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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

Austin Caperton, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Wednesday, October 9, 2019  
WELL WORK PERMIT  
Vertical / Re-Work

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

Re: Permit approval for RIPLEY 7316  
47-035-00521-00-00

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.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

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

James A. Martin  
Chief

Operator's Well Number: RIPLEY 7316  
Farm Name: GREGORY H. AND KATHY S+  
U.S. WELL NUMBER: 47-035-00521-00-00  
Vertical Re-Work  
Date Issued: 10/9/2019

# 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. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code §22-6-20, which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
2. Pursuant to 35 CSR 4-19.1.a, at the request of the surface owner all water wells or springs within 1000 feet of the proposed well that are actually utilized for human consumption, domestic animals or other general use shall be sampled and analyzed.
3. Pursuant to 35 CSR 4-19.1.c, if the operator is unable to sample and analyze any water well or spring with one thousand (1,000) feet of the permitted well location, the Office of Oil and Gas requires the operator to sample, at a minimum, one water well or spring located between one thousand (1,000) feet and two thousand (2,000) feet of the permitted well location.
4. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
5. 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.
6. During the surface casing and cementing process, in the event cement does not return to the surface, or any other casing string that is permitted to circulate cement to the surface and does not return to the surface, the oil and gas inspector shall be notified within twenty-four (24) hours
7. Well work activities shall not constitute a hazard to the safety of persons.
8. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced on this well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.

WW - 2B  
(Rev. 8/10)

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**WELL WORK PERMIT APPLICATION**

1) Well Operator: Columbia Gas Transmission, LLC

307032	Jackson	Ravenswood	Ripley
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Operator ID County District Quadrangle

2) Operator's Well Number: Ripley 7316 3) Elevation: 737 ft.

4) Well Type: (a) Oil \_\_\_\_\_ or Gas X  
(b) If Gas: Production \_\_\_\_\_ / Underground Storage X  
Deep X / Shallow \_\_\_\_\_

5) Proposed Target Formation(s): Oriskany Proposed Target Depth: 4897 ft.

6) Proposed Total Depth: 4930 Feet Formation at Proposed Total Depth: Oriskany

7) Approximate fresh water strata depths: 320 ft

8) Approximate salt water depths: 1337 ft

9) Approximate coal seam depths: 1350 - 1353 ft

10) Approximate void depths,(coal, Karst, other): None of record

11) Does land contain coal seams tributary to active mine? No

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)

Log well, perform a freshwater treatment, and evaluate 45 min. flowback test. If deemed necessary, proceed with a coiled tubing clean-out / low pressure acid treatment. Estimated acid volume: 1000 gals.

13) **CASING AND TUBING PROGRAM**

TYPE	SPECIFICATIONS			FOOTAGE	INTERVALS	CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	Fill -up (Cu. Ft.)
Conductor	16"	Unknown	65	31	0-10	No cement
Fresh Water	13-3/8"	Unknown	48	642	0	No cement
Coal	10-3/4"	Unknown	40	1233	0	No cement
Intermediate	8-1/4"	Unknown	24	2079	0	No cement
Production	7"	Unknown	22	4835	0-61; 4772-4835	No record
Tubing	4-1/2"	J-55	12.6	N/A	4860	425 sx
Liners	4"	N/A	N/A	N/A	2795-2815	Weatherford Enterra Homco Internal Casing Patch

Packers: Kind: None.  
 Sizes: N/A  
 Depths Set N/A

RECEIVED  
Office of Oil and Gas  
SEP 13 2019  
WV Department of  
Environmental Protection  
*[Signature]*  
9-11-19





STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

FILED MAR 21 1955

Quadrangle Ripley

WELL RECORD

Permit No. Jac.-521-R

Oil or Gas Well Storage (KIND)

Company United Fuel Gas  
 Address Box 1273, Charleston, W. Va.  
 Farm Sarah Hertje Acres 60  
 Location (waters) Mud Run of Sandy Creek  
 Well No. X-59-7316 Elev. 736.9  
 District Ravenswood County Jackson  
 The surface of tract is owned in fee by \_\_\_\_\_  
 Address \_\_\_\_\_  
 Mineral rights are owned by Sarah Hertje  
 Address Sandyville, W. Va.  
 Drilling commenced 7-29-54  
 Drilling completed 8-9-54  
 Date Shot From \_\_\_\_\_ To \_\_\_\_\_  
 With \_\_\_\_\_  
 Open Flow /10ths Water in \_\_\_\_\_ Inch  
 /10ths Merc. in \_\_\_\_\_ Inch  
 Volume \_\_\_\_\_ Cu. Ft.  
 Rock Pressure \_\_\_\_\_ lbs. \_\_\_\_\_ hrs.  
 Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
 Fresh water 320 feet \_\_\_\_\_ feet  
 Salt water 1337 feet \_\_\_\_\_ feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
12			Size of
10			Depth set
8 1/2			
8			
5 3/16			
4 1/2	<u>4841'</u>	<u>4841'</u>	Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

CASING CEMENTED	SIZE	No. Ft.	Date
COAL WAS ENCOUNTERED AT 1350 FEET 36 INCHES			
FEET	INCHES	FEET	INCHES
FEET	INCHES	FEET	INCHES

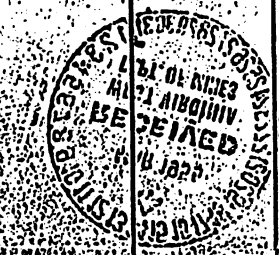
Formation	Color	Hard or Soft	Top	Bottom	Oil Gas or Water	Depth Found	Remarks
Soil			0	10			
Sand			10	20			
Red Rock			20	55			
Soapstone			55	101			
Slate			101	131			
Red Rock			131	287			
Sand			287	360			
Red Rock			360	550			
Sand			550	608			
Slate			608	627			
Lime			627	635			
Sand			635	642			
Blue Slate			642	651			
Lime Shell			651	652			
Slate & Shells			652	680			
Sand			680	734			
Slate & Shells			734	770			
Red Rock			770	795			
Slate & Shells			795	805			
Sand			805	825			
Red Rock			825	880			
Lime			880	900			
Slate & Shells			900	1249			
Lime			1249	1253			
Slate			1253	1265			
Sand			1265	1280			
Slate			1280	1331			
Sand			1331	1350			
Coal			1350	1353			
Sand			1353	1411			
Lime			1411	1465			
Slate & Shells			1465	1490			
Sand			1490	1550			
Lime			1550	1567			
Slate & Shells			1567	1655			
Sand			1655	1756			
Little Lime			1756	1767			
Big Lime			1767	1840			
Sand			1840	1870			



(Over)



Formation	Color	Hard or Soft	Top ft/2	Bottom ft/2	Oil, Gas or Water	Depth Found	Remarks
Lime			1870	1900			
Slate & Shells			1900	1922			
Big Injun Sand			1922	2061	Show gas	2417'	
Lime			2061	2081			
Slate & Shells			2081	2136	Gas 4899-4909'		
Lime			2136	2170			
Slate & Shells			2170	2390			
Shale			2390	2412			
Berea Grit			2412	2430			
Slate & Shells			2430	4583			
Brown Shale			4583	4790			
Corniferous Lime			4790	4897			
Oilshaly Sand			4897	4930			
Total Depth			4930	4930			



