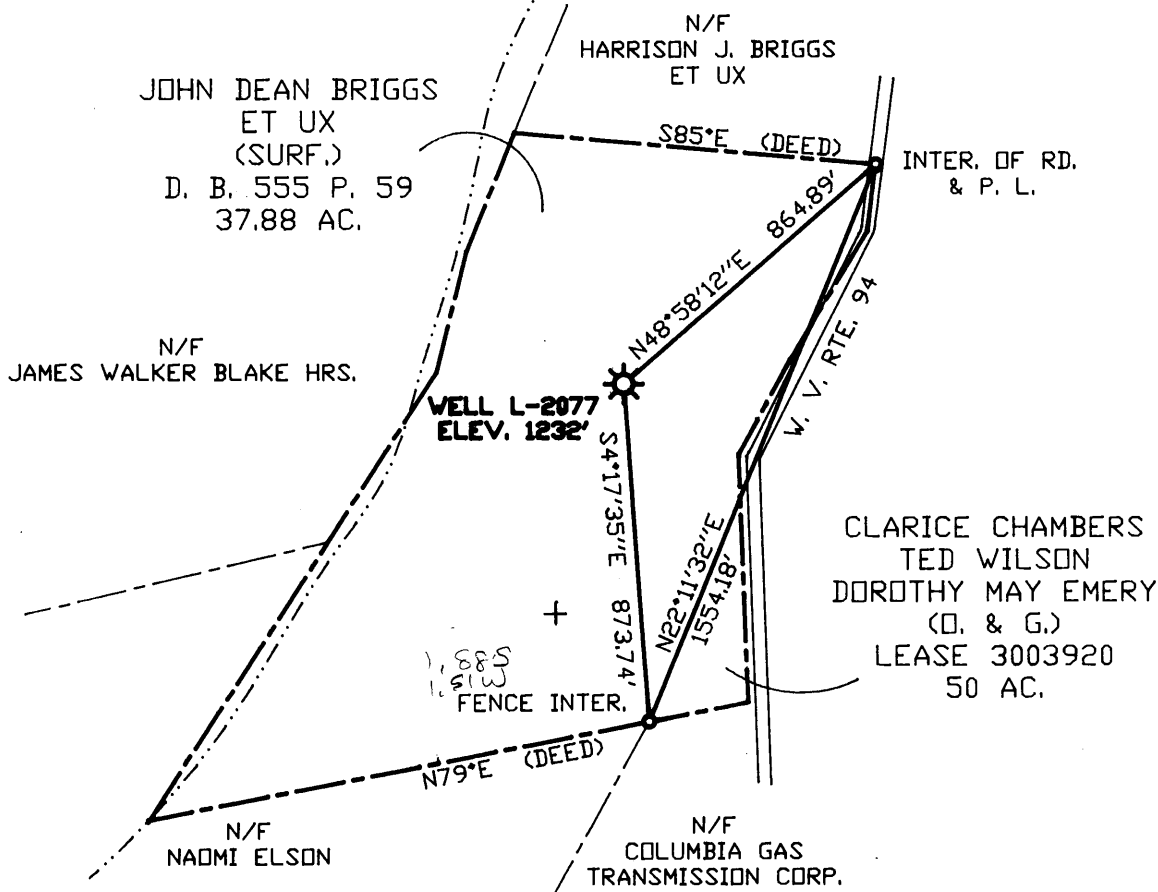


8000'  
LATITUDE 39°47'30"

LONGITUDE 80°35'00"

NORTH  
DEED



LAT. 39°45'51"  
LONG. 80°36'44"

F.B. 1791N P. 8

MAP 4400/532

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

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

4.765  
(.51W)

FILE NO. \_\_\_\_\_  
DRAWING NO. \_\_\_\_\_  
SCALE 1" = 500'  
MINIMUM DEGREE OF ACCURACY 1/2500  
PROVEN SOURCE OF ELEVATION BM F127 770.9'

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) Neil E. Lyon 6/27/94  
R.P.E. \_\_\_\_\_ L.L.S. 945

PLACE SEAL HERE

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION



DATE JUN. 24, 19 94

OPERATOR'S WELL NO. L-2077

API WELL NO. 47-051-008167

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_ STATE COUNTY PERMIT

(IF "GAS,") PRODUCTION \_\_\_ STORAGE X DEEP \_\_\_ SHALLOW Formally 051-00392-A

LOCATION: ELEVATION 1232' WATER SHED FISH CREEK DISTRICT LIBERTY COUNTY MARSHAL showing 9786

QUADRANGLE CAMERON, W.V.

