

NOTES: Gen-Aux-Actv-Tr CRTT CHARGE: 186-02052-W2582-2801  
 FB: 1366 PG: 2-8, 14  
 FB: 1769 PG: 1, 2, 4, 42  
 FARM MAP SQ: 172-131, X-76 STORAGE  
 REF: DWG H-1004, DWG SL-10105  
 INV MAP #4360/620

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 400'  
 MINIMUM DEGREE OF ACCURACY 1/200'  
 PROVEN SOURCE OF ELEVATION USO, U.S. Salts in Root of Double White Oak on North Side of Road 800' below Kingsinger Run Elev 1676.10'

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 ENERGY.  
 (SIGNED) Charles B. Doughty, Jr.  
 R.P.E. \_\_\_\_\_ L.L.S. 819



**STATE OF WEST VIRGINIA**  
 DEPARTMENT OF ENERGY  
**OIL AND GAS DIVISION**



DATE July 20, 1994  
 OPERATOR'S WELL NO. 7378  
 API WELL NO. 47 077 000357  
 STATE COUNTY PERMIT

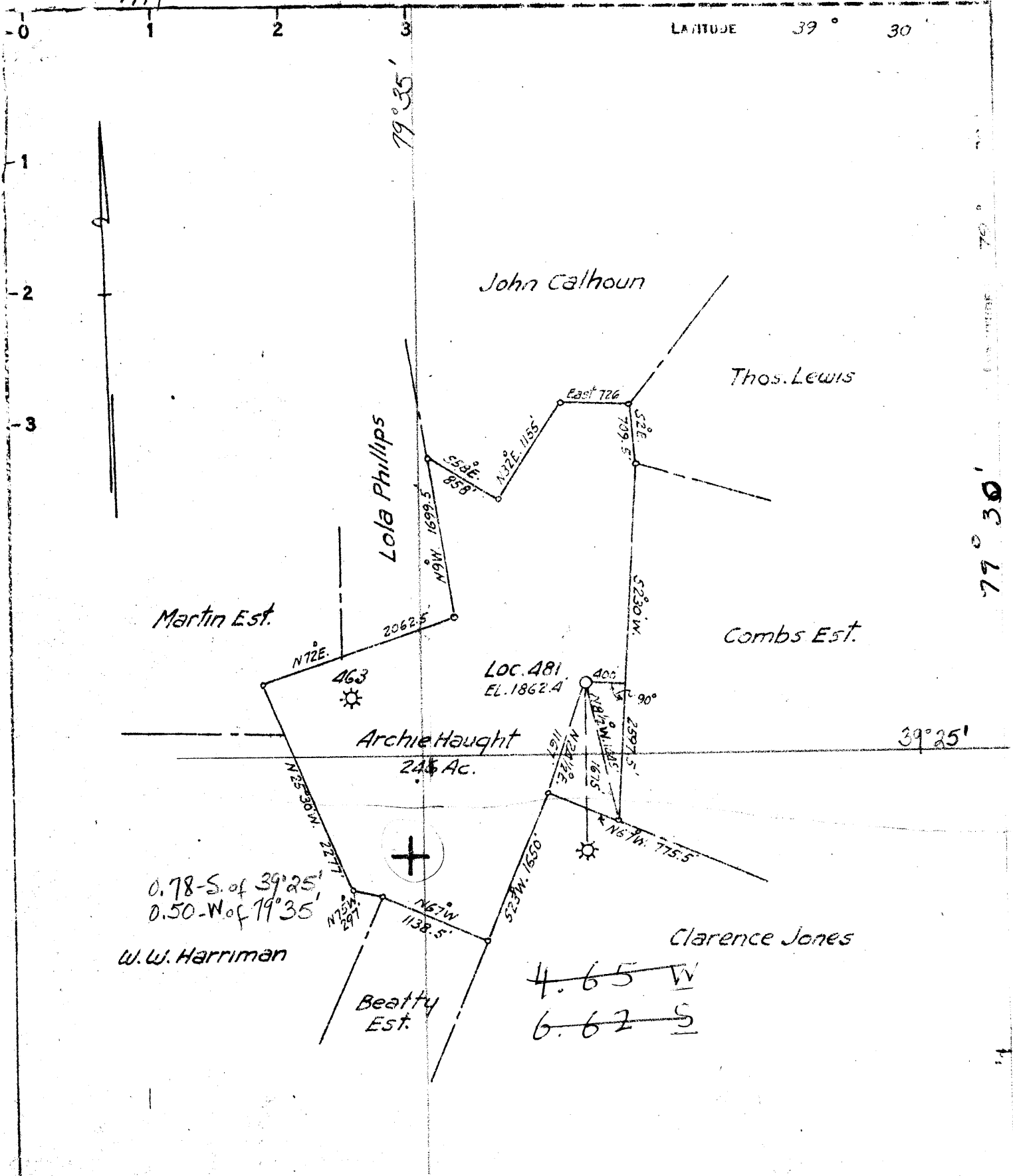
WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 OF "GAS, " PRODUCTION  STORAGE  DEEP  SHALLOW   
 LOCATION: ELEVATION 1861.18 WATER SHED Saltlick Creek  
 DISTRICT Union COUNTY Preston  
 QUADRANGLE Terre Alta, WV Kingswood C COORDINATES LAT: 39°24'12" LONG: 78°34'50"  
 SURFACE OWNER Carl B. & Chung Ja Kim Smith ACREAGE 215.45 Acres  
 OIL & GAS ROYALTY OWNER Archie M. Hought et al LEASE ACREAGE 141 Acres  
 COAL OWNER \_\_\_\_\_ LEASE NO. 1090400 & 1090559  
 PROPOSED WORK: DRILL  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 Chart ESTIMATED DEPTH 4542' 4942' SEP 24 1994  
 WELL OPERATOR COLUMBIA GAS TRANSMISSION CORP DESIGNATED AGENT Rich. Caty  
 ADDRESS PO Box 1273, Charleston, WV 25325-1273 ADDRESS PO Box 1273, Charleston, WV 25325-1273

