



FILE NO. 3K 32 P89  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1:2500  
 PROVEN SOURCE OF ELEVATION USGS Road  
marks 500' East 200'  
El. 839'

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 MINES.  
 (SIGNED) C. J. J. J. J.  
 R.P.E. U.S. 92

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM IV-6 (8-78)



DATE MARCH 10, 1984  
 OPERATOR'S WELL NO. POCAHONTAS  
 API WELL NO. LAND N°1  
47 - 047 - 0909  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP X SHALLOW \_\_\_  
 LOCATION ELEVATION 1830.22 WATER SHED CUCUMBER CREEK  
 DISTRICT BIG CREEK 2 COUNTY MCDOWELL  
 QUADRANGLE GARY WV - VA 359 WELCH 130 SE 9  
 SURFACE OWNER CLARENCE BILLIPS ACREAGE 295  
 OIL & GAS ROYALTY OWNER POCAHONTAS LAND CORP. LEASE ACREAGE 19,215  
 LEASE NO. C-230540  
 PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR  
 STIMULATE X PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW  
 FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_  
 PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION TUSCARORA ESTIMATED DEPTH 7600'  
 WELL OPERATOR CONOCO INC. 199 DESIGNATED AGENT P.M. SHANNON  
 ADDRESS 3817 NW EXPRESSWAY ADDRESS BOX 1217  
OKLAHOMA CITY, OKLAHOMA 73112 PARKERSBURG WV, 26102

JUN 4 1984

RECEIVED

JAN 24 1985



IV-35 (Rev 8-81)

OIL & GAS DIVISION State of West Virginia DEPT. OF MINES Department of Mines Oil and Gas Division

Date 1-16-85 Operator's Well No. 1 Farm Pocahontas Land API No. 47 - 047 - 0909

WELL OPERATOR'S REPORT OF DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas X / Liquid Injection / Waste Disposal / (If "Gas," Production / Underground Storage / Deep X / Shallow /)

LOCATION: Elevation: 1830' GL Watershed Cucumber Creek District: Big Creek County McDowell Quadrangle Gary, W.V.-VA

COMPANY Conoco Inc. as wholly owned subsidiary of E.I. DuPont de Nemours & Co.

ADDRESS 3817 N.W. Expressway, Oklahoma City, OK 73112

DESIGNATED AGENT P. M. Shannon ADDRESS Box 1217 Parkersburg, W.V. 26102

SURFACE OWNER Clarence Billips ADDRESS Newhall, WV 24866

MINERAL RIGHTS OWNER Pocahontas Land Corp. ADDRESS Box 1517, Bluefield, WV 24701-1517

OIL AND GAS INSPECTOR FOR THIS WORK Rue Schoolcraft ADDRESS Pineville, WV 24874

PERMIT ISSUED May 15, 1984

DRILLING COMMENCED June 19, 1984

DRILLING COMPLETED September 1, 1984

IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

Table with 4 columns: Casing & Tubing, Used in Drilling, Left in Well, Cement fill up Cu. ft. Rows include sizes 13-10", 9 5/8, 8 5/8, 7, 5 1/2, 4 1/2, 3, 2, and Liners used.

GEOLOGICAL TARGET FORMATION Silurian Tuscarora Depth 7464 feet

Depth of completed well 7675 feet Rotary X / Cable Tools

Water strata depth: Fresh 100 feet; Salt N/A feet

Coal seam depths: N/A Is coal being mined in the area? No

OPEN FLOW DATA

\*WHOAF = 2373 MCFPD

Producing formation Tuscarora Sd. Pay zone depth 7464 feet

Gas: Initial open flow \*2373 Mcf/d Oil: Initial open flow 0 Bbl/d

Final open flow \*2373 Mcf/d Oil: Final open flow 0 Bbl/d

Time of open flow between initial and final tests N/A hours

Static rock pressure 2100 psig (surface measurement) after 13 hours shut in

(If applicable due to multiple completion--)

Second producing formation Pay zone depth feet

Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d

Final open flow Mcf/d Oil: Final open flow Bbl/d

Time of open flow between initial and final tests hours

Static rock pressure psig (surface measurement) after hours shut in

FEB 04 1985

\*See details of perforated intervals, fracturing or

(Continue on reverse side)

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Perforations: 7,491'-7,508'; 7,464'-7,476'; 7,414'-7,440';  
7,110'-7,148'; 7,156'-7,222'. Treatment: Perf 7,491'-7,508'  
 Stimulate w/500 gal 7½% HCl acid. Perf 7,464'-7,476'. Acidize  
 w/4000 gal 7½% HCl acid. Perf 7,414'-7,440'. Acidize w/1000  
 gal 7½% HCl acid. Perf 7,192'-7,202'. Acidize w/400 gal 7½%  
 HCl acid. Perf 7,110'-7,148'; 7,156'-7,192'; 7,202'-7,222'.  
 Acidize w/4000 gal 7½% HCl acid & 1200# benzoic flakes.

