

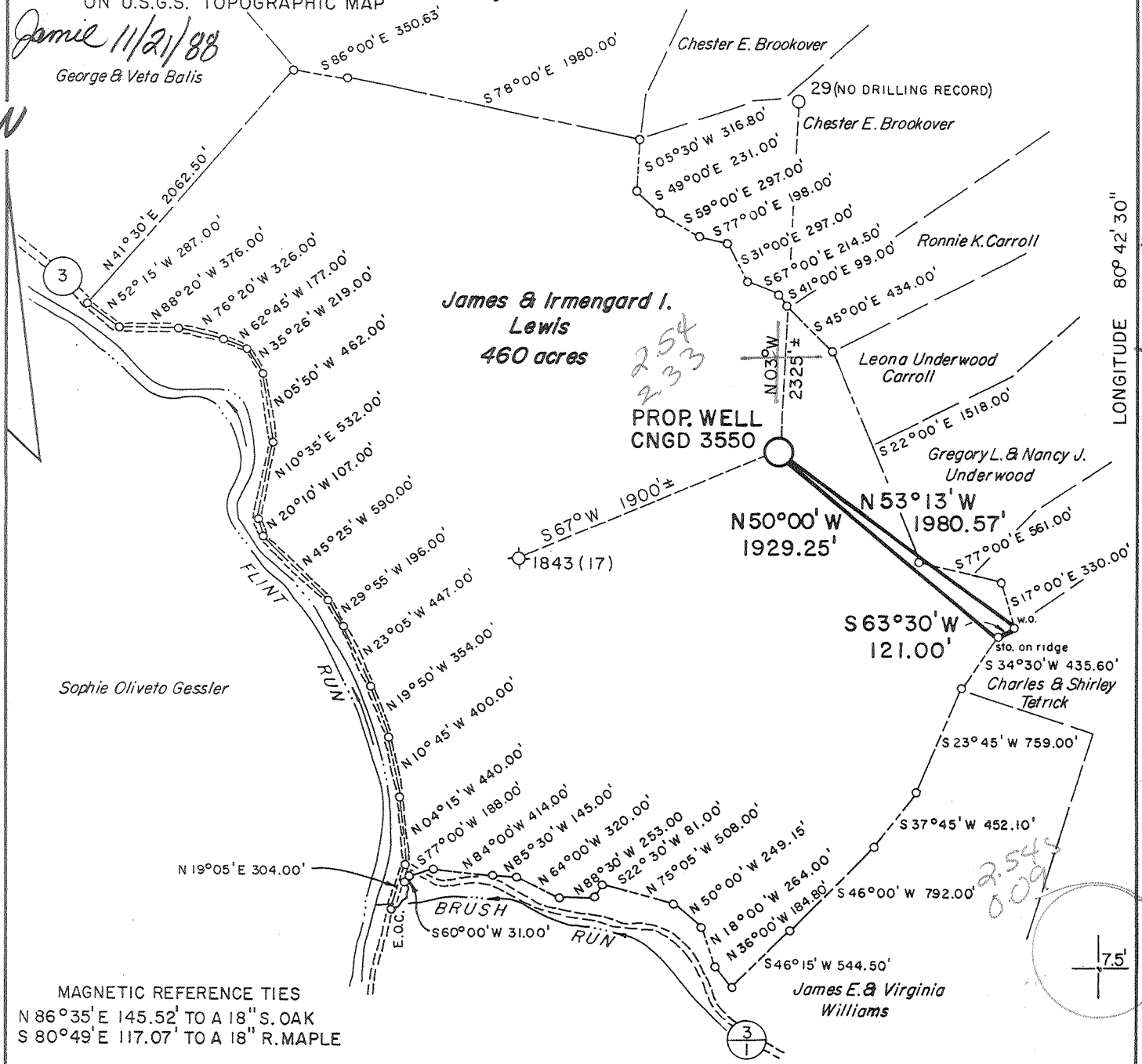
(---) DENOTES LOCATION OF WELL ON U.S.G.S. TOPOGRAPHIC MAP