PRESTON COUNTY NAME PERMIT 35

4  
M

P



COAL OWNED BY \_\_\_\_\_

NEW LOCATION...

DRILL DEEPER...

ABANDONMENT...

COMPANY Cumberland & Allegheny Gas Co.

ADDRESS 800 Union Trust Bldg. Pittsburgh Pa.

FARM Archie Haught

TRACT \_\_\_\_\_ ACRES 246 LEASE NO. 7676

WELL (FARM) NO. 2 SERIAL NO. 481

ELEVATION (SPIRIT LEVEL) 1862.4'

QUADRANGLE Kingwood C

COUNTY Preston DISTRICT Union

ENGINEER Gale C. Snyder E.L.

ENGINEER'S REGISTRATION NO. \_\_\_\_\_

FILE NO. \_\_\_\_\_ DRAWING NO. Y-13-636

DATE Feb. 8, 1952 SCALE 1" = 1370'

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

**WELL LOCATION MAP**

FILE NO. Pres-35

+ 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.

9-0 2 80

WR-35  
**RECEIVED**  
 WV Division of  
 Environmental Protection  
 JUL 03 1995  
 Permitting  
 Office of Oil & Gas

19-Sep-94  
 API # 47- 77-00035 F

State of West Virginia  
 Division of Environmental Protection  
 Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: SMITH, CARL B. ETUX. Operator Well No.: 7378

LOCATION: Elevation: 1,861.18 Quadrangle: TERRA ALTA

District: UNION County: PRESTON  
 Latitude: 3450 Feet South of 39 Deg. 25Min. 0 Sec.  
 Longitude 675 Feet West of 75 Deg. 35 Min. 0 Sec.

Company: COLUMBIA GAS TRANSMISSION  
 P.O. BOX 1273  
 CHARLESTON, WV 25325-1273

Agent: RICHARD L. COTY

Inspector: PHILLIP TRACY  
 Permit Issued: 09/19/94  
 Well work Commenced: 10-27-94  
 Well work Completed: 12-8-94  
 Verbal Plugging  
 Permission granted on:  
 Rotary — Cable — Rig coiled tubing  
 Total Depth (feet) 4952  
 Fresh water depths (ft) 140  
 Salt water depths (ft) unknown

Is coal being mined in area (Y/N)? N  
 Coal Depths (ft): NONE

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
SAME AS PREVIOUSLY SUBMITTED			

