WR-35 Rev. 8/23/13 Page of 4

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

API <u>47</u> - 061 _	01830	ongalia D	oistrict Clay	
Quad Blacksville	Pad Name Ma		ield/Pool Name	
Farm name Matteo			Well Number 2H	
Operator (as registered wit	th the OOG) Northeast Natu	ral Energy LLC		
Address 707 Virginia St	. E, Suite 1200 City C	Charleston	_ <sub>State</sub> WV	<sub>Zip</sub>
	hole Northing 4389916.1 Curve Northing NA	Eastin Eastin	deviation survey ng 568692.5 ng NA NA	
Elevation (ft) 1492	GL Type of We	ll <b>■</b> New □ Existing	Type of Report □I	Interim ■Final
Permit Type   Deviate	ed   Horizontal Hori		Depth Type □	Deep  Shallow
Type of Operation □ Con	vert □ Deepen ■ Drill	□ Plug Back □ Redrilli	ing □ Rework □	Stimulate
Well Type	osal □ CBM	Secondary Recovery	ution Mining 🗆 Storaş	ge 🗆 Other
Type of Completion □ Si	ngle □ Multiple Fluids Pro	oduced □ Brine □Gas	□ NGL □ Oil □	Other
•	■ Rotary			
Drilling Media Surface h Production hole □ Air Mud Type(s) and Additive NA			le 🗆 Air 🗆 Mud 🗅	□ Fresh Water □ Brine  RECEIVED  Office of Oil and Gas  NUV 2 1 2019
				WV Department of
Date permit issued2		ommenced5/2/19	Date drilling ceas	
Date completion activities	began NA	Date completion activi		NA
Verbal plugging (Y/N)	Y Date permission gran	nted9/25/19	Granted by Gayne K	initowski, Inspector
Please note: Operator is re	equired to submit a plugging app	olication within 5 days of ver	bal permission to plug	
Freshwater depth(s) ft	915', 1040'	Open mine(s) (Y/N) dep	oths	N
Salt water depth(s) ft	0.0001	Void(s) encountered (Y		Y, 1040'
Coal depth(s) ft	7401 0041	_ Cavern(s) encountered (		N
Is coal being mined in area	N.I.			
				Reviewed by:

Page Z of 4 WR-35 Rev. 8/23/13 Farm name\_Matteo \_Well number\_2H API 47-061 01830 Did cement circulate (Y/N) **CASING** Hole Casing New or Grade Basket \* Provide details below\* **STRINGS** Size Depth Used wt/ft Depth(s) Size Conductor 24" 30" 40' NA Y Ν NA Surface 54.5 NA Υ 17-1/2" 13-3/8" 1198' Ν Coal Intermediate 1 Intermediate 2 Intermediate 3 Production Tubing Packer type and depth set Comment Details **CEMENT** Volume WOC Class/Type Number Slurry Yield Cement  $(ft^3)$ (ft 3/sks) DATA of Cement of Sacks wt (ppg) Top (MD) (hrs) Conductor 4,500 PSI Grout 36 .75 27 CTS 8+ Surface 547 CTS, 10 bbl 8+ Class A + 2% 15.6 1.21 1232 Coal Intermediate 1 Intermediate 2 Intermediate 3 Production Tubing Drillers TD (ft) 2,800 Loggers TD (ft) 2,780 Deepest formation penetrated Big Injun Plug back to (ft) surface Plug back procedure Set a solid column API cement plug in 500' increments to surface. Fill cellar with concrete. Kick off depth (ft) NA Check all wireline logs run □ deviated/directional □ caliper □ density □ 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

□ Yes 📱 No

□ Yes 💄 No

**DETAILS** 

**DETAILS** 

Surface casing - bow spring centralizers every 3rd joint or approximately 120'

WAS WELL COMPLETED AS SHOT HOLE

WAS WELL COMPLETED OPEN HOLE?

WERE TRACERS USED □ Yes ■ No

TYPE OF TRACER(S) USED

RECEIVED

Office of Oil and Gas

NOV 2 1 2019

WR-35 Rev. 8/23/13

API 47- 061 _ 01830	Farm name Matteo	Well number <sup>2H</sup>
M1 1/		

## PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	NA				
	E .				
			8		
-					

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)
	NA							
								8
						2		
					2			

Please insert additional pages as applicable.

RECEIVED Office of Oil and Gas

NOV 2 1 2019

Page 4 of 4 WR-35 Rev. 8/23/13 API 47- 061 \_ 01830 Farm name Matteo \_\_\_\_Well number\_2H PRODUCING FORMATION(S) **DEPTHS** NA MD TVD Please insert additional pages as applicable. **GAS TEST** □ Build up □ Drawdown □ Open Flow OIL TEST □ Flow □ Pump DURATION OF TEST hrs SHUT-IN PRESSURE Surface psi Bottom Hole psi Oil NGL Water **OPEN FLOW** Gas GAS MEASURED BY bpd bpd □ Estimated □ Orifice □ Pilot mcfpd bpd LITHOLOGY/ TOP **BOTTOM** TOP **BOTTOM** DESCRIBE ROCK TYPE AND RECORD QUANTITYAND DEPTH IN FT **FORMATION** DEPTH IN FT DEPTH IN FT DEPTH IN FT TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H<sub>2</sub>S, ETC) NAME TVD MD TVD MD 0 0 RECEIVED Office of Oil and Gas NOV 2 1 2019 WV Department of Environmental Protection Please insert additional pages as applicable. Drilling Contractor Highlands Drilling Address 900 Virginia St. E State WV Zip 25301 Charleston City Logging Company City Address State Zip Cementing Company Lightning Energy Services State WV Address 104 Heliport Loop Rd Bridgeport Zip 26330 City Stimulating Company City State Zip Please insert additional pages as applicable.

Submittal of Hydraulic Fracturing Chemical Disclosure Information

Completed by Hollie Medley

Signature 4000

Attach copy of FRACFOCUS Registry

Date

Telephone 304-212-0422

Title Regulatory Manager