GW 2509 DOH # 170013-01

FORM 9-1642
(1-68)

Well No. D22 PUNCHED

TRANSMITTED FOR ADP.

WELL SCHEDULE

U. S. DEPT. OF THE INTERIOR — GEOLOGICAL SURVEY — WATER RESOURCES DIVISION

DEC 10 1974

MASTER CARD

Record by B.D. Source of data BOWC Date 9-71 Map

State 28 County (or town) DeSoto 17

Latitude: 345910 N Longitude: 0895130 Sequential number: 1

Lat-long accuracy: 3 T. 1 S R 6 W Sec 20, SW, NE, NW

B & M

Local well number: D022BB20015064W Other number:

Local use: 064 Owner or name: City of Olive Branch

Owner or name: MINERAL WELLS Address: Mineral Wells W.A.

DEC 10 1974

Ownership: (C) County, (F) Fed Gov't, (M) City, (N) Corp or Co, (P) Private, (S) State Agency, (W) Water Dist — N

Use of water: (A) Air cond, (B) Bottling, (C) Comm, (D) Dewater, (E) Power, (F) Fire, (H) Dom, (I) Irr, (M) Med, (N) Ind, (P) P S, (R) Rec, (S) Stock, (T) Instit, (U) Unused, (V) Repressure, (W) Recharge, (X) Desal-P S, (Y) Desal-other, (Z) Other SB — ~~H~~ ~~U~~ P

Use of well: (A) Anode, (D) Drain, (G) Seismic, (H) Heat Res, (O) Obs, (P) Oil-gas, (R) Recharge, (T) Test, (U) Unused, (W) Withdraw, (X) Waste, (Z) Destroyed. ~~Z~~ ~~U~~ W

MT

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

Hyd. lab. data: [ ]

Qual. water data; type: [ ]

Freq. sampling: [ ] Pumpage inventory: yes no, period: [ ]

Aperture cards: yes [ ]

Log data: SPRT D

WELL-DESCRIPTION CARD

SAME AS ON MASTER CARD

Depth well: 272 ft Meas. rept 3 accuracy

Depth cased (first perf.) 237 ft Casing type: ; Diam. 8X6 in 8

Finish: (C) porous concrete, (F) gravel w. (perf.), (G) gravel w. (screen), (H) horiz. gallery, (O) open end, (P) perf., (S) screen, (T) sd. pt., (W) shored, (X) open hole, (Z) other — S

Method Drilled: (A) air rot, (B) bored, (C) cable, (D) dug, (H) hyd rot., (J) jetted, (P) air percussion, (R) reverse rotary, (T) trenching, (V) driven, (W) drive wash, (Z) other — H

Date Drilled: 965 Pump intake setting: ft

Driller: Layne-Central (name) (address)

Lift (type): (A) air, (B) bucket, (C) cent, (J) jet, (L) multiple (cent.), (M) multiple (turb.), (N) none, (P) piston, (R) rot, (S) submerg, (T) turb, (Z) other — T Deep Shallow

Power (type): diesel, elec, nat gas, gasoline, hand, LP gas, wind; H.P. — V Trans. or meter no.

Descrip. MP 340 ft above below LSD, Alt. MP

Alt. LSD: ~~360~~ Accuracy: (source) 3

Water Level 90 ft above below MP; Ft ~~above~~ below LSD 90 Accuracy: D

Date meas: 965 Yield: 250 gpm Method determined

Drawdown: ft Accuracy: Pumping period hrs

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

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

Taste, color, etc.

Well No. D22

Well No. D 22

Latitude-longitude N S d m s d m s

HYDROGEOLOGIC CARD

SAME AS ON MASTER CARD (1–19)

Physiographic Province: _____ 03 (20–21) Section: _____

_____ 1 (22) Drainage Basin: _____ 16R (23–25) Subbasin: _____ (26)

Topo of well site: (D) depression, (C) stream channel, (E) dunes, (F) flat, (H) hilltop, (K) sink, (L) swamp, (Ø) offshore, (P) pediment, (S) hillside, (T) terrace, (U) undulating, (V) valley flat _____ (27)

MAJOR AQUIFER: _____ system, _____ series TE (28–29) _____ aquifer, formation, group SS (30–31)

Lithology: _____ US (32–33) Origin: _____ 2 (34) Aquifer Thickness: 67 ft

(35–37) Length of well open to: _____ ft 35 (38–40) Depth to top of: _____ ft 205 (41–43)

