

#### west virginia department of environmental protection

Office of Oil and Gas 601 57th Street, S.E. Charleston, WV 25304 (304) 926-0450 fax: (304) 926-0452 Jim Justice , Governor Austin Caperton , Cabinet Secretary www.dep.wv,gov

Friday, July 07, 2017 WELL WORK PERMIT Vertical / Re-Work

COLUMBIA GAS TRANSMISSION, LLC (A) P. O. BOX 1273

CHARLESTON, WV 253251273

Re: Permit

Permit approval for 7294 47-035-00476-00-00

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: 7294

Farm Name: FISHER, RALPH

U.S. WELL NUMBER: 47-035-00476-00-00

Vertical / Re-Work

Date Issued: 7/7/2017

Promoting a healthy environment.

### 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. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

#### **CONDITIONS**

- 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, drilling ceased, completion of any other permitted well work and completion of the 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) JUN 7 2017

WV Department of Environmental Protection

## STATE OF WEST VIRGINIA 47-035-00 DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS WELL WORK PERMIT APPLICATION

1) Well Operator:	Columbia Gas Transmission, LLC	307032	Jackson	Ravenswood	Sandyville, WV
		Operator ID	County	District	Quadrangle
2) Operator's Well	Number: Ripley 7294		3) Elevation:	710.0 ft	
4) Well Type: (a) C	0il or Gas X				
(b) If	Gas: Production / Under	ground Stor	rage X		
	Deep X / Sha	ıllow			
7) Approximate fre	et Formation(s): Oriskany Depth: 4867 (existing) Feet Fo sh water strata depths: 220 ft and 62	5 ft (as reported b	y driller in 1945)	rget Depth: 4 al Depth: Orisk	853 ft
8) Approximate sal	It water depths: 1305 ft and 1630 - 1650	ft (as reported by	driller in 1945)		
9) Approximate coa	al seam depths: none reported by	driller in 1945			
10) Approximate vo	oid depths,(coal, Karst, other): no	ne reported b	y driller in 1945	5	
11) Does land cont	tain coal seams tributary to active	mine? no	)		
12) Describe propos	sed well work and fracturing method	s in detail (at	tach addition	al sheets if nee	eded)
Perform coiled tubing of	clean-out and acid treatment.				
Casing listed below a	re existing. No plans to remove, alter,	or install new	casing/tubing.		

### 13) CASING AND TUBING PROGRAM

TYPE **INTERVALS** SPECIFICATIONS **FOOTAGE** CEMENT Size Weight per ft For Drilling Left in Well Fill -up (Cu. Ft.) Grade 16 16 16 no record of cement Conductor 13.375 771 0 Fresh Water Intermediate 1 10.75 1045 0 Intermediate 2 8.625 1600 0 Intermediate 3 7.0 23 2036 2036 no record Intermediate 4 17 5.5 4762 4762 no record Production 3.5 J-55 9.2 4867 4867 cmt'd but no record of vol

Packers: Kind: Parmaco Wall & Anchor

Sizes: 3.5" x 4.75"

Depths Set 4832 ft (slotted or perforated anchor ran below)

07/07/2017

900

200 5%

WR-35			API	# 47- 35	5-Feb-99 -00476 I	
	Division of En	e of West Virgin vironmental Prot ion of Oil and G	ection	Reviewed		
	Well Opera	tor's Report of	Well Work		Office of Oil & G	
Farm name:	FISHER, RALPH	Operator	Well No.:	7294	MAR 08 19	99
LOCATION:	Elevation: 712.00	Quadrangle: S	ANDYVILLE		VeV Dreiston of	
	District: RAVENSW Latitude: 9800 F Longitude 7750 F	eet South of 36		. 0 Sec.		ction
P.	UMBIA GAS TRANSMISS O. BOX 1273 ARLESTON, WV 25325-	Casing			Cement Fill Up	
Agent: RIC	CHARD L. COTY		Drilling	in Well	Cu. Ft.	
Permit Issu	HOMER DOUGHERTY led: 06/05/9 Commenced: 1/30/98			2036'		
Well work C Verbal Plug Permission	Completed: 9/2/98 gging granted on:		<u> </u>	47621		
Total Depth	Cable Rig (feet) 4867' depths (ft) 220'.	<u>3-1/2"</u>	<u> </u>	48351	200sx	
Salt water	depths (ft) 1305'.	1630'				
	ing mined in area (Y	7N)? <u>N</u>				
OPEN FLOW D	DATA					
Gas: I F T Statio	cing formation Orisk Initial open flow N/A Final open flow N/A Fime of open flow be crock Pressure N/A	MCF/d 011: 1 MCF/d F tween initial an psig (surface	Final open f inal open f id final tes ce pressure)	low N/A ts_N/A after_N	Hours Bp1/d	,•
Second Gas: I I Statio	d producing formatic Initial open flow Final open flow Fime of open flow be Frock Pressure	MCF/d Oil: I MCF/d Oil: I MCF/d F tween initial ar psig (surface	Pay zone (nitial open final open final tes ce pressure)	depth (ft flow low ts after	Bbl/d Bbl/d Hours Hours	
INTERVALS, LOG WHICH	ACK OF THIS FORM F FRACTURING OR STIM IS A SYSTEMATIC DE COAL ENCOUNTERED BY	MULATING, PHYSIC ETAILED GEOLOGIC	CAL CHANGE,	ETC. 2).	THE WELL	

By:
Date: 3-5-19

8/6/98 Replaced top joint of 3-1/2" casing. Installed API wellhead.

8/28/98 Fractured Oriskany with N2 Assist Delta Frac using 280 bbls of water, 15 MSCF N2, 3800# 20/40 sand at 1 PPG.

DAN 07 98 WEINSEN COIC STORAGE	PAC .
Ceasiny Address Address Address Address Address Address Address Allera  Content  Con	### PACIFIE STARTION OF 1. 25  CIL & CO. MINISTER  WELL HISOND  CASSING & TURING  Datter Carbon Conserver  Box 1913, Crarleston 27, V.Ya. Wood 16 16  J. C. Fisher at all Icrae 169 13 1/8 771 0  Sendy Creek 1 10 3/4 1445 0  1 (1199) Mev. 712.3 85/8 1400 0  Revenue of J. C. Fisher at all, Revera wood, V.Ya.  Save 5 3/6 4762 5cme  Lag. 25, 1944 2 3/8 1867 5cme  March 26, 1945 Casting consented:  Cas Well 7 1371  Lagra 4612*  Lagra 4612*  Lagra 4612*
Conductor Foul Rock Sand Slote Lise Rock Sand Slote Rei Neck Slate Red Rock Slate Slate Red Rock Slate Red Rock Slate Red Rock Slate Red Rock Slate Slate Red Rock Slate Red Rock Slate Slate Red Rock Slate Red Rock Slate Slate Red Rock Slate Slate Red Rock Re	16
Slate Plera Slate Blera Salt Jona Slate & Swille	170 170 170 170 170 170 170 170 170 170

12-5135-54

WORK OPDER

			WO	W OUD	-11					
REQUEST NO. June	4422 e 18,	54			BUDGET	NO		ORK ORDE	R NO	7482 9 19 54
COMPANY	United Fuel (Recondition V	Gas Company Well X-59-729	4 and Ins	stall Hea		orage pment		DISTRIC	Cler	ndenin
KNOWN AS	ssity To clean	94 - Additions out well and torage in pool	install	heavier	No.	due		ALLATION.	being	pur-
LOCATION:		Ravenswood		TAX	Rural		Jackson		West	Virginia
RELATED PROJECT	work order No J. C. Martin	7481 n		APPROVE	-59-7294 - D вуJ.					
			DETAIL	OF EXPENDIT	JRES	- 11				

	DETAI	L OF EXPENDIT			CTUAL	
MATERIAL TO BE INSTALLED HENNEN PRICE	SIZE	QUANTITY	AMOUNT	QUANTITY	AMOUNT	VARIATION
Steel Tubing 9.2# .81 Wall & Anchor Packer Orbit Gate Valve-Comp. Nord Fig. 2349 P. Valve-Comp. Welded Tee W/N Flanges Ser. 90 16.50 Anchor Clamps Turnbuckles 12.00	3-1/2" 3"x5" 3" 3" 3" 3" 1-1/2"x	4867' 1 1 8 1 18" 2	3,942.00 175.00 356.00 288.00 10.00 132.00 16.00 24.00 35.00	49821 1 1 1 - 8 1 2	4,040.79 139.90 356.95 294.43 - 162.98 16.15 22.26 27.06	98.79 (35.10) .95 6.43 (10.00) 30.98 .15 (1.74) (7.94)
TOTAL MATERIAL		, ,	*. '4.978.00'	, , ,	5,060.52	82,52
Direct Labor Interest Use of Auto and Hauling Tools, Supplies & Misc. Expense Hauling, Erecting and Dismantling Sp Cement & Services Fuel Torpedo Service	udder		1,500.00 53.00 1,000.00 35.00 350.00 2,000.00 35.00 125.00		1,388.80 15.89 1,127.38 144.03 -* 701.40 16.00 149.75	(111.20) (37.11) 127.38 109.03 (350.00) (1,298.60) (19.00) 24.75
Stores Expense & Freight Labor Benefits and Non-Productive Tin Administrative and General Labor Ove	me rheads		538.00 281.00 48.00	*	538.93 252.84 40.91	.93 (28.16 (7.09
TOTAL INSTALLATION XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			5,965.00 10,943.00.	:	4,375.93. 9,436.45.	(1,589.07

INDICATE NORTH

SKETCH (CORRECT TO ACTUAL)

INVENTORY MAP NO. F-16/58-95
Map Square - 58-95

Note: Move in Bucyrus Erie Spudder and string of cleaning out tools.

