







1)	Date:	November 8,	. 12, 85
2)	Operator's Well No.	2248	

3) API Well No. \_

47 -091 -0527

Permit

## STATE OF WEST VIRGINIA

	Ja N	01 7 7	, 1000	DEF	PARTMENT	OF ENERG	Y, OIL AN	D GAS DIV	ISION	
		ALL ME	OH & G	AS		CATION FOR				
Ax	WHILE AFF	IMENT	OF ENE	RGY	v				-	
4)	WELL IT	PE: A C	)ii	/ Ga	ıs X					
e \	LOCATIO	B (1	ir "Gas",	Production	1	/ Under	ground storag	e	/ Deep	_/ Shallow/)
(د	LOCATIO	IN: EN	evation: _	Knott	sville	Water	shed:	<u>riag</u> Tawlor	Quadrangle: _	Thomaton
«۱	WELL OF	וע )מרדגמס	Strict: CNG Der	velopma	ent Co c	ODE 10/	70 3	10)101	Quadrangle: _ DAGENT <u>Gary N</u>	inornton
U)	Address	c/o Pa	aul W.	Garre	tt. P.O.	Box 157	4.6	DESIGNATE	CEOSCHIEG	Corporate Park
	Madiess				A 15244		70			igeport, WV 26330
g 'n	OIL & GAS	S INSPEC	חד פחד	BE NOTII	***************************************	,	D) I		ONTRACTOR:	igepoit, wv 20330
Ο,	Name	Do	onald 1	Ellis					Sam Jack	Drilling Co.
	Address	7.6	504 Cra	ab Appi	le Lane		1	Address	P.O. Box	
	7 144.00			t, WV	~ <del>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</del>			Mudicss	***************************************	on, WV 26201
10)	<b>DBUDUCE</b>	กพะเำ	WODE:	Deill	X / F	trill desper	. ,	Dadeill	/ Stimulate	
10,	i KOI OSE.	. WELL	work.			tion/				^
						ge in well (spec				
11)	GEOLOGI	CAL TAR	GET FOR				-117]			
* + 3	12) Estima	ted denth	of complet	ed well	5300		feet			
						feet			o foot	
					70 <b>, 7</b> 00		,		e area? Yes	( ) 1
15)	CASING A					· · · · · · · · · · · · · · · · · · ·	Is Coal Del	ng maneo m m	e alea: les	/ NO/
•	LSING OR	II O I O DI		CIFICATIONS		\$1 E	OOTAGE INTER	V 4 7 C	7	åt –
	ibing type	Size	Grade	Weight per ft.	New Used		1	Left in well	CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
Con	ductor									Kinds
Fres	h water	11-3/4	H-40	42	х	4	0	40	To Surface	By Rule 15.05
Coa		-	-	ļ						Sizes
inter	mediate	8-5/8	·	23	х	90	<u> </u>	900	To Surface	By Rule 15.05
Prod	duction	4-1/2	7	10.5	Х	530	0	5300	200-400	Depths set
Tubi	ing	1-1/2	CN-55	2.75	х					By Rule 15,01
Linc	. 2		-			i i				Perforations:
			-	-						Top Bottom
			-	-	ļ					
		1	<u> </u>							
	***************************************			<del></del>	<del></del>	OFFICE	USE ONL	Y		
						DRILLI	VG PERM	IT		
_		A 77 (	201 0	- <b>0</b> 7					τ.	
Perr	mit number _	4 (-1	091-0	521			÷	***************************************		anuary 3 19 86
Thi.		mina sha u			11				Da	
anıs quir	ements subje	ct to the c	onditions	or and well contained	herein and or	the reverse he	reof Notificat	imission grani ion must be g	ed to drill in accordativen to the District Oil	nce with the pertinent legal re- l and Gas Inspector, (Refer to ntractor shall notify the proper
AISI.	nct on and gi	as inspecto	or 24 nour	s belore ac	ctual permitte	ed work has co	mmencea.)			
The reve	permitted we rse hereof.	ork is as d	escribed in	the Notic	e and Applic	ation, plat, and	d reclamation	plan, subject	to any modifications	and conditions specified on the
Perr	nit expires _	Jan	uary	3, 19	88	u	aless well work	is commence	d prior to that date and	d prosecuted with due diligence.

NOTE: Keep one copy of this permit posted at the drilling location.

