### MISCELLANEOUS ON DATA

<table>
<thead>
<tr>
<th>Date of Measurement</th>
<th>Aquifer Sampled</th>
<th>Temo</th>
<th>Value</th>
</tr>
</thead>
</table>

### MISCELLANEOUS LOGS DATA

<table>
<thead>
<tr>
<th>Log Type</th>
<th>Begin Depth</th>
<th>End Depth</th>
<th>Value</th>
</tr>
</thead>
</table>

### MISCELLANEOUS NETWORK DATA

<table>
<thead>
<tr>
<th>Agency Source</th>
<th>Freq.</th>
</tr>
</thead>
<tbody>
<tr>
<td>118d</td>
<td></td>
</tr>
</tbody>
</table>

### MISCELLANEOUS REMARKS DATA

<table>
<thead>
<tr>
<th>Date of Remarks</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1864</td>
<td></td>
</tr>
</tbody>
</table>

### DISCHARGE DATA

<table>
<thead>
<tr>
<th>Date</th>
<th>Type</th>
<th>Discharge</th>
<th>Sp. Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974</td>
<td>1986</td>
<td>1974</td>
<td></td>
</tr>
</tbody>
</table>

### GEOHYDROLOGIC DATA

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

### HYDRAULIC DATA

<table>
<thead>
<tr>
<th>Description of Formations Encountered</th>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topo Sand</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Red Clay</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Red Clay <em>Agra</em> Yellow</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Sand &amp; Pea gravel</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Pea gravel</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td><em>Agra</em> Fine Clay</td>
<td>110</td>
<td></td>
</tr>
<tr>
<td>Fine Sand <em>Fano</em></td>
<td>110</td>
<td></td>
</tr>
<tr>
<td><em>Fano</em> Clay</td>
<td>110</td>
<td></td>
</tr>
<tr>
<td><em>Pezo</em> Clay</td>
<td>110</td>
<td></td>
</tr>
<tr>
<td><em>Pezo</em> Fine Clay</td>
<td>110</td>
<td></td>
</tr>
<tr>
<td>Fine Sand <em>Pezo</em></td>
<td>110</td>
<td></td>
</tr>
<tr>
<td>Fine Blue Clay</td>
<td>125</td>
<td>235</td>
</tr>
<tr>
<td>Blue Clay</td>
<td>235</td>
<td>265</td>
</tr>
<tr>
<td>Fine Blue Clay</td>
<td>235</td>
<td>265</td>
</tr>
<tr>
<td>Fine Blue Clay</td>
<td>265</td>
<td>285</td>
</tr>
<tr>
<td><em>Pezo</em> Fine Clay</td>
<td>285</td>
<td></td>
</tr>
<tr>
<td>Fine Sand <em>Pezo</em></td>
<td>285</td>
<td></td>
</tr>
<tr>
<td>Fine Blue Clay</td>
<td>285</td>
<td></td>
</tr>
<tr>
<td>Blue Clay</td>
<td>285</td>
<td>365</td>
</tr>
</tbody>
</table>
**WATER WELL DRILLERS LOG**

**Date well completed:** 9-11-86

**Landowner:** Copiah

**Well Location:**
- **Section:** 5
- **R.** 11
- **T.** 11
- **Location:** Crystal Springs, MS

**Well Purpose:**
- **Home, irrigation, municipal, industrial:**

**Well Completion Data:**
1. **Diameter (inches):** 16"  
2. **Total depth (feet):** 360'
3. **Static water level (feet):** 160' below top of ground
4. **Casing:** 30' above
   - **Material:** 16" 0'-18'
   - **Depth:** 30'-18'
5. **Screen:** 16'-25' 301'  
   - **Length:** 10'
   - **Material:** Stainless Steel
6. **Pump:** 350  
   - **HP:** 750
   - **Yield gpm:**
7. **Electric:** Yes
   - **Type:** Commercial
8. **Electric log:** Yes
   - **Date:** 9-11-86

