



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

Wednesday, April 20, 2022
WELL WORK PLUGGING PERMIT
Vertical Plugging

COLUMBIA GAS TRANSMISSION, LLC
STORAGE TECHNICAL SERVICES - 6TH FLOOR
1700 MACCORKLE AVE. SE.
CHARLESTON, WV 25314

Re: Permit approval for 4437
47-051-00312-00-00

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.


James A. Martin
Chief

Operator's Well Number: 4437
Farm Name: HARSH, NORA
U.S. WELL NUMBER: 47-051-00312-00-00
Vertical Plugging
Date Issued: 4/20/2022

Promoting a healthy environment.

04/22/2022

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 March 1, 2022
- 2) Operator's
Well No. Majorsville Shallow 4437
- 3) API Well No. 47-051 - 0032-0000

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 ___ or Underground storage X) Deep ___ / Shallow X

5) Location: Elevation 1125.7' Watershed Wheeling Creek
District Sand Hill County Marshall Quadrangle Majorsville, WV

6) Well Operator Columbia Gas Transmission, LLC 7) Designated Agent Brad Nelson, Storage Engineer
Address 1700 MacCorkle Avenue S.E., P.O. Box 1273 Address 455 Racetrack Road
Charleston, WV 25325 Washington, PA 15301

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Gayne J. Knitowski Name Contractor Services, Inc. of West Virginia (ConServ)
Address P.O. Box 108 Address 929 Charleston Road
Gormanias, WV 26720 Spencer, WV 25276

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

Refer to enclosed:

- 1) Well job plan.
- 2) Prior to P&A wellbore schematic.
- 3) Proposed P&A wellbore schematic.

4) CHECK INSPECTORS REPORT OF OCTOBER 1, 1957.

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 Date 3-9-2022
Dig. Electronically signed by Gayne Knitowski
Date: 2022.03.09 07:42:26 -0500

JOB PLAN		Well Engineering & Technology		PAGE 3	DATE JOB PREPARED: 1/6/2022
Objective: Plug and Abandon				LAST PROFILE UPDATE:	
TITLE: Plug and Abandon		WELL: 4437		WORK TYPE: Break-fix	
FIELD: Majorsville Shallow		SHL (Lat/Long): 39.954271	-80.533229	API: 47-051-00312-00-00	
STATE: WV		BHL (Lat/Long): 39.954271	-80.533229	CNTY: Marshall	
DIST/TWP: Sandhill					

JOB PLAN

Note: A restriction estimated to be 3" in diameter was identified at ~344' from surface on 11/23/21 within the 7" flowstring.

- 1 Obtain NRP clearances, TOPs, pipeline crossing eval, etc.
- 2 Prepare access road and well site. Install ECD's per EM&CP.
- 3 Service all wellhead valves.
- 4 Document initial tubing / casing / annular pressures.
- 5 Top off the wellbore with kill weight fluid. If successful, remove restricted 4" valve and jump on a full bore 7" access valve.
- 6 Remove concrete pad and dress all casings for well control.
- 7 MIRU service rig.
- 8 NU 7-1/16" 2000 # BOPs (double ram with blind & pipe + annular).
- 9 Pressure test low/high to 250/1600 psig using packer set <30 ft. Pressure test TIW/stabbing valves.
- 10 MIRU Baker Atlas. Run CBL from TD to surface. Use 1-11/16" or 2-3/4" OD tools.
Note: Restricted ID of 3 inches at 344' from surface.
- 11 RDMO Baker Atlas.
- 12 TIH with work string and clean to TD at ~1354'.
- 13 Circulate two bottoms up to clean hole.
- 14 TOOH.
- 15 TIH with work string and install balanced cement plug(s) from TD to 700' WOC 10 hrs and tag.
- 16 ND BOPs.
- 17 NU drilling spool and 13" annular.
- 18 Free-pt and cut/pull all 7", 10-3/4", and 13-3/8" csg that is free.
- 19 TIH with work string and spot balanced cement plug(s) from top of last plug to surface.
- 20 RDMO service rig.
- 21 Top off all annuli with cement.
- 22 Install 7" csg monument 30" above GL, tack weld cap, and affix API number.
- 23 Reclaim road and location.

Type text here

Gayne
Knitowski

Digitally signed by Gayne
Knitowski
Date: 2022.03.09 07:12:03
-0500

PREPARED BY: Brad Nelson	REVIEWED BY:	APPROVED:
PREP DATE: 1/6/2022		

~ not to scale ~

Majorsville Shallow 4437

Proposed P&A

(as of 1/19/2022)

