

## State of West Virginia DEPARTMENT OF ENERGY Division of Oil and Gas

Well Operator's Report of Well Work

Fa	DIVISION OF DEPARAMENT	WELLENGS	CHARLES
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Operator Well No.: CNGD 3889

LOCATION:

Elevation: 848.00

Quadrangle: WEST UNION

District: WESTUNION County: DODDRIDGE Latitude: 8935 Feet South of 80 Deg. 45Min. 0 Sec. Longitude 1785 Feet West of 80 Deg. 45 Min. 0 Sec.

Company: CNG DEVELOPMENT CO. A DEL

P. O. BOX 15746

PITTSBURGH, PA 15244-0000

Agent: RODNEY J. BIGGS

Inspector: MIKE UNDERWOOD

Permit Issued: 11/29/89

Well work Commenced: 12/8/89
Well work Completed: 12/15/89

Verbal Plugging

Permission granted on:

Rotary Cable Rig Total Depth (feet) 5110'

Fresh water depths (ft) 50', 165' 356'

Salt water depths (ft)

Is coal being mined in area (Y/N)? N Coal Depths (ft):

Casing	Used in	Left	Cement
Tubing	Drilling	in Well	Fill Up   Cu. Ft.
Size			
11 3/4"	200	200	To Surf.
8 5/8"	1242	1242	To Surf.
4 1/2"	5077	5077	250 sks
1 1/2"	4821	4821	
1 000000000000000000000000000000000000			

OPEN FLOW DATA

Producing formation Alexan	der Pay zone depth (ft) 4888-4846
Gas: Initial open flow	MCF/d Oil: Initial open flow Bhl/d
12/28/89 Final open flow 978	MCF/d Final open flow Rbl/d
Time of open flow betwe	en initial and final tests 4 Hours
Static rock Pressure 950	_psig (surface pressure) after24Hours
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

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.

				Biggs					
For:	CNG	DEVE	LOF	MENT	CO.	A	DEL.	CORP	-
				~	9		$\sim$		

By: Date: January 3, 1990

Perforated Alexander 4874 - 4888, 7 holes; 4866 - 4870, 4 holes; 4846 - 4860, 11 holes; .39HS

Foam Frac Alexander (70Q) Break 1850, Avg TPSI 2718, Avg Rate 20 BPM, HHP used 999, ISIP 2150 Max Sand Conc. 6#/gal, Used 500 gals 15% HCL, 5000# 80/100 Sand, 120,000# 20/40 Sand, 793,000 SCFN<sub>2</sub>

Cl	ay, Sd & Sh	0	1480	1/2"	stream water	@	50'
L.	Lime	1480	1509		stream water		
Sd	& Sh	1509	1518	1/2"	stream water	@	356'
В.	Lime & Injun	1518	1680				
Sd	& Sh	1680	5110				

## LOG TOPS

Big Lime	1520	1612
Big Injun	1612	1680
Weir	1830	1924
Berea	2031	2046
Gordon Group	2226	2280
Warren	2884	2944
U. Speechley	2962	3096
Bradford	4072	4160
Benson	4558	4595
Alexander	4806	4904



DIVISION OF OIL & GAS DEPARTMENT OF ENERGY

47.017-3760 Issued 11/29/89 AND GAS Expres 11/29/91

	STATE		EST_	VIRGINIA	Ą
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	1 11/	4/18	4		
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	WET.	T.	WORK	DEB	MIT	ADDI	7.0	ו ייף אי	ON

1)	Well Operator:	CNG DEVELOPMENT COMPANY /U110 (8) 670
2)	Operator's Well	Number: CNGD 3889 3) Elevation: 848
		Oil/ or Gas X_/
	(b)	If Gas: Production X / Underground Storage/ Shallow X /
5)	Proposed Target	Formation(s): Alexander
6)	Proposed Total D	Depth: 5072 feet
7)	Approximate fres	sh water strata depths: 106 376; 807 347
8)	Approximate salt	water depths: none
9)	Approximate coal	seam depths: 172 / none
10)	Does land contain	n coal seams tributary to active mine? Yes/ No_X_/
11)	Proposed Well Wo:	
12)		CASING AND TUBING PROGRAM

