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west virginia department of environmental protection

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Office of Oil and Gas  
601 57<sup>th</sup> Street, S.E.  
Charleston, WV 25304  
(304) 926-0450  
fax: (304) 926-0452

Austin Caperton, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Friday, August 24, 2018  
WELL WORK PERMIT  
Vertical / Re-Work

COLUMBIA GAS TRANSMISSION, LLC  
1700 MACCORKLE AVENUE SE

CHARLESTON, WV 25314

Re: Permit approval for 1-3522  
47-051-00056-00-00

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

A blue ink signature of James A. Martin, written in a cursive style.

Operator's Well Number: 1-3522  
Farm Name: VAUGHN, E. N.  
U.S. WELL NUMBER: 47-051-00056-00-00  
Vertical Re-Work  
Date Issued: 8/24/2018

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## 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.

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### CONDITIONS

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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.

WW - 2B  
(Rev. 8/10)

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 Marshall Liberty Littleton, WV  
Operator ID County District Quadrangle

2) Operator's Well Number: Victory B 3522 3) Elevation: 1234.0 ft

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

5) Proposed Target Formation(s): Maxton Proposed Target Depth: 1916 MD ft

6) Proposed Total Depth: 1960 MD ft (existing) Feet Formation at Proposed Total Depth: Maxton

7) Approximate fresh water strata depths: 80 ft, 935 ft

8) Approximate salt water depths: none reported by driller in 1936

9) Approximate coal seam depths: Pittsburgh 930 - 35'

10) Approximate void depths,(coal, Karst, other): none reported by driller in 1936

*JW*  
*7/24/18*

11) Does land contain coal seams tributary to active mine? yes

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

Kill. Replace wellhead. Coiled tubing clean-out. Acid treatment (<1000 gals HCl).

13) **CASING AND TUBING PROGRAM**

| TYPE         | SPECIFICATIONS |       |               | FOOTAGE INTERVALS |              | CEMENT              |
|--------------|----------------|-------|---------------|-------------------|--------------|---------------------|
|              | Size           | Grade | Weight per ft | For Drilling      | Left in Well | Fill -up (Cu. Ft.)  |
| Conductor    | 14             | ??    | ??            | 16                | 16           | no record of cement |
| Fresh Water  | 10-3/4         | ??    | ??            | 284               | 284          | no record of cement |
| Coal         | 8-5/8          | J-55  | 24            | 1446              | 1446         | 350 sx              |
| Intermediate |                |       |               |                   |              |                     |
| Production   | 7              | J-55  | 20            | 1919              | 1919         | 250 sx              |
| Tubing       |                |       |               |                   |              |                     |
| Liners       |                |       |               |                   |              |                     |

Packers: Kind: \_\_\_\_\_  
Sizes: \_\_\_\_\_  
Depths Set \_\_\_\_\_

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JUL 30 2018

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

**AFFIDAVIT OF PLUGGING AND FILLING WELL**

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE. ONE COPY MAILED TO THE DEPARTMENT, ONE COPY TO BE RETAINED BY THE WELL OPERATOR AND THE THIRD COPY (AND EXTRA COPIES IF REQUIRED) SHOULD BE MAILED TO EACH COAL OPERATOR AT THEIR RESPECTIVE ADDRESSES.

COAL OPERATOR OR OWNER \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
COAL OPERATOR OR OWNER \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
LEASE OR PROPERTY OWNER \_\_\_\_\_  
ADDRESS \_\_\_\_\_

**The Manufacturers Light & Heat Company**  
**800 Union Trust Building**  
**Pittsburgh, Penna.**  
COMPLETE ADDRESS.  
March 23, 1955 19  
WELL AND LOCATION  
**Liberty** District  
**Marshall** County  
Well No. **3542**  
**E.W. Vaughn** Farm

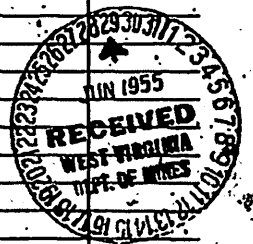
STATE INSPECTOR SUPERVISING PLUGGING \_\_\_\_\_

AFFIDAVIT

STATE OF WEST VIRGINIA  
County of **Marshall**

ss: **E. Pinhart** and **W. H. Lightner**  
Being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by **The Mfg. Light & Heat Co** well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the **18** day of **November**, 19**54**, and that the well was plugged and filled in the following manner:

| SAND OR ZONE RECORD<br>FORMATION               | FILLING MATERIAL     |             |                | PLUGS USED<br>SIZE & KIND <sup>c</sup> | CASING      |                      |
|--|----------------------|-------------|----------------|--|-------------|----------------------|
|  | CONTENT              | FROM        | TO             |  | CSG PULLED  | CSG LEFT IN          |
| <b>Partial Plugging<br/>from the Total</b>     | <b>Cement</b>        | <b>2217</b> | <b>2272</b>    |  | <b>2032</b> | <b>44' of 6 5/8"</b> |
| <b>Depth of 2217' to<br/>The Depth of 1960</b> | <b>Set Lead Plug</b> |             | <b>2291 2'</b> | <b>6" Lead Mandrel</b>                 |             |                      |
|  | <b>Cement</b>        | <b>2291</b> | <b>2298</b>    |  |             |                      |
|  | <b>Stone</b>         | <b>2280</b> | <b>2280</b>    |  |             |                      |
|  | <b>Set Lead Plug</b> |             | <b>2229 1'</b> | <b>4" Lead Mandrel</b>                 |             |                      |
|  | <b>Cement</b>        | <b>2229</b> | <b>1966</b>    |  |             |                      |
|  | <b>Set Lead Plug</b> |             | <b>1966 2'</b> | <b>8" Lead Mandrel</b>                 |             |                      |
|  | <b>Cement</b>        | <b>1966</b> | <b>1966</b>    |  |             |                      |



| COAL BEAMS<br>(NAME) | DESCRIPTION OF MONUMENT |            |
|----------------------|-------------------------|------------|
| <b>Waynesburg</b>    | <b>618</b>              | <b>615</b> |
| <b>Mapleton</b>      | <b>828</b>              | <b>825</b> |
| <b>Pittsburgh</b>    | <b>930</b>              | <b>935</b> |
| (NAME)               |                         |            |

and that the work of plugging and filling said well was completed on the **22nd** day of **March**, 19**55**.

And further deponents saith not.

Sworn to and subscribed before me this **24** day of **April**, 19**55**.

My commission expires: **April 27, 1960**

**E. Pinhart**  
**W. H. Lightner**  
**Clay Church**  
Notary Public.  
Permit No. **1022-55-2**

## PROPOSED MANNER OF PLUGGING AND FILLING WELL

(REQUIRED BY RULES AND REGULATIONS)

## WEST VIRGINIA DEPARTMENT OF MINES

OIL AND GAS DIVISION

## WORK ORDER

Well to be plugged and filled as follows: **PARTIAL PLUGGING REQUEST**

|             |                    |      |                                |
|-------------|--------------------|------|--------------------------------|
| TOTAL DEPTH | <del>35</del> 2217 |      |                                |
| Clay        | 2217               | 2091 |                                |
| Cement      | 2091               | 2081 | Full 6 5/8" Casing set @ 2077' |

After Schlumberger has surveyed hole a  
lead plug will be set in bottom of Maxton sand  
Well to be used for storage in Maxton Sand.

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WV Department of  
Environmental Protection

To the Department of Mines  
Coal Owner or Operator,  
Lease or Property Owner.

