



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

December 11, 2013

WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-2103448, 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: 154061 BAKER 3
Farm Name: COASTAL LUMBER COMPANY
API Well Number: 47-2103448
Permit Type: Plugging
Date Issued: 12/11/2013

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.

CK 16891
\$100.00

2103448P

Date: 10-31-13
Operator's Well _____
Well No. 154061 Baker #3
API Well No.: 47 021 - 03448

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: 1149 Watershed: Schoolhouse Run of Heaters Fork
Location: Gilmer 03 County: Gilmer 21 Quadrangle: Gilmer 7.5' 365
District: _____
- 6) Well Operator EQT Production Company 7) Designated Agent: Rex C. Ray
Address: 120 Professional Place Address: 120 Professional Place
Bridgeport, WV 26330 Bridgeport, WV 26330
- 8) Oil & Gas Bryan Harris 9) Plugging Contractor:
Name: P.O. Box 157 Name: HydroCarbon Well Service
Address: Volga, WV 26238 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.

RECEIVED
Office of Oil and Gas

DEC 05 2013

WV Department of
Environmental Protection

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 Harris Date 12-4-13

PLUGGING PROGNOSIS -Weston

Barker # 3 (154061)

GILMER, COUNY, WEST VIRGINIA
API # 47-021-03448
Burnsville Quad

ELEV: 1149'
TD 1321

BY: Craig Duckworth
DATE: 9/13/13

CURRENT STATUS:

10" csg @ 250'
8 5/8" csg @ 719'
2 3/8" tbg @ 1295'(packer)

TD @ 1321'

Fresh Water @ None reported **Salt Water @** None reported
1st Salt Sand @ 1295' **Coal @** None reported
Gas shows @ 1295'(Salt Sand)
Oil Shows @ None reported
Stimulation: Well produced natural (1,750,000)

1. Notify State Inspector, **Bryan Harris 304-553-6087**, 24 hrs. Prior to commencing operations.
2. Attempt to pull 2 3/8" & packer (1295'). If unable to pull 2 3/8" cut at top of packer@ 1295' and pull 2 3/8"
3. TIH w/ tbg @ 1295'; Set 100' C1A Cement Plug @ 1295' to 1195' (gas show@ 1295' Salt Sand)
4. TOO H w/ tbg @ 1195'; gel hole @ 1195' to 769'.
5. TOO H w/ tbg, Free Point 8 5/8", cut 8 5/8" @ free point, TOO H w/ 8 5/8" csg
6. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas shows below 8 5/8" cut. Do not omit any plugs
7. TIH w/ tbg @ 769'; Set 100' C1A Cement Plug @ 769' to 669'(8 5/8" cag @ 719')
8. TOO H w/ tbg @ 8 5/8" 669; gel hole @ 669' to 300'
9. TOO H w/ tbg @ 300'; Set 300' C1A Cement Plug @ 300' to 0'(10" csg @ 250')
10. Top off as needed
11. Set Monument to WV-DEP Specifications
12. Reclaim Location & Road to WV-DEP Specifications

RECEIVED
Office of Oil and Gas
NOV 01 2013
WV Department of
Environmental Protection
12/13/2013



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

Quadrangle Gilmar 7.5
Permit No. 47-021-3448

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

Company Ferrell L. Prior
Address 717 Union Trust Bldg.
Farm Parkersburg, W. V. Acres 42
Location (waters) Little Kanawha River
Well No. one (1) Elev. 880
District Glenville County Gilmer
The surface of tract is owned in fee by Barker H.S. Scouts Mills, W.V.
Address _____
Mineral rights are owned by same
Address _____
Drilling Commenced March 1, 1979
Drilling Completed April 10, 1979
Initial flow 1,750,000 cu. ft. 0 bbls.
Final production 1,580,000 cu. ft. per day 0 bbls.
Well open 4 hrs. before test 400 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size			
20-16			
Cond. 15"	22	22	
13-10"	250	250	
9 5/8			
8 5/8	719	719	
7			
5 1/2			
4 1/2			
3			
2			
Liners Used			

2 inch set on packer at 1295 feet.

