



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

Friday, September 25, 2026
WELL WORK PERMIT
Vertical / Re-Work

COLUMBIA GAS TRANSMISSION, LLC
1700 MACCORKLE AVENUE SE

CHARLESTON, WV 25314

Re: Permit approval for RIPLEY 7301
47-035-00526-00-00

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.

A handwritten signature in black ink, reading "Jason Harmon".

H. Jason Harmon
Chief

Operator's Well Number: 7301
Farm Name: PURSLEY, ANN
U.S. WELL NUMBER: 47-035-00526-00-00
Vertical Re-Work
Date Issued: 9/25/2026

Promoting a healthy environment.

09/25/2026

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.

4703500526

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 Jackson Ripley Ripley, WV
Operator ID County District Quadrangle

2) Operator's Well Number: Ripley 7301 3) Elevation: 873.9

4) Well Type: (a) Oil _____ or Gas X
(b) If Gas: Production _____ / Underground Storage X
Deep X / Shallow _____

5) Proposed Target Formation(s): Oriskany Proposed Target Depth: 5059

6) Proposed Total Depth: 5059 Feet Formation at Proposed Total Depth: Oriskany

7) Approximate fresh water strata depths: 425'

8) Approximate salt water depths: 1565'

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

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)

Run HRVRT and CBL logs, perform coil tubing cleanout and acid stimulate well.

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	13-3/8		48		747	no record
Fresh Water	10-3/4		32.8	1215	577	no record
Coal	8-5/8		24		2209	94 sx
Intermediate	7		22		4945	55 sx
Production	4-1/2	J-55	12.6		5059	340 sx
Production						
Production						

Packers: Kind: _____
Sizes: _____
Depths Set _____

09/25/2026

WW-2A
(Rev. 6-14)

1.) Date: 08/17/26
 2.) Operator's Well Number Riplev 7301
 State County Permit
 47- 035 - 00526
 3.) API Well No.:

**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 Ann Purslev
 Address 96 Cozy Dr
Riplev, WV 25271
 (b) Name _____
 Address _____
 (c) Name _____
 Address _____

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
 Address _____

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

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

x Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

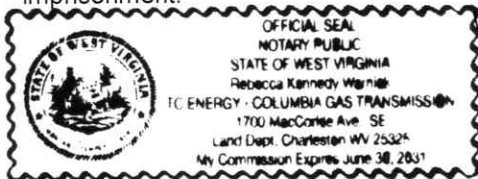
I certify that as required under Chapter 22-6 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through on the above named parties by:

 Personal Service (Affidavit attached)
x 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
 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@tcenergy.com

Subscribed and sworn before me this 17th day of August, 2026

Notary Public

My Commission Expires 6/30/31

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

09/25/2026

Columbia Gas Transmission, LLC

1700 MacCorkle Ave., SE, Charleston, WV, USA 25314

2026, August 17th

Ann Pursley
96 Cozy Dr
Ripley, WV 25271

SEP 08 2026

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 Ripley 7301 (API 47-035-00526).

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

7022 2410 0002 6396 3324

U.S. Postal Service™ CERTIFIED MAIL® RECEIPT Domestic Mail Only	
For delivery information, visit our website at www.usps.com ®.	
Ripley, WV 25271	
Certified Mail Fee	\$5.55
Extra Services & Fees (check box, add fee as appropriate)	
☐ Return Receipt (hardcopy)	\$0.00
☐ Return Receipt (electronic)	\$0.00
☐ Certified Mail Restricted Delivery	\$0.00
☐ Adult Signature Required	\$0.00
☐ Adult Signature Restricted Delivery	\$0.00
Postage	\$12.90
Total Postage and Fees	\$23.10
Sent To	Ann Pursley
Street and Apt. No., or PO Box No.	
City, State, ZIP+4®	RY 7301
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions	

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
- 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.	A. Signature X B. Received by (Printed Name) C. Date of Delivery D. Is delivery address different from item 1? ☐ Yes If YES, enter delivery address below. ☐ No
1. Article Addressed to: Ann Pursley 96 Cozy Rd Ripley, WV 25271	3. Service Type ☐ Adult Signature ☐ Adult Signature Restricted Delivery ☐ Certified Mail® ☐ Certified Mail Restricted Delivery ☐ Collect on Delivery ☐ Collect on Delivery Restricted Delivery ☐ Insured Mail ☐ Insured Mail Restricted Delivery (over \$500)
2. Article Number (Transfer from service label) 7022 2410 0002 6396 3324	4. Signature Confirmation ☐ Priority Mail Express® ☐ Registered Mail™ ☐ Registered Mail Restricted Delivery ☐ Signature Confirmation™ ☐ Signature Confirmation Restricted Delivery

WW-2A Coal Waiver

COAL OPERATOR, OWNER, OR LESSEE WAIVER

* coal not operated

County JacksonOperator Columbia Gas Transmission LLCOperator's Well Number Ripley 7301

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

West Virginia
Office of Oil and Gas

SEP 08 2026

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

09/25/2026

WW-2A Surface Waiver
(4/16)

SURFACE OWNER WAIVER

County Jackson

Operator
Operator well number

Columbia Gas Transmission LLC
Ripley 7301

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.

