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

DATA PACKAGE

GENERAL CHEMISTRY

PROJECT NAME : NJ SOIL PT

CHEMTECH CONSULTING GROUP

284 Sheffield St,

Mountainside, NJ - 07092

Phone No: 908-789-8900

ORDER ID : P4495

ATTENTION : QA Officer

Laboratory Certification ID # 20012

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Cover Page

Order ID : P4495

Project ID : NJ Soil PT

Client : Chemtech Consulting Group

Lab Sample Number	Client Sample Number
P4495-01	PT-AN-SOIL
P4495-02	PT-CORR-SOIL
P4495-03	PT-CN-SOIL
P4495-04	PT-CN-SOIL
P4495-05	PT-FP-SOIL
P4495-06	PT-CR6-SOIL
P4495-07	PT-NUT-SOIL
P4495-08	PT-NUT-SOIL
P4495-09	PT-OGR-SOIL
P4495-10	PT-MET-SOIL
P4495-11	PT-BNA-SOIL
P4495-12	PT-TRIAZINE-SOIL
P4495-13	PT-PAH-SOIL
P4495-14	PT-DIES-SOIL
P4495-15	PT-GAS-SOIL
P4495-16	PT-NJEPH-SOIL
P4495-17	PT-HERB-SOIL
P4495-18	PT-PCB-SOIL
P4495-19	PT-PCBO-SOIL
P4495-20	PT-PEST-SOIL
P4495-21	PT-CHLR-SOIL
P4495-22	PT-TXP-SOIL
P4495-23	PT-VOA-SOIL
P4495-24	PT-SOL-SOIL
P4495-25	PT-NO2-SOIL

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: 12/4/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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

CASE NARRATIVE

Chemtech Consulting Group
Project Name: NJ Soil PT
Project # N/A
Chemtech Project # P4495
Test Name: Hexavalent Chromium,TS,Corrosivity,Oil and Grease,Anions Group2,Cyanide,TOC,Phosphorus, Total,Flash Point,TKN,Ammonia,Anions Group1

A. Number of Samples and Date of Receipt:
25 Solid samples were received on 10/23/2024.

B. Parameters:
According to the Chain of Custody document, the following analyses were requested: Ammonia, Anions Group1, Anions Group2, Corrosivity, Cyanide, Diesel Range Organics, EPH, Flash Point, Gasoline Range Organics, Herbicide Group1, Hexavalent Chromium, Mercury, Metals Group3, Metals ICP-Group1, Nitrite, Oil and Grease, PCB, PESTICIDE Group1, PESTICIDE Group2, PESTICIDE Group3, Phosphorus, Total, SVOCMS Group1, SVOCMS Group2, SVOCMS Group3, SVOCMS Group4, TKN, TOC, TS and VOCMS Group1. This data package contains results for Hexavalent Chromium,TS,Corrosivity,Oil and Grease,Anions Group2,Cyanide,TOC,Phosphorus, Total,Flash Point,TKN,Ammonia,Anions Group1.

C. Analytical Techniques:
The analysis of Flash Point was based on method 1010B, The analysis of Hexavalent Chromium was based on method 7196A, The analysis of Cyanide was based on method 9012B, The analysis of Cyanide was based on method 9014, The analysis of Corrosivity was based on method 9045D, The analysis of Anions Group1,Anions Group2 was based on method 9056A, The analysis of TOC was based on method 9060A, The analysis of Oil and Grease was based on method 9071B, The analysis of TOC was based on method Lloyd Kahn, The analysis of TS was based on method SM2540 B, The analysis of TKN was based on method SM4500 N Org B or C and The analysis of Ammonia was based on method SM4500-NH3.

D. QA/ QC Samples:
The Holding Times were met for all analysis.
Sample PT-AN-SOIL was diluted due to high concentrations for Chloride,Fluoride,Nitrate,Sulfate
& Sample PT-CN-SOIL was diluted due to high concentrations for Cyanide
& Sample PT-CN-SOIL was diluted due to high concentrations for Cyanide
& Sample PT-CR6-SOIL was diluted due to high concentrations for Hexavalent Chromium

& Sample PT-NUT-SOIL was diluted due to high concentrations for Ammonia as N,TKN,Phosphorus, Total

The Blank Spike met requirements for all samples.
The Duplicate (COMP-1DUP) analysis met criteria for all samples except for Ammonia as N but sample and Duplicate results are below reporting limit.
The Matrix Spike (COMP-1MS) analysis met criteria for all samples except for Orthophosphate as P due to matrix interference.
The Matrix Spike (WC-3(0-6)MS) analysis met criteria for all samples except for Oil and Grease due to matrix interference.
The Matrix Spike Duplicate (COMP-1MSD) analysis met criteria for all samples except for Orthophosphate as P due to matrix interference.
The Matrix Spike Duplicate (WC-3(0-6)MSD) analysis met criteria for all samples except for Oil and Grease due to matrix interference.
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 samples P4495-07 and P4495-08 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_____

284 Sheffield Street, Mountainside NJ 07092
Tel. 908-789-8900 Fax: 908-789-8922

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: P4495 MATRIX: Solid

METHOD:
1010B,365.3,7196A,9012B,9014,9045D,9056A,9060A,9071B,Lloyd Kahn,SM2540 B,SM4500 N Org B or C,SM4500-NH3

		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.The Matrix Spike (COMP-1MS) analysis met criteria for all samples except for Orthophosphate as P due to matrix interference. The Matrix Spike (WC-3(0-6)MS) analysis met criteria for all samples except for Oil and Grease due to matrix interference. The Matrix Spike Duplicate (COMP-1MSD) analysis met criteria for all samples except for Orthophosphate as P due to matrix interference. The Matrix Spike Duplicate (WC-3(0-6)MSD) analysis met criteria for all samples except for Oil and Grease due to matrix interference.			
3.	Sample Duplicate Analysis Met QC Criteria		✓	
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
	The Duplicate (COMP-1DUP) analysis met criteria for all samples except for Ammonia as N but sample and Duplicate results are below reporting limit.			
4.	Digestion Holding Time Met		✓	
	If not met, list number of days exceeded for each sample:			
	The Holding Times were met for all analysis.			

ADDITIONAL COMMENTS: Lab has used least representable sample weight for the samples P4495-07 and P4495-08 for TOC analysis. Therefore Lab has reported the TOC result with "OR" qualifier

_____ _____

QA REVIEW Date

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P4495

	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:** 12/04/2024

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LAB CHRONICLE

OrderID:	P4495	**OrderDate:**	10/23/2024 10:29:00 AM
Client:	Chemtech Consulting Group	**Project:**	NJ Soil PT
Contact:	QA Officer	**Location:**	QA Office,VOA Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4495-01	**PT-AN-SOIL**	**SOIL**			**10/21/24 10:00**			**10/23/24**
			Anions Group1	9056A			11/05/24 11:29	
P4495-01DL	**PT-AN-SOILDL**	**SOIL**			**10/21/24 10:00**			**10/23/24**
			Anions Group1	9056A			11/05/24 11:51	
P4495-02	**PT-CORR-SOIL**	**SOIL**			**10/21/24 10:00**			**10/23/24**
			Corrosivity	9045D			11/06/24 16:33	
P4495-03	**PT-CN-SOIL**	**SOIL**			**10/21/24 10:00**			**10/23/24**
			Cyanide	9012B		11/12/24	11/12/24 15:46	
P4495-03DL	**PT-CN-SOILDL**	**SOIL**			**10/21/24 10:00**			**10/23/24**
			Cyanide	9012B		11/12/24	11/12/24 16:01	
P4495-04	**PT-CN-SOIL**	**SOIL**			**10/21/24 10:00**			**10/23/24**
			Cyanide	9014		11/12/24	11/12/24 17:15	
P4495-04DL	**PT-CN-SOILDL**	**SOIL**			**10/21/24 10:00**			**10/23/24**
			Cyanide	9014		11/12/24	11/12/24 17:15	

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LAB CHRONICLE

P4495-05	**PT-FP-SOIL**	**SOIL**			**10/21/24 10:00**		**10/23/24**
			Flash Point	1010B		11/06/24 09:05	
P4495-06	**PT-CR6-SOIL**	**SOIL**			**10/21/24 10:00**		**10/23/24**
			Hexavalent Chromium	7196A	11/21/24	11/21/24 14:04	
P4495-06DL	**PT-CR6-SOILDL**	**SOIL**			**10/21/24 10:00**		**10/23/24**
			Hexavalent Chromium	7196A	11/21/24	11/21/24 14:25	
P4495-07	**PT-NUT-SOIL**	**SOIL**			**10/21/24 10:00**		**10/23/24**
			Ammonia	SM4500-NH3	11/04/24	11/05/24 11:01	
			Phosphorus, Total	365.3	11/13/24	11/13/24 11:07	
			TKN	SM4500-N Org C-11 plus NH3 B plus G-11	11/05/24	11/06/24 10:21	
			TOC	9060A		10/30/24 10:51	
P4495-07DL	**PT-NUT-SOILDL**	**SOIL**			**10/21/24 10:00**		**10/23/24**
			Ammonia	SM4500-NH3	11/04/24	11/05/24 12:29	
			Phosphorus, Total	365.3	11/13/24	11/13/24 11:07	
			TKN	SM4500-N Org C-11 plus NH3 B plus G-11	11/05/24	11/06/24 11:04	
P4495-08	**PT-NUT-SOIL**	**SOIL**			**10/21/24 10:00**		**10/23/24**

LAB CHRONICLE

			TOC	Lloyd Kahn		10/30/24 10:51	
P4495-09	**PT-OGR-SOIL**	**SOIL**			**10/21/24 10:00**		**10/23/24**
			Oil and Grease	9071B		11/08/24 09:30	
P4495-24	**PT-SOL-SOIL**	**SOIL**			**10/21/24 10:00**		**10/23/24**
			TS	SM2540 B		10/23/24 11:00	
P4495-25	**PT-NO2-SOIL**	**SOIL**			**10/21/24 10:00**		**10/23/24**
			Anions Group2	9056A		11/05/24 11:08	

SAMPLE DATA

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	10/21/24 10:00
Project:	NJ Soil PT	Date Received:	10/23/24
Client Sample ID:	PT-AN-SOIL	SDG No.:	P4495
Lab Sample ID:	P4495-01	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Bromide	84.6		1	0.49	40.0	mg/Kg		11/05/24 11:29	9056A
Chloride	723	OR	1	0.096	12.0	mg/Kg		11/05/24 11:29	9056A
Fluoride	125	OR	1	0.38	8.00	mg/Kg		11/05/24 11:29	9056A
Nitrite	0.19	U	1	0.19	12.0	mg/Kg		11/05/24 11:29	9056A
Nitrate	279	OR	1	0.089	10.0	mg/Kg		11/05/24 11:29	9056A
Sulfate	1760	OR	1	0.61	60.0	mg/Kg		11/05/24 11:29	9056A
Orthophosphate as P	191		1	0.24	20.0	mg/Kg		11/05/24 11:29	9056A

Comments:

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

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	10/21/24 10:00
Project:	NJ Soil PT	Date Received:	10/23/24
Client Sample ID:	PT-AN-SOILDL	SDG No.:	P4495
Lab Sample ID:	P4495-01DL	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Chloride	659	D	5	0.48	60.0	mg/Kg		11/05/24 11:51	9056A
Fluoride	121	D	5	1.90	40.0	mg/Kg		11/05/24 11:51	9056A
Nitrate	267	D	5	0.45	50.0	mg/Kg		11/05/24 11:51	9056A
Sulfate	1650	D	5	3.10	300	mg/Kg		11/05/24 11:51	9056A

Comments:

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LOQ = Limit of Quantitation
MDL = Method Detection Limit
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H = Sample Analysis Out Of Hold Time
J = Estimated Value
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E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	10/21/24 10:00
Project:	NJ Soil PT	Date Received:	10/23/24
Client Sample ID:	PT-CORR-SOIL	SDG No.:	P4495
Lab Sample ID:	P4495-02	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Corrosivity	7.50		1	0	0	pH		11/06/24 16:33	9045D

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
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N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	10/21/24 10:00
Project:	NJ Soil PT	Date Received:	10/23/24
Client Sample ID:	PT-CN-SOIL	SDG No.:	P4495
Lab Sample ID:	P4495-03	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Cyanide	119	OR	1	0.044	0.25	mg/Kg	11/12/24 09:00	11/12/24 15:46	9012B

Comments:

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

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	10/21/24 10:00
Project:	NJ Soil PT	Date Received:	10/23/24
Client Sample ID:	PT-CN-SOILDL	SDG No.:	P4495
Lab Sample ID:	P4495-03DL	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Cyanide	133	D	10	0.44	2.50	mg/Kg	11/12/24 09:00	11/12/24 16:01	9012B

Comments:

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

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	10/21/24 10:00
Project:	NJ Soil PT	Date Received:	10/23/24
Client Sample ID:	PT-CN-SOIL	SDG No.:	P4495
Lab Sample ID:	P4495-04	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Cyanide	120	OR	1	0.057	0.25	mg/Kg	11/12/24 09:00	11/12/24 17:15	9014

Comments:

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

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	10/21/24 10:00
Project:	NJ Soil PT	Date Received:	10/23/24
Client Sample ID:	PT-CN-SOILDL	SDG No.:	P4495
Lab Sample ID:	P4495-04DL	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Cyanide	134	D	10	0.57	2.50	mg/Kg	11/12/24 09:00	11/12/24 17:15	9014

Comments:

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

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Fax : 908 789 8922

Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	10/21/24 10:00
Project:	NJ Soil PT	Date Received:	10/23/24
Client Sample ID:	PT-FP-SOIL	SDG No.:	P4495
Lab Sample ID:	P4495-05	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
Flash Point	113		1	0	0	o F		11/06/24 09:05	1010B

Comments: Other method reference for flash point : Pensky-Martens Closed Cup Flash Point ASTM D 93 - IP 34

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

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	10/21/24 10:00
Project:	NJ Soil PT	Date Received:	10/23/24
Client Sample ID:	PT-CR6-SOIL	SDG No.:	P4495
Lab Sample ID:	P4495-06	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Hexavalent Chromium	41.0	OR	1	0.079	0.40	mg/Kg	11/21/24 10:00	11/21/24 14:04	7196A

Comments:

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

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	10/21/24 10:00
Project:	NJ Soil PT	Date Received:	10/23/24
Client Sample ID:	PT-CR6-SOILDL	SDG No.:	P4495
Lab Sample ID:	P4495-06DL	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Hexavalent Chromium	34.0	D	2	0.16	0.80	mg/Kg	11/21/24 10:00	11/21/24 14:25	7196A

Comments:

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

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	10/21/24 10:00
Project:	NJ Soil PT	Date Received:	10/23/24
Client Sample ID:	PT-NUT-SOIL	SDG No.:	P4495
Lab Sample ID:	P4495-07	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Ammonia as N	1360	OR	1	0.90	5.00	mg/Kg	11/04/24 10:10	11/05/24 11:01	SM 4500-NH3 B plus G-11
Phosphorus, Total	167	OR	1	0.24	2.50	mg/Kg	11/13/24 08:30	11/13/24 11:07	365.3
TKN	1690	OR	1	9.40	25.0	mg/Kg	11/05/24 14:20	11/06/24 10:21	SM4500-N Org C-11 plus NH3 B plus G-11
TOC	15900	OR	1	19.8	250	mg/Kg		10/30/24 10:51	9060A

Comments:

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

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	10/21/24 10:00
Project:	NJ Soil PT	Date Received:	10/23/24
Client Sample ID:	PT-NUT-SOILDL	SDG No.:	P4495
Lab Sample ID:	P4495-07DL	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Ammonia as N	2180	D	40	36.0	200	mg/Kg	11/04/24 10:10	11/05/24 12:29	SM 4500-NH3 B plus G-11
Phosphorus, Total	2640	D	100	24.0	250	mg/Kg	11/13/24 08:30	11/13/24 11:07	365.3
TKN	3370	D	10	94.0	250	mg/Kg	11/05/24 14:20	11/06/24 11:04	SM4500-N Org C-11 plus NH3 B plus G-11

Comments:

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

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	10/21/24 10:00
Project:	NJ Soil PT	Date Received:	10/23/24
Client Sample ID:	PT-NUT-SOIL	SDG No.:	P4495
Lab Sample ID:	P4495-08	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
TOC	15900	OR	1	8.00	250	mg/Kg		10/30/24 10:51	Lloyd Kahn

Comments:

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
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E = Indicates the reported value is estimated because of the presence of interference.
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N =Spiked sample recovery not within control limits

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	10/21/24 10:00
Project:	NJ Soil PT	Date Received:	10/23/24
Client Sample ID:	PT-OGR-SOIL	SDG No.:	P4495
Lab Sample ID:	P4495-09	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Oil and Grease	1290		1	3.25	25.0	mg/Kg		11/08/24 09:30	SW9071B

Comments:

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

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	10/21/24 10:00
Project:	NJ Soil PT	Date Received:	10/23/24
Client Sample ID:	PT-SOL-SOIL	SDG No.:	P4495
Lab Sample ID:	P4495-24	Matrix:	SOIL
		% Solid:	75.7

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units	Prep Date	Date Ana.	Ana Met.
TS	75.9		1	1.00	5.00	%		10/23/24 11:00	SM 2540 B-15

Comments:

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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

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Report of Analysis

Client:	Chemtech Consulting Group	Date Collected:	10/21/24 10:00
Project:	NJ Soil PT	Date Received:	10/23/24
Client Sample ID:	PT-NO2-SOIL	SDG No.:	P4495
Lab Sample ID:	P4495-25	Matrix:	SOIL
		% Solid:	100

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Nitrite	149		1	0.19	12.0	mg/Kg		11/05/24 11:08	9056A

Comments:

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

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Initial and Continuing Calibration Verification

Client: Chemtech Consulting Group **SDG No.:** P4495

Project: NJ Soil PT **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

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Initial and Continuing Calibration Verification

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**RunNo.:**	LB133228

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

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Initial and Continuing Calibration Verification

Client: Chemtech Consulting Group **SDG No.:** P4495

Project: NJ Soil PT **RunNo.:** LB133290

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1						
Bromide	mg/L	10	10	100	90-110	10/16/2024
Chloride	mg/L	3	3	100	90-110	10/16/2024
Fluoride	mg/L	2	2	100	90-110	10/16/2024
Nitrite	mg/L	3	3	100	90-110	10/16/2024
Nitrate	mg/L	2.5	2.5	100	90-110	10/16/2024
Sulfate	mg/L	14.9	15	99	90-110	10/16/2024
Orthophosphate as P	mg/L	4.8	5	96	90-110	10/16/2024
Sample ID: CCV1						
Bromide	mg/L	10.4	10	104	90-110	11/05/2024
Chloride	mg/L	3.1	3	103	90-110	11/05/2024
Fluoride	mg/L	2.1	2	105	90-110	11/05/2024
Nitrite	mg/L	3.1	3	103	90-110	11/05/2024
Nitrate	mg/L	2.6	2.5	104	90-110	11/05/2024
Sulfate	mg/L	15.3	15	102	90-110	11/05/2024
Orthophosphate as P	mg/L	5.1	5	102	90-110	11/05/2024
Sample ID: CCV2						
Bromide	mg/L	10.4	10	104	90-110	11/05/2024
Chloride	mg/L	3.1	3	103	90-110	11/05/2024
Fluoride	mg/L	2	2	100	90-110	11/05/2024
Nitrite	mg/L	3.1	3	103	90-110	11/05/2024
Nitrate	mg/L	2.6	2.5	104	90-110	11/05/2024
Sulfate	mg/L	15.4	15	103	90-110	11/05/2024
Orthophosphate as P	mg/L	5.1	5	102	90-110	11/05/2024
Sample ID: CCV3						
Bromide	mg/L	10.4	10	104	90-110	11/05/2024
Chloride	mg/L	3.1	3	103	90-110	11/05/2024
Fluoride	mg/L	2.1	2	105	90-110	11/05/2024
Nitrite	mg/L	3.1	3	103	90-110	11/05/2024
Nitrate	mg/L	2.6	2.5	104	90-110	11/05/2024
Sulfate	mg/L	15.4	15	103	90-110	11/05/2024
Orthophosphate as P	mg/L	5.1	5	102	90-110	11/05/2024

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Initial and Continuing Calibration Verification

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**RunNo.:**	LB133302

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: **ICV1**						
Ammonia as N	mg/L	1	1	100	90-110	11/05/2024
Sample ID: **CCV1**						
Ammonia as N	mg/L	1	1	100	90-110	11/05/2024
Sample ID: **CCV2**						
Ammonia as N	mg/L	1	1	100	90-110	11/05/2024
Sample ID: **CCV3**						
Ammonia as N	mg/L	1	1	100	90-110	11/05/2024
Sample ID: **CCV4**						
Ammonia as N	mg/L	1	1	100	90-110	11/05/2024

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Initial and Continuing Calibration Verification

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**RunNo.:**	LB133312

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	**ICV1**						
TKN		mg/L	4.8	5	96	90-110	11/06/2024
Sample ID:	**CCV1**						
TKN		mg/L	5.3	5	106	90-110	11/06/2024
Sample ID:	**CCV2**						
TKN		mg/L	5.1	5	102	90-110	11/06/2024
Sample ID:	**CCV3**						
TKN		mg/L	5.2	5	104	90-110	11/06/2024

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Initial and Continuing Calibration Verification

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**RunNo.:**	LB133316

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV						
Flash Point	o F	82.1	81	101	78-84	11/06/2024

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Initial and Continuing Calibration Verification

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**RunNo.:**	LB133322

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: **ICV**						
Corrosivity	pH	7.02	7	100	90-110	11/06/2024
Sample ID: **CCV1**						
Corrosivity	pH	2.01	2.00	101	90-110	11/06/2024
Sample ID: **CCV2**						
Corrosivity	pH	12.02	12.00	100	90-110	11/06/2024
Sample ID: **CCV3**						
Corrosivity	pH	2.01	2.00	101	90-110	11/06/2024

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Initial and Continuing Calibration Verification

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**RunNo.:**	LB133420

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV						
Phosphorus, Total	mg/L	0.515	0.50	103	90-110	11/13/2024
Sample ID: CCV1						
Phosphorus, Total	mg/L	0.511	0.50	102	90-110	11/13/2024
Sample ID: CCV2						
Phosphorus, Total	mg/L	0.511	0.50	102	90-110	11/13/2024

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Initial and Continuing Calibration Verification

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**RunNo.:**	LB133427

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	**ICV1**						
Cyanide		mg/L	0.094	0.099	95	90-110	11/12/2024
Sample ID:	**CCV1**						
Cyanide		mg/L	0.24	0.25	96	90-110	11/12/2024
Sample ID:	**CCV2**						
Cyanide		mg/L	0.25	0.25	100	90-110	11/12/2024

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Initial and Continuing Calibration Verification

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**RunNo.:**	LB133428

Analyte		Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID:	**ICV1**						
Cyanide		mg/L	0.094	0.099	95	90-110	11/12/2024
Sample ID:	**CCV1**						
Cyanide		mg/L	0.24	0.25	96	90-110	11/12/2024
Sample ID:	**CCV2**						
Cyanide		mg/L	0.25	0.25	100	90-110	11/12/2024

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Initial and Continuing Calibration Verification

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**RunNo.:**	LB133555

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV						
Hexavalent Chromium	mg/L	0.501	0.5	100	90-110	11/21/2024
Sample ID: CCV1						
Hexavalent Chromium	mg/L	0.503	0.5	101	90-110	11/21/2024
Sample ID: CCV2						
Hexavalent Chromium	mg/L	0.500	0.5	100	90-110	11/21/2024
Sample ID: CCV3						
Hexavalent Chromium	mg/L	0.499	0.5	100	90-110	11/21/2024
Sample ID: CCV4						
Hexavalent Chromium	mg/L	0.501	0.5	100	90-110	11/21/2024

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Initial and Continuing Calibration Blank Summary

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**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

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Initial and Continuing Calibration Blank Summary

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**RunNo.:**	LB133228

Analyte		Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID:	ICB1							
TOC		mg/L	< 125.0000	125.0000	U	22.3	250	08/07/2024
Sample ID:	CCB1							
TOC		mg/L	< 125.0000	125.0000	U	22.3	250	10/30/2024
Sample ID:	CCB2							
TOC		mg/L	< 125.0000	125.0000	U	22.3	250	10/30/2024

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Initial and Continuing Calibration Blank Summary

Client: Chemtech Consulting Group **SDG No.:** P4495

Project: NJ Soil PT **RunNo.:** LB133290

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	10/16/2024
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	10/16/2024
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	10/16/2024
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	10/16/2024
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	10/16/2024
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	10/16/2024
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	10/16/2024
Sample ID: CCB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	11/05/2024
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/05/2024
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	11/05/2024
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/05/2024
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	11/05/2024
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	11/05/2024
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	11/05/2024
Sample ID: CCB2							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	11/05/2024
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/05/2024
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	11/05/2024
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/05/2024
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	11/05/2024
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	11/05/2024
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	11/05/2024
Sample ID: CCB3							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	11/05/2024
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/05/2024
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	11/05/2024
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/05/2024
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	11/05/2024
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	11/05/2024
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	11/05/2024

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Initial and Continuing Calibration Blank Summary

Client: Chemtech Consulting Group **SDG No.:** P4495

Project: NJ Soil PT **RunNo.:** LB133302

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB1							
Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	11/05/2024
Sample ID: CCB1							
Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	11/05/2024
Sample ID: CCB2							
Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	11/05/2024
Sample ID: CCB3							
Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	11/05/2024
Sample ID: CCB4							
Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	11/05/2024

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Initial and Continuing Calibration Blank Summary

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**RunNo.:**	LB133312

Analyte		Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID:	ICB1							
TKN		mg/L	< 0.2500	0.2500	U	0.18	0.5	11/06/2024
Sample ID:	CCB1							
TKN		mg/L	< 0.2500	0.2500	U	0.18	0.5	11/06/2024
Sample ID:	CCB2							
TKN		mg/L	< 0.2500	0.2500	U	0.18	0.5	11/06/2024
Sample ID:	CCB3							
TKN		mg/L	< 0.2500	0.2500	U	0.18	0.5	11/06/2024

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Initial and Continuing Calibration Blank Summary

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**RunNo.:**	LB133420

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB							
Phosphorus, Total	mg/L	< 0.0250	0.0250	U	0.0047	0.05	11/13/2024
Sample ID: CCB1							
Phosphorus, Total	mg/L	< 0.0250	0.0250	U	0.0047	0.05	11/13/2024
Sample ID: CCB2							
Phosphorus, Total	mg/L	< 0.0250	0.0250	U	0.0047	0.05	11/13/2024

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Initial and Continuing Calibration Blank Summary

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**RunNo.:**	LB133427

Analyte		Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID:	ICB1							
Cyanide		mg/L	< 0.0025	0.0025	U	0.00099	0.005	11/12/2024
Sample ID:	CCB1							
Cyanide		mg/L	< 0.0025	0.0025	U	0.00099	0.005	11/12/2024
Sample ID:	CCB2							
Cyanide		mg/L	< 0.0025	0.0025	U	0.00099	0.005	11/12/2024

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Initial and Continuing Calibration Blank Summary

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**RunNo.:**	LB133428

Analyte		Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID:	ICB1							
Cyanide		mg/L	< 0.0025	0.0025	U	0.0010	0.005	11/12/2024
Sample ID:	CCB1							
Cyanide		mg/L	< 0.0025	0.0025	U	0.0010	0.005	11/12/2024
Sample ID:	CCB2							
Cyanide		mg/L	< 0.0025	0.0025	U	0.0010	0.005	11/12/2024

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Initial and Continuing Calibration Blank Summary

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**RunNo.:**	LB133555

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: ICB							
Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0027	0.01	11/21/2024
Sample ID: CCB1							
Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0027	0.01	11/21/2024
Sample ID: CCB2							
Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0027	0.01	11/21/2024
Sample ID: CCB3							
Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0027	0.01	11/21/2024
Sample ID: CCB4							
Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0027	0.01	11/21/2024

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Preparation Blank Summary

Client: Chemtech Consulting Group **SDG No.:** P4495

Project: NJ Soil PT

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB133077BL							
TS	%	< 2.5000	2.5000	U	1	5	10/23/2024
Sample ID: LB133199BLS							
TOC	mg/Kg	18.4	125.0000	J	8	250	10/30/2024
Sample ID: LB133228BLS							
TOC	mg/Kg	< 125.0000	125.0000	U	19.8	250	10/30/2024
Sample ID: LB133290BLS							
Bromide	mg/Kg	< 20.0000	20.0000	U	0.49	40	11/05/2024
Chloride	mg/Kg	< 6.0000	6.0000	U	0.096	12	11/05/2024
Fluoride	mg/Kg	< 4.0000	4.0000	U	0.38	8	11/05/2024
Nitrite	mg/Kg	< 6.0000	6.0000	U	0.19	12	11/05/2024
Nitrate	mg/Kg	< 5.0000	5.0000	U	0.089	10	11/05/2024
Sulfate	mg/Kg	< 30.0000	30.0000	U	0.61	60	11/05/2024
Orthophosphate as P	mg/Kg	< 10.0000	10.0000	U	0.24	20	11/05/2024
Sample ID: LB133347BL							
Oil and Grease	mg/Kg	4.99	12.5000	J	3.25	25	11/08/2024
Sample ID: PB164458BL							
Ammonia as N	mg/Kg	< 2.5000	2.5000	U	0.9	5	11/05/2024
Sample ID: PB164710BL							
TKN	mg/Kg	< 12.5000	12.5000	U	9.4	25	11/06/2024
Sample ID: PB164718BL							
Cyanide	mg/Kg	< 0.1250	0.1250	U	0.044	0.25	11/12/2024
Sample ID: PB164719BL							
Cyanide	mg/Kg	< 0.1250	0.1250	U	0.057	0.25	11/12/2024
Sample ID: PB164936BL							
Phosphorus, Total	mg/Kg	< 1.2500	1.2500	U	0.24	2.5	11/13/2024
Sample ID: PB165110BL							
Hexavalent Chromium	mg/Kg	< 0.2000	0.2000	U	0.079	0.4	11/21/2024

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Matrix Spike Summary

Client: Chemtech Consulting Group
SDG No.: P4495
Project: NJ Soil PT
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

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Matrix Spike Summary

Client: Chemtech Consulting Group
SDG No.: P4495
Project: NJ Soil PT
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

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Matrix Spike Summary

Client: Chemtech Consulting Group
SDG No.: P4495
Project: NJ Soil PT
Sample ID: P4675-01
Client ID: COMP-1MS
Percent Solids for Spike Sample: 77.9

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Bromide	mg/Kg	80-120	259		0.63	U	260	1	100		11/05/2024
Ammonia as N	mg/Kg	75-125	67.5		1.90	J	62.3	1	105		11/05/2024
Chloride	mg/Kg	80-120	126		36.5		76.7	1	117		11/05/2024
Fluoride	mg/Kg	80-120	49.3		6.10	J	51.1	1	85		11/05/2024
Nitrite	mg/Kg	80-120	77.6		0.24	U	76.7	1	101		11/05/2024
Nitrate	mg/Kg	80-120	65.3		0.11	U	63.9	1	102		11/05/2024
Sulfate	mg/Kg	80-120	443		66.8	J	380	1	99		11/05/2024
Orthophosphate as P	mg/Kg	80-120	87.1		0.31	U	130	1	67	*	11/05/2024

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Matrix Spike Summary

Client: Chemtech Consulting Group
SDG No.: P4495
Project: NJ Soil PT
Sample ID: P4675-01
Client ID: COMP-1MSD
Percent Solids for Spike Sample: 77.9

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Bromide	mg/Kg	80-120	257		0.63	U	250	1	103		11/05/2024
Ammonia as N	mg/Kg	75-125	62.9		1.90	J	62.9	1	97		11/05/2024
Chloride	mg/Kg	80-120	126		36.5		76.3	1	117		11/05/2024
Fluoride	mg/Kg	80-120	48.6		6.10	J	50.8	1	84		11/05/2024
Nitrite	mg/Kg	80-120	77.2		0.24	U	76.3	1	101		11/05/2024
Nitrate	mg/Kg	80-120	65.0		0.11	U	63.5	1	102		11/05/2024
Sulfate	mg/Kg	80-120	441		66.8	J	380	1	98		11/05/2024
Orthophosphate as P	mg/Kg	80-120	85.7		0.31	U	130	1	66	*	11/05/2024

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Matrix Spike Summary

Client: Chemtech Consulting Group
SDG No.: P4495
Project: NJ Soil PT
Sample ID: P4722-13
Client ID: WC-3(0-6)MS
Percent Solids for Spike Sample: 86.6

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Oil and Grease	mg/Kg	75-125	2140		2610		115	1	-409	*	11/08/2024

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Matrix Spike Summary

Client: Chemtech Consulting Group
SDG No.: P4495
Project: NJ Soil PT
Sample ID: P4722-13
Client ID: WC-3(0-6)MSD
Percent Solids for Spike Sample: 86.6

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Oil and Grease	mg/Kg	75-125	2160		2610		115	1	-393	*	11/08/2024

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Matrix Spike Summary

Client: Chemtech Consulting Group
SDG No.: P4495
Project: NJ Soil PT
Sample ID: P4910-01
Client ID: MH-COTTAGEMS
Percent Solids for Spike Sample: 87.8

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	75-125	1460		0.090	U	1460	40	100		11/21/2024

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Matrix Spike Summary

Client: Chemtech Consulting Group
SDG No.: P4495
Project: NJ Soil PT
Sample ID: P4910-01
Client ID: MH-COTTAGEMS
Percent Solids for Spike Sample: 87.8

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	85-115	45.0		0.090	U	45.6	2	99		11/21/2024

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Matrix Spike Summary

Client: Chemtech Consulting Group
SDG No.: P4495
Project: NJ Soil PT
Sample ID: P4910-01
Client ID: MH-COTTAGEMS
Percent Solids for Spike Sample: 87.8

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	75-125	37.6		0.090	U	45.6	2	82		11/21/2024

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Duplicate Sample Summary

Client: Chemtech Consulting Group
SDG No.: P4495
Project: NJ Soil PT
Sample ID: P4605-02
Client ID: TAPIAL2-SED01-102824-00-T2MSD
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

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Duplicate Sample Summary

Client: Chemtech Consulting Group
SDG No.: P4495
Project: NJ Soil PT
Sample ID: P4675-01
Client ID: COMP-1DUP
Percent Solids for Spike Sample: 77.9

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Ammonia as N	mg/Kg	+/-20	1.90	J	1.10	U	1	200	*	11/05/2024

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Duplicate Sample Summary

Client: Chemtech Consulting Group
SDG No.: P4495
Project: NJ Soil PT
Sample ID: P4675-01
Client ID: COMP-1MSD
Percent Solids for Spike Sample: 77.9

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Chloride	mg/Kg	+/-15	126		126		1	0		11/05/2024
Nitrate	mg/Kg	+/-15	65.3		65.0		1	0		11/05/2024
Sulfate	mg/Kg	+/-15	443		441		1	0		11/05/2024
Bromide	mg/Kg	+/-15	259		257		1	1		11/05/2024
Fluoride	mg/Kg	+/-15	49.3		48.6		1	1		11/05/2024
Nitrite	mg/Kg	+/-15	77.6		77.2		1	1		11/05/2024
Orthophosphate as P	mg/Kg	+/-15	87.1		85.7		1	2		11/05/2024
Ammonia as N	mg/Kg	+/-20	67.5		62.9		1	7		11/05/2024

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Duplicate Sample Summary

Client: Chemtech Consulting Group
SDG No.: P4495
Project: NJ Soil PT
Sample ID: P4703-01
Client ID: S0-1DUP
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
Flash Point	o F	+/-2	>212.0		>212.0		1	0		11/06/2024

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Duplicate Sample Summary

Client: Chemtech Consulting Group
SDG No.: P4495
Project: NJ Soil PT
Sample ID: P4722-13
Client ID: WC-3(0-6)DUP
Percent Solids for Spike Sample: 86.6

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Oil and Grease	mg/Kg	+/-20	2610		2600		1	0.49		11/08/2024

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Duplicate Sample Summary

Client: Chemtech Consulting Group
SDG No.: P4495
Project: NJ Soil PT
Sample ID: P4722-13
Client ID: WC-3(0-6)MSD
Percent Solids for Spike Sample: 86.6

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Oil and Grease	mg/Kg	+/-20	2140		2160		1	0.85		11/08/2024

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Duplicate Sample Summary

Client: Chemtech Consulting Group
SDG No.: P4495
Project: NJ Soil PT
Sample ID: P4739-16
Client ID: TP-11DUP
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
Corrosivity	pH	+/-20	10.1		10.1		1	0.1		11/06/2024

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Duplicate Sample Summary

Client: Chemtech Consulting Group
SDG No.: P4495
Project: NJ Soil PT
Sample ID: P4910-01
Client ID: MH-COTTAGEDUP
Percent Solids for Spike Sample: 87.8

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/ AD	Qual	Analysis Date
Hexavalent Chromium	mg/Kg	+/-20	0.090	U	0.090	U	1	0		11/21/2024

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Laboratory Control Sample Summary

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**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

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Laboratory Control Sample Summary

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**Run No.:**	LB133228

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID LB133228BSS								
TOC	mg/Kg	1000	1010		101	1	90-110	10/30/2024

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Laboratory Control Sample Summary

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**Run No.:**	LB133290

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID LB133290BSS								
Bromide	mg/Kg	200	208		104	1	90-110	11/05/2024
Chloride	mg/Kg	60	62.2		104	1	90-110	11/05/2024
Fluoride	mg/Kg	40	41.4		104	1	90-110	11/05/2024
Nitrite	mg/Kg	60	62.2		104	1	90-110	11/05/2024
Nitrate	mg/Kg	50	52.1		104	1	90-110	11/05/2024
Sulfate	mg/Kg	300	306		102	1	90-110	11/05/2024
Orthophosphate as P	mg/Kg	100	103		103	1	90-110	11/05/2024

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Laboratory Control Sample Summary

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**Run No.:**	LB133347

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID LB133347BS								
Oil and Grease	mg/Kg	100	94.8		95	1	80-120	11/08/2024

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Laboratory Control Sample Summary

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**Run No.:**	LB133302

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID PB164458BS								
Ammonia as N	mg/Kg	50	51.9		104	1	90-110	11/05/2024

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Laboratory Control Sample Summary

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**Run No.:**	LB133312

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID **PB164710BS**								
TKN	mg/Kg	250	254		102	1	90-110	11/06/2024

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Laboratory Control Sample Summary

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**Run No.:**	LB133427

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID **PB164718BS**								
Cyanide	mg/Kg	5	4.70		94	1	85-115	11/12/2024

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

Laboratory Control Sample Summary

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**Run No.:**	LB133428

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID **PB164719BS**								
Cyanide	mg/Kg	5	4.90		98	1	85-115	11/12/2024

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Fax : 908 789 8922

Laboratory Control Sample Summary

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**Run No.:**	LB133420

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID PB164936BS								
Phosphorus, Total	**mg/Kg**	**25.0**	**25.4**		**102**	**1**	**90-110**	**11/13/2024**

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Fax : 908 789 8922

Laboratory Control Sample Summary

Client:	Chemtech Consulting Group	**SDG No.:**	P4495
Project:	NJ Soil PT	**Run No.:**	LB133555

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID PB165110BS								
Hexavalent Chromium	mg/Kg	20	20.0		100	1	84-110	11/21/2024

RAW DATA

TOTAL SOLIDS - SM2540B

SUPERVISOR: Iwona
ANALYST: jignesh
Date: 10/23/2024
Run Number: LB133077
BalanceID: WC SC-6
OvenID: WC OVEN-1
ThermometerID: WET OVEN#1

TEMP1 IN:	103 °C	10/23/2024 11:00	**TEMP1 OUT:**	103 °C	10/23/2024 12:00
TEMP2 IN:	103 °C	10/23/2024 12:30	**TEMP2 OUT:**	103 °C	10/23/2024 13:30
TEMP3 IN:	104 °C	10/23/2024 15:30	**TEMP3 OUT:**	104 °C	10/24/2024 07:30
TEMP4 IN:	103 °C	10/24/2024 08:00	**TEMP4 OUT:**	103 °C	10/24/2024 09:35

Dish #	Lab ID	Client ID	Empty Dish Weight (g)	Final Empty Dish Weight (g)	Dish + Sample Weight (g)	Orignal weight 1st Dish+Sample weight after Drying @103-@105°C (g)	Constant weight 2nd Dish+Sample weight after Drying @103-@105°C (g)	Final Constant weight Final Dish+Sample weight after Drying @103-@105°C (g)	Weight (g)	Result %
1	LB133077BL	LB133077BL	89.6637	89.6637	89.6637	89.6637	89.6637	89.6637	0.0000	0
2	P4495-24	PT-SOL-SOIL	94.5830	94.5830	117.3522	111.8735	111.8735	111.8740	17.2905	75.9

A = Final Empty Dish Weight (g)
B = Dish + Sample Weight (g)
C = Final Dish+Sample weight after Drying @103-@105°C (g)

Result % = (C - A) * 100 / (B - A)

LB 133077

WORKLIST(Hardcopy Internal Chain)

WorkList Name : ts s p4495 **WorkList ID :** 184711 **Department :** Wet-Chemistry **Date :** 10-23-2024 14:55:55

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4495-24	PT-SOL-SOIL	Solid	TS	Cool 4 deg C	CHEM02	QA Of	10/21/2024	SM2540 B

Date/Time 10/23/24 15:00

Raw Sample Received by: JD WC)

Raw Sample Relinquished by: SJ (QAO)

Date/Time 10/23/24 16:20

Raw Sample Received by: NR

Raw Sample Relinquished by: NR

Reviewed By:Iwona On:10/25/2024 9:30:54 AM Inst Id :WC SC-3 LB :LB133077

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

Sample Results Report Print Date/Time: 2024/10/30 16:40:13

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	..

