

LS 1/24/86

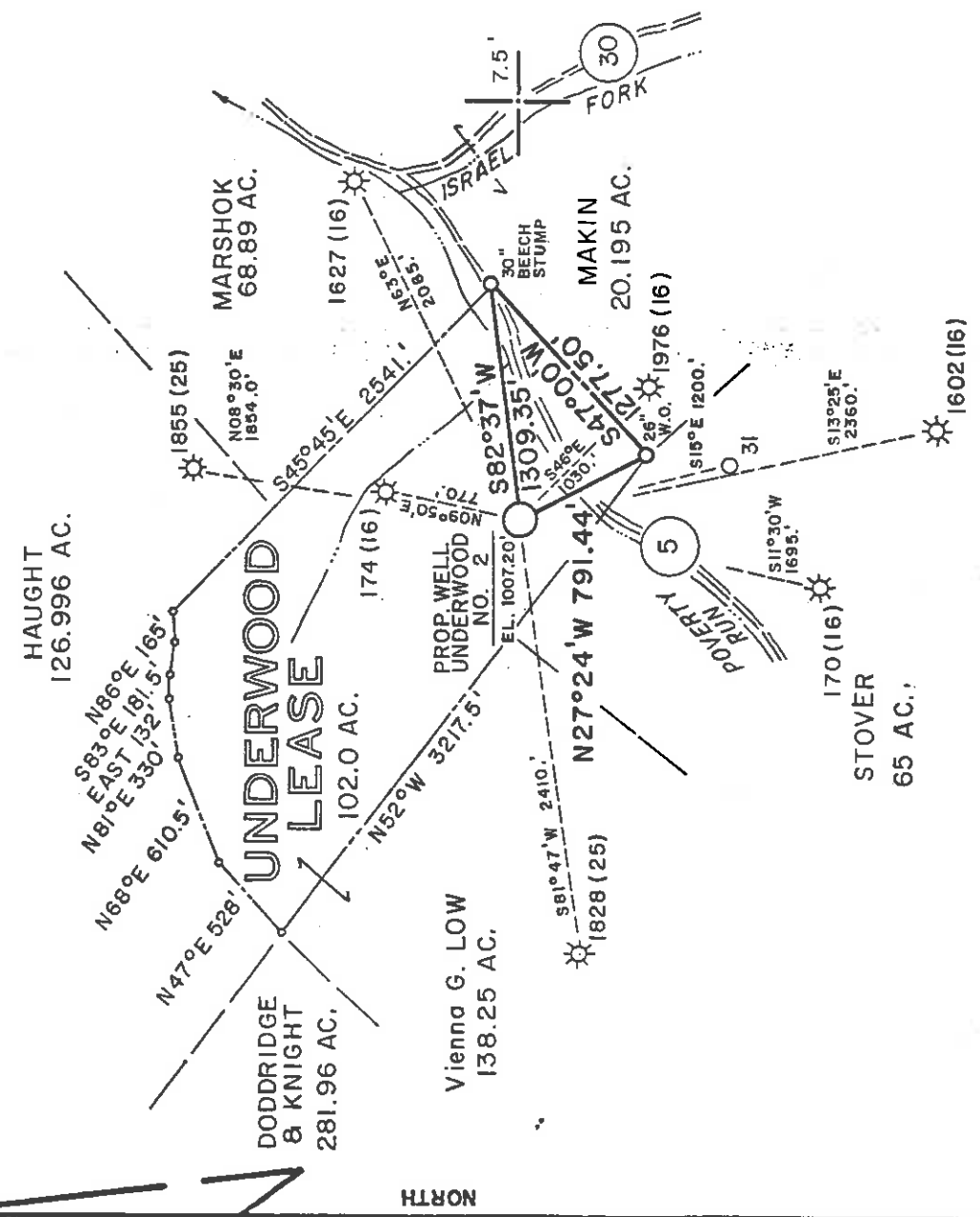
2,775'

LATITUDE 39°22'30"

LONGITUDE 80°42'30"

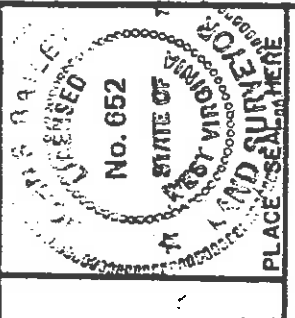
MAGNETIC REFERENCE TIES

PROP. WELL TO 10" FORKED MAPLE N66°15'E 148.20'
PROP. WELL TO 10" ELM N65°30'E 194.70'



FILE NO. MSES 85-684
 DRAWN BY SARC
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1 PART IN 200
 PROVEN SOURCE OF ELEVATION INT. CO. RTS. 5 & 30; EL. 792'

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) *H. A. Bailey*
 R. P. E. L. S. 652



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



Department of Mines
 Oil & Gas Division

DATE OCTOBER 23 19 85
 OPERATOR'S WELL NO. UNDERWOOD #2
 API WELL NO. 47-017-3495
 STATE COUNTY PERMIT

CANCELLED

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS", PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 1007.20' WATER SHED POVERTY RUN TRIBUTARY OF FLINT RUN
 DISTRICT GRANT COUNTY DODDRIDGE
 QUADRANGLE SMITHBURG, WV 7.5' NEAREST TOWN CANTON
 SURFACE OWNER VIENNA G. LOW ACREAGE 138.25 AC.
 OIL & GAS ROYALTY OWNER F. H. UNDERWOOD LEASE ACREAGE 102.0 AC.

