



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 8, 2026
WELL WORK PERMIT
Vertical / Re-Work

COLUMBIA GAS TRANSMISSION, LLC
1700 MACCORKLE AVENUE SE

CHARLESTON, WV 25314

Re: Permit approval for LANHAM 7145
47-079-00261-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

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

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

H. Jason Harmon
Acting Chief

Operator's Well Number: LANHAM 7145
Farm Name: IRVINE, KEVIN L., ETAL
U.S. WELL NUMBER: 47-079-00261-00-00
Vertical Re-Work
Date Issued: 1/8/2026

A handwritten signature in black ink, appearing to read "Jason Harmon".

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. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code §22-6-20, which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
2. Pursuant to 35 CSR 4-19.1.a, at the request of the surface owner all water wells or springs within 1000 feet of the proposed well that are actually utilized for human consumption, domestic animals or other general use shall be sampled and analyzed.
3. Pursuant to 35 CSR 4-19.1.c, if the operator is unable to sample and analyze any water well or spring with one thousand (1,000) feet of the permitted well location, the Office of Oil and Gas requires the operator to sample, at a minimum, one water well or spring located between one thousand (1,000) feet and two thousand (2,000) feet of the permitted well location.
4. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
5. 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.
6. During the surface casing and cementing process, in the event cement does not return to the surface, or any other casing string that is permitted to circulate cement to the surface and does not return to the surface, the oil and gas inspector shall be notified within twenty-four (24) hours
7. Well work activities shall not constitute a hazard to the safety of persons.
8. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced on this well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.
9. 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.

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: Columbia Gas Transmission, LLC 307032 Putnam Poca Pocatalico, WV

Operator ID County District Quadrangle

2) Operator's Well Number: Lanham 7145 3) Elevation: 836.8

4) Well Type: (a) Oil _____ or Gas X

(b) If Gas: Production _____ / Underground Storage X
Deep _____ / Shallow X

5) Proposed Target Formation(s): Big Lime Proposed Target Depth: 1791

6) Proposed Total Depth: 1791 Feet Formation at Proposed Total Depth: Big Lime

7) Approximate fresh water strata depths: None reported by driller

8) Approximate salt water depths: None reported by driller

9) Approximate coal seam depths: None reported by driller

10) Approximate void depths, (coal, Karst, other): None reported by driller

11) Does land contain coal seams tributary to active mine? No

RECEIVED
Office of Oil and Gas
OCT 28 2025

WV Department of
Environmental Protection

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)
Perform a coil tubing cleanout and acid stimulation, flowback.

* casing and equipment listed below are existing

13) **CASING AND TUBING PROGRAM** * existing

TYPE	SPECIFICATIONS		FOOTAGE	INTERVALS	CEMENT	
	Size	Grade	Weight per ft	For Drilling	Left in Well	Fill -up (Cu. Ft.)
Conductor	14		42		0	-
Fresh Water						
Coal	8-5/8		28		1294	-
Intermediate	7		1602 - 1667 depth	observed on	cased hole log	
Production	5-1/2	J-55	17		1685	260 sx
Tubing						
Liners						

Packers: Kind:

Sizes:

Depths Set

Joe S. J. 10/16/2020

01/16/2026

1). Date: 10/09/25
2.) Operator's Well Number Lanham 7145
State County Permit
3.) API Well No.: 47-079 - 00261

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name Kevin L. Irvine, etux
Address 671 Melton Rd
Poca, WV 25159-6771

(b) Name _____
Address _____

(c) Name _____
Address _____

6) Inspector Joe Taylor *SK*
Address 122 Bath Rd
Charleston, WV 25312
Telephone 304-380-7469

5) (a) Coal Operator
Name Not operated
Address _____

(b) Coal Owner(s) with Declaration
Name Not operated
Address _____

(c) Coal Lessee with Declaration
Name Not operated *RECEIVED
Office of Oil and Gas*
Address OCT 28 2025

TO THE PERSONS NAMED ABOVE TAKE NOTICE THAT:

Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas

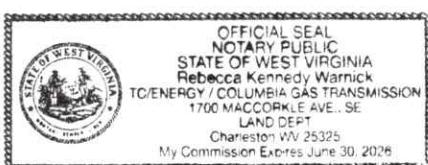
OR

Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)
I certify that as required under Chapter 22-6 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through _____ on the above named parties by:
 Personal Service (Affidavit attached)
 Certified Mail (Postmarked postal receipt attached)
 Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 35 CSR 4, and I agree to the terms and conditions of any permit issued under this application.

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, 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 and imprisonment.



Well Operator Columbia Gas Transmission, LLC *Maria Medvedeva*
By: Maria Medvedeva
Its: Senior Wells Engineer Storage Technical Services
Address: 1700 MacCorkle Ave SE
Charleston WV 25314-1273
Telephone: 304-410-4313
Email: maria.medvedeva@tcenergyc.com

Subscribed and sworn before me this

9th day of October, 2025

Notary Public

My Commission Expires

6/31/26

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

01/16/2026

SURFACE OWNER WAIVER

County	Putnam	Operator	Columbia Gas Transmission LLC
		Operator well number	Lanham 7145

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW2-A

The well operator named on page WW2A is applying for a permit from the State to do oil or gas well work. (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 **FIFTEEN (15) 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.

RECEIVED
Office Of Oil and Gas

OCT 28 2025

WV DEPARTMENT OF
ENVIRONMENTAL PROTECTION

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.

List of Water Testing Laboratories. The Office maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Chief to obtain a copy.

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 Well Work Permit on Form WW2-A, and attachments consisting of pages 1 through ____ including a work order on Form WW2-B, a survey plat, WW-9, and a soil and erosion plan, all for proposed well work on my surface land as described therein.

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

FOR EXECUTION BY A CORPORATION, ETC.

