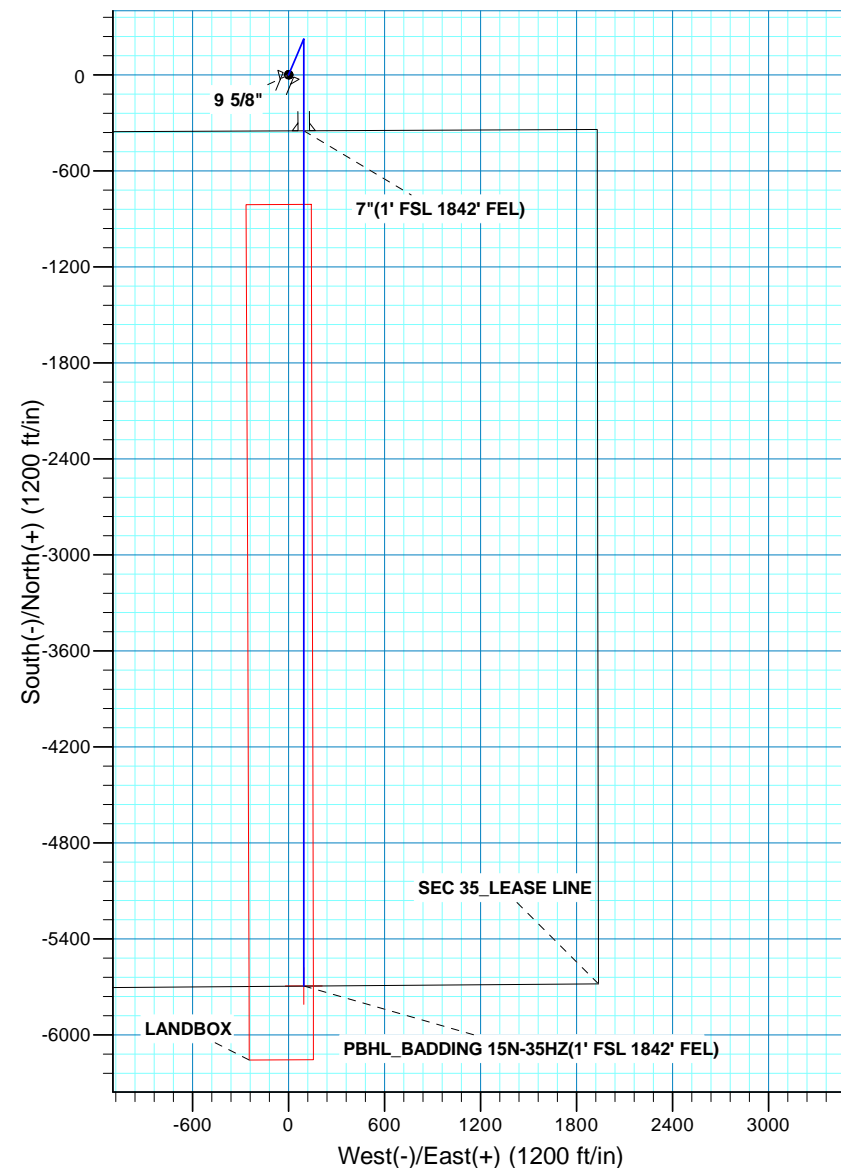
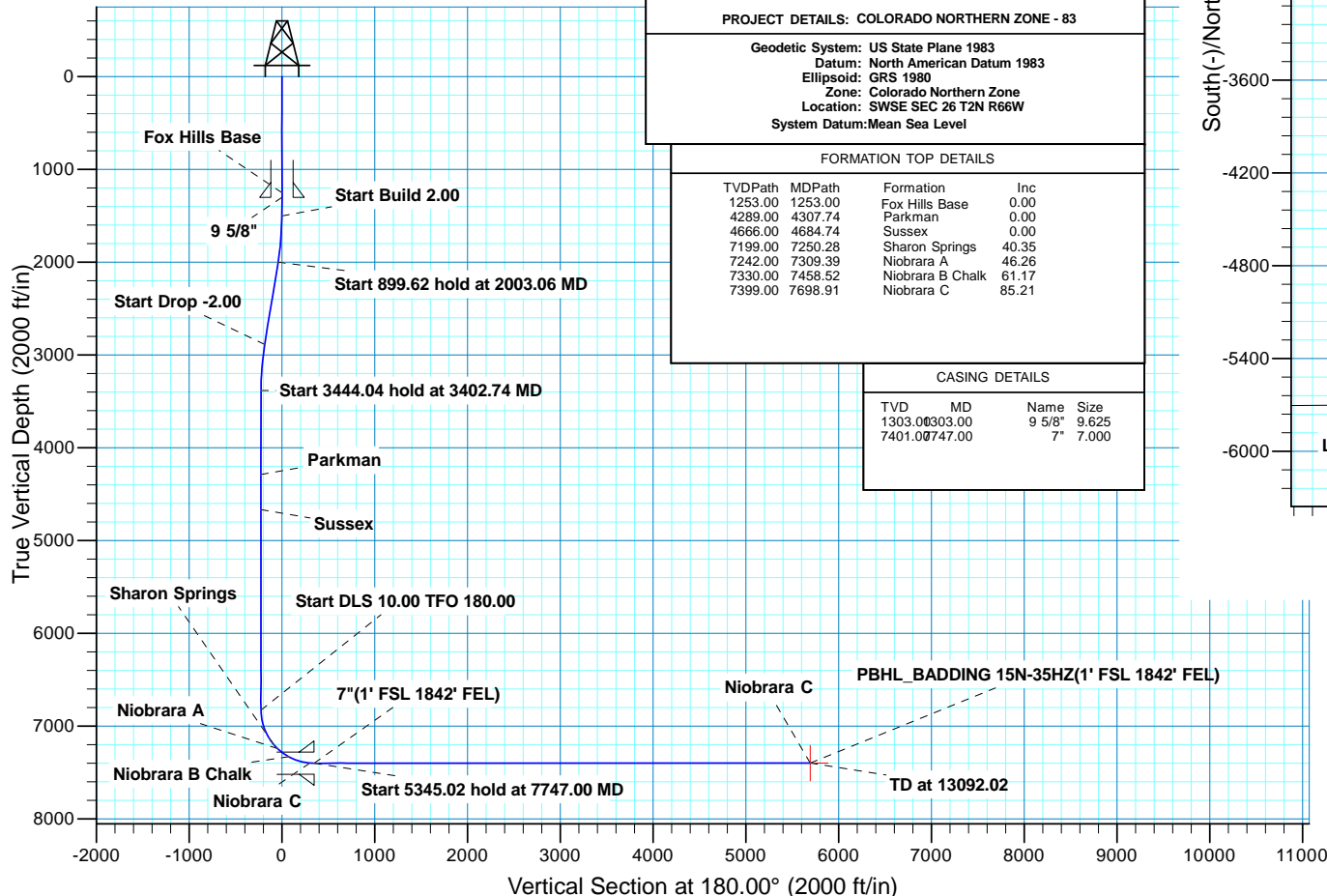


