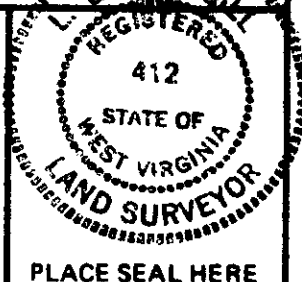


Note: This survey is tied into the Armco Steel Corp. coordinate system.

FILE NO. W75-2 H.O. 308  
 DRAWING NO. D-188  
 SCALE 1" = 1,000'  
 MINIMUM DEGREE OF ACCURACY 1/37,753'  
 PROVEN SOURCE OF ELEVATION R.R. Spika 1st 6" Syc. Sp.  
on west side of Hazy Cr. Rd. near location. Elev. 1090.99

I 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 MINES.  
 (SIGNED) L. G. Sturgill  
 R.P.E. \_\_\_\_\_ L.S. 0412



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6 (8-78)



DATE SEPTEMBER 26, 1979  
 OPERATOR'S WELL NO. 1  
 API WELL NO. \_\_\_\_\_  
47 - 081 - 0516  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 1090.08 WATER SHED HAZY CREEK OF MARSH FORK  
 DISTRICT MARSH FORK COUNTY RALEIGH  
 QUADRANGLE 7.5' WHITESVILLE 15' BALD KNOB EC  
 SURFACE OWNER BERWIND LAND COMPANY ACREAGE \_\_\_\_\_  
 OIL & GAS ROYALTY OWNER BERWIND LAND COMPANY LEASE ACREAGE 0.044  
 LEASE NO. 8529  
 PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION WEIR ESTIMATED DEPTH 2800' NOV 6 1979  
 WELL OPERATOR TEXAS INT'L. PET. CORP. DESIGNATED AGENT JAMES M. BLANTON  
 ADDRESS 300 NATIONAL FOUNDATION CENTER ADDRESS 740 ONE VALLEY SQUARE  
3535 NW 58th ST. OKLA. CITY, OK 73112 - 6 CHARLESTON, WV 25301



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

Date: January 16, 1980

FORM IV-35  
(Obverse)

Operator's  
Well No. Berwind Land Co. #1

[08-78,

WELL OPERATOR'S REPORT  
OF  
DRILLING, FRACURING AND/OR STIMULATING, OR PHYSICAL CHANGE

API Well No. 17-081-0516  
State County Perr

WELL TYPE: Oil  / Gas  / Liquid Injection  / Waste Disposal  /  
(If "Gas", Production  / Underground storage  / Deep  / Shallow  /)

LOCATION: Elevation: 1086.08 Watershed: Hazy Creek of Marsh Fork  
District: Marsh Fork County: Raleigh Quadrangle: 7.5' Whitesville  
15' Bald Knob

WELL OPERATOR Texas International Petroleum Corp. DESIGNATED AGENT James M. Blanton  
Address Suite 300, 3535 N. W. 58th Street Address Suite 740, One Valley Square  
Oklahoma City, Oklahoma 73112 Charleston, West Virginia 25301

PERMITTED WORK: Drill  / Convert  / Drill deeper  / Re-drill  / Plug off old formation  / Perforate new formation  /  
Other physical change in well (specify) \_\_\_\_\_

PERMIT ISSUED ON October 17, 1979

OIL & GAS INSPECTOR FOR THIS WORK:

(IF APPLICABLE: PLUGGING OF DRY HOLE OR  
CONTINUOUS PROGRESSION FROM DRILLING OR  
REWORKING. VERBAL PERMISSION OBTAINED

Name Leroy Hopkins  
Address General Delivery  
Ansted, West Virginia 25812

GEOLOGICAL TARGET FORMATION: Weir Depth \_\_\_\_\_

Depth of completed well, 2800 feet Rotary  / Cable Tools \_\_\_\_\_

Water strata depth: Fresh, 21,60 feet; salt, 2540 feet.

