

No	Course	Distance
1	N21°22'10" W	624.49'
2	N63°16' E	120.75'
3	N66°08'10" E	240.00'
4	N21°22' W	178.25'
5	S68°38' W	360.00'
6	N21°22'10" W	675.51'
7	N61°59'15" E	104.75'
8	S20°57'30" E	215.38'
9	N65°10' E	172.00'
10	N20°57'30" W	225.02'
11	N61°59'15" E	405.92'
12	S17°04' E	154.00'
13	N72°10' E	508.00'
14	S17°04' E	257.80'
15	N72°58' E	800.00'

Lands of Quaker State Refining Corp.

Lat. 40° 36' 53" No.
Long. 80° 37' 29" West

Minimum Error of Closure: 1 / 2000'
 Source of Elevation: U.S. Corp. Eng. Ohio River Chart
 TBM 9L61 Elev. 679.22 (Iron Pin)
 "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 12/5

Company Management Control Corp
 Address 518 Market St. E. Liverpool, Oh.
 Farm Globe Refractories, Inc
 Tract _____ Acres 100 Lease No. _____
 Well (Farm) No. 918 (1) Serial No. _____
 Elevation (Spirit Level) 679.6' C
 Quadrangle Wellsville - 15' Series - E. Liverpool South - 7 1/2' Series
 County Hancock District Grant
 Engineer [Signature]
 Engineer's Registration No. Ohio 52379
 File No. _____ Drawing No. _____
 Date 2/5/74 Scale 1" = 200'

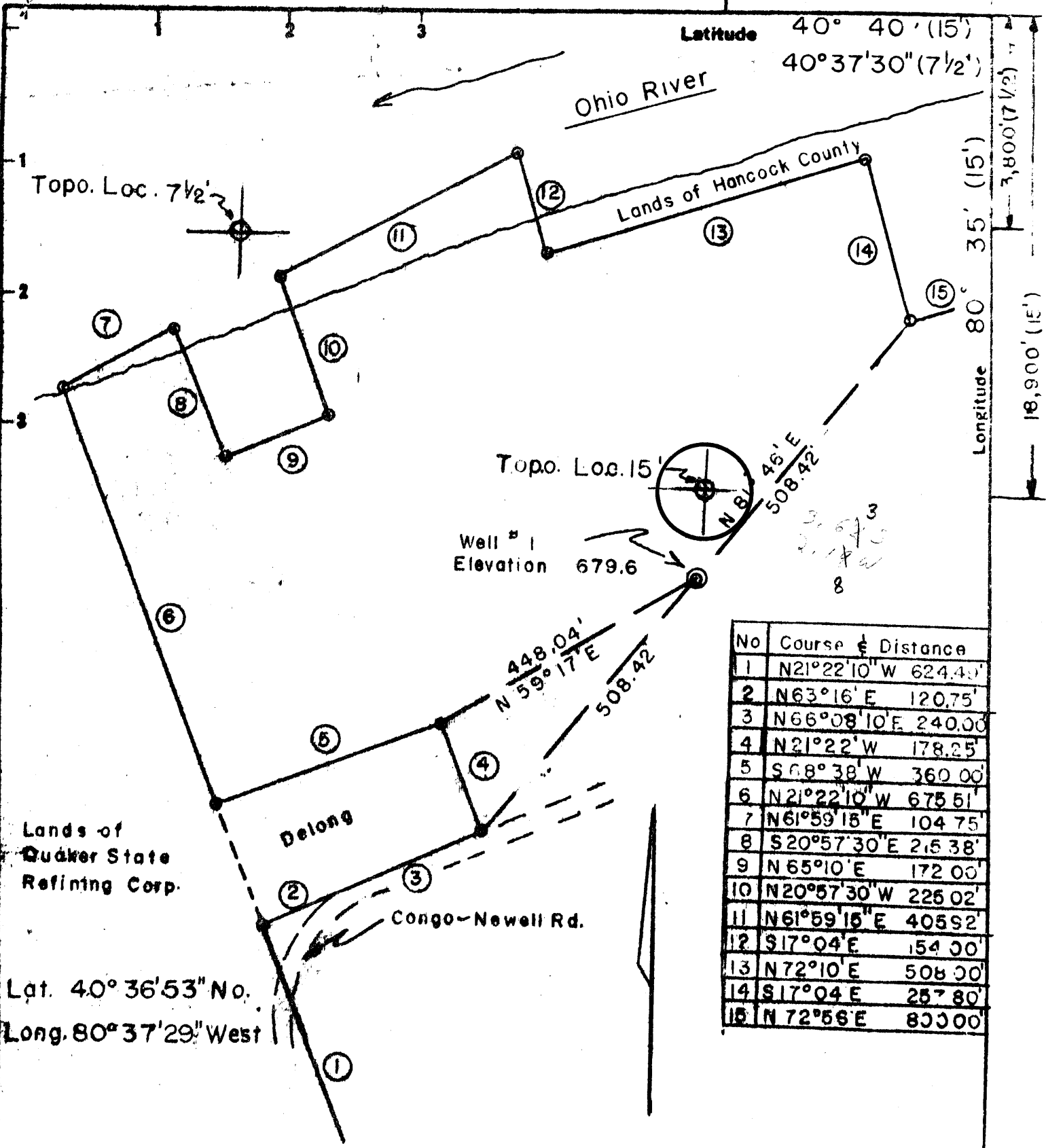
STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON
WELL LOCATION MAP
 FILE NO. HAN-86-P

