



---

west virginia department of environmental protection

---

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

Jim Justice , Governor  
Austin Caperton , Cabinet Secretary  
www.dep.wv.gov

Wednesday, July 12, 2017  
WELL WORK PERMIT  
Vertical / Partial Plug

EQUITRANS, L. P.  
625 LIBERTY AVENUE SUITE 1700

PITTSBURGH, PA 152220000

Re: Permit approval for GSW 5470  
47-095-00446-00-00

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

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

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



James A. Martin  
Chief

Operator's Well Number: GSW 5470  
Farm Name: ORR, ESTA - AGENT  
U.S. WELL NUMBER: 47-095-00446-00-00  
Vertical / Partial Plug  
Date Issued: 7/12/2017

Promoting a healthy environment.

07/14/2017

## PERMIT CONDITIONS

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

### CONDITIONS

---

1. 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.

WW-4B  
Rev. 2/01

1) Date May 12, 2017  
2) Operator's  
Well No. 605470  
3) API Well No. 47-095 - 00446

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 \_\_\_ or Underground storage X ) Deep \_\_\_ / Shallow \_\_\_

5) Location: Elevation 807 Watershed Pratt Run  
District McElroy County Tyler Quadrangle West Union NE 4.3

6) Well Operator Equitrans, L.P. 7) Designated Agent Justin Macken  
Address 625 Liberty Ave Suite 1700 Address 625 Liberty Ave Suite 1700  
Pittsburgh, PA 15222-0000 Pittsburgh, PA 15222-0000

8) Oil and Gas Inspector to be notified 9) Plugging Contractor  
Name ~~Justin Snyder~~ Derek Haight Name To Be Determined  
Address ~~200 Florence~~ P.O. Box 85 Address \_\_\_\_\_  
~~Lumberport WV 26388~~ Smithville, WV 26178

10) Work Order: The work order for the manner of plugging this well is as follows:  
See attachment for details and procedures.

RECEIVED  
Office of Oil and Gas  
JUN 16 2017  
WV Department of  
Environmental Protection

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

Work order approved by inspector [Signature] Date 6-8-17

|   |
|---|
| <b>PARTIAL<br/>PLUG OF STORAGE WELL 5470 IN SHIRLEY STORAGE</b>   |
| <b>2017</b>   |
| <b>Plugback Procedure</b>   |
| Partial Plugging-Removing tubing and completing well to one storage horizon (See attachment-Well 5470 (Current) and Well 5470 (After) Schematics) |
| Notify State Inspector, Derek Haught 304-206-7613. 24 hours prior to commencing operations.   |
| <b>SITE PREPARATION</b>   |
| Field reconnaissance  |
| Upgrade existing well sites to accommodate service rig and ancillary equipment if necessary   |
| Install all necessary erosion control measures spelled out in approved E&S Plan   |
| <b>FIELD WORK</b>   |
| Kill well and annulus with weighted fluid   |
| Move in and rig up service rig and ancillary equipment  |
| Weld bell nipple onto 3.5" tubing   |
| Install new master gate valve and annular BOP on 3.5" tubing  |
| Install bell collar and lifting sub on 1.5" tubing  |
| Use service rig to lift 1.5" tubing and release slips in casing head  |
| Release 3.5" X 1.5" tension packer  |
| Pull 1.5" tubing and packer   |
| Move in and rig up wireline unit  |
| Run Gamma Ray correlation log and check TD  |
| Run flux leakage surveillance logging tool  |
| Trip in with cast iron bridge plug and set at 1824'   |
| Rig down and move off wireline unit   |
| Place 15' of Class A cement on top of plug from 1824' to 1809' with dump bailer on sand line  |
| Wait on cement 8 hours  |
| Check cement top with sand line   |
| Swab and bail fluid out of well   |
| Remove BOP  |
| Rig down and move off service rig   |
| Place well back into service  |
| <b>PLUGGING PROCEDURE WILL COMPLY WITH THE WVDEP CODE REQUIREMENTS</b>  |
| <b>SITE RECLAMATION</b>   |
| Reclaim access road and well site   |
| <b>PERMITTING</b>   |
| Submit final plugging affidavit   |

