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west virginia department of environmental protection

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Office of Oil and Gas  
601 57<sup>th</sup> Street, S.E.  
Charleston, WV 25304  
(304) 926-0450  
fax: (304) 926-0452

Harold D. Ward, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Monday, April 27, 2026  
WELL WORK PLUGGING PERMIT  
Vertical Plugging

WEST VIRGINIA LAND RESOURCES, INC.  
46226 NATIONAL ROAD WEST

ST. CLAIRSVILLE, OH 43950

Re: Permit approval for A-1-A  
47-049-00305-00-00

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.

H. Jason Harmon  
Acting Chief

A handwritten signature in black ink that reads "Jason Harmon".

Operator's Well Number: A-1-A  
Farm Name: CAMPBELL, ROBERT  
U.S. WELL NUMBER: 47-049-00305-00-00  
Vertical Plugging  
Date Issued: 4/27/2026

# 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

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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 15, 20 26  
2) Operator's  
Well No. 8315  
3) API Well No. 47-049 - 00305

**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  / Liquid injection  / Waste disposal  /  
(If "Gas, Production  or Underground storage  ) Deep  / Shallow

5) Location: Elevation 1239.77' Watershed PYLES FORK OF BUFFALO CREEK  
District MANNINGTON County MARION Quadrangle HUNDRED WW, PA

6) Well Operator WEST VIRGINIA LAND RESOURCES INC. 7) Designated Agent DAVID RODDY  
Address 1 BRIDGE STREET Address 1 BRIDGE STREET  
MONONGAH, WV 26554 MONONGAH, WV 26554

8) Oil and Gas Inspector to be notified 9) Plugging Contractor  
Name ROBERT HITT Name \_\_\_\_\_  
Address 8934 GOODHOPE PIKE Address \_\_\_\_\_  
LOST CREEK, WV 26385

10) Work Order: The work order for the manner of plugging this well is as follows:  
**See Exhibit No. 1 and MSHA 101-C Exemption**

**Marion County Mine (MSHA ID# 46-01433)  
MSHA 101-C Docket No. M-2016-017-C**

**Approximate Surface Elevation = 1239.77'  
Approximate Bottom of Coal = 167.72'  
Approximate Depth = 1072.05'**

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

Work order approved by inspector Robert J. Hitt Date 3-9-26

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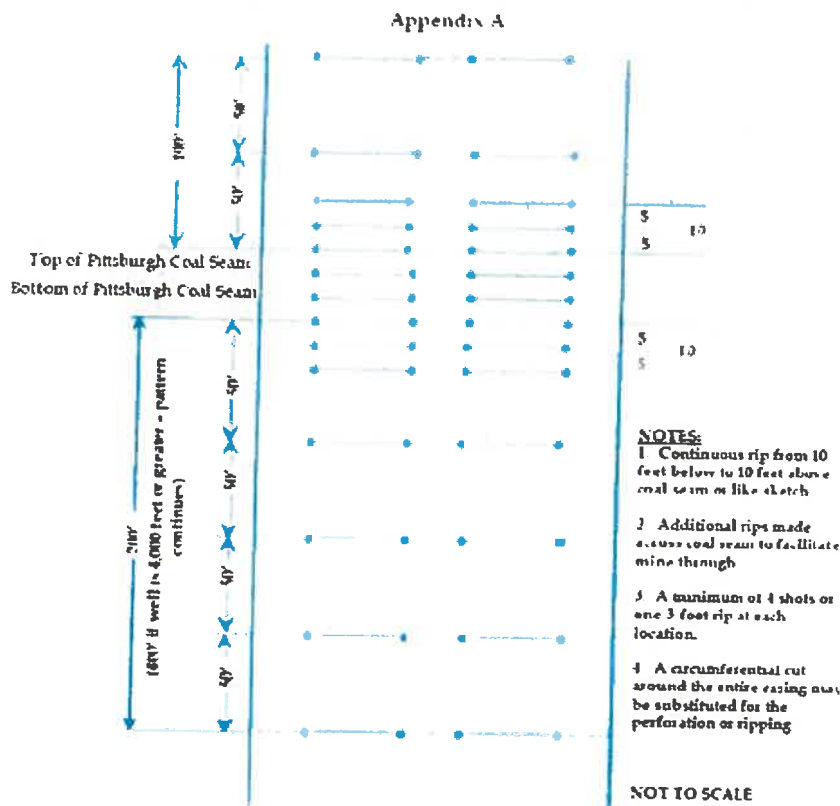
WV Department of **05/01/2026**  
Environmental Protection

EXHIBIT NO. 1

From the experience and technology developed since 1970 in plugging oil and gas wells for mining through, Consolidation Coal Northern West Virginia Operations will utilize the following method to plug all future wells

SOLID PLUG METHOD

- (a) If active well clean out to total depth and set solid cement plug from TD back to minimum of 200 feet below lowest minable coal seam
- (b) If abandoned well: Entire wellbore will be loaded with Gel and will clean out to at least 200 feet below lowest minable coal seam.
- (c) A diligent attempt will be made by pulling 150% of the calculated string weight to remove casing.
- (d) If all diligent attempts fail, the casing will be cut, ripped or perforated according to Appendix A below
- (c) Circulate through tubing or drill steel an expanding Class A cement plug from a minimum of 200 feet below lowest minable coal seam to 100' above coal seam.
- (d) Tag previous cement plug, cement from 100' above coal seam to surface.



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Pipeline-Plus [About](#) [Interactive Mapping](#) [Core & Sample](#) [Oil&Gas Well Header Data Search](#) ["Pipeline"](#) [File Repositories](#) [Digital Records Search](#) [Slabbed Core Photos](#)

### Oil & Gas Well Header Data Search

API #: 4704900305

County:  Well Type:

7.5 Minute Quad:  Total Vertical Depth TVD(ft) >=

Type of Log:  Completion Year =

Scanned Log Bottom (ft) >=

Operator at Completion (contains):

Last Producing Operator (contains):

Surface Owner (contains):

Field Name (contains):

Company Number (contains):

Mineral Owner (contains):

has Scanned Log(s):  minimum 3 characters if searching

has Digitized Log(s):  minimum 3 characters if searching

has Sample Desc Scan:  minimum 3 characters if searching

has Slabbed Core Photo(s):  minimum 3 characters if searching

Horizontal/Deviated Well:

Results/Page: 100

Order By:  API

Please enter or select criteria to perform database search. The application uses an "and" operator between search fields. Searches will not be performed if the required field criteria is not met. Error messages are indicated in RED.

1 Records Found, showing page 1 of 1 at 100 records per page

API #	Pipeline	Map	ELog	DLog	Scans	DD	Long	DD	Lat	UTME	UTMN	7.5	Tax	Status	Scanned Log	Log	Blm	Operator at	Comp	Well	Mineral	Unit/Leas	Owner	Name
4704900305						Marion	-80.412761	39.632226	500392.9	4387103.9	Hundred	Mannington	not available	White Shield Oil & Gas Corp.				Operator	Robert Campbell	A 1 A				

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Select County: (049) Marion    (Check All)

Enter Permit #: 305

Location  Production  Plugging  
 Owner/Completion  Stratigraphy  Sample  
 Pay/ShowWater  Logs  Bm Hole Loc

- Table Descriptions
- County Code Translations
- County Name/County Status
- Lease Notes
- Leasing Information
- Discussion
- WVGES Mail
- Plugins: New

WV Geological & Economic Survey

Well: County = 049 Permit = 305 Link to all digital records for well

Report Time Thursday, January 15, 2026 8:12:09 AM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX DISTRICT	QUAD	76	QUAD	15	LAT_DD	LON_DD	UTME	UTMN
4704900305	Marion	305	Hundred	30.63226	-80.412781	550332.0	4387103.0				

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_ID	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE_LEASE_NUM	MINERAL_OWN_OPERATOR	AT_COMPLETION	PROP_YD	PROP_TRGT_FM	TRM_EST_PR
4704900305	44		Original Loc Permitted	Robert Campbell	A 1 A			White Shield Oil & Gas Corp.				

Completion Information:

API	CMP_ID	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FWT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TYD	TMD	NEW_FTG	KOD	G_BEF	G_AFT	O_BEF	O_AFT	NGL_BEF	NGL_AFT	P_BEF	TI	BEP	P_AFT	TI_AFT	BH_P	BEP	
4704900305	44							unclassified	unclassified	not available	unknown																			

There is no Pay data for this well

There is no Production Gas data for this well

There is no Production Oil data for this well \*\* some operators may have reported NGL under Oil

There is no Production NGL data for this well \*\* some operators may have reported NGL under Oil

There is no Production Water data for this well

There is no Stratigraphy data for this well

Wireline (E-Log) Information:

- \* There is no Scanned/Raster Log data for this well
- \* There is no Digitized/LAS Log data for this well
- \* There is no Scanned or Digital Logs available for download

Plugging Information:

API	PLG_DT	DEPTH_PBT
4704900305	11/2/170	B

There is no Sample data for this well

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State of West Virginia

Department of Mines  
Oil and Gas Division  
Charleston 2

July 28, 1970

White Shield Oil & Gas Corp.  
P. O. Box 2139  
Tulsa, Oklahoma 74101

IN RE: Permit MAR-305-P  
Farm Robert Campbell  
Well No. A-1-A  
District Hammington  
County Marion

Gentlemen:

The final inspection report for the Well which is described above has been received in this office.

Please be advised that the Well which is covered by the above permit number has been released under your Blanket Bond.

Very truly yours,

Deputy Director  
Oil and Gas Wells Division

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

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OIL & GAS DIVISION  
DEPT. OF MINES

INSPECTOR'S WELL REPORT

Permit No. MAR-305-P

FINAL

Oil or Gas Well  
(MINE)

Company <u>WETA SHIELD OIL &amp; GAS CO.</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Address _____	Size _____			
Farm <u>ROBERT CAMPBELL</u>	1 1/2 _____			Kind of Packer _____
Well No. <u>A-1-R</u>	1 1/4 _____			Size of _____
District <u>MORGANTHAU County MORGANTHAU</u>	1 _____			Depth set _____
Drilling commenced _____	3/4 _____			Perf. top _____
Drilling completed _____ Total depth _____	0 _____			Perf. bottom _____
Date shot _____ Depth of shot _____	5/8 _____			Perf. top _____
Initial open flow _____ /10ths Water in _____ Inch	3 _____			Perf. bottom _____
Open flow after tubing _____ /10ths Merc. in _____ Inch	2 _____			Liners Used _____
Volume _____ Cu. Ft.				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:

WELL SITE IN GOOD ORDER FOR RELEASE.

BOND CANCELLED  
RETURNED TO WELL OPERATOR AND/OR PRINCIPAL

7/28/70

7-29-70

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Office of Oil and Gas

Arthur Mill  
DISTRICT WELL INSPECTOR

MAR 17 2026

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

OIL & GAS DIVISION  
DEPT. OF MINES

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPPLICATE. ONE COPY MAILED TO THE DEPARTMENT, ONE COPY TO BE RETAINED BY THE WELL OPERATOR AND THE OTHER COPY (AND EXTRA COPIES IF REQUIRED) SHOULD BE MAILED TO EACH COAL OPERATOR AT THEIR RESPECTIVE ADDRESSES.

<u>Consolidated Coal Company</u> <small>COAL OPERATOR</small>	<u>White Shield Oil and Gas Corp.</u> <small>NAME OF WELL OPERATOR</small>
<u>Monongah, West Virginia</u> <small>ADDRESS</small>	<u>PO # 2137</u> <small>COMPLETE ADDRESS</small>
<u>Charleston National Bank</u> <small>COAL OPERATOR</small>	<u>1401 South Main St., Tulsa, Oklahoma 74101</u>
<u>Charleston, West Virginia</u> <small>ADDRESS</small>	<u>March 20</u> 19 <u>70</u>
<u>Robert Campbell</u> <small>LEASE OR PROPERTY OWNER</small>	<u>Well No. Campbell A-1-A</u>
<u>Fairmont, West Virginia</u> <small>ADDRESS</small>	<u>Marion</u> District
	<u>Marion</u> County
	<u>Robert C Campbell</u> Farm

STATE INSPECTOR SUPERVISING PLUGGING Arthur Hall

AFFIDAVIT

STATE OF WEST VIRGINIA,

County of UPSHUR

Leroy Dye

being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by White Shield Oil and Gas Corp. well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 12th day of JANUARY, 19 70, and that the well was plugged and filled in the following manner:

SAND OR BONE RECORD	FILLING MATERIAL	PLUGS USED	CASING	
			ODD FEET	ODD FEET IN
Formation		SIZE & TYPE		
0-50	Shale			11 3/4 Cemented
50-285	Sand and shale			
285-695	Red rock shale			
695-1015	Sand and shale			
1015-1430	Sand and shale			
1430-1810	Sand and shale			
1810-1930	Sand and shale			
1930-2072	Sand and shale			
2072-2259	Sand and shale			
		Cemented to		
		Surface from		
		1400'		
COAL SEAMS		DESCRIPTION OF MONUMENT		
(NAME)		White Shield Oil and Gas Corp.		
(NAME)		Campbell A-1		
(NAME)		Marion County, West Virginia		
(NAME)				

and that the work of plugging and filling said well was completed on the 12th day of January, 19 70

And further deponents saith not.

