

D26

Latitude-longitude: _____ N _____ S _____ d _____ m _____ s

HYDROGEOLOGIC CARD

CRUSHED ON MASTER CARD

Physiographic Province: _____

03 Section: _____

D Drainage Basin: _____

15E Subbasin: _____

Topo of well site: (D) depression, stream channel, dunes, flat, hilltop, sink, swamp, (P) offshore, pediment, hillside, terrace, undulating, valley flat

MAJOR AQUIFER:

T.E system series

aquifer, formation, group

Lithology: _____

S Origin: _____

2 Aquifer Thickness: _____

300+ ft

Length of well open to: _____ ft

80 Depth to top of: _____

160 ft

160

MINOR AQUIFER:

Lithology: _____

Origin: _____

Aquifer Thickness: _____

Length of well open to: _____ ft

Depth to top of: _____ ft

Intervals Screened:

Depth to consolidated rock: _____ ft

Source of data: _____

Depth to basement: _____ ft

Source of data: _____

Surficial material: _____

Infiltration characteristics: _____

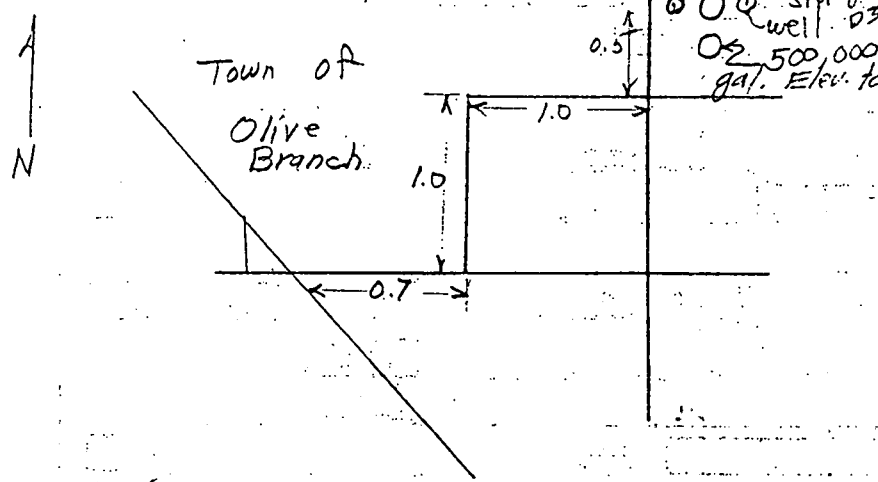
Coefficient of Trans: _____ gpd/ft

Coefficient of Storage: _____

Coefficient of Perm: _____ gpd/ft²; Spec cap: _____ gpm/ft; Number of geologic cards: _____

electric log doesn't look like drilled log could be different location

well D26 + 34 ~ 250' apart



7-9-74 water use ~ 50,000 gpd

DeSoto
D26
10-1-72
Log #22

Nebo DeSoto Well

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

WATER WELL DRILLERS LOG

Oct 1 1972 Carloss Well Supply Co. Desota
 date well completed firm name county well located

LANDOWNER: Well # 1	description of formations encountered	from	to
Holiday Industrial Park			
Olive Branch, Miss. (mailing address)	Coarse Red Gravel	18	75
WELL LOCATION: sec <u>23</u> <u>1</u> <u>S</u> R <u>6</u> <u>W</u>	Clay & Lignite	75	160
<u>5</u> miles <u>NE</u> of <u>Olive Branch</u> (distance) (direction) (nearest town)	Sand	160	220
WELL PURPOSE: Industrial (home, irrigation, municipal, industrial)	Sand	220	351
WELL COMPLETION DATA:	Med. Sand & Lignite	351	471
(1) diameter (inches) <u>16"</u>	Fine Sand & Lignite	471	485
(2) total depth (feet) <u>343</u>			
(3) static water level (feet) <u>142'</u> below top of ground.			
(4) casing <u>Steel</u> <u>251'</u> (material) (depth) (size) If telescope see back.			
(5) screen <u>80'</u> <u>263'</u> (length) (depth to top) <u>10"</u> <u>Stainless Steel</u> (size) (material)			
(6) pump <u>100</u> <u>1600</u> (HP) (yield gpm) <u>Electric</u> (type power)			
(7) electric log <u>Yes</u> (yes or no) <u>U.S.G.S</u> (organization running log)			
(8) how well bottom plugged <u>B.P. Valve</u>			
DRILLERS REMARKS:			