DMH  
G.8.11

RECEIVED  
Office of Oil and Gas

JUN 16 2017

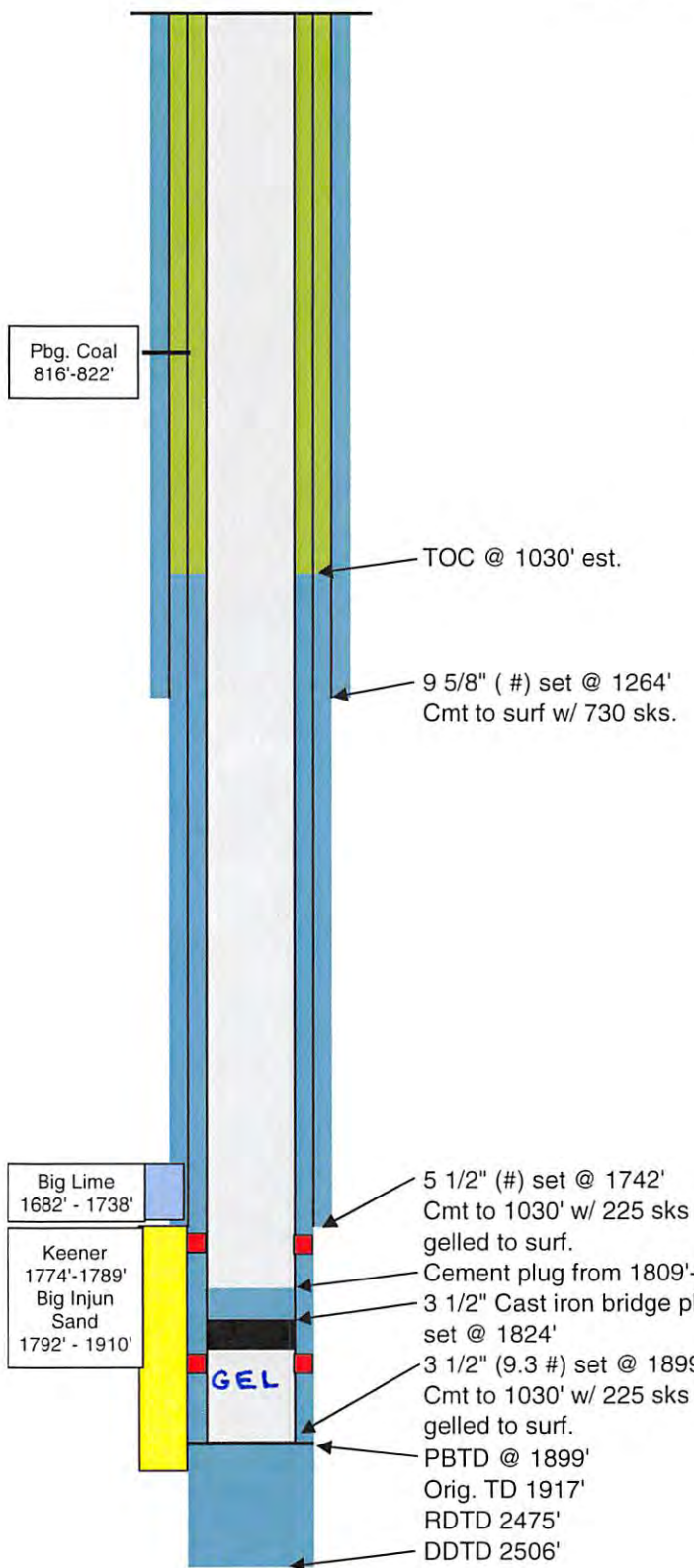
WV Department of  
Environmental Protection  
07/14/2017

# Well 5470 (OBS)

Final Schematics

## Shirley Storage Field

Well Name: Kenneth C. Orr  
 API No.: 47-095-00446  
 Lease No.: 25813  
 Location: McElroy Dist., Tyler Co.  
 Drilled: 7/8/10 TD 1917'  
 Drilled Deeper: 10/24/11 DDTD 2506'  
 Storage: 07/16/73  
 Repaired & CO: 7/16/73 RDTD 2475'  
 PBSD 1790' 7/16/73  
 PBSD 1766' 9/17/75  
 Redrilled: RDTD 1899' 9/26/89  
 \* Presumed weights - exact weight unknown!



*DMH  
6-8-17*

Perfs: 1775'-1790' Keener  
 1829'-1844' Middle Big Injun

RECEIVED  
 Office of Oil and Gas

JUN 16 2017

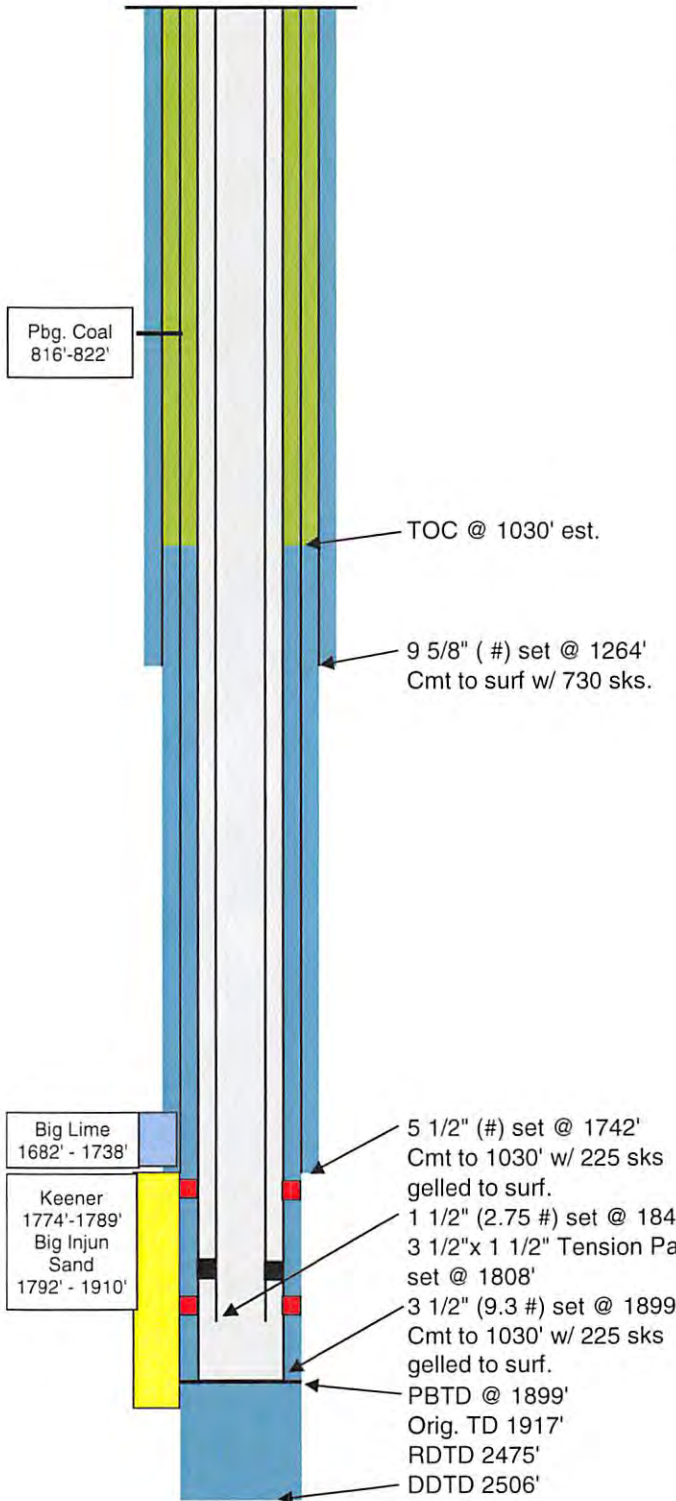
WV Department of Environmental Protection  
 07/14/2017

