

DATA PACKAGE GENERAL CHEMISTRY

PROJECT NAME : FT MEADE TIPTON AIRFIELD PARCEL RI - PO 0111169

WESTON SOLUTIONS

1400 Weston Way

PO Box 2653

West Chester, PA - 19380

Phone No: 610-701-7400

ORDER ID : P4605

ATTENTION : Nathan Fretz



Laboratory Certification ID # 20012



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Cover Page

Order ID : P4605

Project ID : Ft Meade Tipton Airfield Parcel RI - PO 0111169

Client : Weston Solutions

Lab Sample Number

P4605-01
P4605-02
P4605-03
P4605-04
P4605-05
P4605-06

Client Sample Number

TAPIAL2-SED02-102824-00-T2
TAPIAL2-SED01-102824-00-T2
TAPIAL3-SED01-102824-00-T2
TAPHHA-SED01-102824-00-T2
TAPHHA-SED02-102824-00-T2
TAPLPR-SED11-102824-00-T2

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the laboratory manager or his designee, as verified by the following signature.

Signature : _____

Date: 11/11/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



284 Sheffield Street, Mountainside, NJ 07092 Phone: 908 789 8900 Fax: 908 789 8922

CASE NARRATIVE

Weston Solutions

Project Name: Ft Meade Tipton Airfield Parcel RI - PO 0111169

Project # N/A

Chemtech Project # P4605

Test Name: pH,TOC

A. Number of Samples and Date of Receipt:

6 Solid samples were received on 10/29/2024.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: pH and TOC. This data package contains results for pH,TOC.

C. Analytical Techniques:

The analysis of pH was based on method 9045D and The analysis of TOC was based on method Lloyd Kahn.

D. QA/ QC Samples:

The Holding Times were met for all samples except for TAPHHA-SED01-102824-00-T2 of pH, for TAPHHA-SED02-102824-00-T2 of pH.for TAPIAL2-SED01-102824-00-T2 of pH.for TAPIAL2-SED02-102824-00-T2 of pH.for TAPIAL3-SED01-102824-00-T2 of pH.for TAPLPR-SED11-102824-00-T2 of pH as samples were receive out of holding time.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike analysis met criteria for all samples.

The Matrix Spike Duplicate analysis met criteria for all samples.

The Blank analysis did not indicate the presence of lab contamination.

The Calibration met the requirements.

E. Additional Comments:

Lab has used least representable sample weight for the sample P4605-05 for TOC analysis. Therefore Lab has reported the TOC result with "OR" qualifier.

I certify that the data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package.

Signature_____

DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following “ Results Qualifiers” are used:

J	Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL).
U	Indicates the analyte was analyzed for, but not detected.
ND	Indicates the analyte was analyzed for, but not detected
E	Indicates the reported value is estimated because of the presence of interference
M	Indicates Duplicate injection precision not met.
N	Indicates the spiked sample recovery is not within control limits.
S	Indicates the reported value was determined by the Method of Standard Addition (MSA).
*	Indicates that the duplicate analysis is not within control limits.
+	Indicates the correlation coefficient for the MSA is less than 0.995.
D	Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
M	Method qualifiers “P” for ICP instrument “PM” for ICP when Microwave Digestion is used “CV” for Manual Cold Vapor AA “AV” for automated Cold Vapor AA “CA” for MIDI-Distillation Spectrophotometric “AS” for Semi -Automated Spectrophotometric “C” for Manual Spectrophotometric “T” for Titrimetric “NR” for analyte not required to be analyzed
OR	Indicates the analyte’s concentration exceeds the calibrated range of the instrument for that specific analysis.
Q	Indicates the LCS did not meet the control limits requirements
H	Sample Analysis Out Of Hold Time

GENERAL CHEMISTRY CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: P4605

MATRIX: Solid

METHOD: 9045D,Lloyd Kahn

	NA	NO	YES
1. Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
2. Matrix Spike Duplicate Recoveries Met Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable range.			
The Blank Spike met requirements for all samples.			
3. Sample Duplicate Analysis Met QC Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable range.			
4. Digestion Holding Time Met		✓	
If not met, list number of days exceeded for each sample:			
The Holding Times were met for all samples except for TAPHHA-SED01-102824-00-T2 of pH, for TAPHHA-SED02-102824-00-T2 of pH.for TAPIAL2-SED01-102824-00-T2 of pH.for TAPIAL2-SED02-102824-00-T2 of pH.for TAPIAL3-SED01-102824-00-T2 of pH.for TAPLPR-SED11-102824-00-T2 of pH as samples were receive out of holding time.			

ADDITIONAL COMMENTS:

Lab has used least representable sample weight for the sample P4605-05 for TOC analysis. Therefore Lab has reported the TOC result with "OR" qualifier.

QA REVIEW

Date

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P4605

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 11/11/2024

LAB CHRONICLE

OrderID:	P4605	OrderDate:	10/29/2024 11:02:00 AM
Client:	Weston Solutions	Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169
Contact:	Nathan Fretz	Location:	K63

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4605-01	TAPIAL2-SED02-1028 24-00-T2	SOIL	pH	9045D	10/28/24 09:35		10/29/24 16:30	10/29/24
			TOC	Lloyd Kahn			10/30/24 11:40	
P4605-02	TAPIAL2-SED01-1028 24-00-T2	SOIL	pH	9045D	10/28/24 09:50		10/29/24 16:35	10/29/24
			TOC	Lloyd Kahn			10/30/24 11:54	
P4605-03	TAPIAL3-SED01-1028 24-00-T2	SOIL	pH	9045D	10/28/24 10:30		10/29/24 16:40	10/29/24
			TOC	Lloyd Kahn			10/30/24 12:50	
P4605-04	TAPHHA-SED01-1028 24-00-T2	SOIL	pH	9045D	10/28/24 10:45		10/29/24 16:45	10/29/24
			TOC	Lloyd Kahn			10/30/24 13:02	
P4605-05	TAPHHA-SED02-1028 24-00-T2	SOIL	pH	9045D	10/28/24 11:10		10/29/24 16:50	10/29/24

LAB CHRONICLE

P4605-06	TAPLPR-SED11-10282 4-00-T2	SOIL	TOC	Lloyd Kahn		10/30/24 13:40	
			pH	9045D	10/28/24 14:40	10/29/24 17:00	10/29/24
			TOC	Lloyd Kahn		10/30/24 14:03	



SAMPLE DATA

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- 14

Report of Analysis

Client:	Weston Solutions	Date Collected:	10/28/24 09:35
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	Date Received:	10/29/24
Client Sample ID:	TAPIAL2-SED02-102824-00-T2	SDG No.:	P4605
Lab Sample ID:	P4605-01	Matrix:	SOIL
		% Solid:	92

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
pH	5.11	H	1	0	0	0	pH		10/29/24 16:30	9045D
TOC	1980		1	8.00	50.0	250	mg/Kg		10/30/24 11:40	Lloyd Kahn

Comments: pH result reported at temperature 23.4 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	Weston Solutions	Date Collected:	10/28/24 09:50
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	Date Received:	10/29/24
Client Sample ID:	TAPIAL2-SED01-102824-00-T2	SDG No.:	P4605
Lab Sample ID:	P4605-02	Matrix:	SOIL
		% Solid:	85.8

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
pH	4.89	H	1	0	0	0	pH		10/29/24 16:35	9045D
TOC	5490		1	8.00	50.0	250	mg/Kg		10/30/24 11:54	Lloyd Kahn

Comments: pH result reported at temperature 23.3 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	Weston Solutions	Date Collected:	10/28/24 10:30
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	Date Received:	10/29/24
Client Sample ID:	TAPIAL3-SED01-102824-00-T2	SDG No.:	P4605
Lab Sample ID:	P4605-03	Matrix:	SOIL
		% Solid:	89.2

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
pH	7.07	H	1	0	0	0	pH		10/29/24 16:40	9045D
TOC	8320		1	8.00	50.0	250	mg/Kg		10/30/24 12:50	Lloyd Kahn

Comments: pH result reported at temperature 24.5 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	Weston Solutions	Date Collected:	10/28/24 10:45
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	Date Received:	10/29/24
Client Sample ID:	TAPHHA-SED01-102824-00-T2	SDG No.:	P4605
Lab Sample ID:	P4605-04	Matrix:	SOIL
		% Solid:	85.1

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
pH	6.35	H	1	0	0	0	pH		10/29/24 16:45	9045D
TOC	4730		1	8.00	50.0	250	mg/Kg		10/30/24 13:02	Lloyd Kahn

Comments: pH result reported at temperature 22.3 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	Weston Solutions	Date Collected:	10/28/24 11:10
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	Date Received:	10/29/24
Client Sample ID:	TAPHHA-SED02-102824-00-T2	SDG No.:	P4605
Lab Sample ID:	P4605-05	Matrix:	SOIL
		% Solid:	54.7

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
pH	6.16	H	1	0	0	0	pH		10/29/24 16:50	9045D
TOC	21200	OR	1	8.00	50.0	250	mg/Kg		10/30/24 13:40	Lloyd Kahn

Comments: pH result reported at temperature 20.5 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits

Report of Analysis

Client:	Weston Solutions	Date Collected:	10/28/24 14:40
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	Date Received:	10/29/24
Client Sample ID:	TAPLPR-SED11-102824-00-T2	SDG No.:	P4605
Lab Sample ID:	P4605-06	Matrix:	SOIL
		% Solid:	77.6

Parameter	Conc.	Qua.	DF	MDL	LOD	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
pH	6.43	H	1	0	0	0	pH		10/29/24 17:00	9045D
TOC	2070		1	8.00	50.0	250	mg/Kg		10/30/24 14:03	Lloyd Kahn

Comments: pH result reported at temperature 23.2 °C

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

Q = indicates LCS control criteria did not meet requirements

H = Sample Analysis Out Of Hold Time

J = Estimated Value

B = Analyte Found in Associated Method Blank

* = indicates the duplicate analysis is not within control limits.

E = Indicates the reported value is estimated because of the presence of interference.

