November 15, 2021

Beth Della Valle, AICP
Director of Planning and Development
City of Sanford
919 Main Street
Sanford, Maine 04073

RE: 2021 Annual Monitoring Report
Sand Pond, Sanford, Maine
St.Germain File No.: 4447-0001

Dear Ms. Della Valle:

On behalf of Huttopia North America, St.Germain is submitting this 2021 Annual Monitoring Report for Sand Pond located in Sanford, Maine. The monitoring was performed in accordance with the Sand Pond Monitoring Plan which was approved by the City of Sanford Planning Board in April of 2019. The report provides water quality data and observations collected during the 2021 monitoring event. In addition, this report presents the data on the Maine Department of Environmental Protection (Maine DEP) and Lake Stewards of Maine (LSM) forms. Therefore, if the City of Sanford desires, the information can be transferred to the Maine DEP lake monitoring database.

The monitoring program obtains water quality data from three (3) locations in Sand Pond, as shown on **Figure 1 – Monitoring Locations Map**. The monitoring locations are located along a traverse line perpendicular to the Huttopia Southern Maine Campground, with the center point matching a pre-existing Maine DEP pond sampling point (Station 01). At each monitoring point, samples were collected at multiple depths. In accordance with the approved monitoring plan, one sampling event was performed on August 17, 2021.

Table 1 – Sand Pond Monitoring Program Summary provides the location and the depth of each sampling point, and the water quality monitoring parameters for each location.

Table 1
Sand Pond Monitoring Program Summary
Sanford, Maine
August 17, 2021

Sample Point	Lat/Long (Decimal Degrees)	Sample Depths (ft)	Water Quality Parameters
Station 01 (~500 ft from the western shore)	43.39442° -70.74998°	0.5, 5, 10	Field Measured - Secchi disk, temperature, pH, conductivity, dissolved oxygen

Sample Point	Lat/Long (Decimal Degrees)	Sample Depths (ft)	Water Quality Parameters
			Laboratory - total phosphorous, alkalinity, true color
Station 02 (~250 ft from the western shore)	43.394135° -70.751250°	0.5, 5, 10	Field Measured - Secchi disk, temperature, pH, conductivity, dissolved oxygen
Station 03 (~650 ft from the western shore)	43.393935° -70.749400°	0.5, 5, 10	Field Measured - Secchi disk, temperature, pH, conductivity, dissolved oxygen

In addition to performing the water quality monitoring, St.Germain also documented observations of aquatic plants along the monitoring location traverse line. Documentation of observations is included in the field forms and/or photographs (Attachment B and C, respectively).

Table 2 - Sand Pond Monitoring Results provide a summary of the water quality data collected during this reporting period.

Table 2
Sand Pond Monitoring Results
Sanford, Maine
August 17, 2021

Monitoring Point	Secchi Disk Reading	Sampling Depth	Temperature	pH	Specific Conductivity	Dissolved Oxygen	Alkalinity	True Color	Total Phosphorus
	ft	ft	°C	SU	µS/cm	mg/L	mg/L	PTCO	mg/L
Station 01	14.2	0.5	26.15	6.25	30	7.20	6.0	U	0.006
		5	26.45	6.30	24	6.90	5.4	U	0.006
43.39442° - 70.74998°		10	26.35	6.28	28	6.95	J 4.4	10	0.006

Monitoring Point	Secchi Disk Reading	Sampling Depth	Temperature	pH	Specific Conductivity	Dissolved Oxygen	Alkalinity	True Color	Total Phosphorus
	ft	ft	°C	SU	µS/ cm	mg/L	mg/L	PTCO	mg/L
Station 02	12.1	0.5	25.50	5.70	36	6.10	NA	NA	NA
		5	25.77	5.60	29	5.80	NA	NA	NA
43.394135° -70.751250°		10	25.40	6.10	29	6.10	NA	NA	NA
Station 03	12.5 (pond bottom)	0.5	26.35	6.55	22	7.10	NA	NA	NA
		5	26.28	6.09	22	7.00	NA	NA	NA
43.393935° -70.749400°		10	26.64	6.66	23	6.91	NA	NA	NA

Notes:

NA - Not Analyzed
U - Not Detected, J Estimated by Lab below the PQL.

The laboratory report is included in **Attachment A – Laboratory Report.** Field forms containing field measured parameters and general observations are included in **Attachment B – Field Sampling Form**. Photographs taken during the monitoring event are contained in **Attachment C – Photographs.** Finally, the completed Maine DEP/LSM forms are provided in **Attachment D – Maine DEP/LSM Forms**.

