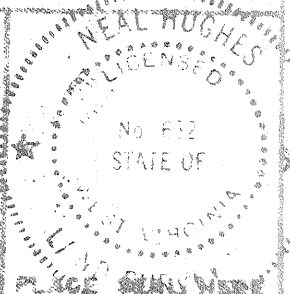


DOAN #1 - DOAN #2 1150'  
 DOAN #1 - EXISTING WELL OWNED BY DOAN 1011'  
 DOAN #1 - JONES #1 973'

FILE NO. L+M  
 DRAWING NO. 1  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION KNOB 1062

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) Neal Hughes  
 M.P.E. 632



LOCATIONS OF WELLS ON UNITED STATES TOPOGRAPHIC MAPS  
 FORM W-8 (8-75)

DATE Sept 22 19 80  
 OPERATOR'S WELL NO. 1  
 API WELL NO. 47-095-0864  
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION

WELL TYPE: OIL  GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 (IF "GAS", PRODUCTION \_\_\_\_\_ STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW \_\_\_\_\_)  
 LOCATION: ELEVATION 946' WATER SHED MIDDLE ISLAND CREEK  
 DISTRICT ELLSWORTH COUNTY TYLER  
 QUADRANGLE MIDDLE BOURNE 7 1/2' WEST UNION 15' NL  
 SURFACE OWNER JAMES DOAN ACRES 197  
 OIL & GAS ROYALTY OWNER JAMES DOAN LEASE ACRES 455.5  
 LEASE NO. \_\_\_\_\_  
 PROPOSED WORK: DRILL  CONVERT \_\_\_\_\_ GRILL DEEPER \_\_\_\_\_ PERFORATE \_\_\_\_\_ FRACTURE OR STIMULATE \_\_\_\_\_ PLUG OFF OLD FORMATION \_\_\_\_\_ PERFORATE NEW FORMATION \_\_\_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_  
 PUMP AND GEARBOX \_\_\_\_\_ CLEAN OUT AND REFLUE \_\_\_\_\_  
 TARGET FORMATION Dominion Salt ESTIMATED DEPTH 4500'  
 WELL OPERATOR P.M. Titelman, Jr. DESIGNATED AGENT Richard Nelson  
 ADDRESS P.O. #1, Box 18, Manilla, Ohio ADDRESS London, W.V.  
614-373-8271 304-822-7308

IV-35  
(Rev 8-81)

RECEIVED  
JUN 6 - 1985



OIL & GAS DIVISION  
DEPT. OF MINES

State of West Virginia  
Department of Mines  
Oil and Gas Division

Date 5/31/85  
Operator's  
Well No. #1  
Farm James Doan  
API No. 47 - 095 - 0864

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

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

LOCATION: Elevation: 946' Watershed Middle Island Creek  
District: Ellsworth County Tyler Quadrangle Middlebourne 7 1/2'

COMPANY PETROLEUM DEVELOPMENT CORPORATION  
ADDRESS PO BOX 26, BRIDGEPORT, WV 26330  
DESIGNATED AGENT STEVEN R. WILLIAMS  
ADDRESS PO BOX 26, BRIDGEPORT, WV 26330  
SURFACE OWNER JAMES DOAN  
ADDRESS BOX 19-A, MIDDLEBOURNE, WV 26149  
MINERAL RIGHTS OWNER JAMES DOAN  
ADDRESS BOX 19-A, MIDDLEBOURNE, WV 26149  
OIL AND GAS INSPECTOR FOR THIS WORK ROBERT  
LOWTHER GENERAL DELIVERY ADDRESS MIDDLEBOURNE, WV 26149  
PERMIT ISSUED 10/01/80  
DRILLING COMMENCED 10/11/80  
DRILLING COMPLETED 10/16/80

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8			
8 5/8	252'	252'	100 sks.
7			
5 1/2			
4 1/2	3933'	3933'	450 sks.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION DEVONIAN SHALE Depth 4500 feet  
Depth of completed well 4000 feet Rotary xx / Cable Tools  
Water strata depth: Fresh n/a feet; Salt n/a feet  
Coal seam depths: n/a Is coal being mined in the area? no

