

west virginia department of environmental protection

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

Harold D. Ward, Cabinet Secretary www.dep.wv.gov

Thursday, July 7, 2022 WELL WORK PERMIT Vertical / Re-Work

COLUMBIA GAS TRANSMISSION, LLC 1700 MACCORKLE AVENUE SE

CHARLESTON, WV 25314

Re: Permit approval for RIPLEY 7297

47-035-00495-00-00

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 7297

Farm Name: STONE, STEPHEN & DEBORA

U.S. WELL NUMBER: 47-035-00495-00-00

Vertical Re-Work Date Issued: 7/7/2022

PERMIT CONDITIONS

West Virginia Code §22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. <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.
- 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.

Columbia Gas Transmission, LLC

1700 MacCorkle Ave., SE, Charleston, WV, USA 25314



February 16, 2022

WV DEP – Office of Oil & Gas 601 57th Street, SE Charleston, WV 25304-2345

Enclosed is a well work permit application for the following Columbia Gas Transmission existing storage well:

Ripley 7297

(035-00495)

Please email to address below, and return hardcopies of permits to:

Columbia Gas Transmission 1700 MacCorkle Ave SE Charleston, WV 25314 Attn: Maria Medvedeva

RECEIVED
Office of Oil and Gas

FEB 28 2022

If you have questions, feel free to call.

Regards,

WV Department of Environmental Protection

Maria Medvedeva Senior Wells Engineer

Well Engineering & Technology Columbia Gas Transmission, LLC

Off: 304-357-2445

Mob: 304-410-4313

maria medvedeva@tcenergy.com

Amt \$ 900 Date 2/28/2022

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

1) Well Operato	or: Colun	nbia Gas	Transmission, LLC	307032	Jackson	Ravenswood	Sandyville, WV
				Operator ID	County	District	Quadrangle
2) Operator's V	Vell Numb	er: Ripley	7297		3) Elevation:	604.4	
4) Well Type: (a	a) Oil	or Ga	as X				
(t	o) If Gas:	Produ	iction/ Und	erground Sto	rage X		
		Deep	o <u>X</u> / Sh	nallow			
6) Proposed To7) Approximate	tal Depth fresh wa	: <u>⁴⁸⁵⁰</u> ter strata	Oriskany Feet Fa depths: No water in Street No salt water intervals	ormation at F tervals reported by	Proposed Tota driller 1945	get Depth: 4 al Depth: Held	787 erberg
			S: None reported b			Qf	RECEIVED
			al, Karst, other): _		by driller 1945		EB 2 8 2022
11) Does land	contain co	al seam	s tributary to acti	ve mine? N	0		W Department of conmental Protect
	•		nd fracturing metho	1/10			
			base fluid, 30000 lbs	s sand.			
casing and equip	ment listed	below are	existing				
13)		<u>C</u>	ASING AND TUB	ING PROGR	AM * existing	7	
TYPE S	PECIFIC	ATIONS		FOOTAGE	INTERVALS	CEME!	<u>VT</u>
	<u>Size</u>	<u>Grade</u>	Weight per ft	For Drilling	Left in Well	Fill -up (Cu.	Ft.)
Conductor	16 *			15	15		
Fresh Water	8.625 *		24	1922	1922	20 s	x
Coal							
Intermediate	7 *		22	4680	4680	66 s	x
Production	4.5 *	J-55	12.6	4780	4780	299 s	SX
Tubing	2.875	N-80	6.4	4840	4840	195	
Liners							
Packers: Kind	-					\cap	10
	ths Set					1 ho	MI

WELL JO	B PLAN		STS We	II Engineering &	Technolog	у		PAGE 1	DATE JOE	B PREPARED: 2/9/2022
Objective:	Isolate leak	in current 4.	5" flowstr	ing					LAST PR	OFILE UPDATE:
TITLE:	Sleeve wit	th Cemented	Tubing					WOR	K TYPE: B	reak-Fix
FIELD:				WELL ID:	7297					
STATE:	: WV			SHL (Lat/ Long	38.890073		0			7-035-00495
DIST/TWP:	Ravenswo	ood		BHL (Lat/Long)	38.890073		0		CNTY: Ja	ackson
EXISTING	G TUBULAR	OD	WEIGHT				PTH (ft)	FORMATION:	refer to N	MISC INFORMATION section
	GURATION	(inches)	(PPF)	GRADE	THREAD	TOP	ВОТТОМ	DEPTH:		EL EL L. EL C. L.
Conductor		16.000				0	15	PAY:		ELEVATIONS
Surface			0100				1000	TD: 4808		TMG:
Intermediate		8.625	24.00			0	1922	PBTD:		KB-RF:
Intermediate	e	7.000	22.00	1.55		0	4680	KB-GL:	DERTH	GL:
Production		4.500	12.60	J-55		0	4716	CSG	DEPTH	WELLBORE SCHEMATIC
Production		4.500	Packer	f	1-1	4716	4718	_		
Production		4.500	slotted/pe	rforated anchor/ta	ipipe	4718	4780	-		
Perforation								-		
Perforation	IS	-						-		
Wellhead	DMENIT				TVDE		DEDTH (6)	- A		
D.H. EQUI		OVED INFO	Heres		TYPE		DEPTH (ft)			
	PA	CKER INFO:						-		
			Lower	L				-		
	NIDDI E DD	OFILE INFO	Unner					-		
	NIPPLE PRO	OFILE INFO:								
			Lower					-		
		SSSV INFO:						=		
CEMENT II		333V INFO.	TELL AUST				Calc. TOC (ft)			
0.000							Caic. 100 (it)	-		
8.625	20 sy poured	down annul	ie from eur	face			1808	+		
8.625 20 sx poured down annulus from surface 7.000 66 sx poured down annulus from surface			4153	-						
4.500				urface. Per Nov.20	21 CBI cemet	ed to or near		-		
4.000	200 bx poure	od down drine	nuo nom oc	311400: 1 0: 1404:20	21 ODE COMO	ou to or mour	I	┥		
								-		
MISC INFO	RMATION						ATO SEMENTING TO SEE			
								_		
I										
	REFER TO	WELL SUN	MMARY R	EPORT, WELL	BORE DIAGE	RAM. LOGS	. ETC.			
				readsheet tabs		,	,			
l			(See Spi	caasiicet tabs	DCIOW)					
	Misc other R	elevant Well	Info/Data							
	Maximum sto	orage field su	rface press	sure (MOP): 1675	psia					
				essure: 1925 psig	P			3		
				pressure: 8.6 ppg	(assuming	200 psi over-	halance)			
	Current AOF			pressure, olo ppg	(assairing	200 par over	odianoo)	1		
	Top historica			0)						
	그 얼마를 취득하면 어디에 가게 되었다.	T:Indicates all		0)				1		
	1999 CBL:			j J						
	1000 002.			strung from TLI 65	0 to BLI 4788					
							7" osa ond			
				val of decent ceme n should be adequ			r csg and			
		4-1/2 pa	ickei, WillCl	i siloulu be adequ	atery searing O	niskany.				
	Note that we	all has stora	an cource	d annular gas, an	d after diagn	netice it annu	220			
				50 ft. Attempt wa						
		The state of the s		not budge - likel	THE RESERVE OF THE PARTY OF THE		sy to			
	pun wennea	a sups but t	Jog would	not budge - likel	y chile a tomea	a surface.				
										RECEIVED
									Offic	ce of Oil and Gas
									FE	EB 2 8 2022

