



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

DATE: *September 24, 2024*

SUBJECT: CLEAN WATER ACT INSPECTION REPORT
United Mobile Homes of Ohio, Inc – Lake Sherman Village MHC, 7227 Beth Avenue SW, Navarre, Ohio, Stark County

FROM: Jonathan Moody, Environmental Engineer
WECAB, Multimedia Section

THRU: Brooke Furio, Section Supervisor
WECAB, Multimedia Section

BASIC INFORMATION

Facility Name: United Mobile Homes of Ohio, Inc. – Lake Sherman Village MHC

Facility Type: *Extended aeration treatment plant (privately-owned mobile home park)*

NPDES Permit Number: *OH0045683*

Date of Inspection: September 5, 2024

Date of Previous Inspection: May 30, 2024

EPA Inspector(s):

1. Jonathan Moody, Lead Inspector

Facility Representative(s):

1. Ron Miller, UMH Properties, Inc. - Operator

Contact Email Address: jyorick@umh.com, jsearcy@umh.com

Owner Contact	Operator Contact	Physical Facility Address
Jeffrey V. Yorick, P.E. Executive Vice President for Engineering UMH Properties, Inc. 150 Clay Street, Suite 410 Morgantown, WV 26501 304-291-3380	Ron Miller UMH Properties, Inc. (330) 484-4767	Lake Sherman Village MHC 7227 Beth Avenue SW, Navarre, Ohio 44662 Stark County (330) 484-4767

Inspection Type: *Compliance Evaluation with Sampling*

Facility Notification:

- ☐ Unannounced Inspection
- ☒ Announced Inspection

Arrival Date and Time: 9/5/24 8:15 AM

Departure Date and Time: 9/5/24 9:00 AM

OPENING CONFERENCE

- ☒ Presented Credentials
- ☒ Stated authority and purpose of inspection
- ☒ Provided Small Business Resource Information Sheet (previously provided)
- ☐ Small Business Resource Information Sheet not provided. Reason: N/A
- ☒ Provided CBI notification to facility (previously provided)

The following information was obtained verbally from Ron Miller unless otherwise noted.

Background:

The Lake Sherman Village is a Manufactured Home Community (MHC) owned by UMH Properties, Inc. The property has approximately 254 lots total for manufactured homes. At the time of the inspection there were approximately 251 occupied lots.

Process Description:

The treatment facility is an extended aeration basins with an equalization tank, slow sand filters and a chlorine contact chamber. This report does not contain Confidential Business Information (CBI).

Staff Interview(s):

Ron Miller is the operator in charge of the sewer plant and is employed by UMH Properties, Inc. Ron Miller is onsite every day. Ron Miller has been an operator for 34 years.

Sometime between Tuesday (9/3/24) morning and Wednesday (9/4/24) morning the pumps in the dosing chamber, which pumps to the sand filters, became inoperable. When Ron arrived at the site on Wednesday morning, water had begun to backup in the plant and was overflowing from the south aeration basin onto the ground in between the south and middle aeration basins. See photos 4 through 6. The ground in that area slopes toward a receiving stream to the south of the treatment plant in the direction shown in photo 5.

FACILITY WALK-THROUGH OCCURRED:

No

Data Collected and Observations:

EPA collected a bacteriological sample for E. coli from the end of the chlorine contact chamber just upstream of a flow measurement weir. Per Ron Miller, this is the same location where samples are collected for routine E. coli compliance purposes.

The sample was collected into a 120mL sterile plastic bottles pre-preserved with sodium thiosulfate provided by Pace Analytical Services. The bottle was dipped into the water matrix with gloved hand with a single motion.

After collecting the sample, Jonathan Moody conducted additional monitoring using an AT-600 wastewater meter and a Hach SL1000 for residual chlorine, and free ammonia field measurements.

Photos and/or Videos: were taken during the inspection.

A photolog for the photos taken during the inspection is included in Appendix B.

Field Measurements: were taken during this inspection.

