

re-punched 3/80

K87

FORM 9-1642 (1-68)

Well No.

WELL SCHEDULE  
U. S. DEPT. OF THE INTERIOR  
GEOLOGICAL SURVEY

E log # 26  
WATER RESOURCES DIVISION

PUNCHED

MASTER CARD

USCE

Record by WTO Source of data Obs driller Date 10-9-73 Map CRENSHAW

State Miss County (or town) De Soto 17

Latitude: 344402N Longitude: 0900411 Sequential number: 1

Lat-long accuracy: 2 T 4 R 8 Sec 17 NE SW

Local well number: K087AC1704SOBW Other number: B & M

Local use: 001026 Owner or name: USCE ARKABUTLA Address: \_\_\_\_\_

DEC 24 1974

mst

Ownership: County, Fed Gov't, City, Corp. or Co, Private, State Agency, Water Dist F

Use of water: (A) Air cond., (B) Bottling, (C) Comm, (D) Dewater, (E) Power, (F) Fire, (G) Dom, (H) Irr, (I) Med, (J) Ind, (K) P-S, (L) Rec, (M) Picnic area, (N) Stock, (O) Instit, (P) Unused, (Q) Repressure, (R) Recharge, (S) Desal-P S, (T) Desal-other, (U) Other camp ground R

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 70 Freq. W/L meas. 71 Field aquifer char. 72

Hyd. lab. data: 73

Qual. water data: type: USGS 4/74 C

Freq. sampling: 75 Pumpage inventory: yes 76 no, period: 77

Aperture cards: 78 yes 79

Log data: E log DE

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: 1450 Meas. 24 ft 3

Depth cased: 1710 Casing type: steel ; Diam. 6x4 in 29 30

Finish: (C) concrete, (F) gravel w. (perf.), (G) gravel w. (screen), (H) horiz. gallery, (I) open end, (J) screen, (K) shored, (L) open hole, (M) other 31

Method: (A) air, (B) bored, (C) cable, (D) dug, (E) hyd jetted, (F) air rot., (G) reverse, (H) trenching, (I) driven, (J) drive wash, (K) other 32

Date Drilled: 973 Pump intake setting: 36 38

Driller: LIPE POPE MISS.

Lift (type): (A) air, (B) bucket, (C) cent, (D) jet, (E) multiple, (F) multiple, (G) none, (H) piston, (I) submerg, (J) turb, (K) other 39 Deep 40 Shallow 40

Power (type): (A) diesel, (B) elec, (C) gas, (D) gasoline, (E) hand, (F) gas, (G) wind, (H) H.P. 5 41 Trans. or meter no. 7

Descrip. MP 42 above ft below LSD, Alt. MP 43

Alt. LSD: 243 Accuracy: Eng 47 2

Water Level: 52 Accuracy: 48 51 52 4

Date meas: 474 Yield: 60 Method determined 61

Drawdown: 2 ft 62 Accuracy: 63 Pumping period: 64 68

QUALITY OF WATER DATA: Iron 69 Sulfate 70 Chloride 71 Hard. 72

Sp. Conduct: 200 K x 10 2 Temp. 74 76 Date sampled 7-10-74 77 79

Taste, color, etc. pH = 8.3

Well No.

K87

Well No. \_\_\_\_\_

Latitude-longitude \_\_\_\_\_  
d m s d m s

HYDROGEOLOGIC CARD

Province: 03 Section: \_\_\_\_\_  
Drainage Basin: 15E Subbasin: \_\_\_\_\_

Topo of well site: (D) depression, stream channel, dunes, flat, hilltop, sink, swamp, (S) offshore, pediment, hillside, terrace, undulating, valley flat

MAJOR AQUIFER: system \_\_\_\_\_ series TE aquifer, formation, group LW

Lithology: \_\_\_\_\_ Origin: 2 Aquifer Thickness: \_\_\_\_\_ ft

Length of well open to: 170 ft Depth to top of: 1350 ft

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: 30' of 4" with .010" slot

Depth to consolidated rock: \_\_\_\_\_ ft Source of data: \_\_\_\_\_

Depth to basement: \_\_\_\_\_ ft Source of data: \_\_\_\_\_

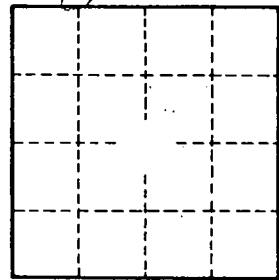
Surficial material: \_\_\_\_\_ Infiltration characteristics: \_\_\_\_\_