CODED

10/5/72

NOV 2 1972

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

DEC 18 1995

DEPARTMENT OF ENVIRONMENTAL QUALITY, OFFICE OF LAND AND WATER RESOURCES

P.O. BOX 10631, JACKSON, MS 39289-0631; (601) 961-5202

This box is for office use only.

4-23-96 AGN

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

Issued: <u>3-11-86</u>	Expires: <u>3-11-2006</u>	Fee Paid: <input checked="" type="checkbox"/>	Permit No. <u>GW-1820</u>
Lat. <u>34 59 04</u>	Long. <u>89 47 40</u>	Elev. <u>402'</u>	USGS No. <u>Dak Phillips</u>
Quad. <u>Olive Branch</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. GW-1820

THIS APPLICATION IS FOR (Circle one): **GROUNDWATER - COMPLETE A,B,E** LWM
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, Casinc, Restaurant) 8) Fire Protection 9) Livestock 10) Flood Protection 11) Other: _____

SECTION A (to be completed by ALL APPLICANTS)

LANDOWNER: Metro DeSoto Utility Co. (Name) (SSN or Tax ID No.)
530 Oak Court Drive, Suite 300 (Address)
Memphis, Tennessee 38117 (City) (State & Zip) (901) 762-7239 (Telephone No.)

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

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

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 24, Township 15S, Range 6W, 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)? **YES** 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.: _____
- Proposed work will begin on N/A, 19____, and will be completed by _____, 19____
If well has already been drilled, when was well completed (date)? October, 1972. Under whose name was well originally drilled (if known)? _____
- Description of proposed or completed well:
 - DEPTH OF WELL: 351 feet. DRILLER: Carlross Well Supply
 - SURFACE CASING: Length 251 feet; Diameter 16 inches; Type 100HP welded st
 - SCREEN: Length 80 feet; Diameter 8 inches; Type Louver
 - PUMP: Type Vertical turbine; Size 12"; Capacity 1250 gallons per minute; Setting depth 200 feet
 - POWER UNIT: Type _____; Size _____ horsepower
- PERMITTED VOLUME:
 - _____ acre-feet per year at a maximum rate of 1500 gallons per minute
 - 500 million gallons per day at a maximum rate of 1500 1250 gallons per minute

(CONTINUED ON BACK)

1500

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

- Source of water is from _____ which drains into _____
which drains into _____
(major stream or river)
- Description of pump/diversion works:
Pump (size & type): _____ Power Unit (size & type): _____
Lift: _____ feet Maximum capacity: _____ gallons per minute
- _____ 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)

- Name of storage reservoir: _____ Dam Height: _____ feet
- 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)

- IRRIGATION:** List the number of acres of each crop to be irrigated: Rice _____; Cotton _____; Oats _____; Corn _____; Soybeans _____; Pasture _____; Truck _____; Wheat _____; Grain Sorghum _____; 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. _____
- FISH CULTURE:** Explain how water will be used: _____
How often will reservoir (s) be emptied and refilled? _____
- 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 _____
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? $\frac{714,000 \text{ gal.}}{\text{(Volume)}}$ $\frac{2000}{\text{(Year)}}$; $\frac{730,000 \text{ gal.}}{\text{(Volume)}}$ $\frac{2005}{\text{(Year)}}$ $\frac{740,000 \text{ gal.}}{\text{(Volume)}}$ $\frac{2010}{\text{(Year)}}$; $\frac{755,000 \text{ gal.}}{\text{(Volume)}}$ $\frac{2015}{\text{(Year)}}$
- INDUSTRIAL:** If the water is to be released into a watercourse, indicate the amount released each year _____
Rate of release: .537 MGD; NPDES Permit No. MS0028479
Explain any changes in quality of water to be released: wastewater collected, treated through wastewater treatment plant, then discharged thru NPDES permit No. MS0028479
Explain how water will be used: employee sanitary needs and industrial process use
How much groundwater will be used for once-through non-contact cooling? unknown
- RECREATION:** Explain how water will be used: _____
- OTHER USE:** Explain in detail (if needed, attach another page): _____
- REMARKS:** _____

