

Cover Page

Order ID : P5277

Project ID : Tanner G. Duckrey Public School

Client : Kleinfelder

Lab Sample Number

P5277-01
P5277-02
P5277-03
P5277-04
P5277-05
P5277-06
P5277-07
P5277-08
P5277-09
P5277-10
P5277-11
P5277-12
P5277-13
P5277-14
P5277-15

Client Sample Number

COMP-1A
COMP-2A
COMP-3A
SB-13
SB-14
SB-15
SB-16
SB-17
SB-18
SB-19
SB-20
SB-21
SB-22
SB-23
SB-24

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: 12/18/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: P5277

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: NILESH PRAJAPATI

Date: 12/18/2024

LAB CHRONICLE

OrderID:	P5277	OrderDate:	12/13/2024 11:44:00 AM
Client:	Kleinfelder	Project:	Tanner G. Duckrey Public School
Contact:	Mark Warchol	Location:	L41,VOA Ref. #2 Soil

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P5277-01	COMP-1A	SOIL			12/12/24 10:40			12/13/24
			Ammonia	SM4500-NH3		12/16/24	12/17/24 10:20	
			Anions Group1	9056A			12/13/24 17:21	
			Hexavalent Chromium	7196A		12/17/24	12/17/24 15:15	
			Trivalent Chromium	6010D			12/16/24 19:15	
P5277-02	COMP-2A	SOIL			12/12/24 11:05			12/13/24
			Ammonia	SM4500-NH3		12/16/24	12/17/24 10:20	
			Anions Group1	9056A			12/13/24 18:25	
			Hexavalent Chromium	7196A		12/17/24	12/17/24 15:20	
			Trivalent Chromium	6010D			12/16/24 19:19	
P5277-03	COMP-3A	SOIL			12/12/24 11:45			12/13/24
			Ammonia	SM4500-NH3		12/16/24	12/17/24 10:20	
			Anions Group1	9056A			12/13/24 18:47	
			Hexavalent Chromium	7196A		12/17/24	12/17/24 15:21	
			Trivalent Chromium	6010D			12/16/24 19:24	



SAMPLE DATA

Report of Analysis

Client:	Kleinfelder	Date Collected:	12/12/24 10:40
Project:	Tanner G. Duckrey Public School	Date Received:	12/13/24
Client Sample ID:	COMP-1A	SDG No.:	P5277
Lab Sample ID:	P5277-01	Matrix:	SOIL
		% Solid:	88.5

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Ammonia as N	0.99	U	1	0.99	5.50	mg/Kg	12/16/24 09:35	12/17/24 10:20	SM 4500-NH3 B plus G-11
Chloride	1.70	J	1	0.11	13.5	mg/Kg		12/13/24 17:21	9056A
Fluoride	5.60	J	1	0.43	9.00	mg/Kg		12/13/24 17:21	9056A
Sulfate	9.30	J	1	0.69	67.5	mg/Kg		12/13/24 17:21	9056A
Hexavalent Chromium	0.089	U	1	0.089	0.45	mg/Kg	12/17/24 12:00	12/17/24 15:15	7196A
Trivalent Chromium	24.0		1	0.56	0.56	mg/Kg		12/16/24 19:15	6010D

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

Report of Analysis

Client:	Kleinfelder	Date Collected:	12/12/24 11:05
Project:	Tanner G. Duckrey Public School	Date Received:	12/13/24
Client Sample ID:	COMP-2A	SDG No.:	P5277
Lab Sample ID:	P5277-02	Matrix:	SOIL
		% Solid:	78.9

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Ammonia as N	1.10	U	1	1.10	6.30	mg/Kg	12/16/24 09:35	12/17/24 10:20	SM 4500-NH3 B plus G-11
Chloride	7.30	J	1	0.12	15.1	mg/Kg		12/13/24 18:25	9056A
Fluoride	6.70	J	1	0.48	10.1	mg/Kg		12/13/24 18:25	9056A
Sulfate	14.9	J	1	0.77	75.4	mg/Kg		12/13/24 18:25	9056A
Hexavalent Chromium	0.10	U	1	0.10	0.51	mg/Kg	12/17/24 12:00	12/17/24 15:20	7196A
Trivalent Chromium	42.0		1	0.63	0.63	mg/Kg		12/16/24 19:19	6010D

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

Report of Analysis

Client:	Kleinfelder	Date Collected:	12/12/24 11:45
Project:	Tanner G. Duckrey Public School	Date Received:	12/13/24
Client Sample ID:	COMP-3A	SDG No.:	P5277
Lab Sample ID:	P5277-03	Matrix:	SOIL
		% Solid:	89.9

Parameter	Conc.	Qua.	DF	MDL	LOQ / CRQL	Units(Dry Weight)	Prep Date	Date Ana.	Ana Met.
Ammonia as N	0.97	U	1	0.97	5.40	mg/Kg	12/16/24 09:35	12/17/24 10:20	SM 4500-NH3 B plus G-11
Chloride	4.60	J	1	0.11	13.3	mg/Kg		12/13/24 18:47	9056A
Fluoride	4.30	J	1	0.42	8.90	mg/Kg		12/13/24 18:47	9056A
Sulfate	18.3	J	1	0.68	66.6	mg/Kg		12/13/24 18:47	9056A
Hexavalent Chromium	0.087	U	1	0.087	0.44	mg/Kg	12/17/24 12:00	12/17/24 15:21	7196A
Trivalent Chromium	33.6		1	0.56	0.56	mg/Kg		12/16/24 19:24	6010D

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

Initial and Continuing Calibration Verification

Client: Kleinfelder

SDG No.: P5277

Project: Tanner G. Duckrey Public School

RunNo.: LB133944

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1						
Bromide	mg/L	10	10	100	90-110	11/18/2024
Chloride	mg/L	3	3	100	90-110	11/18/2024
Fluoride	mg/L	2	2	100	90-110	11/18/2024
Nitrite	mg/L	3	3	100	90-110	11/18/2024
Nitrate	mg/L	2.5	2.5	100	90-110	11/18/2024
Sulfate	mg/L	14.6	15	97	90-110	11/18/2024
Orthophosphate as P	mg/L	5	5	100	90-110	11/18/2024
Sample ID: CCV1						
Bromide	mg/L	10.7	10	107	90-110	12/13/2024
Chloride	mg/L	3.2	3	107	90-110	12/13/2024
Fluoride	mg/L	2.1	2	105	90-110	12/13/2024
Nitrite	mg/L	3.2	3	107	90-110	12/13/2024
Nitrate	mg/L	2.6	2.5	104	90-110	12/13/2024
Sulfate	mg/L	15	15	100	90-110	12/13/2024
Orthophosphate as P	mg/L	5.2	5	104	90-110	12/13/2024
Sample ID: CCV2						
Bromide	mg/L	10.7	10	107	90-110	12/13/2024
Chloride	mg/L	3.2	3	107	90-110	12/13/2024
Fluoride	mg/L	2.1	2	105	90-110	12/13/2024
Nitrite	mg/L	3.2	3	107	90-110	12/13/2024
Nitrate	mg/L	2.6	2.5	104	90-110	12/13/2024
Sulfate	mg/L	15.2	15	101	90-110	12/13/2024
Orthophosphate as P	mg/L	5.4	5	108	90-110	12/13/2024

Initial and Continuing Calibration Verification

Client: Kleinfelder

SDG No.: P5277

Project: Tanner G. Duckrey Public School

RunNo.: LB133973

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV1 Ammonia as N	mg/L	0.96	1	96	90-110	12/17/2024
Sample ID: CCV1 Ammonia as N	mg/L	0.98	1	98	90-110	12/17/2024
Sample ID: CCV2 Ammonia as N	mg/L	0.97	1	97	90-110	12/17/2024

Initial and Continuing Calibration Verification

Client: Kleinfelder

SDG No.: P5277

Project: Tanner G. Duckrey Public School

RunNo.: LB133981

Analyte	Units	Result	True Value	% Recovery	Acceptance Window (%R)	Analysis Date
Sample ID: ICV Hexavalent Chromium	mg/L	0.503	0.5	101	90-110	12/17/2024
Sample ID: CCV1 Hexavalent Chromium	mg/L	0.499	0.5	100	90-110	12/17/2024
Sample ID: CCV2 Hexavalent Chromium	mg/L	0.503	0.5	101	90-110	12/17/2024

Initial and Continuing Calibration Blank Summary

Client: Kleinfelder

SDG No.: P5277

Project: Tanner G. Duckrey Public School

RunNo.: LB133944

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	11/18/2024
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/18/2024
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	11/18/2024
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	11/18/2024
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	11/18/2024
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	11/18/2024
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	11/18/2024
Sample ID: CCB1							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	12/13/2024
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	12/13/2024
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	12/13/2024
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	12/13/2024
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	12/13/2024
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	12/13/2024
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	12/13/2024
Sample ID: CCB2							
Bromide	mg/L	< 1.0000	1.0000	U	0.034	2	12/13/2024
Chloride	mg/L	< 0.3000	0.3000	U	0.011	0.6	12/13/2024
Fluoride	mg/L	< 0.2000	0.2000	U	0.057	0.4	12/13/2024
Nitrite	mg/L	< 0.3000	0.3000	U	0.011	0.6	12/13/2024
Nitrate	mg/L	< 0.2500	0.2500	U	0.0034	0.5	12/13/2024
Sulfate	mg/L	< 1.5000	1.5000	U	0.032	3	12/13/2024
Orthophosphate as P	mg/L	< 0.5000	0.5000	U	0.079	1	12/13/2024

Initial and Continuing Calibration Blank Summary

Client: Kleinfelder

SDG No.: P5277

Project: Tanner G. Duckrey Public School

RunNo.: LB133973

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	12/17/2024
Sample ID: CCB1 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	12/17/2024
Sample ID: CCB2 Ammonia as N	mg/L	< 0.0500	0.0500	U	0.045	0.1	12/17/2024

Initial and Continuing Calibration Blank Summary

Client: Kleinfelder

SDG No.: P5277

Project: Tanner G. Duckrey Public School

RunNo.: LB133981

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	12/17/2024
Sample ID: CCB1 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0027	0.01	12/17/2024
Sample ID: CCB2 Hexavalent Chromium	mg/L	< 0.0050	0.0050	U	0.0027	0.01	12/17/2024

Preparation Blank Summary

Client: Kleinfelder

SDG No.: P5277

Project: Tanner G. Duckrey Public School

Analyte	Units	Result	Acceptance Limits	Conc Qual	MDL	RDL	Analysis Date
Sample ID: LB133944BLS							
Bromide	mg/Kg	< 20.0000	20.0000	U	0.49	40	12/13/2024
Chloride	mg/Kg	< 6.0000	6.0000	U	0.096	12	12/13/2024
Fluoride	mg/Kg	< 4.0000	4.0000	U	0.38	8	12/13/2024
Nitrite	mg/Kg	< 6.0000	6.0000	U	0.19	12	12/13/2024
Nitrate	mg/Kg	< 5.0000	5.0000	U	0.089	10	12/13/2024
Sulfate	mg/Kg	< 30.0000	30.0000	U	0.61	60	12/13/2024
Orthophosphate as P	mg/Kg	< 10.0000	10.0000	U	0.24	20	12/13/2024
Sample ID: PB165645BL							
Ammonia as N	mg/Kg	< 2.5000	2.5000	U	0.9	5	12/17/2024
Sample ID: PB165660BL							
Hexavalent Chromium	mg/Kg	< 0.2000	0.2000	U	0.079	0.4	12/17/2024

