



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 18, 2016

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-3300722, 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: 1-1777
Farm Name: BERRY, JOSEPHINE
API Well Number: 47-3300722
Permit Type: Plugging
Date Issued: 05/18/2016

Promoting a healthy environment.

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 #
20445
\$100⁰⁰

Date: April 12, 2016
Operator's Well
Well No. 656901 (Josephine Berry #1-1777)
API Well No.: 47 033 - 00722

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: 1164 ft. Watershed: Bingamon Creek
Location: Eagle County: Harrison Quadrangle: Wallace 7.5' 635
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 [Signature] Date 5/12/2016

PLUGGING PROGNOSIS

J.H. Berry #2-1777 (656901)

District; Eagle

Harrison Co. WV

API # 47-033-00722

BY: R. Green

DATE: 10/5/15

CURRENT STATUS:

Elevation @ 1028'

TD at 1816'

9 5/8" casing @ 307'

7" csg @ 1616'

4 1/2" csg @ 1818'

Fresh Water @ none reported

Coal, @ 194' to 201' & 274' to 281'

Saltwater @ none reported

Oil and Gas show @ 826'

Gas show @ 1706' & 1780'

1. Notify State Inspector, Sam Ward, 304-389-7583, 24 hrs. in advance of commencing operations. *Spot Gel.*
2. TIH tbg to 1800' set 300' C1A cement plug 1800' to 1500', (Gas show from 1690' to 1785', 7" casing seat). TOOH tbg.
3. Free point 4 1/2" casing, cut casing @ free point. (EST@1500') 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.
4. TOOH tbg to 1400', gel hole 1400' to 1100'.
5. TOOH tbg to 1100', Set 400' C1A cement plug 1100' to 700' TOOH tbg.
6. Free point and cut 7" casing. (EST@ 600') TOOH casing.
7. 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. TOOH tbg to 500' gel hole 500' to 350'.
9. TOOH tbg to 350', set 350' C1A cement plug 350' to surface. (9 5/8" csg seat & coal at 194' & 274').
10. Erect monument with API# and date.
11. Reclaim road and location to WV-DEP specifications.

SDEW
5/12/16



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

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

Quadrangle Clarksburg NW

Permit No. HAR-722

656901

Company <u>Carnegie Natural Gas Company</u>	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Address <u>3904 Main St., Munhall, Pa.</u>				
Farm <u>Josephine H. Berry</u> Acres <u>166.76</u>				
Location (waters) <u>Ringamon Creek</u>	Size			
Well No. <u>2-1777</u> Elev. <u>1028'</u>	<u>20-16'</u>			
District <u>Maple</u> County <u>Harrison</u>	Cund.			
The surface of tract is owned in fee by <u>Alan R. Webb, et ux</u>	<u>13-10"</u>			
Address <u>Wyatt, W. Va. 26463</u>	<u>9 5/8</u>	<u>307</u>	<u>307</u>	<u>150 sacks</u>
Mineral rights are owned by <u>Josephine H. Berry, et con</u> Address <u>Box 352, Clarksburg, W. Va.</u>	<u>8 5/8</u>			
Drilling Commenced <u>Aug. 6, 1973</u>	<u>7</u>	<u>1616</u>	<u>1616</u>	<u>30 sacks</u>
Drilling Completed <u>Aug. 13, 1973</u>	<u>5 1/2</u>			
Initial open flow <u>23,560</u> cu. ft. _____ bbls.	<u>4 1/2</u>	<u>1818</u>	<u>1818</u>	<u>25 sacks</u>
Final production <u>858,000</u> cu. ft. per day _____ bbls.	<u>3</u>			
Well open _____ hrs. before test <u>457</u> RP.	<u>2</u>			
Well treatment details:	Liners Used			

Attach copy of cementing record.

Fractured - Big Injun Sand - 1690-1710' 1081 bbl. water 40,000# sand
1742-1746'
Squaw Sand 1779-1785'

Coal was encountered at 194-201' 274-281 Feet 8 1/2" 8 1/2" inches
Fresh water _____ Feet _____ Salt Water _____ Feet _____
Producing Sand Big Injun Sand, Squaw Sand Depth 1690-1746', 1779-1785'.

