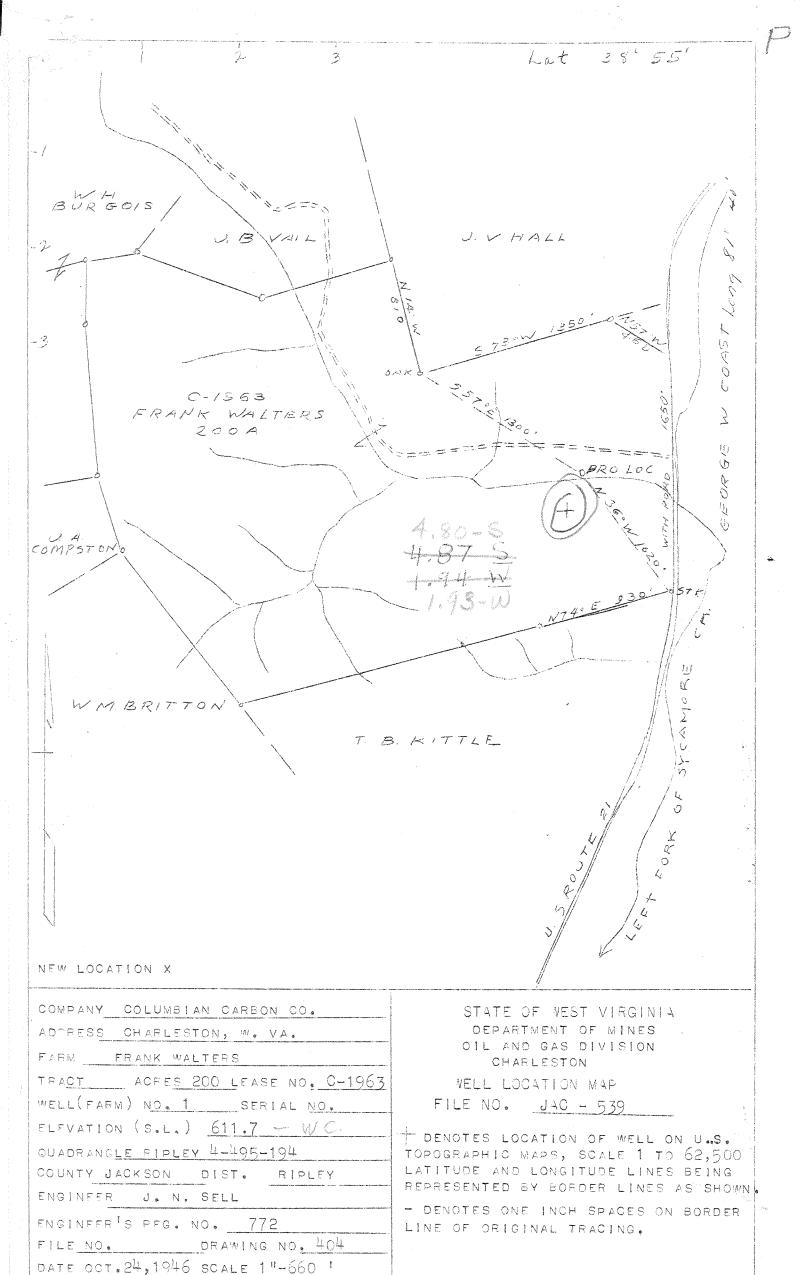
(Elk-loca (51550mille) - 192) 8-1

25325-1273

25325-1273

M \Wells\wv7308 dgn 6/19/2009 10:39:38 AM User=tco1722



Deep Well

WEST VIRGINIA DEPARTMENT OF MINES OIL & GAS DIVISION WELL RECORD

```
Permit No. Jac 539
                                                                                                                                                                                                                                                                                                                                                                                                                                Gas Well
                 Ripley Quad.
                                                                                                                                                                                                                                                                                                                                                                                              CASING & TUBING
                 Company
                                                                                                                                                                  Columbian Carbon Company
                                                                                                                                                                     Box 873, Charleston 23, W.Va. 16
                                                                                                                                                       Box 873, Charleston 23, W.Va. 16 30°0 30°0

Frank Walters Acres 200 13 3/8 498°7 0

Left Fork of Sycamore Creek 10°2 1026°6 0

1 (GW 929) Elev. 611.7 G 8 5/8 1950°7 1950°7

Ripley Jackson County 7 4718°10 4718°10

Frank Walters et al(for 2 3/8 4841°0 4841°0 addresses contact C.C. Co.)
                  Address
                Farm
                 Location
                 Well No.
                District
                 Surface
                                                                                                                                                                  addresses contact C.C. Co.) 11-17-46
                Commenced
                                                                                                                                                                                                                                                                                                                                                                Coal at 466 24"
                Completed
                                                                                                                                                                   3-9-47
                                                                                                                                                                                                                                                                                                                                                                 576 36"
               Not shot
                 Volume
                                                                                                                                                                  3,170,000 C.F.
               Rock Pressure
                                                                                                                                                                    950 lbs. 23 hrs.
               Fresh Water
                                                                                                                                                                    110 1-16 blr. per hr.; 205 2 2 blrs. per hr.
