

#### 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, July 7, 2022 WELL WORK PERMIT Vertical / Re-Work

COLUMBIA GAS TRANSMISSION, LLC 1700 MACCORKLE AVENUE SE

CHARLESTON, WV 25314

Re:

Permit approval for ROCKPORT 12593

47-107-01750-00-00

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.

James A. Martin

Chief

Operator's Well Number: ROCKPORT 12593

Farm Name: WADE, CARL & DIANNE

U.S. WELL NUMBER: 47-107-01750-00-00

Vertical Re-Work

Date Issued: 7/7/2022

#### PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

#### 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.
- 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.

#### Columbia Gas Transmission, LLC

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



February 25, 2022

WV DEP - Office of Oil & Gas 601 57<sup>th</sup> Street, SE Charleston, WV 25304-2345

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

Rockport 12593 (API 107-01750)

Please email to address below, and return hardcopies of permits to: CK# 055285

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

If you have questions, feel free to call.

Regards,

Maria Medvedeva Senior Wells Engineer

Well Engineering & Technology

Columbia Gas Transmission, LLC

Off: 304-357-2445 Mob: 304-410-4313

maria medvedeva@tcenergy.com

PECEIVED Office of Oil and Gas

MAR 1 0 2022

WV Department of Environmental Protection

WW - 2B (Rev. 8/10)

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

| 1) Well Operato   | or: Colur              | nbia Gas              | Transmission, LL   | C 307032         | Wood             | Steele                                   | Rockport                               |
|---|------------------------|-----------------------|--|------------------|------------------|--|--|
|   | -                      |                       |  | Operator ID      | County           | District                                 | Quadrangle                             |
| 2) Operator's V   | Vell Numb              | er: Rock              | oort 12593   |                  | 3) Elevation:    | 1061                                     |  |
| 4) Well Type: (a  | a) Oil                 | or Ga                 | as X   |                  |                  |  |  |
| (t  | o) If Gas:             | Produ                 | iction / Und   | erground Sto     | rage X           |  |  |
|   |                        | Deep                  | o <u>X</u> / S   | hallow           |                  |  |  |
| <ul><li>6) Proposed To</li><li>7) Approximate</li></ul> | otal Depth<br>fresh wa | : 5870 (exist         | : Oriskany  ting) Feet F  a depths: No water in  1972 - 2270' MD / 197 | ormation at I    | Proposed Total   | rget Depth: <u>57</u><br>al Depth: Helde |  |
| 9) Approximate  | coal sea               | m depth:              | S: None reported b   | y driller 2013   |                  | 01                                       | RECEIVED                               |
| 10) Approximat  | te void de             | pths.(coa             | al, Karst, other):   | None reported    | by driller 2013  |  | MAR 1 0 2022                           |
|   |                        |                       | s tributary to acti  |                  |                  | W<br>Enviro                              | V Department of<br>onmental Protection |
| Attempt to tighten                                      | 7" csg conr            | ection at             | nd fracturing metho<br>3300' MD. If not suc<br>complete. Frac info     | cessful, perfora | te 7" casing and | squeeze cemer                            | nt, install new                        |
| casing and equip  |                        |                       |  |                  |                  |  |  |
| 13)<br>TYPE S   | SPECIFIC               | and the second second | ASING AND TUB  | ING PROGR        | AM * existing    | _  | ıT                                     |
|   | Size                   | Grade                 | Weight per ft  | For Drilling     | Left in Well     | Fill -up (Cu.                            |  |
| Conductor   | 20 *                   | B-35                  | 59   | 41               | 24               | at surfa                                 |  |
| Fresh Water   | 13.375 *               | H-40                  | 48   | 448              | 431              | 400 sx / su                              |  |
| Coal  |                        |                       |  | W10 1519004      |                  |  |  |
| Intermediate  | 9.625 *                | J-55                  | 36   | 2318             | 2301             | 760 sx / su                              | ırface                                 |
| Production  | 7 *                    | N-80                  | 23   | 5709             | 5692             | 160 sx / @                               | 4590'                                  |
| Production  | 4.5                    | L-80                  | 11.6   | 5883             | 5870             | 685                                      | sk cts                                 |
| Liners  |                        |                       |  |                  |                  |  |  |
| Packers: Kind<br>Size<br>Dep                            |                        |                       |  |                  |                  | ) /A                                     | 2 <del>7</del> 207/08/2022             |

| WELL JOB PLAN |                      | STS Well Engineering & Technology |          |            | PAGE 3     | DATE JOB PREPARED:   | 2/14/2022 |
|---------------|----------------------|-----------------------------------|----------|------------|------------|----------------------|-----------|
| Objective: I  | ntegrity Improvement |                                   |          |            |            | LAST PROFILE UPDATE: |           |
| TITLE:        | Collar leak repair   |                                   |          |            | WORK TYPE: | GPMC                 |           |
| FIELD:        | Rockport             | WELL:                             | 12593    |            |            |                      |           |
| STAT:         | WV                   | SHL (Lat/Long):                   | 39.06037 | -81.551477 | API:       | 47-107-0175-0000     |           |
| TWP:          | Steele               | BHL (Lat/Long):                   | 39.06409 | -81.5497   | CNTY:      | Wood                 |           |
| The Cales     |                      |                                   | PR       | OCEDURE    |            |                      | 1.        |

NOTE: Directional well profile. Gauge ring lost in the hole – appears to be at 5632' MD. Well has RBP set at 5568' MD / 5145 TVD and wellbore loaded with kill fluid 02/11/2020.

- Cyclic 7" x 9-5/8" annular pressure from storage gas / native Devonian gas. Collar leak @ ~3300' MD (~39deg inclination, avg DLS at 3300 ft MD is 3 deg, highest DLS above 3300 ft MD is 7 deg @ 2825 ft MD).

- Fluid level per 5/28/2020 Echometer at 3260'. Annulus left venting on 07/09/2020.

### 4710701750

#### Attempt to tighten the leaking 7" csg connection

- Obtain State well work permit, EM&CP, pipeline crossing evaluation, call before you dig, etc. Prepare site specific SPCC.
- Notify landowner.
- 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 initial flowstring and 7" x 9-5/8" annular pressures.
- 10 Blow down and load wellbore with fresh water kill fluid. Blow down annulus and leave venting.
- 11 Install second RBP @ ~5000' MD.
- 12 MIRU service rig.
- 13 Remove wellhead, unset slips on 7" casing and weld on pulling nipple.
- 14 Strip / NU 9" or 13" annular BOP on top of the casing head there is no way of testing.
- 15 Perform baseine pre-work 7" casing pressure test to 2200 psi at surface. Chart leak-off rate to compare to later.
- 16 Pull and attempt to tigheten connection leaks as follows:
  - a. Pull 70 Klbs over hook load and tighten.
  - b. Pull 75 Klbs over hook load and tighten.
  - c. Pull 80 Klbs over hook load and tighten.
  - d. Pull 85 Klbs over hook load and tighten.
- 17 Pressure test casing to 2200 psig surface. Consult with WE&T engineer.

If pressure test passes and leak is resolved proceed to Step 18.

If pressure test fails process to Step 30.