Matrix Spike Summary

Client:	Kleinfelder	SDG No.:	P5277
Project:	Tanner G. Duckrey Public School	Sample ID:	P5277-01
Client ID:	COMP-1AMS	Percent Solids for Spike Sample:	88.5

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Ammonia as N	mg/Kg	75-125	58.0		0.99	U	55.4	1	105		12/17/2024
Bromide	mg/Kg	80-120	223		0.55	U	220	1	101		12/13/2024
Chloride	mg/Kg	80-120	69.1		1.70	J	67.4	1	100		12/13/2024
Fluoride	mg/Kg	80-120	47.9		5.60	J	44.9	1	94		12/13/2024
Nitrite	mg/Kg	80-120	67.0		0.21	U	67.4	1	99		12/13/2024
Nitrate	mg/Kg	80-120	55.1		0.10	U	56.2	1	98		12/13/2024
Sulfate	mg/Kg	80-120	324		9.30	J	340	1	93		12/13/2024
Orthophosphate as P	mg/Kg	80-120	98.9		0.27	U	110	1	90		12/13/2024

Matrix Spike Summary

Client:	Kleinfelder	SDG No.:	P5277
Project:	Tanner G. Duckrey Public School	Sample ID:	P5277-01
Client ID:	COMP-1AMS	Percent Solids for Spike Sample:	88.5

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	1430		0.089	U	1450	40	99		12/17/2024

Matrix Spike Summary

Client:	Kleinfelder	SDG No.:	P5277
Project:	Tanner G. Duckrey Public School	Sample ID:	P5277-01
Client ID:	COMP-1AMS	Percent Solids for Spike Sample:	88.5

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	44.9		0.089	U	45.2	2	99		12/17/2024

Matrix Spike Summary

Client:	Kleinfelder	SDG No.:	P5277
Project:	Tanner G. Duckrey Public School	Sample ID:	P5277-01
Client ID:	COMP-1AMSD	Percent Solids for Spike Sample:	88.5

Analyte	Units	Acceptance Limit %R	Spiked Result	Conc. Qualifier	Sample Result	Conc. Qualifier	Spike Added	Dilution Factor	% Rec	Qual	Analysis Date
Ammonia as N	mg/Kg	75-125	54.6		0.99	U	54.9	1	100		12/17/2024
Bromide	mg/Kg	80-120	223		0.55	U	220	1	101		12/13/2024
Chloride	mg/Kg	80-120	69.1		1.70	J	67.4	1	100		12/13/2024
Fluoride	mg/Kg	80-120	46.7		5.60	J	44.9	1	92		12/13/2024
Nitrite	mg/Kg	80-120	67.2		0.21	U	67.4	1	100		12/13/2024
Nitrate	mg/Kg	80-120	55.2		0.10	U	56.2	1	98		12/13/2024
Sulfate	mg/Kg	80-120	319		9.30	J	340	1	91		12/13/2024
Orthophosphate as P	mg/Kg	80-120	95.9		0.27	U	110	1	87		12/13/2024

Matrix Spike Summary

Client:	Kleinfelder	SDG No.:	P5277
Project:	Tanner G. Duckrey Public School	Sample ID:	P5277-01
Client ID:	COMP-1AMS	Percent Solids for Spike Sample:	88.5

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	38.8		0.089	U	45.2	2	86		12/17/2024

Duplicate Sample Summary

Client: Kleinfelder	SDG No.: P5277
Project: Tanner G. Duckrey Public School	Sample ID: P5277-01
Client ID: COMP-1ADUP	Percent Solids for Spike Sample: 88.5

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	0.99	U	0.99	U	1	0		12/17/2024
Hexavalent Chromium	mg/Kg	+/-20	0.089	U	0.089	U	1	0		12/17/2024

Duplicate Sample Summary

Client: Kleinfelder	SDG No.: P5277
Project: Tanner G. Duckrey Public School	Sample ID: P5277-01
Client ID: COMP-1AMSD	Percent Solids for Spike Sample: 88.5

Analyte	Units	Acceptance Limit	Sample Result	Conc. Qualifier	Duplicate Result	Conc. Qualifier	Dilution Factor	RPD/AD	Qual	Analysis Date
Bromide	mg/Kg	+/-15	223		223		1	0		12/13/2024
Chloride	mg/Kg	+/-15	69.1		69.1		1	0		12/13/2024
Nitrate	mg/Kg	+/-15	55.1		55.2		1	0		12/13/2024
Nitrite	mg/Kg	+/-15	67.0		67.2		1	0		12/13/2024
Sulfate	mg/Kg	+/-15	324		319		1	2		12/13/2024
Fluoride	mg/Kg	+/-15	47.9		46.7		1	3		12/13/2024
Orthophosphate as P	mg/Kg	+/-15	98.9		95.9		1	3		12/13/2024
Ammonia as N	mg/Kg	+/-20	58.0		54.6		1	6		12/17/2024

Laboratory Control Sample Summary

Client: Kleinfelder

SDG No.: P5277

Project: Tanner G. Duckrey Public School

Run No.: LB133944

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	LB133944BSS							
Bromide	mg/Kg	200	214		107	1	90-110	12/13/2024
Chloride	mg/Kg	60	63.5		106	1	90-110	12/13/2024
Fluoride	mg/Kg	40	41.6		104	1	90-110	12/13/2024
Nitrite	mg/Kg	60	64.3		107	1	90-110	12/13/2024
Nitrate	mg/Kg	50	52.9		106	1	90-110	12/13/2024
Sulfate	mg/Kg	300	301		100	1	90-110	12/13/2024
Orthophosphate as P	mg/Kg	100	105		105	1	90-110	12/13/2024

Laboratory Control Sample Summary

Client: Kleinfelder

SDG No.: P5277

Project: Tanner G. Duckrey Public School

Run No.: LB133973

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB165645BS							
Ammonia as N	mg/Kg	50	47.8		96	1	90-110	12/17/2024

Laboratory Control Sample Summary

Client: Kleinfelder

SDG No.: P5277

Project: Tanner G. Duckrey Public School

Run No.: LB133981

Analyte	Units	True Value	Result	Conc. Qualifier	% Recovery	Dilution Factor	Acceptance Limit %R	Analysis Date
Sample ID	PB165660BS							
Hexavalent Chromium	mg/Kg	20	20.1		101	1	84-110	12/17/2024

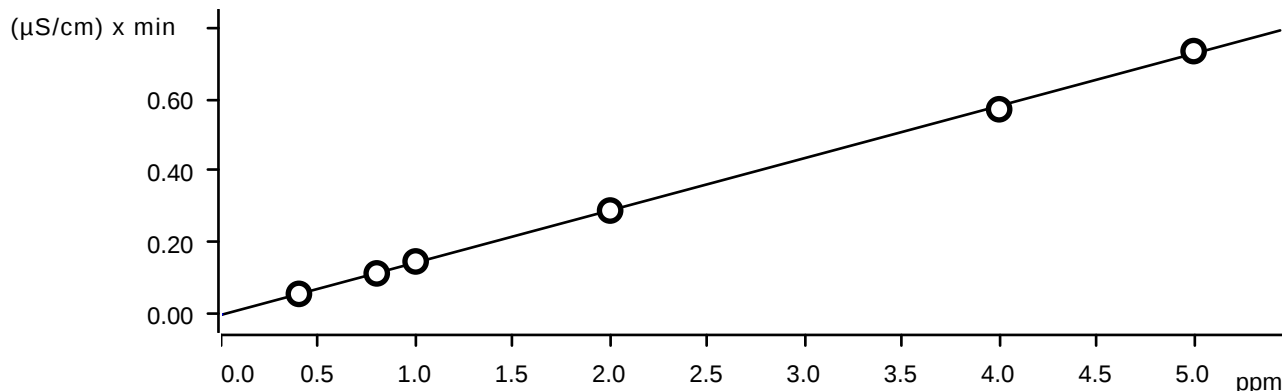


RAW DATA

Method: 0.0 / 9056A											
Instrument		IC-1	Analyst:		NF	Method name		date time	initial wt/Final Vc		Analyst
Ident	Con F-	Con CL-	Con NO2	Con BR-	Con NO3	Con HPO4	Con SO4				
STD1	0	0	0	0	0	0	0	IC1-111824	11/18/2024 11:24	10	NF/IZ
STD2	0.402	0.571	0.601	1.961	0.489	1.025	3.062	IC1-111824	11/18/2024 11:46	10	NF/IZ
STD3	0.794	1.185	1.175	3.939	0.997	1.928	6.062	IC1-111824	11/18/2024 12:07	10	NF/IZ
STD4	1.023	1.554	1.535	5.128	1.284	2.665	7.843	IC1-111824	11/18/2024 12:29	10	NF/IZ
STD5	1.997	3.009	2.993	9.997	2.488	4.96	14.679	IC1-111824	11/18/2024 12:50	10	NF/IZ
STD6	3.936	5.952	5.978	19.928	4.964	9.645	28.993	IC1-111824	11/18/2024 13:11	10	NF/IZ
STD7	5.049	7.529	7.517	25.045	6.279	12.776	37.863	IC1-111824	11/18/2024 13:33	10	NF/IZ
ICV	1.966	3.006	2.997	9.98	2.49	4.979	14.594	IC1-111824	11/18/2024 13:54	10	NF/IZ
ICB	0	0	0	0	0	0	0	IC1-111824	11/18/2024 14:16	10	NF/IZ
CCV	2.072	3.162	3.198	10.654	2.633	5.244	14.956	IC1-111824	12/13/2024 15:55	10	NF/IZ
CCB	0	0	0	0	0	0	0	IC1-111824	12/13/2024 16:16	10	NF/IZ
LB133944BLW	0	0	0	0	0	0	0	IC1-111824	12/13/2024 16:38	5.00g/100ML	NF/IZ
LB133944BSW	2.079	3.176	3.213	10.697	2.646	5.27	15.026	IC1-111824	12/13/2024 16:59	5.00g/100ML	NF/IZ
P5277-01	0.25	0.075	0	0	0	0	0.412	IC1-111824	12/13/2024 17:21	5.02g/100ML	NF/IZ
P5277-01MS	2.133	3.078	2.983	9.916	2.455	4.403	14.408	IC1-111824	12/13/2024 17:43	5.03g/100ML	NF/IZ
P5277-01MSD	2.077	3.074	2.99	9.923	2.456	4.267	14.21	IC1-111824	12/13/2024 18:04	5.03g/100ML	NF/IZ
P5277-02	0.265	0.292	0	0	0.024	0.103	0.591	IC1-111824	12/13/2024 18:25	5.04g/100ML	NF/IZ
P5277-03	0.192	0.208	0	0	0	0	0.826	IC1-111824	12/13/2024 18:47	5.01g/100ML	NF/IZ
CCV	2.081	3.172	3.208	10.673	2.64	5.378	15.172	IC1-111824	12/13/2024 19:08	10	NF/IZ
CCB	0	0	0	0	0	0	0	IC1-111824	12/13/2024 19:30	10	NF/IZ

ident	Relative Error F-
STD1	0.5000
STD2	-0.7500
STD3	2.3000
STD4	-0.1500
STD5	-1.6000
STD6	0.9800
STD7	

