west virginia department of environmental protection

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

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

Friday, September 23, 2016
WELL WORK PERMIT
Vertical / Plugging

EQT PRODUCTION COMPANY
120 PROFESSIONAL PLACE
BUILDING II
BRIDGEPORT, WV 26330

Re: Permit approval for (12181)S-152161
47-001-00956-00-00

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: (12181)S-152161
Farm Name: SANDERSON, CHAS.&RAYELDA
U.S. WELL NUMBER: 47-001-00956-00-00
Vertical / Plugging
Date Issued: 9/23/2016

100956 P

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 within two years of the date of issuance of this permit.

100956P CK # 20672 $400.00

Form WW-4 (B)
Permit Copy
(Rev 2/01)

Date: August 8, 2016
Operator's Well
Well No. 162161 (Reed #12181A)
API Well No.: 47 001 - 00956

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) Location: Elevation: 1396 ft. Watershed: Taylor Drain
District: Pleasant County: Barbour Quadrangle: Philippi

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 Name: Kenneth Greynolds
Address: 613 Broad Run Road
Jane Lew, WV 26378

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 Kenneth Greynolds Date 9-12-16

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PLUGGING PROGNOSIS

Reed, A. #12181A (152161)
Barbour Co. WV
District, Pleasant
API # 47- 001- 00956

BY: Craig Duckworth
DATE: 7/18/16

CURRENT STATUS:

11 3/4" csg @ 270' (cts)
8 5/8" csg @ 1809' (cts)
4 1/2" csg @ 4345' (220 sks)

Elevation @ 1416'

TD: 4352'

Fresh Water @ 40', 460' Coal @ 103', 185', 245', 470'
Saltwater @ none reported
Gas shows @ 4038', 3881', 3224', 2849'

1. Notify State Inspector, Kenneth Greynolds @ (304) 206-6613, 48 hrs. Prior to commencing operations.
2. Check TD w/wireline
3. TIH w/tbg to 4345' or actable TD', set 545'C1A cement plug from 4345' to 3800'. (Gas shows @ 4038', 3881') WAIT 4 HOURS, TAG PLUG ADD CEMENT IF NEEDED. gww
4. 4½ TOC ABOVE 2600'
5. TOOH w/tbg to 3800', gel hole 3800' to 3274'
6. TOOH w/tbg to 3274' set 200' C1A cement plug from 3274' to 3047', (Gas Show @ 3224').
7. TOOH w/tbg to 3047' gel hole 3047' to 2900'.
8. TOOH w/tbg to 2900' set 200' C1A cement plug from 2900' to 2700'.(Gas Show @ 2849')
9. TOOH w/tbg, Free point 4 1/2" csg, cut csg @ free point, TOOH w/csg.
10. 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
11. TIH w/tbg to 2150', set 200' C1A cement plug 2150' to 1950'. (4 ½" csg cut).
12. TOOH w/tbg to 1950' gel hole 1950' to 1850'
13. TOOH w/tbg to 1850' set 100' C1A cement plug from 1850' to 1750', (8 5/8" @ 1809' cts)
14. ~~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~~

8 5/8" CTS.

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15. TOOH w/tbg to 1750' gel hole 1750' to 1415'
16. TOOH w/tbg to 1415' set 200' C1A cement plug from 1415' to 1215' (Elev.@ 1415')
17. TOOH w/tbg to1215' gel hole from 1215' to 700'.
18. TOOH w/tbg to 700' set 100' C1A cement plug from 700' to 600' (Safety Plug).
19. TOOH w/tbg to 600' gel hole from 600'to 470'
20. TOOH w/tbg to 470', set 470' C1A cement plug 470' to 0'. (11 ¾" csg @ 270', Coal Shows @ 470', 245', 185', 103', FW @ 40', 460').
21. Erect monument with API#
22. Reclaim location and road to WV-DEP specifications.

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WR-35

JAN 15 1997
Office of Oil & Gas

State of West Virginia
Division of Environmental Protection
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work

06-Aug-96
API #47-001-00956F

Reed 12181
Farm Name: Sanderson, Chas. & Rayelda
Operator Well No.: (12181) S-152161
Location: Elevation: 1416.0
Quadrangle: Philippi
District: Pleasant
County: Barbour
Latitude: 625 Feet South of 39 Deg. 12 Min. 30 Sec.
Longitude: 800 Feet West of 80 Deg. 2 Min. 30 Sec.