WELL DETAILS: BADDING 15N-35HZ										
GL 5114' & KB 17" @ 5131.00ft (ASSUMED)										
		+N-S 0.00	+E-W 0.00	Northing 1281269.69	Easting 3212100.84	Latitude 40.1029880	Longitude -104.7417580			
SECTION DETAILS										
MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VSect	Target	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
1503.00	0.00	0.00	1503.00	0.00	0.00	0.00	0.00	0.00		Start Build 2.00
2003.06	10.00	22.87	2000.52	40.11	16.92	2.00	22.87	-40.11		Start 899.62 hold at 2003.06 MD
2902.68	10.00	22.87	2886.48	184.06	77.65	0.00	0.00	-184.06		Start Drop -2.00
3402.74	0.00	0.00	3384.00	224.17	94.57	2.00	180.00	-224.17		Start 3444.04 hold at 3402.74 MD
6846.78	0.00	0.00	6828.04	224.17	94.57	0.00	0.00	-224.17		Start DLS 10.00 TFO 180.00
7747.00	90.02	180.00	7401.00	-349.00	94.57	10.00	180.00	349.00		Start 5345.02 hold at 7747.00 MD
13092.02	90.02	180.00	7399.00	-5694.02	94.57	0.00	0.00	5694.02	PBHL_BADDING 15N-35HZ	TD at 13092.02
DESIGN TARGET DETAILS										
Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude	Shape		
PBHL	7399.00	-5694.02	94.57	1275576.69	3212244.10	40.0873570	-104.7414200	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				
TVDP	MD	Formation	Inc	
1253.00	1253.00	Fox Hills Base	0.00	
4289.00	4307.74	Parkman	0.00	
4666.00	4684.74	Sussex	0.00	
7199.00	7250.28	Sharon Springs	40.35	
7242.00	7309.39	Niobrara A	46.26	
7330.00	7458.52	Niobrara B Chalk	61.17	
7399.00	7698.91	Niobrara C	85.21	