SEP 08 2026

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

Date

Print Name

Signature

Date

09/25/2026

WW-2A1
(Rev. 1/11)

Operator's Well Number Ripley 7301

**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
Ermina Puckett, etal	United Fuel Gas Company	Storage Lease - 52755	85 / 102

**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

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

SEP 08 2026
WV Department of Environmental Protection

09/25/2026

WW-2B1
(5-12)Well No. Ripley 7301West 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 contractor 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 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.

09/25/2026

WW-9
(5/16)

API Number 47 - 035 - 00526
Operator's Well No. Ripley 7301

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) Tributary to Left Fork of Sycamore Creek Quadrangle Ripley, 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)
- Appalachian Water Services (WMGR 123SW001)

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, KCl, HCl

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.

Company Official Signature Maria Medvedeva

Company Official (Typed Name) Maria Medvedeva

Company Official Title Senior Wells Engineer Storage Technical Services

Subscribed and sworn before me this 17th day of August 2026

My commission expires 6/30/31



Form WW-9

Operator's Well No. Ripley 7301Proposed 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/acreSeed 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

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: See Taylor

Comments: _____

SEP 08 2026

Title: 006 Inspector Date: 8-25-26Field Reviewed? ☒ Yes ☐ No

09/25/2026

WW-9- GPP
Rev. 5/16

Page _____ of _____
API Number 47 - 035 - 00526
Operator's Well No. Ripley 7301

**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): Tributary to Left Fork of Sycamore Creek

Quad: Ripley, WV

Farm Name: Ermina Puckett, 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.

Mud Run is at a distance of 0.69 miles NE.

WV Baptist Conference Center WV9918034 is the closest Well Head Protection Area at a distance of 5.36 miles SW from discharge area.

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

RECEIVED
Office of Oil and Gas

N/A

SEP 08 2026

WV Department of
Environmental Protection



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

09/25/2026

WW-9- GPP
Rev. 5/16

Page _____ of _____
API Number 47 - 035 - 00526
Operator's Well No. Ripley 7301

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.

REGULATORY
Office of Oil and Gas

SEP 08 2026

WV Department of
Environmental Protection

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.

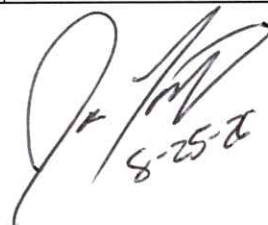
Signature: 

Date: 08/17/26



09/25/2026

WELL JOB PLAN				STS Well Engineering & Technology				PAGE 1		DATE JOB PREPARED: 2/14/2025	
Objective: Deliverability Project								WORK TYPE:			
TITLE: HRVRT, CBL logs, CTOC								LEASE #: 52755			
FIELD: Ripley		WELL ID: 7301		API: 47-035-00526							
STATE: WV		SHL (Lat/ Long) 38.862013 -81.701902		CNTY: Kanawha							
IST/TWP: Ripley		BHL (Lat/Long): 38.862013 -81.701902		WELLLINE #: X59W7301							
EXISTING TUBULAR CONFIGURATION	OD (inches)	WEIGHT (PPF)	GRADE	THREAD	DEPTH (ft)		FORMATION	NOTES	TOP (ft)	BOTTOM (ft)	
					TOP	BOTTOM					
Surface	13 3/8	48.0			0	747	Sand	W 1565'	1520	1580	
Intermediate	10 3/4	32.8			638	1215	Berea		2540	2557	
Intermediate	8 5/8	24.0			0	2209	Slate		2557	3425	
Intermediate	7	22.0			0	4945	Onondaga		4935	5030	
Production	4 1/2	12.6	J-55	Hydrill	0	5023	Oriskany		5030	5059	
Ball and anchor packer					5023	5027	TD		5059	5059	
Production - slotted **	4 1/2	12.6	J-55	Hydrill	5027	5059					
** No record of anchor/tailpipe, but w/ W&A packer, slotted/perforated anchor/tailpipe needed to activate pkr											
Wellhead		API 5k wellhead, 4-1/2" flow x 7" support, 4-1/2" 8 rd connection									
CEMENT INFO						Calc TOC (ft)	ELEVATIONS (ft)				
13 3/8	No record of cement						KB-GL:				
10 3/4	No record of cement						KB-RF:				
8 5/8	94 sx poured down annulus from surface					fill up to 1634	GL:				
7	55 sx poured down annulus from surface					fill up to 4865					
4 1/2	340 sx poured down annulus from surface					per record to surface, CBL not run to surface					
DISC INFORMATION						DIRECTIONAL WELL PROFILE (as applicable)					
REFER TO WELL SUMMARY RPT, WBD for Wellbore Schematic, ELOG, etc tabs in this workbook for additional information						Vertical well profile					
Kill Fluid Calculation						<i>* Note that kill fluid calculation tabs are hidden</i>					
Maximum calculated bottom-hole pressure (reference only):						1922	psig	* input			
Maximum storage field surface pressure (MAOP):						1675	psig	* input			
Well TD:						5059	ft TVD	* input			
Top of storage zone:						5030	ft TVD	* input			
Calculated maximum BH pressure at top of zone:						1907	psig	* output Kill Fluid (TOZ)			
Kill fluid density at top of zone @:						200	psi OB	8.05	ppg	* output Kill Fluid (TOZ)	
Proposed depth of BP:						5030	ft TVD	* input			
Calculated maximum BH pressure at depth of BP:						1907	psig	* output Kill Fluid (BP)			
Kill fluid density at depth of BP @:						200	psi OB	8.05	ppg	* output Kill Fluid (BP)	
Required minimum kill fluid density:						8.1	ppg	* greater of the two			
Current AOF:		47,957 MCF/D									
Top historical AOF:		55,422 MCF/D									
Last MVRT:		08/12/2004 Baker HRVRT indicates maximum metal loss of 26% at 3543', 2% at 2962' and 21% at 2290', all being external isolated events. All other joints are class 1.									
SBT:		05/15/2001 Baker CBL indicates good cement bond from 5025 to 4965, partial / poor quality through 4720, good quality to 3980' and partial quality to 3530', top logged interval.									
PROPOSED YEAR:		2027	ERCB PERMIT REQD:		YES	NO		X			
PREPARED BY:		Maria Medvedeva	DT. APPLIED:		ISSUED:	(Internal) PDS Required:		YES	NO		
REVIEWED BY:		James Amos	APPROVED:		Brent Criser						
PREP DATE:		2/14/2025									


