



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

May 20, 2016

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-3301351, issued to EQT PRODUCTION COMPANY, 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 all 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. The above named operator will also file, as required in WV Code 22-6-23, an affidavit on form WR-38 by two experienced persons in the operator's employment and the Oil and Gas inspector that the work authorized under this permit was performed and a description given. Failure to abide by all statutory and regulatory provisions governing all duties and operations here under may result in suspensions or revocation of this permit and in addition may result in civil and/or criminal penalties being imposed upon the operator.

This permit will expire in two (2) years from date of issue. If there are any questions, please free to contact me at (304) 926-0499 ext. 1654.

James Martin
Chief

Operator's Well No: 2836
Farm Name: ASHCRAFT, SERENA
API Well Number: 47-3301351
Permit Type: Plugging
Date Issued: 05/20/2016

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.
4. This well is under a consent order and must be plugged under the terms of that agreement.

CK # 20442
\$100.00

Date: April 12, 2016
Operator's Well
Well No. 148921 (Serena Ashcraft #2836)
API Well No.: 47 033 - 01351

STATE OF WEST VIRGINIA
DIVISION 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) Elevation: 1195 ft. Watershed: Ten Mile Creek
Location: Sardis County: Harrison Quadrangle: Wolf Summit 7.5'
District: _____

6) Well Operator EQT Production Company
Address: 120 Professional Place
Bridgeport, WV 26330

7) Designated Agent: Rex C. Ray
Address: 120 Professional Place
Bridgeport, WV 26330

8) Oil & Gas Sam Ward
Name: P. O. Box 2327
Address: Buckhannon, WV 26201

9) Plugging Contractor:
Name: HydroCarbon Well Service
Address: PO BOX 995
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.

OFFICE USE ONLY

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

Work order approved by inspector

J. Deane

Date 5/12/2016

PLUGGING PROGNOSIS

Serena Ashcraft (148921)
District, Sardis
Harrison Co. WV
API # 47-033-01351

BY: R. Green
DATE: 10/6/15

CURRENT STATUS:

Elevation @ ???? * 1195'
TD @ 2517'

10" csg at 136'
8 1/4" csg at 1107'
7" csg @ 1530'
5" csg @ 2251'

Fresh Water @ 418' & 860'
Coal, @ 71' to 78'
Saltwater @ none reported
Gas show @ 1499', 1569', 1598', 2136', &2470'

1. Notify State Inspector, Sam Ward, 304-389-7583, 24 hrs. in advance of commencing operations.
2. RIH wireline determine TD.
3. TIH tbg to 2500', set 300' C1A cement plug 2500' to 2200'. (Gas shows at 2470' 2479' and 5" casing seat). TOOH tbg.
4. Free point 5" casing, cut casing at free point. TOOH casing.
5. Set 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.
6. TOOH tbg to 1600', set 300' C1A cement plug, 1600' to 1300'. (7" casing seat, gas show at 1400')TOOH tbg.
7. Free point 7" casing, cut casing at free point. TOOH casing.
8. Set 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. TOOH tbg to top of plug, gel hole to 1200'.
10. TOOH tbg to 1200', set 200' C1A cement plug 1200' to 1000'. (8 1/4" casing seat).TOOH tbg.
11. Free point 8 1/4" casing, cut casing at free point. TOOH casing.
12. Set 100' C1A cement plug 50' in/out of cut. Perforate all freshwater, saltwater, coal, oil and gas shows below cut. Do not omit any plugs.
13. TOOH tbg to top of plug, gel hole to 500'.

SJW
5/12/16

14. TOOH tbg to 500'; set 500' C1A cement plug 500' to surface.
15. Erect monument with API# and date.
16. Reclaim location and road to WV-DEP specifications.
17. * May need to revise plugs after getting elevation from survey.

