WELL SCHEDULE

FIPS: 121
WELL: F 78
LOG NO.: 

Recorded by: Phillips
Data Source: Water Use
Date: 5/12/03

County: Rankin
Permit No.: SW 98000
DOH No.: 

Quad: Jackson
Elevation: 273

¼ S W ¼ N E ¼ S E ¼ S W Sec.: 31 T: 16N R: 2 E

Plotted on quad?: _____ In field? _____ From drillers log? _____ From permit? _____

Latitude: 32 18 52  Longitude: 90 08 07  GPS? 9/19/02 From Quad? ______

Primary aquifer: CKF? Secondary aquifer:

Use: 1 N Well status: ______ Local well name: 

Owner: Nucor Steel Co. (Birmingham SE)

Date completed: 4/27/84 Driller: Layne Central Well depth: 170 Hole Depth: 170

Pump type: Submersible Power type: Electric Pump capacity: 42 gpm

Casing interval: 0 - 150' Casing length: 150' Casing diameter: 4'

Casing interval: (123 to 103) Casing length: ______ Casing diameter: ______

Screen interval: 150' - 170' Screen length: 20' Screen diameter: 4"

Screen interval: ______ Screen length: ______ Screen diameter: ______

Type of logs: ______ Log interval: ______

Initial water level: 104 Date: 4/27/84 M.P. description: ______

Water Quality Data? _____ Source: ______ Reliability: ______

Water Level Data? _____ Source: ______ Reliability: ______

Pump Test Data? _____ Source: ______ Reliability: ______

Water Use Data? _____ Source: ______ Reliability: ______
## Well Data Form

**BIRMINGHAM SOUTHEAST, LLC**

### OLWR Permit Number | MS Health Dept. Tag No. | County | Well Depth (ft) | Rated (GPM) | Casing | Date Drilled | Well Status | Connections on Well | Totals gallons pumped in 2001
---|---|---|---|---|---|---|---|---|---
MS-GW-00350 | RANKIN | 275 | 250 | 8 | 6/17/1985 | Active | 1 | 90 million (est) (a) |
MS-GW-01578 | RANKIN | 727 | 8 | 7/1/1957 | Active | 0 | 0 |
MS-GW-98000 | RANKIN | 170 | 42 | 4 | 4/27/1984 | Active | 2 | 7 million (est) (b) |

(a) Estimated pump operation: \(16 \text{ hrs/day} \times 365 \text{ days} = 5840 \text{ hours} = 350,400 \text{ minutes}\)
\[250 \text{ gpm} = 87,600,000 \text{ gallons}\]
\[= 90 \text{ mil. gals.}\]

(b) Estimated pump operation: \(7 \frac{1}{2} \text{ hrs/day} \times 365 \text{ days} = 2737.5 \text{ hours} = 164,250 \text{ minutes}\)
\[42 \text{ gpm} = 6,858,500 \text{ gallons}\]
\[= 7 \text{ mil. gals.}\]

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Please correct any inaccurate information in the above form and fill in any missing information.

Add any wells not included in the above list.

Well Status = Active (well in use) Standby (well maintained but not used daily) Inactive (well not maintained but not plugged) Abandoned (well plugged as per MDEQ Regulations)

If you did not return a questionnaire last year, please include that information on an attached sheet.
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Office of Land and Water Resources
P. O. Box 10631
Jackson, MS 30289-0631

WATER WELL DRILLERS LOG

COUNTY: Rankin
WELL NUMBER: 2
CODE: E-78
DATE WEL COMPLETE: 4/27/1984

NAME & ADDRESS OF LANDOWNER:
Mississippi Steel Corporation
PO Box 5780
Jackson, MS 35288-5780

LATITUDE: 31° N
LONGITUDE: 89° E

DISTANCE: 10 miles
DIRECTION: NEAREST TOWN: Flawood

OTHER LANDMARK: At cooling tower
WELL PURPOSE: Industrial

WELL LOCATION:

<table>
<thead>
<tr>
<th>SEC</th>
<th>TOWNSHIP</th>
<th>RANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>0</td>
<td>1E</td>
</tr>
</tbody>
</table>

WELL DATA:

<table>
<thead>
<tr>
<th>Depth</th>
<th>Casing Diameter (In.)</th>
<th>Casing Length (Ft.)</th>
<th>Hole Depth</th>
<th>Depth to Static</th>
</tr>
</thead>
<tbody>
<tr>
<td>170'</td>
<td>4&quot;</td>
<td>150'</td>
<td>170'</td>
<td>104'</td>
</tr>
</tbody>
</table>

TYPE OF COMPLETION:

- Gravel Packed
- Natural Development
- Open Hole
- Other (Describe):

WELL GROUTED TO A DEPTH OF:

- Type Grout: Cement
- Ponderosa
- Coal Bit

SCREEN DATA:

<table>
<thead>
<tr>
<th>Diameter (In.)</th>
<th>Length (Ft.)</th>
<th>Slot Size (In.)</th>
<th>Screen Type</th>
<th>Depth to Bottom (Ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4&quot;</td>
<td>20'</td>
<td>0.010&quot;</td>
<td>PVC</td>
<td>170'</td>
</tr>
</tbody>
</table>

PUMP DATA:

- PUMP TYPE: Submersible
- Other (Describe):

- POWER TYPE: Electric
- Other (Describe):

DESCRIPTION OF FORMATIONS ENCOUNTERED:

FROM | TO

RECEIVED
MAY 27 2003

BY: OLWR

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.

LAYNE-CENTRAL
By: [Signature]
Date: 5/20/03

Signature of Licensed Driller and License No.

Additional Information Required on Back
If well telescopes, please sketch and show depths.

GROUND LEVEL

<table>
<thead>
<tr>
<th>SECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please indicate well location X.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pump Capacity (GPM)</th>
<th>No. of Stages</th>
<th>Setting Depth (ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>42</td>
<td>15</td>
<td>147</td>
</tr>
</tbody>
</table>

PUMP TEST
Well yielded _______ GPM with a drawdown of _______ feet after _______ hours of pumping.

LOG DATA

<table>
<thead>
<tr>
<th>TYPE OF LOG</th>
<th>No Log Run</th>
<th>Electric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gamma Ray</td>
<td>Density</td>
<td>Sonic</td>
</tr>
<tr>
<td>Other (Describe)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name of Organization Running Log

GEOLOGIC DATA (Office Use Only)

<table>
<thead>
<tr>
<th>Surface</th>
<th>Geologic Unit</th>
<th>Unit Thickness</th>
<th>Depth to Top</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subs. SWL</td>
<td>Date</td>
<td>Analysis</td>
<td>Aquifer Test</td>
</tr>
</tbody>
</table>

Driller's Remarks

If more than one screen, show location of each on sketch.
Log of Well for Mississippi Steel Corporation

Well No. 2

Address (City) Flowood

(County) Rankin

State Ms.

Location of Well at cooling tower

Made in Test Hole No. 1

STARTED WELL 4-24 19.84 AND COMPLETED 4-27-84 19.

TOTAL DEPTH 170' ELEVATION 104

ALL MEASUREMENTS TAKEN FROM (GROUND) (TOP OF FOUNDATION) (TOP OF CASING) (TOP BASE PLATE)

SURFACE CASING SIZE 4' LENGTH 150' WEIGHT P.V.C.

Cemented WITH SACKS CEMENT OR PACKER TYPE

WELL CASING SIZE 4' LENGTH 150' WEIGHT P.V.C.

Cemented WITH SACKS CEMENT OR PACKER TYPE

INNER CASING SIZE 4' LENGTH 100' WEIGHT P.V.C.

