



FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 600'  
 MINIMUM DEGREE OF ACCURACY 1" = 2500'  
 PROVEN SOURCE OF ELEVATION INTER. RT. 100 B 52  
 B.M. ELEV. = 1007

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) *Luana S. Nelson*  
 R.P.E. 8993 L.L.S. \_\_\_\_\_

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6 (8-78)



DATE AUGUST 11, 19 82  
 OPERATOR'S WELL NO. 1-1872 REV  
 API WELL NO. \_\_\_\_\_  
47 061 0704  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP X SHALLOW \_\_\_  
 LOCATION: ELEVATION 1065' WATER SHED ROBINSON RUN  
 DISTRICT CASS COUNTY MONONGALIA  
 QUADRANGLE OSAGE  
 SURFACE OWNER MARY K. CLINE ACREAGE 81.64  
 OIL & GAS ROYALTY OWNER MARY K. CLINE LEASE ACREAGE 126.7  
 LEASE NO. 12081  
 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 HAVERTY ESTIMATED DEPTH 6150'  
 WELL OPERATOR CARNEGIE NATURAL GAS CO. DESIGNATED AGENT J. C. STEPHENSON, DIVISION SUPERINTENDENT  
 ADDRESS 3904 MAIN STREET ADDRESS P.O. BOX 387  
MUNHALL, PA 15120 MANNINGTON, W.VA. 26582

DEEP WELL

3-3

(068)

RECEIVED



STATE

IV-35  
(Rev 8-81)

FEB 24 1983

Date Jan. 12, 1983  
Operator's  
Well No. 1-1872  
Farm Elmer Brand  
API No. 47 - 061 - 0704

OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES  
State of West Virginia  
Department of Mines  
Oil and Gas Division

WELL OPERATOR'S REPORT  
OF  
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 1070 Watershed Robinson Run  
District: Cass County Monongalia Quadrangle Osage

COMPANY Carnegie Natural Gas Company  
ADDRESS 800 Regis Ave., Pittsburgh, Pa. 15236  
DESIGNATED AGENT J. C. Stephenson  
ADDRESS PO Drawer No. 387, Mannington, WV 26582  
SURFACE OWNER Mary K. Cline  
ADDRESS Rt. #1, Maidsville, WV 26541  
MINERAL RIGHTS OWNER Mary K. Cline  
ADDRESS Rt. #1, Maidsville, WV 26541  
OIL AND GAS INSPECTOR FOR THIS WORK William Blosser  
ADDRESS Rt. #4, Box 17 Fairmont, WV 26554  
PERMIT ISSUED August 2, 1982  
DRILLING COMMENCED Sept. 3, 1982  
DRILLING COMPLETED Sept. 13, 1982  
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON   

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8			
8 5/8	1502	1502	355 sacks
7			
5 1/2			
4 1/2	5386	5386	650 sacks
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Haverty Depth 6150 feet

Depth of completed well 5386 feet Rotary x / Cable Tools   

Water strata depth: Fresh 24, 525 feet; Salt    feet

Coal seam depths: 198-204, 287-307 Is coal being mined in the area? yes

OPEN FLOW DATA Gordon 2667-2715  
Elizabeth, Warren, Balltown 3101-3929  
Co-mingled Riley, Benson, Alexander 4707-5200  
Producing formation    Pay zone depth    feet

Gas: Initial open flow 13.4 Mcf/d Oil: Initial open flow    Bbl/d

Final open flow 219 Mcf/d Oil: Final open flow    Bbl/d

Time of open flow between initial and final tests    hours

Static rock pressure 1050 psig (surface measurement) after 67 1/2 hours shut in  
(If applicable due to multiple completion--)

Second producing formation    Pay zone depth    feet

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)

Monongalia - 0704

FORM IV-35

(REVERSE)

Sheet #2 - Elmer Brand Well No. 1-1872

Permit No. 47-061-0704, Cass District, Monongalia County, W. Va.

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.  
Fractured October 7, 1982.

Hole plugged back to: 5386' with Gel.

Perforations:	1st Stage	Riley, Benson, Alexander	4707-5200	15 holes
	2nd Stage	Elizabeth, Warren, Balltown	3101-3929	18 holes
	3rd Stage	Gordon	2667-2715	18 holes

Fractured:	1st Stage	2nd Stage	3rd Stage
	5,000# 80/100 Sand	10,000# 80/100 Sand	10,000# 80/100 Sand
	15,000# 20/40 Sand	30,000# 20/40 Sand	30,000# 20/40 Sand
	300 Gals. HCL Acid	800 Gals HCL Acid	200 Gals. HCL Acid
	453 Bbls. Water	479 Bbls. Water	422 Bbls. Water

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Top Soil			0	10	
Sand and Shale			10	45	Water - 24' 1/2" stream
Sand			45	70	
Shale			70	80	
Sand			80	90	
Sand and Shale			90	140	
Limestone			140	166	
Sand and Shale			166	198	
Coal			198	204	
Sand and Shale			204	285	
Coal			287	307	
Sand and Shale			307	435	
Shale			435	587	Water - 525' increased to 1" stream
Red Rock			587	630	
Sand			630	638	
Shale and Red Rock			638	677	
Sand and Shale			677	955	
Sand			955	980	
Sand and Shale			980	1150	
Sand			1150	1225	
Shale			1225	1265	
Sand			1265	1287	
Shale			1287	1300	
Sand and Shale			1300	1325	
Shale			1325	1370	
Sand and Shale			1370	1390	
Red Rock			1390	1425	
Sand and Shale			1425	1455	
Sand			1455	1465	
Sand and Shale			1465	1484	
Little Lime			1484	1499	
Pencil Cave			1499	1508	
Big Lime			1508	1605	
Big Injun			1605	1658	
Sand and Shale			1658	6150	
Total Depth				6150	

(Attach separate sheets as necessary)

CARNEGIE NATURAL GAS COMPANY

Well Operator

By: Kenneth G. Dunay

Date: February 22, 1983

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 coal, encountered in the drilling of a well."