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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)

Friday, April 8, 2022

WELL WORK PLUGGING PERMIT  
Vertical Plugging

COLUMBIA GAS TRANSMISSION, LLC  
STORAGE TECHNICAL SERVICES - 6TH FLOOR  
1700 MACCORKLE AVE. SE.  
CHARLESTON, WV 25314

Re: Permit approval for 0  
47-051-00777-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Upon completion of the plugging well work, the above named operator will reclaim the site according to the provisions of WV Code 22-6-30. Please be advised that form WR-38, Affidavit of Plugging and Filling Well, is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin  
Chief

A blue ink signature of James A. Martin, Chief, is written over the printed name and title.

Operator's Well Number: 0  
Farm Name: TURNER, ALBERT - HEIRS  
U.S. WELL NUMBER: 47-051-00777-00-00  
Vertical Plugging  
Date Issued: 4/8/2022

## 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.

4705100777P

1) Date February 3, 2021  
2) Operator's  
Well No. Victory B 2604  
3) API Well No. 47-051 - 0077-00-00

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

APPLICATION FOR A PERMIT TO PLUG AND ABANDON

4) Well Type: Oil \_\_\_ / Gas X / Liquid injection \_\_\_ / Waste disposal \_\_\_ /  
(If "Gas, Production \_\_\_ or Underground storage X) Deep \_\_\_ / Shallow X

5) Location: Elevation 1161.8' Watershed Ben Run - A Tributary of Fish Creek  
District Liberty County Marshall Quadrangle Cameron, WV

6) Well Operator Columbia Gas Transmission, LLC 7) Designated Agent Brad Nelson, Storage Engineer  
Address 1700 MacCorkle Avenue S.E., P.O. Box 1273 Address 455 Racetrack Road  
Charleston, WV 25325 Washington, PA 15301

8) Oil and Gas Inspector to be notified  
Name Barry Stollings  
Address 28 Conifer Drive  
Bridgeport, WV 26330

9) Plugging Contractor  
Name Contractor Services, Inc. of West Virginia (ConServ)  
Address 929 Charleston Road  
Spencer, WV 25276

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

Refer to enclosed:

- 1) Well job plan.
- 2) Prior to P&A wellbore schematic.
- 3) Proposed P&A wellbore schematic.

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

Work order approved by inspector Barry Stollings Date 2-11-21

04/08/2022



Objective: Plug and Abandonment		LAST PROFILE UPDATE:	
TITLE: Plug and Abandonment	WORK TYPE: MOD3		
FIELD: Victory B	WELL: 2604		
STATE: WV	SHL (Lat/Long): 39.783330 -80.56333	API: 47-051-00777-00-00	
TWP: Liberty	BHL (Lat/Long): 39.783330 -80.56333	CNTY: Marshall	

PROCEDURE

4705100777A

- 1 Obtain NRP clearances, TOPs, pipeline crossing eval, etc.
- 2 Obtain State plugging permit.
- 3 Notify Reservoir Engineering & Geosciences (REG) of intent to take well out of service.
- 4 Notify environmental inspector.
- 5 Prepare access road and well site. Install ECD's per EM&CP.
- 6 Service all wellhead valves.
- 7 Document initial tubing / casing / annular pressures.
- 8 MI flowback tank and blow flowstring and all annuli, to unload any lighter density fluid in wellbore.
- 9 Load 2" x 7" and 7" x 8" annuli with kill fluid. Load TFW behind 8-5/8" casing.
- 10 Blow down and kill well. Blow down and load all annuli with kill fluid. Spearhead 10 bbl LCM pill ahead of kill.
- 11 Monitor well pressures for a couple days and top well with kill fluid as necessary.
- 12 MIRU service rig.
- 13 Plumb 7x10 annulus to flowback tank to monitor and capture/control annular fluids.
- \* Step 14 has to be done in one day to maintain well control**
- 14 Remove tubing spool and NU 7-1/16" BOP equipment (blind + pipe + annular) on top of 7" csg. Need kill / choke outlets below blind ram.
- 15 Pressure test BOPs low/high to 250/1000 psig. Pressure test TIW/stabbing valves.
- 16 Release packer, circulate good kill fluid to surface, and condition hole. Pull 2-3/8" tubing/packer. Pull tubing slowly to prevent swabbing. Maintain trip tank volumes.
- 17 Replace pipe rams to accommodate work string OD.
- 18 TIH with steel tooth 3-3/4" tricone bit and work string. Clean to TD at ~2284'. Circulate two bottoms up and TOOH.
- 19 RIH with spear, jars, accelerator, and attempt to pull uncemented perforated liner/packer.
- 21 TBH open-ended and spot balanced bottom cement plug from TD to 1700 ft.
- 21 WOC and tag cement top. TOOH. If cement top is deeper than 1900', then install second cement plug.
- 22 Install 7" CIBP above cement top.
- Consult with WE&T Engineer on the following perf and squeeze steps:*
- 23 Perforate above BP and perform injection / circulation test.
- 24a *If injection / circulation established*, circulate kill fluid to clean hole if circulation established, set cement retainer and squeeze cement with calculated annular volume between squeeze perms and 1300'. WOC and obtain CBL.
- 24b *If injection / circulation not established*, cover perms with 200' cement plug.
- Consult with WE&T Engineer on the following steps; procedure may need altered based on results of squeeze cementing in above steps:*
- 25 Remove BOPs, install pulling nipple on 7" casing and dress 8-5/8" casing to accommodate BOP equipment.
- 26 Install 11" spool with kill / choke outlets and an 11" annular BOP on top of 8-5/8" casing. Function test BOP equipment low / high to 250 psig / 500 psig.
- 27 Wireline freepoint 7" and cut / pull all casing that is free.
- 28 RIH with work string and install balanced cement plugs from retainer/top of last cmt plug to 1300'. WOC 8 hrs and tag cement top. If cement top is less than 100' from top of 7", then reinstall plug.
- Note that it is imperative that we're confident that we've installed a competent cement barrier across the borehole for well control prior to proceeding with next steps. Consult with WE&T engineer.**
- 29 ND BOPs.
- 30 Drive 10' to 20' of 13-3/8" casing.
- 31 Attempt to pull all 8-5/8" casing. If unable to pull, wireline freepoint. Consult with WE&T Engineer.
- 32 Based on results, will either perf and squeeze or cut / pull casing. Goal is to cement from below the Pittsburgh coal to surface. If plugging to MSHA standards then cement plug across Pittsburgh Coal needs to be green-dyed thixotropic.
- 33 TIH open-ended and spot balanced cement plug(s) from top of last plug to surface.
- 34 Top off well and all remaining annuli with cement.
- 35 Install 7" csg monument 30" above GL, tack weld cap, and affix API number.
- 36 When backfilling install plastic Columbia Gas line marker.
- 37 Reclaim road and location.

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Office of Oil and Gas  
FEB 25 2021  
WV Department of  
Environmental Protection

