



Note:
This survey is tied into the Armco Steel Corp. coordinate system.

- New Location
- Drill Deeper
- Abandonment

CO: 081 PMT: 419
 Loc Digitized from OGIS 7.5' Mylar
 Minimum Error QUAD: 547 DATE: 12-JUN-90
 Source of Error LAT: 37 52.5 Miles South: 1.17
 Hazy Cre LONG: 81 32.5 Miles West: 0.73
 "I, the undersigned, hereby certify that I am a duly licensed surveyor and believe 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."
J. L. Sturgill

Company **TIPCO TEXAS INTERNATIONAL PETROLEUM CORPORATION**
 Suite 1020
 Address **Valley Square - Charleston, W. Va.**
 Farm **ROWLAND LAND CO.**
 Tract **B** Acres **3,000** Lease No. **808402**
 Well (Farm) No. _____ Serial No. **B-4**
 Elevation (Spirit Level) **1379.19** **EC**
 Quadrangle **7.5' Pilot Knob / 15' Bald Knob**
 County **Raleigh** District **Marsh Fork**
 Surveyor **W. Va. Surveying & Mapping, Inc. - L.G. Sturgill, LLS**
 Surveyor's Registration No. **412**
 File No. **W75-2 W.O. 113** Drawing No. **D-64**
 Date **4-28-77** Scale **1" = 1,000'**

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

WELL LOCATION MAP
 FILE NO. **RAL-419**

+ 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.

47-081 FB4 PG 62

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11



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division

RECEIVED

OCT 26 1977

OIL & GAS DIVISION
DEPT. OF MINES

WELL RECORD 21

7.5' Pilot Knob
15' Bald Knob
Quadrangle

Permit No. RAL - 419

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

| | | | | |
|--|-----------------------|------------------|--------------|--|
| Company <u>Texas International Petroleum Corp.</u> | Casing and Tubing | Used in Drilling | Left in Well | Cement fill up Cu. ft. (Sks.) |
| Address <u>Charleston, West Virginia</u> | | | | |
| Farm <u>Rowland Land Co.</u> Acres <u>3,000</u> | | | | |
| Location (waters) <u>Hazy Creek of Marsh Fork</u> | Size | | | |
| Well No. <u>B-4</u> Elev. <u>1379.19</u> | <u>20-16</u> | | | |
| District <u>Marsh Fork</u> County <u>Raleigh</u> | Cond. | | | |
| The surface of tract is owned in fee by <u>Rowland Land Company</u> | <u>13-10" 11-3/4"</u> | <u>29'</u> | <u>29'</u> | |
| Address <u>Charleston, West Virginia</u> | <u>9 5/8</u> | | | |
| Mineral rights are owned by <u>Rowland Land Co.</u> Address <u>Charleston, W.Va.</u> | <u>8 5/8</u> | <u>550'</u> | <u>550'</u> | Cemented w/150 sacks. Cement circulated. |
| Drilling Commenced <u>July 1, 1977</u> | <u>7</u> | | | |
| Drilling Completed <u>August 10, 1977</u> | <u>5 1/2</u> | | | |
| Initial open flow <u> </u> cu. ft. <u> </u> bbls. | <u>4 1/2</u> | <u>3094'</u> | <u>3094'</u> | Cemented w/100 sacks. |
| Final production <u>984M</u> cu. ft per day <u> </u> bbls. | <u>3</u> | | | |
| Well open <u>6</u> hrs. before test <u>700</u> RP. | <u>2</u> | | | |
| Well treatment details: | Liners Used | | | |

Attach copy of cementing record.

Perforated @ 2940' - 45', 4 shots per foot, 21 shots; 2832' - 37', 4 shots per foot, 21 shots. Fraced in two stages. First stage - 800 barrels gelled water, 15,000# 80/100 sand, 55,000# 20/40 sand. AIR - 37 BPM, AIP - 1050 PSI. Dropped 21 ball sealers. Second stage - 700 barrels gelled water, 12,000# 80/100 sand, 30,000# 20/40 sand. AIR - 32 BPM, AIP - 1400 PSI. Maximum sand, both stages, 3 PPG.

