



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

Thursday, January 12, 2023
WELL WORK PLUGGING PERMIT
Vertical Plugging

COLUMBIA GAS TRANSMISSION, LLC
1700 MACCORKLE AVENUE SE

CHARLESTON, WV 25314

Re: Permit approval for 7144
47-039-01552-00-00

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: 7144
Farm Name: WILLIAMS, H. F.
U.S. WELL NUMBER: 47-039-01552-00-00
Vertical Plugging
Date Issued: 1/12/2023

Promoting a healthy environment.

01/13/2023



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

Plugging permits issued 4703901552 03906116 03906118

1 message

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

Thu, Jan 12, 2023 at 9:14 AM


To: maria_medvedeva@tcenergy.com, Terry W Urban <terry.w.urban@wv.gov>, sallierobinson@kanawha.us


To whom it may concern, plugging permits have been issued for 4703901552 03906116 03906118.


James Kennedy


WVDEP OOG


6 attachments


 **4703901552.pdf**
6010K

 **4703906118.pdf**
5584K

 **IR-8 4703901552.pdf**
120K

 **4703906116.pdf**
5180K

 **IR-8 4703906118.pdf**
120K

 **IR-8 4703906116.pdf**
120K

01/13/2023

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.

4703901552P

1) Date 10/24, 2022
2) Operator's
Well No. Lanham 7144
3) API Well No. 47-039 - 01552

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

ck# 055005
\$100⁰⁰

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 594 Watershed Pocatalico River
District Poca County Putnam Quadrangle Pocatalico, WV

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

8) Oil and Gas Inspector to be notified Name Terry Urban 9) Plugging Contractor
Address P.O. Box 1207 Name Next Lvl Energy, LLC
Clendenin, WV 25045 Address 736 W Ingomar Rd, Units 268
Ingomar, PA 15127-6613

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.

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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  Date 10-31-22

01/13/2023

Objective: Plug and Abandon TITLE: Plug and Abandon LAST PROFILE UPDATE:

FIELD: Lanham WELL ID: 7144 WORK TYPE: GPMC
 STATE: WV SHL (Lat/ Long) 38.47639 -81.71694 LEASE #: 48211
 DIST/TWP: Union BHL (Lat/Long) 38.47639 -81.71694 API: 47-039-01552-0000

EXISTING TUBULAR CONFIGURATION OD (inches) WEIGHT (PPF) GRADE THREAD DEPTH (ft) TOP BOTTOM FORMATION: refer to MISC INFORMATION section
 WELLLINE #: X2W7144

EXISTING TUBULAR CONFIGURATION	OD (inches)	WEIGHT (PPF)	GRADE	THREAD	DEPTH (ft)	TOP	BOTTOM	FORMATION:	
Conductor	13 3/8	48.0				0	39	PAY: 1509 TD: 1509 PBDT: KB-GL: CSG DEPTH	
Surface	10 3/4	32.8				0	236		
Intermediate	8 5/8	28.0				0	1412	ELEVATIONS TMG: KB-RF: GL: 594	
Intermediate									
Production	5 1/2	17.0				0	1426	WELLBORE SCHEMATIC	
Tubing	2 3/8	4.6	J-55			0	1509		
Perforations	No record								

Wellhead Field Fab 2k, 5-1/2" flowstring x 8-5/8" support, 2 x 11-1/2"V connection 7" x 2" Type "Q" tubing head, 7" x 5-1/2" swedge nipple

D.H. EQUIPMENT	TYPE	DEPTH (ft)
PACKER INFO: Upper		
Lower		
NIPPLE PROFILE INFO: Upper		
Lower		
SSSV INFO:		

CEMENT INFO	Calc TOC (ft)
13 3/8 No cement record	-
10 3/4 No cement record	-
8 5/8 No cement record	-
5 1/2 Cemented with 250 sacks	0

MISC INFORMATION
REFER TO WELL SUMMARY RPT, WELLBORE DIAGRAM, ELOG, ETC. (see spreadsheet tabs below)

Kill Fluid Calculation * Note that kill fluid calculation tabs are hidden

Maximum calculated bottom-hole pressure (for reference only):	1036	psig	* input
Maximum storage field surface pressure (MAOP):	600	psig	* input
* P&A before reservoir pressure exceeds 800 psi for WC			
Well TD:	1509	ft TVD	* input
Top of storage zone:	1410	ft TVD	* input
Calculated maximum BH pressure at top of zone:	620	psig	* output Kill Fluid (TOZ)
Kill fluid density at top of zone @:	150	psi OB	
	10.51	ppg	* output Kill Fluid (TOZ)
Proposed depth of BP:	1410	ft TVD	* input
Calculated maximum BH pressure at depth of BP:	620	psig	* output Kill Fluid (BP)
Kill fluid density at depth of BP @:	150	psi OB	
	10.51	ppg	* output Kill Fluid (BP)
Required minimum kill fluid density:	10.6	ppg	* greater of the two

