



REGION 1
NEW ENGLAND REGIONAL LABORATORY
NORTH CHELMSFORD, MA 01863

July 1st, 2024

MEMORANDUM

Subj: Concentrated Animal Feeding Operation (CAFO) Sampling at Gosliga Farm

From: Nafisah Ali, Inspector
Laboratory Services and Applied Science Division (LSASD)
Field Services Branch (FSB2)

Ali,
Nafisah

Digitally signed by
Ali, Nafisah
Date: 2024.07.22
12:11:12 -04'00'

Reviewed By: Eric Magnan, Manager
LSASD-FSB2

ERIC
MAGNAN

Digitally signed by
ERIC MAGNAN
Date: 2024.07.22
13:03:30 -04'00'

To: Andrew Spejewski, Inspector
Enforcement and Compliance Assurance Division (ECAD)
Water Compliance Section 1

I. Facility Information

- A. Facility Name: Gosliga Farm
- B. Facility Location: 319 Sunset Lane Vergennes, VT 05491
- C. Facility Contact: N/A
- D. NPDES Permit ID: N/A

II. Background Information

- A. Date/Start time of sampling inspection: 5/22/2024 09:50
- B. Weather conditions: Sunny, 82°F
- C. USEPA Representatives: Andrew Spejewski, Eleanor Horvath, Nafisah Ali, Anna Hatke
- D. State/Local Representatives: Nate Sands, VT DEC
- E. Federally Enforceable Requirements Investigated: N/A

III. Disclaimer:

Unless otherwise noted, this report describes conditions at the facility/property as observed by EPA inspector(s), and/or through records provided to and/or information reported to EPA inspector(s) by facility representatives and as understood by the inspector(s). This report may not capture all operations or activities ongoing at the time of the inspection. This report does not make final determinations on potential areas of concern. Nothing in this report affects EPA's authorities under federal statutes and regulations to pursue further investigation or action.

IV. Type and Purpose of Sampling Inspection(s)

The purpose of the compliance sampling inspection was to assess applicability of and compliance with the CAFO requirements under the Clean Water Act at 40 C.F.R. Part 122.23.

V. Sampling Inspection Summary

On Wednesday, May 22nd, 2024, Nafisah Ali, and Anna Hatke of FSB 2 (“the EPA Sampling Team”), conducted wastewater sampling of five locations at Gosliga Farm (see photos and description included as Attachment 1). The sampling activities were conducted in accordance with the Standard Operating Procedure for the Collection of Chemical and Biological NPDES Water and Wastewater Samples FBSOP-NPDES Water Revision 2, 2020.

The EPA sampling team collected one outfall grab sample (GF01). Two in-stream samples (GF02 and GF03), one grab sample from manure pit (GF04) and one grab sample from leachate pit (GF05) for analysis of E. coli (Colilert-MPN), Total Suspended Solids (TSS), Source Tracking Analysis (STA), Ammonia (AMMO), Total Nitrogen (TN) and Total phosphorous (TP). The E. coli samples were collected in 120mL UV Sterile, pre-preserved bottle with Sodium Thiosulfate. Total Suspended Solids samples were collected in 1-liter (L) High Density Polyethylene (HDPE) bottle. Source Tracking Analysis samples were collected in 1-L Amber glass teflon, lined cap bottle. Ammonia, Total Nitrogen and Total Phosphorous were collected in one 500 mL HDPE bottle with preservative Sulfuric Acid to attain a pH of <2. There were no split samples with the facility.

The samples collected by the EPA sampling team were then placed in coolers with ice to maintain an internal temperature of less than 4 degrees Celsius. Samples will be analyzed for E. Coli, at Endyne Laboratory, 56 Etna Road Lebanon, NH 03766. Samples for TSS, STA, TN, and TP will be analyzed at the EPA New England Regional Laboratory in North Chelmsford, MA.

VI. Description of Sampling Location (in order of collection time)

Photographs depicting each sample location are included in Attachment 1 of this report.

- **GF01:** One circular PVC outfall located at Gosliga Farm, approximately 1.5 feet in diameter. Discharge flow was approximately <1 gallon per minute into unnamed stream/brook discharging into Lake Champlain. Sample location was located at the base of hill and Southwest of dairy barns and the feed bunker lot. Grab sample was collected at the mouth of the outfall as indicated by red X. A sweet, fermented odor was detected. Color was clear-yellow, and turbidity was low. White froth was observed exiting the outfall. The matrix of the stream bed was observed to be muddy and loose, filled with organic vegetation and detritus. Some invertebrates and nematodes were observed directly downstream of the outfall.
- **GF02:** In-stream sample of an unnamed brook discharging into Lake Champlain collected mid-field at Gosliga Farm. The sample was collected approximately half a foot from the Northern bank and approximately 2 feet downstream of a metal culvert pipe 2 feet in diameter with minimal-to-no flow as indicated by red X. No notable odor was detected. Color was gray-brown and opaque, and turbidity was high. Tall grasses were observed growing around the waterway which created a buffer of at least 6 feet between the sample location and mowed fields of the farm.

Sampling Inspection Date: 5/22/2024

- **GF03:** In-stream sample of an unnamed brook discharging to Dead Creek collected at Gosliga Farm. The sample was collected approximately half a foot from the Northern bank and approximately 600 feet upstream of GF02 as indicated by red X. No notable odor was detected. Color was murky and yellow-brown, and turbidity was medium-high. Some organic matter was observed floating in-stream. Tall grasses were observed growing in and around the stream. Some invertebrates were observed in-stream.
- **GF04:** A grab sample from a large remote stagnant manure pit was collected at Gosliga Farm. The sample was collected approximately 3 feet from the southwestern bank indicate by the red X. A strong smell of manure was observed. Color was muddy, brown, and opaque. Turbidity was high and a high concentration of organic fecal floatables was observed. Tall grasses were observed growing around all sides of the square pit, except for the concrete access point. A headway of approximately 1.5 feet was observed between the bank and the manure pit level.
- **GF05:** A grab sample from a large stagnant leachate pit was Collected at Gosliga Farm. The leachate pit was located downhill of the dairy barns and approximately 300 feet from the feed bunker lot. The sample was collected approximately 3 feet from the southern bank as indicated by the red X. A musty and sweet smell was observed. Color was reddish brown and opaque and turbidity was high. No floatables were observed. Tall grasses were observed growing around all sides of the square pit, except for the concrete access point. A headway of approximately 1 foot was observed between the bank and the leachate water level.

