



#### STATE OF WEST VIRGINIA DEPARTMENT OF MINES

JAN - 4 1978

# OIL & GAS DIVISION

### DEPT. of MINES Oil and Gas Division

WELL RECORD 16 Rotary\_X Cable. Gas Quadrangle Littleton Recycling Comb. Water Flood\_\_\_ Permit No. Wet-629 Storage\_ Disposal\_\_ (Kind) Pennzoil Company Company\_\_ Casing and Tubing Used in Left Cement fill up Address\_ P. O. Box 1588, Parkersburg, WV Drilling in Well Cu. ft. (Sks.) Shiben Estate Acres 297.50 Location (waters) Left Fork of Richwood Run Size Well No.\_\_\_ 1. \_ Elev. 1337.43 1 20-16 District Grant \_\_ County Wetzel Cond. The surface of tract is owned in fee by\_ 13-10" Merle Goodrich 9 5/8 Address Elyria, Ohio 44035 8 5/8 Paul J. Shiben, Atty. Mineral rights are owned by\_\_\_ 7 1545 1545 100 sks. Address P. O. Box 246, N. Martinsvilles 1/2 9-14-77 Drilling Commenced\_\_\_\_ 4 1/2 3302 120 sks. 3302 9-21-77 Drilling Completed\_ 10,000 Initial open flow \_ \_\_cu. ft. . Final production\_\_\_ Liners Used \_bbls. Well open \_ \_hrs. before test\_\_\_ \_ RP. Well treatment details: Attach copy of cementing record. Fractured 10/6/77 w/795 BW, 30,000# frac. Sand, 1000 gal. acid 15% Coal was encountered at. Feet\_ Inches Fresh water. Feet . Salt Water. Feet \_ Producing Sand. Fourth Depth \_

| Formation Color Hard or Soft | Top Feet | Bottom Feet | Oil, Gas or Water | * Remarks |
|------------------------------|----------|-------------|-------------------|-----------|
| Silt & Shale                 | 0        | 84          |                   |           |
| Sand                         | 84       | 109         |                   |           |
| Silt                         | 109      | 284         |                   |           |
| Sand                         | 284      | 304         |                   |           |
| Silt & Shale                 | 304      | 589         |                   |           |
| Siltstone w/shale stringers  | 589      | 824         |                   |           |
| Sand & Silt                  | 824      | 866         |                   |           |
| Sand                         | 866      | 974         |                   |           |
| Silt                         | 974      | 1021        |                   |           |
| Sand                         | 1021     | 1038        |                   |           |
| Shale & Silt                 | 1038     | 1075        |                   |           |
| Pittsburgh Coal              | 1075     | 1088        | the set of        |           |
| Shale & Silt                 | 1088     | 1211        | \$ 10 B           |           |
| Sand                         | 1211     | 1232        |                   |           |
| Silt & Shale                 | 1232     | 1584        |                   |           |
| Big Dunkard                  | 1584     | 1616        |                   |           |
| Shale & Silt                 | 1616     | 1710        | •                 |           |
| Sand                         | 1710     | 1792        |                   |           |
| Shale                        | 1792     | 1877        |                   |           |
| Sand                         | 1877     | 1913        |                   |           |
| Shale                        | 1913     | 1936        |                   |           |
| Sand                         | 1936     | 1956        |                   |           |
| Shale                        | 1956     | 1978        |                   |           |
| Sand                         | 1978     | 2108        |                   |           |

(over)

<sup>\*</sup> Indicates Electric Log tops in the remarks section.

| Formation Color Hard or Soft  | Top Feet 16  | Bottom Feet  | Oil, Gas or Water * Remarks |
|---|--|--|-----------------------------|
| Shale & Silt Little Lime Pencil Cave Big Lime Loyalhanna Pocono Big Injun Shale & Silt Pebble Zone Silt & Shale Silt Gordon Shale & Silt Fourth Sand Silt & Shale Pebble Zone | 2108<br>2278<br>2282<br>2306<br>2366<br>2404<br>2560<br>3070<br>3076<br>3128<br>3144<br>3170<br>3225<br>3234<br>3286<br>3291 | 2278<br>2282<br>2306<br>2366<br>2404<br>2560<br>3070<br>3076<br>3128<br>3144<br>3178<br>3225<br>3234<br>3286<br>3291<br>3304 |                             |
| Total Depth<br>PBD  | ·  | 3304<br>3266   |                             |
|   |  |  | 3306<br>1337<br>            |
|   |  |  |                             |
|   |  |  |                             |
|   |  |  |                             |
|   |  |  |                             |
|   |  |  |                             |

| Date January 3,           | . [078_ |
|---------------------------|---------|
| APPROVED Pennzoil Company | Oane    |
| B. Courtin a. Lycan       |         |
| (Intle) Eno D             | en Ti   |



