

STAD 345813089571201

GW 4128 DON # 170017-02
Now DON # 170018-08
C4

FORM 9-1642
(1-68)

Well No. _____

WELL SCHEDULE

Elog # 18

U. S. DEPT. OF THE INTERIOR

GEOLOGICAL SURVEY

WATER RESOURCES DIVISION

MASTER CARD

Now Part of City of Southhaven System

Record by WTR Source of data Yenn. Geo. survey Date 6/70 Map Pleasant Hill

State 7 28 County (or town) Desota 17

Latitude: 34^{deg} 58^{min} 13^{sec} N Longitude: 08^{degrees} 9^{min} 57^{sec} 12 Sequential number: 1

Lat-long accuracy: 2⁰ 1⁰ 7⁰ Sec 28^N SW SW NW

Local well number: 0004DB2801S07W Other number: 801311

Local use: 002018 Owner or name: _____

Owner or name: PLUM POINT WEA Address: City of Southhaven

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

Use of Air cond, Bottling, Comm, Dewater, Power, Fire, Dom, Irr, Med, Ind, P S, Rec, water: _____

Stock, Instit, Unused, Repressure, Recharge, Desal-P S, Desal-other, Other AB

Use of Anode, Drain, Seismic, Heat Res, Obs, Oil-gas, Recharge, Test, Unused, Withdraw, Waste, Destroyed. well: W

DATA AVAILABLE: Well data Freq. W/L meas.: Field aquifer char.

Hyd. lab. data: _____

Qual. water data; type: _____

Freq. sampling: _____ Pumpage inventory: yes no, period: _____

Aperture cards: _____

Log data: Elog # -373' SPRT

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD Depth well: _____ ft 351 Meas. rept accuracy 3

Depth cased: _____ ft 311 Casing type: _____; Diam. 8x6 in 8

Finish: porous concrete, gravel w. (perf.), gravel w. (screen), horiz. gallery, open end, (P), (S), (T), (W), (X), (Z) 5

Method: air bored, cable, dug, hyd jetted, air reverse, percussion, rotary, (A), (B), (C), (D), (H), (J), (P), (R), (T), (V), (W), (Z) H

Date Drilled: 970 Pump intake setting: _____ ft _____

Driller: Robert Ratliff

Lift (type): _____ name (L), (M), (N), (P), (R), (S), (T), (Z) Deep 7 Shallow 0

Power (type): _____ nat LP 30 Trans. or meter no:

Descrip. MP 73 ft above below LSD, Alt. MP _____

Alt. LSD: 380 Accuracy: (source) T 3

Water Level: _____ ft above below MP; Ft below LSD 160 Accuracy: _____ D

Date meas: 670 Yield: _____ gpm 280 Method determined 01

Drawdown: _____ ft 42 Accuracy: _____ Pumping period _____ hrs _____

QUALITY OF WATER DATA: Iron _____ Sulfate _____ Chloride _____ Hard. _____

Sp. Conduct _____ K x 10 6 Temp. _____ °F _____ Date sampled _____

Taste, color, etc. _____

TRANSMITTED FOR ADP

Well No.

C4

Well No. C4

Latitude-longitude _____
N
S
d m s d m s

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD Physiographic Province: 03 Section: _____

Drainage Basin: D 16R Subbasin: _____

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

MAJOR AQUIFER: system _____ series TE aquifer, formation, group SS

Lithology: US Origin: 2 Aquifer Thickness: _____ ft

Length of well open to: _____ ft Depth to top of: _____ 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: _____

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/ft² Spec cap: _____ gpm/ft; Number of geologic cards: _____

270' E of Tchulahoma Rd, across Rd from "Cloud Nine", Ranch.

From 9/23/71 J.E. Lauder date ENGR air line broken.

40' of 55 6"

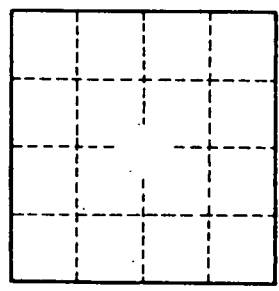
21' of 6"

Pump level 202 @ 280 gpm 25 ft

290' of 8'

311

See well C6 for location.



