GEO YOHO, et al. (Q & G) LEASE 2150-
ANDREW J. STAHLA, et al. (Surf)
DB 596 PG. 471

N/F
BLAKE
HRS.

N/F
O. NEELY

N/F
R. FAIR

N/F
D. YOHO

N/F
J. MURDOCK

TWIN 56° WHITE OAK

HUBERT TEAGARDEN

NOTE: SURVEY BEARINGS ARE DEEP MERIDIAN.
NO BUILDING WITHIN 300' OF WELL.

This well was formerly MARS-367A

MAP 4386W
328 E
FB 1707-N PG. 33
(+ ) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. ____________________________ SCALE 1" = 1000'
DRAWING NO. _________________________ 1/2500
MINIMUM DEGREE OF ACCURACY ______
PROVEN SOURCE OF ELEVATION 140.6 A STA.
"VALVE"

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION

WELL TYPE: OIL____ GAS____ LIQUID INJECTION____ WASTE DISPOSAL____
(IF "GAS," PRODUCTION_____ STORAGE_____ DEEP_____ SHALLOW____
LOCATION: ELEVATION 1540' WATER SHED
DISTRICT LIBERTY _____ COUNTY MARSHALL
QUADRANGLE WILEYVILLE - 71'
SURFACE OWNER ANDREW J. STAHLA, ET. UX.
OIL & GAS ROYALTY OWNER GEORGE N. YOHO, ET AL.
LEASE ACREAGE 152
LEASE NO. 2150

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 _____

WELL OPERATOR COLUMBIA GAS TRANSMISSION DESIGNATED AGENT R. A. SCHOFF
ADDRESS PO BOX 458 WASHINGTON, PA 15301 72 ADDRESS PO BOX 458 WASHINGTON, PA 15301

PLACE SEAL HERE

DATE APRIL 27 1989
OPERATOR'S WELL NO. L-2150
API WELL NO. 057-07246R

STATE COUNTY PERMIT
COUNTY NAME MARSHALL

COUNTY NO. 367

SIGNATURE

R.E. 9916 I.L.S. 756

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)

PLP. 9916 I.L.S. 756
NOTE: SURVEY BEARINGS ARE DEEP MERIDIAN. NO BUILDING WITHIN 300' OF WELL.

Littleton, NC

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION

DATE: APRIL 27 1989
OPERATOR'S WELL NO. L-2937
API WELL NO. 057
WAS: 367-A
MARS: 724-F

WELL TYPE: ___GAS, ___LIQUID INJECTION, ___WASTE DISPOSAL
(IF "GAS," PRODUCTION ___STORAGE X DEEP, ___SHALLOW)

LOCATION: ELEVATION ___1240 ___WATER SHED

DISTRICT: LIBERTY &
QUADRANGLE: WILEYVILLE - 7½, S 81 Littler 15.2

SURFACE OWNER: ANDREW J. STAHARA, ET. UX.

OIL & GAS ROYALTY OWNER: GEORGE N. YOHU, ET. AL.

LEASE ACREAGE: 132
LEASE NO.: 2150
PROPOSED WORK: ___DRILL ___CONVERT ___REDRILL ___FRACUATE OR STIMULATE ___PLUG OFF OLD FORMATION ___PERFORATE NEW FORMATION ___OTHER PHYSICAL CHANGE IN WELL (SPECIFY)

PLUG AND ABANDON ___CLEAN OUT AND REPLUG
TARGET FORMATION ___ESTIMATED DEPTH: ___2400 ' SEP 2 9 1989
WELL OPERATOR: COLUMBIA GAS TRANSMISSION
DESIGNATED AGENT: R. A. SCHOFF

ADDRESS: P.O. BOX 496 WASHINGTON PA 15301
ADDRESS: P.O. BOX 496 WASHINGTON PA 15301

75
State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: STAHARA, ANDREW J. ETAL  Operator Well No.: L-2937
LOCATION:  
Elevation: 1,540.00  Quadrangle: WILEYVILLE
District: LIBERTY  
County: MARSHALL
Latitude: 2230 Feet South of 39 Deg. 45Min. 0 Sec.  
Longitude: 1350 Feet West of 80 Deg. 57 Min. 30 Sec.