WV Department of Environmental Protection PROPOSED YEAR: STATE PERMIT REQD: YES_ NO_X_ (Internal) PDS Required: YES 2022 DATE RECEIVED: PREPARED BY: REVIEWED BY: APPROVED: | Invalid signature Maria Medvedeva Jim Amos (Contractor) PREP DATE: 2/9/2022

Signed by: 011fe607-8970-40e1-86c5-eaed70f2e7d9



WELL JOI	ELL JOB PLAN STS Well Engineeri		ring & Techno	ogy	PAGE 3	DATE JOB PREPARED:	2/9/2022
Objective: I	solate leak in current 4.5" flowst	ring				LAST PROFILE UPDATE:	
TITLE:	Sleeve with Cemented Tubing	1			WORK TYPE:	Break-Fix	
FIELD:	Ripley	WELL:	7297				_
STAT:	WV	SHL (Lat/Long):	38.890073	0	API:	47-035-00495	
TWP:	Ravenswood	BHL (Lat/Long):	38.890073	0	CNTY:	Jackson	
500001-10			DR	CEDURE		NAME OF TAXABLE PARTY.	

Note that well has two RBPs and is loaded with fluid. RBP1 @ 4470' and RBP2 @ 4690'.

4703500495W

- Obtain State permit, EM&CP, pipeline crossing evaluation, call before you dig, etc. Prepare site specific SPCC.
- Notify landowner.
- 3 Obtain General Work Permit and Wellsite Review & Turnover Form from Operations.
- 4 Notify Reservoir Engineering & Geosciences (REG) of intent to take well out of service.
- 5 Notify environmental inspector prior to beginning work.
- 6 If required, notify State/Federal regulatory agencies prior to beginning work.
- 7 Disconnect well line.
- 8 Prepare access road and well site. Install ECD's per EM&CP.
- 9 Service all wellhead valves
- 10 Document initial casing and annular pressures.
- 11 Drop junk basket on top of upper RBP.
- 12 MIRU service rig.
- 13 Blow down annulus and leave venting to atmosphere.
- 14 Remove wellhead down to casing head.
- 15 Spear 4-1/2" csg, pull tension, and split csg head to remove slips.
- 16 Install new 10K SOW casing head and pressure test weld.
- 17 Spear 4-1/2" csg, pull tension, drop slips, and install new 10K tubing spool. Pressure test seals.
- 18 NU BOPs (double ram + annular) and ptest low 250 and high 2500 psig.
- 19 Pull junk basket and both RBPs.
- 20 RIH with 3.75" TCI roller-cone bit, float sub, SN sub, and 2-3/8" DP. May need to switch to viscosity fluid with fluid loss additive.
- 21 Clean to TD and drill new rathole to 4850'. Sweep and TOOH.
- 22 Obtain GR-Density-Compensated Neutron-PE log from TD to 4600'. Verify that data is good with geology.
- 23 Run new 2-7/8" 6.4 ppf N-80 10rd NU tubing with: float shoe, ~10' pup jt, latch-down baffle or float collar, 3 full jts tubing, ID jt, and tubing.

Will need assortment of pup joints to land at appropriate depth to ensure latch-down plug is >10 ft below proposed bottom storage perforation.

- 24 Install tubing hanger and land in top of tubing spool. Engage lock-down pins.
- 25 Establish circulation and cement to surface per Cementing Procedure.
- 26 WOC xx hours (until cement compressive strength reaches 2000 psig based on lab test).
- 27 Obtain CBL
- 28 ND BOPs and install remainder of wellhead; tbg bonnet, 2-9/16" 10K tbg MV, flow cross, and 2-9/16" 10K SV.
- 29 Once cement compressive strength exceeds 4000 psig (based on lab test), pressure test WH/tubing to a minimum of 2300 psig surface pressure, assuming 8.4 ppg FW is in wellbore. Do not exceed 2600 psig. Chart pressure test test passes if no more than 10% drop in 30 minute period. This will serve as documentation of intitial integrity via MIT pressure test, in compliance with PHMSA regulations.
- 30 Swab well dry
- 31 Dump 200 gals 28% HCl acid (corrosion inhibitor + iron control) and load remainder of wellbore with TFW (corrosion inhibitor + iron control + biocide).
- 32 Perforate storage interval, per geology recommendations.
- 33 Perform breakdown. Maximum surface pressure 8000 psig. Once injection established perform 20 bbl injection test @ 4-6 BPM chart pressure and record ISIP.
- 34 Swab/flow well to re-establish gas flow.
- 35 RDMO service rig.
- 36 Perform 60 minute flowback test and report to WET / REG engineer.
- 37 If deemed necessary, fracture stimulate per Frac Procedure.
 Flow well to re-establish gas flow and perform 60 minute flowback test.
- 38 Notify WET Project Support that well is back in-service.
- 39 Reclaim R&L.
- 40 Reconnect well line.
- 41 Paint wellhead and well line.
- 42 Commission well by completing, processing, and retain for records the Wellsite Review and Turnover Form.
- 43 Notify REG that well is ready for storage service.

