<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Construction</td>
<td>21/10/51 / 15/1991</td>
</tr>
<tr>
<td>Well Use</td>
<td>2345 / 2491</td>
</tr>
<tr>
<td>Primary Aquifer</td>
<td>7241124</td>
</tr>
<tr>
<td>Well Depth</td>
<td>24441</td>
</tr>
<tr>
<td>Construction Date</td>
<td>724112 / 01 / 11911 / 6341211</td>
</tr>
<tr>
<td>Contractor Name</td>
<td>Herndon</td>
</tr>
<tr>
<td>Top/Casing / Diameter</td>
<td>72541 / 39141</td>
</tr>
<tr>
<td>Top/Casing / Diameter</td>
<td>72542 / 39141</td>
</tr>
<tr>
<td>Top/Depth / Diameter</td>
<td>72641 / 39141</td>
</tr>
<tr>
<td>Top/Depth / Diameter</td>
<td>72642 / 39141</td>
</tr>
<tr>
<td>Lift / Type / Date</td>
<td>2541 / 6341</td>
</tr>
<tr>
<td>Power / H.P / Serial No.</td>
<td>6544 / 6041011</td>
</tr>
<tr>
<td>Date of Ownership</td>
<td>1594112 / 101 / 117411</td>
</tr>
<tr>
<td>E-Log No.</td>
<td>1901521</td>
</tr>
</tbody>
</table>
MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Land and Water Resources
P.O. Box 10631
Jackson, Mississippi 39209
WATER WELL DRILLERS LOG

100 HP PUMP DATA

PUMP TYPE (Circle One):
Submersible, Turbine, Jet Flowing Well, Other (Describe)

POWER TYPE (Circle One):
Electric, Tractor, Diesel, Gasoline, Butane, Other (Describe)

Pump Capacity (GPM)  1130  No. of Stages  5  S casing depth  282 FT.

PUMP TEST

Well yielded  1130  GPM with
a drawdown of  49  ft.
after  8  hours of pumping

LOG DATA

TYPE OF LOG RUN (Circle One): No Log Run.
Electric, Gamma Ray, Density, Sonic, Neutron, Other (Describe)

Name of Organization Running Log
Herdon Well & Supply, Inc.

GEOLOGIC DATA (Office Use Only)

Surface Elev. Geologic Unit Unit Thickness Depth to Top
5 Subs. SWL Date Analysis Aquifer Test

Driller's Remarks

DESCRIPTION OF FORMATIONS ENCOUNTERED

<table>
<thead>
<tr>
<th>From</th>
<th>TO</th>
<th>FORMATIONS (Continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>20</td>
<td>Sand, Few Clay Breaks</td>
</tr>
<tr>
<td>20</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>95</td>
<td>180</td>
<td></td>
</tr>
<tr>
<td>180</td>
<td>240</td>
<td></td>
</tr>
<tr>
<td>240</td>
<td>275</td>
<td></td>
</tr>
<tr>
<td>275</td>
<td>330</td>
<td></td>
</tr>
<tr>
<td>330</td>
<td>390</td>
<td></td>
</tr>
</tbody>
</table>

RECEIVED

JAN 09, 1992

Cpt. of Environmental Quality
Bureau of Land & Water Resources

IF MORE SPACE IS NEEDED, USE BACK
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 Association
Recreation Institutional (Examples: Church, School) Commercial (Examples: Hotel, Restaurant) Livestock Standby
Fire Protection Flood Protection Other: ____________

LANDOWNER:

CITY OF SOUTHAVEN
(Name)
P.O. BOX 425
(Address)
SOUTHAVEN, MS 38671 (601) 393-5931
(City) (State and Zip) (Telephone Number)

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

SAME AS ABOVE For Assistance Call ECO Resources
(Name) (S/S or Tax ID No.)
(Same as above)
(Address)
(State and Zip) (Telephone Number)

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

SW 1/4 of the NE 1/4 of Section 30 Township 1S Range 7W 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) N/A acre-feet per year at a maximum rate of __________________ gallons per minute
(b) 0.41 million gallons per day at a maximum rate of _______ 1000 ______ gallons per minute
(c) N/A per acre feet of storage at normal pool
(d) N/A per __________________ at a maximum rate of __________________

Construction of proposed work will begin on (date) 10-07-91 and will be completed by (date) 06-07-92.

