



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

Harold D. Ward, Cabinet Secretary
www.dep.wv.gov

Monday, April 11, 2022
WELL WORK PLUGGING PERMIT
Horizontal 6A Plugging

CNX GAS COMPANY LLC
1000 CONSOL ENERGY DR
CANONSBURG, PA 15370

Re: Permit approval for MAJ10BHSU
47-051-02070-00-00

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.

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. Please be advised that form WR-38, Affidavit of Plugging and Filling Well, 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.

A blue ink signature of James A. Martin, Chief, is written over a white rectangular area. The signature is stylized and cursive.

James A. Martin
Chief

Operator's Well Number: MAJ10BHSU
Farm Name: CNX LAND, LLC
U.S. WELL NUMBER: 47-051-02070-00-00
Horizontal 6A Plugging
Date Issued: 4/11/2022

Promoting a healthy environment.

04/15/2022

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 3-28, 2022
2) Operator's
Well No. MAJ10DHSU
3) API Well No. 47-051 - 02070

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 1317 Watershed Wheeling Creek
District Webster County Marshall Quadrangle Majorsville

6) Well Operator CNX Gas Company LLC 7) Designated Agent Anthony Kendziora
Address 1000 Consol Energy Dr. Address 1000 Consol Energy Dr
Canonsburg, PA 15317 Canonsburg PA 15317

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Gayne J Knitowski Name Conserv
Address P.O. Box 108 Address 929 Charleston Road
Gormanian WV 26720 Spencer, WV 25276

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

WELL WILL BE CEMENTED TO
SURFACE W/ CLASS A CEMENT,

gjm

RECEIVED
Office of Oil and Gas
APR 4 2022
WV Department 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 Gayne Knitowski Digitally signed by Gayne Knitowski Date: 2022.03.31 06:53:10 -0400 Date 3-31-2022

04/15/2022

MAJ-10 Well Plugging Procedure

- 1) The MAJ-10 wells (A, B, C, and D) have been top-holed down to 13-3/8" casing point. All of the 13-3/8" casings were cemented to surface and NOT drilled out.
- 2) See current wellbore diagrams for casing setting depths and cementing details.
- 3) MIRU plugging rig.
- 4) Check well for pressure and ND well cap/dry hole tree.
- 5) TIH with workstring/tubing to TD (13-3/8" float collar / wiper plug). Document depth on morning report.
- 6) Plug back from TD to surface using ~500'-800' balanced Class A cement plugs.
- 7) Top-off well with cement.
- 8) Skid to next well.
- 9) RDMO plugging rig when operations are finished.
- 10) Install monuments. Monuments to contain API#, well name, company name, and date plugged.

PER WV STATE CODE,

2/2/22

RECEIVED
Office of Oil and Gas
APR 4 2022
WV Department of
Environmental Protection

04/15/2022



CURRENT WELLBORE DIAGRAM

MAJ-10B-HSU

47-051-02070

Marshall County, WV

Ground Elevation	1317 GL Elevation		MAJ-10B-HSU SHL				N 518305.49, E 1709060.01 (NAD27)	
WELLBORE DIAGRAM	HOLE	CASING	GEOLOGY	MD-GL	TVD-GL	MUD	CEMENT	COMMENTS
	36"	30" L/S	Conductor	100	100	AIR	Grout to Surface	Drill with auger Stabilize surface fill/soil
	24"	18-5/8" 87.5# J-55 BTC	Washington Coal		352	AIR / FW Mist	BJ 15.6 ppg Class A + 2% CaCl2 + 1/4 pps Flake 50% OH Excess Yield = 1.19 TOC @ surface	Set through fresh water zones Set through coal zones Cemented to surface with 1428 sxs (256 bbls), 55 bbls cement returned to surface
			Deepest Fresh Water		482			
			Waynesburg 2 Coal		489			
			Waynesburg 1 Coal		490			
			Sewickley Coal		690			
			Pillsburgh Coal		779			
	FW / Coal Casing	832	832					
	17-1/2"	13-3/8" 68.0# L-80HC BTC	Gas Sand		1403	AIR / Scap	BJ 16.0 ppg Class H Gas block blend with additives 35% OH Excess Yield = 1.16 TOC @ surface	Set through gas storage interval Casing to be set below the Fifth Sand Cemented to surface with 2473 sxs (507 bbls), 50 bbls cement returned to surface, did not bump plug during displacement
			Salt Sands		1470			
			Big Lime		1860			
			Big Injun Sand		1966			
Gantz Sand				2172				
Gordon Sand				2776				
Fifth Sand		2827						
Intermediate Casing	3188	3188						

4705102070P

WW-4A
Revised 6-07

1) Date: 3-28-2022
2) Operator's Well Number MAJ10BHSU
3) API Well No.: 47 - 051 - 0207C

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: (a) Name CNX Land, Address 1000 Consol Energy Drive, Canonsburg PA 15317. (b) Name, Address. (c) Name, Address. 5) (a) Coal Operator Name Consol Pennsylvania Coal Company and CNX Thermal Holdings LLC, Address 1000 Consol Energy Drive, Canonsburg PA 15317. (b) Coal Owner(s) with Declaration Name Consol Pennsylvania Coal Company and CNX Thermal Holdings LLC, Address 1000 Consol Energy Drive, Canonsburg PA 15317. (c) Coal Lessee with Declaration Name N/A, Address. 6) Inspector Name Gayne J Knitowski, Address P.O. Box 108, Gormanville WV 26720, Telephone 304-546-8171.