Gentlemen:

This "work order" is submitted for your approval and concurrence and unless notified of your disapproval or non-concurrence, the undersigned will proceed with the plugging and filling of said well in the above described manner on the date stated in the notice of intention to plug and abandon the said well on opposite side of this sheet.

Very truly yours,

\_\_\_\_\_  
Well Operator.

No objections have been filed by the coal owner or coal operator, or any available adjacent lease or property owners or interposed by the Department of Mines to the manner herein described for the plugging and filling of the well above mentioned. Therefore, the same is hereby approved this

\_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_

DEPARTMENT OF MINES  
Oil and Gas Division

By: \_\_\_\_\_

NOTE: This "work order" shall be filed in triplicate, one copy for the files of the Department of Mines; one to be approved or corrected and returned to the well operator as his authority for plugging said well; and one for the well inspector.



The Manufacturers Light and Heat Company  
Company

3522

Division 4

Record of well No. 3522 on E. H. Vaughn Farm Acres

Cameron Field Liberty DISTRICT Marshall County W Va. State

Rig Commenced 19 Completed 19

Drilling Commenced Nov. 18, 1954, Completed March 23, 1955

Contractor E. B. Mulvaney Address Waynashburg, Pa.

Driller's Name W. A. Lightner and Edd Rinehart

CASING AND TUBING RECORD

| Conductor     | 13" | 10" | 8 1/4" | 7"   | 6 5/8" | 5 3/16" | 4" | 3" |
|---------------|-----|-----|--------|------|--------|---------|----|----|
| Used in Dril. |     |     |        |      |        |         |    |    |
| Left in well  |     | 286 | 1163   | 1910 |        |         |    |    |

PACKER RECORD

SHOOTING RECORD

| Size | Depth Set | Type Packer | Date | Type Explosive | Amount | DEPTH |        | Volume Before Cu. Ft. | Volume After Cu. Ft. |
|------|-----------|-------------|------|----------------|--------|-------|--------|-----------------------|----------------------|
|      |           |             |      |                |        | Top   | Bottom |                       |                      |
|      |           |             |      |                |        |       |        |                       |                      |

VOLUME AND PRESSURE

| Date | Reading in Inches | Liquid | Size Orifice | Volume | Sand | PRESSURE IN MIN. |   |    |    |    | 24 Hour R. P. | Max. R. P. | Hours |
|------|-------------------|--------|--------------|--------|------|------------------|---|----|----|----|---------------|------------|-------|
|      |                   |        |              |        |      | 1                | 5 | 10 | 30 | 60 |               |            |       |
|      |                   |        |              |        |      |                  |   |    |    |    |               |            |       |

TOTAL INITIAL OPEN FLOW No gas to test

CUBIC FEET PER 24 HOURS

| FORMATION               | TOP  | BOTTOM | THICKNESS | Remarks   |
|-------------------------|------|--------|-----------|---|
| Waynesburg Coal         | 610  | 615    | 5'        | 286' of 10" casing (original pipe) left in hole |
| Mapletown Coal          | 820  | 825    | 5'        | not disturbed and not cemented. Run 1163' of    |
| Pittsburgh Coal         | 921  | 931    | 7'        | 8 5/8" casing, 8 rd thd. SM. J55. 21# on steel  |
| Maxton Sand             | 1918 | 1962   | 44'       | shoe set at 1116'. Cemented between 8" and 10"  |
| Total Depth             |      | 1960   |           | with 350 bags cement and 2 bags aquagel. Good   |
| Bottom of 8 5/8" casing |      | 1116   |           | return to surface of cement. Run 1910' of 7"    |
| Bottom of 7" casing     |      | 1919   |           | casing, 8 rd thd. SM. J55. 20# on steel shoe    |
|                         |      |        |           | set at 1919'. Cemented with 250 bags cement and |
|                         |      |        |           | 2 bags aquagel between 7" and 8" casing. Good   |
|                         |      |        |           | return of cement to surface.                    |

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WV Department of  
Environmental Protection

Examined above information and measurements and found to be correct by

Examined and Approved by

*E. B. Mulvaney*

Contractor

*W. A. Lightner*

Field Superintendent

NOTE-The above blank must be filled out carefully by the contractor, with a complete and accurate record of the well, and accompany, when presented for payment of the bill for drilling. All formations and known sands must be given by their proper name, with steel line measurements, and under the head of "Remarks" must be recorded in what sand and at what depth Oil, Gas or water was found, the quantity of same, the quality of the sand, and thickness of pay.

3522

Division \_\_\_\_\_ Company \_\_\_\_\_  
 Record of Well No. \_\_\_\_\_ on \_\_\_\_\_ Farm \_\_\_\_\_ Acres \_\_\_\_\_  
 Field \_\_\_\_\_ District \_\_\_\_\_ County \_\_\_\_\_ State \_\_\_\_\_  
 Rig Commenced \_\_\_\_\_ 19 \_\_\_\_\_ Completed \_\_\_\_\_ 19  
 Drilling Commenced \_\_\_\_\_ 19 \_\_\_\_\_ Completed \_\_\_\_\_ 19  
 Cost per Foot \_\_\_\_\_ Contractor \_\_\_\_\_ Address \_\_\_\_\_  
 Drillers' Names \_\_\_\_\_

| BOILER |     |               | ENGINE |     |               | RIG |     |        |                |
|--------|-----|---------------|--------|-----|---------------|-----|-----|--------|----------------|
| H.P.   | No. | Name of Maker | H.P.   | No. | Name of Maker | New | Old | Height | Name of Boiler |
|        |     |               |        |     |               |     |     |        |                |

| CONDUCTOR AND CASING USED IN DRILLING |         |         |            |            |            |            |            |        |        |
|---------------------------------------|---------|---------|------------|------------|------------|------------|------------|--------|--------|
| Conductor                             | 13 inch | 10 inch | 8 1/4 inch | 6 3/4 inch | 6 1/2 inch | 5 3/4 inch | 5 1/2 inch | 5 inch | 4 inch |
|                                       |         |         |            |            |            |            |            |        |        |

| CONDUCTOR AND CASING LEFT IN WELL |         |         |            |            |            |            |            |        |        |
|-----------------------------------|---------|---------|------------|------------|------------|------------|------------|--------|--------|
| Conductor                         | 13 inch | 10 inch | 8 1/4 inch | 6 3/4 inch | 6 1/2 inch | 5 3/4 inch | 5 1/2 inch | 5 inch | 4 inch |
|                                   |         |         |            |            |            |            |            |        |        |

| OIL WELL  |                 |                      |        | GAS WELL |       |                |           |             |                     |               |
|-----------|-----------------|----------------------|--------|----------|-------|----------------|-----------|-------------|---------------------|---------------|
| When Shot | Size of Torpedo | 1st Day's Production | Tubing | Rods     | Tanks | Size of Packer | Depth Set | Packed with | 1st Minute Pressure | Rock Pressure |
|           |                 |                      |        |          |       |                |           |             |                     |               |