Coefficient Trans: \_\_\_\_\_ gpd/ft Coefficient Storage: \_\_\_\_\_

Coefficient Perm: \_\_\_\_\_ gpd/ft<sup>2</sup>; Spec cap: \_\_\_\_\_ gpm/ft; Number of geologic cards: \_\_\_\_\_

*near water level*  
*4-3-1974 @ 1500*  
*52.18' below lsl*  
*7-10-1974 @ 1010 = 51' below lsl*

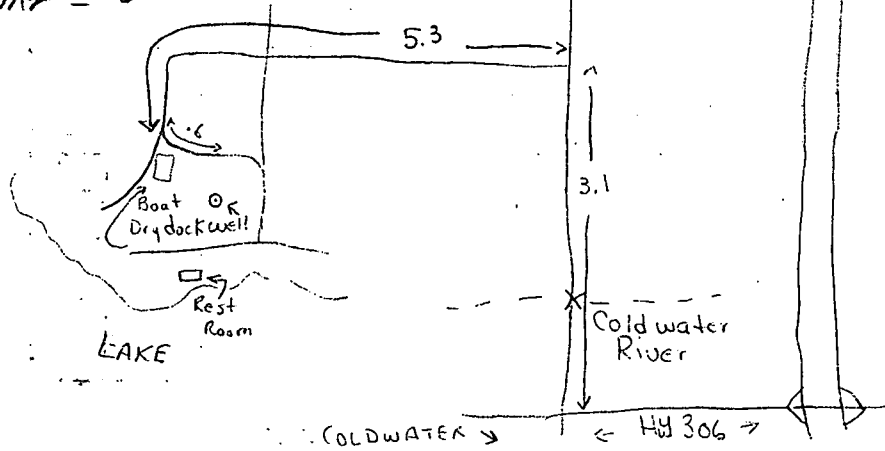
*3900 gallon pressure storage tank*

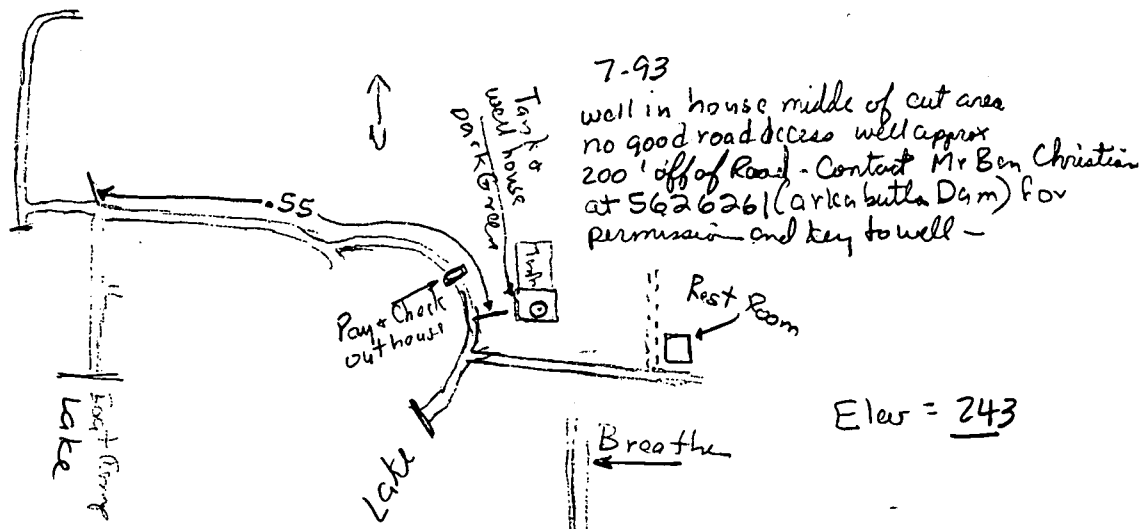


MSB04  
T = 25°C  
Color = 15  
Fe = .2  
driller  
rpts:  
42' dd  
after 20m  
@ 60gpm

