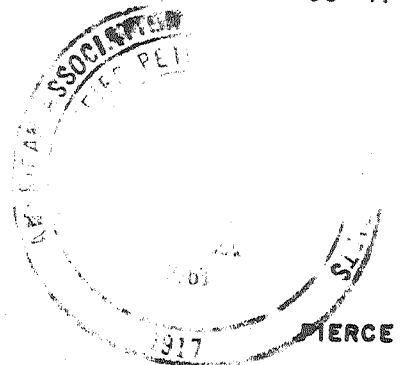


WELL REFERENCES:  
 S60°W, 119.50' TO 8" TWIN HICK.  
 S27°W, 147' TO 8" W. OAK

LATITUDE 39° 17' 30"

GAIN



GAIN

GAIN

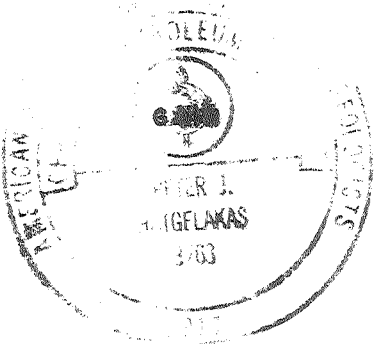
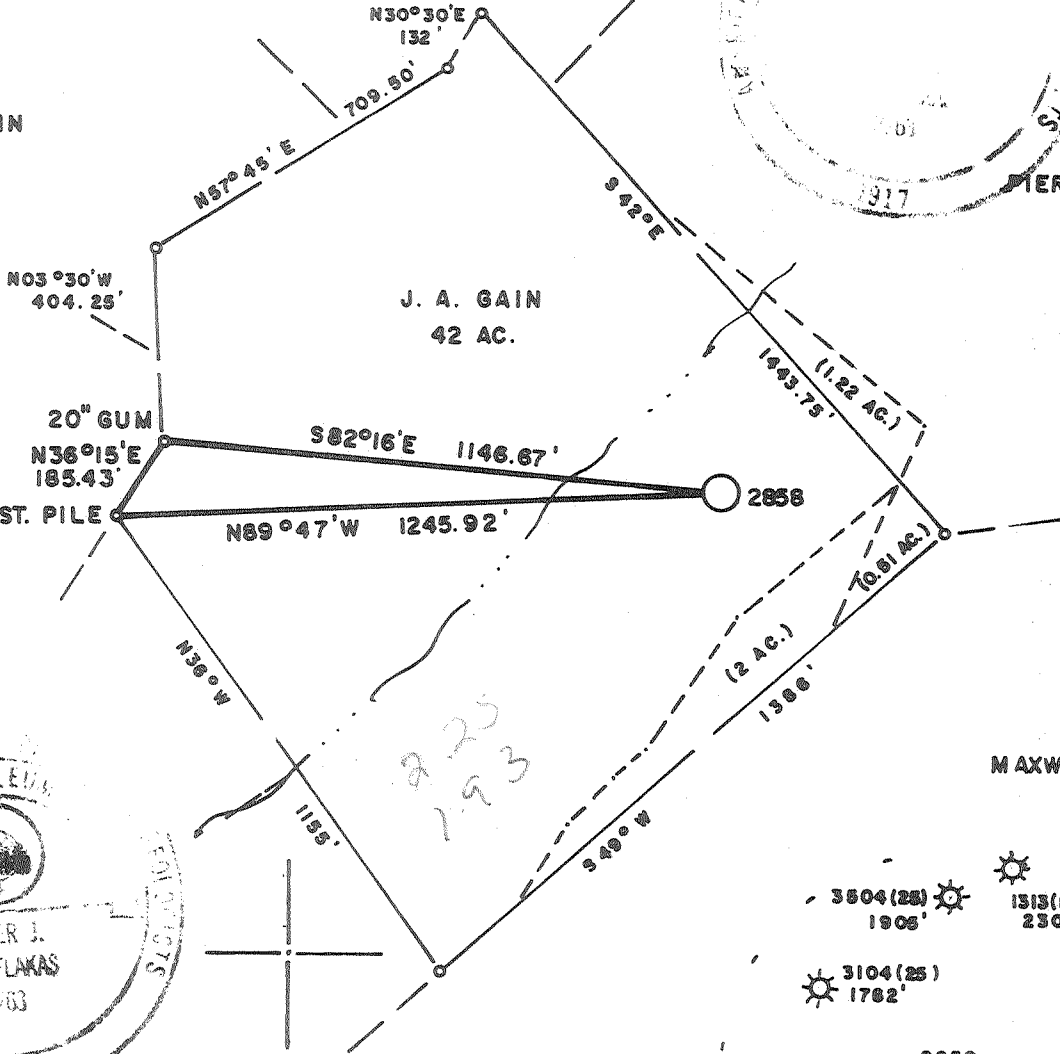
J. A. GAIN  
42 AC.

