



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

April 22, 2014

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-2102269, 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: WV 156171 (7-W165)
Farm Name: GOFF, LAURA
API Well Number: 47-2102269
Permit Type: Plugging
Date Issued: 04/22/2014

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.

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

Date: 3-17-14
Operator's Well
Well No. 156171 Goff #7-W165
API Well No.: 47 021 - 02269

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 Liquid Injection Waste Disposal:
If Gas, Production Or Underground storage Deep Shallow

5) Elevation: 1296' Watershed: Bull Run of Cedar Creek of Little Kanawha River
Location: Center County: Gilmer Quadrangle: Cedarville 7.5'
District:

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

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

8) Oil & Gas Bryan Harris
Name: P.O. Box 157
Address: Volga, WV 26238

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 Bryan O'Harris Date 4-9-14

PLUGGING PROGNOSIS –Weston

Goff, L. #7-W165 (156171)

GILMER, Co., WV
API # 47-021-02269
Center District

BY: Craig Duckworth
DATE: 12/10/13

CURRENT STATUS:

8 5/8" csg @ 203' (cts)
4 1/2" csg @ 2640' (100 sks cement)

TD @ 2642'

Fresh Water @ None Reported
1st Salt Sand @ 1309'
Gas Shows @ 2512', 2532', & 2560' Big Injun
Oil Shows @ 2512', 2532', & 2560' Big Injun
Stimulation: Fractured Perfs. @ 2512' to 2560'

Salt Water @ None reported
Coal @ None reported

1. Notify State Inspector, Bryan Harris 304-553-6087, 24 hrs. Prior to commencing operations.
2. TIH w/ tbg @ 2640'; Set 200' C1A Cement Plug @ 2640' to 2440' (Oil & Gas Show @ 2512',2532 2560')
3. TOOH w/ tbg, Free Point 4 1/2", cut 4 1/2" @ free point, TOOH w/ 4 1/2" csg
4. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas shows below 4 1/2" cut. Do not omit any plugs.
5. TIH w/ tbg @1309'; Set 100' C1A Cement Plug @ 1309' to 1209'(Salt Sand @ 1309')
6. TOOH w/ tbg @ 1309; gel hole @ 1309' to 600'.
7. TOOH w/ tbg @ 600'; Set 100' C1A Cement Plug @ 600' to 500' (Safety Plug)
8. TOOH w/ tbg @ 500'; gel hole @ 500' to 250'
9. TOOH w/ tbg @ 250'; Set 250' C1A Cement Plug @ 250' to Surface (8 5/8" @ 203')
10. Top off as needed
11. Set Monument to WV-DEP Specifications
12. Reclaim Location & Road to WV-DEP Specifications

GEL HOLE FROM 2440' TO 4 1/2" CUT

GEL BETWEEN ALL CEMENT PLUGS.

Received

MAR 19 2014



RECEIVED
MAR 19 1974

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division
WELL RECORD

7-200
6-54

Quadrangle Glenville
Permit No. "IL-2269"

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

Company WACO Oil & Gas Company
Address Box 4, Glenville, W. Va.
Farm Laura Goff Acres 163
Location (waters) Big Bull Run
Well No. Seven (7) Elev. 1309
District Center County Gilmer
The surface of tract is owned in fee by Fannie Goldsmith
Address Flower, West Virginia
Mineral rights are owned by Goff Heirs
Address Clarksburg, W. Va.
Drilling Commenced 2-17-73
Drilling Completed 2-20-73
Initial open flow 40,000 cu. ft. Trace bbls.
Final production 1.5MM cu. ft. per day 10 bbls.
Well open 24 hrs. before test 500 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"			
9 5/8			
8 5/8	203	203	To Surface
7			
5 1/2		2640	100 sks
4 1/2			
3			
2			
Liners Used			

Well treatment details: Hydrofractured 4-30-73 by Dowell - 600 bbls of Oil, 60,000 # 20/40 Sand, 500 gallons Acid. RD 1900# TP 1000# to 1500# ISIP 500#

Coal was encountered at None feet _____ inches
Fresh water None feet _____ Salt Water _____ feet _____
Producing Sand Ri. Injun Depth 2512 to 2560

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Top Soil			0	40		
Sand & Slate			40	720		
Slate & Sand			720	1940		
Sand			1940	2002		
Slate			2002	2046		
Sand			2046	2086		
Slate			2086	2270		
Sand & Lime			2270	2320		
Slate			2320	2336		
Lime (Ri. Lime)			2336	2344		
Sand (Ri. Injun)			2344	2540		Gas & Oil shows at 2512, 2532 & 2560.
Slate			2540	2550		
Sand			2550	2576		
Slate			2576	2642		Total Depth at 2642

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MAR 19 2014

(over)

* Indicates Electric Log tops in the remarks section.