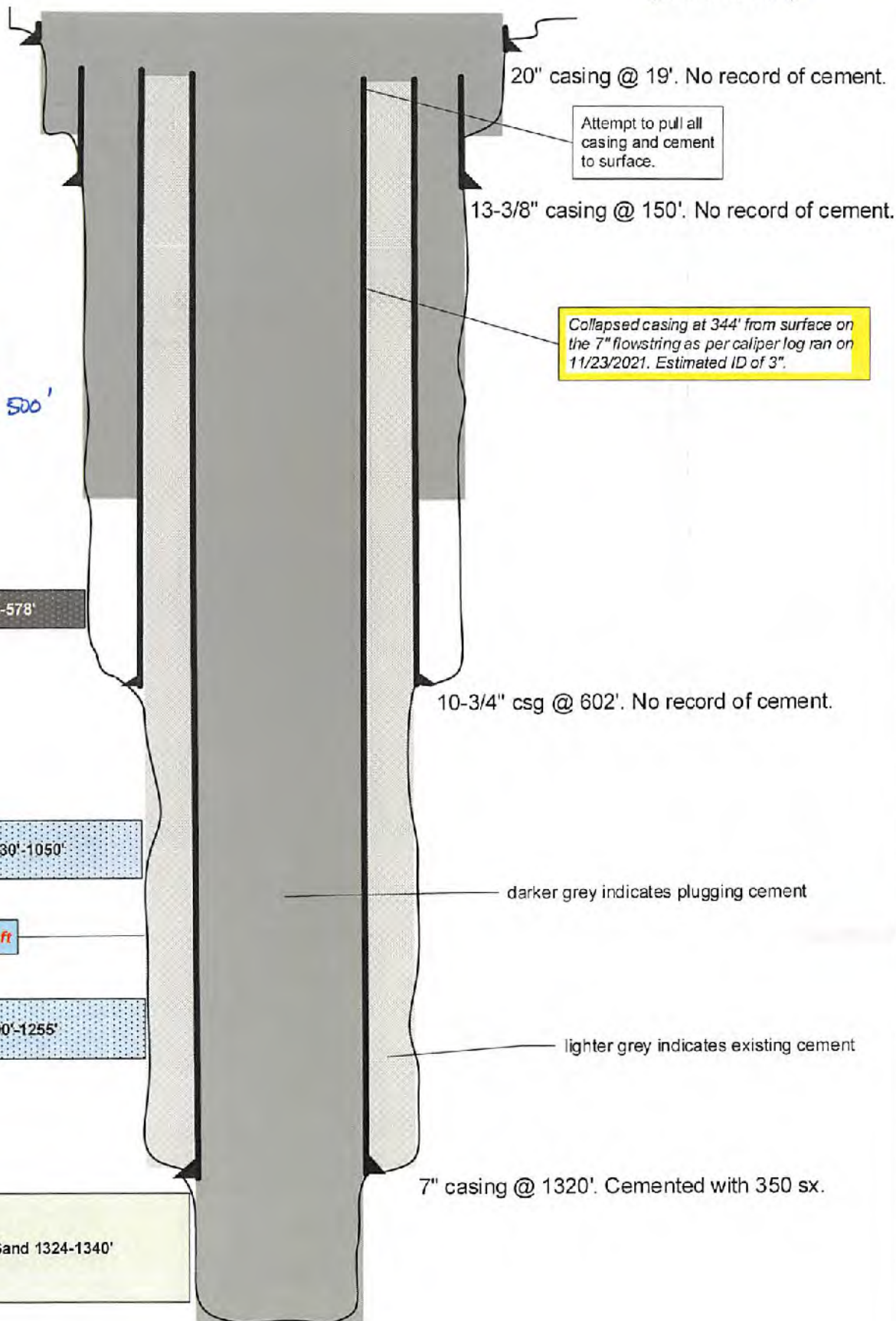
INSPECTION
REPORT OF
OCT. 1, 1957
STATES

150' OF 13" CTS

+

597' OF 10" CTS

PITTSBURGH COAL @ 500'



Attempt to pull all casing and cement to surface.

Collapsed casing at 344' from surface on the 7" flowstring as per caliper log ran on 11/23/2021. Estimated ID of 3'.

darker grey indicates plugging cement

lighter grey indicates existing cement

Pittsburgh Coal 562'-578'

Big Dunkard 1030'-1050'

Sea Level @ 1125.7 ft

Gas Sand 1200'-1255'

1ST Salt Sand 1324'-1340'

TD 1354'

~ not to scale ~

Majorsville Shallow 4437

Prior to P&A
(as of 1/19/2022)

20" casing @ 19'. No record of cement.

SEC INSPECTORS REPORT
OF OCTOBER 1, 1957

13-3/8" casing @ 150'. No record of cement.

Collapsed casing at 344' from surface on
the 7" flowstring as per caliper log ran on
11/23/2021. Estimated ID of 3".

10-3/4" csg @ 602'. No record of cement.

7" casing @ 1320'. Cemented with 350 sx.

Pittsburgh Coal 562'-578'

Big Dunkard 1030'-1050'

Sea Level @ 1125.7 ft

Gas Sand 1200'-1255'

1ST Salt Sand 1324'-1340'

TD 1354'

04/22/2022

47-051-00312 P
gms

09.11.

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

INSPECTOR'S PLUGGING REPORT
INSPECTOR'S WELL REPORT

Permit No. Wab-312 Oil or Gas Well Drilling
(KIND)

Company	<u>Mfg-Light & Heat Co</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS USED
Address	<u>Pittsburgh, Pa.</u>	Size			Well Interval
Farm	<u>John H. Hark Place</u>		<u>11"</u>		Kind of Packer
Well No.	<u>4437</u>		<u>150'</u>		
District	<u>Marshall</u> County <u>Marshall</u>		<u>597'</u>		Size of
Drilling commenced	<u>Sept-12-57</u>				Depth set
Drilling completed					Perf. top
Date shot					Perf. bottom
Initial open flow		Liners Used			Perf. top
Open flow after tubing					Perf. bottom
Volume		Cu. Ft.	CASING CEMENTED	<u>13"</u> SIZE <u>150</u> No. FT <u>92857</u> Date	
Rock pressure		lbs.		<u>10"</u> <u>1597</u> <u>10-1-57</u>	
Oil		bbls. 1st 24 hrs.	COAL WAS ENCOUNTERED AT	<u>265</u> FEET <u>48</u> INCHES	
Fresh water	<u>130</u>	gals. 1st 24 hrs.	<u>440</u> FEET <u>24</u> INCHES <u>563</u> FEET <u>48</u> INCHES		<u>Perf. bar</u>
Salt water		feet			

Drillers' Names Carl Anderson & Ralph Spitzer

Remarks: 9/24-Hall filled with water to within 195' casing
first drilling 13" hole to 150', Pack Chassis at 105
water at 130', Dig-13" hole round to 18" and run
150' 13" cement to top, 13" hole to 597' and
run 597' 10" casing cemented to top
estimated 500' ft. hole in Pittsburgh
local.

