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 west virginia department of environmental protection
 

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Office of Oil and Gas  
 601 57<sup>th</sup> Street, S.E.  
 Charleston, WV 25304  
 (304) 926-0450  
 fax: (304) 926-0452

Austin Caperton, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Wednesday, January 9, 2019  
 WELL WORK PLUGGING PERMIT  
 Vertical Plugging

CUNNINGHAM ENERGY LLC  
 3230 PENNSYLVANIA AVENUE

CHARLESTON, WV 25302

Re: Permit approval for STUMP 1  
 47-039-06384-00-00

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: STUMP 1  
 Farm Name: HUFFMAN, PEARL & MAYFO  
 U.S. WELL NUMBER: 47-039-06384-00-00  
 Vertical Plugging  
 Date Issued: 1/9/2019

H

47-039-06384P

01/11/2019

CTB 1/9/19

## 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

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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.

1) Date OCTOBER 16, 01/11/2019  
2) Operator's  
Well No. STUMP #1  
3) API Well No. 47-039 - 06384

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 X / Gas X / Liquid injection      / Waste disposal      /  
(If "Gas, Production X or Underground storage     ) Deep      / Shallow     

5) Location: Elevation 989' Watershed TRIBUTARY OF BIG SANDY  
District BIG SANDY County KANAWHA Quadrangle CLIO 7.5'

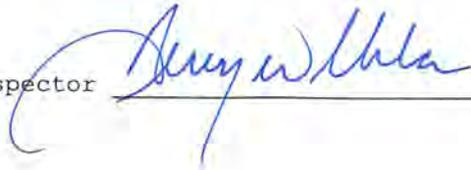
6) Well Operator CUNNINGHAM ENERGY, LLC 7) Designated Agent RYAN CUNNINGHAM  
Address 3230 PENNSYLVANIA AVE. Address 1212 STAUNTON RD.  
CHARLESTON, WV 25302 CHARLESTON, WV 25302

8) Oil and Gas Inspector to be notified Name TERRY URBAN  
Address P.O. BOX 1207  
CLENDENIN, WV 25045  
9) Plugging Contractor Name CUNNINGHAM ENERGY, LLC  
Address 3230 PENNSYLVANIA AVE.  
CHARLESTON, WV 25302

10) Work Order: The work order for the manner of plugging this well is as follows:  
**PULL ALL PUMPS/TUBING/RODS. RIG UP AND PULL ALL PRODUCTION CASING. TRIP TUBING TO TD, FILL HOLE WITH GEL, SET SOLID PLUG FROM TD TO SURFACE. SET MONUMENT WITH API.**

RECEIVED  
Office of Oil and Gas  
OCT 18 2018  
WV Department of  
Environmental Protection

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

Work order approved by inspector  Date 10-18-18

WW-4A  
Revised 6-07

1) Date: 10/16/2018  
2) Operator's Well Number  
STUMP #1

3) API Well No.: 47 - 039 - 06384

**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 <u>PEARL &amp; MAYFORD HUFFMAN</u>	Name _____
Address <u>405 54TH STREET, SE</u>	Address _____
<u>CHARLESTON, WV 25304</u>	_____
(b) Name <u>DANIEL &amp; LAURA BODKINS</u>	(b) Coal Owner(s) with Declaration
Address <u>P.O. BOX 847</u>	Name _____
<u>CLENDENIN, WV 25045</u>	Address _____
(c) Name _____	Name _____
Address _____	Address _____
6) Inspector <u>TERRY URBAN</u>	(c) Coal Lessee with Declaration
Address <u>P.O. BOX 1207</u>	Name _____
<u>CLENDENIN, WV 25045</u>	Address _____
Telephone <u>304-549-5915</u>	_____

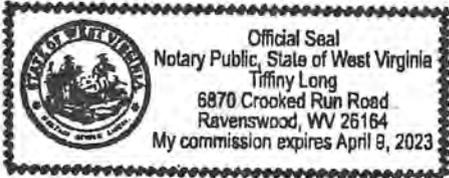
**TO THE PERSONS NAMED ABOVE: You should have received this Form and the following documents:**