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

```
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

Sample Results Report Print Date/Time: 2024/10/30 16:40:13

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	

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

Boat Sampler	...Sample	..	..2024/10/30 14:03	..
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

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

Detailed Analysis Report Print Date/Time: 2024/10/30 16:50:27

Sample ID: CCV1 Mode: TOC
Method: Boat Sampler Filename: 10300856
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 08:58
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	991.3975	39.6559	3102862	-1.287	-0.289	71

Sample ID: CCV1 Mode: TOC
Method: Boat Sampler Filename: 10300859
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:01
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	991.5751	39.6630	3103418	-1.181	-0.184	69

Sample ID: CCV1 Mode: TOC
Method: Boat Sampler Filename: 10300901
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:03
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	997.3158	39.8926	3121385	-1.208	-0.211	69

Sample ID: CCV1 Mode: TOC
Method: Boat Sampler Filename: 10300904
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:05
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1030.5341	41.2214	3225351	-1.112	-0.115	70

Sample ID: CCB1 Mode: TOC
Method: Boat Sampler Filename: 10300913
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:15
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.8991	0.4360	34112	-1.509	-0.517	35

Sample ID: CCB1 Mode: TOC
Method: Boat Sampler Filename: 10300917
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:20
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	8.5703	0.3428	26823	-1.528	-1.628	120

Last Message: Low Sample Detected

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

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

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	11.7154	0.4686	36667	-1.918	-1.962	120

Last Message: Low Sample Detected

Sample ID: LB133199BSS
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ
Mode: TOC
Filename: 10300947
Timestamp: 2024/10/30 09:50
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
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ
Mode: TOC
Filename: 10300951
Timestamp: 2024/10/30 09:53
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
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ
Mode: TOC
Filename: 10300954
Timestamp: 2024/10/30 09:56
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
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ
Mode: TOC
Filename: 10301000
Timestamp: 2024/10/30 10:02
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
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ
Mode: TOC
Filename: 10301004
Timestamp: 2024/10/30 10:05
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
Method: Boat Sampler
Cal. Curve: TOC SOIL
Mode: TOC
Filename: 10301006
Timestamp: 2024/10/30 10:07

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

Operator ID: NF IZ Sample Type: Sample

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 Mode: TOC
Method: Boat Sampler Filename: 10301008
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 10:09
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301010
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 10:11
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301026
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 10:29
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301036
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 10:39
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301044
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 10:47
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301048
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 10:51
Operator ID: NF IZ 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	17083.5605	92.2512	7218165	-1.518	-0.520	139

Sample ID: CCV2 Mode: TOC
Method: Boat Sampler Filename: 10301100
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:02
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301103
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:05
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301105
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:07
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301109
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:10
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301112
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:14
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301115
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:18
Operator ID: NF IZ Sample Type: Sample

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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 Mode: TOC
Method: Boat Sampler Filename: 10301118
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:21
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301122
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:24
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301127
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:29
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301133
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:34
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301136
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:38
Operator ID: NF IZ 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

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

Sample ID: P4605-01 Mode: TOC
Method: Boat Sampler Filename: 10301139
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:40
Operator ID: NF IZ Sample Type: Sample

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 Mode: TOC
Method: Boat Sampler Filename: 10301143
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:45
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301147
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:48
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301150
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:51
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301152
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:54
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301158
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 12:00
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301202

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

Cal. Curve: TOC SOIL Timestamp: 2024/10/30 12:03
Operator ID: NF IZ Sample Type: Sample

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 Mode: TOC
Method: Boat Sampler Filename: 10301206
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 12:08
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301214
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 12:16
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301220
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 12:22
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301223
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 12:25
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301228
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 12:30
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301232
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 12:34
Operator ID: NF IZ Sample Type: Sample

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LB :LB133199

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 Mode: TOC
Method: Boat Sampler Filename: 10301237
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 12:39
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301241
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 12:43
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301245
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 12:47
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301248
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 12:50
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301252
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 12:53
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301254
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 12:56
Operator ID: NF IZ Sample Type: Sample

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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	4668.0747	24.2740	1899310	-1.964	-0.968	66

Sample ID: P4605-04 Mode: TOC
Method: Boat Sampler Filename: 10301258
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 12:59
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301301
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 13:02
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301322
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 13:26
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301328
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 13:31
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301333
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 13:37
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301338
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 13:40
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time

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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	19600.5996	117.6036	9201852	-0.476	0.523	107

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

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

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

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	0.8162	0.0326	2555	-2.406	-2.551	120

Last Message: Low Sample Detected

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

Sample Results Report Print Date/Time: 2024/08/13 14:35:14

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	..

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

Sample Results Report Print Date/Time: 2024/08/13 14:35:14

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

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

Detailed Analysis Report Print Date/Time: 2024/08/13 14:35:45

Sample ID: BLANK Mode: TOC
Method: Boat Sampler Filename: 08070913
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 09:22
Operator ID: NF IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			32715	-1.821	-0.825	28
2			55473	-1.803	-0.813	36
3			37929	-1.819	-1.938	120
4			31907	-1.923	-1.965	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 39506 Std Dev: 10974 RSD: 27.78

Sample ID: 250mg/l Mode: TOC
Method: Boat Sampler Filename: 08070935
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 09:42
Operator ID: NF IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			928435	-2.115	-1.128	54
2			959832	-1.977	-0.980	53
3			916491	-1.980	-0.987	51
4			956518	-1.971	-0.972	58

<<<Statistics>>> Mean: 940319 Std Dev: 21230 RSD: 2.26

Sample ID: 500mg/l Mode: TOC
Method: Boat Sampler Filename: 08070944
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 09:51
Operator ID: NF IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			1823357	-2.186	-1.189	63
2			1859639	-1.995	-1.001	60
3			1934050	-1.963	-0.967	60
4			1875328	-1.941	-0.942	59

<<<Statistics>>> Mean: 1873094 Std Dev: 46099 RSD: 2.46

Sample ID: 1000mg/l Mode: TOC
Method: Boat Sampler Filename: 08071002
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 10:11
Operator ID: NF IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			3379516	-2.352	-1.353	82
2			3413813	-2.007	-1.009	74
3			3485447	-1.842	-0.842	74
4			3371508	-1.476	-0.479	65

<<<Statistics>>> Mean: 3412571 Std Dev: 51933 RSD: 1.52

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

Sample ID: 2000mg/l Mode: TOC
Method: Boat Sampler Filename: 08071012
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 10:23
Operator ID: NF IZ Sample Type: TOC Standard

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 Mode: TOC
Method: Boat Sampler Filename: 08071030
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 10:32
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 08071033
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 10:35
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 08071035
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 10:37
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 08071038
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 10:40
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 08071045
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 10:48
Operator ID: NF IZ 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

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

Last Message: Low Sample Detected

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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

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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

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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

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

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 Raw Data	X Expected ug C	Measured ug C	~~Message~~ Re	Date & 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

LB133199

WORKLIST(Hardcopy Internal Chain)

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
P4368-06	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: NFlwd
Raw Sample Relinquished by: NFlwd

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

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

Reviewed By:Iwona
On:11/5/2024 10:40:52 AM
Inst Id :Appolo-9000
LB :LB133228

Sample Results Report Print Date/Time: 2024/10/31 11:22:18

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	
LB133228BLS	10.6403			TOC	
LB133228BLS	14.2251	..	...	TOC	..
LB133228BLS	36.8427			TOC	
LB133228BLS	11.7154			TOC	
LB133228BSS	1055.5371	..	...	TOC	..
LB133228BSS	955.8657			TOC	
LB133228BSS	989.4545			TOC	
LB133228BSS	1025.9399	..	...	TOC	..
P4368-03	60.9355			TOC	
P4368-03	55.2651			TOC	
P4368-03	54.0817	..	...	TOC	..
P4368-03	52.5116			TOC	
P4495-07	14149.3828			TOC	
P4495-07	16667.2012	..	...	TOC	..
P4495-07	15767.5967			TOC	
P4495-07	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	

Reviewed By:Iwona
On:11/5/2024 10:40:52 AM
Inst Id :Appolo-9000
LB :LB133228

Sample Results Report Print Date/Time: 2024/10/31 11:22:18

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

Reviewed By:Iwona
On:11/5/2024 10:40:52 AM
Inst Id :Appolo-9000
LB :LB133228

Detailed Analysis Report Print Date/Time: 2024/10/31 11:22:27

Sample ID: CCV1 Mode: TOC
Method: Boat Sampler Filename: 10300856
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 08:58
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	991.3975	39.6559	3102862	-1.287	-0.289	71

Sample ID: CCV1 Mode: TOC
Method: Boat Sampler Filename: 10300859
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:01
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	991.5751	39.6630	3103418	-1.181	-0.184	69

Sample ID: CCV1 Mode: TOC
Method: Boat Sampler Filename: 10300901
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:03
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	997.3158	39.8926	3121385	-1.208	-0.211	69

Sample ID: CCV1 Mode: TOC
Method: Boat Sampler Filename: 10300904
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:05
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	1030.5341	41.2214	3225351	-1.112	-0.115	70

Sample ID: CCB1 Mode: TOC
Method: Boat Sampler Filename: 10300913
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:15
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	10.8991	0.4360	34112	-1.509	-0.517	35

Sample ID: CCB1 Mode: TOC
Method: Boat Sampler Filename: 10300917
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:20
Operator ID: NF IZ Sample Type: Sample

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1	8.5703	0.3428	26823	-1.528	-1.628	120

Last Message: Low Sample Detected

Reviewed By:Iwona
On:11/5/2024 10:40:52 AM
Inst Id :Appolo-9000
LB :LB133228

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: LB133228BLS 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: LB133228BLS 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: LB133228BLS 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: LB133228BLS Mode: TOC
Method: Boat Sampler Filename: 10300944
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 09:46
Operator ID: NF IZ Sample Type: Sample

Reviewed By:Iwona
On:11/5/2024 10:40:52 AM
Inst Id :Appolo-9000
LB :LB133228

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: LB133228BSS
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ
Mode: TOC
Filename: 10300947
Timestamp: 2024/10/30 09:50
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: LB133228BSS
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ
Mode: TOC
Filename: 10300951
Timestamp: 2024/10/30 09:53
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: LB133228BSS
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ
Mode: TOC
Filename: 10300954
Timestamp: 2024/10/30 09:56
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: LB133228BSS
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ
Mode: TOC
Filename: 10301000
Timestamp: 2024/10/30 10:02
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: P4368-03
Method: Boat Sampler
Cal. Curve: TOC SOIL
Operator ID: NF IZ
Mode: TOC
Filename: 10301004
Timestamp: 2024/10/30 10:05
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: P4368-03
Method: Boat Sampler
Cal. Curve: TOC SOIL
Mode: TOC
Filename: 10301006
Timestamp: 2024/10/30 10:07

Reviewed By:Iwona
On:11/5/2024 10:40:52 AM
Inst Id :Appolo-9000
LB :LB133228

Operator ID: NF IZ Sample Type: Sample

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: P4368-03 Mode: TOC
Method: Boat Sampler Filename: 10301008
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 10:09
Operator ID: NF IZ 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: P4368-03 Mode: TOC
Method: Boat Sampler Filename: 10301010
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 10:11
Operator ID: NF IZ 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: P4495-07 Mode: TOC
Method: Boat Sampler Filename: 10301026
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 10:29
Operator ID: NF IZ 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: P4495-07 Mode: TOC
Method: Boat Sampler Filename: 10301036
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 10:39
Operator ID: NF IZ 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: P4495-07 Mode: TOC
Method: Boat Sampler Filename: 10301044
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 10:47
Operator ID: NF IZ 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: P4495-07 Mode: TOC
Method: Boat Sampler Filename: 10301048
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 10:51
Operator ID: NF IZ Sample Type: Sample

Reviewed By:Iwona
On:11/5/2024 10:40:52 AM
Inst Id :Appolo-9000
LB :LB133228

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 Mode: TOC
Method: Boat Sampler Filename: 10301100
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:02
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301103
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:05
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301105
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:07
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301109
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:10
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301112
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:14
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301115
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:18
Operator ID: NF IZ Sample Type: Sample

Reviewed By:Iwona
On:11/5/2024 10:40:52 AM
Inst Id :Appolo-9000
LB :LB133228

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 Mode: TOC
Method: Boat Sampler Filename: 10301118
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:21
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 10301122
Cal. Curve: TOC SOIL Timestamp: 2024/10/30 11:24
Operator ID: NF IZ 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

Reviewed By:Iwona
On:11/5/2024 10:40:52 AM
Inst Id :Appolo-9000
LB :LB133228

Sample Results Report Print Date/Time: 2024/08/13 14:35:14

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	..

Reviewed By:Iwona
On:11/5/2024 10:40:52 AM
Inst Id :Appolo-9000
LB :LB133228

Sample Results Report Print Date/Time: 2024/08/13 14:35:14

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

Reviewed By:Iwona
On:11/5/2024 10:40:52 AM
Inst Id :Appolo-9000
LB :LB133228

Detailed Analysis Report Print Date/Time: 2024/08/13 14:35:45

Sample ID: BLANK Mode: TOC
Method: Boat Sampler Filename: 08070913
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 09:22
Operator ID: NF IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			32715	-1.821	-0.825	28
2			55473	-1.803	-0.813	36
3			37929	-1.819	-1.938	120
4			31907	-1.923	-1.965	120

Last Message: Low Sample Detected
<<<Statistics>>> Mean: 39506 Std Dev: 10974 RSD: 27.78

Sample ID: 250mg/l Mode: TOC
Method: Boat Sampler Filename: 08070935
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 09:42
Operator ID: NF IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			928435	-2.115	-1.128	54
2			959832	-1.977	-0.980	53
3			916491	-1.980	-0.987	51
4			956518	-1.971	-0.972	58

<<<Statistics>>> Mean: 940319 Std Dev: 21230 RSD: 2.26

Sample ID: 500mg/l Mode: TOC
Method: Boat Sampler Filename: 08070944
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 09:51
Operator ID: NF IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			1823357	-2.186	-1.189	63
2			1859639	-1.995	-1.001	60
3			1934050	-1.963	-0.967	60
4			1875328	-1.941	-0.942	59

<<<Statistics>>> Mean: 1873094 Std Dev: 46099 RSD: 2.46

Sample ID: 1000mg/l Mode: TOC
Method: Boat Sampler Filename: 08071002
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 10:11
Operator ID: NF IZ Sample Type: TOC Standard

Rep #	ppm C	ug C	Raw Data	Beginning Baseline	Ending Baseline	Integration Time
1			3379516	-2.352	-1.353	82
2			3413813	-2.007	-1.009	74
3			3485447	-1.842	-0.842	74
4			3371508	-1.476	-0.479	65

<<<Statistics>>> Mean: 3412571 Std Dev: 51933 RSD: 1.52

Reviewed By:Iwona
On:11/5/2024 10:40:52 AM
Inst Id :Appolo-9000
LB :LB133228

Sample ID: 2000mg/l Mode: TOC
Method: Boat Sampler Filename: 08071012
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 10:23
Operator ID: NF IZ Sample Type: TOC Standard

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 Mode: TOC
Method: Boat Sampler Filename: 08071030
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 10:32
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 08071033
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 10:35
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 08071035
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 10:37
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 08071038
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 10:40
Operator ID: NF IZ 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 Mode: TOC
Method: Boat Sampler Filename: 08071045
Cal. Curve: TOC SOIL Timestamp: 2024/08/07 10:48
Operator ID: NF IZ 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

Reviewed By:Iwona
On:11/5/2024 10:40:52 AM
Inst Id :Appolo-9000
LB :LB133228

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

==========

Reviewed By:Iwona
On:11/5/2024 10:40:52 AM
Inst Id :Appolo-9000
LB :LB133228

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 Raw Data	X Expected ug C	Measured ug C	~~Message~~ Re	Date & 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

LB133228

WORKLIST(Hardcopy Internal Chain)

WorkList Name : TOC S- 10292024 **WorkList ID :** 186002 **Department :** Wet-Chemistry **Date :** 10-29-2024 15:04:47

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4495-07	PT-NUT-SOIL	Solid	TOC	Cool 4 deg C	CHEM02	QA Of	10/21/2024	9060A

Date/Time 10·30·2024 09:00
Raw Sample Received by: NF(WC)
Raw Sample Relinquished by: SJ (QAO)

Date/Time NA
Raw Sample Received by: v
Raw Sample Relinquished by: v

Reviewed By:lwona On:11/5/2024 10:40:52 AM Inst Id :Appolo-9000 LB :LB133228

Instrumer IC-1 Analyst : NF Method: 300.0 / 9056A

Ident	Con F-	Con CL-	Con NO2	Con BR-	Con NO3	Con HPO	Con SO4	Method name	date time	Initial wt/Final Vol	Analyst
STD1	0	0	0	0	0	0	0	IC1-101624	10/16/2024 10:55	10	NF/IZ
STD2	0.424	0.632	0.639	2.106	0.535	1.072	3.276	IC1-101624	10/16/2024 11:17	10	NF/IZ
STD3	0.796	1.206	1.205	4.013	1	2	6.052	IC1-101624	10/16/2024 11:38	10	NF/IZ
STD4	1.032	1.537	1.531	5.116	1.277	2.557	7.662	IC1-101624	10/16/2024 11:59	10	NF/IZ
STD5	1.966	2.927	2.921	9.77	2.439	4.871	14.51	IC1-101624	10/16/2024 12:21	10	NF/IZ
STD6	3.88	5.901	5.91	19.683	4.912	9.831	29.286	IC1-101624	10/16/2024 12:42	10	NF/IZ
STD7	5.102	7.598	7.593	25.312	6.337	12.67	37.714	IC1-101624	10/16/2024 13:04	10	NF/IZ
ICV	1.966	2.997	3	9.969	2.497	4.753	14.85	IC1-101624	10/16/2024 13:37	10	NF/IZ
ICB	0	0	0	0	0	0	0	IC1-101624	10/16/2024 13:59	10	NF/IZ
CCV	2.068	3.1	3.098	10.357	2.59	5.075	15.273	IC1-101624	11/5/2024 9:20	10	NF/IZ
CCB	0	0	0	0	0	0	0	IC1-101624	11/5/2024 9:42	10	NF/IZ
LB133290BLW	0	0	0	0	0	0	0	IC1-101624	11/5/2024 10:03	5.00g/100ML	NF/IZ
LB133290BSW	2.071	3.11	3.109	10.412	2.603	5.136	15.319	IC1-101624	11/5/2024 10:25	5.00g/100ML	NF/IZ
P4495-25	0	0	7.452	0	0	0	0	IC1-101624	11/5/2024 11:08	5.00g/100ML	NF/IZ
P4495-01	6.266	36.138	0	4.228	13.951	9.563	87.875	IC1-101624	11/5/2024 11:29	5.00g/100ML	NF/IZ
P4495-01DLX5	1.212	6.591	0	0.987	2.671	1.932	16.531	IC1-101624	11/5/2024 11:51	5.00g/100ML	NF/IZ
P4675-01	0.237	1.423	0	0	0	0	2.606	IC1-101624	11/5/2024 13:21	5.01g/100ML	NF/IZ
P4675-01MS	1.927	4.943	3.035	10.132	2.553	3.405	17.338	IC1-101624	11/5/2024 13:43	5.02g/100ML	NF/IZ
P4675-01MSD	1.91	4.952	3.037	10.116	2.558	3.37	17.358	IC1-101624	11/5/2024 14:04	5.05g/100ML	NF/IZ
P4675-02	0.426	4.711	0	0	0	0	1.266	IC1-101624	11/5/2024 14:26	5.04g/100ML	NF/IZ
P4675-03	0.309	1.187	0	0	0	0	2.966	IC1-101624	11/5/2024 14:47	5.02g/100ML	NF/IZ
CCV	2.049	3.117	3.12	10.398	2.608	5.147	15.431	IC1-101624	11/5/2024 15:09	10	NF/IZ
CCB	0	0	0	0	0	0	0	IC1-101624	11/5/2024 15:30	10	NF/IZ
P4675-04	0.276	0.134	0	0	0.087	0	0.922	IC1-101624	11/5/2024 15:52	5.04g/100ML	NF/IZ
P4675-05	0.188	0.168	0	0	0.088	0	1.606	IC1-101624	11/5/2024 16:13	5.04g/100ML	NF/IZ
P4675-06	0.319	1.063	0	0	0.1	0	1.551	IC1-101624	11/5/2024 16:35	5.02g/100ML	NF/IZ
CCV	2.077	3.121	3.116	10.424	2.61	5.131	15.359	IC1-101624	11/5/2024 16:56	10	NF/IZ
CCB	0	0	0	0	0	0	0	IC1-101624	11/5/2024 17:18	10	NF/IZ

Reviewed By:lwona
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

Clear table

Instrument ID: IC-2 Analyst : IZ Method: 300.0 / 9056A

ident	concentration F-	concentration CL-	concentration NO2	concentration BR-	concentration NO3	concentration HPO4	concentration SO4	file name	date time	Initial wt/ Final	Analyst
STD1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	IC1-101624	10/16/2024 10:55	10	NF/IZ
STD2	0.424	0.632	0.639	2.106	0.535	1.072	3.276	IC1-101624	10/16/2024 11:17	10	NF/IZ
STD3	0.796	1.206	1.205	4.013	1.000	2.000	6.052	IC1-101624	10/16/2024 11:38	10	NF/IZ
STD4	1.032	1.537	1.531	5.116	1.277	2.557	7.662	IC1-101624	10/16/2024 11:59	10	NF/IZ
STD5	1.966	2.927	2.921	9.77	2.439	4.871	14.51	IC1-101624	10/16/2024 12:21	10	NF/IZ
STD6	3.88	5.901	5.91	19.683	4.912	9.831	29.286	IC1-101624	10/16/2024 12:42	10	NF/IZ
STD7	5.102	7.598	7.593	25.312	6.337	12.67	37.714	IC1-101624	10/16/2024 13:04	10	NF/IZ

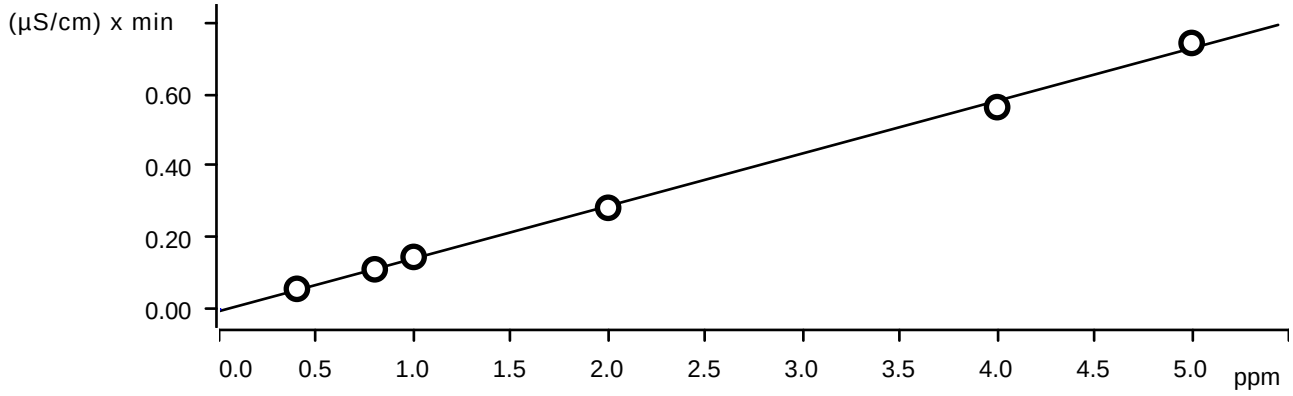
ident	True Value F-	True Value CL-	True Value NO2	True Value BR-	True Value NO3	True Value HPO4	True Value SO4
STD1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
STD2	0.4000	0.6000	0.6000	2.0000	0.5000	1.0000	3.0000
STD3	0.8000	1.2000	1.2000	4.0000	1.0000	2.0000	6.0000
STD4	1.0000	1.5000	1.5000	5.0000	1.2500	2.5000	7.5000
STD5	2.0000	3.0000	3.0000	10.0000	2.5000	5.0000	15.0000
STD6	4.0000	6.0000	6.0000	20.0000	5.0000	10.0000	30.0000
STD7	5.0000	7.5000	7.5000	25.0000	6.2500	12.5000	37.0000

ident	Relative Error F-	Relative Error CL-	Relative Error NO2	Relative Error BR-	Relative Error NO3	Relative Error HPO4	Relative Error SO4
STD1							
STD2	6.0000	5.3333	6.5000	5.3000	7.0000	7.2000	9.2000
STD3	-0.5000	0.5000	0.4167	0.3250	0.0000	0.0000	0.8667
STD4	3.2000	2.4667	2.0667	2.3200	2.1600	2.2800	2.1600
STD5	-1.7000	-2.4333	-2.6333	-2.3000	-2.4400	-2.5800	-3.2667
STD6	-3.0000	-1.6500	-1.5000	-1.5850	-1.7600	-1.6900	-2.3800
STD7	2.0400	1.3067	1.2400	1.2480	1.3920	1.3600	1.9297

Reviewed By:Iwona
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

Fluoride (Anions)



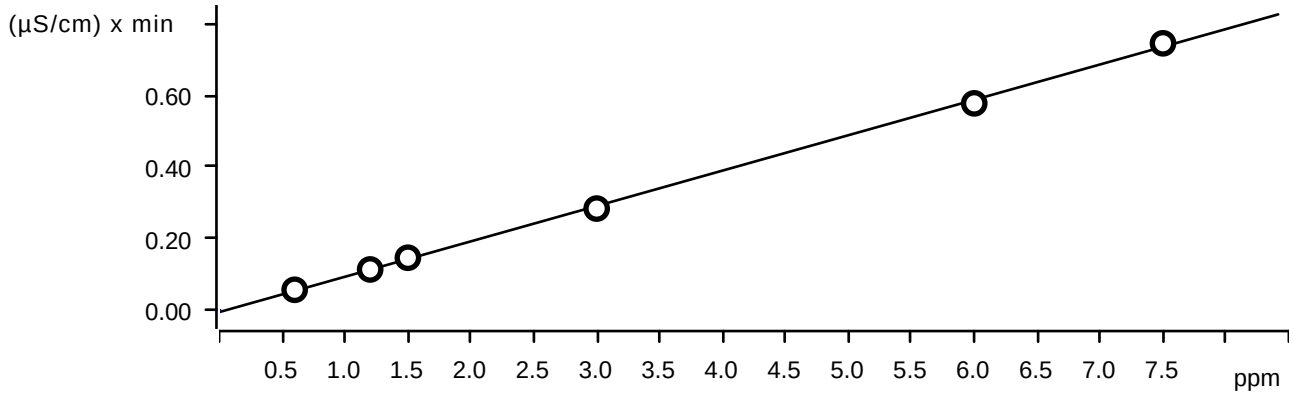
Function: . . . . . *A = - 5.06114E-3 + 0.0146570× Q*

Relative standard deviation . . . . . *3.824450 %*

Correlation coefficient *0.999229*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2024-10-16 10:55:46 UTC-4	used
Standard 2	1	0.400	10.0	1.0	1.0	0.057	STD2	2024-10-16 11:17:08 UTC-4	used
Standard 3	1	0.800	10.0	1.0	1.0	0.112	STD3	2024-10-16 11:38:32 UTC-4	used
Standard 4	1	1.000	10.0	1.0	1.0	0.146	STD4	2024-10-16 11:59:57 UTC-4	used
Standard 5	1	2.000	10.0	1.0	1.0	0.283	STD5	2024-10-16 12:21:22 UTC-4	used
Standard 6	1	4.000	10.0	1.0	1.0	0.564	STD6	2024-10-16 12:42:48 UTC-4	used
Standard 7	1	5.000	10.0	1.0	1.0	0.743	STD7	2024-10-16 13:04:15 UTC-4	used

Chloride (Anions)



Function: . . . . . *A = - 4.66155E-3 + 9.86442E-3× Q*

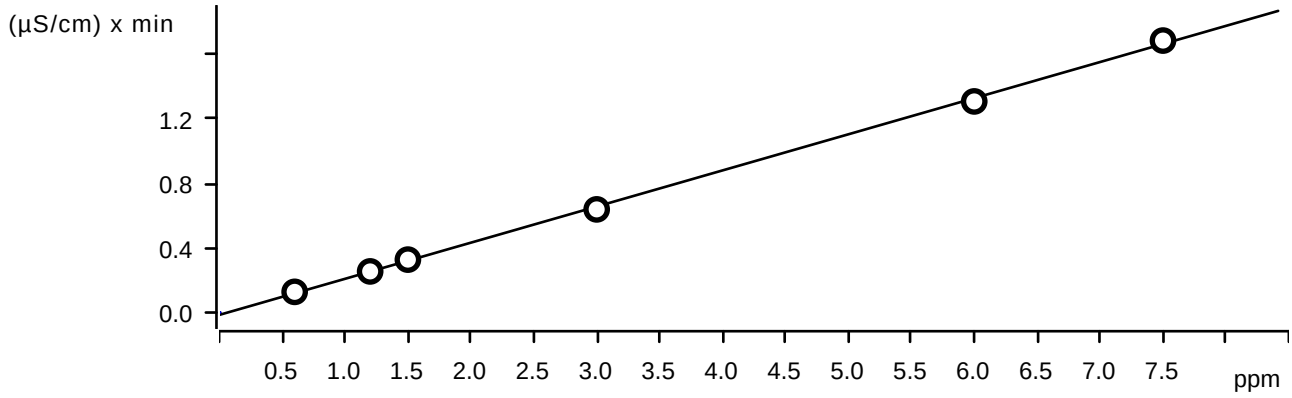
Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

Relative standard deviation . . . . . *2.532075 %*

Correlation coefficient *0.999661*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2024-10-16 10:55:46 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.058	STD2	2024-10-16 11:17:08 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.114	STD3	2024-10-16 11:38:32 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.147	STD4	2024-10-16 11:59:57 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.284	STD5	2024-10-16 12:21:22 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	0.577	STD6	2024-10-16 12:42:48 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	0.745	STD7	2024-10-16 13:04:15 UTC-4	used

Nitrite (Anions)



Function: . . . . . *A = - 0.0158639 + 0.0223869× Q*

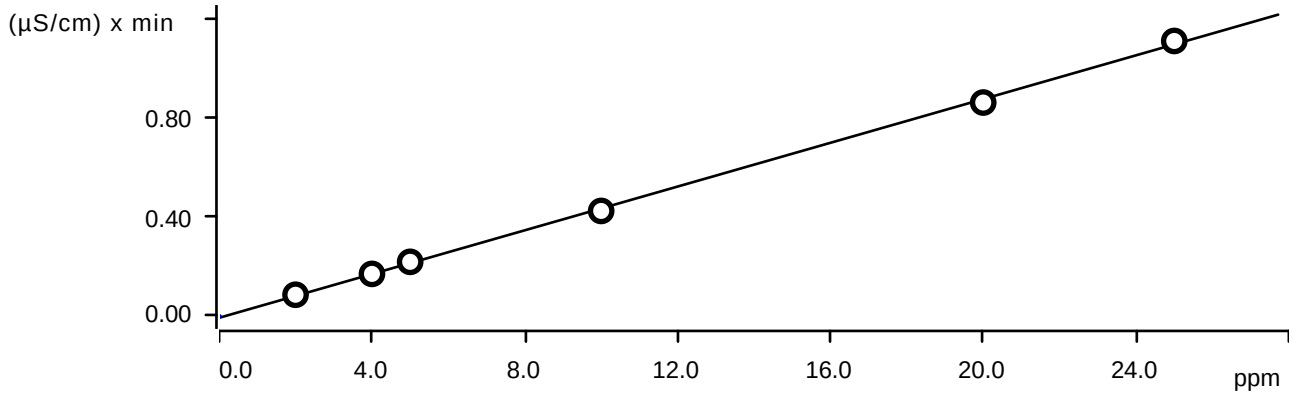
Relative standard deviation . . . . . *2.476730 %*

Correlation coefficient *0.999680*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2024-10-16 10:55:46 UTC-4	used
Standard 2	1	0.600	10.0	1.0	1.0	0.127	STD2	2024-10-16 11:17:08 UTC-4	used
Standard 3	1	1.200	10.0	1.0	1.0	0.254	STD3	2024-10-16 11:38:32 UTC-4	used
Standard 4	1	1.500	10.0	1.0	1.0	0.327	STD4	2024-10-16 11:59:57 UTC-4	used
Standard 5	1	3.000	10.0	1.0	1.0	0.638	STD5	2024-10-16 12:21:22 UTC-4	used
Standard 6	1	6.000	10.0	1.0	1.0	1.307	STD6	2024-10-16 12:42:48 UTC-4	used
Standard 7	1	7.500	10.0	1.0	1.0	1.684	STD7	2024-10-16 13:04:15 UTC-4	used

Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

Bromide (Anions)



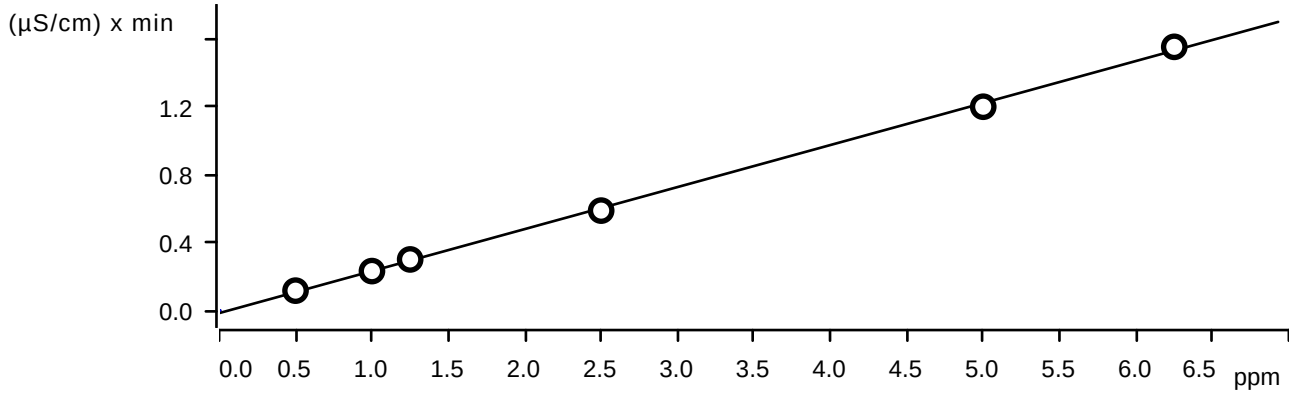
Function: . . . . . *A = - 7.83486E-3 + 4.40426E-3× Q*

Relative standard deviation . . . . . *2.425045 %*

Correlation coefficient *0.999690*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2024-10-16 10:55:46 UTC-4	used
Standard 2	1	2.000	10.0	1.0	1.0	0.085	STD2	2024-10-16 11:17:08 UTC-4	used
Standard 3	1	4.000	10.0	1.0	1.0	0.169	STD3	2024-10-16 11:38:32 UTC-4	used
Standard 4	1	5.000	10.0	1.0	1.0	0.217	STD4	2024-10-16 11:59:57 UTC-4	used
Standard 5	1	10.000	10.0	1.0	1.0	0.422	STD5	2024-10-16 12:21:22 UTC-4	used
Standard 6	1	20.000	10.0	1.0	1.0	0.859	STD6	2024-10-16 12:42:48 UTC-4	used
Standard 7	1	25.000	10.0	1.0	1.0	1.107	STD7	2024-10-16 13:04:15 UTC-4	used

Nitrate (Anions)



Function: . . . . . *A = - 0.0159932 + 0.0247327× Q*

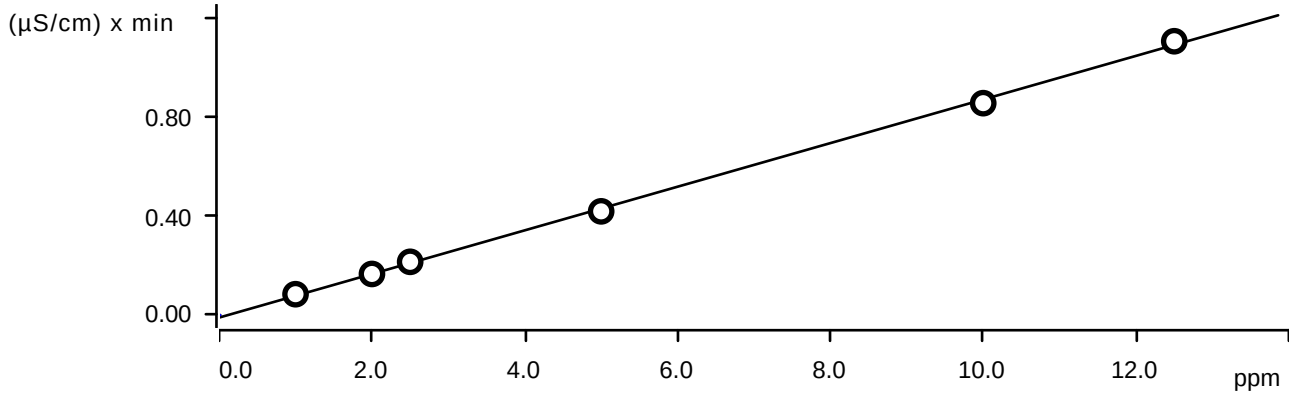
Relative standard deviation . . . . . *2.693966 %*

Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

Correlation coefficient *0.999623*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2024-10-16 10:55:46 UTC-4	used
Standard 2	1	0.500	10.0	1.0	1.0	0.116	STD2	2024-10-16 11:17:08 UTC-4	used
Standard 3	1	1.000	10.0	1.0	1.0	0.231	STD3	2024-10-16 11:38:32 UTC-4	used
Standard 4	1	1.250	10.0	1.0	1.0	0.300	STD4	2024-10-16 11:59:57 UTC-4	used
Standard 5	1	2.500	10.0	1.0	1.0	0.587	STD5	2024-10-16 12:21:22 UTC-4	used
Standard 6	1	5.000	10.0	1.0	1.0	1.199	STD6	2024-10-16 12:42:48 UTC-4	used
Standard 7	1	6.250	10.0	1.0	1.0	1.551	STD7	2024-10-16 13:04:15 UTC-4	used

Phosphate (Anions)



Function: . . . . . *A = - 9.96170E-3 + 8.78405E-3× Q*

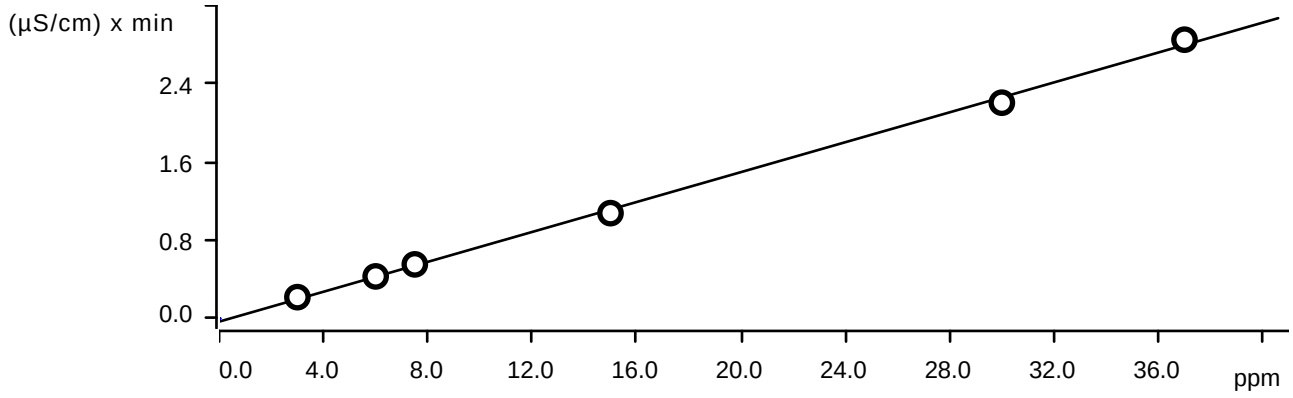
Relative standard deviation . . . . . *2.667639 %*

Correlation coefficient *0.999628*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2024-10-16 10:55:46 UTC-4	used
Standard 2	1	1.000	10.0	1.0	1.0	0.084	STD2	2024-10-16 11:17:08 UTC-4	used
Standard 3	1	2.000	10.0	1.0	1.0	0.166	STD3	2024-10-16 11:38:32 UTC-4	used
Standard 4	1	2.500	10.0	1.0	1.0	0.215	STD4	2024-10-16 11:59:57 UTC-4	used
Standard 5	1	5.000	10.0	1.0	1.0	0.418	STD5	2024-10-16 12:21:22 UTC-4	used
Standard 6	1	10.000	10.0	1.0	1.0	0.854	STD6	2024-10-16 12:42:48 UTC-4	used
Standard 7	1	12.500	10.0	1.0	1.0	1.103	STD7	2024-10-16 13:04:15 UTC-4	used

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LB :LB133290

Sulfate (Anions)



Function: . . . . . *A = - 0.0322401 + 7.64234E-3× Q*

Relative standard deviation . . . . . *3.651427 %*

Correlation coefficient *0.999303*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2024-10-16 10:55:46 UTC-4	used
Standard 2	1	3.000	10.0	1.0	1.0	0.218	STD2	2024-10-16 11:17:08 UTC-4	used
Standard 3	1	6.000	10.0	1.0	1.0	0.430	STD3	2024-10-16 11:38:32 UTC-4	used
Standard 4	1	7.500	10.0	1.0	1.0	0.553	STD4	2024-10-16 11:59:57 UTC-4	used
Standard 5	1	15.000	10.0	1.0	1.0	1.077	STD5	2024-10-16 12:21:22 UTC-4	used
Standard 6	1	30.000	10.0	1.0	1.0	2.206	STD6	2024-10-16 12:42:48 UTC-4	used
Standard 7	1	37.000	10.0	1.0	1.0	2.850	STD7	2024-10-16 13:04:15 UTC-4	used

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Inst Id :IC-2
LB :LB133290

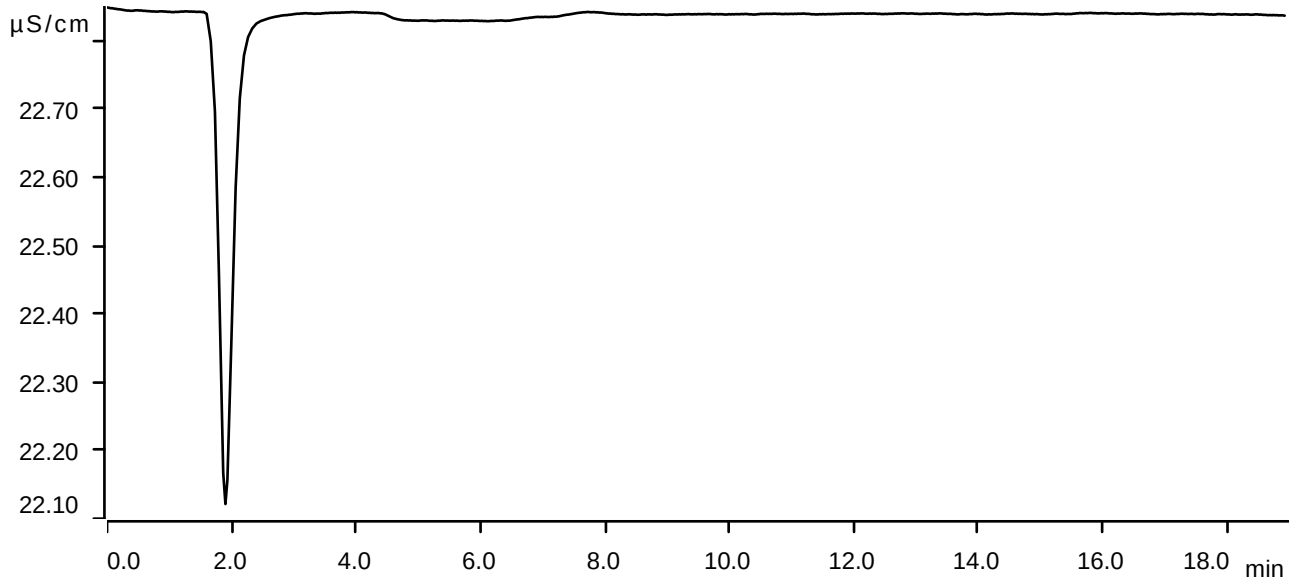
Sample data

Ident	STD1	
Sample type	Standard 1	
Determination start	2024-10-16 10:55:46 UTC-4	
Method	IC1-101624	
Operator		

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	12.33	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



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Inst Id :IC-2
LB :LB133290

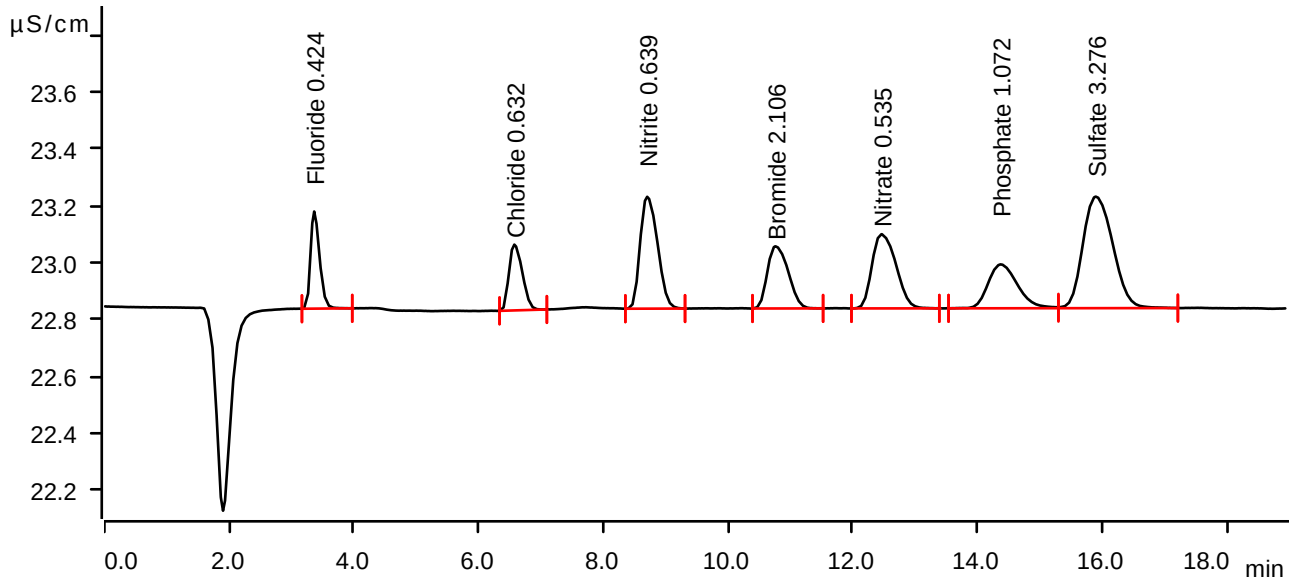
Sample data

Ident	STD2
Sample type	Standard 2
Determination start	2024-10-16 11:17:08 UTC-4
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	12.56	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.365	0.0571	0.341	0.424	Fluoride
2	6.573	0.0576	0.231	0.632	Chloride
3	8.703	0.1273	0.393	0.639	Nitrite
4	10.758	0.0849	0.219	2.106	Bromide
5	12.458	0.1163	0.261	0.535	Nitrate
6	14.368	0.0842	0.154	1.072	Phosphate
7	15.893	0.2181	0.392	3.276	Sulfate

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Inst Id :IC-2
LB :LB133290

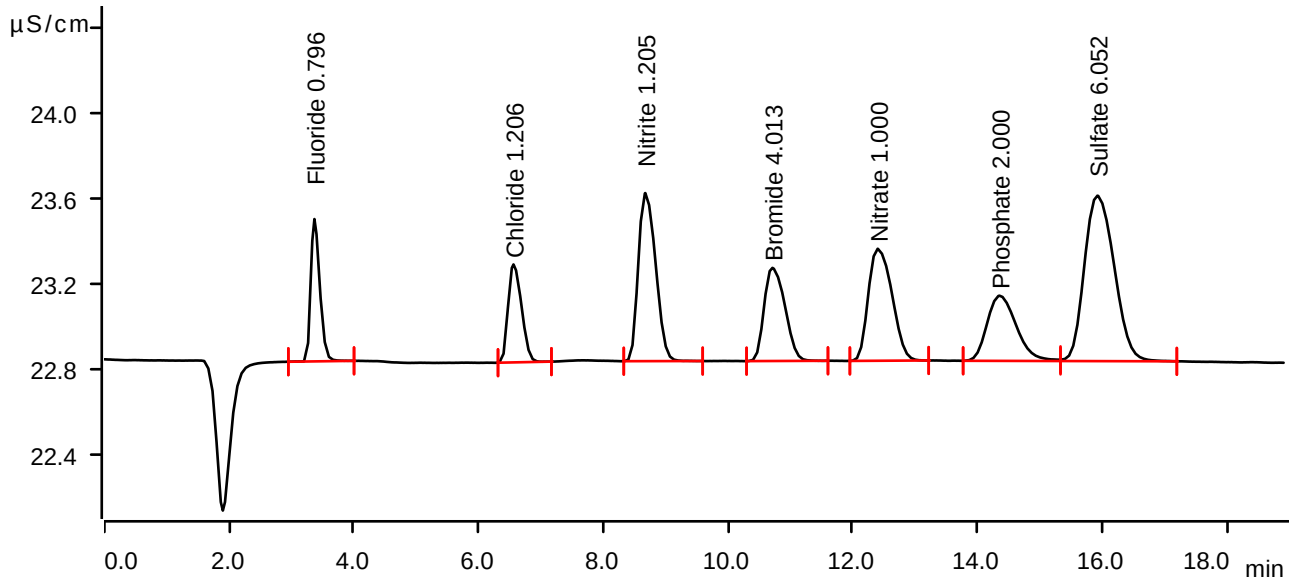
Sample data

Ident	STD3
Sample type	Standard 3
Determination start	2024-10-16 11:38:32 UTC-4
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	12.11	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.368	0.1116	0.667	0.796	Fluoride
2	6.560	0.1143	0.459	1.206	Chloride
3	8.673	0.2538	0.788	1.205	Nitrite
4	10.712	0.1689	0.436	4.013	Bromide
5	12.398	0.2314	0.525	1.000	Nitrate
6	14.353	0.1657	0.305	2.000	Phosphate
7	15.922	0.4302	0.775	6.052	Sulfate

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Inst Id :IC-2
LB :LB133290

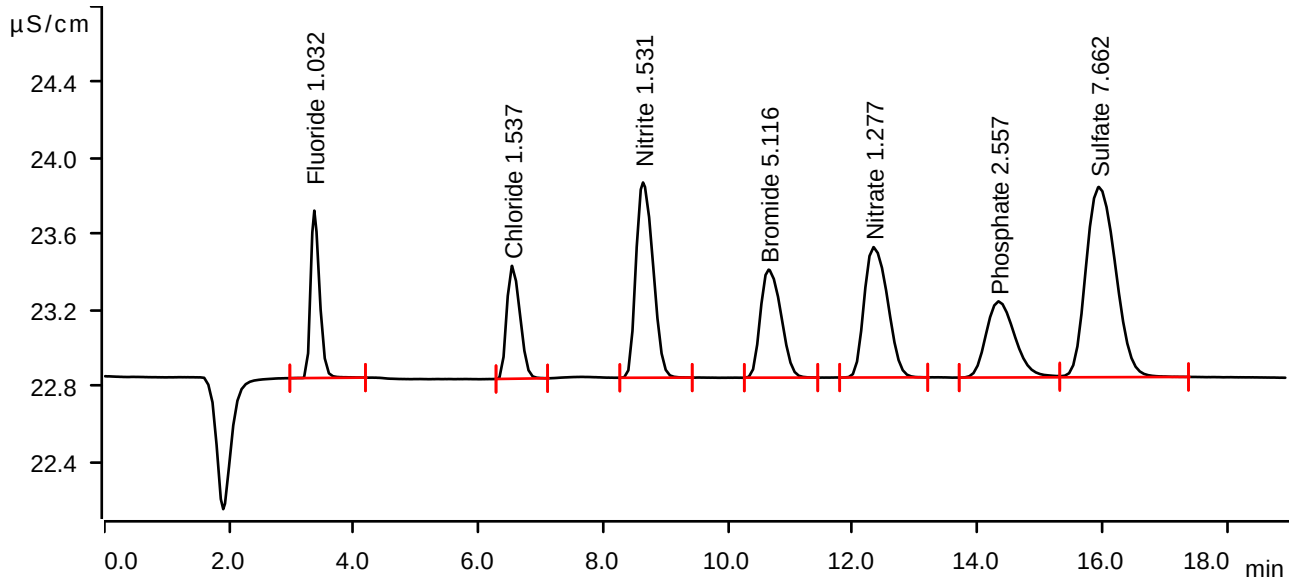
Sample data

Ident	STD4
Sample type	Standard 4
Determination start	2024-10-16 11:59:57 UTC-4
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.94	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.367	0.1462	0.882	1.032	Fluoride
2	6.537	0.1469	0.595	1.537	Chloride
3	8.637	0.3270	1.029	1.531	Nitrite
4	10.650	0.2175	0.569	5.116	Bromide
5	12.332	0.2999	0.687	1.277	Nitrate
6	14.337	0.2147	0.401	2.557	Phosphate
7	15.945	0.5533	1.003	7.662	Sulfate

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On:11/11/2024
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Inst Id :IC-2
LB :LB133290

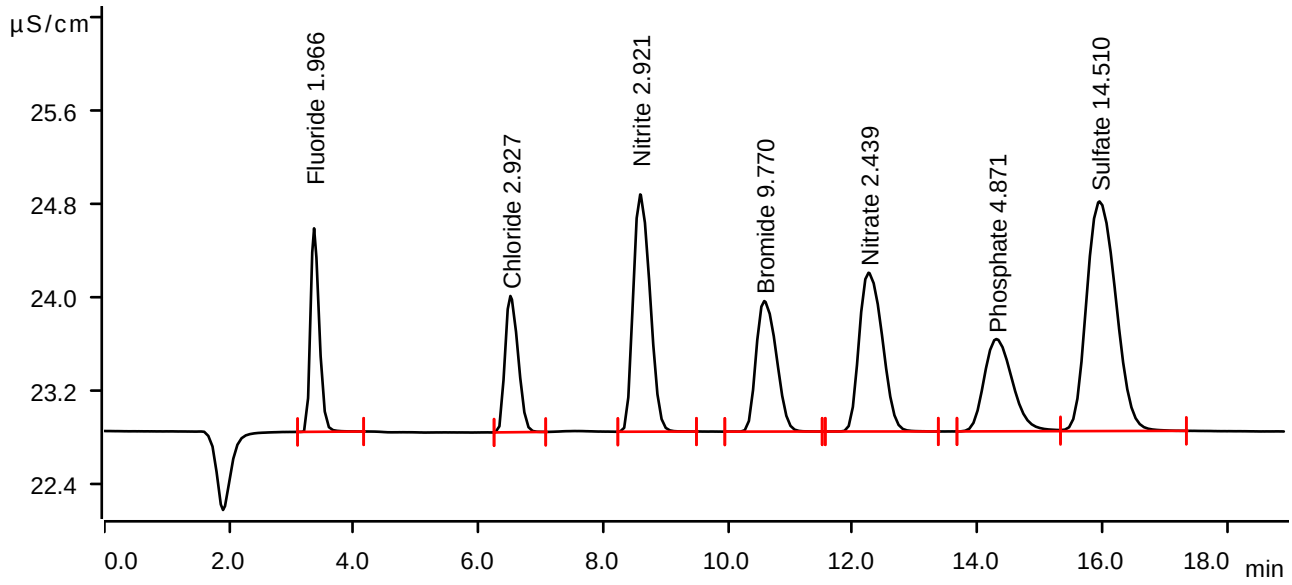
Sample data

Ident	STD5
Sample type	Standard 5
Determination start	2024-10-16 12:21:22 UTC-4
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.99	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.363	0.2831	1.748	1.966	Fluoride
2	6.510	0.2841	1.170	2.927	Chloride
3	8.592	0.6381	2.038	2.921	Nitrite
4	10.580	0.4225	1.121	9.770	Bromide
5	12.252	0.5873	1.364	2.439	Nitrate
6	14.302	0.4179	0.793	4.871	Phosphate
7	15.955	1.0767	1.972	14.510	Sulfate

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Inst Id :IC-2
LB :LB133290

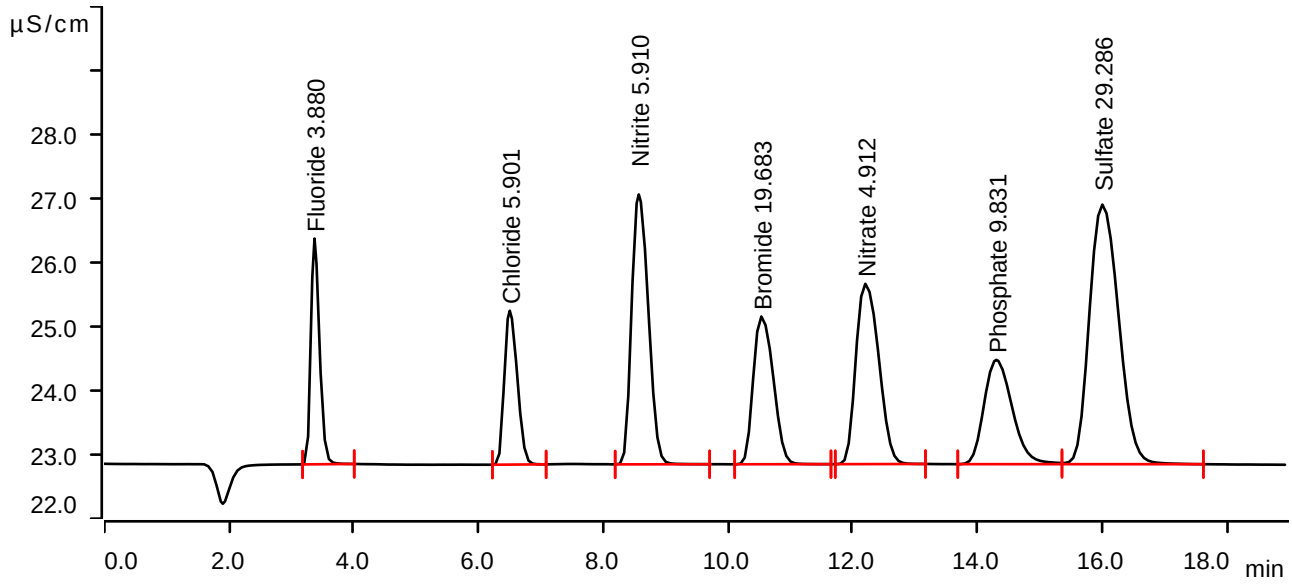
Sample data

Ident	STD6
Sample type	Standard 6
Determination start	2024-10-16 12:42:48 UTC-4
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.88	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.370	0.5637	3.525	3.880	Fluoride
2	6.500	0.5774	2.404	5.901	Chloride
3	8.568	1.3072	4.215	5.910	Nitrite
4	10.535	0.8590	2.306	19.683	Bromide
5	12.202	1.1988	2.815	4.912	Nitrate
6	14.302	0.8536	1.629	9.831	Phosphate
7	16.002	2.2059	4.054	29.286	Sulfate

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Inst Id :IC-2
LB :LB133290

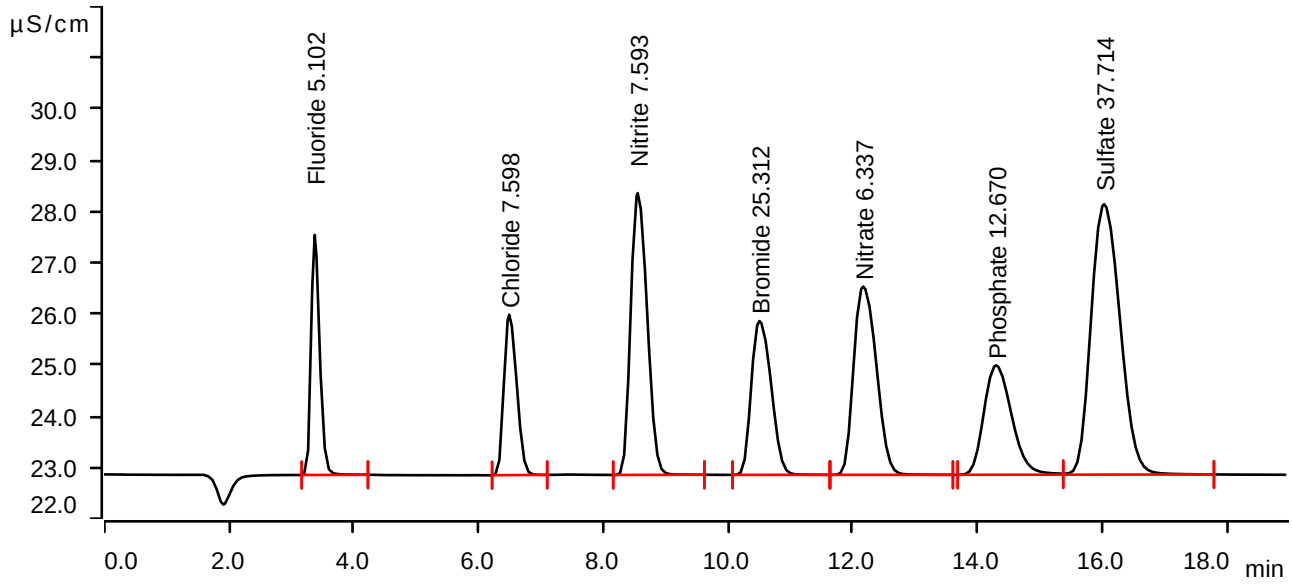
Sample data

Ident	STD7
Sample type	Standard 7
Determination start	2024-10-16 13:04:15 UTC-4
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	12.73	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.373	0.7427	4.687	5.102	Fluoride
2	6.492	0.7448	3.132	7.598	Chloride
3	8.552	1.6841	5.502	7.593	Nitrite
4	10.503	1.1070	3.003	25.312	Bromide
5	12.167	1.5512	3.678	6.337	Nitrate
6	14.297	1.1030	2.137	12.670	Phosphate
7	16.028	2.8500	5.280	37.714	Sulfate

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On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

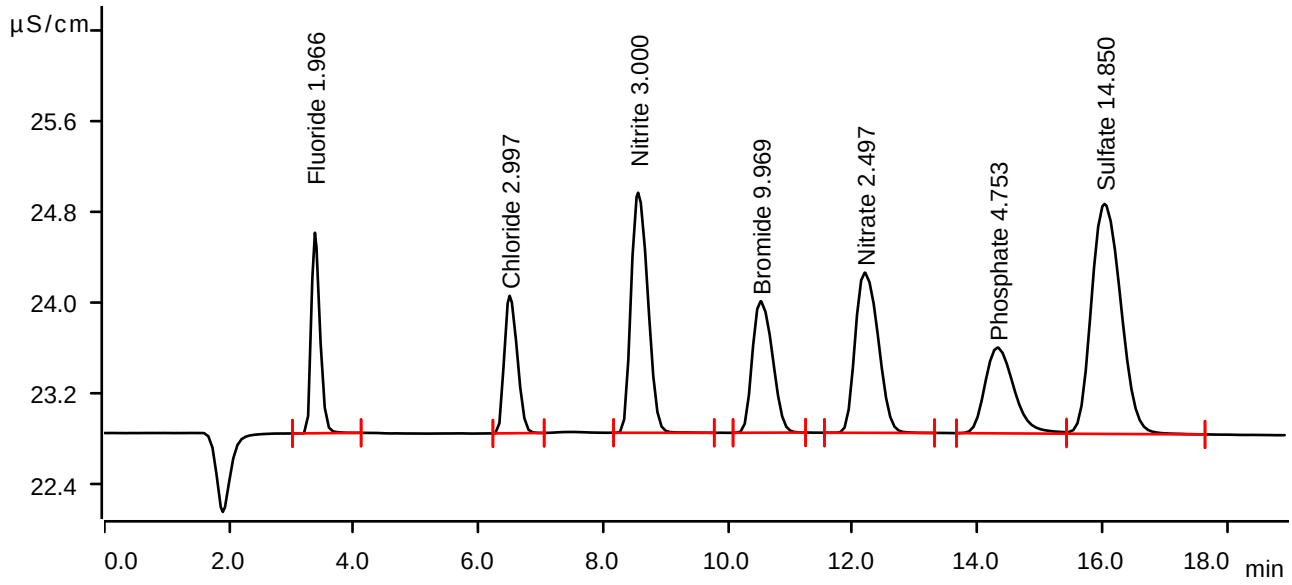
Sample data

Ident	ICV
Sample type	Check standard 1
Determination start	2024-10-16 13:37:49 UTC-4
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.66	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.377	0.2830	1.762	1.966	Fluoride
2	6.498	0.2910	1.209	2.997	Chloride
3	8.558	0.6557	2.109	3.000	Nitrite
4	10.522	0.4312	1.155	9.969	Bromide
5	12.190	0.6017	1.407	2.497	Nitrate
6	14.320	0.4076	0.753	4.753	Phosphate
7	16.035	1.1027	2.020	14.850	Sulfate

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11:44:18 AM
Inst Id :IC-2
LB :LB133290

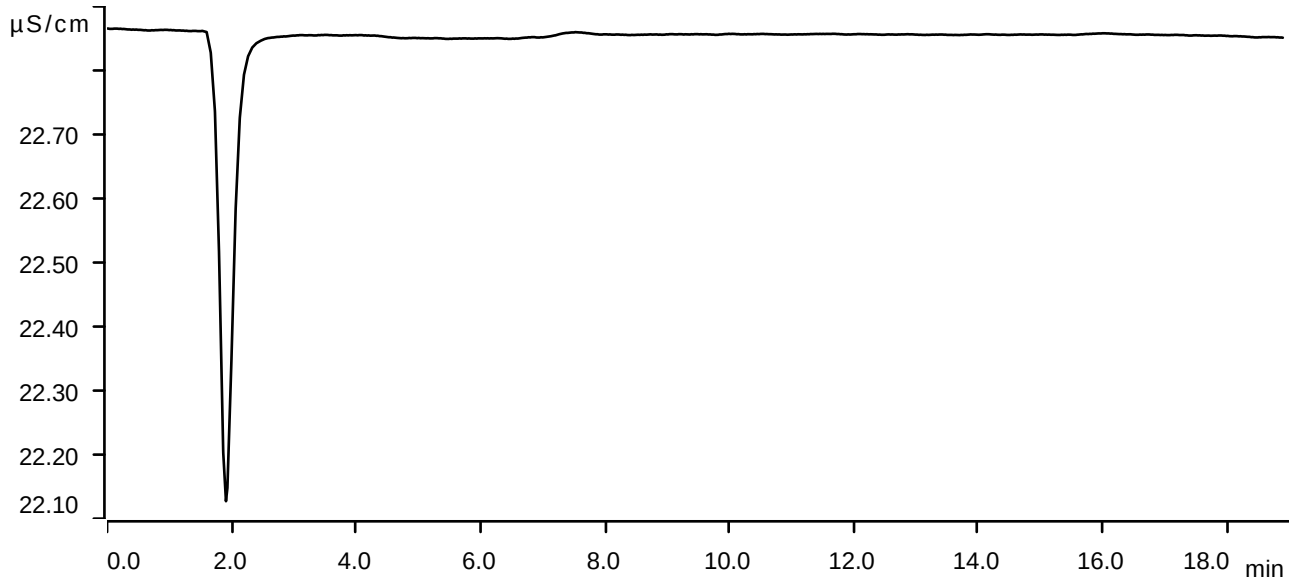
Sample data

Ident	ICB
Sample type	Sample
Determination start	2024-10-16 13:59:18 UTC-4
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.60	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

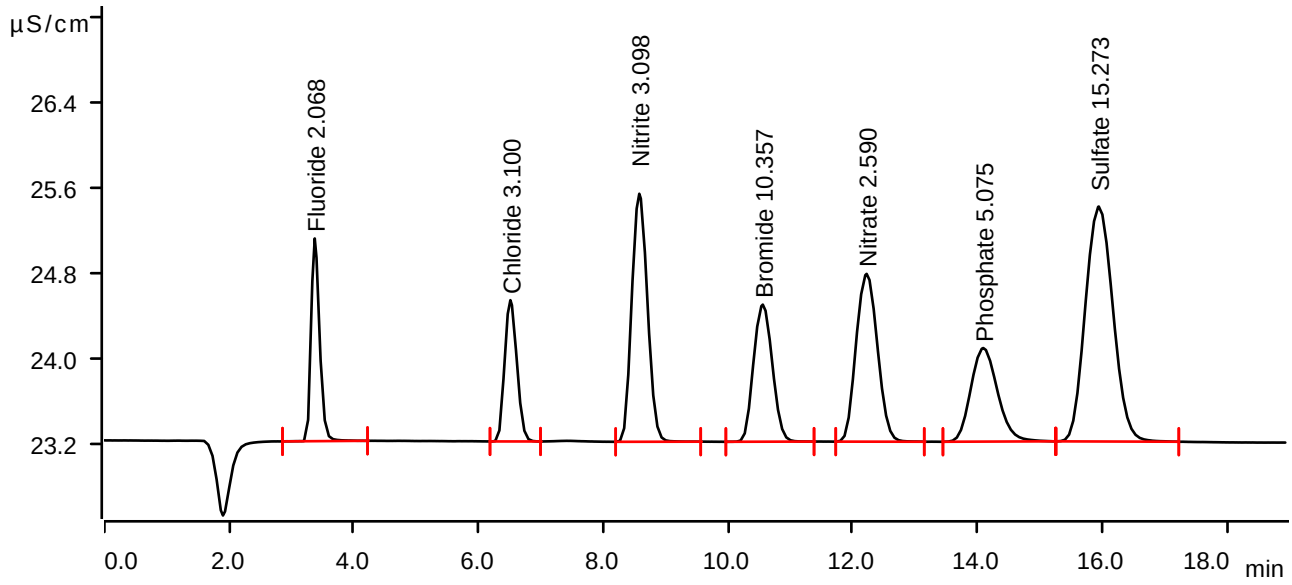
Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-11-05 09:20:45 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.71	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.373	0.2981	1.899	2.068	Fluoride
2	6.510	0.3012	1.324	3.100	Chloride
3	8.577	0.6778	2.324	3.098	Nitrite
4	10.557	0.4483	1.285	10.357	Bromide
5	12.222	0.6246	1.572	2.590	Nitrate
6	14.092	0.4359	0.877	5.075	Phosphate
7	15.943	1.1350	2.202	15.273	Sulfate

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11:44:18 AM
Inst Id :IC-2
LB :LB133290

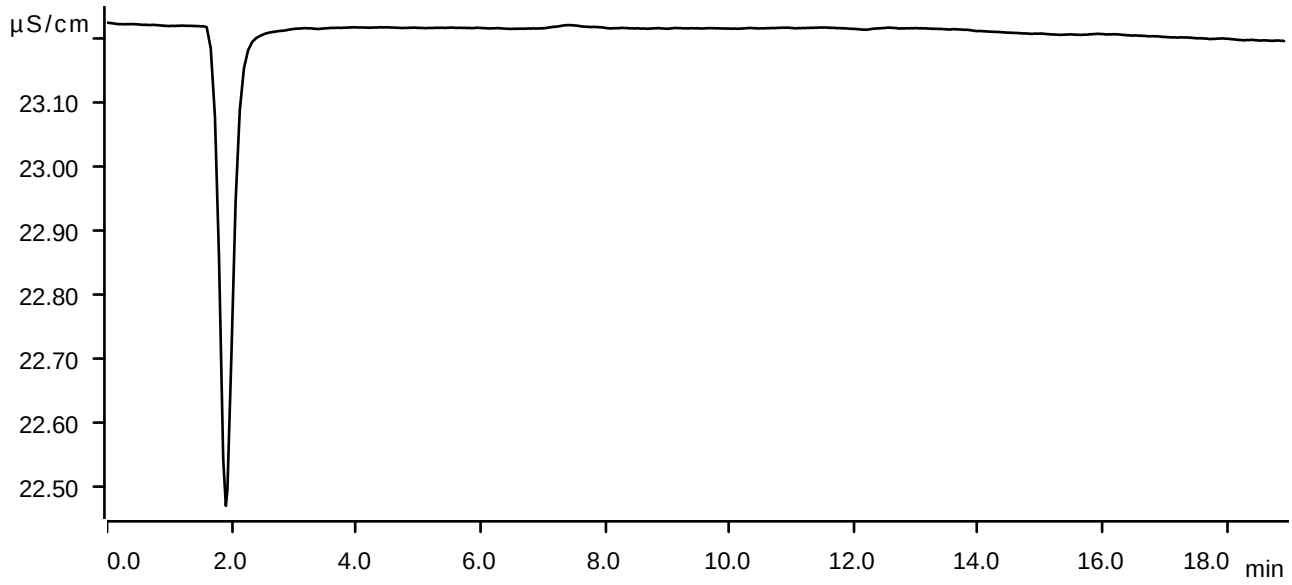
Sample data

Ident	CCB	
Sample type	Sample	
Determination start	2024-11-05 09:42:14 UTC-5	
Method	IC1-101624	
Operator		

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.66	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



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On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

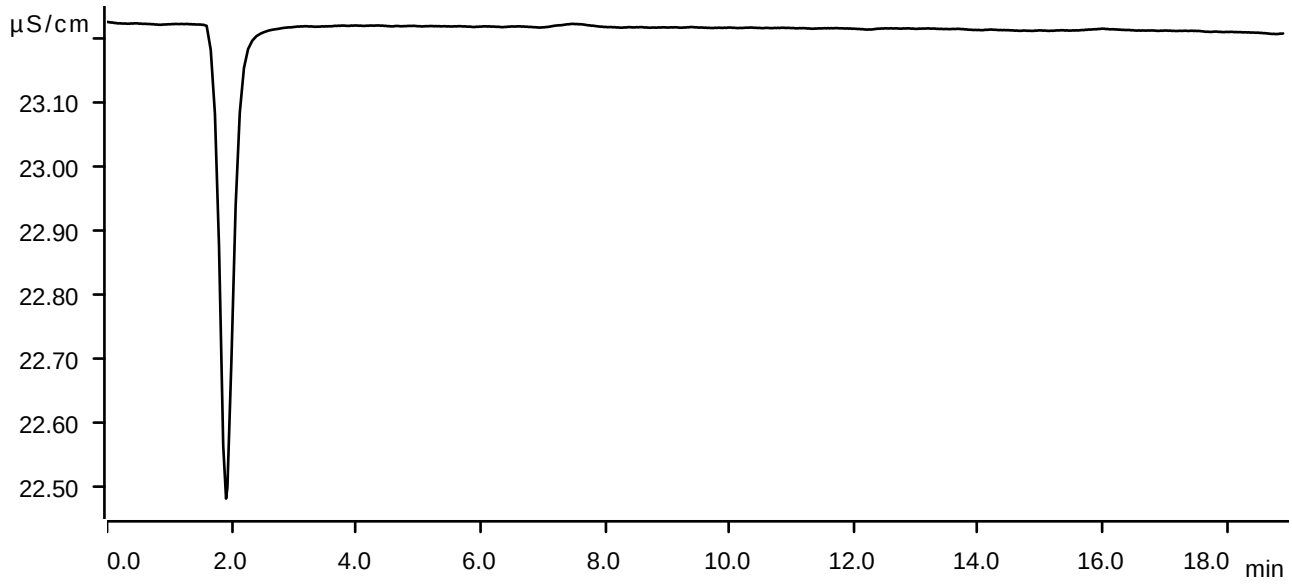
Sample data

Ident	LB133290BLW	
Sample type	Sample	
Determination start	2024-11-05 10:03:45 UTC-5	
Method	IC1-101624	
Operator		

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.71	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

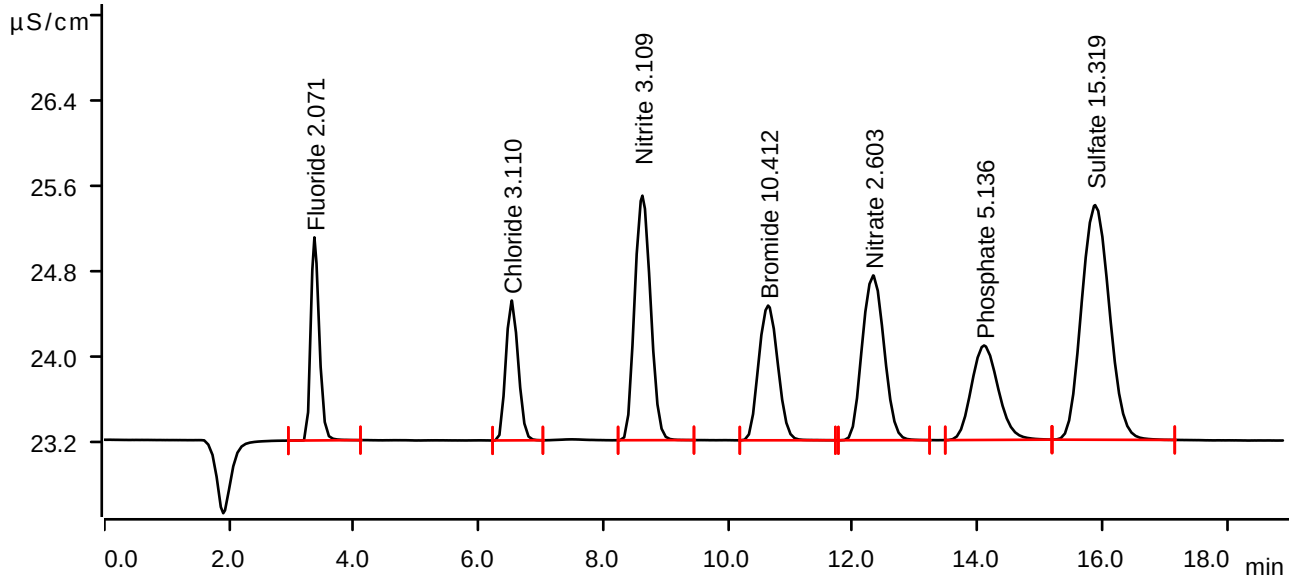
Sample data

Ident	LB133290BSW
Sample type	Check standard 1
Determination start	2024-11-05 10:25:16 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.88	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.368	0.2985	1.903	2.071	Fluoride
2	6.530	0.3021	1.310	3.110	Chloride
3	8.627	0.6802	2.292	3.109	Nitrite
4	10.642	0.4508	1.263	10.412	Bromide
5	12.327	0.6277	1.544	2.603	Nitrate
6	14.105	0.4412	0.885	5.136	Phosphate
7	15.885	1.1385	2.199	15.319	Sulfate

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Inst Id :IC-2
LB :LB133290

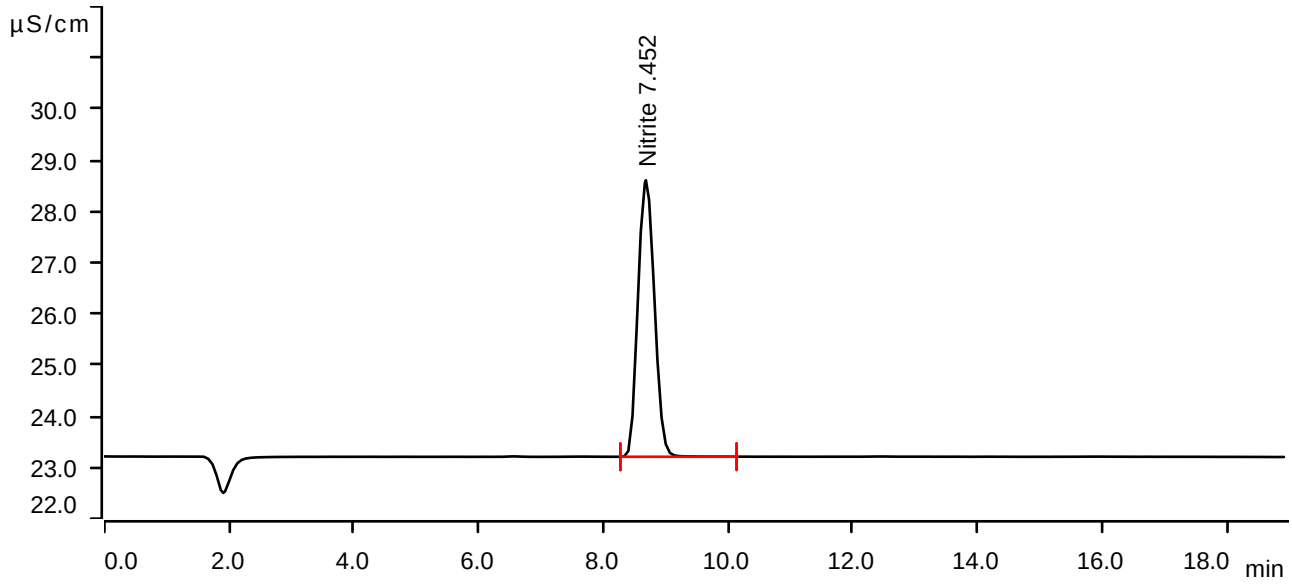
Sample data

Ident	P4495-25	
Sample type	Sample	
Determination start	2024-11-05 11:08:21 UTC-5	
Method	IC1-101624	
Operator		

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	12.16	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	8.683	1.6524	5.398	7.452	Nitrite

Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

Sample data

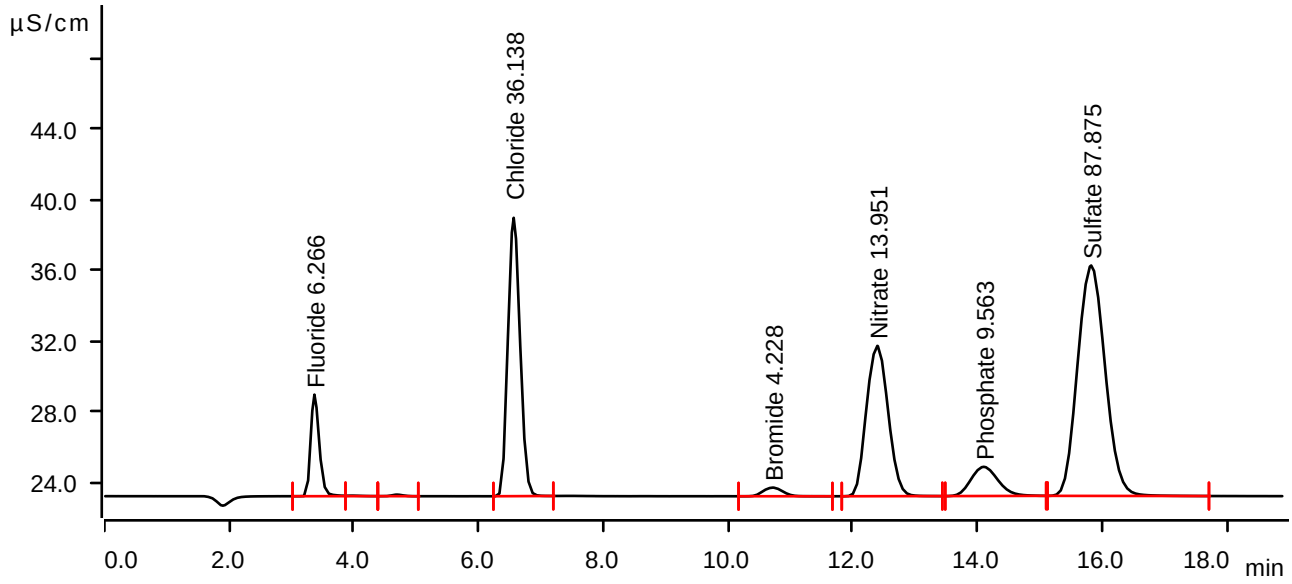
Ident	P4495-01	
Sample type	Sample	
Determination start	2024-11-05 11:29:54 UTC-5	
Method	IC1-101624	
Operator		

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	12.22	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.368	0.9133	5.751	6.266	Fluoride
2	3.988	0.0080	0.030	invalid	
3	4.693	0.0178	0.088	invalid	
4	6.563	3.5601	15.760	36.138	Chloride
5	10.717	0.1784	0.489	4.228	Bromide
6	12.393	3.4345	8.511	13.951	Nitrate
7	14.100	0.8300	1.651	9.563	Phosphate
8	15.822	6.6835	13.047	87.875	Sulfate

Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

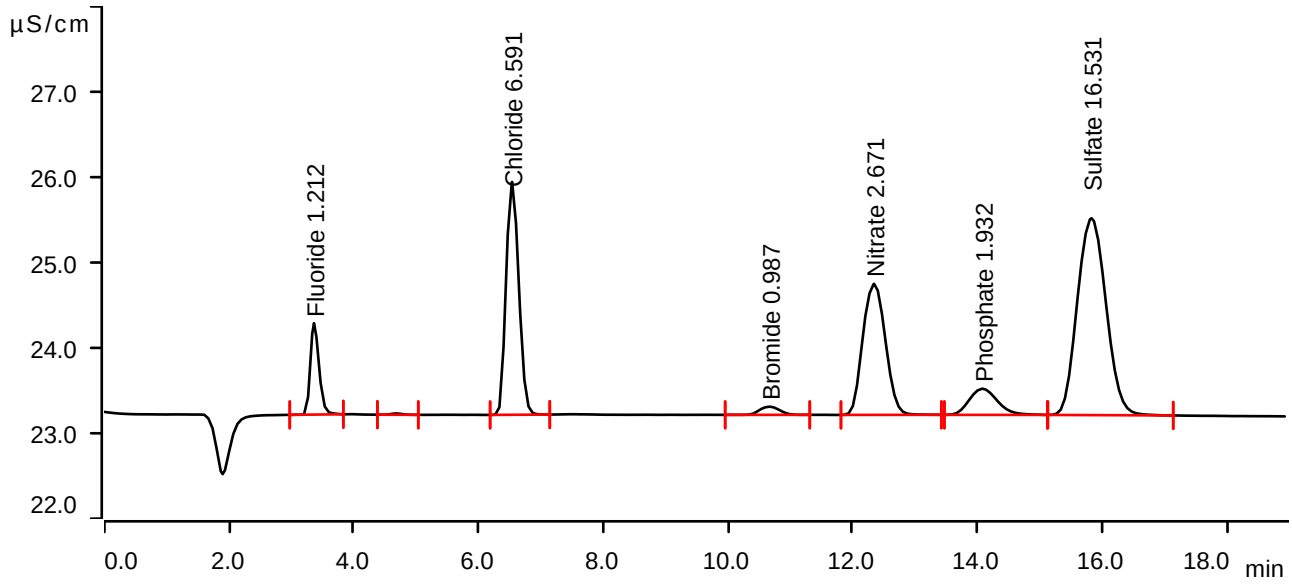
Sample data

Ident	P4495-01DLX5
Sample type	Sample
Determination start	2024-11-05 11:51:29 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	12.16	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.362	0.1725	1.071	1.212	Fluoride
2	4.672	0.0031	0.015	invalid	
3	6.538	0.6455	2.727	6.591	Chloride
4	10.670	0.0356	0.096	0.987	Bromide
5	12.342	0.6446	1.535	2.671	Nitrate
6	14.082	0.1598	0.306	1.932	Phosphate
7	15.827	1.2311	2.306	16.531	Sulfate

Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

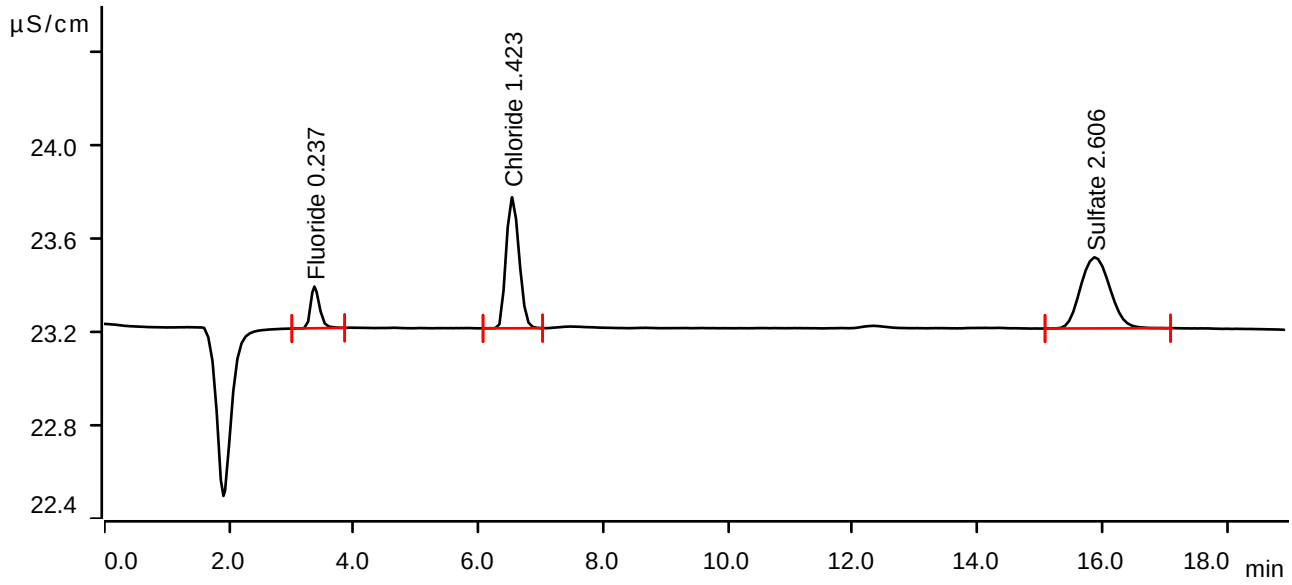
Sample data

Ident	P4675-01
Sample type	Sample
Determination start	2024-11-05 13:21:58 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	12.11	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.368	0.0297	0.179	0.237	Fluoride
2	6.538	0.1357	0.563	1.423	Chloride
3	15.880	0.1669	0.305	2.606	Sulfate

Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

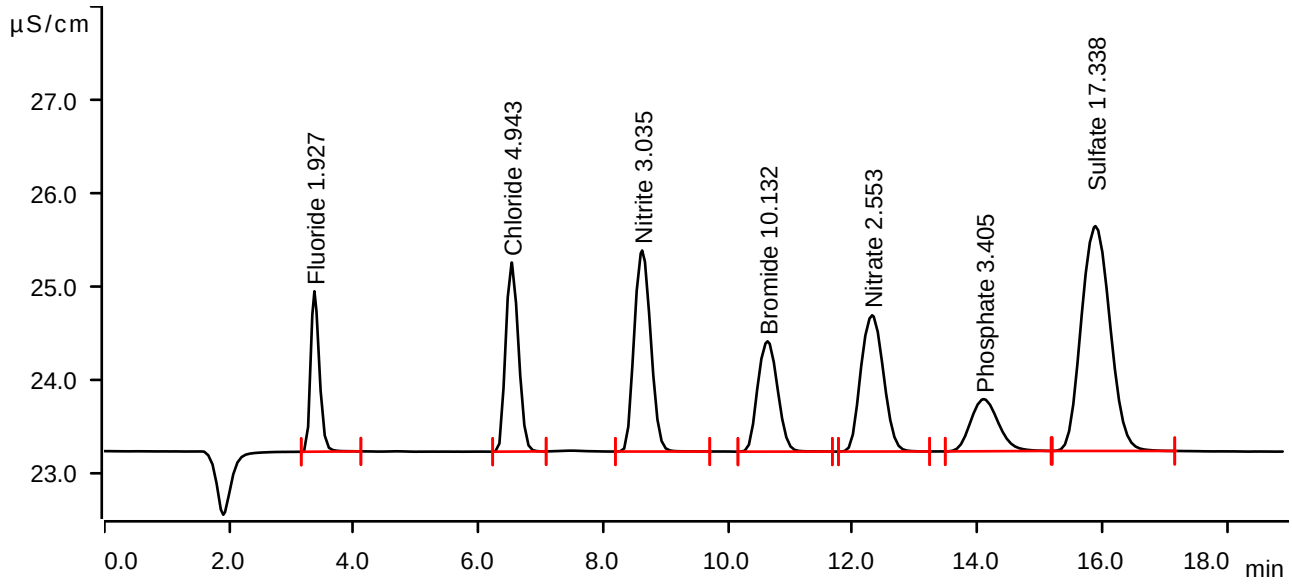
Sample data

Ident	P4675-01MS
Sample type	Sample
Determination start	2024-11-05 13:43:20 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.94	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.368	0.2773	1.722	1.927	Fluoride
2	6.530	0.4829	2.030	4.943	Chloride
3	8.623	0.6636	2.159	3.035	Nitrite
4	10.633	0.4384	1.185	10.132	Bromide
5	12.310	0.6155	1.463	2.553	Nitrate
6	14.100	0.2891	0.560	3.405	Phosphate
7	15.890	1.2928	2.414	17.338	Sulfate

Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

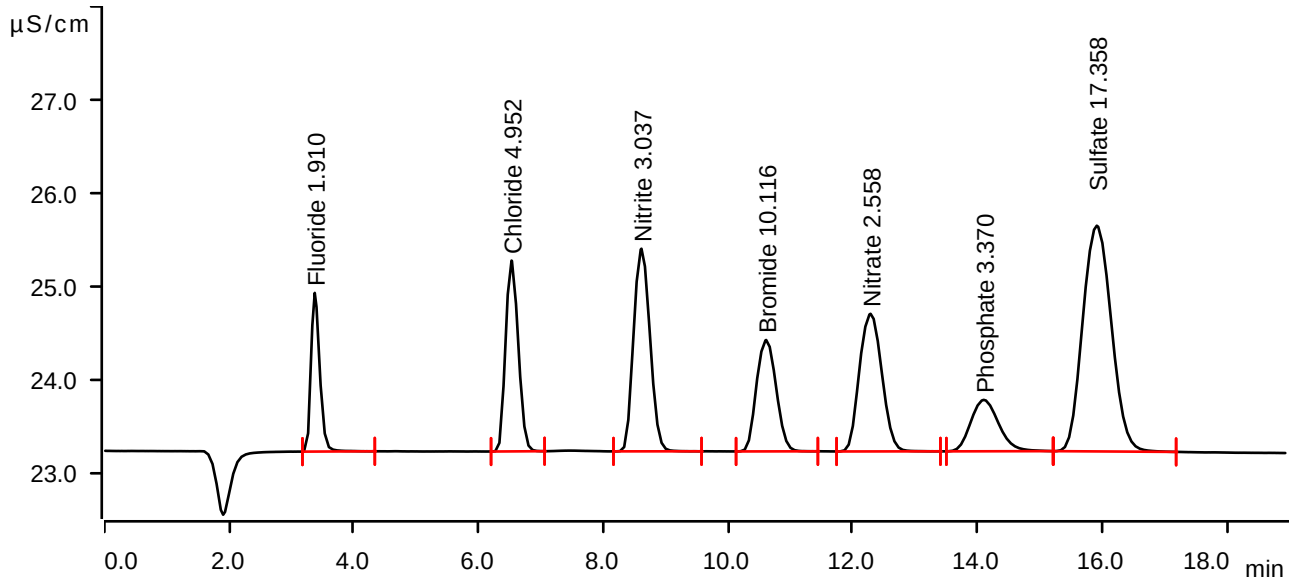
Sample data

Ident	P4675-01MSD
Sample type	Sample
Determination start	2024-11-05 14:04:53 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.94	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.373	0.2749	1.704	1.910	Fluoride
2	6.528	0.4838	2.049	4.952	Chloride
3	8.612	0.6641	2.176	3.037	Nitrite
4	10.612	0.4377	1.196	10.116	Bromide
5	12.285	0.6166	1.478	2.558	Nitrate
6	14.098	0.2860	0.552	3.370	Phosphate
7	15.912	1.2943	2.424	17.358	Sulfate

Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

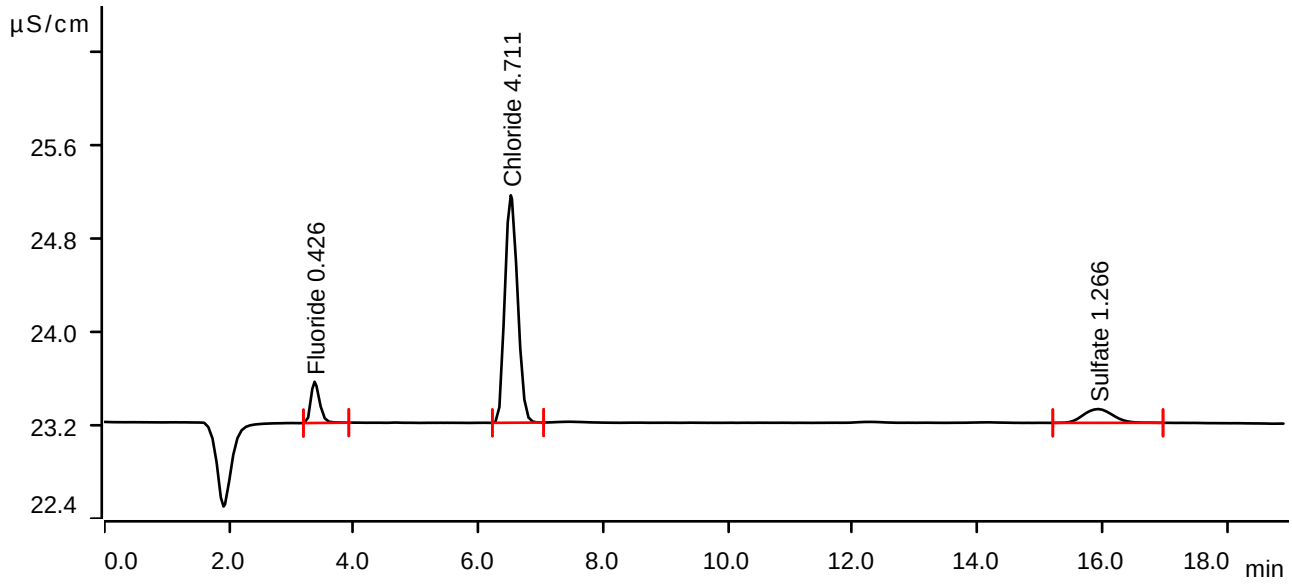
Sample data

Ident	P4675-02
Sample type	Sample
Determination start	2024-11-05 14:26:25 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.82	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.372	0.0574	0.354	0.426	Fluoride
2	6.517	0.4601	1.954	4.711	Chloride
3	15.932	0.0645	0.118	1.266	Sulfate

Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

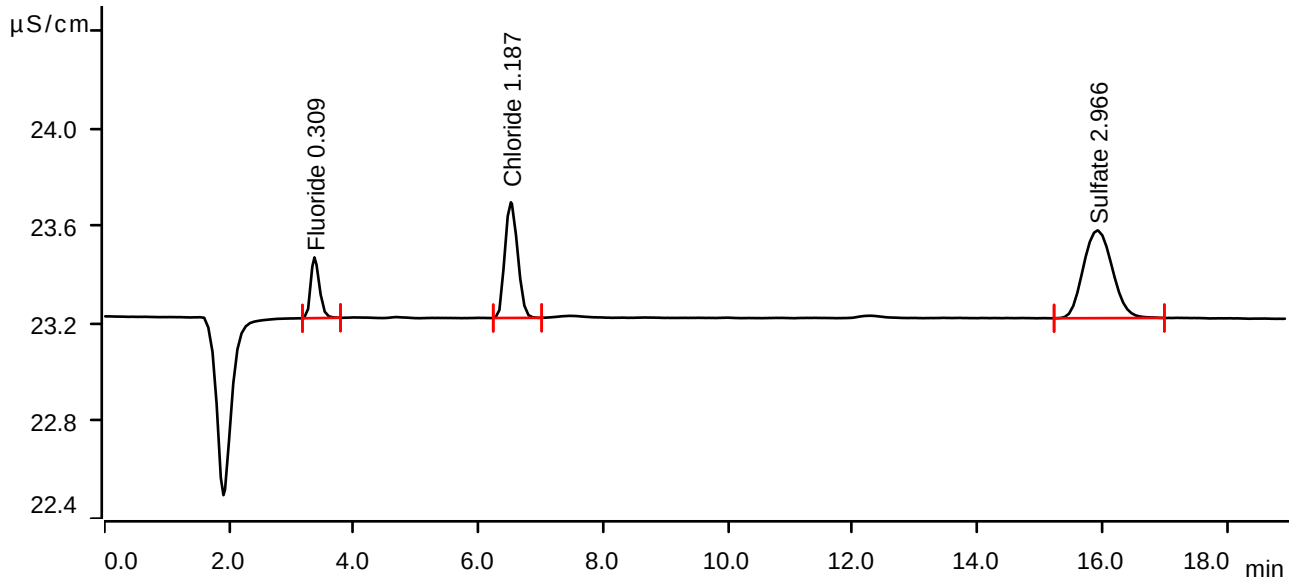
Sample data

Ident	P4675-03	
Sample type	Sample	
Determination start	2024-11-05 14:47:57 UTC-5	
Method	IC1-101624	
Operator		

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.82	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.368	0.0402	0.249	0.309	Fluoride
2	6.518	0.1124	0.474	1.187	Chloride
3	15.922	0.1945	0.360	2.966	Sulfate

Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

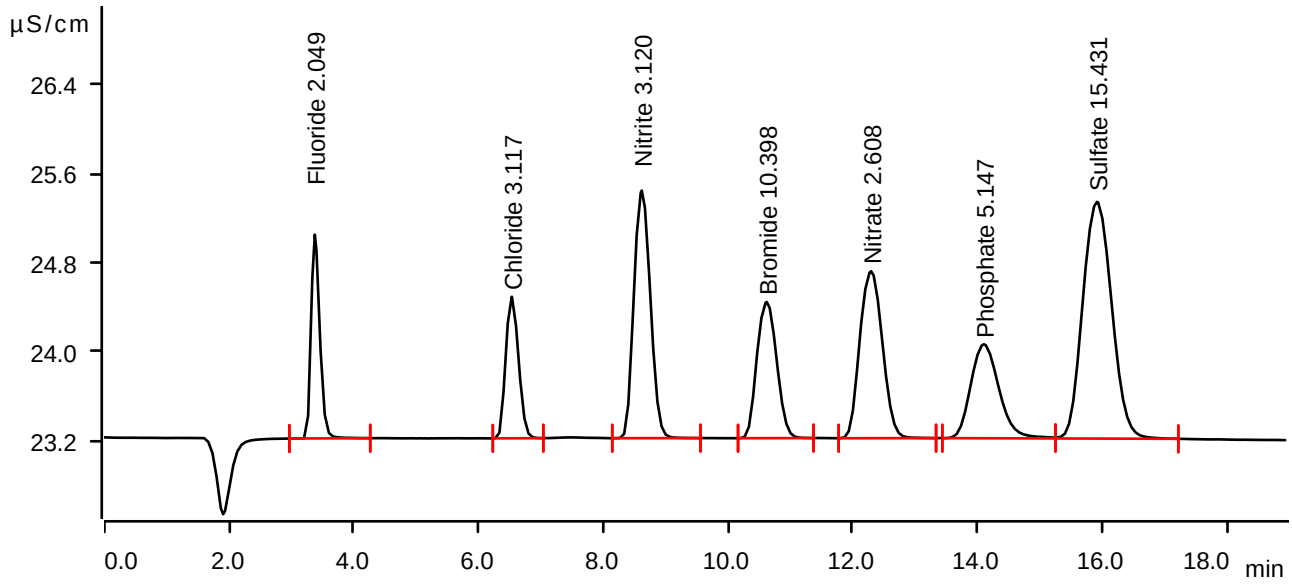
Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-11-05 15:09:27 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.88	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.375	0.2953	1.830	2.049	Fluoride
2	6.532	0.3028	1.271	3.117	Chloride
3	8.617	0.6825	2.224	3.120	Nitrite
4	10.620	0.4501	1.223	10.398	Bromide
5	12.293	0.6290	1.499	2.608	Nitrate
6	14.102	0.4422	0.844	5.147	Phosphate
7	15.915	1.1471	2.126	15.431	Sulfate

Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

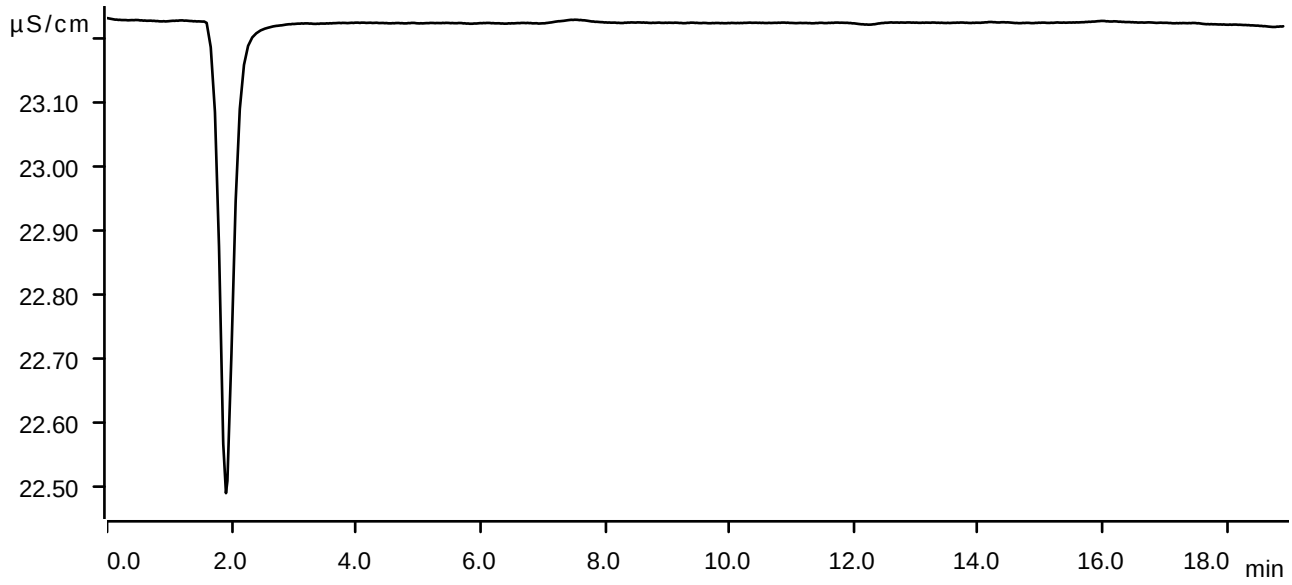
Sample data

Ident	CCB	
Sample type	Sample	
Determination start	2024-11-05 15:30:57 UTC-5	
Method	IC1-101624	
Operator		

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.82	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

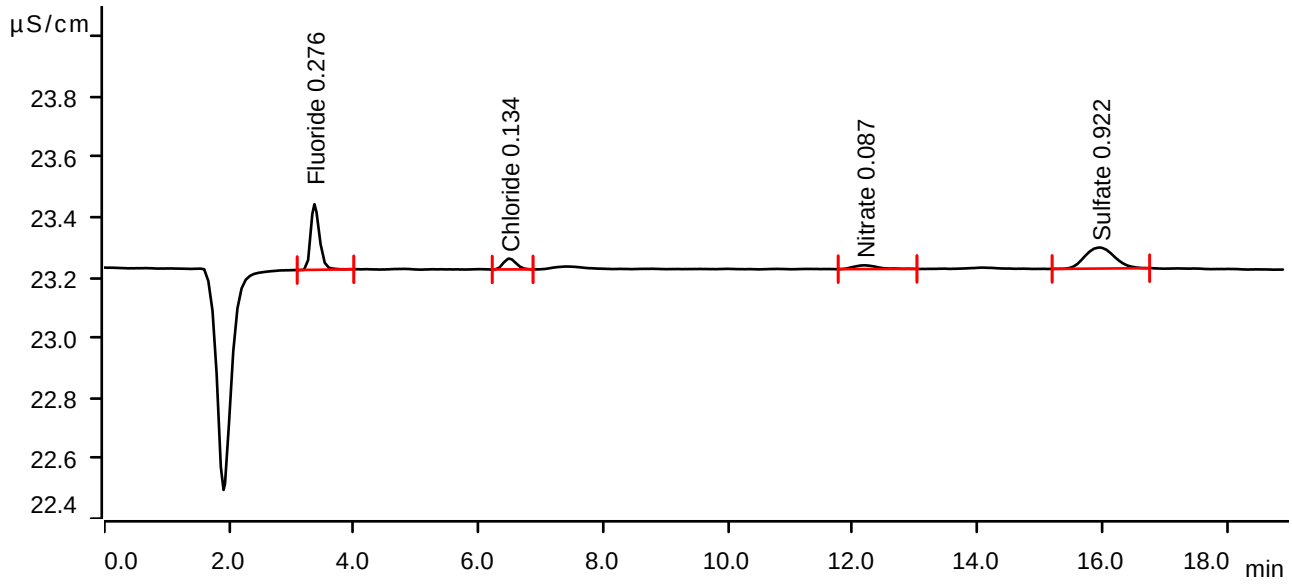
Sample data

Ident	P4675-04
Sample type	Sample
Determination start	2024-11-05 15:52:27 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.66	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.368	0.0354	0.218	0.276	Fluoride
2	6.490	0.0086	0.036	0.134	Chloride
3	12.188	0.0056	0.012	0.087	Nitrate
4	15.943	0.0383	0.070	0.922	Sulfate

Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

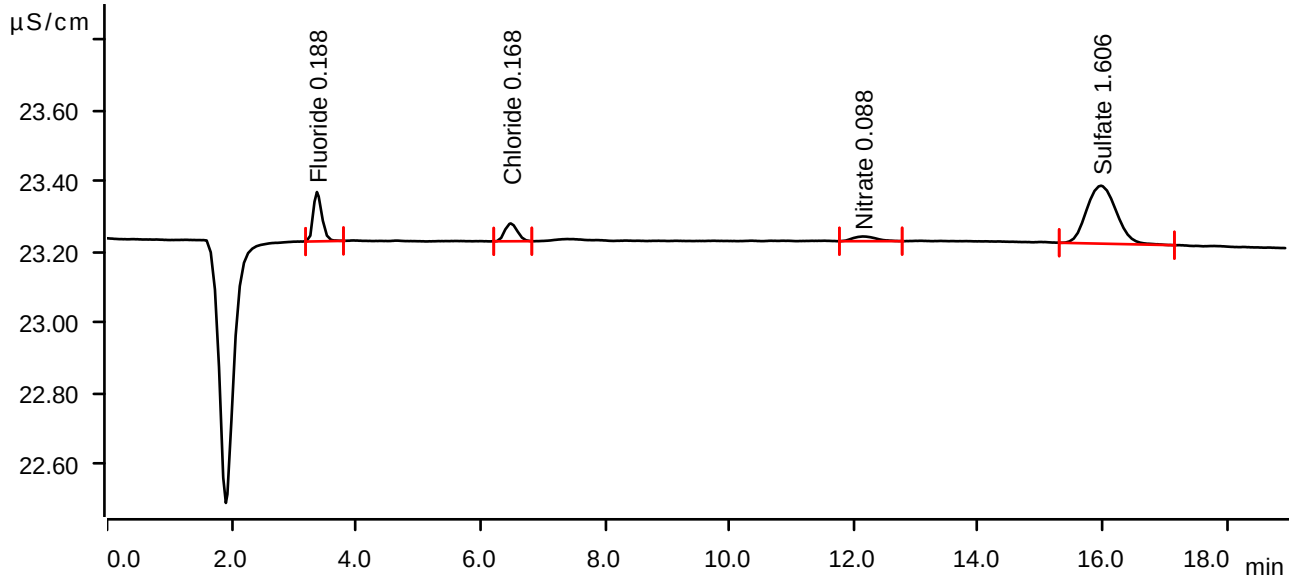
Sample data

Ident	P4675-05
Sample type	Sample
Determination start	2024-11-05 16:13:57 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.60	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.373	0.0225	0.140	0.188	Fluoride
2	6.488	0.0119	0.050	0.168	Chloride
3	12.142	0.0059	0.013	0.088	Nitrate
4	15.973	0.0905	0.164	1.606	Sulfate

Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

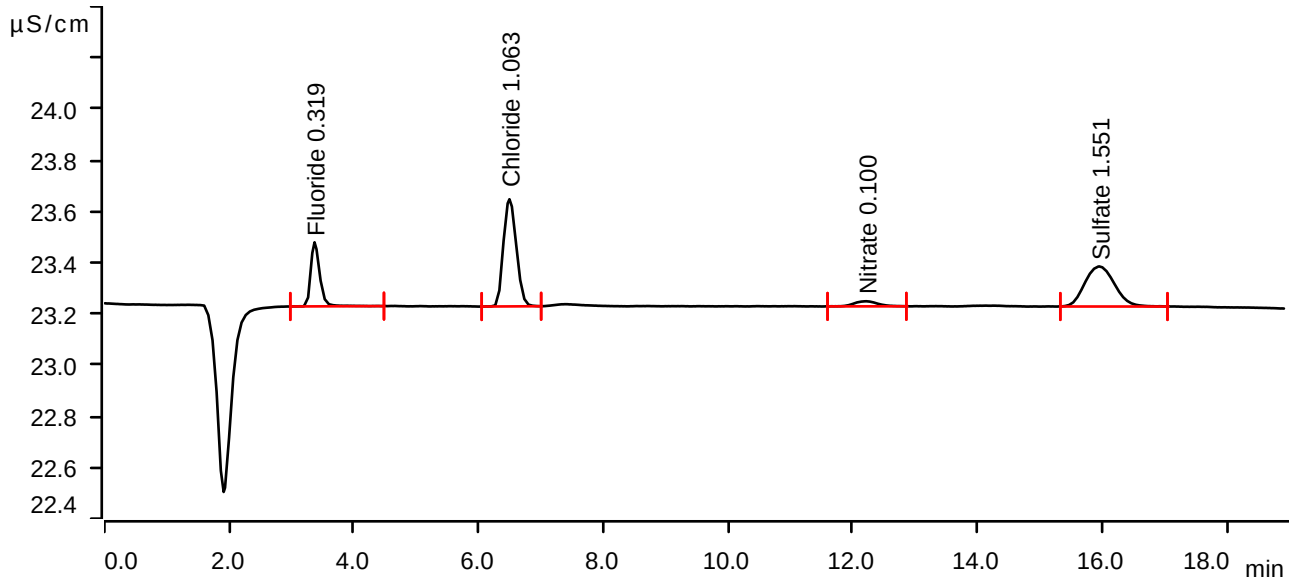
Sample data

Ident	P4675-06
Sample type	Sample
Determination start	2024-11-05 16:35:26 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.66	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.370	0.0417	0.250	0.319	Fluoride
2	6.495	0.1002	0.419	1.063	Chloride
3	12.218	0.0087	0.020	0.100	Nitrate
4	15.952	0.0863	0.156	1.551	Sulfate

Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

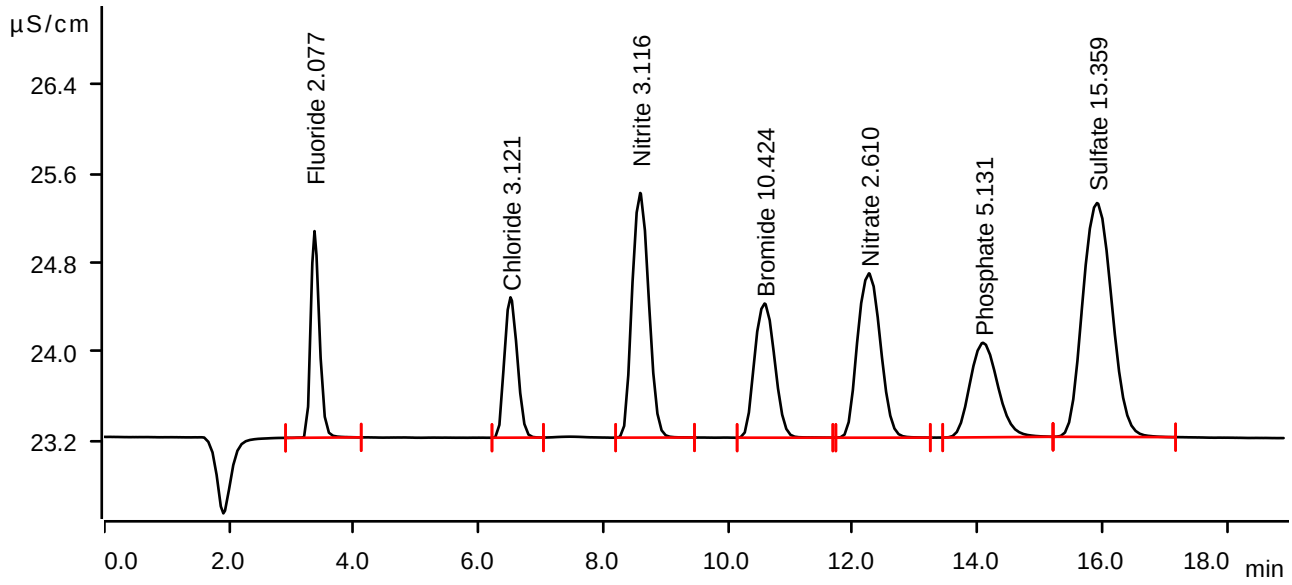
Sample data

Ident	CCV
Sample type	Check standard 1
Determination start	2024-11-05 16:56:48 UTC-5
Method	IC1-101624
Operator	

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.77	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.370	0.2994	1.855	2.077	Fluoride
2	6.512	0.3032	1.260	3.121	Chloride
3	8.592	0.6817	2.197	3.116	Nitrite
4	10.585	0.4513	1.205	10.424	Bromide
5	12.258	0.6295	1.475	2.610	Nitrate
6	14.088	0.4407	0.849	5.131	Phosphate
7	15.915	1.1415	2.101	15.359	Sulfate

Reviewed By:Iwon
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

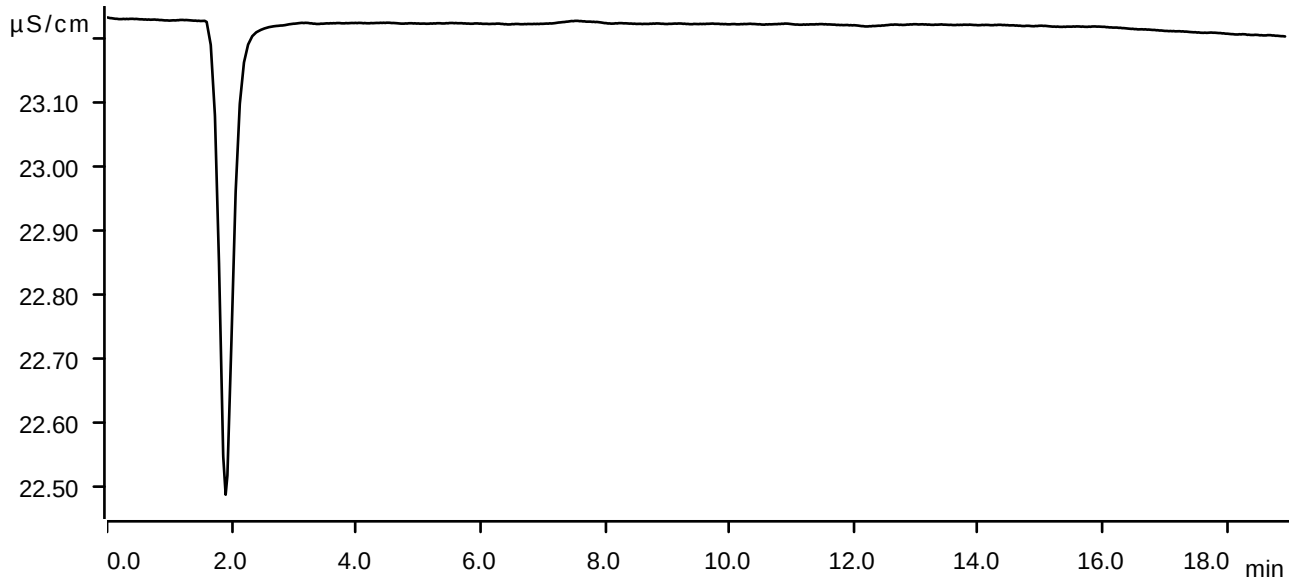
Sample data

Ident	CCB	
Sample type	Sample	
Determination start	2024-11-05 17:18:18 UTC-5	
Method	IC1-101624	
Operator		

Anions

Data source	Conductivity detector 1 (Eco IC 1)	
Channel	Conductivity	
Recording time	19.0	min
Integration	Automatically	
Column type	Metrosep A Supp 19 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	11.88	MPa
Maximum pressure monitored	yes	
Temperature	-----	°C

Anions



LB133290

WORKLIST(Hardcopy Internal Chain)

WorkList Name : ANIONS S-11052024 **WorkList ID :** 185136 **Department :** Wet-Chemistry **Date :** 11-05-2024 08:53:43

Sample	Customer Sample		Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4495-01	PT-AN-SOIL	5.00g	Solid	Anions Group1	Cool 4 deg C	CHEM02	QA Of	10/21/2024	9056A
P4495-25	PT-NO2-SOIL	5.00g	Solid	Anions Group2	Cool 4 deg C	CHEM02	QA Of	10/21/2024	9056A
P4675-01	COMP-1	5.01g	Solid	Anions Group1	Cool 4 deg C	POWE02	K41	10/31/2024	9056A
P4675-02	COMP-2	5.04g	Solid	Anions Group1	Cool 4 deg C	POWE02	K41	10/31/2024	9056A
P4675-03	COMP-3	5.02g	Solid	Anions Group1	Cool 4 deg C	POWE02	K41	10/31/2024	9056A
P4675-04	COMP-4	5.04g	Solid	Anions Group1	Cool 4 deg C	POWE02	K41	10/31/2024	9056A
P4675-05	COMP-5	5.04g	Solid	Anions Group1	Cool 4 deg C	POWE02	K41	10/31/2024	9056A
P4675-06	COMP-6	5.02g	Solid	Anions Group1	Cool 4 deg C	POWE02	K41	10/31/2024	9056A
P4675-01 MS		5.02g							
P4675-01 MSD		5.05g							
BL		5.00g							
BS		5.00g							

Final volume 100ml with DI water. Balance ID : WC SC-4

NF 11.05.2024

Date/Time 11.05.2024 , 9:00

Raw Sample Received by: NF(WC)

Raw Sample Relinquished by: [signature]

Date/Time 11.05.2024 , 12:00

Raw Sample Received by: [signature]

Raw Sample Relinquished by: NF (WC)

Reviewed By:iwona
On:11/11/2024
11:44:18 AM
Inst Id :IC-2
LB :LB133290

Reviewed By:Iwona
On:11/6/2024 11:10:22 AM
Inst Id :Konelab 20
LB :LB133302

LB133302

Test results | Aquakem 7.2AQ1 | Page:

CHEMTECH CONSULTING GROUP INC
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM | Instrument ID : Konelab

11/5/2024 13:12

Test: Ammonia-N

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	1.038	0.0	0.150	
ICB1	0.007	0.0	0.032	
CCV1	1.022	0.0	0.148	
CCB1	0.010	0.0	0.033	
RL CHECK	0.099	0.0	0.043	99%(50—150) 11/05/2024 RM
PB164458BL	0.010	0.0	0.032	
PB164458BS	1.039	0.0	0.150	
P4495-07	27.160	0.0	3.123	Init abs., Test limit hig
P4675-01	0.030	0.0	0.035	
P4675-01DUP	0.013	0.0	0.033	
P4675-01MS	1.083	0.0	0.155	
P4675-01MSD	0.999	0.0	0.145	
P4675-02	0.049	0.0	0.037	
P4675-03	0.011	0.0	0.033	
CCV2	1.028	0.0	0.148	
CCB2	0.022	0.0	0.034	
P4675-04	0.037	0.0	0.036	
P4675-05	0.019	0.0	0.033	
P4675-06	0.025	0.0	0.034	
CCV3	1.042	0.0	0.150	
CCB3	0.033	0.0	0.035	
P4495-07DLX40	1.087	0.0	0.155	
CCV4	1.030	0.0	0.149	
CCB4	0.005	0.0	0.032	

N	24
Mean	1.537
SD	5.4800
CV%	356.47

Reviewed By:Iwona
On:11/6/2024 11:10:22 AM
Inst Id :Konelab 20
LB :LB133302

Aquakem v. 7.2AQ1
Results from time period:
Tue Nov 05 10:50:20 2024
Tue Nov 05 12:29:06 2024

Sample Id	Sam/Ctr/cA	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPM	A	Ammonia-N	P	0.0123	mg/l	11/5/2024 8:44:23	
0.1PPM	A	Ammonia-N	P	0.1131	mg/l	11/5/2024 8:44:24	
0.2PPM	A	Ammonia-N	P	0.1921	mg/l	11/5/2024 8:44:25	
0.4PPM	A	Ammonia-N	P	0.3915	mg/l	11/5/2024 8:44:26	
1.0PPM	A	Ammonia-N	P	1.0168	mg/l	11/5/2024 8:44:27	
1.3PPM	A	Ammonia-N	P	1.2758	mg/l	11/5/2024 8:44:28	
2.0PPM	A	Ammonia-N	P	2.0318	mg/l	11/5/2024 8:44:29	
ICV1	S	Ammonia-N	P	1.0377	mg/l	11/5/2024 10:50:21	
ICB1	S	Ammonia-N	P	0.0074	mg/l	11/5/2024 10:50:22	
CCV1	S	Ammonia-N	P	1.0221	mg/l	11/5/2024 10:50:25	
CCB1	S	Ammonia-N	P	0.0104	mg/l	11/5/2024 10:50:26	
RL CHECK	S	Ammonia-N	P	0.0993	mg/l	11/5/2024 10:50:29	
PB164458BL	S	Ammonia-N	P	0.0097	mg/l	11/5/2024 10:50:31	
PB164458BS	S	Ammonia-N	P	1.0387	mg/l	11/5/2024 11:01:04	
P4495-07	S	Ammonia-N	P	27.1596	mg/l	11/5/2024 11:01:07	
P4675-01	S	Ammonia-N	P	0.0295	mg/l	11/5/2024 11:11:51	
P4675-01DUP	S	Ammonia-N	P	0.0131	mg/l	11/5/2024 11:11:53	
P4675-01MS	S	Ammonia-N	P	1.0826	mg/l	11/5/2024 11:11:54	
P4675-01MSD	S	Ammonia-N	P	0.9988	mg/l	11/5/2024 11:11:55	
P4675-02	S	Ammonia-N	P	0.0488	mg/l	11/5/2024 11:11:58	
P4675-03	S	Ammonia-N	P	0.0109	mg/l	11/5/2024 11:11:59	
CCV2	S	Ammonia-N	P	1.0285	mg/l	11/5/2024 11:22:30	
CCB2	S	Ammonia-N	P	0.0215	mg/l	11/5/2024 11:22:32	
P4675-04	S	Ammonia-N	P	0.0367	mg/l	11/5/2024 11:22:33	
P4675-05	S	Ammonia-N	P	0.0187	mg/l	11/5/2024 11:22:34	
P4675-06	S	Ammonia-N	P	0.0247	mg/l	11/5/2024 11:22:35	
CCV3	S	Ammonia-N	P	1.0421	mg/l	11/5/2024 11:22:40	
CCB3	S	Ammonia-N	P	0.0329	mg/l	11/5/2024 11:27:59	
P4495-07DLX40	S	Ammonia-N	P	1.0875	mg/l	11/5/2024 12:29:00	
CCV4	S	Ammonia-N	P	1.0296	mg/l	11/5/2024 12:29:04	
CCB4	S	Ammonia-N	P	0.0046	mg/l	11/5/2024 12:29:06	

Reviewed By:Iwona
On:11/6/2024 11:10:22 AM
Inst Id :Konelab 20
LB :LB133302

Calibration results Aquakem 7.2AQ1 Page:

CHEMTECH CONSULTING GROUP INC
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM Instrument ID : Konelab

11/5/2024 8:46

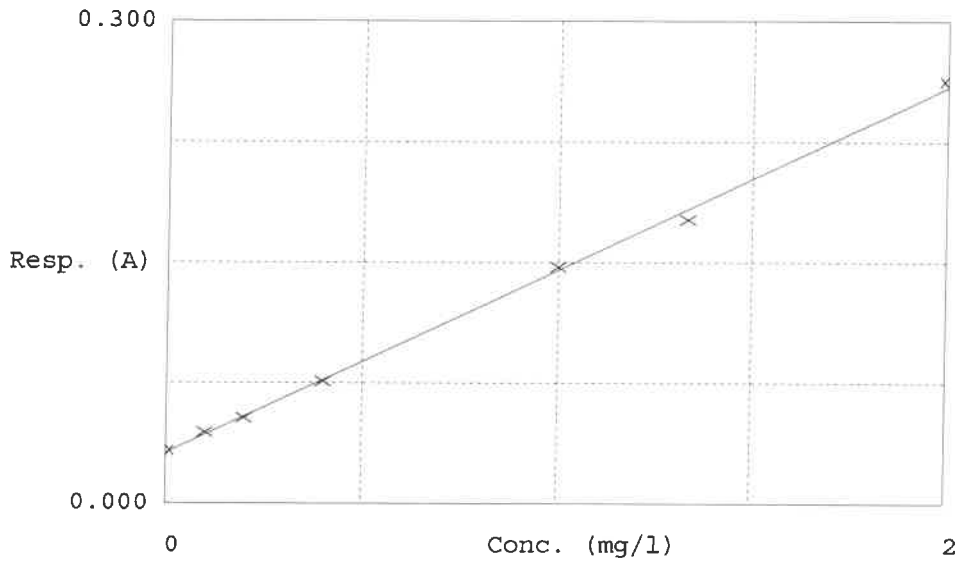
Test Ammonia-N

Accepted 11/5/2024 8:46

Factor 8.784
Bias 0.031

Coeff. of det. 0.998499

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.00PPM	0.033	0.0123	0.0000	—
2	NH3-2PPM	0.044	0.1131	0.1000	13.1
3	NH3-2PPM	0.053	0.1921	0.2000	-4.0
4	NH3-2PPM	0.076	0.3915	0.4000	-2.1
5	NH3-2PPM	0.147	1.0168	1.0000	1.7
6	NH3-2PPM	0.177	1.2758	1.3333	-1.9
7	NH3-2PPM	0.263	2.0318	2.0000	1.6

11/05/2024
RM

Reviewed By:Iwona
On:11/11/2024
11:45:13 AM
Inst Id :Konelab 20
LB :LB133312

(b133

Test results | Aquakem 7.2AQ1 | Page:

CHEMTECH CONSULTING GROUP INC
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM | Instrument ID : Konelab

11/6/2024 11:31

Test: TKN-NH3

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	4.810	0.0	0.626	
ICB1	-0.006	0.0	0.045	
CCV1	5.271	0.0	0.681	
CCB1	0.011	0.0	0.047	
RL CHECK	0.495	0.0	0.105	
PB164710BL	-0.037	0.0	0.041	
PB164710BS	5.088	0.0	0.659	
P4495-07	33.758	0.0	4.119	Init abs., Test limit hig
CCV2	5.090	0.0	0.660	
CCB2	-0.023	0.0	0.043	
11/06/2024 RM P4495-07DLX10	6.741	0.0	0.859	
CCV3	5.182	0.0	0.671	
CCB3	-0.009	0.0	0.044	

N	13
Mean	5.105
SD	9.0185
CV%	176.65

Reviewed By:Iwona
On:11/11/2024
11:45:13 AM
Inst Id :Konelab 20
LB :LB133312

Aquakem v. 7.2AQ1
Results from time period:
Wed Nov 06 09:03:12 2024
Wed Nov 06 11:04:50 2024

Sample Id	Sam/Ctr/cA	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPM	A	TKN-NH3	P	-0.0205	mg/l	11/6/2024 9:28:10	
0.5PPM	A	TKN-NH3	P	0.4469	mg/l	11/6/2024 9:28:11	
1.0PPM	A	TKN-NH3	P	1.0175	mg/l	11/6/2024 9:28:12	
2.5PPM	A	TKN-NH3	P	2.6521	mg/l	11/6/2024 9:28:13	
5.0PPM	A	TKN-NH3	P	4.9296	mg/l	11/6/2024 9:28:14	
6.7PPM	A	TKN-NH3	P	6.5954	mg/l	11/6/2024 9:28:15	
10.0PPM	A	TKN-NH3	P	10.0456	mg/l	11/6/2024 9:28:16	
ICV1	S	TKN-NH3	P	4.8098	mg/l	11/6/2024 10:11:02	
ICB1	S	TKN-NH3	P	-0.0058	mg/l	11/6/2024 10:11:05	
CCV1	S	TKN-NH3	P	5.2709	mg/l	11/6/2024 10:11:06	
CCB1	S	TKN-NH3	P	0.0106	mg/l	11/6/2024 10:11:08	
RL CHECK	S	TKN-NH3	P	0.4954	mg/l	11/6/2024 10:11:11	
PB164710BL	S	TKN-NH3	P	-0.037	mg/l	11/6/2024 10:11:12	
PB164710BS	S	TKN-NH3	P	5.0882	mg/l	11/6/2024 10:21:44	
P4495-07	S	TKN-NH3	P	33.758	mg/l	11/6/2024 10:21:52	
CCV2	S	TKN-NH3	P	5.0901	mg/l	11/6/2024 10:30:13	
CCB2	S	TKN-NH3	P	-0.0234	mg/l	11/6/2024 10:30:14	
P4495-07DLX10	S	TKN-NH3	P	6.7406	mg/l	11/6/2024 11:04:46	
CCV3	S	TKN-NH3	P	5.1818	mg/l	11/6/2024 11:04:47	
CCB3	S	TKN-NH3	P	-0.0094	mg/l	11/6/2024 11:04:49	

Reviewed By:Iwona
On:11/11/2024
11:45:13 AM
Inst Id :Konelab 20
LB :LB133312

Calibration results Aquakem 7.2AQ1 Page: 1

CHEMTECH CONSULTING GROUP INC
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : RM Instrument ID : Konelab

11/6/2024 9:29

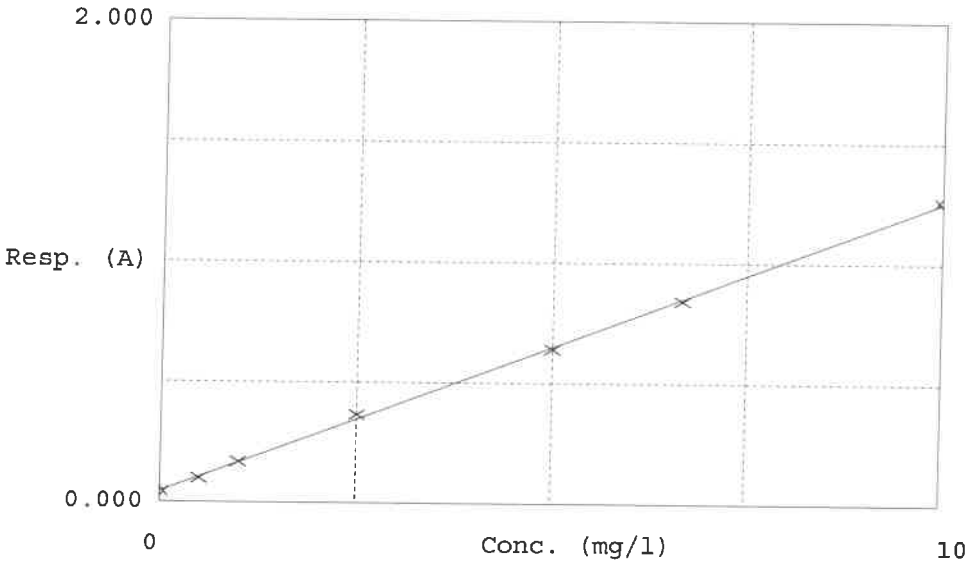
Test TKN-NH3

Accepted 11/6/2024 9:29

Factor 8.286
Bias 0.045

Coeff. of det. 0.999532

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.00PPM	0.043	-0.0205	0.0000	—
2	TKN-10	0.099	0.4469	0.5000	-10.9
3	TKN-10	0.168	1.0175	1.0000	1.8
4	TKN-10	0.365	2.6521	2.5000	6.1
5	TKN-10	0.640	4.9296	5.0000	-1.4
6	TKN-10	0.841	6.5954	6.6667	-1.1
7	TKN-10	1.258	10.0456	10.0000	0.5

11/06/2024
RM

Reviewed By:Iwona
On:11/6/2024 4:15:05 PM
Inst Id :IGN-1
LB :LB133316

Analytical Summary Report

Analysis Method: 1010B
Parameter: Flash Point
Run Number: LB133316
Thermometer ID: Flash Point

Reviewed By: rubina
Supervisor Review By: Iwona
Ambient Barometric Pressure(mmHg): 765.00
Barometric Scale ID: 0511064

Reagent/Standard	Lot/Log #
p-xylene (ICV)	W3088

Seq	LabID	True Value °F	DL	Initial Sample °C	Celsius °C	Result °F	Final Result °F	Anal Date	Anal Time
1	ICV	81	1	8	28.00	82.4	82.1	11/06/2024	08:35
2	P4495-05		1	8	45.00	113.0	112.7	11/06/2024	09:05
3	P4703-01		1	14	100.00	>212.0	>212.0	11/06/2024	09:35
4	P4703-01DUP		1	14	100.00	>212.0	>212.0	11/06/2024	10:05

Result = (Celsius * 1.8) + 32

Final Result = Result + (760 - Ambient Barometric Pressure) * 0.06

WORKLIST(Hardcopy Internal Chain)

LB 133316

WorkList Name : FP-1106 **WorkList ID :** 185170 **Department :** Wet-Chemistry **Date :** 11-06-2024 11:03:29

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4495-05	PT-FP-SOIL	Solid	Flash Point	Cool 4 deg C	CHEM02	QA Of	10/21/2024	1010B
P4703-01	S0-1	Solid	Flash Point	Cool 4 deg C	PSEG03	L23	11/04/2024	1010B

Date/Time 11/06/2024 08.25

Raw Sample Received by: RM (CWC)

Raw Sample Relinquished by:

Date/Time 11/06/2024 10.45

Raw Sample Received by:

Raw Sample Relinquished by: RM (CWC)

Reviewed By:Iwona
On:11/6/2024 4:15:05 PM
Inst Id :IGN-1
LB :LB133316

Alliance TECHNICAL GROUP

Analytical Summary Report

Analysis Method: 9045D
Analyst By : jignesh
Parameter: Corrosivity
Supervisor Review By : sohil
Run Number: LB133322
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].

True Value of CCV3 = 2.00 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	11/06/2024	16:20
2	CAL2	1	Water	NA	NA	20.2	7.00	11/06/2024	16:21
3	CAL3	1	Water	NA	NA	20.3	10.02	11/06/2024	16:22
4	ICV	1	Water	NA	NA	20.3	7.02	11/06/2024	16:25
5	CCV1	1	Water	NA	NA	20.2	2.01	11/06/2024	16:30
6	P4495-02	1	Solid	20.02	20	23.4	7.50	11/06/2024	16:33
7	P4718-03	1	Solid	20.03	20	24.7	8.36	11/06/2024	16:37
8	P4719-03	1	Solid	20.02	20	24.6	8.30	11/06/2024	16:40
9	P4720-05	1	Solid	20.03	20	23.2	5.90	11/06/2024	16:44
10	P4722-04	1	Solid	20.02	20	24.7	9.34	11/06/2024	16:47
11	P4722-09	1	Solid	20.03	20	24.7	9.07	11/06/2024	16:50
12	P4722-14	1	Solid	20.02	20	24.6	8.70	11/06/2024	16:52
13	P4732-02	1	Solid	20.03	20	24.4	8.49	11/06/2024	17:00
14	P4738-02	1	Solid	20.05	20	24.3	6.88	11/06/2024	17:10
15	P4739-04	1	Solid	20.02	20	24.7	7.12	11/06/2024	17:15
16	CCV2	1	Water	NA	NA	20.2	12.02	11/06/2024	17:17
17	P4739-08	1	Solid	20.03	20	24.3	8.09	11/06/2024	17:20
18	P4739-12	1	Solid	20.04	20	24.7	7.68	11/06/2024	17:25
19	P4739-16	1	Solid	20.02	20	24.7	10.13	11/06/2024	17:30
20	P4739-16DUP	1	Solid	20.03	20	24.8	10.14	11/06/2024	17:31

Reviewed By:sohil
On:11/7/2024 10:36:00 AM
Inst Id :WC PH METER-1

Seq	LabID	DF	Matrix	Weight (gm)	Volume (ml)	Temperature (°C)	Result (pH)	Anal Date	An
21	CCV3	1	Water	NA	NA	20.3	2.01	11/06/2024	17:35

WORKLIST(Hardcopy Internal Chain)

VB 133322

WorkList Name : corrosivity p4719 **WorkList ID :** 185151 **Department :** Wet-Chemistry **Date :** 11-06-2024 07:56:26

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4495-02	PT-CORR-SOIL	Solid	Corrosivity	Cool 4 deg C	CHEM02	QA Of	10/21/2024	9045D
P4718-03	WB-307-SB02	Solid	Corrosivity	Cool 4 deg C	PORT06	L21	11/04/2024	9045D
P4719-03	BAYAVE-STOCKPILE	Solid	Corrosivity	Cool 4 deg C	PSEG03	K21	11/05/2024	9045D
P4720-05	JC-701-COMP-01	Solid	Corrosivity	Cool 4 deg C	PSEG03	K31	11/05/2024	9045D
P4722-04	WC-1(0-6)	Solid	Corrosivity	Cool 4 deg C	WALS01	L23	11/05/2024	9045D
P4722-09	WC-2(0-6)	Solid	Corrosivity	Cool 4 deg C	WALS01	L23	11/05/2024	9045D
P4722-14	WC-3(0-6)	Solid	Corrosivity	Cool 4 deg C	WALS01	L23	11/05/2024	9045D
P4732-02	PPE-COMP	Solid	Corrosivity	Cool 4 deg C	FURI01	L11	11/06/2024	9045D
P4738-02	72-12018	Solid	Corrosivity	Cool 4 deg C	PSEG03	L23	11/06/2024	9045D
P4739-04	TP-14	Solid	Corrosivity	Cool 4 deg C	PSEG03	L21	11/06/2024	9045D
P4739-08	BP-G2	Solid	Corrosivity	Cool 4 deg C	PSEG03	L21	11/06/2024	9045D
P4739-12	BP-B2	Solid	Corrosivity	Cool 4 deg C	PSEG03	L21	11/06/2024	9045D
P4739-16	TP-11	Solid	Corrosivity	Cool 4 deg C	PSEG03	L21	11/06/2024	9045D

Date/Time 11/06/24 16:10
Raw Sample Received by:
Raw Sample Relinquished by:

Date/Time 11/06/24 18:30
Raw Sample Received by:
Raw Sample Relinquished by:

Reviewed By:sohil On:11/7/2024 10:36:00 AM Inst Id :WC PH METER-1

Extraction and Analytical Summary Report

Analysis Method: 9071B
Test: Oil and Grease
Run Number: LB133347
Analysis Date: 11/08/2024
BalanceID: WC SC-6
OvenID: EXT OVEN-3

ANALYST: jignesh
REVIEWED BY: sohil
Extraction Date: 11/08/2024
Extration IN Time: 07:50
Extration OUT Time: 08:25
Thermometer ID: EXT OVEN#3

Dish #	Lab ID	Client ID	Matrix	pH	Sample Weight (g)	Final Volume (ml)	Empty Dish Weight (g)	Final Empty Dish Weight(g)	Silica Gel Weight(g)	Weight After Drying(g)	Final Weight After Drying(g)	Change Weight (g)	Result in ppm
1	LB133347BL	LB133347BL	SOLID		20.03	100	2.5987	2.5987	0	2.5988	2.5988	0.0001	4.99
2	LB133347BS	LB133347BS	SOLID		20.04	100	2.9106	2.9106	0	2.9125	2.9125	0.0019	94.81
3	P4495-09	PT-OGR-SOIL	SOLID		20.02	100	3.0607	3.0607	0	3.0865	3.0865	0.0258	1288.71
4	P4722-03	WC-1(0-6)	SOLID		20.03	100	3.1146	3.1146	0	3.1344	3.1344	0.0198	988.52
5	P4722-08	WC-2(0-6)	SOLID		20.04	100	3.0808	3.0808	0	3.4109	3.4109	0.3301	16472.1
6	P4722-13	WC-3(0-6)	SOLID		20.02	100	3.0710	3.0710	0	3.1163	3.1163	0.0453	2262.74
7	P4722-13DUP	WC-3(0-6)DUP	SOLID		20.03	100	3.1018	3.1018	0	3.1469	3.1469	0.0451	2251.62
8	P4722-13MS	WC-3(0-6)	SOLID		20.05	100	3.0724	3.0724	0	3.1096	3.1096	0.0372	1855.36
9	P4722-13MSD	WC-3(0-6)	SOLID		20.04	100	3.0678	3.0678	0	3.1053	3.1053	0.0375	1871.26

QC Batch# LB133347 **Test:** Oil and Grease **Analysis Date:** 11/08/2024

Chemicals Used:

Chemical Name	Chemical Lot #
HEXANE	W3110
pH Paper 0-14	NA
Sodium Sulfate	EP2556
1:1 HCL	WP108566
Silica Gel	NA
Sand	E2865

Standards Used:

Standard Name	Amount Used	Standard Lot #
LCSS	1.00 ML	WP108569
LCSSD	NA	NA
MS/MSD	1.00 ML	WP108570

BALANCE CALIBRATION / OVEN Dessicator Data

Analytical Balance ID # : WC SC-6

Before Analysis

0.0020 gram Balance: 0.0018 **(0.0018-0.0022)**
1.0000 gram Balance: 1.0003 **(0.9950-1.0050)**
Bal Check Time: 08:10

In OVEN TEMP1 : 70 °C **Dessicator Time In1 :** 10:36
In Time1: 09:30
Out OVEN TEMP1: 70 °C **Dessicator Time Out1:** 11:25
Out Time1: 10:35

After Analysis

0.0020 gram Balance: 0.0019 **(0.0018-0.0022)**
1.0000 gram Balance: 1.0005 **(0.9950-1.0050)**