DATE Oct-1-57



O. V. [Signature]
DISTRICT WELL INSPECTOR

04/22/2022

00-11

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

INSPECTOR'S PLUGGING REPORT
INSPECTOR'S WELL REPORT

Permit No. Mar-312 Kind of Well Oil or Gas Well
Well

Company Imp Light & Heat Co
Address Pittsburgh Pa
Farm Nara Water Plant
Well No. 4437
District North Hill County Marshall
Drilling commenced Sept-12-57
Drilling completed _____ Total depth _____
Date shot _____ Depth of shot _____
Initial open flow _____ /10ths Water in _____ Inch
Open flow after tubing _____ /10ths Merc. in _____ Inch
Volume _____ Cu. Ft.
Block pressure _____ lbs _____ hrs.
Oil _____ bbls. 1st 24 hrs.
Fresh-water 130 1 1/2 barrels feet _____ feet
Salt water _____ feet _____ feet

CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Size			Kind of Packer
10			
13	<u>148</u>		Size of
10	<u>598</u>		
8 1/4			Depth set
6 1/4	<u>1320</u>		
5 1/8			Perf. top
3			Perf. bottom
2			Perf. top
			Perf. bottom
Liners Used			

CASING CEMENTED above casing Date _____
above casing cemented
COAL WAS ENCOUNTERED AT 265 FEET 48 INCHES
460 FEET 24 INCHES 563 FEET 48 INCHES
same gas in pph-coal

Drillers' Names Ralph Hinder & Carl C. Anderson

Remarks: fatal depth - 1320' pop salt sand
waiting for drilling corp.



Oct-20-57

Chas. R. ...
DISTRICT WELL INSPECTOR

CG-11

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

INSPECTOR'S PLUGGING REPORT
INSPECTOR'S WELL REPORT

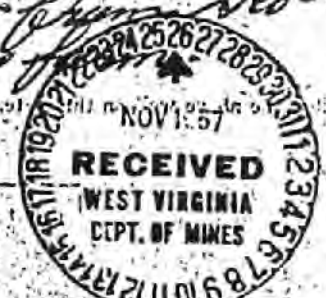
Permit West-312 Oil or Gas Well Oil
(KIND) Storage

COMPANY	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
<u>W. Light & Heat Co</u>	Size			
Address <u>Pittsburgh, Pa.</u>				
Farm <u>Meta Hatch, Grant</u>				Kind of Packer
Well No <u>4437</u>				Size of
Dist <u>Lincoln</u> County <u>Marshall</u>				Depth set
Drilling commenced <u>Sept 12-57</u>				Perf. top
Drilling completed <u>yes</u> Total depth				Perf. bottom
Date shot <u>6</u> Depth of shot				Perf. top
Initial open flow /10ths Water in Inch	Liners Used			Perf. bottom
Open flow after tubing /10ths Merc. in Inch				
Volume <u>2,000,000</u> Cu. Ft.	CASING CEMENTED <u>all</u> SIZE No. FT. Date			
Rock pressure lbs. hrs.	<u>Casing Cemented</u>			
Oil lbs., 1st 24 hrs.	COAL WAS ENCOUNTERED AT FEET INCHES			
Fresh water feet feet	FEET INCHES FEET INCHES			
Salt water feet feet	FEET INCHES FEET INCHES			

Drillers' Names no one at well

Remarks: This well completed few days ago, the 2,000,000 machine moved away. No information from Geo-Loger. Drills at well or adjoining farm.

Nov 20-57
DATE



C. P. Butcher
DISTRICT WELL INSPECTOR



STATE OF WEST VIRGINIA DEPARTMENT OF MINES
OIL AND GAS DIVISION

Quadrangle - Cameron
 Permit No. MAR 312
WELL RECORD
 Oil Gas Well Gas

Company The Manufacturers Light and Heat Company
 Address 800 Union Trust Building, Pgh. 19, Penna.
 Farm Nora Harsh Area 300
 Location (waters)
 Wall No. 4437 Elev. 1121.09
 District Sandhill County Marshall
 The surface of tract is owned in fee by
 Mineral rights are owned by
 Drilling commenced September 12, 1957
 Drilling completed November 4, 1957
 Date Shot From To
 With
 Open Flow 1/10ths Water in Inch
 1/10ths Merc. in Inch
 Volume Cu. Ft.
 Rock Pressure lbs. 72 hrs.
 Oil bbls. 1st 24 hrs.
 Fresh water feet
 Salt water feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
16"			Kind of Packer
12"	148'5"	148'5"	
10"	598'4"	598'4"	Size of
8 7/8"	1320'5"	1320'5"	Depth set
5 3/8"			Perf. top
2"			Perf. bottom
			Perf. top
			Perf. bottom

CASING CEMENTED SIZE No. Ft. Date
 COAL WAS ENCOUNTERED AT FEET INCHES
 FEET INCHES FEET INCHES
 FEET INCHES FEET INCHES

Formation	Color	THICKNESS	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
<u>Drillers Log</u>						Elevation - 1121.09' (Ground level)	
Clay		10	0	10		Depth Datum - Derrick floor - 2'	
Sand		30	10	40		above ground level.	
Slate - Shells		75	40	115			
Sand		15	115	130		Fresh water, 1-1/2 Bbls. per Hr.	
Slate - Shells		40	130	170		12-3/8" (48#, H-40) Csg. Pt. - 148'5"	
Lime		25	170	195		Cemented with 200 bags. 9-27-57	
Slate & Shells		70	195	265			
Waynesburg Coal		4	265	269			
Slate - Shells		26	269	295			
Lime		165	295	460			
Mapletown Coal		2	460	462			
Slate		16	462	478			
Lime		57	478	535			
Slate - Shells		28	535	563			
Pittsburgh Coal		4	563	567		Show of gas in the Pgh. Coal.	
Slate		30	567	597		10-3/4" (32 7/8#, H-40) Csg. Pt. - 598'4"	
Lime		28	597	625		Cemented with 200 bags. 10/1/57	
Slate - Shell		35	625	660			
Sand		40	660	700			
Red Rock		10	700	710			
Lime		15	710	725			
Red Rock		15	725	740			
Slate - Shells		75	740	815			
Red - Red		20	815	835			
Lime Shells		25	835	860			
Red-Red		30	860	880			
Lime		40	880	920			
Lime		25	920	945			
Red Rock		10	945	955			
Lime - Shells		70	955	1025			
Big Dunkard Sand		15	1025	1040			
Lime		160	1040	1200			
Gas Sand		57	1200	1257			
Slate - Shells		58	1257	1315			
1st Salt Sand			1315				
Total Depth			1354	1354			