*driller*  
*1.5' of drawdown @ 62gpm*

*10-10-73*  
*Reported water level by*  
*driller = 60' below lsl*



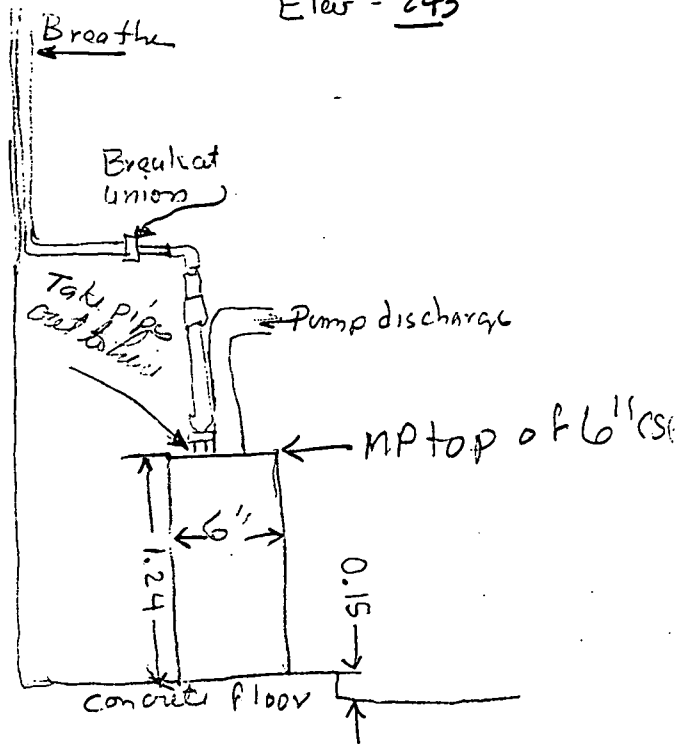


7-93  
 well in house middle of cut area  
 no good road access well approx  
 200' off of Road - Contact Mr Ben Christian  
 at 562 6261 (Arka butla Dam) for  
 permission and key to well -

Elev = 243

PEG + J.G.  
 7-8-93  
 0910

81.00	82.00
2.72	3.72
78.28	78.28
1.39	1.39
76.89	76.89



**CODED**

FORM

De Soto
K87
10/10/73
E 26 #26

MISSISSIPPI  
 BOARD OF WATER COMMISSIONERS  
 416 North State Street  
 Jackson, Mississippi 39201  
**WATER WELL DRILLERS LOG**

OCT 10 1973 19 LIFE WELL & SUPPLY CO., INC. DESOTO  
 date well completed firm name county well located

LANDOWNER: <u>ArkGaul's Res</u>	description of formations encountered	from	to
U. S. CORPS OF ENGINEERS			
VICKSBURG DISTRICT (mailing address)	RED SAND	0	20
WELL LOCATION: sec. <u>17</u> T. <u>4</u> N R. <u>8</u> E 8 miles NW of COLDWATER (distance) (direction) (nearest town)	RED GUMBO	20	43
WELL PURPOSE: UTILITY (home, irrigation, municipal, industrial)	WHITE CLAY	43	50
WELL COMPLETION DATA:	SAND & GRAVEL	50	66
(1) diameter (inches) <u>6 5/8"</u>	COARSE SAND & GRAVEL	66	88
(2) total depth (feet) <u>1450</u>	GRAVEL & SAND	88	108
(3) static water level (feet) <u>60</u> <u>below</u> top of ground.	GUMBO	108	111
(4) casing <u>Steel</u> , <u>1350'</u> (material) (depth) <u>6"</u> if telescope see back. (size)	SOFT WHITE GUMBO	111	131
(5) screen <u>40'</u> , <u>1410'</u> (length) (depth to top) <u>4"</u> , <u>S.S.</u> (size) (material)	SOFT WHITE GUMBO	131	154
(6) pump <u>5</u> , <u>62</u> (HP) (yield gpm) <u>elec.</u> (type power)	WHITE SANDY CLAY	154	177
(7) electric log <u>YES</u> (yes or no) <u>USGS</u> (organization running log)	WHITE SANDY CLAY	177	200
(8) how well bottom plugged: <u>wash bottom</u>	WHITE SAND & WHITE CLAY	200	223
DRILLERS REMARKS: <u>1.5 FT. DRAWDOWN @ 62 gpm</u>	WHITE SAND & WHITE CLAY	223	246
	SAND & LIGNITE	246	264
	SAND & LIGNITE	264	276
	BROWN GUMBO	276	296
	BROWN GUMBO	296	308
	HARD GRAY GUMBO	308	320
	HARD GRAY GUMBO	320	342
	HARD GRAY GUMBO	342	364
	HARD GRAY GUMBO	364	376
	HARD GRAY GUMBO	376	386
	WHITE WATER SAND	386	406
	WHITE WATER SAND	406	415
	BLUE GUMBO	415	427
	HARD SHALE & SOFT GUMBO	427	447
	SOFT BLACK GUMBO	447	458
	SOFT BLACK GUMBO	458	470
	SOFT BLACK GUMBO	470	490
	SOFT BLUE GUMBO	490	502
	GUMBO & SHALE	502	522
	GUMBO & SHALE	522	534
	GUMBO & SHALE	534	554
	GUMBO & SHALE	554	576
	SAND LENS & SHALE	576	586
	SHALE & SAND LENS	586	598
	HARD BLUE GUMBO	598	618
	HARD BLUE GUMBO	618	629
	WHITE WATER SAND	629	649
	WHITE WATER SAND	649	660