Clean well out and run string of 3-1/2" tubing on wall and anchor packer. Cement between all strings of casing and 3-1/2" tubing to surface. Install heavy well fittings and report results.

\* Included in Direct Labor and use of automobile

RECEIVED Office of Oil and Gas

JUN 7 2017

WV Department of Environmental Protection 07/07/2017

2-764-7482

		and the property of the state o	COMPLET	TION REPORT	مناوعت مناوعة المها		
MAKE NE	CESSARY	REVISIONS ON SKETCH TO SHOW WO	RK ACTUALLY P	KRFORMED. I	NDICATI	NG LOCATION AND DIMENSIONS OF S	PECIAL CON.
STRUCTIO	ın.					the second second	
FOR LINE	WORK	ON ESTABLISHED STREET OR HIGHWAY	, INDICATE ON	SKETCH THE	DISTAN	CE OF LINE FROM ADJOINING PROPER	TY, ALSO POR-
TION UND	ER PAV	ING.					
WHEN LIN	NE EXTER	NOS INTO TWO OR MORE TAX DISTRICT	S LIST BELOW F	ORTION INB	TALLED (	OR RETIRED, IN FACH	
	ғт.	OF SIZE KI	ND		гоми	DIST	COUNTY
	FT.	OF SIZE K	ND		TWP.	DIST	COUNTY
	FТ.	OF SIZE KI	ND		TWP.	DIST	COUNTY
		OF			TWP.		
		MATERIAL INSTALLED XIPOREXIMEDA			TWC.	MATERIAL INSTALLED OR RETIRED	5001477
		AND THE RESIDENCE OF TH					
QUANTITY	SIZE	DESCRIPTION		QUANTITY	51ZE	DESCRIPTION	<del></del>
48921	3340I	. Steel Tubing, Gr. J-55,9.	2#·				
ז		1 x24" Comb. Wall & Anc. Pa					,
8.	311	Ser. 90 W/N. Flanges	\ \				
1	311	Orbit Flg.Gate Valve 300	Ω#				
i	3"	Nord #23/19					
<u> </u>		Nord.#2349 Flg.Plug Valv	'e <u>~</u>				
_5	3"	Oval Steel Ring Gaskets.					
1	3"	Steel Bull, Plug					
	311	Welded Tee, Gr. "B"					
ำ	3411	Casing Anchor Clamps	•				
1	<u>}</u> "	M.& F.Steel Needle Valve	<del></del>				
					-		
_2	. ~	12" Turnbuckles	•	<del> </del>			
48	, · •	珍文 x 5-3/4" Stud Bolts		<b></b>			
2	1#"x2	4" Hair Pin Bolts					<del>,</del>
_3		Yds. Ready Mix Concrete	eren e				<u> </u>
200		Sks.Cement	*				•
2		Sks.Aquagel	Y				
10#		National Pipe Thread Lub	ricant				
1000#		Tla Tman					<del></del>
4000#		Junk Iron					
						•	
<del></del>		<del></del>					
<del></del>			T. T				
MATERIAL TI	RANSFER	NUMBERS: June # 196,261,X0X	July #105.	106.152.	Auè #]	159-160-Octo# N-32-MXXXX	Nov.# N-32.
		N-63, N-64, 76. P.O.#	35065-298	05.30485			
	-	PIPE COATING		,		INSTALLATION DATES OF PROPERTY RE	TIPEN
				· · · · · · · · · · · · · · · · · · ·	ORIGINAL		7
QUANTITY		KIND	FT. OF PIPE	QUANTITY		KIND	DATE
			• :				
			* -				
					<del>,</del>		
			edialis III ; il IIII suvery economic	******************		<del>di di milikat i spripti sambandanga arama i da stelah di da kate e teles si saba sila astronga a sessibili sa</del>	
TYPE OF JO				INFORMATI	0N TO E	E FURNISHED FOR BMALL STRUCTUR	E8:
EXCAVATION	N: BY HA	NO FT., MACHINE		OUTSIDE D	IM. LENG	3TH WIDTH	
WIDTH OF	TRENCH	FT., AVG. DEPTH.	FT.	HEIGHT TO	EAVES_	HEIGHT TO RIDGE	
TYPE OF PA	VING			FOUNDATIO	on: KIND	,	
		FT., LENGTH	FT	1		HEIGHT DEPTH ABOVE GROUND BELOW	GROUND
		of soil: Gas Well	· · · · · · · · · · · · · · · · · · ·		•		
OESCHIBE (	AN URE	Or SOIL: MOO NOTE		100	-	ТН	
<del></del>						THIC	
REPORT UN	IUSUAL (	CONDITIONS ENCOUNTERED IN CONSTR	IUCTION:	ROOF: TYPE	£	KIND	
				DOORS: NO	)	SIZE KIND	
•				WINDOWS:	NO	SIZE KIND	
		· · · · · · · · · · · · · · · · · · ·					
				MOGELLAN	·cous		
76-11-11-11-11-11-11-11-11-11-11-11-11-11					***************************************		
REASON FO	OR OVER	RUN - UNDERRUN:					
·		, , , , , , , , , , , , , , , , , , , ,		·	····	07	/07/2017
			P1110000 101 11111111111111111111111111				
DATE WOR	K START	so_June 15.195).	19	DATE WORK	····	Inla- 15 105/	
COMPUES	ny D tif	ED_June_15,1954 -Strickland_DATE_10/28/54		ASI	// //	19 - 1 (1/1) / -/	-19
			10,	PRITECHAL CONTRACTOR	· ////	DATE (: (**/. //))	コロジンでが

.

### WELL WORK ORDER

35	00	47	6W	1
	1			

		_BUDGET N			7 .	W	ORK ORE	DER NO		
COMPANY United Fuel Gas Com	pany			FIELD	endenin	L		ACDES	169	
VELL NO. 299 7294 DISTRICT RE	venswood			COUNTY	Jackson	1		STATE	W.	Va.
on waters Sandy Creek							_MAP SC	QUARE		
LOCATION MADE BY United Carbon C								GS WITHIN		
EASE EXPIRES		_19		CLASS OF LO	CATION					
PURPOSE AND NECESSITY Purchase well										
RELATED WORK ORDER NOS				FOR						
		DAT	A AND A	APPROVALS						
CHECK TYPE OF V	VORK				CHECK PER	RMITS OR SE	RVICES	REQUIRED		
Purchase				RIGHT OF WAY F	OR ROAD	П	DRILLI	NG PERMIT		
DRALLANEWXWELL				WELL LINE				ONMENT PERMIT		-
DRILL WELL DEEPER				INSTALL MEASURI						
ABANDON WELL				SURVEY FOR: W.	2.000					L
10/0		Ominica				- 4	2			
ESTIMATED DEPTH	FEET, SAND_			DRI	ILLING CON	TRACTOR	nited	Carbon (	0.	
COMPANY WILL FURNISH:	RIG: YES	No X		WATER	YFS	NO E	FUEL	YE	s X	10
			APPRO	VALS						
SUPT.	DATE		9					DATE		
DIVISION	DAIL			PROD.				DATE	1	9
SUPT.	DATE		9	MGR.	-			DATE	1	9
ENGINEER	DATE		9	GENERAL SUPT				DATE	1	9
ASST. GEN. MANAGER	DATE	i	9	VICE PRESIDENT				DATE	i	9
DETAIL OF E	STIMATED C	OST				DETAIL OF	ACTUAL	COST	T	
				1		VAR	IATIO			
MATERIAL TO BE INSTALLED - RETIRED	SIZE	QUANTITY	PRICE	TAUOMA	SIZE	QUANTITY	PRICE	THUOMA		
CASING WEIGHT 22#	70	2036								
	2-3/8"	4867°	1.33							*****
4.0F	2-3/0"	4001.	•43						-	-
<i>y</i>										
TUBING WEIGHT			-				-		-	
TOBING		-								
FITTINGS										
Kerotest Xmas Tree Casing Shoe	7"	1	750.0	0						_
Casing Shoe	511	1	23.2 18.7 97.0	5						
Closing Tool	5" 2-3/8"	1	97.0	XO .						-
			-							
					-					
TOTAL MATERIAL INSTALLATION OF RETIREME	NT COST			xxxxx				xxxxx	хх	x x
LABOR		Charles and Assessed Assessed Assessed	A STATE OF THE PARTY OF THE PAR	2,500,00		energy artificial (untrapole) and Local Monthly (unit Little and	SCHOOL SHEET SHEET			
USE OF AUTO AND HAULING				3,000.00						
RIGHT OF WAY									-	
DRILLING 4867 FEET	@ L	•75 PE	R FOOT	23,118.25						
HAULING, ERECTING AND DISMANTLING RIG										
USE OF RIG	-			250.00			-		-	
Cement & Services		10-10-1-1-1		500.00					1	-
TORPEDO									-	
SUPPLIES AND EXPENSE	Office of Oi	VED I and Gas		100.00					+-	
								04/07	1904	7
ENGINEERING DEPARTMENT SURVEY	JUN '	7 2017						4/1/07/	201	1
STORES EVENING AND POSTAGE	WV Depar Environmenta	tment of								-
STORES EXPENSE AND FREIGHT LABOR BENEFITS OVERHEADS	Environmenta	al Protection	!				(	1		
ADMINISTRATIVE OVERHEADS						Salandi dia sia dia mandri ne mandri		V		
TOTAL INSTALLATION OR RETIREMENT COST	ayun sanatorasini munimum									-
TOTAL ESTIMATE				1		The state of the s			1	

