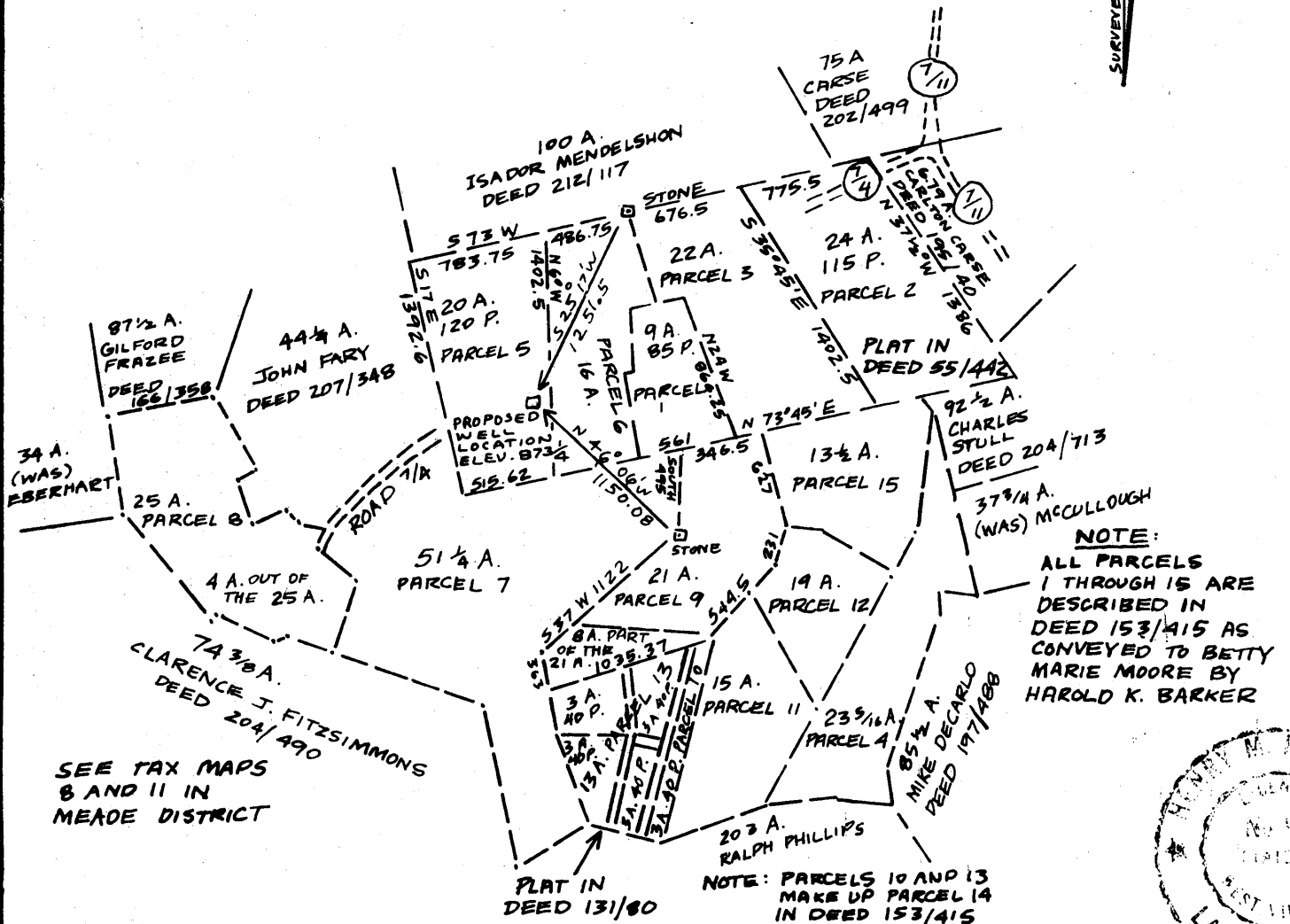
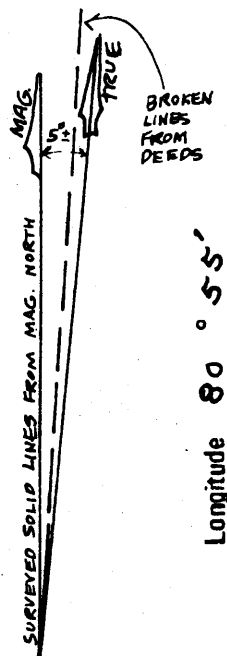
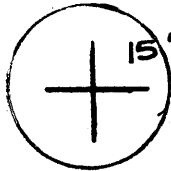