SURFACE OWNER JOHN DEAN BRIGGS ET UX ACREAGE 37.88

OIL & GAS ROYALTY OWNER SEE PLAT LEASE ACREAGE 50

LEASE NO. 3003920

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

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_

TARGET FORMATION ESTIMATED DEPTH

WELL OPERATOR COLUMBIA GAS TRANS. CORP. DESIGNATED Richard L. Coty

2-2-98  
Chas

0096

MARS  
COUNTY NAME

0816-F  
PERMIT

FORM IV-6 (8-78)

8000'

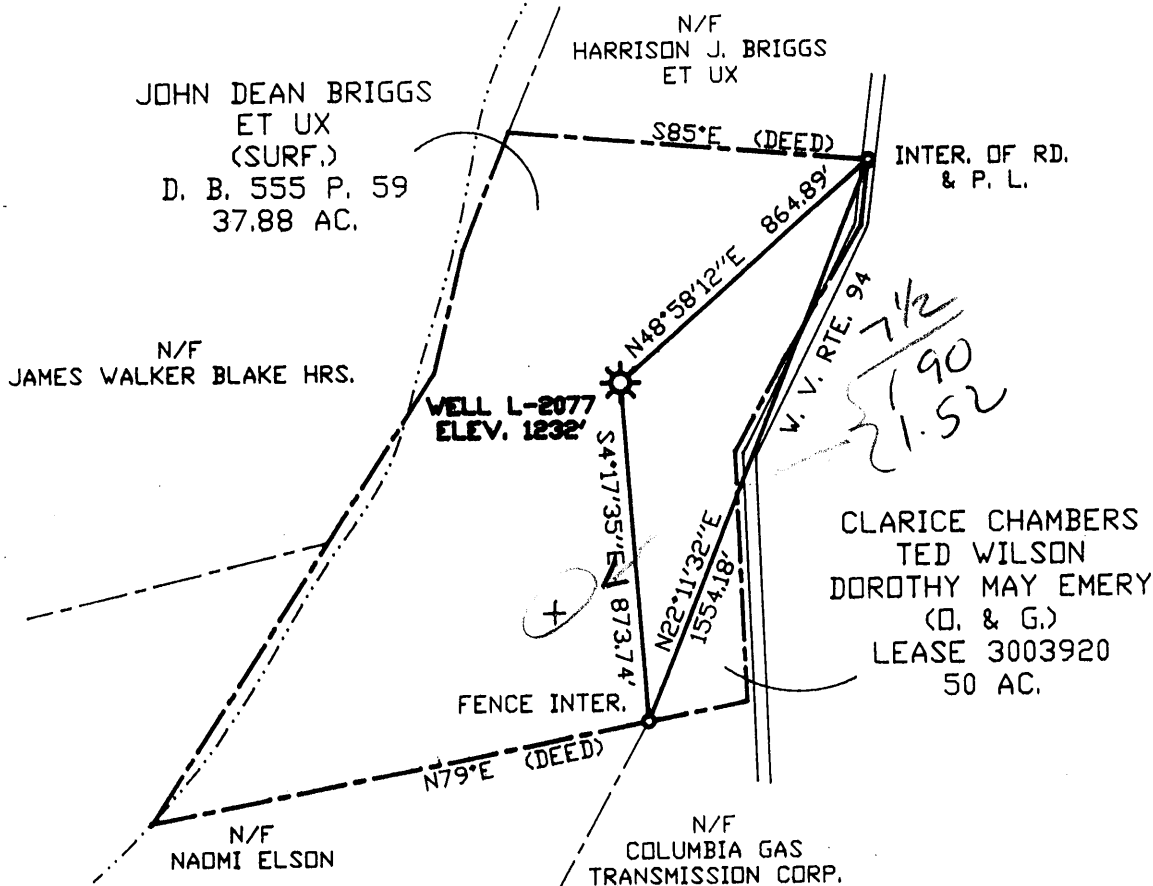
LATITUDE 39°47'30"

Are 051-786 & 051-816 the same?  
They appear to have very different elevations.  
If they are different wells which was formerly  
051-392A?

LONGITUDE 80°35'00"

0066

NORTH  
DEED



DEP indicates 051 816  
no body

4785  
1.52w

LAT. 39°45'51"  
LONG. 80°36'44"

F.B. 1791N P. 8

MAP 4400/532

NOTE: THIS MAP IS FOR WELL LOCATION PURPOSES ONLY AND 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 BM F127 770.9'

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(SIGNED) Neil E. Lyon 6/27/94  
 R.P.E. \_\_\_\_\_ L.L.S. 945

PLACE SEAL HERE

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION



DATE JUN. 24, 1994  
 OPERATOR'S WELL NO. 1-2077  
 API WELL NO. \_\_\_\_\_

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP X SHALLOW \_\_\_  
 LOCATION: ELEVATION 1232' WATER SHED FISH CREEK  
 DISTRICT LIBERTY COUNTY MARSHALL  
 QUADRANGLE CAMERON, W.V. SC