Company: ASHLAND EXPLORATION, INC.
P.O. BOX 391, OS-2
ASHLAND, KY 41114-0391

Agent: James L. Stephens

Inspector: Phillip Tracy
Permit Issued: 10-04-96
Well Work Commenced: 10-10-96
Well Work Completed: 10-24-96
Verbal Plugging
Permission granted on:
Rotary ____ Cable ____ Rig
Total Depth (feet) 4352'
Fresh water depths (ft) 40', 460'
Salt water depths (ft) None
Is coal being mined in area (Y/N)? Y
Coal Depths (ft): 103', 185', 245', 470'

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size 11 3/4"	270'	270'	CTS
8 5/8"	1809'	1809'	CTS
4 1/2"	4345'	4345'	220 sks

NOTE: RECOMPLETION 2959-2969'

OPEN FLOW DATA
Producing formation Speechly / Warren
Pay zone depth (ft) 2635-2639
Gas: Initial open flow 94 Mcf/d
Final open flow 15 Mcf/d
Time of open flow between initial and final tests 3 Hours
Static Rock Pressure 720 psig (surface pressure) after 96 Hours
Oil: Initial open flow ____ Bbl/d
Final open flow ____ Bbl/d

Second Producing formation ____ Pay zone depth (ft) ____
Gas: Initial open flow ____ Mcf/d
Final open flow ____ Mcf/d
Time of open flow between initial and final tests ____ Hours
Static Rock Pressure ____ psig (surface pressure) after ____ Hours
Oil: Initial open flow ____ Bbl/d
Final open flow ____ Bbl/d

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 FORMATION, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: Ashland Exploration, Inc.
By: Deanna M. Rose — Deanna M. Rose, Asst. Eng.
Date: 01-08-97

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Philippi 5

100956P

BAR-956F

Set 4½" Alpha CIBP @ 4140'. Dump 10' cmt on top of CIBP from 4130-4140'. Perf 4 squeeze holes @ 3065-3066'. Pump 175 sx Cl A cement.

Perf Speechly with 3 1/8" HCG .37 jets 23H/2959-2969. 75Q foam frac Speechly using 25,700# 20/40 sand and 323,000 scf N_2 @ 15,000 scf/m . BD @ 3056, ATP 3220 @ 16 B/M foam, MTP 3333, ISIP 2929, 10 min 2849, TF 86 bbl..

Perf Warren with 3 1/8" HCG .37 jets under lubricator 9H/2635-2639. 75Q foam frac Warren using 5000# 20/40 sand and 150,000 scf N_2 @ 14,100 scf/m. BD @ 3524, ATP 3440 @ 16 B/M foam, MTP 3608, ISIP 3359, 10 min 2805, TF 58 bbl.

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OG-10
Rev. - 9-71

1009560

RECEIVED
SEP 27 1978
OIL & GAS DIVISION
DEPT. OF MINES

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

Rotary X Oil ____
Cable ____ Gas X
Recycling ____ Comb. ____
Water Flood ____ Storage ____
Disposal ____ (Kind)

Quadrangle Philippi

Permit No. BAR-956
47-001

Company Consolidated Gas Supply Corp.
Address 445 W. Main St., Clarksburg, WV
Farm Alfred Reed Acres 48
Location (waters) Taylor Drain
Well No. 12181 Elev. 1415'
District Pleasant County Barbour
The surface of tract is owned in fee by
Charles E. Sanderson
Address Rt. 3, Philippi, WV
Mineral rights are owned by Alfred Reed, Agt.
Address Rt. 3, Box 189, Philippi, WV
Drilling Commenced June 20, 1978
Drilling Completed June 27, 1978
Initial open flow 60M cu. ft. ____ bbls.
Final production 1205M cu. ft. per day ____ bbls.
Well open 1 hrs. before test 1000 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"	270'	270'	To surface
9 5/8			
8 5/8	1309'	1309'	To surface
7			
5 1/2			
4 1/2	4315'	4315'	220 Sks.
3			
2			
Liners Used			

Attach copy of cementing record.

Well fractured in Benson with 50,000# sand, 750 bbls. of water & 500 gals. 15% HCL.
Perforations: 4156 - 4161 with 15 holes.

