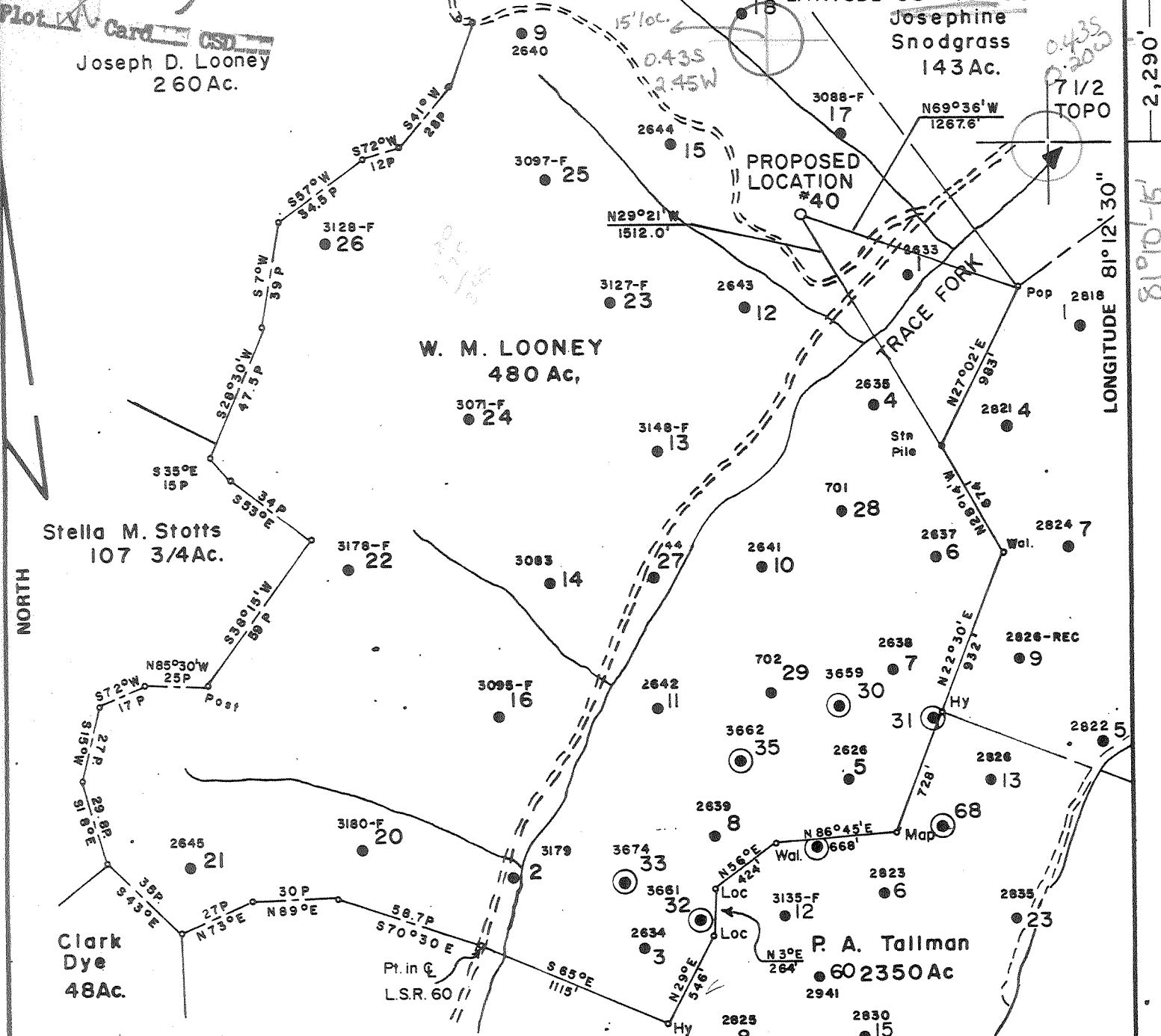


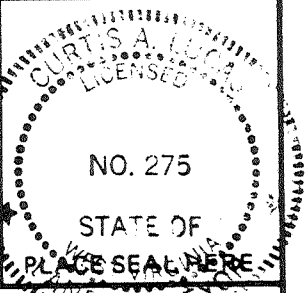
MJ 5-23-83

1,100'



