



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, July 18, 2022

WELL WORK PLUGGING PERMIT
Vertical Plugging

COLUMBIA GAS TRANSMISSION, LLC
1700 MACCORKLE AVENUE SE

CHARLESTON, WV 25314

Re: Permit approval for 7330
47-039-01496-00-00

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: 7330
Farm Name: COPENHAVER, CHLOE J.
U.S. WELL NUMBER: 47-039-01496-00-00
Vertical Plugging
Date Issued: 7/18/2022

Promoting a healthy environment.

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.

4703901496P

WW-4B
Rev. 2/01

1) Date 03.10, 2022
2) Operator's
Well No. Coco C 7330
3) API Well No. 47-039 - 01496

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 X / Shallow ___

5) Location: Elevation 736.6' Watershed One Mile Fork of Blue Creek of the Elk River
District Elk County Kanawha Quadrangle Blue Creek, WV

6) Well Operator Columbia Gas Transmission LLC 7) Designated Agent Maria Medvedeva
Address 1700 MacCorkle SE Address 1700 MacCorkle SE
Charleston, WV 25314 Charleston, WV 25314

8) Oil and Gas Inspector to be notified Name Terry Urban 9) Plugging Contractor Name Contractor Services Inc
Address P.O. Box 1207 Address 929 Charleston Road RECEIVED
Clendenin, WV 25045 Spencer, WV 25276 Office of Oil and Gas

MAR 18 2022

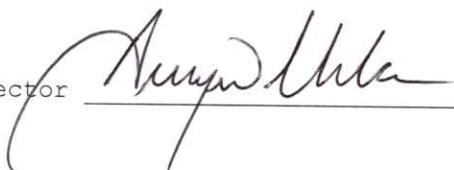
10) Work Order: The work order for the manner of plugging this well is as follows: WV Department of Environmental Protection

Refer to enclosed:

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

REMOVE AS MUCH 7" FREE CASING AS POSSIBLE, given

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

Work order approved by inspector  Date 3/16/22

WELL JOB PLAN		STS Well Engineering & Technology		PAGE 3	DATE JOB PREPARED: 3/8/2022
Objective: Plug and Abandon				LAST PROFILE UPDATE:	
TITLE: Plug and Abandon		WORK TYPE: MOD			
FIELD: Coco	WELL: 7330				
STAT: WV	SHL (Lat/Long):	38.442523	-81.450559	API: 47-039-01496-0000	
TWP: Elk	BHL (Lat/Long):	38.442523	-81.450559	CNTY: Kanawha	

PROCEDURE

- All cement used will be Class A, slurry weight 15.6ppg, slurry yield 1.18 cuft/sk. All spacers will be 6% Bentonite gel.
 - Set down with the 4.68" junk catcher gauge ring at 5096' during 2015 casing inspection log run.
 - 5.5" casing transitions to Hydril thread at 2696'.

- 1 Obtain State well work permit, EM&CP, pipeline crossing evaluation, call before you dig, etc. Prepare site specific SPCC.
- 2 Notify landowner.
- 3 Obtain General Work Permit and Wellsite Review & Turnover Form from Operations.
- 4 Notify Reservoir Engineering & Geosciences (REG) of intent to take well out of service.
- 5 Notify environmental inspector prior to beginning work. If required, notify State/Federal regulatory agencies prior to beginning work.
- 6 Prepare access road and well site. Install ECD's per EM&CP.
- 7 Document and report to WE&T the initial casing and annular pressures.
- 8 Blow down all annuli and replace fittings as necessary. Leave annuli open to atmosphere for monitoring.
- 9 Run caliper (note that during 2015 casing inspection set down with the 4.68" junk catcher gauge ring at 5096', 5.5" casing transitions to Hydril connection thread at 2636').
- 10 Load / top 5-1/2" x 7" and 7" x 8-5/8" annuli with kill fluid. Top off all remaining annuli with FW. Document volumes.
- 11 Kill well with 8.5 ppg viscosified fluid.
- 12 Dig around base of wellhead to uncover casing tops and remove cement if present.
- 13 MIRU service rig.
- 14 NU 7-1/16" Cameron BOPE (blind/shear + pipe + annular). Will need kill/choke outlets below blind/shear rams.
- 15 Function and pressure test BOPE to low (250 psig) and high (2500 psig).
- 16 Obtain a digital magnalog inside 5-1/2" casing from TD to surface to locate the bottom of the 7" casing. Send digital log copies of magnalog to WE&T engineer to determine perf interval for squeeze cementing. 1989 CBL indicates a 5-1/2" wet shoe, cemented from 4850' to 2980'.
- 17 RIH with 2-3/8" work string w/ cut-lip shoe, wash to TD (~ 5175').
- 18 Install a bottom cement plug from TD to 4900'. PU above cement top, reverse circulate to clean tubulars, pull 10 joints, close pipe rams, and WOC (min 8hrs) and tag cement top. If the cement top is deeper than 4950', install a second balanced cement top to 4900'.
- 19 Install 5-1/2" CIDBP as close as feasible above the cement plug.
- 20 Top off 5-1/2" with kill fluid and perform 500 psig pressure test to verify integrity of BP.
- 21 Perforate thru both the 5-1/2" csg and 7" casing (consult with perforating company) above BP 4874 - 4875' at 4spf phased at 90deg.
- 22 Perform injection test and install cement retainer above the perfs.
- 23A If injection established: Squeeze 40 bbls cement behind 7" casing. Disengage from cement retainer and clean tubulars. WOC 8 hrs.
- 23B If injection is not established: perforate through the 5-1/2" and 7" casings at 1650', engage retainer, close BOP, and attempt to circulate perf-to-perf behind the 7" csg taking returns to surface out of 5x7 annulus. If circulation is established, circulate to clean hole and suicide squeeze 40 bbls of cement. If circulation is not established, proceed to step 24.
**** Caution - storage gas may be present after perforating at 1650'. Gas could enter 5-1/2" casing and / or 5-1/2" x 7" annulus. Monitor for kick inside 5-1/2" and in the annulus.**
- 24 Install balanced cement plug from cement retainer to 2980' inside the 5-1/2" casing. WOC minimum 8 hours.
- 25 If the 5-1/2" x 7" annulus is static, ND BOPE.
- 26 Weld pulling nipple on 5-1/2" casing, pull seals and slips.
- 27 NU 11" BOPE (blind ram + pipe ram + annular) on top of the casing head. Need kill/choke outlets below blind/shear.
- 28 Function and attempt to pressure test BOPE to low (250 psig) and high (2500 psig).
- 29 Wireline freepoint and cut / pull all 5-1/2" casing that is free.
- 30 If squeeze cementing was successful, obtain CBL inside 7" csg. Send digital copy to WE&T engineer for evaluation.
 Consult with WE&T engineer prior to proceeding with next Steps. Well condition may determine that a second cement squeeze is needed.
- 31 TIH with work string and install balanced cement plugs from top of last cement plug to 1450'. WOC 8 hrs and tag TOC.
- 32 If the cement top is deeper than 100' above the 5-1/2" casing stub, install balanced cement plug to 1450'.
- 33 Perforate thru both the 7" and 8-5/8" casings (consult with perforating company) above BP at 1" interval at 4spf at 90deg phasing at approx. ~1450'.
- 34 Attempt to circulate to surface with returns behind the 10-3/4" casing.
- 34A If circulation is established - cement surface to surface 8-5/8" and 10-3/4" casings.
- 34B If circulation is not established - install cement retainer above perfs, perforate through both the 7" and 8-5/8" casing at 200'. RIH with work string, engage the cement retainer and attempt perf to perf circulation to surface. If circulation is established, squeeze cement behind 8-5/8" casing and install balanced cement plugs from retainer to surface. If circulation is not established, proceed to install balanced cement plugs from cement retainer to surface.
- 35 ND BOPE.
- 36 Top off and grout all annuli as deep as possible.
- 37 RDMO service rig.
- 38 Erect monument per state regulations. Reclaim location and lease road.
- 39 P&A complete.
- 40 Notify REG / WE&T / Project controller that project is in-service.