L.R. Dye

Sworn to and subscribed before me this 25th day of March, 19 70

My commission expires:

AUGUST 13, 1974

J. Richard M. Vandenberg  
Notary Public

Notary No. MAR-305

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WV Department of  
Environmental Protection

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**PROPOSED MANNER OF PLUGGING AND FILLING WELL**

(Required by Rules and Regulations)

**WEST VIRGINIA DEPARTMENT OF MINES**

**OIL AND GAS DIVISION**

**WORK ORDER**

Well to be plugged and filled as follows:

T. D. 2260 feet.

Was drilled on mud. Got stuck, backed off to 1500 feet.

90 feet of 11" cemented to the surface.

No 8-5/8" run. Propose to fill with cement from 1500' to surface and erect monument.

Approved by: \_\_\_\_\_  
Special Inspector

To the Department of Mines  
Coal Owner or Operator,  
Lease or Property Owner.

**IF PARTIAL PLUGGING  
PLEASE SUBMIT REVISED WELL RECORD  
WHEN WORK IS COMPLETED.**

Gentlemen:

This "work order" is submitted for your approval and concurrence and unless notified of your disapproval or non-concurrence, the undersigned will proceed with the plugging and filling of said well in the above described manner on the date inspector is notified after permit is issued.

Very truly yours, White Shield Oil and Gas Corp.

By: \_\_\_\_\_  
Well Operator

No objections have been filed by the coal owner or coal operator, or any available adjacent lease or property owners, or interposed by the Department of Mines to the manner herein described for the plugging and filling of the well above mentioned. Therefore, the same is hereby approved this

16TH day of JANUARY 1970

DEPARTMENT OF MINES  
Oil and Gas Division

By: \_\_\_\_\_  
Special Inspector

NOTE: This "work order" shall be filed in duplicate; one copy in the files of the Department of Mines; one to be approved or corrected and returned to the well operator as his authority for plugging said well; and one for the well inspector.

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JAN 15 1970

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

OIL & GAS DIVISION  
DEPT. OF MINES

NOTICE OF INTENTION TO PLUG AND ABANDON WELL

(REQUIRED BY SECTION 9, ARTICLE 4, CHAPTER 22 OF THE CODE)

TO THE DEPARTMENT OF MINES,  
Charleston, W. Va.

Consolidated Coal Company White Shield Oil and Gas Corp.  
Coal Operator Name of Well Operator

Monongah, West Virginia 1601 South Main St., Tulsa, Oklahoma 74101  
Address Complete Address

Charleston National Bank January 12, 1970  
Coal Owner Date

Charleston, West Virginia WELL TO BE ABANDONED  
Address (Marion) District

Robert N. Campbell Marion County  
Lease or Property Owner

Fairmont, West Virginia Robert Campbell A-1-A  
Address Well No. Robert Campbell Farm

Inspector Mr. Arthur Null, Box 296, Hundred, W. Va. 26575 Telephone 775-5611

TO BE NOTIFIED 24 HOURS IN ADVANCE OF PLUGGING OPERATIONS  
Gentlemen:—

The undersigned well operator is about to abandon the above described well and will commence

the work of plugging and abandoning said well on the date inspector is notified (which date shall not be less than five days after the day on which this notice so mailed is received, or in due course should be received by the Department of Mines).

This notice is given 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 represented the undersigned will proceed on that date, or shortly thereafter, to plug and fill said well in the manner required by Section 10, Article 4, Chapter 22 of the Code and given in detail on the reverse side of this notice, in "Work Order."

This notice is being mailed by registered mail to each of you at the above addresses on the above date.

Very truly yours, White Shield Oil and Gas Corp.

By: [Signature]  
Well Operator

NOTE: Upon the abandonment of any well drilled prior to June 1, 1929, a plat prepared by a registered engineer, shall be filed with THREE COPIES OF APPLICATION, (OG-9) AND "WORK ORDER" AND TWO COPIES OF THE WELL RECORD, (OG-10). The map must show the district and county in which the tract of land is located, the name and acreage of same, the name or names of the owners and names of adjacent tracts and the location of the well to be abandoned, determined by survey with the courses and distances of such well from two permanent points or landmarks on said tract, in compliance with Rule 5 of the Rules and Regulations.

NOTE: In case plugging is not commenced within four months from the date of permit, same shall expire and be of no further force or effect.

NOTE: PERMIT IS NON TRANSFERABLE.

BLANKET BOND

MAR-305 -P

Permit Number

AFFIDAVIT, FORM OG-8, MANNER WELL PLUGGED MUST BE SUBMITTED TO OBTAIN RELEASE OF BOND

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STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

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OIL & GAS DIVISION  
DEPT. OF MINES

INSPECTOR'S WELL REPORT

ROTHAY

Permit No. NDR-305

Oil or Gas Well  
(Check)

Company	Address	Farm	Well No.	District	Drilling commenced	Drilling completed	Date shot	Initial open flow	Open flow after tubing	Volume	Rock pressure	Oil	Fresh water	Salt water	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
															Size			
<u>White Shicko Oil &amp; Gas Corp.</u>	<u>TULSA, OKLA.</u>	<u>ROBERT CAMPBELL</u>	<u>1-A-1</u>	<u>MARTIN</u>	<u>12-20-69</u>										<u>10</u>			
															<u>10</u>			
															<u>10</u>			
															<u>8 1/2</u>			
															<u>8 1/2</u>			
															<u>5 3/8</u>			
															<u>5</u>			
															<u>2</u>			

Drillers' Names \_\_\_\_\_

Remarks: CONT. S.W. JACK  
SHUTTING DOWN. EVERY PUMP ON JOB FROZEN.

Office of Oil and Gas

Arthur Mull  
DISTRICT WELL INSPECTOR

MAR 17 2026

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

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OIL & GAS DIVISION  
DEPT. OF MINES  
INSPECTOR'S WELL REPORT

Permit No. MAR-305

Oil or Gas Well  
(L&M)

Company WHITE SHIELD OIL & GAS CORP.  
 Address TULSA, OKLA.  
 Farm ROBERT CAMPBELL  
 Well No. 1-A-1  
 District MINNINGTON County MARRIEN  
 Drilling commenced 12-28-69  
 Drilling completed \_\_\_\_\_ Total depth \_\_\_\_\_  
 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			Kind of Packer
18			
14			
10			Size of
8 3/8			
6 3/8			Depth set
5 3/8			
4			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: CONT. S. W. JACK  
TRYING TO WASH 8 5/8" CASING DOWN OVER DRILL COLLARS  
LEFT IN HOLE.

1-8-70  
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Arthur Hall  
DISTRICT WELL INSPECTOR

MAR 17 2026

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

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DEPT. OF MINES  
ROTARY

TROUBLE REPORT  
INSPECTOR'S WELL REPORT

Permit No. MAR-305 Oil or Gas Well (RWD)

Company	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
<u>WHITE SHIELD OIL AND GAS CORP</u>	Size			
Address <u>TULSA, OKLA</u>	10			Kind of Packer
Farm <u>ROBERT CAMPBELL</u>	10			Size of
Well No. <u>1-A-1</u>	8 3/4			Depth set
District <u>MAWHEEN County MARIAN</u>	6 3/4			Perf. top
Drilling commenced <u>12-20-69</u>	5 3/16			Perf. bottom
Drilling completed _____ Total depth _____	2			Perf. top
Date shot _____ Depth of shot _____	2			Perf. bottom
Initial open flow _____ /10ths Water in _____ inch	Liners Used			Perf. top
Open flow after tubing _____ /10ths Merc. in _____ inch				Perf. bottom
Volume _____ Cu. Ft.	CASING CEMENTED _____ SIZE _____ No. FT _____ Date _____			
Rock pressure _____ lbs _____ hrs.	NAME OF SERVICE COMPANY _____			
Oil _____ bbls. 1st 24 hrs.	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
Fresh water _____ feet _____ feet	_____ FEET _____ INCHES	_____ FEET _____ INCHES	_____ FEET _____ INCHES	_____ FEET _____ INCHES
Salt water _____ feet _____ feet	_____ FEET _____ INCHES	_____ FEET _____ INCHES	_____ FEET _____ INCHES	_____ FEET _____ INCHES

Drillers' Names \_\_\_\_\_

Remarks: CONT. SAM JACK

CIRCULATING WHILE WRITING FOR RIG PARTS.

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Office of Oil and Gas  
MAR 17 2026

WV Department of Environmental Protection

1-7-70  
DATE

Arthur [Signature]  
DISTRICT WELL INSPECTOR

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Office of Oil and Gas

MAR 17 2026

05/01/2026

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

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OIL AND GAS DIVISION

OIL & GAS DIVISION  
DEPT. OF MINES

INSPECTION REPORT  
INSPECTOR'S WELL REPORT

ROTRAY

Permit No. MAR-325

Oil or Gas Well  
(KIND)

Company WHITE SHIELD DRILLING COOP.  
 Address TULSA, OKLA  
 Farm ROBERT CAMPBELL  
 Well No. 1-A-1  
 District MAXWELL County MAHAR  
 Drilling commenced 12-20-69  
 Drilling completed \_\_\_\_\_ Total depth \_\_\_\_\_  
 Date shot \_\_\_\_\_ Depth of shot \_\_\_\_\_  
 Initial open flow \_\_\_\_\_ /10lbs Water in \_\_\_\_\_ Inch  
 Open flow after tubing \_\_\_\_\_ /10lbs Merc. in \_\_\_\_\_ Inch  
 Volume \_\_\_\_\_ Cu. Ft.  
 Block pressure \_\_\_\_\_ lbs \_\_\_\_\_ hrs.  
 Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
 Fresh water 40 feet \_\_\_\_\_ feet  
 Salt water 1265 feet \_\_\_\_\_ feet

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

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 CONF. SAM JACK

Remarks: WASCO OVER DRILL PIPE AT 1550 WITH 3/8" CASING. DRILL BATHEN DOWN. CIRCUMVATING UNTIL REPAIR MADE.

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MAR 17 2026

WV Department of  
Environmental Protection

*Arthur Mull*  
DISTRICT WELL INSPECTOR

1-6-70  
DATE

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JAN 13 1970

INSPECTOR'S WELL REPORT

NOTARY

Permit No. MAR-305

Oil & Gas Well (RMD)

Company WHITE SHIELD OIL & GAS CORP.  
 Address TULSA OKLA.  
 Farm ARREAT CAMPBELL  
 Well No. 1-R-1  
 District Marshall County MARSH  
 Drilling commenced 12-22-69  
 Drilling completed \_\_\_\_\_ Total depth \_\_\_\_\_  
 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 40 feet \_\_\_\_\_ feet  
 Salt water 1845 feet \_\_\_\_\_ feet

CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Size			
18			Kind of Packer
18			
10			Size of
8 3/4			
6 3/4			Depth set
5 3/4			
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 \_\_\_\_\_  
CRNT. SAM JACK

Remarks: FISHING AT 1550. DEPT. OF OIL AND GAS FISHING JOB 2259  
 Office of Oil and Gas.

