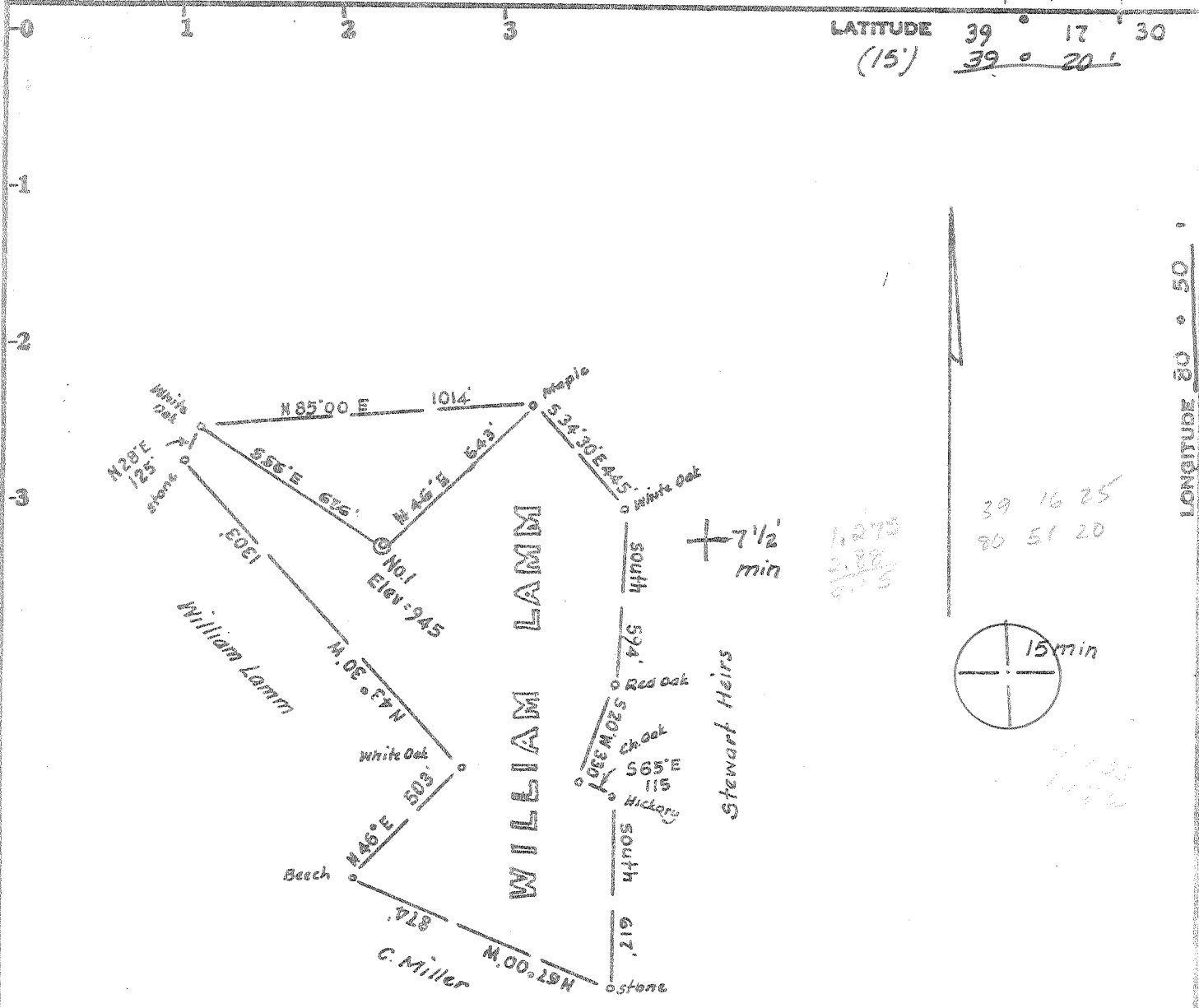


1/23/78

LATITUDE 39° 17' 30"
(15') 39° 20'

LONGITUDE 80° 50'



Surface is owned by:-
William Lamm
Greenwood, West Va.

Minimum Error of Closure 1 in 200
Source of Elevation USGS B.M. Wilhelm Run Road, 1 mi. North = 904'

- 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

Map No. _____

Company INDUSTRIAL GAS ASSOCIATES
 Address P.O. Box 1610, Greenwich, Conn.
 Farm William Lamm
 Tract _____ Acres 37.5 Lease No. _____
 Well (Farm) No. One Serial No. _____
 Elevation (Spirit Level) 945
 Quadrangle West Union 7 1/2, 15' SC
 County Doddridge District Central
 Engineer [Signature]
 Engineer's Registration No. 1227 LL 200
 File No. _____ Drawing No. _____
 Date January 6, 1978 Scale 1" = 500'

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

WELL LOCATION MAP
FILE NO. DODD-1886

+ 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.

