



Project: Weld County, CO  
Site: Sec 7-T10N-R57W  
Well: Horsetail #07F-0608  
Wellbore: Wellbore #1  
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



Azimuths to True North  
Magnetic North: 7.88°  
Magnetic Field  
Strength: 53087.5nT  
Dip Angle: 67.44°  
Date: 1/5/2015  
Model: IGRF2010

WELL DETAILS: Horsetail #07F-0608

+N/-S	+E/-W	Northing	Ground Level:	4925.70	Latitude	Longitude	Slot
0.00	0.00	1558346.57	Easting	3471480.80	40° 51' 12.960 N	103° 47' 44.250 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	625.00	6.50	164.00	624.30	-17.70	5.08	2.00	164.00	-17.65	
4	4825.00	6.50	164.00	4499.23	-442.09	126.77	0.00	0.00	-440.84	
5	4850.00	0.00	0.00	4823.54	-459.79	131.84	2.00	180.00	-458.49	
6	5342.59	0.00	0.00	5316.13	-459.79	131.84	0.00	0.00	-458.49	
7	6160.77	90.00	359.45	5837.00	61.05	126.82	11.00	359.45	62.28	PBHL 0608B
8	12679.02	90.00	359.45	5837.00	6579.00	64.00	0.00	0.00	6579.31	PBHL 0608B

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1550.00	1556.69	Upper Pierre
3500.00	3519.30	Hygiene
3650.00	3670.27	Lower Pierre
5515.00	5546.64	P200 Marker
5530.00	5562.98	P300 Marker
5550.00	5585.13	P350 Marker
5702.00	5777.15	Sharon Springs
5707.00	5784.65	Niobrara
5727.00	5816.00	Top A Chalk
5764.00	5881.68	Top A Marl
5783.00	5921.50	A Marl
5792.00	5942.67	Top Upper B
5820.00	6027.34	Base Upper B
5837.00	6160.77	Top Lower B

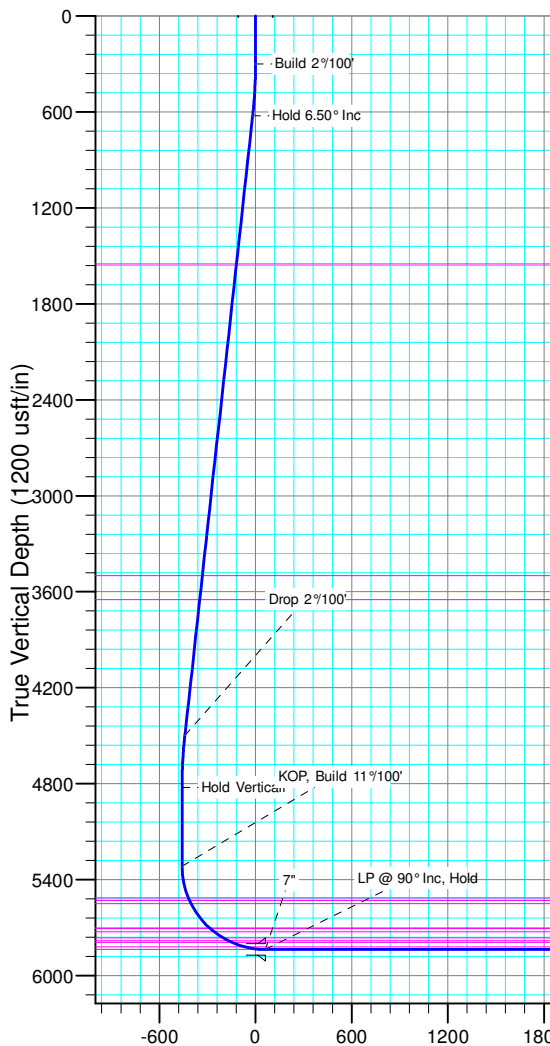
ANNOTATIONS

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'
624.30	625.00	6.50	164.00	-17.70	5.08	-17.65	18.42	Hold 6.50° Inc
4499.23	4525.00	6.50	164.00	-442.09	126.77	-440.84	459.91	Drop 2°/100'
4823.54	4850.00	0.00	0.00	-459.79	131.84	-458.49	478.32	Hold Vertical
5316.13	5342.59	0.00	0.00	-459.79	131.84	-458.49	478.32	KOP, Build 11°/100'
5837.00	6160.77	90.00	359.45	61.05	126.82	62.28	999.19	LP @ 90° Inc, Hold
5837.00	12679.02	90.00	359.45	6579.00	64.00	6579.31	7517.44	TD at 12679.02' MD

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
PBHL 0608B	5837.00	6579.00	64.00	1564925.59	3471418.34	40° 52' 17.965 N	103° 47' 43.417 W

SHL:  
2600' FNL, 2327' FWL  
Sec7-T10N-R57W  
BHL:  
1337' FNL, 2450' FWL  
Sec6-T10N-R57W  
7":  
2535' FNL, 2442' FWL  
Sec7-T10N-R57W



Vertical Section at 0.56° (1200 usft/in)

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