St.Germain appreciates this opportunity to provide 2021 Sand Pond monitoring data to you. If you have any questions or comments, please feel free to contact us at 207-591-7000 or johnm@stgermain.com.

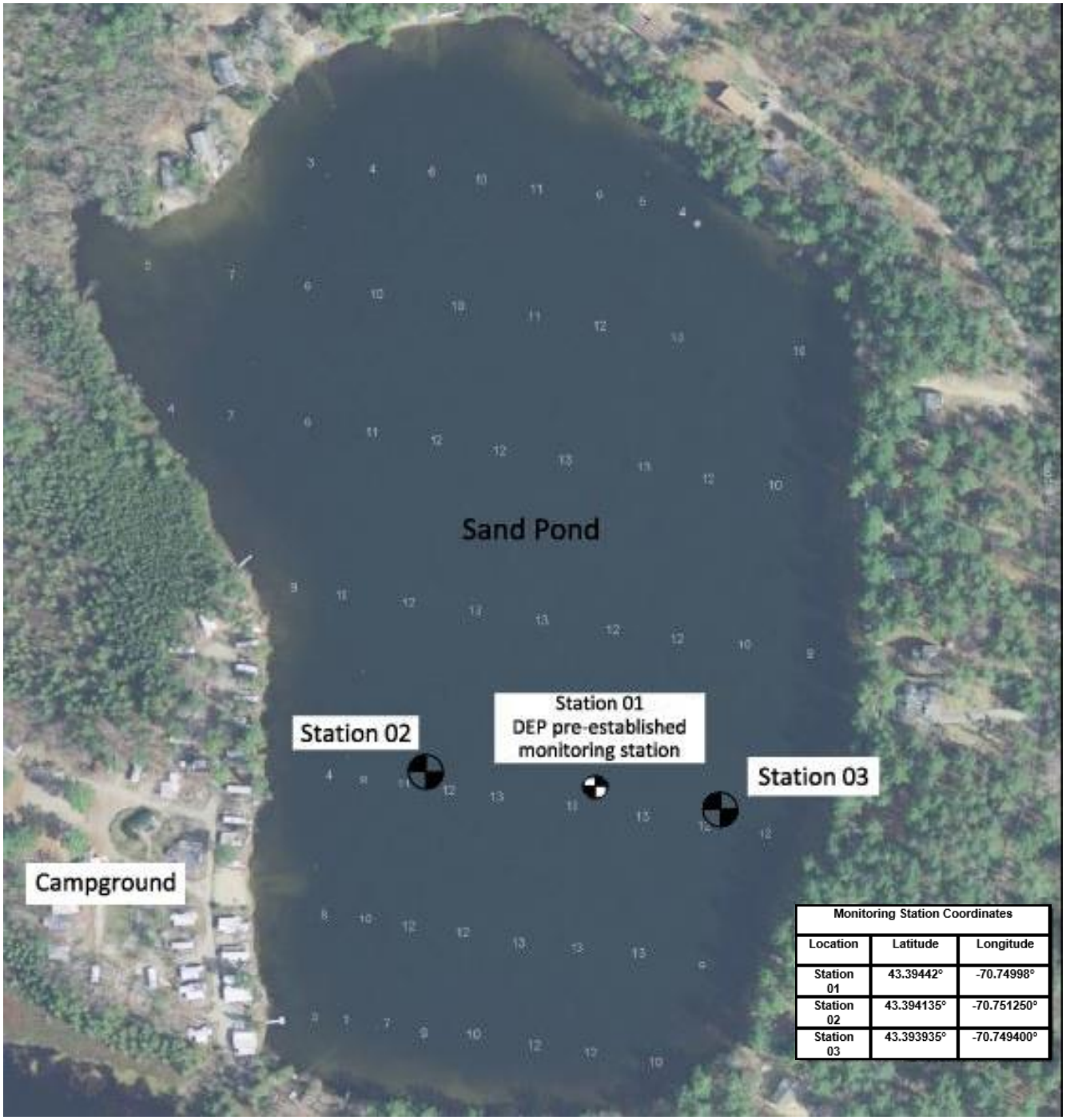
Sincerely,
ST.GERMAIN

John S. Marchewka, L.G.
Senior Environmental Project Manager
Maine Licensed Geologist No. 319

Figure - Monitoring Locations Map
Attachment A – Laboratory Report
Attachment B – Field Sampling Form
Attachment C – Photographs
Attachment D – Maine DEP/LSM Forms