# Well 5470 (WTF)

Current Schematics

## Shirley Storage Field

Well Name: Kenneth C. Orr  
 API No.: 47-095-00446  
 Lease No.: 25813  
 Location: McElroy Dist., Tyler Co.  
 Drilled: 7/8/10 TD 1917'  
 Drilled Deeper: 10/24/11 DDTD 2506'  
 Storage: 07/16/73  
 Repaired & CO: 7/16/73 RDTD 2475'  
 PBDT 1790' 7/16/73  
 PBDT 1766' 9/17/75  
 Redrilled: RDTD 1899' 9/26/89  
 \* Presumed weights - exact weight unknown!



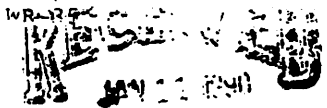
*DMH  
6-8-17*

Perfs: 1775'-1790' Keener  
 1829'-1844' Middle Big Injun

RECEIVED  
 Office of Oil and Gas

JUN 16 2017

07/14/2017  
 WV Department of Environmental Protection



9500446PP

06-Apr-89  
API # 47- 95-00446 W

State of West Virginia  
DEPARTMENT OF ENERGY  
Division of Oil and Gas

Well Operator's Report of Well Work

Farm name: ORR, ESTA, AGENT Operator Well No.: GSW 5470

LOCATION: Elevation: 807.00 Quadrangle: SHIRLEY

District: MCELROY County: TYLER  
Latitude: 8300 Feet South of 39 Deg. 25Min. 0 Sec.  
Longitude 11220 Feet West of 80 Deg. 45 Min. 0 Sec.

Company: EQUITRANS, INC.  
4955 STEUBENVILLE PIKE  
PITTSBURGH, PA 15205-4955

Agent: GARY A. HOY, DIVISION MGR.

Inspector: GLEN P. ROBINSON  
Permit Issued: 04/06/89  
Well work Commenced: 5/4/89  
Well work Completed: 9/26/89  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary ~~XX~~ Cable \_\_\_\_\_ Rig  
Total Depth (feet) 1899  
Fresh water depths (ft) \_\_\_\_\_

| Casing & Tubing Size | Used in Drilling | Left in Well | Cement Fill Up Cu. Ft. |
|----------------------|------------------|--------------|------------------------|
| 9 5/8"               |                  | 1264'        | 1264' to Surface       |
| 5 1/2"               |                  | 1742'        | 1742 to 1030           |
| 3 1/2"               |                  | 1899'        | 1899 to 1030           |
| 1 1/2"               |                  | 1843'        | on packer set @1808    |

Salt water depths (ft) \_\_\_\_\_  
Is coal being mined in area (Y/N)? \_\_\_\_\_  
Coal Depths (ft): \_\_\_\_\_

OPEN FLOW DATA

Producing formation Big Injun Pay zone depth (ft) 1772'  
 Gas: Initial open flow 330 MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
 Final open flow \_\_\_\_\_ MCF/d Final open flow \_\_\_\_\_ Bbl/d  
 Time of open flow between initial and final tests \_\_\_\_\_ Hours  
 Static rock Pressure 130 psig (surface pressure) after 24 Hours

Second producing formation Big Injun Pay zone depth (ft) 1823'  
 Gas: Initial open flow 184 MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
 Final open flow \_\_\_\_\_ MCF/d Final open flow \_\_\_\_\_ Bbl/d  
 Time of open flow between initial and final tests \_\_\_\_\_ Hours  
 Static rock Pressure 130 psig (surface pressure) after 24 Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: EQUITRANS, INC. \_\_\_\_\_  
By: [Signature] PRESIDENT \_\_\_\_\_  
Date: \_\_\_\_\_

