

*Janice 10/19/82*

HARRISON J. BRIGGS

LATITUDE 39° 47' 30"

JOHN DEAN BRIGGS

THELMA YEATER

L-4734  
EL. 1092'

RICH YEATER

L-4781

L-4513 (PLUGGED)

GEORGE CUMPSTON

JOHN DEAN BRIGGS (SURF.)  
D.B. 555 PG. 59  
1ST. TRACT  
81.25 AC.

HARRISON J. & JOHN DEAN BRIGGS  
(O. & G.)  
LEASE 3032057

COLUMBIA GAS TRANSMISSION CORP.

CHARLES HORNER

LAT. 39° 46' 00"  
LONG. 80° 36' 25"  
F.B. 17000 PL. 29-48 (S.M.L.)  
MAP 44000 / 500' W  
CON. PROJ. 4074. 700.  
100 5000 10000 5000

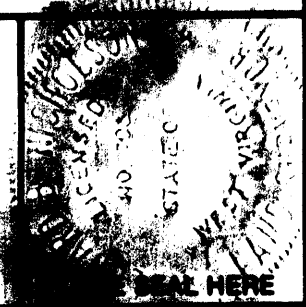
NOTE: THIS MAP IS FOR WELL LOCATION PURPOSES ONLY & DOES NOT REPRESENT A COMPLETE BOUNDARY SURVEY.

CHARLES COOK

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. \_\_\_\_\_  
DRAWING NO. \_\_\_\_\_  
SCALE 1" = 500'  
MINIMUM DEGREE OF ACCURACY 1/2500  
PROVEN SOURCE OF ELEVATION B.M. E-127 EL. 770'  
ALONG RT. 74 1.8 MILES E. OF ADALINE.

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) [Signature]  
R.P.E. 9936 L.L.S. 798



STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY  
OIL AND GAS DIVISION



DATE AUGUST 31, 1982  
OPERATOR'S WELL NO. L-4734  
API WELL NO.

WELL TYPE: OIL    GAS X LIQUID INJECTION    WASTE DISPOSAL     
(IF "GAS,") PRODUCTION    STORAGE X DEEP    SHALLOW   

47 051 482 W  
STATE COUNTY PERMIT

LOCATION: ELEVATION 1092' WATERSHED CEDAR RUN

*Cancelled*

DISTRICT LIBERTY COUNTY MARSHALL

QUADRANGLE CAMERON, WV-PA LAT. 39° 47' 30" LONG. 80° 35' 00"

SURFACE OWNER JOHN DEAN & HARRISON J. BRIGGS ACREAGE 91

OIL & GAS ROYALTY OWNER JOHN DEAN & HARRISON J. BRIGGS LEASE ACREAGE 101

PROPOSED WORK: DRILL    CONVERT    DRILL DEEPER    REDRILL    FRACTURE OR STIMULATE    PLUG OFF OLD FORMATION    PERFORATE NEW FORMATION    OTHER PHYSICAL CHANGE IN WELL (SPECIFY) STORAGE RECONDITION

PLUG AND ABANDON    CLEAN OUT AND REPLUG   

TARGET FORMATION \_\_\_\_\_ ESTIMATED DEPTH \_\_\_\_\_

WELL OPERATOR COLUMBIA GAS TRANS. CORP. DESIGNATED AGENT R. A. SCHOFF  
ADDRESS P.O. BOX 1273 CHARLESTON, WV 25302 ADDRESS P.O. BOX 498 WASHINGTON, PA 15301

DEC 8 1982

LONGITUDE 80° 36' 00"

MARSHALL COUNTY NAME

PERMIT 482 W

FORM WV-6  
WELLS INC.

*Janice 10/19/92*

NORTH

HARRISON J. BRIGGS  
POST POST TO E 85.2'

HARRISON J. BRIGGS (SURF.)  
S. 85° E (DEED)

S. 85° E P. 229 2ND TRACT 10 AC.

L-4734  
EL. 1092'

L-4781

L-4513 (PLUGGED)  
1.665  
1.70

JOHN DEAN BRIGGS (SURF.)  
D.B. 555 PG. 59

1ST. TRACT  
81.25 AC.

HARRISON J. & JOHN DEAN BRIGGS (O. & G.)  
LEASE 3032057

COLUMBIA GAS TRANSMISSION CORP.