Bal Check Time: 13:32

In OVEN TEMP2 : 71 °C **Dessicator Time In2 :** 12:56
In Time2: 12:10
Out OVEN TEMP2: 71 °C **Dessicator Time Out2:** 13:30
Out Time2: 12:55

LB133347

WORKLIST(Hardcopy Internal Chain)

WorkList Name : OIL & GRASE P4795 **WorkList ID :** 185234 **Department :** Wet-Chemistry **Date :** 11-08-2024 07:39:34

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4495-09	PT-OGR-SOIL	Solid	Oil and Grease	Cool 4 deg C	CHEM02	QA Of	10/21/2024	9071B
P4722-03	WC-1(0-6)	Solid	Oil and Grease	Cool 4 deg C	WALS01	L23	11/05/2024	9071B
P4722-08	WC-2(0-6)	Solid	Oil and Grease	Cool 4 deg C	WALS01	L23	11/05/2024	9071B
P4722-13	WC-3(0-6)	Solid	Oil and Grease	Cool 4 deg C	WALS01	L23	11/05/2024	9071B

Date/Time 11/08/24 07:42

Raw Sample Received by:

Raw Sample Relinquished by:

Date/Time 11/08/24 12:30

Raw Sample Received by:

Raw Sample Relinquished by:

Reviewed By:sohil On:11/8/2024 9:19:59 AM Inst Id :WC SC-3 LB :LB133347

Reviewed By:Iwona
On:11/13/2024
12:39:51 PM
Inst Id
:SPECTROPHOTOME

Analytical Summary Report

Analysis Method: 365.3
Parameter: Phosphorus, Total
Run Number: LB133420

ANALYST: Niha
SUPERVISOR REVIEW BY: Iwona
BALANCE ID: WC SC-4

Reagent/Standard	Lot/Log #
calibration std. phosphate 1 ppm	WP110583
calibration std. phosphate 0.5 ppm	WP110582
calibration std. phosphate 0.3 ppm	WP110581
calibration std. phosphate 0.1 ppm	WP110580
calibration std. phosphate 0.05 ppm	WP110579
calibration std. 0 ppm	WP110578
phosphate CCV std.	WP110584
Combined reagent	WP110669
Phenolphthalein indicator	WP108727
Sodium hydroxide, 1N	WP108662
Phosphate ICV-LCS Std	WP110585
Phosphate LOD-MDL Std 0.025ppm	WP110591

Intercept: -0.0025 **Slope:** 0.654 **Regression:** 0.999773

Seq	Lab ID	True Value (mg/L)	DF	Initial Volume (mL)	Final Volume (mL)	Absorbance Reading at 880nm	Result (mg/L)	%D	AnalDate	AnalTime
1	CAL1	0.00	1	50	50	0.000	0.004		11/13/2024	11:00
2	CAL2	0.05	1	50	50	0.033	0.054	8	11/13/2024	11:00
3	CAL3	0.10	1	50	50	0.065	0.103	3	11/13/2024	11:01
4	CAL4	0.30	1	50	50	0.183	0.284	-5.3	11/13/2024	11:01
5	CAL5	0.50	1	50	50	0.325	0.501	0.2	11/13/2024	11:02
6	CAL6	1.00	1	50	50	0.654	1.004	0.4	11/13/2024	11:02

Reviewed By:Iwona
On:11/13/2024
12:39:51 PM
Inst Id
:SPECTROPHOTOME

Analytical Summary Report

Analysis Method: 365.3
ANALYST: Niha
Parameter: Phosphorus, Total
SUPERVISOR REVIEW BY: Iwona
Run Number: LB133420
BALANCE ID: WC SC-4

Seq	Lab ID	True Value (mg/l)	DF	Initial Volume (mL)	Final Volume (mL)	Absorbance Reading at 880nm	Result (mg/L)	AnalDate	AnalTime
1	ICV	0.50	1	50	50	0.334	0.515	11/13/2024	11:03
2	ICB		1	50	50	0.000	0.004	11/13/2024	11:03
3	CCV1	0.50	1	50	50	0.332	0.511	11/13/2024	11:04
4	CCB1		1	50	50	0.000	0.004	11/13/2024	11:04
5	RL Check	0.01	1	50	50	0.033	0.054	11/13/2024	11:05
6	PB164936BL		1	1.00	50	0.000	0.004	11/13/2024	11:05
7	PB164936BS	0.50	1	1.00	50	0.330	0.508	11/13/2024	11:06
8	P4368-03		1	1.00	50	0.015	0.027	11/13/2024	11:06
9	P4495-07		1	1.00	50	2.1786	3.336	11/13/2024	11:07
10	P4495-07		100	1.00	50	0.342	0.527	11/13/2024	11:07
11	CCV2	0.50	1	50	50	0.332	0.511	11/13/2024	11:08
12	CCB2		1	50	50	0.000	0.004	11/13/2024	11:08

Reviewed By:Iwona
On:11/14/2024 4:24:09 PM
Inst Id :Konelab 20
LB :LB133427

LB133

Test results | Aquakem 7.2AQ1 | Page:

CHEMTECH CONSULTING GROUP INC
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : NF | Instrument ID : Konelab

11/12/2024 16:40

Test: Total CN

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	94.295	0.0	0.069	
ICB1	0.198	0.0	0.002	
CCV1	240.372	0.0	0.173	
CCB1	0.090	0.0	0.002	
PB164718BL	0.005	0.0	0.002	
PB164718BS	94.992	0.0	0.070	
LOWPB164718	10.003	0.0	0.009	
HIGHPB164718	485.588	0.0	0.349	
P4495-03	2405.610	0.0	1.720	
P4495-03DLX10	268.126	0.0	0.193	
CCV2	251.437	0.0	0.181	
CCB2	0.838	0.0	0.002	

NF 11.12.2024
100% (90-110)
97%

N	12
Mean	320.963
SD	674.0284
CV%	210.00

Reviewed By:Iwona
On:11/14/2024 4:24:09 PM
Inst Id :Konelab 20
LB :LB133427

Aquakem v. 7.2AQ1
Results from time period:
Tue Nov 12 14:31:42 2024
Tue Nov 12 16:06:25 2024

Sample Id	Sam/Ctr/cA	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPBCN	A	Total CN	P	-0.2684	µg/l	11/12/2024 14:49:12	
5.0PPBCN	A	Total CN	P	4.7817	µg/l	11/12/2024 14:49:13	
10PPBCN	A	Total CN	P	9.8581	µg/l	11/12/2024 14:49:14	
50PPBCN	A	Total CN	P	48.0693	µg/l	11/12/2024 14:49:15	
100PPBCN	A	Total CN	P	100.0876	µg/l	11/12/2024 14:49:16	
250PPBCN	A	Total CN	P	254.5824	µg/l	11/12/2024 14:49:17	
500PPBCN	A	Total CN	P	497.8894	µg/l	11/12/2024 14:49:18	
ICV1	S	Total CN	P	94.2947	µg/l	11/12/2024 15:38:23	
ICB1	S	Total CN	P	0.1975	µg/l	11/12/2024 15:38:25	
CCV1	S	Total CN	P	240.3719	µg/l	11/12/2024 15:38:28	
CCB1	S	Total CN	P	0.0904	µg/l	11/12/2024 15:38:30	
PB164718BL	S	Total CN	P	0.0048	µg/l	11/12/2024 15:38:31	
PB164718BS	S	Total CN	P	94.9917	µg/l	11/12/2024 15:45:58	
LOWPB164718	S	Total CN	P	10.0033	µg/l	11/12/2024 15:45:59	
HIGHPB164718	S	Total CN	P	485.5883	µg/l	11/12/2024 15:46:01	
P4495-03	S	Total CN	P	2405.61	µg/l	11/12/2024 15:46:04	
P4495-03DLX10	S	Total CN	P	268.1258	µg/l	11/12/2024 16:01:10	
CCV2	S	Total CN	P	251.437	µg/l	11/12/2024 16:06:22	
CCB2	S	Total CN	P	0.8376	µg/l	11/12/2024 16:06:25	

Reviewed By:Iwona
On:11/14/2024 4:24:09 PM
Inst Id :Konelab 20
LB :LB133427

Calibration results Aquakem 7.2AQ1 Page: 1

CHEMTECH CONSULTING GROUP INC
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : NF Instrument ID : Konelab

11/12/2024 14:49

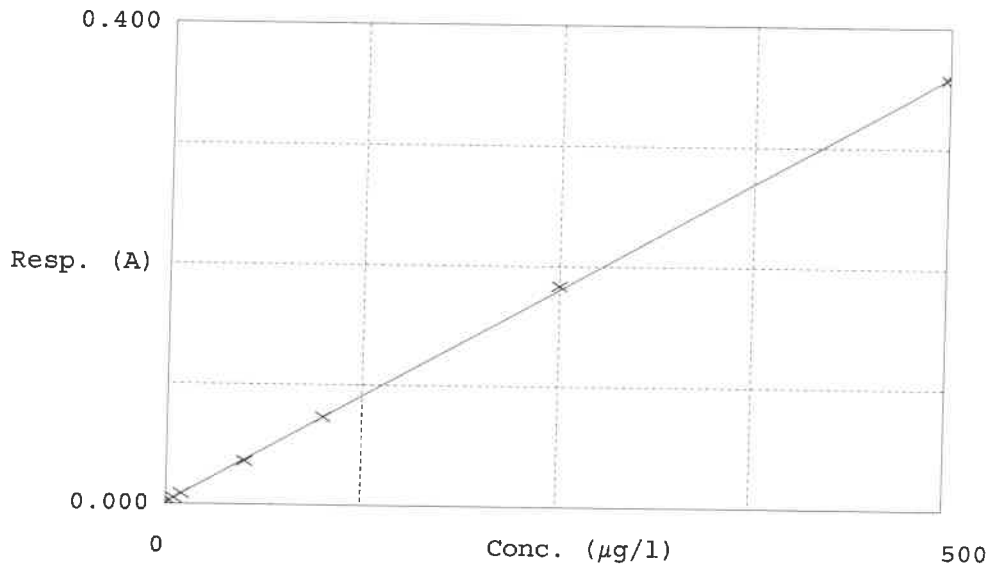
Test Total CN

Accepted 11/12/2024 14:49

Factor 1400
Bias 0.002

Coeff. of det. 0.999857

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors (Rc)
1	0.0PPBCN	0.002	-0.2684	0.0000	
2	5.0PPBCN	0.005	4.7817	5.0000	−4.4
3	10PPBCN	0.009	9.8581	10.0000	−1.4
4	50PPBCN	0.036	48.0693	50.0000	−3.9
5	100PPBCN	0.073	100.0876	100.0000	0.1
6	250PPBCN	0.184	254.5824	250.0000	0.8
7	500PPBCN	0.357	497.8894	500.0000	→ 0.4

NF
11.12.2024

Reviewed By:Iwona
On:11/14/2024 4:24:24 PM
Inst Id :Konelab 20
LB :LB133428

LB133

Test results | Aquakem 7.2AQ1 | Page: 1

CHEMTECH CONSULTING GROUP INC
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : NF

11/12/2024 17:25 | Instrument ID : Konelab

Test: Total CN

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	94.493	0.0	0.069	
ICB1	-1.050	0.0	0.001	
CCV1	243.388	0.0	0.176	
CCB1	-1.201	0.0	0.001	
PB164719BL	-1.169	0.0	0.001	
PB164719BS	97.593	0.0	0.071	
P4495-04	2390.273	0.0	1.709	
P4495-04DLX10	268.652	0.0	0.194	
CCV2	252.217	0.0	0.182	
CCB2	0.381	0.0	0.002	

N	10
Mean	334.358
SD	730.9763
CV%	218.62

Reviewed By:Iwona
On:11/14/2024 4:24:24 PM
Inst Id :Konelab 20
LB :LB133428

Aquakem v. 7.2AQ1
Results from time period:
Tue Nov 12 17:08:19 2024
Tue Nov 12 17:20:13 2024

Sample Id	Sam/Ctr/cA	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPBCN	A	Total CN	P	-0.2684	µg/l	11/12/2024 14:49:12	
5.0PPBCN	A	Total CN	P	4.7817	µg/l	11/12/2024 14:49:13	
10PPBCN	A	Total CN	P	9.8581	µg/l	11/12/2024 14:49:14	
50PPBCN	A	Total CN	P	48.0693	µg/l	11/12/2024 14:49:15	
100PPBCN	A	Total CN	P	100.0876	µg/l	11/12/2024 14:49:16	
250PPBCN	A	Total CN	P	254.5824	µg/l	11/12/2024 14:49:17	
500PPBCN	A	Total CN	P	497.8894	µg/l	11/12/2024 14:49:18	
ICV1	S	Total CN	P	94.4933	µg/l	11/12/2024 17:08:19	
ICB1	S	Total CN	P	-1.0501	µg/l	11/12/2024 17:08:21	
CCV1	S	Total CN	P	243.3883	µg/l	11/12/2024 17:08:23	
CCB1	S	Total CN	P	-1.2006	µg/l	11/12/2024 17:08:26	
PB164719BL	S	Total CN	P	-1.1685	µg/l	11/12/2024 17:08:28	
PB164719BS	S	Total CN	P	97.5934	µg/l	11/12/2024 17:15:51	
P4495-04	S	Total CN	P	2390.273	µg/l	11/12/2024 17:15:53	
P4495-04DLX1	S	Total CN	P	268.6516	µg/l	11/12/2024 17:15:54	
CCV2	S	Total CN	P	252.2169	µg/l	11/12/2024 17:20:10	
CCB2	S	Total CN	P	0.3811	µg/l	11/12/2024 17:20:13	

Reviewed By:Iwona
On:11/14/2024 4:24:24 PM
Inst Id :Konelab 20
LB :LB133428

Calibration results Aquakem 7.2AQ1 Page: 1

CHEMTECH CONSULTING GROUP INC
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : NF Instrument ID : Konelab

11/12/2024 14:49

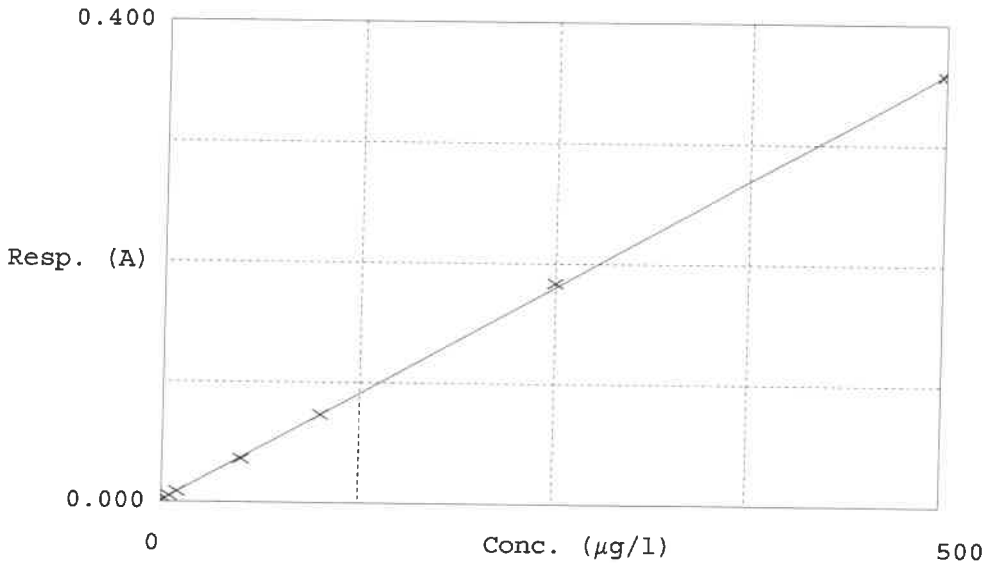
Test Total CN

Accepted 11/12/2024 14:49

Factor 1400
Bias 0.002

Coeff. of det. 0.999857

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors (Rc)
1	0.0PPBCN	0.002	-0.2684	0.0000	
2	5.0PPBCN	0.005	4.7817	5.0000	-4.4
3	10PPBCN	0.009	9.8581	10.0000	-1.4
4	50PPBCN	0.036	48.0693	50.0000	-3.9
5	100PPBCN	0.073	100.0876	100.0000	0.1
6	250PPBCN	0.184	254.5824	250.0000	0.6
7	500PPBCN	0.357	497.8894	500.0000	-0.4

NF
11.12.2024

Reviewed By:Iwona
On:11/21/2024 4:55:51 PM
Inst Id :SPECTROPHOTOME

Analytical Summary Report

Analysis Method: ~~7196A~~

Parameter: ~~Hexavalent Chromium~~

Run Number: ~~LB133555~~

ANALYST: rubina

SUPERVISOR REVIEW BY: Iwona

pH Meter ID: WC pH Meter-1

Reagent/Standard	Lot/Log #
hexavalent chromium color reagent	WP110722
5N sulfuric acid	WP110380
HNO3 Hex-Chrome, 5M	WP110381
Hexchrome Cleaning Solution	WP108645

Intercept: 0.0015 **Slope:** 0.7651 **Regression:** 0.999992

Seq	Lab ID	True Value (mg/l)	DF	Initial Vol (ml)	Final Vol (ml)	pH HN03	pH H2SO4	Absorb.at 540nm		Absorbance Difference	Result (mg/L)	%D	Anal Date	Anal Time
								Backgrnd	Color					
1	CAL1	0	1	100	100	7.28	1.75	0.000	0.000	0.000	-0.00		11/21/2024	13:50
2	CAL2	0.01	1	100	100	7.40	1.87	0.000	0.009	0.009	0.009	-10	11/21/2024	13:51
3	CAL3	0.025	1	100	100	7.35	1.85	0.000	0.021	0.021	0.025	0	11/21/2024	13:52
4	CAL4	0.05	1	100	100	7.37	1.88	0.000	0.040	0.040	0.050	0	11/21/2024	13:53
5	CAL5	0.1	1	100	100	7.35	1.88	0.000	0.080	0.080	0.102	2	11/21/2024	13:54
6	CAL6	0.5	1	100	100	7.38	1.90	0.000	0.383	0.383	0.498	-0.4	11/21/2024	13:55
7	CAL7	1	1	100	100	7.36	1.85	0.000	0.767	0.767	1.000	0	11/21/2024	13:56

Reviewed By:Iwona
On:11/21/2024 4:55:51 PM
Inst Id :SPECTROPHOTOME

Alliance TECHNICAL GROUP

Analytical Summary Report

Analysis Method: 7196A
ANALYST: rubina

Parameter: Hexavalent Chromium
SUPERVISOR REVIEW BY: Iwona

Run Number: LB133555
pH Meter ID: WC pH Meter-1

Seq	Lab ID	True Value	DF	Initial Vol (ml/gm)	Final Vol (ml)	pH HN03	pH H2SO4	Absorb.at540nm		Absorbance Difference	Intermediate Result (mg/L)	Anal Date	Anal Time
								Backgrnd	Color				
1	ICV	0.5	1	100	100	7.43	1.93	0.000	0.385	0.385	0.501	11/21/2024	13:57
2	ICB		1	100	100	7.27	1.75	0.000	0.001	0.001	-0.001	11/21/2024	13:58
3	CCV1	0.5	1	100	100	7.46	1.95	0.000	0.386	0.386	0.503	11/21/2024	13:59
4	CCB1		1	100	100	7.24	1.79	0.000	0.000	0.000	-0.002	11/21/2024	14:00
5	RL Check	0.01	1	100	100	7.40	1.92	0.000	0.010	0.010	0.011	11/21/2024	14:01
6	PB165110BL		1	2.50	100	7.28	1.76	0.000	0.001	0.001	-0.001	11/21/2024	14:02
7	PB165110BS	20	1	2.50	100	7.44	1.93	0.000	0.385	0.385	0.501	11/21/2024	14:03
8	P4495-06		1	2.50	100	7.52	2.04	0.038	0.824	0.786	1.025	11/21/2024	14:04
9	P4910-01		1	2.51	100	7.55	2.14	0.006	0.006	0.000	-0.002	11/21/2024	14:05
10	P4910-01DU		1	2.51	100	7.54	2.18	0.006	0.006	0.000	-0.002	11/21/2024	14:06
11	P4910-01MS	40	2	2.52	100	7.58	2.10	0.000	0.320	0.320	0.416	11/21/2024	14:07
12	P4910-01MS	1284	40	2.51	100	7.54	2.06	0.000	0.617	0.617	0.804	11/21/2024	14:08
13	P4910-01MS	40	2	2.51	100	7.60	2.10	0.000	0.381	0.381	0.496	11/21/2024	14:09
14	P4910-05		1	2.54	100	7.60	2.06	0.004	0.005	0.001	-0.001	11/21/2024	14:10
15	P4916-01		1	2.52	100	7.67	2.10	0.006	0.007	0.001	-0.001	11/21/2024	14:11
16	CCV2	0.5	1	100	100	7.42	1.92	0.000	0.384	0.384	0.500	11/21/2024	14:12
17	CCB2		1	100	100	7.27	1.77	0.000	0.001	0.001	-0.001	11/21/2024	14:13
18	P4916-05		1	2.54	100	7.52	2.20	0.008	0.009	0.001	-0.001	11/21/2024	14:14
19	P4916-09		1	2.54	100	7.60	2.28	0.016	0.017	0.001	-0.001	11/21/2024	14:15
20	P4924-01		1	2.53	100	7.56	2.20	0.009	0.010	0.001	-0.001	11/21/2024	14:16
21	P4925-01		1	2.55	100	7.60	2.10	0.007	0.007	0.000	-0.002	11/21/2024	14:17
22	P4925-05		1	2.51	100	7.68	2.18	0.004	0.005	0.001	-0.001	11/21/2024	14:18
23	P4929-01		1	2.54	100	7.62	2.10	0.038	0.038	0.000	-0.002	11/21/2024	14:19
24	P4936-01		1	2.54	100	7.62	2.20	0.005	0.006	0.001	-0.001	11/21/2024	14:20
25	P4938-01		1	2.51	100	7.60	2.14	0.003	0.004	0.001	-0.001	11/21/2024	14:21
26	P4938-05		1	2.53	100	7.56	2.10	0.004	0.004	0.000	-0.002	11/21/2024	14:22
27	CCV3	0.5	1	100	100	7.46	1.94	0.000	0.383	0.383	0.499	11/21/2024	14:23
28	CCB3		1	100	100	7.29	1.77	0.000	0.001	0.001	-0.001	11/21/2024	14:24
29	P4495-06		2	2.50	100	7.35	2.06	0.017	0.344	0.327	0.425	11/21/2024	14:25
30	CCV4	0.5	1	100	100	7.43	1.96	0.000	0.385	0.385	0.501	11/21/2024	14:26
31	CCB4		1	100	100	7.29	1.74	0.000	0.000	0.000	-0.002	11/21/2024	14:27

Alliance TECHNICAL GROUP

Soil/Sludge Ammonia Preparation Sheet

PB164458

SOP ID : MSM4500-NH3 B,G-Ammonia-17

SDG No : N/A

Matrix : SOIL

Pippete ID : WC

Balance ID : WC SC-4

Hood ID : HOOD#2

Block ID : WC-DIST-BLOCK-1

Weigh By : RM

Start Digest Date: 11/04/2024 **Time :** 10:10 **Temp :** 150 °C

End Digest Date: 11/04/2024 **Time :** 11:10 **Temp :** 160 °C

II batch 11/04/2024 11:30 150c
11/04/2024 12:30 160c RM

Digestion tube ID : M5595

Filter paper ID : N/A

pH Meter ID : N/A

Block Thermometer ID : WC CYANIDE

Prep Technician Signature: RM

Supervisor Signature: 12

Standared Name	MLS USED	STD REF. # FROM LOG
LCSS	1.0ML	WP110181
MS/MSD SPIKE SOL.	1.0ML	WP110180
PBS003	50.0ML	W3112
RL CHECK	0.1ML	WP110180
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
BORATE BUFFER	2.5ML	WP108708
NAOH 6N	0.5-2.0ML	WP108660
H2SO4 0.04N	5.00ML	WP110335
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

ALL GLASSWEAR ARE STEAMED OUT AND THERE WERE NO TRACE OF AMMONIA USING NESLER REAGENT
WP108814

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
11/04/2024 12:40	RM CWG	RM CWG
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Soil/Sludge Ammonia Preparation Sheet

PB164458

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
P4495-07	PT-NUT-SOIL	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
P4675-01DUP	COMP-1DUP	1.02	50	N/A	N/A	N/A	N/A	N/A	N/A
P4675-01MS	COMP-1MS	1.03	50	N/A	N/A	N/A	N/A	N/A	N/A
P4675-01MSD	COMP-1MSD	1.02	50	N/A	N/A	N/A	N/A	N/A	N/A
P4675-01	COMP-1	1.02	50	N/A	N/A	N/A	N/A	N/A	N/A
P4675-02	COMP-2	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
P4675-03	COMP-3	1.03	50	N/A	N/A	N/A	N/A	N/A	N/A
P4675-04	COMP-4	1.02	50	N/A	N/A	N/A	N/A	N/A	N/A
P4675-05	COMP-5	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
P4675-06	COMP-6	1.04	50	N/A	N/A	N/A	N/A	N/A	N/A
PB164458BL	PBS458	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
PB164458BS	LCS458	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : AMMONIA SOIL-11-03 **WorkList ID :** 185069 **Department :** Distillation **Date :** 11-03-2024 14:54:39

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4495-07	PT-NUT-SOIL	Solid	Ammonia	Cool 4 deg C	CHEM02	QA Of	10/21/2024	SM4500-NH3
P4675-01	COMP-1	Solid	Ammonia	Cool 4 deg C	POWE02	K41	10/31/2024	SM4500-NH3
P4675-02	COMP-2	Solid	Ammonia	Cool 4 deg C	POWE02	K41	10/31/2024	SM4500-NH3
P4675-03	COMP-3	Solid	Ammonia	Cool 4 deg C	POWE02	K41	10/31/2024	SM4500-NH3
P4675-04	COMP-4	Solid	Ammonia	Cool 4 deg C	POWE02	K41	10/31/2024	SM4500-NH3
P4675-05	COMP-5	Solid	Ammonia	Cool 4 deg C	POWE02	K41	10/31/2024	SM4500-NH3
P4675-06	COMP-6	Solid	Ammonia	Cool 4 deg C	POWE02	K41	10/31/2024	SM4500-NH3

Date/Time 11/04/2024 08.15
Raw Sample Received by: RM (WC)
Raw Sample Relinquished by: [signature]

Date/Time 11/04/2024 12.40
Raw Sample Received by: [signature] (WC)
Raw Sample Relinquished by: RM (WC)

Alliance TECHNICAL GROUP

Soil/Sludge TKN Preparation Sheet

PB164710

SOP ID : MSM4500-N Org C-TKN-11

SDG No : N/A

Matrix : SOIL

Pippete ID : WC

Balance ID : WC SC-4

Hood ID : HOOD#2&3

Block ID : WC-DIST-BLOCK-1

Weigh By : RM

Start Digest Date: 11/05/2024 **Time :** 14:20 **Temp :** 380 °C

End Digest Date: 11/05/2024 **Time :** 15:50 **Temp :** 375 °C

Start Distillation Date: 11/05/2024 **Time :** 16:10 **Temp :** 150 °C

End Distillation Date: 11/05/2024 **Time :** 17:10 **Temp :** 158 °C

Digestion tube ID : M5595

Filter paper ID : N/A

pH Meter ID : N/A

Block Thermometer ID : Therm#2(2179)

Prep Technician Signature: RM

Supervisor Signature: JZ

Standared Name	MLS USED	STD REF. # FROM LOG
TKN CAL STD	50.0ML	WP110560
TKN CCV STD	50.0ML	WP110561
TKN ICV STD	50.0ML	WP110562
TKN LCS STD	50.0ML	WP110563
RL CHECK	10.0ML	WP110561

Chemical Used	ML/SAMPLE USED	Lot Number
TKN DIGESTION FLUID	10.0ML	WP108657
TKN DISTILLATION BUFFER	10.0ML	WP109441
H2SO4 0.04N	5.0ML	WP110335
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

ALL GLASSWEAR ARE STEAMED OUT AND THERE WERE NO TRACE OF AMMONIA USING NESLER REAGENT
WP108814

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
11/05/2024 17:20	RM (WC)	RM (WC)
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Soil/Sludge TKN Preparation Sheet

PB164710

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
P4495-07	PT-NUT-SOIL	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
PB164710BL	PBS710	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
PB164710BS	LCS710	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : tkn-11-24 **WorkList ID :** 185166 **Department :** Distillation **Date :** 11-05-2024 08:50:34

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4495-07	PT-NUT-SOIL	Solid	TKN	Cool 4 deg C	CHEM02	QA Of	10/21/2024	SM4500 N Org

Date/Time 11/05/2024 13:20
Raw Sample Received by: RM (WC)
Raw Sample Relinquished by: RM (WC)

Date/Time NA
Raw Sample Received by:
Raw Sample Relinquished by:

Alliance TECHNICAL GROUP

Soil/Sludge Cyanide Preparation Sheet

PB164718

SOP ID : M9012B-Total, Amenable and Reactive Cyanide-20

SDG No : N/A

Matrix : SOLID

Pippete ID : WC

Balance ID : WC SC-4

Hood ID : HOOD#1

Block ID : MC-1,MC-2

Weigh By : JP

Start Digest Date: 11/12/2024 **Time :** 09:00 **Temp :** 123 °C

End Digest Date: 11/12/2024 **Time :** 10:30 **Temp :** 126 °C

Digestion tube ID : M5595

Filter paper ID : N/A

pH Meter ID : N/A

Block Thermometer ID : WC CYANIDE

Prep Technician Signature: JP

Supervisor Signature: 12

Standared Name	MLS USED	STD REF. # FROM LOG
LCSS	1.0ML	WP109549
PBS003	50.0ML	W3112
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
0.25N NaOH	50.0ML	WP108640
50% v/v H2SO4	5.0ML	WP110391
51% w/v MgCL2	2.0ML	WP110390
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
S0	S0	N/A	N/A
S5.0	S5.0	N/A	N/A
S10.0	S10.0	N/A	N/A
S100.0	S100.0	N/A	N/A
S250.0	S250.0	N/A	N/A
S500.0	S500.0	N/A	N/A
ICV	ICV	0.5ML	W3011
ICB	ICB	N/A	N/A
CCV	CCV	N/A	N/A
CCB	CCB	N/A	N/A
Midrange	Midrange	N/A	N/A
HIGHSTD	HIGHSTD	5.0ML	WP110035
LOWSTD	LOWSTD	0.1ML	WP110035

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
11.12.2024, 10:45	JP / WC	NF(WC)
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Soil/Sludge Cyanide Preparation Sheet

PB164718

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
P4495-03	PT-CN-SOIL	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
PB164718BL	PBS718	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
PB164718BS	LCS718	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : CN PT-11-12-2024 **WorkList ID :** 185405 **Department :** Distillation **Date :** 11-12-2024 08:30:05

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4495-03	PT-CN-SOIL	Solid	Cyanide	Cool 4 deg C	CHEM02	QA Of	10/21/2024	9012B

Date/Time 11.12.2024, 08:40

Raw Sample Received by: TQ (QC)

Raw Sample Relinquished by: SJ (QAO)

Date/Time NA

Raw Sample Received by: "

Raw Sample Relinquished by: "

Alliance TECHNICAL GROUP

Soil/Sludge Cyanide Preparation Sheet

PB164719

SOP ID : M9014-Reactive Cyanide--9

SDG No : N/A

Matrix : SOLID

Pippete ID : WC

Balance ID : WC SC-4

Hood ID : HOOD#1

Block ID : MC-1, MC-2

Weigh By : JP

Start Digest Date: 11/12/2024 **Time :** 09:00 **Temp :** 123 °C

End Digest Date: 11/12/2024 **Time :** 10:30 **Temp :** 126 °C

Digestion tube ID : M5595

Filter paper ID : N/A

pH Meter ID : N/A

Block Thermometer ID : WC CYANIDE

Prep Technician Signature: JP

Supervisor Signature: JR

Standared Name	MLS USED	STD REF. # FROM LOG
LCSS	1ML	WP109549
PBS003	50.0ML	W3112
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
0.25N NaOH	50ML	WP108640
50% v/v H2SO4	5ML	WP110391
51% w/v MgCL2	2ML	WP110390
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
S0	S0	N/A	N/A
S5.0	S5.0	N/A	N/A
S10.0	S10.0	N/A	N/A
S100.0	S100.0	N/A	N/A
S250.0	S250.0	N/A	N/A
S500.0	S500.0	N/A	N/A
ICV	ICV	N/A	AS PER PB164718
ICB	ICB	N/A	N/A
CCV	CCV	N/A	N/A
CCB	CCB	N/A	N/A
Midrange	Midrange	N/A	N/A
HIGHSTD	HIGHSTD	N/A	AS PER PB164718
LOWSTD	LOWSTD	N/A	AS PER PB164718

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
11.12.2024, 10:45	JP CCIC	NF(WC)
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Soil/Sludge Cyanide Preparation Sheet

PB164719

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
P4495-04	PT-CN-SOIL	1	50	N/A	N/A	N/A	N/A	N/A	N/A
PB164719BL	PBS719	1	50	N/A	N/A	N/A	N/A	N/A	N/A
PB164719BS	LCS719	1	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : CN PT-11122024 **WorkList ID :** 185404 **Department :** Distillation **Date :** 11-12-2024 08:30:58

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4495-04	PT-CN-SOIL	Solid	Cyanide	Cool 4 deg C	CHEM02	QA Of	10/21/2024	9014

Date/Time 11.12.2024. 08:40

Raw Sample Received by: [illegible] (QAO)

Raw Sample Relinquished by: SJ (QAO)

Date/Time NP

Raw Sample Received by:

Raw Sample Relinquished by:

Alliance TECHNICAL GROUP

Soil/Sludge Phosphorus, Total Preparation Sheet

PB164936

SOP ID : M365.3 & SM4500-P E-18

SDG No : N/A

Matrix : SOIL

Pippete ID : WC

Balance ID : WC SC-5

Hood ID : HOOD#3

Block ID : WC S-1, WC S-2

Weigh By : NF

Start Digest Date: 11/13/2024 **Time :** 08:30 **Temp :** 95 °C

End Digest Date: 11/13/2024 **Time :** 09:30 **Temp :** 96 °C

Digestion tube ID : M5595

Filter paper ID : N/A

pH Meter ID : N/A

Block Thermometer ID : WC-BLOCK#1

Prep Technician Signature: NF

Supervisor Signature: 12

Standared Name	MLS USED	STD REF. # FROM LOG
PBS003	50.0ML	W3112
LCSS	0.5ML	WP110401
MDL	50ML	WP110591
N/A	N/A	N/A
N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
11N H2SO4	1ML	WP109922
AMMONIUM PERSULFATE	0.4GM	W3035
pH Paper 0-14	N/A	W3121
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Wt(g)/Vol(ml)	Comment
CAL1	CAL1	50ML	WP110578
CAL2	CAL2	50ML	WP110579
CAL3	CAL3	50ML	WP110580
CAL4	CAL4	50ML	WP110581
CAL5	CAL5	50ML	WP110582
CAL6	CAL6	50ML	WP110583
ICV	ICV	50ML	WP110585
ICB	ICB	50ML	W3112
CCV	CCV	50ML	WP110584
CCB	CCB	50ML	W3112

Extraction Conformance/Non-Conformance Comments:

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
	Preparation Group	Analysis Group

11.13.2024 NF

Alliance TECHNICAL GROUP

Soil/Sludge Phosphorus, Total Preparation Sheet

PB164936

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
P4368-03	MDL-SOIL-03-QT4-2024	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
P4495-07	PT-NUT-SOIL	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
PB164936BL	PB164936BL	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
PB164936BS	LCS936	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : TOTAL-P-11122024 **WorkList ID :** 185356 **Department :** Distillation **Date :** 11-12-2024 08:51:36

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4368-03	MDL-SOIL-03-QT4-2024	Solid	Phosphorus, Total	Cool 4 deg C	CHEM02	QA Of	10/09/2024	365.3
P4495-07	PT-NUT-SOIL	Solid	Phosphorus, Total	Cool 4 deg C	CHEM02	QA Of	10/21/2024	365.3

Date/Time 11.13.2024 , 08:00

Raw Sample Received by: NF(WC)

Raw Sample Relinquished by: SJ(QAO)

Date/Time NA

Raw Sample Received by: "

Raw Sample Relinquished by: "

Alliance TECHNICAL GROUP

Soil/Sludge Hexavalent Chromium Preparation Sheet

PB165110

SOP ID : M3060A,7196A-Hex.Chromium-26

SDG No : N/A

Matrix : SOIL

Pippete ID : WC

Balance ID : WC SC-7

Hood ID : HOOD#3

Block ID : WC S-2, WC S-1

Weigh By : RM

Start Digest Date: 11/21/2024 **Time :** 10:00 **Temp :** 90 °C

End Digest Date: 11/21/2024 **Time :** 11:00 **Temp :** 95 °C

1 batch 11/21/2024 11:30 90 c RM
11/21/2024 12:30 95 c

Digestion tube ID : M6054

Filter paper ID : 400213

pH Meter ID : WC pH meter-1

Block Thermometer ID : WC-Block#1

Prep Technician Signature: RM

Supervisor Signature: 12

Standared Name	MLS USED	STD REF. # FROM LOG
PRE-DIGESTION SPIKE	2.0ML	WP108658
INSOLUBLE SPIKE	0.02GM	W2202
POST-DIGESTION SPIKE	2.0ML	WP108658
LCSS	1.0ML	WP108659
PBS003	50ML	W3112

Chemical Used	ML/SAMPLE USED	Lot Number
MAGNESIUM CHLORIDE	0.4GM	W3001
PHOSPHATE BUFFER	0.5ML	WP110498
HEX. DIGESTION SOLN.	50.0ML	WP110633
5M HNO3	5-7ML	WP110381
5N H2SO4	1-3ML	WP110380
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Vol(ml)	Comment
CAL1	CAL1	2.5ML	W3112
CAL2	CAL2	0.2ML	WP110807
CAL3	CAL3	0.5ML	WP110807
CAL4	CAL4	1ML	WP110807
CAL5	CAL5	0.2ML	WP108658
CAL6	CAL6	1ML	WP108658
CAL7	CAL7	2.0ML	WP108658
ICV	ICV	1ML	WP108659
ICB	ICB	2.5ML	W3112
CCV	CCV	1ML	WP108658
CCB	CCB	2.5ML	W3112

Extraction Conformance/Non-Conformance Comments: 11/21/2024 RM

N/A

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

Soil/Sludge Hexavalent Chromium Preparation Sheet

PB165110

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
P4495-06	PT-CR6-SOIL	2.50	100	N/A	N/A	N/A	N/A	N/A	N/A
P4910-01	MH-COTTAGE	2.51	100	N/A	N/A	N/A	N/A	N/A	N/A
P4910-01DUP	MH-COTTAGEDUP	2.51	100	N/A	N/A	N/A	N/A	N/A	N/A
P4910-01MSPre	MH-COTTAGEMSPRE	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
P4910-01MS2Ins	MH-COTTAGEMS2INS	2.51	100	N/A	N/A	N/A	N/A	N/A	N/A
P4910-01MS3Post	MH-COTTAGEMS3POST	2.51	100	N/A	N/A	N/A	N/A	N/A	N/A
P4910-05	MH-759	2.54	100	N/A	N/A	N/A	N/A	N/A	N/A
P4916-01	TP-1-WC	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
P4916-05	TP-2-WC	2.54	100	N/A	N/A	N/A	N/A	N/A	N/A
P4916-09	TP-3-WC	2.54	100	N/A	N/A	N/A	N/A	N/A	N/A
P4924-01	MH-4	2.53	100	N/A	N/A	N/A	N/A	N/A	N/A
P4925-01	MH-741	2.55	100	N/A	N/A	N/A	N/A	N/A	N/A
P4925-05	MH-758	2.51	100	N/A	N/A	N/A	N/A	N/A	N/A
P4929-01	ARS520	2.54	100	N/A	N/A	N/A	N/A	N/A	N/A
P4936-01	PL-01-11202024	2.54	100	N/A	N/A	N/A	N/A	N/A	N/A
P4938-01	MH-732	2.51	100	N/A	N/A	N/A	N/A	N/A	N/A
P4938-05	MH-734	2.53	100	N/A	N/A	N/A	N/A	N/A	N/A
PB165110BL	PBS110	2.50	100	N/A	N/A	N/A	N/A	N/A	N/A
PB165110BS	LCS110	2.50	100	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : HEX-11-19 **WorkList ID :** 185587 **Department :** Distillation **Date :** 11-19-2024 16:52:02

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4495-06	PT-CR6-SOIL	Solid	Hexavalent Chromium	Cool 4 deg C	CHEM02	QA Of	10/21/2024	7196A
P4910-01	MH-COTTAGE	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG03	L61	11/18/2024	7196A
P4910-05	MH-759	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG03	L61	11/18/2024	7196A
P4916-01	TP-1-WC	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG03	L61	11/18/2024	7196A
P4916-05	TP-2-WC	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG03	L61	11/18/2024	7196A
P4916-09	TP-3-WC	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG03	L61	11/18/2024	7196A
P4924-01	MH-4	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG03	L61	11/18/2024	7196A
P4925-01	MH-741	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG03	L61	11/19/2024	7196A
P4925-05	MH-758	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG03	L51	11/19/2024	7196A
P4929-01	ARS520	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG03	L51	11/19/2024	7196A
P4936-01	PL-01-11202024	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG03	L61	11/19/2024	7196A
P4938-01	MH-732	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG05	L41	11/20/2024	7196A
P4938-05	MH-734	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG03	L51	11/20/2024	7196A

Date/Time 11/21/2024 09.25

Raw Sample Received by: RM CWC

Raw Sample Relinquished by: CWC

Date/Time 11/21/2024 11.40

Raw Sample Received by: CWC

Raw Sample Relinquished by: RM CWC

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

Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QCBatch ID # LB133077

Review By	jignesh	Review On	10/24/2024 5:01:49 PM
Supervise By	Iwona	Supervise On	10/25/2024 9:30:54 AM
SubDirectory	LB133077	Test	TS

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	N/A

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB133077BL	LB133077BL	MB	10/23/24 11:00		jignesh	OK
2	P4495-24	PT-SOL-SOIL	SAM	10/23/24 11:00		jignesh	OK

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

Instrument ID: TOC

Daily Analysis Runlog For Sequence/QCBatch 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

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

Instrument ID: TOC

Daily Analysis Runlog For Sequence/QCBatch 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

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Instrument ID: TOC

Daily Analysis Runlog For Sequence/QCBatch ID # LB133228

Review By	Niha	Review On	11/4/2024 10:12:45 AM
Supervise By	Iwona	Supervise On	11/5/2024 10:40:52 AM
SubDirectory	LB133228	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	LB133228BLS	LB133228BLS	MB	10/30/24 09:46		NF IZ	OK
11	LB133228BSS	LB133228BSS	LCS	10/30/24 10:02		NF IZ	OK
12	P4368-03	MDL-SOIL-03-QT4-20	SAM	10/30/24 10:11		NF IZ	OK
13	P4495-07	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

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Instrument ID: IC-2

Daily Analysis Runlog For Sequence/QCBatch ID # LB133290

Review By	Niha	Review On	11/7/2024 8:43:57 AM
Supervise By	Iwona	Supervise On	11/11/2024 11:44:18 AM
SubDirectory	LB133290	Test	Anions

STD. NAME	STD REF.#
ICAL Standard	WP110250,WP110251,WP110252,WP110253,WP110254,WP110255,WP110256,WP110257
ICV Standard	WP110258
CCV Standard	WP110536
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP110537
Chk Standard	WP110260,WP110261

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	STD1	STD1	CAL1	10/16/24 10:55	All standards, samples, and	NF/IZ	OK
2	STD2	STD2	CAL2	10/16/24 11:17	QC are filtered through	NF/IZ	OK
3	STD3	STD3	CAL3	10/16/24 11:38	0.45um, filter lot W2865	NF/IZ	OK
4	STD4	STD4	CAL4	10/16/24 11:59		NF/IZ	OK
5	STD5	STD5	CAL5	10/16/24 12:21		NF/IZ	OK
6	STD6	STD6	CAL6	10/16/24 12:42		NF/IZ	OK
7	STD7	STD7	CAL7	10/16/24 13:04		NF/IZ	OK
8	ICV1	ICV1	ICV	10/16/24 13:37		NF/IZ	OK
9	ICB1	ICB1	ICB	10/16/24 13:59		NF/IZ	OK
10	CCV1	CCV1	CCV	11/05/24 09:20		NF/IZ	OK
11	CCB1	CCB1	CCB	11/05/24 09:42		NF/IZ	OK
12	LB133290BLS	LB133290BLS	MB	11/05/24 10:03		NF/IZ	OK
13	LB133290BSS	LB133290BSS	LCS	11/05/24 10:25		NF/IZ	OK
14	P4495-25	PT-NO2-SOIL	SAM	11/05/24 11:08		NF/IZ	OK
15	P4495-01	PT-AN-SOIL	SAM	11/05/24 11:29	Cl,F,NO3,SO4 high	NF/IZ	Dilution
16	P4495-01DL	PT-AN-SOILDL	SAM	11/05/24 11:51	5X for Cl,F,NO3,SO4	NF/IZ	Confirms
17	P4675-01	COMP-1	SAM	11/05/24 13:21		NF/IZ	OK
18	P4675-01MS	COMP-1MS	MS	11/05/24 13:43	5ml W3091	NF/IZ	OK

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Instrument ID: IC-2

Daily Analysis Runlog For Sequence/QCBatch ID # LB133290

Review By	Niha	Review On	11/7/2024 8:43:57 AM
Supervise By	Iwona	Supervise On	11/11/2024 11:44:18 AM
SubDirectory	LB133290	Test	Anions

STD. NAME	STD REF.#
ICAL Standard	WP110250,WP110251,WP110252,WP110253,WP110254,WP110255,WP110256,WP110257
ICV Standard	WP110258
CCV Standard	WP110536
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP110537
Chk Standard	WP110260,WP110261

