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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

Harold D. Ward, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Friday, August 26, 2022

WELL WORK PLUGGING PERMIT  
Coal Bed Methane Well Plugging

DIVERSIFIED PRODUCTION LLC  
101 MCQUISTON DRIVE

JACKSON CENTER, PA 16133

Re: Permit approval for HARVEY 1C  
47-081-01386-00-00

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: HARVEY 1C  
Farm Name: CHAMBERS, ARLENE F.  
U.S. WELL NUMBER: 47-081-01386-00-00  
Coal Bed Methane Well Plugging  
Date Issued: 8/26/2022

## 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.

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### 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 # 4708101386 P  
2) Operator's  
Well No. Kanawha Shoals 1-C  
3) API Well No. 47-081 - 01386

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 X or Underground storage \_\_\_) Deep \_\_\_ / Shallow X

5) Location: Elevation 2233.9 ft Watershed Brechenridge Creek of Marsh Fork  
District Trap Hill County Raleigh Quadrangle Arnett

6) Well Operator Diversified Production, LLC 7) Designated Agent Jeff Mast  
Address 414 Summers Street Address 31 Hickory Drive  
Charleston, WV 25301 Barboursville, WV 25504

8) Oil and Gas Inspector to be notified 9) Plugging Contractor  
Name Gary Kennedy Name R & J Well Services  
Address 66 Old Church Lane Address P.O. Box 40  
Pipestem, WV 25979 Hueysville, KY 41640-0040

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

See Attached

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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 *Gary Kennedy* Date 4/29/22

09/02/2022

**Plugging Prognosis**

API #: 4708101386

**Casing Schedule:**

13 3/8" @ 33 CTS  
 9 5/8" @ 397' CTS  
 7" @ 937' CTS

TD listed as 1,100'

Estimated lateral from plat

- C Hole (81-01386)
  - 17,000' x 4.75" Hole ID = 2,092 Cu ft = 465 BBL w/ 125% excess

Fresh Water: None listed

Salt Water: None listed

Gas Shows: None listed

Oil Shows: None listed

Coal: 500', 776', 984', 1028'

Elevation: 2232

*MUST USE EXPANDING CEMENT*

1. Notify Inspector Gary Kennedy @ 304-382-8402, 48 hrs prior to commencing operations.
2. Record pressure on csg.
3. TOOH w/ rods and tbg.
4. Kill well with gel as needed. Then proceed to load wellbore with gel to a minimum of 125% *(465 BBL)* capacity until wellbore is filled.
5. Proceed to load wellbore with bentonite pellets. Top is not to exceed 987'
6. TIH w/ tbg to 987'. Pump 640' C1A cement plug from **987' to 347' (7" & 9 5/8" csg shoe plug & Coal Shows)**. Tag TOC
7. TOOH w/ tbg to 347'. Pump 6% bentonite gel spacer from 347' to 100'.
8. Confirm 7" csg is cemented to surface. If not TOOH w/ tbg. Free point csg and set plug 50' in/out of cut for total of 100'.
9. TOOH w/ tbg to 100'. Pump 100' C1A cement plug from 100' **to surface**
10. Reclaim site and set monument per WV DEP regulations.

*JBL*

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09/02/2022



4708101386P

WR-35

DATE: 07/05/2007  
API#: 4708101386C

State of West Virginia  
Division of Environmental Production  
Section of Oil and Gas  
Well Operator's Report of Well Work

Farm Name Arlene F. Chambers  
LOCATION Elevation: 2232.89

Operator Well No.: KANAWHA SHOALS 1C  
Quadrangle: Arnett 7 1/2'

District: Trap Hill County: Raleigh  
Latitude: 9290 Feet South of 37 Deg. 47 Min. 30 Sec.  
Longitude: 5920 Feet West of 81 Deg. 25 Min. 00 Sec.

