Mississippi Public Health Laboratory Chain of Custody for Chemistry Sampling with the New LIMS Sample Manager



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LIMS Administrator, Mississippi Public Health Laboratory



Mississippi Public Health Laboratory New LIMS Sample Manager

The MPHL has changed to a new LIMS system for all Microbiological and Chemical Analysis.

- Something NEW means change.

- Your samples will still be analyzed in the same manner but the paperwork will be different.
- We now have:
 - A New Chain of Custody
 - A New rule for Residual Chlorine field parameters.



Each new chain of custody is designed to make writing your sampling information easier.

- The new COC is on paper which makes it easier to write your information.
 - Samplers will no longer have to write on the labels.
 - The new COC is designed for each analysis type.
 - Because some sampling protocols require different field information.
- New labels will have been designed for the sample bottles. (the new labels should already be on the sample bottles when shipped to you)



- First we will look at the Inorganic Chemistry Chain of Custody for the different types of samples. These COCs are different depending on the sampling information needed.
- We have Metals and General Chemistry type samples.
- We have Lead and Copper.

This is the look for the new Chain of Custody for IOCs

MISSISSIPPI STATE DEPARTMENT OF	Chain o	of Cu	istody	Inorganic Meta	is & Fluoride
MS Publi	c Health Laboratory - 570 East Woo	drow Wils	son Jackson MS 39216 P	hone: 601-576-7582	
	1805 HWY 471 BRANDON, MS 390	LANGFORD WATER ASSOCIATION 1805 HWY 471 BRANDON, MS 39047 Attention: SONYA BLACKWELL			
Received By		Signatu	ire Confirms Rejects	·	
471	NO OF BRANDON OFF HWY	A R	Signature Date		
	b Use Only e In This Space		Cooler Temp °C	Bubbles >11 mm	emp out of range [o Matching BC [
Other Reason(s) for Rejection Comments:	:				



As you can see the COCs will have most of the sampling in formation already present for your sampling site.

1. In the upper right corner is the analysis for which you are sampling.

2. In the top center are is the facility name and address.

3. To the right of the facility name/address is the PWSID number.

4. On the left side is the Sampling Point – TF103 and the location where to take the sample.

5. Underneath is the barcode that has the sample number unique to this sample for the lab to scan to receive your sample.

6. Below the barcode is a unique numeric Id that will always be associated with this sample.

7. Below the unique numeric Id is a text Id for the sample, the analysis code for the LIMS and the sampling period.

HERE IS THE PART YOU DO:

1. On the right side is Collected By: (please Print your name here)

2. Signature: (please Write your name here)

3. Date _____ Time ____ AM/PM (write the date and time the sample was collected and be sure to circle AM or PM.

4. If you have comments about your sample write them on the comments line (last thing on the page).

5. Collect your sample and you are ready to send it back to the lab.



The next slide has red circles around the items listed in **black 1-7** and a blue rectangle around the information you need to fill out listed in blue 1-3.

1. In the upper right corner is the analysis for which you are sampling.

2. In the top center are is the facility name and address.

3. To the right of the facility name/address is the PWSID number.

4. On the left side is the Sampling Point – TF103 and the location where to take the sample.

5. Underneath is the barcode that has the sample number unique to this sample for the lab to scan to receive your sample.

6. Below the barcode is a unique numeric Id that will always be associated with this sample.

7. Below the unique numeric Id is a text Id for the sample, the analysis code for the LIMS and the sampling period.

HERE IS THE PART YOU DO:

1. On the right side is Collected By: (please Print your name here)

2. Signature: (please Write your name here)

3. Date _____ Time ____ AM/PM (write the date and time the sample was collected and be sure to circle AM or PM.

4. If you have comments about your sample write them on the comments line (last thing on the page).

5. Collect your sample and you are ready to send it back to the lab.



MS Public I	Health Laboratory - 570 East Wo	odrow Wilson, Jackson N	IS 39216 Phone: 601-576-7582	
\langle	LANGFORD WATER 1805 HWY 471 BRANDON, MS 390 Attention: SONYA B	047		
erved By		_Signature Confirms	Rejects	
2061 200206-002	1Q2020	R Signature	Time	AM / PM
		Not Collect	ed □ Well Offline □ D	own for Repairs □
For Lab	Use Only	Not Collect	ed Well Offline D For Lab Use Only up °C Air Bubbles >11 mm	own for Repairs