 8-25-26

RECEIVED
 Office of Oil and Gas
 SEP 08 2026
 WV Department of Environmental Protection

09/25/2026

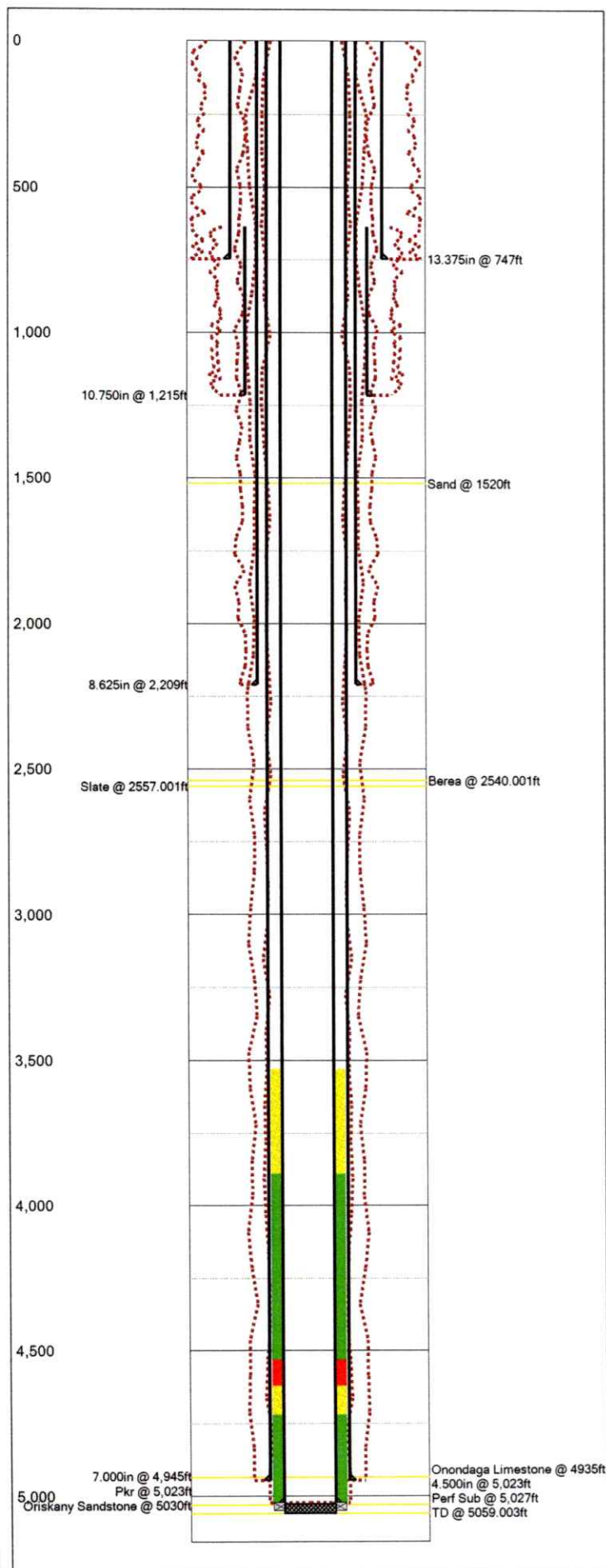
WELL JOB PLAN		STS Well Engineering & Technology		PAGE 2	DATE JOB PREPARED: 2/14/2025
Objective: Deliverability Project				WORK TYPE:	
TITLE: HRVRT, CBL logs, CTCO					
FIELD: Ripley	WELL: 7301				
STAT: WV	SHL (Lat/Long):	38.862013	-81.701902	API: 47-035-00526	
TWP: Ripley	BHL (Lat/Long):	38.862013	-81.701902	CNTY: Kanawha	
PROCEDURE					
NOTES: Tagged at 5049' during 2001 coil cleanout and stimulation. Good deliverability response from this cleanout and hydraulic fracture. Maintain communication with WVDEP Inspector during well operations to ensure compliance with WV Code.					
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 Baker Atlas Logging. Run gauge ring, HRVRT and Intex CBL logs. RD loggers. <i>Request 1-day turnaround on HRVRT analysis. Condition of 4-1/2" casing will determine next steps. Consult with WE&T engineer before proceeding.</i> 11 MIRU 1.75" CTU. 12 Obtain stabilized pre-cleanout rate through 3/4" choke. 13 RI with jetting tool. At 4800' begin flowing well and jet to TD with foamed TFW. At TD begin foamed 15% HCl with mutual solvent (must be compatible with HCl acid to avoid emulsions or damaging by-product) and jet across storage interval (5023 - 5059') until 1000 gals are gone. Pull up into casing and flow well until relatively dry. RBLH to TD and spot 1000 gals 15% HCl acid with mutual solvent. Pull up to 4000' and load wellbore above acid with TFW. Allow to soak for 60 minutes. Displace acid into formation with 1000 gals TFW. Unload wellbore with nitrogen to re-establish gas flow. 14 Flow well to dry and POOH. 15 RDMO CTU. 16 Perform final 45-min flowback test thru 3/4" choke. Record flow test in the FLOWTEST and GAS LOSS DATA SHEET, send report to engineering. 17 Reconnect well line. 18 Notify WET Project Support that well is back in-service. 19 Reclaim R&L. 20 Commission well by completing, processing, and retain for records the Wellsite Review and Turnover Form. 21 Notify REG that well is ready for storage service. All freshwater based fluids to be treated with biocide and clay stabilizer. All acids to be treated with corrosion inhibitor and iron control.  SEP 08 2026 WV Department of Environmental Protection					
PREPARED BY: Maria Medvedeva		REVIEWED BY: James Amos		APPROVED: Brent Criser	
PREP DATE: 2/14/2025					