- 18 NP annular BOP and reinstall DSPA and MV.
- 19 Pressure test wellhead seals.
- 20 NU 7" BOPs (double ram + annular) and pressure test to 250 psi low and 2200 psi high.
- 21 Pull RBPs with wireline.
- 22 Fish lost gauge ring and clean to TD.
- 23 Swab well to re-establish gas flow.
- 24 RDMO and reconnect to pipeline.
- 25 Notify WET Project Support that well is back in-service.
- 26 Reclaim R&L.
- 27 Commission well by completing, processing, and retain for records the Wellsite Review and Turnover Form.
- 28 Work is complete. Notify REG / WE&T that well is ready for storage service.

#### If pressure test failed.

- 30 ND annular BOP, pull and reset 7" casing slips. Install new casing spool.
- 31 Pressure test wellhead seals.
- 32 NU 7" BOPs (double ram + annular) and pressure test 250 psi low and 2200 psi high.
- 33 Pull RBPs with wireline.
- 34 Fish lost gauge ring.
- 35 Proceed to step 40.

#### Perforate-Squeeze Cement. Install new 4-1/2" Flowstring

- 40 Install composite DBP at ~3500'.
- 41 Perforate 7" caing at ~3480' and perform an injection / circulation test.

If circulation is established, proceed with procedure.

If circulation is not established, consult with WE&T engineer.

- 42 Install composite cement retainer above perforations, TIH, squeeze cement to surface, TOOH and WOC.
- 43 Drill cement retainer and cement down to DBP.
- 44 Obtain a CBL.

PREPARED BY: Maria Medvedeva REVIEWED BY: Jim Amos APPROVED: Brent Crises

PREP DATE: 2/14/2022

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WV Department of Environmental Protection

| WELL JOB PLAN |                       | STS Well Engineering & Technology |              |                | PAGE 4   | DATE JOB PREPARED:   | 2/14/2022 |
|---------------|-----------------------|-----------------------------------|--------------|----------------|--|----------------------|-----------|
| Objective: I  | Integrity Improvement |                                   |              |                |  | LAST PROFILE UPDATE: |           |
| TITLE:        | Collar leak repair    |                                   |              |                | WORK TYPE:   | GPMC                 |           |
| FIELD:        | Rockport              | WELL:                             | 12593        |                | The state of the s |                      |           |
| STAT:         | WV                    | SHL (Lat/Long):                   | 39.06037     | -81.551477     | API:   | 47-107-0175-0000     |           |
| DIST/TWP:     | Steele                | BHL (Lat/Long):                   | 39.06409     | -81.5497       | CNTY:  | Wood                 |           |
|               |                       | MANA                              | GEMENT OF CI | HANGE (MOC) DI | ETAILS   |                      |           |

State reason for MOC.

4710701750W

- Pressure test connection leak to an equivalent bottom-hole pressure of 2200 psig at depht of connection leak.
- 46 Drill out composite DBP and clean to TD.
- 47 Run new 4-1/2" casing and cement to surface per Cementing Procedure.
- 48 WOC duration to be determined by cement compressive strength lab testing results.
- 49 Obtain a CBL and HRVRT logs.
- 50 Pressure test casing to 5000 psig surface pressure, for future stimulation.
- ND BOPs and install remainder of new wellhead. 51
- 52 RIH and spot 500 gals 20% HCl acid and TFW.
- 53 Perforate and perform acid breakdown,
- Swab / flow well to re-establish gas flow.
- 55 Fracture stimulate if deemed necessary per Frac Procedure.
  - Flow well to re-establish gas flow and perform 60 minute flowback test.
- 56 Notify WET Project Support that well is back in-service.
- 57 Reclaim R&L.
- 58 Reconnect well line.
- 59 Paint wellhead and well line.
- 60 Commission well by completing, processing, and retain for records the Wellsite Review and Turnover Form.
- 61 Notify REG that well is ready for storage service.

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MAR 1 0 2022

WV Department of Environmental Protection

PREPARED BY: REVIEWED BY: APPROVED: Maria Medvedeva Brent Criser Jim Amos PREP DATE: 2/14/2022

WR-35 Rev. 8/23/13 Page 1 of 4

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

- Well record summary

| API 47 - 107 - 01750 County Wood   | District Ste                        | eele                        |
|--|-------------------------------------|-----------------------------|
|  |                                     | Name Rockport               |
| Farm name Wade, Carl & Dianne  | Well Numl                           |                             |
| Operator (as registered with the OOG) Columbia Gas Tra   | nsmission, LLC                      | Y                           |
| Address 1700 MacCorkle Ave SE City Cha   | arleston State                      | WV Zip 25325-1273           |
| Top hole Northing 39.060372 / 4,3  |                                     | 475 / 452,287.3             |
| Landing Point of Curve Northing N/A - not horizo   |                                     |                             |
| Bottom Hole Northing 39.064096 / 4,3   | 24,033.2 Easting -81.5496           | 699 / 452,443.4             |
| Elevation (ft) 1061 GL Type of Well  | ■New □ Existing Type of             | of Report □Interim ■Final   |
| Permit Type 📱 Deviated 🗆 Horizontal 🗆 Horizon  | tal 6A   Vertical Depth             | Type 🖪 Deep 🗆 Shallow       |
| Type of Operation □ Convert □ Deepen ■ Drill □   | Plug Back   Redrilling   I          | Rework    Stimulate         |
| Well Type □ Brine Disposal □ CBM □ Gas □ Oil □ Sec   | ondary Recovery   Solution Min      | ing ■ Storage □ Other       |
| Type of Completion ■ Single □ Multiple Fluids Produ  | ced □ Brine ■Gas □ NGL              | □ Oil □ Other               |
| Drilled with □ Cable ■ Rotary  |                                     |                             |
| Drilling Media Surface hole ■ Air □ Mud □ Fresh Wa  Production hole □ Air ■ Mud □ Fresh Water □ Bring  Mud Type(s) and Additive(s) |                                     | ■ Mud □ Fresh Water □ Brine |
| Intermediate: fresh water base w/ polymer + KCl + s  | tarch + atapuigite                  |                             |
| Production: fresh water base w/ polymer + starch   |                                     |                             |
| Date permit issued   |                                     | e drilling ceased11/11/14   |
| but completion activities organ  | Date completion activities cease    | NI/A                        |
| Verbal plugging (Y/N)N Date permission granted   | d N/A Granted                       | byN/A                       |
| Please note: Operator is required to submit a plugging application   | ation within 5 days of verbal permi | ssion to plug               |
| Freshwater depth(s) ft none encountered  | Open mine(s) (Y/N) depths           | N                           |
| Salt water depth(s) ft 2140 - 2270   | Void(s) encountered (Y/N) depth     |                             |
| Coal depth(s) ftnone encountered   | Cavern(s) encountered (Y/N) dep     | ths N                       |
| Is coal being mined in area (Y/N)N   | FIECEIVED Office of Oil and Gas     | Reviewed by:                |
|  | MAR 1 0 2022                        | JPJ                         |

