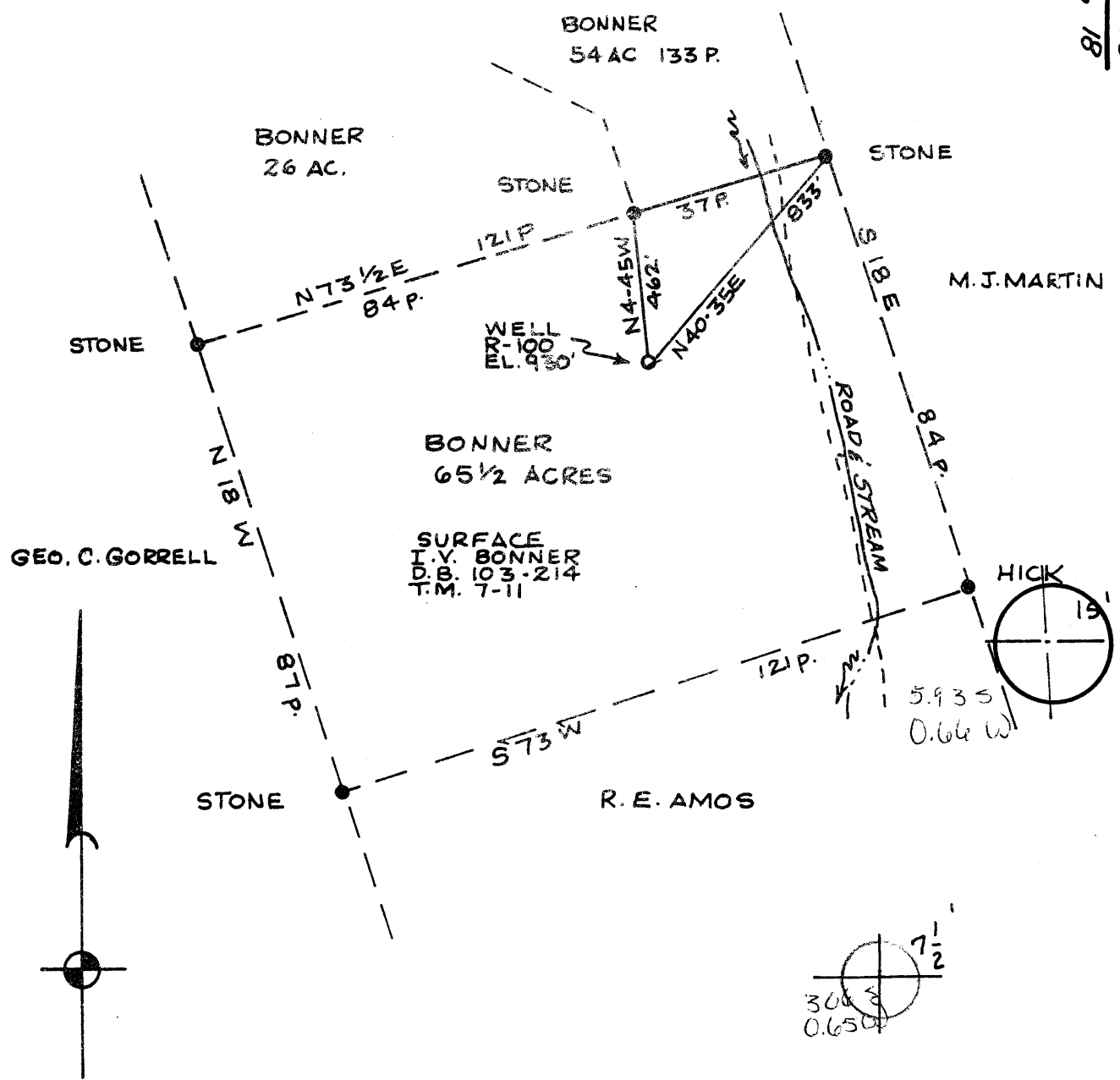


Latitude 39° 27 1/2  
 (15') 39° 30'  
16140 S  
3410 W

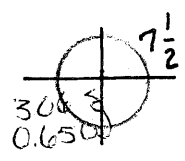
39 24 50  
81 00 45

00 18  
81 00



SURFACE  
 T.V. BONNER  
 D.B. 103-214  
 T.M. 7-11

GEO. C. GORRELL



Feature  Drill  New Location  Drill Deeper  Abandonment  *William R. Mossor*

Source of Elevation ROAD ELEV. EL. 732'

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'

Company C.W. RIGGS Inc  
 Address BOX 358, ST. MARYS, W.VA. 26170  
 Farm 10 BONNER  
 Tract Acres 65 1/2 Lease No. \_\_\_\_\_  
 Well (Farm) No. R-100 Serial No. NE  
 Elevation (Spirit Level) 930' ST MARYS 15'  
 Quadrangle BENS RUN, W.VA. 7 1/2 QUAD.  
 County TYLER District MEADE  
 Surveyor of WILLIAM R. MOSSOR, L.L.S.  
 State's Registration No. 551  
 Date 8 SEPT. 1978 Drawn by \_\_\_\_\_  
 Scale 1" = 30P.

