

# STATE WELL REPORT

## Part 1

### Driller's Log

Mississippi Department of Environmental Quality  
Office of Land and Water Resources  
P. O. Box 2309  
Jackson, MS 39225-2309  
(601)961-5555  
(601)961-5228 (fax)

### For Office Use Only:

Well #: H225  
Aquifer: \_\_\_\_\_  
E-Log #: \_\_\_\_\_

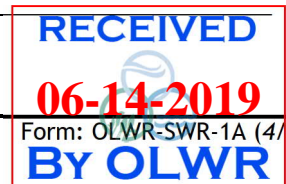
County: Sunflower  
Permit #: \_\_\_\_\_  
Driller: Roland W Tollett (RMO-00009026)  
Date drilling completed: 5/22/2019

USGS site name: SF-02b

*State Law requires that this report be prepared by the license holder responsible for the work and filed with the Department at the above address within 30 days of completion of drilling of the well or borehole.*

<b>Well Owner Information</b> (Landowner if borehole is not for a water well) Owner Name: <u>Woods Eastland (landowner)</u> Mailing Address: <u>USGS (driller - rtollett@usgs.gov)</u> <u>3095 W. California Ave</u> <u>Ruston</u> <u>LA</u> <u>71270</u> City State Zip Code Telephone No. ( <u>318</u> ) <u>251-9630</u> (245-8639 cell)	<input checked="" type="checkbox"/> Well or <input type="checkbox"/> Borehole Location Latitude: <u>33.63998</u> Longitude: <u>-90.53538</u> Method of Lat/Long (check one): Conventional Survey _____, USGS quad _____, Hand-held GPS <input checked="" type="checkbox"/> , Survey-grade GPS _____ <u>NW</u> $\frac{1}{4}$ <u>SW</u> $\frac{1}{4}$ , Sec <u>32</u> T <u>21N</u> R <u>03W</u> <u>1.25</u> Miles <u>SE</u> of <u>Doddsville, MS</u> (Distance) (Direction) (Nearest Town)
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<b>Well / Borehole Data</b>	
Date drilling started: <u>5/22/2019</u> Date drilling completed: <u>5/22/2019</u> Hole depth: <u>62 ft bls</u> Hole diameter: <u>3.75 in</u>	
Location of the source of any surface water used for drilling: <u>none used</u>	
Method of dosing and volume of Chlorine used in drilling and development: <u>none used</u>	
Logs run (check applicable): <input checked="" type="checkbox"/> No log run <input type="checkbox"/> Electric <input type="checkbox"/> Gamma Ray <input type="checkbox"/> Density <input type="checkbox"/> Sonic <input type="checkbox"/> Neutron <input type="checkbox"/> Other: _____	
Name of organization running log(s): <u>USGS, 3095 W. California Ave, Ruston, LA 71270 (318) 251-9630 x13</u>	
Purpose of borehole (check one): <input type="checkbox"/> Water Well <input checked="" type="checkbox"/> Geotechnical/Geological Investigation <input type="checkbox"/> Ground Source Heat Pump <input type="checkbox"/> Seismic Survey <input type="checkbox"/> Other (describe) _____	
<i>If drilling is not related to water well construction, skip the remainder of this block</i>	
Purpose of Well (check all applicable): <input type="checkbox"/> Home <input type="checkbox"/> Industrial <input type="checkbox"/> Public Supply <input type="checkbox"/> Irrigation <input type="checkbox"/> Fish Culture <input checked="" type="checkbox"/> other	
Other (describe): <u>monitoring well</u>	
If a flowing well, method of flow regulation: Valve _____ Other (describe) _____	
Static Water Level: <u>47.56</u> feet <input type="checkbox"/> above or <input checked="" type="checkbox"/> below land surface Date measured: <u>5/23/2019 @ 0840</u> (check one)	
Method of measurement (check one) <input type="checkbox"/> Steel tape <input checked="" type="checkbox"/> Electric tape <input type="checkbox"/> Air line <input type="checkbox"/> Other (describe): _____	
Well depth: <u>59.5</u> Well grouted to a depth of: <u>30</u> feet Type of grout (check one): <input checked="" type="checkbox"/> Neat Cement <input type="checkbox"/> Bentonite <input type="checkbox"/> Mix	
Casing length: <u>49.5</u> feet Casing diameter: <u>2</u> inches Type of casing: <u>PVC</u>	
Screen length: <u>10</u> feet Screen diameter: <u>2</u> inches Type of screen: <u>PVC</u>	
Screen slot size: <u>0.010</u> inches Setting depth: From <u>49.5</u> feet to <u>59.5</u> feet	
Type of completion (check all applicable): <input type="checkbox"/> Gravel packed <input type="checkbox"/> Underreamed <input type="checkbox"/> Open hole <input checked="" type="checkbox"/> Natural Development	
Other (describe): _____	
Top of lap pipe or reduction in casing: <u>NA</u> feet	
<i>If telescoped or more than one screen, describe on next page</i>	





