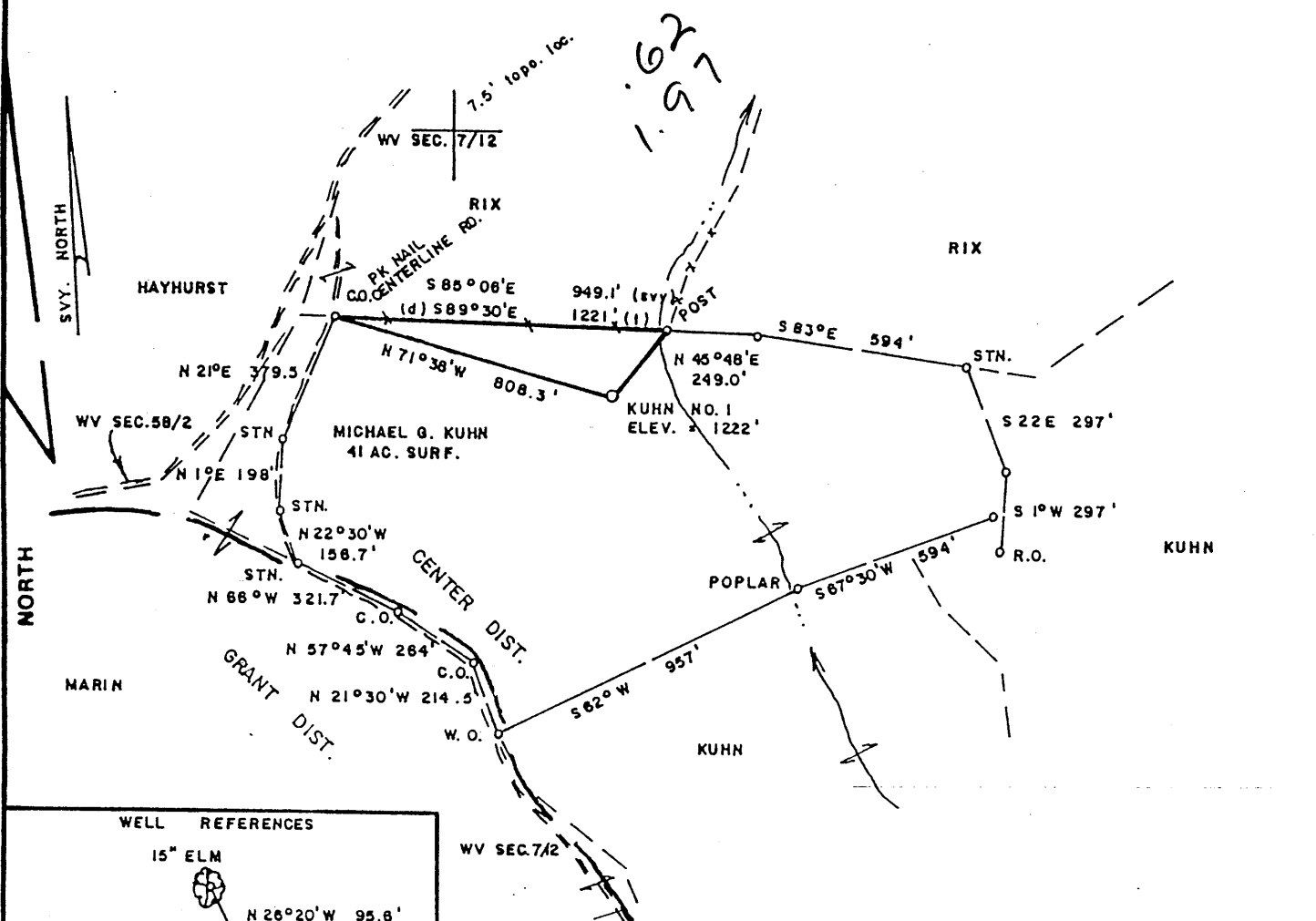


KUHN LEASE 41 AC.

