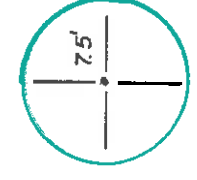


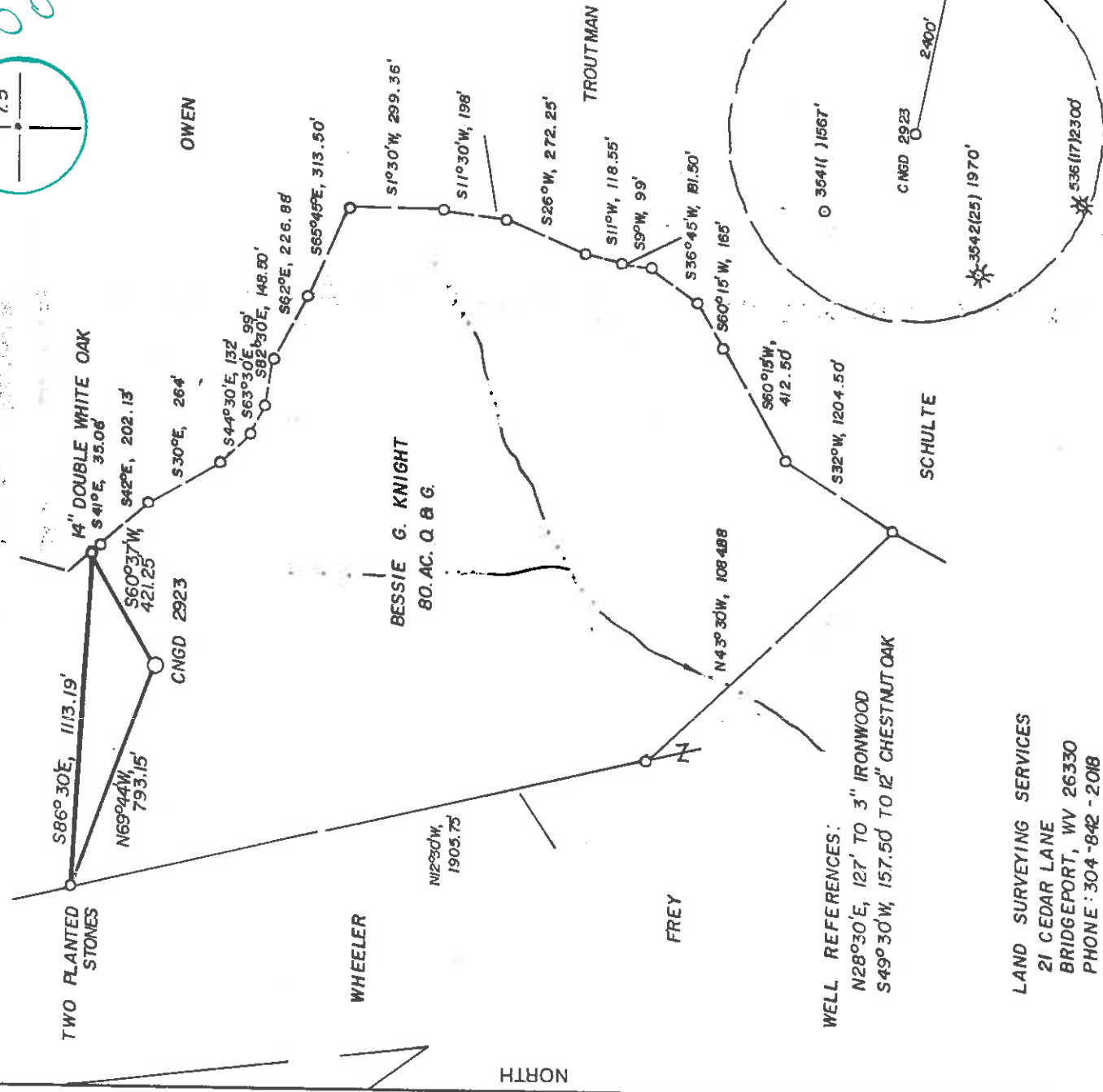


876 10/14/87

LATITUDE 39° 10' 00" LONGITUDE 80° 45' 00" 1850' 3460'



0.67425  
35



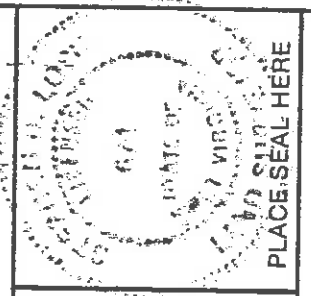
WELL REFERENCES:  
N28°30'E, 127' TO 3" IRONWOOD  
S49°30'W, 157.50' TO 12" CHESTNUT OAK

