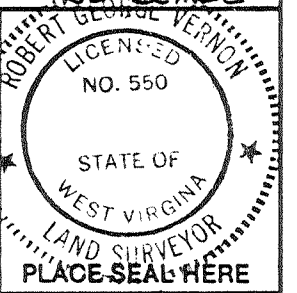


FILE NO. 88-2885  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 200'  
 MINIMUM DEGREE OF ACCURACY 1" = 5000'  
 PROVEN SOURCE OF ELEVATION USGS-891  
ROAD ELEVATION

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 ENERGY.  
 (SIGNED) [Signature]  
 R.P.E. \_\_\_\_\_ L.L.S. 550



**STATE OF WEST VIRGINIA**  
 DEPARTMENT OF ENERGY  
 OIL AND GAS DIVISION

DATE OCTOBER 24, 1988  
 OPERATOR'S WELL NO. G-24  
 API WELL NO. HAMILTON #1

WELL TYPE: OIL    GAS    LIQUID INJECTION    WASTE DISPOSAL     
 (IF "GAS,") PRODUCTION    STORAGE    DEEP    SHALLOW   

LOCATION: ELEVATION 857.9 WATERSHED SANDY CREEK  
 DISTRICT LUBECK 3 COUNTY WOOD  
 QUADRANGLE LUBECK (7 1/2 MINUTE) 449 009, Belleville nw

SURFACE OWNER RUTH HAMILTON ACREAGE 30.6  
 OIL & GAS ROYALTY OWNER SEE ABOVE \* LEASE ACREAGE \_\_\_\_\_  
 LEASE NO. \_\_\_\_\_

PROPOSED WORK: DRILL    CONVERT X 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 ORISKANY ESTIMATED DEPTH 4400'  
 WELL OPERATOR E.I. DUPONT DE NEMOURS DESIGNATED AGENT F.L. (FRED) PHILLIPS  
 ADDRESS P.O. BOX 1217 PARKERSBURG, W.VA. 26102 ADDRESS P.O. BOX 1217 PARKERSBURG, W.VA. 26102

NOV 18 1988

DEEP WELL 6-6 Washington Bottom (351)

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS  
WELL WORK PERMIT APPLICATION

- 1) Well Operator: E.I. Du Pont de Nemours & Co. 14650, 3, 449'
- 2) Operator's Well Number: Hamilton No. 1 (Du Pont G-24) 3) Elevation: 858'
- 4) Well type: (a) Oil   / or Gas X/  
 (b) If Gas: Production X/ Underground Storage   /  
 Deep X/ Shallow
- 5) Proposed Target Formation(s): Oriskany Sandstone 475
- 6) Proposed Total Depth: 4400' feet
- 7) Approximate fresh water strata depths: 50' 130', 190'
- 8) Approximate salt water depths: 1500' 1089-1096'
- 9) Approximate coal seam depths: N/A OK
- 10) Does land contain coal seams tributary to active mine? Yes   / No X/
- 11) Proposed Well Work: Drill & Stimulate New Well
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS			CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	16"	H-40 or spiral weld	65	40'	40'	surface, 11 cu. ft.
Fresh Water	11-3/4"	H-40	42	250'	250'	surface, 119 cu. ft.
Coal	-	-	-	-	-	380 CSR 18-11-3
Intermediate	8-5/8"	K-55	24	1700'	1700'	surface, 435 cu. ft.
Production	5-1/2"	K-55	15.5	4400'	4400'	1900', 329 cu. ft.
Tubing	2-3/8"	J-55	4.7	4100'		380 CSR 18-11-1
Liners	-	-	-	-		

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 NOV 07 1988

PACKERS : Kind Proposed: Baker tension set packer  
 Sizes 5-1/2" 15.5#  
 Depths set 4100'

For Division of Oil and Gas Use Only

Fee(s) paid:    Well Work Permit    Reclamation Fund    WPCP     
 Plat    WW-9    WW-2B    Bond    Agent

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Page 1 of 6  
Form WW2-A  
(09/87)  
File Copy

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

Date: October 27, 1988  
Operator's well number  
Hamilton No. 1 (Du Pont G-24)  
API Well No: 47 - 107 - 1440  
State - County - Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
- (a) Name Bernard & Ruth Hamilton  
Address Rt. 1 Box 157  
Washington, WV 26181 *Surface*
  - (b) Name Powell & Geraldine Burd  
Address Rt. 1 Box 157A  
Washington, WV 26181 *Pipeline only*
  - (c) Name John L. & John C. Wittman  
Address Rt. 1 Box 127A  
Washington, WV 26181 *Pipeline only*
- 6) Inspector Glen P. Robinson  
Address Rt. 1 No. 6 Mt. Pleasant Est.  
Mineral Wells, WV 26150  
Telephone (304)-489-9162

