



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

Tuesday, February 15, 2022
WELL WORK PLUGGING PERMIT
Vertical Plugging

DIVERSIFIED PRODUCTION LLC
101 MCQUISTON DRIVE
JACKSON CENTER, PA 16133

Re: Permit approval for 4-S-160
47-039-02507-00-00

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: 4-S-160
Farm Name: KANAWHA & HOCKING C & H
U.S. WELL NUMBER: 47-039-02507-00-00
Vertical Plugging
Date Issued: 2/15/2022

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4703902507P

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.

02/18/2022

1) Date January 26, 2022
2) Operator's
Well No. 4-S-160
3) API Well No. 47 039 02507

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 1223.21 feet Watershed 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

See Prog Sheet

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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 2-1-22

02/18/2022

Plugging Prognosis

API #: 4703902507

West Virginia, Kanawha Co.

Lat/Long: 38.28668903, -81.43981544

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

Casing Schedule:

10" @ 22'

8-5/8" @ 565' (cemented to 219' w/ 100 sxs cmt)

6-5/8" used in drilling but none left in well

4-1/2" @ 2,230' (cemented to 1,771' w/ 33 sxs cmt)

2" @ 2,179'

TD @ 2,230'

THIS SHOULD HAVE CIRCULATED TO SURFACE

Completion: Perforated: 1,906'-1,928'; 2,174'-2,189'

Fresh Water: 55'

Salt Water: 1,255'

Gas Shows: 1,901'-1,911'; 2,165'-2,172'; 2,178'-2,188'

Oil Shows: None listed

Coal: 532'-534'

Elevation: 1,205'

*Operator to Core with Cement
All Oil & Gas Formation including SALT, Elevations,
Coal & Freshwater*

1. Notify Inspector Terry Urban @ 304-549-5915, 48 hrs prior to commencing operations.
2. Check and record pressures on csg/tbg.
3. Remove tbg and lay down
4. Check TD w/ wireline.
5. Run in to depth @ 2,189'. Kill well as needed with 6% bentonite gel and fill rat hole. Pump at least 10 bbls gel. Pump **115' C1A** cement plug from **2,189' to 1,801'** (Gas shows/ Perforations plug) Tag TOC. Top off as needed.
6. TOOH w/ tbg to 1,801'. Pump 6% bentonite gel from 1,801' to 1,305'.
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 1,305'. Pump 200' C1A cement plug from 1,305' to 1,105' (saltwater and elevation plug)
9. TOOH w/ tbg to 1,105'. Pump 6% bentonite gel from 1,105' to 615'.
10. TOOH w/ tbg to 615'. Pump 133' C1A cement plug from 615' to 482' (8-5/8" csg show and coal show plug)
11. TOOH w/ tbg to 482'. Pump 6% bentonite gel from 482' to 155'.
12. TOOH w/ tbg to 155'. Pump 155' C1A cement plug from 155' to Surface (freshwater and surface plug)
13. Reclaim location and well road to WV DEP specifications and erect P&A well monument.

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02/18/2022



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

Rotary
Spudder
Cable Tools
Storage E. No. 1

38-30
1-34

Quadrangle Clendenin
Permit No. Kan - 2507

WELL RECORD

Oil or Gas Well Gas
(KIND)

Company Spartan Gas Company
Address P. O. Box 766, Charleston, W. Va.
Farm Kanawha & Hocking Coal & Coke Acres 14, 128
Location (waters) Witchers Creek
Well No. 4-S-160 Elev. 1204.69
District Cabin Creek County Kanawha
The surface of tract is owned in fee by Kanawha & Hocking Coal & Coke Co. Address Shrewsbury, W. Va.
Mineral rights are owned by Same Address _____
Drilling commenced 4/14/71
Drilling completed 5/24/71
Date Shot _____ From _____ To _____
With _____
Open Flow 42 /10ths Water in 1" Inch
_____ /10ths Merc. in _____ Inch
Volume 68 M Cu. Ft.
Rock Pressure 195 lbs. 29 hrs.
Oil _____ bbls., 1st 24 hrs.
WELL ACIDIZED (DETAILS) _____
WELL FRACTURED (DETAILS) Weir - 375 Bbls., 17,000 # Sand, 500 Gal. Acid
Injun - 582 Bbls., 24,000 # Sand, 500 Gal. Acid
RESULT AFTER TREATMENT (Initial open flow or bbls.) 434 M 434,000
ROCK PRESSURE AFTER TREATMENT 265# HOURS 16 hours
Fresh Water 55' Feet. Salt Water 1255' Feet.
Producing Sand Injun & Weir Depth _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			
10	22	22	Size of
8 1/4	565	565	
6 1/2	1747	None	Depth set
5 3/16			
4 1/2	2230	2230	
3			Perf. top <u>1906</u>
2		2179	Perf. bottom <u>1928</u>
Liners Used			Perf. top <u>2174</u>
			Perf. bottom <u>2189</u>

