

FILE NO. 66-53
 DRAWING NO. 21095
 SCALE 1"=1000'
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200
 PROVEN SOURCE OF ELEVATION U.S. GOV'T BM ELEV. 613'

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) [Signature]
 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° 16' 59"
LONG: 81° 31' 48"



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

DATE JULY 16, 19 82
 OPERATOR'S WELL NO. 21095
 API WELL NO. 47-039-3914
 STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP X SHALLOW ___
 LOCATION: ELEVATION 1459 WATER SHED GEORGES CREEK
 DISTRICT MALDEN COUNTY KANAWHA
 QUADRANGLE CHARLESTON, EAST 7 1/2 Charleston 15' SE
 SURFACE OWNER ROBERT F. MORRIS ACREAGE 92
 OIL & GAS ROYALTY OWNER GEORGES CREEK LAND & MINING CO. LEASE ACREAGE 640 ACRE UNIT
 LEASE NO. 21661

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 CLINTON ESTIMATED DEPTH 7010' DEEP WELL
 WELL OPERATOR COL. GAS TRANS. CORP. DESIGNATED AGENT J.L. WEEKLEY
 ADDRESS P.O. BOX 1273 ADDRESS SAME
CHARLESTON, W.VA. 25325 6-6 Indian Creek (268) 357

NOV 15 1982

RECEIVED

JUL 14 1983



OIL & GAS DIVISION
DEPT. OF MINES
State of West Virginia

Department of Mines
Oil and Gas Division

Date July 12, 1983
Operator's
Well No. 21095
Farm Georges Creek Investment
API No. 47 - 039 - 3914

IV-35
(Rev 8-81)

JUL 25 1983

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 / Underground Storage / Deep X / Shallow /)

LOCATION: Elevation: 6133 1459 Watershed Georges Creek
District: Malden County Kanawha Quadrangle Charleston, East

COMPANY Columbia Gas Transmission Corporation
ADDRESS 1700 MacCorkle Ave., Charleston, WV
DESIGNATED AGENT James L. Weekley
ADDRESS 1700 MacCorkle Ave., Charleston, WV
SURFACE OWNER Robert F. Morris
ADDRESS
MINERAL RIGHTS OWNER Georges Creek Investments
 Ltd.
ADDRESS P.O. Box 217, Guilford, Connecticut 06437

OIL AND GAS INSPECTOR FOR THIS WORK Homer
Linden Rt., Box 3-4
H. Daugherty ADDRESS Looneyville, WV 25259

PERMIT ISSUED 11-5-82
DRILLING COMMENCED 11-29-82
DRILLING COMPLETED 1-11-83

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

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size <u>20-1/2 24"</u> Cond.	21'	21'	20 sks.
<u>13-1/8</u>	981'	981'	712 cu. ft.
<u>9 5/8</u>	2737'	2737'	1108 cu. ft.
<u>8 5/8</u>			
<u>7</u>	5442'	5442'	117 cu. ft.
<u>5 1/2</u>			
<u>4 1/2</u>	6796'	6796'	1.19 cu. ft.
<u>3</u>			
<u>2</u>			
Liners used			

GEOLOGICAL TARGET FORMATION Clinton Depth 7010 feet
Depth of completed well 6810 feet Rotary X / Cable Tools
Water strata depth: Fresh feet; Salt feet
Coal seam depths: Is coal being mined in the area?

OPEN FLOW DATA

Producing formation Clinton ~~Tascanora~~ Pay zone depth 6724-6780 feet
Gas: Initial open flow 1,800 Mcf/d Oil: Initial open flow Bbl/d
Final open flow 4,300 Mcf/d Final open flow Bbl/d
Time of open flow between initial and final tests 6 hours

Static rock pressure 1527 psig (surface measurement) after hours shut in
(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

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

Test before acidized 1,800 Mcf
 Acidized Clinton 4-7-83 with 2000 gallons MSR
 Test after acidized (6 hours) 4,300 Mcf

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Sand and Shale			0	996	
Shale			996	1120	
Sand white			1120	1509	Damp
Shale gray			1509	1685	
Sand white hard			1685	1747	Water salty
Lime gray			1747	1782	
Shale gray			1782	1808	
Lime gray			1808	1940	
Shale gray			1940	1954	
Sandy Lime gray			1954	2001	
Shale Gray			2001	2014	
Shale			2014	2039	
Shale gray			2039	4810	
Lime gray			4810	5580	Hole damp 5463'
Shale gray			5580	6724	
Sand Clinton	Tusc.		6724	6795	
Shale			6795	6810	
Total Depth				6810'	

(Attach separate sheets as necessary)

Columbia Gas Transmission Corporation
 Well Operator

By:

Date:

[Signature]
 7-12-83

Note: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations..."



1) Date: 11-3, 1982
 2) Operator's Well No. 21095
 3) API Well No. 47 039 3914
 State County Permit

DRILLING CONTRACTOR:

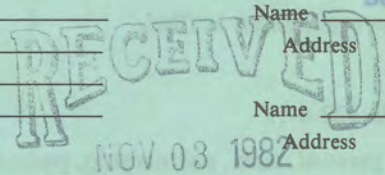
Ray Resources

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

3914

OIL AND GAS WELL PERMIT APPLICATION

- 4) WELL TYPE: A Oil / Gas X /
 B (If "Gas", Production X / Underground storage / Deep X / Shallow)
- 5) LOCATION: Elevation: 1459 Watershed: Georges Creek
 District: Malden County: Kanawha Quadrangle: Charleston East
- 6) WELL OPERATOR Columbia Gas Transmission Corp. 11) DESIGNATED AGENT J. Z. Workley
 Address P. O. Box 1273 Address Charleston, WV 25325
- 7) OIL & GAS ROYALTY OWNER Georges Creek Investments Ltd. 12) COAL OPERATOR Unoperated
 Address P. O. Box 217 Address
Guilford, Connecticut 06437
- 8) SURFACE OWNER Robert F. Morris 13) COAL OWNER(S) WITH DECLARATION ON RECORD:
 Address Name Same as Royalty Owner
 Address Address
 Acreage 92 Name
 Address Address
- 9) FIELD SALE (IF MADE) TO:
 Address
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name Homer H. Daugherty 14) COAL LESSEE WITH DECLARATION ON RECORD:
 Address Linden Rt. Box 3-4 Name
Looneyville, WV 25259 Address
- 15) PROPOSED WORK: Drill X / Drill deeper / Redrill / Fracture or stimulate /
 Plug off old formation / Perforate new formation /
 Other physical change in well (specify)
- 16) GEOLOGICAL TARGET FORMATION, Clinton
- 17) Estimated depth of completed well, 7010 feet
- 18) Approximate water strata depths: Fresh, 900 feet; salt, feet.
- 19) Approximate coal seam depths: Is coal being mined in the area? Yes / No X



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	20"			X		30'	30'	to surface	Kinds
Fresh water									
Coal	13 3/8"	K-55	48#	X		950'	950'	to surface	Sizes
Intermediate	9 5/8"	K-55	36#	X		2700'	2700'	to surface	Depths set
Production	4 1/2"	C-75	13.5#	X		7000'			
Tubing									
Liners	7"	N-80	26#	X		5650'			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: [Signature]
 My Commission Expires 13 1987

Signed: [Signature]
 Its: Director, Drilling & Operations

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-039-3914 Date November 3 1982

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 July 5, 1983 unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>61.35</u>

[Signature]
 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 _____