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 MAR 18 2022
 WV Department of
 Environmental Protection

PREPARED BY: Maria Medvedeva	REVIEWED BY: James Amos	APPROVED: Brent Criser
PREP DATE: 3/8/2022		

~ not to scale ~

COCO C 7330

Proposed P&A

(as of 03/04/2022)

Sea Level @ 736 ft

* Water show 75' and 190' - 230'

* Gas and oil show 765' - 775'

Salt Sand 832' - 1322'
* gas show 832' - 836'
* water show 925' (hole full)

Maxton Sand 1415' - 1435'

Little Lime 1457' - 1480'

Big Lime 1480' - 1650'

Big Injun 1690' - 1725'
* gas show 1700' - 1710'
Weir SS 1755' - 1785'
* gas show 1755' - 1760'

* Gas 1835' - 1850'

Berea SS 2190' - 2200'

Attempts will be made to perf at 1650', squeeze cement behind 7" csg.

Brown Shale 4540' - 4880'
4925' - 4980'
*gas show at 4500' - 4700'

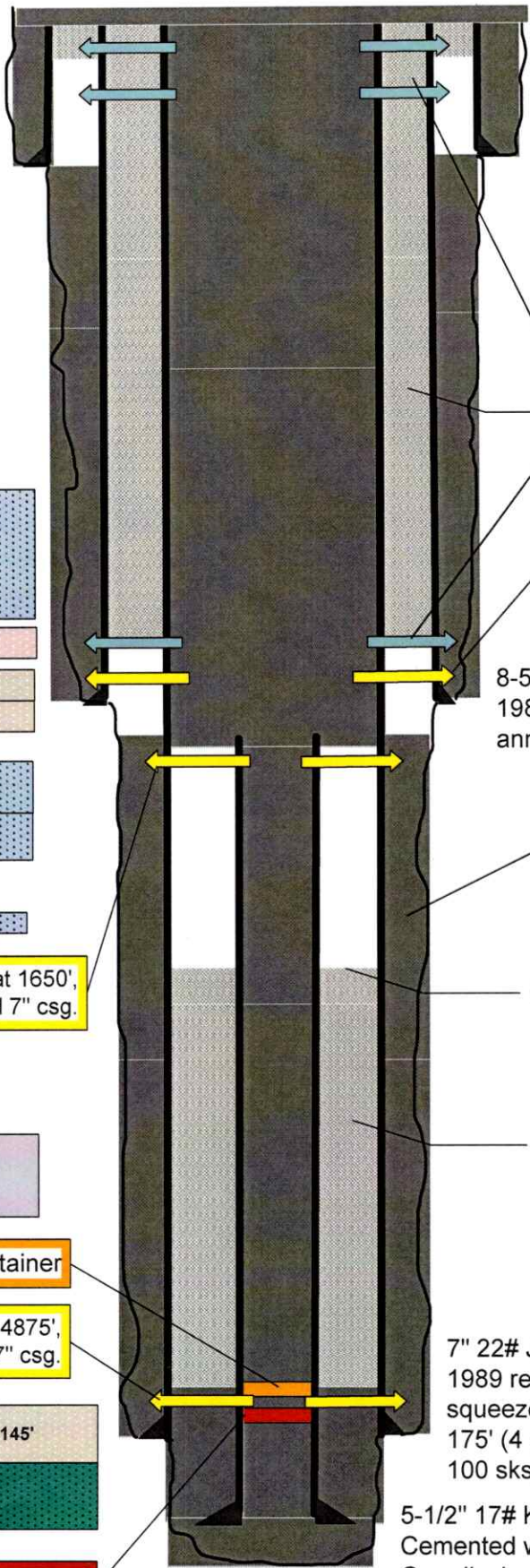
Cement Retainer

Attempts will be made to perf at 4875', squeeze cement behind 7" csg.

