

4140'W

Latitude 39° 17' 30"

8375 S  
4140 W

Jamie  
8/24/95

Longitude 81° 40'

8375 S

W00 593

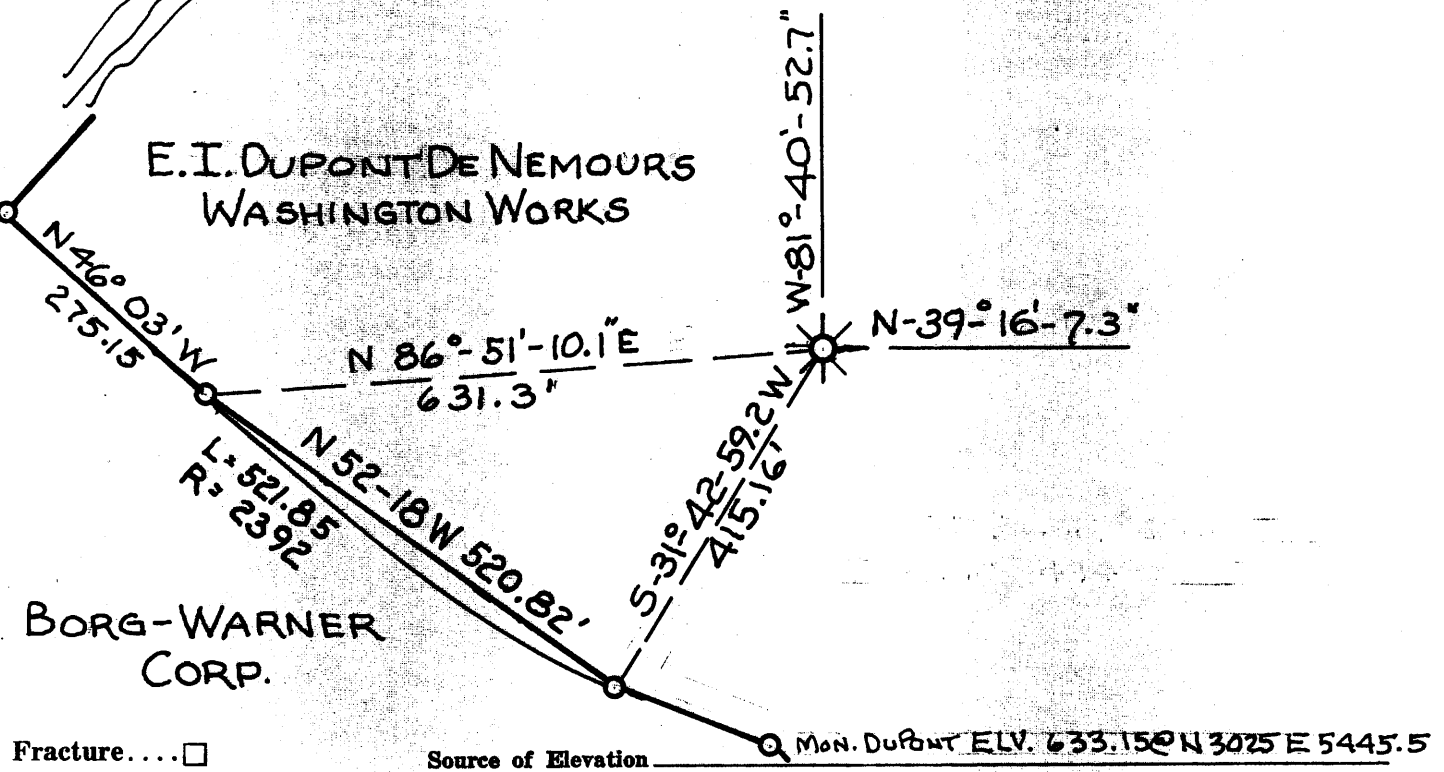


TOPO 7 1/2'

OHIO RIVER

E.I. DUPONT DE NEMOURS  
WASHINGTON WORKS

BORG-WARNER  
CORP.



- Fracture.....
- Redrill.....
- New Location.....
- Drill Deeper.....
- Abandonment.....