JAN 16 1989

RECEIVED  
Office of Oil and Gas

JUN 16 2017

WV Department of Environmental Protection  
07/14/2017

9500446 PP  
95-446W

| FORMATION       | TOP FEET | BOTTOM FEET | REMARKS                               |
|-----------------|----------|-------------|---------------------------------------|
| PITTSBURGH COAL | 436      | 439         |                                       |
| GAS SAND        | 944      | 988         |                                       |
| SALT SAND       | 1062     | 1507        |                                       |
| MAXTON SAND     | 1545     | 1564        |                                       |
| LITTLE LIME     | 1648     | 1670        |                                       |
| BIG LIME        | 1682     | 1738        |                                       |
| BIG INJUN       | 1742     |             | PERFORATED INTERVALS:<br>1775 to 1790 |
|                 |          |             | &                                     |
| T.D.            | 1899     |             | 1829 to 1844                          |

**RECEIVED**  
JAN 11 1990

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

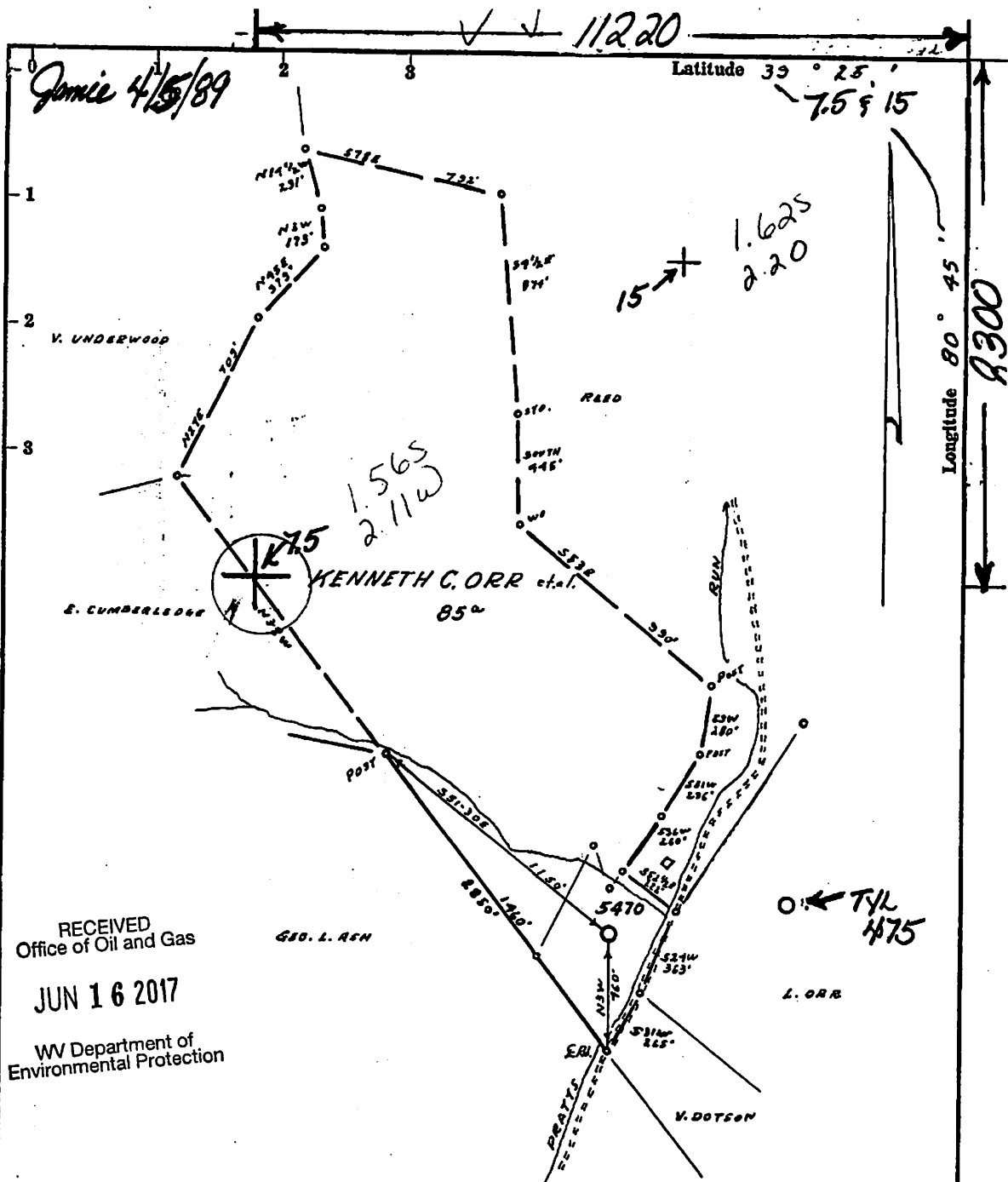
8988

RECEIVED  
Office of Oil and Gas

JUN 16 2017

WV Department of  
Environmental Protection  
07/14/2017





RECEIVED  
Office of Oil and Gas  
  
JUN 16 2017  
  
WV Department of  
Environmental Protection

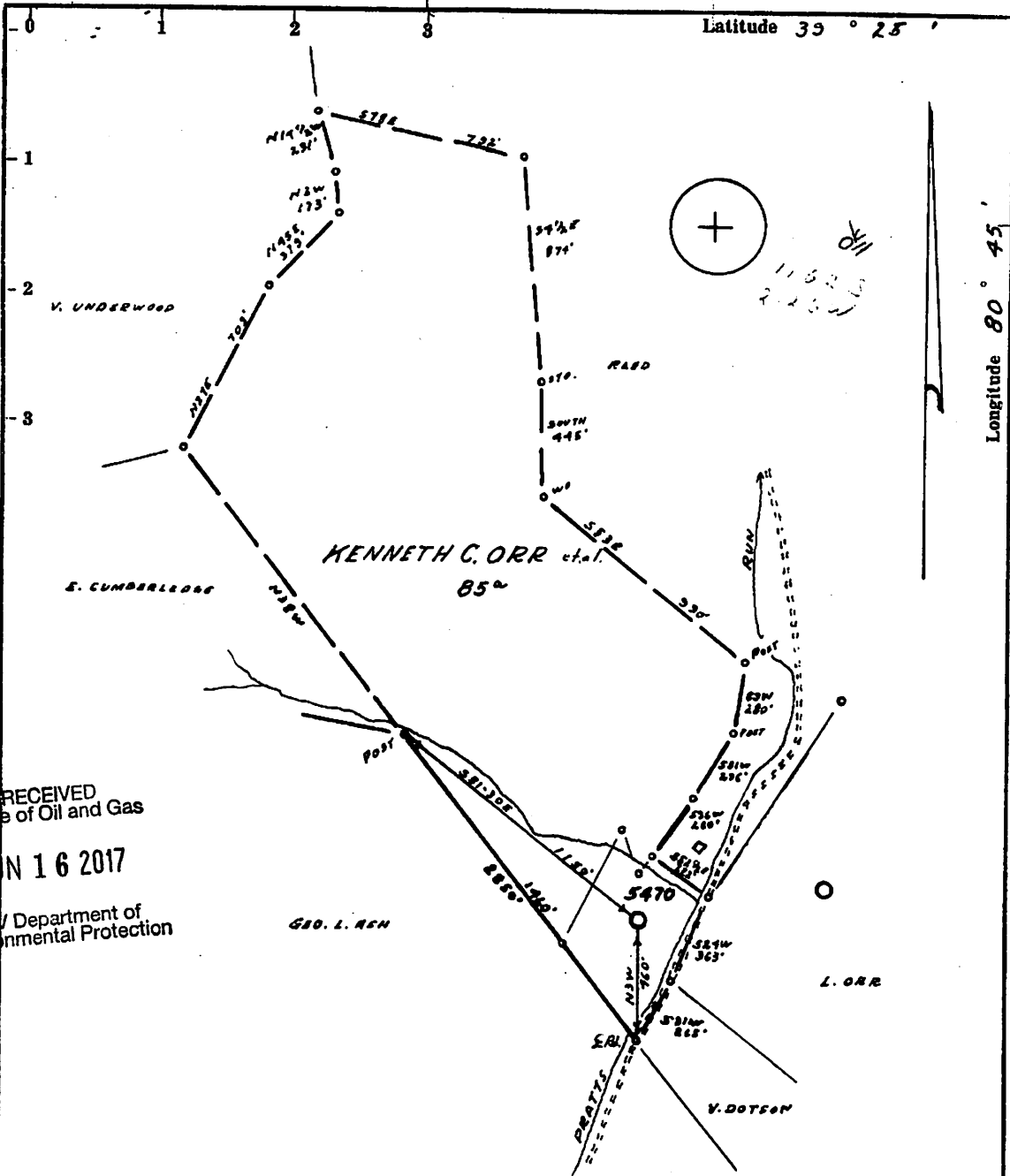
- Fracture.....
- Redrill.....
- New Location.....
- Drill Deeper.....
- Abandonment.....

Source of Elevation BM. MOOTH PRATTS RUN, ELEV. 731'  
I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.  
Minimum accuracy, one part in 200