Signature	Date	Company Name
		By Its
Print Name		Date

Signature

Date

01/16/2026

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



2025, October 14

Kevin L. Irvine, etux
671 Melton Rd
Poca, WV 25159-6771

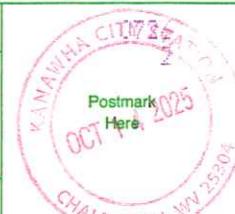
Columbia Gas Transmission, LLC is applying for a permit to the WV Department of Environmental Protection – Office of Oil and Gas, to workover an existing underground natural gas storage well located on property owned by you. As reference, the field and well ID is Lanham 7145 (API 47-079-00261).

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 ®.											
OFFICIAL USE											
<p>Certified Mail Fee \$ 5.30</p> <p>Postage \$ 11.90</p> <p>Total Postage and Fees \$ 21.60</p>											
<p>Extra Services & Fees (check box, add fee as appropriate)</p> <table> <tr> <td><input type="checkbox"/> Return Receipt (hardcopy)</td> <td>\$ 0.00</td> </tr> <tr> <td><input type="checkbox"/> Return Receipt (electronic)</td> <td>\$ 0.00</td> </tr> <tr> <td><input type="checkbox"/> Certified Mail Restricted Delivery</td> <td>\$ 0.00</td> </tr> <tr> <td><input type="checkbox"/> Adult Signature Required</td> <td>\$ 0.00</td> </tr> <tr> <td><input type="checkbox"/> Adult Signature Restricted Delivery</td> <td>\$ 0.00</td> </tr> </table>		<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
<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										
<p>Sent To Kevin Irvine</p> <p>Street and Apt. No., or PO Box No.</p> <p>City, State, ZIP+4® 11718</p>											
											

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 <input checked="" type="checkbox"/> <i>Kevin Irvine</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) <input checked="" type="checkbox"/> <i>Kevin Irvine</i> <input type="checkbox"/> C. Date of Delivery <i>10/18/25</i></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> <hr/> <p>3. Service Type</p> <p><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"/> Adult Signature Restricted Delivery <input type="checkbox"/> Registered Mail Restricted Delivery <input type="checkbox"/> Certified Mail® <input type="checkbox"/> Signature Confirmation™ <input type="checkbox"/> Certified Mail Restricted Delivery <input type="checkbox"/> Signature Confirmation Restricted Delivery <input type="checkbox"/> Collect on Delivery <input type="checkbox"/> Collect on Delivery Restricted Delivery</p> <p>9590 9402 7630 2122 5683 54</p> <p>01/16/2026</p> <p>2. Article Number (Transfer from service label) 7022 2410 0002 6396 3201</p> <p>restricted Delivery</p>	

WW-2A Coal Waiver

COAL OPERATOR, OWNER, OR LESSEE WAIVER

* coal not operated

County Kanawha

Operator Columbia Gas Transmission LLC

Operator's Well Number

Lanham 7145

INSTRUCTIONS TO COAL OPERATOR, OWNER, OR LESSEE

To the coal operator, owner, or lessee named on page WW2-A. You are hereby notified that any objection you wish to make or are required to make by WV Code 22-6-15, 16 or 17, must be filed with the Chief of the Office of Oil and Gas within fifteen (15) days after the receipt of this application by the Office. Mail objections to:

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0499 extension 1654

WAIVER

The undersigned coal operator ____/ owner ____/ lessee ____/ of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of well location, the well location has been added to the mine map. 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.

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

Signature _____ Date _____

Company
Name
By
Its _____ Date _____

Signature _____ Date _____

RECEIVED
Office Of Oil and Gas
OCT 28 2025
WV Department of
Environmental Protection

01/16/2026

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6, Section 8(d)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
Reba V. Celendnin, Etal	United Fuel Gas Company	Storage Lease - 1047902-000	43 / 585

**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources
- WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

RECEIVED
Office of Oil and Gas
OCT 28 2025
WV Department of
Environmental Protection

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator:
By: Its:

Columbia Gas Transmission, LLC
Maria Medvedeva
Senior Wells Engineer Storage Technical Services

West Virginia Department of Environmental Protection
Office of Oil and Gas

NOTICE TO SURFACE OWNERS

The well operator named below is preparing to file for a permit from the state to drill a new well. Before a well work permit can be filed with the Chief of the Office of Oil and Gas, the well operator is required to have given notice of the right to request water well or spring analytical testing. This notice shall be given to the owners or occupants of land which have a water well or spring being utilized for human consumption, domestic animals, or other general use and which is located within 1000 feet of the proposed well site.

With this form, the operator is giving you notice of your right to request analytical testing. The operator is required to sample and analyze the water wells or springs of all owners or occupants who request it. Therefore, if you wish to have your water well or spring tested, contact the operator named below.

All sampling shall be completed prior to drilling. Within thirty (30) days of the receipt of such sample analyses the operator shall submit the results to the Chief of the Office of Oil and Gas and to the owners or occupants who may have requested them.

Be advised, you have the right to sample and analyze any water supply at your own expense.

Listed below is the laboratory chosen by operator to perform analysis, and contactor chosen to collect sample.

Certified Laboratory Name _____
Sampling Contractor _____

Well Operator Not applicable - existing underground natural gas storage well
Address _____

Telephone _____

FOR OPERATOR'S USE ONLY: Below, or on an attached page, list those persons which were given this notice. Place an asterisk beside the one(s) that contacted you and requested sampling and analyses. If there were no requests made, indicate by underling which one(s) you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site, the Chief may require the operator to test wells up to 2000 feet from the proposed site.