MINOR AQUIFER: _____ system, _____ series (44–45) _____ aquifer, formation, group (46–47)

Lithology: _____ (48–49) Origin: _____ (50) Aquifer Thickness: _____ ft

(51–53) Length of well open to: _____ ft (54–56) Depth to top of: _____ ft (57–59)

Intervals Screened: 6"

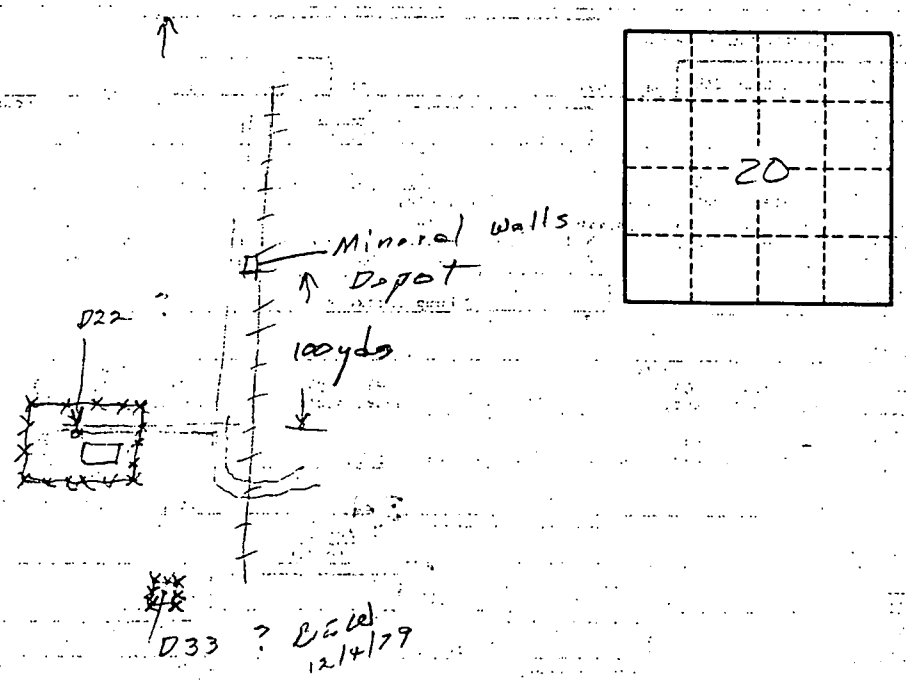
Depth to consolidated rock: _____ ft (60–63) Source of data: _____ (64)

Depth to basement: _____ ft (65–68) Source of data: _____ (69)

Surficial material: _____ (70–71) Infiltration characteristics: _____ (72)

Coefficient Trans: _____ gpd/ft (73–75) Coefficient Storage: _____ (76–78)

Coefficient Perm: _____ gpd/ft^2; Spec cap: _____ gpm/ft; Number of geologic cards: _____ (79)



Well No. D22

GPO 937-142

DeSoto
D22
9-65 GW 0258

MISSISSIPPI BOARD OF WATER COMMISSIONERS

WATER WELL DRILLERS LOG CODED

Date: 9-1-, 1965, Driller: Layne-Central Co. (Name) County DeSoto

Town of
(1) Owner of Land: Mineral Wells (Name)

Mineral Wells, Mississippi (Address)

(2) Location: ____¼, ____¼, Sec. ____ T ____ R ____,

____ miles (distance) ____ (direction), of ____ (Nearest Town),

(3) Topography: ____ (Hilly) (Flat) (Level)

(4) Purpose of Well: Municipal (Domestic Irrigation Municipal, Industrial, Other)

Information upon completion of well:

(1) Diameter 8" inches.

(2) Total Depth 272 feet.

(3) Water Level 90 feet below top of ground.

(4) Cased to 237', Size 8",

(5) Screen: Size 6", Length 35' 7".

(6) Were any formations sealed against pollution?

x yes, ____ no.

If YES depth of formation 237',

Why required

Drillers Remarks: ____

Description & Color of Materials Sand, Clay, Red Clay, Shell, etc.	Thickness Feet	Depth Feet
clay	15	
fine gravel sand	10	25
tough white clay		90
sandy clay		161
soft sandy clay	20	181
soft sandy clay	24	205
soft muddy sand	22	227
soft muddy sand	13	240
pk sand	7	247
pk sand	3	250
pk sand	22	272

CODED

MISS. BOARD OF WATER COMM.

