

GW3215

DOM # 170025-04

Horn Lake Quad

1/81WTO

T/ADP

Recorded by

WTO

U.S. GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
MISSISSIPPI DISTRICT
WELL RECORD

Well No.

F96

Date

9/5/82

E-Log No.

45

County

Desoto

Site ID

345632090052601

R=0*

T=A*

2=W*

Data reliab.

3=C*

Report. agency

4=USGS*

Dist.

6=28*

7=28*

Co.

8=033*

Lat.

Long.

9=345632*

10=0900526*

Well No.

12=F096*

Location

13=SWNW S 0.6 T 0.2 S R 0.8 W*

Alt.

16=300. 295

Hyd. Unit (OWDC)

20=

Date

21=08/20/1982*

Well use

23=U*

Water use

24=P*

Hole depth

27=254.*

Well depth

28=78.*

WL

30=42.*

Date

31=01/15/1983*

Source

33=D*

Status

273=

Project No.

5=

R=158*

T=A*

Date

159# 01/15/1983*

Owner No.

Twin Lks. Sub.

Owner

161# ~~DESOTO UTIL~~

PW SPRT

North MS Utility Co.

R=192*

T=A*

Date

193# / / *

Temp.

196#00010*

197= . . *

R=192*

T=A*

Date

193# / / *

Cond.

196#00095*

197= . . *

R=192*

T=A*

Date

193# / / *

pH

196#00400*

197= . . *

R=58*

T=A*

59# 1*

Date

60=01/15/1983*

Remarks

Drlg.

63=002*

Name

Ratiff

Method

65=H*

Finish

66=S*

R=76*

T=A*

59# 1*

Top csng.

77# 0.*

Bot. csng.

78=58.*

Diam.

79# 8.*

R=76*

T=A*

59# 1*

Top csng

77# . . *

Bot. csng.

78= . . *

Diam.

79# . . *

R=82*

T=A*

59# 1*

Top

83# 58.*

Bottom

84=78.*

Type

85=S*

Diam.

87=8.*

Size

88= . . *

R=82*

T=A*

59# 1*

Top

83# . . *

Bottom

84= . . *

Type

85= . . *

Diam.

87= . . *

Size

88= . . *

R=146*

T=A*

147# 1*

Q

150=150.*

Q/S

272= . . *

R=42* T= A * Lift type 43# S* Intake 44= * Power type 45= E*
 Date 38= 01/15/1983* H.P. 46= 10.*

LIFT

R=198* T= A * Log 199# E* Top 200= 44.* Bot 201= 254.*
 R=198* T= A * Log 199# D* Top 200= 0.* Bot 201= 253.*
 R=189* T= A * E Log No. 190# 045* 191= M I S S D I S T *

LOGS

R=114* T= A * Year 115# * 117= * 120= *

ANAL.

R=90* T= A * 256# 1 * Top 91= 42.* Bot 92= 71.*

Unit ID 93= 124SPRT * Name of Unit _____

R=90* T= A * 256# 1 * Top 91= * Bot 92= *

Unit ID 93= * Name of Unit _____

AQUIFER

R=98* T= A * 99# 1 * Unit tested 100= * 103= *

R=105* T= A * 99# 1 * Test No. 106# *

107= * Transmissivity (gal/d)/ft _____

108= * Hydraul. cond. (gal/d)/ft² _____

110= * Storage coeff. Boundaries _____

HYDRAULICS

R=121* T= * Yr Begin 122# * Network 258# *

Water Level Data Collection (1)

description of formations encountered	from	to
Clay	0	16
Sand	16	24
Clay & sand	24	28
Sand & gravel	28	71
Clay	71	76
Sand	76	83
Clay	83	163
Blue Clay	163	182
Sand	182	216
Clay	216	253

DESOTO
F96
1/83
E log #45

MISSISSIPPI
BOARD OF WATER COMMISSIONERS
416 North State Street
Jackson, Mississippi 39201