|  |   |                    |                          | *              |                                |                           |                       |               |                                 |
|--|---|--------------------|--------------------------|----------------|--------------------------------|---------------------------|-----------------------|---------------|---------------------------------|
| WR-35<br>Rev. 8/23/13                              |   |                    |                          |                |                                |                           |                       | P             | Page _2 of _4                   |
| API 47- 107  | _ 01750   | _ Farm na          | <sub>me</sub> Wade, 0    | Carl & Diar    | ne                             | Well                      | number_12             | 593           |                                 |
| CASING<br>STRINGS                                  |   | Casing<br>Size     | Depth                    | New or<br>Used | Grade<br>wt/ft                 | •                         | Basket<br>Depth(s)    | Did cement    | circulate (Y/ N) details below* |
| Conductor  | 24"   | 20"                | 41' KB                   | New            | 1                              | 5 / 59 ppf                | none                  | Trovide (     | Y                               |
| Surface  | 17.5"   | 13.375"            | 448' KB                  | New            |                                | 0 / 48 ppf                | none                  |               | Y                               |
| Coal   |   |                    |                          | 1              | 1                              | эт торы                   | riono                 |               |                                 |
| intermediate 1                                     | 12.25   | 9.625"             | 2318' KB                 | New            | J-55                           | 5 / 36 ppf                | none                  |               | Y                               |
| intermediate 2                                     |   |                    | -                        | <b>+</b>       | 1                              | РР.                       |                       |               |                                 |
| intermediate 3                                     |   |                    |                          |                |                                |                           |                       |               |                                 |
| Production   | 8.75  | 7"                 | 5709' KB                 | New            | N-80                           | 0 / 23 ppf                | None                  | <del> </del>  | N                               |
| Tubing   |   |                    |                          | 1              | 1                              |                           |                       | <del> </del>  |                                 |
| acker type and d                                   | epth set  |                    |                          |                |                                |                           |                       |               |                                 |
| Comment Details                                    |   |                    |                          |                |                                |                           | 18                    |               |                                 |
| CEMENT<br>DATA                                     | Class/Type<br>of Cement   | Number<br>of Sacks | · Frage                  |                | Yield<br>ft <sup>3</sup> /sks) | Volume (ft <sup>3</sup> ) | Ceme<br>Top (M        |               | WOC<br>(hrs)                    |
| Conductor  | Neat  | 34                 | 15.                      |                | 1.18                           | 42                        | 0                     |               | 16                              |
| Surface  | Class A   | 400                | 15.                      | .6             | 1.19                           | 476                       | 0                     |               | 10                              |
| Coal   |   |                    |                          |                |                                |                           |                       |               |                                 |
| ntermediate 1                                      | 65-35 Poz / Class A   | 600 / 160          | 0 13.1 /                 | 15.6 1.7       | 1 / 1.19                       | 1026 / 190                | 0                     |               | 12                              |
| ntermediate 2                                      |   |                    |                          |                |                                |                           |                       |               |                                 |
| ntermediate 3                                      |   |                    |                          |                |                                |                           |                       |               |                                 |
| roduction  | Class A   | 160                | 15.                      | 6              | 1.21                           | 194                       | 459                   | 0             | 36                              |
| ubing  |   |                    |                          |                |                                |                           |                       |               |                                 |
| Orillers TD (ft                                    | 5870  |                    |                          | Loggers 7      | TD (A) 58                      | 51                        |                       |               |                                 |
|  | tion penetrated Helde   | erberg dolomite    |                          | Plug back      |                                |                           |                       |               |                                 |
| lug back pro                                       | • —   |                    |                          | _ 1146 0401    | (11)_                          |                           |                       |               |                                 |
| Cick off depth                                     | (ft) 2394   |                    |                          |                | *****                          |                           | žilty v o             |               |                                 |
| Check all wire                                     | line logs run   | a caliper neutron  | ■ density  □ resistivity |                | ted/directi<br>a ray           |                           | duction<br>emperature | □sonic        |                                 |
| Vell cored   | Yes No  | Convention         | nal Side                 | wall           | W                              | ere cuttings              | collected =           | ıYes □ N      | Vo                              |
| ESCRIBE T  | HE CENTRALIZER  | R PLACEME          | NT USED FO               | OR EACH C      | ASING S                        | TRING                     |                       |               | 13.70mm                         |
| 3.375" csg: four bow-spr<br>0.625" csg: six bow-sp | ing on its 1, 3, 5, and 7<br>pring on its 1, 10, 20, 30, 40, an | nd 50              |                          |                | -                              |                           |                       | Offi          | RECEIVED<br>lee of Oil and (    |
|  | on jts 1, 2, 3, 4, 5, and 6 - six t                             |                    | 8, 10, 12, 13, and 14    | 4.             |                                |                           |                       | 1.1           | AD * 2 222                      |
|  |   |                    |                          |                |                                |                           |                       | IVI)          | AK 1 0 2022                     |
| VAS WELL C   | COMPLETED AS S  | HOT HOLE           | □ Yes 🛔                  | No D           | ETAILS                         |                           |                       | WV<br>Enviror | Department on mental Protect    |
| VAS WELL C   | COMPLETED OPEN  | N HOLE?            | ■ Yes □ N                | lo DET         | AILS 6.                        | 125" borehole from        | m 5720 to 5870 ft.    |               |                                 |
|  |   |                    |                          |                |                                |                           |                       |               |                                 |
| ERE TRACI  | ERS USED □ Yes  | ■ No               | TYPE OF T                | RACER(S)       | USED _                         | -                         |                       |               |                                 |

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| WR-  | 35     |   |
|------|--------|---|
| Rev. | 8/23/1 | 3 |

Page 3 of 4

| API | 47- 107 | 01750 | Farm name | Wade, Carl & Dianne | Well number | 12593 |
|-----|---------|-------|-----------|---------------------|-------------|-------|
|     |         |       |           |                     | T           |       |

#### PERFORATION RECORD

| Stage<br>No. | Perforation date | Perforated from MD ft. | Perforated to MD ft. | Number of<br>Perforations | Formation(s) |
|--------------|------------------|------------------------|----------------------|---------------------------|--------------|
|              | 4                | N/A                    | N/A                  |                           |              |
|              |                  |                        |                      |                           |              |
|              |                  |                        |                      |                           |              |
|              |                  |                        |                      |                           |              |
|              |                  |                        |                      |                           |              |
|              |                  |                        |                      |                           |              |
|              |                  |                        | St.                  |                           |              |
|              |                  |                        |                      |                           |              |
|              |                  |                        |                      |                           |              |
|              |                  |                        |                      |                           |              |
|              |                  |                        |                      |                           |              |
|              | 0                |                        |                      |                           |              |
|              | 3 8              |                        |                      |                           |              |
|              | ČÁ.              |                        |                      |                           |              |
|              |                  |                        |                      |                           |              |
|              | 9                |                        |                      |                           |              |
|              |                  |                        |                      |                           |              |
|              |                  |                        | L                    |                           |              |

Please insert additional pages as applicable.

#### STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

| Stage<br>No. | Stimulations<br>Date | Ave Pump<br>Rate (BPM) | Ave Treatment<br>Pressure (PSI) | Max Breakdown<br>Pressure (PSI) | ISIP (PSI) | Amount of<br>Proppant (lbs)                      | Amount of<br>Water (bbls) | Amount of<br>Nitrogen/other (units) |
|--------------|----------------------|------------------------|---------------------------------|---------------------------------|------------|--|---------------------------|-------------------------------------|
| 1            | 12/8/14              | 20                     | 3200                            | 2600                            | 3680       | 29700  | 638                       | 239 MSCF N2                         |
|              |                      |                        |                                 |                                 |            |  |                           |                                     |
|              |                      | -                      |                                 |                                 |            |  |                           |                                     |
|              |                      |                        |                                 |                                 |            | <del> </del>                                     |                           |                                     |
|              |                      |                        |                                 | <del> </del>                    |            | <u> </u>   |                           |                                     |
|              | -                    |                        |                                 |                                 |            |  |                           |                                     |
| -            |                      |                        |                                 |                                 |            |  |                           |                                     |
|              |                      |                        |                                 |                                 |            | <u> </u>   |                           |                                     |
|              |                      |                        |                                 |                                 |            |  |                           |                                     |
|              |                      |                        |                                 |                                 |            |  |                           |                                     |
|              |                      |                        |                                 |                                 |            |  |                           | RECEIVED                            |
|              |                      |                        |                                 |                                 |            |  | - 00                      | ce of Oil and Gas                   |
|              |                      |                        |                                 |                                 |            |  | l N                       | AR 1 0 2022                         |
|              |                      |                        |                                 |                                 |            |  | iv.                       | 0 2022                              |
|              |                      |                        |                                 |                                 |            |  | , W                       | / Department of nmental Protection  |
|              |                      |                        |                                 |                                 |            | <del>                                     </del> | - Payiro                  | nmental Protection                  |
|              |                      |                        |                                 | -                               |            | <del> </del>                                     |                           |                                     |
|              |                      |                        |                                 |                                 |            |  | L                         |                                     |

Please insert additional pages as applicable.

50/

| WR-35<br>Rev. 8/23/13            |                     |                                       |                  |                  |  |  |                 | Pa             | age <u>4</u> of <u>4</u> |
|----------------------------------|---------------------|---------------------------------------|------------------|------------------|--|--|-----------------|----------------|--------------------------|
| API 47- 107                      | _ 01750             | Farm                                  | name Wade, (     | Carl & Diani     | ne   | Well nu  | mber 1259       | )3             |                          |
| M1 +/-                           | ·                   | Taim                                  | name             |                  | ALTERNATION AND ADMINISTRATION A | wen no   | imber           |                |                          |
| PRODUCING                        | FORMATION           | (S)                                   | DEPTHS           |                  |  |  |                 |                |                          |
| Oriskany Sands                   | stone               |                                       | 5323 - 5370      | TVD 5            | 741 - 5788   | MD   |                 |                |                          |
|                                  |                     | · · · · · · · · · · · · · · · · · · · |                  |                  |  |  |                 |                |                          |
| <del></del>                      |                     |                                       |                  |                  |  |  |                 |                |                          |
|                                  |                     |                                       |                  |                  |  |  |                 |                |                          |
| Please insert ad                 | ditional pages      | as annlicable                         |                  |                  |  |  |                 |                |                          |
|                                  | T                   |                                       |                  |                  |  |  |                 |                |                          |
| GAS TEST                         | □ Build up          | □ Drawdown                            | ■ Open Flow      | 0                | IL TEST 🗆  | Flow 🗆 l   | Pump            |                |                          |
| SHUT-IN PRE                      | SSURE Sur           | face_1050                             | _psi Botto       | om Hole          | psi  | DURATI   | ON OF TES       | ST             | hrs                      |
| OPEN FLOW                        | Gas                 | Oil                                   | NGL              |                  | Vater  |  | EASURED         | RV             | 8                        |
|                                  |                     |                                       | bpd              |                  |  |  | ated Or         |                | ilot                     |
|                                  |                     |                                       | 5 10-176         |                  |  | The second secon |                 |                |                          |
| LITHOLOGY/                       | TOP                 | воттом                                | TOP              | BOTTOM           |  |  |                 |                |                          |
| FORMATION                        | DEPTH IN FT         | DEPTH IN FT                           | DEPTH IN FT      | DEPTH IN FT      | DESCRIBE   | ROCK TYPE  | AND RECOR       | D QUANTIT      | YAND                     |
|                                  | NAME TVD            | TVD                                   | MD               | MD               |  |  | HWATER, BR      |                |                          |
| siltstone                        | 0                   | 46                                    | 0                | 46               |  |  | none            |                |                          |
| şand                             | 46                  | 476                                   | 46               | ; 476            |  |  | none            |                |                          |
| shale, sand, siltstone           | 476                 | 1972                                  | 476              | 1972             | Re   | ed Rock 1264   | 4 - 1428' & 152 | 26 - 1586', No | Fluid                    |
| Salt Sand                        | 1972                | 2270                                  | 1972             | 2270             |  |  | salt water      |                |                          |
| Pocono shale                     | 2270                | 2614                                  | 2270             | 2616             | <del> </del>   |  | none            |                |                          |
| Coffee / Sunbury shale           | 2614                | 2632                                  | 2616             | 2634             | -  |  | none            |                |                          |
| Berea horizon                    | 2632                | 2634                                  | 2634             | 2636             |  | -  | none            |                |                          |
| Devonian shale  Marcellus shale  | 2634                | 5192                                  | 2636             | 5610             |  | _  | none            |                |                          |
| Onondaga limestone               | 5192<br>5204        | 5204                                  | 5610             | 5622             | +  |  | none            |                |                          |
| Oriskany sandstone               | 5323                | 5323<br>5342                          | 5622             | 5741<br>5760     |  |  | none            | nanana.        | Ossi- REC                |
| Oriskany sandstone               | 5342                | 5370                                  | 5741<br>5760     | 5760             |  |  | ipper, storage  |                | Office of                |
| -leiderberg limestone            | 5370                | 5451                                  | 5788             | 5788<br>5870     |  |  | lower, storage  | gas            | MAR T                    |
| TD                               | 50.0                | 5451                                  | 3700             | 5870             | <del> </del>   |  | none            |                | MAR 1                    |
| Please insert ad                 | ditional pages :    | 595,5377.5                            |                  | 3070             |  |  |                 |                | WV Depar                 |
|                                  |                     |                                       |                  |                  |  |  |                 |                | Environmenta             |
| Drilling Contrac                 |                     | g, LLC                                |                  | M Maria          |  |  | DA              | 45040          |                          |
| Address 313 Ste                  | ele I III Road      |                                       | City             | Mt. Morris       |  | State _  | PA Zip          | 15349          |                          |
| Logging Compa                    | any Baker Atlas     | Logging                               |                  |                  |  |  |                 |                |                          |
| Address W Main                   |                     |                                       | City             | Buckhannon       |  | State  | WV Zip          | 26201          |                          |
|                                  | Habia               | I Wall Canada                         | N-h              |                  |  |  |                 |                |                          |
| Cementing Con<br>Address Route 5 |                     |                                       |                  | Dunkk            | laua I   |  | AD / / \AC /    | 00004 155      | 070                      |
| Address Rodie 5                  | 1 1411 Nu / 520 ING | usulai raik Ku                        | City             | Buckhannon /     | Jane Léw   | State _\   | WV/WV Zip       | 26201 / 26     | 3/8                      |
| Stimulating Cor                  | npany Nabor         | s Completion &                        | Production       |                  |  |  |                 |                |                          |
| Address 528 Ind                  |                     |                                       | City             | Jane Lew         |  | State \  | AV Zip          | 26378          |                          |
| Please insert add                |                     | as applicable.                        |                  |                  |  |  |                 |                |                          |
| Completed by                     | James Amos          |                                       |                  |                  | Telephone  | 304-483-0  | 073             |                |                          |
| Signature                        | - C                 |                                       | Title St         | Well Services I  |  |  |                 | /.             |                          |
| J.g.ia.u.c                       | fine E              | Um                                    | IIIle            | TOIL OUI VICES I |  | D  | ate /2/         | 23/14          | _                        |
| Submittal of Hy                  | draulic Fractur     | ing Chemical I                        | Disclosure Infor | mation A         | Attach copy of   | f FRACFO   | CUS Regist      | trv            |                          |
|                                  |                     | -                                     |                  |                  | -FJ 0  |  |                 |                |                          |