PREPARED BY: Brad Nelson	REVIEWED BY:	APPROVED:
PREP DATE: 1/5/2021		



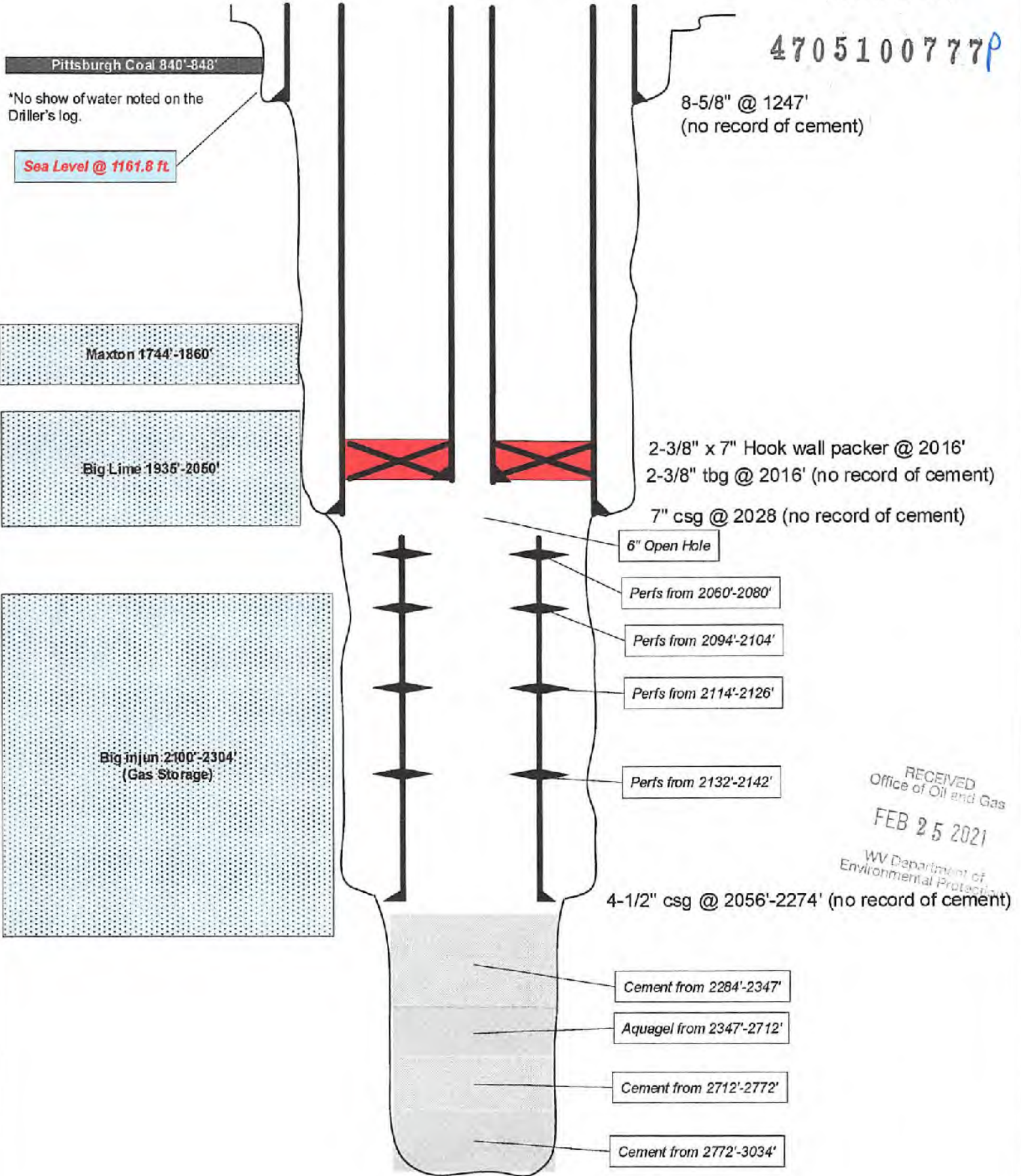
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# Victory B 2604

Prior to P&A

(as of 10/9/2020)

4705100777P



\*No show of water noted on the Driller's log.

Sea Level @ 1161.8 ft

8-5/8" @ 1247'  
(no record of cement)

2-3/8" x 7" Hook wall packer @ 2016'  
2-3/8" tbg @ 2016' (no record of cement)

7" csg @ 2028 (no record of cement)

6" Open Hole

Perfs from 2060'-2080'

Perfs from 2094'-2104'

Perfs from 2114'-2126'

Perfs from 2132'-2142'

4-1/2" csg @ 2056'-2274' (no record of cement)

Cement from 2284'-2347'

Aquagel from 2347'-2712'

Cement from 2712'-2772'

Cement from 2772'-3034'

TD 3034'

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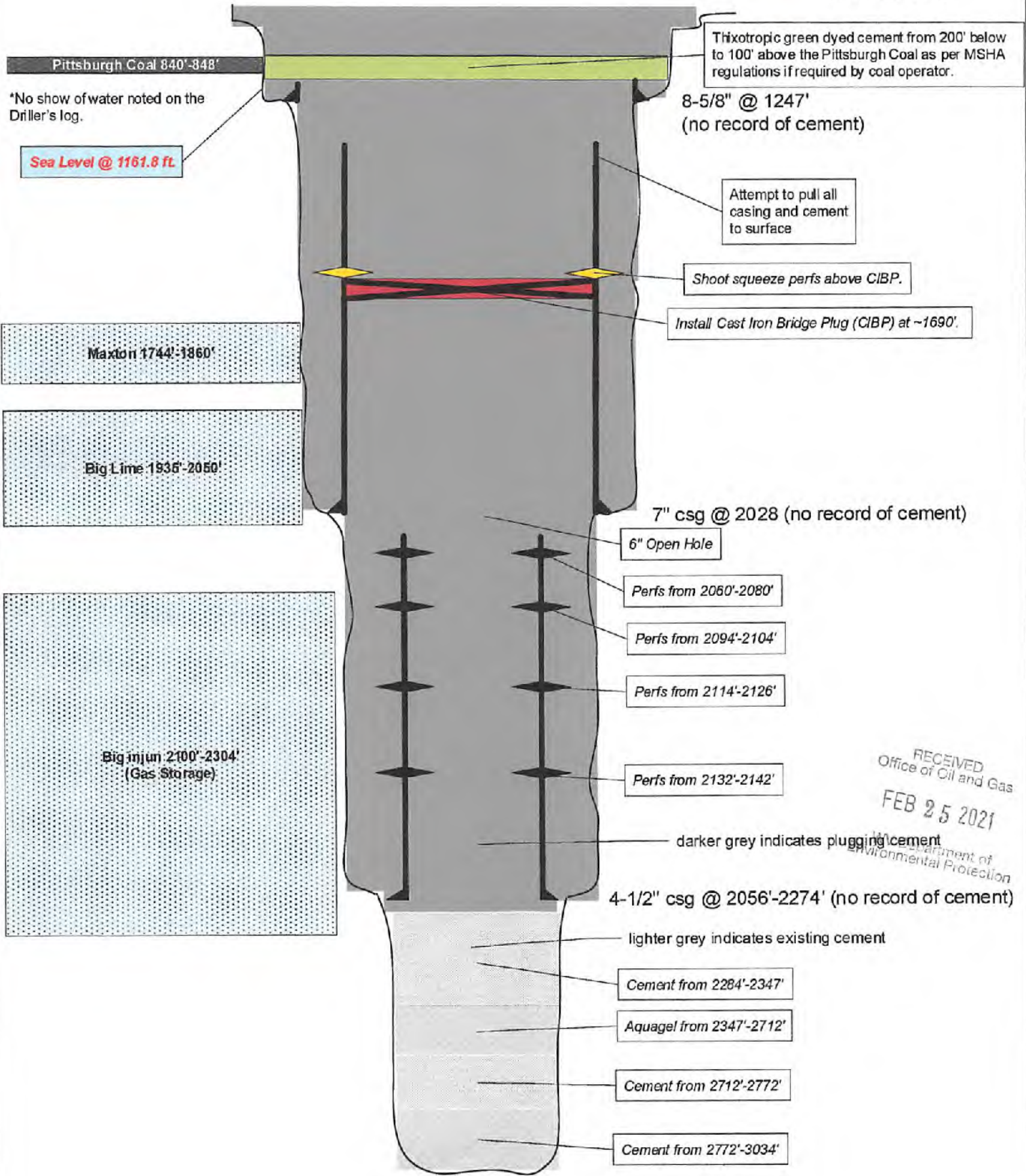
04/08/2022



~ not to scale ~

4705100777 Victory B 2604

Proposed P&A  
(as of 1/5/2021)



Thixotropic green dyed cement from 200' below to 100' above the Pittsburgh Coal as per MSHA regulations if required by coal operator.

\*No show of water noted on the Driller's log.

8-5/8" @ 1247'  
(no record of cement)

Sea Level @ 1161.8 ft.

Attempt to pull all casing and cement to surface

Shoot squeeze perms above CIBP.

Install Cast Iron Bridge Plug (CIBP) at ~1690'.

Maxton 1744'-1860'

Big Lime 1936'-2050'

7" csg @ 2028 (no record of cement)

6" Open Hole

Perfs from 2060'-2080'

Perfs from 2094'-2104'

Perfs from 2114'-2126'

Big Injun 2100'-2304'  
(Gas Storage)

Perfs from 2132'-2142'

darker grey indicates plugging cement

4-1/2" csg @ 2056'-2274' (no record of cement)

lighter grey indicates existing cement

Cement from 2284'-2347'

Aquagel from 2347'-2712'

Cement from 2712'-2772'

Cement from 2772'-3034'

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FEB 25 2021  
Department of Environmental Protection

TD 3034'

04/08/2022



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

4705100777P

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 THIRD COPY (AND EXTRA COPIES IF REQUIRED) SHOULD BE MAILED TO EACH COAL OPERATOR AT THEIR RESPECTIVE ADDRESSES.

