

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

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD Physiographic Province: 03 **Section:** _____

Drainage Basin: D 161R **Subbasin:** _____

Topo of well site: (D) depression, stream channel, dunes, flat, hilltop, sink, swamp, (E) (F) (H) (K) (L) (P) (S) (T) (U) (V) offshore, pediment, hillside, terrace, undulating, valley flat: _____

MAJOR AQUIFER: _____ TIE _____ SS _____
system series aquifer, formation, group

Lithology: _____ US 2 Origin: _____ Aquifer Thickness: _____ ft

Length of well open to: _____ ft 71 Depth to top of: _____ ft 305

MINOR AQUIFER: _____ _____ _____
system series aquifer, formation, group

Lithology: _____ _____ Origin: _____ Aquifer Thickness: _____ ft

Length of well open to: _____ ft _____ Depth to top of: _____ ft _____

Intervals Screened: 8" SS

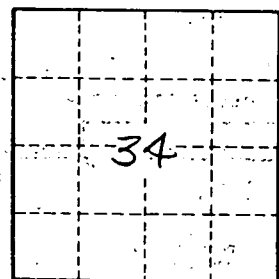
Depth to consolidated rock: _____ ft _____ Source of data: _____

Depth to basement: _____ ft _____ Source of data: _____

Surficial material: _____ Infiltration characteristics: _____

Coefficient Trans: _____ gpd/ft _____ Coefficient Storage: _____

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



Well No.

B33

WELL SCHEDULE

U. S. DEPT. OF THE INTERIOR

GEOLOGICAL SURVEY

WATER RESOURCES DIVISION

PUNCHED

MASTER CARD

Record by JCM Source of data BOWC Date 5-72 Map HORN LAKE 24B

State 28 County (or town) DeSoto 17

Latitude: 34^{deg} 52^{min} 23^{sec} N Longitude: 09^{deg} 00^{min} 24^{sec} W Sequential number: 1

Lat-long accuracy: 5^{sec} 1^{min} 8^{sec} 34 SW NW SESENW B & M

Local well number: B033 3401508W Other number: _____

Local use: 064 Owner or name: HORN LAKE UTIL

Owner or name: DELTA UTILITY Address: Horn Lake

10/31/89
97.04

Ownership: County (C), Fed Gov't (F), City, Corp or Co, Private (M), State Agency, Water Dist (N) N

Use of water: (A) Air cond; (B) Bottling; (C) Comm; (D) Dewater; (E) Power; (F) Fire; (G) Dom; (H) Irr; (I) Med; (J) P S; (K) Rec; (L) Stock; (M) Instit; (N) Unused; (O) Reprussure; (P) Recharge; (Q) Desal-P S; (R) Desal-other; (S) Other Z

Use of well: (A) Anode; (B) Drain; (C) Seismic; (D) Heat Res; (E) Obs; (F) Oil-gas; (G) Recharge; (H) Test; (I) Unused; (J) Withdraw; (K) Waste; (L) Destroyed W

DATA AVAILABLE: Well data Freq. W/L meas.: Field aquifer char.

Hyd. lab. data: _____

Qual. water data; type: _____

Freq. sampling: _____ Pumpage inventory: yes no; period: _____

Aperture cards: _____ yes no

Log data: _____ D

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 368 ft Meas. 3

Depth cased: 297 ft Casing type: steel; Diam. 12 in

Finish: porous concrete, gravel w. (perf.), (screen), gravel w. (screen), gallery, open end, perf., (S), (T), (W), (X), (Z) 5

Method: (A) air bored, (B) cable, (C) dug, (D) hyd jetted, (E) air rot., (F) reverse, (G) trenching, (H) driven, (I) drive wash, (J) other 17

Date Drilled: 9.7.2 Pump intake setting: _____ ft

Driller: Singer Layne name address

Lift (type): (A) air, (B) bucket, (C) cent, (D) jet, (E) multiple, (F) multiple, (G) none, (H) piston, (I) rot, (J) submerg, (K) turb, (L) other T Deep Shallow

Power (type): (A) diesel, (B) gas, (C) gasoline, (D) hand, (E) gas, (F) wind, (G) H.P. 30 Trans. or meter no. _____

Descrip. MP 301 ft above below LSD, Alt. MP _____

Alt. LSD: 260 Accuracy: (source) 4

Water Level: ft above below MP; Ft below LSD 60 Accuracy: D

Date meas: 9.7.2 Yield: 500 gpm Method determined _____

Drawdown: ft Accuracy: _____ Pumping period: _____ hrs

QUALITY OF WATER DATA: Iron _____ ppm Sulfate _____ ppm Chloride _____ ppm Hard. _____ ppm

Sp. Conduct _____ K x 10⁶ Temp. _____ °F Date sampled _____

Taste, color, etc. _____

Well No.