REQUEST NO. 1421		WOR	K OR	DER REC			3500476W
DATE June 18. 19 5	9.				BUDGET NO		
DATE TO 19	11.1					DATE ISSUED_	19
COMPANY United Fuel Gas Comp	anv				DEPT. Production	DISTRICT	Clendenin
PROPOSED WORK Pull string of	2" tub	ing, and	remot	re well 1	Pittings.		
	7				and the Company of th		
known as Well X-59-7294 - Pa	rt Rem	oval.			NO	ORIGINAL INSTALLATION	
PURPOSE AND NECESSITY TO TOMOVE IN	ateria:	1 in ord	er to	recondit	ion well for store	DATE POOT	X_59
				9777		50 231 1002	- //-
LOCATION: Well X-59-7294- J.							
N	Ra	OCUSENCE DISTRICT	<u>d</u>	Rural	R DISTRICT COUN	ackson	We Va.
						11	STATE
RELATED PROJECT-REQUEST NO. 44			R Wel	1 X-59-7	294 - Additions.		
MATERIAL TO BE IN TALLY OF RETIRED	ESTIMATE	QUANTITY	PRICE	AMOUNT	DATA	AND APPROVALS	
4.6# Steel Tubing - Sal.			PRICE	AMOUNT	CHECK TYPE OF WORK	7.11.2.10.2.10.2.0	
Kerotest Kmas Tree -J.	78	1007			ADDITION RETIR	REMENT I	BEBLACEMENT D
Closing Tool -J.	2-3/8	1 7			CHECK BELOW PERMITS AN		
	2-3/0	-			RAILROAD CROSSING PERM		
					BRIDGE CROSSING PERMIT		
					HIGHWAY PERMIT	_	LEASE
					BUILDINGS ON PROPOSED EXTENSION	NEW GO	NSUMERS
						-	اد
					WORK WILL BE STARTED		19 54
					WORK WILL BE FINISHED	July	19 54
					FIELD ESTIMATE		
TOTAL MATERIAL	-		-		BY BY		6/18/ 19 5h
NOTAL MATERIAL	MENT COS	т		* * * *	GEN L OFFICE VERIFICATION	•	
DIRECT LABOR	MENT COS				BY		19
				125.00		APPROVALS	
USE OF EQUIPMENT			-		APPROVED		
USE OF AUTO AND HAULING				115.00			19
TOOLS, SUPPLIES AND MISCELLANEOUS	EXPENSE			اللاق الريشماء			
STORES EXPENSE & FREIGHT						1 772	19
RIGHT OF WAY							19
							19
							19
CONSTRUCTION OVER 1					BUDGET APPROPRIATION		
CONSTRUCTION OVERHEADS  TOTAL INSTALLATION OR RETIREM	JENIT COO	r			VERIFIED		19
TOTAL ESTIMATE	TENT COS						10
INTER ENTINATE							18

RECEIVED Office of Oil and Gas

JUN 7 2017

WV Department of Environmental Protection

07/07/2017



04-10

Slate



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

#### WELL RECORD

Permit No JAC-476 Oil or Gas Well\_ Gas Company United Carbon Company Casing and Tubing Used in Drilling Packers Address Box 1913, Charleston 27, W. Va. Parm J. C. Fisher et al. Acres 169 Size Location (waters) Sandy Creek 16 (Wood) 16' 161 Kind of Packer\_ Well No. 1 (1199) Elev. 712.3' 133/8" 771 1 ററ District Ravenswood County Jackson The surface of tract is owned in fee by J. C. Fisher etal 103/4" 10451 00 Sim of Address Rovenswood . W. Va. 8%5/8" 16001 GO Mineral rights are owned by SAMS 647"OD 20361 20361 Depth set. 47621 47621 53/10\_ Drilling commenced August 25. 1944 Perf. top. 23/8" Drilling completed March 26. 1945 48671 48671 Perf. bottom. Date Shot Not shot From Linera Used. Perf. ton. With Perf. bottom Open Flow /10ths Water in. \_Inch CASING CEMENTED 7" SIZE 1371 No. Ft. /10ths Merc. in. Date \_Inch Gas well Volume\_. \_Cu Fl 8 5/8" 4612' Rock Pressure 1720 COAL WAS ENCOUNTERED AT\_ FEET. bbls., 1st 24 hrs. 220 625 INCHES INCHES PEET. Fresh water ... 1305 1630-1650 feet INCHES Teet INCHES Salt water\_ CIL Gas or Water Hard or Depth Faund **Formation** Color Remarks Bottom Top Conductor 0 Red Rock 16 100. Sand 100 120 120 Slate 150 Red Rock 150 220 2201 9 B P Hr. Sand 220 250 Water 250 31ate 280 Red Rock 280 290 Slate 290 310 Red Rock 310 335 335 355 Slate 385 Red Rock 355 Sand 385 110 420 Slate 410 Red Rock 420 433 Sard 439 485 485 510 Red Rock Slete 510 520 Red Rock 320 545 545 615 Sand 12 B P Mr. 625 Yia ter Slate Black 615 620 Sand 620 630 Slete White 630 664 Sand 664 715 Bluo 715 735 Slate 769 735 Red Rock 720 Slate White 769 Sand 78C **860** 800 840 Red . Rock 860 Slate White 840 Red Rock 860 875 895 White 875 Slate Slate Brown 895 905 905 910 Sand 910 950 Slate 970 950 RedRock 970 980 Slate Red Rock 980 980 990 1023 White

Formation	Color	Hard or Soft	Тор	Bottom	Oll, Gas or Water	Depth Found	Remarks
lute	Black		1023	1030			
ock. late	Pink White		1030 1050	1050 1185	į		1
and Tace	MILLO		1165	1195	1	ł	
late,	White		1195	1215 ~1220	}	1	<b>.</b>
end 1ate	White	. •	1215 1220	2280	ł	<b>.</b>	ŀ
late	Black		1280	· ~1295			
<b>àlt Sanó</b> late & Sh	1110		1295 1360	1350 1430	Water Cas	1365' 1310'	Hole full
and	1		1430	1465		!	{
late .			1465 1470	1470 1480			
late			1480	1485	]	1	}
ine	]		1485 1490	1490 1500	1	l .	
and late			1500	1505	i		
and			1505	1524	1	1	
late ime			1524 1560	1560 1585	1	]	Ì
and			1585	1767	Water Sand	1630=1650	Hole full
ig Lime njun Sand			1767 1845	1845 2020	1	I	
late & Sh	113		2020	2350			
hale erea Sand	Brown		2350 2364	2364 1377			
late & Sh	dlls		2377	3540	]	l .	
rown Shel	d & Shell	<b>s</b>	3540	3640			
late & Sh	Brown		3640 3840	3840 4120	Gas .	3960'	Jhow.
ig White			4120	4500		ł	
hale Corniferou	Brown		4500 4750	4750 4853	Gas	48531	Show
riskany S			4853	4867	Gas	46581	,
OTAL DEPT	1		'	4867'	Gas	4865	
OTHE DEPT	Î		•	250.		i	1
:	1				1	1	)
i.				l .		l .	į
		·					
		:	-				
			<b>.</b>	·			·
			-	·			
	<i>:</i>		<b>-</b>				
	•		<b>-</b> 				
			-				
	<i>:</i>		-				
			-	*			
			<b>-</b>				
			•				
			- 				
			- 				
			- 				
			24.5				

