### MISCELLANEOUS QW DATA

<table>
<thead>
<tr>
<th>Date of Measurement</th>
<th>Aquifer Sampled</th>
<th>Temp</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1934</td>
<td>1954</td>
<td>19600010</td>
<td>1974</td>
</tr>
<tr>
<td>1934</td>
<td>1954</td>
<td>19600095</td>
<td>1974</td>
</tr>
<tr>
<td>1934</td>
<td>1954</td>
<td>19600400</td>
<td>1974</td>
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</table>

### MISCELLANEOUS LOGS DATA

<table>
<thead>
<tr>
<th>Log Type</th>
<th>Beg. Depth</th>
<th>End Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>2004</td>
<td>2014</td>
</tr>
<tr>
<td>1994</td>
<td>2004</td>
<td>2014</td>
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</tbody>
</table>

### MISCELLANEOUS NETWORK DATA

<table>
<thead>
<tr>
<th>Beg. Year</th>
<th>End Year</th>
<th>Agency Source</th>
<th>Freq.</th>
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<tbody>
<tr>
<td>1154</td>
<td>1164</td>
<td>1174</td>
<td>1184</td>
</tr>
<tr>
<td>1214</td>
<td>1164</td>
<td>1174</td>
<td>1184</td>
</tr>
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</table>

### MISCELLANEOUS REMARKS DATA

<table>
<thead>
<tr>
<th>Date of Remarks</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1840/11/11/1914</td>
<td>1914 M7GW 14.52</td>
</tr>
</tbody>
</table>

### DISCHARGE DATA

<table>
<thead>
<tr>
<th>Date</th>
<th>Type</th>
<th>Discharge</th>
<th>Sp. Capacity</th>
</tr>
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<tbody>
<tr>
<td>1840/11/11</td>
<td>7034</td>
<td>1504</td>
<td>2724</td>
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### GEOHYDROLOGIC DATA

<table>
<thead>
<tr>
<th>Depth Top</th>
<th>Depth Bot.</th>
<th>Unit Id</th>
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<tbody>
<tr>
<td>914</td>
<td>924</td>
<td>934</td>
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</table>

### HYDRAULIC DATA

<table>
<thead>
<tr>
<th>Unit Tested</th>
<th>1004</th>
<th>1034</th>
</tr>
</thead>
</table>

**55'dd after 8hrs e 1001 gpm**
COUNTY WELL LOCATED
Hancock

WELL NUMBER: 3

K 470

DATE WELL COMPLETED: March 1994

NAME & MAILING ADDRESS OF LANDOWNER
Diamondhead Water & Sewer Dist.
4351 Park Ten Drive
Diamondhead, MS 38052

WELL LOCATION: SEC 8 TOWNSHIP 19 R

DISTANCE TO NEAREST TOWN: Miles

OTHER LANDMARK:

WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc.

PUMP DATA

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

POWER TYPE (Circle One): Electric, Tractor, Diesel, Gasoline, Butane, H/P

PUMP Capacity (GPM): 1000

No. of Stages: 4

Setting Depth (FT.): 190

Well yielded __________ GPM with a drawdown of ________ ft.

after __________ hours of pumping

WELL DATA

Well Depth: 220'

Casing Diameter (in.): 10'

Casing Length (ft.): 060'

Type of Casing: Steel

Hole Depth: 920'

Depth to Static Water Level: 320'

TYPE OF COMPLETION (Circle One or More): Gravel Packed, Underreamed, Telescoped, Natural Development, Open Hole, Other

Top of Lap Pipe or Reduction in Casing: FEET

SCREEN DATA

Diameter - Inches: 10'

Length - Feet: 70

Slot Size - Inches: 0.90

Screen Type: Stainless Steel

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>11'</td>
<td>Clay &amp; Shale</td>
</tr>
<tr>
<td>11'</td>
<td>21'</td>
<td>Sand with Clay splits</td>
</tr>
<tr>
<td>21'</td>
<td>50'</td>
<td>Shale</td>
</tr>
<tr>
<td>50'</td>
<td>99 '</td>
<td>Sand</td>
</tr>
<tr>
<td>99'</td>
<td>184'</td>
<td>Clay with Sand</td>
</tr>
<tr>
<td>184'</td>
<td>256'</td>
<td>Shale with Sandy clay</td>
</tr>
<tr>
<td>256'</td>
<td>666'</td>
<td>Sand with clay</td>
</tr>
<tr>
<td>666'</td>
<td>720'</td>
<td>Sand and Clay</td>
</tr>
</tbody>
</table>

LOG DATA

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

Name of Organization Running Log:
Layne-Central Co.

