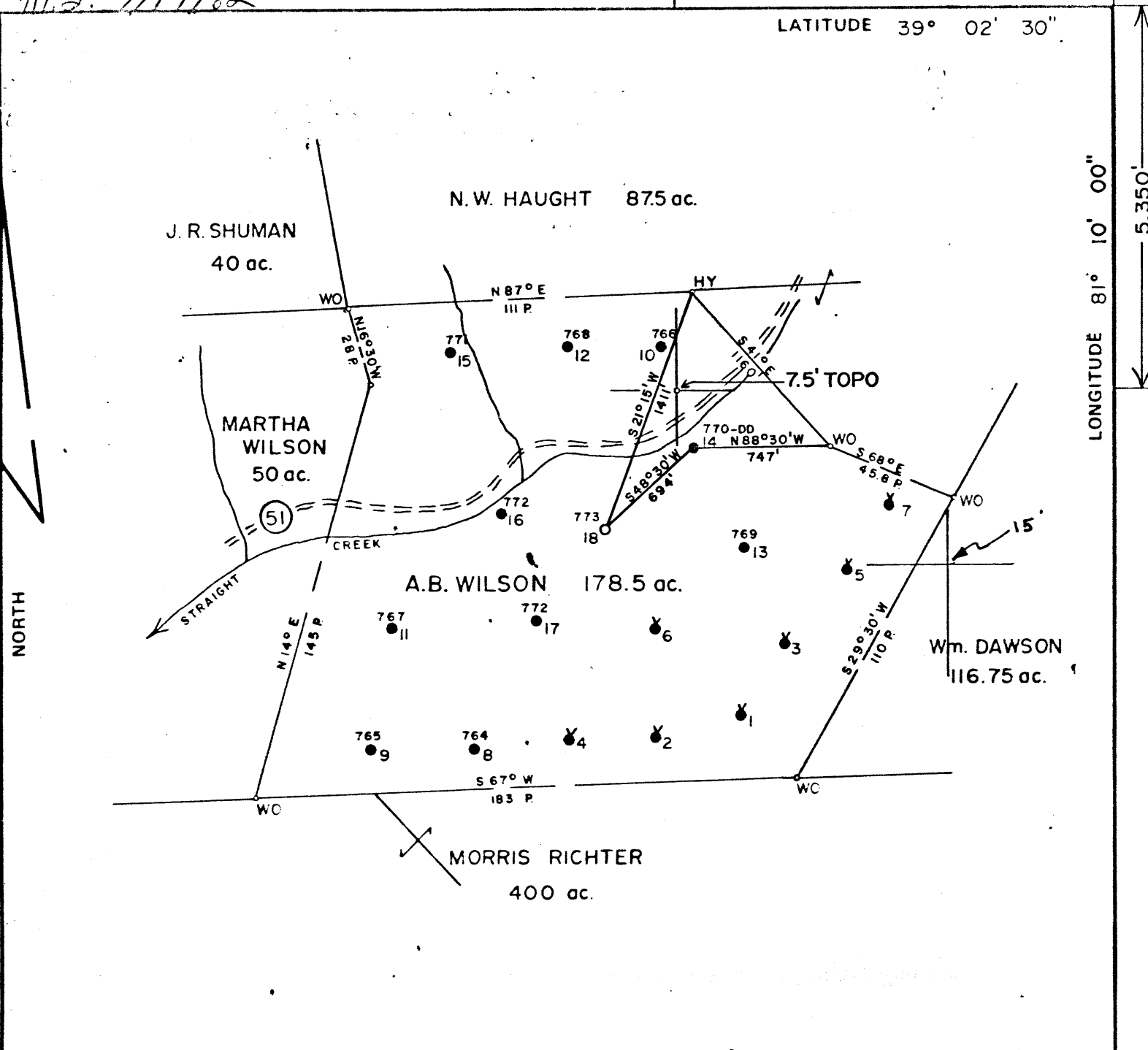


LATITUDE 39° 02' 30"

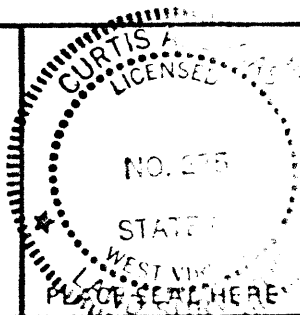
LONGITUDE 81° 10' 00"



FILE NO. 1702
 MAP 23 SQS S-29 W-31
 SCALE 1" = 800'
 MINIMUM DEGREE OF
 ACCURACY 1 in 200
 PROVEN SOURCE OF
 ELEVATION A.B. WILSON 14
Elev. = 862.90'

