DEPARTMENT OF ENVIRONMENTAL QUALITY - OLWR
PUBLIC SUPPLY WELLS PROJECT

GPS LOG

USER NAME(S): Back/Days

UNIT DEQ #: 84090

HEALTH DEPT. #: 170022-03

USGS #: 501 B-63

OWNER: City of Hors Lake

LOCATION: S E SE SW S 33 T 15 R 8 W

LOCATION DESCRIPTION: Well behind caretakers 150' off road

CASING DIA: 16" PUMP TYPE & SIZE: Turbine 1/100

GPS FIELD LOCATION: LAT. 34° 20' 93" LONG. 90° 03' 20" W

GPS CORRECTED LOCATION: LAT. 34° 20' 95" LONG. 90° 03' 15" W

REMARKS: Well located at Cornwall farm and road

Hors Lake "D"

LAT. 34° 20' 93" LONG. 90° 03' 20" W

LAT. 34° 20' 95" LONG. 90° 03' 15" W
MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Land and Water Resources
Southport Mall
P.O. Box 10631
Jackson, Mississippi 39209
WATER WELL DRILLERS LOG

Well #3
July 17, 1987 Layne Central Company DeSoto
Date well completed Firm Name County well located

<table>
<thead>
<tr>
<th>LANDOWNER:</th>
<th>description of formations encountered</th>
<th>from</th>
<th>to</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Horn Lake Clay</td>
<td>0</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Horn Lake, Mississippi Sand</td>
<td>22</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WELL LOCATION:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>sec 30 T 1 N R 8 W</td>
<td></td>
</tr>
<tr>
<td>miles from nearest town:</td>
<td>164</td>
</tr>
<tr>
<td>(distance)</td>
<td>(direction)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WELL PURPOSE:</th>
<th>Municipal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home, Irrigation, Municipal, Industrial</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>WELL COMPLETION DATA:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Diameter (inches)</td>
<td>16&quot;</td>
</tr>
<tr>
<td>(2) Total depth (feet)</td>
<td>415'</td>
</tr>
<tr>
<td>(3) Static water level (feet) below top of ground</td>
<td></td>
</tr>
<tr>
<td>(material)</td>
<td></td>
</tr>
<tr>
<td>(depth)</td>
<td></td>
</tr>
<tr>
<td>(size)</td>
<td>10&quot;</td>
</tr>
<tr>
<td>(length)</td>
<td>363'</td>
</tr>
<tr>
<td>(depth to top)</td>
<td></td>
</tr>
<tr>
<td>(material)</td>
<td>Stainless Steel</td>
</tr>
<tr>
<td>(size)</td>
<td>10&quot;</td>
</tr>
<tr>
<td>(type power)</td>
<td>Electric</td>
</tr>
<tr>
<td>(yield gpm)</td>
<td>1000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(7) Electric log</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layne-Central Co.</td>
<td></td>
</tr>
<tr>
<td>(organization running log)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(8) how well bottom plugged</th>
<th>Cement Plug</th>
</tr>
</thead>
</table>

DRILLERS REMARKS:
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: 415 feet. DRILLER (name): LAYNE CENTRAL
   (b) SURFACE CASING: Length: feet. Diameter: 16 inches. Type: STEEL
   (c) SCREEN: Length: 50 feet. Diameter: 10 inches. Type: STAINLESS STEEL
   (d) PUMP: Type: VERTICAL CENTRIFUGAL. Size: 10" x 24" x 11". Capacity: 1000 gallons per minute.
      Number of stages: 4 Setting depth: 164 feet.
   (e) POWER UNIT: Type: TF 1018 Size: 100 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.