Source of Elevation Q Mon. Dupont ELV. 633.150 N 3025 E 5445.5  
 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.  
 Minimum accuracy one part in \_\_\_\_\_

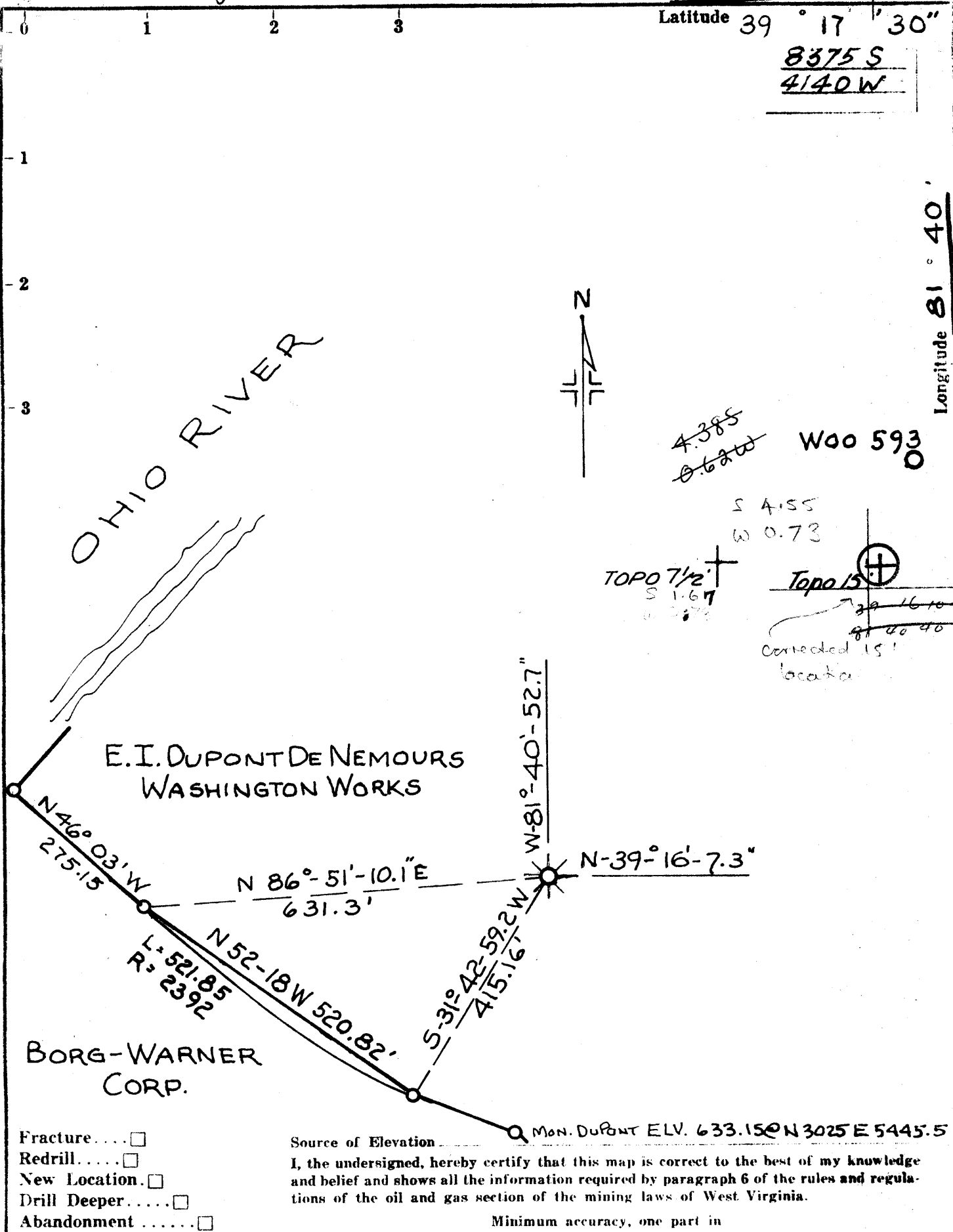
Company	E.I. DU PONT DE NEMOURS		
Address	PARKERSBURG, W. VA.		
Farm	WASHINGTON WORKS		
Tract	Acres	Lease No.	
Well (Farm) No.	4	Serial No.	
Elevation (Spirit Level)	608.09		
Quadrangle	LITTLE HOCKING, OHIO-W.VA.		
County	WOOD	District	LUBECK
Surveyor or Engineer	<i>Howard J. Schuster</i>		
Surveyor's or Engineer's Registration No.	2492		
File No.	Drawing No. WWSK-13908		
Date	JULY 29, 1975 Scale 1" = 200'		

STATE OF WEST VIRGINIA  
 DIVISION OF ENVIRONMENTAL PROTECTION  
 OFFICE OF OIL & GAS  
 NITRO, WEST VIRGINIA 25143

WELL LOCATION MAP

*APP. No. 47-107-00704-P*

- + Denotes location of well on United States Topographic Maps, scale 1 to 24,000 latitude and longitude lines being represented by border lines as shown.
- Denotes one inch spaces on border line of original tracing.