LAND SURVEYING SERVICES  
21 CEDAR LANE  
BRIDGEPORT, WV 26330  
PHONE: 304-842-2018

RJH 9/28/87

FILE NO. \_\_\_\_\_  
DRAWING NO. \_\_\_\_\_  
SCALE 1" = 500'  
MINIMUM DEGREE OF \_\_\_\_\_  
ACCURACY 1/16" IN 200'  
PROVEN SOURCE OF \_\_\_\_\_  
ELEVATION ROAD INT. 3170' SW.  
OF LOC. AT ELEV. 938'

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENERGY.  
(SIGNED) \_\_\_\_\_  
R.P.E. \_\_\_\_\_ I.L.S. NO. 674  
STEPHEN D. LOSH



PLACE SEAL HERE

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY  
OIL AND GAS DIVISION



DATE JULY 2, 19 67  
OPERATOR'S WELL NO. CNGD 2923  
API WELL NO. \_\_\_\_\_

47-017-3602  
STATE COUNTY PERMIT

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL  
(IF "GAS,") PRODUCTION X STORAGE DEEP SHALLOW X  
LOCATION: ELEVATION 1325 WATER SHED MIDDLE FORK  
DISTRICT COVE 2 COUNTY DODDRIDGE  
QUADRANGLE OXFORD 75' 526 058 E.C. Holbrook  
SURFACE OWNER PAUL W. McCUTCHAN ACREAGE 80.  
OIL & GAS ROYALTY OWNER BESSIE G. KNIGHT LEASE ACREAGE 80.  
LEASE NO. DV 399 - 002

PROPOSED WORK: DRILL X CONVERT DRILL DEEPER REDRILL FRACTURE OR  
STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW  
FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) NDV 2 1987

PLUG AND ABANDON CLEAN OUT AND REPLUG  
TARGET FORMATION ALEXANDER ESTIMATED DEPTH 5670'  
WELL OPERATOR CNG DEVELOPMENT COMPANY DESIGNATED AGENT GARY A. NICHOLAS  
ADDRESS ONE PARK RIDGE CENTER ADDRESS ROUTE 2, BOX 698  
PITTSBURGH, PA 15244 142 BRIDGEPORT, WV 26330

6-6 Straight Fork-Biwestone Creek (133)





CNGP 2923 WORKOVER

6/24/96 - Young Wireline Perforated

6/27/96 - Dowell Fraced

Formation	Gordon/Meir 2484-2889 (28 holes)	Blue Monday/Injun 2160-2317 (25 holes)
Perfs	2980	2330
Plug	501	506
Total Fluid	5+25	35
Total Sand	750	750
Total Acid	28	28
Avg. Rate	1900	2700
Avg. Press.		

10/7/96 - F.O.F. = 400 MCFD

10/7/96 - T.B.I.L.

Hooked up as casing well.



**RECEIVED**  
JAN 07 1988

Date December 30, 1987  
Operator's State of West Virginia  
Well No. 2923  
Farm Knight  
Department of Mines  
Oil and Gas Division  
API No. 47 - 017 - 3602

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

WELL OPERATOR'S REPORT

OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil  / Gas  / Liquid Injection / Waste Disposal /  
(If "Gas," Production  / Underground Storage  / Deep  / Shallow  /)

LOCATION: Elevation: 1325 Watershed Middle Fork  
District: Cove County Doddridge Quadrangle Oxford

COMPANY CNG Development Company

ADDRESS P.O. Box 15746

Pittsburgh, PA 15244

DESIGNATED AGENT Gary A. Nicholas

ADDRESS Rt. 2 Box 698

Bridgeport, WV 26330

SURFACE OWNER Paul W. McCurchan

ADDRESS 300 Wood St. WV 26456

MINERAL RIGHTS OWNER Bessie G. Knight

ADDRESS \_\_\_\_\_

OIL AND GAS INSPECTOR FOR THIS WORK

Mike Underwood Rt. 2 Box 114

PERMIT ISSUED October 26, 1987

DRILLING COMMENCED Nov. 24, 1987

DRILLING COMPLETED Dec. 5, 1987

IF APPLICABLE: PLUGGING OF DRY HOLE ON  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED  
ON \_\_\_\_\_

Casing Tubing Size	Used in Drilling	Left in Well	Cement fill up Cu. ft.
20-16 Cond.			
13-10"	196	196	To Surf.
9 5/8			
8 5/8	1786	1786	To Surf.
7			
5 1/2			
4 1/2	4629	4629	330 sks.
3			
2-3/8"	4249	4249	----
Liners used			