07/08/2022

| WW-2  | 2A    |
|-------|-------|
| (Rev. | 6-14) |

1). Date:

02/15/2022

2.) Operator's Well Number

Rockport 12593

State

County

Permit

3.) API Well No .:

47-

\_\_\_107\_\_\_ - \_\_\_01750

# 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:                                 | 5) (a) Coal Ope        | rator                            |  |
|------------------|--|------------------------|----------------------------------|--|
| (a) Nam          | ne Carl E. and Dianne L. Wade                          |                        | Not operated                     |  |
| Address          | 9784 Slate Creek Road                                  | Address                |                                  |  |
|                  | Rockport, WV 26169                                     |                        |                                  |  |
| (b) Nam          |  | (b) Coal Ov            | vner(s) with Declaration         |  |
| Address          |  | Name                   | Not operated                     | 59   |
|                  |  | Address                | 110t operated                    |  |
|                  |  |                        | 2                                |  |
| (c) Nam          | ie.  | Name                   | P                                | Office of Oil and Gaz                        |
| Address          |  | Address                | B                                | and Gaz                                      |
| 71001000         |  | Address                |                                  | MAR 1 n 2022                                 |
| 6) Inspector     | loo Toylor O/  | (a) Cool I o           | anna with Daalaastiaa            | - 0 5055                                     |
| Address          |  |                        | ssee with Declaration            | WV Department of<br>Environmental Protection |
| Address          |  | Name                   | Not operated                     |  |
| <b>T</b> ( )     | Ripley, WV 25271                                       | Address                |                                  |  |
| Telephor         |  |                        |                                  |  |
|                  | TO THE PERSONS N                                       | IAMED ABOVE TA         | KE NOTICE THAT:                  |  |
| Included         | is the lease or leases or other continui               | ng contract or contra  | cts by which I hold the right    | t to extract oil and gas                     |
| <u>OR</u>        |  |                        |                                  |  |
| × Included       | is the information required by Chapter                 | 22, Article 6, Section | 8(d) of the Code of West \       | √irginia (see page 2)                        |
| I cer            | tify that as required under Chapter 22                 | -6 of the West Virgin  | <u>nia Code</u> I have served co | pies of this notice and                      |
| application, a   | location plat, and accompanying docu                   | ments pages 1 through  | gh on the above name             | d parties by:                                |
|                  | Personal Service (Affidavit at                         |                        |                                  |  |
|                  | x Certified Mail (Postmarked po                        | ostal receipt attached | )                                |  |
| Lhov             | Publication (Notice of Publica                         |                        |                                  |  |
| issued under     | e read and understand Chapter 22-6 a this application. | and 35 CSR 4, and I    | agree to the terms and c         | conditions of any permit                     |
|                  | tify under penalty of law that I have pe               | reanally avamined a    | nd am familiar with the inf      | Lamestine and control                        |
| this application | on form and all attachments, and that                  | hased on my inquiry    | of those individuals imme        | ormation submitted on                        |
| obtaining the    | information, I believe that the informati              | on is true, accurate a | and complete                     | ediately responsible for                     |
| Ĭam              | aware that there are significant penalti               | es for submitting fals | e information, including the     | e possibility of fine and                    |
| imprisonment     | t  | ar var anarmining rais | a mannadan, malading the         | possibility of fifte and                     |
| WEST L           | official seal Well Operate                             | or Columbia Gas        | Transmission, LLC                | march 1                                      |
| 12/ 12           | NOTARY PUBLIC STATE OF WEST VIRGINIA                   | y: Maria Medved        | eva //9                          |  |
| E ME TO          | Michael T. Donnally                                    |                        | ngineer Storage Tech             | nical Services                               |
|                  | 3940 Green Valley Road Huntington WV 25701 Addres      | s: 1700 MacCork        | de Ave SF                        | 711007 001 11000                             |
| Santa City       | My Commission Expires October 30, 2026                 | Charleston W           |                                  |  |
| - annimi         | Telephon   | e: 304-410-4313        |                                  |  |
|                  | Ema  |                        | leva@tcenergv.com                |  |
| Subscribed a     | nd sworn before me this 28th day                       | of Februar             | , 2022                           |  |
|                  | n  |                        | -                                |  |
| 9                | mehalls. Konnelly                                      |                        | Notary Public                    |  |
| My Commissi      | on Expires 10-30-2026                                  |                        |                                  |  |
| Oil and Gas Priv | acy 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 07/08/2022

#### Columbia Gas Transmission, LLC

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





February 25, 2022

Carl E. and Dianne L. Wade 9784 Slate Creek Road Rockport, WV 26169

Columbia Gas Transmission, LLC is applying for a permit to the WV Department of Environmental Protection - Office of Oil and Gas, to repair an existing underground natural gas storage well located on property owned by you. As reference, the field and well ID is Rockport 12593 (API 47-107-01750).

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.

1. Article Addressed to:

DQ Earm 2811 July 2020 DENI 7520 02 000 0052

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

> RECEIVED Office of Oil and Gas MAR 1 0 2022 WV Department of Environmental Protection

CERTIFIED MAIL® RECEIPT П Domestic Mail Only 35 20 \$3.75 18 Services & Fees (check to 001 Certified Mail Restricted Deli Adult Signature Required 970 \$8.95 7027 & Vianne SENDER: COMPLETE THIS SECTION COMPLETE THIS SECTION ON DELIVERY Complete items 1, 2, and 3. ☐ Agent Print your name and address on the reverse so that we can return the card to you. ☐ Addresse B. Received by (Printed Name) C. Date of Deliver Attach this card to the back of the mailpiece, or on the front if space permits. D. Is delivery address different from item 1? Carl E. Wade & Bianne L. Wade If YES, enter delivery address below: 9784 State Creek Road fookport, WV 26169 3. Service Type ☐ Priority Mail Express® ☐ Adult Signature ☐ Registered Mail™ Adult Signature Restricted Delivery Certified Mail® ☐ Registered Mail Restrict 9590 9402 6856 1104 6318 56 Certified Mail Restricted Delivery ☐ Signature Confirmation Collect on Delivery Restricted Delivery 9 Article Number (Transfer from service label 7021 1970 0001 1850 3669 Mail Restricted Delivery

U.S. Postal Service™

www.tcenergy.com

WW-2A Surface Waiver (4/16)

#### SURFACE OWNER WAIVER

| County | Wood | Operator             | Columbia Gas Transmission LLC |
|--------|------|----------------------|-------------------------------|
|        |      | Operator well number | Rockport 12593                |

#### **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 57<sup>th</sup> St. SE Charleston, WV 25304 (304) 926-0450

<u>Time Limits and methods for filing comments.</u> The law requires these materials to be served on or before the date the operator files his Application. You have **FIFTEN (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.