VII. EPA Sampling and Analytical Results

The table below provides a summary of the laboratory analytical results collected during the inspection. For a full list of compounds analyzed for each parameter and their results, refer to the laboratory reports that are attached to this inspection report (Attachment 2).

Table 1: Summary of Gosliga Farm (GF01, GF02, GF03, GF04, GF05) May 22nd, 2024, analytical results.

Location	Site ID	GF01	GF02	GF03	GF04	GF05
	Sample date	5/22/24	5/22/24	5/22/24	5/22/24	5/22/24
	Sample time	09:50	10:13	10:33	10:54	11:17
Bacteria (MPN/100mL)	E. coli	>2400	>2400	2400	17000	8200
Ammonia (mg/L)	AMMO	NA	NA	NA	NA	NA
Total Nitrogen (ug/L)	TN	3400	830	1500	ANR	ANR
Total Phosphorous (ug/L)	TP	770	1600	1600	160000	12000
TSS (mg/L)	TSS	7.0	80	68	8200	290
PPCPs (ng/L)	Cotinine	1.0	2.2	2.2	NA	NA
	Acetaminophen	16	5.7	12	NA	NA
	Paraxanthine	19	4.7	6.0	NA	NA
	Atenolol	ND	ND	ND	NA	NA
	Caffeine	15	7.8	9.1	NA	NA
	Metoprolol	ND	ND	ND	NA	NA
	Diphenhydramine	ND	ND	ND	NA	NA
	Carbamazepine	ND	ND	ND	NA	NA

*NA= Not Analyzed

*ANR = Analysis not required

*ND = Not Detected

Attachments:

Attachment 1: Photo of sampling locations (GF01, GF02, GF03, GF04, GF05) and descriptions at Gosliga Farm.

Attachment 2: Laboratory Reports for Analysis (E. coli, TSS, \$STA, TN, TP)

Note: Pages of Laboratory Reports have been redacted, the information that has been redacted does not pertain to this facility.

Sampling Inspection Date: 5/22/2024

Attachment 1:

Arial image of GF01, GF02, GF03, GF04, GF05 at Gosliga Farm.



Photo of sampling location VF01 at Veldman Farm.



Sampling Inspection Date: 5/22/2024

Photo of sampling location VF02 at Veldman Farm.



Photo of sampling location VF03 at Veldman Farm.

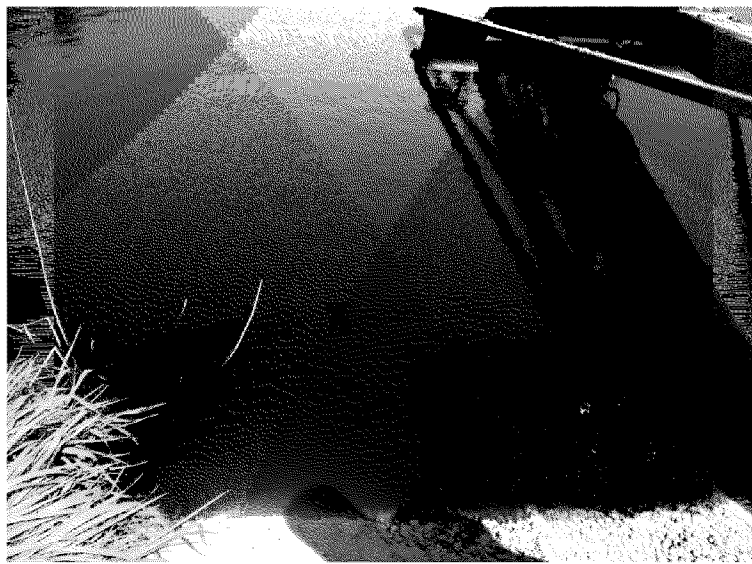


Sampling Inspection Date: 5/22/2024

Photo of sampling location VF04 at Veldman Farm.



Photo of sampling location VF04 at Veldman Farm.



Sampling Inspection Date: 5/22/2024

Attachment 2: Laboratory Reports for Analysis (E. coli, TSS, \$STA, TN, TP)

Note: Pages of Laboratory Reports have been redacted, the information that has been redacted does not pertain to this facility.

Redacted Information

E. coli: Total of 4 pages

TSS: Total of 7 pages

TN: Total of 18 pages, pages 1-8, 13-18 pertains to this facility.

\$STA: Total of 15 pages, pages 1-5, 13-15 pertains to this facility.

TP: Total of 8 pages



Laboratory Report

EPA 089621
11 Technology Drive
Chelmsford, MA 01863

PROJECT: E. coli Analysis
WORK ORDER: 2405-14444
DATE RECEIVED: May 22, 2024
DATE REPORTED: May 28, 2024
SAMPLER: Nafisah Ali

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody located at the end of this report.

The column labeled Lab/Tech in the accompanying report denotes the laboratory facility where the testing was performed and the technician who conducted the assay. A "W" designates the Williston, VT lab under NELAC certification ELAP 11263; "R" designates the Lebanon, NH facility under certification NH 2037 and "N" the Plattsburgh, NY lab under certification ELAP 11892. "Sub" indicates the testing was performed by a subcontracted laboratory. The accreditation status of the subcontracted lab is referenced in the corresponding NELAC and Qual fields.

This NELAC column also denotes the accreditation status of each laboratory for each reported parameter. "A" indicates the referenced laboratory is NELAC accredited for the parameter reported. "N" indicates the laboratory is not accredited. "U" indicates that NELAC does not offer accreditation for that parameter in that specific matrix. Test results denoted with an "A" meet all National Environmental Laboratory Accreditation Program requirements except where denoted by pertinent data qualifiers.

Endyne, Inc. warrants, to the best of its knowledge and belief, the accuracy of the analytical test results contained in this report, but makes no other warranty, expressed or implied, especially no warranties of merchantability or fitness for a particular purpose.