Company: COLUMBIA GAS TRANSMISSION  
P.O. BOX 1273  
CHARLESTON, WV 25325-1273
Agent: RICHARD L. COTY

Inspector: RANALD MICK  
Permit Issued:  08/22/94
Well work Commenced: 08/22/94
Well work Completed: ____________
Verbal Plugging
Permission granted on: N/A
Rotary Cable Rig N/A
Total Depth (feet) 2,400
Fresh water depths (ft) 100
Salt water depths (ft) 1100

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 1036-1042

<table>
<thead>
<tr>
<th>Casing &amp; Used in</th>
<th>Left</th>
<th>Cement Fill Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tubing Drilling</td>
<td>in Well</td>
<td>Cu. Ft.</td>
</tr>
<tr>
<td>Size</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 3/4</td>
<td>305</td>
<td>305 None</td>
</tr>
<tr>
<td>8 5/8</td>
<td>1,503</td>
<td>1,503 227 sks</td>
</tr>
<tr>
<td>7</td>
<td>2,049</td>
<td>2,049 250 sks</td>
</tr>
<tr>
<td>4 1/2</td>
<td>2,407</td>
<td>125 sks</td>
</tr>
</tbody>
</table>

OPEN FLOW DATA

Producing formation Maxton  Pay zone depth (ft) 2048-2058
Gas: Initial open flow N/A MCF/d  Oil: Initial open flow Bbl/d
Final open flow 2900 MCF/d  Final open flow Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 800 psig (surface pressure) after ? Hours

Second producing formation Big Injun  Pay zone depth (ft) 2284-2300
Gas: Initial open flow 1500 MCF/d  Oil: Initial open flow Bbl/d
(After frac)Final open flow 2700 MCF/d  Final open flow Bbl/d
Time of open flow between initial and final tests 2.7 Years
Static rock Pressure 800 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.

Manager—Well Services  R.L. Coty

For: COLUMBIA GAS TRANSMISSION CORP.

By:  R.L. Coty
Date: 12/13/94
1) Perforated Maxton Sand from 2,048'-2,058' with 61 shots in dry (natural gas filled) wellbore using a logging truck and a wireline lubricator.

2) Geologic record remains as is originally on record.
State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas  

Well Operator's Report of Well Work  

Farm name: STAHARA, ANDREW J., ETUX  
Operator Well No.: L-2937  

LOCATION: Elevation: 1340.00  
Quadrangle: WILEYVILLE  

District: LIBERTY  
County: MARSHALL  
Latitude: 2200 Feet South of 39 Deg. 45 Min. 0 Sec.  
Longitude: 1250 Feet West of 80 Deg. 57 Min. 30 Sec.  

Company: COLUMBIA GAS TRANSMISSION  
1700 MacCORKLE AVENUE S.E.  
CHARLESTON, WV 25314-0000  

Agent: ROBERT C. WEIDNER  

Inspector: RANDAL MICK  
Permit Issued: 09/02/92  
Well work Commenced: 09/16/92  
Well work Completed: 11/01/92  
Verbal Plugging  
Permission granted on: N/A  
Rotary Cable Rig  
Total Depth (feet) 2400'  
Fresh water depths (ft) 100' (EST.)  
Salt water depths (ft) 1100' (EST.)  

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): 1036-42  
PITTSBURGH COAL  

<table>
<thead>
<tr>
<th>Casing &amp; Tubing Size</th>
<th>Used in Drilling</th>
<th>Left in Well</th>
<th>Cement Fill Up Cu. Ft.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-3/4''</td>
<td>305'</td>
<td>305'</td>
<td>NONE</td>
</tr>
<tr>
<td>8-5/8''</td>
<td>1503'</td>
<td>1503'</td>
<td>227 SX</td>
</tr>
<tr>
<td>7''</td>
<td>2049'</td>
<td>2049'</td>
<td>250 SX</td>
</tr>
<tr>
<td>4-1/2''</td>
<td>2407'</td>
<td>125 SX</td>
<td></td>
</tr>
</tbody>
</table>

