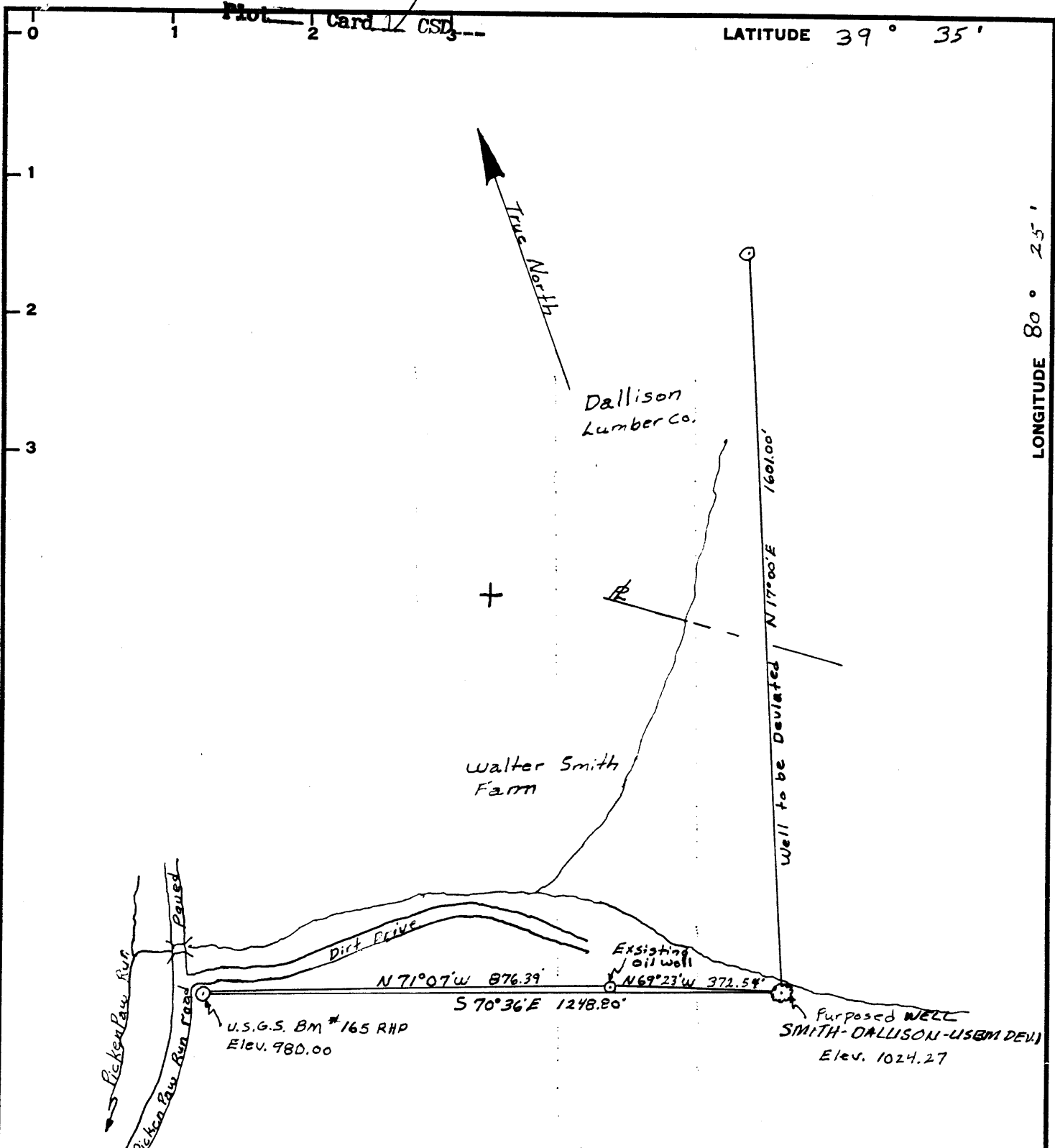


O.K. H.S

Plot Card 1/2 CSD 3

LATITUDE 39° 35'

LONGITUDE 80° 25'



Minimum Error of Closure less than 1 in 2000

Source of Elevation U.S.G.S. BM #165 RHP on Pickenpaw Run Road
Elev. 980.00

- 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: William P. Foley R.P.C.E.
Squares: N S E W

U.S. Dept of the Interior
Company U.S. Bureau of Mines

Address Collins Ferry Road, Morgantown W.Va.

