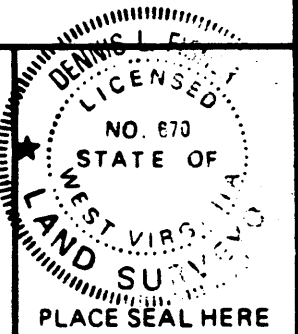


FILE NO. _____
 DRAWING NO. REV 1
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION SPOT ELEV. 951 AT KNOLL NW OF PROPOSED LOG.

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.

(SIGNED) Dennis L. Asher
 R.P.E. _____ L.L.S. 670



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FORM IV-6 (8-78)

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS,") PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 826 WATER SHED BIG POND CREEK
 DISTRICT HARRIS COUNTY WOOD
 QUADRANGLE POND CREEK (7.5) BELLEVILLE (15)

SURFACE OWNER LEO TOWNSEND ACREAGE 20
 OIL & GAS ROYALTY OWNER LEO TOWNSEND LEASE ACREAGE 220
 LEASE NO. 82-09-473

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON CLEAN OUT AND REPLUG

TARGET FORMATION DRISKANY ESTIMATED DEPTH 4611'

WELL OPERATOR KAGER EXPLOSION & MINING DESIGNATED AGENT KAGER EXPLOSION & MINING COMPANY
 ADDRESS PO BOX 8, RAVENSWOOD, WEST VIRGINIA 26104 ADDRESS PO BOX 8, RAVENSWOOD, WEST VIRGINIA 26104