Office of Oil and Gas

FEB 28 2022

WV Department of Environmental Protection

PREPARED BY:	Maria Medvedeva	REVIEWED BY:	Jim Amos	APPROVED:	Brent Criser
PREP DATE:	2/9/2022				



State of West Virginia Department of Environmental Protection - Office of Oil and Gas Well Operator's Report of Well Work

RECEIVED
Office of Oil and Gas

JUN 29 2022

	Field/Pool Name Ripley					
	Well Number 7297					
Operator (as registered with the OOG) Address 1700 MacCorkle Ave SE Columbia Gas Transmission LLC City Charleston	State WV Zip 25314					
As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey Top hole Northing Easting Landing Point of Curve Bottom Hole Northing Not applicable Easting Elevation (ft) 604.4 GL Type of Well New Existing Type of Report Interim Final Permit Type Deviated Horizontal Horizontal A Vertical Depth Type Deep Shallow Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other						
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other Drilled with Cable Rotary Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine Production hole Air Mud Fresh Water Brine Mud Type(s) and Additive(s)						
Not applicable. Job scope was to repair a shallow casing leak by backing	off existing 4-1/2" casing and running new casing.					
Log well. Could not proceed with job scope due to finding casing cemented to surface	ce. Temporarily isolate welll with RBPs, plan new repairs.					
en Augusta	n activities ceasedN/A					
Verbal plugging (Y/N)N/A Date permission grantedN/A	Granted by N/A					
Please note: Operator is required to submit a plugging application within 5 days	s of verbal permission to plug					
Freshwater depth(s) ft None reported by driller when drilled Open mine(s) (Y.	/N) depths N					
Management of the delite of th	ered (Y/N) depths					
Name appearant of the state of the state of	ntered (Y/N) depths N					
Is coal being mined in area (Y/N)N	RO7/08/2022					

Page 2 of 4

WR-35 Rev. 8/23/13

API 47- 035	_ 00495	Farm na	_{ame} Stone & I	Heatheri	ngton	Well	number 729	7	
CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft		Basket Depth(s)		circulate (Y/N) etails below*
Conductor	N/A		existing well				1 , ,	_	
Surface	1		<u> </u>						
Coal									
Intermediate 1						0	RECEIVED on of Oil and Gas		
Intermediate 2						-			
Intermediate 3					1	Į)	UN 29 2982		
Production						Į,	N Depart ment of		
Tubing						Envi	onmental Protect	n CR	
Packer type and d	epth set	· · · · · · · · · · · · · · · · · · ·			•	•		 	
Comment Details	Existing well. Job sco	ppe was casing repail							
CEMENT DATA	Class/Type of Cement	Numbe of Sack			Yield (ft ³ /sks)	Volume (ft ³)	Cemer Top (M		WOC (hrs)
Conductor	N/A		existing						
Surface									
Coal									•
Intermediate 1									
Intermediate 2									
Intermediate 3									
Production			***						
Tubing									
Drillers TD (fi Deepest forma Plug back pro	tion penetrated C	Driskany		Loggers Plug bac	TD (ft)				
Kick off depth	ı (ft) <u>N/A</u>								
Check all wire	eline logs run	□ caliper ■ neutron	□ density □ resistivity		ated/direction		nduction emperature	□sonic	
Well cored	Yes A No	Conventi	onal Sidev	wall	We	ere cuttings	collected =	Yes ■ N	lo
								1	
DESCRIBE T	HE CENTRALIZ	ER PLACEM	ENT USED FO	R EACH	CASING ST	TRING N	<u> </u>		
			·						
WASWELL	COMPLETED AS	TOUR TOUR	E □ Yes □	No I	DETAILS	N/A			
	- LIED A	STICT HOLE	, u 168 U	190 I	NETAILS .				
WAS WELL (COMPLETED O	PEN HOLE?	□ Yes □ No	o DE	TAILS N/A			-	
WERE TRAC	ERS USED D	Yes □ No	TYPE OF T	RACER(S) USED <u>N/A</u>			07/08	3/2022

API 47-035 ₋ 00495	Farm name Stone & Heatherington	Well number 7297
	' '	

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
	N/A		existing well		
		-			
	- · ·				
					RECEIVED Office of Oil and Gas
					JUN 29 2022
	, ,		<u> </u>		
-					WV Department of Environmental Protection
			<u> </u>		
<u> </u>					
	-				

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
	N/A		existing well					<u></u>
					" .			
								<u></u>

WR-35

Rev. 8/23/13

API 47- 035	_ 00495	Farm	name Stone &	Heathering	ton	Well number	_r 7297	
PRODUCING N/A	FORMATION(<u>S)</u> .	<u>DEPTHS</u>	_TVD _		MD		
					· · · · · · · · · · · · · · · · · · ·			
Please insert ad	lditional pages a	as applicable.						
GAS TEST	□ Build up □	Drawdown	□ Open Flow	O	IL TEST 🗆 F	`low □ Pump	,	
SHUT-IN PRE	SSURE Surf	ace	_psi Botto	m Hole	psi	DURATION (OF TEST _	hrs
OPEN FLOW	Gas met	Oil pd	NGL bpd	V bpd		GAS MEASU		□ Pilot
LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD		OCK TYPE AND	-	ANTITYAND IL, GAS, H2S, ETC)
N/A	0		0			exi	isting well	
								- · · ·
					<u> </u>			
							RECEIVE Office of Oil an	D d Gas
				<u></u>	<u> </u>	·	JUN 29	
						Er	MV Deps Mironme	
	_							
Please insert ad	lditional pages a	s applicable.		<u>.</u>				
Drilling Contra Address	ctor N/A				_	_ State	Zip	
	any Baker Atlas		City			State	Zip	
	npany N/A				<u> </u>			
Address			City			_State	Zip	
Stimulating Co			City			State	Zip	
Please insert ad	ditional pages a	s applicable.			- 10			
Completed by	Maria Medvede	va		· · · · · · · · · · · · · · · · · · ·	Telephone _	304-410-4313	F) 4.	
Signature	MANN !	<u> </u>	Title So	enior Wells Eng	ineer —	Date _	06/29/2022	7/0 8/2022

NEST VINCINIA DEPARTMENT OF WINES OTL & GAS DIVISION T S L'EMPE V.ORD

Ripley News, Quade Address Tara Location Well No. District Surface · Wineral Commenced Completed Mat shot Open flow

Volume Rock Tressure

3-74

33710

Sand

Sand

Fig Lime

Injun Sand

Slate Treak

Sinte & Sholls

Sinte Brown

Fresh Tater

Salt Tater

CASINO & TUBINO United Carbon Company Sox 1913, Charleston 27, We've Tolle Hupp of al Acres 164,34

15. 13 3/8 509 101 1100 N.E. Repp of al Acres 104.37 13 3/6 307 100 100 2 (1220) Elev. 615.2 Or. 8 5/8 1928 Revenewood Jackson County 7 00 4609 W.E. Hupp of al, Sandyville, W.Va. 2 3/0 470819 1920 . · \$550 1 Sept. 10,1945

CASING CEMENTED! 8 5/8 1192' 10-21-45 7 CD 22# 4619' 11-25-45 Doc. 4,1945 32/10th W in 7" 22#

9,005,000 C.F. 1360 lbs. 23 hre. 508 1 BPH; 730* 1 BPH(salt mater); 100* H.F. 1195' H.F.

