August Mack
ENVIRONMENTAL

317.916.8000 ▪ www.augustmack.com
1302 North Meridian Street, Suite 300 ▪ Indianapolis, Indiana 46202

MEMORANDUM

Date: April 25, 2024

To: Ms. Cynthia Carrasco, University of Indianapolis General Counsel

From: Jase L. Hixson, Ph.D. – August Mack Environmental, Inc.

Project Number: JY0988.250

Subject: Storm Water Pond – Environmental Consulting Services

SUMMARY OF FINDINGS

This memorandum has been prepared to provide the University of Indianapolis with information and preliminary data from the environmental consulting services performed at the storm water pond on the northwest side of campus (the site). Following a report of dead fish located in the storm water pond, August Mack performed a site investigation and sample collection in an attempt to determine the cause and source of pollutant(s) resulting in the fish kill (the event).

A summary of all field and laboratory analyses performed are summarized in Table 1. Full analytical results are included in Attachment A. Samples were collected from the storm sewer immediately after flowing into the pond (influent), in the middle of the pond near the fountain (fountain), and next to the pond outfall weir (outfall).

The majority of analytes sampled were found to be within ranges expected for an urban storm water pond. This included pH, dissolved oxygen, total toxic organics (TTO), and carbonaceous biochemical oxygen demand (cBOD). Surfactants were measured in the pond at concentrations above expected values for an urban storm water pond. Peer-reviewed research has indicated that the 3.6 and 3.7 mg/L of surfactants could possibly result in increased mortality of aquatic species[1],[2]. Higher concentrations observed in the

[1] Warne, M. St., and A. D. Schifko. Toxicity of Laundry Detergent Components to a Freshwater Cladoceran and Their Contribution to Detergent Toxicity. Ecotoxicology and Environmental Safety 1999, 44, 196-206.
[2] Gheorghe, S., Stan, M.S., Mitroi, D.N., Staicu, A.C., Cicirma, M., Lucaciu, I.E., Nita-Lazar, M., Dinischiotu, A. Oxidative Stress and Histopathological Changes in Gills and Kidneys of Cyprinus carpio following Exposure to Benzethonium Chloride, a Cationic Surfactant. Toxics 2022, 10, 227.

influent water indicates that the source of surfactants was likely flowing from the storm water collection system.

August Mack, University of Indianapolis, Indiana Department of Environmental Management (IDEM), and Marion County's Public Health Department (MCPHD) walked the storm water line and observed a milky-white flow into the pond. IDEM noted that the milky-white flow was visible in the upstream storm water through the eastern edge of the university's property (National Ave and S. State Ave), indicating a possible off-site source.

August Mack is collecting an additional sample for surfactants to evaluate current concentrations. There have not been any dead fish reported since April 5, 2024. We hypothesize that the surfactants that entered the storm water pond have degraded and diluted to concentrations that are no longer toxic to aquatic life.

Table 1
Sampling Results

Analyte	Pond Sampling Location	Result	Units
pH	Influent	~8.0	SU
	Fountain	~8.0	
Dissolved Oxygen	Influent	3.86	mg/L
	Fountain	~4.2	
Total Toxic Organics	Influent	30.9	ug/L
	Fountain	BDL*	
cBOD	Influent	135	mg/L
	Fountain	10.7	
	Outfall	15.5	
Surfactants	Influent	7.9	
	Fountain	3.6	
	Outfall	3.7	

* BDL = Below laboratory detection limits

SITE INVESTIGATION

Shortly after August Mack arrived at the site, IDEM's emergency response and a representative of MCPHD arrived at the site. IDEM noted that they had received an anonymous call and proceeded to notify MCPHD to mobilize to the site. August Mack noted that the storm water pond had considerable green algae growth and the inflowing storm water had a milky color. In order to evaluate if algal growth was responsible for the event, August Mack and IDEM measured the pH and dissolved oxygen in two places within the storm water pond. In both locations, the pH was approximately 8.0 SU. These

values are well within the normal range for an urban storm water pond and are not believed to be responsible for the event. Additionally, dissolved oxygen measured near the inflowing discolored storm water was 3.86 mg/L. The second dissolved oxygen was collected near the fountain, and measured slightly higher, around 4.2 mg/L. The measured dissolved oxygen values are well within safe levels for aquatic life and is not believed to negatively affect the biota in the pond.

Observations from the University of Indianapolis' staff included iridescent bubbles within the pond and were concerned that a chemical or oil spill may have occurred. Upon inspection, the pond did not show an iridescent film indicative of an oil spill. Only the bubbles were found to show iridescence. Iridescent bubbles are often associated with soap. While examining the foam on the pond, we noted a laundry-like odor coming from the pond. When the odor was mentioned to IDEM and MCPHD, they also noted an odor similar to the sent of fabric softener or freshly washed clothes. As a result of the odor and the iridescent bubbles, surfactants were measured from the influent water as well as near the fountain and outfall. Concentrations were measured at 7.9 mg/L, 3.6 mg/L, and 3.7 mg/L, respectively. Given the surface area of the pond and the estimated average depth, the 3.6 mg/L equates to approximately 35 pounds of surfactants in the pond.

While surfactants are generally considered to have low toxicity[1], some have demonstrated toxicity at concentrations below 1 mg/L[1,2]. Analysis of surfactants included the sum of all surfactants and does not identify concentrations of specific surfactants. August Mack does acknowledge that, given the concentration of surfactants, strong odor from the pond, and iridescent bubbles, surfactants may be the cause of the event.

While sampling the pond, August Mack also collected samples to be analyzed for cBOD and TTO. These analytes, coupled with surfactants and on-site measurements, provided a wide range of possible pollutants to be screened for. Concentrations of cBOD were found to be within typical ranges for an urban storm water pond. Influent TTO had detections of bis(2-Ethylhexyl)phthalate and Phenol, but neither were found at concentrations expected to pose a risk to aquatic life.

Following the investigation, University of Indianapolis staff continued to monitor the pond for any new dead fish. After 4 days, no new dead fish have been found. At this time, we hypothesize that a one-time release of surfactants entered the storm water system from off university property and flowed into the storm water pond, resulting in the event.

Should you have any questions about the results and findings of this investigation, please don't hesitate to contact us.

ATTACHMENT A
Analytical Results

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

April 08, 2024

Ms. Jennifer Richards
August Mack
1302 N Meridian St.
Suite 300
Indianapolis, IN 46202

RE: Project: JY0988.25
Pace Project No.: 50369568

Dear Ms. Richards:

Enclosed are the analytical results for sample(s) received by the laboratory on April 01, 2024. The results relate only 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 - Indianapolis

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

Sincerely,

Allison Martinez
allison.martinez@pacelabs.com
(317)228-3118
Project Manager

Enclosures

cc: Andy Tennyson, August Mack Environmental Consultants

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project: JY0988.25
Pace Project No.: 50369568

Pace Analytical Services Indianapolis

7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050
Ohio VAP Certified Laboratory #: CL0065
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
Washington Dept of Ecology #: C1081
Wisconsin Laboratory #: 999788130
USDA Foreign Soil Permit #: 525-23-13-23119
USDA Compliance Agreement #: IN-SL-22-001

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: JY0988.25
Pace Project No.: 50369568

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50369568001	**Influent 002**	Water	04/01/24 15:25	04/01/24 16:32
50369568003	**Outfall**	Water	04/01/24 14:40	04/01/24 16:32
50369568004	**Fountain**	Water	04/01/24 14:45	04/01/24 16:32

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Indianapolis, IN 46268
(317)228-3100

SAMPLE ANALYTE COUNT

Project: JY0988.25
Pace Project No.: 50369568

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
50369568001	**Influent 002**	SM 5210B	LHZ	1	PASI-I
		SM 5540C	JTR	1	PASI-I
50369568003	**Outfall**	SM 5210B	LHZ	1	PASI-I
		SM 5540C	JTR	1	PASI-I
50369568004	**Fountain**	SM 5210B	LHZ	1	PASI-I
		SM 5540C	JTR	1	PASI-I

PASI-I = Pace Analytical Services - Indianapolis

Pace Analytical Services, LLC
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(317)228-3100