Current AOF:	778 MCF/D
Top historical AOF:	2,265 MCF/D
Last MVRT:	No records
SBT:	No records

PROPOSED YEAR: 2023 ERCB PERMIT REQD: YES ___ NO ___X___ (Internal) PDS Required: YES ___ NO ___
 PREPARED BY: Maria Medvedeva DT. APPLIED: ISSUED: APPROVED: Brent Criser
 REVIEWED BY: James Amos
 PREP DATE: 7/29/2022

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 01/13/2023
 WV Department of Environmental Protection

WELL JOB PLAN		STS Well Engineering & Technology		PAGE 2	DATE JOB PREPARED: 7/29/2022
Objective: Plug and Abandon					
TITLE: Plug and Abandon			LAST PROFILE UPDATE:		
FIELD: Lanham	WELL: 7144		WORK TYPE: GPMC		
STAT: WV	SHL (Lat/Long): 38.47639	-81.71694	API: 47-039-01552-0000		
TWP: Union	BHL (Lat/Long): 38.47639	-81.71694	CNTY: Kanawha		

PROCEDURE

NOTE: Cement used will be API Class A, slurry weight 15.6ppg, slurry yield 1.18 cuft/sk or API Class L, slurry weight 15.6ppg, slurry yield 1.14 cuft/sk, as per the approved WVDEP Variance Order No.2022-13. All spacers will be 6% Bentonite gel.
NOTE: Well was killed in 2021 due to a casing collar leak. Location is unknown due to cement slab cover.
Well pressure must be below 600 psi to begin the P&A for kill weight consideration and well control.

- 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 Disconnect well line. (done)
- 7 Prepare access road and well site. Install ECD's per EM&CP.
- 8 Service all wellhead valves.
- 9 Document and report to WE&T the initial casing and annular pressures.
- 10 Well was killed in 2021 using 14.1 ppg fluid. Circulate a 10.6 ppg kill weight viscosified polymer fluid around to get an even clean weight fluid in and out. Monitor well to ensure fluid level is static before continuing. If the well is not static, consult with the WE&T engineer (MIRU wireline unit, run RBP).
- 11 MIRU service rig.
- 12 Remove tbg valve and bonnet.
- 13 Verify that the mandrel has lift threads and if so, stab a pup joint with a 2" valve into the top of mandrel. If mandrel doesn't have lift threads, consult with WE&T engineer.
- 14 Spray / pour lubricant around top of tubing mandrel and around lock-down pins. Clean mandrel lift threads and verify thread profile.
- 15 NU 7-1/16" 3M gate valve, Cameron double BOP (blind-shear in bottom / 2-3/8" pipes in top), and annular. Function and pressure test low (250psi) and high (1100 psi based on the maximum calculated BHP).
Secure BOPE to prevent swaying to minimize torsional stress on interface between the flowstring and cement block, where the location of the leak is.
- 16 Pull 2-3/8" tubing.
- 17 Obtain a CBL on the 5-1/2" casing to surface. Send digital copies of logs to WE&T engineer.
- 18 RIH with 2-3/8" work string w/ cut-lip shoe, wash to TD (~1509'), and install bottom cement plug from TD to depth of 1300'.
- 19 PU above cement top, reverse circulate to clean tubulars, pull 10 joints, close pipe rams, and WOC (minimum 8 hrs).
- 20 RIH and tag cement. If cement has fallen below 1325', then spot a second balanced cmt plug.
- 21 Install a 5-1/2" CIBP as close as feasible to the cement plug.
- 22 Top off 5-1/2" with kill fluid and perform 300 psig pressure test to verify integrity of BP.
- 23 Release all annular pressure.
- 24 Top off annuli with fluid again, plumb to flowback tank with adjustable choke.
- 25 Perforate through both the 5-1/2" and 8-5/8" casings as close to the CIBP as possible. Attempt to circulate to surface or establish injection.
Note: there may be storage gas behind the 8-5/8" csg as the shoe is set at the top of the Big Lime; monitor for kick and 8 x 10 annular pressure.
- 26A If circulation to surface established, circulate kill weight fluid until good kill density fluid is returned. Consult with WE&T engineer to confirm procedure:
 - > RIH with sliding-sleeve style cement retainer on work string
 - > Set retainer above perfs
 - > Establish circulation
 - > Squeeze cement behind 8-5/8" casing with pre-determined cement volume that occupies no more annular volume than that required to place top of cement at 250'.
 - > Disengage from retainer, clean hole and TOOH.
 - > WOC 24 hours.
 - > Obtain CBL and compare to original CBL to evaluate squeeze cementing results. Utilize the same CBL tools.
- 26B If no circulation to surface, but injection established, consult with WE&T engineer to confirm procedure:
 - > RIH with sliding-sleeve style cement retainer on work string
 - > Set retainer above perfs
 - > Establish injection
 - > Disengage from retainer and spot cement at bottom of work string
 - > Squeeze cement behind 8-5/8" casing with pre-determined cement volume that occupies no more annular volume than that required to place top of cement at 250'.
 - > Disengage from retainer, clean hole and TOOH.
 - > WOC 24 hours.
 - > Obtain CBL and compare to original CBL to evaluate squeeze cementing results. Utilize the same CBL tools.
- 26C If circulation / injection not established, perforate (per WE&T engineer) and repeat process above to 250'.
*** Note that during steps above cement plugs must be installed across all perf zones, casing shoes, and O/G/W zones**