- 1) Date: 3-17-14
 2) Operator's Well Number
156171 Goff #7-W165
 3) API Well No.: 47 021 - 02269
 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>Eldon S. Goldsmith</u> ✓ Address <u>C/O Mrs Eldon S. Goldsmith</u> <u>1938 Bona Vista Dr.</u> <u>Charleston, WV 25311-1302</u></p> <p>(b) Name <u>Glennis Pauline Waldeck</u> ✓ Address <u>2876 Walker Fork Road</u> <u>Cedarville, WV 26611</u></p> <p>(c) Name _____ Address _____</p>	<p>5) (a) Coal Operator: Name <u>None</u> Address _____</p> <p>(b) Coal Owner(s) with Declaration Name <u>Diana Goff Cather M. Trust</u> ✓ <u>315 Spring Street</u> Address <u>Clarksburg, WV 26301-2150</u></p> <p>Name <u>Harold Fair</u> ✓ Address <u>6964 Will James Road</u> <u>Rockford, IL 61109</u> <u>(see attached)</u></p> <p>(c) Coal Lessee with Declaration Name <u>None</u> Address _____</p>
<p>6) Inspector <u>Bryan Harris</u> Address <u>P.O. Box 157</u> <u>Volga, WV 26238</u> Telephone <u>304-553-6087</u></p>	

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.

Received
 MAR 19 2014

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.

<p>Well Operator: OFFICIAL SEAL By: _____ STATE OF WEST VIRGINIA NOTARY PUBLIC Nicholas L. Bumgardner Rt. 1, Box 4 Liberty, WV 25124 My Commission Expires July 27, 2018</p>	<p>EQT Production Company <u>Victoria J. Roark</u> <u>Permitting Supervisor</u> <u>PO Box 280</u> <u>Bridgeport, WV 26330</u> <u>(304) 848-0076</u></p>
<p>Subscribed and sworn before me this <u>17</u> day of <u>MARCH</u>, <u>2014</u></p>	<p>_____ Notary Public</p>
<p>My Commission Expires: <u>6/27/2018</u></p>	

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: Bull Run of Cedar Creek of Little Kanawha River Quadrangle: Cedarville 7.5'
Elevation: 1296' County: Gilmer District: Center

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.? 30 ml

Proposed Disposal Method for Treated Pit Wastes:
X Land Application
____ Underground Injection - UIC Permit Number _____
____ Reuse (at API Number) _____
____ Offsite Disposal Permit #. _____
____ Other: Explain _____

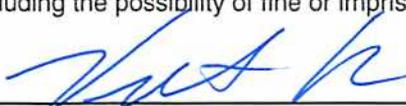
Drilling medium anticipated for this well? Air, freshwater, oil based, etc. _____
If oil based, what type? Synthetic, petroleum, etc. _____
Additives to be used? _____

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? _____

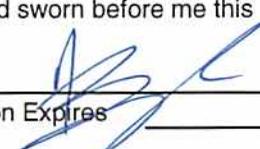
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Division of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of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

