



PHOENIX
TECHNOLOGY SERVICES



91-01281



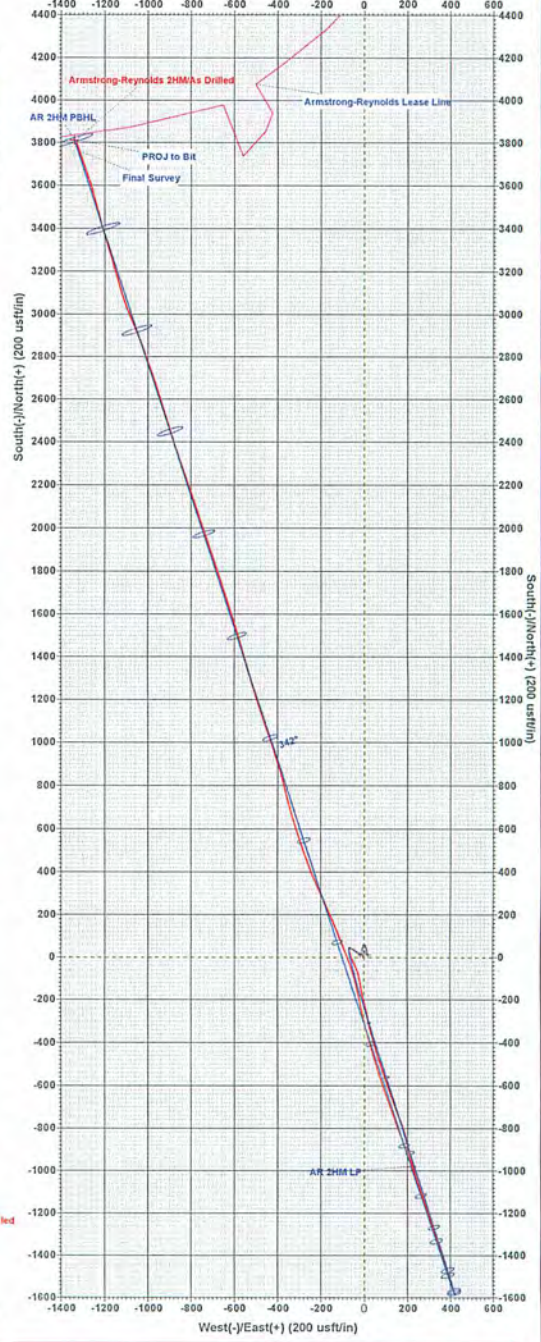
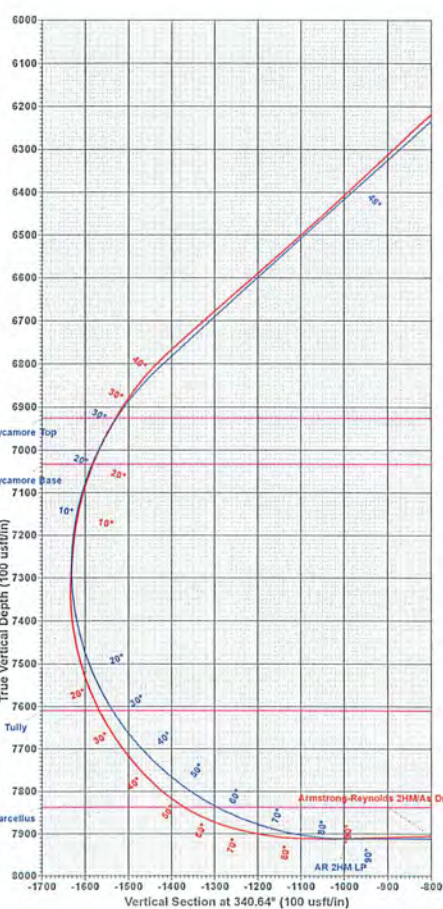
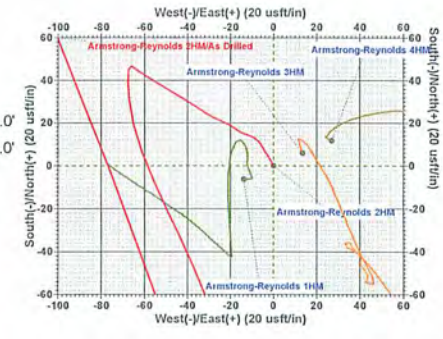
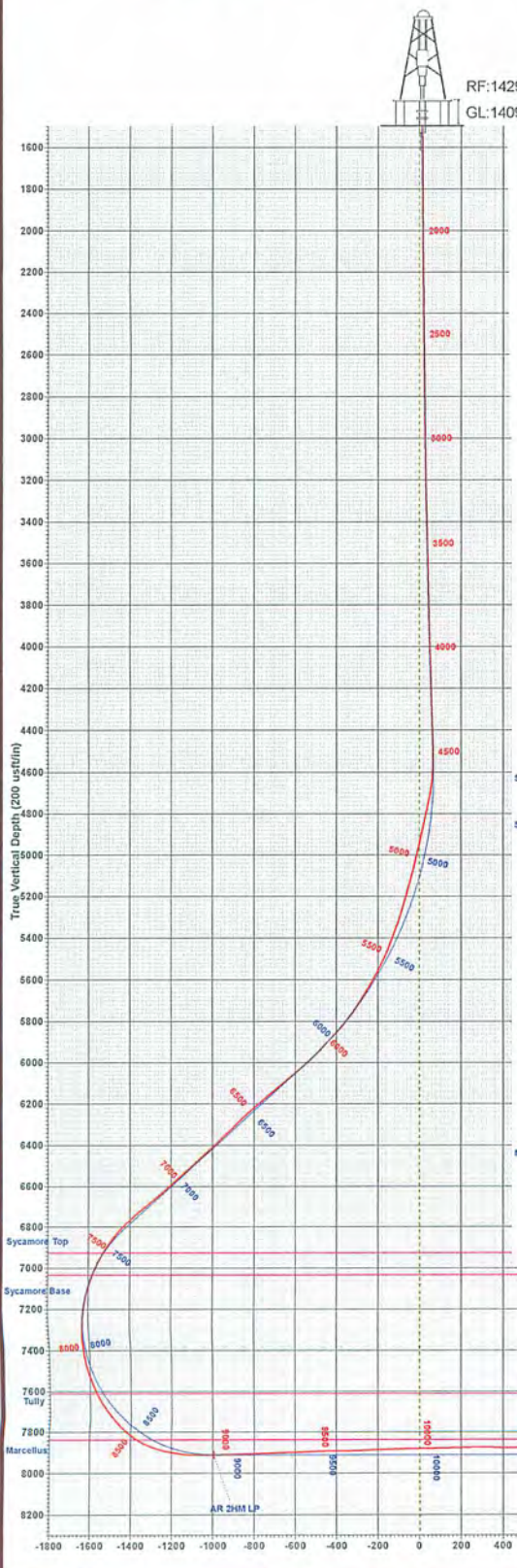
Azimuths to Grid North
True North: 0.40°
Magnetic North: -8.50°
Magnetic Field
Strength: 52310.25nT
Dip Angle: 66.81°
Date: 9/25/2013
Model: IGRF2010_14