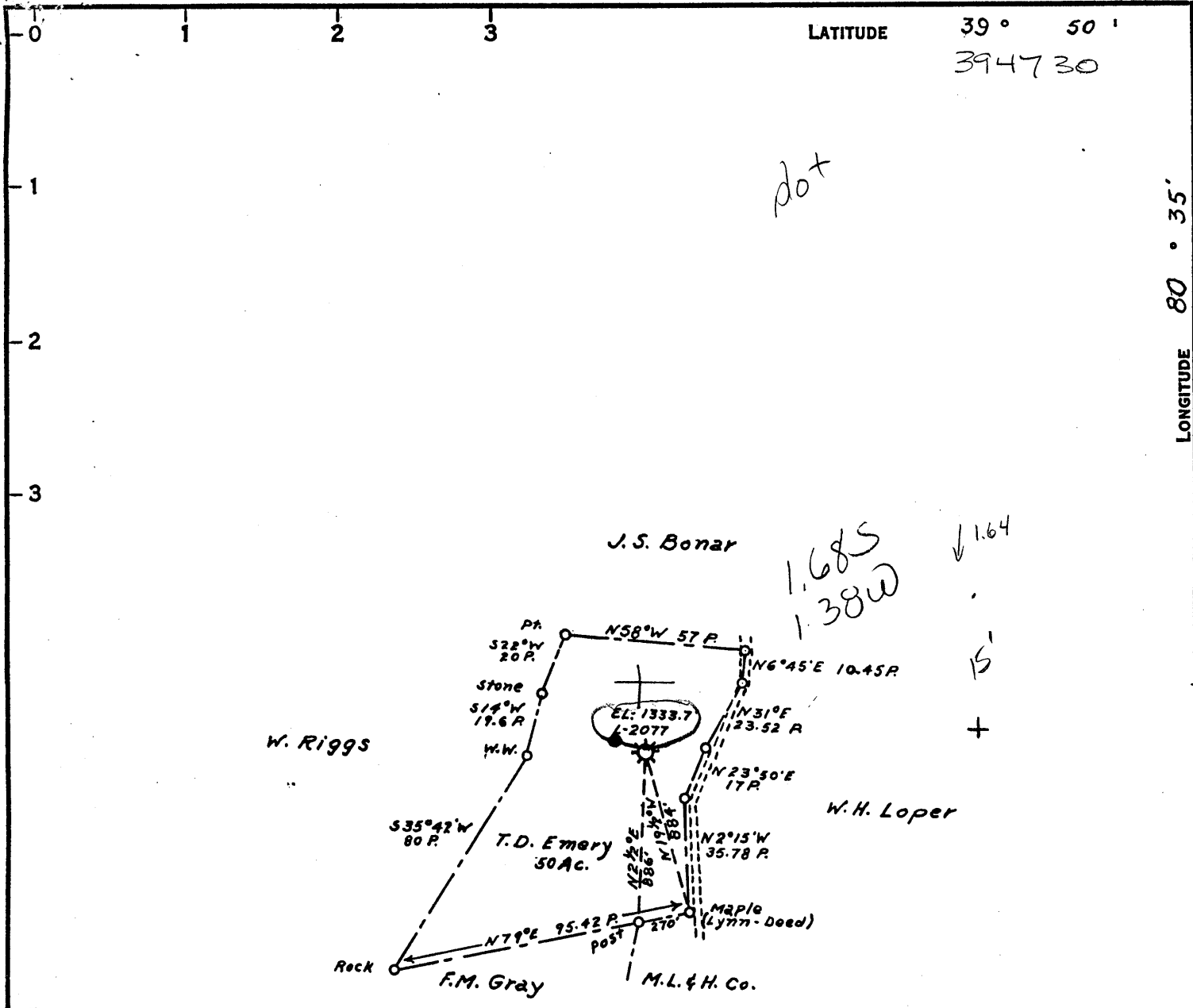
SURFACE OWNER JOHN DEAN BRIGGS ET UX ACREAGE 37.88  
 OIL & GAS ROYALTY OWNER SEE PLAT LEASE ACREAGE 50  
 LEASE NO. 3003920

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

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION 17 ESTIMATED DEPTH \_\_\_\_\_  
 WELL OPERATOR COLUMBIA GAS TRANS. CORP. DESIGNATED Richard L. Coty

FORM IV-B (8-78)

COUNTY NAME  
PERMIT



18282

COAL OWNED BY \_\_\_\_\_  
*Recondition & Partial Plug*  
 NEW LOCATION...   
 DRILL DEEPER.....   
 ABANDONMENT.....

0-25-28

COMPANY The Manufacturers Light & Heat Co.  
 ADDRESS 800 Union Trust Bldg., Pittsburgh 27, Pa.  
 FARM T.D. Emery  
 TRACT \_\_\_\_\_ ACRES 50 LEASE No. (3920)  
 WELL (FARM) No. 1 SERIAL No. L-2077  
 ELEVATION (SPIRIT LEVEL) 1333.7'  
 QUADRANGLE Cameron  
 COUNTY Marshall DISTRICT Liberty  
 ENGINEER Robert M. Heall (I.E.)  
 ENGINEER'S REGISTRATION No. 361-E  
 FILE No. \_\_\_\_\_ DRAWING No. Y-15-808  
 DATE 5-19-58 SCALE 1"=800'

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

**WELL LOCATION MAP**

FILE No. MARS-392-A-Storage  
See: 051-0786-T

+ 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.