$$*WFOAF = 1440 \left[ \frac{2100^2}{2100^2 - 1400^2} \right] .85 = 2373 \text{ MCFPD}$$

(n = .85 per discussion w/Mr. Huzzey)

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Ravenclyff			1147	1250	
Big Lime L.S.			2438	3174	
Berea Sd.			3789	3816	
Tully L.S.			5643	5668	
Hamilton Shale			5668	5910	
Marcellus Shale			5910	6250	
Onandaga L.S.			6250	6366	
Cacapon Sd			6970	7022	
Tuscarora Sd.			7022	7525	
<u>Martinsburg Shale</u>			7603	-	
Total Depth - <u>7675'</u>					
Plug Back Depth - 7600'					

Subscribed and sworn before me, a Notary Public in and for said County and State this 22 day of January, 1985.

County Oklahoma State Oklahoma

Notary Martha K. Decham My Commission Expires: 7-2-88

(Attach separate sheets as necessary)

CONOCO INC.

Well Operator

W. G. Webb

By: [Signature] Production Superintendent

Date: 1/16/85

Note: Regulation 2.02(i) provides as follows:  
 "The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including



1) Date: April 13, 19 84  
 2) Operator's Well No. Pocahontas Land Co. #1  
 3) API Well No. 47 - 047 - 0909  
 State \_\_\_\_\_ County \_\_\_\_\_ Permit \_\_\_\_\_

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES, OIL AND GAS DIVISION  
APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil \_\_\_\_\_ / Gas X /  
 B (If "Gas", Production X / Underground storage \_\_\_\_\_ / Deep X / Shallow \_\_\_\_\_)
- 5) LOCATION: Elevation: 1830.22 Watershed: Gucumber Creek  
 District: Big Creek County: McDowell Quadrangle: Gary, W.V.-VA
- 6) WELL OPERATOR Conoco Inc. as wholly owned  
 Subsidiary of E.I. du Pont de Nemours & Co.  
 Address 3817 N.W. Expressway  
Oklahoma City, OK 73112
- 7) DESIGNATED AGENT P. M. Shannon  
 Address Box 1217  
Parkersburg, W.V. 26102
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED  
 Name Rue Schoolcraft  
 Address Box 706  
Pineville, W.V. 24874
- 9) DRILLING CONTRACTOR:  
 Name \_\_\_\_\_ Job to be bid May 1, 1984  
 Address \_\_\_\_\_
- 10) PROPOSED WELL WORK: Drill X / Drill deeper \_\_\_\_\_ / Redrill \_\_\_\_\_ / Stimulate \_\_\_\_\_  
 Plug off old formation \_\_\_\_\_ / Perforate new formation \_\_\_\_\_  
 Other physical change in well (specify) \_\_\_\_\_
- 11) GEOLOGICAL TARGET FORMATION, 6400' Devonian Oriskany; 7500' Silurian Tuscarora
- 12) Estimated depth of completed well, 7600' feet
- 13) Approximate trata depths: Fresh, 100 feet; salt, None feet.
- 14) Approximate coal seam depths: None Is coal being mined in the area? Yes \_\_\_\_\_ / No X

**RECEIVED**  
 MAY 4 - 1984  
 OIL & GAS DIVISION  
**DEPT. OF MINES**  
 No. X

15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor	16"	H-40	65	x		30'		To Surface	Kinds
Fresh water	11 3/4"	H-40	42	x		250'		To Surface	
Coal	Not Required								Sizes
Intermediate	8 5/8"	S-80/K-55	28 7/24	x		3750'	Run only if	needed (Bad hole conditions)	
Production	5 1/2"	K-55	17	x		7600'		Above all Pay Zones	Depths
Tubing	2 7/8"	J-55	6.5	x		7500'		N/A	
Liners									Perforations:
									Top Bottom

Note: Rig will be equipped with blowout preventers, a rotating head and choke to handle any unexpected high pressure gas; also a tank full of drilling mud (KCL water) will be on location to kill the well, if necessary.

OFFICE USE ONLY  
**DRILLING PERMIT**

Permit number 47-047-0909 Date May 25, 19 84

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector, (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.  
 Permit expires May 25, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>BA</u>	Agent: <u>[Signature]</u>	Plat: <u>MH</u>	Casing: <u>MH</u>	Fee: <u>[Signature]</u>
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1847951

[Signature]  
 Administrator, Office of Oil and Gas