



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

June 09, 2014

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-4700407, 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: 10978
Farm Name: McDOWELL-PCC
API Well Number: 47-4700407
Permit Type: Plugging
Date Issued: 06/09/2014

Promoting a healthy environment.

06/13/2014

WW-4A
Revised 6-07

1) Date: _____
2) Operator's Well Number
10978

3) API Well No.: 47 - 047 - 00407

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>McDowell Pocahontas Coal Company</u>	Name _____
Address <u>PO Box 187</u>	Address _____
<u>Tazewell, VA 24651</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>McDowell Pocahontas Coal Company</u>
_____	Address <u>PO Box 187</u>
(c) Name _____	<u>Tazewell, VA 24651</u>
Address _____	Name _____
_____	Address _____
6) Inspector <u>Gary Kennedy</u>	(c) Coal Lessee with Declaration
Address <u>PO Box 268</u>	Name _____
<u>Nimlitz, 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	<u>CNX Gas Company LLC</u>	Received MAY 14 2014
By:	<u>[Signature]</u>	
Its:	<u>Attorney-in-Fact</u>	
Address	<u>1000 Consol Energy Drive</u> <u>Canonsburg, PA 15317</u>	
Telephone	<u>276-596-5075</u>	

Office of Oil and Gas
WV Dept. of Environmental Protection

Subscribed and sworn before me this _____ day of _____

Notary Public

My Commission Expires _____

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 depprivacyofficer@wv.gov.

06/13/2014

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MAY 2 2014

Sent To
 Pocahontas Land Corporation
 P.O. Box 1517
 Bluefield, WV 24701

PS Form 3800

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Sent To
 McDowell Pocahontas Coal Company
 P.O. Box 187
 Tazewell, VA 24651

PS Form 3800

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MAY 12 2014

Sent To
 Gary Kennedy
 P.O. Box 268
 Nimitz, WV 25978

PS Form 3800

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MAY 12 2014

Sent To
 WV DEP Office of Oil & Gas
 ATTN: Kay Holtsclaw
 601 57th Street, SE
 Charleston, WV 25304-2345

PS Form 3800

1) Date _____, 20_____
2) Operator's
Well No. 10978
3) API Well No. 47-047 - 00407

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 1668 ft. Watershed Crane Creek
District Sandy River County McDowell Quadrangle Davy

6) Well Operator CNX Gas Company LLC 7) Designated Agent Jeremy Jones
Address 1000 Consol Energy Drive Address One Dominion Drive
Canonsburg, PA 15317 Jane Lew, WV 26378

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Gary Kennedy Name L&D Well Services
Address PO Box 268 Address PO Box 1192
Nimitz, WV 25978 Vansant, VA 24656

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

Received

MAY 14 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

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 4/22/14

API 47-47-00407 Plugging Procedure

10978

1. Verify total depth 4335'.
2. Run free-point survey on 4-1/2" casing.
3. Run tubing to TD. Set plug of expanding cement from established TD to approximately 50' below free point, utilizing a 100' gel spacer at approximately the half-way point of the wellbore.
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 8-5/8" casing shoe. (Approx. 1493') Pull remaining 4-1/2" out of well.
6. Run free-point survey on 8-5/8" casing.
7. Run tubing to previous cement top (1493'). Cement across the 8-5/8" shoe to a minimum of 50' above shoe, bringing cement top to approximately 50' below the 8-5/8" free-point or to surface, whichever is necessary.
8. If necessary, cut and pull free 8-5/8" casing.
9. Repeat free-point and cutting procedures for 11-3/4" if 8-5/8" is cut and pulled.
10. Cement from 50' below 11-3/4" shoe to surface.
11. Install 7" X 4' steel monument with API# and Date.

NOTE: A 100' gel spacer will be placed at approximately half the well depth. Also, Expanding cement will be utilized throughout the entire cementing process.