SUMMARY OF DETECTION

Project: JY0988.25
Pace Project No.: 50369568

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50369568001	**Influent 002**					
SM 5210B	Carbonaceous BOD, 5 day	135	mg/L	2.0	04/08/24 11:45	
SM 5540C	Surfactants	7.9	mg/L	0.40	04/03/24 14:10	C6,E,SU
50369568003	**Outfall**					
SM 5210B	Carbonaceous BOD, 5 day	15.5	mg/L	2.0	04/08/24 11:40	
SM 5540C	Surfactants	3.7	mg/L	0.40	04/03/24 14:10	SU
50369568004	**Fountain**					
SM 5210B	Carbonaceous BOD, 5 day	10.7	mg/L	2.0	04/08/24 11:44	
SM 5540C	Surfactants	3.6	mg/L	0.40	04/03/24 14:10	SU

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ANALYTICAL RESULTS

Project: JY0988.25
Pace Project No.: 50369568

Sample: Influent 002 **Lab ID: 50369568001** Collected: 04/01/24 15:25 Received: 04/01/24 16:32 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
5210B cBOD, 5 day	Analytical Method: SM 5210B Preparation Method: SM 5210B Pace Analytical Services - Indianapolis							
Carbonaceous BOD, 5 day	**135**	mg/L	2.0	1	04/03/24 11:15	04/08/24 11:45		
5540C MBAS Surfactants	Analytical Method: SM 5540C Pace Analytical Services - Indianapolis							
Surfactants	**7.9**	mg/L	0.40	1		04/03/24 14:10		C6,E,SU

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: JY0988.25
Pace Project No.: 50369568

Sample: Outfall **Lab ID: 50369568003** Collected: 04/01/24 14:40 Received: 04/01/24 16:32 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
5210B cBOD, 5 day	Analytical Method: SM 5210B Preparation Method: SM 5210B Pace Analytical Services - Indianapolis							
Carbonaceous BOD, 5 day	**15.5**	mg/L	2.0	1	04/03/24 10:24	04/08/24 11:40		
5540C MBAS Surfactants	Analytical Method: SM 5540C Pace Analytical Services - Indianapolis							
Surfactants	**3.7**	mg/L	0.40	1		04/03/24 14:10		SU

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: JY0988.25
Pace Project No.: 50369568

Sample: Fountain **Lab ID: 50369568004** Collected: 04/01/24 14:45 Received: 04/01/24 16:32 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
5210B cBOD, 5 day	Analytical Method: SM 5210B Preparation Method: SM 5210B Pace Analytical Services - Indianapolis							
Carbonaceous BOD, 5 day	**10.7**	mg/L	2.0	1	04/03/24 11:05	04/08/24 11:44		
5540C MBAS Surfactants	Analytical Method: SM 5540C Pace Analytical Services - Indianapolis							
Surfactants	**3.6**	mg/L	0.40	1		04/03/24 14:10		SU

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Indianapolis, IN 46268
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QUALITY CONTROL DATA

Project: JY0988.25
Pace Project No.: 50369568

QC Batch: 783196
QC Batch Method: SM 5210B
Analysis Method: SM 5210B
Analysis Description: 5210B cBOD, 5 day
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50369568001, 50369568003, 50369568004

METHOD BLANK: 3583570 Matrix: Water
Associated Lab Samples: 50369568001, 50369568003, 50369568004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Carbonaceous BOD, 5 day	mg/L	ND	2.0	04/08/24 11:28	

LABORATORY CONTROL SAMPLE: 3583572

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbonaceous BOD, 5 day	mg/L	198	168	85	85-115	

SAMPLE DUPLICATE: 3583692

Parameter	Units	50369601001 Result	Dup Result	RPD	Max RPD	Qualifiers
Carbonaceous BOD, 5 day	mg/L	ND	ND		20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: JY0988.25
Pace Project No.: 50369568

QC Batch: 783208
QC Batch Method: SM 5540C
Analysis Method: SM 5540C
Analysis Description: 5540C MBAS Surfactants
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50369568001, 50369568003, 50369568004

METHOD BLANK: 3583596 Matrix: Water
Associated Lab Samples: 50369568001, 50369568003, 50369568004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Surfactants	mg/L	ND	0.20	04/03/24 14:10	SU

LABORATORY CONTROL SAMPLE: 3583597

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Surfactants	mg/L	1	0.98	98	90-110	SU

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3583598 3583599

Parameter	Units	50369568003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Surfactants	mg/L	3.7	2	2	5.8	5.0	103	62	90-110	15	20	M0,SU

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Indianapolis, IN 46268
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QUALIFIERS

Project: JY0988.25
Pace Project No.: 50369568

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

C6	Result confirmed by reanalysis conducted outside of the method specified holding time.
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
SU	MBAS, calculated as LAS, Mol wt 342.2 g/mol

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(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: JY0988.25
Pace Project No.: 50369568

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50369568001	**Influent 002**	SM 5210B	783196	SM 5210B	783248
50369568003	**Outfall**	SM 5210B	783196	SM 5210B	783248
50369568004	**Fountain**	SM 5210B	783196	SM 5210B	783248
50369568001	**Influent 002**	SM 5540C	783208		
50369568003	**Outfall**	SM 5540C	783208		
50369568004	**Fountain**	SM 5540C	783208		

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Lor... MTJL Workorder Number or

WO# : 50369568

50369568

ALL SHADED AR

Company: August Mack Environmental	Billing Information:
Address: 1302 North Meridian	
Report To: Jennifer Richards	Email To: jrichards@augustmack.com
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: JV0988.25	State: / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET
Phone: Email:	Site/Facility ID #: UIndy — Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): Jase Hixson	Purchase Order #: Quote #: — DW PWS ID #: DW Location Code:
Collected By (signature): JH	Turnaround Date Required: — Immediately Packed on Ice: [ ] Yes [ ] No
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) — Field Filtered (if applicable): [ ] Yes [ ] No Analysis: _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Container Preservative Type **	Analyses: CBOD	Analyses: Surfactants	Lab Profile/Line:
influent 002		G	4-1	15:25					U	✓	✓	001
influent 001		G	4-1	14:37					U	✓	✓	002
outfall		G	4-1	14:40					U	✓	✓	003
Fountain		G	4-1	14:45					U	✓	✓	004

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips:			
Sample pH Acceptable	Y	N	NA
pH Strips:			
Sulfide Present	Y	N	NA
Lead Acetate Strips:			

LAB USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:
Profile 11247

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2622274

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y (N) NA
Therm ID#: 07
Cooler 1 Temp Upon Receipt: 0.6 oC
Cooler 1 Therm Corr. Factor: 0.0 oC
Cooler 1 Corrected Temp: 0.6 oC
Comments:

Relinquished by/Company: (Signature) Jase Hixson / AME	Date/Time: 4-1-24 16:32	Received by/Company: (Signature) Ann Pale	Date/Time: 4/1/24 1632
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: _____ of: _____

Pace

SAMPLE CONDITION UPON RECEIPT FORM

Date/Time and Initials of person examining contents: RC 4-1-24 17:26

1. **Courier:** ☐ FED EX ☐ UPS ☑ CLIENT ☐ PACE ☐ NOW/JETT ☐ OTHER _____

2. **Custody Seal on Cooler/Box Present:** ☐ Yes ☑ No

(If yes)Seals Intact: ☐ Yes ☐ No **(leave blank if no seals were present)**

3. **Thermometer:** 1 2 3 4 5 6 7 8 A B C D E F (G) H

4. **Cooler Temperature(s):** 0.6/0.6 | | | |
(Initial/Corrected) RECORD TEMPS OF ALL COOLERS RECEIVED (use Comments below to add more)

5. **Packing Material:** ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other _____

6. **Ice Type:** ☑ Wet ☐ Blue ☐ None

7. **If temp. is over 6°C or under 0°C, was the PM notified?:** ☐ Yes ☐ No
Cooler temp should be above freezing to 6°C

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
USDA Regulated Soils? (HI, ID, NY, WA, OR,CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		✓	All containers needing acid/base preservation have been pH CHECKED?: **Exceptions: VOA, coliform, LLHg, O&G, RAD CHEM, and any container with a septum cap or preserved with HCl.** **Circle:** **HNO3 (<2) H2SO4 (<2) NaOH (>10) NaOH/ZnAc (>9)** Any non-conformance to pH recommendations will be noted on the container count form			✓
Short Hold Time Analysis (48 hours or less)? **Analysis:** cBOD, MBAS	✓					
Time 5035A TC placed in Freezer or Short Holds To Lab	Time:			Present	Absent	N/A
			Residual Chlorine Check (SVOC 625 Pest/PCB 608)			✓
Rush TAT Requested (4 days or less):		✓	Residual Chlorine Check (Total/Amenable/Free Cyanide)			✓
Custody Signatures Present?	✓		Headspace Wisconsin Sulfide?			✓
Containers Intact?:	✓		Headspace in VOA Vials (>6mm): See Containter Count form for details	Present	Absent	No VOA Vials Sent ✓
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID		✓	Trip Blank Present?		✓	
Extra labels on Terracore Vials? (soils only)			Trip Blank Custody Seals?:			✓

