

Horn Lake

TRANSMITTED FOR 5/81

1/81 WTO

Recorded by WTO
Date 3/16/81

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

Well No. F95
E-Log No. 44
County Desoto

Site ID 345413090044201 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=345413* 10=0900442* Well No. 12=F095*

Location 13=SENE S 19 T 0 2 S R 0 8 W* Alt. 16=300.* 315

Hyd. Unit (OWDC) 20= Date 21=09/02/1980*

Well use 23=W* Water Use 24=P* Hole depth 27=510.* Well depth 28=503.*

WL 30=113.* Date 31=09/24/1980* Source 33=D*

Status 273= Project No. 5=

WA SPRT

R=158* T=A* Date 159#09/24/1980* Owner No. _____

Owner 161#DAYS W A

R=192* T=A* Date 193#11/04/1980* Temp. 196#00010* 197=18.0*

R=192* T=A* Date 193# Cond. 196#00095* 197=

R=192* T=A* Date 193#11/04/1980* pH 196#00400* 197=5.8*

R=58* T=A* 59#1* Date 60=09/24/1980* Remarks _____

Drig. 63=002* Name R. Ratliff Method 65=H* Finish 66=G*

R=76* T=A* 59#1*
Top csng. 77#0.* Bot. csng. 78=450.* Diam. 79#1.0.*

R=76* T=A* 59#1*
Top csng. 77#416.* Bot. csng. 78=459.* Diam. 79#6.*

R=82* T=A* 59#1* Top 83#459.* Bottom 84=503.*

Type 85=S* Diam. 87=6.* 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=250.* Q/S 272=

134 flows 146 pumped

GEN. SITE DATA

OWNER

FIELD LOG

CONSTR.

CASING

OPENINGS

YIELD

LIFT

R=42* T= A * Lift type 43# T * Intake 44= * Power type 45= E *

Date 38= 09/24/1980* H.P. 46= 20.*

LOGS

R=198* T= A * Log 199# D * Top 200= 0.* Bot 201= 510.*

R=198* T= A * Log 199# E * Top 200= 0.* Bot 201= 500.*

R=189* T= A * E Log No. 190# 044* 191= M I S S D I S T *

ANAL.

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

R=90* T= A * 256# 1 * Top 91= 450.* Bot 92= 510.*

Unit ID 93= 124 S.P.R.T. * Name of Unit

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

Unit ID 93= * Name of Unit

HYDRAULICS

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

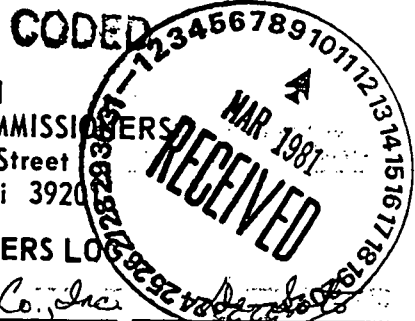
R=121* T= * Yr Begin 122# * Network 258# *

Water Level Data Collection (1)

description of formations encountered	from	to
Top sand clay	0	20
Blue shale	20	60
Pea gravel	60	90
shale	90	180
sandy shale	180	238
shale	238	380
sand	380	420
Clay	420	440
sand	440	510

De Soto
 F95
 9-24-80
 GWP 02178

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



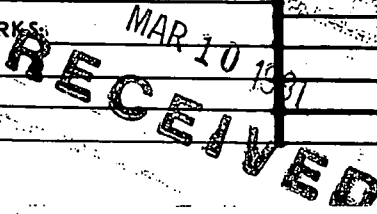
WATER WELL DRILLERS LOG

date well completed 19 80 Robert E. Ratliff Co., Inc. firm name county well located

