



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

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Friday, August 30, 2019
WELL WORK PLUGGING PERMIT
Vertical Plugging

CORE APPALACHIA OPERATING LLC
414 SUMMERS STREET

CHARLESTON, WV 25301

Re: Permit approval for 804937
47-043-02060-00-00

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.

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. Please be advised that form WR-38, Affidavit of Plugging and Filling Well, 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: 804937
Farm Name: MUD RIVER GREYHOUNDS⁺
U.S. WELL NUMBER: 47-043-02060-00-00
Vertical Plugging
Date Issued: 8/30/2019

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.

1) Date July 23, 2019
2) Operator's
Well No. 804937
3) API Well No. 47-043 - 02060 P

STATE OF WEST VIRGINIA
DEPARTMENT 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 ___ or Underground storage ___) Deep ___ / Shallow X

5) Location: Elevation 247.95 m Watershed Unnamed tributary of Mud River
District Union County Lincoln Quadrangle Hager

6) Well Operator Core Appalachia Operating, LLC 7) Designated Agent Jessica Greathouse
Address P.O. Box 6070 Address P.O. Box 6070
Charleston, WV 25362 Charleston, WV 25362

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Jeffery L. Smith Name R & J Well Service, Inc.
Address 5349 Karen Circle, Apartment #2101 Address P.O. Box 40
Cross Lane, WV 25313 Hueysville, KY 41640-0040

10) Work Order: The work order for the manner of plugging this well is as follows:

SEE ATTACHED SHEET

OK JLM

Notification must be given to the district oil and gas inspector 24 hours before permitted work can commence.

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Office of Oil and Gas

Work order approved by inspector _____ Date JUL 29 2019

PLUGGING PROCEDURE

804937

LINCOLN COUNTY, WEST VIRGINIA

API# 47-043-02060

BY: JM

DATE: 7/17/2019

Current Status**Csg Schedule**

- 10" csg @ 14'. Not on completion report. Assumed depth from offset 804936 (47-043-02059)
- 6 5/8" csg @ 1335'
- 2" tbg w/ packer (Original ran to 2080 w/ packer at 1487').
- TD @ 2080' (Original)

Completion

- Open Hole Completion @ 1335'- 2080
- Big Lime 1330'- 1508'
- Big Injun 1523'- 1545'
- Berea 2062'- 2080'

Plugged Back

- June 2012 tbg and packer was attempted to be pulled. Tbg was shot off at 1487' and 5 sacks cement dumped on top of packer.

Fresh water @ No shows

Coal @ No Shows

Gas Shows @ No shows

Elevation 813'

Objective: Plug and abandon

- 1) Prepare road and location.
- 2) MIRU service rig and support equipment.
- 3) Blow well down. Check TD.
- 4) TIH w/ tbg to 1487'. Load hole with 6% bentonite gel to 1487'. Pump 202' C1A cement plug from 1487'- 1285'.
WOC, TAG TOC, ADD CEMENT IF NEEDED.
- 5) TOOH w/ tbg. Free point 6 5/8" csg. Shoot or rip csg at free point. TOOH w/ 6 5/8" csg. A 100' C1A cement plug must be set across csg cut. Any plugs below that will remain behind 6 5/8" csg must be shot or ripped at bottom of plug and then every 50' through plug
- 6) TIH w/ tbg to 1285'. Pump 6% bentonite gel from 1285'- 813'
- 7) TOOH w/ tbg to 813'. Pump 100' C1A cement plug from 813' to 713'
- 8) TOOH w/ tbg to 713'. Pump 6% bentonite gel from 713' to 250'.
- 9) TOOH w/ tbg to 250'. Pump 250' C1A cement from 250' to Surface.
- 10) Pull work string and top off w/cement.
- 11) Erect permanent monument (30" minimum height and 6" minimum diameter pipe) with API # (1/2" height numbering) and reclaim.

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JUL 29 2019

WV Department of
Environmental Protection

Lease No. **4437**
-50

Acres **28 1/2**

Farm Name

W. F. Black

Well No. **47-043-02060P**

N. S. E. W.
Civil District **Carroll**
County **Lincoln**
State **West Va.,**

Location Made
Rig Completed
Dr'g Commenced
Dr'g Completed **7-14-22**
Dr'g Contractor **C. C. Wolfe**

Purchased From **Laurel**
Date Purchased
Sold To
Date Sold
Date Abandoned

Oil Rights Owned By **W. F. Black**

FORMATION

Kind	Top	Bottom	Steel Line Meas.	Tests
Big Lime	1330	1508		
Big Injun	1523	1545		
Berea	2062	2080		
Total Depth			2080	

CASING RECORD

Size	Bottom Casing Steel Line	Put in Well Tally Meas.	Pulled Tally Meas.	Date
6 5/8	1335'			