COMMENTS: Influent 002 rcvd as IN2 with time but no date, RC 4-1-24

COC PAGE ____ of ____

Sample Container Count

** Place a RED dot on containers that are out of conformance **

COC Line Item	WGFU	WGKU BG1U	MeOH (only) SBS DI R	DG9H VG9H	VOA VIAL HS >6mm	VG9U DG9U	VG9T	AMBER GLASS: AG0U	AG1H	AG1U	AG3U	AG3S	AG3SF	AG3B	PLASTIC: BP1U	BP1N	BP2U	BP3U	BP3N	BP3F	BP3S	BP3B	BP3Z	OTHER: CG3H	CG3F	Syringe Kit	Matrix	Nitric Red HNO3 <2	Sulfuric Yellow H2SO4 <2	Sodium Hydroxide Green NaOH >10	Sodium Hydroxide/ZnAc Black NaOH/Zn Ac >9
1															1												WT				
2																	1														
3															1												WT				
4															1																
5																															
6																															
7																															
8																															
9																															
10																															
11																															
12																															

Container Codes

Glass

DG9H	40mL HCl amber voa vial	BG1T	glass
DG9P	40mL TSP amber vial	BG1U	1L unpreserved glass
DG9S	40mL H2SO4 amber vial	CG3U	250mL Unpres Clear Glass
DG9T	40mL Na Thio amber vial	AG0U	100mL unpres amber glass
DG9U	40mL unpreserved amber vial	AG1H	1L HCl amber glass
VG9H	40mL HCl clear vial	AG1S	1L H2SO4 amber glass
VG9T	40mL Na Thio. clear vial	AG1T	1L Na Thiosulfate amber glass
VG9U	40mL unpreserved clear vial	AG1U	1liter unpres amber glass
I	40mL w/hexane wipe vial	AG2N	500mL HNO3 amber glass
WGKU	8oz unpreserved clear jar	AG2S	500mL H2SO4 amber glass
WGFU	4oz clear soil jar	AG2U	500mL unpres amber glass
JGFU	4oz unpreserved amber wide	AG3S	250mL H2SO4 amber glass
CG3H	250mL clear glass HCl	AG3SF	250mL H2SO4 amb glass -field filtered
CG3F	250mL clear glass HCl, Field Filter	AG3U	250mL unpres amber glass
BG1H	1L HCl clear glass	AG3B	250mL NaOH amber glass
BG1S	1L H2SO4 clear glass		

Plastic

BP1B	1L NaOH plastic	BP4U	125mL unpreserved plastic
BP1N	1L HNO3 plastic	BP4N	125mL HNO3 plastic
BP1S	1L H2SO4 plastic	BP4S	125mL H2SO4 plastic
BP1U	1L unpreserved plastic		
BP1Z	1L NaOH, Zn, Ac		
BP2N	500mL HNO3 plastic		
BP2C	500mL NaOH plastic		
BP2S	500mL H2SO4 plastic		
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3F	250mL HNO3 plastic-field filtered		
BP3U	250mL unpreserved plastic		
BP3S	250mL H2SO4 plastic		
BP3Z	250mL NaOH, ZnAc plastic		
BP3R	250mL Unpres. FF SO4/OH buffer		

Miscellaneous

Syringe Kit	LL Cr+6 sampling kit
ZPLC	Ziploc Bag
R	Terracore Kit
SP5T	120mL Coliform Sodium Thiosulfate
GN	General Container
U	Summa Can (air sample)
WT	Water
SL	Solid
OL	Oil
NAL	Non-aqueous liquid
WP	Wipe

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

April 02, 2024

Ms. Jennifer Richards
August Mack
1302 N Meridian St.
Suite 300
Indianapolis, IN 46202

RE: Project: JY0988.25
Pace Project No.: 50369575

Dear Ms. Richards:

Enclosed are the analytical results for sample(s) received by the laboratory on April 02, 2024. The results relate only 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 - Indianapolis

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

Sincerely,

Allison Martinez
allison.martinez@pacelabs.com
(317)228-3118
Project Manager

Enclosures

cc: Andy Tennyson, August Mack Environmental Consultants

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project: JY0988.25
Pace Project No.: 50369575

Pace Analytical Services Indianapolis

7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050
Ohio VAP Certified Laboratory #: CL0065
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
Washington Dept of Ecology #: C1081
Wisconsin Laboratory #: 999788130
USDA Foreign Soil Permit #: 525-23-13-23119
USDA Compliance Agreement #: IN-SL-22-001

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: JY0988.25
Pace Project No.: 50369575

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50369575001	**OUT TTO**	Water	04/01/24 17:50	04/02/24 08:15
50369575002	**Pond TTO**	Water	04/01/24 17:50	04/02/24 08:15

Pace Analytical Services, LLC
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(317)228-3100

SAMPLE ANALYTE COUNT

Project: JY0988.25
Pace Project No.: 50369575

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
50369575001	**OUT TTO**	EPA 625.1	FIP	63	PASI-I
50369575002	**Pond TTO**	EPA 625.1	FIP	63	PASI-I

PASI-I = Pace Analytical Services - Indianapolis

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SUMMARY OF DETECTION

Project: JY0988.25
Pace Project No.: 50369575

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
50369575001	**OUT TTO**					
EPA 625.1	bis(2-Ethylhexyl)phthalate	5.2	ug/L	5.0	04/02/24 15:07	
EPA 625.1	Phenol	25.7	ug/L	10.0	04/02/24 15:07	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: JY0988.25
Pace Project No.: 50369575

Sample: OUT TTO **Lab ID: 50369575001** Collected: 04/01/24 17:50 Received: 04/02/24 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
625.1 MSSV	Analytical Method: EPA 625.1 Preparation Method: EPA 625.1 Pace Analytical Services - Indianapolis							
Acenaphthene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	83-32-9	
Acenaphthylene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	208-96-8	
Anthracene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	120-12-7	
Benzidine	ND	ug/L	50.0	1	04/02/24 11:10	04/02/24 15:07	92-87-5	
Benzo(a)anthracene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	207-08-9	
4-Bromophenylphenyl ether	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	20.0	1	04/02/24 11:10	04/02/24 15:07	59-50-7	
bis(2-Chloroethoxy)methane	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	108-60-1	
2-Chloronaphthalene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	91-58-7	
2-Chlorophenol	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	7005-72-3	
Chrysene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	53-70-3	
1,2-Dichlorobenzene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	20.0	1	04/02/24 11:10	04/02/24 15:07	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	120-83-2	
Diethylphthalate	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	105-67-9	
Dimethylphthalate	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	50.0	1	04/02/24 11:10	04/02/24 15:07	534-52-1	
2,4-Dinitrophenol	ND	ug/L	50.0	1	04/02/24 11:10	04/02/24 15:07	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	117-84-0	
1,2-Diphenylhydrazine	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	122-66-7	N2
bis(2-Ethylhexyl)phthalate	**5.2**	ug/L	5.0	1	04/02/24 11:10	04/02/24 15:07	117-81-7	
Fluoranthene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	206-44-0	
Fluorene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	87-68-3	
Hexachlorobenzene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	20.0	1	04/02/24 11:10	04/02/24 15:07	77-47-4	
Hexachloroethane	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	67-72-1	N2
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	193-39-5	
Isophorone	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	78-59-1	
Naphthalene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	91-20-3	
Nitrobenzene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	98-95-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: JY0988.25
Pace Project No.: 50369575