*See paid  
SAP 07 1993*

FORM BLW-AP-1  
(rev. 10/88)

The box below is for office use only. WLCXL

Issue: <u>1-11-94</u>	Expires: <u>1-11-2004</u>	Fee Paid: <u>IV</u>	Permit No. <u>GW-14715</u>
Lot: <u>34-43-59</u>	Lease: <u>90-04-06</u>	Elev: <u>245</u>	USGS No. <u>K-87</u>
Quad: <u>Arkabutla East</u>	Dist:		Basin No. <u>08030204</u>
STAC:			Perm Inv. No.
			Dem appl. No.

Dept. of Natural Resources, Bureau of Land and Water Resources, P.O. Box 10631, Jackson, MS 39289-0631

### 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) Limestone ~~Industry~~  
 Fire Protection Flood Protection Other: \_\_\_\_\_

**LANDOWNER:**  
 U.S. ARMY CORPS OF ENGINEERS  
 ARKABUTLA RESERVOIR  
 (Name) \_\_\_\_\_ 17110087 (S/S or Tax ID No.)  
 VICKSBURG DISTRICT - P.O. BOX 60 (Address)  
 VICKSBURG MS 38618 (601) 631-7634 (City) (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):  
 NE 1/4 of the SW 1/4 of Section 17, Township 4S, 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) .005 million gallons per day at a maximum rate of 62 gallons per minute  
 (c) \_\_\_\_\_ acre feet of storage at normal pool  
 (d) 62 GAL per MINUTE at a maximum rate of 3,000 GAL/DAY

Construction of proposed work will begin on (date) 10-10, 19 73 and will be completed by (date) 10-10, 19 73  
 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)?

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

- Source of water is from \_\_\_\_\_ which drains into \_\_\_\_\_ which drains into \_\_\_\_\_ which drains into \_\_\_\_\_
- 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.

*GW*  
*14715*

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

1. Source of water is GROUND WLCXL aquifer.
2. Description of proposed water well:
  - (a) DEPTH OF WELL: 1450 feet. DRILLER (name): LKPE WELL & SUPPLY CO., INC.
  - (b) SURFACE CASING: Length: 1350 feet. Diameter: 6" inches. Type: STEEL
  - (c) SCREEN: Length: 40 feet. Diameter: 4 inches. Type: STEEL
  - (d) PUMP: Type: ELECTRIC Size: 5 HP Capacity: 62 gallons per minute.  
Number of stages: 12 Setting depth: 89' feet.
  - (e) POWER UNIT: Type: SUBMERSIBLE Size: 4" 5 HP 2" DISCHARGE 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.

TOWNSHIP	RANGE	SECTION	NE1/4				NW1/4				SW1/4				SE1/4				TOTALS
			NE1A	NW1A	SW1A	SE1A	NE1A	NW1A	SW1A	SE1A	NE1A	NW1A	SW1A	SE1A	NE1A	NW1A	SW1A	SE1A	

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: PUBLIC USE
6. OTHER use: Explain in detail: \_\_\_\_\_

REMARKS: \_\_\_\_\_

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

A. D. GORDON  
(Name) \_\_\_\_\_  
ROUTE 1 BOX 572  
(Address) \_\_\_\_\_  
COLDWATER, MS 38618  
(City, State, Zip) \_\_\_\_\_  
601-562-6261  
(Telephone) \_\_\_\_\_

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

(Signature) \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 19\_\_\_\_ at \_\_\_\_\_  
County of \_\_\_\_\_ My commission expires \_\_\_\_\_