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

Garland Crawford
(Name)
530 Oak Court Dr., Suite 300
(Address)
Memphis, Tennessee 38117
(City, State, Zip)
901-762-7239
(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.

Garland Crawford
(Signature)

Subscribed and sworn to before me this 11 day of Dec, 19 95, at Memphis County of Shelby
My commission expires 12-29-96; Patricia J. Dickblatt Notary Public.

DeSoto

RECEIVED

SECOND NOTICE

Mississippi Department Of Environmental Quality NOV 03 1994
Office of Land and Water Resources

Dept. of Environmental Quality
Office of Land & Water Resources

Water Supplier Information Sheet

Name of Water System or Well Owner Metro DeSoto Utilities Co.
Mailing Address 8276 Hacks Cross Road
City Olive Branch County DeSoto Zip 38654
Health Department (Public Water Supply) ID Number 170023

Name of Owner Metro DeSoto Utility Co.
Address P. O. Box 171199
City Memphis, TN County Shelby Zip 38187-1199

Water Superintendent/Operator

Name William M. Ross
Address P. O. Box 718
City Senatobia Zip 38668
Work Phone 601-562-8545 Home Phone 601-562-8545
MSDH Certification Number C00862

Secretary/Treasurer/Bookkeeper

Name Vickie Dupree
Address 8090 Mockingbird Lane, Olive Branch, MS 38654
Work Phone 895-2976 Home Phone 895-8824

System Information

How many usable sources of water (wells for groundwater systems, purchase points if buying water, etc.) does this system have? Wells Two (2) Purchase Points none
Others (explain) _____

How many active connections on this system? 84 ^{0.035}
.33

How many people does this system serve? 2500 (Day Shift)

How many gallons of water did this system:
pump during the 1993 calendar year (Jan - Dec)? 190.2 million* gal. ^{.52}
sell during the 1993 calendar year (Jan - Dec)? 155.3 million gal.

How many gallons of water did this system purchase during the 1993 calendar year (Jan - Dec)?
none gal. From whom? _____

Name of individual completing this form: William M. Ross - Plant Operator
Phone Number: Work 601-562-8545 Home same

Complete this form once for each Water System

*Estimated by service pump running time.

MS-150

NOV 03 1994

Mississippi Department of Environmental Quality
Office of Land and Water Resources
Well Data Form

Dept. of Environmental Quality
Office of Land & Water Resources

Name of Water System or Facility Metro DeSoto Utility Date Oct. 29, 1994
Number of wells Two (2) PWS ID 1 7 0 0 2 3 Sheet No. 1 of 1

PWS Well ID No.: 1 7 0 0 2 3 - 0 2 Date of Construction Oct. 1972
MDEQ - Permit No. MS-GW-01820 Local Name or No. West Well
Well Depth 354 ft. Casing diam. 12 in. Type pump Vert. 12" Turbine 4 Stage
Active Unused Standby Abandoned Metered yes no
Pumping Rate: 1200 gpm. Average time of daily operation: 3.7 hrs.
Location Description SW 1/4 of NW 1/4, Section 21,
Township 15, Range 6W, DeSoto County

Remarks

PWS Well ID No.: 1 7 0 0 2 3 - 0 2 Date of Construction Nov. 1972
MDEQ - Permit No. MS - GW - 0 1 8 2 1 Local Name or No. East Well
Well Depth 351 ft. Casing diam. 12 in. Type pump Vert. 12" Turbine 4 Stage
Active Unused Standby Abandoned Metered yes no
Pumping Rate: 1200 gpm. Average time of daily operation: 3.7 hrs.
Location Description SW 1/4 of NW 1/4, Section 21,
Township 15, Range 6 W, DeSoto County

