west virginia department of environmental protection

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

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

Tuesday, August 09, 2016
WELL WORK PERMIT
Vertical / Plugging - 3

CNX GAS COMPANY LLC
POST OFFICE BOX 1248

JANE LEW, WV 263786506

Re: Permit approval for 11385
47-001-00561-00-00

This well work permit 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 any additional specific 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.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin
Chief

Operator's Well Number: 11385
Farm Name: U. S. STEEL
U.S. WELL NUMBER: 47-001-00561-00-00
Vertical / Plugging - 3
Date Issued: 8/9/2016

100561P

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.

100561P

WW-4B
Rev. 2/01

1) Date _____, 2016
2) Operator's Well No. CNX #11385
3) API Well No. 47- 001 - 00561

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 393.1m Watershed Tygart Valley River
District Pleasant - 6 County Barbour Quadrangle Philippi -545

6) Well Operator CNX Gas Company, LLC
Address 1000 Consol Energy Drive
Canonsburg, PA 15317

7) Designated Agent Anthony Kendziora
Address 1 Dominion Drive
Jane Lew, WV 26378

8) Oil and Gas Inspector to be notified
Name Kenneth Greynolds
Address 613 Broad Run Road
Jane Lew, WV 26378

9) Plugging Contractor
Name Coastal Drilling East LLC
Address 70 Gums Springs Road
Morgantown, WV 26508

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

Please see attached pages.

Received
Office of Oil & Gas
JUL 13 2016

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

Work order approved by inspector Kenneth L. Greynolds Date 7-5-16

100561P

Plugging Work Order for Permit 47-001-00561

CNX Gas - Well 11385

1. Pull 2-3/8" tubing and tension packer set @ 3654'.
2. Verify 4-1/2" casing TD ~3874'.
3. TIH w/ 2-3/8" EUE work string to TD.
4. Pump cement plug from TD to 3400'. (Benson)
5. TOH w/ 2-3/8" EUE work string. Wait on cement before pulling 4-1/2".
6. Run CBL, cut and pull 4-1/2" casing above T.O.C. est. 3350'.
7. Pull 4-1/2 casing up 1', pump 100' cement plug across 4-1/2" cut.
8. Pull 4-1/2" casing up to 1405'.
9. Pump cement plug from 1405' to 1245'. (Water 1355', & Elevation 1295')
10. TOH w/ 4-1/2" casing.
11. Run CBL, cut and pull 8-5/8" above T.O.C. est. 900'
12. Pull 8-5/8" casing up 1', pump 100' cement plug across 8-5/8" cut.
13. TOH w/ 8-5/8" casing.
14. Attempt to pull 11-3/4" casing (254'). If unable to pull cement in place.
15. TIH w/ 2-3/8" EUE work string to 335'.
16. Pump cement plug from 335' to surface.
17. TOH with 2-3/8" EUE, and top off cement to surface.
18. Install 6" x 14' monument (10' below grade, 4' above grade) API 47-001-00561

Work Order approved by Inspector Lemuel L. Beyrath Date: 7-5-16

Note: All cement will be Class A, no additives. All spacers between plugs will be 6% gel.

OK
JWM

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JUL 13 2016

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JAN 25 1972
OIL & GAS DIV. DIV. OF MINES

Form OG-10

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

WELL RECORD

Rotary xx☒xx
Spudder ☐
Cable Tools ☐
Storage ☐

Quadrangle PHILIPPI
Permit No. BAR-561
Oil or Gas Well Gas (KIND)

Company Consolidated Gas Supply Corporation
Address Clarksburg, W. Va.
Farm U.S. Steel Corporation Acres 100
Location (waters)
Well No. 11385 Elev. 1295'
District Pleasant County Barbour
The surface of tract is owned in fee by
Address
Mineral rights are owned by
Address
Drilling commenced 10-4-71
Drilling completed 10-15-71
Date Shot Not shot From To
With
Open Flow /10ths Water in Inch
/10ths Merc. in Inch
Volume 48,000 Natural Cu. Ft.
Rock Pressure 420 lbs. 1 hrs.
Oil None bbls., 1st 24 hrs.
WELL ACIDIZED (DETAILS) No
WELL FRACTURED (DETAILS) 11-1-71 with 750 bbl water, 50,000# sand, 500 gal 15% acid, and 2500 HHP

