



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

December 14, 2015

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-8101489, issued to CNX GAS COMPANY LLC , is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalties being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.

James Martin

Chief

Operator's Well No: 33109

Farm Name: DANIEL, RAYMOND

API Well Number: 47-8101489

Permit Type: Plugging

Date Issued: 12/14/2015

Promoting a healthy environment.

12/18/2015

PERMIT CONDITIONS

West Virginia Code § 22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

1. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
3. Well work activities shall not constitute a hazard to the safety of persons.

1) Date _____, 20____
2) Operator's
Well No. 33109
3) API Well No. 47-081-01489

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil ____/ Gas x/ Liquid injection ____/ Waste disposal ____/
(If "Gas, Production x or Underground storage ____) Deep ____/ Shallow x

5) Location: Elevation 1945ft. Watershed Cove Creek
District Marsh Fork County Raleigh Quadrangle Arnett, WV

6) Well Operator CNX Gas Company LLC 7) Designated Agent Anthony Kendziora
Address 637 Claypool Hill Mall Road Address One Dominion Drive
Cedar Bluff, VA 24609 Jane Lew, WV 26378

8) Oil and Gas Inspector to be notified Name Gary Kennedy
Address PO Box 268
Nimitz, WV 24978
9) Plugging Contractor Name L&D Well Services
Address PO Box 1192
Vansant, VA 24656

10) Work Order: The work order for the manner of plugging this well is as follows:
see attached plugging procedures

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Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector *Gary Kennedy* Date 11/24/15

12/18/2015

API 47-081-01489 Plugging ProcedureWell # 33109

1. Verify total depth 4907'.
2. Run free-point survey on 4-1/2" casing. Drillers log states that the top of cement per bond log is 2215'.
3. Run tubing to TD. Set plug of Class A 3% CaCl cement from established TD to approximately 50' below free point or a point at least 100' above the Union Perforations (2530' – 2540') utilizing a 100' gel spacer at approximately 100' above the Union Perforations.
4. Cut 4-1/2" casing at free-point.
5. Cement through 4-1/2" csg. while pulling 4-1/2", from top of bottom plug to approximately 100' below the 7" casing shoe. (Approx. 1602') Pull remaining 4-1/2" out of well.
6. Run bond log on 7" casing.
7. Run tubing to previous cement top (1602'). Cement across the 7" shoe to a minimum of 50' above shoe, bringing cement top to approximately 50' below the 7" free-point or to surface, whichever is necessary.
8. If necessary, cut and pull free 7" casing.
9. Repeat free-point and cutting procedures for 9-5/8" if 7" is cut and pulled.
10. Cement from 50' below 9-5/8" shoe to surface.
11. Install 4-1/2" X 4' steel monument with API# and Date.

NOTE: A 100' gel spacer will be placed at approximately half the well depth. Class A 3% CaCl cement will be utilized throughout the entire cementing process.

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★ IT APPEARS 7" & 4 1/2" WERE CEMENTED TO SURFACE.

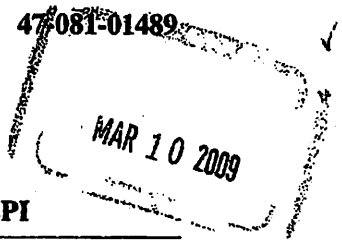
JMM

12/18/2015

8101489 P

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

DATE: 12/12/2008
API No: 47081-01489



Farm Name: DANIEL, RAYMOND Operator Well No.: 33109 DEPI

LOCATION: Elevation: 1945' Quadrangle: Arnett 7.5'

District: Marsh Fork County: Raleigh

Latitude: 3,000 Feet South of: 37 Deg. 47 Min. 30 Sec.
Longitude: 3,890 Feet West of: 81 Deg. 25 Min. 00 Sec.