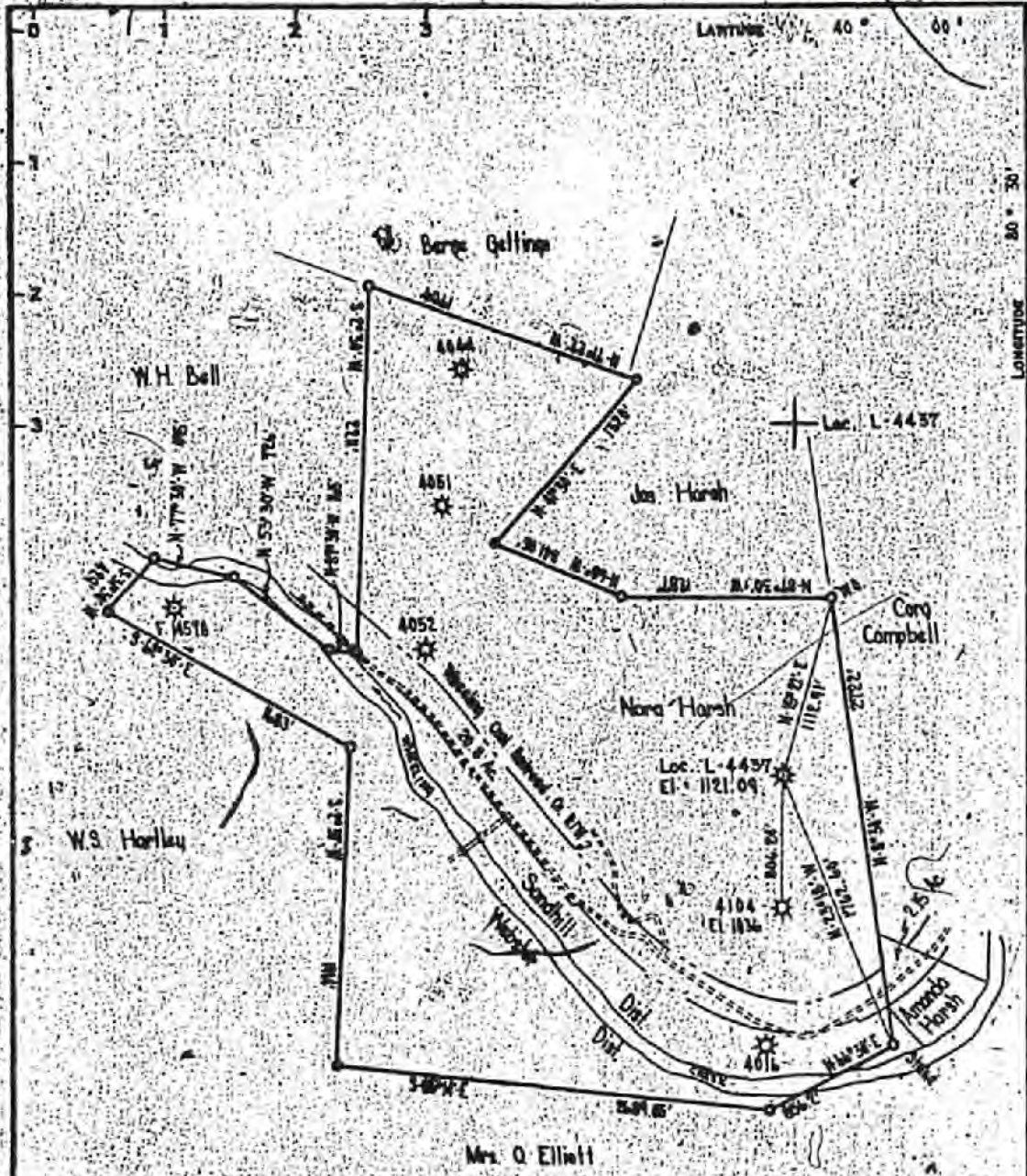


gwm

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Drilling in			1320	1320			of pay zone
			1320	1320	Drilling in	78,869 Cu. Ft.	day
			1321	1321	1330-1331	195,199 Cu. Ft.	day
			1322	1322	1331-1332	409,971 Cu. Ft.	day
			1323	1323	1332-1333	475,046 Cu. Ft.	day
			1324	1324	1333-1334	484,962 Cu. Ft.	day
			1325	1325	1334-1335	2,208,848 Cu. Ft.	day
			1326	1326			
			1327	1327			
			1328	1328			
			1329	1329			
			1330	1330			
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			1398	1398			
			1399	1399			
			1400	1400			



OKLAHOMA GEOLOGICAL SURVEY
 DIVISION OF OIL AND GAS
 DEPARTMENT OF MINES
 DATE: December 2, 19 57
 BY: [Signature] Land Agent



COAL OWNED BY Manassas Improvement Co. et al. % CH Jones
Hinton Coal Co, Grant Bldg, Pgh. Pa.