Notary Public



N

# Public Water Supply Annual Report

Name of Water Supply North Abutment  
 Public Water Supply (PWS) ID Number 

1	7	0	0	3	6
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 County Desoto

Official Public Water Supply Address (This is the address where all official correspondence is received)  
 Attention Arkabutla Lake Daytime Phone (601) 562-6261  
 Address Rt 1 Box 572 Coldwater, MS 38619

Monthly Bacteriological Sample Results Should be Mailed to: (Complete if different from official water supply address in above section)  
 Attention Same as Above Daytime Phone ( ) - -  
 Address \_\_\_\_\_

Owner/Responsible Official of System (President, mayor, or owner of the water system)  
 Name Hal Moore  
 Address \_\_\_\_\_  
 Home Phone (601) 429-5454 Work Phone (Same as above)

Water Superintendent/Operator (To be completed by the person who directly supervises and is personally responsible for the daily operation and maintenance of this water system. Must be certified by Mississippi State Department of Health for a community water supply.)  
 Name Ben Christian, Jr.  
 Address P.O. Box 702 Lambert, MS 38643  
 Home Phone (601) 326-8595 Work Phone (601) 562-6261

Mississippi State Department of Health Certification Number 

0	0	1	7	5	5
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 Expiration Date 9/1/93  
 I certify that I am the person who directly supervises and is personally responsible for the daily operation and maintenance of this public water system and I do hold a valid Certificate of Competency as required by Sections 21-27-201 through 21-27-211, Mississippi Code of 1972, Annotated. Signed this 4 day of March 1992.  
 Signature of Operator Ben Christian, Jr.

Secretary/Treasurer/Bookkeeper  
 Name ARKABUTLA LAKE  
 Address \_\_\_\_\_  
 Home Phone ( ) - - Work Phone ( ) - -

### System Information

- How many usable sources of water (wells for groundwater systems, purchase points if buying water, etc.) does this system have?  
 Wells = \_\_\_\_\_ Purchase Points = \_\_\_\_\_ Surface Water = \_\_\_\_\_ Other = \_\_\_\_\_ (explain) \_\_\_\_\_
- How many active connections on this system? \_\_\_\_\_
- How many people does this system serve? Non-Community
- How many gallons of water did this system sell during the last calendar year (January-December)? \_\_\_\_\_
- What was the peak month for water sales during the last calendar year and how many gallons of water were sold during that month?  
 Month = \_\_\_\_\_ Gallons Sold = \_\_\_\_\_
- The charge to the customer for the 1st \_\_\_\_\_ gallons of water is \$ \_\_\_\_\_.

This Annual Report is to be completed and returned to the Division of Water Supply no later than February 29, 1992. Information from this report will be used to update our files and for determining compliance with the laws and regulations governing public water supplies in Mississippi. Return the completed report to: Division of Water Supply; P. O. Box 1700; Jackson, Mississippi 39215-1700.

Who completed this report? Name A M Gordon Title Asst. Manager

Signature A M Gordon Date 4/3/92

GW 14715

WILCOX DATA SHEET-VERIFICATION CHECKLIST

COUNTY DESOTO

Arkabutla East Quad  
U.S.G.S. E-103 = 26

WELL OWNER U.S.C.E. Arkabutla Reservoir (Hennard Point Rec. Area) CHECKED

U.S.G.S. NO. K-87 10/18/94

B.O.H. NO. 170041 - ? 10/18/94

OLWR NO. GW-14715 \_\_\_\_\_

LOCATION:

MAP SE, NE, SW S 17, T 4S, R 8W 10/18/94

GPS No \_\_\_\_\_

ELEV. (MSL) 243' 10/18/94

W.L. (L.S.) (1) - 76.89' 10/18/94

(2) - 76.89' 10/18/94

HEAD (MSL) + 166.11' 10/18/94

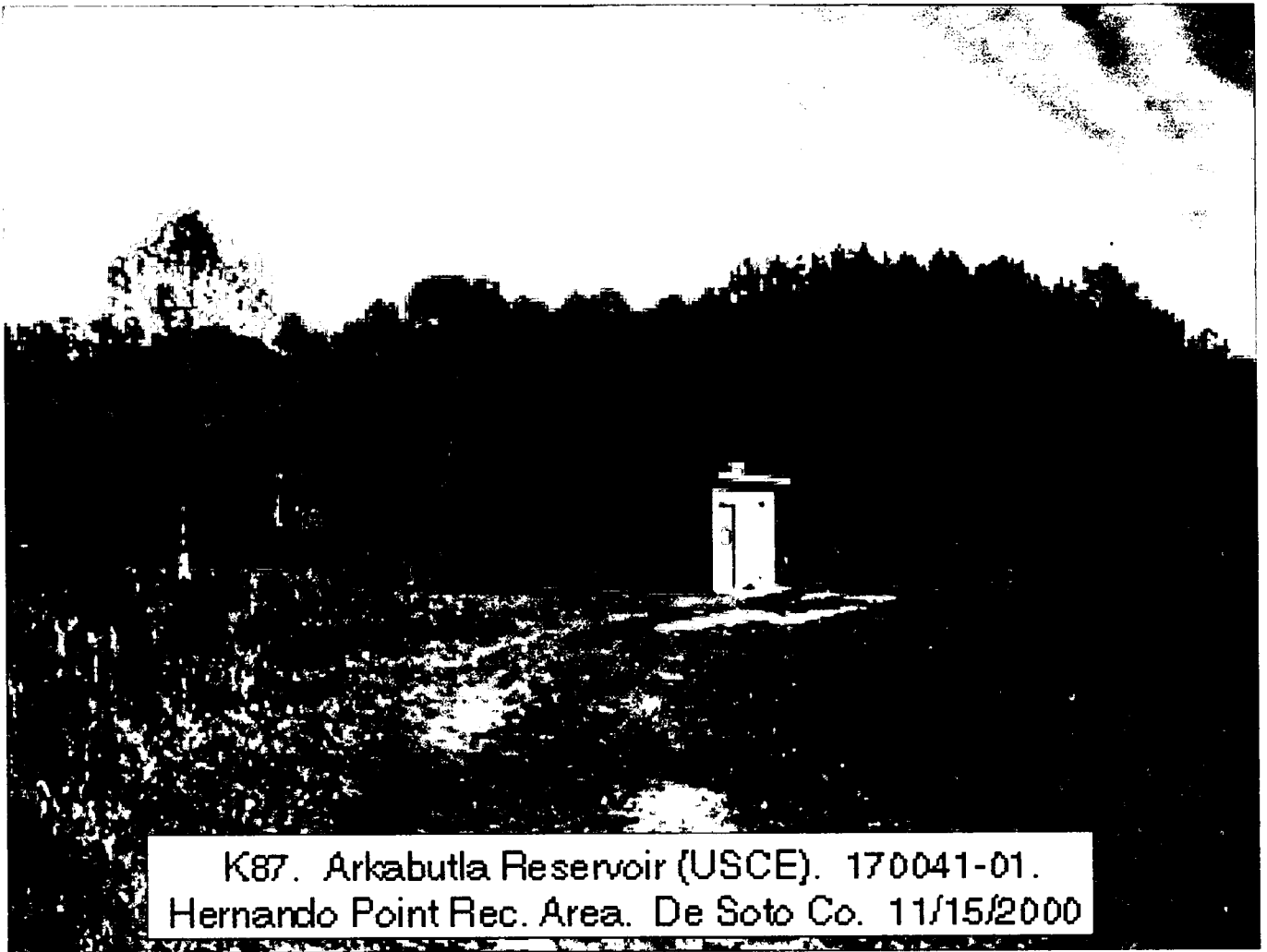
SCREENED INTERVAL 1,410' - 1,450' (Ls) / - 1,167' - - 1,207' (msc) 10/18/94

AQUIFER VERIFIED Lower Wilcox 10/18/94

PREVIOUS W.L. - 52.15' (1974) 10/18/94

DATA ENTERED \_\_\_\_\_

033K0087.bmp



K87. Arkabutla Reservoir (USCE). 170041-01.  
Hernando Point Rec. Area. De Soto Co. 11/15/2000

DEPARTMENT OF ENVIRONMENTAL QUALITY - OLWR

PUBLIC SUPPLY WELLS PROJECT

GPS LOG

USER NAME(S): SHB+PEG ~~LAR/DAB~~ DATE: 8-21-94 ~~7/27/94~~  
UNIT DEQ #: 84090 FILE #: ~~10072774A~~ A082123A  
HEALTH DEPT. #: 170041-01 ELEV. 241  
USGS #: 525 K-87 OLWR #: MS-GW-14715

OWNER: HERNANDO POINT LLC.  
LOCATION: SE/NE/SW S 17 T 45 R 8W COUNTY: DECATO

LOCATION DESCRIPTION: AKTABUTLA E. Quad  
IN DARK GRAY BUILDING SE of GATE HOUSE  
TO CAMP GROUND 1.0 MI. EAST of MAIN RD

