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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)

Tuesday, August 14, 2018  
WELL WORK PLUGGING PERMIT  
Vertical Plugging

XTO ENERGY, INC.  
810 HOUSTON STREET

FORT WORTH, TX 76102

Re: Permit approval for LOWE 1 S-10  
47-033-02195-00-00

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

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. Please be advised that form WR-38, Affidavit of Plugging and Filling Well, is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

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

James A. Martin  
Chief

Operator's Well Number: LOWE 1 S-10  
Farm Name: LOWE, HENRY C.  
U.S. WELL NUMBER: 47-033-02195-00-00  
Vertical Plugging  
Date Issued: 8/14/2018

## 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. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
2. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
3. Well work activities shall not constitute a hazard to the safety of persons.
4. This well is under a consent order and must be plugged under the terms of that agreement.

WW-4B  
Rev. 2/01

1) Date 7/3, 20 18  
2) Operator's  
Well No. Lowe 1 S-10  
3) API Well No. 47-033 - 02195

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

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

- 4) Well Type: Oil \_\_\_/ Gas X/ Liquid injection \_\_\_/ Waste disposal \_\_\_/  
(If "Gas, Production X or Underground storage \_\_\_) Deep \_\_\_/ Shallow X
- 5) Location: Elevation 1378' Watershed 0502000206 Lower West Fork River  
District Eagle County Harrison Quadrangle Wallace
- 6) Well Operator XTO Energy Inc. 7) Designated Agent Gary Beall  
Address PO Box 1008 Address PO Box 1008  
Jane Lew, WV 26378 Jane Lew, WV 26378
- 8) Oil and Gas Inspector to be notified 9) Plugging Contractor  
Name Sam Ward Name \_\_\_\_\_  
Address PO Box 2327 Address \_\_\_\_\_  
Buckhannon, WV 26201

10) Work Order: The work order for the manner of plugging this well is as follows:  
**See attached**

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

Work order approved by inspector *S. Debra* Date 7/3/2018

08/17/2018

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| <u>API</u>   | <u>Farm Name</u> | <u>Well Number</u> |
|--------------|------------------|--------------------|
| 47-033-02195 | LOWE, HENRY C.   | LOWE 1 S-10        |

### Plugging Procedure

4.5 casing at 5,345'

6% gel from 5,340' to surface.

Perfs - 5,250' - 5,197'

Cement - 5,340' - 5,090' = 250' x 0.0159 = 4 bbl = 19 sks

6% gel - 5,090' - 4,810'.

Perfs - 4,756' - 4,731'

Cement - 4,810' - 4,625' = 185' x 0.0159 = 3 bbl = 14 sks

6% gel - 4,625' - 4,265'

Perfs - 4,210' - 4,190'

Cement - 4,265' - 4,075' = 190' x 0.0159 = 3 bbl = 14 sks

6% gel - 4,075' - 3,240'

Perfs - 3,180' - 2,865'

Cement - 3,240' - 2,700' = 540' x 0.0159 = 8.6 - 9 bbl = 43 sks

Tag cement, if ok, pull tubing out and RIH to CBL

Cut 4.5 casing at 1,850' and circulate 6% gel back to surface.

Cement - 1,850' - 1,700' = 150' x 0.0602 = 9 bbl = 44 sks.

6% gel - 1700' - 1520'.

Elevation at 1,378' - Bottom of 8 5/8 casing at 1,450'.

Cement - 1,520' - 1,350' = 170' = 11 bbl = 53 sks

6% gel - 1,350' - 1,023'

Coal seam - 970' - 973'

Cement - 1,023' - 940' = 83' x 0.0641 = 5.3 bbl = 26 sks

6% gel - 940' - 700'

Fresh water at 650'

Cement - 700' - 600' = 100 x 0.0641 = 6.4 bbl = 31 sks

6% gel - 600' - 225'

Cement - 225' to Surface = 225 x 0.0641 = 15 bbl = 73 sks.

Install well monument.

We will check on the cement top on the 8 5/8 casing and adjust as needed.

