

FRACTURE 8/17/72

New Location...
 Drill Deeper...
 Abandonment...

Company KEYSTONE GAS COMPANY
 Address MELLONBANK BLDG, CANNONBURG, Pa.
 Farm E.C. ARKWRIGHT TRACT NO. 1
 Tract NO. 1 Acres 20.00 Lease No. _____
 Well (Farm) No. 20 Serial No. _____
 Elevation (Spirit Level) 809.0
 Quadrangle MORGANTOWN NW
 County MONONGALIA District CASS
 Engineer Ralph E. Baker
 Engineer's Registration No. W. Va. 441
 File No. 2-19D-198 Drawing No. 8262
 Date Dec. 18, 1954 Scale 1" = 400'

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

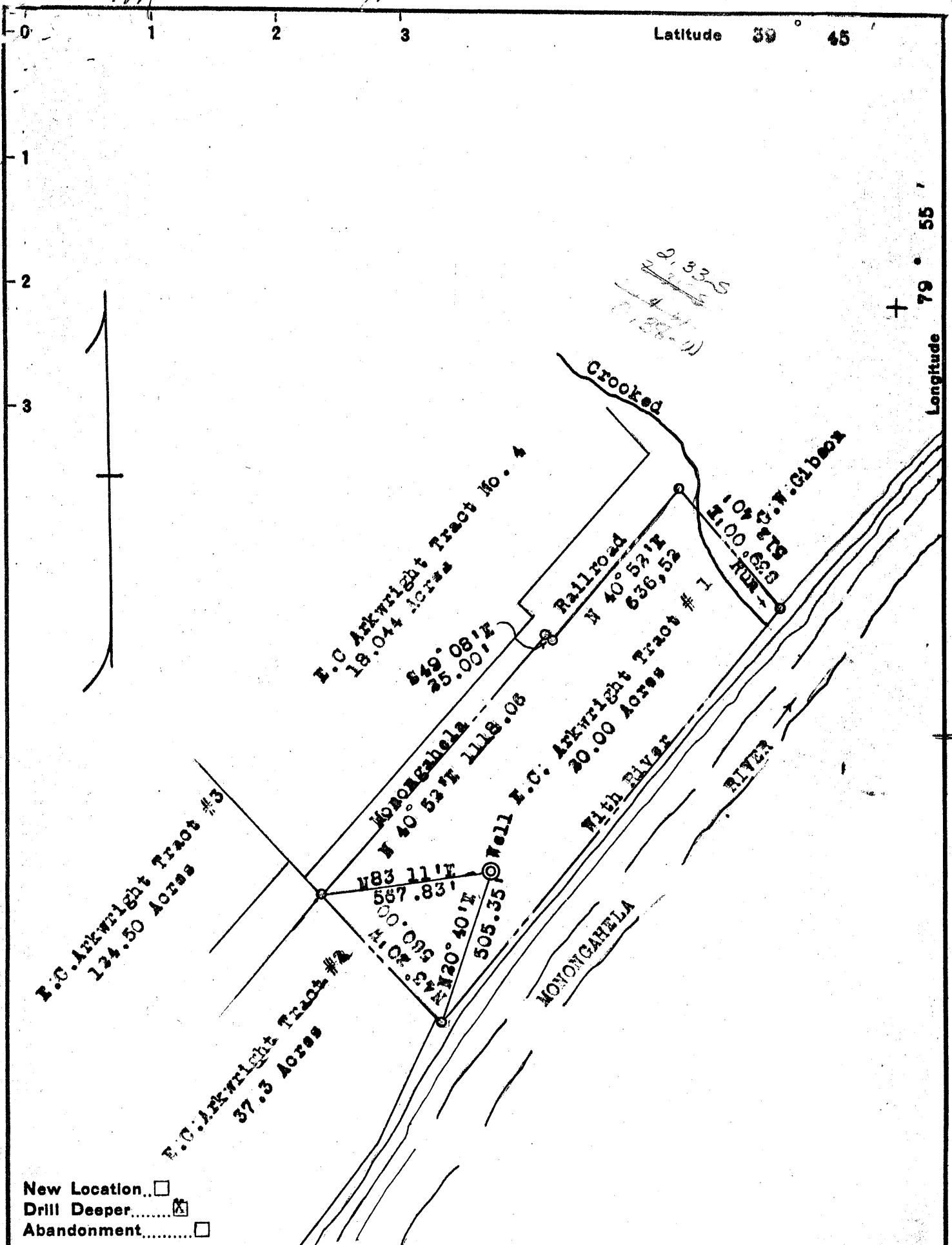
WELL LOCATION MAP

FILE NO. MON-213-D-FRAC

+ 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.

