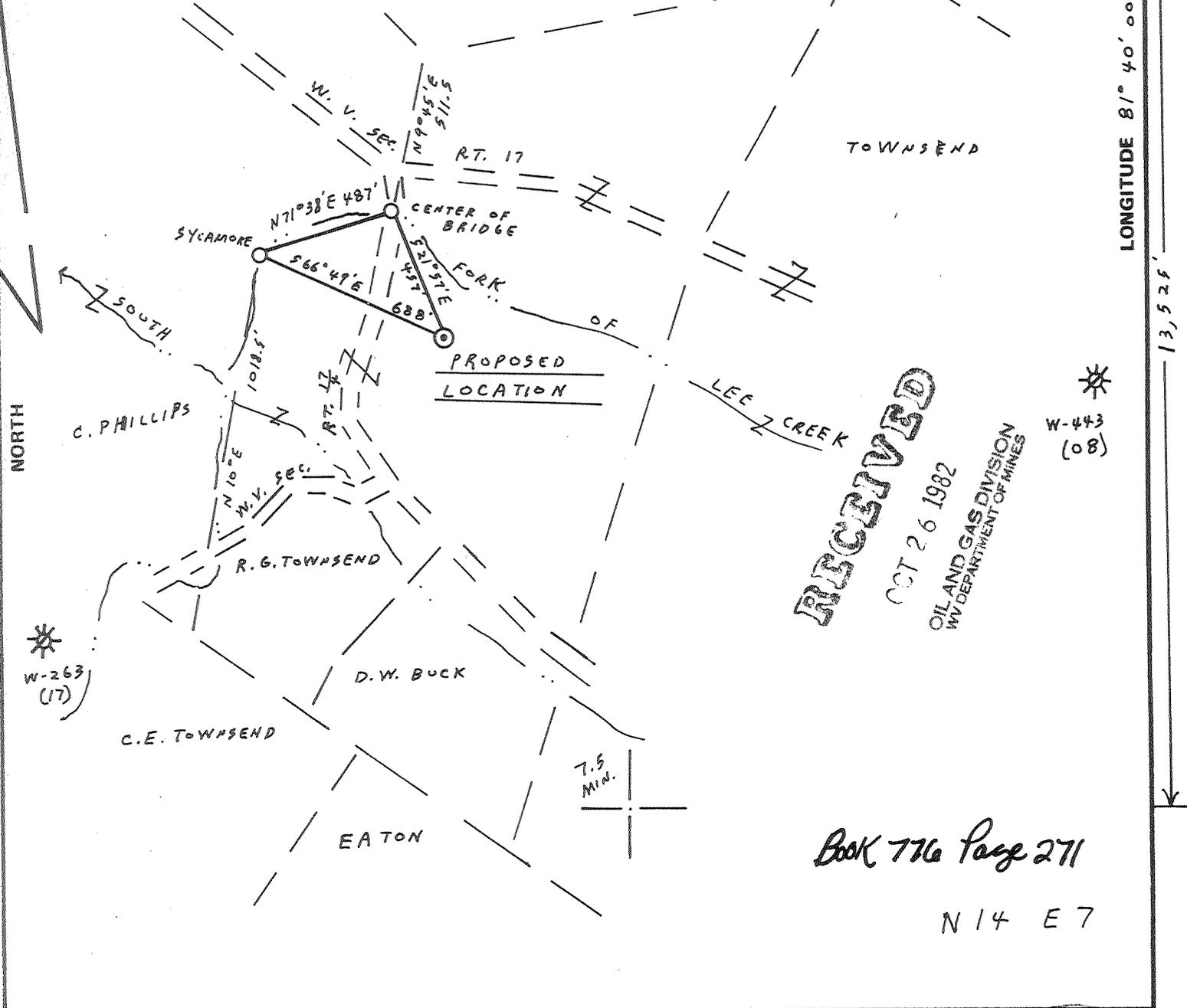


LATITUDE 39° 10' 00"

Jamie 5/22/89
" 9/27/90

J. WHITE

LONGITUDE 81° 40' 00"



