

- New Location.
- Drill Deeper.
- Redrill.
- Abandonment.

Carnegia Natural Gas Company
 800 Regis Avenue
 Pittsburgh, Pa. 15236
 Surface: John Steel

Tract 224 Acres 520.92 Lease No. 17459

Well (Farm) No. 26 Serial No. E-1713

Elevation (Spirit Level) 1044.23'

Quadrangle MATEWAN 15 / Majestic 15

County MINGO District MAGNOLIA

Engineer John Steel

Engineer's Registration No. 1850

File No. _____ Drawing No. _____

Date 3-13-58 Scale 1"=400'

WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS
 #10 McJUNKIN ROAD
 NITRO, WEST VIRGINIA 25143-2506

WELL LOCATION MAP

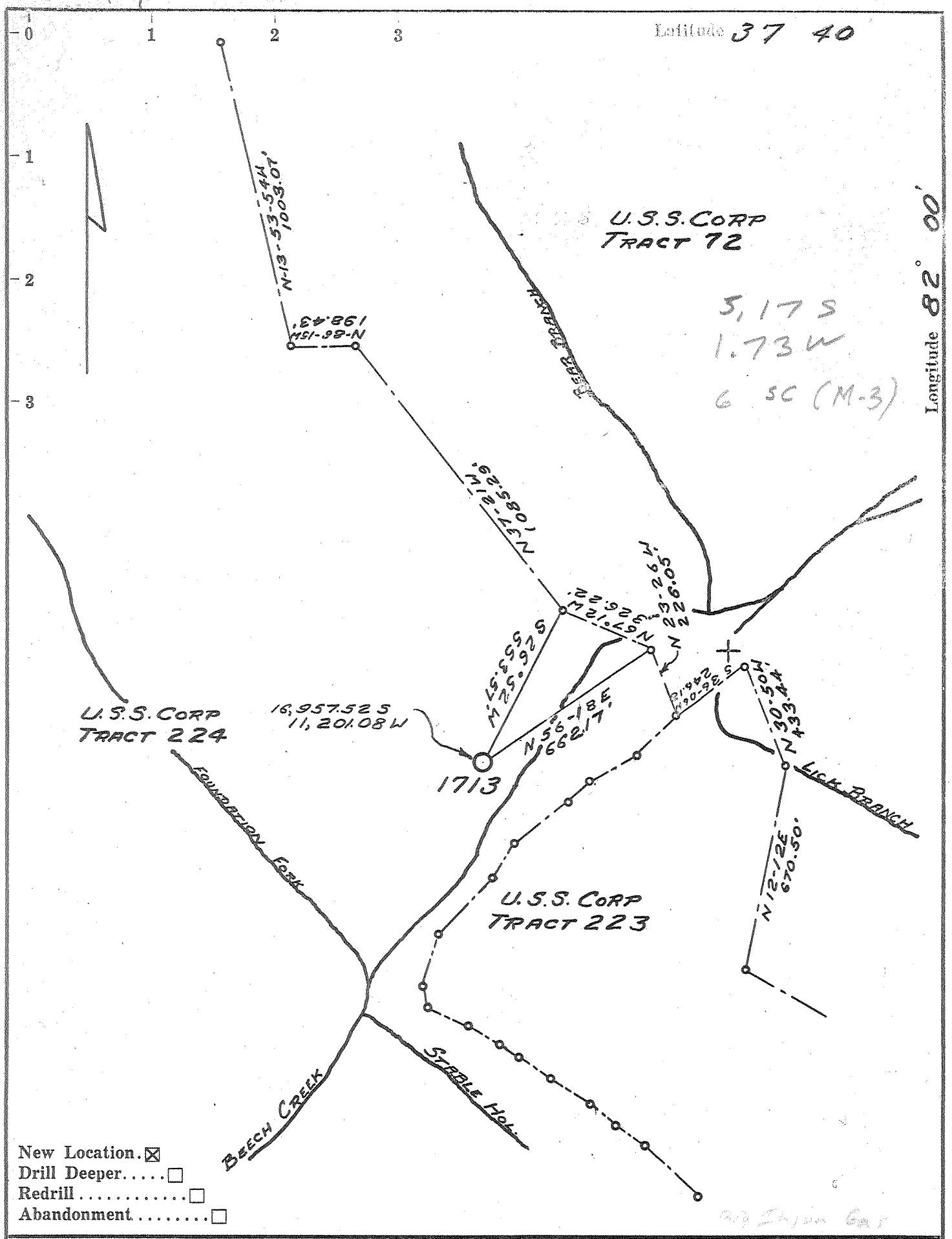
OPD Well No. 47-059-00568-F.
Well drilled in 1958 TO 5109'
Plugged Back to 2050'
Produced Best Time
Repair existing Producing
Zone.

