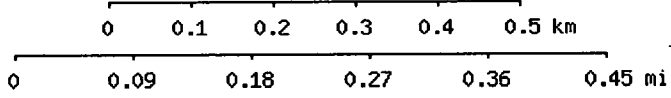


0170022-01  
Gw14702  
B62



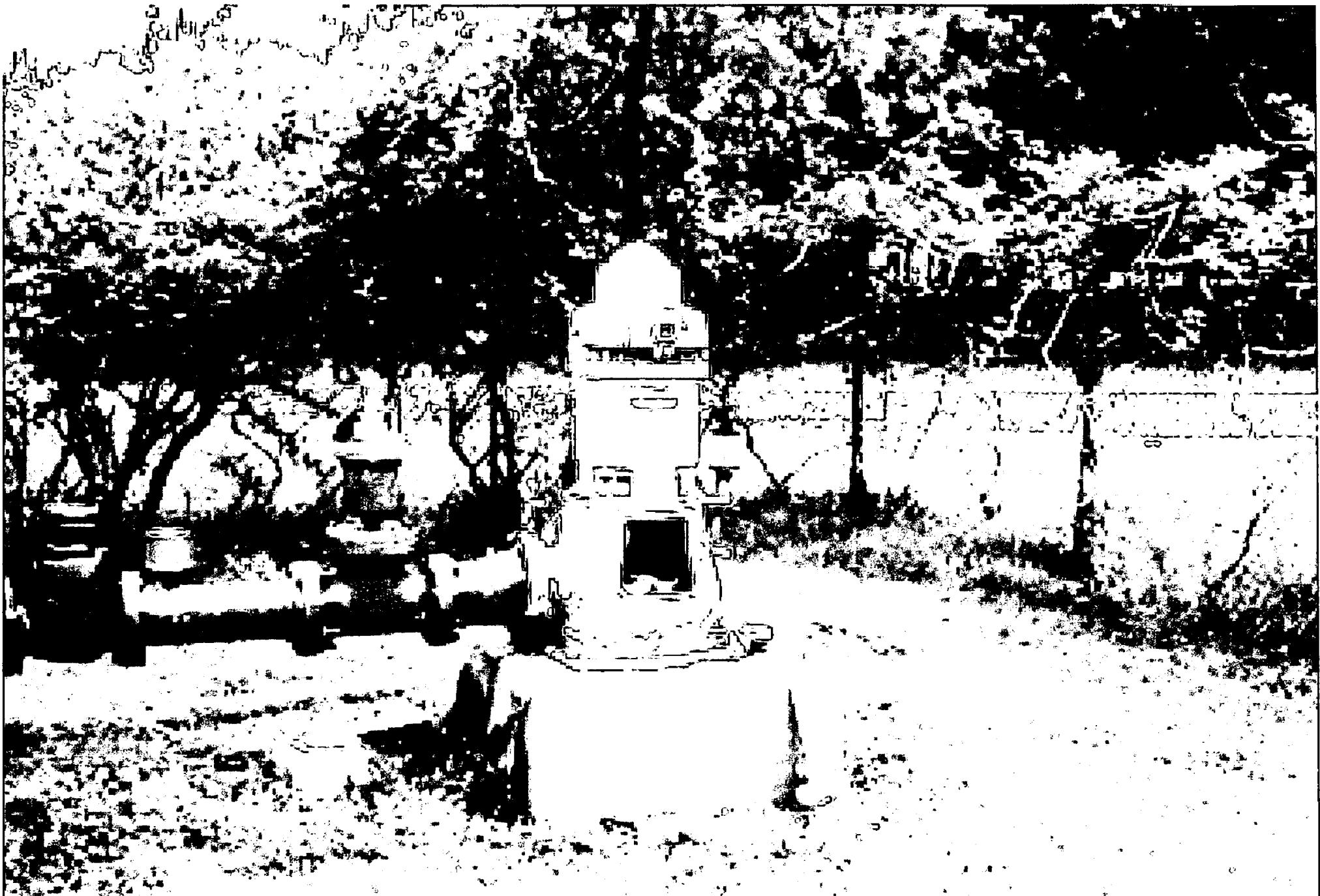
Map center is 34° 57' 12"N, 90° 02' 06"W (WGS84/NAD83)  
**Horn Lake** quadrangle  
 Projection is UTM Zone 15 NAD83 Datum

