

Latitude  $39^{\circ}35'$  (15')  
 $39^{\circ}37'30''$  (7 1/2')



Longitude  $80^{\circ}32'30''$  (7 1/2')  
 $80^{\circ}30'$  (15')

+ 7 1/2" TO PO

- RECONDITION  4/11/78  
 Fracture.....  
 Redrill.....  
 New Location.....  
 Drill Deeper.....  
 Abandonment.....

Source of Elevation \_\_\_\_\_  
 I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.  
 Minimum accuracy, one part in \_\_\_\_\_

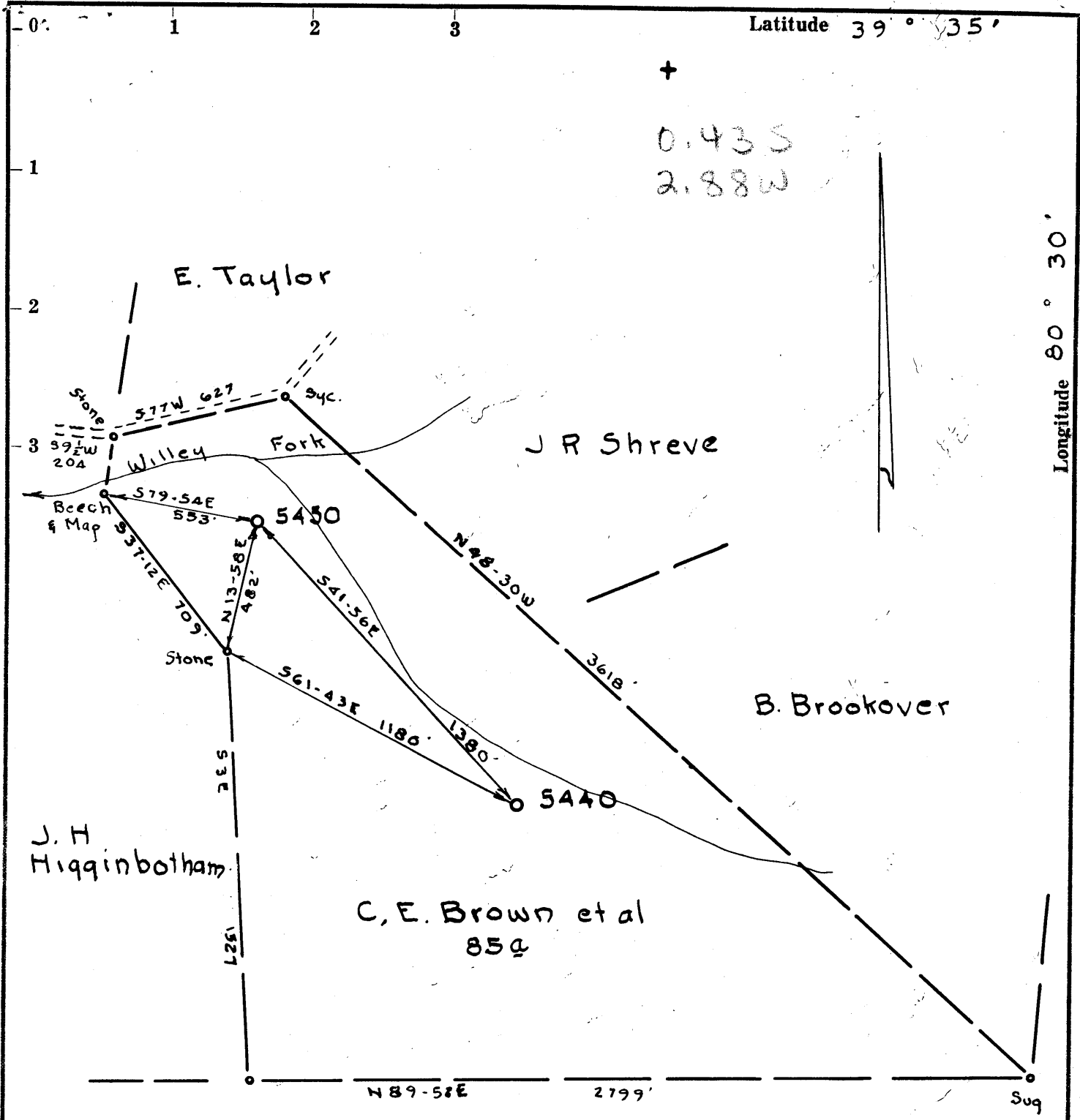
Company EQUITABLE GAS COMPANY  
 Address 420 BLVD. OF THE ALLIES, PGH. PA.  
 Farm C. E. BROWN et al  
 Tract \_\_\_\_\_ Acres 85 Lease No. 25423  
 Well (Farm) No. \_\_\_\_\_ Serial No. 5440  
 Elevation (Spirit Level) 1098' SE  
 Quadrangle LITTLETON (15') BIG RUN (7 1/2')  
 County WETZEL District GRANT  
 Engineer James S. Telford  
 Engineer's Registration No. 2886  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date MAR. 23, 1978 Scale 1" = 500'

