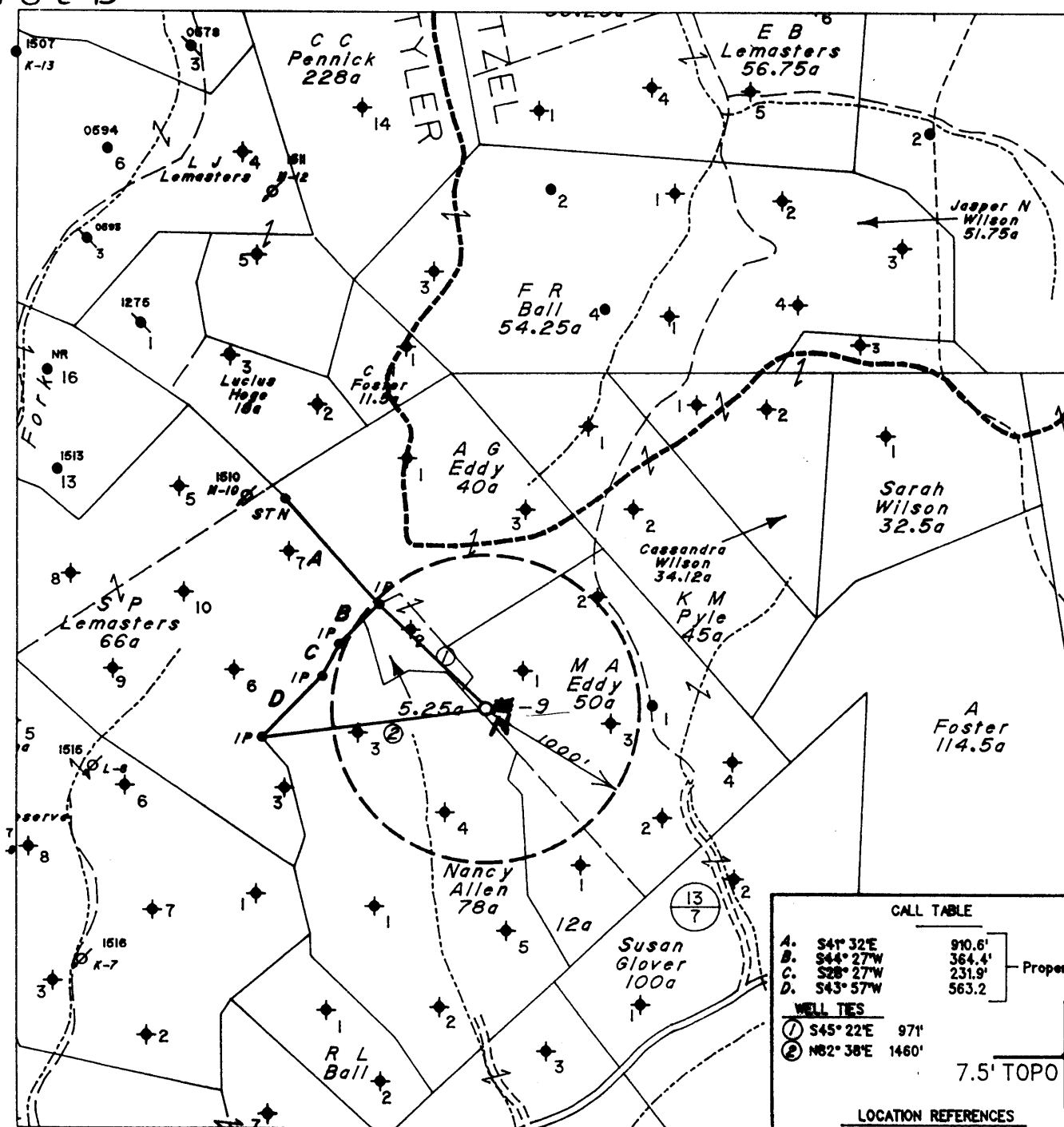


GS 3-2-93

LATITUDE 39° 30' 00"