M=0.009  
G=1.7









B62. Horn Lake (Eco Systems). De Soto Co. 4/19/2002

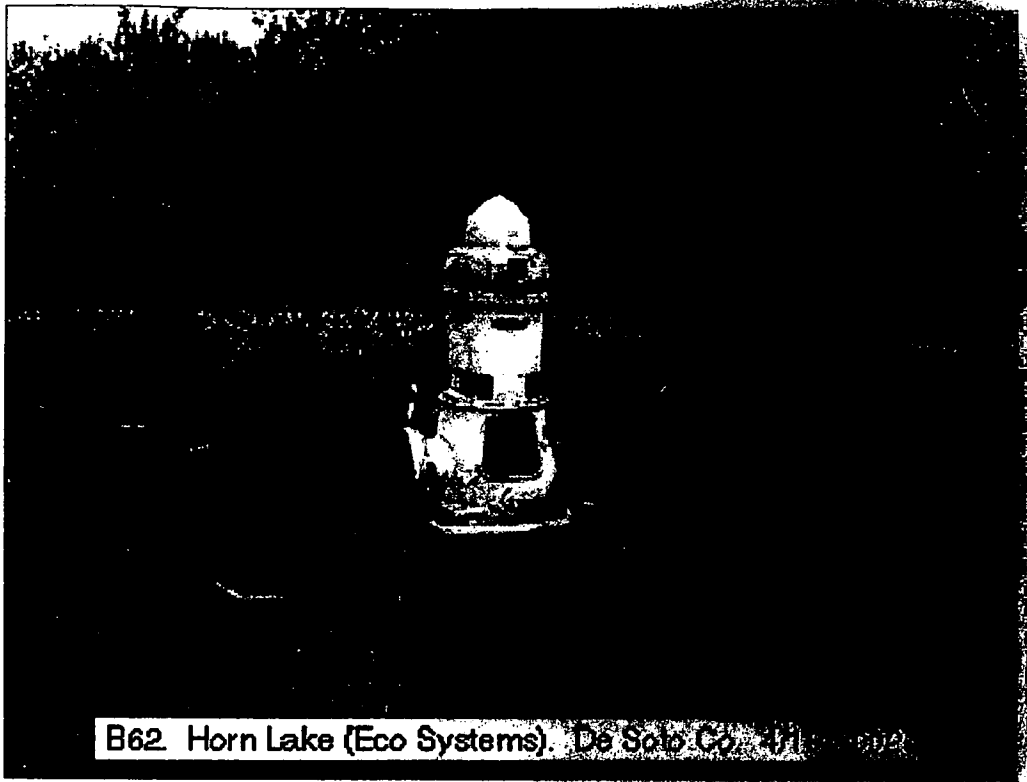


# Water Well Field Data Form

USGS / FP B0062-033 County DE SOTO Health # 170022-01 Aquifer SPRT

Owner HORN LAKE, CITY OF Local Name \_\_\_\_\_

Quad Map HORN LAKE Location NE SE NE SW S34 T1S R3W Elevation 302



Measuring Point \_\_\_\_\_ Date 4/1/03 Party PLP

USGS #/FP	Party	LM/CE	Date	Level
B0062033	LM/CE		4/19/02	-102.59
MP = 1.6 (3" CAP, NORTH SIDE)				
B0062033	WW		6/27/95	-97.20
B0062033	JG		6/23/94	-98.00
B0062033			11/2/79	-96.00