CODED

WATER WELL DRILLERS LOG

January 1983 Robert E. Pettiford Co. Inc. Desoto
Date well completed Firm name county well located

LANDOWNER: Desoto Utility
Company, 5878 Hwy 301
Wells, Mo. 38680
(mailing address)

description of formations encountered	from	to
Clay	0	16
Sand	16	24
Clay & sand CODED	24	28
Sand & gravel	28	71
Clay	71	76
Sand	76	83
Clay	83	163
Blue Clay	163	182
Sand	182	216
Clay	216	253

WELL LOCATION:
sec. 6 T. 2 N R. 8 E
S W
Twin Lakes Subdivision
(distance) miles (direction) of (nearest town)

WELL PURPOSE: Municipal
(home, irrigation, municipal, industrial)

WELL COMPLETION DATA:

(1) diameter (inches) 8"

(2) total depth (feet) 78'

(3) static water level (feet) 42' below above top of ground.

(4) casing PVC 58' (material) (depth)
8" (size) if telescope see back.

(5) screen 20' 58' (length) (depth to top)
8" PVC (size) (material)

(6) pump 10 150 (HP) (yield gpm)
electric (type power)

(7) electric log yes (yes or no)
MGS - state (organization running log)

(8) how well bottom plugged PVC cap

DEPT. OF NATURAL RESOURCES
BUREAU OF LAND & WATER RESOURCES

APR - 4 1983

DRILLERS REMARKS: 50' of
20" surface casing

RECEIVED

MAILED 1996

APPLICATION FOR PERMIT TO DIVERT OR WITHDRAW FOR BENEFICIAL USE THE PUBLIC WATERS OF THE STATE OF MISSISSIPPI

DEPARTMENT OF ENVIRONMENTAL QUALITY, OFFICE OF LAND AND WATER RESOURCES
P.O. BOX 10631, JACKSON, MS 39289-0631; (601) 361-5202

This box is for office use only.

4-23-96 AGN.

FORM OLWR-AP-2 (REV. 9/94)

Issued: <u>8-12-86</u>	Expires: <u>5-13-2006</u>	Fee Paid: <input checked="" type="checkbox"/>	Permit No. <u>GW-3215</u>
Lat. <u>34 56 30</u>	Long. <u>90 05 28</u>	Elev. <u>300'</u>	USGS No.
Quad. <u>Arvin Lake</u>	ASCS Farm No.	STAC.	MSDOH No.
Aquifer: <u>SPRT</u>	Tract No.		Basin No.
Remarks:			Dam Inv. No.

THIS APPLICATION IS FOR (Circle one): NEW PERMIT RENEWAL - PERMIT NO. 03215

THIS APPLICATION IS FOR (Circle one): GROUNDWATER - COMPLETE A,B,E
SURFACE WATER - COMPLETE A,C,D,E

BENEFICIAL USE (Circle one or more): 1) Public Supply - Municipal, Rural Water, or Private Water 2) Irrigation
3) Industrial 4) Fish Culture 5) Recreation 6) Institutional (eg. Church, School) 7) Commercial (eg. Hotel, Casino, Restaurant) 8) Fire Protection 9) Livestock 10) Flood Protection 11) Other: _____

SECTION A (to be completed by ALL APPLICANTS)

LANDOWNER: NORTH MISSISSIPPI UTILITY COMPANY 64-0676172
(Name) (SSN or Tax ID No.)
P O BOX 362, 1481 BYHALIA ROAD
(Address)
HERNANDO MS 38632 (601) 429 - 9509
(City) (State & Zip) (Telephone No.)

