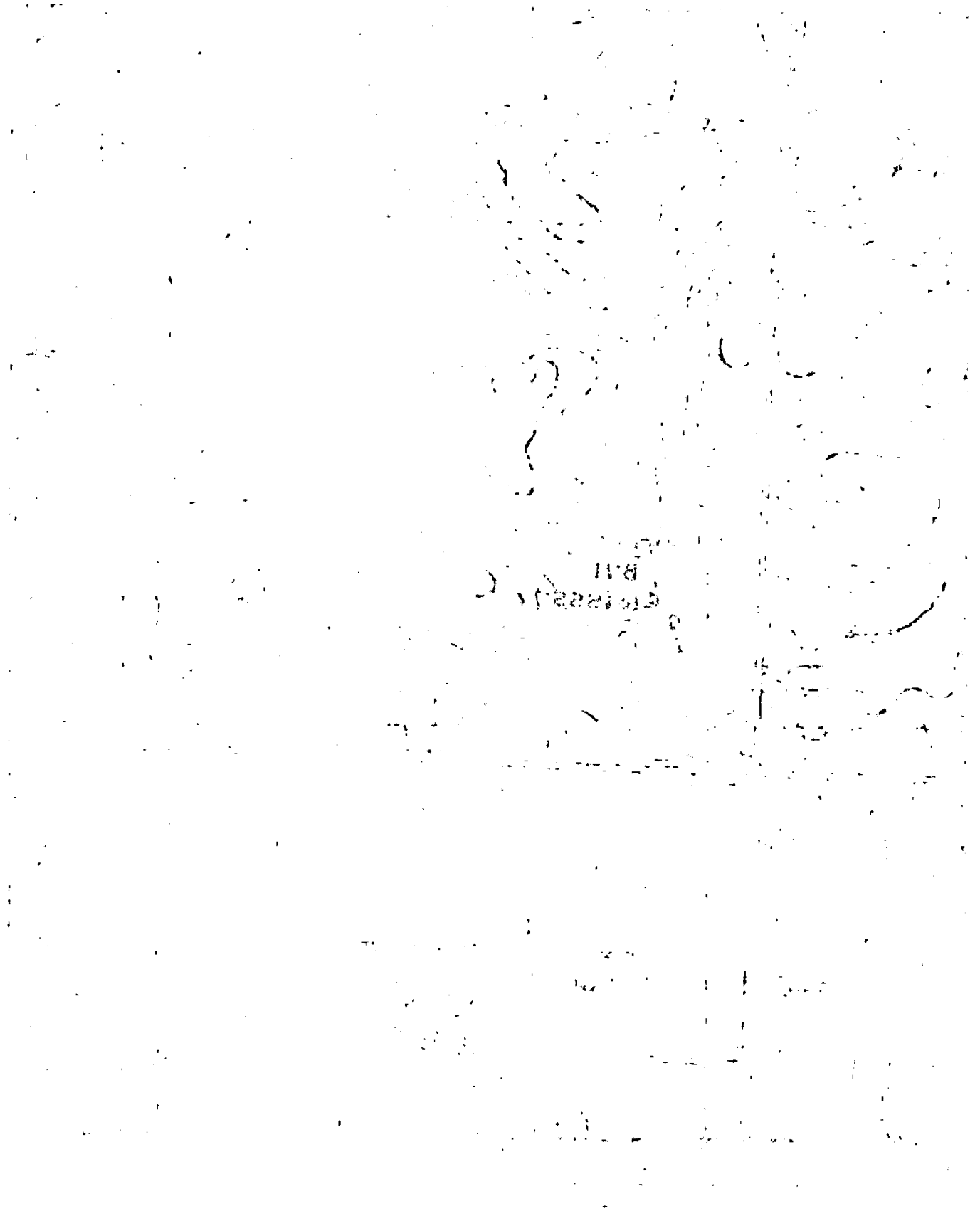


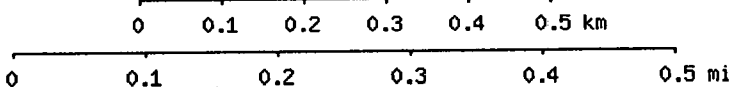
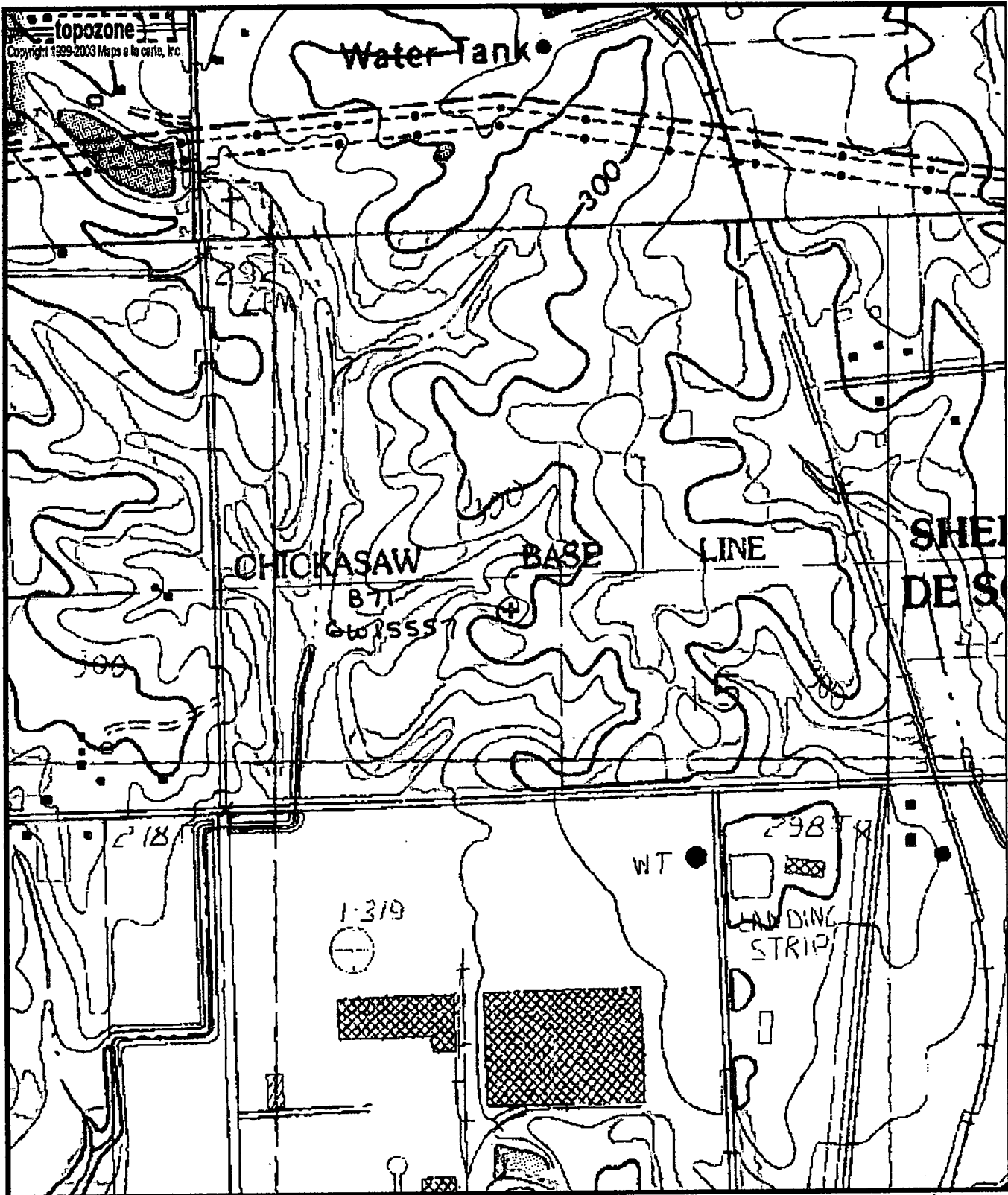
Map center is 34° 59' 41"N, 90° 02' 15"W (WGS84/NAD83)
Horn Lake quadrangle - TopoZone Pro elevation display
 Projection is UTM Zone 15 NAD83 Datum

G
 M=0.135
 G=1.7



11/8
 11/8

10-1-81



Map center is 34° 59' 41"N, 90° 02' 16"W (WGS84/NAD83)
Horn Lake quadrangle - TopoZone Pro elevation display
 Projection is UTM Zone 15 NAD83 Datum