MAR 17 2026

WV Department of Environmental Protection

1-5-80

Arthur Mull DISTRICT WELL INSPECTOR

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

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OIL & GAS DIVISION  
DEPT. OF MINES

INSPECTOR'S WELL REPORT

Permit No. MAA-305

Oil or Gas Well  
(RWD)

Company	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
<u>White Shield Drilling Co.</u>	Size			
Address <u>TULSA, OKLA.</u>	16			Kind of Packer
Farm <u>ROBERT CAMPBELL</u>	22			
Well No. <u>1-A-1</u>	<u>2 3/4</u>	<u>27</u>		Size of
District <u>MONROE</u> County <u>MONROE</u>	8 1/2			Depth set
Drilling commenced <u>12-20-69</u>	6 3/16			
Drilling completed	3			Perf. top
Date shot	2			Perf. bottom
Initial open flow	Liners Used			Perf. top
Open flow after tubing				Perf. bottom
Volume	CASING CEMENTED	SIZE	No. FT.	Date
Rock pressure	NAME OF SERVICE COMPANY			
Oil	COAL WAS ENCOUNTERED AT <u>975 FEET 4 1/2 INCHES</u>			
Fresh water	<u>1070 FEET 1 1/2 INCHES</u> FEET INCHES			
Salt water	FEET INCHES FEET INCHES			

Drillers' Names

Remarks: CONT. SAM JACK

FISHING, WELL DOWN TO 2259. BACKED OFF DRILL COLLARS AT 1650. TRYING TO WASH OUT DRILL PIPE

1-2-70 RECEIVED  
Office of Oil and Gas

Arthur Mill  
DISTRICT WELL INSPECTOR

MAR 17 2026

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

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OIL & GAS DIVISION  
DEPT. OF MINES

INSPECTOR'S WELL REPORT

NOTARY

Permit No. MAR-305

Oil or Gas Well  
(XMS)

Company WHITE SHIELD O. AND G. CORP.  
 Address TULSA, OKLA.  
 Farm ROBERT CAMPBELL  
 Well No. A-1-A  
 District MANNINGTON County MARIAN  
 Drilling commenced 12-20-69  
 Drilling completed \_\_\_\_\_ Total depth \_\_\_\_\_  
 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 40 feet \_\_\_\_\_ feet  
 Salt water 1265 feet \_\_\_\_\_ feet

CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Size			
10			Kind of Packer
<u>12 5/8"</u>	<u>87'</u>	<u>CEMENTED</u>	
10			Size of
8 1/2			Depth set
6 1/2			Perf. top
5 9/16			Perf. bottom
5			Perf. top
2			Perf. bottom
Line Used			Perf. top
			Perf. bottom

CASING CEMENTED \_\_\_\_\_ SIZE \_\_\_\_\_ No. FT. \_\_\_\_\_ Date \_\_\_\_\_  
 NAME OF SERVICE COMPANY \_\_\_\_\_  
 COAL WAS ENCOUNTERED AT 925 FEET 48 INCHES  
1070 FEET 120 INCHES FEET INCHES  
 FEET INCHES FEET INCHES

Drillers' Names COPT. SAM JACK

Remarks: I VISITED THIS WELL 12-23-69 THEY WERE DRILLING AT 1917' WELL WAS SHUT DOWN PART DAY AND HAS NOT STARTED UP.

12-30-69  
DATE

Arthur Mull  
INSPECTOR

WV Department of Environmental Protection  
MAR 17 2026

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STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

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INSPECTOR'S WELL REPORT

ROTARY

Permit No. MAR-1-305

Oil or Gas Well  
(KIND)

Company <u>WHITE SHIELD DRILLING CORP</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Address <u>TULSA, OKLA.</u>	Size			
Farm <u>ROBERT CAMPBELL</u>	12"	87'		Kind of Packer
Well No. <u>A-1-A 7</u>	10"			Size of
District <u>MARRIOTT</u> County <u>MARRION</u>	8 1/2"			Depth set
Drilling commenced <u>12-20-69</u>	6"			
Drilling completed	5 5/16"			Perf. top
Date shot	3"			Perf. bottom
Initial open flow	2"			Perf. top
Open flow after tubing	Liners Used			Perf. bottom
Volume	CASING CEMENTED	SIZE	No. FT.	Date
Rock pressure	NAME OF SERVICE COMPANY			
Oil	COAL WAS ENCOUNTERED AT <u>975</u> FEET <u>48</u> INCHES			
Fresh water	<u>1070</u> FEET <u>120</u> INCHES FEET INCHES			
Salt water	FEET INCHES FEET INCHES			

Drillers' Names CONT. SAM JACK

Remarks: DRG. 1917. WILL SHUT DOWN WHEN 8 1/4" CASING IS RUN AT ABOUT 2300', WILL WAIT FOR PERMIT.

Perf. used 12-22-69  
Mr

12-22-69

Office of Oil and Gas  
Robert M. Mull  
DISTRICT WELL INSPECTOR

MAR 17 2026

WV Department of Environmental Protection

05/01/2026

DEC 23 1969

DEPARTMENT OF MINES OIL & GAS DIVISION  
OIL AND GAS DIVISION DEPT. OF MINES

INSPECTOR'S WELL REPORT

ARTJAY

Permit No. MAA-307

Oil or Gas Well  
(Kind)

		CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Company <u>WHITE SWELL A. &amp; S. CO., INC.</u>					
Address <u>TULSA, OKLAHOMA</u>		Size			
Farm <u>ROBERT CAMPBELL</u>		10			Kind of Packer
Well No. <u>2</u>		1 1/2			
District <u>MAXWELL County MASON</u>		10			Size of
Drilling commenced		8 1/2			
Drilling completed		6 1/2			Depth set
Date shot		5 3/16			
Initial open flow		3			Perf. top
Open flow after tubing		2			Perf. bottom
Volume		Liners Used			Perf. top
Rock pressure					Perf. bottom
Oil		GASING CEMENTED		SIZE	No. FT.
Fresh water		NAME OF SERVICE COMPANY			Date
Salt water		COAL WAS ENCOUNTERED AT		FEEET	INCHES
		FEEET		INCHES	FEEET
		FEEET		INCHES	FEEET
		FEEET		INCHES	FEEET

Drillers' Names CONT. SAM JACK

Remarks: RIPPING UP FOR NEW HOLE 50' FROM HOLE DRILLED 12-15-69

12-19-69  
DATE

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Office of Oil and Gas

Arthur Bull  
DISTRICT WELL INSPECTOR

WV Department of Environmental Protection

NO WELL

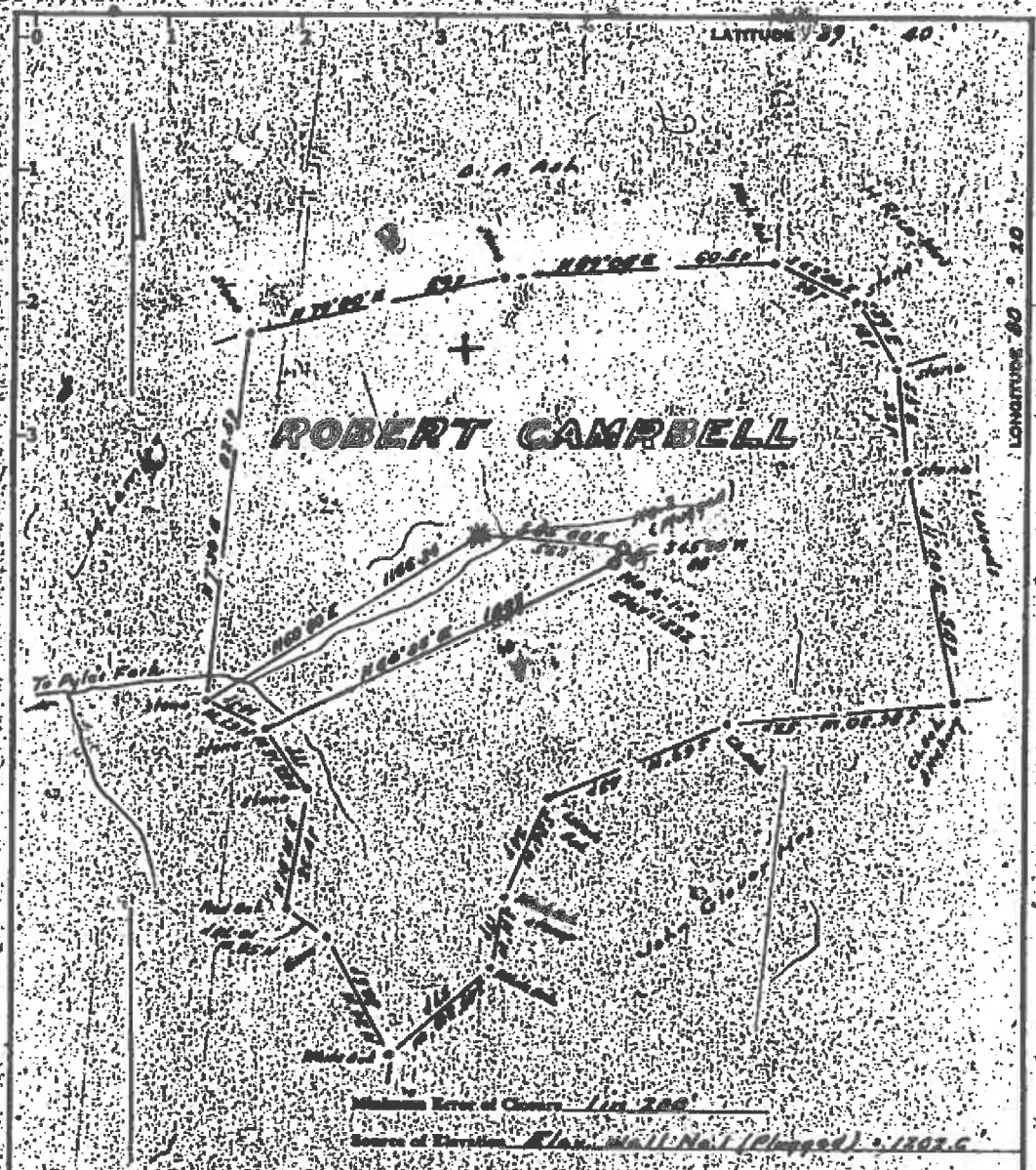
RECORD

IN

FILE.

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WV Department of  
Environmental Protection

05/01/2026



Minimum Error of Closure 1 in 200  
 Source of Elevation Bar. Well No. 1 (Checked) 5182.6

Fracture   
 New Location   
 Drill Deeper   
 Abandonment  1-16-70

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

Signed: [Signature]  
 Engineer N S E W

Company White Shield Oil & Gas Co.  
 Address P.O. Box 2129 Tulsa Oklahoma  
 Farm Robert Campbell  
 Tract Acres 110 Lease No. \_\_\_\_\_  
 Well (Farm) No. A-1-A Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 1885  
 Quadrangle Mannington  
 County Maries District Mannington  
 Engineer [Signature]  
 Engineer's Registration No. 7100  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date Dec. 27, 1969 Scale 1" = 312.5'

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

WELL LOCATION MAP

FILE NO. MAR-305-0  
No Well Record

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.

— Denotes one-inch spaces on border line of original tracing.

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 MAR 17 2026  
 WV Department of Environmental Protection

THIS IS AN ESTIMATE ONLY  
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO:  DRILL  DEEPEN  FRACTURE  WELL

WELL OPERATOR: White Shield Oil and Gas Corp. RESPONSIBLE AGENT: J. R. Harrison

ADDRESS: Box 2139, Tulsa, Oklahoma ADDRESS: Box 459, Rockhamon, W. Va.

TELEPHONE: 918 587-9421 TELEPHONE: 472-6100

DRELLING CONTRACTOR: (IF KNOWN) Unknown LAND OWNER: Robert H. Campbell

TELEPHONE: Unknown TELEPHONE: Unknown

ESTIMATED DEPTH OF COMPLETED WELL: 4000 ROTARY:

PROPOSED GEOLOGICAL FORMATION: Gantz CABLE TOOLS:

TYPE OF WELL:  OIL  GAS  COMB.  STORAGE  DISPOSAL

TYPE WASTE:  RECYCLING  WATER FLOOD  OTHER

TENTATIVE CASING PROGRAM:

CASING/AND TUBING	CEMENT TO BE USED	FOR DRILLING	TO BE LEFT
20			
16			
13 3/8			
12 3/4 - 20-120'	6-80' ex.	yes	yes
10 3/4			
9 5/8			
8 5/8 - 800-1600	200-400' ex.	yes	yes
7			
5 1/2			
4 1/2 - 4000'	600' ex.	Prod.	yes
3 1/2			
2 3/8 - 3800'	None	Prod.	No.
LINERS USED			

APPROXIMATE DEPTHS OF EXPECTED POTABLE WATER STRATA: 20, 90, 210

APPROXIMATE DEPTHS OF EXPECTED WORKABLE COAL SEAMS: Unknown

IS COAL BEING MINED IN AREA?  Yes

WAIVER: I, the undersigned, Agent for Coal Company, owner or operator of the coal under this lease have examined and placed on our mine maps this proposed well location. We, the Coal Company have no objections to said well being drilled at this location, providing operator complies with all rules and regulations in Articles 4, 5, and 7 Chapter 22 of the West Virginia Code.