Plat:

Casing

Fee

2252

Agent:

Bond:

Vision of Oil and Gas

File

Other

WPCP

S&E

IV-35 (Rev 8-81)

de of Mest Virginia

Bepartment of Mines

DIVISION OF OIL & GAS DEPARTMENT OF ENERGY Gil und Cas Bivision

Date Dec. 16, 1986	
Operator's	
Well No. CNGD WN 2248	-
Farm Young & Haessly	
API No. 47 - 001 - 0527	

WELL OPERATOR'S REPORT

OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

(If "Gas," Production x / Undergrow	und Storag	e/ Deer	/ Sha	llow_x/)
IOCATION: Elevation: 1311 Watershed	Flag Run			
District: Knottsville County Tav	_		<u>Thorn</u>	ton
		žįs.		
COMPANY CNG Development Company				Cement
ADDRESS P. O. Box 15746 Pittsburgh, PA 15244	Caşing	Used in		fill up
DESIGNATED AGENT Gary A. Nicholas	Tubing	Drilling	in Well	Cu. ft.
ADDRESS Rt. 2 Box 698 Bridgeport, WV 26330	Size 20-16			
SURFACE OWNER Rita Haessly  2165 Bassett Road  ADDRESS Westlake, OH 44155	Cond.			
	13-10"			
MINERAL RIGHTS OWNER A.M. Young & Rita Haessly	9 5/8			
ADDRESS	8 5/8	929	929	To Surf.
OIL AND GAS INSPECTOR FOR THIS WORK	7			
onald Ellis ADDRESS Fairmont, WV 26554	5 1/2			
PERMIT ISSUED January 3, 1986	4 1/2	5060	5060	325 sks
DRILLING COMMENCED Nov. 17. 1986	3			-
DRILLING COMPLETED Nov. 22, 1986	2 1-1	4810	4810	
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR	Liners			
REWORKING. VERBAL PERMISSION OBTAINED ON	used			
GEOLOGICAL TARGET FORMATION 3rd Elk		Dep	th5300	feet
Depth of completed well 5150 feet	Rotary_x	/ Cabl	e Tools_	
Water strata depth: Fresh 178 feet;	Salt	feet		
Coal seam depths: 269 - 274	Is coal	being min	ed in the	area? No
OPEN FLOW DATA			, a	
Producing formation Riley	Pay	y zone dep	th 4325 =	4832 1938 feet
Gas: Initial open flow Mcf/d			1900 E 1007	
Final open flow (531) Mcf/d	Fir	nal open f	low_	Bbl/d
Time of open flow between init	rial and f	inal tests	4 hc	ours
Static rock pressure 840 psig(surface	se measure	ment) afte	r <sub>24</sub> hou	ırs shut in
(If applicable due to multiple completion	r)			
Second producing formation	Pa	y zone dep	th	feet
Gas: Initial open flow Mcf/d	Oil: In	itial open	flow	Bbl/d
Final open flow Mcf/d				
Time of open flow between ini	tial and f	inal tests	h	ours
Static rock pressurepsig(surfac	e measurem	ent) after	ho	ırs shut in
·		1000+0	m,a a= =	Florida 1984

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Perforated 3rd Elk 4961-4969, 8 holes; 4934-4942, 8 holes; 4844-4848, 5 holes; 4832-4836, 5 holes; .39 HSC. Foam Frac (55Q) 3rd Elk - Break 2500, Avg TPSI 3300, Avg Rate 20 BPM, HHP used 1023, ISI 2300, 3 min 2300, Max Sand Conc. 4#/gal, used 5000# 80/100 Sand, 45,000# 20/40 Sand, used 500 gals 15% FE Acid & 460,000 SCFN<sub>2</sub>

Perforated Benson 4170-4175, 24 holes, .39 HSC; Foam Frac (70Q) Benson - Break 2600, Avg TPSI 3300, Avg Rate 20 BPM, HHP used 1089, ISI 2300, 3 min 2300, Max Sand Conc. 6#/gal, used 5000# 80/100 Sand, 75,000# 20/40 Sand, used 500 gals 15% FE Acid & 683,000 SCFN<sub>2</sub>

Perforated Riley 3947-3950, 6 holes; 3936-3943, 24 holes, .39 HSC Foam Frac Riley (70Q) - Break 1800, Avg TPSI 2900, Avg Rate 20 BPM, HHP used 955, ISI 1850, Max Sand Conc. 6#/gal, used 5000# 80/100 Sand, 90,000# 20/40 Sand, used 500 gals 15% FE Acid & 620,000 SCFN<sub>2</sub> WEIL ICG

		-	
FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fres and salt water, coal, oil and ga
Cond.	0	26	l" stream water @ 50'
Sand & Shale	26	269	2" stream water @ 110'
Coal	269	274	Service Control of the Control of th
Sand & Shale & RR	274	1176	. '
Lime	1176	1190	Transmission
R.R.	1190	1220	
B. Lime	1220	1305	**************************************
Sand & Shale	1305	(5150) 7,0 -	
		EIKOTD.	
LOG TOPS			
B. Lime/B. Inj.	1235	1410	
Pocono	1493	1589	
50'	1734	1816	
5th/L. 5th	2222	2346	
Speechley	2943	2994	
Balltown	3115	3289	
Bradford	3400	3510	
Riley	3844	3966	
Benson 1st Elk	4162 4362	4176 4498	
2nd Elk	4570	4498	
3rd Elk	4807	4982	
	4007	4,502	· ·
	and the state of t		

(Attach separate sheets as necessary)

CNG D	EVELOPMENT			
Well	Operator	1	0//	
	4-1	- X/ -/		
By:	Vary X	1 hik	<del>16</del> a	
Dakos	D 76 3	006		
Date:	nec. 10, 1	1986		

Note: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including that, encountered in the drilling of a well."