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

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

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

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

<u>List of Water Testing Laboratories.</u> 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. |  |      |
|-----------------------------------|---------------|--------------------------------------|--|------|
|                                   | Date          | Company<br>Name                      | Office of Oil and Gas                        |      |
| Signature                         | <del></del> : | Ву                                   | MAR 1 0 2022                                 |      |
| <del>-</del>                      |               | Its                                  | WV Department of<br>Environmental Protection | Date |
| Print Name                        |               | Si                                   | ignature                                     | Date |

07/08/2022

### COAL OPERATOR, OWNER, OR LESSEE WAIVER

| County Wood   |  |  |                             | * coal not                       | operated                   |         |                   |
|---|--|--|-----------------------------|----------------------------------|----------------------------|---------|-------------------|
| County Wood Operator Columbia Gas Transmission LLC  | Operator                               | 's Well Nur  | mber                        | Rockp                            | ort 1259                   | 93      |                   |
|   |  |  |                             |                                  |                            |         |                   |
| INSTRUCTIONS TO C   | OAL OPER                               | RATOR, O   | WNER                        | , OR LE                          | SSEE                       |         |                   |
| To the coal operator, owner, or less any objection you wish to make or are receivith the Chief of the Office of Oil and Gaby the Office. Mail objections to:  | quired to m                            | ake by WV  | Code /                      | 22-6-15                          | i, 16 or 17,               | must l  | be filed          |
| Chief, Office of Oil and Gas Department of Environmental Protection 601 57 <sup>th</sup> St. SE Charleston, WV 25304 (304) 926-0499 extension 1654  |  |  |                             |                                  |                            |         |                   |
|   | WAIV                                   | ER   |                             |                                  |                            |         |                   |
| The undersigned coal operatorlocation has examined this proposed well location, the well location has been added work proposed to be done at this location, requirements of the West Virginia Code as | location. I<br>to the mir<br>provided, | f a mine mand mand mander for the map. The the well op | ap exis<br>ne und<br>erator | sts which<br>ersigned<br>has con | n covers th<br>I has no ol | e area  | of well<br>to the |
| FOR EXECUTION BY A NATURAL PERSON   |  | FOR  | EXEC                        | UTION BY                         | A CORPOR                   | RATION, | ETC.              |
| Date  |  | Company<br>Name  | -                           |                                  |                            |         |                   |
| Signature   |  | By<br>Its  |                             |                                  |                            |         | Date              |
|   |  |  |                             |                                  |                            |         |                   |
|   |  |  | Signat                      | ture                             |                            |         | Date              |
|   |  |  |                             |                                  |                            |         |                   |
|   |  |  |                             |                                  |                            | 1       |                   |
|   | i                                      | RECEIVED   |                             |                                  | 1                          | N       |                   |
|   | Office                                 | RECEIVED<br>e of Oil and Ga                            | 8                           |                                  |                            | ) /     |                   |

MAR 1 0 2022

WV Department of Environmental Protection

07/08/2022

Operator's Well Number Rockport 12593

# 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:

| 8   | Grantor, Lessor, etc. | Grantee, Lessee, etc.   | Royalty         | Book/Page     |  |
|-----|-----------------------|-------------------------|-----------------|---------------|--|
| SHL | O.H. Blair            | United Fuel Gas Company | Storage Lease - | 359 / 200-202 |  |
|     |                       |                         | 1046161-002     |               |  |
| BHL | A.J. Holbert et al    | United Fuel Gas Company | Storage Lease   | 360 / 504-506 |  |
|     |                       |                         | 1050678         |               |  |

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

The permit app licant for the proposed well work addressed in this application he reby a cknowledges 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 Crifice of Oil and Gas

MAR 1 0 2022

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 ac quired from the appropriate aut hority before the affected activity is initiated.

Well Operator:

By:Its:

Columbia Gas Transmission, LLC

perator: Maria Medvedeva

Senior Wells Engineer Storage Technical Services

58/

| WW-2B1 |  |
|--------|--|
| (5-12) |  |

| Well No | Rockport 12593 |  |
|---------|----------------|--|
|         |                |  |

## 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 Labora<br>Sampling Contr |  |
|------------------------------------|--|
| Well Operator<br>Address           | Not applicable - existing underground natural gas storage well |
| 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.

RECEIVED Office of Oil and Gas

MAR 1 0 2022

WV Department of Environmental Protection



WW-9 (5/16)

| API Number 47 -   | 107     | _ 01750    |  |
|-------------------|---------|------------|--|
| Operator's Well N | o. Rock | port 12593 |  |

## 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) Tygart Creek Quadrangle Rockport   |                |
| 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 V  |                |
| 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 systembe 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 FECEIVED Office of Oil and (   | Ca.            |
| Additives to be used in drilling medium? NaCl, biocide, soda ash, polymer, starch, CaCO3, HCl acid  | ചരമ            |
| Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. N/A   | 2              |
| -If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) N/A  WV Department of Environmental Proteins   | of<br>ctio     |
| -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 issue on April 1, 2016, by the Office of Oil and Cas 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 the 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 is submitting false information, including the possibility of fine or imprisonment.  Company Official Signature  Company Official Title Senior Wells Engineer Storage Technical Services  Subscribed and sworn before me this 28th day of February 120 22 | he<br>w<br>nis |
| My commission expires 16-30-2026  OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRGINIA Michael T. Donnally 3940 Green Valley Road   |                |
| Huntington WV 25701   |                |