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16X 20"	20	20	Kind of Packer
13			
10X 11"	254	254	Size of
8¼	1431	1431	
6⅝			Depth set
5 3/16			
4½	3878	3878	
3			Perf. top 3733 Benson
2			Perf. bottom 3741
Liners Used			Perf. top
			Perf. bottom

Attach copy of cementing record. 20" & 11" to surface
CASING CEMENTED SIZE No. Ft. Date
Amount of cement used (bags) 8" with 100 bags 4½"/125 bags
Name of Service Co. Halliburton
COAL WAS ENCOUNTERED AT 35 FEET 24 INCHES
FEET INCHES FEET INCHES
FEET INCHES FEET INCHES

RESULT AFTER TREATMENT (Initial open Flow or bbls.) 289,000 cu ft
ROCK PRESSURE AFTER TREATMENT 18 HOURS 1420#
Fresh Water 40', 95', 285' Feet Salt Water 1355' Feet
Producing Sand Benson Depth 3733-3741

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Sand & Shale			0	35			
Coal			35	37			
Sand & Shale			37	885	Water 40'	95' & 285'	Fresh
Little Lime			885	900			
Sand & Shale			900	930			
Big Lime			930	1040			
Big Injun			1040	1160			
Sand & Shale			1160	1285			
Gantz			1285	1350			
Sand & Shale			1350	1840	Water	1355'	Salt
5th Sand			1840	1935			
Shale & Red Rock			1935	3255			
Riley			3255	3730			
BENSON			3730	3745	Gas	3733-41'	
Total Depth				3884'			

Consolidated Gas Supply Corporation
445 West Main Street
Clarksburg, W. Va.

All measurements taken from K.B. 10' above G.L.

