

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

API 47 - 051 - 01838 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 FHS
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 39.849815 Easting -80.774376
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
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: Jim [Signature]
DATE: 8/10/2017

RECEIVED
Office of Oil and Gas
Reviewed by: AUG 01 2017
08/31/2018
WV Department of
Environmental Protection

API 47- 051 - 01838 Farm name CNX Gas Company, LLC ET AL Well number MND 1 FHS

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 _____

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08/31/2018

Well is located on topo map 9175 feet south of Latitude: 39° 52' 30"

Well is located on topo map 6847

feet west of Longitude: 80° 49' 00"

SURFACE HOLE LOCATION (SHL)

UTM 17 - NAD83
 N: 4411112.770
 E: 519301.324
NAD27 WV NORTH
 N: 494147.770
 E: 1642153.550
LAT/LON DATUM-NAD83
 LAT: 39.848815
 LON: -80.774376

APPROX. LANDING POINT

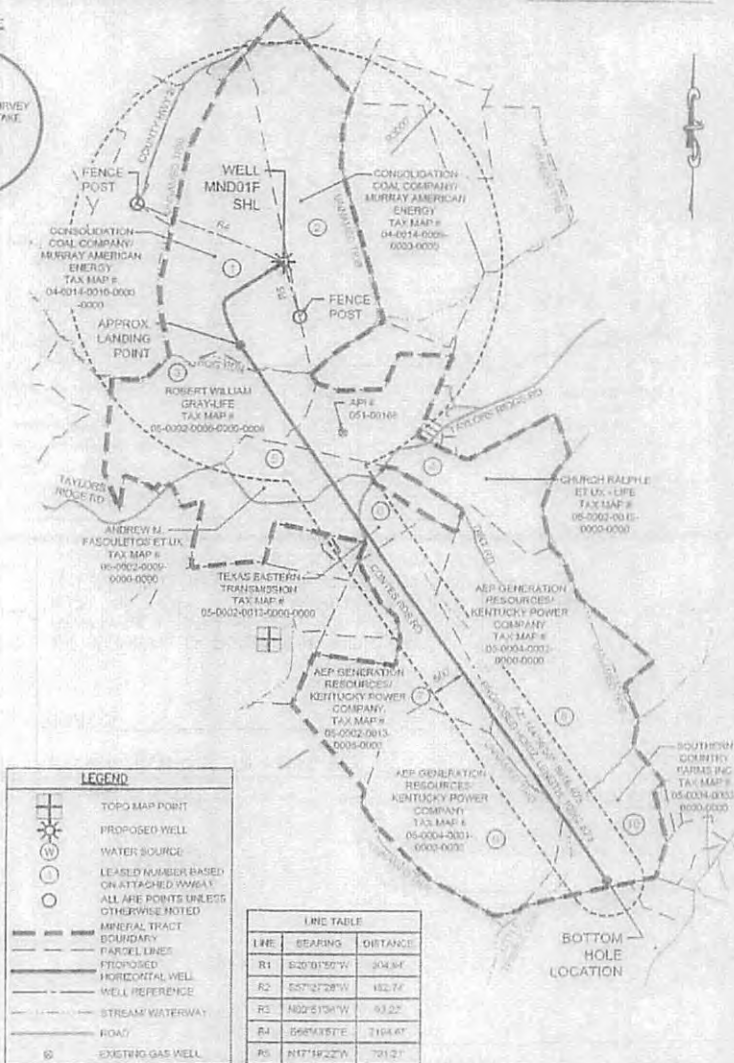
UTM 17 - NAD83
 N: 4410758.090
 E: 519128.567
NAD27 WV NORTH
 N: 492993.370
 E: 1641567.230
LAT/LON DATUM-NAD83
 LAT: 39.846624
 LON: -80.776406

BOTTOM HOLE LOCATION

UTM 17 - NAD83
 N: 4408558.981
 E: 520723.836
NAD27 WV NORTH
 N: 485689.424
 E: 1646681.512
LAT/LON DATUM-NAD83
 LAT: 39.826772
 LON: -80.778229

**WATER WELLS:
 NONE FOUND**

**REFERENCE
 DETAIL**



NOTES:

1. There are no water wells or developed springs within 250' of proposed well.
2. There are no existing buildings within 625' of proposed well.
3. Proposed well is greater than 100' from (vertical) stream, wetland, pond, reservoir or lake.
4. There are no active trout streams within 300' of proposed well.
5. Proposed well is greater than 1000' from surface groundwater intake or public water supply.
6. If 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, land and/or tax map position, unless otherwise noted.

LEGEND

- TOPO MAP POINT
- PROPOSED WELL
- WATER SOURCE
- LEASE NUMBER BASED ON ATTACHED W/WAY
- ALL ARE POINTS UNLESS OTHERWISE NOTED
- MINERAL TRACT BOUNDARY
- PARCEL LINES
- PROPOSED HORIZONTAL WELL
- WELL REFERENCE
- STREAM WATERWAY
- ROAD
- EXISTING GAS WELL

LINE	BEARING	DISTANCE
R1	S20°01'50"W	204.84'
R2	S57°27'28"W	182.77'
R3	N82°17'04"W	93.22'
R4	S68°43'57"E	2194.67'
R5	N17°18'22"W	791.27'

FILE #: MND 01 FHS
 DRAWING #: MND 01 FHS
 SCALE: 1"=2000'
 MINIMUM DEGREE OF ACCURACY: 1/2500'
 PROVEN SOURCE: U.S.G.S. MONUMENT
 OF ELEVATION: H 138; 638.56'

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. _____

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

DATE: FEBRUARY 12, 2015 - REV MARCH 3, 2015
 OPERATOR'S WELL #: MND 01 FHS
 API WELL #: 47 051 01831
 STATE: COUNTY: PERMIT:

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

WATERSHED: SHORT CREEK-OHIO RIVER ELEVATION: 1160.64'
 COUNTY/DISTRICT: MARSHALL / CLAY QUADRANGLE: POWHATAN POINT, W. VA./OHIO
 SURFACE OWNER: CONSOLIDATION COAL COMPANY/ MURRAY ENERGY ACREAGE: 126.99
 OIL & GAS ROYALTY OWNER: CNX GAS COMPANY, LLC, ET AL ACREAGE: 126.99

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 ESTIMATED DEPTH: TVD 6,360' ± TMD 16.077 ±
 WELL OPERATOR: NOBLE ENERGY, INC. DESIGNATED AGENT: JESSICA ALSOP
 Address: 1000 NOBLE ENERGY DRIVE Address: 301 GOLDEN EAGLE DRIVE
 City CANNONSBURG State PA Zip Code 15317 City MORGANTOWN State WV Zip Code 26508

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Well Operator's Report of Well Work

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AUG 01 2017
WV Department of
Environmental Protection

APPROVED

NAME: Steve J. ...
DATE: 8/16/2017

Reviewed by: _____
08/31/2018

API 47-051 - 01839

Farm name CNX Gas Company, LLC ET AL Well number MND 1 MHS

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