Company:

Penn Virginia Oil & Gas Corporation	Casing and Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 2550 East Stone Drive, Suite 110	13 3/8	33	33	11.8
Kingsport, TN 37660	9 5/8	397	397	177
Agent: Bryant Bowman	7	937	937	265.5
Inspector: Terry Urban				
Date Permit Issued: 12/05/2005				
Date Well Work Commenced:				
Date Well Work Completed: 04/24/2006				
Verbal Plugging:				
Date Permission granted on:				
Rotary X Cable Rig				
Total Depth (feet): 1,100				
Fresh Water Depth (ft): None Reported				
Salt Water Depth (ft): None Reported				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft): 500-502; 776-779; 984-985; 1028-1031				

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OPEN FLOW DATA

Producing formation Lower Beckley Coal Pay zone depth (ft) 1,034  
 Gas: Initial open flow NA MCF/d Oil: Initial open flow            Bbl/d  
 Final open flow            MCF/d Final open flow            Bbl/d  
 Time of open flow between initial and final tests:            Hours  
 Static rock pressure            psig (surface pressure) after            Hours

Second producing formation            Pay zone depth (ft)             
 Gas: Initial open flow            MCF/d Oil: Initial open flow            Bbl/d  
 Final open flow            MCF/d Final open flow            Bbl/d  
 Time of open flow between initial and final tests:            Hours  
 Static rock pressure            psig (surface pressure) after            Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANE, TEC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Signed: Michael E. Stimpert  
By: Michael E. Stimpert  
Date: 7/5/07



RAL 1386

09/02/2022

FORM WR-35R  
(REVERSE)

PERMIT # 4708101386C  
WELL #: KANAWHA SHOAL

DETAILS OF PERFORATIONS, FRACTURING, OR PHYSICAL CHANGE, ETC.

