



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

August 13, 2013

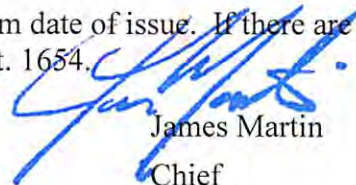
WELL WORK PLUGGING PERMIT

Plugging

This permit, API Well Number: 47-3903187, 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 001380) J.A. OSBORNE 6
Farm Name: WOODS, TRACIE L.

API Well Number: 47-3903187

Permit Type: Plugging

Date Issued: 08/13/2013

3403187P

CK# 15783
\$200.⁰⁰
(001440 + 001380)

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

Date: July 25, 2013
Operator's Well _____
Well No. WV 001380 J.A. Osborne #6
API Well No.: 47 39 - 03187

**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: 1191' Watershed: Laurel Fork
Location: Big Sandy 01 County: Kanawha 39 Quadrangle: Clendenin 7.5' 299
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 Terry Urban
Name: P.O. Box 1207
Address: Clendenin, WV 25045

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 _____

Received
Office of Oil & Gas
Date _____
AUG - 5 2013

08/16/2013

PLUGGING PROGNOSIS

Osborne, J.A. # 6 (001380)

Kanawha County, West Virginia
API # 47-039-03187
Clendenin Quad

BY: Craig Duckworth
DATE: 2/05/13

CURRENT STATUS:

- 10" csg @ 36'
- 8 1/4" csg @ 693'
- 6 5/8" csg @ 1825' Packer @ 1825'
- 2" tbg @ 2231'

TD @ 2231'

Fresh Water @ 110' Salt Water @ None reported

Salt Sand @ 1125' Coal @ 440'-446'

Gas shows @ Salt Sand (1190'); Big Lime (1960'); Injun Sand (2013'); Weir (2152')

Oil Shows @ Slate (1210') Weir (2190')

Stimulation: 2013' - 2025' 40Qts.

1. Notify State Inspector, Terry Urban 304-549-5915, and 24 hrs prior to commencing operations.
2. Attemp to pull 2" tbg / if tbg will not pull Shoot off @ 1825'. If tbg pulls ,TOOH w/ 2" tbg and check condition.
3. TIH w/ tbg @ 2152'; Set 242' C1A Cement Plug @ 2152' to 1910' (Weir 2152';Injun Sand 2013'; Big Lime 1960')
4. TOOH w/ tbg and attempt to pull 6 5/8";Freepoint and cut/shoot @ freepoint, Set 100' C1A Cement Plug @ 1850' to 1750' (6 5/8" csg)
5. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas shows below 6 5/8" cut Do not omit any plugs
6. TIH w/ tbg @ 1750'; Gel hole @ ~~1910'~~ 1750' to 1240'
7. TOOH w/ tbg @ 1240'; Set 215' C1A Cement Plug @ 1240' to 1025' (Salt Sand 1125' & Gas Show 1190')
8. TOOH w/ tbg @ 1025'; gel hole @ 1025' to 743'.
9. TOOH w/tbg and attempt to pull 8 1/4", Freepoint and cut/shoot @ freepoint
10. TIH w/ tbg @ 743'; Set 100' C1A Cement Plug @ 743' to 643' (8 1/4" csg)
11. Set a 100' C1A Cement Plug 50' In/Out of cut. Perf all FW, Coal, Oil and Gas shows below 8 1/4" cut Do not omit any plugs
12. TIH w/ tbg @ 643'; gel hole @ 643' to 496'
13. TOOH w/ tbg @ 496; Set 106' C1A Cement Plug @ 496' to 390' (Coal 440'-446')
14. TIH w/ tbg @ 390'; gel hole @ 390' to 200'
15. TOOH w/ tbg @ 200'; Set 200' C1A Cement Plug @ 200' to 0 (Surface).
16. Top off as needed
17. Set Monument to WV-DEP Specifications
18. Reclaim Location & Road to WV-DEP Specifications