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Clay and Sand			0	110		
Sand			110	123		
Slate			123	194		
Coal			194	201		
Sand and Shells			201	221		
Slate			221	227		
Sand			227	258		
Slate			258	274		
Coal			274	281		
Sand			281	298		
Slate			298	321		
Sand			321	330		
Slate			330	344		
Sand			344	362		
Slate			362	381		
Red Rock			381	412		
Sand			412	414		
Slate			414	429		
Sand			429	432		
Slate			432	462		
Red Rock			462	486		
Slate			486	514		
Red Rock			514	554		
Sand			554	562		

RECEIVED
APR 17 1973
OIL & GAS DIVISION
DEPT. OF MINES
Received
Office of Oil & Gas
APR 18 1973

(over)

* Indicates Electric Log tops in the remarks section.

3300722P

HAR-722

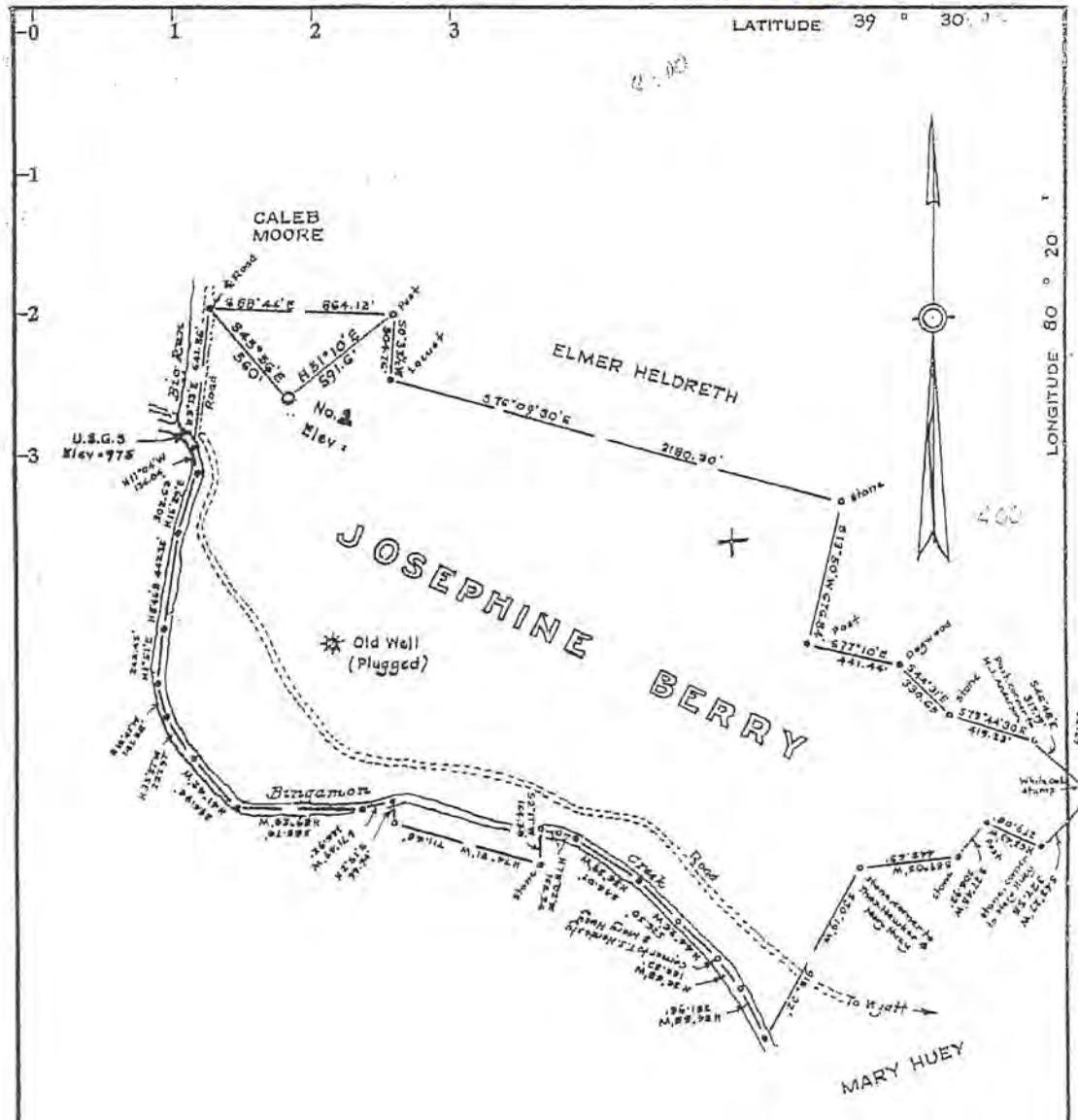
Formation	Color	Hard or Soft	Top Feet 4	Bottom Feet	Oil, Gas or Water	* Remarks
Red Rock			562	569		
Slate			569	592		
Red Rock			592	604		
Slate			604	632		
Red Rock			632	640		
Slate			640	784		
Sand			784	885	Show-oil and gas - 826'	
Slate and Shells			885	912		
Sand			912	930		
Slate and Shells			930	950		
Sand			950	978		
Slate and Shells			978	1018		
Sand			1018	1076		
Slate			1076	1091		
Sand			1091	1115		
Slate			1115	1137		
Sand			1137	1183		
Slate			1183	1192		
Slate and Shells			1192	1205		
Sand			1205	1284		
Slate and Shells			1284	1328		
Slate			1328	1348		
Slate and Shells			1348	1353		
Sand			1353	1400		
Slate			1400	1417		
Red Rock			1417	1422		
Slate and Shells			1422	1451		
Red Rock			1451	1519		
Sand			1519	1531		
Red Rock			1531	1545		
Slate			1545	1561		
Lime			1561	1566		
Slate			1566	1599		
Lime			1599	1673		
Sand			1673	1684		
Red Rock			1684	1689		
Sand			1689	1766	Show-gas - 1706'	
Slate and Shells			1766	1816	Show-gas - 1780'	
Total Depth				1816		