Latitude 39° 25'

Longitude 80° 55'

0.855  
1.88 W



New Location   
 Drill Deeper   
 Abandonment

Minimum Error of Closure METHODS USED SHOULD PRODUCE 1 IN 2500  
 Source of Elevation 818 AT WICK ROAD AND SOUTH FORK ROAD INTERSECTION  
 EAST OF THE VILLAGE OF WICK SHOWN ON THE MIDDLEBOURNE TOPO MAP  
 "1", the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all the information required by paragraph 6 of the rules and regulations of the oil and gas section of the mining laws of West Virginia.  
*Henry M. Parsons*

Company C.W. RIGGS, INC.  
 Address BOX 358, ST. MARYS, W.VA.  
 Farm BETTY MARIE MOORE (PAR 5<sup>th</sup>)  
 Tract \_\_\_\_\_ Acres 2.63 Lease No. \_\_\_\_\_  
 Well (Farm) No. MOORE #2 Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 873 1/4  
 Quadrangle MIDDLEBOURNE, WEST UNION 15'  
 County TYLER District MEADE  
 SURVEYOR HENRY M. PARSONS  
 SURVEYOR'S 98  
 Engineer's Registration No. 98  
 File No. 79-5358 Drawing No. 79-5358  
 Date MAY 21, 1979 Scale 1" = 1000'

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON  
**WELL LOCATION MAP**  
 FILE NO. **47-095-0693**

+ Denotes location of well on United States Topographic Maps, scale 1 to 62,500 latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.

JUN 14 1979

5-5 Shiloh-Wick (86)



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

**RECEIVED**  
FEB 22 1980

**Oil and Gas Division**  
**WELL RECORD** 80

OIL & GAS DIVISION  
**DEPT. OF MINES**  
Rotary  Oil \_\_\_\_\_  
Cable \_\_\_\_\_ Gas \_\_\_\_\_  
Recycling \_\_\_\_\_ Comb.   
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ (Kind)

Quadrangle Middlebourne  
Permit No. 47-045-0693

Company C.W. Riggs, Inc  
Address St. Marks, W. VA.  
Farm Betty Moore Acres 263  
Location (waters) Sugar Creek  
Well No. 2 Elev. 813.25'  
District Made County Tyler  
The surface of tract is owned in fee by Betty Moore  
Address Middlebourne, W. Va.  
Mineral rights are owned by Betty Moore  
Address SAME  
Drilling Commenced 8-12-79  
Drilling Completed 8-17-79  
Initial open flow \_\_\_\_\_ cu. ft. \_\_\_\_\_ bbls.  
Final production 45,000 cu. ft. per day \_\_\_\_\_ bbls.  
Well open \_\_\_\_\_ hrs. before test \_\_\_\_\_ RP.  
Well treatment details:

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13 (10)	250	250	
9 5/8			
8 5/8	896'	896'	
7			
5 1/2			
4 1/2			
3			
2			
Liners Used			

Attach copy of cementing record.  
Perforations 2710' - 2804' 45 MCF  
Fracture Treatment 1500 BBL H<sub>2</sub>O, 100,000 # SAND, 115,000 SCF N<sub>2</sub>

