

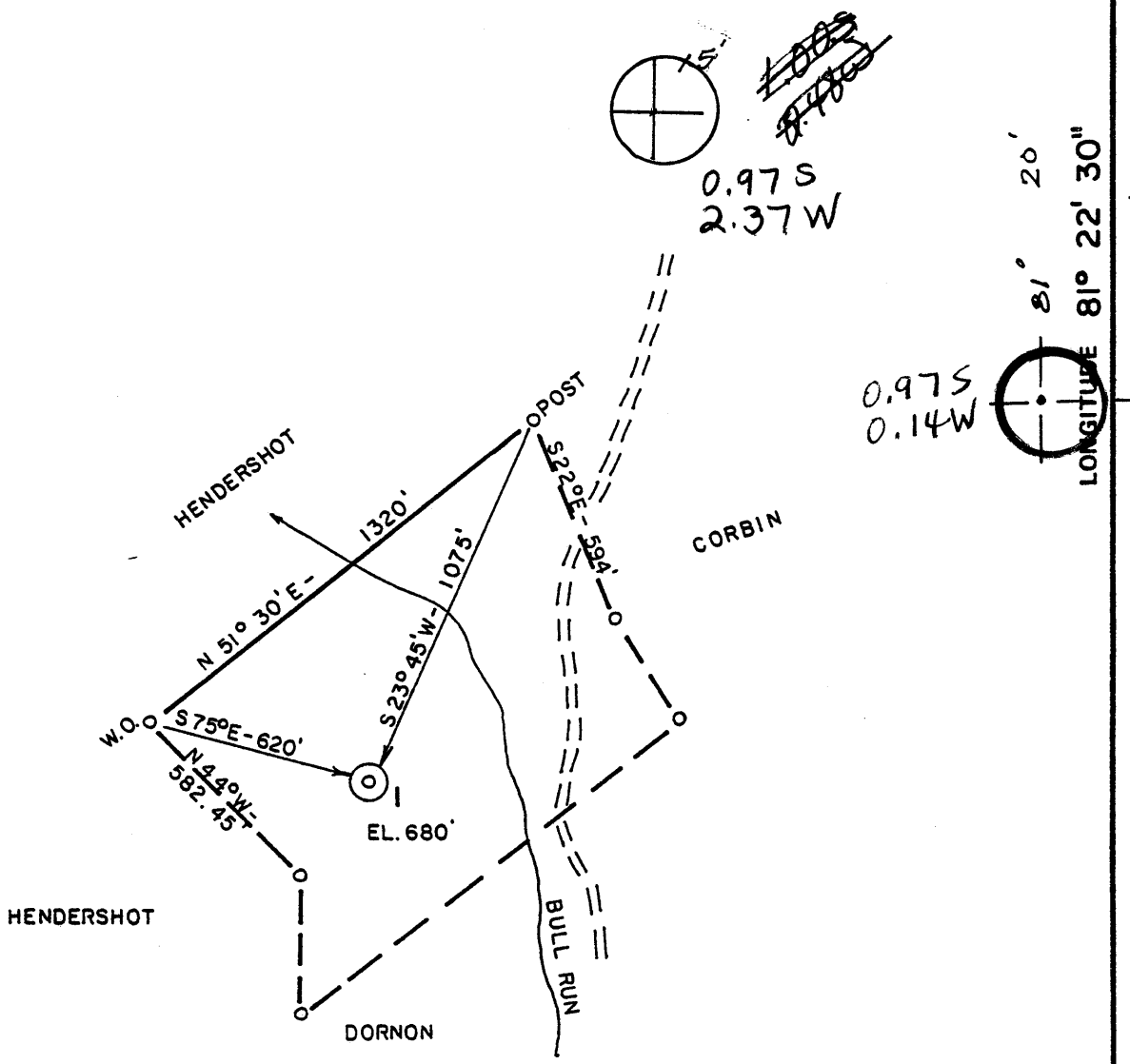
ch 5/26

Plot Card CSD

LATITUDE 39° 20' 00"

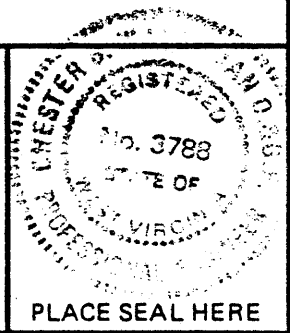
800' W

NORTH



FILE NO. 81-233  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1/200'  
 PROVEN SOURCE OF ELEVATION ROUTE 2 (620')

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) Chet Waterman  
 R.P.E. 3788 L.L.S. \_\_\_\_\_