NEW LOCATION
 DRILL DEEPER
 ABANDONMENT STWAGE

COMPANY The Manufacturers Light & Heat Company
 ADDRESS 880 Union Trust Bldg, Pgh., Pa.
 FARM Nora Harsh
 TRACT 300 ACRES LEASE NO. 19436
 WELL (FARM) NO. 4437 SERIAL NO. 4437
 ELEVATION (SPIRIT LEVEL) 1121.09
 QUADRANGLE Common
 COUNTY Marshall DISTRICT Sandhill
 ENGINEER A.C. Sireator
 ENGINEER'S REGISTRATION NO. 9442
 FILE NO. Y-15-616
 DATE 8-20-57 SCALE 1" = 800'

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

WELL LOCATION MAP

FILE NO. MARS-312

+ 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.

LOCATION FOR WELL

No. L-4437

FIELD DISTRICT Washington COMPANY The M.L.& H.

LEASE NO. 19436 FOR 300 ACRES ON FARM OF

Nora Harsh

TOWN
DIST.
TWP.

ACCTG. Sandhill TOWN Marshall CO. W.Va.
DIST. NO.

BY 8-19-57
A.C. Streater

LOCATED 1957

COMPLETED
OIL
GAS
DRY HOLE

PRODUCING
SAND

TOTAL DEPTH 1354

STORAGE FIELD Marshall

ROCK PRESS. 568

ON MAP 0-25-10 Y-15-616

OPEN FLOW 2, 208.848 cwt.

ON PIPE LINE NO. 9718

19 BY

ENTERED ON TRACINGS

1) Date: 3/1/2022
2) Operator's Well Number
Majorsville Shallow 4437
3) API Well No.: 47 - 051 - 003120000

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 Consolidation Coal Company	Name American Consolidated Natural Resources, Inc.
Address 46226 National Road	Address 46226 National Road
St. Clairsville, OH 43950	St. Clairsville, OH 43950
(b) Name Murray Energy c/o Land Department	(b) Coal Owner(s) with Declaration
Address 46226 National Road	Name American Consolidated Natural Resources, Inc.
St. Clairsville, OH 43950	Address 46226 National Road
(c) Name	Name
Address	Address
6) Inspector Gayne J. Kmitowski	(c) Coal Lessee with Declaration
Address P.O. Box 108	Name N/A
Gorman, WV 26720	Address
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.

Well Operator Columbia Gas Transmission, LLC
 By: Brad Nelson *Brad Nelson*
 Storage Engineer
 Address 455 Racetrack Road
 Washington, PA 15301
 Telephone 724-250-0610

Commonwealth of Pennsylvania - Notary Seal
 Elaine Rybski, Notary Public
 Allegheny County
 My commission expires May 11, 2022
 Commission number 1332803
 Member, Pennsylvania Association of Notaries

Subscribed and sworn before me this 1 day of March 2022 Commonwealth of Pennsylvania
 County of Allegheny
Elaine Rybski Notary Public
 My Commission Expires 5/11/2022

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.

Columbia Gas Transmission, LLC
1700 MacCorkle Ave., SE, Charleston, WV, USA 25325



March 8, 2022

American Consolidated Natural Resources, Inc.
Murray Energy Corporation c/o Land Department
Consolidation Coal Company
46226 National Road
St. Clairsville, OH 43950

Columbia Gas Transmission (TC Energy), an underground natural gas storage operator, is planning to permanently plug and abandon a storage well (Majorsville Shallow 4437, API # 47-051-00312-00-00) on property owned by you in Marshall County, WV. Records indicate that American Consolidated Natural Resources, Inc., (Murray Energy, Consolidation Coal Company) may own the coal on subject property.

To comply with WV DEP Code, Columbia is required to provide the coal owner the following documents as notification and for processing.

- WV DEP form WW-4A (Notice of Application to Plug and Abandon a Well)
- WV DEP form WW-4B (Application for a Permit to Plug and Abandon)
- Copy of survey plat
- Proposed method of plugging
- Wellbore diagram (prior to plugging)
- Wellbore diagram (proposed plugging)

If you have questions, feel free to call.

Regards,

A handwritten signature in blue ink that reads "Brad Nelson".

Brad Nelson
Storage Engineer
TC Energy (Columbia Gas Transmission, LLC)
brad_nelson@tcenergy.com
off: 724-223-2753
cell: 724-250-0610

4705100312 P

7019 2970 0001 4413 5126

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Saint Clairsville, OH 43950

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<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
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Postage	\$1.96
Total Postage and Fees	\$8.76

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03/08/2022

Sent To American Consolidated Natural Resources, Inc.,
Murray Energy c/o Land Department, Consolidation Coal Company
 Street and Apt. No., or PO Box No.
46226 National Road
 City, State, ZIP+4®
St. Clairsville, OH 43950

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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- For an additional fee, and with a proper endorsement on the mailpiece, you may request the following services:
 - Return receipt service, which provides a record of delivery (including the recipient's signature). You can request a hardcopy return receipt or an electronic version. For a hardcopy return receipt, complete PS Form 3811, *Domestic Return Receipt*; attach PS Form 3811 to your mailpiece;
 - Restricted delivery service, which provides delivery to the addressee specified by name, or to the addressee's authorized agent.
 - Adult signature service, which requires the signee to be at least 21 years of age (not available at retail).
 - Adult signature restricted delivery service, which requires the signee to be at least 21 years of age and provides delivery to the addressee specified by name, or to the addressee's authorized agent (not available at retail).

IMPORTANT: Save this receipt for your records.