Company: Dominion Exploration & Production, Inc.

| | Casing and Tubing | Used in drilling | Left in well | Cement fill up Cu. Ft. |
|--|-------------------|------------------|--------------|------------------------|
| Address: P.O. Box 1248 Jane Lew, WV 26378 | | | | |
| Agent: Rodney J. Biggs | | | | |
| Inspector: Bryan Harris | | | | |
| Date Permit Issued: 5/28/2008 | | | | |
| Date Well Work Commenced: 9/10/2008 | 12 3/4" | 21' | 21' | Sand In |
| Date Well Work Completed: 09/25/2008 | | | | |
| Verbal Plugging: N/A | 9 5/8" | 351' | 351' | 175 sks |
| Date Permission granted on: N/A | | | | |
| Rotary X Cable Rig | 7" | 1502' | 1502' | 255 sks |
| Total Depth (feet): 4950' | | | | |
| Fresh Water Depth (ft.): 115' | 4 1/2" | 4907' | 4907' | 360 sks |
| Salt Water Depth (ft.): N/A | | | | |
| Is coal being mined in area (N/Y)?: No | | | | |
| Coal Depths (ft. 535'-538, 556'-559, 820'-824', 850'-853') | | | | |
| Oil Depths (ft.) N/A | | | | |

OPEN FLOW DATA

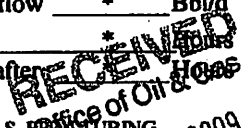
| Producing formation | Pay zone depth (ft) |
|--|------------------------------------|
| PICKAWAY (4) | 2648'-2658' |
| DENMAR (3) | 2826'-2832' |
| GORDON (2) | 3558'-3564' |
| UPPER HURON (1) | 4490'-4500' |
| Gas: Initial open flow _____ MCF/d | Oil: Initial open flow _____ Bbl/d |
| Final open flow _____ MCF/d | Final open flow _____ Bbl/d |
| Time of open flow between initial and final tests _____ Hours | |
| Static rock Pressure _____ psig (surface pressure) after _____ Hours | |

| Second Producing formation | Pay zone depth (ft) |
|--|------------------------------------|
| UNION (5) | 2530'-2540' |
| Gas: Initial open flow _____ MCF/d | Oil: Initial open flow _____ Bbl/d |
| Final open flow _____ MCF/d | Final open flow _____ Bbl/d |
| Time of open flow between initial and final tests _____ Hours | |
| Static rock Pressure _____ psig (surface pressure) after _____ Hours | |

* COMMINGLED WITH PREVIOUS FORMATIONS

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FLOWING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: _____
By: Rodney J. Biggs
Date: 3/8/09



WV Department of Environmental Protection

12/18/2015

WELL: 33109 DEPI

09/25/2008 PERFORMED 5 STAGE FRAC W/ J&W WIRELINE AND SUPERIOR.
 UPPER HURON (1) 4490'- 4500' (21 HOLES)- 75 Q FOAM FRAC - 14,200# 20/40 SAND, 135 BBL CLEAN FLUID, 243,000 SCF N2, BDP 2404#, ATP 1749#, AIR 24.8 BPM, FOAM FLUSH, ISIP 1662#, 2 MIN 1532#, 5 MIN SIP 1477#.
 GORDON (2) 3558'- 3564' (19 HOLES) - PUMPED 500 GAL 15% HCL, (DROPPED 3" FRAC BALL) - 75Q FOAM FRAC - 15,400# 20/40 SAND, 152 BBL CLEAN FLUID, 224,000 SCF N2, BDP 1785#, ATP 1463#, AIR 24.7 BPM, FOAM FLUSH, ISIP 1377#, 2 MIN SIP 1348#, 5 MIN SIP 1332#.
 DENMAR (3) 2826'- 2832' (7 HOLES) - PUMPED 500 GAL 15% HCL, (DROPPED 3-1/4" FRAC BALL) - ACID/N2 ASSIST - 2000 GAL OF 28% HCL ACID, 42 BBL CLEAN FLUID, 82,000 SCF N2, BDP 2054#, ATP 1197#, AIR 10.2 BPM, FOAM FLUSH, ISIP 1252#, 2 MIN SIP 1223#, 5 MIN SIP 1208#.
 PICKAWAY (4) 2648'- 2658' (11 HOLES) - PUMPED 500 GAL 15% HCL, (DROPPED 3-3/8" FRAC BALL) - ACID/N2 ASSIST - 2500 GAL OF 28% HCL ACID, 38 BBL CLEAN FLUID, 56,000 SCF N2, BDP 1395#, ATP 1106#, AIR 9.7 BPM, FOAM FLUSH, ISIP 1065#, 2 MIN SIP 1056#, 5 MIN SIP 1052#.
 UNION (5) 2530'- 2540' (16 HOLES) - PUMPED 500 GAL 15% HCL, (DROPPED 3-1/2" FRAC BALL) - ACID/N2 ASSIST - 3000 GAL OF 28% HCL ACID, 10 PERF BALLS, 56 BBL CLEAN FLUID, 121,000 SCF N2, BDP 1483#, ATP 1312#, AIR 10.4 BPM, FOAM FLUSH, ISIP 1231#, 2 MIN SIP 1157#, 5 MIN SIP 1141#.
 OPENED WELL ON 3/8" CHOKE TO PIT. STEPPED UP TO 2" OVERNIGHT. UNLOADING FLUID. RECOVERED 0 OF 4 FRAC BALLS. 14 HOUR OPEN FLOW - 16# ON 2" - (UNION ONLY OPEN FLOW) - 1.73 MMCF/D.

