

Coded By Q 16/92
Checked By File 12-27-92
Entered By 21978
Date 12-2-92
U.S. GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
MISSISSIPPI DISTRICT

E-Log No. 58
County DE SOTO
Agency

Well No. D69

WELL RECORD

Agency Code U S G S Site Id 1335711200950115011 Project No. 54

Station Name 12-D01691 OLIVE BRANCH Latitude 9-33571121 Longitude 104089501151

Lat/Long Ac. 11 S F T M Dist 6-28 State 7-28 County 8-033 Land Net 13-NW 33 T 01 S R 10 16 W

Location Map 14-OLIVE BR Altitude 16-408 Met/Meas. 17-A L M Accuracy 18-15 Hydrologic Unit 20-081031012014

Agency Use 803-A I O Date Inventoried 711 Station Type 4 Data Type 804

Instru. 805 Remarks 806 Relia. 3-C L M U 2-W X

Date of Construction 21-07-11-51-1992 Well Use 23-W Water Use 24-P Primary Aquifer 714-124 SPORT Hole Depth 27-1178 MU

Well Depth 28-369 Water Level 30-160 Water Level Date 31-07-11-51-1992 Method 34 Status 37 Source 33-D

CONSTRUCTION DATA

R=58 T=A 723#1 Construction Date 60-07-11-51-1992 Contractor 63-0614 Name Layne Method 65-H Finish 66-G

CONSTRUCTION CASING DATA

| | | | | | | |
|------|-----|-------|------|---------|---------|--------|
| R=76 | T=A | 725#1 | 59#1 | 77-101 | 78-1299 | 79-116 |
| R=76 | T=A | 725#2 | 59#1 | 77-2114 | 78-3014 | 79-101 |

CONSTRUCTION OPENINGS DATA

| | | | | | | | | | |
|------|-----|-------|------|---------|---------|---------|------|----|----|
| R=82 | T=A | 726#1 | 59#1 | 83-3014 | 84-1369 | 87-1101 | 85-S | 89 | 88 |
| R=82 | T=A | 726#2 | 59#1 | 83 | 84 | 87 | 85 | 89 | 88 |

CONSTRUCTION LIFT DATA

R=42 T=A 254#1 Lift Type 43 Date 38-07-11-51-1992 Intake 44

Power 45-E H.P. 46-175 Serial No. 49

MISCELLANEOUS OWNER DATA

R=158 T=A 718#1 159-07-11-51-1992 Owner Name 161-OLIVE BRANCH

MISCELLANEOUS OTHER ID DATA

R=189 T=A 736#1 E-Log No. 190-058 Assigner 191-M I S S I D I S T

MISCELLANEOUS QW DATA

| | | | | | | | | | | |
|-------|-----|-------|---------------------|----------------------------|-----------------|------------------------|---------|-----------|-------|----------------|
| R=192 | T=A | 738#1 | Date of Measurement | 193# / / . | Aquifer Sampled | 195# . | Temp | 196#00010 | Value | 197# . |
| R=192 | T=A | 738#2 | Date of Measurement | 193# / / . | Aquifer Sampled | 195# . | Sp Cond | 196#00095 | Value | 197# . |
| R=192 | T=A | 738#3 | Date of Measurement | 193# / / . | Aquifer Sampled | 195# . | pH | 196#00400 | Value | 197# . |

MISCELLANEOUS LOGS DATA

| | | | | | | | | |
|-------|-----|-------|----------|-------|------------|---------------|-----------|--------------|
| R=198 | T=A | 739#1 | Log Type | 199#E | Req. Depth | 200# 20 . | End Depth | 201# 478 . |
| R=198 | T=A | 739#1 | Log Type | 199#D | Req. Depth | 200# 10 . | End Depth | 201# 475 . |

MISCELLANEOUS NETWORK DATA $Q = Q_w$ WL WD *

| | | | | | | | | | | | |
|-------|-----|-------|-----------|--------------|----------|--------------|---------------|----------------|----------------|----------|----------|
| R=114 | T=A | 730#1 | Beg. Year | 115# 9 . | End Year | 116# 9 . | Agency Source | 120=A | 117# . | Freq. | 118# . |
| R=121 | T=A | 730#2 | Beg. Year | 115# 9 . | End Year | 116# 9 . | Agency Source | 117# . | Freq. | 118# . | |