Remarks  
~~34.90052~~  
~~90.07433~~  
 34.953159  
 90.034869

Tape Down #	1	2	3	4
BT how long?				
Soil	115	115	115	
Wat	9.4	20.1	9.8	
Difference	105.1		105.2	
MP Correction	1.7		1.7	
Water Level	103.4		103.5	

STEVEN BOXX 662-393-4285, 393-0249

Additional remarks and/or sketches on back (circle if any)

11

11 2 1

11 2 1 11 2 1



DEPARTMENT OF ENVIRONMENTAL QUALITY - OLWR

PUBLIC SUPPLY WELLS PROJECT

GPS LOG

USER NAME(S): SHB + PEG LAA / DRS DATE: 7-24-96  
UNIT DEQ #: 84090 FILE #: 5072819A  
HEALTH DEPT. #: 170022-01 ELEV. 300 R072416A  
USGS #: 499 B-62 OLWR #: MS-GW-15280 1A702

OWNER: City of HOKW LAKE

LOCATION: SE/NE/SW S 34 T 15 R 8W COUNTY: DeSoto

LOCATION DESCRIPTION: Well in NW corner next to  
purple + white elevated tank

CASING DIA: 10" PUMP TYPE & SIZE: Turbine / 30

GPS FIELD LOCATION: LAT. 34-57-188N LONG. 90-02-122W  
34° 57' 10.1" 90° 02' 05.7"

GPS CORRECTED LOCATION: LAT. 34.95315878 LONG. 90.03486934

REMARKS: Approx. 1 mile west of Hwy 51 on road  
Take left on Hunt St. go approx. 1 mile  
to Treatment plant and elevated tank on  
Meadowbrook - Hunt. To next well #2  
get on meadowbrook go approx. .5 mile.  
Cross bridge well right after bridge on left.

34° 57' 11.4" 90° 02' 5.5"

**SECTION B** (to be completed if application is for groundwater source)

1. Source of water is 124 SPRT aquifer.
2. Description of proposed water well:
- (a) DEPTH OF WELL: 367 feet. DRILLER (name): LAYNE CENTRAL
- (b) SURFACE CASING: Length: \_\_\_\_\_ feet. Diameter: 12" inches. Type: STEEL
- (c) SCREEN: Length: 50' feet. Diameter: 8" inches. Type: \_\_\_\_\_
- (d) PUMP: Type: VERTICAL CENTRIFUGAL. Size: 8" x 1 1/2 x 1. Capacity: 560 gallons per minute.  
 Number of stages: 4 Setting depth: 160 feet.
- (e) POWER UNIT: Type: RU. Size: 30 horsepower.
- (f) TYPE OF COMPLETION: \_\_\_\_\_

**WATER USE DATA:**

If for IRRIGATION, FISH CULTURE or any other areal use, show the number of acres to which water will be applied in the appropriate 40-acre block(s). Acreage must be shown on accompanying location map.

TOWN-SHIP	RANGE	SECTION	NE1/4				NW1/4				SW1/4				SE1/4				TOTALS
			NE1/4	NW1/4	SW1/4	SE1/4	NE1/4	NW1/4	SW1/4	SE1/4	NE1/4	NW1/4	SW1/4	SE1/4	NE1/4	NW1/4	SW1/4	SE1/4	

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

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

3. MUNICIPAL or WATER ASSOCIATION  
 Choose "a" or "b". (a) The number of people served is \_\_\_\_\_. (b) The number of connections/customers is 3000.  
 What is the estimated average daily consumption during periods of maximum use at the end of each five-year period during the next twenty years?  
 \_\_\_\_\_ (Volume) \_\_\_\_\_ (Year); \_\_\_\_\_ (Volume) \_\_\_\_\_ (Year); \_\_\_\_\_ (Volume) \_\_\_\_\_ (Year); \_\_\_\_\_ (Volume) \_\_\_\_\_ (Year)