OPEN FLOW DATA

Producing formation Oriskany Sandstone Pay zone depth (ft) 4782 top  
 Gas: Initial open flow 65,000 MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
 Final open flow see below MCF/d Final open flow \_\_\_\_\_ Bbl/d  
 Time of open flow between initial and final tests \_\_\_\_\_ Hours  
 Static rock Pressure 1894 psig (surface pressure) after 24 Hours

Second producing formation Huntersville Chert Pay zone depth (ft) 4553 top  
 Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Combined Chert and Oriskany flow Final open flow 75,000 MCF/d Final open flow \_\_\_\_\_ Bbl/d  
 Time of open flow between initial and final tests 262 days ~~Hours~~  
 Static rock Pressure 1894 psig (surface pressure) after 24 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: COLUMBIA GAS TRANSMISSION CORP.

By: Richard L. Coty  
 Date: 01/19/95

JUL 03 1995

Well was originally perforated in the Oriskany only.

Re-perforated Oriskany from 4794-4804 and 4812-4817 with 6 shots per foot. Treated with 4500 gallons of 15% gelled acid and foam.

Opened Huntersville Chert with new perforations from 4607-4612, 4622-4632, 4656-4661, 4677-4682 at 6 shots per foot. Treated with 15% gelled acid and 75 quality foam.



STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 DRILL DEEPER  
**WELL RECORD**

Quadrangle Kingwood

Permit No. PRES. 35-D

Oil or Gas Well Gas  
 (KIND)

Company Atlantic Seaboard Corp.  
 Address P.O. Box 1273; Charleston 25, W. Va.  
 Farm Archie M. Haught Acres 141  
 Location (waters) Saltlick Creek  
 Well No. 7378 Elev. 1861.18'  
 District Portland County Preston  
 The surface of tract is owned in fee by \_\_\_\_\_  
 Address \_\_\_\_\_  
 Mineral rights are owned by Archie M. Haught, Agt., et  
R.D.D. #1 Address Waynesburg, Penna.  
 Drilling commenced July 7, 1959  
 Drilling completed July 13, 1959  
 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		29	
13		409	Size of _____
10		1264 9'	Depth set _____
8 1/4		4560	
6 1/2 7"			Perf. top _____
5 3/16		4942	Perf. bottom _____
4 1/2"			Perf. top _____
2			Perf. bottom _____
Liners Used			

CASING CEMENTED Yes SIZE 4 1/2" To Surface  
 No. Ft. \_\_\_\_\_ Date July 15, 1959

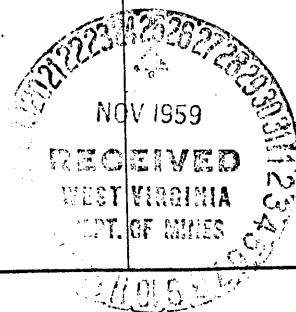
COAL WAS ENCOUNTERED AT \_\_\_\_\_ FEET \_\_\_\_\_ INCHES  
 \_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES  
 \_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES

RESULT AFTER TREATMENT Storage Well

ROCK PRESSURE AFTER TREATMENT

Fresh Water \_\_\_\_\_ Feet Salt Water \_\_\_\_\_ Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
<u>Drill Deeper Record From 4708'</u>							
Chert				4772'			
Shale - <u>Needmore</u>			4772	4782			
Oriskany			4782	4913			
Helderberg			4913	-			
Total Depth				4942'			
				<u>4850</u>			
<u>Well Surveys Run</u>							



WEST VIRGINIA DEPARTMENT OF MINES  
OIL & GAS DIVISION  
W E L L R E C O R D

Permit No. Pres 35  
Kingwood Quad.  
Company  
Address  
Farm  
Well No.  
Location  
District  
Commenced  
Completed  
Volume  
Rock Pressure  
Water

The Cumberland & Allegheny Gas Company  
Archie Haught Acres  
A-481 Elev. **1862**  
Union Preston County  
March 24, 1952  
July 25, 1952  
6/10 M 6 5/8" 4,552,860 Chert 7-25-52  
48 hrs. 1530#  
140° H.F.