APPLICANT, AGENT, OR LESSEE (if different from Landowner):

(Name) _____ (SSN or Tax ID No.) _____
(Address) _____
(City) _____ (State & Zip) _____ (Telephone) _____

MAP SENT

Location of diversion/withdrawal point (A suitable map with location marked must accompany this application):

SW 1/4 of the NW 1/4 of Section 6, Township 2 S, Range 8 W, County DESOTO

Does the land to which this application pertains have any source(s) of water other than that for which you are now applying (circle one)? NO If yes, describe the nature and amount of any additional supply and, if applicable, list permit number. _____

SECTION B (to be completed for GROUNDWATER SOURCE)

- AQUIFER: SPARTA MISSISSIPPI DEPARTMENT OF HEALTH NO.: 170025
- Proposed work will begin on _____, 19____, and will be completed by _____, 19____.
If well has already been drilled, when was well completed (date)? JANUARY, 1983. Under whose name was well originally drilled (if known)? DESOTO UTILITY COMPANY
- Description of proposed or completed well:
 - DEPTH OF WELL: 78 feet. DRILLER: RATLIFF COMPANY
 - SURFACE CASING: Length 58 feet; Diameter 8 inches; Type PVC
 - SCREEN: Length 28 feet; Diameter 8 inches; Type PVC
 - PUMP: Type SUBMERGE; Size 10 HP; Capacity 150 gallons per minute; Setting depth _____ feet
 - POWER UNIT: Type _____; Size _____ horsepower
- PERMITTED VOLUME:
 - _____ acre-feet per year at a maximum rate of _____ gallons per minute
 - 0.130 million gallons per day at a maximum rate of 150 gallons per minute

130 Del 3-8-96

(CONTINUED ON BACK)

150

SECTION C (to be completed for **SURFACE WATER SOURCE**)

1. Source of water is from _____ which drains into _____
which drains into _____
(major stream or river)
2. Discription of pump/diversion works:
Pump (size & type): _____ Power Unit (size & type): _____
Lift: _____ feet Maximum capacity: _____ gallons per minute
3. _____ acre-feet per year at a maximum rate of _____ gallons per minute

SECTION D (to be completed for **SURFACE WATER IMPOUNDMENTS (DAMS)** on continuously flowing streams)

1. Name of storage reservoir: _____ Dam Height: _____ feet
2. Surface area at normal pool: _____ Storage capacity at normal pool: _____ acre-feet

SECTION E WATER USE DATA (ALL APPLICATIONS - complete section related to beneficial use)

1: **IRRIGATION:** List the number of acres of each crop to be irrigated: Rice _____; Cotton _____; Oats _____; Corn _____; Soybeans _____; Pasture _____; Truck _____; Wheat _____; Grain Sorgum _____; Other (specify) _____ Acres _____

- A. Method of Irrigation (circle one) - Center Pivot Flood Furrow
- B. Land Condition (circle one) - Precision Land Formed Smoothed
- C. ASCS Farm No. _____ Tract No. _____

2. **FISH CULTURE:** Explain how water will be used: _____
How often will reservoir (s) be emptied and refilled? _____

3. **MUNICIPAL, WATER ASSOCIATION, or PRIVATE WATER SYSTEM**

Chose "a" or "b". (a) The number of people served is _____ or (b) The number of connections is 710
What is the estimated average daily consumption during periods of maximum use at the end of each five-year period during the next twenty (20) years?

$\frac{242,000}{(\text{Volume})}$	$\frac{2000}{(\text{Year})}$;	$\frac{242,000}{(\text{Volume})}$	$\frac{2005}{(\text{Year})}$;	$\frac{245,000}{(\text{Volume})}$	$\frac{2010}{(\text{Year})}$;	$\frac{245,000}{(\text{Volume})}$	$\frac{2015}{(\text{Year})}$
-----------------------------------	------------------------------	---	-----------------------------------	------------------------------	---	-----------------------------------	------------------------------	---	-----------------------------------	------------------------------

4. **INDUSTRIAL:** If the water is to be released into a watercourse, indicate the amount released each year _____;
Rate of release _____; NPDES Permit No. _____

Explain any changes in quality of water to be released: _____

Explain how water will be used: _____

How much groundwater will be used for once-through non-contact cooling? _____

5. **RECREATION:** Explain how water will be used: _____

6. **OTHER USE:** Explain in detail (if needed, attach another page): _____

7. **REMARKS:** _____

List below the person to be contacted for additional information if required.