OR = Over Range

N =Spiked sample recovery not within control limits



QC RESULT SUMMARY

- 1
- 2
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Initial and Continuing Calibration Verification

Client: Weston Solutions

SDG No.: P4605

Project: Ft Meade Tipton Airfield Parcel RI - PO 0111169

RunNo.: LB133195

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV pH	pH	7.00	7	100	90-110	10/29/2024
Sample ID: CCV1 pH	pH	2.02	2.00	101	90-110	10/29/2024
Sample ID: CCV2 pH	pH	12.02	12.00	100	90-110	10/29/2024

Initial and Continuing Calibration Verification

Client: Weston Solutions

SDG No.: P4605

Project: Ft Meade Tipton Airfield Parcel RI - PO 0111169

RunNo.: LB133199

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 TOC	mg/L	1010	1000	101	90-110	08/07/2024
Sample ID: CCV1 TOC	mg/L	1000	1000	100	90-110	10/30/2024
Sample ID: CCV2 TOC	mg/L	1020	1000	102	90-110	10/30/2024
Sample ID: CCV3 TOC	mg/L	1060	1000	106	90-110	10/30/2024

Initial and Continuing Calibration Blank Summary

Client:	Weston Solutions	SDG No.:	P4605
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	RunNo.:	LB133199

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1 TOC	mg/L	< 125.0000	125.0000	U	32.1	250	08/07/2024
Sample ID: CCB1 TOC	mg/L	< 125.0000	125.0000	U	32.1	250	10/30/2024
Sample ID: CCB2 TOC	mg/L	< 125.0000	125.0000	U	32.1	250	10/30/2024
Sample ID: CCB3 TOC	mg/L	< 125.0000	125.0000	U	32.1	250	10/30/2024

Preparation Blank Summary

Client: Weston Solutions

SDG No.: P4605

Project: Ft Meade Tipton Airfield Parcel RI - PO 0111169

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID:	LB133199BLS						
TOC	mg/Kg	18.4	125.0000	J	8	250	10/30/2024

Matrix Spike Summary

Client:	Weston Solutions	SDG No.:	P4605
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	Sample ID:	P4605-02
Client ID:	TAPIAL2-SED01-102824-00-T2MS	Percent Solids for Spike Sample:	85.8

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
TOC	mg/Kg	75-125	6270		5490		1000	1	78		10/30/2024

Matrix Spike Summary

Client:	Weston Solutions	SDG No.:	P4605
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	Sample ID:	P4605-02
Client ID:	TAPIAL2-SED01-102824-00-T2MSD	Percent Solids for Spike Sample:	85.8

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
TOC	mg/Kg	75-125	6440		5490		1000	1	95		10/30/2024

Duplicate Sample Summary

Client: Weston Solutions Project: Ft Meade Tipton Airfield Parcel RI - PO 0111169 Client ID: TAPIAL2-SED01-102824-00-T2MSD	SDG No.: P4605 Sample ID: P4605-02 Percent Solids for Spike Sample: 85.8
---	---

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
TOC	mg/Kg	+/-20	6270		6440		1	3		10/30/2024

Duplicate Sample Summary

Client:	Weston Solutions	SDG No.:	P4605
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	Sample ID:	P4617-03
Client ID:	CONCRETE-PILEDUP	Percent Solids for Spike Sample:	100

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
pH	pH	+/-20	9.35		9.36		1	0.11		10/29/2024

Laboratory Control Sample Summary

Client:	Weston Solutions	SDG No.:	P4605
Project:	Ft Meade Tipton Airfield Parcel RI - PO 0111169	Run No.:	LB133199

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB133199BSS							
TOC	mg/Kg	1000	1010		101	1	90-110	10/30/2024



RAW DATA

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Analytical Summary Report

Analysis Method: 9045D

Analyst By : jignesh

Parameter: pH

Supervisor Review By : Iwona

Run Number: LB133195

Slope : 98.6

BalanceID: WC SC-4

pH Meter ID : WC PH METER-1

Calibration Standards	Chemtech Log#
PH 4 BUFFER SOLUTION	W3107
BUFFER PH 7.00 GREEN 1PINT PK6	W3093
PH 10.01 BUFFER,COLOR CD 475ML	W3094
buffer solution pH 7 yellow	W3071
Buffer Solution, PH2 (500ml)	W3005
Buffer Solution, PH12 (500ml)	W3072

True Value of ICV = 7.00 Control Limits[+/- 0.1].

True Value of CCV1 = 2.00 Control Limits[+/- 0.1].

True Value of CCV2 = 12.00 Control Limits[+/- 0.1].

Seq	LabID	DF	Matrix	Weight (gm)	Volume (ml)	Temperature (°C)	Result (pH)	Anal Date	Anal Time
1	CAL1	1	Water	NA	NA	20.2	4.01	10/29/2024	16:10
2	CAL2	1	Water	NA	NA	20.1	7.01	10/29/2024	16:11
3	CAL3	1	Water	NA	NA	20.2	10.02	10/29/2024	16:15
4	ICV	1	Water	NA	NA	20.3	7.00	10/29/2024	16:20
5	CCV1	1	Water	NA	NA	20.2	2.02	10/29/2024	16:22
6	P4605-01	1	Solid	20.02	20	23.4	5.11	10/29/2024	16:30
7	P4605-02	1	Solid	20.03	20	23.3	4.89	10/29/2024	16:35
8	P4605-03	1	Solid	20.04	20	24.5	7.07	10/29/2024	16:40
9	P4605-04	1	Solid	20.03	20	22.3	6.35	10/29/2024	16:45
10	P4605-05	1	Solid	20.03	20	20.5	6.16	10/29/2024	16:50
11	P4605-06	1	Solid	20.04	20	23.2	6.43	10/29/2024	17:00
12	P4617-03	1	Solid	20.02	20	24.5	9.35	10/29/2024	17:40
13	P4617-03DUP	1	Solid	20.03	20	24.6	9.36	10/29/2024	17:41
14	CCV2	1	Water	NA	NA	20.2	12.02	10/29/2024	17:45

WORKLIST(Hardcopy Internal Chain)

W5123195

WorkList Name : ph p4605 WorkList ID : 184922 Department : Wet-Chemistry Date : 10-29-2024 16:31:28

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4605-01	TAPIAL2-SED02-102824-00-T2	Solid	pH	Cool 4 deg C	WEST04	K63	10/28/2024	9045D
P4605-02	TAPIAL2-SED01-102824-00-T2	Solid	pH	Cool 4 deg C	WEST04	K63	10/28/2024	9045D
P4605-03	TAPIAL3-SED01-102824-00-T2	Solid	pH	Cool 4 deg C	WEST04	K63	10/28/2024	9045D
P4605-04	TAPHHA-SED01-102824-00-T2	Solid	pH	Cool 4 deg C	WEST04	K63	10/28/2024	9045D
P4605-05	TAPHHA-SED02-102824-00-T2	Solid	pH	Cool 4 deg C	WEST04	K63	10/28/2024	9045D
P4605-06	TAPLPR-SED11-102824-00-T2	Solid	pH	Cool 4 deg C	WEST04	K63	10/28/2024	9045D
P4617-03	CONCRETE-PILE	Solid	pH	Cool 4 deg C	PSEG03	K61	10/29/2024	9045D

Date/Time 10/24/24 16:00
Raw Sample Received by: RD WLC
Raw Sample Relinquished by: RJ CEA-WB

Date/Time 10/29/24 18:13
Raw Sample Received by: RJ CEA-WB
Raw Sample Relinquished by: RD WLC

Sample ID	Result	Std. Dev.	RSD	Mode	ALT
CCV1	991.3975			TOC	
CCV1	991.5751			TOC	
CCV1	997.3158			TOC	
CCV1.....	1030.5341...	..	...	TOC	..
CCB1	10.8991			TOC	
CCB1	8.5703			TOC	
CCB1.....	1.6966...	..	...	TOC	..
CCB1	2.4376			TOC	
LB133199BLS	10.6403			TOC	
LB133199BLS.....	14.2251...	..	...	TOC	..
LB133199BLS	36.8427			TOC	
LB133199BLS	11.7154			TOC	
LB133199BSS.....	1055.5371...	..	...	TOC	..
LB133199BSS	955.8657			TOC	
LB133199BSS	989.4545			TOC	
LB133199BSS.....	1025.9399...	..	...	TOC	..
P4368-06	60.9355			TOC	
P4368-06	55.2651			TOC	
P4368-06.....	54.0817...	..	...	TOC	..
P4368-06	52.5116			TOC	
P4495-08	14149.3828			TOC	
P4495-08.....	16667.2012...	..	...	TOC	..
P4495-08	15767.5967			TOC	
P4495-08	17083.5605			TOC	
CCV2.....	1062.5548...	..	...	TOC	..
CCV2	1000.0698			TOC	
CCV2	1013.0583			TOC	
CCV2.....	1000.5969...	..	...	TOC	..
CCB2	4.6681			TOC	
CCB2	3.1272			TOC	
CCB2.....	7.4140...	..	...	TOC	..
CCB2	1.3917			TOC	
P4605-01	2479.6904			TOC	
P4605-01.....	1857.7506...	..	...	TOC	..
P4605-01	1778.8116			TOC	
P4605-01	1801.8263			TOC	
P4605-02.....	6250.8174...	..	...	TOC	..
P4605-02	5025.3462			TOC	
P4605-02	5395.6421			TOC	
P4605-02.....	5281.4429...	..	...	TOC	..
P4605-02MS	5434.0605			TOC	
P4605-02MS	5848.5068			TOC	
P4605-02MS.....	5837.1079...	..	...	TOC	..
P4605-02MS	7943.2817			TOC	
P4605-02MSD	6384.4673			TOC	
P4605-02MSD.....	6889.4121...	..	...	TOC	..
P4605-02MSD	6245.0693			TOC	
P4605-02MSD	6224.8306			TOC	
P4605-03.....	7797.0776...	..	...	TOC	..
P4605-03	8710.0400			TOC	
P4605-03	8643.8896			TOC	
P4605-03.....	8122.2886...	..	...	TOC	..
P4605-04	4665.1890			TOC	
P4605-04	4668.0747			TOC	
P4605-04.....	4959.4697...	..	...	TOC	..
P4605-04	4607.3726			TOC	
P4605-05	24410.2812			TOC	
P4605-05.....	20961.2891...	..	...	TOC	..
P4605-05	19788.2930			TOC	
P4605-05	19600.5996			TOC	
P4605-06.....	1622.4015...	..	...	TOC	..
P4605-06	2284.3083			TOC	
P4605-06	2284.6006			TOC	
P4605-06.....	2080.7566...	..	...	TOC	..

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CCV3	976.1515		TOC	
CCV3	1126.0535		TOC	
CCV3.....	1072.4744...	..	...TOC	..
CCV3	1061.8827		TOC	
CCB3	10.9403		TOC	
CCB3.....	1.5216...	..	...TOC	..
CCB3	4.3038		TOC	
CCB3	0.8162		TOC	