| | | |
|-----------|------|------|
| Fill | 0 | 6 |
| Sandstone | 6 | 22 |
| Shale | 22 | 100 |
| Sandstone | 100 | 400 |
| Sandstone | 400 | 460 |
| Shale | 460 | 535 |
| Coal | 535 | 538 |
| Shale | 538 | 556 |
| Coal | 556 | 559 |
| Shale | 559 | 644 |
| Sandstone | 644 | 815 |
| Shale | 815 | 820 |
| Coal | 820 | 824 |
| Shale | 824 | 850 |
| Coal | 850 | 853 |
| Shale | 853 | 920 |
| Sandstone | 920 | 1110 |
| Shale | 1110 | |

| GAMMA RAY/ FORMATION | | | |
|----------------------------|------|------|--------------|
| DEPI #33109 | TOPS | | 47-081-01489 |
| | TOP | BASE | |
| PRIDE SHALE | 1500 | 1538 | |
| RAVENCLIFF SAND | 1537 | 1582 | |
| AVIS LIME | 1583 | 1599 | |
| UPPER MAXTON | 2004 | 2077 | |
| MIDDLE MAXTON | 2189 | 2198 | |
| LOWER MAXTON | 2209 | 2301 | |
| LITTLE LIME | 2322 | 2482 | |
| BIG LIME | 2483 | 2851 | |
| PRICE FORMATION | 2917 | 3379 | |
| WEIR SAND | 2968 | 3052 | |
| SUNBURY SHALE | 3350 | 3379 | |
| BEREA | 3380 | 3408 | |
| GORDON | 3531 | 3584 | |
| UPPER HURON | 4422 | 4968 | |
| LTD | 4888 | | |

WW-4A
Revised 6-07

1) Date: 12/2/2015
2) Operator's Well Number 33109

3) API Well No.: 47 - 081 - 01489

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL

| | |
|-------------------------------------|--|
| 4) Surface Owner(s) to be served: ✓ | 5) (a) Coal Operator |
| (a) Name <u>Raymond Daniels</u> | Name _____ |
| Address <u>PO Box 134</u> | Address _____ |
| <u>Bolt, WV 25817</u> | _____ |
| (b) Name _____ | (b) Coal Owner(s) with Declaration ✓ |
| Address _____ | Name <u>Southern Land Company, et al</u> |
| _____ | Address <u>Eddie Workman</u> |
| (c) Name _____ | <u>300 Capitol Street</u> |
| Address _____ | Name <u>Charleston, WV 25304</u> |
| _____ | Address _____ |
| 6) Inspector <u>Gary Kennedy</u> ✓ | (c) Coal Lessee with Declaration |
| Address <u>PO Box 268</u> | Name _____ |
| <u>Nimitz, WV 25978</u> | Address _____ |
| Telephone <u>304-382-8402</u> | _____ |

TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:

- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.