- (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 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 CUNNINGHAM ENERGY, LLC  
 By: RYAN CUNNINGHAM  
 Its: PRESIDENT  
 Address 3230 PENNSYLVANIA AVENUE  
CHARLESTON, WV 25302  
 Telephone 304-344-9291



Subscribed and sworn before me this 17<sup>TH</sup> day of October 2018  
Tiffany Long Notary Public  
My Commission Expires April 9, 2023

**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 [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

01/11/2019

WW-9  
(5/16)

API Number 47 - 039 - 06384  
Operator's Well No. \_\_\_\_\_

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

Operator Name CUNNINGHAM ENERGY, LLC OP Code 494508594

Watershed (HUC 10) TRIBUTARY OF BIG SANDY CREEK Quadrangle BIG SANDY

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: \_\_\_\_\_

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

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection ( UIC Permit Number 392210-UIC )
- Reuse (at API Number \_\_\_\_\_)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain \_\_\_\_\_)

*Tu*

Will closed loop system be used? If so, describe: NO PIT WILL BE USED - ALL FLUIDS WILL BE PUT INTO A FLOWBACK TANK

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. N/A

-If oil based, what type? Synthetic, petroleum, etc. N/A

Additives to be used in drilling medium? N/A

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. N/A

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) N/A

-Landfill or offsite name/permit number? N/A

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 \_\_\_\_\_

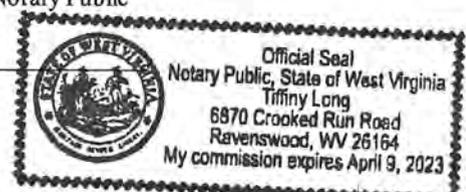
Company Official (Typed Name) RYAN E. M. CUNNINGHAM

Company Official Title MEMBER

Subscribed and sworn before me this 17th day of October, 2018

Tiffany Long Notary Public

My commission expires April 9, 2023



Proposed Revegetation Treatment: Acres Disturbed 2.75 Prevegetation pH \_\_\_\_\_

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type 5-10-10

Fertilizer amount 1/3 lbs/acre

Mulch HAY - 2 Tons/acre

Seed Mixtures

**Temporary**

**Permanent**

Seed Type	lbs/acre
KY-31	40
ALSIKE CLOVER	5
ANNUAL RYE	15

Seed Type	lbs/acre
ORCHARD RYE	15
ALSIKE CLOVER	5

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: [Signature]

Comments: Rig Down NEEDS cleaned up before plugging process

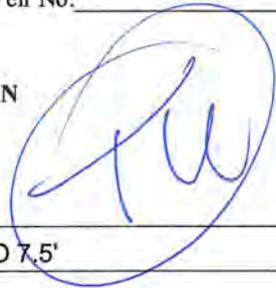
Title: Inspecte Julie (GAS) Date: 10-18-18

Field Reviewed? (  ) Yes (  ) No

WW-9- GPP  
Rev. 5/16

Page 1 of 2  
API Number 47 - 039 - 06384  
Operator's Well No. \_\_\_\_\_

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS  
GROUNDWATER PROTECTION PLAN



Operator Name: CUNNINGHAM ENERGY, LLC  
Watershed (HUC 10): TRIBUTARY OF BIG SANDY CREEK Quad: CLIO 7.5'  
Farm Name: \_\_\_\_\_

1. List the procedures used for the treatment and discharge of fluids. Include a list of all operations that could contaminate the groundwater.

N/A NO PIT

2. Describe procedures and equipment used to protect groundwater quality from the list of potential contaminant sources above.

N/A

3. List the closest water body, distance to closest water body, and distance from closest Well Head Protection Area to the discharge area.

N/A

4. Summarize all activities at your facility that are already regulated for groundwater protection.

N/A

5. Discuss any existing groundwater quality data for your facility or an adjacent property.

WW-9- GPP  
Rev. 5/16

Page 2 of 2  
API Number 47 - 039 - 06384  
Operator's Well No. \_\_\_\_\_



N/A

6. Provide a statement that no waste material will be used for deicing or fill material on the property.

N/A

7. Describe the groundwater protection instruction and training to be provided to the employees. Job procedures shall provide direction on how to prevent groundwater contamination.