PREPARED BY: Maria Medvedeva	REVIEWED BY: James Amos	APPROVED: Brent Criser
PREP DATE: 7/29/2022		

Handwritten signature and date: 10-31-20

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 01/13/2023
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WELL JOB PLAN		STS Well Engineering & Technology		PAGE 3	DATE JOB PREPARED: 7/29/2022
Objective: Plug and Abandon				LAST PROFILE UPDATE:	
TITLE: Plug and Abandon		WELL: 7144		WORK TYPE: GPMC	
FIELD: Lanham	SHL (Lat/Long): 38.47639 -81.71694		API: 47-039-01552-0000		
STAT: WV	BHL (Lat/Long): 38.47639 -81.71694		CNTY: Kanawha		
DIST/TWP: Union					

PROCEDURE (continued)

*** If a verifiable annular cement barrier behind the 8-5/8" csg has not been installed during previous Steps consult with WET engineer to determine if additional well control measures (welding an annular barrier) are required before proceeding with procedure.**

- 27 If applicable, install balanced cement plugs from PBTD to 250'.
- 28 ND BOPE and remove A-section.
- 29 If 5-1/2" csg is not cemented to surface, install pulling nipples on top of 5-1/2" and 8-5/8" casings.
- 30 Install a pulling nipple on top of 10-3/4" casing.
- 31 If 5-1/2" csg is not cemented to surface, free-point and cut / pull all 5-1/2" and 8-5/8" csg that is free.
- 32 Attempt to pull all 10-3/4" casing that is free. If can't pull and 5-1/2" / 8-5/8" casings were pulled as per Step 31, then wireline freepoint and cut / pull all 10-3/4" that is free.
- 33 Perforate through both the 5-1/2" and 8-5/8" casings above inside cement plug, ~250'. Attempt to circulate to surface or establish injection.
- 34A If circulation to surface is established, circulate until clean fluid is returned. Consult with WE&T engineer to confirm procedure:
 - > RIH with sliding-sleeve style cement retainer on work string
 - > Set retainer above perfs
 - > Establish circulation
 - > Squeeze cement behind 8-5/8" casing to surface.
 - > Disengage from retainer.
 - > Install cement plug inside the 5-1/2" casing to surface.
- 34B If no circulation to surface, but injection is established, consult with WE&T engineer to confirm procedure:
 - > RIH with sliding-sleeve style cement retainer on work string
 - > Set retainer above perfs
 - > Establish injection
 - > Disengage from retainer and spot cement at bottom of work string
 - > Squeeze cement behind 8-5/8" casing to surface.
 - > Disengage from retainer.
 - > Install cement plug inside the 5-1/2" casing to surface.
- 34C If circulation / injection not established, perforate 100' (per WE&T engineer) and repeat process above to surface.
 - * Note that during steps above cement plugs must be installed across all perf zones.
- 35 Grout all annuli as deep as possible.
- 36 RDMO service rig.
- 37 Erect monument per state regulations. Reclaim location and lease road.
- 38 P&A complete.
- 39 Notify REG / WE&T that well is back in-service.

PREPARED BY: Maria Medvedeva	REVIEWED BY: James Amas	APPROVED: Brent Criser
PREP DATE: 7/29/2022		

Handwritten signature: Amy W. Miller
 10-31-22

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 Environmental Protection

~ not to scale ~

Lanham 7144

Prior to P&A

(as of 07/28/2022)

Sea Level @ 594 ft

Red Rock 10 - 25'
River Sand 25 - 60' water show at 50'
Red Rock 70 - 90'
Slate / Sand 90 - 396'
Sand 396 - 445' water show at 415'

Calculated TOC at surface based on volumetric calculations

13-3/8" 48# casing @ 39'
- No cement record

10-3/4" 32.75# casing @ 236'
- No cement record

Light grey fill indicates originally installed cement

Slate / Sand 945 - 1410'
hole full water @ 955'

Big Lime 1410 -1509'
(gas storage)

8-5/8" 28# csg @ 1412'
- No cement record

5-1/2" 17# casing @ 1426'
- Cemented with 250 sx

2-3/8" 4.6# J-55 tubing @ 1509'

TD 1509'

