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



#### **Chain of Custody**

Inorganic Metals & Fluoride

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

LANGFORD WATER ASSOCIATION 1805 HWY 471 BRANDON, MS 39047 Attention: SONYA BLACKWELL PWSID: MS0610012

Down for Repairs

Received	Ву	Sig	natu	ure Confirms Reject	5	
TF103	APPROX 4 MI NO OF BR 471	ANDON OFF HWY	A	Collected By		
			D	Signature		
42061	6 002 IN	102020		Date	Time	AM / PM

For Lab Use Only

Do Not Write In This Space

Other Reason(s) for Rejection:

Comments:

Air Bubbles >11 mm Temp out of range Reason to Reject Leaked in Transit No Matching BC

Well Offline

For Lab Use Only

Cooler Temp °C



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.

- 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.

- 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.



Chain of Custody

MISSISSIPPI STATE DEPARTMENT OF HEALTH

Inorganic Metals & Fluoride

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

LANGFORD WATER ASSOCIATION 1805 HWY 471

BRANDON, MS 39047

Attention: SONYA BLACKWELL

PWSID: MS0610012

	OF BRANDON OFF HWY	Collected By		- 192
471		Signature		**
061 200206-002 IN	1Q2020	Date	Time	AM / PM

For Lab Use Only
Do Not Write In This Space

Other Reason(s) for Rejection: \_

Comments: -

Cooler Temp °C	27			
	Air Bubbles >11 mm		Temp out of range	
Reason to Reject	Leaked in Transit	$\Box$	No Matching BC	Г

Not Collected Well Offline Down for Repairs



### Example of COC



#### **Chain of Custody**

**Inorganic Metals & Fluoride** 

Not Collected Well Offline Down for Repairs

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

LANGFORD WATER ASSOCIATION 1805 HWY 471 BRANDON, MS 39047

Attention: SONYA BLACKWELL

PWSID: MS0610012

Received B	у		-	_Signati	ure Confirms F	Rejects		
TF103		4 MI NO C	F BRANDON OFF HWY	Δ	Collected By		watkins	
	471			11		Sum W	atkins	
42061				R	Digitatai		Time 4:15 A	M/PM
IN-200206-	002	IN	1Q2020					



# 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
CLARKSDALE, MS 38614

5 36014

Cyanide

PWSID: MS0140002

0140002

		Attention. Cokris	D DOGGILL	•••		
Received By			Signati	ure Confirms Rejects		
TF111 WEST 42057 CN-200206-002		1Q2020	A R	Collected By Signature Date Chlorine Residual Free Inst. Hach	Time Total	AM / PN
				Total Lot #Not Collected Well	Exp.Date	
	For Lab U	se Only		Cooler Temp °C		np out of range
Do N	ot Write I	n This Space		Reason to Reject Leaked	l 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 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.

- 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).
- 6. Collect your sample, add the preservative and you are ready to send it back to the lab <u>on ice</u>.



### Example of COC



Chain of Custody

Cyanide

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

	Signature Confirms Rejects
TF111 WEST SIDE OF CITY-EAST OF WELL #3  42057 CN-200206-002 CN 1Q2020	A Collected By Jack Sprat  Signature Josh Sprat  R Date 2/5/2020 Time 3:30 AM/PM  Chlorine Residual Free 0.4 Total 0.8  Inst. Hach LaMotte  Free Lot # A 10662 Exp. Date 10/31/2020  Total Lot # A 11163 Exp. Date 11/30 2021  Not Collected Well Offline Down for Repairs
For Lab Use Only	For Lab Use Only  Cooler Temp °C Temp out of range



# 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).
- 6. Collect your sample, add the preservative and you are ready to send it back to the lab on ice.



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



#### Chain of Custody

**Lead Copper** 

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

Signa	ture Confirms Rejects
A STATE OF THE STA	Collected By
PB 1Q2020 _	Date/TimeAM / PN
	LocationSite #
	Address
	Not collected Reason:
Lab Use Only	Reason to Reject For Lab Use Only
	Sample Exceeds Hold Time Leaked in Transit
Write In This Space	Lab Accident No Matching BC
	PB 1Q2020



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

- 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



alm of Custody

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 PWSID: MS0250008

Lead Copper

Received By: Signat	ture Confirms Rejects —
Distribution  42063 PB-200206-002 PB  1Q2020	Collected By  Sam Ellio ##  Sam Ellio ##  Sam Ellio ##  Date/Time  Location  Address  Not collected Reason:
For Lab Use Only  Do Not Write In This Space	Reason to Reject For Lab Use Only  Sample Exceeds Hold Time Leaked in Transit Lab Accident No Matching BC



- 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

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

PWSID: MS0050002

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  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.