Fluoride (Anions)



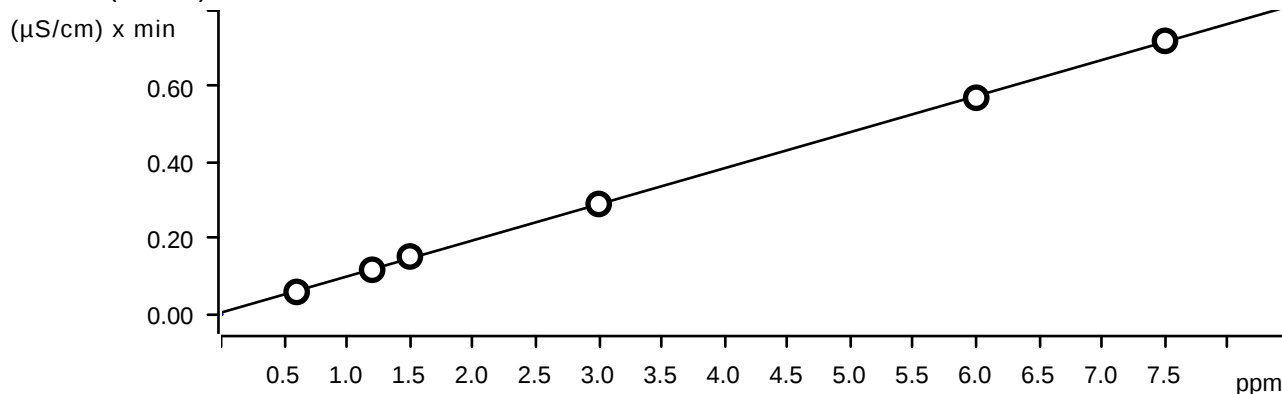
Function: $A = -1.48773\text{E-}3 + 0.0145652 \times Q$

Relative standard deviation 1.923523 %

Correlation coefficient 0.999800

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	2024-11-18 11:24:52 UTC-5	used
Standard 2	1	0.400	10.0	1.0	1.0	0.057	STD2	2024-11-18 11:46:16 UTC-5	used
Standard 3	1	0.800	10.0	1.0	1.0	0.114	STD3	2024-11-18 12:07:40 UTC-5	used
Standard 4	1	1.000	10.0	1.0	1.0	0.147	STD4	2024-11-18 12:29:05 UTC-5	used
Standard 5	1	2.000	10.0	1.0	1.0	0.289	STD5	2024-11-18 12:50:30 UTC-5	used
Standard 6	1	4.000	10.0	1.0	1.0	0.572	STD6	2024-11-18 13:11:57 UTC-5	used
Standard 7	1	5.000	10.0	1.0	1.0	0.734	STD7	2024-11-18 13:33:24 UTC-5	used

Chloride (Anions)



Function: $A = 4.85841\text{E-}3 + 9.50243\text{E-}3 \times Q$

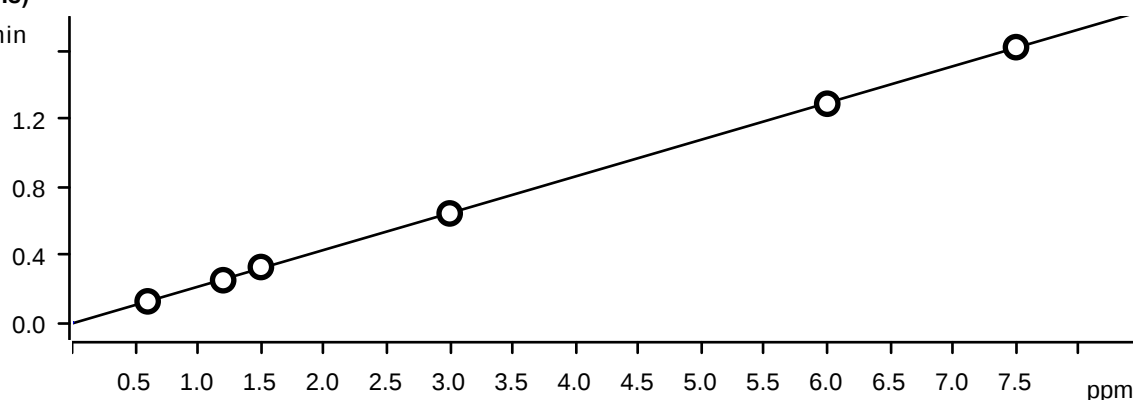
Relative standard deviation 1.265280 %

Correlation coefficient 0.999910

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	2024-11-18 11:24:52 UTC-5	used
Standard 2	1	0.600	10.0	1.0	1.0	0.059	STD2	2024-11-18 11:46:16 UTC-5	used
Standard 3	1	1.200	10.0	1.0	1.0	0.117	STD3	2024-11-18 12:07:40 UTC-5	used
Standard 4	1	1.500	10.0	1.0	1.0	0.153	STD4	2024-11-18 12:29:05 UTC-5	used
Standard 5	1	3.000	10.0	1.0	1.0	0.291	STD5	2024-11-18 12:50:30 UTC-5	used
Standard 6	1	6.000	10.0	1.0	1.0	0.570	STD6	2024-11-18 13:11:57 UTC-5	used
Standard 7	1	7.500	10.0	1.0	1.0	0.720	STD7	2024-11-18 13:33:24 UTC-5	used

Nitrite (Anions)

(μS/cm) x min

Function: $A = -5.27414E-3 + 0.0216316 \times Q$

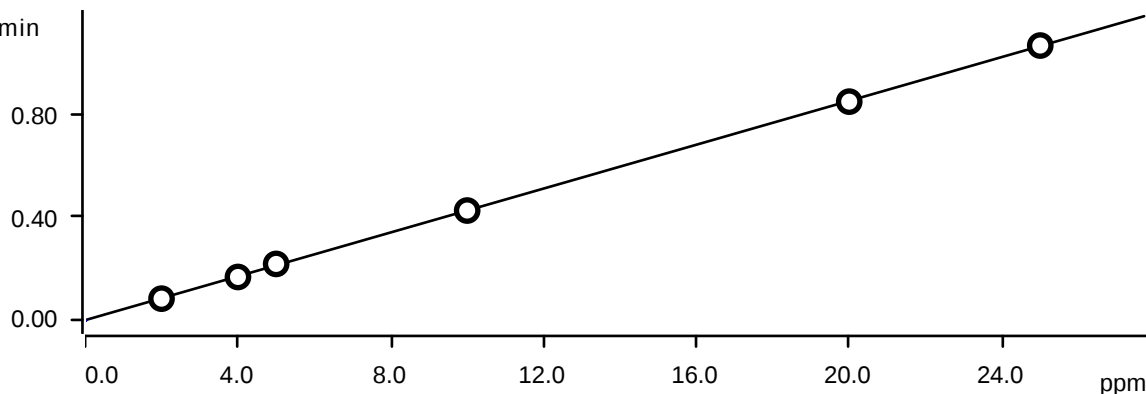
Relative standard deviation 0.783603 %

Correlation coefficient 0.999967

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	2024-11-18 11:24:52 UTC-5	used
Standard 2	1	0.600	10.0	1.0	1.0	0.125	STD2	2024-11-18 11:46:16 UTC-5	used
Standard 3	1	1.200	10.0	1.0	1.0	0.249	STD3	2024-11-18 12:07:40 UTC-5	used
Standard 4	1	1.500	10.0	1.0	1.0	0.327	STD4	2024-11-18 12:29:05 UTC-5	used
Standard 5	1	3.000	10.0	1.0	1.0	0.642	STD5	2024-11-18 12:50:30 UTC-5	used
Standard 6	1	6.000	10.0	1.0	1.0	1.288	STD6	2024-11-18 13:11:57 UTC-5	used
Standard 7	1	7.500	10.0	1.0	1.0	1.621	STD7	2024-11-18 13:33:24 UTC-5	used

Bromide (Anions)

($\mu\text{S}/\text{cm}$) $\times$ min



Function: $A = 7.64331\text{E-}4 + 4.24604\text{E-}3 \times Q$

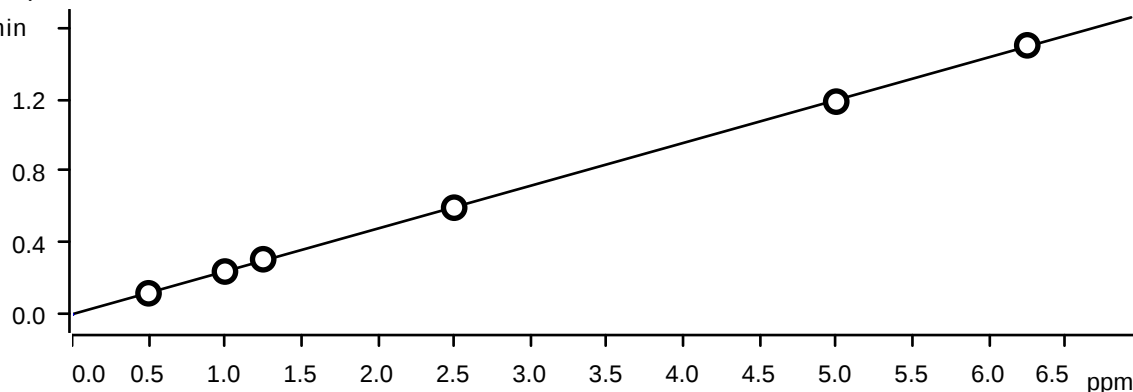
Relative standard deviation 0.771268 %

Correlation coefficient 0.999967

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	2024-11-18 11:24:52 UTC-5	used
Standard 2	1	2.000	10.0	1.0	1.0	0.084	STD2	2024-11-18 11:46:16 UTC-5	used
Standard 3	1	4.000	10.0	1.0	1.0	0.168	STD3	2024-11-18 12:07:40 UTC-5	used
Standard 4	1	5.000	10.0	1.0	1.0	0.219	STD4	2024-11-18 12:29:05 UTC-5	used
Standard 5	1	10.000	10.0	1.0	1.0	0.425	STD5	2024-11-18 12:50:30 UTC-5	used
Standard 6	1	20.000	10.0	1.0	1.0	0.847	STD6	2024-11-18 13:11:57 UTC-5	used
Standard 7	1	25.000	10.0	1.0	1.0	1.064	STD7	2024-11-18 13:33:24 UTC-5	used