MISCELLANEOUS REMARKS DATA

| | | | | | | |
|-------|-----|-------|-----------------|----------------------------|---------|------------------------|
| R=183 | T=A | 311#1 | Date of Remarks | 184# / / . | Remarks | 185# . |
|-------|-----|-------|-----------------|----------------------------|---------|------------------------|

DISCHARGE DATA

| | | | | | | | | | | | |
|-------|-----|-----------|-------|------|---------------------|------|---------|-----------|-----------------|--------------|----------------|
| R=146 | T=A | Pump/Flow | 147#1 | Date | 148# 07 / 15 / 1992 | Type | 703#(P) | Discharge | 150# 7150 . | Sp. Capacity | 272# . |
|-------|-----|-----------|-------|------|---------------------|------|---------|-----------|-----------------|--------------|----------------|

GEOHYDROLOGIC DATA

| | | | | | | | | | |
|------|-----|-------|-----------|----------------|------------|----------------|---------|-----------------|-------|
| R=90 | T=A | 721#1 | Depth Top | 91# 1216 . | Depth Bot. | 92# 1369 . | Unit Id | 93# 1121451PRTI | 304=P |
|------|-----|-------|-----------|----------------|------------|----------------|---------|-----------------|-------|

HYDRAULIC DATA

| | | | | | |
|------|-----|-------|-------------|------------------------|------------|
| R=98 | T=A | 790#1 | Unit Tested | 100# . | 103# . |
|------|-----|-------|-------------|------------------------|------------|

| | | |
|-------------------------|-----|-----|
| Red Clay | 25 | 25 |
| Red Sand | 48 | 22 |
| Boulders | 53 | 5 |
| Rock | 54 | 1 |
| Clay | 142 | 88 |
| Sandy Clay | 192 | 50 |
| Sand | 205 | 13 |
| Sand & Fine Streaks of | | |
| Clay | 264 | 59 |
| Sand | 369 | 3 |
| Clay | 372 | 3 |
| Sand & Clay Half & Half | 475 | 103 |

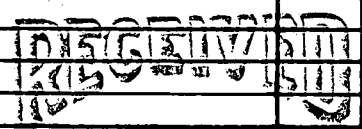
DeSoto
MS 601 14 104
D 69

MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
 Bureau of Land and Water Resources
 Southport Mall
 P.O. Box 10631
 Jackson, Mississippi 39209
WATER WELL DRILLERS LOG

Coded

July 15 19 92 Layne-Central DeSoto
 date well completed firm name county well located

| LANDOWNER: | Description of formations encountered | from | to |
|---|---------------------------------------|------|-----|
| City of Olive Branch | | | |
| 2667 Byhalia Road | Red Clay | 25 | 25 |
| Olive Branch, MS | Red Sand | 48 | 23 |
| (mailing address) | Boulders | 53 | 5 |
| WELL LOCATION: | Rock | 54 | 1 |
| sec. <u>33</u> T <u>1</u> N R <u>6</u> E | Clay | 142 | 88 |
| (distance) miles (direction) of (nearest town) | Sandy Clay | 192 | 50 |
| | Sand | 205 | 13 |
| WELL PURPOSE: Municipal | Sand & Fine Streaks of | | |
| (home, irrigation, municipal, industrial) | Clay | 264 | 59 |
| WELL COMPLETION DATA: | Sand | 369 | 5 |
| (1) diameter (inches) <u>16"</u> | Clay | 372 | 3 |
| (2) total depth (feet) <u>370'</u> | Sand & Clay Half & Half | 475 | 103 |
| (3) static water level (feet) <u>160</u> below above top of ground. | | | |
| (4) casing <u>Steel Pipe 299'</u> (material) (depth) | | | |
| (size) if telescope see back. | | | |
| (5) screen <u>65'</u> (length) <u>304'</u> (depth to top) | | | |
| <u>10 3/4</u> O.D. <u>Stainless Steel</u> (size) (material) | | | |
| (6) pump <u>75</u> (HP) <u>750</u> (yield gpm) | | | |
| <u>3/460/60</u> (type power) | | | |
| (7) electric log <u>Yes</u> (yes or no) | | | |
| <u>Layne-Central</u> (organization running log) | | | |
| (8) how well bottom plugged <u>Concrete</u> | | | |
| DRILLERS REMARKS: | | | |