Reviewed by:

Alexander J Rakotz
Laboratory Director Lebanon, NH

www.endynelabs.com



ELAP 11263

160 James Brown Dr., Williston, VT 05495
Ph 802-879-4333 Fax 802-879-7103

56 Etna Road, Lebanon, NH 03766
Ph 603-678-4891 Fax 603-678-4893



NH2037

ED_019088A_00004944-00009

Laboratory Report

DATE REPORTED: 05/28/2024

CLIENT: EPA
PROJECT: E. coli Analysis

WORK ORDER: 2405-14444
DATE RECEIVED: 05/22/2024

004 Site: GF 01 Date Sampled: 5/22/24 Time: 9:50

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual
E. coli	> 2400	MPN/100 mL	SM20 9223B QuantiTray	5/22/24 15:54	R AJR	A	

005 Site: GF 02 Date Sampled: 5/22/24 Time: 10:13

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual
E. coli	> 2400	MPN/100 mL	SM20 9223B QuantiTray	5/22/24 15:54	R AJR	A	

006 Site: GF 03 Date Sampled: 5/22/24 Time: 10:33

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual
E. coli	2400	MPN/100 mL	SM20 9223B QuantiTray	5/22/24 15:54	R AJR	A	

007 Site: GF 04 Date Sampled: 5/22/24 Time: 10:54

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual
E. coli	17000	MPN/100 mL	SM20 9223B QuantiTray	5/22/24 15:54	R AJR	A	

008 Site: GF 05 Date Sampled: 5/22/24 Time: 11:17

Parameter	Result	Units	Method	Analysis Date/Time	Lab/Tech	NELAC	Qual
E. coli	8200	MPN/100 mL	SM20 9223B QuantiTray	5/22/24 15:54	R AJR	A	



E. coli Analysis

Endyne Inc. COC

Prepared: 1/31/23

2405-14444

Lab Use WO#

Bill To:

Report To:

EPA

Nafisah Ali

Cust #

11 Technology Drive, Chelmsford 01863



2405-14444

EPA
E. coli Analysis

Email: ali.nafisah@epa.gov

1

LOCATION GF 01 Sampled Date/Time: 5/22/24 @ 9:50am Sampler: NA

E. coli

1 - 120ml Sterile Plastic

<10C, Na2S2O3

LOCATION GF 02 Sampled Date/Time: 5/22/24 @ 10:13 Am Sampler: NA

E. coli

1 - 120ml Sterile Plastic

<10C, Na2S2O3

LOCATION GF 03 Sampled Date/Time: 5/22/24 @ 10:33am Sampler: NA

E. coli

1 - 120ml Sterile Plastic

<10C, Na2S2O3

\$25.00 Per Sample

****Samples MUST be received within 6 hours of sample collection****

Samples must be filled to the bottom of the bottle's cap where the lid screws on.

Relinquished by: _____ Date Time _____ Accepted by: _____ Date Time _____

Relinquished by: _____ Date Time _____ Received by: _____ Date Time _____

Sites/Parameters correct as listed. Client Initials _____

Client Authorization to use Subcontract lab Client Initials _____

Sample origin: VT ☐ NH ☐ NY ☐ Other ☐

Special reporting instructions: (PO#) _____

Requested Turnaround Time: Routine: Rush Due Date _____

Delv: _____ Temp C: _____ Log by _____
Comment: _____

Lab use Only



160 James Brown Dr.
Williston, VT 05495
Ph 802-879-4333
Fax 802-879-7103

56 Etna Road
Lebanon, NH 03766
Ph 603-678-4891
Fax 603-678-4893

315 New York Rd.
Plattsburgh, NY 12903
Ph 518-563-1720
Fax 518-563-0052

ED_019088A_00004944-00011

E. coli Analysis

Endyne Inc. COC

Lab Use WO#

Bill To:

Report To:

Prepared: 1/31/23

Cust #

089621



GEN



ECOLI



Ph: Email:

Page 1 of 1

LOCATION GF 04 Sampled Date/Time: 5/22/24 @ 10:54am Sampler: NA

E. coli

1 - 120ml Sterile Plastic

<10C, Na2S2O3

LOCATION GF 05 Sampled Date/Time: 5/22/24 @ 11:17am Sampler: NA

E. coli

1 - 120ml Sterile Plastic

<10C, Na2S2O3

LOCATION _____ Sampled Date/Time: ____/____/____ @ ____ Sampler: _____

E. coli

1 - 120ml Sterile Plastic

<10C, Na2S2O3

LOCATION _____ Sampled Date/Time: ____/____/____ @ ____ Sampler: _____

E. coli

1 - 120ml Sterile Plastic

<10C, Na2S2O3

LOCATION _____ Sampled Date/Time: ____/____/____ @ ____ Sampler: _____

E. coli

1 - 120ml Sterile Plastic

<10C, Na2S2O3

LOCATION _____ Sampled Date/Time: ____/____/____ @ ____ Sampler: _____

E. coli

1 - 120ml Sterile Plastic

<10C, Na2S2O3

\$25.00 Per Sample

****Samples MUST be received within 6 hours of sample collection****

Samples must be filled to the bottom of the bottle's cap where the lid screws on.

Relinquished by:

Accepted by:

Date Time

Date Time

Relinquished by:

Received by:

Date Time

Date Time

Sites/Parameters correct as listed. Client Initials _____

Client Authorization to use Subcontract lab. Client Initials _____

Sample origin: VT ☐ NH ☐ NY ☐ Other ☐

Special reporting instructions: (PO#) _____

Requested Turnaround Time: Routine: Rush Due Date _____

Delv:

Tmpl Ck

Lab use Only

Temp C:

Log by

Comment:

C. Scan



160 James Brown Dr.
Williston, VT 05495
Ph 802-879-4333
Fax 802-879-7103

56 Etna Road
Lebanon, NH 03766
Ph 603-678-4891
Fax 603-678-4893

315 New York Rd.
Plattsburgh, NY 12903
Ph 518-563-1720
Fax 518-563-0052

2012

ED_019088A_00004944-00012

Laboratory Results

June 10, 2024

Nafisah Ali
US EPA Region 1

Project No: 24050033
Project: Concentrated Animal Feeding Operation Sampling Inspectio
Analysis: Total Suspended Solids in Water
EPA Chemist: Holly Westbrook

Date Samples Received by the Laboratory: 05/23/2024

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, LSBSOP-TSS-TDS7.