Operator's Well No. Rockport 12593

| Proposed Revegetation Trea   | atment: Acres Disturbed   | < 1.0                      |  | Preveg etation                   | <sub>pH</sub> 6-7                                 |                 |
|--|---|----------------------------|--|----------------------------------|---|-----------------|
| Lime 2   | Tons/acre or to co  | rrect to pH 7              | '-8                                    |                                  |   |                 |
| Fertilizer type 10-  | -10-10  |                            |  |                                  |   |                 |
| Fertilizer amount_6  | 500   | lbs/a                      | acre                                   |                                  |   |                 |
| Mulch_ hay or st   | raw @ 2   | Tons/acr                   | e                                      |                                  |   |                 |
|  |   | Seed N                     | <u> Mixtures</u>                       |                                  |   |                 |
| Т  | emporary  |                            |  | Pern                             | nanent  |                 |
| Seed Type  | lbs/acre  |                            | Se                                     | ed Type                          | lbs/acre  |                 |
| Annual rye   | 40  |                            | Orchard G                              | rass and/c                       | or Tall Fescue                                    | 29              |
|  |   | ``                         | Birdsfoot 7                            | refoil (En                       | npire)  | 9               |
|  |   |                            | Annual Ry                              | е                                |   | 12              |
| Maps(s) of road, location, p<br>rovided). If water from the<br>L, W), and area in acres, of  | pit will be land applied,<br>f the land application area  | provide water<br>a.        | on (unless engine<br>r volume, include | ered plans incl<br>dimensions (I | uding this info have l<br>L, W, D) of the pit, ar | been<br>nd dime |
| Maps(s) of road, location, porovided). If water from the L, W), and area in acres, of Photocopied section of invo  | e pit will be land applied,<br>f the land application area<br>olved 7.5' topographic sho  | provide wate<br>a.<br>eet. | r volume, include                      | dimensions (I                    | L, W, D) of the pit, ar                           | been<br>ad dime |
| Maps(s) of road, location, porovided). If water from the L, W), and area in acres, of Photocopied section of invo  | e pit will be land applied,<br>f the land application area<br>olved 7.5' topographic sho  | provide wate<br>a.<br>eet. | on (unless engine<br>r volume, include | dimensions (I                    | L, W, D) of the pit, ar                           | been<br>nd dime |
| Maps(s) of road, location, porovided). If water from the L, W), and area in acres, of Photocopied section of invo  | e pit will be land applied, f the land application area level 7.5' topographic shows Tayko  | provide wate<br>a.<br>eet. | r volume, include                      | dimensions (I                    | L, W, D) of the pit, ar                           | been ad dime    |
| Maps(s) of road, location, porovided). If water from the L, W), and area in acres, of Photocopied section of invo  | e pit will be land applied, f the land application area level 7.5' topographic shows Tayko  | provide wate<br>a.<br>eet. | r volume, include                      | dimensions (I                    | L, W, D) of the pit, ar                           | od dime         |
| Maps(s) of road, location, porovided). If water from the L, W), and area in acres, of Photocopied section of invo  | e pit will be land applied, f the land application area level 7.5' topographic shows Tayko  | provide wate<br>a.<br>eet. | r volume, include                      | dimensions (I                    | Office of   | CEIVED Oil and  |
| Maps(s) of road, location, porovided). If water from the L, W), and area in acres, of Photocopied section of invo  | e pit will be land applied, f the land application area level 7.5' topographic shows Tayko  | provide wate<br>a.<br>eet. | r volume, include                      | dimensions (I                    | Office of  MAR 1                                  | CEIVED Oil and  |
| Maps(s) of road, location, porovided). If water from the L, W), and area in acres, of Photocopied section of invo  | e pit will be land applied, f the land application area level 7.5' topographic shows Tayko  | provide wate<br>a.<br>eet. | r volume, include                      | dimensions (I                    | Office of  MAR 1                                  | CEIVED Oil and  |
| Maps(s) of road, location, porovided). If water from the L, W), and area in acres, of Photocopied section of invo  | e pit will be land applied, f the land application area level 7.5' topographic shows Tayko  | provide wate<br>a.<br>eet. | r volume, include                      | dimensions (I                    | Office of  MAR 1                                  | CEIVED Oil and  |
| Attach: Maps(s) of road, location, p provided). If water from the (L, W), and area in acres, of Photocopied section of invo Plan Approved by:  Comments: | e pit will be land applied, f the land application area level 7.5' topographic shows Tayko  | provide wate<br>a.<br>eet. | r volume, include                      | dimensions (I                    | Office of  MAR 1                                  | CEIVED Oil and  |
| Maps(s) of road, location, p provided). If water from the (L, W), and area in acres, of Photocopied section of invo                                      | e pit will be land applied, f the land application area alved 7.5' topographic should be applied to the land application area alved 7.5' topographic should be applied to the land application area alved 7.5' topographic should be applied to the land application area alved to the land application | provide wate<br>a.<br>eet. | r volume, include                      | dimensions (I                    | Office of  MAR 1                                  | CEIVED Oil and  |

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| Page                    | 1 of 2     |
|-------------------------|------------|
| API Number 47 - 107     | - 01750    |
| Operator's Well No Rock | oort 12593 |

## 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): Tygart Creek  | Quad: Rockport  |
| Farm Name: Carl & Dianne Wade   |   |
| List the procedures used for the treatment and discharge groundwater.                         | of fluids. Include a list of all operations that could contaminate the                                    |
| will be stored on site, but located within seco construction equipment, well treatment fluids | , and produced well fluids are the only possible lling and flowback fluids to be stored in tanks. All     |
| 2. Describe procedures and equipment used to protect groun                                    | ndwater quality from the list of potential contaminant sources above                                      |
| All construction and well servicing equipment Tanks to be monitored daily for leaks. Spill ki | t will be monitored and inspected daily for leaks.<br>ts will be on site.                                 |
| List the closest water body, distance to closest water b discharge area.                      | oody, and distance from closest Well Head Protection Area to th   |
| Tygart Creek is at a distance of 0.19 miles W   | <i>1</i> .  |
|   | d Protection Area at a distance of 12.9 miles NW cipal Water Works is a Well Head Protection Area e area. |
| . Summarize all activities at your facility that are already r                                | egulated for groundwater protection.  |
|   |   |
| N/A   | RECEIVED<br>Office of Oil and   |
| N/A   | Office of Oil and MAR 1 0 202   |

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

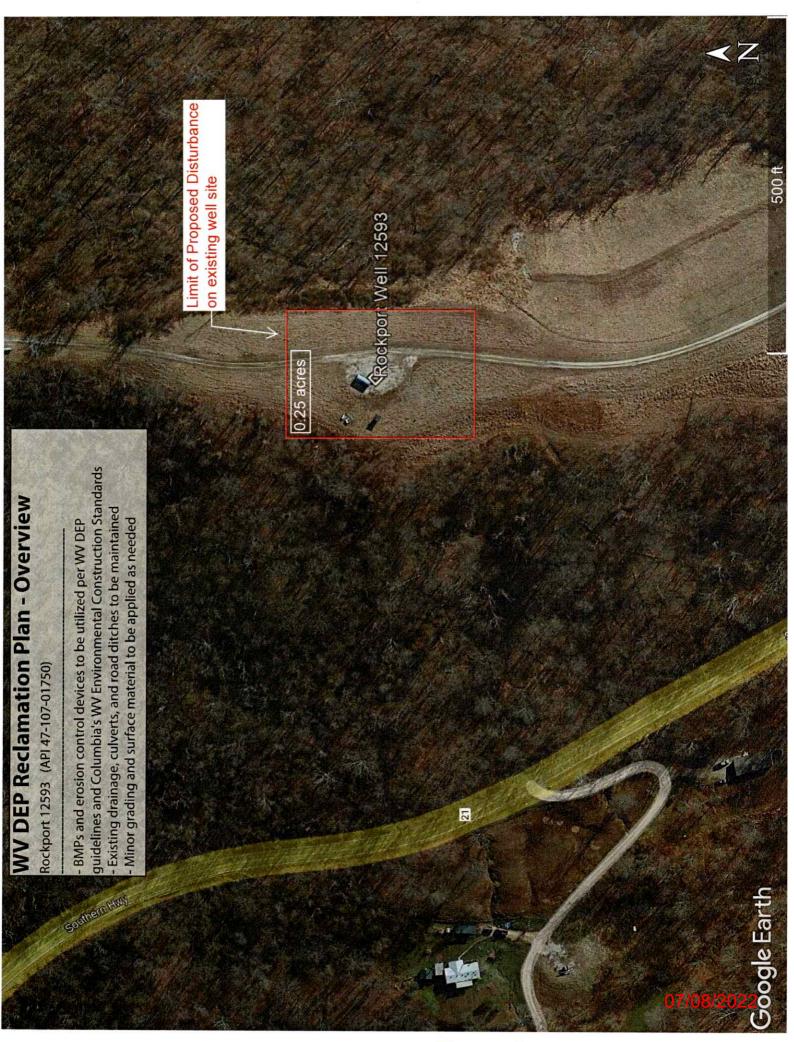
200

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API Number 47 - 107 - 01750

Operator's Well No. Rockport 12593

| N/A   |   |
|---|---|
|   | ,                                       |
| . 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.  |   |
|   |   |
|   |   |
| . Describe the groundwater protection instruction and training to be provided to the employees. Je provide direction on how to prevent groundwater contamination.   | ob procedures shall                     |
| During routine tailgate and JSA meetings groundwater protection will be a top   | oic of discussion.                      |
|   |   |
|   |   |
| O   | RECEIVED<br>Office of Oil and Gas       |
|   | MAR 1 0 2022                            |
| V<br>Envi   | W Department of<br>ronmental Protection |
|   |   |
| . 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, secondary containment. Spills from construction equipment, well treatment fluid well fluids are the only possible source of contamination to groundwater. |   |
| All construction and well servicing equipment will be monitored and inspected d spills.   | laily for leaks or                      |
| Date: 0415/1012   |   |