RECEIVED
OCT 26 1982
OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

W-443
(08)

Book 776 Page 271

N 14 E 7

FILE NO. _____
 DRAWING NO. 5-18
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION INTERSECTION W.V. RT. 17 AND 1/4, ELEV. = 638

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) Vincent W. Wood
 R.P.E. _____ L.L.S. 664

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



DATE OCTOBER 12, 1982
 OPERATOR'S WELL NO. KEM 270
 API WELL NO. _____

47-107-12307
 STATE COUNTY PERMIT
Fracture Cancelled

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP X SHALLOW ___
 LOCATION: ELEVATION 630 WATERSHED SOUTH FORK OF LEE CREEK
 DISTRICT HARRIS COUNTY WOOD
 QUADRANGLE LUBECK (7.5 MIN.)

SURFACE OWNER CLARENCE TOWNSEND, ET AL. ACREAGE 53.5 P/O 189.12
 OIL & GAS ROYALTY OWNER CLARENCE TOWNSEND, ET AL. LEASE ACREAGE 189.12
 LEASE NO. 87-10-1054

PROPOSED WORK: DRILL X 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 ORISKANY ESTIMATED DEPTH 4385'
 WELL OPERATOR Durst Oil Gas DESIGNATED AGENT ROBERT W. DURST, JR.
 ADDRESS Rt. 2 Box 538 Pt. Pleasant, W.V. 25550 ADDRESS Rt. 2 Box 538 Pt. Pleasant, W.V. 25550

