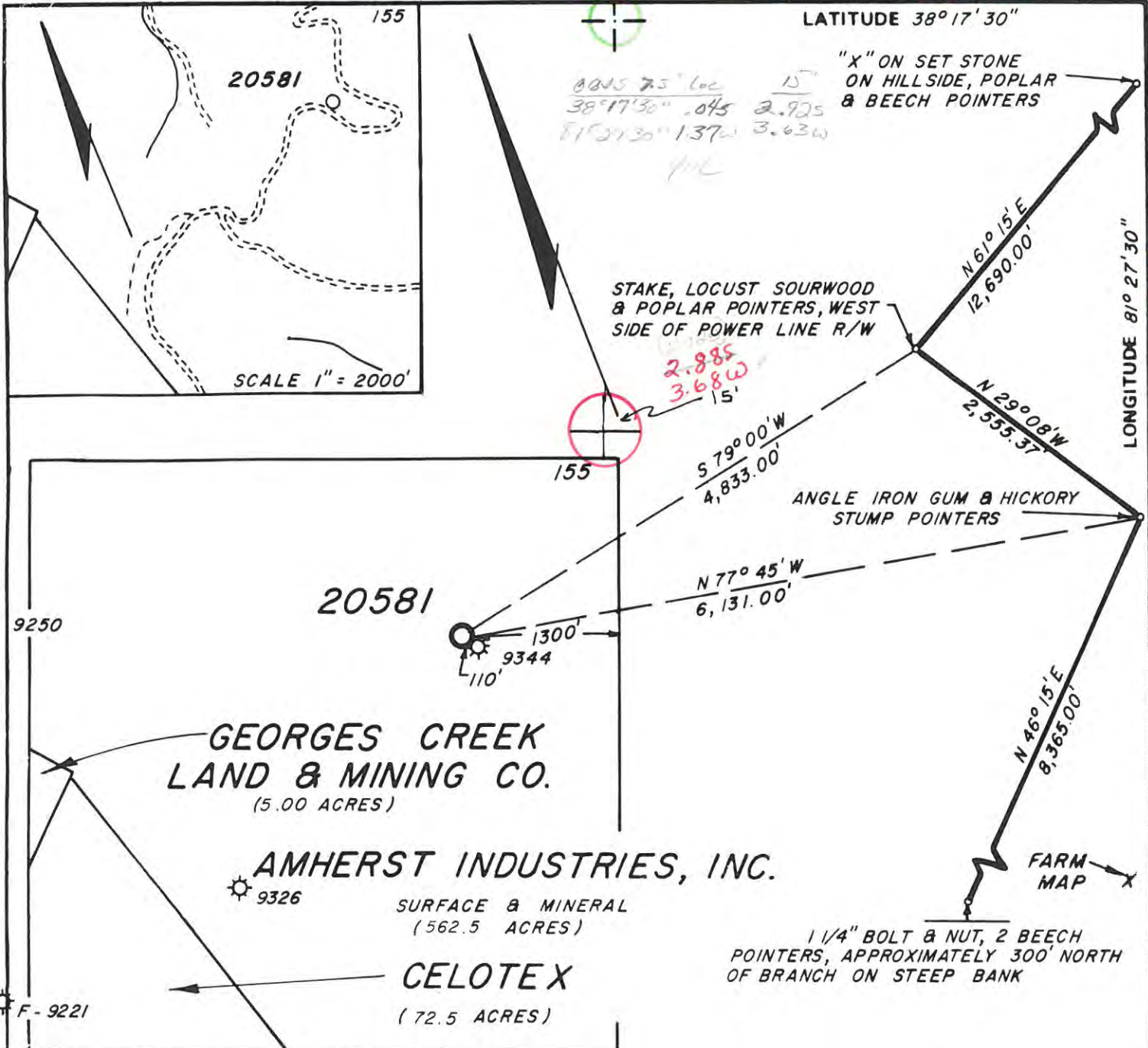


LATITUDE 38° 17' 30"