The SOP is based on SM 2540 D.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

If you have any questions please call me at 617-918-8340.

Sincerely,

DANIEL

BOUDREAU

Digitally signed by
DANIEL BOUDREAU

Date: 2024.06.10
13:21:22 -04'00'

24050033TSS

Qualifiers:

RL = Reporting limit

ND = Not Detected above Reporting limit

NA = Not Applicable due to high sample dilutions or sample interferences

NC = Not calculated since analyte concentration is ND.

J = Estimated value

J1 = Estimated value due to MS recovery outside acceptance criteria

J2 = Estimated value due to LFB result outside acceptance criteria

J3 = Estimated value due to RPD result outside acceptance criteria

J4 = Estimated value due to LCS result outside acceptance criteria

E = Estimated value exceeds the calibration range

L = Estimated value is below the calibration range

B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.

R = No recovery was calculated since the analyte concentration is greater than four times the spike level.

P = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.

C = The identification has been confirmed by GC/MS.

A = Suspected Aldol condensation product.

N = Tentatively identified compound.

ANR = Analysis not required.

24050033TSS

Concentrated Animal Feeding Operation Sampling Inspection

Total Suspended Solids in Water

Matrix: Wastewater

Sample Number	Lab ID	Collected	Analysis	Concentration mg/L	RL mg/L	Qualifier
GF01	AC13039	05/22/2024 9:50	05/28/2024	7.0	2.5	
Comments:						
GF02	AC13040	05/22/2024 10:13	05/28/2024	80	5.0	
Comments:						
GF03	AC13041	05/22/2024 10:33	05/28/2024	68	4.0	
Comments:						
GF04	AC13042	05/22/2024 10:54	05/28/2024	8200	500	
Comments: Only 2 mLs could be filtered, reporting limit raised accordingly.						
GF05	AC13043	05/22/2024 11:17	05/28/2024	290	67	
Comments: Only 15 mLs could be filtered, reporting limit raised accordingly.						
████	████	██████████	████████	█	█	
████████						
████	████	██████████	████████	█	█	
████████						
████	████	██████████	████████	█	█	
████████						
████	████	██████████	████████	█	█	
████████						
Blank			05/28/2024	ND	2.5	
Comments:						

Concentrated Animal Feeding Operation Sampling Inspection

Concentrated Animal Feeding Operation Sampling Inspection

Laboratory Duplicate Results

SAMPLE ID	PARAMETER	SAMPLE RESULT	SAMPLE DUP RESULT	PRECISION RPD	QC LIMITS
		mg/L	mg/L	%	(%RPD)
AC13039	Total Suspended Solids in Water	7.0	6.5	7.4	25



US EPA Region 1

11 Technology Drive, N. Chelmsford, MA 01863

CHAIN OF CUSTODY RECORD

EPA Project No: 24050033		Project Name & Location: Concentrated Animal Feeding Operation (CAFO) Sampling Inspection		Sampler's Name and Signature: Nafisah Ali/Anna Hatke							
Matrix (insert letter in column below) A. Drinking water B. Ground/Well water C. Storm water D. Surface water E. Wastewater	Preservative (insert # in box to the right) →										
	1. Ice 2. H ₂ SO ₄ , pH<2 3. HNO ₃ , pH<2 4. HCl, pH<2 5. Na ₂ S ₂ O ₃	6. NaOH, pH>12 7. Ascorbic Acid 8. MeOH 9. Other 10. Other	# of Containers								
Sample ID	Date	Time	Comp	Grab	Matrix						
GF01	05/22/2024	09:50	☒	☐	E						
GF02	05/22/2024	10:13	☒	☐	E						
GF03	05/22/2024	10:33	☒	☐	E						
GF04	05/22/2024	10:54	☒	☐	E						
GF05	05/22/2024	11:17	☒	☐	E						
[Redacted]											
Relinquished by: (Signature) Ali, Nafisah	Digitally signed by Ali, Nafisah Date: 2024.05.22 18:57:23 -04'00'		Received by: (Signature) <i>Lane S. Howard (ESAT)</i>		Remarks CAFO samples collected at different farms.						
Relinquished by: (Signature)			Received by: (Signature)								
Relinquished by: (Signature)			Received for Laboratory by: (Signature)								

Distribution: Original Accompanies Shipment. Copy to Coordinator Field Files.

US EPA REGION 1 SAMPLE RECEIPT CHECKLIST

PROJ #: 24050033	RECEIPT DATE: 5/23/24
SURVEY NAME: Concentrated Animal Feeding Operation LOCATION:	REC'D BY: Laura Glowacki (ESAT)
OSC/PO: Nafisah Ali	SITE ID: SUPERFUND: N ☒

WERE SAMPLES SHIPPED? _____ TRACKING #: _____ DATE/SENT: _____ NO, Hand Delivered ☒ COOLER TEMPERATURE UPON ARRIVAL ²⁵ _____ °C / NA CHAIN OF CUSTODY PRESENT? Y ☒ COMPLETE? Y ☒ CUSTODY SEALS PRESENT ON COOLER? N ☒ SAMPLES? N ☒ WERE SAMPLE CONTAINERS INTACT? Y ☒ WAS SAMPLE PRESERVATION DOCUMENTED? Y ☒ COC ✓ Sample Container ✓ APPROPRIATE SAMPLES VOLUME FOR REQUESTED ANALYSIS? Y ☒ SAMPLES AND COC MATCH? Y ☒ IF ANY PROBLEMS WAS PROJECT MANAGER NOTIFIED? BY WHOM? NA _____ APPROPRIATE SAMPLE CONTAINERS? Y ☒ SAMPLES WITHIN HOLDING TIMES? Y ☒ ALL ANALYSIS SPECIFIED ON COC? Y ☒ DATE/TIME OF COLLECTION ON COC Y ☒ TURN-AROUND TIME: 4 weeks	COMMENTS: Wastewater samples 9 \$TNL 9 AMMO 9 TP 9 TSS 8 \$STA Samples relinquished to walk in on 5/22/24 by Nafisah Ali and recieved by Laura Glowacki on 5/23/24
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United States Environmental Protection Agency
Laboratory Services and Applied Science Division
11 Technology Drive
North Chelmsford, MA 01863-2431

Page 1 of 18

Laboratory Report

June 24, 2024

Nafisah Ali
US EPA Region 1

Project Number: 24050033
Project: Concentrated Animal Feeding Operation Sampling Inspectic
Analysis: Total Nitrogen
EPA Chemist: Paul Toompas

Date Samples Received by the Laboratory: 05/23/2024

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, LSBSOP-NO2-NO34.