Well treatment details:

Attach copy of cementing record.

Well produced natural

Coal was encountered at None Feet _____ Inches _____
Fresh water None Feet _____ Salt Water _____ Feet _____
Producing Sand Salt Sand Depth 1295 feet to 1321 feet

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
soil			0	6		
sand			6	20		
slate			20	60		
sand			60	115		
red rock			115	130		
slate			130	140		
sand			140	162		
red rock			162	260		
sand			260	270		
red rock			270	300		
slate			300	350		
slate & shale			350	360		
red rock			360	390		
sand			390	405		
red rock			405	445		
slate&shale			445	515		
red rock			515	530		
slate			530	540		
sand			540	570		
slate			570	679		
sand			679	710		
slate & shale			710	800		
sand			800	855		

GIL - 3448

RECEIVED
Office of Oil and Gas

NOV 01 2013

WV Department of
Environmental Protection

* Indicates Electric Log tops in the remarks section.

GIL-3448

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil Gas or Water	Remarks
	slate		855	860		
	sand		860	940		
	slate		940	1035		
	sand		1035	1085		
	slate & shale		1085	1140		
	sand		1140	1155		
	slate		1155	1255		
	sand		1255	1275		
	slate		1275	1295		
	sand		1295	1321		
	TOTAL	DEPTH	1321			1,580,000 Natural

