





Storage

DaspWell



STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION & DARK THE THE PROPERTY OF THE PROPERTY O

Quadrangle Ripley

- Turner

Permit No. J	AC 916		M Est Print Print	RECOR		Oil or Gas	Well Gas (KIND)
Address P. O	. Box 1273;		25, W. Va.	Casing and Tubing	Used in Drilling	Left in Well	Packers
Location (waters	s) Mud	et al Lick Branch	1	Size			ind of Packer
	ract is owned in		cson	13 3/8 10 3/4 8 % 5/8	1159	566 Pulled s	ize of
	re owned byM	<u>-H-M-Enterpr</u> Address Spend	rises, Inc. cer, W. Va.	7 6% 5 3/16		4765 D	epth set
Drilling complete	ed Augu Fron	st 23, 1956)	2	1	P	erf. bottomerf. top
Volume5	/10ths Water /10ths Merc. 3_52	in 7 21,000 - Oris	Inch Inch Skany Cu. Ft.	CASING CEM	ENTED		. FtDate
OilFresh water	255	fest685	24 hrsbbls., 1st 24 hrs. 5 feet	COAL WAS E	TINCI	HESFE	ET 24 INCHES
Formation	Color	Hard or Soft	Тор	Bottom	Oil, Gas or Water	Depth Found	Remarks
Red Rock Slate Red Rock Slate Red Rock Sand Red Rock Slate		/	0 36 70 130 170 238 300 335	36 70 130 170 238 300 335 455	Hole full w Water 685' Hole full w Show gas 39	2½ bailers pater 1270'	per hour

Formation	Color	Hard or Soft	Тор	Bottom	Oil, Gas or Water	Depth Found	Remarks
Red Rock Slate Red Rock Slate Red Rock Sand Red Rock Slate Red Rock Sand Slate Sand Slate Red Rock Sand Red Rock Slate Sand Lime Sand Lime Sand Lime Sand			0 36 70 130 170 238 300 335 455 473 545 549 695 705 730 755 785 875 920 940 955 1206 1270 1375 1438 1455 1475 1500 1565	36 70 130 170 238 300 335 455 473 545 549 551 629 695 705 730 755 785 875 920 940 955 1206 1220 1270 1375 1438 1455 1475 1500 1565	Hole full was Water 685' 2 Hole full was Show gas 395 Gas 4840' 2/ Gas 4848-485 3,521 M FINAL OPEN F 24 Hr. R.P.	Found ter 255; bailers per 1270; 10 W 2" 60 M 2' 5/10 Mer 120 Mer	r hour 7° 23# M - Oriskany
Big Lime	**************************************		1707 1805 1816	1805 1816 1840			

	Formation	Color	Hard or ·Soft	Тор З	Bottom	Oil, Gas or Water	Depth Found	Remarks
# 175	Lime Slate & She Brown Shale Slate & She Brown Shale Slate & She Brown Shale	e - 444 ells ells		1990 2020 3545 3650 3820 4040	2020 3545 3650 3820 4040 4465			
	Oriskany			4735 4839 4871	4839			
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								ing the state of t
						greipe I 7,450 pë 11,550 përsisë ku	Tall of the state	

	Date	November 28	, 19.56
APPROV	ED UNITED	FUEL GAS COMPANY	, Owner
	Ву	(Title)	e de la companya de l
	SUPT., CIVI	L FNGINEERING DEED NEED	

SEP 0 4 1994

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

MAY Division of

Well Operator's Report of Well Work

Farmonametal Protection, BERNARD & HAZEL Operator Well No.: RIPLEY #7340

LOCATION: Elevation: 659.38, Quadrangle: RIPLEY

District: RAVENSWOOD County: JACKSON
Latitude: 1600 Feet South of 38 Deg. 52Min. 30 Sec.
Longitude 8600 Feet West of 81 Deg. 41 Min. 0 Sec.