PS Form 3800, April 2015 (Reverse) PSN 7530-02-000-9047

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<p>1. Article Addressed to: American Consolidated Natural Resources, Inc. Murray Energy c/o Land Department Consolidation Coal Company 46226 National Road St. Clairsville, OH 43950</p> <p>2. Article Number (Transfer from service label) 7019 2970 0001 4413 5126</p>	<p>A. Signature [Signature] <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) [Signature] C. Date of Delivery [Signature]</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input type="checkbox"/> No</p> <p>3. Service Type <input type="checkbox"/> Adult Signature <input type="checkbox"/> Adult Signature Restricted Delivery <input type="checkbox"/> Certified Mail <input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Collect on Delivery Restricted Delivery <input type="checkbox"/> Registered Mail <input type="checkbox"/> Registered Mail Restricted Delivery <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> Signature Confirmation™ <input type="checkbox"/> Signature Confirmation Restricted Delivery</p>

<p>USPS TRACKING#</p> <p>9590 9402 2622 6336 9361 38</p> <p>United States Postal Service</p>	<p>First-Class Mail Postage & Fees Paid USPS Permit No. G-10</p> <p>* Sender: Please print your name, address, and ZIP+4® in this box*</p> <p>Brad Nelson 216 Cedarville Street Apt. 2 Pittsburgh, PA 15224</p>
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04/22/2022

WW-9
(5/16)

4705103501P

API Number 47 - 051 - 00312-00-00
Operator's Well No. _____

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS
FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name Columbia Gas Transmission, LLC OP Code 307032

Watershed (HUC 10) Wheeling Creek Quadrangle Majorsville, WV

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: Fresh water, cement returns, bentonite gel, NaCl salt

Will a synthetic liner be used in the pit? Yes No If so, what ml? 20

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection (UIC Permit Number 34-119-28776, 34-167-23862)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain Appalachian Water Services, Station W1 Ronco WTP, Masontown, PA - Permit 2608201)

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

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? _____

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) Subsoils

-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 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 Brad Nelson
Company Official (Typed Name) Brad Nelson
Company Official Title Storage Engineer

Commonwealth of Pennsylvania - Notary Seal
Elaine Rybski, Notary Public
Allegheny County
My commission expires May 11, 2022
Commission number 1332803
Member, Pennsylvania Association of Notaries

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

Elaine Rybski Elaine Rybski Notary Public

My commission expires 5/11/2022

Commonwealth of Pennsylvania
County of Allegheny 04/22/2022

Proposed Revegetation Treatment: Acres Disturbed <1.0 Prevegetation pH 6.5

Lime 2 Tons/acre or to correct to pH 7

Fertilizer type 10-10-10

Fertilizer amount 600 lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Annual Rye	40	Orchard Grass and/or Tall Fescue	29
		Birdsfoot trefoil (empire)	9
		Annual Rye	12

For wetland areas: Annual Rye (40 lbs/acre) until indigenous plants re-establish cover.

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: 2022.03.09 07:41:35 -0500

Comments: _____

Reclaim site ASAP

Title: Inspector Date: 3-9-2022

Field Reviewed? () Yes () No

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

Operator Name: Columbia Gas Transmission, LLC
Watershed (HUC 10): Wheeling Creek Quad: Majorsville, WV
Farm Name: _____

1. List the procedures used for the treatment and discharge of fluids. Include a list of all operations that could contaminate the groundwater.

No fertilizer will be stored on site. Small quantities of fuel, oil, and lubricants will be stored on site, but located within secondary containment.

Accidental release from well fluids and spills from construction equipment are the only sources of contaminate to groundwater.

All accumulated fluids to be hauled off site to UIC disposal facility.

2. Describe procedures and equipment used to protect groundwater quality from the list of potential contaminant sources above.

All construction equipment will be inspected daily for leaks. Spill kits will be on site.

3. List the closest water body, distance to closest water body, and distance from closest Well Head Protection Area to the discharge area.

The closest water body is Wheeling Creek, approximately 0.22 miles to the E.
The nearest Wellhead Protection area is 3.3 mi. to the NW - (PWSID WV3302617 ISKCON - NEW VRINDABAN).

4. Summarize all activities at your facility that are already regulated for groundwater protection.

N/A

5. Discuss any existing groundwater quality data for your facility or an adjacent property.

N/A

6. Provide a statement that no waste material will be used for deicing or fill material on the property.

No waste material will be used for deicing or fill material on the property.

7. Describe the groundwater protection instruction and training to be provided to the employees. Job procedures shall provide direction on how to prevent groundwater contamination.

During routine tailgate meetings groundwater protection will be a topic of discussion.

8. Provide provisions and frequency for inspections of all GPP elements and equipment.

No fertilizer will be stored on site. Small quantities of fuel, oil, and lubrications will be stored on site, but located within secondary containment. Construction equipment will be inspected daily for leaks or spill.

Signature: Brent Nelson

Date: 3/15/2022

WVDEP Reclamation Site Overview

Majorsville Shallow 4437 (API 051-00312)

- BMPs and erosion control devices to be utilized per WVDEP guidelines and Columbia's WV Environmental Construction Standards.
- Existing drainage, culverts, and road ditches to be maintained
- Minor grading and surface material to be applied as needed.

Legend

- Majorsville Shallow 4437
- Majorsville Shallow 4437 Access Road
- Majorsville Shallow 4437 LOD



Google Earth

600 ft

4705103501P

WVDEP Reclamation Site Detail

Majorsville Shallow 4437 (API 051-00312)

- BMPs and erosion control devices to be utilized per WVDEP guidelines and Columbia's WW Environmental Construction Standards.
- Existing drainage, culverts, and road ditches to be maintained.
- Minor grading and surface material to be applied as needed.