Received

MAR 19 2014

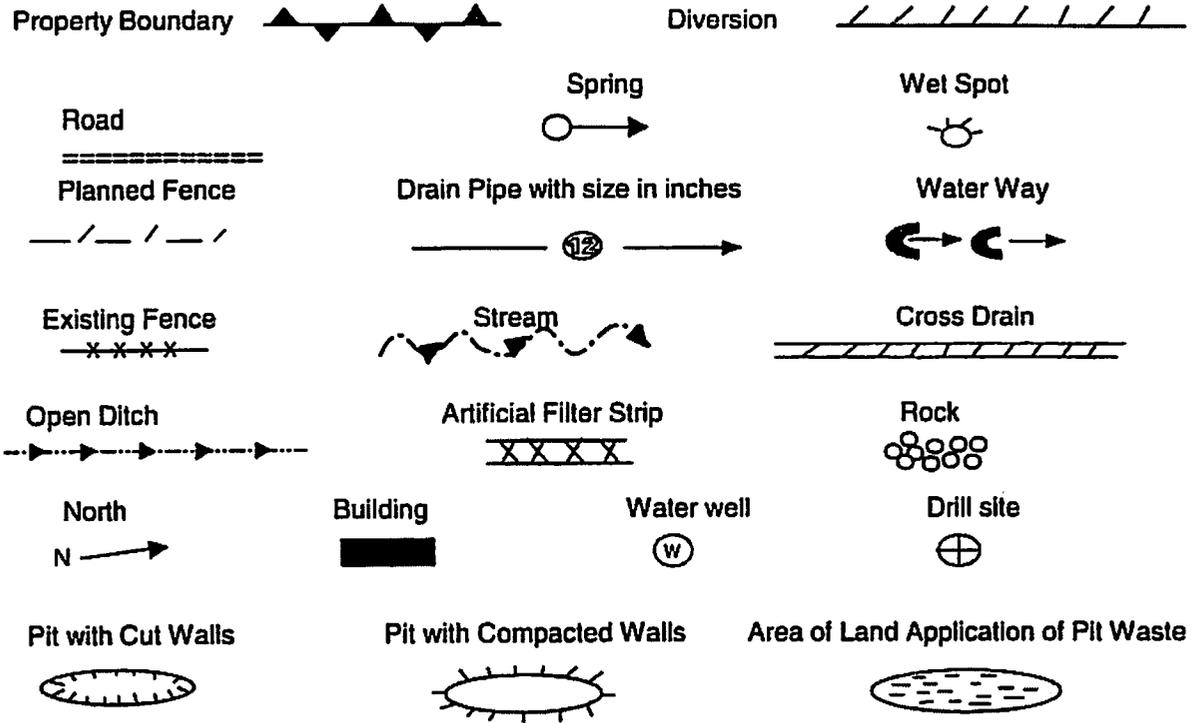
Company Official Signature 
Company Official (Typed or Printed) Victoria Roark
Company Official Title Permitting Supervisor-WV
Subscribed and sworn before me this 17 day of MARCH, 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

My Commission Expires  6/27/2018 Notary Public

OPERATOR'S WELL NO.:
156171 Goff #7-W165

LEGEND



Proposed Revegetation Treatment: Acres Disturbed: 1± Prevegetation pH 5.8

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
KY-31	40	Orchard Grass	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: *Diana O'Hara*

Comments: _____

Title: Inspector Date: 4-9-14
Field Reviewed? X Yes _____ No _____

2102269A

Topo Quad: Cedarville 7.5'