Initial Open Flow Production \_\_\_\_\_      Cubic Feet Per 24 Hours \_\_\_\_\_      Shut in Pressure \_\_\_\_\_      Cubic Feet Per 24 Hours \_\_\_\_\_

| FORMATION           | FORMATION |        |           | REMARKS |
|---------------------|-----------|--------|-----------|---------|
|                     | Top       | Bottom | Thickness |         |
|                     | SHEET # 2 |        |           |         |
| Slate               | soft      | 1110   | 1120      | 10      |
| Murphy Sand         | hard      | 1120   | 1135      | 15      |
| Red rock            | soft      | 1135   | 1155      | 20      |
| Lime                | hard      | 1155   | 1175      | 20      |
| Slate               | soft      | 1175   | 1205      | 30      |
| Red rock            | soft      | 1205   | 1230      | 25      |
| Lime                | hard      | 1230   | 1265      | 35      |
| Slate               | soft      | 1265   | 1280      | 25      |
| Slate               | soft      | 1280   | 1305      | 25      |
| Little Dunkard sand | hard      | 1305   | 1325      | 20      |
| Red rock            | soft      | 1325   | 1335      | 10      |
| Lime                | hard      | 1335   | 1370      | 35      |
| Slate               | soft      | 1370   | 1425      | 55      |
| Big Dunkard sand    | hard      | 1425   | 1430      | 5       |
| Slate               | soft      | 1430   | 1475      | 45      |
| Gritty lime         | hard      | 1475   | 1500      | 25      |
| Slate               | soft      | 1500   | 1520      | 20      |
| Coal                | soft      | 1520   | 1525      | 5       |
| Slate               | soft      | 1525   | 1540      | 15      |
| Lime                | hard      | 1540   | 1550      | 10      |
| Slate & Shells      |           | 1550   | 1600      | 50      |
| Lime                | hard      | 1600   | 1625      | 25      |
| Slate               | soft      | 1625   | 1660      | 35      |
| Lime                | hard      | 1660   | 1665      | 5       |
| Slate               | soft      | 1665   | 1700      | 35      |
| Lime                | hard      | 1700   | 1740      | 40      |
| Slate               | soft      | 1740   | 1800      | 60      |

Examined above information and measurements and found to be correct by \_\_\_\_\_  
 Examined and approved by \_\_\_\_\_  
 Contractor \_\_\_\_\_ Superintendent of Co. \_\_\_\_\_

NOTE—The above blank must be filled out carefully by the contractor, with a complete and accurate record of the Well, and accompany, when presented for payment of the bill for drilling.

All formations and known rods must be given by their proper name, with steel line measurements, and under the head of "Remarks" must be recorded in what sand and at what depth Oil, Gas or Water was found, the quantity of same, the quality of the sand, and thickness of pay.

Make no memoranda of boiler and engine if owned by contractor.

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WV Department of  
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NO. 4  
APPROVED BY  
[Signature]  
JUL 30 2018

3522

Division \_\_\_\_\_ Company \_\_\_\_\_

Record of Well No. \_\_\_\_\_ on \_\_\_\_\_ District \_\_\_\_\_ Farm \_\_\_\_\_ Acres \_\_\_\_\_  
 Field \_\_\_\_\_ Township \_\_\_\_\_ County \_\_\_\_\_ State \_\_\_\_\_

Rig Commenced \_\_\_\_\_ 10 \_\_\_\_\_ Completed \_\_\_\_\_ 19  
 Drilling Commenced \_\_\_\_\_ 19 \_\_\_\_\_ Completed \_\_\_\_\_ 19

Cost per Foot \_\_\_\_\_ Contractor \_\_\_\_\_ Address \_\_\_\_\_

Drillers' Names \_\_\_\_\_

| BOILER                                       |         |               | ENGINE     |            |               |            | RIG        |        |               |
|--|---------|---------------|------------|------------|---------------|------------|------------|--------|---------------|
| H.P.   | No.     | Name of Maker | H.P.       | No.        | Name of Maker | New        | Old        | Weight | Name of Buick |
| <b>CONDUCTOR AND CASING USED IN DRILLING</b> |         |               |            |            |               |            |            |        |               |
| Conductor                                    | 13 inch | 10 inch       | 8 1/2 inch | 6 1/2 inch | 6 1/2 inch    | 5 1/2 inch | 5 1/2 inch | 5 inch | 4 inch        |
| <b>CONDUCTOR AND CASING LEFT IN WELL</b>     |         |               |            |            |               |            |            |        |               |
| Conductor                                    | 13 inch | 10 inch       | 8 1/2 inch | 6 1/2 inch | 6 1/2 inch    | 5 1/2 inch | 5 1/2 inch | 5 inch | 4 inch        |

| OIL WELL                     |                 |                      | GAS WELL |      |       |                |           |             |                     |               |
|------------------------------|-----------------|----------------------|----------|------|-------|----------------|-----------|-------------|---------------------|---------------|
| When Shot                    | Size of Torpedo | 1st Day's Production | Tubing   | Rods | Tanks | Size of Packer | Depth Set | Packed with | 1st Minute Pressure | Rock Pressure |
| Initial Open Flow Production |                 |                      |          |      |       |                |           |             |                     |               |

| FORMATION          | Cubic Feet Per 24 Hours |        | Shut In Pressure | REMARKS  |
|--------------------|-------------------------|--------|------------------|--|
|                    | Top                     | Bottom |                  |  |
| SHEET 3 of 3       |                         |        |                  |  |
| Salt Sand ✓ Hard   | 1812                    | 1837   | 25               |  |
| Slate soft         | 1837                    | 1908   | 71               |  |
| Sand hard          | 1908                    | 1985   | 77               | Gas at 1923, S.L. 33/10 W. in 2" 180,000 Cu F                            |
| Slate soft         | 1985                    | 2000   | 15               |  |
| Maxon Sand ✓ ✓     | 2000                    | 2025   | 25               | S.L. 2008 Gas 2002' & 2010-2015 34/10 Water 2" Opening or 182,844 Cu Ft. |
| Pencil Cave ✓ ✓    | 2025                    | 2030   | 5                |  |
| Big Lime ✓ ✓       | 2030                    | 2091   | 61               |  |
| Rig Injun Sand ✓ ✓ | 2091                    | 2217   | 126              | Gas at 2103' test 29/10 Water in 3"                                      |
| Total Depth        | 2217                    |        |                  | Total for Maxon & Injun Sands. 375,000 Cu Ft.                            |

Salt Sand 180,000  
 Maxon 183,000  
 Big Injun 192,000  
 555,000

*Hardy*  
 HARDY

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 WV Department of  
 Environmental Protection

Examined above information and measurements and found to be correct by \_\_\_\_\_ Examinated and approved by \_\_\_\_\_  
 Contractor \_\_\_\_\_ Superintendent of Co. \_\_\_\_\_

NOTE—The above blank must be filled out carefully by the contractor, with a complete and accurate record of the Well, and accompany, when presented for payment of the bill for drilling.

All formations and known sands must be given by their proper name, with steel line measurements, and under the head of "Remarks" must be recorded in what sand and at what depth Oil, Gas or Water was found, the quantity of same, the quality of the sand, and thickness of pay.

Make no memoranda of boiler and engine if owned by contractor.