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

DATE JANUARY 15 19 82
 OPERATOR'S WELL NO. KEP 107
 API WELL NO. _____
47 - 107 - 1208-Rem
 STATE COUNTY PERMIT

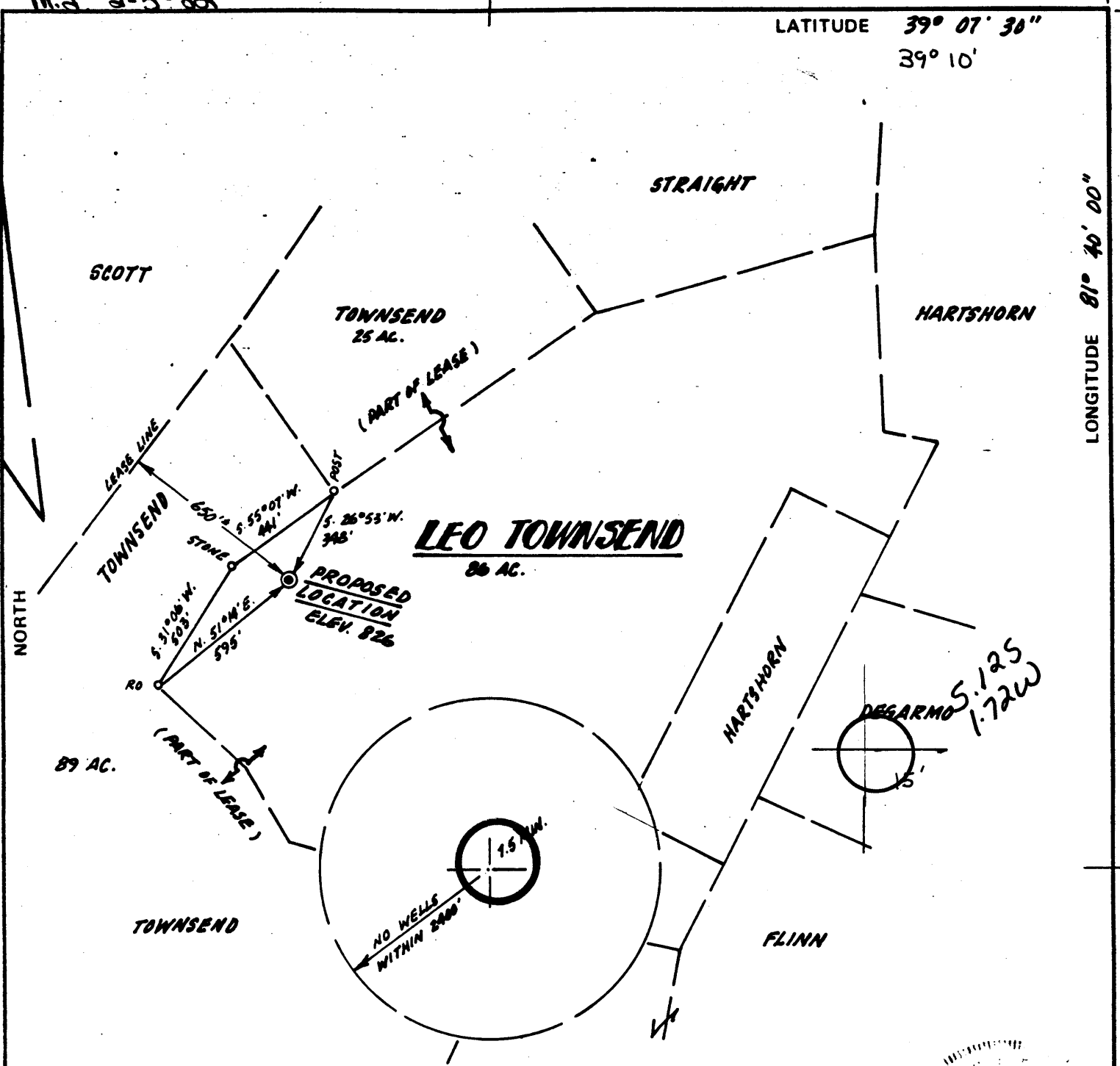
CANCELLED

JAN 3 1984

W.M.S. 2-5-82

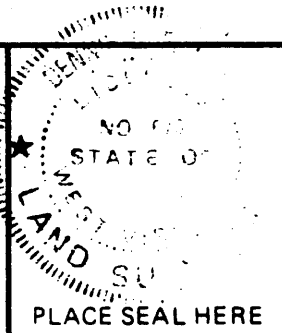
LATITUDE 39° 07' 30"
39° 10'

LONGITUDE 81° 40' 00"
12,025'



FILE NO. _____
DRAWING NO. REV 1
SCALE 1" = 500'
MINIMUM DEGREE OF ACCURACY 1:200
PROVEN SOURCE OF ELEVATION SPOT ELEV. 951 AT KNOLL NW OF PROPOSED LOG.

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.
(SIGNED) Dennis L. Asher
R.P.E. _____ L.L.S. 670



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
FORM IV-6 (8-78)



DATE JANUARY 15 19 82
OPERATOR'S WELL NO. KEM 147
API WELL NO. 47 - 107 - 1208
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION X STORAGE ___ DEEP X SHALLOW ___
LOCATION: ELEVATION 826 WATER SHED BIG POND CREEK
DISTRICT HARRIS COUNTY WOOD
QUADRANGLE POND CREEK (7.5) BELLEVILLE (15)
SURFACE OWNER LEO TOWNSEND ACREAGE 86
OIL & GAS ROYALTY OWNER LEO TOWNSEND LEASE ACREAGE 220
LEASE NO. 82-09-493
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

MAR 9 1982

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION ORISKANY ESTIMATED DEPTH 4611'
WELL OPERATOR KALBER EXPLORATION & MINING DESIGNATED AGENT KALBER EXPLORATION & MINING COMPANY
ADDRESS PO BOX 8, RAVENSWOOD, WEST VIRGINIA 26164 ADDRESS PO BOX 8, RAVENSWOOD, WEST VIRGINIA 26164

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

OIL AND GAS WELL PERMIT APPLICATION

RENEW
RECEIVED
OCT 26 1982

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

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

DATE, October 22, 1982

Surface Owner Leo Townsend

Company Kaiser Exploration and Mining Company

Address Rt. 1, Murraysville, WV 26153

Address P. O. Box 8, Ravenswood, WV 26164

Mineral Owner Same

Farm Leo Townsend Acres 220

Address _____

Location (waters) Big Pond Creek

Coal Owner Same

Well No. KEM #147 Elevation 826

Address _____

District Harris County Wood

Coal Operator None

Quadrangle Pond Creek (7.5) Belleville (15)

Address _____

THIS PERMIT MUST BE POSTED AT THE WELL SITE
ALL PROVISIONS BEING IN ACCORDANCE WITH CHAPTER 22,
ARTICLE 4 OF THE W. VA. CODE, THE LOCATION IS HEREBY