BILL J ROBERSON
(Name)
P O BOX 362
(Address)
HERNANDO MS 38632
(City, State, Zip)
(601) 429-9509
(Telephone)

The accompanying map is hereby declared a part of this application.
For irrigation and fish culture use, an ASCS photograph is required.
The **TEN DOLLAR (\$10.00)** permit fee is enclosed herewith.

Bill J Roberson
(Signature)

Subscribed and sworn to before me this 28th day of Feb, 19 96, at Hernando County of Miss
My commission expires March 23, 1998; Lumina Roberson Notary Public.

DEPARTMENT OF ENVIRONMENTAL QUALITY - OLWR
PUBLIC SUPPLY WELLS PROJECT

SHO+PEG GPS LOG

8-21-96

USER NAME(S): LIAH / DUB DATE: 7/26/94
UNIT DEQ #: 84090 FILE #: B072619B
HEALTH DEPT. #: 170025 -04 ELEV. 280 A082114B

USGS #: 507 F-96 OLWR #: MS-GW-03215

OWNER: DeSoto (ATL) / TWIN LAKES (N. MS. 4th Co.)

LOCATION: SW / SE / NW S 6 T 25 R 8W COUNTY: DE SOTO

LOCATION DESCRIPTION: Well across str. from #1 well.

CASING DIA: 10" / ~~8~~ PUMP TYPE & SIZE: Sub 1

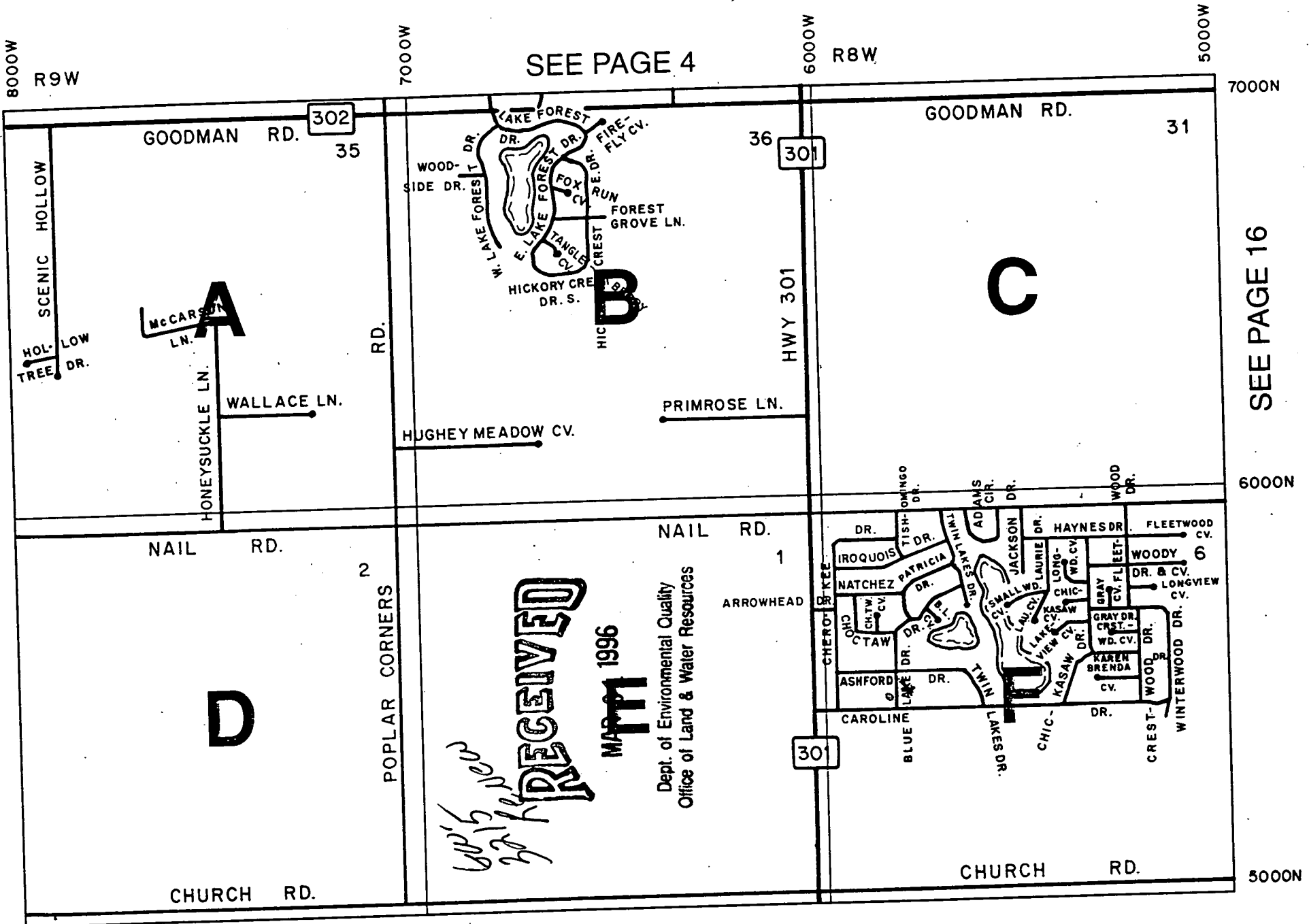
GPS FIELD LOCATION: LAT. 34-56-49N LONG. 90-05-48W