FIGURE

Monitoring Locations Map



Monitoring Station Coordinates		
Location	Latitude	Longitude
Station 01	43.39442°	-70.74998°
Station 02	43.394135°	-70.751250°
Station 03	43.393935°	-70.749400°

SOURCE: LAKE STEWARDS OF MAINE

LEGEND

POND SAMPLE STATION

10 DEPTH (FT)

NORTH

MONITORING LOCATIONS MAP

SAND POND
SANFORD, MAINE

CLIENT:
HUTTOPIA NORTH AMERICA
149 SAND POND ROAD
SANFORD, MAINE

St.Germain

846 MAIN ST., WESTBROOK, ME 04092 WWW.STGERMAIN.COM

FIGURE 1

DATE: 11/15/2021	SCALE: 1" = 200'	PROJECT NO.: 4447-0001	FILE: FIGURE 1

ATTACHMENT A

Laboratory Report

September 7, 2021

Mr. John Marchewka
St Germain
846 Main Street #3
Westbrook,ME 04098

RE: Katahdin Lab Number: SO5405
Project ID: Sand Pond Huttopia
Project Manager: Mr. Alexander Croteau
Sample Receipt Date(s): August 17, 2021

Dear Mr. Marchewka:

Please find enclosed the following information:

* Report of Analysis (Analytical and/or Field)
* Laboratory results from subcontracted analysis (es)
* Quality Control Data Summary
* Chain of Custody (COC)
* Login Report

A copy of the Chain of Custody is included in the paginated report. If requested, the original COC is attached as an addendum to this report.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact the project manager listed above. The results contained in this report relate only to the submitted samples. This cover letter is an integral part of the ROA.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in an attached technical narrative or in the Report of Analysis.

We appreciate your continued use of our laboratory and look forward to working with you in the future. The following signature indicates technical review and acceptance of the data.

Please go to http://www.katahdinlab.com/cert for copies of Katahdin Analytical Services Inc. current certificates and analyte lists.

Sincerely,
KATAHDIN ANALYTICAL SERVICES

Leslie Dimond

Leslie Dimond - Quality Assurance Officer

09/07/2021

Date

TECHNICAL NARRATIVE

Katahdin references the following versions of Standard Methods:

Color: SM 2120 B 2011
Turbidity: SM 2130 B 2011
Alkalinity: SM 2320 B 2011
Hardness: SM 2340 B 2011
Residue-total (TS): SM 2540 B 2011
Residue-filterable (TDS): SM 2540C 2011
Residue-nonfilterable (TSS): SM 2540 D 2011
Residue-settleable: SM 2540 F 2011
Total Solids: SM 2540 G 2011
Total Volatile Solids: SM 2540 G 2011
Chromium VI: SM 3500-Cr B 2011
Iron (Ferrous): SM 3500-Fe D 2011
Chloride: SM 4500-Cl^- E 2011
Amenable cyanide: SM 4500-CN G 2011
Fluoride: SM 4500-F^- B 2011
pH: SM 4500-H+ B 2011
Ammonia as N: SM 4500-NH3 H 2011
Orthophosphate as P: SM 4500-P E 2011
Sulfide: SM 4500-$S2^-$ F 2011
Sulfite: SM 4500-$SO3^-$ B 2011
Biochemical oxygen demand: SM 5210 B 2011
Carbonaceous BOD, CBOD: SM 5210 B 2011
COD-Color: SM 5220 D 2011
Total Organic Carbon: SM 5310 B 2011
Surfactants: SM 5540 C 2011

ClearWater references the following version of Standard Methods:

Total Phosphorus: SM4500PE 2012

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL "U" LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Practical Quantitation Level (PQL) (also called Limit of Quantitation (LOQ)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level (PQL) or LOQ could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfite H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

MCL	Maximum Contaminant Level	NL	No limit
NFL	No Free Liquid Present	FLP	Free Liquid Present
NOD	No Odor Detected	TON	Threshold Odor Number

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L. The reported value should be considered a minimum value.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: John Marchewka
St Germain
846 Main Street #3
Westbrook,ME 04098

Lab Sample ID: SO5405-1
Report Date: 07-SEP-21
Project: Sand Pond Huttopia
SDG: SO5405

Sample Description	Matrix	Date Sampled	Date Received
STA-01(0-0.5)	AQ	17-AUG-21 10:15:00	17-AUG-21