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

**WELL LOCATION MAP**  
 FILE NO. WET-531-REC

+ Denotes location of well on United States Topographic Maps, scale 1 to  $\frac{62,500}{24,000}$  latitude and longitude lines being represented by border lines as shown.  
 - Denotes one inch spaces on border line of original tracing.

47-103 APR 13 1978



Redrill..... RECONDITION  
 New Location.  
 Drill Deeper.....  
 Abandonment..... Partial Plug

Company Equitable Gas Co., W.Va. Div.  
 Address Pittsburgh, Pa.  
 Farm C.E. Brown et al  
 Tract \_\_\_\_\_ Acres 85 Lease No. 25423  
 Well (Farm) No. 1 Serial No. 5440  
 Elevation (Spirit Level) 1098'  
 Quadrangle Littleton - SE.  
 County Wetzel District Grant  
 Engineer J. M. [Signature]  
 Engineer's Registration No. 1084  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date 5-15-62 Scale 1" = 500'

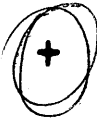
STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON

**WELL LOCATION MAP**  
 FILE NO. WET-531.

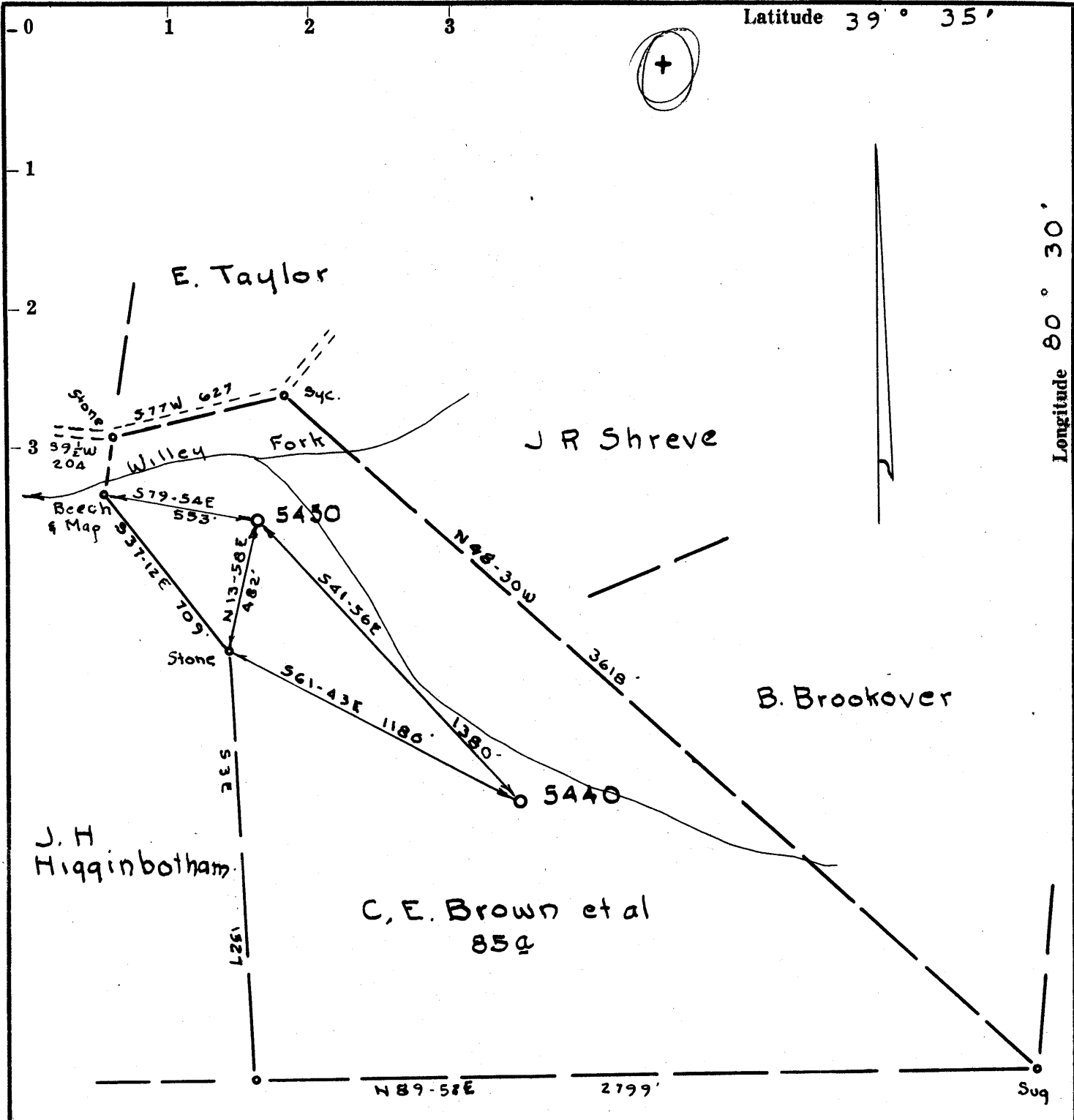
⊕ Denotes location of well on United States Topographic Maps, scale 1 to 62,500, latitude and longitude lines being represented by border lines as shown.  