                                                                                                                                                            466 5 blrs. per hr.; 723-34 1/2-13" blr. per hr.
                Salt Water
                                                                                                                                                                    1545-50 H.F.
                                                                                                                                         0
25
50
65
80
                                                                                                                                                                                                                          25 Slate 2116 2270

50 — Shale 2270 2288

65 — Sand — 2288 2300 Bore 200

80 Slate & Shells 2300 3500

106 Brown Shale 3500 3608

113 Gray Shale 3600 3700
               Soil
     Red Rock 65 80 Slate & Shells 2300 3500 Slate 80 106 113 Gray Shale 3500 3608 Sand 106 113 Gray Shale 3600 3700 Red Rock 113 140 Lime 3700 3770 4050 Sand 145 205 Gray Lime Hard 4050 4070 Blue Slate 232 251 Slate 4160 452 4200 Red Rock 210 232 Brown Shale 4070 4100 Red Rock 221 232 Brown Shale 4070 4152 Blue Slate 232 251 Slate 4152 4200 Red Rock 251 258 289 Brown Shale 4200 4372 Blue Slate 258 289 Brown Shale 4200 4372 Blue Slate 258 289 Brown Shale 4200 4372 Blue Slate 320 550 Jriskawy Sand 4686 SLM 4785SLM 4816 Red Rock 350 375 Total Depth 4618 Red Rock 350 375 Total Depth 4618 Slate 466 468 521 Slate 466 468 521 Slate 525 576 Wooll 525 576 Wooll 525 576 Wooll 525 576 Shale 466 674 710 723 Slate 579 630 and 1 bale fibrotex. No roturns. Red Rock 836 836 853 Slate 855 SLM 5100 1035 SLM 1375 SLM Slate 853 1010 1029 DLM - 1035 SLM 1375 SLM Slate 853 1010 1029 DLM - 1035 SLM 1375 SLM Slate 853 1010 1029 DLM - 1035 SLM 1375 SLM Slate 853 1010 1029 DLM - 1035 SLM 1375 SLM Slate 853 1010 1029 DLM - 1035 SLM 1375 SLM Slate 853 1010 1029 DLM - 1035 SLM 1375 SLM Slate 853 1020 SLM 1375 SLM Slate 853 SLM 5 SLM 
              Red Rock
               Slate
  ~ Coal
  - Woal
            Slate Hard
                                                                                                                                                               1035 SLM 1175
            Sand
                                                                                                                                                                                                                1220
                                                                                                                                                               1175
          Slate
                                                                                                                                                                                                                            1245
                                                                                                                                                                  1220
          Sand
                                                                                                                                                                                                                           1315
1339
1353
                                                                                                                                                             1315
          Slate
          Sand
Sand
Slate
Salt Sand
Gritty Lime
Lime
Slate
Slat
                                                                                                                                                            1339
```