Formation	Color	Hard or Soft	Top ft/2	Bottom ft/2	Oil, Gas or Water	Depth Found	Remarks
Shale	Gray	Soft	1870	1900			
Slate	Black	Hard	1900	1922			
Sand	Light	Medium	1922	2061	COUL. SAND	2417'	30' INCHES
Shale	Dark	Hard	2061	2081			
Slate	Black	Hard	2081	2136	COUL. SAND	2417'	30' INCHES
Sand	Light	Medium	2136	2170			
Slate	Black	Hard	2170	2390			
Shale	Dark	Hard	2390	2412			
Sand	Light	Medium	2412	2430			
Slate	Black	Hard	2430	4583			
Shale	Dark	Hard	4583	4790			
Sand	Light	Medium	4790	4897			
Sand	Light	Medium	4897	4930			

OIL AND GAS DIVISION Date March 11, 19 55  
 DEPARTMENT OF THE INTERIOR  
 BY APPROVED UNITED FUEL GAS COMPANY Owner  
 By A. R. Jewell  
 (Title)  
 Mgr. Civil Engineering Dept.



12-5135-54

FORM U 397-R-P-C-S-D

**WELL WORK ORDER**

DATE ISSUED 9-23 19 54 BUDGET NO. 931 WORK ORDER NO. 8259  
 COMPANY United Fuel Gas Company FIELD Clendenin  
 FARM W. T. Armstrong et al LEASE NO. 52275 ACRES 60  
 WELL NO. X-59-7316 DISTRICT Ravenswood COUNTY Jackson STATE W. Va.  
 ON WATERS Mud Run MAP SQUARE 58-95  
 LOCATION MADE BY Columbian Carbon Co. DATE May 29, 19 46 NOTE BOOK \_\_\_\_\_ PAGE \_\_\_\_\_  
 COAL \_\_\_\_\_ NO BUILDINGS WITHIN \_\_\_\_\_ FEET \_\_\_\_\_  
 LEASE EXPIRES Operated 19 \_\_\_\_\_ CLASS OF LOCATION \_\_\_\_\_  
 PURPOSE AND NECESSITY Re Drill Plugged Well for Storage in Pool X-59.  
 RELATED WORK ORDER NOS. \_\_\_\_\_ FOR \_\_\_\_\_

DATA AND APPROVALS

CHECK TYPE OF WORK	CHECK PERMITS OR SERVICES REQUIRED
Re-Drill <input checked="" type="checkbox"/>	RIGHT OF WAY FOR ROAD <input type="checkbox"/>
<del>NEW WELL</del> <input type="checkbox"/>	DRILLING PERMIT <input type="checkbox"/>
DRILL WELL DEEPER <input type="checkbox"/>	WELL LINE <input type="checkbox"/>
ABANDON WELL <input type="checkbox"/>	ABANDONMENT PERMIT <input type="checkbox"/>
	INSTALL MEASURING EQUIPMENT <input type="checkbox"/>
	SURVEY FOR W. G. LINE <input type="checkbox"/>

ESTIMATED DEPTH 4,930 FEET, SAND Orskany DRILLING CONTRACTOR Moran Drilling Co.  
 COMPANY WILL FURNISH: RIG: YES  NO  WATER: YES  NO  FUEL: YES  NO

APPROVALS

SUPT. J.W.G. John C. Martin DATE 9-10 19 54  
 DIVISION SUPT. J. A. Seese DATE 9-14 19 54 PROD. MGR. H. C. Mefford, Jr. DATE 9-15 19 54  
 ENGINEER S. R. Ferrell DATE 9-17 19 54 GENERAL SUPT. J. H. Kime DATE 9-15 19 54  
 ASST. GEN. MANAGER \_\_\_\_\_ DATE \_\_\_\_\_ VICE PRESIDENT \_\_\_\_\_ DATE \_\_\_\_\_

DETAIL OF ESTIMATED COST

DETAIL OF ACTUAL COST

MATERIAL TO BE INSTALLED	SIZE	QUANTITY	PRICE	AMOUNT	SIZE	QUANTITY	PRICE	AMOUNT	VARIATION	
CASING WEIGHT 65	16"OD	10'	4.89	49.00	16"	10'	4.89	48.91	(.09)	
" " 23	7"OD	61'	1.59	97.00	7"	51'	1.88	95.72	(1.28)	
TUBING WEIGHT 12.6	4-1/2"	4,841'	1.06	5,131.00	4-1/2"	4,841'	1.16	5,737.16	606.16	
Insulation Flange	-	-	-	-	4"	1	-	11.62	11.62	
FITTINGS				100.00				35.23	(64.77)	
Nord Fig. 2349 P. Valve	4"	1		365.00	4"	1		369.81	4.81	
Orbit G. Valve	4"	1		510.00	4"	1		399.30	(110.70)	
Flange w/n Ser. 90	4"	8	25.00	200.00	4"	8	34.01	272.06	72.06	
Welding Tee	4"	1		13.00	-	-		-	(13.00)	
Anchor Clamp	4"	1		20.00	4-1/2"	1		19.63	(.37)	
Turnbuckles 1-1/2"x18"		2	14.00	28.00	1-1/2"x12"	2	11.06	22.11	(5.89)	
Anchor Clamp	7"	1		56.00	7"	1 Set		13.72	(42.28)	
Guide Shoe & Float Collar	4"	1		60.00	4-1/2"	1		69.53	9.53	
TOTAL MATERIAL				6,628.00				7,094.80	466.80	
INSTALLATION OR RETIREMENT COST				X X X X X	X X X X X				X X X X X	
LABOR				1,200.00				1,498.32	298.32	
USE OF AUTO AND HAULING				3,000.00				3,944.14	944.14	
Use of Equipment Jackson Pipe Line Const. Co.				500.00				402.00	(98.00)	
RIGHT OF WAY W. G. Line				-				58.50	58.50	
DRILLING FEET @ PER FOOT										
HAULING, ERECTING AND DISMANTLING RIG										
<del>xxxx</del> Laying W. G. Line-Jackson Pipe Line Const. Co.				-				604.17	604.17	
<del>xxxx</del> Welding				50.00				63.60	13.60	
Moran Drilling Co.										
<del>xxxx</del> Re-Drilling - 14 days @ \$650.00 per day				9,000.00	4,930'	@ 1.73		8,550.99	(449.01)	
SUPPLIES AND EXPENSE								589.82	589.82	
Aquagel Cement & Services				2,250.00				1,978.26	(271.74)	
Stores Expense and Freight				716.00				763.41	47.41	
ENGINEERING DEPARTMENT SURVEY Interest				-				31.35	31.35	
Lumber 1-Lot				75.00				78.40	3.40	
<del>xxxx</del> Rock Bits				500.00				248.48	(251.52)	
LABOR BENEFITS OVERHEADS				224.00				294.39	70.39	
ADMINISTRATIVE OVERHEADS				108.00				114.86	6.86	
TOTAL INSTALLATION COST				17,623.00				18,967.69	1,344.69	
TOTAL ESTIMATE				24,252.00	2-931-8259			26,062.49	1,810.49	

