

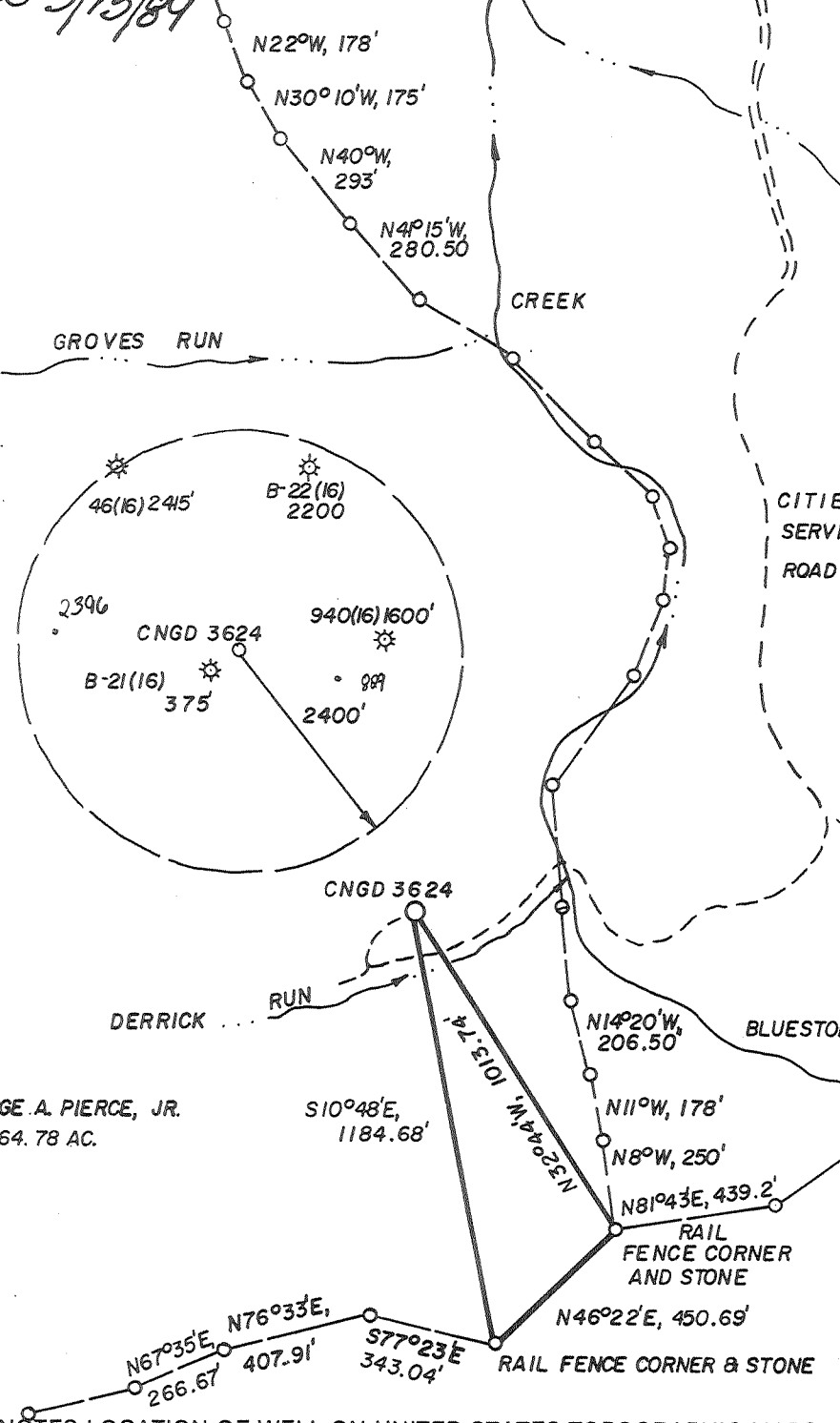
Comie 3/13/89

20 2230'

LATITUDE 39°17'30"

LONGITUDE 80°45'00"

NORTH



WELL REFERENCES:

N1°15'E, 122' TO 9" TWIN BL. WALNUT
N33°30'E, 173.50' TO 7" WHITE OAK

CITIES SERVICE ROAD

CHARLES WELLINGS
650.84 AC.