 — Denotes one inch spaces on border line of original tracing.

9-0 45

Latitude 39° 35'



Longitude 80° 30'



- Redrill.....
- New Location.....
- Drill Deeper.....
- Abandonment.....

Partial Plug JUN 6 1962

2.86  
~~2.9~~ W  
0.42

Company Equitable Gas Co., W.Va. Div.  
 Address Pittsburgh, Pa.  
 Farm C. E. Brown et al  
 Tract \_\_\_\_\_ Acres 85 Lease No. 25423  
 Well (Farm) No. 1 Serial No. 5440  
 Elevation (Spirit Level) 1098'  
 Quadrangle Littleton S.E. 23  
 County Wetzel District Grant  
 Engineer James J. Griffin  
 Engineer's Registration No. 1084  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date 5-15-62 Scale 1" = 500'

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

**WELL LOCATION MAP**  
 FILE NO. WET-1144-PP

† 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.

C. E. BROWN FT 82, No. 10840 - EQUITABLE GAS CO., W. VA. DIV. - WET-1144-PP



AUG 9 1979

STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
**Oil and Gas Division**  
**WELL RECORD**

Quadrangle Lit. SE 2<sup>3</sup>  
Permit No. Wet. 531-REC

Rotary \_\_\_\_\_ Oil \_\_\_\_\_  
Cable X Gas X  
Recycling \_\_\_\_\_ Comb. \_\_\_\_\_  
Water Flood \_\_\_\_\_ Storage (X)  
Disposal \_\_\_\_\_ (Kind)