LANDOWNER: <u>Days Water Association, Inc.</u>	description of formations encountered	from	to
<u>4642 Days Road</u> <u>Lake Cormorant, Ms. 38641</u> (mailing address)			
WELL LOCATION: sec. <u>19</u> T. <u>2</u> S. R. <u>8</u> W. <u>14 mi</u> miles <u>NW</u> of <u>Hernando</u> (distance) (direction) (nearest town)	<u>Top sand clay</u>	<u>0</u>	<u>20</u>
WELL PURPOSE: (home, irrigation, municipal, <u>industrial</u>)	<u>Blue shale</u>	<u>20</u>	<u>60</u>
WELL COMPLETION DATA: (1) diameter (inches) <u>10 x 6</u>	<u>Peas gravel</u>	<u>60</u>	<u>90</u>
(2) total depth (feet) <u>503</u>	<u>Shale</u>	<u>90</u>	<u>180</u>
(3) static water level (feet) <u>113'</u> below above top of ground.	<u>Sturdy shale</u>	<u>180</u>	<u>238</u>
(4) casing <u>steel</u> (material) <u>450</u> (depth)	<u>Shale</u>	<u>238</u>	<u>380</u>
<u>10"</u> (size) If telescope see back.	<u>Sand</u>	<u>380</u>	<u>420</u>
(5) screen <u>44'</u> (length) <u>416</u> (depth to top)	<u>Clay</u>	<u>420</u>	<u>440</u>
<u>6"</u> (size) <u>stainless steel</u> (material)	<u>Sand</u>	<u>440</u>	<u>510</u>
(6) pump <u>20</u> (HP) <u>350</u> (yield gpm)			
<u>electric</u> (type power)			
(7) electric log <u>Yes</u> (yes or no)			
<u>state</u> (organization running log)			
(8) how well bottom plugged			
DRILLERS REMARKS:			

CODED

5 3 x/a
1 1/2



SPARTA DATA SHEET-VERIFICATION CHECKLIST

COUNTY DE SOTO

QUADRANGLE HORN LAKE

WELL OWNER DAYS WA (N. MISS. UTL)

CHECKED
EMR

U.S.G.S. NO. F95

11-7-95

B.O.H. NO _____

OLWR NO. _____

LOCATION:

MAP ^{NE} N 1/2 NE SE NE 19 25 8W

GPS _____

ELEV. (MSL) 315

W.L. (L.S.) (1) 111.9

(2) 111.9

HEAD (MSL) 203.1

SCREENED INTERVAL 459 - 503

AQUIFER VERIFIED SPARTA

PREVIOUS W.L. 113 9-24-80

DATA ENTERED _____

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

RECEIVED

DEC 1 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>4-8-86</u>	Expires: <u>4-8-2006</u>	Fee Paid: <input checked="" type="checkbox"/>	Permit No. <u>GW-2178</u>
Lat. <u>34 53 52</u>	Long. <u>90 05 00</u>	Elev. <u>300' h</u>	USGS No.
Quad. <u>Horn 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. MS-GW-02178

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: DAYS WATER ASSOCIATION
(Name) _____ (SSN or Tax ID No.) _____
PO BOX 171
(Address) _____
LAKE CORMORANT MS 38641
(City) _____ (State & Zip) _____
(601) 781-2002
(Telephone No.) _____

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

NO MAP

(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):

NE SW 1/4 of the NE 1/4 of Section 19, 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)? YES NO If yes, describe the nature and amount of any additional supply and, if applicable, list permit number. MS-GW-02177

SECTION B (to be completed for GROUNDWATER SOURCE)

1. AQUIFER: SPARTA MISSISSIPPI DEPARTMENT OF HEALTH NO.: 170005

2. Proposed work will begin on _____, 19____, and will be completed by _____, 19____.
If well has already been drilled, when was well completed (date)? _____, 19 80. Under whose name was well originally drilled (if known)? DAYS WATER ASSOCIATION

3. Description of proposed or completed well:
(a) DEPTH OF WELL: 503 Feet. DRILLER: RATLIFF COMPANY, GRENADA, MS
(b) SURFACE CASING: Length 450 feet; Diameter 8 inches; Type STEEL
(c) SCREEN: Length 44 feet; Diameter 6 inches; Type STAINLESS STEEL
(d) PUMP: Type TURBINE; Size 6; Capacity 250 gallons per minute; Setting depth _____ feet
(e) POWER UNIT: Type _____; Size 30 horsepower

4. PERMITTED VOLUME :
(a) _____ acre-feet per year at a maximum rate of _____ gallons per minute
(b) 0.360 0.12 million gallons per day at a maximum rate of 250 gallons per minute
0.15 250

(CONTINUED ON BACK)

DLK
12-96

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. Description 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 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. _____

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 575
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?

	<u>.139</u>	<u>2000</u>	<u>.155</u>	<u>2005</u>	<u>.171</u>	<u>2010</u>	<u>.187</u>	<u>2015</u>
(Volume)	(Year)	(Volume)	(Year)	(Volume)	(Year)	(Volume)	(Year)	(Volume)

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:** TOTAL CONNECTIONS AND ESTIMATED CONSUMPTION IS FOR BOTH WELLS ON THIS SYSTEM.