# STATE WELL REPORT

## Part 2

**Pump Installer's Completion Report**  
 Mississippi Department of Environmental Quality  
 Office of Land and Water Resources  
 P.O. Box 2309  
 Jackson, MS 39225-2309  
 (601)961-5210  
 (601) 360-0535 (fax)

### For Office Use Only:

Well #: **H225**  
 Aquifer: \_\_\_\_\_

County: Sunflower  
 Permit #: \_\_\_\_\_  
 Driller: \_\_\_\_\_  
 Date completed: \_\_\_\_\_  
Copy information from block on Part 1

*This part of the report must be completed by a licensed water well contractor or a licensed pump installer. A copy of Part 1 of the report must be attached and both parts filed with the Department at the above address within 30 days of well completion.*

Well Owner Information	Well Location
Owner Name: <u>Woods Eastland (landowner)</u>	Latitude: _____ Longitude: _____
Mailing Address: _____	Method of Lat/Long (check one): Conventional Survey _____,
_____	USGS quad _____, Hand-held GPS _____, Survey-grade GPS _____
City _____ State _____ Zip Code _____	_____ 1/4 _____ 1/4, Sec _____ T _____ R _____
Telephone No. (____) _____	_____ Miles _____ of _____ (Distance) (Direction) (Nearest Town)

**Pump Type (check one)**

Submersible  Turbine  Air Lift  Centrifugal  Flowing Well  Jet  Piston  Rotary  Other (describe): \_\_\_\_\_

Date Pump Installed: \_\_\_\_\_ Rated Pump Capacity: \_\_\_\_\_ Gallons Per Minute

Is This Pump (check one):  New  Repaired  Replacement

**Power Type (check one)**

Electric  Diesel  Gasoline  Natural Gas  Tractor PTO  Windmill  Other (describe): \_\_\_\_\_

Horse Power Rating of Motor: \_\_\_\_\_ Setting Depth: \_\_\_\_\_ feet Number of Stages: \_\_\_\_\_

**Pump Test Data for Non Flowing Well**

Date Well Tested: \_\_\_\_\_ Duration of Pump Test (minimum 4 hours): \_\_\_\_\_ hours

Static Water Level (A): \_\_\_\_\_ Feet Below Land Surface Pumping Water Level (B): \_\_\_\_\_ Feet Below Land Surface

Drawdown [(B) - (A)]: \_\_\_\_\_ Feet Below Land Surface Test Pumping Rate: \_\_\_\_\_ Gallons Per Minute

Method of measurement (check one): Steel tape  Electric tape  Air line  Other (describe): \_\_\_\_\_

**Pump Test Data for Flowing Well**

Measured shut in head: \_\_\_\_\_ feet.

Well yielded \_\_\_\_\_ GPM with a drawdown of \_\_\_\_\_ feet after \_\_\_\_\_ hours of pumping

**Meter Installation**

Meter Manufacturer: \_\_\_\_\_ Meter Serial Number: \_\_\_\_\_

Meter Model Number/Name: \_\_\_\_\_ Type of Meter: \_\_\_\_\_

Totalizer Register Unit and Multiplier Factor (AF x .001, gal x 1000, etc): \_\_\_\_\_

Installation Date: \_\_\_\_\_ Meter installed by: \_\_\_\_\_

Is This Meter (check one):  New  Repaired  Replacement

*Important: By submitting the above information you are certifying that this meter was installed to manufacturer standards. For agricultural wells, a list of approved meters is on the MDEQ website.*

I HEREBY CERTIFY that the above statements are true to the best of my knowledge.