RECEIVED

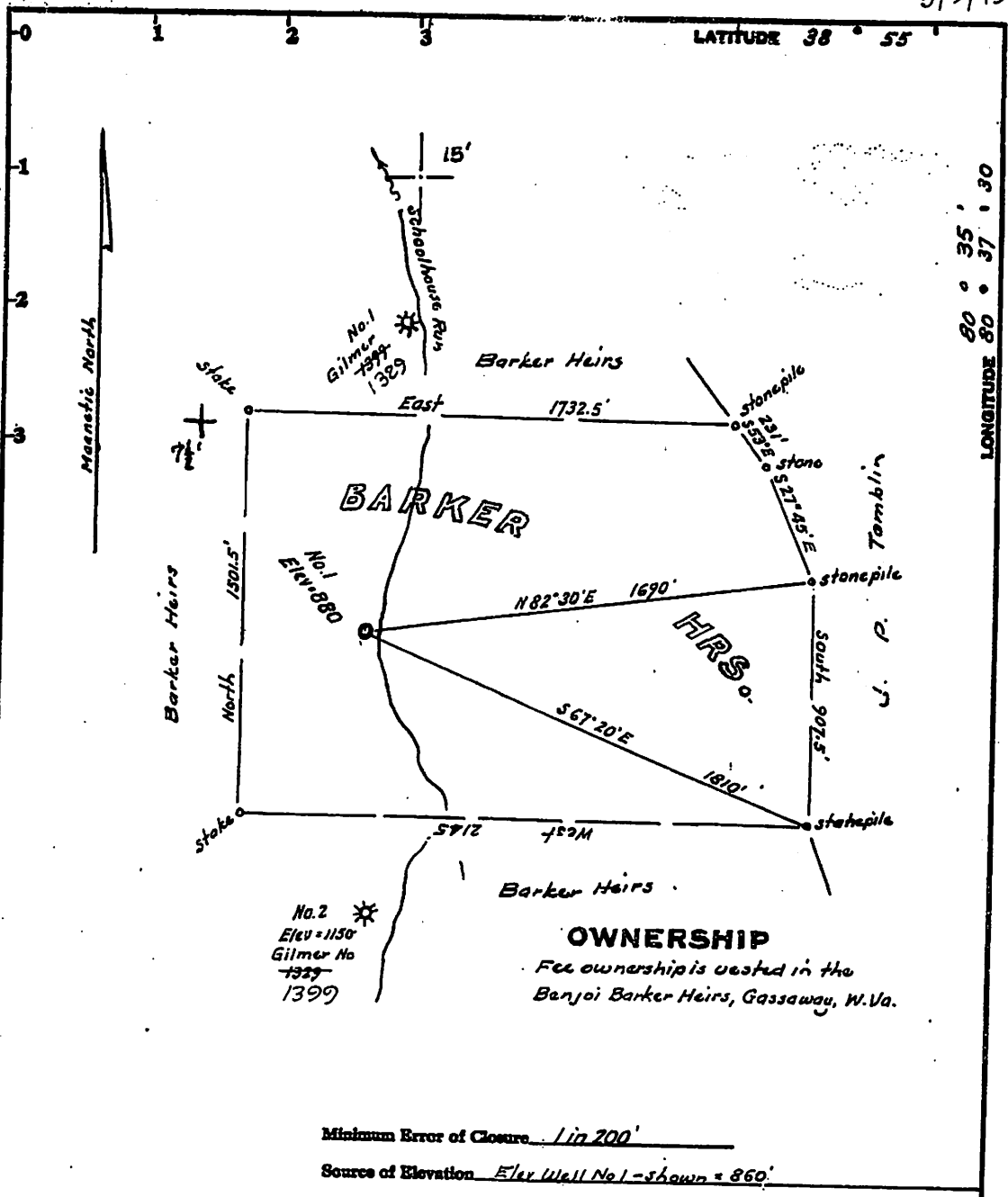
Office of Oil and Gas

Date 4/12 '12

APPROVED [Signature] 2013

By [Signature] Director

Environment 12/13/2008



OWNERSHIP

Fee ownership is vested in the Benjai Barker Heirs, Gassaway, W. Va.

Minimum Error of Closure 1 in 200'

Source of Elevation Elev Well No 1 - shown = 860'

- 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: W. S. [Signature]
Squares: N S E W

Map No. _____

Company Ferrill L. Prior

Address 717 Union Trust Bldg. Parkersburg, W. Va.

Farm Barker Heirs

Tract _____ Acres 42 Lease No. _____

Well (Farm) No. One Serial No. _____

Elevation (Spirit Level) 880

Quadrangle Gilmer T 1/2, Burnsville 15'

County Gilmer District Glenville

Engineer W. S. [Signature]

Engineer's Registration No. 1227

File No. _____ Drawing No. _____

Date March 1, 1979 Scale 1" = 500'

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

WELL LOCATION MAP
FILE NO. 47-021-3448

+ Denotes location of well on United States Topographic Maps, scale 1 to 24,000 latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.

2600' Area

12/13/2013

1) Date: 10-31-13
2) Operator's Well Number
154061 Baker #3
3) API Well No.: 47 021 - 03448
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:
(a) Name Coastal Lumber Company ✓
Address Attn: Ed Kraynok
P.O. Box 709
Buckhannon, WV 26301
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Bryan Harris ✓
Address P.O. Box 157
Volga, WV 26238
Telephone 304-533-6087

5) (a) Coal Operator:
Name None
Address _____
(b) Coal Owner(s) with Declaration ✓
Name Coastal Lumber Company
Address Attn: Ed Kraynok
P.O. Box 709
Buckhannon, WV 26301
Name _____
Address _____
(c) Coal Lessee with Declaration
Name None
Address _____

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 ✓
Address: Permitting Supervisor
PO Box 280
Bridgeport, WV 26330
Telephone: (304) 848-0076
Subscribed and sworn before me this 31 day of OCTOBER, 2013
My Commission Expires: 1/27/2016 Notary Public



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.

WW-9
Revised 2/03

Page ____ of ____
2) Operator's Well Number
154061 Baker #3
3) API Well No.: 47 021 - 03448

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: Schoolhouse Run of Heaters Fork Quadrangle: Gilmer 7.5'
Elevation: 1149 County: Gilmer District: Gilmer *Glenville*
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:
 Land Application
 Underground Injection - UIC Permit Number _____
 Reuse (at API Number) _____
 Offsite Disposal Permit #. _____
 Other: Explain _____

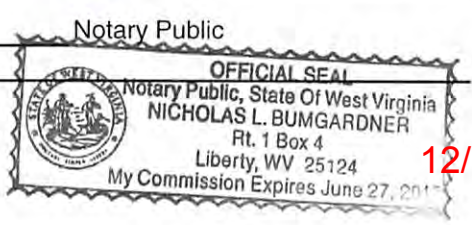
Drilling medium anticipated for this well? Air, freshwater, oil based, etc. _____
If oil based, what type? Synthetic, petroleum, etc. _____
Additives to be used? _____

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.

