



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, January 29, 2024
WELL WORK PLUGGING PERMIT
Vertical Plugging

ANTERO RESOURCES CORPORATION
1615 WYNKOOP STREET

DENVER, CO 80202

Re: Permit approval for 1
47-033-00464-00-00

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: 1
Farm Name: YOCHYM BROS. COAL CO.
U.S. WELL NUMBER: 47-033-00464-00-00
Vertical Plugging
Date Issued: 1/29/2024

Promoting a healthy environment.

02/02/2024

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. 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.

1) Date January 12, 2024
2) Operator's
Well No. Yochym Bros 1
3) API Well No. 47-033 - 00464

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 ___ or Underground storage ___) Deep ___/ ShallowX

5) Location: Elevation 1330' Watershed Middle West Fork Creek
District Elk County Harrison Quadrangle Berlin

6) Well Operator Antero Resources Corporation 7) Designated Agent Kevin Ellis
Address 1615 Wynkoop Street Address 535 White Oaks Blvd
Denver, CO 80202 Bridgeport, WV 26330

8) Oil and Gas Inspector to be notified 9) Plugging Contractor
Name Ken Greynolds Name N/A - Antero will plug well
Address 601 57th Street SE Address _____
Charleston, WV 25304

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

***Please See Attached Work Order**

RECEIVED
Office Of Oil and Gas

JAN 19 2024

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 Ky. Williams Date 1/22/24

DEPARTMENT OF MINES
OIL AND GAS DIVISION 3

WELL RECORD

Quadrangle Wenton S-E

Permit No. HARR-464 O.S.W. 7405

Oil or Gas Well Gas

Company St. Clair Oil Company
Address 219 E. Main St., St. Clairsville, O. 43940
Farm Yochym Bros. Coal Co. Acres 73.76

Location (waters) Rooting Creek
Well No. One Elev. 1357
District Elk County Harrison

The surface of tract is owned in fee by Yochym Bros. Coal
Box 946 Address Clarksburg, W. Va. 26301

Mineral rights are owned by Same as above
Address _____

Drilling commenced December 9, 1967

Drilling completed April 11, 1968

Date Shot _____ From _____ To _____

With _____

Open Flow 34 /10ths Water in One Inch
_____ /10ths Merc. in _____ Inch

Volume 60,000 Nat. _____ Cu. Ft.

Rock Pressure _____ lbs. _____ hrs.

Oil No _____ bbls., 1st 24 hrs.

WELL ACIDIZED No

Casing and Tubing	Used in Drilling	Left in Well	Packers
			None
Size			Kind of Packer
16	18		None
13			Size of
10	391		
8 1/2	1651		Depth set
6 1/2	2304	3760	
5 3/16			Perf. top <u>4505-1/2</u>
X 4-1/2		4580	Perf. bottom <u>4506</u>
2			Perf. top _____
Liners Used			Perf. bottom _____

CASING CEMENTED 4-1/2" SIZE 600 No. Ft. 4/12/68 Date
7" 470 4/29/68

COAL WAS ENCOUNTERED AT No FEET INCHES
_____ FEET INCHES FEET INCHES
_____ FEET INCHES FEET INCHES

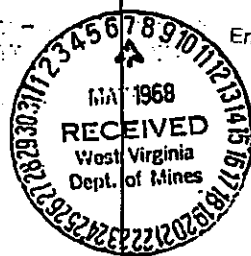
WELL FRACTURED Yes-4/18/68-Incompleted Job-4-1/2" Casing Burst at 1609 ft. 5/3/68-44,000 Gal.
Water-52,000 lbs. 20-40 Sand-300 lbs. Glass Beads & 3000 lbs. 10-20 Sand

