

Minimum Error of Closure 1' IN 200'
 Source of Elevation C.G.S.C. WELL 2074 = EL. 1179'

"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."

- RECONDITION
 New Location
 Drill Deeper
 Abandonment

75' loc Calc 15' loc
 2.145 39°10' 2.145 loc 4/19/2001
 1.18 W 80°25' 1.18 W
 M.S. 57, S23 W9 - FB. 1175, Pg. 6

Company CONSOLIDATED GAS SUPPLY CORP.
 Address CLARKSBURG WEST VIRGINIA
 Farm S. G. HALL
 Tract Acres 90 Lease No. 14031
 Well (Farm) No. Serial No. 3456
 Elevation (Spirit Level) 1211'
 Quadrangle WEST MILFORD 7.5 WESTON 15' WC
 County LEWIS District HACKERS CR.
 Engineer Harrell M Radcliffe
 Engineer's Registration No. 445-74
 File No. Drawing No.
 Date 5/15/80 Scale 1" = 500

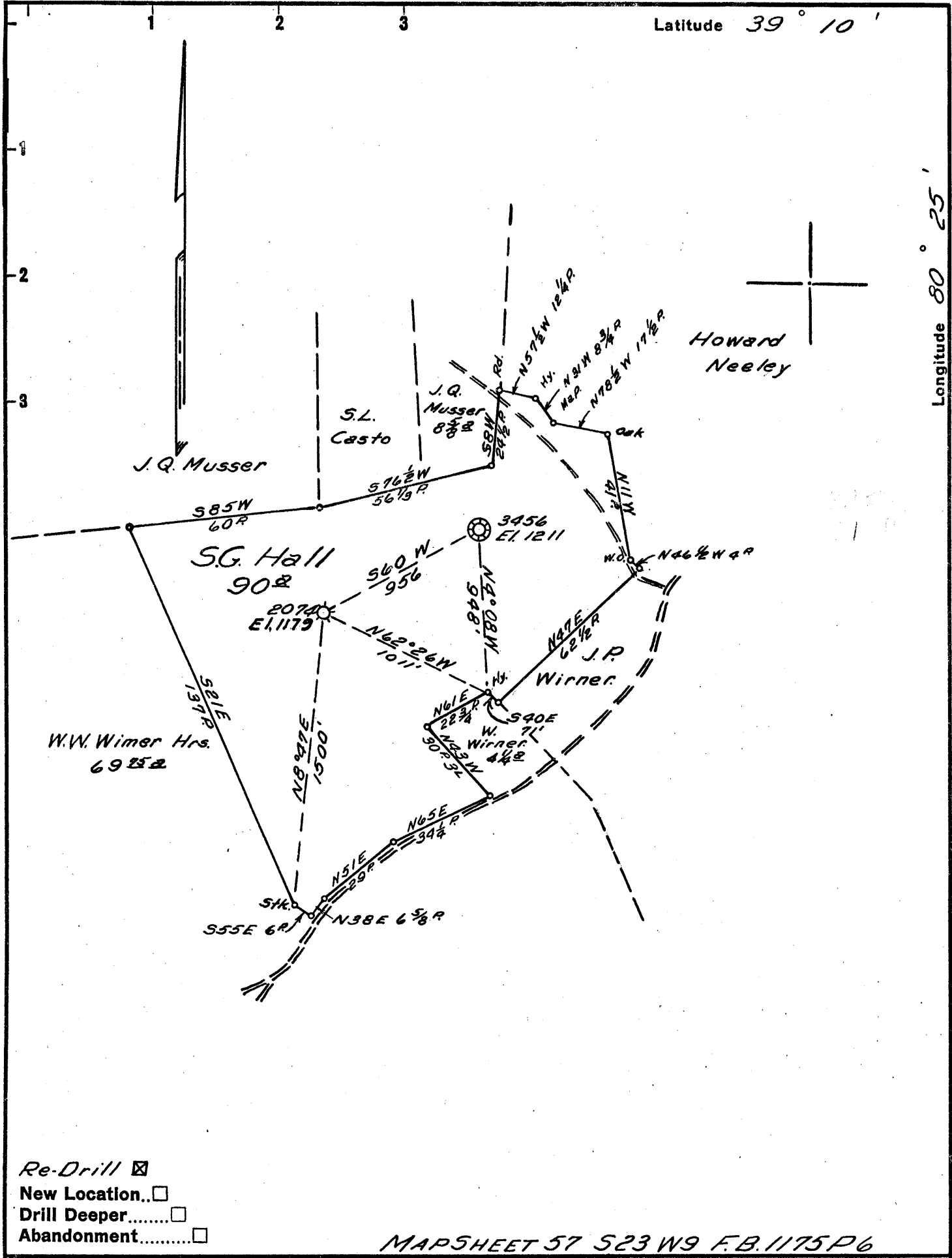
STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP
 FILE NO. 041-0323 REC