Corniferous Lime 5028' - 5145'

Oriskany 5145' - 5175'
(gas storage)

Cast Iron Bridge plug @ ~4900'



10-3/4" 32.75# casing @ 384'.
No record of cement.

1989 7" squeeze – perf 7" & 8" at 1485', circ. behind 7" only, cmt'ed w/ ~300 bags. Perf at 175' w/no injection. 7" TOC at 120' per 1989 CBL. Perf 7" and 8" at 112', cement both to surface

Attempts will be made to perf at ~1450', squeeze cement behind 8-5/8" and 10-3/4" csgs.

8-5/8" 28# csg @ 1530'
1989 records indicate 8-5/8" x 10-3/4" annulus cemented from 112' to surface

Dark grey cement indicates cement to be placed during P&A

CBL TOC 2980'

Light grey cement indicates existing cement prior to P&A

7" 22# J-55 casing @ 5052'.
1989 records indicate 7" csg was shot & squeeze cmt'd at 1485' (4 shots & 142 sks), 175' (4 shots, no injection), and 112' (4 shots & 100 sks) to surface.

5-1/2" 17# K-55 casing @ 5142'
Cemented with 88sx 10lb latex cement
Overdisplaced shoe, bottom of cement at 4850' per 8/30/1989 CBL

TD 5175'

~ not to scale ~

COCO C 7330

Prior to P&A
(as of 03/04/2022)

Sea Level @ 736 ft

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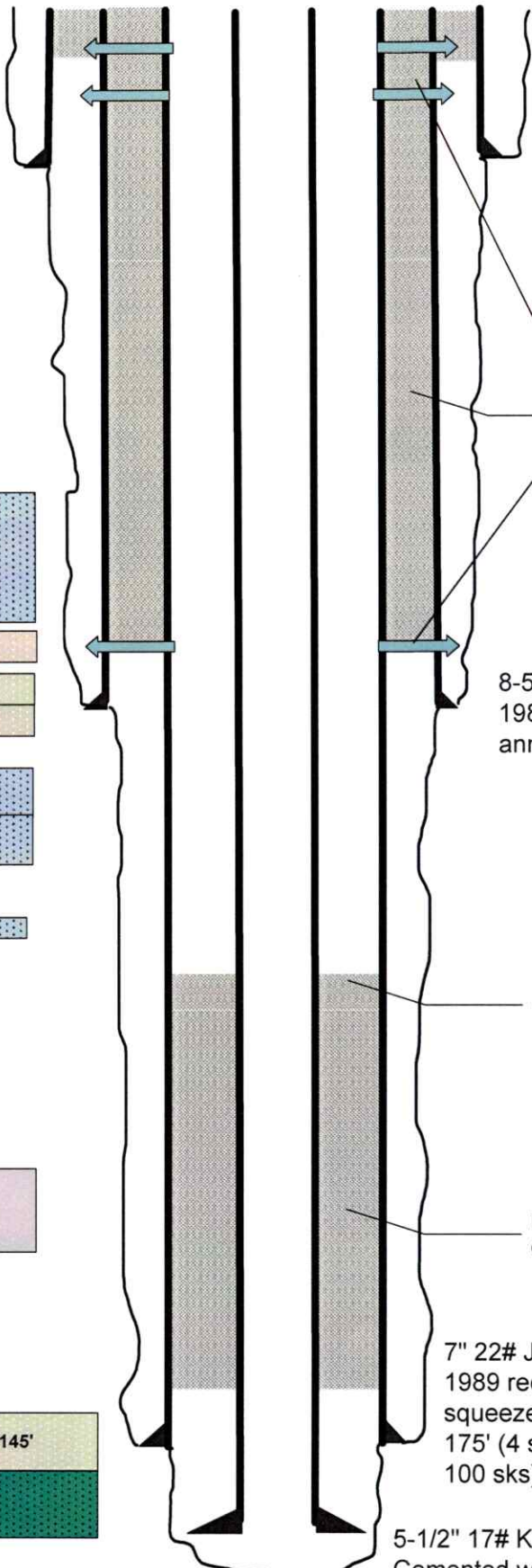
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TD 5175'

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DM-25

United Fuel Gas Company
COMPANY

SERIAL WELL NO. 6483

LEASE NO. 7425

MAP SQUARE 70-65

RECORD OF WELL NO. <u>19</u> on the		CASING AND TUBING				TEST BEFORE SHOT
SIZE	WEIGHT	USED IN DRILLING	LEFT IN WELL			
<u>Chas J. Copenhagen</u> farm of <u>97</u> Acres				/10 of Water in _____ inch		
in <u>Elk</u> District	<u>10 3/4"</u>	<u>32.75</u>	<u>384' 4"</u>	<u>384' 4"</u>	/10 of Merc. in _____ inch	
<u>Kanawha</u> County	<u>8 5/8"</u>	<u>28#</u>	<u>1530' 10"</u>	<u>1530' 10"</u>	Volume <u>25,000,000</u> Cu. ft.	
State of: <u>West Virginia</u>	<u>2"</u>	<u>22#</u>	<u>5128' 11"</u>	<u>5128' 11"</u>	TEST AFTER SHOT	
Field: <u>Clendenin</u>	<u>2"</u>	<u>4#</u>	<u>5139' 4"</u>	<u>5139' 4"</u>	/10 of Water in _____ inch	
Rig Commenced <u>12/2/48</u> 194					/10 of Merc. in _____ inch	
Rig Completed <u>12/8/48</u> 194					Volume _____ Cu. ft.	
Drilling Commenced <u>12/15/48</u> 194					Hours After Shot _____	
Drilling Completed <u>3/25/49</u> 194					Rock Pressure <u>1650 #</u>	
Drilling to cost _____ per foot					Date Shot <u>Not shot</u>	
Contractor is: <u>Mays & Harper</u>					Size of Torpedo _____	
Address: <u>Kenna, W. Va.</u>					Oil Flowed _____ bbls. 1st 24 hrs.	
					Oil Pumped _____ bbls. 1st 24 hrs.	
Driller's Name <u>O.E. Casto</u>		<u>2</u> in.				
<u>Dan Scyoc</u>					Well abandoned and	
<u>Bert Litton</u>					Plugged _____ 194	
					1st. Perf. Set <u>5177</u> from <u>5167</u>	
Elevation: <u>741</u>					2nd Perf. Set _____ from _____	