(Use Back Side)

Well No.

Mail this copy to Board of Water Commissioners 429 Miss. St. Jackson, Miss

APPLICATION FOR PERMIT TO DIVERT OR WITHDRAW FOR BENEFICIAL USE THE PUBLIC WATERS OF THE STATE OF MISSISSIPPI

NOV 27 1995

Dept. of Environmental Quality
Office of Land & Water Resources

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. 7-23-96 AGN.

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

Issued: 5-27-96	Expires: 5-27-2006	Fee Paid:	Permit No.
Lat. 34-59-21	Long. 89-51-37	Elev. 340	USGS No.
Quad Olive Branch	ASCS Farm No.	STAC.	MSDOH No.
Aquifer: SPRT	Tract No.		Basin No.
Remarks:			Dam Inv. No.

THIS APPLICATION IS FOR (Circle one): **NEW PERMIT** (RENEWAL) - **PERMIT NO.** MS-GW-2509

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 OLIVE BRANCH (Name) 64-6001544 (SSN or Tax ID No.)

9189 PIGEON ROOST (Address)

OLIVE BRANCH, MS. 38654-2499 (City) (State & Zip) (601) 895 - 4000 (Telephone No.)

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

_____ (Name) _____ (SSN or Tax ID No.)

Mail sent

_____ (Address)

_____ (City) (State & Zip) ( ) - (Telephone)

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

N E 1/4 of the N W 1/4 of Section 20, Township 01S, Range 06W, County DESOTO

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. 1 OTHER CITY WELL

SECTION B (to be completed for GROUNDWATER SOURCE)

1. **AQUIFER:** SPARTA **MISSISSIPPI DEPARTMENT OF HEALTH NO.:** 170013
2. Proposed work will begin on _____, 19____, and will be completed by _____, 19____.
   If well has already been drilled, when was well completed (date)? SEPT 1, 19 65. Under whose name was well originally drilled (if known)? MINERAL WELLS WATER ASSOCIATION
3. Description of proposed or completed well:
   (a) DEPTH OF WELL: 279 feet. DRILLER: LAYNE CENTRAL
   (b) SURFACE CASING: Length 243 feet; Diameter 12 inches; Type STEEL
   (c) SCREEN: Length 36 feet; Diameter 6 inches; Type STAINLESS STEEL
   (d) PUMP: Type SUBMERSIBLE; Size 20 HP; Capacity 250 gallons per minute; Setting depth 140 feet.
   (e) POWER UNIT: Type AC; Size _____ horsepower
4. **PERMITTED VOLUME:**
   (a) _____ acre-feet per year at a maximum rate of _____ gallons per minute
   (b) 0.4 million gallons per day at a maximum rate of 250 gallons per minute

(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 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 550
   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? 20,000 (Volume) 1996 (Year); 25,000 (Volume) 2001 (Year); 30,000 (Volume) 2006 (Year); 35,000 (Volume) 2011 (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.

DON SAPPINGTON
(Name)

9189 PIGEON ROOST
(Address)

OLIVE BRANCH, MS. 38654-2499
(City, State, Zip)

601-895-4000
(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.

Don Sappington
(Signature)

Subscribed and sworn to before me this 6th day of November, 19 95, at Olive Branch County of DeSoto

My commission expires My Commission Expires April 13, 1998; Sybil Barry Notary Public.

DEPARTMENT OF ENVIRONMENTAL QUALITY - OLWR

PUBLIC SUPPLY WELLS PROJECT

GPS LOG

USER NAME(S): SHB + PEG ~~LAK / ORR~~ DATE: 7-24-96 ~~7/ 94~~

UNIT DEQ #: 84090 FILE #: ~~B07 16C~~ B072420C

HEALTH DEPT. #: 170013-01 ELEV. 330

USGS #: 471 D-22 OLWR #: MS-GW-02709

OWNER: Mineral Wells

LOCATION: SW / NE / NW S 20 T 1S R 6W COUNTY: DeSoto

Olive Branch Quad.

LOCATION DESCRIPTION: South of White House 150 West of R&R Track.