Gas Well  
CASING & TUBING

13	29°0	29°
10	409°1	409°1
8 1/2	1264°9	1264°9
7	4546°7	4546°7

Thds, off

Yellow Clay	0	20
Slate Shells	20	100
Hard Rock	100	350
Slate Shells	350	1065
Brown Shale	1065	1084
✓ Brown Sand <i>fan</i>	1084	1114
White Slate Shells	1114	2729
Brown Shale	2729	2750
Slate Shells	2750	3050
Dark Slate & Shells	3050	3100
White Slate & Shells	3100	3460
Brown Shale	3460	4000
✓ Hard Limo <i>Sully</i>	4000	4020
Gray Slate	4020	4100
Dark Slate	4100	4528
✓ Brown Break	4528	4530
✓ Onandago Lime	4530	4553
✓ Chert Sand	4553	4686
T.D.	4686	

Gas 4629° tested 42/10 M-3"  
Gas 4678° tested 90/10 W 3"  
Gas 4681° tested 6/10 M 6 5/8" casing

4530  
1862  

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- 2668

X

AUG 22 1994 STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

Issued 9/19/94  
Expires 9/19/96  
⑦ 637

Permitting WELL WORK PERMIT APPLICATION  
Office of Oil & Gas

1) Well Operator: Columbia Gas Transmission Corporation 10450

2) Operator's Well Number: 7378 3) Elevation: 1862'

Well type: (a) Oil \_\_\_ / or Gas X /  
(b) If Gas: Production \_\_\_ / Underground Storage X /  
Deep \_\_\_ / Shallow \_\_\_ /

Proposed Target Formation(s): Chert 4,542' - 4,759'

Proposed Total Depth: 4,952 feet

Approximate fresh water strata depths: 140'

8) Approximate salt water depths: \_\_\_\_\_

9) Approximate coal seam depths: None

10) Does land contain coal seams tributary to active mine? Yes \_\_\_ / No X /

11) Proposed Well Work: Perforate the Chert and acidize. Currently only the Oriskany is perforated. Offset storage wells utilize both Chert and Oriskany-formations.

12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT	
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	13 3/8	H-40	48#		29	Total 158 Sacks
Fresh Water	10 3/4	J-55	40.5#		409	
<del>Intermediate Coal</del>	8 5/8	J-55	24#		1,265	
Intermediate	7	J-55	23#		4,247	
Production	4 1/2	J-55	12.6#		4,952	450 Sacks
Tubing	None					
Liners						

PACKERS : Kind NONE  
Sizes \_\_\_\_\_  
Depths set \_\_\_\_\_

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)

19665

402294  
78

**RECEIVED**  
WV Division of  
Environmental Protection  
AUG 22 1994

- 1) Date: 8-15-94
- 2) Operator's well number 7378
- 3) API Well No: 47 - 077 - 00035-F  
State - County - Permit

Permitting  
Office of Oil & Gas

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
  - (a) Name Carl B. Smith  
Address 4505 Boxwood Road  
Bethesda, MD 20816
  - (b) Name Chung J. Kim Smith, wife  
Address Same
  - (c) Name \_\_\_\_\_  
Address \_\_\_\_\_
- 6) Inspector Phillip Tracy  
Address Route 2, Box 37-A  
Montrose, WV 26283  
Telephone (304)- 636-8798

- 5) (a) Coal Operator:  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- (b) Coal Owner(s) with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_
- (c) Coal Lessee with Declaration  
Name \_\_\_\_\_  
Address \_\_\_\_\_

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

\_\_\_\_\_ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR  
\_\_\_\_\_ Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

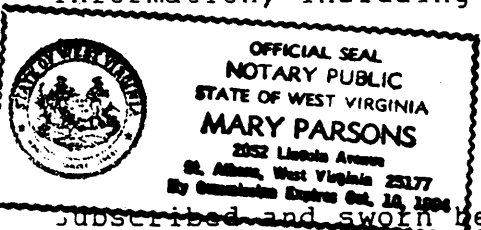
I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through \_\_\_\_\_ on the above named parties, by:  
\_\_\_\_\_ Personal Service (Affidavit attached)  
\_\_\_\_\_ Certified Mail (Postmarked postal receipt attached)  
\_\_\_\_\_ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator Columbia Gas Transmission Corporation  
By: Richard L. Colby  
Its: Manager - Well Services  
Address P. O. Box 1273  
Charleston, WV 25325-1273  
Telephone (304) 357-3034



Subscribed and sworn before me this 15th day of August, 1994  
Mary Parsons Notary Public  
My commission expires October 10, 1994