The results of monitoring conducted while in the field are included in Appendix C.
The results of the field sampling are included in Appendix D.

RECORDS REVIEW

List of Records Reviewed Onsite:

No records were reviewed onsite

Requested documents: N/A

Documents Received From Facility: N/A

CLOSING CONFERENCE

- ☒ Provided U.S. EPA point of contact to the facility.
- ☒ Explained Inspection Report Process
- ☒ Confirm CBI status at end of closing conference. No CBI claimed.
- ☒ Discussed Preliminary Area(s) of Concern

Areas of Concern:

1. NPDES Permit No. OH0045683 Part III-General Conditions 2. GENERAL EFFLUENT LIMITATIONS

"The effluent shall, at all times, be free of substances:

- A. In amounts that will settle to form putrescent, or otherwise objectionable, sludge deposits; or that will adversely affect aquatic life or water fowl;*
- B. Of an oily, greasy, or surface-active nature, and of other floating debris, in amounts that will form noticeable accumulations of scum, foam or sheen;*
- C. In amounts that will alter the natural color or odor of the receiving water to such degree as to create a nuisance;*

At the time of the inspection the filters were being bypassed. The effluent had a cloudy or discolored appearance as shown in Photos 2 and 3. The turbidity of the discharge was 7.3 NTU equivalents. During a prior inspection conducted on May 30, 2024 the filters were in service and the effluent turbidity was 0 NTU equivalents.

2. NPDES Permit No. OH0045683 Part III-General Conditions 3.A. - Facility Operation and Quality Control

"All wastewater treatment works shall be operated in a manner consistent with the following: A. At all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or

used by the permittee necessary to achieve compliance with the terms and conditions of this permit..."

- a) The pumps in the dosing chamber were offline and the slow sand filters and chlorine feeder were being bypassed. Temporary pumps were in place to pump water from the dosing chamber into the chlorine contact chamber and chlorine pucks were placed directly into the chlorine chamber.
- b) Chlorine residual in the contact chamber was below detection for free chlorine and 2.22 mg/L for Total Chlorine. These values are below the state recommended standard in the Ohio EPA manual *Design Standards: Wastewater Treatment Plants & Collection Systems ≤ 100,000 gpd, Version 2013 -Section 8.72 Chlorination, Page 55:*

"...

C) The chlorine dose usually ranges from 5 to 20 milligrams per liter (mg/L). and

D) Hypochlorite is the only acceptable type of chlorine for disinfection. Chlorinated isocyanurates (swimming pool disinfection products) are not to be used in disinfection of wastewater treatment.

..."

At the time of the inspection, the chlorine dosing could not be determined, however the chlorine dosing was not enough to maintain an effective free chlorine residual. The concentration of ammonia in the discharge was high enough to fully react with all available free chlorine, eliminating the free chlorine from the hypochlorite disinfectant.

Appendices and Attachments

- A. Aerial Image
- B. Digital Image Log
- C. Field Measurement Data
- D. EPA Sampling Results from Pace Analytical Services

Attachments

- 1. Transmittal of Sample Analysis Results (Laboratory Reports)