RECEIVED  
Office of Oil and Gas



COMPLETION REPORT

RIG COMMENCED \_\_\_\_\_ 19\_\_\_\_, COMPLETED \_\_\_\_\_, CONTRACTOR \_\_\_\_\_  
 DRILLING COMMENCED July 29, 19 54, COMPLETED August 9, 19 54, CONTRACTOR Moran Drlg Co  
 DAYS DRILLING 12 DEPTH 4930 FEET, PRODUCING SAND Oriskany, INITIAL ROCK PRESSURE 90 LBS.  
 INITIAL OPEN FLOW 7/10-W 1/2" M. C. F. 7.000, DATE SHUT IN 9-27-54 19\_\_\_\_  
 DAYS FISHING \_\_\_\_\_ RIG NUMBER \_\_\_\_\_

CASING AND TUBING RECORD	16 INCH		7 INCH		4 1/2 INCH		INCH		INCH	
	FEET	IN.	FEET	IN.	FEET	IN.	FEET	IN.	FEET	IN.
TOTAL CHARGES TO WELL	10		51		4841					
TRANSFERRED FROM WELL BEFORE COMPLETION	0		0		0					
TRANSFERRED TO LOOSE MATERIAL AT TIME OF COMPLETION										
TOTAL TRANSFERRED FROM WELL										
BALANCE CHARGED TO WELL										
AMOUNT PUT IN WELL										
AMOUNT PULLED OUT										
AMOUNT LEFT IN WELL	10	✓	51	✓	4841	✓				

ITEMIZE BELOW ALL MATERIAL AND EQUIPMENT OTHER THAN CASING AND TUBING USED IN OR REMOVED FROM THIS WELL

5-4" Steel Ring Gaskets ✓	2-7" Casing Couplings ✓
8-4" W.N. Flanges Ser 90 ✓	1-4" Baker Guide Shoe ✓
1-4" Bull Plug	1-4" Baker Float Collar ✓
1-4" Welding Tee	1-6-3/4" Rock Bit ✓
1-4" Orbit Gate Valve ✓	1-6-1/8" Rock Bit ✓
1-4" Nord 2349 Plug Valve ✓	10-Lbs Thread Lube ✓
1-4" Flange Insulation ✓	425-Sks Cement ✓
2-1 1/2"x12" Turnbuckles ✓	1000-Ft Lumber ✓
2-1-1/8" X 24" Hair Pin Bolts & Links ✓	
52-1-1/8" X 6-3/4" Bolts ✓	2 1/2-Cu Yds Ready Mixed Concrete ✓
1-7"x3" Swedge Nipple ✓	300-Sks Aquagel ✓
1-7" Anchor Clamp ✓	200-Lb # 12 Wire ✓
1-4" Anchor Clamp ✓	1-Roll Friction Tape ✓

MATERIAL TRANSFER NUMBERS 1954 7-334, 8-52-74-188-191, 11-198 Aug N-69 Nov N-51-58-65-66-122-117-116-128.

COMPILED BY Monroe Murphy 11-10 19 54 APPROVED BY John C. Martin 11-12 19 54

SKETCH OF SHUTTING IN OUTFIT

RECEIVED  
 Office of Oil and Gas  
 SEP 13 2019  
 WV Department of  
 Environmental Protection

REASON FOR VARIATION FROM ESTIMATE: Use of Auto was overestimated. Laying W. G. Line was not included in estimate.

47-035-00521-W

Form OG-2

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

**WELL DRILLING PERMIT**

REDRILL

Permit No. JAC-521-R

JUNE 14, 19 54

TO UNITED FUEL GAS COMPANY  
Well Operator

LOCATION OF WELL:

P. O. BOX 1273  
Street

RAVENSWOOD DISTRICT

CHARLESTON, WEST VIRGINIA  
City

JACKSON COUNTY

WELL No. X-59-7316

SARAH HERTJE FARM

The Department of Mines received your Notice and Plat of the Well described above on the 3d day of

JUNE, 19 54, showing proposed location for drilling an oil or gas well.

Ten days having expired since the receipt of Notice and Plat and no objections having been made by the coal owners, coal operators, or the Department of Mines, the location is approved and permission is granted you to drill strictly in accordance with the several provisions of Chapter 22, Code of 1931, the Well to be numbered and located as above shown and more particularly as indicated on the Plat on file with this Department.

This Permit is assignable either by separate instrument, or incident to the transfer of title to the oil and gas, or of the right to drill therefore at said location, but no such assignment shall entitle the assignee to drill thereat until he shall have filed with the Department of Mines a certified, or sworn copy of the instrument assigning same, or as an incident to which such assignment was made.

In case the well is not commenced within four months from the above date, this Permit shall expire and be of no further force or effect.



*Cliff Hall*  
*Acting Chief of Dept*

RECEIVED  
Chief of Department of Mines  
Oil and Gas

SEP 13 2019  
WV Department of  
Environmental Protection



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, 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.

None COAL OPERATOR OR OWNER  
Columbian Carbon Company NAME OF WELL OPERATOR  
Box 873, Charleston 23, W. Va. COMPLETE ADDRESS  
July 3, 1950 19  
COAL OPERATOR OR OWNER WELL AND LOCATION  
Ravenswood District  
Jackson County  
LEASE OR PROPERTY OWNER  
Well No. 3 - 07-509  
T. W. Armstrong Farm

STATE INSPECTOR SUPERVISING PLUGGING

AFFIDAVIT

STATE OF WEST VIRGINIA  
County of Jackson

Charles R. Gaudes and Walter I. Stump  
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 Columbian Carbon Company well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 15th day of June, 1950, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD FORMATION	FILLING MATERIAL			PLUGS USED	CASING	
	CONTENT	FROM	TO	SIZE & KIND	CSG PULLED	CSG LEFT IN
	Pulled tubing			2-3/8"	all	
	Filled solid	1830	1879	7"	1772'8"	63'1"
	Cement-5 sacks	1879	1854	16"		30'9"
	Aquagel-24 sacks					
	Pulled 7"					
	Bridge	2107	2397			
	Cement-5 sacks	2397	2387			
	Bridge	1327	1317			
	Cement-5 sacks	1317	1307			
	Bridge	310	300			
	Cement-12 sks.	300	290			
	Did not pull 16" Drive pipe					
	Bridged					
	Filled solid	41	0			
COAL SEAMS	DESCRIPTION OF MONUMENT					
(NAME)	07-509, T. W. Armstrong #3,					
(NAME)	Columbian Carbon Company					
(NAME)	July 3, 1950					
(NAME)						

and that the work of plugging and filling said well was completed on the 3rd day of July, 1950

And further deponents saith not.

Sworn to and subscribed before me this 11th day of July, 1950

My commission expires:

12-31-52

Charles R. Gaudes  
Walter I. Stump

R. H. [Signature]  
Notary Public.

Permit No. 310-52-P



J.C. - 521-P



47-035-00521W  
7376

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE MADE IN TRIPLICATE, 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.