1250

1350

1450

1400

1516

1770

1074

1001

1922

1350

1400

1400

1615

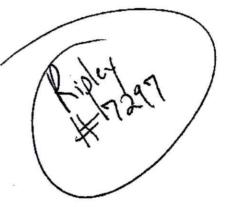
1770

1674

1961

1922

2250



2258 2255 Boron Shell 2260 22-3 Sinte & Shells 3203 State Breva 3400 3540 Elate & Shells 3540 3740 Shale Brown 3743 4025 Slote Thite 4025 44 20 Shale Sream 4100 4679 Turniferous Line 4679 4757 CHINANT SAIN 4757 4100 1000

Ona 47091 9,0005 1CF

CALS GLE DIVISION WELL RECORD

1935

478619

Permit No. Jac. 495 Ripley N.J. Quad. CASING & TURING United Carbon Company Company Address 13

Box 1913, Charleston 27, T.Va. 16 15 13 3/8 509 100 1100 7ara Nod Rum of Sandy Greek
2 (1820) Eleve 515-2 Or.
Ravenswood Jackson County
W.E. Hupp et al. Sundyville, J.Va. Location 8 5/3 1928 7 00 4689 2 3/3 478619 Well Mee District Surfeça Mineral

Sept. 10,1948 De. 4,1945

CASTNO CENTROS 8 5/0 1192 10-21-45 7 CD 22# 4619 11-25-45

Open flow 32/10the # in 7º 22# 9,005,000 C.F. 1360 1bs. 23 hre. 701 aze Rock Pressure Tresh Reter 508 1 EPH; 730° 1 EPH(salt water); 100° H.F. 1195° H.F. Salt Fater

Commenced

Completed

Not shot

						į
3 mines	٥	15				
2-d Rock	13	30				1
Sand	50	125				
Red Rock	125	173				
Slate & Shells	175	320				
Cal Rock	320	350				
Sen?	350	300				
Slata	350	400				
Red Rock	450	430				
Sand	+33	453				
Sinte	480	345				1
3-22 .	365	500				
Slate	606	725				į
Cand	725	745				
Sinte	745			7.5		
Sand	765	765				
Slate	603	300				- 1
C-nt	963	963				
Size	1015	1015				;
Sind	1125	1125				i
31+te	1175	1175				
San!	1150	1190				
Sinte	1250	1250				i
3-04	1356	1350				
31110		1400				
\$-51	1405	1450				1
Dig Line	1516	1616				
Injun Sand	1770	1770				
Slate Front	1674	1574				1
Sd	1851	1561				ļ
Slate & Shells	1922	1922				į
Sle Brown		2250				
Deres Stell	2258	2250				
Sinte & Shells	2269	2273				
State Brown	5502	3430				
Sinto & Shells	3460 3340	3540				i
Sh-le Brown	3748	3740				i
Sinte Thite	1025	4025				į
Z.rle Brown	4420	44 30		Si .		į
Curniferous Line	4579	4679				1
Trickmay Soud	4737	475 7 4000	_		4 22 2	
TAL PERT	4101	1803	Sas	47.4	9,0005	:CT
2024 5		1003				1

OEIVED Oil and Gas

F-3 28 2022

Department of comental Protection

WW-2	2A
(Rev.	6-14)

1). Date: 02/15/2022

2.) Operator's Well Number

Ripley 7297

State

County

Permit

3.) API Well No.:

47-

035 - 00495

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

4)	Surface Own	ner(s) to be served:	5) (a) Coal Ope	rator	
٦)	(a) Name	Steven B. Stone	Name	Not operated	
	Address	14 Crooked Run Road	Address	- rior operated	
	Address		_ Address	<u> </u>	
	/le\ NI e e e	Sandvville, WV 25275	(h) Cool O	mar(a) with Declaration	
	(b) Name			vner(s) with Declaration	
	Address		_ Name	Not operated	
			_ Address		
	(c) Name	Variable Control of the Control of t	_ Name		RECEIVED
	Address		Address	3	Office of Oil and Ga
				New York Control of the Control of t	FF 0 0 2022
6) I	nspector	Joe Taylor	(c) Coal Les	ssee with Declaration	FES 20 2022
	Address	1478 Claylick Road	Name	Not operated	WAI Department of
		Ripley, WV 25271	 Address		Environmental Protect
	Telephone	304-380-7469			
	1.1.1	TO THE PERSONS NAI	MED ABOVE TA	KE NOTICE THAT:	
	Included is the	e lease or leases or other continuing			o extract oil and gas
OR		o reads or reads or ourser contained by	oomaa or oomaa	oto by million i mora the right.	o oxuaot on ana gao
x		e information required by Chapter 22	. Article 6. Section	8(d) of the Code of West Vi	rginia (see page 2)
		nat as required under Chapter 22-6			
app		ation plat, and accompanying docume			
	-	Personal Service (Affidavit attac			\$1
	X	Certified Mail (Postmarked post	al receipt attached)	
	-	Publication (Notice of Publicatio			
	I have rea	ad and understand Chapter 22-6 and	135 CSR 4, and I	agree to the terms and co	nditions of any permit
issu	ed under this			X-X	32m (m
770g 191		nder penalty of law that I have person			
		rm and all attachments, and that ba			liately responsible for
obt		mation, I believe that the information			
		re that there are significant penalties	for submitting fals	e information, including the	possibility of fine and
imp	risonment.	Wall Operator	Calumbia Caa	Transmission II.C. A	11 (1)
		vveii Operator	Morio Moduco	Transmission, LLC	
			Maria Medved		Carriage
		Address:	1700 MacCarl	Ingineer Storage Techn	icar Services
		Address.	1700 MacCorl		
		Tolonhono	Charleston W	V 25314-1273	
			304-410-4313	daya Otaananay	
Suk	secribed and ex	worn before me this // day of	mana medved	deva@tcenergv.com	
Our	oscribed and si	worn before the this day or	_FCB	, 2027	
	(- 12		Notary Public	
Му	Commission E	xpires July 20	2125		· · · · · · · · · · · · · · · · · · ·
	nd Gas Privacy N				GREGORY S LARCH Notary Public Official Seal
					State of West Virginia
The	Office of Oil and	Gas processes your personal information,	such as name, addre	ss and phone numbers a part of	of our regulatory duties.