RESULT AFTER TREATMENT 2,768,000

ROCK PRESSURE AFTER TREATMENT 1850

Fresh Water 35 Feet Salt Water 1798 Feet 2025

Formation	Color	Hard or Soft	Top	Bottom	Oil Gas or Water	Depth	Remarks
Clay			0	20			
Slate			20	113	Water	35	Hole Full
Red Rock			113	125			
Slate			125	134			
Red Rock			134	150			
Slate			150	204			
Red Rock			204	275			
Lime			275	295			
Sand			285	315			
Slate			315	380			
Red Rock			380	445			
Lime			445	465			
Red Rock			465	485			
Lime			485	563			
Slate			563	614			
Lime			614	628			
Sand			628	652			
Slate			652	788			
Sand			788	800			
Slate			800	829			
Sand			829	891			
Slate			891	950			
Sand			950	970			
Slate			970	1002			
Sand			1002	1080			
Slate			1080	1102			
Sand			1102	1145			
Lime			1145	1232			
Sand			1232	1320			
Lime			1320	1345			



RECEIVED
Office Of Oil and Gas
JAN 19 2024
W.V. Department of
Environmental Protection

(over)

02/02/2024

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Red Rock			1345	1395			
Lime			1395	1405			
Red Rock			1405	1452			
Lime			1452	1575			
Slate			1575	1600			
Little Lime			1600	1617			
Slate			1617	1670			
Big Lime			1670	1746			
Big Injum			1746	1865	Water	1798	6 Bbl. Hr.
Slate			1865	2000			
Lime			2000	2028	Oil	2010	Show
Sand			2028	2103	Oil-Gas-Water	2025	H.F. Water
Slate			2103	2109			
Lime			2109	2125			
Sand			2125	2208			
Slate			2208	2213			
Sand			2213	2248			
Lime	Pink		2248	2250			
Lime			2250	2275			
Red Rock			2275	2305	Drill Gas at	4506-08	
Slate			2305	2310			
Lime			2310	2327			
Sand			2327	2336	34-10/10 One in Water	40,000-4503-4508	
Red Rock			2336	2350			
Lime	Red		2350	2372	27 One in Water	54,000	- 4511
Red Rock			2372	2420	24 One in Water	51,000	- 4516
Lime	Red		2420	2475	16 One in Water	42,000	- 4523
Sand			2475	2510	9 One in Water	31,000	- 4582
Slate			2510	2542			
Sand			2542	2565			
Slate			2565	2575			
Sand			2575	2615			
Slate			2615	2635			
Sand			2635	2660	Oil	2645	Show
Slate			2660	2750			
Lime			2750	3965	Gas	3750-55	Show
Slate			3965	4285			
Sand			4285	4345	Oil	4290	Show
Slate			4345	4501			
Benson			4501	4516	Gas	4506-08	60,000
Slate			4516	4582			
			4582 T.D.	- Drill			
			4583 Log	T.D.			

RECEIVED
Office Of Oil and Gas

JAN 19 2024

WV Department of
Environmental Protection

Date May 6 19 68

APPROVED ST. CLAIR OIL COMPANY, Owner

By Harry J. Iles (Title) President

02/02/2024

Yochym Bros 1
Harrison County, WV
API #47-033-00464



Antero Resources
1615 Wynkoop St.
Denver, CO 80202
Office: 303.357.7310
Fax: 303.357.7315

Objective: Plug and Abandon from 4,583' TD

Well Design:

- 7" Intermediate Casing @ 1,740' – Cemented to 1,270'
- 4-1/2" Production Casing @ 4,580' – Est. TOC 3,980'
- Open Hole to 4,583'
- Currently 1 1/2" tubing to 4,580'
- Perforations at 4,505'-4,506'

Oil and Gas Zones:

1. Salt water/Fresh Water interface – 1,357'
2. Big Injun- 1,746'-1,865'
3. Lime/Sand – 2,010'-2,025'
4. Sand – 2,645'
5. Lime – 3,750'-3,755'
6. Sand – 4,290' – behind production casing cement
7. Benson- 4,501'-4,516'

Procedure:

1. Check and record casing surface pressures into Wellview. Verify no pressure behind 4-1/2". Bleed off pressure and monitor any build-up prior to performing any more work.
2. Notify WV DEP 24 hours prior to commencing work.
3. Move in and rig up flat tank and frac tank (No pits will be utilized).
4. Kill well if necessary after monitoring build-up
5. MIRU Service rig. Pressure test well control equipment. Current load fluid is a mixture of produced water and fluids
6. Unseat production packer, TOOH with production tubing, install JU (Jack up) head. TIH with 2 3/8" EUE work string to TD. Load hole with 6% Gel, if not already loaded.
7. MIRU cement services. Mix and pump a 100' cement plug (4,580'-4,480') (Class A cement + 2% CaCl₂, zero excess, yield = 1.15 ft³/sk, WR = 5.2 gal/sk, minimum 500 psi compressive strength)
 - a. 4 1/2" casing volume = 0.0912 ft³/ft
 - b. 100' plug = 10 ft³ cement, 9 sacks
 - c. Displace with 6% gel to balance plug
 - d. Slowly pull out of cement plug and lay down 200' of 2-3/8" tubing
8. WOC, tag plug, top off if necessary
9. TOOH racking back tubing
10. MIRU wireline services, run free point, cut 4 1/2" casing. Ensure casing is free and RDMO wireline.
11. TOOH while laying down 4 1/2" casing.
12. RIH 2-3/8" work string to 50' past estimated casing cut @ 3,980'

RECEIVED
Office Of Oil and Gas

JAN 19 2024

WV Department of
Environmental Protection

02/02/2024

13. MIRU cement services. Mix and pump a 100' cement plug (4,030'-3,930') (Class A cement + 2% CaCl₂, zero excess, yield = 1.15 ft³/sk, WR = 5.2 gal/sk, minimum 500 psi compressive strength)
 - a. 6 3/4" open hole volume = 0.2485 ft³/ft
 - b. 100' plug = 25 ft³ cement, 22 sacks
 - c. Displace to balance plug with 8.33 ppg fluid
 - d. Slowly pull out of cement plug and lay down 330' of 2-3/8" tubing
 - e. Circulate tubing clear of cement with 8.33ppg fluid
14. MIRU cement services. Mix and pump a 100' cement plug (3,800'-3,700') (Class A cement + 2% CaCl₂, zero excess, yield = 1.15 ft³/sk, WR = 5.2 gal/sk, minimum 500 psi compressive strength)
 - a. 6 3/4" open hole volume = 0.2485 ft³/ft
 - b. 100' plug = 25 ft³ cement, 22 sacks
 - c. Displace to balance plug with 8.33 ppg fluid
 - d. Slowly pull out of cement plug and lay down 1,095' of 2-3/8" tubing
 - e. Circulate tubing clear of cement with 8.33ppg fluid
15. MIRU cement services. Mix and pump a 100' cement plug (2,705'-2,605') (Class A cement + 2% CaCl₂, zero excess, yield = 1.15 ft³/sk, WR = 5.2 gal/sk, minimum 500 psi compressive strength)
 - a. 6 3/4" open hole volume = 0.2485 ft³/ft
 - b. 100' plug = 25 ft³ cement, 22 sacks
 - c. Displace to balance plug with 8.33 ppg fluid
 - d. Slowly pull out of cement plug and lay down 595' of 2-3/8" tubing
 - e. Circulate tubing clear of cement with 8.33ppg fluid
16. MIRU cement services. Mix and pump a 400' cement plug (2,075'-1,675') (Class A cement + 2% CaCl₂, zero excess, yield = 1.15 ft³/sk, WR = 5.2 gal/sk, minimum 500 psi compressive strength)
 - a. 7" casing volume = 0.2331 ft³/ft
 - b. 400' plug = 94 ft³ cement, 82 sacks
 - c. Displace to balance plug with 8.33 ppg fluid
 - d. Slowly pull out of cement plug and lay down 630' of 2-3/8" tubing
 - e. Circulate tubing clear of cement with 8.33ppg fluid
17. MIRU cement services. Mix and pump a 100' cement plug (1,407'-1,307') (Class A cement + 2% CaCl₂, zero excess, yield = 1.15 ft³/sk, WR = 5.2 gal/sk, minimum 500 psi compressive strength)
 - a. 7" casing volume = 0.2331 ft³/ft
 - b. 100' plug = 24 ft³ cement, 21 sacks
 - c. Displace to balance plug with 8.33 ppg fluid
 - d. Slowly pull out of cement plug and lay down 150' of 2-3/8" tubing
 - e. Circulate tubing clear of cement with 8.33ppg fluid
 - f. Wait on cement and tag before pulling out of hole
18. MIRU wireline services, run free point, cut 7" casing. Ensure casing is free and RDMO wireline.
19. MIRU cement services. Mix and pump a 100' cement plug (Free point cut depth) (Class A cement + 2% CaCl₂, zero excess, yield = 1.15 ft³/sk, WR = 5.2 gal/sk, minimum 500 psi compressive strength)
 - a. 8" open hole volume = 0.3491 ft³/ft
 - b. 100' plug = 35 ft³ cement, 31 sacks
 - c. Displace to balance plug with 8.33 ppg fluid
 - d. Slowly pull out of cement plug and lay down 300' of 2-3/8" tubing
 - e. Circulate tubing clear of cement with 8.33ppg fluid
20. TOOH to 300'
21. Mix and pump the final cement plug to fill up open hole from 150' to surface.
 - a. Mix and pump 150' surface cement plug (Class A cement + 2% CaCl₂, zero excess, yield = 1.15 ft³/sk, WR = 5.2 gal/sk, minimum 500 psi compressive strength)
 - a. 8" open hole volume = 0.3491 ft³/ft
 - b. 150' plug = 53 ft³ cement, 46 sacks
 - c. Slowly pull out of cement plug while laying down 150' of 2-3/8" tubing
 - d. Clean up tubing if possible
 - e. Install Monument Marker with API# 47-033-00464