Received

MAY 14 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

Adk

06/13/2014

DEPARTMENT OF MINES
OIL AND GAS DIVISION

Cable Tools
Storage

Quadrangle WELCH
Permit No. MCD-407

WELL RECORD

Oil or Gas Well Gas
(KIND)

Company Consolidated Gas Supply Corporation
Address Clarksburg, W. Va.
Farm McDowell Pocahontas Coal Co. Acres 3147
Location (waters) _____
Well No. 10978 Elev. 1668'
District Sandy River, County McDowell
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by _____
Address _____
Drilling commenced 9-1-68
Drilling completed 9-11-68
Date Shot Not shot From _____ To _____
With _____
Open Flow 1/10ths Water in _____ Inch
1/10ths Merc. in. _____ Inch
Volume 58 M Natural Cu. Ft.
Rock Pressure 910 lbs. 24 hrs.
Oil None bbls. 1st 24 hrs.
WELL ACIDIZED (DETAILS) No

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			Size of
11"	29	29	
8 1/4	1393	1393	Depth set
6 1/4			
5 3/16			Perf. top
4 1/2	4310	4310	Perf. bottom
3			Perf. top
2			Perf. bottom
Liners Used			

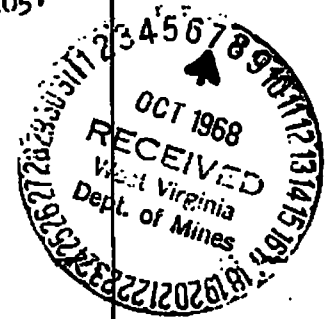
Attach copy of cementing record. 8" with 40 bags-Well Service
CASING CEMENTED SIZE No. Ft. Date
Amount of cement used (bags) 4 1/2" with 100 bags-Dowell
Name of Service Co. Well Service & Dowell
COAL WAS ENCOUNTERED AT 448 FEET 24 INCHES
1323 FEET 24 INCHES FEET INCHES
FEET INCHES FEET INCHES
WELL FRACTURED (DETAILS) 9-17-68 With 500 gal mud acid, 946 bbl fluid, 100# glass beads and 71,000# Sand.
RESULT AFTER TREATMENT (Initial open Flow or bbls.) 995 M 995000
ROCK PRESSURE AFTER TREATMENT 910# 24 HOURS
Fresh Water 105' & 1105' Feet Salt Water None Feet
Producing Sand Berea Depth 4229-35'

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Sand & Shale			0	448	Water	105'	
Coal			448	450			
Sand & Shale			450	505			
Coal			505	506			
Sand & Shale			506	1323	Water	1105'	
Coal			1323	1325			
Sand & Shale			1325	1870			
Ravencliff			1870	1955			
Sand & Shale			1955	2435			
Maxton			2435	2615			
Sand & Shale			2615	2790			
Lower Maxton			2790	2840			
Shale			2840	2905			
Little Lime			2905	2990			
Sand & Shale			2990	3125			
BIG LIME			3125	3570			
Sand & Shale			3570	4220			
BEREA			4220	4259	Gas	4228-42'	
Shale			4259	4335			
TOTAL DEPTH				4335'			
ALL MEASUREMENTS TAKEN FROM KELLY BUSHING 13" above GROUND LEVEL.							