DRILLER'S RECORD

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil	0	12		
Sand	12	40		
Blue Mud	40	80		Water 75'
Lime	80	95		
Sand	95	180		
Slate	180	190		
Sand	190	230		Hole full Water
Slate	230	242		
Lime	242	290		
Slate	290	315		
Lime	315	325		
Blue Mud	325	355		
Gray Lime	355	475		
Slate	475	510		
Slate & Shells	510	690		
Sand	690	720		
Lime Shells	720	765		

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MAR 18 2022

WV Department of
Environmental Protection

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JUN 30 1949
DIVISION SUPT.

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FORM U 97-1-P C 8 D

SERIAL WELL NO. 6483LEASE NO. 7425MAP SQUARE 70-65

DRILLER'S RECORD

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Black Slate	765	775		Show of gas & Oil
Black Lime	775	790		
Slate	790	800		
Lime	800	815		
Slate	815	832		
Salt Sand	832	1322		Gas 832' to 836' Water 925' Hole full
Slate	1312	1314		
Broken Sand	1314	1321		
Red Rock	1321	1330		
Grey Lime	1330	1400		
Black Lime	1400	1415		
Maxon Sand	1415	1435		
Slate Shells	1435	1457		
Black Lime	1457	1480		
Big Lime	1480	1650		
Broken Sand	1650	1680		
Slate	1680	1690		
Big Injun	1690	1725		Gas 1700' to 1710'
Slate Shells	1725	1755		
Weir Sand	1755	1785		Gas 1755' to 1760'
Slate Shells	1785	1900		Gas 1835' to 1850'
Broken Sand	1900	2000		
Lime Shells	2000	2100		
Slate Shells	2100	2190		
Berea Grit	2190	2200		
Slate Shells	2200	2450		
XXXXXXXXXX White Slate	2450	2700		
Broken Sand	2700	2710		
Slate Shells	2710	3790		
Dark slate	3790	4040		
White Slate	4040	4540		
Brown Shale	4540	4880		Gas 4500' to 4700'
XXXXXXXXXX White Slate	4880	4925		
Brown Shale	4925	4980		
Black Shale	4980	5028		Temperature at 5150' 120 F.
Concretionary Lime	5028	5145		Steel Line top concretionary 5028'
Oriskany Sand	5145	5175		Gas 5156' to 5175' test. 25,000,000
Total Depth	5175			

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Office of Oil and Gas

MAR 18 2022

WV Department of
Environmental Protection

4703901496P

WW-4A
Revised 6-07

1) Date: 03.10.2022
2) Operator's Well Number
Coco C 7330

3) API Well No.: 47 - 039 - 01496

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

4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Arnold and Teresa Wade</u>	Name <u>Not operated</u>
Address <u>627 Elk Est</u>	Address _____
<u>Elkview, WV 25071</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name _____
_____	Address _____
(c) Name _____	Name _____
Address _____	Address _____
_____	_____
6) Inspector <u>Terry Urban</u>	(c) Coal Lessee with Declaration
Address <u>P.O. Box 1207</u>	Name _____
<u>Clendenin, WV 25045</u>	Address _____
Telephone <u>304-549-5915</u>	_____

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Office of Oil and Gas
MAR 18 2022
WV Department of
Environmental Protection

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
 By: Maria Medvedeva
 Its: Senior Wells Engineer - Well Engineering and Technology
 Address 1700 MacCorkle Ave SE
Charleston, WV 25314
 Telephone 304-410-4313

Subscribed and sworn before me this 14th day of March, 2022
Michael T. Donnelly Notary Public
My Commission Expires 10-30-2026

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.

4703901496P

Columbia Gas Transmission, LLC
1700 MacCorkle Ave., SE, Charleston, WV, USA 25314



March 10, 2022

Arnold and Teresa Wade
627 Elk Est
Elkview, WV 25071

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Office of Oil and Gas

MAR 18 2022

WV Department of
Environmental Protection

Columbia Gas Transmission, LLC is applying for a permit to the WV Department of Environmental Protection – Office of Oil and Gas, to plug and abandon an existing underground natural gas storage well located on property owned by you. As reference, the field and well ID is Coco C 7330 (API 47-039-01496).

As part of the well permitting process, Columbia, the well operator, is required to provide a copy of all applicable permit application forms for your review and record retention.

Regards,

Maria Medvedeva
Senior Wells Engineer
Well Engineering & Technology
Columbia Gas Transmission, LLC

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

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

Elkview, WV 25071

OFFICIAL USE

Certified Mail Fee	\$3.75
Extra Services & Fees (check box, add fee as appropriate)	\$7.05
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<input type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00
Postage	\$8.95
Total Postage and Fees	\$15.75

Sent To: 25064
Street and Apt. No., or PO Box No.: Arnold & Teresa Wade
City, State, ZIP+4®: Coco C 7330