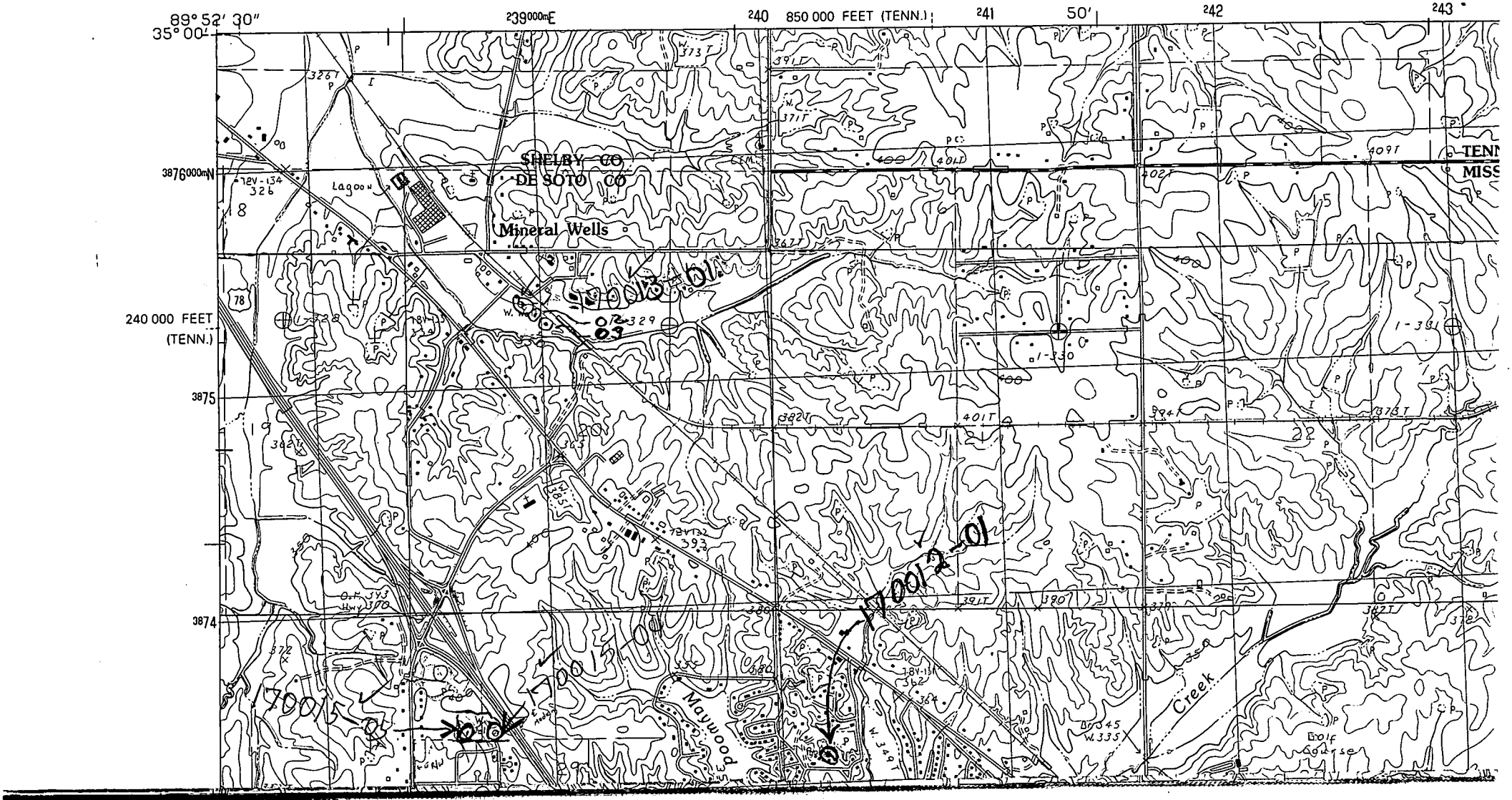
CASING DIA: 8" PUMP TYPE & SIZE: Turbine / 20