+ 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. 47-029

11,400' (15')

Latitude 40° 40' (15')
40° 37' 30" (7 1/2')

Longitude 80° 35' (15')
80° 35' (15')
18,900' (15')



No	Course & Distance
1	N21°22'10" W 624.40'
2	N63°16' E 120.75'
3	N66°08'10" E 240.00'
4	N21°22' W 178.25'
5	S68°38' W 360.00'
6	N21°22'10" W 675.51'
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11	N61°59'15" E 405.92'
12	S17°04' E 154.00'
13	N72°10' E 508.00'
14	S17°04' E 257.80'
15	N72°56' E 800.00'

Lat. 40° 36' 53" No.
Long. 80° 37' 29" West

Minimum Error of Closure..... 1/2000'
Source of Elevation..... U.S. Corp. Eng. Ohio River Chart
TBM 9L61 Elev. 679.22 (Iron Pin)

"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
Abandoned

Company Management Control Corp
 Address 518 Market St. E. Liverpool, Oh.
 Farm Globe Refractories, Inc
 Tract _____ Acres 100 Lease No. _____
 Well (Farm) No. one (1) Serial No. _____
 Elevation (Spirit Level) 679.6' C
 Quadrangle Wellsville - 15' Series - E. Liverpool South - 7 1/2' Series
 County Hancock District Grant
 Engineer Paul S. ...
 Engineer's Registration No. Ohio 32379
 File No. _____ Drawing No. _____
 Date 2/15/74 Scale 1" = 200'

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

WELL LOCATION MAP
 FILE NO. HAN-86

+ 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.

47-029



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MAY 20 1974

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES

40-45
5-43
10

WELL RECORD 3

Quadrangle Wellsville Ohio, W. Va.

Permit No. Han-86 47-029

Rotary X Oil _____
Cable _____ Gas _____
Recycling _____ Comb. _____
Water Flood _____ Storage _____
Disposal _____ DRY G. NOLL

Company MANAGEMENT CONTROL CORP.
Address P.O. Box 916
Farm Globe Refractories #1 Acres 100
Location (waters) Ohio River, .95 mi. +N. of
Well No. #1 Elev. 679.6'
District Grant County Hancock
The surface of tract is owned in fee by
Globe Refractories, Inc.
Address Newell, W. Va.
Mineral rights are owned by Same
Address _____
Drilling Commenced March 13, 1974
Drilling Completed March 23, 1974
Initial open flow _____ cu. ft. _____ bbls.
Final production _____ cu. ft. per day _____ bbls.
Well open _____ hrs. before test _____ RP.

Casing and Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft. (Sks.)
Congo Run			
20-16			
Cond.			
13-10" 11"	86	81.50	
9 5/8			
8 5/8	836'	817	w/250 sx cement
7			
5 1/2			
4 1/2		6466'	w/250 cu ft. of
3			50/50 Poz mix,
2			250 sx, 500 gal
Liners Used			mud flush

Well treatment details:

Attach copy of cementing record.

Perf. 5932-5940 w/16 0.56" dia. holes; tried acidizing w/500 gal of 28% acid did not break down at 4000#; no open flow recorded.