NOV 12 1993

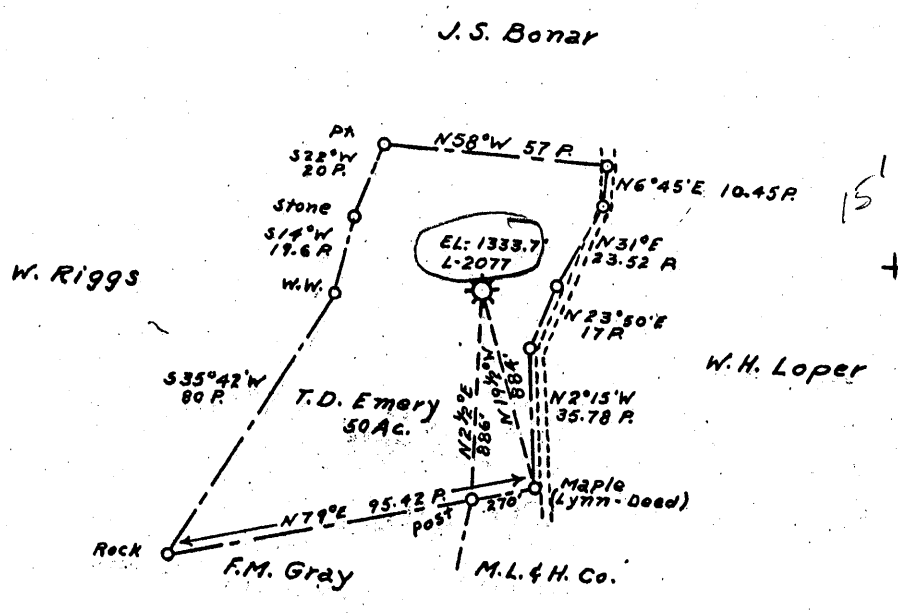
0 1 2 3 LATITUDE 39° 50'

-1

-2

-3

LONGITUDE 80° 35'



COAL OWNED BY Recondition & Partial Plug

NEW LOCATION...

DRILL DEEPER...

ABANDONMENT...

4.575  
2.88  
1.39W

0-25-28

COMPANY The Manufacturers Light & Heat Co.

ADDRESS 800 Union Trust Bldg., Pittsburgh 27, Pa.

FARM T.D. Emery

TRACT \_\_\_\_\_ ACRES 50 LEASE No. 3920

WELL (FARM) No. 1 SERIAL No. L-2077

ELEVATION (SPIRIT LEVEL) 1333.7

QUADRANGLE Cameron

COUNTY Marshall DISTRICT Liberty

ENGINEER Robert A. Spill (L.E.)

ENGINEER'S REGISTRATION No. 361-E

FILE No. \_\_\_\_\_ DRAWING No. Y-15-808

DATE 5-19-58 SCALE 1"=800'

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

WELL LOCATION MAP

FILE No. MARS-392-A-STORAGE

+ 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.