W
W
W

DEPARTMENT OF ENVIRONMENTAL QUALITY - OLWR

PUBLIC SUPPLY WELLS PROJECT

10/22/98

GPS LOG

SHOT PEG

~~8-21-94~~
~~7-24-95~~

USER NAME(S): LIAK / DND

DATE: 7/28/94

UNIT DEQ #: 84070

FILE #: B0728 14B

HEALTH DEPT. #: 170022-02

ELEV. * 270
~~* 4082.13 A~~

USGS #: 500 B-33

OLWR #: FILE # A102218A MS 6w-1470

OWNER: City of HORN LAKE
S 1/4 SW 1/4 NW

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

LOCATION DESCRIPTION: Well behind arator + pump house.
Horn Lk. Quad

CASING DIA: 12" PUMP TYPE & SIZE: Turline 1 30

GPS FIELD LOCATION: LAT. 34 57 375N LONG. 90-02 507W
34° 57' 420"

GPS CORRECTED LOCATION: LAT 34° 57.428' LONG. 90° 02.522'
90° 02.516'

REMARKS: Meadowbrook - Mayfair also next to budge. To reach well turn left on Mayfair, follow it E to cornwall turn left, follow it to T² pembroke

~~* File # B072416B no point received (no good) Re started~~
~~* File # D072416C no points received (no good)~~
Re-Run 8-21-94 OK

~~Lat. 34.956799N Long. 90.042053W~~

SPARTA

DATA SHEET-VERIFICATION CHECKLIST

COUNTY DE SOTO

QUADRANGLE HORN LAKE

WELL OWNER HORN LAKE UTILITY

CHECKED

U.S.G.S. NO. B33

EIP
116-95

B.O.H. NO _____

OLWR NO. _____

LOCATION:

MAP NE SE NESW 34 15 8W

✓

GPS _____

ELEV. (MSL) 302

W.L. (L.S.) (1) 97.2

✓

(2) 97.2

✓

HEAD (MSL) 204.8

✓

SCREENED INTERVAL 297 - 368

✓

AQUIFER VERIFIED SPARTA

✓

PREVIOUS W.L. 97.04 10-31-89

✓

DATA ENTERED _____

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: 368 feet. DRILLER (name): LAYNE CENTRAL
- (b) SURFACE CASING: Length: _____ feet. Diameter: 12 inches. Type: STEEL
- (c) SCREEN: Length: 71 feet. Diameter: 8 inches. Type: STAINLESS STEEL
- (d) PUMP: Type: VERTICAL CENTRIFUGAL. Size: 8" x 1 1/2 x 1. Capacity: 590 gallons per minute.
 Number of stages: 4 Setting depth: 134 feet.
- (e) POWER UNIT: Type: TF 818. 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	SEC-TION	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 _____.
 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)
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.

Garry D. Smith
 (Signature)

Subscribed and sworn to before me this 6 day of August, 1993, at _____
 County of Desoto. My commission expires 6/30/95 My Commission Expires August 25, 1995
Rolucca Scott Notary Public

The box below is for office use only.

SPRT

B33

Issued: <u>10-26-93</u>	Expires: <u>10-26-2003</u>	Fee Paid <input checked="" type="checkbox"/>	Permit No. <u>GW-14703</u>
Lat. <u>34-57-26</u>	Long. <u>90-02-30</u>	Elev. <u>268</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 39208-0631

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

RECEIVED

AUG 09 1993
to file

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

Beneficial Use (circle one or more): Irrigation Fish Culture Municipal Rural Water Association Industrial
 Recreation Institutional (Examples: Church, School) Commercial (Examples: Hotel, Restaurant) Livestock Standby
 Fire Protection Flood Protection Other: _____

Dept. of Environmental Quality
Office of Land & Water Resource

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):

SW 1/4 of the NW 1/4 of Section 34, Township 1S, Range 8W, 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) 849,600 .34 ~~gallons~~ gallons per day at a maximum rate of 590 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) SEPT 22, 1971 and will be completed by (date) _____, 19 71.

PERMIT NO. NGW17020033 **WELL NO. 33**
 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)

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

(Continued on back)

DeSoto
B33
9-22-71

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

WATER WELL DRILLERS LOG
Singer Layne Central Division DeSoto

thi May 5-72
CODED

9/22/71 19 _____ firm name _____ county well located _____

LANDOWNER:	description of formations encountered	from	to
Delta Utility Company	Fill	0	3'
Horn Lake, Mississippi	Clay	3	22'
(mailing address)	Soft Clay	22	67'
WELL LOCATION:	Hard Clay	67	112
sec. 34 T 1 S R 8 W	Hard Clay	112	200
(distance) miles (direction) of (nearest town)	Rock	200	202
WELL PURPOSE: industrial	Tough Clay	202	232
(home, irrigation, municipal, industrial)	Rock	232	234
WELL COMPLETION DATA:	Clay	234	305
(1) diameter (inches) 12"	Sand	305	317
(2) total depth (feet) 368'-5"	Soft Strks	317	320
(3) static water level (feet) 60 below top of ground	Sand	320	325
(4) casing steel 307' 297'	Sand	325	340
(size) If telescope see back.	Sand	340	358
(5) screen 71'-5" 297'	Soft Sand	358	362
(length) (depth to top)	Sandy Clay	362	390
8" stainless steel	Sand	390	410
(size) (material)	Sand	410	432
(6) pump 30 500			
(HP) (yield gpm)			
electric			
(type power)			
(7) electric log (yes or no)			
(organization running log)			
(8) how well bottom plugged BP?			
DRILLERS REMARKS:			

368
71
297
CODED

MAY 5 - 1972

MISS. BD. OF
WATER COMM.