TYPE	<u> </u>	PECIFICAT	rions	FOOTAGE IN	TERVALS	CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up
Conductor		See .				
Fresh Water	11 3/4	H-40	42	200	200	To surface
Coal						To surface
<u>Intermediate</u>	8 5/8	X-42	23	1250	1250	38CSR1811.2.2 & 38CSR1811.3
Production	4 1/2	J-55	10.5	5072	5072	200-400 sks 38CSR18-11.1
Tubing	1 1/2	CN-55	2.75	4900	4900	
Liners					161124	PRINTER

Liners				are a constant of the constant		In sep	MIND DIST	ta
PACKERS	: Kind						rac A C	
	Sizes_					CALL NO	N 08 1999	ولال
1	Depths	set _						4 200
00						<u> </u>	<del>***                                  </del>	s <sup>.</sup>
		For	Divison o	E Oil and	Gas, Use Only	DEPARTI	TENT TILL	ŜΥ
Fee (	(s) paid:		Well Work	Permit	Reclamat:	ion Fund	WPCP	ı
Plat	: Story	₩-9 (	WW-2BC	Bond		ul.	Agen	t
			* <b>U</b>		/ (Type)	) 2		

Form WW2-A (09/87)File Copy



Date	<u> </u>	Octo	ber :	30.	1989		
	cator						
		CNGD	3889	)			
API	Well	No:	47	_	017	 3760	

State - County - Permit

DIVISION OF OIL & GAS

DEFARTMENT OF ENERGY
STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

## NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4)		wher(s) to be served:	5) (a) Coal Operat	or:
		Charles Wellings	Name	
	Address _	New Milton Star Route, Box	2 Address	
		West Union, WV 26456		
	(b) Name	Daniel J. Wellings	(b) Coal Owner(s)	with Declaration
		New Milton Star Route, Box		
		West Union, WV 26456	Address 105 High St.	D O Pox 425
	(c) Name			
	Address			WV 26456
	Address _		Name	
			Address	
6)	Thenester	Mike Underwood	(-) () [	hh D1
0 )			(c) Coal Lessee wi	th Declaration
	Address _	Route 2, Box 135	Name	
		Salem, WV 26426	Address	
	Telephone	2 (304) - 782-1043	*	
		TO THE PERSON(S) NAMED	ABOVE TAKE NOTICE THA	T:
				pet-magazini
	Included	is the lease or leases	or other continuing c	ontract or
cont	racts by w	which I hold the right t	o extract oil and das	UB
y	Included	is the information requ	ired by Chapter 229	Article 1
Coo+	included	of the Code of Took Wine	rired by Chapter 22B,	Article 1,
sect	1011 0 (0) (	of the Code of West Virg	nnia (see page 2)	
	1 certify	that as required under	: Chapter 22B of the ${ t W}$	<u>est Virginia Code</u>
I ha	ve served	copies of this notice a	ind application, a loc	ation plat, and
acco	mpanying d	locuments pages 1 throug	h on the above na	med parties.bv:
	Pers	sonal Service (Affidavit	attached)	pararo, 2, 2, 1
		ified Mail (Postmarked		04)
	Dub!	lication (Notice of Publ	postar receipt attach	20,
	Fub	icacion (Notice of Publ	ication attached)	
	<b>*</b> 1			<del></del>
	I have re	ead and understand Chapt	er 22B and 38 CSR 11-	18, and I agree
to t	he terms a	and conditions of any pe	ermit issued under thi	s application.
	I certify	y under penalty of law t	hat I have personally	examined and am
fami	liar with	the information submitt	ed on this application	n form and all
atta	chments a	and that based on my inq	wire of those individ	unle dimmediatelu
~~~	ongible for	and that based on my ind	diry of those individ	uais immediately
resh	OUSIDIE I	or obtaining the informa	icion, i believe that	the information
is t		ate, and complete.		
	I am awar	e that there are signif	icant penalties for s	ubmitting false
info	rmation, i	including the possibilit	y of fine and impriso	nment.
			or / CNG Development Comp	
		By: 365		**************************************
			rui cor Burchasina/Bushasi	·
		Addross O	ervisor Purchasing/Product	lon Services
			Park Ridge Center, P. O.	Box 15746
			sburgh, PA 15244	
a1		Telephone	(412) 787-4117	
Subs	cribed and	sworn before me this	30 day of <u>October</u>	, 19 <u>89</u>
		6/1/2 N/1/2 1		-
		MUL IN ONE	Notarial Seal	Notary Public
Мус	ommission	expires	Barbara A. Schaub, Notary Public Findley Twp., Altugheny County	
			My Convinces on Expires June 14, 1993	
		•	Member, Pennsylvania Association of Alexander	
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