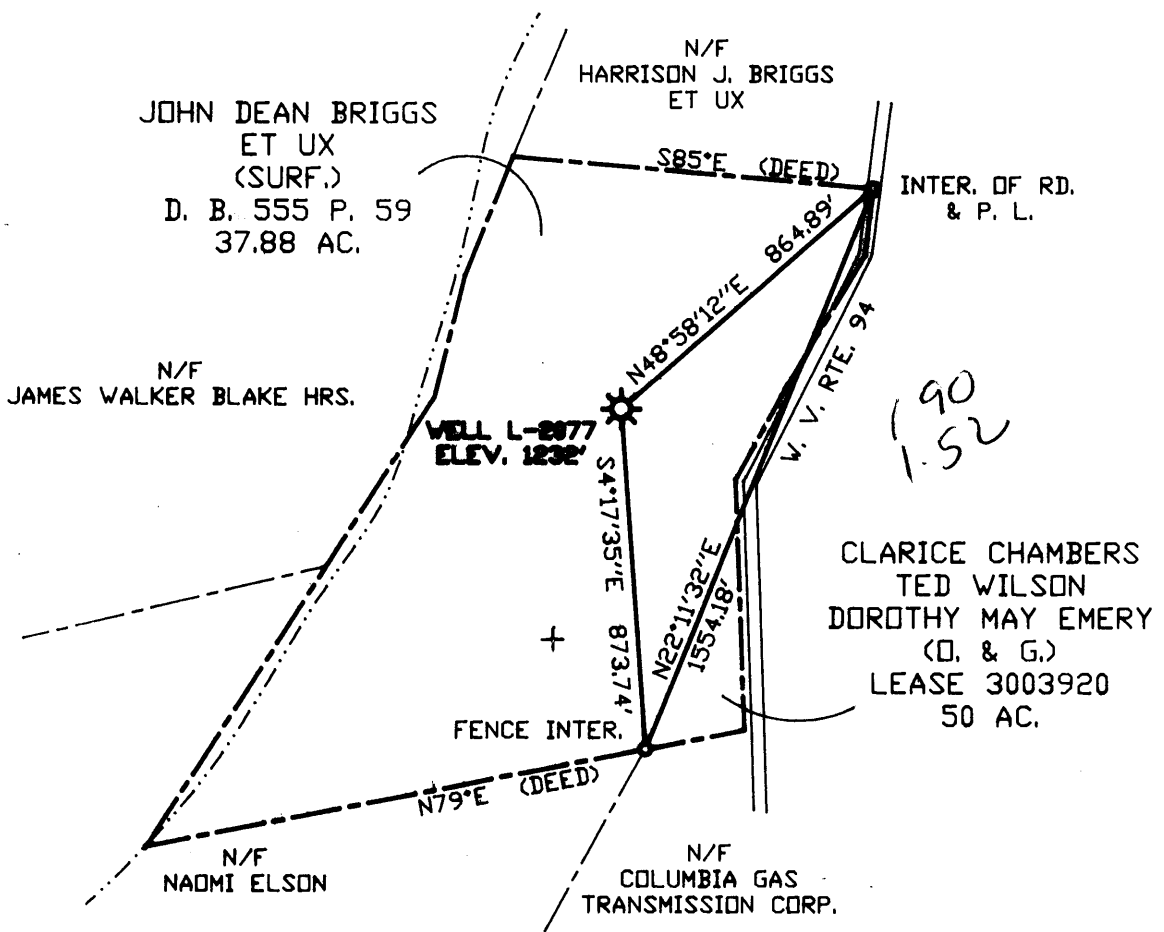
- DENOTES ONE INCH SPACES ON BORDER LINE OF ORIGINAL TRACING.

8000'

LATITUDE 39°47'30"

LONGITUDE 80°35'00"

NORTH  
DEED



LAT. 39°45'51"  
LONG. 80°36'44"

F.B. 1791N P. 8

MAP 4400/532

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

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

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1/2500  
 PROVEN SOURCE OF ELEVATION BM F127 770.9'

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) Neil E. Lyon 6/27/94  
 R.P.E. \_\_\_\_\_ L.L.S. 945

PLACE SEAL HERE

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



DATE JUN. 24, 1994  
 OPERATOR'S WELL NO. 1-2077  
 API WELL NO. \_\_\_\_\_

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION \_\_\_ STORAGE X DEEP \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 1232' WATER SHED FISH CREEK  
 DISTRICT LIBERTY COUNTY MARSHALL  
 QUADRANGLE CAMERON, W.V. SC  
 SURFACE OWNER JOHN DEAN BRIGGS ET UX ACREAGE 37.88  
 OIL & GAS ROYALTY OWNER SEE PLAT LEASE ACREAGE 50