Scale: 1" = 2000' P

County: Gilmer

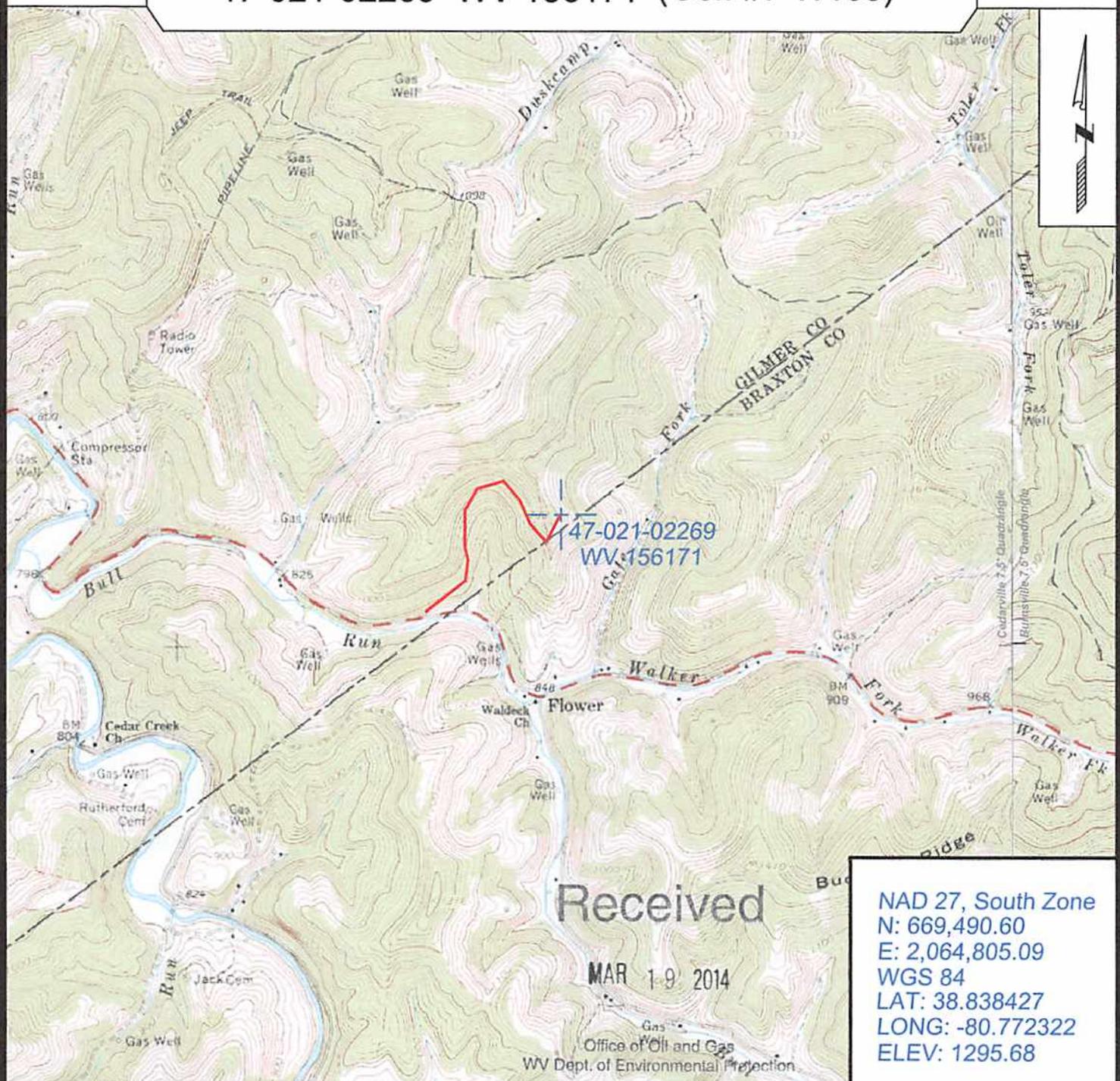
Date: February 24, 2014

District: Center

Project No: 25-19-00-07

47-021-02269 WV 156171 (Goff #7-W165)

Topo



NAD 27, South Zone
 N: 669,490.60
 E: 2,064,805.09
 WGS 84
 LAT: 38.838427
 LONG: -80.772322
 ELEV: 1295.68



SURVEYING AND MAPPING SERVICES PERFORMED BY:
ALLEGHENY SURVEYS, INC.
 1-800-482-8606
 P.O. BOX 438
 BIRCH RIVER, WV 26610
 PH: (304) 649-8606

PREPARED FOR:
EQT Production Company
 P.O. Box 280
 Bridgeport, WV 26330

2102269P

WW-7
8-30-06



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

API: 47-021-02269 WELL NO.: WV 156171 (Goff #7-W165)

FARM NAME: Laura Goff

RESPONSIBLE PARTY NAME: EQT Production Company

COUNTY: Gilmer DISTRICT: Center

QUADRANGLE: Cedarville 7.5'

SURFACE OWNER: Elden S. Goldsmith

ROYALTY OWNER: Diana Goff Cather, et al.

UTM GPS NORTHING: 4298871

UTM GPS EASTING: 519760 GPS ELEVATION: 395 m (1296 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.