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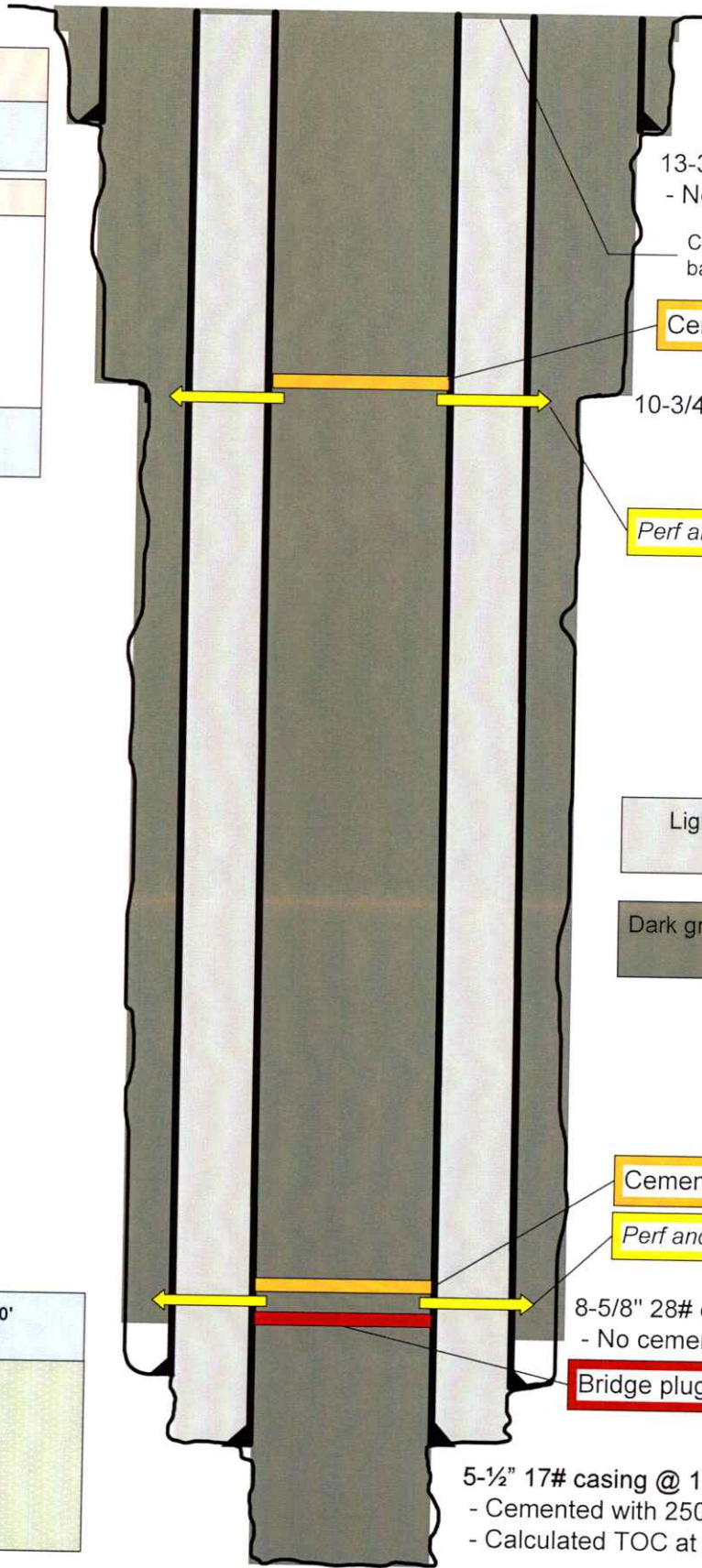
NOV 07 2022

WPD 01/13/2023
Environmental Services

~ not to scale ~

Lanham 7144
Proposed P&A
(as of 07/28/2022)

Sea Level @ 594 ft
Red Rock 10 - 25'
River Sand 25 - 60' water show at 50'
Red Rock 70 - 90'
Slate / Sand 90 - 396'
Sand 396 - 445' water show at 415'



13-3/8" 48# casing @ 39'
- No cement record

Calculated TOC at surface
based on volumetric calculations

Cement Retainer

10-3/4" casing seat @ 236'

Perf and squeeze cement behind 8-5/8"

Light grey fill indicates originally
installed cement

Dark grey fill indicates cement installed
during the P&A

Cement Retainer

Perf and squeeze cement behind 8-5/8"

8-5/8" 28# csg @ 1412'
- No cement record

Bridge plug @ 1300'

5-1/2" 17# casing @ 1426'
- Cemented with 250 sx
- Calculated TOC at surface

Slate / Sand 945 - 1410' hole full water @ 955'
Big Lime 1410 -1509' (gas storage)

TD 1509'

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01/13/2023

WELL SERVICE INCORPORATED

47039015529

19TH FLOOR KANAWHA VALLEY BUILDING

CHARLESTON 1, W. VA.