Coal was encountered at N/A Feet \_\_\_\_\_ Inches \_\_\_\_\_  
Fresh water N/A Feet \_\_\_\_\_ Salt Water N/A Feet \_\_\_\_\_  
Producing Sand GREEN, GREEN STRAY Depth 2626-2810

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
COW RUN			995'	1249'		* TOP LOG
1st Silt SAND			1357'	1409'		
2nd Silt SAND			1470'	1498'		
3rd Silt SAND			1549'	1580'		
MAXON			1658'	1685'		
Big Lime			1705'	1767'		
Keener			1768'	1791'		
INJES			1812'	1950'		
SQUAW			1952'	1961'		
Welch Stray			2129'	2153'		
BERCA			2204'	2214'		
50 FOOT			2409'	2459'		
30 FOOT			2471'	2498'		

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
GORDON STRAY			2676'	2712'	GAS	
GORDON			2759'	2810'	GAS	
4th SAND			2851'	2866'		
			2974-btm	4 1/2" CSG		
			drlr TD on log	2990		

Date Feb 13, 19 80  
APPROVED C.W. Riggs, Inc. Owner  
By John Schneider



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

JUN - 1 1979

OIL & GAS DIVISION  
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

DATE 5-30-79

Surface Owner Betty M. Moore  
Address Middlebourne, W. Va.  
Mineral Owner Betty M. Moore  
Address Middlebourne, W. Va.  
Coal Owner Betty M. Moore  
Address Middlebourne, W. Va.  
Coal Operator None  
Address \_\_\_\_\_

Company C. W. Riggs, Inc.  
Address Box 358, St. Marys, W. Va.  
Farm Moore Acres 263  
Location (waters) Sugar Creek  
Well No. 2 Elevation 873.25'  
District Meade County Tyler  
Quadrangle Middlebourne, W. Va.

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 2-4-80.

INSPECTOR  
TO BE NOTIFIED Philip Tracy  
ADDRESS Middlebourne, W. Va.  
PHONE 758-4573

Robert H. [Signature]  
Secretary - Oil & Gas Division

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 March 17 1979 by Barker  
and Moore made to Loren Bagley and recorded on the 29th day of March  
1979, in Tyler County, Book 218 Page 459

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

Very truly yours,

(Sign Name) C. W. Riggs  
Well Operator

Address Box 358  
of St. Marys  
Well Operator St. Marys  
W. Va.  
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

47-095-0693

PERMIT NUMBER

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

PROPOSED WORK ORDER TO  X  DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) \_\_\_\_\_ RESPONSIBLE AGENT: \_\_\_\_\_  
 NAME  Little Swiss Drilling  NAME  C. W. Riggs, Inc.   
 ADDRESS  Buchannon, W. Va.  ADDRESS  St. Marys, W. Va.   
 TELEPHONE  472-6396  TELEPHONE  684-3974   
 ESTIMATED DEPTH OF COMPLETED WELL:  3000'  ROTARY  X  CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION:  Upper Devonian   
 TYPE OF WELL: OIL \_\_\_\_\_ GAS \_\_\_\_\_ COMB.  XX  STORAGE \_\_\_\_\_ DISPOSAL \_\_\_\_\_  
 RECYCLING \_\_\_\_\_ WATER FLOOD \_\_\_\_\_ OTHER \_\_\_\_\_

**TENTATIVE CASING PROGRAM:**

CASING AND TUBING SIZE	USED FOR DRILLING	LIFT IN WELL	CEMENT LIFT UP OR SACKS (CUBIC FT)
20 - 16			
13 - 10			
9 - 5/8			
8 - 5/8 250'		250'	cement top-bottom
7			
5 1/2			
4 1/2		3000'	200 sks,
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS  98'  FEET \_\_\_\_\_ SALT WATER \_\_\_\_\_ FEET \_\_\_\_\_  
 APPROXIMATE COAL DEPTHS \_\_\_\_\_  
 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 Seal