Company: COLUMBIA GAS TRANSMISSION 1700 MacCORKLE AVENUE S.E. Casing | Used in Left | Cement CHARLESTON, WV 25314-0000 Tubing Drilling in Well|Cu Ft. Agent: ROBERT C. WEIDNER CARE Size-16" Inspector: GLEN ROBINSON Not Arriba Permit Issued: 07/09/93 Well work Commenced: 12-13-13 Well work Completed: 3/2-13/93 Verbal Plugging Permission granted on: Rotary Cable R
Total Depth (feet) 4895' 470 SNUS Fresh water depths (Yth) Salt water depths (ft)

Is coal being mined in area (YND? Coal Depths (ft): 549-551

Coal Depths (ft): 549-551

OPEN FLOW DATA

Producing formation Oriskay Pay zone depth (ft) 4831-4871

Gas: Initial open flow 4200 MCF/d Oil: Initial open flow Bbl/

#Final open flow between initial and final tests Hour

Static rock Pressure 1348 psig (surface pressure) after 34 Hour

Aln

Second producing formation Pay zone depth (ft)

Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/
Final open flow MCF/d Final open flow Bbl/
Time of open flow between initial and final tests Hour
Static rock Pressure psig (surface pressure) after Hour

- 0Ver -

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

of No part-test taken pendang on force job-

or:	COLUMBIA	GAS	TRAN	SMISSION	CORP.
	By:	This	he	yd L	. Coly
	Date:	C	1/27	199	$-\sigma$

Details of Perforated Intervals, fracturing or stimulating, physical change
1.) Pulled 4875.80' (threads on) of 2-3/8" to round tubing -
2.) Pulled 32 joints of 7" caring -a total of 1020.65
3.) String shot and backed off top joint of 8-5/8" Csg- Keplaced W/ new 36' jt of 85/8" 24#/ft Scamber Coung-
4.) Free-pointed and perforated the 8-5/8" casing from 750-752'
5.) Cemented the 85/8" casing w/470 sacks of Class A cement -
Cenert returns to the surface
Existing String - 1010 1 15 15 15 15 15 15 15 15 15 15 15 15 1
(1) Ran Hilan - N80 compto adoption 4886 G.L. 2000 18001
Cencert returns to the surface (c) Re-ran 1010 of original 7" casing Deciment back into 1000 leads of the surface of the surf
With additives Tiges 1800 -
* concing forms: One with the state of the s
NOTE ON BACK OF CLS CONTROLLED COLLEGES 1). DETAILS LANGED AND COLLEGES AND COLLEGE
° 35C/

Permitting STATE OF WEST VIRGINIA Expuse 07/09/95

Permitting STATE OF WEST VIRGINIA Expuse 07/09/95

WELL WORK PERMIT APPLICATION

-			175		المرسوع المسام	12 677
l) Well Ope	rator:	COLUMBIA GA	AS TRANSMISS	ION CORPORAT	ION 10450	(2) 577
2) Operator	's Well N	lumber:	RIPLEY 73	40	3) El	evation:667.71
4) Well typ	e: (a) (Dil_/	or Gas	<u>X_</u> /	The second secon	
	(b) I	f Gas:	Production Deep	Underg	round Storag Shallo	e_X/ w/
5) Proposed	Target F	Formation	(s):	ORISKANY S	AND	-
6) Proposed	Total De	epth: 492	5	feet		
7) Approxim	ate fresh	n water s	trata dept	hs: 57	5 '	
8) Approxim	ate salt	water de	pths:	700'	- Landau and Albania and A	
9) Approxim	ate coal	seam dep	ths:5	49'-551'		
10) Does lan	d contain	n coal se	ams tribut	ary to act	ive mine? Y	es/ No_X/
11) Proposed	Well Wor	A) PULI	L 2-3/8" TUB FORATE & SQU	ING. B)	PULL 7" CSG. & CSG.	TOP JT. OF 8-5/8
12) E) DRILL 25' F) RUN 4-1/2	OF ADDTL. " CSG C	6-1/4" HO EMEN <u>CASIN</u>	/8" CSG. LE. <u>G AND TUB</u> I	D) :NG PROGRAM	REPLACE 7" CSG. CSG. G) ACIDIZE 8	TOP JT. OF 8-5/8 & TOP JT. OF 8- & FRACTURE DOO PSI API FLANG WELLHEAD ASSY CEMENT
TYPE	SI	PECIFICAT	IONS	FOOTAGE I	NTERVALS	WELLHEAD ASS
	Size	Grade	Weight	For drilling	Left in well	
Conductor	16" 13-3/8"		65 48		22 ' 569 '	NOT AVAILABLE
Fresh Water	10"		40.5		-0-	NOT AVAILABLE
Coal	8-5/8"		24		2008'	NOT AVAILABLE
Intermediate	7"		23		4825 '	NOT AVAILABLE
Production	4-1/2"	N	11.6	7	4925'	221 CU. FT.
Tubing	2-3/8"	J	4.7		4850'	NO CEMENT
Liners		1/	while tol	erin 38	CSRA11.1	
PACKERS : Kin	id NONE		,			
/ Siz						
23/2		or Diviso	n of Oil a	and Gas Use	Only	
Fee(s) p	_	V	ork Permit		lamation Fun	d WPCP
	WW-9	WW-		Bond fre	nt Blinke	Agent
ALETON D					(Type)	