COAL OPERATOR OR OWNER	<u>none</u>	NAME OF WELL OPERATOR	<u>Columbian Carbon Company</u>
ADDRESS		COMPLETE ADDRESS	<u>Box 873, Charleston 23, W. Va.</u>
COAL OPERATOR OR OWNER		WELL AND LOCATION	<u>July 3, 1950</u> 19
ADDRESS		District	<u>Ravenswood</u>
LEASE OR PROPERTY OWNER		County	<u>Jackson</u>
ADDRESS		Well No.	<u>3 - GW-909</u>
		Farm	<u>T. W. Armstrong</u>

STATE INSPECTOR SUPERVISING PLUGGING.....

AFFIDAVIT

STATE OF WEST VIRGINIA, }  
County of Jackson } SS:

Charles R. Gendee and Walder I Stump  
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 Columbian Carbon Company, well operator, and participated in the work of plugging and filling the above well, that said work was commenced on the 15th day of June, 1950, and that the well was plugged and filled in the following manner:

SAND OR ZONE RECORD	FILLING MATERIAL			PLUGS USED	CASING		
	FORMATION	CONTENT	FROM		TO	SIZE & KIND	CSG PULLED
		Pulled tubing			2-3/8"	all	
		Filled solid	4930	4879	7"	4772'8"	63'1"
		Cement-5 sacks	4879	4854	16"	-	30'9"
		Aquagel-24 sacks					
		Pulled 7"					
		Bridge	2407	2397			
		Cement-5 sacks	2397	2387			
		Bridge	1327	1317			
		Cement-5 sacks	1317	1307			
		Bridge	310	300			
		Cement-12 sks.	300	290			
		Did not pull 16" Drive pipe					
		Bridged					
		Filled solid	41	0			
COAL SEAMS					DESCRIPTION OF MONUMENT		
(NAME)					GW-909, T. W. Armstrong #3,		
(NAME)					Columbian Carbon Company		
(NAME)					July 3, 1950		
(NAME)							

and that the work of plugging and filling said well was completed on the 3rd day of July, 19 50.

And further deponents saith not.

Sworn to and subscribed before me this 3rd day of July, 19 50

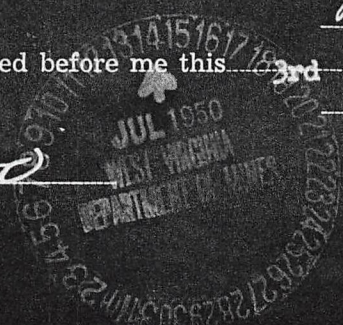
My commission expires: 12-31-50

*Charles R. Gendee*  
*Walder I Stump*

*R. W. [Signature]*  
Notary Public.

Permit No. JAC-52-P

JAC-521-P







STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

Rifley

WELL RECORD

Permit No. JAC-521 Oil or Gas Well GAS  
(KIND)

Company Columbian Carbon Company  
Address Box 873, Charleston 23, W. Va.  
Farm T. W. Armstrong, et al Acres 79 1/2  
Location (waters) Mid Run  
Well No. 3 - G-909 Elev. 739. DF  
District Rayonwood County Jackson  
The surface of tract is owned in fee by Sarah Hertje  
Address Sandyville, W. Va.  
Mineral rights are owned by T. W. Armstrong, et al  
Address (For further particulars contact ...)  
Drilling commenced 5-29-16  
Drilling completed 8-29-16  
Date Shot not shot From      To       
With       
Open Flow 1/10ths Water in Inch  
6/10ths Merc. in 7" 22" Inch  
Volume 3,901,000 Cu. Ft.  
Rock Pressure 975 lbs. 1 1/2 das. hrs.  
Oil      bbls., 1st 24 hrs.  
Fresh water 320 feet  
Salt water 1337 feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
18 3/8" 65'	30' 9"	30' 9"	Kind of Packer <u>Mid cont</u>
12 3/8" 132'	612' 1"	pulled	Bottom Hole
10 5/8" 104'	1233' 1"	pulled	Size of <u>7"</u>
8 1/4" 214'	2079' 9"	pulled	Depth set <u>1,802' SLM</u>
6 3/8" 7" 22'	1,835' 9"	1,835' 9"	
Perf. top			
Perf. bottom	<u>1,915' 11"</u>	<u>1,915' 11"</u>	
Liners Used			
<u>none</u>			
Perf. top			
Perf. bottom			

CASING CEMENTED      SIZE      No. Ft.      Date       
See reverse side  
COAL WAS ENCOUNTERED AT 1350 FEET 36 INCHES  
     FEET      INCHES      FEET      INCHES  
     FEET      INCHES      FEET      INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Top Soil			0	10			
Sand			10	20			
Red Rock			20	55			
Soapstone			55	101			
Slate			101	131			
Red Rock			131	287			
Sand			287	360	F. Water	320'	6-13" blr.
Red Rock			360	550			
Sand			550	608			
Slate			608	627			
Lime			627	635			
Sand			635	612			
Clay slate			612	651 SLM			
Lime shell			651 SLM	652			
Slate & Shells			652	680			
Sand			680	734			
Slate & Shells			734	770			
Red Rock			770	795			
Slate & Shells			795	805			
Sand			805	825			
Red Rock			825	880			
Lime			880	900			
Slate & Shells			900	1219			
Lime			1219	1253			
Slate			1253	1265			
Sand			1265	1280			
Slate			1280	1331			
Sand			1331	1350			
Coal			1350	1353	S. water	1337'	hole full
Sand			1353	1411			
Lime			1411	1465			
Slate & Shells			1465	1490			
Sand			1490	1550			
Lime			1550	1567			
Slate & Shells			1567	1655			
Sand			1655	1756			
Little Lime			1756	1767			
big Lime			1767	1810			





Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Sand			1810	1870			
Lim			1870	1900			
Slate & Shells			1900	1922			
Big Inj. Sand			1922	2081			
Lim			2081	2136			
Slate & Shells			2136	2170			
Lim			2170	2390			
Slate & Shells			2390	2412			
Shale			2412	2430	Gas	2417'	show
Borca Grit			2430	1583			
Slate & Shells			1583	1790 SLM			
Brown shale			1790 SLM	1897 SLM			
Congiferous Lim			1897 SLM	1930 SLM			
Ordinary Sand			1930 SLM	1930 SLM			
TOTAL DEPTH - - - - 1930' ELM							

PAYS, 1893-1909' 8/10 11.7' 22'  
1,500,000 cu. ft

CEMENT RECORD

6-1-16	15-3/8" casing, Ran 16 bags Aquagel and 50' Fibertex. Started to circulate while mixing - then lost circulation. Columbian Carbon Company Crew.
6-12-16	10-5/4" casing, Ran 25 bags Aquagel and 50' Fibertex. No circulation or returns. Columbian Carbon Company Crew.
7-5-16	8-5/8" casing, Ran 24 bags Aquagel and 50' Fibertex. Circulation while mixing - returns at 1750'. Columbian Carbon Company Crew.
8-12-16	7" casing, Ran 70 sacks Aquagel and 3' bales Fibertex. Ran aquagel thru tubing. Columbian Carbon Company Crew.