09/25/2026

Last Updated: 4/26/2024 12:02 PM



Field Name		Lease Name		Well No.		
Ripley		Ripley - 07301		07301		
County		State		API No.		
Jackson		WV		47035005260000		
Version		Version Tag				
0		Current Completion				
G.L. (ft)	K.B. (ft)	Sec.	Township/Block	Range/Survey		
5,059.0		58-93	Ripley	031207301		
Operator		Well Status		Latitude	Longitude	
TransCanada		ACTIVE		38.862	-81.7019	
Dist. N/S (ft)	N/S Line	Dist. E/W (ft)	E/W Line	Footage From		
PropNum		Spud Date		Comp. Date		
Ermina Puckett, Et Al		9/10/1946				
Additional Information						
Other1	Other2	Other3	Other4			
Ripley	0312	031207301				
Prepared By		Updated By		Last Updated		
				4/26/2024 12:02 PM		
Hole Summary						
Date	O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments		
9/10/1946	17.500	0	747			
9/15/1946	14.750	638	1,215			
9/20/1946	10.625	0	2,209	SEP 08 2026		
9/25/1946	8.750	0	4,945			
11/2/1954	6.250	0	5,023			
Tubular Summary						
Date	Description	O.D. (in)	Wt (lb/ft)	Grade	Top (MD ft)	Bottom (MD ft)
9/10/1946	Surface Pipe	13.375	48.00		0	747
9/15/1946	Casing	10.750	32.75		638	1,215
9/20/1946	Casing	8.625	24.00		0	2,209
9/25/1946	Casing	7.000	22.00		0	4,945
11/2/1954	Casing	4.500	12.60	J-55	0	5,023
Casing Cement Summary						
C	Date	No. Sx	Csg. O.D. (in)	Top (MD ft)	Bottom (MD ft)	Comments
	5/15/2001	0	4.500	3,530	3,890	Partial Quality
	5/15/2001	0	4.500	3,890	4,530	Good Quality
	5/15/2001	0	4.500	4,530	4,620	Poor Quality
	5/15/2001	0	4.500	4,620	4,720	Partial Quality
	5/15/2001	0	4.500	4,720	5,025	Good Quality
Tools/Problems Summary						
Date	Tool Type	O.D. (in)	I.D. (in)	Top (MD ft)	Bottom (MD ft)	
11/2/1954	Pkr	6.400	4.000	5,023	5,027	
11/2/1954	Perf Sub	4.500	3.500	5,027	5,059	
Formation Tops Summary						
Formation	Top (TVD ft)	Comments				
Sand	1,520	Comments: fresh water at 425 Comments: 1565 hole full				
Berea	2,540					
Slate	2,557					
Onondaga Limestone	4,935					
Oriskany Sandstone	5,030					