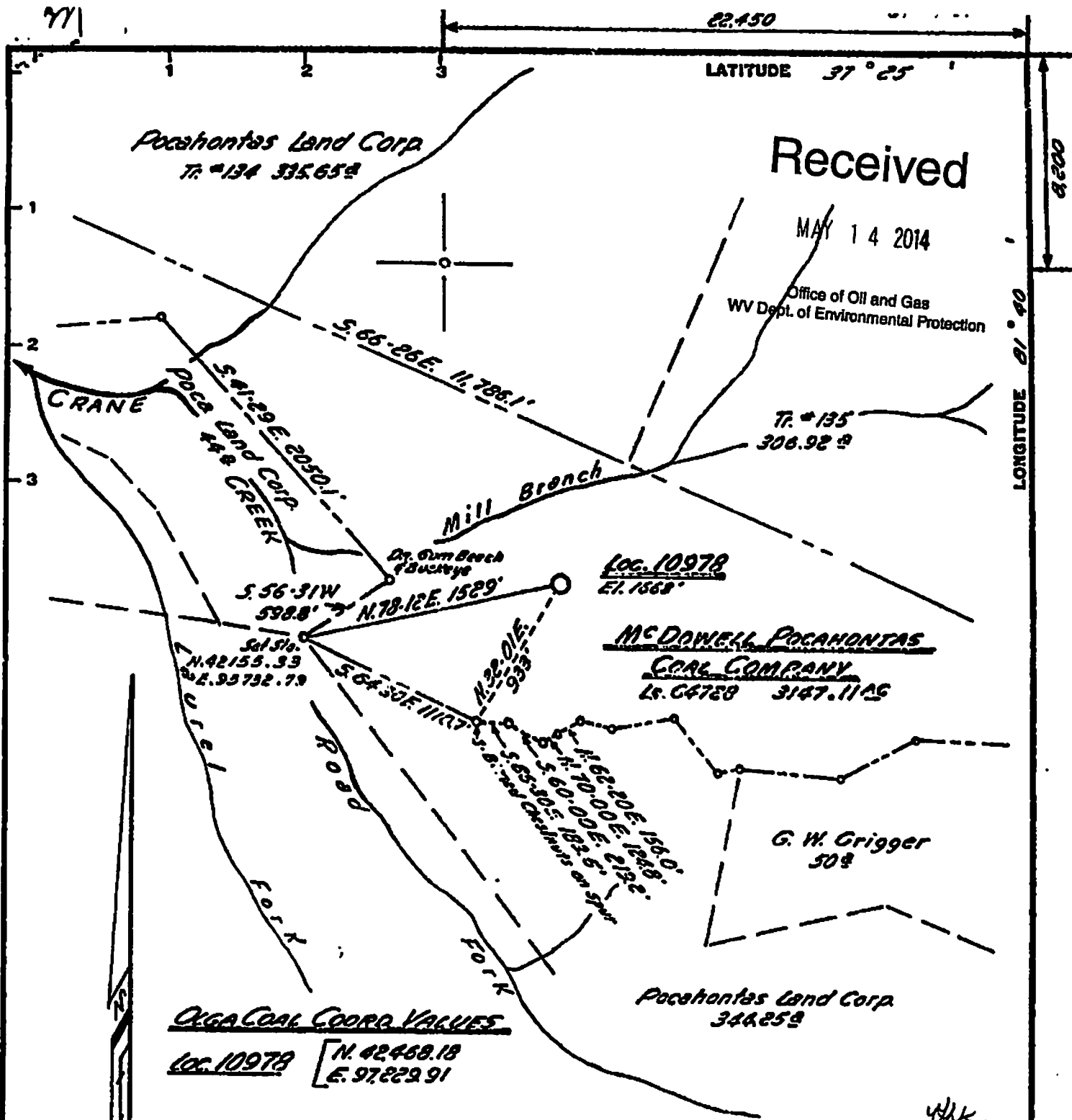
Received

MAY 14 2014

Office of Oil and Gas
WV Dept. of Environmental Protection



06/13/2014



OGA COAL COORD. VALUES
 LOG. 10978 [N. 42468.18
 E. 97229.91

Minimum Error of Closure 1" IN 200'
 Source of Elevation LEVELS FROM U.S.G.S. U.E., SQUARE CUT IN A ROCK, 700' BELOW MOUTH OF LEFT BR. OF CRANE CR., ELEV. ON ROCK 117400'
 "I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph G of the rules and regulations of the oil and gas section of the mining laws of West Virginia."