Combined nitrate and nitrite will be reported as nitrogen.

Total nitrogen (the sum of nitrate-nitrogen, nitrite-nitrogen, ammonia-nitrogen and organically bonded nitrogen) will be reported as nitrogen.

Samples were analyzed according to LSBSOP-NO2-NO34, which is currently under review.

Samples were analyzed on a SEAL AQ300 Discrete Analyzer.

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340 .

Sincerely,

DANIEL
BOUDREAU

Digitally signed by
DANIEL BOUDREAU
Date: 2024.06.24
10:42:43 -04'00'

24050033\$TNL

Qualifiers:

Page 2 of 18

RL = Reporting limit

ND = Not Detected above Reporting limit

NA = Not Applicable due to high sample dilutions or sample interferences

NC = Not calculated since analyte concentration is ND.

J = Estimated value

J1 = Estimated value due to MS recovery outside acceptance criteria

J2 = Estimated value due to LFB result outside acceptance criteria

J3 = Estimated value due to RPD result outside acceptance criteria

J4 = Estimated value due to LCS result outside acceptance criteria

E = Estimated value exceeds the calibration range

L = Estimated value is below the calibration range

B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.

R = No recovery was calculated since the analyte concentration is greater than four times the spike level.

P = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.

C = The identification has been confirmed by GC/MS.

A = Suspected Aldol condensation product.

N = Tentatively identified compound.

ANR = Analysis not required.

24050033\$TNL

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

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Concentrated Animal Feeding Operation Sampling Inspection

Total Nitrogen

Client Sample ID:	GF01	Lab Sample ID:	AC13039
Date of Collection:	5/22/2024	Matrix:	Wastewater
Date of Preparation:	6/12/2024	Amount Prepared:	N/A
Date of Analysis:	6/12/2024	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	10
Wet Weight Prepared:	N/A	pH:	>2
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	N/A		

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
	Combined Nitrate & Nitrite	3400	400	J

Comments: Sample not preserved to a pH less than 2. Value determined from 10x dilution. Reporting limit raised accordingly.

24050033\$TNL

ED_019088A_00004944-00022

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

Page 4 of 18

Concentrated Animal Feeding Operation Sampling Inspection

Laboratory Blank for Nitrogen

Client Sample ID:	N/A	Lab Sample ID:	N/A
Date of Collection:	N/A	Matrix:	Wastewater
Date of Preparation:	6/12/2024	Amount Prepared:	N/A
Date of Analysis:	6/12/2024	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	N/A
Wet Weight Prepared:	N/A	pH:	n/a
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	N/A		

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
	Combined Nitrate & Nitrite	ND	40	

24050033\$TNL

ED_019088A_00004944-00023

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

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Concentrated Animal Feeding Operation Sampling Inspection

Total Nitrogen

Client Sample ID:	GF02	Lab Sample ID:	AC13040
Date of Collection:	5/22/2024	Matrix:	Wastewater
Date of Preparation:	6/12/2024	Amount Prepared:	N/A
Date of Analysis:	6/12/2024	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	10
Wet Weight Prepared:	N/A	pH:	>2
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	N/A		

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
	Combined Nitrate & Nitrite	830	400	J

Comments: Sample not preserved to a pH less than 2. Value determined from 10x dilution. Reporting limit raised accordingly.

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

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Concentrated Animal Feeding Operation Sampling Inspection

Total Nitrogen

Client Sample ID:	GF03	Lab Sample ID:	AC13041
Date of Collection:	5/22/2024	Matrix:	Wastewater
Date of Preparation:	6/12/2024	Amount Prepared:	N/A
Date of Analysis:	6/12/2024	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	10
Wet Weight Prepared:	N/A	pH:	>2
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	N/A		

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
	Combined Nitrate & Nitrite	1500	400	J

Comments: Sample not preserved to a pH less than 2. Value determined from 10x dilution. Reporting limit raised accordingly.

US ENVIRONMENTAL PROTECTION AGENCY
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Concentrated Animal Feeding Operation Sampling Inspection

Total Nitrogen

Client Sample ID:	GF04	Lab Sample ID:	AC13042
Date of Collection:	5/22/2024	Matrix:	Wastewater
Date of Preparation:	6/12/2024	Amount Prepared:	N/A
Date of Analysis:	6/12/2024	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	1
Wet Weight Prepared:	N/A	pH:	<2
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	N/A		

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
	Combined Nitrate & Nitrite	ANR	40	

Comments: Sample not suitable for analysis due to color and inability to filter.

24050033\$TNL

ED_019088A_00004944-00026

US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

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Concentrated Animal Feeding Operation Sampling Inspection

Total Nitrogen

Client Sample ID:	GF05	Lab Sample ID:	AC13043
Date of Collection:	5/22/2024	Matrix:	Wastewater
Date of Preparation:	6/12/2024	Amount Prepared:	N/A
Date of Analysis:	6/12/2024	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	1
Wet Weight Prepared:	N/A	pH:	<2
Volume Extracted:	N/A	GPC Factor:	N/A
Final Volume:	N/A		

CAS Number	Compound	Concentration ug/L	RL ug/L	Qualifier
	Combined Nitrate & Nitrite	ANR	40	

Comments: Sample not suitable for analysis due to color.