AUG 08 1997

DEEP WELL

M 4

P



Company CARNEGIE NATURAL GAS

Address 1015 FRICK BLDG. PITTSBURGH PA

Farm UNITED STATES STEEL CORP

Tract 224 Acres 520.92 Lease No. 17459

Well (Farm) No. 26 Serial No. E-1713

Elevation (Spirit Level) 1044.23'

Quadrangle MATEWAN - EC

County MINGO District MAGNOLIA

Engineer John O. [Signature]

Engineer's Registration No. 1850

File No. _____ Drawing No. _____

Date 3-13-58 Scale 1"=400'

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

WELL LOCATION MAP
 FILE NO. MIN-568

+ 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.

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

6-6-26

Deep Well



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

Quadrangle Matewan

WELL RECORD

Permit No. MIN-568

Oil or Gas Well GAS
 (KIND)

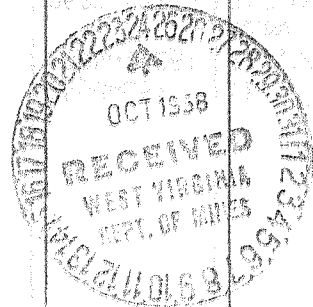
Company Carnegie Natural Gas Company
 Address 1015 Frick Building, Pittsburgh 19, Pa.
 Farm United States Steel Corp. Tract No. 224
 Acres 520.92
 Location (waters) _____
 Well No. 26-1713 Elev. 1044.23'
 District Magnolia County Mingo
 The surface of tract is owned in fee by U. S. Steel Corp.
525 Wm. Penn Place Address Pittsburgh, Pa.
 Mineral rights are owned by U. S. Steel, Corp.,
525 Wm. Penn Place Address Pittsburgh, Pa.
 Drilling commenced March 31, 1958
 Drilling completed July 3, 1958
 Date Shot _____ From _____ To _____
 With _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			Bottom Hole
13-3/8"	15'	15'	Size of 7" x 8-5/8"
10-3/4"	15 1/2'	15 1/2'	Depth set 2138'
8 1/2"	1533'	1533'	
6 3/4"	2138'	2138'	
5 3/16			
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

Open Flow 1 1/10ths Water in 2 Inch
 /10ths Merc. in _____ Inch
 Volume 110,000 - Blew down to 119,000 Cu. Ft.
 Rock Pressure 840 lbs. 72 hrs.
 Oil _____ bbls., 1st 24 hrs.
 Fresh water 30 feet
 Salt water _____ feet

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____
 COAL WAS ENCOUNTERED AT 187 FEET 12 INCHES
 _____ FEET _____ INCHES _____ FEET _____ INCHES
 _____ FEET _____ INCHES _____ FEET _____ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Sand			0	99	Water	30'	Hole Full
Slate			99	139			
Lime			139	170			
Slate			170	176			
Lime (Gritty)			176	187			
Coal			187	188			
Lime			188	204			
Slate			204	360			
Sand			360	396			
Slate			396	400			
Sand			400	654			
Slate			654	659			
Sand			659	750			
Slate			750	780			
Sand			780	813			
Slate			813	835			
Sand			835	860			
Slate			860	942			
Sand			942	1372			
Slate			1372	1380			
Sand			1380	1428			
Slate			1428	1437			
Sand			1437	1470			
Lime			1470	1487			
Slate			1487	1500			
Lime (Gritty)			1500	1542			
Slate and Shells			1542	1600			
Lime			1600	1810			
Red Rock			1810	1835			
Sand			1835	1850			
Slate			1850	1858			
Lime			1858	1872			
Red Rock			1872	1910			
Lime			1910	1947			
Sand			1947	1965			
Slate and Shells			1965	1992			
Lime (Gritty)			1992	2014			
Slate and Shells			2014	2050			
Sand			2050	2138			