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 REGU-
 LATIONS ISSUED AND PRESCRIBED BY THE DEPART-
 MENT 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 10, 19 82
 FARM A. B. WILSON NO. 18
 API WELL NO.
47 - 105 - 0994-Li
 STATE COUNTY PERMIT

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 911.77' WATER SHED STRAIGHT CREEK
 DISTRICT BURNING SPRINGS COUNTY WIRT
 QUADRANGLE MacFARLAN 7.5'
 SURFACE OWNER Virgil R. Mays ACREAGE 178.5 ac.
 OIL & GAS ROYALTY OWNER Mildred R. Javins - Agent LEASE ACREAGE 178.5 ac.
 LEASE NO. 52325-50
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR
 STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW
 FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
X Convert to Waste Disposal
 PLUG AND ABANDON CLEAN OUT AND REPLUG
 TARGET FORMATION Salt Sand ESTIMATED DEPTH 1726'
 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

FORM IV-37
(Obverse)
[08-78]

Date: May 17, 19 82

Operator's Well No. A. B. Wilson 18-DD
API Well No. 47-105-994-L1
State County Permit

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

PRE-OPERATION CERTIFICATE
FOR LIQUID INJECTION OR WASTE DISPOSAL WELL

WELL OPERATOR Pennzoil Company DESIGNATED AGENT James A. Crews
Address P. O. Box 1588 Address P. O. Box 1588
Parkersburg, WV 26101 Parkersburg, WV 26101

GEOLOGICAL TARGET FORMATION Salt Sand Depth 1650 feet(top) to 1720 feet(bottom)
Virgin reservoir pressure in target formation 80 psig
Source of information on virgin reservoir pressure Estimated
Perforation intervals _____ Open-hole intervals 1654-1726

MAXIMUM PROPOSED INJECTION OPERATIONS
Volume per hour: 5 Bbl/Hr. Bottom hole pressure: 1500 psig

DETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED

Liquids to be injected for oil recovery under Code § 22-4-10a: _____

Wastes to be disposed of: Salt water produced from Area Producing Wells

Additives (slurry mediums, inhibitors, solvents, oxidizers, deoxidizers, etc.): _____

SPECIFICATIONS FOR CATHODIC PROTECTION AND OTHER CORROSION CONTROL _____

FILTERS (IF ANY) Cartridge Filter

ADDITIONAL DRILLING AS PART OF THE CONVERSION

(Complete and submit Form IV-35, "Well Operator's Report of Drilling, Fracturing and/or Stimulating or Physical Change".)

DETAILS ON NEW CASING AND TUBING PROGRAM AS PART OF THE CONVERSION:

(To be completed below unless the new casing and tubing program is described on a Form IV-35, "Well Operator's Report of Drilling, Fracturing and/or Stimulating or Physical Change", submitted in connection with the permit to which this Form IV-37 pre-operation certificate relates.)

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									
Coal									Sizes
Intermediate	6-5/8				X	1488	1488		Set on shoulder
Production	4-1/2	K55	9.5	X		1654	1654	25 sks.	Depths set
Tubing	2-3/8	J55	4.6	X		1650	1650		Tension Packer
Liners									Perforations:
									Top Bottom

(Continue on reverse side)

OIL & GAS DIVISION
DEPT. OF MINES

JUL 09 1982

RECEIVED

[03-81]

MECHANICAL INTEGRITY TEST

Test method: Mechanical Integrity Test will be performed
upon completion of work prior to water injection. Results
of this test will be submitted to Oil & Gas Commission.

The undersigned certifies that the test above was made
on _____, 19____, and demonstrated the
mechanical integrity of the well. The above test will
be performed again within ninety (90) days of five
years from this date and certified to the office.

FACILITIES OR SYSTEMS TO PROTECT THE
INTEGRITY OF THE GEOLOGICAL TARGET
FORMATION FRACTURING THE CONFINING STRATA Daily monitoring of injection
rate and wellhead pressure will indicate if formation parting
has occurred.

APPLICATION FOR VARIANCE (IF ANY) FROM REGULATION 9.01(a)
[Specify purpose, necessity, and justification]

Well Operator

By: Curtis A. Lucas

Its _____

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:
 ACTUAL INFORMATION MUST BE SUBMITTED IN
 FORM IV-35 AND/OR FORM IV-37 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN): _____
 Address _____

GEOLOGICAL TARGET FORMATION: Salt Sand

Estimated depth of completed well, 1726 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 X

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									
Coal									Sizes
Intermediate	6-5/8				x	1488	1488		Set on shoulder
Production	4-1/2	K-55	9.5	X		1654	1654	25 sks.	Depths set
Tubing	2-3/8	J-55	4.6	X		1650	1650		Tension Packer
liners									Perforations:
									Top Bottom

NOTE 1: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-3 must be filed with the Department, accompanied by (i) a plan 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 § 22-4-3a, (iii) unless previously paid on the same well, the fee required by Code § 22-4-12a, (iv) Form IV-3, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-13b and Regulation 33, and (v), if applicable, the consent required by Code § 22-4-3a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate Form IV-3 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-3 filed in connection therewith.