47-035-00526 F

FORM WW-2B

Page ___ of ___

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

- 1) Well Operator: COLUMBIA GAS TRANSMISSION CORP.
- 2) Operator's Well Number: RIPLEY 7301 3) Elevation: 2881
- 4) Well type: (a) Oil / or Gas / 10450 035 2 578
 (b) If Gas: Production / Underground Storage /
 Deep / Shallow /
- 5) Proposed Target Formation(s): ORISKANY
- 6) Proposed Total Depth: 5054 feet
- 7) Approximate fresh water strata depths: 425'
- 8) Approximate salt water depths: 1565'
- 9) Approximate coal seam depths: NOT REPORTED
- 10) Does land contain coal seams tributary to active mine? Yes / No /
- 11) Proposed Well Work: REPLACE WELHEAD AND TOP JO. OF 4 1/2" CASING AND
FRAC
- 12)

CASING AND TUBING PROGRAM

SEP 08 2026

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
3/1/99 H.H.D. Conductor	13 3/8"		48		747'	
Fresh Water	10 3/4"		32.75	1215'	658'	
Coal	8 5/8"		24		2209'	TO 1634'
Intermediate	7"		22		4945'	TO 4865'
Production	4 1/2"	J-55	12.6		5010'	340 SK
Tubing						
Liners						

PACKERS : Kind 4 1/2" x 7" Wall + Anchor

MAY 06 1999

Sizes
Depths set 5010WV Division of
Oil and Gas

For Division of Oil and Gas Use Only

☐ Fee(s) paid: ☐ Well Work Permit ☐ Reclamation Fund ☐ WPCP

☐ Plat ☐ WW-9 ☐ WW-2B ☐ Bond Blanket 12/31/99 ☐ Agent

(Type)

09/25/2026

WEST VIRGINIA DEPARTMENT OF MINES
OIL & GAS DIVISION
WELL RECORD

Gas Well
CASING & TUBING

Permit No. Jao 326
Ripley Quad.
Company
Address
Farm
Location
Well No.
District
Surface
Mineral

United Carbon Company
Box 1913, Charleston 27, W. Va.
Erwina Puckett et al. & 218
Left Fork of Synacore Creek
1 (1938) Elev. 800.5' DE
Ripley Jackson County

13 3/8 747 747
108 1219 638
8 5/8 2209 2209
7 00 4445 4445
2 3/8 3056 3056

Commenced
Completed
Not shot

Erwina Puckett et al, Rt. 1
Ripley, W. Va.
June 24, 1946
Sept. 27, 1946

Casing cemented
8 5/8 to 1634 8-6-46
7 00 to 4865 9-18-46

Open flow
Volume
Rock Pressure
Fresh Water

29/10ths M in 7" OD 22#
9,941,000 C.F.
1220 lbs. 24 hrs.
425'

SEP 08 2026

Soil	4	30	Sand	1205	1205
Red Rock	24	124	Slate	1226	1226
Sand	120	140	Rip. Linc	1235	1235
Red Rock	140	200	Slate Sh	2080	2080
Lime	200	230	Sand	2090	2140
Red Rock	230	415	Slate	2140	2160
Sand	415	435	Sand	2160	2200
Slate	435	500	Slate & Shells	2200	2300
Red Rock	500	515	Shale, Brown	2300	2340
Sand	515	525	Berea Sand	2340	2397
Slate White	525	565	Slate & Shells	2397	3425
Red Rock	565	590	Shale Br	3425	3675
Sand	590	605	Slate & Shells	3675	3750
Red Rock	605	655	Shale Br	3750	3850
Sand	655	690	Slate & Shells	3850	4010
Slate	690	695	Shale Br	4010	4250
Sand	695	735	Slate Sh	4250	4450
Slate	735	805	Shale Br	4450	4935
Sand	805	875	Corniferous Lime	4935	5030
Slate	875	905	Crinkly Sand	5030	
Rock Pink	905	915	TOTAL DEPTH		5039
Slate	915	935			
Red Rock	935	955	Gas 2540'		
Sand	955	980	Gas & Oil 3300 stop		
Red Rock	980	995	Gas 3039' 10' 47" HGT (High gauge)		
Lime	995	1010			
Slate	1010	1065			
Red Rock	1065	1080			
Lime Shell	1080	1080			
Red Rock	1080	1095			
Slate & Shells	1095	1110			
Red Rock	1110	1120			
Sand	1120	1135			
Slate	1135	1145			
Red Rock	1145	1150			
Slate	1150	1170			
Slate	1170	1190			
Slate	1190	1197			
Red Rock	1197	1209			
Shells	1209	1218			
Red Rock	1218	1223			
Slate & Shells	1223	1225			
Sand	1225	1235			
Slate	1235	1290			
Sand	1290	1425			
Slate, Black	1425	1450			
Sand	1450	1500			
Slate Br	1500	1520			
Sand	1520	1530			
Slate	1530	1670			
Sand	1670	1700			
Slate & Shells	1700	1725			
Salt Sand	1725	1890			
Slate	1890	1895			

1585' H.P.