WW-4-A
Revised 6/07

- 1) Date: April 12, 2016
- 2) Operator's Well Number
148921 (Serena Ashcraft #2836)
- 3) API Well No.: 47 033 - 01351
State County Permit

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS
NOTICE AND APPLICATION TO PLUG AND ABANDON WELL

<p>4) Surface Owner(s) to be served:</p> <p>(a) Name <u>Joshua M. and Sherah F. Kraan</u> ✓ Address <u>321 Centennial Farm Road</u> <u>Clarksburg, WV 26301</u></p> <p>(b) Name _____ Address _____</p> <p>(c) Name _____ Address _____</p> <p>6) Inspector <u>Sam Ward</u> Address <u>P. O. Box 2327</u> <u>Buckhannon, WV 26201</u> Telephone <u>(304) 389-7583</u></p>	<p>5) (a) Coal Operator: Name <u>None</u> Address _____</p> <p>(b) Coal Owner(s) with Declaration Name <u>Attention: Alex O'Neill</u> <u>Murray Energy Corporation</u> ✓ Address <u>46226 National Road</u> <u>St. Clairsville, OH 43950</u></p> <p>(c) Coal Lessee with Declaration Name <u>None</u> Address _____</p>
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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 Division 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:	<u>EQT Production Company</u>
By:	<u>Victoria J. Roark</u> ✓
Its:	<u>Permitting Supervisor</u>
Address:	<u>PO Box 280</u> <u>Bridgeport, WV 26330</u>
Telephone:	<u>(304) 848-0076</u>

Subscribed and sworn before me this 12th day of April, 2016
Misty S. Christie Notary Public
 My Commission Expires: 2/20/18

The Office of Oil & Gas processes your personal information, such as name, address and phone number, as 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.



05/20/2016

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL & GAS
CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM
GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name: EQT PRODUCTION COMPANY OP ID: _____
Watershed: Ten Mile Creek Quadrangle: Wolf Summit 7.5'
Elevation: 1195 ft. County: Harrison District: Sardis
Description of anticipated Pit Waste: Formation Fluids

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes ___ No X
Will synthetic liner be used in the pit? Yes Is so, what ml.? 20-40 ml gva

Proposed Disposal Method for Treated Pit Wastes:
 Land Application
 Underground Injection - UIC Permit Number
 Reuse (at API Number) - Various
 Offsite Disposal Permit #. See attached.
 Other: Explain _____
SDW 5/12/16

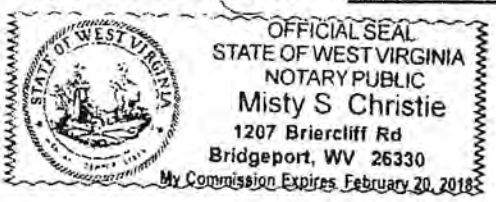
Drilling medium anticipated for this well? Air, freshwater, oil based, etc.
If oil based, what type? Synthetic, petroleum, etc. _____
Additives to be used? _____

Will closed loop system be used? _____
Drill Cuttings disposal method? Leave in pit, landfill, remove offsite, etc. _____
If left in pit and plan to solidify what medium will be used? Cement, Lime, sawdust _____
Landfill or offsite name/permit number? _____

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Division of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any terms 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.

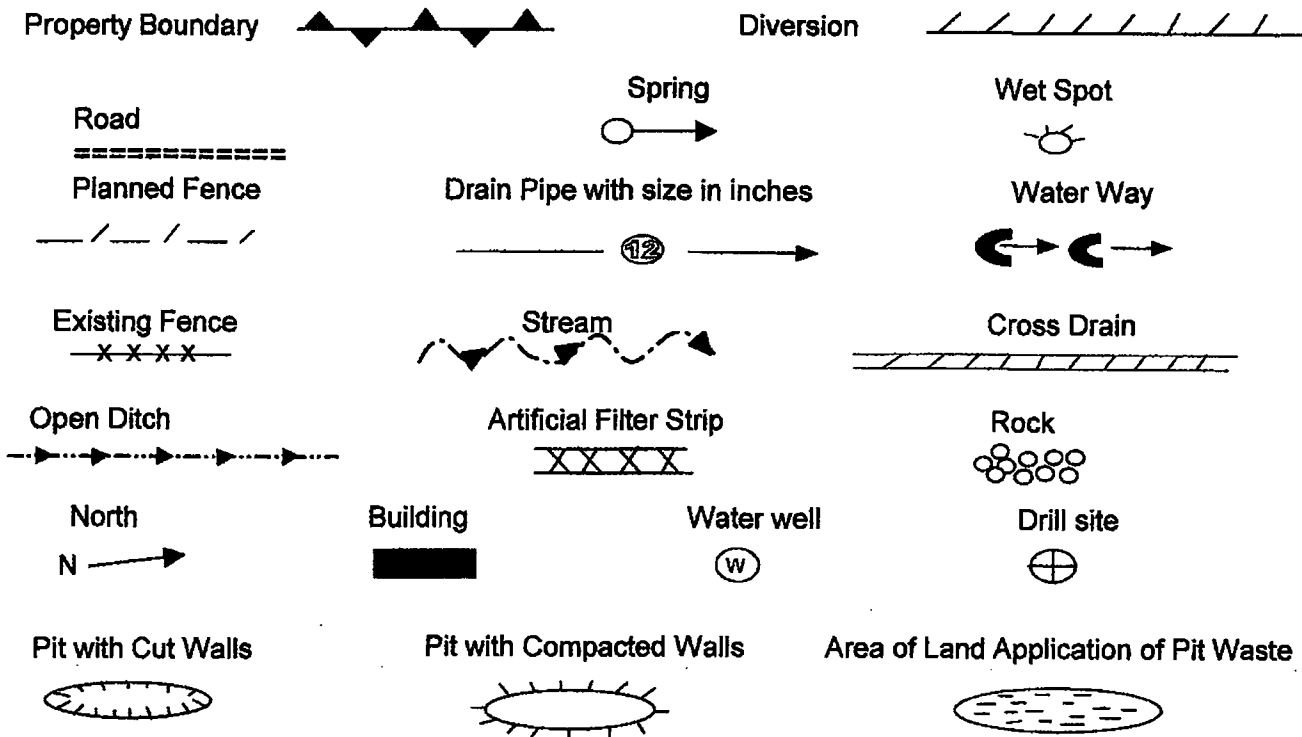
Company Official Signature *Victoria Roark*
Company Official (Typed or Printed) Victoria Roark
Company Official Title Permitting Supervisor-WV