Well No. C4

Desota
C4
5-12-71
2W 04120

CODED

FLOG #18

MISSISSIPPI
 BOARD OF WATER COMMISSIONERS
 416 North State Street
 Jackson, Mississippi 39201

FEB 2 1971
 Gled

WATER WELL DRILLERS LOG

12 May 1971 date well completed
 ROBERT E RALLIFF Co firm name
 Desota county well located

| LANDOWNER: <u>Plum Point Water Association</u> | description of formations encountered | from | to |
|---|---------------------------------------|------------|------------|
| <u>Horn Lake Miss</u> (mailing address) | <u>RED CLAY</u> | <u>0</u> | <u>21</u> |
| | <u>SAND + GRAVEL</u> | <u>21</u> | <u>60</u> |
| | <u>Blue clay</u> | <u>60</u> | <u>120</u> |
| WELL LOCATION: | <u>FINE SAND + CLAY</u> | <u>120</u> | <u>160</u> |
| sec. <u>28</u> T. <u>1</u> S. R. <u>2</u> W. | <u>FINE SAND</u> | <u>160</u> | <u>220</u> |
| <u>4</u> miles <u>E</u> of <u>Horn Lake</u> | <u>FINE SAND AND SAND CLAY</u> | <u>220</u> | <u>260</u> |
| (distance) (direction) (nearest town) | <u>COARSE SAND</u> | <u>260</u> | <u>336</u> |
| WELL PURPOSE: <u>INDUSTRIAL</u> (home, irrigation, municipal, industrial) | <u>Blue clay</u> | <u>336</u> | <u>356</u> |
| | <u>SAND</u> | <u>356</u> | <u>374</u> |
| WELL COMPLETION DATA: | | | |
| (1) diameter (inches) <u>8"</u> | | | |
| (2) total depth (feet) <u>336'</u> | | | |
| (3) static water level (feet) <u>160</u> below top of ground. | | | |
| (4) casing <u>Coated STEEL</u> <u>290'</u> (material) (depth) | | | |
| <u>8" X 6"</u> if telescope see back. (size) | | | |
| (5) screen <u>40'</u> <u>296'</u> (length) (depth to top) | | | |
| <u>6"</u> <u>Stainless Steel</u> (size) (material) | | | |
| (6) pump <u>30</u> <u>280</u> (HP) (yield gpm) | | | |
| <u>Electric</u> (type power) | | | |
| (7) electric log <u>YES</u> (yes or no) | | | |
| <u>USGS MEMPHIS</u> (organization running log) | | | |
| (8) how well bottom plugged <u>6" B.P.O.</u> | | | |
| DRILLERS REMARKS: | | | |

CODED

**APPLICATION FOR PERMIT TO DIVERT OR WITHDRAW
FOR BENEFICIAL 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) 964-5202

RECEIVED

JUN 18 1997

This box is for office use only.

FORM OLWR-AP-2 (REV. 9/94)

| | | | |
|----------------------------|----------------------------|--------------------|--|
| Issued: <u>11-24-87</u> | Expires: <u>10-28-2007</u> | Fee Paid: <u>X</u> | Permit No. <u>Dept. of Environmental Quality</u> |
| Lat. <u>34-58-12</u> | Long. <u>89-57-12</u> | Elev. <u>370</u> | USGS No. <u>Office of Land & Water Resources</u> |
| Quad. <u>PLEASANT HILL</u> | ASCS Farm No. | STAC. | MSDOH No. |
| Aquifer: <u>SPRT</u> | Tract No. | | Basin No. |
| Remarks: | | | Dam Inv. No. |

THIS APPLICATION IS FOR (Circle one): RENEWAL PERMIT NO. MS-GW-04128

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 (eg. Church, School) 7) Commercial (eg. Hotel, Casino, Restaurant) 8) Fire Protection 9) Livestock 10) Flood Protection 11) Other: _____

SECTION A (to be completed by ALL APPLICANTS)

LANDOWNER: CITY OF SOUTHAVEN 64-064-2403
(Name) (SSN or Tax ID No.)

P.O. BOX 425
(Address)

SOUTHAVEN MS. 38637 (601) 393-5931
(City) (State & Zip) (Telephone No.)

