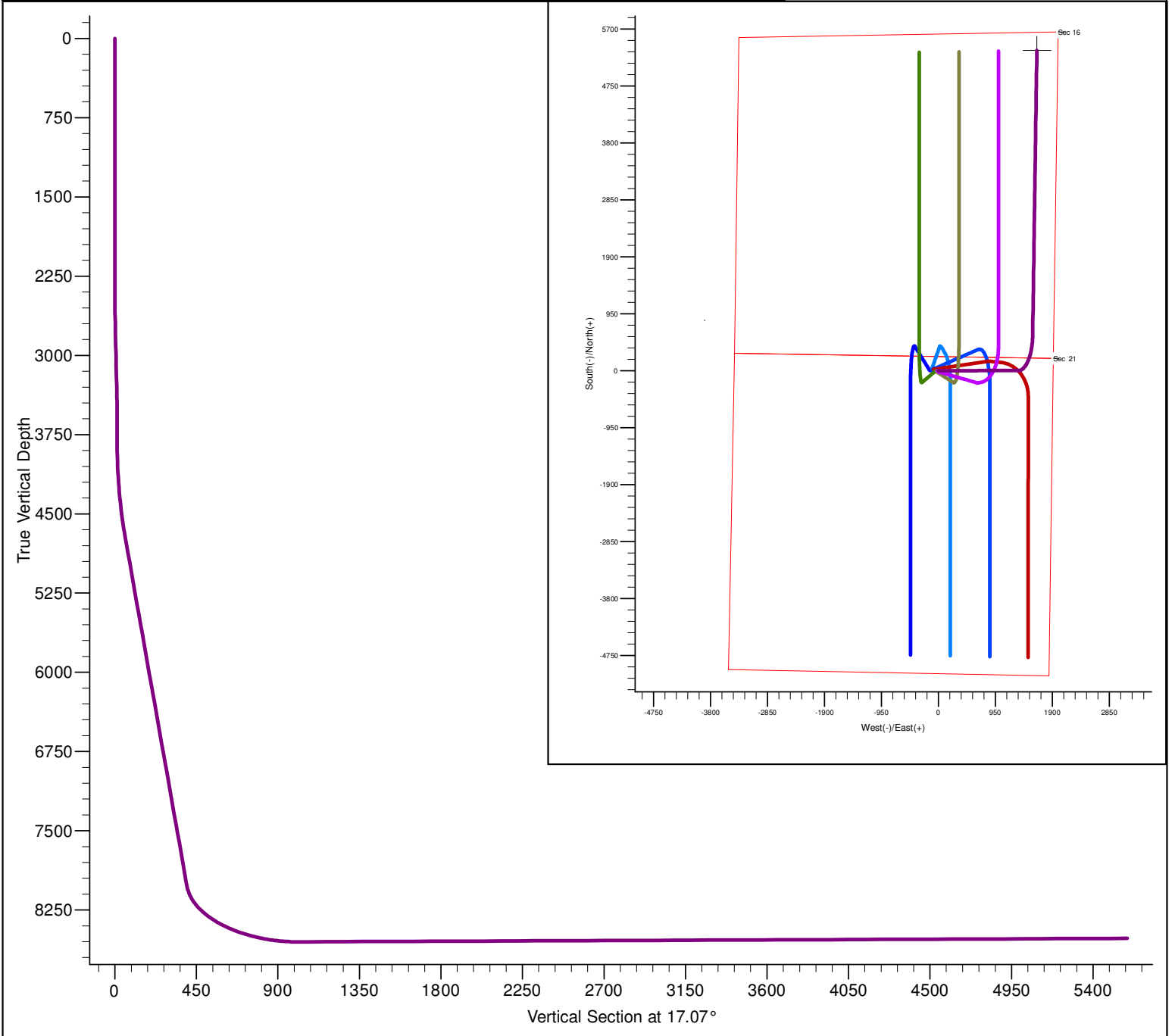


PROJECT DETAILS: North Park Basin										<div><div><div><div></div><div>G</div></div><div><div></div><div>T</div></div><div><div></div><div>M</div></div></div><div><div></div><div></div><div></div></div></div> <div>Azimuths to Grid North True North: 0.57° Magnetic North: 10.44° Magnetic Field Strength: 53183.9snT Dip Angle: 66.97° Date: 12/31/2009 Model: IGRF200510</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	
TVDPPath		MDPath		Formation		DipAngle		DipDir		No casing data is available			
6502.0		6624.9		Shannon		0.00							
7998.0		8209.5		Niobrara		0.00							
DESIGN DETAILS: Design #1												Project: North Park Basin Site: T7N-R80W-S21 Well: Ray Ranch 0780 4-16H Wellbore: Wellbore #1 Design: Design #1	
0' Vertical Section coordinates													
Type	Target	Azimuth	Origin	Type	N/S	E/W	From	TVD					
Target		17.07	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	2631.9	2.64	90.00	2631.9	0.0	3.0	2.00	90.00	0.9		
4	3369.0	2.64	90.00	3368.1	0.0	37.0	0.00	0.00	10.9		
5	3500.9	0.00	0.00	3500.0	0.0	40.0	2.00	180.00	11.7		
6	3800.0	0.00	0.00	3799.1	0.0	40.0	0.00	0.00	11.7		
7	4762.1	19.24	89.87	4743.3	0.4	200.1	2.00	89.87	59.1		
8	8235.4	19.24	89.87	8022.5	2.9	1344.7	0.00	0.00	397.5		
9	8627.7	45.00	27.20	8359.7	131.5	1478.0	10.00	-83.33	559.6		
10	9138.2	90.40	0.84	8551.2	577.1	1570.5	10.00	-34.81	1012.7	Ray Ranch 4-16H target	
11	13903.9	90.40	0.84	8518.0	5342.1	1640.4	0.00	0.00	5588.3	Ray Ranch 4-16H target	