Subscribed and sworn before me this 2nd day of May, 2016
Misty S. Christie Notary Public
My Commission Expires 2/20/18



OPERATOR'S WELL NO.:
148921 (Serena Ashcraft #2836)

LEGEND



Proposed Revegetation Treatment: Acres Disturbed: 1± Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20) or equivalent 1/3 ton lbs/acre (500 lbs minimum)

Mulch 2 Tons/acre or hydroseed.

SEED MIXTURES

Area I		Area II	
Seed Type	lbs/acre	Seed Type	lbs/acre
Red Fescue	40	Red Fescue	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		

ATTACH:

Drawing(s) of road, location, pit and proposed area for land application.

Photocopies section of involved 7.5' topographic sheet.

Plan approved by: S. Ashcraft

Comments: _____

Title: COG Inspector Date: 5/12/16

Field Reviewed? Yes No

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

RECEIVED
Office of Oil and Gas

MAY 05 2016

WV Department of
Environmental Protection



May 4, 2016

Mr. Jeff McLaughlin
West Virginia Department of Environmental Protection
Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304

Re: Revision of 47-033-01351

Dear Mr. McLaughlin,

Enclosed is an updated WW-9 for the above API number. The disposal method was updated from Land Application, which now requires a permit, to Reuse and Offsite Disposal. I have sent new pages to the inspectors for their signatures.

If you have any questions, please do not hesitate to contact me at (304) 848-0076.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Vicki Roark', is written over a light blue horizontal line.

Vicki Roark
Permitting Supervisor-WV

Enc.