Postmark Here: MAR 14 2022
03/14/2022

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

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY																
<ul style="list-style-type: none"> Complete items 1, 2, and 3. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 	<p>A. Signature X </p> <p>B. Received by (Printed Name) S MIAAM</p> <p>C. Date of Delivery 3-15</p> <p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes If YES, enter delivery address below: <input checked="" type="checkbox"/> No</p>																
<p>1. Article Addressed to: Arnold and Teresa Wade 627 Elk Est Elkview, WV 25071</p>	<p>3. Service Type</p> <table border="0"> <tr> <td><input type="checkbox"/> Adult Signature</td> <td><input type="checkbox"/> Priority Mail Express®</td> </tr> <tr> <td><input type="checkbox"/> Adult Signature Restricted Delivery</td> <td><input type="checkbox"/> Registered Mail™</td> </tr> <tr> <td><input type="checkbox"/> Certified Mail®</td> <td><input type="checkbox"/> Registered Mail Restrict Delivery</td> </tr> <tr> <td><input type="checkbox"/> Certified Mail Restricted Delivery</td> <td><input type="checkbox"/> Signature Confirmation</td> </tr> <tr> <td><input type="checkbox"/> Collect on Delivery</td> <td><input type="checkbox"/> Signature Confirmation Restricted Delivery</td> </tr> <tr> <td><input type="checkbox"/> Collect on Delivery Restricted Delivery</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Insured Mail</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)</td> <td></td> </tr> </table>	<input type="checkbox"/> Adult Signature	<input type="checkbox"/> Priority Mail Express®	<input type="checkbox"/> Adult Signature Restricted Delivery	<input type="checkbox"/> Registered Mail™	<input type="checkbox"/> Certified Mail®	<input type="checkbox"/> Registered Mail Restrict Delivery	<input type="checkbox"/> Certified Mail Restricted Delivery	<input type="checkbox"/> Signature Confirmation	<input type="checkbox"/> Collect on Delivery	<input type="checkbox"/> Signature Confirmation Restricted Delivery	<input type="checkbox"/> Collect on Delivery Restricted Delivery		<input type="checkbox"/> Insured Mail		<input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)	
<input type="checkbox"/> Adult Signature	<input type="checkbox"/> Priority Mail Express®																
<input type="checkbox"/> Adult Signature Restricted Delivery	<input type="checkbox"/> Registered Mail™																
<input type="checkbox"/> Certified Mail®	<input type="checkbox"/> Registered Mail Restrict Delivery																
<input type="checkbox"/> Certified Mail Restricted Delivery	<input type="checkbox"/> Signature Confirmation																
<input type="checkbox"/> Collect on Delivery	<input type="checkbox"/> Signature Confirmation Restricted Delivery																
<input type="checkbox"/> Collect on Delivery Restricted Delivery																	
<input type="checkbox"/> Insured Mail																	
<input type="checkbox"/> Insured Mail Restricted Delivery (over \$500)																	
<p>2. Article Number (Transfer from recipient label) 7021 0350 0001 9251 8530</p>																	

www.tcenergy.com

SURFACE OWNER WAIVER

4703901496 P

Operator's Well
Number

Coco C 7330

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A

The well operator named on page WW-4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

**NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.
WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:**

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

Time Limits and methods for filing comments. The law requires these materials to be served on or before the date the operator files his Application. You have **FIVE (5) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation..."

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If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application For A Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON
ETC.

FOR EXECUTION BY A CORPORATION,

_____	Date _____	Name _____
Signature		By _____
		Its _____

		Signature _____
		Date _____

4703901496

WW-4B

API No. 47-039-01496
Farm Name _____
Well No. Coco C 7330

Coal not operated

**INSTRUCTIONS TO COAL OPERATORS
OWNERS AND LESSEE**

The well operator named on the obverse side of WW-4 (B) is about to abandon the well described in the enclosed materials and will commence the work of plugging and abandoning said well on the date the inspector is notified. Which date shall not be less than five days after the day on which this notice and application so mailed is received, or in due course should be received by the Department of Environmental Protection Office of Oil & Gas.

This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Article 6, Chapter 22 of the Code and given in detail on obverse side of this application.

NOTE: If you wish this well to be plugged according to 22-6-24(d) then as per Regulation 35CSR4-13.9 you must complete and return to this office on form OB-16 "Request by Coal Operator, Owner, or Lessee for plugging" prior to the issuance of this plugging permit.

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WAIVER

The undersigned coal operator ____/ owner ____/ lessee ____/ of the coal under this well location has examined this proposed plugging work order. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: _____

By: _____

Its _____

WW-9
(5/16)

API Number 47 - 039 - 01496
Operator's Well No. - Coco C 7330

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

Operator Name Columbia Gas Transmission OP Code 307032

Watershed (HUC 10) One Mile Fork of Blue Creek of the Elk River Quadrangle Blue Creek, 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 14

If so, please describe anticipated pit waste: fresh water, brine, cement returns, bentonite gel

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 34-167-23862)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain Mud Master 64054; Reserve Environmental Services (WMGR 123SW008)
Appalachian Water Services (WMGR 123SW001))

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? 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) Subsoils

-Landfill or offsite name/permit number? _____

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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) Maria Medvedeva
Company Official Title Senior Wells Engineer - Well Engineering and Technology



Subscribed and sworn before me this 14th day of March, 2022

Michael F. Donnelly Notary Public

My commission expires 10-30-2026

Proposed Revegetation Treatment: Acres Disturbed <1.0 Prevegetation pH 6 - 7

Lime 2 Tons/acre or to correct to pH 7 - 8

Fertilizer type 10-10-10

Fertilizer amount 600 lbs/acre

Mulch hay or straw @ 2 Tons/acre

Seed Mixtures

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

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: *[Signature]*

Comments: _____

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Title: *Inspect Oil & Gas*

Date: *3-16-22*

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): One Mile Fork of Blue Creek of the Elk River Quad: Blue Creek, 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 fluids planned to be discharged.
- No fertilizer will be stored on site. Small quantities of fuel, oil, and lubrications 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 contaminants 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 and well servicing equipment will be monitored and 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.

Blue Creek is at a distance of 0.17 miles N.

The Trail Kitchen (WV9908037) is the closest Well Head Protection Area at a distance of 10.07 miles SE from discharge area.