007 1 0 1032

Dept. of Environmental Quality
 Bureau of Land & Water Resources

SPRT

GW 1693
GW 1664
D 09

| | | | | |
|--------------------|------------------|-----------|---|---------------------|
| Issued: 4/28/92 | Expires: 4/28/02 | Fee Paid | X | Permit No. GW-14104 |
| Lat. 345710 | Long. 895004 | Elev. 400 | | USGS No. |
| Quad. Olive Branch | Dist. | | | Basin No. 08030204 |
| STAC | | | | Dam Inv. No. |
| | | | | Dam appl. No. |

Dept. of Natural Resources, Bureau of Land and Water Resources, P.O. Box 10631, Jackson, Mississippi 39202

RECEIVED

MAR 27 1992

APPLICATION FOR PERMIT TO DIVERT OR WITHDRAW FOR BENEFICIAL USE OF 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) Livestock Standby
 Fire Protection Flood Protection Other: _____

Dept. of Environmental Quality
Bureau of Land & Water Resources

LANDOWNER:

CITY OF OLIVE BRANCH 64-6001544
 (Name) (S/S or Tax ID No.)
C.R. HALL
 (Address)
OLIVE BRANCH MISS 38632 (601) 895-4000
 (City) (State and Zip) (Telephone Number)

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

SAME
 (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):

NW 1/4 of the SE 1/4 of Section 33, Township 01S, Range 6W, 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) 0.36 84 million gallons per day at a maximum rate of 1250 750 gallons per minute
- (c) _____ acre feet of storage at normal pool
- (d) _____ per _____ at a maximum rate of _____

Construction of proposed work will begin on (date) April 1, 1992 and will be completed by (date) Oct 1, 1992

Water will be used from (month) JAN. to (month) DEC. 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.

TWO OTHER WELLS - 750 GPM AND 1250 GPM

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.

(Continued on back)

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

1. Source of water is Memphis Aquifer (Spate) aquifer.
2. Description of proposed water well:
- (a) DEPTH OF WELL: 466 370 feet. DRILLER (name): CAYNE-CENTRAL CO.
- (b) SURFACE CASING: Length: 270 299 feet. Diameter: 16 inches. Type: STEEL
- (c) SCREEN: Length: 80 65 feet. Diameter: 10" inches. Type: STEEL
- (d) PUMP: Vertical Turbine. Size: 75 HP. Capacity: 1250 750 gallons per minute.
Number of stages: 3 Setting depth: 340' feet.
- (e) POWER UNIT: Type: ELECTRIC Size: 75 HP 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.

| TOWN-SHIP | RANGE | SEC-TION | NE1/4 | | | | NW1/4 | | | | SW1/4 | | | | SE1/4 | | | | TOTALS |
|-----------|-------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| | | | NE1/4 | NW1/4 | SW1/4 | SE1/4 | NE1/4 | NW1/4 | SW1/4 | SE1/4 | NE1/4 | NW1/4 | SW1/4 | SE1/4 | NE1/4 | NW1/4 | SW1/4 | SE1/4 | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |

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 17000. (b) The number of connections/customers is 2300
- 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?
- | | | | | | | | |
|----------------------------|-----------------------|----------------------------|---------------------|----------------------------|---------------------|----------------------------|---------------------|
| <u>700 000</u> (Volume) | <u>1991</u> (Year) | <u>770 000</u> (Volume) | <u>92</u> (Year) | <u>840 000</u> (Volume) | <u>93</u> (Year) | <u>910 000</u> (Volume) | <u>93</u> (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: _____

6. OTHER use: Explain in detail: _____

REMARKS: _____

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

Joe F. LAUDONALE
(Name)
321 LOSICK ST.
(Address)
HERRAND MS 38632
(City, State, Zip)
601-429-0427
(Telephone)

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

J. F. Haud...
(Signature) C. E. ENGINEER

Subscribed and sworn to before me this 24 day of August 1992 at Memphis
County of DeSoto. My commission expires _____ My Commission Expires June 7, 2001

Wanda M. Cochran, Notary Public

DEPARTMENT OF ENVIRONMENTAL QUALITY - OLWR

PUBLIC SUPPLY WELLS PROJECT

GPS LOG

USER NAME(S): SHB-PEG GARTZEB DATE: 7-24-96
7/27/94
UNIT DEQ #: 84090 FILE #: 6072718C
HEALTH DEPT. #: 170015-06' ELEV. 350
00724220
USGS #: 481 D-69 OLWR #: MS-GW-14104