4705100056W

The Manufacturers Light & Heat Company

Division # 1  
 Record of Well No. 3522 on E.B. Vaughn Farm 80 Acres  
Cameron Field Liberty District Marshall County W. Va. State  
 Rig Commenced 3/23/36 19 , Completed 3/28/36 19  
 Drilling Commenced 4/15/36 19 , Completed 6/9/36 19  
 Cost per Foot 1.60 Contractor O.H. Fox Address Cameron, West Virginia.  
 Drillers' Names Frank Santee, Joe Moose, Andrew Workman.

| BOILER |     |               | ENGINE |     |               | RIG |     |        |                |
|--------|-----|---------------|--------|-----|---------------|-----|-----|--------|----------------|
| H.P.   | No. | Name of Maker | H. P.  | No. | Name of Maker | New | Old | Height | Name of Boiler |
|        |     |               |        |     |               |     | Old | 81'    | Company men.   |

| CONDUCTOR AND CASING USED IN DRILLING |         |         |            |            |            |            |            |        |        |  |
|---------------------------------------|---------|---------|------------|------------|------------|------------|------------|--------|--------|--|
| Conductor                             | 13 inch | 10 inch | 8 1/4 inch | 6 3/4 inch | 6 1/4 inch | 5 1/4 inch | 5 1/2 inch | 5 inch | 4 inch |  |
| 16'                                   |         | 286'-6" | 1140'-11"  | 2077'-11"  |            |            |            |        |        |  |

| CONDUCTOR AND CASING LEFT IN WELL |         |         |            |            |            |            |            |        |        |        |
|-----------------------------------|---------|---------|------------|------------|------------|------------|------------|--------|--------|--------|
| Conductor                         | 13 inch | 10 inch | 8 1/4 inch | 6 3/4 inch | 6 1/4 inch | 5 1/4 inch | 5 1/2 inch | 5 inch | 4 inch | 3 inch |
| 16'                               |         | 286'-6" | 1140'-11"  | 2077'-11"  |            |            |            |        |        |        |

| OIL WELL  |                 |                      |        |      | GAS WELL |                 |           |             |                     |               |
|-----------|-----------------|----------------------|--------|------|----------|-----------------|-----------|-------------|---------------------|---------------|
| Well Shot | Size of Torpedo | 1st Day's Production | Tubing | Rods | Tanks    | Size of Packer  | Depth Set | Packed with | 1st Minute Pressure | Rock Pressure |
|           |                 |                      |        |      |          | 8 1/2" x 6 5/8" | 1973'     |             |                     | 180'          |

| Initial Open Flow Production | Cubic Feet Per 24 Hours | Shut in Pressure | Cubic Feet Per 24 Hours |
|------------------------------|-------------------------|------------------|-------------------------|
|                              |                         |                  |                         |

| FORMATION       | Top  | Bottom | Thickness | REMARKS                |
|-----------------|------|--------|-----------|------------------------|
| Clay            | 0    | 10     | 10        |                        |
| Lime            | 10   | 40     | 30        |                        |
| Slate           | 40   | 80     | 40        | Little water           |
| Lime            | 80   | 125    | 45        |                        |
| Gritty Lime     | 125  | 140    | 15        |                        |
| Slate           | 140  | 200    | 60        |                        |
| Sand            | 200  | 225    | 25        |                        |
| Slate           | 225  | 240    | 15        |                        |
| Lime            | 240  | 275    | 35        |                        |
| Sand            | 275  | 300    | 25        |                        |
| Lime            | 300  | 350    | 50        |                        |
| Slate           | 350  | 400    | 50        |                        |
| Slate & shells  | 400  | 450    | 50        |                        |
| Gritty Lime     | 450  | 475    | 25        |                        |
| Slate           | 475  | 500    | 25        |                        |
| Lime            | 500  | 610    | 110       |                        |
| Waynesburg Coal | 610  | 615    | 5         |                        |
| Lime            | 615  | 820    | 205       |                        |
| Mapletown Coal  | 820  | 825    | 5         |                        |
| Lime            | 825  | 930    | 105       |                        |
| Pittsburgh Coal | 930  | 935    | 5         | 1/2 barrel water @ 935 |
| Lime            | 935  | 980    | 45        |                        |
| Red rock        | 980  | 995    | 15        |                        |
| Slate           | 995  | 1025   | 30        |                        |
| Red rock        | 1025 | 1033   | 8         |                        |
| Lime            | 1033 | 1062   | 29        |                        |
| Red rock        | 1062 | 1085   | 23        |                        |
| Lime            | 1085 | 1110   | 25        |                        |

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No. 4  
 APPROVED BY  
 HARRY H. HARRIS  
 FIELD SUPT.

Examined above information and measurements and found to be correct by O.H. Fox Contractor  
 Examined and approved by \_\_\_\_\_ Superintendent of Co.  
 NOTE - The above blank must be filled out carefully by the contractor, with a complete and accurate record of the Well, and accompany, when presented for payment of the bill for drilling.  
 All formations and known sands must be given by their proper name, with steel line measurements, and under the head of "Remarks" must be recorded in what sand and at what depth Oil, Gas or Water was found, the quantity of same, the quality of the sand, and thickness of pay.  
 Make no memoranda of boiler and engine if owned by contractor.

47-056-00056W

The Manufacturers Light & Heat Company  
 800 Union Trust Bldg. Pittsburgh, Pa. address

COMPLETION DATA SHEET  
 NO. 2  
 FORMATION RECORD

Well No. 3522 / E. N. Vaughn farm

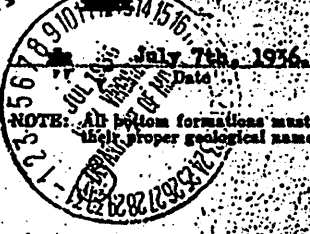
| Name            | Color       | Character   | Oil, Gas or Water | Top  | Bottom | Thickness | Total Depth | Remarks |
|-----------------|-------------|-------------|-------------------|------|--------|-----------|-------------|---------|
| Clay            |             | Soft        |                   | 0    | 10     | 10        |             |         |
| Lime            |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Slate           |             | Soft        | Water @ 80'       | 10   | 10     | 0         |             |         |
| Lime            |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Gritty Lime     |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Slate           |             | Soft        |                   | 10   | 10     | 0         |             |         |
| Sand            |             | Soft        |                   | 10   | 10     | 0         |             |         |
| Slate           |             | Soft        |                   | 10   | 10     | 0         |             |         |
| Lime & sand     |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Lime            |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Slate           |             | Soft        |                   | 10   | 10     | 0         |             |         |
| Slate & shells  |             | Soft        |                   | 10   | 10     | 0         |             |         |
| Gritty Lime     |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Slate           |             | Soft        |                   | 10   | 10     | 0         |             |         |
| Lime            |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Waynesburg Coal | Black       | Soft        |                   | 10   | 10     | 0         |             |         |
| Lime            |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Mapletown coal  | Black       | Soft        |                   | 10   | 10     | 0         |             |         |
| Lime            |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Pitts. Coal     | Black       | Soft        | Water @ 935'      | 10   | 10     | 0         |             |         |
| Lime            |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Red rock        | Red         | Soft        |                   | 10   | 10     | 0         |             |         |
| Slate           |             | Soft        |                   | 10   | 10     | 0         |             |         |
| Red rock        | Red         | Soft        |                   | 10   | 10     | 0         |             |         |
| Lime            |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Red rock        | Red         | Soft        |                   | 10   | 10     | 0         |             |         |
| Lime            |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Slate           |             | Soft        |                   | 10   | 10     | 0         |             |         |
| Murphy sand     |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Red rock        | Red         | Soft        |                   | 10   | 10     | 0         |             |         |
| Lime            |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Slate           | Dark        | Soft        |                   | 10   | 10     | 0         |             |         |
| Red rock        | Red         | Soft        |                   | 10   | 10     | 0         |             |         |
| Lime            |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Slate           | Gray & dark | Soft        |                   | 10   | 10     | 0         |             |         |
| Little Dunkard  | Red         | Hard        |                   | 10   | 10     | 0         |             |         |
| Red rock        | Red         | Soft        |                   | 10   | 10     | 0         |             |         |
| Lime            |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Slate           | Dark        | Soft        |                   | 10   | 10     | 0         |             |         |
| Big Dunkard     |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Slate           |             | Soft        |                   | 10   | 10     | 0         |             |         |
| Gritty Lime     |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Slate           |             | Soft        |                   | 10   | 10     | 0         |             |         |
| Coal            |             | Soft        |                   | 10   | 10     | 0         |             |         |
| Slate           |             | Soft        |                   | 10   | 10     | 0         |             |         |
| Lime            |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Slate & shells  |             | Soft & hard |                   | 10   | 10     | 0         |             |         |
| Lime            |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Slate           |             | Soft        |                   | 10   | 10     | 0         |             |         |
| Lime            |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Slate           |             | Soft        |                   | 10   | 10     | 0         |             |         |
| Lime            |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Slate           |             | Soft        |                   | 10   | 10     | 0         |             |         |
| Salt sand       |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Slate           |             | Soft        |                   | 10   | 10     | 0         |             |         |
| Sand            |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Slate           |             | Soft        |                   | 10   | 10     | 0         |             |         |
| Marion sand     |             | Hard        |                   | 10   | 10     | 0         |             |         |
| Poncell Cave    |             | Soft        | Sp. of gas        | 2025 | 2030   | 5         |             |         |
| Big Lime        |             | Hard        | @ 1925            | 2030 | 2031   | 1         |             |         |
| Big Injia sand  |             | Hard        | @ 2002, 2010      | 2031 | 2037   | 6         |             |         |
|                 |             |             | @ 2015            | 2037 | 2051   | 14        |             |         |
|                 |             |             | (Gas 2103')       | 2051 | 2217   | 166       | 2217        |         |