Coal was encountered at 103' 185' 245' 470' Feet 36" 48" 36" 60" Inches
Fresh water 40' 460' Feet ____ Salt Water None Feet ____
Producing Sand Benson Depth 4161'

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water		* Remarks
Top Soil			0	5			
Shale & Sand			5	50	Water	40'	Damp
Red Rock & Shale			50	68			
Red Rock			68	70			
Shale & Sand			70	103			
Coal			103	106			
Sand			106	110			
Red Rock			110	125			
Sand			125	185			
Coal			185	189			
Sand			189	200			
Red Rock			200	210			
Shale & Sand			210	245			
Coal			245	248			
Shale & Sand			248	470	Water	460'	Damp
Coal			470	475			
Sand & Shale			475	935			
Red Rock & Shale			935	1040			
Sand & Shale			1040	1280			
Big Lime			1280	1385	Gas	2849'	133M
Sand & Shale			1385	1950	Gas	3224'	84M
Shale & Red Rock			1950	2165	Gas	3981'	60M
Sand & Shale			2165	4160	Gas	4038'	60M
Benson			4160	4200			
Shale			4200	4352	T.D.		

KBM 10' above G. L.

(over)

* Indicates Electric Log tops in the remarks section.

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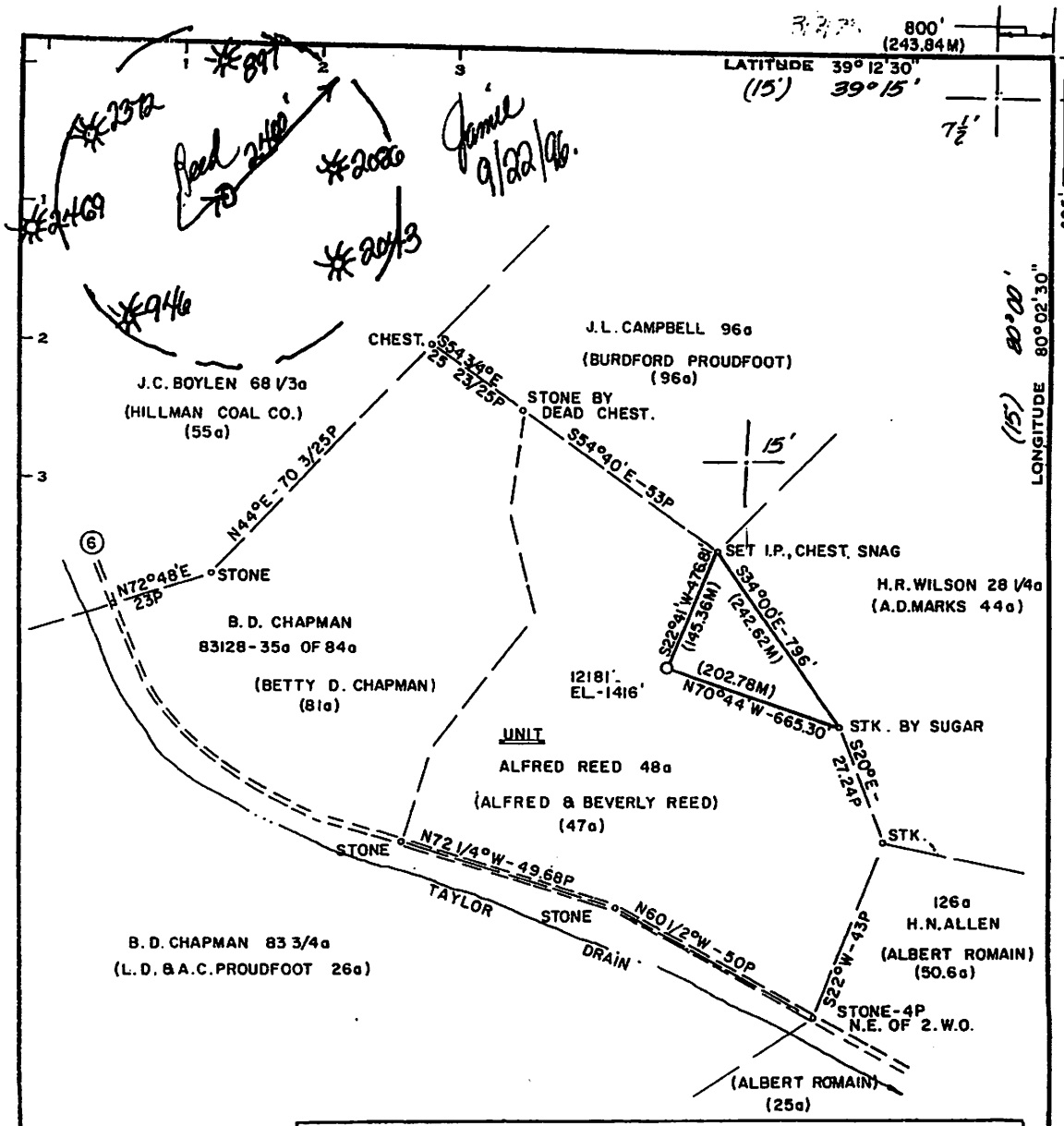