47-017 FEB 3 1978



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division

RECEIVED

SEP 8 1978

OIL & GAS DIVISION
DEPT. OF MINES

WELL RECORD

Quadrangle West Union 7 1/2

Permit No. DoD -1886

Rotary X Oil ●
Cable _____ Gas X
Recycling _____ Comb. _____
Water Flood _____ Storage _____
Disposal _____ (Kind)

Company Industrial Gas Associates
Address Box 1610 Greenwich, Conn.
Farm William Lamm Acres 37.5

Location (waters) _____
Well No. (1) Elev. 946
District Central County Doddridge

The surface of tract is owned in fee by William Lamm

Address Rt # 1 Greenwood, W. Va.
Mineral rights are owned by William Lamm

Address Rt # 1 Greenwood W. Va.

Drilling Commenced 3-1-78

Drilling Completed 5-14-78

Initial open flow _____ cu. ft. _____ bbls.

Final production 12,000 ft. per day _____ bbls.

Well open 4 hrs. before test 1250 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"			
9 5/8			
8 5/8	247	247	80 sks
7			
5 1/2			
4 1/2		2433	140 sks
3			
2			
Liners Used			

Attach copy of cementing record.

Well treated in 3 stages:

Weir # 1 243 Bbls water - 7,000 # Sand - 70,000 SCF N2 500 gal HCL

Weir # 2 260 Bbls Water - 7,000 # Sand - 70,000 SCF N2 500 gal HCL

Injun - 370 Bbls Water 17,000 # sand 28,000 SCF N2 500 gal HCL

Coal was encountered at None Feet _____

Fresh water None Feet _____ Inches _____

Producing Sand Injun & Weir Salt Water _____ Feet _____

Depth 2030-2096 2262 -2384

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Soil			0	17		
Shale			17	195		
Sand			195	255		
Shale			255	357		
Sand			357	415		
Shale			415	560		
Sand			560	623		
Shale			623	775		
Sand			775	815		
Shale			815	1061		
Sand			1061	1095		
Shale			1095	1206		
Sand			1206	1280		
Shale			1280	1380		
Sand			1380	1450		
Shale			1450	1497		
Sand			1497	1600		
Shale			1600	1628		
Sand			1628	1645		
Shale			1645	1683		
Sand			1683	1720		
Shale			1720	1775		

2507
2030
477 EXP. FT.

(over)

Indicates Electric Log tops in the remarks section.

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Sand			1775	1810		
Shale			1810	1820		
Sand			1820	1835		
Shale			1835	1875		
Sand			1875	1895		
Shale			1895	1925		
Lime (Little)			1925	1970		
Lime (Big)			-1970	2030		
Sand- Injun			2030	2096		
Shale			2096	2262		
Sand-Weir			2262	2384		
Shale			2384	2453		
Sand <u>Berea</u>			-2453	2456		
Shale			2456	2507		
TOTAL DEPTH			2507			

Date 9-6 1978

APPROVED John Cushing (Owner)

By Agent (Title)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

RECEIVED
JAN 19 1978
OIL & GAS DIVISION
DEPT. OF MINES

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

DATE January 18, 1978

Surface Owner William E. Lamm
Address Rt. #1 Greenwood, W. Va.
Mineral Owner William E. Lamm
Address Rt. # 1 Greenwood, W. Va.
Coal Owner N/A
Address N/A
Coal Operator N/A
Address N/A

Company Industrial Gas Associates
Address Box 1610 Greenwich, Conn.
Farm Lamm Acres 37.5
Location (waters) _____
Well No. #1 Elevation 945
District Central County Doddridge
Quadrangle West Union 7 1/2

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 TO BE NOTIFIED
operations have not commenced by 5-24-78 Paul Garrett

Deputy Director - Oil & Gas Division ADDRESS 321 Beech St. Clarksburg, W. Va.
PHONE 622-3871

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. 8 1976 by Wm. & Erma Lamm made to Kanawha Drilling Co. and recorded on the 21 day of Dec. 1976, in Doddridge County, Book 102 Page 141
XX 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

Very truly yours, Industrial Gas Associates
(Sign Name) John Cushing
Well Operator

Address
of
Well Operator

Box 1610
Street
Greenwich
City or Town
Conn.
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.

Dodd-1886 PERMIT NUMBER
47-017

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

PROPOSED WORK ORDER TO XX DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:
 NAME Stalnaker Drilling NAME Vearl Summers
 ADDRESS Letter Gap, W. Va. ADDRESS Box 1486 Parkersburg, W. Va.
 TELEPHONE _____ TELEPHONE 485-7419
 ESTIMATED DEPTH OF COMPLETED WELL: 2500 ROTARY XX CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: _____
 TYPE OF WELL: OIL _____ GAS _____ COMB. XX 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	230	230	To Surface
7			
5 1/2			
4 1/2		2500	125 Sacks
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 150 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