LONGITUDE 80° 40' 00"



NOTE: No Known Water Supply Sources Are Located Within 1000' of Proposed Well

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

CALL TABLE	
A. S44° 32'E	910.6'
B. S44° 27'W	364.4'
C. S28° 27'W	231.9'
D. S43° 57'W	563.2'

Property Line

WELL TIES

① S45° 22'E	971'
② N82° 38'E	1460'

7.5' TOPO

LOCATION REFERENCES	
S18° 31'E	218' 10" CO
N30° 54'W	184' 12" WO
N53° 52'W	165' 11" W

FILE NO. 1779

MAP NO. N48 N S E W

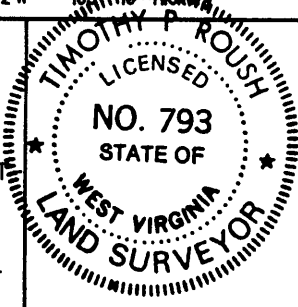
SCALE 1" = 1000'

MINIMUM DEGREE OF ACCURACY 1 in 200

PROVEN SOURCE OF ELEVATION C.C. Pennick No.22
(47-095-1056) = 1382'

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) Timothy P. Roush
TIMOTHY P. ROUSH PS 793



STATE OF WEST VIRGINIA
DIVISION OF ENERGY
OIL AND GAS SECTION



DATE February 9, 19 93

FARM J.T. Eddy NO. N-9

API WELL NO. 47-095-1525-LT

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

LOCATION: ELEVATION 1247' WATERSHED Indian Creek

DISTRICT McElroy COUNTY Tyler

QUADRANGLE Centerpoint

Cancelled

SURFACE OWNER Ellen J. Muth ACREAGE 125 Ac.

OIL & GAS ROYALTY OWNER Pennzoil Products Co. et.al. LEASE ACREAGE 91.67 Ac.

LEASE NO. 47220-00

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

PLUG AND ABANDON CLEAN OUT AND REPLUG

TARGET FORMATION Gordon ESTIMATED DEPTH 3240'