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	6.0 mg/L	5.0	0.23	4	STDM 2320B	WG304829	19-AUG-21 13:34:32	N/A	N/A	
True Color	U5.0 PTCO	5.0	5.0	N/A	SM2120B	WG304601	17-AUG-21 14:00:00	N/A	N/A	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: John Marchewka
St Germain
846 Main Street #3
Westbrook,ME 04098

Lab Sample ID: SO5405-2
Report Date: 07-SEP-21
Project: Sand Pond Huttopia
SDG: SO5405

Sample Description	Matrix	Date Sampled	Date Received
STA-01(5.0)	AQ	17-AUG-21 10:25:00	17-AUG-21

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	5.4 mg/L	5.0	0.23	4	STDM 2320B	WG304829	19-AUG-21 14:12:30	N/A	N/A	
True Color	U5.0 PTCO	5.0	5.0	N/A	SM2120B	WG304601	17-AUG-21 14:00:00	N/A	N/A	

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http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Report of Analytical Results

Client: John Marchewka
St Germain
846 Main Street #3
Westbrook,ME 04098

Lab Sample ID: SO5405-3
Report Date: 07-SEP-21
Project: Sand Pond Huttopia
SDG: SO5405

Sample Description	Matrix	Date Sampled	Date Received
STA-01(10.0)	AQ	17-AUG-21 10:40:00	17-AUG-21

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Alkalinity	J4.4 mg/L	5.0	0.23	4	STDM 2320B	WG304829	19-AUG-21 14:52:02	N/A	N/A	
True Color	10. PTCO	5.0	5.0	N/A	SM2120B	WG304601	17-AUG-21 14:00:00	N/A	N/A	

600 Technology Way
P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029
http://www.katahdinlab.com

Quality Control Report

Blank Sample Summary Report

Alkalinity

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG304829	SM2320B	19-AUG-21	N/A	J 2.0 mg/L	5.0 mg/L	4.0

True Color

Samp Type	QC Batch	Anal. Method	Anal. Date	Prep. Date	Result	PQL	LOD
MBLANK	WG304601	SM2120B	17-AUG-21	N/A	U 5.0 PTCO	5.0 PTCO	N/A

Quality Control Report

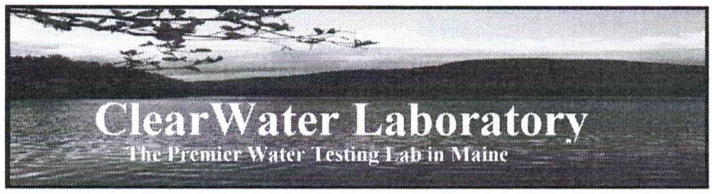
Laboratory Control Sample Summary Report

Alkalinity

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG304829-2	LCS	WG304829	19-AUG-21	N/A	mg/L	120	130	112	80-120	
WG304829-5	LCSD	WG304829	19-AUG-21	N/A	mg/L	120	140	115	80-120	3

True Color

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG304601-2	LCS	WG304601	17-AUG-21	N/A	PTCO	50	50.	100	80-120	



8/30/2021

Mr. Alex Croteau
Katahdin Analytical Services
P.O. Box 540
Scarborough, ME 04074

Dear Alex

Please find enclosed the results of your sample analysis. Below you will find any comments related to your sample results. We appreciate the opportunity to provide you with our analytical services. Please do not hesitate to contact our office if you have any questions or comments regarding these results.

Sincerely,
ClearWater Laboratory

Marc H. Hein
Laboratory Director
Enclosure

153 Main Street • Newport, ME 04953 • Phone: 207.368.5700 • Fax: 207.368.5120 • E-mail: MHein@ClearWaterLab.com

ClearWater Laboratory
The Premier Water Testing Lab in Maine

Client: Katahdin Analytical Services
Mr. Alex Croteau
P.O. Box 540
Scarborough, ME 04074

Report Date: 08/30/2021

REPORT OF LABORATORY ANALYSIS

Sample Description		Result	Units	Reporting Limit	Method	Date / Time Sampled	Date / Time Analyzed
Total Phosphorus		**0.006**	mg/L	0.001	SM4500 P B5 E	08/17/21 1015	08/27/21 1024
2021-08-352.1	STA-01(0-0.5) - Grab					Lab: CWL	Analyst: sm
Total Phosphorus		**0.006**	mg/L	0.001	SM4500 P B5 E	08/17/21 1025	08/27/21 1024
2021-08-352.2	STA-01(5.0) - Grab					Lab: CWL	Analyst: sm
Total Phosphorus		**0.006**	mg/L	0.001	SM4500 P B5 E	08/17/21 1040	08/27/21 1024
2021-08-352.3	STA-01(10.0) - Grab					Lab: CWL	Analyst: sm