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

WV Department of
Environmental 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.

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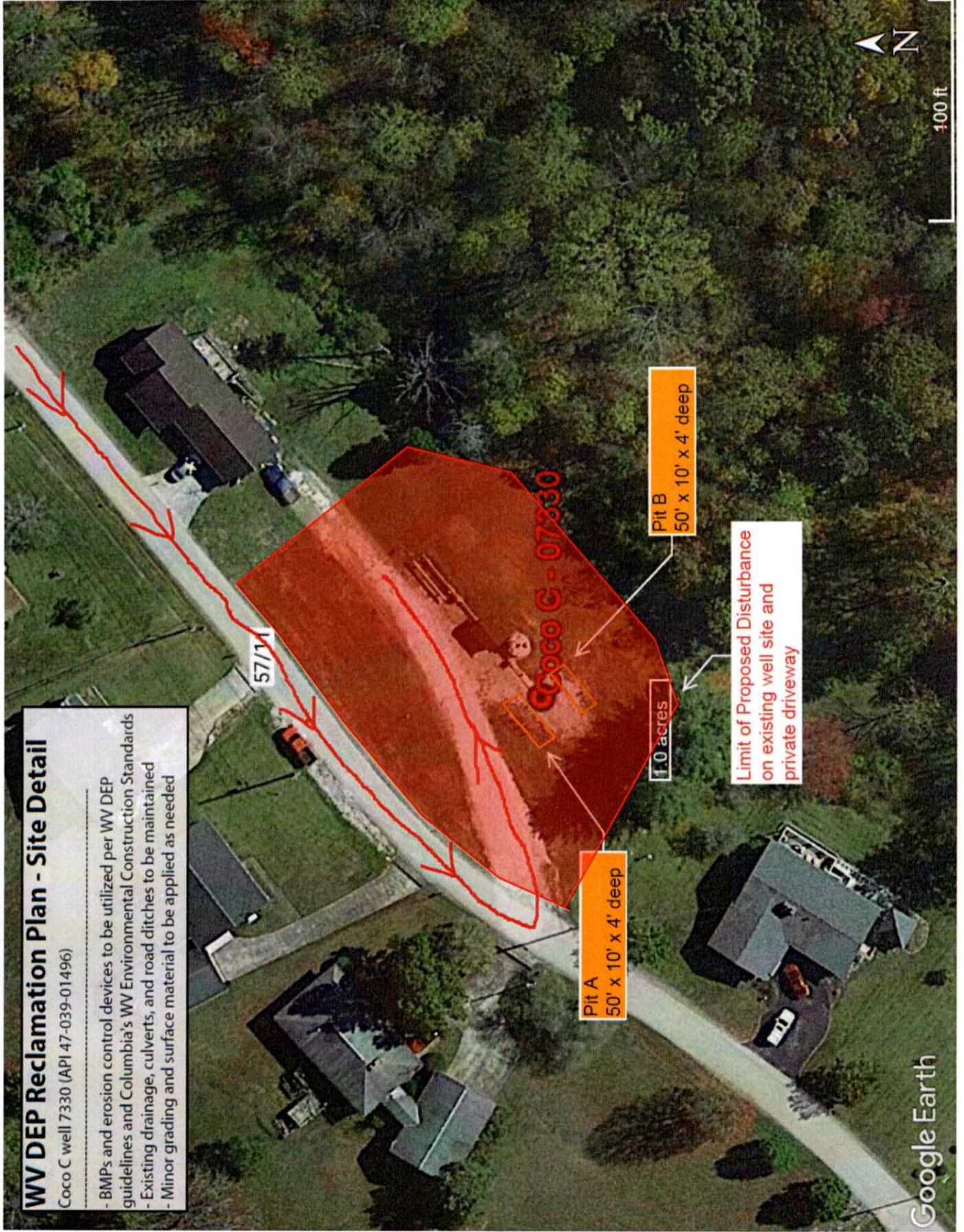
8. Provide provisions and frequency for inspections of all GPP elements and equipment.

No fertilizer will be stored on site. Small quantities of fuel, oil, and 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 contaminants to groundwater.

All construction and well servicing equipment will be monitored and inspected daily for leaks or spills.

Signature: 

Date: 03/10/2022





WV DEP Reclamation Plan - Overview

Coco C well 7330 (API 47-039-01496)

- BMPs and erosion control devices to be utilized per WV DEP 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