4. INDUSTRIAL: If water is to be released into a watercourse, indicate the amount released each year \_\_\_\_\_  
 Rate of release \_\_\_\_\_; Location of release point in reference to diversion/withdrawal point \_\_\_\_\_  
 \_\_\_\_\_; Explain any change in quality of water to be released: \_\_\_\_\_  
 NPDES Permit No. \_\_\_\_\_  
 Explain how water will be used: \_\_\_\_\_  
 How much groundwater will be used for once-through non-contact cooling? \_\_\_\_\_

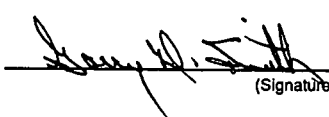
5. RECREATION: Explain how water will be used: \_\_\_\_\_

6. OTHER use: Explain in detail: \_\_\_\_\_

REMARKS: \_\_\_\_\_

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

GARRY D. SMITH  
 (Name) \_\_\_\_\_  
2285 GOODMAN RD  
 (Address) \_\_\_\_\_  
HORN LAKE, MS 38637  
 (City, State, Zip) 393-4285 *eco services*  
601 393 6178  
 (Telephone) \_\_\_\_\_

The accompanying map is hereby declared a part of this application. The TEN DOLLAR (\$10.00) permit fee is enclosed herewith.  
  
 \_\_\_\_\_ (Signature)

Subscribed and sworn to before me this 6 day of August 19 93, at \_\_\_\_\_  
 County of DeSoto. My commission expires \_\_\_\_\_ My Commission Expires August 25, 1996  
Rebecca Scott \_\_\_\_\_, Notary Public

The box below is for office use only.

*SPRT*

*B602*

Issued: <u>10-26-93</u>	Expires: <u>10-26-2003</u>	Fee Paid <input checked="" type="checkbox"/>	Permit No. <u>GW-14702</u>
Lat. <u>34-57-10</u>	Long. <u>90-02-05</u>	Elev. <u>303</u>	USGS No.
Quad. <u>HORN LAKE</u>	Dist.		Basin No. <u>08010211</u>
STAC			Dam Inv. No.
			Dam appl. No.

Dept. of Natural Resources, Bureau of Land and Water Resources, P.O. Box 10631, Jackson, MS 39289-0631

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

**RECEIVED**  
*NO FEE*  
**AUG 09 1993**  
*fee paid*

This application is for (circle one): GROUNDWATER SURFACE WATER

Beneficial Use (circle one or more): Irrigation Fish Culture Municipal Rural Water Association Environmental Quality  
Recreation Institutional (Examples: Church, School) Commercial (Examples: Hotel, Restaurant) Office & Water Resources  
Fire Protection Flood Protection Other: \_\_\_\_\_

**LANDOWNER:**

(Name) CITY OF HORN LAKE NGW 17020009  
(S/S or Tax ID No.)  
(Address) 2285 GOODMAN ROAD  
(City) HORN LAKE MS 38637 (601) 393-6178  
(State and Zip) (Telephone Number)

**APPLICANT, AGENT, OR LESSEE (If different from Landowner):**

(Name) \_\_\_\_\_ (S/S or Tax ID No.)  
(Address) \_\_\_\_\_  
(City) \_\_\_\_\_ (State and Zip) \_\_\_\_\_ (Telephone Number) \_\_\_\_\_

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

NE  
SE 1/4 of the SW 1/4 of Section 34, Township 1S, Range 8 W, County DESOTO

**Volume of water diverted/withdrawn (Choose "a", "b", "c", or "d" ["d" is for units other than those shown in "a", "b", or "c"]):**

(a) \_\_\_\_\_ acre-feet per year at a maximum rate of \_\_\_\_\_ gallons per minute  
(b) .31 806,400 ~~gallons~~ gallons per day at a maximum rate of 560 gallons per minute  
(c) \_\_\_\_\_ acre feet of storage at normal pool  
(d) \_\_\_\_\_ per \_\_\_\_\_ at a maximum rate of \_\_\_\_\_

Construction of proposed work will begin on (date) NOV 2, 1979 and will be completed by (date) \_\_\_\_\_, 1980.