MAXWELL

NORTH

LONGITUDE 80° 45' 00"

11, 875'



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

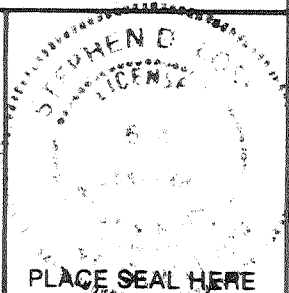
(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 400'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION RD. INTER. 2000' S.W. OF LOCATION ELEV. 860'

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) [Signature]

R.P.E. \_\_\_\_\_ L.L.S. 674  
**STEPHEN D. LOSH**



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



DATE MAY 25, 19 88  
 OPERATOR'S WELL NO. 2858  
 API WELL NO. 47-017-3668-W

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 1021' WATERSHED LEFT FORK OF ARNOLDS CREEK  
 DISTRICT WEST UNION COUNTY DODDRIDGE  
 QUADRANGLE WEST UNION 7.5 min. SE  
 SURFACE OWNER JAMES A. GAIN ACREAGE 41  
 OIL & GAS ROYALTY OWNER JAMES A. GAIN LEASE ACREAGE 42  
 LEASE NO. DV-10026

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 5385'  
 WELL OPERATOR CNG DEVELOPMENT COMPANY DESIGNATED AGENT GARY A. NICHOLAS  
 ADDRESS ONE PARK RIDGE CENTER 142 ADDRESS RT. 2, BOX 698  
PITTSBURGH, PA 15244 BRIDGEPORT, WV 26330