Cement 5,340' - 5,090'

Cement 4,810' - 4,625'

Cement 4,265' - 4,075'

Cement 3,240' - 2,700'

Cement 1,850' - 1,700'

Cement 1,520' - 1,350'

Cement 1,023' - 940'

Cement 700' - 600'

Cement 225' - Surface

SDaw  
7/3/2018

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STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
**Oil and Gas Division**  
**WELL RECORD**

Quadrangle Wallace 7 1/2

Permit No. 47-033-2080  
2195

Rotary  Oil \_\_\_\_\_  
Cable \_\_\_\_\_ Gas   
Recycling \_\_\_\_\_ Comb. \_\_\_\_\_  
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ (Kind)

Company Doran & Associates, Inc.  
Address 728 Washington Road, Pgh., PA 15228  
Farm H. Lowe #1 K-L-263 Acres 26  
Location (waters) Harris Fork  
Well No. 1 Elev. 1455  
District Eagle County Harrison  
The surface of tract is owned in fee by Henry C. & Celia J. Lowe, R#1, Box 301  
Address Wallace, WV 26448  
Mineral rights are owned by same as above  
Address \_\_\_\_\_  
Drilling Commenced 12-6-79  
Drilling Completed 12-18-79  
Initial open flow -- cu. ft. -- bbls.  
Final production 474 cu. ft. per day -- bbls.  
Well open 72 hrs. before test 1540 RP.  
Well treatment details:

| Casing and Tubing   | Used in Drilling | Left in Well | Cement fill up Cu. ft. (Sks.) |
|---------------------|------------------|--------------|-------------------------------|
| Size 20-16          |                  |              |                               |
| Cond. 13-10" 11 3/4 | 30               | 30           |                               |
| 9 5/8               |                  |              |                               |
| 8 5/8               | 1450'            | 1450'        | 300 sks.                      |
| 7                   |                  |              |                               |
| 5 1/2               |                  |              |                               |
| 4 1/2               | 5345'            | 5345'        | 640 sks.                      |
| 3                   |                  |              |                               |
| 2                   |                  |              |                               |
| Liners Used         |                  |              |                               |

Attach copy of cementing record.

STIMULATION RECORD:

| DATE:   | INTERVAL PERFORATED: | FROM | TO   | AMT. FLUID | AMT. SAND |
|---------|----------------------|------|------|------------|-----------|
| 1-20-80 |                      | 5197 | 5250 | 530 BBls.  | 40,000#   |
| 1-20-80 |                      | 4731 | 4756 | 488 BBls.  | 40,000#   |
| 1-20-80 |                      | 4190 | 4210 | 539 BBls.  | 40,000#   |

Coal was encountered at 150', 970' Feet \_\_\_\_\_ Inches  
Fresh water 650' Feet \_\_\_\_\_ Salt Water 1290', 2410' Feet \_\_\_\_\_  
Producing Sand Benson, Bradford, Balltown Depth 5192, 4716, 4184

| Formation    | Color | Hard or Soft | Top Feet | Bottom Feet | Oil, Gas or Water | * Remarks |
|--------------|-------|--------------|----------|-------------|-------------------|-----------|
| Substructure |       |              | 0        | 30          |                   |           |
| Sand         |       |              | 30       | 65          |                   |           |
| Sand & Shale |       |              | 65       | 80          |                   |           |
| Sand         |       |              | 80       | 150         |                   |           |
| Coal         |       |              | 150      | 155         |                   |           |
| Shale & Sand |       |              | 155      | 185         |                   |           |
| Red Rock     |       |              | 185      | 200         |                   |           |
| Shale & Sand |       |              | 200      | 210         |                   |           |
| Red Rock     |       |              | 210      | 220         |                   |           |
| Shale & Sand |       |              | 220      | 255         |                   |           |
| Shale        |       |              | 255      | 280         |                   |           |
| Shale & Sand |       |              | 280      | 285         |                   |           |
| Red Rock     |       |              | 285      | 340         |                   |           |
| Shale        |       |              | 340      | 830         |                   |           |
| Sand         |       |              | 830      | 850         |                   |           |
| Shale        |       |              | 850      | 895         |                   |           |
| Sand         |       |              | 895      | 960         |                   |           |
| Shale        |       |              | 960      | 970         |                   |           |
| Coal         |       |              | 970      | 973         |                   |           |
| Sand & Shale |       |              | 973      | 1188        |                   |           |
| Red Rock     |       |              | 1188     | 1210        |                   |           |
| Shale        |       |              | 1210     | 1215        |                   |           |
| Red Rock     |       |              | 1215     | 1230        |                   |           |
| Shale        |       |              | 1230     | 1280        |                   |           |

