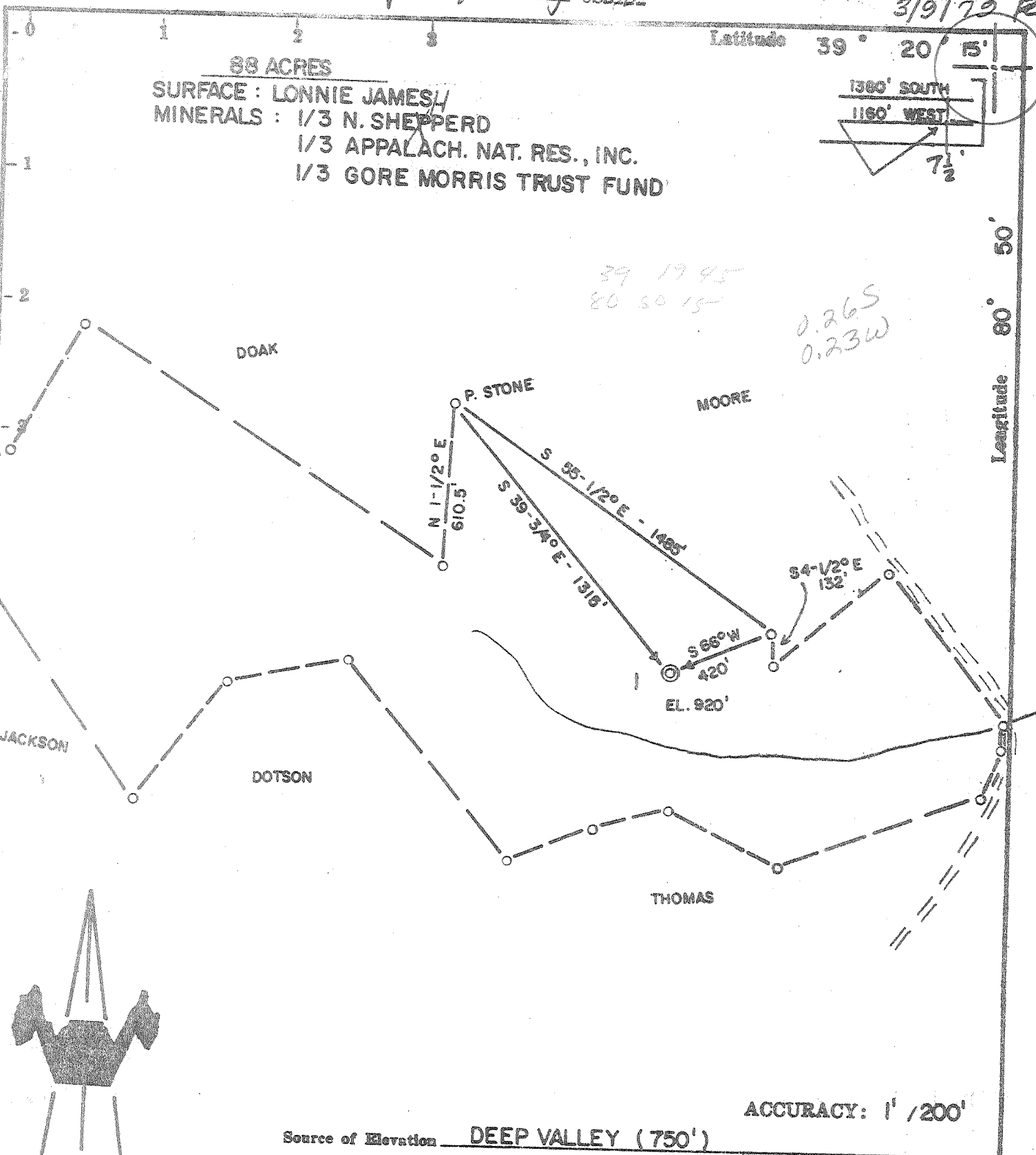
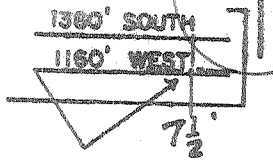


3/9/79



88 ACRES
 SURFACE : LONNIE JAMES
 MINERALS : 1/3 N. SHEPPERD
 1/3 APPALACH. NAT. RES., INC.
 1/3 GORE MORRIS TRUST FUND

Latitude 39° 20' 15"



39 19 45
 80 50 15

0.26S
 0.23W

Longitude 80° 50'

ACCURACY: 1" / 200'

Source of Elevation DEEP VALLEY (750')

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.