The Office of Oil and Gas processes your personal information, such as name, address and phone numbers a part of our contactory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of Oslamess or streets to the play 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 17/08/2022

Columbia Gas Transmission, LLC

1700 MacCorkle Ave., SE, Charleston, WV, USA 25314



February 16, 2022

Steven B. Stone 14 Crooked Run Road Sandyville, WV 25275

Columbia Gas Transmission, LLC is applying for a permit to the WV Department of Environmental Protection – Office of Oil and Gas, to repair an existing underground natural gas storage well located on property owned by you. As reference, the field and well ID is Ripley 7297 (API 47–035–00495).

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

Regards, COMPLETE THIS SECTION ON DELIVERY SENDER: COMPLETE THIS SECTION A. Signature ■ Complete items 1, 2, and 3. ☐ Agent Print your name and address on the reverse ☐ Addresse so that we can return the card to you. Date of Deliver Attach this card to the back of the mailpiece, or on the front if space permits. 1. Article Addressed to: D. Is delivery address different from item 1? ☐ Yes Maria Medvedeva If YES, enter delivery address below: Senior Wells Engineer 14 Grooked Run Rd Well Engineering & Technology Columbia Gas Transmission, LLC 3. Service Type ☐ Priority Mail Express® ☐ Adult Signature
☐ Adult Signature Restricted Delivery ☐ Registered Mail™ ☐ Registered Mail Restrict Delivery ☐ Signature Confirmation[™] Certified Mail Restricted Delivery 9590 9402 6856 1104 6636 28 Collect on Delivery
Collect on Delivery Restricted Delivery ☐ Signature Confirmation Restricted Delivery 7021 1970 0001 1849 9887 ill Restricted Delivery PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt CERTIFIED MAIL® RECEIPT Domestic Mail Only 40 RECEIVED Office of Oil and Gas 84 FEB 28 2022 W Department of Environmental Protection Return Receipt (electronic) Certified Mail Restricted Del Adult Signature Required Adult Signature Restricted Deli \$8.95 딥 www.tcenergy.com 07/08/2022

WW-2A Surface Waiver (4/16)

SURFACE OWNER WAIVER

County	Jackson	Operator	Columbia Gas Transmission LLC
		Operator well number	Ripley 7297

INSTRUCTIONS TO SURFACE OWNERS NAMED ON PAGE WW2-A

The well operator named on page WW2A is applying for a permit from the State to do oil or gas well work. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22 of the West Virginia Code. Well work permits are valid for 24 months. If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator and the Office of Oil and Gas.

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

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

<u>Time Limits and methods for filing comments.</u> The law requires these materials to be served on or before the date the operator files his Application. You have **FIFTEEN (15) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

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

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

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

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

<u>List of Water Testing Laboratories.</u> The Office maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Chief to obtain a copy.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners and that I have received copies of a Notice and Application for a Well Work Permit on Form WW2-A, and attachments consisting of pages 1 through ____ including a work order on Form WW2-B, a survey plat, WW-9, and a soil and erosion plan, all for proposed well work on my surface land as described therein.

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

FOR EXECUTION BY A NATURA	L PERSON	FOR EXI	ECUTION BY A CORPORAT	ION, ETC.
	Date	Company Name	Office of Oil and Gas	
Signature		Ву	FER 9.8 2022	
		Its	I have at the contract of the	Date
			WV Department of Environmental Protection	
Print Name		ÿ 	Elivitotimental	
		Sic	nature	Date



COAL OPERATOR, OWNER, OR LESSEE WAIVER

County Jackson		* coal not operated
County_Jackson Operator_Columbia Gas Transmission LLC	Operator's Well Numbe	Ripley 7297
INSTRUCTIONS TO C	COAL OPERATOR, OWN	ER, OR LESSEE
To the coal operator, owner, or leany objection you wish to make or are rewith the Chief of the Office of Oil and Goby the Office. Mail objections to:	quired to make by WV Co	V2-A. You are hereby notified that ide 22-6-15, 16 or 17, must be filed after the receipt of this application
Chief, Office of Oil and Gas Department of Environmental Protection 601 57 th St. SE Charleston, WV 25304 (304) 926-0499 extension 1654		
	WAIVER	
The undersigned coal operator location has examined this proposed wel location, the well location has been adde work proposed to be done at this location requirements of the West Virginia Code a	I location. If a mine map e d to the mine map. The u n, provided, the well operat	ndersigned has no objection to the tor has complied with all applicable
FOR EXECUTION BY A NATURAL PERSON	FOR EXI	ECUTION BY A CORPORATION, ETC.
Date Signature	Company Name By	
	lts	Date
	Sig	nature Date

Office of Sil and Gas

FEB 2 8 2022

WV Department of Environmental Protection



WW-2B	1
(5-12)	

Well N	o. Ripley	7297
vveiriv	IO. Kipiey	1291

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 Labora Sampling Control			
Well Operator Address	Not applicable - existing underground natural of	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.

