



LATITUDE 39° 32' 30"
(15') 39° 35'

LONGITUDE 80° 27' 30"
(15') 80° 25'

4265
4115
385W
312W
39 31 25
80 29 20

Minimum Error of Closure Less Than 1 in 7,200

Source of Elevation U.S.G.S BM #165 RHP ON PICKENPAW RUN ROAD
Elev. = 980 (979.89)

Fracture.....
New Location.....
Drill Deeper.....
Abandonment.....

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.

Signed: John W. Horne
Squares: N S E W

Map No.

U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
Address P.O. BOX 880, MORGANTOWN, WVA 26505
Farm WALTER B. SMITH
Tract _____ Acres 15 Lease No. _____
Well (Farm) No. PI-3 Serial No. SW
Elevation (Spirit Level) 1053.02 MANNINGTON 15'
Quadrangle GLOVER GAP W.VA. (7.5')
County WETZEL District GRANT
Surveyor John W. Horne
Surveyor's Registration No. W.V.A. E.L. #72-JU.
File No. _____ Drawing No. _____
Date JAN. 10, 1977 Scale 1" = 400'

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

WELL LOCATION MAP

FILE NO. WET-627

+ Denotes location of well on United States Topographic Maps, scale 1 to ^{24,000}/_{62,500} latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing. **47-103**



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

Rotary 13
Spudder
Cable Tools
Storage

Quadrangle Glover Gap (7.5')

WELL RECORD

Permit No. WET-627

Oil or Gas Well (KIND)

Company Department of Energy, Morgantown Energy Research Center
Address P.O. Box 880, Morgantown, WV 26505
Farm Walter B. Smith Acres _____
Location (waters) Headwaters of Pickenpaw Run
Well No. Smith-ERDA-PI-3 Elev. 1053.02
District Grant County Wetzel
The surface of tract is owned in fee by Walter B. Smith
Address Smithfield, WV 26437
Mineral rights are owned by Mr. & Mrs. Rex Smith
Address Smithfield, WV 26437
Drilling commenced 9/8/77
Drilling completed 9/20/77
Date Shot From _____ To _____
With _____
Open Flow /10ths Water in _____ Inch
/10ths Merc. in _____ Inch
Volume _____ Cu. Ft.
Rock Pressure _____ lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			Size of
10 -3/4	205.5'	205.5'	
8 1/4			Depth set
6 1/2	907.06'	907.06'	
5 3/16			Perf. top
4 1/2			Perf. bottom
3			Perf. top
2			Perf. bottom
Liners Used			
Attach copy of cementing record. 10-3/4" - 205.5' 9/10/77			
7" - 905.56 9/21/77			
CASING CEMENTED SIZE No. Ft. Date			
Amount of cement used (bags) ^{BULK} 10-3/4-130 sacks; 7"- 250 sacks			
Name of Service Co. <u>Halliburton</u>			
COAL WAS ENCOUNTERED AT 394 FEET INCHES			
472 FEET INCHES 528 FEET INCHES			
792 FEET INCHES 902 FEET INCHES			

WELL ACIDIZED (DETAILS) _____
WELL FRACTURED (DETAILS) _____

RESULT AFTER TREATMENT (Initial open Flow or bbls.) _____

ROCK PRESSURE AFTER TREATMENT _____ HOURS

Fresh Water _____ Feet Salt Water _____ Feet

~~Producing Sand~~ Pittsburgh coal seam Depth 902 - 909

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Unconsolidated Sediments	--	--	0	10			
Siltstone and Shale			10	36			
Sandstone Calc.			36	43			
Siltstone and Shale			43	100			
Sandstone			100	112			
Shale and Siltstone			112	147			
Sandstone			147	155			
Shale and Sandstone			155	185			
Sandstone			185	205			
Lime Siltstone and Shale			205	229			

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sandstone			229	250		
Shale			250	257		
Sandstone			257	262		
Lime Shale			262	292		
Siltstone and Shale			292	357		
Limestone			357	370		
Siltstone and Shale			370	394		
Washington Coal			394	398		
Siltstone and Shale			398	472		
Waynesburg "A" Coal			472	475		
Lime Siltstone			475	493		
Limestone			493	514		
Waynesburg Sandstone			514	525		
Shale			525	528		
Waynesburg Coal			528	531		
Shale and Limestone			531	655		
Siltstone and Shale			655	792		
Sewickley Coal			792	796		
Shale and Limestone			796	902		
Pittsburgh Coal			902	909		
Shale			909	924		

Date November 30 19 77

APPROVED U.S. Department of Energy Owner

By G. E. Rennick
(Title)

G. E. Rennick, Petroleum Engineer



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

AUG - 2 1977

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

Surface Owner Mr. Walter B. Smith
Address Smithfield, WV 26437
Mineral Owner Mr. & Mrs. Rex Smith
Address Smithfield, WV 26437
Coal Owner Consolidation Coal Company
Address P.O. Box 1632, Fairmont, WV 26554
Coal Operator _____
Address _____

DATE July 26, 1977
Company U.S. Energy Research & Development Administration
Address P.O. Box 880 Morgantown, WV 26505
Farm Walter B. Smith Acres 15
Location (waters) Pickenpaw Run
Well No. Smith-ERDA-PI-3 Elevation 1053.02
District Grant County Wetzel
Quadrangle Mannington

THIS PERMIT MUST BE POSTED AT THE WELL SITE

If 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 12-4-77.

[Signature]
Deputy Director - Oil & Gas Division

INSPECTOR TO BE NOTIFIED Phil Tracy
PH: 758-4573 ADDRESS Middlebourn, W. Va.

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for research purposes title thereto, (or as the case may be) under cooperative agreement dated 14 June 19 74 by Consolidation Coal Co made to The U.S. of America and recorded on the Fourth day of March 19 77 in Wetzel County, Book #45 Page 173

XXX 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, W. Va. 26505

Very truly yours,

(Sign Name) L. D. Strickland
Well Operator L. D. Strickland

Address
of
Well Operator

Morgantown Energy Research Center
P.O. Box 880
Morgantown
City or Town
West Virginia 26505
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.

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

PROPOSED WORK ORDER TO XXX DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:
 NAME Paramount Exploration, Inc. NAME L. D. Strickland
 ADDRESS P.O. Box 551, Waynesburg, PA 15370 ADDRESS P.O. Box 880 Morgantown, WV 26505
 TELEPHONE 412/627-6144 TELEPHONE 599-7494
 ESTIMATED DEPTH OF COMPLETED WELL: 915 ft. ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Pittsburgh coal
 TYPE OF WELL: OIL _____ GAS _____ COMB. _____ STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER *

TENTATIVE CASING PROGRAM: *Underground Coal Gasification Research

CASING AND TUBING SIZE	USED FOR DRILLING	LEFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - <u>10</u>	200 ft.	200 ft.	Surface to 200 ft.
9 - 5/8			
8 - 5/8			
<u>7</u>	900 ft.	900 ft.	Surface to 900 ft.
5 1/2			
4 1/2			
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 40 FEET SALT WATER _____ FEET
 APPROXIMATE COAL DEPTHS 900 ft.
 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 Consolidation 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 Consolidation 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.

Ray M Henderson

 For Coal Company
Regional Manager of Engineering and Environmental Affairs

 Official Title