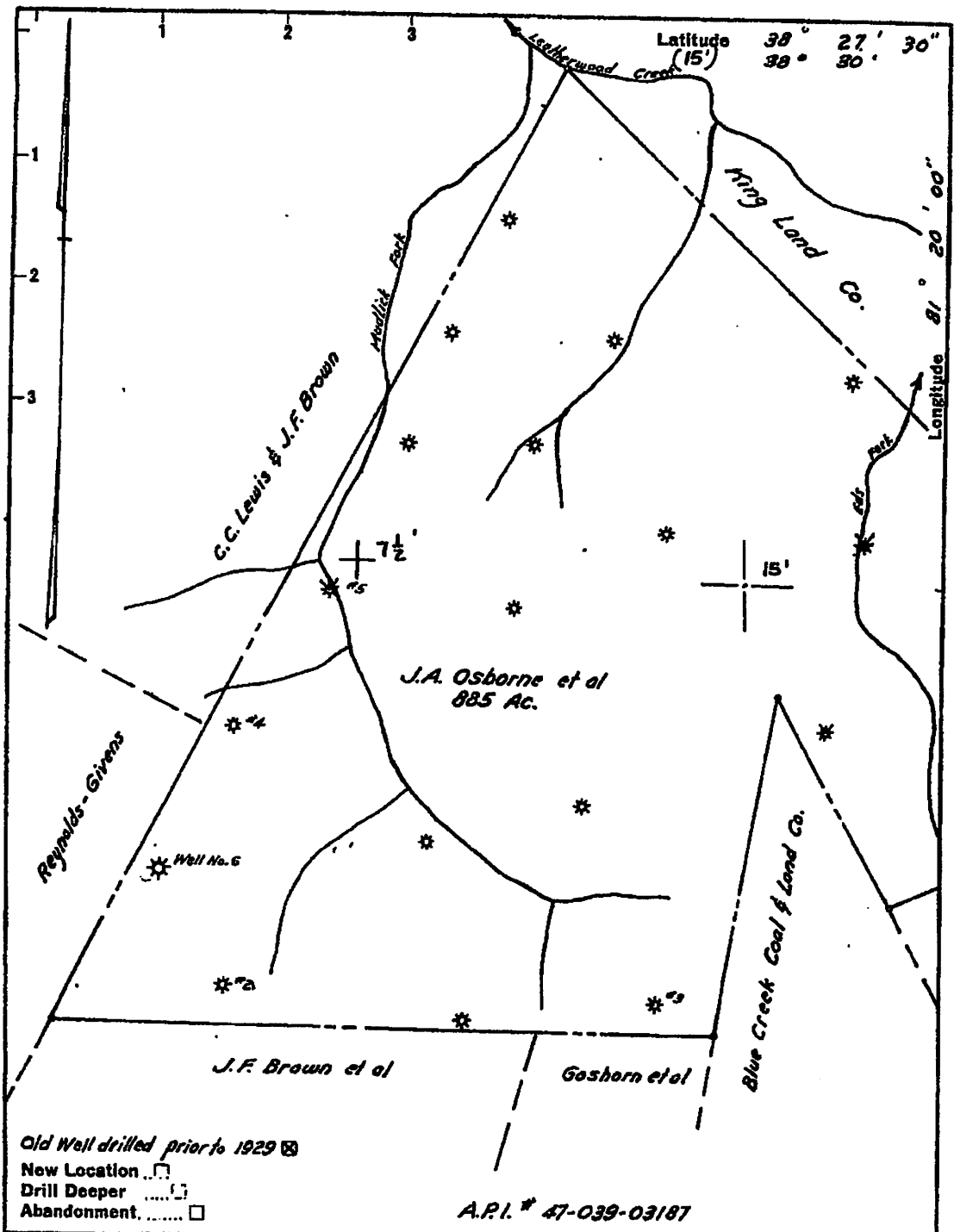
Received
Office of Oil & Gas

AUG 2013

CEMENT PLUGS MINIMUM 100' CLASS A ≤ 3% CaCl₂ OK
GEL MUST BE AT LEAST 6% GEL gmm

08/16/2013

3903187P



Company ASHLAND EXPLORATION, INC.
 Address BOX 391 - ASHLAND, KY 4101
 Farm J.A. OSBORNE ET AL
 Tract _____ Acres 885 Lease No. 738
 Well (Farm) No. 6 Serial No. 001380
 Elevation (Spirit Level) 1197
 Quadrangle CLENDENIN
 County KANAWHA District BIG SANDY
 Engineer John H. Eustace
 Engineer's Registration No. 1442
 File No. _____ Drawing No. _____
 Date JAN. 25, 1979 Scale 1"=1000'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON
WELL LOCATION MAP
 FILE NO. KAN-3187
 + 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.

