

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

API 47-069-00170 County Ohio District Liberty  
Quad Bethany Pad Name Clarence Farmer Pad Field/Pool Name \_\_\_\_\_  
Farm name Clarence Farmer OHI 206H Well Number 837777  
Operator (as registered with the OOG) Chesapeake Appalachia, L.L.C.  
Address P.O. Box 18496 City Oklahoma City State OK Zip 73154-0496

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 444172.3 Easting 536141.0  
Landing Point of Curve Northing \_\_\_\_\_ Easting \_\_\_\_\_  
Bottom Hole Northing 4441398.0 Easting 537057.8

Elevation (ft) 1330 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 \_\_\_\_\_  
Type of Completion  Single  Multiple Fluids Produced  Brine  Gas  NGL  Oil  Other \_\_\_\_\_  
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)  
SOBM

Date permit issued 5/14/2013 Date drilling commenced 7/23/2013 Date drilling ceased 8/14/2013  
Date completion activities began \_\_\_\_\_ Date completion activities ceased \_\_\_\_\_  
Verbal plugging (Y/N) \_\_\_\_\_ Date permission granted \_\_\_\_\_ Granted by \_\_\_\_\_

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

Freshwater depth(s) ft 425' Open mine(s) (Y/N) depths \_\_\_\_\_  
Salt water depth(s) ft 750' Void(s) encountered (Y/N) depths Y 627'  
Coal depth(s) ft 627' Cavern(s) encountered (Y/N) depths \_\_\_\_\_  
Is coal being mined in area (Y/N) N

Received

Reviewed by: \_\_\_\_\_

API 47- 069 - 00170 Farm name Clarence Farmer OHI 206H Well number 837777

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	30"	20"	122'	New	J-55 94#		Y
Surface	17 1/2"	13 3/8"	659'	New	J-55 54.5#		Y
Coal							
Intermediate 1	12 1/4"	9 5/8"	2102'	New	J-55 40#		Y
Intermediate 2							
Intermediate 3							
Production	8 3/4" / 8 1/2"	5 1/2"	15730'	New	P-110 20#		Y
Tubing		2 3/8"	Approx. 6894'	New	N-80		
Packer type and depth set							

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	Class A	306	15.6	1.18	361.08	Surface	8
Surface	Class A	469	15.6	1.21	567.49	Surface	8
Coal							
Intermediate 1	Class A	745	15.6	1.20	894	Surface	8
Intermediate 2							
Intermediate 3							
Production	Class H	3263	15.6	1.18	3850.34	862'	8
Tubing	NA	NA		NA	NA	NA	

Drillers TD (ft) 15,732' Loggers TD (ft) \_\_\_\_\_  
 Deepest formation penetrated Marcellus Plug back to (ft) NA  
 Plug back procedure \_\_\_\_\_

Kick off depth (ft) 6048'

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 \_\_\_\_\_  
Surface / Coal - Run centralizers in the middle and top of the first joint, top of the third jt and every 4th joint to surface.  
 Production - Run 1st centralizer 3' from Shoe, 2nd at top of the first joint and then one every 3rd joint to TOC.

WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS Received

WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_

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

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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)

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Please insert additional pages as applicable.

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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>Marcellus</u>	<u>6304</u>	<u>TVD</u>	<u>6740</u> <u>MD</u>
_____	_____	_____	_____
_____	_____	_____	_____

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 \_\_\_\_\_ mcfpd Oil \_\_\_\_\_ bpd NGL \_\_\_\_\_ bpd Water \_\_\_\_\_ bpd GAS MEASURED BY  Estimated  Orifice  Pilot

<u>LITHOLOGY/ FORMATION</u>	<u>TOP DEPTH IN FT NAME TVD</u>	<u>BOTTOM DEPTH IN FT TVD</u>	<u>TOP DEPTH IN FT MD</u>	<u>BOTTOM DEPTH IN FT MD</u>	<u>DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H<sub>2</sub>S, ETC)</u>
	0		0		
LS	0	628	0	628	LIMESTONE & MINOR SILTSTONE
COAL	628	638	628	638	PITTSBURGH COAL
SILT/SH	638	1250	638	1250	SILTSOTNE & SHALE
SS/SILT	1250	1650	1250	1650	SANDSTONE & SILTSTONE
LS	1650	1754	1650	1754	BIG LIME
BGIJ SS	1754	1965	1754	1965	BIG INJUN SANDSTONE
SH	1965	6137	1965	6434	SHALE
GENESEO	6137	6156	6434	6462	GENESEO SHALE
TULLY LS	6156	6202	6462	6530	TULLY LIMESTONE
HAMILTON	6202	6304	6530	6740	HAMILTON GREY SHALE
MARCELLUS	6304	6431/TD	6740	15732/TD	MARCELLUS SHALE

Please insert additional pages as applicable.

Drilling Contractor Nomac Drilling  
Address 171 Locust Ave Extension City Mt. Morris State PA Zip 15349

Logging Company Nomac Drilling  
Address 171 Locust Ave Extension City Mt. Morris State PA Zip 15349

Cementing Company Baker Hughes  
Address 837 Philippi Pike City Clarksburg State WV Zip 26301

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

Please insert additional pages as applicable.

Office of Oil and Gas  
WV Dept. of Environmental Protection

Completed by Marlene Williams Telephone 405-935-4158  
Signature Marlene Williams Title Regulatory Analyst Date 1-16-2014

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

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

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	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	0		0		
LS	0	628	0	628	LIMESTONE & MINOR SILTSTONE
COAL	628	638	628	638	PITTSBURGH COAL
SILT/SH	638	1250	638	1250	SILTSTONE & SHALE
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