THELMA YEATER

RICH YEATER

GEORGE CUMPSTON

CHARLES HORNER

CHARLES COOK

LAT. 39° 46' 00"  
LONG. 80° 36' 25"  
P.B. 1799 N P.B. 29-40 (K.M.L.)  
MAP 4400N / 5000 17  
GEN. PROJ. ACTV. YOG.  
103 2000 0000 0001

NOTE: THIS MAP IS FOR WELL LOCATION PURPOSES ONLY & DOES NOT REPRESENT A COMPLETE BOUNDARY SURVEY.

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. \_\_\_\_\_  
DRAWING NO. \_\_\_\_\_  
SCALE 1" = 500'  
MINIMUM DEGREE OF ACCURACY 1/2500  
PROVEN SOURCE OF ELEVATION B.M. E-127 EL. 770'  
ALONG RT. 74 1.8 MILES E. OF ADALINE.

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) *[Signature]*  
R.P.E. 9936 I.L.S. 798



STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY  
OIL AND GAS DIVISION



DATE AUGUST 31 1992  
OPERATOR'S WELL NO. L-4734  
API WELL NO. 47-051-482 W

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
(IF "GAS,") PRODUCTION  STORAGE  DEEP  SHALLOW   
LOCATION: ELEVATION 1092' WATER SHED CEDAR RUN  
DISTRICT LIBERTY 4 COUNTY MARSHALL  
QUADRANGLE CAMERON, WV-PA LAT. 39° 47' 30" LONG. 80° 35' 00"  
SURFACE OWNER JOHN DEAN & HARRISON J. BRIGGS ACREAGE 91  
OIL & GAS ROYALTY OWNER JOHN DEAN & HARRISON J. BRIGGS LEASE ACREAGE 101  
LEASE NO. 3032057  
PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) STORAGE RECONDITION  
PLUG AND ABANDON  CLEAN OUT AND REPLUG   
TARGET FORMATION \_\_\_\_\_ ESTIMATED DEPTH \_\_\_\_\_  
WELL OPERATOR COLUMBIA GAS TRANS. CORP. DESIGNATED AGENT R.A. SCHOFF  
ADDRESS P.O. BOX 1273 CHARLESTON, WV 25325 ADDRESS P.O. BOX 498 WASHINGTON, PA 15301