M=0.135
 G=1.7

B71

e log # 81

MISSISSIPPI OFFICE OF GEOLOGY

2525 North West Street

Jackson, MS 39216

| COMPANY Layne Central Memphis Office WELL ID NEPCO Th#1 PW#3 FIELD NEPCO COUNTY#1 DeSoto STATE MS | | ELOG FILE # B-009 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|----------------------|---|-----------------|---------------|------|---------------|-------|--|--|-----|-----|------|----|------|------|------|----|---|---------|----|-----|---------|--|----|-----|--|--------|-----|-------|------|------|-----|-------|--|--|
| LOCATION 345941N/900216W NW,NW,SE,SW SEC 15 TWP 1S RGE 8W | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PERMANENT DATUM | MSL | ELEVATION 290' | K.B. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LOG MEAS. FROM | Ground Level | ABOVE PERM. DATUM | D.F. 295' | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DRILLING MEAS. FROM | Ground Level | | G.L. 290' | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DATE | 22 January 02 | TYPE FLUID IN HOLE | Water Based Mud | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RUN No | 1 | SALINITY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TYPE LOG | GR,SP,Res8,16,32,SPR | DENSITY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DEPTH-DRILLER | 1534' | LEVEL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DEPTH-LOGGER | 1521' | MAX. REC. TEMP. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Engineer | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Geologist | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Driller | Linwood Hathcock | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RECORDED BY | Mark Teague | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WITNESSED BY | Linwood Hathcock | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>RUN</th> <th colspan="3">BOREHOLE RECORD</th> <th colspan="4">CASING RECORD</th> </tr> <tr> <th>NO.</th> <th>BJT</th> <th>FROM</th> <th>TO</th> <th>SIZE</th> <th>WGT.</th> <th>FROM</th> <th>TO</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>29.000"</td> <td>0'</td> <td>48'</td> <td>26.000"</td> <td></td> <td>0'</td> <td>48'</td> </tr> <tr> <td></td> <td>9.875"</td> <td>48'</td> <td>1534'</td> <td>Open</td> <td>Hole</td> <td>48'</td> <td>1534'</td> </tr> </tbody> </table> | | RUN | BOREHOLE RECORD | | | CASING RECORD | | | | NO. | BJT | FROM | TO | SIZE | WGT. | FROM | TO | 1 | 29.000" | 0' | 48' | 26.000" | | 0' | 48' | | 9.875" | 48' | 1534' | Open | Hole | 48' | 1534' | | |
| RUN | BOREHOLE RECORD | | | CASING RECORD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NO. | BJT | FROM | TO | SIZE | WGT. | FROM | TO | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 29.000" | 0' | 48' | 26.000" | | 0' | 48' | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 9.875" | 48' | 1534' | Open | Hole | 48' | 1534' | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Comments <i>Logger Malfunction; Long Normal (R64) dropped</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | | | |
|-----|--------------|-----|--|-----|
| | | | | |
| 725 | SP (mV) | 825 | | |
| 15 | Current (mA) | 18 | | |
| | | | | 240 |

If well telescopes please sketch and show depths.

GROUND LEVEL

| | | | |
|--|---|--|--|
| | | | |
| | | | |
| | | | |
| | X | | |

SECTION 15

Please indicate well location X.

| | | |
|---------------------|---------------|---------------|
| Pump Capacity (GPM) | No. of Stages | Setting Depth |
| 1200 | 6 | 260 FT. |

PUMP TEST

Well yielded 1200 GPM with
a drawdown of 64 ft.
after 25 hours of pumping

LOG DATA

TYPE OF LOG RUN (Circle One): No Log Run.
 (Electric) Gamma Ray. Density. Sonic. Neutron.
Other (Describe) _____

Name of Organization Running Log

Layne Central Co.

GEOLOGIC DATA (Office Use Only)

| Surface Elev. | Geologic Unit | Unit Thickness | Depth to Top |
|---------------|---------------|----------------|--------------|
| Subs. SWL | Date | Analysis | Aquifer Test |

Driller's Remarks

If more than one screen,
show location of each on sketch.