WV Department of
Environmental Protection

**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) 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: N/A

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

Proposed Disposal Method For Treated Pit Wastes:

■ 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)

Will closed loop system be used? If so, describe: yes - steel flow line to tanks

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

-If oil based, what type? Synthetic, petroleum, etc. N/A

Additives to be used in drilling medium? NaCl, biocide, soda ash, polymer, starch, CaCO₃, HCl acid

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) N/A

-Landfill or offsite name/permit number? To be managed by Waste Management and US Ecology for disposal at permitted landfill

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. *[Signature]*

Company Official Signature

Company Official (Typed Name) Maria Medvedeva

Company Official Title Senior Wells Engineer Storage Technical Services

Subscribed and sworn before me this

9th day of October

Nota



OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
Rebecca Kennedy Warnick
ENERGY / COLUMBIA GAS TRANSMISSION
1700 MACCORKLE AVE., SE
LAND DEPT.
Charleston, West Virginia
My Commission Expires June 30, 2020
01/16/2026

Proposed Revegetation Treatment: Acres Disturbed < 1.0 Prevegetation pH 6-7Lime 2 Tons/acre or to correct to pH 7-8Fertilizer type 10-10-10Fertilizer amount 600 lbs/acreMulch hay or straw @ 2 Tons/acre**Seed Mixtures****Temporary**

Seed Type	lbs/acre
Annual rye	<u>40</u>

Permanent

Seed Type	lbs/acre
Orchard Grass and/or Tall Fescue	<u>29</u>
Birdsfoot Trefoil (Empire)	<u>9</u>
Annual Rye	<u>12</u>

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.

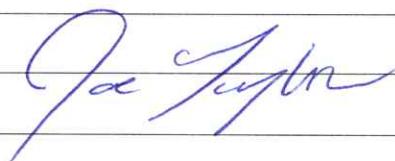
Plan Approved by: _____

Comments: _____

RECEIVED
Office Of Oil and Gas

OCT 28 2025

WV Department of
Environmental Protection



Title: 006 Inspector

Date: 10-10-25

Field Reviewed? Yes X 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): Pocatalico River

Quad: Pocatalico, WV

Farm Name: Pearl W. Melton, Et Al

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. Fuel, oil, and lubricants will be stored on site, but located within secondary containment. Accidental spills from construction equipment, well treatment fluids, and produced well fluids are the only possible source of contamination to groundwater. Drilling and flowback fluids to be stored in tanks. 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. Tanks to be monitored 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 0.06 miles E.

The Rippling Waters Campground WV9918017 is the closest Well Head Protection Area at a distance of 8.65 miles NE from discharge area.

RECEIVED
Office Of Oil and Gas

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

OCT 28 2025

N/A

WV Department of
Environmental Protection

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

01/16/2026

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.

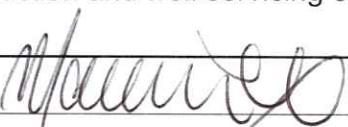
7. Describe the groundwater protection instruction and training to be provided to the employees. Job procedures shall provide direction on how to prevent groundwater contamination.

During routine tailgate and JSA 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. Fuel, oil, and lubricants will be stored on site, but located within secondary containment. Spills from construction equipment, well treatment fluids, and produced well fluids are the only possible source of contamination to groundwater.

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

Signature: 

Date: 10/09/2015 

WELL JOB PLAN

STS Well Engineering & Technology

PAGE 1

DATE JOB PREPARED: 03.30.24

Objective: Resotre Deliverability

LAST PROFILE UPDATE:

TITLE: CTCO			WELL ID: 7145			WORK TYPE:																																																										
FIELD: Lanham			SHL (Lat/ Long) 38.473101			LEASE #: 41162																																																										
STATE: WV			BHL (Lat/Long) 38.473101			API: 47-079-00261																																																										
DIST/TWP: Poca						CNTY: Putnam																																																										
EXISTING TUBULAR CONFIGURATION			OD (inches)	WEIGHT (PPF)	GRADE	THREAD	DEPTH (ft)	WELLLINE #: X2W7145																																																								
Conductor			14	42.0			TOP	Bottom	FORMATION: refer to MISC INFORMATION section																																																							
Surface			10 3/4	Pulled 1950			0	20	PAY: TD: 1791																																																							
Intermediate			8 5/8	28.0			0	1294	ELEVATIONS TMG:																																																							
Intermediate			7 *	Observed on 2013 HRVRT			1602	1667	PBTM: KB-RL: GL:																																																							
Production			5 1/2	17.0	J-55		0	1685	CSG DEPTH WELLBORE SCHEMATIC																																																							
Tubing			2 3/8	Pulled 2013																																																												
* well originally completed as producer w/ 7 csg on packer @ 1680, P&A & redrilled for storage									Refer to "Wellbore Diagram" tab																																																							
Perforations			Openhole, acid frac																																																													
Wellhead			API 3k, 5-1/2" flowstring x 8-5/8" support, 8-5/8" casing head welded to plate that is welded to (assumed) 14" conductor. 5-1/2" API 8 RD wellhead connection																																																													
D.H. EQUIPMENT			TYPE			DEPTH (ft)																																																										
PACKER INFO:			Upper																																																													
			Lower																																																													
NIPPLE PROFILE INFO:			Upper																																																													
			Lower																																																													
SSSV INFO:																																																																
CEMENT INFO			Calc TOC (ft)																																																													
14	No record of cement								-																																																							
8 5/8	No record of cement								-																																																							
5 1/2	Cemented w/ 260 sx neat - job locked up - left 66 sx in pipe.								215 - 256'																																																							
MISC INFORMATION																																																																
REFER TO WELL SUMMARY RPT, WELLBORE DIAGRAM, ELOG, ETC. (see spreadsheet tabs below)																																																																
<u>Kill Fluid Calculation</u> * Note that kill fluid calculation tabs are hidden Maximum calculated bottom-hole pressure (for reference only): <table border="1"><tr><td>1036</td><td>psig</td><td>* input</td></tr><tr><td>850</td><td>psig</td><td>* input</td></tr></table> Maximum storage field surface pressure (MAOP): <table border="1"><tr><td>1791</td><td>ft TVD</td><td>* input</td></tr><tr><td>1677</td><td>ft TVD</td><td>* input</td></tr><tr><td>886</td><td>psig</td><td>* output Kill Fluid (TOZ)</td></tr><tr><td>11.88</td><td>ppg</td><td>* output Kill Fluid (TOZ)</td></tr></table> Well TD: <table border="1"><tr><td>1791</td><td>ft TVD</td><td>* input</td></tr><tr><td>1677</td><td>ft TVD</td><td>* input</td></tr><tr><td>886</td><td>psig</td><td>* output Kill Fluid (TOZ)</td></tr><tr><td>11.88</td><td>ppg</td><td>* output Kill Fluid (TOZ)</td></tr></table> Top of storage zone (Big Lime): <table border="1"><tr><td>1677</td><td>ft TVD</td><td>* input</td></tr><tr><td>886</td><td>psig</td><td>* output Kill Fluid (BP)</td></tr><tr><td>11.88</td><td>ppg</td><td>* output Kill Fluid (BP)</td></tr></table> Calculated maximum BH pressure at top of zone: Kill fluid density at top of zone @: <table border="1"><tr><td>150</td><td>psi OB</td></tr></table> Proposed depth of BP (N/A): <table border="1"><tr><td>1677</td><td>ft TVD</td><td>* input</td></tr><tr><td>886</td><td>psig</td><td>* output Kill Fluid (BP)</td></tr><tr><td>11.88</td><td>ppg</td><td>* output Kill Fluid (BP)</td></tr></table> Calculated maximum BH pressure at depth of BP: Kill fluid density at depth of BP @: <table border="1"><tr><td>150</td><td>psi OB</td></tr></table> Required minimum kill fluid density: <table border="1"><tr><td>11.9</td><td>ppg</td><td>* greater of the two</td></tr></table>									1036	psig	* input	850	psig	* input	1791	ft TVD	* input	1677	ft TVD	* input	886	psig	* output Kill Fluid (TOZ)	11.88	ppg	* output Kill Fluid (TOZ)	1791	ft TVD	* input	1677	ft TVD	* input	886	psig	* output Kill Fluid (TOZ)	11.88	ppg	* output Kill Fluid (TOZ)	1677	ft TVD	* input	886	psig	* output Kill Fluid (BP)	11.88	ppg	* output Kill Fluid (BP)	150	psi OB	1677	ft TVD	* input	886	psig	* output Kill Fluid (BP)	11.88	ppg	* output Kill Fluid (BP)	150	psi OB	11.9	ppg	* greater of the two	
1036	psig	* input																																																														
850	psig	* input																																																														
1791	ft TVD	* input																																																														
1677	ft TVD	* input																																																														
886	psig	* output Kill Fluid (TOZ)																																																														
11.88	ppg	* output Kill Fluid (TOZ)																																																														
1791	ft TVD	* input																																																														
1677	ft TVD	* input																																																														
886	psig	* output Kill Fluid (TOZ)																																																														
11.88	ppg	* output Kill Fluid (TOZ)																																																														
1677	ft TVD	* input																																																														
886	psig	* output Kill Fluid (BP)																																																														
11.88	ppg	* output Kill Fluid (BP)																																																														
150	psi OB																																																															
1677	ft TVD	* input																																																														
886	psig	* output Kill Fluid (BP)																																																														
11.88	ppg	* output Kill Fluid (BP)																																																														
150	psi OB																																																															
11.9	ppg	* greater of the two																																																														
Current AOF: <table border="1"><tr><td>63,276</td><td>MCF/D</td></tr><tr><td>103,419</td><td>MCF/D</td></tr></table> Top historical AOF: Last MVRT: 06/06/2016 Baker HRVRT indicates no pitting or corrosion in this well which exceeds the 20% metal loss cut off. SBT: 2004 Baker CBL indicates cmt up to 336'.			63,276	MCF/D	103,419	MCF/D							RECEIVED Office Of Oil and Gas OCT 28 2025																																																			
63,276	MCF/D																																																															
103,419	MCF/D																																																															
PROPOSED YEAR: 2026			ERCB PERMIT REQD: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> DT. APPLIED: ISSUED:			(Internal) PDS Required: YES <input type="checkbox"/> NO <input type="checkbox"/> WV Department of Environmental Protection																																																										
PREPARED BY: Maria Medvedeva			REVIEWED BY: James Ames			APPROVED: Brent Cuser																																																										
PREP DATE: 03.30.24																																																																

JAI

01/16/2026

WELL JOB PLAN		STS Well Engineering & Technology	PAGE 2	DATE JOB PREPARED: 03.30.24
Objective: Resotre Deliverability				LAST PROFILE UPDATE: 0
TITLE: CTCO				
FIELD: Lanham	WELL: 7145		WORK TYPE:	
STAT: WV	SHL (Lat/Long): 38.473101	-81.724632	API:	47-079-00261
TWP: Poca	BHL (Lat/Long): 38.473101	-81.724632	CNTY:	Putnam
PROCEDURE				

NOTE: Great results in performance improvement with pulling the tbg and acidizing (1600 gal 15% HCl acid) in 2013. Highest AOF of 103,419 noted in the fall of 2014 well test.