Reviewed By:Iwona
On:11/6/2024 10:11:57
AM
Inst Id :Appolo-9000
LB :LB133199

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Method ID		Sample Type	Vial Timestamp		Message	
Boat	Sampler	Sample	2024/10/30	08:58		
Boat	Sampler	Sample	2024/10/30	09:01		
Boat	Sampler	Sample	2024/10/30	09:03		
Boat	Sampler	...Sample	..	..2024/10/30	09:05	..
Boat	Sampler	Sample	2024/10/30	09:15		
Boat	Sampler	Sample	2024/10/30	09:20	Low Sample Detected	
Boat	Sampler	...Sample	..	..2024/10/30	09:23	..Low Sample Detected
Boat	Sampler	Sample	2024/10/30	09:30	Low Sample Detected	
Boat	Sampler	Sample	2024/10/30	09:34	Low Sample Detected	
Boat	Sampler	...Sample	..	..2024/10/30	09:36	..
Boat	Sampler	Sample	2024/10/30	09:42		
Boat	Sampler	Sample	2024/10/30	09:46	Low Sample Detected	
Boat	Sampler	...Sample	..	..2024/10/30	09:50	..
Boat	Sampler	Sample	2024/10/30	09:53		
Boat	Sampler	Sample	2024/10/30	09:56		
Boat	Sampler	...Sample	..	..2024/10/30	10:02	..
Boat	Sampler	Sample	2024/10/30	10:05		
Boat	Sampler	Sample	2024/10/30	10:07		
Boat	Sampler	...Sample	..	..2024/10/30	10:09	..
Boat	Sampler	Sample	2024/10/30	10:11		
Boat	Sampler	Sample	2024/10/30	10:29		
Boat	Sampler	...Sample	..	..2024/10/30	10:39	..
Boat	Sampler	Sample	2024/10/30	10:47		
Boat	Sampler	Sample	2024/10/30	10:51		
Boat	Sampler	...Sample	..	..2024/10/30	11:02	..
Boat	Sampler	Sample	2024/10/30	11:05		
Boat	Sampler	Sample	2024/10/30	11:07		
Boat	Sampler	...Sample	..	..2024/10/30	11:10	..
Boat	Sampler	Sample	2024/10/30	11:14	Low Sample Detected	
Boat	Sampler	Sample	2024/10/30	11:18	Low Sample Detected	
Boat	Sampler	...Sample	..	..2024/10/30	11:21	..Low Sample Detected
Boat	Sampler	Sample	2024/10/30	11:24	Low Sample Detected	
Boat	Sampler	Sample	2024/10/30	11:29		
Boat	Sampler	...Sample	..	..2024/10/30	11:34	..
Boat	Sampler	Sample	2024/10/30	11:38		
Boat	Sampler	Sample	2024/10/30	11:40		
Boat	Sampler	...Sample	..	..2024/10/30	11:45	..
Boat	Sampler	Sample	2024/10/30	11:48		
Boat	Sampler	Sample	2024/10/30	11:51		
Boat	Sampler	...Sample	..	..2024/10/30	11:54	..
Boat	Sampler	Sample	2024/10/30	12:00		
Boat	Sampler	Sample	2024/10/30	12:03		
Boat	Sampler	...Sample	..	..2024/10/30	12:08	..
Boat	Sampler	Sample	2024/10/30	12:16		
Boat	Sampler	Sample	2024/10/30	12:22		
Boat	Sampler	...Sample	..	..2024/10/30	12:25	..
Boat	Sampler	Sample	2024/10/30	12:30		
Boat	Sampler	Sample	2024/10/30	12:34		
Boat	Sampler	...Sample	..	..2024/10/30	12:39	..
Boat	Sampler	Sample	2024/10/30	12:43		
Boat	Sampler	Sample	2024/10/30	12:47		
Boat	Sampler	...Sample	..	..2024/10/30	12:50	..
Boat	Sampler	Sample	2024/10/30	12:53		
Boat	Sampler	Sample	2024/10/30	12:56		
Boat	Sampler	...Sample	..	..2024/10/30		
12:59	..					
Boat	Sampler	Sample	2024/10/30	13:02		
Boat	Sampler	Sample	2024/10/30	13:26		
Boat	Sampler	...Sample	..	..2024/10/30	13:31	..
Boat	Sampler	Sample	2024/10/30	13:37		
Boat	Sampler	Sample	2024/10/30	13:40		
Boat	Sampler	...Sample	..	..2024/10/30	13:47	..
Boat	Sampler	Sample	2024/10/30	13:50		
Boat	Sampler	Sample	2024/10/30	13:53		

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Boat Sampler	...	Sample	..	..	2024/10/30 14:03	..	Reviewed By:Iwona On:11/6/2024 10:11:57 AM Inst Id :Appolo-9000 LB :LB133199		
Boat Sampler		Sample			2024/10/30 14:37				
Boat Sampler		Sample			2024/10/30 14:49				
Boat Sampler	...	Sample	..	..	2024/10/30 14:52	..			
Boat Sampler		Sample			2024/10/30 14:56				
Boat Sampler		Sample			2024/10/30 15:03	Low Sample Detected			
Boat Sampler	...	Sample	..	..	2024/10/30 15:10	..Low Sample Detected			
Boat Sampler		Sample			2024/10/30 15:13	Low Sample Detected			
Boat Sampler		Sample			2024/10/30 15:20	Low Sample Detected			

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Sample ID: CCB1 Mode: TOC
Method: Boat Sampler Filename: 10300921
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:23
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.6966	0.0679	5310	-1.595	-1.682	120

Last Message: Low Sample Detected

Sample ID: CCB1 Mode: TOC
Method: Boat Sampler Filename: 10300928
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:30
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2.4376	0.0975	7629	-1.746	-1.778	120

Last Message: Low Sample Detected

Sample ID: LB133199BLS Mode: TOC
Method: Boat Sampler Filename: 10300931
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:34
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.6403	0.4256	33302	-1.788	-1.825	120

Last Message: Low Sample Detected

Sample ID: LB133199BLS Mode: TOC
Method: Boat Sampler Filename: 10300935
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:36
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	14.2251	0.5690	44522	-1.767	-0.775	38

Sample ID: LB133199BLS Mode: TOC
Method: Boat Sampler Filename: 10300941
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:42
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	36.8427	1.4737	115310	-1.915	-0.916	41

Sample ID: LB133199BLS Mode: TOC
Method: Boat Sampler Filename: 10300944
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:46
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	11.7154	0.4686	36667	-1.918	-1.962	120

Last Message: Low Sample Detected

Sample ID: LB133199BSS Mode: TOC
Method: Boat Sampler Filename: 10300947
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:50
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1055.5371	42.2215	3303605	-1.992	-0.995	82

Sample ID: LB133199BSS Mode: TOC
Method: Boat Sampler Filename: 10300951
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:53
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	955.8657	38.2346	2991655	-1.825	-0.827	69

Sample ID: LB133199BSS Mode: TOC
Method: Boat Sampler Filename: 10300954
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:56
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	989.4545	39.5782	3096781	-1.917	-0.922	71

Sample ID: LB133199BSS Mode: TOC
Method: Boat Sampler Filename: 10301000
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 10:02
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1025.9399	41.0376	3210972	-1.961	-0.966	73

Sample ID: P4368-06 Mode: TOC
Method: Boat Sampler Filename: 10301004
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 10:05
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	60.9355	2.4374	190715	-1.973	-0.976	44

Sample ID: P4368-06 Mode: TOC
Method: Boat Sampler Filename: 10301006
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 10:07

Operator ID: NF IZ

Sample Type: Sample

Reviewed By:Iwona
On:11/6/2024 10:11:57
AM
Inst Id :Appolo-9000
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Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	55.2651	2.2106	172968	-2.050	-1.062	39

Sample ID: P4368-06
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301008
Timestamp: 2024/10/30 10:09
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	54.0817	2.1633	169264	-2.046	-1.055	46

Sample ID: P4368-06
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301010
Timestamp: 2024/10/30 10:11
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	52.5116	2.1005	164350	-2.093	-1.098	41

Sample ID: P4495-08
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301026
Timestamp: 2024/10/30 10:29
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	14149.3828	82.0664	6421258	-1.967	-0.967	147

Sample ID: P4495-08
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301036
Timestamp: 2024/10/30 10:39
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	16667.2012	88.3362	6911832	-1.695	-0.698	134

Sample ID: P4495-08
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301044
Timestamp: 2024/10/30 10:47
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	15767.5967	91.4521	7155634	-1.792	-0.795	148

Sample ID: P4495-08
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301048
Timestamp: 2024/10/30 10:51
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	17083.5605	92.2512	7218165	-1.518	-0.520	139

Sample ID: CCV2
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301100
Timestamp: 2024/10/30 11:02
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1062.5548	42.5022	3325569	-1.377	-0.379	76

Sample ID: CCV2
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301103
Timestamp: 2024/10/30 11:05
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1000.0698	40.0028	3130005	-1.436	-0.437	69

Sample ID: CCV2
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301105
Timestamp: 2024/10/30 11:07
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1013.0583	40.5223	3170656	-1.456	-0.461	73

Sample ID: CCV2
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301109
Timestamp: 2024/10/30 11:10
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1000.5969	40.0239	3131654	-1.647	-0.653	74

Sample ID: CCB2
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301112
Timestamp: 2024/10/30 11:14
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4.6681	0.1867	14610	-1.682	-1.781	120

Last Message: Low Sample Detected

Sample ID: CCB2
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301115
Timestamp: 2024/10/30 11:18
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	3.1272	0.1251	9788	-1.833	-1.882	120

Last Message: Low Sample Detected

Sample ID: CCB2
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301118
Timestamp: 2024/10/30 11:21
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	7.4140	0.2966	23204	-1.884	-1.929	120

Last Message: Low Sample Detected

Sample ID: CCB2
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301122
Timestamp: 2024/10/30 11:24
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.3917	0.0557	4356	-1.879	-1.941	120

Last Message: Low Sample Detected

Sample ID: P4605-01
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301127
Timestamp: 2024/10/30 11:29
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2479.6904	14.8781	1164135	-1.959	-0.959	58

Sample ID: P4605-01
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301133
Timestamp: 2024/10/30 11:34
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1857.7506	11.1465	872154	-1.943	-0.944	55

Sample ID: P4605-01
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301136
Timestamp: 2024/10/30 11:38
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1778.8116	11.5623	904686	-2.044	-1.056	54

Sample ID: P4605-01
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301139
Timestamp: 2024/10/30 11:40
Sample Type: Sample

Reviewed By:Iwona
On:11/6/2024 10:11:57
AM
Inst Id :Appolo-9000
LB :LB133199

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1801.8263	10.2704	803605	-1.944	-0.951	49

Sample ID: P4605-02
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301143
Timestamp: 2024/10/30 11:45
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	6250.8174	35.0046	2738921	-2.084	-1.085	74

Sample ID: P4605-02
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301147
Timestamp: 2024/10/30 11:48
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	5025.3462	32.1622	2516521	-1.982	-0.983	71

Sample ID: P4605-02
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301150
Timestamp: 2024/10/30 11:51
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	5395.6421	30.7552	2406427	-1.968	-0.970	69

Sample ID: P4605-02
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301152
Timestamp: 2024/10/30 11:54
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	5281.4429	30.1042	2355495	-1.771	-0.771	65

Sample ID: P4605-02MS
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301158
Timestamp: 2024/10/30 12:00
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	5434.0605	30.9741	2423561	-2.126	-1.128	76

Sample ID: P4605-02MS
Method: Boat Sampler

Mode: TOC
Filename: 10301202

Cal. Curve: TOC SOIL
Operator ID: NF IZ

Timestamp: 2024/10/30 12:03
Sample Type: Sample

Reviewed By:Iwona
On:11/6/2024 10:11:57
AM
Inst Id :Appolo-9000
LB :LB133199

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	5848.5068	32.1668	2516879	-1.984	-0.986	71

Sample ID: P4605-02MS
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301206
Timestamp: 2024/10/30 12:08
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	5837.1079	32.1041	2511974	-2.110	-1.112	74

Sample ID: P4605-02MS
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301214
Timestamp: 2024/10/30 12:16
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	7943.2817	43.6880	3418356	-2.019	-1.023	87

Sample ID: P4605-02MSD
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301220
Timestamp: 2024/10/30 12:22
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	6384.4673	40.8606	3197123	-2.139	-1.140	83

Sample ID: P4605-02MSD
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301223
Timestamp: 2024/10/30 12:25
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	6889.4121	37.8918	2964828	-1.952	-0.955	79

Sample ID: P4605-02MSD
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301228
Timestamp: 2024/10/30 12:30
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	6245.0693	34.9724	2736402	-2.090	-1.094	77

Sample ID: P4605-02MSD
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301232
Timestamp: 2024/10/30 12:34
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	6224.8306	34.8591	2727534	-2.072	-1.072	74

Sample ID: P4605-03
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301237
Timestamp: 2024/10/30 12:39
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	7797.0776	46.0028	3599470	-2.132	-1.136	95

Sample ID: P4605-03
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301241
Timestamp: 2024/10/30 12:43
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	8710.0400	48.7762	3816479	-2.053	-1.054	108

Sample ID: P4605-03
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301245
Timestamp: 2024/10/30 12:47
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	8643.8896	48.4058	3787493	-2.068	-1.072	85

