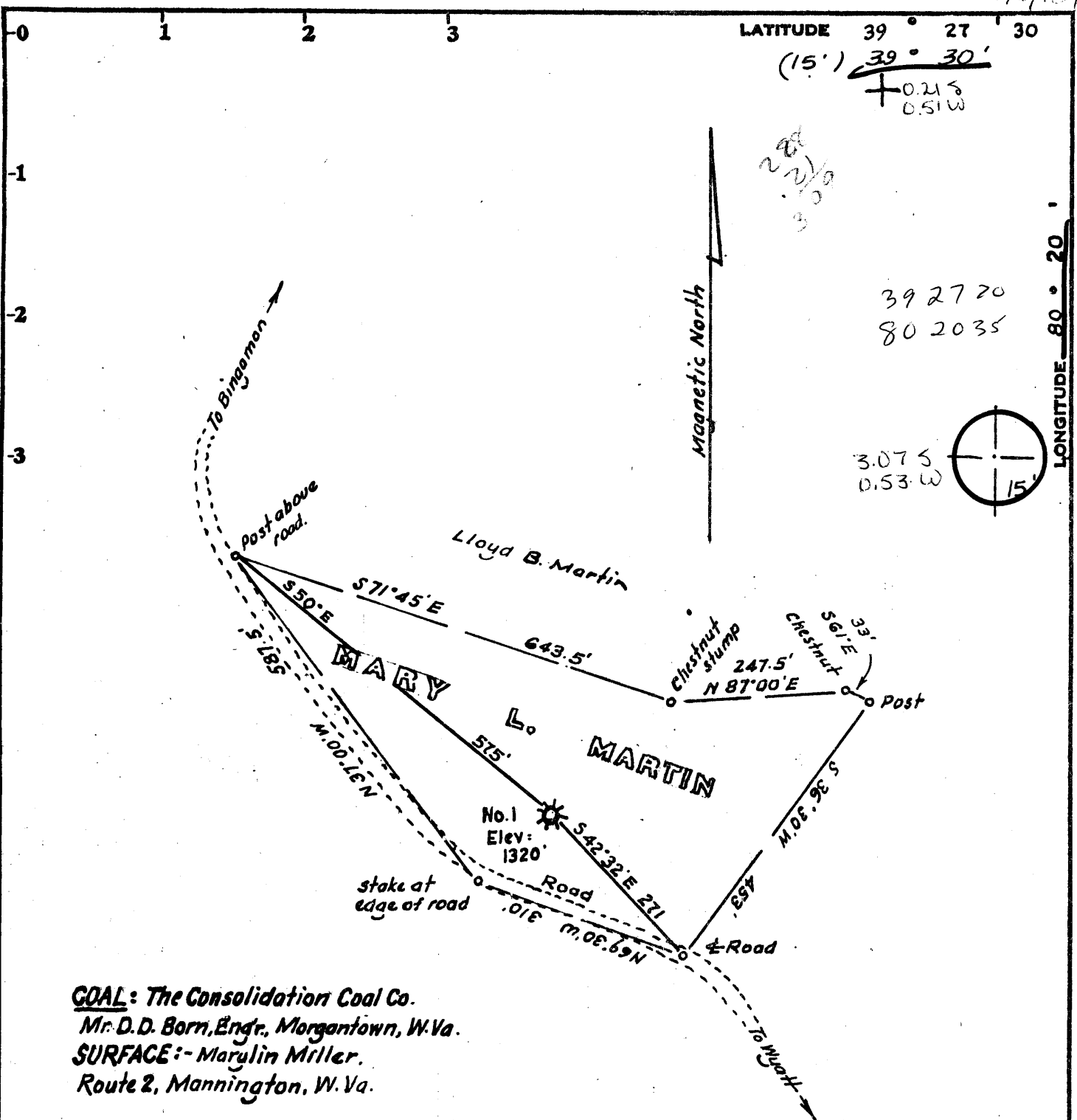


7/6/78 R



Minimum Error of Closure 1 in 200

Sources of Elevation USGS BM at top of hill, 800 NW of location = 1326

Fracture.....
 New Location.....
 Drill Deeper..... 7/2/78
 Abandonment.....

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.

Signed: [Signature]
 Squares: N S E W

Map No.

Company CARNEGIE NATURAL GAS CO.
 Address Munhall, Pennsylvania
 Farm Mary L. Martin Marilyn Miller
 Tract _____ Acres Five Lease No. 6960
 Well (Farm) No. One Serial No. 154
 Elevation (Spirit Level) 1320 NC
 Quadrangle Shinnston, Clarksburg 15'
 County Marion District Lincoln
 Engineer [Signature]
 Engineer's Registration No. 1227 LLS 200
 File No. _____ Drawing No. _____
 Date June 30, 1978 Scale 1" = 200'

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

WELL LOCATION MAP

FILE NO. MAR-457-DD

+ Denotes location of well on United States Topographic Maps, scale 1 to ^{24,000}/_{62,500}, latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.