Remarks

PWS Well ID No.: _____ Date of Construction _____
MDEQ - Permit No. MS - GW - Local Name or No. _____
Well Depth _____ ft. Casing diam. _____ in. Type pump _____
Active _____ Unused _____ Standby _____ Abandoned _____ Metered _____ yes _____ no
Pumping Rate: _____ gpm. Average time of daily operation: _____ hrs.
Location Description _____

Remarks

PWS Well ID No.: _____ Date of Construction _____
MDEQ - Permit No. MS - GW - Local Name or No. _____
Well Depth _____ ft. Casing diam. _____ in. Type pump _____
Active _____ Unused _____ Standby _____ Abandoned _____ Metered _____ yes _____ no
Pumping Rate: _____ gpm. Average time of daily operation: _____ hrs.
Location Description _____

Remarks

PWS Well ID No.: _____ Date of Construction _____
MDEQ - Permit No. MS - GW - Local Name or No. _____
Well Depth _____ ft. Casing diam. _____ in. Type pump _____
Active _____ Unused _____ Standby _____ Abandoned _____ Metered _____ yes _____ no
Pumping Rate: _____ gpm. Average time of daily operation: _____ hrs.
Location Description _____

Remarks

Use Copies of this form if you have more than 5 wells

WILCOX DATA SHEET-VERIFICATION CHECKLIST

COUNTY DESOTO

Olive Branch Quad
U.S.G.S. E-log #22

WELL OWNER Metro - De Soto Ind. Park #1 (Holiday Inn Ind Park)

CHECKED

U.S.G.S. NO. D-26

10/17/94

B.O.H. NO. 170023-01

10/17/94

OLWR NO. GW-01820

LOCATION:

MAP SW, SW, SW, NW S 24, T 1 S, R 6 W

10/17/94

GPS ✓

ELEV. (MSL) 400'

10/17/94

W.L. (L.S.) (1) ✓ - 147.60'

10/17/94

(2) - 147.52'

10/17/94

HEAD (MSL) + 252.40'

10/17/94

SCREENED INTERVAL 263' - 343' (LS) | + 137' — + 57' (MSL)

