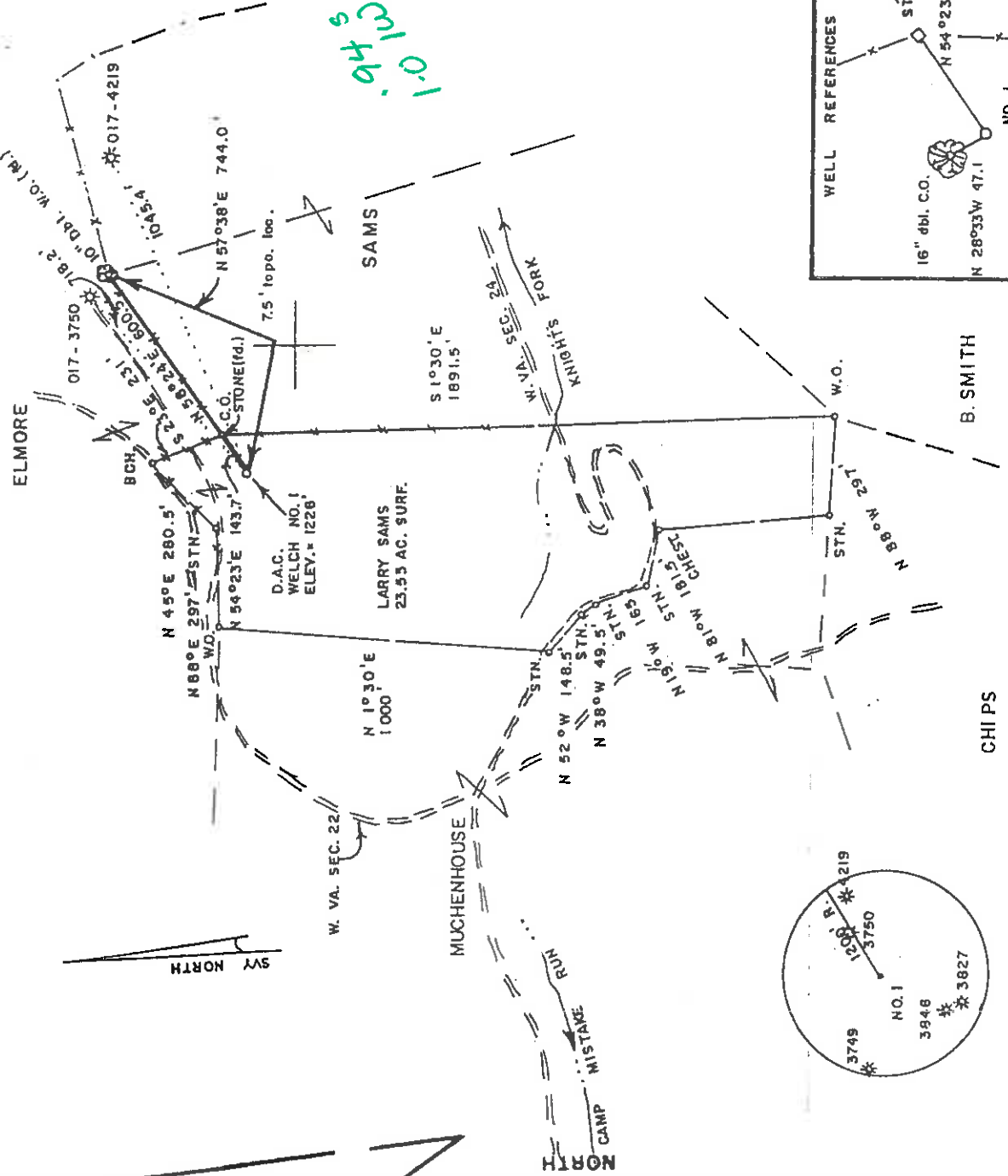


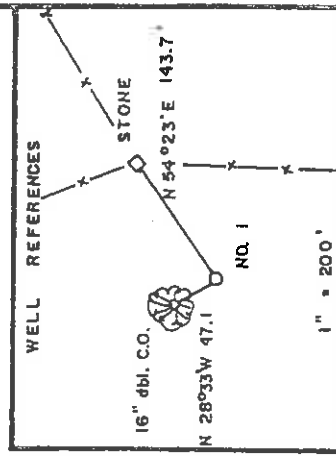
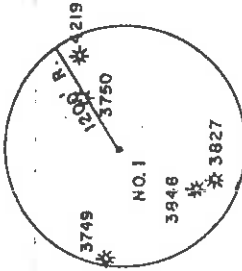
WELCH LEASE 23.55 AC.±