FORM WW-2B

Page $\frac{1}{}$ of $\frac{1}{}$

	STATE OF							
DEPARTMENT	OF ENERGY	, DI	VISION	OF OIL	AND	GAS	CHONES	6(24)94
WEI	L WORK PE	CRMIT	APPI.TO	TATTON	······································			

			MELL M	OKK PERMIT	APPLICATIO	N	s
1) W	Vell Ope	erator:	COLUMBI	A GAS TRANSM	ISSION CORP.	10450 (3)	577
2) 0	perato:	c's Well	Number:_	Well 7308	, Ripley Stor	age 3) E1	evation:610.61
4) W	Well typ	pe: (a)	0il_/	or Gas	5 <u>X</u> /		
		(b)	If Gas:		n/ Underg	round Storag	
5) P	roposed	l Target :	Formation		iskany Sand T		
6) P	roposed	d Total D	epth:	4818'	feet		RECEIVED Office of Oil & Gas
7) A	pproxin	nate fres	h water :	strata dept	hs:4	66' est.	Permitting
8) A	pproxin	mate salt	water de	epths:	723' est.		our 9 92
9) A	pproxin	nate coal	seam de	pths: 576'	-579' and 466	'-468' B	WV Division of mirrormental Protection
10) D	oes lar	nd contain	n coal se	eams tribut	ary to act	ive mine? Y	es/ No_X/
11) P	roposed	Well Wo	. A) Pu	ll and partia	ally replace	the 4-1/2" tub	ing - replace to
			.10	THE OT / and	1 0-0/0 Last	wellhead assem	ale and Someere
			CASI	NG AND TUBI	NG PROGRAM		÷
TYPE		SI	PECIFICA!	FIONS	FOOTAGE I	NTERVALS	CEMENT
		Size	Grade	Weight per ft.	For drilling		Fill-up
Conduc	tor	16"	•	69.50 #/ft.		30'	13 sks. Aquage
Fresh	Water	- Parameter and the second sec		-			
Coal .					:		
Interm	ediate	8-5/8"	-	24#/ft.	1951'	1951'	24 sks. Aquage 1 bale Fibrete
Produc	tion	7"		23#/ft.	4719'	4719'	approx. 1000' 90.3 c. ft.
Tubing		4-1/2"	J - 55	12.6#/ft.	4818'	4818'	515 sacks ceme 5 sks. Aquage
Liners							
		d 1-7" Mid	daet Botto	m Hole Packer	· - 1 -4"x7" !	Wall and Ancho	r Packer
_	Siz	esths set				and Anchor	Tacket.
<u>.7733</u>	385	-	ne Diviec	of Oil a	nd Gas Use	0-1.	
	ee(s) p		K/	ork Permit	/h		
	lat	Se some	WW-	$\sim 1/M$	ond Dunge	lamation Fun	
7/1. F.	iai y	WW-3	WW-	- 4 B	ona winge	- Cymac	Agent

Page 1 of 1 1) Date: April 1, 1992 Form WW2-A 2.) Operator's well number Well No. 7308, Ripley Storage Field (09/87)File Copy API Well No: 47 - 035 - 00539-Rework State - County - Permit STATE OF WEST VIRGINIA RECEIVED DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS Office of Oil & Gas Permitting NOTICE AND APPLICATION FOR A WELL WORK PERMIT Surface Owner(s) to be served:
(a) Name Ernest E. Monday
Address Rt. 1, Box 369 4) 5) (a) Coal Operator: W Division of Name <u>none</u> Environmental Protection Address Ripley, WV 25271 (b) Name ____ (b) Coal Owner(s) with Declaration Address Name none Address _ (c) Name ____ Address Name Address _____ 6) Inspector Glen P. Robinson (c) Coal Lessee with Declaration Address <u>Box 1</u> Name none Belleville, WV 26133 Address _ Telephone (304)-863-8766 (304) - 367 - 1832TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT: Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR x Included is the information required by Chapter 228, Article 1, Section 8(d) of the Code of West Virginia (see page 2) I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through ____ on the above named parties, by: Personal Service (Affidavit attached) ______X Certified Mail (Postmarked postal receipt attached) Publication (Notice of Publication attached) I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application. I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information isstrue, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator COLUMBIA GAS TRANSMISSION CORP. OFFICIAL SEAL By: NOTARY PUBLIC Its: Director, Drilling & Maintenance STATE OF WEST . MARY PARSONS Address _____ P. O. Box 1273 2052 Lincoln Avenue Charleston, WV 25325-1273 St. Albais, West Virginia 25177 Telephone (304) 357-2459 My Commissium Expires Oct. 10, 1994 ubscribed and sworm before me this 3/16 day of _Notary Public