Perf. 6347-6379 w/20 0.56" dia. holes; Dowell Frac w/1400 bbl to gel water & 300 sx 20/40 sd SICP 2200# instantaneous

Coal was encountered at not encountered Feet _____ Inches
Fresh water 86' Feet _____ Salt Water _____ Feet _____
Producing Sand P & A Depth _____

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	* Remarks
Berea	gray; silty	sand-stone	480	532	gas & water	
Devonian Shale	gray & black	Shale	532	4045	Shale & gas	
Onondaga	Lt. tan to buff	L5	4045	4626	gas in Oriskany?	4414-22 est. 25M
Salina, dol., Shale, salt, Anh.			4626	5654	"F" salt top	4790'
Lockport, dol.,	Lt. grn. to buff tan & white		5654	5996	gas in Ohio Newburg	5832-40 es 130M natural Show
Lockport & Rochester interbedded Dol., & shale			5996	6108		
Rochester	gray	shale	6108	6192		

(over)

* Indicates Electric Log tops in the remarks section.

*all tops are electric log tops

JUN 21 1974

Formation	Color	Hard or Soft	Top Feet 3	Bottom Feet	Oil, Gas or Water	* Remarks
Irondegoit & shale	Dolomitic Lime		6192	6224		"Casing Shell"
Sodus	green	shale	6224	6246		
Reynales	Dolomitic lm,		6246	6266		Top Tuscarora
	hematite at base					
Thorold	silty sand & shale		6266	6344		Tuscarawas sand 6266' "Stray Clinton"
	red & gray					
Grimsby	white sandstone,		6344	6404		Slight odor of gas "1st or Red Clinton"
	hard tite, quar-					
	tzitic					
Cabot Head	gray	shale	6404	6464		"Second Clinton or White" Sandstone absent
Total Depth Logged Cabot Head				6464		
Log Total Depth				6464		Juniata
Drillers Total Depth				6583		Hole fill-up due to sluthing shale at top of Big Lime.
DRY HOLE: WELL PLUGGED AND ABANDONED			5/2/74.			6404 688 5716

Date May 15 1974

APPROVED Management Control Corp. Owner

By Thomas P. Sanders
Thomas P. Sanders (Title) Staff Geologist



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

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FEB 21 1974

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

DATE February 14, 1974

Surface Owner Globe Refractories Inc.

Company Management Control Corporation

Address Newell, West Virginia

Address 518 Market St., E. Liverpool, Ohio

Mineral Owner Same

Farm Globe Refractories, Inc. Acres 100⁴³⁴²⁰

Address _____

Location (waters) Ohio Riv. 45 mi + NE mouth

Coal Owner Same

Well No. 1 Elevation 679.6

Address _____

District Grant County Hancock

Coal Operator None

Quadrangle Wellsville

Address _____

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 6-26-74

INSPECTOR TO BE NOTIFIED Paul
321 Beech St., PH: Harrett
Clarksburg 622-3871
wt. 26301

Robert A. Hood
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 21 November 1969 by Quaker State Oil Refining Corp. made to Globe Refractories, Inc. and recorded on the 3rd day of December 1969, in Hancock County, Book 140 Page 220

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, MANAGEMENT CONTROL CORPORATION

(Sign Name) Carl F. Pelini
Well Operator

Carl F. Pelini, Vice President
518 Market St.

Street

East Liverpool,

City or Town

Ohio 43920

State

PLEASE SUBMIT COPIES OF ALL
GEOPHYSICAL LOGS DIRECTLY TO:

West Virginia Geological and Economic Survey,
P. O. Box 879
Morgantown, W. Va. 26505
AC 304-296-4461

Address
of
Well Operator

*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.

Han-86 PERMIT NUMBER

47-029

**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 Perkins & Summers NAME Globe Refractories, Inc.
 ADDRESS R.D. 6 - Highway 40 West ADDRESS Newell, W. Va.
Cambridge Ohio 43725
 TELEPHONE 614-439-3511 TELEPHONE 387-1160
 ESTIMATED DEPTH OF COMPLETED WELL: 7000 ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Tuscarawas
 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	125'		
9 - 5/8			
8 - 5/8	1000'		
7			
5 1/2	5900' or		
4 1/2	5900'		
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS _____ FEET _____ SALT WATER X FEET 900
 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