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Office of Land and Water Resources

P. O. Box 10631
Jackson, MS 39289-0631
WATER WELL DRILLERS LOG

| | |
|--|----------------------|
| COUNTY WELL LOCATED <u>DeSoto</u> | |
| WELL NUMBER <u>B-71</u> | CODED <u>13</u> + |
| DATE WELL COMPLETED <u>02-11-02</u> | |

| |
|---|
| PERMIT NUMBER <u>MS-GW -15557</u> |
| NAME OF DRILLING FIRM <u>Layne Central Co.</u> |
| <u>Memphis</u> |

| | |
|---|---------------------------------------|
| NAME & MAILING ADDRESS OF LANDOWNER <u>Southaven Power LLC-Logentrix Ene</u> | |
| <u>9405 Arrowpoint Blvd. Charlotte, NC 28273-8110</u> | |
| Latitude: <u>34 59' 41" N</u> | Longitude: <u>90 02' 16" W</u> |
| WELL LOCATION: SEC <u>15</u> TOWNSHIP <u>1</u> RANGE <u>N 8 E</u> | (S) (W) |
| DISTANCE _____ MILES | DIRECTION _____ of NEAREST TOWN _____ |
| OTHER LANDMARK _____ | |
| WELL PURPOSE: Home, Irrigation, Municipal, Industrial, Fish Pond, etc. <u>Industrial</u> | |

| PUMP DATA | | |
|--|------|----|
| PUMP TYPE (Circle One): Submersible, (Turbine) Jet <input type="checkbox"/> Flowing Well, Other (Describe) _____ | | |
| POWER TYPE (Circle One): (Electric,) Tractor, Diesel, Gasoline, Butane, Other (Describe) _____ H/P _____ | | |
| DESCRIPTION OF FORMATIONS ENCOUNTERED | FROM | TO |
| | | |
| | | |
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| | | |
| | | |
| | | |
| | | |
| Top of Lap Pipe or Reduction in Casing <u>1228 FEET</u> IF TELESCOPED OR MORE THAN ONE SCREEN: USE BACK PAGE | | |

RECEIVED
MAR - 8 2002
BY: OLWR

| WELL DATA | | |
|---|-------------------------------------|--|
| Well Depth <u>1394'</u> | Casing Diameter (In.) <u>20"</u> | Casing Length (Ft.) <u>1285'</u> |
| Type of Casing <u>steel</u> | Hole Depth <u>1394'</u> | Depth to Static Water Level <u>131'</u> |
| TYPE OF COMPLETION: (Circle One or More): <input checked="" type="checkbox"/> Gravel Packed, <input type="checkbox"/> (Underreamed) <input type="checkbox"/> Telescoped, <input type="checkbox"/> Natural Development, <input type="checkbox"/> Open Hole, <input type="checkbox"/> Other (Describe) _____ | | |
| WELL GROUTED TO A DEPTH OF <u>1285</u> FEET Type Grout (circle one): Cement, Bentonite, or Mix _____ | | |

| SCREEN DATA | | |
|---|--|-----------------------------------|
| Diameter - Inches <u>12</u> | Length - Feet <u>101</u> | Slot Size - Inches <u>.020</u> |
| Screen Type <u>304 stainless steel</u> | Depth to Bottom - Feet <u>1394'</u> | |

I certify that the well was drilled, constructed and completed in accordance with all applicable Requirements of the Mississippi Department of Environmental Quality and/or the Mississippi Department of Health regulations and state laws.

Doyle Goodman
Signature of Licensed Driller and License No.
Doyle Goodman, 0064

03/04/02
Date

Additional Information Required On Back

MISCELLANEOUS NETWORK DATA 706=QW,WL,WD*

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

MISCELLANEOUS REMARKS DATA

| | | | | | | | | |
|-------|-----|-------|-----------------|------|------------|---------|------|-------------|
| R=183 | T=A | 311#1 | Date of Remarks | 184= | 02-11-2002 | Remarks | 185= | MS-GW-15556 |
|-------|-----|-------|-----------------|------|------------|---------|------|-------------|

DISCHARGE DATA

| | | | | | | | | | | | |
|------------|------|-------|--------------------|------|------------|-----------|------|-------|--------------|------|-------|
| R=146 | T=A | 147#1 | Date | 148= | 02-11-2002 | Type | 703= | (P) F | Discharge | 150= | 1200. |
| Meth. Dis. | 152= | R | Static Water Level | 154= | | Source WL | 155= | | Sp. Capacity | 272= | |