New Location
 Drill Deeper
 Abandonment

MAP SHEET - 243 W 5-141 W-67 FB. 1452 P. 13-16

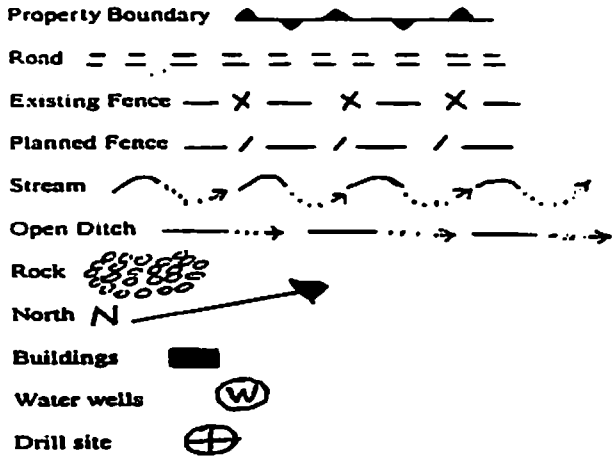
Company CONSOL. GAS SUPPLY CORP
 Address CLARKSBURG, W. VA.
 Farm MCDOWELL POCAHONTAS COAL CO.
 Tract _____ Acres 3147.11 Lease No. 64728
 Well (Farm) No. _____ Serial No. 10978
 Elevation (Spirit Level) 1668'
 Quadrangle WELCH W.C.
 County MCDOWELL District SANDY RIVER
 Engineer Jacobson M. Jordan
 Engineer's Registration No. 2397
 File No. _____ Drawing No. _____
 Date 5-2-68 Scale 1" = 800'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON

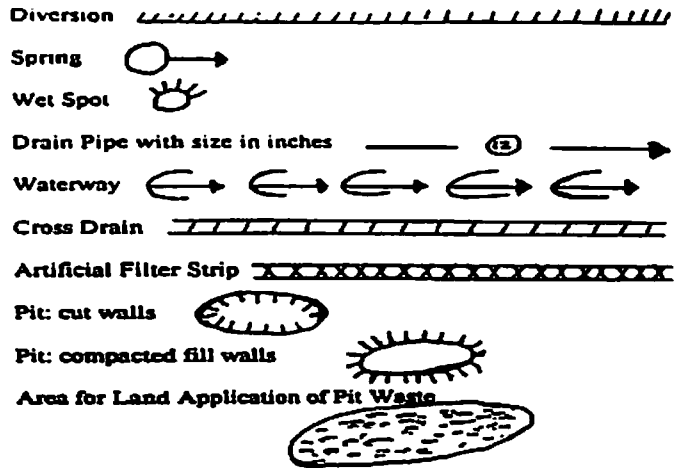
WELL LOCATION MAP
 FILE NO. MS D-409

06/13/2014

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.
 - Denotes one inch spaces on border line of original tracing.



LEGEND



Proposed Revegetation Treatment: Acres Disturbed 2.0 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 lbs/acre	Seed Type	Area II lbs/acre
Orchard grass	25	same as Area I	
Birdsfoot trefoil	15		
Lidino clover	10		

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

Photocopied section of involved 7.5' topographic sheet.