CASING DETAILS				
TVDP	MD	Name	Size	
1303.00	1303.00	9 5/8"	9.625	
7401.00	7401.00	7"	7.000	





Scientific Drilling

US ROCKIES REGION PLANNING

COLORADO NORTHERN ZONE - 83

BADDING 15-26HZ

BADDING 15N-35HZ

OH

Plan: PLAN #1 PRELIMINARY

Standard Planning Report

24 September, 2013

Database:	Denver Sales Office	Local Co-ordinate Reference:	Well BADDING 15N-35HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5114' & KB 17' @ 5131.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5114' & KB 17' @ 5131.00ft (ASSUMED)
Site:	BADDING 15-26HZ	North Reference:	True
Well:	BADDING 15N-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 15N-35HZ, 350 FSL 1927 FEL			
Well Position	+N/-S	0.35 ft	Northing:	1,281,269.69 usft
	+E/-W	77.77 ft	Easting:	3,212,100.84 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	Ground Level: 5,114.00 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	
1,503.00	0.00	0.00	1,503.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,003.06	10.00	22.87	2,000.52	40.11	16.92	2.00	2.00	0.00	22.87	
2,902.68	10.00	22.87	2,886.48	184.06	77.65	0.00	0.00	0.00	0.00	
3,402.74	0.00	0.00	3,384.00	224.17	94.57	2.00	-2.00	0.00	180.00	
6,846.78	0.00	0.00	6,828.04	224.17	94.57	0.00	0.00	0.00	0.00	
7,747.00	90.02	180.00	7,401.00	-349.00	94.57	10.00	10.00	20.00	180.00	
13,092.02	90.02	180.00	7,399.00	-5,694.02	94.57	0.00	0.00	0.00	0.00	PBHL_BADDING 15N