Farm Walter Smith & Dallison Lumber Co.

Tract _____ Acres 15 Lease No. _____

Well (Farm) No. _____ Serial No. _____

Elevation (Spirit Level) 1024.27

Quadrangle Mannington

County Wetzel District Grant

Engineer William P. Foley

Engineer's Registration No. 4449

File No. _____ Drawing No. _____

Date 9-4-74 Scale 1" = 300'

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

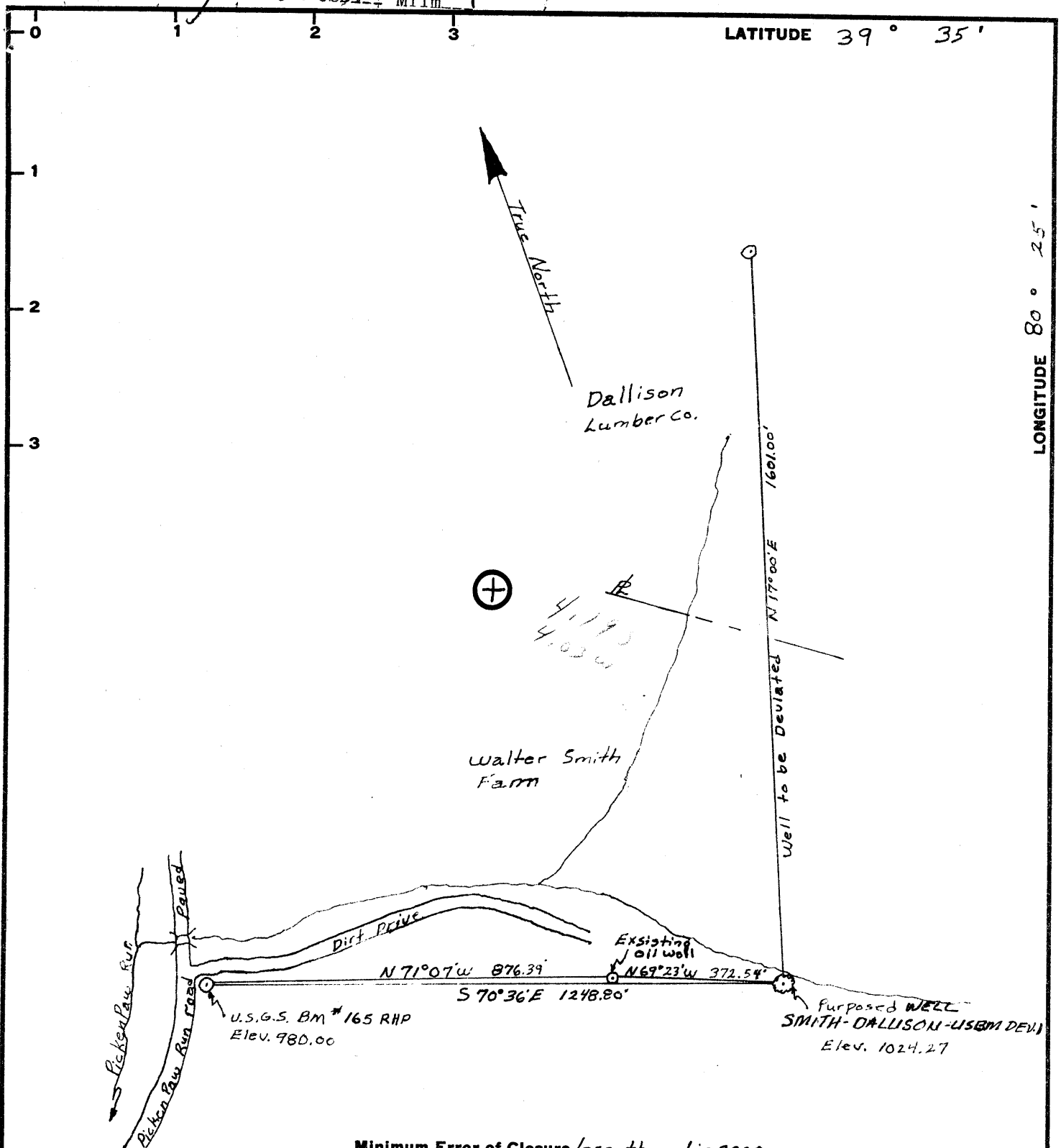
WELL LOCATION MAP

FILE NO. Wet-598-P

+ 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.

