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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)

Wednesday, June 27, 2018  
WELL WORK PERMIT  
Vertical / Plugging

EQT PRODUCTION COMPANY  
625 LIBERTY AVE., SUITE 1700

PITTSBURGH, PA 15222

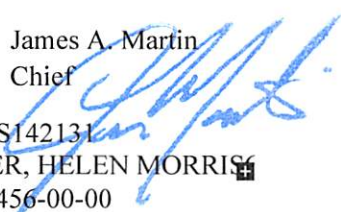
Re: Permit approval for STKS 7R-S142131  
47-109-01456-00-00

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: STKS 7R-S142131  
Farm Name: ETTENGER, HELEN MORRIS   
U.S. WELL NUMBER: 47-109-01456-00-00  
Vertical Plugging  
Date Issued: 6/27/2018

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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.

### 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.

1) Date May 21, 2018  
2) Operator's  
Well No. 142131 Stokes-Ritter 7R  
3) API Well No. 47-109 - 01456

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 \_\_\_) Deep \_\_\_ / Shallow X

5) Location: Elevation 1923 Watershed Reedy Creek of the Guyandotte River  
District Clear Fork County Wyoming Quadrangle Oceana

6) Well Operator EQT Production Company 7) Designated Agent Jason Ranson  
Address 2400 Ansys Drive- Suite 200 Address 120 Professional Place  
Canonsburg PA 15317 Bridgeport WV 26330

8) Oil and Gas Inspector to be notified 9) Plugging Contractor  
Name Brian Ferguson GARY KENNEDY Name HydroCarbon Well Service  
Address 708 Manor Drive 66 Old Church Lane Address PO Box 995  
Beckley WV 25801 PIPESTEM, WV 25979 Buckhannon WV 26201

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

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

Work order approved by inspector GARY KENNEDY BY EMAIL Date 6/26/2018

*Jawm*

## PLUGGING PROGNOs

142131  
 Ritter R7  
 API# 47-109-01456  
 District, Clear Fork  
 Wyoming County, WV

BY: R Green  
 DATE: 02/22/18

**CURRENT STATUS:**

**TD @ 5718'**  
**Elevation @ 1890'**

16" casing @ 40' (Cemented with 9.4 cu/ft.) CTS  
 11 3/4" casing @ 234' (Cemented with 154 cu/ft.) CTS  
 8 5/8" casing @ 2075' (Cemented with 676 cu/ft.) CTS  
 5 1/2" casing @ 5708' (Cemented with 405 cu/ft.)  
 Perfs... Lower Huron 5460'-5480'. (120 holes) - TOC ≈ 3700'  
 " ... Upper Huron 5184'-5204'. (120 holes)  
 " ... Upper Devonian 4476'-4496' (120 holes)  
 " ... Berea 3976'-3986' (60 holes).

**Note, well has two strings of 1 1/2" tubing in hole.**

1<sup>st</sup>. string hanging on slips @ 4011'  
 2<sup>nd</sup>. String setting on Halliburton R-4 packer set @ 4076', TD on tubing @ 5375'

**Fresh Water @ 139'**

Saltwater @ None Reported

**Oil Show @ None Reported**

**Gas shows @ None Reported**

Coal @ 595'

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- GARY KENNEDY 382-8402*
1. Notify inspector, ~~Brian Ferguson~~ @ 304-55-6265, 24 hrs. prior to commencing operations.
  2. Load hole with fluid to kill well.
  3. Rig up and TOO H both strings of 1 1/2" tubing.
  4. TIH to 5500', spot 60 bbl. of 6% gelled water followed by a 500' C1A cement plug 5500' to 5000' (Upper & Lower Huron perfs). WOC 8 hrs. Tag TOC. Add additional C1A cement if necessary
  5. TOO H to 4550' set a 200' C1A cement plug 4550' to 4350', (Upper Devonian perfs), WOC 6 hrs. Tag TOC, add additional C1A cement if necessary.
  6. TOO H to 4050' set a 200' C1A cement plug 4050' to 3850'. (Berea perfs) WOC 6 hrs. Tag TOC, add additional C1A cement if necessary.
  7. Free point 5 1/2" casing, cut casing @ free point. TOO H 5 1/2" casing.
  8. Set a 100' C1A cement plug 50' in/out of casing cut. Perforate all freshwater, saltwater, coal, oil and gas shows below cut. Do not omit any plugs.
  9. TOO H to 2175' set a 375' C1A cement plug 2175' to 1800'. (8 5/8" casing seat & Elevation). *EXPANDING CEMENT*
  10. TOO H to 1400' set a 200' C1A cement plug 1400' to 1200'.

- 650' 650' 650'
11. TOOH to ~~400'~~ set a ~~400'~~ C1A cement plug ~~400'~~ to surface. (Water @ 139' & 11 3/4" ~~2 OPEN MINE @ 595'~~ casing seat).
  12. Erect monument with API#, date plugged, and company name.
  13. Reclaim road, location to WV-DEP specifications.

★ MONUMENT MUST EXTEND 20" ABOVE GROUND.

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109-01456 P

WR-35 RECEIVED  
WV Division of  
Environmental Protection  
NOV 10 1994  
Permitting  
Office of Oil & Gas

13-Jul-94  
API # 47-109-01456

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Well Operator's Report of Well Work

Farm Name: ETTENGER, HELEN MORRISON Operator Well No.: STKS #7R-S142131

Location: Elevation: 1,890.42 Quadrangle: OCEANA

District: CLEAR FORK County: WYOMING  
Latitude: 6100 Feet South of 37 Deg. 40 Min. 0 Sec.  
Longitude: 6630 Feet West of 81 Deg. 42 Min. 30 Sec.