Well was not shot at \_\_\_\_\_ feet; well was shot at \_\_\_\_\_ feet.

Fresh water at \_\_\_\_\_ feet; fresh water at \_\_\_\_\_ feet.

Well was producing hole.

THE MANUFACTURERS LIGHT & HEAT COMPANY,



Approved \_\_\_\_\_  
 Owner Land Department.

NOTE: All bottom formations must be noted as indicated above and all key-rocks and oil and gas sands must be recorded under their proper geological names in the district as well as any local names commonly used in the district for such strata.

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WW-2A  
(Rev. 6-14)

JUL 30 2018

WV Department of  
Environmental Protection

1.) Date: 6/5/2018  
2.) Operator's Well Number Victory B 3522  
State County Permit  
3.) API Well No.: 47-051-00056

**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 Donald & Joyce Romack /  
Address 290 Gillmer Rd  
Leavittsburg, OH 44430  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
6) Inspector James Nicholson  
Address PO Box 44  
Moundsville, WV 26041  
Telephone 304-552-3874  
5) (a) Coal Operator  
Name McElroy Coal Company /  
Address 1000 Consol Energy Dr  
Canonsburg, PA 15317  
(b) Coal Owner(s) with Declaration  
Name Consolidated Coal / OK  
Address 1000 Consol Energy Dr  
Canonsburg, PA 15317  
(c) Coal Lessee with Declaration  
Name McElroy Coal Company /  
Address 1000 Consol Energy Dr  
Canonsburg, PA 15317

**TO THE PERSONS NAMED ABOVE TAKE NOTICE THAT:**

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

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

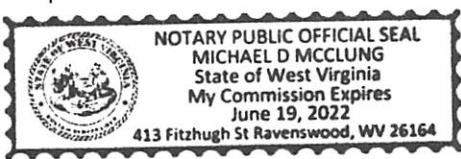
I certify that as required under Chapter 22-6 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through \_\_\_ on the above named parties by:

- 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: James E. Amos / James E. Amos  
Its: Senior Engineer  
Address: 48 Columbia Gas Rd  
Sandville, WV 25275  
Telephone: 304-373-2412  
Email: james\_amos@transcanada.com

Subscribed and sworn before me this 13th day of July, 2018  
Michael D. McClung Notary Public  
My Commission Expires 6/19/2022

Oil and Gas Privacy Notice

WW-2A1  
(Rev. 1/11)

Operator's Well Number Victory B 3522

**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 |
|-----------------------|--------------------------------|---------------------------|-----------|
| W. R. Vaught, et al   | Columbia Gas Transmission, LLC | Storage Lease 3196871-000 | 529 / 306 |

**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

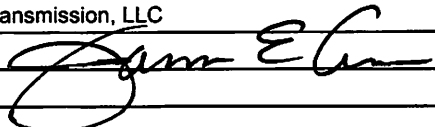
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The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired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

Well Operator:  
By: Its:

Columbia Gas Transmission, LLC  
James E. Amos   
Senior Engineer

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) Laurel Run of Fish Creek Quadrangle Littleton, 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: \_\_\_\_\_

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? \_\_\_\_\_

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection ( UIC Permit Number 34-119-28776, 34-167-23862)
- Reuse (at API Number \_\_\_\_\_)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain Appalachian Water Services, Masontown, PA (permit 2608201))

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Will closed loop system be used? If so, describe: yes - steel piping connecting wellhead and tank(s)

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. N/A - no drilling planned

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

Additives to be used in drilling medium? No drilling planned; fresh water, polymer, starch, LCM, surfactant, HCl acid, iron control (for clean-out and stimulation)

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. N/A - no drilling planned

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) \_\_\_\_\_

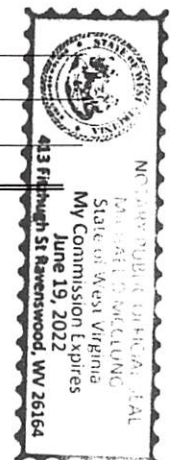
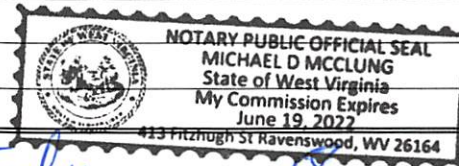
-Landfill or offsite name/permit number? if needed: Rumpke Beech Hollow Landfill - Wellston, OH

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 *James E. Amos*  
Company Official (Typed Name) James E. Amos  
Company Official Title Senior Well Services Engineer



Subscribed and sworn before me this 13th day of July, 2018  
*Michael D McClung* Notary Public

My commission expires 6/19/2022

Proposed Revegetation Treatment: Acres Disturbed < 1.0 Prevegetation pH 6

Lime 2 Tons/acre or to correct to pH 7

Fertilizer type 10-10-10

Fertilizer amount 600 lbs/acre

Mulch straw @ 2 for permanent (@ 3 for temporary) Tons/acre

Seed Mixtures

**Temporary**

**Permanent**

Seed Type lbs/acre

Seed Type lbs/acre

Annual Rye @ 40

Orchard Grass and/or Tall Fescue @ 29

Birdsfoot Trefoil (empire) @ 9

Annual Rye @ 12

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: *Jim Walcott*

Comments: \_\_\_\_\_

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Title: Oil & Gas Inspector

Date: 7/26/18

Field Reviewed? (  ) Yes (  ) No

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**OFFICE OF OIL AND GAS**  
**GROUNDWATER PROTECTION PLAN**

Operator Name: Columbia Gas Transmission, LLC  
Watershed (HUC 10): Laurel Run of Fish Creek Quad: Littleton, WV  
Farm Name: W. R. Vaughn (WV DEP records indicate Vaughn, E. N.)

1. List the procedures used for the treatment and discharge of fluids. Include a list of all operations that could contaminate the groundwater.

No fertilizer will be stored on site. Small quantities of fuel, oil, and lubrications will be stored on site, but located within secondary containment.

Spills from construction equipment and well treatment fluids is the only source of contaminate to groundwater.

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. Fluid pumping well service equipment will have secondary containment under all leak paths. 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.

No discharges planned. Laurel Run is approximately 690 ft to the SW.

PWSID WV9925016 ZPC Covestro (FKA Bayer Material) intersects protection area. Refer to enclosed SWAP Protection Area letter dated 2/16/18 from the Dept of Health and Human Resources.