Sample: OUT TTO **Lab ID: 50369575001** Collected: 04/01/24 17:50 Received: 04/02/24 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
625.1 MSSV	Analytical Method: EPA 625.1 Preparation Method: EPA 625.1 Pace Analytical Services - Indianapolis							
2-Nitrophenol	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	88-75-5	
4-Nitrophenol	ND	ug/L	50.0	1	04/02/24 11:10	04/02/24 15:07	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	20.0	1	04/02/24 11:10	04/02/24 15:07	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	86-30-6	
Pentachlorophenol	ND	ug/L	50.0	1	04/02/24 11:10	04/02/24 15:07	87-86-5	
Phenanthrene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	85-01-8	
Phenol	**25.7**	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	108-95-2	
Pyrene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	120-82-1	
2,4,6-Trichlorophenol	ND	ug/L	10.0	1	04/02/24 11:10	04/02/24 15:07	88-06-2	
Surrogates								
2-Fluorophenol (S)	47	%.	1-102	1	04/02/24 11:10	04/02/24 15:07	367-12-4	
Phenol-d5 (S)	36	%.	8-424	1	04/02/24 11:10	04/02/24 15:07	4165-62-2	
Nitrobenzene-d5 (S)	80	%.	15-314	1	04/02/24 11:10	04/02/24 15:07	4165-60-0	
2-Fluorobiphenyl (S)	70	%.	30-116	1	04/02/24 11:10	04/02/24 15:07	321-60-8	
2,4,6-Tribromophenol (S)	83	%.	30-152	1	04/02/24 11:10	04/02/24 15:07	118-79-6	
p-Terphenyl-d14 (S)	71	%.	7-156	1	04/02/24 11:10	04/02/24 15:07	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: JY0988.25
Pace Project No.: 50369575

Sample: Pond TTO **Lab ID: 50369575002** Collected: 04/01/24 17:50 Received: 04/02/24 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
625.1 MSSV	Analytical Method: EPA 625.1 Preparation Method: EPA 625.1 Pace Analytical Services - Indianapolis							
Acenaphthene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	83-32-9	
Acenaphthylene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	208-96-8	
Anthracene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	120-12-7	
Benzidine	ND	ug/L	51.5	1	04/02/24 11:10	04/02/24 15:23	92-87-5	
Benzo(a)anthracene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	56-55-3	
Benzo(a)pyrene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	207-08-9	
4-Bromophenylphenyl ether	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	101-55-3	
Butylbenzylphthalate	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	85-68-7	
4-Chloro-3-methylphenol	ND	ug/L	20.6	1	04/02/24 11:10	04/02/24 15:23	59-50-7	
bis(2-Chloroethoxy)methane	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	111-91-1	
bis(2-Chloroethyl) ether	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	111-44-4	
bis(2-Chloroisopropyl) ether	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	108-60-1	
2-Chloronaphthalene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	91-58-7	
2-Chlorophenol	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	95-57-8	
4-Chlorophenylphenyl ether	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	7005-72-3	
Chrysene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	53-70-3	
1,2-Dichlorobenzene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	106-46-7	
3,3'-Dichlorobenzidine	ND	ug/L	20.6	1	04/02/24 11:10	04/02/24 15:23	91-94-1	
2,4-Dichlorophenol	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	120-83-2	
Diethylphthalate	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	84-66-2	
2,4-Dimethylphenol	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	105-67-9	
Dimethylphthalate	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	131-11-3	
Di-n-butylphthalate	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	84-74-2	
4,6-Dinitro-2-methylphenol	ND	ug/L	51.5	1	04/02/24 11:10	04/02/24 15:23	534-52-1	
2,4-Dinitrophenol	ND	ug/L	51.5	1	04/02/24 11:10	04/02/24 15:23	51-28-5	
2,4-Dinitrotoluene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	121-14-2	
2,6-Dinitrotoluene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	606-20-2	
Di-n-octylphthalate	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	117-84-0	
1,2-Diphenylhydrazine	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	122-66-7	N2
bis(2-Ethylhexyl)phthalate	ND	ug/L	5.2	1	04/02/24 11:10	04/02/24 15:23	117-81-7	
Fluoranthene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	206-44-0	
Fluorene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	86-73-7	
Hexachloro-1,3-butadiene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	87-68-3	
Hexachlorobenzene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	118-74-1	
Hexachlorocyclopentadiene	ND	ug/L	20.6	1	04/02/24 11:10	04/02/24 15:23	77-47-4	
Hexachloroethane	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	67-72-1	N2
Indeno(1,2,3-cd)pyrene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	193-39-5	
Isophorone	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	78-59-1	
Naphthalene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	91-20-3	
Nitrobenzene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	98-95-3	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: JY0988.25
Pace Project No.: 50369575

Sample: Pond TTO **Lab ID: 50369575002** Collected: 04/01/24 17:50 Received: 04/02/24 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
625.1 MSSV	Analytical Method: EPA 625.1 Preparation Method: EPA 625.1 Pace Analytical Services - Indianapolis							
2-Nitrophenol	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	88-75-5	
4-Nitrophenol	ND	ug/L	51.5	1	04/02/24 11:10	04/02/24 15:23	100-02-7	
N-Nitrosodimethylamine	ND	ug/L	20.6	1	04/02/24 11:10	04/02/24 15:23	62-75-9	
N-Nitroso-di-n-propylamine	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	621-64-7	
N-Nitrosodiphenylamine	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	86-30-6	
Pentachlorophenol	ND	ug/L	51.5	1	04/02/24 11:10	04/02/24 15:23	87-86-5	
Phenanthrene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	85-01-8	
Phenol	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	108-95-2	
Pyrene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	129-00-0	
1,2,4-Trichlorobenzene	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	120-82-1	
2,4,6-Trichlorophenol	ND	ug/L	10.3	1	04/02/24 11:10	04/02/24 15:23	88-06-2	
Surrogates								
2-Fluorophenol (S)	41	%.	1-102	1	04/02/24 11:10	04/02/24 15:23	367-12-4	
Phenol-d5 (S)	30	%.	8-424	1	04/02/24 11:10	04/02/24 15:23	4165-62-2	
Nitrobenzene-d5 (S)	70	%.	15-314	1	04/02/24 11:10	04/02/24 15:23	4165-60-0	
2-Fluorobiphenyl (S)	62	%.	30-116	1	04/02/24 11:10	04/02/24 15:23	321-60-8	
2,4,6-Tribromophenol (S)	77	%.	30-152	1	04/02/24 11:10	04/02/24 15:23	118-79-6	
p-Terphenyl-d14 (S)	45	%.	7-156	1	04/02/24 11:10	04/02/24 15:23	1718-51-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: JY0988.25
Pace Project No.: 50369575

QC Batch: 783017
QC Batch Method: EPA 625.1
Analysis Method: EPA 625.1
Analysis Description: 625.1 MSS
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50369575001, 50369575002

METHOD BLANK: 3582869 Matrix: Water
Associated Lab Samples: 50369575001, 50369575002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trichlorobenzene	ug/L	ND	10.0	04/02/24 14:35	
1,2-Dichlorobenzene	ug/L	ND	10.0	04/02/24 14:35	
1,2-Diphenylhydrazine	ug/L	ND	10.0	04/02/24 14:35	N2
1,3-Dichlorobenzene	ug/L	ND	10.0	04/02/24 14:35	
1,4-Dichlorobenzene	ug/L	ND	10.0	04/02/24 14:35	
2,4,6-Trichlorophenol	ug/L	ND	10.0	04/02/24 14:35	
2,4-Dichlorophenol	ug/L	ND	10.0	04/02/24 14:35	
2,4-Dimethylphenol	ug/L	ND	10.0	04/02/24 14:35	
2,4-Dinitrophenol	ug/L	ND	50.0	04/02/24 14:35	
2,4-Dinitrotoluene	ug/L	ND	10.0	04/02/24 14:35	
2,6-Dinitrotoluene	ug/L	ND	10.0	04/02/24 14:35	
2-Chloronaphthalene	ug/L	ND	10.0	04/02/24 14:35	
2-Chlorophenol	ug/L	ND	10.0	04/02/24 14:35	
2-Nitrophenol	ug/L	ND	10.0	04/02/24 14:35	
3,3'-Dichlorobenzidine	ug/L	ND	20.0	04/02/24 14:35	
4,6-Dinitro-2-methylphenol	ug/L	ND	50.0	04/02/24 14:35	
4-Bromophenylphenyl ether	ug/L	ND	10.0	04/02/24 14:35	
4-Chloro-3-methylphenol	ug/L	ND	20.0	04/02/24 14:35	
4-Chlorophenylphenyl ether	ug/L	ND	10.0	04/02/24 14:35	
4-Nitrophenol	ug/L	ND	50.0	04/02/24 14:35	
Acenaphthene	ug/L	ND	10.0	04/02/24 14:35	
Acenaphthylene	ug/L	ND	10.0	04/02/24 14:35	
Anthracene	ug/L	ND	10.0	04/02/24 14:35	
Benzidine	ug/L	ND	50.0	04/02/24 14:35	
Benzo(a)anthracene	ug/L	ND	10.0	04/02/24 14:35	
Benzo(a)pyrene	ug/L	ND	10.0	04/02/24 14:35	
Benzo(b)fluoranthene	ug/L	ND	10.0	04/02/24 14:35	
Benzo(g,h,i)perylene	ug/L	ND	10.0	04/02/24 14:35	
Benzo(k)fluoranthene	ug/L	ND	10.0	04/02/24 14:35	
bis(2-Chloroethoxy)methane	ug/L	ND	10.0	04/02/24 14:35	
bis(2-Chloroethyl) ether	ug/L	ND	10.0	04/02/24 14:35	
bis(2-Chloroisopropyl) ether	ug/L	ND	10.0	04/02/24 14:35	
bis(2-Ethylhexyl)phthalate	ug/L	ND	5.0	04/02/24 14:35	
Butylbenzylphthalate	ug/L	ND	10.0	04/02/24 14:35	
Chrysene	ug/L	ND	10.0	04/02/24 14:35	
Di-n-butylphthalate	ug/L	ND	10.0	04/02/24 14:35	
Di-n-octylphthalate	ug/L	ND	10.0	04/02/24 14:35	
Dibenz(a,h)anthracene	ug/L	ND	10.0	04/02/24 14:35	
Diethylphthalate	ug/L	ND	10.0	04/02/24 14:35	
Dimethylphthalate	ug/L	ND	10.0	04/02/24 14:35	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: JY0988.25
Pace Project No.: 50369575

