



**\*NOTE:**

COAL OWNED AND OPERATED BY VALLEY CAMP COAL CO. WINIFREDE SEAM PRESENTLY OPERATED - ELEV. 1095'. SOLID COAL AT PROPOSED WELL LOCATION

FILE NO 68-53  
 DRAWING NO 21192  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1 PART IN 2500  
 PROVEN SOURCE OF ELEVATION HUNT TRIANG. STA. - EL. 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) Lloyd C. Hart  
 R.P.E. \_\_\_\_\_ L.L.S. 99



STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 LAT: 38° 16' 32"  
 LONG: 81° 29' 48"



DATE APRIL 15 19 83  
 OPERATOR'S WELL NO. 21192  
 API WELL NO. 47-039-3963  
 STATE COUNTY PERMIT

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP X SHALLOW \_\_\_  
 LOCATION ELEVATION 1461 WATER SHED LEFT FORK OF WITCHER CREEK  
 DISTRICT CABIN CREEK COUNTY KANAWHA  
 QUADRANGLE QUICK, W.VA. Clendenin 15' SW  
 SURFACE OWNER KANAWHA & HOCKING C&C CO. ACREAGE 14.128  
 OIL & GAS ROYALTY OWNER KANAWHA & HOCKING C&C CO. LEASE ACREAGE 640 AC. UNIT  
 LEASE NO. 9279  
 PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) DEED WELL  
 PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION TUSCARORA ESTIMATED DEPTH 7150' 6-6 Indian Creek pool (358)

KAN, 3963



RECEIVED



IV-35  
(Rev 8-81)

OCT 21 1983

Date October 18, 1983

OIL & GAS DIVISION  
DEPT. OF MINES

State of West Virginia  
Department of Mines  
Oil and Gas Division

Operator's Well No. 21192  
Farm Kanawha & Hocking C&C Co.  
API No. 47 - 039 - 03963

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: 1461 Watershed Left Fork of 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 Kanawha & Hocking Coal & Coke  
ADDRESS P.O. Box 70194, Cleveland, OH 44190  
MINERAL RIGHTS OWNER Valley Camp Coal Company  
ADDRESS 2971 Dupont Ave., E., Shrewsbury, WV 25184  
OIL AND GAS INSPECTOR FOR THIS WORK Craig  
Dukworth ADDRESS P.O.Box 454  
Mt. Lookout, WV  
PERMIT ISSUED June 22, 1983  
DRILLING COMMENCED June 14, 1983  
DRILLING COMPLETED July 1, 1983  
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 20- <del>18</del> Cond.	20'	20'	20 sacks
13- <del>12</del> "	566.41'	566.41'	400 sacks
9 5/8	2498.51'	2498.51'	520 sacks
8 5/8			
7	5481.77'	5481.77'	200 sacks
5 1/2			
4 1/2	6847.54'	6847.54'	140 sacks
3			
2 3/8"	6779.40'	6779.40'	
Liners used			

GEOLOGICAL TARGET FORMATION Tuscarora Depth 7150 feet  
Depth of completed well 6908 feet Rotary X / Cable Tools       
Water strata depth: Fresh 44, 197 feet; Salt      feet  
Coal seam depths: 141, 260, 290, 363, 373, 552 Is coal being mined in the area? Yes

OPEN FLOW DATA

Producing formation Tuscarora Pay zone depth 6887-6893 feet  
Gas: Initial open flow 500 Mcf/d Oil: Initial open flow      Bbl/d  
Final open flow 2390 Mcf/d Final open flow      Bbl/d  
Time of open flow between initial and final tests      hours  
Static rock pressure 1500 psig (surface measurement) after 72 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      psig (surface measurement) after      hours shut in



Acidized Tuscarora 9-25-83 with 3000 gals. mud acid.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fre: and salt water, coal, oil and g:
Sand Shale			0	141	
Coal			141	148	
Shale			148	230	
Sand			230	260	
Coal			260	270	
Sand			270	290	
Coal			290	296	
Sand			296	363	
Coal			363	367	
Sand			367	373	
Coal			373	377	
Sand			377	391	
Shale			391	498	
Sand Shale			498	552	
Coal			552	556	
Sand Shale			556	567	
Sand			567	587	
Shale			587	870	
Sand			870	974	
Shale			974	1054	
Sand			1054	1186	
Shale			1186	1189	
Sand			1189	1214	
Shale			1214	1219	
Sand Shale			1219	1411	
Shale			1411	1430	
Sand			1430	1525	
Sand Shale			1525	1636	
Sand			1636	1675	
Red Rock			1675	1685	
Shale			1685	1787	
Lime			1787	1830	
Shale			1830	1838	
Sand			1838	1847	
Greenbrier			1850	2030	
Onondaga			5340	5430	
Williamsport			6118	6145	
<u>Tuscarora</u>			6848	6905	

LTD  
DTD

6914'

6908'

(Attach separate sheets as necessary)

Columbia Gas Transmission Corporation

Well Operator

By:

Date:

October 18, 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 ..., encountered in the drilling of a well."





1) Date: May 18, 1983  
 2) Operator's Well No. 21192  
 3) API Well No. 47 State 039 County 3963 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: 1461 Watershed: Left Fork of Witcher Creek  
 District: Cabin Creek County: Kanawha Quadrangle: Quick
- 6) WELL OPERATOR Columbia Gas Transmission Corp. 11) DESIGNATED AGENT J. L. Weckley  
 Address P. O. Box 1273 Address P. O. Box 1273  
Charleston, WV 25325 Charleston, WV 25325
- 7) OIL & GAS ROYALTY OWNER Kanawha & Hocking Coal & Coke 12) COAL OPERATOR Valley Camp Coal Co.  
 Address P. O. Box 70194-T Address 2971 Dupont Ave., East  
Cleveland, Ohio 44190 Shrewsbury, WV 25184
- 8) SURFACE OWNER Kanawha & Hocking Coal & Coke 13) COAL OWNER(S) WITH DECLARATION ON RECORD:  
 Name Kanawha & Hocking Coal & Coke  
 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 Craig Duckworth Name Valley Camp Coal Co.  
 Address P. O. Box 454 Address \_\_\_\_\_  
Mt. Lookout, WV
- 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, 7150 feet  
 18) Approximate water strata depths: Fresh, \_\_\_\_\_ feet; salt, \_\_\_\_\_ feet.  
 19) Approximate coal seam depths: \_\_\_\_\_ 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	20"			X		60'		to surface	Kinds	
Fresh water	13-3/8"			X		1025'		to surface		
Coal	9-5/8"			X		2525'		to surface	Sizes	
Intermediate	7"			X		3400'				
Production	4-1/2"			X		7150'			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: Director, Oil & Special Projects  
 My Commission Expires \_\_\_\_\_ Its: \_\_\_\_\_

OFFICE USE ONLY  
DRILLING PERMIT

Permit number \_\_\_\_\_ Date \_\_\_\_\_ 19 \_\_\_\_\_

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 \_\_\_\_\_ unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing:	Fee:

Administrator, Office of Oil and Gas



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...
4B) 'Shallow well' means any well drilled and completed in a formation above the top of the uppermost member of the 'Onondaga Group'...
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 \_\_\_\_\_