Company Official Signature *Victoria Roark*
Company Official (Typed or Printed) Victoria Roark
Company Official Title Permitting Supervisor-WV
Subscribed and sworn before me this 31 day of OCTOBER, 2013

My Commission Expires 6/27/2018



12/13/2013

2103448 P

RECEIVED
Office of Oil and Gas

OPERATOR'S WELL NO.:
154061 Baker #3

LEGEND

DEC 05 2013

Property Boundary

WV Department of Environmental Protection Road

Planned Fence

Existing Fence

Open Ditch

North

Pit with Cut Walls

Spring

Drain Pipe with size in inches

Stream

Artificial Filter Strip

Building

Water well

Diversion

Wet Spot

Water Way

Cross Drain

Rock

Drill site

Pit with Compacted Walls

Area of Land Application of Pit Waste

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: *Debra Hani*

Comments: _____

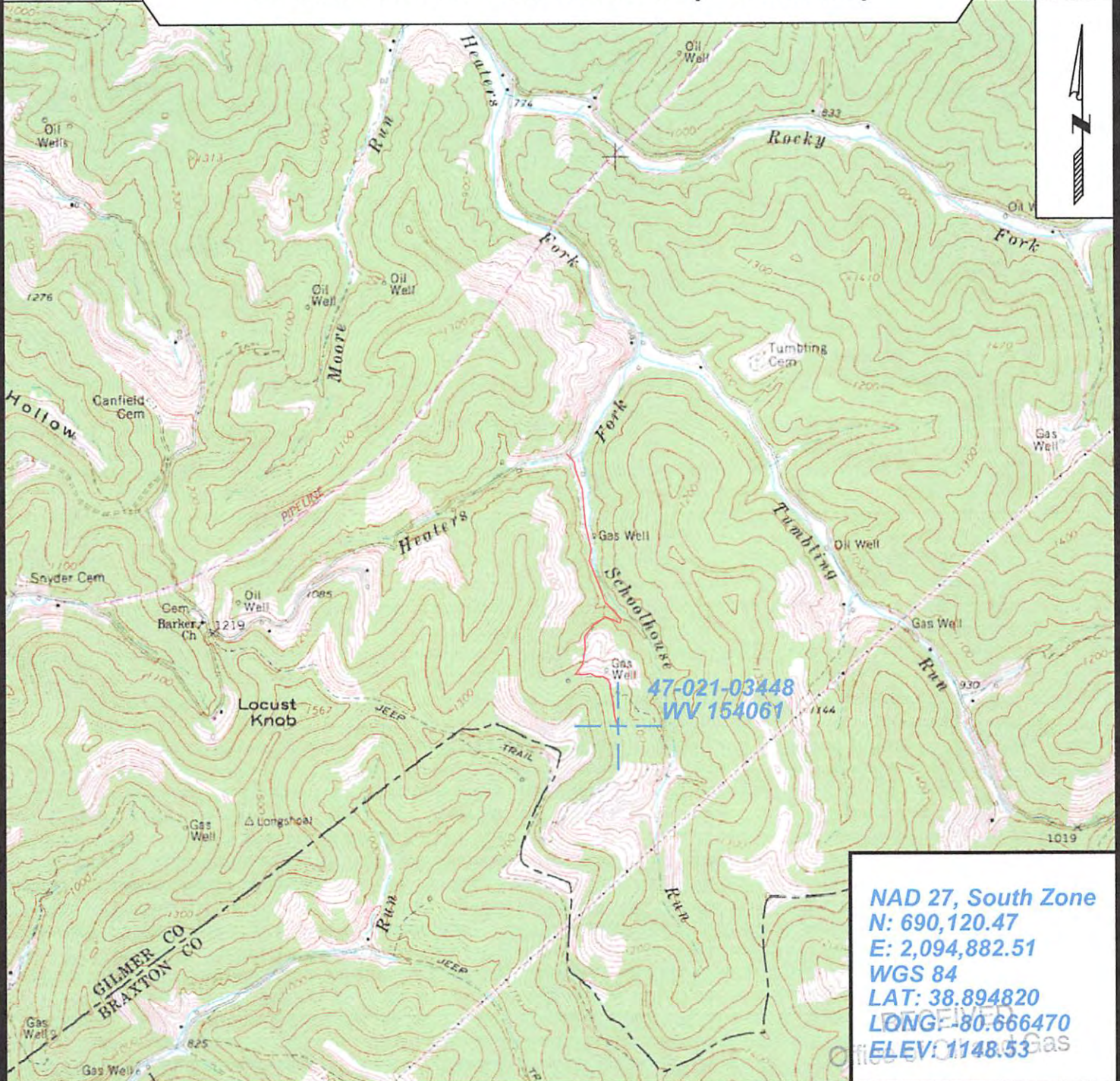
Title: *Oil & Gas Inspector* Date: *12-4-13*
Field Reviewed? *X* Yes No