WELL OPERATOR Pennzoil Products Company DESIGNATED AGENT James A. Crews

ADDRESS P. O. Box 5519 ADDRESS P. O. Box 5519

Vienna, W.Va. 26105 673 ADDRESS Vienna, W.Va. 26105

JUN 9 1995

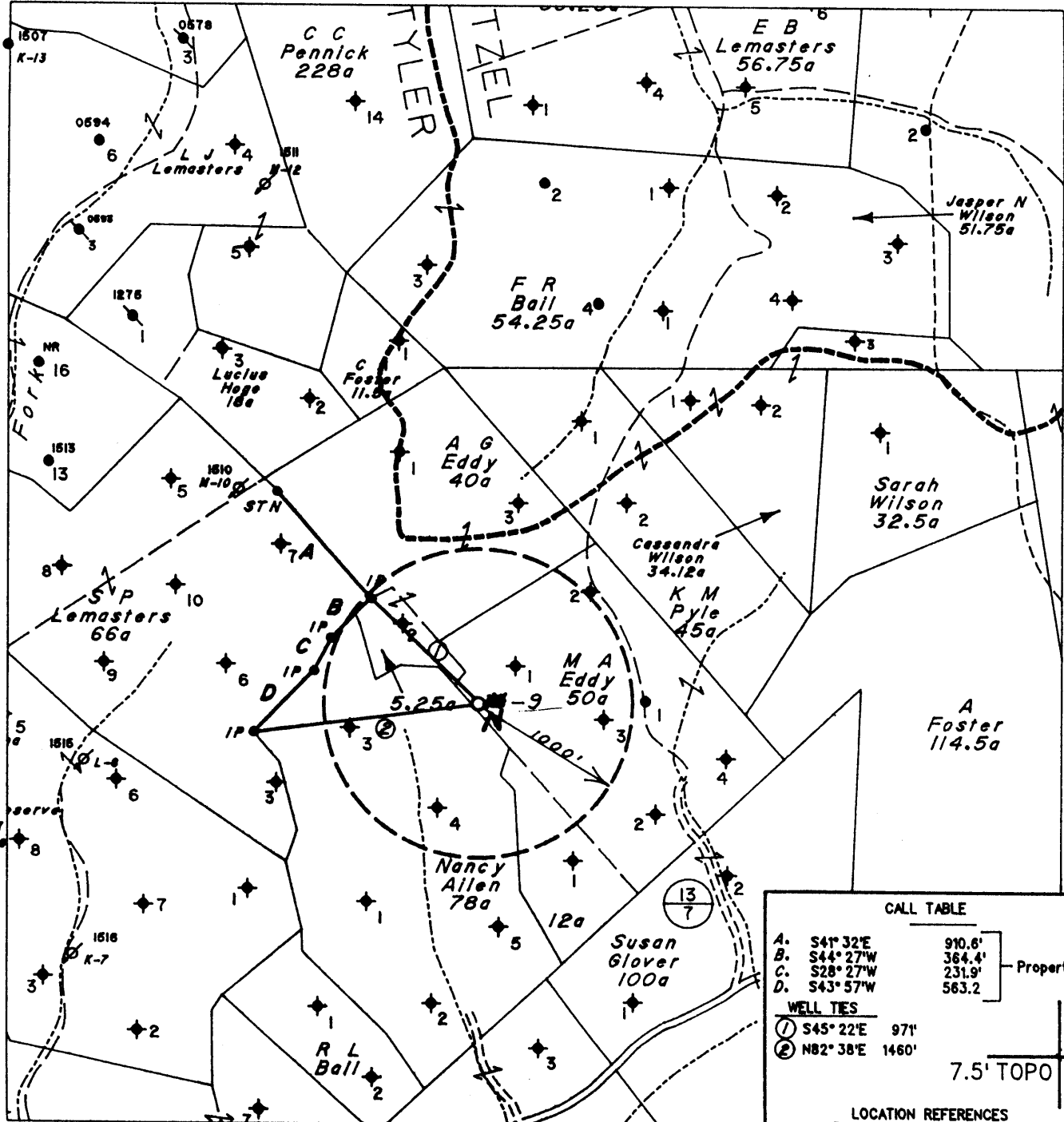
FORM IV-6

TYLER 1525 LT

GS 3-2-93

LATITUDE 39° 30' 00"

LONGITUDE 80° 40' 00"



NOTE: No Known Water Supply Sources Are Located Within 1000' Of Proposed Well

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

CALL TABLE

A.	S41° 32'E	910.6'	Property Line
B.	S44° 27'W	364.4'	
C.	S28° 27'W	231.9'	
D.	S43° 57'W	563.2'	

WELL TIES

①	S45° 22'E	971'
②	N82° 38'E	1460'

7.5' TOPO

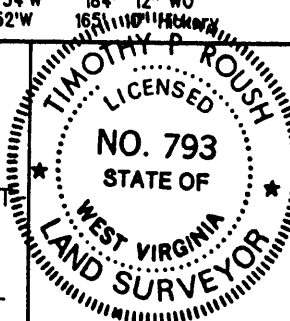
LOCATION REFERENCES

S18° 31'E	218' 10" CO
N30° 54'W	184' 12" WO
N53° 52'W	165' 11" FROM

FILE NO. 1779
 MAP NO. N48 N S E W
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1 in 200
 PROVEN SOURCE OF ELEVATION C.C. Pennick No.22
(47-095-1056) = 1382'

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) Timothy P. Roush
 TIMOTHY P. ROUSH PS 793