Example of COC

MISSISSIPPI STATE DEPARTMENT OF HEALTH	Chain	of Cu	Inorganic Metals & Fluori ustody	ide
MS Public Health	Laboratory - 570 East Woo	odrow Wils	lson Jackson MS 39216 Phone: 601-576-7582	
	LANGFORD WATER A 1805 HWY 471 BRANDON, MS 390		TION PWSID: MS0610012	
	Attention: SONYA B	LACKWEL	ill	
Received By		_Signatu	ture Confirms Rejects	-
TF103 APPROX 4 MI NO OF H 471 42061 IN-200206-002 IN		A R	Collected By <u>Sam Watkins</u> Signature <u>Sam Watkins</u> Date <u>2/5/2020</u> Time <u>4:15</u> AM	10
			Not Collected 🔲 Well Offline 📄 Down for Repai	irs
For Lab Us	e Only		For Lab Use Only Cooler Temp °C	~ '
Do Not Write In	This Space		Reason to Reject Leaked in Transit No Matching Be	-
Other Reason(s) for Rejection:				
Comments:				



Another analyses that has this same format for the Chain of Custody is Uranium.

The same steps apply:

1. On the right side is Collected By: (please Print your name here)

2. Signature: (please Write your name here)

3. Date _____ Time _____ AM/PM (write the date and time the sample was collected and be sure to circle AM or PM.

4. If you have comments about your sample write them on the comments line (last thing on the page).

5. Collect your sample and you are ready to send it back to the lab.



This is the look for the new Chain of Custody for CNs



Chain of Custody

MS Public Health Laboratory - 570 East Woodrow Wilson Jackson MS 39216 Phone: 601-576-7582

CLARKSDALE PUBLIC UTILITIES

P O BOX 70

PWSID: MS0140002

Cyanide

CLARKSDALE, MS 38614

Attention: CURTIS D BOSCHERT

Received By	Signature Confirms Rejects	
TF111 WEST SIDE OF CITY-EAST OF WELL #3 42057 CN-200206-002 CN 1Q2020	A Collected By	PM
For Lab Use Only Do Not Write In This Space	For Lab Use Only Cooler Temp °C	
Other Reason(s) for Rejection: Comments:		



As you can see the COCs will have most of the sampling in formation already present for your sampling site.

1. In the upper right corner is the analysis for which you are sampling.

- 2. In the top center are is the facility name and address.
- 3. To the right of the facility name/address is the PWSID number.
- 4. On the left side is the Sampling Point TF111 and the location where to take the sample.

5. Underneath is the barcode that has the sample number unique to this sample for the lab to scan to receive your sample.

6. Below the barcode is a unique numeric Id that will always be associated with this sample.

7. Below the unique numeric Id is a text Id for the sample, the analysis code for the LIMS and the sampling period.

HERE IS THE PART YOU DO:

1. On the right side is Collected By: (please Print your name here)

2. Signature: (please Write your name here)

3. Date_____ Time____ AM/PM (write the date and time the sample was collected and be sure to circle AM or PM.

4. Enter your residual chlorine reading, free and/or total (or both), check the type of kit used and enter your residual chlorine pillow lot number and expiration date.

5. If you have comments about your sample write them on the comments line (last thing on the page).



Example of COC



Cyanide

Chain of Custody

MS Public Health Laboratory - 570 East Woodrow Wilson Jackson MS 39216 Phone: 601-576-7582

CLARKSDALE PUBLIC UTILITIES

P O BOX 70

CLARKSDALE, MS 38614

Attention: CURTIS D BOSCHERT

PWSID: MS0140002 0140002

Received By	Signature Confirms Rejects
TF111 WEST SIDE OF CITY-EAST OF Y 42057 CN-200206-002 CN 1Q202	A contented by Signatureacle Sprat R Date 2/5/2020 Time 3:30 AM/PM
For Lab Use Only Do Not Write In This	Air Bubbles >11 mm Temp out of range Reason to Reject Leaked in Transit No Matching BC
Other Reason(s) for Rejection:	
Comments:	



Other analyses that have this same format for their Chain of Custody is Nitrate/Nitrite and Bromate/Bromide.

The same steps apply:

1. On the right side is Collected By: (please Print your name here)

2. Signature: (please Write your name here)

3. Date Time AM/PM (write the date and time the sample was collected and be sure to circle AM or PM.

4. Enter your residual chlorine reading, free and/or total (or both), check the type of kit used and enter your residual chlorine pillow lot number and expiration date.