W/a drawdown of 64ft. after 25 hours of pumping

GEOHYDROLOGIC DATA

| | | | | | | | | | | | | |
|------|-----|-------|-----------|-----|--|--------------|-----|--|---------|-----|---------------|-------|
| R=90 | T=A | 721#1 | Depth Top | 91= | | Depth Bottom | 92= | | Unit ID | 93= | 124 W L C X L | 304=P |
|------|-----|-------|-----------|-----|--|--------------|-----|--|---------|-----|---------------|-------|

HYDRAULIC DATA

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

HISTORICAL WATER LEVEL DATA

| | | | | | | | | | | | | | | | |
|-------|-----|------|------|------------|-------------|------|------|--------|-------|---------------|------|---|-------|---------------|-----------|
| R=234 | T=A | 235# | Date | 02-11-2002 | Water Level | 237= | 131. | Source | 243=L | Meth. of Meas | 244= | D | 239=R | Source Agency | 247=MS008 |
|-------|-----|------|------|------------|-------------|------|------|--------|-------|---------------|------|---|-------|---------------|-----------|

used driller's lat/long for Topozone map GW15557

Coded by 2/23/02
Checked by JPK 2-6-02
Entered by JPK
Date 5/12/02

U.S. GEOLOGICAL SURVEY
WATER RESOURCES DIVISION
MISSISSIPPI DISTRICT

E-Log No. 81 Well No. B71
County DESOTO 29B
Agency

WELL RECORD

Horn Lake Quad

Agency Code U S G S Site ID 1= 345941090021601 5= Project No.

12= B071 DESOTO NEPCO 9= 345941
Longitude Lat/Long Ac. Lat/Long Met. Lat/Long Datum Dist Code State Code County Code

10= 0900216 11= 1 35= D 36= NAD83 6= 28 7= 28 8= 033
S=GPS, F=5 sec, T=+10 sec, M=+1 min, b=>1 min

Land Net Location NW 13= N W S E S W S I 5 T O I S R O B W Meridian
Location Map Altitude Accuracy Method Meas.

14= HORN LAKE 16= 290. 18= 5 17= M
Altitude Datum Hydrologic Unit Topo Set. Agency Use Date Inventoried

22= NAVD88 20= 08010211 19= 803= A I 711=
Station Type Data Type Gr. Time Loc. Time Web-R Reliability Date of Construction

802= Y 804= A I O 813= -06 814= Y 32= 3= C L M 2= W X 21= 02-11-2002
Well Use Water Use Primary Aquifer Hole Depth Well Depth

23= W 24= N 714= 124 W L C X L 27= 1534. 28= 1394.
CONSTRUCTION DATA Construction Date Contractor Method Finish

R=58 T=A 723#1 60= 02-11-2002 63= 064 Name Lume Central Memphis 65= H 66= G

CONSTRUCTION CASING DATA
R=76 T=A 725#1 59#1 77= 0. 78= 1285. 79= 20.
R=76 T=A 725#2 59#1 77= 1228. 78= 1285. 79= 12.

CONSTRUCTION OPENINGS DATA
R=82 T=A 726#1 59#1 83= 1285. 84= 1394. 87= 12. 85= S 89= . 88= .02.
R=82 T=A 726#2 59#1 83= . 84= . 67= . 85= . 89= . 88= .

CONSTRUCTION LIFT DATA
R=42 T=A 254#1 Lift Type 43= T Date 39= 02-11-2002 Intake 44= 260.
Power H.P. Serial No.
45= E 46= 1. 49= .

MISCELLANEOUS OWNR DATA Date of Ownership
R=158 T=A 718#1 159= 02-11-2002 Owner: Robert D. Pelts
Owner Name
161= NEPCO TEST HOLE #1-PW #3

MISCELLANEOUS OTHER ID DATA E-Log No. Assigner
R=189 T=A 736#1 190= 81. 191= H I S S D I S T

MISCELLANEOUS LOGS DATA
R=198 T=A 739#1 199= E 200= 0. 201= 1521.
R=198 T=A 739#2 199= 200= . 201= .