Database:	Denver Sales Office	Local Co-ordinate Reference:	Well BADDING 15N-35HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5114' & KB 17' @ 5131.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5114' & KB 17' @ 5131.00ft (ASSUMED)
Site:	BADDING 15-26HZ	North Reference:	True
Well:	BADDING 15N-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
1,253.00	0.00	0.00	1,253.00	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
1,303.00	0.00	0.00	1,303.00	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
1,503.00	0.00	0.00	1,503.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 2.00									
1,600.00	1.94	22.87	1,599.98	1.51	0.64	-1.51	2.00	2.00	0.00
1,700.00	3.94	22.87	1,699.84	6.24	2.63	-6.24	2.00	2.00	0.00
1,800.00	5.94	22.87	1,799.47	14.17	5.98	-14.17	2.00	2.00	0.00
1,900.00	7.94	22.87	1,898.73	25.30	10.68	-25.30	2.00	2.00	0.00
2,000.00	9.94	22.87	1,997.51	39.62	16.72	-39.62	2.00	2.00	0.00
2,003.06	10.00	22.87	2,000.52	40.11	16.92	-40.11	2.00	2.00	0.00
Start 899.62 hold at 2003.06 MD									
2,100.00	10.00	22.87	2,095.99	55.62	23.47	-55.62	0.00	0.00	0.00
2,200.00	10.00	22.87	2,194.47	71.62	30.22	-71.62	0.00	0.00	0.00
2,300.00	10.00	22.87	2,292.95	87.62	36.97	-87.62	0.00	0.00	0.00
2,400.00	10.00	22.87	2,391.43	103.63	43.72	-103.63	0.00	0.00	0.00
2,500.00	10.00	22.87	2,489.91	119.63	50.47	-119.63	0.00	0.00	0.00
2,600.00	10.00	22.87	2,588.39	135.63	57.22	-135.63	0.00	0.00	0.00
2,700.00	10.00	22.87	2,686.87	151.63	63.97	-151.63	0.00	0.00	0.00
2,800.00	10.00	22.87	2,785.35	167.63	70.72	-167.63	0.00	0.00	0.00
2,900.00	10.00	22.87	2,883.83	183.63	77.47	-183.63	0.00	0.00	0.00
2,902.68	10.00	22.87	2,886.48	184.06	77.65	-184.06	0.00	0.00	0.00
Start Drop -2.00									
3,000.00	8.05	22.87	2,982.58	198.13	83.59	-198.13	2.00	-2.00	0.00
3,100.00	6.05	22.87	3,081.82	209.45	88.36	-209.45	2.00	-2.00	0.00
3,200.00	4.05	22.87	3,181.43	217.56	91.78	-217.56	2.00	-2.00	0.00
3,300.00	2.05	22.87	3,281.28	222.47	93.85	-222.47	2.00	-2.00	0.00
3,400.00	0.05	22.87	3,381.26	224.17	94.57	-224.17	2.00	-2.00	0.00
3,402.74	0.00	0.00	3,384.00	224.17	94.57	-224.17	2.00	-2.00	0.00
Start 3444.04 hold at 3402.74 MD									
3,500.00	0.00	0.00	3,481.26	224.17	94.57	-224.17	0.00	0.00	0.00
3,600.00	0.00	0.00	3,581.26	224.17	94.57	-224.17	0.00	0.00	0.00
3,700.00	0.00	0.00	3,681.26	224.17	94.57	-224.17	0.00	0.00	0.00
3,800.00	0.00	0.00	3,781.26	224.17	94.57	-224.17	0.00	0.00	0.00
3,900.00	0.00	0.00	3,881.26	224.17	94.57	-224.17	0.00	0.00	0.00
4,000.00	0.00	0.00	3,981.26	224.17	94.57	-224.17	0.00	0.00	0.00