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FEB - 4 1980  
OIL & GAS DIVISION  
DEPT. OF MINES

F. W. @ 650'

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(over)

\* Indicates Electric Log tops in the remarks section.

| Formation      | Color | Hard or Soft | Top Feet | Bottom Feet | Oil, Gas or Water | Remarks |
|----------------|-------|--------------|----------|-------------|-------------------|---------|
| Sand           |       |              | 1280     | 1295        | S. W. @ 1290'     |         |
| Shale          |       |              | 1295     | 1660        |                   |         |
| Lime           |       |              | 1660     | 1700        |                   |         |
| Shale          |       |              | 1700     | 2410        |                   |         |
| Sand           |       |              | 2410     | 2800        | S. W. @ 2410'     |         |
| Shale          |       |              | 2800     | 2910        |                   |         |
| Sand & Shale   |       |              | 2910     | 3000        |                   |         |
| Sand           |       |              | 3000     | 3030        |                   |         |
| Shale          |       |              | 3030     | 3060        |                   |         |
| Sand           |       |              | 3060     | 3085        |                   |         |
| Shale          |       |              | 3085     | 3200        |                   |         |
| Sand & Shale   |       |              | 3200     | 3240        |                   |         |
| Shale          |       |              | 3240     | 3360        |                   |         |
| Sand & Shale   |       |              | 3360     | 3500        |                   |         |
| Shale          |       |              | 3500     | 3665        |                   |         |
| Sand & Shale   |       |              | 3665     | 3835        |                   |         |
| Shale          |       |              | 3835     | 3890        |                   |         |
| Sand & Shale   |       |              | 3890     | 3900        |                   |         |
| Shale          |       |              | 3900     | 5200        |                   |         |
| Sand & Shale   |       |              | 5200     | 5320        |                   |         |
| Shaley Sand    |       |              | 5320     | 5612        |                   |         |
| Driller's T.D. |       |              |          | 5612        |                   |         |
| Speechley      |       |              | 3956     | 3976        |                   |         |
| Balltown       |       |              | 4184     | 4230        |                   |         |
| Bradford       |       |              | 4716     | 4758        |                   |         |
| Benson         |       |              | 5192     | 5250        |                   |         |
| Logger's T.D.  |       |              |          | 5607        |                   |         |

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08/17/2018

Date Feb 1 1980

APPROVED Donald R. Laughlin Owner

By Donald R. Laughlin, Vice President Operations  
(Title)

FERC

IV-35  
(Rev 8-81)

12/31/86



State of West Virginia  
Department of Mines  
Oil and Gas Division

Date February 11th, 1986  
Operator's Well No. S-10  
Farm Lowe # 1  
API No. 47 - 033 - 2195-F

WELL OPERATOR'S REPORT  
OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil \_\_\_ / Gas X / Liquid Injection \_\_\_ / Waste Disposal \_\_\_ /  
(If "Gas," Production \_\_\_ / Underground Storage \_\_\_ / Deep \_\_\_ / Shallow \_\_\_ /)

LOCATION: Elevation: 1455' Watershed Jones Run  
District: Eagle County Harrison Quadrangle Wallace

COMPANY Sheldon and Sheldon, Inc.  
ADDRESS 901 W. Main St. Suite 201 Bldgpt., WV  
DESIGNATED AGENT David J. Sheldon  
ADDRESS 118 westwood Ave. Bridgeport, WV 26330  
SURFACE OWNER Henry C. & Celia J. Lowe  
ADDRESS Rt.1 Box 301 Wallace, WV 26448  
MINERAL RIGHTS OWNER Same  
ADDRESS Same