Nitrate (Anions)

($\mu\text{S}/\text{cm}$) $\times$ min

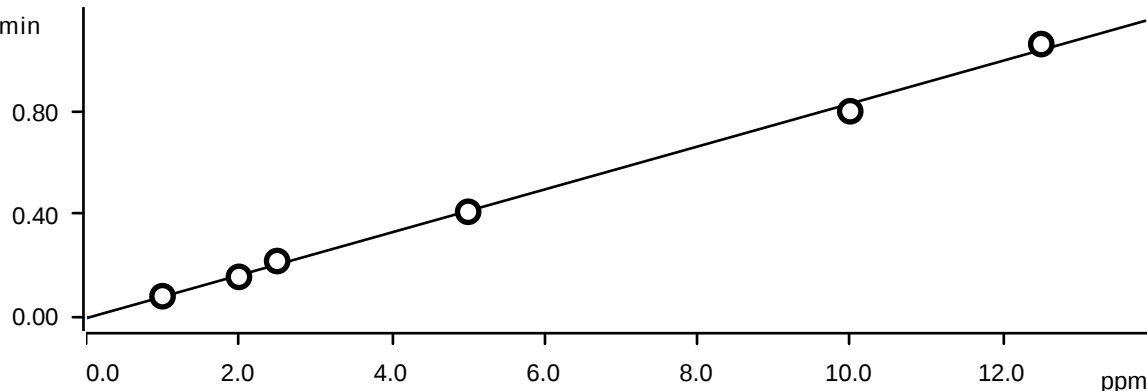


Function: $A = 1.14484\text{E-}3 + 0.0238833 \times Q$

Relative standard deviation 1.085494 %

Correlation coefficient 0.999936

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	2024-11-18 11:24:52 UTC-5	used
Standard 2	1	0.500	10.0	1.0	1.0	0.118	STD2	2024-11-18 11:46:16 UTC-5	used
Standard 3	1	1.000	10.0	1.0	1.0	0.239	STD3	2024-11-18 12:07:40 UTC-5	used
Standard 4	1	1.250	10.0	1.0	1.0	0.308	STD4	2024-11-18 12:29:05 UTC-5	used
Standard 5	1	2.500	10.0	1.0	1.0	0.595	STD5	2024-11-18 12:50:30 UTC-5	used
Standard 6	1	5.000	10.0	1.0	1.0	1.187	STD6	2024-11-18 13:11:57 UTC-5	used
Standard 7	1	6.250	10.0	1.0	1.0	1.501	STD7	2024-11-18 13:33:24 UTC-5	used

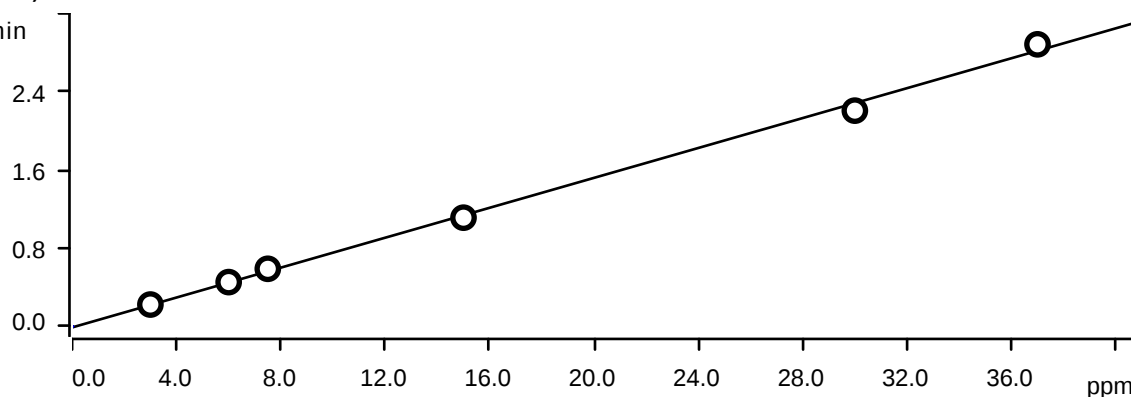
Phosphate (Anions) $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -2.33576E-3 + 8.30878E-3 \times Q$

Relative standard deviation 4.444706 %

Correlation coefficient 0.998936

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	2024-11-18 11:24:52 UTC-5	used
Standard 2	1	1.000	10.0	1.0	1.0	0.083	STD2	2024-11-18 11:46:16 UTC-5	used
Standard 3	1	2.000	10.0	1.0	1.0	0.158	STD3	2024-11-18 12:07:40 UTC-5	used
Standard 4	1	2.500	10.0	1.0	1.0	0.219	STD4	2024-11-18 12:29:05 UTC-5	used
Standard 5	1	5.000	10.0	1.0	1.0	0.410	STD5	2024-11-18 12:50:30 UTC-5	used
Standard 6	1	10.000	10.0	1.0	1.0	0.799	STD6	2024-11-18 13:11:57 UTC-5	used
Standard 7	1	12.500	10.0	1.0	1.0	1.059	STD7	2024-11-18 13:33:24 UTC-5	used

Sulfate (Anions)

 $(\mu\text{S}/\text{cm}) \times \text{min}$ Function: $A = -9.71222\text{E-}3 + 7.64397\text{E-}3 \times Q$

Relative standard deviation 4.327283 %

Correlation coefficient 0.998986

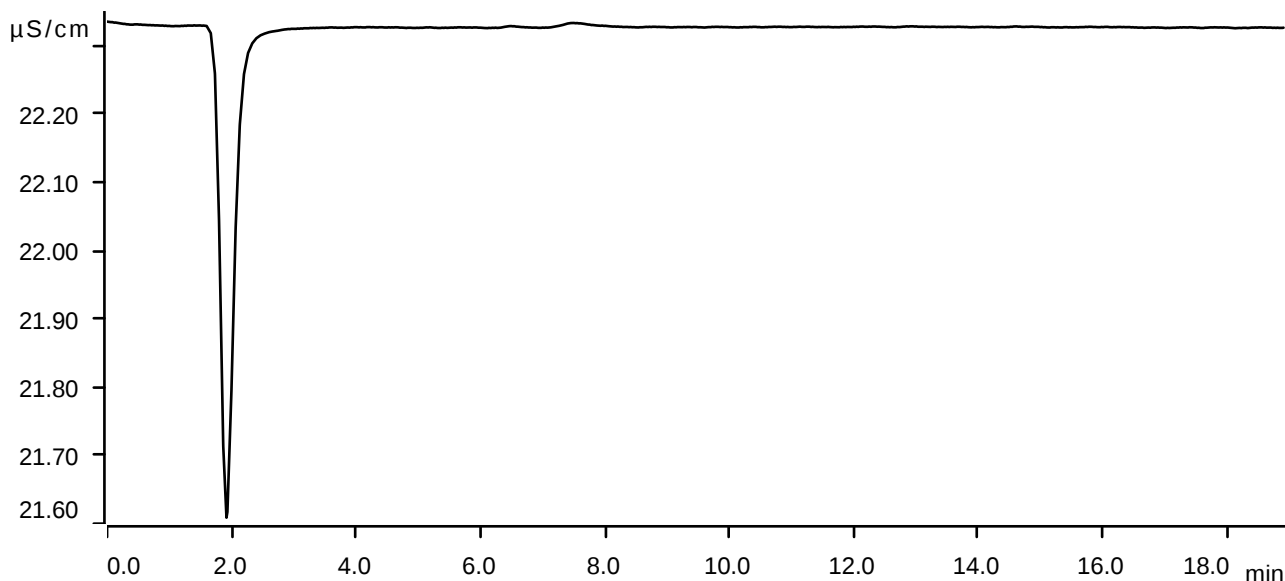
Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date	Used
Standard 1	1	0.000	10.0	1.0	1.0	n. d.	STD1	2024-11-18 11:24:52 UTC-5	used
Standard 2	1	3.000	10.0	1.0	1.0	0.224	STD2	2024-11-18 11:46:16 UTC-5	used
Standard 3	1	6.000	10.0	1.0	1.0	0.454	STD3	2024-11-18 12:07:40 UTC-5	used
Standard 4	1	7.500	10.0	1.0	1.0	0.590	STD4	2024-11-18 12:29:05 UTC-5	used
Standard 5	1	15.000	10.0	1.0	1.0	1.112	STD5	2024-11-18 12:50:30 UTC-5	used
Standard 6	1	30.000	10.0	1.0	1.0	2.206	STD6	2024-11-18 13:11:57 UTC-5	used
Standard 7	1	37.000	10.0	1.0	1.0	2.884	STD7	2024-11-18 13:33:24 UTC-5	used

Sample data

Ident STD1
Sample type Standard 1
Determination start 2024-11-18 11:24:52 UTC-5
Method IC1-111824
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

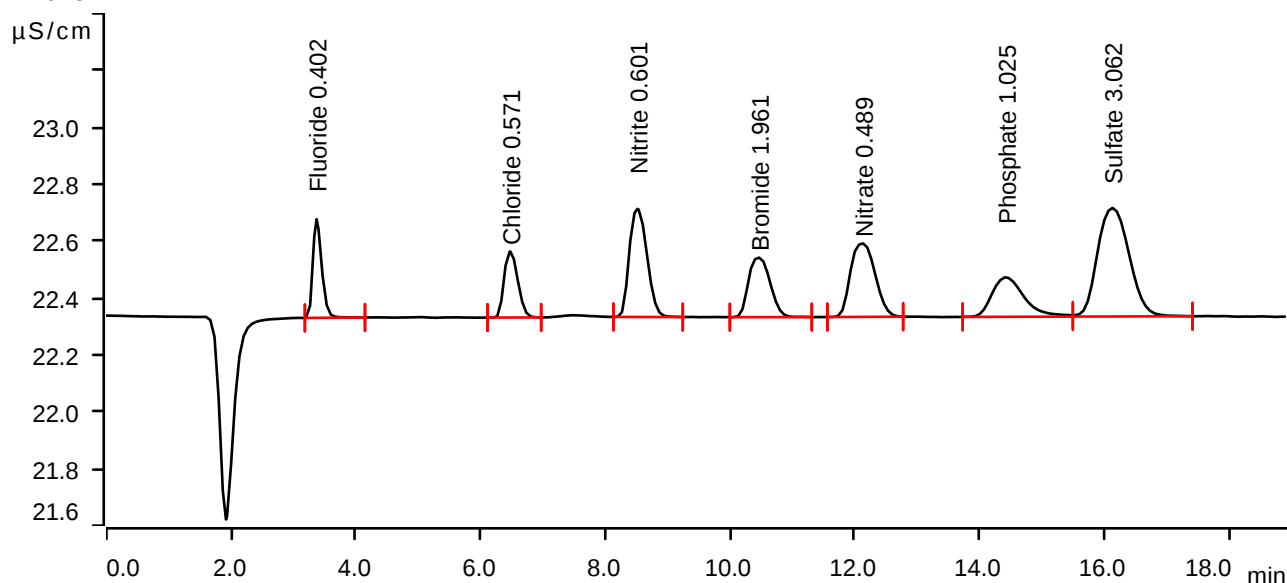
Sample data

Ident STD2
Sample type Standard 2
Determination start 2024-11-18 11:46:16 UTC-5
Method IC1-111824
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 11.54 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	0.0570	0.347	0.402	Fluoride
2	6.477	0.0592	0.232	0.571	Chloride
3	8.515	0.1247	0.380	0.601	Nitrite
4	10.463	0.0840	0.209	1.961	Bromide
5	12.127	0.1179	0.258	0.489	Nitrate
6	14.418	0.0829	0.139	1.025	Phosphate
7	16.130	0.2243	0.381	3.062	Sulfate