- 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.
- 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 MIRU 1.75" CTU.
- 11 Flow well. If well won't flow unload with nitrogen.
- 12 Perform CTCO and 1500 gallons of 15% HCL treatment.
- 13 RDMO CTU.
- 14 Flow well to recover treatment fluids.
- 15 Perform final 45-min flowback test thru 3/4" choke. Record flow test in the FLOWTEST and GAS LOSS DATA SHEET.
- 16 Notify WET Project Support that well is back in-service.
- 17 Reclaim R&L.
- 18 Reconnect well line.
- 19 Commission well by completing, processing, and retain for records the Wellsite Review and Turnover Form.
- 20 Notify REG that well is ready for storage service.


 Oct 10 2025
 RECEIVED
 Office Of Oil and Gas
 OCT 28 2025
 WV Department of
 Environmental Protection

PREPARED BY:	Maria Medvedeva	REVIEWED BY:	James Amos	APPROVED:	Brent Criser
PREP DATE:	03.30.24				

Lanham 7145 (API 47-079-00261) - CTCO and Acid Treatment

API 3K wellhead

5-1/2" 17# csg J-55 ran to 1685'

Burst: 5320 psig new (4256 psig assuming 80% safety factor)

Capacity: 1685 ft x 0.9764 gal/ft = 1645.25 gals; x 0.0232 bbl/ft = 39.17 bbls

Openhole

Capacity 4-3/4" hole: 106 ft x 0.02192 bbl/ft = 2.32 bbls

Total Capacity: 42 bbls

Big Lime: 1677 – 11708' (driller)

Perfs: None (openhole completion)

TD: 1791 (drilled deeper 2004)

Fluids Needed

1500 gals 15% HCl acid treated with corrosion inhibitor, iron control/sequestering agent, and surfactant. Biocide, clay stabilizer, and surfactant to treat +/- 150 bbls fresh water. Liquid caustic on location in case need to neutralize flowback fluids.

** One day before acid treatment load 5-1/2" x 8-5/8" annulus with fresh water treated with biocide, corrosion inhibitor, and clay stabilizer*

CTCO Procedure

1. MIRU 1.75" CTU.
2. Load CT with treated fresh water (TFW) and pressure test CT and BOPs to 1100 psig.
** based on the maximum calculated bottomhole pressure*
3. Open well and RIH under static conditions.
4. At 1400' begin jetting with foamed TFW. Jet to TD and cycle up and down across interval 1650' – TD.
5. Begin 15% HCl acid foamed to 50Q and cycle up and down across interval 1650' – TD until 500 gals acid gone.
6. Flow well while POOH to 1200'. Flow until returns are relatively dry.

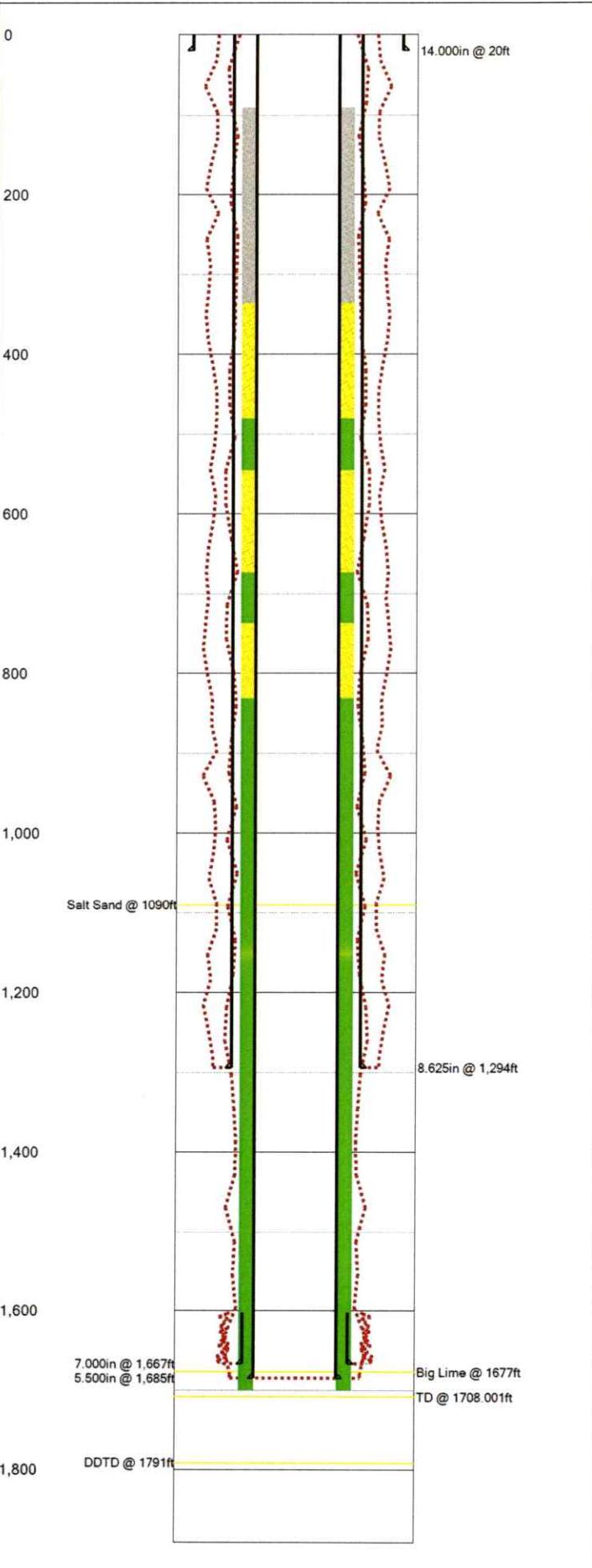
Acid Treatment

1. RU to perform matrix acid treatment down casing as follows:

▪ 1000 gals 15% HCl acid	2-4 BPM	Max Treating Press = 1100 psig
▪ 25 bbls TFW	2-4 BPM	Max Treating Press = 1100 psig
▪ 20 bbls TFW	2-3 BPM	Max Treating Press = 1000 psig

RECEIVED
Of Oil and Gas
OCT 28 2025
Department of
Environmental Protection
2. SHUT DOWN FOR 30 minutes TO ALLOW ACID TO SOAK
3. Flow well. If well quits flowing, RBIH with CT unloading fluid with N2.
3. RDMO and release CTU/acid equipment.