F. 20605

(RAVENSWOOD) mytopo
081° 43' 16.2218" W
038° 53' 01.8965" N

RIPLEY QUADRANGLE
WEST VIRGINIA
TOPOGRAPHIC SERIES (LIVERPOOL)

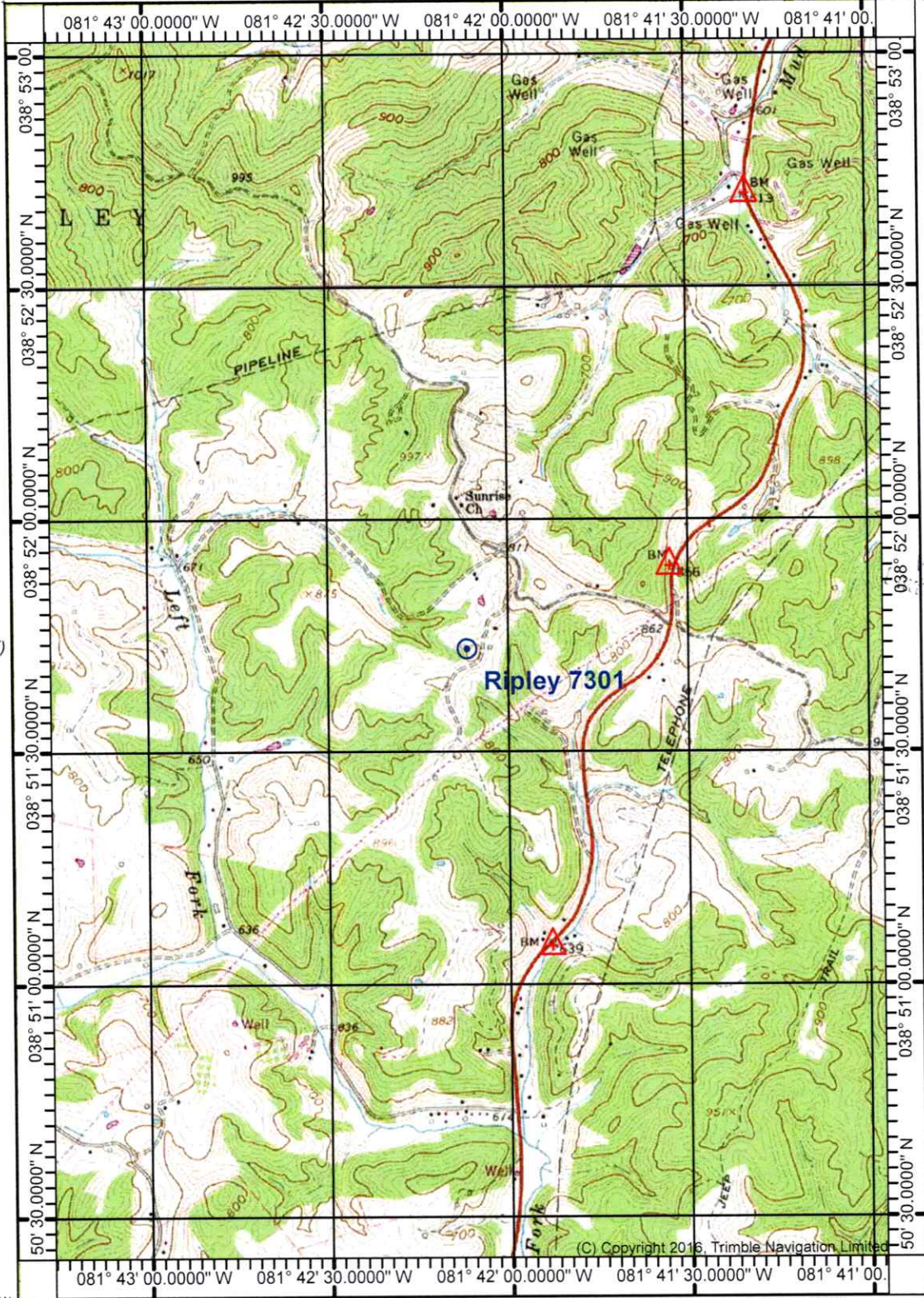
(SANDYVILLE)

081° 40' 56.9519" W
038° 53' 01.8965" N

(COTTAGEVILLE)

RECEIVED
SEP 08 2026
U.S. Department of
Natural Resources

(GAY)



038° 50' 24.1674" N
081° 43' 16.2218" W

(ELMWOOD)

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

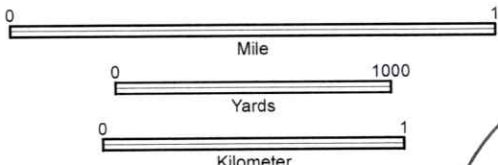
North American 1983 Datum (NAD83)

To place on the predicted North American
1927 move the projection lines 9M N and
13M E

Declination

MN
GN 0.44° W
MN 7.79° W

(KENNA)
SCALE 1:24000



CONTOUR INTERVAL 20 FT

Printed: Mon Mar 09, 2026

038° 50' 24.1674" N
081° 40' 56.9519" W

(KENTUCK)

