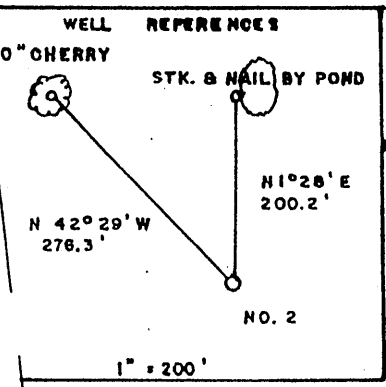


JOLLIFFE LEASE 287 AC.

3610' W

LATITUDE 39°40' 00"

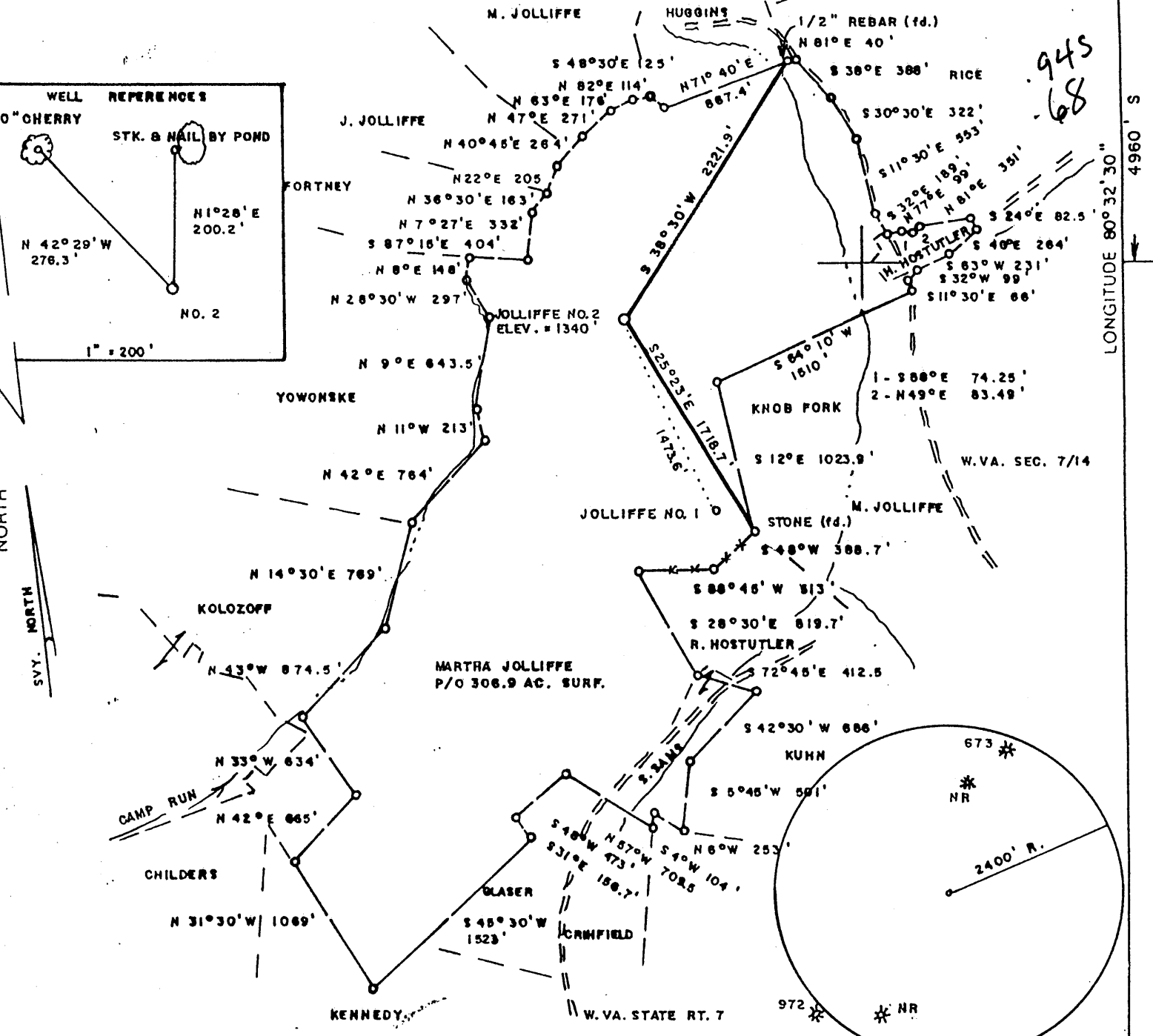
LONGITUDE 80°32' 30"



NORTH

SVY. NORTH

945
68



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

FILE NO. _____

DRAWING NO. _____

SCALE 1" = 1000'

MINIMUM DEGREE OF ACCURACY 1/200

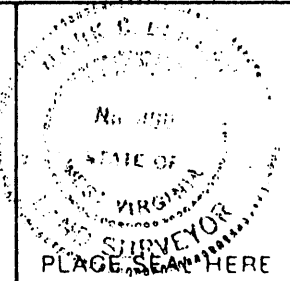
PROVEN SOURCE OF ELEVATION BM EAST SIDE OF LEASE

ELEV. = 1056'

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 ENERGY.

(SIGNED) Mark C. Echard

R.P.E. _____ L.L.S. 490



STATE OF WEST VIRGINIA
Division of Environmental Protection
OFFICE OF OIL AND GAS

DATE AUGUST 20, 2001

OPERATOR'S WELL NO. JOLLIFFE NO. 2

API WELL NO. 47-103-01860

STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL

(IF "GAS.") PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 1340' WATER SHED CAMP RUN OF KNOB FORK

DISTRICT CENTER COUNTY WETZEL

QUADRANGLE LITTLETON

SURFACE OWNER MARTHA JOLLIFFE ACREAGE P/O 308.9

OIL & GAS ROYALTY OWNER MARTHA JOLLIFFE, et al LEASE ACREAGE 287

LEASE NO. _____

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 SPEECHLEY/BAYARD ESTIMATED DEPTH 3900'

WELL OPERATOR D.A.C. DESIGNATED AGENT KENNETH MASON

ADDRESS P.O. BOX 99 ADDRESS P.O. BOX 99

ALMA, WV 26320 ALMA, WV 26320

AUG 31 2001

WET

COUNTY NAME

PERMIT

1860

6-6 44

Jolliffe # 2
09-18-01

Stage #1	perfs	sand	avg rate	isip
Bayard 4th	3145-3482	246 sks	22 bpm	3644#
Big Injun	2370-2402	201	24	2443#

Drillers Log

Sh	0	70	
RR	70	77	
Sd/Sh	77	230	
RR	230	242	1" strm @ 76'
Sd/Sh	242	778	
Coal	778	784	
Sd/Sh	784	1902	Damp @ 1255'
Sd	1902	1986	
Sd/Sh	1986	2290	
Lime	2290	2380	
Sd	2380	2555	gas ck @ 2495 =
Sd/Sh	2560	2732	gas ck @ 2735 = mcfs
Sd	2732	2765	
Sd/Sh	2765	2910	
Sd	2910	2920	
Sd/Sh	2920	3100	
Sd	3100	3110	
Sd/Sh	3110	3170	
Sd	3170	3210	
Sh	3210	3611	gas ck @ 3234 = mcfs
Td	3611		

Electric Log Tops

Big Lime	2284
Berea	2694
Gordon	3094