M. A. Hanna Coal Company COAL OPERATOR OR OWNER Cadiz, Ohio Attention: T. J. Henderson ADDRESS	The Manufacturers Light & Heat Company 800 Union Trust Building Pittsburgh 19, Pennsylvania COMPLETE ADDRESS
Mary A. Turner Heira COAL OPERATOR OR OWNER c/o Herman Turner, Atty.-in-Fact Box 68 ADDRESS	March 29, 1965 WELL AND LOCATION Liberty District
Hundred, West Virginia LEASE OR PROPERTY OWNER ADDRESS	Marshall County
	Well No. 2604
	Alfred Turner Farm

STATE INSPECTOR SUPERVISING PLUGGING: Bryan Shuman, Wileyville, West Virginia

AFFIDAVIT

STATE OF WEST VIRGINIA, }  
County of Marshall } ss:

Phillip D. Whipkey and Dale E. Yeater 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 The Manufacturers Light & Heat Co. well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 23rd day of December, 1964, and that the well was plugged and filled in the following manner:

BAND OR ZONE RECORD	FILLING MATERIAL	Casing SIZE & RING	CASING	
			CSG PULLED	CSG LEFT IN
3034'	Total Depth	10-3/4"	0	135'
3034' to 2772'	Aquagel	8-5/8"	0	1247'
2772' to 2712'	Cement	7"	0	1994'
2712' to 2347'	Aquagel	1-1/2"	2056'	218'
2347' to 2284'	Cement			
Note: All plugging material run by Well Service Inc., using 2-3/8" Tubing.				
COAL SLAMS	DESCRIPTION OF MONUMENT			
(NAME) Pittsburgh	(840' to 848')	Partial Plug Only		
(NAME)				
(NAME)				
(NAME)				

and that the work of plugging and filling said well was completed on the 15th day of March, 1965.

And further deponents saith not.

Sworn to and subscribed before me this 30th day of March, 1965.

My commission expires:  
July 7, 1970

*Phillip D. Whipkey*  
*Dale E. Yeater*  
*William C. Luther*

Notary Public  
Permit No. MARS-A-PP

04/08/2022

474



47051007779

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

Rotary   
Spudder   
Cable Tools   
Storage

Quadrangle \_\_\_\_\_

Permit No. MARS-474A-PP

WELL RECORD

Oil or Gas Well Storage  
(KIND)

Company The Manufacturers Light & Heat Company  
Address 808 Union Trust Bldg., Pgh. 19, Penna.  
Farm Alfred Turner Acres 140

Location (waters) Big Run

Well No. 2604 Elev 1159.00'

District Liberty County Marshall

The surface of tract is owned in fee by John M. Straight  
R D # 5 Address Cameron, W. Va.

Mineral rights are owned by Mary A. Turner Hrs.  
(Harman Turner Agt.) Address Hundred, W. Va.

Drilling commenced December 23, 1964

Drilling completed March 15, 1965

Date Shot N/A From N/A To N/A

With Wall not Shot

Open Flow 0 /10ths Water in 1/4" Inch

/10ths Merc. in \_\_\_\_\_ Inch

Volume None Cu. Ft.

Rock Pressure 50 lbs. 48 hrs.

Oil None bbls., 1st 24 hrs.

WELL ACIDIZED Not Acidized

WELL FRACTURED Not Fractured

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size OD			Kind of Packer _____
16. _____			Hook Wall _____
13. _____			Size of <u>4-1/2" X 7"</u>
10. <u>10-3/4"</u>		<u>135'</u>	<u>w/4" X 2" Swage</u>
8 1/4. <u>8-5/8"</u>		<u>1247'</u>	Depth set <u>2016'</u>
6 1/2. <u>7"</u>		<u>1994'</u>	
5 3/16. _____			
3. <u>4-1/2"</u>		<u>218'</u>	Perf. top <u>2060'</u>
2. <u>2-3/8"</u>	<u>2016'</u>	<u>2016'</u>	Perf. bottom <u>2080'</u>
Liners Used			Perf. top <u>2094'</u>
			Perf. bottom <u>2104'</u>
			<u>2114-2126 &amp; 2132-2142'</u>

CASING CEMENTED \_\_\_\_\_ SIZE \_\_\_\_\_ No. Ft. \_\_\_\_\_ Date \_\_\_\_\_

No Casing or Tubing Cemented

COAL WAS ENCOUNTERED AT 840 FEET 00 INCHES

840 FEET 00 INCHES 848 FEET 00 INCHES

FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES

RESULT AFTER TREATMENT N/A

ROCK PRESSURE AFTER TREATMENT N/A

Fresh Water N/A Feet N/A Salt Water N/A Feet N/A

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Pittsburgh Coal			840'	848'			
Murphy Sand			1005'	1025'			
Little Dunkard			1205'	1230'			
1st Salt Sand			1496'	1544'			
2nd Salt Sand			1622'	1635'			
3rd Salt Sand			1740'	1764'			
Maxton Sand			1834'	1893'			
Big Lime			1960'	1992'			
Big Injun Sand			1994'	2264'			
Total Depth				2284'			38' of Shale, 2148' to 2170', Original Gas Pay 2134 to 2136', produced from year of 1921 to 1929. Drilled Deeper in 1929. This Well in not in communication with main Storage Field.

Note: The Original 10-3/4", 8-5/8" and 7" Casings were not disturbed, not cemented. 2-3/8" X 7" Hook Wall Packer with 4" X 2" Swage Nipple on top was set at 2016'. 218' of Original ~~10-3/4"~~ 4-1/2" Tubing left in hole, 2056 to 2274'. Original 4-1/2" Tubing perforated as follows: 2060-2080', 2094-2104', 2114-2126' and 2132-2142', perforated by Schlumberger Well Survey Corp.. Well plugged back as follows: 3034-2772' Aquagel, 2772-2712' Cement, 2712-2347' Aquagel, 2347-2284' Cement.

(over)

atg  
04/08/2022





STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

4705100777P

Quadrangle \_\_\_\_\_

Permit No. Mass 474-A

WELL RECORD

Oil or Gas Well Gas  
(KIND)

Company The Manufacturers Light and Heat Co.  
800 Union Trust Building  
Address Pittsburgh, Pennsylvania 15219

Farm Alfred Turner Heirs Acres 140

Location (waters) \_\_\_\_\_

Well No. 2604 Elev. 1159'

District Liberty County Marshall

The surface of tract is owned in fee by Herman Turner,  
Atty.-in-Fact Address Box 68, Hundred,  
W. Va.

Mineral rights are owned by \_\_\_\_\_  
Address \_\_\_\_\_

Drilling commenced March 21, 1929

Drilling completed April 9, 1929

Date Shot \_\_\_\_\_ From \_\_\_\_\_ To \_\_\_\_\_

With \_\_\_\_\_

Open Flow /10ths Water in \_\_\_\_\_ Inch  
/10ths Merc. in \_\_\_\_\_ Inch

Volume \_\_\_\_\_ Cu. Ft.

Rock Pressure 300 lbs. hrs.

Oil \_\_\_\_\_ bbls., 1st 24 hrs.

