

LATITUDE 39° 15'

JOHN MAYHOORN

GUM - GONE

N 85-30' W 1650' GONE

SUZAN HANFORD

N 78' W 684.75'

80° 50'

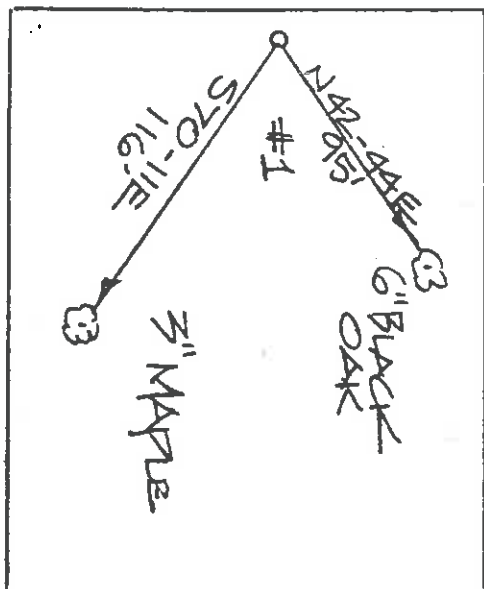
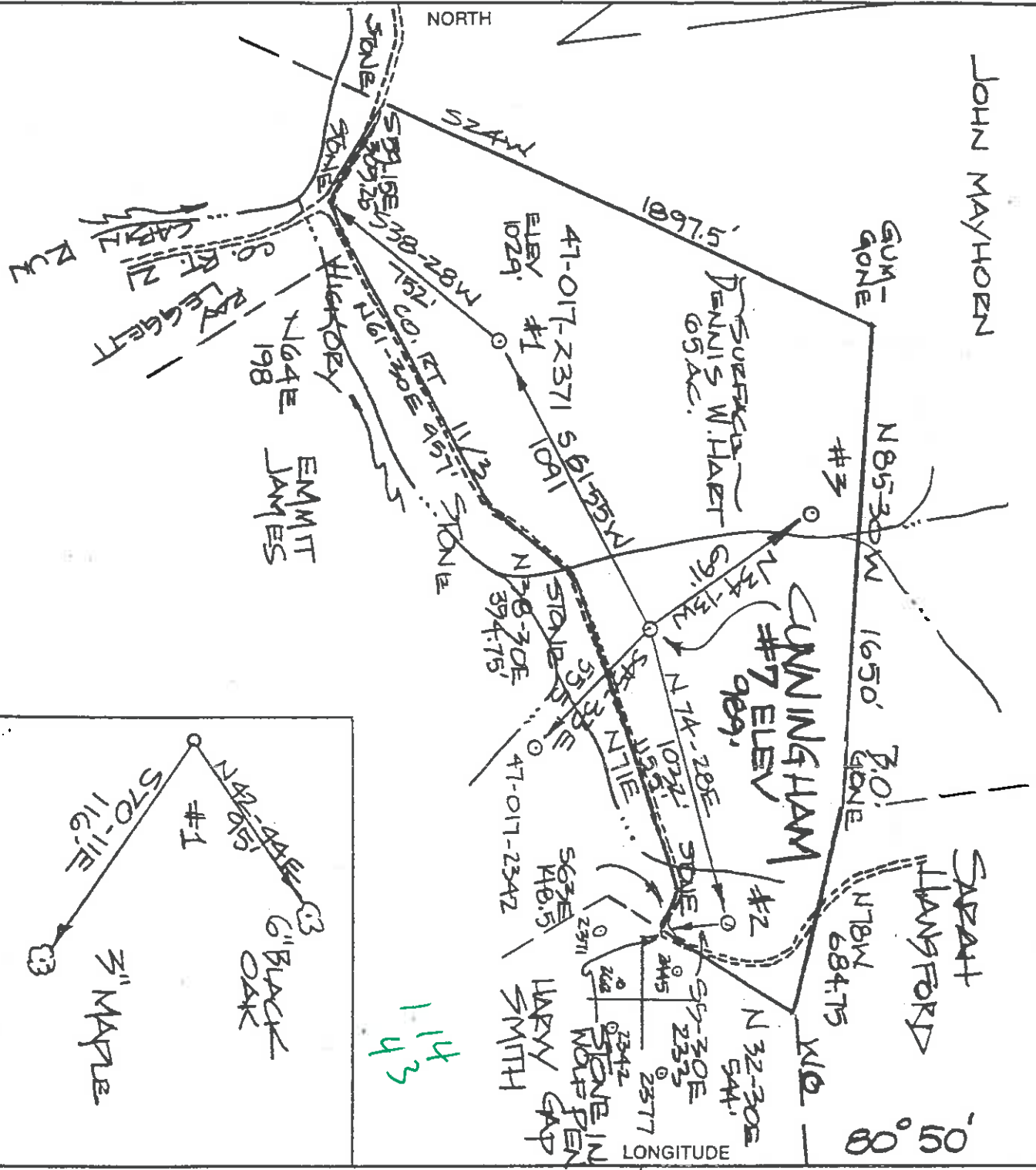
SURFACE DENNIS W. HART 0.5 AC.

