

Project: Wattenberg Field
Site: K (Sec. 1-T04-R66W) Weld County, CO
Well: Loeffler K1-69-1HN
Wellbore: Original Drilling
Design: APD - Rev 0

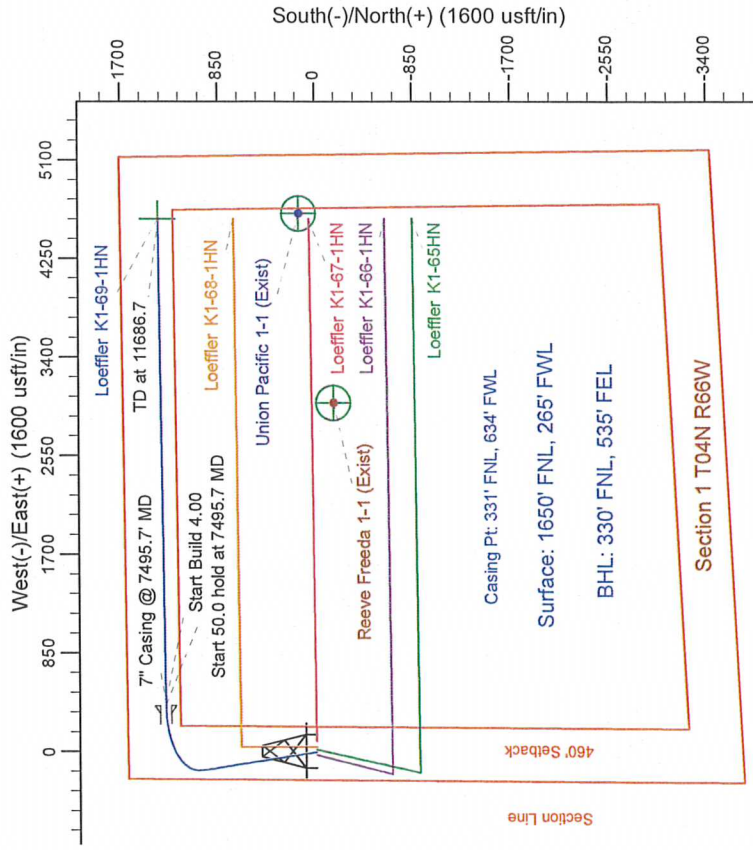
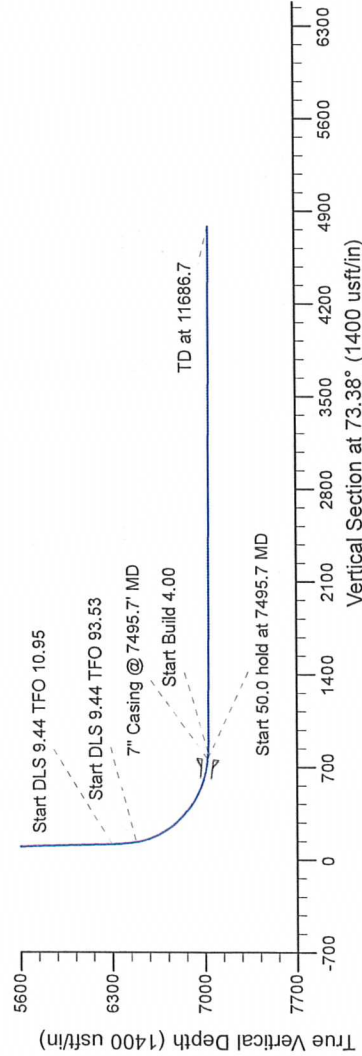
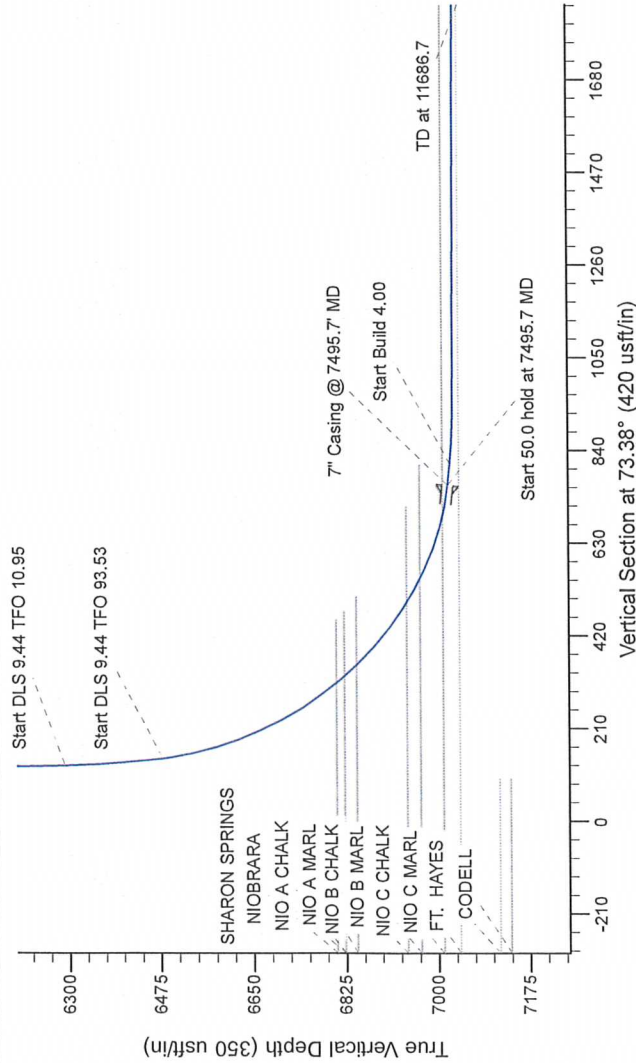
Northern Region Drilling

Geodetic System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone: Colorado Northern Zone
System Datum: Mean Sea Level

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+NLS	+EAW	Dleg	TFace	VSecl	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1550.0	11.00	351.00	1549.6	52.0	9.2	2.00	351.00	7.0	
4	1850.0	11.00	351.00	1849.6	52.0	9.2	2.00	351.00	7.0	
5	6882.6	23.72	358.11	6882.7	982.7	-152.5	0.00	129.2	129.2	
6	6882.6	23.72	358.11	6882.7	982.7	-152.5	0.00	129.2	129.2	
7	7495.7	85.00	89.32	7019.8	1031.6	9.44	10.95	144.4	144.4	
8	7545.7	85.00	89.32	7024.2	1320.0	400.0	9.44	93.53	760.8	
9	11686.7	89.80	89.32	7029.6	1322.0	449.8	0.00	0.00	808.7	
							0.00	0.00	923.9	
							0.00	-116.75	4790.3	

Loeffler K1-69-1HN BHL 330'FNL, 535'FEL



T G M

Azimuths to Grid North
True North: -0.49°
Magnetic North: 8.06°

Magnetic Field
Strength: 52947.0snT
Dip Angle: 66.96°
Date: 3/20/2013
Model: IGRF200510

WELL DETAILS: Loeffler K1-69-1HN

Nothing	Easting	Ground Level	Latitude	Longitude
0.0	0.0	1369045.75	3213523.97	-104.733960

Plan: APD - Rev 0 (Loeffler K1-69-1HN/Original Drilling)

Created By: Shalley Jewell Date: 9:03, April 23 2013

Checked: Date: _____

Reviewed: Date: _____

Approved: Date: _____