Clearwater AW

Katahdin
ANALYTICAL SERVICES

Sub-contract Laboratory Chain of Custody

Client:	Contact:	Email:		Phone #:
Katahdin Analytical Services	Mr. Alexander Croteau	acroteau@katahdinlab.com		(207) 874-2400
Address:	**City:**	**State:**	**Zip:**	**Project Name:**
600 Technology Way	Scarborough	Maine	04074	
KAS WO #:	**Quote #:**	**Purchase Order #:**		**TAT:**
SO5405				**Verbal TAT:**
RPT Level:	**Reporting Format:**	**EDD:**		

Sample ID:	Collect Date/Time:	Matrix:	No. of Containers	Pres.	MS/MSD Dup.	Analysis: Total phos. Filtered? Y / N	Analysis: Filtered? Y / N	Analysis: Filtered? Y / N
STA-01(0-0.5) .01	17-AUG-21 10:15	AQ	1	H_2SO_4	no	X		
STA-01(5.0) .02	17-AUG-21 10:25	AQ	1	↓	no	X		
STA-01(10.0) .03	17-AUG-21 10:40	AQ	1	↓	no	X		

JB

Relinquished By:	Date/Time:	Received By:

Comments: Needs reporting limit of 1 ppb

Rec'd w/ice Temp 1.3°C

Diane Curtis 8/20/21 1200

2021-08-352.

Katahdin Analytical Services, LLC. — Sample Receipt Condition Report

Client: St Germain	KAS PM: APC	Sampled By: Client
Project:	KIMS Entry By: JM	Delivered By: Client
KAS Work Order#: SO5405	KIMS Review By: APC	Received By: JM
	Labeled By: JM	
SDG #:	Cooler: _____ of _____	Date/Time Rec.: 8/17/21 1057

Receipt Criteria	Y	N	EX*	NA	Comments and/or Resolution
1. Custody seals present / intact?	✓				
2. Chain of Custody present in cooler?	✓				
3. Chain of Custody signed by client?	✓				
4. Chain of Custody matches samples?	✓				
5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun.		✓			Temp (°C): 24.1 — Thermometer ID: IR-1
Samples received at <6 °C w/o freezing?		✓			Note: Not required for metals (except Hg soil) analysis.
Ice packs or ice present?	✓				The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data.
If yes, was there sufficient ice to meet temperature requirements?	✓				
If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool?	✓				Note: No cooling process required for metals (except Hg soil) analysis.
6. Volatiles: **Aqueous:** No bubble larger than a pea?				✓	
Soil/Sediment:				✓	
Received in airtight container?				✓	
Received in methanol?				✓	
Methanol covering soil?				✓	
D.I. Water - Received within 48 hour HT?				✓	
7. Trip Blank present in cooler?				✓	
8. Proper sample containers and volume?	✓				
9. Samples within hold time upon receipt?	✓				
10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2	✓				
Sulfide - >9				✓	
Cyanide – pH >12				✓	
11. Bottleware Prepped on:					

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

Katahdin ANALYTICAL SERVICES

600 Technology Way
Scarborough, ME 04074
Tel: (207) 874-2400
Fax: (207) 775-4029

CHAIN of CUSTODY

PLEASE BEAR DOWN AND PRINT LEGIBLY IN PEN

Page 1 of 1

Client	Contact	Phone #	Fax #
St. Germain	John Marchewka	(207) 591-7000	( )

Address	City	State	Zip Code
846 Main Street	Westbrook	ME	04092

Purchase Order #	Proj. Name / No.	Katahdin Quote #
4447-0001	Sand Pond Hubtopia	

Bill (if different than above) — Address —

Sampler (Print / Sign) Nick Barker

Copies To: johnm@stgermain.com nickb@stgermain.com

LAB USE ONLY

WORK ORDER #:

KATAHDIN PROJECT NUMBER SO5405

REMARKS:

SHIPPING INFO: ☐ FED EX ☐ UPS ☐ CLIENT

AIRBILL NO:

TEMP°C ☐ TEMP BLANK ☐ INTACT ☐ NOT INTACT

★	Sample Description	Date / Time coll'd	Matrix	No. of Cntrs.	ANALYSIS AND CONTAINER TYPE PRESERVATIVES: True Color <6°C Filt. ☐Y ☒N	Alkalinity <6°C Filt. ☐Y ☒N	Total Phosphorus H2SO4 Filt. ☐Y ☒N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N	Filt. ☐Y ☐N
	STA-01 (0.-0.5')	8/17/21 10:15	AQ	2	X	X	X							
	STA-01 (5.0')	8/17/21 10:25	AQ	2	X	X	X							
	STA-01 (10.0')	8/17/21 10:40	AQ	2	X	X	X							

COMMENTS: *Alkalinity – Need DL of 2 mg/L * Total Phosphorus – Need DL of 1 ppb
* True Colors (Not apparent) Historic work order – SN7229

Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)
	8/17/21 13:56				
Relinquished By: (Signature)	Date / Time	Received By: (Signature)	Relinquished By: (Signature)	Date / Time	Received By: (Signature)

Katahdin
ANALYTICAL SERVICES

Katahdin Analytical Services

Login Chain of Custody Report (lno1)

Aug. 18, 2021

10:18 AM

Quote/Incoming: STGERM001

Login Number: SO5405

Account: STGERM001

St. Germain Collins

Project:

Primary Report Address:

John Marchewka
St Germain
846 Main Street #3

Westbrook,ME 04098

JohnM@stgermain.com

Primary Invoice Address:

Accounts Payable
St. Germain Collins
846 Main Street #3

Westbrook,ME 04098

Report CC Addresses:

Invoice CC Addresses:

Login Information:

ANALYSIS INSTRUCTIONS	:	Alk needs limit of 2mg/L
CHECK NO.	:	
CLIENT PO#	:	4447-0001
CLIENT PROJECT MANAGE	:	
CONTRACT	:	
COOLER TEMPERATURE	:	24.1
DELIVERY SERVICES	:	Client
EDD FORMAT	:	
LOGIN INITIALS	:	GM
PM	:	APC
PROJECT NAME	:	Sand Pond Huttopia
QC LEVEL	:	II
REPORT INSTRUCTIONS	:	email pdf and invoice to John, no HC
SDG ID	:	
SDG STATUS	:	
VERBAL TAT	:	

Login Number: SO5405

Account: STGERM001

St. Germain Collins

Project:

Quote/Incoming: STGERM001

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SO5405-1	STA-01(0-0.5)	17-AUG-21 10:15	17-AUG-21			29-AUG-21	

Matrix		*Product*	*Hold Date (shortest)*	*Bottle Type*	*Bottle Count*	*Comments*
Aqueous	S	MISC-SUB		125mL Plastic+H2SO4		
Aqueous	S	SM2120-TRUECOLOR	19-AUG-21	125mL Plastic		
Aqueous	S	SM2320B-ALKALINITY	31-AUG-21			
Service	S	WASTE-DISPOSAL				

SO5405-2	STA-01(5.0)	17-AUG-21 10:25	17-AUG-21			29-AUG-21	

Matrix		*Product*	*Hold Date (shortest)*	*Bottle Type*	*Bottle Count*	*Comments*
Aqueous	S	MISC-SUB		125mL Plastic+H2SO4		
Aqueous	S	SM2120-TRUECOLOR	19-AUG-21	125mL Plastic		
Aqueous	S	SM2320B-ALKALINITY	31-AUG-21			
Service	S	WASTE-DISPOSAL				

SO5405-3	STA-01(10.0)	17-AUG-21 10:40	17-AUG-21			29-AUG-21	

Matrix		*Product*	*Hold Date (shortest)*	*Bottle Type*	*Bottle Count*	*Comments*
Aqueous	S	MISC-SUB		125mL Plastic+H2SO4		
Aqueous	S	SM2120-TRUECOLOR	19-AUG-21	125mL Plastic		
Aqueous	S	SM2320B-ALKALINITY	31-AUG-21			
Service	S	WASTE-DISPOSAL				

Total Samples: 3 ***Total Analyses: 12***

ATTACHMENT B

Field Sampling Form

St.Germain

PROJECT: Huttopia Sand Pond Sanford, ME

Date: August 17, 2021
Weather: Sunny, 80°F
Wind Speed: 4 mph
Wind Direction: SE

Pond Sampling Measurement Data Record

Monitoring Point	Secchi Reading (ft)	Sample Depth (ft)	Temperature (°C)	pH (S.U.)	Specific Conductivity (ms/cm)	Dissolved Oxygen (mg/L)
01	14.2	0.5	26.15	6.25	0.030	7.20
		5.0	26.45	6.30	0.024	6.90
		10.0	26.35	6.28	0.028	6.95
02	12.1	0.5	25.50	5.70	0.036	6.10
		5.0	25.77	5.60	0.029	5.80
		10.0	25.40	6.10	0.029	6.10
03	12.5 (bottom)	0.5	26.35	6.55	0.022	7.10
		5.0	26.38	6.09	0.022	7.00
		10.0	26.64	6.66	0.023	6.91

