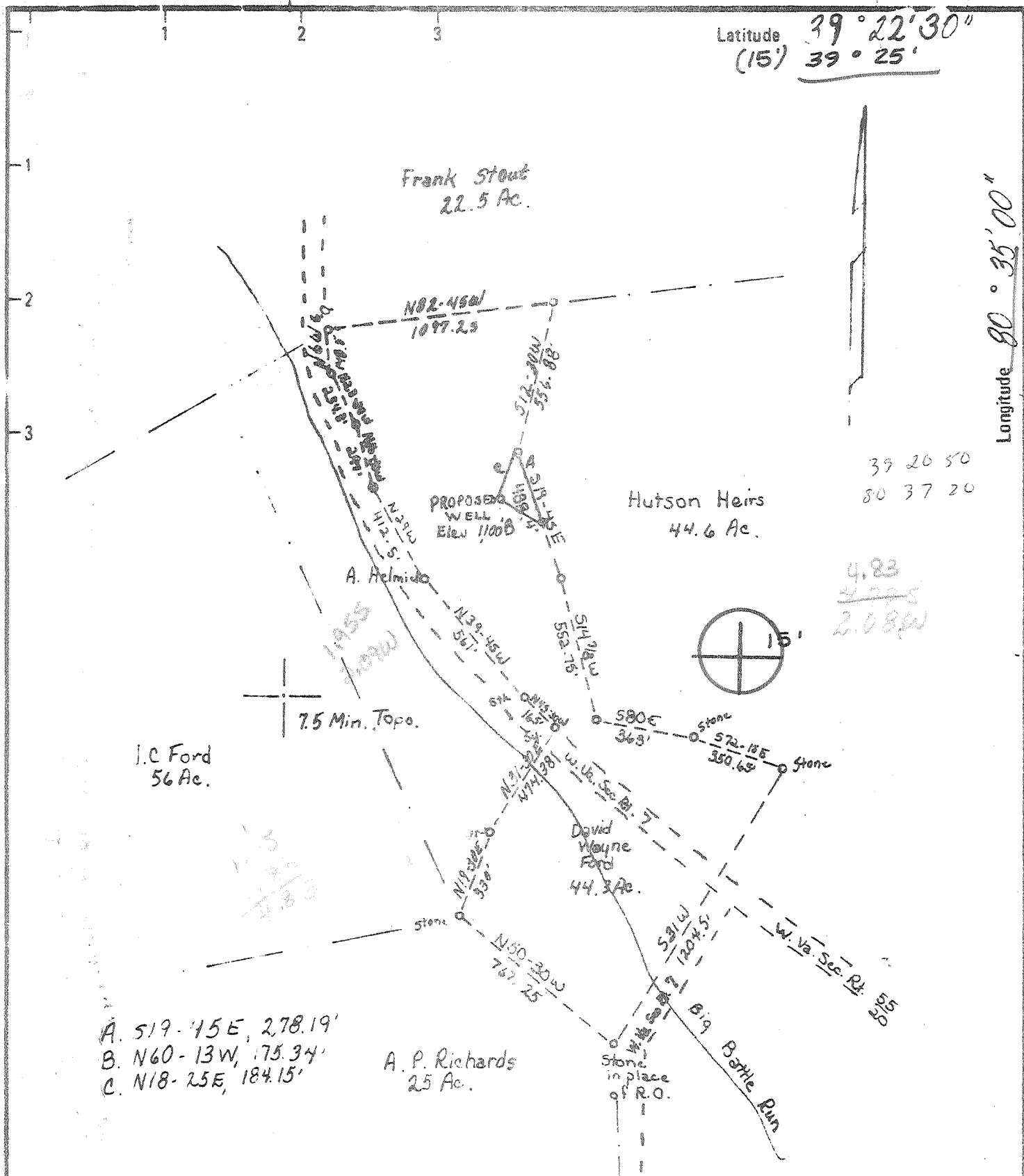


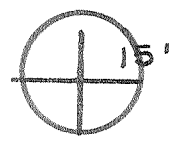
10,950'

Latitude  $39^{\circ} 22' 30''$   
(15')  $39^{\circ} 25'$

Longitude  $80^{\circ} 35' 00''$



39 20 50  
80 37 20  
4.83  
4.225  
2.08W



- New Location
- Drill Deeper
- Abandonment

Minimum Error of Closure 1 in 200  
 Source of Elevation USGS BM 899, Possum Run  
 USGS Salem Quad 7.5 Min.  
 "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."

Company Petroleum Development Corp.  
 Address 103 E. Main St., Bridgeport, W. Va.  
 Farm David Wayne Ford, DAVIS, UNDERWOOD, HORST  
 Tract \_\_\_\_\_ Acres 44.3 Lease No. \_\_\_\_\_  
 Well (Farm) No. 1 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 1100'  
 Quadrangle Salem 7.5', Centerpoint 15'  
 County Doddridge District McClellan  
 Engineer Wayne D. Norton  
 Engineer's Registration No. 624  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date Jan. 4, 1979 Scale 1" = 500'

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

WELL LOCATION MAP  
 FILE NO. 47-017-2335

+ 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.