GPS CORRECTED LOCATION: LAT. 34.94163312 LONG. 90.09164718

REMARKS: See well #1 for location

f

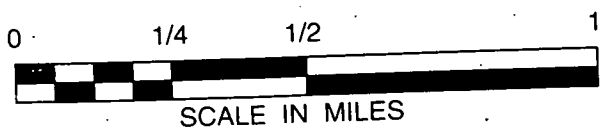
T1S · SEE PAGE 14
T2S · SEE PAGE 14



SEE PAGE 4

SEE PAGE 16

SEE PAGE 25



PAGE 15

6/15/96
3/2/96
RECEIVED
MAY 1996

Dept. of Environmental Quality
Office of Land & Water Resources

A

B

C

D

30

36

302

31

2

1

8000W R9W

7000W

6000W R8W

5000W

7000N

6000N

5000N



RSW
RSW

Lynchburg

SEWAGE TREATMENT PONDS

SEWAGE LID 2000

COMPRESSOR ST

S. AVE. LYNCHBURG

Twin Lakes

SEWAGE TREATMENT

WELL

301

127

1245

246

240

240

240

240

240

240

240

240

240

240

240

240

240

240

240

262

262

262

262

262

262

262

262

262

262

262

262

262

262

262

262

262

262

274

274

274

274

274

274

274

274

274

274

274

274

274

274

274

274

274

274

304

304

304

304

304

304

304

304

304

304

304