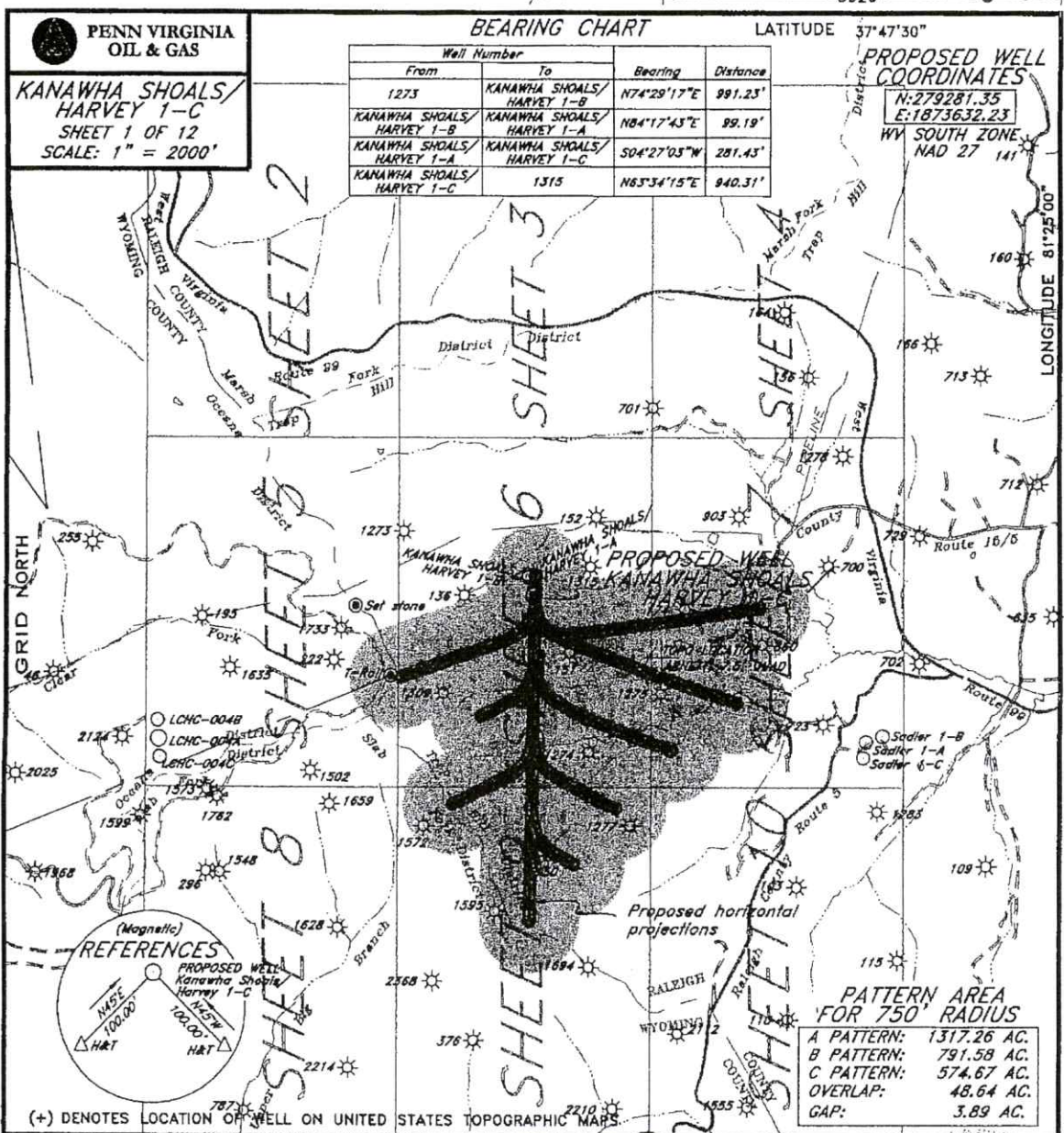
*[Handwritten signature]*

<u>FORMATIONS</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>REMARKS</u>
Sand/Shale	0	400	
Beckley Coal	1028	1031	
Sand/Shale	1031	TD	
Shale	400	460	
Sand	460	500	
Coal	500	502	
Sand/Shale	502	620	
Sand	620	700	
Sand/Shale/Coal	700	776	
Coal	776	779	
Sand	779	984	
Coal	984	986	
Sand/Shale	986	1028	

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4708101386F



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1"=2000'  
 MINIMUM DEGREE OF ACCURACY 1:15000  
 PROVEN SOURCE OF ELEVATION GPS DISK NO. B1  
 2161.27'

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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.  
 (SIGNED) Dwain D. Goumnik  
 R.P.E. \_\_\_\_\_ L.L.S. 736

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 Office of Oil and Gas  
 MAY 03 2022  
 WV Department of Environmental Protection  
 PLACE SEAL HERE

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

DATE SEPTEMBER 10, 2005  
 OPERATOR'S WELL NO. KANAHA SHOALS/HARVEY 1-C  
 API WELL NO. 47-081-1386-C  
 STATE COUNTY PERMIT

WELL TYPE: OIL \_\_\_ GAS \_\_\_ LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 2232.89' WATERSHED BRECHENRIDGE CREEK OF MARSH FORK  
 DISTRICT TRAP HILL COUNTY RALEIGH  
 QUADRANGLE ARNETT, WY

SURFACE OWNER Arlene F. Chambers ACREAGE 40.07  
 OIL & GAS ROYALTY OWNER Kanawha Shoals, LLC LEASE ACREAGE 40.07  
 LEASE NO. \_\_\_\_\_

PROPOSED WORK: DRILL  CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR  
 STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW  
 FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION Lower Brechehey ESTIMATED DEPTH 1773'

WELL OPERATOR PENN VIRGINIA OIL & GAS CORPORATION DESIGNATED AGENT MR. HARRY JEWEL  
 ADDRESS 2550 EAST STONE DRIVE SUITE 110 ADDRESS PO BOX 460  
 KINGSFORD, TN 37660 RAVENCLIFF, WY 25913

COUNTY NAME RAL PERMIT 1386-C

09/02/2022

WW-4A  
Revised 6-07

1) Date: April 25, 2022  
2) Operator's Well Number: Kanawha Shoals 1-C

3) API Well No.: 47 - 081 - 01386

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

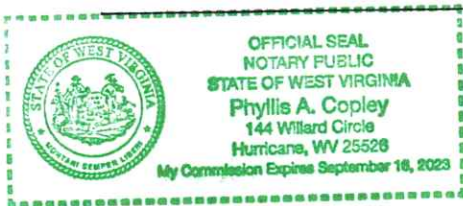
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Joshua &amp; Raylene Caron</u>	Name <u>None</u>
Address <u>P.O. Box 936</u>	Address _____
<u>Bolt, WV 25817</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>Joshua &amp; Raylene Caron</u>
_____	Address <u>P.O. Box 936</u>
(c) Name _____	<u>Bolt, WV 25817</u>
Address _____	Name _____
_____	Address _____
6) Inspector <u>Gary Kennedy</u>	(c) Coal Lessee with Declaration
Address <u>66 Old Church Lane</u>	Name <u>No Declaration</u>
<u>Pipestem, WV 25979</u>	Address _____
Telephone <u>304-382-8402</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 Diversified Production, LLC  
 By: [Signature] Jeff Mast  
 Its: Director Technical Services  
 Address 414 Summers Strret  
Charleston, WV 25301  
 Telephone 304-543-6988

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 Office of Oil and Gas  
 MAY 03 2022

WV Department of Environmental Protection

Subscribed and sworn before me this 25<sup>th</sup> day of April 2022  
Phyllis A. Copley Notary Public  
 My Commission Expires September 16, 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 [depprivacyoffier@wv.gov](mailto:depprivacyoffier@wv.gov).