Received
Office of Oil & Gas
JUL 13 2016

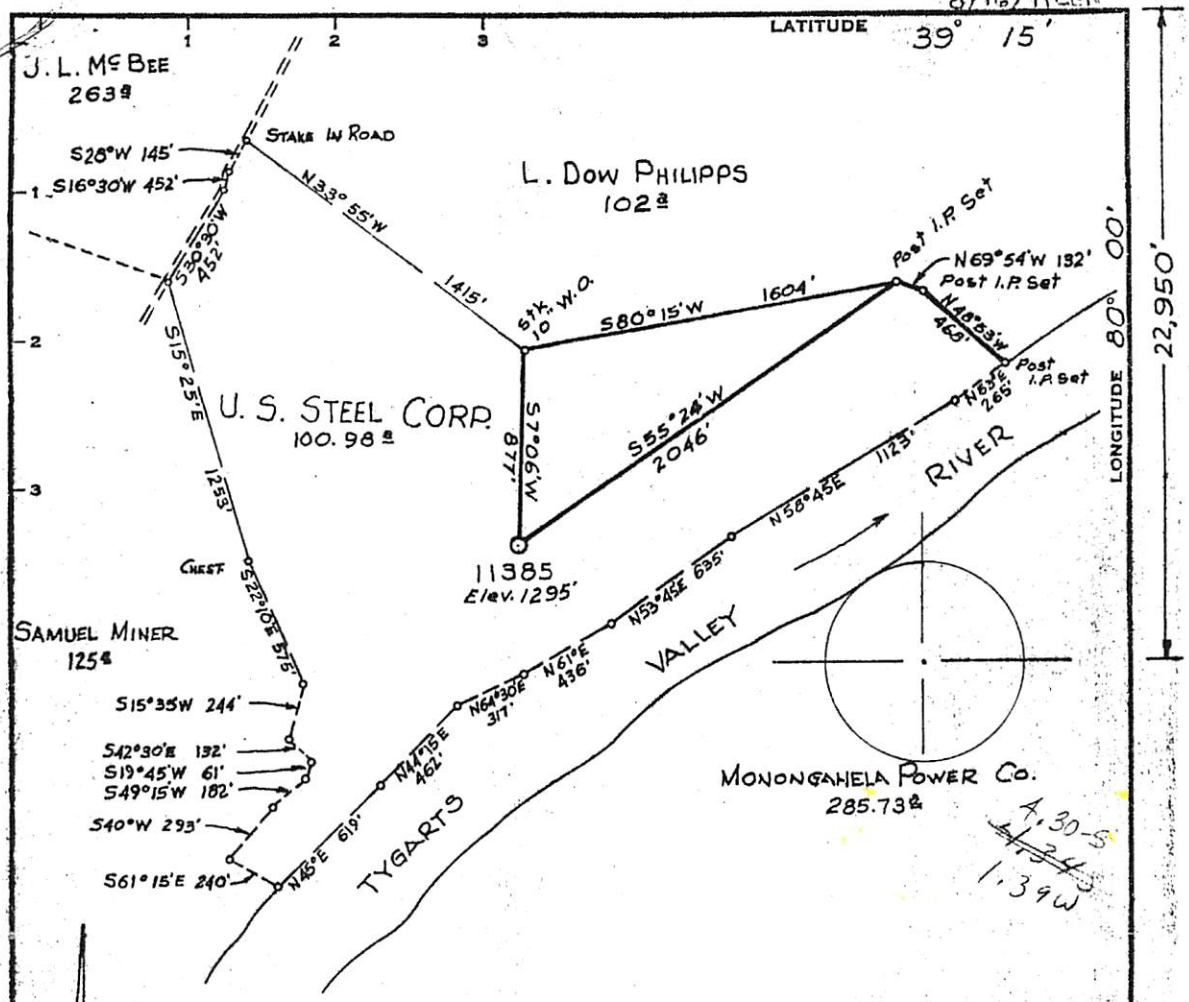
(over)

FEB 7 1972

Plot ✓ Log___ Card ✓ CSD___ Mflm ✓

7350
8/16/71 CEN

100561P



Minimum Error of Closure 1' IN 200'

Source of Elevation CONSOLIDATED GAS SUPPLY CORP

WELL # 10520 ELEVATION - 1357'

"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 6 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 42A S-20, E-32 F.B 1578 Pgs. 30-33

Company CONSOLIDATED GAS SUPPLY CORP
Address CLARKSBURG, W. VA.
Farm U.S. STEEL CORPORATION
Tract ____ Acres 100.98 Lease No. 77232
Well (Farm) No. ____ Serial No. 11385
Elevation (Spirit Level) 1295'
Quadrangle PHILIPPI N.E.
County BARBOUR District PLEASANT
Engineer Jackson M. Jarvis
Engineer's Registration No. 2397
File No. ____ Drawing No. ____
Date 6-4-71 Scale 1" = 660'

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

WELL LOCATION MAP

FILE NO. Bar-561

+ 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.

Received
Office of Oil & Gas
JUL 13 2016

AUG 23 1971 6-6 Taylor Drain (316)

5906

100561P

WW-4A
Revised 6-07

1) Date: 6/21/2016
2) Operator's Well Number
CNX #11385

3) API Well No.: 47 - 001 - 00561

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE 0F APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Owner(s) to be served:
(a) Name: CNX Gas Company LLC
Address: 1000 Consol Energy Drive
Canonsburg, PA 15317

(b) Name
Address

(c) Name
Address

6) Inspector: Kenneth Greynolds
Address: 613 Broad Run Road
Jane Lew, WV 26378
Telephone: 304-206-6613

