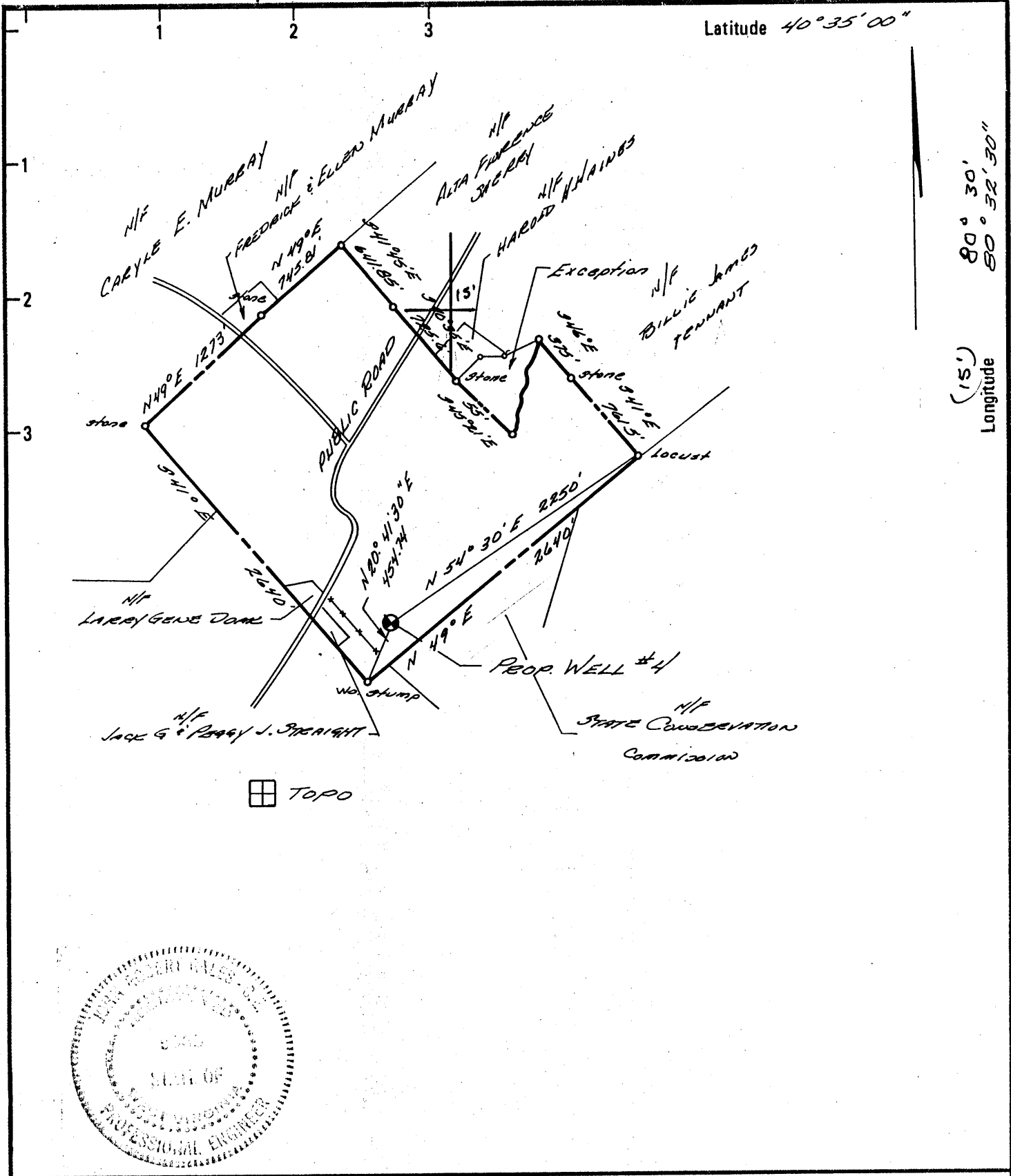


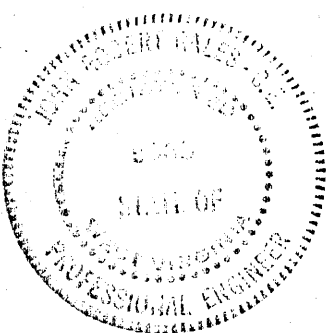
11,300

Latitude 40° 35' 00"



Longitude 80° 30' 00" (15') 80° 32' 30"

11800



New Location
 Drill Deeper
 Abandonment

Minimum Error of Closure 1 PART IN 2500
 Source of Elevation U.S.G.S. Map - 7 1/2 Min. Series
John Robert Gales
 "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."