19	P4675-01MSD	COMP-1MSD	MSD	11/05/24 14:04	5ml W3091	NF/IZ	OK
20	P4675-02	COMP-2	SAM	11/05/24 14:26		NF/IZ	OK
21	P4675-03	COMP-3	SAM	11/05/24 14:47		NF/IZ	OK
22	CCV2	CCV2	CCV	11/05/24 15:09		NF/IZ	OK
23	CCB2	CCB2	CCB	11/05/24 15:30		NF/IZ	OK
24	P4675-04	COMP-4	SAM	11/05/24 15:52		NF/IZ	OK
25	P4675-05	COMP-5	SAM	11/05/24 16:13		NF/IZ	OK
26	P4675-06	COMP-6	SAM	11/05/24 16:35		NF/IZ	OK
27	CCV3	CCV3	CCV	11/05/24 16:56		NF/IZ	OK
28	CCB3	CCB3	CCB	11/05/24 17:18		NF/IZ	OK

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Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB133302

Review By	rubina	Review On	11/6/2024 11:08:04 AM
Supervise By	Iwona	Supervise On	11/6/2024 11:10:22 AM
SubDirectory	LB133302	Test	Ammonia

STD. NAME	STD REF.#
ICAL Standard	WP110538
ICV Standard	WP110540
CCV Standard	WP110539
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP110181
Chk Standard	WP110416,WP110019,WP108709,WP108840

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPM	0.0PPM	CAL1	11/05/24 08:44		rubina	OK
2	0.1PPM	0.1PPM	CAL2	11/05/24 08:44		rubina	OK
3	0.2PPM	0.2PPM	CAL3	11/05/24 08:44		rubina	OK
4	0.4PPM	0.4PPM	CAL4	11/05/24 08:44		rubina	OK
5	1.0PPM	1.0PPM	CAL5	11/05/24 08:44		rubina	OK
6	1.3PPM	1.3PPM	CAL6	11/05/24 08:44		rubina	OK
7	2.0PPM	2.0PPM	CAL7	11/05/24 08:44		rubina	OK
8	ICV1	ICV1	ICV	11/05/24 10:50		rubina	OK
9	ICB1	ICB1	ICB	11/05/24 10:50		rubina	OK
10	CCV1	CCV1	CCV	11/05/24 10:50		rubina	OK
11	CCB1	CCB1	CCB	11/05/24 10:50		rubina	OK
12	RL	RL	SAM	11/05/24 10:50		rubina	OK
13	PB164458BL	PB164458BL	MB	11/05/24 10:50		rubina	OK
14	PB164458BS	PB164458BS	LCS	11/05/24 11:01		rubina	OK
15	P4495-07	PT-NUT-SOIL	SAM	11/05/24 11:01	High	rubina	Dilution
16	P4675-01	COMP-1	SAM	11/05/24 11:11		rubina	OK
17	P4675-01DUP	COMP-1DUP	DUP	11/05/24 11:11		rubina	OK
18	P4675-01MS	COMP-1MS	MS	11/05/24 11:11		rubina	OK

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Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB133302

Review By	rubina	Review On	11/6/2024 11:08:04 AM
Supervise By	Iwona	Supervise On	11/6/2024 11:10:22 AM
SubDirectory	LB133302	Test	Ammonia

STD. NAME	STD REF.#
ICAL Standard	WP110538
ICV Standard	WP110540
CCV Standard	WP110539
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP110181
Chk Standard	WP110416,WP110019,WP108709,WP108840

19	P4675-01MSD	COMP-1MSD	MSD	11/05/24 11:11		rubina	OK
20	P4675-02	COMP-2	SAM	11/05/24 11:11		rubina	OK
21	P4675-03	COMP-3	SAM	11/05/24 11:11		rubina	OK
22	CCV2	CCV2	CCV	11/05/24 11:22		rubina	OK
23	CCB2	CCB2	CCB	11/05/24 11:22		rubina	OK
24	P4675-04	COMP-4	SAM	11/05/24 11:22		rubina	OK
25	P4675-05	COMP-5	SAM	11/05/24 11:22		rubina	OK
26	P4675-06	COMP-6	SAM	11/05/24 11:22		rubina	OK
27	CCV3	CCV3	CCV	11/05/24 11:22		rubina	OK
28	CCB3	CCB3	CCB	11/05/24 11:27		rubina	OK
29	P4495-07DL	PT-NUT-SOILDL	SAM	11/05/24 12:29	Report 40X	rubina	Confirms
30	CCV4	CCV4	CCV	11/05/24 12:29		rubina	OK
31	CCB4	CCB4	CCB	11/05/24 12:29		rubina	OK

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Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB133312

Review By	rubina	Review On	11/7/2024 8:25:48 AM
Supervise By	Iwona	Supervise On	11/11/2024 11:45:13 AM
SubDirectory	LB133312	Test	TKN

STD. NAME	STD REF.#
ICAL Standard	WP110560
ICV Standard	WP110562
CCV Standard	WP110561
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP110563
Chk Standard	WP110416,WP110019,WP108709,WP108840

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPM	0.0PPM	CAL1	11/06/24 09:28		rubina	OK
2	0.5PPM	0.5PPM	CAL2	11/06/24 09:28		rubina	OK
3	1.0PPM	1.0PPM	CAL3	11/06/24 09:28		rubina	OK
4	2.5PPM	2.5PPM	CAL4	11/06/24 09:28		rubina	OK
5	5.0PPM	5.0PPM	CAL5	11/06/24 09:28		rubina	OK
6	6.7PPM	6.7PPM	CAL6	11/06/24 09:28		rubina	OK
7	10.0PPM	10.0PPM	CAL7	11/06/24 09:28		rubina	OK
8	ICV1	ICV1	ICV	11/06/24 10:11		rubina	OK
9	ICB1	ICB1	ICB	11/06/24 10:11		rubina	OK
10	CCV1	CCV1	CCV	11/06/24 10:11		rubina	OK
11	CCB1	CCB1	CCB	11/06/24 10:11		rubina	OK
12	RL	RL	SAM	11/06/24 10:11		rubina	OK
13	PB164710BL	PB164710BL	MB	11/06/24 10:11		rubina	OK
14	PB164710BS	PB164710BS	LCS	11/06/24 10:21		rubina	OK
15	P4495-07	PT-NUT-SOIL	SAM	11/06/24 10:21	High	rubina	Dilution
16	CCV2	CCV2	CCV	11/06/24 10:30		rubina	OK
17	CCB2	CCB2	CCB	11/06/24 10:30		rubina	OK
18	P4495-07DL	PT-NUT-SOILDL	SAM	11/06/24 11:04	Report 10x	rubina	Confirms

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Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB133312

Review By	rubina	Review On	11/7/2024 8:25:48 AM
Supervise By	lwona	Supervise On	11/11/2024 11:45:13 AM
SubDirectory	LB133312	Test	TKN

STD. NAME	STD REF.#
ICAL Standard	WP110560
ICV Standard	WP110562
CCV Standard	WP110561
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP110563
Chk Standard	WP110416,WP110019,WP108709,WP108840

19	CCV3	CCV3	CCV	11/06/24 11:04		rubina	OK
20	CCB3	CCB3	CCB	11/06/24 11:04		rubina	OK

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Instrument ID: IGN-1

Daily Analysis Runlog For Sequence/QCBatch ID # LB133316

Review By	rubina	Review On	11/6/2024 3:56:57 PM
Supervise By	Iwona	Supervise On	11/6/2024 4:15:05 PM
SubDirectory	LB133316	Test	Flash Point

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	W3088

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	ICV	ICV	ICV	11/06/24 08:35		rubina	OK
2	P4495-05	PT-FP-SOIL	SAM	11/06/24 09:05		rubina	OK
3	P4703-01	S0-1	SAM	11/06/24 09:35		rubina	OK
4	P4703-01DUP	S0-1DUP	DUP	11/06/24 10:05		rubina	OK

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Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QCBatch ID # LB133322

Review By	jignesh	Review On	11/7/2024 9:53:18 AM
Supervise By	sohil	Supervise On	11/7/2024 10:36:00 AM
SubDirectory	LB133322	Test	Corrosivity

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	11/06/24 16:20		Jignesh	OK
2	CAL2	CAL2	CAL	11/06/24 16:21		Jignesh	OK
3	CAL3	CAL3	CAL	11/06/24 16:22		Jignesh	OK
4	ICV	ICV	ICV	11/06/24 16:25		Jignesh	OK
5	CCV1	CCV1	CCV	11/06/24 16:30		Jignesh	OK
6	P4495-02	PT-CORR-SOIL	SAM	11/06/24 16:33		Jignesh	OK
7	P4718-03	WB-307-SB02	SAM	11/06/24 16:37		Jignesh	OK
8	P4719-03	BAYAVE-STOCKPILE	SAM	11/06/24 16:40		Jignesh	OK
9	P4720-05	JC-701-COMP-01	SAM	11/06/24 16:44		Jignesh	OK
10	P4722-04	WC-1(0-6)	SAM	11/06/24 16:47		Jignesh	OK
11	P4722-09	WC-2(0-6)	SAM	11/06/24 16:50		Jignesh	OK
12	P4722-14	WC-3(0-6)	SAM	11/06/24 16:52		Jignesh	OK
13	P4732-02	PPE-COMP	SAM	11/06/24 17:00		Jignesh	OK
14	P4738-02	72-12018	SAM	11/06/24 17:10		Jignesh	OK
15	P4739-04	TP-14	SAM	11/06/24 17:15		Jignesh	OK
16	CCV2	CCV2	CCV	11/06/24 17:17		Jignesh	OK
17	P4739-08	BP-G2	SAM	11/06/24 17:20		Jignesh	OK
18	P4739-12	BP-B2	SAM	11/06/24 17:25		Jignesh	OK

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Instrument ID: WC PH METER-1

Daily Analysis Runlog For Sequence/QCBatch ID # LB133322

Review By	jignesh	Review On	11/7/2024 9:53:18 AM
Supervise By	sohil	Supervise On	11/7/2024 10:36:00 AM
SubDirectory	LB133322	Test	Corrosivity

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

19	P4739-16	TP-11	SAM	11/06/24 17:30		Jignesh	OK
20	P4739-16DUP	TP-11DUP	DUP	11/06/24 17:31		Jignesh	OK
21	CCV3	CCV3	CCV	11/06/24 17:35		Jignesh	OK

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Instrument ID: WC SC-3

Daily Analysis Runlog For Sequence/QCBatch ID # LB133347

Review By	jignesh	Review On	11/8/2024 9:09:23 AM
Supervise By	sohil	Supervise On	11/8/2024 9:19:59 AM
SubDirectory	LB133347	Test	Oil and Grease

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	W3110,NA,EP2556,WP108566,NA,E2865,WP108569,NA,WP108570

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	LB133347BL	LB133347BL	MB	11/08/24 09:30		jignesh	OK
2	LB133347BS	LB133347BS	LCS	11/08/24 09:30		jignesh	OK
3	P4495-09	PT-OGR-SOIL	SAM	11/08/24 09:30		jignesh	OK
4	P4722-03	WC-1(0-6)	SAM	11/08/24 09:30		jignesh	OK
5	P4722-08	WC-2(0-6)	SAM	11/08/24 09:30		jignesh	OK
6	P4722-13	WC-3(0-6)	SAM	11/08/24 09:30		jignesh	OK
7	P4722-13DUP	WC-3(0-6)DUP	DUP	11/08/24 09:30		jignesh	OK
8	P4722-13MS	WC-3(0-6)MS	MS	11/08/24 09:30		jignesh	OK
9	P4722-13MSD	WC-3(0-6)MSD	MSD	11/08/24 09:30		jignesh	OK

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Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QCBatch ID # LB133420

Review By	Niha	Review On	11/13/2024 12:02:03 PM
Supervise By	Iwona	Supervise On	11/13/2024 12:39:51 PM
SubDirectory	LB133420	Test	Phosphorus, Total

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	WP110583,WP110582,WP110581,WP110580,WP110579,WP110578,WP110584,WP110669,WP108727,WP108662,\

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	11/13/24 11:00		Niha	OK
2	CAL2	CAL2	CAL	11/13/24 11:00		Niha	OK
3	CAL3	CAL3	CAL	11/13/24 11:01		Niha	OK
4	CAL4	CAL4	CAL	11/13/24 11:01		Niha	OK
5	CAL5	CAL5	CAL	11/13/24 11:02		Niha	OK
6	CAL6	CAL6	CAL	11/13/24 11:02		Niha	OK
7	ICV	ICV	ICV	11/13/24 11:03		Niha	OK
8	ICB	ICB	ICB	11/13/24 11:03		Niha	OK
9	CCV1	CCV1	CCV	11/13/24 11:04		Niha	OK
10	CCB1	CCB1	CCB	11/13/24 11:04		Niha	OK
11	RL Check	RL Check	SAM	11/13/24 11:05		Niha	OK
12	PB164936BL	PB164936BL	MB	11/13/24 11:05		Niha	OK
13	PB164936BS	PB164936BS	LCS	11/13/24 11:06		Niha	OK
14	P4368-03	MDL-SOIL-03-QT4-20	SAM	11/13/24 11:06		Niha	OK
15	P4495-07	PT-NUT-SOIL	SAM	11/13/24 11:07		Niha	OK
16	P4495-07DL	PT-NUT-SOILDL	SAM	11/13/24 11:07		Niha	OK
17	CCV2	CCV2	CCV	11/13/24 11:08		Niha	OK
18	CCB2	CCB2	CCB	11/13/24 11:08		Niha	OK

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Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB133427

Review By	Niha	Review On	11/14/2024 4:01:54 PM
Supervise By	Iwona	Supervise On	11/14/2024 4:24:09 PM
SubDirectory	LB133427	Test	Cyanide

STD. NAME	STD REF.#
ICAL Standard	WP110678,WP110679,WP110680,WP110681,WP110682,WP110683,WP110684
ICV Standard	W3011
CCV Standard	WP110679
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP109549
Chk Standard	WP109068,WP110103,WP110685WP109068,WP110103,WP110685

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	11/12/24 14:49		Niha	OK
2	5.0PPBCN	5.0PPBCN	CAL2	11/12/24 14:49		Niha	OK
3	10PPBCN	10PPBCN	CAL3	11/12/24 14:49		Niha	OK
4	50PPBCN	50PPBCN	CAL4	11/12/24 14:49		Niha	OK
5	100PPBCN	100PPBCN	CAL5	11/12/24 14:49		Niha	OK
6	250PPBCN	250PPBCN	CAL6	11/12/24 14:49		Niha	OK
7	500PPBCN	500PPBCN	CAL7	11/12/24 14:49		Niha	OK
8	ICV1	ICV1	ICV	11/12/24 15:38		Niha	OK
9	ICB1	ICB1	ICB	11/12/24 15:38		Niha	OK
10	CCV1	CCV1	CCV	11/12/24 15:38		Niha	OK
11	CCB1	CCB1	CCB	11/12/24 15:38		Niha	OK
12	PB164718BL	PB164718BL	MB	11/12/24 15:38		Niha	OK
13	PB164718BS	PB164718BS	LCS	11/12/24 15:45		Niha	OK
14	LOWPB164718	LOWPB164718	SAM	11/12/24 15:45		Niha	OK
15	HIGHPB164718	HIGHPB164718	SAM	11/12/24 15:46		Niha	OK
16	P4495-03	PT-CN-SOIL	SAM	11/12/24 15:46		Niha	OK
17	P4495-03DL	PT-CN-SOILDL	SAM	11/12/24 16:01		Niha	OK
18	CCV2	CCV2	CCV	11/12/24 16:06		Niha	OK

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Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB133427

Review By	Niha	Review On	11/14/2024 4:01:54 PM
Supervise By	Iwona	Supervise On	11/14/2024 4:24:09 PM
SubDirectory	LB133427	Test	Cyanide

STD. NAME	STD REF.#
ICAL Standard	WP110678,WP110679,WP110680,WP110681,WP110682,WP110683,WP110684
ICV Standard	W3011
CCV Standard	WP110679
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP109549
Chk Standard	WP109068,WP110103,WP110685WP109068,WP110103,WP110685

19	CCB2	CCB2	CCB	11/12/24 16:06		Niha	OK

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Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QCBatch ID # LB133428

Review By	Niha	Review On	11/14/2024 3:59:39 PM
Supervise By	Iwona	Supervise On	11/14/2024 4:24:24 PM
SubDirectory	LB133428	Test	Cyanide

STD. NAME	STD REF.#
ICAL Standard	WP110678,WP110679,WP110680,WP110681,WP110682,WP110683,WP110684
ICV Standard	W3011
CCV Standard	WP110679
ICSA Standard	N/A
CRI Standard	N/A
LCS Standard	WP109549
Chk Standard	WP109068,WP110103,WP110685WP109068,WP110103,WP110685

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPBCN	0.0PPBCN	CAL1	11/12/24 14:49		Niha	OK
2	5.0PPBCN	5.0PPBCN	CAL2	11/12/24 14:49		Niha	OK
3	10PPBCN	10PPBCN	CAL3	11/12/24 14:49		Niha	OK
4	50PPBCN	50PPBCN	CAL4	11/12/24 14:49		Niha	OK
5	100PPBCN	100PPBCN	CAL5	11/12/24 14:49		Niha	OK
6	250PPBCN	250PPBCN	CAL6	11/12/24 14:49		Niha	OK
7	500PPBCN	500PPBCN	CAL7	11/12/24 14:49		Niha	OK
8	ICV1	ICV1	ICV	11/12/24 17:08		Niha	OK
9	ICB1	ICB1	ICB	11/12/24 17:08		Niha	OK
10	CCV1	CCV1	CCV	11/12/24 17:08		Niha	OK
11	CCB1	CCB1	CCB	11/12/24 17:08		Niha	OK
12	PB164719BL	PB164719BL	MB	11/12/24 17:08		Niha	OK
13	PB164719BS	PB164719BS	LCS	11/12/24 17:15		Niha	OK
14	P4495-04	PT-CN-SOIL	SAM	11/12/24 17:15		Niha	OK
15	P4495-04DL	PT-CN-SOILDL	SAM	11/12/24 17:15		Niha	OK
16	CCV2	CCV2	CCV	11/12/24 17:20		Niha	OK
17	CCB2	CCB2	CCB	11/12/24 17:20		Niha	OK

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Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QCBatch ID # LB133555

Review By	rubina	Review On	11/21/2024 4:48:49 PM
Supervise By	Iwona	Supervise On	11/21/2024 4:55:51 PM
SubDirectory	LB133555	Test	Hexavalent Chromium

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	WP110722,WP110380,WP110381,WP108645

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	11/21/24 13:50		rubina	OK
2	CAL2	CAL2	CAL	11/21/24 13:51		rubina	OK
3	CAL3	CAL3	CAL	11/21/24 13:52		rubina	OK
4	CAL4	CAL4	CAL	11/21/24 13:53		rubina	OK
5	CAL5	CAL5	CAL	11/21/24 13:54		rubina	OK
6	CAL6	CAL6	CAL	11/21/24 13:55		rubina	OK
7	CAL7	CAL7	CAL	11/21/24 13:56		rubina	OK
8	ICV	ICV	ICV	11/21/24 13:57		rubina	OK
9	ICB	ICB	ICB	11/21/24 13:58		rubina	OK
10	CCV1	CCV1	CCV	11/21/24 13:59		rubina	OK
11	CCB1	CCB1	CCB	11/21/24 14:00		rubina	OK
12	RL Check	RL Check	SAM	11/21/24 14:01		rubina	OK
13	PB165110BL	PB165110BL	MB	11/21/24 14:02		rubina	OK
14	PB165110BS	PB165110BS	LCS	11/21/24 14:03		rubina	OK
15	P4495-06	PT-CR6-SOIL	SAM	11/21/24 14:04		rubina	OK
16	P4910-01	MH-COTTAGE	SAM	11/21/24 14:05		rubina	OK
17	P4910-01DUP	MH-COTTAGEDUP	DUP	11/21/24 14:06		rubina	OK
18	P4910-01MSPre	MH-COTTAGEMS	MS	11/21/24 14:07		rubina	OK

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Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QCBatch ID # LB133555

Review By	rubina	Review On	11/21/2024 4:48:49 PM
Supervise By	Iwona	Supervise On	11/21/2024 4:55:51 PM
SubDirectory	LB133555	Test	Hexavalent Chromium

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	WP110722,WP110380,WP110381,WP108645

19	P4910-01MS2Ins	MH-COTTAGEMS	MS	11/21/24 14:08		rubina	OK
20	P4910-01MS3Post	MH-COTTAGEMS	MS	11/21/24 14:09		rubina	OK
21	P4910-05	MH-759	SAM	11/21/24 14:10		rubina	OK
22	P4916-01	TP-1-WC	SAM	11/21/24 14:11		rubina	OK
23	CCV2	CCV2	CCV	11/21/24 14:12		rubina	OK
24	CCB2	CCB2	CCB	11/21/24 14:13		rubina	OK
25	P4916-05	TP-2-WC	SAM	11/21/24 14:14		rubina	OK
26	P4916-09	TP-3-WC	SAM	11/21/24 14:15		rubina	OK
27	P4924-01	MH-4	SAM	11/21/24 14:16		rubina	OK
28	P4925-01	MH-741	SAM	11/21/24 14:17		rubina	OK
29	P4925-05	MH-758	SAM	11/21/24 14:18		rubina	OK
30	P4929-01	ARS520	SAM	11/21/24 14:19		rubina	OK
31	P4936-01	PL-01-11202024	SAM	11/21/24 14:20		rubina	OK
32	P4938-01	MH-732	SAM	11/21/24 14:21		rubina	OK
33	P4938-05	MH-734	SAM	11/21/24 14:22		rubina	OK
34	CCV3	CCV3	CCV	11/21/24 14:23		rubina	OK
35	CCB3	CCB3	CCB	11/21/24 14:24		rubina	OK
36	P4495-06DL	PT-CR6-SOILDL	SAM	11/21/24 14:25		rubina	OK
37	CCV4	CCV4	CCV	11/21/24 14:26		rubina	OK
38	CCB4	CCB4	CCB	11/21/24 14:27		rubina	OK

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Prep Standard - Chemical Standard Summary

Order ID : P4495

Test : Ammonia,Anions Group1,Anions Group2,Corrosivity,Cyanide,Flash Point,Hexavalent Chromium,Oil and Grease,Percent Solids,Phosphorus, Total,TKN,TOC,TS

Prepbatch ID : PB164458,PB164710,PB164718,PB164719,PB164936,PB165110,

Sequence ID/Qc Batch ID: LB133077,LB133199,LB133228,LB133290,LB133302,LB133312,LB133316,LB133322,LB133347,LB13

Standard ID :
EP2556,WP108566,WP108569,WP108570,WP108640,WP108645,WP108657,WP108658,WP108659,WP108660,WP108661,WP108662,WP108708,WP108709,WP108727,WP108840,WP109068,WP109217,WP109218,WP109219,WP109220,WP109221,WP109222,WP109223,WP109224,WP109225,WP109441,WP109549,WP109922,WP110019,WP110103,WP110149,WP110150,WP110180,WP110181,WP110250,WP110251,WP110252,WP110253,WP110254,WP110255,WP110256,WP110257,WP110258,WP110259,WP110260,WP110261,WP110335,WP110380,WP110381,WP110390,WP110391,WP110400,WP110401,WP110416,WP110493,WP110494,WP110495,WP110498,WP110536,WP110537,WP110538,WP110539,WP110540,WP110560,WP110561,WP110562,WP110563,WP110578,WP110579,WP110580,WP110581,WP110582,WP110583,WP110584,WP110585,WP110586,WP110587,WP110588,WP110590,WP110591,WP110633,WP110669,WP110677,WP110678,WP110679,WP110680,WP110681,WP110682,WP110683,WP110684,WP110685,WP110685WP109068,WP110722,

Chemical ID :
E2865,E3551,E3657,E3726,E3788,M5673,M5929,M5943,M5947,M5954,M6041,M6096,W1992,W1993,W2202,W2306,W2511,W2606,W2647,W2650,W2651,W2652,W2664,W2666,W2668,W2697,W2699,W2700,W2708,W2784,W2788,W2817,W2858,W2860,W2871,W2882,W2979,W2983,W3001,W3005,W3009,W3011,W3019,W3035,W3058,W3062,W3063,W3071,W3072,W3074,W3082,W3088,W3093,W3094,W3107,W3110,W3111,W3112,W3113,W3121,W3132,W3136,W3138,W3139,W3142,W3143,

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Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3923	Baked Sodium Sulfate	EP2556	11/03/2024	01/03/2025	Rajesh Parikh	Extraction_SCALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 11/03/2024

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
229	1:1 HCL	WP108566	06/27/2024	10/24/2024	Jignesh Parikh	None	None	Iwona Zarych 06/27/2024

FROM 500.00000ml of M5943 + 500.00000ml of W2606 = Final Quantity: 1.000 L

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3931	Spiking std for 9071B	WP108569	06/27/2024	12/25/2024	Jignesh Parikh	WETCHEM_SCALE_4 (WCSC-4)	None	Iwona Zarych 06/27/2024

FROM 1.00000gram of W2817 + 1.00000gram of W2871 + 1000.00000ml of E3726 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3873	Spiking solution for 9071B - SS	WP108570	06/27/2024	12/25/2024	Jignesh Parikh	WETCHEM_SCALE_4 (WCSC-4)	None	Iwona Zarych 06/27/2024

FROM 1.00000gram of W3009 + 1.00000gram of W3082 + 1000.00000L of E3726 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
11	Sodium hydroxide absorbing solution 0.25 N	WP108640	07/05/2024	01/05/2025	Rubina Mughal	WETCHEM_SCALE_4 (WCSC-4)	None	Iwona Zarych 07/08/2024

FROM 21.00000L of W3112 + 210.00000gram of E3657 = Final Quantity: 21.000 L

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3354	Hexchrome Cleaning Solution	WP108645	07/05/2024	12/27/2024	Rubina Mughal	None	None	Iwona Zarych 07/08/2024

FROM 182.00000ml of M5947 + 727.00000ml of W3112 + 91.00000ml of M5954 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
619	TKN digestion solution	WP108657	07/09/2024	01/09/2025	Rubina Mughal	WETCHEM_SCALE_4 (WCSC-4)	None	Iwona Zarych 07/09/2024

FROM 134.00000gram of W2983 + 134.00000ml of M5673 + 7.30000gram of W2697 + 725.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1993	HEXAVALENTCHROMIUM STOCK STD 1, 50PPM	WP108658	07/09/2024	01/09/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 07/09/2024

FROM 0.14140gram of W2651 + 1000.00000ml of W3112 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1994	HEXAVALENTCHROMIUM STOCK STD 2, 50PPM	WP108659	07/09/2024	01/09/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 07/09/2024

FROM 0.14140gram of W2652 + 1000.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1471	NaOH Solution, 6N	WP108660	07/09/2024	01/09/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 07/09/2024

FROM 240.00000gram of W3113 + 760.00000ml of W3112 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1796	NaOH, 0.1N	WP108661	07/09/2024	01/09/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 07/09/2024

FROM 4.00000gram of W3113 + 996.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1571	Sodium hydroxide, 1N	WP108662	07/09/2024	01/09/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 07/11/2024

FROM 4.00000gram of W3113 + 96.00000ml of W3112 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1494	BORATE BUFFER	WP108708	07/11/2024	01/09/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Mohan Bera 07/17/2024

FROM 0.90250L of W3112 + 9.50000gram of W2700 + 88.00000ml of WP108661 = Final Quantity: 1.000 L

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
290	Phenol reagent for Ammonia	WP108709	07/11/2024	01/11/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Mohan Bera 07/17/2024

FROM 3.20000gram of W3113 + 8.30000gram of W2858 + 88.80000ml of W3112 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1213	Phenolphthalein indicator	WP108727	07/12/2024	01/12/2025	Niha Farheen Shaik	WETCHEM_SCALE_3 (WCSC-3)	None	Mohan Bera 07/17/2024

FROM 0.10000gram of W2650 + 50.00000ml of W2788 + 50.00000ml of W3112 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
635	EDTA BUFFER FOR AMMONIA	WP108840	07/26/2024	01/26/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 07/26/2024

FROM 5.50000gram of W3113 + 50.00000gram of W3132 + 950.00000ml of W3112 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
607	PYRIDINE-BARBITURIC ACID	WP109068	08/06/2024	12/08/2024	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 08/07/2024

FROM 145.00000ml of W3112 + 15.00000gram of W2882 + 15.00000ml of M5929 + 75.00000ml of W3019 = Final Quantity: 250.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2050	TOC STOCK STD, 4000PPM	WP109217	08/07/2024	01/18/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCSC-5)	WETCHEM_PIPETTE_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

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2051	TOC STOCK STD-SS, 4000PPM	WP109218	08/07/2024	02/07/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCSC-5)	WETCHEM_PIPETTE_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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
712	TOC SOIL cal 250ppm	WP109220	08/07/2024	08/14/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Mohan Bera 08/16/2024

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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
710	TOC SOIL cal 500ppm	WP109221	08/07/2024	08/14/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Mohan Bera 08/16/2024

FROM 14.00000ml of W3112 + 2.00000ml of WP109217 = Final Quantity: 16.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3544	TOC SOIL Cal- CCV 1000PPM	WP109222	08/07/2024	08/14/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Mohan Bera 08/16/2024

FROM 15.00000ml of W3112 + 5.00000ml of WP109217 = Final Quantity: 20.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
713	TOC SOIL cal 2000ppm	WP109223	08/07/2024	08/14/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Mohan Bera 08/16/2024

FROM 5.00000ml of W3112 + 5.00000ml of WP109217 = Final Quantity: 10.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2819	TOC ICV-LCSS, 1000PPM	WP109224	08/07/2024	08/14/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Mohan Bera 08/16/2024

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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2435	1:1 PHOSPHORIC ACID FOR TOC SOILS	WP109225	08/07/2024	02/07/2025	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Mohan Bera 08/16/2024

FROM 50.00000ml of W2860 + 50.00000ml of W3112 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1338	TKN DISTILLING BUFFER	WP109441	08/29/2024	02/28/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 08/30/2024

FROM 0.47500L of W3112 + 25.00000gram of W3136 + 500.00000gram of W3113 = Final Quantity: 1.000 L

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3371	Cyanide LCS Spike Solution, 5PPM	WP109549	09/06/2024	01/05/2025	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 09/06/2024

FROM 1.00000ml of W3138 + 199.00000ml of WP108640 = Final Quantity: 200.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1211	11 N sulfuric acid	WP109922	09/26/2024	03/26/2025	Iwona Zarych	None	None	Jignesh Parikh 10/07/2024

FROM 306.00000ml of M5673 + 694.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
289	Sodium Hypochlorite for Ammonia	WP110019	10/02/2024	01/31/2025	Rubina Mughal	None	None	Iwona Zarych 10/04/2024

FROM 50.00000ml of W3112 + 50.00000ml of W3143 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
539	CN BUFFER	WP110103	10/08/2024	04/08/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 10/08/2024

FROM 138.00000gram of W2668 + 862.00000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
153	Ammonia Stock Std. (1000 ppm)	WP110149	10/11/2024	04/08/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 10/14/2024

FROM 3.81900gram of W1993 + 996.18100ml of W3112 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1895	Ammonia Stock Std, 1000PPM-SS	WP110150	10/11/2024	04/08/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 10/14/2024

FROM 3.81900gram of W1992 + 996.18100ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1322	Ammonia Intermediate Std, 50PPM	WP110180	10/14/2024	11/14/2024	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/15/2024

FROM 95.00000ml of W3112 + 5.00000ml of WP110149 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1639	Ammonia Intermediate Std-Second source, 50PPM	WP110181	10/14/2024	11/14/2024	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/15/2024

FROM 95.00000ml of W3112 + 5.00000ml of WP110150 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2487	Anions 300/9056 calibration standard 1	WP110250	10/16/2024	10/17/2024	Iwona Zarych	None	None	Jignesh Parikh 10/17/2024

FROM 10.00000ml of W3112 = Final Quantity: 10.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
24	Anions 300/9056 calibration standard 2	WP110251	10/16/2024	10/17/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 10/17/2024

FROM 0.20000ml of W3062 + 9.80000ml of W3112 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
25	Anions 300/9056 calibration standard 3	WP110252	10/16/2024	10/17/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 10/17/2024

FROM 0.40000ml of W3062 + 9.60000ml of W3112 = Final Quantity: 10.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
26	Anions 300/9056 calibration standard 4	WP110253	10/16/2024	10/17/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 10/17/2024

FROM 0.50000ml of W3062 + 9.50000ml of W3112 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3680	Anions 300/9056 calibration standard 5-CCV	WP110254	10/16/2024	10/17/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 10/17/2024

FROM 45.00000ml of W3112 + 5.00000ml of W3062 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3679	Anions 300/9056 calibration standard 6	WP110255	10/16/2024	10/17/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 10/17/2024

FROM 2.00000ml of W3062 + 8.00000ml of W3112 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3681	Anions 300/9056 calibration standard 7	WP110256	10/16/2024	10/17/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 10/17/2024

FROM 2.50000ml of W3062 + 7.50000ml of W3112 = Final Quantity: 10.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
34	Anions 300/9056 calibration standard 8	WP110257	10/16/2024	10/17/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 10/17/2024

FROM 5.00000ml of W3062 + 5.00000ml of W3112 = Final Quantity: 10.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3233	Anions 300/9056 ICV-LCS std	WP110258	10/16/2024	10/17/2024	Iwona Zarych	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 10/17/2024

FROM 45.00000ml of W3112 + 5.00000ml of W3063 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4035	IC ELUENT CONCENTRATE FOR IC-1	WP110259	10/16/2024	04/16/2025	Iwona Zarych	WETCHEM_SCALE_5 (WCSC-5)	None	Jignesh Parikh 10/17/2024

FROM 2.10000gram of W2647 + 84.75000gram of W3058 + 913.15000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4036	IC ELUENT FOR IC-1	WP110260	10/16/2024	11/16/2024	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 10/17/2024

FROM 1980.00000ml of W3112 + 20.00000ml of WP110259 = Final Quantity: 2000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4037	IC H2SO4 FOR IC-1	WP110261	10/16/2024	11/16/2024	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh 10/17/2024

FROM 5.60000ml of M6041 + 994.40000ml of W3112 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1597	0.04 N H2SO4	WP110335	10/22/2024	04/22/2025	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/22/2024

FROM 1.00000ml of M5673 + 999.00000ml of W3112 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
126	5N sulfuric acid	WP110380	10/24/2024	04/24/2025	Rubina Mughal	None	None	Iwona Zarych 10/24/2024

FROM 140.00000ml of M5673 + 860.00000ml of W3112 = Final Quantity: 1.000 L

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1836	HNO3 Hex-Chrome, 5M	WP110381	10/24/2024	04/24/2025	Rubina Mughal	None	None	Iwona Zarych 10/24/2024

FROM 320.00000ml of M6096 + 680.00000ml of W3112 = Final Quantity: 1000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3214	Magnesium Chloride For Cyanide 2.5M(51%W/V)	WP110390	10/24/2024	04/24/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 10/24/2024

FROM 500.00000ml of W3112 + 510.00000gram of W3001 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1714	Sulfuric Acid, 50% (v/v)	WP110391	10/24/2024	04/24/2025	Niha Farheen Shaik	None	None	Iwona Zarych 10/24/2024

FROM 1000.00000ml of M5673 + 1000.00000ml of W3112 = Final Quantity: 2000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
115	Phosphate Stock Std. (50 ppm)	WP110400	10/24/2024	04/23/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 10/25/2024

FROM 0.11000gram of W2699 + 500.00000ml of W3112 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2790	Phosphate Stock std, 50PPM-SS	WP110401	10/24/2024	04/24/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 10/25/2024

FROM 0.11000gram of W2708 + 500.00000ml of W3112 = Final Quantity: 500.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
740	sodium nitroferricyanide for ammonia	WP110416	10/25/2024	04/25/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 10/25/2024

FROM 0.05000gram of W2666 + 99.95000ml of W3112 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
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

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3545	TOC SOIL MDL-50PPM	WP110495	10/30/2024	11/06/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 10/31/2024

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

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
190	HEX CHROME PHOSPHATE BUFFER	WP110498	10/31/2024	04/29/2025	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 10/31/2024

FROM 0.84500L of W3112 + 68.04000gram of W2708 + 87.09000gram of W2511 = Final Quantity: 1.000 L

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3680	Anions 300/9056 calibration standard 5-CCV	WP110536	11/05/2024	11/06/2024	Niha Farheen Shaik	None	None	Jignesh Parikh 11/07/2024

FROM 45.00000ml of W3112 + 5.00000ml of W3062 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3233	Anions 300/9056 ICV-LCS std	WP110537	11/05/2024	11/06/2024	Niha Farheen Shaik	None	None	Jignesh Parikh 11/07/2024

