

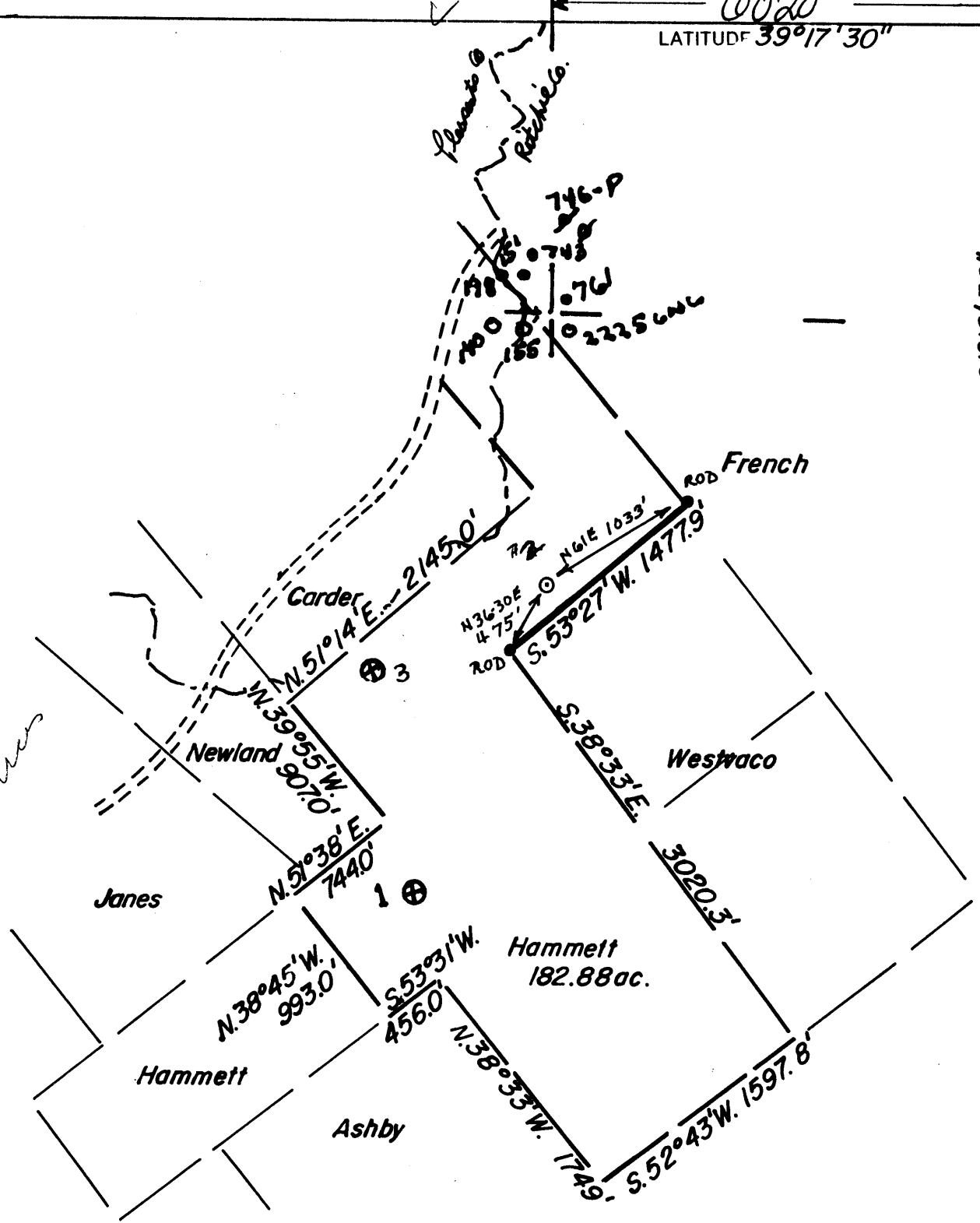
*Janice  
4/30/91*

0020'  
LATITUDE 39°17'30"

LONGITUDE 81°12'30"

NORTH

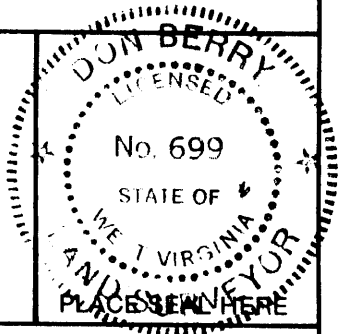
*Beverly Resmussen*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. 83-0240  
 DRAWING NO. L  
 SCALE 1"=1000'  
 MINIMUM DEGREE OF ACCURACY 1:200  
 PROVEN SOURCE OF ELEVATION USGS B.M.= 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) Don Berry  
 R.P.E. \_\_\_\_\_ L.L.S. 699



STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION



DATE June 8 19 83  
 OPERATOR'S WELL NO. Hammett #2  
 API WELL NO.