OWNER: CITY of OLIVE BRANCH
LOCATION: NW/NE/SE S 33 T 15 R 6W COUNTY: DECATUR

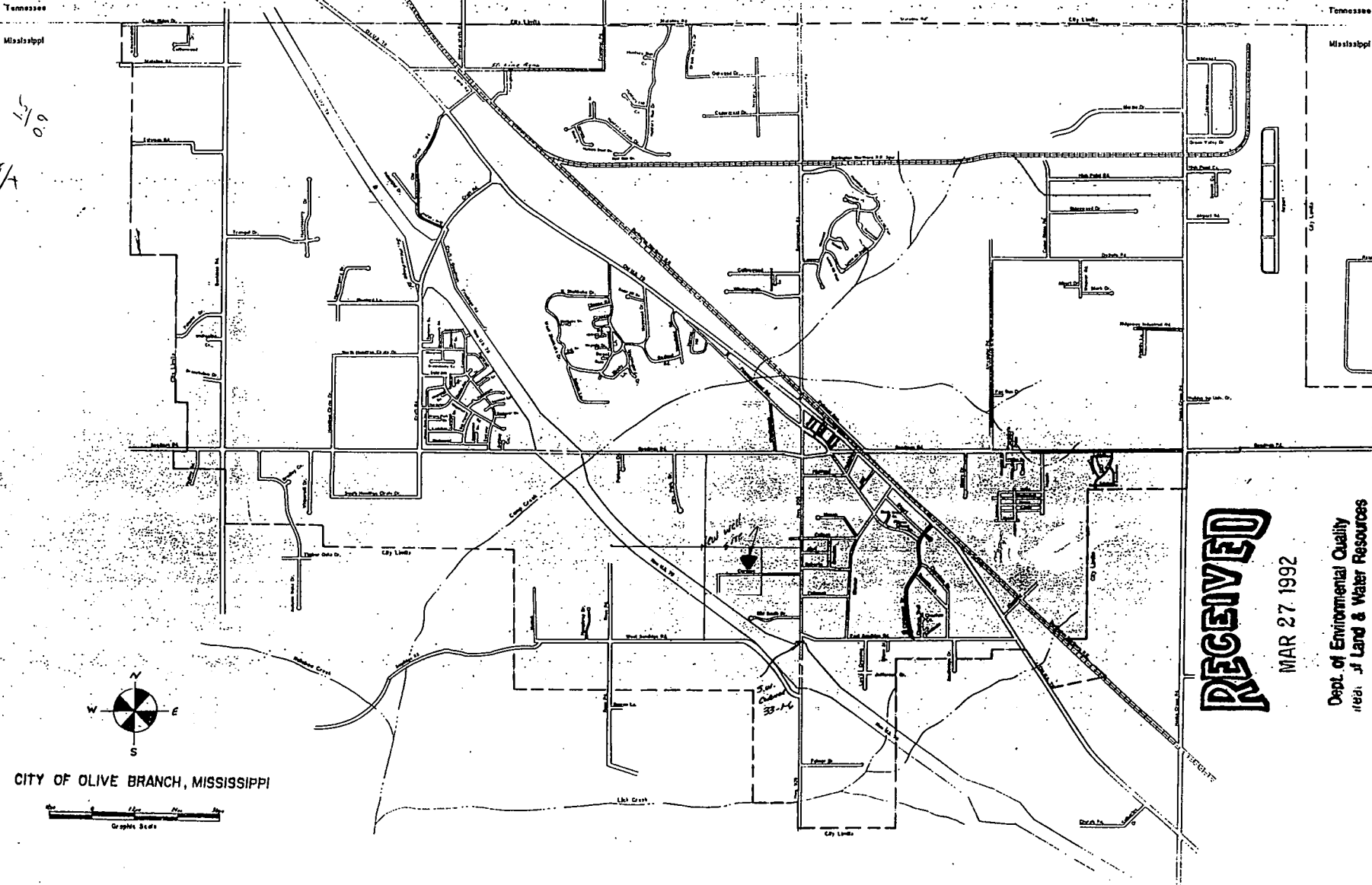
LOCATION DESCRIPTION: NE CORNER of CANOE TRAILER PARK 500' NORTH of W/P.
OLIVE BRANCH QUAD