APPROVED FOR reviewing THIS PERMIT SHALL EXPIRE _____
IF OPERATIONS HAVE NOT COMMENCED BY 11/27/83 TO BE NOTIFIED Deo Mace

BY Fred B. Rudolph ADDRESS Rt. 1, Box 65, Sandridge, WV

PHONE 655-8693

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee
there to, (or as the case may be) under grant or lease dated April 19 1979 by I. Leo & Alma
Townsend made to Kaiser Exploration and Mining Company and recorded on the 29th day of October
1979, in Wood County, Book 729 Page 680

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
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
coal owners at their above shown respective address _____ day _____ before, or on the
_____ day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL
PHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND
ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN, WEST VIRGINIA 26505
304 - 292-6331

Very truly yours,
(Sign Name) E. A. P.

Address
of
Well Operator

Well Operator
Kaiser Exploration and Mining Company
P. O. Box 8
Street
Ravenswood
City or Town
West Virginia 26164
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
the plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting
the fact that no objections have been made by the coal operators or found thereto by the department and that the same is approved
by the well operator authorized to proceed.

PROPOSED WORK ORDER TO X DRILL DEEPEN FRACTURE-STIMULATE

DRILLING CONTRACTOR: (If Known) NAME Clint Hurt & Associates, Inc.
ADDRESS P. O. Box 388, Elkvicw, WV 25071
TELEPHONE 273-5371

RESPONSIBLE AGENT: NAME Robert A. Pryce
ADDRESS P. O. Box 8, Ravenswood, WV 26076
TELEPHONE 273-5371

ESTIMATED DEPTH OF COMPLETED WELL: 4611'
 PROPOSED GEOLOGICAL FORMATION: Oriskany
 TYPE OF WELL: OIL GAS 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 10 3/4"	250'	250'	150 sks class A (to surface)
8 - 5/8			
7	2086'	2086'	65 sks 50/50 pozmix 100 sks Class A
5 1/2			
4 1/2	4611'	4611'	225 sks class A
3			Perf. Top
2			Perf. Bottom
1			Perf. Top
1/2			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS _____ FEET SALT WATER _____ FEET
 APPROXIMATE COAL DEPTHS _____
 IS COAL BEING MINED IN THE AREA? None 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



THIS PERMIT MUST BE POSTED AT THE WELL SITE

STATE OF WEST VIRGINIA 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 10-25-82.

Oil and Gas Division

Deputy Director - Oil & Gas Division

OIL AND GAS WELL PERMIT APPLICATION

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

Surface Owner Leo Townsend
Address Rt. 1, Murraysville, WV 26153
Mineral Owner Same
Address
Coal Owner Same
Address
Coal Operator None
Address

DATE January 25, 1982
Company Kaiser Exploration and Mining Company
Address P. O. Box 8, Ravenswood, WV 26164
Farm Leo Townsend Acres 220
Location (waters) Big Pond Creek
Well No. KEM #147 Elevation 826
District Harris County Wood
Quadrangle Pond Creek (7.5) Belleville (15)

RECEIVED FEB 3 - 1982 OIL AND GAS DIVISION WV DEPARTMENT OF MINES

INSPECTOR TO BE NOTIFIED Deo Mace
ADDRESS Rt. 1, Box 65, Sandridge, WV
PHONE 655-8693

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 April 19 1979 by I. Leo & Alma Townsend made to Kaiser Exploration and Mining Company and recorded on the 29th day of October 1979, in Wood County, Book 729 Page 680
X 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 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 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 PHYSICAL LOGS DIRECTLY TO: WEST VIRGINIA GEOLOGICAL AND ECONOMIC SURVEY P. O. BOX 879 MORGANTOWN, WEST VIRGINIA 26505 304 - 292-6331

Very truly yours, (Sign Name) K.A.P. Well Operator
Kaiser Exploration and Mining Company
P. O. Box 8
Ravenswood
West Virginia 26164

*SECTION If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting filing of said plat; that no objections have been made by the coal operators or found thereto by the department and that the same is approved the well operator authorized to proceed.