OIL AND GAS INSPECTOR FOR THIS WORK

Steve Casey ADDRESS Rt. 2 Box 232-D Jane Lew, WV

PERMIT ISSUED October 30, 1985

DRILLING COMMENCED 2/11/86

DRILLING COMPLETED 2/11/86

IF APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED  
ON N/a

| Casing & Tubing  | Used in Drilling | Left in Well | Cement fill up Cu. ft. |
|------------------|------------------|--------------|------------------------|
| Size 20-16 Cond. |                  |              |                        |
| 13-10"           |                  |              |                        |
| 9 5/8            |                  |              |                        |
| 8 5/8            |                  |              |                        |
| 7                |                  |              |                        |
| 5 1/2            |                  |              |                        |
| 4 1/2            |                  |              |                        |
| 3                |                  |              |                        |
| 2                |                  |              |                        |
| Liners used      |                  |              |                        |

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GEOLOGICAL TARGET FORMATION \_\_\_\_\_ Depth \_\_\_\_\_ feet  
Depth of completed well \_\_\_\_\_ feet Rotary \_\_\_ / Cable Tools \_\_\_\_\_  
Water strata depth: Fresh \_\_\_\_\_ feet; Salt \_\_\_\_\_ feet  
Coal seam depths: \_\_\_\_\_ Is coal being mined in the area? \_\_\_\_\_

OPEN FLOW DATA

Producing formation 50. 30. Gordon Pay zone depth 2865, - 3180 feet  
Gas: Initial open flow No Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow 340 Mcf/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests 4 hours

Static rock pressure 565 psig (surface measurement) after 72 hours shut in  
(If applicable due to multiple completion--)

Second producing formation \_\_\_\_\_ Pay zone depth \_\_\_\_\_ feet  
Gas: Initial open flow \_\_\_\_\_ Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow \_\_\_\_\_ Mcf/d Oil: Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ hours

Static rock pressure \_\_\_\_\_ psig (surface measurement) after \_\_\_\_\_ hours shut in

(Continue on reverse side)

105  
2195-F  
08/17/2018

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Perforation: 2864-3180 - 24 Holes

Fraced Using: 590 bbls of water, 35,000# 20-40 sand  
500 gals acid, and 75,000 scf N2.

WELL LOG

| FORMATION  | COLOR | HARD OR SOFT | TOP FEET | BOTTOM FEET | REMARKS<br>Including indication of all fresh and salt water, coal, oil and gas |
|--|-------|--------------|----------|-------------|--|
| THIS INFORMATION IS SHOWN OF ORIGINAL WELL REPORT. |       |              |          |             |  |

(Attach separate sheets as necessary)

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Sheldon and Sheldon, Inc.  
Well Operator  
By: *[Signature]*  
Date: February 11th, 1986

08/17/2018

Note: Regulation 2.02(i) provides as follows:  
"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including coal, encountered in the drilling of a well."

WW-4A  
Revised 6-07

1) Date: 7/3/18  
 2) Operator's Well Number  
 Lowe, 1 S-10  
 3) API Well No.: 47 - 033 - 02195

**STATE OF WEST VIRGINIA  
 DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
 NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL**