NOTE 2: In addition to the permit required from the Department of Mines, the operator of a disposal well must obtain a separate permit from the Department of Natural Resources under the provisions of Code § 20-5A-5(b)(7).

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 Liquid Inj. THIS PERMIT SHALL EXPIRE
 IF OPERATIONS HAVE NOT COMMENCED BY Feb. 3, 1984.
 BY Fred Bunselle

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 § 22-4-37, if the permit is to be issued within thirty (30) days of receipt thereof:

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.

By Fred Bunselle
 Is: _____

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:
ACTUAL INFORMATION MUST BE SUBMITTED IN
FORM IV-35 AND/OR FORM IV-37 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN): _____

Address _____

GEOLOGICAL TARGET FORMATION, Salt Sand

Estimated depth of completed well, 1726 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

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									
Coal									Sizes
Intermediate	6-5/8				X	1488	1488		Set on shoulder
Production	4-1/2	K-55	9.5	X		1654	1654	25 sks.	Depths set
Tubing	2-3/8	J-55	4.6	X		1650	1650		Tension Packer
Lines									Perforations:
									Top Bottom

NOTE 1: Regulation 7.03 of the Department of Mines provides that the original and four copies of Form IV-3 must be filed with the Department, accompanied by (i) a plan on 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 § 22-4-2a, (iii) unless previously paid on the same well, the fee required by Code § 22-4-12a, (iv) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, and (v), if applicable, the consent required by Code § 22-4-3a from the owner of any water used or dwelling within 200 feet of the proposed well.

A separate Form IV-3 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-3 filed in connection therewith.

NOTE 2: In addition to the permits required from the Department of Mines, the operator of a disposal well must obtain a separate permit from the Department of Natural Resources under the provisions of Code § 20-5A-5(b)(7).

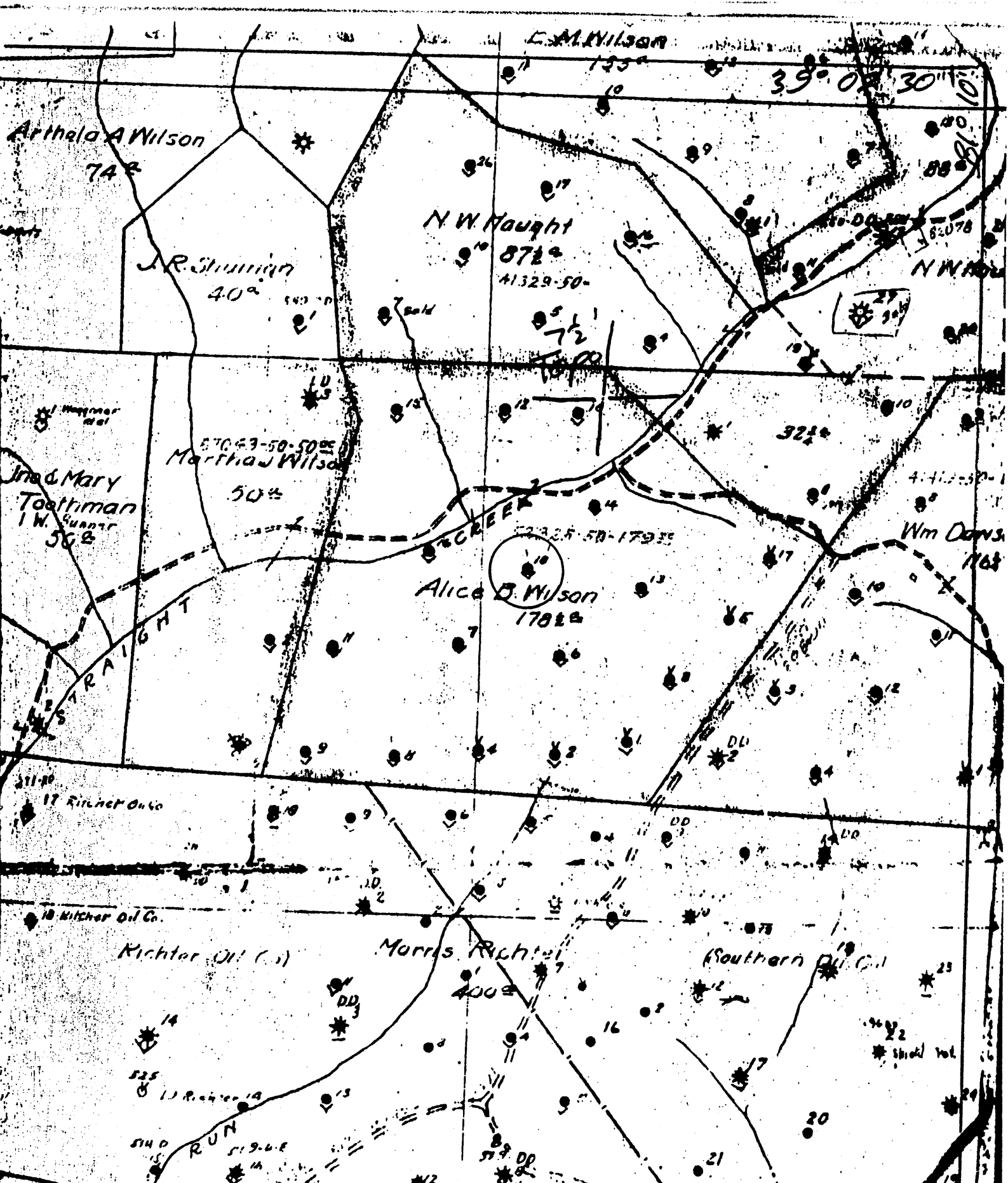
THIS PERMIT MUST BE POSTED AT THE WELL SITE
ALL PROVISIONS BEING IN ACCORDANCE WITH CHAPTER 22,
ARTICLE 4 OF THE W. VA. CODE, THE LOCATION IS HEREBY
APPROVED FOR Liquid Injection. THIS PERMIT SHALL EXPIRE
IF OPERATIONS HAVE NOT COMMENCED BY 4-19-83
BY [Signature]