GEOLOGIC DATA (Office Use Only)

Surface Elevation: Subs. SWL: 460'

Geologic Unit: Sand with clay

Liue Thickness: 666'

Dept. of Environmental Quality

Office of Land & Water Resources

M.R. 28 1994

Driller's Remarks:

IF MORE SPACE IS NEEDED, USE BACK Page 1.
APPLICATION FOR PERMIT TO DIVERT OR WITHDRAW FOR BENEFICIAL USE
THE PUBLIC WATERS OF THE STATE OF MISSISSIPPI

May 25, 1993

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

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

LANDOWNER:

Diamondhead Water and Sewer District

(Diamondhead, MS 39520) (601) 255-5813 (Telephone Number)

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

A. Garner Russell & Associates, Inc.

(P.O. Box 1677) (601) 863-0667 (Telephone Number)

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

1/4 of the 1/4 of Section 3 Township 85, Range 14W, County Hancock

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) _______________ million gallons per day at a maximum rate of _______________ gallons per minute

(c) _______________ per _______________ at a maximum rate of _______________

(d) _______________ per _______________ acre feet of storage at normal pool

Construction of proposed work will begin on (date) June 1993 and will be completed by (date) Oct 1993.

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.

MS-GW-12541 (350 GPM) MS-GW-12542 (1,100 GPM)

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

1. Source of water is: Miocene aquifer.

2. Description of proposed water well:
   (a) DEPTH OF WELL: 720 feet. DRILLER (name): ADELE CENTRAL
   (b) SURFACE CASING: Length: 640 feet. Diameter: 16 inches. Type: Steel
   (c) SCREEN: Length: 70 feet. Diameter: 10 inches. Type: Stainless Steel
   (d) PUMP: Type: Turbine. Size: 12". Capacity: 1,000 gallons per minute.
      Number of stages: 4
      Setting depth: 100 feet
   (e) POWER UNIT: Type: Electric Motor. Size: 10 HP. 75 horsepower.
   (f) TYPE OF COMPLETION: Gravel Pack & SAND D

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>SECTION</th>
<th>NE1/4</th>
<th>NW1/4</th>
<th>SW1/4</th>
<th>SE1/4</th>
<th>TOTALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></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 ______; (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? 500K (Volume) 1993: 575K (Volume) 1998: 661K (Volume) 2003: 769K (Volume) 2008: (Volume)

4. INDUSTRIAL: If water is to be released into a watercourse, indicate the amount released each year ______.
   Rate of release ______; Location of release point ______. Explain any change in quality of water to be released:

   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:
John Campton, P.E.
A. Garner Russell & Associates, Inc.
P.O. Box 1677
Gulfport, MS 39502
(601-863-0667)

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

Subscribed and sworn to before me this 21st day of May 1983, at Gulfport, Mississippi.

John Campton, Notary Public
DEPARTMENT OF ENVIRONMENTAL QUALITY - OLWR
PUBLIC SUPPLY WELLS PROJECT
GPS LOG

USER NAME(S): Stewart/Everett          DATE: 11/28/88
UNIT DEQ #:      FILE #:     A012828
HEALTH DEPT. #: 230805-03           ELEV. 26° 40'
USGS #:          OLWR #:        G014657
OWNER:           Diamondhead Util. S.35 N. North
LOCATION:        NE Truc S 3 T 85 R 146 COUNTY: Hancock
LOCATION DESCRIPTION:_____________________________________________________________________

CASING DIA.: _______ PUMP TYPE & SIZE: ________________________

GPS FIELD LOCATION: LAT. 30°22.252  LONG. 89°22.819
GPS CORRECTED LOCATION: LAT. 30.37939D  LONG. 89.380196
REMARKS:          K: Ind Qual