Fresh water \_\_\_\_\_ feet

Salt water \_\_\_\_\_ feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
18			
13			Size of _____
10			
8 3/4			Depth set _____
6 3/4			Perf. top _____
5 3/16	2263'4"	2263'4"	Perf. bottom _____
3			Perf. top _____
2			Perf. bottom _____
Liners Used			

CASING CEMENTED \_\_\_\_\_ SIZE \_\_\_\_\_ No. Ft. \_\_\_\_\_ Date \_\_\_\_\_

COAL WAS ENCOUNTERED AT \_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES \_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES \_\_\_\_\_ FEET \_\_\_\_\_ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
		<u>THICKNESS</u>					
Beginning at			2136				
Big Injun Sand		260	2044	2304	Little Gas	2124 - 2123 - 2130	
Slate and Shells		236	2304	2540			
Lime white hard		30	2580	2610			
Lime white hard		20	2700	2720			
Fifty-foot Sand white hard		25	2828	2853	Gas	2830 S.L. - 50/10" W. in 2" Opn.	
Slate & Shells white hard		40	2853	2895			
Slate - white soft		25	2930	2955			
Gordon Sand white hard		35	2895	2930			
Fourth Sand - white hard		6	2955	2961	Gas	2958 - Pay-22/10" W. in 4" Opn.	
Slate - white soft		73	2961	3034			
<u>TOTAL DEPTH</u>			<u>3034</u>				
Slate & Shells white		136	2304	2540			
Lime - white hard		20	2540	2560			
Slate & Shells - white		20	2560	2580			
Slate - white soft		10	2610	2620			
Lime - white hard		15	2620	2635			



04/08/2022



Division 2006 248 Fourth Ave., Pittsburgh, Pa.  
 Record of Well No. 260 on 1st Farm 140 Acres  
 County Marshall State W. Va.  
 Rig Commenced March 1929 Completed March 1929  
 Drilling Commenced March 1929 Completed April 1929  
 Cost per Foot 1.20 Contractor Edu. H. ... Address Cameron, W. Va.  
 Drillers' Names Am. Guthrie, ...

BOILER			ENGINE			RIG			
H. P.	No.	Name of Maker	H. P.	No.	Name of Maker	New	Old	Height	Name of Builder

CONDUCTOR AND CASING USED IN DRILLING										
Conductor	13 inch	10 inch	8 1/2 inch	6 1/2 inch	6 1/2 inch	5 1/2 inch	5 1/2 inch	5 inch	4 inch	3 inch

CONDUCTOR AND CASING LEFT IN WELL										
Conductor	13 inch	10 inch	8 1/2 inch	6 1/2 inch	6 1/2 inch	5 1/2 inch	5 1/2 inch	5 inch	4 inch	3 inch

OIL WELL										X GAS WELL	
When Shot	Size of Torpedo	1st Day's Production	Tubing	Roofs	Tanks	Size of Packer	Depth Set	Packed with	1st Minute Pressure	Rock Pressure	

FORMATION	Top		Bottom		Thickness	REMARKS
Beginning of						
Big Sand	2044				10	1 1/2" G. 2124-2128 2130
Slate	2304					
Lime white hard	2580					
" "	2700					
Fifty-foot Sand	2828					Gas 2570 S. 1. - 5 1/2" W. in 20' G. W.
Slate & Shells	2850					
Sand white	2895					
Slate white soft	2930					Gas 2958 - 10 1/2" W. in 40' G. W.
Sand white	2955					
Sand white soft	2961					
Finished						410000 cu ft
Slate & Shells white	2304	2040			36	
Lime white hard	2540	2060			20	
Slate & shells white	2070	2080			20	
Slate white soft	2610	2620			10	
Lime white hard	2620	2630			10	
Slate & shells white hard	2630	2700			60	
Slate & shells white	2720	2760			40	
Sand white soft	2820	2820			0	

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 Office of Oil and Gas  
 FEB 25 2021  
 WV Department of  
 Environmental Protection

Examined above information and found to be correct by Edu. H. ... Contractor  
 Examined and approved by ... Superintendent of Co.  
 NOTE: - The above blank must be filled out verbally by the Contractor, with a complete and accurate record of the Well, and accompany, when presented for payment the bill for drilling.  
 All formations and known sands must be given by their proper name, with steel line measurements, and under the head of "Remarks" must be recorded in what sand and at what depth Oil, Gas or Water was found, the quantity of same, the quality of the sand, and thickness of pay.  
 Make no memoranda of boiler and engine if owned by contractor.



The *Manuel* *Light* *Company*

2604

Division *Cameron* 285 Fourth Ave., Pittsburgh, Pa.  
 Record of Well No. *2604* on *Alfred Turner* Farm Acres  
 Field *Liberty* District *Mar.* County *Ut. Va.* State  
 Rig Commenced *Oct 27* 19*40*. Completed *Oct 27* 19*40*  
 Drilling Commenced *Dec 5* 19*40*. Completed *Jan. 8* 19*41*  
 Cost per foot *2.35* Contractor *Paul M. Martin*, Address *Cameron W. Va.*  
 Drillers' Names *A. W. Huns. R. L. Hughes.*

BOILER			ENGINE			RIG			
H. P.	No.	Name of Maker	H. P.	No.	Name of Maker	New	Old	Height	Name of Builder

CONDUCTOR AND CASING USED IN DRILLING										
Conductor	13 inch	10 inch	8 1/4 inch	6 3/4 inch	6 1/2 inch	5 3/4 inch	5 1/2 inch	5 inch	4 inch	
<i>16</i>		<i>125</i>	<i>1247</i>	<i>2028</i>						

CONDUCTOR AND CASING LEFT IN WELL										
Conductor	13 inch	10 inch	8 1/4 inch	6 3/4 inch	6 1/2 inch	5 3/4 inch	5 1/2 inch	5 inch	4 inch	3 inch
			<i>1347</i>	<i>2028</i>						

OIL WELL					GAS WELL					
When Shot	Size of Torpedo	1st Day's Production	Tubing	Rods	Tanks	Size of Packer	Depth Set	Packed with	1st Minutes Pressure	Rock Pressure

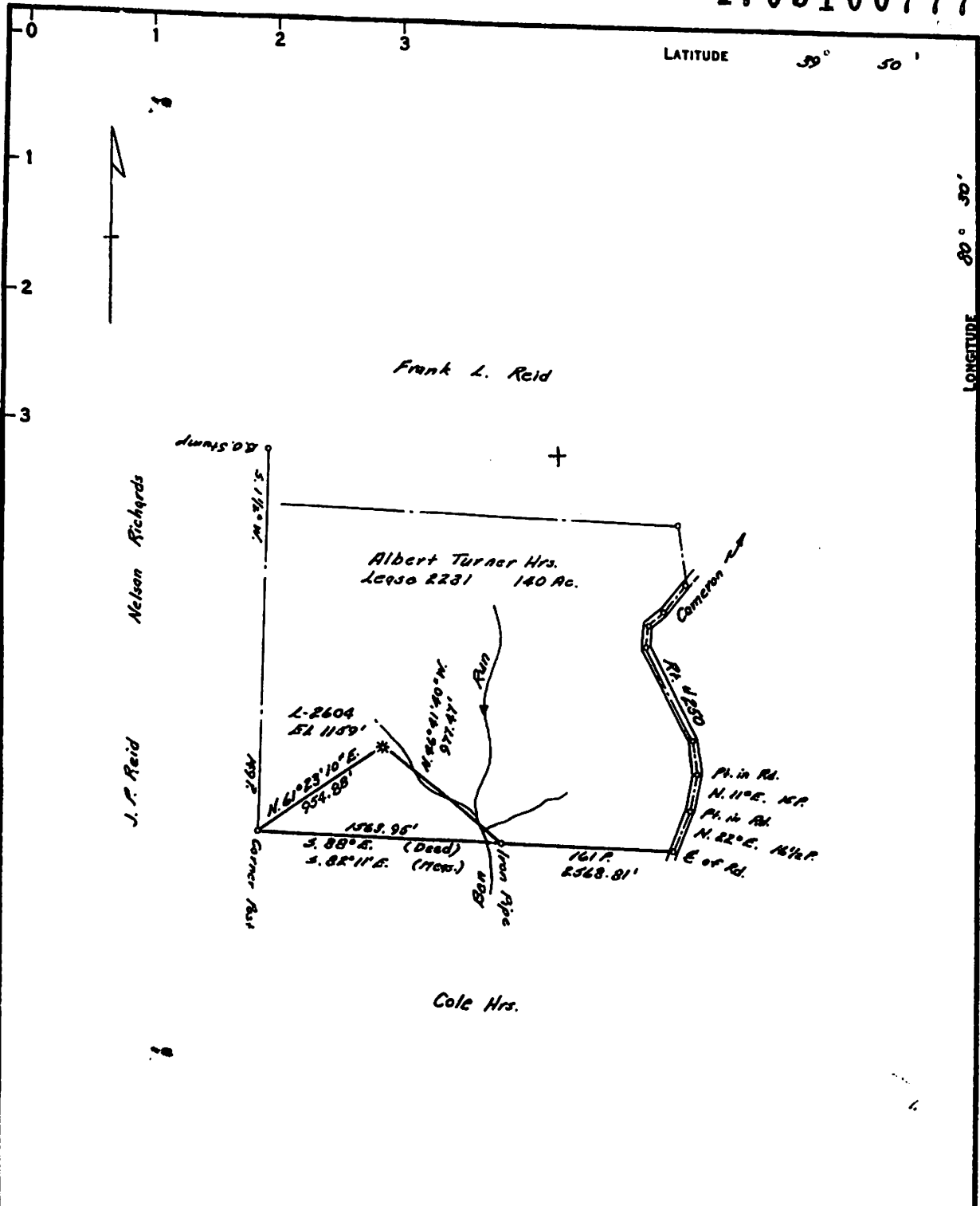
FORMATION	Top	Bottom	Thickness	REMARKS
<i>Sand.</i>	<i>25</i>	<i>50</i>	<i>25</i>	<i>1 hole full of water.</i>
<i>1/4 Coal</i>	<i>870</i>	<i>879</i>	<i>9</i>	
<i>Little Drummond white</i>	<i>1275</i>	<i>1315</i>	<i>40</i>	
<i>Big Drummond white</i>	<i>1390</i>	<i>1405</i>	<i>15</i>	
<i>Big Sand white hard</i>	<i>1461</i>	<i>1575</i>	<i>114</i>	<i>7 barrels water up 11565</i>
<i>1st Salt Sand white</i>	<i>1710</i>	<i>1760</i>	<i>50</i>	
<i>2 Salt Sand white</i>	<i>1835</i>	<i>1885</i>	<i>50</i>	<i>lime white hard</i>
<i>Proton white hard</i>	<i>1710</i>	<i>1960</i>	<i>250</i>	<i>Red 1/2 N white hard</i>
<i>Lower lime white hard</i>	<i>1787</i>	<i>1999</i>	<i>212</i>	<i>lime</i>
<i>General Cone</i>	<i>1999</i>	<i>2003</i>	<i>4</i>	<i>lime</i>
<i>Big lime white hard</i>	<i>2003</i>	<i>2044</i>	<i>41</i>	<i>lime</i>
<i>Big lime white hard</i>	<i>2044</i>			<i>lime</i>
<i>Total depth</i>		<i>2136</i>		
<i>Slate black</i>	<i>50</i>	<i>157</i>	<i>107</i>	
<i>Coal black</i>	<i>147</i>	<i>150</i>	<i>3</i>	
<i>lime white hard</i>	<i>157</i>	<i>22</i>	<i>70</i>	
<i>slate white</i>	<i>256</i>	<i>307</i>	<i>51</i>	
<i>sand white hard</i>	<i>300</i>	<i>351</i>	<i>51</i>	
<i>lime white hard</i>	<i>351</i>	<i>400</i>	<i>49</i>	
<i>sand white hard</i>	<i>400</i>	<i>450</i>	<i>50</i>	
<i>slate black</i>	<i>450</i>	<i>600</i>	<i>150</i>	
<i>Red 1/2 N white hard</i>	<i>600</i>	<i>600</i>	<i>0</i>	
<i>lime white hard</i>	<i>600</i>	<i>700</i>	<i>100</i>	
<i>sand white hard</i>	<i>700</i>	<i>750</i>	<i>50</i>	
<i>slate black</i>	<i>750</i>	<i>820</i>	<i>70</i>	
<i>lime white hard</i>	<i>820</i>	<i>870</i>	<i>50</i>	