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

N/A

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

N/A

6. Provide a statement that no waste material will be used for deicing or fill material on the property.

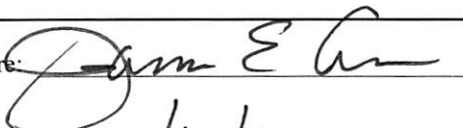
No waste material will be used for deicing or fill material on the property.

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

During routine tailgate meetings groundwater protection will be a topic of discussion.

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

No fertilizer will be stored on site. Small quantities of fuel, oil, and lubrications will be stored on site, but located within secondary containment. Construction and well servicing equipment will be monitored and inspected daily for leaks or spill.

Signature: 

Date: 7/12/18

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STATE OF WEST VIRGINIA  
**DEPARTMENT OF HEALTH AND HUMAN RESOURCES**  
 Bureau for Public Health

Bill J. Crouch  
 Cabinet Secretary

Office of Environmental Health Services

Rahul Gupta, MD, MPH, MBA, FACP  
 Commissioner  
 State Health Officer

February 16, 2018

William Timmermeyer  
 TransCanada -Columbia Pipeline Group  
 1700 MacCorkle Ave., SE  
 Charleston, WV 25314

Re: WV DEP SWAP Info Request  
**Protection Areas for 8 wells**  
 Randolph/Preston/Marshall Counties,

Dear Mr. Timmermeyer:

This is a response to the informational request dated February 15, 2018 concerning protection areas near eight wells.

Based on the current information, we have found the following:

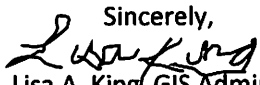
| Well                  | PA PWSID  | PA Type | System Name                    | County   | Note   |
|-----------------------|-----------|---------|--------------------------------|----------|--|
| Glady 7455            | WV9942049 | ZPC     | USFS Middle Mountain Cabins HP | Randolph | Distance 1 mile, does not intersect any PA   |
| Glady 7459            |           |         |                                |          | Out of WV State                              |
| Terra Alta South 7500 | WV3303908 | ZPC     | Kingwood Water Board Primary   | Preston  | Intersects Protection Area                   |
| Victory B 2265        | WV9925016 | ZPC     | Covestro (FKA Bayer Material)  | Marshall | Intersects Protection Area                   |
|                       | WV3304803 | ZPC     | Sistersville Municipal Water   | Marshall | Intersects Protection Area                   |
| Victory B 2345        | WV9925016 | ZPC     | Covestro (FKA Bayer Material)  | Marshall | Intersects Protection Area                   |
|                       | WV3304803 | ZPC     | Sistersville Municipal Water   | Marshall | Intersects Protection Area                   |
| Victory B 2589        | WV9925016 | ZPC     | Covestro (FKA Bayer Material)  | Marshall | Intersects Protection Area                   |
| Victory B 3522        | WV9925016 | ZPC     | Covestro (FKA Bayer Material)  | Marshall | Intersects Protection Area                   |
| Victory B 4502        | WV9925016 | ZPC     | Covestro (FKA Bayer Material)  | Marshall | Distance 250 feet, does not intersect any PA |

I hope the information provided helps you with the completion of your project. If you have any questions, please do not hesitate to contact me at (304) 356-4309.

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Sincerely,  
  
 Lisa A. King, GIS Administrator  
 Source Water Assessment and Protection

CC: William J. Toome

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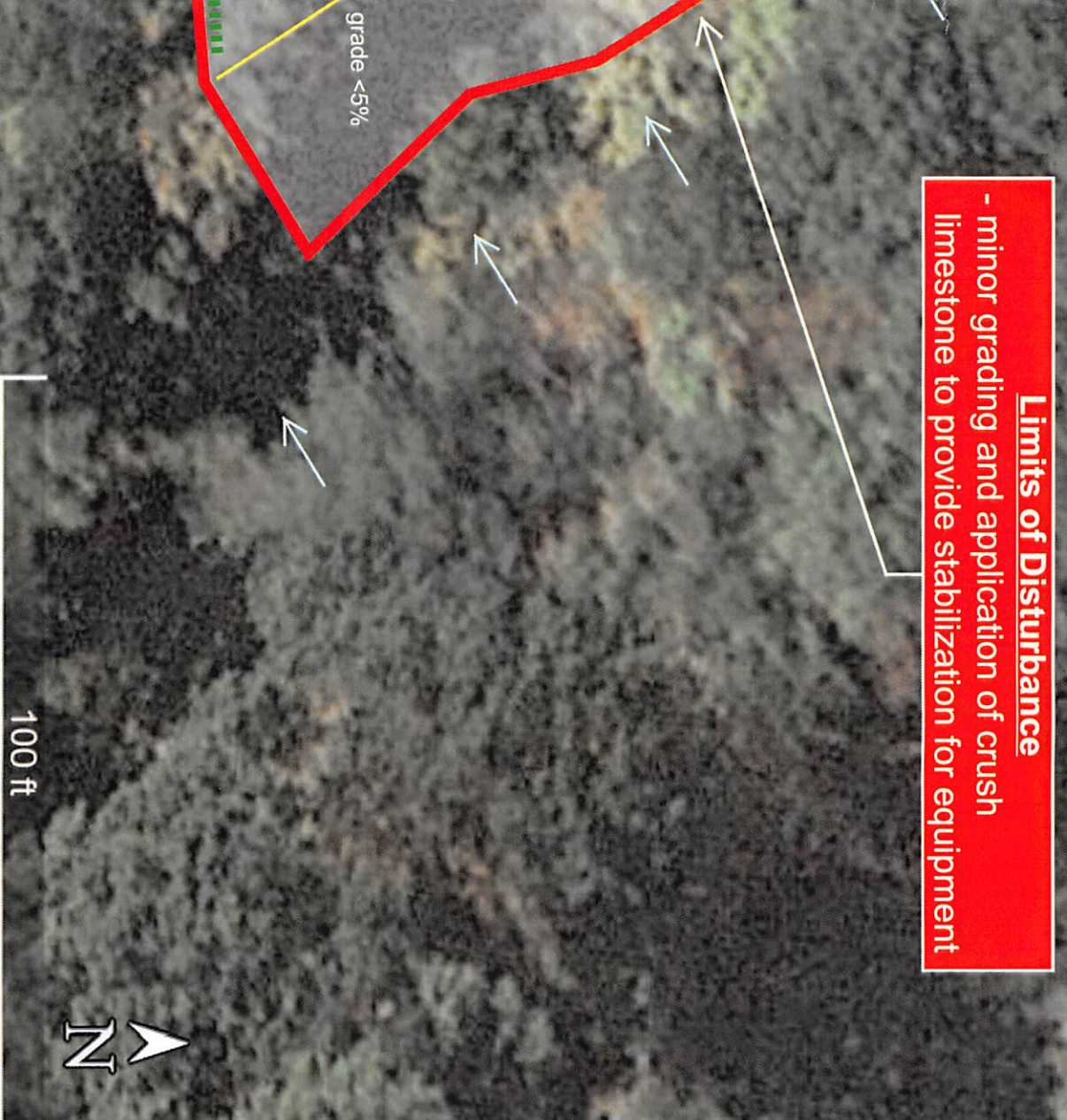
## WV DEP Reclamation Plan (siting detail)

Victory B well 3522

- Existing road surface and culverts to be maintained
- BMPs to be utilized per WV DEP guidelines