Sample ID: P4605-03
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301248
Timestamp: 2024/10/30 12:50
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	8122.2886	48.7337	3813154	-1.666	-0.670	93

Sample ID: P4605-04
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301252
Timestamp: 2024/10/30 12:53
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4665.1890	27.9911	2190157	-2.036	-1.036	76

Sample ID: P4605-04
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301254
Timestamp: 2024/10/30 12:56
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4668.0747	24.2740	1899310	-1.964	-0.968	66

Sample ID: P4605-04
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301258
Timestamp: 2024/10/30 12:59
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4959.4697	25.7892	2017870	-2.070	-1.076	69

Sample ID: P4605-04
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301301
Timestamp: 2024/10/30 13:02
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4607.3726	26.7228	2090913	-2.056	-1.059	69

Sample ID: P4605-05
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301322
Timestamp: 2024/10/30 13:26
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	24410.2812	141.5796	11077849	-2.181	-1.182	187

Sample ID: P4605-05
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301328
Timestamp: 2024/10/30 13:31
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	20961.2891	121.5755	9512630	-1.935	-0.939	157

Sample ID: P4605-05
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301333
Timestamp: 2024/10/30 13:37
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	19788.2930	118.7298	9289968	-2.066	-1.068	169

Sample ID: P4605-05
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 10301338
Timestamp: 2024/10/30 13:40
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
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1	19600.5996	117.6036	9201852	-0.476	0.523	107
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Sample ID:	P4605-06	Mode:	TOC
Method:	Boat Sampler	Filename:	10301345
Cal. Curve:	TOC SOIL	Timestamp:	2024/10/30 13:47
Operator ID:	NF IZ	Sample Type:	Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1622.4015	9.7344	761665	-2.153	-1.159	52

Sample ID:	P4605-06	Mode:	TOC
Method:	Boat Sampler	Filename:	10301348
Cal. Curve:	TOC SOIL	Timestamp:	2024/10/30 13:50
Operator ID:	NF IZ	Sample Type:	Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2284.3083	13.7059	1072409	-2.165	-1.166	62

Sample ID:	P4605-06	Mode:	TOC
Method:	Boat Sampler	Filename:	10301351
Cal. Curve:	TOC SOIL	Timestamp:	2024/10/30 13:53
Operator ID:	NF IZ	Sample Type:	Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2284.6006	12.7938	1001043	-2.180	-1.186	60

Sample ID:	P4605-06	Mode:	TOC
Method:	Boat Sampler	Filename:	10301400
Cal. Curve:	TOC SOIL	Timestamp:	2024/10/30 14:03
Operator ID:	NF IZ	Sample Type:	Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	2080.7566	11.6522	911725	-0.143	0.849	105

Sample ID:	CCV3	Mode:	TOC
Method:	Boat Sampler	Filename:	10301434
Cal. Curve:	TOC SOIL	Timestamp:	2024/10/30 14:37
Operator ID:	NF IZ	Sample Type:	Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	976.1515	39.0461	3055145	-2.297	-1.303	124

Sample ID:	CCV3	Mode:	TOC
Method:	Boat Sampler	Filename:	10301445
Cal. Curve:	TOC SOIL	Timestamp:	2024/10/30 14:49
Operator ID:	NF IZ	Sample Type:	Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1126.0535	45.0421	3524306	-2.304	-1.305	135

Sample ID: CCV3 Mode: TOC
Method: Boat Sampler Filename: 10301449
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 14:52
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1072.4744	42.8990	3356615	-2.053	-1.056	126

Sample ID: CCV3 Mode: TOC
Method: Boat Sampler Filename: 10301453
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 14:56
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1061.8827	42.4753	3323466	-2.238	-1.243	127

Sample ID: CCB3 Mode: TOC
Method: Boat Sampler Filename: 10301500
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 15:03
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.9403	0.4376	34241	-2.471	-2.511	120

Last Message: Low Sample Detected

Sample ID: CCB3 Mode: TOC
Method: Boat Sampler Filename: 10301507
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 15:10
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1.5216	0.0609	4762	-2.449	-2.555	120

Last Message: Low Sample Detected

Sample ID: CCB3 Mode: TOC
Method: Boat Sampler Filename: 10301511
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 15:13
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4.3038	0.1722	13470	-2.342	-2.573	120

Last Message: Low Sample Detected

Sample ID: CCB3 Mode: TOC
Method: Boat Sampler Filename: 10301517
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 15:20
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.8162	0.0326	2555	-2.406	-2.551	120

Last Message: Low Sample Detected
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Sample ID	Result	Std. Dev.	RSD	Mode	ALT
BLANK	39506	10974	27.78	TOC	
250mg/l	940319	21230	2.26	TOC	
500mg/l	1873094	46099	2.46	TOC	
1000mg/l.....	3412571...	51933..	1.52...	TOC	..
2000mg/l	6351508	124411	1.96	TOC	
ICV	993.2583			TOC	
ICV.....	1020.2207...	..	...	TOC	..
ICV	1017.6028			TOC	
ICV	1012.1844			TOC	
ICB.....	8.2074...	..	...	TOC	..
ICB	4.1941			TOC	
ICB	5.7204			TOC	
ICB.....	0.7378...	..	...	TOC	..

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Method ID	Sample Type	Vial	Timestamp	Message
Boat Sampler	TOC Standard		2024/08/07 09:22	Low Sample Detected
Boat Sampler	TOC Standard		2024/08/07 09:42	
Boat Sampler	TOC Standard		2024/08/07 09:51	
Boat Sampler	...TOC Standard	..	..2024/08/07 10:11	..
Boat Sampler	TOC Standard		2024/08/07 10:23	
Boat Sampler	Sample		2024/08/07 10:32	
Boat Sampler	...Sample	..	..2024/08/07 10:35	..
Boat Sampler	Sample		2024/08/07 10:37	
Boat Sampler	Sample		2024/08/07 10:40	
Boat Sampler	...Sample	..	..2024/08/07 10:48	..Low Sample Detected
Boat Sampler	Sample		2024/08/07 10:51	Low Sample Detected
Boat Sampler	Sample		2024/08/07 10:55	Low Sample Detected
Boat Sampler	...Sample	..	..2024/08/07 11:00	..Low Sample Detected

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Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			6448500	-2.157	-1.158	122
2			6169360	-1.872	-0.875	105
3			6383533	-1.862	-0.865	118
4			6404640	-1.723	-0.723	110

<<<Statistics>>> Mean: 6351508 Std Dev: 124411 RSD: 1.96

Sample ID: ICV
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 08071030
Timestamp: 2024/08/07 10:32
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	993.2583	39.7303	3108686	-2.505	-1.505	83

Sample ID: ICV
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 08071033
Timestamp: 2024/08/07 10:35
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1020.2207	40.8088	3193073	-2.200	-1.202	71

Sample ID: ICV
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 08071035
Timestamp: 2024/08/07 10:37
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1017.6028	40.7041	3184879	-2.158	-1.158	91

Sample ID: ICV
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 08071038
Timestamp: 2024/08/07 10:40
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1012.1844	40.4874	3167920	-2.183	-1.184	76

Sample ID: ICB
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ

Mode: TOC
Filename: 08071045
Timestamp: 2024/08/07 10:48
Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	8.2074	0.3283	25688	-2.579	-2.601	120

Last Message: Low Sample Detected
=====

Sample ID: ICB Mode: TOC
Method: Boat Sampler Filename: 08071049
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 10:51
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	4.1941	0.1678	13127	-2.548	-2.584	120

Last Message: Low Sample Detected
=====

Sample ID: ICB Mode: TOC
Method: Boat Sampler Filename: 08071052
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 10:55
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	5.7204	0.2288	17904	-2.605	-2.622	120

Last Message: Low Sample Detected
=====

Sample ID: ICB Mode: TOC
Method: Boat Sampler Filename: 08071057
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 11:00
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	0.7378	0.0295				
2309	-2.568	-2.631	120			

Last Message: Low Sample Detected
=====

Calibration Report Print Date/Time: 2024/08/07 10:25:11

Cal. Curve ID: TOC SOIL
Created: 2024/08/07 10:25
Calibration Factor (m): 7.824e+04
Y Intercept (b): 176060
r-squared: 0.99776

Standard ID	Y	X Expected	Measured	Message	Date &
	Raw Data	ug C	ug C		Time
BLANK	39506	0.000	-1.745	—	2024/08/07 09:22
250mg/l	940319	10.000	9.768	-2.3	2024/08/07 09:42
500mg/l	1873094	20.000	21.689	8.4	2024/08/07 09:51
1000mg/l	3412571	40.000	41.364	3.4	2024/08/07 10:11
2000mg/l	6351508	80.000	78.925	-1.3	2024/08/07 10:23

12
08/07/24

WORKLIST(Hardcopy Internal Chain)

LB133199

WorkList Name : TOC S-10292024		WorkList ID : 184918		Department : Wet-Chemistry		Date : 10-29-2024 15:03:01	
Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date Method
P4388-06	MDL-SOIL-06-QT4-2024	Solid	TOC	Cool 4 deg C	CHEM02	QA Of	10/09/2024 Lloyd Kahn
P4495-08	PT-NUT-SOIL	Solid	TOC	Cool 4 deg C	CHEM02	QA Of	10/21/2024 Lloyd Kahn
P4605-01	TAPIAL2-SED02-102824-00-T2	Solid	TOC	Cool 4 deg C	WEST04	K63	10/28/2024 Lloyd Kahn
P4605-02	TAPIAL2-SED01-102824-00-T2	Solid	TOC	Cool 4 deg C	WEST04	K63	10/28/2024 Lloyd Kahn
P4605-03	TAPIAL3-SED01-102824-00-T2	Solid	TOC	Cool 4 deg C	WEST04	K63	10/28/2024 Lloyd Kahn
P4605-04	TAPHHA-SED01-102824-00-T2	Solid	TOC	Cool 4 deg C	WEST04	K63	10/28/2024 Lloyd Kahn
P4605-05	TAPHHA-SED02-102824-00-T2	Solid	TOC	Cool 4 deg C	WEST04	K63	10/28/2024 Lloyd Kahn
P4605-06	TAPLPR-SED11-102824-00-T2	Solid	TOC	Cool 4 deg C	WEST04	K63	10/28/2024 Lloyd Kahn

Date/Time 10.30.2024, 08:45
Raw Sample Received by: NFLWCJ
Raw Sample Relinquished by: NFLWCJ

Date/Time 10.30.2024, 12:00
Raw Sample Received by: NFLWCJ
Raw Sample Relinquished by: NFLWCJ

Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB133195

Review By	jignesh	Review On	11/8/2024 7:36:50 AM
Supervise By	Iwona	Supervise On	11/11/2024 9:08:24 AM
SubDirectory	LB133195	Test	pH
STD. NAME	STD REF.#		
ICAL Standard	N/A		
ICV Standard	N/A		
CCV Standard	N/A		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	N/A		
Chk Standard	W3107,W3093,W3094,W3071,W3005,W3072		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	10/29/24 16:10		Jignesh	OK
2	CAL2	CAL2	CAL	10/29/24 16:11		Jignesh	OK
3	CAL3	CAL3	CAL	10/29/24 16:15		Jignesh	OK
4	ICV	ICV	ICV	10/29/24 16:20		Jignesh	OK
5	CCV1	CCV1	CCV	10/29/24 16:22		Jignesh	OK
6	P4605-01	TAPIAL2-SED02-1028	SAM	10/29/24 16:30		Jignesh	OK
7	P4605-02	TAPIAL2-SED01-1028	SAM	10/29/24 16:35		Jignesh	OK
8	P4605-03	TAPIAL3-SED01-1028	SAM	10/29/24 16:40		Jignesh	OK
9	P4605-04	TAPHHA-SED01-1028	SAM	10/29/24 16:45		Jignesh	OK
10	P4605-05	TAPHHA-SED02-1028	SAM	10/29/24 16:50		Jignesh	OK
11	P4605-06	TAPLPR-SED11-1028	SAM	10/29/24 17:00		Jignesh	OK
12	P4617-03	CONCRETE-PILE	SAM	10/29/24 17:40		Jignesh	OK
13	P4617-03DUP	CONCRETE-PILEDUP	DUP	10/29/24 17:41		Jignesh	OK
14	CCV2	CCV2	CCV	10/29/24 17:45		Jignesh	OK