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

(Name) (SSN or Tax ID No.)

(Address)

(City) (State & Zip) (Telephone)

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

NW-SW 1/4 of the NE-NW 1/4 of Section 28, Township 015, Range 07W, County DE SOTO

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 number. _____

SECTION B (to be completed for GROUNDWATER SOURCE)

1. AQUIFER: SPARTA SAND MISSISSIPPI DEPARTMENT OF HEALTH NO.: 170018-08

2. Proposed work will begin on _____, 19____, and will be completed by _____, 19____

If well has already been drilled; when was well completed (date)? 5-12, 19 71. Under whose name was well originally drilled (if known)? PLUM POINT WATER

3. Description of proposed or completed well:

(a) DEPTH OF WELL: 351 feet. DRILLER: ROBERT E. RATLIFF

(b) SURFACE CASING: Length 290 feet; Diameter 8 inches; Type STEEL COATED

(c) SCREEN: Length 40 feet; Diameter 6 inches; Type STAINLESS STEEL

(d) PUMP: Type VERTICAL TURBINE; Size 8; Capacity 280 gallons per minute; Setting depth 202 feet

(e) POWER UNIT: Type ELECTRIC; Size 30 horsepower

4. PERMITTED VOLUME :

(a) _____ acre-feet per year at a maximum rate of _____ gallons per minute

(b) 0.10.15 million gallons per day at a maximum rate of 250 gallons per minute

01 88
8-27-97

(CONTINUED ON BACK)

250

SECTION C (to be completed for SURFACE WATER SOURCE)

1. Source of water is from _____ which drains into _____
which drains into _____
(major stream or river)
2. Discription of pump/diversion works:
Pump (size & type): _____ Power Unit (size & type): _____
Lift: _____ feet Maximum capacity: _____ 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 Sorghum _____; 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 22 455 or (b) The number of connections is 8317
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?

| | | | | | | | |
|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|
| <u>3.4 MGD</u> | <u>2000</u> | <u>3.6 MGD</u> | <u>2005</u> | <u>3.9 MGD</u> | <u>2010</u> | <u>4.2 MGD</u> | <u>2020</u> |
| (Volume) | (Year) | (Volume) | (Year) | (Volume) | (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:** THIS WELL HAS BEEN INCORPORATED INTO THE CITY SYSTEM

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

J.A. CATES, MAYOR
(Name)
P.O. BOX 425
(Address)
SOUTHAVEN, MS. 38671
(City, State, Zip)
601-393-5931
(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.

J. A. Cates
(Signature)

Subscribed and sworn to before me this 21st day of May, 1997, at Southaven County of Desoto
 NOTARY PUBLIC STATE OF MISSISSIPPI AT LARGE.
 MY COMMISSION EXPIRES: Apr. 6, 2001.
 My commission expires BONDED THRU NOTARY PUBLIC UNDERWRITERS
Henry W. Bennett Notary Public.

DEPARTMENT OF ENVIRONMENTAL QUALITY - OLWR
PUBLIC SUPPLY WELLS PROJECT

GPS LOG

USER NAME(S): SHB+PEG LAR/DRE DATE: 7-24-96
7/27/96
UNIT DEQ #: 84090 FILE #: 80727200
8072414C
HEALTH DEPT. #: 170017 -02 ELEV. 362
USGS #: 486 C-4 OLWR #: MS-GW-04128