For Coal Company

Official Title

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Environmental Protection

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

OIL & GAS DIVISION DEPT. OF MINES

NOTICE OF PROPOSED LOCATION OF OIL AND GAS WELL

To THE DEPARTMENT OF MINES, Charleston, W. Va.

Consolidated Coal Company

White Shield Oil and Gas Corp.

Honolougah, West Virginia

1601 South Main Street, Tulsa, Oklahoma 7410

Charleston National Bank

December 22, 19 69

Charleston, West Virginia

Hennington District

Robert N. Campbell

Marion County

Fairmont, West Virginia

Well No. A-1A

Robert Campbell

Elevation, 1232 Acres 110

GENTLEMEN:

The undersigned well operator is entitled to drill... The above named coal operators or coal owners (if any) are notified that any objections they may desire to make to such proposed location...

April 20, 1965 made by Robert N. Campbell, et als to Quaker State Oil Refining Co. and recorded on the day of in the office of the County Clerk for said County in Book 696 page 275

The enclosed plat was prepared by a competent engineer and shows the proposed location of a well to be drilled for oil and gas by the undersigned well operator on the farm and in the Magisterial District and County above named, determined by survey and courses and distances from two permanent points, or land-marks.

The undersigned well operator is informed and believes there are no coal operators operating beds of coal beneath said farm or tract of land on which said well is located, or within 500 feet of the boundaries of the same, who have mapped their workings and filed their maps as required by law, excepting the coal operators or coal owners (if any) above named as addressees.

The above named coal operators or coal owners (if any) are notified that any objections they may desire to make to such proposed location, or which they are required to make by Section 3 of said Code, if the drilling of a well at said proposed location will cause a dangerous condition in or about their respective coal mines, must be received by, or filed with the Department of Mines within ten days from the receipt of a copy of this notice and accompanying plat by said Department. Said coal operators are further notified that forms for use in making such objections will be furnished to them by the Department of Mines promptly on request and that all such objections must set forth as definitely as is reasonably possible, the ground or grounds on which such objections are based and indicate the direction and distance the proposed location should be moved to overcome same.

(The next paragraph is to be completed only in Department's copy.)

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address day before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

Very truly yours, White Shield Oil and Gas Corp.

(Sign Name) By

Richard M. Voderberg

1601 South Main Street

Tulsa

Oklahoma

WELL DRILLING PERMIT

All provisions being in accordance with Chapter 22 of the W. Va. Code, the location is hereby approved for drilling.

This permit shall expire if drilling is not commenced by April 23, 1970

Deputy Director - Oil & Gas Division

Address of Well Operator

Section 3... If no such objections be filed or be found by the department of mines, within said period of ten days from the receipt of said notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a drilling permit receding the filing of such plat, that no objections have been made by the coal operators to the location, or found thereto by the department, and that the same is approved and the well operator authorized to proceed to drill at said location.

BLANKET BOND

PERMIT NUMBER

RECEIVED Office of Oil and Gas

Department of Environmental Protection

05/01/2026

In the matter of:  
The Marion County Coal Company  
Marion County Mine  
I.D. No. 46-01433

Petition for modification

Docket No. M-2016-017-C

MSHA 101 C  
EXEMPTION

**DECISION AND ORDER**

On May 31, 2016, a petition was filed seeking a modification of the application of 30 C.F.R. § 75.1700 to The Marion County Coal Company's Marion County Mine located in Marion County, West Virginia. The Petitioner filed the petition to permit an alternative method of compliance with the standard with respect to vertical to horizontal oil and gas wells into the underground coal seams. The petitioner request to amend their current Proposed Decision Order (PDO) grant by MSHA on June 4, 1991, under Docket M-1990-156-C formerly known as Consolidation Coal Company, Loveridge No. 22 Mine to the alternate method stipulated in the April 29, 2013 PDO granted to ACI Tygart Valley, Leer Mine.

The Petitioner alleges that the proposed alternative method will at all times guarantee no less than the same measure of protection afforded miners under 30 C.F.R. § 75.1700 as that provided by the standard, which states:

**§ 75.1700 Oil and gas wells.**

Each operator of a coal mine shall take reasonable measures to locate oil and gas wells penetrating coalbeds or any underground area of a coal mine. When located, such operator shall establish and maintain barriers around such oil and gas wells in accordance with State laws and regulations, except that such barriers shall not be less than 300 feet in diameter, unless the Secretary or his authorized representative permits a lesser barrier consistent with the applicable State laws and regulations where such lesser barrier will be adequate to protect against hazards from such wells to the miners in such mine, or unless the Secretary or his authorized representative requires a greater barrier where the depth of the mine, other geologic conditions, or other factors warrant such a greater barrier.

The Petition addresses items for which District Manager approval is required, procedures for cleaning out and preparing oil and gas wells prior to plugging or re-plugging, procedures for plugging or re-plugging oil or gas wells to the surface, procedures for plugging or re-plugging oil or gas wells for use as degasification boreholes, alternative procedures for preparing and plugging or re-plugging oil or gas wells, and procedures after approval has been granted to mine through a plugged or re-plugged well.

05/01/2026

Between July 20, 2016 and August 3, 2016, MSHA personnel conducted an investigation of the petition and filed a report of their findings with the Administrator for Coal Mine Safety and Health. The modification granted under Docket No. M-1990-156-C will be superseded and replaced by this amended modification granted under Docket No. M-2016-017-C after this Proposed Amended Decision and Order becomes final.

The mine is represented by United Mine Workers of America (UMWA), AFL-CIO, CLC-1638 with miners' representatives and did not file any questions or comments on behalf of the miners.

After review of the parties' submissions and Joint Motion for Settlement, the following Decision and Order is issued.

### **FINDINGS OF FACT AND CONCLUSIONS OF LAW**

The Marion County Mine employs approximately 712 miners and produces approximately 50,000 tons of bituminous coal per day from the Pittsburgh #8 coal seam with an average mine height of 66 inches. At this time, there are no coal seams being mined below (i.e., stratigraphically down section from) the Pittsburgh seam. The mine is accessed through 2 slope and 12 air shafts. The mine operates 3 production shifts per day, 5 days per week, on five working sections, two longwall and three advancing gate sections utilizing continuous mining machines. The mine liberates 11,659,131 cubic feet of methane on a daily basis.

Although MSHA has granted modifications of this standard at different mines over the years, changing circumstances in oil and gas drilling technology and practices compels MSHA to reconsider the safest approach to mining around or through such wells. In recent years, changes in hydraulic fracturing (fracking) technology, marketplace and resource conditions have led to an increase in the number and depth of oil and gas wells penetrating the Pittsburgh #8 and other coal seams. Since deeper wells are usually associated with higher well pressures, modifications of § 75.1700 must include appropriate measures to better protect miners. In addition to the risks associated with higher well pressures, MSHA is concerned that operators may be preparing and plugging wells to inadequate depths for convenience or to lower costs, which may result in reduced safety for miners.

This Decision and Order reflects the settlement between the Petitioner's proposal and the amended terms and conditions first set forth by MSHA, under the terms set forth below. The major points of compromise include the following:

1. *Making a diligent effort to remove the casing to the original total depth. If all of the casing can be removed, or if the well contains no casing, the operator shall*

prepare the well for plugging, and use seals described below, for wells less than 4,000' depth to seal to 200 feet below the coal seam to be mined, or the lowest mineable seam, whichever is lower, or for wells 4,000' deep or greater, seal 400 feet below the coal seam to be mined, or lowest mineable seam, whichever is lower. MSHA retains the right to review and direct the operator's sealing protocol, in the event geologic or well conditions require further measures. As used in this Proposed Amended Decision and Order, in order to make a diligent effort to remove the casing, the operator shall pull a minimum of 150% of casing string weight and/or have made at least three attempts to spear or overshot to grip the casing for the required minimum pull effort. Where casing string length is unknown, a 3,000' casing string will be assumed. The operator shall keep a record of these efforts, including casing length and weights, and make available for MSHA review. The District Manager reserves the right to require additional measures in efforts to remove casing, as appropriate.

2. *Unknown total depth.* If the total depth of the well is unknown the operator must contact the District Manager before proceeding. MSHA believes, by including this step in the process, that miner safety will be better served because the Petitioner and the District Manager can work together to evaluate the conditions of the well to be plugged as well as the safest way to accomplish the plugging. MSHA and the operator will work cooperatively to establish a communications protocol, so that the operator may contact the District Manager while working outside normal working hours.
3. *Cement.* Cement is specified to be used as a plugging material, instead of an unnamed "approved equivalent," as requested by Petitioner.
4. *Wells vary in depth.* The terms and conditions required by MSHA will require operator to prepare these wells for safe intersection by making a diligent effort to remove casing to the total depth if possible, then: cleaning to and setting a plug at least 200' below the coal seam to be mined or lowest mineable seam, whichever is lower; or for wells 4,000' or greater, to at least 400 feet below the coal seam to be mined, or lowest mineable seam, whichever is lower. The operator will then plug from either the attainable bottom or the newly installed plug, as applicable, by pumping expanding cement slurry and pressurizing to at least 200 psi. If the total depth is not reached and casing cannot be removed, these alternative methods included in this proposed decision and order have proven to be safe and effective when properly implemented.
5. *Notification* – Where the operator is required to notify the District Manager pursuant to the terms of this Proposed Decision and Order, the method of notification will be set forth in the cut-through procedures for each well. The

District Manager agrees to provide a number wherein he or his designee is available at all times.

Therefore, the terms and conditions as amended will at all times guarantee no less than the same measure of protection afforded the miners under 30 C.F.R. § 75.1700 for all wells regardless of depth. On the basis of the Petition, comments received, the findings of MSHA's investigation, and the Joint Motion for Settlement by the parties, the Marion County Coal Company is granted a modification of the application of 30 C.F.R. § 75.1700 to its Marion County Mine.

### **ORDER**

Under the authority delegated by the Secretary of Labor to the Administrator for Coal Mine Safety and Health, and under § 101(c) of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. § 811(c), and 30 C.F.R. Part 44, a modification of the application of 30 C.F.R. § 75.1700 at The Marion County Coal Company's Marion County Mine is hereby:

**GRANTED**, subject to the following terms and conditions:

**1. DISTRICT MANAGER APPROVAL REQUIRED**

- a. The type of oil or gas well that will be considered under this Petition includes wells that have been depleted of oil or gas production or have not produced oil or gas and may have been plugged, or active conventional vertical wells which are not producing gas or oil, subject to the provisions below. Unconventional wells in the Marcellus, Utica, and all other unconventional shale oil and gas wells are not subject to this modification. Nothing in these provisions is meant to lessen, diminish, or substitute any provision found in applicable state laws or regulations.
- b. A safety barrier of 300 feet in diameter (150 feet between any mined area and a well) shall be maintained around all oil and gas wells (defined herein to include all active, inactive, abandoned, shut-in, previously plugged wells, water injection wells, and carbon dioxide sequestration wells) until approval to proceed with mining has been obtained from the District Manager. Wells that were drilled into potential oil or gas producing formations that did not produce commercial quantities of either gas or oil (exploratory wells, wildcat wells or dry holes) are classified as oil or gas wells by MSHA.
- c. Prior to mining within the safety barrier around any well that the mine plans to intersect, the mine operator shall provide to the District Manager a sworn affidavit or declaration executed by a company official, the person at the mine

who is in charge of health and safety at the mine, stating that all mandatory procedures for cleaning out, preparing, and plugging each gas or oil well have been completed as described by the terms and conditions of this order.

The affidavit or declaration must be accompanied by all logs, electronic or otherwise, described in subparagraphs 2(a)(2) and 2(a)(3) below and any other records described in those subparagraphs which the District Manager may request. The District Manager will review the affidavit or declaration, the logs and any other records that have been requested, and may inspect the well itself, and will then determine if the operator has complied with the procedures for cleaning out, preparing, and plugging each well as described by the terms and conditions of this Order. If the District Manager determines that the procedures have been complied with, he will provide his approval, and the mine operator may then mine within the safety barrier of the well, subject to the terms of this Order.

