302.00	0.00	0.00	1,302.00	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
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,502.00	0.00	0.00	1,502.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
1,600.00	1.96	302.52	1,599.98	0.90	-1.41	-0.90	2.00	2.00	0.00
1,700.00	3.96	302.52	1,699.84	3.68	-5.77	-3.68	2.00	2.00	0.00
1,800.00	5.96	302.52	1,799.46	8.32	-13.06	-8.32	2.00	2.00	0.00
1,900.00	7.96	302.52	1,898.72	14.84	-23.27	-14.84	2.00	2.00	0.00
2,000.00	9.96	302.52	1,997.50	23.21	-36.41	-23.21	2.00	2.00	0.00
2,001.97	10.00	302.52	1,999.44	23.39	-36.70	-23.39	2.00	2.00	0.00
Start 1914.20 hold at 2001.97 MD									
2,100.00	10.00	302.52	2,095.98	32.54	-51.05	-32.54	0.00	0.00	0.00
2,200.00	10.00	302.52	2,194.46	41.88	-65.69	-41.88	0.00	0.00	0.00
2,300.00	10.00	302.52	2,292.94	51.21	-80.33	-51.21	0.00	0.00	0.00
2,400.00	10.00	302.52	2,391.42	60.55	-94.97	-60.55	0.00	0.00	0.00
2,500.00	10.00	302.52	2,489.90	69.88	-109.61	-69.88	0.00	0.00	0.00
2,600.00	10.00	302.52	2,588.38	79.21	-124.26	-79.21	0.00	0.00	0.00
2,700.00	10.00	302.52	2,686.86	88.55	-138.90	-88.55	0.00	0.00	0.00
2,800.00	10.00	302.52	2,785.34	97.88	-153.54	-97.88	0.00	0.00	0.00
2,900.00	10.00	302.52	2,883.82	107.22	-168.18	-107.22	0.00	0.00	0.00
3,000.00	10.00	302.52	2,982.31	116.55	-182.82	-116.55	0.00	0.00	0.00
3,100.00	10.00	302.52	3,080.79	125.88	-197.46	-125.88	0.00	0.00	0.00
3,200.00	10.00	302.52	3,179.27	135.22	-212.11	-135.22	0.00	0.00	0.00
3,300.00	10.00	302.52	3,277.75	144.55	-226.75	-144.55	0.00	0.00	0.00
3,400.00	10.00	302.52	3,376.23	153.89	-241.39	-153.89	0.00	0.00	0.00
3,500.00	10.00	302.52	3,474.71	163.22	-256.03	-163.22	0.00	0.00	0.00
3,600.00	10.00	302.52	3,573.19	172.55	-270.67	-172.55	0.00	0.00	0.00
3,700.00	10.00	302.52	3,671.67	181.89	-285.31	-181.89	0.00	0.00	0.00
3,800.00	10.00	302.52	3,770.15	191.22	-299.96	-191.22	0.00	0.00	0.00
3,900.00	10.00	302.52	3,868.63	200.56	-314.60	-200.56	0.00	0.00	0.00
3,916.17	10.00	302.52	3,884.56	202.07	-316.97	-202.07	0.00	0.00	0.00
Start Drop -2.00									
4,000.00	8.32	302.52	3,967.32	209.24	-328.22	-209.24	2.00	-2.00	0.00
4,100.00	6.32	302.52	4,066.50	216.09	-338.97	-216.09	2.00	-2.00	0.00
4,200.00	4.32	302.52	4,166.06	221.08	-346.79	-221.08	2.00	-2.00	0.00
4,300.00	2.32	302.52	4,265.89	224.19	-351.68	-224.19	2.00	-2.00	0.00

Database:	Denver Sales Office	Local Co-ordinate Reference:	Well BADDING 36C-35HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5113' & KB 17' @ 5130.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5113' & KB 17' @ 5130.00ft (ASSUMED)
Site:	BADDING 15-26HZ	North Reference:	True
Well:	BADDING 36C-35HZ	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)
4,327.13	1.78	302.52	4,293.00	224.72	-352.50	-224.72	2.00	-2.00	0.00
Parkman									
4,400.00	0.32	302.52	4,365.85	225.44	-353.62	-225.44	2.00	-2.00	0.00
4,416.15	0.00	0.00	4,382.00	225.46	-353.66	-225.46	2.00	-2.00	0.00
Start 2614.04 hold at 4416.15 MD									
4,500.00	0.00	0.00	4,465.85	225.46	-353.66	-225.46	0.00	0.00	0.00
4,600.00	0.00	0.00	4,565.85	225.46	-353.66	-225.46	0.00	0.00	0.00
4,700.00	0.00	0.00	4,665.85	225.46	-353.66	-225.46	0.00	0.00	0.00