•	Date	194
APPROVED	UNITED CARBON COMPANY	Owner
By_	60 Wilson	· · ·
:	Genefal (Title) Superi	ntondent
•	<b>#.</b>	ntondent 07/07/2017

Date thits Size When All Seed

## OL NIVERS

				u.			
	Sem 191 J. C. F Sendy C 1 (1199 Livery J. C. F	) ider. och docke later et al	Acres 187	Nood 13 3/8 10 1/4 8 5/8 7 69 1 3/2 2 3/8	16 771 1045 1600 2036 4762 4867	3000 H	
Combensed Completed Not that Yeluma Room Propours Frenk Later Salt Water	ing, 25 Surch i One that 1720 16 220 9 1305 1		12 MPE 90 XVV	Control of			
Contactor Sed Book	24.	). 100 100	Seed Class	1430 2465	1445 1470 1480		
Send Slate Lot Rock	133			11.0	1485 1490 1500		
	3			1490 1900 1908	1500 1505		D
Red Rock Slate End Rock					1505 1514 1540 1585 1767		
	255	1000 (1000 (1000)) 1885	20 mg 4.55 (1994) Swed	1585	1507		
Slate Red Dock Sand Slate				1545 1767 1767	2000		
Sinia Red knok Send				1. 2.0	2750		
Red Books					2050 2044 2017		
Slote Bod Sock	100			nie 2017	3540		
Slate Wisch	2.5			11 • <u>2</u> 40	مسر		
Sile White		12		110 3443	7840 1120		
Slate Nom	735	理		11: 3640 Br. 3640 : 4130 Br. 4300	1,500 1,750		
Med Sock Slate Unite Sond			Correl (vi Line Orienza	1750	1855		
Red lock Slate white	800 840 860	04.0 86.0	Carl same.	LE53			
Real Section 1	蜘螂	275 675	11.11.	774	1867 1867		1
Slate Unite Slate Drown Send	995	928 932	Cas 131 Ges 356	os of sher			
Sin to Bod Sock	805 905 910 950 930 930	950	One 396 One 445 One 445	3 Talicae			
	910 900	100 100 100 100 100 100 100 100	ON LEA	8.0			
State Ships State Ships	990 102)	1022			72		
Sinte Silver Sint Pink Sinte Chite	12.00 12.00	1000				1	
South Chita	11.55 2195	1195 1315				1 JO	
	1715	170				V	

-07/07/2017

WW-2A (Rev. 6-14)

RECEIVED Office of Oil and Gas

> 7 2017 JUN

WV Department of Environmental Protection

1). Date: 4/12/2017

2.) Operator's Well Number

Ripley 7294

State

County

Permit

47-3.) API Well No .:

00476

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

	vner(s) to be served:	5) (a) Coal Operator
(a) Name	David W. & Marcella R. Cu	
Address	259 Crooked Run Rd	√ Address
	Ravenswood, WV 26164	
(b) Name		(b) Coal Owner(s) with Declaration
Address		Name
		Address
(c) Name		Name
Address		Address
6) Inspector	Jamie Stevens	(c) Coal Lessee with Declaration
Address	105 Kentuck Rd	Name
1,7571575	Kenna, WV 25248	Address
Telephone	304-206-7775	
10.00		NAMED ABOVE TAKE NOTICE THAT:
Included is t		ing contract or contracts by which I hold the right to extract oil and gas
OR	ic icase of leases of other continu	ing contract of contracto by which i hold the right to extract on and gue
	he information required by Chapter	22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)
		2-6 of the West Virginia Code I have served copies of this notice and
		uments pages 1 through on the above named parties by:
application, a loc	Personal Service (Affidavit a	
$\overline{x}$	Certified Mail (Postmarked p	
	Publication (Notice of Publication	
I have re		and 35 CSR 4, and I agree to the terms and conditions of any permit
issued under this		
I certify	under penalty of law that I have p	ersonally examined and am familiar with the information submitted on
		based on my inquiry of those individuals immediately responsible for
obtaining the info	ormation, I believe that the informat	tion is true, accurate and complete.
	are that there are significant penal	ties for submitting false information, including the possibility of fine and
imprisonment.		- 01 11 0 F ( ) 110 O (
	Well Opera	tor Columbia Gas Transmission, LLC
TIE		By: James E. Amos Jun Clin
		Its: Senior Engineer
	tonnette S Roberts } Addres	ss: 48 Columbia Gas/Rd
1.00	388 Highlawn Drive Ripley, WV 25271	Sandyville, WV 25275
My Commit	그렇다 그리고 얼마나 이 아이 아이는 아는 이 얼마나는 사람이 하고 있다. 그 그렇게 그 때문에 그리고 있다. 그 아이는 아이는 아이는 아이는 아이를 다 했다.	ne: 304-373-2412
	Em	ail: iames amos@transcanada.com
Subscribed and	sworn before me this _/54_ day	y of June, 2017, 60476
Kon	mette of Roberto	Notary Public
My Commission	Expires 4. 8, 208	22
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

## 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
Ralph and Ruth C. Fisher	Columbia Gas Transmission, LLC	Storage lease 1052510-000	84/251; 84/289
Allie Fisher	Columbia Gas Transmission, LLC	Storage lease 1052510-000	84/251; 84/289
Vernon and Bobbi Fisher	Columbia Gas Transmission, LLC	Storage lease 1052510-000	84/251; 84/289
Warren and Genevee Fisher	Columbia Gas Transmission, LLC	Storage lease 1052510-000	84/251; 84/289

### 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 he reby a cknowledges 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

RECEIVED Office of Oil and Gas

JUN 7 2017

WV Department of Environmental Protection

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 ac quired from the appropriate authority before the affected activity is initiated.

Well Operator:

By:Its:

Columbia Gas Transmission, LLC

James E. Amos

Senior Engineer



WW-2B1	۱
(5-12)	

Well No.	Ripley 7294	
----------	-------------	--

### West Virginia Department of Environmental Protection Office of Oil and Gas

#### NOTICE TO SURFACE OWNERS

The well operator named below is preparing to file for a permit from the state to drill a new well. Before a well work permit can be filed with the Chief of the Office of Oil and Gas, the well operator is required to have given notice of the right to request water well or spring analytical testing. This notice shall be given to the owners or occupants of land which have a water well or spring being utilized for human consumption, domestic animals, or other general use and which is located within 1000 feet of the proposed well site.

With this form, the operator is giving you notice of your right to request analytical testing. The operator is required to sample and analyze the water wells or springs of all owners or occupants who request it. Therefore, if you wish to have your water well or spring tested, contact the operator named below.

All sampling shall be completed prior to drilling. Within thirty (30) days of the receipt of such sample analyses the operator shall submit the results to the Chief of the Office of Oil and Gas and to the owners or occupants who may have requested them.

Be advised, you have the right to sample and analyze any water supply at your own expense.

Listed below is the laboratory chosen by operator to perform analysis, and contactor chosen to collect sample.

Certified Labor Sampling Cont		
Well Operator Address	Not applicable - existing underground natural gas storage well.	
Telephone		

FOR OPERATOR'S USE ONLY: Below, or on an attached page, list those persons which were given this notice. Place an asterisk beside the one(s) that contacted you and requested sampling and analyses. If there were no requests made, indicate by underling which one you have selected to sample and analyze. If there are no water wells or springs within 1000 feet of the proposed site, the Chief may require the operator to test wells up to 2000 feet from the proposed site.

Office of Oil and Gas

JUN 7 2017

WV Department of Environmental Protection 07/07/2017

WW-9 (5/16)