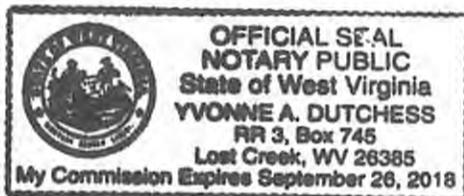
|   |  |
|---|--|
| 4) Surface Owner(s) to be served:           | 5) (a) Coal Operator                   |
| (a) Name <u>Consolidation Coal Company</u>  | Name _____                             |
| Address <u>c/o Murray Energy Corp.</u>      | Address _____                          |
| <u>46226 National Road</u>                  |  |
| (b) Name <u>Saint Clairsville, OH 43950</u> | (b) Coal Owner(s) with Declaration     |
| Address _____                               | Name <u>Consolidation Coal Company</u> |
|   | Address <u>Shortline Fuel Co. Coal</u> |
| (c) Name _____                              | <u>C/o Group Nord - Prop Tax Div</u>   |
| Address _____                               | Name <u>1800 Washington Rd</u>         |
|   | Address <u>Washington PA 15241</u>     |
|   | <u>-see attached</u>                   |
| 6) Inspector <u>Sam Ward</u>                | (c) Coal Lessee with Declaration       |
| Address <u>PO Box 2327</u>                  | Name _____                             |
| <u>Buckhannon, WV 26201</u>                 | Address _____                          |
| Telephone <u>304-389-7583</u>               |  |

**TO THE PERSONS NAMED ABOVE:** You should have received this Form and the following documents:

- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
- (2) The plat (surveyor's map) showing the well location on Form WW-6.

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

Take notice that under Chapter 22-6 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a permit to plug and abandon a well with the Chief of the Office of Oil and Gas, West Virginia Department of Environmental Protection, with respect to the well at the location described on the attached Application and depicted on the attached Form WW-6. Copies of this Notice, the Application, and the plat have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Chief.



Well Operator XTO Energy Inc  
 By: [Signature]  
 Its: Regulatory Coordinator  
 Address PO Box 1008  
Jane Lew, WV 26378  
 Telephone 304-884-6000

Subscribed and sworn before me this 5th day of July 2018  
Yvonne A. Dutches Notary Public  
 My Commission Expires September 26, 2018

**Oil and Gas Privacy Notice**

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at [deprivacyofficer@wv.gov](mailto:deprivacyofficer@wv.gov).

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 WV Department of  
 Environmental Protection

API 47-033-02195

Well Number Lowe, 1 S-10

Additional Coal Owners:

Consolidation Coal Company  
1000 Consol Energy Drive  
Canonsburg, PA 15317

JayStern, LLC  
c/o Murray Energy  
Attn: Lane  
46226 National Road  
St. Clairsville, OH 43950

Guy Corporation  
92 16<sup>th</sup> St. 2<sup>nd</sup> Floor  
Wheeling, WV 26003

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WW-9  
(5/16)

API Number 47 - 033 - 02195  
Operator's Well No. Low 1 S-10

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS  
FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name XTO Energy Inc. OP Code 494487940

Watershed (HUC 10) 0502000206 Lower West Fork River Quadrangle Wallace

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: Fluids from plugging operations will be put into tanks.

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

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection ( UIC Permit Number 4707302523, 4708505151, 4708509721 )
- Reuse (at API Number \_\_\_\_\_)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain Meadowbrook Landfill SWF#1032, RES Water Recycling -WMGR123SW005 (PA))

*SDW  
7/3/2018*

Will closed loop system be used? If so, describe: NA

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. NA - Plugging

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

Additives to be used in drilling medium? NA

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Any solid waste from plugging will be taken to landfill.

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

-Landfill or offsite name/permit number? Meadowbrook Landfill SWF#1032

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 *Tim Sands*

Company Official (Typed Name) Tim Sands

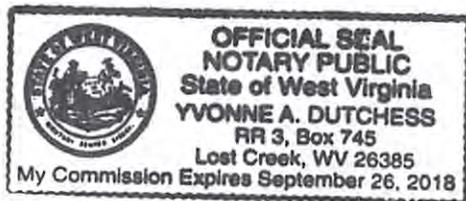
Company Official Title Regulatory Coordinator

Subscribed and sworn before me this 5<sup>th</sup> day of July, 2018

*Yvonne A. Dutches* Notary Public

My commission expires September 26, 2018

08/17/2018



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WV Department of  
Environmental Protection

Form WW-9

Operator's Well No. Low 1 5-10

Proposed Revegetation Treatment: Acres Disturbed 1.07 +/- Prevegetation pH \_\_\_\_\_