Date Oct 2 1950

Service Ticket No. 77 71130

Company	<u>United Fuel Co</u>
P. O. - Street	
City - State	<u>Charleston</u>
Lease	<u>12</u>
Well No.	<u>2144</u>
County	<u>Harrison</u>
State	<u>W. Va.</u>
Time called for	<u>1:30 PM</u>
Time on job	<u>1:30 PM</u>
Job started	
Finished	
Waiting time	
Road Condition	<u>Good</u>
Weather condition	<u>fine</u>
Tractor Used	
Contractor	<u>Arthur Brown</u>
Unit No.	<u>1200</u>

Casing Size 10 3/4

PACKER SET

Weight
Depth

Operator's Work Data

Type operation:

MATERIALS:

Casing pressure cement

Name Kearns

Casing Balance cement

Type

Casing Comb. Gel - cement

Sacks 250

Casing Squeeze cement

Gallons

Casing Squeeze chemical

Wt. per gal.

Plugging Gel - Cement

Ad - mix

Pumping Casing - Tubing

Sp. Gr.

Formation Cement Squeeze

Viscosity

Formation Chem. Squeeze

Temp.

Killing well mud - water

HOLE CONDITION:

Supervising special tools

Water in hole full

Gas @ 0

Cavings @ no

Pipe leaking

Shoe leaking

Temp.

Sp. Gr. water

Casing Size 8 7/8

TUBING SIZE

24 Weight
1412 Depth

Press Cement
5 7/8 Casing

Special tool used:

Casing Size 5 3/4

17 WEIGHT
1426 DEPTH - T. D.

SERVICE CHARGES

Job charge	<u>22500</u>	Pumping charge	
Pumping hrs.		Stand-by charge	
Waiting time		Mileage charge	
Miles R. T.		Supervising	
Tool rental		Tool time	
Material chg.		Trans. chg.	
Extra unit		Chemical chg.	

Total charges 22500

Completion Report

Normal pump pressure 100 Max.

Return circulation at surface water

Return circulation of materials cement

General Remarks: 250 lb cement
1 Solid Plug

Size Open Hole

OPEN HOLE DATA

Bridge Top _____

Bridge BTM. _____

Water Formations:

Name _____

From _____

To _____

Porosity _____

Perm. _____

T. D. _____

It is mutually agreed by both parties involved that WELL SERVICE, INC., equipment No. 1200 is leased to United Fuel Co and will operate under their supervision. Our Field Engineer and his crew will, in a competent and cooperative manner, efficiently operate the equipment and with additional assistance, if needed, to be furnished by the lessee. Due to many unknown and variable conditions, of which we have no mutual knowledge or control, it requires WELL SERVICE, INC. not to assume any responsibility toward unsuccessful results or incompleteness of the operation.

Operator Arthur Brown Company _____

Crew _____ Supervisor _____

NOV 07 2022

01/13/2023

Emp. ...

MAY 1950
DIVISION OF OIL AND GAS

4703901552P

Approved

Jm 7144
Superintendent

United Fuel Gas Co.
COMPANY

SERIAL WELL NO. X-2-7144

LEASE NO. _____

MAP SQUARE 56-67

RECORD OF WELL NO. <u>X-2-7144</u> on the		CASING AND TUBING				TEST BEFORE SHOT
<u>R. F. Williams et. al.</u> of <u>5 5/8</u> Acres		SIZE	WEIGHT	USED IN DRILLING	LEFT IN WELL	<u>3/10</u> of Water in <u>2 1/2</u> inch
in <u>Union</u> District		<u>13</u>		<u>60'-2"</u>	<u>38'-7"</u>	<u>/10</u> of Merc. in _____ inch
<u>Kanawha</u> County		<u>10</u>		<u>340'-4"</u>	<u>235'-10"</u>	Volume <u>73,000</u> Cu. ft.
State of: <u>West Virginia</u>		<u>8</u>		<u>1503'-3"</u>	<u>1454'-6"</u>	TEST AFTER SHOT
Field: <u>Clendenin</u>		<u>5</u>		<u>1668'-11"</u>	<u>1449'-10"</u>	<u>20/10</u> of Water in <u>2</u> inch
Rig Commenced _____ 194		<u>2</u>		<u>1630'-8"</u>	<u>1539'-9"</u>	<u>/10</u> of Merc. in _____ inch
Rig Completed _____ 194						Volume <u>189,000</u> Cu. ft.
Drilling Commenced <u>August 15,</u> 19 <u>50</u>						Hours After Shot _____
Drilling Completed <u>October 17,</u> 19 <u>50</u>						Rock Pressure <u>340# 12-Hrs.</u>
Drilling to cost _____ per foot						Date Shot _____
Contractor is: <u>Adkins Bro. Drlg. Co.</u>						Size of Torpedo _____
Address: <u>Huntington, W. Va.</u>				SHUT IN		Oil Flowed _____ bbls. 1st 24 hrs.
				Date <u>10/17/50</u>		Oil Pumped _____ bbls. 1st 24 hrs.
Driller's Name <u>Frank Mixer</u>				<u>2</u> in. Tubing or _____		Well abandoned and _____
<u>Fat Adkins</u>				Size of Packer _____		Plugged _____ 194
				Kind of Packer _____		
				1st Perf. Set _____ from _____		
Elevation: <u>610.38</u>				2nd Perf. Set _____ from _____		