METHOD BLANK: 3582869 Matrix: Water
Associated Lab Samples: 50369575001, 50369575002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Fluoranthene	ug/L	ND	10.0	04/02/24 14:35	
Fluorene	ug/L	ND	10.0	04/02/24 14:35	
Hexachloro-1,3-butadiene	ug/L	ND	10.0	04/02/24 14:35	
Hexachlorobenzene	ug/L	ND	10.0	04/02/24 14:35	
Hexachlorocyclopentadiene	ug/L	ND	20.0	04/02/24 14:35	
Hexachloroethane	ug/L	ND	10.0	04/02/24 14:35	N2
Indeno(1,2,3-cd)pyrene	ug/L	ND	10.0	04/02/24 14:35	
Isophorone	ug/L	ND	10.0	04/02/24 14:35	
N-Nitroso-di-n-propylamine	ug/L	ND	10.0	04/02/24 14:35	
N-Nitrosodimethylamine	ug/L	ND	20.0	04/02/24 14:35	
N-Nitrosodiphenylamine	ug/L	ND	10.0	04/02/24 14:35	
Naphthalene	ug/L	ND	10.0	04/02/24 14:35	
Nitrobenzene	ug/L	ND	10.0	04/02/24 14:35	
Pentachlorophenol	ug/L	ND	50.0	04/02/24 14:35	
Phenanthrene	ug/L	ND	10.0	04/02/24 14:35	
Phenol	ug/L	ND	10.0	04/02/24 14:35	
Pyrene	ug/L	ND	10.0	04/02/24 14:35	
2,4,6-Tribromophenol (S)	%.	71	30-152	04/02/24 14:35	
2-Fluorobiphenyl (S)	%.	50	30-116	04/02/24 14:35	
2-Fluorophenol (S)	%.	42	1-102	04/02/24 14:35	
Nitrobenzene-d5 (S)	%.	71	15-314	04/02/24 14:35	
p-Terphenyl-d14 (S)	%.	82	7-156	04/02/24 14:35	
Phenol-d5 (S)	%.	28	8-424	04/02/24 14:35	

LABORATORY CONTROL SAMPLE: 3582870

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4-Trichlorobenzene	ug/L	50	28.5	57	44-142	
1,2-Dichlorobenzene	ug/L	50	28.7	57	26-89	
1,2-Diphenylhydrazine	ug/L	50	37.8	76	41-129	N2
1,3-Dichlorobenzene	ug/L	50	27.5	55	22-87	
1,4-Dichlorobenzene	ug/L	50	28.5	57	24-88	
2,4,6-Trichlorophenol	ug/L	50	34.2	68	37-144	
2,4-Dichlorophenol	ug/L	50	33.4	67	39-135	
2,4-Dimethylphenol	ug/L	50	33.4	67	32-120	
2,4-Dinitrophenol	ug/L	50	40.5J	81	1-191	
2,4-Dinitrotoluene	ug/L	50	39.0	78	39-139	
2,6-Dinitrotoluene	ug/L	50	37.0	74	50-158	
2-Chloronaphthalene	ug/L	50	31.4	63	60-120	
2-Chlorophenol	ug/L	50	30.9	62	23-134	
2-Nitrophenol	ug/L	50	33.1	66	29-182	
3,3'-Dichlorobenzidine	ug/L	50	35.0	70	1-262	
4,6-Dinitro-2-methylphenol	ug/L	50	42J	84	1-181	
4-Bromophenylphenyl ether	ug/L	50	34.3	69	53-127	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: JY0988.25
Pace Project No.: 50369575

LABORATORY CONTROL SAMPLE: 3582870

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
4-Chloro-3-methylphenol	ug/L	50	37.6	75	22-147	
4-Chlorophenylphenyl ether	ug/L	50	34.6	69	25-158	
4-Nitrophenol	ug/L	50	20.8J	42	1-132	
Acenaphthene	ug/L	50	33.2	66	47-145	
Acenaphthylene	ug/L	50	33.6	67	33-145	
Anthracene	ug/L	50	37.5	75	27-133	
Benzidine	ug/L	50	6.9J	14	1-61	
Benzo(a)anthracene	ug/L	50	40.0	80	33-143	
Benzo(a)pyrene	ug/L	50	41.3	83	17-163	
Benzo(b)fluoranthene	ug/L	50	38.8	78	24-159	
Benzo(g,h,i)perylene	ug/L	50	40.6	81	1-219	
Benzo(k)fluoranthene	ug/L	50	42.7	85	11-162	
bis(2-Chloroethoxy)methane	ug/L	50	32.4	65	33-184	
bis(2-Chloroethyl) ether	ug/L	50	31.5	63	12-158	
bis(2-Chloroisopropyl) ether	ug/L	50	29.5	59	36-166	
bis(2-Ethylhexyl)phthalate	ug/L	50	41.1	82	8-158	
Butylbenzylphthalate	ug/L	50	42.2	84	1-152	
Chrysene	ug/L	50	40.2	80	17-168	
Di-n-butylphthalate	ug/L	50	39.9	80	1-120	
Di-n-octylphthalate	ug/L	50	42.1	84	4-146	
Dibenz(a,h)anthracene	ug/L	50	41.5	83	1-227	
Diethylphthalate	ug/L	50	37.9	76	1-120	
Dimethylphthalate	ug/L	50	38.2	76	1-120	
Fluoranthene	ug/L	50	38.4	77	26-137	
Fluorene	ug/L	50	35.7	71	59-121	
Hexachloro-1,3-butadiene	ug/L	50	26.8	54	24-120	
Hexachlorobenzene	ug/L	50	34.6	69	1-152	
Hexachlorocyclopentadiene	ug/L	50	22.2	44	1-100	
Hexachloroethane	ug/L	50	27.1	54	40-120	N2
Indeno(1,2,3-cd)pyrene	ug/L	50	42.0	84	1-171	
Isophorone	ug/L	50	34.3	69	21-196	
N-Nitroso-di-n-propylamine	ug/L	50	33.6	67	1-230	
N-Nitrosodimethylamine	ug/L	50	22.8	46	17-66	
N-Nitrosodiphenylamine	ug/L	50	36.1	72	62-113	
Naphthalene	ug/L	50	31.6	63	21-133	
Nitrobenzene	ug/L	50	32.9	66	35-180	
Pentachlorophenol	ug/L	50	39J	78	14-176	
Phenanthrene	ug/L	50	36.6	73	54-120	
Phenol	ug/L	50	15.0	30	5-120	
Pyrene	ug/L	50	40.2	80	52-120	
2,4,6-Tribromophenol (S)	%.			69	30-152	
2-Fluorobiphenyl (S)	%.			50	30-116	
2-Fluorophenol (S)	%.			41	1-102	
Nitrobenzene-d5 (S)	%.			62	15-314	
p-Terphenyl-d14 (S)	%.			79	7-156	
Phenol-d5 (S)	%.			29	8-424	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: JY0988.25
Pace Project No.: 50369575