Well Operator CNX Gas Company LLC
 By: [Signature]
 Its: Permitting Manager
 Address 637 Claypool Hill Mall Road
Cedar Bluff, VA 26637
 Telephone 276-596-5137

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COMMONWEALTH OF PENNSYLVANIA
DEC 04 2015

NOTARIAL SEAL
 SHERRI J KURAN
 Notary Public
 FRANKLIN TWP, GREENE COUNTY, WV
 Commission Expires Dec 11, 2017
WV Department of Environmental Protection

Subscribed and sworn before me this 2nd day of December, 2015

My Commission Expires 12-11-14

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at depprivacyoffier@wv.gov.

12/18/2015

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name CNX Gas Company LLC OP Code 494458046

Watershed (HUC 10) 0507010101 Quadrangle Arnett, WV

Elevation 1945 ft. County Raleigh District Marsh Fork

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No X

Will a pit be used for drill cuttings? Yes No X *JHK*

If so, please describe anticipated pit waste:

Will a synthetic liner be used in the pit? Yes No X If so, what ml.?

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- X Underground Injection (UIC Permit Number 2D0550319)
- Reuse (at API Number)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain)

Will closed loop system be used? yes, an 80 bbl flow back tank will contain all fluids.

Drilling medium anticipated for this well? Air, freshwater, oil based, etc.

-If oil based, what type? Synthetic, petroleum, etc.

Additives to be used in drilling medium?

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc.

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust)

-Landfill or offsite name/permit number?

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature *Matt Hanley*

Company Official (Typed Name) Matt Hanley

Company Official Title Permitting Manager

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WV Department of
Environmental Protection
COMMONWEALTH OF WEST VIRGINIA

Subscribed and sworn before me this 2nd day of December, 2015

Sherril J. Kuran

Notary Public

My commission expires 12.11.17

NOTARIAL SEAL
SHERRI J KURAN
Notary Public
FRANKLIN TWP., GREENE COUNTY
My Commission Expires Dec 11 2017

12/18/2015

Form WW-9

Operator's Well No. 33109

Proposed Revegetation Treatment: Acres Disturbed 1.5 Prevegetation pH 6.5

Lime based on pH Tons/acre or to correct to pH 7.0

Fertilizer (10-20-20 or equivalent) 550 lbs/acre (500 lbs minimum)

Mulch 2 Tons/acre

Seed Mixtures

| Seed Type | Area I | | Seed Type | Area II | |
|---------------------------|--------|-----------|-----------|---------|----------|
| | | lbs/acre | | | lbs/acre |
| <u>Orchard grass</u> | | <u>25</u> | | | |
| <u>Birds-foot trefoil</u> | | <u>15</u> | | | |
| <u>Lidino clover</u> | | <u>10</u> | | | |

Attach:

Drawing(s) of road, location, pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