4,704.15	0.00	0.00	4,670.00	225.46	-353.66	-225.46	0.00	0.00	0.00
Sussex									
4,800.00	0.00	0.00	4,765.85	225.46	-353.66	-225.46	0.00	0.00	0.00
4,900.00	0.00	0.00	4,865.85	225.46	-353.66	-225.46	0.00	0.00	0.00
5,000.00	0.00	0.00	4,965.85	225.46	-353.66	-225.46	0.00	0.00	0.00
5,100.00	0.00	0.00	5,065.85	225.46	-353.66	-225.46	0.00	0.00	0.00
5,200.00	0.00	0.00	5,165.85	225.46	-353.66	-225.46	0.00	0.00	0.00
5,300.00	0.00	0.00	5,265.85	225.46	-353.66	-225.46	0.00	0.00	0.00
5,400.00	0.00	0.00	5,365.85	225.46	-353.66	-225.46	0.00	0.00	0.00
5,500.00	0.00	0.00	5,465.85	225.46	-353.66	-225.46	0.00	0.00	0.00
5,600.00	0.00	0.00	5,565.85	225.46	-353.66	-225.46	0.00	0.00	0.00
5,700.00	0.00	0.00	5,665.85	225.46	-353.66	-225.46	0.00	0.00	0.00
5,800.00	0.00	0.00	5,765.85	225.46	-353.66	-225.46	0.00	0.00	0.00
5,900.00	0.00	0.00	5,865.85	225.46	-353.66	-225.46	0.00	0.00	0.00
6,000.00	0.00	0.00	5,965.85	225.46	-353.66	-225.46	0.00	0.00	0.00
6,100.00	0.00	0.00	6,065.85	225.46	-353.66	-225.46	0.00	0.00	0.00
6,200.00	0.00	0.00	6,165.85	225.46	-353.66	-225.46	0.00	0.00	0.00
6,300.00	0.00	0.00	6,265.85	225.46	-353.66	-225.46	0.00	0.00	0.00
6,400.00	0.00	0.00	6,365.85	225.46	-353.66	-225.46	0.00	0.00	0.00
6,500.00	0.00	0.00	6,465.85	225.46	-353.66	-225.46	0.00	0.00	0.00
6,600.00	0.00	0.00	6,565.85	225.46	-353.66	-225.46	0.00	0.00	0.00
6,700.00	0.00	0.00	6,665.85	225.46	-353.66	-225.46	0.00	0.00	0.00
6,800.00	0.00	0.00	6,765.85	225.46	-353.66	-225.46	0.00	0.00	0.00
6,900.00	0.00	0.00	6,865.85	225.46	-353.66	-225.46	0.00	0.00	0.00
7,000.00	0.00	0.00	6,965.85	225.46	-353.66	-225.46	0.00	0.00	0.00
7,030.19	0.00	0.00	6,996.04	225.46	-353.66	-225.46	0.00	0.00	0.00
Start DLS 10.00 TFO 180.00									
7,100.00	6.98	180.00	7,065.68	221.21	-353.66	-221.21	10.00	10.00	0.00
7,200.00	16.98	180.00	7,163.38	200.48	-353.66	-200.48	10.00	10.00	0.00
7,241.93	21.17	180.00	7,203.00	186.78	-353.66	-186.78	10.00	10.00	0.00
Sharon Springs									
7,288.84	25.87	180.00	7,246.00	168.06	-353.66	-168.06	10.00	10.00	0.00
Niobrara A									
7,300.00	26.98	180.00	7,255.99	163.10	-353.66	-163.10	10.00	10.00	0.00
7,391.65	36.15	180.00	7,334.00	115.17	-353.66	-115.17	10.00	10.00	0.00
Niobrara B Chalk									
7,400.00	36.98	180.00	7,340.71	110.20	-353.66	-110.20	10.00	10.00	0.00
7,482.76	45.26	180.00	7,403.00	55.82	-353.66	-55.82	10.00	10.00	0.00
Niobrara C									
7,500.00	46.98	180.00	7,414.95	43.39	-353.66	-43.39	10.00	10.00	0.00
7,600.00	56.98	180.00	7,476.46	-35.29	-353.66	35.29	10.00	10.00	0.00
7,700.00	66.98	180.00	7,523.38	-123.45	-353.66	123.45	10.00	10.00	0.00
7,750.33	72.01	180.00	7,541.00	-170.58	-353.66	170.58	10.00	10.00	0.00
Fort Hays									
7,800.00	76.98	180.00	7,554.27	-218.43	-353.66	218.43	10.00	10.00	0.00

Database:	Denver Sales Office	Local Co-ordinate Reference:	Well BADDING 36C-35HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5113' & KB 17' @ 5130.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5113' & KB 17' @ 5130.00ft (ASSUMED)
Site:	BADDING 15-26HZ	North Reference:	True
Well:	BADDING 36C-35HZ	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)
