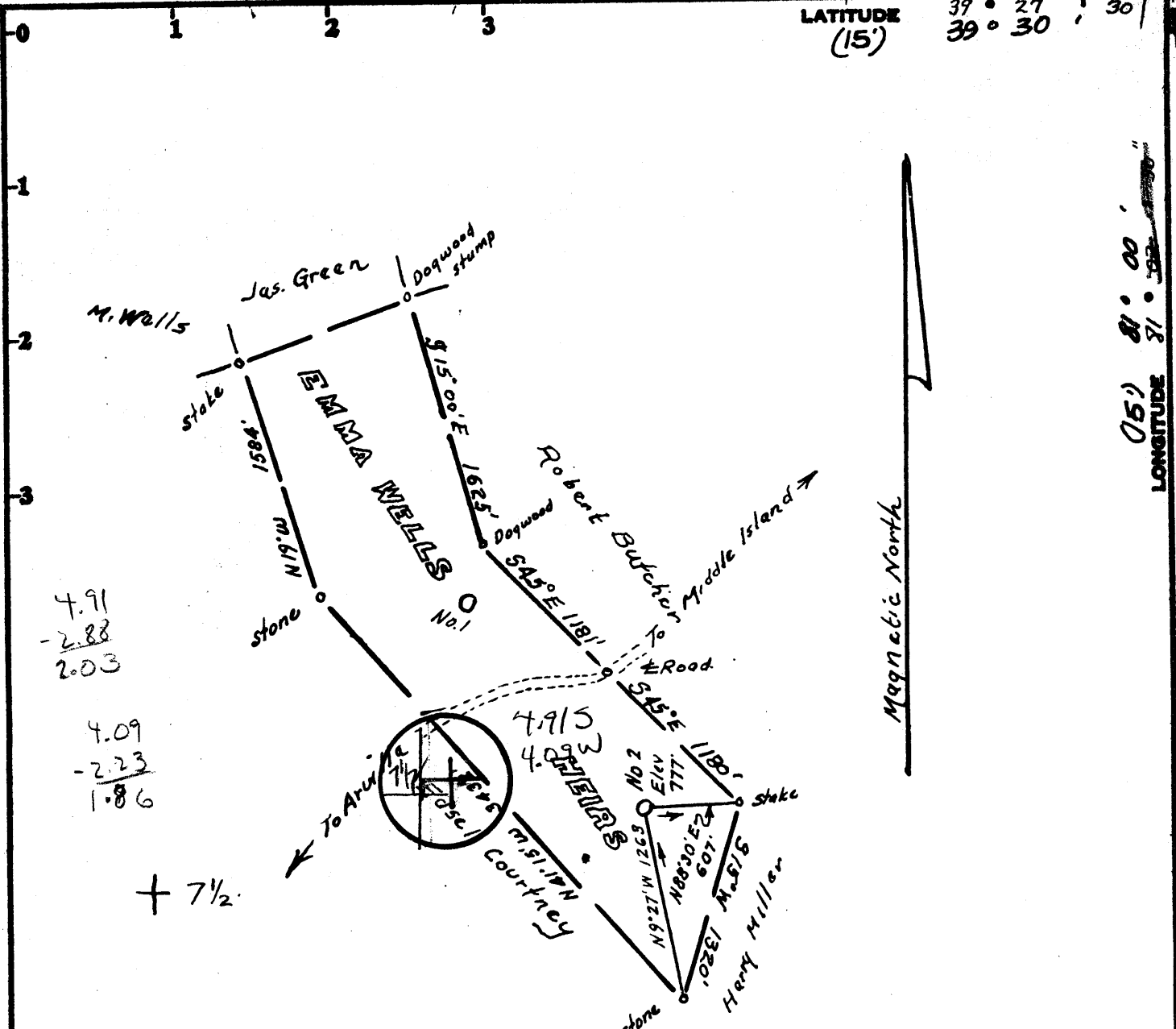


10/2/79 *RG*

LATITUDE (15') 39° 27' 30" / 39° 30' 30"



4.91
-2.88
2.03

4.09
-2.23
1.86

+ 7 1/2

LONGITUDE (15') 81° 00' 00" / 81° 18' 00"

LEGEND

- Lines plotted from deeds
- Surveyed Lines
- - - Roads
- Well Location

OWNERSHIP

Fee ownership is vested in Emma Wells Heirs
Rural Route, Bens Run, W.Va.