47-061 SEP 21 1977



New Location
 Drill Deeper
 Abandonment

Company KEYSTONE GAS COMPANY
 Address CITIZENS TRUST, Cannonsburg, Pa.
 Farm E.C. ARKWRIGHT TRACT NO. 1
 Tract NO. 1 Acres 20.00 Lease No. _____
 Well (Farm) No. 2 Serial No. _____
 Elevation (Spirit Level) 809.0
 Quadrangle MORGANTOWN NW
 County MONONGALIA District CASS
 Engineer Ralph E. Baker
 Engineer's Registration No. W. Va. 441
 File No. 2-12D-128 Drawing No. 8369
 Date Dec. 12, 1954 Scale 1" = 400'

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

WELL LOCATION MAP
 FILE NO. MON-213-D

+ 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.



RECEIVED

OCT 25 1977

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

WELL RECORD

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

Quadrangle Morgantown
Permit No. MON-213-D-Frac

Company <u>Keystone Gas Company</u>	Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Address <u>Mellon Bank Bldg., Canonsburg, PA 15317</u>				
Farm <u>Monongahela Power</u> Acres <u>20</u>				
Location (waters) <u>Monongahela River</u>				
Well No. <u>20</u> Elev. <u>809'</u>				
District <u>Cass</u> County <u>Monongalia</u>				
The surface of tract is owned in fee by _____ <u>Monongahela Power Company</u>				
Address <u>1310 Fairmont, WV 26550</u>				
Mineral rights are owned by <u>Mertie Sterling</u>				
Address <u>Uniontown, PA</u>				
Drilling Commenced <u>Feb. 8, 1955</u>				
Drilling Completed <u>March 8, 1955</u>				
Initial open flow <u>17M</u> cu. ft. _____ bbls.				
Final production <u>125M</u> cu. ft. per day _____ bbls.				
Well open <u>24</u> hrs. before test <u>315</u> RP.				
Size <u>20-16</u>				
Cond. <u>13-10"</u>				
<u>9 5/8</u>				
<u>8 5/8</u>				
<u>7</u>		<u>942</u>	<u>942</u>	
<u>5 1/2</u>				
<u>4 1/2</u>				
<u>3</u>		<u>2018</u>	<u>2018</u>	<u>65 sks.</u>
<u>2</u>				
Liners Used _____				

Well treatment details: Attach copy of cementing record.
Frac open hole 2018-35' with 16000 gal. W, 18000# sand, I.R. 24 BPM, T.P. 2800, I.S.I. 1700

Coal was encountered at 245 (Freeport) Feet _____ Inches _____
 Fresh water no record Feet _____ Salt Water no record Feet _____
 Producing Sand Fifth Depth 2016-2037

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
See record for MON-213-D						
	<u>TD</u>	<u>542</u>				

(over)

* Indicates Electric Log tops in the remarks section.



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

Permit No. Mon-213-D

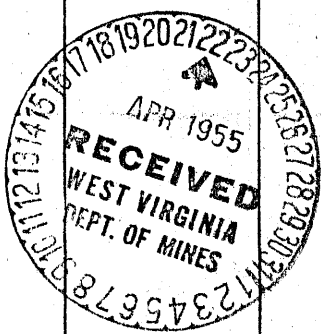
Oil or Gas Well Gas
(KIND)

Company Keystone Gas Company
Address Canonsburg, Pa.
Farm E.C. Arkwright Acres 20
Location (waters) Crooked Run
Well No. 20 Elev. 809'
District Cass County Monongalia
The surface of tract is owned in fee by E.C. Arkwright
Morgantown, W. Va. Address _____
Mineral rights are owned by Myrtie Sterling
Mayflower Drive Address Uniontown, Pa.
Drilling commenced Feb. 8, 1955
Drilling completed March 8, 1955
Date Shot _____ From _____ To _____
With _____
Open Flow 28 /10ths Water in 1 56M Inch
/10ths Merc. in _____ Inch
Volume 41,472 Cu. Ft.
Rock Pressure 460 lbs. 24 hrs.
Oil _____ bbls., 1st 24 hrs.
Fresh water _____ feet _____ feet
Salt water _____ feet _____ feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			Anchor
18			Size of <u>65/8 x3</u>
10			Depth set <u>1622</u>
8 1/4			Perf. top <u>2084</u>
6 1/2	<u>942</u>	<u>942</u>	Perf. bottom <u>2105</u>
5 3/16		<u>2105</u>	Perf. top <u>1996</u>
3			Perf. bottom <u>2017</u>
2			
Liners Used			