**Drillers Remarks:**

---

**Description of Formations Encountered:**
- **Top Spil:** 0'-2'
- **Red Clay:** 2'-5'
- **Sand & Clay:** 5'-68'
- **Graywacke Sand:** 68'-87'
- **U. Lime Clay Stone:** 87'-110'
- **Clay Ledges:** 110'-180'
- **Sandstone:** 130'-160'
- **Shale:** 160'-175'
- **Sandstone:** 175'-300'
- **Shale:** 300'-350'

**Drillers signature:**

---

**Jackson, Mississippi 39209**

**Department of Natural Resources**

---

**FEB 11, 1987**
APPLICATION FOR PERMIT TO DIVERT OR USE THE PUBLIC WATERS OF THE STATE OF MISSISSIPPI

DEPARTMENT OF ENVIRONMENTAL QUALITY, OFFICE OF LAND AND WATER RESOURCES
P.O. BOX 10631, JACKSON, MS 39289-0631; (601) 961-5202

This box is for office use only.

Issued: 3-10-98 AGN

Exp. Date: 3-10-2008

Lat.: 31° 57' 11"

Long.: 90° 25' 00"

Elev.: 395

Quadrant: QALLMAN

ASCS Farm No.: STAC.

MDSOAH No.:

Aquifer: MOGN

Tract No.: Basin No.

Remarks:

THIS APPLICATION IS FOR (Circle one): NEW PERMIT RENEWAL PERMIT NO. GW-009728

THIS APPLICATION IS FOR (Circle one): GROUNDWATER COMPLETE A,B,E SURFACE WATER - COMPLETE A,C,D,E

BENEFICIAL USE (Circle one or more):
1) Public Supply - Municipal, Rural Water, or Private Water
2) Irrigation
3) Industrial
4) Fish Culture
5) Recreation
6) Institutional (e.g., Church, School)
7) Commercial (e.g., Hotel, Casino, Restaurant)
8) Fire Protection
9) Livestock
10) Flood Protection
11) Other:

SECTION A (to be completed by ALL APPLICANTS)

LANDOWNER: COPIAH-NEW ZION WATER ASSOCIATION, INC. 910-009-780

P.O. BOX 309

CRISTAL SPRINGS MS 39059 (601) 892-1205

SSN or Tax ID No.

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

ALFORD ENGINEERING

P.O. BOX 16621

JACKSON MS 35936-6621 (601) 362-7450

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

NE 1/4 of the SE 1/4 of Section 5 Township 1N Range 2W County COPIAH

Desc 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 1) YES If yes, describe the nature and amount of any additional supply and, if applicable, list permit number.

247 GPM (PERMIT NO. GW-009729) 289 GPM (PERMIT NO. GW-009727)

289 GPM (PERMIT NO. GW-009727) 300 GPM

SECTION B (to be completed for GROUNDWATER SOURCE)

1. AQUIFER: MIocene MISSISSIPPI DEPARTMENT OF HEALTH NO.: 150009-03

2. Proposed work will begin on ________________ 19__, and will be completed by ________________ 19__.

If well has already been drilled, when was well completed (date)? JUNE 9, 19, 87. Under whose name was well originally drilled (if known)? COPIAH-NEW ZION WATER ASSOCIATION, INC.

3. Description of proposed or completed well:

(a) DEPTH OF WELL: 359 Feet. DRILLER: LAYNE-CENTRAL CO.