Company GLOBE REFRACTORIES INC.
 Address P.O. Box D, NEWELL WV 26850
 Farm HARRY F. NICHOL
 Tract _____ Acres 131 Lease No. _____
 Well (Farm) No. 4 Serial No. _____
 Elevation (Spirit Level) 940 WELLSVILLE' 15'
 Quadrangle EAST LIVERPOOL SOUTH 7 1/2 Min. Series
 County HANCOCK District CLAY
 Engineer J. B. GALES
 Engineer's Registration No. 5566
 File No. _____ Drawing No. _____
 Date 3-11-80 Scale 1" = 1000'

334

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

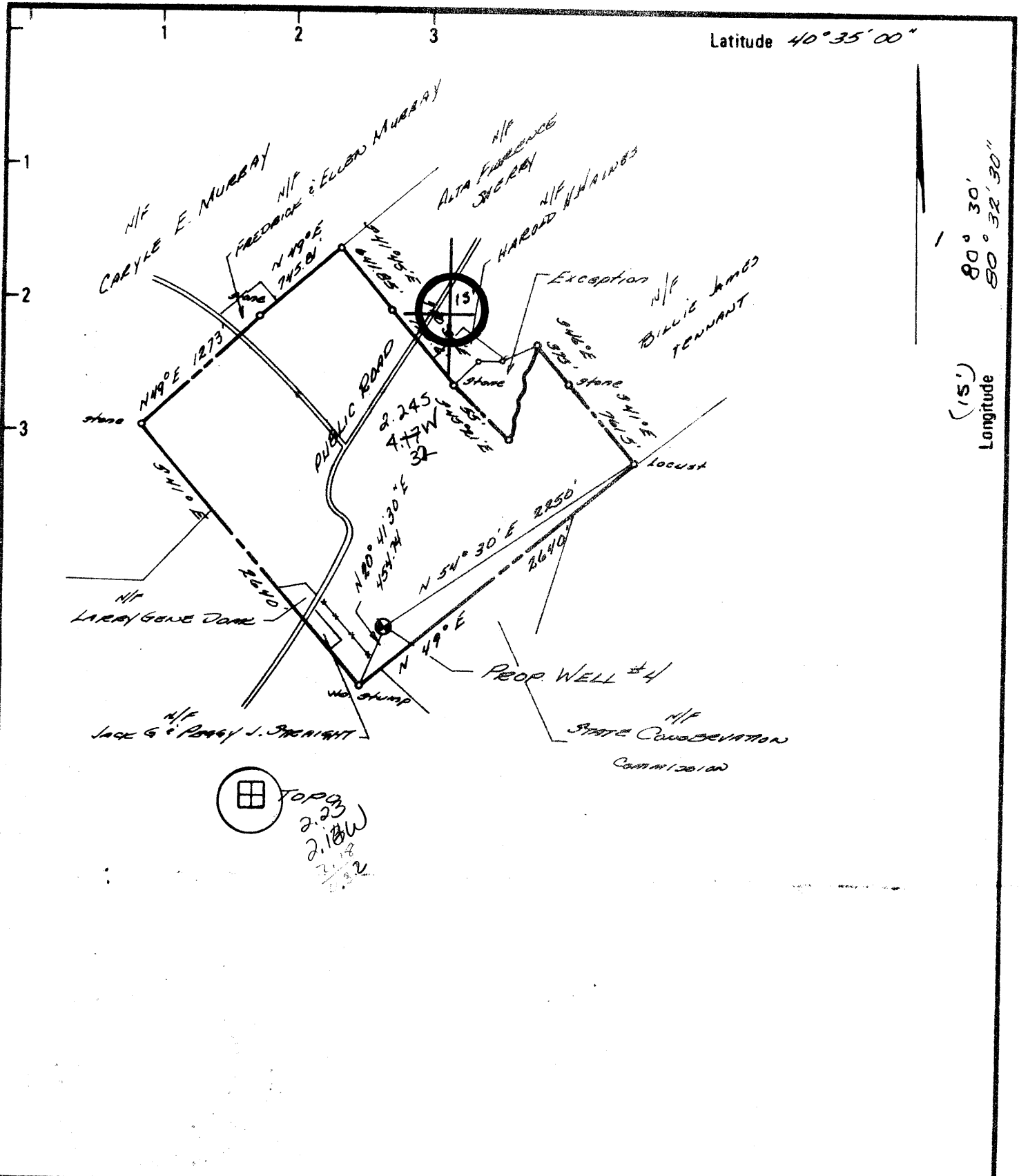
WELL LOCATION MAP
 FILE NO. 029-0100
 CANCELLED
 FORMERLY 029-0092

+ 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.

NOV 16 1987

J.B. # 58 P. 4 5000' Oriskany DB. # 29-378 33-20 P. 34-228 #79-399



TOPOG
2.23
2.18W
3/12

New Location
 Drill Deeper
 Abandonment

Minimum Error of Closure 1 PART IN 2500
 Source of Elevation U.S.G.S. Map - 7 1/2 Min. Series
John Robert Gales
 "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."