Instrument ID: TOC

Daily Analysis Runlog For Sequence/QC Batch ID # LB133199

Review By	Niha	Review On	11/6/2024 9:24:09 AM
Supervise By	Iwona	Supervise On	11/6/2024 10:11:57 AM
SubDirectory	LB133199	Test	TOC
STD. NAME	STD REF.#		
ICAL Standard	WP109219,WP109220,WP109221,WP109222,WP109223		
ICV Standard	WP109224		
CCV Standard	WP110493		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP110494		
Chk Standard	WP109225,WP110495		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	BLANK	BLANK	CAL1	08/07/24 09:22		NF IZ	OK
2	250mg/l	250mg/l	CAL2	08/07/24 09:42		NF IZ	OK
3	500mg/l	500mg/l	CAL3	08/07/24 09:51		NF IZ	OK
4	1000mg/l	1000mg/l	CAL4	08/07/24 10:11		NF IZ	OK
5	2000mg/l	2000mg/l	CAL5	08/07/24 10:23		NF IZ	OK
6	ICV1	ICV1	ICV	08/07/24 10:40		NF IZ	OK
7	ICB1	ICB1	ICB	08/07/24 11:00		NF IZ	OK
8	CCV1	CCV1	CCV	10/30/24 09:05		NF IZ	OK
9	CCB1	CCB1	CCB	10/30/24 09:30		NF IZ	OK
10	LB133199BLS	LB133199BLS	MB	10/30/24 09:46		NF IZ	OK
11	LB133199BSS	LB133199BSS	LCS	10/30/24 10:02		NF IZ	OK
12	P4368-06	MDL-SOIL-06-QT4-20	SAM	10/30/24 10:11		NF IZ	OK
13	P4495-08	PT-NUT-SOIL	SAM	10/30/24 10:51		NF IZ	OK
14	CCV2	CCV2	CCV	10/30/24 11:10		NF IZ	OK
15	CCB2	CCB2	CCB	10/30/24 11:24		NF IZ	OK
16	P4605-01	TAPIAL2-SED02-1028	SAM	10/30/24 11:40		NF IZ	OK
17	P4605-02	TAPIAL2-SED01-1028	SAM	10/30/24 11:54		NF IZ	OK
18	P4605-02MS	TAPIAL2-SED01-1028	MS	10/30/24 12:16	sample + 40ul of WP110493	NF IZ	OK

Instrument ID: TOC

Daily Analysis Runlog For Sequence/QC Batch ID # LB133199

Review By	Niha	Review On	11/6/2024 9:24:09 AM
Supervise By	Iwona	Supervise On	11/6/2024 10:11:57 AM
SubDirectory	LB133199	Test	TOC
STD. NAME	STD REF.#		
ICAL Standard	WP109219,WP109220,WP109221,WP109222,WP109223		
ICV Standard	WP109224		
CCV Standard	WP110493		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP110494		
Chk Standard	WP109225,WP110495		

19	P4605-02MSD	TAPIAL2-SED01-1028	MSD	10/30/24 12:34	sample + 40ul of WP110493	NF IZ	OK
20	P4605-03	TAPIAL3-SED01-1028	SAM	10/30/24 12:50		NF IZ	OK
21	P4605-04	TAPHHA-SED01-1028	SAM	10/30/24 13:02		NF IZ	OK
22	P4605-05	TAPHHA-SED02-1028	SAM	10/30/24 13:40		NF IZ	OK
23	P4605-06	TAPLPR-SED11-1028	SAM	10/30/24 14:03		NF IZ	OK
24	CCV3	CCV3	CCV	10/30/24 14:56		NF IZ	OK
25	CCB3	CCB3	CCB	10/30/24 15:20		NF IZ	OK

Prep Standard - Chemical Standard Summary

Order ID : P4605

Test : Percent Solids,pH,TOC

Prepbatch ID :

Sequence ID/Qc Batch ID: LB133195,LB133199,

Standard ID :

WP109217,WP109218,WP109219,WP109220,WP109221,WP109222,WP109223,WP109224,WP109225,WP 110493,W
P110494,WP110495,

Chemical ID :

W2784,W2860,W3005,W3071,W3072,W3093,W3094,W3107,W3111,W3112,

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Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2050	TOC STOCK STD, 4000PPM	WP109217	08/07/2024	01/18/2025	Iwona Zarych	WETCHEM_SCALE_5 (WC)	WETCHEM_FIPETTE_3 (WC)	Mohan Bera 08/16/2024
FROM 5.00000ml of W2860 + 8.51200gram of W3111 + 990.00000ml of W3112 = Final Quantity: 1000.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2051	TOC STOCK STD-SS, 4000PPM	WP109218	08/07/2024	02/07/2025	Iwona Zarych	WETCHEM_SCALE_5 (WC)	WETCHEM_FIPETTE_3 (WC)	Mohan Bera 08/16/2024
FROM 5.00000ml of W2860 + 8.51200gram of W2784 + 990.00000ml of W3112 = Final Quantity: 1000.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
304	TOC CAL 0.00ppm	WP109219	08/07/2024	08/14/2024	Iwona Zarych	None	None	Mohan Bera
								08/16/2024

FROM 100.00000ml of W3112 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
712	TOC SOIL cal 250ppm	WP109220	08/07/2024	08/14/2024	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Mohan Bera
								08/16/2024

FROM 15.00000ml of W3112 + 1.00000ml of WP109217 = Final Quantity: 16.000 ml

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
710	TOC SOIL cal 500ppm	WP109221	08/07/2024	08/14/2024	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Mohan Bera 08/16/2024
FROM 14.00000ml of W3112 + 2.00000ml of WP109217 = Final Quantity: 16.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3544	TOC SOIL Cal- CCV 1000PPM	WP109222	08/07/2024	08/14/2024	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Mohan Bera 08/16/2024
FROM 15.00000ml of W3112 + 5.00000ml of WP109217 = Final Quantity: 20.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
713	TOC SOIL cal 2000ppm	WP109223	08/07/2024	08/14/2024	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Mohan Bera 08/16/2024
FROM 5.00000ml of W3112 + 5.00000ml of WP109217 = Final Quantity: 10.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2819	TOC ICV-LCSS, 1000PPM	WP109224	08/07/2024	08/14/2024	Iwona Zarych	None	WETCHEM_F IPETTE_3 (WC)	Mohan Bera 08/16/2024
FROM 15.00000ml of W3112 + 5.00000ml of WP109218 = Final Quantity: 20.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2435	1:1 PHOSPHORIC ACID FOR TOC SOILS	WP109225	08/07/2024	02/07/2025	Iwona Zarych	None	WETCHEM_FIPETTE_3 (WC)	Mohan Bera 08/16/2024
FROM 50.00000ml of W2860 + 50.00000ml of W3112 = Final Quantity: 100.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3544	TOC SOIL Cal- CCV 1000PPM	WP110493	10/30/2024	11/06/2024	Niha Farheen Shaik	None	None	Iwona Zarych 10/31/2024
FROM 15.00000ml of W3112 + 5.00000ml of WP109217 = Final Quantity: 20.000 ml								

Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2819	TOC ICV-LCSS, 1000PPM	WP110494	10/30/2024	11/06/2024	Niha Farheen Shaik	None	None	Iwona Zarych
								10/31/2024

FROM 15.00000ml of W3112 + 5.00000ml of WP109218 = Final Quantity: 20.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3545	TOC SOIL MDL-50PPM	WP110495	10/30/2024	11/06/2024	Niha Farheen Shaik	None	WETCHEM_FIPETTE_3	Iwona Zarych
							(WC)	10/31/2024

FROM 39.50000ml of W3112 + 5.00000ml of WP109217 = Final Quantity: 40.000 ml

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P243-500 / Potassium Hydrogen Phthalate, 500 gms	201089	06/30/2025	12/23/2020 / apatel	12/16/2020 / apatel	W2784

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J0260-3 / Phosphoric Acid, 2.5 L	0000278313	01/31/2026	07/12/2021 / apatel	07/12/2021 / apatel	W2860

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL13850-1 / Buffer Solution, PH2 (500ml)	4212E45	12/31/2024	01/31/2023 / lwona	01/31/2023 / lwona	W3005

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14455-3 / buffer solution pH 7 yellow	4308H30	07/31/2025	01/02/2024 / JIGNESH	12/06/2023 / lwona	W3071

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14940-1 / Buffer Solution, PH12 (500ml)	2310P21	04/30/2025	01/02/2024 / JIGNESH	12/07/2023 / lwona	W3072

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	566002 / BUFFER PH 7.00 GREEN 1PINT PK6	44001f99	12/31/2025	04/03/2024 / jignesh	04/02/2024 / jignesh	W3093

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	1601-1 / PH 10.01 BUFFER,COLOR CD 475ML	4310g83	03/31/2025	04/03/2024 / jignesh	04/02/2024 / jignesh	W3094

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AL14055-3 / PH 4 BUFFER SOLUTION	AL14055-3	02/27/2026	09/05/2024 / jignesh	05/13/2024 / jignesh	W3107

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P243-500 / Potassium Hydrogen Phthalate, 500 gms	24A1956910	01/18/2025	06/26/2024 / lwona	06/26/2024 / lwona	W3111

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / lwona	07/03/2024 / lwona	W3112

Phosphoric Acid
BAKER ANALYZED® A.C.S. Reagent

(orthophosphoric acid)



Material No.: 0260-03
Batch No.: 0000278313
Manufactured Date: 2021/02/01
Retest Date: 2026/01/31
Revision No: 2

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay (H ₃ PO ₄) (by acidimetry)	85.0 – 87.0 %	85.8
Calcium (Ca)	<= 0.002 %	< 0.001
Color (APHA)	<= 10	5
Insoluble Matter	<= 0.001 %	< 0.001
ACS – Magnesium (Mg)	<= 0.002 %	<0.002
Sulfate (SO ₄)	<= 12 ppm	< 4
Volatile Acids (as CH ₃ COOH)	<= 0.001 %	0.001
Reducing Substances	Passes Test	PT
Chloride (Cl)	<= 3 ppm	< 1
Nitrate (NO ₃)	<= 5 ppm	< 2
Trace Impurities – Antimony (Sb)	<= 20.000 ppm	0.007
Trace Impurities – Arsenic (As)	<= 0.500 ppm	< 0.001
Trace Impurities – Iron (Fe)	<= 10.000 ppm	< 1.000
Heavy Metals (as Pb)	<= 8 ppm	< 3
Trace Impurities – Manganese (Mn)	<= 0.500 ppm	0.005
Trace Impurities – Potassium (K)	<= 40.000 ppm	< 0.001
Trace Impurities – Sodium (Na)	<= 200.000 ppm	0.082

For Laboratory, Research or Manufacturing Use
Exceeds A.C.S. Specifications
Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC


Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700


W3071
Rec 12/6/23

Certificate of Analysis 12

Buffer, Reference Standard, pH 7.00 ± 0.01 at 25°C (Color Coded Yellow)

Lot Number: 4308H30

Product Number: 1551

Manufacture Date: AUG 09, 2023

Expiration Date: JUL 2025

The certified value for this product is confirmed in independent testing by a second qualified chemist.