PACKERS AND SHOES

Kind	Size	Depth Set
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TORPEDO RECORD

Date	No. Qts.	Size Shell	Top Shot	Bottom
	30			

DRILLING DEEPER

Commenced	Completed	Original Depth	Final Depth
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ABANDONMENT RECORD

Filled With	From	To	PLI	
			Size	Kind

Initial Prod. | Sand | ★ At Completion | ★ 30 Days After | ★

Oil
Gas

APPROVED

★ Oil in Barrels

TESTS, REPORTS AND REMARKS ON REVI

043-2060

WW-4A
Revised 6-07

1) Date: July 23, 2019
2) Operator's Well Number
804937

3) API Well No.: 47 - 47-043 - 02060

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
NOTICE OF APPLICATION TO PLUG AND ABANDON A WELL

4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name: Mud River Geyhounds, LLC	Name: None
Address: P.O. BOX 356 Hamlin, WV 25523	Address: _____
(b) Name: _____	(b) Coal Owner(s) with Declaration
Address: _____	Name: Waco Oil & Gas Company, Inc.
(c) Name: _____	Address: P.O. Box 397 Glennville, WV 26351
Address: _____	Name: _____
6) Inspector: Jeffery L. Smith	(c) Coal Lessee with Declaration
Address: 5369 Big Tyler Road	Name: None
Cross Lanes, WV 25313	Address: _____
Telephone: 681-313-6743	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 Department 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: Core Appalachia Operating, LLC
 By: JG Jessica Greathouse
 Its: Manager - EHS & Administration Services
 Address: P.O. Box 6070
 Charleston, WV 25362
 Telephone: 304-353-5240

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Office of Oil and Gas

Subscribed and sworn before me this 22nd day of July 2019
Phyllis A. Copley Notary Public
 My Commission Expires September 16, 2023

JUL 29 2019
WV Department of Environmental Protection

Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a 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 depprivacvoffier@wv.gov.

SURFACE OWNER WAIVER

Operator's Well
Number

804937

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A

The well operator named on page WW-4A 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
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

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WV Department of
Environmental Protection

Time Limits and methods for filing comments. The law requires these materials to be served on or before the date the operator files his Application. You have **FIVE (5) DAYS** after the filing date to file your 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.

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.

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
ETC.

FOR EXECUTION BY A CORPORATION,

Signature

Date

Name
By
Its

John D. Daily
President 7/25/19

Date

Signature

Date

WW-9
(5/16)

API Number 47-043-02060
Operator's Well No. 804937

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

Operator Name Core Appalachia Operating, LLC OP Code 494518671

Watershed (HUC 10) Unnamed tributary of Mud River Quadrangle Hager

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No

Will a pit be used? Yes No

If so, please describe anticipated pit waste: Plugging returns/Cement - Will utilize above ground tanks

Will a synthetic liner be used in the pit? Yes No If so, what ml.? 20

Proposed Disposal Method For Treated Pit Wastes: NO LAND APPLICATION
 Land Application (if selected provide a completed form WW-9-GPP)
 Underground Injection (UIC Permit Number _____)
 Reuse (at API Number _____)
 Off Site Disposal (Supply form WW-9 for disposal location)
 Other (Explain Any fluid recovered will be hauled to a Core tank battery and disposed of properly)

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, removed 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 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 Department 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 submitting false information, including the possibility of fine or imprisonment.

Company Official Signature [Signature]

Company Official (Typed Name) Jessica Greathouse

Company Official Title Manager - EHS and Administrative Services



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Subscribed and sworn before me this 22nd day of July, 20 19

Phyllis A. Copley Notary Public

My commission expires September 16, 2023

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WV Department of Environmental Protection

47-043-02060P

Proposed Revegetation Treatment: Acres Disturbed 1 +/- Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type 10-20-20 or equivalent

Fertilizer amount _____ lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
Red Fescue	40	Red Fescue	15
Alsike	5	Alsike Clover	5
Annual Rye	15		

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, provide water volume, include dimensions (L, W, D) of the pit, and dimensions (L, W), and area in acres, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: _____

Comments: _____

Title: _____

Date: _____

Field Reviewed? () Yes

() No

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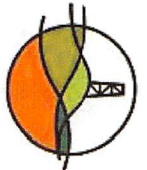
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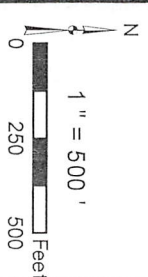
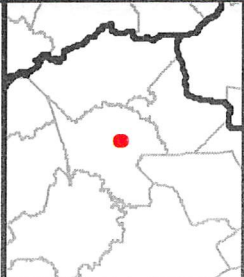
Diversified Gas & Oil
 Corporation
 100 Diversified Way
 Pikeville, KY, 41051