Attach copy of cementing record.
CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____
Amount of cement used (bags) See Below
Name of Service Co. _____
COAL WAS ENCOUNTERED AT 532 FEET 24 INCHES
FEET _____ INCHES FEET _____ INCHES
FEET _____ INCHES FEET _____ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Clay			0	10			
Sand			10	55			
Slate			55	185			
Sand			185	215			
Slate			215	265			
Sand			265	300			
Slate			300	503			
Sand			503	532			
Coal ✓			532	534			
Sand			534	602			
Slate, Sandy			602	635			
Sand			635	657			
Slate, Sand			657	752			
Sand			752	860			
Slate			860	890			
Sand			890	921			
Slate			921	942			
Sand			942	1066			
Shale			1066	1110			
Sand			1110	1335			
Slate			1335	1363			
Red Rock			1363	1370			
Slate			1370	1421			
Red Rock			1421	1444			
Slate			1444	1470			
Sand			1470	1632			
Slate			1632	1638			
Sand, Broken			1638	1660			
Slate			1660	1670			

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Elevate Salt H₂O

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Formation	Color	Hard or Soft	Top \downarrow	Bottom	Oil, Gas or Water	Depth Found	Remarks
Lime			1671	1710	- - - - - - - - - - -	Little lime Big lime Bygone	} Cmt
Slate			1710	1720			
Lime			1720	1730			
Slate			1730	1739			
Big Lime			1739	1914			
Sand			1914	1942			
Broken Sand			1942	1962			
Slate & Shells			1962	2021			
Sand			2021	2030			
Slate & Shells			2030	2158			
Sand			2158	2192			
Total Depth				2227			
					Gas:	1901-11	6/10 W 1"
						2165-72	20/10 W 1"
						2178-88	52/10 W 1"
Cement Record: 4/21/71 - Cement 8 5/8" Casing with 100 Sacks. Well Service, Inc. 5/24/71 - Cement 4 1/2" Casing with 33 Sacks RFG cement. Circulate 700# Gel. ahead. Dowell Division							

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Date June 18, 1971

APPROVED SPARTAN GAS COMPANY, Owner

By William T. J. J. J.
(Title)

02/18/2022

WW-4A
Revised 6-07

1) Date: January 26, 2022
2) Operator's Well Number
4-S-160
3) API Well No.: 47 - 039 - 02507

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

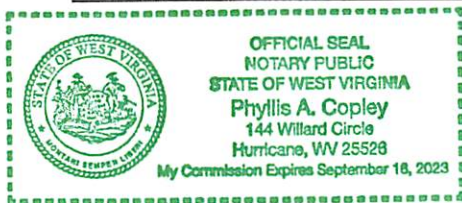
4) Surface Owner(s) to be served:	5) (a) Coal Operator
(a) Name <u>ACIN, LLC</u>	Name <u>None</u>
Address <u>5260 Irwin Road</u>	Address _____
<u>Huntington, WV 25705</u>	_____
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>ACIN, LLC C/O NRP (Operating) LLC</u>
_____	Address <u>5260 Irwin Road</u>
_____	<u>Huntington, WV 25705</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>Investment Management Group, LLC</u>
<u>Clendenin, WV 25045</u>	Address <u>4010 MacCorkle Avenue, SE</u>
Telephone <u>304-549-5915</u>	<u>Charleston, WV 25304</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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WV Department of
Environmental Protection

Subscribed and sworn before me this 28th day of January 2022
Phyllis 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.

02/18/2022

4-5-160
47-039-02507P

7020 3160 0000 1694 9985

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Certified Mail Fee	\$3.75	0523
Extra Services & Fees (check box, add fee as appropriate)	\$3.05	03
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00	Postmark Here
<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	\$2.16	01/28/2022
Total	\$8.96	
Sent To	3-S-158, 4-S-160, 1-S-155	
Street	Investment Management Group	
City, St	4010 MacCorkle Avenue SE	
PS F	Charleston, WV 25304	

7020 3160 0000 1694 9992

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Certified Mail Fee	\$3.75	0523
Extra Services & Fees (check box, add fee as appropriate)	\$3.05	03
<input type="checkbox"/> Return Receipt (hardcopy)	\$0.00	Postmark Here
<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	\$2.16	01/28/2022
Total	\$8.96	
Sent To	3-S-158, 4-S-160, 1-S-155	
Street	ACIN LLC	
City, St	C/O NRP (Operating) LLC	
PS F	5260 Irwin Road	
	Huntington, WV 25705	

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02/18/2022

4703902507P

WW-9
(5/16)

API Number 47 - 039 - 02507
Operator's Well No. 4-S-160

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) 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 HW

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 30th day of January, 2022

[Signature] Notary Public

My commission expires September 16, 2023

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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.