7,854.45	82.43	180.00	7,564.00	-271.99	-353.66	271.99	10.00	10.00	0.00
Codell									
7,900.00	86.98	180.00	7,568.20	-317.33	-353.66	317.33	10.00	10.00	0.00
7,931.69	90.15	180.00	7,569.00	-349.00	-353.66	349.00	10.00	10.00	0.00
Start 5348.69 hold at 7931.69 MD - 7"(1' FSL 2324' FEL)									
8,000.00	90.15	180.00	7,568.82	-417.31	-353.66	417.31	0.00	0.00	0.00
8,100.00	90.15	180.00	7,568.56	-517.31	-353.66	517.31	0.00	0.00	0.00
8,200.00	90.15	180.00	7,568.29	-617.31	-353.66	617.31	0.00	0.00	0.00
8,300.00	90.15	180.00	7,568.03	-717.31	-353.66	717.31	0.00	0.00	0.00
8,400.00	90.15	180.00	7,567.77	-817.31	-353.66	817.31	0.00	0.00	0.00
8,500.00	90.15	180.00	7,567.51	-917.31	-353.66	917.31	0.00	0.00	0.00
8,600.00	90.15	180.00	7,567.25	-1,017.31	-353.66	1,017.31	0.00	0.00	0.00
8,700.00	90.15	180.00	7,566.99	-1,117.31	-353.66	1,117.31	0.00	0.00	0.00
8,800.00	90.15	180.00	7,566.72	-1,217.31	-353.66	1,217.31	0.00	0.00	0.00
8,900.00	90.15	180.00	7,566.46	-1,317.31	-353.66	1,317.31	0.00	0.00	0.00
9,000.00	90.15	180.00	7,566.20	-1,417.31	-353.66	1,417.31	0.00	0.00	0.00
9,100.00	90.15	180.00	7,565.94	-1,517.31	-353.66	1,517.31	0.00	0.00	0.00
9,200.00	90.15	180.00	7,565.68	-1,617.31	-353.66	1,617.31	0.00	0.00	0.00
9,300.00	90.15	180.00	7,565.42	-1,717.31	-353.66	1,717.31	0.00	0.00	0.00
9,400.00	90.15	180.00	7,565.15	-1,817.31	-353.66	1,817.31	0.00	0.00	0.00
9,500.00	90.15	180.00	7,564.89	-1,917.31	-353.66	1,917.31	0.00	0.00	0.00
9,600.00	90.15	180.00	7,564.63	-2,017.31	-353.66	2,017.31	0.00	0.00	0.00
9,700.00	90.15	180.00	7,564.37	-2,117.31	-353.66	2,117.31	0.00	0.00	0.00
9,800.00	90.15	180.00	7,564.11	-2,217.31	-353.66	2,217.31	0.00	0.00	0.00
9,900.00	90.15	180.00	7,563.85	-2,317.30	-353.66	2,317.30	0.00	0.00	0.00
10,000.00	90.15	180.00	7,563.58	-2,417.30	-353.66	2,417.30	0.00	0.00	0.00
10,100.00	90.15	180.00	7,563.32	-2,517.30	-353.66	2,517.30	0.00	0.00	0.00
10,200.00	90.15	180.00	7,563.06	-2,617.30	-353.66	2,617.30	0.00	0.00	0.00
10,300.00	90.15	180.00	7,562.80	-2,717.30	-353.66	2,717.30	0.00	0.00	0.00
10,400.00	90.15	180.00	7,562.54	-2,817.30	-353.66	2,817.30	0.00	0.00	0.00
10,500.00	90.15	180.00	7,562.28	-2,917.30	-353.66	2,917.30	0.00	0.00	0.00
10,600.00	90.15	180.00	7,562.01	-3,017.30	-353.66	3,017.30	0.00	0.00	0.00
10,700.00	90.15	180.00	7,561.75	-3,117.30	-353.66	3,117.30	0.00	0.00	0.00
10,800.00	90.15	180.00	7,561.49	-3,217.30	-353.66	3,217.30	0.00	0.00	0.00
10,900.00	90.15	180.00	7,561.23	-3,317.30	-353.66	3,317.30	0.00	0.00	0.00
11,000.00	90.15	180.00	7,560.97	-3,417.30	-353.66	3,417.30	0.00	0.00	0.00
11,100.00	90.15	180.00	7,560.71	-3,517.30	-353.66	3,517.30	0.00	0.00	0.00
11,200.00	90.15	180.00	7,560.44	-3,617.30	-353.66	3,617.30	0.00	0.00	0.00
11,300.00	90.15	180.00	7,560.18	-3,717.30	-353.66	3,717.30	0.00	0.00	0.00
11,400.00	90.15	180.00	7,559.92	-3,817.30	-353.66	3,817.30	0.00	0.00	0.00
11,500.00	90.15	180.00	7,559.66	-3,917.30	-353.66	3,917.30	0.00	0.00	0.00
11,600.00	90.15	180.00	7,559.40	-4,017.30	-353.66	4,017.30	0.00	0.00	0.00
11,700.00	90.15	180.00	7,559.14	-4,117.30	-353.66	4,117.30	0.00	0.00	0.00