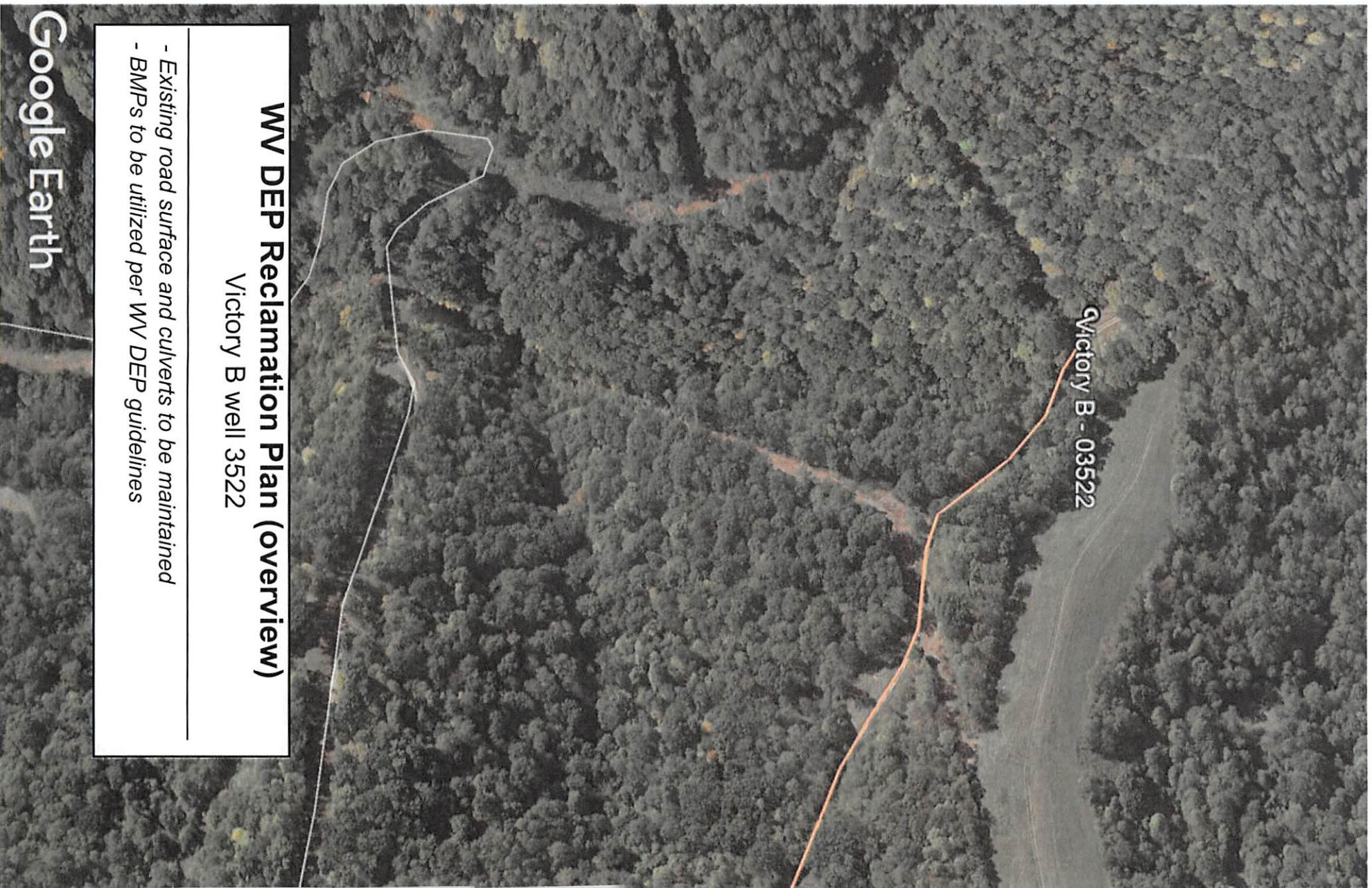
### Limits of Disturbance

- minor grading and application of crush limestone to provide stabilization for equipment



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Victory B - 03522

## WV DEP Reclamation Plan (overview)

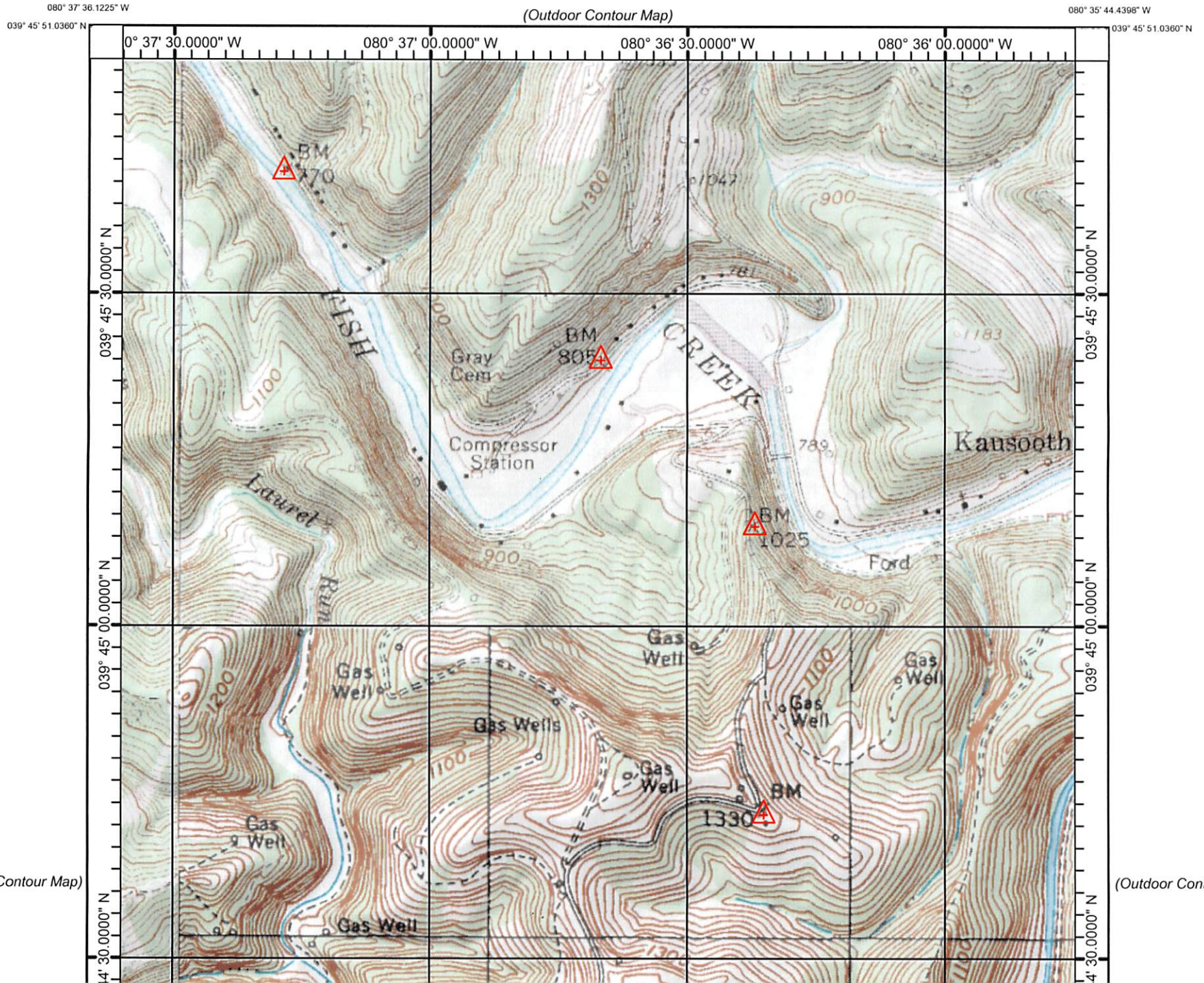
Victory B well 3522

- Existing road surface and culverts to be maintained
- BMPs to be utilized per WV DEP guidelines