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.

Commonwealth of Pennsylvania - Notary Seal
Todd Fleming, Notary Public
Washington County
My commission expires September 23, 2024
Commission number 1244937
Member, Pennsylvania Association of Notaries

Well Operator CNX Gas Company LLC
By: Raymond Hoon (Signature)
Its: Senior Project Manager
Address: 1000 Consol Energy Dr, Canonsburg, PA 15317
Telephone: 724-485-4000
RECEIVED Office of Oil and Gas APR 4 2022 WV Department of Environmental Protection

Subscribed and sworn before me this 1 day of April, 2022
Todd Fleming Notary Public
My Commission Expires September 23, 2024

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. 04/15/2022

4705102070P

7015 1520 0002 1117 4016

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com.

CONSUMER USE

Certified Mail Fee \$3.75

0518
92

- Extra Services & Fees (check box and fee as appropriate)
- Return Receipt (hardcopy) \$ 10.00
- Return Receipt (electronic) \$ 3.00
- Certified Mail Restricted Delivery \$ 3.00
- Adult Signature Required \$ 0.00
- Adult Signature Restricted Delivery \$ 0.00

Postmark
Here

APR 1 2022

Total Postage and Fees \$0.92

Sent To **CNY LAND**

Street and Apt. No., or PO Box No.

1000 CONSOL ENERGY DRIVE

City, State, ZIP+4® CARONSVILLE PA, 15317

PS Form 3800, April 2015 PSN 7530-02-000-9007 See Reverse for Instructions

RECEIVED
Office of Oil and Gas
APR 4 2022
WV Department of
Environmental Protection

7015 1520 0002 1117 4023

U.S. Postal Service™
CERTIFIED MAIL® RECEIPT
Domestic Mail Only

For delivery information, visit our website at www.usps.com.

CONSUMER USE

Certified Mail Fee \$3.75

Postmark
Here
APR 1 2022

- Extra Services & Fees (check box and fee as appropriate)
- Return Receipt (hardcopy) \$ 10.00
- Return Receipt (electronic) \$ 3.00
- Certified Mail Restricted Delivery \$ 3.00
- Adult Signature Required \$ 0.00
- Adult Signature Restricted Delivery \$ 0.00

Postmark
Here
APR 1 2022

Total Postage and Fees \$0.92

Sent To

Consol PA Consol + CNY Thermal Holding

Street and Apt. No., or PO Box No. 1000 Consol Energy Drive

City, State, ZIP+4® Caronsville PA 15317

PS Form 3800, April 2015 PSN 7530-02-000-9007 See Reverse for Instructions

04/15/2022



Michael L. Holiday
Land Manager - Surface
Work: 724-485-3208
Email: Michael.Holiday@cnx.com

CNX Center
1000 CONSOL Energy Drive
Canonsburg, PA 15317-6506
724-485-4000

March 29, 2022

Department of Environmental Protection
Office of Oil and Gas
601 57th Street, SE
Charleston, WV 25304-2345

RE: MAJ 10
API# 47-051-02068, 47-051-02070, 47-051-02065, 47-051-02069
Restoration Waiver

Ladies and Gentlemen:

I Michael L. Holiday, Assistant Vice President of CNX LAND LLC, the undersigned landowner of the land on which the above mentioned well was located, consent and approve of waiving reclamation requirements and that the site may remain after plugging operations.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Michael L. Holiday'.

Michael L. Holiday
Assistant Vice President

RECEIVED
Office of Oil and Gas
APR 4 2022
WV Department of
Environmental Protection

04/15/2022

WW-9
(5/16)

API Number 47 - 051 - 02070
Operator's Well No. MAJ10BHSU

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) Wheeling Creek Quadrangle Majorsville

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: _____

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

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection (UIC Permit Number _____)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain Waste Management or Ryan Environmental will use Vacuum trucks and properly dispose of any fluid or waste return)

Will closed loop system be used? If so, describe: no

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

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

Additives to be used in drilling medium? na

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

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

-Landfill or offsite name/permit number? na

RECEIVED
Office of Oil and Gas

APR 4 2022

WV Dept. of
Environmental Protection

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 April 1, 2016, 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 [Signature]

Company Official (Typed Name) Raymond Hoon

Company Official Title Senior Project Manager

Subscribed and sworn before me this 1 day of April, 2022

[Signature] Notary Public

My commission expires September 23, 2024

Commonwealth of Pennsylvania - Notary Seal
Todd Fleming, Notary Public
Washington County
My commission expires September 23, 2024
Commission number 1244937
Member, Pennsylvania Association of Notaries