5. If you have comments about your sample write them on the comments line (last thing on the page).



This is the look for the new Chain of Custody for PB/CU

-

	Lead Copper			
		of Custody		
MISSISSIPPI STATE DEPARTMENT OF HEALTH MS Public Health Laboratory - 570 East Woodrow Wilson Jackson MS 39216 Phone: 601-576-7582				
	CITY OF JACKSON PO BOX 17 JACKSON, MS 39205 Attention: CHARLES E V	PWSID: MS0250008 		
Received By:	Signat	ure Confirms Rejects		
DS000 42063 PB-200206-002	Distribution	Collected By SignatureAM / PM LocationSite # Address Not collected Reason:		
	For Lab Use Only Not Write In This Space	Reason to Reject For Lab Use Only Sample Exceeds Hold Time Leaked in Transit Lab Accident No Matching BC		
Addition Informa	ation Needed:			

4

As you can see the COCs will have most of the sampling in formation already present for your sampling site.

1. In the upper right corner is the analysis for which you are sampling.

2. In the top center are is the facility name and address.

3. To the right of the facility name/address is the PWSID number.

4. On the left side is the Distribution Point – no location given.

5. Underneath is the barcode that has the sample number unique to this sample for the lab to scan to receive your sample.

6. Below the barcode is a unique numeric Id that will always be associated with this sample.

7. Below the unique numeric Id is a text Id for the sample, the analysis code for the LIMS and the sampling period.

HERE IS THE PART THE HOME OWNER DOES:

1. On the right side is Collected By: (please have home owner Print name here)

2. Signature: (please have home owner Write name here)

3. Date_____ Time____ AM/PM (write the date and time the sample was collected and be sure to circle AM or PM.

4. Location (faucet/ room in home where sample taken

5. Address: Write the address where sample is taken

HERE IS THE PART YOU DO:

A

1. Enter the site # supplied by water supply from your site plan.

2. If you have comments about your sample write them on the comments line (last thing on the page).

3. Collect your samples from the home owners and you are ready to send them back to the lab.

Example of COC



сеаа соррег

MISSISSIPPI STATE DEPARTMENT OF HEALTH

Chain of Custody

MS Public Health Laboratory - 570 East Woodrow Wilson Jackson MS 39216 Phone: 601-576-7582

CITY OF JACKSON PO BOX 17 JACKSON, MS 39205 Attention: CHARLES E WILLIAMS JR PWSID: MS0250008

Received By:	y: Signature Confirms Rejects				
DS000 42063 PB-200206-002	Distribution PB 1Q2020	Collected By $Sam Ellio H$ Signature $Sam Elliott$ Date/Time $2/5/2020$ $8:00$ $M)/PM$ Location $K:tchen Taucet$ Site # 9 Address 186 West Palm St Not collected \Box Reason:			
	For Lab Use Only	Reason to Reject For Lab Use Only			
Do N	ot Write In This Space	Sample Exceeds Hold Time Leaked in Transit Lab Accident No Matching BC			
Addition Informa	ation Needed:				



- Now we will look at the Organic Chemistry Chain of Custody. These COCs are all the same format because they all require the same sampling information.
- We have VOCs, THMs, HAAs, CARBs, GLYs and EDBs.
- What you will notice is that the COC has the analysis name in the top right corner, but the analysis code may be different next to the sampling period.



This is the look for the new Chain of Custody for VOCs



Chain of Custody

Volatile Organics

0050002

PWSID: MS0050002

MS Public Health Laboratory - 570 East Woodrow Wilson Jackson MS 39216 Phone: 601-576-7582

TOWN OF HICKORY FLAT 225 W SPRUCE

HICKORY FLAT, MS 38633

Attention: DIANNA GRIST

TF103 NORTH OF ELEVATED TANK 42080 42080 102020 VO-200206-007 VO 1Q2020	A R	Collected By
For Lab Use Only Do Not Write In This Space Other Reason(s) for Rejection:		For Lab Use Only Cooler Temp °C Air Bubbles >11 mm Temp out of range Reason to Reject Leaked in Transit No Matching BC



As you can see the COCs will have most of the sampling in formation already present for your sampling site.

1. In the upper right corner is the analysis for which you are sampling.

- 2. In the top center are is the facility name and address.
- 3. To the right of the facility name/address is the PWSID number.
- 4. On the left side is the Sampling Point TF103 and the location where to take the sample.

5. Underneath is the barcode that has the sample number unique to this sample for the lab to scan to receive your sample.