Company: Equitrans, Inc. 4468  
 Address: 4955 Steubenville Pike, Pittsburgh, PA 15205  
 Farm: KENNETH C. ORR et al.  
 Tract: \_\_\_\_\_ Acres 85 Lease No. 25813  
 Well (Farm) No. 1 Serial No. 5470  
 Elevation (Spirit Level) 807' 133  
 Quadrangle WEST UNION NE 4 15/ SHIRLEY 7.5  
 County TYLER District M'ELROY'S  
 Engineer R. J. McMillan  
 Engineer's Registration No. 105 L.L.S.  
 File No. 222/40 Drawing No. \_\_\_\_\_  
 Date 8-17-72 Scale 1" = 500'

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION  
CHARLESTON

**WELL LOCATION MAP**  
 607 FILE NO. TYL-446-RED.  
47-095  
 + Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.  
 — Denotes one inch spaces on border line  
 APP. 07  
 original tracing.



RECEIVED  
Office of Oil and Gas  
JUN 16 2017  
W/ Department of  
Environmental Protection

- Fracture....
- Redrill....
- New Location.
- Drill Deeper.....
- Abandonment.....

Source of Elevation ON MARSH PRATT RUN, ELEV. 731'  
I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.  
Minimum accuracy, one part in 200

Company EQUITABLE GAS CO. WVA DIV.  
 Address PITTSBURGH, PA. 15219  
 Farm KENNETH C. ORR et. al.  
 Tract \_\_\_\_\_ Acres 85 Lease No. 25813  
 Well (Farm) No. 1 Serial No. 5470  
 Elevation (Spirit Level) 807'  
 Quadrangle WEST UNION EC  
 County TYLER District M'ELROY  
 Engineer R. S. Williams  
 Engineer's Registration No. 105 L.L.S.  
 File No. 222/40 Drawing No. \_\_\_\_\_  
 Date 8-17-72 Scale 1" = 500'

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION  
CHARLESTON

**WELL LOCATION MAP**  
FILE NO. TYL-446-RED.

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.  
 — Denotes one inch spaces on border line of original tracing.



