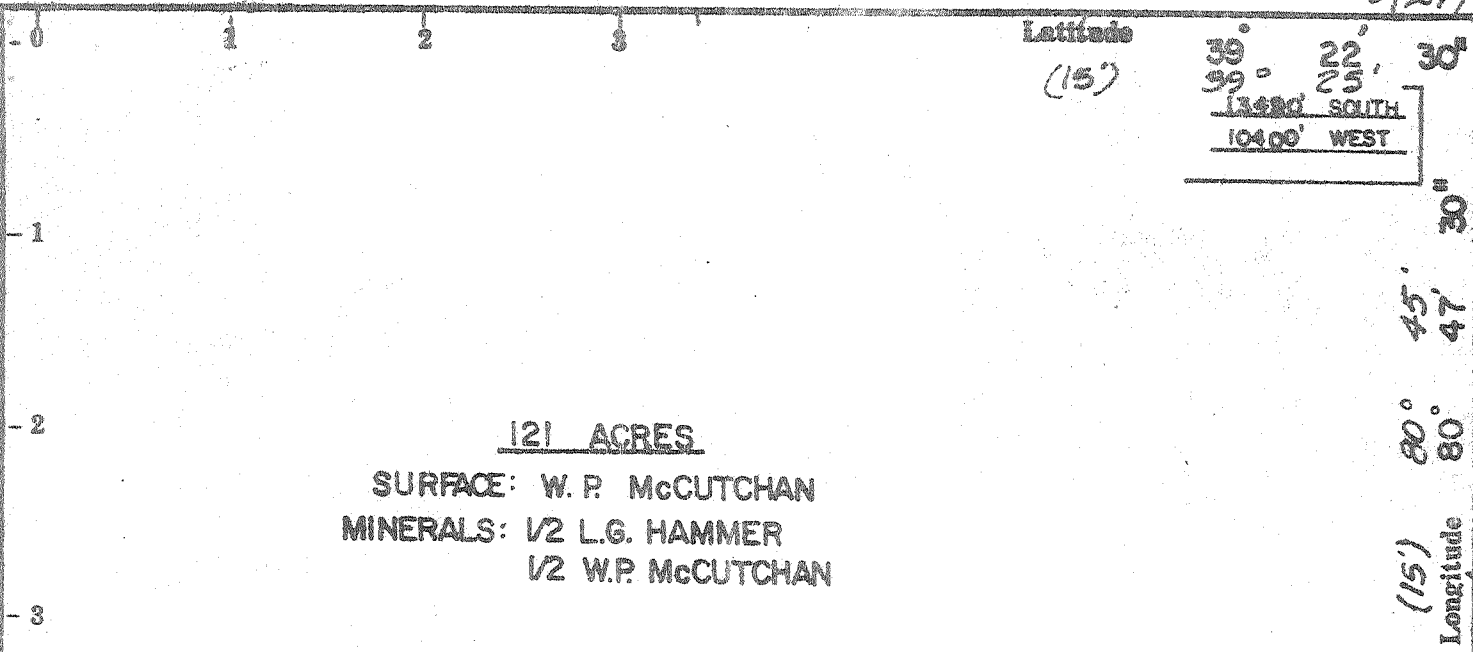
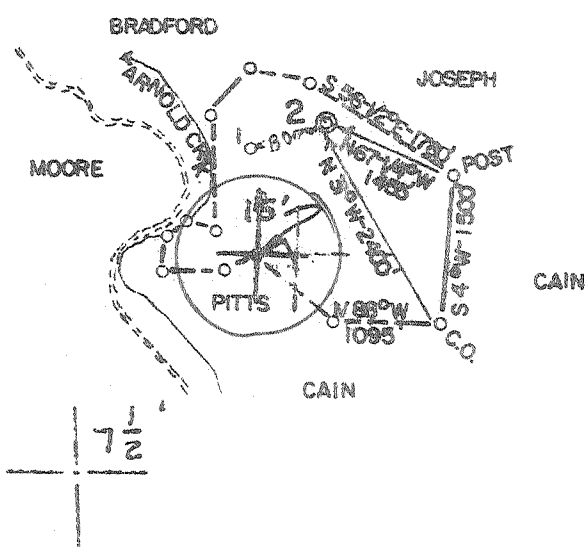


3/27/79 76



121 ACRES
 SURFACE: W. P. McCUTCHAN
 MINERALS: 1/2 L.G. HAMMER
 1/2 W.P. McCUTCHAN

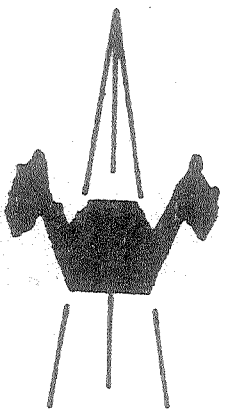
5.40'S
 4.25'W



39 20 20
 85 49 45

2.51'S
 1.98'W

1.51'S
 2.22'W
 1.98'W
 1.21'W



ACCURACY: 1'/200'

Source of Elevation DEEP VALLEY (750')

- New Location GAS
- Drill Deeper
- Abandonment
- Fracture
- Redrill

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.