RECEIVED
DEC 4 1973
ENGINEERING
DEPT.

Date December 13, 1973

APPROVED Carnegie Natural Gas Company, Owner
Office By: Raymond J. Dunaway, Geologist
(Title)
APR 18 2016

3300722P 8/1/73 CEN



Minimum Error of Closure 1 in 2500'
 Source of Elevation Elev of road at Big Run: 975'

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

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.

Signed: Murphy J. Huddleston
 Map No. _____ Squares: N S E W

Company CARNEGIE NATURAL GAS CO.
 Address Murhall, Pennsylvania
 Farm Josephine Berry, et Con
 Tract Acres 166.76 Lease No. 17575
 Well (Farm) No. Two Serial No. 1777
 Elevation (Spirit Level) 1028'
 Quadrangle Clarksburg
 County Harrison District Eagle
 Engineer Murphy J. Huddleston
 Engineer's Registration No. 1227
 File No. _____ Drawing No. _____
 Date May 23 1972 Scale 1" = 400' = 660'

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

WELL LOCATION MAP
 FILE NO. MAA-722

+ 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.

47 033

1) Date: April 12, 2016
2) Operator's Well Number
656901 (Josephine Berry #1-1777)
3) API Well No.: 47 033 - 00722
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

4) Surface Owner(s) to be served:	5) (a) Coal Operator:
(a) Name <u>David W. Webb</u>	Name <u>None</u>
Address <u>931 Joetown Road</u>	Address _____
<u>Mannington, WV 26582</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>Attention: Alex O'Neill</u>
_____	Address <u>Murray Energy Corporation</u>
_____	<u>46226 National Road</u>
(c) Name _____	<u>St. Clairsville, OH 43950</u>
Address _____	Name _____
_____	Address _____
_____	_____
6) Inspector <u>Sam Ward</u>	(c) Coal Lessee with Declaration
Address <u>P. O. Box 2327</u>	Name <u>None</u>
<u>Buckhannon, WV 26201</u>	Address _____
Telephone <u>(304) 848-0082</u>	_____
_____	_____

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

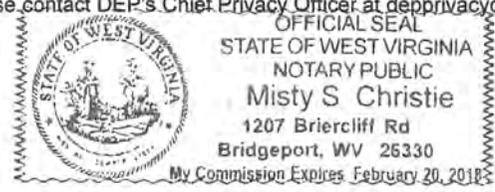
- (1) The application to Plug and Abandon a Well on Form WW-4B, which sets out the parties involved in the work and describes the well its and the plugging work order; and
 - (2) The plat (surveyor's map) showing the well location on Form WW-6.
- The reason you received these documents is that you have 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 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 14th 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.