Company: ASHLAND EXPLORATION, INC.  
P.O. BOX 391, AT-9  
ASHLAND, KY 41114-0391

Agent: B. E. Widener

Inspector: OFIE HELMICK  
Permit Issued: 07-12-94  
Well Work Commenced: 08-20-94  
Well Work Completed: 10-28-94  
Verbal Plugging \_\_\_\_\_  
Permission granted on: \_\_\_\_\_  
Rotary  Cable \_\_\_\_\_ Rig \_\_\_\_\_  
Total Depth (feet) 5718  
Fresh water depths (ft) Damp @ 139'  
Salt water depths (ft) None Noted  
Is coal being mined in area (Y/N)? \_\_\_\_\_  
Coal Depths (ft): 595' lost circ \_\_\_\_\_

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size 16"	40'	40'	9.4
11 1/2"	234'	234'	154
8 1/2"	2075'	2075'	676
5 1/2"	5708'	5708'	405
1.9" @ 5408' w/R-4 pkr @ 4076			
1.9" @ 4011' KB			

OPEN FLOW DATA

Producing formation Dev. Shale Pay zone depth (ft) 4476-5460  
Gas: Initial open flow 59 MCF/d Oil: Initial open flow -- Bbl/d  
Final open flow 319 MCF/d Final open flow -- Bbl/d  
Time of open flow between initial and final tests 3 Hours  
Static Rock Pressure 360 psig (surface pressure) after 72 Hours  
Second producing formation Berea Pay zone depth (ft) 3976-3986  
Gas: Initial open flow 0 MCF/d Oil: Initial open flow -- Bbl/d  
Final open flow 988 MCF/d Final open flow -- Bbl/d  
Time of open flow between initial and final tests 3 Hours  
Static Rock Pressure 340 psig (surface pressure) after 72 Hours

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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: Ashland Exploration, Inc.  
By: James L. Stephens James L. Stephens, Eng. Tech.  
Date: 11-02-94

WY0-1456

<u>Formation or Rock Type</u>	<u>Top</u>	<u>Base</u>
Sand and Shale (base Lee Sand)		0
Pennington	1983	1983
U. Maxton	2382	2937
M. Maxton	2544	2462
L. Maxton	2862	2620
Little Lime	2937	2892
Big Lime	3034	3034
Borden	3379	3379
Sunbury Shale	3934	3934
Berea	3954	3954
Devonian Shale	3997	3997
		T.D.

Drillers TD 5718

Loggers TD 5715

85/8 and 113/4 cmt'd to surface on primary job.

Perf L. Huron in HCG 6 spf 60' phasing 120H/5460-5480'. N<sub>2</sub> frac L. Huron using 850,000 scf N<sub>2</sub> @ 86,000 scf/min. BD @ 3160, ATP 2751, MTP 3207, ISIP 1818, 10 min 1735.

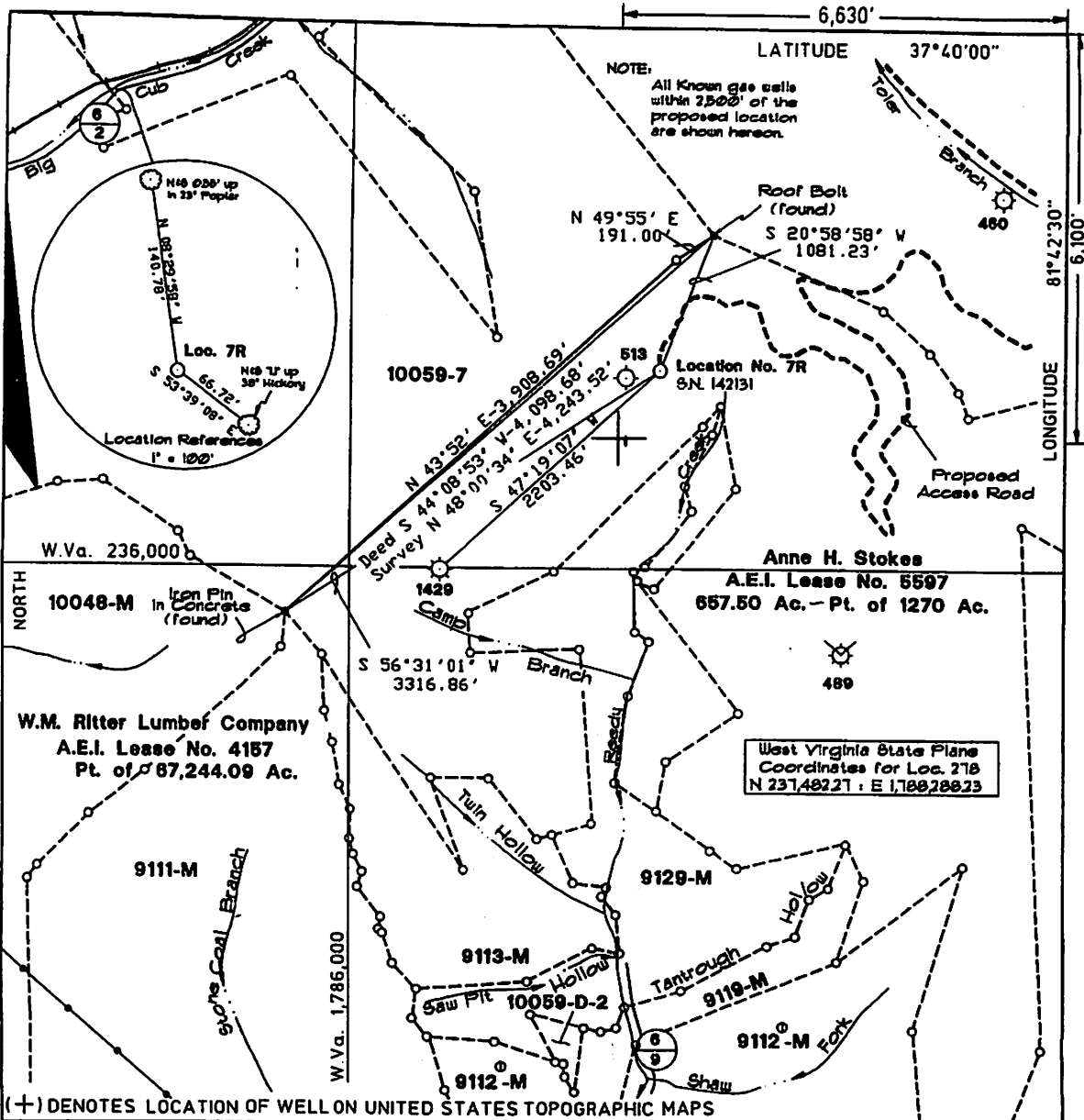
Perf U. Huron in HCG 6 spf 60' phasing 120H/5184-5204'. N<sub>2</sub> frac U. Huron using 850,000 scf N<sub>2</sub> @ 86,000 scf/m. BD @ 2370, ATP 2678, MTP 2778, ISIP 1830, 10 min 1768.