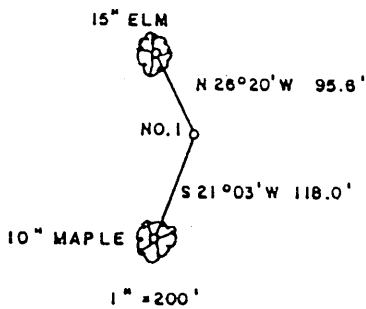
10,400' W

LATITUDE 39°37'30"

LONGITUDE 80°03'08"



WELL REFERENCES



NOTE: NO WELLS SHOWN WITHIN 2400'

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION BM SOUTH OF LEASE
 ELEV. = 1541'

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.
Mark C. Echard
 (SIGNED) MARK C. ECHARD
 R.P.E. _____ L.L.S. 490



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



DATE JUNE 2 2000
 OPERATOR'S WELL NO. KUHN NO. 1
 API WELL NO. _____
 47 - 103 - 01808
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION

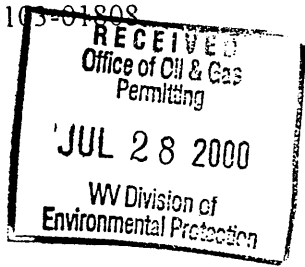
WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS.") PRODUCTION STORAGE ___ DEEP ___ SHALLOW
 LOCATION: ELEVATION 1222' WATER SHED KNOB FORK
 DISTRICT CENTER COUNTY WETZEL
 QUADRANGLE BIG RUN 7.5'
 SURFACE OWNER MICHAEL G. KUHN ACREAGE 41
 OIL & GAS ROYALTY OWNER MICHAEL G. KUHN LEASE ACREAGE 41
 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) 6-6 45
 PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION SPEECHLEY ESTIMATED DEPTH 3900'
 WELL OPERATOR D.A.C. DESIGNATED AGENT KENNETH MASON JUN 23 2000
 ADDRESS P.O. BOX 99 ALMA, WV 26320 ADDRESS P.O. BOX 99 ALMA, WV 26320

BLAS BLUEPRINT Huntington, W.V. 579536

WET 1808

WR-35

API# -47-105-01808



State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm Name: Kuhn
Location: Elevation: 1222'
District: Grant
Latitude: 3250 Feet South of
Longitude: 10400 Feet West of

Operators Well No.: Kuhn #1
Quadrangle: Big Run 7.5'
County: Wetzel
39 Deg. 37 min. 30sec.
80 Deg. 30 min. 00sec.

Company: D.A.C.
P. O. 99
Alma WV 26320

casing used in left cement
tubing drilling in well fill up sks

Agent: Kenneth Mason

09 5/8 225 210 85 sks

Inspector: Randall Mick
Permit Issued: 05/16/00

6 5/8 1950 1858 150 sks

Well Work Commenced: 07/11/00

Well Work Completed: 07/15/00

4 1/2 3362 3283 140 sks

Rotary X Cable _____ Rig

Total Depth (feet) 3362'

Fresh Water Depths (ft) 1785'

Salt Water Depths (ft) N/A

Is coal being mined in area (Y/N) N

Coal Depths (ft): 1364'

OPEN FLOW DATA

Producing formation 4th

Pay zone depth (ft) 3120-3138

Gas: Initial open flow 1stm MCF/D

Oil: Initial open flow 0 BBL/D

Final open flow 450 MCF/D

Final open flow show BBL/D

Static Rock Pressure _____

psig (surface pressure) after 48 Hours

Second producing formation Big Injun

Pay zone depth (ft) 2268-2358

Gas: Initial open flow 133,000 MCF/D

Oil: Initial open flow 0 BBL/D

Final open flow * MCF/D

Final open flow 0 BBL/D

static rock pressure *

psig (surface pressure) after * Hours

* = commingled zones

For: D.A.C.

By:

Date: 07-20-00

WET 1808

AUG 11 2000

Stage	Formation	Perfs	Sand	N2
07-20-00	Kuhn #1			
1	4th, 5th	3046-3140 16 holes	150 sks	240,000 scf
2	Big Injun	2278-2360 18 holes	250 sks	245,000 scf

ISIP =
5 min =

Drillers Log

Formation	Top	Bottom	
Fill	0	15	
Sd/Sh	15	110	
Sd	110	215	
Sd/Sh	215	420	damp @ 35'
Sd	420	430	
Sd/Sh	430	1364	
Coal	1364	1369	2" strm @ 1785
Sd/Sh	1369	1635	
Sd	1635	1675	
Sd/Sh	1675	1740	
Sd	1740	1800	
Sd/Sh	1800	2056	
RR	2056	2100	
Sd/Sh	2100	2204	
BL	2204	2254	
Sd	2254	2470	
Sh	2470	3035	
Sd	3035	3075	
Sh	3075	3123	gas ck @ 2487 = 4/10" - 2" w/w
Sd	3123	3138	
Sh	3138	3362	
Td	3362		gas ck @ Td = 10/10" - 2" w/w

Electric Log Tops

Formation	Depth top
Big Lime	2200
Big Injun	2250
Berea	2598
Gordon	3022
4th	3118