

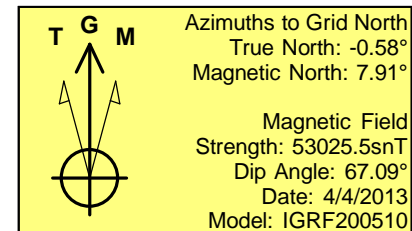
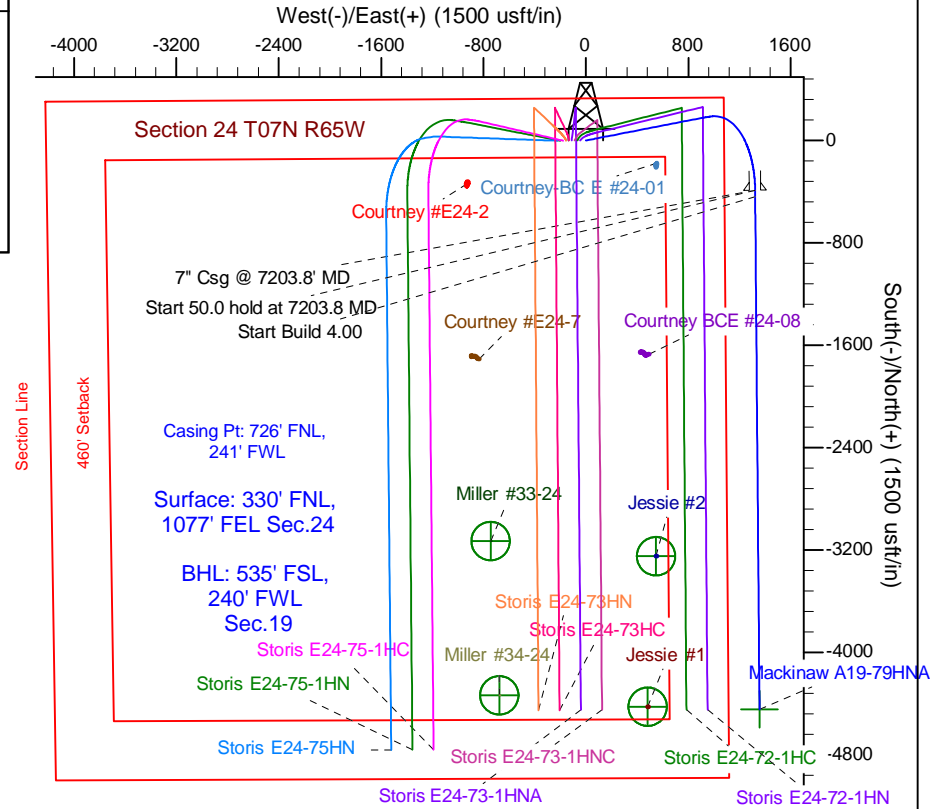
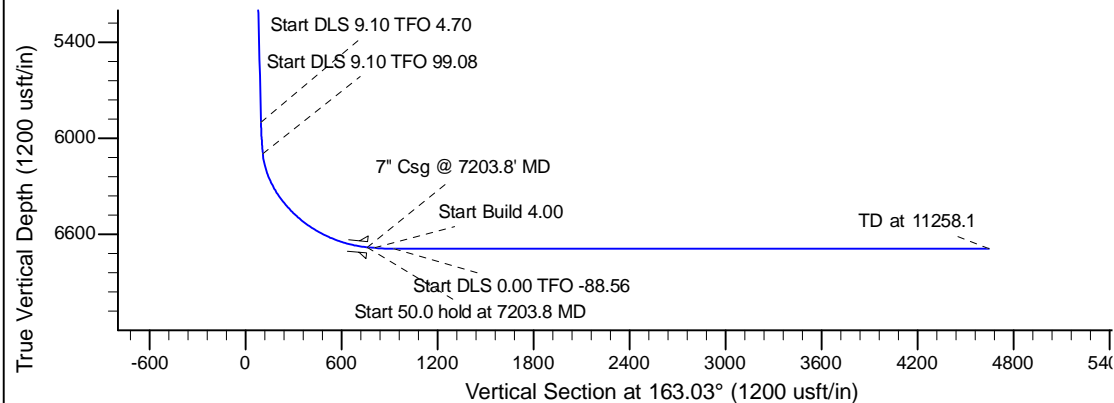
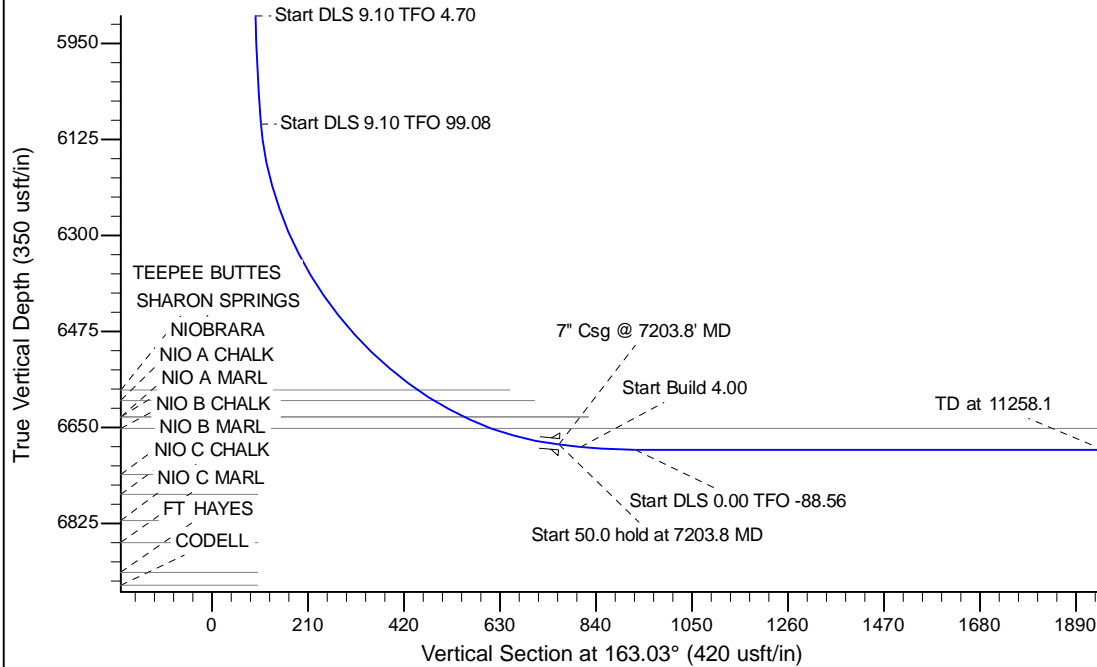
Project: Wattenberg Field
Site: E (Sec.24-T06N-R65W) Weld County, CO
Well: Mackinaw A19-79HNA
Wellbore: Original Drilling
Design: APD - Rev 1