Water will be used from (month) JANUARY to (month) DECEMBER 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.

TWO WELLS AND TREATMENT PLANT (SEE ATTACHED SITE PLAN)

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

1. Source of water is from N/A 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)
1. Source of water is **SPARTA SAND**

2. Description of proposed water well:
   - Depth: 446 feet
   - Driller: HERDON WELL & SUPPLY, INC.
   - Surface Casing: Length: 395 feet, Diameter: 16 inches, Type: STEEL
   - Screen: Length: 51 feet, Diameter: 10 inches, Type: STAINLESS STEEL RIBBED
   - Pump: Type: TURBINE 12 L.C., Size: 11 1/4", Capacity: 1000 gallons per minute.
   - Setting depth: 282 feet
   - Number of stages: FIVE
   - Power Unit: Type: VERT., HOLLOW SHAFT 1775 RPM.
   - Size: 100 horsepower.
   - Type of completion: DEEP WELL TURBINE PUMP-OIL LUBRICATION-ELECTRIC MOTOR

3. **WATER USE DATA**

   If for irrigation, fish culture or any other aerial 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>
</tr>
</thead>
<tbody>
<tr>
<td>NE1/4</td>
</tr>
<tr>
<td>NW1/4</td>
</tr>
<tr>
<td>SW1/4</td>
</tr>
<tr>
<td>SE1/4</td>
</tr>
<tr>
<td>TOTALS</td>
</tr>
</tbody>
</table>

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 **N/A**  
   (b) The number of connections/customers is **6818**

   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?
   
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Volume)</td>
<td>(Year)</td>
<td>(Volume)</td>
<td>(Year)</td>
</tr>
<tr>
<td>3.4</td>
<td>1997</td>
<td>3.6</td>
<td>2002</td>
</tr>
<tr>
<td>(Year)</td>
<td>(Volume)</td>
<td>(Year)</td>
<td>(Volume)</td>
</tr>
<tr>
<td>2007</td>
<td>4.2</td>
<td>2012</td>
<td></td>
</tr>
</tbody>
</table>

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.

   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: **N/A**

6. OTHER use: Explain in detail: **N/A**

REMARKS: THIS WILL BRING THE EXISTING 3000 G.P.M. TREATMENT PLANT UP TO FULL CAPACITY. (TWO EXISTING 1000 G.P.M. WELLS IN USE).

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

Ronald E. Smith, P.E.
Name
P.O. Box 425
Address
Southaven, MS 38671
City, State, Zip
(601) 935-931
Telephone

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

Ronald E. Smith, P.E.
(Signature)

Subscribed and sworn to before me this 1st day of April 1992 at Mississippi
County of DESOTO, My commission expires 8/2/97
Marlene Sprinkle, Notary Public
DEPARTMENT OF ENVIRONMENTAL QUALITY - OLWR
PUBLIC SUPPLY WELLS PROJECT

SHB + PEC   GPS LOG

USER NAME(S):  [Blank]  DATE:  7/24/94
UNIT DEQ #:     84000   FILE #:   607-8-160
HEALTH DEPT. #:  1700P - 74606   ELEV.  330
USGS #:  493 C-20   OLWR #:  MS-6W-14174
OWNER:  City of Southaven / Greenwood P L #1
LOCATION:  N 34° 58' 26.4" W 89° 58' 85.3"
LOCATION DESCRIPTION:  Well is on fence line 0.5 miles west of
Greenbrook Rd. On Greenbrook Parkway, 0.5 mi. N. of Goodman Rd.

CASING DIA:  10"   PUMP TYPE & SIZE:  Turbine 100
GPS FIELD LOCATION:  LAT.  34° 58' 26.4" W 89° 58' 85.3"
GPS CORRECTED LOCATION:  LAT.  34° 58' 26.4"  LONG.  89° 58' 85.3"

REMARKS:  See well #4 for location
          * Well has two no. #09 & #06. (Two taps?)

[Signature]
Map center is 34° 58' 15" N, 89° 58' 50" W (WGS84/NAD83)

Pleasant Hill quadrangle

Projection is UTM Zone 16 NAD83 Datum

M = -0.034
G = -1.71