was 041 70223
 + Denotes location of well on United States Topographic Maps, scale 1 to 24,000, latitude and longitude lines being represented by border lines as shown.
 — Denotes one inch spaces on border line of original tracing. 1760' GANTZ

Latitude 39° 10'

Longitude 80° 25'



- Re-Drill
- New Location..
- Drill Deeper.....
- Abandonment.....

MAPSHEET 57 523 W9 F.B.1175 P6

Company HOPE NATURAL GAS CO.
 Address CLARKSBURG, W.VA.
 Farm S.G. HALL
 Tract _____ Acres 90 Lease No. 14031
 Well (Farm) No. _____ Serial No. 3456
 Elevation (Spirit Level) 1211
 Quadrangle WESTON WC
 County LEWIS District HACKERSCRK
 Engineer Lucy N. Bradley
 Engineer's Registration No. 2425
 File No. _____ Drawing No. _____
 Date 5/6/57 Scale 1"=40R

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

WELL LOCATION MAP
 FILE NO. LEW-323-REDRILL
#3456

+ 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.



IV-35
(Rev 8-81)

Date January 14, 1982
Operator's
Well No. 3456
Farm S. G. Hall
API No. 47 - 041 - 0323-Red

State of West Virginia
Department of Mines
Oil and Gas Division

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

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

LOCATION: Elevation: 1211' Watershed Rroad Run
District: Hackers Creek County Lewis Quadrangle West Milford

COMPANY Consolidated Gas Supply Corp.
ADDRESS 445 W. Main St., Clarksburg, WV
DESIGNATED AGENT Thomas A. Kuhn
ADDRESS 445 W. Main St., Clarksburg, WV
SURFACE OWNER Willard McWhorter
ADDRESS Rt. 2, Jane Lew, WV 26378
MINERAL RIGHTS OWNER Maude Barb
ADDRESS Rt. 2, Jane Lew, WV 26378
OIL AND GAS INSPECTOR FOR THIS WORK Robert
Bates ADDRESS 109 Minnich St.
Weston, WV 26452
PERMIT ISSUED May 19, 1980
Recondition
DRELLING-COMMENCED August 5, 1980
Recondition
DRELLING-COMPLETED September 19, 1980
IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8			
8 5/8		905	To surface
7			
5 1/2		1651	To surface
4 1/2			
3	RECEIVED JAN 10 1982 OIL AND GAS DIVISION WV DEPARTMENT OF MINES		
2			
Liners used			

GEOLOGICAL TARGET FORMATION Gantz Depth 1705 feet
Depth of completed well 1760 feet Rotary / Cable Tools X
Water strata depth: Fresh None feet; Salt feet
Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Gantz Pay zone depth 1709-1758 feet
Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d
Final open flow 124* Mcf/d Final open flow Bbl/d
Time of open flow between initial and final tests 4 hours
Static rock pressure 850 psig (surface measurement) after 1 hours shut in
(If applicable due to multiple completion--)
Second producing formation 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

FEB 01 1982

(Continue on reverse side)

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

Acidized-fractured with 1500 gals. HCA 15% acid and 40 bbls. of water.
Perforated from 1705-1758'.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Big Dunkard			340	383	
Gas Sand			437	665	
First Salt			675	760	
Second Salt			815	916	
Third Salt			960	1040	
Maxon			1215	1295	
Big Lime			1315	1385	
Injun			1385	1505	
Gantz			1705	1728	
Gantz			1742	- -	
Total Depth				1760	

(Attach separate sheets as necessary)

Consolidated Gas Supply Corp.

Well Operator

By: J. E. Dwyer Manager of Production

Date: January 11, 1982

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 coal, encountered in the drilling of a well."

Hackers Creek District; 1.1 miles northeast of Lightburn; authority, Hope Natural Gas Co.; completed, July 16, 1914; elevation, 1195' B.

Samuel G. Hall No. 3456 Well Record (106).