3301351A

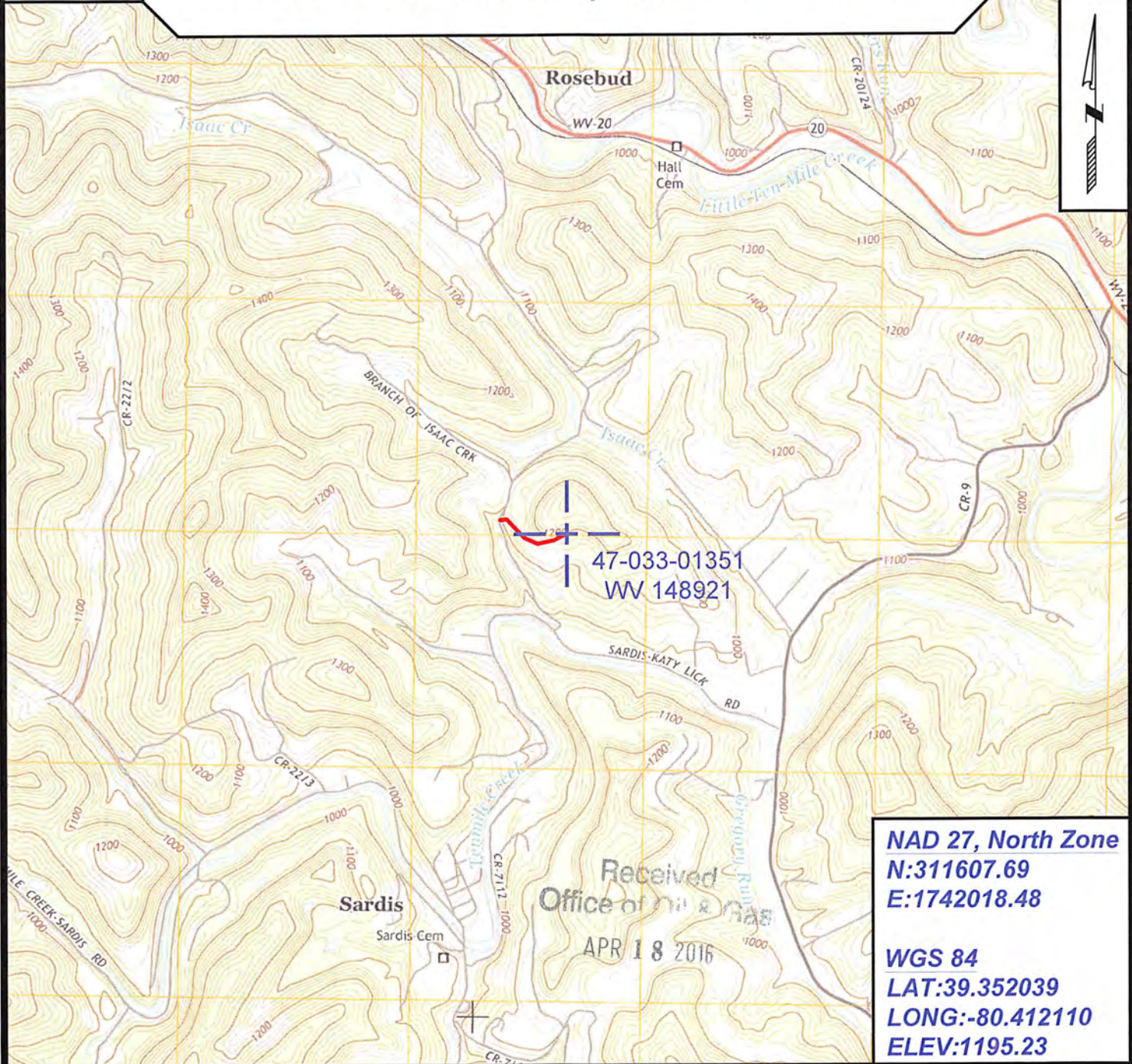
Topo Quad: Wolf Summit 7.5' Scale: 1" = 2000'

County: Harrison Date: March 15, 2016

District: Sardis Project No: 70-36-00-08

47-033-01351 WV 148921 (Serena Ashcraft #2836)

Topo



47-033-01351
WV 148921

Received
Office of Oil & Gas
APR 18 2016

NAD 27, North Zone
N:311607.69
E:1742018.48

WGS 84
LAT:39.352039
LONG:-80.412110
ELEV:1195.23



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
 P.O. Box 280
 Bridgeport, WV 26330

05/20/2016



POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY
LEASE NAME AND WELL No. Serena Ashcraft #2836 - WV 148921 - API No. 47-033-01351

POTENTIAL SAMPLE LOCATIONS

Site: 1 Spacing: 927 +/- Owner: Steven L. Gilbert
Address: 112 Serenity Dr., Clarksburg, WV 26301 Phone No. _____
Comments: _____

Site: 2 Spacing: 861 +/- Owner: Steven L. Gilbert
Address: 112 Serenity Dr., Clarksburg, WV 26301 Phone No. _____
Comments: Pond

Received
Office of Oil & Gas
APR 18 2016

BIRCH RIVER OFFICE
237 Birch River Road
Birch River, WV 26610
phone: 304-649-8606
fax: 304-649-8608

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 Rd
Alum Creek, WV 25003
phone: 304-756-2949
fax: 304-756-2948

MARTINSBURG OFFICE
25 Lights Addition Drive
Martinsburg, WV 25404
phone: 304-901-2162
fax: 304-901-2182

3301351P

Topo Quad: Wolf Summit 7.5'

Scale: 1" = 2000'