Received

Plan Approved by: *Henry Kunnick*

MAY 14 2014

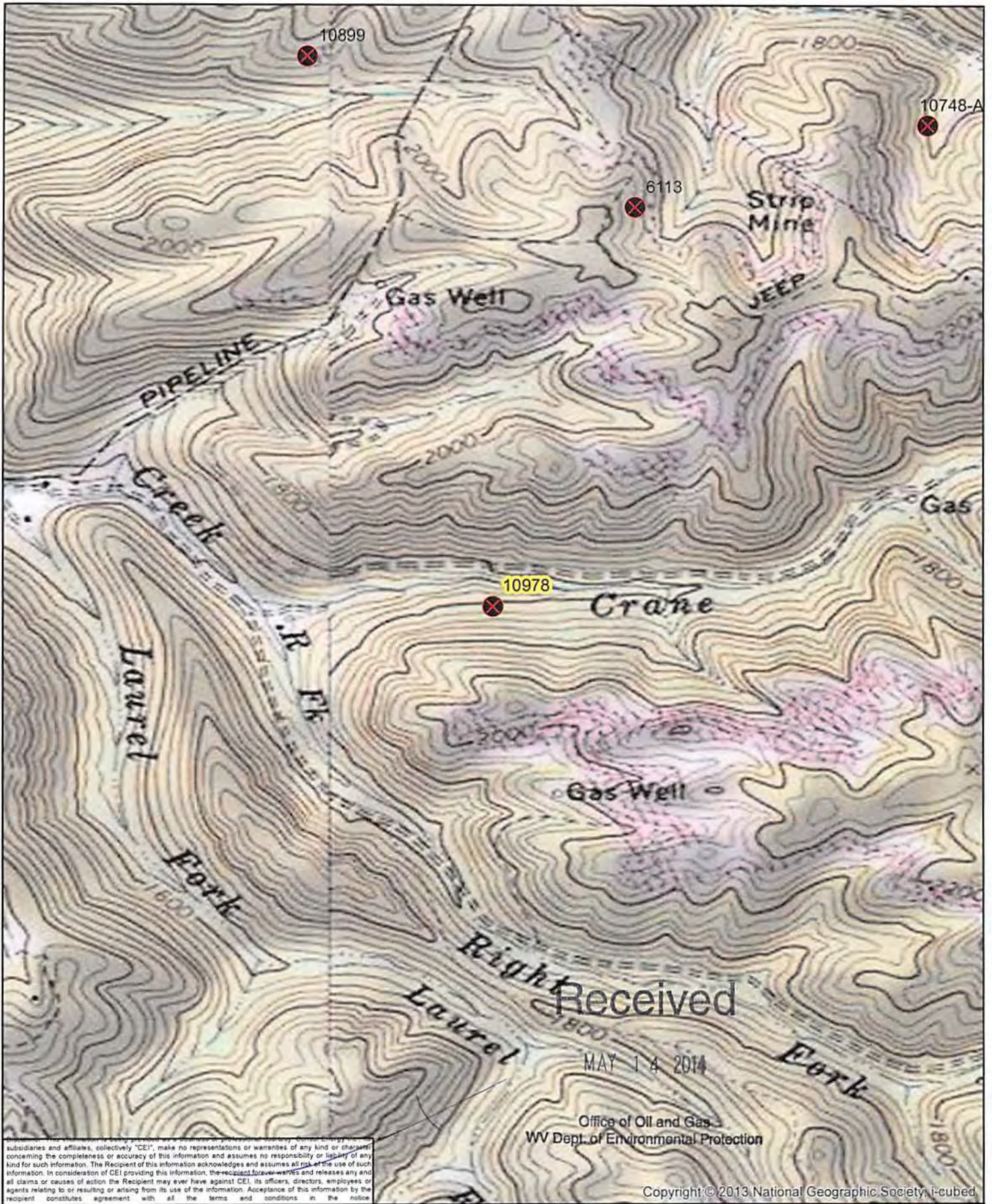
Comments: _____

Office of Oil and Gas
 WV Dept. of Environmental Protection

Title: *Inspector*

Date: *4/22/14*

Field Reviewed? (*X*) Yes () No



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Office of Oil and Gas
 WV Dept. of Environmental Protection

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	<table border="1" style="width: 100%;"> <tr> <td>Date: 1/24/2014</td> <td>Prepared By: KK</td> </tr> <tr> <td>Revisions:</td> <td>Approved By: BS</td> </tr> </table>		Date: 1/24/2014	Prepared By: KK	Revisions:
Date: 1/24/2014	Prepared By: KK				
Revisions:	Approved By: BS				



West Virginia Department of Environmental Protection
Office of Oil and Gas

WELL LOCATION FORM: GPS

API: 47-047-00407 WELL NO.: 10978

FARM NAME: McDowell Pocahontas

RESPONSIBLE PARTY NAME: CNX Gas Co. LLC

COUNTY: McDowell DISTRICT: Sandy River *le*

QUADRANGLE: Davy *319*

SURFACE OWNER: McDowell Pocahontas

ROYALTY OWNER: McDowell Pocahontas

UTM GPS NORTHING: 4,138,855 m

UTM GPS EASTING: 433,971 m GPS ELEVATION: 521 m

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:

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

Survey grade GPS : Post Processed Differential
Real-Time Differential

Mapping Grade GPS : Post Processed Differential
Real-Time Differential

- 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 issued and prescribed by the Office of Oil and Gas.

[Signature]
Signature

Prod. Coord
Title

4/28/14
Date

Received

MAY 14 2014

Office of Oil and Gas
WV Dept. of Environmental Protection