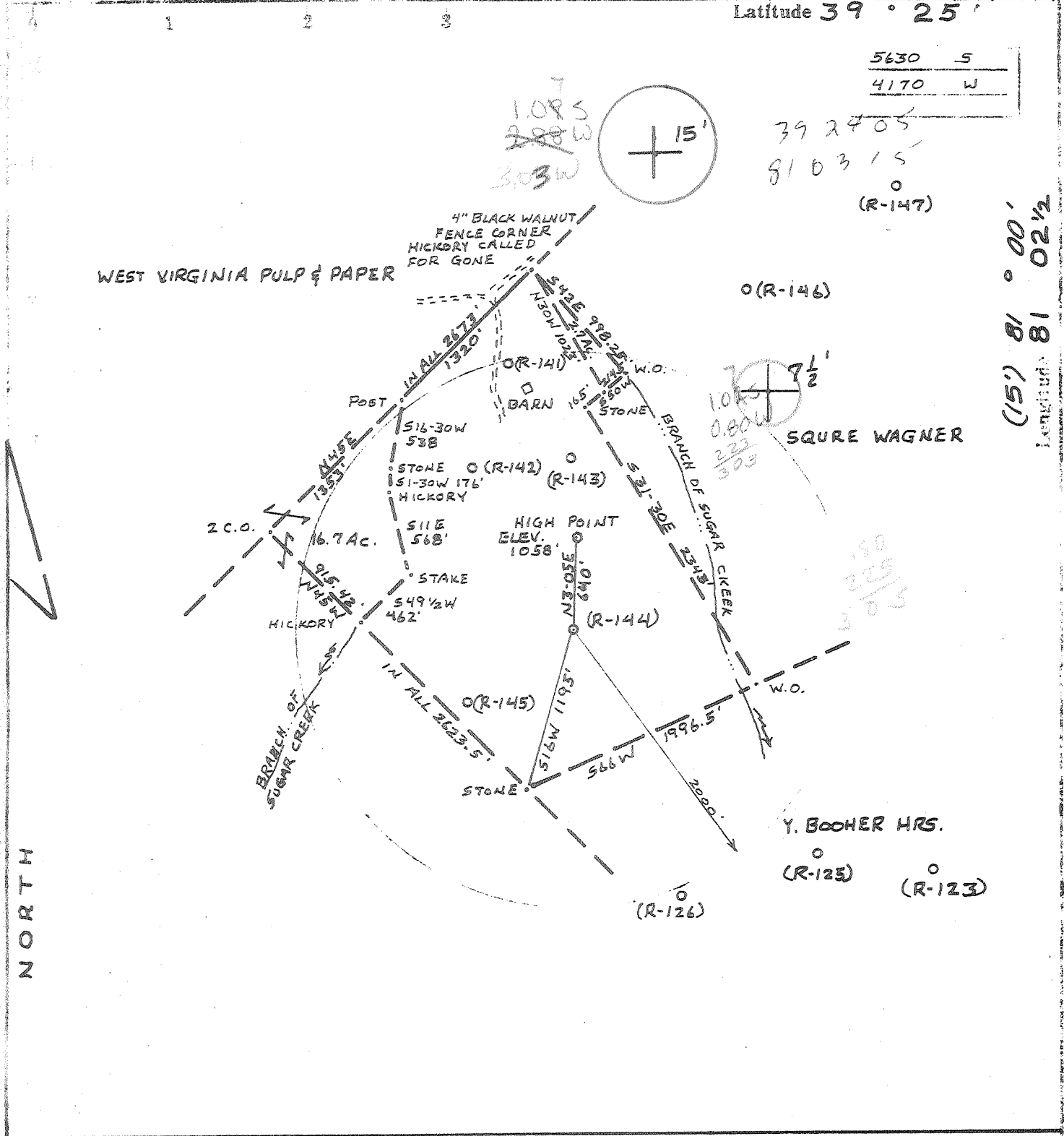


5630	S
4170	W

39 24 05  
81 03 15  
○  
(R-147)

(15) 81° 00'  
Longitude 81° 02 1/2'



WELL TYPE: OIL  GAS  LIQUID INJECTION \_\_\_\_\_ WASTE DISPOSAL \_\_\_\_\_  
 PRODUCTION  STORAGE \_\_\_\_\_ DEEP \_\_\_\_\_ SHALLOW   
 TARGET FORMATION UPPER DEVONIAN  
 ESTIMATED DEPTH 3120'

API WELL NO. 47-073-0777  
 STATE COUNTY PERMIT

Source of Elevation HIGH POINT ELEV. 1058'

I, 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.

Minimum accuracy, one part in 200

WELL OPERATOR C.W. RIGGS, INC.  
 ADDRESS BOX 358, ST. MARYS, W.VA. 26170  
 DESIGNATED AGENT C.W. RIGGS  
BOX 358, ST. MARYS, W.VA. 26170  
 SURFACE OWNER C.B. TIGHE  
 O.G. ROYALTY OWNER C.B. TIGHE

STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION  
 CHARLESTON

WELL LOCATION MAP  
 FILE NO. 47-073-0777

Acres 148 1/2 Lease No. \_\_\_\_\_  
 Permit No. R-144 Serial No. \_\_\_\_\_  
 (Water Level) 1022'  
 WATER SHEED SUGAR CREEK  
 Range BENS RUN, W.VA. 7 1/2 QUAD.  
ST. MARYS 15  
 District PLEASANTS District UNION  
 Surveyor WILLIAM R. MOSSOR, L.L.S.  
 Surveyor's Registration No. 551  
 Drawing No. \_\_\_\_\_  
6 JUNE 1979 Scale 1" = 1000'

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

-- Denotes one inch spaces on the dot line of original tracing.