Received
Office of Oil & Gas

2013

08/16/2013

1) Date: July 25, 2013
 2) Operator's Well Number
WV 001380 J.A. Osborne #6
 3) API Well No.: 47 39 - 03187 *P*
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

*Check # 15783
 \$ 200.00
 (001440 & 001380)*

4) Surface Owner(s) to be served:
 (a) Name Tracie L. Wood ✓
 Address 1365 Donna Marie Dr.
Melbourne, FL 32904
 (b) Name See Attached ✓
 Address _____
 (c) Name _____
 Address _____
 6) Inspector Terry Urban
 Address P.O. Box 1207
Clendenin, WV 25045
 Telephone _____

5) (a) Coal Operator:
 Name None
 Address _____
 (b) Coal Owner(s) with Declaration
 Name Dr. R.D. Karr ✓
U/W R.J. Karr
 Address Dr. Robert D. Karr Trustee
P.O. Box 883
Mt. Holley, NC 28120-0883
 Name See Attached ✓
 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: _____
 By: _____
 Its _____
 Address: _____
 Telephone: _____
 Subscribed and sworn before me this 1 day of August, 2013
 My Commission Expires: 8-24-22

EQT Production Company
Victoria J. Roark
Permitting Supervisor
PO Box 280
Bridgeport, WV 26330
(304) 848-0076

Received
 Office of Oil & Gas
 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.

SURFACE OWNER WAIVER

Operator's Well Number: WV 001380 J.A. Osborne #6

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW 4-A

The well operator named on page WW4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:

Chief, Office of Oil and Gas
Division of Environmental Protection
601 57th Street, SE
Charleston, WV 25304
(304) 926-0450

Time Limits and methods for filing comments.

the date the operator files for this Application. You have comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

The law requires these materials to be served on or before **FIVE (5) DAYS** after the filing date to file your

Comments must be in writing.

Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation..."

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

List of Water Testing Laboratories.

The office maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Chief to obtain a copy.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application For a Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON

FOR EXECUTION BY A CORPORATION, ETC.

Signature

Date

Name _____ Received _____
 By _____ Office of Oil & Gas
 Its _____

 Signature _____ Date _____

Operator's Well Number: WV 001380 J.A. Osborne #6

INSTRUCTIONS TO COAL OPERATOR, OWNER, OR LESSEE

The well operator named on the attached page WW-4(B) is about to abandon the well described in the enclosed materials and will commence the work of plugging and abandoning said well on the date the inspector is notified. Which date shall not be less than five days after the date on which this notice and application so mailed is received, or in due course should be received by the Department of Environmental Protection Office of Oil & Gas

This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Article 6, Chapter 22 of the Code and given in detail on the obverse side of this application

Note: If you wish this well to be plugged according to 22-6-24(d) then as per Regulation 35CSR4-13.9 you must complete and return to this office on form OB-16 "Request by Coal Operator, Owner or Lessee for plugging" prior to the issuance of this plugging permit.

WAIVER

The undersigned operator _____/ owner_____/ lessee_____ of the coal under this well location has examined this proposed plugging work order. The undersigned has not no objection to the work proposed to be done at this location, provided the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: _____

By: _____
Its: _____

Received
Office of Oil & Gas

2013

08/16/2013

**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: Laurel Fork Quadrangle: Clendenin 7.5'
Elevation: 1191' County: Kanawha District: Big Sandy

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.