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

WEIR 2400'

Company INDUSTRIAL GAS ASSOCIATES
 Address GREENWICH, CONN.
 Farm N. SHEPPERD
 Tract Acres 88 Lease No. _____
 Well (Farm) No. 1 Serial No. _____
 Elevation (Spirit Level) 920' SC
 Quadrangle WEST UNION (7.5'), 15'
 County DODDRIDGE District CENTRAL
 Engineer CHET WATERMAN
 Engineer's Registration No. 3788
 File No. 79-136 Drawing No. _____
 Date 3/6/79 Scale 1" = 500'

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

WELL LOCATION MAP
 FILE NO. 47-017-2356

+ 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.

MAR 30 1979

6-62500' Beren CENTRAL STATION 91



Shepherd #1

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

WELL RECORD

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

Ownership Dear Union 7 5

Permit No. 7-012-1356

Operator Industrial Gas Associates
Address Box 1610, Greenwich, Connecticut
Location Shepherd Acres 88
Location (waters) Arnolds Creek
Elev. 920
County Doddridge
Address Greenwood, WV
Drilling Commenced 3/13/79
Drilling Completed 3/17/79
Initial open flow 3 cu. ft. _____ bbls.
Final production 250 MCF ft. per day 3 bbls.
Well open 4 hrs. before test 900 RP.
Well treatment details:

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Size 20-16			
Condi. 13-10"			
9 5/8			
8 5/8	237	237	115 sks.
7			
5 1/2			
4 1/2		2258	125 sks.
3			
2			
Liners Used			

Attach copy of cementing record.

Fraced

Gravel - 450 BBL water - 22,000# sand 55,000 SCP N²

Weir - 421 BBL water 21,000# sand 55,000 SCP N²

Coal was encountered at N/A Feet _____ Inches _____
Fresh water 50 Feet Feet _____ Salt Water _____ Feet _____
Producing Sand sand injun & Weir Depth 1872-1986 2142-2248

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Coal	Brown	Soft	0	10		
Shale & Shale	Brown	Soft	10	1090		
Sand	White	Hard	1090	1105		
Sand	Brown	Soft	1105	1315		
Sand	White	Hard	1315	1452		
Sand	Brown	Soft	1452	1545		
Sand	White	Hard	1545	1648		
Sand	Brown	Soft	1648	1800		
Sand	White	Hard	1800	1872		
Sand	White	Soft	1872	1986		
Sand	Brown	Soft	1986	2142		
Weir	Brown	Soft	2142	2248		
Shale	Brown	Soft	2248	2303		
				2303		

DEPT. OF MINES



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED
MAR - 9 1979

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

OIL & GAS DIVISION
DEPT. OF MINES

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

DATE March 7, 1979

Surface Owner Lornie James

Company Industrial Gas Associates

Address Greenwood, W.V.

Address Box 1610 Greenwich, Conn. 06830

Mineral Owner Lillie Shepherd

Farm Shepherd Acres 88

Address Box 94 Greenwood, W.V.

Location (waters) Arnolds Creek

Coal Owner N/A

Well No. 1 Elevation 920

Address N/A

District Central County Doddridge

Coal Operator N/A

Quadrangle West Union 7.5

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 11-9-79.

INSPECTOR
TO BE NOTIFIED Mr. Paul Garrett
ADDRESS 321 Beach Street, Clarksburg, W.V.
PHONE 622-3871

DIRECTOR - Oil & Gas Division

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 Feb. 26 1979 by Lillie Shepherd made to Petroleum Services, Inc. and recorded on the 27 day of Feb. 1979, in Doddridge County, Book 107 Page 499

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

Address
of
Well Operator

Very truly yours, Industrial Gas Associates
(Sign Name)
Well Operator
P.O. Box 1610
Street
Greenwich
City or Town
Connecticut 06830
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.

47-017-2356 PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

Signed by _____

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

PROPOSED WORK ORDER TO X DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) _____ RESPONSIBLE AGENT: _____
 NAME Cone Stalmeier, Inc. NAME Dallas Frederick
 ADDRESS Letter Gap, W.V. ADDRESS Box 13, Nobe, W.V.
 TELEPHONE 462-7092 TELEPHONE 354-7484
 ESTIMATED DEPTH OF COMPLETED WELL: 2500 ROTARY XX CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Berea
 TYPE OF WELL: OIL _____ GAS X 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		2500'	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 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