Proposed Revegetation Treatment: Acres Disturbed N/A no reclaim see attached Prevegetation pH _____

Lime _____ Tons/acre or to correct to pH _____

Fertilizer type _____

Fertilizer amount _____ lbs/acre

Mulch _____ Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type lbs/acre

Seed Type lbs/acre

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and dimensions (L, W), and area in acres, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: Gayne Knitowski Digitally signed by Gayne Knitowski
Date: 2022.03.31 06:52:33 -0400

Comments: _____

RECEIVED
Office of Oil and Gas

APR 4 2022

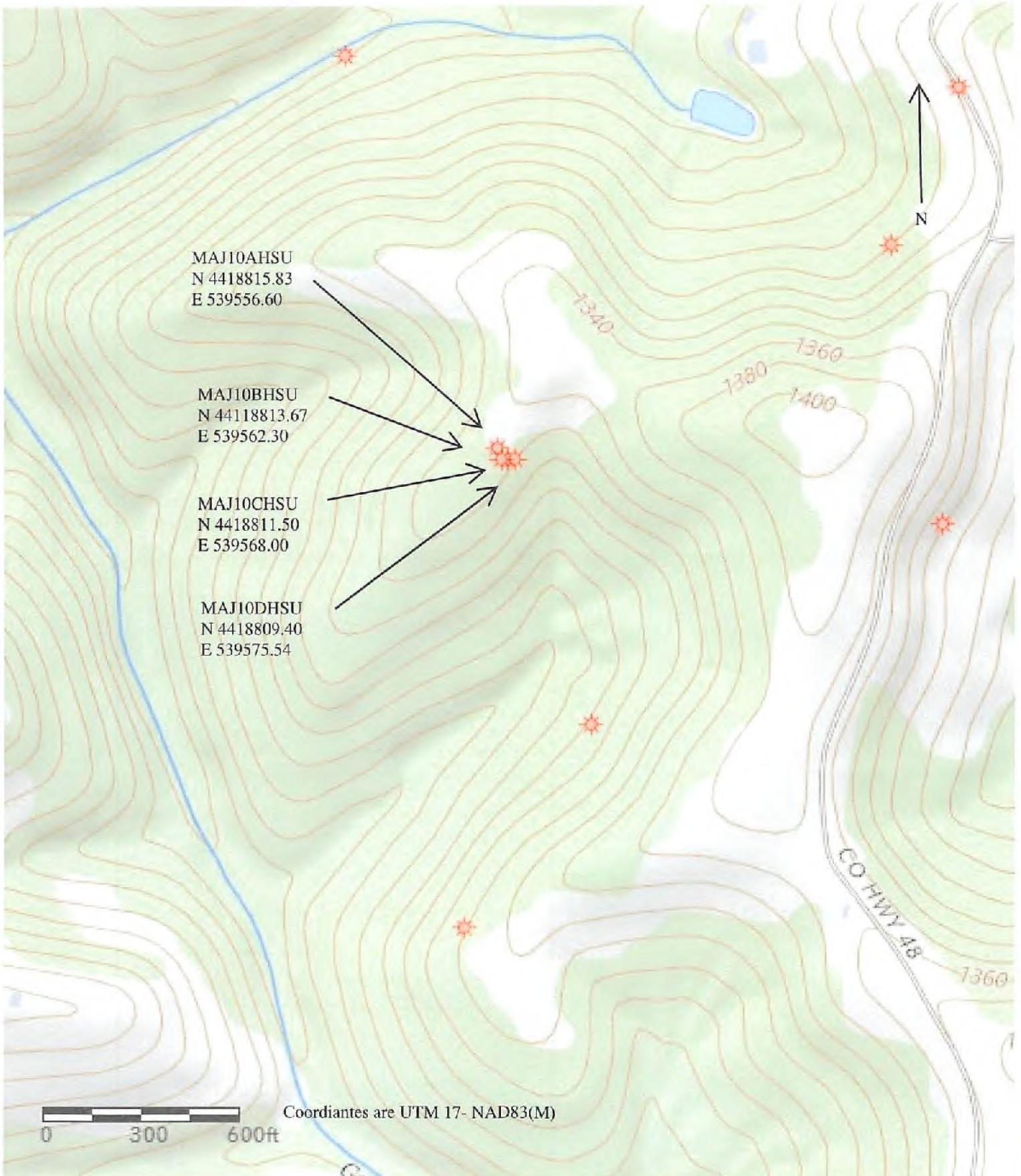
WV Department of
Environmental Protection

Title: Inspector

Date: 3-31-2022

Field Reviewed? Yes No

4705102070P



04/15/2022

WR-35
Rev. 8/23/13

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

API 47-051-02070 County MARSHALL District WEBSTER
Quad MAJORSVILLE Pad Name MAJ10HSU Field/Pool Name _____
Farm name MAJORSVILLE Well Number MAJ10BHSU
Operator (as registered with the OOG) CNX GAS COMPANY, LLC
Address 1000 CONSOL ENERGY DRIVE City CANONSBURG State PA Zip 15317

