



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, May 24, 2021

WELL WORK PLUGGING PERMIT
Vertical Plugging

DIVERSIFIED PRODUCTION LLC
101 MCQUISTON DRIVE

JACKSON CENTER, PA 16133

Re: Permit approval for 824403
47-045-01380-00-00

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: 824403
Farm Name: CONLEY, HAZEL, ETAL
U.S. WELL NUMBER: 47-045-01380-00-00
Vertical Plugging
Date Issued: 5/24/2021

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 April 15, 2021
2) Operator's Well No. 824403
3) API Well No. 47-045 -- 01380

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 1,204.6 ft Watershed Brushy Fork of Crawley Creek
District Guyan County Logan Quadrangle Chapmanville

6) Well Operator Diversified Production LLC 7) Designated Agent Jeff Mast
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 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
Operator to cover all Perfs, Oil & Gas bearing
Formation, Elventon, Coal, Water Formation with Cut Display
6% Cel, Pull all CSG Not Cement IN

RECEIVED
Office of Oil and Gas

APR 20 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 4/16/21

PLUGGING PROGNOSIS

API # 47-045-01380

Logan County, West Virginia

37.9220043384433, -82.0752164932344

Nearest Emergency Room: Logan Regional Medical Center: 20 Hospital Drive, Logan, WV 25601**Casing Schedule**

13 3/8" csg @ 20'

9 5/8" csg @ 351' CTS w/159 **CFT**7" csg @ 1626' CTS w/324 **CFT**4 1/2" csg @ 3839' w/ 304 **CFT** TOC @ 1112' CBL

2 3/8" tbg @ 3630'

TD @ 3890'

Completion: Frac

Devonian Shale: 49H/3149'-3660'

Fresh Water: 99'**Salt Water:** 1190'**Gas Shows:** 3149'-3660'**Oil Shows:** None Reported**Coal:** 93'**Elevation:** 1202'

1. Prepare road and location.
2. MIRU service rig and support equipment.
3. Record PSI on csg/tbg.
4. RIH w/ wireline. Check TD.
5. TOOH LD tbg. Inspect.
6. TIH w/ tbg to 3660'. Load well as needed w/ 6% bentonite gel. Pump 611' C1A cement plug from **3660'-3049' (Shale Gas Show)**. Check TOC. Top off as needed.
7. TOOH w/ tbg to **3049'**. Pump 6% bentonite gel from **3049'-1240'**
8. TOOH w/ tbg to 1240'. Pump 138' C1A cement plug from **1240'-1102' (Salt water and elevation)**.
9. TOOH w/ tbg to 1102'. Pump 6% bentonite gel from 1102'-150'. TOOH LD tbg.
10. Free Point 4 1/2" csg. Cut and TOOH. Pump 100' C1A cement plug across cut. 50' in/out of cut. Do not omit any plugs listed below. Perforate as needed.
11. TIH w/ tbg to 150'. Pump 150' C1A cement plug from **150'-0' (Freshwater, Coal, and Surface)**. TOOH LD tbg.
12. Erect monument with API#, date plugged, and company name.
13. Reclaim location and road to WV-DEP specifications.

RECEIVED
Office of Oil and Gas

APR 20 2021

WV Department of
Environmental Protection

See WW-4B



4/19/21

05/28/2021

WELL # 824403

PERFORATIONS:

Stage 1, Perforations: 49 holes from 3,149' to 3,660'
 Stage 2, Perforations: holes from to
 Stage 3 Perforations: holes from to
 Stage 4, Perforations: holes from to

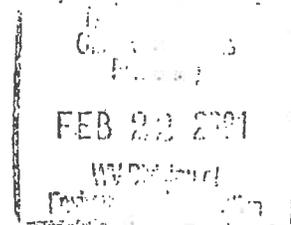
FRACTURING:

1ST STAGE: N2 FRAC ON DEVONIAN SHALE

Perforations from 3,149 - 3,660', Acid gal. HCL,
 Breakdown @ 2,010 PSI, Avg. Rate 52,595 SCFM OR BPM
 ATP 2,532 PSI, Total H₂O Bbl., Total sand #
 Total N₂ 1,500,000 Scf. I.S.I.P. 2,780 15 min. 725

2nd STAGE:

Perforations from - , Acid gal. HCL,
 Breakdown @ PSI, Avg. Rate SCFM OR BPM
 ATP PSI, Total H₂O Bbl., Total sand #
 Total N₂ Scf. I.S.I.P. 15 min.



3rd STAGE:

Perforations from - , Acid gal. HCL,
 Breakdown @ PSI, Avg. Rate SCFM OR BPM
 ATP PSI, Total H₂O Bbl., Total sand #
 Total N₂ Scf. I.S.I.P. 15 min.

4th STAGE:

Perforations from - , Acid gal. HCL,
 Breakdown @ PSI, Avg. Rate SCFM OR BPM
 ATP PSI, Total H₂O Bbl., Total sand #
 Total N₂ Scf. I.S.I.P. 15 min.