Legend

- Majorsville Shallow 4437
- Majorsville Shallow 4437 Access Road
- Majorsville Shallow 4437 LOD

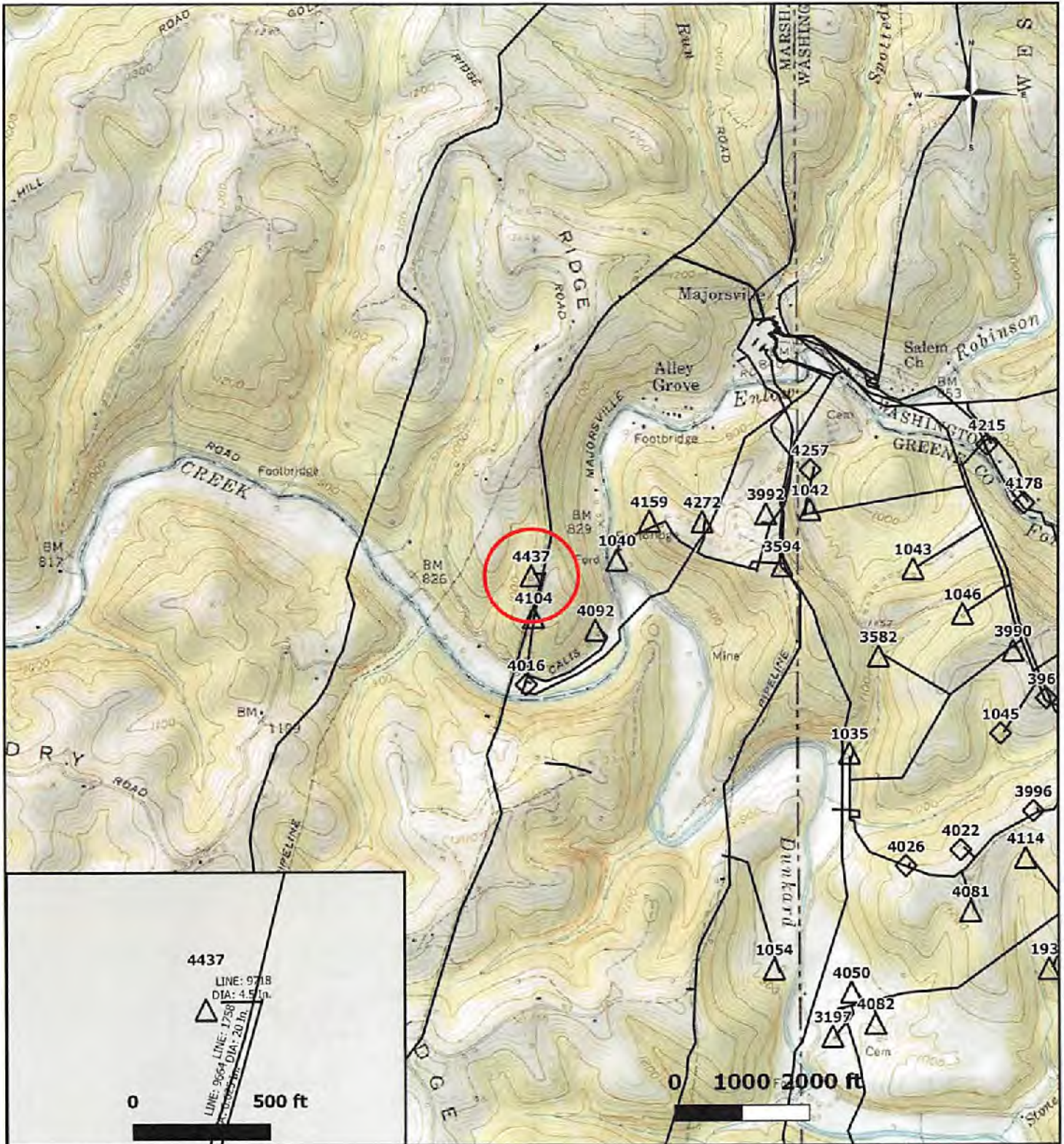
Pit A and Pit B
50' x 10' x 4' deep.



Google Earth

470510352

19



Legend

Storage Well Classification

- △ Active
 - ◊ Observation
 - ◊ Special
 - CPG Pipelines
- Well of Interest



Majorsville Shallow Storage Field
Storage Well 4437
Marshall County, West Virginia