323
WV004(70223)

	Top.	Bottom.
	Feet.	Feet.
Little Dunkard Sand.....	235	300
Big Dunkard Sand.....	320	445
Gas Sand.....	474	525
Second Cow Run Sand (Gas, 580').....	538	700
Salt Sand.....	910	1030
Maxton Sand (Gas, 1276').....	1220	1283
Little Lime.....	1285	1295
Penoll Cave.....	1300	1300
Big Lime.....	1300	1355
Big Injun Sand (Gas, 1433').....	1320?	1535
Sandy shells.....	1695	1723
Berea Sand (Gas, 1700-6').....	1808 3/4	1838
Gantz Sand.....	1893	1905
Fifty-foot Sand (Gas, 1902').....	1946	1961
Thirty-foot Sand.....	1970	1995
Gordon Stray Sand.....	2005	2045
Gordon Sand.....	2215	2235
Fifth Sand (Gas, 2230').....	2215	2324
Total depth.....	2324	

Richard Beeghley No. 448 Well Record (108).

Hackers Creek District; on West Fork River, 0.7 mile north of Lightburn; authority, Reserve Gas Co.; elevation, 1025' B.

70224
4322A
260

	Thickness	Total
	Feet.	Feet.
Conductor.....	16	16
Unrecorded.....	4	20
Clay.....	2	22
Slate.....	48	70
Sand, Moundsville (hole full water, 80').....	30	100
Coal, Bakerstown.....	1	101
Blue limestone.....	34	135
Slate.....	25	160
Lime.....	40	200
Sand, Little Dunkard.....	35	235
Slate.....	51	286
Sand, Big Dunkard.....	21	307
Slate.....	42	349
Lime.....	7	356
Sand, Gas (hole full water, 357').....	15	371
Lime.....	9	380
Slate.....	53	433
Sand, Second Cow Run.....	127	560
Slate.....	5	565
Lime.....	26	581
Sand, Salt.....	10	591

Base

Color

Formation

71
269-A
730
7470



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

MAY 19 1980

OIL & GAS DIVISION
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

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

DATE May 16, 1980
Company Consolidated Gas Supply Corp.
Address 445 W. Main St., Clarksburg, WV
Farm S. G. Hall Acres 90
Location (waters) Broad Run
Well No. 3456 Elevation 1211'
District Backers Creek County Lewis
Quadrangle West Milford

Surface Owner Willard McWhorter
Address Rt. 2, Jane Lew, WV 26378
Mineral Owner Maude Barb
Address Rt. 2, Jane Lew, WV 26378
Coal Owner Same
Address _____
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 reconditioning. This permit shall expire if operations have not commenced by 1-21-81.

INSPECTOR
TO BE NOTIFIED Robert Bates
ADDRESS 109 Minnich St., Weston, WV
PHONE 269-3820

Robert H. [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 Dec. 16 1908 by S. G. Hall made to Hope Natural Gas Company and recorded on the 5th day of April 1909, in Lewis County, Book 68 Page 130

NEW WELL DRILL DEEPER REDRILL RECONDITION
X 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) R. E. Bayne/dw
Well Operator
Consolidated Gas Supply Corp.
Street
445 West Main Street
City or Town
Clarksburg, West Virginia 26301
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

47-041-0323-REC.

PERMIT NUMBER

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

PROPOSED WORK ORDER TO _____ DRILL _____ DEEPEN X RECONDITION X
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT: _____
 NAME _____ Company Spudder _____ NAME R. E. Bayne _____
 ADDRESS _____ ADDRESS Clarksburg, WV 26301 _____
 TELEPHONE _____ TELEPHONE 623-8440 _____
 ESTIMATED DEPTH OF COMPLETED WELL: 1760 _____ ROTARY _____ CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Gantz _____
 TYPE OF WELL: OIL _____ GAS _____ COMB. _____ STORAGE X DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LIFT IN WELL	CEMENT PUT UP OR SACKS - CUBIC FT.
20 - 16	Clean out well to T.D. 1760'. Run 2 x 5 1/2" packer on 2" tubing. Acidize Gantz Sand.		
13 - 10			
9 - 5/8	Pull 2" tubing and packer. Clean up, test and turn back into line.		
8 - 5/8			
7			
5 1/2			
4 1/2			
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 600 FEET SALT WATER 1900 FEET
 APPROXIMATE COAL DEPTHS No coal
 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