REVISED 3-30-83

FILE NO. 68-55  
 DRAWING NO. 20581  
 SCALE 1" = 1320'  
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200  
 PROVEN SOURCE OF ELEVATION U.S. GOVT. TRI. STA.  
ELEV. 1625'

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) Howard C. Hart  
 R.P.E. \_\_\_\_\_ L.L.S. 99

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6  
 (8.78) LAT: 38° 17' 28"  
 LONG: 81° 29' 01"



DATE 7-1, 19 80  
 OPERATOR'S WELL NO. 20581  
 API WELL NO. 47-039-3950  
 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 \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 1431.20' WATER SHED LEFT FORK WITCHER CREEK  
 DISTRICT CABIN CREEK COUNTY KANAWHA  
 QUADRANGLE QUICK Clendenen SW  
 SURFACE OWNER SAME ACREAGE 575  
 OIL & GAS ROYALTY OWNER AMHERST INDUSTRIES, INC. LEASE ACREAGE 575  
 LEASE NO. 1021  
 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 TUSCARORA ESTIMATED DEPTH 6730'  
 WELL OPERATOR COL. GAS TRANS. CORP. DESIGNATED AGENT J.L. WEEKLEY  
 ADDRESS P.O. BOX 1273 ADDRESS SAME  
CHARLESTON W. VA. 25325

MAY 09 1983  
 Deepwell



IV-35  
(Rev 8-81)



Date November 17, 1983  
Operator's  
Well No. 20581  
Farm Amherst Coal Co.  
API No. 47-039-039  
039-3950

**RECEIVED**  
NOV 21 1983

State of West Virginia  
Department of Mines  
Oil and Gas Division

OIL & GAS DIVISION  
DEPT. OF MINES

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 X / Shallow   )

LOCATION: Elevation: 1431.20 Watershed Left Fork Witcher Creek  
District: Cabin Creek County Kanawha Quadrangle Quick

COMPANY Columbia Gas Transmission Corporation

ADDRESS P. O. Box 1273, Charleston, WV 25325

DESIGNATED AGENT James L. Weekley

ADDRESS P. O. Box 1273, Charleston, WV 25325

SURFACE OWNER Amherst Industries, Inc.

ADDRESS Port Amherst, Charleston, WV 25306

MINERAL RIGHTS OWNER Amherst Industries, Inc.

ADDRESS Port Amherst, Charleston, WV 25306

OIL AND GAS INSPECTOR FOR THIS WORK D. Craig Duckworth

ADDRESS P. O. Box 454 Mt. Lookout, WV 26678

PERMIT ISSUED 4-15-83

DRILLING COMMENCED 5-17-83 *no way drill 6918' in*

DRILLING COMPLETED 5-18-83 *1 day!*

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

Casing Tubing Size	Used in Drilling	Left in Well	Cement fill up Cu. ft
20-16 Cond.	20	20	15 sack
13-10"	221.78	221.78	165 sa
9 5/8	2523.37	2532.37	630 sa
8 5/8			
7	5520.63	5520.63	280 sa
5 1/2			
4 1/2	6866.94	6866.94	140 sa
3			
2	6812.15	6812.15	
Liners used			