FIFTH 2900'

Chet Waterman

Company INDUSTRIAL GAS ASSOCIATES
 Address GREENWICH, CONN.
 Farm L.G. HAMMER
 Tract _____ Acres 121 Lease No. _____
 Well (Farm) No. 2 Serial No. _____
 Elevation (Spirit Level) 990' EC
 Quadrangle WEST UNION, 7 1/2', 15'
 County DODDRIDGE District CENTRAL
 Engineer CHET WATERMAN
 Engineer's Registration No. 3788
 File No. 79-177 Drawing No. _____
 Date 3/21/79 Scale 1" = 2000'

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

WELL LOCATION MAP
 FILE NO. 47-017-2361

+ 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.

APR 16 1979

2700' Bertha - 4

Wilbur (92)

92



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

REC'D
APR 26 1979

Oil and Gas Division
WELL RECORD

OIL & GAS DIVISION
DEPT. OF MINES

Quadrangle West Union 7 1/2

Permit No. 47-017-2361

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

Company Industrial Gas Associates
Address Box 1610, Greenwich, Connecticut
Farm Hanes Acres 121
Location (waters) Arnolds Creek
Well No. 2 Elev. 990
District Central County Doddridge
The surface of tract is owned in fee by _____
Paul McCutchan
Address West Union, W.V.
Mineral rights are owned by Paul McCutchan
Address West Union, W.V.
Drilling Commenced 3/27/79
Drilling Completed 3/31/79
Initial open flow Show cu. ft. _____ bbls.
Final production 400,000 cu. ft. per day 3 bbls.
Well open 4 hrs. before test 800 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	239	239	115 Sks
7			
5 1/2			
4 1/2		2341	115 Sks
3			
2			
Liners Used			

Attach copy of cementing record.

Weir: Fraced with 319 BBL water - 20,000# Sand - 53,000 SCF N²

Injun: Fraced with 355 BBL water - 21,000# sand - 51,000 SCF N²

Coal was encountered at None Feet _____ Inches
Fresh water 80 Feet _____ Salt Water _____ Feet _____
Producing Sand Weir & Injun Depth 1942 - 2302

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Soil	Brown	Soft	0	10		
Sand & Shale	Brown	Soft	10	1042		
1st Cow Run	White	Soft	1042	1080		
Shale	Black	Soft	1080	1110		
2nd Cow Run	White	Soft	1110	1150		
Shale	Black	Soft	1150	1850		
Big Lime	White	Hard	1850	1942		
Big Injun	White	Hard	1942	2052		
Shale	Black	Soft	2052	2144		
Weir	Brown	Soft	2144	2302		
Shale	Black	Soft	2302	2396		
T.D.				2396		

MAY 8 1979



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

MAR 26 1979

Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

OIL AND GAS WELL PERMIT APPLICATION

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

DATE 3/21/79

Surface Owner W.P. McCutchan

Company Industrial Gas Associates

Address Box 8, West Union, W.V.

Address Box 1610, Greenwich, Conn. 06830

Mineral Owner W.P. McCutchan - L.G. Hammer

Farm L.G. Hammer Acres 121

Address Box 8, West Union, W.V.

Location (waters) Arnolds Creek

Coal Owner N/A

Well No. 2 Elevation 990'

Address N/A

District Central County Doddridge

Coal Operator N/A

Quadrangle West Union 7 1/2

Address N/A

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 11-27-79.

INSPECTOR

TO BE NOTIFIED Mr. Paul Garrett

ADDRESS 321 Beach St., Clarksburg, W.V.

PHONE 622-3871

[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 Jan. 12 1979 by W.P. McCutchan made to Petroleum Services, Inc. and recorded on the 15th day of Jan. 1979 in Doddridge County, Book 107 Page 142

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,

Industrial Gas Associates
(Sign Name) John [Signature] Well Operator

P.O. Box 1610
Street

Greenwich
City or Town

Connecticut 06830
State

Address
of
Well Operator

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

*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 COPY

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 Gene Stalnaker, Inc. NAME Dallas Frederick
 ADDRESS Letter Gap, W.V. ADDRESS Box 13, Nobe, W.V.
 TELEPHONE 462-7092 TELEPHONE 345-7484
 ESTIMATED DEPTH OF COMPLETED WELL: 2700 ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Berea
 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	240	240	Circ
7			
5 1/2			
4 1/2		2700	125 Sks
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 80 FEET SALT WATER _____ FEET
 APPROXIMATE COAL DEPTHS N/A
 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