JUN 7 2017

WV Department of Environmental Protection

API Number 47 -	035	_00476
Operator's Well No	. Riple	y 7294

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

tershed (HUC 10) Cherrycamp Run of Sandy Creek  Quadrangle Sandyville, WV you anticipate using more than 5,000 bibs of water to complete the proposed well work? Yes No V  If so, please describe anticipated pit waste:  Will a synthetic liner be used in the pit? Yes No If so, please describe anticipated pit wastes:  Will a synthetic liner be used in the pit? Yes No If so, what ml.?  Proposed Disposal Method For Treated Pit Wastes:  Land Application (if selected provide a completed form WW-9-GPP)  Underground Injection (UIC Permit Number 34-009-23821, 34-009-23823, 34-009-23824, 34-105-23619)  Reuse (at API Number Off Site Disposal (Supply form W W-9 for disposal location)  Other (Explain O	Operator Name Columbia Gas Transmission, LLC OP Code 307032	
If so, please describe anticipated pit waste:  Will a synthetic limer be used in the pit? Yes  No  If so, what ml.?  Proposed Disposal Method For Treated Pit Wastes:  Land Application (if selected provide a completed form WW-9-GPP)  Underground Injection (UIC Permit Number 34-009-23821, 34-009-23824, 34-105-23619)  Reuse (at API Number  Off Site Disposal (Supply form WW-9 for disposal location)  Other (Explain  Other (Explain  Arithmetic  Off Site  Other		
If so, please describe anticipated pit waste:  Will a synthetic liner be used in the pit? Yes  No  If so, what ml.?  Proposed Disposal Method For Treated Pit Wastes:  Land Application (if selected provide a completed form WW-9-GPP)  Underground Injection (UIC Permit Number 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  Other (Explain  Other (Explain	Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No	
Will a synthetic liner be used in the pit? Yes No If so, what ml.?  Proposed Disposal Method For Treated Pit Wastes:  Land Application (if selected provide a completed form WW-9-GPP)  Underground Injection (UIC Permit Number 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  Il closed loop systembe used? If so, describe; yes - steel piping connecting wellhead and tank(s)  Illing medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. fresh water  If oil based, what type? Synthetic, petroleum, etc.  ditives to be used in drilling medium? NaCl, biocide, polymer, starch, calcium carbonate, surfactant (CTCO), HCl acid (atimulation)  Ill 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)  -Landfill or offsite name/permit number? If needed: Rumpke Beech Hollow Landfill -Wellston, OH  mittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any set Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose ere it was properly disposed.  I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued April I, 2016, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the vivisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law 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 olication form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for o btaining information. I believe that the information i	Will a pit be used? Yes No ✓	
Proposed Disposal Method For Treated Pit Wastes:  Land Application (if selected provide a completed form WW-9-GPP)  Underground Injection (UIC Permit Number 34-009-23821, 34-009-23823, 34-009-23824, 34-105-23819)  Reuse (at API Number)  Off Site Disposal (Supply form WW-9 for disposal location)  Other (Explain)  Il closed loop systembe used? If so, describe: yes - steel piping connecting wellhead and tank(s)  Illing medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. freshwater  -If oil based, what type? Synthetic, petroleum, etc.  ditives to be used in drilling medium? NaCl, bioide, polymer, starch, calcium carbonate, surfactant (CTCO), HCl acid (stimulation)  Ill 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)  -Landfill or offsite name/permit number? If needed: Rumpke Beech Hollow Landfill - Wellston, OH  mittee shall provide written notice to the Office of Oil and Cas of any load of drill cuttings or associated waste rejected at any est Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose ere it was properly disposed.  I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued April I, 2016, by the Office of Oil and Cas of the West Virginia Department of Environmental Protection. I understand that the visions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law 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 officention form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for o btaining information, I believe that the information is true, accurate, and complete. I am aware that there are signif	If so, please describe anticipated pit waste:	
Land Application (if selected provide a completed form WW-9-GPP)  Underground Injection (UIC Permit Number 34-009-23821, 34-009-23824, 34-105-23619) Reuse (at API Number Off Site Disposal (Supply form WW-9 for disposal location) Other (Explain Ot	Will a synthetic liner be used in the pit? Yes No If so, what ml.?	
Underground Injection ( UIC Permit Number 34-009-23821, 34-009-23823, 34-009-23824, 34-105-23819 ) Reuse (at API Number Offs to Disposal (Supply form WW-9 for disposal location) Other (Explain Other (E	Proposed Disposal Method For Treated Pit Wastes:	
Other (Explain  Il closed loop systembe used? If so, describe: yes - steel piping connecting wellhead and tank(s)  Iling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. fresh water  -If oil based, what type? Synthetic, petroleum, etc.  ditives to be used in drilling medium? NaCl. biocide, polymer, starch, calcium carbonate, surfactant (CTCO), HCl acid (stimulation)  Il 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)  -Landfill or offsite name/permit number? If needed: Rumpke Beech Hollow Landfill -Wellston, OH  mittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any est Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose ere it was properly disposed.  I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued April I, 2016, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the visions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law 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 indication form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for omitting false information, including the possibility of fine or imprisonment.  mpany Official (Typed Name) James E. Amos  mpany Official Title Serior Well Services Engineer  Described and swom before me this 18th day of Suna Legical Capacity Public Capacity Public Capacity Public	Underground Injection (UIC Permit Number 34-009-23821, 34-009-23823, 34-009-23824, 34-105-23619 ) Reuse (at API Number )	
Il closed loop systembe used? If so, describe: yes - steel piping connecting wellhead and tank(s)  lling medium anticipated for this well (vertical and horizontal)? Air, fireshwater, oil based, etc. fresh water  -If oil based, what type? Synthetic, petroleum, etc.  ditives to be used in drilling medium? NaCl, biocide, polymer, starch, calcium carbonate, surfactant (CTCO), HCl acid (stimulation)  ll 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)  -Landfill or offsite name/permit number? If needed: Rumpke Beech Hollow Landfill - Wellston, OH  mittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any set Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose ere it was properly disposed.  I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued April I, 2016, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the visions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law 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 plication form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining information, including the possibility of fine or imprisonment.  Impany Official Signature  Impany Official Title Serior Well Services Engineer  Described and swom before me this 18th day of June 19th Angles Publical Serior Publical Serior Well Services Engineer		
lling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. freshwater  -If oil based, what type? Synthetic, petroleum, etc.  ditives to be used in drilling medium? NaCl. biocide, polymer, starch, calcium carbonale, surfactant (CTCO), HCl acid (stimulation)  Il cuttings disposalmethod? 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)  -Landfill or offsite name/permit number? if needed: Rumpke Beech Hollow Landfill - Wellston, OH  mittee shall provide written notice to the Office of Oil and Cas of any load of drill cuttings or associated waste rejected at any est Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose ere it was properly disposed.  I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued April 1, 2016, by the Office of Oil and Cas of the West Virginia Department of Environmental Protection. I understand that the visions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law 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 olication form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining information is true, accurate, and complete. I am aware that there are significant penalties for omitting false information, including the possibility of fine or imprisonment.  many Official Signature many official Title Serior Well Services Engineer  bescribed and swom before me this 1 st day of Jumes L. Amos Motary Publical Services Engineer		
If oil based, what type? Synthetic, petroleum, etc.  ditives to be used in drilling medium? NaCl, biocide, polymer, starch, calcium carbonate, surfactant (CTCO), HCl acid (stimulation)  If 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)  -Landfill or offsite name/permit number? if needed: Rumpke Beech Hollow Landfill - Wellston, OH  mittee shall provide written notice to the Office of Oil and Cas of any load of drill cuttings or associated wasterejected at any set Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose ere it was properly disposed.  I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued April I, 2016, by the Office of Oil and Cas of the West Virginia Department of Environmental Protection. I understand that the visions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law 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 objection form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining information, including the possibility of fine or imprisonment.  Impany Official Signature Amos mpany Official Title Serier World Services Engineer  Described and swom before me this 1st day of June 1st.  Notary Publication of the permit and o	Will closed loop systembe used? If so, describe: yes - steel piping connecting wellhead and tank(s)	
ditives to be used in drilling medium? NaCl, biocide, polymer, starch, calcium carbonate, surfactant (CTCO), HCl acid (slimulation)  Il 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)  —Landfill or offsite name/permit number? if needed: Rumpke Beech Hollow Landfill - Wellston, OH  mittee shall provide written notice to the Office of Oil and Cas of any load of drill cuttings or associated waste rejected at any est Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose ere it was properly disposed.  I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued April 1, 2016, by the Office of Oil and Cas of the West Virginia Department of Environmental Protection. I understand that the visions of the permit are enforceable by law. Violations of any term or condition of the general permit and/orother applicable law 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 information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for omitting false information, including the possibility of fine or imprisonment.  Impany Official Signature ————————————————————————————————————	Orilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. fresh water	
Il cuttings disposal method? Leave in pit, landfill, removed offsite, etcN/A  -If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust)  -Landfill or offsite name/permit number? if needed: Rumpke Beech Hollow Landfill - Wellston, OH  mittee shall provide written notice to the Office of Oil and Cas of any load of drill cuttings or associated waste rejected at any set Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose ere it was properly disposed.  I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued April I, 2016, by the Office of Oil and Cas of the West Virginia Department of Environmental Protection. I understand that the visions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law 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 oblication form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for omitting false information, including the possibility of fine or imprisonment.  Impany Official Title Serior Well Services Engineer  Described and swom before me thisIST	-If oil based, what type? Synthetic, petroleum, etc	
Il cuttings disposal method? Leave in pit, landfill, removed offsite, etcN/A  -If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust)  -Landfill or offsite name/permit number? if needed: Rumpke Beech Hollow Landfill - Wellston, OH  mittee shall provide written notice to the Office of Oil and Cas of any load of drill cuttings or associated waste rejected at any set Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose ere it was properly disposed.  I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued April I, 2016, by the Office of Oil and Cas of the West Virginia Department of Environmental Protection. I understand that the visions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law 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 oblication form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for omitting false information, including the possibility of fine or imprisonment.  Impany Official Title Serior Well Services Engineer  Described and swom before me thisIST	Additives to be used in drilling medium? NaCl, biocide, polymer, starch, calcium carbonate, surfactant (CTCO), HCl acid (stimulation)	
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust)  -Landfill or offsite name/permit number? if needed: Rumpke Beech Hollow Landfill - Wellston, OH  mittee shall provide written notice to the Office of Oil and Cas of any load of drill cuttings or associated waste rejected at any set Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose ere it was properly disposed.  I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued April 1, 2016, by the Office of Oil and Cas of the West Virginia Department of Environmental Protection. I understand that the positions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law 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 oil cation form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for omitting false information, including the possibility of fine or imprisonment.  Impany Official Signature  I approved the Services Engineer  Described and swom before me this 1st day of Jumes E. Amos  I approved the Services Engineer  Described and swom before me this 1st day of Jumes E. Amos  Notary Publication Official Signature  OFFICIAL SEAL NOTARY Publication of the Services and seal of the seal of the seal of the second of the seal of the	Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. N/A	
-Landfill or offsite name/permit number? if needed: Rumpke Beech Hollow Landfill - Wellston, OH  mittee shall provide written notice to the Office of Oil and Cas of any load of drill cuttings or associated waste rejected at any set Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose ere it was properly disposed.  I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued April I, 2016, by the Office of Oil and Cas of the West Virginia Department of Environmental Protection. I understand that the evisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law 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 olication form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for omitting false information, including the possibility of fine or imprisonment.  Impany Official Signature Impany Official Title Sentor Well Services Engineer  Described and swom before me this 1st day of 5um		
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued April 1, 2016, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the visions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law 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 dication form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for omitting false information, including the possibility of fine or imprisonment.  I certify under penalty of law that I have personally examined and am familiar with the information submitted on this possibility of fine or imprisonment.  I certify under penalty of law that I have personally examined and am familiar with the information submitted on this possibility of fine or imprisonment.  I certify under penalty of law that I have personally examined and am familiar with the information submitted on this possibility of fine or imprisonment.  I certify under penalty of law that I have personally examined and am familiar with the information submitted on this possibility of those individuals immediately responsible for obtaining the information, including the possibility of fine or imprisonment.  I certify under penalty of law that I have personally examined and am familiar with the information submitted on this possibility of fine or imprisonment.  I certify under penalty of law that I have personally examined and am familiar with the information submitted on this possibility of fine or imprisonment.  I certify that I understand that I have personally examined and am familiar with the information is understand that I have personally ex		
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued April I, 2016, by the Office of Oil and Cas of the West Virginia Department of Environmental Protection. I understand that the visions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law 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 olication form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for omitting false information, including the possibility of fine or imprisonment.  Impany Official Signature  Impany Official Title Serior West Services Engineer  Secribed and swom before me this 1st day of June 1st day of June 2017  Motary Public Official Sealors And Sources		
April 1, 2016, by the Office of Oil and Cas of the West Virginia Department of Environmental Protection. I understand that the evisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law 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 edication form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for o btaining information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for emitting false information, including the possibility of fine or imprisonment.  I mpany Official Signature for the property of the property of those individuals immediately responsible for o btaining false information, including the possibility of fine or imprisonment.  I may official Signature for the property of the property of those individuals immediately responsible for o btaining false information, including the possibility of fine or imprisonment.  I certify under penalty of law that I have personally examined and am familiar with the information submitted on this policial immediately responsible for o btaining the property of those individuals immediately responsible for o btaining the possibility of fine or imprisonment.  I certify under penalty of law that I have personally examined and am familiar with the information submitted on this policial information of the general permit and/or other applicable law regulation of the general permit and/or other applicable law regulation of the general permit and/or other applicable law regulation of the general permit and/or other applicable law regulation of the general permit and/or other applicable law regulation of the general permit and/or other applicable law regulation of the general permit and/or other applicable law regulation of the general permit and/or other applicable law regul	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.	
Honnette & Roberte Notary Publish Notary Publish NOTARY PUBL	on April 1, 2016, by the Office of Oil and Cas of the West Virginia Department of Environmental Protection. I understand that provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable 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 application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for o btain	t the law this ning
Honnette & Roberte Notary Publish Notary Publish NOTARY PUBL		
	School and an amount to form me this 15ft day of T	
	// Annual	
commission expires Act. 8, 2022	home the & holies to	

