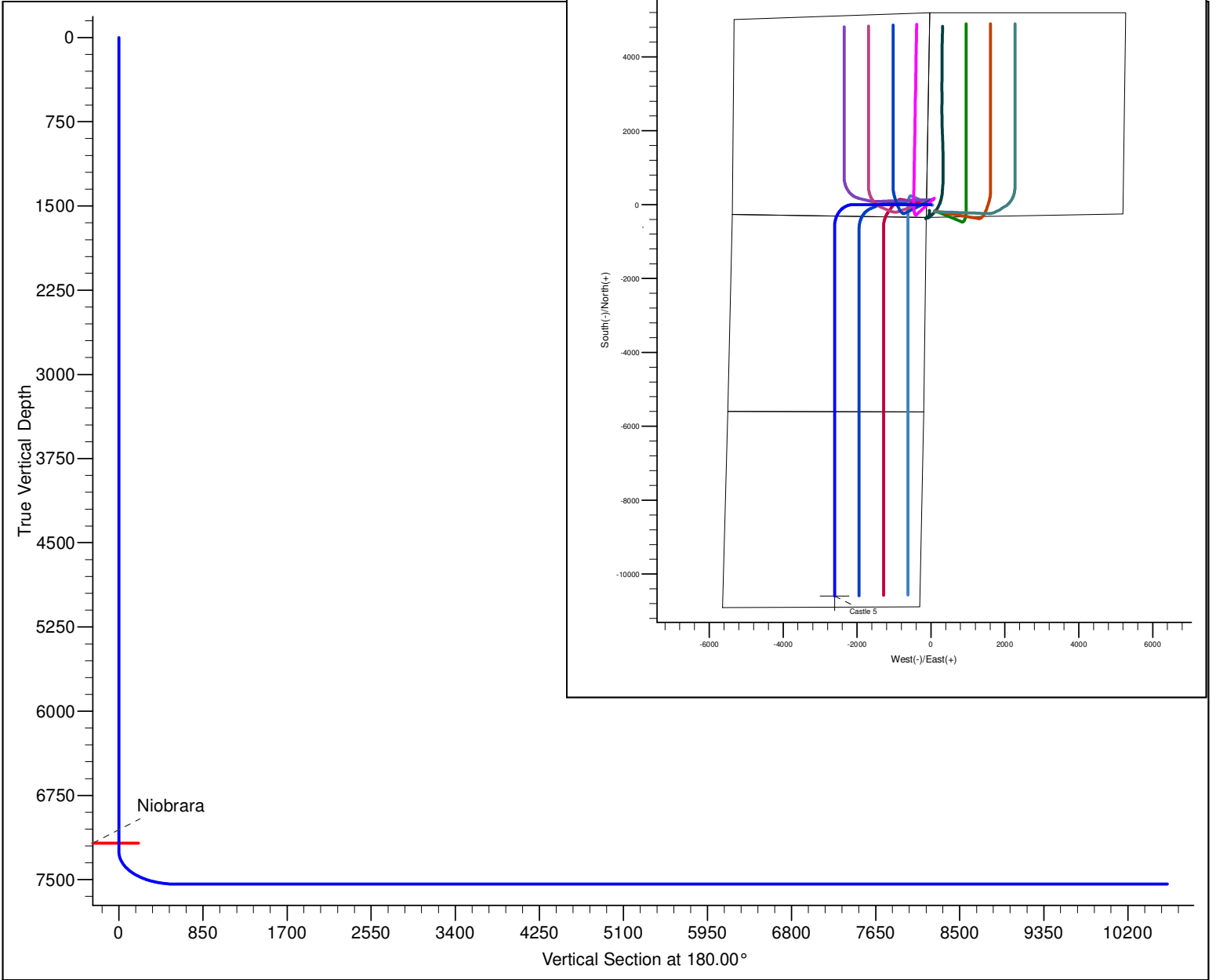


PROJECT DETAILS: North Park Basin										<div><div><div><div></div><div>G</div></div><div><div></div><div>T</div></div><div><div></div><div>M</div></div></div><div><div></div></div></div> <div><div>Azimuths to Grid North</div><div>True North: 0.57°</div><div>Magnetic North: 10.46°</div><div>Magnetic Field</div><div>Strength: 53191.9snT</div><div>Dip Angle: 66.98°</div><div>Date: 12/31/2009</div><div>Model: IGRF200510</div></div>			
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												CASING DETAILS	
TVDPATH		MDPATH		Formation		DipAngle		DipDir		No casing data is available			
7175.0		7636.2		Niobrara		0.00							
DESIGN DETAILS: Design #1												Project: North Park Basin Site: T7N-R80W-S9 Well: Castle 0780 5-17H20 Wellbore: Wellbore #1 Design: Design #1	
0' Vertical Section coordinates													
Type	Target	Azimuth	Origin	Type	N/S	E/W	From	TVD					
User		180.00	Slot		0.0	0.0		0.0					



SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0		
2	2500.0	0.00	0.00	2500.0	0.0	0.0	0.00	0.00	0.0		
3	3713.6	24.27	270.00	3677.6	0.0	-253.2	2.00	270.00	0.0		
4	7196.6	24.27	270.00	6852.7	0.0	-1685.0	0.00	0.00	0.0		
5	7643.2	60.00	270.00	7178.5	0.0	-1979.8	8.00	0.00	0.0		
6	7793.2	60.00	270.00	7253.5	0.0	-2109.7	0.00	0.00	0.0		
7	8693.1	90.00	180.00	7540.0	-572.9	-2605.9	10.00	-90.00	572.9	Castle 5	
8	18719.3	90.00	180.00	7540.0	-10599.1	-2605.9	0.00	0.00	10599.1	Castle 5	