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

**RECEIVED**

JUL 27 1973

OIL & GAS DIVISION  
DEPT. OF MINES

**WELL RECORD**

Quadrangle West Union NE 4.3  
Permit No. TYI-446-RED

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

|  |                   |                  |              |                                 |
|--|-------------------|------------------|--------------|---------------------------------|
| Company <u>Equitable Gas 15219</u>                             | Casing and Tubing | Used in Drilling | Left in Well | Cement fill up Cu. ft. (Sks.)   |
| Address <u>420 Blvd. of Allies, Pgh. Pa.</u>                   | Size              |                  |              |                                 |
| Farm <u>Kenneth C. Orr</u> Acres <u>85</u>                     | 20-16             |                  |              |                                 |
| Location (waters) <u>Pratt Run</u>                             | Cond.             |                  |              |                                 |
| Well No. <u>5470</u> Elev. <u>807</u>                          | 13-10"            |                  |              |                                 |
| District <u>McElory</u> County <u>Tyler</u>                    | 9 5/8             | 1264             | 1264         | 730 sks. to surface.            |
| The surface of tract is owned in fee by <u>Esta Orr, Agent</u> | 8 5/8             |                  |              |                                 |
| Address <u>Alma, W. Va. 26320</u>                              | 7                 |                  |              |                                 |
| Mineral rights are owned by <u>Same as surface</u>             | 5 1/2             | 1742             | 1742         | 130 sks. to 1030, gel f surface |
| Address _____  | 4 1/2             |                  |              |                                 |
| re- Drilling Commenced <u>11-13-72</u>                         | 3                 |                  |              |                                 |
| re- Drilling Completed <u>7-16-73</u>                          | 2                 |                  |              |                                 |
| Initial open flow _____ cu. ft. _____ bbls.                    | Liners Used       |                  |              |                                 |
| Final production _____ cu. ft. per day _____ bbls.             |                   |                  |              |                                 |
| Well open _____ hrs. before test _____ RP.                     |                   |                  |              |                                 |

Well treatment details:

Attach copy of cementing record.

Coal was encountered at 436-439 Feet \_\_\_\_\_ Inches  
Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand Big Injun Storage Depth \_\_\_\_\_

| Formation             | Color | Hard or Soft | Top Feet | Bottom Feet | Oil, Gas or Water | * Remarks    |
|-----------------------|-------|--------------|----------|-------------|-------------------|--------------|
| Pittsburgh Coal       |       |              | 436      | 439         |                   | Driller Est. |
| Gas Sand              |       |              | 944      | 988         |                   |              |
| Salt Sand             |       |              | 1062     | 1507        |                   |              |
| Maxton Sand           |       |              | 1545     | 1564        |                   |              |
| Little Lime           |       |              | 1648     | 1670        |                   |              |
| Big Lime              |       |              | 1682     | 1738        |                   |              |
| Big Injun Sand        |       |              | 1742     | 1910        |                   |              |
| Weir Sand             |       |              | 2062     | 2148        |                   |              |
| Redrilled to          |       |              |          | <u>2475</u> |                   |              |
| Cement Plug Back to   |       |              |          | 1790        |                   |              |
| Completed Total Depth |       |              |          | 1790        |                   |              |

1682  
807  
875

Note: Gamma Ray Survey from surface to 2475.

RECEIVED  
Office of Oil and Gas

JUN 16 2017

WV Department of  
Environmental Protection

\* Indicates Electric Log tops in the remarks section.

(over)

9500446PP

WW-4A  
Revised 6-07

RECEIVED  
Office of Oil and Gas

JUN 16 2017

WV Department of  
Environmental Protection

1) Date: 5/12/2017  
2) Operator's Well Number  
605470  
3) API Well No.: 47 - 095 - 00446

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 Lloyd D. Talkington and Donna J. Talkington       | Name N/A                           |
| Address 5812 Interboro Ave                                 | Address                            |
| Pittsburgh, PA 15207-2229                                  |                                    |
| (b) Name   | (b) Coal Owner(s) with Declaration |
| Address  | Name Same as Surface Owner(s)      |
|  | Address                            |
| (c) Name   | Name                               |
| Address  | Address                            |
| 6) Inspector <del>Justin Snyder</del> <b>Derek Haught</b>  | (c) Coal Lessee with Declaration   |
| Address <del>200 Florence</del> <b>PO BOX 85</b>           | Name N/A                           |
| <del>Lumberport WV 26386</del> <b>Smithville, WV 26178</b> | Address                            |
| Telephone <del>681-343-6995</del> <b>(304) 206-7613</b>    |                                    |

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.