4708101386 P

47-081-01386  
Kanawha Shoals  
I-C

7020 2450 0001 5225 2058  
0502 5225 T000 0542 0202

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Bolt, WV 25817

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Certified Mail Fee	\$3.75
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<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00
<input type="checkbox"/> Return Receipt (electronic)	\$0.00
<input type="checkbox"/> Certified Mail Restricted Delivery	\$0.00
<input type="checkbox"/> Adult Signature Required	\$0.00
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00
Postage	\$2.36
<b>Total</b>	<b>\$8.86</b>

0523 04  
 Postmark Here  
 APR 25 2022

**Kanawha Shoals I-A, I-B and I-C**  
 Joshua & Raylene Caron  
 P.O. Box 936 *396*  
 Bolt, WV 25817

for Instructions

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APR 27 2022  
WV Department of  
Environmental Protection

09/02/2022

WW-9  
(5/16)

API Number 47 - 081 - 01386  
Operator's Well No. Kanawha Shoals 1-C

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

Operator Name Diversified Production, LLC OP Code 494524121

Watershed (HUC 10) Brechenridge Creek of Marsh Fork Quadrangle Arnett

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: Produced fluid and cement returns

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

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection ( UIC Permit Number Twin Branch 47471511 )
- Reuse (at API Number \_\_\_\_\_)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain \_\_\_\_\_)

Will closed loop system be used? If so, describe: N/A

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

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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) Jeff Mast

Company Official Title Director Technical Services



Subscribed and sworn before me this 25<sup>th</sup> day of April, 2022

Phyllis A. Copley

Notary Public

My commission expires September 16, 2023

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

Lime 3 Tons/acre or to correct to pH 6.05

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: [Signature]

Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Title: Inspector

Date: 4/29/22

Field Reviewed? ( ) Yes ( ) No

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4708101386



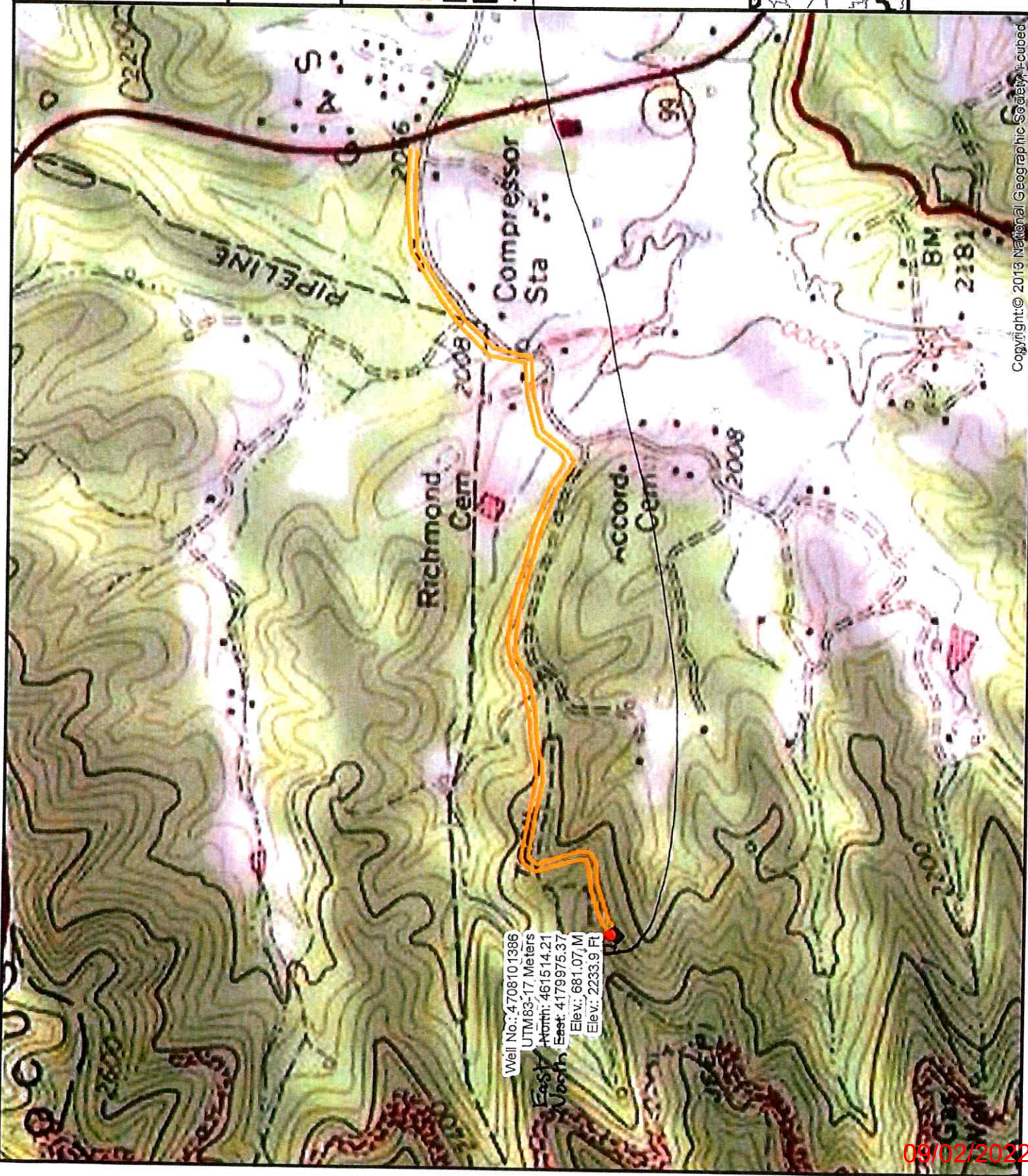
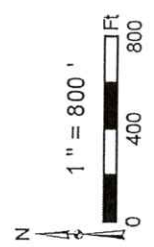
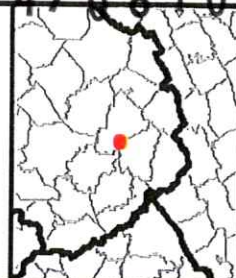
**DIVERSIFIED**  
energy  
100 Diversified Way  
Pikeville, KY, 41051

