



FILE NO. L+M  
 DRAWING NO. L.C. WA. 7  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION KNDB 1058'

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) Neal Hughes  
 R.P.E. \_\_\_\_\_ L.L.S. 632

PLACE SEAL HERE

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



DATE MARCH 13, 1980  
 OPERATOR'S WELL NO 7  
 API WELL NO. 47-073 0836-4  
 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 962' WATER SHED SUGAR CREEK  
 DISTRICT UNION COUNTY PLEASANTS  
 QUADRANGLE BENS RUN (7 1/2') ST. MARY 15'  
 SURFACE OWNER WESTVACO (478) ACREAGE 511.3 (BY PERD)  
 OIL & GAS ROYALTY OWNER L.C. WAGNER (1/2) W.J. ELLIOTT (1/2) LEASE ACREAGE 511.3  
 LEASE NO. \_\_\_\_\_  
 PROPOSED WORK: DRILL  CONVERT \_\_\_\_\_ 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 Dev. + Gordon ESTIMATED DEPTH 2800  
 OHIO L & M COMPANY, INC.  
 4150 BELDEN VILLAGE  
 CANTON, OHIO 44718-2553  
 SIGNATURE AGENT  
 DD | Peggy Coffman  
 Rt. 2, Box 40  
 St. Marys, Wva. 26170-0040  
 JUN 6 1997

State of West Virginia  
Division of Environmental Protection  
Section of Oil and Gas

Permitting  
Office of Oil & Gas  
Well Operator's Report of Well Work

Farm name: WESTVACO Operator Well No.: WAGNER #7

LOCATION: Elevation: 962.00 Quadrangle: BENS RUN

District: UNION County: PLEASANTS  
Latitude: 5400 Feet South of 39 Deg. 25Min. 0 Sec.  
Longitude 6400 Feet West of 81 Deg. 2 Min. 30 Sec.

Company: OHIO L & M COMPANY, INC.  
4150 BELDEN VILLAGE  
CANTON, OH 44718-0000

Agent: PEGGY COFFMAN

Inspector: SAM HERSMAN  
Permit Issued: 06/03/97  
Well work Commenced: 07/01/97  
Well work Completed: 08/05/97  
Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary  Cable \_\_\_\_\_ Rig \_\_\_\_\_  
Total Depth (feet) 2940 *original*  
Fresh water depths (ft) \_\_\_\_\_  
60 - 250  
Salt water depths (ft) 800'

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8 5/8		250'	CTS
4 1/2		2912.41	300 SX
1 1/2"		2512'	N/A

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): \_\_\_\_\_

OPEN FLOW DATA

Producing formation Beata - Thirty Foot Pay zone depth (ft) \_\_\_\_\_  
Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow \_\_\_\_\_ MCF/d Final open flow \_\_\_\_\_ Bbl/d  
Time of open flow between initial and final tests \_\_\_\_\_ Hours  
Static rock Pressure \_\_\_\_\_ psig (surface pressure) after \_\_\_\_\_ Hours

*Recompletion*

Second producing formation SQUAN Pay zone depth (ft) 2012-2036  
Gas: Initial open flow 5.0 MCF/d Oil: Initial open flow 2.0 Bbl/d  
Final open flow 5.0 MCF/d Final open flow 1.0 Bbl/d  
Time of open flow between initial and final tests 24 Hours  
Static rock Pressure 395 psig (surface pressure) after 24 Hours

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: OHIO L & M COMPANY, INC.  
By: Mark Miller  
Date: 8-11-97

1. Wide Mouth Alphas Frac Plug Set at 2300' C.L.

2. Squaw Sand perforated with 19 shots  
From ~~2010~~ 2010' - 2032'

3. Well Fractured with:

A. 500 Gallons Acid

B. Break Down Pressure - 2651#

C. Treating Rate - 12-18 BPM

Treating Pressure - 2931 - 2800 psi

D. Pumped 262 BBL. Crosslink Gel  
with 25,000 # 20/40 sand  
sand rate .5 #/gal start  
ramped to 4 #/gal END

4. Flow Back well on 3/8" choke - 18hrs - 60%  
swab and sand pump out Frac  
Ball - Coning zones  
Recovered

5. Frac Water Hauled by Campen Well Service  
to Davis/Huffman Disposal well  
Washington Co. Ohio \*

6. 5.0 mcfD GAS - 1.0 - 2.0 BOPD



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STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL & GAS DIVISION  
DEPT. OF MINES  
**Oil and Gas Division**

**WELL RECORD**

Quadrangle Bens Run  
Permit No. 47-073-0836

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

Company L&M Petroleum Co.  
Address Rt. 1, Marietta, OH 45750  
Farm Elliott/Wagner Acres 511.3  
Location (waters) Sugar Creek  
Well No. 7 Elev. 962'  
District Union County Pleasants  
The surface of tract is owned in fee by \_\_\_\_\_  
Westvaco  
Address Ruppert, WV  
Mineral rights are owned by L.C. Wagner &  
J. Elliott Address Rt. #2, St. Marys, WV  
Drilling Commenced 7/16/80  
Drilling Completed 7/23/80  
Initial open flow 150 M cu. ft. \_\_\_\_\_ bbls.  
Final production 80 M cu. ft. per day \_\_\_\_\_ bbls.  
Well open 10 hrs. before test \_\_\_\_\_ RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"			
9 5/8			
8 5/8			
7			
5 1/2			
4 1/2	2912.41	2912.41	300 sx
3			
2			
Liners Used			

Well treatment details:

Attach copy of cementing record.

