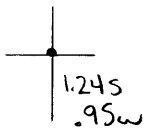


40°35'00"

Latitude

80°37'30"

Longitude



Topo Location

7.5' Loc. \_\_\_\_\_ 15' Loc. \_\_\_\_\_  
 \_\_\_\_\_ (calc.) \_\_\_\_\_

Company Jack Morrow

Farm Jack Morrow #1

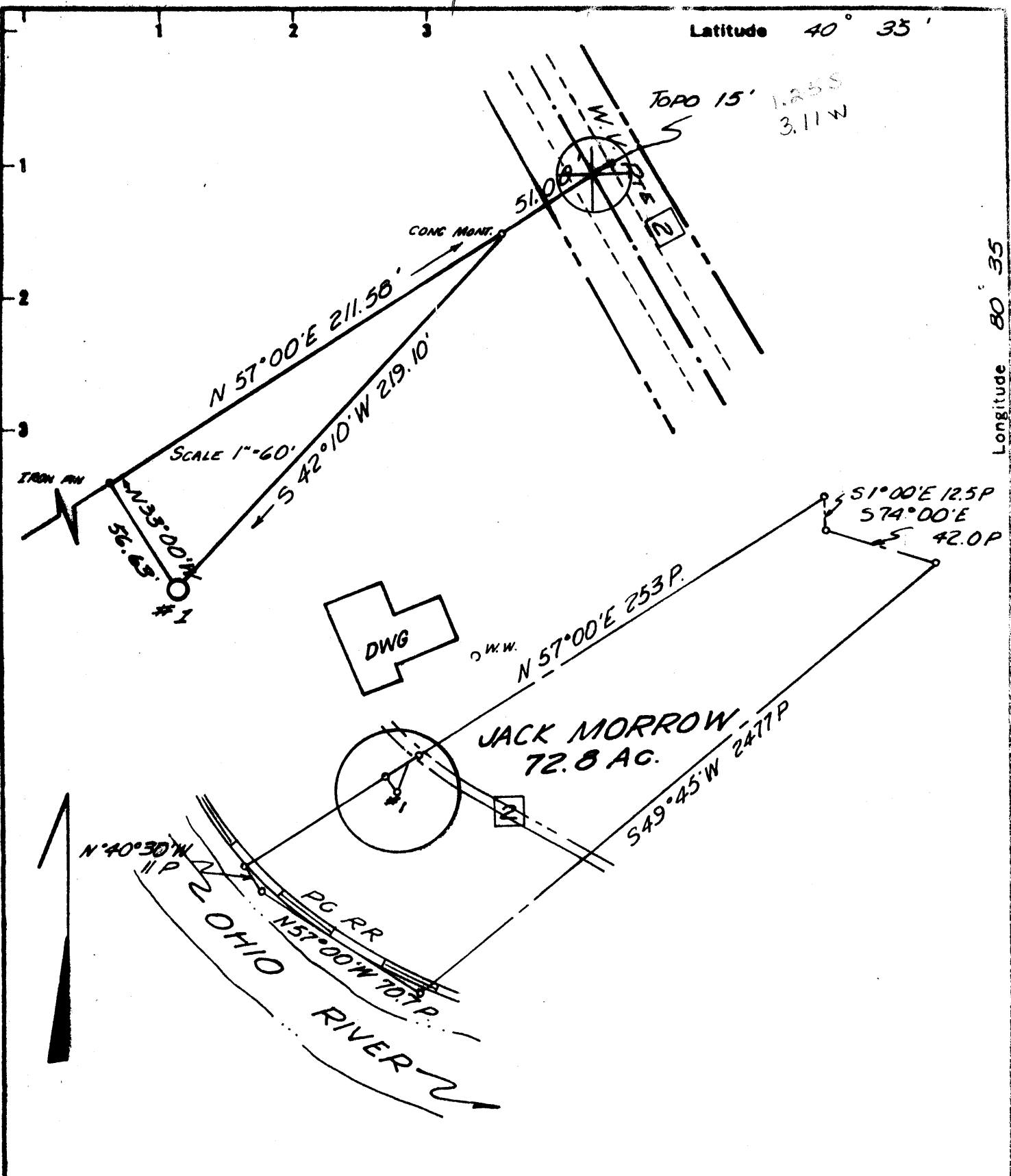
15' Quad \_\_\_\_\_  
 (sec.)