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

BILL ROBERSON
(Name)
PO 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 Roberson
(Signature)

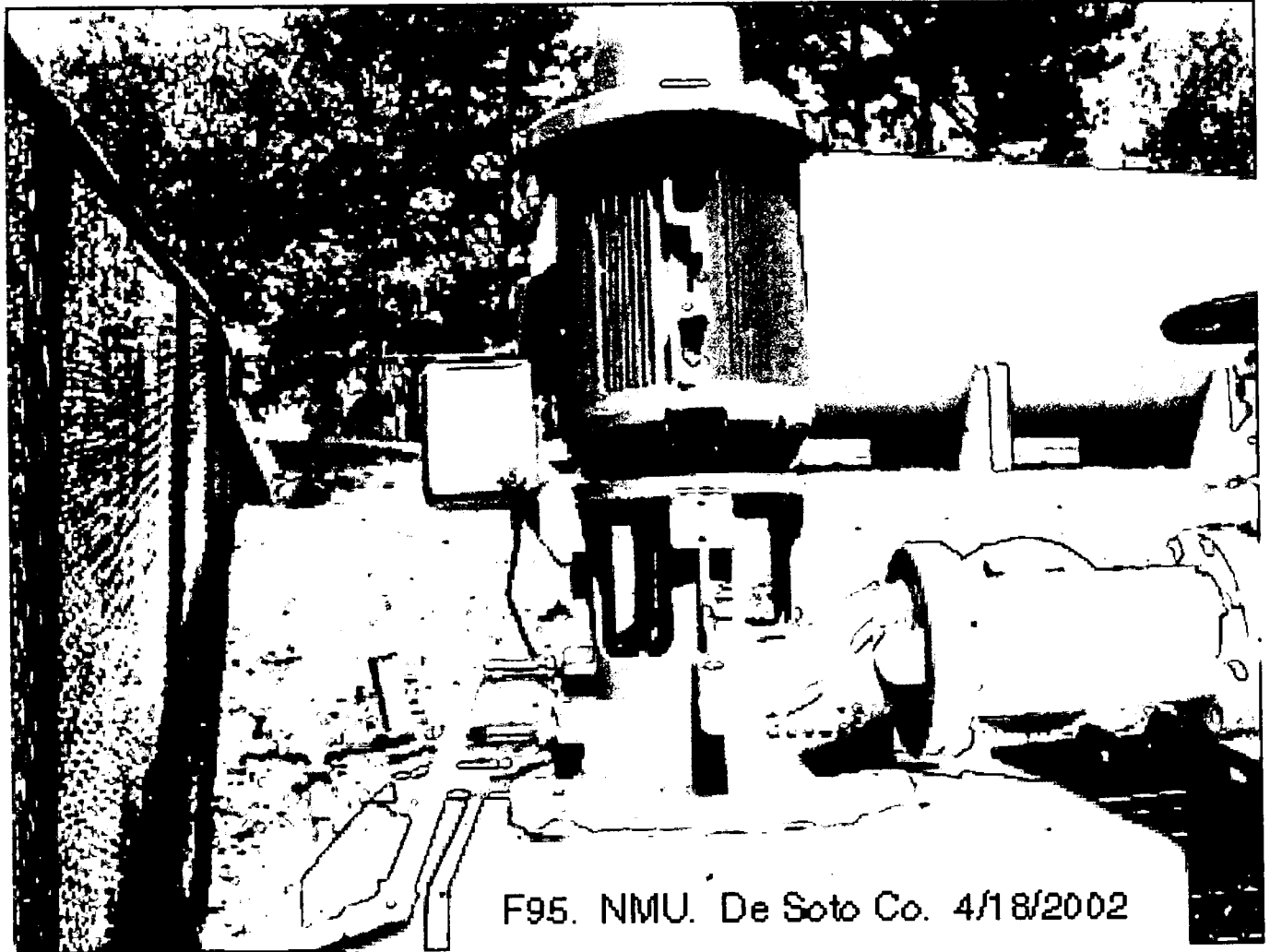
Subscribed and sworn to before me this 13th day of Dec., 1995, at Hernando County of DeSoto
My commission expires March 23, 1998; Rhonda Roberson Miller Notary Public.