804937

Plugging Map

Legend

- Well
- ⊗ Sediment Control
- Access Road
- ▨ Pits
- Pad
- Public Roads

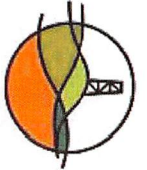




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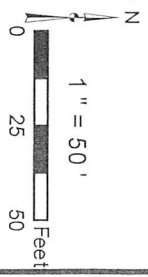
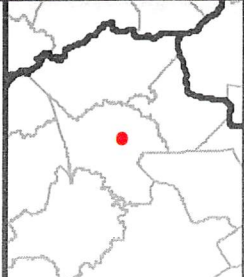
Diversified Gas & Oil
Corporation
100 Diversified Way
Pikeville KY, 41051

804937

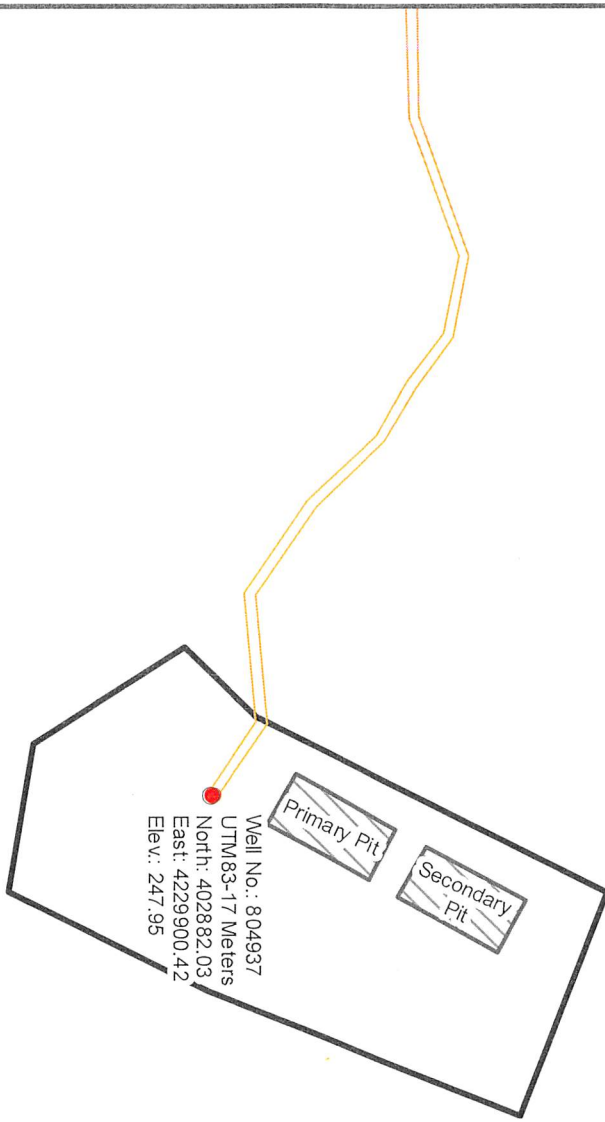
Plugging Map

Legend

- Well
- ⊗ Sediment Control
- Access Road
- ▨ Pits
- Pad
- Public Roads



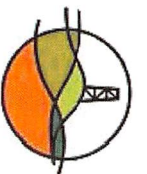
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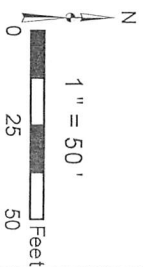
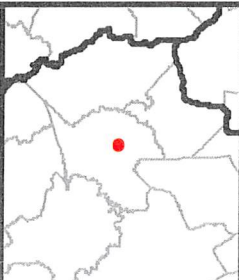
Diversified Gas & Oil
 Corporation
 100 Diversified Way
 Pikeville KY, 41051