The NIST traceable pH value is certified to ±0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05.

°C	0	5	10	15	20	25	30	35	40	45	50
pH	7.12	7.09	7.06	7.04	7.02	7.00	6.99	6.98	6.98	6.97	6.97

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Phosphate Dibasic	7558-79-4	ACS
Potassium Dihydrogen Phosphate	7778-77-0	ACS
Preservative	Proprietary	
Yellow Dye	Proprietary	
Sodium Hydroxide	1310-73-2	Reagent

Test	Specification	Result
Appearance	Yellow liquid	Passed

*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	7.002	0.02	186-I-g, 186-II-g, 191d

Specification	Reference
Commercial Buffer Solutions	ASTM (D 1293 B)
Buffer A	ASTM (D 5464)
Buffer A	ASTM (D 5128)

pH measurements were performed in our Batesville, IN laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.02) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1551-2.5	10 L Cubitainer®	24 months
1551-5	20 L Cubitainer®	24 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Paul Brandon (08/09/2023)

Production Manager

This document is designed to comply with ISO Guide 31 "Reference Materials --
Contents of Certificates and Labels."

This product was tested in an ISO 17025 Accredited Laboratory

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.



RICCA CHEMICAL COMPANY®

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Pocomoke City, MD 21851
<http://www.riccachemical.com>
1-888-GO-RICCA
customerservice@riccachemical.com

W 3072
REC. 12/01/23
12

Certificate of Analysis

Buffer, Reference Standard, pH 12.00 ± 0.01 at 25°C

Lot Number: 2310P21

Product Number: 1615

Manufacture Date: OCT 24, 2023

Expiration Date: APR 2025

The certified value for this product is confirmed in independent testing by a second qualified chemist.

°C	15	20	25	30	35	40
pH	12.35	12.17	11.99	11.78	11.62	11.46

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Chloride	7447-40-7	ACS
Sodium Hydroxide	1310-73-2	Reagent

Test	Specification	Result
Appearance	Colorless liquid	Passed

*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	12.005	0.02	186-I-g, 186-II-g, 191d

pH measurements were performed in our Pocomoke City, MD laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.01) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1615-1	4 L natural poly	18 months
1615-16	500 mL clear PET-G	18 months
1615-32	1 L natural poly	18 months
1615-5	20 L Cubitainer®	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Sharon Travers

Sharon Travers (10/24/2023)

Operations Manager

This document is designed to comply with ISO Guide 31 "Reference Materials --
Contents of Certificates and Labels."

This product was tested in an ISO 17025 Accredited Laboratory

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Certificate of Analysis

ThermoFisher
SCIENTIFIC

Certificate of Analysis

1 Reagent Lane

Fair Lawn, NJ 07410

201.796.7100 tel

201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System
Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	P243	Quality Test / Release Date	06/19/2020
Lot Number	201089		
Description	POTASSIUM HYDROGEN PHTHALATE, ACIDIMETRIC STANDARD, A.C.S.		
Country of Origin	Spain	Suggested Retest Date	Jun/2025
Chemical Origin	Organic - non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	WHITE CRYSTALS
ASSAY POTASSIUM HYDROGEN PHTHALATE	%	Inclusive Between 99.95 - 100.05	100.03
CHLORINE COMPOUNDS	%	<= 0.003	<0.003
HEAVY METALS (as Pb)	ppm	<= 5	<5
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE MATTER	%	<= 0.005	<0.005
IRON (Fe)	ppm	<= 5	<5
PH OF 0.05M SOLUTION		Inclusive Between 4.00 - 4.02	4.00
SODIUM (Na)	%	<= 0.005	<0.005
SULFUR COMPOUNDS	%	<= 0.002	<0.002%
TRACEABLE TO NIST	SOD CARBONATE	= LOT 351a	351a
TRACEABLE TO NIST KHP STD	POT. ACID PHTHALATE	= LOT 84L	84L



Julian Burton - Quality Control Manager – Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.
If there are any questions with this certificate, please call at (800) 227-6701.

*Based on suggested storage condition.



W 3005

REC- 1/31/23

12

1490 Lammers Pike

Batesville, IN 47006

<http://www.riccachemical.com>

1-888-GO-RICCA

customerservice@riccachemical.com

Certificate of Analysis

Buffer, Reference Standard, pH 2.00 ± 0.01 at 25°C

Lot Number: 4212E45

Product Number: 1493

Manufacture Date: DEC 20, 2022

Expiration Date: DEC 2024

The certified value for this product is confirmed in independent testing by a second qualified chemist.

The NIST traceable pH value is certified to ±0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05.

°C	10	15	20	25	30	35	40	45	50
pH	1.93	1.98	1.98	2.00	2.01	2.03	2.03	2.04	2.04

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Chloride	7447-40-7	ACS
Hydrochloric Acid	7647-01-0	ACS

Test	Specification	Result
Appearance	Colorless liquid	Passed

*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	2.000	0.02	185i, 186-I-g, 186-II-g

pH measurements were performed in our Batesville, IN laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.02) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1493-1	4 L natural poly	24 months
1493-16	500 mL natural poly	24 months
1493-32	1 L natural poly	24 months
1493-5	20 L Cubitainer®	24 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Paul Brandon (12/20/2022)

Production Manager

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

This product was tested in an ISO 17025 Accredited Laboratory

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.



Certificate of Analysis

W3093
094121
04/03/2024
16

Buffer, Reference Standard, pH 7.00 ± 0.01 at 25°C (Color Coded Yellow)

Lot Number: 4401F99

Product Number: 1551

Manufacture Date: JAN 08, 2024

Expiration Date: DEC 2025

The certified value for this product is confirmed in independent testing by a second qualified chemist.

The NIST traceable pH value is certified to ±0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05.

°C	0	5	10	15	20	25	30	35	40	45	50
pH	7.12	7.09	7.06	7.04	7.02	7.00	6.99	6.98	6.98	6.97	6.97

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Phosphate Dibasic	7558-79-4	ACS
Potassium Dihydrogen Phosphate	7778-77-0	ACS
Preservative	Proprietary	
Yellow Dye	Proprietary	
Sodium Hydroxide	1310-73-2	

Test	Specification	Result
Appearance	Yellow liquid	Passed

*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	7.004	0.02	186-I-g, 186-II-g, 191d

Specification	Reference
Commercial Buffer Solutions	ASTM (D 1293 B)
Buffer A	ASTM (D 5464)
Buffer A	ASTM (D 5128)

pH measurements were performed in our Batesville, IN laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.02) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1551-1	4 L natural poly	24 months
1551-1CT	4 L Cubitainer®	24 months
1551-2.5	10 L Cubitainer®	24 months
1551-5	20 L Cubitainer®	24 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Paul Brandon (01/08/2024)

Production Manager

This document is designed to comply with ISO Guide 31 "Reference Materials --
Contents of Certificates and Labels."

This product was tested in an ISO 17025 Accredited Laboratory

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Certificate of Analysis

Buffer, Reference Standard, pH 10.00 ± 0.01 at 25°C (Color Coded Blue)

Lot Number: 4310G83

Product Number: 1601

Manufacture Date: OCT 09, 2023

Expiration Date: MAR 2025

The certified value for this product is confirmed in independent testing by a second qualified chemist.

The NIST traceable pH value is certified to ±0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05.

°C	0	5	10	15	20	25	30	35	40	50
pH	10.31	10.23	10.17	10.11	10.05	10.00	9.95	9.91	9.87	9.81

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Carbonate	497-19-8	ACS
Sodium Bicarbonate	144-55-8	ACS
Sodium Hydroxide	1310-73-2	Reagent
Preservative	Proprietary	
Blue Dye	Proprietary	

Test	Specification	Result
Appearance	Blue liquid	Passed

*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	10.003	0.02	186-I-g, 186-II-g, 191d

Specification	Reference
Commercial Buffer Solutions	ASTM (D 1293 B)
Buffer C	ASTM (D 5464)
Buffer C	ASTM (D 5128)

pH measurements were performed in our Batesville, IN laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.02) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1601-16	500 mL natural poly	18 months
1601-5	20 L Cubitainer®	18 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)



Paul Brandon (10/09/2023)

Production Manager

This document is designed to comply with ISO Guide 31 "Reference Materials --
Contents of Certificates and Labels."

This product was tested in an ISO 17025 Accredited Laboratory

This test report shall not be reproduced, except in full, without the written approval of Ricca Chemical Company.



Certificate of Analysis

Buffer, Reference Standard, pH 4.00 ± 0.01 at 25°C (Color Coded Red)

Lot Number: 4403F90

Product Number: 1501

Manufacture Date: MAR 09, 2024

Expiration Date: FEB 2026

The certified value for this product is confirmed in independent testing by a second qualified chemist.

The NIST Traceable pH value is certified to ±0.01 at 25 °C only. All other pH values at their corresponding temperatures are accurate to ± 0.05.

°C	0	5	10	15	20	25	30	35	40	45	50
pH	4.00	4.00	4.00	4.00	4.00	4.00	4.01	4.02	4.03	4.04	4.06

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Acid Phthalate	877-24-7	Buffer
Preservative	Proprietary	Commercial
Red Dye	Proprietary	Purified

Test	Specification	Result
Appearance	Red liquid	Passed

*Not a certified value.

Test	Certified Value	Uncertainty	NIST SRM#
pH at 25°C (Method: SQCP027, SQCP033)	4.000	0.02	185i, 186-I-g, 186-II-g

Specification	Reference
Commercial Buffer Solutions	ASTM (D 1293 B)
Buffer B	ASTM (D 5464)
Buffer B	ASTM (D 5128)

pH measurements were performed in our Batesville, IN laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387.02) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
1501-2.5	10 L Cubitainer®	24 months
1501-32	1 L natural poly	24 months
1501-5	20 L Cubitainer®	24 months

Recommended Storage: 15°C - 30°C (59°F - 86°F)

Paul Brandon

Production Manager

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This product was tested in an ISO 17025 Accredited Laboratory

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POTASSIUM HYDROGEN PHTHALATE

Material: N983
Grade: ACS GRADE
Batch Number: 24A1956910

Chemical Formula: HOCC6H4COOK
Molecular Weight: 204.22
CAS #: 877-24-7
Appearance:

Manufacture Date: 01/19/2022
Reassay Date: 01/18/2025

Storage: Room Temperature

White crystals.

TEST	SPECIFICATION	ANALYSIS	DISPOSITION
Assay (dried basis)	99.95 - 100.05 %	99.97 %	PASS
Chlorine Compounds	<= 0.003 %	<0.003 %	PASS
Heavy Metals (as Pb)	<= 5 ppm	<5 ppm	PASS
Insoluble Matter	<= 0.005 %	0.003 %	PASS
Iron	<= 5 ppm	<5 ppm	PASS
pH (0.05M, Water) @25C	4.00 - 4.02	4.00	PASS
Sodium	<= 0.005 %	<0.005 %	PASS
Sulfur Compounds	<= 0.002 %	<0.002 %	PASS

Spec Set: N983ACS

Internal ID #: 710

Signature	Additional Information
We certify that this batch conforms to the specifications listed. This document has been electronically produced and is valid without a signature. Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC. 28600 Fountain Parkway, Solon OH 44139 USA	Analysis may have been rounded to significant digits in specification limits. Product meets analytical specifications of the grades listed.