FROM 45.00000ml of W3112 + 5.00000ml of W3063 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
275	Ammonia Calibration Std. (2 ppm)	WP110538	11/05/2024	11/06/2024	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 11/07/2024

FROM 48.00000ml of W3112 + 2.00000ml of WP110180 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
285	Ammonia CCV Std. (1 ppm)	WP110539	11/05/2024	11/06/2024	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 11/07/2024

FROM 49.00000ml of W3112 + 1.00000ml of WP110180 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
286	Ammonia ICV Std. (1 ppm)	WP110540	11/05/2024	11/06/2024	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 11/07/2024

FROM 49.00000ml of W3112 + 1.00000ml of WP110181 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
295	TKN Calibration Std (10 ppm)	WP110560	11/05/2024	11/12/2024	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 11/07/2024

FROM 49.50000ml of W3112 + 0.50000ml of WP110149 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
297	TKN CCV STD 5 ppm	WP110561	11/05/2024	11/12/2024	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 11/07/2024

FROM 49.75000ml of W3112 + 0.25000ml of WP110149 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
296	TKN ICV STD 5 ppm	WP110562	11/05/2024	11/12/2024	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 11/07/2024

FROM 49.75000ml of W3112 + 0.25000ml of WP110150 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
298	TKN LCS STD 5 ppm	WP110563	11/05/2024	11/12/2024	Rubina Mughal	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 11/07/2024

FROM 49.75000ml of W3112 + 0.25000ml of WP110150 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
122	calibration std. 0 ppm	WP110578	11/07/2024	11/14/2024	Niha Farheen Shaik	None	None	Jignesh Parikh 11/07/2024

FROM 100.00000ml of W3112 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
121	calibration std. phosphate 0.05 ppm	WP110579	11/07/2024	11/14/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 11/07/2024

FROM 99.90000ml of W3112 + 0.10000ml of WP110400 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
120	calibration std. phosphate 0.1 ppm	WP110580	11/07/2024	11/14/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 11/07/2024

FROM 99.80000ml of W3112 + 0.20000ml of WP110400 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
119	calibration std. phosphate 0.3 ppm	WP110581	11/07/2024	11/14/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 11/07/2024

FROM 99.40000ml of W3112 + 0.60000ml of WP110400 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
118	calibration std. phosphate 0.5 ppm	WP110582	11/07/2024	11/14/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 11/07/2024

FROM 99.00000ml of W3112 + 1.00000ml of WP110400 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
117	calibration std. phosphate 1 ppm	WP110583	11/07/2024	11/14/2024	Niha Farheen Shaik	None	None	Jignesh Parikh 11/07/2024

FROM 98.00000ml of W3112 + 2.00000ml of WP110400 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
124	phosphate CCV std.	WP110584	11/07/2024	11/14/2024	Niha Farheen Shaik	None	None	Jignesh Parikh 11/07/2024

FROM 99.00000ml of W3112 + 1.00000ml of WP110400 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3805	Phosphate ICV-LCS Std	WP110585	11/07/2024	11/14/2024	Niha Farheen Shaik	None	None	Jignesh Parikh 11/07/2024

FROM 99.00000ml of W3112 + 1.00000ml of WP110401 = Final Quantity: 100.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
590	Ascorbic Acid	WP110586	11/07/2024	11/14/2024	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Jignesh Parikh 11/07/2024

FROM 0.52800gram of W3074 + 30.00000ml of W3112 = Final Quantity: 30.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
648	Ammonium molybdate solution	WP110587	11/07/2024	05/07/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Jignesh Parikh 11/07/2024

FROM 20.00000gram of W2664 + 480.00000ml of W3112 = Final Quantity: 500.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
588	Potassium Antimonyl Tartrate	WP110588	11/07/2024	05/07/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Jignesh Parikh 11/07/2024

FROM 1.37150gram of W2306 + 500.00000ml of W3112 = Final Quantity: 500.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3907	Phosphate MDL-LOD-LOQ spike solution, 5ppm	WP110590	11/07/2024	11/14/2024	Niha Farheen Shaik	None	None	Jignesh Parikh 11/07/2024

FROM 9.00000ml of W3112 + 1.00000ml of WP110400 = Final Quantity: 10.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3814	Phosphate LOD-MDL Std 0.025ppm	WP110591	11/07/2024	11/14/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Jignesh Parikh 11/07/2024

FROM 99.50000ml of W3112 + 0.50000ml of WP110590 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
148	hexchrome digestion fluid	WP110633	11/11/2024	12/11/2024	Rubina Mughal	WETCHEM_SCALE_4 (WCSC-4)	None	Iwona Zarych 11/11/2024

FROM 120.00000gram of W3058 + 4.00000L of W3112 + 80.00000gram of W3113 = Final Quantity: 4000.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
658	Combined reagent	WP110669	11/13/2024	11/14/2024	Niha Farheen Shaik	None	None	Iwona Zarych 11/14/2024

FROM 15.00000ml of WP110587 + 30.00000ml of WP110586 + 5.00000ml of WP110588 + 50.00000ml of WP110380 = Final Quantity: 100.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3456	Cyanide Intermediate Working Std, 5PPM	WP110677	11/12/2024	11/13/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 11/14/2024

FROM 0.25000ml of W3142 + 49.75000ml of WP108640 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
4	Calibation standard 500 ppb	WP110678	11/12/2024	11/13/2024	Niha Farheen Shaik	None	None	Iwona Zarych 11/14/2024

FROM 45.00000ml of WP108640 + 5.00000ml of WP110677 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3761	Calibration-CCV CN Standard 250 ppb	WP110679	11/12/2024	11/13/2024	Niha Farheen Shaik	None	None	Iwona Zarych 11/14/2024

FROM 2.50000ml of WP110677 + 47.50000ml of WP108640 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
6	Calibration Standard 100 ppb	WP110680	11/12/2024	11/13/2024	Niha Farheen Shaik	None	None	Iwona Zarych 11/14/2024

FROM 1.00000ml of WP110677 + 49.00000ml of WP108640 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
7	Calibration Standard 50 ppb	WP110681	11/12/2024	11/13/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 11/14/2024

FROM 0.50000ml of WP110677 + 49.50000ml of WP108640 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
8	Calibration Standard 10 ppb	WP110682	11/12/2024	11/13/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 11/14/2024

FROM 1.00000ml of WP110678 + 49.00000ml of WP108640 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
9	Calibration Standard 5 ppb	WP110683	11/12/2024	11/13/2024	Niha Farheen Shaik	None	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 11/14/2024

FROM 0.50000ml of WP110678 + 49.50000ml of WP108640 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
167	0 ppb CN calibration std	WP110684	11/12/2024	11/13/2024	Niha Farheen Shaik	None	None	Iwona Zarych 11/14/2024

FROM 50.00000ml of WP108640 = Final Quantity: 50.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1582	Chloramine T solution, 0.014M	WP110685	11/12/2024	11/13/2024	Niha Farheen Shaik	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 11/14/2024

FROM 0.08000gram of W3139 + 20.00000ml of W3112 = Final Quantity: 20.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
114	hexavalent chromium color reagent	WP110722	11/15/2024	11/22/2024	Rubina Mughal	WETCHEM_SCALE_5 (WCSC-5)	None	Iwona Zarych 11/18/2024

FROM 0.25000gram of W2979 + 50.00000ml of E3788 = Final Quantity: 50.000 ml

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-3382-05 / Sand, Purified (cs/4x2.5kg)	0000243821	12/31/2024	04/30/2020 / RAJESH	04/28/2020 / RAJESH	E2865

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	01/03/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19510-5 / Sodium Hydroxide Pellets 2.5 Kg, Pk of 4	23B1556310	12/31/2025	12/04/2023 / Rajesh	12/01/2023 / Rajesh	E3657

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	1234	12/25/2024	02/26/2024 / Rajesh	02/23/2024 / Rajesh	E3726

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	23H1462005	04/23/2025	08/13/2024 / Rajesh	08/13/2024 / Rajesh	E3788

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	09/21/2023 / mohan	09/05/2023 / mohan	M5673

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	12/08/2024	06/24/2024 / Al-Terek	06/07/2024 / Al-Terek	M5929

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	12/24/2024	06/24/2024 / Al-Terek	06/21/2024 / Al-Terek	M5943

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L)	22G2862015	12/27/2024	06/27/2024 / Al-Terek	06/23/2024 / Al-Terek	M5947

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	01/02/2025	07/01/2024 / Al-Terek	06/25/2024 / Al-Terek	M5954

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	23D2462010	03/20/2028	08/16/2024 / mohan	08/16/2024 / mohan	M6041

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9598-34 / Nitric Acid, Instra-Analyzed (cs/4x2.5L)	24D1062002	03/25/2029	10/22/2024 / Janvi	09/21/2024 / Janvi	M6096

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J0660-1 / AMMONIUM CHLORIDE, ACS, 500G	WL13B	04/08/2025	04/08/2015 / apatel	04/08/2015 / apatel	W1992

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J0660-1 / AMMONIUM CHLORIDE, ACS, 500G	XE09B	04/08/2025	04/08/2015 / apatel	04/08/2015 / apatel	W1993

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AA14125-36 / LEAD (II) CHROMATE, ACS, 500G	U19B018	01/23/2027	01/23/2017 / apatel	01/23/2017 / apatel	W2202

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	A1561-500GM / POTASSIUM ANTIMONY TARTRATE TRIHYDRATE, 500G	2GH0057	12/11/2027	12/11/2017 / apatel	12/11/2017 / apatel	W2306

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3252-1 / POTAS PHOSPHATE, DIBASIC PWD, ACS, 500G	0000207436	04/29/2025	05/22/2019 / AMANDEEP	03/21/2019 / apatel	W2511

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	10/24/2024	10/24/2019 / apatel	10/24/2019 / apatel	W2606

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3506-5 / SODIUM BICARBONATE, PWD, ACS, 2.5KG	0000240594	06/03/2026	02/24/2020 / AMANDEEP	01/20/2020 / apatel	W2647

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J2870-1 / PHENOLPHTHALEIN, INDICATOR F/TITRATION, 500G	0000235350	06/04/2025	01/31/2020 / AMANDEEP	01/20/2020 / apatel	W2650

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	AA13450-36 / Potassium Dichromate, 500g(NEW)	T15F019	01/24/2030	01/24/2020 / apatel	01/24/2020 / apatel	W2651

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P188-500 / Potassium Dichromate, 500g(new-2nd lot)	194664	01/24/2030	01/24/2020 / apatel	01/24/2020 / apatel	W2652

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J07716-1 / Ammonium Molybdate 500G	0000234410	02/11/2026	02/10/2020 / AMANDEEP	01/31/2020 / apatel	W2664

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	87683 / Sodium Nitroferricyanide 250g	W12F013	02/10/2030	02/10/2020 / apatel	02/10/2020 / apatel	W2666

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3818-5 / SODIUM PHOSPHATE, MONOBAS/HYD, CRYS, ACS, 2.5 KG	0000225799	12/03/2025	04/05/2021 / Alexander	02/10/2020 / apatel	W2668

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	0330-500G / Cupric Sulfate Pentahydrate	CPECG2635	04/23/2025	04/23/2020 / apatel	04/23/2020 / apatel	W2697

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3246-1 / POTAS PHOSPHATE, MONO, CRYS, ACS, 500G	04/2019-20	04/23/2025	04/23/2020 / apatel	03/11/2020 / apatel	W2699

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3568-1 / Sodium Borate, 500 gms	2019111354	04/23/2025	04/23/2020 / apatel	03/11/2020 / apatel	W2700

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3246-1 / POTAS PHOSPHATE, MONO, CRYS, ACS, 500G	99/2019-20	05/05/2025	05/05/2020 / apatel	05/05/2020 / apatel	W2708

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

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC16721-3 / Isopropanol, 99%	C20F23007	06/23/2025	12/30/2020 / apatel	12/30/2020 / apatel	W2788

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	A12244 / Stearic acid, 98%, 100 g	U20E006	04/02/2026	04/02/2021 / apatel	04/02/2021 / apatel	W2817

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P1060-10 / PHENOL, ACS, 500G	M13H048	01/07/2026	07/07/2021 / apatel	07/07/2021 / apatel	W2858

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 #
Seidler Chemical	H223-57 / Hexadecane, 99.0%	0000266903	05/04/2027	09/07/2021 / apatel	08/26/2021 / apatel	W2871

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	EM-BX0035-3 / Barbituric Acid, 100 gms	1.00132.0100	04/30/2025	12/07/2021 /	11/30/2021 / apatel	W2882

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	31390 / 1,5-Diphenylcarbazide	MKCR6636	12/09/2027	12/09/2022 / Iwona	12/09/2022 / Iwona	W2979

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3278-5 / Potassium Sulfate, 2.5 Kgs	SLCM9788	11/21/2027	11/21/2022 / Iwona	11/21/2022 / Iwona	W2983

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	01237-10KG / Megnasium Chloride Hexahydrate ACS 10KG	002251-03319	06/06/2027	01/23/2023 / Iwona	06/06/2022 / Iwona	W3001

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 / Iwona	01/31/2023 / Iwona	W3005

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	H223-57 / Hexadecane, 99.0%	SHBP8192	02/27/2028	02/27/2023 / Iwona	02/27/2023 / Iwona	W3009

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
EPA	/ ICV-CN	ICV6-400	12/31/2024	01/03/2024 / Iwona	02/20/2020 / Iwona	W3011

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Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
SIGMA ALDRICH	270970-1L / Pyridine 1L	SHBQ2113	04/03/2028	04/03/2023 / Iwona	04/03/2023 / Iwona	W3019

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	BDH0214-500G / Ammonium Persulfate Crystal, 500g	MKCR9319	06/30/2028	03/05/2024 / Iwona	06/06/2023 / Iwona	W3035

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	EM-SX0395-3 / SODIUM CARBONATE ANHYDR 2.5KG	2023012653	10/19/2028	09/03/2024 / jignesh	10/19/2023 / Iwona	W3058

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	300-CAL-A-500ML / 300.0 Calibration Standard, 500 ml	T2-MEB716667	02/12/2025	02/12/2024 / Iwona	10/30/2023 / Iwona	W3062

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Inorganic Ventures	300-CAL-A-500ML / 300.0 Calibration Standard, 500 ml	U2-MEB735684	04/09/2025	04/09/2024 / Iwona	11/16/2023 / Iwona	W3063

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 / Iwona	W3071

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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 / Iwona	W3072

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J0938-7 / Ascorbic Acid, 500 gms	MKCS4627	09/30/2025	01/16/2024 / Iwona	01/16/2024 / Iwona	W3074

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	A12244 / Stearic acid, 98%, 100 g	U23E020	02/26/2029	02/26/2024 / Iwona	02/26/2024 / Iwona	W3082

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	TCX0014-500ML / p-xylene	Y348K-RX	03/20/2029	09/19/2024 / rubina	03/20/2024 / Iwona	W3088

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

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

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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 #
Seidler Chemical	BA-9262-03 / Hexane, Ultra-Resi (cs/4x4L)	235898	02/28/2029	06/27/2024 / jignesh	06/26/2024 / jignesh	W3110

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 / Iwona	06/26/2024 / Iwona	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 / Iwona	07/03/2024 / Iwona	W3112

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19510-7 / Sodium Hydroxide Pellets 12 Kg	23B1556310	12/31/2025	07/08/2024 / Iwona	07/08/2024 / Iwona	W3113

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	140444 / TEST PAPERS,PH 0-14,.5 SENSI,100PK	HC446507	07/25/2029	07/25/2024 / Iwona	07/25/2024 / Iwona	W3121

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC05050-1 / EDTA, disodium salt, dihydrate 1 lb	2ND0156	07/10/2026	07/26/2024 / Iwona	07/26/2024 / Iwona	W3132

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J3946-1 / Sodium Thiosulfate Pentahydrate, 500 gms	MKCV5080	01/31/2029	08/26/2024 / Iwona	08/26/2024 / Iwona	W3136

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	LC135457 / Cyanide Standard, 1000 PPM, Second Source	44080060	01/30/2025	09/06/2024 / Iwona	08/28/2024 / Iwona	W3138

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	JTE494-6 / CHLORAMINE-T BAKER 250GM	10239484	09/09/2029	09/09/2024 / Iwona	09/09/2024 / Iwona	W3139

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	RC2543-4 / CYANIDE STD 1000PPM 4OZ	1405J81	11/30/2024	09/25/2024 / Iwona	09/25/2024 / Iwona	W3142

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J9416-1 / Sodium Hypochlorite 500 ml	2407F34	01/31/2025	09/30/2024 / Iwona	09/30/2024 / Iwona	W3143

Alfa Aesar

Certificate of analysis

Product No.	14125
Product:	Lead(II) chromate, ACS, 98%
Lot No.:	U19B018

Test	Limits	Results
Assay	98.0 % min	99.3 %
Soluble matter	0.15 % max	< 0.02 %
Carbon compounds	0.01 % max	< 0.01 %

Traceable to NIST? Yes

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ThermoFisher SCIENTIFIC

CERTIFICATE OF ANALYSIS

Printed: 12/8/2017

Customer No : 30017 **Customer :** PCI SCIENTIFIC **Customer PO :** 6035343
Order Number : 3008126 **Delivery # :** 58495347
Catalog : A1561 Potassium Antimony Tartrate Trihydrate, Reagent, ACS **Lot :** 2GH0057

W2306
Received
12/11/17
BP

Chemical Formula : $C_8H_4K_2O_{12}Sb_2.3H_2O$ **Formula Weight :** 667.87
CAS# : 28300-74-5

Test	Limit Min.	Limit Max.	Results
ASSAY ($C_8H_4K_2O_{12}Sb_2.3HO$)	99.0	103.0 %	101.0 %
TITRATABLE ACID OR BASE	--	0.020 meq/g	<0.020 meq/g
LOSS ON DRYING	--	2.7 %	<2.7 %
ARSENIC (As)	--	0.015 %	<0.015 %
APPEARANCE			WHITE POWDER
DATE OF MANUFACTURE			29-DEC-2015

All pharmaceutical ingredients are tested using current edition of applicable pharmacopeia.

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SpectrumChemical.com

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755-769 Jersey Ave.
New Brunswick, NJ 08901
(732) 214-1300

West Coast Plant:
14422 S. San Pedro St.
Gardena, CA 90248
(310) 516-8000

Ibad Tirmizi
Director, Quality Assurance, Quality Control
New Brunswick, NJ 08901

Certificate of Analysis

Date of Release: ***12/18/2013***

Product: ***Ammonium Chloride GR ACS***

Catalog No.: ***AX1270 all size codes***

Grade: ***Meets ACS Specifications***

CAS #: ***12125-02-9***

Country of Origin: ***India***

FW: ***53.49***

Lot No.: ***WL13B***

ClH_4N

Characteristic	Requirement Minimum	Maximum	Results	UOM
Assay (argentometric)	99.5		99.9	%
Calcium (Ca)		0.001	0.0001	%
Form	White crystals		White crystals	
Heavy metals (as Pb)		5	5	ppm
Identification	To pass test		Passes	
Insoluble matter		0.005	0.002	%
Iron (Fe)		2	2	ppm
Loss on drying (105 C)		0.5	0.21	%
Magnesium (Mg)		5	0.6	ppm
pH of a 5% solution at 25 C	4.5	5.5	4.76	
Phosphate (PO4)		2	2	ppm
Residue after ignition		0.01	0.002	%
Sulfate (SO4)		0.002	0.002	%

Joe Schoellkopff

Quality Control Manager

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EMD Millipore Corporation
290 Concord Road
Billerica, MA 01821

Certificate of Analysis

Date of Release: *5/12/2014*

Product: ***Ammonium Chloride GR ACS***

Catalog No.: ***AX1270 all size codes***

Grade: ***Meets ACS Specifications***

CAS #: ***12125-02-9***

Country of Origin: ***India***

FW: ***53.49***

Lot No.: ***XE09B***

ClH_4N

	Requirement			
Characteristic	**Minimum**	**Maximum**	**Results**	**UOM**
Assay (argentometric)	99.5		99.8	%
Calcium (Ca)		0.001	0.0001	%
Form	White crystals		White crystals	
Heavy metals (as Pb)		5	5	ppm
Identification	To pass test		Passes	
Insoluble matter		0.005	0.002	%
Iron (Fe)		2	2	ppm
Loss on drying (105 C)		0.5	0.22	%
Magnesium (Mg)		5	0.7	ppm
pH of a 5% solution at 25 C	4.5	5.5	4.95	
Phosphate (PO4)		2	2	ppm
Residue after ignition		0.01	0.002	%
Sulfate (SO4)		0.002	0.002	%

Joe Schoellkopff

Quality Control Manager

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EMD Millipore Corporation
290 Concord Road
Billerica, MA 01821

W2699 Received on 3/11/2020 by AP

Subject to Vadodara Jurisdiction

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E-mail : info@cpcindia.com
Web : www.cpcindia.com

CERTIFICATE OF ANALYSIS

PRODUCT : POTASSIUM PHOSPHATE MONOBASIC Anhy. - ACS

CERTIFICATE NO : 04/2019-20 DATE 13-05-2019

Date of receipt of sample : 29.04.2019 Quantity : 1000 KGS.

Batch No. /Lot No : 04/2019-20

Mfg. Date : April-2019

1. Characteristic : A White powder

2. Identification : Positive

	RESULT OBTAINED	LIMITS
3. Clearity and colour of solution	: 10% solution is clear and colourless	
4. Assay (on dry basis)	99.35%	Min.99.00%
5. PH (5% solution)	4.28	4.1-4.5
6. Loss on Drying	0.06%	Max 0.2%
7. Heavy Metals	0.0004%	Max.0.001%
8. iron	0.001%	Max 0.002%
9. Sulphate	0.0015%	Max. 0.003%
10. Chloride	0.0005%	Max.0.001%
11. Insoluble Matter	0.002%	Max. 0.01%
12. Sodium	0.0038%	Max. 0.005%

The sample does comply with specification as per Above.

Analysed by J. A. PATHAK

Quality Control Department

W2651 Received on 1/24/2020 by AP

ThermoFisher SCIENTIFIC

Certificate of Analysis

Product No.: 13450

Product: Potassium dichromate, ACS, 99.0% min

Lot No.: T15F019

Test	Limits	Results
Appearance	Orange-red crystals	Orange-red crystals
Identification	To Pass	Passes
Purity	99.0 % min	99.67 %
Insoluble matter	0.005 % max	0.004 %
Loss on drying	0.05 % max	0.03 %
Chloride	0.001 % max	< 0.001 %
Sulfate	0.005 % max	< 0.005 %
Iron	0.001 % max	< 0.001 %
Calcium	0.003 % max	0.0012 %
Sodium	0.02 % max	0.0047 %

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W2664 Received on 01/31/2020 by AP

Ammonium Molybdate, 4-Hydrate, Crystal
BAKER ANALYZED® A.C.S. Reagent

(ammonium heptamolybdate, tetrahydrate)

Material No.: 0716-01
Batch No.: 0000234410
Manufactured Date: 2019/02/13
Retest Date: 2026/02/11
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay (as MoO_3)	81.0 - 83.0 %	81.4
ACS - Insoluble Matter	<= 0.005 %	< 0.001
Chloride (Cl)	<= 0.002 %	< 0.002
Nitrate (NO_3)	Passes Test	PT
Arsenate, Phosphate and Silicate (as SiO_2)	<= 0.001 %	< 0.001
ACS - Phosphate (PO_4)	<= 5 ppm	< 5
Sulfate (SO_4)	<= 0.02 %	< 0.02
Heavy Metals (as Pb)	<= 0.001 %	< 0.001
Magnesium (Mg)	<= 0.005 %	< 0.001
Potassium (K)	<= 0.01 %	< 0.01
Sodium (Na)	<= 0.01 %	<0.001

For Laboratory, Research or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US
Packaging Site: Paris 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

W2650 Received on 01/20/2020 by AP

Phenolphthalein, Powder
BAKER ANALYZED® A.C.S. Reagent

Material No.: 2870-01
Batch No.: 0000235350
Manufactured Date: 2018/06/06
Retest Date: 2025/06/04
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
ACS - Clarity of Solution	Passes Test	PT
Visual Transition Interval - pH...8.0 (Colorless)	Passes Test	PT
Visual Transition Interval - pH...10.0 (Red)	Passes Test	PT

For Laboratory, Research or Manufacturing Use

Country of Origin: CN
Packaging Site: Paris Mfg Ctr & DC

Jamie Ethier
Vice President Global Quality

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W2647 Received on 01/20/2020 by AP

Sodium Bicarbonate, Powder
BAKER ANALYZED® A.C.S. Reagent

(sodium hydrogen carbonate)

Material No.: 3506-05
Batch No.: 0000240594
Manufactured Date: 2019/06/05
Retest Date: 2026/06/03
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay ($NaHCO_3$) (dried basis)	99.7 - 100.3 %	100.1
Insoluble Matter	<= 0.015 %	< 0.002
Chloride (Cl)	<= 0.003 %	0.003
Phosphate (PO_4)	<= 0.001 %	0.001
Sulfur Compounds (as SO_4)	<= 0.003 %	0.003
Calcium (Ca)	<= 0.02 %	0.02
Trace Impurities - Iron (Fe)	<= 0.001 %	0.001
Magnesium (Mg)	<= 0.005 %	0.005
Potassium (K)	<= 0.005 %	0.005
Ammonium (NH_4)	<= 5 ppm	5
Trace Impurities - ACS - Heavy Metals (as Pb)	<= 5 ppm	5

For Laboratory, Research or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs

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

Jamie Ethier
Vice President Global Quality

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100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Hexadecane, 99.0%

Material No.: H223-57
Batch No.: 0000266903
Manufactured Date: 2020/05/05
Retest Date: 2027/05/04
Revision No: 1

Certificate of Analysis

Test	Specification	Result
Assay ($CH_3(CH_2)_{14}CH_3$) (by GC)	>= 99.0 %	99.3
Infrared Spectrum	Passes Test	PT

For Laboratory, Research or Manufacturing Use

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

Jamie Ethier
Vice President Global Quality

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W2511 Received on 3/26/2019 by AP

Potassium Phosphate, Dibasic, Powder
BAKER ANALYZED® A.C.S. Reagent

(dipotassium hydrogen phosphate)

Material No.: 3252-01
Batch No.: 0000207436
Manufactured Date: 2018/05/01
Retest Date: 2025/04/29
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay (K_2HPO_4) (by acidimetry)	>= 98.0 %	99.2
Insoluble Matter	<= 0.01 %	< 0.01
Loss on Drying at 105°C	<= 1.0 %	< 1.0
pH of 5% Solution at 25°C	8.5 - 9.6	9.1
Chloride (Cl)	<= 0.003 %	< 0.003
Fluoride (F)	<= 0.001 %	< 0.001
Nitrogen Compounds (as N)	<= 0.001 %	< 0.001
Sulfate (SO_4)	<= 0.005 %	< 0.005
Trace Impurities - Iron (Fe)	<= 0.001 %	< 0.001
Sodium (Na)	<= 0.05 %	< 0.05
Trace Impurities - Arsenic (As)	<= 1.000 ppm	< 1.000
Trace Impurities - ACS - Heavy Metals (as Pb)	<= 5 ppm	< 5
Trace Impurities - Lead (Pb)	<= 5.000 ppm	< 5.000
Color (APHA), For Information Only		5

For Laboratory, Research or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs

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

ISO
Phillipsburg, NJ 9001:2015, FSSC22000
Paris, KY 9001:2008
Mexico City, Mexico 9001:2008
Gliwice, Poland 9001:2015, 13485:2012
Selangor, Malaysia 9001:2008
Dehradun, India, 9001:2008, 14001:2004, 13485:2003
Mumbai, India, 9001:2015, 17025:2005
Panoli, India 9001:2015

Jamie Ethier
Vice President Global Quality

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ThermoFisher SCIENTIFIC

Certificate of Analysis

W2858 Received by AP on 07/07/2021

Product No.: 33213

Product: Phenol, ACS, 99+%, stab.

Lot No.: M13H048

Test	Limits	Results
Assay	99.0 % min	99.8 %
Freezing point	40.5ºC min	40.5 ºC
Clarity of solution	To pass test	Passes
Residue after evaporation	0.05 % max	< 0.05 %
Water	0.5 % max	0.2 %

Retest date: January 7, 2026

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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_3PO_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_3COOH)	<= 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
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100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

ThermoFisher SCIENTIFIC

Certificate of Analysis

W2666 Recived on 02/10/2020 by AP

Product No.:	87683
Product:	Sodium pentacyanonitrosylferrate(III) dihydrate, ACS, 99.0-102.0%
Lot No.:	W12F013

Test	Limits	Results
Assay	99.0 - 102.0 %	99.67 %
Insoluble	0.01 % max	0.0079 %
Chloride	0.02 % max	Not detected
Sulfate	To pass test	Passes test
Aqueous solubility	To pass test	Passes test
Limit on Ferricyanide	To pass test	Passes test
Limit on Ferrocyanide	To pass test	Passes test

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ThermoFisher SCIENTIFIC

W2817
Rec. 04/02/2021

Product Specification

Product Name: Stearic acid, 98%, Thermo Scientific Chemicals
Catalog Number: A12244.14

CAS Number: 57-11-4
Molecular Formula: C18H36O2
Molecular Weight: 284.48
InChI Key: QIQXTHQIDYTFRH-UHFFFAOYSA-N
SMILES: CCCCCCCCCCCCCCCCCC(O)=O
Synonym: stearic acid acide stearique hydrofol acid 1855 hydrofol acid 1655 industrene 5016 stearic acid, ion(1-) (8CI) glycon TP glycon DP acidum stearinicul hydrofol acid 150

Product Specification

Appearance (Color): White
Form: Crystals or powder or crystalline powder or flakes or waxy solid
Assay (Silylated GC): ≥97.5%
Melting Point (clear melt): 67.0-74.0?C

Date Of Print: 11/30/2023

Product Specifications are subject to amendment and may change over time. Data contained is accurate as of the date printed.

CERTIFICATE OF ANALYSIS

Product Name	ISOPROPYL ALCOHOL, 99%
Grade	Meets ACS/USP/NF Monographs
Catalog #	231000099, zp231000099
Lot #	C20F23007
Date of Manufacture:	06/23/20
Recommended Retest Date:	Five Years from Date of Manufacture

W2788 Received on 12/30/2020 by AP

TEST	MONO GRAPH	SPECIFICATION	RESULT
Assay (corrected for water)	USP	99.0% min	99.92%
Assay (corrected for water)	ACS	99.5% min	
Solubility in water	ACS+	To Pass Test	Pass
Appearance	ACS+	Clear, colorless liquid	Pass
Color, APHA	ACS	10 max	1
Limit of Nonvolatile Residue	USP+	NMT 2.5 mg (0.005%)	0.1 mg
Residue after Evaporation	ACS+	0.001% max	< 0.001%
Specific Gravity	USP	0.783 - 0.787 @25°C	0.783
Identification A - Infrared Absorption	USP	To Pass Test	Pass
Identification B	USP	To Pass Test	Pass
Refractive Index @ 20°C	USP	1.376-1.378	1.377
Acidity	USP+	NMT 0.70 ml of 0.020N NaOH is required	0.30 mL
Titrable Acid or Base	ACS+	0.0001 meq/g max	0.0001 meq/g
Carbonyl Compounds	ACS	Propionaldehyde 0.002% max	< 0.002%
		Acetone 0.002% max	None Detected
Limit of Volatile Impurities	USP	Diethyl Ether NMT 0.1%	< 0.1%
		Acetone NMT 0.1%	None Detected
		Diisopropyl Ether NMT 0.1%	< 0.1%
		n-Propyl Alcohol NMT 0.1%	< 0.1%
		2-Butanol NMT 0.1%	< 0.1%
		Total NMT 1.0%	< 0.1%
Water, wt%	ACS	NMT 0.2%	0.05%
Water Determination	USP	NMT 0.5%	

+ This test is performed quarterly

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Certification and Compliance Statements

This lot of Isopropyl Alcohol complies with all of the current requirements listed in the United States Pharmacopeia, American Chemical Society monographs and the National Formulary.
No chemicals whatsoever are used as solvents at any point in the manufacture, processing or packaging of Isopropyl Alcohol. Only Class 2 and Class 3 residual solvents may appear as impurities / related substances / low level contaminants in IPA Concentration of Class 2 Option 1 and Class 3 residual solvents is below limits in the current USP/NF General Chapter <467>.
This product is not derived, nor does it come in contact with, any materials derived from bovine or other animal sources.
This product is for further commercial manufacturing, laboratory or research use, and may be used as an excipient or a process solvent for pharmaceutical purposes. It is not intended for use as an active ingredient in drug manufacturing nor as a medical device or disinfectant. Appropriate/legal use of this product is the responsibility of the user.

Approved by: D. Simoncelli, Quality Control Chemist

Date of Approval: 06/23/2020

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W3071
Rec 12/6/23

Certificate of Analysis