DODD COUNTY NAME PERMIT 3668-W

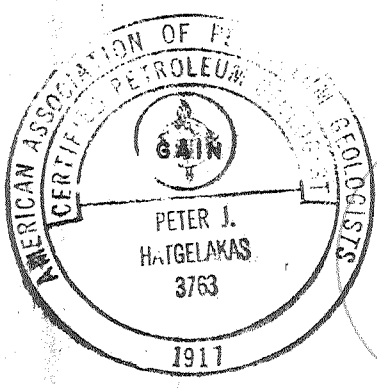
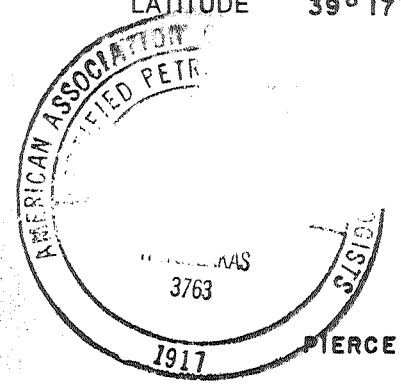
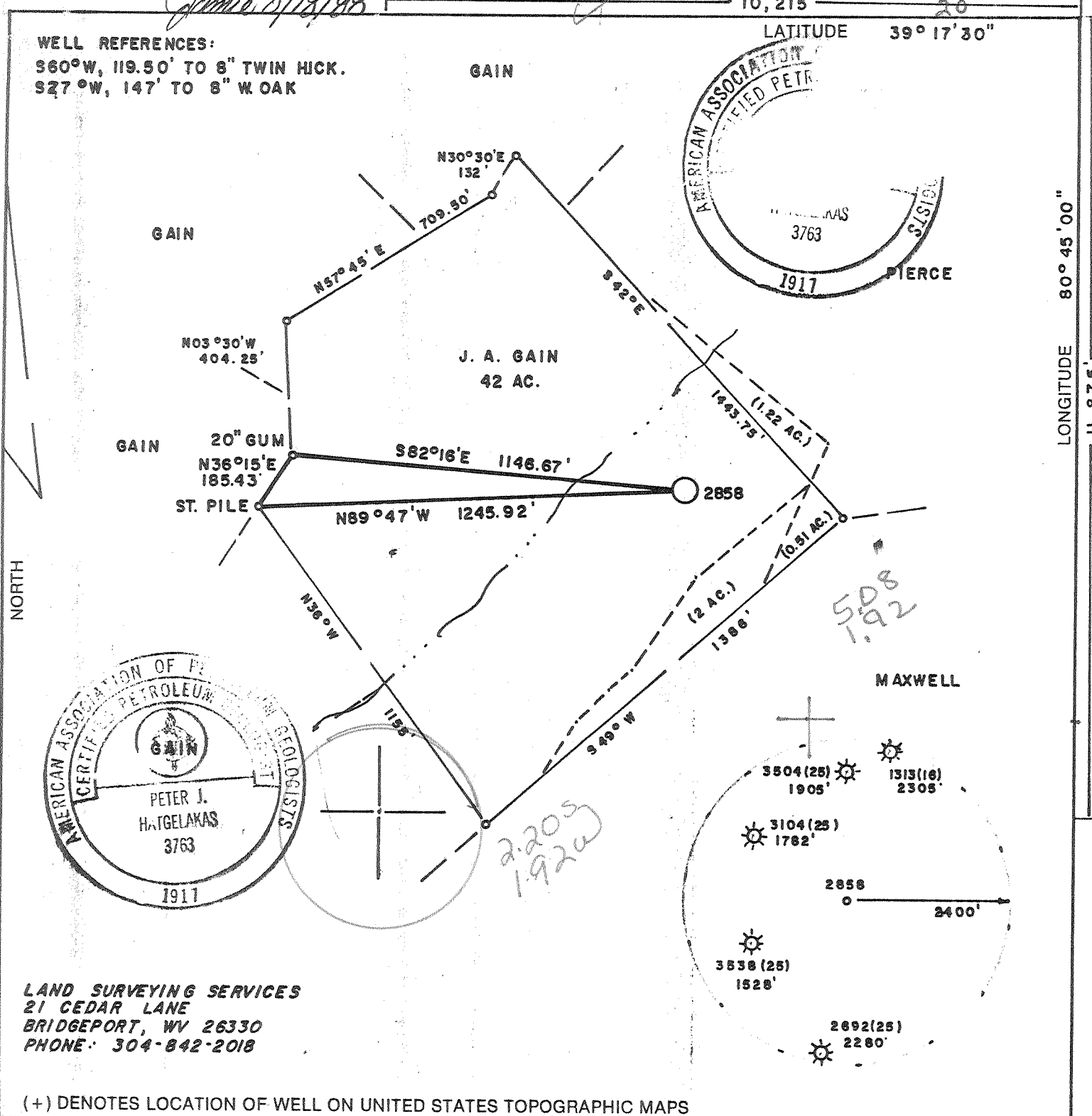
DODD 6-6 Straight Fork - Bluestone Creek (133)

FORM WW-6 H.T. HALL 48673

*Janice 8/18/88*

10,215' LATITUDE 39° 17' 30" 20

WELL REFERENCES:  
 S60°W, 119.50' TO 8" TWIN HICK.  
 S27°W, 147' TO 8" W OAK

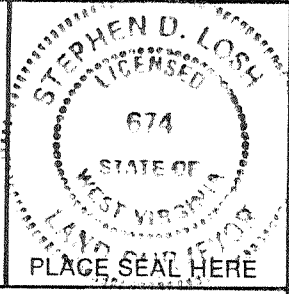


LAND SURVEYING SERVICES  
 21 CEDAR LANE  
 BRIDGEPORT, WV 26330  
 PHONE: 304-842-2018

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

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 400'  
 MINIMUM DEGREE OF ACCURACY 1 in 200  
 PROVEN SOURCE OF ELEVATION RD. INTER. 2000' S.W. OF LOCATION ELEV. - 860

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) *Stephen D. Losh*  
 R.P.E. \_\_\_\_\_ L.L.S. 674  
 STEPHEN D. LOSH



STATE OF WEST VIRGINIA  
 DEPARTMENT OF ENERGY  
 OIL AND GAS DIVISION



DATE MAY 25, 19 88  
 OPERATOR'S WELL NO. 2858  
 API WELL NO. 47-017-3668  
 STATE COUNTY PERMIT

WELL TYPE: OIL \_\_\_ GAS  LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION  STORAGE \_\_\_ DEEP \_\_\_ SHALLOW   
 LOCATION: ELEVATION 1021' WATER SHED LEFT FORK OF ARNOLDS CREEK  
 DISTRICT WEST UNION COUNTY DODDRIDGE  
 QUADRANGLE WEST UNION 7.5 min. 671 1339 +15' SE  
 SURFACE OWNER JAMES A. GAIN ACREAGE 41  
 OIL & GAS ROYALTY OWNER JAMES A. GAIN LEASE ACREAGE 42  
 LEASE NO. DV-10026