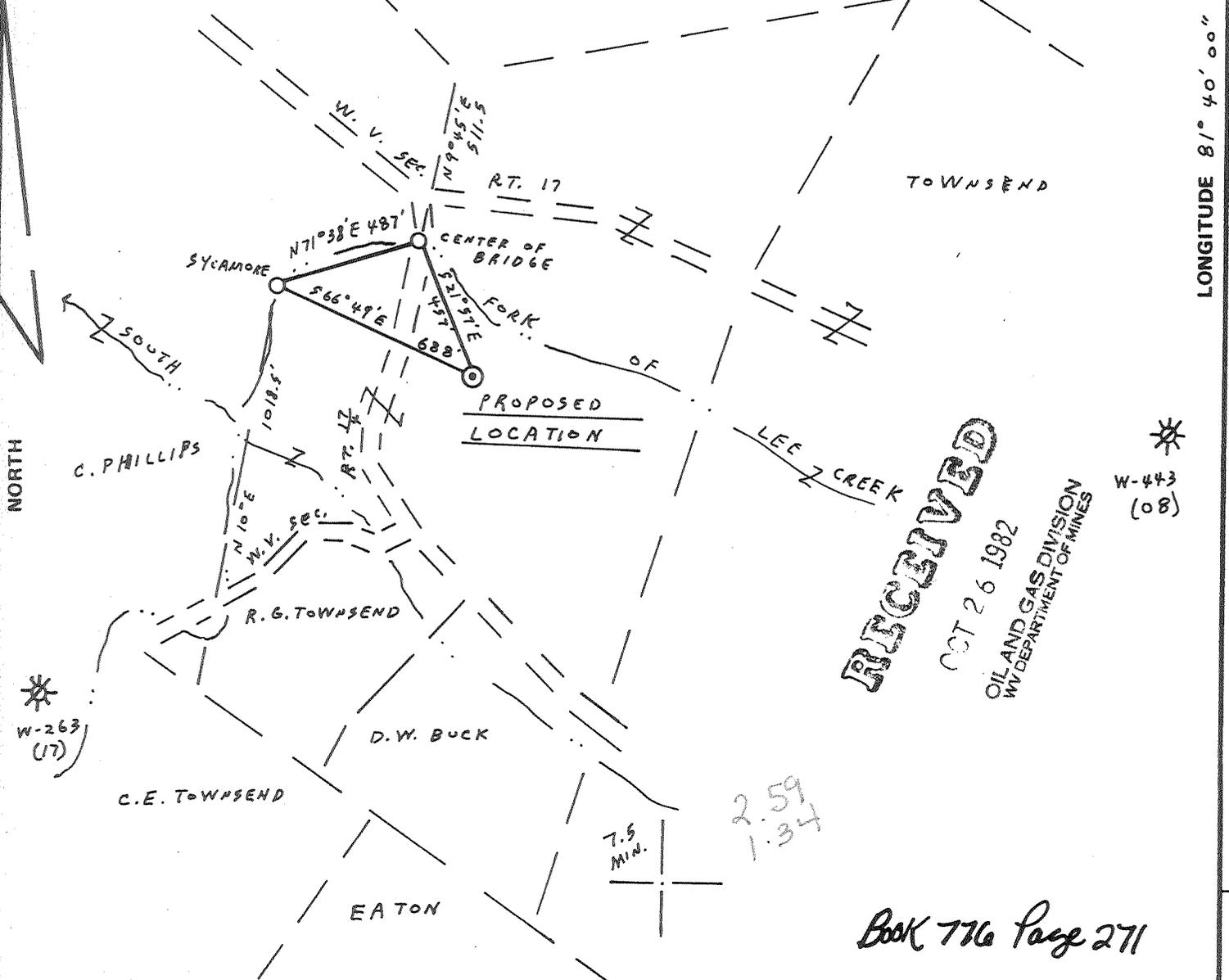
WOOD - 1230 F

LATITUDE 39° 10' 00"

Jamie 5/22/89
" 9/27/90

J. WHITE

LONGITUDE 81° 40' 00"



RECEIVED
OCT 26 1982
OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

W-443
(08)

Book 776 Page 271

N 14 E 7

2.59
134 Bellman WC

FILE NO. _____
 DRAWING NO. 5-18
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION INTERSECTION W.V. RT. 17 AND 17 1/4, ELEV. = 638

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) Vincent W. Wood
 R.P.E. _____ L.L.S. 664

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



DATE OCTOBER 12, 1982
 OPERATOR'S WELL NO. KEM 270
 API WELL NO. _____

47-107-12307
 STATE COUNTY PERMIT

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP X SHALLOW ___
 LOCATION: ELEVATION 630 WATER SHED SOUTH FORK OF LEE CREEK
 DISTRICT HARRIS COUNTY WOOD
 QUADRANGLE LUBECK (7.5 MIN.)

SURFACE OWNER CLARENCE TOWNSEND, ET AL. ACREAGE 53.5 P/189.12
 OIL & GAS ROYALTY OWNER CLARENCE TOWNSEND, ET AL. LEASE ACREAGE 189.12
 LEASE NO. 87-10-1054

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

OCT 22 1990

Aug Back TD 3670

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION ORISKANY ESTIMATED DEPTH 4385'
 WELL OPERATOR DURST OIL & GAS DESIGNATED AGENT RONALD W. DURST, JR.
 ADDRESS Pt. Pleasant, W.V. 25530 ADDRESS Pt. Pleasant, W.V. 25530

