



**Project: Weld County, CO**  
**Site: Sec 7-T10N-R57W**  
**Well: Horsetail Fed #07F-0638**  
**Wellbore: Hz**  
**Design: Design #1**

**PROJECT DETAILS: Weld County, CO**  
 Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: Colorado Northern Zone  
 System Datum: Mean Sea Level

**FORMATION TOP DETAILS**

TVDPATH	MDPATH	FORMATION
1550.00	1561.84	Upper Pierre
3500.00	3536.15	Hygiene
3650.00	3688.02	Lower Pierre
5515.00	5570.41	P200 Marker
5530.00	5585.41	P300 Marker
5550.00	5605.41	P350 Marker
5702.00	5760.81	Sharon Springs
5707.00	5766.12	Niobrara
5727.00	5787.58	Top A Chalk
5764.00	5828.32	Top A Marl
5783.00	5849.86	A Marl
5792.00	5860.24	Top Upper B
5820.00	5893.35	Base Upper B
5837.00	5914.16	Top Lower B
5857.00	5939.47	Base Lower B
5864.00	5948.56	Top B Marl
5914.00	6018.09	Top C Chalk
5922.00	6030.15	Middle C Chalk
5936.00	6052.09	Middle C Marl
5955.00	6083.88	Lower C Chalk
5973.00	6116.80	Lower C Marl
6004.00	6183.61	Lower C Marker
6009.00	6196.25	Top Ft. Hays
6029.00	6256.90	Ft. Hays Marker
6049.00	6399.63	Top Codell

**WELL DETAILS: Horsetail Fed #07F-0638**

+N/-S	+E/-W	Northing	Ground Level:	Easting	Latitude	Longitude	Slot
0.00	0.00	1558346.73	4925.70	3471330.86	40° 51' 12.990 N	103° 47' 46.200 W	

**SECTION DETAILS**

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	
3	750.00	9.00	230.00	748.15	-22.67	-27.02	2.00	230.00	-20.38	
4	4950.00	9.00	230.00	4896.44	-445.00	-530.33	0.00	0.00	-399.93	
5	5400.00	0.00	0.00	5344.59	-467.67	-557.35	2.00	180.00	-420.30	
6	5583.54	0.00	0.00	5528.13	-467.67	-557.35	0.00	0.00	-420.30	
7	6401.72	90.00	359.66	6049.00	53.19	-560.40	11.00	359.66	99.05	PBHL 0638D
8	13663.93	90.00	359.66	6049.00	7315.27	-603.00	0.00	0.00	7340.08	PBHL 0638D

**ANNOTATIONS**

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Departure	Annotation
300.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	Build 2°/100'
748.15	750.00	9.00	230.00	-22.67	-27.02	-20.38	35.27	Hold 9° Inc
4896.44	4950.00	9.00	230.00	-445.00	-530.33	-399.93	692.29	Drop 2°/100'
5344.59	5400.00	0.00	0.00	-467.67	-557.35	-420.30	727.57	Hold Vertical
5528.13	5583.54	0.00	0.00	-467.67	-557.35	-420.30	727.57	KOP, Build 11°/100'
6049.00	6401.72	90.00	359.66	53.19	-560.40	99.05	1248.43	LP @ 90° Inc, Hold
6049.00	13663.84	90.00	359.66	7315.19	-603.00	7340.00	8510.56	TD at 13663.84' MD

**DESIGN TARGET DETAILS**

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL 0638D	6049.00	7315.27	-603.00	1565649.06	3470587.42	40° 52' 25.270 N 103° 47' 54.050 W	
Beffie #1	6735.70	3233.87	-1584.48	1561549.55	3469684.54	40° 51' 44.942 N 103° 48' 6.822 W	

SHL:  
2594' FNL, 2177' FWL  
Sec7-T10N-R57W

BHL:  
600' FNL, 1633' FWL  
Sec6-T10N-R57W

7":  
2543' FNL, 1603' FWL  
Sec7-T10N-R57W

Enter Beffie #1  
1550' Radius @ 8415' MD  
Exit Beffie #1  
1550' Radius @ 10749' MD