Office of Oil & Gas
APR 18 2016

33007224

WW-9
Revised 2/03

Page _____ of _____
2) Operator's Well Number
656901 (Josephine Berry #1-1777)
3) API Well No.: 47 033 - 00722

**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: Bingamon Creek Quadrangle: Wallace 7.5'

Elevation: 1164 ft. County: Harrison District: Eagle

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 ml

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 _____

*SDLO
BIZITE*

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 _____

Company Official (Typed or Printed) Victoria Roark

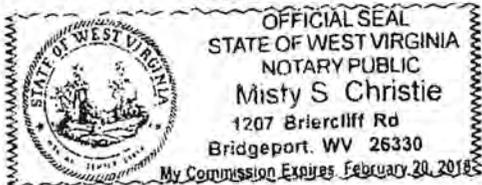
Company Official Title Permitting Supervisor-WV

Subscribed and sworn before me this 2nd day of May, 2016

Misty S. Christie

Notary Public

My Commission Expires 2/20/18



3300722A

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

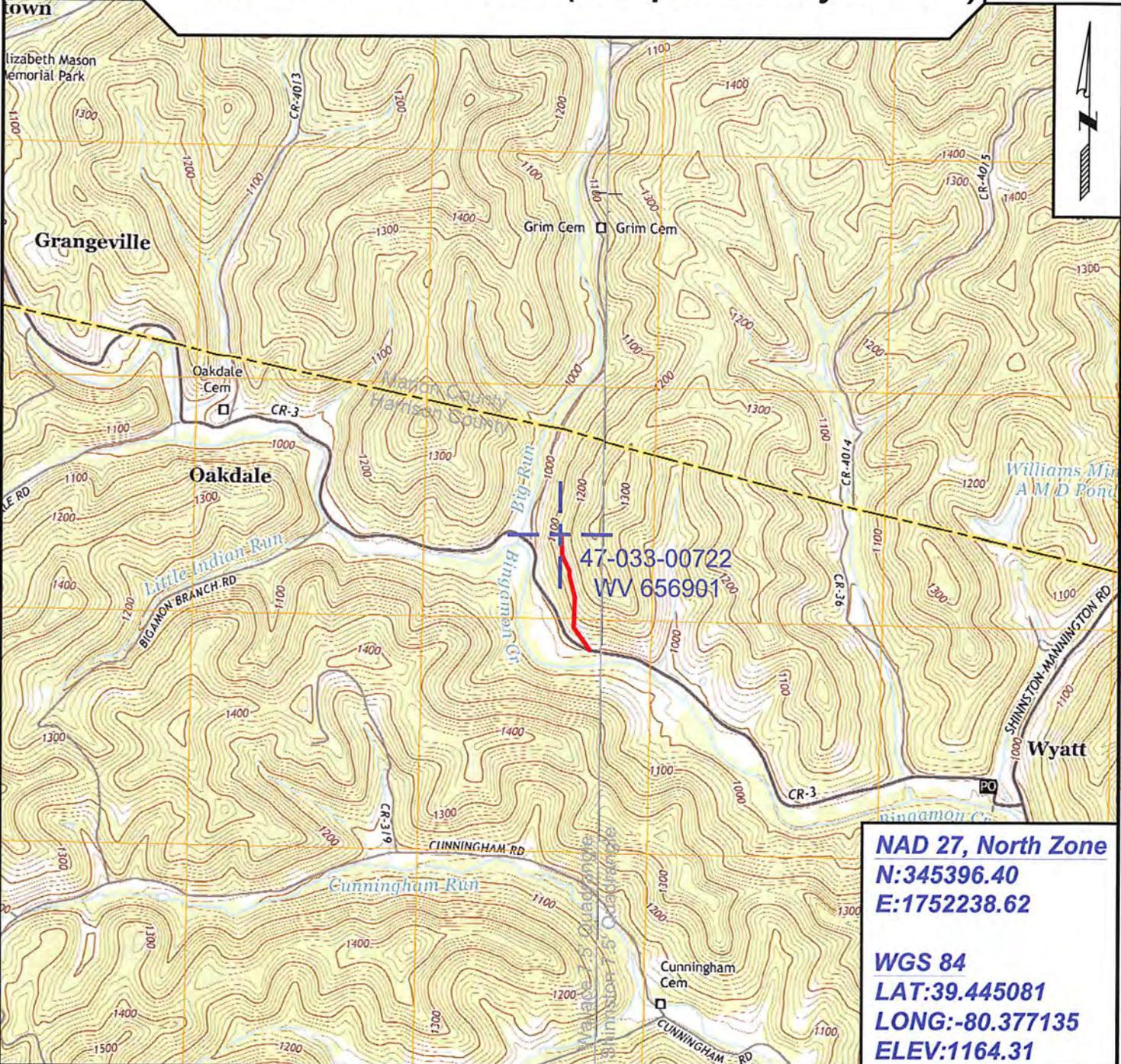
Waste Management - Northwestern Landfill