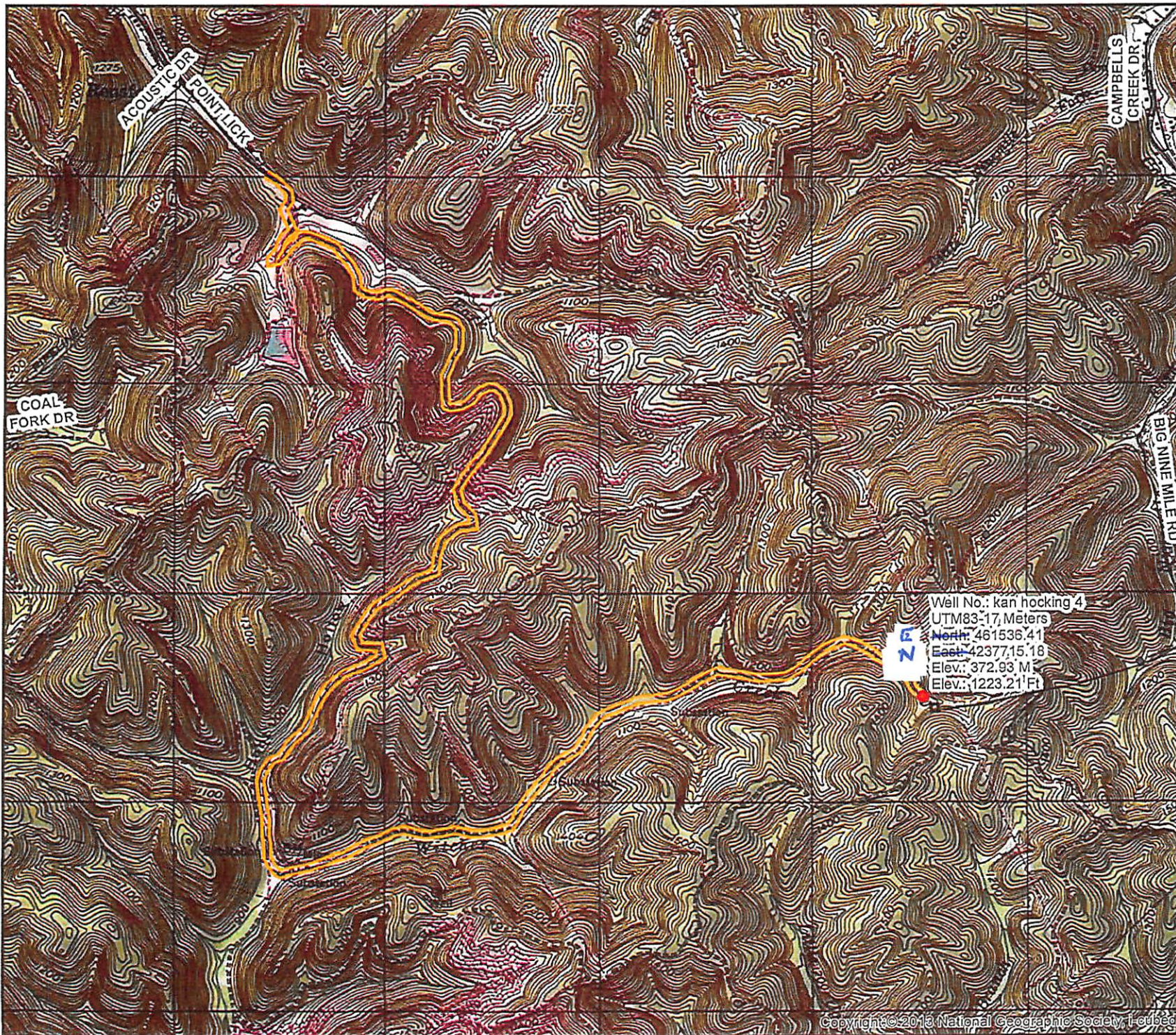
Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]
Comments:

Title: Inspector [Signature] Date: 2-1-22

Field Reviewed? (X) Yes () No

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WV Department of Environmental Protection



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

47-039-02507

Plugging Map

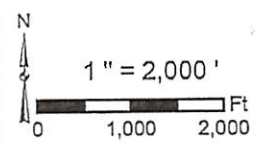
Legend

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

Well No.: kan hocking 4
 UTM83-17, Meters
 North: 461536.41
 East: 4237715.18
 Elev.: 372.93 M
 Elev.: 1223.21 Ft

N
E

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



4703902507P



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

Plugging Vertical Well Work Permit API: 47-039-02471 & 47-039-02507)

1 message

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

Tue, Feb 15, 2022 at 8:45 AM

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

Terry,

I have printed off IR-8s for you.

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

47-039-02471 - 1-S-1 55
47-039-02507 - 4-S-160

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

3 attachments

IR-8 Blank.pdf
216K

47-039-02471 - Copy.pdf
3230K

47-039-02507 - Copy.pdf
3569K

02/18/2022