General Observations: Floating-leaves plants (likely Nymphaea odorta) and emergent/submerged plants (likely Putamogeton richardsonii) observed along the eastern and western edges of the pond.
* White water lily * Clasping leaf pondweed

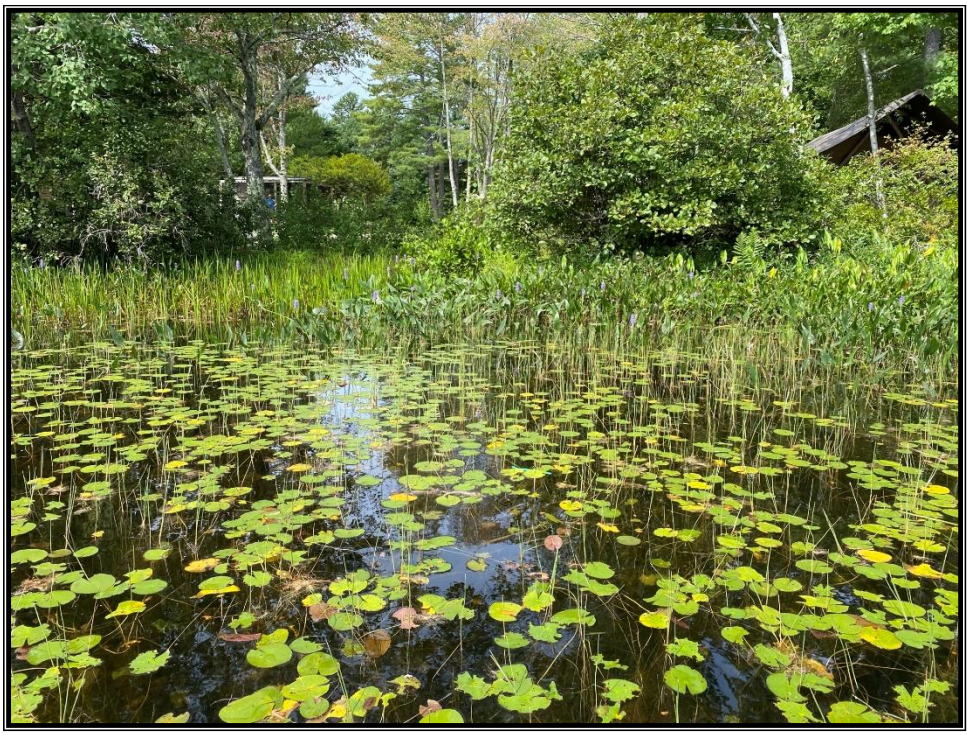
Photos Taken? [Yes] No

Field Sampler(s): Barker/McFadden

ATTACHMENT C

Photographs

Photograph #1: Vegetation observed south of Huttopia Beach area on August 17, 2021.



Photograph #2: Vegetation observed north of Huttopia Beach area on August 17, 2021.

Photograph #3: Vegetation observed north of Huttopia Beach area on August 17, 2021.

Photograph #4: Vegetation observed along the eastern shore of Sand Pond on August 17, 2021.

ATTACHMENT D

Maine DEP/LSM Forms

WIND DIR. CODES

N = 1 S = 5
NE = 2 SW = 6
E = 3 W = 7
SE = 4 NW = 8
no wind, enter 0

LAKE Sand Pond TOWN Sanford

STATION DESCRIPTION 01 COUNTY York

STATION: LAT 43.39443° LONG -70.74998° DATUM DEC. DEG. ACCURACY _____ ON TARGET? [Y] / N

LAKE	MIDAS	STATION	CERTIFIED MONITORS 1 & 2 (Last name, First name)	PROJECT
9999	3862	01	BARKER, NICHOLAS MCFADDEN, CAMDEN	EI03

MONTH	DAY	YEAR	MILITARY TIME	WIND VELOCITY	WIND DIRECTION	Sky Condition at Time of Secchi Readings – CIRCLE ONE	Gloeo Category (0 to 6; Refer to Visual Aid)
08	17	2021	1000	04	4	[B] C O (B = Bright (shadows), C = Cloudy Bright, O = Overcast)	1

DIRECTIONS: Use this form when obtaining Temp./D.O. profiles. Please fill out completely. Please indicate missing data by filling spaces with 9s.