JUN 26 1979



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

RECEIVED

FEB 22 1980

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

Quadrangle BENS RUN  
Permit No. 47-073-0777

Company C. W. Riggs, Inc.  
Address St. Marys, W. Va.  
Farm C.B. Tice Acres 148.5  
Location (waters) SUGAR CREEK  
Well No. R-144 Elev. 1022  
District Un. Co. County Pleasant  
The surface of tract is owned in fee by C.B. Tice  
Address St. Marys W. Va.  
Mineral rights are owned by C.B. Tice  
Address SAME  
Drilling Commenced 7-26-79  
Drilling Completed 7-31-79  
Initial open flow \_\_\_\_\_ cu. ft. \_\_\_\_\_ bbls.  
Final production 24,000 cu. ft. per day 15 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"	950	950	
9 5/8			
8 5/8	1050'	1050'	
7			
5 1/2			
4 1/2			
3			
2			
Liners Used			
		<u>8115</u>	4.56 SKS

Attach copy of cementing record.

PERFORATIONS 2853' - 2891' 20 SALT  
Fracture Treatment  
1500 bbl H<sub>2</sub>O, 100,000 FF SAND  
1580+24 MCF

Coal was encountered at N/A Feet \_\_\_\_\_ Inches \_\_\_\_\_  
Fresh water N/A Feet \_\_\_\_\_ Salt Water N/A Feet \_\_\_\_\_  
Producing Sand GREEN Depth 2835 - 2898

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
1st	SALT SAND		1449'	1508'		* TOP LOG
2nd	SALT SAND		1522'	1575'		
3rd	SALT SAND		1547'	1633'		
	MARON		1668'	1714'		
	Big Lime		1800'	1911'		
	Acree		1953'	1981'		
	INJUN		1994'	2091'		
	SQUAW		2092'	2101'		
	Welch STRAY		2338'	2351'		
	Berea		2394'	2402'		
	50 FOOT		2564'	2610'		
	30 FOOT		2678'	2710		
						3014 800 2119

(over)

Indicates Electric Log tops in the remarks section.

MAR 10 1980

Formation	Color	Hard or Soft	Top Feet <small>GS</small>	Bottom Feet	Oil, Gas or Water	Remarks
GORDON STRAY			2697'	2720'		
GORDON			2835	2893'	OIL & GAS	
SH SAND			2904	2912'		
SH SAND			3006	3019'		

Date Feb 8 1980

APPROVED C. W. Riggs, Inc Owner

By John Schmidt



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

OIL & GAS DIVISION  
DEPT. OF MINES

JUN 13 1979

Oil and Gas Division  
OIL AND GAS WELL PERMIT APPLICATION

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

Surface Owner C.B. Tice  
Address Rt 39, St. Marys, W. Va.  
Mineral Owner C.B. Tice  
Address Rt. 39, St. Marys, W. Va.  
Coal Owner C.B. Tice  
Address Rt. 39, St. Marys, W. Va.  
Coal Operator None

DATE 6-11-79  
Company C.W. Riggs, Inc.  
Address Box 358 St. Marys, W. Va.  
Farm C.B. Tice Acres 148.5  
Location (waters) Sugar Creek  
Well No. B-144 Elevation 1022'  
District Union County Pleas.  
Quadrangle Bens Run, W. Va.

PERMIT MUST BE POSTED AT THE WELL SITE

provisions being in accordance with Chapter 22,  
the W. Va. Code, the location is hereby approved  
drilling. This permit shall expire if  
operations have not commenced by 2-14-80

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

*John T. ...*  
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  
there to, (or as the case may be) under grant or lease dated March 15 1979 by C.B. Tice  
made to Frank Pethel and recorded on the 15th day of March  
79 in Pleas. County, Book 151 Page 382  
 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  
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  
coal owners at their above shown respective address \_\_\_\_\_ day \_\_\_\_\_ before, or on the  
\_\_\_\_\_ day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL  
PHYSICAL LOGS DIRECTLY TO:

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

Very truly yours,

(Sign Name) C.W. Riggs  
Well Operator

Address  
of  
Well Operator

BOX 358 Street  
St. Marys City or Town  
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  
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

47-073-0777

PERMIT NUMBER

**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 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: 3120' \_\_\_\_\_ ROTARY  CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Upper Devonian \_\_\_\_\_  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS \_\_\_\_\_ COMB.  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 - 1 1/2			
13 - 10			
9 - 5/8			
8 - 5/8 250'		250'	Cement Top-Bottom
7			
5 1/2			
4 1/2		3120'	200 sks.
3			Perf. Top
2			Perf. Bottom
LINERS			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 120 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 hereof.

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