CUNNINGHAM #7 ELEV 989'

N 32-30' E 541'

LONGITUDE

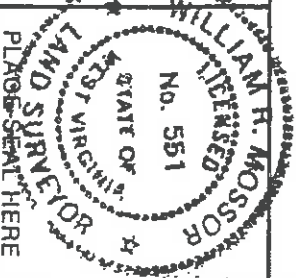
NORTH



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

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1:200  
 PROVEN SOURCE OF ELEVATION 47-017-2371 ELEV. 1029'

I THE UNDERSIGNED, HERBERT 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 BY THE DEPARTMENT OF ENERGY AND MINERAL RESOURCES (SIGNATURE) \_\_\_\_\_



R.P.E. \_\_\_\_\_ L.L.S. 551

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

DATE 3 JANUARY 2000  
 OPERATOR'S WELL NO. #7 Cunningham  
 API WELL NO. 47 017 04539



WELL TYPE: OIL  GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 LOCATION: ELEVATION 989' WATER SHED CABIN DEEP  SHALLOW   
 DISTRICT CENTRAL COUNTY POPPARD  
 QUADRANGLE OXFORD  
 SURFACE OWNER DENNIS W. HART  
 OIL & GAS ROYALTY OWNER RICHARD CUNNINGHAM LEASE ACREAGE 0.5 ACREAGE 0.5  
 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 \_\_\_\_\_ ESTIMATED DEPTH 2600'  
 TARGET FORMATION WELF  
 WELL OPERATOR OHIO L & M CO., INC DESIGNATED AGENT JEFF SAYGER  
 ADDRESS P.O. BOX 80 ADDRESS 16 FOX HILL TERRACE  
RENO, OHIO 45773 45773 PARKERSBURG, WV 26101

6-6 133

4539 PERMIT

0000 COUNTY NAME

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

Reviewed

Well Operator's Report of Well Work

Farm name: Cunningham Operator Well No.: #7  
LOCATION: Elevation: 989' Quadrangle: Cabin Run

District: Central County: Doddridge  
Latitude:      Feet South of      Deg.      Min.      Sec.  
Longitude:      Feet West of      Deg.      Min.      Sec.

Company: Ohio L&M Co., Inc.