If well intersection is not planned, the mine operator may request a permit to reduce the 300 foot diameter of the safety barrier that does not include intersection of the well. The District Manager may require documents and information that help verify the accuracy of the location of the well in respect to the mine maps and mining projections. This information may include survey closure data, down-hole well deviation logs, historical well intersection location data and any additional data required by the District Manager. If the District Manager determines that the proposed barrier reduction is reasonable, he will provide his approval, and the mine operator may then mine within the safety barrier of the well.

d. The terms and conditions of this Order apply to all types of underground coal mining.

## 2. MANDATORY PROCEDURES FOR CLEANING OUT, PREPARING, PLUGGING, AND RE-PLUGGING OIL OR GAS WELLS

### a. MANDATORY PROCEDURES FOR CLEANING OUT AND PREPARING VERTICAL OIL AND GAS WELLS PRIOR TO PLUGGING OR RE-PLUGGING

The mine operator shall test for gas emissions inside the hole before cleaning out, preparing, plugging, and re-plugging oil and gas wells. The District Manager shall be contacted if the well is actively producing gas.

(1) A diligent effort shall be made to remove all the casing in the well and clean the well to 200' below the coal seam to be mined, or the lowest

mineable coal seam, whichever is lower, or for wells 4,000' or greater, clean the well to 400' below the coal seam to be mined, or the lowest mineable coal seam, whichever is lower.

**If the total depth of the well is less than 4,000 feet, the operator shall completely clean out the well from the surface to at least 200 feet below the coal seam to be mined, unless the District Manager requires cleaning to a greater depth based on his judgment as to what is required due to the geological strata, or due to the pressure within the well. The operator shall provide the District Manager with all information it possesses concerning the geological nature of the strata and the pressure of the well. If the total depth of the well is 4,000 feet, or greater, the operator shall completely clean out the well from the surface to at least 400 feet below the coal seam to be mined. Wells of this greater depth are under greater pressure, so the 400 feet requirement provides greater protection for miners.** The operator shall make a diligent effort to remove all material from the entire diameter of the well, wall to wall. If the total depth of the well is unknown and there is no historical information, the mine operator must contact the District Manager before proceeding.

Where active wells which are no longer producing are being cleaned and prepared subject to this order, the operator must: 1) attempt to remove all of the casing using a diligent effort, and comply with all other applicable provisions in this order, or 2) if the casing cannot be removed from the total depth, must be filled with cement from the lowest possible depth to 200 feet below the seam to be mined or lowest mineable coal seam, whichever is lower for wells less than 4,000', or 400 feet below the seam to be mined or lowest mineable coal seam, whichever is lower, for wells 4,000' or greater, and the other applicable provisions in this order still apply, or 3) if the casing cannot be removed it shall be perforated from 200 feet below the coal seam to be mined, or lowest mineable seam, whichever is lower, or 400 feet below the seam to be mined or lowest mineable coal seam, whichever is lower, for wells 4,000' or greater, and the annuli shall be cemented or otherwise filled, and the other applicable provisions in this order still apply.

- (2) The operator shall prepare down-hole logs for each well. Logs shall consist of a caliper survey, a bond log if appropriate, a deviation survey, and a gamma survey for determining the top, bottom, and thickness of all coal seams down to the coal seam to be mined, or the lowest mineable coal seam, whichever is lower, potential hydrocarbon producing strata and the location of any existing bridge plug. In addition, a journal shall be maintained describing the depth of each material encountered; the nature

of each material encountered; bit size and type used to drill each portion of the hole; length and type of each material used to plug the well; length of casing(s) removed, perforated or ripped or left in place; any sections where casing was cut or milled; and other pertinent information concerning cleaning and sealing the well. Invoices, work-orders, and other records relating to all work on the well shall be maintained as part of this journal and provided to MSHA upon request.

- (3) When cleaning out the well as provided for in subparagraph (a)(1), the operator shall make a diligent effort to remove all of the casing in the well. Thereafter, the well should be plugged to the attainable bottom, at least 200 feet below the coal seam to be mined or lowest mineable seam, whichever is lower, by pumping expanding cement slurry and pressurizing to at least 200 psi. If the casing cannot be removed, it must be cut, milled, perforated or ripped at sufficient intervals to facilitate the removal of any remaining casing in the coal seam by the mining equipment. Any casing which remains shall be perforated or ripped to permit the injection of cement into voids within and around the well. All casing remaining at the coal seam to be mined shall be perforated or ripped at least every 5 feet from 10 feet below the coal seam to 10 feet above the coal seam.

**Perforations or rips are required at least every 50 feet from 200 feet (400 feet if the total well depth is 4,000 feet or greater) below the base of the lowest mineable coal seam up to 100 feet above the uppermost mineable coal seam. For perforations in the Pittsburgh Seam, see Appendix A.** The mine operator must take appropriate steps to ensure that the annulus between the casing and the well walls are filled with expanding (minimum 0.5% expansion upon setting) cement and contain no voids.

Jet/sand cutting is one method for ripping or perforating casing with three or more strings of casing in the Pittsburgh coal seam in preparation for mining. This method uses compressed nitrogen gas and sand to cut the well casings as outlined in Appendix A. On active wells cuts start at 200' above the bottom of the casing at 200' intervals, to 200' below the bottom of the Pittsburgh coal seam where Appendix A outlines cut interval minimums.

If it is not possible to remove all of the casing, the operator shall notify the District Manager before any other work is performed. **If the well cannot be cleaned out or the casing removed, the operator shall prepare the well as described from the surface to at least 200 feet below the base of the lowest mineable coal seam for wells less than 4000 feet in depth and**

**400 feet below the lowest mineable coal seam for wells 4000 feet or greater, unless the District Manager requires cleaning out and removal of casing to a greater depth based on his judgement as to what is required due to geological strata, or due to the pressure within the well.**

If the operator, using a casing bond log, can demonstrate to the satisfaction of the District Manager that all annuli in the well are already adequately sealed with cement, then the operator will not be required to perforate or rip the casing for that particular well. When multiple casing and tubing strings are present in the coal horizon(s), any casing which remains shall be ripped or perforated and filled with expanding cement as indicated above. An acceptable casing bond log for each casing and tubing string is needed if used in lieu of ripping or perforating multiple strings.

- (4) If the District Manager concludes that the completely cleaned-out well is emitting excessive amounts of gas, the operator must place a mechanical bridge plug in the well.

**It must be placed in a competent stratum at least 200 feet (400 feet if the total well depth is 4,000 feet or greater) below the base of the lowest mineable coal seam, but above the top of the uppermost hydrocarbon-producing stratum, unless the District Manager requires a greater distance based on his judgment that it is required due to the geological strata, or due to the pressure within the well.** The operator shall provide the District Manager with all information it possesses concerning the geological nature of the strata and the pressure of the well. If it is not possible to set a mechanical bridge plug, an appropriately sized packer may be used. The mine operator shall document what has been done to "kill the well" and plug the hydrocarbon producing strata.

- (5) If the upper-most hydrocarbon-producing stratum is within 300 feet of the base of the coal seam to be mined, or lowest mineable seam, whichever is lower, the operator shall properly place mechanical bridge plugs as described in subparagraph (a)(4) to isolate the hydrocarbon-producing stratum from the expanding cement plug.

**Nevertheless, the operator shall place a minimum of 200 feet (400 feet if the total well depth is 4,000 feet or greater) of expanding cement below the coal seam to be mined, or lowest mineable seam, whichever is lower, unless the District Manager requires a greater distance based on his judgment that it is required due to the geological strata, or due to the pressure within the well.**

b. MANDATORY PROCEDURES FOR PLUGGING OR RE-PLUGGING OIL OR GAS WELLS TO THE SURFACE

After completely cleaning out the well as specified in paragraph 2(a) above, the following procedures shall be used to plug or re-plug wells:

- (1) **The operator shall pump expanding cement slurry down the well to form a plug which runs from at least 200 feet (400 feet if the total well depth is 4,000 feet or greater) below the base of the coal seam to be mined, or lowest mineable seam, whichever is lower, (or lower if required by the District Manager based on his judgment that a lower depth is required due to the geological strata, or due to the pressure within the well) to the surface.** The expanding cement will be placed in the well under a pressure of at least 200 pounds per square inch. Portland cement or a lightweight cement mixture may be used to fill the area from 100 feet above the top of the uppermost mineable coal seam (or higher if required by the District Manager based on his judgment that a higher distance is required due to the geological strata, or due to the pressure within the well) to the surface.
- (2) The operator shall embed steel turnings or other small magnetic particles in the top of the cement near the surface to serve as a permanent magnetic monument of the well. In the alternative, a 4-inch or larger diameter casing, set in cement, shall extend at least 36 inches above the ground level with the API well number engraved or welded on the casing. When the hole cannot be marked with a physical monument (e.g. prime farmland), high-resolution GPS coordinates (one-half meter resolution) are required.

c. MANDATORY PROCEDURES FOR PLUGGING OR RE-PLUGGING OIL AND GAS WELLS FOR USE AS DEGASIFICATION WELLS

After completely cleaning out the well as specified in paragraph 2(a) above, the following procedures shall be utilized when plugging or re-plugging wells that are to be used as degasification wells:

- (1) **The operator shall set a cement plug in the well by pumping an expanding cement slurry down the tubing to provide at least 200 feet (400 feet if the total well depth is 4,000 feet or greater) of expanding cement below the coal seam to be mined, or lowest mineable seam, whichever is lower, unless the District Manager requires a greater depth based on his judgment that a greater depth is required due to the geological strata, or due to the pressure within the well.** The expanding cement will be placed in the well under a pressure of at least 200 pounds

per square inch. The top of the expanding cement shall extend at least 50 feet above the top of the coal seam being mined, unless the District Manager requires a greater distance based on his judgment that a greater distance is required due to the geological strata, or due to the pressure within the well.

- (2) The operator shall securely grout into the bedrock of the upper portion of the degasification well a suitable casing in order to protect it. The remainder of this well may be cased or uncased.
- (3) The operator shall fit the top of the degasification casing with a wellhead equipped as required by the District Manager in the approved ventilation plan. Such equipment may include check valves, shut-in valves, sampling ports, flame arrestor equipment, and security fencing.
- (4) Operation of the degasification well shall be addressed in the approved ventilation plan. This may include periodic tests of methane levels and limits on the minimum methane concentrations that may be extracted.
- (5) After the area of the coal mine that is degassed by a well is sealed or the coal mine is abandoned, the operator must plug all degasification wells using the following procedures:
  - (i) The operator shall insert a tube to the bottom of the well or, if not possible, to within 100 feet above the coal seam being mined. Any blockage must be removed to ensure that the tube can be inserted to this depth.
  - (ii) The operator shall set a cement plug in the well by pumping Portland cement or a lightweight cement mixture down the tubing until the well is filled to the surface.
  - (iii) The operator shall embed steel turnings or other small magnetic particles in the top of the cement near the surface to serve as a permanent magnetic monument of the well. In the alternative, a 4-inch or larger casing, set in cement, shall extend at least 36 inches above the ground level with the API well number engraved or welded on the casing.
  - (iv) This provision does not apply to traditional degasification holes which have not intersected the seam to be mined, have not commercially produced gas and have no API number.

d. MANDATORY ALTERNATIVE PROCEDURES FOR PREPARING AND PLUGGING OR RE-PLUGGING OIL OR GAS WELLS

The following provisions apply to all wells which the operator determines, and with which the MSHA District Manager agrees, cannot be completely cleaned out due to damage to the well caused by subsidence, caving, or other factors.

- (1) **The operator shall drill a hole adjacent and parallel to the well, to a depth of at least 200 feet (400 feet if the total well depth is 4,000 feet or greater) below the coal seam to be mined, or lowest mineable seam, whichever is lower, unless the District Manager requires a greater depth based on his judgment that a greater depth is required due to the geological strata, or due to the pressure within the well.**
- (2) The operator shall use a geophysical sensing device to locate any casing which may remain in the well.
- (3) If the well contains casing(s), the operator shall drill into the well from the parallel hole. From 10 feet below the coal seam to 10 feet above the coal seam, the operator shall perforate or rip all casings at least every 5 feet. **Beyond this distance, the operator shall perforate or rip at least every 50 feet from at least 200 feet (400 feet if the total well depth is 4,000 feet or greater) below the base of the coal seam to be mined, or lowest mineable seam, whichever is lower, up to 100 feet above the seam being mined, unless the District Manager requires a greater distance based on his judgment that a greater distance is required due to the geological strata, or due to the pressure within the well.** The diagram shown in Appendix A is representative of the locations of the perforations or ripping that must be done.