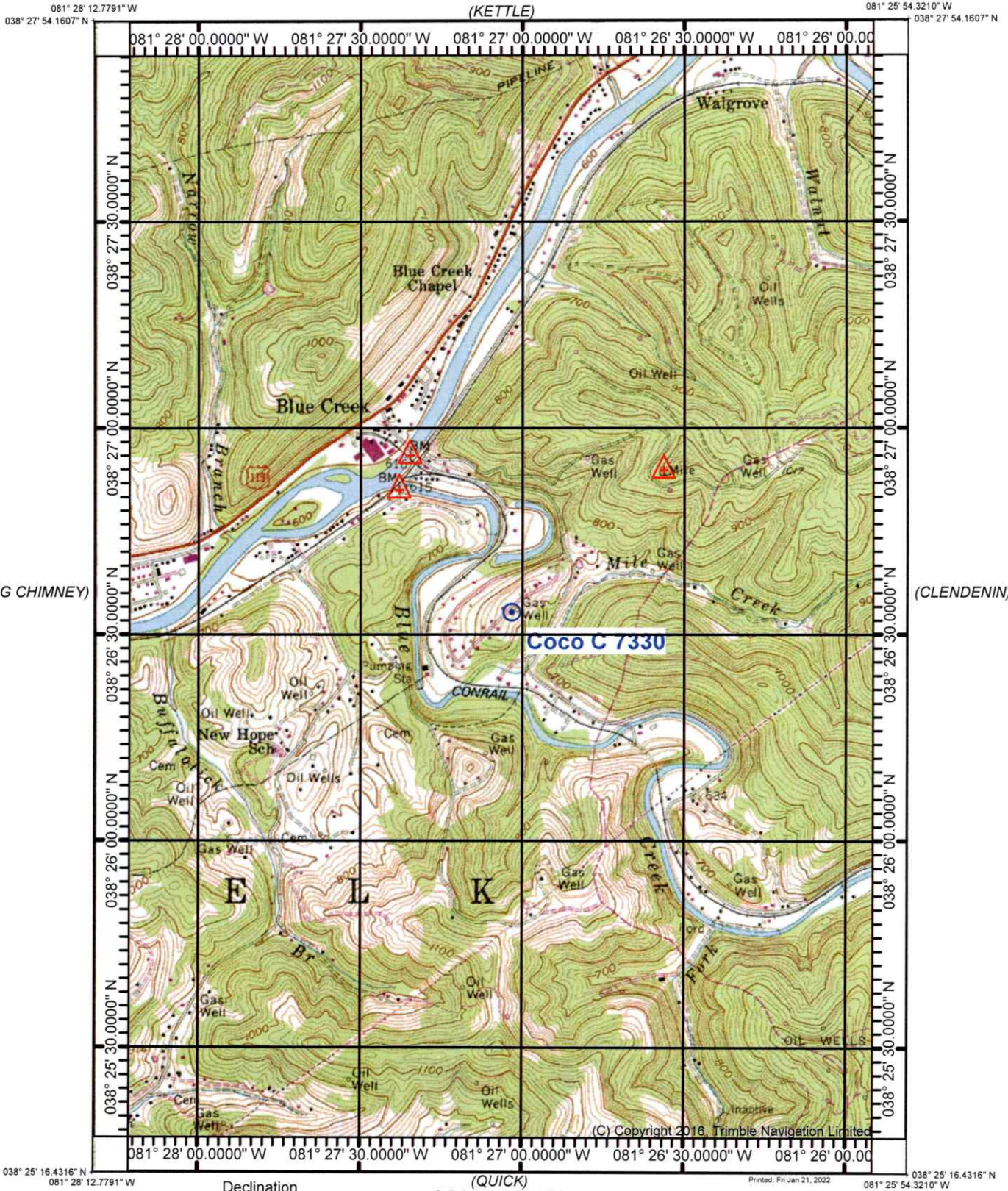
MyOlaMelts

(ROMANCE)



BLUE CREEK QUADRANGLE
WEST VIRGINIA
TOPOGRAPHIC SERIES

(CLIO)



(CHARLESTON EAST)

Produced by Trimble Terrain Navigator Pro
Topography based on USGS 1:24,000
Maps

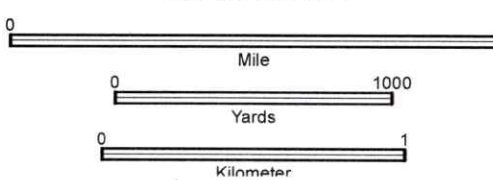
North American 1983 Datum (NAD83)

To place on the predicted North American
1927 move the projection lines 11M N and
14M E

Declination



SCALE 1:24000



CONTOUR INTERVAL 20 FT

38081-D3-TM-024
BLUE CREEK, WV
JAN 1, 1977

9,699'

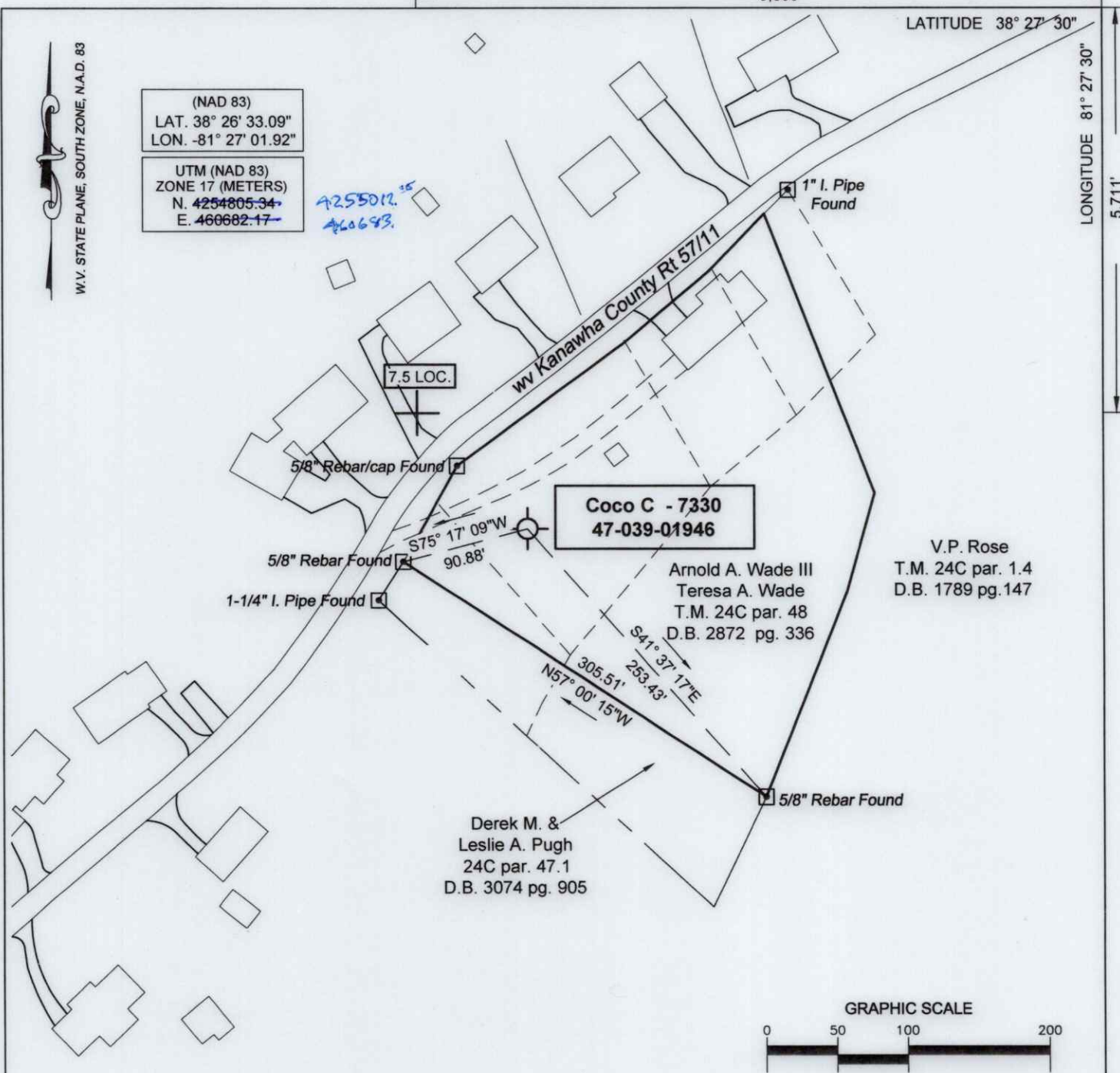
LATITUDE 38° 27' 30"