Lime 2 Tons/acre or to correct to pH \_\_\_\_\_

Fertilizer type 10-20-10

Fertilizer amount 1000 lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

**Temporary**

**Permanent**

| Seed Type          | lbs/acre |
|--------------------|----------|
| Kentucky Bluegrass | 30       |
| Redtop             | 5        |
| Birdsfoot Trefoil  | 15       |

| Seed Type          | lbs/acre |
|--------------------|----------|
| Kentucky Bluegrass | 30       |
| Redtop             | 5        |
| Birdsfoot Trefoil  | 15       |

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and dimensions (L, W), and area in acres, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

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

Title: OOG Inspector

Date: 7/3/2018

Field Reviewed? ( ) Yes

( X ) No

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Page \_\_\_\_\_ of \_\_\_\_\_  
API Number 47 - 033 - 02195  
Operator's Well No. Low 15-10

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

Operator Name: XTO Energy Inc.

Watershed (HUC 10): 0502000206 Lower West Fork River Quad: Wallace

Farm Name: Low, Henry C.

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

Fluids will not be discharged.

2. Describe procedures and equipment used to protect groundwater quality from the list of potential contaminant sources above.

NA

3. List the closest water body, distance to closest water body, and distance from closest Well Head Protection Area to the discharge area.

NA

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

NA

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

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API Number 47 - 033 - 02195  
Operator's Well No. Love 2 S-10

NA

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

NA

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.