Northern Region Drilling - Working

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	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1600.0	0.00	0.00	1600.0	0.0	0.0	0.00	0.00	0.0	
3	2250.0	13.00	79.00	2244.4	14.0	72.1	2.00	79.00	7.6	
4	6001.7	13.00	79.00	5900.0	175.0	900.5	0.00	0.00	95.5	
5	6216.8	32.55	81.93	6097.3	187.9	982.3	9.10	4.70	107.0	
6	7203.8	85.00	179.52	6681.2	-390.0	1322.0	9.10	99.08	758.9	
7	7253.8	85.00	179.52	6685.6	-439.8	1322.4	0.00	0.00	806.7	
8	7378.8	90.00	179.52	6691.0	-564.6	1323.5	4.00	0.00	926.4	
9	11258.1	90.00	179.51	6691.0	-4443.8	1356.3	0.00	-88.56	4646.1	Mackinaw A19-79HNA BHL 535'FSL, 240'FWL



WELL DETAILS: Mackinaw A19-79HNA				
Ground Level: 4684.0				
0.0	0.0	Northing	Easting	Latitude
		1418164.61	3248770.56	40.477820
				Longitude
				-104.605740
Plan: APD - Rev 1 (Mackinaw A19-79HNA/Original Drilling)				
Created By: Shailey Jewell		Date: 15:19, October 14 2013		
Checked: _____		Date: _____		
Reviewed: _____		Date: _____		
Approved: _____		Date: _____		