

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

Well Operator's Report of Well Work

Farm	name:	MICHELS,	JOHN	W	&	EPPA	Μ.	Operator	Well	No.:	CNGD	3549

LOCATION: Elevation: 1041.00 Quadrangle: CENTER POINT

District: MCCLELLAN County: DODDRIDGE
Latitude: 14250 Feet South of 39 Deg. 25Min. 0 Sec.
Longitude 5940 Feet West of 80 Deg. 40 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: 04/20/90Well work Commenced: 10/30/90Well work Completed: 11/06/90

Verbal Plugging

Permission granted on:

Rotary X Cable Rig
Total Depth (feet) 5428'
Fresh water depths (ft) 50'

Salt water depths (ft) 1160', 1385'

Is coal being mined in area (Y/N)? N Coal Depths (ft): 63-65;

Casing	Used in	Left	Cement Fill Up Cu. Ft.	
Tubing	Drilling	in Well		
Size				
11 3/4"	129	129	To Surf.	
8 5/8"	1485	1485	To Surf'	
4 1/2"	5343	5343	200 sks	
1 1/2"	5114	5114		

OPEN FLOW DATA

Producing formation	on Benson	Pay zone depth (f	t)5131-36
Gas: Initial open	flow MCF/d Oil	: Initial open flow	Bb1 /d
11/15/90 Final open fl Time of open	ow 158 MCF/d	Final open flow	Bbl/d
Time of open	flow between initial	and final tests $\frac{1}{4}$	Hours
Static rock Pressu	ire <u>1125</u> psig (sur	face pressure) after _	24 Hours
Second producing i	formation	Pay zone depth (f	t)
Gas: Initial open	flowMCF/d Oil	: Initial open flow	Bbl/d
Final open fl	low MCF/d	Final open flow	Bbl/d
Time of open	flow between initial	and final tests	Hours
Static rock Pressu	repsig (sur	face 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.

For: Rodney J. Biggs, Manager

CNG DEVELOPMENT CO. A DEL. CORP.

By:
Date: November 19, 1990

Perforated Benson 5131 - 36, 15 holes, .39" HSC

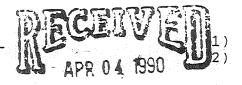
30# Gel Grac - Break 2500#, Ave HHP 1800#, Ave Rate 30, Ave Pres. 2450, Max Tr Pr. 3070, Total Acid 500 gal, Total Sand 65,000#, Max Conc. 5#/gal, Total Fl. 780 bbl, SL Fl. 488 bbl, ISIP 1600/2000, 5 min 1500.

Clay, Sd & Sh	0	63	1/2" stream water @ 50'
Coal	63	65	Damp @ 1160'
Sd, Sh & RR	65	1955	Damp @ 1385'
B. Lime/Injun	1955	2170	Damp @ 1590'
Sd & Sh	2170	5428	

	LOG TOP	S CNGD	3549	
Little Lime	1953	1980		
Blue Monday	1980	2000		
Big Lime	2000	2058		
Big Injun	2058	2120		
Pocono	2120			
Weir Sd	2324	2422		
Berea	2574	2593		
Devonian	2615			
Thirty Ft. Sd	2763	2821		
Warren Sd	3440	3484		
Bradford Sd	4606	4703		
Riley	4936	5058		
Benson	5129	5172		
Alexander	5184			

Form WW2-A (09/87)File Copy

4)



DEPARTMENT OF ENERGY

Date: March 20,	1990
Operator's well	number
CNGD 3549	

DIVISION OF OIL & GAS 3) API Well No: 47 - 017 - 3809

State - County - Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

Surface Owner(s) to be served: 5) (a) Coal Operator:

	(a) Name <u>John W. & Eppa M. Michels</u>	Name	
	Address <u>Centerpoint Star Route, Box 108</u>	Address	
	West Union, WV 26456	· .	
	(b) Name	(b) Coal Owner(s) v	with Declaration
	Address	Name XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
	<u> </u>	Address XXXXXXXXXXXXXXXX	
	(c) Name	XW X X X X X X X X X X X X X X X X X X	X 2645 6X
	Address	Name Herbert Carroll	
		Address Rt. 2, Box 111	
		West Union, WV	
6)	Inspector Mike Underwood	(c) Coal Lessee wit	
	Address Route 2, Box 135	Name	
	Salem, WV 26426	Address	
	Telephone (304)- 782-1043		
	TO THE PERSON(S) NAMED	ABOVE TAKE NOTICE THAT	
	APPEAR I CHEER AND A CHEER CHE		
	Included is the lease or leases	or other continuing co	ntract or
contr	cacts by which I hold the right t	o extract oil and gas	OR
X	Included is the information requ	ired by Chapter 22B. A	Article 1
Secti	ion 8(d) of the Code of West Virg	inia (see page 2)	11 (11 (1)
	I certify that as required under	Chapter 22B of the We	est Virginia Code
I hav	ve served copies of this notice a	nd application a loca	etion plat and
accor	mpanying documents pages 1 throug	h on the shove nor	ed partice by:
	Personal Service (Affidavit	attached)	med parties, by:
	Certified Mail (Postmarked	nostal rossint attach	. .
	Publication (Notice of Publ	postar receipt attache	:d)
	rabifederon (Motite of Fabi		
	I have read and understand Chapt	er 22B and 38 CCP 11-1	8 and I agree
to th	ne terms and conditions of any pe	rmit issued under this	o, and ragree
	I certify under penalty of law t	hat I have never all:	application.
famil	liar with the information submitt	ed on this application	examined and am
attac	chments, and that based on my inq	ed on this application	l lorm and all
resno	onsible for obtaining the informa	tion I believe that t	als immediately
is	cue, accurate, and complete.	cion, i believe that t	ne information
		Sannt namelting for a	
info	I am aware that there are signif	icant penaities for st	ibmitting raise
211101	rmation, including the possibilit	y or rine and imprisor	iment.
	weil obeidto	CNG Development Compa	ny
	By:	Jack	
	Its: Super	rvisor Purchasing/Producti	on Services
		Park Ridge Center, P. O. B	ox 15746
		sburgh, PA 15244	
Cubaa	Telephone	(412) 787-4117	
Jupst	cribed and sworn before me this _	20 day of March	, 1990
	1911, ASW	Notarial Seal	
My Co	ommission expires	Barbara A. Schaub, Netary Public	Notary Public
. my Co	Jumitssion expires	Firstlay Twp., Allegheny County	
		My Commission Expires June 14, 1993	

017-3809 Issued 4/20/90 Expres 4/20/92 Page_of_

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS WELL WORK PERMIT APPLICATION

1) Well o	perator:	CNG DEV	ELOPMENT COM	PANY /0//	0 (5)	286			
2) Operat	or's Well	Number:	CNGD 3549	-		Elevation: 1041			
4) Well t	ype: (a)	0il_/	or Ga		The second secon	72C 4GC10#1. 1041			
			Production	n <u>X</u> / Underg	round Stora	age /			
,	(b) If Gas: Production X / Underground Storage/ Deep/ Shallow X /								
•	Denson								
	Proposed Total Depth: 5200 feet								
7) Approx	imate fre	sh water	strata dep	ths: 517					
8) Approx	imate sal	water d	epths: <u>n/</u>	a					
9) Approx	imate coal	. seam de	pths: 36	6. 616	tools.				
10) Does la	and contai	n coal s	eams tribu	tary to act	ive mine?	Yes/ No_X_/			
	ed Well Wo		rill new wel:	1					
12)				Deilles	timulate 1	Navellell.			
		CASI	NG AND TUB	ING PROGRAM					
TYPE	s	PECIFICA'	TIONS	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	120	120	To surface			
Coal									
ntermediate	8 5/8	X-42	23	1500	1500	To surface 38CSR1811.2.2			
roduction	4 1/2	J-55	10.5	5200	1500	& 38CSR1811.3			
ubing	1 1/2	CN-55	2.75		5200	38CSR18-11.1			
iners	2		2.73	5000	5000				
ACKERS: Kind									
Sizes									
Depths set									
For Divison of Oil and Gas Use Only DEPARTMENT OF LINEAGY									
Fee(s) paid: Well Work Permit Reclamation Fund WPCP									
Plat I	Agent								
(Type)									