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 BENSON ESTIMATED DEPTH 5213'
 WELL OPERATOR Quaker State Oil Refining Corp. DESIGNATED AGENT SAMUEL F. BARBER
 ADDRESS P. O. BOX 1327 ADDRESS PARKERSBURG, WV 26101
 PARKERSBURG, WV 26101

MAR 18 1988

PREPARED BY KSP

LS 1/24/86

39°25' 2.775"

2.775"

CODE

CARD

PRINT

LATITUDE 39°22'30"

LONGITUDE 80°42'30" 80°40'

MAGNETIC REFERENCE TIES
PROP. WELL TO 10" FORKED MAPLE N66°15'E 148.20'
PROP. WELL TO 10" ELM N65°30'E 194.70'

HAUGHT
126.996 AC.

UNDERWOOD LEASE

DODDRIDGE & KNIGHT
281.96 AC.

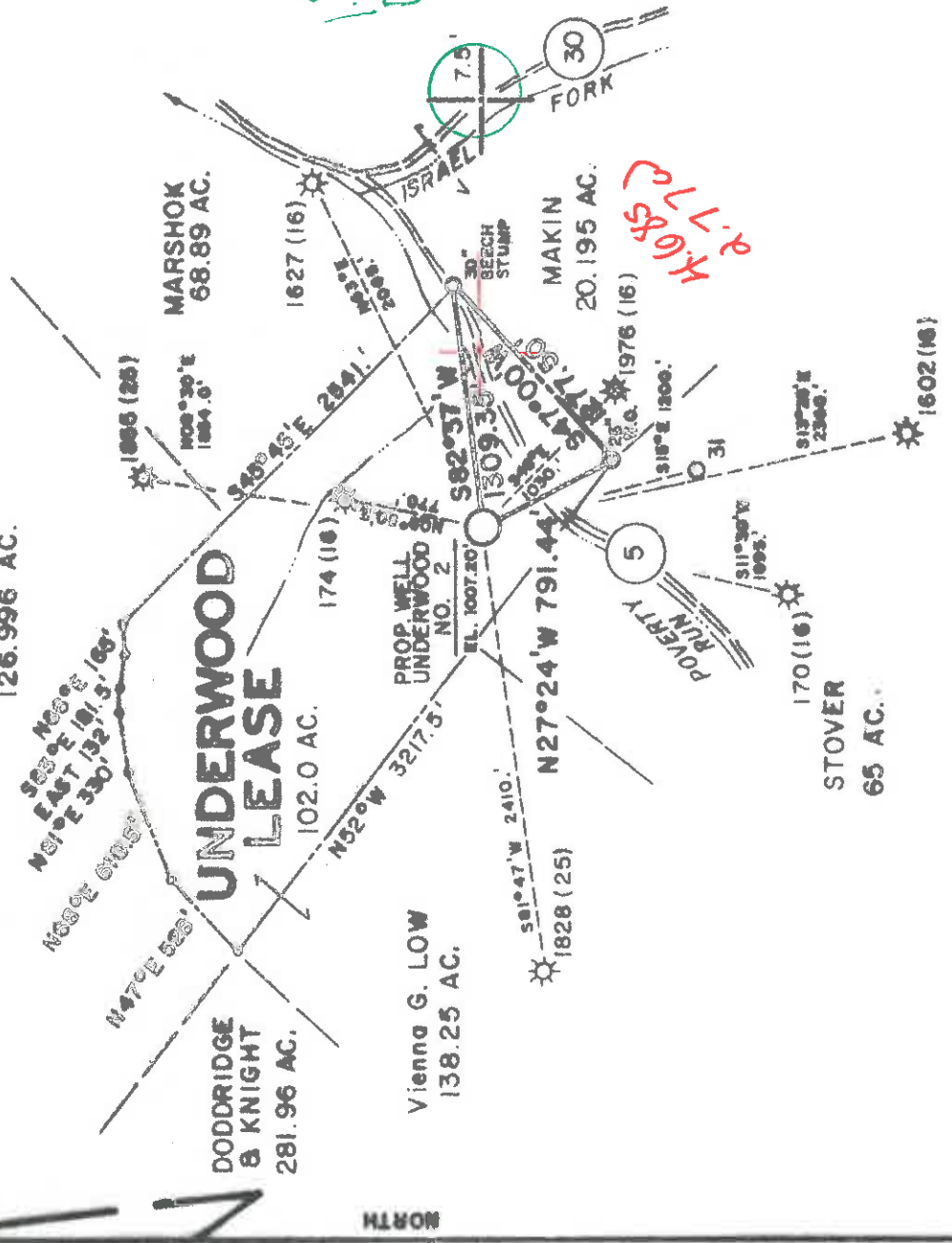
102.0 AC.