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

LOCATION: ELEVATION 1125' WATERSHED Quincy Fork  
 DISTRICT \_\_\_\_\_ COUNTY GRANT COUNTY RITCHIE

QUADRANGLE Schultz  
 SURFACE OWNER Hammett HERS ACREAGE 182.88  
 OIL & GAS ROYALTY OWNER Hammett LEASE ACREAGE 150

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 Summit Shale ESTIMATED DEPTH 5000'

WELL OPERATOR Horton Energy Services DESIGNATED AGENT John Simons  
 ADDRESS Box 5370 VIENNA, WV, 26105 ADDRESS Box 5056 VIENNA, WV, 26105

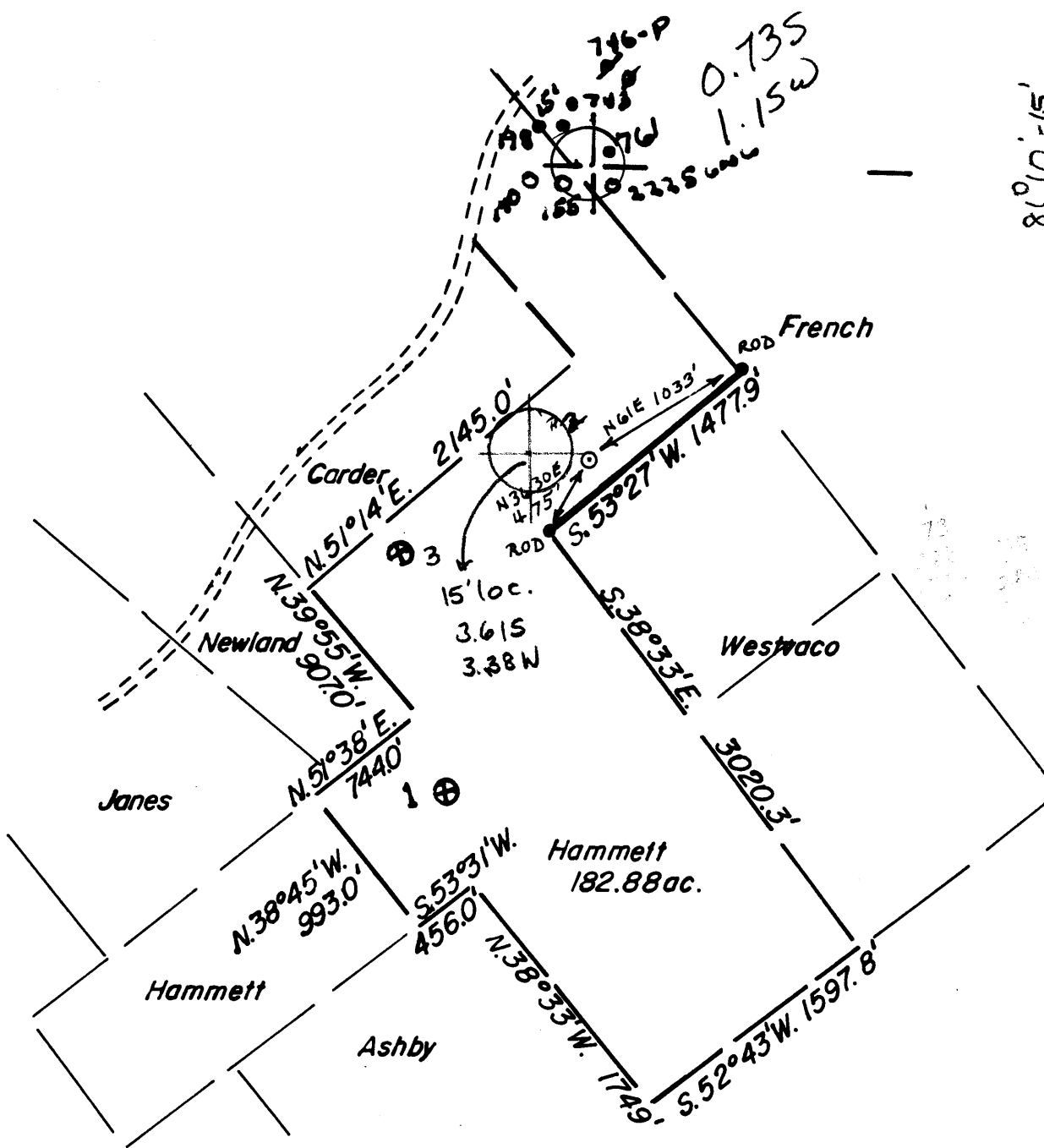
COUNTY NAME

PERMIT

*R.T. 6713*

MAY 6 1991

NORTH



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

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(SIGNED) Don Brury  
 R.P.E. \_\_\_\_\_ L.L.S. 699



STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION



DATE June 8, 19 83  
 OPERATOR'S WELL NO. Hammett #2  
 API WELL NO.