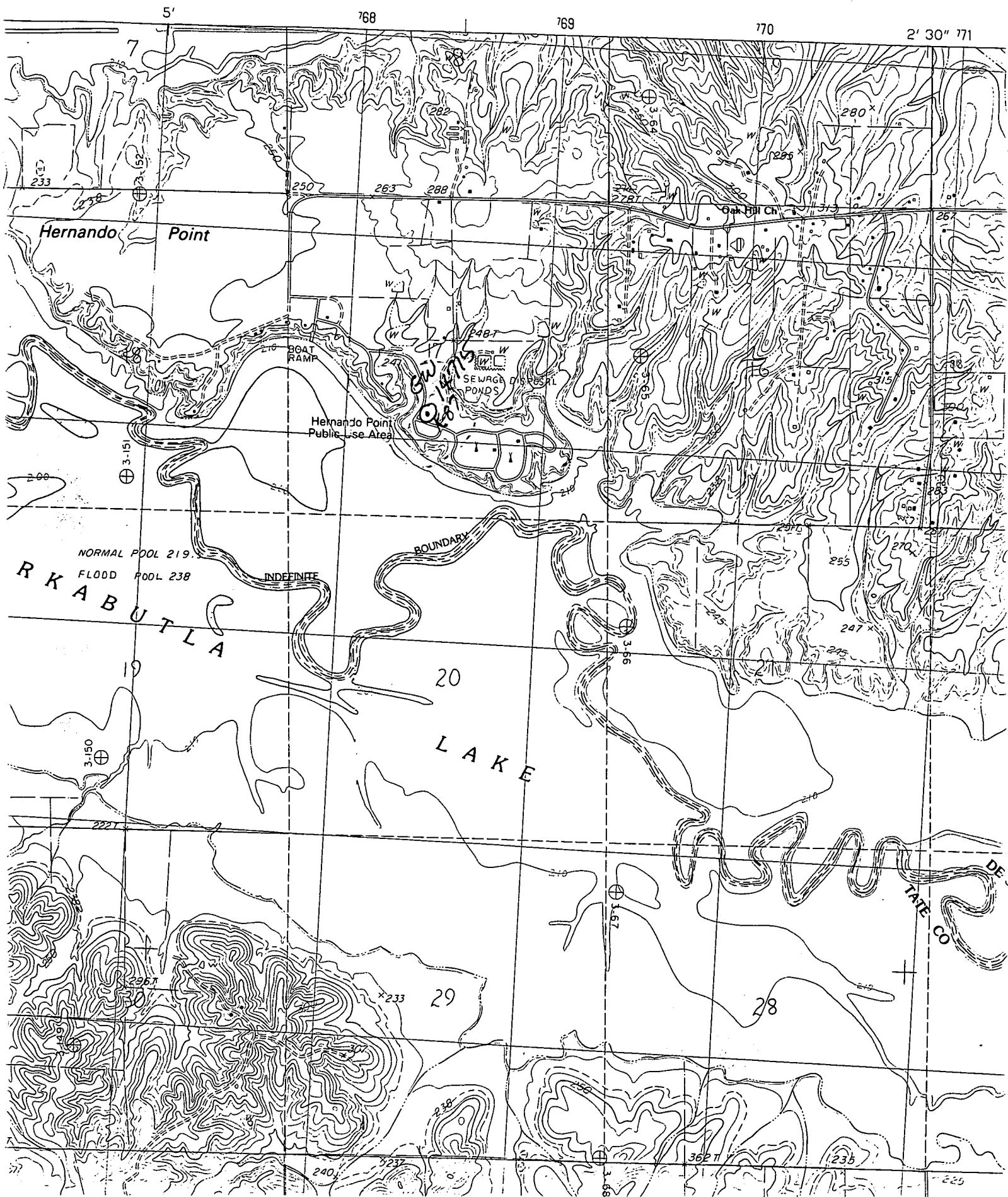
CASING DIA: \_\_\_\_\_ PUMP TYPE & SIZE: \_\_\_\_\_