OPEN FLOW DATA  

Producing formation BIG INJUN SAND  
Pay zone depth (ft) 2277'  
Gas: Initial open flow MCF/d  
Final open flow MCF/d  
Time of open-flow between initial and final tests Hours  
Static rock Pressure psig (surface pressure) after Hours  

Second producing formation  
Pay zone depth (ft)  
Gas: Initial open flow MCF/d  
Final open flow MCF/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 WELLOBORE.
Activity

9/16/92: Atlas Wireline perforated Big Injün Sand 2284'-2300' (GR/CBL) w/3 holes/ft. to increase shot density to 6 holes/ft.

9/16/92: Halliburton foam fractured well with 75 quality foam: 50,000# 20/40 sand; 191 bbl. water; 389,000 SCF nitrogen; 15 BPM rate; 3035 psig avg. treating pressure; I.S.I.P: 2010 psig.

Note: Geological well log remains the same as previously submitted.
Well Operator’s Report of Well Work

Farm Name: STAHARA, ANDREW J. ETUX. Operator Well No.: L-2937

LOCATION: Elevation: 1340.00 Quadrangle: WILEYVILLE

District: LIBERTY County: MARSHALL
Latitude: 2200 Feet South of 39 Deg. 45Min. 0 Sec.
Longitude 1250 Feet West of 80 Deg. 37 Min. 30 Sec.

Company: COLUMBIA GAS TRANSMISSION
P. O. BOX 1273
CHARLESTON, WV 25325-0000

Agent: ROBERT E. WEIDNER

Inspector: MIKE UNDERWOOD
Permit Issued: 09/27/89
Well work Commenced: 10/13/89
Well work Completed: 2/16/90

Verbal Plugging
Permission granted on: N/A

Rotary x Cable Rig
Total Depth (feet): 2410 (KB)
Fresh water depths (ft): 100
Salt water depths (ft): 1100

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 1036-1042

Casing & Tubing Used in Drilling Left in Well Cement Fill Up Cu. Ft.

<table>
<thead>
<tr>
<th>Size</th>
<th>10-3/4&quot;</th>
<th>305'</th>
<th>none</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8-5/8&quot;</td>
<td>1503'</td>
<td>227 sx.</td>
</tr>
<tr>
<td></td>
<td>7&quot;</td>
<td>2027'</td>
<td>250 sx.</td>
</tr>
<tr>
<td>4-1/2&quot;</td>
<td>1267'(KB) 125 sx.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OPEN FLOW DATA

Producing formation Big Injun Sand
Pay zone depth (ft) 2284'
Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow 996 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 671 psig (surface pressure) after 24 Hours

Second producing formation
Pay zone depth (ft) 2284'
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: /s/ [Signature]
Date: FEB 21 1990
10/15/89: Pulled 2398' of existing 4 1/2" 12.6#/ft. J-55 tubing & anchor packer (6-5/8"x4 1/2").

10/17/89: Ran 77 joints of 4 1/2" 11.6#/ft. K-55 casing and set same @2407' (KB). Halliburton cemented 4 1/2" w/125 sx of 25/75 Pozmix, 6% Calseal, 1% Halad. 322.

10/19/89: Installed new National 7"x4 1/2" API 2000# flanged wellhead w/2 Barton 4 1/2" gate valves.

11.21/89: Western Atlas ran gamma-ray, neutron, and cement bond logs from 2375'-0'; swabbed 4 1/2" casing down to 1100'.

01/18/90: Western Atlas perforated Big Injun Sand 2284'-2300', w/49 shots.