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

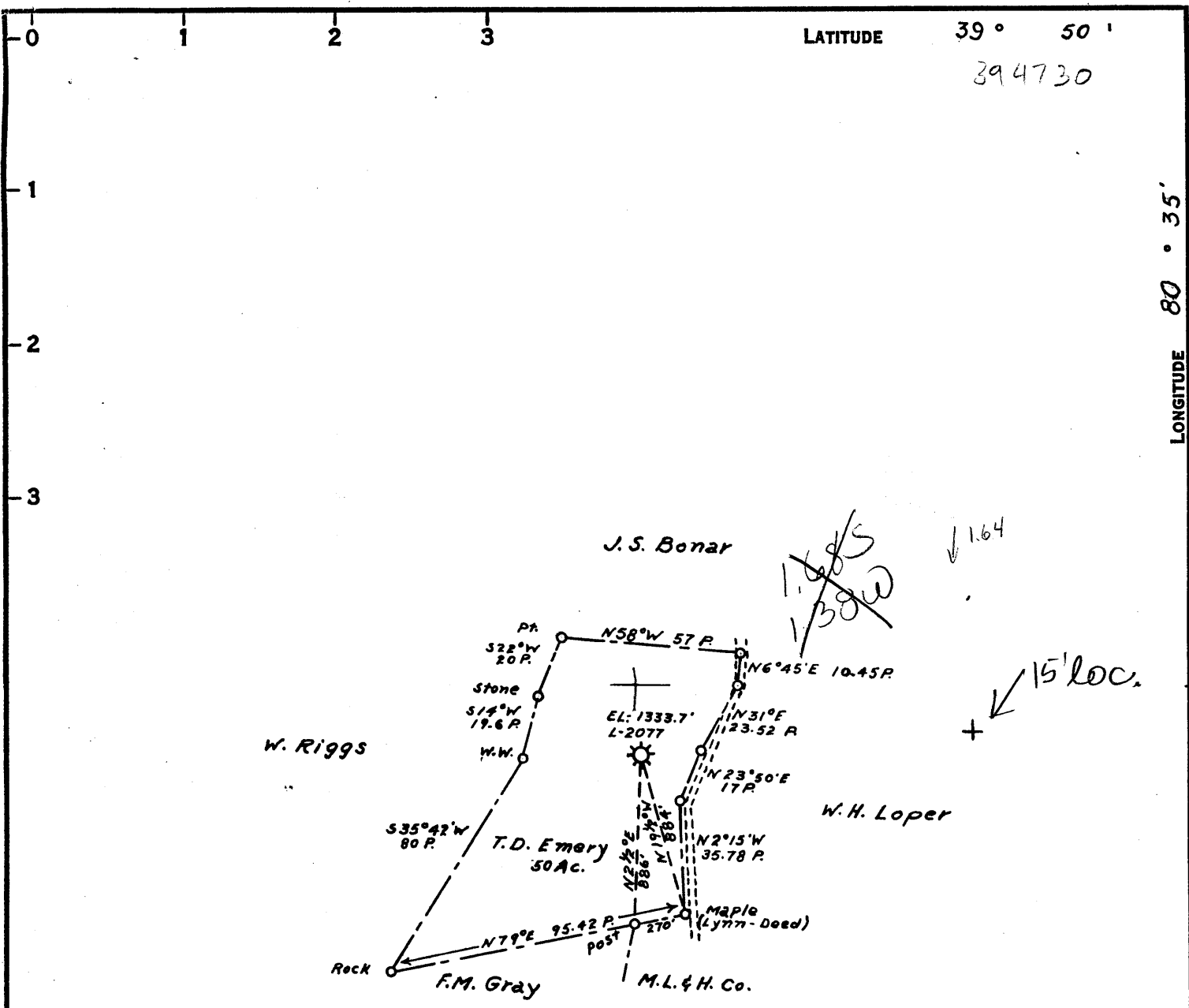
PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION 12 ESTIMATED DEPTH \_\_\_\_\_  
 WELL OPERATOR COLUMBIA GAS TRANS. CORP. DESIGNATED Richard L. Coty

AUG 26 1994

COUNTY NAME

PERMIT

FORM IV-6 (8-78)



18282

COAL OWNED BY \_\_\_\_\_  
*Recondition & Partial Plug*  
 NEW LOCATION...   
 DRILL DEEPER.....   
 ABANDONMENT.....

0-25-28

COMPANY The Manufacturers Light & Heat Co.  
 ADDRESS 800 Union Trust Bldg, Pittsburgh 27, Pa.  
 FARM T.D. Emery  
 TRACT \_\_\_\_\_ ACRES 50 LEASE No. 3920  
 WELL (FARM) No. 1 SERIAL No. L-2077  
 ELEVATION (SPIRIT LEVEL) 1333.7'  
 QUADRANGLE Cameron  
 COUNTY Marshall DISTRICT Liberty  
 ENGINEER Robert M. Speall (J.E.)  
 ENGINEER'S REGISTRATION No. 361-E  
 FILE No. \_\_\_\_\_ DRAWING No. Y-15-808  
 DATE 5-19-58 SCALE 1"=800'