Company Official Signature *Victoria Roark*

Company Official (Typed or Printed) Victoria Roark

Company Official Title Permitting Supervisor-WV

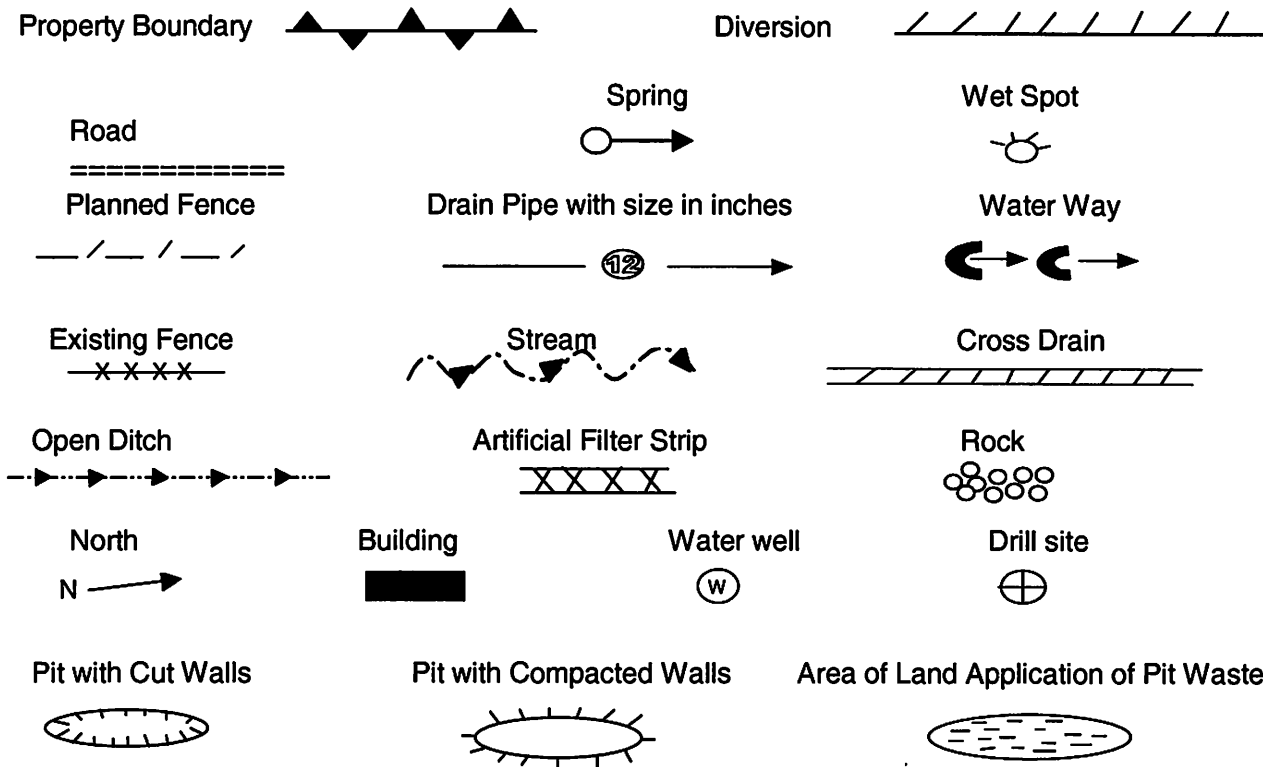
Subscribed and sworn before me this 1 day of August, 2013

Pamela Sykes Notary Public
My Commission Expires 8-24-22



OPERATOR'S WELL NO.:
WV 001380 J.A. Osborne #6

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: _____

Received
Office of Oil & Gas

Comments: _____

Title: _____ Date: _____
Field Reviewed? Yes No

2013
08/16/2013

3903187P

Topo Quad: Clendenin 7.5'

Scale: 1" = 2000'