(Over)

STATE OF WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
 WELL WORK PERMIT APPLICATION

059 568 Frac

- 24025
- 1) Well Operator: CARNEGIE NATURAL GAS COMPANY 8650(5) 462
- 2) Operator's Well Number: U.S. STEEL #1713 3) Elevation: 1044.23
- 4) Well type: (a) Oil ___ / or Gas X /
- (b) If Gas: Production X / Underground Storage ___ /
 Deep ___ / Shallow X /
- Proposed Target Formation(s): BIG LIME³⁴⁵
- Proposed Total Depth: 2693' feet
- Approximate fresh water strata depths: 30'
- Approximate salt water depths: _____
- 9) Approximate coal seam depths: 137'
- 10) Does land contain coal seams tributary to active mine? Yes X / No ___ /
- 11) Proposed Well Work: RE-STIMULATE BIG LIME (ACID FRAC)
RUN 4 1/2" FRAC STRING - FRACTURE WELL & REMOVE STRING
- 12) _____

Issued 08/06/97
 Expires 08/06/99

RECEIVED
 Environmental Protection
 JUL 21 1997
 Permitting
 Office of Oil & Gas

CASING AND TUBING PROGRAM

TYPE SPECIFICATIONS FOOTAGE INTERVALS CEMENT

TYPE	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	13 3/8"				15'	
Fresh Water	10 3/4"				154'	
Coal						
Intermediate	8 5/8"				1533'	
Production	7"				2438'	
Tubing	Pulling 2859' of 3 1/2"					
Liners	4 1/2" to be run				2000'	38058 gal

Op. string from well records.

PACKERS : Kind BOTTOM HOLE
 Sizes 7" X 8 5/8"
 Depths set 2438'

For Office of Oil and Gas Use Only

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

01105/28

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas
Well Operator's Report of Well Work

FARM NAME Steele, John OPERATOR WELL NO. U.S. Steel 1713
LOCATION: ELEVATION 1,044.23 QUADRANGLE Majestic
DISTRICT: Magnolia COUNTY Mingo
LATITUDE: 11120 Feet South of 37 Deg. 37 Min. 30 Sec.
LONGITUDE: 9410 Feet West of 82 Deg. 0 Min. 0 Sec.

COMPANY:	CARNEGIE NATURAL GAS CO. 800 REGIS AVENUE PITTSBURGH, PA 15236	CASING/ TUBING SIZE	USED IN DRILLING	LEFT IN WELL	CEMENT FILL UP CU. FT.
AGENT:	DOUGLAS R. NAY	No Additional Pipe Left In Well			
INSPECTOR:	Ofie Helmick				
PERMIT ISSUED:	8/6/97	Refer to Original Report			
WELL WORK COMMENCED:	8/28/97				
WELL WORK COMPLETED:	9/24/97				
VERBAL PLUGGING					
PERMISSION GRANTED ON:					
ROTARY _____ CABLE _____ RIG _____					
TOTAL DEPTH (FEET):	2690'				
FRESH WATER DEPTHS (FT):					
SALT WATER DEPTHS (FT):					
IS COAL BEING MINED IN AREA (Y/N)					
COAL DEPTHS (FT):					

Permitting
Office of Oil & Gas
FEB 24 1998

OPEN FLOW DATA

PRODUCING FORMATION Big Lime PAY ZONE DEPTH (FT) 2305-2650'
GAS INITIAL OPEN FLOW _____ MCF/d OIL INITIAL OPEN FLOW _____ Bbl/d
FINAL OPEN FLOW 60 MCF/d FINAL OPEN FLOW _____ Bbl/d
TIME OF OPEN FLOW BETWEEN INITIAL AND FINAL TESTS _____ HOURS
STATIC ROCK PRESSURE 50 psig (SURFACE PRESSURE) AFTER _____ 16 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.

FOR: CARNEGIE NATURAL GAS COMPANY
BY: Douglas R. Nay
DATE: 2/9/98

FEB 24 1998

Ran 2600' of 4 1/2" casing with 4 1/2" x 7" tension packer on bottom.

Treated Big Lime with 2500 gal. 15% HCL @ 4 BPM Rate.

Well went on vacuum.

Flowed well back, pulled 4 1/2" casing and packer. Cleaned well out to T.D., 2690'