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



DATE 5/12, 1981  
 OPERATOR'S WELL NO. \_\_\_\_\_  
 API WELL NO. \_\_\_\_\_  
47 - 107 - 1160  
 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 \_\_\_ SHALLOW \_\_\_  
 LOCATION: ELEVATION 680' WATER SHED BULL RUN  
 DISTRICT UNION COUNTY WOOD  
 QUADRANGLE VALLEY MILLS 7.5' Marietta Sc  
 SURFACE OWNER R. NEIGHBORS ACREAGE 25  
 OIL & GAS ROYALTY OWNER M. WELCH LEASE ACREAGE 25  
 LEASE NO. \_\_\_\_\_  
 PROPOSED WORK: DRILL X 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 GORDON ESTIMATED DEPTH 2800'  
 WELL OPERATOR ENERGY UNLIMITED DESIGNATED AGENT DOUG GALLOWAY  
 ADDRESS MARIETTA OHIO ADDRESS MARIETTA OHIO

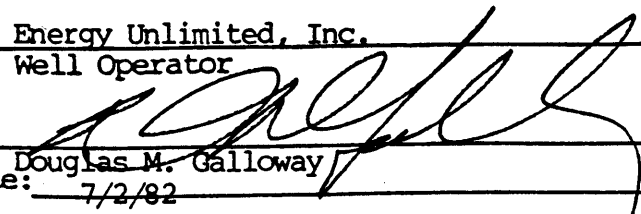


DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
soil		soft	0	10'	
shale		soft	10'	45'	
sand		hard	45'	76'	
shale		soft	76'	118'	
sand		hard	118'	139'	Freshwater
shale		soft	139'	240'	
sand		hard	240'	396'	
shale		soft	396'	523'	
sand		hard	523'	605'	
shale		soft	605'	928'	
sand		hard	928'	1015'	
shale		soft	1015'	1110'	
sand & shale		hard	1110'	1300'	
shale		soft	1300'	1370'	
Maxton		hard	1370'	1430'	saltwater
shale		soft	1430'	1470'	
Keener		hard	1470'	1520'	
shale		soft	1520'	1550'	
Big Injun		hard	1550'	1650'	saltwater
shale		soft	1650'	1662'	
Squaw		hard	1662'	1676'	
shale		soft	1676'	2026'	
Berea		hard	2026'	2034'	show of gas
shale		soft	2034'	2380'	show of gas
Gordon		soft	2380'	2412'	
shale		soft	2412'	T. D.	T. D. 2580'

(Attach separate sheets as necessary)

Energy Unlimited, Inc.  
Well Operator  
By:   
Date: Douglas M. Galloway  
7/2/82

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 soil, encountered in the drilling of a well."



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED

MAY 20 1981

Oil and Gas Division

OIL & GAS DIVISION  
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

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

Surface Owner Ralph Neighbors  
Address 158 Eldone Ave. Columbus, OH  
Mineral Owner Mary Welch, etal  
Address P. O. Box 4308 Parkersburg, WV 26101  
Coal Owner same  
Address \_\_\_\_\_  
Coal Operator none  
Address \_\_\_\_\_

DATE May 15, 1981  
Company Energy Unlimited, Inc.  
Address 427 Second St. Marietta, OH 45750  
Farm Neighbors \_\_\_\_\_ Acres 25  
Location (waters) Bull Run  
Well No. #1 Elevation 680  
District Union County Wood  
Quadrangle Valley Mills

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 1-27-82.

INSPECTOR  
TO BE NOTIFIED Paul Goodnight  
ADDRESS Smithville, WV  
PHONE 477-2455

Fred W. Russell  
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 April 20, 1981 by Mary M. Welch made to Energy Unlimited, Inc. and recorded on the 20th day of April 19 81 in Wood County, Book 753 Page 632  
XX 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.

Very truly yours, Energy Unlimited, Inc.  
(Sign Name) \_\_\_\_\_

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

Douglas M. Galloway  
427 Second St.  
Street  
Marietta  
City or Town  
Ohio  
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

47-107-1160

PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 9, Section 12-b and will carry out the specified requirements."

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

G. Sw.

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

PROPOSED WORK ORDER TO XX DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) \_\_\_\_\_ RESPONSIBLE AGENT: \_\_\_\_\_  
 NAME N/A \_\_\_\_\_ NAME David C. Clovis \_\_\_\_\_  
 ADDRESS \_\_\_\_\_ ADDRESS Union Trust Bldg., P'burg, WV 26101 \_\_\_\_\_  
 TELEPHONE \_\_\_\_\_ TELEPHONE 485-4403 \_\_\_\_\_  
 ESTIMATED DEPTH OF COMPLETED WELL: 2800' \_\_\_\_\_ ROTARY XX \_\_\_\_\_ CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Gordon \_\_\_\_\_  
 TYPE OF WELL: OIL X \_\_\_\_\_ GAS X \_\_\_\_\_ COMB. X \_\_\_\_\_ 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 X	250'	250'	to surface
7			
5 1/2			
4 1/2 X	TD	TD	280 or as required by Perf. Top rule 15.01
3			Perf. Bottom
2			Perf. Top
Liners			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 150 FEET \_\_\_\_\_ SALT WATER 1500 FEET \_\_\_\_\_  
 APPROXIMATE COAL DEPTHS NONE \_\_\_\_\_  
 IS COAL BEING MINED IN THE AREA? NO \_\_\_\_\_ 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