County: Kanawha

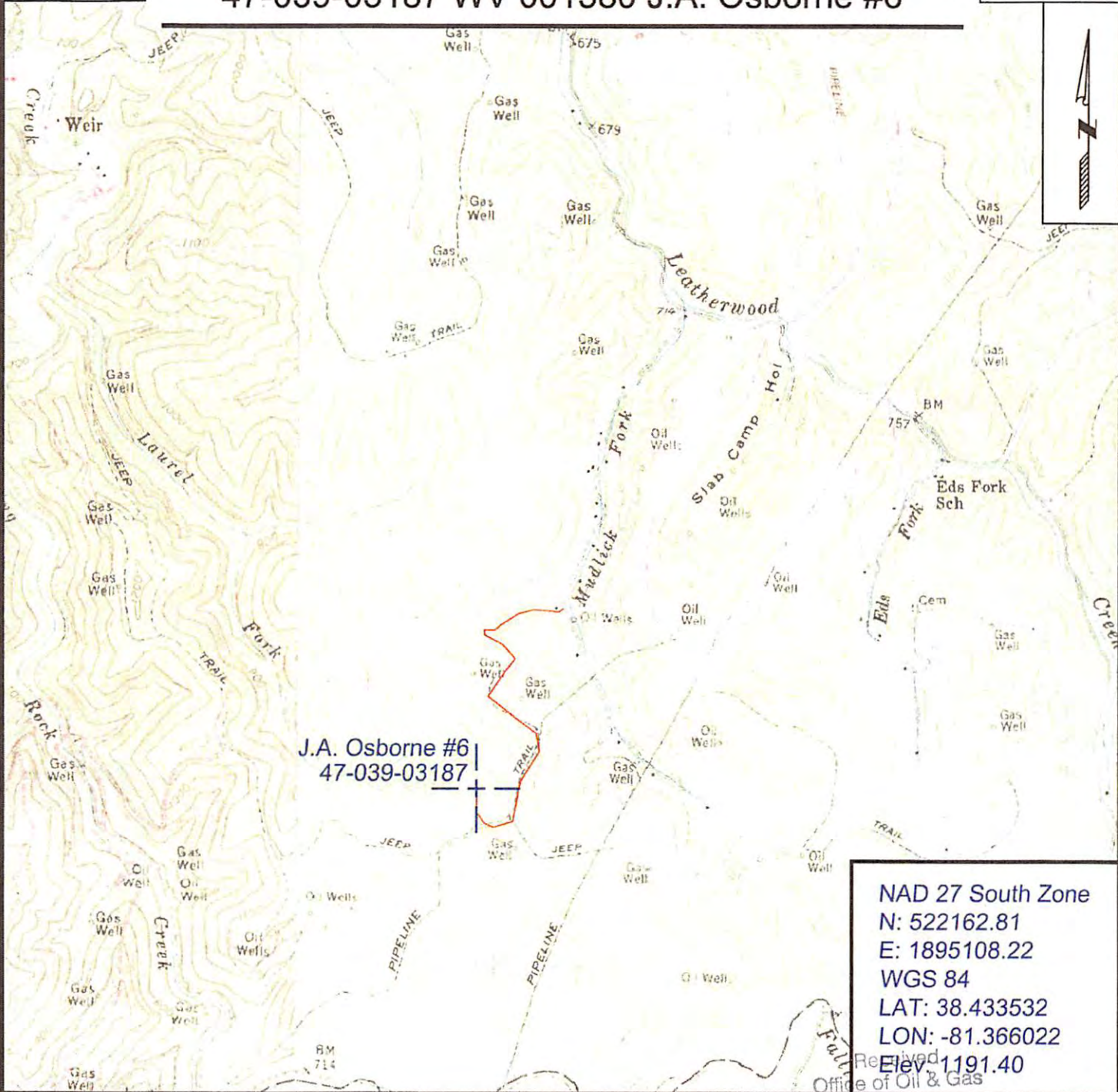
Date: May 24, 2013

District: Big Sandy

Project No: 52-14-00-07

47-039-03187 WV 001380 J.A. Osborne #6

Topo



J.A. Osborne #6
47-039-03187

NAD 27 South Zone
 N: 522162.81
 E: 1895108.22
 WGS 84
 LAT: 38.433532
 LON: -81.366022
 Elev: 1191.40



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:

EQT Production Company

P.O. Box 280
 Bridgeport, WV 26330

08/16/2013

WW-7
8-30-06



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

API: 47-039-03187 WELL NO.: WV 001380 (J.A. Osborne #6)

FARM NAME: Osborne

RESPONSIBLE PARTY NAME: EQT Production Company

COUNTY: Kanawha DISTRICT: Big Sandy

QUADRANGLE: Clendenin 7.5'

SURFACE OWNER: Tracie L. Woods

ROYALTY OWNER: Dr. R. D. Karr, et al

UTM GPS NORTHING: 4253981

UTM GPS EASTING: 468054 GPS ELEVATION: 362 m (1191 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.

