

New Location... REVISED
 Drill Deeper.....
 Abandonment.....

Company	GARNEGIE NATURAL GAS
Address	1015 FRICK BLDG. PITTSBURGH 19, PA.
Farm	UNITED STATES STEEL CORPORATION
Tract	174 Acres 691.65 Lease No. 17459
Well (Farm) No.	20 Serial No. E-1705
Elevation (Spirit Level)	1716.17'
Quadrangle	MATEWAN (EC)
County	MINGO District MAGNOLIA
Engineer	JOHN ORTH COOK 7-25-57
Engineer's Registration No.	1850
File No.	Drawing No.
Date	8-19-57 Scale 1" = 400'

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

WELL LOCATION MAP
 FILE NO. MIN-547-REVISED

+ 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.

Samples 31-6 (2950'-3315') - Deep Well



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION 4

*Well not abandoned.
Being produced from
depth 3350'*
Gas
Oil or Gas Well (KIND)

Quadrangle Matewan
Permit No. MIN-547-Revised

WELL RECORD

Company Carnegie Natural Gas Company
Address 1015 Frick Building, Pittsburgh, Pa.
Farm United States Steel Corp. Tract No. 174 Acres 691.65
Location (waters) _____
Well No. 20-1705 Elev. 1716.17'
District Magnolia County Mingo
The surface of tract is owned in fee by United States Steel Corp. 525 Wm. Penn Place Address Pittsburgh, Pa.
Mineral rights are owned by United States Steel Corp., 525 Wm. Penn Place Address Pittsburgh, Pa.
Drilling commenced August 8, 1957
Drilling completed November 21, 1957
Date Shot _____ From _____ To _____
With _____
Open Flow _____ /10ths Water in _____ Inch
_____ /10ths Merc. in _____ Inch
Volume _____ Cu. Ft.
Rock Pressure _____ lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.
WELL ACIDIZED _____
WELL FRACTURED _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			Bottom Hole
13 1/4"	21'	pulled	Size of 7"x8-5/8"
10-3/4"	192'	192'	Depth set 3075'
8 1/4-5/8"	2184'	2184'	
6 3/4 7"	3075'	3075'	
5 3/16			
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

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

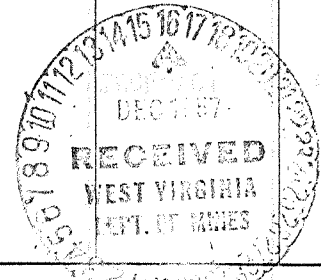
COAL WAS ENCOUNTERED AT 120 FEET 24 INCHES
210 FEET 60 INCHES 319 FEET 48 INCHES
400 FEET 60 INCHES 450 FEET 24 INCHES

RESULT AFTER TREATMENT

ROCK PRESSURE AFTER TREATMENT

Fresh Water 210', 452', Feet 495' Salt Water 1804-10', 2419-24' Feet 2758-63'

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Gravel			0	20			
Sand			20	120			
Coal			120	122	<i>Williamson</i>		
Sand (broken)			122	210	Water	210'	1/2 bailer per hr.
Coal			210	215	A		
Sand			215	241			
Slate			241	248			
Sand			248	319			
Coal			319	323	B		
Slate			323	356			
Lime (gritty)			356	400			
Coal			400	405	C		
Slate and Shells			405	450			
Coal			450	452	D	452'	3 bailers per hr.
Sand			452	512	Water	495'	Hole full
Slate			512	555			
Sand			555	597			
Lime (gritty)			597	620			
Sand			620	665			
Lime (broken)			665	748			
Sand			748	830			
Slate and Shells			830	875			
Sand (broken)			875	975			
Sand			975	1003			
Slate and Shells			1003	1030			
Sand			1030	1055			
Slate			1055	1084			
Lime (gritty)			1084	1125			
Sand			1125	1161			
Slate and Shells			1161	1193			



(over)

Formation	Color	Hard or Soft	Top <i>4</i>	Bottom	Oil, Gas or Water	Depth Found	Remarks
Sand			1193	1315			
Lime (broken)			1315	1345			
Sand			1345	1448			
Slate and Shells			1448	1498			
Sand			1498	1517			
Slate and Shells			1517	1627			
Sand			1627	2121	Water	1804-10'	2 bailers per hr.
Slate			2121	2129			
Sand			2129	2160			
Slate			2160	2177			
Sand			2177	2191			
Lime (gritty)			2191	2224			
Slate			2224	2253			
Lime (gritty)			2253	2353			
Lime			2353	2372			
Slate			2372	2390			
Lime			2390	2413			
Sand			2413	2440	Water	2419-24'	1/2 bailer per hr.
Lime			2440	2462			
Red Rock			2462	2485			
Lime			2485	2505			
Red Rock			2505	2600			
Lime			2600	2630			
Sand			2630	2652			
Lime			2652	2726			
Sand			2726	2793	Water	2758-63'	1 1/2 bailers per hr
Slate			2793	2797			
Lime (gritty)			2797	2810			
Slate			2810	2840			
Lime			2840	2872			
Pink Rock			2872	2877			
Lime			2877	2910			
Slate			2910	2922			
Sand			2922	2973			
Lime			2973	3310	Gas	3299'	Show
Red Injun			3310	3380			
Shells			3380	3560			
Slate and Shells			3560	3797			
Lime			3797	3825			
Slate and Shells			3825	3878			
Shale (broken)			3878	3909			
Sand			3909	3933			
Shale			3933	3980			
Slate and Shells			3980	4640			
Lime			4640	4672			
Slate and Shells			4672	4886			
Shale			4886	4902			
Lime (gritty)			4902	4936			
Shale			4936	5200			
Slate and Shells			5200	5536			
Shale	Dark Gray		5536	5692			
Lime	- conspicuous		5692				
Total Depth				5711			

Plug Back 3350

*5692
1716
3976*

Date November 21, 1957

APPROVED Carnegie Natural Gas Company, Owner

By _____ (Title) Div. Supt.