RECEIVED
Office Of Oil and Gas

JAN 19 2024

WV Department of
Environmental Protection

02/02/2024

1) Date: 1/12/2024
2) Operator's Well Number
Yochym Bros 1
3) API Well No.: 47 - 033 - 00464

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>Please See Attached</u>	Name _____
Address <u>John A Gidley Jr</u>	Address _____
<u>745 Coburn Hollow Rd</u>	
(b) Name <u>Lost Green, WV 26385</u>	(b) Coal Owner(s) with Declaration
Address _____	Name _____
	Address _____
(c) Name _____	Name _____
Address _____	Address _____
6) Inspector <u>Ken Greynolds</u>	(c) Coal Lessee with Declaration
Address <u>601 57th Street SE</u>	Name _____
<u>Charleston, WV 25304</u>	Address _____
Telephone <u>304-553-6087</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.

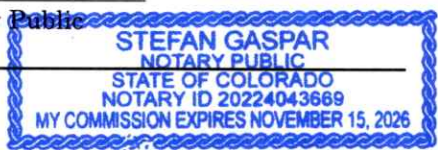
RECEIVED Office Of Oil and Gas JAN 19 2024 WV Department of Environmental Protection	Well Operator <u>Antero Resources Corporation</u>
	By: <u>Jon McEvers</u>
	Its: <u>Senior VP of Operations</u>
	Address <u>1615 Wynkoop Street</u>
	<u>Denver, CO 80202</u>
Telephone <u>303-357-7310</u>	

Subscribed and sworn before me this 12th day of January, 2024

Stefan Gaspar

Notary Public

My Commission Expires November 15, 2026



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.

02/02/2024

Cut on dotted line.

Instructions

1. Each Click-N-Ship® label is unique. Labels are to be used as printed and used only once. DO NOT PHOTO COPY OR ALTER LABEL.
2. Place your label so it does not wrap around the edge of the package.
3. Adhere your label to the package. A self-adhesive label is recommended. If tape or glue is used, DO NOT TAPE OVER BARCODE. Be sure all edges are secure.
4. To mail your package with PC Postage®, you may schedule a Package Pickup online, hand to your letter carrier, take to a Post Office™, or drop in a USPS collection box.
5. Mail your package on the "Ship Date" you selected when creating this label.