PDC MOUNTAINEER

Armstrong-Reynolds 2HM
Armstrong - Reynolds Unit
20' RKB - 1409' GL @ 1429.0usft (Pioneer 63)
Latitude: 39° 18' 10.836 N
Longitude: 80° 7' 51.588 W
Northing: 293099.55
Easting: 1821438.47
Design #2

FORMATION TOP DETAILS			
TVDPath	MDPath	Formation	
6925.0	7529.0	Sycamore Top	
7032.0	7647.2	Sycamore Base	
7609.0	8248.2	Tully	
7836.0	8583.8	Marcellus	

SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	Vsect	Target
1	4450.0	2.50	306.87	4479.0	-46.4	-65.4	0.00	0.00	65.4	
2	4530.0	2.50	308.87	4528.9	-47.7	-67.1	0.00	0.00	67.2	
3	6185.0	47.60	162.51	6007.3	-51.5	99.1	3.00	-145.62	-552.9	
4	7367.0	47.60	162.51	6804.3	-1384.1	360.4	0.00	0.00	-1425.3	
5	8995.9	90.00	342.00	7911.0	-979.1	217.5	9.00	179.24	-956.3	AR 2HM LP
6	13933.3	90.00	342.00	7911.0	3811.7	-1339.2	0.00	0.00	4040.1	AR 2HM PBHL



DESIGN TARGET DETAILS									
Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude	Shape	
AR 2HM LP	7911.0	-979.1	217.5	293120.42	1821655.97	39° 18' 1.174 N	80° 7' 49.734 W	Point	
- plan hits target center									
AR 2HM PBHL	7911.0	3811.7	-1339.2	293120.42	1821655.97	39° 18' 1.174 N	80° 7' 49.734 W	Point	
- plan hits target center									

RECEIVED
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WV Department of Environment
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Phoenix Technology Services
Foster Plaza 5, Suite 300, 651 Holiday Dr
Pittsburgh, PA 15220