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 518305.49 (NAD 27) Easting 1709060.01 (NAD 27)
Landing Point of Curve Northing N/A Easting N/A
Bottom Hole Northing 518324.86 (NAD 27) Easting 1709046.20 (NAD 27)

Elevation (ft) 1317 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
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)
Air drilled top hole ONLY
Deep intermediate hole (12-1/4" hole section) and production hole (8-1/2" hole section) NOT drilled

RECEIVED
Office of Oil and Gas
APR 4 2022
WV Department of
Environmental Protection

Date permit issued 12/19/2018 Date drilling commenced 1/18/2019 Date drilling ceased 2/2/2019
Date completion activities began N/A Date completion activities ceased N/A
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 175, 378, 482 (deepest) Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1470 Void(s) encountered (Y/N) depths N
Coal depth(s) ft 352, 489, 490, 690, 779 Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) Y

Reviewed by:
04/15/2022

API 47-051 - 02070 Farm name MAJORSVILLE Well number MAJ10BHSU

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"	100	NEW	A-252 99#	N/A	Y - GROUT TO SURFACE
Surface							
Coal	24"	18.625"	832	NEW	J-55 87.5#	N/A	Y - CEMENT TO SURFACE
Intermediate 1	17.5"	13.375"	3188	NEW	L-80HC 68.0#	N/A	Y - CEMENT TO SURFACE
Intermediate 2							
Intermediate 3							
Production							
Tubing							
Packer type and depth set		N/A					

Comment Details 30" conductor set with auger rig and grouted to surface. 18-5/8" casing set through fresh water zones and coal zones; cemented to surface (55 bbls cement returned).
13-3/8" casing set through gas storage interval (shoe set below Fifth Sand); cemented to surface (50 bbls of cement returned to surface).

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	TYPE 1					Surface	
Surface							
Coal	CLASS A	1428	15.6	1.19	256 bbls	Surface	8
Intermediate 1	CLASS H	2473	16.0	1.16	507 bbls	Surface	8
Intermediate 2							
Intermediate 3							
Production							
Tubing							

Drillers TD (ft) 3238 Loggers TD (ft) 3238
Deepest formation penetrated SHALE BELOW FIFTH SAND Plug back to (ft) N/A
Plug back procedure N/A

Kick off depth (ft) N/A

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

30" CONDUCTOR: None
18.625" COAL: Centralize first joint and then every 3rd joint to surface
13.375" INTERMEDIATE 1: Centralize first joint and then on every joint to 200' above the Storage Zone (from 13-3/8" shoe to Gas Sand); then centralize every 3rd joint to surface

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

API 47- 051 - 02070 Farm name MAJORSVILLE Well number MAJ10BHSU

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
	TVD	MD
N/A		

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface _____ psi Bottom Hole _____ psi DURATION OF TEST _____ hrs

OPEN FLOW Gas _____ mcfpd Oil _____ bpd NGL _____ bpd Water _____ bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
UNDIFFERENTIATED SOIL	0	100	0	100	SOIL / CLAY / SANDSTONE / SILTSTONE
UNDIFFER. SAND / SILT	100	352	100	352	SANDSTONE / SILTSTONE
WASHINGTON COAL	352	353	352	353	COAL
UNDIFFER. SAND / SILT	353	489	353	489	SANDSTONE / SILTSTONE
WAYNESBURG 2 COAL	489	490	489	490	COAL
WAYNESBURG 1 COAL	490	491	490	491	COAL
UNDIFFER. SAND / SILT	491	690	491	690	SANDSTONE / SILTSTONE
SEWICKLEY COAL	690	691	690	691	COAL
UNDIFFER. SAND / SILT	691	779	691	779	SANDSTONE / SILTSTONE
PITTSBURGH COAL	779	785	779	785	COAL
UNDIFFER. SAND / SILT	785	1403	785	1403	SANDSTONE / SILTSTONE / LIMESTONE / RED SHALE
GAS SAND	1403	1470	1403	1470	SANDSTONE / SILTSTONE
SALT SANDS	1470	1860	1470	1860	SANDSTONE/ SILTSTONE
BIG LIME	1860	1966	1860	1966	LIMESTONE / SANDSTONE / SILTSTONE

Please insert additional pages as applicable.

Drilling Contractor Decker Drilling, Inc.
Address 11565 OH-676 City Vincent State OH Zip 45784

Logging Company _____
Address _____ City _____ State _____ Zip _____

Cementing Company BJ Services
Address 11211 Farm-To-Market 2920 City Tomball State TX Zip 77375

Stimulating Company N/A
Address _____ City _____ State _____ Zip _____

Please insert additional pages as applicable.

