



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

Harold D. Ward, Cabinet Secretary
www.dep.wv.gov

Monday, November 29, 2021
WELL WORK PLUGGING PERMIT
Vertical Plugging

DIVERSIFIED PRODUCTION LLC
101 MCQUISTON DRIVE
JACKSON CENTER, PA 16133

Re: Permit approval for CUNNINGHAM 8
47-017-04540-00-00

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: CUNNINGHAM 8
Farm Name: HART, DENNIS
U.S. WELL NUMBER: 47-017-04540-00-00
Vertical Plugging
Date Issued: 11/29/2021

Promoting a healthy environment.

12/03/2021

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4701704540P

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.

12/03/2021

WW-4B
Rev. 2/01

1) Date November 9, 2021
2) Operator's
Well No. 8
3) API Well No. 47-017 - 0450

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 1124 ft Watershed Cabin Run
District Central County Doddridge Quadrangle Oxford
- 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 Sam Ward Name Diversified Production, LLC (In-House Rig)
Address P.O. Box 2327 Address 1951 Pleasantview Ridge Road
Buckhannon, WV 26201 Ravenswood, WV 26164
-
- 10) Work Order: The work order for the manner of plugging this well is as follows:

See Attached

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

Work order approved by inspector  Date 11/12/2021

12/03/2021

PLUGGING PROGNOSIS

API# 47-017-04540

West Virginia, Doddridge County

Nearest ER: Stonewall Jackson Memorial Hospital, 230 Hospital Plaza, Weston, WV 26452

Casing Schedule

10 ¾" @ 40' Pulled

7" @ 468'. Cemented w/ 75 sks (Estimated CTS)

4 1/2" csg @ 2,579 Cemented w/ 75 sks (Estimated TOC at 1650')

1 ½" » tbg @ 2,475'

TD @ 2,579'

Completion: Weir 2385'- 2476'**Fresh Water: None Recorded****Salt Water: None Recorded****Gas Shows: Injun (2128'), Squaw (2180'), Weir (2359')****Oil Show: None Recorded****Coal: None Reported****Elevation: 1124'**

1. Notify Inspector Sam Ward @ 304-389-7583, 48 hours prior to commencing operations.
2. Check and record pressures on csg/tbg.
3. Kill well as needed with 6% bentonite gel.
4. TOOH w/ 1 ½" tbg. LD and inspect.
5. TIH w/ tbg to 2,476'. Lead with tbg capacity in gel. Pump 207' C1A cement from 2235' to 2028' (Weir completion and Injun/Squaw shows) Tag TOC and top off as needed.
6. TOOH w/ tbg to 2028'. Pump 6% bentonite gel 2028' to 1124'.
7. TOOH w/ tbg. 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. TIH w/ tbg to 1124'. Pump 100' C1A cement plug from 1124' to 1024'. (Elevation).
9. TOOH w/ tbg to 1024'. Pump 6% bentonite gel from 1024' to 518'
10. TOOH w/tbg to 518'. Pump 100 C1A cement plug from 518' to 418'. (7" csg st)
11. TOOH w/ tbg to 418'. Pump 6% bentonite gel from 418' to 100'.
12. TOOH w/ tbg. Confirm 7" csg is cemented to surface. Otherwise, Free point 7" csg. Cut and TOOH. Set 100' C1A cement plug across csg cut. 50' in/out of cut.
13. TIH w/ tbg to 100'. Pump 100' C1A cement plug 100' to surface (Surface)
14. Erect monument with API#, date plugged, and company name.
15. Reclaim location and road to WV-DEP specifications.

S Dew

11/12/2021

4701704540P

WR-35

DATE: 6-27-00
API#: 47-17-04540

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Reviewed _____

Well Operator's Report of Well Work

Farm name: Dennis Hart Operator Well No.: Cunningham #8'

LOCATION: Elevation: 1134' G.L. Quadrangle: Oxford

District: Central County: Doddridge
Latitude: 5510 Feet South of 80 Deg. 50 Min. _____ Sec.
Longitude 3140 Feet West of 34 Deg. 15 Min. _____ Sec.

Company: Ohio L&M Co. Inc.