6. Below the barcode is a unique numeric Id that will always be associated with this sample.

7. Below the unique numeric Id is a text Id for the sample, the analysis code for the LIMS and the sampling period.

HERE IS THE PART YOU DO:

1. On the right side is Collected By: (please Print your name here)

2. Signature: (please Write your name here)

3. Date_____ Time____ AM/PM (write the date and time the sample was collected and be sure to circle AM or PM.

4. Enter your residual chlorine reading, free and/or total (or both), check the type of kit used and enter your residual chlorine pillow lot number and expiration date.

5. If you have comments about your sample write them on the comments line (last thing on the page).



The next slide has red circles around the items listed in **black 1-7** and a blue rectangle around the information you need to fill out listed in blue 1-4.

1. In the upper right corner is the analysis for which you are sampling.

- 2. In the top center are is the facility name and address.
- 3. To the right of the facility name/address is the PWSID number.
- 4. On the left side is the Sampling Point TF103 and the location where to take the sample.

5. Underneath is the barcode that has the sample number unique to this sample for the lab to scan to receive your sample.

6. Below the barcode is a unique numeric Id that will always be associated with this sample.

7. Below the unique numeric Id is a text Id for the sample, the analysis code for the LIMS and the sampling period.

HERE IS THE PART YOU DO:

1. On the right side is Collected By: (please Print your name here)

2. Signature: (please Write your name here)

3. Date _____ Time ____ AM/PM (write the date and time the sample was collected and be sure to circle AM or PM.

4. Enter your residual chlorine reading, free and/or total (or both), check the type of kit used and enter your residual chlorine pillow lot number and expiration date.

5. If you have comments about your sample write them on the comments line (last thing on the page).

MISSISSIPPI STATE DEPARTMENT OF HEALTH	s 38633
Received By	Signature Confirms Rejects
TF103 NORTH OF ELEVATED TANK 42080 VO-200206-007 VO 1Q2020	A Collected By
For Lab Use Only Do Not Write In This Space	For Lab Use Only Cooler Temp °C
Other Reason(s) for Rejection:	
Comments:	



Example of COC



Volatile Organics

0050002

PWSID: MS0050002

Chain of Custody

MISSISSIPPI STATE DEPARTMENT OF HEALTH

MS Public Health Laboratory - 570 East Woodrow Wilson Jackson MS 39216 Phone: 601-576-7582

TOWN OF HICKORY FLAT 225 W SPRUCE HICKORY FLAT, MS 38633

Attention: DIANNA GRIST

De	col	vec	
R.0	cei	vec	

Signature Confirms Rejects

TF103 NORT	H OF ELEVATE	ED TANK	Δ	Collected By Elmer Fudd
			11	Signature Elmer Fuld
42080 VO-200206-007	vo	1Q2020	R	Date <u>2/5/2020</u> Time <u>3:15</u> AM (PM)
				Chlorine Residual Free Total
				Inst. Hach LaMotte
				Free Lot # A 10101 Exp.Date 10/31/2020
				Total Lot # <u>A 20316</u> Exp.Date <u>12/31/2021</u>
				Not Collected Well Offline Down for Repairs
				For Lab Use Only
F	For Lab Us	se Only		Cooler Temp °C
Do No	ot Write II	n This Space		Air Bubbles >11 mm Temp out of range Reason to Reject Leaked in Transit No Matching BC
Other Descent(a) for	Balaatiaat			
Other Reason(s) for	Rejection:			
Comments:				



This is the look for the new Chain of Custody for THMs

MISSISSIPPI STATE DEPARTMENT OF HEALTH	Chain c	of Cu	Istody
MS Public Heal	th Laboratory - 570 East Woo	drow Wil	son Jackson MS 39216 Phone: 601-576-7582
	CITY OF WEST POINT PO BOX 1117 WEST POINT, MS 3 Attention: HARMON		PWSID: MS0130008
Received By		Signatu	ire Confirms Rejects
DS000 SM1 9100 HWY 50 T 42071 TH-200206-002 TH	E 1Q2020	A R	Collected By
For Lab U Do Not Write I			For Lab Use Only Cooler Temp °C
Other Reason(s) for Rejection: Comments:]	



As you can see the COCs will have most of the sampling in formation already present for your sampling site.

1. In the upper right corner is the analysis for which you are sampling.

2. In the top center are is the facility name and address.

3. To the right of the facility name/address is the PWSID number.

4. On the left side is the Sampling Point - DS000 SM1 and the location where to take the sample.

5. Underneath is the barcode that has the sample number unique to this sample for the lab to scan to receive your sample.