DIGITAL SIGNATURES

Report Author: Jonathan Moody

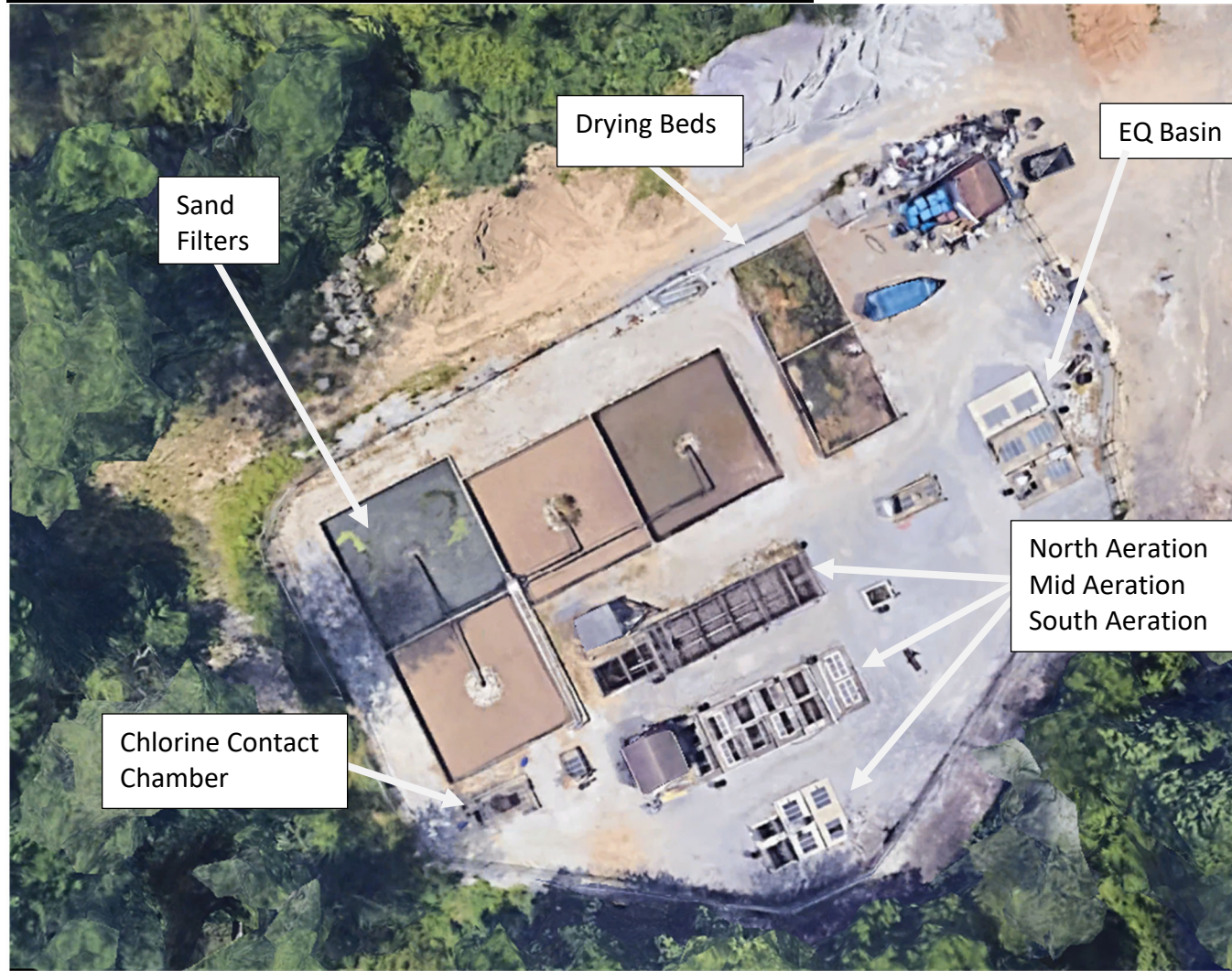
Report Author Signature: **JONATHAN MOODY**
Digitally signed by JONATHAN MOODY
Date: 2024.09.25 07:41:28 -04'00'

Section Supervisor: Brooke Furio

Section Supervisor Signature: **BROOKE FURIO**
Digitally signed by BROOKE FURIO
Date: 2024.09.25 08:03:14 -04'00'

Facility Name: Lake Sherman Village MHC
Facility Location: 7227 Beth Avenue SW, Navarre, Ohio
Date of Inspection: September 5, 2024

APPENDIX A: AERIAL PHOTO FROM GOOGLE MAPS VISITED 07/24/2024



Facility Name: *Lake Sherman Village MHC*
Facility Location: *7227 Beth Avenue SW, Navarre, Ohio*
Date of Inspection: September 5, 2024

APPENDIX B: PHOTOLOG

CAMERA: COOLPIX W300

Facility Name: Lake Sherman Village MHC

Facility Location: 7227 Beth Avenue SW, Navarre, Ohio

Date of Inspection: September 5, 2024



1: DSCN2254.JPG

Location: Lake Sherman Village

Photographer: Jonathan Moody

Date/Time: 9/5/2024 8:35 AM

Camera Direction: Down, North

Description: Sample S01 taken from the end of the chlorine contact chamber, just upstream of the flow measurement weir.