<table>
<thead>
<tr>
<th>TOWN</th>
<th>RANGE</th>
<th>SEC</th>
<th>NE1/4</th>
<th>NW1/4</th>
<th>SW1/4</th>
<th>SE1/4</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
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</table>

1. IRRIGATION: List the number of acres of each crop to be irrigated: Rice_________; Cotton_________; Soybeans_________; Corn_________; Pasture_________; Truck_________; Wheat_________; Cats_________; Grain sorghum_________; Other (specify)_________; Acres_________

2. FISH CULTURE: Explain how water will be used: __________________________________________________________

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)

4. INDUSTRIAL: If water is to be released into a watercourse, indicate the amount released each year. Explain how water will be used: __________________________________________________________
   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._________

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)

Subscribed and sworn to before me this 16 day of August 1993, at
County of __________ My commission expires __________
Notary Public

The accompanying map is hereby declared a part of this application. The TEN DOLLAR ($10.00) permit fee is enclosed herewith.
**APPLICATION FOR PERMIT TO DIVERT OR WITHDRAW FOR BENEFICIAL USE**  
THE PUBLIC WATERS OF THE STATE OF MISSISSIPPI

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

**Beneficial Use** (circle one or more):  
- Irrigation  
- Fish Culture  
- Municipal  
- Rural Water  
- Recreation  
- Commercial (Examples: Hotel, Restaurant)  
- Livestock  
- Standby  
- Fire Protection  
- Flood Protection  
- Other: _____________

**LANDOWNER:**

<table>
<thead>
<tr>
<th>Name</th>
<th>CITY OF HORN LAKE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2285 GOODMAN ROAD</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Name</th>
<th>(S/S or Tax ID No.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(S/S or Tax ID No.)</td>
</tr>
</tbody>
</table>

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

SE 1/4 of the NW 1/4 of Section 35, Township 15, 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) 1,537,920 ___________ million gallons per day at a maximum rate of 1068 ___________ 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) JULY 17, 1987 and will be completed by (date) ___________, 1988.

**WELL NO. 63**

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 ____________________________

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)
TRANSMITTED FOR ADP

U.S. GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
MISSISSIPPI DISTRICT

Well No. 663
County Desoto
Agency

WELL RECORD

Agency Code  U.S.G.S  
Site Id  113415174H10191015170111
Station Name  HICKORY LAKE 1

Project No.  54111111111
Latitude  93415174H10191015170111
Longitude  SE/SE/SE

Lat/Long Ac.  114 S F T/W  
Dist  620
State  728
County  81031
Land Net  S33
Location Map  14E HICKORY LAKE 1  16415174H1741A  174 A L H  184 15T  20A 1810 101111

Agency Use  8034 A V0  
Date Inventoryed  7114051111511191817
Station Type  1111Y
Data Type  8044  

Instru.  50 4  
Remarks  34 C L H /D  
Relia.  2=V  

Date of Construction  214017111191817
Well Use  244P  
Water Use  244P  
Primary Aquifer  714147145P R  274 150A 4

Well Depth  284
Water Level  41/17111191817
Water Level Date  31415174H11111191817
Method  341  
Status  3311
Source  3311

CONSTRUCTION DATA

Construction Date  723417
Contractor  LAYNE
Method  65417
Finish  66417

CONSTRUCTION CASING DATA

Top/Casing  72514
Bot/Casing  5941
Diameter  774 1104 784 135181 794 161

Top/Casing  72522
Bot/Casing  5941
Diameter  774 1219171 784 13613 794 161

CONSTRUCTION OPENINGS DATA

Top/Depth  72602
Bot/Depth  5941
Diameter  834 13613 844 14151 874 101 854 1 894 1 884 1

Top/Depth  72602
Bot/Depth  5941
Diameter  834 13613 844 14151 874 101 854 1 894 1 884 1

CONSTRUCTION LIFT DATA

Lift Type  2541T
Date  384017111191817
Intake  4411

Power H.P.  45E
Serial No.  461101

MISCELLANEOUS OWNER DATA

Date of Ownership  71841
Owner Name  159017111191817

MISCELLANEOUS OTHER ID DATA

E-Log No.  19041481
Assigner  19141111111

R=58  T=A  723417
604017111191817  634 1614  Name  LAYNE  65417  66417

R=76  T=A  72514
5941  774 1104 784 135181 794 161

R=76  T=A  72522
5941  774 1219171 784 13613 794 161

R=82  T=A  72602
5941  834 13613 844 14151 874 101 854 1 894 1 884 1

R=82  T=A  72602
5941  834 13613 844 14151 874 101 854 1 894 1 884 1

R=42  T=A  2541T
4314  Date  384017111191817  Intake  4411

Power H.P.  45E
Serial No.  461101