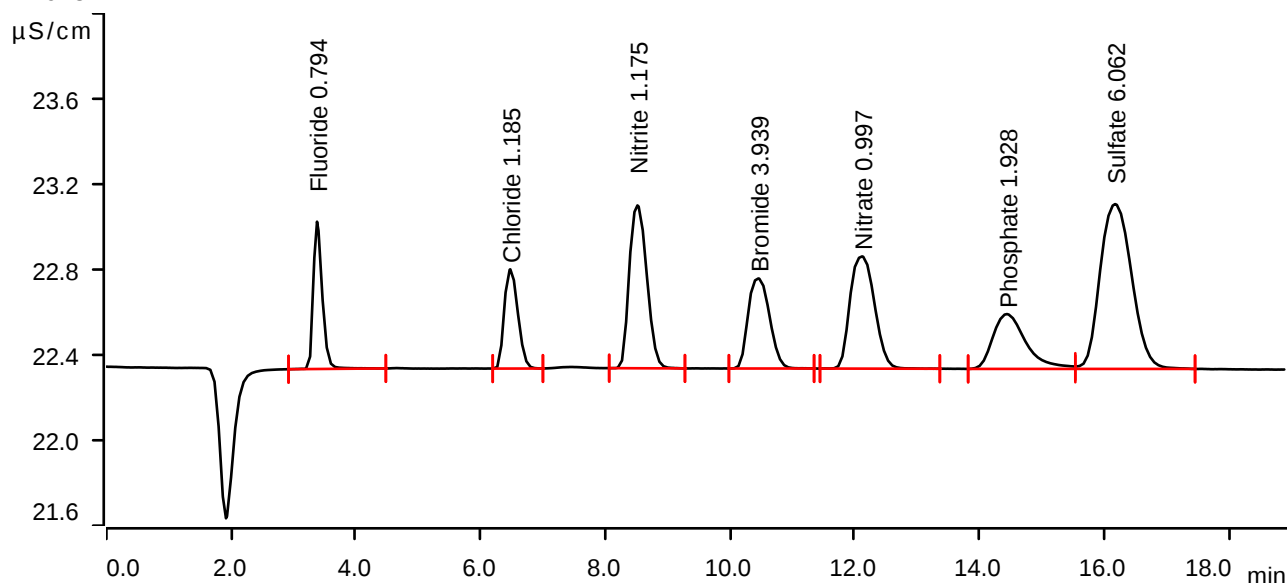
Sample data

Ident STD3
Sample type Standard 3
Determination start 2024-11-18 12:07:40 UTC-5
Method IC1-111824
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 11.37 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	3.378	0.1141	0.690	0.794	Fluoride
2	6.478	0.1175	0.465	1.185	Chloride
3	8.515	0.2490	0.763	1.175	Nitrite
4	10.453	0.1680	0.422	3.939	Bromide
5	12.117	0.2394	0.526	0.997	Nitrate
6	14.440	0.1579	0.257	1.928	Phosphate
7	16.173	0.4537	0.772	6.062	Sulfate

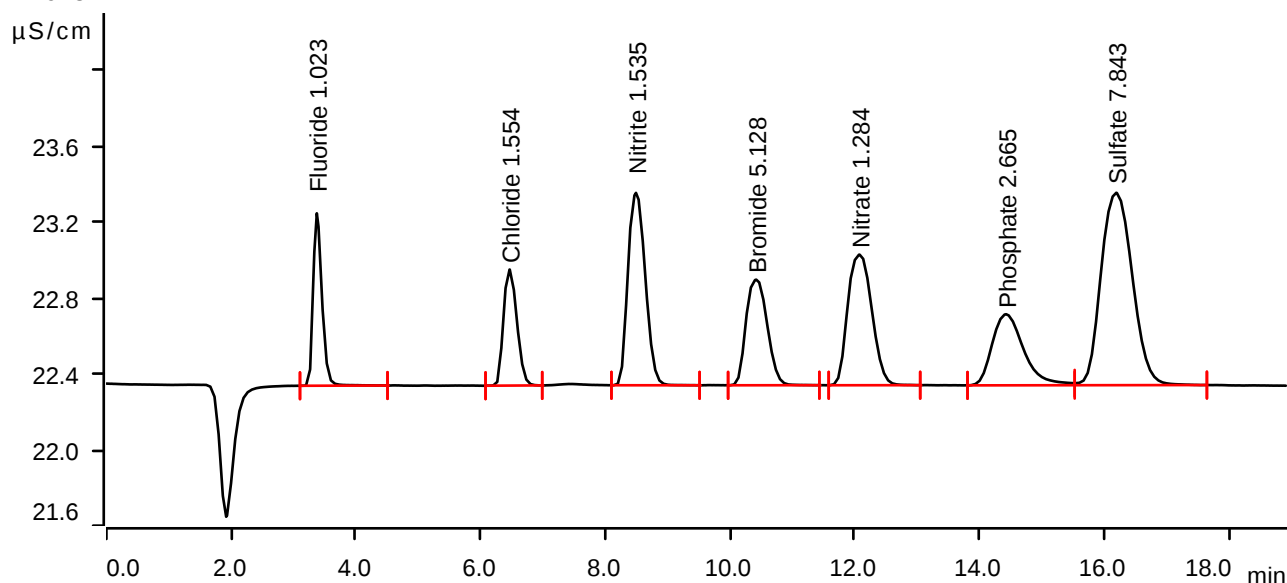
Sample data

Ident STD4
Sample type Standard 4
Determination start 2024-11-18 12:29:05 UTC-5
Method IC1-111824
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 11.32 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	0.1475	0.909	1.023	Fluoride
2	6.465	0.1525	0.612	1.554	Chloride
3	8.493	0.3268	1.014	1.535	Nitrite
4	10.420	0.2185	0.557	5.128	Bromide
5	12.077	0.3078	0.689	1.284	Nitrate
6	14.427	0.2191	0.375	2.665	Phosphate
7	16.192	0.5898	1.014	7.843	Sulfate

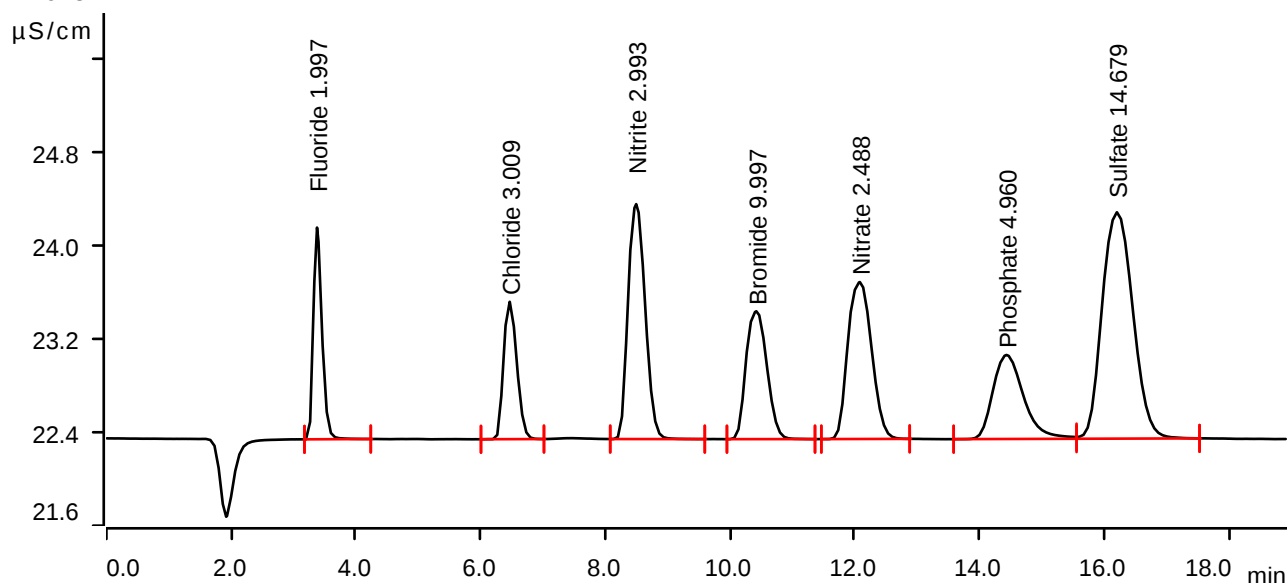
Sample data

Ident STD5
Sample type Standard 5
Determination start 2024-11-18 12:50:30 UTC-5
Method IC1-111824
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 11.26 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



Peak number	Retention time	Area	Height	Concentration	Component name
	min	(µS/cm) x min	µS/cm	ppm	
1	3.378	0.2894	1.819	1.997	Fluoride
2	6.467	0.2908	1.180	3.009	Chloride
3	8.495	0.6422	2.018	2.993	Nitrite
4	10.422	0.4253	1.098	9.997	Bromide
5	12.082	0.5953	1.348	2.488	Nitrate
6	14.432	0.4098	0.722	4.960	Phosphate
7	16.203	1.1123	1.944	14.679	Sulfate