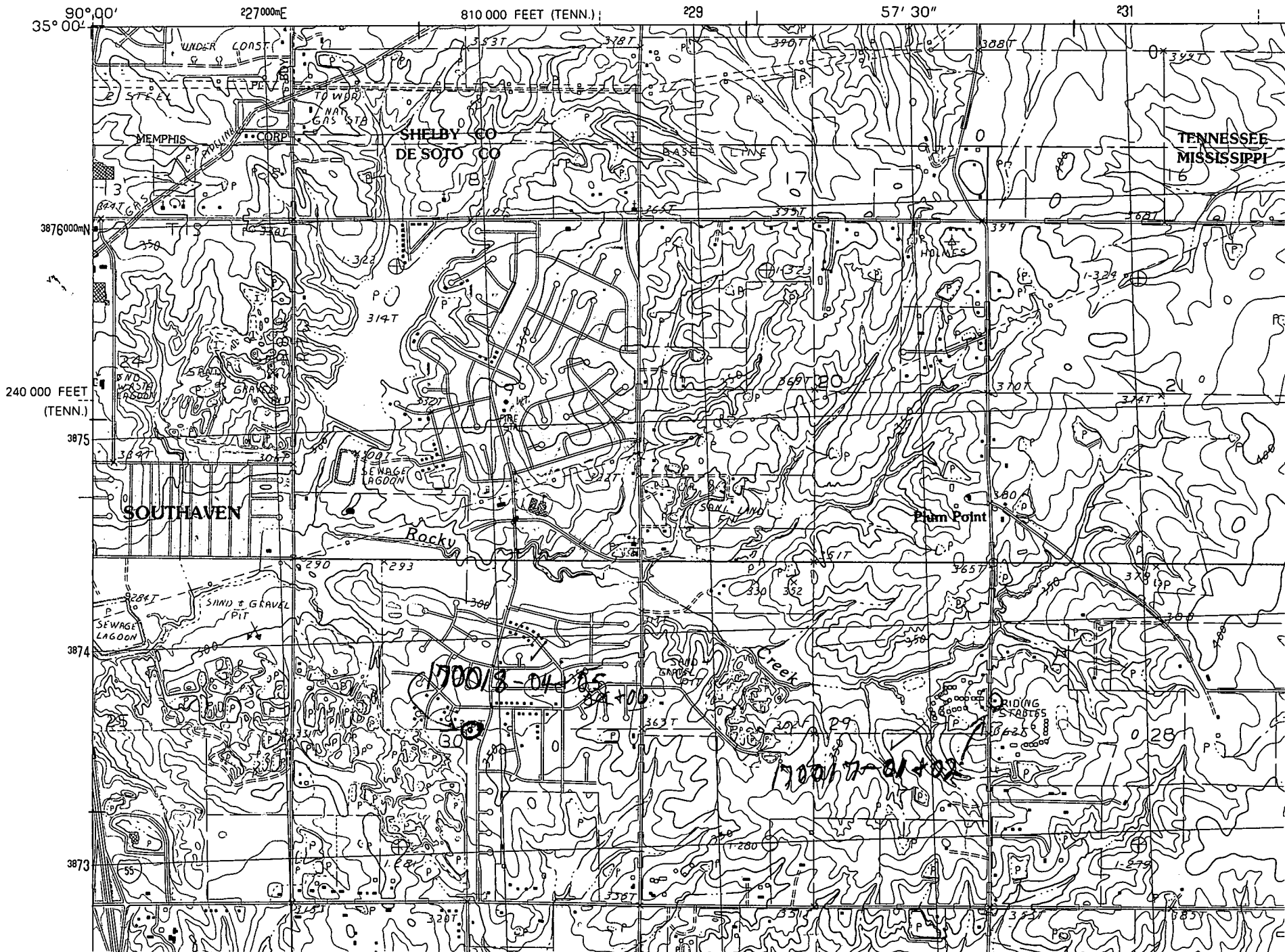
OWNER: CITY SOUTH HAVEN PLUM POINT
LOCATION: SW/SW/NW S 28 T 15 R 1W COUNTY: DESO
Pleasant Hill Quad
LOCATION DESCRIPTION: FAR ^{East} END OF WATER PLANT YARD