NA

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

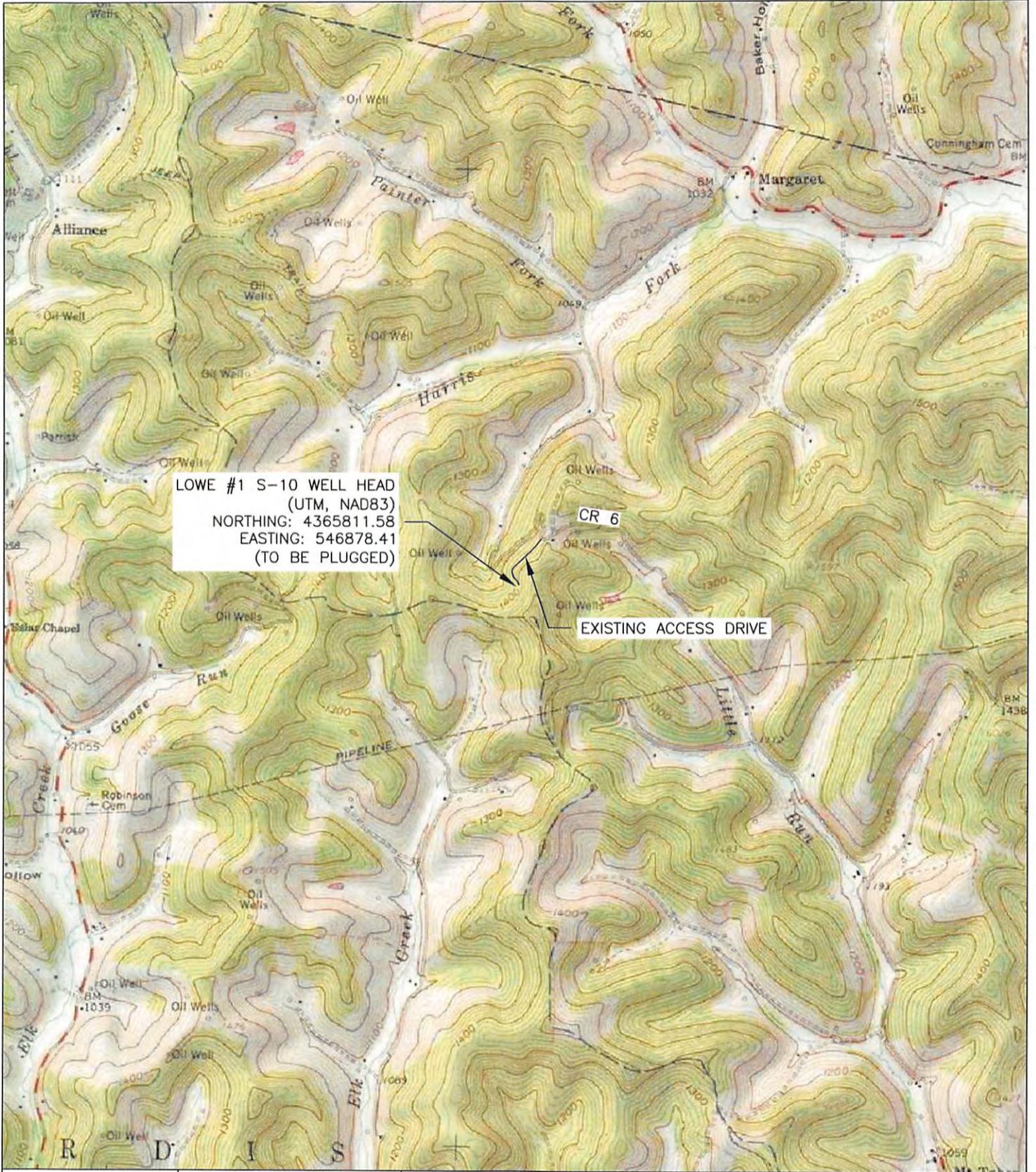
NA

Signature: Tim Sack

Date: 6/28/18

08/17/2018

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LOWE #1 S-10 WELL HEAD  
 (UTM, NAD83)  
 NORTHING: 4365811.58  
 EASTING: 546878.41  
 (TO BE PLUGGED)

EXISTING ACCESS DRIVE

|  |                                |   |
|--|--------------------------------|---|
| SCALES<br>HORIZ: 1"=2000'<br>VERT:<br>CONTOUR INT: 20' | DESN BY: SDG                   | REV. BY: _____ DATE: _____ DESC.: _____ |
|  | DRWN BY: SDG                   | REV. BY: _____ DATE: _____ DESC.: _____ |
|  | RVWD BY: MMV                   | REV. BY: _____ DATE: _____ DESC.: _____ |
|  | FLD BK: _____                  | REV. BY: _____ DATE: _____ DESC.: _____ |
|  | BK PG: _____<br>DATE: 06/12/18 | REV. BY: _____ DATE: _____ DESC.: _____ |

SHEET NUMBER:  
 1 OF 1

USGS MAP - WALLACE QUADRANGLE  
**LOWE #1 S-10**  
 FOR: XTO ENERGY, INC.  
 CR 6, HARRISON COUNTY, WEST VIRGINIA

**MORRIS KNOWLES & ASSOCIATES, INC.**  
 A HAMMONTREE COMPANY  
 ENGINEERS, PLANNERS, SURVEYORS  
 443 ATHENA DRIVE DELMONT, PA 15626  
 PHN: (724) 468-4623 FAX: (724) 468-8910  
 www.morri-k.com

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WW-7  
8-30-06



West Virginia Department of Environmental Protection  
Office of Oil and Gas

**WELL LOCATION FORM: GPS**

API: 47-033-02195 WELL NO.: Lowe 1 S-10

FARM NAME: Lowe, Henry C.

RESPONSIBLE PARTY NAME: XTO Energy, Inc.

COUNTY: Harrison DISTRICT: Eagle

QUADRANGLE: Wallace

SURFACE OWNER: Consolidation Coal Company

ROYALTY OWNER: See Attached

UTM GPS NORTHING: 4365811.58

UTM GPS EASTING: 546878.41 GPS ELEVATION: 419.98 / 1378'

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:  
Survey grade GPS \_\_\_\_ : Post Processed Differential \_\_\_\_

Real-Time Differential \_\_\_\_

Mapping Grade GPS  : Post Processed Differential

Real-Time Differential \_\_\_\_

4. **Letter size copy of the topography map showing the well location.**

I the undersigned, hereby certify this data 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 Office of Oil and Gas.

*Tim Lamb* Regulatory Coordinator 6/14/18  
Signature Title Date

08/17/2018

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