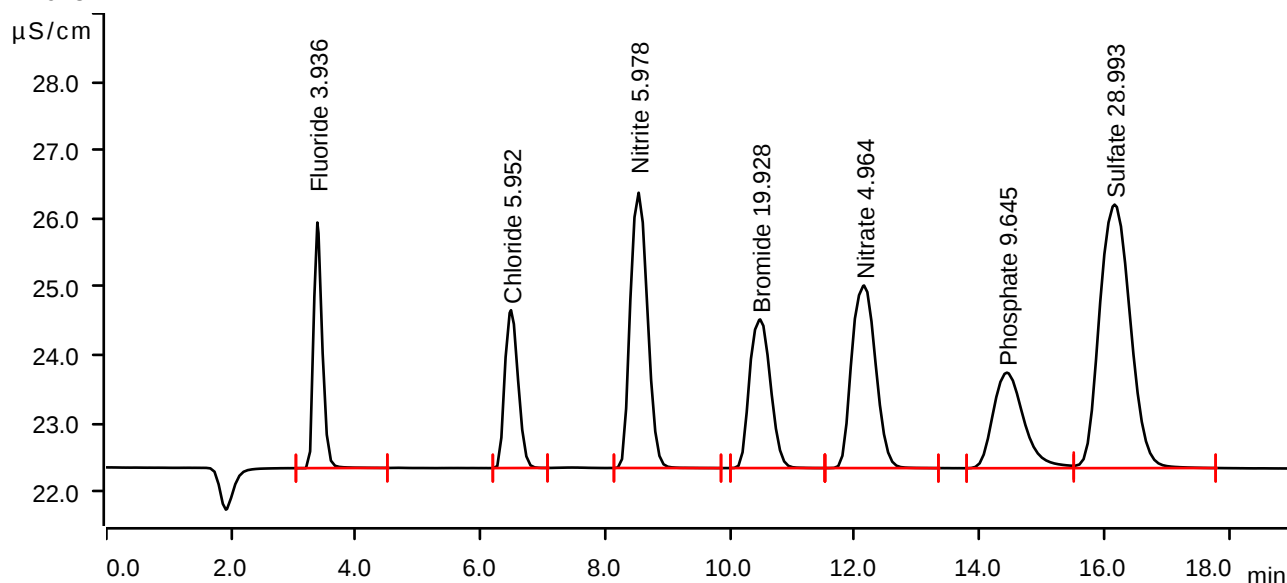
Sample data

Ident STD6
Sample type Standard 6
Determination start 2024-11-18 13:11:57 UTC-5
Method IC1-111824
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 11.37 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	3.383	0.5717	3.596	3.936	Fluoride
2	6.488	0.5704	2.311	5.952	Chloride
3	8.533	1.2879	4.031	5.978	Nitrite
4	10.483	0.8469	2.176	19.928	Bromide
5	12.148	1.1866	2.673	4.964	Nitrate
6	14.438	0.7991	1.399	9.645	Phosphate
7	16.165	2.2065	3.859	28.993	Sulfate

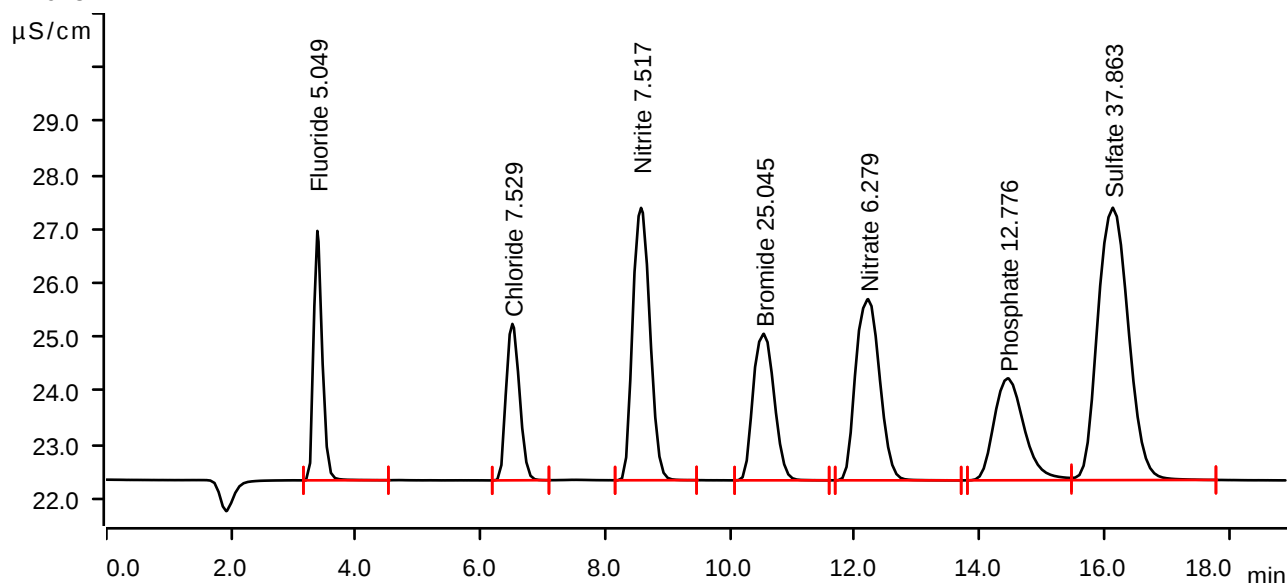
Sample data

Ident STD7
Sample type Standard 7
Determination start 2024-11-18 13:33:24 UTC-5
Method IC1-111824
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 11.54 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	3.383	0.7339	4.626	5.049	Fluoride
2	6.510	0.7203	2.901	7.529	Chloride
3	8.573	1.6208	5.052	7.517	Nitrite
4	10.542	1.0642	2.717	25.045	Bromide
5	12.213	1.5007	3.361	6.279	Nitrate
6	14.452	1.0592	1.891	12.776	Phosphate
7	16.138	2.8845	5.052	37.863	Sulfate

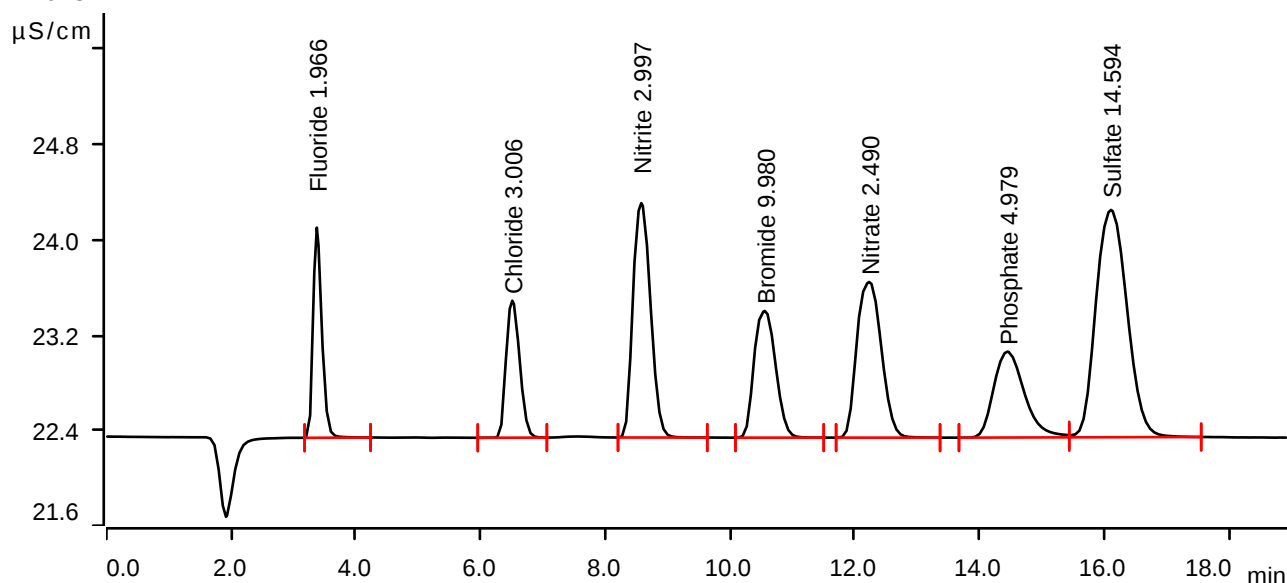
Sample data

Ident ICV
Sample type Check standard 1
Determination start 2024-11-18 13:54:44 UTC-5
Method IC1-111824
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	3.375	0.2848	1.764	1.966	Fluoride
2	6.508	0.2905	1.150	3.006	Chloride
3	8.577	0.6430	1.968	2.997	Nitrite
4	10.557	0.4245	1.063	9.980	Bromide
5	12.230	0.5959	1.307	2.490	Nitrate
6	14.447	0.4114	0.721	4.979	Phosphate
7	16.107	1.1058	1.909	14.594	Sulfate

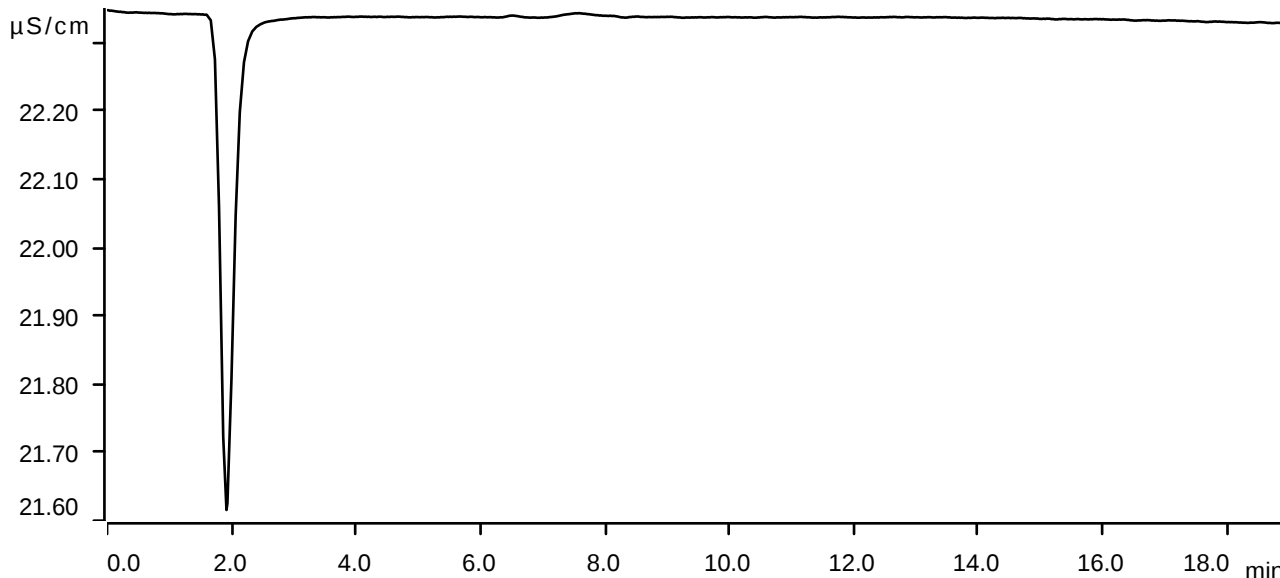
Sample data

Ident ICB
Sample type Sample
Determination start 2024-11-18 14:16:12 UTC-5
Method IC1-111824
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