101
01/16/2026



Last Updated: 2/13/2024 12:02 PM

TransCanada

Field Name		Lease Name		Well No.				
Lanham		Lanham - 07145		07145				
County		State		API No.				
Putnam		WV		47079002610000				
Version	Version Tag							
0	Current Completion							
G.L. (ft)	K.B. (ft)	Sec.	Township/Block	Range/Survey				
1,791.0	1,791.0	56-67	Poca	031007145				
Operator	Well Status		Latitude	Longitude				
TransCanada	ACTIVE		38.4731	-81.7246				
Dist. N/S (ft)	N/S Line	Dist. E/W (ft)	E/W Line	Footage From				
PropNum	Spud Date		Comp. Date					
Pearl W. Melton, Et Al	9/1/1950							
Additional Information								
7145-Charleston, WV I-77 N to exit 111 (Tuppers Creek). Take off ramp, turn left on CR 29 W to CR 21 N, continue to traffic light (Sissonville HS), turn left on SR 622 E @ 3 1/2 miles to CGT compressor station, continue (bear left) on SR 622 E, watch for church on left, turn right on Poca River Rd (CR 7/5), turn right on Harmon Bridge Rd, then right on Milton Farm Rd. Follow road to farmstead, go between sheds bearing left uphill to well. Note: bridge on Harmon Bridge Rd may not be suitable for heavy trucks. Consult with CG rep for alternate route.								
Other1	Other2	Other3	Other4					
Lanham	0310	031007145						
Prepared By	Updated By		Last Updated					
	2/13/2024 12:02 PM							
Hole Summary								
Date	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments				
9/3/1950	10.625	0	1,294					
11/1/1943	8.750	1,602	1,667					
9/5/1950	7.875	0	1,685					
Tubular Summary								
Date	Description	O.D. (in)	Wt (lb/ft)	Grade	Top (MD ft)	Bottom (MD ft)		
9/1/1950	Casing	14.000	42.00		0	20		
9/3/1950	Casing	8.625	28.00		0	1,294		
11/1/1943	Casing	7.000			1,602	1,667		
9/5/1950	Casing	5.500	17.00	J-55	0	1,685		
Casing Cement Summary								
C	Date	No. Sx	Csg. O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments		
	6/16/2004	0	5.500	90	336	Free Pipe		
	6/16/2004	0	5.500	336	480	Partial Quality		
	6/16/2004	0	5.500	480	545	Good Quality		
	6/16/2004	0	5.500	545	673	Partial Quality		
	6/16/2004	0	5.500	673	736	Good Quality		
	6/16/2004	0	5.500	736	831	Partial Quality		
	6/16/2004	0	5.500	831	1,235	Good Quality		
	6/25/2004	0	5.500	1,100	1,700	Good Quality		
Formation Tops Summary								
Formation		Top (TVD ft)	Comments					
Salt Sand		1,090	RECEIVED					
Big Lime		1,677	Comments: g @ 1700-1708 (7.505 Gas mmcf/d)					
TD		1,708	OCT 28 2025					
DDTD		1,791						

WV Department of
Environmental Protection

01/16/2026 Page 5 of 5

Joe Mays
10-10-26

United Fuel Gas Company
COMPANYFm
Superintendent

7145

SERIAL WELL NO. X-2-7145

LEASE NO. 47902

MAP SQUARE 56-67

RECORD OF WELL NO.		CASING AND TUBING				TEST BEFORE SHOT	
	on the	SIZE	WEIGHT	USED IN DRILLING	LEFT IN WELL	/10 of Water in	inch
Reba V. Clendenin et al. of 174 Acres	in Poca District	14		20 ¹ 4 ¹ "	20 ¹ 4 ¹ "	65 ¹ 10 of Merc. in 5 ¹ 17 ¹ "	inch
Putman County		10		1070 ¹ 9 ¹ "	0	Volume 7,505,000	Cu. ft.
State of: W. Va.		8		1785 ¹ 1 ¹ "	1306 ¹ 1 ¹ "	TEST AFTER SHOT	
Field: Clendenin		5		1868 ¹ 6 ¹ "	1700 ¹ 10 ¹ "	/10 of Water in	inch
Rig Commenced	194	2		1745 ¹ 7 ¹ "	1708 ¹ 7 ¹ "	/10 of Merc. in	inch
Rig Completed	194					Volume	Cu. ft.
Drilling Commenced	August 30, 1950					60	Hours After Start
Drilling Completed	September 30, 1950					Rock Pressure	485
Drilling to cost	per foot					Date Shot	
Contractor is: C.O. Tools, Stg # 51						Size of Torpedo	
Address:				SHUT IN		Oil Flowed	bbls. 1st 24 hrs.
Driller's Name	Walter G. Wright		2 in.	Tubing or X ¹ 10 ¹ "		Oil Pumped	bbls. 1st 24 hrs.
	McDonald Conley			Size of Packer		Well abandoned and	
				Kind of Packer		Plugged	194
Elevation:	855.11			1st. Perf. Set from			
				2nd Perf. Set from			

DRILLER'S RECORD

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Soil Clay	000	30		
Blue Shale	30	70		
Red Rock	70	160		
Sand	160	170		
Blue Shale	170	200		
Red Rock	200	215		
Blue Rock	215	225		
Red Rock	225	300		
Blue Rock	300	315		
Lime	315	320		
Gray Shale	320	355		
Red Rock	355	375		
Lime Shells	375	390		
Brown Shale	390	420		
Slate & Shells	420	440		
Sand	440	490		
Slate	490	508		