County: Harrison

Date: March 15, 2016

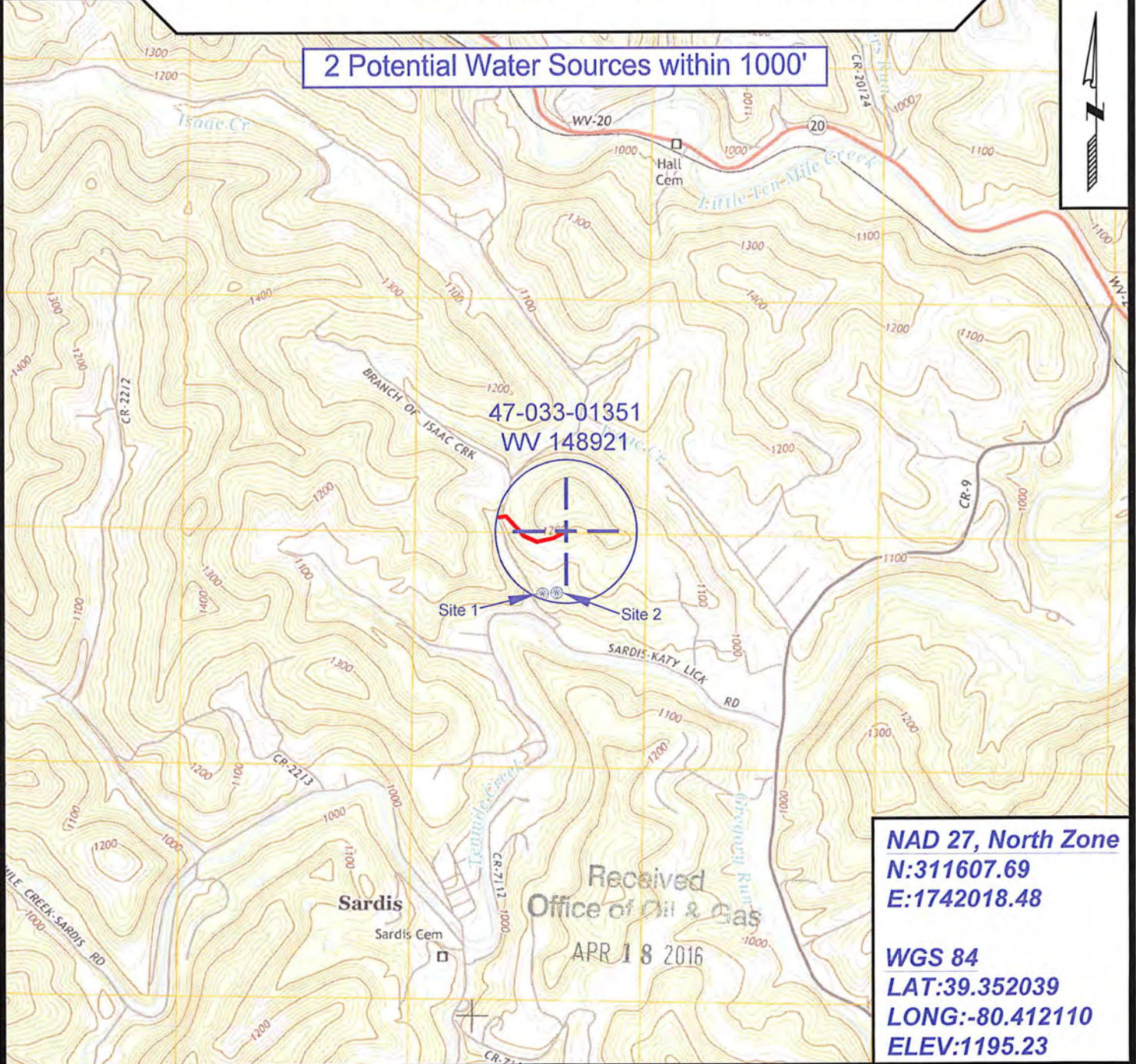
District: Sardis

Project No: 70-36-00-08

Water

47-033-01351 WV 148921 (Serena Ashcraft #2836)

2 Potential Water Sources within 1000'



NAD 27, North Zone
N:311607.69
E:1742018.48

WGS 84
LAT:39.352039
LONG:-80.412110
ELEV:1195.23

Received
Office of Oil & Gas
APR 18 2016



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PREPARED FOR:

EQT Production Company

P.O. Box 280
Bridgeport, WV 26330

05/20/2016