PLEASE HELP US AVOID DUPLICATE DATA IN THE DATASET BY ENTERING SECCHI DATA ON ONLY ONE FORM.

SCOPE TYPE CODES:

1 = None
2 = Flat glass, no mask
3 = Slant glass, no mask
4 = Slant glass & mask
5 = Flat glass & mask
6 = 6" diameter, slant glass & mask

SECCHI (meters)	SCOPE TYPE	DISK HIT BOT? Y/N	MONITOR'S QA CERTIFICATION #	READING # (1, 2 etc)
4.33	1	N	99-9999	
			-	

On two dates each year, please take two readings and record as Reading #1 & 2.

TEMPERATURE / DISSOLVED OXYGEN PROFILES

CIRCLE DEPTH UNI TS: METERS / [FEET] **CIRCLE TEMP. UNITS:** [CENT.] / FAREN.

PLEASE CIRCLE D.O. METHOD: *Titration:* Hach Kit / Lamotte Kit / Other Kit: _____ *Meter (enter model):* YSI Meter _____ / Hach Meter _____ / ~~Other Meter~~ HORIBA U-52 METER ID#: _____ [X] **Check to indicate D.O. meter was calibrated**

DEPTH	WATER TEMP	OXYGEN (mg/l)	DEPTH	WATER TEMP	OXYGEN (mg/l)	DEPTH	WATER TEMP	OXYGEN (mg/l)
0.5	26.2	7.2	11.					
1.			12.					
2.			13.					
3.			14.					
4.			15.					
5.0	26.5	6.9						
6.								
7.								
8.								
9.								
10.0	26.4	7.0						

Required QA/QC Dupes (1 for every 10)

BOTTOM: _____ CORE DEPTH: _____ CHL. #: _____ TP #: _____ AIR TEMP: _____ C / F

COMMENTS:

SIGNATURE:

DATA PROCESSING STAFF ONLY Please Date & Initial

Checked	- -	
Entered	- -	
Proofed	- -	

LAKE Sand Pond DATE 8-17-2021

MIDAS 3862 STATION 01

M = Meters
F = Feet

C = Core
G = Grab

METHODS: pH: C = Colorimetric, E = Electronic, A = Air Equilibrated, S = Sonde
Color: A/T = Apparent (unfiltered) / True (filtered)
N = Nessler, H = Hach wheel, F = Field Kit, S = Spectrophotometer
Conductivity: F = Field meter, L = Lab meter, S = Sonde
Alkalinity: M = Methyl Orange, G = GRAN Plot, L = Lamotte,
B = Methyl red/bromcresol green, O = other _____

REP: Assign a unique number for each replicate taken. e.g. 1, 2, 3, 4…

LAB CODES: H =HETL, P = PWD, C = Colby,
N= Northeast Labs, S = Sawyer/Orono, D=DEP,
U=UNH, Q = Other Katahdin

DEPTH	M/F	C/G	pH	M	L	COLOR	A/T	M	L	CONDUCTIVITY (ms)(cm)	M	L	ALKALINITY	M	L	TP LABEL	TP (ppb)	Lab Code	Rep #	CHL a (ppb)	Lab Code	Rep #
0.5	F	G	6.25			<5.0	T		0	0.030	F		6.0		0	Tot. P	6	0				
5.0	F	G	6.36			<5.0	T		0	0.024	F		5.4		0	Tot. P	6	0				
10.0	F	G	6.28			10	T		0	0.628	F		4.4		0	Tot. P	6	0				

ZOOPLANKTON: # of Tows _____ Depth of Tows _____ Net I.D. _____ Notes: _____

PHYTOPLANKTON: # of Cores _____ Depth of Cores _____ Notes: _____

SURFACE SEDIMENTS: # of Cores _____ Sed. Color _____ Sed. Odor _____ Worm Tubes? Y / N Notes: _____

LITTORAL EVALUATIONS COMPLETED: # Sites: ____ pHab: ____ Shoreline: ____ Macrophytes: ____ Macroinvertebrates: ____

PHOTOGRAPHS: Camera ID _____ # Taken _____ Descriptions: _____

NOTES:

Uncorrected Conductivity: _____ Temp: _____° C Cond. Cell Constant: _____

Who determined pH, Color, Cond. & Alk? _____