GEORGE A. PIERCE, JR.
1564.78 AC.

S10°48'E,
1184.68'

CNGD 3624

DERRICK ... RUN

N14°20'W,
206.50'

BLUESTONE

N11°W, 178'

N8°W, 250'

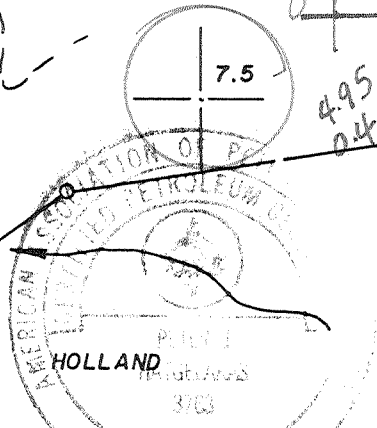
N81°43'E, 439.2'
RAIL FENCE CORNER AND STONE

N46°22'E, 450.69'

RAIL FENCE CORNER & STONE

N67°35'E, 266.67'
N76°33'E, 407.91'

S77°23'E
343.04'



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

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1 IN 200
 PROVEN SOURCE OF ELEVATION ROAD INT. 4400' NE.
 OF LOC. AT ELEV. 883'

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. _____ L.L.S. NO. 674
STEPHEN D. LOSH



PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



DATE FEBRUARY 8, 19 89
 OPERATOR'S WELL NO. CNGD 3624
 API WELL NO.

47 - 017 - 3702
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION: ELEVATION 884' WATER SHED BLUESTONE CREEK

DISTRICT WEST UNION 8 COUNTY DODDRIDGE

QUADRANGLE WEST UNION 7.5' 671 1339 +15' SE

SURFACE OWNER GEORGE A. PIERCE, JR. ACREAGE 1564.78

OIL & GAS ROYALTY OWNER LEWIS MAXWELL HRS. LEASE ACREAGE 1600.

LEASE NO. _____

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

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___

TARGET FORMATION ALEXANDER ESTIMATED DEPTH 5100'

WELL OPERATOR CNG DEVELOPMENT CO. DESIGNATED AGENT RODNEY J. BIGGS

ADDRESS ONE PARK RIDGE CENTER ADDRESS RT. 2, BOX 698

PITTSBURGH, PA 15244 BRIDGEPORT, WV 26330

MAR 24 1989

6-G Smithton-Flint-Sedalia (099)

FORM WVW-6 H.T. HALL 4-8673

COUNTY NAME PERMIT

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AUG 18 1989

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

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Well Operator's Report of Well Work

Farm name: PIERCE, GEORGE A. JR. Operator Well No.: CNGD 3624

LOCATION: Elevation: 884.00 Quadrangle: WEST UNION

District: WESTUNION County: DODDRIDGE
Latitude: 11000 Feet South of 39 Deg. 17Min. 30 Sec.
Longitude 2230 Feet West of 80 Deg. 45 Min. 0 Sec.

Company: CNG DEVELOPMENT CO., A DE
P. O. BOX 15746
PITTSBURGH, PA 15244-0000

Agent: RODNEY J. BIGGS

Inspector: MIKE UNDERWOOD
Permit Issued: 03/23/89
Well work Commenced: 07/11/89
Well work Completed: 07/16/89
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5105
Fresh water depths (ft) 70'

Salt water depths (ft) _____

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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4	178	178	To Surf.
8 5/8	1224	1224	To Surf.
4 1/2	5070	5070	250 sks
1 1/2	4823	4823	----

OPEN FLOW DATA

Producing formation Alexander Benson Pay zone depth (ft) 4830-4910 4568-4574
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
8/1/89 Final open flow 1.2 M MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock Pressure 900 psig (surface pressure) after 24 Hours

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.

Rodney J. Biggs, Manager
For: CNG DEVELOPMENT CO., A DELAWARE CORP.

