



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

Source of Elevation GRAY #2-F-32822 ELEV. 850'

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.

Minimum accuracy, one part in 200

Company ALLEGHENY LAND & MINERAL CO.

Address CLARKSBURG, W. V. 26301

Farm LLOYD W. GRAY, J.F. GRAY

Tract _____ Acres 318.23 Lease No. _____

Well (Farm) No. _____ Serial No. A-810

Elevation (Spirit Level) 974'

Quadrangle HOLBROOK 15'

County DODDRIDGE District SOUTHWEST

Engineer Daniel L. Shuler

Engineer's Registration No. 530 L.L.S.

File No. 257 Drawing No. _____

Date 1-11-79 Scale 1" = 1000'

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

WELL LOCATION MAP
FILE NO. 47-017-2338

+ 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.

FEB 9 1979

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

2,300' G-G STRAIGHT FR BLOESTONE CR 172

FORM IV-85
(Obverse)
APR 13 1979

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

Date: March 2, 1979

Operator's L. Gray
Well No. A-810

108-78

OIL & GAS DIVISION
DEPT. OF MINES

WELL OPERATOR'S REPORT

API Well No. 017-2338

OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas / Liquid Injection / Waste Disposal
(If "Gas", Production / Underground storage / Deep / Shallow
LOCATION: Elevation: 974' Watershed: Sugar Run
District: Southwest County: Doddridge Quadrangle: Holbrook (15')

WELL OPERATOR ALLEGHENY LAND & MINERAL CO. DESIGNATED AGENT ALLEGHENY LAND & MINERAL CO.
Address Box 1740 Address Box 1740
Clarksburg, WV 26301 Clarksburg, WV 26301

PERMITTED WORK: Drill / Convert / Drill deeper / Re-drill / Fracture or stimulate
Plug off old formation / Perforate new formation
Other physical change in well (specify) _____

PERMIT ISSUED ON January 11, 1979

OIL & GAS INSPECTOR FOR THIS WORK:

(IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED

Name Paul Garrett
Address 321 Beech Street
Clarksburg, WV 26301

GEOLOGICAL TARGET FORMATION: Weir Depth 2300' feet

Depth of completed well, 2450 feet Rotary / Cable Tools

Water strata depth: Fresh, 40' feet; salt, _____ feet.

Coal seam depths: xx Is coal being mined in the area? no

Work was commenced February 7, 1979, and completed February 10, 1979.

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		
Conductor								Kinds
Fresh water	<u>8-5/8"</u>					<u>348'</u>	<u>348'</u>	<u>cement to surface</u>
Coal								Slips
Intermediate								
Production Tubing	<u>4 1/2"</u>	<u>ERW</u>	<u>10.5#</u>			<u>2364'</u>	<u>2364'</u>	<u>cement to 1664'</u>
Liners								Bottom

OPEN FLOW DATA

Producing formation Injun Pay zone depth 1910-1958 feet

Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Mcf/d

Final open flow, 1,078 Mcf/d Final open flow, _____ Mcf/d

Time of open flow between initial and final tests, _____ hours

Static rock pressure, 500# psig (surface measurement) after 14 hours shut in.

(If applicable due to multiple completion--)

Second producing formation Weir Pay zone depth 2130-2256 feet

Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Mcf/d

Final open flow, 492 Mcf/d Final open flow, _____ Mcf/d

Time of open flow between initial and final tests, _____ hours

APR 10 1979

[08-78]

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

Well was fractured February 16, 1979 by Halliburton.

Perforations: 1920-1950' - 18 holes
 2137-2144' - 5 "
 2154-2162' - 4 "
 2192-2200' - 5 "
 2222-2238' - 6 "

WELL LOG

FORMATION	Color	Hard or Soft	10 Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Red Rock			0	10	
Red Rock & Shale			10	767	Water @ 40'
Salt Sand			767	775	
Red Rock & Shale			775	945	
Sand			945	1210	
Sand & Shale			1210	1336	
Sand			1336	1358	
Sand & Shale			1358	1830	
Big Lime			1830	1910	
Injun Sand			1910	1958	
Sand & Shale			1958	2130	
Weir Sand			2130	2256	
Sand & Shale			2256	2318	
Berea Sand			2318	2322	
Shale			2322	2450	
			total depth	2450	(Driller)

(Attach separate sheets to complete as necessary.)

Allegheny Land & Mineral Company
Well Operator

By Claron Dawson

Its Superintendent

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."

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

OIL AND GAS WELL PERMIT APPLICATION

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

LOCATION: Elevation: 974' Watershed: Sugar Run
District: Southwest County: Doddridge Quadrangle: Holbrook (15')

WELL OPERATOR ALLEGHENY LAND & MINERAL CO. DESIGNATED AGENT ALLEGHENY LAND & MINERAL
Address P. O. Drawer 1740 Address P. O. Drawer 1740
Clarksburg, West Virginia 26301 Clarksburg, WV 26301

OIL & GAS ROYALTY OWNER Hayward Gray
Address Ellenboro
West Virginia 26364
Acreage 318.23
SURFACE OWNER J. F. Gray
Address Route 1, Box 171
West Union, WV 26456
Acreage 318.23

COAL OPERATOR none
Address

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name Hayward Gray
Address Ellenboro
West Virginia
Name
Address

FIELD SALE (IF MADE) TO:
Name no contract as of this date
Address

COAL LESSEE WITH DECLARATION ON RECORD:
Name none
Address

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Paul Garrett
Address 321 Beech Street
Clarksburg, West Virginia 26301

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease XX / other contract / dated , 19 , to the undersigned well operator from see attached

[If said deed, lease, or other contract has been recorded:]
Recorded on , 19 , in the office of the Clerk of the County Commission of County, West Virginia, in Book at page . A permit is requested as follows:

PROPOSED WORK: Drill XX / 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.

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) 348-3092

ALLEGHENY LAND & MINERAL COMPANY
Well Operator
By Glen E. Watkins
Glen E. Watkins, Manager
Land, Lease and Right of Way

BLANKET BOND

RECEIVED

JAN 23 1978

OIL & GAS DIVISION
DEPT. OF MINES

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) Union Drilling Company
Address P. O. Box 40
Buckhannon, West Virginia 26201

GEOLOGICAL TARGET FORMATION, Weir

Estimated depth of completed well, 2300 feet Rotary XX / Cable tools ___ /
Approximate water strata depths: Fresh, 30-60 feet; salt, ___ feet.
Approximate coal seam depths: 87, 125, ___ Is coal being mined in the area? Yes ___ / No ___ /

CASING AND TUBING PROGRAM

Table with columns: CASING OR TUBING TYPE, SPECIFICATIONS (Size, Grade, Weight, New, Used), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT FILL-UP OR SACKS (Cubic feet), PACKERS (Kinds, Sizes, Depths set, 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 9-23-79.

Signature of Robert H. Todd, Deputy Director - Oil & Gas Division

The following waiver must be 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.

Date: ___, 19__

By ___
Its ___

Under this lease or grant dated the 1st day of August, 1907, by D. W. Gray, etux unto Hope Natural Gas Company, subsequently Consolidated Gas Supply Corporation.

This lease was recorded on the 26th day of January, 1902 in Lease Book 30, Page 148 in the Office of the County Clerk of Doddridge County, West Virginia.

Allegheny Land and Mineral Company is vested with the drilling rights of this lease by virtue of an assignment dated the 15th day of November, 1957 and is of record in the office of the County Clerk of Doddridge County in Book 60, Page 84.

RECEIVED

JAN 22 1979

OIL & GAS DIVISION
DEPT. OF MINES