11,800.00	90.15	180.00	7,558.87	-4,217.30	-353.66	4,217.30	0.00	0.00	0.00
11,900.00	90.15	180.00	7,558.61	-4,317.30	-353.66	4,317.30	0.00	0.00	0.00
12,000.00	90.15	180.00	7,558.35	-4,417.30	-353.66	4,417.30	0.00	0.00	0.00
12,100.00	90.15	180.00	7,558.09	-4,517.30	-353.66	4,517.30	0.00	0.00	0.00
12,200.00	90.15	180.00	7,557.83	-4,617.30	-353.66	4,617.30	0.00	0.00	0.00
12,300.00	90.15	180.00	7,557.57	-4,717.30	-353.66	4,717.30	0.00	0.00	0.00
12,400.00	90.15	180.00	7,557.30	-4,817.30	-353.66	4,817.30	0.00	0.00	0.00
12,500.00	90.15	180.00	7,557.04	-4,917.30	-353.66	4,917.30	0.00	0.00	0.00
12,600.00	90.15	180.00	7,556.78	-5,017.30	-353.66	5,017.30	0.00	0.00	0.00
12,700.00	90.15	180.00	7,556.52	-5,117.30	-353.66	5,117.30	0.00	0.00	0.00
12,800.00	90.15	180.00	7,556.26	-5,217.30	-353.66	5,217.30	0.00	0.00	0.00

Database:	Denver Sales Office	Local Co-ordinate Reference:	Well BADDING 36C-35HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5113' & KB 17' @ 5130.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5113' & KB 17' @ 5130.00ft (ASSUMED)
Site:	BADDING 15-26HZ	North Reference:	True
Well:	BADDING 36C-35HZ	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	90.15	180.00	7,556.00	-5,317.29	-353.66	5,317.29	0.00	0.00	0.00
13,000.00	90.15	180.00	7,555.73	-5,417.29	-353.66	5,417.29	0.00	0.00	0.00
13,100.00	90.15	180.00	7,555.47	-5,517.29	-353.66	5,517.29	0.00	0.00	0.00
13,200.00	90.15	180.00	7,555.21	-5,617.29	-353.66	5,617.29	0.00	0.00	0.00
13,280.38	90.15	180.00	7,555.00	-5,697.67	-353.66	5,697.67	0.00	0.00	0.00
TD at 13280.38 - PBHL_BADDING 36C-35HZ(1' FSL 2324' FEL)									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
PBHL_BADDING 36C-3	0.00	0.00	7,555.00	-5,697.67	-353.66	1,275,568.41	3,211,744.16	40.0873460	-104.7432070
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,302.00	1,302.00	9 5/8"	9.625	12.250	
7,931.69	7,569.00	7"(1' FSL 2324' FEL)	7.000	7.500	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,252.00	1,252.00	Fox Hills Base				
4,327.13	4,293.00	Parkman				
4,704.15	4,670.00	Sussex				
7,241.93	7,203.00	Sharon Springs				
7,288.84	7,246.00	Niobrara A				
7,391.65	7,334.00	Niobrara B Chalk				
7,482.76	7,403.00	Niobrara C				
7,750.33	7,541.00	Fort Hays				
7,854.45	7,564.00	Codell				

Database:	Denver Sales Office	Local Co-ordinate Reference:	Well BADDING 36C-35HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5113' & KB 17' @ 5130.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5113' & KB 17' @ 5130.00ft (ASSUMED)
Site:	BADDING 15-26HZ	North Reference:	True
Well:	BADDING 36C-35HZ	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PLAN #1 PRELIMINARY		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
1,502.00	1,502.00	0.00	0.00	Start Build 2.00	
2,001.97	1,999.44	23.39	-36.70	Start 1914.20 hold at 2001.97 MD	
3,916.17	3,884.56	202.07	-316.97	Start Drop -2.00	
4,416.15	4,382.00	225.46	-353.66	Start 2614.04 hold at 4416.15 MD	
7,030.19	6,996.04	225.46	-353.66	Start DLS 10.00 TFO 180.00	
7,931.69	7,569.00	-349.00	-353.66	Start 5348.69 hold at 7931.69 MD	
13,280.38	7,555.00	-5,697.67	-353.66	TD at 13280.38	