Minimum Error of Closure 1 in 200'

Source of Elevation Elev. Well No. 1 (Location) = 777

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.

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

Signed: *[Signature]*
Squares: N S E W

Map No.

Company Security Gas and Oil Inc.
 Address 47 1/2 2nd Street St. Marys W.Va. 26170
 Farm Emma Wells Hrs.
 Tract _____ Acres 95t Lease No. _____
 Well (Farm) No. Two Serial No. _____
 Elevation (Spirit Level) 777 NE
 Quadrangle Bens Run 7 1/2, St. Marys 15'
 County Pleasants District Union
 Engineer _____
 Engineer's Registration No. 1227
 File No. _____ Drawing No. _____
 Date Sept. 19, 1979 Scale 1" = 1000'

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

WELL LOCATION MAP
FILE NO. 47-073-0798

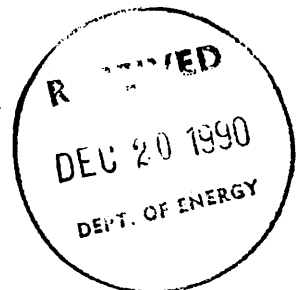
+ Denotes location of well on United States Topographic Maps, scale 1 to 25,000 latitude and longitude lines being represented by border lines as shown.

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

OCT 12 1979



WR-35



State of West Virginia

DEPARTMENT OF ENERGY
Oil and Gas Division

Date December 14, 1990
Operator's Well No. 2
Farm Emma Wells
API No. 47 - 073 - 0798

WELL OPERATOR'S REPORT OF DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil X/ Gas X/ Liquid Injection / Waste Disposal / (If "Gas," Production X/ Underground Storage / Deep / Shallow /)

LOCATION: Elevation: 777 Watershed Middle Island
District: Union County Pleasants Quadrangle Bens Run

COMPANY Halwell Company, Inc.
ADDRESS 423 Second Street
DESIGNATED AGENT Roy C. Martin, Esquire
ADDRESS 2020 Kanawha Blvd., E., Charleston WV 25311
SURFACE OWNER Emma Wells Heirs
ADDRESS Rt. 1 Box 48 Friendly, WV
MINERAL RIGHTS OWNER Ruth Mets (Agent)
ADDRESS Rt. 1 Box 48 Friendly, WVA
OIL AND GAS INSPECTOR FOR THIS WORK Sam Hershman
ADDRESS Rt. 1 Box 240 Harrisville, WVa 26362
PERMIT ISSUED Sept. 27, 1979
DRILLING COMMENCED 10/30/79
DRILLING COMPLETED 11/3/79
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON

Table with 4 columns: Casing & Tubing Size, Used in Drilling, Left in Well, Cement fill up Cu. ft. Rows include sizes 20-16, 13-10, 9 5/8, 8 5/8, 7, 5 1/2, 4 1/2, 3, 2, and Liners used.

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 3200 feet
Depth of completed well 3452 feet Rotary X / Cable Tools
Water strata depth: Fresh 36 feet; Salt) feet
Coal seam depths: 0 Is coal being mined in the area? NO

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 3200 feet
Gas: Initial open flow unknown Mcf/d Oil: Initial open flow unknown Bbl/d
Final open flow unknown Mcf/d Oil: Final open flow unknown Bbl/d
Time of open flow between initial and final tests hours
Static rock pressure unknown psig (surface measurement) after hours shut in
Second producing formation NA Pay zone depth feet
Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d
Final open flow Mcf/d Oil: Final open flow Bbl/d
Time of open flow between initial and final tests hours
Static rock pressure psig (surface measurement) after hours shut in

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

Perfs from 3200 to 3229

Slick water frac with Nitrogen Assist.