Page 1 of 12 ECENTED 1) Form WW2-A Revision 2)	MAY 10 1000
Page 1 of 12 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Page 1 of 10 10 10 10 10 10 10 10 10 10 10 10 10	Operator's well number
(10-91) Environmental 3 (3)	RIPLEY 7340
	API Well No: 47 - 035 - 00916 -FRAC
Permitting Permitting	State - County - Permit
Per Oil & Day	-
Permitting STATE OF WES	ST VIRGINIA
DIVISION OF ENVIRONMENTAL PROT	ECTION, OFFICE OF OIL AND GAS
	TOTAL OF THE WIP GIP
NOTICE AND APPLICATION	FOR A WELL WORK DERMIT
= TOTION AND ANIMOTORY	TOR A WELL WORK PERMIT
4) Surface Owner(s) to be served:	E) (a) Gaal Gaard
	5) (a) Coal Operator:
(a) Name BERNARD AND HAZEL OFFUTT	
Address RT 2, BOX 144	Address
SANDYVILLÉ, WV 25275	
(b) Name	(b) Coal Owner(s) with Declaration
Address	NT DEDNARD AND UATEL OFFUTT
	Address RT 2 ROX 144
(c) Name	SANDVILLE WV 25275
	Address RT. 2, BOX 144 SANDYVILLE, WV 25275
Address	Name
	Address
6) Inspector <u>GLEN P. ROBINSON</u>	(c) Coal Lessee with Declaration
Address <u>BOX 1</u>	Name NONE
BELLEVILLE, WV 26133	Address
Telephone (304) - 465-1911	
(304) = 367-1832	
Address BOX 1 BELLEVILLE, WV 26133 Telephone (304) - 465-1911 (304) - 367-1832 TO THE PERSON(S) NAMED A Included is the lease or leases or	פרווף שאצף ארשורים ששאש.
10 IIII I IMBON(B) NAPIMD A	DOVE TARE NOTICE THAT:
Included is the lease or leases or	r other continuing contract or
contracts by which I hold the right to	extract oil and gas <u>OR</u>
Included is the information requi:	red by Chapter 22B, Article 1,
Section 8(d) of the Code of West Virgin	nia (see page 2) 👻
I certify that as required under (Chapter 22B of the West Virginia Code
I have served copies of this notice and	d application, a location plat, and
accompanying documents pages 1 through	on the above named parties by:
Personal Service (Affidavit a	the above named parties, by:
V Cortified Mail (Deatherholm	accached;
Certified Mail (Postmarked po	ostal receipt attached;
Publication (Notice of Public	cation attached)
	000 UNA AND CON CON UNIO SEE SEE CON
I have read and understand Chapter	r 22B and 38 CSR 11-18, and I agree
to the terms and conditions of any perm	mit issued under this application.
I certify under penalty of law that	at I have personally examined and am
familiar with the information submitted	on this application form and all
attachments, and that based on my inqui	iry of those individuals immediately
responsible for obtaining the information	ion. I bolious that the information
is true, accurate, and complete.	ion, i believe that the information
and aware that there are signific	cant penalties for submitting false
information, including the possibility	of fine and imprisonment.
OFFICIAL SEAL Well Operator	COLUMBIA CAS TRANSMISSION CORP.
NOTARY PUBLIC STATE OF WEST WIRCHNIA BY:	Veilne
WAISON I. TERRY IR WITES: DIRECTOR.	DRILLING & MAINTENANCE
P. O. BOX 1273	0. BOX 1273
CHARLESTON WV 25225	RLESTON, WV 25325-1273
MI COMMISSION EXPIRES 05 - 14 2000	-357-2459
Subscribed and sworn before me this 2/	
24 June 11 Description of Chils 24	day of, 19 <u>93</u>
1 A A	
wallow & Jany	Notary Public
My commission expires That 16, 19	93