Facility Name: Lake Sherman Village MHC

Facility Location: 7227 Beth Avenue SW, Navarre, Ohio

Date of Inspection: September 5, 2024



2: DSCN2255.JPG

Location: Lake Sherman Village

Photographer: Jonathan Moody

Date/Time: 9/5/2024 8:44 AM

Camera Direction: Northeast

Description: Visual grab of the effluent. At the time of the inspection the effluent was cloudy and discolored.

Facility Name: Lake Sherman Village MHC

Facility Location: 7227 Beth Avenue SW, Navarre, Ohio

Date of Inspection: September 5, 2024



3: DSCN2256.JPG

Location: Lake Sherman Village

Photographer: Jonathan Moody

Date/Time: 9/5/2024 8:45 AM

Camera Direction: Down

Description: Visual grab of the effluent. At the time of the inspection the effluent was cloudy and discolored.

Facility Name: Lake Sherman Village MHC

Facility Location: 7227 Beth Avenue SW, Navarre, Ohio

Date of Inspection: September 5, 2024



4: DSCN2257.JPG

Location: Lake Sherman Village

Photographer: Jonathan Moody

Date/Time: 9/5/2024 8:47 AM

Camera Direction: South

Description: Looking at the south aeration basin. Per Ron Miller, this basin had overflowed onto the ground shown in the foreground of this photo.

Facility Name: Lake Sherman Village MHC

Facility Location: 7227 Beth Avenue SW, Navarre, Ohio

Date of Inspection: September 5, 2024



5: DSCN2258.JPG

Location: Lake Sherman Village

Photographer: Jonathan Moody

Date/Time: 9/5/2024 8:47 AM

Camera Direction: South

Description: Looking at the south aeration basin. Per Ron Miller, this basin had overflowed onto the ground shown in the foreground of this photo.

Facility Name: Lake Sherman Village MHC

Facility Location: 7227 Beth Avenue SW, Navarre, Ohio

Date of Inspection: September 5, 2024



6: DSCN2259.JPG

Location: Lake Sherman Village

Photographer: Jonathan Moody

Date/Time: 9/5/2024 8:47 AM

Camera Direction: East

Description: Looking at the south aeration basin. Per Ron Miller, this basin had overflowed onto the ground shown in the foreground of this photo.

Facility Name: Lake Sherman Village MHC

Facility Location: 7227 Beth Avenue SW, Navarre, Ohio

Date of Inspection: September 5, 2024



7: DSCN2260.JPG

Location: Lake Sherman Village

Photographer: Jonathan Moody

Date/Time: 9/5/2024 8:51 AM

Camera Direction: Down

Description: Result of the monitoring conducted by EPA at the end of the chlorine contact chamber using a Hach SL1000.

Facility Name: Lake Sherman Village MHC

Facility Location: 7227 Beth Avenue SW, Navarre, Ohio

Date of Inspection: September 5, 2024

APPENDIX C: FIELD MEASUREMENT DATA AND SAMPLING

Jonathan Moody conducted field monitoring using an In-Situ AquaTroll 600 (AT600), Serial Number 1079129. The AT600 was equipped with a temperature/conductivity sensor, pH sensor, Rugged Dissolved Oxygen (RDO) sensor and a turbidity sensor. The chart below shows the results of the monitoring. The AT600 was calibrated September 4, 2024 using a 3-point pH calibration and the In-Situ "Quick Cal" solution for specific conductivity. The RDO sensor was calibrated using the 100% saturation method on September 5, 2024, just before starting the field monitoring.