DRILLER'S RECORD

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Surface	0	10	10	
Red Rock	10	25	15	
River Sand	25	60	35	
White Slate	60	70	10	Water at 50'
Red Rock	70	90	20	
White Slate	90	160	70	
Sand	160	275	115	
White Slate	275	396	121	
Sand	396	445	49	Water at 415'
Slate	445	448	3	
Sand	448	576	128	
Slate	576	610	34	
Lime	610	619	9	
Slate	619	630	11	
Sand	630	670	40	
Slate	670	730	60	
Lime	730	750	20	

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NOV 07 2022

01/13/2023

WW-4A
Revised 6-07

1) Date: 10/24/2022
2) Operator's Well Number
Lanham 7144

3) API Well No.: 47 - 039 - 01552

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>Michael D. & Sheila G. Trader</u>	Name <u>Not operated</u>
Address <u>433 Camp Virgil Tate Rd</u>	Address _____
<u>Charleston, WV 25312</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>	_____
_____	_____

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.

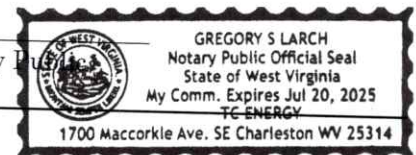
The reason you received these documents is that you have rights regarding the application which are summarized in the instructions on the reverses side. However, you are not required to take any action at all.

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 20 day of OCT 2022

My Commission Expires July 20, 2025 Notary



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.

NOV 07 2022
01/13/2023

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



October 27, 2022

Michael D. & Sheila G. Trader
 433 Camp Virgil Tate Rd.
 Charleston, WV 25312

Columbia Gas Transmission, LLC is applying for a permit to the WV Department of Environmental Protection – Office of Oil and Gas, to repair an existing underground natural gas storage well located on property owned by you. As reference, the field and well ID is Lanham 7144 (API 47-039-01552).

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®.

Charleston, WV 25312

OFFICIAL USE

Certified Mail Fee	\$4.00
Extra Services & Fees (check box, add fee as appropriate)	\$7.75
<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	\$9.90
Total Postage and Fees	\$17.15

Postmark Here: 10/27/2022

Sent To: Michael & Sheila Trader
 Street and Apt. No., or PO Box No.
 City, State, ZIP+4®: LM 7144

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

SENDER: COMPLETE THIS SECTION

- 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.

1. Article Addressed to:
 Michael & Sheila Trader
 433 Camp Virgil Tate Rd
 Charleston, WV 25312

7020 3160 0000 3743 7850

9590 9402 7677 2122 2704 49

COMPLETE THIS SECTION ON DELIVERY

A. Signature
 KH MARRRY Agent Addressee

B. Received by (Printed Name)
 KH MARRRY

C. Date of Delivery
 10/27/22

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type
 Adult Signature Priority Mail Express®
 Adult Signature Restricted Delivery Registered Mail™
 Certified Mail® Registered Mail Restricted Delivery
 Certified Mail Restricted Delivery Signature Confirmation™
 Collect on Delivery Signature Confirmation Restricted Delivery
 Certified Mail Restricted Delivery Mail Signature Restricted Delivery
 Certified Mail Restricted Delivery Mail Restricted Delivery (over \$500)

PS Form 3811, July 2020 PSN 7530-02-000-9053

www.tcenergy.com

SURFACE OWNER WAIVER

4703901552P

Operator's Well
Number

Lanham 7144

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..."

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,

Signature

Date

Name
By
Its

Date

Signature

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Office of Oil and Gas

NOV 07 2022

Date
Office of
Environmental Protection

01/13/2023

WW-4B

4703901552P

API No. 47-039-01552
Farm Name _____
Well No. Lanham 7144

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.

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 _____

01/13/2023

4703901552P



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street, SE
Charleston, WV 25304
Phone (304) 926-0450

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

**BEFORE THE OFFICE OF OIL AND GAS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE OF WEST VIRGINIA**

**IN THE MATTER OF A VARIANCE FROM)
LEGISLATIVE RULE 35CSR4)
SECTION 14.1. AND LEGISLATIVE RULE)
35CSR8 SECTION 20.1,)
RELATING TO THE CEMENTING)
OF OIL AND GAS WELLS)**

ORDER NO. 2022-13

REPORT OF THE OFFICE

In response to industry requests, the West Virginia Department of Environmental Protection, Office of Oil and Gas has reviewed the proposed use of American Petroleum Institute (API) Class L cement to be used in place of API Class A cement for well plugging.