Coal was encountered at None reported Feet Inches
Fresh water 140' Feet Salt Water Feet
Producing Sand Weir Depth 2870' - 3054'

| Formation | Color | Yard or Soft | Top Feet | Bottom Feet | Oil, Gas or Water | * Remarks |
|------------------|-------|--------------|----------|-------------|-------------------|-----------|
| Fill | | | 0 | 4 | | |
| Sand | | | 4 | 114 | | |
| Shale | | | 114 | 226 | Water @ 140' | |
| Sand | | | 226 | 241 | | |
| Shale | | | 241 | 305 | | |
| Sand | | | 305 | 325 | | |
| Shale | | | 325 | 360 | | |
| Sand & Shale | | | 360 | 572 | | |
| Sand & Shale | | | 572 | 971 | | |
| Shale | | | 971 | 992 | | |
| Sand | | | 992 | 1090 | | |
| Shale | | | 1090 | 1148 | | |
| Sand | | | 1148 | 1231 | | |
| Shale | | | 1231 | 1240 | | |
| Sand | | | 1240 | 1505 | | |
| Ravencliff Sand | | | 1505 | 1576 | | |
| Shale | | | 1576 | 1604 | | |
| Sand & Shale | | | 1604 | 1740 | | |
| Sand | | | 1740 | 1760 | | |
| Red Rock | | | 1760 | 1800 | | |
| Sand | | | 1800 | 1865 | | |
| Red Rock | | | 1865 | 1885 | | |
| Shale | | | 1885 | 1900 | | |
| Red Rock & Shale | | | 1900 | 1998 | | |
| Sand | | | 1998 | 2233 | | |

(over)

* Indicates Electric Log tops in the remarks section.

| Formation | Color | Hard or Soft | Top Feet | Bottom Feet | Oil, Gas or Water | * Remarks |
|-----------------|-------|--------------|----------|-------------|-------------------|-----------|
| Shale | | | 2233 | 2324 | | |
| Little Lime | | | 2324 | 2373 | | |
| Big Lime & Sand | | | 2373 | 2771 | | |
| Sand & Lime | | | 2771 | 2790 | | |
| Injun. | | | 2790 | 2810 | | |
| Shale & Sand | | | 2810 | 2850 | | |
| Sand | | | 2850 | 2870 | | |
| <u>Weir</u> | | | 2870 | 3054 | | |
| Shale | | | 3054 | 3130 | T.D. | |

Date October 20, 1977

APPROVED Texas International Owner

By Division Manager
(Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

DATE May 19, 1977

Surface Owner Rowland Land Company
Address Charleston, W.V.
Mineral Owner Same as above
Address Same as above
Coal Owner Same as above
Address Same as above
Coal Operator Armco Steel
Address Montcoal, W.V.

Company Texas International Petroleum Cor
Address Charleston, W.V.
Farm Rowland Land Co. Acres 3,000
Location (waters) Hazy Creek of Marsh Fork
Well No. B-4 Elevation 1379.19
District Marsh Fork County Raleigh
Quadrangle Pilot Knob

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 drilling. This permit shall expire if
operations have not commenced by 11-29-77.

[Signature]
Deputy Director - Oil & Gas Division

INSPECTOR
TO BE NOTIFIED Carlos Loudin
ADDRESS Buckhannon, W. Va.
PHONE 472-6566

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 February 5 19 42 by Rowland Land Co. made to Columbia Carbon Co. and recorded on the 5th day of Feb. 19 42 in Raleigh County, Book 11 Page 252

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.

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

Very truly yours,

(Sign Name)

Jim Blanton
Well Operator

Address
of
Well Operator

Texas International Petroleum Corp
Street
Suite 1020-One Valley Square
City or Town
Charleston, W.V. 25301
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.

BLANKET BOND

"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

Jim Blanton

RAL-419 PERMIT NUMBER

47-081

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

PROPOSED WORK ORDER TO X DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT: _____
 NAME Appalachian Drilling Co. NAME James M. Blanton
 ADDRESS Jesse, W. V. ADDRESS Charleston, W.V. 25301
 TELEPHONE 732-8133 TELEPHONE (304)343-4609
 ESTIMATED DEPTH OF COMPLETED WELL: 3100' ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Weir
 TYPE OF WELL: OIL _____ GAS XX 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 11-3/4 | 25 | 25 | Conductor |
| 9 - 5/8 | | | |
| 8 - 5/8 | 500 | 500 | Cement to surface |
| 7 | | | |
| 5 1/2 | | | |
| 4 1/2 | 3100 | 3100 | 100 sacks |
| 3 | | | Perf. Top |
| 2 | | | Perf. Bottom |
| Liners | | | Perf. Top |
| | | | Perf. Bottom |

APPROXIMATE FRESH WATER DEPTHS 100 FEET _____ SALT WATER _____ 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 Armco Steel 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 Armco Steel 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.

Wayton L. Conroy
 For Coal Company
Ch. Eng. Coal Operations
 Official Title