By: Rodney J. Biggs
Date: August 4, 1989

AUG 25 1989

Perforate Alexander 4907 - 4910 (3 holes); 4896 - 4901 (4 holes);
 4879 - 4887 (8 holes); 4868 - 4872 (4 holes); 4853 - 4863 (10 holes);
 4834 - 4840 (4 holes); 4830 - 4833 (3 holes)

Foam Frac Alexander (70Q) - Break 1850, Avg TPSI 2746, Avg Rate 20 BPM,
 HHP used 1010, ISI 1100, used 500 gals 15% HCL, 5000# 80/100, 120,000#
 20/40 Sand, 807,617 SCFN₂, Max Sand Conc. 6#/gal.

Perforated Benson 4568 - 4574, 21 holes, .39 HSC
 Foam (70Q) Frac Benson - Break 2150, Avg TPSI 2940, Ave Rate 20 BPM,
 HHP used 1030, ISI 1300, Used 1000 gals 15% HCL, 5000# 80/100 Sand,
 60,000# 20/40 Sand, 550,797 SCFN₂, Max Sand Conc. 5#/gal.

Clay	0	3	@ 70' 1/2" stream water
Sd, Sh & RR	3	1507	Damp @ 940'
L. Lime	1507	1533	
Shale	1533	1547	
B.Lime & Injun	1547	1681	
Sd & Sh	1681	5105	

LOG TOPS

Big Lime	1544	1632
Big Injun	1632	1694
Weir	1840	1938
Berea	2044	2058
Gordon Gp.	2274	2291
Warren	2896	2955
U. Speechley	2976	3035
Benson	4564	4628
Alexander	4814	4912

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DIVISION OF OIL & GAS
 DEPARTMENT OF ENERGY

1989 7 5 011A

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

- 1) Well Operator: CNG DEVELOPMENT COMPANY 10110, 8, 670
- 2) Operator's Well Number: CNGD 3624 3) Elevation: 884
- 4) Well type: (a) Oil / or Gas /
(b) If Gas: Production / Underground Storage /
Deep / Shallow /
- 5) Proposed Target Formation(s): Alexander
- 6) Proposed Total Depth: 5100 feet
- 7) Approximate fresh water strata depths: 101,201
- 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: Drill new well
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT Fill-up (cu. ft.)
	Size	Grade	Weight per ft.	For drilling	Left in well	
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 & 38CSR181.3
Production	4-1/2	J-55	10.5	5100	5100	200-400 sks 38CSR18-11.1
Tubing	1-1/2	CN-55	2.75			
Liners						

PACKERS : Kind _____
Sizes _____
Depths set _____

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MAR 07 1989

For Division of Oil and Gas Use Only

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat: WW-9 WW-2B Bond Blanket Agent

(Type)

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MAR 07 1989

Page 1 of _____
Form WW2-A
(09/87)
File Copy

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

1) Date: March 1, 1989
2) Operator's well number
CNGD 3624
3) API Well No: 47 - 017 - 3702
State - County - Permit

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:
- (a) Name George A. Pierce, Jr.
Address 408 The Strand
Oxford, MD 21654
 - (b) Name _____
Address _____
 - (c) Name _____
Address _____
- 6) Inspector Mike Underwood
Address Route 2, Box 135
Salem, WV 26426
Telephone (304)-782-1043
- 5) (a) Coal Operator:
Name _____
Address _____
- (b) Coal Owner(s) with Declaration
Name Robert L. Holland, Jr. Agent
Address Lewis Maxwell Heirs
105 High St., P.O. Box 425, West Union, WV 26456
Name State of West Virginia
Address State Auditor, Capitol Complex
Charleston, WV 25305
- (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
x Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B 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)
- x Certified Mail (Postmarked postal receipt attached)
- ____ Publication (Notice of Publication attached)

I have read and understand Chapter 22B 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 Development Company
By: [Signature]
Its: Supervisor Purchasing/Production Services
Address One Park Ridge Center, P. O. Box 15746
Pittsburgh, PA 15244
Telephone (412) 787-4117

Subscribed and sworn before me this 1 day of March, 1989

[Signature]
My commission expires 5/21/90

NOTARIAL SEAL
SHEILA L. MURCH, NOTARY PUBLIC
FINSLAY TOWNSHIP, ALLEGHENY COUNTY
MY COMMISSION EXPIRES MAY 21, 1990

Notary Public

Member, Pennsylvania Association of Notaries