12/13/2013

Topo Quad: Gilmer 7.5' Scale: 1" = 2000'
 County: Gilmer Date: October 17, 2013
 District: Glenville Project No: 25-19-00-07

47-021-03448 WV 154061 (Barker #3)

Topo



NAD 27, South Zone
 N: 690,120.47
 E: 2,094,882.51
 WGS 84
 LAT: 38.894820
 LONG: -80.666470
 ELEV: 1148.53



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
 FAX: (304) 649-8608

PREPARED FOR:
 NOV 01 2013
EQT Production Company
 115 Professional Place
 P.O. Box 280
 Bridgeport, WV 26330
 12/13/2013

WW-7
8-30-06



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

API: 47-021-03448 WELL NO.: WV 154061 (Barker #3)

FARM NAME: Barker

RESPONSIBLE PARTY NAME: EQT Production Company

COUNTY: Gilmer DISTRICT: Glennville

QUADRANGLE: Gilmer 7.5'

SURFACE OWNER: Coastal Lumber Company

ROYALTY OWNER: Elaine Arbogast, et al.

UTM GPS NORTHING: 4305158

UTM GPS EASTING: 528924 GPS ELEVATION: 350 m (1149 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
10/25/13
Date

PS# 2180
Title

RECEIVED
Office of Oil and Gas

NOV 01 2013

WV Department of
Environmental Protection
12/13/2013



POTENTIAL WATER SAMPLE DATA SHEET

CLIENT: EQT PRODUCTION COMPANY INC.

LEASE NAME AND WELL No. Barker #3 WV 154061 (47-021-03448) .

POTENTIAL SAMPLE LOCATIONS

There appears to be no known water samples within the required 1000' of the existing well WV 154061.

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 • 4416 Childress Road
Alum Creek, WV 25003
phone: 304-756-2949
fax: 304-756-2948

RECEIVED
Office of Oil and Gas
NOV 13 2013
WV Department of Environmental Protection

Topo Quad: Gilmer 7.5'

Scale: 1" = 2000'