Address: 4150 Belden Village Ave NW Suite 410 Canton, OH 44718	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Agent: Jeff Sayger	7"	365'	365'	65 sks.
Inspector: Mike Underwood	4-1/2"		2398'	70 sks.
Date Permit Issued: 2-8-00	1-1/2"		2350'	N/A
Date Well Work Commenced: 2-11-00				
Date Well Work Completed: 2-16-00				
Verbal Plugging:				
Date Permission granted on:				
Rotary X Cable Rig				
Total Depth (feet): 2425'				
Fresh Water Depth (ft.): None Found				
Salt Water Depth (ft.): Dusted To TD				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): None				

**RECEIVED**  
 Office of Oil & Gas  
 Permitting  
**AUG 21 2000**  
 WV Division of  
 Environmental Protection

OPEN FLOW DATA

Producing formation Weir Pay zone depth (ft) 2318-2256'  
 Gas: Initial open flow 75 MCF/d Oil: Initial open flow 5 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 650 psig (surface pressure) after 48 Hours

Second producing formation      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

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.

Signed: *Martin L. Miller*  
 By: Martin L. Miller

Date: August 16, 2000

0000 4539

AUG 25 2000



**COPY**

WELL: Ohio L & M Co., Inc.#7 Cunningham.

LOCATION: Central District, Doddridge County, West Virginia.

PERMIT NUMBER: Doddridge-4539.

ELEVATION: 989' Ground 992'KB.

STATUS: Preparing to complete as an oil and gas producer.

CASING: 7" @ 365'.

TOTAL DEPTH: 2425' Driller 2423' Logger.

CONTRACTOR: Century Drilling Co..

TOOLS: Rotary.

SPUD DATE: 2/11/00.

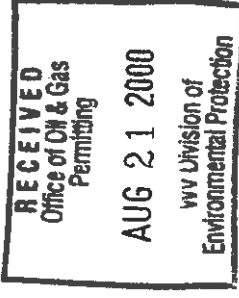
COMPLETED DRILLING: 2/16/00.

FORMATION AT TOTAL DEPTH: Mississippian shale.

ELECTRICAL SURVEYS: Gamma Ray-Compensated Density-Epithermal Neutron-Caliper-Temperature-Induction by Allegheny Wireline Services, Inc.

SHOWS: Good shows of gas were noted in the Big Lime and Weir. A small show of gas was recorded in the Injun. Good to very good hydrocarbon fluorescence were noted in the Big Lime, Squaw and Weir. A more detailed description of the above mentioned fluorescence can be found on the attached Formation Evaluation Log.

FORMATION TOPS:	1st Salt Sand	1292'	-	300
	2nd Salt Sand	1482'	-	490
	3rd Salt Sand	1643'	-	651
	Maxon sandstone	1888'	-	896
	Big Lime (Greenbrier)	1928'	-	936
	Injun sandstone	1993'	-	1001
	Squaw sandstone	2042'	-	1050
	Weir sandstone	2230'	-	1238



STRUCTURAL COMPARISON:

	Ohio L&M Co., Inc.	Ohio L&M Co., Inc.
	Cunningham #7	Cunningham #2
Big Lime	- 936	- 922
Weir sandstone	- 1238	- 1221

GEOLOGY:

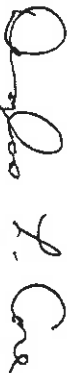
Sample analysis indicated very good to excellent sandstone development in the Injun, Squaw and Weir. Good to very good porosity development was also noted at the top of the Big Lime. Good shows of gas were encountered in both the Big Lime and Weir along with good to very good hydrocarbon fluorescence. Good hydrocarbon fluorescence was also noted in the Squaw.

The log analysis showed 4 potential zones in this well. The calculations are as follows:

Zone	Net thickness	Average porosity	Water saturation
Big Lime	8'	10%	15%
Injun sandstone	12'	12%	18%
Squaw sandstone	10'	9%	22%
Weir sandstone	107'	9%	24%

The Cunningham #7 should be a good to excellent producer of oil and gas from the Weir sandstone. Prior to abandonment, the Big Lime, Injun and Squaw should be tested.

Respectfully submitted,



NATIONAL MINERALS CORPORATION  
By: Douglas L. Core, President

**RECEIVED**  
Office of Oil & Gas  
Permitting  
AUG 21 2000  
...v Division of  
Environmental Protection

March 2, 2000.

AUG 25 2000