5) (a) Coal Operator
Name
Address

(b) Coal Owner(s) with Declaration
Name: Hunter Ridge Coal Co. C/O Chuck Duckworth Arkland Northern Appalachia
Address: 100 Tygart Drive
Grafton, WV 26354

Name
Address

(c) Coal Lessee with Declaration
Name
Address

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: Matthew Hanley
Its: Permitting Manager
Address: 1000 Consol Energy Drive
Canonsburg, PA 15317
Telephone: 1-724-485-3011

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

Subscribed and sworn before me this 21st day of June 2016
Sherri J Kuran Notary Public
My Commission Expires 12-11-17

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Office of Oil & Gas
JUL 13 2016

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.

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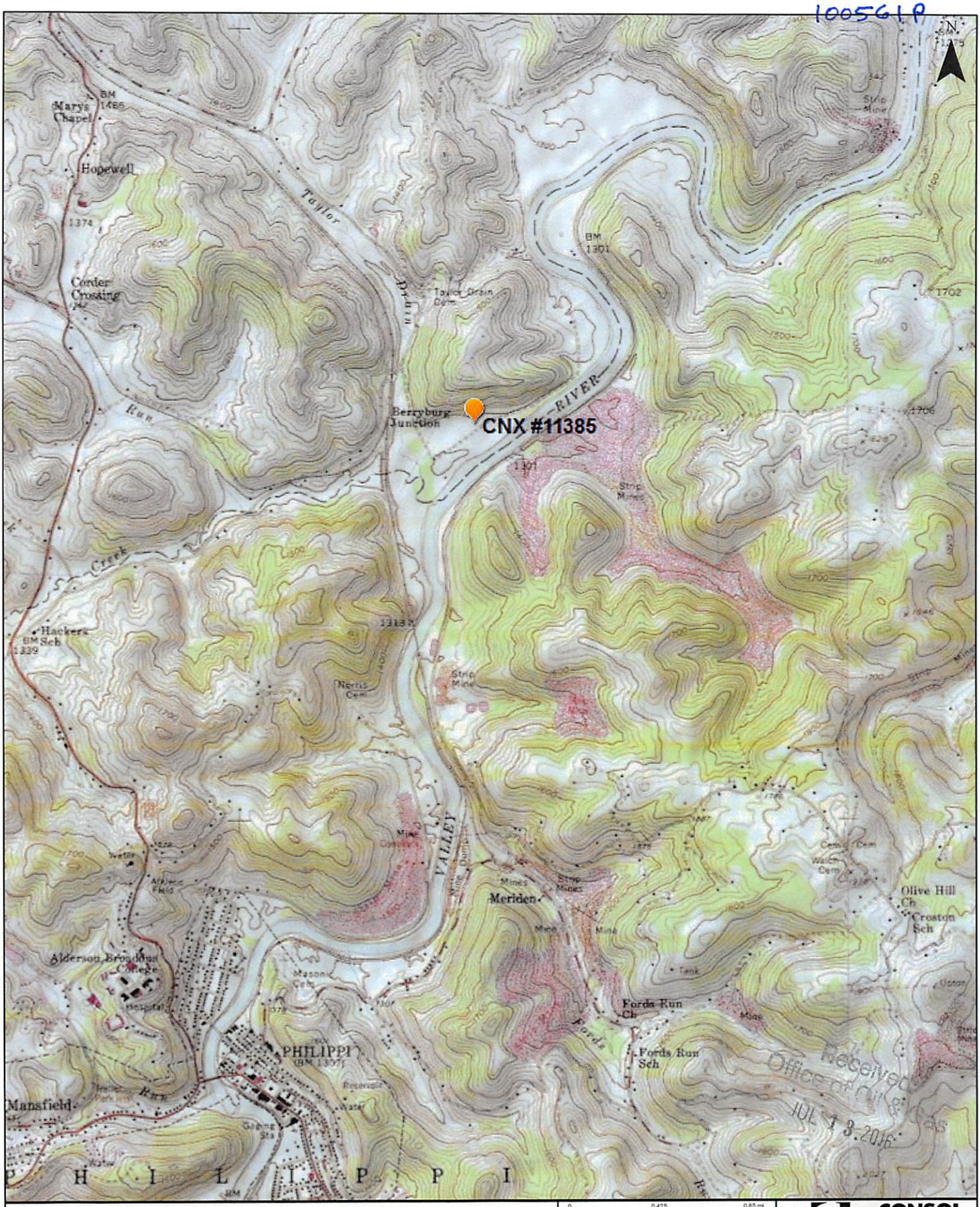
100561P



