

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

DIVISION OF OIL & GREWWell Operator's Report of Well Work

HEASTER, CHARLES & PATSY Operator Well No.: CNGD 3621 Farm name:

LOCATION: Elevation: 889.00

Quadrangle: OXFORD

District: WESTUNION County: DODDRIDGE
Latitude: 5915 Feet South of 39 Deg. 15Min. 0 Sec.
Longitude 11025 Feet West of 80 Deg. 45 Min. 0 Sec.

Company: CNG DEVELOPMENT CO., A DE

P. O. BOX 15746

15244-0000 PITTSBURGH, PA

Agent: RODNEY J. BIGGS

Inspector: MIKE UNDERWOOD

07/03/89 Permit Issued: Well work Completed: 08/17/89
Verbal plussia Verbal Plugging

Permission granted on:
Rotary X Cable Ric
Total Depth (feet) 5200' Fresh water depths (ft) 10', 69', 240',

730', 1050' Salt water depths (ft)

Is coal being mined in area (Y/N)?_N Coal Depths (ft): 167-170, 720-723

Casing	Used in		Cement
Tubing	Drilling		Fill Up Cu. Ft.
Size	an comp comp comp comp comp comp comp comp		
11 3/4"	178	178	To Surf.
8 5/8	759	759	To Surf.
4 1/2"	5069	5069	450 sks
1 1/2"	4862	4862	
		manage opposite	

OPEN FLOW DATA

Producing formation Alexander	Pay zone depth (ft)4872-4910
Gas: Initial open flow Mo	CF/d Oil: Initial open flow Bbl/d
9/8/89 Final open flow 880 M	CF/d Final open flow Bbl/d initial and final tests 4 Hours
Time of open flow between	initial and final tests 4 Hours
Static rock Pressure 975 p	sig (surface pressure) after 24 Hours
Second producing formation	Pay zone depth (ft)
Second producing formation Gas: Initial open flow Mo	Pay zone depth (ft)
Gas: Initial open flow Mo	F/d Oil: Initial open flow Bbl/d F/d Final open flow Bbl/d
Gas: Initial open flow More Final open flow More Time of open flow between	F/d Oil: Initial open flow Bbl/d

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: Rodney J. Biggs, Manager

CNG DEVELOPMENT CO., A DELAWARE CORP.

By: By:

Date: September 12, 1989

007 8 1989 Perforated Alexander 4904 - 4910 (6 holes), 4898 - 4900 (2 holes), 4889 - 4893 (4 holes), 4872 - 4882 (10 holes) .39 HSC

Foam Frac (70Q) Alexander - Break 1830, Avg TPSI 2743, Avg Rate 20 BPM, HHP used 1008, ISI 1520, Used 500 gals 15% HCL, 5000# 80/100 Sand, 120,000# 20/40 Sand, 702,280 SCFN₂ BHTP 3125, Max Sand Conc. 6#/gal.

	Sd, Sh & RR	0	167	2" stream H ₂ O @ 10'
	Coal	167	170	3" stream at 69'
	Sd, Sh & RR	170	720	1 1/2" stream at 240'
	Coal	7.20	723	2" stream at 730'
	Sd, Sh & RR	723	1552	1/4" stream water at 1050'
	Big Lime	1552	1647	
	Shale	1647	1659	Coal at 167 - 170
	Injun	1659	1700	720 - 723
	Sd, Sh & RR	1700	5200	
LOG TOPS	-			
	Warren	2928	2978	
	U. Speechley	2996	3084	
	Speechley	3280	3520	
	Balltown	3590	3770	
	Riley	4420	4530	
	Benson	4585	4646	
	Alexander	4839	4930	



STATE OF WEST VIRGINIA Sound 7/3/89 Expres 7/3/9/ DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS WELL WORK PERMIT APPLICATION

