

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

API 47-87-04690 County Roane District Curtis  
Quad Penie / 538 Pad Name \_\_\_\_\_ Field/Pool Name \_\_\_\_\_  
Farm name Monk Well Number 2010A4-2  
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) 941 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 Awaiting  
Type of Completion  Single  Multiple Fluids Produced  Brine  Gas  NGL  Oil  Other Awaiting  
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 02/15/2011 Date drilling commenced 02/17/2011 Date drilling ceased 02/25/2011  
Date completion activities began 02/26/2011 Date completion activities ceased ~~02/27/2011~~ 3/06/11  
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 - 04690

Farm name Monk

Well number 2010A4-3

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	<del>7.25</del>	9 5/8	23 3/4 ft	new	J55-42lbs		Yes Cemented
Surface	8.75	7"	911	New	J55-231lb		Yes
Coal							
Intermediate 1	<del>8.75</del>	<del>7"</del>	<del>2000ft</del>	<del>new</del>	<del>J55-231lb</del>		Yes
Intermediate 2							
Intermediate 3							
Production	6.25	4.5"	2000ft		J55- <sup>9.5lb</sup> <del>19.5lb</del>		Yes
Tubing		2 3/8	As Needed				
Packer type and depth set	4.6 / 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 - Frac info

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



API 47- 87 - 04690 Farm name Monk Well number 2010A4-2

PRODUCING FORMATION(S) DEPTHS  
No Frack To Date - ND \_\_\_\_\_ 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 \_\_\_\_\_ mofpd Oil \_\_\_\_\_ bpd NGL \_\_\_\_\_ bpd Water \_\_\_\_\_ bpd GAS MEASURED BY  
 Estimated  Orifice  Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC)
Red Rock	0	610	0		
Platts Sand	610	655			
Slate	655	730			
Platts-Sand	730	770			
late Red Roc	770	965			
L. Dunkard	965	1204			
SLate Lime	1204	1290			
Gas Sand	1290	1481			
Slate-sand	1481	1730			
Salt Sand	1730	1941			

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 Universal Well Services  
 Address P.O. Box 7437 City Brookhaven State WV Zip 26201

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