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 § 22-4-27, if the permit is to be issued within thirty (30) days of receipt thereof:

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 _____



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6
 (8-78)
 23 S 29 W 31



STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

DATE Dec 28 1978
 OPERATOR'S WELL NO. 18
 API WELL NO. 47-105-0773
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS _____ LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS", PRODUCTION _____ STORAGE _____ DEEP _____ SHALLOW
 LOCATION: ELEVATION _____ WATER SHED Straight Creek
 DISTRICT Burning Spring COUNTY WIRT
 QUADRANGLE MacFarlan 7 1/2
 SURFACE OWNER _____ ACREAGE _____
 OIL & GAS ROYALTY OWNER _____ LEASE NO. _____ LEASE ACREAGE _____
 PROPOSED WORK: DRILL _____ CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR
 STIMULATE _____ PLUS OFF OLD FORMATION _____ PERFORATE NEW
 FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUS AND ABANDON _____ CLEAN OUT AND REPLUG _____
 TARGET FORMATION _____ ESTIMATED DEPTH _____
 WELL OPERATOR Pennzoil Company DESIGNATED AGENT James A. Crews
 ADDRESS P. O. Box 1588 ADDRESS P. O. Box 1588
Parkersburg, WV 26101 Parkersburg, WV 26101

Well No. 18 A. B. Wilson Farm 179 Acres
 Lease No. B Springs District Unit County Wm. State
 U. S. Day Contractor SOUTH PENN DRILLING TOOLS A: Contractor
 Drilling Commenced May 16 1917 Drilling Completed June 6 1917
 N. S. 26 E. W. 32

T.D. 1726
 Log 1492

CSG

ROCK FORMATION	TOP	BOTTOM	STEEL LINE MEASUREMENT	REMARKS
flowline conductor		16		
Boebel rock	968	972	968	
slate	972	1250		
sand	1250	1338		
slate	1338	1495		
Gas Sand	1495	1640	1485	
slate	1640	1650		
Salt Sand	1650		1650	
" " Gel	1680	1720	1683	
Total depth		1740	1740	

CASING RECORD AS TALLIED. NOT STEEL LINE MEASUREMENT

SIZE	PUT IN WELL		PULLED OUT		LEFT IN WELL		Shot Date Amount Sand Result Packer Size Depth Set
	FEET	IN.	FEET	IN.	FEET	IN.	
10	162	11	162	11			6-14-17 90 lbs Salt
8 1/2	976	5	976	5			
6 3/4	1487						

Production First 24 Hours 10 Bbls. Gas Test _____

Approved by U. S. Day Superintendent