FILE NO. 425
 MAP 72 sqs S54 W35
 SCALE 1" = 800'
 MINIMUM DEGREE OF ACCURACY 1' in 200'
 PROVEN SOURCE OF ELEVATION W. M. LOONEY #30 1076.63

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) *Curtis A. Lucas*
 CURTIS A. LUCAS LLS 275



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



DATE MAY 19, 1983
 FARM W. M. LOONEY NO. 40
 API WELL NO. _____
 STATE 47 COUNTY 087 PERMIT 3774 LI

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS ___ LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 1069.18 WATER SHED TRACE FORK
 DISTRICT SMITHFIELD COUNTY ROANE
 QUADRANGLE TARIFF 7 1/2' other 15' WC
 SURFACE OWNER FERRELL BOOTHE ACREAGE 40 ac.
 OIL & GAS ROYALTY OWNER KEITH CRIHFIELD LEASE ACREAGE 480 ac.
 LEASE NO. 60218-50
 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 BIG INJUN ESTIMATED DEPTH 2150'
 WELL OPERATOR PENNZOIL COMPANY DESIGNATED AGENT JAMES A. CREWS
 ADDRESS P. O. BOX 1588 ADDRESS P. O. BOX 1588
PARKERSBURG, W. V. 26101 PARKERSBURG, W. V. 26101

JUN 21 1983

8-0 Tariff (Tallman) (199)

CG-10
27. - 9.71



RECEIVED

NOV 1 1983

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

OIL & GAS DIVISION
DEPT. OF MINES

Oil and Gas Division

WELL RECORD

Quadrangle Tariff 7.5'
Permit No. 47-087-3774-Li

Rotary Oil
Cable _____ Gas
Recycling _____ Comb.
Water Flood Storage
Disposal _____

Company Pennzoil Company
Address P.O. Box 1588, Parkersburg, WV 26101
From W. M. Looney Acres 480
Location (nearest) Sycamore Fork
Well No. 40 Elev. 1069.18'
District Smithfield County Roane
The surface of tract is owned in fee by Ferrell Boothe
Address Left Hand, WV
Mineral rights are owned by Keith Crikfield
Address P.O. Box 431, Spencer, WV
Drilling Commenced 7-27-83
Drilling Completed 7-30-83
Initial open flow WIW 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 Cu. ft. (SK)
Size 20-16			
Cund. 13-10"			
9 5/8			
8 5/8			
7	389	389	125 sks
5 1/2			
4 1/2	2165	2165	75 sks
3			
2			
Liners Used			

Well treatment details:
Fractured: 10/10/83 w/250 gls. 15% HCL, 160 bbls. 20# gelled water, 1500# 20/40 sd
Perf: 2086-2106/20H
Attach copy of cementing record.

Coal was encountered at _____ NR _____ Feet _____ Inches
Fresh water: _____ NR _____ Feet _____ Salt Water _____ NR _____ Feet
Producing Sand _____ Depth _____

Formation	Color	Hard or Soft	Top Feet	Bottom Feet	Oil, Gas or Water	Remarks
Silt & Shale			0	76		
Silt & Sand			76	110		
Shale, Silt, Sand			110	1600		
Salt Sand			1600	1840		
Silt, Shale, Sand			1840	1904		
Little Lime			1904	1948		
Blue Monday			1948	1956		
Pencil Cave			1956	1971		
Big Lime			1971	2076		
Big Injun			2076	2111		
Pocono Shale			2111	2184		
Total Depth				2184		

JAN 23 1984

- 1) Date: May 19 1983
- 2) Operator's
Well No. W. M. Looney #40
- 3) SIC Code
- 4) API Well No. 47 - 087 - 3774
State County Permi
- 5) UIC Permit _____