*Jamie 11/21/88*  
George & Veta Balis

Arleigh G. Dotson

LATITUDE 39°25'00"

N



LONGITUDE 80°42'30"

13,490'

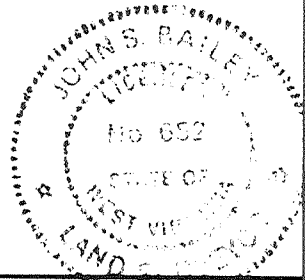
MAGNETIC REFERENCE TIES  
N 86°35'E 145.52' TO A 18" S. OAK  
S 80°49'E 117.07' TO A 18" R. MAPLE

**MSES consultants, inc.**

FILE NO. MSES 88 - 867  
DRAWN BY RRC / VSH  
SCALE 1" = 1000'  
MIN. DEGREE OF ACCURACY 1 IN 2500  
PROVEN SOURCE OF ELEVATION:  
B.M. ELEV. 778' 7800' SW OF  
PROPOSED LOCATION

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 MINES.

(SIGNED) John S. Bailey  
R.P.E. \_\_\_\_\_ L.L.S. 652



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



DATE OCTOBER 10, 1988  
OPERATOR'S WELL NO. CNGD 3550  
API WELL NO. 47 - 017 - 3681  
STATE \_\_\_\_\_ COUNTY \_\_\_\_\_ PERMIT \_\_\_\_\_

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
IF "GAS", PRODUCTION  STORAGE  DEEP  SHALLOW   
LOCATION: ELEVATION 1112.00' WATERSHED FLINT RUN OF MCELROY CREEK  
DISTRICT GRANT 3 COUNTY DODDRIDGE  
QUADRANGLE CENTERPOINT, WV 7.5' 286 0224 NEAREST TOWN LITTLE PITTSBURG  
SURFACE OWNER JAMES & IRMENGARD I. LEWIS ACREAGE 460  
OIL & GAS ROYALTY OWNER J.D. MCREYNOLDS LEASE ACREAGE 1500  
LEASE NO. TC - 743

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 5594'  
WELL OPERATOR CNG DEVELOPMENT COMPANY DESIGNATED AGENT RODNEY J. BIGGS  
ADDRESS ONE PARK RIDGE CENTER ADDRESS CROSSWIND CORPORATE PARK  
P.O. BOX 15746 BRIDGEPORT, WV 26330  
PITTSBURGH, PA 15244

DEC 2 1988

FORM IV - 6

COUNTY PERMIT

6-6 Centerpoint (098)

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

Well Operator's Report of Well Work

Farm name: LEWIS, IRMENGARD I. Operator Well No.: CNGD 3550

LOCATION: Elevation: 1112.00 Quadrangle: CENTER POINT

District: GRANT County: DODDRIDGE  
 Latitude: 13490 Feet South of 39 Des. 25Min. 0 Sec.  
 Longitude: 640 Feet West of 80 Des. 42 Min. 30 Sec.

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

Asent: RODNEY J. BIGGS

Inspector: MIKE UNDERWOOD  
 Permit Issued: 12/01/88  
 Well work Commenced: 5/31/89  
 Well work Completed: 6/5/89  
 Verbal Plussings  
 Permission granted on: \_\_\_\_\_  
 Rotary X Cable \_\_\_\_\_ Rig 2  
 Total Depth (feet) 5327  
 Fresh water depths (ft) 80' - 1/4";  
 1000' damp  
 Salt water depths (ft) 1250, 1430,  
 1679 (Are only damp spots)  
 Is coal being mined in area (Y/N)? N  
 Coal Depths (ft): 568 - 572

Size	Used in & Drillings	Left in Well	Cement (Fill Up) Cu. Ft.
11 3/4"	220'	220'	To Surf.
8 5/8"	1557'	1557'	To Surf.
4 1/2"	5296'	5296'	150 sks+
1 1/2"	5219'	5219'	-----