RECEIVED
 Office of Oil and Gas

APR 20 2021

WV Department of
 Environmental Protection

Additional Comments:

4704501380P

WELL DATA SHEET

date 1/23/2001
well name COLUMBIA FEE
operator ONK

WELL NO. 824403 PERMIT NO. 1380
COUNTY LOGAN STATE WV GEOLOGIST Jim Templin
TWP BOYAN

FEB 22 2001
WV Division of
Environmental Protection

FORMATION TOPS & BOTTOMS

SACI SAND	679-1142	Anglin 3786-410.	
MAXON	1321-1392		
LITTLE LIME	1526-1566		
BIG LIME	1866-1800		
BIG TRUNK	1800-1836		
SOFT	234-2320		
U. Devonian	2320-3338		
L. Huron	3338-3660		
BOYA	3660-3784		

LOGS RUN

SLICR

RECEIVED
Office of Oil and Gas
APR 20 2021
WV Department of
Environmental Protection

05/28/2021

106 1380

WW-4A
Revised 6-07

1) Date: April 15, 2021
2) Operator's Well Number
824403

3) API Well No.: 47 - 045 - 01380

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

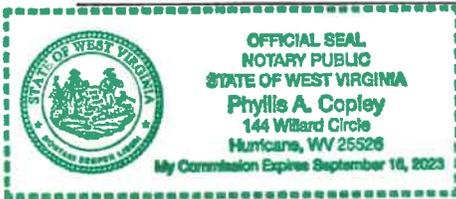
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>Curly and Wilma Belcher</u>	Name _____
Address <u>P.O. Box 1545</u>	Address _____
<u>Chapmanville, WV 25508</u>	
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>Southern Regional Development</u>
	Address <u>3 Commercial Drive</u>
	<u>Norfolk, VA 23510</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>Boone West Development</u>
<u>Clendenin, WV 25045</u>	Address <u>P.O. Box 1867</u>
Telephone <u>304-549-5915</u>	<u>Charleston, WV 25327</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 P.O. Box 6070
Charleston, WV 25362
 Telephone 304-543-6988

RECEIVED
Office of Oil and Gas

Subscribed and sworn before me this 15th day of April, 2021
Phyllis A. Copley Notary Public
 My Commission Expires September 16, 2023

APR 20 2021

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 depprivacyofficer@wv.gov.

05/28/2021

4704501380P

824403
47-047-01380

7017 1450 0002 3854 1143

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

For delivery information, visit our website at www.usps.com®.

Charleston, WV 25327

OFFICIAL USE

Certified Mail Fee	\$3.60	0523 01
Extra Services & Fees (check box, add fee if appropriate)	\$2.85	
<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	Postmark Here
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	
Postage	\$1.60	04/15/2021 824403
Total Postage and Fees	\$8.05	

Sent To: Boone West Dev
Street and Apt. No., or PO Box No.: P.O. Box 1867
City, State, ZIP+4®: Charleston, WV 25327

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

7017 1450 0002 3854 1136

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

For delivery information, visit our website at www.usps.com®.

Chapmanville, WV 25508

OFFICIAL USE

Certified Mail Fee	\$3.60	0523 01
Extra Services & Fees (check box, add fee if appropriate)	\$2.85	
<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	Postmark Here
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	
Postage	\$1.40	04/15/2021 824403
Total Postage and Fees	\$7.85	

Sent To: Curly + Wilma Belcher
Street and Apt. No., or PO Box No.: PO Box 1545
City, State, ZIP+4®: Chapmanville WV 25508

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

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

For delivery information, visit our website at www.usps.com®.

Norfolk, VA 23510

OFFICIAL USE

Certified Mail Fee	\$3.60	0523 01
Extra Services & Fees (check box, add fee if appropriate)	\$2.85	
<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	Postmark Here
<input type="checkbox"/> Adult Signature Restricted Delivery	\$0.00	
Postage	\$1.60	04/15/2021 824403
Total Postage and Fees	\$8.05	

Sent To: Southern Regional Development
Street and Apt. No., or PO Box No.: 3 Commercial Drive
City, State, ZIP+4®: Norfolk, VA 23510

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

7019 1640 0000 1003 3066

RECEIVED
Office of Oil and Gas

APR 20 2021

WV Department of
Environmental Protection

05/28/2021

WW-9
(5/16)

API Number 47 - 045 - 01380
Operator's Well No. 824403

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) Brushy Fork of Crawley Creek Quadrangle Chapmanville

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 _____)
- Reuse (at API Number _____)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain All fluid recovered will be hauled to a Diversified 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 _____

Company Official (Typed Name) Jeff Mast

Company Official Title Director Production



Subscribed and sworn before me this 15th day of April, 2021

Phyllis A. Copley Notary Public

My commission expires September 16, 2023

RECEIVED
Office of Oil and Gas

APR 20 2021

WV Department of
Environmental Protection
05/28/2021

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: [Signature]