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

Topo Quad: Wallace 7.5' Scale: 1" = 2000'
 County: Harrison Date: March 08, 2016
 District: Eagle Project No: 70-36-00-08

47-033-00722 WV 656901 (Josephine Berry #1-1777)

Topo



NAD 27, North Zone
N:345396.40
E:1752238.62

WGS 84
LAT:39.445081
LONG:-80.377135
ELEV:1164.31



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

APR 18 2016



POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY
 LEASE NAME AND WELL No. Josephine Berrv #1-1777 - WV 656901 - API No. 47-033-00722

POTENTIAL SAMPLE LOCATIONS

Site: 1 Spacing: 853 +/- Owner: Sydney Bock
 Address: 1889 Joetown Rd., Mannington, WV 26582 Phone No. _____
 Comments: _____

Site: 2 Spacing: 656 +/- Owner: Myron Bock
 Address: 1834 Joetown Rd., Mannington, WV 26582 Phone No. _____
 Comments: _____

Site: 3 Spacing: 771 +/- Owner: Betty Bock
 Address: 1832 Joetown Rd., Mannington, WV 26582 Phone No. _____
 Comments: _____

Site: 4 Spacing: 353 +/- Owner: John Bock
 Address: 1834 Joetown Rd., Mannington, WV 26582 Phone No. _____
 Comments: _____

Site: 5 Spacing: 887 +/- Owner: Dave Webb
 Address: 931 Joetown Rd., Mannington, WV 26582 Phone No. _____
 Comments: _____

Received
 Office of Oil & Gas

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

Topo Quad: Wallace 7.5'

Scale: 1" = 2000'