Minimum Error of Closure 1' IN 200'

Source of Elevation ROAD FORK EL-1391' PHILIPPI 7 1/2 TOPO.

"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."

REVISED LOC — ☒
New Location — ☐
Drill Deeper — ☐
Abandonment — ☐

S18E31

F.B. 1898 PG. 6-7
F.B. 1784 PG. 35-40

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Ashland Exploration, Inc.
P.O. box 391-Ashland, Ky 41114-0391
Surface: Charles & Rayelda Sanderson

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL & GAS
NITRO, WEST VIRGINIA 25143

WELL LOCATION MAP

API Well No. 47-001-00956 F

Tract _____ Acres 48 Lease No. 83127
Well (Farm) No. _____ Serial No. 12181
Elevation (Spirit Level) 1416'
Quadrangle PHILIPPI 7 1/2'
County BARBOUR District PLEASANT
Engineer Darrell M. Radcliffe
Engineer's Registration No. L.L.S 741
File No. _____ Drawing No. _____
Date 2-13-78 Scale 1"=500'

Well drilled in 1979 by Consolidated Gas Supply Co. T.D. 4352' Production from Benson, squeeze #2 final Riley, Speechley commingle with Benson. Philippi 5

FORM 1328

100956P

WW-4-A
Revised 6/07

1) Date: August 8, 2016
2) Operator's Well Number
152161 (Reed #12181A)
3) API Well No.: 47 (State) 001 (County) - 00956 (Permit)

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

4) Surface Owner(s) to be served:
(a) Name: Kevin L. Keene, Richard L. & Esther Keene
Address: 110 Sunset Circle Lane
Philippi, WV 26416

(b) Name:
Address:

(c) Name:
Address:

6) Inspector: Kenneth Greynolds
Address: 613 Broad Run Road
Jane Lew, WV 26378
Telephone: (304) 206-6613

5) (a) Coal Operator:
Name: Wolf Run Mining Co., LLC
Address: 1 Edmiston, Suite 211
Buckhannon, WV 26201

(b) Coal Owner(s) with Declaration
Name: Kevin L. Keene, Richard L. & Esther Keene
110 Sunset Circle Lane
Address: Philippi, WV 26416

Name:
Address:

(c) Coal Lessee with Declaration
Name: Arch Coal / Ark Land Company
Address: c/o Vaughn R. Miller
Arc Land Northern Appalachia
100 Tygart Drive
Grafton, WV 26354

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: **EQT Production Company**
By: **Victoria J.Roark**
Its: **Permitting Supervisor**
Address: **PO Box 280**
Bridgeport, WV 26330
Telephone: **(304) 848-0076**

Subscribed and sworn before me this 8th day of August, 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.

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
Misty S Christie
1207 Briercliff Rd
Bridgeport, WV 26330
My Commission Expires February 20, 2018

Office of Oil & Gas
AUG 19 2016

100956P

WW-9
Revised 5/16

Page ____ of ____
2) Operator's Well Number
152161 (Reed #12181A)
3) API Well No.: 47 001 - 00956

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

Operator Name: EQT PRODUCTION COMPANY OP CODE: ____

Watershed (HUC 10): Taylor Drain Quadrangle: Phillipi
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes___ No X
Will a pit be used? Yes X No___
If so, please describe anticipated pit waste: **Formation Fluids**
Will a synthetic liner be used in the pit? Yes X No ___ Is so, what ml.? 20 ~~10~~ ml
Proposed Disposal Method for Treated Pit Wastes:

___ Land Application (if selected provide a completed form WW-9-GPP)
___ Underground Injection (UIC Permit Number ____
X Reuse (at API Number -- Various ____
X Off Site Disposal Permit (Supply form WW-9 for disposal location. See attachment)
___ 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, 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? ____

Permittee shall provide written notice to the Office of the 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 Division 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

Company Official Signature ____
Company Official (Typed Name) Vicki Roark
Company Official Title Permitting Supervisor - WV

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Office of Oil & Gas
AUG 19 2016

Subscribed and sworn before me this 8th day of August, 2016

Misty S. Christie Notary Public

My Commission Expires 2/20/18

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
Misty S Christie
1207 Briercliff Rd
Bridgeport, WV 26330
My Commission Expires February 20, 2018

100956A

OPERATOR'S WELL NO.:
152161 (Reed #12181A)

LEGEND

Property Boundary

Diversion

Road

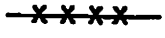
Spring

Wet Spot

Planned Fence

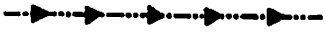
Drain Pipe with size in inches

Water Way

Existing Fence 

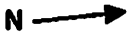
Stream

Cross Drain

Open Ditch 

Artificial Filter Strip

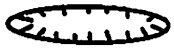
Rock

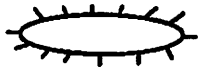
North 

Building

Water well

Drill site

Pit with Cut Walls 

Pit with Compacted Walls 

Area of Land Application of Pit Waste

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: Tamara Rogers

Comments: RECLAIM, RESEED AND MULCH ASAP

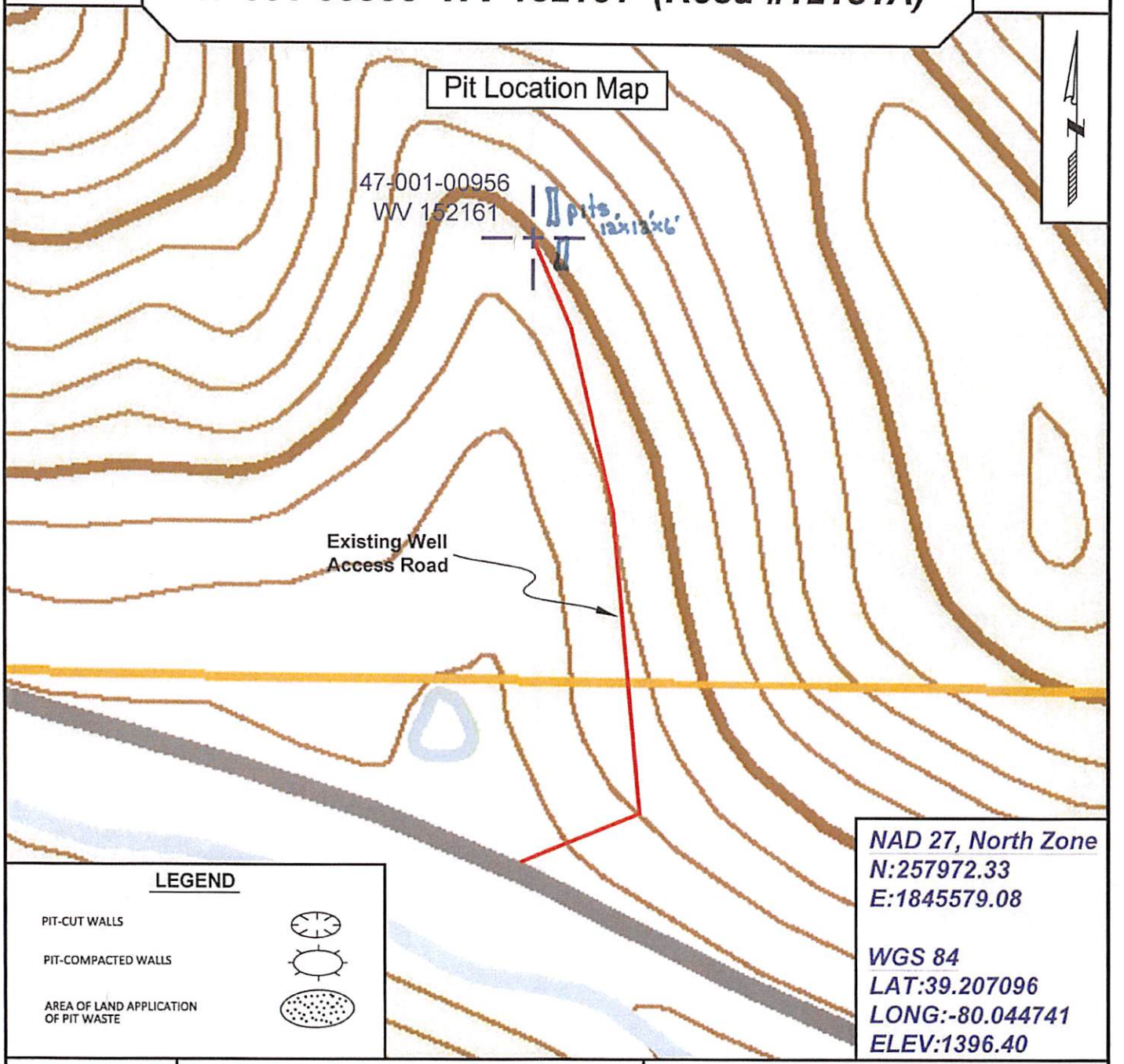
Title: OIL & GAS INSPECTOR Date: 9-12-16