Perf U. Dev. Shale using HCG 6 spf 60' phasing 120H/4476-4496'. Set RBP @ 4540'. N<sub>2</sub> frac U. Dev. Shale using 800,000 scf N<sub>2</sub> @ 84,000 scf/m. BD @ 2385, ATP 2847, MTP 2922, ISIP 1674, 10 min 1097.

Perf Berea using 3 7/8" expendable HCG 6 spf 60' phasing 60H/3976-3986'. Set Arrow RBP @ 4030' KB. RU Howco & 65Q Foam Frac Berea using 500 gal 16% HCl-Fe acid, 78,180# 20/40 sand & 183,170 scf N<sub>2</sub> @ 6251 scf/m. BD @ 1230, ATP 879 @ 20 B/M foam, MTP 1858, ISIP 1858, 10 min 1823.

807261

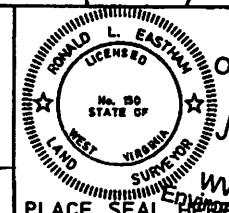
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FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1: 21066  
 PROVEN SOURCE OF ELEVATION ICCG, Sta. PP 51  
 Elev. = 2111.49

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY THE LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.

(SIGNED) Ronald L. East  
 R.P.E. \_\_\_\_\_ L.L.S. 150



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**STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY OIL AND GAS DIVISION**

DATE June 14 1994  
 OPERATOR'S WELL NO. Anne H. Stokes No. 7R  
 API WELL NO. 5N 142131

**47-109-1456**

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

LOCATION: ELEVATION 1890.42 WATER SHED Reedy Creek of the Guyandotte River  
 DISTRICT Clear Fork COUNTY Wyoming  
 QUADRANGLE Oceana

SURFACE OWNER Anne H. Stokes, Heirs ACREAGE 657.50  
 OIL & GAS ROYALTY OWNER Anne H. Stokes, Heirs LEASE ACREAGE 1270  
 LEASE NO. 5597

PROPOSED WORK: DRILL \_\_\_ CONVERT X DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_

TARGET INFORMATION Devonian Shale ESTIMATED DEPTH 5,712' KB  
 WELL OPERATOR Ashland Exploration, Inc. DESIGNATED AGENT Bobby E. Widener  
 ADDRESS P.O. Box 391 **Ashland** ADDRESS P.O. Box 379  
Ashland, Ky. 41114 Brenton, W.V. 24818

FORM WW-5

COUNTY NAME PERMIT



WW-4A  
Revised 6-07

1) Date: May 21, 2018  
2) Operator's Well Number  
142131 Stokes-Ritter 7R  
3) API Well No.: 47 - 109 - 01456

**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>See Attached</u>	Name _____
Address _____	Address _____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>See Attached</u>
(c) Name _____	Address _____
Address _____	Name _____
6) Inspector <u>Brian Ferguson</u>	(c) Coal Lessee with Declaration
Address <u>708 Manor Drive</u>	Name _____
<u>Beckley WV 25801</u>	Address _____
Telephone <u>304-550-6265</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 EQT Production Company  
 By: Erin Spine   
 Its: Regional Land Supervisor  
 Address 2400 Ansys Drive, Suite 200  
Canonsburg PA 15317  
 Telephone (304) 848-0035

Subscribed and sworn before me this 29 day of May 2018  
Rebecca L. Wanstreet Notary Public  
 My Commission Expires 4-7-2020

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 WV Department of  
 Environmental Protection

**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).

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*[Handwritten signature]*

*Nov 2018*

*Rebecca J. Wanstyret*  
*4-1-2018*



47-109-01456

142131 (Stokes Ritter 7R)