Operator's Well No. Ripley 7294

Proposed Revegetation Trea	atment: Acres Disturbed _	0.2 Prevegetation pH 6 - 7	
Lime 2 Tons/acre or to correct to		ct to pH 7 - 8	
Fertilizer type 10-	10-10	_	
Fertilizer amount_6	800	lbs/acre	
Mulch_straw @	2	Tons/acre	
		Seed Mixtures	
Te	emporary	Permanent	
Seed Type	lbs/acre	Seed Type lbs	/acre
Annual Rye	40	Orchard Grass and/or Tall Fes	scue 29
		Birdsfoot Trefoil (Empire)	S
		Annual Rye	12
Attach: Maps(s) of road, location, p provided). If water from the (L, W), and area in acres, of	pit will be land applied, pr the land application area.	d application (unless engineered plans including this intovide water volume, include dimensions (L, W, D) of the	o have been ne pit, and dim
Maps(s) of road, location, p provided). If water from the (L, W), and area in acres, of Photocopied section of invo	pit will be land applied, prothe land application area.  Ived 7.5' topographic sheet	ovide water volume, include dimensions (L, W, D) of the control of	o have been ne pit, and dim
Maps(s) of road, location, p provided). If water from the (L, W), and area in acres, of Photocopied section of invo	pit will be land applied, prothe land application area.  Ived 7.5' topographic sheet	ovide water volume, include dimensions (L, W, D) of the	o have been ne pit, and dim
Maps(s) of road, location, p provided). If water from the (L, W), and area in acres, of Photocopied section of invo	pit will be land applied, profite land application area.  Ived 7.5' topographic sheet	ovide water volume, include dimensions (L, W, D) of the control of	o have been ne pit, and dim
Maps(s) of road, location, p provided). If water from the (L, W), and area in acres, of Photocopied section of invo	pit will be land applied, profite land application area.  Ived 7.5' topographic sheet	ovide water volume, include dimensions (L, W, D) of the control of	o have been ne pit, and dim
Maps(s) of road, location, p provided). If water from the L, W), and area in acres, of Photocopied section of invo	pit will be land applied, profite land application area.  Ived 7.5' topographic sheet	ovide water volume, include dimensions (L, W, D) of the	ne pit, and dim
Maps(s) of road, location, p provided). If water from the (L, W), and area in acres, of Photocopied section of invo	pit will be land applied, profite land application area.  Ived 7.5' topographic sheet	ovide water volume, include dimensions (L, W, D) of the contraction of	Gas
Maps(s) of road, location, p provided). If water from the (L, W), and area in acres, of Photocopied section of invo	pit will be land applied, profite land application area.  Ived 7.5' topographic sheet	ovide water volume, include dimensions (L, W, D) of the state of the s	Gas
Maps(s) of road, location, p provided). If water from the (L, W), and area in acres, of Photocopied section of invo  Plan Approved by:  Comments:	pit will be land applied, profithe land application area.  Ived 7.5' topographic sheet	ovide water volume, include dimensions (L, W, D) of the state of the s	Gas 7
Maps(s) of road, location, p provided). If water from the (L, W), and area in acres, of Photocopied section of invo  Plan Approved by:  Comments:	pit will be land applied, profite land application area.  Ived 7.5' topographic sheet	ovide water volume, include dimensions (L, W, D) of the state of the s	Gas 7

WW-9- GPP Rev. 5/16

Page	of 2
API Number 47 - 035	- 00476
Operator's Well No. Rig	oley 7294

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

Watershed (HUC 10); Cherrycamp Run of Sandy Creek	Quad: Sandyville, WV
arm Name: Fisher, Ralph	Vann.
. List the procedures used for the treatment and discharge of fl groundwater.	uids. Include a list of all operations that could contaminate th
No fluids planned to be discharged.	
No fertilizer will be stored on site. Fuel, oil, and lub secondary containment. Spills from construction e well fluids are the only possible source of contamin fluids to be stored in tanks.	quipment, well treatment fluids, and produced
2. Describe procedures and equipment used to protect groundwa	ater quality from the list of potential contaminant sources above
I was partipling from our flow organization than flow of	
Spill kits will be on site.  List the closest water body, distance to closest water body discharge area.	secondary containment under all leak paths.
3. List the closest water body, distance to closest water body	, and distance from closest Well Head Protection Area to th
5. List the closest water body, distance to closest water body discharge area.	, and distance from closest Well Head Protection Area to th  V.  les from ZPC (WVSID WV3301811 - City of ted 1/5/17 from Department of Health and
Cherrycamp Run is approximately 480 ft to the Value Closest Well Head Protection Area is 3.8 mi Ripley). Refer to enclosed assessment letter da	, and distance from closest Well Head Protection Area to the W.  N.  les from ZPC (WVSID WV3301811 - City of ted 1/5/17 from Department of Health and and Protection department.
List the closest water body, distance to closest water body discharge area.  Cherrycamp Run is approximately 480 ft to the Variable The closest Well Head Protection Area is 3.8 mi Ripley). Refer to enclosed assessment letter da Human Resources, Source Water Assessment and Resources. Source Water Assessment and Resources are sourced as the second seco	, and distance from closest Well Head Protection Area to the W.  N.  les from ZPC (WVSID WV3301811 - City of ted 1/5/17 from Department of Health and and Protection department.
List the closest water body, distance to closest water body discharge area.  Cherrycamp Run is approximately 480 ft to the Variable The closest Well Head Protection Area is 3.8 mi Ripley). Refer to enclosed assessment letter da Human Resources, Source Water Assessment and Resources. Source Water Assessment and Resources are sourced as the second seco	and distance from closest Well Head Protection Area to the V.  No.  No.  No.  No.  No.  No.  No.  N