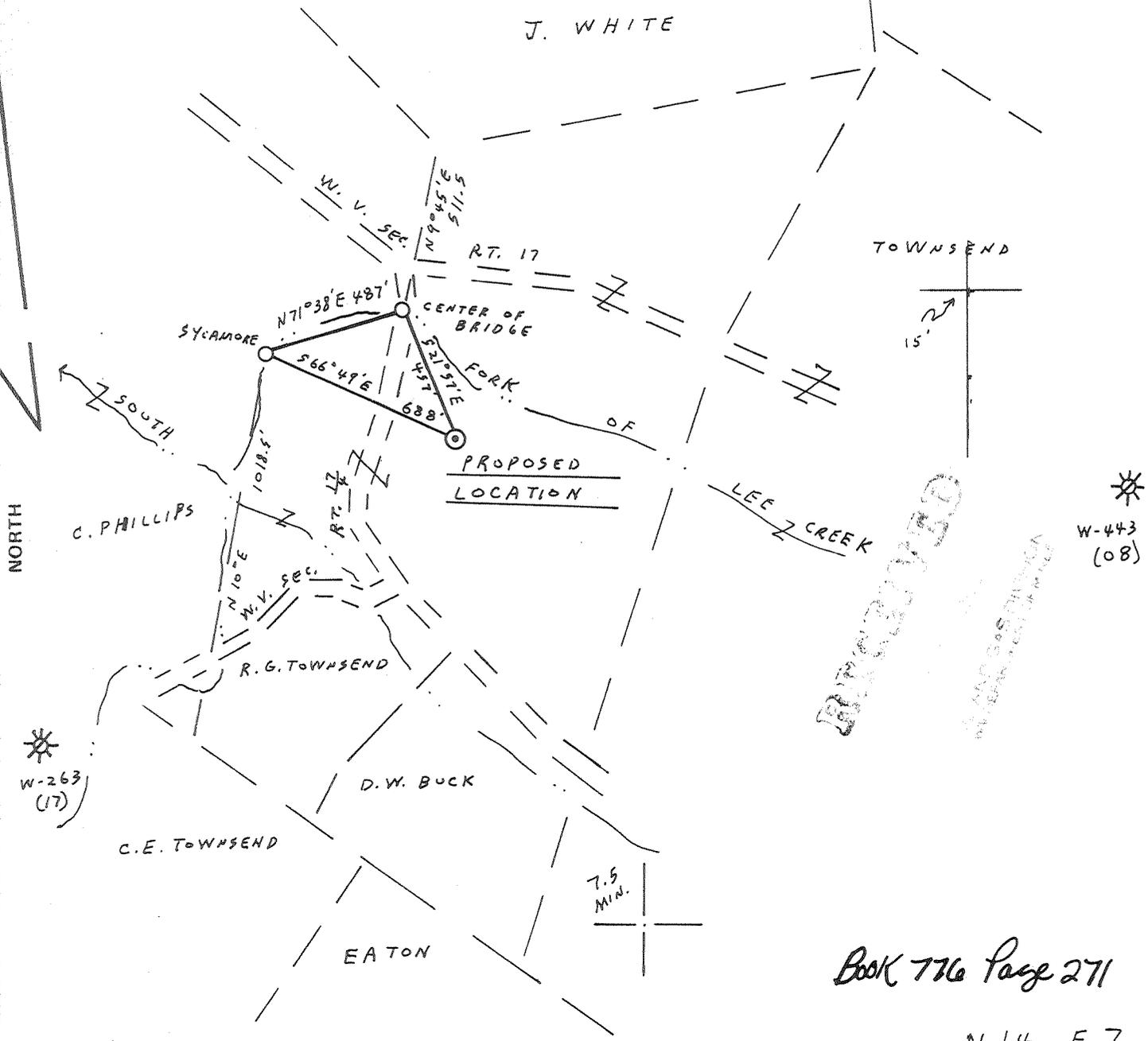
WOOD - 1230 P

Jamie 5/22/89

LATITUDE 39° 10' 00"

J. WHITE

LONGITUDE 81° 40' 00"



RECEIVED

W-443 (08)

Book 776 Page 271

N 14 E 7

FILE NO. _____
 DRAWING NO. 5-18
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION INTERSECTION W.V. RT. 17 AND 1/4, ELEV. = 638

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) Vincent W. Wood
 R.P.E. _____ L.L.S. 664

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



DATE OCTOBER 12, 1982
 OPERATOR'S WELL NO. KEM 270
 API WELL NO. _____

47-107-1230
 STATE COUNTY PERMIT

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP X SHALLOW ___
 LOCATION: ELEVATION 630 WATER SHED SOUTH FORK OF LEE CREEK
 DISTRICT HARRIS COUNTY WOOD
 QUADRANGLE LUBECK (7.5 MIN.)