N/A

8. Provide provisions and frequency for inspections of all GPP elements and equipment.

N/A

Signature: \_\_\_\_\_

Date: 10/17/18

WW-7  
8-30-06



*TH*

West Virginia Department of Environmental Protection  
Office of Oil and Gas

WELL LOCATION FORM: GPS

API: 47-03906384 WELL NO.: STUMP #1

FARM NAME: I.C. AND L.C. STUMP

RESPONSIBLE PARTY NAME: Cunningham Energy

COUNTY: KANAWHA DISTRICT: BIG SANDY

QUADRANGLE: CLIO 7.5'

SURFACE OWNER: PEARL & MAYFORD HUFFMAN/DANIEL & LAURA BODKINS

ROYALTY OWNER: BLUE GROUP ENERGY, INC.

UTM GPS NORTHING: 4260990

UTM GPS EASTING: 468280 GPS ELEVATION: 915'

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 \_\_\_\_  
Real-Time Differential X

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

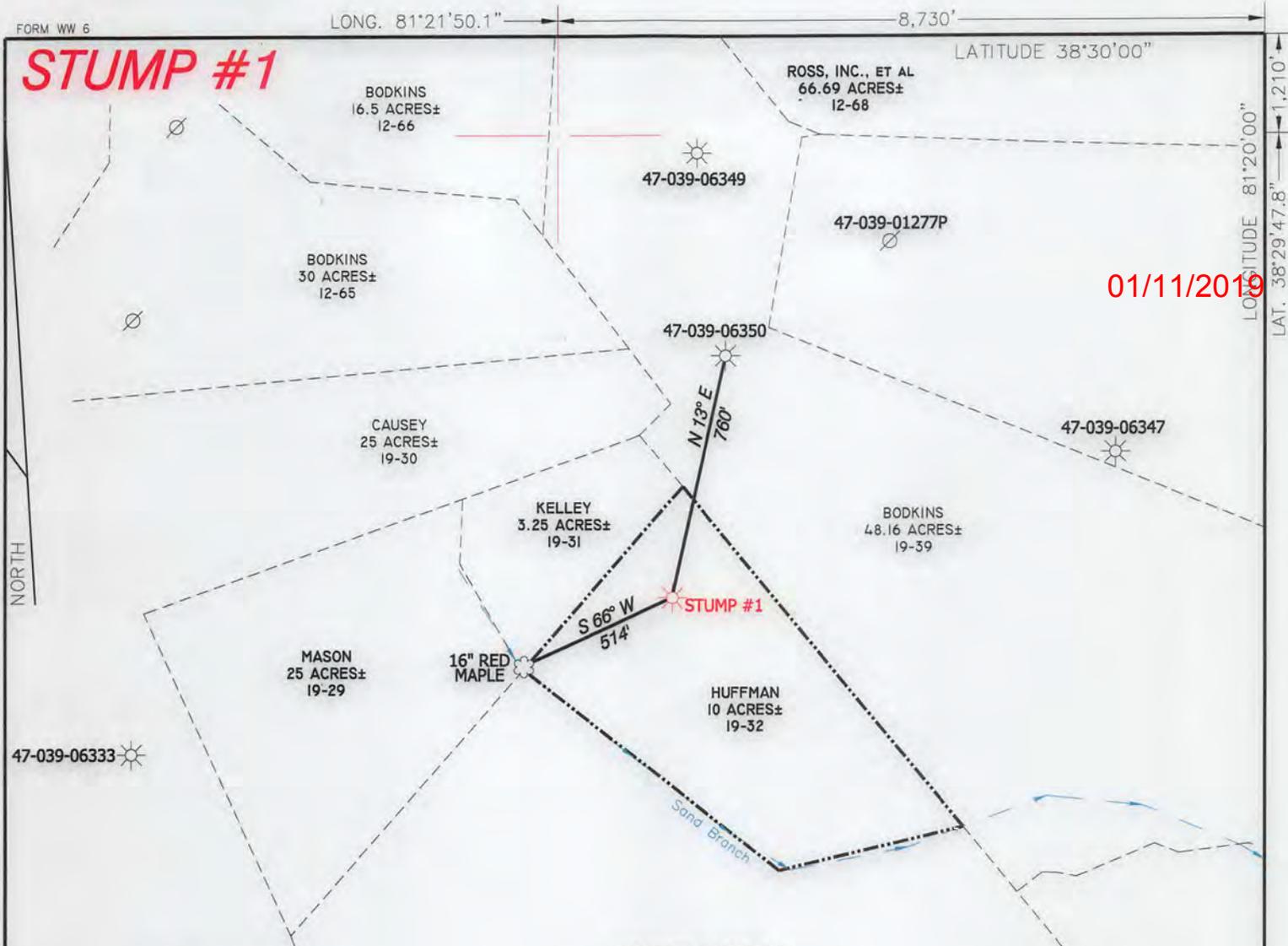
I the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.