SERIAL WELL NO. X-2-7145

LEASE NO 47902

~~MAP - SQUARE 50-67~~

7145

DRILLER'S RECORD

FORMATION	TOP	BOTTOM	THICKNESS	REMARKS
Sand	508	524		
Gray Slate	524	550		
Broken Sand	550	600		
Slate Shells	600	620		
White Slate	620	635		
Sand Shells	635	675		
Black Slate	675	690		Note: This is from the Original Log Well has been plugged in 1945.
White Sand	690	715		
Broken Sand	715	725		Old Well # 5325.
Sand	725	783		
Sand	783	805		
Slate	805	830		
Sand	830	852		
White Sand	852	891		
Dark Slate	891	975		
Sand	975	1005		
Slate	1005	1090		
Salt Sand	1090	1677		
Big Lime	1677	1708		
Total Depth	1708			Well Was Cleaned Out and Casing Run Tested 65/10 M. 5" 17# 7,505,000 MCF. Well Shut in Sept. 30, 1950. Tubing run March 14, 1951.

RECEIVED
Office of Oil and Gas

OCT 28 2025

MA Department of
Environmental Protection

01/16/2026

WR-35
Rev (9-11)

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

DATE: 6/11/13
API #: 47-7900261

Farm name: Irvine, Kevin L., et al Operator Well No.: 7145

LOCATION: Elevation: 840 ft Quadrangle: Pocatalico

District: Poca County: Putnam
Latitude: 39.815 Feet South of 38 Deg. 30 Min. 00 Sec.
Longitude 4.600 Feet West of 81 Deg. 42 Min. 30 Sec.

Company: Columbia Gas Transmission, LLC

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
<u>1700 MacCorkle Ave SE</u>	<u>14"</u>	<u>20</u>	<u>20</u>	<u>NA</u>
<u>Charleston, WV 25325-1273</u>				
<u>Agent: Paul Amick</u>	<u>10-3/4"</u>	<u>522</u>	<u>0</u>	<u>NA</u>
<u>Inspector: Terry Urban</u>	<u>8-5/8"</u>	<u>1294</u>	<u>1294</u>	<u>no record</u>
<u>Date Permit Issued: 5/22/13</u>	<u>5-1/2"</u>	<u>1685</u>	<u>1685</u>	<u>260 sx</u>
<u>Date Well Work Commenced: 3/4/13</u>				
<u>Date Well Work Completed: 6/11/13</u>				
<u>Verbal Plugging:</u>	<u>NA</u>			
<u>Date Permission granted on:</u>				
<u>Rotary</u> <input type="checkbox"/> <u>Cable</u> <input type="checkbox"/> <u>Rig</u> <input checked="" type="checkbox"/>				
<u>Total Vertical Depth (ft):</u>				
<u>Total Measured Depth (ft): 1791 (in year 2004)</u>				
<u>Fresh Water Depth (ft.): none rpt'd by driller in 1950</u>				
<u>Salt Water Depth (ft.): none rpt'd by driller in 1950</u>				
<u>Is coal being mined in area (N/Y)? N</u>				
<u>Coal Depths (ft.): NA</u>				
<u>Void(s) encountered (N/Y) Depth(s) none rpt'd</u>				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Big Lime (natural gas storage) Pay zone depth (ft) 1700 - 1708

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

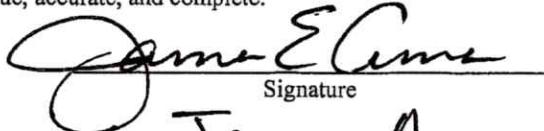
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow _____ MCF/d Final open flow _____ Bbl/d

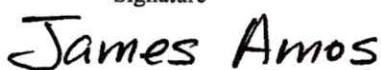
Time of open flow between initial and final tests _____ Hours

Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments 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.


Signature


Date


James Amos

01/16/2026

Were core samples taken? Yes No X

Were cuttings caught during drilling? Yes No NA

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list MicroVertilog (pipe inspection)

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Killed well. Pulled tubing. Logged and installed mechanical bridge plug. Installed new wellhead.

Pulled bridge plug. Acid stimulated.

Acid treatment: 1600 gal 15% HCl acid, 50 bbl fresh water, Avg rate = 3.5 bpm, ATP = 330 psig

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: _____ Top Depth / _____ Bottom Depth
Surface: _____