Completed by Greg Zofchak Telephone 724-485-3032
Signature  Title Drilling Engineer Date 3/31/2022

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

04/15/2022



CNX GAS Company

Marshall County, WV

MAJ-10 PAD

B-HSU

Wellbore #1

Design: Wellbore #1

Survey Report - Geographic

04 February, 2019



04/15/2022



Survey Report - Geographic



Company:	CNX GAS Company	Local Co-ordinate Reference:	Well B-HSU
Project:	Marshall County, WV	TVD Reference:	RKB @ 1329.0usft (Decker #11)
Site:	MAJ-10 PAD	MD Reference:	RKB @ 1329.0usft (Decker #11)
Well:	B-HSU	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project	Marshall County, WV		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	West Virginia North 4701		Using geodetic scale factor

Site	MAJ-10 PAD				
Site Position:		Northing:	518,312.90 usft	Latitude:	39° 55' 6.378 N
From:	Map	Easting:	1,709,041.44 usft	Longitude:	80° 32' 14.438 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.66 °

Well	B-HSU					
Well Position	+N/-S	0.0 usft	Northing:	518,305.49 usft	Latitude:	39° 55' 6.307 N
	+E/-W	0.0 usft	Easting:	1,709,060.01 usft	Longitude:	80° 32' 14.198 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	1,317.0 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	1/27/2019	-8.88	66.90	52,034.59915445

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:		Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
		0.0	0.0	0.0	290.79

Survey Program	Date		2/4/2019		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
50.0	742.0	VES GYRO (Wellbore #1)	GYRO-NS	OWSG Gyrocompass Gyro	
887.0	3,250.0	QES MWD (Wellbore #1)	MWD	OWSG MWD - Standard	

RECEIVED
Office of Oil and Gas
APR 4 2022
WV Dept. of Environmental Protection

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	518,305.49	1,709,060.01	39° 55' 6.307 N	80° 32' 14.198 W
50.0	0.32	292.60	50.0	0.1	-0.1	518,305.54	1,709,059.88	39° 55' 6.308 N	80° 32' 14.200 W
100.0	0.27	284.67	100.0	0.1	-0.4	518,305.62	1,709,059.64	39° 55' 6.308 N	80° 32' 14.203 W
150.0	0.27	316.87	150.0	0.3	-0.6	518,305.74	1,709,059.45	39° 55' 6.310 N	80° 32' 14.206 W
200.0	0.34	309.37	200.0	0.4	-0.8	518,305.92	1,709,059.25	39° 55' 6.311 N	80° 32' 14.208 W
250.0	0.47	297.52	250.0	0.6	-1.1	518,306.11	1,709,058.95	39° 55' 6.313 N	80° 32' 14.212 W
300.0	0.31	273.90	300.0	0.7	-1.4	518,306.21	1,709,058.64	39° 55' 6.314 N	80° 32' 14.216 W
350.0	0.42	271.21	350.0	0.7	-1.7	518,306.23	1,709,058.32	39° 55' 6.314 N	80° 32' 14.220 W
400.0	0.16	281.49	400.0	0.8	-1.9	518,306.24	1,709,058.07	39° 55' 6.314 N	80° 32' 14.223 W
450.0	0.23	286.11	450.0	0.8	-2.1	518,306.29	1,709,057.90	39° 55' 6.315 N	80° 32' 14.226 W
500.0	0.12	318.30	500.0	0.9	-2.2	518,306.35	1,709,057.77	39° 55' 6.315 N	80° 32' 14.227 W