4150 Belden Village NW Suite	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 410	10-3/4"	40'	0'	N/A
Canton, OH 44718	7"	468	468	75 Sk.
Agent: <u>Jeff Sawyer</u>				
Inspector: <u>Mike Underwood</u>				
Date Permit Issued: <u>3-16-00</u>	4-1/2"		2579	75 Sk.
Date Well Work Commenced: <u>4-20-00</u>				
Date Well Work Completed: <u>4-25-00</u>				
Verbal Plugging:	1-1/2"		2475	N/A
Date Permission granted on:				
Rotary X Cable Rig				
Total Depth (feet): <u>2625'</u>				
Fresh Water Depth (ft.): <u>None Found</u>				
Salt Water Depth (ft.): <u>Tested to TD</u>				
Is coal being mined in area (N/Y)? <u>No</u>				
Coal Depths (ft.): <u>None</u>				

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Office of Oil & Gas
Permitting
AUG 21 2000
WV Division of
Environmental Protection

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Office of Oil and Gas
NOV 15 2021
WV Department of
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OPEN FLOW DATA

Producing formation Weir Pay zone depth (ft) 2385-2476
Gas: Initial open flow -- MCF/d Oil: Initial open flow -- Bbl/d
Final open flow 5 MCF/d Final open flow 1.0 Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 425 psig (surface pressure) after 24 Hours

Second producing formation Big Injun 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 150 psig (surface pressure) after 40 Hours *Not Productive

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

Signed: Martin L. Miller
By: Martin L. Miller
Date: Aug. 16, 2000

0000 4540

12/03/2021

COPY

WELL: Ohio L & M Co., Inc.#8 Cunningham.

LOCATION: Central District, Doddridge County, West Virginia.

PERMIT NUMBER: Doddridge-4540.

ELEVATION: 1134' Ground 1137'KB.

STATUS: Preparing to complete as an oil and gas producer.

CASING: 7" @ 468'.

TOTAL DEPTH: 2625' Driller 2627' Logger.

CONTRACTOR: Century Drilling Co..

TOOLS: Rotary.

SPUD DATE: 4/20/2000.

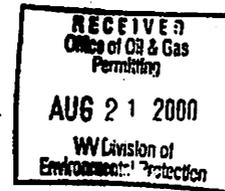
COMPLETED DRILLING: 4/25/2000.

FORMATION AT TOTAL DEPTH: Mississippian shale.

ELECTRICAL SURVEYS: Gamma Ray-Compensated Density-Epithermal Neutron-Caliper-Temperature-Induction by Allegheny Wireline Services, Inc.

SHOWS: Good to very good hydrocarbon fluorescence was noted in the Injun, Squaw and Weir. A more detailed description of the above mentioned fluorescence can be found on the attached Formation Evaluation Log.

FORMATION TOPS:	1st Salt Sand	1616'	- 479
	2nd Salt Sand	1770'	- 633
	3rd Salt Sand	1936'	- 799
	Maxon sandstone	Absent	
	Big Lime (Greenbrier)	2061'	- 924
	Injun sandstone	2128'	- 991
	Squaw sandstone	2180'	- 1043
	Weir sandstone	2359'	- 1222



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Office of Oil and Gas
NOV 15 2021
WV Department of
Environmental Protection

WW-4A
Revised 6-07

1) Date: November 9, 2021
2) Operator's Well Number
8

3) API Well No.: 47 - 017 - 04540

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

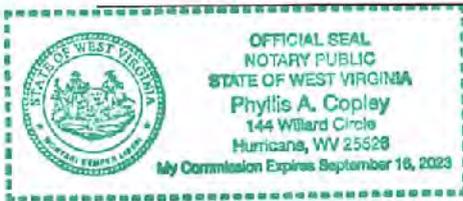
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Judy A. Horton/Pater A. Gregori</u>	Name <u>None</u>
Address <u>3893 Elliot Road</u>	Address _____
<u>West Union, WV 26456</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>Paul J. Cunningham</u>
_____	Address <u>P.O. Box 182</u>
(c) Name _____	<u>West Covina, CA 91793</u>
Address _____	Name <u>Robin Joanne LeMesurier</u>
_____	Address <u>1007 Legacy Walk</u>
6) Inspector <u>Sam Ward</u>	(c) Coal Lessee with Declaration
Address <u>P.O. Box 2327</u>	Name <u>No Declaration</u>
<u>Buckhannon, WV 26201</u>	Address _____
Telephone <u>304-389-7583</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

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Office of Oil and Gas
NOV 15 2021
WV Department of
Environmental Protection

Subscribed and sworn before me this 12th day of November, 2021
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.