47-049 AUG 7 1978

Latitude

	.22s
	.56w

Longitude

Topo Location

7.5' Loc. _____ 15' Loc. _____
 _____ (calc.) _____

Company Carnegie Nat Gas Co

Farm Manly L Mantum #1

15' Quad _____
(sec.)

7.5' Quad Shinnston

District Lincoln

WELL LOCATION PLAT

County 049 Permit 457

FORM IV-35
(Obverse)

Operator's Well No. 1-154

[08-78]

WELL OPERATOR'S REPORT 60
OF

API Well No. 049 457DD
State County Permits

DRILLING, FRACURING AND/OR STIMULATING, OR PHYSICAL CHANGE

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

LOCATION: Elevation: 1320' Watershed: Little Binghamon Creek
District: Lincoln County: Marion Quadrangle: Clarksburg NE

WELL OPERATOR Carnegie Natural Gas Company DESIGNATED AGENT J. C. Stephenson, Div.Supt.
Address 3904 Main St. Address PO Drawer No. 387
Munhall, Pa. 15120 Mannington, WV 26582

PERMITTED WORK: Drill / Convert / Drill deeper / Redrill / Fracture or stimulate
Plug off old formation / Perforate new formation /
Other physical change in well (specify) _____

PERMIT ISSUED ON July 6, 19 78

OIL & GAS INSPECTOR FOR THIS WORK:

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

Name William Blosser
Address Colfax, W. Va.

GEOLOGICAL TARGET FORMATION: Balltown Depth 3760

Depth of completed well, 2740 feet Rotary / Cable Tools

Water strata depth: Fresh, _____ feet; salt, _____ feet.

Coal seam depths: _____ Is coal being mined in the area?

Work was commenced June 21, 19 78, and completed Could not complete, 19 _____

LOGGING AND TUBING PROGRAM

LOGGING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	TAPERS
	Size	Grade	Weight per ft	New	Used	For drilling	Left in well		
conductor	Commenced drilling deeper at 2935'.								Kinds
open water	Could not complete.								Step Expanding
al	Lost tools at 3200'.								Sizes 3"x6-1/2"
intermediate	Cut loose at 3174'.								
production	Plugged back to 2740'.								Depth set 1889'6"
line	3.5"	J55	9.20	X		2741	2741		
PIPE									Perforations
									2651 2661
									1890 1900

RECORDED
FEB - 8 1980

FLOW DATA

OIL & GAS DIVISION

2651-2661
1890-1900

Producing formation: Gordon Stray, Big Injun DEPT. OF MINES

Test: Initial open flow, _____ Mcf/d Initial screen flow, _____ gals/d

Final open flow, 18 Mcf/d Final screen flow, _____ gals/d

Time of open flow between initial and final tests, 72 hours

Grain size of proppant, 64# (surface measurement) after _____ hours shut in

(If applicable, see multiple completion)

Second open flow test: _____ For a complete log see _____

Test: Initial open flow, _____ Mcf/d Initial screen flow, _____ gals/d

Final open flow, _____ Mcf/d Final screen flow, _____ gals/d

Time of open flow between initial and final tests, _____ hours

Grain size of proppant, _____ (surface measurement) after _____ hours shut in

FEB 28 1980

OF INCORPORATED INTERVALS, FRACTURING OR STIMULATING, ...

Corrections: 10 holes 651 - 1061
10 holes 1890 - 1900

... of ...

Formation	Color	Hard or Soft	60 Top Feet	Bolt Feet	Notes
Total Depth				2935	
... out to				2935	
Sand and Shale			2935	<u>3200</u>	CHEMUNGA
Test tools at				2000	
Cut loose at 174'					
Bridge set at				2820	
...			2820	2780	
...			2780	2740	
Total depth				2740	

3200
2935
265 DORT.

(Attach separate sheets ...)

CARNEGIE NATURAL ...
[Signature]

This publication ... provides as follows:
"The term 'log' or 'well log' shall mean a systematic, detailed record of all formations, including coal, encountered in the drilling of a well."