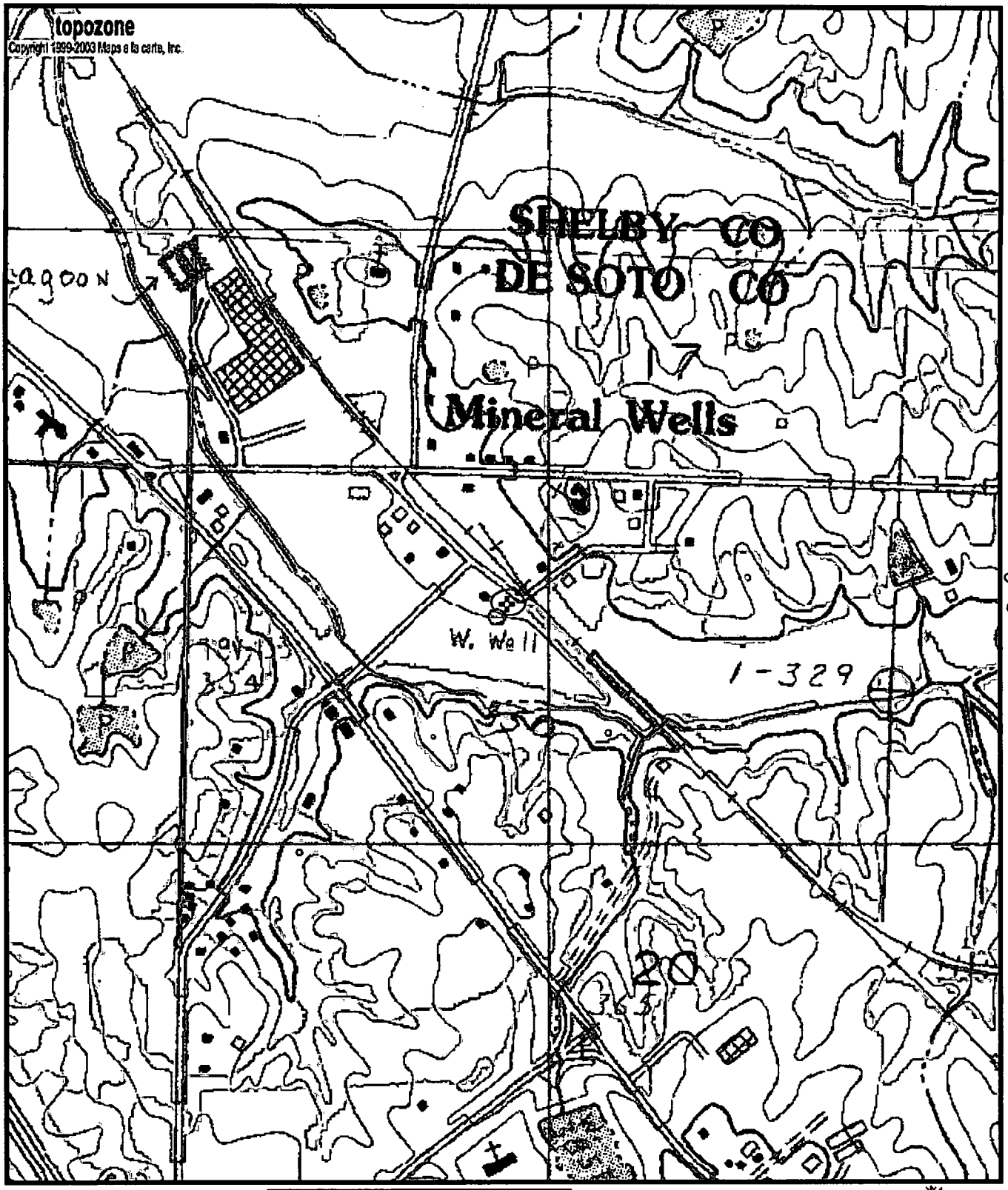
GPS FIELD LOCATION: LAT. ~~34-59-361 N~~ 34° 59' 21.3" LONG. ~~89-51-622 W~~ 89° 51' 3 "

GPS CORRECTED LOCATION: LAT. 34.98946641 LONG. 89.86030190

REMARKS: Water Plant located 40' S. of white house, West side of Tracks .2 mi. S. of Mineral Wells (State Line) N. of Old Hwy 78. .4 miles from Tenn State Line.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY





0170013-01
GW02509
D22

0 0.1 0.2 0.3 0.4 0.5 km
0 0.09 0.18 0.27 0.36 0.45 mi

Map center is 34° 59' 22"N, 89° 51' 37"W (WGS84/NAD83)
Olive Branch quadrangle
Projection is UTM Zone 16 NAD83 Datum

M=-0.128
G=-1.642