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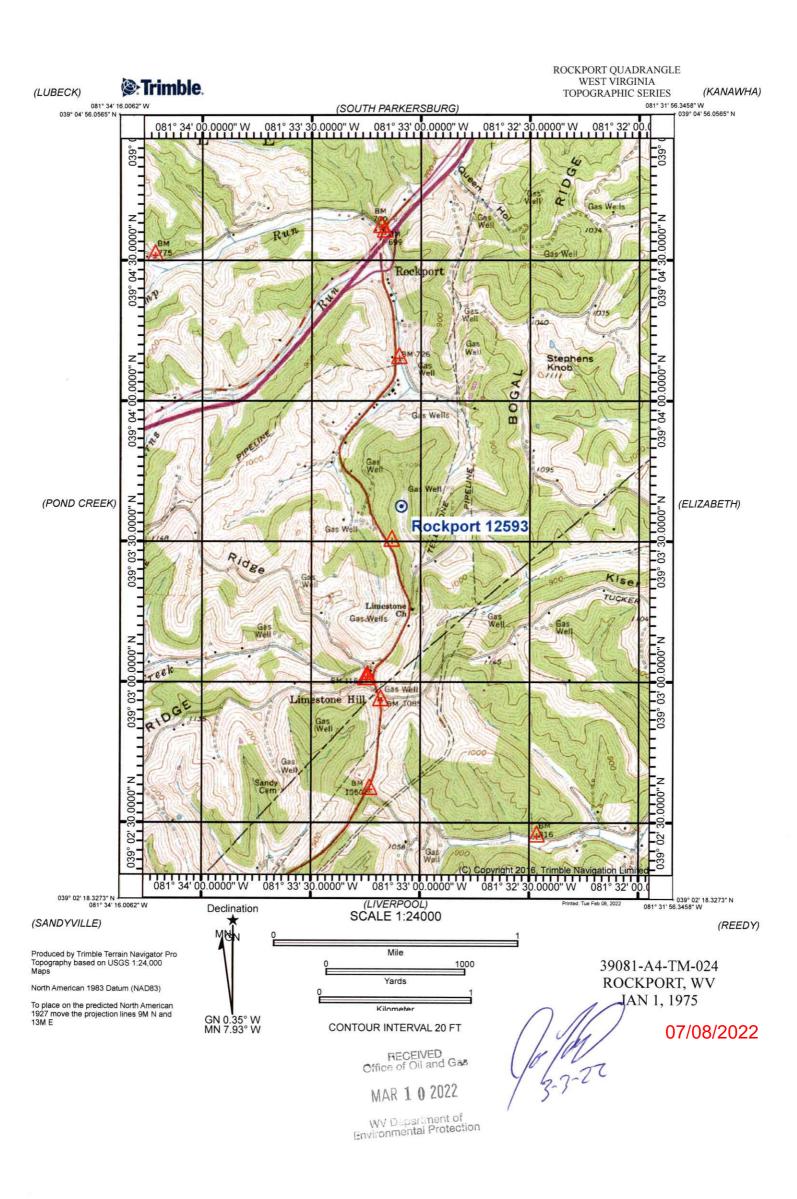
WV Department of Environmental Protection



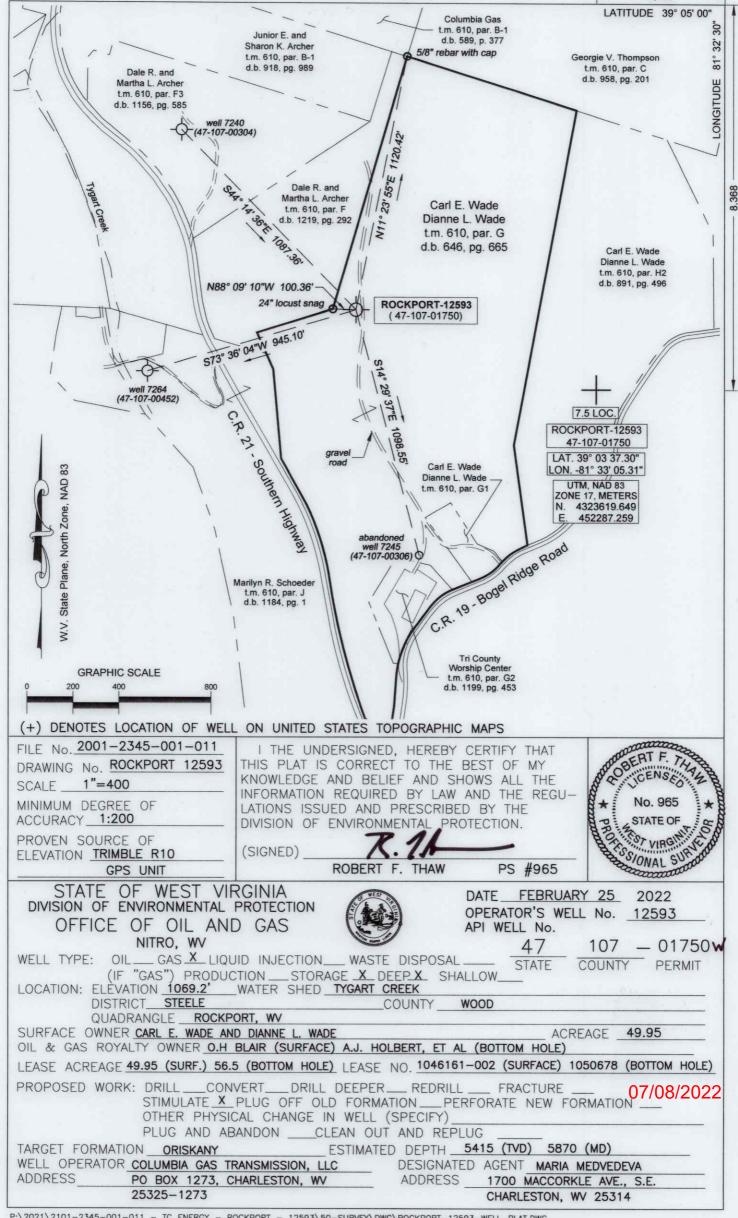
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MAR 1 0 2022

WV Daparment of Environmental Protection



- 2.785





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

#### 4710701750 rework permit issued

2 messages

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

Thu, Jul 7, 2022 at 1:25 PM

To: dnohe@woodcountywv.com, Wade A Stansberry <wade.a.stansberry@wv.gov>, Jeffrey W McLaughlin <jeffrey.w.mclaughlin@wv.gov>, maria\_medvedeva@tcenergy.com

To whom it may concern this permit has been issued.

James Kennedy WVDEP OOG



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

Thu, Jul 7, 2022 at 2:00 PM

To: dnohe@woodcountywv.com, Wade A Stansberry <wade.a.stansberry@wv.gov>, Jeffrey W McLaughlin <jeffrey.w.mclaughlin@wv.gov>, maria\_medvedeva@tcenergy.com

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Thank you [Quoted text hidden]