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3582871 3582872

Parameter	Units	50369575002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trichlorobenzene	ug/L	ND	103	103	63.2	67.4	61	65	44-142	6	50	
1,2-Dichlorobenzene	ug/L	ND	103	103	66.6	67.3	65	65	22-88	1	40	
1,2-Diphenylhydrazine	ug/L	ND	103	103	82.2	80.0	80	78	45-118	3	40	N2
1,3-Dichlorobenzene	ug/L	ND	103	103	63.6	65.7	62	64	14-84	3	40	
1,4-Dichlorobenzene	ug/L	ND	103	103	66.0	67.8	64	66	17-86	3	40	
2,4,6-Trichlorophenol	ug/L	ND	103	103	77.9	75.9	76	74	37-144	3	58	
2,4-Dichlorophenol	ug/L	ND	103	103	82.5	86.7	80	84	39-135	5	50	
2,4-Dimethylphenol	ug/L	ND	103	103	80.2	82.0	78	80	32-120	2	58	
2,4-Dinitrophenol	ug/L	ND	103	103	85.8J	86.8J	83	84	1-191		132	
2,4-Dinitrotoluene	ug/L	ND	103	103	81.9	82.8	79	80	39-139	1	42	
2,6-Dinitrotoluene	ug/L	ND	103	103	80.5	81.9	78	79	50-158	2	48	
2-Chloronaphthalene	ug/L	ND	103	103	71.0	71.2	69	69	60-120	0	24	
2-Chlorophenol	ug/L	ND	103	103	77.3	77.4	75	75	23-134	0	61	
2-Nitrophenol	ug/L	ND	103	103	79.4	78.1	77	76	29-182	2	55	
3,3'-Dichlorobenzidine	ug/L	ND	103	103	52.3	57.0	51	55	1-262	9	108	
4,6-Dinitro-2-methylphenol	ug/L	ND	103	103	83.8J	81J	81	79	1-181		203	
4-Bromophenylphenyl ether	ug/L	ND	103	103	73.4	72.4	71	70	53-127	1	43	
4-Chloro-3-methylphenol	ug/L	ND	103	103	90.8	97.0	88	94	22-147	7	73	
4-Chlorophenylphenyl ether	ug/L	ND	103	103	76.5	75.6	74	73	25-158	1	61	
4-Nitrophenol	ug/L	ND	103	103	70.3J	68.8J	68	67	1-132		131	
Acenaphthene	ug/L	ND	103	103	75.2	73.7	73	71	47-145	2	48	
Acenaphthylene	ug/L	ND	103	103	76.1	74.9	74	73	33-145	1	74	
Anthracene	ug/L	ND	103	103	79.1	78.1	77	76	27-133	1	66	
Benzidine	ug/L	ND	103	103	ND	ND	3	5	1-38		40	
Benzo(a)anthracene	ug/L	ND	103	103	81.9	80.9	79	78	33-143	1	53	
Benzo(a)pyrene	ug/L	ND	103	103	84.6	84.8	82	82	17-163	0	72	
Benzo(b)fluoranthene	ug/L	ND	103	103	87.3	91.2	85	88	24-159	4	71	
Benzo(g,h,i)perylene	ug/L	ND	103	103	80.7	80.7	78	78	1-219	0	97	
Benzo(k)fluoranthene	ug/L	ND	103	103	79.6	78.7	77	76	11-162	1	63	
bis(2-Chloroethoxy)methane	ug/L	ND	103	103	75.5	75.7	73	73	33-184	0	54	
bis(2-Chloroethyl) ether	ug/L	ND	103	103	76.5	74.1	74	72	12-158	3	108	
bis(2-Chloroisopropyl) ether	ug/L	ND	103	103	71.5	70.5	69	68	36-166	1	76	
bis(2-Ethylhexyl)phthalate	ug/L	ND	103	103	87.3	89.1	85	86	8-158	2	82	
Butylbenzylphthalate	ug/L	ND	103	103	91.6	92.0	89	89	1-152	0	60	
Chrysene	ug/L	ND	103	103	80.1	80.6	78	78	17-168	1	87	
Di-n-butylphthalate	ug/L	ND	103	103	86.4	85.0	84	82	1-120	2	47	
Di-n-octylphthalate	ug/L	ND	103	103	94.9	94.2	92	91	4-146	1	69	
Dibenz(a,h)anthracene	ug/L	ND	103	103	83.4	83.6	81	81	1-227	0	126	
Diethylphthalate	ug/L	ND	103	103	82.4	82.4	80	80	1-120	0	100	
Dimethylphthalate	ug/L	ND	103	103	79.1	77.9	77	76	1-120	2	183	
Fluoranthene	ug/L	ND	103	103	79.5	78.5	77	76	26-137	1	66	
Fluorene	ug/L	ND	103	103	78.4	78.0	76	76	59-121	0	38	
Hexachloro-1,3-butadiene	ug/L	ND	103	103	60.6	65.0	59	63	24-120	7	62	
Hexachlorobenzene	ug/L	ND	103	103	72.0	69.3	70	67	1-152	4	55	
Hexachlorocyclopentadiene	ug/L	ND	103	103	41.3	38.8J	40	38	1-84		40	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: JY0988.25
Pace Project No.: 50369575

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3582871 3582872

Parameter	Units	50369575002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Hexachloroethane	ug/L	ND	103	103	62.2	65.5	60	64	40-120	5	52	N2
Indeno(1,2,3-cd)pyrene	ug/L	ND	103	103	86.2	85.5	84	83	1-171	1	99	
Isophorone	ug/L	ND	103	103	77.7	77.4	75	75	21-196	0	93	
N-Nitroso-di-n-propylamine	ug/L	ND	103	103	81.2	78.7	79	76	1-230	3	87	
N-Nitrosodimethylamine	ug/L	ND	103	103	68.5	61.4	66	60	1-75	11	40	
N-Nitrosodiphenylamine	ug/L	ND	103	103	78.4	77.8	76	75	40-131	1	40	
Naphthalene	ug/L	ND	103	103	72.4	74.4	70	72	21-133	3	65	
Nitrobenzene	ug/L	ND	103	103	76.9	77.1	75	75	35-180	0	62	
Pentachlorophenol	ug/L	ND	103	103	84.2J	84.6J	82	82	14-176		86	
Phenanthrene	ug/L	ND	103	103	78.4	78.7	76	76	54-120	0	39	
Phenol	ug/L	ND	103	103	54.2	51.2	53	50	5-120	6	64	
Pyrene	ug/L	ND	103	103	85.0	84.2	82	82	52-120	1	49	
2,4,6-Tribromophenol (S)	%.						78	76	30-152			
2-Fluorobiphenyl (S)	%.						64	64	30-116			
2-Fluorophenol (S)	%.						64	60	1-102			
Nitrobenzene-d5 (S)	%.						73	74	15-314			
p-Terphenyl-d14 (S)	%.						56	59	7-156			
Phenol-d5 (S)	%.						55	51	8-424			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALIFIERS

Project: JY0988.25
Pace Project No.: 50369575

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: JY0988.25
Pace Project No.: 50369575

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50369575001	**OUT TTO**	EPA 625.1	783017	EPA 625.1	783074
50369575002	**Pond TTO**	EPA 625.1	783017	EPA 625.1	783074

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workord

Rush

ALL SHADED

WO# : 50369575

50369575

Company: August Mack Environmental	Billing Information:
Address: 1302 North Meridian	
Report To: Jennifer Richards	Email To: jrichards@augustmack.com
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: JV0988.25	State: / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET
Phone: Email:	Site/Facility ID #: Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): Jase Hixson	Purchase Order #: Quote #: DW PWS ID #: DW Location Code:
Collected By (signature): JH	Turnaround Date Required: Immediately Packed on Ice: [ ] Yes [ ] No
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [X] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)
	Field Filtered (if applicable): [ ] Yes [ ] No Analysis: _____

Container Preservative Type **

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Analyses: TTO
Out TTO	W	G	4-1	17:50				2	1
Pond TTO								2	1

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips: _____	
Sample pH Acceptable	Y N NA
pH Strips: _____	
Sulfide Present	Y N NA
Lead Acetate Strips: _____	

LAB USE ONLY:
Lab Sample # / Comments:

See Sur

Customer Remarks / Special Conditions / Possible Hazards:

Profile 11247

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2622275

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y (N) NA
Therm ID#: C7
Cooler 1 Temp Upon Receipt: 1.3 oC
Cooler 1 Therm Corr. Factor: 0.0 oC
Cooler 1 Corrected Temp: 1.3 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Steve Kyle AME	7:45	[signature] 4-1-24	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time: 4-2-24 0815
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y (N) NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page _____ of: _____