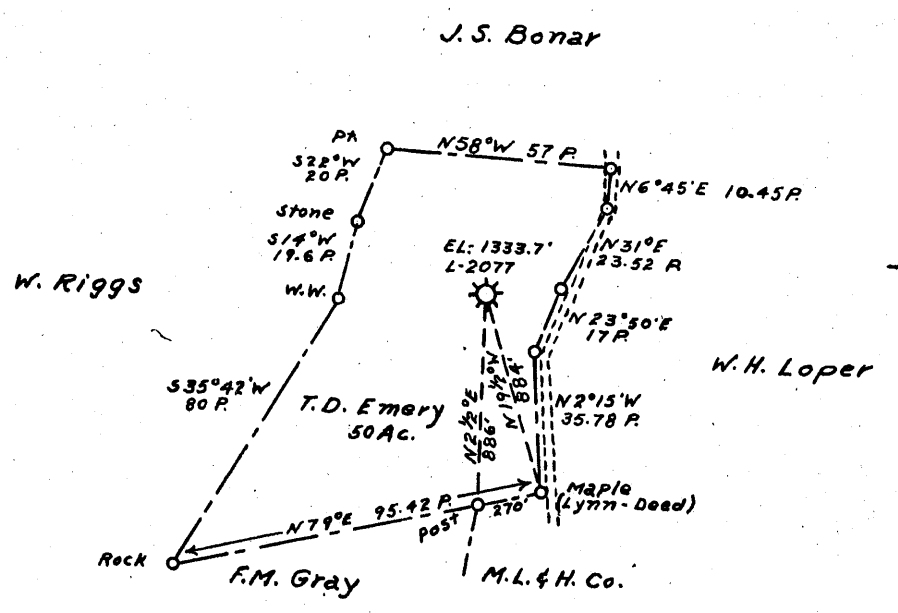
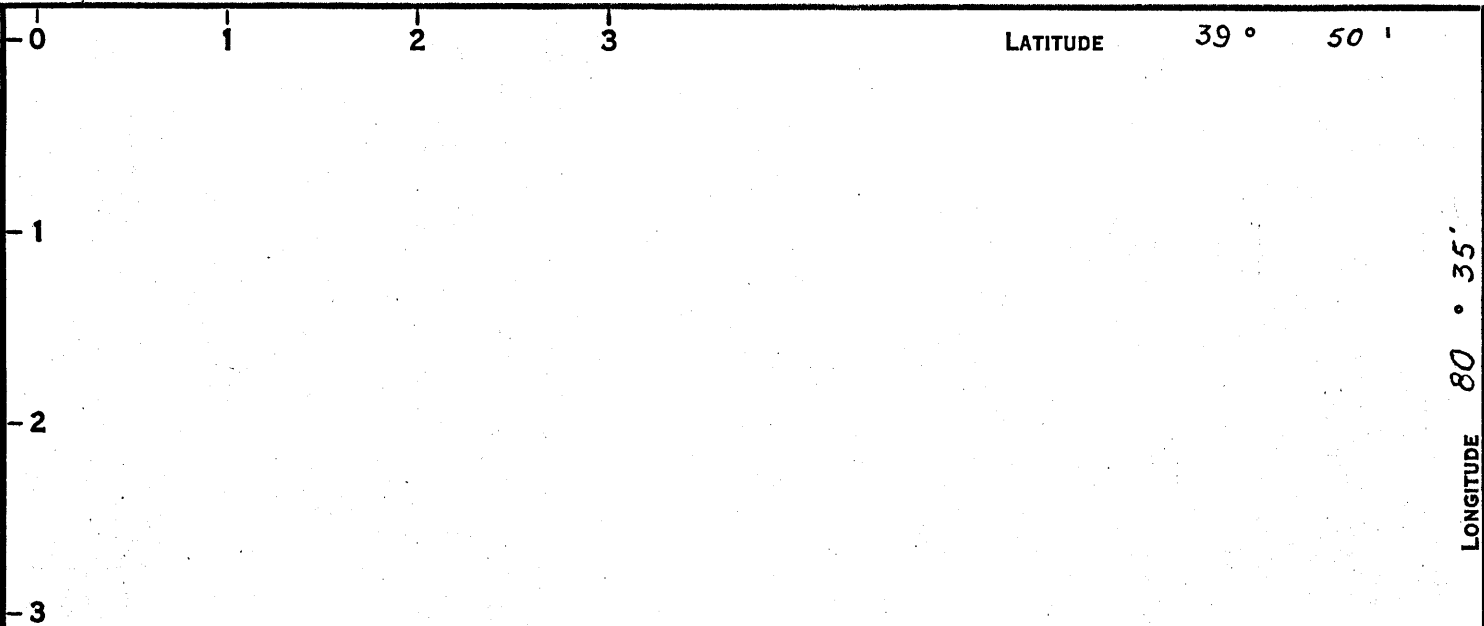
STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON

WELL LOCATION MAP

FILE No. MARS-3920-Storage  
 See 051-0786-T → 806

+ 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.



COAL OWNED BY Recondition & Partial Plug

NEW LOCATION...

DRILL DEEPER.....

ABANDONMENT.....

4.57S  
2.88  
1.39W

0-25-28

COMPANY The Manufacturers Light & Heat Co.

ADDRESS 800 Union Trust Bldg., Pittsburgh 27, Pa.

FARM T.D. Emery

TRACT \_\_\_\_\_ ACRES 50 LEASE No. 3920

WELL (FARM) No. 1 SERIAL No. L-2077

ELEVATION (SPIRIT LEVEL) 1333.7'

QUADRANGLE Cameron

COUNTY Marshall DISTRICT Liberty

ENGINEER Robert M. Heall (L.F.)

ENGINEER'S REGISTRATION No. 361-E

FILE No. \_\_\_\_\_ DRAWING No. Y-15-808

DATE 5-19-58 SCALE 1" = 800'

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

WELL LOCATION MAP

FILE No. MARS-392-A-STORAGE

5786 → 816

+ 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.

MAY 25 1993

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

Permitting Office of Oil & Gas

Well Operator's Report of Well Work

Farm name: BRIGGS, JOHN D. Operator Well No.: 2077

LOCATION: Elevation: 1,232.00 Quadrangle: CAMERON

District: LIBERTY County: MARSHALL
Latitude: 9900 Feet South of 39 Deg. 47Min. 30 Sec.
Longitude 8000 Feet West of 80 Deg. 35 Min. 0 Sec.