LONGITUDE 81° 27' 30"

W.V. STATE PLANE, SOUTH ZONE, N.A.D. 83

(NAD 83)
LAT. 38° 26' 33.09"
LON. -81° 27' 01.92"
UTM (NAD 83)
ZONE 17 (METERS)
N. 4254805.34
E. 460682.17

4255012.35
460683.



V.P. Rose
T.M. 24C par. 1.4
D.B. 1789 pg.147

Arnold A. Wade III
Teresa A. Wade
T.M. 24C par. 48
D.B. 2872 pg. 336

Derek M. &
Leslie A. Pugh
24C par. 47.1
D.B. 3074 pg. 905

GRAPHIC SCALE



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

FILE No. 2101-2345-001-010
DRAWING No. 2101-2345-001-010
SCALE 1"=100'
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)

ROBERT F. THAW PS #965



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



DATE MARCH 07 2022
OPERATOR'S WELL No. 7330
API WELL No.

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___ STATE 47 COUNTY 039 PERMIT 01496
(IF "GAS") PRODUCTION ___ STORAGE X DEEP X SHALLOW ___
LOCATION: ELEVATION 736.6' WATER SHED ONE MILE FORK OF BLUE CREEK OF THE ELK RIVER
DISTRICT ELK COUNTY KANAWHA
QUADRANGLE BLUE CREEK, WV
SURFACE OWNER ARNOLD A. WADE III AND TERESA A. WADE ACREAGE 1.6±
OIL & GAS ROYALTY OWNER CHLOE COPENHAVER, ET UX
LEASE ACREAGE 97 LEASE NO. 1007425-000

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

TARGET FORMATION ORISKANY ESTIMATED DEPTH 5175
WELL OPERATOR COLUMBIA GAS TRANSMISSION, LLC DESIGNATED AGENT MARIA MEDVEDEVA
ADDRESS PO BOX 1273, CHARLESTON, WV 25325-1273 ADDRESS 1700 MACCORKLE AVE., S.E. CHARLESTON, WV 25314

FORM IV-6 (8-78)

Columbia Gas Transmission, LLC
1700 MacCorkle Ave., SE, Charleston, WV, USA 25314



March 10, 2022

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

Enclosed are well plugging permit application for the following Columbia Gas Transmission existing storage wells:

Coco C 7330 (API 47-039-01496)

Please email to address below, and return hardcopies of permit to:

Columbia Gas Transmission
1700 MacCorkle Ave SE
Charleston, WV 25314
Attn: Maria Medvedeva

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WV Department of
Environmental Protection

If you have questions, feel free to call.

Regards,

A handwritten signature in blue ink, appearing to read "Maria Medvedeva", written over a white background.

Maria Medvedeva
Senior Wells Engineer
Well Engineering & Technology
Columbia Gas Transmission, LLC
Off: 304-357-2445
Mob: 304-410-4313
maria_medvedeva@tcenergy.com

CHK# 055288
Amt \$ 100
Date 3/14/22

4703901496P



McLaughlin, Jeffrey W
<jeffrey.w.mclaughlin@wv.gov>

COCO 7330 UTM COORDINATES

1 message

Robert Thaw <robert.thaw@terradon.com> Tue, Mar 22, 2022 at 11:32 AM
To: "Jeffrey.W.McLaughlin@wv.gov" <Jeffrey.W.McLaughlin@wv.gov>

Mr. McLaughlin

I am confirming that the correct UTM coordinates for COCO 7330 are as follows:

N 4255012.05

E 460683.16

4703901496P

Robert F. Thaw, PS

Vice President - Survey Services

TERRADON Corp.

409 Jacobson Dr.

Poca, WV 25159

main://304.755.8291

direct://304.729.9105

mobile://304.415-4080

web://terraddon.com





Kennedy, James P <james.p.kennedy@wv.gov>

ATTN plugging permit approval for 4703901496

1 message

Kennedy, James P <james.p.kennedy@wv.gov>


Mon, Jul 18, 2022 at 3:05 PM

To: Jeffrey W McLaughlin <jeffrey.w.mclaughlin@wv.gov>, Wade A Stansberry <wade.a.stansberry@wv.gov>, maria_medvedeva@tcenergy.com, sallierobinson@kanawha.us, Terry W Urban <terry.w.urban@wv.gov>

For whom it may concern. Plugging permit for 4703901496 has been approved and issued.

James Kennedy
WVDEP OOG

2 attachments

 **4703901496.pdf**
5708K

 **IR-8 Blank.pdf**
237K