6. Below the barcode is a unique numeric Id that will always be associated with this sample.

7. Below the unique numeric Id is a text Id for the sample, the analysis code for the LIMS and the sampling period.

HERE IS THE PART YOU DO:

1. On the right side is Collected By: (please Print your name here)

2. Signature: (please Write your name here)

3. Date_____ Time____ AM/PM (write the date and time the sample was collected and be sure to circle AM or PM.

4. Enter your residual chlorine reading, free and/or total (or both), check the type of kit used and enter your residual chlorine pillow lot number and expiration date.

5. If you have comments about your sample write them on the comments line (last thing on the page).



Example of COC

16		THM
MISSISSIPPI STATE DEPARTMENT OF HE	Chain of C	ustody
		/ilson Jackson MS 39216 Phone: 601-576-7582
	CITY OF WEST POINT PO BOX 1117 WEST POINT, MS 39773 Attention: HARMON A ROE	PWSID: MS0130008
Received By	Signa	ture Confirms Rejects
DS000 SM1 9100 HWY 42071 TH-200206-002 TH		Collected By Jason Bourne Signature Bourne Date $2/5/2020$ Time 11:00 M P Chlorine Residual Free 0.8 Total 1.1 Inst. Hach LaMotte Free Lot # A 12345 Exp.Date $12/3\sqrt{2021}$ Total Lot # A 22230 Exp.Date $10/31/202$ Not Collected Well Offline Down for Repairs
	Use Only In This Space	For Lab Use Only Cooler Temp °C Air Bubbles >11 mm Temp out of range Reason to Reject Leaked in Transit No Matching BC

This is the look for t	he new
Chain of Custody for	r HAAs
	Haloaceticacid
MISSISSIPPI STATE DEPARTMENT OF HEALTH	
MS Public Health Laboratory - 570 East Woodrow Wilson Jackson MS 39216 Ph	one: 601-576-7582
YOKENA-JEFF DAVIS WATER DEPT	PWSID: MS0750011

4865 JEFF DAVIS ROAD VICKSBURG, MS 39180 Attention: ROBERT GREER ▲ Collected By _____

Signature Confirms Rejects	

DS000	SMH



42072 HA-200206-001	HA	1Q2020	R	Signature Time AM / PM
				Chlorine Residual Free Total
				Inst. Hach LaMotte
				Free Lot # Exp.Date
				Total Lot # Exp.Date
				Not Collected Well Offline Down for Repairs
				For Lab Use Only
	For Lab	Use Only		Cooler Temp °C
				Air Bubbles >11 mm Temp out of range
Do N	lot Write	In This Space		Reason to Reject Leaked in Transit No Matching BC
Other Reason(s) f	or Rejection:			

Comments: _____



As you can see the COCs will have most of the sampling in formation already present for your sampling site.

1. In the upper right corner is the analysis for which you are sampling.

- 2. In the top center are is the facility name and address.
- 3. To the right of the facility name/address is the PWSID number.
- 4. On the left side is the Sampling Point DS000 SMH and no location where to take the sample.

5. Underneath is the barcode that has the sample number unique to this sample for the lab to scan to receive your sample.

6. Below the barcode is a unique numeric Id that will always be associated with this sample.

7. Below the unique numeric Id is a text Id for the sample, the analysis code for the LIMS and the sampling period.

HERE IS THE PART YOU DO:

1. On the right side is Collected By: (please Print your name here)

2. Signature: (please Write your name here)

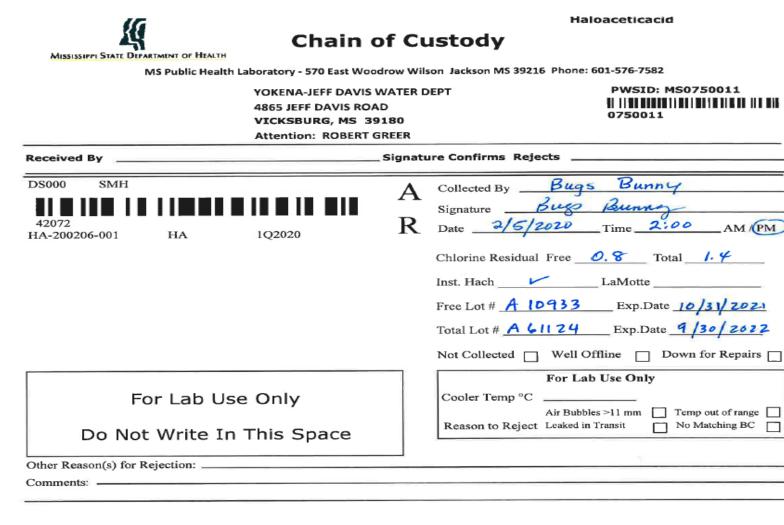
3. Date_____ Time____ AM/PM (write the date and time the sample was collected and be sure to circle AM or PM.