STATE OF WEST VIRGINIA
 DIVISION OF ENERGY
 OIL AND GAS SECTION



DATE February 9, 19 93
 FARM J.T. Eddy NO. N-9
 API WELL NO. 47-095-1525-LT

WELL TYPE: OIL ___ GAS ___ LIQUID INJECTION X WASTE DISPOSAL ___
 (IF "GAS") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 1247' WATERSHED Indian Creek
 DISTRICT McElroy COUNTY Tyler
 QUADRANGLE Centerpoint

SURFACE OWNER Ellen J. Muth ACREAGE 125 Ac.
 OIL & GAS ROYALTY OWNER Pennzoil Products Co. et.al. LEASE ACREAGE 91.67 Ac.
 LEASE NO. 47220-00

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

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION Gordon ESTIMATED DEPTH 3240'
 WELL OPERATOR Pennzoil Products Company DESIGNATED AGENT James A. Crews
 ADDRESS P. O. Box 5519 ADDRESS P. O. Box 5519
Vienna, W.Va. 26105 673 4670 ADDRESS Vienna, W.Va. 26105

MAR 20 1993

FORM IV-6

FEB 26 93
Environmental Protection



- 1) Date: February 24, 19 93
- 2) Operator's Well No. J. T. EDDY NO. N-9
- 3) SIC Code
- 4) API Well NO. 47 - 095 - 1525-LI
State County Permit
- 5) UIC Permit No.

Issued 3/24/93
Expires 3/24/95

STATE OF WEST VIRGINIA
NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION
for the
DEPARTMENT OF ENERGY, OIL AND GAS DIVISION

17017

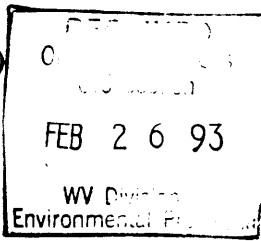
- 5) WELL TYPE: Liquid injection / Gas injection (not storage) _____ / Waste disposal _____
- 7) LOCATION: Elevation: 1247' Watershed: Indian Creek
District: McElroy County: Tyler Quadrangle: Centerpoint
- 1) WELL OPERATOR Pennzoil Products Co. 37450 9) DESIGNATED AGENT J. A. Crews
Address P.O. Box 5519 4670 Address P.O. Box 5519
Vienna, WV 26105 Vienna, WV 26105
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED
Name Mike Underwood 11) DRILLING CONTRACTOR:
Address Rt. #2, Box 135 Name _____
Salem, WV 26426 Address _____
- 12) PROPOSED WELL WORK: Drill / Drill deeper _____ / Redrill _____ / Stimulate /
Plug off old formation _____ / Perforate new formation _____ / Convert _____
Other physical change in well (specify) _____
- 13) GEOLOGICAL TARGET FORMATION, Gordon 419 Depth 3142 feet(top) to 3152 feet(bottom)
- 14) Estimated depth of completed well, (or actual depth of existing well) 3240 ft.
- 15) Approximate water strata depths: Fresh, 447 feet; salt, >450 feet.
- 16) Approximate coal seam depths: 1058
- 17) Is coal being mined in the area? Yes _____ / No /
- 18) Virgin reservoir pressure in target formation 1400 psig. Source ESTIMATED
- 19) Estimated reservoir fracture pressure 3500 psig (BHFP)
- 20) MAXIMUM PROPOSED INJECTION OPERATIONS: Volume per hour: 25 Bottom hole pressure 2340
- 21) DETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED, INCLUDING ADDITIVES: Fresh water, produced water, bactericides, and other chemicals as necessary to maintain water quality and improve oil recovery.
- 22) FILTERS (IF ANY): Cartridge Filters and/or Coal Bed Filters
- 23) SPECIFICATIONS FOR CATHODIC PROTECTION AND OTHER CORROSION CONTROL: _____

24) 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
Fresh water	8 5/8	L.S.	20	X		510	510	Cement to Surface	Sizes
Coal									
Intermediate									
Production	4 1/2	J-55	10.5	X		3240	3240	Cement over Salt Sand	Depths set
Tubing									
Liners									Perforations: Top Bottom

- 25) APPLICANT'S OPERATING RIGHTS were acquired from Hazel L. Kinney etal
by deed _____ / lease / other contract _____ / dated August 16, 19 78, of record in the
Tyler County Clerk's office in Book 216 at page 725

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.