DEPARTMENT OF ENVIRONMENTAL QUALITY - OLWR
PUBLIC SUPPLY WELLS PROJECT

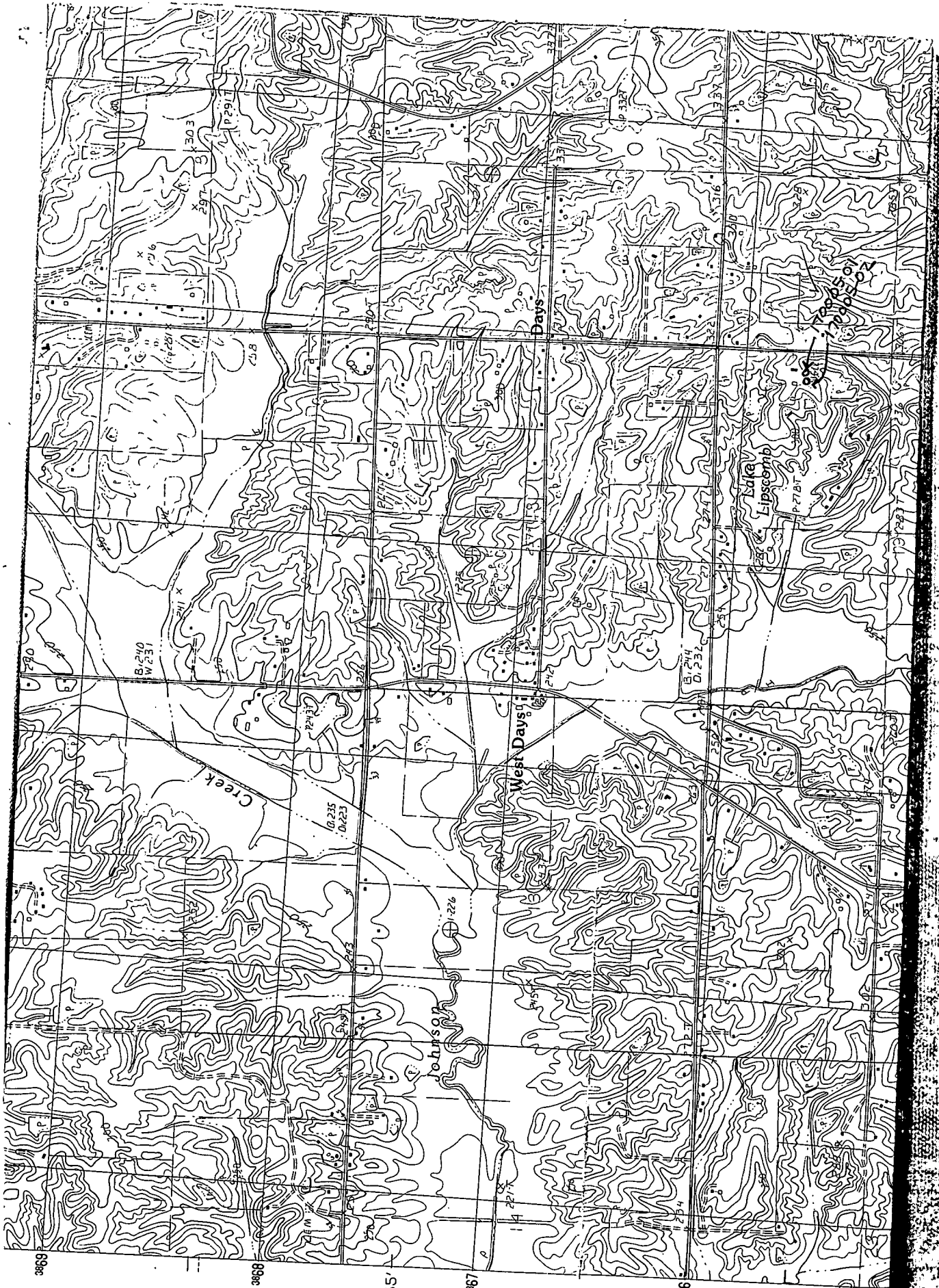
GPS LOG

USER NAME(S): SHB+PEG LAE/DEB DATE: 8-21-9
UNIT DEQ #: 84090 84759 FILE #: BO 726/8A
HEALTH DEPT. #: 170005-02 ELEV. 280 ^{ACE 117A}
USGS #: 151 F-95 OLWR #: MS-GW-350 02178
OWNER: DAY WATER ASSOC.
LOCATION: NE/SE/NE S 19 T 25 R 8W COUNTY: DE Soto
HOW TO: Quadr
LOCATION DESCRIPTION: SOUTH SIDE WATER PLANT BEHIND TANK.
CASING DIA: 6" PUMP TYPE & SIZE: TURBINE 3 HP
GPS FIELD LOCATION: LAT. 34° 54' 02" N LONG. 90° 04' 16" W
GPS CORRECTED LOCATION: LAT. 34.90061739 LONG. 90° 04' 744
REMARKS: STAR LANDING Rd WEST of Hwy 51
Rd TURN LEFT .25 MI. TO BRUCE Rd
RIGHT TO WATER PLANT. 300 FT.