- Fracture
- Redrill
- New Location
- Drill Deeper
- Abandonment

Source of Elevation  MON. DUPONT ELV. 633.15

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.

Minimum accuracy, one part in

Company E.I. DU PONT DE NEMOURS  
 Address PARKERSBURG, W. VA.  
 Farm WASHINGTON WORKS  
 Tract \_\_\_\_\_ Acres ~600 Lease No. \_\_\_\_\_  
 Well (Farm) No. 4 Serial No. SW  
 Elevation (Spirit Level) 608.09 Parkersburg 15'  
 Quadrangle 1/4 LITTLE HOCKING, OHIO-W.VA.  
 County WOOD District LUBECK  
 Surveyor or Engineer [Signature]  
 Surveyor's or Engineer's Registration No. 2142  
 File No. \_\_\_\_\_ Drawing No. WWSK-13908  
 Date JULY 29, 1975 Scale 1" = 200'

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

WELL LOCATION MAP  
 FILE NO. WOO-707

+ Denotes location of well on United States Topographic Maps, scale 1 to 24,000 latitude and longitude lines being represented by border lines as shown.

— Denotes one inch spaces on border line of original tracing.

47-107

2-2 Washington Bottom

(357) Deep well

AUG 14 1975

OG-10  
Rev. - 9-71

JUL 09 1976



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

Quadrangle Little Hocking, Ohio-W. Va.

Permit No. WOO-707

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

Company E.I. DuPont DeNemours & Co.  
Address P.O. Box 1217, Parkersburg, W. Va.  
Farm Washington Works Acres 600+  
Location (waters) Ohio River  
Well No. 4 Elev. 608.09  
District Lubeck County Wood  
The surface of tract is owned in fee by \_\_\_\_\_  
E.I. DuPont DeNemours & Co.  
Address Parkersburg, W. Va.  
Mineral rights are owned by Same  
Address \_\_\_\_\_  
Drilling Commenced 8/7/75  
Drilling Completed 8/15/75  
Initial open flow \_\_\_\_\_ cu. ft. \_\_\_\_\_ bbls.  
Final production 1,800 M cu. ft. per day XX bbls.  
Back pressure \_\_\_\_\_  
Well opened 9/5/75 hrs. before test 1651 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10" 11 3/4	112'	112'	Circulated to surface (75 sx)
9 5/8			
8 5/8	1975'	1975'	Circulated to surface (540 sx)
7			
5 1/2	4075'	4075'	136' (22 sx)
4 1/2			
3			
2			
Liners Used			

Well treatment details:

Halliburton Frac w/1035 bbls. water, 28,000# 20-40 sand, 500 gal acid

Attach copy of cementing record.

Coal was encountered at \_\_\_\_\_ Feet \_\_\_\_\_ Inches  
Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand Oriskany - open hole Depth 4079-99

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Gravel			0	72		*All Log Depths
Sand			72	110		
Shale			110	124		
Sand			124	144		
Shale			144	153		
Sand			153	193		
Shale			193	210		
Sand & shale			210	810		
Sand			810	849		
Shale			849	928		
Sand			928	997		
Sand & shale			997	1310		
Sand			1310	1446		
Shale			1446	1894		
Berea Sand			1894	1896		
Shale			1896	3882		
Shale - marcellus			3882	3986		
Corniferous-Lime			3986	4079		
<u>Oriskany</u>			<u>4079</u>	<u>4099</u>		
<u>Lime - Helderberg</u>			<u>4099</u>	<u>4113</u>		
					Total Depth 4113	

3986 4079  
608 808  
- 3378 3271

(over)

\* Indicates Electric Log tops in the remarks section.



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED

AUG 1 1975

OIL & GAS DIVISION  
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

DATE July 29, 1975

Surface Owner E.I. DuPont DeNemours & Co. Company E.I. DuPont DeNemours & Co, Inc.

Address P. O. Box 1217, Parkersburg, W. Va. Address P.O. Box 1217, Parkersburg, W. Va.

Mineral Owner Same Farm Washington Works Acres ~ 600

Address \_\_\_\_\_ Location (waters) Ohio River

Coal Owner None Well No. 4 Elevation 608.09'

Address \_\_\_\_\_ District Lubeck County Wood

Coal Operator None Quadrangle Little Hocking, Ohio - W.Va.

Address \_\_\_\_\_

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 12-1-75.