SURFACE OWNER CLARENCE TOWNSEND, ET AL. ACREAGE 53.5 P/189.12
 OIL & GAS ROYALTY OWNER CLARENCE TOWNSEND, ET AL. LEASE ACREAGE 189.12
 LEASE NO. 87-10-1054

PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
 MAY 26 1989

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION ORISKANY ESTIMATED DEPTH 4385'
 WELL OPERATOR DURST OIL GAS DESIGNATED AGENT _____
 ADDRESS Rt. 2 Box 538 Pleasant, W.V. 25550 ADDRESS Rt. 2 Box 538 Pleasant, W.V. 25550

WOOD - 1230

M.J. 10/35/82

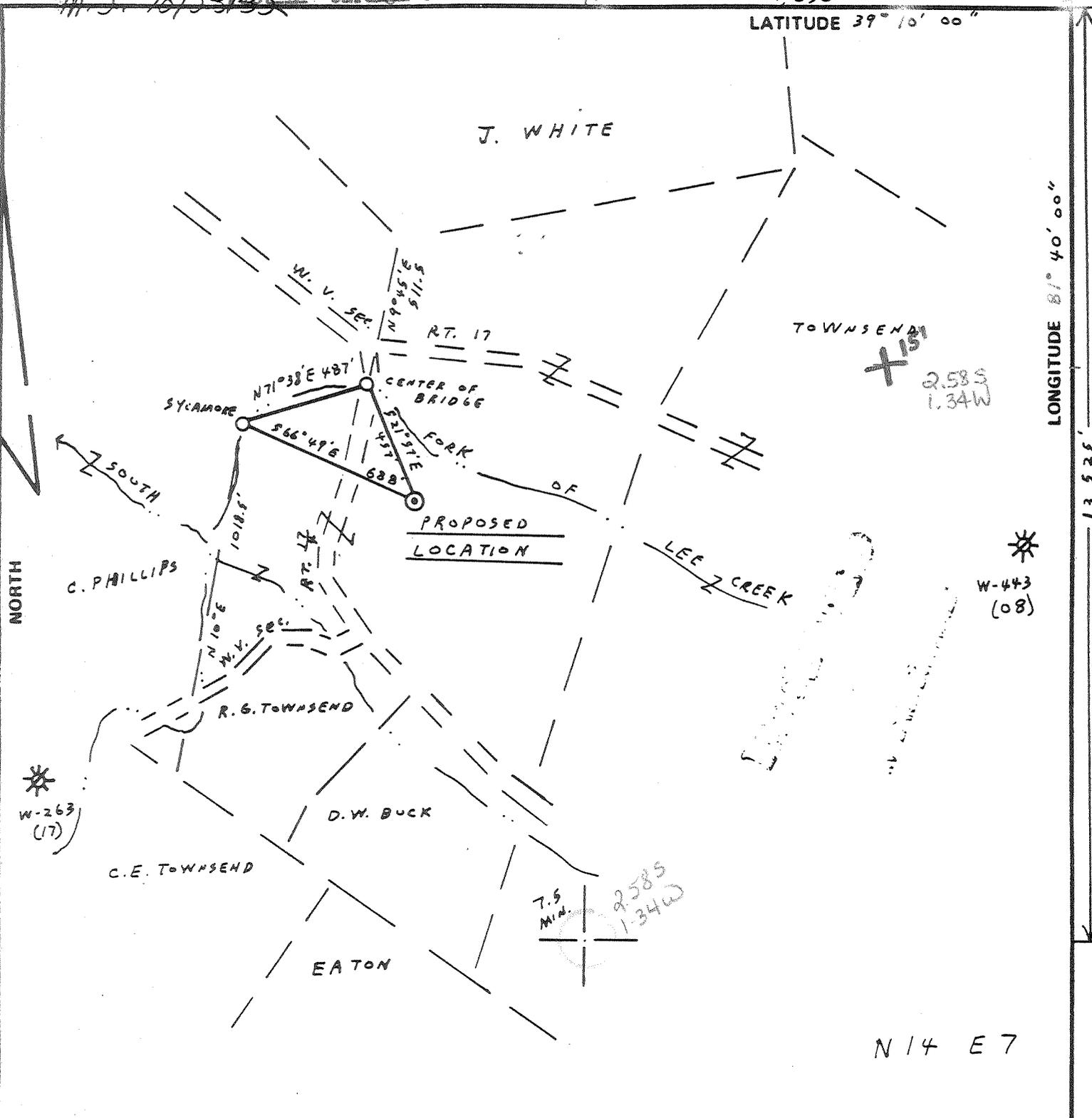
Card CSD

7,050'