32,000 lb. sand.

Break 1850 psi

34,357 gal. water

ISIP 1500 psi

100,000 SCF nitrogen

495 gal. Acid

WELL LOG

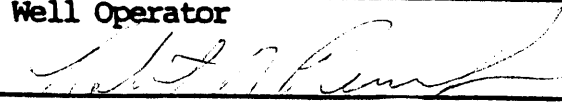
FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Sandy Shale	Gray		0	1360	
3rd Salt sand			1360	1405	
Shale	gray	hard	1405	1472	
Maxton	gray	hard	1472	1513	
Shale	gray	hard	1513	1592	
Keener	gray	hard	1592	1608	
Sand	gray	hard	1608	1761	
Squaw	gray	hard	1761	1780	
Shale	gray	hard	1780	2258	
Berea	gray	hard	2258	2261	
Shale	gray	hard	2261	2555	
Gordon	gray	hard	2555	2568	
Shale	gray	hard	2568	3452	

(Attach separate sheets as necessary)

Halwell Co. Inc.

Well Operator

By:



Date: Robert N. Pennock

December 14, 1990

Petroleum Engineer

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 ... encountered in the drilling of a well."

198/2

Date: Sept. 27, 1979

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. Emma Wells #2
API Well No. 47 - 073 - 0798
State County Permit

WELL TYPE: Oil xxx / Gas xxx /
(If "Gas", Production / Underground storage / Deep / Shallow /)

LOCATION: Elevation: 777 Watershed: Middle Island
District: Union County: Pleasants Quadrangle: Bens Run 7 1/2

WELL OPERATOR Security Gas & Oil Inc.
Address 417 1/2 Second Street
St. Marys, WV 26170

DESIGNATED AGENT Bur. W. Smith
Address Rt. 39, St. Marys, WV
26170

OIL & GAS ROYALTY OWNER Emma Wells Weirs c/o Gordon Weddell
Address Rt. 1, Box 108
Friendly, WV 26146

OPERATOR Lone
Address

ACREAGE 95+
SURFACE OWNER Same
Address
ACREAGE

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name Lone
Address
Name
Address

FIELD SALE (IF MADE) TO:
Name
Address

COAL LESSEE WITH DECLARATION ON RECORD:
Name
Address

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Phillip Tracey
Address Middlebourne, WV
1-304-752-4573

[Handwritten signature]
OCT 1 - 1979

OIL & GAS DIVISION
DEPT. OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease xxx / other contract / dated May 19, 1979, to the undersigned well operator from Emma Wells Weirs c/o Gordon Wells

[If said deed, lease, or other contract has been recorded:]

Recorded on May 22, 1979, in the office of the Clerk of the County Commission of Pleasants County, West Virginia, in Deed Book 152 at page 220 A permit is requested as follows:

PROPOSED WORK: Drill xxx / Drill deeper / Redrill / Fracture or stimulate /
Plug off old formation / Perforate new formation /
Other physical change in well (specify)

--planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code § 22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.

Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

Security Gas & Oil Inc.
Well Operator

By Frank E. Pettit
Its Field Supt.

BLANKET BOND

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION
1615 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 248-3002

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY. ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) _____ Address _____

GEOLOGICAL TARGET FORMATION, Gordon Series

Estimated depth of completed well, 3500 feet Rotary xy/ Cable tools /

Approximate water strata depths: Fresh, 250 feet; salt, feet.

Approximate coal seam depths: None Is coal being mined in the area? Yes / No

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling	Left in well		
Conductor	8 5/8		24 lb.	x		250'	250'	85 sacks	Kinds
Fresh water									
Coal									Sizes
Intermediate									
Production	4 1/2		10.5				3500'	400 sacks	Depths set
Tubing									
Liners									Perforations:
									Top Bottom

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

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 6-2-80.

[Signature]
Deputy Director - Oil & Gas Division

completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code § 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof:

W A I V E R

The undersigned coal operator / owner / lessee / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

ate: _____, 19 _____

By _____
Its _____