7.5' Quad Woodsboro

District Grant

**WELL LOCATION PLAT**

County 029 Permit 88



|  |  |
|--|--|
| <p>New Location <input checked="" type="checkbox"/></p> <p>Drill Deeper <input type="checkbox"/></p> <p>Abandonment <input type="checkbox"/></p> | <p>Minimum Error of Closure <i>1 IN 2500'</i></p> <p>Source of Elevation <i>USGS DATUM</i></p> <p>"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"</p> |
|--|--|

Company *JACK MORROW*

Address *RTE 2, NEW CUMERLAND W.V.*

Farm *JACK MORROW*

Tract \_\_\_\_\_ Acres *72.8* Lease No. \_\_\_\_\_

Well (Farm) No. *1* Serial No. \_\_\_\_\_

Elevation (Spirit Level) *632*

Quadrangle *WELLSVILLE SC*

County *HANCOCK* District *GRANT*

L.L.S. *FRANKLIN D. HANEY* COPY OF ORIGINAL PLAT *17*

L.L.S. No. \_\_\_\_\_

Engineer's Registration No. *267*

File No. *108* Drawing No. *50*

Date *FEB 28, 1975* Scale *1" = 800'*

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

**WELL LOCATION MAP**  
FILE NO. *HAN-88*

+ 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.

*47-029*



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

RECEIVED

MAR 24 1975

DEPT OF MINES

Wellsville  
Quadrangle  
Han 88  
Permit No.

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

Company Jack Morrow  
Address RD#2 New Cumberland, W. Va.  
Farm Jack Morrow Acres 72.8  
Location (waters) Ohio  
Well No. 1 Elev. 692  
District Grant County Hancock  
The surface of tract is owned in fee by \_\_\_\_\_

Address Same  
Mineral rights are owned by \_\_\_\_\_

Address Same  
Drilling Commenced Mar. 12, 1975  
Drilling Completed April 10, 1975

Initial open flow 10,000 cu. ft. \_\_\_\_\_ bbls.  
Final production 15,000 m cu. ft. per day \_\_\_\_\_ bbls.  
Well open 8 hrs. before test \_\_\_\_\_ RP.

Well treatment details:

Attach copy of cementing record.

Shot with 100lbs Jeleton from 638' to 654'

Cleanen well after shot

Coal was encountered at None Feet \_\_\_\_\_ Inches \_\_\_\_\_  
Fresh water 45' & 75' Feet \_\_\_\_\_ Salt Water 240' Feet \_\_\_\_\_  
Producing Sand Berea 635' to 654' Depth T.D. 654' Feet \_\_\_\_\_

| Formation   | Color    | Hard or Soft | Top Feet | Bottom Feet | Oil, Gas or Water | * Remarks                        |
|-------------|----------|--------------|----------|-------------|-------------------|----------------------------------|
| Sand        | Brown    | Soft         | 0        | 4           |                   |                                  |
| Large Sand  |          |              |          |             |                   |                                  |
| Gravel      |          | "            | 4        | 55          |                   | water at 45'                     |
| Sand        | Brown    | "            | 55       | 62          |                   |                                  |
| Sand Stone  | Brown    | Hard         | 62       | 67          |                   |                                  |
| Shale L     | Gray     | Soft         | 67       | 70          |                   |                                  |
| Lime        | Brown    | Hard         | 70       | 78          |                   | water at 75'                     |
| Shale       | L&D Gray | Hard         | 78       | 190         |                   |                                  |
| Lime        | Brown    | Hard         | 190      | 200         |                   |                                  |
| Gray Shale  | Gray     | Hard         | 200      | 240         |                   |                                  |
| Shale       | Black    | Soft         | 240      | 250         |                   | Salt water at 240'               |
| Sand        | Gray     | Hard         | 250      | 262         |                   |                                  |
| Shale       | D Gray   | Hard         | 262      | 285         |                   |                                  |
| Sand        | White    | Hard         | 285      | 295         |                   |                                  |
| Shale       | Black    | Hard         | 295      | 362         |                   |                                  |
| Sand Engine | Gray     | Hard         | 362      | 430         |                   |                                  |
| Shale       | Gray     | Soft         | 430      | 465         |                   |                                  |
| Sand        | D Gray   | Hard         | 465      | 498         |                   |                                  |
| Shale       | Gray     | Hard         | 498      | 612         |                   |                                  |
| Shale       | Black    | Soft         | 612      | 635         |                   |                                  |
| Sand        | White    | Hard         | 635      | 654         |                   | <u>Berea Sand</u><br>Gas at 654' |