Well log remains the same as previously submitted.
**Casing and Tubing Record**

<table>
<thead>
<tr>
<th>Casing Size</th>
<th>Casing Length</th>
<th>Date</th>
<th>Type</th>
<th>Amount</th>
<th>Depth</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 3/4&quot;</td>
<td>2,506 ft</td>
<td>14/9</td>
<td>Anchor</td>
<td>2,060 gal</td>
<td>Bottom</td>
<td>250 gal</td>
</tr>
</tbody>
</table>

**Packer Record**

<table>
<thead>
<tr>
<th>Date</th>
<th>Depth Set</th>
<th>Type Packer</th>
<th>Date</th>
<th>Type Explosive</th>
<th>Amount</th>
<th>Depth Top</th>
<th>Depth Bottom</th>
<th>Volume Before Co. Ft</th>
<th>Volume After Co. Ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 x 6 5/8&quot;</td>
<td>2,060 ft</td>
<td>Anchor</td>
<td>2,060 gal</td>
<td>250 gal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Volume and Pressure**

<table>
<thead>
<tr>
<th>Date</th>
<th>Reading in Inches</th>
<th>Liquid</th>
<th>Size Orifice</th>
<th>Volume</th>
<th>Sand</th>
<th>Pressure in lbs.</th>
<th>1</th>
<th>5</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>24 Hour R. P.</th>
<th>Max. R. P.</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>5</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Initial Open Flow**

**Cubic Feet per 24 Hours**

<table>
<thead>
<tr>
<th>Formation</th>
<th>Top</th>
<th>Bottom</th>
<th>Thickness</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native Coal</td>
<td>756</td>
<td>750</td>
<td>6</td>
<td>365 ft of 10 3/4&quot; casing was original casing</td>
</tr>
<tr>
<td>Mapleton Coal</td>
<td>936</td>
<td>951</td>
<td>5</td>
<td>1,000 ft of 8 5/8&quot; casing new run in well and connected to original casing left in hole</td>
</tr>
<tr>
<td>Pittsburgh Coal</td>
<td>1026</td>
<td>1042</td>
<td>6</td>
<td>1,000 ft of 8 5/8&quot; casing new run in well and connected to original casing left in hole</td>
</tr>
<tr>
<td>Marlin Sand</td>
<td>2207</td>
<td>2207</td>
<td>7</td>
<td>1,000 ft of 8 5/8&quot; casing new run in well and connected to original casing left in hole</td>
</tr>
<tr>
<td>Big Tom Sand</td>
<td>2107</td>
<td>2107</td>
<td>7</td>
<td>250 ft of 8 5/8&quot; casing new run in well and connected to original casing left in hole</td>
</tr>
<tr>
<td>Total Depth</td>
<td>2356</td>
<td></td>
<td></td>
<td>277 feet of cement run between 10 3/4&quot; casing and 8 5/8&quot; casing good return to surface</td>
</tr>
</tbody>
</table>

**Tubing Record**

<table>
<thead>
<tr>
<th>Date</th>
<th>Reading in Inches</th>
<th>Liquid</th>
<th>Size Orifice</th>
<th>Volume</th>
<th>Sand</th>
<th>Pressure in lbs.</th>
<th>1</th>
<th>5</th>
<th>10</th>
<th>20</th>
<th>30</th>
<th>40</th>
<th>24 Hour R. P.</th>
<th>Max. R. P.</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>5</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Division of Oil & Gas**

**Department of Energy**

*NOTE: The above block must be filled out carefully by the contractor, with a complete and accurate record of the well, and accompany, when presented for payment of the bill for drilling. All formations and known seams must be given by their proper name, with steel line measurements, and under the head of Remarks must be recorded in the names of the person who looked this record up.*
### WELL RECORD