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 5231-5237  
 Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
 6/19/89 Final open flow 499 MCF/d Final open flow \_\_\_\_\_ Bbl/d  
 Time of open flow between initial and final tests 4 Hours  
 Static rock Pressure 1250 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: June 22, 1989

JUL 14 1989

Perforated Benson 5231 - 5237 (.39) HSC  
 Halliburton water frac (30# Gel) Break 1850, Avg TPSI 2532, Ave Rate 29 BPM, HHP used 1801,  
 ISIP 2100, Used 5000# 80/100 Sand, 65,000# 20/40 Sand, 500 gals 15% HCL, BHTP 3800#,  
 5#/gal Max Sand Conc.

Sand, Shale & RR	0	568	Water: 1/4" stream @ 80'
Coal	568	572	damp @ 1000'
Sand, Shale & RR	572	2054	1250'
L. Lime	2054	2070	1430'
Shale	2070	2080	1679'
B. Lime	2080	2180	
Injun	2180	2300	Show of oil @ 2205'
Sand & Shale	2300	5327	
			Coal @ 568 - 572

LOG TOPS

Big Lime	2110	2193
Big Injun	2193	2306
Weir	2460	2553
Berea	2660	2686
Gordon	2882	2922
Warren	3540	3588
U. Speechley	3600	3680
Benson	5226	5296

8006

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

- 1) Well Operator: CNG DEVELOPMENT COMPANY *10110, 3, 286*
- 2) Operator's Well Number: CNGD 3550 3) Elevation: 1112
- 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: 5594 feet
- 7) Approximate fresh water strata depths: 840, 395, 356'
- 8) Approximate salt water depths: 1435
- 9) Approximate coal seam depths: 1138
- 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	Fill-up (cu. ft.)
Conductor						
Fresh Water	11-3/4	H-40	42	200	200	<i>C/S Sand in-</i>
Coal						To surface
Intermediate	8-5/8	X-42	23	1550	1550	38CSR18-11.2.2 & 38CSR18-11.3
Production	4-1/2	J-55	10.5	5594	5594	200-400 sks 38CSR18-11.1
Tubing	1-1/2	CN-55	2.75	5494	5494	
Liners						

**RECEIVED**  
NOV 15 1988

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

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

For Division of Oil and Gas Use Only

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

*027463  
39*

*006*

**RECEIVED**  
NOV 15 1988

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

1) Date: November 1, 1988  
2) Operator's well number  
CNGD 3550  
3) API Well No: 47 - 017 - 3681  
State - County - Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- |   |   |
|---|---|
| <p>4) Surface Owner(s) to be served:</p> <p>(a) Name <u>Irmengard I. Lewis</u><br/>Address <u>Paris</u><br/><u>Virginia 22130</u></p> <p>(b) Name _____<br/>Address _____</p> <p>(c) Name _____<br/>Address _____</p> | <p>5) (a) Coal Operator:</p> <p>Name _____<br/>Address _____</p> <p>(b) Coal Owner(s) with Declaration</p> <p>Name <u>Arby Glaspell</u><br/>Address <u>Star Route</u><br/><u>West Union, WV 26456</u></p> <p>Name _____<br/>Address _____</p> <p>(c) Coal Lessee with Declaration</p> <p>Name _____<br/>Address _____</p> |
| <p>6) Inspector <u>Mike Underwood</u><br/>Address <u>Route 2, Box 135</u><br/><u>Salem, WV 26426</u><br/>Telephone (304)- <u>782-1043</u></p>   |   |

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 1st day of November, 1988

My commission expires \_\_\_\_\_ [Signature] Notary Public

NOTARY SEAL  
SHARON L. BROWN, NOTARY PUBLIC  
FINLAY TOWNSHIP, ALLEGHENY COUNTY  
MY COMMISSION EXPIRES JUNE 16, 1990  
Member, Pennsylvania Association of Notaries