(over)

\* Indicates Electric Log tops in the remarks section.



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED

FEB 28 1975

OIL & GAS DIVISION  
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

DATE Feb. 27, 1975

Surface Owner Jack Morrow

Company Jack Morrow

Address R.D. #2, New Cumberland, W. Va.

Address R.D. #2, New Cumberland, W. Va.

Mineral Owner None

Farm Jack Morrow Acres 72.8

Address \_\_\_\_\_

Location (waters) Ohio River

Coal Owner None

Well No. 1 Elevation 692

Address \_\_\_\_\_

District Grant County Hancock

Coal Operator \_\_\_\_\_

Quadrangle Wellsville

Address \_\_\_\_\_

THIS PERMIT IS VALID FOR THE FOLLOWING PURPOSES:

In accordance with Chapter 22,  
of the Code of West Virginia, the location is hereby approved  
for drilling. This permit shall expire if  
operations have not commenced by 6-28-75

[Signature]  
Deputy Director - Oil & Gas Division

INTERESTED PARTY TO BE NOTIFIED Richard Morris  
Grantsville, W. Va. PH: 354-7259

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 licensee may be)~~ under grant or lease dated August 23 19 75 by Eva Cowl A. H. Cowl made to Jack Morrow and recorded on the 11 day of Sept. 19 75 in Hancock County, Book 159 Page 277

NEW WELL DRILL DEEPER REDRILL FRACTURE OR STIMULATE  
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.

Very truly yours,  
(Sign Name) Jack Morrow  
Well Operator

R.D. #2  
Street  
New Cumberland  
City or Town  
W. Va.  
State

PLEASE SUBMIT COPIES OF ALL  
GEOLOGICAL LOGS DIRECTLY TO:  
West Virginia Geological and Economic Survey  
P. O. Box 879  
Morgantown, W. Va. 26505  
AC 304-296-4461

Address  
of  
Well Operator

\*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.

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

PROPOSED WORK ORDER TO  DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) \_\_\_\_\_ RESPONSIBLE AGENT: \_\_\_\_\_  
 NAME Smith Drilling Contractors, Inc. NAME Jack Marrow  
 ADDRESS R.D. #1, Box 66, Chester, W.Va. ADDRESS RD#2, New Cumberland, W.Va.  
 TELEPHONE 387-0127 TELEPHONE 387-0560  
 ESTIMATED DEPTH OF COMPLETED WELL: 670' ROTARY \_\_\_\_\_ CABLE TOOLS  \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Berea Sand  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS  COMB. \_\_\_\_\_ STORAGE \_\_\_\_\_ 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 - 5/8                | <u>40'</u>        |                             | <u>Drive pipe</u>                   |
| 7                      | <u>130'</u>       | <u>Cement to top of 7"</u>  |                                     |
| 5 1/2                  | <u>460'</u>       | <u>Aqua Jel behind pipe</u> |                                     |
| 4 1/2                  |                   |                             |                                     |
| 3                      |                   |                             | Perf. Top                           |
| 2                      |                   |                             | Perf. Bottom                        |
| Liners                 |                   |                             | Perf. Top                           |
|                        |                   |                             | Perf. Bottom                        |

APPROXIMATE FRESH WATER DEPTHS 70'-110' FEET \_\_\_\_\_ SALT WATER 360' - 410' FEET \_\_\_\_\_  
 APPROXIMATE COAL DEPTHS None \_\_\_\_\_  
 IS COAL BEING MINED IN THE AREA? No 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