

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

API 47-061-01711 County Monongalia District Clay
Quad Blacksville, WV Pad Name Campbell Field/Pool Name _____
Farm name Ellen F. Campbell Well Number 7H
Operator (as registered with the OOG) Northeast Natural Energy, LLC
Address 707 Virginia Street East, Suite 1200 City Charleston State WV Zip 25301

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4394761.4 Easting 569973.5
Landing Point of Curve Northing 4394625.9 Easting 569552.2
Bottom Hole Northing 4396954.4 Easting 567936.7

Elevation (ft) 1,293.6' 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)
Synthetic Based Mud- Horizontal Section: BIO-BASE 365, CALCIUM CHLORIDE POWDER, G-SEAL PLUS, HRP, LIME, M-I WATE (BARITE), M-I-X II MEDIUM,
MEGADRIL P SYSTEM, MEGADRIL P SYSTEM RENTAL, MEGAMUL, SAFE-CARB 250, VERSATHIN HF, VERSAWET, VG-PLUS, VINSEAL MEDIUM, WALNUT NUT PLUG MEDIUM

Date permit issued 6/17/2015 Date drilling commenced 7/29/2015 Date drilling ceased 2/27/2016
Date completion activities began 07/06/2016 Date completion activities ceased 07/27/2016
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 1,190' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 2,000' Void(s) encountered (Y/N) depths _____
Coal depth(s) ft 200' ; 940' Cavern(s) encountered (Y/N) depths _____

Is coal being mined in area (Y/N) N
APPROVED
NAME: [Signature]
DATE: 4/27/2017

RECEIVED
Office of Oil and Gas
APR 03 2017
Reviewed by:
WV Department of
Environmental Protection
05/26/2017

API 47-061 - 01711

Farm name Ellen F. Campbell

Well number 7H

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	24	50	N	N/A	N/A	Y to surface
Surface	17.5	13-3/8	1,265'	N	54.5	N/A	Y 38 bbl return
Coal							
Intermediate 1	12.25	9-5/8	2,432'	N	40	N/A	Y 21 bbl return
Intermediate 2							
Intermediate 3							
Production	8.5	5-1/2	18,382'	N	20	N/A	Y 6 bbl return
Tubing		2-3/8	8,912	N	4.7	N/A	N/A
Packer type and depth set		No packer utilized.					

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	4,500 psi ready mix	36.4		.75	27.27	CTS	48
Surface	Class A	1,054	15.2	1.27	1,271	CTS	8
Coal							
Intermediate 1	Class A	889	15.2	1.26	1,074	CTS	8
Intermediate 2							
Intermediate 3							
Production	50/50 Premium NE - 1.3% R-3.3% MPA 170	2,804	14.5	1.17	2,661	CTS	48
Tubing							

Drillers TD (ft) 18,392'

Loggers TD (ft) 18,367'

Deepest formation penetrated Marcellus

Plug back to (ft) N/A

Plug back procedure _____

Kick off depth (ft) 6,515'

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: bow spring centralizers every 3rd joint or aprox 120'

Intermediate: bow spring centralizers every 3rd joint or aprox 120'

Production: Hard bodied spiral centralizers every other joint or aprox 80' from TD to KOP then bow spring from KOP to 9 5/8" every forth joint or aprox 140'

WAS WELL COMPLETED AS SHOT HOLE Yes No

DETAILS Perforations shot through production casing along lateral. See attached documentation.

WAS WELL COMPLETED OPEN HOLE? Yes No

DETAILS _____

WERE TRACERS USED Yes No

TYPE OF TRACER(S) USED _____

