



Source of elevation :-
 U.S.G.S. B.M. West Union - 836'
 Error in Closure :-
 Less than 1' in 200'

I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all of the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.
W. W. Stout
 E. P. No. 1227

- Fracture
- Drill Deeper
- Abandonment

Company CARNEGIE NATURAL GAS CO. 155
 Address 800 Regis Ave., Pittsburgh, PA. 15236
 Farm Leeman Maxwell / SURFACE OWNER
 Tract _____ Acres 2164 Lease No. 6764
 Well (Farm) No. 19 Serial No. 609
 Elevation (Spirit Level) 1051
 Quadrangle Holbrook 15 / Oxford 7.5
 County Doddridge District Southwest 7
 Engineer W. W. Stout
 Engineer's Registration No. 1227
 File No. _____ Drawing No. _____
 Date June 24, 1965 Scale 1" = 100' poles

Office of Oil & GAS
 Div. of Env. Prot.
 Nitro, W.V.
Justin M. Henderson
WELL LOCATION MAP
 API. Well No. 47-017-02381-D
 † Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown. *Drill Deeper FPAC Alexander*
 - Denotes one inch spaces on border line of original tracing.
 NOV 13 1962

MAR 03 1995

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

Permitting
 Office of Oil & Gas

Well Operator's Report of Well Work

Farm name: HENDERSON, JUSTIN M. Operator Well No.: 19-609

LOCATION: Elevation: 1051.00 Quadrangle: OXFORD

District: SOUTHWEST County: DODDRIDGE
 Latitude: 2450 Feet South of 39 Deg. 12Min. 30 Sec.
 Longitude 6510 Feet West of 80 Deg. 45 Min. 0 Sec.

Company: CARNEGIE NATURAL GAS CO.
 800 REGIS AVE
 PITTSBURGH, PA 15236-0000

Agent: J. C. STEPHENSON

Inspector: MIKE UNDERWOOD
 Permit Issued: 11/10/92
 Well work Commenced: 11-11-92
 Well work Completed: 5-31-93
 Verbal Plugging
 Permission granted on: _____
 Rotary X Cable _____ Rig
 Total Depth (feet) 5199
 Fresh water depths (ft) _____
 Salt water depths (ft) _____

Is coal being mined in area (Y/N)? N
 Coal Depths (ft): NONE

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
7"	1702'	1702'	
SQUEEZED 7" TO SURFACE			70 SKS C.T.S.
4 1/2"	5123'	5123'	280 SKS

OPEN FLOW DATA

Producing formation ALEXANDAR Pay zone depth (ft) _____
 Gas: Initial open flow SHOW 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 1040 psig (surface pressure) after 72 Hours
 4580-4640
 Second producing formation LOWER RILEY, BENSON Pay zone depth (ft) 4664-4730
 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.

For: Douglas R. May
 CARNEGIE NATURAL GAS CO.
 By: _____
 Date: 5/31/93

API# 47-017-2381
 WELL# MAXWELL 609

FRAC DATA

TYPE: FOAM

FORMATION	DEPTH	SHOTS	
1ST STAGE RILEY SECTION/ BENSON	4585 - 4678	16	75Q FOAM 500 GAL. 15% HCL 5100# 80/100 SAND 26,520# 20/40 SAND 384,470 (N2) 250 BBL FOAM
2ND STAGE ALEXANDER	4956 - 4967	16	75Q FOAM 500 GAL. 15% HCL 4520# 80/100 SAND 42,000# 20/40 SAND 465,970 SCF (N2) 247 BBL FOAM

FORMATION	TOP	BOTTOM	REMARKS
COMMENCED DRILLING DEEPER @ 2652'			
SAND & SHALE	2652	3060	
WARREN	3060	3243	
SPEECHLEY SECTION	3243	3582	
BALLTOWN SECTION	3582	4149	
RILEY SECTION	4149	4637	
SHALE	4637	4674	
BENSON	4674	4680	
SHALE	4680	4936	
ALEXANDER	4936	5022	
SHALE	5022	5199	T.D.