JAN 0 5 1996

State of West Virginia Division of Environmental Protection Section of Oil and Gas

Permitting Office of Oil & Gas

Well Operator's Report of Well Work (fracturing)

Farm name: OFFUTT, BERNARD & HAZEL Operator Well No.: Ripley 7340

LOCATION: Elevation: 659.38 Quadrangle: RIPLEY

District: RAVENSWOOD County: JACKSON

Latitude: 1600 Feet South of 38 Deg. 52Min. 30 Sec. Longitude 8600 Feet West of 81 Deg. 40 Min. Sec.

CAC PRANCHICATION				
Company: COLUMBIA GAS TRANSMISSION P.O. BOX 1273	Casing	Used in		Cement Fill Up
CHARLESTON, WV 25325-1273	& Tubing	Drilling		
Agent: RICHARD L. COTY	Size			
Inspector: GLEN ROBINSON Permit Issued: 08/11/95		Same as	 reported	Augustus Communication Communi
Fracturing Commenced: 12-26-95 Fracturing Completed: 12-28-95 Verbal Plugging		in 1994.		
Permission granted on: Rotary Cable Rig				
Total Depth (feet) Fresh water depths (ft)				1
Salt water depths (ft)				
Is coal being mined in area (Y/N)?Coal Depths (ft):	Control of the Contro			

OPEN FLOW DATA

Producing formation Oriskany Sandstone Pay zone depth (ft) 48 Gas: Initial open flow 2600 MCF/d Oil: Initial open flow NA Final open flow 2600 MCF/d Final open flow NA Time of open flow between initial and final tests Static rock Pressure 1000 psig (surface pressure) after 72	_Bbl/d _Bbl/d _Hours
Second producing formation Pay zone depth (ft) Gas: Initial open flow MCF/d Oil: Initial open flow Final open flow MCF/d Final open flow	_Bbl/d _Bbl/d
Time of open flow between initial and final tests Static rock Pressure psig (surface pressure) after	Hours Hours

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.

For: C		GAS TRAN		11 L	
В	y:	Repha	rd Z.	Coty	
D	ate:	1/3/96		V	

Spotted 500 gallons 15% HC1 acid followed by

18 barrels of water. Schlumberger perforated

from 4834'-4858' with .41" diameter perforations
at 6 spf.

12-27-95

Nowsco fractured well with 239 barrels of 30 pound gelled water 13,500 pounds of 20/40 sand. Breakdown at 2730 psig at 16 barrels/minute Treated at 19.5 barrels/minute at 2842 psi.

I.S.I.P. 2900 psi.

12-28-95 Used coiled tubing unit to unload liquid. Blew well into portable steel tank. Open Flow 2,600 Mcfd. Shot in pressure 1000 psig.