PROPOSED WORK: DRILL  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 5385'  
 WELL OPERATOR CNG DEVELOPMENT COMPANY DESIGNATED AGENT GARY A. NICHOLAS  
 ADDRESS ONE PARK RIDGE CENTER ADDRESS RT. 2, BOX 698  
 PITTSBURGH, PA 15244 BRIDGEPORT, WV 26330

AUG 22 1988

6-6 Straight Fork - Bluestone Creek (133)

FORM WW-6

COUNTY NAME PERMIT

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: GAIN, JAMES A. Operator Well No.: CNGP 2858

LOCATION: Elevation: 1,021.00 Quadrangle: WEST UNION

District: WEST UNION County: DODDRIDGE  
Latitude: 11875 Feet South of 39 Deg. 17Min. 30 Sec.  
Longitude 10215 Feet West of 80 Deg. 45 Min. Sec.

Company: CNG PRODUCING COMPANY  
ROUTE 2, BOX 698  
BRIDGEPORT, WV 26330-0698

Agent: RODNEY J. BIGGS

Inspector: MIKE UNDERWOOD  
Permit Issued: 10/04/93  
Well work Commenced: 12/1/93  
Well work Completed: 12/28/93  
Verbal Plugging \_\_\_\_\_  
Permission granted on: \_\_\_\_\_  
Rotary \_\_\_\_\_ Cable \_\_\_\_\_ Rig \_\_\_\_\_  
Total Depth (feet) \_\_\_\_\_  
Fresh water depths (ft) \_\_\_\_\_

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			
No Additional Casing Ran in Well			

Salt water depths (ft) \_\_\_\_\_

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

OPEN FLOW DATA

Producing formation	Balltown	3914-36
	Speechley	3148-3282
	Gordon	2470-2500
Gas: Initial open flow _____ MCF/d	Oil: Initial open flow _____ Bbl/d	Pay zone depth (ft) _____
Final open flow * 340 MCF/d	Final open flow _____ Bbl/d	
Time of open flow between initial and final tests _____ Hours		
Static rock Pressure 380 psig (surface pressure) after 48 Hours		
*Commingled production		
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 PRODUCING COMPANY

By: [Signature]  
Date: January 10, 1994

Perf. Balltown 3914-36, 24 shots, .39" HSC

Frac with 20# Gel  
Break 1710  
Ave HHP 1525  
Ave Rate 27  
Ave Pres. 2300  
Max Tr Pr 3800  
Total Sand 30,000#  
Total Acid 500  
Max Conc. 3#/gal  
Total fl 468  
SL Fluid 335  
ISIP 1200 (w/3#gal sand in hole)  
Screen out on flush

Perf. Speechley 3148-3282, 32 shots, .39" HSC plug @ 3290'  
Gordon 2470-2500, 24 shots, .39" HSC plug @ 2508'

Frac with 24# Gel

	Speechley	Gordon
Breakdown	1550	2130
Ave HHP	1050	1700
Ave Rate	25	25
Ave Pres.	1690	2780
Max Tr Pres	2170	3080
Total Acid	500	500
Total Sand	40,000	30,000
Max Conc	3#/gal	3#/gal
Total Fluid	607	540
SL Fluid	384	341
ISIP	1230	2100
5-min	1020	1590

TO 5423

OP - 924

OP - 439

0661

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

Well Operator's Report of Well Work

Farm name: GAIN, JAMES A. Operator Well No.: CNGD 2858

LOCATION: Elevation: 1021.00 Quadrangle: WEST UNION  
Water Shed: Left Fork of Arnolds Creek  
District: WESTUNION County: DODDRIDGE  
Latitude: 11875 Feet South of 39 Des. 17Min. 30 Sec.  
Longitude 10215 Feet West of 80 Des. 45 Min. 0 Sec.

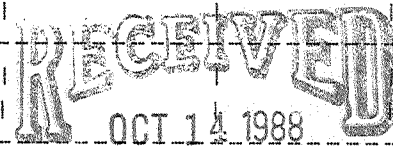
Company: CNG DEVELOPMENT CO., A DE  
P. O. BOX 15746  
PITTSBURGH, PA

Asent: RODNEY J. BIGGS

Inspector: MIKE UNDERWOOD  
Permit Issued: 08/19/88  
Well work Commenced: 09/15/88  
Well work Completed: 09/21/88  
Verbal Plussins  
Permission granted on:  
Rotary X Cable \_\_\_\_\_ Rig \_\_\_\_\_  
Total Depth (feet) 5423  
Fresh water depths (ft) 1420'

Size	Used in	Left	Cement
	Drillings	in Well	Fill Use
			Co. Ft.
11 3/4"	221	221	To Surf.
8 5/8"	1526	1526	To Surf.
4 1/2"	5350	5350	To Surf.