The operator shall fill the annulus between the casings and between the casings and the well wall with expanding (minimum 0.5% expansion upon setting) cement, and shall ensure that these areas contain no voids. If the operator, using a casing bond log, can demonstrate to the satisfaction of the District Manager that the annulus of the well is adequately sealed with cement, then the operator will not be required to perforate or rip the casing for that particular well, or fill these areas with cement. When multiple casing and tubing strings are present in the coal horizon(s), any casing which remains shall be ripped or perforated and filled with expanding cement as indicated above. An acceptable casing bond log for each casing and tubing string is needed if used in lieu of

ripping or perforating multiple strings.

- (4) Where the operator determines, and the District Manager agrees, that there is insufficient casing in the well to allow the method outlined in subparagraph (d)(3) to be used, then the operator shall use a horizontal hydraulic fracturing technique to intercept the original well. **From at least 200 feet (400 feet if the total well depth is 4,000 feet or greater) below the base of the coal seam to be mined, or lowest mineable seam, whichever is lower, to a point at least 50 feet above the seam being mined, the operator shall fracture in at least six places at intervals to be agreed upon by the operator and the District Manager after considering the geological strata and the pressure within the well.** The operator shall then pump expanding cement into the fractured well in sufficient quantities and in a manner which fills all intercepted voids.
- (5) The operator shall prepare down-hole logs for each well. Logs shall consist of a caliper survey, a bond log if applicable, a deviation survey, and a gamma log for determining the top, bottom, and thickness of all coal seams down to the coal seam to be mined, **or lowest mineable seam, whichever is lower**, potential hydrocarbon producing strata and the location of any existing bridge plug. The operator may obtain the logs from the adjacent hole rather than the well if the condition of the well makes it impractical to insert the equipment necessary to obtain the log.
- (6) A journal shall be maintained describing the depth of each material encountered; the nature of each material encountered; bit size and type used to drill each portion of the hole; length and type of each material used to plug the well; length of casing(s) removed, perforated or ripped or left in place; any sections where casing was cut or milled; and other pertinent information concerning sealing the well. Invoices, work-orders, and other records relating to all work on the well shall be maintained as part of this journal and provided to MSHA upon request.
- (7) After the operator has plugged the well as described in subparagraphs (d)(3) and/or (d)(4), the operator shall plug the adjacent hole, from the bottom to the surface, with Portland cement or a lightweight cement mixture.

The operator shall embed steel turnings or other small magnetic particles in the top of the cement near the surface to serve as a permanent magnetic monument of the well. In the alternative, a 4-inch or larger casing, set in cement, shall extend at least 36 inches above the ground level.

A combination of the methods outlined in subparagraphs (d)(3) and (d)(4) may have to be used in a single well, depending upon the conditions of the hole and the presence of casings. The operator and the District Manager shall discuss the nature of each hole. The District Manager may require that more than one method be utilized. The mine operator may submit an alternative plan to the District Manager for approval to use different methods to address wells that cannot be completely cleaned out. The District Manager may require additional documentation and certification by a registered petroleum engineer to support the proposed alternative methods.

**3. MANDATORY PROCEDURES WHEN MINING WITHIN A 100-FOOT DIAMETER BARRIER AROUND WELL**

- a. A representative of the operator, a representative of the miners, the appropriate State agency, or the MSHA District Manager may request that a conference be conducted prior to intersecting any plugged or re-plugged well. Upon receipt of any such request, the District Manager shall schedule such a conference. The party requesting the conference shall notify all other parties listed above within a reasonable time prior to the conference to provide opportunity for participation. The purpose of the conference shall be to review, evaluate, and accommodate any abnormal or unusual circumstance related to the condition of the well or surrounding strata when such conditions are encountered.
- b. The operator shall intersect a well on a shift approved by the District Manager. The operator shall notify the District Manager and the miners' representative in sufficient time prior to intersecting a well in order to provide an opportunity to have representatives present.
- c. When using continuous mining methods, the operator shall install drivage sights at the last open crosscut near the place to be mined to ensure intersection of the well. The drivage sites shall not be more than 50 feet from the well. When using longwall-mining methods, distance markers shall be installed on 5-foot centers for a distance of 50 feet in advance of the well in the headgate entry and in the tailgate entry.
- d. The operator shall ensure that fire-fighting equipment including fire extinguishers, rock dust, and sufficient fire hose to reach the working face area of the well intersection (when either the conventional or continuous mining method is used) is available and operable during all well intersections. The fire hose shall be located in the last open crosscut of the entry or room. The operator shall maintain the water line to the belt

conveyor tailpiece along with a sufficient amount of fire hose to reach the farthest point of penetration on the section. When the longwall mining method is used, a hose to the longwall water supply is sufficient.

- e. The operator shall ensure that sufficient supplies of roof support and ventilation materials shall be available and located at the last open crosscut. In addition, emergency plugs and suitable sealing materials shall be available in the immediate area of the well intersection.
- f. On the shift prior to intersecting the well, the operator shall service all equipment and check it for permissibility. Water sprays, water pressures, and water flow rates used for dust and spark suppression shall be examined and any deficiencies corrected.
- g. The operator shall calibrate the methane monitor(s) on the longwall, continuous mining machine, or cutting machine and loading machine on the shift prior to intersecting the well.
- h. When mining is in progress, the operator shall perform tests for methane with a handheld methane detector at least every 10 minutes from the time that mining with the continuous mining machine or longwall face is within 30 feet of the well until the well is intersected. During the actual cutting process, no individual shall be allowed on the return side until the well intersection has been completed, and the area has been examined and declared safe. All workplace examinations on the return side of the shearer will be conducted while the shearer is idle. The operator's most current Approved Ventilation Plan will be followed at all times unless the District Manager deems a greater air velocity for the intersect is necessary.
- i. When using continuous or conventional mining methods, the working place shall be free from accumulations of coal dust and coal spillages, and rock dust shall be placed on the roof, rib, and floor to within 20 feet of the face when intersecting the well. On longwall sections, rock dusting shall be conducted and placed on the roof, rib, and floor up to both the headgate and tailgate gob.
- j. When the well is intersected, the operator shall de-energize all equipment, and thoroughly examine and determine the area to be safe before permitting mining to resume.
- k. After a well has been intersected and the working place determined to be safe, mining shall continue in by the well a sufficient distance to permit adequate ventilation around the area of the well.

- l. If the casing is cut or milled at the coal seam level, the use of torches should not be necessary. However, in rare instances, torches may be used for inadequately or inaccurately cut or milled casings. No open flame shall be permitted in the area until adequate ventilation has been established around the well bore and methane levels of less than 1.0% are present in all areas that will be exposed to flames and sparks from the torch. The operator shall apply a thick layer of rock dust to the roof, face, floor, ribs and any exposed coal within 20 feet of the casing prior to the use of torches.
- m. Non-sparking (brass) tools will be available and will be used exclusively to expose and examine cased wells.
- n. No person shall be permitted in the area of the well intersection except those actually engaged in the operation, including company personnel, representatives of the miners, personnel from MSHA, and personnel from the appropriate State agency.
- o. The operator shall alert all personnel in the mine to the planned intersection of the well prior to their going underground if the planned intersection is to occur during their shift. This warning shall be repeated for all shifts until the well has been mined through.
- p. The well intersection shall be under the direct supervision of a certified individual. Instructions concerning the well intersection shall be issued only by the certified individual in charge.
- q. If the mine operator cannot find the well in the longwall panel or if a development section misses the anticipated intersection, the operator shall cease mining to examine for hazardous conditions at the projected location of the well, notify the District Manager, and take reasonable measures to locate the well, including visual observation/inspection or through survey data. Mining may resume if the well is located and no hazardous conditions exist. If the well cannot be located, the mine operator shall work with District Manager to resolve any issues before mining resumes.
- r. The provisions of this Order do not impair the authority of representatives of MSHA to interrupt or halt the well intersection, and to issue a withdrawal order, when they deem it necessary for the safety of the miners. MSHA may order an interruption or cessation of the well

intersection and/or a withdrawal of personnel by issuing either a verbal or written order to that effect to a representative of the operator, which order shall include the basis for the order. Operations in the affected area of the mine may not resume until a representative of MSHA permits resumption. The mine operator and miners shall comply with verbal or written MSHA orders immediately. All verbal orders shall be committed to writing within a reasonable time as conditions permit.

- s. A copy of this Order shall be maintained at the mine and be available to the miners.
- t. If the well is not plugged to the total depth of all minable coal seams identified in the core hole logs, any coal seams beneath the lowest plug will remain subject to the barrier requirements of 30 C.F.R. § 75.1700, should those coal seams be developed in the future.
- u. All necessary safety precautions and safe practices according to Industry Standards, required by MSHA regulations and State regulatory agencies having jurisdiction over the plugging site will be followed to provide the utmost protection to the miners involved in the process.
- v. All miners involved in the plugging or re-plugging operations will be trained on the contents of this Petition prior to starting the process and a copy of this Petition will be posted at the well site until the plugging or re-plugging has been completed.
- w. Mechanical bridge plugs should incorporate the best available technologies that are either required or recognized by the State regulatory agency and/or oil and gas industry.
- x. Within 30 days after this Order becomes final, the operator shall submit proposed revisions for its approved 30 C.F.R. Part 48 training plan to the District Manager. These proposed revisions shall include initial and refresher training on compliance with the terms and conditions stated in the Order. The operator shall provide all miners involved in well intersection with training on the requirements of this Order prior to mining within 150 feet of the next well intended to be mined through.
- y. The responsible person required under 30 C.F.R. § 75.1501 Emergency Evacuations, is responsible for well intersection emergencies. The well intersection procedures should be reviewed by the responsible person prior to any planned intersection.

- z. Within 30 days after this Order becomes final, the operator shall submit proposed revisions for its approved mine emergency evacuation and firefighting program of instruction required under 30 C.F.R § 75.1502. The operator will revise the program of instruction to include the hazards and evacuation procedures to be used for well intersections. All underground miners will be trained in this revised plan within 30 days of submittal.

**SUBJECT TO THE ABOVE TERMS AND CONDITIONS**, and under the authority delegated by the Secretary of Labor to the Administrator for Coal Mine Safety and Health, and under § 101(c) of the Federal Mine Safety and Health Act of 1977, 30 U.S.C. § 811(c), and 30 C.F.R. Part 44, a modification of the application of 30 C.F.R. § 75.1700 at The Marion County Coal Company's Marion County Mine is hereby **GRANTED**.

**DISTRIBUTION:**

*Winfield Wilson  
Office of the Solicitor, U.S. Dept. of Labor  
201 12<sup>th</sup> St S, Suite 401  
Arlington, VA 22202*

*Christopher D. Pence  
Hardy Pence PLLC  
500 Lee Street East, Suite 701  
Charleston, WV 25301*

*Stephen Gigliotti  
Coal Mine Safety & Health, Safety Division  
Mine Safety and Health Administration, U.S. Dept. of Labor  
201 12<sup>th</sup> St S, Suite 401  
Arlington, VA 22202*