RECEIVED Office of Oil and Gas

FEB 2 8 2022

WV Department of Environmental Protection

07/08/2022

WW-2A1 (Rev. 1/11)

Operator's Well Number Ripley 7297

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
W.E. Hupp, et al	United Fuel Gas Company	Storage Lease -	84 / 416
		1052756-000	

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

The permit app licant 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

FEB 28 2022

WW 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

Maria Medvedeva

Senior Wells Engineer Storage Technical Services

507

07/08/2022

WW-9 (5/16)

API Number	47 -	035	_ 00495
Operator's W	ell No	. Riple	y 7297

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) Sandy Creek	Quadrangle Sandyville, WV
Do you anticipate using more than 5,000 bbls of water to comp Will a pit be used? Yes No	
If so, please describe anticipated pit waste: N/A	7 - 10 N/A
Will a synthetic liner be used in the pit? Yes	No ✓ If so, what ml.? N/A
Proposed Disposal Method For Treated Pit Wastes:	and a supply of the supply of
Other (Explain	Number_34-167-23862
Will closed loop systembe used? If so, describe: yes - steel flo	ow line to tanks
Drilling medium anticipated for this well (vertical and horizont	
-If oil based, what type? Synthetic, petroleum, etc. N	
Additives to be used in drilling medium?NaCl, biocide, soda ast	
Drill cuttings disposal method? Leave in pit, landfill, removed	
-If left in pit and plan to solidify what medium will be	e used? (cement, lime, sawdust) N/A
1001 Mathematical Section (1977)	ed by Waste Management and US Ecology for disposal at permitted landfill
Permittee shall provide written notice to the Office of Oil and O	Gas of any load of drill cuttings or associated waste rejected at any d within 24 hours of rejection and the permittee shall also disclose
on April 1, 2016, by the Office of Oil and Cas of the West Vin provisions of the permit are enforceable by law. Violations of or regulation can lead to enforcement action. I certify under penalty of law that I have personally application form and all attachments thereto and that, based on	HECEIVED
Company Official Signature	Office of the and Gas
Company Official (Typed Name) Maria Medvedeva	FER 2 8 2022
Company Official Title Senior Wells Engineer Storage Technic	Envi or mental Protection
Subscribed and sworn before me this the day of	Notary Public GREGORY S LARCH
My commission expires Tuly 20, 20	State of West Virgini

Operator's Well No. Ripley 7297

	atment: Acres Disturbed <		
Lime 2	Tons/acre or to correct	t to pH 7-8	
Fertilizer type 10-	10-10		
Fertilizer amount_6	500	lbs/acre	
Mulch_ hay or st	raw @ 2	_Tons/acre	
		Seed Mixtures	
Te	emporary	Permanent	
Seed Type	lbs/acre	Seed Type lbs/acre	
Annual rye	40	Orchard Grass and/or Tall Fescue	29
		Birdsfoot Trefoil (Empire)	9
		Annual Rye	12
Maps(s) of road, location, pirovided). If water from the L, W), and area in acres, of	pit will be land applied, proving the land application area.	application (unless engineered plans including this info have by vide water volume, include dimensions (L, W, D) of the pit, an	een d dim
L, W), and area in acres, of	pit will be land applied, province the land application area. lved 7.5' topographic sheet.	vide water volume, include dimensions (L, W, D) of the pit, an	een d dim
Maps(s) of road, location, pi provided). If water from the L, W), and area in acres, of	pit will be land applied, proving the land application area. lived 7.5' topographic sheet.	application (unless engineered plans including this info have by vide water volume, include dimensions (L, W, D) of the pit, an	een d dim
Maps(s) of road, location, piprovided). If water from the L, W), and area in acres, of Photocopied section of involutional Plan Approved by:	pit will be land applied, proving the land application area. lived 7.5' topographic sheet.	vide water volume, include dimensions (L, W, D) of the pit, an	een d dim
Maps(s) of road, location, piprovided). If water from the L, W), and area in acres, of Photocopied section of involutional Plan Approved by:	pit will be land applied, proving the land application area. lived 7.5' topographic sheet.	vide water volume, include dimensions (L, W, D) of the pit, an	een d dim
Maps(s) of road, location, piprovided). If water from the L, W), and area in acres, of Photocopied section of involutional Plan Approved by:	pit will be land applied, proving the land application area. lived 7.5' topographic sheet.	vide water volume, include dimensions (L, W, D) of the pit, an	een d dim
Maps(s) of road, location, piprovided). If water from the L, W), and area in acres, of Photocopied section of involutional Plan Approved by:	pit will be land applied, proving the land application area. lived 7.5' topographic sheet.	vide water volume, include dimensions (L, W, D) of the pit, an	een d dim
Maps(s) of road, location, piprovided). If water from the L, W), and area in acres, of Photocopied section of involutional Plan Approved by:	pit will be land applied, proving the land application area. lived 7.5' topographic sheet.	vide water volume, include dimensions (L, W, D) of the pit, an	een d dim
Maps(s) of road, location, piprovided). If water from the L, W), and area in acres, of Photocopied section of involutional Plan Approved by:	pit will be land applied, proving the land application area. lived 7.5' topographic sheet.	vide water volume, include dimensions (L, W, D) of the pit, an	een d dim
Maps(s) of road, location, piprovided). If water from the L, W), and area in acres, of Photocopied section of involutional Plan Approved by:	pit will be land applied, provide land application area. lived 7.5' topographic sheet.	vide water volume, include dimensions (L, W, D) of the pit, an	een d dim

WW-9- GPP Rev. 5/16

	Page	V.	of	
API Number 47 -	035	-	00495	
Operator's Well N	o. Riple	y 7297	-	

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): Sandy Creek	Quad: Snadyville, WV
Farm Name: Stone and Heatherington	
List the procedures used for the treatment and dischar groundwater.	rge of fluids. Include a list of all operations that could contaminate th
construction equipment, well treatment fluid	ds, and produced well fluids are the only possible brilling and flowback fluids to be stored in tanks. All
2. Describe procedures and equipment used to protect gro	oundwater quality from the list of potential contaminant sources above
All construction and well servicing equipme Tanks to be monitored daily for leaks. Spill	nt will be monitored and inspected daily for leaks. kits will be on site.
List the closest water body, distance to closest water discharge area.	body, and distance from closest Well Head Protection Area to the
Mud Run of the Sandy Creek is at a distance 0.18 miles E.	ce of 0.05 miles E. Sandy Creek is at a distance of
The Ravenswod Municipal Water Works Water at a distance of 5.27 miles NW from dischar	V3301810 is the closest Well Head Protection Area rge area.
Summarize all activities at your facility that are already	regulated for groundwater protection.
N/A	
	RECEIVED Se of Oil and Cas
	FEB 28 2022
	WV Department of
	WV Department of wironmental Protection