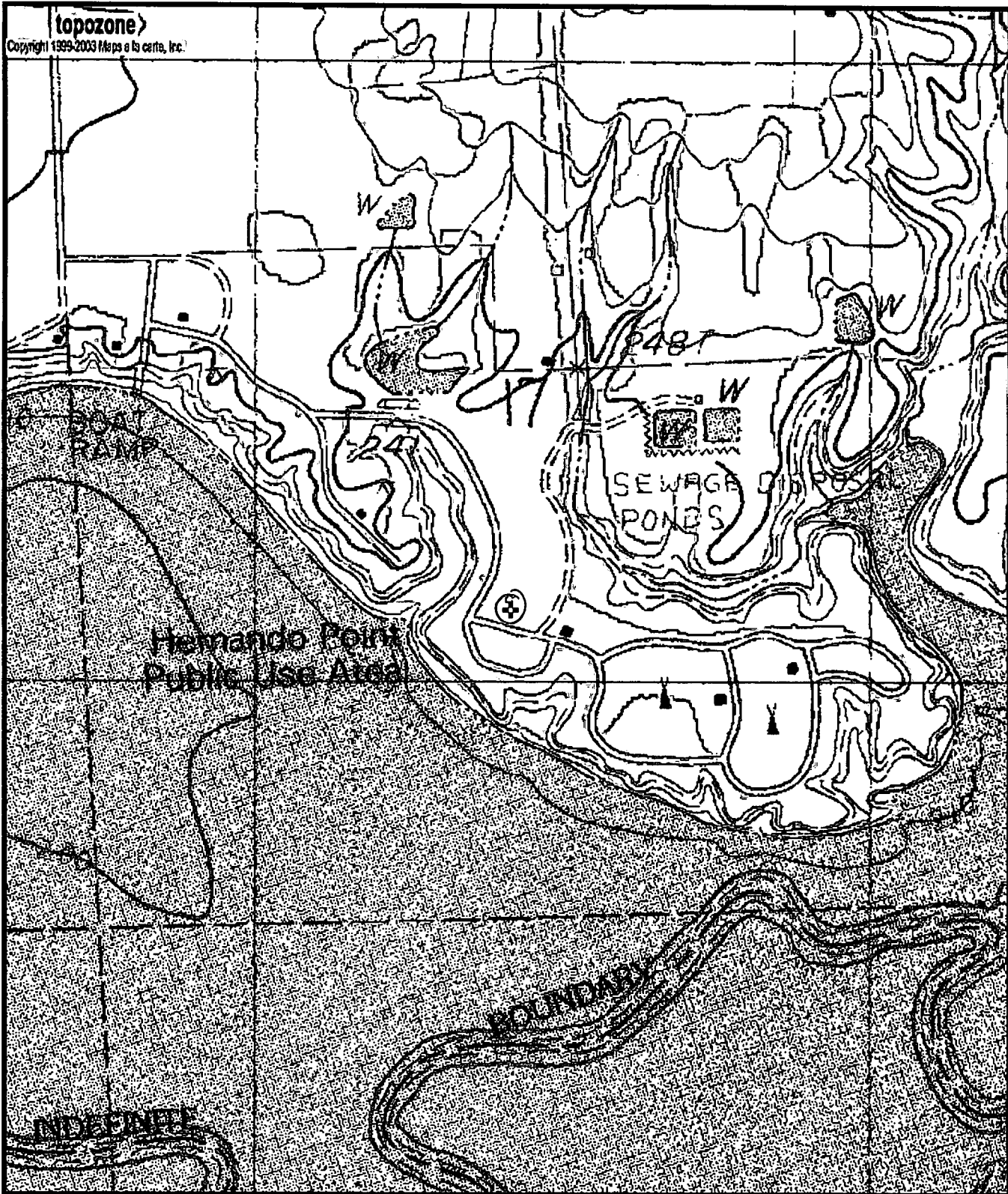
GPS FIELD LOCATION: LAT. ~~34.43772N~~ LONG. ~~90.04148W~~  
34° 43' 984" 90° 04' 082"

GPS CORRECTED LOCATION: LAT. 34.73291684 LONG. 90.06871512

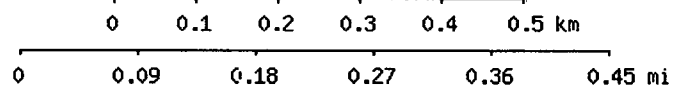
REMARKS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# ARKABUTLA EAST QUAD





0170041-01  
6W14715  
K87



Map center is 34° 43' 58"N, 90° 04' 07"W (WGS84/NAD83)  
**Arkabutla East** quadrangle  
 Projection is UTM Zone 15 NAD83 Datum