304

304

304

304

304

304

304

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

260

260

260

260

260

260

260

260

260

260

260

260

260

260

260

260

260

260

235

235

235

235

235

235

235

235

235

235

235

235

235

235

235

235

235

235

240

240

240

240

240

240

240

240

240

240

240

240

240

240

240

240

240

240

P-244T

1-317

2447

2417

2407

P-277

2457

2430

2497

2497

2497

2497

2497

2497

2497

2497

2497

2497

P-276-T

P-278-T

P-295-T

P-269-T

P-264-T

P-292-T

P-263-T

2507

302-T

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

300

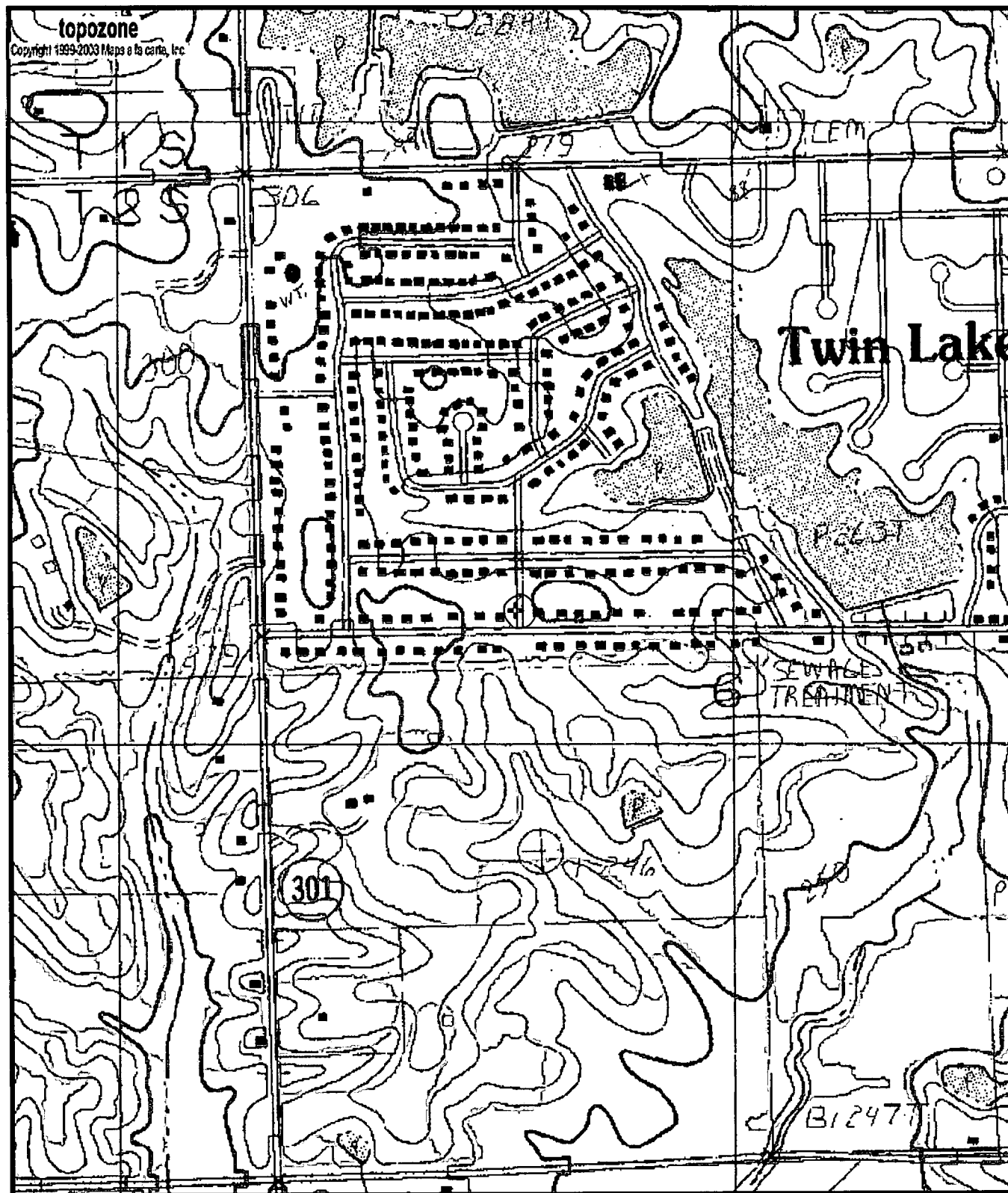
300

300

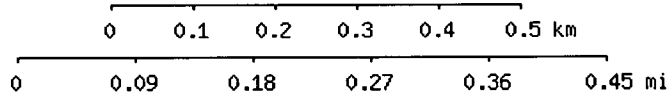
300

300

300



0170025-04
 6w03215
 F96



Map center is 34° 56' 30"N, 90° 05' 30"W (WGS84/NAD83)
Horn Lake quadrangle
 Projection is UTM Zone 15 NAD83 Datum



M=0.054
 G=1.667