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

JP

WW-9- GPP Rev. 5/16 Page of O0495

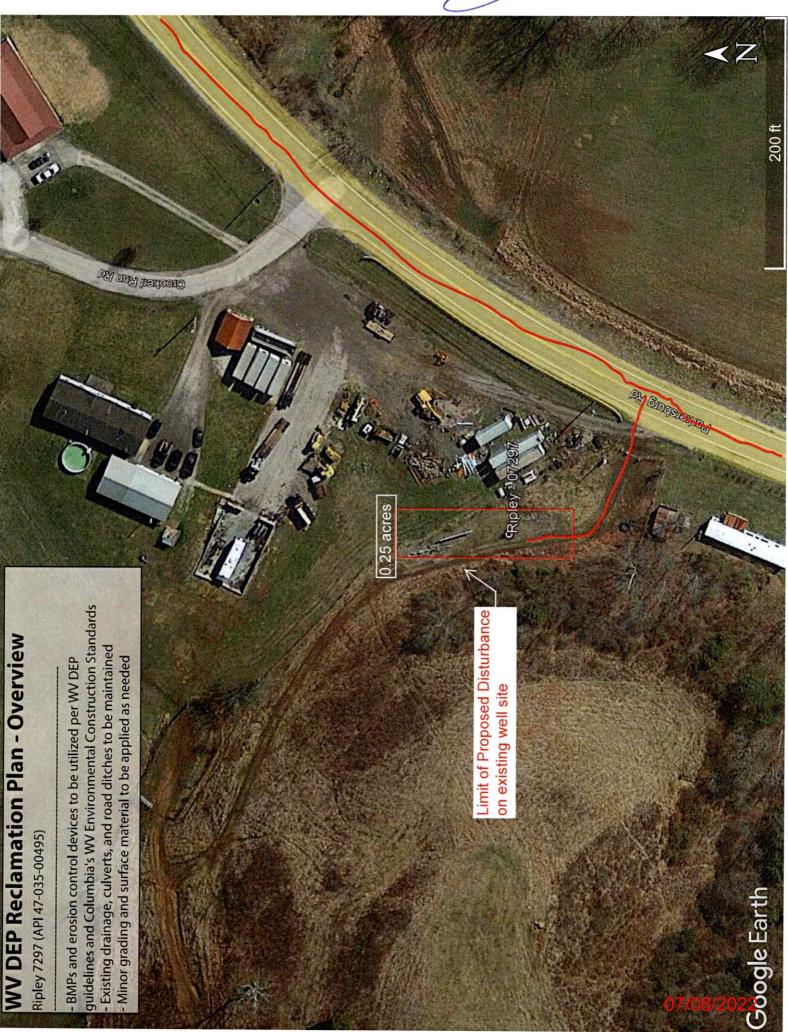
API Number 47 - 035 - 00495

Operator's Well No. Ripley 7297

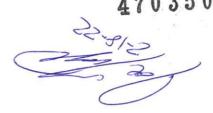
N/A	
Provide a statement that no wa	ste material will be used for deicing or fill material on the property.
No waste material will be	used for deicing or fill material on the property.
	section instruction and training to be provided to the employees. Job procedures shall event groundwater contamination.
Ouring routine tailgate and	d JSA meetings groundwater protection will be a topic of discussion.
Provide provisions and frequen	acy for inspections of all GPP elements and equipment.
secondary containment. S	on site. Fuel, oil, and lubricants will be stored on site, but located within spills from construction equipment, well treatment fluids, and produced sible source of contamination to groundwater.
All construction and well so	ervicing equipment will be monitored and inspected daily for leaks or
ignature: Malle	
75/1(al	7022