[Signature]  
Signature

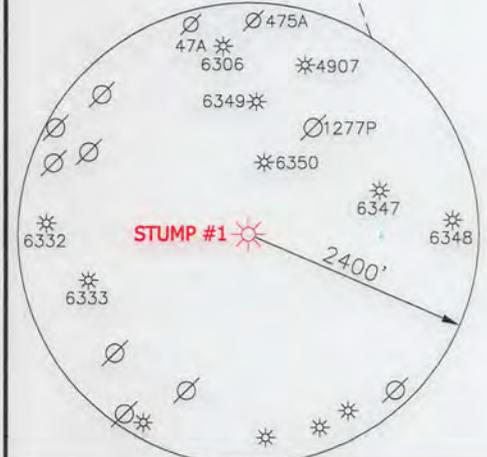
President  
Title

10/16/2018  
Date

# STUMP #1



01/11/2019



**STUMP #1**  
**STATE PLANE**  
**COORDINATES**  
**(SOUTH ZONE)**  
**(N) 545165**  
**(E) 1895849**

**STUMP #1**  
**L & L DECIMAL**  
**38.49661**  
**81.36391**

**STUMP #1**  
**UTM (NAD 83)**  
**4260990**  
**468280**

### NOTES ON SURVEY

1. NO DWELLINGS WITHIN 625' WERE FOUND.
2. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250' WERE FOUND.
3. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV SOUTH ZONE NAD '27.
4. WELL LAT./LONG. ESTABLISHED BY DGPS (SUB-METER GRADE).
5. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF KANAWHA COUNTY IN FEBRUARY, 2015 AND INFORMATION PROVIDED BY CUNNINGHAM ENERGY, LLC.
6. WELLS SHOWN ARE TAKEN FROM RECORDS OF WDEP.

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
 DATE NOVEMBER 12, 20 18  
 OPERATORS WELL NO. STUMP #1  
 API WELL NO. 47-039-06384P  
 STATE COUNTY PERMIT

P.S. 834  
  
 HUPP Surveying & Mapping  
 P.O. Box 647 Grantsville, WV 26147  
 (304) 354-7035 EMAIL: hupp@frontiernet.net

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. W2477 (BK 83-1)  
 PROVEN SOURCE OF ELEVATION DGPS (SUBMETER GRADE) SCALE 1" = 500'

STATE OF WEST VIRGINIA  
 DIVISION OF ENVIRONMENTAL PROTECTION  
 OFFICE OF OIL AND GAS

WELL TYPE : OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION :  
 ELEVATION 915' WATERSHED SAND BRANCH  
 DISTRICT BIG SANDY COUNTY KANAWHA QUADRANGLE CLENDENIN 7.5'

SURFACE OWNER PEARL & MAYFORD HUFFMAN ACREAGE 10±  
 ROYALTY OWNER BLUE GROUP ENERGY, INC. LEASE ACREAGE 10±  
 PROPOSED WORK : LEASE NO. \_\_\_\_\_

DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN OUT AND REPLUG  OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION \_\_\_\_\_  
 ESTIMATED DEPTH \_\_\_\_\_

WELL OPERATOR CUNNINGHAM ENERGY, LLC. DESIGNATED AGENT RYAN CUNNINGHAM  
 ADDRESS 3230 PENNSYLVANIA AVE. CHARLESTON, WV 25302 ADDRESS 3230 PENNSYLVANIA AVE. CHARLESTON, WV 25302

COUNTY NAME  
 PERMIT