FINDINGS OF FACT

1. On July 28, 2022, Diversified Gas & Oil Co. (DGO) submitted a variance request from Legislative Rule 35CSR4 for the use of API Class L cement in place of API Class A cement, relating to the plugging of conventional wells.
2. Laboratory analysis submitted by DGO on July 28, 2022, indicates API Class L cement is comparable to API Class A cement and thereby satisfies the requirements of the West Virginia Code.
3. Contemporaneously, the Chief of the Office of Oil and Gas also chose to consider a variance to Legislative Rule 35CSR8 Section 20.1., for the use of API Class L cement in place of API Class A cement, relating to the plugging of horizontal wells.

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Promoting a healthy environment.

4. On August 18, 2022, the Office of Oil and Gas provided public notice of acceptance of public comments on the variance consideration. During the 20-day public comment period, no comments were received.

CONCLUSIONS OF LAW

Pursuant to Article 6 and Article 6A, Chapter 22 of the Code of West Virginia, the Office of Oil and Gas has jurisdiction over the subject matter, and the persons interested therein, and jurisdiction to promulgate the hereinafter prescribed Order.

Pursuant to Legislative Rule 35CSR4, Section 18 and Legislative Rule 35CSR8, Section 14, the Chief of the Office of Oil and Gas may grant a variance from any requirement of these rules.

ORDER

It is ordered that the Class L cement product approved and monogrammed by API is approved for use in place of API Class A cement for well plugging subject to the provisions of Legislative Rule 35CSR4 and Legislative Rule 35CSR8.

Dated this, the 13th day of September, 2022.

IN THE NAME OF THE STATE OF WEST VIRGINIA

OFFICE OF OIL AND GAS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OF THE STATE OF WEST VIRGINIA



James Martin, Chief
Office of Oil and Gas

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WV Department of
Environmental Protection

WW-9
(5/16)

4703901552P

API Number 47 - 039 - 01552

Operator's Well No. Lanham 7144

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) Pocatalico River Quadrangle Pocatalico, 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, 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 (WMGR123SW005)
Appalachian Water Services (WMGR123SW001))

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? _____

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 *Maria Medvedeva*

Company Official (Typed Name) Maria Medvedeva

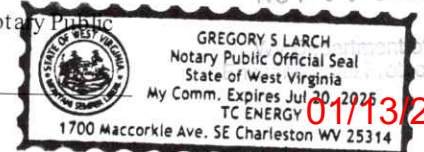
Company Official Title Senior Wells Engineer - Well Engineering and Technology

Subscribed and sworn before me this 20 day of Oct., 2022

[Signature] Notary Public

My commission expires July 20, 2025

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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

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: [Signature]

Comments: _____

Title: Impulse Oil & Gas Date: 10-31-22

Field Reviewed? () Yes () No

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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): Pocatalico River Quad: Pocatalico, 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.

Pocatalico River is at a distance of 0.19 miles W.
Mason Co PSD-Crab Creek (WV3302714c) is the closest Well Head Protection Area at a distance of 4.13 miles W from discharge area.

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.

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Environmental Protection

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.

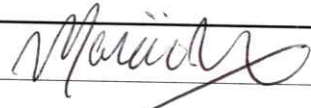
7. Describe the groundwater protection instruction and training to be provided to the employees. Job procedures shall provide direction on how to prevent groundwater contamination.

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 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: 10/24/2022

