



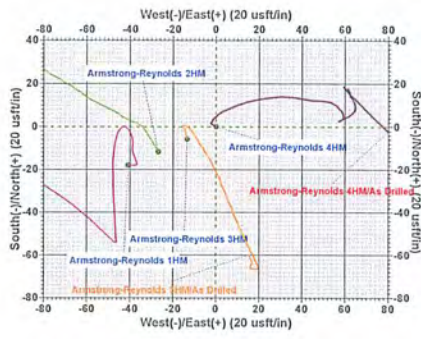
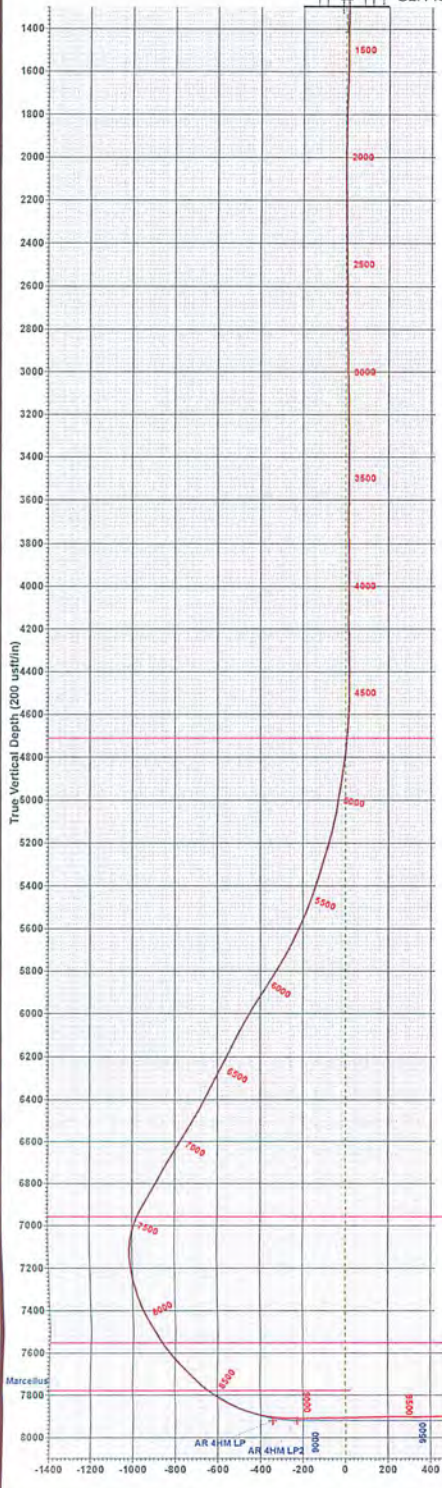
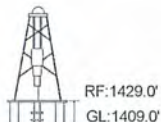
PHOENIX TECHNOLOGY SERVICES



91-01280  
Azimuths to Grid North  
True North: 0.40°  
Magnetic North: -8.50°  
Magnetic Field  
Strength: 52310.2snT  
Dip Angle: 66.81°  
Date: 9/25/2013  
Model: IGRF2010\_14

# PDC MOUNTAINEER

Armstrong-Reynolds 4HM  
Armstrong - Reynolds Unit  
20' RKB - 1409' GL @ 1429.0usft (Pioneer 63)  
Latitude: 39° 18' 10.954 N  
Longitude: 80° 7' 51.247 W  
Northing: 293111.27  
Easting: 1821465.38  
Design #2