<i>Date/Time</i>	<i>Ref. #</i>	<i>Location</i>	<i>Cond (ug/cm)</i>	<i>pH (SU)</i>	<i>RDO (mg/l)</i>	<i>Turbidity (NTU) equivalent</i>
9/5/2024 8:39	MP-01	Outfall 001	782	7.98	9.70	7.3

<i>Date/Time</i>	<i>Location</i>	<i>T. Chlorine (mg/L)¹</i>	<i>F. Chlorine (mg/L)²</i>	<i>Free Ammonia (mg/L)³</i>	<i>Monochloramine (mg/L)</i>
9/5/2024 8:50	Inside the chlorine contact chamber at the flow monitoring weir	2.22	0.00 (under range)	> 0.60	2.00
Notes					
1. USEPA DPD Method, Hach Method 10260 range (0.04 to 4.00)					
2. USEPA DPD Method, Hach Method 10260 range (0.04 to 4.00)					
3. Indophenol Method, Hach Method 10269 range (0.05 to 0.50)					

Facility Name: *Lake Sherman Village MHC*
Facility Location: *7227 Beth Avenue SW, Navarre, Ohio*
Date of Inspection: September 5, 2024

APPENDIX D: EPA SAMPLING RESULTS FROM PACE ANALYTICAL SERVICES

One grab sample was collected during this inspection. A complete copy of the laboratory report is included in Attachment 1. A summary of the results is shown in the table below:

<i>Date/Time</i>	<i>Ref. #</i>	<i>Location</i>	<i>E. Coli MPN 100 ml</i>
9/5/2024 8:34	4092714- 01	Effluent Outfall 001	8

Method: Colilert[®] - Most Probable Number (MPN)

Facility Name: *Lake Sherman Village MHC*

Facility Location: *7227 Beth Avenue SW, Navarre, Ohio*

Date of Inspection: September 5, 2024

ATTACHMENT 1 : LABORATORY REPORTS

Certificate of Analysis 4092714

Jonathan Moody
(ERG) Eastern Research Group, Inc
14555 Avion Parkway Suite 200
Chantilly, VA 20151

Customer ID: 44-103012
Report Printed: 09/10/2024 18:35

Project Name: UMH E.Coli Sampling

Workorder: 4092714

Dear Jonathan Moody

Enclosed are the analytical results for samples received by the laboratory 09/05/2024 13:21.

The results relate to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services LLC Kentucky - Englewood

If you have any questions concerning this report, please feel free to contact me.



#460210 Madisonville, KY
#460291 Pikeville, KY
#E871136 Englewood, OH

This page is included as part of the Analytical Report and must be retained as a permanent record thereof.



Alicia Barnes, Project Manager



SAMPLE SUMMARY

Lab ID	Client Sample ID/Alias	Matrix	Date Collected	Date Received	Sampled By
4092714-01	E.Coli/S01 - Lake Sherman	Water	09/05/2024 08:34	09/05/2024 13:21	Jonathan Moody
4092714-02	E.Coli/S02 - Fohl Village	Water	09/05/2024 09:20	09/05/2024 13:21	Jonathan Moody

ANALYTICAL RESULTS

Lab Sample ID: **4092714-01**

Sample Collection Date Time: 09/05/2024 08:34

Description: **E.Coli S01 - Lake Sherman**

Sample Received Date Time: 09/05/2024 13:21

Conventional Chemistry Analyses Englewood

Analyte	Result	Flag	Units	MRL	MDL	Method	Prepared	Analyzed	Analyst
E. Coli	8		MPN/100m L	1	1	Colilert® - MPN	09/05/2024 15:50	09/06/2024 17:28	EKWW

ANALYTICAL RESULTS

Lab Sample ID: **4092714-02**

Sample Collection Date Time: 09/05/2024 09:20

Description: **E.Coli S02 - Fohl Village**

Sample Received Date Time: 09/05/2024 13:21

Conventional Chemistry Analyses Englewood

Analyte	Result	Flag	Units	MRL	MDL	Method	Prepared	Analyzed	Analyst
E. Coli	2708		MPN/100m L	20	20	Colilert® - MPN	09/05/2024 15:50	09/06/2024 17:28	EKWW