**Company:** THE MANUFACTURERS LIGHT AND HEAT COMPANY  
**Address:** 800 UNION TRUST BLDG., PHILADELPHIA, PENNA.  
**Farm:** Geo. N. Yoho  
**Acres:** 136  
**Location (waters):**  
**Well No.:** 2957  
**Elev.:** 1353  
**District:** Liberty  
**County:** Marshall  
**The surface of the tract is owned by:**  
**Address:**  
**Mineral rights are owned by:**  
**Address:**  
**Drilling commenced:** June 30, 1924  
**Drilling completed:** July 25, 1924  
**Date Shot From:**  
**To:**  
**With:**  
**Open Flow:**  
**/10ths Water in.**  
**/10ths Merc. in.**  
**Volume:** 1,867,000  
**Cu. Ft.**  
**Rock Pressure:** lbs. hrs.  
**Oil:** bbls., 1st 24 hrs.  
**Fresh water:** feet  
**Salt water:** feet  
**Casing and Tubing:**  
**Used in Drilling:**  
**Left in Well:**  
**Packers:**  
<table>
<thead>
<tr>
<th>Size</th>
<th>Size of</th>
<th>Depth set</th>
<th>Perf. top</th>
<th>Perf. bottom</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>305</td>
<td>305</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>1493</td>
<td>1493</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 3/4</td>
<td>2150</td>
<td>2150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 3/16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2399.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2399.3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Casing Cemented:**  
**Size:** No. Ft. Date  
**COAL WAS ENCOUNTERED AT:**  
**736 FEET INCHES**  
**936 FEET INCHES**  
**1936 FEET INCHES**  
**Friedinger ENCHIES**  
**Formation:** Lime  
**Color:**  
**Hard or Soft:**  
**Top:**  
**Bottom:**  
**Oil, Gas or Water:**  
**Depth Found:**  
**Remarks:**  
<table>
<thead>
<tr>
<th>Formation</th>
<th>Color</th>
<th>Hard or Soft</th>
<th>Top</th>
<th>Bottom</th>
<th>Oil, Gas or Water</th>
<th>Depth Found</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lime</td>
<td></td>
<td></td>
<td>16</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lime</td>
<td></td>
<td></td>
<td>200</td>
<td>240</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sand</td>
<td></td>
<td></td>
<td>300</td>
<td>325</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coal</td>
<td></td>
<td></td>
<td>736</td>
<td>740</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mapleton Coal</td>
<td></td>
<td></td>
<td>936</td>
<td>941</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pitts. Coal</td>
<td></td>
<td></td>
<td>1036</td>
<td>1042</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sand</td>
<td></td>
<td></td>
<td>1050</td>
<td>1085</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Rock</td>
<td></td>
<td></td>
<td>1150</td>
<td>1182</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Murphy Sand</td>
<td></td>
<td></td>
<td>1182</td>
<td>1220</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big Duneard</td>
<td></td>
<td></td>
<td>1488</td>
<td>1500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas Sand</td>
<td></td>
<td></td>
<td>1660</td>
<td>1742</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mazon Sand</td>
<td></td>
<td></td>
<td>2045</td>
<td>2072</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas 2600 to 2066</td>
<td></td>
<td></td>
<td>2072</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total Depth:** 2072  
**DRILLED DEEPER:**  
**Drilling Commenced September 4, 1928; Completed September 14, 1928**  
**Drilled Deeper from depth of 2072**  

**Slate**  
**Big Lime**  
**Big Injun**  
**Total Depth**  

<table>
<thead>
<tr>
<th>Formation</th>
<th>Size</th>
<th>Size of</th>
<th>Depth set</th>
<th>Perf. top</th>
<th>Perf. bottom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slate</td>
<td>2072</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big Lime</td>
<td>2082</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Big Injun</td>
<td>2125</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Depth</td>
<td>2298</td>
<td></td>
<td>Gas 2298-2298</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** In 1936 this well was drilled deeper to 2400' but we do not have a record of this drilling.
<table>
<thead>
<tr>
<th>Formation</th>
<th>Color</th>
<th>Hard or Soft</th>
<th>Top</th>
<th>Bottom</th>
<th>Oil, Gas or Water</th>
<th>Depth Found</th>
<th>Remarks</th>
</tr>
</thead>
</table>

Date: MAY 12, 1954

APPROVED: THE MANUFACTURERS LIGHT AND HEAT COMPANY

By: [Signature]
ASST. LAND AGENT (Title)
STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS  
WELL WORK PERMIT APPLICATION  

1) Well Operator: Columbia Gas Transmission Corp.  