RECEIVED
November 9, 1992
Permitting
Office of Oil & Gas

- 1) Date: November 3, 1992
- 2) Operator's well number 19-609
- 3) API Well No: 47 - 017 - 2381 DD
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 Justin M. Henderson
Address 108 Wood Street
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 NONE
Address _____
 - (b) Coal Owner(s) with Declaration
Name NONE RECORDED
Address _____
 - (c) Coal Lessee with Declaration
Name NONE RECORDED
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 Carnegie Natural Gas Company
 By: James C. Stephenson
 Its: Division Superintendent
 Address 800 Regis Avenue
Pittsburgh, PA 15236
 Telephone 412-655-8510

Subscribed and sworn before me this 3rd day of November, 1992

My commission expires October 26, 2001

J. Wayne Jones

 Commissioner
 DEPARTMENT OF ENERGY
 DIVISION OF OIL AND GAS
 P.O. BOX 100
 CHARLESTON, WV 25302

FORM RECEIVED

WV Dept. Environmental Protection

NOV 09 92

Well Permitting Office of the State

518-47017-2381-0

Page of

STATE OF WEST VIRGINIA

DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS

WELL WORK PERMIT APPLICATION

Issued 11/10/92

Expires 11/10/94

155
Carnegie Natural Gas Company 8650 (7) 585

2) Operator's Well Number: 19-609 3) Elevation: 1051

4) Well type: (a) Oil ___ / or Gas X /
(b) If Gas: Production X / Underground Storage ___ /
Deep ___ / Shallow X /

5) Proposed Target Formation(s): Alexander 439

6) Proposed Total Depth: 5300 feet

7) Approximate fresh water strata depths: 150'

8) Approximate salt water depths: _____

9) Approximate coal seam depths: _____

10) Does land contain coal seams tributary to active mine? Yes ___ / No X /

11) Proposed Well Work: DRILL DEEPER

Drill Existing well deeper & frac New formation

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				0-500'	from well head	
Fresh Water	* 10 3/4"		7" 400	210'	210'	
Coal					Existing	
Intermediate	* 7"		17#	1702'	1702'	O.K. MCA NO CEMENT CANNOT PERMIT
Production	4 1/2"	J-55	10.5#		5200'	2000'
Tubing				3805A/B-11.1		Cement back to
Liners						1700'

* Existing Pipe in Well

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

193712/36
Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Blanket one Agent
(Type)



9-21-65
WB

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Quadrangle Holbrook N.E.

Permit No. DOD-3-FRAC.

WELL RECORD

Oil or Gas Well GAS
(KIND)

Company Carnegie Natural Gas Company
Address 3904 Main St., Munhall, Pa.
Farm Boeman Maxwell Acres 2164
Location (waters) _____
Well No. 19-609 Elev. 1051'
District Southwest County Doddridge
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by _____
Address _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			7" set on steel size
16			Kind of Packer _____
13			Hold Down Tension
10		112	Size of <u>3 1/2" x 7"</u>
8 1/4		923	
6 5/8 7"	1715	1702	Depth set <u>1740'</u>
5 3/16			
3-1/2"	1800	pulled	Perf. top _____
2			Perf. bottom _____
Liners Used			Perf. top _____
			Perf. bottom _____

Cleaning Out _____ Address _____
Work commenced March 16, 1965
Cleaning Out _____
Work completed August 2, 1965

Date Shot _____ From _____ To _____

With _____

Open Flow /10ths Water in _____ Inch

/10ths Merc. in _____ Inch

Volume show of gas Cu. Ft.

Rock Pressure 180 lbs. _____ hrs.

Oil _____ bbls., 1st 24 hrs.

WELL ACIDIZED _____

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____

COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES

_____ FEET _____ INCHES _____ FEET _____ INCHES

_____ FEET _____ INCHES _____ FEET _____ INCHES

WELL FRACTURED July 19, 1965

RESULT AFTER TREATMENT 211,000 cu.ft.

ROCK PRESSURE AFTER TREATMENT 250# - 16 hours.

Fresh Water _____ Feet _____ Salt Water _____ Feet _____

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
OLD WELL - REWORKED.							