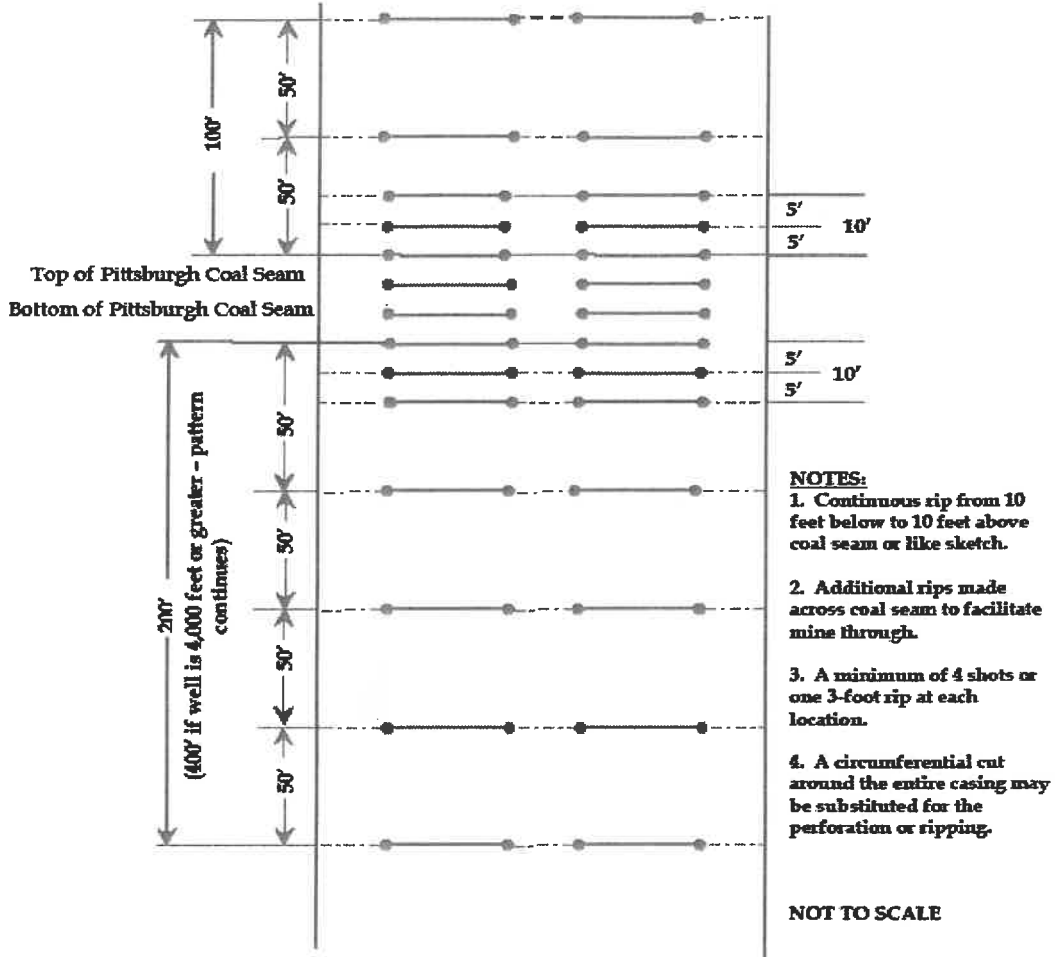
*Sheila McConnell  
Office of Standards Regulations and Variances  
Mine Safety and Health Administration, U.S. Dept. of Labor  
201 12<sup>th</sup> St S, Suite 401  
Arlington, VA 22202*

*David Roddy  
Marion County Coal Company  
1 Bridge Street  
Monongah, WV 26554*

*Greg J. Norman, Director  
West Virginia Office of Miners' Health Safety & Training  
#7 Players Club Dr. Suite 2  
Charleston WV 25311*

*Ricky L. Rinehart  
UMWA Representative, Marion County Coal Mine  
67 Cellular Drive  
Mannington, West Virginia 26582*

Appendix A



WW-4A  
Revised 6-07

1) Date: JANUARY 15, 2026

2) Operator's Well Number 8315

3) API Well No.: 47 - 049 - 00305

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

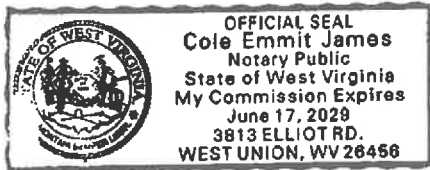
<b>4) Surface Owner(s) to be served:</b>	<b>5) (a) Coal Operator</b>
(a) Name <u>RENEE E. CAMPBELL</u>	Name <u>WEST VIRGINIA LAND RESOURCES INC.</u>
Address <u>908 VIRGINIA AVE.</u>	Address <u>1 BRIDGE STREET</u>
<u>FOLLANSBEE, WV 26037</u>	<u>MONONGAH, WV 26554</u>
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name _____
	Address _____
(c) Name _____	Name _____
Address _____	Address _____
<b>6) Inspector</b> <u>ROBERT HITT</u>	(c) Coal Lessee with Declaration
Address <u>8934 GOODHOPE PIKE</u>	Name _____
<u>LOST CREEK, WV 26385</u>	Address _____
Telephone <u>(681) 344-4747</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 reverse 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 WEST VIRGINIA LAND RESOURCES INC

By: DAVID RODDY

Its: PROJECT ENGINEER

Address 1 BRIDGE STREET

MONONGAH, WV 26554

Telephone (304) 534-4748

Subscribed and sworn before me this 19 day of January 2026

Cole James Notary Public

My Commission Expires June 17, 2029

**Oil and Gas Privacy Notice**

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

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Office of Oil and Gas

MAR 17 2026

WV Department of  
Environmental Protection **05/01/2026**

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City, State, ZIP+4® Follensboro, WV 26037

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

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WV Department of  
 Environmental Protection

05/01/2026

WW-4B

API No. 47-049-00305  
Farm Name \_\_\_\_\_  
Well No. 8315

**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 X / owner X / 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: 2/18/26

By: [Signature]  
Its Designated Agent

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WW-9  
(5/16)

API Number 47 - 049 - 00305  
Operator's Well No. \_\_\_\_\_

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

Operator Name WEST VIRGINIA LAND RESOURCES INC OP Code \_\_\_\_\_

Watershed (HUC 10) PYLES FORK OF BUFFALO CREEK Quadrangle HUNDRED WW, PA

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 \_\_\_\_\_ )
- Reuse (at API Number \_\_\_\_\_)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain Tanks, see attached letter)

Will closed loop system be used? If so, describe: Yes. Gel circulated from tank thru well bore and returned to tank

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Gel or Cement

-If oil based, what type? Synthetic, petroleum, etc.

Additives to be used in drilling medium? Bentonite, Bicarbonate of Soda

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Shaker cutting buried on site

-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

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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.

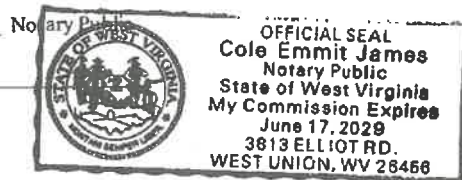
Company Official Signature David Roddy

Company Official (Typed Name) David Roddy

Company Official Title Project Engineer

Subscribed and sworn before me this 19 day of January, 2026

Cole James  
My commission expires June 17, 2029



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Proposed Revegetation Treatment: Acres Disturbed 1 Prevegetation pH \_\_\_\_\_

Lime 3 Tons/acre or to correct to pH 6.0

Fertilizer type 10-20-20 or equivalent

Fertilizer amount 500 lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type lbs/acre

Seed Type lbs/acre

See Attachment 100

See Attachment 100

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: Robert J. Hitt

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

Title: OOG Inspector

Date: 3-9-26

Field Reviewed? ( ) Yes ( ) No

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CAVILL WILD • 1851 E. MAIN HWY 69 • WEAVER • WOODBURN KY 40259 • PH# 4524



**NOTICE TO CONSUMERS**

Notice: A certification of a mediator required by some states. Under the seed laws of several states, a violation, mislabeling, or concealment is regarded as a prerequisite to maintaining a legal action based upon the failure of seed, to wit: the notice is intended to produce as represented. The consumer must file a complaint within 180 days, IN, MS, OK, TX, WA, signed only CA, MD, ND, SD, along with the required filing fee (where applicable) with the Commissioner, Director, or Secretary of Agriculture, Seed Commission or Dept. of Civil Applications, Court within such time as to permit inspection of the crops, plants, or trees by the designated agency and the Mediator from whom the seed was purchased. A copy of the complaint shall be sent to the seller by certified or registered mail or by delivery provided by the state.

MIXTURE-COASTAL SEED 20 5  
 LC# 20 714220 NET WT 50  
 CROP: 58 INERT: 1 55 SEED SIZE

KIND	VARIETY
ANNUAL RYEGRASS	MAGNUM
CROPERGRASS	POTOMAC
COATING MATERIAL	LINE
PERENNIAL RYEGRASS	NOT STATED
CLOVER	CLIMAX
COATING MATERIAL	NOT STATED
TIMOTHY	SEMIN: L
BROADFOOT TREFOIL	
COATING MATERIAL	
LADINO CLOVER	
COATING MATERIAL	

ORG	PURE	COPY	HESS	DCPH	1/16
DR	29.48	85.00	.00	.00	11/16
CR	11.35	85.00	.00	.00	11/16
CA	8.00	85.00	.00	.00	11/16
CP	13.60	85.00	.00	.00	11/16
OP	5.48	85.00	.00	.00	12/16
CAF	3.48	85.00	.00	.00	2/16
CFN	8.00	85.00	.00	.00	3/16
CFN	2.83	83.00	.00	.00	11/16
CR	1.91	80.00	.00	.00	11/16
CR	3.17	60.00	25.00	.00	8/16
	1.78	80.00	.00	.00	8/16

NOTICE TO BUYER: WE WARRANT THAT SEEDS WE SELL WILL CONFORM TO THE LABEL DESCRIPTION REQUIRED UNDER STATE AND FEDERAL LAWS WITHIN RECOGNIZED TOLERANCES. WE MAKE NO WARRANTIES, EXPRESSED OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR PURPOSE, OR OTHERWISE WHICH WOULD EXTEND BEYOND SUCH DESCRIPTIONS. AND IN ANY EVENT OUR LIABILITY FOR BREACH OF ANY WARRANTY OR CONTRACT WITH RESPECT TO SUCH SEED IS LIMITED TO THE PURCHASE PRICE OF SUCH SEEDS.

Map  
 10/1/16

NET WT 50 LBS PER 100

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Consolidation Coal Company,  
Northern West Virginia Operations  
1 Bridge Street  
Martinsburg, WV 25401

Phone: 304-534-4143  
Fax: 304-534-4139  
Email: [ronnieharsh@consolidationcoal.com](mailto:ronnieharsh@consolidationcoal.com)  
Web: [www.consolidationcoal.com](http://www.consolidationcoal.com)

\*Name: RONNIE HARSH  
\*Title: Project Engineer

April 7, 2014

Department of Environmental Protection  
Office of Oil and Gas  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304-2345  
Phone: (304) 926-0499  
Fax: (304) 926-0452

To Whom It May Concern:

As per the Department of Environmental Protection, Office of Oil and Gas request, Consolidation Coal Company, Northern West Virginia Operations, submits the following procedures utilizing pit waste.

Upon submitting a well work application (without general permit for Oil and Gas Pit Waste Discharge Application), Consolidation Coal Company, Northern West Virginia Operations, will construct no pits, but instead will use mud tanks to contain all drilling muds.

Once the well is completed, that material (minus the cave material) will be trucked to the next well to be plugged or to DEP impoundment facilities number U-78-83, U-104-83, or U-1011-93.

Sincerely,



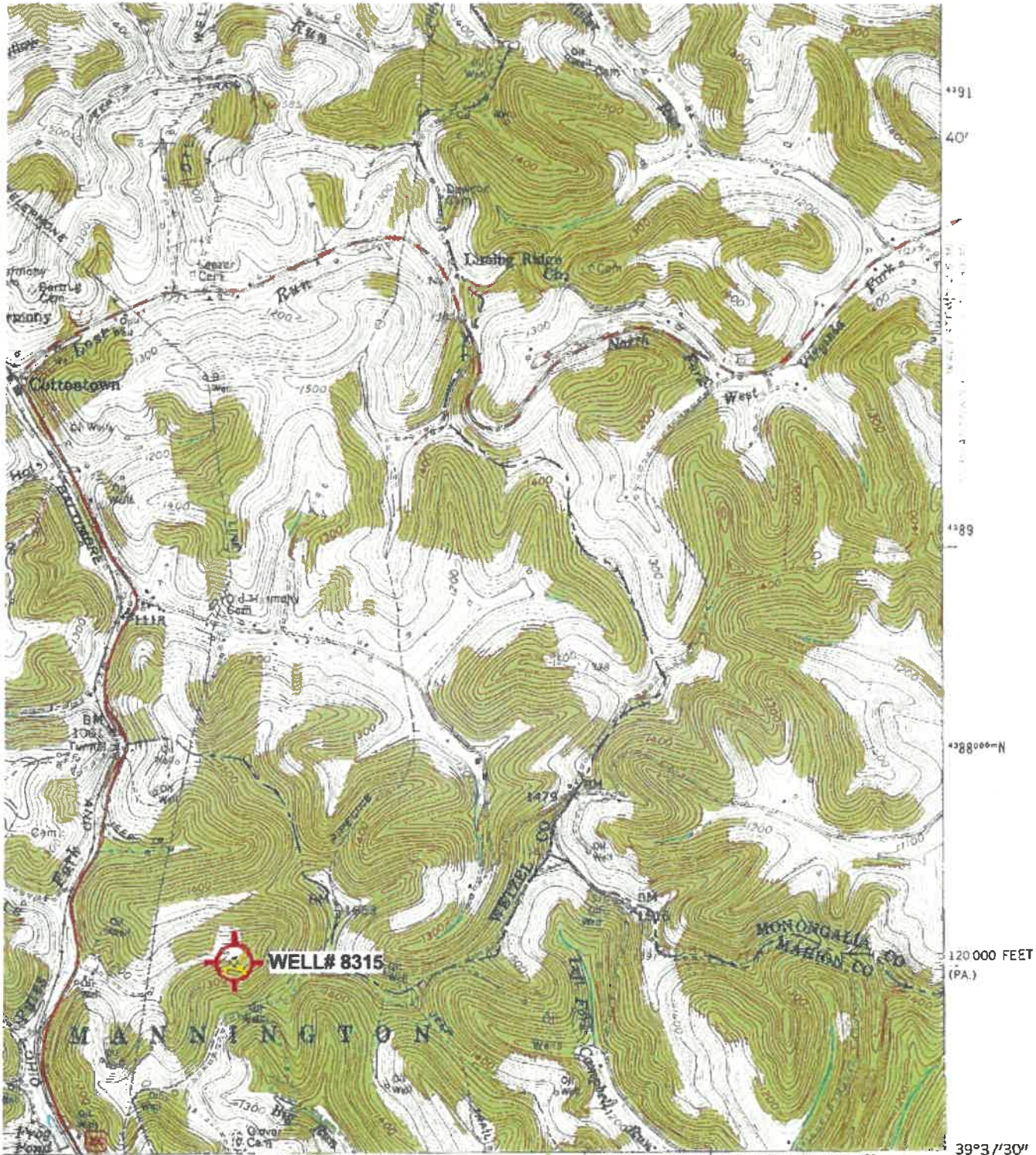
Ronnie Harsh  
Project Engineer

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1:250 000 FEET (PA.)