Database:	Denver Sales Office	Local Co-ordinate Reference:	Well BADDING 15N-35HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5114' & KB 17' @ 5131.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5114' & KB 17' @ 5131.00ft (ASSUMED)
Site:	BADDING 15-26HZ	North Reference:	True
Well:	BADDING 15N-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)
4,100.00	0.00	0.00	4,081.26	224.17	94.57	-224.17	0.00	0.00	0.00
4,200.00	0.00	0.00	4,181.26	224.17	94.57	-224.17	0.00	0.00	0.00
4,300.00	0.00	0.00	4,281.26	224.17	94.57	-224.17	0.00	0.00	0.00
4,307.74	0.00	0.00	4,289.00	224.17	94.57	-224.17	0.00	0.00	0.00
Parkman									
4,400.00	0.00	0.00	4,381.26	224.17	94.57	-224.17	0.00	0.00	0.00
4,500.00	0.00	0.00	4,481.26	224.17	94.57	-224.17	0.00	0.00	0.00
4,600.00	0.00	0.00	4,581.26	224.17	94.57	-224.17	0.00	0.00	0.00
4,684.74	0.00	0.00	4,666.00	224.17	94.57	-224.17	0.00	0.00	0.00
Sussex									
4,700.00	0.00	0.00	4,681.26	224.17	94.57	-224.17	0.00	0.00	0.00
4,800.00	0.00	0.00	4,781.26	224.17	94.57	-224.17	0.00	0.00	0.00
4,900.00	0.00	0.00	4,881.26	224.17	94.57	-224.17	0.00	0.00	0.00
5,000.00	0.00	0.00	4,981.26	224.17	94.57	-224.17	0.00	0.00	0.00
5,100.00	0.00	0.00	5,081.26	224.17	94.57	-224.17	0.00	0.00	0.00
5,200.00	0.00	0.00	5,181.26	224.17	94.57	-224.17	0.00	0.00	0.00
5,300.00	0.00	0.00	5,281.26	224.17	94.57	-224.17	0.00	0.00	0.00
5,400.00	0.00	0.00	5,381.26	224.17	94.57	-224.17	0.00	0.00	0.00
5,500.00	0.00	0.00	5,481.26	224.17	94.57	-224.17	0.00	0.00	0.00
5,600.00	0.00	0.00	5,581.26	224.17	94.57	-224.17	0.00	0.00	0.00
5,700.00	0.00	0.00	5,681.26	224.17	94.57	-224.17	0.00	0.00	0.00
5,800.00	0.00	0.00	5,781.26	224.17	94.57	-224.17	0.00	0.00	0.00
5,900.00	0.00	0.00	5,881.26	224.17	94.57	-224.17	0.00	0.00	0.00
6,000.00	0.00	0.00	5,981.26	224.17	94.57	-224.17	0.00	0.00	0.00
6,100.00	0.00	0.00	6,081.26	224.17	94.57	-224.17	0.00	0.00	0.00
6,200.00	0.00	0.00	6,181.26	224.17	94.57	-224.17	0.00	0.00	0.00
6,300.00	0.00	0.00	6,281.26	224.17	94.57	-224.17	0.00	0.00	0.00
6,400.00	0.00	0.00	6,381.26	224.17	94.57	-224.17	0.00	0.00	0.00
6,500.00	0.00	0.00	6,481.26	224.17	94.57	-224.17	0.00	0.00	0.00
6,600.00	0.00	0.00	6,581.26	224.17	94.57	-224.17	0.00	0.00	0.00
6,700.00	0.00	0.00	6,681.26	224.17	94.57	-224.17	0.00	0.00	0.00
6,800.00	0.00	0.00	6,781.26	224.17	94.57	-224.17	0.00	0.00	0.00
6,846.78	0.00	0.00	6,828.04	224.17	94.57	-224.17	0.00	0.00	0.00
Start DLS 10.00 TFO 180.00									
6,900.00	5.32	180.00	6,881.18	221.70	94.57	-221.70	10.00	10.00	0.00
7,000.00	15.32	180.00	6,979.44	203.81	94.57	-203.81	10.00	10.00	0.00
7,100.00	25.32	180.00	7,073.10	169.12	94.57	-169.12	10.00	10.00	0.00
7,200.00	35.32	180.00	7,159.31	118.70	94.57	-118.70	10.00	10.00	0.00
7,250.28	40.35	180.00	7,199.00	87.87	94.57	-87.87	10.00	10.00	0.00
Sharon Springs									
7,300.00	45.32	180.00	7,235.45	54.07	94.57	-54.07	10.00	10.00	0.00
7,309.39	46.26	180.00	7,242.00	47.34	94.57	-47.34	10.00	10.00	0.00
Niobrara A									
7,400.00	55.32	180.00	7,299.22	-22.79	94.57	22.79	10.00	10.00	0.00
7,458.52	61.17	180.00	7,330.00	-72.53	94.57	72.53	10.00	10.00	0.00
Niobrara B Chalk									
7,500.00	65.32	180.00	7,348.67	-109.57	94.57	109.57	10.00	10.00	0.00
7,600.00	75.32	180.00	7,382.30	-203.61	94.57	203.61	10.00	10.00	0.00
7,698.91	85.21	180.00	7,399.00	-300.97	94.57	300.97	10.00	10.00	0.00
Niobrara C									
7,700.00	85.32	180.00	7,399.09	-302.06	94.57	302.06	10.00	10.00	0.00
7,747.00	90.02	180.00	7,401.00	-349.01	94.57	349.01	10.00	10.00	0.00
Start 5345.02 hold at 7747.00 MD - 7"(1' FSL 1842' FEL)									