CNX #11385 Well (API#47-001-00561)
CNX Gas Company, LLC
Philippi, WV Quadrangle

0 0.425 0.85 mi

Date: 6/13/2016 | Prepared By: Miller, Shannon

This product was generated by CONSOL Energy's WEB Map. Intended for Internal Use Only.

EMPOWER CONSOL ENERGY

My Map

CNX #11385 Well

100561P

WW-9
(2/15)

API Number 47 - 001 - 00561
Operator's Well No. CNX 11385

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) Tygart Valley River Quadrangle Philippi

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

Will a pit be used? Yes ☐ No ☑

If so, please describe anticipated pit waste: N/A

Will a synthetic liner be used in the pit? Yes ☐ No ☐ If so, what ml.? N/A

Proposed Disposal Method For Treated Pit Wastes:

ANY WELL EFFLUENT MUST BE CONTAINED IN TANKS BEFORE DISPOSING OF OFF-SITE.

____ Land Application
____ Underground Injection (UIC Permit Number _____)
____ Reuse (at API Number _____)
____ Off Site Disposal (Supply form WW-9 for disposal location)
✓ Other (Explain Off-site disposal of any associated fluids.

Will closed loop system be used? If so, describe: N/A

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. N/A

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

Additives to be used in drilling medium? N/A

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

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

-Landfill or offsite name/permit number? _____

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

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 Matthew Hanley

Company Official (Typed Name) Matthew Hanley

Company Official Title Permitting Manager, CNX Gas Company LLC

Received
Office of Oil & Gas
JUL 13 2016

Subscribed and sworn before me this 21st day of June, 20 16

Sherri J Kuran Notary Public

My commission expires 12·11·17

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

100561P

Form WW-9

Operator's Well No. CNX 11385

CNX Gas Company LLC

Proposed Revegetation Treatment: Acres Disturbed less than 1 acre Prevegetation pH _____

Lime 2-3 Tons/acre or to correct to pH _____

Fertilizer type 10-20-20 or equivalent

Fertilizer amount 500 lbs/acre

Mulch hay or straw 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Tall Fescue	40	Tall Fescue	40
Landino Clover	5	Landino Clover	5

Attach:
Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Daniel J. Smith

Comments: RECLAIM, RESEED AND MULCH ASAP

Title: OIL & GAS INSPECTOR Date: 7-5-16

Field Reviewed? ( ) Yes (✓) No

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Office of Oil & Gas
JUL 13 2016

100561P

WW-7
8-30-06

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

API: 47-001-00561 **WELL NO.:** 11385

FARM NAME: CNX

RESPONSIBLE PARTY NAME: Matthew Hanley

COUNTY: Barbour **DISTRICT:** Pleasant - 06

QUADRANGLE: Philippi - 545

SURFACE OWNER: CNX Gas Company LLC

ROYALTY OWNER: _____

UTM GPS NORTHING: 4338045.24m

UTM GPS EASTING: 584176.13m **GPS ELEVATION:** 393.1m = 1289.69

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 X: Post Processed Differential X

Real-Time Differential _____

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 issued and prescribed by the Office of Oil and Gas.

Received
Office of Oil & Gas
JUL 13 2016

Signature	Title	Date
Matthew Hanley	Manager-Gas Permitting	6/21/2016