FEB 6 1979

5-51 SMITHTON FLINT SEDALIA 99



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

JUN - 5 1979

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

OIL & GAS DIVISION  
DEPT. OF MINES

**WELL RECORD**

Quadrangle Salem

Permit No. DODD-2335

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

Company PETROLEUM DEVELOPMENT CORPORATION  
Address P.O. Box 26, Bridgeport, W.V. 26330  
Farm Garland O. Ford Acres 44.3  
Location (waters) Big Battle  
Well No. One Elev. 1100  
District McClellan County Doddridge  
The surface of tract is owned in fee by Larry G Davis et al.  
Address Rt. 2, Salem, W.V.  
Mineral rights are owned by Garland O. Ford  
Address Riverton, W.V.  
Drilling Commenced 4/20/79  
Drilling Completed 5/10/79  
Initial open flow 58 m cu. ft. \_\_\_\_\_ bbls.  
Final production 852m cu. ft. per day \_\_\_\_\_ bbls.  
Well open 48 hrs. before test 1450 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. <del>13 1/2</del> 11 3/4		20	surface
9 5/8			
8 5/8	2025	1952	430 sks
7			
5 1/2			
4 1/2	5499	5324	250 sks
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

Benson 740 bbl 10,000# 80/100 49,000# 20/40

Coal was encountered at 755, 1146 Feet \_\_\_\_\_ Inches  
Fresh water Damp @175' Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand Benson Depth 5200

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Fill			0	5		
Soapstone			5	62		
Soapstone, Shale			62	93		
Red Rock, Shale			93	262		Damp Hole @175'
Sand			262	303		
Red Rock, Shale			303	425		
Sand, Shale			425	512		
Sand			512	617		
Sand, Shale			617	755		
Coal			755	770		
Sand, Shale			770	788		
Sand			788	840		
Sand, Shale			840	970		
Red Rock, Shale			970	1146		
Coal			1146	1151		
Sand, Shale			1151	1406		
Sand			1406	1470		
Sand, Shale			1470	1514		
Sand			1514	1559		
Sand, Shale			1559	1855		
Sand			1855	1895		
Red Rock, Shale			1895	1910		
Sand, Shale			1910	2047		
Big Lime			2047	2100		
Injun			2100	2191		

(over)

\* Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand, Shale			2191	2381	Gas Check @2223'	36/10 thru 1" w/H <sub>2</sub> O
Sand			2381	2411		
Sand, Shale			2411	2590		
50ft. Sand			2590	2633		
Sand, Shale			2633	2804		
Gordon Sand			2804	2906		
Sand, Shale			2906	3112	Gas check @2909'	20/10 thru 1" w/H <sub>2</sub> O
Sandy Shale			3112	3182		
Sand, Shale			3182	3498		
Sandy Shale			3498	4141		
Sand, shale			4141	5050	Gas check @5027	18/10 thru 1" w/H <sub>2</sub> O
Benson Sand			5050	5210		
Sand, Shale			5210	5499	T.D. Gas Check	30/10 thru 1" w/H <sub>2</sub> O

Date May 31, 1979

APPROVED Petroleum Development Corporation Owner

By *John C. M. ...*  
(Title)

Petroleum Engineer

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. one

API Well No. 47 - 017 - 2335  
State County Permit

WELL TYPE: Oil  / Gas  /  
(If "Gas", Production  / Underground storage  / Deep  / Shallow )  
LOCATION: Elevation: 1100' Watershed: Big Battle  
District: McCallan County: Doddridge Quadrangle: Salem

WELL OPERATOR Petroleum Development Corp.  
Address P. O. Box 26  
Bridgeport, WV 26330

DESIGNATED AGENT Petroleum Development Corp.  
Address P.O. Box 26  
Bridgeport, WV 26330

OIL & GAS ROYALTY OWNER Garland O. Ford etal  
Address \_\_\_\_\_  
Riverton, WV 26814  
Acreage 44.3

COAL OPERATOR \_\_\_\_\_  
Address \_\_\_\_\_

SURFACE OWNER (1) Larry G. Davis; Rt 2, Salem, WV  
Address (2) Orland M. Underwood; Rt 2, Salem, WV  
(3) Ethel F. Hurst  
Rt 2, Bx 104  
Salem, WV 26426  
Acreage 83

COAL OWNER(S) WITH DECLARATION ON RECORD:  
Name Consolidation Coal Company  
Address Routes 119 & 48  
Morgantown, WV 26505

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

Name \_\_\_\_\_  
Address \_\_\_\_\_

OIL & GAS INSPECTOR TO BE NOTIFIED  
Name Paul Garrett  
Address 321 Beech Street  
Clarksburg, WV 26301

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 September 13, 1978, to the undersigned well operator from Clarence W. Mutschelknaus

[If said deed, lease, or other contract has been recorded:]

Recorded on November 3, 1978, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Lease Book 105 at page 338. A permit is requested as follows:

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

--placed 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 § 20-9-3 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 SEND COPIES OF ALL PHYSICAL CHANGES DIRECTLY TO:  
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION  
101 WASHINGTON STREET EAST  
CHARLESTON, WV 25301  
PHONE NO: 336-3333-3332

**RECEIVED**  
JAN 18 1979  
OIL & GAS DIVISION  
DEPT. OF MINES  
BLANKET BOND

PETROLEUM DEVELOPMENT CORPORATION  
Well Permit # \_\_\_\_\_  
By Brad Liggitt  
Drilling Superintendent

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) Unknown Address

GEOLOGICAL TARGET FORMATION, Benson

Estimated depth of completed well, 4800' feet Rotary x / Cable tools / Approximate water strata depths: Fresh, 150' feet; salt, 1500' feet. Approximate coal seam depths: 300' 900' Is coal being mined in the area? Yes / No x

CASING AND TUBING PROGRAM

Table with columns: CASING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight per ft, New, Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), PACKERS. Rows include Conductor, Fresh water, Coal, Intermediate Production, Tubing, and Liners.

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-3, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-11b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-18a, 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.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

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 9-22-79.

Signature of Deputy Director

Deputy Director - Oil & Gas Division is 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 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.

By Its