CASING DIA: 24" PUMP TYPE & SIZE: TURBINE 75HP

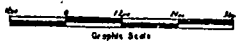
GPS FIELD LOCATION: LAT. 34.57273N LONG. 89.50710W
34°57'12.7"N 89°50'14.6"W

GPS CORRECTED LOCATION: LAT. 34.95384245 LONG. 89.83720729

REMARKS: Swimming pool not used for drinking



CITY OF OLIVE BRANCH, MISSISSIPPI



RECEIVED

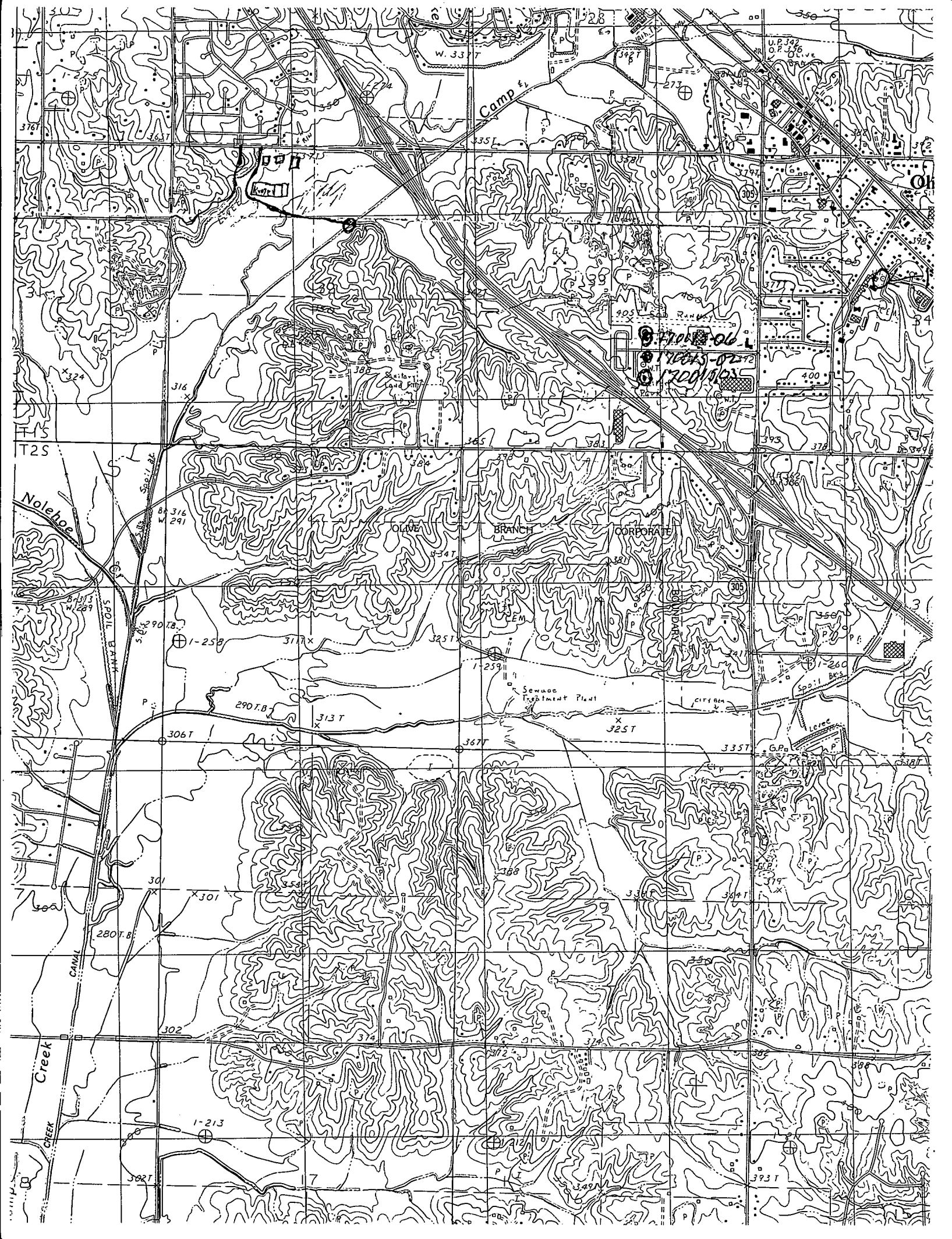