RECEIVED
Office Of Oil and Gas

JAN 19 2024

WV Department of
Environmental Protection



Thank you for shipping with the United States Postal Service!
Check the status of your shipment on the USPS Tracking® page at usps.com

Click-N-Ship® Label Record

USPS TRACKING # : 9405 5036 9930 0651 9824 71			
Trans. #:	599116249	Priority Mail® Postage:	\$8.65
Print Date:	01/17/2024	Total:	\$9.65
Ship Date:	01/17/2024		
Expected Delivery Date:	01/20/2024		
From:	JOHN GIANNAULA 1615 WYNKOOP ST DENVER CO 80202-1106		
To:	JOHN A GULLEY JR 745 COBURN HOLLOW RD LOST CREEK WV 26385-7273		
<small>* Retail Pricing Priority Mail rates apply. There is no fee for USPS Tracking® service on Priority Mail service with use of this electronic rate shipping label. Refunds for unused postage paid labels can be requested online 30 days from the print date.</small>			

02/02/2024

SURFACE OWNER WAIVER

Operator's Well
Number

Yochym Bros 1

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW4-A

The well operator named on page WW-4A is applying for a permit from the State to plug and abandon a well. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

**NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.
WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION:**

Chief, Office of Oil and Gas
Department of Environmental Protection
601 57th St. SE
Charleston, WV 25304
(304) 926-0450

Time Limits and methods for filing comments. The law requires these materials to be served on or before the date the operator files his Application. You have **FIVE (5) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

The Chief has the power to deny or condition a well work permit based on comments on the following grounds:

- 1) The proposed well work will constitute a hazard to the safety of persons.
- 2) The soil erosion and sediment control plan is not adequate or effective;
- 3) Damage would occur to publicly owned lands or resources;
- 4) The proposed well work fails to protect fresh water sources or supplies;
- 5) The applicant has committed a substantial violation of a previous permit or a substantial violation of one or more of the rules promulgated under Chapter 22, and has failed to abate or seek review of the violation..."

If you want a copy of the permit as it is issued or a copy of the order denying the permit, you should request a copy from the Chief.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application For A Permit To Plug And Abandon on Forms WW-4A and WW-4B, and a survey plat.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

FOR EXECUTION BY A NATURAL PERSON
ETC.

FOR EXECUTION BY A CORPORATION,
ETC.

RECEIVED
Office Of Oil and Gas
Signature _____ Date _____
Name _____
By _____
Its _____ Date _____

WV Department of
Environmental Protection

Signature

Date
02/02/2024

WW-4B

API No. 47-033-00464

Farm Name _____

Well No. Yochym Bros 1

**INSTRUCTIONS TO COAL OPERATORS
OWNERS AND LESSEE**

The well operator named on the obverse side of WW-4 (B) is about to abandon the well described in the enclosed materials and will commence the work of plugging and abandoning said well on the date the inspector is notified. Which date shall not be less than five days after the day on which this notice and application so mailed is received, or in due course should be received by the Department of Environmental Protection Office of Oil & Gas.

This notice and application is given to you in order that your respective representatives may be present at the plugging and filling of said well. You are further notified that whether you are represented or not the operator will proceed to plug and fill said well in the manner required by Section 24, Article 6, Chapter 22 of the Code and given in detail on obverse side of this application.

NOTE: If you wish this well to be plugged according to 22-6-24(d) then as per Regulation 35CSR4-13.9 you must complete and return to this office on form OB-16 "Request by Coal Operator, Owner, or Lessee for plugging" prior to the issuance of this plugging permit.

WAIVER

The undersigned coal operator ____/ owner ____/ lessee ____/ of the coal under this well location has examined this proposed plugging work order. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: _____

By: _____

Its _____

RECEIVED
Office Of Oil and Gas

JAN 19 2024

WV Department of
Environmental Protection

02/02/2024

WW-9
(5/16)

API Number 47 - 033 - 00464
Operator's Well No. Yochym Bros 1

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

Operator Name Antero Resources Corporation OP Code 494507062

Watershed (HUC 10) Middle West Fork Creek Quadrangle Berlin

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:

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 *UIC Permit # will be provided on Form WR-34)
- Reuse (at API Number Future permitted well locations when applicable. API# will be provided on Form WR-34)
- Off Site Disposal (Supply form WW-9 for disposal location) (Meadowfill Landfill Permit #SWF-1032-98)
- Other (Explain Northwestern Landfill Permit #SWF-1025/WV0109410, Wetzel Co Landfill Permit #SWF-1021

Will closed loop system be used? If so, describe: Yes, fluids stored in tanks, cuttings removed off site and taken to landfill.