38081-G5-TM-024
RIPLEY, WV
JAN 1, 1975

09/25/2026

[Handwritten signature]
S-25-26

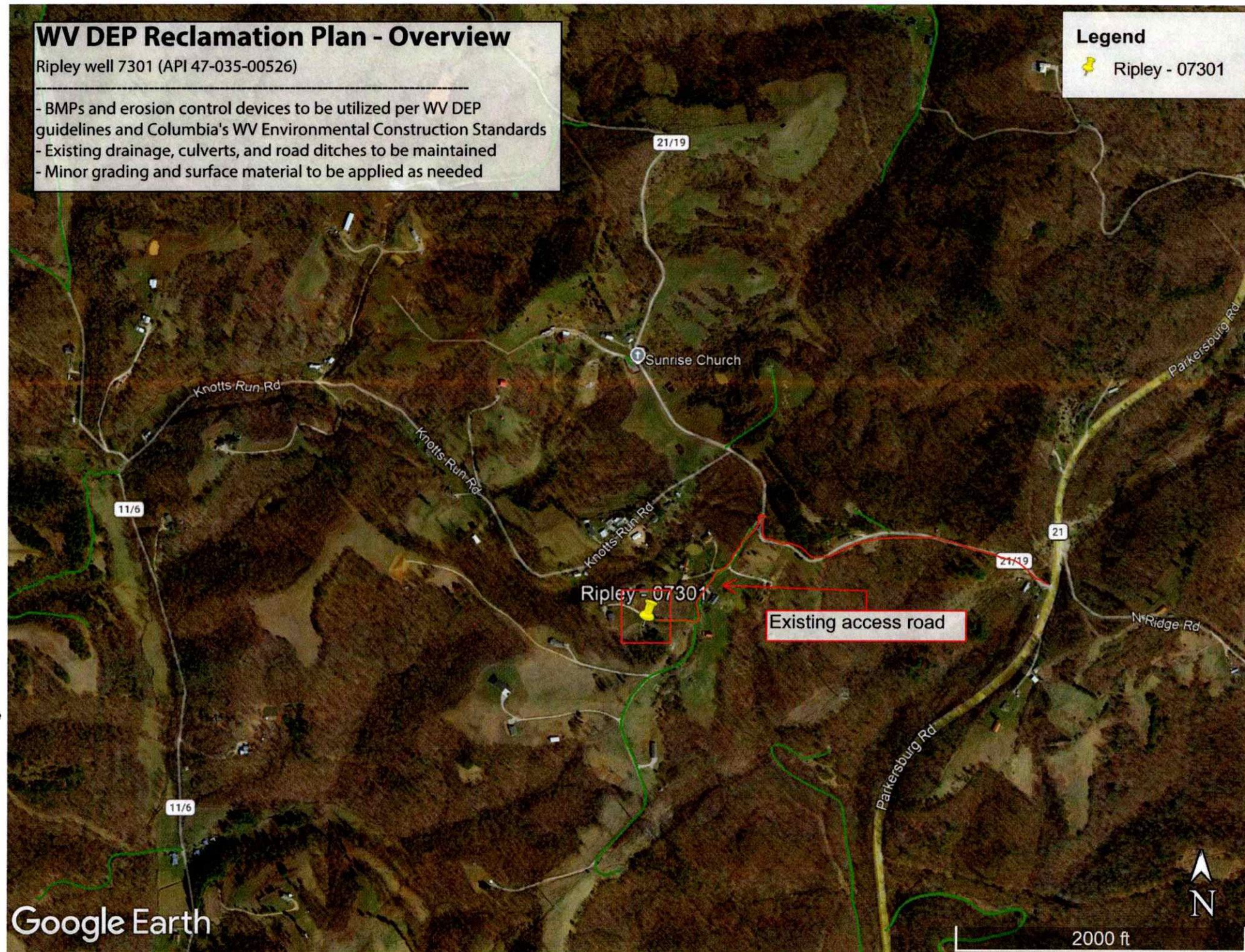
WV DEP Reclamation Plan - Overview

Ripley well 7301 (API 47-035-00526)

- 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

 Ripley - 07301



RECEIVED
Office of Oil and Gas
SEP 08 2026

WV DEP Reclamation Plan - Site Detail

Ripley well 7301 (API 47-035-00526)

- 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

- CWARY 7301
- Ripley - 07301

Existing access road

Ripley - 07301

Limit of Proposed Disturbance
on existing well site

~0.25 acre

Google Earth

300 ft

N

RECEIVED
COLUMBIA COUNTY
SEP 08 2026

Columbia Gas Transmission, LLC

1700 MacCorkle Ave., SE, Charleston, WV, USA 25314

2026, September 8th

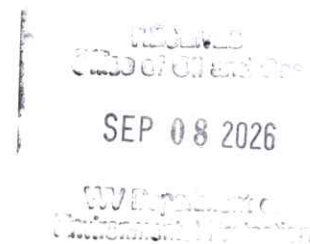
WV DEP – Office of Oil & Gas
601 57th Street, SE
Charleston, WV 25304-2345