MAR 27 1992

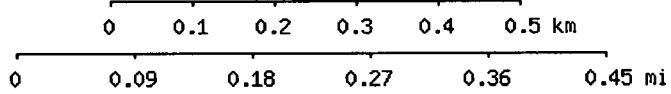
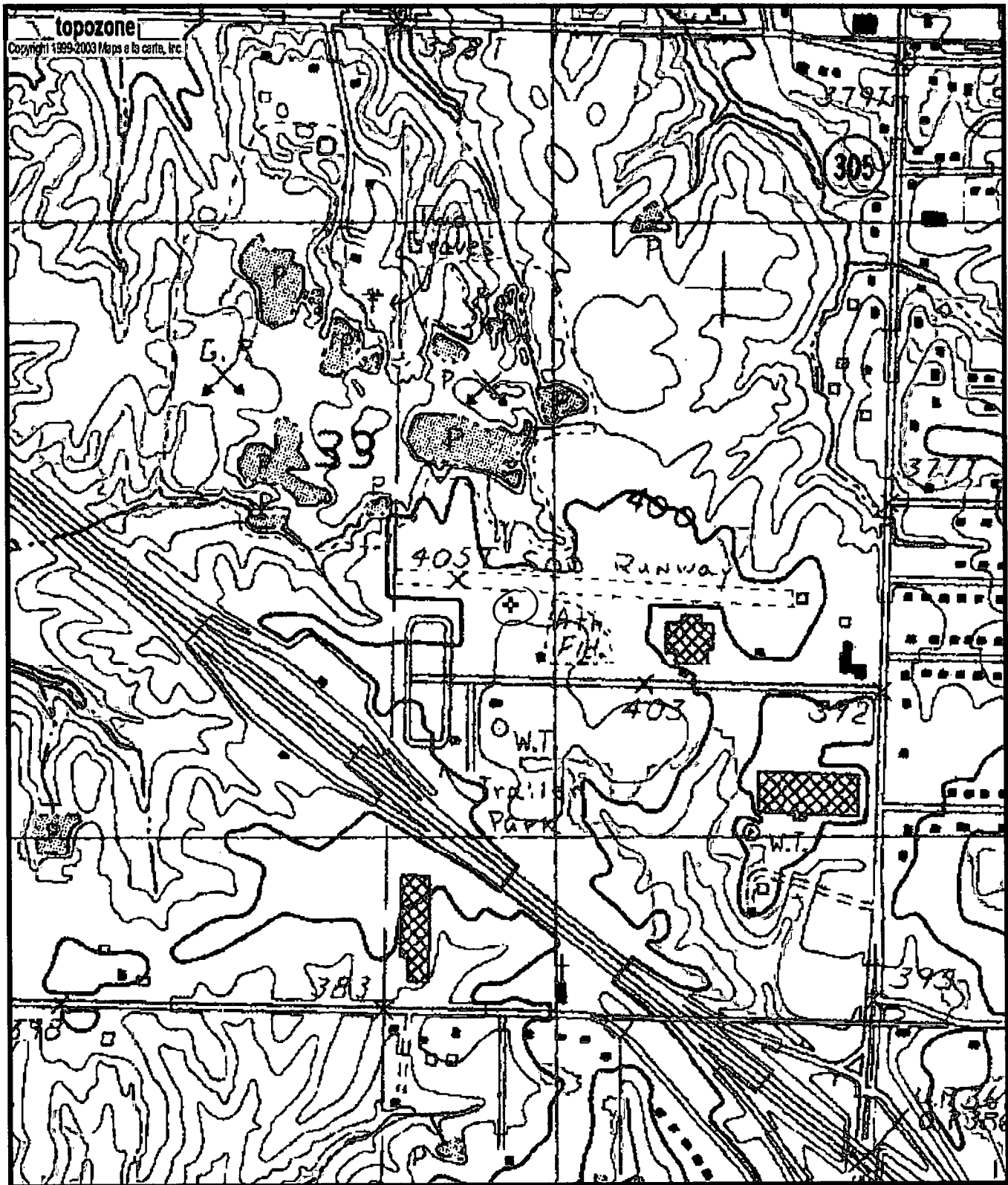
Dept. of Environmental Quality
(Real. of Land & Water Resources)

23/7
12/9

30141-14199

S.W. Channel
33-14





Map center is 34° 57' 14"N, 89° 50' 14"W (WGS84/NAD83)

Olive Branch quadrangle

Projection is UTM Zone 16 NAD83 Datum

M=-0.141
G=-1.627