Company Equitable Gas Co.  
Address 420 Blvd. of the Allies, Pgh, Pa. 15219  
Farm C. E. Brown et al Acres 85  
Location (waters) Willey Fork  
Well No. 5440 Elev. 1098  
District Grant County Wetzel  
The surface of tract is owned in fee by Nellie J. Phillips, Agt.  
Address 326 Glenn Ln., Follansbee, W. Va. 26307  
Mineral rights are owned by Jessie M. Brown, Agt.  
Route 2, Bx. 233,  
Address New Martinsville, W. Va.  
Drilling Commenced 6-27-79 26155  
Drilling Completed 8-10-79  
Initial open flow N/A cu. ft. ---- bbls.  
Final production N/A cu. ft. per day ---- bbls.  
Well open N/A hrs. before test ---- RP.  
Well treatment details:

| Casing and Tubing | Used in Drilling | Left in Well | Cement fill up Cu. ft. (Sks.)   |
|-------------------|------------------|--------------|---|
| Size 20-16        |                  |              | 7" cemented from 1280' to surface w/ 160 sks. 50-50 pozmix, 10% salt. |
| Cond. 13-10"      |                  |              |   |
| 9 5/8             |                  |              | 4 1/2" cement from 2066' to 1000' w/ 115 sks 50-50 pozmix, 10% sal    |
| 8 1/4             |                  | 1269'        |   |
| 7                 |                  | 2057'        |   |
| 5 1/2             |                  |              |   |
| 4 1/2             |                  | 2066'        |   |
| 3                 |                  |              |   |
| 2                 |                  |              |   |
| Liners Used       |                  |              |   |

Attach copy of cementing record.

Coal was encountered at \_\_\_\_\_ Feet \_\_\_\_\_ Inches  
Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Storage Producing Sand Top Big Injun Depth 2074' to 2082'

| Formation        | Color | Hard or Soft | Top Feet | Bottom Feet | Oil, Gas or Water | * Remarks       |
|------------------|-------|--------------|----------|-------------|-------------------|-----------------|
| Big Dunkard Sand |       |              | 1300     | 1331        |                   |                 |
| Gas Sand         |       |              | 1432     | 1512        |                   |                 |
| Salt Sand        |       |              | 1564     | 1650        |                   |                 |
| Salt Sand        |       |              | 1688     | 1829        |                   |                 |
| Salt Sand        |       |              | 1836     | 1848        |                   |                 |
| Maxton Sand      |       |              | 1982     | 2000        |                   |                 |
| Big Lime         |       |              | 2010     | 2066        |                   |                 |
| (top) Big Injun  |       |              | 2074     | 2105        | Gas Storage       | 2074' - 2082'   |
| From Elec. Logs. |       |              |          | TD. 2105    |                   | Plug Back Depth |

(over)

\* Indicates Electric Log tops in the remarks section.

AUG 22 1979



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

Quadrangle Littleton SE 2,3

Permit No. ~~WET-1110-PP~~ WET-531

**WELL RECORD**  
PARTIAL PLUG AND RECONDITION

Oil or Gas Well Gas Storage  
(KIND)

Company Equitable Gas Company  
Address 120 Blvd. of Allies, Pittsburgh 19, Pa.  
Farm C. E. Brown Acres 85  
Location (waters) Littleton SE 2.3  
Well No. 5440 Elev. 1,098  
District Grant County Wetzel  
The surface of tract is owned in fee by O. E. Shreve,  
3704 Hamlin Avenue, Address Weirton, W. Va.  
Mineral rights are owned by C. E. Brown et al  
Rt. 2, Box 237, Address New Martinsville,  
West Virginia  
Repair Drilling commenced 6-20-62  
Repair Drilling completed 9-24-62  
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                |                  |              | Hook Wall               |
| 13                |                  |              | Size of <u>6-5/8 x</u>  |
| 10                | <u>389</u>       | <u>None</u>  | <u>5-3/16</u>           |
| 8 1/4             | <u>1269</u>      | <u>1269</u>  | Depth set <u>2,064</u>  |
| 6 3/4             | <u>2053</u>      | <u>2053</u>  |                         |
| 5 3/16            | <u>2064</u>      | <u>2064</u>  |                         |
| 3                 |                  |              | Perf. top <u>---</u>    |
| 2                 |                  |              | Perf. bottom <u>---</u> |
| Liners Used       |                  |              | Perf. top <u>---</u>    |
|                   |                  |              | Perf. bottom <u>---</u> |