47-017-04540P
Well 8

7020 2450 0001 5225 2362

**U.S. Postal Service™
CERTIFIED MAIL® RECEIPT**
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For delivery information, visit our website at www.usps.com®.

West Covina, CA 91795

OFFICIAL USE

Certified Mail Fee	\$3.75	\$3.05
Extra Services & Fees (check box, add fee)		\$0.00
<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	\$	
Postage	\$1.56	
Total Postage and Fees	\$8.36	

Postmark Here
11/12/2021

Sent To: Paul Cunningham
Street and Apt. No., or PO Box No.: PO Bx 182
City, State, ZIP+4®: West Covina CA 91793

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7020 2450 0001 5225 2379

**U.S. Postal Service™
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For delivery information, visit our website at www.usps.com®.

Woodstock, GA 30189

OFFICIAL USE

Certified Mail Fee	\$3.75	\$3.05
Extra Services & Fees (check box, add fee)		\$0.00
<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	\$	
Postage	\$1.56	
Total Postage and Fees	\$8.36	

Postmark Here
11/12/2021

Sent To: Robin J. Lemesurier
Street and Apt. No., or PO Box No.: 1007 Legacy Walk
City, State, ZIP+4®: Woodstock, GA 30189

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7020 2450 0001 5225 2355

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West Union, WV 26456

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Certified Mail Fee	\$3.75	\$3.05
Extra Services & Fees (check box, add fee)		\$0.00
<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	\$	
Postage	\$1.56	
Total Postage and Fees	\$8.36	

Postmark Here
11/12/2021

Sent To: Judy Horton / Peter Gregor
Street and Apt. No., or PO Box No.: 3698 Elliot Road
City, State, ZIP+4®: West Union WV 26456

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

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12/03/2021

WW-9
(5/16)

API Number 47 - 017 - 04540
Operator's Well No. 8

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) Cabin Run Quadrangle Oxford

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.?

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection (UIC Permit Number 4709300103)
- 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 12th day of November, 2021

Phyllis A. Copley Notary Public

My commission expires September 16, 2023

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Office of Oil and Gas
NOV 15 2021
WV Department of
Environmental Protection

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: DDG Inspector Date: 11/12/2021