Notes for work order 4092714

- Samples collected by PACE personnel are done so in accordance with procedures set forth in PACE field services SOPs .
 - Results contained in this report are only representative of the samples received.
 - PACE does not provide interpretation of these results unless otherwise stated .
 - All Waste Water analyses comply with methodology requirements of 40 CFR Part 136.
 - All Drinking Water analyses comply with methodology requirements of 40 CFR Part 141.
 - Unless otherwise noted, all quantitative results for soils are reported on a dry weight basis.
 - The Chain of Custody document is included as part of this report.
 - All Library Search analytes should be regarded as tentative identification based on the presumptive evidence of the mass spectra.
- Concentrations reported are estimated values.

Qualifiers

U Target analyte was analyzed for , but was below detection limit (the value associated with the qualifier is the laboratory method detection limit in our LIMS system).

Standard Qualifiers/Acronyms

MDL	Method Detection Limit
MRL	Minimum Reporting Limit
ND	Not Detected
LCS	Laboratory Control Sample
MS	Matrix Spike
MSD	Matrix Spike Duplicate
DUP	Sample Duplicate
% Rec	Percent Recovery
RPD	Relative Percent Difference
>	Greater than
<	Less than



Pace Analytical Services, LLC

P.O. Box 907

Madisonville, KY 42431

270.821.7375

www.pacelabs.com

Conventional Chemistry Analyses Englewood - Quality Control

Analyte	Result	Reporting	Units	Spike	Source	%REC		RPD	Limit	Notes
		Limit		Level	Result	%REC	Limits			

Batch BDI0449 - Default Prep Micro 7

Blank (BDI0449-BLK1)

Prepared: 9/5/2024 15:50, Analyzed: 9/6/2024 17:28

E. Coli	ND	1	MPN/100mL							U
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Conventional Chemistry Analyses Englewood - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch BDI0449 - Default Prep Micro 7

LCS (BDI0449-BS1)

Prepared: 9/5/2024 15:50, Analyzed: 9/6/2024 17:28

E. Coli	2420	1	MPN/100mL	2420	100	0-200
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Certified Analyses included in this Report

Analyte	Certifications
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Colilert® - MPN in Water

E. Coli	KY Drinking Water Mdv (00030) KY Wastewater Mdv (00030)
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Sample Acceptance Checklist for Work Order 4092714

Shipped By: Client

Temperature: 4.50° Celcius

Condition

Check if Custody Seals are Present/Intact	☐
Check if Custody Signatures are Present	☒
Check if Collector Signature Present	☒
Check if bottles are intact	☒
Check if bottles are correct	☒
Check if bottles have sufficient volume	☒
Check if samples received on ice	☒
Check if VOA headspace is acceptable	☐
Check if samples received in holding time.	☒
Check if samples are preserved properly	☒

Office of Enforcement
MILWAUKEE

11097714

REGION 5
77 West Jackson Boulevard
Chicago, Illinois 60604

Chicago Illinois 60604
West Jackson Boulevard

Activity Code:

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PROJ. NO.	PROJECT NAME	NO. OF CON-TAINERS	ANALYTE	TAG NUMBERS
24240	UMH e, Coli Samplings			
SAMPLERS: (Print Name and Sign)				
Jonathan Needy				
STA. NO.	DATE	TIME	COMP.	GRAB
1	9/5/24	834	X	Lake Sherman
2	9/5/24	920	X	Fork Village
Thermometer Serial Number				
220622444				
230364898				
Temp 15°C				
Relinquished by: (Signature)				
Jonathan Needy				
Date / Time				
0934 9/5/24				
Received by: (Signature)				
[Signature]				
Date / Time				
9/5/24 13:21				
Received for Laboratory by: (Signature)				
[Signature]				
Date / Time				
9/5/24 13:21				
Relinquished by: (Signature)				
[Signature]				
Date / Time				
9/5/24 13:21				
Chain of Custody Seal Numbers				