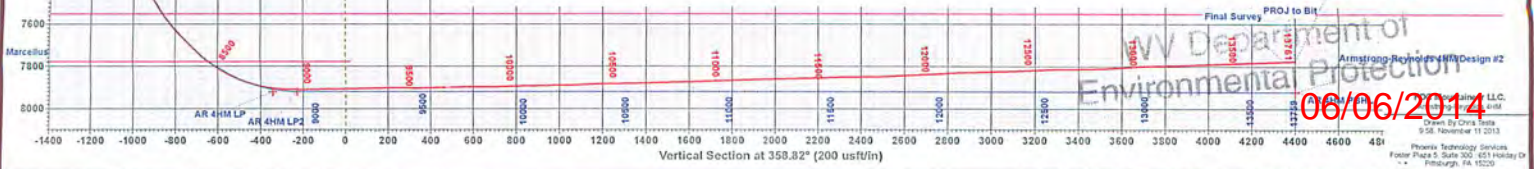
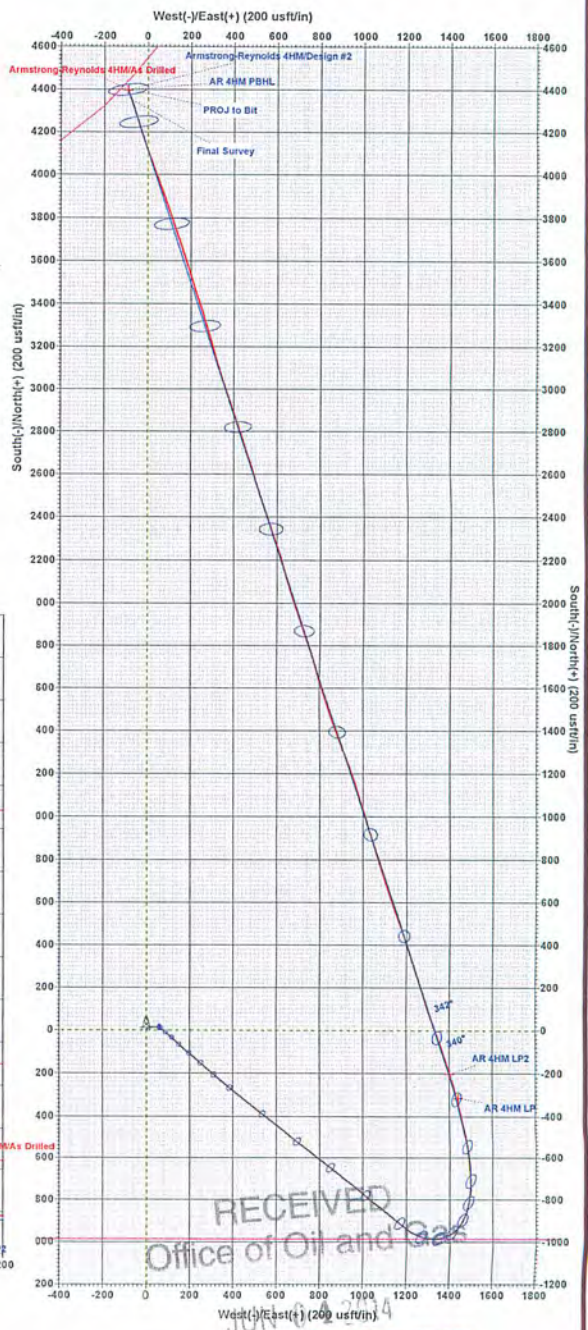
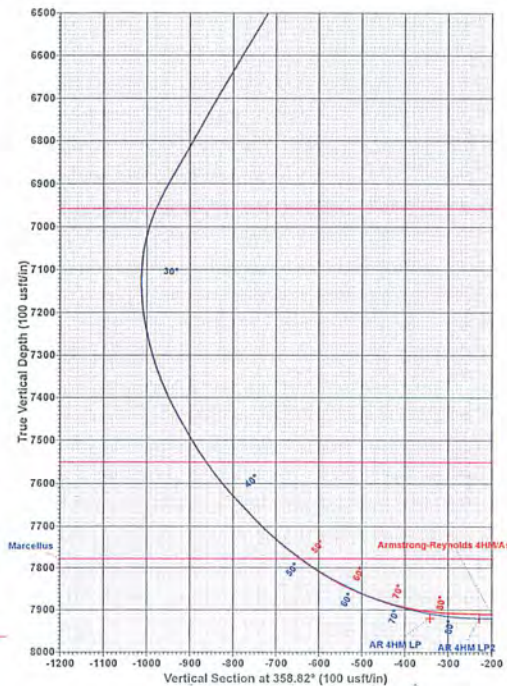


FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4709.0	4712.3	Benson
6957.0	7463.7	Sycamore Base
7550.0	8152.6	Tully
7777.0	8469.7	Marcellus

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	VFace	Target
1	8403.0	47.90	350.10	7734.6	-964.8	1495.4	0.00	0.00	-695.5	
2	8927.5	90.00	342.07	7919.6	-1169.1	1395.5	8.33	-20.44	-226.9	
3	13758.7	90.00	342.07	7920.0	4398.5	-90.7	0.00	0.00	4399.4	AR 4HM PBHL



06/06/2014

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