PERMIT NO. NGW 17020062 WELL NO. 62  
Water will be used from (month) \_\_\_\_\_ to (month) \_\_\_\_\_ each year.

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 numbers.

**SECTION A (to be completed if application is for surface water source)**

- Source of water is from \_\_\_\_\_ which drains into \_\_\_\_\_ which drains into \_\_\_\_\_ which drains into \_\_\_\_\_
- Description of pump/diversion works:
  - Pump (size and type): \_\_\_\_\_ Power Unit (size and type): \_\_\_\_\_  
Lift: \_\_\_\_\_ feet Maximum capacity: \_\_\_\_\_ gallons per minute.
  - Name of storage reservoir: \_\_\_\_\_ Dam height: \_\_\_\_\_ feet.  
Surface area at normal pool: \_\_\_\_\_ acres. Storage capacity at normal pool: \_\_\_\_\_ acre-feet.

(Continued on back)



# Water Well Field Data Form

USGS Well No. B-~~933~~<sup>vw</sup>62 County LaSalle

T \_\_\_\_\_ R \_\_\_\_\_ S \_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4 \_\_\_\_\_ 1/4 \_\_\_\_\_

Local Well Name \_\_\_\_\_

Owner Delta Utility

Date 6/23 1994 Party JG

OLWR Permit No. MS-GW- \_\_\_\_\_ Quad Map North Lake

Health Department (PWS) Tag No. 170022-01

GPS File No. D062312A Elevation 302 ft.

Measuring Point Vent Pipe on W side of pump

Previous Water Level 95.07 ft. Date 10/31/89

Tape down no.	1	2	3	4
Time	7:00			
Held	115.00	107.00		
Wet	15.1	7.15		
Difference	99.9	99.85		
MP Correction	1.9	1.9		
Water Level	98.00	97.95		
WL corr. to MSL				

Note: Provide sketch of location and/or measuring point on back if necessary.

Remarks: \_\_\_\_\_

*Lat - 39 57 11.9  
Long 90 02 03.5*



Desoto  
B62  
11/2/79

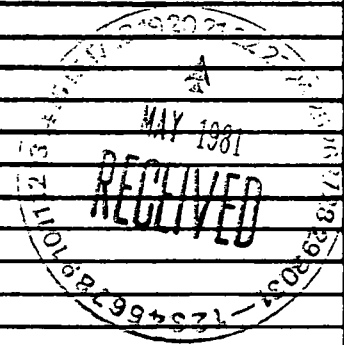
MISSISSIPPI  
BOARD OF WATER COMMISSIONERS  
416 North State Street  
Jackson, Mississippi 39201

COPIED

WATER WELL DRILLERS LOG

11/2 1979 Layne-Central Company DeSoto  
date well completed firm name county well located

LANDOWNER:	description of formations encountered	from	to
Delta Utility Co. City of Horn Lake	Clay	0	2
P. O. Box 152, Horn Lake, MS (mailing address)	Sand & small gravel	28	3
	Sandy Clay	36	6
WELL LOCATION: sec 34 T 1 N R 8 E under water tank north of plant	Clay	65	8
	Sandy Clay	83	9
(distance) miles (direction) of (nearest town)	Clay	90	10
	Sandy Clay	104	11
WELL PURPOSE: municipal (home, irrigation, municipal, industrial)	Clay	112	23
	Fine Sand & Clay stks.	238	29
WELL COMPLETION DATA: (1) diameter (inches) 12" (2) total depth (feet) 367' (3) static water level (feet) 96' below top of ground (4) casing steel 312' (material), (depth) 8" (size) If telescope see back. (5) screen 50' 362' 312' (length), (depth to top) 8" stainless steel (size), (material) (6) pump 30 560 @ 10 psi (HP) (yield gpm) elec. (type power) (7) electric log No. (yes or no) (organization running log) (8) how well bottom plugged 5' x 8" back pressure valve	Coarse sand, few clay stk	294	36
	Sandy Clay	362	38
	Sand & Clay	384	39
	Hard Clay	395	40
DRILLERS REMARKS:			