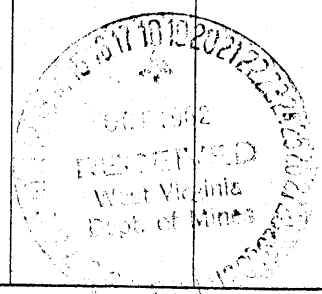
CASING CEMENTED --- SIZE --- No. Ft. --- Date ---

COAL WAS ENCOUNTERED AT 330 FEET 36 INCHES  
816 FEET 94 INCHES FEET INCHES  
FEET INCHES FEET INCHES

RESULT AFTER TREATMENT ---  
ROCK PRESSURE AFTER TREATMENT ---  
Fresh Water --- Feet Salt Water --- Feet

| Formation             | Color | Hard or Soft | Top  | Bottom | Oil, Gas or Water                        | Depth                                     | Remarks            |
|-----------------------|-------|--------------|------|--------|--|---|--------------------|
| ✓ Native Coal         |       |              | 330  | 333    |  |   | Driller<br>Driller |
| ✓ Pgh. Coal           |       |              | 816  | 824    |  |   |                    |
| ✓ B. Dunkard Sand     |       |              | 1295 | 1327   |  |   |                    |
| ✓ Gas Sand            |       |              | 1410 | 1509   |  |   |                    |
| ✓ Salt Sand           |       |              | 1560 | 1572   |  |   |                    |
| ✓ Salt Sand           |       |              | 1600 | 1645   | <u>2008</u><br><u>1098</u><br><u>910</u> | <u>2290</u><br><u>1098</u><br><u>1192</u> |                    |
| ✓ Salt Sand           |       |              | 1687 | 1825   |  |   |                    |
| ✓ Salt Sand           |       |              | 1832 | 1842   |  |   |                    |
| ✓ Maxton Sand         |       |              | 1980 | 1995   |  |   |                    |
| ✓ Big Lime            |       |              | 2008 | 2060   |  |   |                    |
| Big Injun Sand        |       |              | 2070 | 2120   |  |   |                    |
| ✓ Big Injun Sand      |       |              | 2130 | 2236   |  |   |                    |
| Big Injun Sand        |       |              | 2255 | 2290   |  |   |                    |
| ✓ Gordon Stray Sand   |       |              | 2835 | 2885   |  |   |                    |
| ✓ Gordon Sand         |       |              | 2920 | 2945   |  |   |                    |
| Cleaned Out to        |       |              |      | 3065-  |  |   |                    |
| Cemented back         |       |              | 3065 | 2105   |  |   |                    |
| Completed Total Depth |       |              |      | 2105   |  |   |                    |

NOTE: Log shown from Gamma Ray Survey except where noted.  
Well located in Mobley Gas Storage Pool Area.  
Pulled 2,335' of old 5-3/16" casing.  
522' old 5-3/16" casing left in from 2,335' to 2,857'.





STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,  
Charleston, W. Va.

DATE March 30, 1978

Surface Owner Nellie J. Phillips, Agt. Company Equitable Gas Company  
 Address 326 Glenn Lane, Follansbee, W. Va. 260307 Address Pittsburgh, Pa. 15219  
 Mineral Owner Jessie M. Brown, Agt. Farm C.E. Brown et al Acres 85  
 Address Route 2, Box 233, New Martinsville, W. Va. 26155 Location (waters) Willey Fork  
 Coal Owner Consolidation Coal Co. Well No. 1- 5440 Elevation 1098  
 Address Moundsville Div., P.O. Drawer L, Moundsville, W. Va. 26041 District Grant County Wetzel  
 Coal Operator Moundsville, W. Va. 26041 Quadrangle Littleton S.E. 2-3  
 Address \_\_\_\_\_

THIS PERMIT MUST BE POSTED AT THE WELL SITE

All provisions being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for **RECONDITIONING**. This permit shall expire if operations have not commenced by 8-11-78.