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US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

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Concentrated Animal Feeding Operation Sampling Inspection

MATRIX SPIKE (MS) RECOVERY

Sample ID: AC13039

PARAMETER	SPIKE ADDED ug/L	SAMPLE CONCENTRATION ug/L	MS CONCENTRATION ug/L	MS % REC	QC LIMITS (% REC)
Combined Nitrate & Nitrite	400	3440	4010	R	80 - 120

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US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

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Concentrated Animal Feeding Operation Sampling Inspection

MATRIX SPIKE DUPLICATE (MSD) RECOVERY

Sample ID:AC13039

PARAMETER	MSD SPIKE ADDED	MSD CONCENTRATION ug/L	MSD % REC	RPD %	QC LIMITS RPD
Combined Nitrate & Nitrite	400	4440	R	10.2	20

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US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

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Concentrated Animal Feeding Operation Sampling Inspection

Laboratory Duplicate Results

Sample ID: AC13039

PARAMETER	SAMPLE RESULT ug/L	SAMPLE DUPLICATE RESULT ug/L	PRECISION RPD %	QC LIMITS
Combined Nitrate & Nitrite	3440	3280	5	20

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US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

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Concentrated Animal Feeding Operation Sampling Inspection

Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
Combined Nitrate & Nitrite	400	393	98	90 - 110

Comments:

Samples in Batch: AC13039, AC13040, AC13041, AC13042, AC13043, AC13044, AC13045, AC13046, AC13047

24050033\$TNL

ED_019088A_00004944-00031

**US EPA REGION 1
SAMPLE RECEIPT CHECKLIST**

PROJ #: 24050033	RECEIPT DATE: 5/23/24
SURVEY NAME: Concentrated Animal Feeding Operation LOCATION:	REC'D BY: Laura Glowacki (ESAT)
OSC/PO: Nafisah Ali	SITE ID: SUPERFUND: N ☐

WERE SAMPLES SHIPPED? _____ TRACKING #: _____ DATE/SENT: _____ NO. Hand Delivered ☒ COOLER TEMPERATURE UPON ARRIVAL _____ °C / NA CHAIN OF CUSTODY PRESENT? Y ☒ COMPLETE? Y ☒ CUSTODY SEALS PRESENT ON COOLER? N ☒ SAMPLES? N ☒ WERE SAMPLE CONTAINERS INTACT? Y ☒ WAS SAMPLE PRESERVATION DOCUMENTED? Y ☒ COC ✓ Sample Container ✓ APPROPRIATE SAMPLES VOLUME FOR REQUESTED ANALYSIS? Y ☒ SAMPLES AND COC MATCH? Y ☒ IF ANY PROBLEMS WAS PROJECT MANAGER NOTIFIED? BY WHOM? _____ APPROPRIATE SAMPLE CONTAINERS? Y ☒ SAMPLES WITHIN HOLDING TIMES? Y ☒ ALL ANALYSIS SPECIFIED ON COC? Y ☒ DATE/TIME OF COLLECTION ON COC Y ☒ TURN-AROUND TIME: 4 weeks	COMMENTS: Wastewater samples 9 \$TNL 9 AMMO 9 TP 9 TSS 8 SSTA Samples relinquished to walk in on 5/22/24 by Nafisah Ali and recieved by Laura Glowacki on 5/23/24
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United States Environmental Protection Agency
Laboratory Services and Applied Science Division
11 Technology Drive
North Chelmsford, MA 01863-2431

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Laboratory Report

June 10, 2024

Nafisah Ali
US EPA Region 1

Project Number: 24050033
Project: Concentrated Animal Feeding Operation Sampling Inspection
Analysis: HPLC/MS/MS Source Tracking Analysis
EPA Chemist: Peter Philbrook

Date Samples Received by the Laboratory: 05/23/2024

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region I SOP, LSBSOP-LCMS_STA3.

The SOP is based on an EPA Regional Analytical Method developed at the EPA New England Laboratory.

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

If you have any questions please call me at 617-918-8340.

Sincerely,

**DANIEL
BOUDREAU**

Digitally signed by
DANIEL BOUDREAU
Date: 2024.06.10
09:08:18 -04'00'

24050033\$STA

Qualifiers:

Page 2 of 15

RL = Reporting limit
ND = Not Detected above Reporting limit
NA = Not Applicable due to high sample dilutions or sample interferences
NC = Not calculated since analyte concentration is ND.
J = Estimated value
J1 = Estimated value due to MS recovery outside acceptance criteria
J2 = Estimated value due to LFB result outside acceptance criteria
J3 = Estimated value due to RPD result outside acceptance criteria
J4 = Estimated value due to LCS result outside acceptance criteria
E = Estimated value exceeds the calibration range
L = Estimated value is below the calibration range
B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
R = No recovery was calculated since the analyte concentration is greater than four times the spike level.
P = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.
C = The identification has been confirmed by GC/MS.
A = Suspected Aldol condensation product.
N = Tentatively identified compound.

24050033\$STA

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION I
LABORATORY SERVICES BRANCH

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Concentrated Animal Feeding Operation Sampling Inspection

HPLC/MS/MS Source Tracking Analysis

Client Sample ID:	GF01	Lab Sample ID:	AC13039
Date of Collection:	5/22/2024	Matrix:	Wastewater
Date of Preparation:	5/28/2024	Amount Prepared:	500 mL
Date of Analysis:	6/04/2024	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	1
Wet Weight Prepared:	N/A	pH:	N/A

CAS Number	Compound	Concentration ng/L	Dilution	RL ng/L	Qualifier
486-56-6	Cotinine	1.0	1	0.40	
103-90-2	Acetaminophen	16	1	2.0	
611-59-6	Paraxanthine	19	1	2.0	
29122-68-7	Atenolol	ND	1	2.0	
58-08-2	Caffeine	15	1	4.0	
56392-17-7	Metoprolol	ND	1	2.0	
58-73-1	Diphenhydramine	ND	1	0.40	
298-46-4	Carbamazepine	ND	1	0.40	

Surrogate Compounds	Recoveries (%)	QC Ranges
Phentermine-D5	55	37 - 113
Diphenhydramine-D3	61	8 - 114

Comments:

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U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION I
LABORATORY SERVICES BRANCH

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Concentrated Animal Feeding Operation Sampling Inspection