#### 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 August 23, 1977  |
| Surface Owner Merle Goodrich   | Company PENNZOIL COMPANY  |
| Address Elvria, Ohio 44035   | Address P. O. Box 1588, Parkersburg, W. Va. 2610  |
| Mineral Owner Paul J. Shiben, Atty.  | Farm Shiben Estate Acres 297.50   |
| Address P. O. Box 246, New Martinsville, WV  |   |
| Coal Owner   | Well No. 1 Elsystion 1337.43  |
| Address  | 7 . 1   |
| Cosi Operator COAL NOT OPERATED  |   |
| Address  | Quadrangle 210011 15  |
| THIS PERMIT MUST BE POSTED AT THE WELL SITE  All provisions being in accordance with Chapter 22,   | :   |
|  | SPECTOR Phillip Transco   |
| for <u>drilling</u> . This permit shall expire if TO   | BE NOTIFIED Phillip Tracy   |
| operations have not commenced by 12-26-77. ADD   | ORESS Middlebourn, W. Va.   |
| Turne de   |   |
| Deputy Director - Oil & Gas Division   | ONE 758-4573  |
| GENTLEMEN:   |   |
| The undersigned well operator is entitled to drill upon the a  | bove named farm or tract of land for oil and gas having fac   |
| title thereto, (or as the case may be) under grant or lesse dat  | - · · · · · · · · · · · · · · · · · · ·   |
| made to Consolidated Gas Supp  | 1y and recorded on the day of   |
| 19 in County, Book54   |   |
|  |   |
| X NEW WELL DRILL DEEPER  | •   |
| OIL AND GAS WELL ORIGINALLY DRILLED  | BEFORE JUNE 5, 1969.  |
| The enclosed plat was prepared by a registered engineer or have been notified as of the above date.  | licensed land surveyor and all coal owners and/or operators   |
| The above named coal owners and/or operator are hereby no to make by Section 3 of the Code, must be received by, or file   | tified that any objection they wish to make, or are required d with the Department of Mines within ten (10) days. *   |
| Copies of this notice and the enclosed plat were mailed by re-<br>or coal owners at their above shown respective address—<br>same day with the mailing or delivery of this copy to the Depar   | day before or on the  |
| V  | ery truly yours, PENNZOIL COMPANY   |
| PLEASE SUBMIT COPIES OF ALL  | ign Name Gentle a- Lecco  |
| GEOPHYSICAL LOGS DIRECTLY TO: (S   | Well Operator Curtis A. Lucas,  |
| WEST VIRGINIA GEOLOGICAL AND   | P. O. Box 1588 Civil Eng. Dept.   |
| ECONOMIC SURVEY  Address  P. O. BOY 870  | Street  |
| P. O. BOX 879  MORGANTOWN, WEST VIRGINIA 26505  Well Operator  | Parkersburg,  |
| AC-304 - 292-6331  | City or Town  |
|  | West Virginia 26101   |
|  | State   |
|  |   |
| *SECTION 3 If no objections are filed or found by the Dep notice and plat by the department of mines, to said proposed location, the filing of such plat, that no objections have been made by the coal operand the well operator authorized to proceed. | artment of mines, within said period of ten days from the receipt of a department shall forthwith issue to the well operator a permit reciting ators or found thereto by the department and that the same is approved |
| BLANKET BOND   | WET-629 PERMIT NUMBER   |
| "I have read and understand the reclamation requirements as set for Chapter 22, Article 4, Section 12-b and will carry gut the specified requirements  | th in 47–103 ents."   |
| Signed by Carrier a. Jetusa  | manus :   |