COMMONWEALTH OF PENNSYLVANIA  
**NOTARIAL SEAL**  
 Morgan Smith, Notary Public  
 City of Pittsburgh, Allegheny County  
 My Commission Expires Aug. 20, 2019  
 MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

Well Operator Equitrans, L.P.  
 By: Justin Macken *Justin A. Macken*  
 Its: VP Gas Systems Planning  
 Address 625 Liberty Avenue  
 Pittsburgh, PA 15222  
 Telephone 412-395-5554; Email: jmacken@eqt.com

Subscribed and sworn before me this 23<sup>rd</sup> day of May, 2017  
*Morgan Smith* Notary Public

My Commission Expires August 20, 2019

Oil and Gas Privacy Notice

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

07/14/2017

WW-9  
(5/16)

API Number 47 - 095 - 00446  
Operator's Well No. 605470

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

Operator Name Equitrans, L.P. OP Code 5547235  
Watershed (HUC 10) Pratt Run Quadrangle West Union NE 4.3

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes  No

Will a pit be used? Yes  No

If so, please describe anticipated pit waste: N/A

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

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection ( UIC Permit Number \_\_\_\_\_ )
- Reuse (at API Number \_\_\_\_\_ )
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain \_\_\_\_\_ )

Will closed loop system be used? If so, describe: N/A

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. N/A

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

Additives to be used in drilling medium? N/A

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Removed Offsite

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

-Landfill or offsite name/permit number? (See Attachment) \_\_\_\_\_

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 Justin A. Macken

Company Official (Typed Name) Justin Macken

Company Official Title VP Gas Systems Planning

RECEIVED  
Office of Oil and Gas

JUN 16 2017

Subscribed and sworn before me this 23<sup>rd</sup> day of May, 20 17

Morgan Smith

Notary Public

My commission expires August 20, 2019

COMMONWEALTH OF PENNSYLVANIA  
NOTARIAL SEAL  
Morgan Smith, Notary Public  
City of Pittsburgh, Allegheny County  
My Commission Expires Aug. 20, 2019  
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

07/14/2017

DH  
6-8-17

WV Department of Environmental Protection

Proposed Revegetation Treatment: Acres Disturbed less than one (1) acre Prevegetation pH N/A

Lime 3 Tons/acre or to correct to pH 6 1/2

Fertilizer type 10-20-20 or equivalent

Fertilizer amount 600 lbs/acre

Mulch Hay or Straw Tons/acre

**Seed Mixtures**

| Temporary |          | Permanent  |                |
|-----------|----------|------------|----------------|
| Seed Type | lbs/acre | Seed Type  | lbs/acre       |
| N/A       |          | Meadow Mix | 40lbs per acre |
|           |          |            |                |
|           |          |            |                |

**Attach:**

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by:

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

Title: Oil + Gas Inspector

Date: 6-8-17

Field Reviewed?  Yes  No

RECEIVED  
Office of Oil and Gas

JUN 16 2017

WV Department of  
Environmental Protection  
07/14/2017

Attachment WW-9 Landfill or Offsite Disposal Name/Permit Number

| Region       | Facility Type | Facility Location Name              | Street                       | City         | State | Zip Code |
|--------------|---------------|-------------------------------------|------------------------------|--------------|-------|----------|
| Marion/Union | Disposal Well | Nichols (SWIW #13) 1 - A            | 10555 Veto Road              | Belpre       | OH    | 45714    |
|              | Disposal Well | D - 1 (SWIW #7)                     | 3549 Warner Road             | Fowler       | OH    | 44418    |
|              | Disposal Well | Goff (SWIW #27) 1                   | 9350 East Pike Road          | Norwich      | OH    | 43767    |
|              | Disposal Well | Eva Jean Root Wolf 1 and 4, Wolf 2  | 5480 State Route 5           | Newton Falls | OH    | 44444    |
|              | Disposal Well | Pander R&P (SWIW # 15 & #16) 1 & 2  | 5310 State Route 5           | Newton Falls | OH    | 44444    |
|              | Disposal Well | John G. Delores Blazek 2            | 5700 Allyn Road              | Hiram        | OH    | 44234    |
|              | Disposal Well | Belden & Blake Corporation 2 - 1050 | 8000 Edison Street           | Louisville   | OH    | 43641    |
|              | Disposal Well | Plum Creek 1                        | 4285 Karg Industrial Parkway | Kent         | OH    | 44240    |
|              | Disposal Well | Ed Lyons (Genet) 1                  | 7700 Lincoln Street          | East Canton  | OH    | 44730    |