Google Earth



47-051-00056W

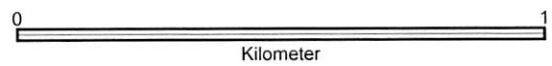
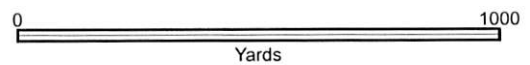
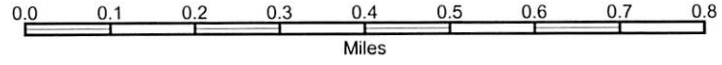


RECEIVED  
Office of Oil and Gas  
JUL 30 2018  
WV Department of  
Environmental Protection



039° 43' 21.5047" N  
080° 37' 36.1225" W  
039° 44' 00.0000" N  
080° 37' 00.0000" W  
080° 36' 30.0000" W  
080° 36' 00.0000" W  
039° 43' 30.0000" N  
039° 43' 00.0000" N  
039° 43' 21.5047" N  
080° 35' 44.4398" W

(Outdoor Contour Map)



CONTOUR INTERVAL UNKNOWN FT

Produced by Trimble Terrain Navigator Pro  
Topography based on USGS variable Maps  
North American 1983 Datum (NAD83)  
To place on the predicted North American 1927 move the  
projection lines 9M N and 17M E

Printed: Thu Jun 07, 2018

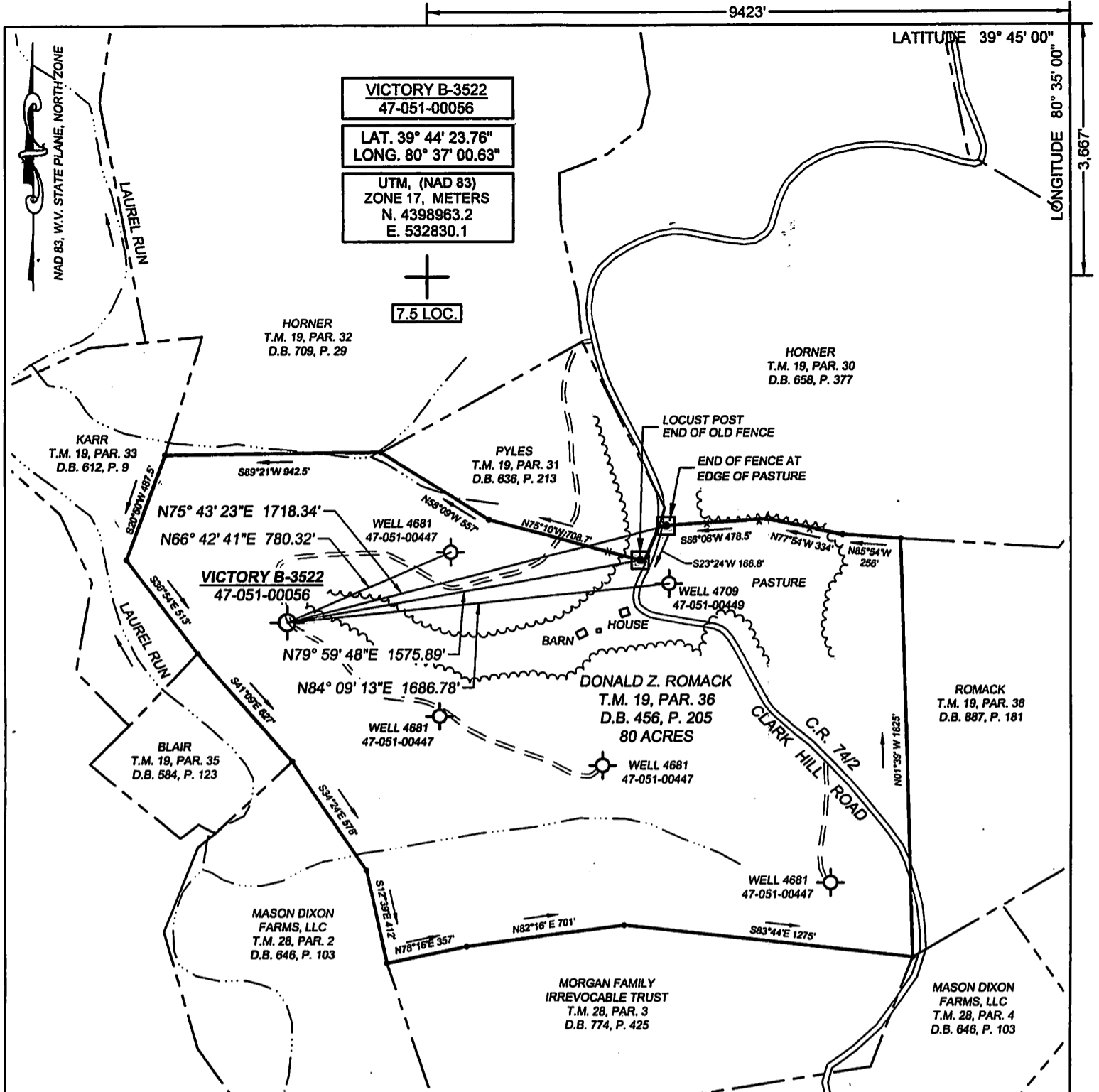
039° 43' 21.5047" N

080° 35' 44.4398" W

(Outdoor Contour Map)

N/A  
LITTLETON, WV  
UNKNOWN

A7-051-00056W



VICTORY B-3522  
47-051-00056

LAT. 39° 44' 23.76"  
LONG. 80° 37' 00.63"

UTM, (NAD 83)  
ZONE 17, METERS  
N. 4398963.2  
E. 532830.1

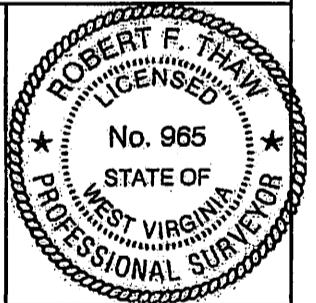
7.5 LOC.

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

FILE No 1701-2345-001-027  
DRAWING No. VICTORY B-3522  
SCALE 1"=600'  
MINIMUM DEGREE OF ACCURACY 1:200  
PROVEN SOURCE OF ELEVATION TRIMBLE R8-3  
GPS UNIT

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.

(SIGNED) R.F. Thaw  
ROBERT F. THAW PS #965



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

DATE MAY 15 2018  
OPERATOR'S WELL No. 3522  
API WELL No. 47 051 - 00056W

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

LOCATION: ELEVATION 1234.0 WATER SHED LAUREL RUN OF FISH CREEK  
DISTRICT LIBERTY COUNTY MARSHALL  
QUADRANGLE LITTLETON, WV

SURFACE OWNER DONALD Z. ROMACK ACREAGE 80  
OIL & GAS ROYALTY OWNER W.R. VAUGHN, ET AL  
LEASE ACREAGE 80 LEASE No. 3196871-000

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

TARGET FORMATION MAXTON ESTIMATED DEPTH 1960

WELL OPERATOR COLUMBIA GAS TRANSMISSION, LLC DESIGNATED AGENT JAMES AMOS  
ADDRESS PO BOX 1273, CHARLESTON, WV ADDRESS P.O. BOX 1273, CHARLESTON W.V.  
25325-1273 25325-1273