



---

west virginia department of environmental protection

---

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)

Tuesday, February 1, 2022  
WELL WORK PLUGGING PERMIT  
Vertical Plugging

DIVERSIFIED PRODUCTION LLC  
101 MCQUISTON DRIVE  
JACKSON CENTER, PA 16133

Re: Permit approval for 2-S-157  
47-039-02488-00-00

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: 2-S-157  
Farm Name: KANAWHA & HOCKING  
U.S. WELL NUMBER: 47-039-02488-00-00  
Vertical Plugging  
Date Issued: 2/1/2022

I

4703902488P

## 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.

02/11/2022

1) Date January 18, 2022  
2) Operator's  
Well No. 2-S-157  
3) API Well No. 47 039 02488

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 883.71 feet Watershed Left Fork Witcher Creek  
District Cabin Creek County Kanawha Quadrangle Quick

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 Terry Urban Name Diversified Production, LLC (in-house rig)  
Address P.O. Box 1207 Address 1951 Pleasantview Ridge Road  
Clendenin, WV 25045 Ravenswood, WV 26164

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

See Attached

*Operate to Case with Cement all Oil & Gas Formations including Casing cuts, Salt, Elevation, Coal, Freshwater*

RECEIVED  
Office of Oil and Gas

JAN 21 2021

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 *[Signature]* Date 1-21-22

02/11/2022

**Plugging Prognosis**

API #: 4703902488

West Virginia, Kanawha Co.

Lat/Long: 38.27011943, -81.48005333

Nearest ER: CAMC Memorial Hospital 3200 MacCorkle Ave SE, Charleston, WV 25304

**Casing Schedule:**

10" @ 16'

8-1/4" @ 251' (cement to 91' w/ 50 sxs)

**6-5/8" none left in well**

4-1/2" @ 1,575' (cemented to 1,283' w/ 21 sxs)

2" tbg @ 1,521'

TD @ 1,575'

Completion: Injun - 1,509'-1,521'

Fresh Water: 1,085'

Salt Water: None listed

Gas Shows: 1,408'; 1,518'-1,527'

Oil Shows: 1,490'

Coal: 170'-175'

Elevation: 856.39'

1. Notify Inspector Terry Urban @ 304-549-5915, 48 hrs prior to commencing operations.
2. Check and record pressures on csg/tbg.
3. Pull tbg and lay down.
4. Check TD w/ wireline.
5. Run in to depth @ 1,521'. Kill well as needed with 6% bentonite gel and fill rat hole. Pump at least 10 bbls gel. Pump 213' C1A cement plug from **1,521' to 1,308' (perforations, oil and gas shows plug)**. Tag TOC. Top off as needed.
6. TOOH w/ tbg to 1,308'. Pump 6% bentonite gel from 1,308' to 1,135'.
7. Free point 4-1/2" csg. Cut and TOOH. Set 100' C1A cement plug across csg cut. 50' in/out of cut.  
**Do not omit any plugs listed below. Perforate as needed.**
8. TOOH w/ tbg to 1,135'. Pump 100' C1A cement plug from **1,135' to 1,035' (SALT fresh water plug)**.
9. TOOH w/ tbg to 1,035'. Pump 6% bentonite gel from 1,035' to 857'.
10. TOOH w/ tbg to 857'. Pump 100' C1A cement plug from **857' to 757' (elevation plug)**
11. TOOH w/ tbg to 757'. Pump 6% bentonite gel from 757' to 301'.
12. TOOH w/ tbg to 301'. Pump 301' C1A cement plug from **301' to surface (8-1/4" csg shoe, coal and surface plug)**.
13. Reclaim location and well road to WV DEP specifications and erect P&A well monument.

*Operator to core well Cement all Dice Gas for core shows  
including casing cuts, Salt, Elevation, Coal & Freshwater*

RECEIVED  
Office of Oil and Gas  
JAN 21 2021  
WV Department of  
Environmental Protection  
1-21-22 **02/11/2022**

4703902488P

Form OG-10



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION 7

Rotary   
Spudder   
Cable Tools   
Storage

Quadrangle Clendenin

Permit No. Kan - 2488

WELL RECORD

Oil or Gas Well Gas  
(KIND)

Company Spartan Gas Company  
Address P.O. Box 766, Charleston, West Va.  
Farm Kan. & Hocking Coal & Coke Acres 14.128  
Location (waters) Witchers Creek  
Well No. 2-5-157 Elev 856.39  
District Cabin Creek County Kanawha  
The surface of tract is owned in fee by Kan. & Hocking Coal & Coke Co. Address Shrewsbury, W.Va.  
Mineral rights are owned by Same Address \_\_\_\_\_

Drilling commenced 12/14/70  
Drilling completed 1/27/71  
Date Shot \_\_\_\_\_ From \_\_\_\_\_ To \_\_\_\_\_  
With \_\_\_\_\_

Open Flow 2 /10ths Water in 1" Inch  
\_\_\_\_\_ /10ths Merc. in \_\_\_\_\_ Inch  
Volume 15M Cu. Ft.  
Rock Pressure 440 lbs. 5 days hrs.

Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
WELL ACIDIZED (DETAILS) \_\_\_\_\_

WELL FRACTURED (DETAILS) 2/8/71 800 Ebls., 30,000# Sand 500 Gal. Acid

RESULT AFTER TREATMENT (Initial open flow or bbls.) 400 MCF 400,000  
ROCK PRESSURE AFTER TREATMENT 440# HOURS \_\_\_\_\_  
Fresh Water 155 Feet \_\_\_\_\_ Salt Water 865' Feet 1085'  
Producing Sand Injun Depth 1509-1521

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			
10	16'	16'	Size of
8 1/4	251	251	
6 5/8	1,356	None	Depth set
5 3/16			
4 1/2	1,575	1,575	
3			Perf. top 1,509
2	1,521	1,521	Perf. bottom 1,521
Liners Used			Perf. top _____
			Perf. bottom _____

Attach copy of cementing record.  
CASING CEMENTED 8" SIZE 251' No. Ft. 12/17/70 Date  
Amount of cement used (bags) 50  
Name of Service Co. Well Service, Inc.  
COAL WAS ENCOUNTERED AT 170 FEET 60 INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Soil & Clay			0	10			
Sand			10	35			
Slate			35	155			
Sand			155	170			
Coal			170	175			
Sand			175	225			
Slate			225	230			
Lime			230	277			
Sand			277	290			
Slate			290	299			
Sand			299	325			
Slate			325	355			
Sand			355	420			
Slate			420	432			
Sand			432	660			
Slate			660	670			
Sand			670	870			
Slate			870	873			
Sand			873	929			
Slate			929	1007			
Red Rock			1007	1022			
Slate			1022	1035			
Sand			1035	1250			
Slate			1250	1258			
Lime			1258	1301			
Slate			1301	1307			
Lime			1307	1317			
Slate			1317	1326			

*856.39 - Elev*  
*Salt Sand?*

HFW 1085'

RECEIVED  
MAR 11 1971

RECEIVED  
Office of Oil and Gas  
JAN 21 2021

4703902488P

Formation	Color	Hard or Soft	Top 7	Bottom	Oil, Gas or Water	Depth Found	Remarks
Big Lime			1326	1481			
Injun			1481	1531			
Bkn. Sand			1531	1550			
Slate			1550	1575			
Total Depth				1575			
					Gas	1408	Show
					Oil	1490	Show
					Gas	1518-27	15 MCF
					2-1-71 Ran & cemented 4 1/2" casing at 1575'. Circulated gel to surface ahead of 21 sks. cement 60# calcium Chloride - Dowell		

Date March 9, 19 71 RECEIVED  
Office of Oil and Gas

APPROVED SPARTAN GAS COMPANY, Owner  
By William T. J. J. J. JAN 21 2021

(Title)

02/11/2022  
NY Department of Environmental Protection

47039024889

WW-4A  
Revised 6-07

1) Date: December 18, 2022  
2) Operator's Well Number  
2-S-157

3) API Well No.: 47 - 039 - 02488

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

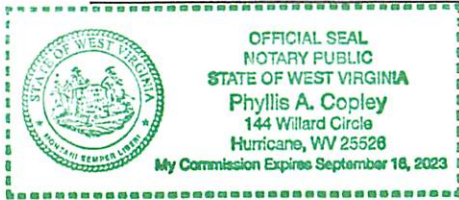
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Blackhawk Mining LLC</u>	Name <u>None</u>
Address <u>1801 Watergap Road</u>	Address _____
<u>Prestonsburg, KY 41653</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>Blackhawk Land &amp; Resources</u>
_____	Address <u>1801 Watergap Road</u>
_____	<u>Prestonsburg, KY 41653</u>
(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>No Declaration</u>
<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 Diversified Production, LLC  
 By: [Signature] Jeff Mast  
 Its: Director Production  
 Address 414 Summers Street  
Charleston, WV 25301  
 Telephone 304-543-6988

Subscribed and sworn before me this 18<sup>th</sup> day of January 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 [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

RECEIVED  
Office of Oil and Gas

JAN 21 2021

02/11/2022 of  
Environmental Protection

Well: 2-5-157  
47-039-024880

7020 2450 0001 5225 1662 2991 5225 1000 0542 0201

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
*Domestic Mail Only*

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

Prestonsburg, KY 41653

**OFFICIAL USE**

Certified Mail Fee	\$3.75	0523
\$	\$3.05	11
Extra Services & Fees (check box, add fees as appropriate)		
<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	
\$	\$7.11	
To	5-S-161, 2-S-157, 6-S-164	01/18/2022
\$	Blackhawk Mining LLC and	
\$	Blackhawk Land & Resources	
\$	1801 Watergap Road	
\$	Prestonsburg, KY 41653	
\$		
\$		
\$		

Postmark Here

PS. For more information, visit [www.usps.com](http://www.usps.com) for instructions.