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

Quadrangle Clarksburg NE
Permit No. Marion 457

Rotary _____ Oil _____
Cable X Gas Y
Recycling _____ Comb. _____
Water Flood _____ Storage _____
Disposal _____ (Kind)

Company <u>Carnegie Natural Gas Company</u>	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Address <u>3904 Main St., Munhall, Pa. 15120</u>				
Farm <u>J. O. Martin</u> Acres <u>5 1/2</u>				
Location (waters) <u>Little Bingamon Creek</u>				
Well No. <u>1-154</u> Elev. _____	Size			
District <u>Lincoln</u> County <u>Marion</u>	<u>20-16</u>			
The surface of tract is owned in fee by <u>Marilyn Miller</u>	Cond.			
Address <u>Rt. #2, Box 392, Mannington, WV 26582</u>	<u>13-10" 10"</u>	<u>491</u>	<u>491</u>	
Mineral rights are owned by <u>Marie Martin, Atty-in-fact</u>	<u>9 5/8</u>			
<u>Mary L. & J. O. Martin Heirs, Negleg, Ohio</u>	<u>8 5/8</u>	<u>1485</u>	<u>pulled</u>	
Address _____	<u>5 1/2</u>	<u>1836</u>	<u>1836</u>	
Drilling Commenced <u>Dec. 14, 1909</u>	<u>4 1/2</u>			
Drilling Completed <u>Feb. 24, 1910</u>	<u>3</u>	<u>1900</u>	<u>1900</u>	
Initial open flow _____ cu. ft. _____ bbls.	<u>2</u>			
Final production _____ cu. ft. per day _____ bbls.	Liners Used			
Well open _____ hrs. before test _____ RP.				

Well treatment details:

Attach copy of cementing record.

Coal was encountered at 358-364, 453-463 Feet 72", 120" Inches
Fresh water _____ Feet _____ Salt Water _____ Feet _____
Producing Sand Big Injun, Gordon, 5th Sand Depth 1940', 2620', 2830'

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Mapleton Coal			358	364		
Pittsburgh Coal			453	463		
Little Dunkard			805	815		
Big Dunkard			950	1050		
Gas Sand			1200	1310		
1st Salt Sand			1450	1550		
2nd Salt Sand			1575	1650		
Maxton Sand			1680	1695		
Little Lime			1738	1755		
Pencil Save			1755	1760		
Big Lime			1760	1840		
Big Injun			1840	1950	Gas at 1940	
Squaw			1960	1975		
50 Foot Sand			2370	2455		
30 Foot Sand			2485	2500		
Gordon Stray			2615	2625	Gas at 2620	
4th Sand			2686	2700		
5th Sand			2830	2840	Gas at 2830	
Total Depth				2935		

(over)

* Indicates Electric Log tops in the remarks section.



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED
JUL 16 1978

OIL AND GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,
Charleston, W. Va.

DATE June 30, 1978

Surface Owner Marilyn Miller
Address Rt. #2, Box 392, Mannington, WV 26582

Company Carnegie Natural Gas Company
Address 3904 Main St., Munhall, Pa. 15120

Mineral Owner Mary L. & J. O. Martin heirs
Address Negley, Ohio 44411

Farm Mary L. & J. O. Martin Acres 5 1/2

Coal Owner _____
Address _____

Location (waters) Little Binghamon Creek
Well No. 1-154 Elevation 1320

Coal Operator Consolidation Coal Co.
Address Morgantown, WV 26505

District Lincoln County Marion

Quadrangle Clarksburg NE

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22 of the W. Va. Code, the location is hereby approved for deepening. This permit shall expire if operations have not commenced by 11-21-78.

INSPECTOR TO BE NOTIFIED Wm. Blosser

ADDRESS Colfax, W. Va.

PHONE Fairmont - 363-9105

Deputy Director - Oil & Gas Division

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated May 4 1909 by Mary L. and J. O. Martin made to Dora B. Hardesty and recorded on the 26th day of April 1912, in Marion County, Book 186 Page 20

NEW WELL DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE _____
OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. *

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address _____ day _____ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN, WEST VIRGINIA 26505
AC-304 - 292-6331

Address of Well Operator

Very truly yours, CARNEGIE NATURAL GAS COMPANY
(Sign Name) James C. Stephenson
Well Operator Div. Supt.
3904 Main St.
Street
Munhall
City or Town
Pennsylvania 15120
State

*SECTION 3 If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

BLANKET BOND

MAR-457-DD PERMIT NUMBER

THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO _____ DRILL DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT: _____
 NAME Carnegie Natural Gas Company NAME J. C. Stephenson
 ADDRESS PO Drawer No. 387, Mannington, WV 26582 ADDRESS PO Drawer No. 387, Mannington, WV
 TELEPHONE 304-986-2060 TELEPHONE 304-986-2060
 ESTIMATED DEPTH OF COMPLETED WELL: 3760 ROTARY _____ CABLE TOOLS
 PROPOSED GEOLOGICAL FORMATION: Balltown
 TYPE OF WELL: OIL _____ GAS COMB. _____ STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8			
7			
5 1/2			
3 1/2 3.50"	3760'	3760'	800'
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS _____ FEET SALT WATER _____ FEET
 APPROXIMATE COAL DEPTHS 358-364, 453-463
 IS COAL BEING MINED IN THE AREA? _____ BY WHOM? Consolidation Coal Co.

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for _____ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the _____ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

For Coal Company

Official Title