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Examined above information and measurements and found to be correct by *Paul M. Martin* Superintendent of Co.  
 Examined and approved by *M. J. ...*  
 NOTE: The above blank must be filled out entirely by the Contractor, with a complete and accurate record of the Well, and measurements presented for payment the bill for drilling.  
 All formations and known sands must be given by their proper name, with steel line measurements, and under the head of "Remarks" must be recorded in what sand and at what depth Oil, Gas or Water was found, the quantity of same, the quality of the sand, and thickness of pay.  
 Make no memoranda of boiler and engine if owned by contractor.

04/08/2022

4705100777P



Partially Plugged

COAL OWNED BY Mary A. Turner Hr. 1/4 - M. A. Hanna Co 1/4

- NEW LOCATION
- RECONDITION
- DRILL DEEPER
- ABANDONMENT

"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."  
 Minimum degree of accuracy is one part in 2500

Signed Robert M. Heill (J.E)

COMPANY The Manufacturers Light And Heat Company  
 ADDRESS 800 Union Trust Bldg. Pittsburgh, Pa.  
 FARM Albert Turner Hrs.  
 MAP 0-25/29 ACRES 140 LEASE NO 2231  
 WELL (FARM) NO. 1 SERIAL NO. L 2604  
 ELEVATION (SPIRIT LEVEL) 1159'  
 QUADRANGLE Cameron 15'  
 COUNTY Marshall DISTRICT Liberty  
 POINT OF PROVEN ELEVATION Intersection of Lane and R. # 250

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON  
 WELL LOCATION MAP  
 FILE NO. M.R.S-474-A  
 Reconditioned For Storage  
 + DENOTES LOCATION OF WELL ON U.S. ED STATES TOPOGRAPHIC

04/08/2022



1) Date: 2/3/2021 **4705100777P**  
2) Operator's Well Number  
Victory B 2604  
3) API Well No.: 47 - 051 - 007770000

**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>Garrett D. O'Neil and Amy L. O'Neil</u>	Name <u>CONSOL RCPC, LLC</u>
Address <u>9860 Fork Ridge Road</u>	Address <u>1000 Consol Energy Drive, Suite 100</u>
<u>Glen Easton, WV 26039</u>	<u>Canonsburg, PA 15317</u>
(b) Name _____	(b) Coal Owner(s) with Declaration
Address _____	Name <u>CONSOL RCPC, LLC</u>
	Address <u>1000 Consol Energy Drive, Suite 100</u>
	<u>Canonsburg, PA 15317</u>
(c) Name _____	Name <u>Murray Energy Corporation, American Consolidated Natural Resources, Inc.</u>
Address _____	Address <u>46226 National Road</u>
	<u>St. Clairsville, OH 43950</u>
<b>6) Inspector</b> <u>Barry Stollings</u>	(c) Coal Lessee with Declaration
Address <u>28 Conifer Drive</u>	Name <u>Not leased.</u>
<u>Bridgeport, WV 26330</u>	Address _____
Telephone <u>304-552-4194</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.

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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.

WV Department of Environmental Protection

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 Columbia Gas Transmission, LLC  
By: Brad Nelson  
Its: Storage Engineer  
Address 455 Racetrack Road  
Washington, PA 15301  
Telephone 724-250-0610

Commonwealth of Pennsylvania - Notary Seal  
Elaine Rybski, Notary Public  
Allegheny County  
My commission expires May 11, 2022  
Commission number 1332803

Commonwealth of Pennsylvania  
County of Allegheny

Subscribed and sworn before me this 3 day of February 2021  
Elaine Rybski Notary Public  
My Commission Expires 5/11/2022

**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).

04/08/2022

February 4, 2021

Garrett D. O'Neil and Amy L. O'Neil  
9860 Fork Ridge Road  
Glen Easton, WV 26039

Columbia Gas Transmission, LLC is applying for a permit to the WV Department of Environmental Protection – Office of Oil and Gas, to plug and abandon an existing underground natural gas storage well located on property owned by you. As reference, the field and well ID is Victory B 2604 (API # 47-051-00777-00-00).

As part of the well permitting process, Columbia, the well operator, is required to provide a copy of all applicable permit application forms for your review and record retention.

If you have questions, feel free to call.

Regards,



Brad Nelson  
Storage Engineer  
TC Energy (Columbia Gas Transmission, LLC)  
brad\_nelson@tcenergy.com  
off: 724-223-2753  
cell: 724-250-0610

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Environmental Protection

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February 4, 2021

CONSOL RCPC, LLC  
1000 Consol Energy Drive, Suite 100  
Canonsburg, PA 15317

Columbia Gas Transmission, an underground natural gas storage operator, is planning to plug and abandon a storage well (API # 47-051-00777-00-00) in Marshall County, WV. Records indicate that CONSOL RCPC, LLC may own the coal on subject property.

To comply with WV DEP Code, Columbia is required to provide the coal owner the following documents as notification and for processing.

- WV DEP form WW-4A (Notice of Application to Plug and Abandon a Well)
- WV DEP form WW-4B (Application for a Permit to Plug and Abandon)
- Copy of survey plat
- Proposed method of plugging
- Wellbore diagram (prior to plugging)
- Wellbore diagram (proposed plugging)

If you have questions, feel free to call.