LATITUDE 39° 10' 00"

LONGITUDE 81° 40' 00"

13,525'



N 14 E 7

FILE NO. _____
 DRAWING NO. 5-18
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION INTERSECTION W.V. RT. 17 AND 1/4, ELEV. = 638

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) Vincent W. Wood
 R.P.E. _____ L.L.S. 664

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



DATE OCTOBER 12, 1982
 OPERATOR'S WELL NO. KEM 270
 API WELL NO. 47-107-1230
 STATE COUNTY PERMIT

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP X SHALLOW ___
 LOCATION: ELEVATION 630 WATERSHED SOUTH FORK OF LEE CREEK
 DISTRICT HARRIS COUNTY WOOD
 QUADRANGLE LUBECK (7.5 MIN.) Belleville 15' WC
 SURFACE OWNER CLARENCE TOWNSEND, ET AL. ACREAGE 53.5 P/189.12
 OIL & GAS ROYALTY OWNER CLARENCE TOWNSEND, ET AL. LEASE ACREAGE 189.12
 LEASE NO. 87-10-1054
 PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

NOV 8 1982

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION ORISKANY ESTIMATED DEPTH 4385' New England
 WELL OPERATOR KAISER EXPLOR. & MIN. CO. DESIGNATED AGENT KAISER EXPLORATION AND MINING CO.
 ADDRESS P.O. BOX 8 ADDRESS P.O. BOX 8

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

12/13/82: Young's Wireline perforated the Oriskany Sandstone from 4268'-4276' (KB), 33 holes, .41" diameter.

1/6/83: B. J. Hughes hydrofractured zone w/15,000# of 80/100 mesh sand, 45,000# 20/40 mesh sand, 500 gal 28% HCL acid; 180,000 SCF of nitrogen; 829 bbl water.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Shale			0	347	
Sandstone			347	404	
Sandstone & Shale			404	810	
Shale			810	1013	
Sandstone			1013	1053	
Shale			1053	1152	
Sandstone			1152	1207	
Sandstone & Shale			1207	1340	
Sandstone			1340	1400	
Shale			1400	1440	
Injun Sandstone			1440	1480	
Shale			1480	1916	
Coffee Shale			1916	1938	
Berea Sandstone			1938	1941	S/g
Shale			1941	3400	S/g at 2950'
Devonian Brown Shale			3400	3600	S/g
Shale			3600	3946	
Marcellus Shale			3946	4165	S/g
Onondaga Limestone			4165	4244	
Oriskany Sandstone			4244	4293	S/g
Helderberg			4293	TD	
				TD 4417	

(Attach separate sheets as necessary)

KAISER EXPLORATION AND MINING COMPANY

Well Operator

By: R. A. P.

Date: January 28, 1983

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."

DRILLING CONTRACTOR (IF KNOWN) Clint Hurt & Associates, Inc.

Address P. O. Box 388

Elkview, WV 25071

GEOLOGICAL TARGET FORMATION, Oriskany

Estimated depth of completed well, 4385' feet Rotary X / Cable tools /

Approximate water strata depths: Fresh, feet; salt, feet.

Approximate coal seam depths: Is coal being mined in the area? Yes / No /

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								
Fresh Water	10 3/4"					250'	250'	150 sks class A (to surface)
Coal								Sizes
Intermediate	7"					1845'	1845'	65 sks 50/50 pozmix 100 sks Class A
Production	4 1/2"					4385'	4385'	225 sks 50/50 pozmix set
Tubing								
Liners								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,
ARTICLE 4 OF THE W. VA. CODE, THE LOCATION IS HEREBY
APPROVED FOR Drilling. THIS PERMIT SHALL EXPIRE
IF OPERATIONS HAVE NOT COMMENCED BY 6-29-83
BY Fred Bunde

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.