RECEIVED  
Office of Oil and Gas

JAN 20 2022

WV Department of  
Environmental Protection

02/11/2022



4703902488P

WW-9  
(5/16)

API Number 47 - 039 - 02488  
Operator's Well No. 2-S-157

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) Left Fork Witcher Creek Quadrangle Quick

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  *JW*

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 2D03902327 002 )
- 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

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 Production



Subscribed and sworn before me this 18<sup>th</sup> day of January, 2022

*Phyllis A. Copley* Notary Public

My commission expires September 16, 2023

RECEIVED  
Office of Oil and Gas

JAN 21 2021

WV Department of Environmental Protection  
02/11/2022

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: [Signature]

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

Title: Inspector del GAS Date: 1-21-22

Field Reviewed? ( ) Yes ( ) No

RECEIVED  
Office of Oil and Gas  
JAN 21 2021

WV Department of  
Environmental Protection  
02/11/2022



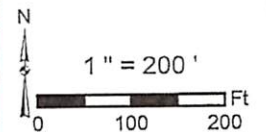
Diversified Gas & Oil  
Corporation  
100 Diversified Way  
Pikeville KY, 41051

47-039-02488

Plugging Map

### Legend

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



Well No.: kana hocking 2  
UTM83: 17, Meters  
North: 458007.86  
East: 4235894.15  
Elev.: 269.42 M  
Elev.: 883.71 Ft

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

4703902488P

WW-7  
8-30-06



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

API: 4703902488 WELL NO.: 2-S-157

FARM NAME: Kan & Hocking Coal & Coke

RESPONSIBLE PARTY NAME: Diversified Production LLC

COUNTY: Kanawha DISTRICT: Cabin Ck

QUADRANGLE: Quick

SURFACE OWNER: Blackhawk Mining

ROYALTY OWNER: Pardee Resources

UTM GPS NORTHING: 4235894.15

UTM GPS EASTING: 458007.86 GPS ELEVATION: 883.71

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

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.

*Austin Suttler*  
Signature

Digitally signed by Austin Suttler  
Date: 2022.01.17 08:32:43  
-05'00'

Sr. Proj. Manager  
Title

1/17/2022  
Date

RECEIVED  
Office of Oil and Gas  
JAN 21 2021  
WV Department of  
Environmental Protection  
02/11/2022



Stansberry, Wade A &lt;wade.a.stansberry@wv.gov&gt;

**Plugging Vertical Well Work Permit API: 47-039-02488, 02522, 02541, 02929, 03430, 03431)**

1 message

**Stansberry, Wade A** <wade.a.stansberry@wv.gov>

Wed, Feb 2, 2022 at 7:23 AM

To: "Mast, Jeff" &lt;jmast@dgoc.com&gt;, Sallie Robinson &lt;sallierobinson@kanawha.us&gt;, "Urban, Terry W" &lt;terry.w.urban@wv.gov&gt;

Terry,

I will be in the office tomorrow and have hard copies ready for you along with release sheets.

I have attached a copy of the newly issued well [permit](#) number. This will serve as your copy.








47-039-02488 -  
47-039-02522 -  
47-039-02541 -  
47-039-02929 -  
47-039-03430 -  
47-039-03431 -

If you have any questions, then [please](#) contact us here at the Office of Oil and Gas.

Thank you,

**Wade A. Stansberry**  
Environmental Resource Specialist 3  
West Virginia Department of Environmental Protection  
Office of Oil & Gas  
601 57th St. SE  
Charleston, WV 25304  
(304) 926-0499 ext. 41115  
(304) 926-0452 fax  
[Wade.A.Stansberry@wv.gov](mailto:Wade.A.Stansberry@wv.gov)

**7 attachments**

-  **47-039-02488 - Copy.pdf**  
2727K
-  **47-039-02929 - Copy.pdf**  
2838K
-  **47-039-03430 - Copy.pdf**  
3045K
-  **47-039-02541 - Copy.pdf**  
3302K
-  **47-039-02522 - Copy.pdf**  
3798K
-  **47-039-03431 - Copy.pdf**  
3393K
-  **IR-8 Blank.pdf**  
212K

**02/11/2022**