1 MILE  
7000 FEET  
1.0 METER

**ROAD CLASSIFICATION**

Heavy duty	—	Light duty	- - -
Medium-duty	- · - · -	Unimproved dirt	- · - · -
U. S. Route	—	State Route	—

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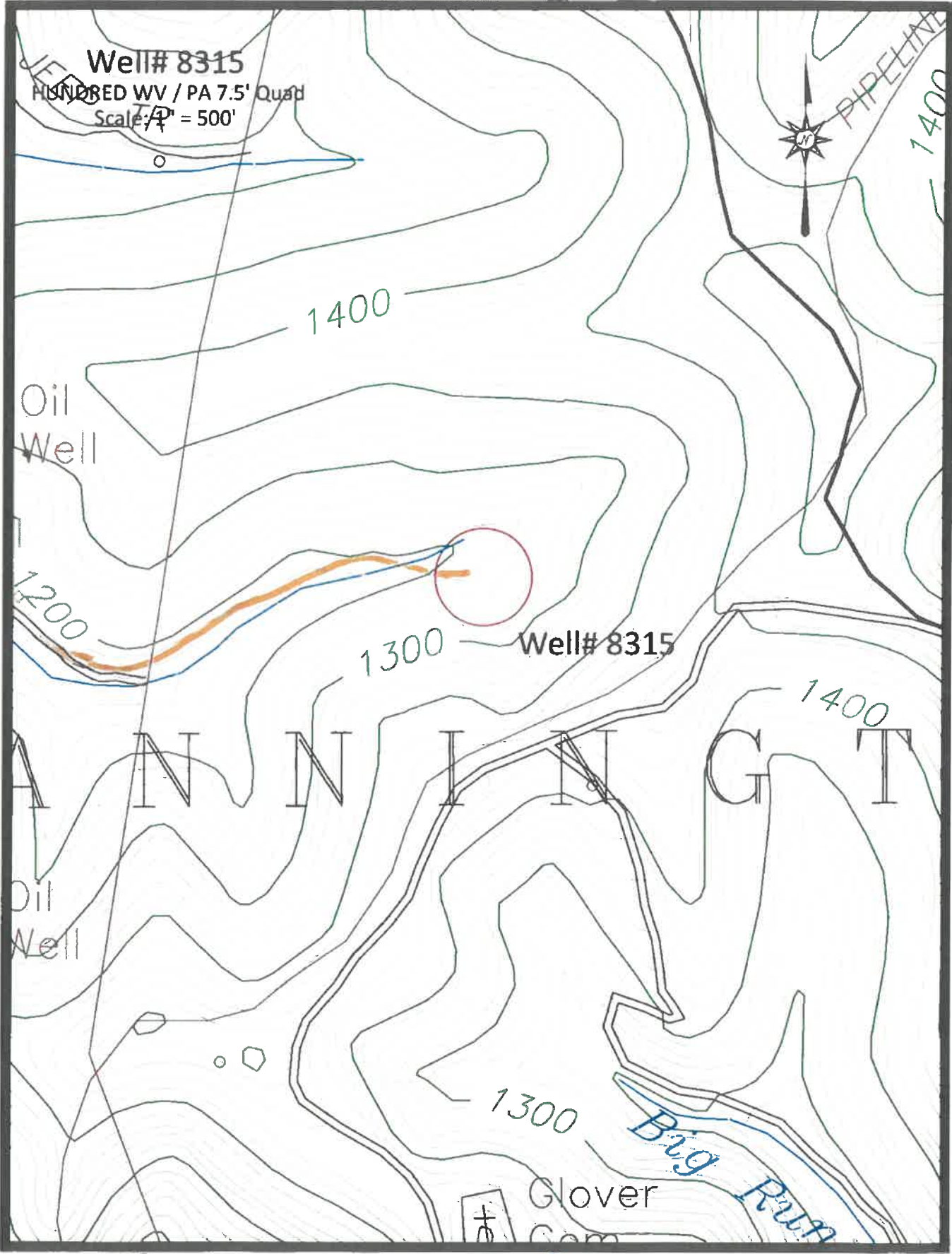


QUADRANGLE LOCATION

'Hundred', W. VA. Scale: 1" = 0.379Mi 610Mi 2,000Ft, 1 Mi = 2.640", 1 cm = 240Mi

**HUNDRED, W. VA.—PA.**  
NW/4 MANNINGTON 15' QUADRANGLE  
N 3937.5 — W 8022.5/7.5

05/01/2026



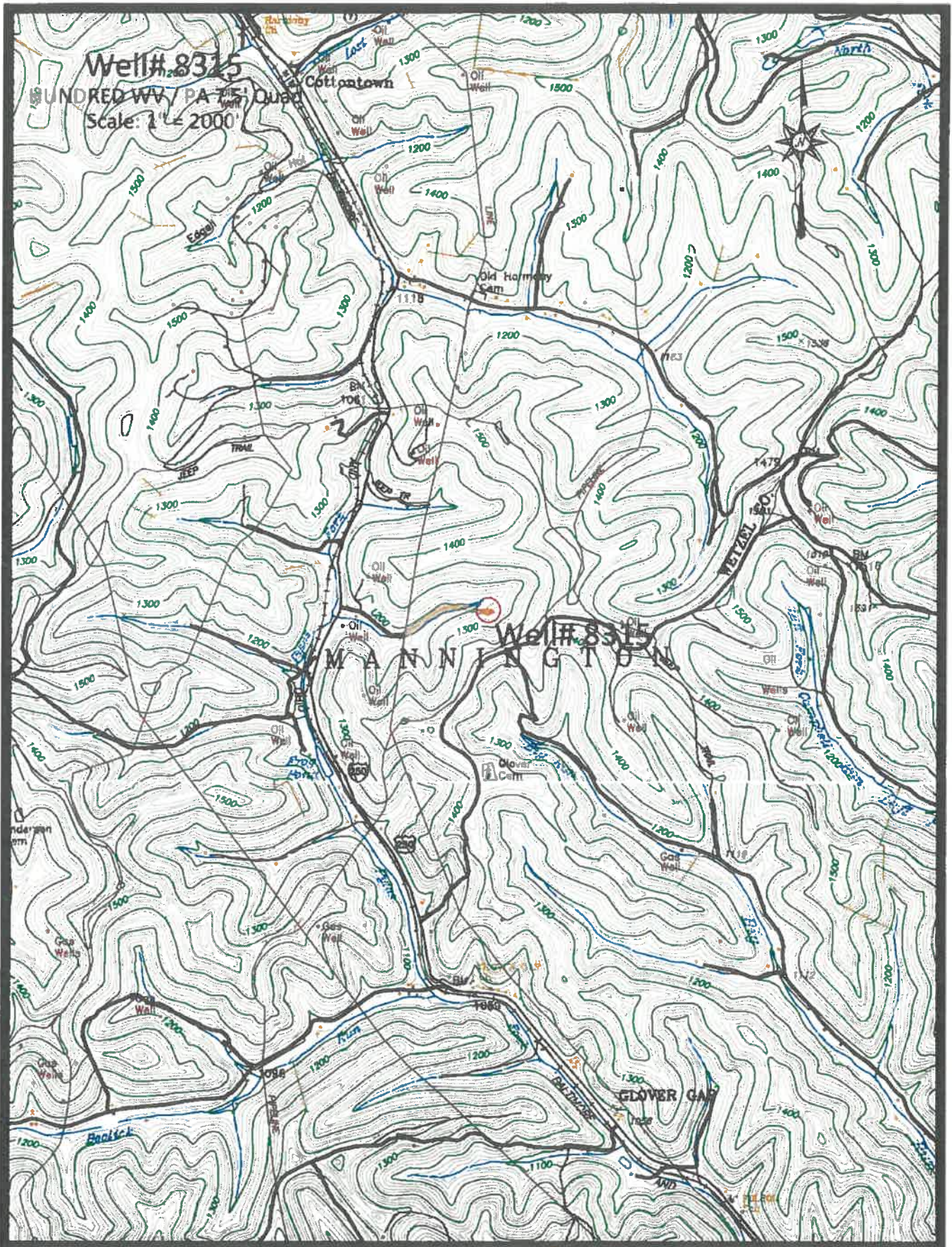
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 Access Road

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WW-7  
8-30-06



West Virginia Department of Environmental Protection  
Office of Oil and Gas

**WELL LOCATION FORM: GPS**

API: 47-049-00305 WELL NO.: 8315

FARM NAME: ROBERT N. CAMPBELL

RESPONSIBLE PARTY NAME: WEST VIRGINIA LAND RESOURCES INC.

COUNTY: MARION DISTRICT: MANNINGTON

QUADRANGLE: HUNDRED WV, PA

SURFACE OWNER: RENEE E. CAMPBELL

ROYALTY OWNER: \_\_\_\_\_

UTM GPS NORTHING: 4,387,188 m

UTM GPS EASTING: 550,416 m GPS ELEVATION: 378 m

The Responsible Party named above has chosen to submit GPS coordinates in lieu of preparing a new well location plat for a plugging permit or assigned API number on the above well. The Office of Oil and Gas will not accept GPS coordinates that do not meet the following requirements:

1. Datum: NAD 1983, Zone: 17 North, Coordinate Units: meters, Altitude: height above mean sea level (MSL) – meters.
2. Accuracy to Datum – 3.05 meters
3. Data Collection Method:

Survey grade GPS  : Post Processed Differential \_\_\_\_\_  
Real-Time Differential

Mapping Grade GPS \_\_\_\_\_ : Post Processed Differential \_\_\_\_\_  
Real-Time Differential \_\_\_\_\_

**4. Letter size copy of the topography map showing the well location.**

I the undersigned, hereby certify this data is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Office of Oil and Gas.

 \_\_\_\_\_ JANUARY 15, 2026  
 Signature Title Date

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MAR 17 2026

05/01/2026



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

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## plugging permits issued for 4704900305, 304, and 297

1 message

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

Mon, Apr 27, 2026 at 9:39 AM

To: "Roddy, David" <DavidRoddy@acnrinc.com>, Robert J Hitt <robert.j.hitt@wv.gov>, mtrach@wvassessor.com

To whom it may concern, plugging permits have been issued for 4704900305, 304, and 297.

--

**James Kennedy**

Environmental Resource Specialist III / Permitting

WVDEP Office of Oil and Gas

601 57<sup>th</sup> Street, SE


Charleston, WV 25304


304-926-0499 ext. 45025


[james.p.kennedy@wv.gov](mailto:james.p.kennedy@wv.gov)

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### 3 attachments

 **4704900305.pdf**  
5854K

 **4704900304.pdf**  
5402K

 **470490297.pdf**  
7886K

05/01/2026