WAIVER

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

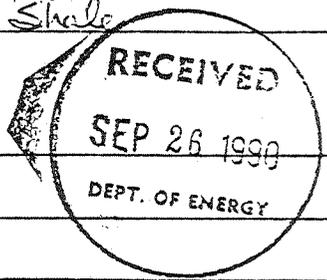
Issued 10/16/90
 Expired 10/16/92
 47-107-1230 F PB

FORM WW-2B

Page ___ of ___

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

- 1) Well Operator: Durst Oil and Gas ⁴⁵⁰⁰ 1468° (2) 449
- 2) Operator's Well Number: KEM-270 Townsend 3) Elevation: 630'
- 4) Well type: (a) Oil or Gas
 (b) If Gas: Production Underground Storage
 Deep Shallow
- 5) Proposed Target Formation(s): Devonian Brown Shale
- 6) Proposed Total Depth: 3670' Plug Back TD feet
- 7) Approximate fresh water strata depths: _____
- 8) Approximate salt water depths: _____
- 9) Approximate coal seam depths: none
- 10) Does land contain coal seams tributary to active mine? Yes / No
- 11) Proposed Well Work: ① Set perm. cast iron bridge plug @ 370' ② Place dump bailer of casing on top of plug ③ Perf casing 3000' to 3400' w/20 holes. ④ Free Devonian Brown
- 12) Shale w/75 Quality Foam and 45,000 lbs 20/40 sand

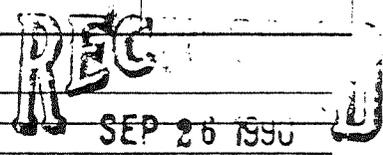


CASING AND TUBING PROGRAM

Plug Back Free w/ Hole

TYPE	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	
Conductor					
Fresh Water	10 3/4"	H	32.75	259	259' 150 SK Class A
Coal					<i>C. Gisting</i>
Intermediate	7"	K	20.00	1559	1559' 65 SK PL-2 100 SK Class A
Production	4 1/2"		11.60	4397	4397' 200 SK PL-2
Tubing					Plug Back TD 4 1/2" @ 3670'
Liners					

PACKERS : Kind _____
 Sizes _____
 Depths set _____



For Division of Oil and Gas Use Only

DIVISION OF OIL & GAS
 DEPARTMENT OF ENERGY

Fee(s) paid: Well Work Permit Reclamation Fund WPCP

Plat 9 WW-2B Bond L.C. Gunkel Agent

11324

REC
SEP 26 1990

1) Date: 6-17-90
2) Operator's well number
KEM 270 Townsend
3) API Well No: 47-107 - 1230
State - County - Permit

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
- (a) Name Clarence Townsend, etal
Address Rt 2
Belleville, WV 26133
 - (b) Name _____
Address _____
 - (c) Name _____
Address _____
- 5) (a) Coal Operator:
- Name _____
Address _____
 - (b) Coal Owner(s) with Declaration
Name _____
Address _____
 - Name _____
Address _____
 - (c) Coal Lessee with Declaration
Name _____
Address _____
- 6) Inspector Glen Robinson
Address Rt 1 #6 Mt. Pleasant Est
Mineral Wells, WV 26150
Telephone (304) - 489-9862

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

_____ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR
 Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)
 I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through _____ on the above named parties, by:
 Personal Service (Affidavit attached)
 _____ Certified Mail (Postmarked postal receipt attached)
 _____ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.
 I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.
 I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator Durst Oil and Gas
 By: Ronald W. Durst Jr
 Its: owner
 Address Rt 2 Box 538
Point Pleasant, WV 25550
 Telephone (304) 675-3064

Subscribed and sworn before me, this 31st day of July, 1970

Ma. S. Merritt Notary Public
My commission expires 1/26/94