SAMPLE CONDITION UPON RECEIPT FORM

Date/Time and Initials of person examining contents: 4-2-24 0815 CRR

1. **Courier:** ☐ FED EX ☐ UPS ☑ CLIENT ☐ PACE ☐ NOW/JETT ☐ OTHER _____

2. **Custody Seal on Cooler/Box Present:** ☐ Yes ☑ No

(If yes)**Seals Intact:** ☐ Yes ☐ No **(leave blank if no seals were present)**

3. **Thermometer:** 1 2 3 4 5 6 7 8 A B C D E F (G) H

4. **Cooler Temperature(s):** 1.3 | 1.3 | | | | (Initial/Corrected) RECORD TEMPS OF ALL COOLERS RECEIVED (use Comments below to add more)

5. **Packing Material:** ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

6. **Ice Type:** ☑ Wet ☐ Blue ☐ None

7. **If temp. is over 6°C or under 0°C, was the PM notified?:** ☐ Yes ☐ No
Cooler temp should be above freezing to 6°C

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
USDA Regulated Soils? (HI, ID, NY, WA, OR,CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		—	All containers needing acid/base preservation have been pH CHECKED?: **Exceptions: VOA, coliform, LLHg, O&G, RAD CHEM, and any container with a septum cap or preserved with HCl.** **Circle:** **HNO3 (<2) H2SO4 (<2) NaOH (>10) NaOH/ZnAc (>9)** Any non-conformance to pH recommendations will be noted on the container count form			—
Short Hold Time Analysis (48 hours or less)? Analysis:		—				
Time 5035A TC placed in Freezer or Short Holds To Lab	Time:			Present	Absent	N/A 4-2-24 CRR
			Residual Chlorine Check (SVOC 625 Pest/PCB 608)		—	
Rush TAT Requested (4 days or less): Same day	—		Residual Chlorine Check (Total/Amenable/Free Cyanide)			—
Custody Signatures Present?	—		Headspace Wisconsin Sulfide?			—
Containers Intact?:	—		Headspace in VOA Vials (>6mm): See Containter Count form for details	Present	Absent	No VOA Vials Sent —
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	—		Trip Blank Present?		—	
Extra labels on Terracore Vials? (soils only)			Trip Blank Custody Seals?:			—

COMMENTS:

COC PAGE ____ of ____

Sample Container Count

** Place a RED dot on containers that are out of conformance **

									AMBER GLASS							PLASTIC									OTHER					Matrix	Nitric Red HNO3 <2	Sulfuric Yellow H2SO4 <2	Sodium Hydroxide Green NaOH >10	Sodium Hydroxide/ ZnAc Black NaOH/Zn Ac >9
COC Line Item	WGFU	WGKU BG1U	MeOH (only) SBS DI R	DG9H VG9H	VOA VIAL HS >6mm	VG9U DG9U	VG9T	AG0U	AG1H	AG1U	AG3U	AG3S	AG3SF	AG3B	BP1U	BP1N	BP2U	BP3U	BP3N	BP3F	BP3S	BP3B	BP3Z	CG3H	CG3F	Syringe Kit							
1										2																						
2										2																						
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass

DG9H	40mL HCl amber voa vial
DG9P	40mL TSP amber vial
DG9S	40mL H2SO4 amber vial
DG9T	40mL Na Thio amber vial
DG9U	40mL unpreserved amber vial
VG9H	40mL HCl clear vial
VG9T	40mL Na Thio. clear vial
VG9U	40mL unpreserved clear vial
I	40mL w/hexane wipe vial
WGKU	8oz unpreserved clear jar
WGFU	4oz clear soil jar
JGFU	4oz unpreserved amber wide
CG3H	250mL clear glass HCl
CG3F	250mL clear glass HCl, Field Filter
BG1H	1L HCl clear glass
BG1S	1L H2SO4 clear glass
BG1T	glass
BG1U	1L unpreserved glass
CG3U	250mL Unpres Clear Glass
AG0U	100mL unpres amber glass
AG1H	1L HCl amber glass
AG1S	1L H2SO4 amber glass
AG1T	1L Na Thiosulfate amber glass
AG1U	1liter unpres amber glass
AG2N	500mL HNO3 amber glass
AG2S	500mL H2SO4 amber glass
AG2U	500mL unpres amber glass
AG3S	250mL H2SO4 amber glass
AG3SF	250mL H2SO4 amb glass -field filtered
AG3U	250mL unpres amber glass
AG3B	250mL NaOH amber glass

Plastic

BP1B	1L NaOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn, Ac
BP2N	500mL HNO3 plastic
BP2C	500mL NaOH plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Ac
BP3B	250mL NaOH plastic
BP3N	250mL HNO3 plastic
BP3F	250mL HNO3 plastic-field filtered
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, ZnAc plastic
BP3R	250mL Unpres. FF SO4/OH buffer
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic

Miscellaneous

Syringe Kit	LL Cr+6 sampling kit
ZPLC	Ziploc Bag
R	Terracore Kit
SP5T	120mL Coliform Sodium Thiosulfate
GN	General Container
U	Summa Can (air sample)
WT	Water
SL	Solid
OL:	Oil
NAL	Non-aqueous liquid
WP	Wipe

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

April 29, 2024

Ms. Jennifer Richards
August Mack
1302 N Meridian St.
Suite 300
Indianapolis, IN 46202

RE: Project: JY0988.25
Pace Project No.: 50371641

Dear Ms. Richards:

Enclosed are the analytical results for sample(s) received by the laboratory on April 26, 2024. The results relate only 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 - Indianapolis

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

Sincerely,

Allison Martinez
allison.martinez@pacelabs.com
(317)228-3118
Project Manager

Enclosures

cc: Andy Tennyson, August Mack Environmental Consultants

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

CERTIFICATIONS

Project: JY0988.25
Pace Project No.: 50371641

Pace Analytical Services Indianapolis

7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050
Ohio VAP Certified Laboratory #: CL0065
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
Washington Dept of Ecology #: C1081
Wisconsin Laboratory #: 999788130
USDA Foreign Soil Permit #: 525-23-13-23119
USDA Compliance Agreement #: IN-SL-22-001

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

SAMPLE SUMMARY

Project: JY0988.25
Pace Project No.: 50371641

Lab ID	Sample ID	Matrix	Date Collected	Date Received
50371641001	**Fountain 001**	Water	04/26/24 13:28	04/26/24 14:28

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
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SAMPLE ANALYTE COUNT

Project: JY0988.25
Pace Project No.: 50371641

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
50371641001	**Fountain 001**	SM 5540C	JTR	1	PASI-I

PASI-I = Pace Analytical Services - Indianapolis

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

ANALYTICAL RESULTS

Project: JY0988.25
Pace Project No.: 50371641

Sample: Fountain 001 **Lab ID: 50371641001** Collected: 04/26/24 13:28 Received: 04/26/24 14:28 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
5540C MBAS Surfactants	Analytical Method: SM 5540C Pace Analytical Services - Indianapolis							
Surfactants	ND	mg/L	0.20	1		04/26/24 15:45		SU

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA

Project: JY0988.25
Pace Project No.: 50371641

QC Batch: 786942
QC Batch Method: SM 5540C
Analysis Method: SM 5540C
Analysis Description: 5540C MBAS Surfactants
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 50371641001

METHOD BLANK: 3600016 Matrix: Water
Associated Lab Samples: 50371641001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Surfactants	mg/L	ND	0.20	04/26/24 15:45	SU

LABORATORY CONTROL SAMPLE: 3600017

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Surfactants	mg/L	1	0.93	93	90-110	SU

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3600018 3600019

Parameter	Units	50371641001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Surfactants	mg/L	ND	1	1	0.77	0.81	66	70	90-110	5	20	M3,SU

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALIFIERS

Project: JY0988.25
Pace Project No.: 50371641

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M3	Matrix spike recovery was outside laboratory control limits due to matrix interferences.
SU	MBAS, calculated as LAS, Mol wt 342.2 g/mol

Pace Analytical Services, LLC
7726 Moller Road
Indianapolis, IN 46268
(317)228-3100

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: JY0988.25
Pace Project No.: 50371641

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
50371641001	**Fountain 001**	SM 5540C	786942		

Pace® Location Requested (City/State):
Pace Analytical Indianapolis
7726 Moller Road, Indianapolis, IN 46268