10/17/94

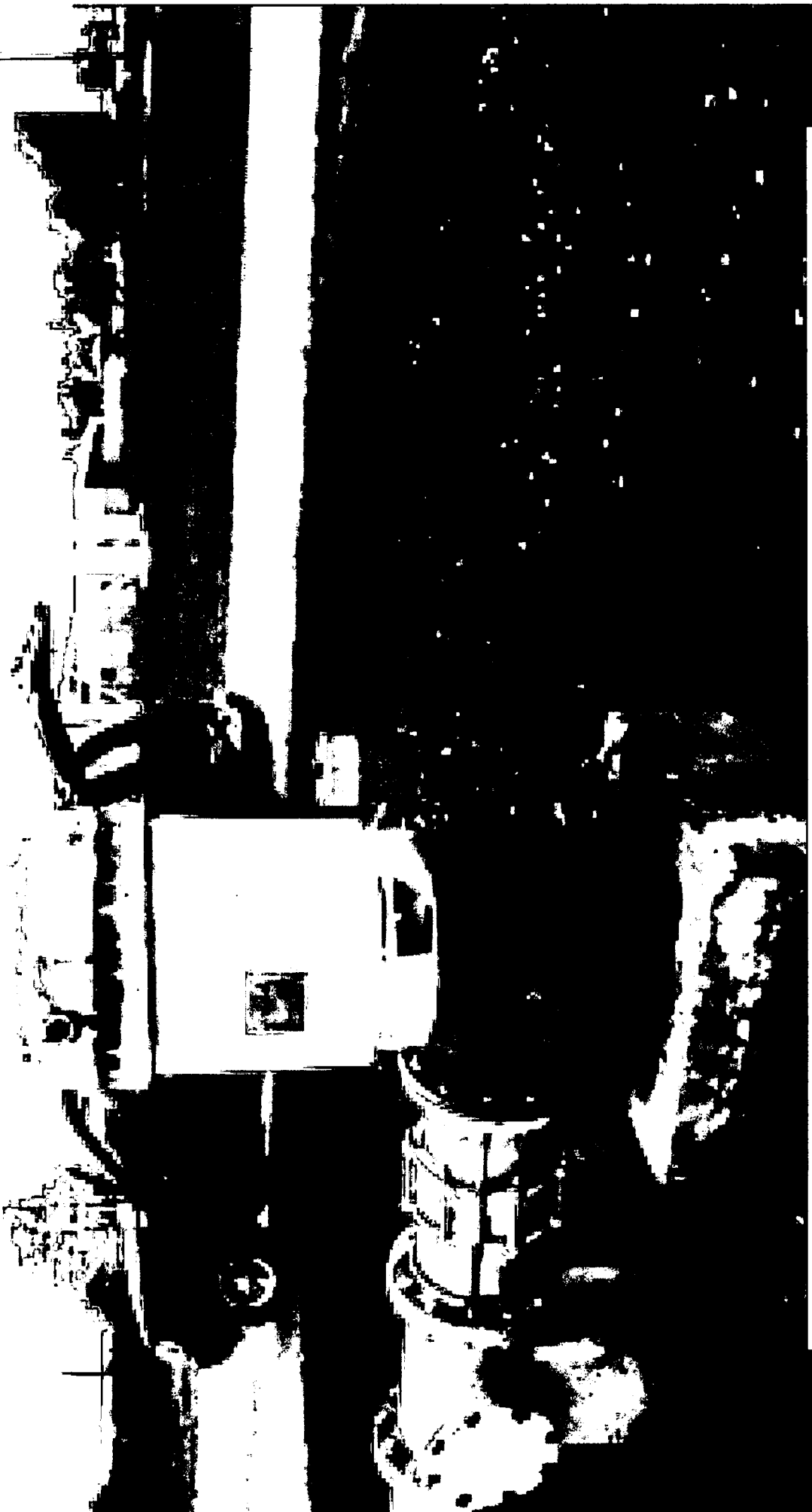
AQUIFER VERIFIED Sparta (Memphis Aquifer)

10/17/94

PREVIOUS W.L. - 164.52' (1989) | - 166.80' (1988) | - 142' (1972)

10/17/94

DATA ENTERED _____



D26. Metro Ind. Park (Eco Sys). De Soto Co. 4/19/2002

DEPARTMENT OF ENVIRONMENTAL QUALITY - OLWR
PUBLIC SUPPLY WELLS PROJECT

GPS LOG

USER NAME(S): Bishop & Grantham DATE: 8/20/96
UNIT DEQ #: _____ FILE #: A082020A
HEALTH DEPT. #: 170023-01 ELEV. 405
USGS #: D26 OLWR #: MS-6W-01820
OWNER: Metro, DeSoto Utility Co QUAD: Olive Branch
LOCATION: SW/SW/NW S 24 T 15 R 6W COUNTY: Deato
LOCATION DESCRIPTION: S. of Elev. tank

On Hack-cross RD at R. Rd Track .6 mi south of 5th Line

CASING DIA: _____ PUMP TYPE & SIZE: 100 Elec Turbine
GPS FIELD LOCATION: LAT. 34° 59' .082 LONG. 89° 47' .701"
GPS CORRECTED LOCATION: LAT. 34.98452366 LONG. 89.79473198
REMARKS: West well

34° 59' 4.29 89° 47' 41.04

OLIVE BRANCH QUADRANGLE
MISSISSIPPI-TENNESSEE
7.5 MINUTE SERIES (TOPOGRAPHIC)