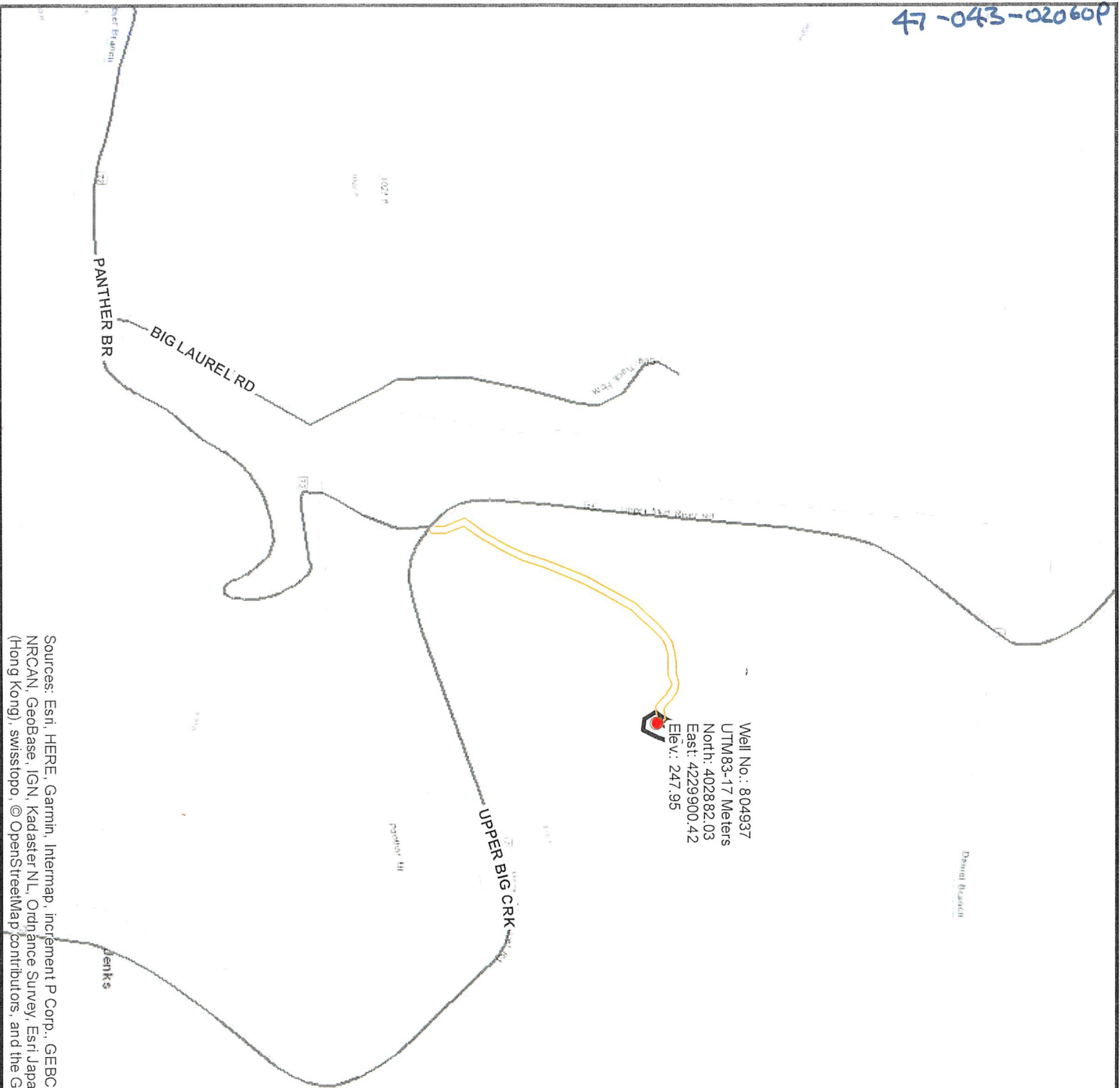
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Plugging Map

Legend

-  Well
-  Sediment Control
-  Access Road
-  Pits
-  Pad

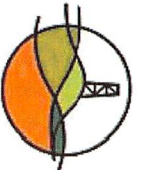




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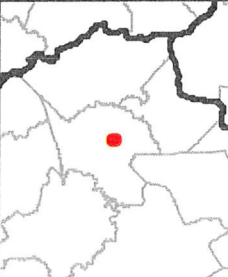


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Plugging Map

Legend

- Well
- ⊗ Sediment Control
- Access Road
- ▨ Pits
- Pad
- Public Roads



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, Geobase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community



47-043-02060P

WW-7
8-30-06



West Virginia Department of Environmental Protection
Office of Oil and Gas

WELL LOCATION FORM: GPS

API: 47-043-02060 WELL NO.: 804937

FARM NAME: W.F. Black

RESPONSIBLE PARTY NAME: Core Appalachia Operating LLC

COUNTY: Lincoln DISTRICT: Union

QUADRANGLE: Hager

SURFACE OWNER: Mud River Greyhounds, LLC

ROYALTY OWNER: Waco Oil and Gas CO INC

UTM GPS NORTHING: 402,882.03

UTM GPS EASTING: 4,229,900.42 GPS ELEVATION: 247.95 m (813.3')

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 : Post Processed Differential

Real-Time Differential

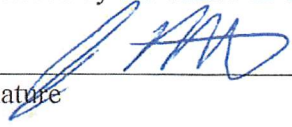
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4. Letter size copy of the topography map showing the well location.

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

Engineer III
Title

7-22-2019
Date