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 Gretchen Kohler

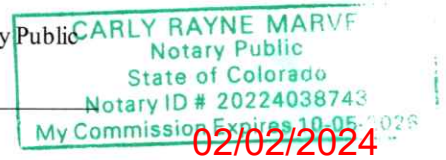
Company Official (Typed Name) Gretchen Kohler

Company Official Title Director of Environmental & Regulatory Compliance

Subscribed and sworn before me this 17 day of January, 20 24

Carly Rayne Marvel Notary Public

My commission expires 10-9-2024



Proposed Revegetation Treatment: Acres Disturbed 1.87 Prevegetation pH _____

Lime 2-3 Tons/acre or to correct to pH 6.5

Fertilizer type _____

Fertilizer amount 500 lbs/acre

Mulch 2-3 Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type	lbs/acre
Annual Ryegrass	40
Field Bromegrass	40

Seed Type	lbs/acre
Crownvetch	10-15
Tall Fescue	30

Please reference Table IV-3 on page 7 of the Well #1 Plugging Plan

Please reference Table IV-4A on page 7 of the Well #1 Plugging Plan

***or type of grass seed requested by surface owner**

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.

Ky Walleck
1/22/24

Plan Approved by: _____

Comments: _____

RECEIVED
Office Of Oil and Gas

JAN 19 2024

WV Department of
Environmental Protection

Title: _____ Date: _____

Field Reviewed? () Yes () No



West Virginia Department of Environmental Protection
Office of Oil and Gas

WELL LOCATION FORM: GPS

API: 047-033-00464 WELL NO.: 1

FARM NAME: Yochym Bros Coal Co.

RESPONSIBLE PARTY NAME: Antero Resources Corporation

COUNTY: Harrison DISTRICT: Elk

QUADRANGLE: Berlin

SURFACE OWNER: John A. Gulley Jr.

ROYALTY OWNER: N/A

UTM GPS NORTHING: 4329937.66 m

UTM GPS EASTING: 563660.75 m GPS ELEVATION: 1330.5 ft

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

RECEIVED
Office Of Oil and Gas

JAN 19 2024

WV Department of
Environmental Protection

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.

Mark Tim
Signature

Permitting Manager
Title

1/17/24
Date

L K

Antero Resources Corporation
Yochym Bros 1
API # 47-033-00464-0000



Antero Resources Corporation
Appalachian Basin
Yochym Bros 1
Harrison County
RECEIVED
Oil and Gas
JAN 19 2024
WV Department of
Environmental Protection

Quadrangle: Berlin
Watershed: Elk Creek
District: Elk
Date: 10-30-2023

02/02/2024

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

INSPECTOR'S WELL REPORT

Permit No. HOL-464

Oil or Gas Well _____
(KIND)

Company St. Clair Oil Company
 Address St. Clairsville, Ohio
 Farm YOUNG, BROTHERS
 Well No. ONE
 District ELK County HARRISON
 Drilling commenced _____
 Drilling completed _____ Total depth 130'
 Date shot _____ Depth of shot _____
 Initial open flow _____ /10ths Water in _____ Inch
 Open flow after tubing _____ /10ths Merc. in _____ Inch
 Volume _____ Cu. Ft.
 Rock pressure _____ lbs. _____ hrs.
 Oil _____ bbls., 1st 24 hrs.
 Fresh water _____ feet _____ feet
 Salt water _____ feet _____ feet

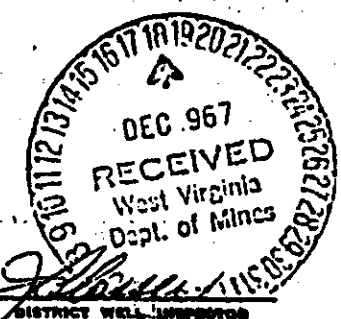
CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Size			
16			Kind of Packer _____
13			
10			Size of _____
8 3/4			
8 1/4			Depth set _____
5 3/16			
3			Perf. top _____
2			Perf. bottom _____
Liners Used			Perf. top _____
			Perf. bottom _____

CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____
 NAME OF SERVICE COMPANY _____
 COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES
 _____ FEET _____ INCHES FEET _____ INCHES
 _____ FEET _____ INCHES FEET _____ INCHES

Drillers' Names _____

Remarks: _____

Contractor - Ralph WATNET.