Company GLOBE REFRATORIES INC.
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 Engineer's Registration No. 5566
 File No. _____ Drawing No. _____
 Date 3-11-80 Scale 1" = 1000'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON
 WELL LOCATION MAP
 FILE NO. 029-0100
 FORMERLY 029-0092

+ 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.

OCT 17 1980



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED
MAR 1 1980

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 February 27, 1980

Surface Owner Harry F. Nichol

Company Globe Refractories, Inc.

Address R.D. #2, New Cumberland, WV 26047

Address P.O. Box D, Newell WV 26050

Mineral Owner same

Farm Harry F. Nichol Acres 131

Address same

Location (waters) _____

Coal Owner same

Well No. #4 Elevation 940'

Address same

District Clay County Hancock

Coal Operator same

Quadrangle East Liverpool South

Address same

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 11-28-80.

INSPECTOR
TO BE NOTIFIED Phillip Tracy

ADDRESS Middleburn, West Virginia

PHONE 304-758-4573

Robert H. [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 August 30, 1979 by Harry F. Nichol made to Globe Refractories Inc. and recorded on the 30th day of Oct. 1979 in Hancock County, Book 18 Page 406

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 Feb. 25, 1980 day or 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,
(Sign Name) Globe Refractories, Inc.
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

Address
of
Well Operator

P.O. Box D
Street
Newell
City or Town
West Virginia 26050
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 BOND

"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 Richard W. [Signature]

Formerly
47-029-0092 PERMIT NUMBER
Currently
47-029-100

[Handwritten signature]

**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: # 3101-State of WV
 NAME _____ NAME Richard W. Lee Mine Supt. P.E.E.M.
 ADDRESS _____ ADDRESS 434 Florida Ave., Chester WV
 TELEPHONE _____ TELEPHONE 304-387-1160
 ESTIMATED DEPTH OF COMPLETED WELL: 5,000' ROTARY X CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Oriskany
 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	30' then pulled		
11 3/4 250' *		250'	
9 - 5/8			
8 - 5/8 1,000' **		1,000'	
7			
5 1/2			
4 1/2 5,000'		5,000'	
3			
2 5,000'		5,000'	Perf. Top
Liners			Perf. Bottom
			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 300 FEET _____ SALT WATER 800 FEET _____
 APPROXIMATE COAL DEPTHS 200'
 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.

* or to protect nearby domestic water
 ** or thru berea sand

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



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

RECEIVED

OCT - 3 1980

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 September 26, 1980
Company Globe Refractories, Inc.
Address P.O. Box D, Newell, WV 26050
Farm Harry F. Nichol Acres 131
Location (waters) _____
Well No. #4 Elevation 940'
District Clay County Hancock
Quadrangle East Liverpool South

Surface Owner Harry F. Nichol
Address R.D. #2, New Cumberland, WV 26047
Mineral Owner Same
Address Same
Coal Owner Same
Address Same
Coal Operator Same
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 6-6-81.

INSPECTOR
TO BE NOTIFIED Phillip Tracy
ADDRESS Middleburn, West Virginia
PHONE 304-758-4573

J. V. Huggins
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 August 30, 1979 by Harry F. Nichol made to Globe Refractories Inc and recorded on the 30th day of Oct. 1979, in Hancock County, Book 18 Page 406
 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 Feb. 25, 1980 day or 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,
(Sign Name) Globe Refractories, Inc.
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

Address
of
Well Operator

P. O. Box D
Street
Newell
City or Town
West Virginia 26050
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 BOND

"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 William H. Chisler

FORMERLY:
47-029-0092 PERMIT NUMBER

47-029-0100

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

PROPOSED WORK ORDER TO X DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
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 NAME _____ NAME Richard M. Lee Mine Supt. P.E.E.M.
 ADDRESS _____ ADDRESS 434 Florida Ave., Chester WV
 TELEPHONE _____ TELEPHONE 304-387-1160
 ESTIMATED DEPTH OF COMPLETED WELL: _____ ROTARY _____ CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: _____
 TYPE OF WELL: OIL _____ GAS X COMB. _____ STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LIFT IN WELL	CEMENT LIFT UP OR SACKS - CUBIC FT.
20 - 16	30' then pulled		
11 3/4 250' *		250'	To surface
9 - 5/8			
8 - 5/8 1,000' **		1,000'	To surface
7			
5 1/2			
4 1/2 5,000'		5,000'	<i>to register of rule 15.01</i>
3			Perf. Top
2 5,000'		5,000'	Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 300 FEET SALT WATER 800 FEET
 APPROXIMATE COAL DEPTHS 200'
 IS COAL BEING MINED IN THE AREA? No BY WHOM? _____

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 For Coal Company

 Official Title