GEOLOGICAL TARGET FORMATION Alexander

Depth of completed well 5322 feet Rotary  / Cable Tools \_\_\_\_\_

Water strata depth: Fresh --- feet; Salt --- feet

Coal seam depths: 265 - 270 Is coal being mined in the area? No \_\_\_\_\_

OPEN FLOW DATA

Producing formation Balltown  
Speechely

Pay zone depth 4274 - 4288 feet

Gas: Initial open flow \_\_\_\_\_ Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d

Final open flow 377 Mcf/d Final open flow \_\_\_\_\_ Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 250 psig (surface measurement) after 1 hours shut in

(If applicable due to multiple completion--)

Second producing formation \_\_\_\_\_

Gas: Initial open flow \_\_\_\_\_ Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d

Final open flow \_\_\_\_\_ Mcf/d Oil: Final open flow \_\_\_\_\_ Bbl/d

Time of open flow between initial and final tests \_\_\_\_\_ hours

Static rock pressure \_\_\_\_\_ psig (surface measurement) after \_\_\_\_\_ hours shut in

(Continue on reverse side)


JAN 11 1988



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

Perforated Balltown 4274-4288, 23 holes; Speechley 3587-3663, 14 holes  
 Frac with 30# Gel Water - Breakdown 1800, Ave HHP 2052, Ave Rate 32.8, Ave Pr 2552,  
 Max Tr Pr 3410, Total Acid 500 gal, total sand 39,000#, Max Conc. 4#/gal, Total  
 Fluid 576, SL Fluid 377, ISIP 1000, 5 min 900.  
 2nd stage - Breakdown 1150, Ave HHP 1370, Ave Rate 34.6, Ave Pr 1615, Max Tr Pr 1707,  
 500 gal acid, 55,000# sand, Max Conc. 5, Total Fluid 699, SL Fluid 483, ISIP 865,

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fire and salt water, coal, oil and c
Clay & Fill			0	5	 <p>DIVISION OF OIL &amp; GAS DEPARTMENT OF ENERGY</p>
Sand, Shale & RR			5	265	
Coal			265	270	
Sand, Shale & RR			270	5322	
Log Tops					
Big Lime			2186	2310	
Big Injun			2310	2334	
Weir			2464	2566	
Berea			2658	2670	
Gordon Gp.			2840	3014	
Warren			3500	3550	
U. Speechley			3570	3670	
Balltown			4260	4300	
Bradford			4700	4744	
Riley			5040	5060	
Benson			5136	5192	
Leopold			5260	5284	

(Attach separate sheets as necessary)

CNG DEVELOPMENT COMPANY  
Well Operator

By: Mary A. Michaelson  
 Date: 12/30/87

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  
 and, encountered in the drilling of a well."



1) Date: October 1, 19 87  
 2) Operator's Well No. CNGD 2923  
 3) API Well No. 47 017 3602 Permit

RECEIVED  
 OCT 08 1987

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

- 4) WELL TYPE: A Oil  Gas  B (If "Gas", Production  Undergrnd storage  Deep  Shallow   
 Elevation: 1325 Watershed: Middle Fork  
 District: Cove 2 County: Doddridge 017 Quadrangle: Oxford 525  
 6) WELL OPERATOR: CNG Development Co. CODE: 1010 7) DESIGNATED AGENT: Gary Nicholas  
 Address c/o Cheryl S. Hartle P.O. Box 15746 Address: Crosswind Corporate Park  
 Pittsburgh, PA 15244 Rt. 2, Box 698, Bridgeport, WV 26330  
 8) OIL & GAS INSPECTOR TO BE NOTIFIED  
 Name: Mike Underwood  
 Address: Route 2, Box 114  
 Salem, WV 26426

- 10) PROPOSED WELL WORK: Drill  deeper  Redrill  Stimulate   
 Plug off old formation  Perforate new formation   
 Other physical change in well (specify) \_\_\_\_\_

- 11) GEOLOGICAL TARGET FORMATION, Alexander  
 12) Estimated depth of completed well, 5670 feet  
 13) Approximate tract depths: Fresh, 393-505 feet; salt, 1632, 2030 feet.  
 14) Approximate coal seam depths: \_\_\_\_\_ Is coal being mined in the area? Yes \_\_\_\_\_ No \_\_\_\_\_

- 15) CASING AND TUBING PROGRAM From Dodd - 505, 536, 2836

CASING OR TUBING TYPE	Size	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
		Grade	Weight per ft.	For drilling	Left in well		
Conductor	11-3/4	H-40	42	X	200		
Fresh water	8-5/8	X-42	23	X	1750	To surface	By rule 15.05
Coal	4-1/2	J-55	10.5	X	5670	To surface	By rule 15.05
Intermediate	3-1/2	CN-55	2.75	X		200 - 400	Depth set
Production							By rule 15.01
Tubing							Perforations:
Liners							Top _____ Bottom _____

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-017-3602 Date October 26 19 87

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.  
 Permit expires October 26, 1989 unless well work is commenced prior to that date and prosecuted with due diligence.