Print Name of Pump Installer and License No. (if applicable) \_\_\_\_\_ Date \_\_\_\_\_ Signature of Pump Installer \_\_\_\_\_



Driller: Roland W Tollett, USGS, 3095 W California Ave, Ruston, LA 71270 [318-245-8639] (MS LIC RMO-00009026)

Site number: <MDEQ no> Leflore SF-02b

Drill date: 20190522

Plugged date: active monitoring well

Site type: USGS monitoring well

EC-HPT log depth: 93 ft bls

Monitoring well depth: 59.5 ft bls (MP=3.0ft)

Rig Type: Geoprobe 7822DT [note: EC-HPT log collected at well 6 ft to the SE (SF-02a-EC)]

Lat/Long 33.63998 -90.53538 (+- 9ft)

Sec Township Range: NW1/4,SW1/4,S32,T21N,R03W

Land surface elevation: 39.0 meters (128 feet; accuracy 1.6 ft) [data source: DEM]

Topo Map Name: Ruleville, MS

County/Parish: 083 Leflore County, MS (1:24,000)

HUC code: 080302070506 Gorman Lake-Big Sunflower MAPS site\_no for NWIS: 333824090320702

Land owner: James Eastland (famer) Woods Eastland (owner)

Note: Four selected intervals were cored (2") at this site prior to well installation in same hole.



\*\*\*\*\* USER NOTES \*\*\*\*\*

Drilled by Roland (USGS Ruston LA) and Zach Bray (USDA ARS Oxford MS).

SF-02b: Zach Bray (USDA-ARS) and Roland W Tollett (USGS) collected cores and pushed this well. Conditions were excellent (breezy and nice). There is a second, deeper well [<MDEQ no> Leflore SF-02a-EC (79ft deep)] on site for water level monitoring and EC-HPT logs.

**Core intervals (to be processed for grain size by USDA ARS Oxford MS, JR Rigby):**

5-10 (silt and clay); 20-23 (clay); 35-39 (moist sand w thin clay lenses); 50-54 (gray medium sand typical of area).

Well construction: This 2" PVC monitoring well is ~62.5 ft from bottom of point to TOC with a 10 ft screen; screened interval is ~49.5-59.5 ft bls; MP is 3.00 above land surface with aluminum protective riser and 2 ft radius concrete slab; a 4" point was added to btm of casing; about 10 gallons of tap water were poured into PVC casing prior to pulling rods; this technique was used to balance and equalize pressure.

About 2 cups of bentonite granules were poured into the annular space of the borehole and bridged over around 30 ft below land surface (bls). Portland cement at a tap water ratio of 5-6 gals per 92-lb bag was used to seal the borehole from about 30 ft bls to land surface.