47-085-6713  
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION 1125' WATER SHED Brush Fork  
 DISTRICT \_\_\_\_\_ COUNTY GRANT COUNTY RITCHIE  
 QUADRANGLE Schultz St. Marys 15' SW

SURFACE OWNER Hammett HERS ACREAGE 182.88  
 OIL & GAS ROYALTY OWNER Hammett LEASE ACREAGE 150

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 main shales ESTIMATED DEPTH 5000'

WELL OPERATOR LM Petroleum Co. DESIGNATED AGENT Don Brury  
 ADDRESS P.O. Box 89, Lane Park, W.V. 26113 ADDRESS Miner Millersville, WV 26149

OCT 3 1983

10-5. Brush Fork-Buck Run (79)



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

Frac'd 12/14/83 two stage frac:

First stage: BD: 3750; ATP: 1800; RATE: 48 MCF/MI; ISI: 1400; 5 Min: 1370;  
Nitrogen: 1,269 MSCF, Perfs: 18 shots from 3879-4055

Second stage: BD: 2200; ATP: 1800; RATE: 32MSCF/Mi; ISI: 1260; 5 Min: 1220  
Nitrogen: 1,148 MSCF; Perfs: 3650-3845' 18 shots

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Clay			0	3	
Siltstone, shale, sandstone			3	485	
Dunkard			485	495	
Cow Run			870	882	
Maxon			1865 /	1869	
Squaw			2020	2026	
Wier			2318	2322	
Berea			2440	2446	
Cantz			2548	2554	
Thirty Foot			2690	2700	
Cordon			2822	2830	
Warren			3120	3128	
Elizabeth			3684	3688	
Speechly			3766	3772	
Ball Town			3838	3844	
Riley			4240	4248	
Shale			4248	4660'	T.D. Huron @ T.D.

4660  
2446  
2214

(Attach separate sheets as necessary)

OHIO L&M CO., INC.  
Well Operator  
By: Norma Anderson  
Date: 12/16/83  
Norma Anderson, Asst. Secretary

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."



1) Date: September 2, 19 83  
 2) Operator's Well No. Hammett #2  
 3) API Well No. 47 - 085 - 6713  
 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 XX / Gas XX /  
 B (If "Gas", Production X / Underground storage \_\_\_\_\_ / Deep \_\_\_\_\_ / Shallow \_\_\_\_\_)
- 5) LOCATION: Elevation: 1125 Watershed: Brushy Fork  
 District: Grant County: Ritchie Quadrangle: Schultz
- 6) WELL OPERATOR Ohio L&M Co., Inc. 7) DESIGNATED AGENT Don Berry  
 Address P.O. Box 89 Address Main Street  
Reno, OH 45773 614-373-8771 Middlebourne, WV 26149
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:  
 Name Samuel Hersman Name Not known  
 Address P.O. Box 66, Smithville, WV Address \_\_\_\_\_  
304-477-3597
- 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, Upper Devonian/Hampshire Formation  
 12) Estimated depth of completed well, 5000 feet  
 13) Approximate strata depths: Fresh, NA 370 feet; salt, NA feet.  
 14) Approximate coal seam depths: NA Is coal being mined in the area? Yes \_\_\_\_\_

**RECEIVED**  
 SEP 12 1983  
 OIL & GAS DIVISION  
 DEPT. OF MINE

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		
Conductor	11 3/4					150	Kinds <u>By Rule 15-05</u>
Fresh water							
Coal							Sizes
Intermediate	8 5/8			1900	1900	210	
Production	4.5			5000	5000	250	Depths set <u>OR AS REQ BY Rule 15-01</u>
Tubing							Perforations:
Liners							Top Bottom

OFFICE USE ONLY  
 DRILLING PERMIT

Permit number 47-085-6713 Date September 30, 19 83

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 September 30, 1985 unless well work is commenced prior to that date and prosecuted with due diligence.

<b>BLANKET BOND</b>	Bond:	Agent:	Plat:	Casing:	Fee
		<u>[Signature]</u>	<u>[Signature]</u>	<u>[Signature]</u>	<u>1455</u>

[Signature]  
 Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.