Field Reviewed? _____ Yes ✓ No

100956P

Topo Quad:	Philippi 7.5'	**Scale:**	1" = 200'
County:	Barbour	**Date:**	August 12, 2016
District:	Pleasant	**Project No:**	163-10-00-16

47-001-00956 WV 152161 (Reed #12181A)



NAD 27, North Zone
N:257972.33
E:1845579.08

WGS 84
LAT:39.207096
LONG:-80.044741
ELEV:1396.40

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

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Office of Oil & Gas
AUG 19 2016

100956P

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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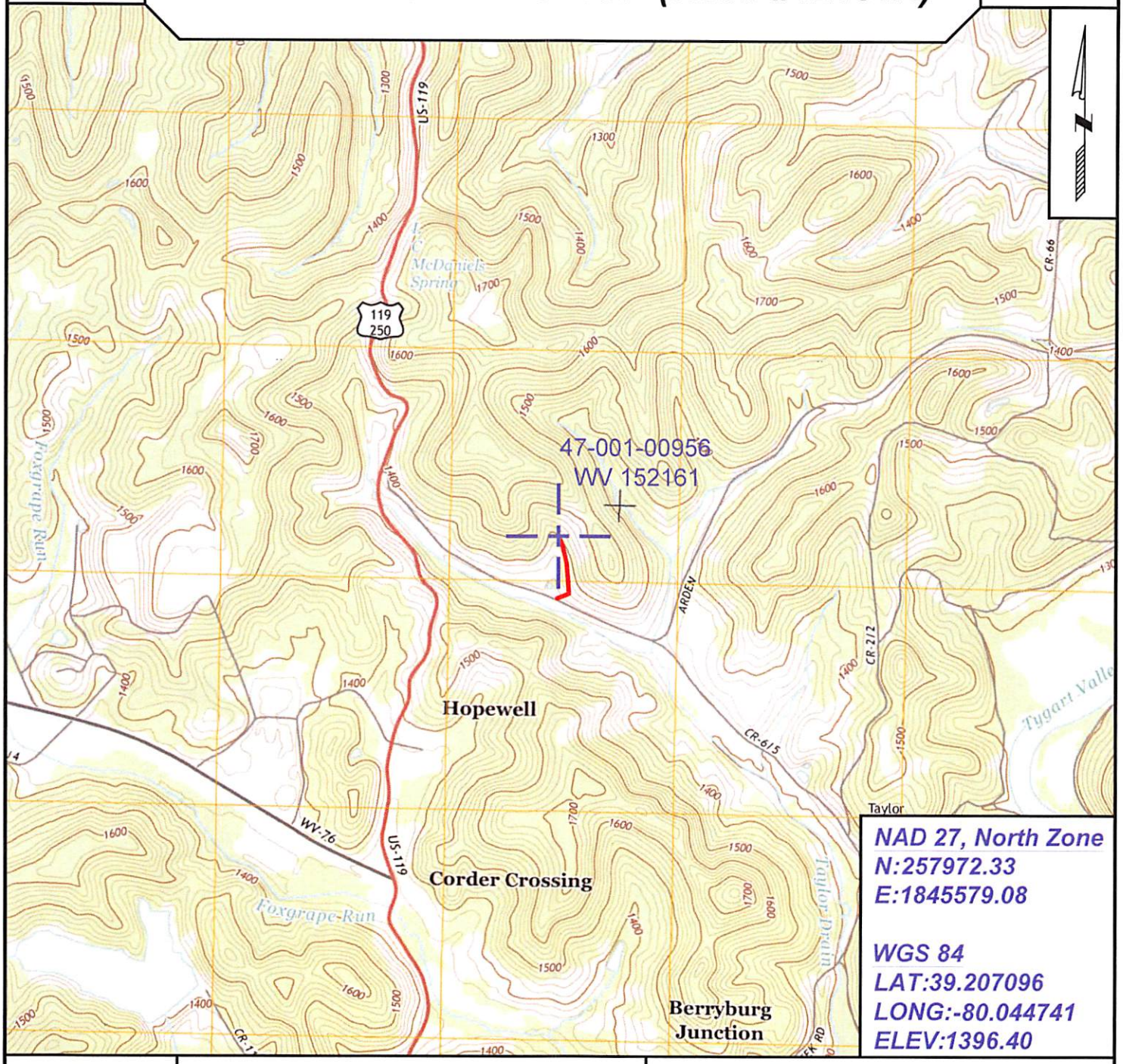
Office of Oil & Gas
AUG 19 2016