DECEMBER 14, 1967
DATE

RECEIVED
Office Of Oil and Gas
JAN 19 2024
WV Department of
Environmental Protection

02/02/2024

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

INSPECTOR'S WELL REPORT

Permit No. HAT-464

Oil or Gas Well _____
(KIND)

Company <u>St. Clair Oil Co.</u> Address <u>St. Clairville, Ohio</u> Farm <u>Yocum Bros.</u> Well No. <u>ONE</u> District <u>EWK</u> County <u>HARRISON</u> Drilling commenced _____ Drilling completed _____ Total depth <u>160'</u> Date shot _____ Depth of shot _____ Initial open flow _____ /10ths Water in _____ Inch Open flow after tubing _____ /10ths Merc. in _____ Inch Volume _____ Cu. Ft. Rock pressure _____ lbs. _____ hrs. Oil _____ bbls., 1st 24 hrs. Fresh water <u>60'</u> feet feet Salt water _____ feet feet	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
	Size			
	16			Kind of Packer
	13 <u>14'</u> - <u>60'</u>			
	10			Size of
	8 3/4			
	6 3/4			Depth set
	5 3/16			
	3			Perf. top
	2			Perf. bottom
	Liners Used			Perf. top
				Perf. bottom

CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____

NAME OF SERVICE COMPANY _____

COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES

_____ FEET _____ INCHES _____ FEET _____ INCHES

_____ FEET _____ INCHES _____ FEET _____ INCHES

Drillers' Names _____

Remarks: _____

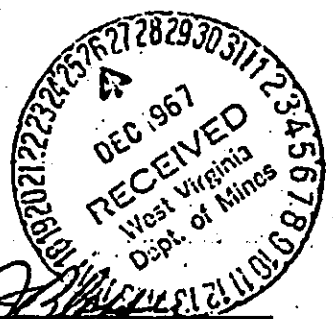
Contractor - Ralph Warner

RECEIVED
Office Of Oil and Gas

JAN 19 2024

WV Department of
Environmental Protection

DEC 21, 1967
DATE



William J. [Signature]
DISTRICT WELL INSPECTOR
02/02/2024

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

INSPECTOR'S WELL REPORT

Permit No. HAT-4164

Oil or Gas Well _____
(KIND)

Company St. Clair Oil Company
 Address St. Clairsville, Ohio
 Farm Yockum-Brois-Carl Co.
 Well No. ONE
 District F.L.K. County Harrison
 Drilling commenced _____
 Drilling completed _____ Total depth 1300'
 Date shot _____ Depth of shot _____
 Initial open flow _____ /10ths Water in _____ Inch
 Open flow after tubing _____ /10ths Merc. in _____ Inch
 Volume _____ Cu. Ft.
 Rock pressure _____ lbs. _____ hrs.
 Oil _____ bbls., 1st 24 hrs.
 Fresh water _____ feet _____ feet
 Salt water _____ feet _____ feet

CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Size			
10			Kind of Packer
13			
10	<u>403'</u>		Size of
8 3/4			
8 1/2			Depth set
5 3/16			
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____
 NAME OF SERVICE COMPANY _____
 COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES
 _____ FEET _____ INCHES FEET _____ INCHES
 _____ FEET _____ INCHES FEET _____ INCHES

Drillers' Names _____

Remarks: _____

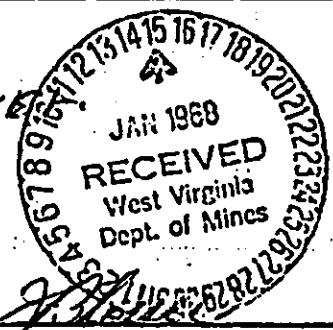
Contractor - Ralph. W. Turner

JANUARY 10, 1968
DATE

RECEIVED
Office Of Oil and Gas

JAN 19 2024

WV Department of
Environmental Protection



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

INSPECTOR'S WELL REPORT

Permit No. 464-464

Oil or Gas Well _____
(KIND)