	1 of		- <sup>1</sup>	Date:	February 23,	1994
Form	WW2-A	· · · · · · · · · · · · · · · · · · ·	2)	Operator	's well numbe	r .
(10-9	1)	94			CNGP 2248	1 - <u>0527</u> - W
		74	3)	API Well	No: 47 - 09	1 - 0527 - 1
	C	Form ting Mics or the & Qua	1		State - Cou	nty - Permit
		4 622	STATE OF WE	ST VIRGINI	<b>A</b>	
					TICE OF OIL A	ND GAS
		NOTICE AND	APPLICATION	FOR A WELL	WORK PERMIT	
		_				
4)			be served:		oal Operator:	
	(a) Name	W.J. & Rit	a Haessly	Name		
	Address _	Durban No	ew Lane	Address		
	(b) Name	Durnam, NC	27705	(b) Coal	Owner(s) wit	h Declaration
	Address			Name		
				Address	athan A. Coul	sonke
	(c) Name			G	rafton, WV 2	6354
	Address			Name Bo	ard of Truste	<u>es-Davis Elkin</u> s C
				Address	Elkins, WV	26241
<i>c</i> )	<b>-</b> .					
6)	Inspector	Phillip	Tracy		Lessee with	
	Address _	Rt. 2. Box	37-A	Name <u>Re</u>	<u>public Steel</u>	Corporation
	Telephone	(304) - 626	26283 5-8798	Address	<u>Republic Bui</u>	lding
	rerephone	(204) 036	)-0/90	Box 6//8	, Cleveland,	OH 44101
		TO THE PER	SON(S) NAMED	ABOVE TAKE	NOTICE THAT:	
Secti I hav	racts by ware Included on 8(d) on Incertify reserved apanying dame of the control	hich I hold is the info f the Code that as re copies of t ocuments pa onal Servic ified Mail	the right to brmation required under this notice ander through the (Affidavit	extract of extract of the contract of the cont	B of the <u>West</u> ion, a location e above named ipt attached)	icle 1,  Virginia Code on plat, and parties, by:
to the familattac resposis trainfor	e terms a I certify iar with hments, a nsible foue, accurate mation, i	nd condition under pend the informathe informathe description of the condition of the condi	ons of any per- party of law the sed on my inquested on my inquested on the information of the information of the possibility well Operator By:  Its: Designation of the possibility of the information of the possibility of	mit issued nat I have ed on this liry of tho cion, I bell cant penal of fine at CNG Promated Agent wind Corpo 98. Bridgep 304) 623-88	application for se individuals ieve that the ties for submind imprisonment ducing Companions Compan	pplication. amined and am orm and all s immediately information itting false nt.
Subsc	ribed and	sworn befo	re me this _	23 day of	February	, 19_94
Ma					***	Matary Dublia
	mmission	expires o	September 26.	2003		CEPTOINL SEAL
<u>-</u>			september 20.	2003		NOTALLY PUBLIC STATE OF WEST VIRIGINA NANCY D. COLTON BT. 2. DOK 0010 SHINNCH L, WW 28401

1527 W

Lacued 03/24/94

Expres 03/24/96

FORM WW-2B

fermitting. Office of Cal & STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL

WELL WORK PERMIT APPLICATION

wel wel	1 Ope	erator:_	CNG Pr	oducing Co	mpany /0//	)		
	rator	's Well	Number:_	CNGP 2	248	3) El	levation: 1311	
Wel	l typ	pe: (a)	0il_/	or Ga:	s_X/			
		(b)	If Gas:		n_X/ Underg	round Storaç Shallo		
5) Pro	posed	l Target	Formation		eener Sand			
6) Pro	posed	i Total D	epth:	1068	feet	oug	oughed formation 3 ed Elk Begson	
7) App	roxin	mate fres	h water s	strata dept	chs: Behir	d Casing	3rd Elk	
8) App	roxin	nate salt	water de	epths:	Behir	d Casing	Benson	
					Behir		, , ,	
							es/ No/	
11) Pro	posed	Well Wo	rk: Sque	eze Cement	to cover H	Keener Inter	val.	
12)	Perfo	rate and			well up and	l commingle	production	
TYPE		S		'IONS			CEMENT	
	and the second of the second o	among options in a single state of the state	Grade	Weight		Left in	Fill-up (cu. ft.)	
Conducto:	r							
Fresh Wa	ter	11 3/4	H-40	42	40		the ARminas	
Coal							Mell Jean	
Intermed	iate	8 5/8	X-42	23	929	929	To Surf.	
Producti		4 1/2	J-55	10.5	5060	(5060/	325 sks	
<u>Fubing</u>		1 1/2	CN-55	2.75	4810	4810		
Liners								
PACKERS	: Kin	ıd						
Sizes								
1	For Divison of Oil and Cas Use Only							
Thee	(s) <u>s</u>	aid:	# Wg 11 W	ork Permit	Reg	lamation Fun	d WPCP	