(b) SURFACE CASING: Length 301 feet; Diameter 16 inches; Type THREADED STEEL

(c) SCREEN: Length 35 feet; Diameter 10 inches; Type WIRE WRAPPED

(d) PUMP: Type SU; Size 50 HP; Capacity 250 gallons per minute; Setting depth _feet

(e) POWER UNIT: Type ELECTRIC; Size 50 horsepower

4. PERMITTED VOLUME:

(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

CONTINUED ON BACK

#3
SECTION C, (to be completed for SURFACE WATER SOURCE)

1. Source of water is from __________________________ which drains into ________________________________ (major stream or river)

2. Description of pump/diversion works:
   Pump (size & type): __________________________
   Lift: __________________________ feet
   Maximum capacity: __________________________ gallons per minute
   Power Unit (size & type): __________________________
   Gallons per minute

3. ___________ acre-feet per year at a maximum rate of __________________________ gallons per minute

SECTION D (to be completed for SURFACE WATER IMPOUNDMENTS (DAMS) on continuously flowing streams)

1. Name of storage reservoir: __________________________
   Dam Height: __________________________ feet

2. Surface area at normal pool: __________________________ Storage capacity at normal pool: __________________________ acre-feet

SECTION E WATER USE DATA (ALL APPLICATIONS - complete section related to beneficial use)

1. IRRIGATION: List the number of acres of each crop to be irrigated:
   Rice: __________________________; Cotton: __________________________; Oats: __________________________;
   Corn: __________________________; Soybeans: __________________________; Pasture: __________________________;
   Truck: __________________________; Wheat: __________________________; Grain Sorgum: __________________________;
   Other (specify): __________________________ Acres: __________________________
   A. Method of Irrigation (circle one) - Center Pivot Flood Furrow
   B. Land Condition (circle one) - Precision Land Formed Smoothed
   C. ASCS Farm No. __________________________  Tract No. __________________________

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

3. MUNICIPAL, WATER ASSOCIATION, or PRIVATE WATER SYSTEM
   Chose "a" or "b". (a) The number of people served is __________________________ or (b) The number of connections 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 (20) years?
   2003: __________________________ (Volume) 2008: __________________________ (Volume) 2013: __________________________ (Volume)
   139,000 146,000 154,000 161,000 2018
   (Year) (Year) (Year) (Volume) (Year)

4. INDUSTRIAL: If the water is to be released into a watercourse, indicate the amount released each year __________________________;
   Rate of release __________________________; NPDES Permit No. __________________________
   Explain any changes in quality of water to be released:
   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 (if needed, attach another page):

7. REMARKS:

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

S. F. ALFORD, III, P.E.
(Name)
P.O. BOX 16621
(Address)
JACKSON, MS 39236-6621
(City, State, Zip)
(601) 362-7450
(Telephone)

The accompanying map is hereby declared a part of this application. For irrigation and fish culture use, an ASCS photograph is required. The TEN DOLLAR ($10.00) permit fee is enclosed herewith.

S. F. ALFORD, III, P.E.

Subscribed and sworn to before me this 9TH day of JANUARY 1998 at County of HINDS

Commissioner of Notary Public.
DEPARTMENT OF ENVIRONMENTAL QUALITY - OLWR
PUBLIC SUPPLY WELLS PROJECT

GPS LOG

Hornbeck

USER NAME(S):  BAK/OEO  DATE:  7/24/96
UNIT DEQ #:  23555  82859  FILE #:  6072420A
HEALTH DEPT. #:  150089-03  ELEV.  370
USGS #:  J-68  OLWR #:  09728
OWNER: Copiah W.A. Inc./new QUAD: Callaway
LOCATION: NE 1/4 SE 1/4 T 11N R 24W COUNTY: Copiah
LOCATION DESCRIPTION: .40 mi. West of Copiah Lake Dam/Spillway
in NE corner of intersection at west end of Copiah Lake Rd.

CASING DIA: 16"  PUMP TYPE & SIZE: Turbine 50 HP
31° 57' 10.74"  90° 25' 03.05"
GPS FIELD LOCATION: LAT. 31.57158 N  LONG. 90.25033 W

GPS CORRECTED LOCATION: LAT. 31.95298475  LONG. 90.4751266

REMARKS: Take EXIT 68 Turn Left 55 mi. to Burney Rd
Turn Left go 3 to Copiah Lake Rd. Turn West
Right go 1.35 to Spillway then West 1/4 to
Well in NE corner of intersection at west end of Copiah Lake Rd.
GPS at well.