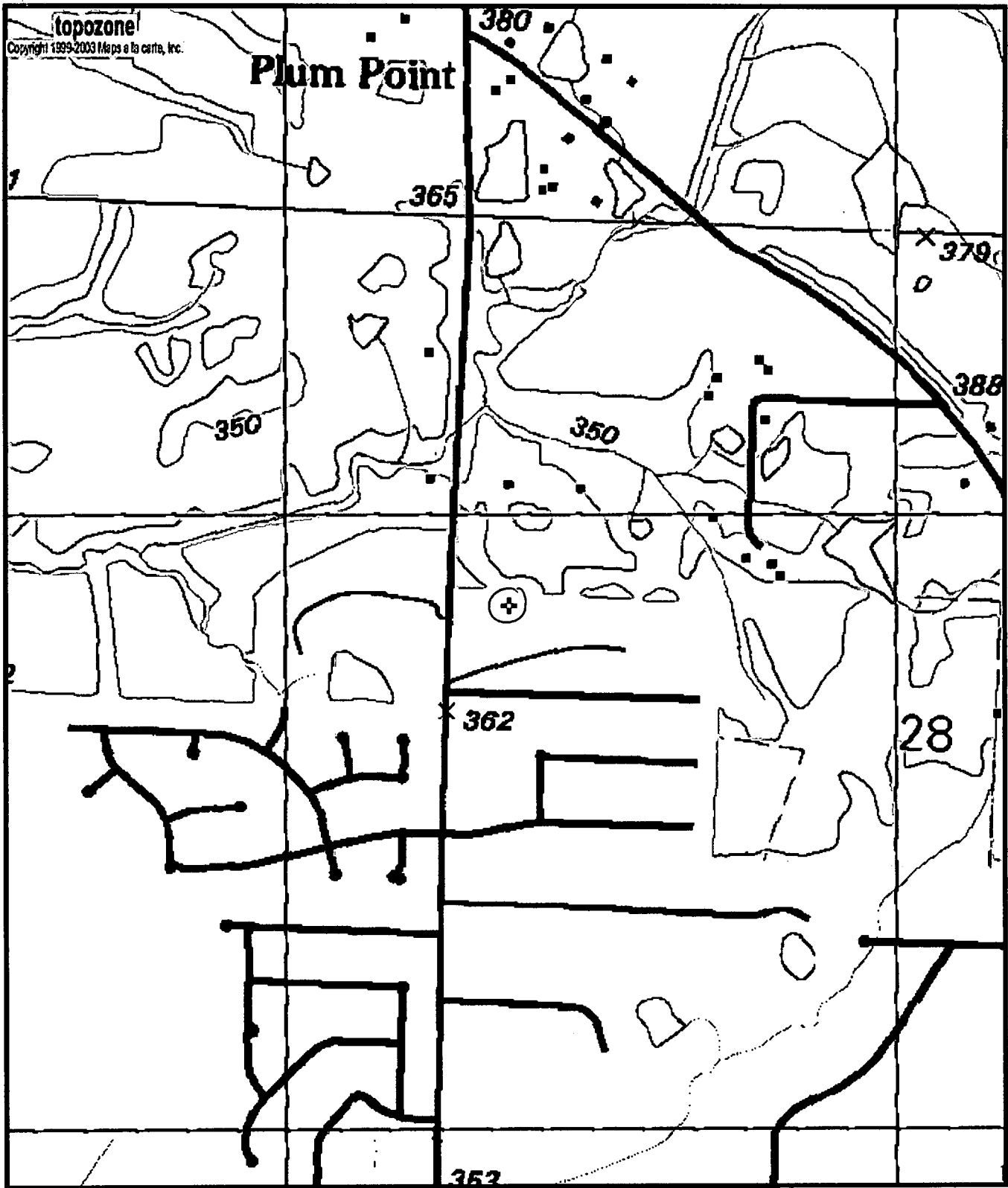
CASING DIA: 12" PUMP TYPE & SIZE: TURBINE 30 HP

GPS FIELD LOCATION: LAT. 34.583014 LONG. 89.572176
34° 58' 16.2" 89° 57' 12.9"
GPS CORRECTED LOCATION: LAT. 34.97143930 LONG. 89.95340041

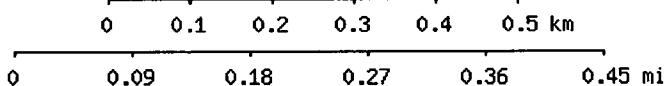
REMARKS: TCHUAHOMA Rd. NORTH .7 MI. FROM GOODMAN Rd.
PLANT RIGHT.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY





0170018-05
6604128
CA



Map center is 34° 58' 17"N, 89° 57' 12"W (WGS84/NAD83)
Pleasant Hill quadrangle
 Projection is UTM Zone 16 NAD83 Datum