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.

Sigma-Aldrich.

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Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

~~H2278~~ W2983
Rec. 11/21/22 ,2

Certificate of Analysis

Product Name:
Potassium sulfate - ReagentPlus®, ≥99.0%

Product Number:	**P0772**
Batch Number:	**SLCM9788**
Brand:	SIGALD
CAS Number:	7778-80-5
MDL Number:	MFCD00011388
Formula:	K2O4S
Formula Weight:	174.26 g/mol
Quality Release Date:	03 MAR 2022

K_2SO_4

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form)	Powder	Powder
Solubility (Color)	Colorless	Colorless
Solubility (Turbidity) 10 g plus 150 mL, H2O	Clear	Clear
Titration with NaOH	≥ 99.0 %	99.2 %

Brian Dulle

Brian Dulle, Supervisor
Quality Assurance
St. Louis, Missouri US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

~~W2918~~ W3001 rec. 06/06/22 exp. 06/06/27

Chem-Impex International, Inc.

Tel: (630) 766-2112
E-mail: sales@chemimpex.com
Shipping and Correspondence:
935 Dillon Drive
Wood Dale, IL 60191

Fax: (630) 766-2218
Web site: www.chemimpex.com
Manufacturing site:
825 Dillon Drive
Wood Dale, IL 60191

Certificate of Analysis

Catalogue Number	01237
Product	**Magnesium chloride hexahydrate**
Lot Number	002251-03319
	Magnesium chloride•$6H_2O$
CAS Number	7791-18-6
Molecular Formula	$MgCl_2$•$6H_2O$
Molecular Weight	203.3

Appearance	Colorless crystals, very deliquescent
Heavy Metals	< 5 ppm
Anion	Nitrate : < 0.001% Phosphate : < 5 ppm Sulfate : < 0.002%
Cation	Ammonium : < 0.002% Barium : < 0.005% Calcium : 0.0006% Iron : < 5 ppm Manganese : 1.8 ppm Potassium : 0.0006% Sodium : 0.0008% Strontium : 0.0015%
Insoluble material	0.0025%
Assay by titration	100.29%
Grade	ACS reagent
Storage	Store at RT
Country of Origin	India

Certificate of Analysis

Catalog Number: 01237 **Lot Number: 002251-03319**

Remarks	See material safety data sheet for additional information
	For laboratory use only

The foregoing is a copy of the Certificate of Analysis as provided by our supplier



Bala Kumar
Quality Control Manager

Sigma-Aldrich

W3009

Rec. 2/27/2023 12

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Hexadecane - ReagentPlus®, 99%

Product Number:	**H6703**
Batch Number:	**SHBP8192**
Brand:	SIAL
CAS Number:	544-76-3
MDL Number:	MFCD00008998
Formula:	C16H34
Formula Weight:	226.44 g/mol
Quality Release Date:	04 AUG 2022

$CH_3(CH_2)_{14}CH_3$

Test	Specification	Result
Appearance (Color)	Colorless or White	Colorless
Appearance (Form)	Liquid or Solid	Liquid
Infrared Spectrum	Conforms to Structure	Conforms
Refractive index at 20 ° C	1.432 - 1.436	1.435
Purity (GC)	≥ 98.5 %	99.3 %
Color Test	≤ 20 APHA	< 5 APHA

Larry Coers, Director
Quality Control
Sheboygan Falls, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Sigma-Aldrich.

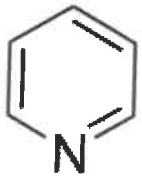
W3019
Rec 4/3/23

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Pyridine - anhydrous, 99.8%

Product Number:	**270970**
Batch Number:	**SHBQ2113**
Brand:	SIAL
CAS Number:	110-86-1
MDL Number:	MFCD00011732
Formula:	C5H5N
Formula Weight:	79.10 g/mol
Quality Release Date:	15 DEC 2022



Test	Specification	Result
Appearance (Color)	Colorless	Colorless
Appearance (Form)	Liquid	Liquid
Infrared Spectrum	Conforms to Structure	Conforms
Purity (GC)	≥ 99.75 %	99.99 %
Water (by Karl Fischer)	≤ 0.003 %	0.002 %
Residue on Evaporation	≤ 0.0005 %	< 0.0001 %

Larry Coers, Director
Quality Control
Sheboygan Falls, WI US

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Sigma-Aldrich.

W 3035
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Lec. 6/6/23

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Ammonium persulfate - ACS reagent, ≥98.0%

Product Number:	**248614**
Batch Number:	**MKCR9319**
Brand:	SIGALD
CAS Number:	7727-54-0
MDL Number:	MFCD00003390
Formula Weight:	228.20 g/mol
Quality Release Date:	13 OCT 2022

$(NH_4)_2S_2O_8$

Test	Specification	Result
Appearance (Color)	White to Off White	White
Appearance (Form)	Powder or Crystals or Granules or Chunks	Crystals
ICP Major Analysis Confirms Sulfur Component	Confirmed	Confirmed
Titration by KMNO4	≥ 98.0 %	100.0 %
Residue on ignition (Ash)	≤ 0.05 %	< 0.05 %
Insoluble Matter c = 10 %; In Water	≤ 0.005 %	0.002 %
Chloride and Chlorate (as Cl)	≤ 0.001 %	< 0.001 %
Iron (Fe)	≤ 0.001 %	< 0.001 %
Heavy Metal as Lead	≤ 0.005 %	< 0.001 %
Manganese (Mn)	≤ 0.5 ppm	< 0.1 ppm
Titratable Acid (meq/g)	≤ 0.04	< 0.04
Meets ACS Requirements	Current ACS Specification	Conforms

Larry Coers, Director
Quality Control
Milwaukee, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Certificate Of Analysis

W 3058

Rec. 10/19/23 12

Date of Release: 1/27/2023

Name: **Sodium Carbonate, Anhydrous**
Powder, ACS

Item No: **SX0395 All Sizes**
Lot / Batch No: **2023012653**
Country of Origin: **India**

Item	Specifications	Analysis
Assay (calculated on dried substance)	99.5% min.	100.2%
Calcium (Ca)	0.03% max.	0.004%
Chloride (Cl)	0.001% max.	<0.001%
Color	White	Passes Test
Form	Powder	Passes Test
Heavy metals (by ICP-OES)	5 ppm max.	<5 ppm
Insoluble Matter	0.01% max.	0.003%
Iron (Fe)	5 ppm max.	<5 ppm
Loss on heating at 285C	1.0% max.	0.1%
Magnesium (Mg)	0.005% max.	0.0008%
Phosphate (PO4)	0.001% max.	<0.001%
Potassium (K)	0.005% max.	0.003%
Silica (SiO2)	0.005% max.	<0.005%
Sulfur compounds (as SO4)	0.003% max.	<0.003%

Joe Schoellkopff

Quality Control Manager

This document has been produced electronically and is valid without a signature.

EMD Millipore is a division of Merck KGaA, Darmstadt, Germany

EMD Millipore Corporation
400 Summit Drive
Burlington, MA 01803
U.S.A.

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INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

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N 3062
NEC on 10/30/23
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Ion Chromatography Solution
Catalog Number:	300-CAL-A
Lot Number:	T2-MEB716667
Matrix:	H2O
Value / Analyte(s):	150 µg/mL ea: Sulfate, 100 µg/mL ea: Bromide, 50 µg/mL ea: o-Phosphate as P, 30 µg/mL ea: Chloride, Nitrite as N, 25 µg/mL ea: Nitrate as N, 20 µg/mL ea: Fluoride

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Bromide, Br	100.0 ± 0.5 µg/mL	Chloride, Cl	30.00 ± 0.13 µg/mL
Fluoride, F-	20.00 ± 0.06 µg/mL	Nitrate as N, NNO3-	25.00 ± 0.09 µg/mL
Nitrite as N, NNO2-	30.00 ± 0.15 µg/mL	o-Phosphate as P, PPO4	50.00 ± 0.30 µg/mL
Sulfate, SO4	150.0 ± 0.9 µg/mL		

Density: 0.999 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Br	IC Assay	3184	151130
Br	Fajans	999c	999c
Cl	IC Assay	3182	060925
Cl	Fajans	999c	999c
Cl	Calculated		See Sec. 4.2
F-	IC Assay	3183	140203
NNO3-	IC Assay	3185	050517
NNO2-	IC Assay		traceable to 40h
PPO4	IC Assay	3186	170606
SO4	IC Assay	3181	080603

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 CHROMATOGRAM

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 17, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- March 17, 2027

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

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Christiansburg, VA 24073 USA
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info@inorganicventures.com

W3063
rec. 11/16/23 12

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 863.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Ion Chromatography Solution
Catalog Number:	300-CAL-A
Lot Number:	U2-MEB735684
Matrix:	H2O
Value / Analyte(s):	150 µg/mL ea: Sulfate, 100 µg/mL ea: Bromide, 50 µg/mL ea: o-Phosphate as P, 30 µg/mL ea: Chloride, Nitrite as N, 25 µg/mL ea: Nitrate as N, 20 µg/mL ea: Fluoride

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Bromide, Br	100.0 ± 0.5 µg/mL	Chloride, Cl	30.00 ± 0.14 µg/mL
Fluoride, F-	20.00 ± 0.06 µg/mL	Nitrate as N, NNO3-	25.00 ± 0.09 µg/mL
Nitrite as N, NNO2-	30.00 ± 0.15 µg/mL	o-Phosphate as P, PPO4	50.00 ± 0.18 µg/mL
Sulfate, SO4	150.0 ± 0.8 µg/mL		

Density: 0.999 g/mL (measured at 20 ± 4 °C)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Br	IC Assay	3184	151130
Br	Fajans	999c	999c
Cl	IC Assay	3182	190830
Cl	Fajans	999c	999c
F-	IC Assay	3183	140203
NNO3-	IC Assay	3185	170309
NNO2-	IC Assay		traceable to 40h
PPO4	IC Assay	3186	170606
SO4	IC Assay	3181	080603

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 CHROMATOGRAM

N/A

6.0 INTENDED USE

6.1 This standard is intended for the calibration of analytical instruments and validation of analytical methods as appropriate. This CRM may be used in connection with EPA Methods 6010, 6020 (all versions), Standard Methods 3120 B and USP <232> / ICH Q3D.

6.2 For products attaining traceability through Inorganic Ventures' Primary Certified Reference Materials (PCRM™) see the Limited License to Use PCRM™ in the Inorganic Ventures Terms and Conditions of Sale https://www.inorganicventures.com/terms-and-conditions-sale. The Terms and Conditions contain information on the use of materials traceable to PCRM™ certified reference materials. This Limited License agreement is especially pertinent for laboratories accredited under ISO:17034.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

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10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 10, 2023

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- August 10, 2028

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

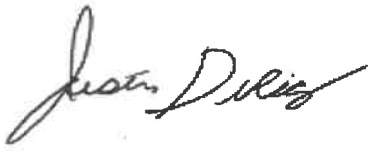
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Justin Dirico
Stock Processing Supervisor



Certificate Approved By:

Nicholas Plymale
Custom VSM Coordinator



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director



RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

W3072
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 (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

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

Certificate Of Analysis

Date of Release: 11/14/2019

W2700 Recived by AP on 3/11/2020

Name: **Sodium Borate, Decahydrate**
ACS

Item No: **SX0355 All Sizes**
Lot / Batch No: **2019111354**
Country of Origin: **India**

Item	Specifications	Analysis
Assay (Na2B4O7 • 10H2O)	99.5 - 105.0%	101.7%
Calcium (Ca)	0.005% max.	0.003%
Chloride (Cl)	0.001% max.	<0.001%
Color	White	Passes Test
Form	Crystals	Passes Test
Heavy Metals (as Pb)	0.001% max.	<0.001%
Insoluble Matter	0.005% max.	0.002%
Iron (Fe)	5 ppm max.	<5 ppm
pH of a 0.01 M solution at 25C	9.15 - 9.20	9.17
Phosphate (PO4)	0.001% max.	<0.001%
Sulfate (SO4)	0.005% max.	<0.005%

Joe Schoellkopff

Quality Control Manager

This document has been produced electronically and is valid without a signature.

EMD Millipore is a division of Merck KGaA, Darmstadt, Germany

EMD Millipore Corporation
400 Summit Drive
Burlington, MA 01803
U.S.A.

Form number: 00005624CA, Rev. 2.0

W2652 Received on 01/24/2020 by AP

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	P188	Quality Test / Release Date	08/12/2019
Lot Number	194664		
Description	POTASSIUM DICHROMATE, A.C.S.		
Country of Origin	United States	Suggested Retest Date	Aug/2024
Chemical Origin	Inorganic-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.		
Chemical Comment			

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Fine, orange-red crystals
ASSAY	%	>= 99	99.2
CALCIUM	%	<= 0.003	<0.003
CHLORIDE	%	<= 0.001	<0.001
LOSS ON DRYING @ 105 C	%	<= 0.05	<0.05
SULFATE (SO4)	%	<= 0.005	<0.005
INSOLUBLE MATTER	%	<= 0.005	0.003
IRON (Fe)	%	<= 0.001	<0.001
SODIUM (Na)	%	<= 0.02	<0.02
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST

Teresa Bailey-Wyche

Quality Assurance Specialist - Certificate of Analysis 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.

W2784 Received on 12/16/2020 by AP

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

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.

Allan Chemical Corporation

235 Margaret King Avenue
Ringwood NJ 07456

Telephone: 973-962-4014
Fax: 973-962-6820
E-Mail: allanchem@allanchem.com

W2697

ATTN: ALLAN CHEMICAL - QC DEPT.
DATE: September 20, 2021
P.O. #: 14410
PART #: N/A
LOT #: CPECG2635

CERTIFICATE OF ANALYSIS

CUPRIC SULFATE CRYSTAL – ACS GRADE

ASSAY:	102.0 %
LEAD:	< 0.0001 %
NITROGEN COMPOUNDS:	< 0.001 %
ZINC:	< 0.0001 %
INSOLUBLE MATTER:	< 0.001 %
CHLORIDE:	< 0.001 %
CHROMIUM:	< 0.00002 %
IRON:	0.0003 %
NICKEL:	< 0.0001 %
CADMIUM:	< 0.0001 %
MANGANESE:	< 0.0001 %
CALCIUM:	< 0.005 %
POTASSIUM:	< 0.001 %
SODIUM:	< 0.001 %

Sand
Purified
Washed and Ignited

avantor™ | J.T.Baker®

Material No.: 3382-05
Batch No.: 0000243821
Manufactured Date: 2018/04/09
Retest Date: 2025/04/07
Revision No: 1

Certificate of Analysis

Test	Specification	Result
Substances Soluble in HCl	<= 0.16 %	0.01

For Laboratory, Research or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs

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

E 2865

James T Ethier
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

PRODUCTOS QUIMICOS MONTERREY, S.A. DE C.V.

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MEXICO
CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na_2SO_4
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na_2SO_4)	Min. 99.0%	99.7 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.1
Insoluble matter	Max. 0.01%	0.005 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO_4)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.003 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreing matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

RG-02-01, Ed. 3

Recd. by RI on 7/24/23 E3551

VWR®

Certificate of Analysis

Sodium Hydroxide (Pellets)

Material: 0583
Grade: ACS GRADE
Batch Number: 23B1556310

Chemical Formula: NaOH
Molecular Weight: 40
CAS #: 1310-73-2
Appearance:

Pellets

Manufacture Date: 12/14/2022
Expiration Date: 12/31/2025

Storage: Room Temperature

TEST	SPECIFICATION	ANALYSIS	DISPOSITION
Calcium	<= 0.005 %	<0.005 %	PASS
Chloride	<= 0.005 %	0.002 %	PASS
Heavy Metals	<= 0.002 %	<0.002 %	PASS
Iron	<= 0.001 %	<0.001 %	PASS
Magnesium	<= 0.002 %	<0.002 %	PASS
Mercury	<= 0.1 ppm	<0.1 ppm	PASS
Nickel	<= 0.001 %	<0.001 %	PASS
Nitrogen Compounds	<= 0.001 %	<0.001 %	PASS
Phosphate	<= 0.001 %	<0.001 %	PASS
Potassium	<= 0.02 %	<0.02 %	PASS
Purity	>= 97.0 %	99.2 %	PASS
Sodium Carbonate	<= 1.0 %	0.5 %	PASS
Sulfate	<= 0.003 %	<0.003 %	PASS

Internal ID #: 710

Signature

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

Additional Information

Analysis may have been rounded to significant digits in specification limits.

Product meets analytical specifications of the grades listed.

E 3657	E 3659
E 3654	E 3660

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™ | J.T.Baker®

Material No.: 9254-03
Batch No.: 23H1462005
Manufactured Date: 2023-07-26
Expiration Date: 2026-07-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ($(CH_3)_2CO$) (by GC, corrected for water)	≥ 99.4 %	99.7 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (µeq/g)	≤ 0.3	0.1
Titrable Base (µeq/g)	≤ 0.6	< 0.1
Water (H_2O)	≤ 0.5 %	0.3 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

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

Recd. by RP on 8/13/24

E 3788

Ken Koehnlein
Sr. Manager, Quality Assurance

W3011
W3012
W3013
W3014
W3015

For ICP-MS use: dilute the ICV1 concentrate 50-fold with 1% (v/v) nitric acid; pipet 2 mL of the concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

ICV5-0415 For the cold vapor analysis of mercury by AA: dilute the ICV5 concentrate 100-fold with 2% (v/v) nitric acid; pipet 1 mL of the concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

ICV6-0400 For the analysis of cyanide: dilute the ICV6 concentrate 100-fold with Type II water; pipet 1 mL of the concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

NOTE: USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

(D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

ICV1-1014		
Element	**Concentration (µg/L) (after 10-fold dilution)**	**Concentration (µg/L) (after 50-fold dilution)**
Al	2520	504
Sb	1010	202
As	997	199
Ba	518	104
Be	514	103
Cd	514	103
Ca	10000	2000
Cr	517	103
Co	521	104
Cu	505	101
Fe	10100	2020
Pb	1030	206
Mg	5990	1198
Mn	524	105
Ni	525	105
K	9940	1988
Se	1030	206
Ag	252	50
Na	10100	2020
Tl	1040	208
V	504	101
Zn	1010	202

ICV5-0415		ICV6-0400	
Element	**Concentration (µg/L) (after 100-fold dilution)**	**Analyte**	**Concentration (µg/L) (after 100-fold dilution)**
Hg	4.0	**CN^-**	99

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010
Manufactured Date: 2023-03-22
Retest Date: 2028-03-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H_2SO_4)	95.0 – 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Substances Reducing Permanganate (as SO2)	≤ 2 ppm	< 2 ppm
Ammonium (NH_4)	≤ 1 ppm	1 ppm
Chloride (Cl)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO_3)	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO_4)	≤ 0.5 ppm	< 0.1 ppm
Trace Impurities – Aluminum (Al)	≤ 30.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities – Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities – Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities – Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities – Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
Trace Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010

Test	Specification	Result
Trace Impurities – Sodium (Na)	≤ 500.0 ppb	5.4 ppb
Trace Impurities – Strontium (Sr)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.4 ppb

For Laboratory,Research,or Manufacturing Use

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

James T Ethier

Jamie Ethier
Vice President Global Quality

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

MS943 MS944
MS945 MS946

Material No.: 9530-33
Batch No.: 22G2862015
Manufactured Date: 2022-06-15
Retest Date: 2027-06-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl_2)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO_4)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO_3)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH_4)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
Trace Impurities – Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities – Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Magnesium (Mg)	≤ 10.0 ppb	2.9 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities – Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities – Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities – Niobium (Nb)	≤ 1.0 ppb	0.8 ppb
Trace Impurities – Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	0.5 ppb
Trace Impurities – Sodium (Na)	≤ 100.0 ppb	2.3 ppb
Trace Impurities – Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Tantalum (Ta)	≤ 1.0 ppb	1.6 ppb
Trace Impurities – Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Tin (Sn)	≤ 5.0 ppb	4.0 ppb
Trace Impurities – Titanium (Ti)	≤ 1.0 ppb	1.5 ppb
Trace Impurities – Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities – Zirconium (Zr)	≤ 1.0 ppb	0.3 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result

For Laboratory,Research,or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

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

James T Ethier

Jamie Ethier
Vice President Global Quality

Hydrochloric Acid, 36.5–38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

MS947 MS948 MS949
MS950 MS951 MS952

Material No.: 9530-33
Batch No.: 22G2862015
Manufactured Date: 2022-06-15
Retest Date: 2027-06-14
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.9 %
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.191
ACS – Bromide (Br)	≤ 0.005 %	< 0.005 %
ACS – Extractable Organic Substances	≤ 5 ppm	< 1 ppm
ACS – Free Chlorine (as Cl_2)	≤ 0.5 ppm	< 0.5 ppm
Phosphate (PO_4)	≤ 0.05 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.5 ppm	< 0.3 ppm
Sulfite (SO_3)	≤ 0.8 ppm	0.3 ppm
Ammonium (NH_4)	≤ 3 ppm	< 1 ppm
Trace Impurities – Arsenic (As)	≤ 0.010 ppm	< 0.003 ppm
Trace Impurities – Aluminum (Al)	≤ 10.0 ppb	1.3 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 3.0 ppb
Trace Impurities – Barium (Ba)	≤ 1.0 ppb	0.2 ppb
Trace Impurities – Beryllium (Be)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Bismuth (Bi)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Boron (B)	≤ 20.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	163.0 ppb
Trace Impurities – Chromium (Cr)	≤ 1.0 ppb	0.7 ppb
Trace Impurities – Cobalt (Co)	≤ 1.0 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gallium (Ga)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities – Germanium (Ge)	≤ 3.0 ppb	< 2.0 ppb
Trace Impurities – Gold (Au)	≤ 4.0 ppb	0.6 ppb
Heavy Metals (as Pb)	≤ 100 ppb	< 50 ppb
Trace Impurities – Iron (Fe)	≤ 15 ppb	6 ppb

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result
Trace Impurities - Lead (Pb)	≤ 1.0 ppb	< 0.5 ppb
Trace Impurities - Lithium (Li)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Magnesium (Mg)	≤ 10.0 ppb	2.9 ppb
Trace Impurities - Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities - Mercury (Hg)	≤ 0.5 ppb	0.1 ppb
Trace Impurities - Molybdenum (Mo)	≤ 10.0 ppb	< 3.0 ppb
Trace Impurities - Nickel (Ni)	≤ 4.0 ppb	< 0.3 ppb
Trace Impurities - Niobium (Nb)	≤ 1.0 ppb	0.8 ppb
Trace Impurities - Potassium (K)	≤ 9.0 ppb	< 2.0 ppb
Trace Impurities - Selenium (Se), For Information Only		< 1.0 ppb
Trace Impurities - Silicon (Si)	≤ 100.0 ppb	< 10.0 ppb
Trace Impurities - Silver (Ag)	≤ 1.0 ppb	0.5 ppb
Trace Impurities - Sodium (Na)	≤ 100.0 ppb	2.3 ppb
Trace Impurities - Strontium (Sr)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Tantalum (Ta)	≤ 1.0 ppb	1.6 ppb
Trace Impurities - Thallium (Tl)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Tin (Sn)	≤ 5.0 ppb	4.0 ppb
Trace Impurities - Titanium (Ti)	≤ 1.0 ppb	1.5 ppb
Trace Impurities - Vanadium (V)	≤ 1.0 ppb	< 0.2 ppb
Trace Impurities - Zinc (Zn)	≤ 5.0 ppb	0.8 ppb
Trace Impurities - Zirconium (Zr)	≤ 1.0 ppb	0.3 ppb

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5-38.0%
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis

avantor™ | J.T.Baker®

Material No.: 9530-33
Batch No.: 22G2862015

Test	Specification	Result

For Laboratory,Research,or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications
Storage Condition: Store below 25 °C.

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

James T Ethier

Jamie Ethier
Vice President Global Quality

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

MS954 MS955 MS956
MS957 MS958

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 – 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities – Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities – Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities – Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities – Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities – Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities – Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities – Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities – Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

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

Jamie Croak
Director Quality Operations, Bioscience Production

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

M 6041-46
MS

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010
Manufactured Date: 2023-03-22
Retest Date: 2028-03-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H_2SO_4)	95.0 – 98.0 %	96.1 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	≤ 10	5
ACS – Residue after Ignition	≤ 3 ppm	< 1 ppm
ACS – Substances Reducing Permanganate (as SO2)	≤ 2 ppm	< 2 ppm
Ammonium (NH_4)	≤ 1 ppm	1 ppm
Chloride (Cl)	≤ 0.1 ppm	< 0.1 ppm
Nitrate (NO_3)	≤ 0.2 ppm	< 0.1 ppm
Phosphate (PO_4)	≤ 0.5 ppm	< 0.1 ppm
Trace Impurities – Aluminum (Al)	≤ 30.0 ppb	< 5.0 ppb
Arsenic and Antimony (as As)	≤ 4.0 ppb	< 2.0 ppb
Trace Impurities – Boron (B)	≤ 10.0 ppb	8.5 ppb
Trace Impurities – Cadmium (Cd)	≤ 2.0 ppb	< 0.3 ppb
Trace Impurities – Chromium (Cr)	≤ 6.0 ppb	< 0.4 ppb
Trace Impurities – Cobalt (Co)	≤ 0.5 ppb	< 0.3 ppb
Trace Impurities – Copper (Cu)	≤ 1.0 ppb	< 0.1 ppb
Trace Impurities – Gold (Au)	≤ 10.0 ppb	0.5 ppb
Heavy Metals (as Pb)	≤ 500.0 ppb	< 100.0 ppb
Trace Impurities – Iron (Fe)	≤ 50.0 ppb	1.3 ppb
Trace Impurities – Lead (Pb)	≤ 0.5 ppb	< 0.5 ppb
Trace Impurities – Magnesium (Mg)	≤ 7.0 ppb	0.8 ppb
Trace Impurities – Manganese (Mn)	≤ 1.0 ppb	< 0.4 ppb
Trace Impurities – Mercury (Hg)	≤ 0.5 ppb	< 0.1 ppb
Trace Impurities – Nickel (Ni)	≤ 2.0 ppb	0.3 ppb
Trace Impurities – Potassium (K)	≤ 500.0 ppb	< 2.0 ppb
Trace Impurities – Selenium (Se)	≤ 50.0 ppb	< 0.1 ppb
Trace Impurities – Silicon (Si)	≤ 100.0 ppb	31.5 ppb
Trace Impurities – Silver (Ag)	≤ 1.0 ppb	< 0.3 ppb

>>> Continued on page 2 >>>

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010

Test	Specification	Result
Trace Impurities - Sodium (Na)	≤ 500.0 ppb	5.4 ppb
Trace Impurities - Strontium (Sr)	≤ 5.0 ppb	< 0.2 ppb
Trace Impurities - Tin (Sn)	≤ 5.0 ppb	< 0.8 ppb
Trace Impurities - Zinc (Zn)	≤ 5.0 ppb	0.4 ppb

For Laboratory,Research,or Manufacturing Use

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

James T Ethier

Jamie Ethier
Vice President Global Quality

Nitric Acid 69%
CMOS

M6096
M6097
M6098
M6099
M6100

Mtd 9/21/24

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002
Manufactured Date: 2024-03-26
Retest Date: 2029-03-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay (HNO_3)	69.0 - 70.0 %	69.7 %
Appearance	Passes Test	Passes Test
Color (APHA)	≤ 10	5
Residue after Ignition	≤ 2 ppm	1 ppm
Chloride (Cl)	≤ 0.08 ppm	< 0.03 ppm
Phosphate (PO_4)	≤ 0.10 ppm	< 0.03 ppm
Sulfate (SO_4)	≤ 0.2 ppm	< 0.2 ppm
Trace Impurities - Aluminum (Al)	≤ 40.0 ppb	< 1.0 ppb
Arsenic and Antimony (as As)	≤ 5.0 ppb	< 2.0 ppb
Trace Impurities - Barium (Ba)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Beryllium (Be)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Bismuth (Bi)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Boron (B)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities - Cadmium (Cd)	≤ 50 ppb	< 1 ppb
Trace Impurities - Calcium (Ca)	≤ 50.0 ppb	2.3 ppb
Trace Impurities - Chromium (Cr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities - Cobalt (Co)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Copper (Cu)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Gallium (Ga)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Germanium (Ge)	≤ 20 ppb	< 10 ppb
Trace Impurities - Gold (Au)	≤ 20 ppb	< 5 ppb
Heavy Metals (as Pb)	≤ 100 ppb	100 ppb
Trace Impurities - Iron (Fe)	≤ 40.0 ppb	< 1.0 ppb
Trace Impurities - Lead (Pb)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities - Lithium (Li)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Magnesium (Mg)	≤ 20 ppb	< 1 ppb
Trace Impurities - Manganese (Mn)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities - Nickel (Ni)	≤ 20.0 ppb	< 5.0 ppb

>>> Continued on page 2 >>>

For questions on this Certificate of Analysis please contact Technical Services at 855 282 6867 or +1 610 386 1700

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result
Trace Impurities – Niobium (Nb)	≤ 50.0 ppb	< 1.0 ppb
Trace Impurities – Potassium (K)	≤ 50 ppb	16 ppb
Trace Impurities – Silicon (Si)	≤ 50 ppb	< 10 ppb
Trace Impurities – Silver (Ag)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Sodium (Na)	≤ 150.0 ppb	< 5.0 ppb
Trace Impurities – Strontium (Sr)	≤ 30.0 ppb	< 1.0 ppb
Trace Impurities – Tantalum (Ta)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Thallium (Tl)	≤ 10.0 ppb	< 5.0 ppb
Trace Impurities – Tin (Sn)	≤ 20.0 ppb	< 10.0 ppb
Trace Impurities – Titanium (Ti)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Vanadium (V)	≤ 10.0 ppb	< 1.0 ppb
Trace Impurities – Zinc (Zn)	≤ 20.0 ppb	< 1.0 ppb
Trace Impurities – Zirconium (Zr)	≤ 10.0 ppb	< 1.0 ppb
Particle Count – 0.5 µm and greater	≤ 60 par/ml	10 par/ml
Particle Count – 1.0 µm and greater	≤ 10 par/ml	3 par/ml

>>> Continued on page 3 >>>

Nitric Acid 69%
CMOS

avantor™ | J.T.Baker®

Material No.: 9606-03
Batch No.: 24D1062002

Test	Specification	Result

For Microelectronic Use

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

Jamie Croak
Director Quality Operations, Bioscience Production

Certificate of Analysis

1.00132.0000 Barbituric acid for analysis EMSURE®
Batch N020065932

	Spec. Values		Batch Values	
Assay (acidimetric)	≥ 99	%	99.6	%
Identity (IR-spectrum)	passes test		passes test	
Chloride (Cl)	≤ 40	ppm	≤ 40	ppm
Heavy metals (as Pb)	≤ 50	ppm	≤ 50	ppm
Fe (Iron)	≤ 10	ppm	≤ 10	ppm
Sulfated ash	≤ 0.1	%	≤ 0.1	%
Loss on Drying (105 °C)	≤ 0.1	%	≤ 0.1	%
Suitability as reagent (for cyanide determination)	passes test		passes test	

Date of release (DD.MM.YYYY) 17.04.2020
Minimum shelf life (DD.MM.YYYY) 30.04.2025

Ioannis Chartomatsidis
Responsible laboratory manager quality control

This document has been produced electronically and is valid without a signature.

CHAMPA PURIE-CHEM INDUSTRIES

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E-mail : info@cpcindia.com
Web : www.cpcindia.com

W2708 Received on 05/05/20 by AP

CERTIFICATE OF ANALYSIS

PRODUCT : **POTASSIUM PHOSPHATE MONOBASIC Anhy. - ACS**

CERTIFICATE NO : 99/2019- 20 DATE 26-08-2019

Date of receipt of sample : 22.08.2019 Quantity : 1000 KGS

Batch No. /Lot No : 99/2019- 20

Mfg. Date : Aug-2019

1. Characteristic : A White powder

2. Identification : Positive

	RESULT OBTAINED	LIMITS
3. Clearity and colour of solution	: 10% solution is clear and colourless	
4. Assay (on dry basis)	: 99.27%	Min.99.00%
5. PH (5% solution)	: 4.4	4.1-4.5
6. Loss on Drying	: 0.1%	Max 0.2%
7. Heavy Metals	: 0.0003%	Max.0.001%
8. Iron	: 0.001%	Max 0.002%
9. Sulphate	: 0.001%	Max. 0.003%
10. Chloride	: 0.0005%	Max.0.001%
11. Insoluble Matter	: 0.003%	Max. 0.01%
12. Sodium	: 0.004%	Max. 0.005%

The sample does comply with specification as per Above.

Analysed by J.A.PATHAK

Quality Control Department

W2668 Received on 02/10/2020 by AP

Sodium Phosphate, Monobasic, Monohydrate, Crystal
BAKER ANALYZED® A.C.S. Reagent

(sodium dihydrogen phosphate, monohydrate)

Material No.: 3818-05
Batch No.: 0000225799
Manufactured Date: 2018/12/05
Retest Date: 2025/12/03
Revision No: 1

Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay ($NaH_2PO_4 \cdot H_2O$)	98.0 - 102.0 %	99.5
pH of 5% Solution at 25°C	4.1 - 4.5	4.3
Insoluble Matter	<= 0.01 %	< 0.01
Chloride (Cl)	<= 5 ppm	< 5
ACS - Sulfate (SO_4)	<= 0.003 %	< 0.003
Calcium (Ca)	<= 0.005 %	<0.005
Potassium (K)	<= 0.01 %	< 0.01
Heavy Metals (as Pb)	<= 0.001 %	< 0.001
Trace Impurities - Iron (Fe)	<= 0.001 %	< 0.001

For Laboratory, Research or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: IN
Packaging Site: Paris 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

Sigma-Aldrich.

W 2979

Rec: 12/09/22

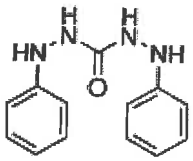
exp. 12/09/27

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
1,5-Diphenylcarbazide - ACS reagent

Product Number:	**259225**
Batch Number:	**MKCR6636**
Brand:	SIAL
CAS Number:	140-22-7
MDL Number:	MFCD00003013
Formula:	C13H14N4O
Formula Weight:	242.28 g/mol
Quality Release Date:	02 JUN 2022