OPEN FLOW DATA  
Producing formation WARREN, BEREA Pay zone depth 2861-3430 feet  
Gas: Initial open flow not taken Mcf/d Oil: Initial open flow \_\_\_ Bbl/d  
Final open flow 27 Mcf/d Final open flow \_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_ hours  
Static rock pressure n/a psig (surface measurement) after 72 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

(Continue on reverse side)

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.  
PERFORMED A 75 QUALITY FOAM FRAC ON WARREN AND BEREA FORMATIONS

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas	
KB to GL			0	10	drillers book not available	
sand, shale, redrock			10	1750		
maxton			1750	1767		
sand, shale			1767	2258		
weir			2258	2301		
sand, shale			2301	2436		
berea			2436	2440		
sand, shale			2440	2861		
gordon			2861	2870		
sand, shale			2870	3383		
<u>warren</u>			3383	3430		
sand, shale			3430	4000		TD driller

2870  
221  
3101

2870  
221  
3101  
599 - exp. 1/85

(Attach separate sheets as necessary)

PETROLEUM DEVELOPMENT CORPORATION

Well Operator

By:

Date:

*R. W. Williams*

6/3/85

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 coal, encountered in the drilling of a well."



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

RECEIVED

OCT - 1 1980

OIL AND GAS WELL PERMIT APPLICATION  
OIL & GAS DIVISION  
DEPT. OF MINES

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

DATE September 25, 1980  
Company L&M Petroleum Co.  
Address Rt. #1, Marietta, OH 45750  
Farm James Doan Acres 455.5  
Location (waters) Middle Island Creek  
Well No. 1 Elevation 946'  
District Ellsworth County Tyler  
Quadrangle Middlebourne

Surface Owner James Doan  
Address Box 19-A, Middlebourne, WV  
Mineral Owner Same  
Address \_\_\_\_\_  
Coal Owner Same  
Address \_\_\_\_\_  
Coal Operator None  
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 6-3-81.

[Signature]  
Deputy Director - Oil & Gas Division

INSPECTOR TO BE NOTIFIED Phil Tracy  
ADDRESS Middlebourne, WV  
PHONE 758 4573

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, (or as the case may be) under grant or lease dated Dec. 19 1979 by James Doan made to Clarence Mutschelknaus and recorded on the \_\_\_\_\_ day of \_\_\_\_\_ 19\_\_\_\_ in Tyler County, Book 222 Page 564

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, WEST VIRGINIA 26505  
AC-304 - 292-6331

Address of Well Operator

Very truly yours, L&M Petroleum Co.  
(Sign Name) Joanne Cooper Asst. Sec.  
Well Operator  
Rt. #1, Box 18-B  
Street  
Marietta  
City or Town  
Ohio 45750  
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.

47-095-0864 PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

Signed by \_\_\_\_\_

BLANKET BOND

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

PROPOSED WORK ORDER TO  DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) \_\_\_\_\_ RESPONSIBLE AGENT: \_\_\_\_\_  
 NAME \_\_\_\_\_ NAME Richard Hudson  
 ADDRESS \_\_\_\_\_ ADDRESS Parkersburg, WV 26101  
 TELEPHONE \_\_\_\_\_ TELEPHONE 304-422-7208  
 ESTIMATED DEPTH OF COMPLETED WELL: 4500' ROTARY  CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Devonian Shale  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS \_\_\_\_\_ COMB.  STORAGE \_\_\_\_\_ DISPOSAL \_\_\_\_\_  
 RECYCLING \_\_\_\_\_ WATER FLOOD \_\_\_\_\_ OTHER \_\_\_\_\_

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LIFT IN WELL	CEMENT FILL UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10			
8 - 5/8			
8 - 5/8	250		125 sx
5 1/2			
4 1/2	TD	TD	400 sx
3			Perf. Top
2			Perf. Bottom
1 1/2			Perf. Top
			Perf. Bottom

PROXIMATE FRESH WATER DEPTHS \_\_\_\_\_ FEET \_\_\_\_\_ SALT WATER \_\_\_\_\_ FEET \_\_\_\_\_  
 PROXIMATE COAL DEPTHS \_\_\_\_\_  
 COAL BEING MINED IN THE AREA? No BY WHOM? \_\_\_\_\_

DRILL:  
 SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

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.

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 hereof.

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