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Da _____
COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES
_____ FEET _____ INCHES _____ FEET _____ INCHES
_____ FEET _____ INCHES _____ FEET _____ INCHES

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Sand	gray	hard	1058	1166			
Lime	l gray	"	1166	1221			
Sand	d gray	"	1221	1336			
Lime shells and slate		medium	1336	1415			
Lime	gray	"	1415	1445			
Lime shells and slate	"	"	1445	1486			
Gritty lime	"	extra hard	1486	1495			
Sand	d gray	hard	1495	1505			
Lime shells and slate	"	medium	1505	1575			
Sand	"	hard	1575	1578			
Slate & sand shells	"	medium	1578	1591			
Sand	dark	hard	1591	1684			
Slate and lime shells	l gray	medium	1684	1704			
Slate	light	soft	1704	1720			
Gritty lime	gray	hard	1720	1741			
Slate	white	soft	1741	1760			
Red rock & sand shells	red	medium	1760	1791			
Sand	gray	hard	1791	1803			
Slate, lime & red rock	red	medium	1803	1929			
Gritty lime	gray	hard	1929	1940			
Red rock & sand shells	red	medium	1940	2002			
Gritty lime & sand shells	gray	hard	2002	2009			
Lime shells	"	"	2009	2020			
Sand	"	"	2020	2046	Gas	2022 2025	S.L.H.
Red rock	red	soft	2046	2054			
Sand	gray	hard	2054	2090			
Slate	l gray	soft	2090	2105	Net depth	2105	S.L.H.
				1058			



54

(10-7)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

DATE July 15, 1977

Surface Owner Monongahela Power Co.
Address 1310 - Fairmont, W.Va. 26550

Company Keystone Gas Company
Address Mellon Nat'l Bank, Canonsburg, Pa. 15

Mineral Owner Same
Address _____

Farm Monongahela Power Acres 20

Coal Owner Christopher Coal Co.
% Consolidation Coal

Location (waters) _____

Address 924 North Washington Road

Well No. 20 Elevation 809'

Coal Operator McMurray, Pennsylvania 15317

District Cass County Monongalia

Address _____

Quadrangle Morgantown

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 fracturing. This permit shall expire if operations have not commenced by 12-17-77.

INSPECTOR TO BE NOTIFIED William Blosser
ADDRESS P.O. Box 1028, Colfax, W.Va. 26566
PHONE 363-9105 (Fairmont)

[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. 31 1921 by Myrtie M. Sterl Henry Miller made to Morton V. Voorhis and recorded on the 25th. day of November 1932 in Monongalia County, Book 256 Page 426

XX NEW WELL XX DRILL DEEPER XX REDRILL XX FRACTURE OR STIMULATE
XX 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) Charles E. Campbell
Well Operator
Keystone Gas Co., Div. of Crescent Hill
Street Coal Company
Mellon Bank Building
City or Town
Canonsburg, Pennsylvania 15317
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 ROAD

MON-213-D-FRAC. 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."

47-061

Signed by _____

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

PROPOSED WORK ORDER TO DRILL DEEPEEN XXXX FRACTURE-STIMULATE
 DRILLING CONTRACTOR: (If Known) Keystone Gas Company RESPONSIBLE AGENT: Melvin Peluchette
 NAME Keystone Gas Company NAME Melvin Peluchette
 ADDRESS Canonsburg, Pa. ADDRESS N. Front St. Wheeling, W.Va.
 TELEPHONE 412-745-4130 TELEPHONE 232-8336
 ESTIMATED DEPTH OF COMPLETED WELL: 2105' ROTARY _____ CABLE TOOLS XXX
 PROPOSED GEOLOGICAL FORMATION: Fifth Sand
 TYPE OF WELL OIL _____ GAS XXX 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			
7	942'	942'	
5 1/2			
4 1/2			
3	2020'	2020'	XXXXXX 50 sacks
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS _____ FEET SALT WATER _____ FEET
 APPROXIMATE COAL DEPTHS Freeport - 245'
 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