Salt water depths (ft) \_\_\_\_\_  
Is coal beins mined in area (Y/N)? N  
Coal Depths (ft): \_\_\_\_\_



OPEN FLOW DATA

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

Producing formation Alexander Pay zone depth (ft) 5042-510Z  
Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow 993 MCF/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests 4 Hours  
Static rock Pressure 995 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.

OCT 24 1988

Rodney J. Biggs  
For: CNG DEVELOPMENT CO., A DELAWARE CORP.  
By: *Rodney J. Biggs*  
Date: October 3, 1988

Perforated Alexander; 5042 - 5046, 4 holes; 5065 - 5079, 14 holes; 5088 - 5090, 3 holes; 5094 - 5101, 7 holes; 5104 - 5107, 4 holes; Total 32 holes, .39 HSC

Foam Frac (70Q) Break 1430, Avg TPSI 2933, Avg Rate 20 BPM, HHP used 1078, ISI 1350, 5 min 1240, used 700 gals 15% FE Acid, 5,000# 80/100 Sand, 115,000# 20/40 Sand, used 761,937 SCFN<sub>2</sub>, Max Sand Conc. 6#/gal.

Fill	0	2	Damp @ 1420'
Sand, Shale & RR	2	1750	
B. Lime & Injun	1750	1898	
Shale	1898	2018	
Weir	2018	2170	
Sand & Shale	2170	2260	
Berea	2260	2265	
Sand & Shale	2265	2460	
Gordon Group	2460	2567	
Sand & Shale	2567	3125	
Warren	3125	3175	
Shale	3175	3285	
U.Speechley	3285	3300	
Sand & Shale	3300	4700	
Riley	4700	4710	
Sand & Shale	4710	5116	
✓ Alexander	5116	5176	
Sand & Shale	5176	5423	

**RECEIVED**  
OCT 14 1988

LOG TOPS ✓

Big Lime	1744	1842
Big Injun	1842	1899
Weir	2052	2152
Berea	2254	2264
Gordon Gp.	2450	2500
Warren	3120	3170
Balltown	3890	3940
Benson	4728	4838
Alexander	5040	5122

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

888 3 2 730

017-3668-  
 issued 8/19/88 Expired 8/19/9  
 Page \_\_\_\_\_ of \_\_\_\_\_

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

- 1) Well Operator: CNG DEVELOPMENT COMPANY <sup>142</sup> 10/10, 8, 670
- 2) Operator's Well Number: CNGD 2858 3) Elevation: 1021
- 4) Well type: (a) Oil  / or Gas  /  
 (b) If Gas: Production  / Underground Storage  /  
 Deep  / Shallow  /
- 5) Proposed Target Formation(s): Alexander <sup>439</sup>
- 6) Proposed Total Depth: 5385 feet
- 7) Approximate fresh water strata depths: OK <sup>350</sup>
- 8) Approximate salt water depths: OK
- 9) Approximate coal seam depths: OK
- 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	
	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	1500	1500	38CSR18 11.2.2 & 38CSR18 11.3
Production	4-1/2	J-55	10.5	5300	5300	200-400 sks 38CSR18-11.1
Tubing	1-1/2	CN-55	2.75	5200	5200	
Liners						

**RECEIVED** AUG 18 1988 **RECEIVED** AUG 18 1988

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

7575

DIVISION OF OIL & GAS DEPARTMENT OF ENERGY  
 For Division of Oil and Gas Use Only

Fee(s) paid: OK Well Work Permit OK Reclamation Fund OK WPCP OK  
 Plat OK WW-9 OK WW-2B OK Bond 50 Blanket Ager OK  
 (Type)

RECEIVED  
AUG 18 1988

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

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

1)  
2)  
3)

Date: August 9, 1988  
Operator's well number  
CNGD 2858  
API Well No: 47 - 017 - 3668  
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 James A. Gain  
Address Box 54  
West Union, WV 26456  
(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 Same as surface owner  
Address  
Name  
Address  
(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 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)
- 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 9th day of August, 1988

[Signature] Notary Public

My commission expires 12/19/88