Vienna G. LOW
138.25 AC.

MARSHOK
68.89 AC.

MAKIN
20.195 AC.

STOVER
65 AC.



Handwritten: 1.865
D.S.P.S.

Handwritten: 2.775
K.085

FILE NO. MSES 85-684
DRAWN BY SARG
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY 1 PART IN 200
PROVEN SOURCE OF ELEVATION 107.20' RTS. 5 & 30; EL. 792'

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) *[Signature]* R. P. E. L. L. S. 652



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

FORM IV-6 (8-78)



Department of Mines
Oil & Gas Division

DATE OCTOBER 23 19 85
OPERATOR'S WELL NO. UNDERWOOD 22
API WELL NO. _____

47-017-3495
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS, PRODUCTION STORAGE DEEP SHALLOW
LOCATION: ELEVATION 1007.20' WATER SHED POVERTY RUN TRIBUTARY OF FLINT RUN
DISTRICT GRANT 3 COUNTY DODDRIDGE
QUADRANGLE SMITHBURG, WY 7.5' 611 022 NEAREST TOWN CANTON
SURFACE OWNER VIENNA G. LOW 102.4 ACREAGE 138.25 AC.
OIL & GAS ROYALTY OWNER F. H. UNDERWOOD LEASE ACREAGE 102.0 AC.
LEASE NO. _____

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 REPLUS
TARGET FORMATION BENSON ESTIMATED DEPTH 5213'
WELL OPERATOR Quaker State Oil Refining Corp. DESIGNATED AGENT SAMUEL F. BARBER
ADDRESS P.O. BOX 1327 ADDRESS P.O. BOX 1327
PARKERSBURG, WY 26101 747
PARKERSBURG, WY 26101

FEB 18 1986



1) Date: November 18, 1985
 2) Operator's Well No. F.H. UNDERWOOD #2
 3) API Well No. 47 -017-3495
 State County Permit

JAN 21 1986

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

4) WELL TYPE: A Oil / Gas XX / Undergrnd storage / Deep XX / Shallow XX /
 B (If "Gas", Production XX /
 5) LOCATION: Elevation: 1007.20' / Watershed: Poverty Run of Flint Run
 District: Grant / County: Doddridge / Quadrangle: Smithburg 7.5'
 6) WELL OPERATOR QUAKER STATE OIL CODE: 40400 7) DESIGNATED AGENT: Samuel F. Barber
 Address: P.O. Box 1327 / P.O. Box 1327
 Parkersburg, WV 26101 / Parkersburg, WV 26101
 8) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name: H. Mike Underwood / 9) DRILLING CONTRACTOR:
 Address: Route 2, Box 114 / DEVELOPMENT DRILLING
 Salem, WV 26426 (304) 782-1043 / P.O. Drawer 0
 Jane Lew, WV 26378

10) PROPOSED WELL WORK: Drill XX / Drill deeper / Redrill / Stimulate X
 Plug off old formation / Perforate new formation /
 Other physical change in well (specify):

11) GEOLOGICAL TARGET FORMATION: BENSON
 12) Estimated depth of completed well, 5213' feet
 13) Approximate trata depths: Fresh, 207' feet; salt, 1100' feet.
 14) Approximate coal seam depths: N/A / is coal being mined in the area? Yes / No XX

15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT FILLUP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	For drilling	Left in well		
Conductor	11 3/4"	H-40	42	X	250'	250'	C.T.S. NEAT DYNALDINE 15.05
Fresh water	8 5/8"	H-40	20	X	1822'	1822'	500' by RULE 15.05
Coal	7"	H-20	17	X			Sizes
Intermediate							Depths set
Production	4 1/2"	J-55	9.5	X	5213'	5213'	1200' or as required by RULE 15.01
Tubing	2"	J	4.5	X	--	5110'	Perforations.
Line...							Top
							Bottom

OFFICE USE ONLY
 DRILLING PERMIT

Permit number: 47-017-3495 / Date: February 13 19 86

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 reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires February 13, 1988 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee	WPCP	S&E	Other
	K-13	BS	BS	14698	BS	BS	BS

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

John H. Johnston
 Director, Division of Oil and Gas

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