04/15/2022



Company:	CNX GAS Company	Local Co-ordinate Reference:	Well B-HSU
Project:	Marshall County, WV	TVD Reference:	RKB @ 1329.0usft (Decker #11)
Site:	MAJ-10 PAD	MD Reference:	RKB @ 1329.0usft (Decker #11)
Well:	B-HSU	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
550.0	0.22	329.72	550.0	1.0	-2.3	518,306.47	1,709,057.69	39° 55' 6.317 N	80° 32' 14.228 W	
600.0	0.19	286.22	600.0	1.1	-2.5	518,306.58	1,709,057.56	39° 55' 6.318 N	80° 32' 14.230 W	
650.0	0.34	285.79	650.0	1.2	-2.7	518,306.64	1,709,057.34	39° 55' 6.318 N	80° 32' 14.233 W	
700.0	0.18	251.15	700.0	1.2	-2.9	518,306.66	1,709,057.12	39° 55' 6.318 N	80° 32' 14.236 W	
742.0	0.08	221.40	742.0	1.1	-3.0	518,306.62	1,709,057.04	39° 55' 6.318 N	80° 32' 14.237 W	
Gyro Tie-in @ 742.0' MD / 742.0' TVD										
887.0	0.57	310.87	887.0	1.5	-3.6	518,307.01	1,709,056.43	39° 55' 6.322 N	80° 32' 14.245 W	
975.0	0.51	314.86	975.0	2.1	-4.2	518,307.57	1,709,055.82	39° 55' 6.327 N	80° 32' 14.253 W	
1,061.0	0.69	314.72	1,061.0	2.7	-4.8	518,308.21	1,709,055.18	39° 55' 6.334 N	80° 32' 14.261 W	
1,146.0	0.66	310.69	1,146.0	3.4	-5.6	518,308.89	1,709,054.44	39° 55' 6.340 N	80° 32' 14.270 W	
1,232.0	0.56	308.68	1,232.0	4.0	-6.3	518,309.47	1,709,053.74	39° 55' 6.346 N	80° 32' 14.279 W	
1,319.0	0.48	308.55	1,319.0	4.5	-6.9	518,309.97	1,709,053.12	39° 55' 6.351 N	80° 32' 14.287 W	
1,408.0	0.67	296.67	1,408.0	4.9	-7.6	518,310.43	1,709,052.37	39° 55' 6.355 N	80° 32' 14.297 W	
1,495.0	0.43	301.41	1,495.0	5.3	-8.4	518,310.83	1,709,051.63	39° 55' 6.359 N	80° 32' 14.307 W	
1,583.0	0.25	296.96	1,583.0	5.6	-8.8	518,311.09	1,709,051.18	39° 55' 6.362 N	80° 32' 14.313 W	
1,670.0	0.10	337.93	1,670.0	5.8	-9.0	518,311.25	1,709,050.98	39° 55' 6.363 N	80° 32' 14.315 W	
1,757.0	0.24	336.06	1,757.0	6.0	-9.1	518,311.48	1,709,050.88	39° 55' 6.365 N	80° 32' 14.316 W	
1,844.0	0.29	313.83	1,844.0	6.3	-9.4	518,311.80	1,709,050.65	39° 55' 6.368 N	80° 32' 14.319 W	
1,931.0	0.40	335.47	1,931.0	6.7	-9.6	518,312.23	1,709,050.36	39° 55' 6.373 N	80° 32' 14.323 W	
2,019.0	0.36	335.56	2,019.0	7.3	-9.9	518,312.76	1,709,050.12	39° 55' 6.378 N	80° 32' 14.326 W	
2,106.0	0.26	323.95	2,105.9	7.7	-10.1	518,313.17	1,709,049.89	39° 55' 6.382 N	80° 32' 14.329 W	
2,193.0	0.22	313.95	2,192.9	8.0	-10.4	518,313.45	1,709,049.66	39° 55' 6.385 N	80° 32' 14.332 W	
2,281.0	0.27	312.83	2,280.9	8.2	-10.6	518,313.70	1,709,049.38	39° 55' 6.387 N	80° 32' 14.336 W	
2,368.0	0.32	315.85	2,367.9	8.5	-11.0	518,314.02	1,709,049.06	39° 55' 6.390 N	80° 32' 14.340 W	
2,452.0	0.26	325.27	2,451.9	8.9	-11.2	518,314.34	1,709,048.79	39° 55' 6.393 N	80° 32' 14.344 W	
2,539.0	0.30	327.41	2,538.9	9.2	-11.5	518,314.70	1,709,048.56	39° 55' 6.397 N	80° 32' 14.347 W	
2,626.0	0.35	309.78	2,625.9	9.6	-11.8	518,315.06	1,709,048.23	39° 55' 6.400 N	80° 32' 14.351 W	
2,711.0	0.61	304.27	2,710.9	10.0	-12.4	518,315.48	1,709,047.66	39° 55' 6.404 N	80° 32' 14.358 W	
2,798.0	0.72	310.51	2,797.9	10.6	-13.2	518,316.10	1,709,046.86	39° 55' 6.410 N	80° 32' 14.369 W	
2,885.0	1.07	311.51	2,884.9	11.5	-14.2	518,316.99	1,709,045.83	39° 55' 6.419 N	80° 32' 14.382 W	
2,971.0	1.23	337.68	2,970.9	12.9	-15.1	518,318.38	1,709,044.88	39° 55' 6.433 N	80° 32' 14.394 W	
3,015.0	1.13	356.01	3,014.9	13.8	-15.3	518,319.24	1,709,044.67	39° 55' 6.441 N	80° 32' 14.397 W	
3,102.0	1.40	17.91	3,101.9	15.6	-15.1	518,321.11	1,709,044.94	39° 55' 6.460 N	80° 32' 14.394 W	
3,181.0	1.58	18.85	3,180.9	17.6	-14.4	518,323.06	1,709,045.59	39° 55' 6.479 N	80° 32' 14.386 W	
3,250.0	1.58	18.85	3,249.8	19.4	-13.8	518,324.86	1,709,046.20	39° 55' 6.497 N	80° 32' 14.378 W	
Last QES MWD Survey										

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
742.0	742.0	1.1	-3.0	Gyro Tie-in @ 742.0' MD / 742.0' TVD	
3,250.0	3,249.8	19.4	-13.8	Last QES MWD Survey	