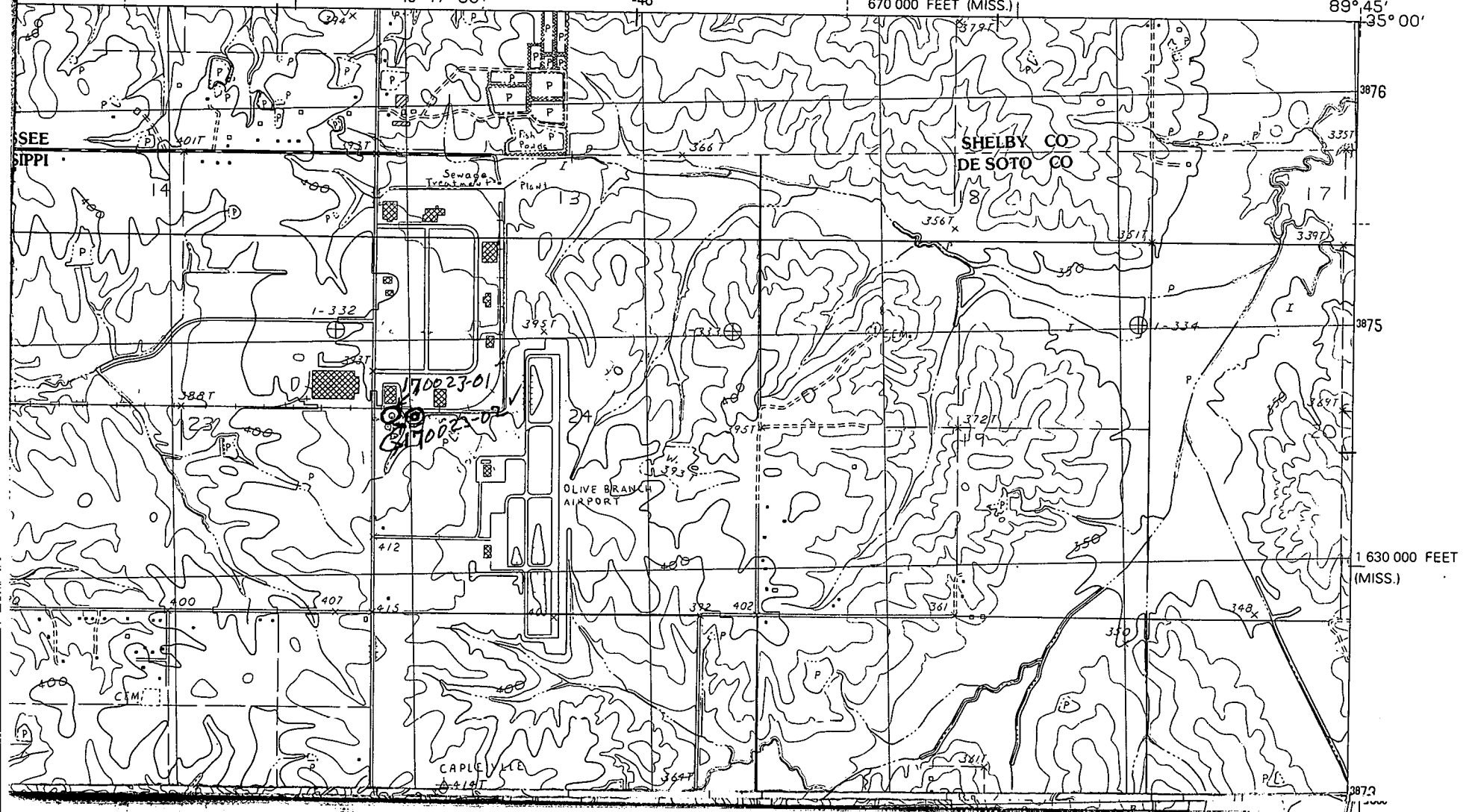
244

245 47' 30"

246

670 000 FEET (MISS.)