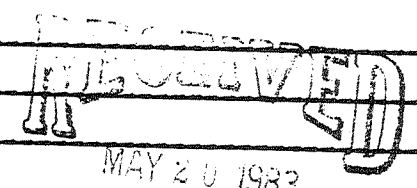
DRILLING CONTRACTOR

STATE OF WEST VIRGINIA
LIQUID INJECTION OR WASTE DISPOSAL WELL PERMIT APPLICATION

For Both

DEPT. OF MINES, OFFICE OF OIL AND GAS, DNR, DIVISION OF WATER RESOURCES

- 6) WELL TYPE: Liquid Injection / Disposal ___ / Gas Injection ___ /
- 7) LOCATION: Elevation 1069.18' Watershed Sycamore Fork
District Smithfield County Roane Quadrangle Tariff 7.5'
- 8) WELL OPERATOR Pennzoil Company 12) DESIGNATED AGENT James A. Crews
Address P. O. Box 1588 Address P. O. Box 1588
Parkersburg, WV 26101 Parkersburg, WV 26101
- 9) ROYALTY OWNER Keith Crihfield 13) COAL OPERATOR NO COMMERCIAL COAL
Address P. O. Box 431 Address _____
Spencer, WV 25276
- Acreage 480
- 10) SURFACE OWNER Ferrell Boothe 14) COAL OWNER(S) WITH DECLARATION ON RECORD:
Address Left Hand, WV Name _____
Acreage 40 Address _____
- 1) OIL AND GAS INSPECTOR TO BE NOTIFIED BEFORE
DRILLING, AND 24 HOURS IN ADVANCE OF ANY
MECHANICAL INTEGRITY TEST
Name Homer H. Dougherty Address _____
Address Linden Rt., Box 3A
Looneyville, WV
- 15) COAL LESSEE WITH DECLARATION ON RECORD:
Name _____
Address _____



OIL & GAS DIVISION
DEPT. OF MINES

The undersigned well operator is entitled to operate for liquid injection or waste disposal purposes at the above location under a deed ___ / lease / other contract ___ / dated 12-14-, 1988 to the undersigned well operator from W. M. & Anna Looney. (If said deed, lease, or other contract has been recorded:) Recorded on , 19 , in the office of the Clerk of the County Commission of Roane County, West Virginia, in Lease Book 3 at page 390. A permit is requested as follows:

- PROPOSED WORK: Convert ___ / Drill / Drill deeper ___ / Fracture or stimulate ___ / Plug off old formation ___ / Other physical change in well (specify) _____
- Date of first liquid injection or waste disposal: _____, 19 .

PROPOSED WORK ORDER
THIS IS AN ESTIMATE ONLY:
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-37 UPON COMPLETION

- Estimated depth of completed well 2150 feet Rotary / Cable tools ___ /
- Approximate water strata depths: Fresh, feet; salt, feet.
- Approximate coal seam depths: Is coal being mined in the area? Yes ___ / No /

- GEOLOGICAL TARGET FORMATION Big Injun Depth 2074 feet(top) to 2109 feet(bottom)
 - a) Virgin reservoir pressure in target formation 80 psig; Source Estimated
 - b) Estimated reservoir fracture pressure psig (BHFP)
 - c) Perforation intervals Open-hole intervals Big Injun

MAXIMUM PROPOSED INJECTION OPERATIONS
Volume per hour: 12 Bbls Bottom hole pressure: 2000 psig

DETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED - PLUS ADDITIVES
Fresh Water

SPECIFICATION FOR CATHODIC PROTECTION AND OTHER CORROSION CONTROL
FILTERS (IF ANY) Coal Filters

27) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS Cubic ft.	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor									Kinds
Fresh water	7				X	375	825	375828	Cement to surface
Coal									Sizes
Intermediate									
Production	4-1/2	K55	9.5	X		2150	2150	Over Salt Sand	Depths
Tubing									
Liners									Perforation
									Top Bottom

28) Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed 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.

The person signing this document shall make the following certification:

Pennzoil Company
Well Operator

By Curtis A. Ryan
Its Supervisor, Surveying & Mapping

"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.

W A I V E R

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 _____

OFFICE USE ONLY

PERMIT

Permit number 47-087-3774-LI

June 13 1983
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 prior to the construction of roads, locations and pits for any permitted work. (Refer to No. 10)

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 February 13, 1984 unless work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing:	Fee:
<u>Blanket</u>	<u>ok</u>	<u>M.F.</u>	<u>M.F.</u>	<u>15359</u>

[Signature]
Administrator, Office of Oil and Gas