Frac Well on 11/19/80 using 600 bbl water & 60M# sand at 1860 psig, 43BPM  
W/ 100MSCF Nitrogen

TD. 2940

Coal was encountered at \_\_\_\_\_ Feet \_\_\_\_\_ Inches  
Fresh water \_\_\_\_\_ Feet \_\_\_\_\_ Salt Water \_\_\_\_\_ Feet \_\_\_\_\_  
Producing Sand Berea Depth 2507 - 2510

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Coal			1018	1021		
Sand & Shale			1021	1695		
Maxon Sand			1695	1700		
Big Lime			1791	1845		
B. Injun Sand			1892	2000		
Squaw Sand			2000	2039		
Weir Sand			2283	2358		
Berea Sand			2507	2510		
Gordon Sand			2805	2815		

NOTE: No logs or Samples were taken above these depths.

(over)

\* Indicates Electric Log tops in the remarks section.



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

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MAR 21 1980

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION MINES

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

DATE March 18, 1980

Surface Owner Westvaco  
Address Ruppert, WV  
Mineral Owner L.C. Wagner & W.J. Elliott  
Address St. Marys, WV  
Coal Owner Same as above  
Address \_\_\_\_\_  
Coal Operator None  
Address \_\_\_\_\_

Company L&M Petroleum, Co.  
Address Rt. 1, Box 18-8, Marietta, OH  
Farm Elliott-Wagner Acres 511.3  
Location (waters) Sugar Creek  
Well No. 7 Elevation 962'  
District Union County Pleasants  
Quadrangle Bens Run

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 11-24-80.

INSPECTOR  
TO BE NOTIFIED Phillip Lee Tracy  
ADDRESS P.O. Box 173-Dodd Street  
Middlebourne, WV 26149  
PHONE 758-4573

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

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 11/2 & 11/12 1977 by L.C. Wagner & J. Elliott made to J.E. Olds and recorded on the 15 & 21 day of Nov. 1977 in Pleasants County, Book 148 Page 528, 529, & 556

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:

Very truly yours, L & M Petroleum, Co.  
(Sign Name) *Phillip C. Tracy*  
Well Operator

WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY  
P. O. BOX 879  
MORGANTOWN, WEST VIRGINIA 26505  
AC-304 - 292-6331

Address of Well Operator Route #1, Box 18-8, Newport Pike  
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.

BLANKET BOND  
"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."

47-073-0836 PERMIT NUMBER

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

**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 Perkersburg, WV  
 TELEPHONE \_\_\_\_\_ TELEPHONE 304-422-7208  
 ESTIMATED DEPTH OF COMPLETED WELL: 2800' ROTARY  CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Devonian Gordon  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS \_\_\_\_\_ 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			
9 - 5/8			
8 - 5/8	250'	250'	Surface
7			
5 1/2			
4 1/2	TD	TD	400
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS \_\_\_\_\_ FEET SALT WATER \_\_\_\_\_ FEET  
 APPROXIMATE COAL DEPTHS \_\_\_\_\_  
 IS COAL BEING MINED IN THE AREA? \_\_\_\_\_ 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

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

073836 W

Issued 06/03/97  
 Expires 06/03/99

- 1) Well Operator: Ohio L&M Company, Inc.
- 2) Operator's Well Number: L.C. Wagoner #7 3) Elevation: 902'
- 4) Well type: (a) Oil  / or Gas  / Permit No. 47-~~103~~<sup>013</sup>-807  
 (b) If Gas: Production  / Underground Storage  /  
 Deep  / Shallow  /
- 5) Proposed Target Formation(s): 371 Big Injun
- 6) Proposed Total Depth: 2940 feet \*Original T.D.
- 7) Approximate fresh water strata depths: 60- 250'
- 8) Approximate salt water depths: 800'
- 9) Approximate coal seam depths: 450'
- 10) Does land contain coal seams tributary to active mine? Yes  / No  /
- 11) Proposed Well Work: Plug Back With Wide Mouth Alpha Frac Plug - Perforate Big Injun And Frac With Slick Water And Sand.
- 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						
Fresh Water	8-5/8"	J55			250'	CIS
Coal						
Intermediate						
Production	4-1/2"	J55			2912.41	300SX
Tubing						
Liners						

PACKERS : Kind \_\_\_\_\_  
 Sizes \_\_\_\_\_  
 Depths set \_\_\_\_\_

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 Environmental Protection  
 JUN 02 1997  
 Permitting  
 Office of Oil & Gas

For Division of Oil and Gas Use Only

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

330

WV Division of Environmental Protection  
Office of Oil and Gas  
#10 McJunkin Rd.  
Nitro, WV 25143

073-836

073

L.C. Wagoner #7 Permit No. 47-103-0807 Rework  
Attn. Charlotte Milan

May 30, 1997

To Whom It May Concern:

Ohio L&M Co. Inc. is planning to refrac the above referenced well in the Big Injun formation by setting a wire line frac plug above the current completion zone in the Berea Sand at aprox. 2500' and then stimulating the Big Injun with a sand and slick water frac through perforations at aprox. 2000'.

A check in the amount of \$100.00 is enclosed as fee for the permit.

We do not plan to use a pit, but to flow back and swab fluids into frac tanks and then hauling to a disposal.

Ohio L&M will submit an amended completion report after the project is completed.

Sincerely,

Martin L. Miller  
V.P. of Operations  
Ohio L&M Co. Inc.

23742

33742  
E. Miller

19250  
12

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WV Division of Environmental Protection  
MAY 30 1997  
Office of Oil & Gas