**Owner(s) (Surface and Access)**

Helen Ettinger and First Citizens Bank & Trust Co.  
C/O CM Energy.  
P.O. Box 1085  
Beckley, WV. 25801

**Coal Owner(s):**

Helen Ettinger and First Citizens Bank & Trust Co.  
C/O CM Energy.  
P.O. Box 1085  
Beckley, WV. 25801

**Potential Water Owner(s):**

N/A

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Office of Oil and Gas

Department of Environmental Protection

John F. Kennedy Federal Building

Room 1000

P.O. Box 1000

Charleston, WV 25302

Phone: (304) 251-3000

John F. Kennedy Federal Building

Room 1000

P.O. Box 1000

Charleston, WV 25302

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WW-9  
(5/16)

API Number 47 - 109 - 01456  
Operator's Well No. 142131 Stokes-Ritter 7R

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

Operator Name EQT Production Company OP Code \_\_\_\_\_

Watershed (HUC 10) Reedy Creek of the Guyandotte River Quadrangle Oceana

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: Formation Fluids

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? 20 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: \_\_\_\_\_

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

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

Additives to be used in drilling medium? \_\_\_\_\_

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

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

-Landfill or offsite name/permit number? \_\_\_\_\_

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 [Signature]

Company Official (Typed Name) Erin Spine

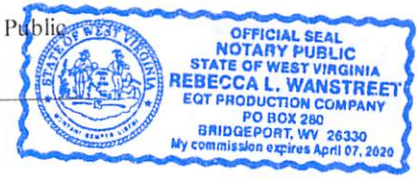
Company Official Title Regional Land Supervisor

Subscribed and sworn before me this 29 day of May, 20 18

Rebecca L. Wanstreet

Notary Public

My commission expires 4-7-2020



**EQT Production Water plan**  
**Offsite disposals**

**Waste Management - Meadowfill Landfill**

Rt. 2, Box 68 Dawson Drive  
Bridgeport, WV 26330  
304-326-6027  
Permit #SWF-1032-98  
Approval #100785WV

**Waste Management - Northwestern Landfill**

512 E. Dry Road  
Parkersburg, WV 26104  
304-428-0602  
Permit #SWF-1025 WV-0109400  
Approval #100833WV

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Proposed Revegetation Treatment: Acres Disturbed 1± Prevegetation pH \_\_\_\_\_

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type (10-20-20) or equivalent

Fertilizer amount 1/3 ton lbs/acre

Mulch 2 Tons/acre

**Seed Mixtures**

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Red Fescue	40	Red Fescue	15
Aslike Clover	5	Aslike Clover	5
Annual Rye	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: \_\_\_\_\_

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

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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Title: \_\_\_\_\_ Date: \_\_\_\_\_

Field Reviewed? ( ) Yes ( ) No

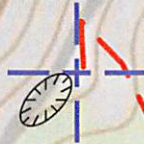
Topo Quad: Oceana 7.5'                      Scale: 1" = 400'  
County: Wyoming                              Date: May 11, 2018  
District: Clear Fork                          Project No: 22-22-00-08

**47-109-01456 WV 142131 (Stokes-Ritter 7R)**

Topo

Pit Location Map

47-109-01456  
WV 142131



Existing Well  
Access Road

Existing  
Haulroad

**NAD 27, South Zone**  
N:237485.17  
E:1788269.21

**WGS 84**  
LAT:37.650021  
LONG:-81.731144  
ELEV:1923.03

**LEGEND**

 Proposed Pit Location



SURVEYING AND MAPPING SERVICES PERFORMED BY:

**ALLEGHENY SURVEYS, INC.**

1-800-482-8606  
237 Birch River Road  
Birch River, WV 26610  
PH: (304) 649-8606  
FAX: (304) 649-8608

PREPARED FOR:

**EQT Production Company**

2400 Ansys Drive  
Canonsburg, PA 15317



Topo Quad: Oceana 7.5'    Scale: 1" = 2500'