- 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).
- 6. Collect your sample, add the preservative and you are ready to send it back to the lab <u>on ice</u>.



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.

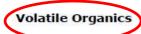
- 1. In the upper right corner is the analysis for which you are sampling.
- 2. In the top center are is the facility name and address.
- 3. To the right of the facility name/address is the PWSID number.
- 4. On the left side is the Sampling Point TF103 and the location where to take the sample.
- 5. 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.

- 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).
- 6. Collect your sample, add the preservative and you are ready to send it back to the lab on ice.





#### **Chain of Custody**



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 PWSID: MS0050002

eceived By	Signature Confirms Rejects
F103 NORTH OF ELEVATED TANK	A Collected By
42080 7O-200206-007 VO 1Q20	R Signature
	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 Onl	Y Cooler Temp °C Air Bubbles >11 mm Temp out of range
Do Not Write In This	Reason to Reject Leaked in Transit No Matching RC



### Example of COC



#### **Chain of Custody**

Volatile Organics

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

Received By \_\_\_\_\_\_Signature Confirms Rejects \_\_\_\_\_

PWSID: MS0050002

gnature Elmer Fudd  gnature Tull  ate 2/5/2020 Time 3:15 AM (PM)  alorine Residual Free 0.6 Total 1.2  st. Hach LaMotte
ee Lot # A 10101 Exp.Date 10/31/2020
otal Lot # A 20316 Exp. Date 12/31/2021  ot Collected
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 the new Chain of Custody for THMs



#### **Chain of Custody**

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

CITY OF WEST POINT
PO BOX 1117
WEST POINT, MS 39773

Attention: HARMON A ROBINSON

PWSID: MS0130008

THM

Received By			Signati	Signature Confirms Rejects		
DS000 SM1 9100 HWY 50 E  42071 TH-200206-002 TH 1Q2020		A R	Signature  Date  Chlorine Residual Fre  Inst. Hach  Free Lot #  Total Lot #	TimeAM / PM  reTotal  LaMotte Exp.Date  Exp.Date ell Offline Down for Repairs [		
	For Lab Us	se Only This Space		Cooler Temp °C	Bubbles >11 mm Temp out of range ced 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 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.

- 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).
- 6. Collect your sample, add the preservative and you are ready to send it back to the lab <u>on ice</u>.



### Example of COC



#### **Chain of Custody**

THM

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

CITY OF WEST POINT PO BOX 1117 WEST POINT, MS 39773

Attention: HARMON A ROBINSON

PWSID: MS0130008 0130008

Received By	Signature Confirms Rejects		
DS000 SM1 9100 HWY 50 E  42071 TH-200206-002 TH 1Q2020	A Collected By Jason Bourne  Signature Power Bourne  R Date 2/5/2020 Time 11:00 MM PM  Chlorine Residual Free 0.8 Total 1.1  Inst. Hach LaMotte  Free Lot # A 123 45 Exp.Date 12/31/2021  Total Lot # A 22230 Exp.Date 10/31/2022  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 [  Reason to Reject Leaked in Transit No Matching BC [		



# This is the look for the new Chain of Custody for HAAs



#### Chain of Custody

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

YOKENA-JEFF DAVIS WATER DEPT 4865 JEFF DAVIS ROAD VICKSBURG, MS 39180 Attention: ROBERT GREER PWSID: MS0750011

Haloaceticacid

Received By	Signature Confirms Rejects
DS000 SMH  42072 HA-200206-001 HA 1Q2020	A Collected By
For Lab Use Only  Do Not Write In This Space  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 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.

- 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).
- 6. Collect your sample, add the preservative and you are ready to send it back to the lab <u>on ice</u>.



## Example of COC



#### **Chain of Custody**

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

YOKENA-JEFF DAVIS WATER DEPT 4865 JEFF DAVIS ROAD VICKSBURG, MS 39180 Attention: ROBERT GREER

PWSID: MS0750011

Haloaceticacid

Received By		Signature Confirms Rejects
DS000 SMH 42072 HA-200206-001	HA 1Q2020	A Collected By Bugs Bunny  Signature Bugs Bunny  R Date 2/5/2020 Time 2:00 AM PM  Chlorine Residual Free 0.8 Total 1.4  Inst. Hach LaMotte  Free Lot # A 10933 Exp.Date 10/31/2021  Total Lot # A 61124 Exp.Date 9/30/2022  Not Collected Well Offline Down for Repairs
F	or Lab Use Only	Cooler Temp °C Air Bubbles >11 mm Temp out of range
Do Not Write In This Space		Reason to Reject Leaked in Transit No Matching BC



# 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).
- 6. Collect your sample, add the preservative and you are ready to send it back to the lab <u>on ice</u>.



### 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.





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.





## Questions?