Regards,



Brad Nelson  
Storage Engineer  
TC Energy (Columbia Gas Transmission, LLC)  
brad\_nelson@tcenergy.com  
off: 724-223-2753  
cell: 724-250-0610

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1700 MacCorkle Ave. SE  
P.O. Box 1273  
Charleston, WV 25325

February 4, 2021

Murray Energy Corporation  
American Consolidated Natural Resources, Inc.  
Attn: Mason Smith  
46226 National Road  
St. Clairsville, OH 43950

Columbia Gas Transmission, an underground natural gas storage operator, is planning to permanently plug and abandon a storage well (API # 47-051-00777-00-00) in Marshall County, WV. Records indicate that Murray Energy (American Consolidated Natural Resources, Inc.) may own the coal on subject property.

To comply with WV DEP Code, Columbia is required to provide the coal owner the following documents as notification and for processing.

- WV DEP form WW-4A (Notice of Application to Plug and Abandon a Well)
- WV DEP form WW-4B (Application for a Permit to Plug and Abandon)
- Copy of survey plat
- Proposed method of plugging
- Wellbore diagram (prior to plugging)
- Wellbore diagram (proposed plugging)

If you have questions, feel free to call.

Regards,

A handwritten signature in blue ink that reads "Brad Nelson".

Brad Nelson  
Storage Engineer  
TC Energy (Columbia Gas Transmission, LLC)  
brad\_nelson@tcenergy.com  
off: 724-223-2753  
cell: 724-250-0610

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04/08/2022



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

Operator Name Columbia Gas Transmission, LLC OP Code 307032

Watershed (HUC 10) Ben Run - A Tributary of Fish Creek Quadrangle Cameron, WV

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: Fresh water, cement returns, bentonite gel, NaCl salt

Will a synthetic liner be used in the pit? Yes  No  If so, what ml? 20

Proposed Disposal Method For Treated Pit Wastes:

- Land Application (if selected provide a completed form WW-9-GPP)
- Underground Injection ( UIC Permit Number 34-119-28776, 34-167-23882 )
- Reuse (at API Number \_\_\_\_\_)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain Appalachian Water Services, Station W1 Ronco WTP, Masontown, PA - Permit 2608201)

Will closed loop system be used? If so, describe: No

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. N/A

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

Additives to be used in drilling medium? \_\_\_\_\_

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. N/A

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) Subsoils

-Landfill or offsite name/permit number? \_\_\_\_\_

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on April 1, 2016, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature Brad Nelson Commonwealth of Pennsylvania

Company Official (Typed Name) Brad Nelson County of Allegheny

Company Official Title Storage Engineer

Subscribed and sworn before me this 3 day of February, 2021

Elaine Rybski Elaine Rybski

Notary Public  
Commonwealth of Pennsylvania - Notary Seal  
Elaine Rybski, Notary Public  
Allegheny County  
My commission expires May 11, 2022  
Commission number 1332803

My commission expires 5/11/2022

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Proposed Revegetation Treatment: Acres Disturbed <1.0 Prevegetation pH 6.5

Lime 2 Tons/acre or to correct to pH 7

Fertilizer type 10-10-10

Fertilizer amount 600 lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type	lbs/acre
<u>Annual Rye</u>	<u>40</u>

Seed Type	lbs/acre
<u>Orchard Grass and/or Tall Fescue</u>	<u>29</u>

<u>Birdsfoot trefoil (empire)</u>	<u>9</u>
-----------------------------------	----------

<u>Annual Rye</u>	<u>12</u>
-------------------	-----------

For wetland areas: Annual Rye (40 lbs/acre) until indigenous plants re-establish cover.

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: *Randy Sillje*

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

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Title: Inspector Date: 2-11-21

Field Reviewed?  Yes  No



N/A

6. Provide a statement that no waste material will be used for deicing or fill material on the property.

No waste material will be used for deicing or fill material on the property.

7. Describe the groundwater protection instruction and training to be provided to the employees. Job procedures shall provide direction on how to prevent groundwater contamination.

During routine tailgate meetings groundwater protection will be a topic of discussion.

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8. Provide provisions and frequency for inspections of all GPP elements and equipment.

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No fertilizer will be stored on site. Small quantities of fuel, oil, and lubrications will be stored on site, but located within secondary containment. Construction equipment will be inspected daily for leaks or spill.

Signature: Bruce Nelson

Date: 2/17/21

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS  
GROUNDWATER PROTECTION PLAN

Operator Name: Columbia Gas Transmission, LLC  
Watershed (HUC 10): Ben Run - A Tributary of Fish Creek Quad: Cameron, WV  
Farm Name: \_\_\_\_\_

- 1. List the procedures used for the treatment and discharge of fluids. Include a list of all operations that could contaminate the groundwater.

No fertilizer will be stored on site. Small quantities of fuel, oil, and lubricants will be stored on site, but located within secondary containment.  
Accidental release from well fluids and spills from construction equipment are the only sources of contaminate to groundwater.  
All accumulated fluids to be hauled off site to UIC disposal facility.

- 2. Describe procedures and equipment used to protect groundwater quality from the list of potential contaminant sources above.

All construction equipment will be inspected daily for leaks. Spill kits will be on site.

- 3. List the closest water body, distance to closest water body, and distance from closest Well Head Protection Area to the discharge area.

The closest water body is Ben Run, approximately 0.16 miles to the E.  
The closest Wellhead Protection Area is approximately 5.90 mi. to the SE - (PWSID WV 3305202 Hundred Littleton PSD).

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- 4. Summarize all activities at your facility that are already regulated for groundwater protection.

N/A

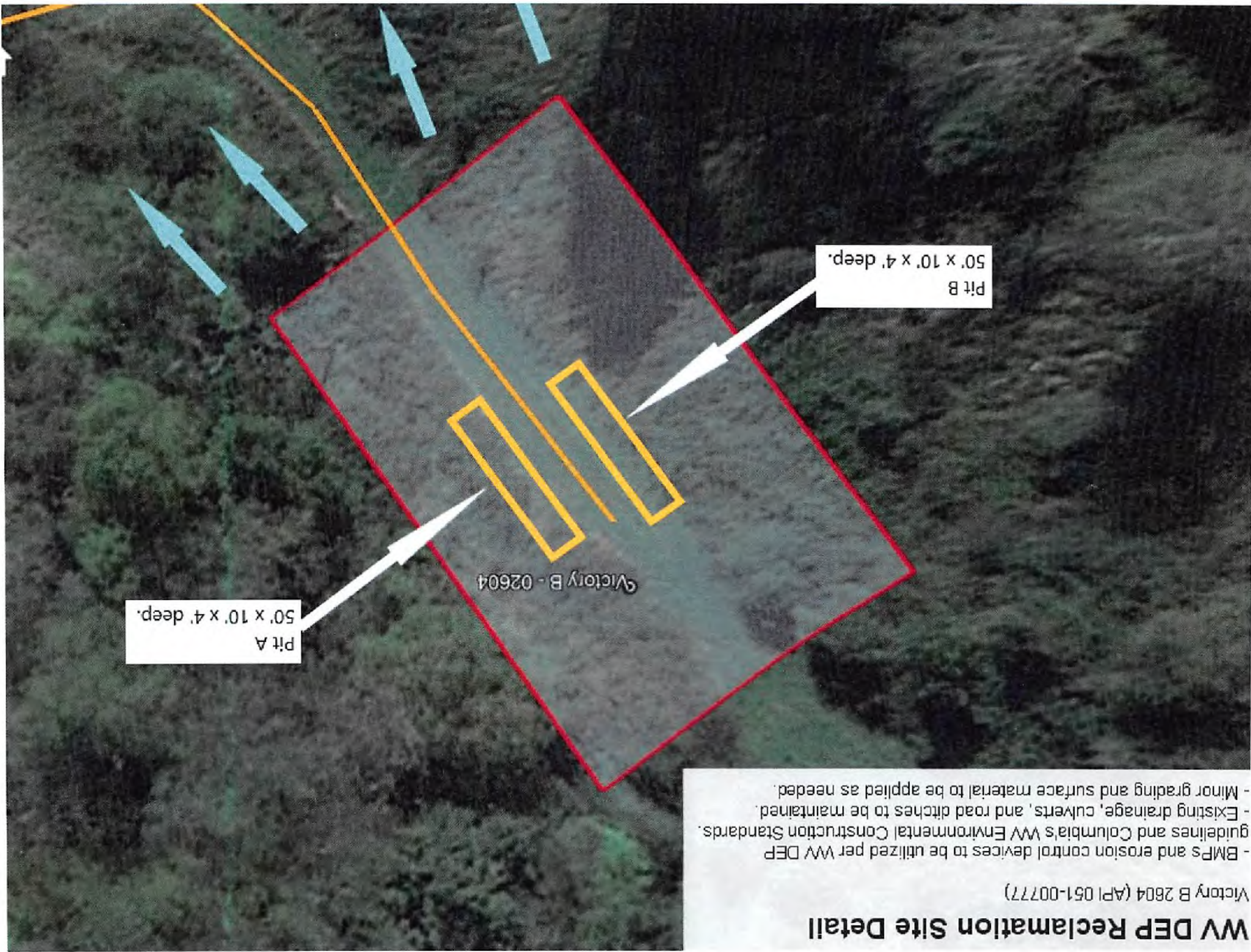
- 5. Discuss any existing groundwater quality data for your facility or an adjacent property.