4705102070 P

RECEIVED
Office of Oil and Gas

APR 4 2022

WV Department of
Environmental Protection

11/10/2016

PLUGGING PERMIT CHECKLIST

Plugging Permit

- WW-4B
- WW-4B signed by inspector
- WW-4A
- SURFACE OWNER WAIVER or PROOF THAT APPLICATION WAS SENT BY REGISTERED OR CERTIFIED MAIL
- COAL OWNER/COAL OPERATOR/COAL LESSEE WAIVERS or PROOF THAT APPLICATION WAS SENT BY REGISTERED OR CERTIFIED MAIL
- WW-9 PAGE 1 (NOTARIZED)
- WW-9 PAGE 2 with attached drawing of road, location, pit and proposed area for land application
- WW-9 GPP PAGE 1 and 2 if well effluent will be land applied
- RECENT MYLAR PLAT OR WW-7
- WELL RECORDS/COMPLETION REPORT
- TOPOGRAPHIC MAP OF WELL, SHOWING PIT IF PIT IS USED
- MUST HAVE VALID BOND IN OPERATOR'S NAME
- CHECK FOR \$100 IF PIT IS USED

04/15/2022

BHL is located on topo map 6,483 feet south of Latitude: 39° 55' 00"
 SHL is located on topo map 14,512 feet south of Latitude: 39° 57' 30"

4705102070P

	SURFACE OWNER	LESSOR	DIST-TM/PAR
1	CNX LAND, LLC	CNX GAS COMPANY LLC (FEE)	P/O 15-11/12
2	CNX LAND, LLC	CNX GAS COMPANY LLC (FEE)	15-11/11
3	ROGER D. MCCrackEN ET AL	AUGUST W. CHAMBERS ET AL CHESTNUT HOLDINGS INC	P/O 15-11/21
4	ROGER D. MCCrackEN ET AL	AUGUST W. CHAMBERS ET AL CHESTNUT HOLDINGS INC	P/O 15-11/21
5	MICHAEL S. RIGGLE	MICHAEL S. RIGGLE	15-11/19
6	MICHAEL S. RIGGLE	RALPH CURTIS RIGGLE	15-11/20
7	CNX LAND, LLC	JACKIE L. FRYE	P/O 15-11/13
8	CNX LAND, LLC	CNX GAS COMPANY LLC (FEE)	P/O 15-11/12
9	DAVID L. KINNEY, ET AL	DAVID L. KINNEY & RAYMOND P. KINNEY	P/O 15-11/9
10	RODNEY J. & DEBRA J. KINNEY	DAN WILLIAMSON THOMAS ALBERS JOHN JOSEPH ALBERS, JR. JAMES WILLIAMSON BONNIE MIKE CONNIE WRIGHT JADE WILLIAMSON GINGER WILLIAMSON SCOTT SAMUEL & SHEILA COTTRELL LEON & ELLA KINNEY ROBERT S. & JODI NEELY RODNEY J. & DEBRA J. KINNEY MICHAEL ALBERS MICHAEL ELLIOT RYAN FOLLWEILER (FKA RYAN ELLIOT)	15-11/8
11	RODNEY J. KINNEY CNX LAND, LLC JOSEPH SCARLATA TRUSTEE BRADLEY S. SCHERICH	COLUMBIA GAS TRANSMISSION	15-11/15 P/O 15-11/13 P/O 15-11/14 P/O 15-12/17
12	JOSEPH SCARLATA TRUSTEE	COLUMBIA GAS TRANSMISSION	P/O 15-11/14
13	CNX LAND, LLC	EDWARD G. STROPE, ET AL	P/O 15-11/16
14	DRY RIDGE COMMUNITY ASSC'N	DRY RIDGE COMMUNITY ASSOCIATION, A WEST VIRGINIA NON-PROFIT CORPORATION	15-11/16.1
15	CNX LAND, LLC CNX LAND, LLC CNX LAND, LLC CONSOL PENNSYLVANIA COAL CO. BRADLEY S. SCHERICH	COLUMBIA GAS TRANSMISSION	15-11/17 P/O 15-11/13 P/O 15-11/16 15-12/18 P/O 15-12/17
16	CNX LAND, LLC	RICHARD E. SCHERICH JANET M. SCHERICH SCOTT DOUGLAS REED RICHARD P. AND MARY LEE BARTO	15-11/18
17	CNX LAND, LLC	EUGENE SCHERICH	15-12/20
18	GLEN AND MARLENE SPITZNOCLE PAUL & MALLORY HEWITT	EUGENE SCHERICH	15-12/16 15-12/16.1
19	HELEN L. DOMAN	HELEN L. DOMAN	15-12/22
20	HELEN L. DOMAN	HELEN L. DOMAN	15-12/21
21	HELEN L. DOMAN	HELEN L. DOMAN	22-3/106
22	GAHC L.P.	EUGENE SCHERICH	P/O 22-3/105 P/O 22-3/105A
23	CONSOL PENNSYLVANIA COAL CO. JOHN E. SYNDER ET UX	B.L. AND DORA FRYE	P/O 22-3/107 P/O 22-3/107A
24	HELEN L. DOMAN	HELEN L. DOMAN	3-5/10
25	WILLIAM SNYDER ET AL	W. COLLIER AND SARAH H. BALDWIN	22-3/115B
26	JOHN E. SNYDER ET UX		22-3/115A
28	GAHC L.P.	DELMAR W. & BLANCHE SCHERICH	22-3/102
29	GAHC L.P.	TOM SABELLA AKA THOMAS J. SABELLA AND BETH ANN SABELLA	22-3/104
30	GAHC L.P.	S. ELSWORTH AND LUCILLE ALLISON	22-3/100
31	TIM M. TURLEY & TAMMY JENKINS	DORCAS DOMAN FRANCIS E. DOMAN JUNE DOMAN	15-5/48