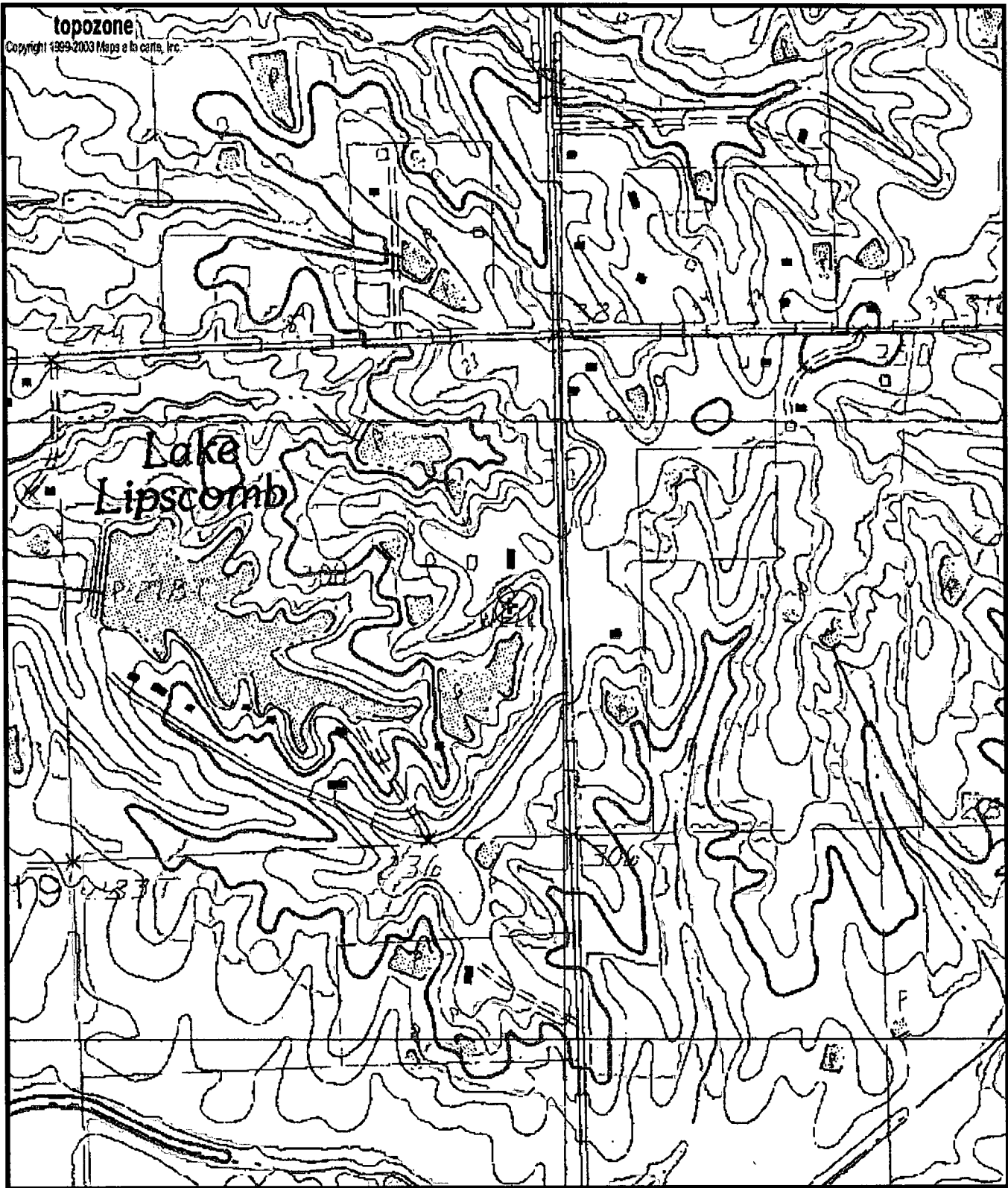
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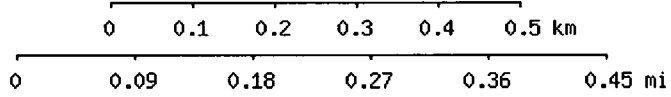
F95. NMU. De Soto Co. 4/18/2002



1 600 000 FEET
(MISS.)



017005-02
 6W02178
 F95



Map center is 34° 54' 02"N, 90° 04' 45"W (WGS84/NAD83)
Horn Lake quadrangle
 Projection is UTM Zone 15 NAD83 Datum

M=0.049
 G=1.673