Core No.	Depth	Top	Bottom	Remarks
1	0-10'	0'	10'	...
2	10-20'	10'	20'	...
3	20-30'	20'	30'	...
4	30-40'	30'	40'	...
5	40-50'	40'	50'	...
6	50-60'	50'	60'	...
7	60-70'	60'	70'	...
8	70-80'	70'	80'	...
9	80-90'	80'	90'	...
10	90-100'	90'	100'	...
11	100-110'	100'	110'	...
12	110-120'	110'	120'	...
13	120-130'	120'	130'	...
14	130-140'	130'	140'	...
15	140-150'	140'	150'	...
16	150-160'	150'	160'	...
17	160-170'	160'	170'	...
18	170-180'	170'	180'	...
19	180-190'	180'	190'	...
20	190-200'	190'	200'	...

DEVELOPMENT OF WELLS  
 Date September 12, 1916  
 APPROVED: Columbian Carbon Company  
 By O. W. Van Pottas, Sup't  
 (Title)  
 Owner



7316  
F-20494

WEST VIRGINIA DEPARTMENT OF MINES  
OIL & GAS DIVISION  
W E L L R E C O R D

Company Columbian Carbon Company  
Address Box 873, Charleston 23, W.Va.  
Farm T. W. Armstrong et al Acres 394  
Location Mud Run  
Well No. 3-GW-909 Elev. 739. DF  
District Ravenswood Jackson County  
Surface Sarah Hertje, Sandyville, W. Va.  
Mineral T. W. Armstrong et al (for further  
addresses contact C.C.C.)

Commenced 5-29-46  
Completed 8-29-46  
Not shot  
Open flow  
Volume 6/10ths M in 7" 22#  
Rock Pressure 3,901,000 C.F.  
Fresh Water 975 lbs. 4 days  
Salt Water 320' 6-13" blr.  
1337' H.F.

Gas Well  
CASING & TUBING  
16 65# 30'9 Same  
13 3/8 48# 642'1 pld.  
10 3/4 40# 1233'1 pld.  
8 1/4 24# 2079'9 pld.  
7 22# 4835'9 Same  
2 3/8 4# 4945'11 Same  
No Liners

PACKER  
Midget Bottom Hole  
7"  
depth 4802' SLM  
Coal at 1350' 36"

Top soil	0	10	Brown Shale	4583	4790 SLM
Sand	10	20	Corniferous Lime	4790 SLM	4897 SLM
Red Rock	20	55	Oriskany Sand	4897 SLM	4930
Soapstone	55	101		4792' DLM-4790' SLM	
Slate	101	131	TOTAL DEPTH	SLM	4930
Red Rock	131	287		4901' DLM-4897' SLM	
Sand	287	360			
Red Rock	360	550			
Sand	550	608			
Slate	608	627			
Sand	627	635			
Blue Slate	635	642			
Lime Shell	642	651			
Slate & Shells	651 SLM	652			
Sand	652	680			
Slate & Shells	680	734			
Red Rock	734	770			
Slate & Shells	770	795			
Sand	795	805			
Red Rock	805	825			
Lime	825	880			
Slate & Shells	880	900			
Lime	900	1249			
Slate	1249	1253			
Sand	1253	1265			
Slate	1265	1280			
Sand	1280	1331			
Coal	1331	1350			
Sand	1350	1353			
Lime	1353	1411			
Slate & Shells	1411	1465			
Sand	1465	1490			
Lime	1490	1550			
Slate & Shells	1550	1567			
Sand	1567	1655			
Little Lime	1655	1756			
Big Lime	1756	1767			
Sand	1767	1840			
Lime	1840	1870			
Slate & Shells	1870	1900			
Big Injån Sand	1900	1922			
Lime	1922	2061			
Slate & Shells	2061	2081			
Lime	2081	2136			
Slate & Shells	2136	2170			
Shale	2170	2390			
Berea Grit	2390	2412			
Slate & Shells	2412	2430			
	2430	4583	Gas 2417' show		

PAYS: 4899-4909' 8/10 M 7" 22#, 4,500,000 CF

CEMENT RECORD:  
6-1-46 13-3/8" casing. Ran 16 bags Aquagel and 50# Fibertex. Started to circulate while mixing, then lost circulation.

6-12-46 10-3/4 casing. Ran 23 bags Aquagel and 50# Fibertex. No circulation or returns.

7-5-46 8-5/8" casing. Ran 24 bags Aquagel and 50# Fibertex. Circulation while mixing-returns at 1750'.

8-12-46 7" casing. Ran 70 sacks Aquagel and 3 bales Fibertex. Ran aquagel thru tubing.

650' DLM-651' SLM

4897  
4930  
415

7316

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SEP 13 2019

WV Department of  
Environmental Protection

WW-2A  
(Rev. 6-14)

1.) Date: 08/29/2019  
2.) Operator's Well Number Ripley 7316  
State 47- County 035 Permit 00521 W  
3.) API Well No.:

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**NOTICE AND APPLICATION FOR A WELL WORK PERMIT**

4) Surface Owner(s) to be served:  
(a) Name Gregory H. and Kathy S. Offutt  
Address 126 Sugar Maple Lane  
Sandyville, WV 25275  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
6) Inspector Joe Taylor  
Address 1478 Claylick Road  
Ripley, WV 25271  
Telephone 304-380-7469

5) (a) Coal Operator  
Name Not operated  
Address \_\_\_\_\_  
(b) Coal Owner(s) with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_

**TO THE PERSONS NAMED ABOVE TAKE NOTICE THAT:**

OR Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas

X Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22-6 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through \_\_\_ on the above named parties by:

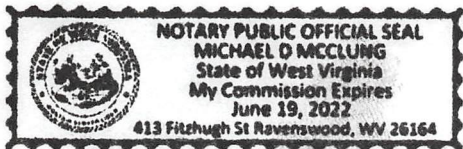
- Personal Service (Affidavit attached)
- Certified Mail (Postmarked postal receipt attached)
- Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 35 CSR 4, and I agree to the terms and conditions of any permit issued under this application.

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, 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 and imprisonment.

Well Operator: Columbia Gas Transmission, LLC  
By: James Amos  
Its: Principal Engineer  
Address: 48 Columbia Gas Rd  
Sandyville, WV 25275  
Telephone: 304-373-2412  
Email: james\_amos@tcenergvy.com



Subscribed and sworn before me this 30th day of September, 2019

M.D. McClung  
My Commission Expires 6/19/2022

Notary Public

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Office of Oil and Gas

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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)



**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE  
Chapter 22, Article 6, Section 8(d)  
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
Bernard & Hazel Offutt	Columbia Gas Transmission	Lease No. 1052275	390 / 217


**Acknowledgement of Possible Permitting/Approval  
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources
- WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator:  
By: Its:

James Amos  RECEIVED  
 Columbia Gas Transmission, LLC  
 Principal Engineer  
 Office of Oil and Gas  
 SEP 13 2019

47-035-00521W

WW-9  
(5/16)

API Number 47 - 035 - 00521  
Operator's Well No. Ripley 7316

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) Mud Run of Sandy Creek Quadrangle Ripley

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)
- Undergound Injection ( UIC Permit Number 34-009-23821, 34-009-23823, 34-009-23824, 34-105-23619 )
- Reuse (at API Number \_\_\_\_\_)
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain \_\_\_\_\_)

Will closed loop system be used? If so, describe: Yes - steel piping connecting wellhead and tank(s).