Coal seam depths: 20-25', 55-60' Is coal being mined in the area? no

Work was commenced November 24, 1979, and completed December 2, 1979

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	REMARKS	
	Size	Grade	Weight per ft	New	Used	For drilling			Left in well
Conductor	16" 11-3/4"		42#	X X		14' 95'	14' 95'	None	Blinds
Fresh water	8-5/8"		24#	X		1000'	1000'	Cemented to surface.	
Seal									Sizes
Intermediate									
Production	4 1/2"		10.5#	X		2692'	2692'	Cemented w/100 sacks	Depth set
Tubing									
Liners									Perforations

OPEN FLOW DATA

Producing formation Weir zone depth 2566  
Gas: Initial open flow, N/M Mcf/d Oil: Initial open flow, \_\_\_\_\_ bbl/d  
Final open flow, 959 Mcf/d Final open flow, \_\_\_\_\_ bbl/d  
Time of open flow between initial and final tests, 4 hours  
Static rock pressure, 600 psi; (surface measurement) after 24 hours shut in.

(If applicable for multiple completion--)

Second producing formation None Pay zone depth \_\_\_\_\_  
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, \_\_\_\_\_ psi; (surface measurement) after \_\_\_\_\_ hours shut in.

FEB 13 1980

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Perforated 2566'-2576', 2 shots/ft., 21 total shots. Spotted 500 gal. 15% HCl. Loaded hole. Broke formation w/1100 PSI. Fraced w/15,000# 80/100 sand, 45,000# 30/40 sand, 10,000# 10/20 sand, 780 bbls. fluid. AIP- 37 BPM. AIP-1600 PSI. ISIP-900 PSI, 5 minutes-850 PSI, 15 minutes-800 PSI.

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all free and salt water, coal, oil and
Sand	Brown	Hard	0	20	
Coal	Black	Soft	20	25	H <sub>2</sub> O @ 21'.
Shale	Black	Soft	25	55	
Coal	Black	Soft	55	60	
Shale	Black	Soft	60	96	
Sand & Shale	Gr.-Brn.	Medium	96	165	
Sand	Gray	Hard	165	269	Gas smell @ 165'-245'.
Sand & Shale	Gray	Medium	269	275	
Sand	Gray	Hard	275	284	
Sand & Shale	Bl.-Gr.	Medium	284	339	
Sand	Brown	Hard	339	394	
Shale	Black	Soft	394	401	
Sand	Gray	Hard	401	411	
Shale	Black	Soft	411	433	
Salt Sand	White	Hard	433	605	Hole wet (gas).
Salt Sand & Shale	Wh.-Bl.	Medium	605	720	
Salt Sand	White	Hard	720	848	
Salt Sand & Shale	Wh.-Bl.	Medium	848	919	
Salt Sand	White	Hard	919	1062	Gas test @ 1025'. 44/10 thru 1" H <sub>2</sub> O = 69.93 MCF.
Shale	Dark	Soft	1062	1193	
Sand	White	Hard	1193	1481	
Lime	White	Hard	1481	1526	
Shale	Dark	Soft	1526	1565	
Upper Maxton	White	Hard	1565	1620	
Shale	Gray	Soft	1620	1710	Gas check @ 1635'. No show.
Sand & Shale	Gr.-Wh.	Medium	1710	1761	
Lower Maxton Sand	White	Hard	1761	1862	Hole damp @ 1825'
Shale	Gray	Soft	1862	2040	
Lime	White	Medium	2040	2110	
Big Lime			2110	2470	Gas test @ 2536'-no show.
Shale & Sand			2470	2566	H <sub>2</sub> O @ 2540'.
<u>Weir</u>			2566	2784	Gas test @ 2660' - smell.
Shale			2784	2800	Gas test @ 2800' - smell.

(Attach separate sheets to complete as necessary)

Texas International Petroleum Corporation

Well Operator  
*James M. Blanton*  
 by James M. Blanton  
 Division Manager

NOTE: Regulation 2.01 (i) provides as follows:  
 "The term 'log' or 'well log' shall mean a systematic, detailed geological report of all formations, including coal, encountered in the drilling of a well."