19601

Board: <input checked="" type="checkbox"/>	Agent: <input checked="" type="checkbox"/>	Operator: <input checked="" type="checkbox"/>	Fee: 233	Other: <input checked="" type="checkbox"/>
			20761	

NOTE: Keep one copy of this permit posted at the drilling location. Director, Division of Oil and Gas  
 See the reverse side of the APPLICANT'S COPY for instructions to the well operator. File





RECEIVED  
WV Division of  
Environmental Protection

017-3602-Frac

1) Well Operator: 46 Producing Company 10110 (2) 526

2) Operator's Well Number: CNGP 2923M

3) Elevation: 1325'

4) Well type: (a) Oil  or Gas

Seamed 04/18/96  
Exposed 04/18/98

(b) If Gas: Production  Underground Storage   
Deep  Shallow

21804

Proposed Target Formation(s): Blue Monday, Gordon  
2162-2184

Proposed Total Depth: 2882-2889 feet

7) Approximate fresh water strata depths: \_\_\_\_\_

8) Approximate salt water depths: \_\_\_\_\_

9) Approximate coal seam depths: \_\_\_\_\_

10) Does land contain coal seams tributary to active mine? Yes  No

11) Proposed Well Work: Squeeze cement to cover intervals. Perf and Frac proposed intervals.  
Commingle with existing production.

12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor	13"10"			196'	196'	To Surface
Fresh Water						
Coal						
Intermediate	8 5/8"			1786'	1786'	To Surface
Production	4 1/2"			4629'	4629'	330 sks.
Tubing	2 3/8"			4249'	4249'	---
Liners						

PACKERS : Kind \_\_\_\_\_  
Sizes \_\_\_\_\_  
Depths set \_\_\_\_\_

11912  
01914 11

For Division of Oil and Gas Use Only  
Fee(s) paid:  Well Work Permit  Reclamation Fund  WPCP  
Plat  WW-9  WW-2B  Bond  Agent

**RECEIVED**  
WV Division of  
Environmental Protection  
APR 02 1996

1) Date: 3/28/96  
2) Operator's well number CNGP 2923H  
3) API Well No: 47 - 017 - 3602H F  
State County Permit

Permitting  
Office of the  
STATE OF VIRGINIA - BUREAU OF ENVIRONMENT  
DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

**NOTICE AND APPLICATION FOR A WELL WORK PERMIT**

4) Surface Owner(s) to be served:

(a) Name Blaney Hardware of Ohio  
Address 4720 State Rt. 556  
Beallsville, OH 43716

5) (a) Coal Operator:  
Name \_\_\_\_\_  
Address \_\_\_\_\_

(b) Name \_\_\_\_\_  
Address \_\_\_\_\_

(b) Coal Owner(s) with Declaration  
Name Bessie G. Knight  
Address 212 Stuart Street  
West Union, WV 26456

(c) Name \_\_\_\_\_  
Address \_\_\_\_\_

Name \_\_\_\_\_  
Address \_\_\_\_\_

6) Inspector Mike Underwood  
Address \_\_\_\_\_  
Telephone (304) - 288-4604 (Cellular)  
782-1043 (Home)

(c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_

**TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:**

Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas **OR**

Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

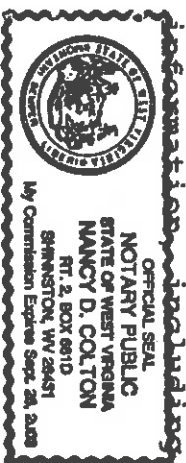
I certify that as required under Chapter 22 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through \_\_\_\_\_ on the above named parties, by:

- Personal Service (Affidavit attached)
- Certified Mail (Postmarked postal receipt attached)
- Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.



Well Operator CNG Producing Company  
By: Rodney J. Biggs RJB  
Its: Designated Agent - Production Manager, Appalachian Region  
Address Rt. 2, Box 698, Crosswind Corp. Park  
Bridgport, WV 26330

Telephone (304) 623-8840

Subscribed and sworn before me this 28<sup>th</sup> day of March, 1996

Nancy D. Colton Notary Public  
My commission expires 09-26-2003

*nr*