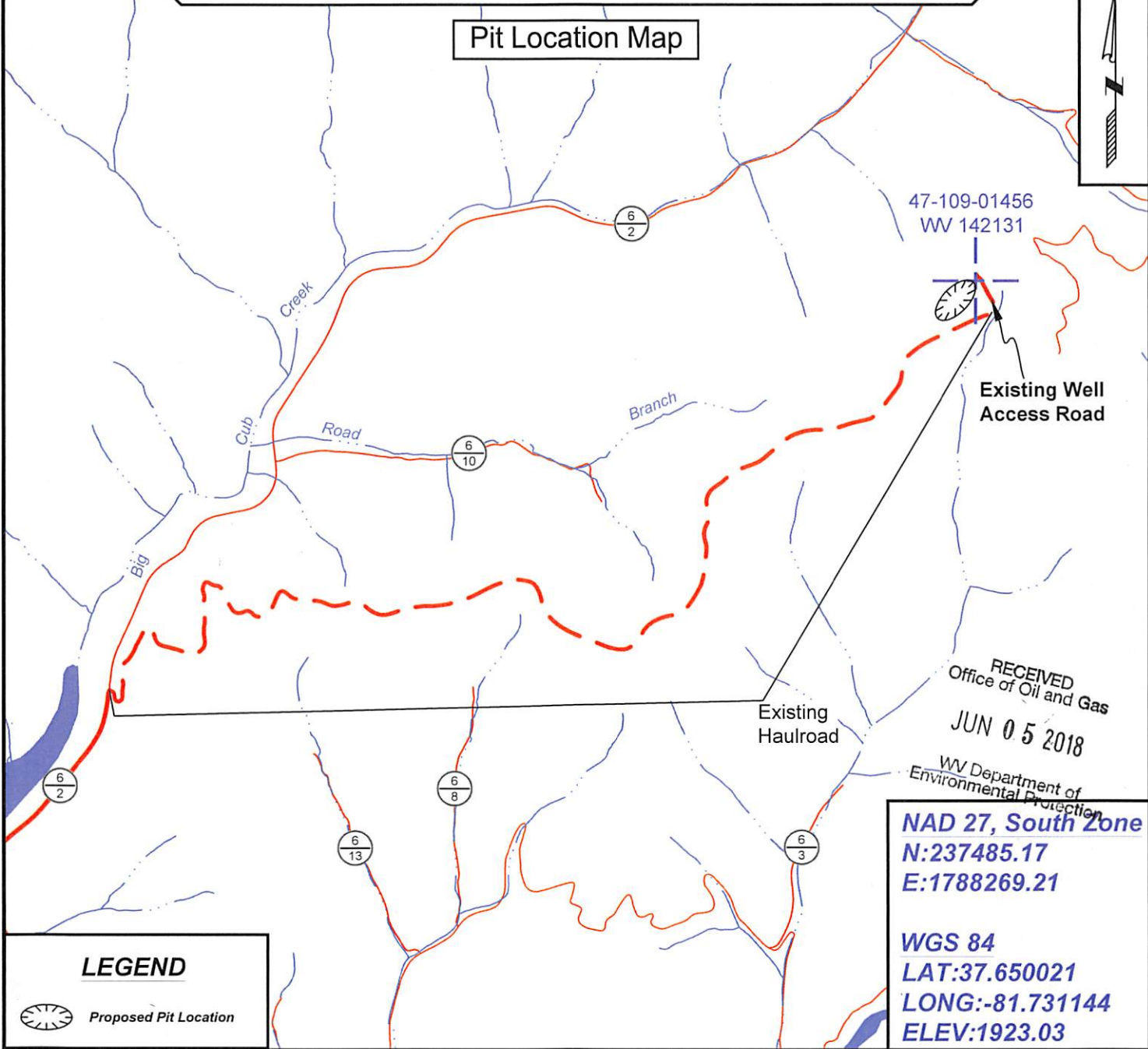
County: Wyoming    Date: May 11, 2018

District: Clear Fork    Project No: 22-22-00-08

Highway

**47-109-01456 WV 142131 (Stokes-Ritter 7R)**

**Pit Location Map**



**LEGEND**

 Proposed Pit Location

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Environmental Protection

**NAD 27, South Zone**  
N:237485.17  
E:1788269.21

**WGS 84**  
LAT:37.650021  
LONG:-81.731144  
ELEV:1923.03



SURVEYING AND MAPPING SERVICES PERFORMED BY:

**ALLEGHENY SURVEYS, INC.**

1-800-482-8606  
237 Birch River Road  
Birch River, WV 26610  
PH: (304) 649-8606  
FAX: (304) 649-8608

PREPARED FOR:

**EQT Production Company**

2400 Ansys Drive  
Canonsburg, PA 15317

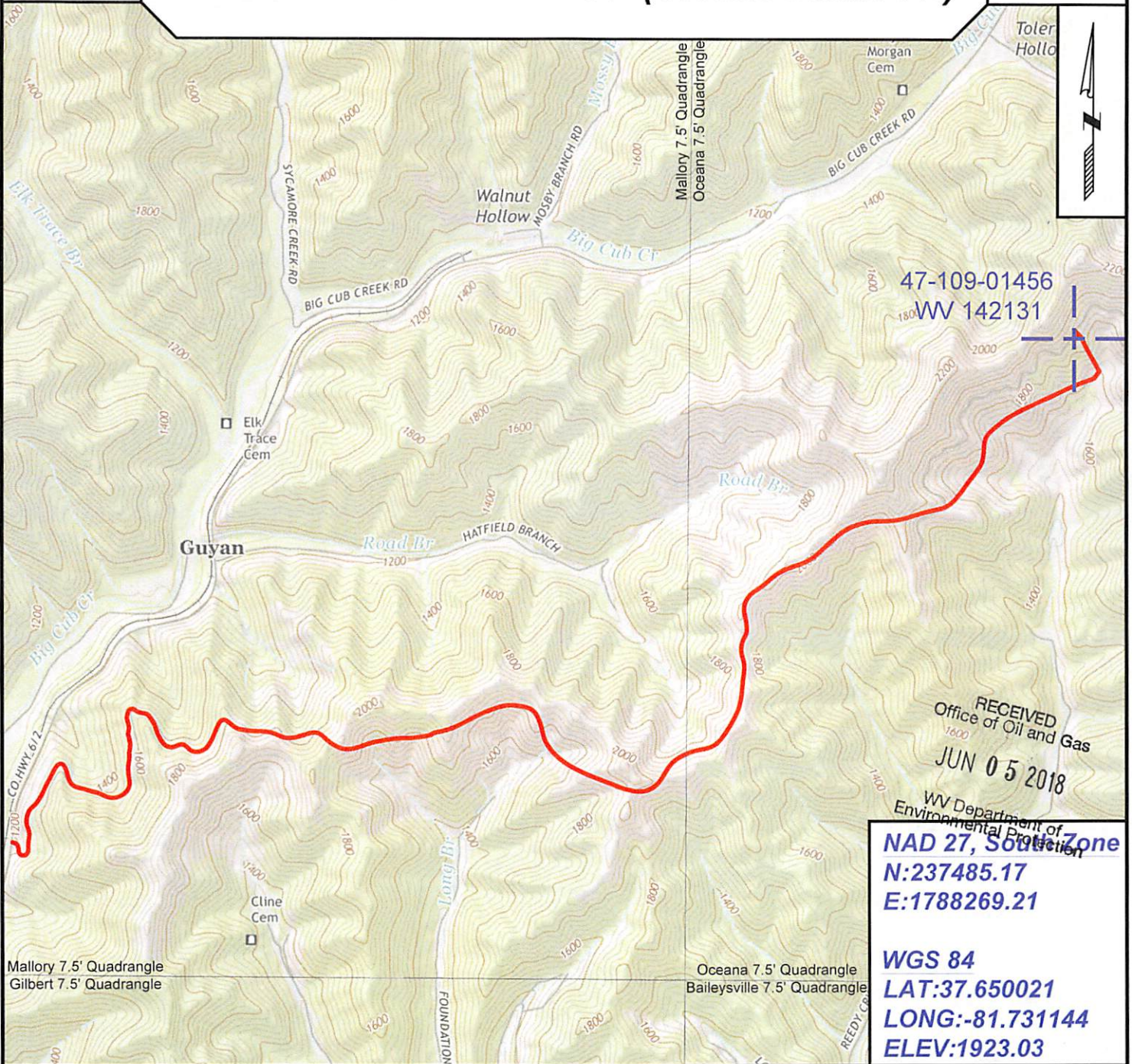
Topo Quad: Oceana 7.5' Scale: 1" = 2000'