Field Reviewed? () Yes (X) No



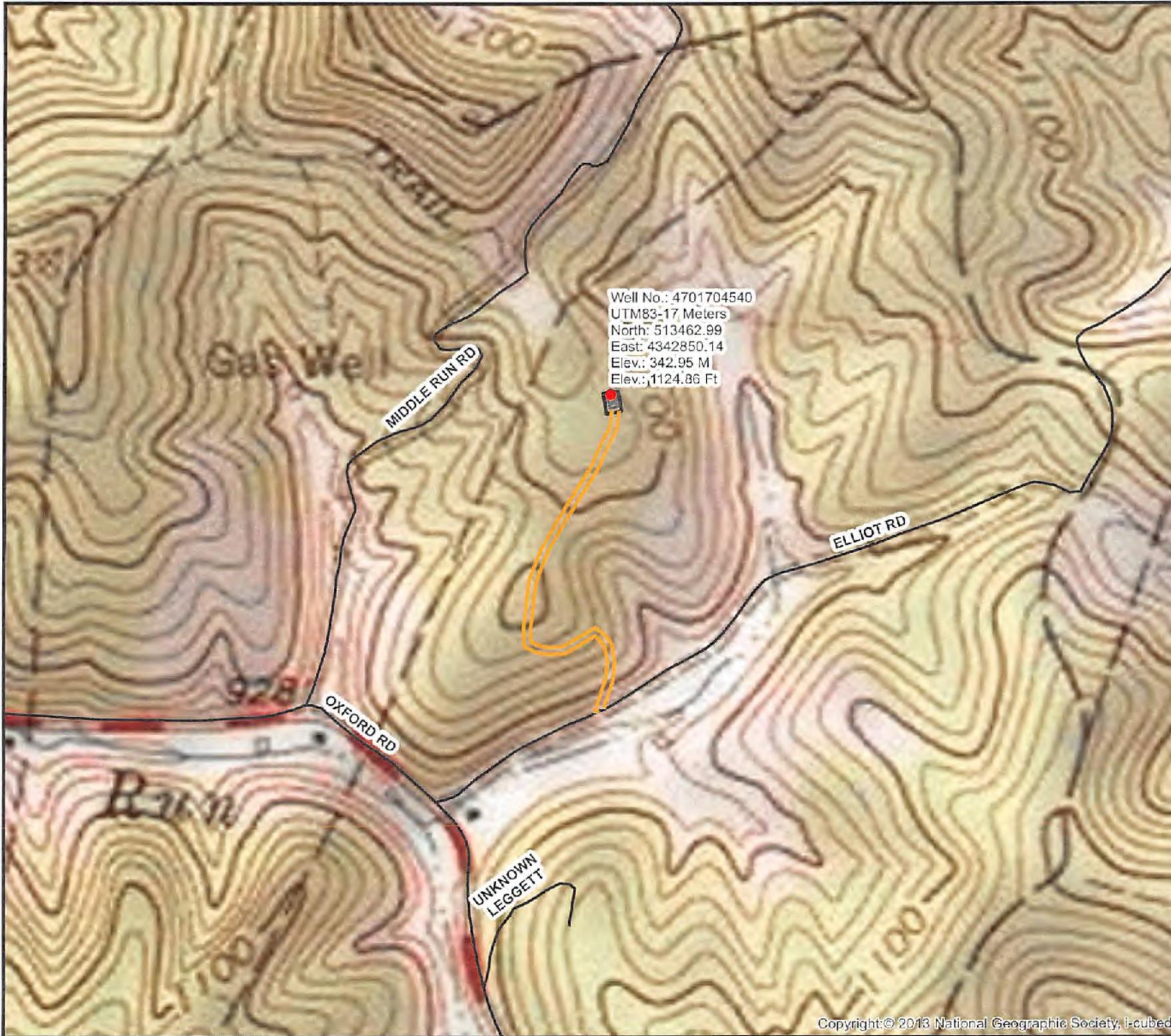
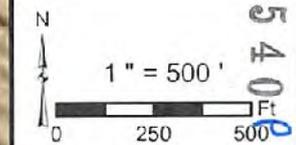
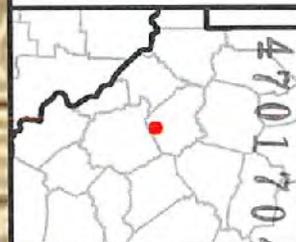
Diversified Gas & Oil
Corporation
100 Diversified Way
Pikeville KY, 41051

47-017-04540

Plugging Map

Legend

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



4701704540P

WW-7
8-30-06



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

API: 47-017-04540 WELL NO.: 8

FARM NAME: Cunningham

RESPONSIBLE PARTY NAME: Diversified Production LLC

COUNTY: Doddridge DISTRICT: Central

QUADRANGLE: Oxford

SURFACE OWNER: Judy A. Horton/ Peter A. Gregori

ROYALTY OWNER: Diversified Production, LLC

UTM GPS NORTHING: 4,342,850

UTM GPS EASTING: 513,462 GPS ELEVATION: 1124'

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

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.

Director Production 11/5/2021
Signature Title Date

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Office of Oil and Gas
NOV 15 2021
WV Department of
Environmental Protection

12/03/2021



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

Plugging Well Work Permit (API: 47-017-04540)

1 message

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

Mon, Nov 29, 2021 at 12:48 PM

To: "Mast, Jeff" <jmast@dgoc.com>, Douglas Newlon <douglas.c.newlon@wv.gov>, David Sponaugle <dsponaug@assessor.state.wv.us>

I have attached a copy of the newly issued well [permit](#) number "**CUNNINGHAM 8**". This will serve as your copy.

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

2 attachments

 **IR-8 Blank.pdf**
183K

 **47-017-04540 - Copy.pdf**
846K

12/03/2021