



Project: Weld County, CO  
Site: Sec 7-T10N-R57W  
Well: Horsetail #07H-0646  
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	1555.78	Upper Pierre
3500.00	3516.53	Hygiene
3650.00	3667.35	Lower Pierre
5515.00	5540.75	P200 Marker
5530.00	5555.75	P300 Marker
5550.00	5575.75	P350 Marker
5702.00	5731.15	Sharon Springs
5707.00	5736.46	Niobrara
5727.00	5757.93	Top A Chalk
5764.00	5798.66	Top A Marl
5783.00	5820.20	A Marl
5792.00	5830.58	Top Upper B
5820.00	5863.70	Base Upper B
5837.00	5884.51	Top Lower B
5857.00	5909.81	Base Lower B
5864.00	5918.90	Top B Marl
5914.00	5988.43	Top C Chalk
5922.00	6000.50	Middle C Chalk
5936.00	6022.43	Middle C Marl
5955.00	6054.22	Lower C Chalk
5973.00	6087.14	Lower C Marl
6004.00	6153.95	Lower C Marker
6009.00	6166.59	Top Ft. Hays
6029.00	6227.24	Ft. Hays Marker
6049.00	6370.55	Top Codell

WELL DETAILS: Horsetail #07H-0646

+N/-S	+E/-W	Northing	Ground Level:	Easting	Latitude	Longitude	Slot
0.00	0.00	1558322.78	4908.90	3473713.23	40° 51' 12.300 N	103° 47' 15.210 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	600.00	6.00	221.00	599.45	-11.84	-10.30	2.00	221.00	-11.32	
4	5100.00	6.00	221.00	5074.80	-366.84	-318.89	0.00	0.00	-350.65	
5	5400.00	0.00	0.00	5374.25	-378.69	-329.19	2.00	180.00	-361.97	
6	5553.88	0.00	0.00	5528.13	-378.69	-329.19	0.00	0.00	-361.97	
7	6372.06	90.00	359.73	6049.00	142.18	-331.68	11.00	359.73	158.38	PBHL 0646D
8	13643.40	90.00	359.73	6049.00	7413.44	-366.42	0.00	0.00	7422.49	PBHL 0646D

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'
599.45	600.00	6.00	221.00	-11.84	-10.30	-11.32	15.69	Hold 6° Inc
5074.80	5100.00	6.00	221.00	-366.84	-318.89	-350.65	486.07	Drop 2°/100'
5374.25	5400.00	0.00	0.00	-378.69	-329.19	-361.97	501.77	Hold Vertical
5528.13	5553.88	0.00	0.00	-378.69	-329.19	-361.97	501.77	KOP, Build 11°/100'
6049.00	6372.06	90.00	359.73	142.18	-331.68	158.38	1022.63	LP @ 90° Inc, Hold
6049.00	13643.40	90.00	359.73	7413.43	-366.42	7422.48	8293.97	TD at 13643.40' MD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL 0646D	6049.00	7413.44	-366.42	1565727.76	3473203.73	40° 52' 25.550 N 103° 47' 19.980 W	

SHL:  
2633' FSL, 630' FEL  
Sec7-T10N-R57W  
  
BHL:  
600' FNL, 979' FEL  
Sec6-T10N-R57W  
  
7":  
2546' FNL, 962' FEL  
Sec7-T10N-R57W

West(-)/East(+) (1500 usft/in)