County: Wyoming Date: May 11, 2018

District: Clear Fork Project No: 22-22-00-08

# 47-109-01456 WV 142131 (Stokes-Ritter 7R)

Topo



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**NAD 27, South Zone**  
**N:237485.17**  
**E:1788269.21**

**WGS 84**  
**LAT:37.650021**  
**LONG:-81.731144**  
**ELEV:1923.03**

Mallory 7.5' Quadrangle  
Gilbert 7.5' Quadrangle

Oceana 7.5' Quadrangle  
Baileysville 7.5' Quadrangle



SURVEYING AND MAPPING SERVICES PERFORMED BY:  
**ALLEGHENY SURVEYS, INC.**  
1-800-482-8606  
237 Birch River Road  
Birch River, WV 26610  
PH: (304) 649-8606  
FAX: (304) 649-8608

PREPARED FOR:  
**EQT Production Company**  
2400 Ansys Drive  
Canonsburg, PA 15317



## POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY

LEASE NAME AND WELL No. Stokes-Ritter 7R - WV 142131 - API No. 47-109-01456

### POTENTIAL SAMPLE LOCATIONS

There appears to be no potential water sources within the required 1000 feet of the existing well WV 142131.

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**BRIDGEPORT OFFICE**  
172 Thompson Drive  
Bridgeport, WV 26330  
*phone: 304-848-5035 fax: 304-848-5037*

**ALUM CREEK OFFICE**  
P.O. Box 108 • 1413 Childress Road  
Alum Creek, WV 25003  
*phone: 304-756-2949 fax: 304-756-2948*



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Office of Oil and Gas  
1000 Pennsylvania Avenue, N.W.  
Washington, D.C. 20460  
Tel: (202) 566-0100  
Fax: (202) 566-0101  
www.epa.gov/oilgas

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Topo Quad: Oceana 7.5' Scale: 1" = 2000'