Received
Office of Oil & Gas

Ben R. Siefert
Signature

P.S. 2092
Title

7-8-13
Date

AUG 2013

3903187P

Topo Quad: Clendenin 7.5'

Scale: 1" = 2000'

County: Kanawha

Date: May 24, 2013

District: Big Sandy

Project No: 52-14-00-07

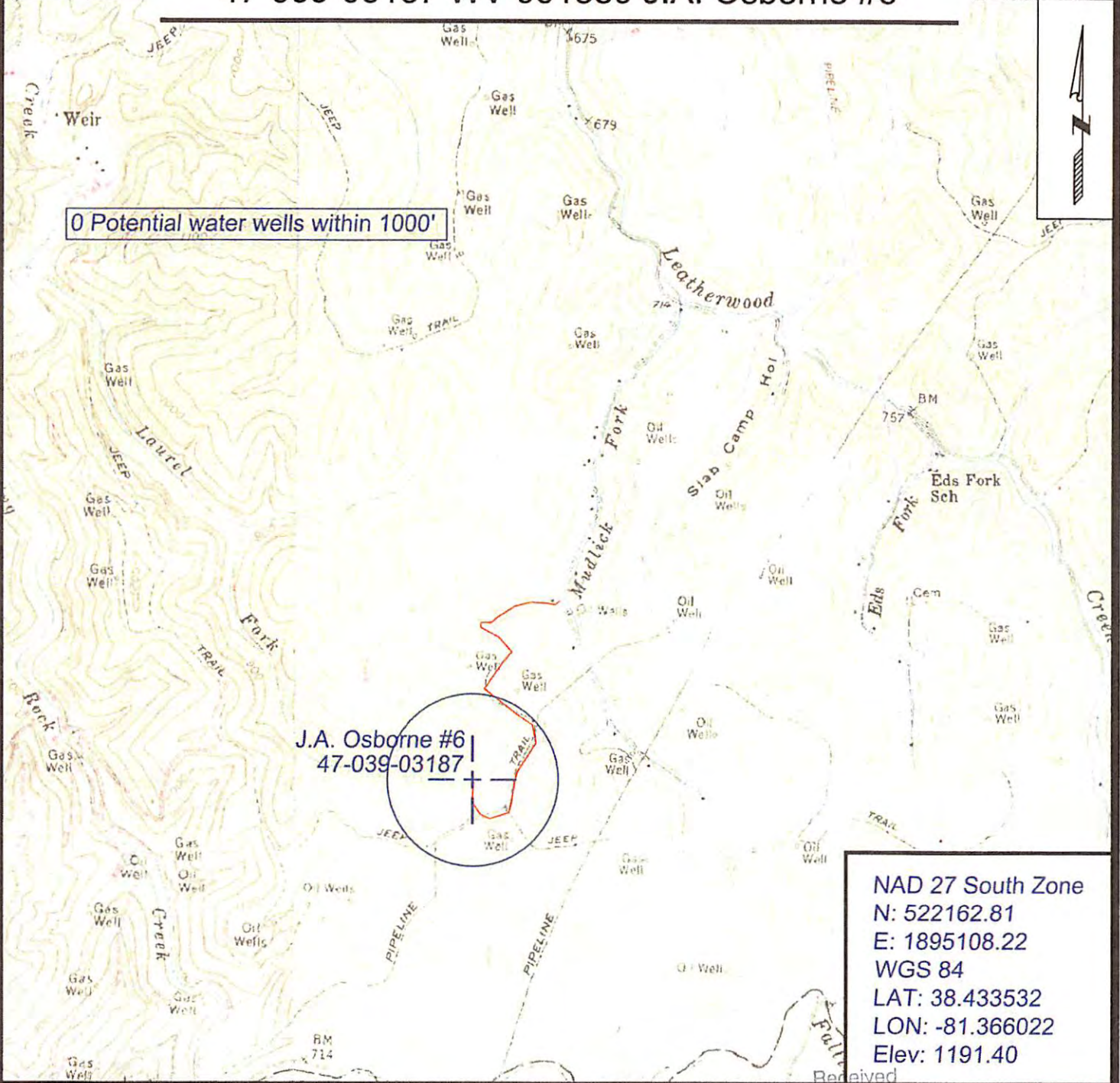
Water

47-039-03187 WV 001380 J.A. Osborne #6

Topo



0 Potential water wells within 1000'



J.A. Osborne #6
47-039-03187

NAD 27 South Zone
N: 522162.81
E: 1895108.22
WGS 84
LAT: 38.433532
LON: -81.366022
Elev: 1191.40



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 & Gas

EQT Production Company

AUG 2013
P.O. Box 280
Bridgeport, WV 26330

08/16/2013