Database:	Denver Sales Office	Local Co-ordinate Reference:	Well BADDING 15N-35HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5114' & KB 17' @ 5131.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5114' & KB 17' @ 5131.00ft (ASSUMED)
Site:	BADDING 15-26HZ	North Reference:	True
Well:	BADDING 15N-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)
7,800.00	90.02	180.00	7,400.98	-402.01	94.57	402.01	0.00	0.00	0.00
7,900.00	90.02	180.00	7,400.94	-502.01	94.57	502.01	0.00	0.00	0.00
8,000.00	90.02	180.00	7,400.90	-602.01	94.57	602.01	0.00	0.00	0.00
8,100.00	90.02	180.00	7,400.87	-702.01	94.57	702.01	0.00	0.00	0.00
8,200.00	90.02	180.00	7,400.83	-802.01	94.57	802.01	0.00	0.00	0.00
8,300.00	90.02	180.00	7,400.79	-902.01	94.57	902.01	0.00	0.00	0.00
8,400.00	90.02	180.00	7,400.75	-1,002.01	94.57	1,002.01	0.00	0.00	0.00
8,500.00	90.02	180.00	7,400.72	-1,102.01	94.57	1,102.01	0.00	0.00	0.00
8,600.00	90.02	180.00	7,400.68	-1,202.01	94.57	1,202.01	0.00	0.00	0.00
8,700.00	90.02	180.00	7,400.64	-1,302.01	94.57	1,302.01	0.00	0.00	0.00
8,800.00	90.02	180.00	7,400.61	-1,402.01	94.57	1,402.01	0.00	0.00	0.00
8,900.00	90.02	180.00	7,400.57	-1,502.01	94.57	1,502.01	0.00	0.00	0.00
9,000.00	90.02	180.00	7,400.53	-1,602.01	94.57	1,602.01	0.00	0.00	0.00
9,100.00	90.02	180.00	7,400.49	-1,702.01	94.57	1,702.01	0.00	0.00	0.00
9,200.00	90.02	180.00	7,400.46	-1,802.01	94.57	1,802.01	0.00	0.00	0.00
9,300.00	90.02	180.00	7,400.42	-1,902.01	94.57	1,902.01	0.00	0.00	0.00
9,400.00	90.02	180.00	7,400.38	-2,002.01	94.57	2,002.01	0.00	0.00	0.00
9,500.00	90.02	180.00	7,400.34	-2,102.01	94.57	2,102.01	0.00	0.00	0.00
9,600.00	90.02	180.00	7,400.31	-2,202.01	94.57	2,202.01	0.00	0.00	0.00
9,700.00	90.02	180.00	7,400.27	-2,302.01	94.57	2,302.01	0.00	0.00	0.00
9,800.00	90.02	180.00	7,400.23	-2,402.01	94.57	2,402.01	0.00	0.00	0.00
9,900.00	90.02	180.00	7,400.19	-2,502.01	94.57	2,502.01	0.00	0.00	0.00
10,000.00	90.02	180.00	7,400.16	-2,602.01	94.57	2,602.01	0.00	0.00	0.00
10,100.00	90.02	180.00	7,400.12	-2,702.01	94.57	2,702.01	0.00	0.00	0.00
10,200.00	90.02	180.00	7,400.08	-2,802.01	94.57	2,802.01	0.00	0.00	0.00
10,300.00	90.02	180.00	7,400.04	-2,902.01	94.57	2,902.01	0.00	0.00	0.00
10,400.00	90.02	180.00	7,400.01	-3,002.01	94.57	3,002.01	0.00	0.00	0.00
10,500.00	90.02	180.00	7,399.97	-3,102.01	94.57	3,102.01	0.00	0.00	0.00
10,600.00	90.02	180.00	7,399.93	-3,202.01	94.57	3,202.01	0.00	0.00	0.00
10,700.00	90.02	180.00	7,399.89	-3,302.01	94.57	3,302.01	0.00	0.00	0.00
10,800.00	90.02	180.00	7,399.86	-3,402.01	94.57	3,402.01	0.00	0.00	0.00
10,900.00	90.02	180.00	7,399.82	-3,502.01	94.57	3,502.01	0.00	0.00	0.00
11,000.00	90.02	180.00	7,399.78	-3,602.01	94.57	3,602.01	0.00	0.00	0.00
11,100.00	90.02	180.00	7,399.75	-3,702.01	94.57	3,702.01	0.00	0.00	0.00
11,200.00	90.02	180.00	7,399.71	-3,802.01	94.57	3,802.01	0.00	0.00	0.00
11,300.00	90.02	180.00	7,399.67	-3,902.01	94.57	3,902.01	0.00	0.00	0.00
11,400.00	90.02	180.00	7,399.63	-4,002.01	94.57	4,002.01	0.00	0.00	0.00
11,500.00	90.02	180.00	7,399.60	-4,102.01	94.57	4,102.01	0.00	0.00	0.00
11,600.00	90.02	180.00	7,399.56	-4,202.01	94.57	4,202.01	0.00	0.00	0.00
11,700.00	90.02	180.00	7,399.52	-4,302.01	94.57	4,302.01	0.00	0.00	0.00
11,800.00	90.02	180.00	7,399.48	-4,402.01	94.57	4,402.01	0.00	0.00	0.00
11,900.00	90.02	180.00	7,399.45	-4,502.01	94.57	4,502.01	0.00	0.00	0.00
12,000.00	90.02	180.00	7,399.41	-4,602.01	94.57	4,602.01	0.00	0.00	0.00
12,100.00	90.02	180.00	7,399.37	-4,702.01	94.57	4,702.01	0.00	0.00	0.00
12,200.00	90.02	180.00	7,399.33	-4,802.01	94.57	4,802.01	0.00	0.00	0.00
12,300.00	90.02	180.00	7,399.30	-4,902.01	94.57	4,902.01	0.00	0.00	0.00
12,400.00	90.02	180.00	7,399.26	-5,002.01	94.57	5,002.01	0.00	0.00	0.00
12,500.00	90.02	180.00	7,399.22	-5,102.01	94.57	5,102.01	0.00	0.00	0.00
12,600.00	90.02	180.00	7,399.18	-5,202.01	94.57	5,202.01	0.00	0.00	0.00
12,700.00	90.02	180.00	7,399.15	-5,302.01	94.57	5,302.01	0.00	0.00	0.00
12,800.00	90.02	180.00	7,399.11	-5,402.01	94.57	5,402.01	0.00	0.00	0.00
12,900.00	90.02	180.00	7,399.07	-5,502.01	94.57	5,502.01	0.00	0.00	0.00
13,000.00	90.02	180.00	7,399.03	-5,602.01	94.57	5,602.01	0.00	0.00	0.00
13,092.02	90.02	180.00	7,399.00	-5,694.02	94.57	5,694.02	0.00	0.00	0.00