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

WELL LOCATION MAP  
 FILE NO. TYL-670

⊕ 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 map of original tracing.

47-095 NOV 1 1978

*b-b Shiloh-Wick (86)*



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

RECEIVED

FEB 22 1980

Oil and Gas Division  
WELL RECORD 74

OIL & GAS DIVISION  
DEPT. OF MINES

Quadrangle BENS RUN  
Permit No. TYL-67047-095a

Rotary X Oil \_\_\_\_\_  
Cable \_\_\_\_\_ Gas \_\_\_\_\_  
Recycling \_\_\_\_\_ Comb. X  
Water Flood \_\_\_\_\_ Storage \_\_\_\_\_  
Disposal \_\_\_\_\_ (Kind) \_\_\_\_\_

Company C.W. Riggs, Inc.  
Address Box 358, St. Marys, W.Va.  
Farm BONNER Acres 65.5  
Location (waters) SUGAR CREEK  
Well No. R-100 Elev. 930'  
District MEADE County TYLER  
The surface of tract is owned in fee by E. E. BONNER  
Address MEADEVILLE, W.VA.  
Mineral rights are owned by SAME  
Address SAME  
Drilling Commenced 2-10-79  
Drilling Completed 2-16-79  
Initial open flow N/A cu. ft. N/A bbls.  
Final production 20,000 cu. ft. per day 2 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. 130' MIN.	250'	250'	
9 5/8			
8 5/8			
7			
5 1/2			
4 1/2		2898'	280 sks.
3			
2			
Liners Used			

Attach copy of cementing record. 280+20MCF

PERFORATIONS 2793-2802 - 15 SHOTS

H<sub>2</sub>O/SAND/N<sub>2</sub> TREATMENT

1500 BBL H<sub>2</sub>O, 100,000\* 20-40 SAND, 105,000 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 GORDON Depth 2793'-2802'

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
SALT SAND #1			1328'	1338'		* Top Log
SALT SAND #2			1452'	1470'		
SALT SAND #3			1521'	1529'		
MAXON			1557'	1575'		
BIG LIME			1630'	1651'		
KENNER			1762'	1776'		
INJUN			1861'	1949'		
SQUAW			2011'	2026'		
WELCH STRAY			2286'	2324'		
BEREA			2374'	2378'		
FIFTY FOOT			2498'	2568'		
THIRTY FOOT			2614'	2652'		

(over)

\* Indicates Electric Log tops in the remarks section.

MAR 10 1980

Formation	Color	Hard or Soft	Top Feet <sup>74</sup>	Bottom Feet	Oil, Gas or Water	Remarks
GORDON STRAY			2709'	2726'		
GORDON			2790'	2806'	→ OIL & GAS	
FOURTH SAND			2860'	2870'		
				btm 4 1/2" csg 2898		
				d-r-T-D on log - 2926		

Date 1-23 1980  
APPROVED C.W. Riggs, INC. Owner  
By *[Signature]*



RECEIVED

OCT 20 1978

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES

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 10-19-78  
Company C W Riggs INC  
Address Box 358, ST MARYS, WVA  
Farm BUNNER Acres 65.5  
Location (waters) SUGAR CREEK  
Well No. R-100 Elevation 930'  
District MEADE County TYLER  
Quadrangle BENS RUN

Surface Owner I V BONNER  
Address MEADEVILLE, WVA  
Mineral Owner I V BONNER  
Address MEADEVILLE, WVA  
Coal Owner I V BONNER  
Address MEADEVILLE, WVA  
Coal Operator NONE  
Address \_\_\_\_\_

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 2-20-79.

INSPECTOR TO BE NOTIFIED PHILLIP TRACY  
ADDRESS MIDDLEBOURNE, WVA  
PHONE 758-4573

Richard Green  
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 \_\_\_\_\_ 19\_\_\_\_ by IV

made to Supp and recorded on the \_\_\_\_\_ day of \_\_\_\_\_  
1978 in Tyler County, Book 216 Page 317

1 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

Address of Well Operator

Very truly yours  
(Sign Name) C W Riggs Well Operator  
Box 358 Street  
ST MARYS, WVA City or Town  
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

TYL-670 PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

47-095

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

**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 GLEN L HAUGHT & SONS NAME C. W. RIGGS, INC  
 ADDRESS SANITARIUM, WVA ADDRESS Box 358, ST. MARYS, WVA  
 TELEPHONE 477-3333 TELEPHONE 684-3974  
 ESTIMATED DEPTH OF COMPLETED WELL: 2980' ROTARY  CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Carbon  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS \_\_\_\_\_ COMB.  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 <u>250'</u>		<u>250'</u>	<u>LEAST TOP - BOTTOM</u>
7			
5 1/2			
4 1/2		<u>100'</u>	<u>200 SACKS</u>
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 175 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 Title