2) Operator's Well Number: L-2937  

3) Elevation: 1340'  

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

5) Proposed Target Formation(s): Big Injun Sand  

6) Proposed Total Depth: 2400 feet  

7) Approximate fresh water strata depths: Estimated @ 100'  

8) Approximate salt water depths: Estimated @ 1100'  

9) Approximate coal seam depths: Pittsburgh Coal @ 1036' - 1042'  

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

11) Proposed Well Work: 1) Remove the existing 4-1/2" OD casing; 2) Drill deeper from 2388' to 2400'; 3) Run & cement new 4-1/2" OD casing with 400 sks.; and 4) Perforate the Maxton and Big Injun Sands undetermined by well logs.  

CASING AND TUBING PROGRAM - EXISTING  

<table>
<thead>
<tr>
<th>TYPE</th>
<th>SPECIFICATIONS</th>
<th>FOOTAGE INTERVALS</th>
<th>CEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Size</td>
<td>Grade</td>
<td>Weight per ft.</td>
</tr>
<tr>
<td>Conductor</td>
<td>10-3/4&quot; OD</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Coal</td>
<td>7&quot; OD</td>
<td>N-80</td>
<td>23#</td>
</tr>
<tr>
<td>Intermediate</td>
<td>4-1/2&quot; OD</td>
<td>J-55</td>
<td>12.6#</td>
</tr>
<tr>
<td>Production</td>
<td>7&quot; OD</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tubing</td>
<td>4-1/2&quot; OD</td>
<td>J-55</td>
<td>12.6#</td>
</tr>
<tr>
<td>Liners</td>
<td>7&quot; OD</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

PACKERS: Kind  Anchor Packer  

Sizes  4-1/2" x 7"  

Depths set  2164'  

For Division of Oil and Gas Use Only  

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY  

Fee(s) paid:  

Well Work Permit  

Reclamation Fund  

Well Permit  

Agent  

Type  

SEP 9-3 1989  

RECEIVED  

05/2/82
NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
   (a) Name Andrew J. Stahara, et ux
   Address RD #5, Box 174
       Cameron, W. Va. 26033

5) (a) Coal Operator:
   Name Consolidation Coal Co.
   Address Consol Plaza, 1800 Washington Rd.
       Pittsburgh, PA 15241

   (b) Coal Owner(s) with Declaration
       Name ____________________________
       Address _________________________

   (c) Coal Lessee with Declaration
       Name McElroy Coal Co.
       Address Consol Plaza, 1800 Washington Rd.
       Pittsburgh, PA 15241

6) Inspector Mike Underwood
   Address Rt. 2, Box 135
       Salem, W. Va. 26426

   Telephone (304) 782-1043

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:

X Personal Service (Affidavit attached)
X Certified Mail (Postmarked postal receipt 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: ____________________________
Its: Director, Drilling & Maintenance
Address P. O. Box 1273
       Charleston, WV 25325-1273
Telephone 304-357-2459

Subscribed and sworn before me this 3rd day of September, 1989

Mary Parsons, Notary Public

My commission expires ____________________________
STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: COLUMBIA GAS TRANSMISSION CORPORATION 10450
2) Operator's Well Number: L-2937
3) Elevation: 1340
4) Well type: (a) Oil / or Gas /
   (b) If Gas: Production / or Underground Storage / Deep / Shallow /
5) Proposed Target Formation(s): Big Injun Sand
6) Proposed Total Depth: 2400 feet
7) Approximate fresh water strata depths: 100' (est.)
8) Approximate salt water depths: 1100' (est.)
9) Approximate coal seam depths: Pittsburgh Coal - 1036'-1042'
10) Does land contain coal seams tributary to active mine? Yes / No /
11) Proposed Well Work: Fracture the Big Injun Sand to increase deliverability.