Database:	Denver Sales Office	Local Co-ordinate Reference:	Well BADDING 15N-35HZ
Company:	US ROCKIES REGION PLANNING	TVD Reference:	GL 5114' & KB 17' @ 5131.00ft (ASSUMED)
Project:	COLORADO NORTHERN ZONE - 83	MD Reference:	GL 5114' & KB 17' @ 5131.00ft (ASSUMED)
Site:	BADDING 15-26HZ	North Reference:	True
Well:	BADDING 15N-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)
TD at 13092.02 - PBHL_BADDING 15N-35HZ(1' FSL 1842' 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 15N-3	0.00	0.00	7,399.00	-5,694.02	94.57	1,275,576.69	3,212,244.10	40.0873570	-104.7414200
- plan hits target center									
- Point									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,303.00	1,303.00	9 5/8"	9.625	12.250	
7,747.00	7,401.00	7"(1' FSL 1842' FEL)	7.000	7.500	

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,253.00	1,253.00	Fox Hills Base				
4,307.74	4,289.00	Parkman				
4,684.74	4,666.00	Sussex				
7,250.28	7,199.00	Sharon Springs				
7,309.39	7,242.00	Niobrara A				
7,458.52	7,330.00	Niobrara B Chalk				
7,698.91	7,399.00	Niobrara C				

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,503.00	1,503.00	0.00	0.00	Start Build 2.00
2,003.06	2,000.52	40.11	16.92	Start 899.62 hold at 2003.06 MD
2,902.68	2,886.48	184.06	77.65	Start Drop -2.00
3,402.74	3,384.00	224.17	94.57	Start 3444.04 hold at 3402.74 MD
6,846.78	6,828.04	224.17	94.57	Start DLS 10.00 TFO 180.00
7,747.00	7,401.00	-349.00	94.57	Start 5345.02 hold at 7747.00 MD
13,092.02	7,399.00	-5,694.02	94.57	TD at 13092.02