County: Harrison

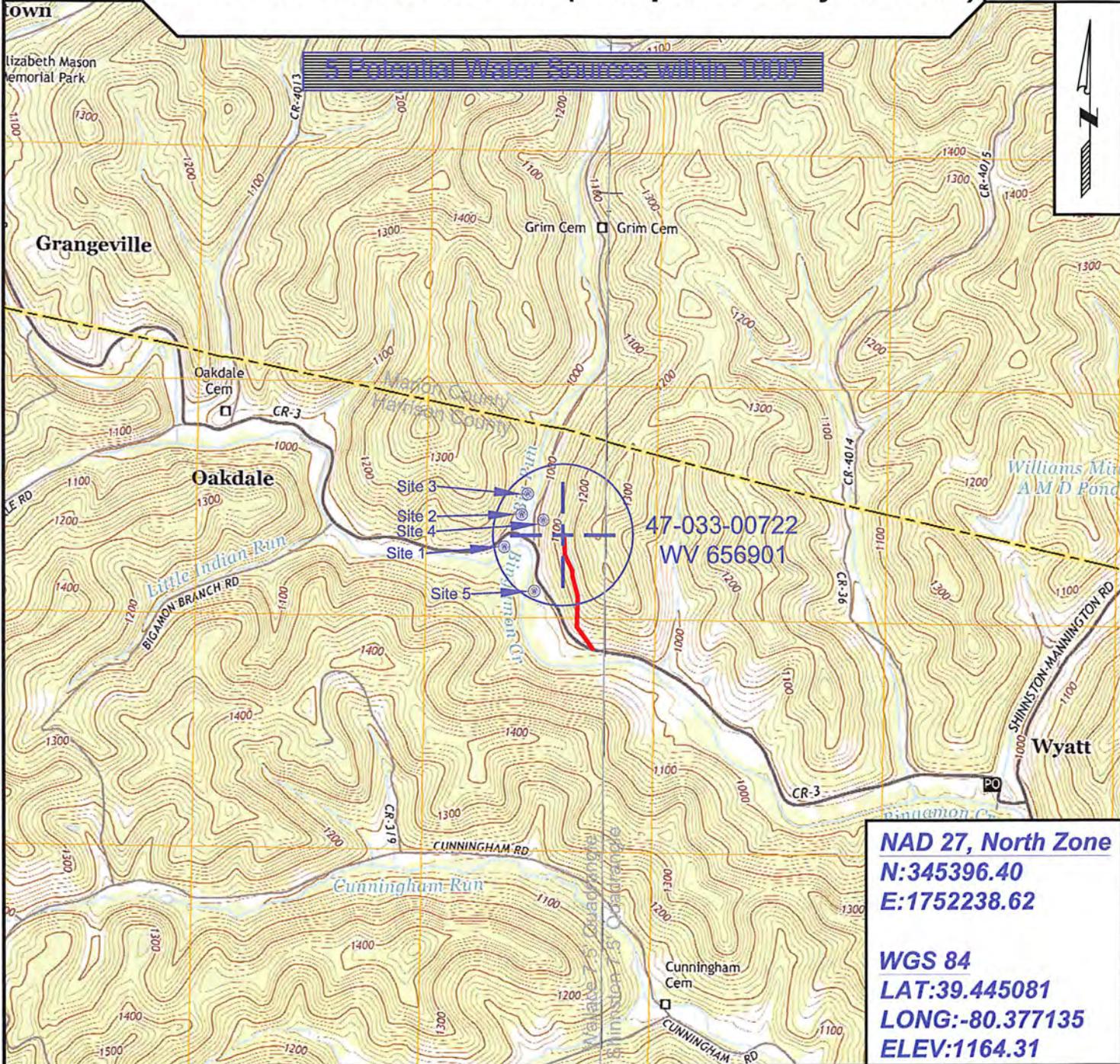
Date: March 08, 2016

District: Eagle

Project No: 70-36-00-08

Water

47-033-00722 WV 656901 (Josephine Berry #1-1777)



NAD 27, North Zone
N:345396.40
E:1752238.62

WGS 84
LAT:39.445081
LONG:-80.377135
ELEV:1164.31



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 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
 March 23, 2016

WW-7
8-30-06



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

API: 47-033-00722 WELL NO.: WV 656901 (Josephine Berry #1-1777)
FARM NAME: Josephine Berry
RESPONSIBLE PARTY NAME: EQT Production Company
COUNTY: Harrison DISTRICT: Eagle
QUADRANGLE: Wallace 7.5'
SURFACE OWNER: David W. Webb
ROYALTY OWNER: Linda B. Kirby
UTM GPS NORTHING: 4366355
UTM GPS EASTING: 553596 GPS ELEVATION: 355 m (1164 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:

- Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
- Accuracy to Datum – 3.05 meters
- Data Collection Method:
Survey grade GPS : Post Processed Differential
Real-Time Differential
Mapping Grade GPS : Post Processed Differential
Real-Time Differential

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

I the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.

[Signature]
Signature

PS #2180
Title

Received
Office of Oil & Gas
3/29/16
Date APR 18 2016