OCT 25 1992  
OCT 25 1992

00' 56" 09 EQUILIBRIOT

MARSHALL COUNTY NAME

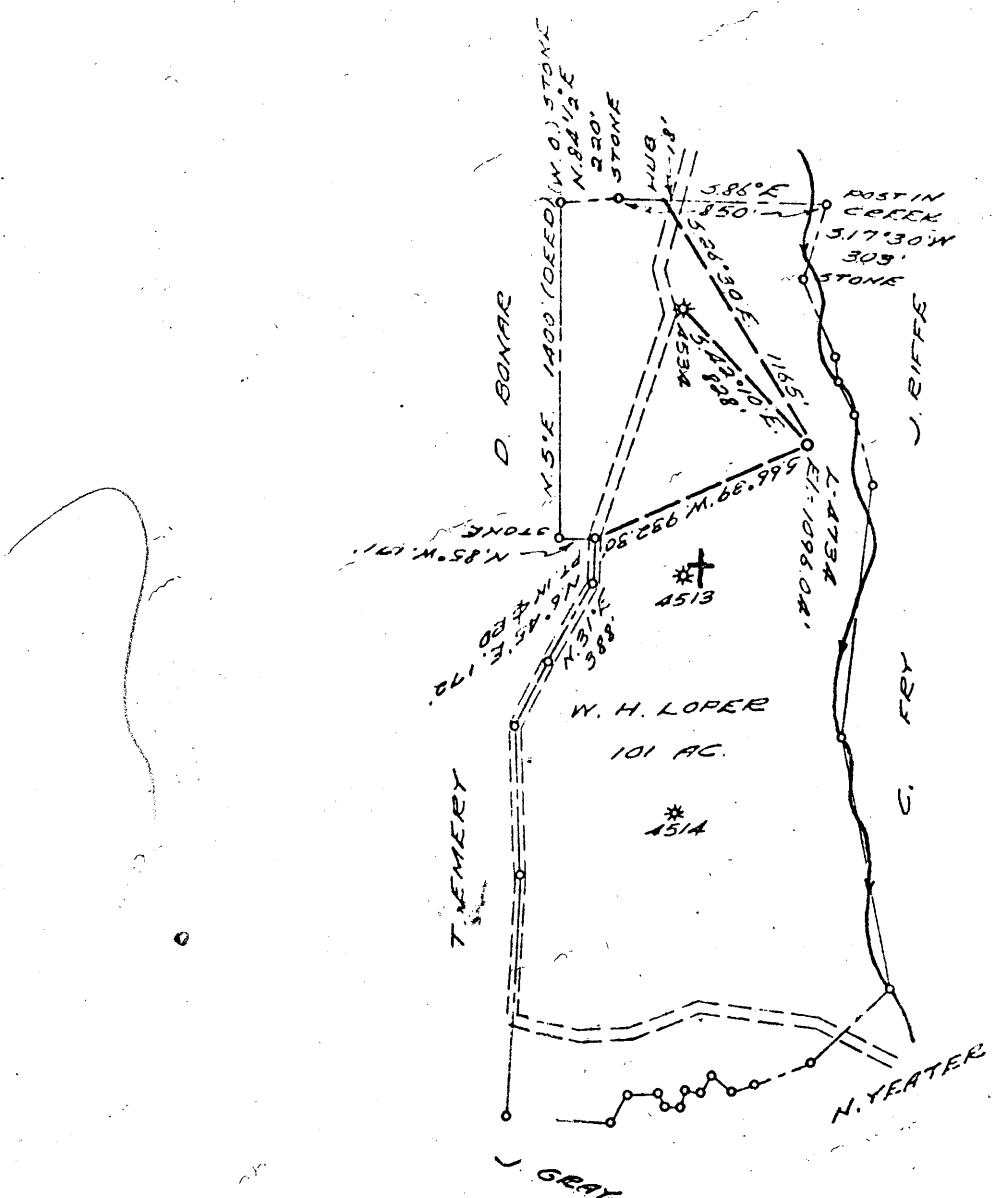
PERMIT

482

0 1 2 3 LATITUDE 39 ° 17 ' 30"

Wing Lat.  
check 4513  
Mar 35BR

LONGITUDE 80 ° 35'



4.48 S  
3.23 W

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

NEW LOCATION...  FOR STORAGE

DRILL DEEPER...

ABANDONMENT...

0-25-28

COMPANY THE MANUFACTURERS LIGHT & HEAT

ADDRESS 800 UNION TRUST BLDG. PGH. PA.

FARM W. H. LOPER

TRACT \_\_\_\_\_ ACRES 101 LEASE No. 28901

WELL (FARM) No. 4 SERIAL No. 473A

ELEVATION (SPIRIT LEVEL) 1096.04'

QUADRANGLE CAMERON 7.5 SC

COUNTY MARSHALL DISTRICT LIBERTY

ENGINEER Gene E. Antill

ENGINEER'S REGISTRATION No. 8081 E

FILE No. \_\_\_\_\_ DRAWING No. Y-25-619

DATE 24 SEPT. 62 SCALE 1" = 800'

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

WELL LOCATION MAP  
FILE No. MARS-482

+ 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.

9025



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

Quadrangle Cameron

WELL RECORD

Permit No. MARS-482

STORAGE ✓  
Oil or Gas Well GAS  
(KIND)

Company The Mfrs. Lt. and Ht. Co.  
Address 800 Union Trust Bldg., Pittsburgh 19, Pa.  
Farm W. H. Loper Acres 101  
Location (waters) \_\_\_\_\_  
Well No. 4734 Elev. 1096.04'  
District Liberty County Marshall  
The surface of tract is owned in fee by \_\_\_\_\_  
Address \_\_\_\_\_  
Mineral rights are owned by \_\_\_\_\_  
Address \_\_\_\_\_  
Drilling commenced ~~XXXXXXXXXXXX~~ October 11, 1962  
Drilling completed October 17, 1962  
Date Shot 10/17/62 From Big Injun  
With Pitot Tube

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13 3/8"	31'	31'	
10			Size of
8 5/8"	804'	804'	
6"			Depth set
5 1/2"	1889'	1889'	
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

Open Flow 4.0 /10ths Water in 4-1/2 Inch  
/10ths Merc. in \_\_\_\_\_ Inch  
Volume 3,850,000 Cu. Ft.  
Rock Pressure 800 lbs. 24 hrs.  
Oil \_\_\_\_\_ bbls., 1st 24 hrs.  
Fresh water \_\_\_\_\_ feet  
Salt water \_\_\_\_\_ feet

CASING CEMENTED \_\_\_\_\_ SIZE \_\_\_\_\_ No. Ft. \_\_\_\_\_ Date \_\_\_\_\_  
COAL WAS ENCOUNTERED AT 753 FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES FEET \_\_\_\_\_ INCHES