List of Ohio SWDs 6.13.2013

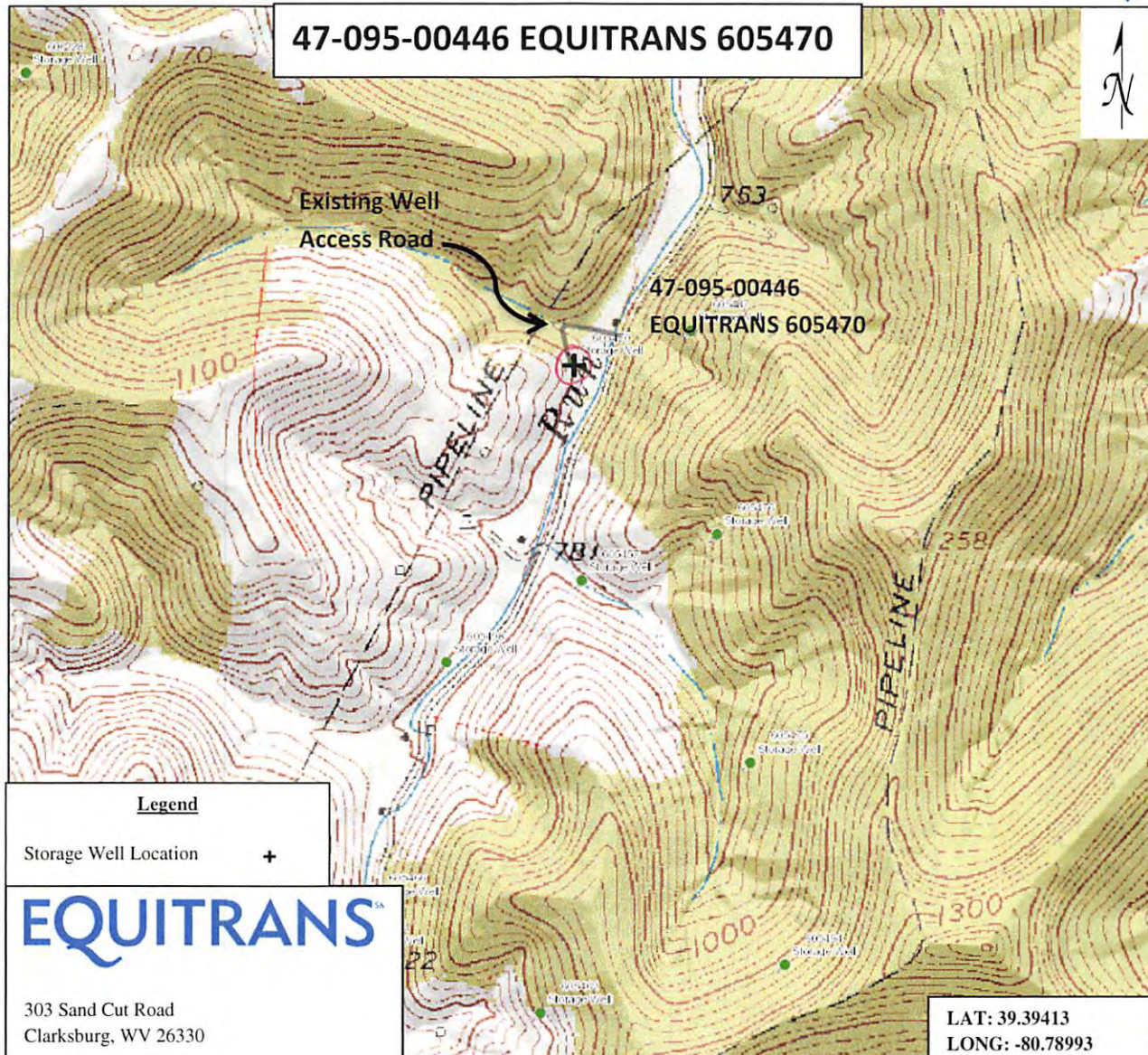
| Wells                            | County       | Township  | State | Permit #s     | Entity                               |
|----------------------------------|--------------|-----------|-------|---------------|--------------------------------------|
| Belden & Blake #2                | Stark        | Marlboro  | Ohio  | 34-151-2-3420 | Heckmann Water Resources (CVR), Inc. |
| Blazek #2                        | Portage      | Hiram     | Ohio  | 34-133-2-0525 | Heckmann Water Resources (CVR), Inc. |
| Lyons #1                         | Stark        | Osnaburg  | Ohio  | 34-151-2-1198 | Heckmann Water Resources (CVR), Inc. |
| Pander R & P #1                  | Trumbull     | Newton    | Ohio  | 34-155-2-3795 | Heckmann Water Resources (CVR), Inc. |
| Pander R & P #2                  | Trumbull     | Newton    | Ohio  | 34-155-2-3794 | Heckmann Water Resources (CVR), Inc. |
| Plum Creek #1                    | Portage      | Brimfield | Ohio  | 34-133-2-3614 | Heckmann Water Resources (CVR), Inc. |
| Eva Jean Root Wolf #1            | Trumbull     | Newton    | Ohio  | 34-155-2-1893 | Heckmann Water Resources (CVR), Inc. |
| Wolf #2                          | Trumbull     | Newton    | Ohio  | 34-155-2-1894 | Heckmann Water Resources (CVR), Inc. |
| Eva Jean Root Wolf #4            | Trumbull     | Newton    | Ohio  | 34-155-2-3203 | Heckmann Water Resources (CVR), Inc. |
| D-1 (AnnaRock)                   | Trumbull     | Fowler    | Ohio  | 34-155-2-2403 | Heckmann Water Resources (CVR), Inc. |
| Nichols #1-A <sup>SWIW #13</sup> | Washington   | Dunham    | Ohio  | 34-167-2-3862 | Heckmann Water Resources (CVR), Inc. |
| Goff #1                          | Muskingum    | Union     | Ohio  | 34-119-2-8776 | Heckmann Water Resources (CVR), Inc. |
| Appalachian Water (APP or AWS)   | Connelsville | N/A       | PA    | 2608201       |                                      |

RECEIVED  
Office of Oil and Gas

JUN 16 2017

WV Department of  
Environmental Protection

07/14/2017



*DMH  
6/8/17*

Quad: West Union NE 4.3 Scale: Not Mapped to Scale

County: Tyler Date: May 12, 2017

District: McElroy API: 47-095-00446

RECEIVED  
Office of Oil and Gas

JUN 16 2017

WV Department of  
Environmental Protection  
07/14/2017