Enclosed are well work permit applications for the following Columbia Gas Transmission existing storage wells:

Coco A 7077 (API 47-039-01236)
Coco B 7229 (API 47-039-01616)
Lanham 7126 (API 47-039-00264)
Ripley 7286 (API 47-035-00512)
Ripley 7301 (API 47-035-00526)
Ripley 7304 (API 47-035-00489)
Ripley 7344 (API 47-035-00918)
Ripley 12413 (API 47-035-02462)

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,

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

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



Samples, Casey M <casey.m.samples@wv.gov>

TC Energy 2027 project programs for permitting

3 messages

Maria Medvedeva <maria_medvedeva@tcenergy.com>

Tue, Sep 8, 2026 at 11:58 AM

To: "Samples, Casey M" <casey.m.samples@wv.gov>

Cc: "McLaughlin, Jeffrey W" <jeffrey.w.mclaughlin@wv.gov>, Renae D Whitlock <renae.d.whitlock@wv.gov>

Good afternoon Casey,

The following projects are scheduled for the 2027 well workover program. The permit application fees are listed on the right side of the table and will need to be processed by credit card. Company and card information is listed below. Please give me a call when its convenient for you to process these payments. The permit packets have been dropped off at the front desk of the Charleston WVDEP Office of Oil and Gas just now.

Company – TC Energy (Legacy Columbia Gas Transmission)

Designated Agent – Maria Medvedeva

Billing Address – 1700 MacCorkle Ave SE, Charleston WV 25314

Contact Number – 304 – 410 – 4313

Contact email – maria_medvedeva@tcenergy.com

\$5,600

STORAGE FIELD	WELL NUMBER	CONCISE SCOPE	API Permit #	Amount for payment
Coco A	7077	HRVRT cased hole log, coil cleanout and acid stimulation, if needed frac openhole	47-039-01236-0000	\$800
Coco B	7229	Coil cleanout and acid stimulation	47-039-01616-0000	\$800
Lanham	7126	Plug and abandon OB well	47-079-00264-0000	Not required
Ripley	7286	FWW, coil cleanout and acid stimulation	47-035-00512-0000	\$800
Ripley	7301	Coil cleanout and acid stimulation, HRVRT cased hole log	47-035-00526-0000	\$800
Ripley	7304	Coil cleanout and acid stimulation	47-035-00489-0000	\$800
Ripley	7344	Freshwater wash, coil cleanout and acid stimulation	47-035-00918-0000	\$800
Ripley	12413	HRVRT cased hole log, reperforate, coil cleanout and acid stimulation, if needed refrac	47-035-02462-0000	\$800

Maria (Masha) MedvedevaSenior Wells Engineer – Well Engineering & Technology
Gas Storagemaria_medvedeva@tcenergy.com

M: +1-304-410-4313

1700 MacCorkle Ave SE
Charleston, WV 25314TCEnergy.com

TC Energy
maria - medvedeva @tcenergy.com
304-410-4313

09/25/2026

Casey,

Good afternoon, \$150 of each fee will go to the funding below:

3322/9254/6869/0000

The remainder of each fee will go to the funding below:

3323/9280/6869/0000

Thank you,

Rena

[Quoted text hidden]

\$5600
total

\$1050

3322-0000-0313-9254-6869-0000

\$4550

3323-0000-0313-9280-6869-0000

WV Dept of Env. Prot.
601 57th St SE
Charleston, WV 25304
304-926-0499

SALE

REF#: 00000032
Bank ID: 000000
Batch #: 1549 RRN: 751313650752
09/08/26 14:05:53
AVS: Z CVC: M
Invoice #: WELLS

APPR CODE: 09289S
VISA Manual CP
*****4694 **/**

AMOUNT \$2,800.00

APPROVED

SIGNATURE NOT REQUIRED

I AGREE TO PAY ABOVE TOTAL AMOUNT
IN ACCORDANCE WITH CARD ISSUER'S
AGREEMENT
(MERCHANT AGREEMENT IF CREDIT VOUCHER)
RETAIN THIS COPY FOR STATEMENT
VERIFICATION

Thank You
Please Come Again

MERCHANT COPY

WV Dept of Env. Prot.
601 57th St SE
Charleston, WV 25304
304-926-0499

SALE

REF#: 00000032
Bank ID: 000000
Batch #: 1549 RRN: 251039550709
09/08/26 14:05:09
AVS: Z CVC: M
Invoice #: WELLS

APPR CODE: 04647S
VISA Manual CP
*****4694 **/**

AMOUNT \$2,800.00

APPROVED

SIGNATURE NOT REQUIRED

I AGREE TO PAY ABOVE TOTAL AMOUNT
IN ACCORDANCE WITH CARD ISSUER'S
AGREEMENT
(MERCHANT AGREEMENT IF CREDIT VOUCHER)
RETAIN THIS COPY FOR STATEMENT
VERIFICATION

Thank You
Please Come Again

MERCHANT COPY

09/25/2026