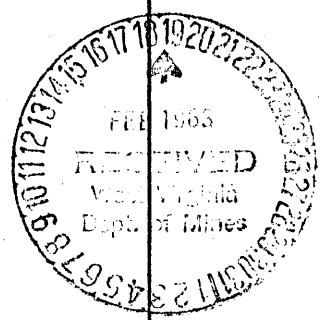
Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
✓Pittsburgh Coal			753	760			
✓Murphy Sand			872	885			
✓Big Dunkard Sand			1243	1332			
✓First Salt Sand			1470	1490			
✓Second Salt Sand			1580	1602			
✓Third Salt Sand			1656	1674			
✓Maxton Sand			1782	1793			
✓Lower Maxton Sand			1830	1838			
✓Big Lime			1840	1878			
✓Big Injun Sand			1880				

1840  
1096  
~~744~~

Packer Shoe set @  
5 1/2" Halliburton Form.  
Total Depth

1891  
2083

Well Logged by Schlumberger Well Surveying Corporation  
October 15, 1962. Logged to Total Depth



51-482 W

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS**  
**WELL WORK PERMIT APPLICATION**

Issued 10/21/92

Expires 10/21/94

- 1) Well Operator: COLUMBIA GAS TRANSMISSION CORP. 10450 <sup>175</sup> (4) 278
- 2) Operator's Well Number: L-4734 3) Elevation: 1092 <sup>1092</sup>
- 4) Well type: (a) Oil  / or Gas  /  
 (b) If Gas: Production  / Underground Storage  /  
 Deep  / Shallow  /
- 5) Proposed Target Formation(s): Big Injun Sand <sup>371</sup>
- 6) ~~Proposed~~ Total Depth: 2083 feet
- 7) Approximate fresh water strata depths: not recorded
- 8) Approximate salt water depths: est. 870'
- 9) Approximate coal seam depths: Pittsburgh Coal: 753'-760'
- 10) Does land contain coal seams tributary to active mine? Yes  / No  /
- 11) Proposed Well Work: Fracture the Big Injun Sand open hole to increase deliverability.
- 12)

**CASING AND TUBING PROGRAM**

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT	
	Size	Grade	Weight per ft.	For drilling		Left in well
Conductor	13-3/8"	H	48	31	31	30 sks.
Fresh Water						
Coal	8-5/8"	J	24	804'	804'	500 sks.
Intermediate						
Production	5-1/2"	J	17	1889'	1889'	500 sks.
Tubing						
Liners						

*Fracture from well records*

**RECEIVED**  
 WV Division of Environmental Protection

**PACKERS** : Kind Halliburton  
 Sizes 5-1/2"x7-7/8" OH Formation Packer  
 Depths set 1889' (7-7/8" open hole: 1889'-2083')

OCT 07 92

Permitting Office of Oil & Gas

195617  
 34

For Division of Oil and Gas Use Only

Fee(s) paid:  Well Work Permit  Reclamation Fund  WPCP  
 Plat  WW-9  WW-2B  Bond Blanket one  Agent

RECEIVED

WV Division of Environmental Protection

OCT 07 92

Permitting Office of Oil & Gas

Page 1 of 1
Form WW2-A (09/87)
File Copy

1) Date: 09/21/92
2) Operator's well number L-4734
3) API Well No: 47 - 051 - 00482-FRAC
State - County - Permit

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 John Dean Briggs
Address Rt. 5, Box 79
Cameron, WV 26033
(b) Name
Address
(c) Name
Address
6) Inspector Randal Mick
Address Route 3, Box 248
Weston, WV 26452
Telephone (304)-269-2335

5) (a) Coal Operator:
Name
Address
(b) Coal Owner(s) with Declaration
Name Consolidation Coal
Address Consol Plaza, 1800 Washington Rd.
Pittsburgh, PA 15241
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
X 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:

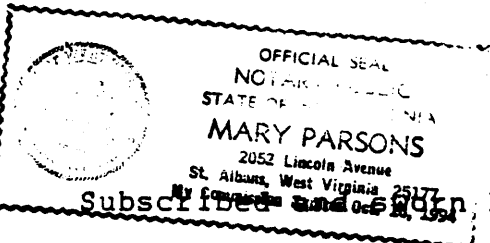
- Personal Service (Affidavit attached)
X Certified Mail (Postmarked postal receipt attached)
Publication (Notice of Publication attached)

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 CORP.
By: [Signature]
Its: Director, Drilling & Maintenance
Address P. O. Box 1273
Charleston, WV 25325-1273
Telephone 304-357-2459



Subscribed and sworn to before me this 21st day of September, 1992

My commission expires October 10, 1994 Notary Public