SURFACE HOLE LOCATION (SHL)
UTM 17-NAD83(M)
N:4418813.67
E:539562.30
 NAD83, WV NORTH
 N:518342.814
 E:1677625.181
 LAT/LON-NAD83
 LAT:39°55'06.585"
 LON:80°32'13.464"

APPROX. LANDING POINT
UTM 17-NAD83(M)
N:4418694.37
E:539813.07
 NAD83, WV NORTH
 N:517937.583
 E:1678441.517
 LAT/LON-NAD83
 LAT:39°55'02.673"
 LON:80°32'02.927"

BOTTOM HOLE LOCATION (BHL)
UTM 17-NAD83(M)
N:4416644.59
E:541300.06
 NAD83, WV NORTH
 N:511129.638
 E:1683208.510
 LAT/LON-NAD83
 LAT:39°53'55.933"
 LON:80°31'00.759"

BHL is located on topo map 4,735 feet west of Longitude: 80° 30' 00"
 SHL is located on topo map 10,398 feet west of Longitude: 80° 30' 00"



RECEIVED
 Office of Oil and Gas
 APR 4 2022

SEE PAGE 2 DUE TO UNIT BOUNDARY SIZE

FILE #: MAJ10BHSU
 DRAWING #: MAJ10BHSU
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT THOMAS 1498.81'

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: *George D. Six*
 R.P.E.: _____ L.L.S.: P.S. No. 2000



PLACE SEAL HERE

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



DATE: MAY 20, 2019
 OPERATOR'S WELL #: MAJ10BHSU
 API WELL #: 47 51 02070
 STATE COUNTY PERMIT

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

WATERSHED: WHEELING CREEK ELEVATION: 1317.00'

COUNTY/DISTRICT: MARSHALL / WEBSTER QUADRANGLE: MAJORSVILLE, WV 7.5'

SURFACE OWNER: CNX LAND, LLC ACREAGE: 59.00±

OIL & GAS ROYALTY OWNER: CNX GAS LLC ACREAGE: 2369.225±

04/15/2022

DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE

(SPECIFY): TARGET FORMATION: POINT PLEASANT ESTIMATED DEPTH: TVD: 11,890'± TMD: 20,640'±

WELL OPERATOR: CNX GAS COMPANY LLC DESIGNATED AGENT: CHRIS TURNER

Address: 1000 CONSOL ENERGY DRIVE Address: 1 DOMINION DRIVE
 City: CANONSBURG State: PA Zip Code: 15317 City: JANE LEW State: WV Zip Code: 26378



Stansberry, Wade A <wade.a.stansberry@wv.gov>

Plugging Vertical Well Work Permit API: 47-051-02065)

1 message

Stansberry, Wade A <wade.a.stansberry@wv.gov>

Mon, Apr 11, 2022 at 9:04 AM

To: "Hoon, Raymond" <raymondhoon@cnx.com>, erikawhetstone@cnx.com, "Kendziora, Anthony" <anthonykendziora@consolenergy.com>, John Hardcastle <JohnHardcastle@cnx.com>, Eric Buzzard <ebuzzard@marshallcountywv.org>, "Gayne J. Knitowski" <gayne.j.knitowski@wv.gov>

I have attached a copy of the newly issued well [permit](#) number. This will serve as your copy.

47-051-02065 - MAJ10CHSU
47-051-02068 - MAJ10AHSU
47-051-02069 - MAJ10DHSU
47-051-02070 - MAJ10BHSU

If you have any questions, then [please](#) contact us here at the Office of Oil and Gas.

Thank you,

Wade A. Stansberry

Environmental Resource Specialist 3

West Virginia Department of Environmental Protection

Office of Oil & Gas

601 57th St. SE

Charleston, WV 25304

(304) 926-0499 ext. 41115

(304) 926-0452 fax

Wade.A.Stansberry@wv.gov

5 attachments

 **IR-8 Blank.pdf**
233K

 **47-051-02065 - Copy.pdf**
1703K

 **47-051-02069 - Copy.pdf**
1831K

 **47-051-02068 - Copy.pdf**
1686K

 **47-051-02070 - Copy.pdf**
1869K

04/15/2022