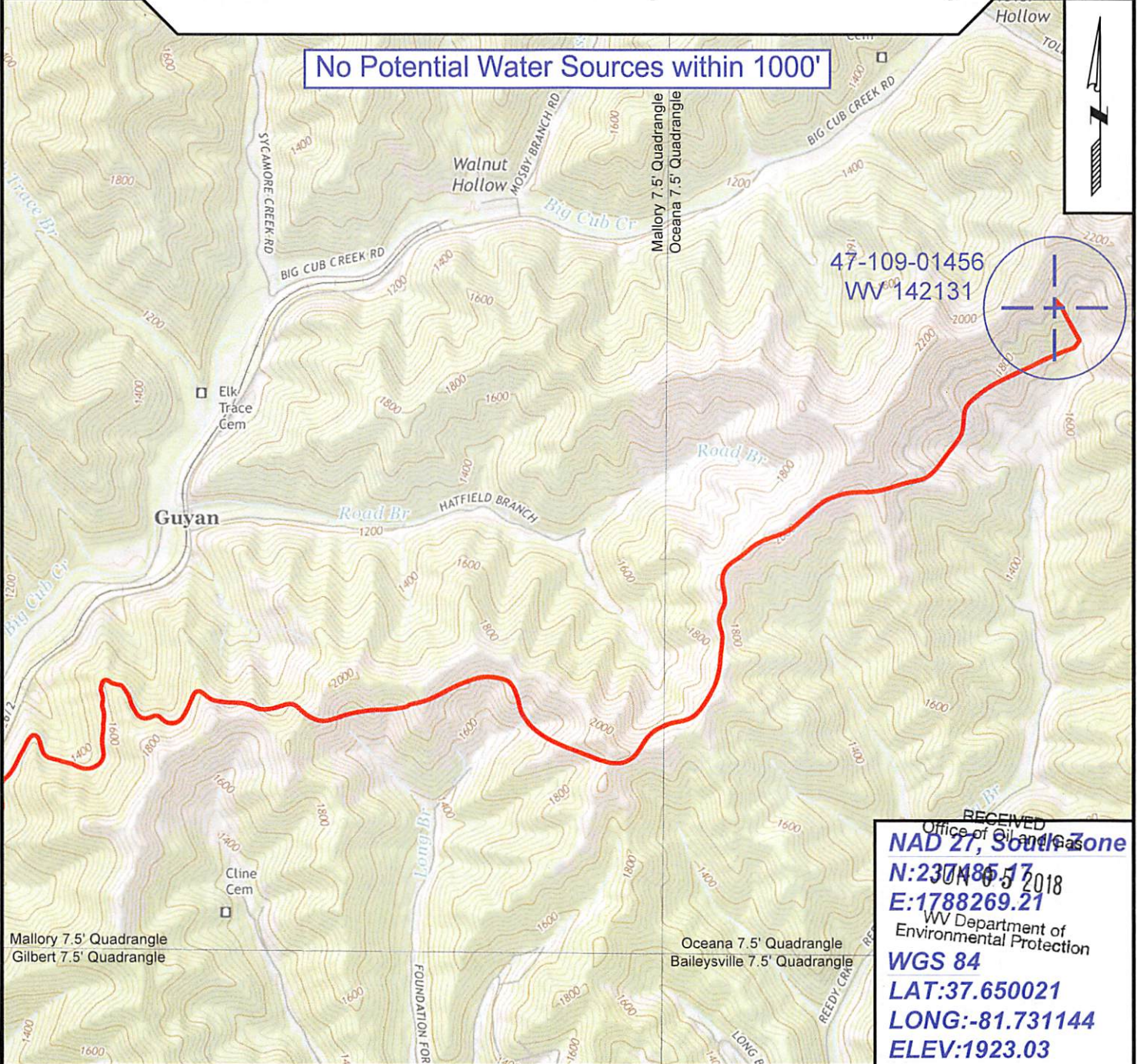
County: Wyoming Date: May 11, 2018

District: Clear Fork Project No: 22-22-00-08

Water

# 47-109-01456 WV 142131 (Stokes-Ritter 7R)

No Potential Water Sources within 1000'



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**WGS 84**  
LAT:37.650021  
LONG:-81.731144  
ELEV:1923.03



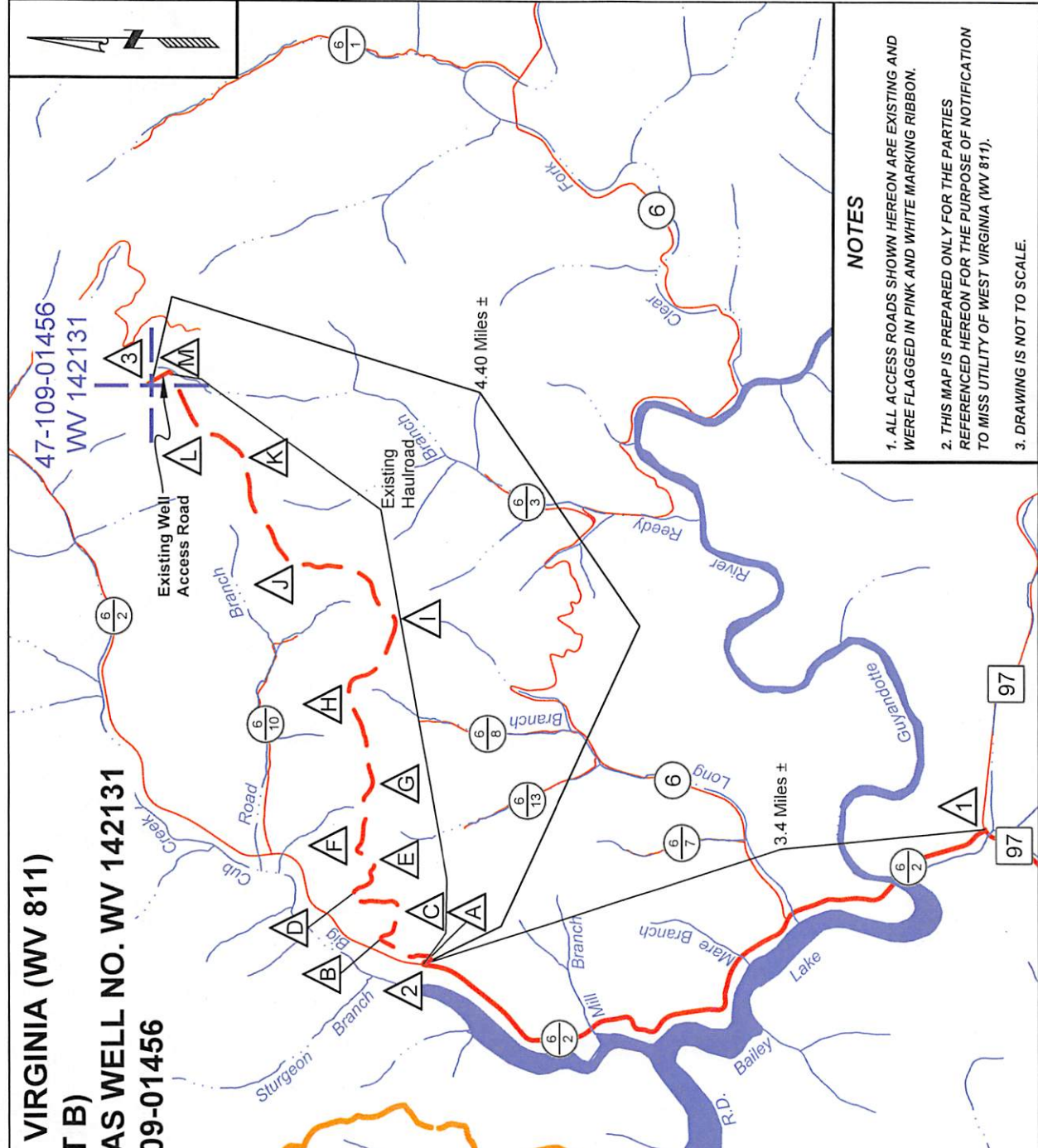
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237 Birch River Road  
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PH: (304) 649-8606  
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PREPARED FOR:  
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2400 Ansys Drive  
Canonsburg, PA 15317

