

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

RECEIVED  
Office of Oil and Gas

AUG 01 2017

API 47-051-01810 County Marshall District Clay  
Quad Powhatan Point Pad Name MND 1 Field/Pool Name Marcellus  
Farm name CNX Gas Company, LLC ET AL Well Number MND 1 AHS  
Operator (as registered with the OOG) Noble Energy, Inc.  
Address 1001 Noble Energy Way City Houston State Texas Zip 77070

WV Department of  
Environmental Protection

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 39.850009 Easting -80.774286  
Landing Point of Curve Northing \_\_\_\_\_ Easting \_\_\_\_\_  
Bottom Hole Northing \_\_\_\_\_ Easting \_\_\_\_\_

Elevation (ft) 1152.08 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)  
\_\_\_\_\_  
\_\_\_\_\_

Date permit issued 03/18/2015 Date drilling commenced 07/31/2015 Date drilling ceased 07/31/2015

Date completion activities began na Date completion activities ceased na

Verbal plugging (Y/N) 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 521' Open mine(s) (Y/N) depths na

Salt water depth(s) ft na Void(s) encountered (Y/N) depths na

Coal depth(s) ft 687-697 Cavern(s) encountered (Y/N) depths na

Is coal being mined in area (Y/N) Yes

**APPROVED**

NAME: Jan Underaker

DATE: 8/16/2017

Reviewed by:

[Signature]

API 47-051 - 01810 Farm name CNX Gas Company, LLC ET AL Well number MND 1 AHS

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	36"	30"	40'	New	LS/117#		
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							
Packer type and depth set							

Comment Details \*set only the conductor.

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							
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							

Drillers TD (ft) 40' Loggers TD (ft) 40'  
 Deepest formation penetrated \_\_\_\_\_ Plug back to (ft) \_\_\_\_\_  
 Plug back procedure \_\_\_\_\_

Kick off depth (ft) NA

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 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

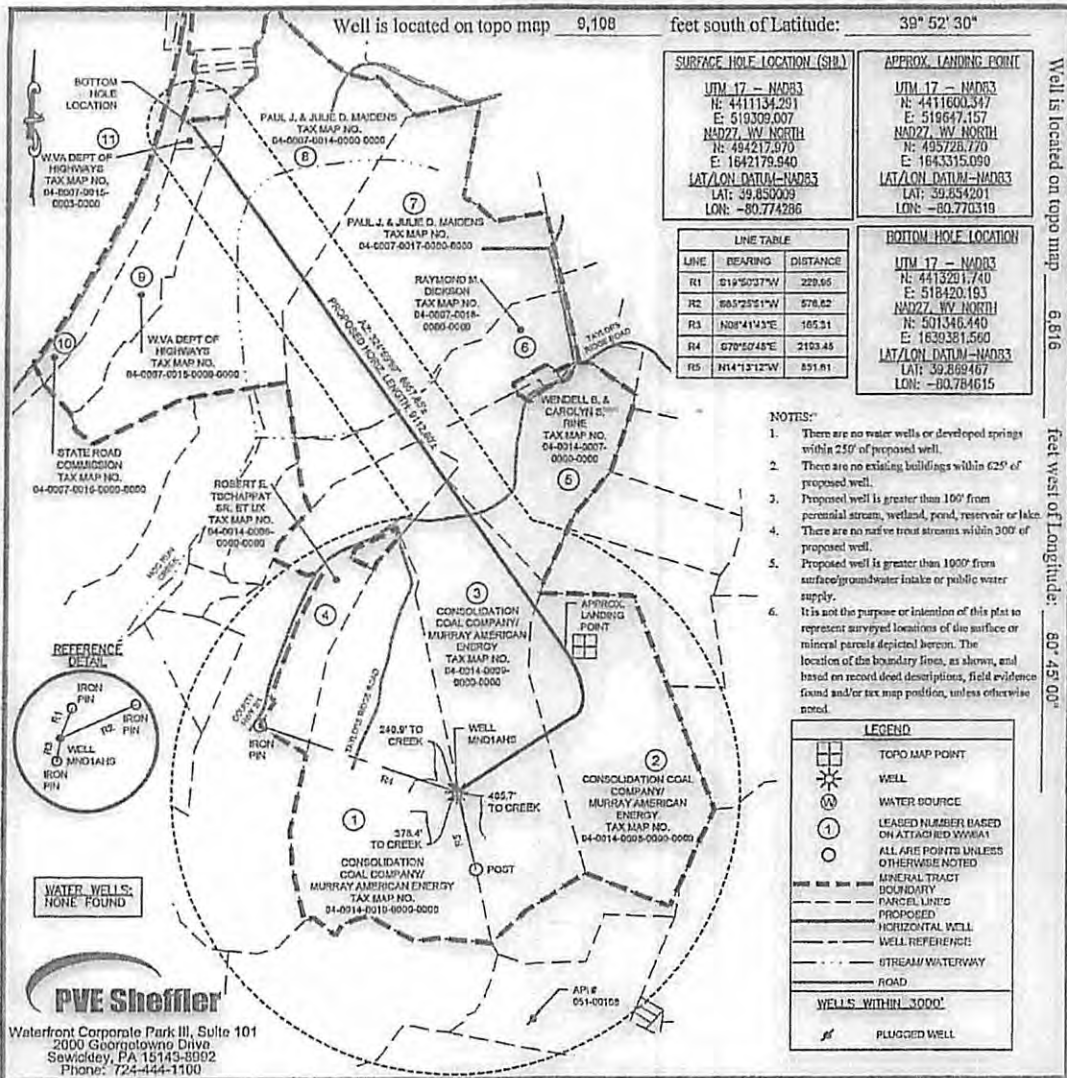
WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS \_\_\_\_\_ **RECEIVED**  
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WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_ **AUG 01 2017**

WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED \_\_\_\_\_ **WV Department of Environmental Protection**







FILE #: MND 1 AHS  
DRAWING #: MND 1 AHS  
SCALE: 1"=1500'  
MINIMUM DEGREE OF ACCURACY: 1/2500  
PROVEN SOURCE U.S.G.S. MONUMENT OF ELEVATION: H 130: 658.60'

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

SIGNED *Charles Douglas Davidson*  
R.P.E.: \_\_\_\_\_ L.L.S.: P.S. NO. 819



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
WVDEP  
OFFICE OF OIL & GAS  
601 57TH STREET  
CHARLESTON, WV 25304

Well Type:  Oil  Waste Disposal  Production  Deep  
 Gas  Liquid Injection  Storage  Shallow

WATERSHED: OHIO RIVER  
COUNTY/DISTRICT: MARSHALL/CLAY  
SURFACE OWNER: CONSOLIDATION COAL COMPANY/MURRAY ENERGY  
OIL & GAS ROYALTY OWNER: CNX GAS COMPANY, LLC, ET AL

DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE   
PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG AND ABANDON   
CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY)

TARGET FORMATION: MARCELLUS  
WELL OPERATOR: NOBLE ENERGY, INC.  
Address: 333 TECHNOLOGY DRIVE, SUITE 116  
City CANNONSBURG State PA Zip Code 15317

DATE: NOVEMBER 17, 2014 - REV: DECEMBER 15, 2014  
OPERATOR'S WELL #: MND 1 AHS  
API WELL # 47 051 01910  
STATE COUNTY PERMIT

ELEVATION: 1152.05'  
QUADRANGLE: POWHATAN POINT, W. VA./OHIO  
ACREAGE: 126.00  
ACREAGE: 126.99

ESTIMATED DEPTH: TVD: 6,350' ± TMD: 16,612' ±  
DESIGNATED AGENT: STEVEN M. GREEN  
Address: 500 VIRGINIA STREET EAST, UNITED CENTER SUITE 500  
City CHARLESTON State WV Zip Code 25301

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