WITH X (GUIDES LOCATED) TYPE BACKOFF

SIZE SEAL BACKPRESSURE VALVE SIZE 4' LENGTH GUIDE

WELL STRAINER: MAKE P.V.C. TYPE P.V.C. SIZE 4' LENGTH 20' OPENING 10 slot

TYPE MATERIAL P.V.C. WITH glue CONNECTIONS

SIZE HOLE DRILLED FOR SURFACE CASING 7-7/8 WITH 6 way BIT

SIZE HOLE DRILLED FOR WELL CASING 7-7/8 WITH 6 way BIT

SIZE HOLE DRILLED FOR STRAINER 7-7/8 WITH 6 way REAMER

YARDS OF GRAVEL USED 1/4 HOW PLACED poured TYPE 20-40

HOW WAS WELL DEVELOPED Pumping SANDING no CLEAN yes

FOUNDATION INSTALLED YES DEPTH FEELING RODS ON TOP OF WELL

NOTES: Failing 1500 Supt. A.K. Collins DRILLER Ray Smith

Layne DIVISION

LW-177
**INSTALLATION REPORT**

**INSTALLED FOR**: Mississippi Steel Corporation  
**CONTRACT NO.**: JA-1882

**CITY**: Flowood  
**COUNTY**: Rankin  
**STATE**: MS

**LOCATION**: at cooling tower

**DATE INSTALLATION COMPLETED**: 4-27-1984

**WELL NUMBER**: 2

**PUMP**  
**MAKE**: Betta Flow  
**SERIAL NO.**: 25M  
**TYPE**: Head Sub

**TOTAL LENGTH COLUMN**: 147'  
**SIZE**: 2'' x x x  
**OIL WATER LUBRICATED**: IN LENGTHS

**BOWL**:  
**SIZE**: 4''  
**TYPE**: 25M  
**NO. OF STAGES**: 15

**OPEN CLOSED PORTS**  
**SUCTION**: INCH LENGTH  
**SUCTION STRAINER**: YES NO  
**BASE PLATE**: YES NO

**IS PUMP SEALED**: NO IF SO, HOW?  
**WHERE?**

**LUBRICATOR**: TYPE

**LENGTH OF AIR LINE**: 147  
**SIZE**: 1/2

**AIR RELEASE VALVE TYPE**

**DAYTON COUPLING**: NO PRESSURE GAUGE  
**4'' INCH SPEED**

**CAN WATER BE PUMPED OUTSIDE?**: YES  
**TOTAL SETTING**: 153

**IS COLUMN SCREWED OR**

**MOTOR**  
**MAKE**: Betta Flow  
**H.P.**: 3  
**FRAME NO.**

**SERIAL NO.**: 1  
**PHASE**: 60  
**CYCLES**: 230  
**VOLTS**: DOES MOTOR HAVE NON-REVERSE RATCHET REVERSE PHASE RELAY

**MAKE OF STARTER**: A.B.

**GEAR DRIVE**  
**MAKE**:  
**MODEL**:  
**RATIO**: TO

**SERIAL NO.**

**ENGINE**  
**MAKE**:  
**H.P.**:  
**STYLE**:  
**SERIAL NO.**

**SPEED**:  
**TYPE FUEL**:  
**STANDARD UNDERGROUND FUEL TANK**: SIZE PULLEY

**MAGNETO MAKE**:  
**NO.**:  
**STARTER MAKE**:  
**STARTER NO.**:  
**FLEXIBLE SHAFT MAKE**:  
**LENGTH**

**BELT LENGTH**:  
**OTHER EQUIPMENT**

**REMARKS**

**STATIC LEVEL**: 104  
**FEET**

**CAPACITY OF PUMP**: 42 GPM AT 0 POUNDS  
**SIGNED**: /s/ Ray Smith

**LC-3**
DEPARTMENT OF ENVIRONMENTAL QUALITY - OLWR-
PUBLIC SUPPLY WELLS PROJECT

GPS LOG

USER NAME (S): RLB
DATE: 9-19-2002

UNIT DEQ #: ____________________ FILE #: ____________________

HEALTH DEPT. #: ____________________ ELEVATION: ______________

USGS #: ____________________ OLWR #: GW 9800; NOT A OFFICIAL PERMIT NO., ASSIGNED

OWNER : BIRMINGHAM STEEL CORP. QUAD : JACKSON

LOCATION: ___________ S _____ T _____ R _____ COUNTY RANKIN

LOCATION DESCRIPTION: _______________________________________

________________________

CASING DIA: 4INCH WELL._________ PUMP TYPE & SIZE: SUB.

GPS FIELD LOCATION: LAT. 32.31447 LONG. -90.13535

GPS CORRECTED LOCATION: LAT. ___________ LONG. ___________

REMARKS : NOT PERMITTED 4 INCH WELL, 170 FT DEEP DRILLED 1984

PO00741

________________________

32°18'52" 90°08'7"

________________________

Same loc as Nucor Steel Corp.