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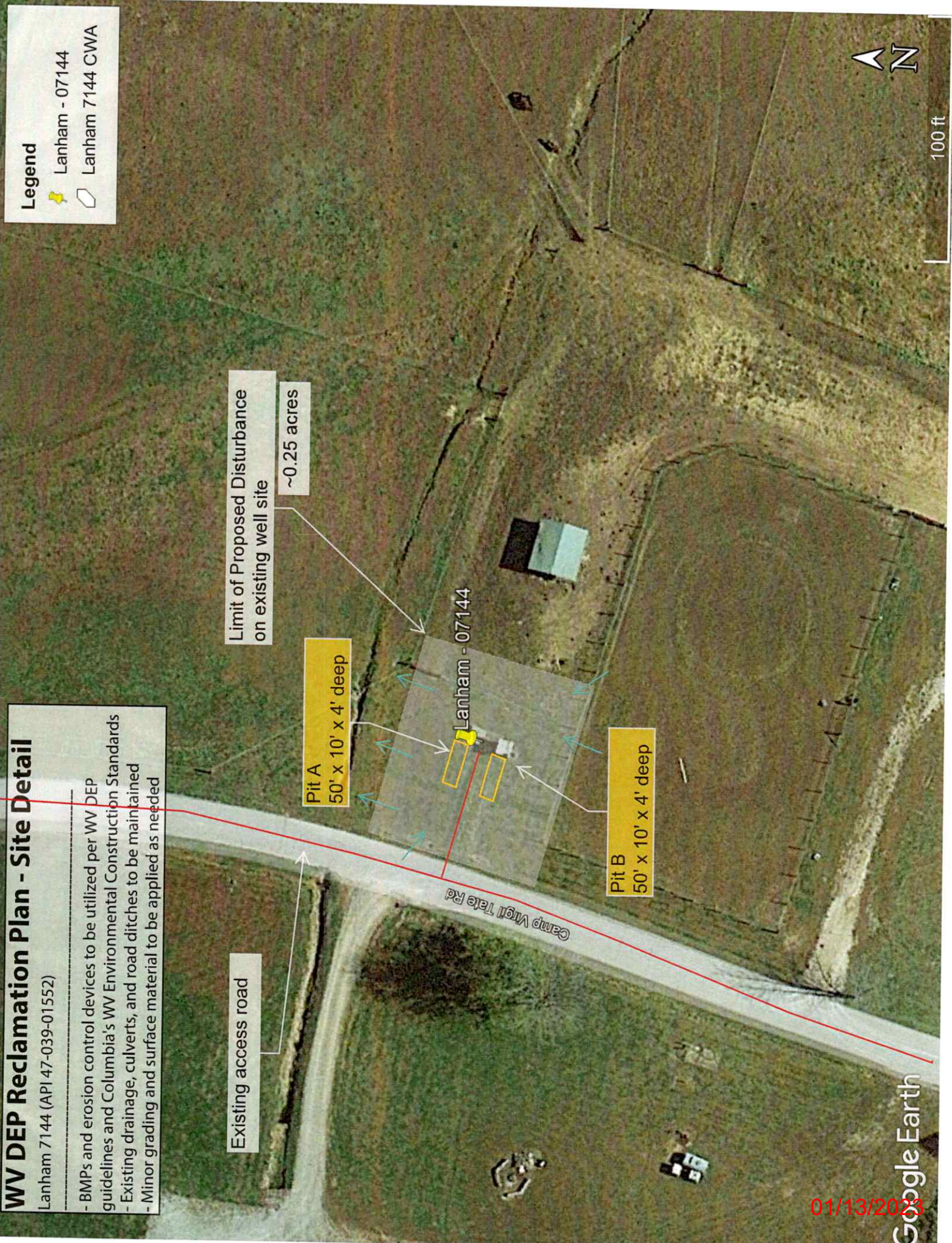
WV DEP Reclamation Plan - Site Detail

Lanham 7144 (API 47-039-01552)

- 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

Legend

-  Lanham - 07144
-  Lanham 7144 CWA



Limit of Proposed Disturbance on existing well site ~0.25 acres

Pit A 50' x 10' x 4' deep

Pit B 50' x 10' x 4' deep

Camp Virgil Tate Rd

Lanham - 07144

Existing access road

Google Earth

01/13/2023

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WV Department of
Environmental Protection



Legend
 Lanham - 07144

WV DEP Reclamation Plan - Overview
 Lanham 7144 (API 47-039-01552)

- 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

Existing access road

01/13/2023

Google Earth

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4703901552P

(BANCROFT) 

POCOTALICO QUADRANGLE
WEST VIRGINIA
TOPOGRAPHIC SERIES (ROMANCE)



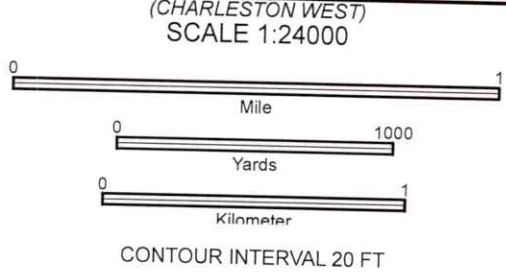
Produced by Trimble Terrain Navigator Pro
Topography based on USGS 1:24,000
Maps

North American 1983 Datum (NAD83)

To place on the predicted North American
1927 move the projection lines 10M N and
13M E

Declination

 GN 0.45° W
 MN 7.71° W



38081-D5-TM-024
POCOTALICO, WV
JAN 1, 1999

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WV Department of
Environmental Protection

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

4703901552P



November 4th, 2022

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

RECEIVED
Office of Oil and Gas
NOV 07 2022
Department of Environmental Protection

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

Lanham 7144 (API ~~039~~-01552)

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

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

If you have questions, feel free to call.

Regards,

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



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

Plugging permits issued 4703901552 03906116 03906118

1 message

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

Thu, Jan 12, 2023 at 9:14 AM


To: maria_medvedeva@tcenergy.com, Terry W Urban <terry.w.urban@wv.gov>, sallierobinson@kanawha.us


To whom it may concern, plugging permits have been issued for 4703901552 03906116 03906118.


James Kennedy

WVDEP OOG


6 attachments


 **4703901552.pdf**
6010K

 **4703906118.pdf**
5584K

 **IR-8 4703901552.pdf**
120K

 **4703906116.pdf**
5180K

 **IR-8 4703906118.pdf**
120K

 **IR-8 4703906116.pdf**
120K

01/13/2023