47-103 AUG 23 1982



LATITUDE 39° 35'

LONGITUDE 80° 25'

Minimum Error of Closure less than 1 in 2000

Source of Elevation U.S.G.S. BM #165 RHP on Pickensaw Run Road
Elev. 980.00

- 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: William P. Foley R.P.C.E.
Squares: N S E W

Map No.

U.S. Dept of the Interior
Company U.S. Bureau of Mines

Address Collins Ferry Road, Morgantown W.Va.

Farm Walter Smith & Dallison Lumber Co.

Tract Acres 15 Lease No. SMITH-DALLISON USBM DEV. 1

Well (Farm) No. Serial No.

Elevation (Spirit Level) 1024.27

Quadrangle Marrington SW

County Wetzel District Grant

Engineer William P. Foley

Engineer's Registration No. 4449

File No. Drawing No.

Date 9-4-74 Scale 1" = 300'

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

WELL LOCATION MAP

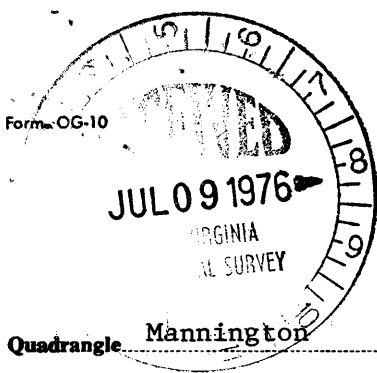
FILE NO. Wet-598

+ 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.

47-103

P.H.S. Coal



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JUL 9 - 1976

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

- Rotary
- Spudder
- Cable Tools
- Storage

Quadrangle Mannington

Permit No. Wet - 598

WELL RECORD

Oil or Gas Well Coal Research
(KIND)

Company <u>ERDA, Morgantown Energy Research Center</u> Address <u>P.O. Box 880, Morgantown, WV 26505</u> Farm <u>Walter B. Smith</u> Acres <u>7</u> Location (waters) <u>Pickenpaw Run</u> Well No. <u>Smith-Dallison-USBM-Dev.</u> Elev. <u>1024.75</u> District <u>Grant</u> County <u>Wetzel</u> The surface of tract is owned in fee by <u>Walter B. Smith</u> Address <u>Smithfield, WV 26437</u> Mineral rights are owned by <u>Mr. & Mrs. Rex Smith</u> Address <u>Smithfield, WV 26437</u> Drilling commenced <u>13 August 1975</u> Drilling completed <u>30 June 1976</u> Date Shot From To With Open Flow /10ths Water in. In. /10ths Merc. in. In. Volume Cu. Ft. Rock Pressure lbs. hrs. Oil bbls., 1st 24 hrs. WELL ACIDIZED (DETAILS) WELL FRACTURED (DETAILS)	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Casing and Tubing</th> <th style="width: 15%;">Used in Drilling</th> <th style="width: 15%;">Left in Well</th> <th style="width: 55%;">Packers</th> </tr> </thead> <tbody> <tr> <td>Size</td> <td></td> <td></td> <td>Kind of Packer</td> </tr> <tr> <td>16</td> <td></td> <td></td> <td></td> </tr> <tr> <td>13</td> <td></td> <td></td> <td></td> </tr> <tr> <td>10</td> <td></td> <td></td> <td>Size of</td> </tr> <tr> <td>8 1/4</td> <td>39</td> <td>39</td> <td></td> </tr> <tr> <td>6 5/8</td> <td></td> <td></td> <td>Depth set</td> </tr> <tr> <td>5 1/2</td> <td></td> <td>1548</td> <td></td> </tr> <tr> <td>4 1/2</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> <td>Perf. top</td> </tr> <tr> <td>2</td> <td></td> <td></td> <td>Perf. bottom</td> </tr> <tr> <td>Liners Used</td> <td></td> <td></td> <td>Perf. top</td> </tr> <tr> <td></td> <td></td> <td></td> <td>Perf. bottom</td> </tr> </tbody> </table> Attach copy of cementing record. <u>8-1/4 - 39'</u> CASING CEMENTED <u>5-1/2" SIZE 1548</u> No. Ft. <u>4-12-76</u> Date Amount of cement used (bags) <u>450</u> Name of Service Co. <u>Halliburton</u> COAL WAS ENCOUNTERED AT <u>498</u> FEET - INCHES <u>762</u> FEET - INCHES <u>865</u> FEET - INCHES FEET INCHES FEET INCHES	Casing and Tubing	Used in Drilling	Left in Well	Packers	Size			Kind of Packer	16				13				10			Size of	8 1/4	39	39		6 5/8			Depth set	5 1/2		1548		4 1/2				3			Perf. top	2			Perf. bottom	Liners Used			Perf. top				Perf. bottom
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Liners Used			Perf. top																																																		
			Perf. bottom																																																		

RESULT AFTER TREATMENT (Initial open Flow or bbls.)