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Fresh water

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

Additives to be used in drilling medium? fresh water, surfactant (CTCO), biocide, HCl acid (stimulation), corrosion inhibitor, iron control

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

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

-Landfill or offsite name/permit number? If needed: Rumpke Beech Hollow Landfill - Wellston, OH.

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

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

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

Company Official Signature [Signature]  
Company Official (Typed Name) James Amos  
Company Official Title Principal Engineer

[Signature]

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Office of Oil and Gas

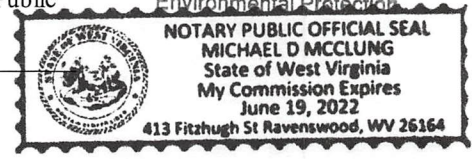
Subscribed and sworn before me this 3rd day of September, 2019

[Signature]  
Notary Public

My commission expires 6/19/2022

SEP 13 2019

WV Department of Environmental Protection





Proposed Revegetation Treatment: Acres Disturbed < 0.2 Prevegetation pH 6 - 7

Lime 2 Tons/acre or to correct to pH 7 - 8

Fertilizer type 10-10-10

Fertilizer amount 600 lbs/acre

Mulch Straw @ 2 Tons/acre

**Seed Mixtures**

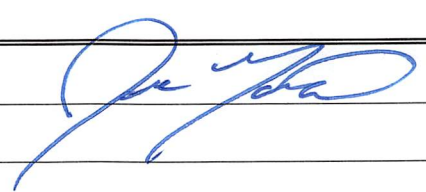
<b>Temporary</b>		<b>Permanent</b>	
Seed Type	lbs/acre	Seed Type	lbs/acre
<u>Annual Rye</u>	<u>40</u>	<u>Orchard Grass and/or Tall Fescue</u>	<u>29</u>
		<u>Birdsfoot Trefoil (Empire)</u>	<u>9</u>
		<u>Annual Rye</u>	<u>12</u>

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: Joe Taylor



Comments:

Title: 000 Inspector

Date: 9-11-19

Field Reviewed?  Yes  No

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WV Department of  
Environmental Protection

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): Mud Run of Sandy Creek Quad: Ripley, WV  
Farm Name: Offutt, Bernard & Hazel

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

No fluids planned to be discharged.

No fertilizer will be stored on site. Fuel, oil, and lubricants will be stored on site, but located within secondary containment. Spills from construction equipment, well treatment fluids, and produced well fluids are the only possible source of contamination to groundwater. Drilling and flowback fluids to be stored in tanks.

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

All construction and well servicing equipment will be monitored and inspected daily for leaks. Fluid pumping well service equipment will have secondary containment under all leak paths. 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.

Mud Run - 0.5 mile.  
6.2 miles from WHPA (Ravenswood Municipal Water Works).  
3.8 miles from ZCC (City of Ripley).

- 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.

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WV Department of  
Environmental Protection



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.

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

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 and well servicing equipment will be monitored and inspected daily for leaks or spill.

Signature:

*James E. ...*

Date:

*9/3/19*

*JP*

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SEP 13 2019  
WV Department of  
Environmental Protection





STATE OF WEST VIRGINIA  
DEPARTMENT OF HEALTH AND HUMAN RESOURCES  
Bureau for Public Health  
Office of Environmental Health Services

Bill J. Crouch  
Cabinet Secretary

Catherine C. Slemp, MD, MPH  
Commissioner & State Health Officer

August 27, 2019

Mr. Brad Nelson  
Well Engineering & Technology  
455 Racetrack Road  
Washington, PA 15301

**Re: Data Request for Public Drinking Water Locations Near  
Ripley 7344 (38.8862, -81.6884) & Ripley 7316 (38.8743, -81.6982)**

Dear Mr. Nelson:

This letter is in response to the August 8, 2019, data request concerning public drinking water locations near the above referenced sites in Jackson County. Our agency regulates public drinking water and their corresponding source water protection areas. Private drinking water well information is not maintained by this office, however, the Jackson County Health Department may have additional information. This area does not intersect any public water sources or source water protection areas on record. Your location is approximately 6 miles southeast and upstream from the public drinking water Well Head Protection Area for Ravenswood Municipal Water Works (WV3301810). Your location is approximately 4 miles northeast of the public surface water intake and zone of critical concern for the City of Ripley (WV3301811).

Well Name	Distance	PWSID	System Name
Ripley 7344	5.9 mile from WHPA	WV3301810	Ravenswood Municipal Water Works
	4.7 miles from ZPC	WV3301811	City of Ripley
Ripley 7316	6.2 mile from WHPA	WV3301810	Ravenswood Municipal Water Works
	3.8 miles from ZCC	WV3301811	City of Ripley

The West Virginia Department of Health and Human Resources provides a map viewer for the public to access a collection of data including delineated source water protection areas and reported potential contaminant sources. This viewer contains data that has been deemed publicly available by the West Virginia Division of Homeland Security and Emergency Management. It should be noted that we are making this data available solely as public service. As a disclaimer, this data was acquired from multiple federal and state sources, is updated periodically and maintained by the individual sources. Any questions will have to be directed to the responsible agency. The public map viewer can be found here: <https://oehsportal.wvdhhr.org/wvswap/index.html>.

Sincerely,

Brian A. Carr, P.G., Program Manager  
Source Water Assessment and Protection

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47-035-00521W

(RAVENSWOOD)

