

State of West Virginia  
Department of Environmental Protection - Office of Oil and Gas  
Well Operator's Report of Well Work

API 42-87-04689 County Roane District Curtis  
Quad Penie / 538 Pad Name \_\_\_\_\_ Field/Pool Name \_\_\_\_\_  
Farm name Monk Well Number 2010A4-1  
Operator (as registered with the OOG) Longhorn Hydrocarbons LLC  
Address 3152 Parkway City Pigeon Forge State TN Zip 37863

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing \_\_\_\_\_ Easting \_\_\_\_\_  
Landing Point of Curve Northing \_\_\_\_\_ Easting \_\_\_\_\_  
Bottom Hole Northing \_\_\_\_\_ Easting \_\_\_\_\_

Elevation (ft) 1003 GL Type of Well  New  Existing Type of Report  Interim  Final

Permit Type  Deviated  Horizontal  Horizontal 6A  Vertical Depth Type  Deep  Shallow

Type of Operation  Convert  Deepen  Drill  Plug Back  Redrilling  Rework  Stimulate

Well Type  Brine Disposal  CBM  Gas  Oil  Secondary Recovery  Solution Mining  Storage  Other Awalting

Type of Completion  Single  Multiple Fluids Produced  Brine  Gas  NGL  Oil  Other Awalting

Drilled with  Cable  Rotary

Drilling Media Surface hole  Air  Mud  Fresh Water Intermediate hole  Air  Mud  Fresh Water  Brine

Production hole  Air  Mud  Fresh Water  Brine

Mud Type(s) and Additive(s)

Soap

Date permit issued 01/24/2011 Date drilling commenced 02/01/2011 Date drilling ceased 02/09/2011  
Date completion activities began 02/11/2011 Date completion activities ceased 02/12/2011  
Verbal plugging (Y/N) N Date permission granted N/A Granted by \_\_\_\_\_

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 600ft Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 1100ft Void(s) encountered (Y/N) depths N  
Coal depth(s) ft N/A Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

Reviewed by:

10/17/2014

API 47-87 - 04689 Farm name Monk Well number 2010A4-1

CASING STRINGS	Hole Size	Casing Size	Depth	Now or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	14.25	13 3/8	32ft	new	J55-42lbs		Yes Cemented
Surface	9 5/8	9 5/8	800ft	NEW			Yes
Coal							
Intermediate 1	8.75	7"	2000ft	new	J55-23lbs		Yes
Intermediate 2							
Intermediate 3							
Production	6.25	4.5"	2800ft		J55-10.5lbs		Yes
Tubing	2"						
Packer type and depth set		4.5 / 800 feet					

Comment Details \_\_\_\_\_

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	Class1	10				ground level	8/WDBR
Surface							
Coal							
Intermediate 1	Class1	230	15.6	1.18	271.4	ground level	8
Intermediate 2							
Intermediate 3							
Production	Class1	350	14.2	1.29	451.5	ground level	12
Tubing							

Drillers TD (ft) 2000 Loggers TD (ft) 2000  
 Deepest formation penetrated Salt Sand Plug back to (ft) \_\_\_\_\_  
 Plug back procedure \_\_\_\_\_

Kick off depth (ft) \_\_\_\_\_

Check all wireline logs run  
 caliper     density     deviated/directional     induction  
 neutron     resistivity     gamma ray     temperature     sonic

Well cored  Yes  No    Conventional    Sidewall    Were cuttings collected  Yes  No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING \_\_\_\_\_

WAS WELL COMPLETED AS SHOT HOLE  Yes  No    DETAILS \_\_\_\_\_

WAS WELL COMPLETED OPEN HOLE?  Yes  No    DETAILS No Frack Date

WERE TRACERS USED  Yes  No    TYPE OF TRACER(S) USED \_\_\_\_\_



API 47- 87 - 04689

Farm name Monk

Well number 2010A4-1

PRODUCING FORMATION(S)                      DEPTHS  
No Frack To Date - No Current                      TVD                      MD  
production                      \_\_\_\_\_                      \_\_\_\_\_  
 \_\_\_\_\_                      \_\_\_\_\_                      \_\_\_\_\_  
 \_\_\_\_\_                      \_\_\_\_\_                      \_\_\_\_\_

Please insert additional pages as applicable.

GAS TEST     Build up     Drawdown     Open Flow                      OIL TEST     Flow     Pump  
 SHUT-IN PRESSURE    Surface \_\_\_\_\_ psi    Bottom Hole \_\_\_\_\_ psi    DURATION OF TEST \_\_\_\_\_ hrs  
 OPEN FLOW    Gas                      Oil                      NGL                      Water                      GAS MEASURED BY  
                     \_\_\_\_\_ mcfpd    \_\_\_\_\_ bpd    \_\_\_\_\_ bpd    \_\_\_\_\_ bpd     Estimated     Orifice     Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
Red Rock	0	610	0		
Pitts Sand	610	715			
Slate	715	790			
Pitts-Sand	790	830			
late Red Roc	830	1125			
L. Dunkard	1125	1264			
SLate Lime	1265	1350			
Gas Sand	1351	1541			
Slate-sand	1542	1790			
Salt Sand	1791	2000			

Please insert additional pages as applicable.

Drilling Contractor Monroe Drilling  
 Address 46886 Moore Ridge Rd.                      City Woodsfield                      State OH                      Zip 43793

Logging Company Appalachian Well Survey  
 Address 4973 Skyline Drive                      City Cambridge                      State OH                      Zip 43725

Cementing Company Formation Cement  
 Address P.O. Box 2667                      City Zanesville                      State OH                      Zip 43702

Stimulating Company \_\_\_\_\_  
 Address \_\_\_\_\_                      City \_\_\_\_\_                      State \_\_\_\_\_                      Zip \_\_\_\_\_

Please insert additional pages as applicable.

Completed by Eric Moser                      Telephone 865.287.6208  
 Signature \_\_\_\_\_                      Title Managing Partner                      Date 09/24/2014

Submittal of Hydraulic Fracturing Chemical Disclosure Information                      Attach copy of FRACFOCUS Registry