CASING AND TUBING PROGRAM

<table>
<thead>
<tr>
<th>TYPE</th>
<th>SPECIFICATIONS</th>
<th>FOOTAGE INTERVALS</th>
<th>CEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Size</td>
<td>Grade</td>
<td>Weight per ft.</td>
</tr>
<tr>
<td>Conductor</td>
<td>10-3/4&quot;</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Fresh Water</td>
<td>8-5/8&quot;</td>
<td>J</td>
<td>24</td>
</tr>
<tr>
<td>Coal</td>
<td>7&quot;</td>
<td>N</td>
<td>23</td>
</tr>
<tr>
<td>Intermediate</td>
<td>4-1/2&quot;</td>
<td>K</td>
<td>11.6</td>
</tr>
<tr>
<td>Production</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tubing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liners</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PACKERS: Kind: none
Sizes:
Depths set:

For Division of Oil and Gas Use Only

Fee(s) paid: $ Well Work Permit $ Reclamation Fund $ WPCP
Plat: WW-9 WW-2B Bond (Type)

Agent
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 Andrew J. Stahara, et al
   Address RD 5, Box 174
       Cameron, W.V. 26033

   (b) Name
   Address

   (c) Name
   Address

5) (a) Coal Operator:
    Name _____________________________
    Address _____________________________

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

    (c) Coal Lessee with Declaration
    Name _____________________________
    Address _____________________________

6) Inspector Randal Mick
   Address Rt. 3, Box 248
       Weston, WV 26452
   Telephone (304)-269-2335

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

Included is the lease or leases or other continuing contracts by which I hold the right to extract oil and gas OR

Included is the information required by Chapter 22B, Article
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: ____________________________
   Its: Director, Drilling & Maintenance
   Address P. O. Box 1273
       Charleston, W.V. 25325-1273
   Telephone 304-357-2459

Subscribed and sworn before me this 22nd day of August, 1992.

My commission expires May 16, 2007

Notary Public

OFFICIAL SEAL
NOTARY PUBLIC, STATE OF WEST VIRGINIA
WATSON T. TERRY, JR.
P.O. BOX 1273
CHARLESTON, W.V. 25325
MY COMMISSION EXPIRES 05 - 16 - 2008
STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: COLUMBIA GAS TRANSMISSION CORPORATION
Operator's Well Number: L-2937
Well type: (a) Oil / or Gas /
(b) If Gas: Production / Underground Storage / Deep / Shallow /
Proposed Target Formation(s): Maxton Sand 2048-2058
Proposed Total Depth: 2400 feet

7) Approximate fresh water strata depths: 100' (est.)
8) Approximate salt water depths: 1100' (est.)
9) Approximate coal seam depths: Pittsburgh Coal - 1036'-1042'
10) Does land contain coal seams tributary to active mine? Yes / No /
11) Proposed Well Work: Perforate the Maxton Sand that was previously open before new pipe was cemented in 1989. See attached procedure.

CASING AND TUBING PROGRAM

<table>
<thead>
<tr>
<th>TYPE</th>
<th>SPECIFICATIONS</th>
<th>FOOTAGE INTERVALS</th>
<th>CEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Size  Grade  Weight For</td>
<td>Left in</td>
<td>Fill-up</td>
</tr>
<tr>
<td></td>
<td>per ft.   drilling in (cu. ft.)</td>
<td>well</td>
<td></td>
</tr>
<tr>
<td>Conductor</td>
<td>10-3/4&quot;      305'</td>
<td>305'</td>
<td>None</td>
</tr>
<tr>
<td>Fresh Water</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coal</td>
<td>8-5/8&quot; J 24 1503'</td>
<td>1503'</td>
<td>227 sx.</td>
</tr>
<tr>
<td>Intermediate</td>
<td>7&quot; N 23 2049'</td>
<td>2049'</td>
<td>250 sx.</td>
</tr>
<tr>
<td>Production</td>
<td>4-1/2&quot; K 11.6 2407'</td>
<td>2407'</td>
<td>125 sx.</td>
</tr>
<tr>
<td>Tubing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liners</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PACKERS: Kind None
Sizes Depths set

For Office of Oil and Gas Use Only

Fee(s) paid: 1 Well Work Permit 1 Reclamation Fund WPCP
Plat: WW-9 WW-2B Bond (Type) Agent
STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS  
WV Division of Environmental Protection

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 2 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]

Address: P. O. Box 1273
Charleston, WV 25325-1273

Telephone: 304/357-2459

Before me this 14th day of July, 1994, I have subscribed and sworn to this instrument. I am a Notary Public for the State of West Virginia.