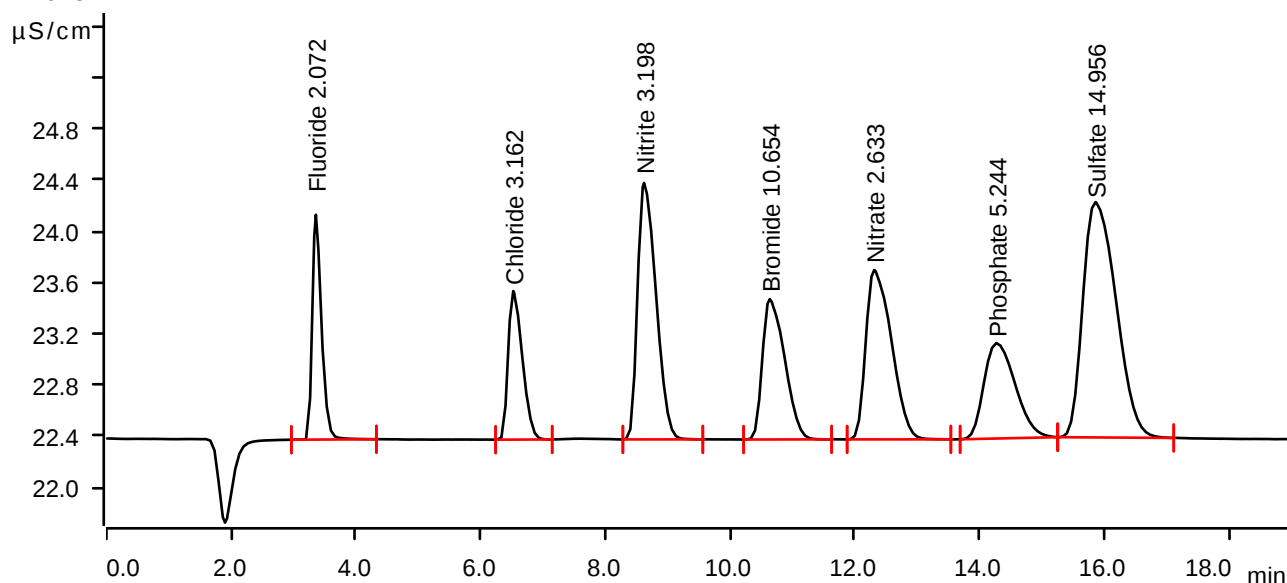
Sample data

Ident CCV
Sample type Check standard 1
Determination start 2024-12-13 15:55:23 UTC-5
Method IC1-111824
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	3.360	0.3003	1.756	2.072	Fluoride
2	6.523	0.3054	1.159	3.162	Chloride
3	8.622	0.6865	2.003	3.198	Nitrite
4	10.637	0.4531	1.096	10.654	Bromide
5	12.312	0.6301	1.323	2.633	Nitrate
6	14.273	0.4333	0.745	5.244	Phosphate
7	15.858	1.1335	1.838	14.956	Sulfate

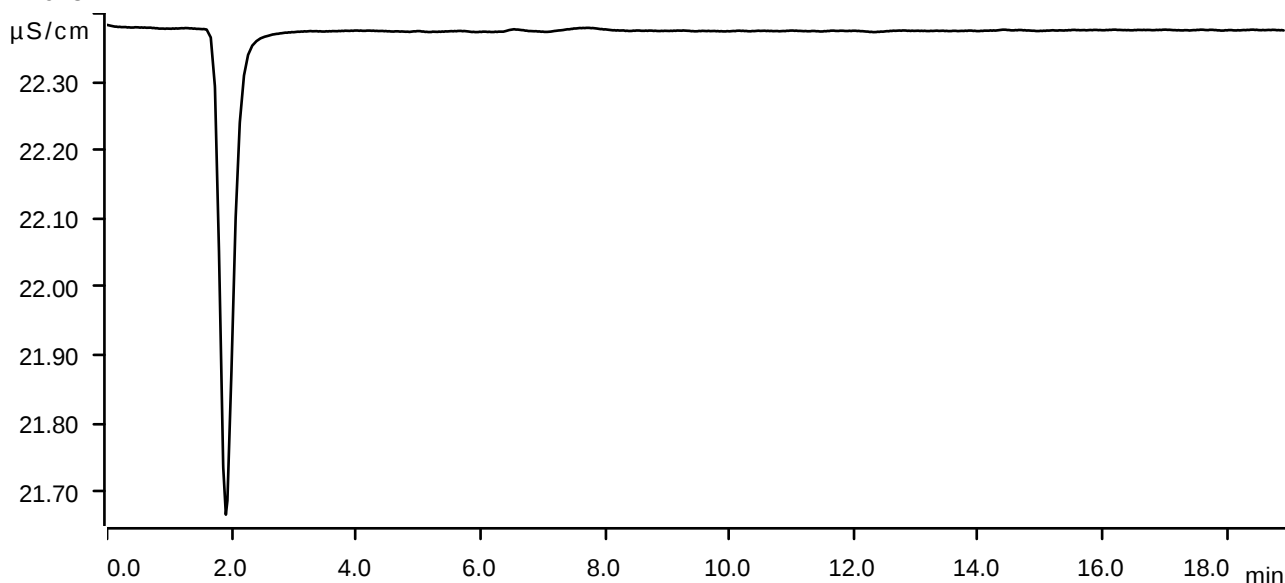
Sample data

Ident CCB
Sample type Sample
Determination start 2024-12-13 16:16:53 UTC-5
Method IC1-111824
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



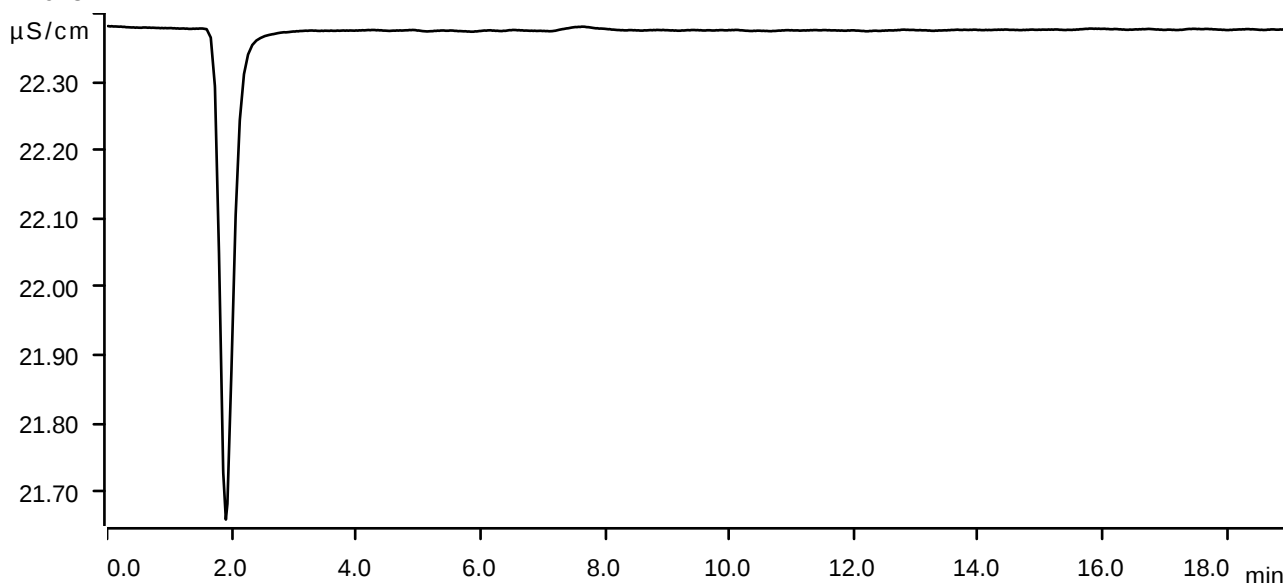
Sample data

Ident LB133944BLW
 Sample type Sample
 Determination start 2024-12-13 16:38:24 UTC-5
 Method IC1-111824
 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 12.05 MPa
 Maximum pressure monitored yes
 Temperature ---- °C

Anions



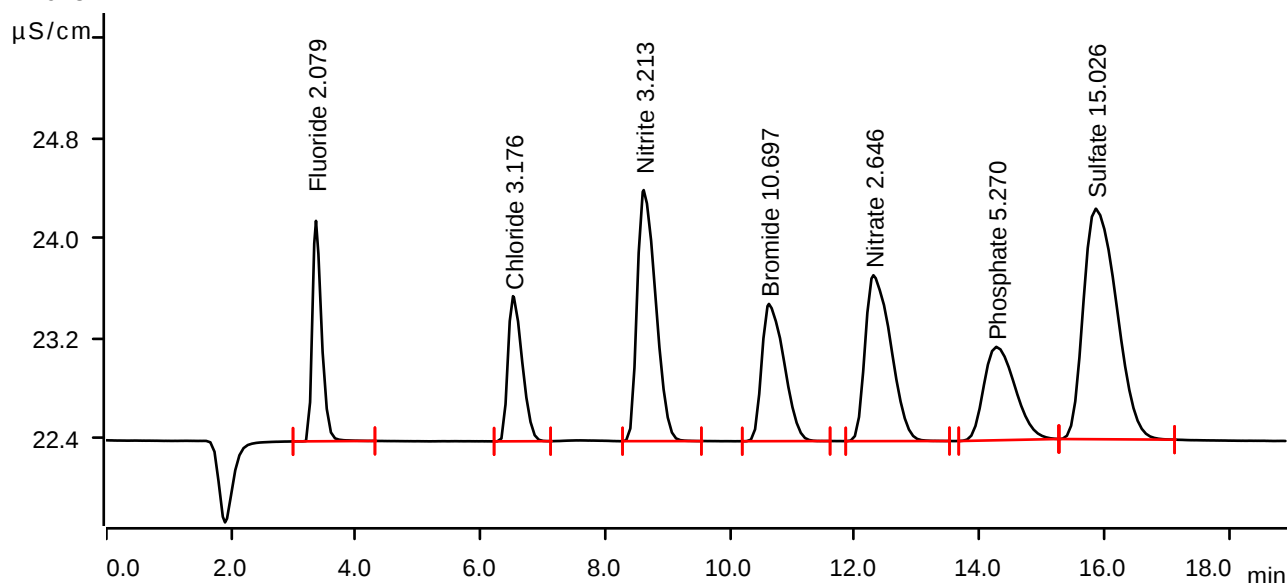
Sample data

Ident LB133944BSW
Sample type Check standard 1
Determination start 2024-12-13 16:59:55 UTC-5
Method IC1-111824
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	0.3013	1.764	2.079	Fluoride
2	6.520	0.3066	1.162	3.176	Chloride
3	8.615	0.6898	2.009	3.213	Nitrite
4	10.623	0.4550	1.099	10.697	Bromide
5	12.298	0.6331	1.328	2.646	Nitrate
6	14.270	0.4355	0.748	5.270	Phosphate
7	15.863	1.1389	1.845	15.026	Sulfate