1) Date February 24, 1993
Operator's
2) Well No. J. T. EDDY NO. N-9
3) SIC Code _____
4) API Well No. 47 - 095 - 1525
State County Permit _____

STATE OF WEST VIRGINIA
NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION
for the

DIVISION OF OIL AND GAS, DEPARTMENT OF ENERGY

- | | |
|--|---|
| 6) SURFACE OWNER(S) OF RECORD TO BE SERVED | 7 (i) COAL OPERATOR <u>N/A</u>
Address _____ |
| (i) Name <u>Ellen J. Muth</u>
Address <u>337 Wayne Avenue</u>
<u>Weirton, WV 26062</u> | 7 (ii) COAL OWNER(S) WITH DECLARATION ON RECORD:
Name _____
Address _____ |
| (ii) Name _____
Address _____ | 7 (iii) COAL LESSEE WITH DECLARATION ON RECORD:
Name _____
Address _____ |
| (iii) Name _____
Address _____ | |

TO THE PERSON(S) NAMED ABOVE: You should have received this Form and the following documents:

- (1) The Application for a Liquid Injection or Waste Disposal Well Work Permit on Form WW-3(B), which sets out the parties involved in the drilling or other work, and
- (2) The plat (surveyor's map) showing the well location on Form WW-6; and
- (3) The Construction and Reclamation Plan on Form WW-9 (unless the well work is only to plug a well), which sets out the plan for erosion and sediment control and for reclamation for the site and access road.

The date proposed for the first injection or waste disposal is _____, 19____.

THE REASON YOU RECEIVED THESE DOCUMENTS IS THAT YOU HAVE RIGHTS REGARDING THE APPLICATION WHICH ARE SUMMARIZED IN THE "INSTRUCTIONS" ON THE REVERSE SIDE OF THE COPY OF THE APPLICATION (FORM WW-3(B)) DESIGNATED FOR YOU. HOWEVER, YOU ARE NOT REQUIRED TO TAKE ANY ACTION AT ALL.

Take notice that under Chapter 22B of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a Well Work Permit with the Director of the Division of Oil and Gas, West Virginia Department of Energy, with respect to a well at the location described on the attached Application and depicted on attached Form WW-6. Copies of this Notice, the Application, the plat, and the Construction and Reclamation Plan have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Director.

The person signing this document shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document 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.

Pennzoil Products Company
Well Operator
By *Timothy P. Roush*
Timothy P. Roush
Its Supervisor - Surveying/Mapping
Telephone (304) 422-6565

**OFFICE USE ONLY
DRILLING PERMIT**

Permit number 095-1525-LI

March 24th. 19 93

Date

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. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. 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.)

The permitted work is as described in the Notice and Application, plat, and (if required) construction and reclamation plan, subject to any modifications and conditions specified below.

Permit expires 3-24-95 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: /	Agent: /	Plat: MS	Casing: MS	Fee: 18713
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Michael D. Lewis
 Director, Oil and Gas Division

NOTE: Keep one copy of this permit posted at the drilling location.

PERMIT MODIFICATIONS AND CONDITIONS (IF ANY) TO THE PROPOSED WELL WORK

OFFICE USE ONLY

This part of Form IV-3(b) is to record the dates of certain occurrences and any follow-up inspections.

	Date	Follow-up inspection(s)	Date(s)
Application received			
Well work started		" "	
Total depth reached		" "	
Well Record received		" "	
Reclamation completed		" "	

OTHER INSPECTIONS

Reason: _____

Reason: _____