GEOLOGICAL TARGET FORMATION Tuscarora Depth 6730 feet

Depth of completed well 6918 feet Rotary X / Cable Tools   

Water strata depth: Fresh 109,1090 feet; Salt    feet

Coal seam depths: 156', 290', 392', 424' Is coal being mined in the area? Ye

OPEN FLOW DATA

Producing formation Tuscarora Pay zone depth 6894-6902 feet

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

Final open flow 4420 Mcf/d Final open flow    Bbl/d

Time of open flow between initial and final tests    hours

Static rock pressure 1580 psig (surface measurement) after 72 hours shut

(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



DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Natural Well

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all and salt water, coal, oil and
Shale			0	76	
Sand Shale			76	156	
Coal			156	162	
Shale			162	290	
Penn Coal			290	300	
Shale			300	392	
Undiff. Coal			392	398	
Shale			398	424	
Cole			424	429	
Shale			429	562	
Sand			562	623	
Shale			623	716	
Sand			716	754	
Shale			754	793	
Sand			793	830	
Shale			830	915	
Sand			915	932	
Shale			932	1012	
Salt Sand			1012	1062	
Shale			1062	1090	
Salt Sand			1090	1226	
Shale			1226	1263	
Salt Sand			1263	1526	
Shale			1526	1552	
Maxon Sand			1552	1834	
Greenbrier			1850	2030	
Big Injun			2030	2070	
Pocono Undif.			2070	2520	
Devonian Shale			2520	5330	
Onondaga			5330	5430	
Williamsport			6115	6145	
<u>Tuscarora</u>			6850	6910	
LTD				6913	
DTD				<u>6918</u>	

(Attach separate sheets as necessary)

Columbia Gas Transmission Corporation

Well Operator

By:

Date:

November 17, 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."





1) Date: March 30, 1983  
 2) Operator's Well No. 20581  
 3) API Well No. 47 039 3950  
 State County Permit

DRILLING CONTRACTOR:  
Ray Resources Corporation

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

**OIL AND GAS WELL PERMIT APPLICATION**

- 4) WELL TYPE: A Oil  / Gas  /  
 B (If "Gas", Production  / Underground storage  / Deep  / Shallow  /)
- 5) LOCATION: Elevation: 1431.20 Watershed: Left Fork Witcher Creek  
 District: Cabin Creek County: Kanawha Quadrangle: Quick
- 6) WELL OPERATOR Columbia Gas Transmission Corp. 11) DESIGNATED AGENT J. L. Weekley  
 Address P. O. Box 1273 Address P. O. Box 1273  
Charleston, WV 25325 Charleston, WV 25325
- 7) OIL & GAS ROYALTY OWNER Amherst Industries Inc. 12) COAL OPERATOR Pratt Mining Company  
 Address Port Amherst Address P. O. Box 1751  
Charleston, WV 25306 Hansford, WV 25103
- 8) SURFACE OWNER Amherst Industries, Inc. 13) COAL OWNER(S) WITH DECLARATION ON RECORD:  
 Name Amherst Industries, Inc.  
 Address \_\_\_\_\_  
 Name \_\_\_\_\_  
 Address \_\_\_\_\_
- 9) FIELD SALE (IF MADE) TO:  
 Address \_\_\_\_\_
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED 14) COAL LESSEE WITH DECLARATION ON RECORD:  
 Name D. Craig Duckworth Name Pratt Mining Company  
 Address P. O. Box 454 Address \_\_\_\_\_  
Mt. Lookout, WV 26678
- 15) PROPOSED WORK: Drill  / Drill deeper  / Redrill  / Fracture or stimulate  /  
 Plug off old formation  / Perforate new formation  /  
 Other physical change in well (specify) \_\_\_\_\_
- 16) GEOLOGICAL TARGET FORMATION, Tuscarora
- 17) Estimated depth of completed well, 6730 feet
- 18) Approximate water strata depths: Fresh, \_\_\_\_\_ feet; salt, \_\_\_\_\_ feet.
- 19) Approximate coal seam depths: 75', 180' Is coal being mined in the area? Yes  / No

20) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor	<u>20</u>			<input checked="" type="checkbox"/>		<u>60</u>	<u>60</u>	<u>To surface</u>	Kinds
Fresh water	<u>13-3/8</u>			<input checked="" type="checkbox"/>		<u>225</u>	<u>225</u>	<u>To surface</u>	
Coal	<u>9-5/8</u>			<input checked="" type="checkbox"/>		<u>2350</u>	<u>2350</u>	<u>To surface</u>	Sizes
Intermediate	<u>7</u>			<input checked="" type="checkbox"/>		<u>5200</u>			
Production	<u>4-1/2</u>			<input checked="" type="checkbox"/>		<u>6730</u>			Depths set
Tubing									
Liners									Perforations: Top Bottom