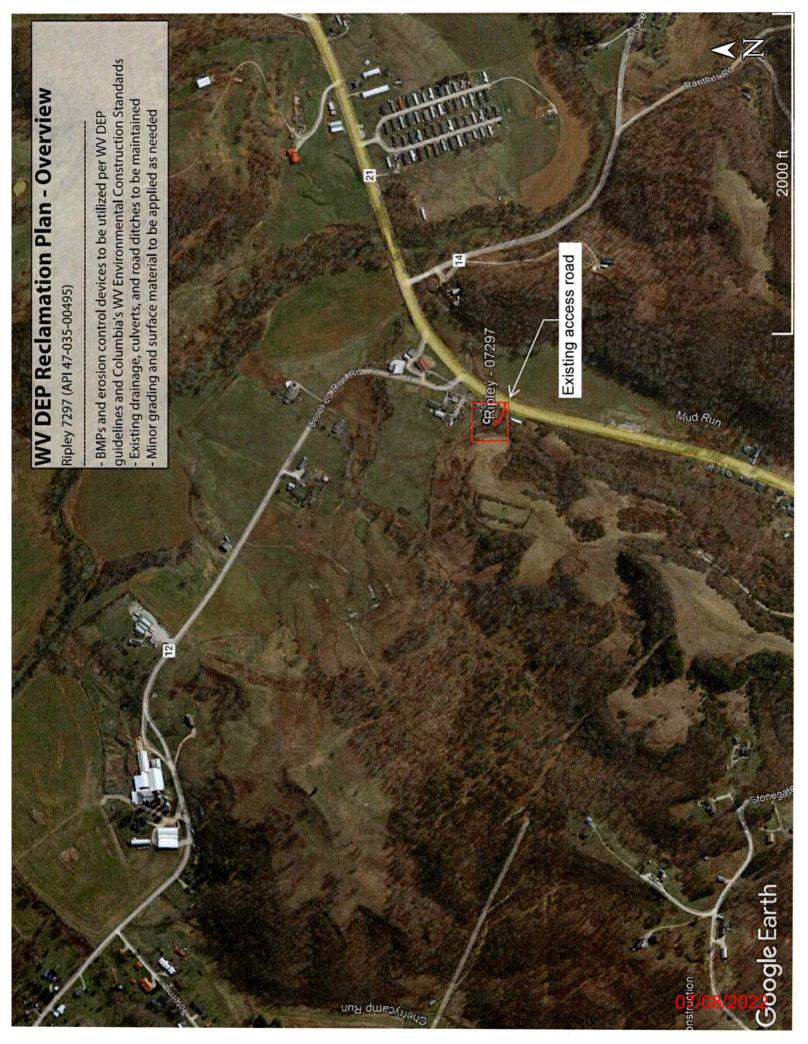
JO

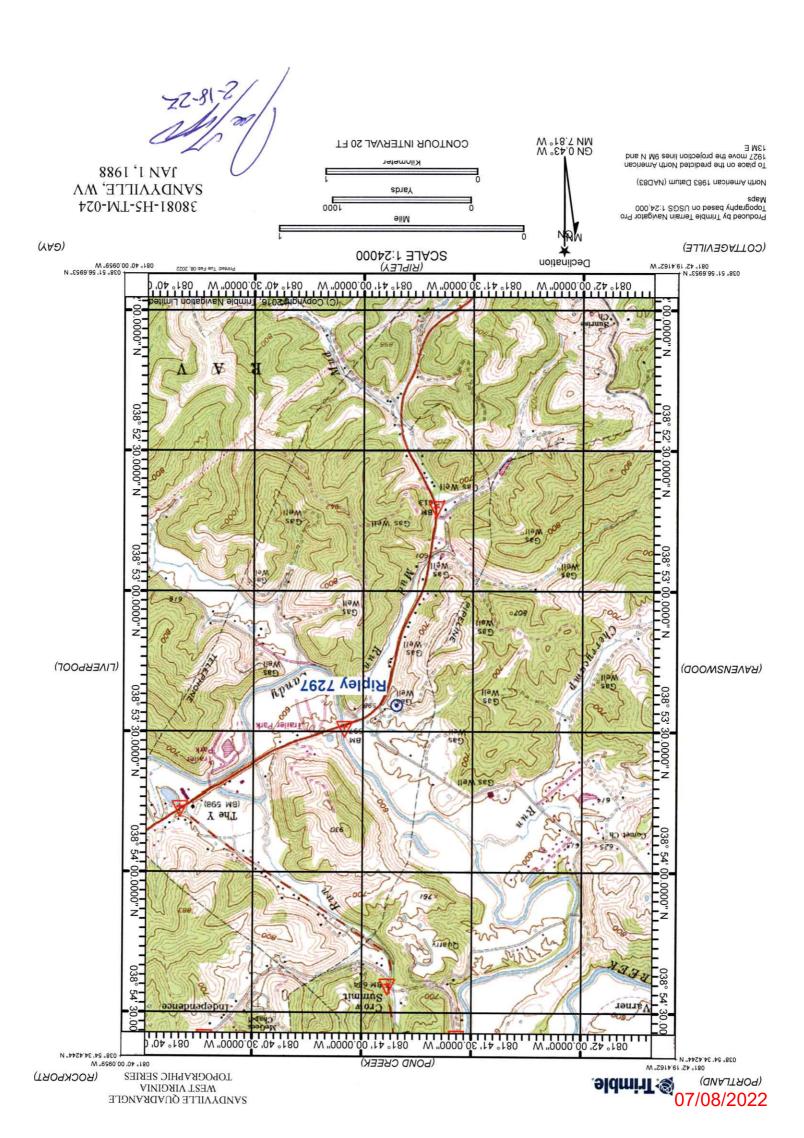
PAIN NO STATE OF THE PAIN NO S

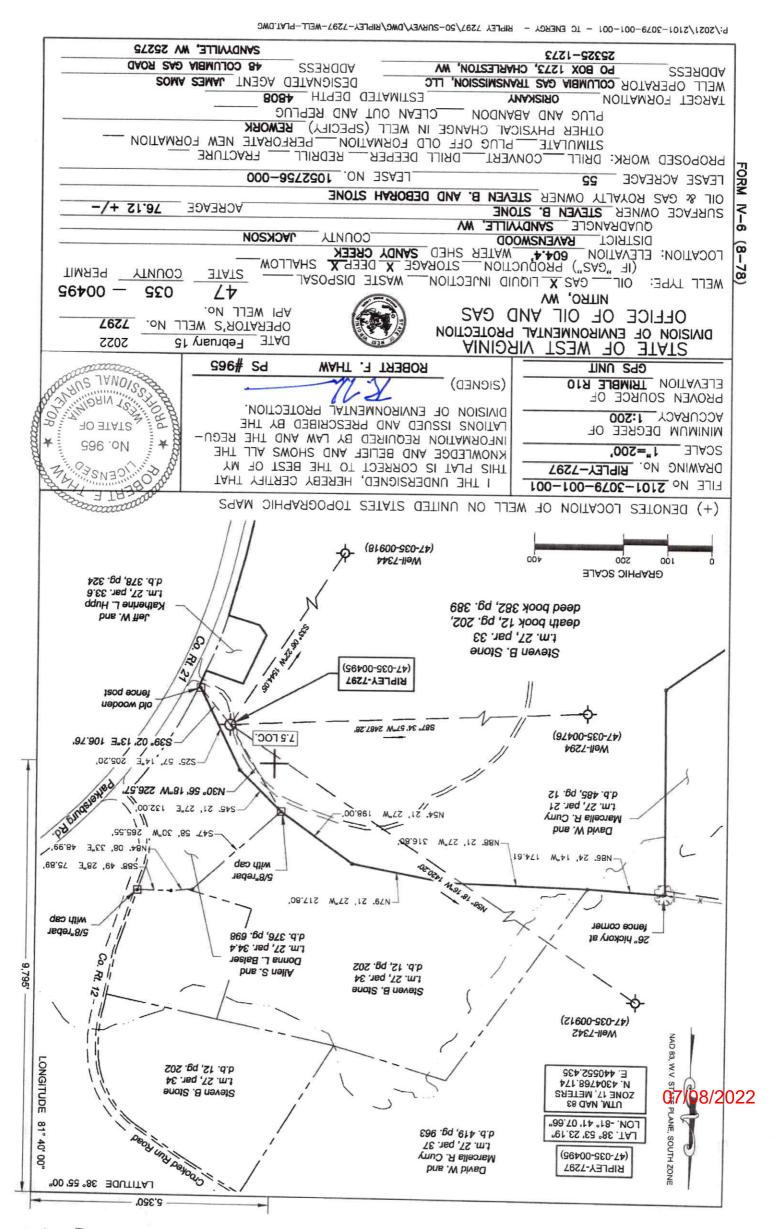


4703500495W











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

4703500495 rework

1 message

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

Thu, Jul 7, 2022 at 2:22 PM

To: maria_medvedeva@tcenergy.com, Jeffrey W McLaughlin <jeffrey.w.mclaughlin@wv.gov>, Wade A Stansberry <wade.a.stansberry@wv.gov>, bkthomas@jacksoncountywv.com, beth.roberts@jacksoncountywv.com

To whom it may concern this permit has been issued.

James Kennedy WVDEP OOG

4703500495.pdf 6286K