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

WO# : 50371641

50371641

Company Name:	August Mack-IN	Contact/Report To:	Richards, Jennifer
Street Address:	1302 N Meridian St., Indianapolis, IN 46202	Phone #:	317-916-3126
		E-Mail:	jrichards@augustmack.com
		Cc E-Mail:	
Customer Project #:		Invoice To:	Vendor Invoices
Project Name:	JY0988.25	Invoice E-Mail:	[redacted]
Site Collection Info/Facility ID (as applicable):	University of Indianapolis	Purchase Order # (if applicable):	VendorInvoices@augustmack.com JY0988-25
		Quote #:	
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [X] ET		County / State origin of sample(s):	Indiana

Data Deliverables:
[ ] Level II [ ] Level III [ ] Level IV
[ ] EQUIS
[ ] Other

Regulatory Program (DW, RCRA, etc.) as applicable: Reportable [ ] Yes [ ] No

Rush (Pre-approval required):
[ ] Same Day [ ] 1 Day [ ] 2 Day [ ] 3 Day [ ] Other _____

DW PWSID # or WW Permit # as applicable:

Date Results Requested:

Field Filtered (if applicable): [ ] Yes [ ] No
Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Waste Water (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Surface Water (SW),Sediment (SED), Sludge (SL), Caulk (CK), Leachate (LL), Biosolid (BS), Other (OT)

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) 90mL, (10) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only

Proj. Mgr: **Allison Martinez**
AcctNum / Client ID:
Table #:
Profile / Template: **11247-2**
Prelog / Bottle Ord. ID: **1175234**

Preservation non-conformance identified for sample.

Customer Sample ID	Matrix *	Comp / Grab	Composite Start Date	Composite Start Time	Collected or Composite End Date	Collected or Composite End Time	# Cont.	Res. Chlorine Results	Res. Chlorine Units	Surfactants by 5540C	Sample Comment
Fountain 001				1:28pm	4/26/24	1:28pm	1			✓	

Additional Instructions from Pace®:
Surfactants has a 48 hour Short Hold Time

Collected By:
(Printed Name) Steve Kyler
Signature:

Customer Remarks / Special Conditions / Possible Hazards:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C)	Corrected Temp. (°C)	On Ice:
1	H	0.0	10.7	10.7	Y

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	4/26/24 1:28pm		4/26/24 228
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

Tracking Number:

Delivered by: [✓] In- Person [ ] Courier
[ ] FedEX [ ] UPS [ ] Other

Page: of

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ENV-FRM-CORQ-0019_v02_110423

SAMPLE CONDITION UPON RECEIPT FORM

Date/Time and Initials of person examining contents: 4/26/24 1433 mw

1. **Courier:** FED EX UPS ✓CLIENT PACE NOW/JETT OTHER _____
2. **Custody Seal on Cooler/Box Present:** Yes ✓No
   (If yes)Seals Intact: Yes No **(leave blank if no seals were present)**
3. **Thermometer:** 1 2 3 4 5 6 7 8 A B C D E F G (H)
4. **Cooler Temperature(s):** 10.7 / 10.7 (Initial/Corrected) RECORD TEMPS OF ALL COOLERS RECEIVED (use Comments below to add more)

5. **Packing Material:** Bubble Wrap Bubble Bags ✓None Other _____
6. **Ice Type:** ✓Wet Blue None
7. **Was the PM notified of out of temp cooler?:** Yes ✓No
   Cooler temp should be above freezing to 6°C
8. **EZ Bottle Order?** Yes ✓No
   EZ Bottle Order Number:

All discrepancies will be written out in the comments section below.

	Yes	No		Yes	No	N/A
USDA Regulated Soils? (HI, ID, NY, WA, OR,CA, NM, TX, OK, AR, LA, TN, AL, MS, NC, SC, GA, FL, or Puerto Rico)		✓	All containers needing acid/base preservation have been pH CHECKED?: **Exceptions: VOA, coliform, LLHg, O&G, RAD CHEM, and any container with a septum cap or preserved with HCl.** **Circle: HNO3 (<2) H2SO4 (<2) NaOH (>10) NaOH/ZnAc (>9)** Any non-conformance to pH recommendations will be noted on the container count form			✓
Short Hold Time Analysis (48 hours or less)? **Analysis:** surfactants	✓					
Time 5035A TC placed in Freezer or Short Holds To Lab	Time: 1450			Present	Absent	N/A
			Residual Chlorine Check (SVOC 625 Pest/PCB 608)			✓
Rush TAT Requested (4 days or less):		✓	Residual Chlorine Check (Total/Amenable/Free Cyanide)			✓
Custody Signatures Present?	✓		Headspace Wisconsin Sulfide?			✓
Containers Intact?:	✓		Headspace in VOA Vials (>6mm): See Containter Count form for details	Present	Absent	No VOA Vials Sent ✓
Sample Label (IDs/Dates/Times) Match COC?: Except TCs, which only require sample ID	✓		Trip Blank Present?		✓	
Extra labels on Terracore Vials? (soils only)			Trip Blank Custody Seals?:			✓

COMMENTS:

COC PAGE ____ of ____

Sample Container Count

** Place a RED dot on containers that are out of conformance **

									AMBER GLASS							PLASTIC									OTHER								
			MeOH (only)																											Nitric	Sulfuric	Sodium Hydroxide	Sodium Hydroxide/ ZnAc
			SBS																											Red	Yellow	Green	Black
			DI																													
COC Line Item	WGFU	WGKU BG1U	R	DG9H VG9H	VOA VIAL HS >6mm	VG9U DG9U	VG9T	AG0U	AG1H	AG1U	AG3U	AG3S	AG3SF	AG3B	BP1U	BP1N	BP2U	BP3U	BP3N	BP3F	BP3S	BP3B	BP3Z	CG3H	CG3F	Syringe Kit		Matrix	HNO3 <2	H2SO4 <2	NaOH >10	NaOH/Zn Ac >9
1																	I										WT				
2																																
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass

DG9H	40mL HCl amber voa vial	BG1T	glass
DG9P	40mL TSP amber vial	BG1U	1L unpreserved glass
DG9S	40mL H2SO4 amber vial	CG3U	250mL Unpres Clear Glass
DG9T	40mL Na Thio amber vial	AG0U	100mL unpres amber glass
DG9U	40mL unpreserved amber vial	AG1H	1L HCl amber glass
VG9H	40mL HCl clear vial	AG1S	1L H2SO4 amber glass
VG9T	40mL Na Thio. clear vial	AG1T	1L Na Thiosulfate amber glass
VG9U	40mL unpreserved clear vial	AG1U	1liter unpres amber glass
I	40mL w/hexane wipe vial	AG2N	500mL HNO3 amber glass
WGKU	8oz unpreserved clear jar	AG2S	500mL H2SO4 amber glass
WGFU	4oz clear soil jar	AG2U	500mL unpres amber glass
JGFU	4oz unpreserved amber wide	AG3S	250mL H2SO4 amber glass
CG3H	250mL clear glass HCl	AG3SF	250mL H2SO4 amb glass -field filtered
CG3F	250mL clear glass HCl, Field Filter	AG3U	250mL unpres amber glass
BG1H	1L HCl clear glass	AG3B	250mL NaOH amber glass
BG1S	1L H2SO4 clear glass		

Plastic

BP1B	1L NaOH plastic	BP4U	125mL unpreserved plastic
BP1N	1L HNO3 plastic	BP4N	125mL HNO3 plastic
BP1S	1L H2SO4 plastic	BP4S	125mL H2SO4 plastic
BP1U	1L unpreserved plastic		
BP1Z	1L NaOH, Zn, Ac		
BP2N	500mL HNO3 plastic		
BP2C	500mL NaOH plastic		
BP2S	500mL H2SO4 plastic		
BP2U	500mL unpreserved plastic		
BP2Z	500mL NaOH, Zn Ac		
BP3B	250mL NaOH plastic		
BP3N	250mL HNO3 plastic		
BP3F	250mL HNO3 plastic-field filtered		
BP3U	250mL unpreserved plastic		
BP3S	250mL H2SO4 plastic		
BP3Z	250mL NaOH, ZnAc plastic		
BP3R	250mL Unpres. FF SO4/OH buffer		

Miscellaneous

Syringe Kit	LL Cr+6 sampling kit
ZPLC	Ziploc Bag
R	Terracore Kit
SP5T	120mL Coliform Sodium Thiosulfate
GN	General Container
U	Summa Can (air sample)
WT	Water
SL	Solid
OL:	Oil
NAL	Non-aqueous liquid
WP	Wipe