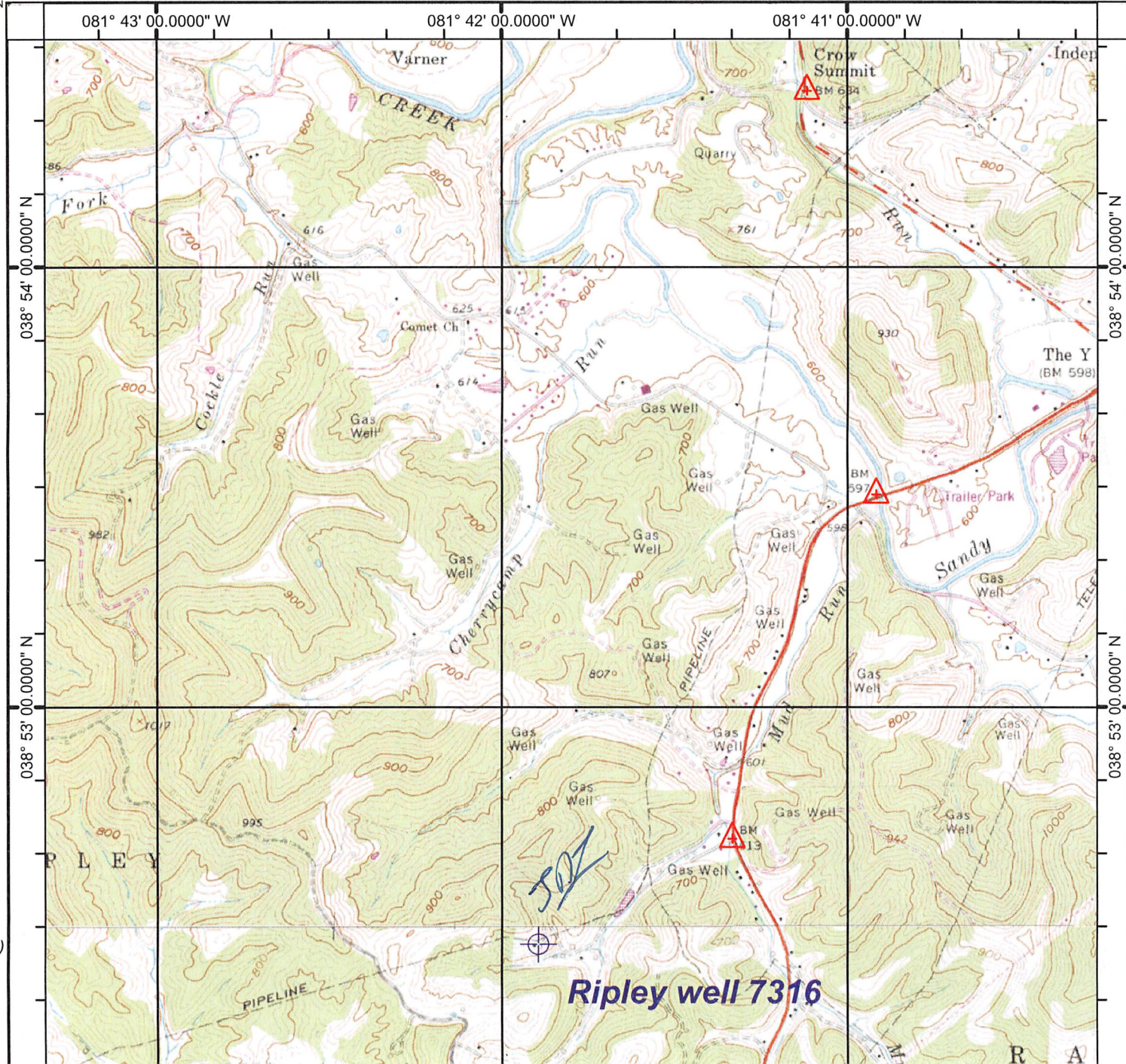


RIPLEY QUADRANGLE  
WEST VIRGINIA  
TOPOGRAPHIC SERIES

081° 43' 19.5455" W  
038° 54' 31.0465" N

(SANDYVILLE)

081° 40' 15.5792" W  
038° 54' 31.0465" N



(COTTAGEVILLE)

(GAY)

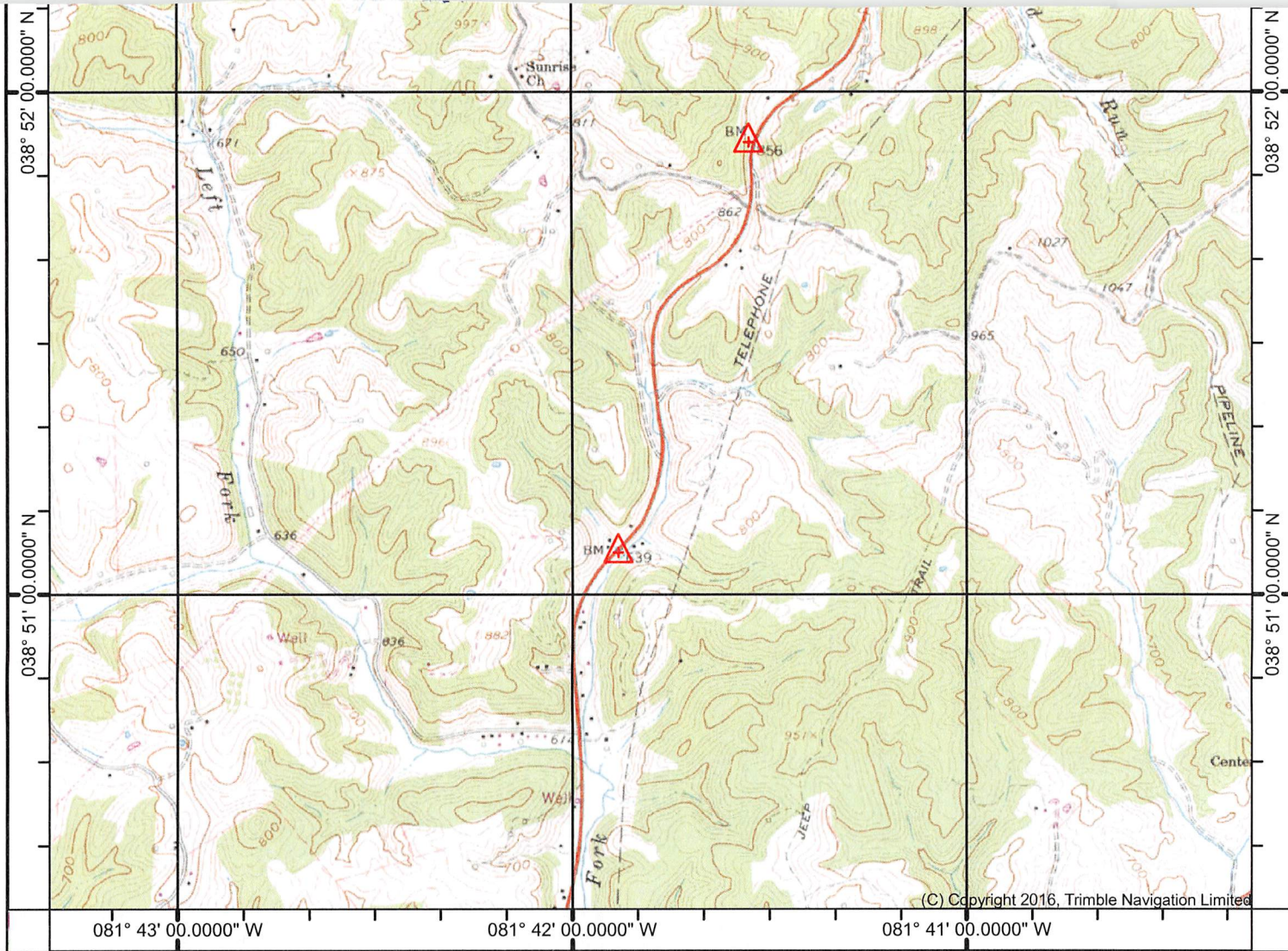
**Ripley well 7316**

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SEP 13 2019  
(LIVERPOOL)