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 10/30/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 10/29/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:15
Out Date: 10/30/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB133188

Lab ID	Client SampleID	Dish #	Dish Wt (g) (A)	Sample Wt (g)	Dish + Sample Wt (g) (B)	Dish+Dry Sample Wt (g) (C)	% Solid	Comments
P4599-01	EX-1-TPH-1	1	1.15	8.84	9.99	8.33	81.2	
P4599-02	EX-1-TPH-2	2	1.15	8.38	9.53	8.01	81.9	
P4599-03	EX-1-TPH-3	3	1.18	8.79	9.97	8.64	84.9	
P4599-04	EX-1-TPH-4	4	1.19	8.75	9.94	8.75	86.4	
P4599-05	EX-1-TPH-5	5	1.12	8.86	9.98	8.57	84.1	
P4599-06	EX-1-TPH-6	6	1.17	8.61	9.78	8.25	82.2	
P4599-07	EX-1-TPH-7	7	1.18	8.66	9.84	8.34	82.7	
P4599-08	EX-1-TPH-8	8	1.18	8.66	9.84	8.49	84.4	
P4599-09	EX-1-TPH-9	9	1.15	8.81	9.96	8.94	88.4	
P4601-19	COPI0	10	1.14	8.82	9.96	7.38	70.7	
P4601-20	COPI2	11	1.18	8.42	9.6	9.15	94.7	
P4601-21	COPI6	12	1.14	8.64	9.78	8.53	85.5	
P4601-22	COPI8	13	1.15	8.84	9.99	8.31	81.0	
P4601-23	COPI9	14	1.18	8.63	9.81	8.68	86.9	
P4601-24	CC0P1	15	1.13	8.70	9.83	9.42	95.3	
P4601-25	CC0P3	16	1.13	8.61	9.74	8.68	87.7	
P4601-26	CC0P5	17	1.17	8.55	9.72	8.77	88.9	
P4601-27	CC0P7	18	1.18	8.33	9.51	8.51	88.0	
P4601-28	CC0P9	19	1.15	8.56	9.71	8.71	88.3	
P4601-29	CC0Q1	20	1.17	8.53	9.7	8.68	88.0	
P4601-30	CC0Q6	21	1.16	8.69	9.85	9.22	92.8	
P4601-31	CC0Q8	22	1.16	8.50	9.66	8.35	84.6	
P4601-32	CC0R3	23	1.17	8.56	9.73	7.84	77.9	
P4601-33	CC0R4	24	1.16	8.42	9.58	7.19	71.6	
P4601-34	CC0R5	25	1.18	8.77	9.95	9.55	95.4	
P4601-35	CC0R6	26	1.14	8.62	9.76	9.25	94.1	
P4601-36	CC0R7	27	1.15	8.37	9.52	7.95	81.2	
P4601-37	P4601-36MS	28	1.15	8.37	9.52	7.95	81.2	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 10/30/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 10/29/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:15
Out Date: 10/30/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB133188

Lab ID	Client SampleID	Dish #	Dish Wt (g) (A)	Sample Wt (g)	Dish + Sample Wt (g) (B)	Dish+Dry Sample Wt (g) (C)	% Solid	Comments
P4601-38	P4601-36MSD	29	1.15	8.37	9.52	7.95	81.2	
P4602-19	C0P17	30	1.17	8.65	9.82	9.06	91.2	
P4602-21	CC0P2	31	1.15	8.78	9.93	9.58	96.0	
P4602-22	CC0P4	32	1.14	8.41	9.55	9.17	95.5	
P4602-23	CC0P6	33	1.14	8.64	9.78	9.11	92.2	
P4602-24	CC0P8	34	1.18	8.57	9.75	8.71	87.9	
P4602-25	CC0Q0	35	1.16	8.40	9.56	8.7	89.8	
P4602-26	CC0Q2	36	1.13	8.54	9.67	8.43	85.5	
P4602-27	CC0Q3	37	1.13	8.47	9.6	6.8	66.9	
P4602-28	CC0Q4	38	1.16	8.42	9.58	7.84	79.3	
P4602-29	CC0Q5	39	1.15	8.38	9.53	7.64	77.4	
P4602-30	CC0Q7	40	1.15	8.78	9.93	8.61	85.0	
P4602-31	CC0Q9	41	1.14	8.79	9.93	9.57	95.9	
P4602-32	CC0R0	42	1.13	8.83	9.96	8.82	87.1	
P4602-33	CC0R1	43	1.15	8.66	9.81	7.9	77.9	
P4602-34	CC0R2	44	1.15	8.64	9.79	7.53	73.8	
P4602-37	CC0P0	45	1.15	8.57	9.72	9.1	92.8	
P4602-38	P4602-38MS	46	1.15	8.57	9.72	9.1	92.8	
P4602-39	P4602-38MSD	47	1.15	8.57	9.72	9.1	92.8	
P4602-40	CC0R6	48	1.15	8.62	9.77	9.3	94.5	
P4602-41	P4602-40MS	49	1.15	8.62	9.77	9.3	94.5	
P4602-42	P4602-40MSD	50	1.15	8.62	9.77	9.3	94.5	
P4602-43	CC0R8	51	1.15	8.41	9.56	8.85	91.6	
P4602-44	P4602-43MS	52	1.15	8.41	9.56	8.85	91.6	
P4602-45	P4602-43MSD	53	1.15	8.41	9.56	8.85	91.6	
P4605-01	TAPIAL2-SED02-102824-00-T2	54	1.16	8.51	9.67	8.99	92.0	
P4605-02	TAPIAL2-SED01-102824-00-T2	55	1.15	8.46	9.61	8.41	85.8	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 10/30/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 10/29/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:15
Out Date: 10/30/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB133188

Lab ID	Client SampleID	Dish #	Dish Wt (g) (A)	Sample Wt (g)	Dish + Sample Wt (g) (B)	Dish+Dry Sample Wt (g) (C)	% Solid	Comments
P4605-03	TAPIAL3-SED01-102824-00-T2	56	1.17	8.61	9.78	8.85	89.2	
P4605-04	TAPHHA-SED01-102824-00-T2	57	1.15	8.43	9.58	8.32	85.1	
P4605-05	TAPHHA-SED02-102824-00-T2	58	1.15	8.65	9.8	5.88	54.7	
P4605-06	TAPLPR-SED11-102824-00-T2	59	1.16	8.50	9.66	7.76	77.6	
P4606-01	1	60	1.00	1.00	2.00	2.00	100.0	caluk
P4611-01	TP-1	61	1.18	8.80	9.98	9.52	94.8	
P4611-02	TP-1-E2	62	1.15	8.82	9.97	9.33	92.7	
P4611-04	TP-2	63	1.17	8.37	9.54	9.16	95.5	
P4611-05	TP-2-E2	64	1.12	8.45	9.57	9.33	97.2	
P4611-07	TP-3	65	1.15	8.47	9.62	9.35	96.8	
P4611-08	TP-3-E2	66	1.15	8.59	9.74	9.47	96.9	
P4611-10	TP-4	67	1.19	8.50	9.69	9.22	94.5	
P4611-11	TP-4-E2	68	1.16	8.50	9.66	9.24	95.1	
P4611-13	TP-5	69	1.14	8.58	9.72	9.33	95.5	
P4611-14	TP-5-E2	70	1.19	8.47	9.66	9.31	95.9	
P4611-16	TP-6	71	1.16	8.53	9.69	9.32	95.7	
P4611-17	TP-6-E2	72	1.15	8.63	9.78	9.39	95.5	
P4612-01	W029020-1-1	73	1.00	1.00	2.00	2.00	100.0	oilc
P4612-02	W029020-1-2	74	1.00	1.00	2.00	2.00	100.0	oilc
P4612-03	MOO-24-00335	75	1.15	8.54	9.69	9.38	96.4	
P4612-05	CONCRETE-PAD	76	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
P4613-01	ARS20-0001	77	1.17	8.71	9.88	8.88	88.5	
P4614-01	NB-07-102924	78	1.17	8.80	9.97	8.43	82.5	
P4614-02	NB-07-102924-E2	79	1.14	8.74	9.88	8.61	85.5	
P4616-01	BP-F10	80	1.18	8.80	9.98	9.22	91.4	
P4616-02	BP-F10-EPH	81	1.17	8.53	9.7	8.71	88.4	
P4616-05	BP-F9-MOVED	82	1.15	8.80	9.95	8.93	88.4	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 10/30/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 10/29/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:15
Out Date: 10/30/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB133188

Lab ID	Client SampleID	Dish #	Dish Wt (g) (A)	Sample Wt (g)	Dish + Sample Wt (g) (B)	Dish+Dry Sample Wt (g) (C)	% Solid	Comments
P4616-06	BP-F9-MOVED-EPH	83	1.16	8.67	9.83	8.83	88.5	
P4617-01	RO-SOIL	84	1.13	8.65	9.78	9.1	92.1	
P4617-02	RO-SOIL-E2	85	1.18	8.48	9.66	9.13	93.8	
P4617-03	CONCRETE-PILE	86	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
P4618-01	HR-01-102924	87	1.15	8.46	9.61	9.22	95.4	
P4618-02	HR-01-102924-E2	88	1.15	8.83	9.98	9.62	95.9	
P4618-03	HR-04-102924	89	1.15	8.69	9.84	9.5	96.1	
P4618-04	HR-04-102924-E2	90	1.14	8.61	9.75	9.46	96.6	
P4619-01	SU-03-102924	91	1.15	8.57	9.72	9.05	92.2	
P4619-02	SU-03-102924-E2	92	1.17	8.36	9.53	8.8	91.3	
P4619-03	SU-04-102924	93	1.17	8.70	9.87	8.86	88.4	
P4619-04	SU-04-102924-E2	94	1.13	8.47	9.6	8.67	89.0	

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

133188

WorkList Name : %1-102924 WorkList ID : 184886 Department : Wet-Chemistry Date : 10-29-2024 08:07:10

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4599-01	EX-1-TPH-1	Solid	Percent Solids	Cool 4 deg C	ENTA05	K63	10/28/2024	Chemtech -SO
P4599-02	EX-1-TPH-2	Solid	Percent Solids	Cool 4 deg C	ENTA05	K63	10/28/2024	Chemtech -SO
P4599-03	EX-1-TPH-3	Solid	Percent Solids	Cool 4 deg C	ENTA05	K63	10/28/2024	Chemtech -SO
P4599-04	EX-1-TPH-4	Solid	Percent Solids	Cool 4 deg C	ENTA05	K63	10/28/2024	Chemtech -SO
P4599-05	EX-1-TPH-5	Solid	Percent Solids	Cool 4 deg C	ENTA05	K63	10/28/2024	Chemtech -SO
P4599-06	EX-1-TPH-6	Solid	Percent Solids	Cool 4 deg C	ENTA05	K63	10/28/2024	Chemtech -SO
P4599-07	EX-1-TPH-7	Solid	Percent Solids	Cool 4 deg C	ENTA05	K63	10/28/2024	Chemtech -SO
P4599-08	EX-1-TPH-8	Solid	Percent Solids	Cool 4 deg C	ENTA05	K63	10/28/2024	Chemtech -SO
P4599-09	EX-1-TPH-9	Solid	Percent Solids	Cool 4 deg C	ENTA05	K63	10/28/2024	Chemtech -SO
P4601-19	C0P10	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/22/2024	Chemtech -SO
P4601-20	C0P12	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/22/2024	Chemtech -SO
P4601-21	C0P16	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/22/2024	Chemtech -SO
P4601-22	C0P18	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/22/2024	Chemtech -SO
P4601-23	C0P19	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/22/2024	Chemtech -SO
P4601-24	CC0P1	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/22/2024	Chemtech -SO
P4601-25	CC0P3	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/22/2024	Chemtech -SO
P4601-26	CC0P5	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/22/2024	Chemtech -SO
P4601-27	CC0P7	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/22/2024	Chemtech -SO
P4601-28	CC0P9	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/22/2024	Chemtech -SO
P4601-29	CC0Q1	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/22/2024	Chemtech -SO
P4601-30	CC0Q6	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/22/2024	Chemtech -SO