89° 45'
35° 00'



SEE
MISSISSIPPI

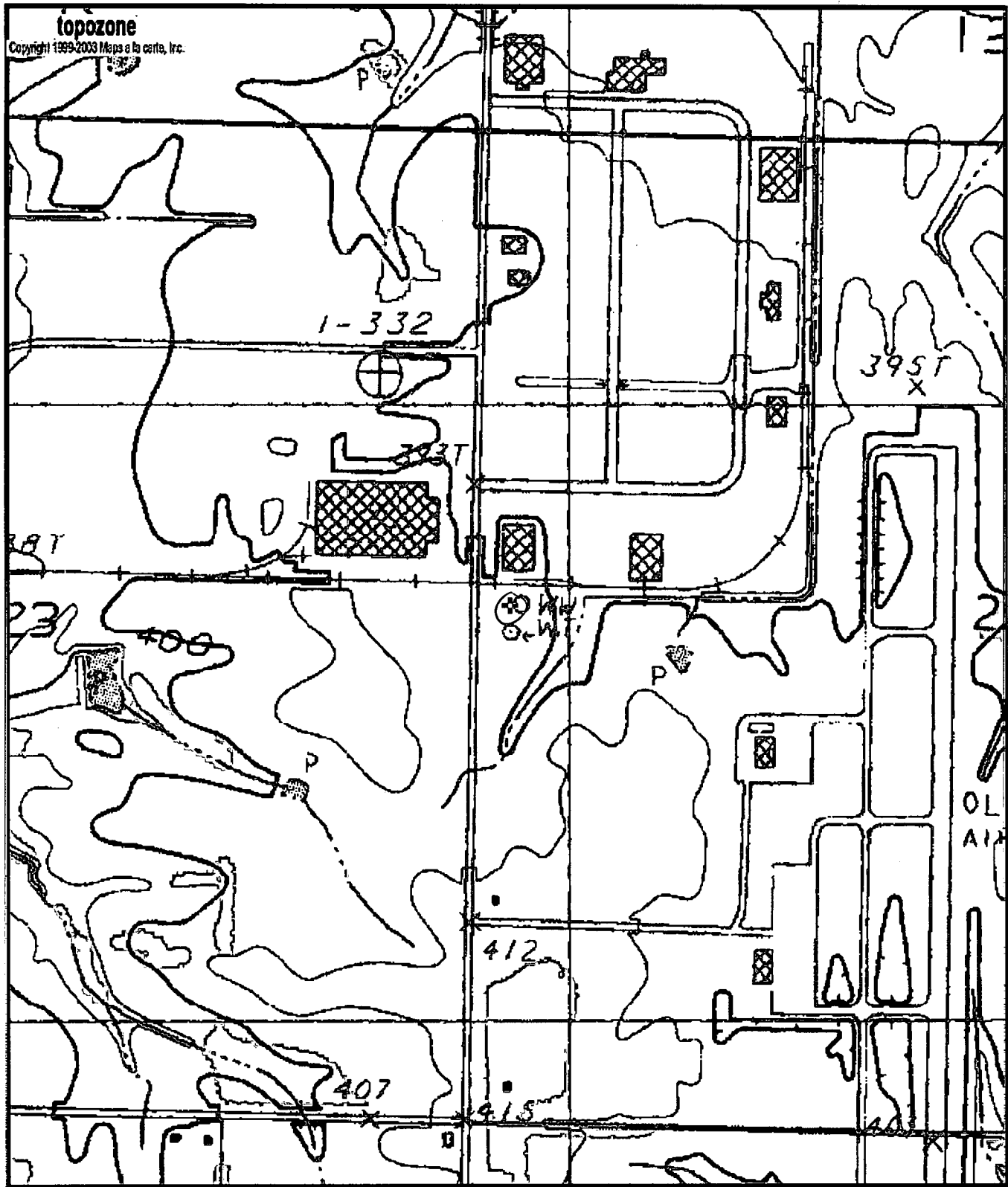
SHELBY CO
DE SOTO CO

OLIVE BRANCH
AIRPORT

10023-01
10023-02
10023-03

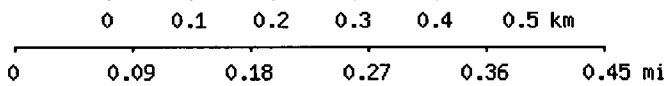
CAPLE
A 414T

1 630 000 FEET
(MISS.)



0170023-01
 Gw01820
 D26

OL
 AIR



Map center is 34° 59' 04"N, 89° 47' 41"W (WGS84/NAD83)
Olive Branch quadrangle
 Projection is UTM Zone 16 NAD83 Datum