PROPOSED WORK ORDER TO X DRILL DEEPEN FRACTURE-STIMULATE
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:
 NAME Clint Hurt & Associates, Inc. NAME Robert A. Pryce
 ADDRESS P. O. Box 388, Elkview, WV 25071 ADDRESS P. O. Box 8, Ravenswood, WV 26165
 TELEPHONE 273-5371 TELEPHONE 273-5371
 ESTIMATED DEPTH OF COMPLETED WELL: 4611' 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			
13 - 10			
9 - 5/8 10 3/4"	250' - 350'	250' - 350'	150 sks class A (to surface)
8 - 5/8			
7	2086'	2086'	65 sks 50/50 pozmix 100 sks Class A
5 1/2			
4 1/2	4611'	4611'	225 sks class A
3			Perf. Top
2			Perf. Bottom
Links			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS _____ FEET SALT WATER _____ FEET
 APPROXIMATE COAL DEPTHS _____
 IS COAL BEING MINED IN THE AREA? None 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

DRILLING CONTRACTOR:

Clint Hurl

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

OIL AND GAS WELL PERMIT APPLICATION

1) Date: June 22, 1983
2) Operator's Well No. KEM #147
3) API Well No. 47 - 107 - 1208-Ren
State: _____ County: _____ Permit: _____

- 4) WELLTYPE: A Oil _____ / Gas X /
B (If "Gas", Production X / Underground storage _____ / Deep _____ / Shallow X /)
- 5) LOCATION: Elevation: 826' Watershed: Big Pond Creek
District: Harris County: Wood Quadrangle: Pond Creek
- 6) WELL OPERATOR Kaiser Exploration and Mining Co. II DESIGNATED AGENT R. A. Pryce
Address P. O. Box 8 Address Same
Ravenswood, WV 26164
- 7) OIL & GAS ROYALTY OWNER Leo Townsend 12) COAL OPERATOR None
Address Rt. 1 Address _____
Murraysville, WV 26153
- 8) SURFACE OWNER Same 13) COAL OWNER(S) WITH DECLARATION ON RECORD:
Name None
Address _____
- 9) FIELD SALE (IF MADE) TO:
Address _____
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED
Name Homer Dougherty 14) COAL LESSEE WITH DECLARATION ON RECORD:
Name None
Address _____
- 15) PROPOSED WORK: Drill X / Drill deeper _____ / Redrill _____ / Fracture or stimulate _____
Plug off old formation _____ / Perforate new formation _____
Other physical change in well (specify) _____
- 16) GEOLOGICAL TARGET FORMATION, Devonian Brown Shale
- 17) Estimated depth of completed well, 4611 feet
- 18) Approximate water strata depths: Fresh, _____ feet; salt, _____ feet.
- 19) Approximate coal seam depths: _____ Is coal being mined in the area? Yes _____ / No _____

20) 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	Left in well		
Conductor									Kinds <u>by Rules 1505</u>
Fresh water	<u>10 3/4"</u>			<u>X</u>		<u>350</u> 250	<u>350</u> 250	<u>150</u> sks class A to surface	
Coal									Sizes
Intermediate	<u>7"</u>			<u>X</u>		<u>2086</u>	<u>2086</u>	<u>65</u> sks 50/50 pozmix	
Production	<u>4 1/2"</u>			<u>X</u>		<u>4611</u>	<u>4611</u>	<u>100</u> sks class A	
Tubing								<u>225</u> sks 50/50 pozmix	Depths set
Liners									Perforations:
									Top Bottom

- 21) EXTRACTION RIGHTS
Check and provide one of the following:
 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.
 The requirement of Code 22-4-1-(c) (1) through (4). (See reverse side for specifics.)
- 22) ROYALTY PROVISIONS
Is the right to extract, produce or market the oil or gas based upon a lease or other continuing contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes No
If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit Form IV-60.
- 23) Required Copies (See reverse side.)
- 24) 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.
- Notary: _____
My Commission Expires _____
- Signed: R. A. Pryce
Its: General Manager

OFFICE USE ONLY

Permit number 47-107-1208-Ren DRILLING PERMIT Date August 25, 1983

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.

Permit expires August 25, 1985 unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond: <u>BB</u>	Agent: <u>OK</u>	Plat: <u>BB</u>	Casing: <u>BB</u>	Fee
-----------------	------------------	-----------------	-------------------	-----

T. H. ...
Administrator, Office of Oil and Gas