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

07/07/2017

W	W	-9-	GPF
Re	v	5/1	6

	Page	2 of 2
API Number 47 -	035	- 00476
Operator's Well No	Riples	7294

N/A	
Provide a statement tha	at no waste material will be used for deicing or fill material on the property.
No waste material v	will be used for deicing or fill material on the property.
	ater protection instruction and training to be provided to the employees. Job procedures sha ow to prevent groundwater contamination.
During routine tailga	ate meetings groundwater protection will be a topic of discussion.

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

RECEIVED Office of Oil and Gas

JUN 7 2017



# STATE OF WEST VIRGINIA DEPARTMENT OF HEALTH AND HUMAN RESOURCES BUREAU FOR PUBLIC HEALTH OFFICE OF ENVIRONMENTAL HEALTH SERVICES

Earl Ray Tomblin Governor

Karen L. Bowling Cabinet Secretary

January 05, 2017

William Timmermeyer CESSWI Natural Resource Permitting Principal TransCanada | Columbia Pipeline Group 1700 MacCorkle Ave., SE Charleston, WV 25314

Re: SWAP Information Request -

Dear Mr. Timmermeyer:

In response to the informational request dated January 4, 2017 concerning the closest Protection Areas to the indicated seven (7) wells, we have found the following:

ID	Well Name	Distance	PWSID	System Name
1	Coco A well 7106	within the ZPC	WV3302016	WVAWC KANAWHA VALLEY DIST
2	Glady well 7464/Glady well 7465/Glady well 7467/Glady well 12371	1 mile from WHPA	WV9942049	USFS MIDDLE MOUNTAIN CABINS - HP
		6.2 from ZCC	WV3304202	TOWN OF BEVERLY
		7.0 miles from ZPC	WV3304202	TOWN OF BEVERLY
3	Ripley well 7294	3.8 miles from ZPC	WV3301811	CITY OF RIPLEY
		5 miles from ZCC	WV3301811	CITY OF RIPLEY
		5 miles from WHPA	WV3301810	RAVENSWOOD MUNICIPAL WATER
4	Rockport well 7240	0.7 miles from ZPC	WV3305402	CLAYWOOD PARK PSD

We are now putting up all of our active protection areas for download at this location, https://www.wvdhhr.org/oehs/eed/swap/GISTA Downloads.asp.

We do not have information regarding private drinking wells in the area. I suggest you contact the county health department for this information.

I hope the information provided helps you with the completion of your project. If you have any questions, please do not hesitate to contact me at (304) 356-4309.

RECEIVED Office of Oil and Gas

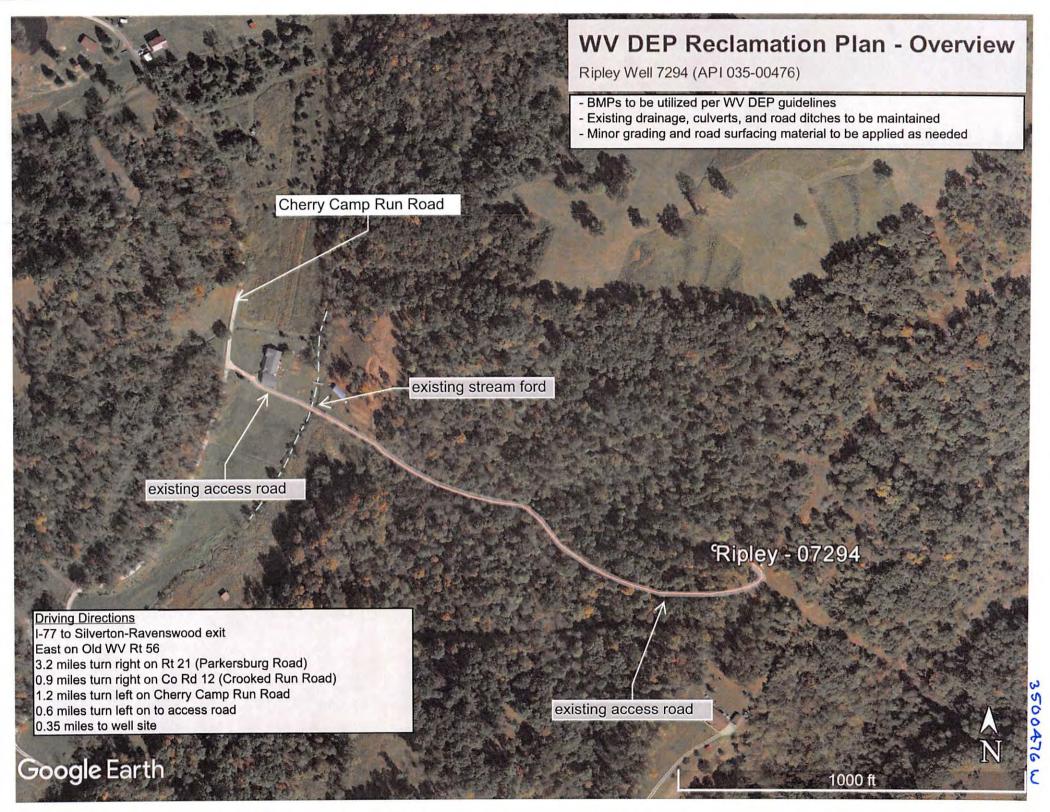
JUN 7 2017

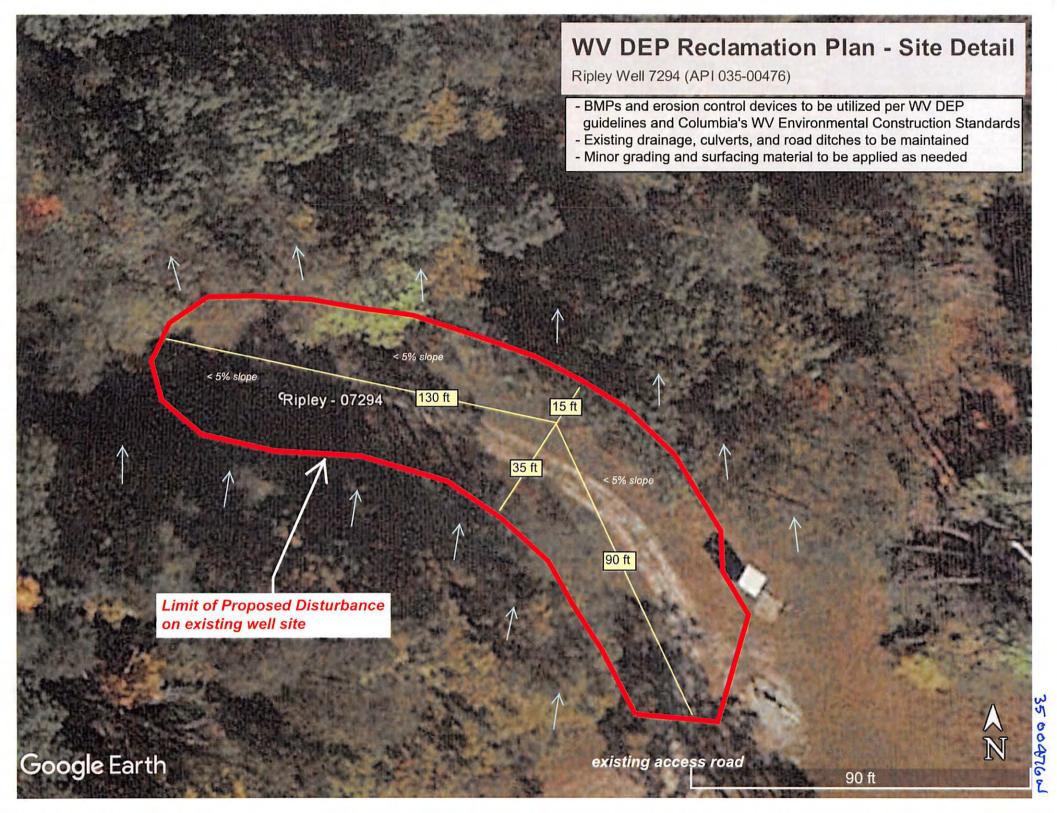
WV Department of Environmental Protection