Company <u>St. Clair Oil Company</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Address <u>St. Clairsville, Ohio</u>	Size			
Farm <u>YACKMAN-BROTHERS</u>	16			Kind of Packer
Well No. <u>ONE</u>	13			
District <u>ELK</u> County <u>HARRISON</u>	10			Size of
Drilling commenced _____	8 1/4	<u>1676'</u>		
Drilling completed _____ Total depth <u>2230'</u>	6 1/4			Depth set
Date shot _____ Depth of shot _____	5 3/16			
Initial open flow _____ /10ths Water In _____ Incl:	3			Perf. top
Open flow after tubing _____ /10ths Merc. In _____ Inch	2			Perf. bottom
Volume _____ Cu. Ft.	Liners Used			Perf. top
Rock pressure _____ lbs _____ hrs.				Perf. bottom
Oil _____ bbls., 1st 24 hrs.	CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____			
Fresh water _____ feet _____ feet	NAME OF SERVICE COMPANY _____			
Salt water _____ feet _____ feet	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			

Drillers' Names _____

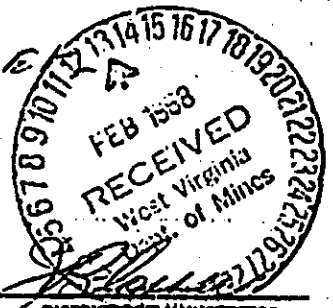
Remarks:

Contractor - Ralph Wayne

RECEIVED
Office Of Oil and Gas

JAN 19 2024

WV Department of
Environmental Protection



FEB-9, 1968
DATE

02/02/2024

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

INSPECTOR'S WELL REPORT

Permit No. H-41-464

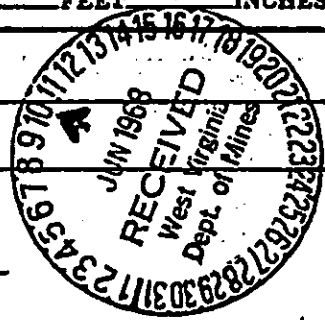
Oil or Gas Well _____
(KIND)

Company <u>St. Clair Oil Co.</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Address _____	Size			
Farm <u>Yachym Bros. Coal Co.</u>	18			Kind of Packer _____
Well No. <u>1</u>	13			
District <u>ELK</u> County <u>HARRISON</u>	10			Size of _____
Drilling commenced _____	8 1/4			
Drilling completed _____ Total depth _____	6 3/8			Depth set _____
Date shot _____ Depth of shot _____	5 9/16			
Initial open flow _____ /10ths Water in _____ Inch	3			Perf. top _____
Open flow after tubing _____ /10ths Merc. in _____ Inch	2			Perf. bottom _____
Volume _____ Cu. Ft.	Liners Used _____			Perf. top _____
Rock pressure _____ lbs. _____ hrs.				Perf. bottom _____
Oil _____ bbls., 1st 24 hrs.	CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____			
Fresh water _____ feet _____ feet	NAME OF SERVICE COMPANY _____			
Salt water _____ feet _____ feet	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			

Drillers' Names _____

Remarks: _____

FINAL INSPECTION FOR GOND RELEASE



JUNE 9, 1968
DATE

RECEIVED
Office Of Oil and Gas
JAN 19 2024
WV Department of
Environmental Protection

William J. Shuman
DISTRICT WELL INSPECTOR
02/02/2024



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

plugging permit issued 4703300464

1 message

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


Mon, Jan 29, 2024 at 12:57 PM

To: Dani Devito <ddevito@shalepro.com>, rromano2@harrisoncountywv.com, Mallory Stanton <mstanton@anteroresources.com>, Kenny S Willett <kenny.s.willett@wv.gov>

To whom it may concern, a plugging permit has been issued for 4703300464.

James Kennedy

WVDEP OOG

 **4703300464.pdf**
2153K

02/02/2024