

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

API 47-051-01837 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 EHS
Operator (as registered with the OOG) Noble Energy, Inc.
Address 1001 Noble Energy Way City Houston State Texas Zip 77070

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 39.849854 Easting -80.774358
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 05/27/2015 Date drilling commenced 08/02/2015 Date drilling ceased 08/02/2015

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 RECEIVED
Salt water depth(s) ft na Void(s) encountered (Y/N) depths na Office of Oil and Gas
Coal depth(s) ft 687-697 Cavern(s) encountered (Y/N) depths na AUG 01 2017

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

APPROVED
NAME: Jan Nubaker
DATE: 8/16/2017

Reviewed by _____
Department of Environmental Protection

API 47-051 - 01837 Farm name CNX Gas Company, LLC ET AL Well number MND 1 EHS

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 ³ /sks)	Volume (ft ³)	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 _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

RECEIVED
Office of Oil and Gas

AUG 01 2017

Department of Environmental Protection

SURFACE HOLE LOCATION (SHL)

UTM 17 - NAD83
 N: 441117.074
 E: 519302.861
 NAD27, WY NORTH
 N: 494161.810
 E: 1642158.830
 LAT/LON DATUM-NAD83
 LAT: 39.84854
 LON: -80.77438

APPROX LANDING POINT

UTM 17 - NAD83
 N: 441055.811
 E: 519200.521
 NAD27, WY NORTH
 N: 493300.238
 E: 1642005.474
 LAT/LON DATUM-NAD83
 LAT: 39.84783
 LON: -80.774861

BOTTOM HOLE LOCATION

UTM 17 - NAD83
 N: 4408605.082
 E: 520916.254
 NAD27, WY NORTH
 N: 485830.140
 E: 1647315.442
 LAT/LON DATUM-NAD83
 LAT: 39.827183
 LON: -80.755579

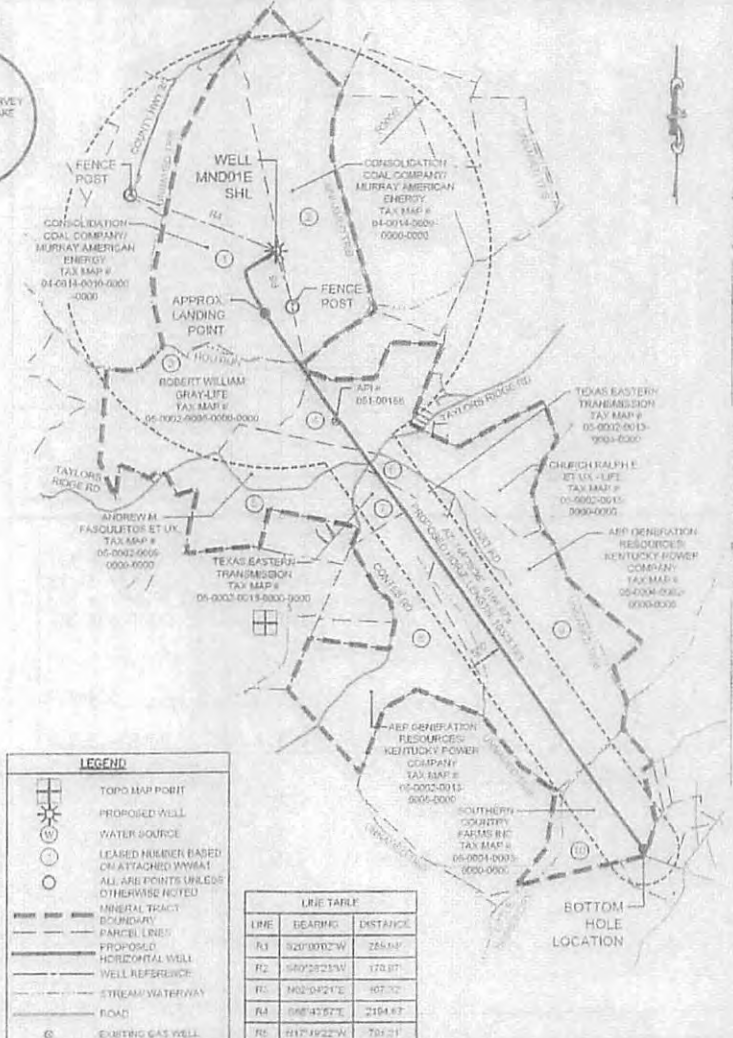
**WATER WELLS:
 NONE FOUND**

NOTES:

- There are no water wells or developed springs within 250' of proposed well.
- There are no existing buildings within 625' of proposed well.
- Proposed well is greater than 100' from personal stream, wetland, pond, reservoir or lake.
- There are no active trout streams within 100' of proposed well.
- Proposed well is greater than 1000' from surface groundwater intake or public water supply.
- It is not the purpose or intention of this plat to represent surveyed locations of the surface or mineral parcels depicted herein. The location of the boundary lines, as shown, and based on record deed descriptions, field evidence (soil and/or tax map) position, unless otherwise noted.

PVE Sheffler
 Engineering • Surveying • Design
 Waterfront Corporate Park III, Suite 301
 2000 Georgetown Drive
 Sewickley, PA 15143-8292
 Phone: 724-444-1100

Well is located on topo map 9.161 feet south of Latitude: 39° 52' 30"



LEGEND

- TOPO MAP POINT
- PROPOSED WELL
- WATER SOURCE
- LEASED MINERALS BASED ON ATTACHED MINERAL ALL ARE POINTS UNLESS OTHERWISE NOTED
- MINERAL TRACT BOUNDARY
- PANEL LINES
- PROPOSED HORIZONTAL WELL
- WELL REFERENCE
- STREAM/WATERWAY
- ROAD
- EXISTING GAS WELL

LINE TABLE

LINE	BEARING	DISTANCE
R1	S20°00'27"W	285.69'
R2	S89°28'23"W	170.87'
R3	N62°08'21"E	107.32'
R4	S88°43'57"E	2184.87'
R5	N17°19'22"W	791.21'

Well is located on topo map 6.842 feet west of Longitude: 80° 45' 00"

TITLE: MND 01 EHS
 DRAWING: MND 01 EHS
 SCALE: 1"=2000'
 MINIMUM DEGREE OF ACCURACY: 1/2500'
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT H.136: 636.58'

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: *[Signature]*
 R.P.E.: 18766 L.L.S.: P.S. NO. _____

DATE: FEBRUARY 12, 2015 - REV MARCH 3, 2015
 OPERATOR'S WELL #: MND 01 EHS
 API WELL #: 47 051 01837
 STATE COUNTY PERMIT

(H) 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: SHORT CREEK-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: 1000 NOBLE ENERGY DRIVE
 City: CANNONSBURG State: PA Zip Code: 15317
 ELEVATION: 1150.42'
 QUADRANGLE: POWHATAN POINT, W. VA/OHIO
 ACREAGE: 126.99
 ESTIMATED DEPTH: TVD: 5,360' ± TMD: 16,325' ±
 DESIGNATED AGENT: JESSICA ALSOP
 Address: 301 GOLDEN EAGLE DRIVE
 City: MORGANTOWN State: WV Zip Code: 26506

RECEIVED
 Office of Oil and Gas
 AUG 01 2017
 WV Department of Environmental Protection