

17-06103



**Antero Resources**  
**Ruckman Unit 3H**  
**Doddridge County WV**  
**Northing: 14217504.51**  
**Easting: 1726786.83**  
**Original Wellpath**

**WELL DETAILS:** Ruckman Unit 3H

Ground Level:	1250.0
+N/-S	0.0
+E/-W	0.0
Northing	14217504.51
Eastings	1726786.83
Latitude	39° 07' 20" N 80° 41' 43.201" W
Longitude	
Spot	

**PROJECT DETAILS:** Doddridge County WV

Geodetic System: Universal Transverse Mercator (US Survey Feet)  
Datum: NAD 1983 (NAD83 CONUS)  
Eipsoid: GRS 1980  
Zone: Zone 17N (64 W to 78 W)  
System Datum: Mean Sea Level

**REFERENCE INFORMATION**

Coordinate (N/E) Reference: Well Ruckman Unit 3H, Grid North  
Vertical (TVD) Reference: Surface of 201' Fossil # 1207' OI - 24' RIG @ 1214.04ft  
Measured Depth Reference: Ruckman Unit 3H Fossil # 1207' OI - 24' RIG @ 1214.04ft  
Geographic Method: Brnohous Correction

**LEGEND**

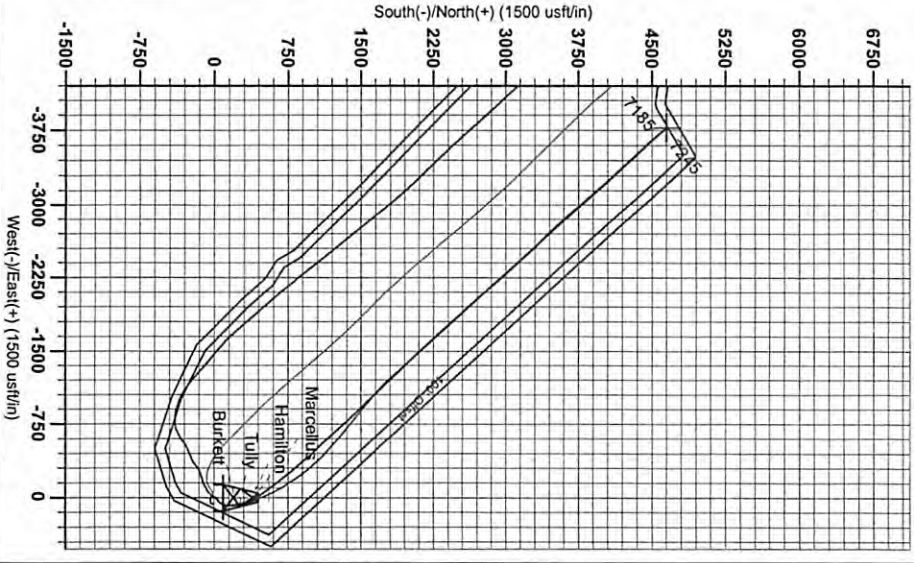
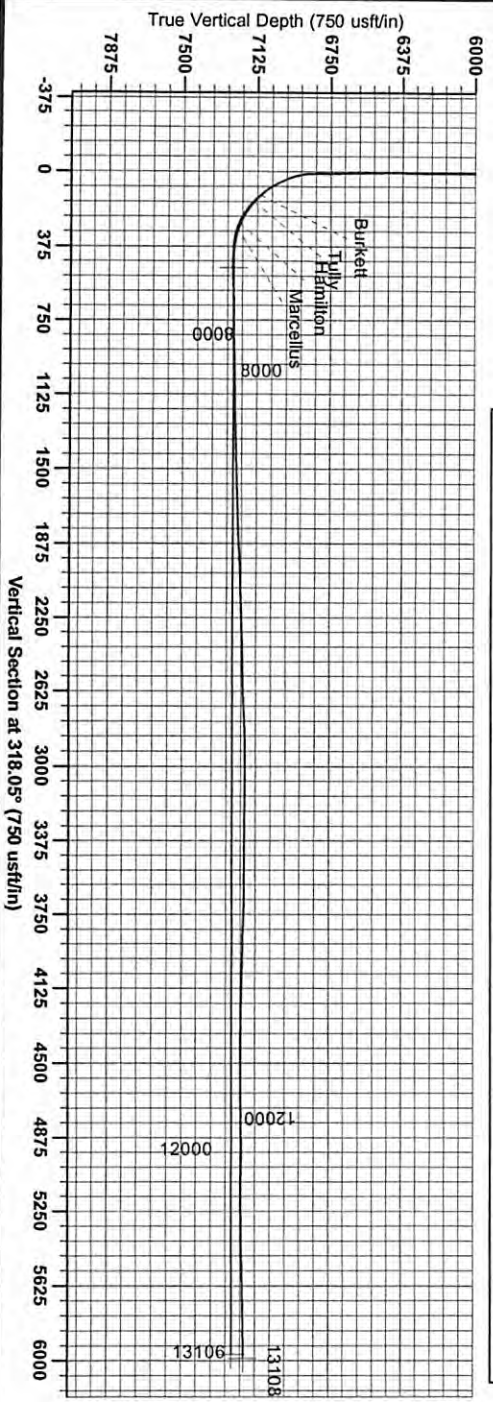
- Ruckman Unit 3H, Original Wellpath, Original Wellpath VO
- Droppeman Unit 1H, Original Wellpath, Original Wellpath VO
- Ruckman Unit 1H, Original Wellpath, Original Wellpath VO
- Ruckman Unit 3H, Original Wellpath, Plan 4 VO
- Original Wellpath

**Scientific Drilling**  
421 South Eagle Lane  
Oklahoma City, OK

Gaile Lightfoot  
14:38, September 08 2013

**DESIGN TARGET DETAILS**

Name	TVD	+N/-S	+E/-W	Northing	Eastings	Latitude	Longitude
SHL Ruckman Unit 3H	0.0	4656.6	0.0	0.014217504	1726786.83	39° 07' 20" N 80° 41' 43.201" W	
Actual BHL Ruckman Unit 3H	8.8			-3778.114222161	07 1723008.71	39° 07' 54.136" N 80° 42' 30.988" W	
SHL (UTM meters)				4333.722m	625.340m		
BHL (UTM meters)				4.335, 126m	525.192m		



**Magnetic Field**  
Strength: 52414.2nT  
Dip Angle: 65.03°  
Year: 2013  
Model: IGRF2010

**Azimuths to Grid North**  
True North: -0.15°  
Magnetic North: -8.03°

To convert True North to Grid, Subtract 8.03°  
To convert True North to Mag, Subtract 0.15°

01/10/2014