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

| PRESS Parkers EPHONE 422 ARY X  STORAG WATER FL  LEFT IN WELL  1542  3287  SALT WATER f 1072  BY WHOM? | Company burg, West Virginia 2610 -6565 CABLE TOOLS  E DISPOSAL OOD OTHER  CEMENT FILL UP OR SACKS - CUBIC FT.  Cement to surface  100 sks. Perf. Top Perf. Bottom Perf. Bottom  FEET  |
|--|---|
| PRESS Parkers EPHONE 422 ARY X  STORAG WATER FL  LEFT IN WELL  1542  3287  SALT WATER f 1072  BY WHOM? | burg, West Virginia 2610 -6565  CABLE TOOLS  E  |
| SALT WATER ft 1072.  SEPHONE 422  ARY X  STORAG  WATER FL  1542.  SALT WATER  1072.                    | CABLE TOOLS  EDISPOSAL_ OODOTHER  CEMENT FILL UP OR SACKS - CUBIC FT.  Cement to surface  100 sks.  Perf. Top Perf. Bottom  Perf. Bottom  FEET  FEET  |
| STORAG WATER FL  LEFT IN WELL  1542   3287   SALT WATER f 1072  BY WHOM?                               | CABLE TOOLS  EDISPOSALOODOTHER  CEMENT FILL UP OR SACKS - CUBIC FT.  Cement to surface  100 sks.  Perf. Top Perf. Bottom  Perf. Top Perf. Bottom  |
| STORAG WATER FL  LEFT IN WELL  1542 '  3287 '  SALT WATER £ 1072 '  BY WHOM?                           | CEMENT FILL UP OR SACKS - CUBIC FT.  Cement to surface  100 sks.  Perf. Top Perf. Bottom  Perf. Bottom  FEET  |
| LEFT IN WELL  1542   3287   SALT WATER  f 1072  BY WHOM?   | CEMENT FILL UP OR SACKS - CUBIC FT.  Cement to surface  100 sks.  Perf. Top Perf. Bottom  Perf. Bottom  FEET  |
| LEFT IN WELL  1542   3287   SALT WATER  f 1072  BY WHOM?   | CEMENT FILL UP OR SACKS - CUBIC FT.  Cement to surface  100 sks.  Perf. Top Perf. Bottom  Perf. Bottom  FEET  |
| LEFT IN WELL  1542'  3287' SALT WATER f 1072' •BY WHOM?  | Cement to surface  Cement to surface  100 sks.  Perf. Top  Perf. Bottom  Perf. Bottom   |
| 1542 ' 3287 '  | Cement to surface  100 sks.  Perf. Top Perf. Bottom  Perf. Bottom  FEET   |
| 1542 ' 3287 '  | Cement to surface  100 sks.  Perf. Top Perf. Bottom Perf. Bottom  FEET  |
| 1542 ' 3287 '  | OR SACKS - CUBIC FT.  Cement to surface  100 sks.  Perf. Top  Perf. Bottom  Perf. Bottom  FEET  |
| 1542 ' 3287 '  | OR SACKS - CUBIC FT.  Cement to surface  100 sks.  Perf. Top  Perf. Bottom  Perf. Bottom  FEET  |
| SALT WATER f 1072 •BY WHOM?  | Cement to surface  100 sks.  Perf. Top  Perf. Bottom  Perf. Bottom  FEET  |
| SALT WATER f 1072 •BY WHOM?  | Cement to surface  100 sks.  Perf. Top  Perf. Bottom  Perf. Bottom  FEET  |
| SALT WATER f 1072 •BY WHOM?  | Cement to surface  100 sks.  Perf. Top  Perf. Bottom  Perf. Bottom  FEET  |
| SALT WATER f 1072 •BY WHOM?  | Cement to surface  100 sks.  Perf. Top  Perf. Bottom  Perf. Bottom  FEET  |
| SALT WATER f 1072 •BY WHOM?  | 100 sks.  Perf. Top Perf. Bottom  Perf. Bottom  FEET  |
| SALT WATER f 1072 • •BY WHOM?  | Perf. Top Perf. Bottom Perf. Top Perf. Bottom  FEET   |
| SALT WATER f 1072 • •BY WHOM?  | Perf. Top Perf. Bottom Perf. Bottom  Perf. Bottom  FEET   |
| f 1072.  | Perf. Bottom Perf. Top Perf. Bottom FEET  |
| f 1072.  | Perf. Bottom  FEET  |
| f 1072.  | FEET_   |
| f 1072.  |   |
| f 1072.  |   |
| f 1072.  |   |
| BY WHOM?   |   |
|  |   |
| The second second  |   |
|  | $\label{eq:continuous} \mathcal{A}_{ij} = \mathcal{A}_{ij} + \mathcal{A}_{$ |
| PERFORMANCE I  | BOND AND PERMANENT COPY   |
|  |   |
|  |   |
| RMIT NUMBER A  | ND PERFORMANCE BOND. ON   |
|  | THE ORIGINAL WELL RECORD  |
|  | and the second of the second  |
|  |   |
| E 5, 1929, FIVE (5)  | COPIES OG - 1, PERFORMANCE  |
| ,, (0)   |   |
| AFTER JUNE 5, 19   | 229, FIVE COPIES OG - 1, SHOW-  |
|  |   |
| on for bond release  | . Inspector to be notified twenty-  |
| m for bond release   | . Inspector to be notified twenty   |
|  |   |
|  |   |
| •  |   |
|  |   |
| the permit is to be  | e issued within ten days of receipt   |
|  | ·   |
|  | er or Operator of the coal under  |
|  |   |
|  | well being drilled at this location,  |
| n Articles 4, 5, and   | 7, Chapter 22 of the West Virginia  |
|  |   |
|  |   |
|  | For Coal Company  |
| E A  | THE PLAT AND  E 5, 1929, FIVE (5)  AFTER JUNE 5, 19  on for bond release  the permit is to be  oal Company, Own proposed well loca  objections to said in Articles 4, 5, and  |

Official Title