100956P

Topo Quad:	Philippi 7.5'	**Scale:**	1" = 2000'
County:	Barbour	**Date:**	July 26, 2016
District:	Pleasant	**Project No:**	163-10-00-16

47-001-00956 WV 152161 (Reed #12181A)

Topo



NAD 27, North Zone
N:257972.33
E:1845579.08

WGS 84
LAT:39.207096
LONG:-80.044741
ELEV:1396.40

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

Received
Office of Oil & Gas
AUG 19 2016

100956P

WW-7
8-30-06

West Virginia Department of Environmental Protection
Office of Oil and Gas
WELL LOCATION FORM: GPS

API: 47-001-00956 **WELL NO.:** WV 152161 (Reed #12181A)

FARM NAME: Charles & Rayelda Sanderson

RESPONSIBLE PARTY NAME: EQT Production Company

COUNTY: Barbour **DISTRICT:** Pleasant

QUADRANGLE: Philippi 7.5'

SURFACE OWNER: Kevin L. Keene

ROYALTY OWNER: Enzo & Roberta Cardelli, et al.

UTM GPS NORTHING: 4340193

UTM GPS EASTING: 582477 **GPS ELEVATION:** 425 m (1396 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.

Signature | PS #2180 Title | 7/29/16 Date

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POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY
LEASE NAME AND WELL No. Reed #12181A - WV 152161 - API No. 47-001-00956

POTENTIAL SAMPLE LOCATIONS

Site: 1 Spacing: 400 +/- Owner: Kevin L. Keene - Richard L. and Esther Keene (Life Estate)
Address: 110 Sunset Circle Lane, Philippi, WV 26416 Phone No. _____
Comments: Public water

Site: 2 Spacing: 800 +/- Owner: Kevin L. Keene - Richard L. and Esther Keene (Life Estate)
Address: 110 Sunset Circle Lane, Philippi, WV 26416 Phone No. _____
Comments: Public water

Site: 3 Spacing: 780 +/- Owner: Kevin L. Keene - Richard L. and Esther Keene (Life Estate)
Address: 110 Sunset Circle Lane, Philippi, WV 26416 Phone No. _____
Comments: Unoccupied house

Site: 4 Spacing: 580 +/- Owner: Kevin L. Keene - Richard L. and Esther Keene (Life Estate)
Address: 110 Sunset Circle Lane, Philippi, WV 26416 Phone No. _____
Comments: Unoccupied mobile home

Site: 5 Spacing: 670 +/- Owner: Kevin L. Keene - Richard L. and Esther Keene (Life Estate)
Address: 110 Sunset Circle Lane, Philippi, WV 26416 Phone No. _____
Comments: Pond

Site: 6 Spacing: 680 +/- Owner: Kevin L. Keene - Richard L. and Esther Keene (Life Estate)
Address: 110 Sunset Circle Lane, Philippi, WV 26416 Phone No. _____
Comments: Public water