WV Department of  
Environmental Protection





038° 50' 21.9262" N 081° 43' 19.5455" W (ELMWOOD) 038° 52' 00.0000" N 081° 42' 00.0000" W (KENNA) SCALE 1:24000 038° 51' 00.0000" N 081° 41' 00.0000" W (KENTUCK) 038° 50' 21.9262" N 081° 40' 15.5792" W

(ELMWOOD)

(KENTUCK)

Produced by Trimble Terrain Navigator Pro  
Topography based on USGS 1:24,000 Maps

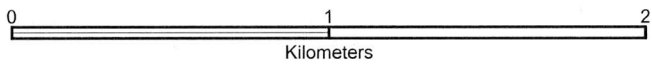
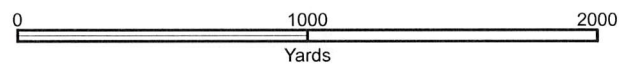
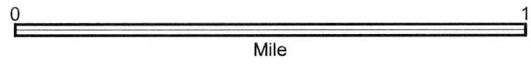
North American 1983 Datum (NAD83)

To place on the predicted North American 1927 move the  
projection lines 9M N and 13M E

Declination



GN 0.44° W  
MN 7.79° W

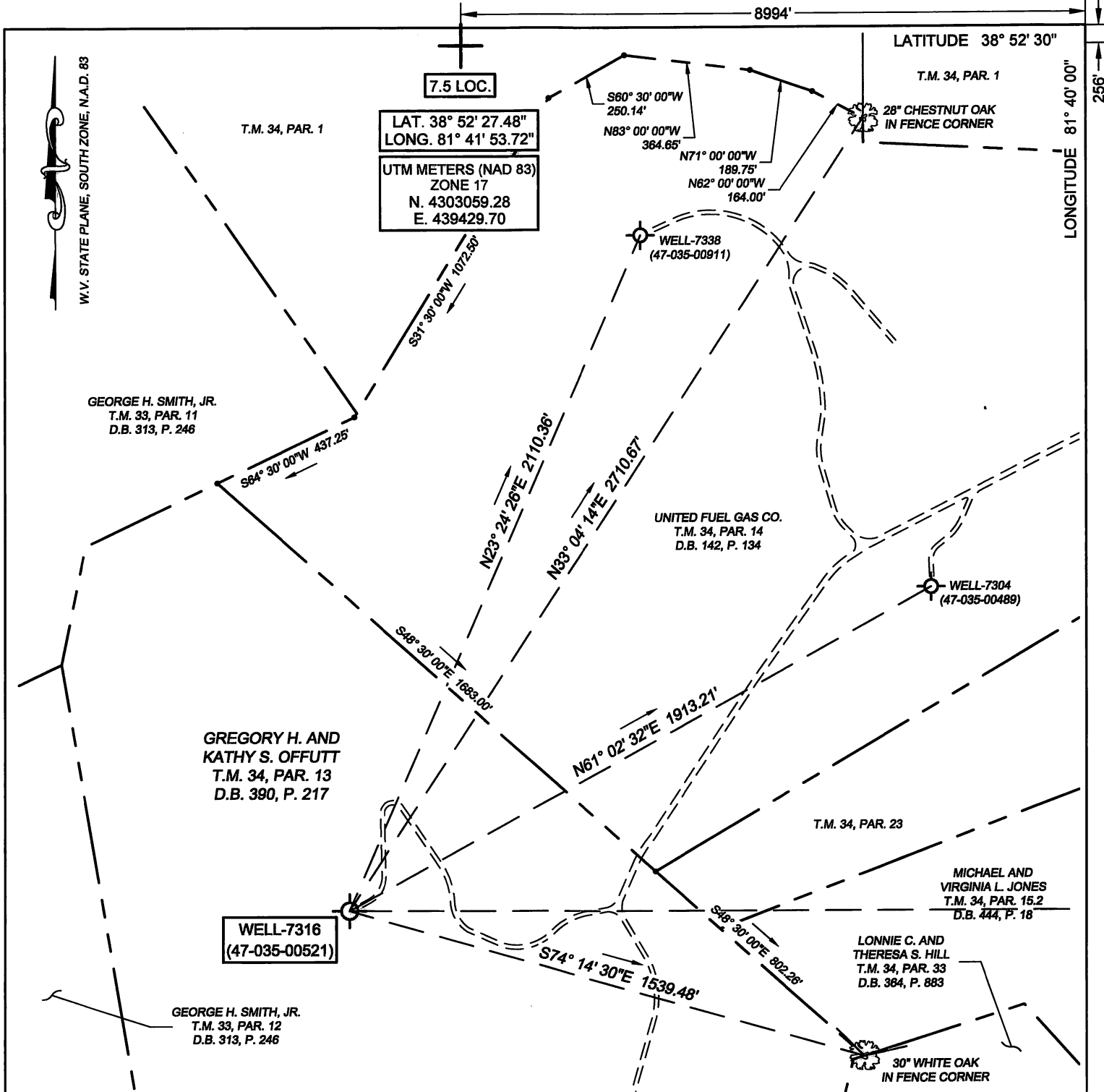


CONTOUR INTERVAL 20 FT

Printed: Wed Sep 04, 2019

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38081-G5-TM-024  
RIPLEY, WV  
JAN 1, 1975



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

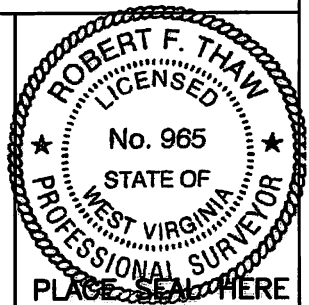
FILE No 1901-2345-001  
 DRAWING No. 1901-2345-001  
 SCALE 1"=400'  
 MINIMUM DEGREE OF ACCURACY 1:200  
 PROVEN SOURCE OF ELEVATION TRIMBLE R8-3  
GPS UNIT

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)

*R. Thaw*  
 ROBERT F. THAW

PS #965



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



DATE MAY 16 2019  
 OPERATOR'S WELL No. 7316  
 API WELL No. 47 035 - 00521W

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  STATE 47 COUNTY 035 PERMIT 00521W  
 (IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 737.5' WATER SHED MUD RUN OF SANDY CREEK  
 DISTRICT RAVENSWOOD COUNTY JACKSON  
 QUADRANGLE RIPLEY, WV

SURFACE OWNER GREGORY H. AND KATHY S. OFFUTT ACREAGE 65.44  
 OIL & GAS ROYALTY OWNER BERNARD AND HAZEL OFFUTT LEASE ACREAGE 60  
 LEASE No. 1052275

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

PLUG AND ABANDON  CLEAN OUT AND REPLUG   
 TARGET FORMATION ORISKANY ESTIMATED DEPTH 4930  
 WELL OPERATOR COLUMBIA GAS TRANSMISSION, LLC DESIGNATED AGENT JIM AMOS  
 ADDRESS PO BOX 1273, CHARLESTON, WV ADDRESS 48 COLUMBIA GAS ROAD  
25325-1273 SANDYVILLE, WV 25275

FORM IV-6 (8-78)