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

Agent: RICHARD L. COTY

Inspector: RANDAL MICK
Permit Issued: 08/23/94
Well work Commenced: 10/27/94
Well work Completed: 12/8/94
Verbal Plugging
Permission granted on:
Rotary X Cable Rig
Total Depth (feet) 2237
Fresh water depths (ft)
NOT RECORDED BY DRILLER
Salt water depths (ft)
NOT RECORDED BY DRILLER
Is coal being mined in area (Y/N)? N
Coal Depths (ft): PGH. COAL

Table with 4 columns: Casing & Tubing Size, Used in Drilling, Left in Well, Cement Fill Up Cu. Ft.
Rows include: 10 3/4" OD (220', 220', 89), 8 5/8" OD (1332', 1332', 236), 7" OD (2002', 2002', 354), 4 1/2" OD (2270', 2270', 158)

OPEN FLOW DATA

Producing formation BIG INJUN SAND Pay zone depth (ft) 2034-50 2130-50
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d
Final open flow 6,665 MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests Hours
Static rock Pressure 490 psig (surface pressure) after Hours
Second producing formation Pay zone depth (ft)
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d
Final open flow MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests Hours
Static rock Pressure psig (surface pressure) after 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: Ronald A. Schuff
Date: APRIL 23, 1998

MAY 10 1998



- 10/27/94 CLEANED OUT TO PLUGGED BACK TOTAL DEPTH @ 2270' G.L.
- 10/31/94 RAN 2270' G.L. OF 4 1/2" OD, K-55, 11.6 ypp CASING AND HALLIBURTON CEMENTED IT IN PLACE WITH 125 <sup>SKS</sup>.
- 11/1/94 INSTALLED A NEW 7" X 4 1/2", API 2000, CUSTOM WELLHEAD WITH 2 - 4 1/8", API 2000, CUSTOM GATE VALVES.
- 12/8/94 HITWELL SURVEYS PERFORATED THE 4 1/2" OD CASING FROM 2034' TO 2050' AND FROM 2130' TO 2150' @ 6 <sup>SHOTS</sup>/FOOT.
- 12/7/95 NOWSCO FRACTURED THE BIG INJUN SAND WITH 500 <sup>GAL</sup> OF HCL, 415 <sup>BBL</sup> OF GELLED WATER, AND 25,000# OF 20/40 SAND. THE LAST 5,000# OF 20/40 SAND PUMPED WAS RESIN COATED.

FORMATION DEPTHS (FROM SERVICE COMPANY LOGS RUN BY HALLIBURTON LOGGING ON 10/28/94):

<u>FORMATION</u>	<u>FROM</u>	<u>TO</u>
PITTSBURGH COAL	903'	910'
BIG DUNKARD SAND	1455'	1493'
BIG LIME	1988'	2028'
BIG INJUN SAND	2028'	-
CLEANED OUT TD	-	2270'
LOGGED TD	-	2272'

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
WELL WORK PERMIT APPLICATION

Issued 08/23/94

1) Well Operator: COLUMBIA GAS TRANSMISSION CORP. 10450 (4) 278

2) Operator's Well Number: 2077 3) Elevation: 1232'

Well type: (a) Oil    / or Gas X /

Expires 08/23/96

(b) If Gas: Production    / Underground Storage X /  
Deep    / Shallow X /

19521

EXISTING  
Proposed Target Formation(s): BIG INJUN SAND

EXISTING  
Proposed Total Depth: 2270 feet

Approximate fresh water strata depths: 150'

8) Approximate salt water depths: 1030'

9) Approximate coal seam depths: 600'-605', 804'-808', 898'-905'

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

11) Proposed Well Work: KILL WELL; CLEAN OUT TO ORIGINAL T.D., INSTALL NEW  
FLANGED API 7"X4-1/2" WELLHEAD; PERFORATE AND FRACTURE BIG INJUN SAND.

12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS		Weight per ft.	For drilling	FOOTAGE INTERVALS Left in well	CEMENT Fill-up (cu. ft.)
	Size	Grade				
Conductor						
Fresh Water	10-3/4"	H	32.75	218'	218'	75 SKS
Coal	8-5/8"	J	24	1324'	1324'	200 SKS
Intermediate	7	J	20	2002'	2002'	300 SKS
Production	4-1/2	K	11.6		2270'	150 SKS
Tubing						
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)

343-907  
25

1) Date: 07/07/94  
2) Operator's well number 2077  
3) API Well No: 47 - 051 - ~~X08892X~~ 0816-F  
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 D. BRIGGS  
Address R.D. 5, BOX 79  
CAMERON, WV 26033  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
6) Inspector \_\_\_\_\_  
Address \_\_\_\_\_  
Telephone (304)- \_\_\_\_\_

5) (a) Coal Operator:  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
(b) Coal Owner(s) with Declaration  
Name CONSOLIDATION COAL CO.  
Address 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, OFFICE OF REGULATORY SERVICES  
Address P. O. BOX 1273  
CHARLESTON, WV 25325-1273  
Telephone 304-357-3034

Subscribed and sworn before me this 19<sup>th</sup> day of July, 1994

Phyllis N. Snidow Notary Public  
My commission expires November 20, 2001