**MISS UTILITY OF WEST VIRGINIA (WV 811)  
(EXHIBIT B)**

**DIRECTIONS TO EXISTING GAS WELL NO. WV 142131  
API NO. 47-109-01456**

SITE	LATITUDE	LONGITUDE
1	37.589890	-81.770441
2	37.630195	-81.782966
3	37.650021	-81.731144
A	37.629705	-81.782337
B	37.633227	-81.780639
C	37.631970	-81.777869
D	37.635204	-81.776518
E	37.633793	-81.773699
F	37.634884	-81.772389
G	37.633894	-81.766634
H	37.635604	-81.758971
I	37.632357	-81.752489
J	37.639870	-81.747037
K	37.643436	-81.737403
L	37.646433	-81.735140
M	37.648500	-81.730145



**NOTES**

1. ALL ACCESS ROADS SHOWN HEREON ARE EXISTING AND WERE FLAGGED IN PINK AND WHITE MARKING RIBBON.
2. THIS MAP IS PREPARED ONLY FOR THE PARTIES REFERENCED HEREON FOR THE PURPOSE OF NOTIFICATION TO MISS UTILITY OF WEST VIRGINIA (WV 811).
3. DRAWING IS NOT TO SCALE.

PREPARED FOR:

County:	Wyoming
District:	Clear Fork
Date:	May 11, 2018
Project No.:	22-22-00-08
File Name:	WV 142131 STOKES

SURVEYING AND MAPPING SERVICES PERFORMED BY:

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 FAX: (304) 649-8608

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Department of Environmental Protection



**EQT Production Company**  
 2400 Ansys Drive  
 Canonsburg, PA 15317



**Miss Utility of West Virginia (WV811)**  
**(Exhibit A)**  
**Directions to Gas Well No. WV 142131**  
**API No. 47-109-01456**

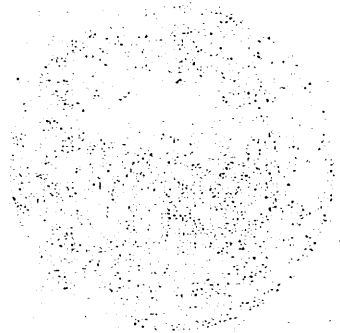
- Beginning at the intersection of US Interstate 64 Exit 58A (Oakwood Road/Logan) and US Route 119 in Charleston, Kanawha County, WV.
- Proceed Southwest on US Route 119, for approximately 52.8 miles, to the WV State Route 73 exit toward WV State Route 10 (Logan).
- Turn left at bottom of Exit ramp and proceed East, for approximately 2.3 miles, to the intersection of WV County Route 44.
- Turn left and proceed East to continue on WV State Route 73, for approximately 0.6 mile, to WV State Route 10 (Logan Blvd) straight ahead.
- Proceed Southeast on State Route 10 (Logan Blvd), for approximately 13.8 miles, to the intersection of WV State Route 10 and WV State Route 80.
- Turn right onto WV State Route 80 and proceed South, for approximately 12.1 miles, to the intersection of WV State Route 80 and US Route 52.
- Turn left onto US Route 52 and proceed Southeast, for approximately 6.5 miles, to WV State Route 97, on the left.
- Turn left onto WV State Route 97 and proceed Northeast, for approximately 2.1 miles, to WV County Route 6/2, on the left. **(Point No. 1)**

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OFFICE OF THE ATTORNEY GENERAL  
STATE OF MASSACHUSETTS  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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Boston, MA 02109



- Turn left onto WV County Route 6/2 and proceed Northwest, for approximately 3.4 miles, to the Well Access Road, on the right. (*Point No. 2*)
- Turn right onto the Well Access Road and proceed Northeast, for approximately 4.40 miles, arriving at Gas Well WV 142131. (*Point No. 3*)

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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: 47-109-01456 WELL NO.: WV 142131 (Stokes-Ritter 7R)

FARM NAME: Anne H. Stokes

RESPONSIBLE PARTY NAME: EQT Production Company

COUNTY: Wyoming DISTRICT: Clear Fork

QUADRANGLE: Oceana 7.5'

SURFACE OWNER: Helen Ettinger and First Citizens Bank & Trust Co.

ROYALTY OWNER: Helen Ettinger and First Citizens Bank & Trust Co.

UTM GPS NORTHING: 4167237

UTM GPS EASTING: 435503 GPS ELEVATION: 586 m (1923 ft)

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   X   : Post Processed Differential   X    
   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.

[Handwritten Signature]  
Signature

PS #2180  
Title

5/10/18  
Date

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