INSPECTOR TO BE NOTIFIED Phillip Lee Tracy  
 ADDRESS P.O. Box 173, Dodd St. Middlebourn, W. Va. 26149  
 PHONE 758-4573

[Signature]  
Deputy Director - Oil & Gas Division

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated Aug. 23 1961 by C.E. Brown et al made to Equitable Gas Co. and recorded on the 27th day of March 1962, in Wetzel County, Book 45 A Page 278

NEW WELL \_\_\_\_\_ DRILL DEEPER XX ~~REDRILL~~ \_\_\_\_\_ FRACTURE OR STIMULATE \_\_\_\_\_  
X OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. \*

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address \_\_\_\_\_ day \_\_\_\_\_ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY  
P. O. BOX 879  
MORGANTOWN, WEST VIRGINIA 26505  
AC-304 - 292-6331

Address of Well Operator

Very truly yours, S. M. Linger  
 (Sign Name) Equitable Gas Co.  
 Well Operator  
420 Blvd. of the Allies  
 Street  
Pittsburgh,  
 City or Town  
Pa. 15219  
 State

\*SECTION 3 . . . . If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

Wet. 531-REC. \_\_\_\_\_ PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

Signed by S. M. Linger

**THIS IS AN ESTIMATE ONLY  
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION**

**RECONDITION**

PROPOSED WORK ORDER TO \_\_\_\_\_ DRILL XX ~~DEEPEN~~ XXXXX FRACTURE-STIMULATE  
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:  
 NAME Equitable Gas Company Tools NAME H. E. Gardner, Jr.  
 ADDRESS \_\_\_\_\_ ADDRESS Box 1550, Clarksburg, W.Va.  
 TELEPHONE \_\_\_\_\_ TELEPHONE 624-6576  
 ESTIMATED DEPTH OF COMPLETED WELL: 2008 ROTARY \_\_\_\_\_ CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Big Injun  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS \_\_\_\_\_ COMB. \_\_\_\_\_ STORAGE XX DISPOSAL \_\_\_\_\_  
 RECYCLING \_\_\_\_\_ WATER FLOOD \_\_\_\_\_ OTHER \_\_\_\_\_

**TENTATIVE CASING PROGRAM:**

| CASING AND TUBING SIZE | USED FOR DRILLING | LEFT IN WELL | CEMENT FILL UP OR SACKS - CUBIC FT. |
|------------------------|-------------------|--------------|-------------------------------------|
| 20 - 16                |                   |              |                                     |
| 13 - 10                |                   |              |                                     |
| 9 - 5/8                |                   |              |                                     |
| 8 - <del>5/8</del> 1/4 | 1269              | 1269         |                                     |
| <del>7</del> 6-5/8     | 2053              | 2053         |                                     |
| 5 <del>3</del> -3/16   | 2064              | Pull 2064    |                                     |
| 4 1/2                  |                   | Run 2008     |                                     |
| 3                      |                   |              | Perf. Top                           |
| 2                      |                   |              | Perf. Bottom                        |
| Liners                 |                   |              | Perf. Top                           |
|                        |                   |              | Perf. Bottom                        |

APPROXIMATE FRESH WATER DEPTHS \_\_\_\_\_ FEET SALT WATER \_\_\_\_\_ FEET  
 APPROXIMATE COAL DEPTHS 330-333, 816-824  
 IS COAL BEING MINED IN THE AREA? \_\_\_\_\_ BY WHOM? \_\_\_\_\_

**TO DRILL:**

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

**TO DRILL DEEPER OR REDRILL:**

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

**TO FRACTURE - STIMULATE:**

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for \_\_\_\_\_ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the \_\_\_\_\_ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

\_\_\_\_\_  
For Coal Company

\_\_\_\_\_  
Official Title