4. Enter your residual chlorine reading, free and/or total (or both), check the type of kit used and enter your residual chlorine pillow lot number and expiration date.

5. If you have comments about your sample write them on the comments line (last thing on the page).



Example of COC





Other analyses that have this same format for their Chain of Custody is Carbamates, Glyphosates, EDBs, and Pesticides

The same steps apply:

1. On the right side is Collected By: (please Print your name here)

2. Signature: (please Write your name here)

3. Date Time AM/PM (write the date and time the sample was collected and be sure to circle AM or PM.

4. Enter your residual chlorine reading, free and/or total (or both), check the type of kit used and enter your residual chlorine pillow lot number and expiration date.

5. If you have comments about your sample write them on the comments line (last thing on the page).



Important Points to Note:

1. If your residual chlorine pillows are expired your sample will be rejected.

2. If you do not put the lot number and expiration date on your COC for a sample, Water Supply will try to get that information from you, but if we don't receive that information in the laboratory by the end of the day of receipt - your sample will be rejected.

3. If your VOC or THM sample has headspace (greater than 11mm), it will be rejected.

4. If your sample and COC do not match, your sample will be rejected.

5. For multiple samples in one cooler, all COCs must be filled out and returned with the samples to the lab.

- 6. Always put your completed COC in the plastic bag to keep it dry.
- 7. Keep treating the trip blanks as usual when received with the kits.



Multiple Samples in one cooler – such as VOCs Make sure the numbers on the vial and COC match when collecting the sample and filling out the COC.

	L(Chain of C	Volatile Organics
	MISSISSIPPI STATE DEPARTMENT OF HEALTH MS Public Health Labo	ratory - 570 East Woodrow Wil	son Jackson MS 39216 Phone: 601-576-7582
WN OF HICKORY	2 H	OWN OF HICKORY FLAT 25 W SPRUCE IICKORY FLAT, MS 38633 ttention: DIANNA GRIST	PWSID: MS0050002 1 1 1 1 1 1 1 1 1 1 1 1
HOFLELVATED	Received By	Signat	ure Confirms Rejects
42080 107 VO	1F103 NORTH OF ELEVATED TA	NK A Q2020 R	Collected By Elmex Fudd Signature Elmex Fudd Date 2/5/2022 Time 3:15 AM (PM) Chlorine Residual Free 0.6 Total 1.2 Inst. Hach LaMotte Free Lot # A 10101 Exp.Date 10/31/2020 Total Lot # A 20316 Exp.Date 12/31/2021 Not Collected Well Offline Down for Repairs
	For Lab Use 0	Dnly	For Lab Use Only Cooler Temp °C
	Do Not Write In Th	nis Space	Reason to Reject Leaked in Transit
AND DESCRIPTION OF TAXABLE	Other Reason(s) for Rejection:		
	Comments:		

Multiple Samples in one cooler to be distributed to others for collection– such as PB/CU Make sure the numbers on the vial and COC match before leaving at a home for collection.

	Chain of MISSISSIPPI STATE DEPARTMENT OF HEALTH MS Public Health Laboratory - 570 East Woodrom		
	CITY OF JACKSON PO BOX 17 JACKSON, MS 39205 Attention: CHARLES E WI	PWSID: MS0250008 	
	Received By: Signatur	e Confirms Rejects	
ESERCE CITY OF JACKSON prot Distribution 42085 8-200206-002 PB 102829	DS000 Distribution A 42063 PB-200206-002 PB 1Q2020 R	Collected By Sam Ellis H Signature Sam Ellis H Date/Time 2/5/2020 8:00 AW) / PM Location Kitchen Taucet Site # 9 Address 186 West Palm St Not collected Reason:	
	For Lab Use Only	Reason to Reject For Lab Use Only	
	Do Not Write In This Space	Sample Exceeds Hold Time Leaked in Transit Lab Accident No Matching BC	
	Addition Information Needed:		
And the second			

WEBSITES

• WATER SUPPLY CHAIN OF CUSTODY

https://www.msdh.ms.gov/msdhsite/ static/resources/10573.pdf

DRINKING WATER WATCH https://apps.msdh.ms.gov/DWW/



Questions?