- 5) (a) Coal Operator:  
Name None  
Address \_\_\_\_\_
- (b) Coal Owner(s) with Declaration  
Name None  
Address \_\_\_\_\_
- (c) Coal Lessee with Declaration  
Name None  
Address \_\_\_\_\_

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

\_\_\_\_\_ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR  
X Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 6 on the above named parties, by:

- X Personal Service (Affidavit attached)
- \_\_\_\_\_ Certified Mail (Postmarked postal receipt attached)
- \_\_\_\_\_ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator E.I. Du Pont de Nemours & Co.  
By: Frederick L. Phillips  
Its: Designated Agent  
Address P.O. Box 1217  
Washington, WV 26102  
Telephone (304) 464-4689(H) (304) 863-2189(W)

Subscribed and sworn before me this 27th day of OCTOBER, 1988

My commission expires July 9, 1990 Ruth A. Lewis Notary Public

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MAY 23 1989

14-Nov-88  
API # 47-107-01440

State of West Virginia  
DEPARTMENT OF ENERGY  
Division of Oil and Gas

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY Well Operator's Report of Well Work

Farm name: HAMILTON, BERNARD & RUTH Operator Well No.: 1 G-24

LOCATION: Elevation: 857.90 Quadrangle: LUBECK  
District: LUBECK County: WOOD  
Latitude: 12150 Feet South of 39 Deg. 15Min. 0 Sec.  
Longitude 2400 Feet West of 81 Deg. 40 Min. 0 Sec.

Company: DUFONT, E.I. de NEMOURS & P.O. BOX 1217 WASHINGTON WORKS PARKERSBURG, WV	Casings	Used in	Left	Cement
	&			(Fill Up)
Asent: FREDERICK L. PHILLIPS	Tubins	Drillins	in Well	Cu. Ft.
Inspector: GLEN P. ROBINSON	Size			
Permit Issued: 11/15/88	16" O.D.			
Well work Commenced: DEC. 1, 1988	(1/2" WALL)	35'	35'	NONE
Well work Completed: APRIL 18, 1989	11-3/4"			SURFACE
Verbal Plussins	42#	272'	272'	110 CU.FT
Permission granted on: N/A	H-40			
Rotary Cable Ris	8-5/8"			SURFACE
Total Depth (feet): 4720	24#	1823'	1823'	255 CU.FT
Fresh water depths (ft) 60' (EST.)	K-55			
	5 1/2"			3830'
Salt water depths (ft) 1630' (BIG INJUN)	15.5#	4683'	4683'	114 CU.FT
	K-55			
Is coal being mined in area (Y/N)? N	2-3/8"			
Coal Depths (ft): N/A	J-55	4330'	4330'	N/A
	EUE			

OPEN FLOW DATA

Producing formation ORISKANY SANDSTONE Pay zone depth (ft) 4400'  
Gas: Initial open flow 180 MCF/d Oil: Initial open flow 1 Bbl/d  
Final open flow 165 MCF/d Final open flow 1 Bbl/d  
Time of open flow between initial and final tests 92 Hours  
Static rock Pressure 1550 psis (surface pressure) after 1000+ Hours

Second producing formation SHALE Pay zone depth (ft) 3560  
Gas: Initial open flow NOT MCF/d Oil: Initial open flow NOT Bbl/d  
Final open flow TESTED MCF/d Final open flow TESTED Bbl/d  
Time of open flow between initial and final tests 0 Hours  
Static rock Pressure 950 psis (surface pressure) after 1000+ Hours

NOTE: Shale zone may be productive but was not tested.

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: DUFONT, E.I. de NEMOURS & CO. (INC.)  
By: *[Signature]*  
Date: DESIGNATED AGENT MAY 17, 1989 MAY 26 1989

1008 & N YAM 20

PERFORATED INTERVAL

TREATMENT

ORISKANY  
(4402'-4420')

Broke down perforations with 700 g. 15% HCl with additives

Frac'd Oriskany in 6 stages with a total of 70,000 lbs. 20/40 Ottawa sand and 35,000 gal. of 70% nitrogen foam. The job was pumped at 20 BPM at an average treating pressure of approximately 2000 PSI. ISIP was 1740 PSI.

SHALE  
(TOP 3550' - NO PERFS)

No treatment. Shut in at surface. Will produce at a later date.

FORMATION TOPS (KB = 10', GL = 858')

BIG INJUN	1630' (EST.)
BEREA	2084'
GORDON	2355'
OHIO BROWN	3560'
MARCELLUS	4120'
ONONDAGA	4288'
ORISKANY	4400'

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MAY 23 1989

DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

7961

MAY 26 1989