LATITUDE 39°22'30"

LONGITUDE 80°45'00"



0410
1-0



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION TOP OF KNOB
 NW OF LEASE ELEV. = 1307'

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

PLACE SEAL HERE

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



DATE MARCH 21, 19 97
 OPERATOR'S WELL NO. WELCH NO. 1
 API WELL NO. 47-017-04549
 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 1226' WATER SHED KNIGHTS FORK OF LITTLE FLINT RUN
 DISTRICT GRANJ COUNTY DODDRIDGE
 QUADRANGLE WEST UNION 7.5
 SURFACE OWNER LARRY SAMS ACREAGE 23.55
 OIL & GAS ROYALTY OWNER N.M. WELCH & C.R. PIERSOL LEASE ACREAGE 23.55

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 GORDON - BIG LITTLE ESTIMATED DEPTH 3300'
 WELL OPERATOR D.A.C. DESIGNATED AGENT KENNETH MASON
 ADDRESS P.O. BOX 99 ALMA, W. VA. 26320
 P.O. BOX 99 ALMA, W. VA. 26320

6-6 92
 MAY 19 2000

WR-35

API# -47-017-04549



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

Reviewed _____

Well Operator's Report of Well Work

Farm Name: Sams
 Location: Elevation: 1226'
 District: Grant
 Latitude:
 Longitude:

Operators Well No.: Welch #1
 Quadrangle: West Union 7.5'
 County: Doddridge
 39 Deg. 22 min. 30sec.
 80 Deg. 45 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
 Inspector: Mike Underwood
 Permit Issued: 05/18/00
 Well Work Commenced: 05/22/00
 Well Work Completed: 05/27/00
 Rotary Cable _____ Rig
 Total Depth (feet) 3214'
 Fresh Water Depths (ft) 159'
 Salt Water Depths (ft) 1970'
 Is coal being mined in area (Y/N) N
 Coal Depths (ft): N/A

09 5/8	177	127	50 sks
6 5/8	1900	1851	304 sks
4 1/2	3214	3078	140 sks

OPEN FLOW DATA

Producing formation Gordon Pay zone depth (ft) 2934-2940
 Gas: Initial open flow 60 MCF/D Oil: Initial open flow 0 BBL/D
 Final open flow 323 MCF/D Final open flow show BBL/D
 Static Rock Pressure 225 psig (surface pressure) after 48 Hours

Second producing formation Big Injun Pay zone depth (ft) 2203-2300
 Gas: Initial open flow * 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: Kenneth Mason

Date: 06-20-00

Dodd 4549

AUG 11 2000

Stage	Formation	Perfs	Sand	N2
06-06-00	Welch #1			
1	Gordon	2934-2940 14 holes	100 sks	197,000 scf
2	Big Injun	2203-2300 18 holes	150 sks	405,000 scf

ISIP = 2292#
5 min = 1935#

Drillers Log

Formation	Top	Bottom	Formation	Depth top
Fill	0	10	Big Lime	2132
Sh	10	240	Big Injun	2200
RR	240	252	Berea	2636
Sd/Sh	252	495	Gordon	2844
RR	495	505		
Sd/Sh	505	1992		
Sd	1992	2017		
Sd/Sh	2017	2073		
Lime	2073	2089		
Sd/Sh	2089	2114		
BL	2114	2230		
Sd	2230	2350	gas ck @ 2252 = tstm	
Sd/Sh	2350	2931	gas ck @ 2346 = tstm	
Sd	2931	2939	gas ck @ Td = 02/10 in 2" w/w	
Sd/Sh	2939	3214		
Td	3214			

Electric Log Tops