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's  
Well No. Berwind Land #1  
API Well No. 47 - 081 - 0516  
State County Permit

WELL TYPE: Oil  / Gas   
(If "Gas", Production  / Underground storage  / Deep  / Shallow )

LOCATION: Elevation: 1086.08 Watershed: Hazy Creek of Marsh Fork  
District: Marsh Fork County: Raleigh Quadrangle: 7.5' Whitesville  
15' Bald Knob

WELL OPERATOR Texas International Petroleum Corp. DESIGNATED AGENT James M. Blanton  
Address 3535 N. W. 58th Street, Suite 300 Address Suite 740, One Valley Square  
Oklahoma City, Oklahoma 73112 Charleston, West Virginia 25301

OIL & GAS ROYALTY OWNER Berwind Land Company  
Address 1150 One Valley Square  
Charleston, West Virginia 25301

COAL OPERATOR Armco Steel Corporation  
Address Montcoal, West Virginia 25135

ACREAGE 8,044  
SURFACE OWNER Berwind Land Company  
Address 1150 One Valley Square  
Charleston, West Virginia 25301  
ACREAGE 8,044

COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
Name \_\_\_\_\_  
Address \_\_\_\_\_

**RECEIVED**  
**OCT 17 1979**

FIELD SALE (IF MADE) TO:  
Name L  
Address \_\_\_\_\_

Address OIL & GAS DIVISION  
DEPT. OF MINES

OIL & GAS INSPECTOR TO BE NOTIFIED  
Name Leroy Hopkins  
Address 658-4280

COAL LESSEE WITH DECLARATION ON RECORD:  
Name \_\_\_\_\_  
Address \_\_\_\_\_

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed  / lease  / other contract  / dated August 14, 1979, to the undersigned well operator from Berwind Land Company

[If said deed, lease, or other contract has been recorded:] Lease has not been recorded. Recorded on \_\_\_\_\_, 19\_\_\_\_, in the office of the Clerk of the County Commission of \_\_\_\_\_ County, West Virginia, in \_\_\_\_\_ Book \_\_\_\_\_ at page \_\_\_\_\_. A permit is requested as follows:

PROPOSED WORK: Drill  / Drill deeper  / Redrill  / Fracture or stimulate  / Plug off old formation  / Perforate new formation  / Other physical change in well (specify) \_\_\_\_\_

--planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code § 22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.

Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:  
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION  
1615 WASHINGTON STREET EAST  
CHARLESTON, WV 25311  
TELEPHONE: (304) 348-3092

**BLANKET BOND**

Texas International Petroleum Corporation  
Well Operator  
By James M. Blanton (L)  
James M. Blanton  
Its Division Manager

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:  
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) Appalachian Drilling Company  
Address Suite 333-Morrison Building  
Charleston, West Virginia 25301

GEOLOGICAL TARGET FORMATION, Weir

Estimated depth of completed well, 2800 feet Rotary X / Cable tools      /

Approximate water strata depths: Fresh, 950 feet; salt,      feet.

Approximate coal seam depths: none indicated Is coal being mined in the area? Yes      / No X

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling	Left in well		
Conductor	11-3/4"		42	x		25'	25'	None	Kinds
Fresh water	8-5/8"		24	x		1000'	1000'	Cement to surface	
Coal									Sizes
Intermediate									
Production	4 1/2"		10.5	x		2800'	2800'	100 sacks	Depths set
Tubing									
Liners									Perforations:
									Top Bottom

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

THIS PERMIT MUST BE POSTED AT THE WELL SITE  
where fracturing or stimulating is to be part of the work for which a permit is sought and is not otherwise 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 6/17/80.

Robert L. [Signature]  
Deputy Director - Oil & Gas Division

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code § 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof:

W A I V E R

The undersigned coal operator      / owner      / lessee X / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: 10-15, 1979

By [Signature]  
Its [Signature]