# WV DEP Reclamation Site Detail

Victory B 2804 (API 051-00777)

- BMPs and erosion control devices to be utilized per WV DEP guidelines and Columbia's WV Environmental Construction Standards.
- Existing drainage, culverts, and road ditches to be maintained.
- Minor grading and surface material to be applied as needed.



Pit A  
50' x 10' x 4' deep.

Victory B - 02604

Pit B  
50' x 10' x 4' deep.



# WV DEP Reclamation Site Detail

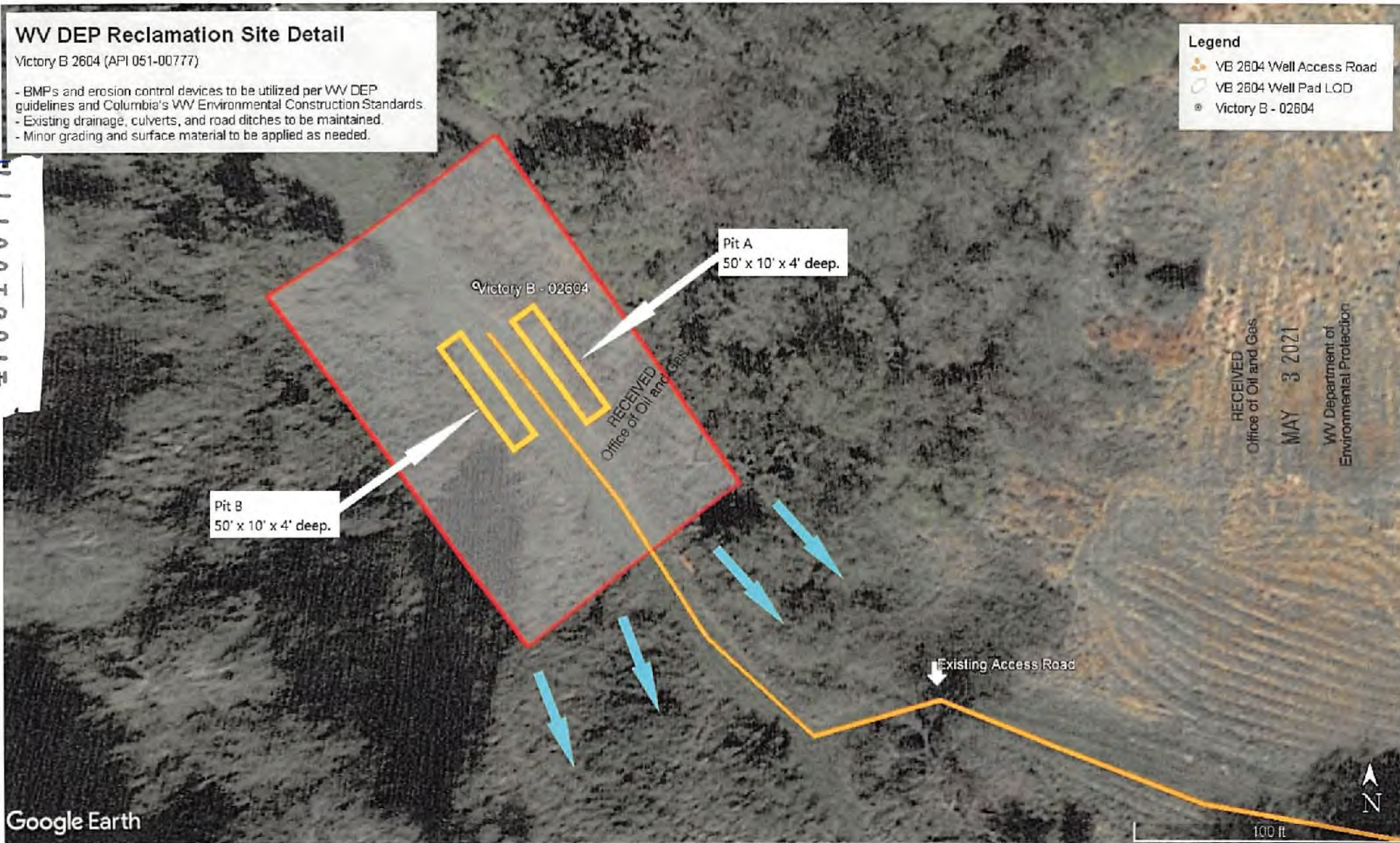
Victory B 2604 (API 051-00777)

- BMPs and erosion control devices to be utilized per WV DEP guidelines and Columbia's WV Environmental Construction Standards.
- Existing drainage, culverts, and road ditches to be maintained.
- Minor grading and surface material to be applied as needed.

**Legend**

- VB 2604 Well Access Road
- VB 2604 Well Pad LOD
- Victory B - 02604

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Google Earth

100 ft



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### WV DEP Reclamation Site Overview

Victory B 2604 (API 051-00777)

- BMPs and erosion control devices to be utilized per WV DEP guidelines and Columbia's WV Environmental Construction Standards.
- Existing drainage, culverts, and road ditches to be maintained.
- Minor grading and surface material to be applied as needed.