FORM WW-2B Page __of [035 916 Aac. STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS 10450 (2 WELL WORK PERMIT APPLICATION Well Operator: Columbia Gas Transmission Corporation .) Operator's Well Number: 7340 _____3) Elevation:___ Isruel 08/11/95 Well type: (a) Oil $\underline{\hspace{0.1cm}}/\hspace{0.1cm}$ or Gas $\underline{\hspace{0.1cm}}/\hspace{0.1cm}$ If Gas: Production_/ Underground Storage X/ Shallow Deep Proposed Target Formation(s):___ 5) Proposed Total Depth: 4856 feet 6) Approximate fresh water strata depths:_____ 7) Approximate salt water depths:_____ 8) Approximate coal seam depths: 9) Does land contain coal seams tributary to active mine? Yes___/ No___/ 10) Proposed Well Work: Perforate Oriskany sandstone from 4834'-4858' 11) at 6 spf. and perform hydraulic fracture treatment. 12) CASING AND TUBING PROGRAM FOOTAGE INTERVALS CEMENT _ SPECIFICATIONS TYPE Left in Fill-up Weight For (cu. ft.) Size Grade per ft. drilling well Conductor Fresh Water Coal Intermediate Production Tubing Liners PACKERS : Kind_ Sizes_ Depths set For Divison of Oil and Gas Use Only Fee(s) paid: | | | Well Work Permit | | | Reclamation Fund | | | WPCP

All Information is same as submitted in 1993 except 170. 11.

Page	1 of 1		Date: June 19, 1995	
	WW2-A	2)	perator's well number	
(09/8 ile		31	RIPLEY 7340 API Well No: 47 - <u>035</u> -	- 00916-FRAC
116	Сору	3,	State - County	
			_	
		STATE OF WEST		
		DEPARTMENT OF ENERGY, DIV	SION OF OIL AND GAS	
		NOTICE AND APPLICATION FO	R A WELL WORK PERMIT	
4)	Surface O	wner(s) to be served:	5) (a) Coal Operator:	
	(a) Name	BERNARD AND HAZEL OFFUTT	Name NONE	
		ROMXEXOXXRXXOXXRXXXXXXXXXXXXXXXXXXXXXXXX	Address	
		177, JANUIVILLE, NV 23273	(b) Coal Owner(s) with Dec	claration
			Name BERNARD AND HAZEL OF	FUTT
			Address RT. 2, BOX 144	
	(c) Name		SANDYVILLE, WV 25275	
	Address _		Address	
	-	CLEN D. DODINGON	(-)	
6)	Inspector	GLEN P. ROBINSON BOX 1	(c) Coar Lessee with Deci	aration
	Address _	BELLEVILLE, WV 26133	Address	
	Telephone	(304) - 465-1911		
		(304) - 367-1832 TO THE PERSON(S) NAMED AB	עב האגה איטהוכה ההאה.	
		10 THE PERSON(S) NAMED AD	VE TAKE HOTTES THAT.	
		is the lease or leases or		or
		hich I hold the right to is the information requir		1
Sect	ion 8(d) o	f the Code of West Virgin	a (see page 2) Storage leas	e on file in Chas. offic
	I certify	that as required under C	apter 22B of the West Vir	<u>ginia Code</u>
		copies of this notice and		
acco	mpanying d Pers	ocuments pages 1 through onal Service (Affidavit a	on the above hamed par tached)	cles, by.
	X Cert	ified Mail (Postmarked po	tal receipt attached)	
	Publ	ication (Notice of Public	tion attached)	
	I have re	ad and understand Chapter	 22B and 38 CSR 11-18, and	I agree
to t	he terms a	nd conditions of any perm	t issued under this appli	cation.
	I certify	under penalty of law tha	I have personally examin	ed and am
		the information submitted nd that based on my inqui		
resp	onments, a	or obtaining the informati	n. I believe that the inf	ormation
	rue, accur	ate, and complete.		
		e that there are signific		ng false
) uto	CALLE TO B AND A	ncluding the possibility	r fine and imprisonment. COLUMBIA/GAS TRANSMASSION CORI	PORATION
NOTA	OFFICIAL RY PUBLIC STATE O	SEAL 1	hard L. Coly	
>	ST. T MCSTAW	RRY, JR. A Its:	MANAGER, WELL SERVICES	
•	P. O. SOX : CHARLSTON, V.	77 25325 C	P. O. BOX 1273 CHARLESTON, WV 25325-1273	Walter the state of the state o
	DOMMISSION EXP.R.		(304) 357-3034	
ubs	cribed and	sworn before me this _2	tday of June	, 19 95
111	The O	- Vanist.	U	ary Public
My c	ommission	expires 105/16/1200	NOC	
unit.				