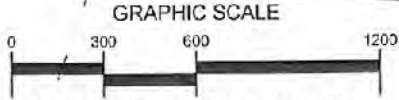
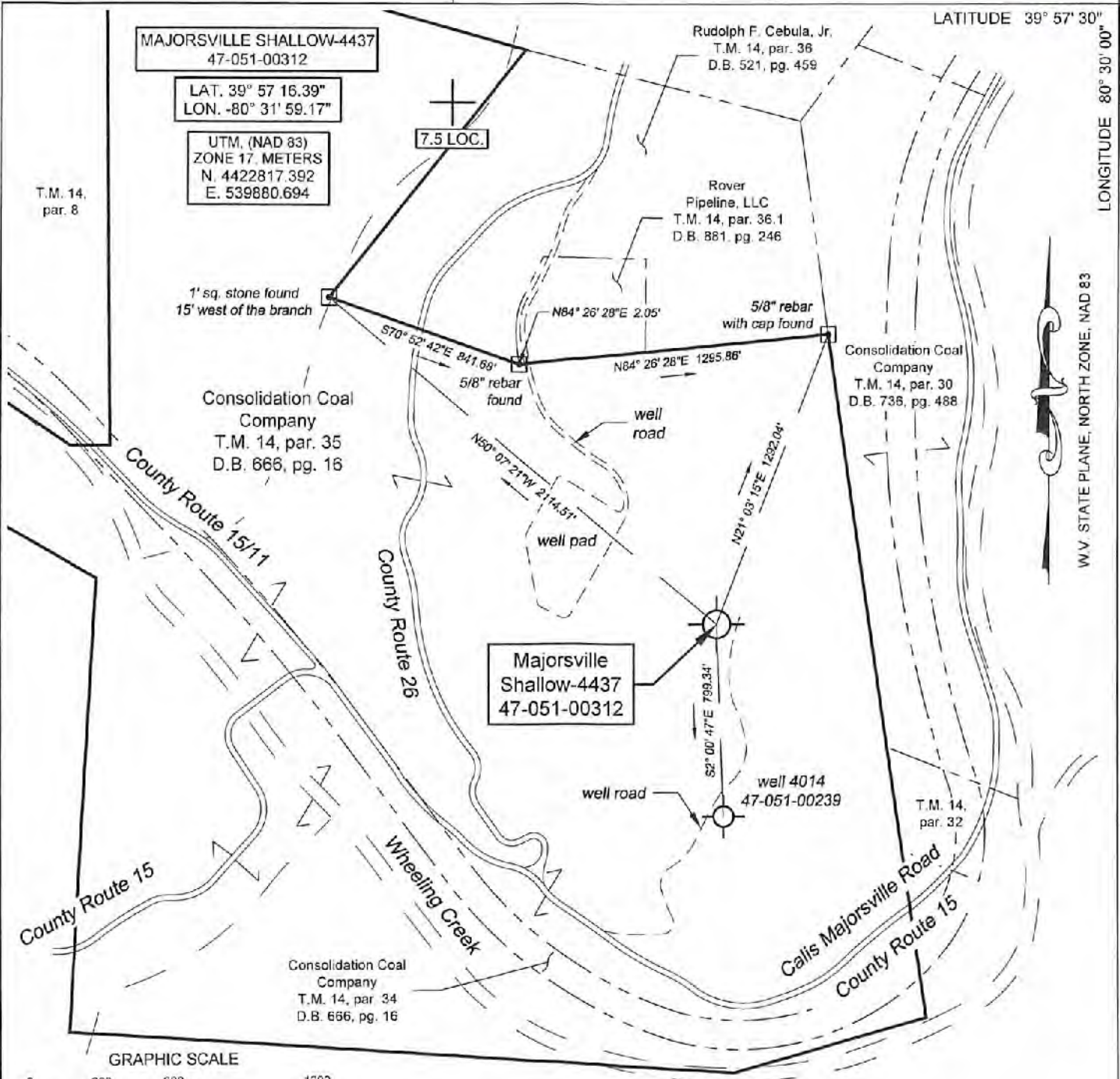
USGS Topographic Map (Scaled 2000 Ft/ In) to be included with PROJECT ENVIRONMENTAL INFORMATION FORM (PEIF).

4705103501P

9,279

LATITUDE 39° 57' 30"

LONGITUDE 80° 30' 00"

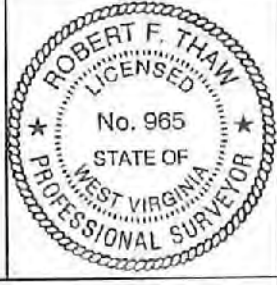


(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE No. 2001-2345-001-015
 DRAWING No. MAJORSVILLE 4437
 SCALE 1 INCH = 600 FEET
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION TRIMBLE R10
GPS UNIT

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 DIVISION OF ENVIRONMENTAL PROTECTION.

(SIGNED) [Signature]
ROBERT F. THAW PS #965



STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS
 NITRO, WV

DATE MARCH 2 2022
 OPERATOR'S WELL No. 4437
 API WELL No. 47 051 - 00312

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL STATE COUNTY PERMIT
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 1125.7' WATER SHED WHEELING CREEK
 DISTRICT SAND HILL COUNTY MARSHALL
 QUADRANGLE MAJORSVILLE, WV

SURFACE OWNER CONSOLIDATION COAL COMPANY ACREAGE 248.393
 OIL & GAS ROYALTY OWNER CONSOLIDATION COAL COMPANY

LEASE ACREAGE 300 LEASE NO. 3019436-000

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE 04/22/2022
 STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
 OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
 PLUG AND ABANDON CLEAN OUT AND REPLUG

TARGET FORMATION SALT SAND ESTIMATED DEPTH 1348
 WELL OPERATOR COLUMBIA GAS TRANSMISSION, LLC DESIGNATED AGENT BRAD NELSON
 ADDRESS PO BOX 1273, CHARLESTON, WV 25325-1273 ADDRESS 455 RACETRACK ROAD WASHINGTON, PA 15301

Columbia Gas Transmission, LLC
1700 MacCorkle Ave., SE, Charleston, WV, USA 25325



March 15, 2022

WV DEP – Office of Oil & Gas
601 57th Street, SE
Charleston, WV 25304-2345

Ch#
055080
2/15/2022
\$100⁰⁰

Enclosed is a plugging permit application for the following Columbia Gas Transmission existing storage well:

Majorsville Shallow 4437 (API 051-00312)

Please return permit to:

Columbia Gas Transmission, LLC
455 Racetrack Road
Washington, PA 15301
Attn: Brad Nelson

If you have questions, feel free to call.

Regards,



Brad Nelson
Storage Engineer
TC Energy (Columbia Gas Transmission, LLC)
brad_nelson@tcenergy.com
off: 724-223-2753
cell: 724-250-0610

RECEIVED
Office of Oil and Gas
MAR 16 2022
WV Department of
Environmental Protection

www.tcenergy.com

04/22/2022



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

Plugging Vertical & Re-work Vertical Well Work Permit API: 47-051-00312 & 00458)

1 message

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

Wed, Apr 20, 2022 at 2:52 PM

To: Brad Nelson <Brad_Nelson@tcenergy.com>, Strader C Gower <strader.c.gower@wv.gov>, "Gayne J. Knitowski" <gayne.j.knitowski@wv.gov>, Eric Buzzard <ebuzzard@marshallcountywv.org>



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

47-051-00312 - MAJORSVILLE SHALLOW 4437 - PLUGGING PERMIT**47-051-00458 - VICTORY B 4712 - RE-WORK VERTICAL PERMIT**

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**

4 attachments **47-051-00312 - Copy.pdf**
2500K **47-051-00458 - Copy.pdf**
2126K **IR-8 Blank.pdf**
233K **IR-26 Blank.pdf**
169K**04/22/2022**