ROCK PRESSURE AFTER TREATMENT HOURS

Fresh Water Feet Salt Water Feet

Producing Sand Pittsburgh Coal Depth Top 865 ft.

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
NOTE: This is a deviated well that was drilled to the middle of the Pittsburgh coal. True vertical depth to the middle of the coal was 868 feet. A horizontal hole was drilled 512 feet in the Pittsburgh coal. Total length of hole was 2060 feet.							
Shale and Siltstone	-	-	0	32			
Sandstone	-	-	32	44			
Shale and Siltstone	-	-	44	76			
Sandstone	-	-	76	96			
Shale and Siltstone	-	-	96	172			
Sandstone	-	-	172	186			
Shale and Siltstone	-	-	186	474			
Sandstone	-	-	474	496			
Shale	-	-	496	498			
Waynesburg Coal	Black	-	498	501			
Shale and Siltstone	-	-	501	672			
Shale and Limestone	-	-	672	762			
Sewickly Coal	Black	-	762	766			
Shale and Limestone	-	-	766	856			
Shale	-	-	856	865			
<u>Pittsburgh Coal</u>	Black	-	865	-			

(over)

JUL 9 1976



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

OCT 8 1974

OIL & GAS DIVISION
DEPARTMENT 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, W. Va. 26437
Mineral Owner Mr. & Mrs. Rex Smith
Address Smithfield, W. Va. 26437
Coal Owner Consolidation Coal Company
Address P.O. Box 1632, Fairmont, W. Va. 26554
Coal Operator _____
Address _____

DATE September 16, 1974
Company U.S. Department of the Interior
Bureau of Mines
Address P. O. Box 880, Morgantown, W. Va. 26505
Farm Walter B. Smith Acres 7 Part of 150
Location (waters) Pickenpaw Run
Well No. Smith-Dallison-USBM-
Dev. 1 Elevation 1,024.27
District Grant County Wetzel
Quadrangle Mannington

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 2-9-75

Robert R. Bell

Deputy Director - Oil & Gas Division

IN ORDER TO BE NOTIFIED
Grantsville PH: Fairmont
W. Va. 354-7259 or 366-1913

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for ~~research purposes~~ cooperative agreement having fee title thereto, (or as the case may be) under ~~grant or lease~~ grant or lease dated 14 June 1974 by Consol. and CONOCO made to U.S. Dept. of Interior and recorded on the _____ day of _____ 19____, in _____ Bureau of Mines County, Book _____ Page Not yet recorded
 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
AC 304-296-4461

Very truly yours.

(Sign Name) J. Pasini III for
Well Operator J. Pasini III
Bureau of Mines, P. O. Box 880
Street
Morgantown
City or Town
West Virginia 26505
State

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.

Wet-598 PERMIT NUMBER
47-103

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

Drill deviated well into the Pittsburgh coal

PROPOSED WORK ORDER TO DRILL DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:
 NAME To be determined by bid NAME J. Pasini III
 ADDRESS _____ ADDRESS P. O. Box 880, Morgantown, W. Va.
 TELEPHONE _____ TELEPHONE 599-7103
 ESTIMATED DEPTH OF COMPLETED WELL: 815 ROTARY _____ CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Pittsburgh coal
 TYPE OF WELL: OIL _____ GAS _____ COMB. _____ STORAGE _____ DISPOSAL _____
 Length of well: 1,900 feet RECYCLING _____ WATER FLOOD _____ OTHER X

Underground Gasification Coal
Research

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 20'	20'	20'	100 sacks thermal 350 sacks neat
8 - 5/8			
7			
5 1/2 1,550'	1,550'	1,550'	
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 815
 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.

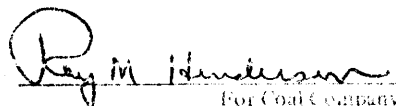
OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

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.


For Coal Company

Engineering Assistant to Senior V.P.
Chief Title