**Water level:**

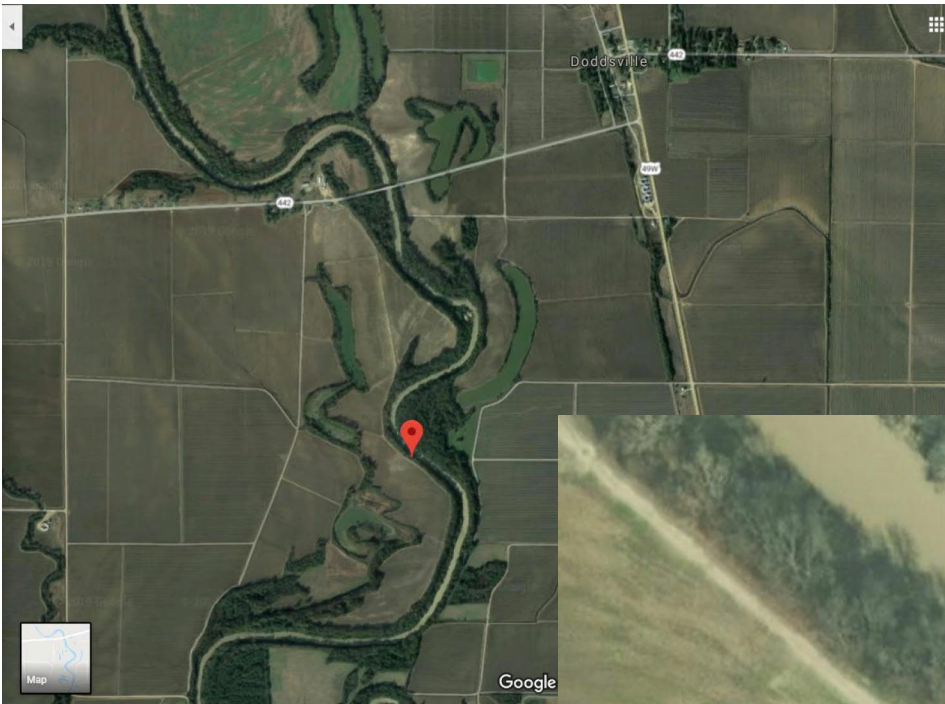
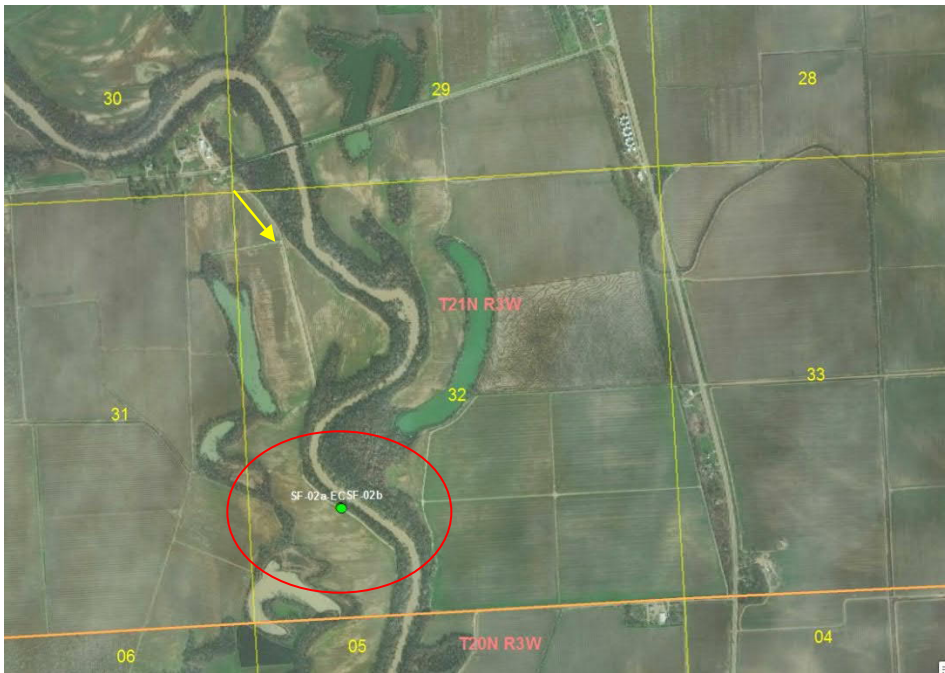
5/23/19 @ 0840 = 51.56 - 1.00 - 3.00 = 47.56 ft bls measured with e-tape by Roland W Tollett of the USGS

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USGS SF-02b (continued)

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Figure 1. Location of monitoring well SF-02b near Doddsville, MS.



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BY OLWR

New Site Sheet Form - MAPS

File Tables Search Network Help

**NEW SITE**

Site Record

Agency Code USGS : U.S. Geologica Site Number 333824090320702 Site Type Code GW

Station Name <MDEQ no> SUNFLOWER SF-02b Agency Use Code

Coordinate/Altitude Data

Latitude 333823.93 Longitude 0903207.37 Coordinate Accuracy H: Hndrth secon Coordinate Method G: GPS

Coordinate Datum NAD83: NA Datum of 1983 Latitude NAD83 in decimal degrees Longitude NAD83 in decimal degrees

Altitude in ft 127 Altitude Datum Code NAVD88: V Datum of 1988 Altitude Method Code N: DEM Altitude Accuracy Value in

Surface Water Data

Drainage Area in sq mi Basin Code

Contributing Drainage Area in sq mi

Hydrologic Unit Code 080302070506: Gorman Lake-Big Sunfl

Spatial Data

Land Net S32 T21N R03W 0 Topographic Code

Map Name RULEVILLE, MS Map Scale 24000

Groundwater Data

Aquifer Code

National Aquifer Code

Aquifer Type Code

Well Depth in ft

Hole Depth in ft

Source of Depth

Administrative Data

Country Code US: United Stat

State Fips Code 28: Mississippi

County Fips Code 133: Sunflower C

Minor Civil Division 92817: District 4

District Code 28: MISSISSIPP

Time Zone Code CST : Central Standar

Daylight Savings Time Flag Y: Yes

Use Data

Primary Use of Site

Secondary Use of Site

Tertiary Use of Site Code

Primary Use of Water Code

Secondary Use of Water Code

Tertiary Use of Water Code

National Water Use Code



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BY OLWR