Robert L. ...  
Deputy Director - Oil & Gas Division

INSPECTOR TO BE NOTIFIED Paul Goodnight  
PH: 477-2455 ADDRESS Smithville, W.Va.

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, ~~XXXXXX~~ January 24 1957 by R. C. Umbarger made to E. I. DuPont and recorded on the 24th day of January 1957, in Wood County, Book 406 Page 484

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. F. Thomas

Well Operator

P. O. Box 1217

Street

Parkersburg

City or Town

West Virginia

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.

BOND DRILL

W-00-707 PERMIT NUMBER

47-107

*[Handwritten signature]*

**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 Unknown NAME Ralph E. Sieber  
 ADDRESS \_\_\_\_\_ ADDRESS P.O. Box 1217, Parkersburg, W.  
 TELEPHONE \_\_\_\_\_ TELEPHONE (304)863-5311  
 ESTIMATED DEPTH OF COMPLETED WELL: 4400' ROTARY X CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Oriskany  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS X 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	100'	100'	To surface
9 - 5/8			
8 - 5/8	1950'	1950'	To surface
7			
5 1/2	4100'	4100'	500' Fill up
4 1/2			
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 30 FEET SALT WATER 1350 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 \_\_\_\_\_ 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 \_\_\_\_\_ 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

\_\_\_\_\_  
 Official Title

38-  
-Aug-95

WV Division of  
Environmental Protection

API # 47-107-00707-P

FEB 26 1996

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION  
SECTION OF OIL AND GAS

Permitting  
Office of Oil & Gas

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPLICATE, one copy mailed to the Division, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

Farm name: DUPONT, E.I. Operator Well No.: 4-G-1

LOCATION: Elevation: 608.09 Quadrangle: LITTLE HOCKING  
 District: LUBECK County: WOOD  
 Latitude: 8375 Feet South of 39 Deg. 17 Min. 30 Sec.  
 Longitude 4140 Feet West of 81 Deg. 40 Min. 0 Sec.

Well Type: OIL \_\_\_\_\_ GAS x

Company: E. I. Dupont Coal Operator \_\_\_\_\_  
PO Box 1217 or Owner \_\_\_\_\_  
Parkersburg, WV 26102

Agent: David Prather Coal Operator \_\_\_\_\_  
 or Owner \_\_\_\_\_

Permit Issued: 08/24/95

AFFIDAVIT

STATE OF WEST VIRGINIA,  
County of Lincoln ss:

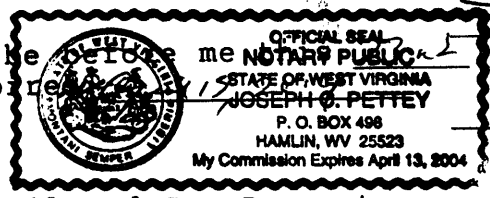
Scott Parsons and Ed Starett being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by the above named well operator, and participated in the work of plugging and filling the above well, and Glen Robinson Oil and Gas Inspector representing the Director, say that said work was commenced on the 7th day of September, 1995, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Gel Hole	surface	3098'		
Cement	3098'	2998'		
Cement	2943'	2843'		
Left 8-5/8" in well		1975'	cemented to surface	1975'
Cement	2550'	2450'		
Shot & Pulled 5 1/2"		1731'	1731'	2344'
Cement	2031'	1831'		
Cement	1679'	1629'		
Left 11-3/4" in well		112'	cemented to surface	112'
Cement	100'	surface		

Description of monument: Erect monument with API No. 47-107-0707P  
and that the work of plugging and filling said well was completed on the 29th day of September, 1995.

And further deponents saith not. Scott Parsons

Sworn and subscribed before me Joseph C. Petrey day of October, 1995  
My commission expires April 13, 2004



Joseph C. Petrey  
Notary Public

Oil and Gas Inspector: \_\_\_\_\_

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION  
SECTION OF OIL AND GAS

Permitting  
Office of Oil & Gas

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or Owner \_\_\_\_\_

Permit Issued: 08/24/95

AFFIDAVIT

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County of Lincoln ss:

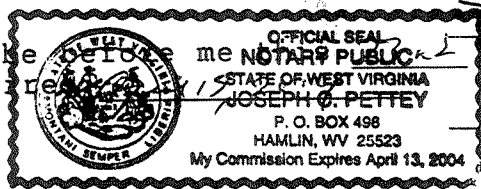
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My commission expires April 13, 2004



Joseph C. Pettes  
Notary Public

Oil and Gas Inspector: \_\_\_\_\_