**Legend**

-  VB 2604 Well Access Road
-  VB 2604 Well Pad LOD
-  Victory B - 02604



Google Earth

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400 ft



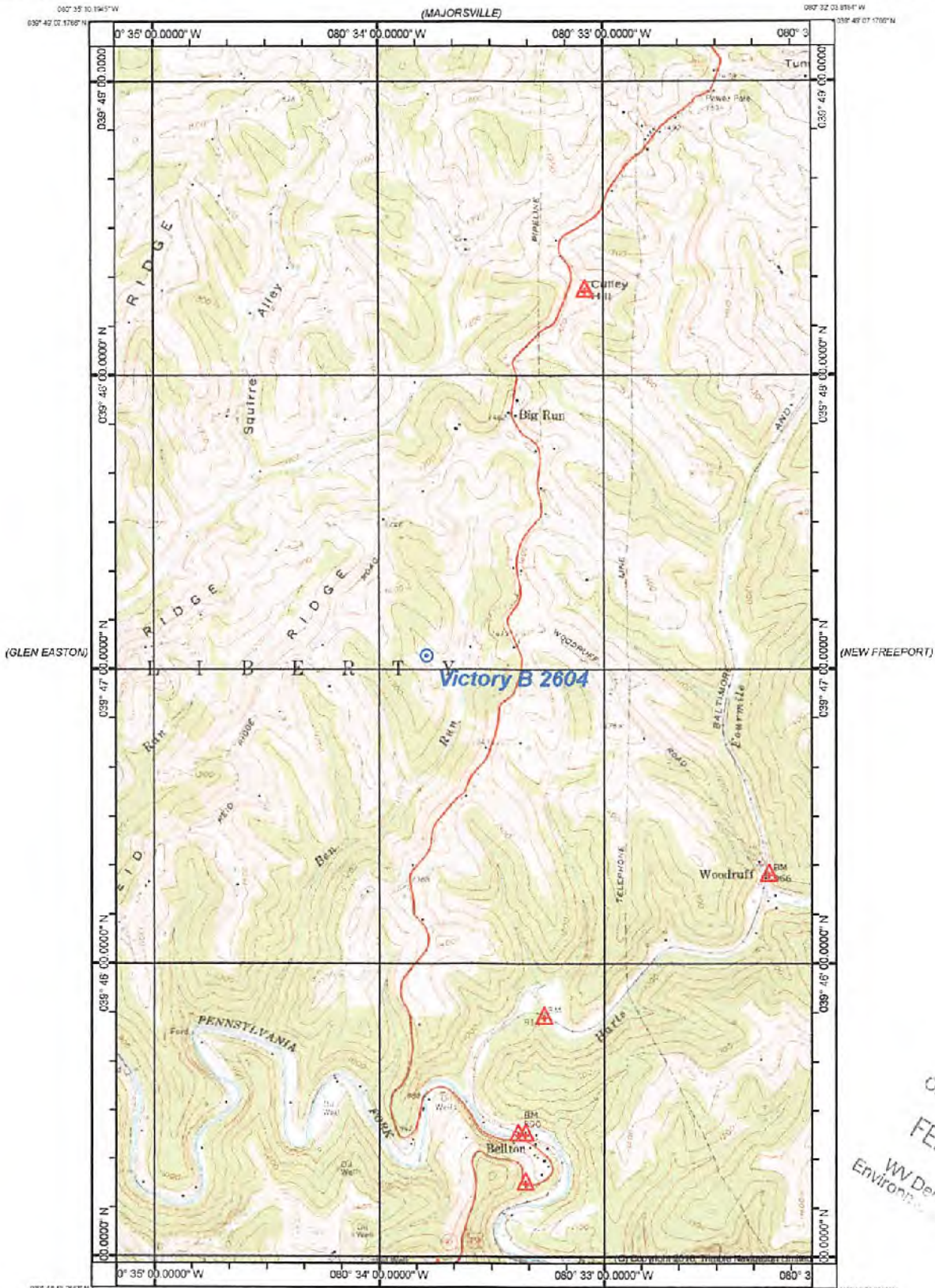
4705100777P

CAMERON QUADRANGLE  
WEST VIRGINIA  
TOPOGRAPHIC SERIES

(WIND RIDGE)



(MOUNDSVILLE)



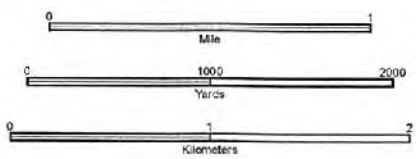
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(WILEYVILLE)

Produced by Trimble Terrain Navigator Pro  
Topography based on USGS 1:24,000 Maps  
North American 1983 Datum (NAD83)  
To place on the predicted North American 1927 move the  
projection lines 1M N and 17M E



(LITTLETON)  
SCALE 1:24000

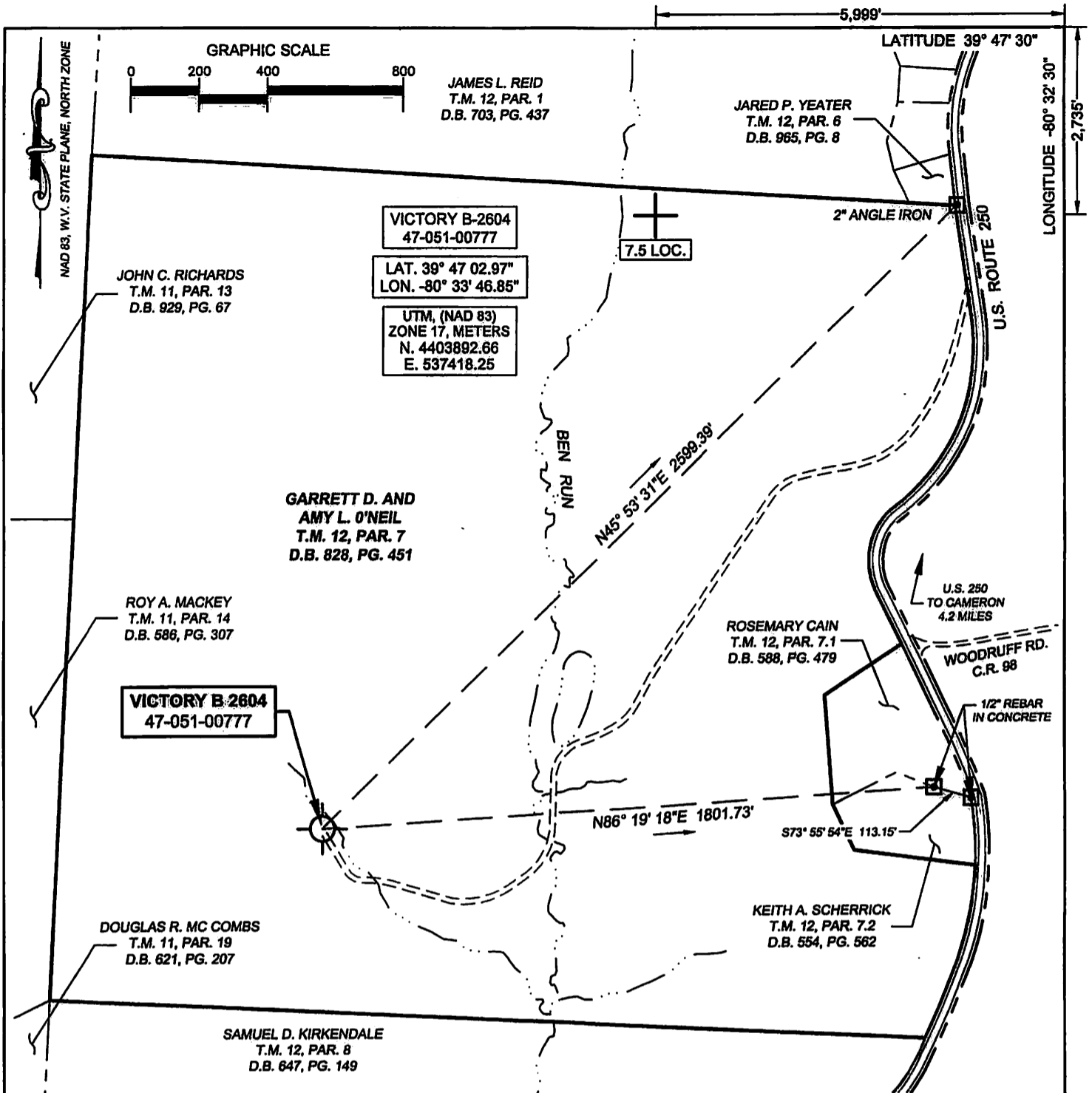


CONTOUR INTERVAL 20 FT

39080-G4-TM-024  
CAMERON, WV  
JAN 1, 1988

04/08/2022





(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE No 2001-3079-001-021  
 DRAWING No. VICTORY B-2604  
 SCALE 1"=400  
 MINIMUM DEGREE OF ACCURACY 1:200  
 PROVEN SOURCE OF ELEVATION TRIMBLE R10  
GPS UNIT

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT 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 DIVISION OF ENVIRONMENTAL PROTECTION.

(SIGNED)

ROBERT F. THAW

PS #965



STATE OF WEST VIRGINIA  
 DIVISION OF ENVIRONMENTAL PROTECTION  
 OFFICE OF OIL AND GAS  
 NITRO, WV



DATE DECEMBER 18 2020

OPERATOR'S WELL No. 2604

API WELL No.

47 051 - 00777P

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  STATE COUNTY PERMIT

(IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 1161.8' WATER SHED BEN RUN - A TRIBUTARY OF FISH CREEK

DISTRICT LIBERTY COUNTY MARSHALL

QUADRANGLE CAMERON, WV

SURFACE OWNER GARRET D. AND AMY L. O'NEIL ACREAGE 134 ±

OIL & GAS ROYALTY OWNER ALFRED TURNER, ET UX

LEASE ACREAGE 140 ± LEASE NO. 3022231-000

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE   
 STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION   
 OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

04/08/2022

PLUG AND ABANDON  CLEAN OUT AND REPLUG

TARGET FORMATION BIG INJUN ESTIMATED DEPTH 3034

WELL OPERATOR COLUMBIA GAS TRANSMISSION, LLC

DESIGNATED AGENT JAMES AMOS

ADDRESS: PO BOX 1273, CHARLESTON, WV  
25325-1273

ADDRESS 48 COLUMBIA GAS ROAD  
SANDYVILLE, WV 25275