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	;			ANY /0//		
2) Operator	's Well	Number:	CNGD 3621		3) E	levation: 889
4) Well typ	pe: (a)	0il_/	or Gas	5 <u>X</u> /		
	(b)	If Gas:		n <u>X</u> / Undergr	ound Storag	
5) Proposed	l Target	Formation	ı(s):_Alexa	nder		
6) Proposed	l Total D	epth: _505	0	feet		
7) Approxim	nate fres	h water s	trata dept	hs: Alexand	ler	
8) Approxim	nate,salt	water de	epths:	none		
9) Approxim	mate coal	seam dep	oths:	none		egypan kannan ann an eilde 1900 (1900) an agailt (1900) an agailt (1900) an agailt (1900) an agailt (1900) an a
10) Does lar	nd contai	n coal se	eams tribut	tary to acti	ve mine?	Yes/ No_x_/
11) Proposed	Well Wo	rk: Dril	l new well			-
12)		•				
		CASIN	IG AND TUB	ING PROGRAM		
TYPE	S	PECIFICAT	CIONS	FOOTAGE IN	TERVALS	CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor						
Fresh Water	11 3/4	H-40	42	200	200	To surface
Coal						To surface
Intermediate	8 5/8	X-42	23	1250	1250	38CSR1811.2.2 & 38CSR1841.3
Production	4 1/2	J-55	10.5	5050	5050	200-400 sks 38CSR18-11.1
Tubing	1 1/2	CN-55	2.75	4950	4950	
Liners					- Andrews in the Control of the Cont	
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	zes					JUN 1 5 198
	ths set					DIVISION OF OIL 8
5,	E	er Diviso	on of Oil a	and Gas Use	Only	DEPARTMENT OF E
Fee(s)	paid: 47	Well w	Vork Permij	Recl	amation Fur	nd WPCP
Plat (Ww-9	WW-	-2B (1) I	Bond Olfak	Type)	_ Agent
Plat (e-ww	Ww-	-2B (1)		Type)	_ Agent

Page	1 of
Form	WW2-A
(09/8	7)
File	Copy



Date	:	June	8,	198	9			
Open	rator	's w	ell	nι	ımber			
		CNGD	362	1				
API	Well	No:	4	7 -	- 017	_	3733	
		~ -			~		75	

DIVISION OF OIL & GAS DEPARTMENT OF ENERGY

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4)	Surface Owner(s) to be served:	5) (a) Coal Operator:
	(a) Name Charles P. & Patsy J. Heaster	Name
	Address P. O. Box 112	Address
•	West Union, WV 26456	
	(b) Name Michael P. & Keiko A. Heaster	(b) Coal Owner(s) with Declaration
	Address c/o P. O. Box 112	Name Robert L. Holland, Jr. Agent
	West Union, WV 26456	Address 105 High St., P. O. Box 425
	(c) Name Clarence B. & Dawn E. Conner	West Union, WV 26456
	Address <u>www.xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx</u>	StName
	West Union, WV 26456	Address
	•	
6)	Inspector <u>Mike Underwood</u>	(c) Coal Lessee with Declaration
	Address Route 2, Box 135	Name
	Salem, WV 26426	Address
	Telephone (304)	
	TO THE PERSON(S) NAMED AB	OVE TAKE NOTICE THAT:
***************************************	Included is the lease or leases or	
	acts by which I hold the right to	
<u>X</u>	Included is the information requir	ed by Chapter 22B, Article 1,
Secti	on 8(d) of the Code of West Virgin	ia (see page 2)
	I certify that as required under C	hapter 22B of the West Virginia Code
I hav	re served copies of this notice and	application, a location plat, and
accon	mpanying documents pages 1 through	on the above named parties, by:
	Personal Service (Affidavit a	
	X Certified Mail (Postmarked po	stal receipt attached)
	Publication (Notice of Public	ation attached)
	I have read and understand Chapter	22B and 38 CSR 11-18, and I agree
to th	ne terms and conditions of any perm	it issued under this application.
	I certify under penalty of law tha	t I have personally examined and am
ramıl	iar with the information submitted	on this application form and all
attac	inments, and that based on my inqui	ry of those individuals immediately
respo	onsible for obtaining the informati	on, I believe that the information
	ue, accurate, and complete.	
	I am aware that there are signific	ant penalties for submitting false
intor	mation, including the possibility	The state of the s
	Well Operator	CNG Development Company
	By: 30/1/2	uch_
		isor Purchasing/Production Services
		rk Ridge Center, P. O. Box 15746
		urgh, PA 15244
Cuba	Telephone	(412) 787-4117
	cribed and sworn before me this 8	_ day of NOTARIAL SEAL June , 19 89
Ks.	LAIA I RANGER	BARBARA L. RANDALL, NOTARY PUBLIC
My	mmission expires	FINDLAYTOWNSHIP ALLEGHENY COUNTY Notary Public
uy co	ommission expires	MY COMMISSION EXPIRES APRIL 5, 1993
	5- 5	Member, Pennsylvania Association of Notaries