Stacy O'Brien
Signature
3/3/14
Date

PS # 2180
Title

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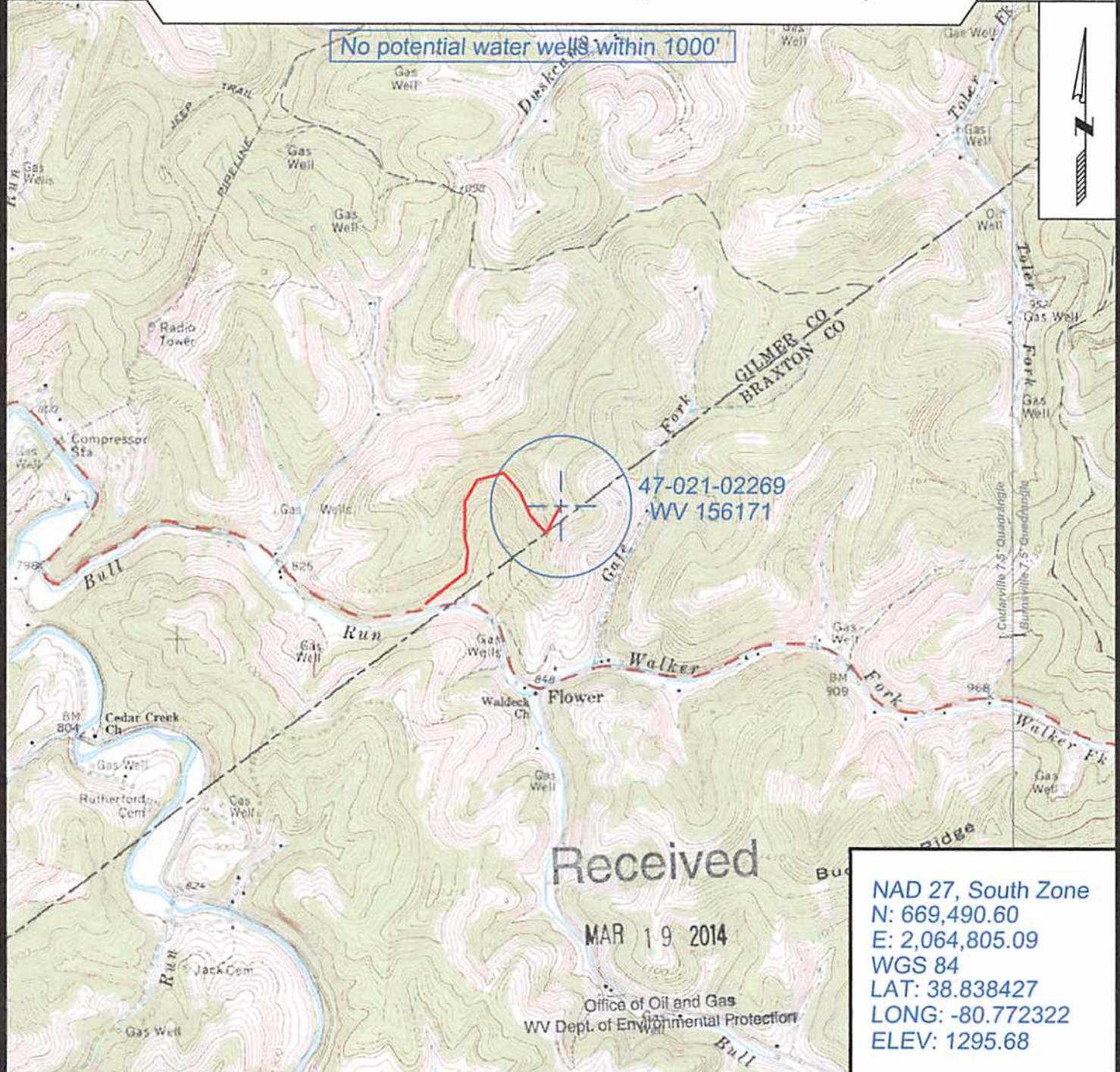
MAR 19 2014

Topo Quad: Cedarville 7.5' Scale: 1" = 2000'
 County: Gilmer Date: February 24, 2014
 District: Center Project No: 25-19-00-07

Water

47-021-02269 WV 156171 (Goff #7-W165)

No potential water wells within 1000'



47-021-02269
WV 156171

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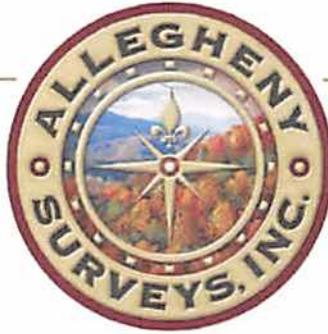
Office of Oil and Gas
WV Dept. of Environmental Protection

NAD 27, South Zone
 N: 669,490.60
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PREPARED FOR:
EQT Production Company
 P.O. Box 280
 Bridgeport, WV 26330



POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY
LEASE NAME AND WELL No. Goff #7-W165 - WV 156171 - API No. 47-021-02269

POTENTIAL SAMPLE LOCATIONS

There appears to be no known water samples within the required 1000' of the existing well WV 156171.

Received

MAR 19 2014

Office of Oil and Gas
WV Dept. of Environmental Protection

BIRCH RIVER OFFICE
P.O. Box 438 • 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

CALDWELL OFFICE
212 Cumberland Street
Caldwell, OH 43724
phone: 740-305-5007
fax: 740-305-5126

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

2102269P

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

Date: 3-17-14
Operator's Well
Well No. 156171 Goff #7-W165
API Well No.: 47 021 - 02269

*CKI 12MB
100*

**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: 1296' Watershed: Bull Run of Cedar Creek of Little Kanawha River
Location: Center County: Gilmer Quadrangle: Cedarville 7.5' 285
District: _____

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120 Professional Place
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8) Oil & Gas Bryan Harris
Name: P.O. Box 157
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9) Plugging Contractor:
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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

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Work order approved by inspector _____

Date Received

MAR 19 2014

Office of Oil and Gas
WV Dept. of Environmental Protection