47-081-01386  
Plugging Map

**Legend**

- Well
- Access Road
- Pits
- Pad
- Public Roads

**1 Pit**  
 10'W  
 20'L  
 8'D  
 285 bbl



Well No.: 4708101386  
 UTM83-17 Meters  
 North: 4615 14.21  
 East: 4179975.37  
 Elev.: 681.07 M  
 Elev.: 2233.9 Ft

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09/02/2022



WW-7  
8-30-06



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

API: 4708101386 WELL NO.: 1-C

FARM NAME: Arlene F Chambers

RESPONSIBLE PARTY NAME: Diversified Production LLC

COUNTY: Raleigh DISTRICT: Trap Hill

QUADRANGLE: Arnett, WV

SURFACE OWNER: Joshua Caron and Raylene Caron

ROYALTY OWNER: Summit Nat. Resources & DP Bluegrass LLC

UTM GPS NORTHING: 4179975.37

UTM GPS EASTING: 461514.21 GPS ELEVATION: 2233.9

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:

- Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
- Accuracy to Datum – 3.05 meters
- Data Collection Method:

Survey grade GPS  : Post Processed Differential

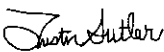
Real-Time Differential

Mapping Grade GPS  : Post Processed Differential

Real-Time Differential

- 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

Digitally signed by Austin Suttler  
Date: 2022.04.14 15:21:55  
-04'00'

Sr Proj. Manager  
Title

4/14/2022  
Date

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Kennedy, James P <james.p.kennedy@wv.gov>

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## plugging permits issued 4708101384, 08101385, 08101386

1 message

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**Kennedy, James P** <james.p.kennedy@wv.gov>

Fri, Aug 26, 2022 at 2:23 PM

To: Phyllis Copley <pcopley@dgoc.com>, Gary L Kennedy <gary.l.kennedy@wv.gov>, Austin Sutler <asutler@dgoc.com>, raleigh@wvassessor.com


To whom it may concern, plugging permits have been issued for 4708101384, 08101385, 08101386.


James Kennedy


WVDEP OOG

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### 4 attachments

 **4708101384.pdf**  
2744K

 **4708101385.pdf**  
2800K

 **4708101386.pdf**  
2443K

 **IR-8 Blank.pdf**  
237K

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