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

Date 38= 11/10/21/1979\* H.P. 46= 30.\*

LIFT

R=198\* T= A \* Log 199# D\* Top 200= 0.\* Bot 201= 4.0.5.\*

R=198\* T= A \* Log 199# \* Top 200= \* Bot 201= \*

R=189\* T= A \* E Log No. 190# \* 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= 2.9.4.\* Bot 92= 3.6.2.\*

Unit ID 93= 1.24.S.P.R.T. \* Name of Unit SPARTAN

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

Unit ID 93= \* Name of Unit

AQUIFERS

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)/ft<sup>2</sup>

110= \* Storage coeff. Boundaries

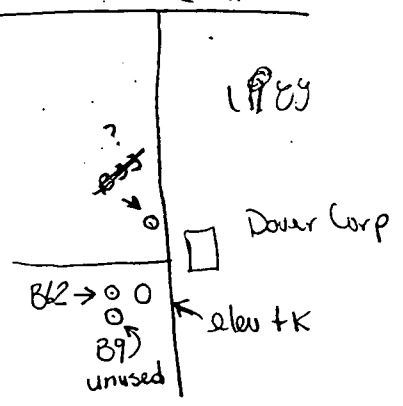
HYDRAULICS

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

Water Level Data Collection (1)

N under water tank north of plant

Goodman Rd



description of formations encountered	from	to
Clay	0	28
Sand & small gravel	28	36
Sandy Clay	36	65
Clay	65	83
Sandy Clay	83	90
Clay	90	104
Sandy Clay	104	112
Clay	112	238
Fine Sand & Clay stks.	238	294
Coarse sand, few clay stk	294	362
Sandy Clay	362	384
Sand & Clay	384	395
Hard Clay	395	405



TRANSMITTED: EGR/ADP

1/81 WTO

Recorded by Mount

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

Well No. B62

Date 6/2/81

E-Log No. \_\_\_\_\_

County De Soto

Horn Lake Quad

Site ID 345652090020901 R=0\* T=A\* 2=W\*

Data reliab. 3=U\* Report. agency 4=USGS\* Dist. 6=28\* 7=28\* Co. 8=033\*

Lat. \_\_\_\_\_ Long. 9=345652\* 10=0900209\* Well No. 12=B062\*

Location 13=SE SW S 34 T 01 S R 08 W\* Alt. 16=295.303\*

Hyd. Unit (OWDC) 20= Date 21=11/10/21/1979\*

Well use 23=W\* Water use 24=D\* Hole depth 27=405.\* Well depth 28=362.\*

WL 30=96.\* Date 31=11/10/21/1979\* Source 33=D.\*

Status 273= Project No. 5=

MU SPRT

R=158\* T=A\* Date 159# 11/10/21/1979\* Owner No. \_\_\_\_\_

Owner 161# D.E.L.T.A. UTILITY

HORN LAKE UTIL

City of Horn Lake

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=11/10/21/1979\* Remarks \_\_\_\_\_

Drlg. 63=0.64\* Name Layer Control Method 65=H\* Finish 66=G\*

R=76\* T=A\* 59# 1\* Steel  
Top csng. 77# 0.\* Bot. csng. 78=312.\* Diam. 79# 12.\*

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

R=82\* T=A\* 59# 1\* Top 83# 312.\* Bottom 84=362.\*

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=560.\* Q/S 272=

134 flows 146 pumped

GEN. SITE DATA

OWNER

FIELD QW

CONSTR.

CASING

OPENINGS

YIELD