My commission expires

WR-35 Rev (5-01)

DATE: 1/11/10 API#: 47-035-00539 W

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

Well Operator's Report of Well Work

Farm name: Donat, Walter S. III Operator Well No.: 7308					
LOCATION: Elevation: 611 ft	Quad	rangle: <u>Riple</u> y	<i>f</i>	**************************************	
District: Ripley	Cour	ity: <u>Jackson</u>			
Latitude: 10.850 Feet South of			ec.		
Longitude 10,200 Feet West of					
Company: Columbia Gas Transmission, LLC		a i ta las la			
	Casing &	Used in	Left in well	Cement fill	
	Tubing	drilling		up Cu. Ft.	
Address: 1700 MacCorkle Ave SE					
Charleston, WV 25325-1273			ll - no casing/tu		
Agent: Paul Amick			Below is a reco	ord of current	
Inspector: Jamie Stevens	tubulars in we	11.		**************************************	
Date Permit Issued: 9/3/09	16	30	30	none	
Date Well Work Commenced: 12/15/2009	13-3/8	499	0	попе	
Date Well Work Completed: 1/5/2010	10-3/4	1027	0	none	
Verbal Plugging:	8-5/8 24#	1951	0 - 1951	unknown	
Date Permission granted on:	7 23#	4719	0-4719	unknown	
Rotary X Cable Rig	4-1/2 12.6#	4818	0 - 4818	old well records	
		****		indicate "cemented to	
		9404		surface"	
Total Depth (feet): 4818					
Fresh Water Depth (ft.): not applicable - rework	<u> </u>				
Sait Water Depth (ft.): not applicable - rework				1	
Is coal being mined in area (N/Y)? N					
Coal Depths (ft.): none reported ft					
	*	\$		4	
OPEN FLOW DATA					
Producing formation Oriskany Sand	Pay zone der	wh (A) 4785	. 4818		
Gas: Initial open flow <u>not applicable</u>				Bbl/d	
Final open flow 14,200 MCF/c		Final open flo		Bbl/d	
Time of open flow between initial and			House		
*		.,	Lious	NEL	
Time of open flow between initial and final tests not applicable Hours Static rock pressure 1335 psig (surface pressure) after 24 Hours Hours Second Producing formation N/A Pay zone depth (ft) Office of Oil & Gas Second Producing formation N/A Pay zone depth (ft) Office of Oil & Gas Second Producing formation N/A Pay zone depth (ft) Office of Oil & Gas MCF/d Oil: Initial open flow Hours Final open flow MCF/d Final open flow Bbl/d neOt of the Company of the Comp					
Second Producing Competion, N/A Producing Competion, N/A					
Second Producing formation N/A Pay zone depth (ft) Office 19 10 10 10 10 10 10 10 10 10 10 10 10 10					
Cas: initial open flow MCF/d Oil: Initial open flow ANBbl/d					
Second Producing formation N/A Pay zone depth (ft) Office of One Control of Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/dment of Final open flow MCF/d Final open flow Bbl/dment of Time of open flow between initial and final tests Hours pepal protection Static rock pressure psig (surface pressure) after Mours mental protection Environmental Protection Enviro					
Time of open flow between initial and final tests Hour Departs Professional Profess					
Static rock pressure psig (surface pressure) after Pours Pours					
EUNILO					
W'					
•					
INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS,					
INCLUDING COAL ENCOUNTERED BY THE WELLBORE.					
INCLUDING COAL ENCOUNTERED BY THE WELLBORE.					
Signed: Signed:					
By James E. Amos - Senior Storage Engineer - Columbia Gas Transmission, LLC					
Date: 1/11/10					

Ripley storage well 7308 (035 - 00539)

This is an existing storage well. Below is a summary of work performed.