County: Gilmer

Date: October 17, 2013

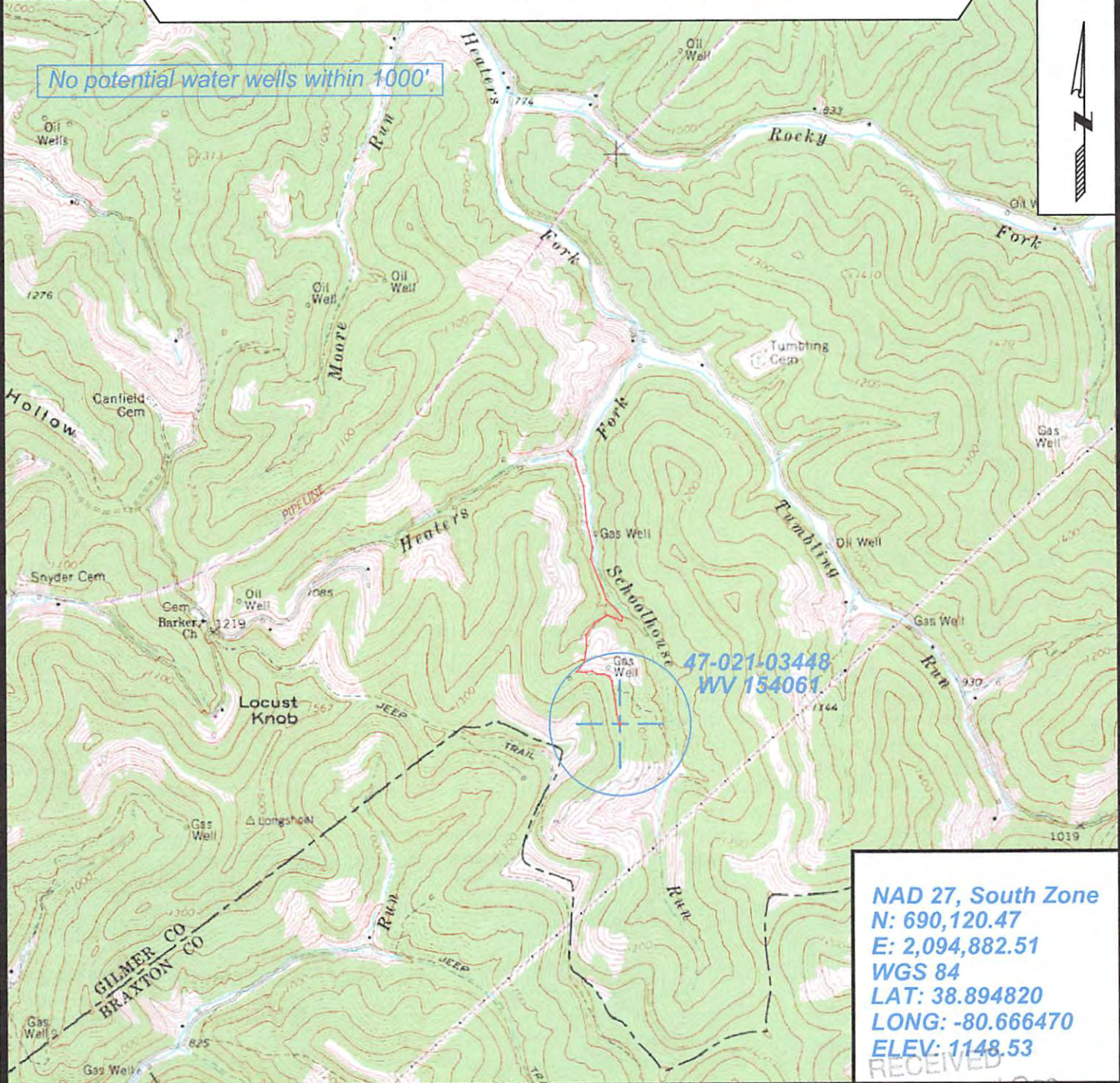
District: Glenville

Project No: 25-19-00-07

Water

47-021-03448 WV 154061 (Barker #3)

No potential water wells within 1000'



NAD 27, South Zone
 N: 690,120.47
 E: 2,094,882.51
 WGS 84
 LAT: 38.894820
 LONG: -80.666470
 ELEV: 1148.53



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
 FAX: (304) 649-8608

PREPARED FOR: *Office of Oil and Gas*
EQT Production Company
 115 Professional Place
 P.O. Box 280
 Bridgeport, WV 26330
 RECEIVED
 12/13/2013