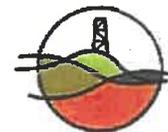
Date: 4-19-21

Field Reviewed? () Yes () No

RECEIVED Office of Oil and Gas

APR 20 2021

WV Department of Environmental Protection



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

47-045-01380

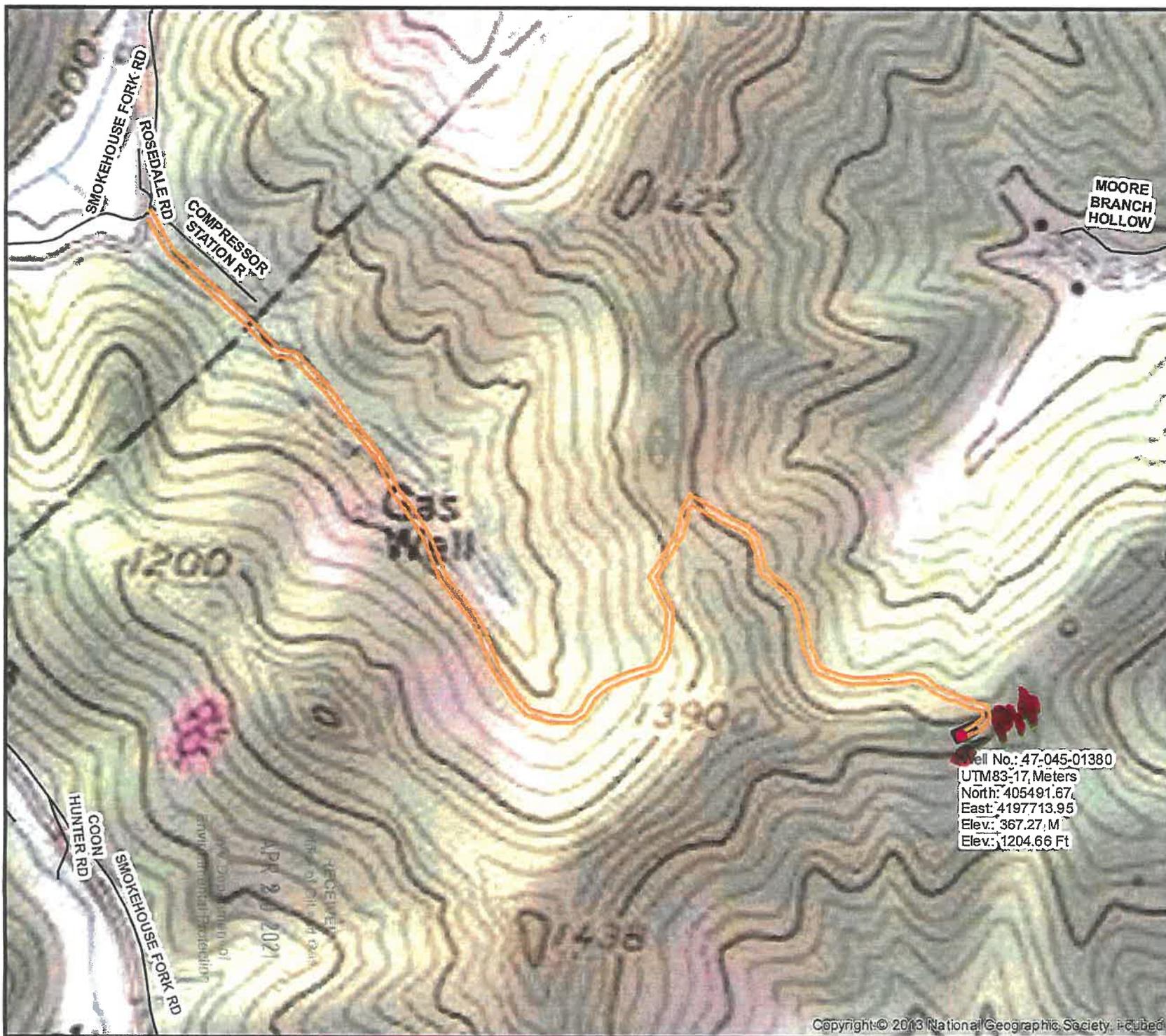
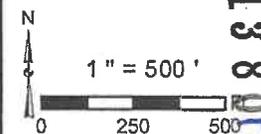
Plugging Map

Legend

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

*Pit
20' L x 10' W x 8' deep
285bbl*

Well No.: 47-045-01380
UTM83-17, Meters
North: 405491.67
East: 4197713.95
Elev.: 367.27 M
Elev.: 1204.66 Ft



WW-7
8-30-06



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

API: 47-045-01380 WELL NO.: 824403
 FARM NAME: Conley Hazel Etal
 RESPONSIBLE PARTY NAME: Diversified Production LLC
 COUNTY: Logan DISTRICT: Guyan
 QUADRANGLE: Chapmanville
 SURFACE OWNER: Curly & Wilma Belcher
 ROYALTY OWNER: Diversified Production LLC
 UTM GPS NORTHING: 4,197,713.95
 UTM GPS EASTING: 405,491.67 GPS ELEVATION: 1,204.6'

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 X

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.

Signature

Director Production

Title

04/14/2021

Date

RECEIVED
Office of Oil and Gas

APR 20 2021

WV Department of
Environmental Protection

05/28/2021