



- 1-510°15'E 165' stone
- 2-561°30'E 137' Hickory
- 3-N74°E 123.5' Black Oak
- 4-589°E 214.5' Rock
- 5-537°15'E 82.5' "
- 6-552°15'N 429' "
- 7-531°E 334.1' stone
- 8-515°E 231.6' Black Oak
- 9-S4°45'W 455' stone
- 10-529°E 300' stone
- 11-S11°45'E 302' White Oak
- 12-583°30'E 140' stake
- 13-N84°30'E 429' sugar
- 14-58°30'E 1592.2' stone
- 15-553°W 60' Locust
- 16-N66°W 303.5' Hickory
- 17-534°W 396' stone at gate
- 18-569°W 330' White Oak
- 19-556°15'N 470' stone
- 20-N69°W 148' stone
- 21-N59°W 140' "
- 22-N89°W 197' stone
- 23-N89°W
- 24-S39°W 345' Walnut

NOTE - Shown is a 325 ac tract from which 5 outconveyances have been deducted, leaving a leased area of 238.38 acres.

Minimum Error of Closure 1 in 200

Source of Elevation USGS B.M. (shown) = 767

- Fracture.....
- New Location.....
- Drill Deeper.....
- Abandonment.....

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.

Signed: [Signature]  
 Squares: N S E W

Company SECURITY GAS & OIL INC  
 Address 100 BUSH ST, SAN FRANCISCO, CA 94104  
 Farm Iva B. Horner  
 Tract \_\_\_\_\_ Acres 238.38 Lease No. \_\_\_\_\_  
 Well (Farm) No. One Serial No. \_\_\_\_\_  
 Elevation (Spirit Level) 827  
 Quadrangle Bens Run 7 1/2  
 County Pleasants District Union  
 Engineer [Signature]  
 Engineer's Registration No. 1227 LLS 200  
 File No. \_\_\_\_\_ Drawing No. \_\_\_\_\_  
 Date April 28, 1978 Scale 1" = 1000'

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

**WELL LOCATION MAP**  
 FILE NO. 47-073-0758

+ Denotes location of well on United States Topographic Maps, scale 1 to 24,000 to 62,500, latitude and longitude lines being represented by border lines as shown.

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

MAY 23 1979



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

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

Quadrangle Bens Run  
 Permit No. 47-073-0758

Company Security Gas & Oil Inc.  
 Address 41 1/2 Second Street St. Marys, W. Va.  
 Farm Iva B. Horner Acres 238  
 Location (waters) Big Run  
 Well No. #1 Elev. 827  
 District Union County Pleasants  
 The surface of tract is owned in fee by Norman Horner  
 Address Star Route, Bens Run, W. Va.  
 Mineral rights are owned by Norman & Iva B. Horner  
 Address Star Route, Bens Run, W. Va.  
 Drilling Commenced 5-21-79  
 Drilling Completed 5-26-79  
 Initial open flow 150,000 cu. ft. 200 bbls.  
 Final production 100,000 cu. ft. per day 12 bbls.  
 Well open 2 hrs. before test 1475 RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Cond. 13-10"			
9 5/8	937		Cement to Surface
8 5/8			
7			
5 1/2			
4 1/2	2971		366 Sacks
3			
2	2670		No Cement
Liners Used			

Well treatment details:  
500 Gal. MOD 202      52,000 Gal. Water  
90,000 20-40 Sand      500 lb. WG-12  
500 lb WAC-10      35 Gal. Clay Sta  
25 Gal Frac Flow  
100 mcf + 1280

Coal was encountered at 0 Feet 0 Inches  
 Fresh water 35 Feet 0 Salt Water \_\_\_\_\_ Feet  
 Producing Sand Gordon Depth 2682-2690

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Clay	Yellow	Soft	0	80		
Sandstone	Gray	Hard	80	100		
Clay	Red	Soft	100	140		
Shale	Gray	Soft	140	200		
Shale	Red	Soft	200	250		
Shale	Gray	Soft	250	290		
Shale	Red	Soft	290	390		
Shale	Gray	Soft	390	420		
Shale	Red	Soft	420	450		
Shale	Gray	Hard	450	480		
Shale	Red	Soft	480	490		
Shale	Gray	Hard	490	560		
Sand	White	Soft	590	580		
Shale	Gray	Soft	580	590		
Shale	Gray	Hard	590	640		