- 21) EXTRACTION RIGHTS  
 Check and provide one of the following:  
 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.  
 The requirement of Code 22-4-1-(c) (1) through (4). (See reverse side for specifics.)
- 22) ROYALTY PROVISIONS  
 Is the right to extract, produce or market the oil or gas based upon a lease or other continuing contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes  No
- If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit Form IV-60.
- 23) Required Copies (See reverse side.)
- 24) Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

Notary: \_\_\_\_\_ Signed: \_\_\_\_\_  
 My Commission Expires \_\_\_\_\_ Its: Director, Drilling & Operations

OFFICE USE ONLY  
DRILLING PERMIT

Permit number 47-039-3950 Date May 2 1983

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. **Notification must be given to the District Oil and Gas Inspector.** (Refer to No. 10) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

Permit expires January 2, 1984 unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
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Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.



Line Item Explanation

- 1) Date of Application
- 2) Your well name and number
- 3) To be filled out by office of oil & gas
- 4A) "Oil" means natural crude oil or petroleum and other hydrocarbons, regardless of gravity, which are produced at the well in liquid form by ordinary production methods and which are not the result of condensation of gas after it leaves underground reservoirs: "Gas" means all natural gas and all other fluid hydrocarbons not defined as oil.
- 4B) "Shallow well" means any well drilled and completed in a formation above the top of the uppermost member of the "Onondaga Group" or a depth less than six thousand feet, whichever is shallower.  
"Deep well" means any well drilled and completed in a formation at or below the top of the uppermost member of the "Onondaga Group" or at a depth less than six thousand feet, whatever is shallower.
- 5) Where well is located
- 6) Before a permit can be issued in a corporation, company partnership, or fictitious name, the name must be registered with the Secretary of State Office
- 7) Use separate sheet if necessary
- 8) Present surface owner at time application is filed.
- 9) Optional
- 11) See Reg. 7.01 relating to code §22-4-1k
- 12) "Coal Operator" means any persons, firm, partnership, partnership association or corporation that proposes to or does operate a coal mine. See Note 24
- 13 & 14) As per §22-4-20; See Note 24
- 15) Work that will be attempted—A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.
- 16) Anticipated formation for which well will be completed
- 17) Self explanatory
- 18) Depth to deepest freshwater, and shallowest salt water, taken from nearby wells corrected for differences in elevation
- 19) All coal seam depths
- 20) Proposed casing program and cementing refer to Code 22-4-5, 22-4-6, 22-4-7, 22-4-8, 22-4-8a Reg 9.01, 15.01, 15.02, 15.03, 15.04, 25.01, 25.02, 25.03, 25.04
- 21) Code 22-4-11(c) - In lieu of filing the lease or leases or other continuing contract or contracts, the applicant for a permit described herein may file the following:
  - (1) A brief description of the tract of land including the district and county wherein the tract is located;
  - (2) The identification of all parties to all leases or other continuing contractual agreements by which the right to extract, produce or market the oil or gas is claimed;
  - (3) The book and page number wherein each such lease or contract by which the right to extract, produce or market the oil or gas is recorded;
  - (4) A brief description of the royalty provisions of each such lease or contract.
- 22) Code 22-4-11(d) and 22-4-11(e).
- 23) Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code §22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code §22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code §22-4-12a, and (v) if applicable, the consent required by Code §22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.
- 24) **The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code §22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.**

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof.

WAIVER

The undersigned coal operator \_\_\_\_\_ / owner \_\_\_\_\_ / lessee \_\_\_\_\_ / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: \_\_\_\_\_, 19\_\_\_\_\_

By \_\_\_\_\_

Its \_\_\_\_\_