Comments: _____

Title: Inspector

Date: 11/24/15

Field Reviewed? () Yes

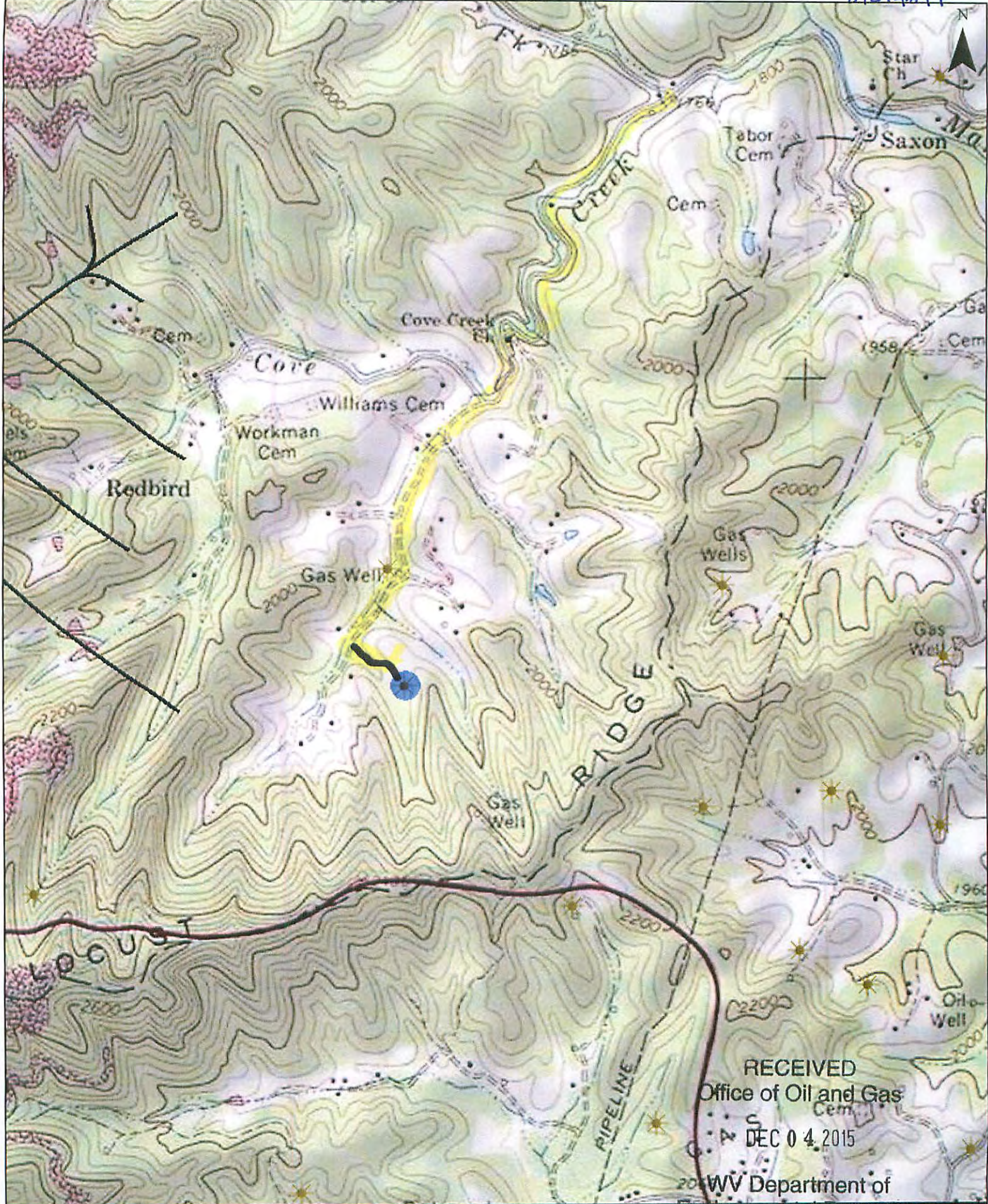
() No

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WV Department of

API 47-081-01489 WELL NO. 33109

Legend
 - ACCESS ROAD

Scale: 0 30 60
 Date: 11/3/2014 Prepared By: CNX Web Map

Consolidated Energy
EMPOWER ENERGY
 General Reference Map
 12/18/2015
JK

WW-7
8-30-06



West Virginia Department of Environmental Protection
Office of Oil and Gas
WELL LOCATION FORM: GPS

API: 47-081-01489 WELL NO.: 33109

FARM NAME: Raymond Daniels

RESPONSIBLE PARTY NAME: CNX Gas Company LLC

COUNTY: Raleigh DISTRICT: Marsh Fork

QUADRANGLE: Arnett, WV

SURFACE OWNER: Raymond Daniels

ROYALTY OWNER: Truman Daniel et al

UTM GPS NORTHING: 4,181,872.60 m

UTM GPS EASTING: 462,146.93 m GPS ELEVATION: 1945 ft.

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:

Survey grade GPS : Post Processed Differential _____

Real-Time Differential

Mapping Grade GPS _____ : Post Processed Differential _____

Real-Time Differential _____

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4. Letter size copy of the topography map showing the well location. I the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations prescribed by the Office of Oil and Gas.

DEC 04 2015
WV Department of
Environmental Protection

[Signature]
Signature

Permitting Manager
Title

12/2/2015
Date

[Signature]