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AUG 19 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

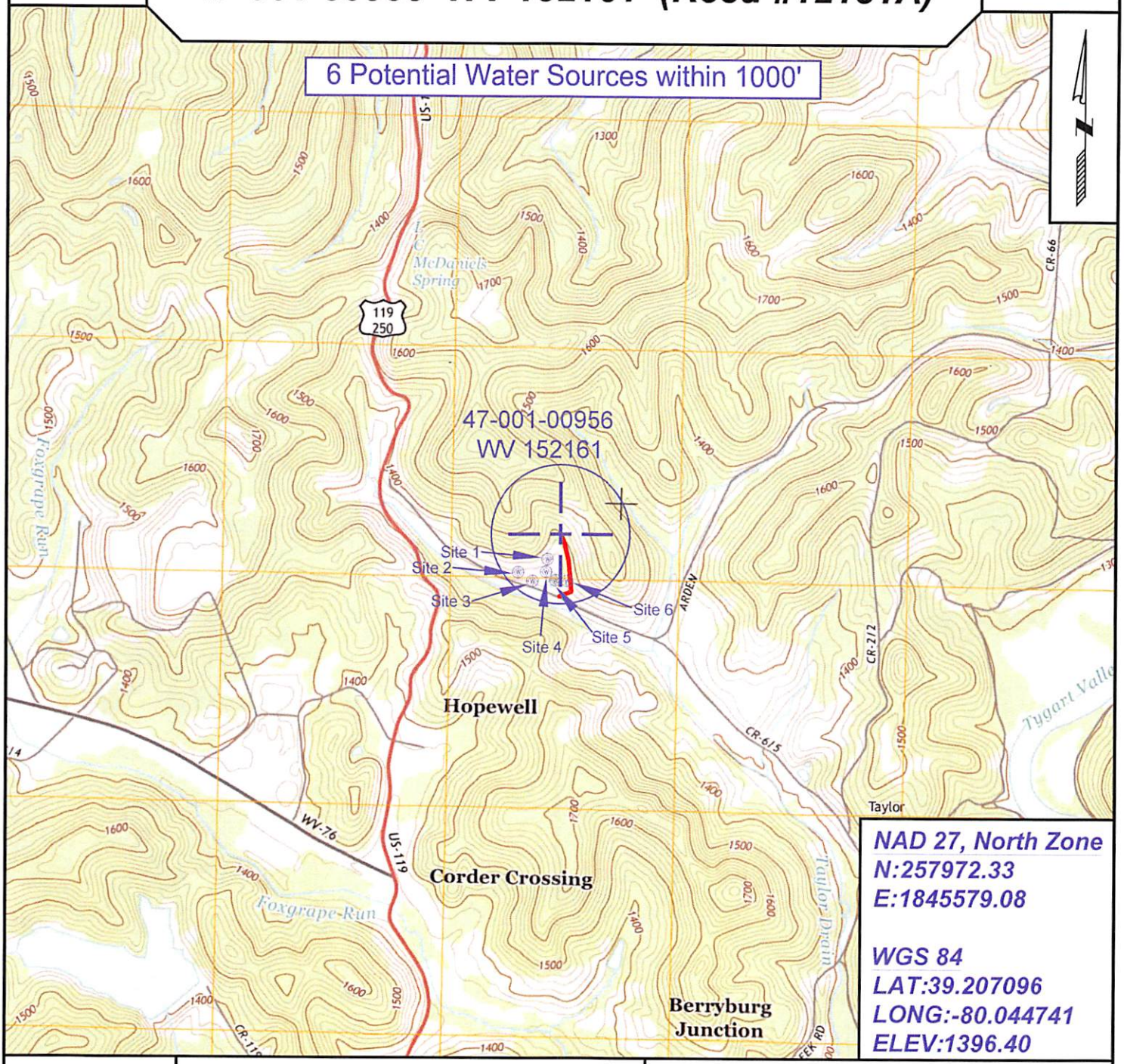
ALLEGHENYSURVEYS.COM

100956P

Topo Quad:	Philippi 7.5'	**Scale:**	1" = 2000'
County:	Barbour	**Date:**	July 26, 2016
District:	Pleasant	**Project No:**	163-10-00-16

Water

47-001-00956 WV 152161 (Reed #12181A)



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