HPLC/MS/MS Source Tracking Analysis

Client Sample ID:	GF02	Lab Sample ID:	AC13040
Date of Collection:	5/22/2024	Matrix:	Wastewater
Date of Preparation:	5/28/2024	Amount Prepared:	500 mL
Date of Analysis:	6/04/2024	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	1
Wet Weight Prepared:	N/A	pH:	N/A

CAS Number	Compound	Concentration ng/L	Dilution	RL ng/L	Qualifier
486-56-6	Cotinine	2.2	1	0.40	
103-90-2	Acetaminophen	5.7	1	2.0	
611-59-6	Paraxanthine	4.7	1	2.0	
29122-68-7	Atenolol	ND	1	2.0	
58-08-2	Caffeine	7.8	1	4.0	
56392-17-7	Metoprolol	ND	1	2.0	
58-73-1	Diphenhydramine	ND	1	0.40	
298-46-4	Carbamazepine	ND	1	0.40	

Surrogate Compounds	Recoveries (%)	QC Ranges
Phentermine-D5	53	37 - 113
Diphenhydramine-D3	31	8 - 114

Comments:

24050033\$STA

ED_019088A_00004944-00037

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 1
LABORATORY SERVICES BRANCH

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Concentrated Animal Feeding Operation Sampling Inspection

HPLC/MS/MS Source Tracking Analysis

Client Sample ID:	GF03	Lab Sample ID:	AC13041
Date of Collection:	5/22/2024	Matrix:	Wastewater
Date of Preparation:	5/28/2024	Amount Prepared:	500 mL
Date of Analysis:	6/04/2024	Percent Solids:	N/A
Dry Weight Prepared:	N/A	Extract Dilution:	1
Wet Weight Prepared:	N/A	pH:	N/A

CAS Number	Compound	Concentration ng/L	Dilution	RL ng/L	Qualifier
486-56-6	Cotinine	2.2	1	0.40	
103-90-2	Acetaminophen	12	1	2.0	
611-59-6	Paraxanthine	6.0	1	2.0	
29122-68-7	Atenolol	ND	1	2.0	
58-08-2	Caffeine	9.1	1	4.0	
56392-17-7	Metoprolol	ND	1	2.0	
58-73-1	Diphenhydramine	ND	1	0.40	
298-46-4	Carbamazepine	ND	1	0.40	

Surrogate Compounds	Recoveries (%)	QC Ranges
Phentermine-D5	54	37 - 113
Diphenhydramine-D3	51	8 - 114

Comments:

24050033\$STA

ED_019088A_00004944-00038



Analytical Report Narrative

HPLC/MS/MS Source Tracking Analysis (\$STA)

Project Number: 24050033 – CAFO -VT Farms

Analyst: Peter Philbrook

Date: 05-JUN-2024

Analysis Code: \$STA (Source Tracking Analysis)

Sample extracts were all a yellow tan color and foamed.

Two samples could not be extracted. One was from a manure lagoon, the other was a manure leachate. Impossible to pass through SPE cartridge. GF04 / AC13042 manure pit GF05 / AC13043 manure leachate. Clients were notified via email.

Routine analysis otherwise

**US EPA REGION 1
SAMPLE RECEIPT CHECKLIST**

PROJ #: 24050033	RECEIPT DATE: 5/23/24
SURVEY NAME: Concentrated Animal Feeding Operation LOCATION:	REC'D BY: Laura Glowacki (ESAT)
OSC/PO: Nafisah Ali	SITE ID: SUPERFUND: N ☐

WERE SAMPLES SHIPPED? _____ TRACKING #: _____ DATE/SENT: _____ NO. Hand Delivered ☒ COOLER TEMPERATURE UPON ARRIVAL <u>21</u> °C / NA CHAIN OF CUSTODY PRESENT? Y ☒ COMPLETE? Y ☒ CUSTODY SEALS PRESENT ON COOLER? N ☒ SAMPLES? N ☒ WERE SAMPLE CONTAINERS INTACT? Y ☒ WAS SAMPLE PRESERVATION DOCUMENTED? Y ☒ COC ☒ Sample Container ☒ APPROPRIATE SAMPLES VOLUME FOR REQUESTED ANALYSIS? Y ☒ SAMPLES AND COC MATCH? Y ☒ IF ANY PROBLEMS WAS PROJECT MANAGER NOTIFIED? BY WHOM? _____ APPROPRIATE SAMPLE CONTAINERS? Y ☒ SAMPLES WITHIN HOLDING TIMES? Y ☒ ALL ANALYSIS SPECIFIED ON COC? Y ☒ DATE/TIME OF COLLECTION ON COC Y ☒ TURN-AROUND TIME: 4 weeks	COMMENTS: Wastewater samples 9 \$TNL 9 AMMO 9 TP 9 TSS 8 \$STA Samples relinquished to walk in on 5/22/24 by Nafisah Ali and recieved by Laura Glowacki on 5/23/24
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United States Environmental Protection Agency
Laboratory Services and Applied Science Division
11 Technology Drive
North Chelmsford, MA 01863-2431

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Laboratory Results

June 24, 2024

Nafisah Ali
US EPA Region 1

Project No: 24050033
Project: Concentrated Animal Feeding Operation Sampling Inspectic
Analysis: Total Phosphorus in Water as P
EPA Chemist: Holly Westbrook

Date Samples Received by the Laboratory: 05/23/2024

Analytical Procedure:

All samples were received and logged in by the laboratory according to the USEPA New England Laboratory SOP for Sample Log-in.

Sample preparation and analysis was done following the EPA Region 1 SOP, LSBSOP-OPHOS-TP13.

The SOP is based on the AQ300 Method EPA-119-D Rev. 3A "Phosphorus-P, Total, in Surface and Saline Waters, Domestic and Industrial Wastes" and EPA method 365.1 "Determination of Phosphorous by Semi-Automated Colorimetry", Revision 2.0, August 1993 .

Samples were analyzed on a SEAL AQ300 Discrete Analyzer.

Results relate only to the items tested or to the samples as received by the Laboratory. This analytical report shall not be reproduced except in full, without written approval of the laboratory.

Data were reviewed in accordance with the internal verification procedures described in the EPA New England Quality Manual for NERL.