Test	Specification	Result
Appearance (Color) Off-White to Pink, Light Purple or Tan	Conforms to Requirements	Pink
Appearance (Form)	Powder or Chunks	Powder
Melting Point	173.0 - 176.0 °C	173.0 °C
Infrared Spectrum	Conforms to Structure	Conforms
Residue on ignition (Ash) 15 minutes, 800 Degrees Celsius	≤ 0.05 %	0.01 %
Solubility	Pass	Pass
Sensitivity Test	Pass	Pass
Meets ACS Requirements	Current ACS Specification	Conforms

Larry Coers, Director
Quality Control
Milwaukee, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

RICCA CHEMICAL COMPANY®

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Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

W 3005 REC. 1/31/23 12

Certificate of Analysis

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

Lot Number: 4212E45 **Product Number:** 1493

Manufacture Date: DEC 20, 202[illegible]

Expiration Date: DEC 202[illegible]

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

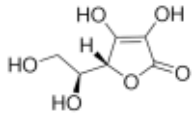
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3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

W3074 Rec. on 01/16/24 by IZ

Certificate of Analysis

Product Name:
L-Ascorbic acid - ACS reagent, ≥99%



Product Number:	**255564**
Batch Number:	**MKCS4627**
Brand:	SIAL
CAS Number:	50-81-7
MDL Number:	MFCD00064328
Formula:	C6H8O6
Formula Weight:	176.12 g/mol
Quality Release Date:	21 NOV 2022
Recommended Retest Date:	SEP 2025

Test	Specification	Result
Appearance (Color)	White	White
Appearance (Form) Powder, Crystals, Crystalline Powder, Granules and/or Chunks	Conforms to Requirements	Powder
Infrared Spectrum	Conforms to Structure	Conforms
Optical Rotation (+); c = 10%; Water	20.5 - 21.5 deg	20.7 deg
Titration by Iodine	≥ 99.0 %	99.4 %
Residue on Ignition	≤ 0.10 %	0.03 %
Iron (Fe)	≤ 0.001 %	< 0.001 %
Heavy Metals by ICP-OES	≤ 0.002 %	0.001 %
Recommended Retest Period 3 Years	----------	----------
Meets ACS Requirements	Current ACS Specification	Conforms

Larry Coers, Director
Quality Control
Milwaukee, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Certificate of analysis

W3082 Received on 2/26/2026 by IZ

Product No.:	A12244
Product:	Stearic acid, 98%
Lot No.:	U23E020

Appearance	White flakes
Assay	98.7 %

This document has been electronically generated and does not require a signature.

W3084-W3088 Received on 3/20/24 by IZ

Certificate of Analysis

03/20/2024(JST)

TOKYO CHEMICAL INDUSTRY CO.,LTD.
T-PLUS Nihonbashi-Kodemmacho
16-12 Nihonbashi-kodemmacho, Chuo-ku, Tokyo 103-0001, Japan

Chemical Name: ***p*-Xylene**		
Product Number: X0014 CAS RN: 106-42-3	Lot: Y348K	

Tests	Results	Specifications
Appearance	Colorless clear liquid	Colorless to Almost colorless clear liquid
Purity(GC)	99.7 %	min. 99.0 %

TCI Lot numbers are 4-5 characters in length. Characters listed after the first 4-5 characters are control numbers for internal purpose only.
The contents of the specifications are subject to change without advance notice. The specification values displayed here are the most up to date values. There may be cases where the product labels display a different specification, however, the product quality still meets the latest specification.

Customer Service:

TCI AMERICA
Tel: +1-800-423-8616 / +1-503-283-1681
Fax: +1-888-520-1075 / +1-503-283-1987
E-mail: Sales-US@TCIchemicals.com



Takuya Nishioka
Quality Assurance Department Manager

RICCA CHEMICAL COMPANY®

1490 Lammers Pike
Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

W3093 0941 04/03/2024 LG

Certificate of Analysis

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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RICCA CHEMICAL COMPANY®

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Batesville, IN 47006
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

W3094 78 open: 04/03/2025

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

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W3107
38

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 (03/09/2024)
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

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

Certificate of Analysis
ThermoFisher SCIENTIFIC

W3110 SP update... 06/27/2024

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 – 0120633

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	H303	Quality Test / Release Date	02/23/2024
Lot Number	235898		
Description	HEXANES - OPTIMA		
Country of Origin	United States	Suggested Retest Date	Feb/2029
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	Clear, colorless liquid
ASSAY (N-HEXANE)	%	>= 60	73
ASSAY (SUM C6 HYDROCARBONS)	%	>= 99.9	>99.9
COLOR	APHA	<= 5	<5
DENSITY AT 25 DEGREES C	GM/ML	Inclusive Between 0.653 - 0.673	0.670
EVAPORATION RESIDUE	ppm	<= 1	0.3
FLUORESCENCE BACKGROUND	ppb	<= 1	<1
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
OPTICAL ABS AT 195 NM	ABS. UNITS	<= 1	0.64
OPTICAL ABS AT 210 NM	ABS. UNITS	<= 0.25	0.16
OPTICAL ABS AT 220 NM	ABS. UNITS	<= 0.07	0.06
OPTICAL ABS AT 254 NM	ABS. UNITS	<= 0.005	0.002
PESTICIDE RESIDUE ANALYSIS	NG/L	<= 10	<10
REFRACTIVE INDEX @ 25 DEG C		Inclusive Between 1.375 - 1.385	1.380
SUITABILITY FOR GC/MS		= PASS TEST	PASS TEST
SULFUR COMPOUNDS	%	<= 0.005	<0.005
THIOPHENE	PASS/FAIL	= PASS TEST	PASS TEST
WATER (H2O)	%	<= 0.01	<0.01
WATER-SOLUBLE TITRABLE ACID	MEQ/G	<= 0.0003	0.0001

Harout Sahagian - 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.

Certificate of Analysis

POTASSIUM HYDROGEN PHTHALATE

Material: **N983**

Grade: **ACS GRADE**

Batch Number: **24A1956910**

Chemical Formula: HOOCC6H4COOK
Molecular Weight: 204.22
CAS #: 877-24-7
Appearance:

White crystals.

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

Storage: Room Temperature

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

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

Additional Information

Analysis may have been rounded to significant digits in specification limits.

Product meets analytical specifications of the grades listed.

Certificate of Analysis

Sodium Hydroxide (Pellets)

Material: 0583

Grade: ACS GRADE

Batch Number: 23B1556310

Chemical Formula: NaOH
Molecular Weight: 40
CAS #: 1310-73-2
Appearance:

Pellets

Manufacture Date: 12/14/2022
Expiration Date: 12/31/2025

Storage: Room Temperature

TEST	SPECIFICATION	ANALYSIS	DISPOSITION
Calcium	<= 0.005 %	<0.005 %	PASS
Chloride	<= 0.005 %	0.002 %	PASS
Heavy Metals	<= 0.002 %	<0.002 %	PASS
Iron	<= 0.001 %	<0.001 %	PASS
Magnesium	<= 0.002 %	<0.002 %	PASS
Mercury	<= 0.1 ppm	<0.1 ppm	PASS
Nickel	<= 0.001 %	<0.001 %	PASS
Nitrogen Compounds	<= 0.001 %	<0.001 %	PASS
Phosphate	<= 0.001 %	<0.001 %	PASS
Potassium	<= 0.02 %	<0.02 %	PASS
Purity	>= 97.0 %	99.2 %	PASS
Sodium Carbonate	<= 1.0 %	0.5 %	PASS
Sulfate	<= 0.003 %	<0.003 %	PASS

Internal ID #: 710

Signature

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

Additional Information

Analysis may have been rounded to significant digits in specification limits.

Product meets analytical specifications of the grades listed.

Certificate of Analysis

Sodium Hydroxide (Pellets)

Material: **0583**

Grade: **ACS GRADE**

Batch Number: **23B1556310**

Chemical Formula:	NaOH	Manufacture Date:	12/14/2022
Molecular Weight:	40	Expiration Date:	12/31/2025
CAS #:	1310-73-2		
Appearance:		Storage:	Room Temperature

Pellets

Spec Set: 0583ACS

Internal ID #: 710

Signature

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

Additional Information

Analysis may have been rounded to significant digits in specification limits.

Product meets analytical specifications of the grades listed.

spectrum® CHEMICAL MFG CORP

Certificate Of Analysis

Item Number	ED150	Lot Number	2ND0156
Item	Edetate Disodium, Dihydrate, USP	CAS Number	6381-92-6
Molecular Formula	$C_{10}H_{14}N_2Na_2O_8 \cdot 2H_2O$	Molecular Weight	372.24

TEST	SPECIFICATION		RESULT
	MIN	MAX	
ASSAY (DRIED BASIS)	99.0	101.0 %	99.5 %
pH OF A 5% SOLUTION @ 25°C	4.0	6.0	4.6
LOSS ON DRYING	8.7	11.4 %	8.90 %
CALCIUM (Ca)	NO PRECIPITATE IS FORMED		NO PRECIPITATE IS FORMED
ELEMENTAL IMPURITIES:			.
NICKEL (Ni)	AS REPORTED		<0.3 ppm
CHROMIUM (Cr)	AS REPORTED		<0.3 ppm
NITRILOTRIACETIC ACID[$n[(HOCOCH_2)_3N]$]		0.1 %	<0.10 %
IDENTIFICATION A	MATCHES REFERENCE		MATCHES REFERENCE
IDENTIFICATION B	RED COLOR IS DISCHARGED, LEAVING A YELLOWISH SOLUTION		RED COLOR IS DISCHARGED, LEAVING A YELLOWISH SOLUTION
IDENTIFICATION C	MEETS THE REQUIREMENTS FOR SODIUM		MEETS THE REQUIREMENTS FOR SODIUM
CERTIFIED HALAL			CERTIFIED HALAL
EXPIRATION DATE			10-JUL-2026
DATE OF MANUFACTURE			11-JUL-2023
APPEARANCE			WHITE CRYSTALLINE POWDER
RESIDUAL SOLVENTS		AS REPORTED	NO RESIDUAL SOLVENTS PRESENT
MONOGRAPH EDITION			USP 2024

Certificate of Analysis Results Entered By:

CACEVEDO
Charmian Acevedo
22-MAY-24 08:12:30

Certificate of Analysis Results Approved By:

GHERRERA
Genaro Herrera
22-MAY-24 12:32:01

Spectrum Chemical Mfg Corp
755 Jersey Avenue
New Brunswick 08901 NJ

All pharmaceutical ingredients are tested using current edition of applicable pharmacopeia.

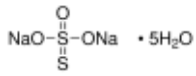
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The Elemental Impurities standards implemented by USP and other Pharmaceutical Compendia reflect a growing understanding of the toxicology of trace levels of elemental impurities that can remain in drug substances originating from either raw materials or manufacturing processes. Identifying and quantifying impurities can be critical to predicting the best possible patient outcomes. Elemental Impurities has been a requirement of all products meeting USP/NF, EP and BP monographs since January 1, 2018. More information can be found in USP sections <232> Elemental Impurities – Limits and <233> Elemental Impurities – Procedures. Data for drug substances furnished by Spectrum Chemical Mfg. Corp can be used to ensure that patient daily exposures by oral administration to the selected elements are not exceeded in the formulation of pharmaceutical products.

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

Certificate of Analysis

Product Name:
Sodium thiosulfate pentahydrate - ACS reagent, ≥99.5%



Product Number:	**217247**
Batch Number:	**MKCV5080**
Brand:	SIGALD
CAS Number:	10102-17-7
MDL Number:	MFCD00149186
Formula:	Na2O3S2 · 5H2O
Formula Weight:	248.18 g/mol
Quality Release Date:	10 JAN 2024
Recommended Retest Date:	JAN 2029

Test	Specification	Result
Appearance (Color)	Colorless or White	White
Appearance (Form)	Powder or Crystals or Pellets	Crystals
ICP Major Analysis Confirms Sodium and Sulfur Components	Confirmed	Confirmed
Titration by Iodine	99.5 - 101.0 %	99.8 %
pH c = 5%; Water; At 25 Deg C	6.0 - 8.4	7.2
Insoluble Matter c = 10%; Water	≤ 0.005 %	0.003 %
Nitrogen Compounds	≤ 0.002 %	< 0.002 %
Sulfate & Sulfite (as SO4)	≤ 0.1 %	< 0.1 %
Sulfide	Pass	Pass
Meets ACS Requirements	Current ACS Specification	Conforms
Recommended Retest Period 5 Years	----------	----------

Larry Coers, Director
Quality Control
Milwaukee, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

LabChem
Part of TCP Analytical Group
Jackson's Pointe Commerce Park- Building 1000
1010 Jackson's Pointe Court, Zelienople, PA 16063

Certificate of Analysis

Cyanide Standard 1000 ppm (1ml = 1mg CN)

Product Code: **LC13545**

Manufacture Date: August 01, 2024

Lot Number: **44080060**

Expiration Date: January 30, 2025

Test	Specification	Result
Appearance (clarity)	clear solution	clear solution
Appearance (color)	colorless	colorless
Concentration (CN)	0.990 - 1.010mg/mL	1.008mg/mL
Concentration (CN)	990 - 1,010ppm	1,008ppm
Traceable to NIST SRM	Report	999b

Intended Use *- Product is intended for use in manufacturing procedures and laboratory procedures and protocols.*

Storage Information *- Unless noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.*

Instructions for Handling and Use - *Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.*

Preparation - *All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST standards.*

The suffix of the product code may differ from what is on your product label. The suffix will designate the size and be associated with a numeric digit(s). Visit LabChem.com for more information

Suffix	1	2	3/3S/36/36S	4/4C	5	6	7	8	9	20	44	200	246	486
Size	500mL or g	1L or 1kg	2.5L/2.5L Coated/6x2.5L/6x2.5L Coated	4L	20L	10L	125mL	25g	100g	20x20mL	4x4L	200L	24x6mL	48x6mL

Michael Monteleone

Michael Monteleone
Chemistry Supervisor - Quality Control

ISO9001:2015 Registration #0306-01

ThermoFisher SCIENTIFIC

Certificate of Analysis

W3139 Received on 9/9/24 by IZ

Product No.:	A12044
Product:	Chloramine-T trihydrate, 98%
Lot No.:	10239484

Appearance:	White powder
Melting Point:	166°C(dec)
Assay (Iodometric titration):	100.5%
Identification (FTIR):	Conforms

Order our products online **thermofisher.com/chemicals**

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customerservice@riccachemical.com

Certificate of Analysis

Cyanide Standard, 1000 ppm CN^-

Lot Number: 1405J81 **Product Number:** 2543

Manufacture Date: MAY 20, 2024
Expiration Date: NOV 2024

This standard is prepared using accurate volumetric techniques from material that has been assayed against Silver Nitrate solution certified traceable to NIST Standard Reference Material 999. The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is the combined uncertainty based on the stability of the assayed Potassium Cyanide, and the uncertainty in the mass and volume measurements.
Use 0.16% (w/v) (0.04 N) Sodium Hydroxide or 0.225 % (w/v) (0.04 N) Potassium Hydroxide to make dilutions of this standard. Restandardize weekly if extreme accuracy is required.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Potassium Cyanide	151-50-8	ACS
Sodium Hydroxide	1310-73-2	Reagent

Test	Specification	Result
Appearance	Colorless liquid	Passed
Cyanide (CN^-)	995-1005 ppm	1000 ppm

Specification	Reference
Stock Standard Cyanide Solution	APHA (4500-CN- F)
Stock Cyanide Solution	APHA (4500-CN- E)
Stock Cyanide Solution	APHA (4500-CN- K)
Stock Cyanide Solution	APHA (4500-CN- H)
Cyanide Reference Solution (1000 mg/L)	EPA (SW-846) (7.3.3.2)
Cyanide Calibration Stock Solution (1,000 mg/L CN-)	EPA (SW-846) (9213)
Stock Cyanide Solution	EPA (335.3)
Stock Cyanide Solution	EPA (335.2)
Cyanide Solution Stock	ASTM (D 4282)
Simple Cyanide Solution, Stock (1.0 g/L CN)	ASTM (D 4374)

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)
2543-16	500 mL amber poly	6 months
2543-4	120 mL amber poly	6 months

Recommended Storage: 2°C - 8°C (36°F - 46°F)



Heidi J Green (05/20/2024)
Operations Manager

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RICCA CHEMICAL COMPANY®

1841 Broad Street
Pocomoke City, MD 21851
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

Certificate of Analysis

Sodium Hypochlorite Solution, 5% available Chlorine

Lot Number: 2407F34 **Product Number:** 7495.5

Manufacture Date: JUL 12, 2024
Expiration Date: JAN 2025

This solution is subject to slow decomposition upon exposure to air. Keep container tightly capped. Refrigeration may improve stability. When used in the Phenate method for Ammonia, APHA recommends replacing this solution about every 2 months.

Name	CAS#	Grade
Water	7732-18-5	Commercial
Sodium Hypochlorite	7681-52-9	Commercial

Test	Specification	Result	NIST SRM#
Appearance	Colorless to greenish-yellow liquid	Passed	
Assay (vs. Sodium Thiosulfate/Starch)	4.75-5.25 % (w/w) Cl_2	5.05 % (w/w) Cl_2	136

Specification	Reference
Sodium Hypochlorite, 5%	APHA (4500-NH3 F)
Sodium Hypochlorite	ASTM (D 4785)

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)
7495.5-1	4 L black poly	6 months
7495.5-16	500 mL amber poly	6 months
7495.5-32	1 L amber poly	6 months
7495.5-8	250 mL amber poly	6 months

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

Jose Pena (07/12/2024)
Operations Manager

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

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 10/25/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 17:25
In Date: 10/23/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:20
Out Date: 10/24/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB133085

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
P4488-09	HCC-1	1	1.00	1.00	2.00	2.00	100.0	oil sample
P4488-10	HCC-2	2	1.00	1.00	2.00	2.00	100.0	oil sample
P4495-01	PT-AN-SOIL	3	1.00	1.00	2.00	2.00	100.0	
P4495-02	PT-CORR-SOIL	4	1.00	1.00	2.00	2.00	100.0	
P4495-03	PT-CN-SOIL	5	1.00	1.00	2.00	2.00	100.0	
P4495-04	PT-CN-SOIL	6	1.00	1.00	2.00	2.00	100.0	
P4495-05	PT-FP-SOIL	7	1.00	1.00	2.00	2.00	100.0	
P4495-06	PT-CR6-SOIL	8	1.00	1.00	2.00	2.00	100.0	
P4495-07	PT-NUT-SOIL	9	1.00	1.00	2.00	2.00	100.0	
P4495-08	PT-NUT-SOIL	10	1.00	1.00	2.00	2.00	100.0	
P4495-09	PT-OGR-SOIL	11	1.00	1.00	2.00	2.00	100.0	
P4495-10	PT-MET-SOIL	12	1.00	1.00	2.00	2.00	100.0	
P4495-11	PT-BNA-SOIL	13	1.00	1.00	2.00	2.00	100.0	
P4495-12	PT-TRIAZINE-SOIL	14	1.00	1.00	2.00	2.00	100.0	
P4495-13	PT-PAH-SOIL	15	1.00	1.00	2.00	2.00	100.0	
P4495-14	PT-DIES-SOIL	16	1.00	1.00	2.00	2.00	100.0	
P4495-15	PT-GAS-SOIL	17	1.00	1.00	2.00	2.00	100.0	
P4495-16	PT-NJEPH-SOIL	18	1.00	1.00	2.00	2.00	100.0	
P4495-17	PT-HERB-SOIL	19	1.00	1.00	2.00	2.00	100.0	
P4495-18	PT-PCB-SOIL	20	1.00	1.00	2.00	2.00	100.0	
P4495-19	PT-PCBO-SOIL	21	1.00	1.00	2.00	2.00	100.0	
P4495-20	PT-PEST-SOIL	22	1.00	1.00	2.00	2.00	100.0	
P4495-21	PT-CHLR-SOIL	23	1.00	1.00	2.00	2.00	100.0	
P4495-22	PT-TXP-SOIL	24	1.00	1.00	2.00	2.00	100.0	
P4495-23	PT-VOA-SOIL	25	1.00	1.00	2.00	2.00	100.0	
P4495-24	PT-SOL-SOIL	26	0.92	8.80	9.72	7.58	75.7	
P4495-25	PT-NO2-SOIL	27	1.00	1.00	2.00	2.00	100.0	
P4508-01	TP-3	28	1.14	8.38	9.52	8.64	89.5	

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 10/25/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 17:25
In Date: 10/23/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:20
Out Date: 10/24/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB133085

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
P4508-02	TP-3-EPH	29	1.15	8.81	9.96	9.22	91.6	
P4508-03	TP-3-VOC	30	1.15	8.66	9.81	8.88	89.3	
P4508-05	BP-F23	31	1.15	8.82	9.97	9.22	91.5	
P4508-06	BP-F23-EPH	32	1.14	8.83	9.97	9.29	92.3	
P4508-07	BP-F23-VOC	33	1.15	8.40	9.55	8.61	88.8	
P4508-09	BP-F22	34	1.18	8.78	9.96	9.15	90.8	
P4508-10	BP-F22-EPH	35	1.15	8.70	9.85	8.98	90.0	
P4508-11	BP-F22-VOC	36	1.16	8.60	9.76	8.68	87.4	
P4509-02	AU-06-10232024	37	1.12	8.82	9.94	9.44	94.3	
P4510-01	FDH119M-1-1	38	1.00	1.00	2.00	2.00	100.0	pilc
P4510-02	FDH119M-1-2	39	1.00	1.00	2.00	2.00	100.0	pilc
P4510-03	BC271327-1-1	40	1.00	1.00	2.00	2.00	100.0	pilc
P4510-04	BC271327-1-2	41	1.00	1.00	2.00	2.00	100.0	pilc
P4510-05	BC271327-2-1	42	1.00	1.00	2.00	2.00	100.0	pilc
P4510-06	BC271327-2-2	43	1.00	1.00	2.00	2.00	100.0	pilc
P4510-07	FDA886K-1-1	44	1.00	1.00	2.00	2.00	100.0	pilc
P4510-08	FDA886K-1-2	45	1.00	1.00	2.00	2.00	100.0	pilc
P4510-09	FDA886K-2-1	46	1.00	1.00	2.00	2.00	100.0	pilc
P4510-10	FDA886K-2-2	47	1.00	1.00	2.00	2.00	100.0	pilc
P4510-11	HID111K-1-1	48	1.00	1.00	2.00	2.00	100.0	pilc
P4510-12	HID111K-1-2	49	1.00	1.00	2.00	2.00	100.0	pilc
P4510-13	HID111K-2-1	50	1.00	1.00	2.00	2.00	100.0	pilc
P4510-14	HID111K-2-2	51	1.00	1.00	2.00	2.00	100.0	pilc
P4510-15	HID111K-3-1	52	1.00	1.00	2.00	2.00	100.0	pilc
P4510-16	HID111K-3-2	53	1.00	1.00	2.00	2.00	100.0	pilc
P4510-17	FDA563W-1-1	54	1.00	1.00	2.00	2.00	100.0	pilc
P4510-18	FDA563W-1-2	55	1.00	1.00	2.00	2.00	100.0	pilc
P4510-19	FDA563W-2-1	56	1.00	1.00	2.00	2.00	100.0	pilc

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 10/25/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 17:25
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Weight Check 1.0g: 1.00
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OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:20
Out Date: 10/24/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB133085

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
P4510-20	FDA563W-2-2	57	1.00	1.00	2.00	2.00	100.0	pilc
P4510-21	JEC128C-1-1	58	1.00	1.00	2.00	2.00	100.0	pilc
P4510-22	JEC128C-1-2	59	1.00	1.00	2.00	2.00	100.0	pilc
P4510-23	JEC128C-2-1	60	1.00	1.00	2.00	2.00	100.0	pilc
P4510-24	JEC128C-2-2	61	1.00	1.00	2.00	2.00	100.0	pilc
P4511-02	267	62	1.00	1.00	2.00	2.00	100.0	debris
P4512-03	VNJ-212	63	1.15	8.81	9.96	9.66	96.6	
P4512-04	VNJ-212-E2	64	1.16	8.48	9.64	9.39	97.1	
P4513-01	D3683	65	1.00	1.00	2.00	2.00	100.0	oil sample
P4513-02	D3694	66	1.00	1.00	2.00	2.00	100.0	debris
P4513-03	D3695	67	1.00	1.00	2.00	2.00	100.0	debris
P4514-01	BC274653-1-1	68	1.00	1.00	2.00	2.00	100.0	pilc
P4514-02	BC274653-1-2	69	1.00	1.00	2.00	2.00	100.0	pilc
P4514-03	BC274767-1-1	70	1.00	1.00	2.00	2.00	100.0	pilc
P4514-04	BC274767-1-2	71	1.00	1.00	2.00	2.00	100.0	pilc
P4514-05	BC274767-2-1	72	1.00	1.00	2.00	2.00	100.0	pilc
P4514-06	BC274767-2-2	73	1.00	1.00	2.00	2.00	100.0	pilc
P4515-01	CHVB0783	74	1.15	8.83	9.98	5.28	46.8	
P4516-01	72-11986	75	1.12	8.67	9.79	8.93	90.1	
P4517-01	NASSAU-ST-CO	76	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
P4517-03	S.JEFFERSON-CO-1	77	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
P4517-05	S.JEFFERSON-CO-2	78	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
P4517-07	FOREST-ST-CO	79	1.00	1.00	2.00	2.00	100.0	CONCRETE sample

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

WORKLIST(Hardcopy Internal Chain)

VB133085

WorkList Name : %1-102324 **WorkList ID :** 184679 **Department :** Wet-Chemistry **Date :** 10-23-2024 08:16:39

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4488-09	HCC-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/22/2024	Chemtech -SO
P4488-10	HCC-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/22/2024	Chemtech -SO
P4495-01	PT-AN-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-02	PT-CORR-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-03	PT-CN-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-04	PT-CN-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-05	PT-FP-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-06	PT-CR6-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-07	PT-NUT-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-08	PT-NUT-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-09	PT-OGR-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-10	PT-MET-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-11	PT-BNA-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-12	PT-TRIAZINE-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-13	PT-PAH-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-14	PT-DIES-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-15	PT-GAS-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-16	PT-NJEPH-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-17	PT-HERB-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-18	PT-PCB-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-19	PT-PCBO-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO

Date/Time 10/23/24 16:00

Raw Sample Received by: JB (WC)

Raw Sample Relinquished by: [signature]

Date/Time 10/23/24 17:30

Raw Sample Received by: [signature]

Raw Sample Relinquished by: JB (WC)

WB 133085

WORKLIST(Hardcopy Internal Chain)

WorkList Name : %1-102324 **WorkList ID :** 184679 **Department :** Wet-Chemistry **Date :** 10-23-2024 08:16:39

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4495-20	PT-PEST-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-21	PT-CHLR-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-22	PT-TXP-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-23	PT-VOA-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-24	PT-SOL-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4495-25	PT-NO2-SOIL	Solid	Percent Solids	Cool 4 deg C	CHEM02	QA Of	10/21/2024	Chemtech -SO
P4508-01	TP-3	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/23/2024	Chemtech -SO
P4508-02	TP-3-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/23/2024	Chemtech -SO
P4508-03	TP-3-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/23/2024	Chemtech -SO
P4508-05	BP-F23	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/23/2024	Chemtech -SO
P4508-06	BP-F23-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/23/2024	Chemtech -SO
P4508-07	BP-F23-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/23/2024	Chemtech -SO
P4508-09	BP-F22	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/23/2024	Chemtech -SO
P4508-10	BP-F22-EPH	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/23/2024	Chemtech -SO
P4508-11	BP-F22-VOC	Solid	Percent Solids	Cool 4 deg C	PSEG03	K63	10/23/2024	Chemtech -SO
P4509-02	AU-06-10232024	Solid	Percent Solids	Cool 4 deg C	PSEG05	K61	10/23/2024	Chemtech -SO
P4510-01	FDH119M-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-02	FDH119M-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-03	BC271327-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-04	BC271327-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-05	BC271327-2-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO

Date/Time 10/23/24 16:00

Raw Sample Received by: (WC)

Raw Sample Relinquished by:

Date/Time 10/23/24 17:30

Raw Sample Received by:

Raw Sample Relinquished by: (WC)

WORKLIST(Hardcopy Internal Chain)

JD 133085

WorkList Name : %1-102324 **WorkList ID :** 184679 **Department :** Wet-Chemistry **Date :** 10-23-2024 08:16:39

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4510-06	BC271327-2-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-07	FDA886K-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-08	FDA886K-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-09	FDA886K-2-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-10	FDA886K-2-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-11	HID111K-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-12	HID111K-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-13	HID111K-2-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-14	HID111K-2-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-15	HID111K-3-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-16	HID111K-3-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-17	FDA563W-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-18	FDA563W-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-19	FDA563W-2-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-20	FDA563W-2-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-21	JEC128C-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-22	JEC128C-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-23	JEC128C-2-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4510-24	JEC128C-2-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4511-02	267	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4512-03	VNJ-212	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO

Date/Time 10/23/24 1610

Raw Sample Received by: JD CWC)

Raw Sample Relinquished by: CP

Date/Time 10/23/24 1730

Raw Sample Received by: CP

Raw Sample Relinquished by: JD CWC)

WORKLIST(Hardcopy Internal Chain)

WB 133085

WorkList Name : %1-102324 **WorkList ID :** 184679 **Department :** Wet-Chemistry **Date :** 10-23-2024 08:16:39

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4512-04	VNJ-212-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4513-01	D3683	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4513-02	D3694	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4513-03	D3695	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4514-01	BC274653-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K31	10/23/2024	Chemtech -SO
P4514-02	BC274653-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K31	10/23/2024	Chemtech -SO
P4514-03	BC274767-1-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K31	10/23/2024	Chemtech -SO
P4514-04	BC274767-1-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K31	10/23/2024	Chemtech -SO
P4514-05	BC274767-2-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K31	10/23/2024	Chemtech -SO
P4514-06	BC274767-2-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K31	10/23/2024	Chemtech -SO
P4515-01	CHVB0783	Solid	Percent Solids	Cool 4 deg C	PSEG03	K62	10/23/2024	Chemtech -SO
P4516-01	72-11986	Solid	Percent Solids	Cool 4 deg C	PSEG03	K62	10/23/2024	Chemtech -SO
P4517-01	NASSAU-ST-CO	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4517-03	S.JEFFERSON-CO-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4517-05	S.JEFFERSON-CO-2	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO
P4517-07	FOREST-ST-CO	Solid	Percent Solids	Cool 4 deg C	PSEG03	K61	10/23/2024	Chemtech -SO

Date/Time 10/23/24 1610

Raw Sample Received by: [signature]

Raw Sample Relinquished by: [signature]

Date/Time 10/23/24 1730

Raw Sample Received by: [signature]

Raw Sample Relinquished by: [signature]

SHIPPING DOCUMENTS

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Certified Reference Materials

Packing List

Date	Order #
10/21/2024	318989

6390 Joyce Dr., #100
Golden, CO 80403

Tel: +1-303-940-0033
Fax: +1-303-940-0043
info@phenova.com
www.phenova.com

Received : SJ
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Ship To

Alliance Tech Group - Newark
ATTN: Sohil Jodhani
284 Sheffield St., #1
Mountainside, NJ 07092
USA

Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
240903-01	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
1	1	0	PT-MET-SOIL	SOIL/HW Trace Metals	HW1024	7098-04
1	1	0	PT-CR6-SOIL	SOIL/HW Hexavalent Chromium ✓	HW1024	7098-05D
1	1	0	PT-CN-SOIL	SOIL/HW Cyanide	HW1024	7098-06
1	1	0	PT-CORR-SOIL	SOIL/HW Corrosivity/pH ✓	HW1024	7098-11
1	1	0	PT-FP-SOIL	SOIL/HW Flash Point	HW1024	7098-10
1	1	0	PT-AN-SOIL	SOIL/HW Anions ✓	HW1024	7098-08
1	1	0	PT-NUT-SOIL	SOIL/HW Nutrients ✓	HW1024	7098-09B
1	1	0	PT-SOL-SOIL	SOIL/HW Solids	HW1024	7098-31
1	1	0	PT-NO2-SOIL	SOIL/HW Nitrite as N	HW1024	7098-71
1	1	0	PT-GAS-SOIL	SOIL/HW Gasoline	HW1024	7098-96
1	1	0	PT-DIES-SOIL	SOIL/HW Diesel in Soil	HW1024	7098-100
1	1	0	PT-OGR-SOIL	SOIL/HW Oil and Grease ✓	HW1024	7098-94
1	1	0	PT-VOA-SOIL	SOIL/HW Volatiles	HW1024	7098-12
1	1	0	PT-BNA-SOIL	SOIL/HW BNAs	HW1024	7098-13
1	1	0	PT-PEST-SOIL	SOIL/HW Pesticides	HW1024	7098-14
1	1	0	PT-CHLR-SOIL	SOIL/HW Chlordane	HW1024	7098-15
1	1	0	PT-TXP-SOIL	SOIL/HW Toxaphene	HW1024	7098-16
1	1	0	PT-PCB-SOIL	SOIL/HW PCBs	HW1024	7098-17
1	1	0	PT-PCBO-SOIL	SOIL/HW PCBs in Oil	HW1024	7098-88
1	1	0	PT-HERB-SOIL	SOIL/HW Herbicides	HW1024	7098-18
1	1	0	PT-PAH-SOIL	SOIL/HW PAHs	HW1024	7098-22
1	1	0	PT-TRIAZINE-SOIL	SOIL/HW Triazine Pesticides	HW1024	7098-106

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Date	Order #
10/21/2024	318989

6390 Joyce Dr., #100
Golden, CO 80403

Tel: +1-303-940-0033
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Customer PO #	Terms	PT Acct #	Customer #	Ship Via	F.O.B.
240903-01	Net 30	ZCM-100	1500470	FedEx 2nd Day	Golden, CO

Qty Ordered	Qty Shipped	Qty Backorder	Part Number	Part Description	Study Number	Lot Number
1	1	0	PT-NJEPH-SOIL	NJ EPH in SOIL ✓✓	HW1024	7098-105

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