Date/Time 10/29/24 15:00 Date/Time 10/29/24 17:10
Raw Sample Received by: 80 w/c 1 Raw Sample Received by: CP 80 w/c
Raw Sample Relinquished by: CP 80 w/c

WORKLIST(Hardcopy Internal Chain)

133188

WorkList Name : %1-102924 WorkList ID : 184886 Department : Wet-Chemistry Date : 10-29-2024 08:07:10

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4601-31	CC0Q8	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/23/2024	Chemtech -SO
P4601-32	CC0R3	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/23/2024	Chemtech -SO
P4601-33	CC0R4	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/23/2024	Chemtech -SO
P4601-34	CC0R5	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/23/2024	Chemtech -SO
P4601-35	CC0R6	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/23/2024	Chemtech -SO
P4601-36	CC0R7	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/23/2024	Chemtech -SO
P4601-37	P4601-36MS	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/23/2024	Chemtech -SO
P4601-38	P4601-36MSD	Solid	Percent Solids	Cool 4 deg C	TETR16	K31	10/23/2024	Chemtech -SO
P4602-19	C0P17	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/22/2024	Chemtech -SO
P4602-21	CC0P2	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/22/2024	Chemtech -SO
P4602-22	CC0P4	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/22/2024	Chemtech -SO
P4602-23	CC0P6	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/22/2024	Chemtech -SO
P4602-24	CC0P8	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/22/2024	Chemtech -SO
P4602-25	CC0Q0	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/22/2024	Chemtech -SO
P4602-26	CC0Q2	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/22/2024	Chemtech -SO
P4602-27	CC0Q3	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/22/2024	Chemtech -SO
P4602-28	CC0Q4	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/23/2024	Chemtech -SO
P4602-29	CC0Q5	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/23/2024	Chemtech -SO
P4602-30	CC0Q7	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/23/2024	Chemtech -SO
P4602-31	CC0Q9	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/23/2024	Chemtech -SO
P4602-32	CC0R0	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/23/2024	Chemtech -SO

Date/Time 10/29/24 15:00

Raw Sample Received by: 80 wpc

Raw Sample Relinquished by: CP 80 wpc

Date/Time 10/29/24 17:10

Raw Sample Received by: CP 80 wpc

Raw Sample Relinquished by: 80 wpc

WORKLIST(Hardcopy Internal Chain)

133188

WorkList Name : %1-102924 WorkList ID : 184886 Department : Wet-Chemistry Date : 10-29-2024 08:07:10

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4602-33	CC0R1	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/23/2024	Chemtech -SO
P4602-34	CC0R2	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/23/2024	Chemtech -SO
P4602-37	CC0P0	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/23/2024	Chemtech -SO
P4602-38	P4602-38MS	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/23/2024	Chemtech -SO
P4602-39	P4602-38MSD	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/23/2024	Chemtech -SO
P4602-40	CC0R6	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/23/2024	Chemtech -SO
P4602-41	P4602-40MS	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/23/2024	Chemtech -SO
P4602-42	P4602-40MSD	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/23/2024	Chemtech -SO
P4602-43	CC0R8	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/23/2024	Chemtech -SO
P4602-44	P4602-43MS	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/23/2024	Chemtech -SO
P4602-45	P4602-43MSD	Solid	Percent Solids	Cool 4 deg C	TETR16	K61	10/23/2024	Chemtech -SO
P4605-01	TAPIAL2-SED02-102824-00-T2	Solid	Percent Solids	Cool 4 deg C	WEST04	K63	10/28/2024	Chemtech -SO
P4605-02	TAPIAL2-SED01-102824-00-T2	Solid	Percent Solids	Cool 4 deg C	WEST04	K63	10/28/2024	Chemtech -SO
P4605-03	TAPIAL3-SED01-102824-00-T2	Solid	Percent Solids	Cool 4 deg C	WEST04	K63	10/28/2024	Chemtech -SO
P4605-04	TAPHHA-SED01-102824-00-T2	Solid	Percent Solids	Cool 4 deg C	WEST04	K63	10/28/2024	Chemtech -SO
P4605-05	TAPHHA-SED02-102824-00-T2	Solid	Percent Solids	Cool 4 deg C	WEST04	K63	10/28/2024	Chemtech -SO
P4605-06	TAPLPR-SED11-102824-00-T2	Solid	Percent Solids	Cool 4 deg C	WEST04	K63	10/28/2024	Chemtech -SO
P4606-01	1	Solid	Percent Solids	Cool 4 deg C	ATCE02	K63	10/26/2024	Chemtech -SO
P4611-01	TP-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4611-02	TP-1-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4611-04	TP-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO

Date/Time 10/29/24 15:00 Date/Time 10/29/24 17:10

Raw Sample Received by: [Signature] Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature] Raw Sample Relinquished by: [Signature]

WY 133188

WORKLIST(Hardcopy Internal Chain)

WorkList Name : %1-102924 WorkList ID : 184886 Department : Wet-Chemistry Date : 10-29-2024 08:07:10

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4611-05	TP-2-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4611-07	TP-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4611-08	TP-3-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4611-10	TP-4	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4611-11	TP-4-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4611-13	TP-5	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4611-14	TP-5-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4611-16	TP-6	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4611-17	TP-6-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4612-01	W029020-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4612-02	W029020-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4612-03	MOO-24-00335	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4612-05	CONCRETE-PAD	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4613-01	ARS20-0001	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4614-01	NB-07-102924	Solid	Percent Solids	Cool 4 deg C	PSEG03	K62	10/29/2024	Chemtech -SO
P4614-02	NB-07-102924-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	K63	10/29/2024	Chemtech -SO
P4616-01	BP-F10	Solid	Percent Solids	Cool 4 deg C	PSEG05	K63	10/29/2024	Chemtech -SO
P4616-02	BP-F10-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4616-05	BP-F9-MOVED	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4616-06	BP-F9-MOVED-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4617-01	RO-SOIL	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO

Date/Time 10/29/24 15:10:00 Date/Time 10/29/24 15:10

Raw Sample Received by: [Signature] Raw Sample Received by: [Signature]

Raw Sample Relinquished by: [Signature] Raw Sample Relinquished by: [Signature]

WORKLIST(Hardcopy Internal Chain)

133188

WorkList Name : %1-102924 WorkList ID : 184886 Department : Wet-Chemistry Date : 10-29-2024 08:07:10

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4617-02	RO-SOIL-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4617-03	CONCRETE-PILE	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/29/2024	Chemtech -SO
P4618-01	HR-01-102924	Solid	Percent Solids	Cool 4 deg C	PSEG05	K61	10/29/2024	Chemtech -SO
P4618-02	HR-01-102924-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	K61	10/29/2024	Chemtech -SO
P4618-03	HR-04-102924	Solid	Percent Solids	Cool 4 deg C	PSEG05	K61	10/29/2024	Chemtech -SO
P4618-04	HR-04-102924-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	K61	10/29/2024	Chemtech -SO
P4619-01	SU-03-102924	Solid	Percent Solids	Cool 4 deg C	PSEG05	K61	10/29/2024	Chemtech -SO
P4619-02	SU-03-102924-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	K63	10/29/2024	Chemtech -SO
P4619-03	SU-04-102924	Solid	Percent Solids	Cool 4 deg C	PSEG05	K63	10/29/2024	Chemtech -SO
P4619-04	SU-04-102924-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	K63	10/29/2024	Chemtech -SO

Date/Time 10/29/24 15:00
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: [Signature]

Date/Time 10/29/24 15:10
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: [Signature]



SHIPPING DOCUMENTS

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Weston COC ID
Weston_20241028_1508

Chain of Custody Record/Lab Work Request

P4605

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Client:	Weston Solutions, Inc.		
Project Manager:	David Sembrot		
Street Address:	1400 Weston Way	City:	West Chester
Phone:	610-314-5456	ST, ZIP:	PA, 19038
e-mail:	david.sembrot@westonsolutions.com		
Sampled By:	Cheyenne Harrington		

Project Name:	Fort Meade RI	Project POC:	Nathan Fretz
PO Number	0111145	Phone:	484-524-5665
W.O. #:		POC e-mail:	nathan.fretz@westonsolutions.com
Lab:	CHEMTECH	Lab POC:	Samantha Beazley
TAT (days):	21	Lab Phone:	908-728-3148
Lab Address:	284 Sheffield Street Mountainside, NJ 07092		

Matrix Codes
SS - Soil
SE - Sediment
SO - Solid
SL - Sludge
GW - Groundwater
W - Water
O - Oil
A - Air
DS - Drum Solids
DL - Drum Liquids
L - EP/TCLP Leachate
WI - Wipe
X - Other
F - Fish

Lab Use Only		
Temperature of cooler when received (°C)		
COC Tape was present and unbroken on outer package?	Y	N
Samples received in good condition?	Y	N
Labels indicate properly preserved?	Y	N
Received within holding times?	Y	N
Discrepancies between sample labels and COC record?	Y	N

Analyses Requested:	EPA 9045D	EPA 9060A/Lloyd Kahn																
	Container Num:	Glass	Glass Jar															
	Container Type:	8 oz	8 oz															
	Preservative:	Ice to 0-6	Ice to 0-6															

#	Sample ID	G/C	Matrix	MS/MSD	Date Collected	Time Collected													Special Instructions/Comments
1	TAPIAL2-SED02-102824-00-T2	g	SED	no	10/28/2024	9:35	1	1											1 sample container for both analyses
2	TAPIAL2-SED01-102824-00-T2	g	SED	no	10/28/2024	9:50	1	1											1 sample container for both analyses
3	TAPIAL3-SED01-102824-00-T2	g	SED	no	10/28/2024	10:30	1	1											1 sample container for both analyses
4	TAPHHA-SED01-102824-00-T2	g	SED	no	10/28/2024	10:45	1	1											1 sample container for both analyses
5	TAPHHA-SED02-102824-00-T2	g	SED	no	10/28/2024	11:10	1	1											1 sample container for both analyses
6	TAPLPR-SED11-102824-00-T2	g	SED	no	10/28/2024	14:40	1	1											1 sample container for both analyses
7																			
8																			
9																			
10																			
11																			
12																			

Shipping Airbill Number: 7795 7604 6746		Cooler Number:		of		
Relinquished By	Date	Time	Received By	Date	Time	Additional Comments
1.) [Signature]	10/28/24	1645	[Signature]	10-29-24	9:55	
2.)						
3.)						QSM 5.4 Compliant Deliverable Requirements: DoD Level IV report, EnviroData EDD, and ERIS-compatible EDD

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488