If you have any questions please call me at 617-918-8340.

Sincerely,

DANIEL

BOUDREAU

Digitally signed by
DANIEL BOUDREAU

Date: 2024.06.24
11:19:07 -04'00'

24050033TP

Qualifiers:

Page 2 of 8

RL = Reporting limit
ND = Not Detected above Reporting limit
NA = Not Applicable due to high sample dilutions or sample interferences
NC = Not calculated since analyte concentration is ND.
J = Estimated value
J1 = Estimated value due to MS recovery outside acceptance criteria
J2 = Estimated value due to LFB result outside acceptance criteria
J3 = Estimated value due to RPD result outside acceptance criteria
J4 = Estimated value due to LCS result outside acceptance criteria
E = Estimated value exceeds the calibration range
L = Estimated value is below the calibration range
B = Analyte is associated with the lab blank or trip blank contamination. Values are qualified when the observed concentration of the contamination in the sample extract is less than 10 times the concentration in the blank.
R = No recovery was calculated since the analyte concentration is greater than four times the spike level.
P = The confirmation value exceeded 35% difference and is less than 100%. The lower value is reported.
C = The identification has been confirmed by GC/MS.
A = Suspected Aldol condensation product.
N = Tentatively identified compound.
ANR = Analysis not required.

24050033TP

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Total Phosphorus in Water as P

Sample Number	Lab ID	Collected	Extracted	Analysis	Concentration ug/L	RL ug/L	Qualifier
GF01	AC13039	05/22/2024 9:50	06/17/2024	06/17/2024	770	120	J
Comments:	Result determined from 10x dilution, reporting limit raised accordingly. Sample not preserved, results qualified.						
GF02	AC13040	05/22/2024 10:13	06/17/2024	06/17/2024	1600	120	J
Comments:	Result determined from 10x dilution, reporting limit raised accordingly. Sample not preserved, results qualified.						
GF03	AC13041	05/22/2024 10:33	06/17/2024	06/17/2024	1600	120	J
Comments:	Result determined from 10x dilution, reporting limit raised accordingly. Sample not preserved, results qualified.						
GF04	AC13042	05/22/2024 10:54	06/17/2024	06/17/2024	160000	18000	J
Comments:	Result determined from 1,500x dilution, reporting limit raised accordingly. Sample not preserved, results qualified. Digestion filtered due to suspended solids.						
GF05	AC13043	05/22/2024 11:17	06/17/2024	06/17/2024	12000	1600	J
Comments:	Result determined from 130x dilution, reporting limit raised accordingly. Sample not preserved, results qualified.						
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]						
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]						
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]						
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]						
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]						
Blank			06/17/2024	06/17/2024	ND	12	
Comments:							

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US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

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Concentrated Animal Feeding Operation Sampling Inspection

MATRIX SPIKE (MS) Results

SAMPLE ID	PARAMETER	SPIKE ADDED ug/L	SAMPLE CONCENTRATION ug/L	MS CONCENTRATION ug/L	MS % REC	QC LIMITS (% REC)
AC13040	Total Phosphorus in Water as P	800	1551	2334	97.9	83 - 119

Comments:

MATRIX SPIKE DUPE (MSD) RESULTS

SAMPLE ID	PARAMETER	MSD SPIKE ADDED	MSD CONCENTRATION ug/L	MSD % REC	RPD %	QC LIMITS RPD
AC13040	Total Phosphorus in Water as P	800	2240	86.1	4	20

Comments:

24050033TP

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US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

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Concentrated Animal Feeding Operation Sampling Inspection

Laboratory Duplicate Results

SAMPLE ID	PARAMETER	SAMPLE RESULT ug/L	SAMPLE DUP RESULT ug/L	PRECISION RPD %	QC LIMITS (%RPD)
AC13040	Total Phosphorus in Water as P	1551	1662	7	20

24050033TP

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US ENVIRONMENTAL PROTECTION AGENCY
NEW ENGLAND LABORATORY

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Concentrated Animal Feeding Operation Sampling Inspection

Laboratory Fortified Blank (LFB) Results

PARAMETER	LFB AMOUNT SPIKED ug/L	LFB RESULT ug/L	LFB RECOVERY %	QC LIMITS %
Total Phosphorus in Water as P	80	82.8	103.5	90 - 110

Samples in Batch: AC13039, AC13040, AC13041, AC13042, AC13043, AC13044, AC13045, AC13046, AC13047

**US EPA REGION 1
SAMPLE RECEIPT CHECKLIST**

PROJ #: 24050033	RECEIPT DATE: 5/23/24
SURVEY NAME: Concentrated Animal Feeding Operation LOCATION:	REC'D BY: Laura Glowacki (ESAT)
OSC/PO: Nafisah Ali	SITE ID: SUPERFUND: N ☐

WERE SAMPLES SHIPPED? _____ TRACKING #: _____ DATE/SENT: _____ NO. Hand Delivered ☒ COOLER TEMPERATURE UPON ARRIVAL <u>21</u> °C / NA CHAIN OF CUSTODY PRESENT? Y ☒ COMPLETE? Y ☒ CUSTODY SEALS PRESENT ON COOLER? N ☒ SAMPLES? N ☒ WERE SAMPLE CONTAINERS INTACT? Y ☒ WAS SAMPLE PRESERVATION DOCUMENTED? Y ☒ COC ✓ Sample Container ✓ APPROPRIATE SAMPLES VOLUME FOR REQUESTED ANALYSIS? Y ☒ SAMPLES AND COC MATCH? Y ☒ IF ANY PROBLEMS WAS PROJECT MANAGER NOTIFIED? BY WHOM? NA APPROPRIATE SAMPLE CONTAINERS? Y ☒ SAMPLES WITHIN HOLDING TIMES? Y ☒ ALL ANALYSIS SPECIFIED ON COC? Y ☒ DATE/TIME OF COLLECTION ON COC Y ☒ TURN-AROUND TIME: 4 weeks	COMMENTS: Wastewater samples 9 \$TNL 9 AMMO 9 TP 9 TSS 8 \$STA Samples relinquished to walk in on 5/22/24 by Nafisah Ali and recieved by Laura Glowacki on 5/23/24
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