Well was killed, pipe inspection and cement bond logs ran, installed new wellhead valves, cleaned with coil tubing, and fracture stimulated.

Fracture stimulation:

BJ Services

500 gals 20% HCl acid

412 bbls gel

154 MSCF nitrogen

25,900 lbs 20/40 Ottawa sand Avg bottomhole rate: 16 BPM

Break: 3225 psig ATP: 3500 psig ISIP: 3890 psig

* well screened off during flush

^{*} Note that no earthen pit was utilized. All fluids recovered via steel tanks and transported off site to waste water treatment facility.

SEP 0 4 1994 Division of Environmental Protection
Section of Oil and Gas

WV Division of Well Operator's Report of Well Work
Environmental Protection
Farm name: MONDAY, ERNEST Operator Well No.:

arm hame: MONDAY, ERNEST Operator Well No.: 7308

LOCATION: Elevation: 610.61 Quadrangle: RIPLEY

District: RIPLEY County: JACKSON

Latitude: 10900 Feet South of 38 Deg. 52Min. 30 Sec. Longitude 9950 Feet West of 81 Deg. 40 Min. 0 Sec.

Company: COLUMBIA GAS TRANSMISSION 1700 MacCORKLE AVENUE S.E. CHARLESTON, WV 25314-0000

Agent: ROBERT C. WEIDNER

Inspector: GLEN P. ROBINSON
Permit Issued: 06/24/92
Well work Commenced: 1-22-12
Well work Completed: 1/2-10-12
Verbal Plugging
Permission granted on:
Rotary Cable

Rotary Cable Rig
Total Depth (feet) 4818'
Fresh water depths (ft) 466' est.

Salt water depths (ft) 723 cst.

Is coal being mined in area (Y/N)?
Coal Depths (ft): 576'-579' and 466'-468'

Casing	Used in	Left	Cement
Tubing	Drilling	in Well	Fill Up Cu. Ft.
Size			Ī
16"	30	30	13 sto. Agraga
8-5/8"	1951	1951 ¹	1 bale Fibrotea
7"	4749	47191	≈ 10001 - 90.3 cm ft.
41/2"	4818'	4818'	515 sks com

OPEN FLOW DATA

Producing formation

Gas: Initial open flow ____ MCF/d Oil: Initial open flow ___ Bbl/d

Final open flow ___ MCF/d Final open flow ___ Bbl/d

Time of open flow between initial and final tests ____ Hours

Static rock Pressure ____ psig (surface pressure) after ____ Hours

Second producing formation Pay zone depth (ft)

Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d

Final open flow MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests Hours

Static rock Pressure psig (surface pressure) after Hours

-over -

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

By: Charl L. Coty
Date: 9/23/94

200

Details	of perforat	ed intervals,	fracturing.	or stimulating, physical change, etc.
1.) Yer	forated the	- 41/211 +ul ω/ six sh	ing from	H77H'-479H' in two separate runs t. ruid followed w/ 22 bbl of treated poi. Then pumped in Stages 9 90 bbl of energized acid, 177 bbl bbls of water flush.
. 27 - 53				
· 200	1917		A CALLED THE CONTROL OF THE CONTROL	.सटक विशेष स्थापन स स्थापन स्थापन
	1886	1995		
			Superarchemon George (1967) (1979)	
		erajo Estad esta Osmidē, ē - someto d	i Ot. nacielski	
		a jila yaya da jir Areka da da kara da kara kara kara kara kar		

7377

TO BUILD HE SEE SEEN

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