NA - no new borehole drilled

RECEIVED
Office Of Oil and Gas

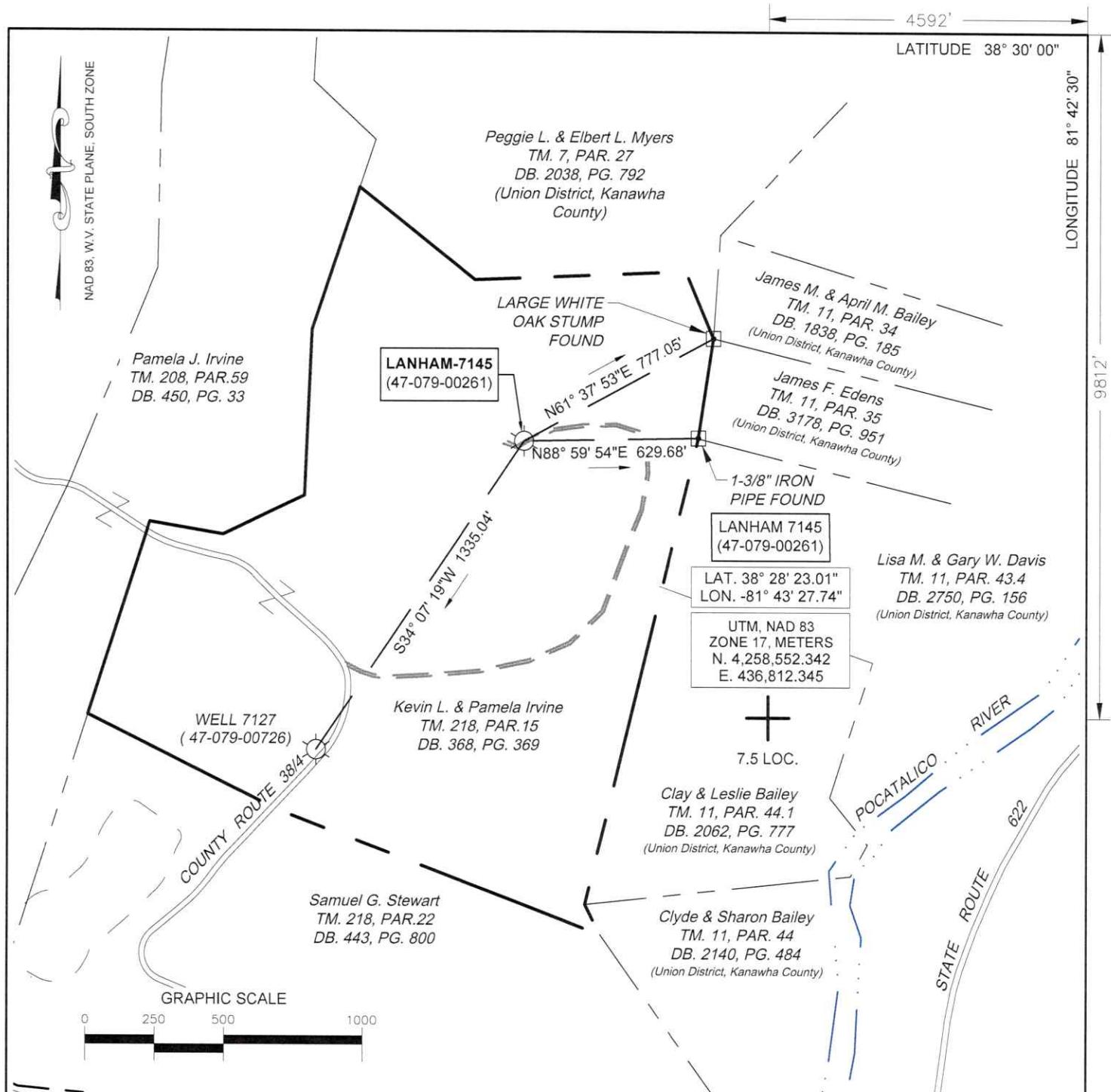
OCT 28 2025

RECEIVED
WV Department of
Environmental Protection
Office Of Oil and Gas

OCT 28 2025

WV Department of
Environmental Protection

01/16/2026



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

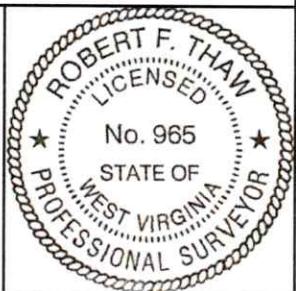
FILE No 2501-3079-001-004
 DRAWING No. LANHAM 7145
 SCALE 1" = 500'
 MINIMUM DEGREE OF
 ACCURACY 1: 200
 PROVEN SOURCE OF
 ELEVATION TRIMBLE R12
 GPS UNIT

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 REGU-
 LATIONS ISSUED AND PRESCRIBED BY THE
 DIVISION OF ENVIRONMENTAL PROTECTION.

(SIGNED)

R. Thaw
 ROBERT F. THAW

PS #965



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



DATE OCTOBER 6 2025
 OPERATOR'S WELL No. 7145
 API WELL No.

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL STATE 47 COUNTY 079 — 00261
 (IF "GAS") PRODUCTION STORAGE X DEEP SHALLOW X PERMIT

LOCATION: ELEVATION 836.8' WATER SHED POCATALICO RIVER

DISTRICT POCA COUNTY PUTNAM
 QUADRANGLE POCATALICO, WV

SURFACE OWNER KEVIN L. & PAMELA J. IRVINE ACREAGE 67.91

OIL & GAS ROYALTY OWNER REBA V. CELENDIN, ET. AL.

LEASE ACREAGE 147 LEASE NO. 1047902-000

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

01/16/2026

TARGET FORMATION ORISKANY Big Lime ESTIMATED DEPTH 1940

WELL OPERATOR COLUMBIA GAS TRANSMISSION, LLC

ADDRESS PO BOX 1273, CHARLESTON, WV
 25325-1273

DESIGNATED AGENT MARIA MEDVEDEVA

ADDRESS 1700 MACCORKLE AVE., S.E.
 CHARLESTON, WV 25314

WV DEP Reclamation Plan - Overview

Lanham well 7145 (API 47-079-00261)

- 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



Google Earth

Image © 2025 Airbus

WV DEP Reclamation Plan - Site Detail

Lanham well 7145 (API 47-079-00261)

- 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





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

Well work permit issued 4707900261

1 message

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

Thu, Jan 8, 2026 at 2:12 PM

To: Maria Medvedeva <maria_medvedeva@tcenergy.com>, Joseph D Taylor <joseph.d.taylor@wv.gov>, gwarner@wvassessor.com

To whom it may concern, a re work permit has been issued for 4707900261.

--

James Kennedy

Environmental Resource Specialist III / Permitting

WVDEP Office of Oil and Gas

601 57th Street, SE

Charleston, WV 25304

304-926-0499 ext. 45025

james.p.kennedy@wv.gov

[4707900261.pdf](#)
5724K

01/16/2026