OVER

MAY 16 1983

(over)

758

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Lime	Gray	Hard	640	650		
Shale	Gray	Soft	650	760		
Shale	Red	Soft	760	790		
Shale	Gray	Soft	790	805		
Sand	Gray	Soft	805	815		
Shale	Red	Soft	815	995		
Shale	Gray	Soft	995	1155		
Sand	Gray	Hard	1155	1195		
Shale	Gray	Soft	1195	1325		
Sand	Gray	Hard	1326	1385		
Shale	Gray	Hard	1385	1415		
Shale	Gray	Soft	1415	1585		
Sand	Gray	Hard	1585	1615		
Shale	Gray	Soft	1615	1645		
Big Lime	Gray	Hard	1645	1745		
Sand ke	Gray	Soft	1745	1765		
Shale	Gray	Soft	1765	1800		
Sand 103	Gray	Hard	1800	1834		
Shale	Gray	Soft	1834	1846		
Sand 103	Gray	Hard	1846	1914		
Shale	Gray	Soft	1914	2000		
Sand & Shale	Gray	Soft	2000	2080		
Shale	Gray	Soft	2080	2140		
Sand & Shale	Gray	Hard	2140	2230		
Shale	Gray	Soft	2230	2380		
Sand & Shale	Gray	Hard	2380	2460		
Shale	Gray	Soft	2460	2480		
Sand & Shale	Gray	Soft	2598	2678		
Sand Gordon	Gray	Hard	2678	2692		
Shale	Gray	Soft	2692	2971		TD

1981 production 9233 mcf  
 @ 197.7800

Date January 21, 19 80

APPROVED Security Gas & Oil Inc. Owner

By Frank J. Pettit



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES

MAY - 9 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 April 9, 1979

Surface Owner Iva B. Horner  
Address Wilber W. Va. c/o Borman Pierson  
Mineral Owner Same  
Address \_\_\_\_\_  
Coal Owner Same  
Address \_\_\_\_\_  
Coal Operator None  
Address \_\_\_\_\_

Company Security Gas & Oil Inc.  
Address 100 Bush St. Suite 2301  
San Francisco, Ca 94104  
Farm Iva Horner Acres 238.38  
Location (waters) Big Run  
Well No. One Elevation 827  
District Union County Pleasants  
Quadrangle Bens Run

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 1-10-80.

INSPECTOR  
TO BE NOTIFIED Philip Tracy  
ADDRESS Middlebourne, W. Va.  
PHONE 1-304-758-4573

*[Signature]*  
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 18 1978 by Iva B. Horner made to Frank E. Pethtel and recorded on the 19th day of April 1978, in Pleasants County, Book 149 Page 495  
XXX 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,  
(Sign Name) Frank E. Pethtel

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

Well Operator  
Security Gas & Oil Inc.  
100 Bush St. Suite 2301  
Street  
San Francisco, Ca 94104  
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.

CASH DEPOSIT  
HELD BY TREASURER

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

PROPOSED WORK ORDER TO XXX DRILL \_\_\_\_\_ DEEPEN \_\_\_\_\_ FRACTURE-STIMULATE \_\_\_\_\_  
 DRILLING CONTRACTOR: (If Known) \_\_\_\_\_ RESPONSIBLE AGENT: \_\_\_\_\_  
 NAME \_\_\_\_\_ NAME Burl W. Smith  
 ADDRESS \_\_\_\_\_ ADDRESS Rt. 39, St. Marys, W.Va. 26170  
 TELEPHONE \_\_\_\_\_ TELEPHONE 1-304-684-7259  
 ESTIMATED DEPTH OF COMPLETED WELL: 3000' ROTARY XXX CABLE TOOLS \_\_\_\_\_  
 PROPOSED GEOLOGICAL FORMATION: Gordon Series  
 TYPE OF WELL: OIL \_\_\_\_\_ GAS \_\_\_\_\_ COMB. XXX 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	250'	250'	Fill-up
7			
5 1/2			
4 1/2	3000'	3000'	180 sacks
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 100 FEET \_\_\_\_\_ SALT WATER \_\_\_\_\_ 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