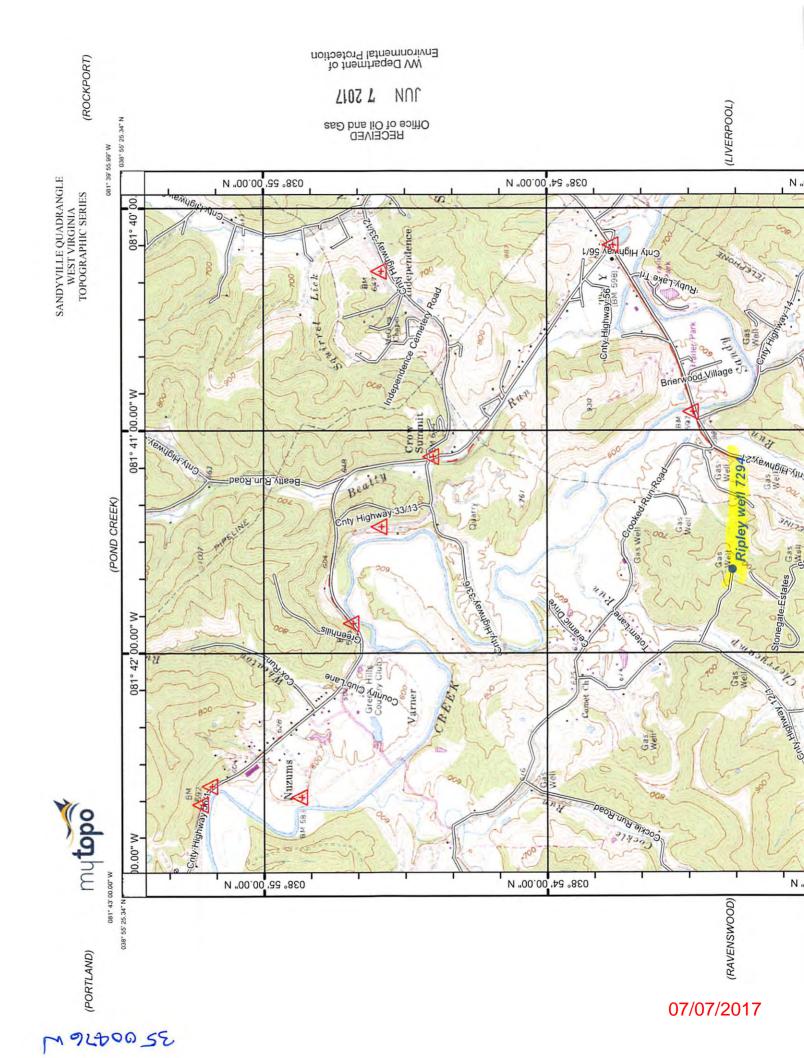
CC: William J. Toomey

Lisa A. King, GIS Administrator

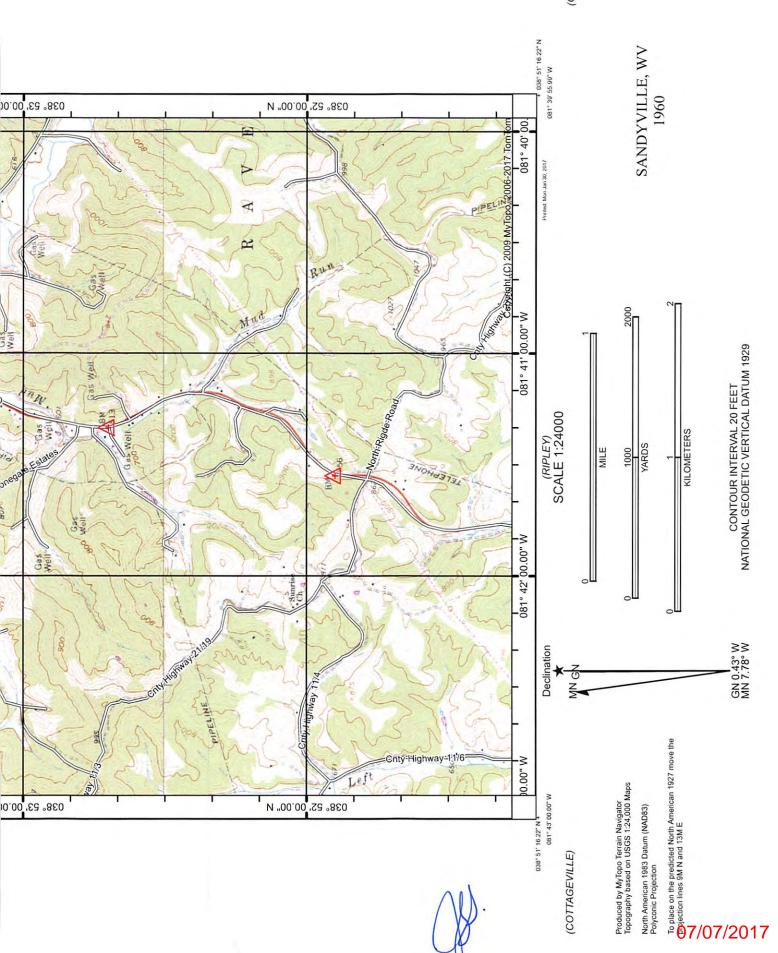
Source Water Assessment and Protection

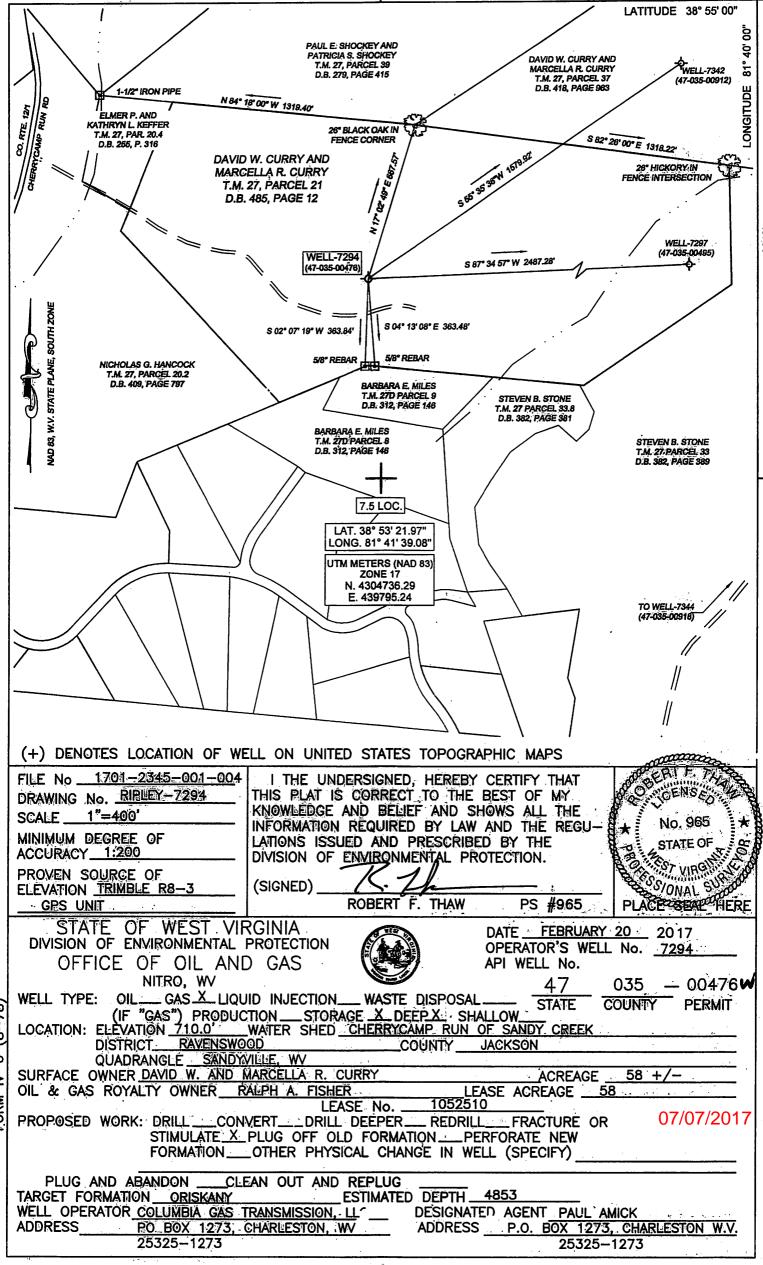












-7834<sup>-</sup>