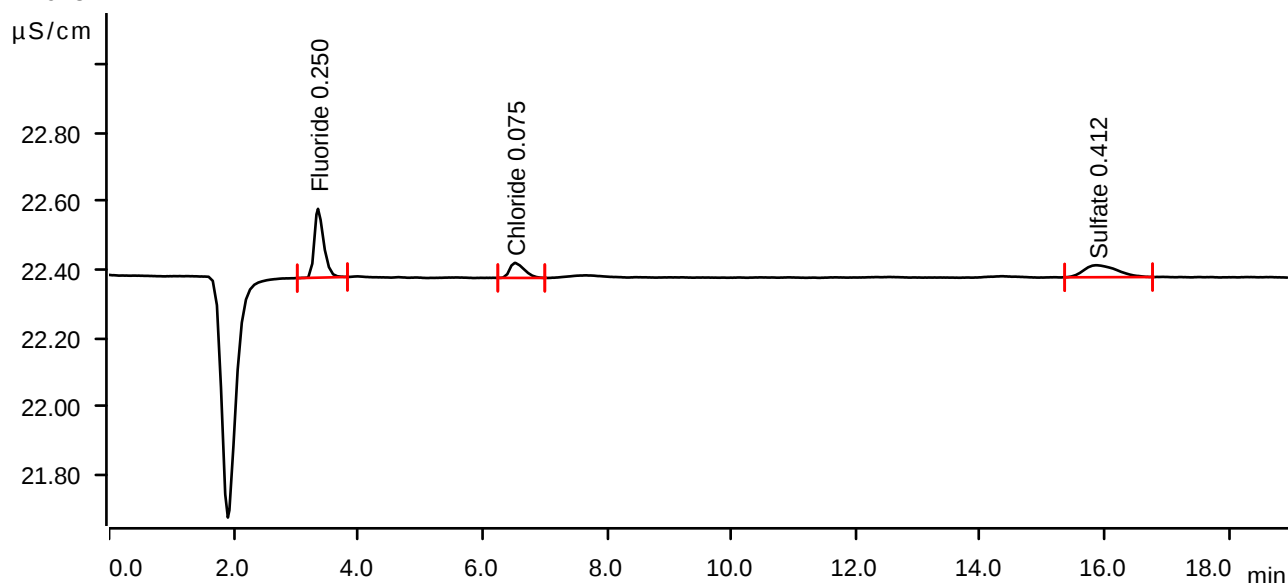
Sample data

Ident P5277-01
Sample type Sample
Determination start 2024-12-13 17:21:29 UTC-5
Method IC1-111824
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	3.358	0.0350	0.202	0.250	Fluoride
2	6.520	0.0119	0.044	0.075	Chloride
3	15.878	0.0217	0.035	0.412	Sulfate

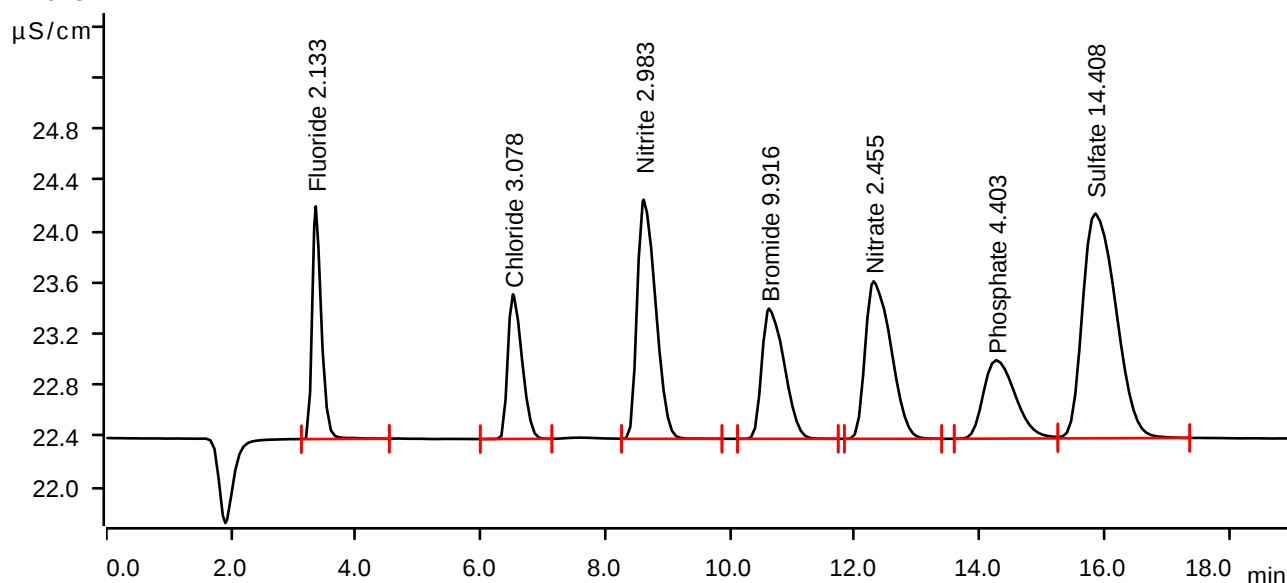
Sample data

Ident P5277-01MS
Sample type Sample
Determination start 2024-12-13 17:43:00 UTC-5
Method IC1-111824
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	3.358	0.3092	1.818	2.133	Fluoride
2	6.518	0.2973	1.130	3.078	Chloride
3	8.615	0.6400	1.868	2.983	Nitrite
4	10.625	0.4218	1.017	9.916	Bromide
5	12.302	0.5875	1.230	2.455	Nitrate
6	14.268	0.3635	0.613	4.403	Phosphate
7	15.853	1.0916	1.754	14.408	Sulfate

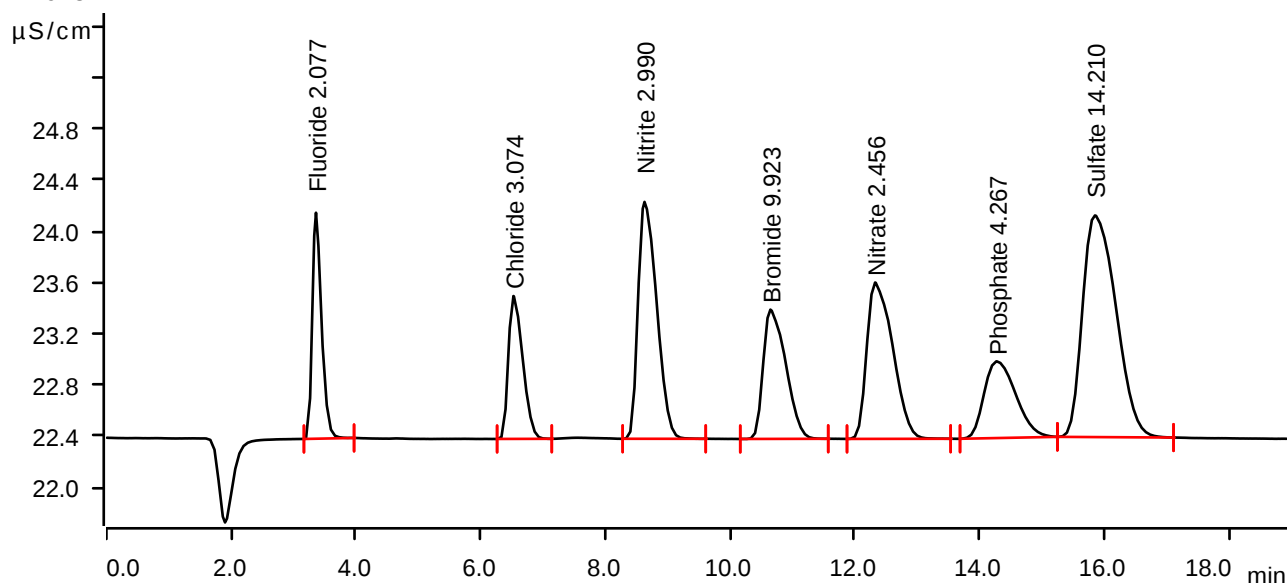
Sample data

Ident P5277-01MSD
Sample type Sample
Determination start 2024-12-13 18:04:24 UTC-5
Method IC1-111824
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	0.3010	1.765	2.077	Fluoride
2	6.527	0.2969	1.116	3.074	Chloride
3	8.628	0.6414	1.850	2.990	Nitrite
4	10.647	0.4221	1.010	9.923	Bromide
5	12.325	0.5878	1.221	2.456	Nitrate
6	14.277	0.3522	0.599	4.267	Phosphate
7	15.850	1.0765	1.731	14.210	Sulfate

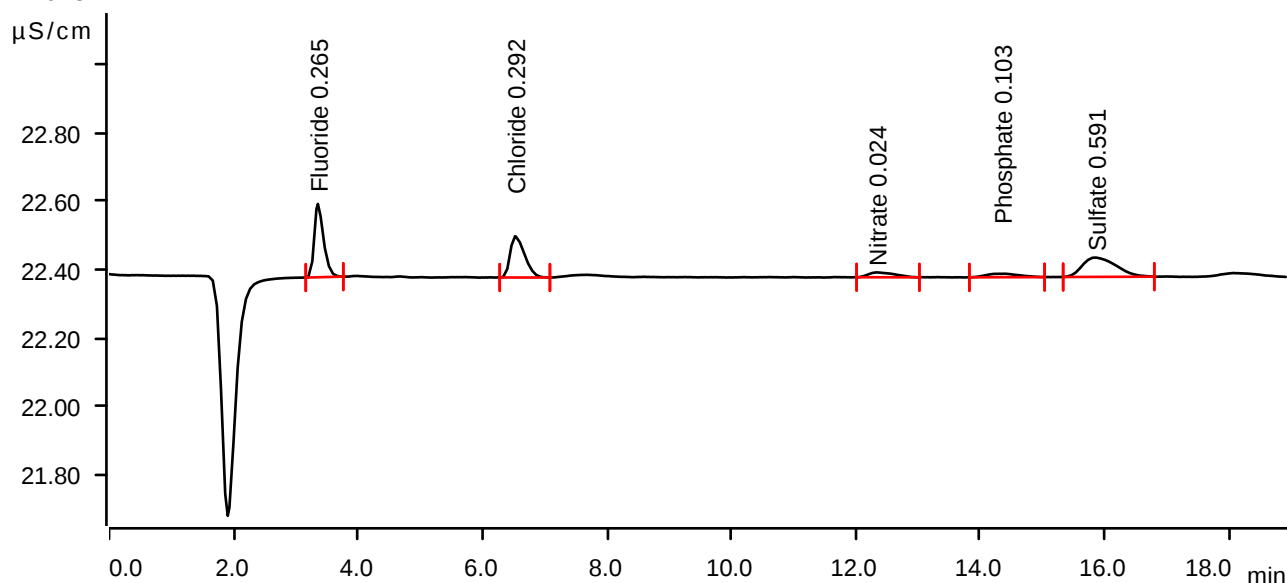
Sample data

Ident P5277-02
Sample type Sample
Determination start 2024-12-13 18:25:55 UTC-5
Method IC1-111824
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 12.27 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	3.357	0.0372	0.215	0.265	Fluoride
2	6.525	0.0326	0.121	0.292	Chloride
3	12.335	0.0069	0.014	0.024	Nitrate
4	14.348	0.0063	0.010	0.103	Phosphate
5	15.855	0.0355	0.057	0.591	Sulfate

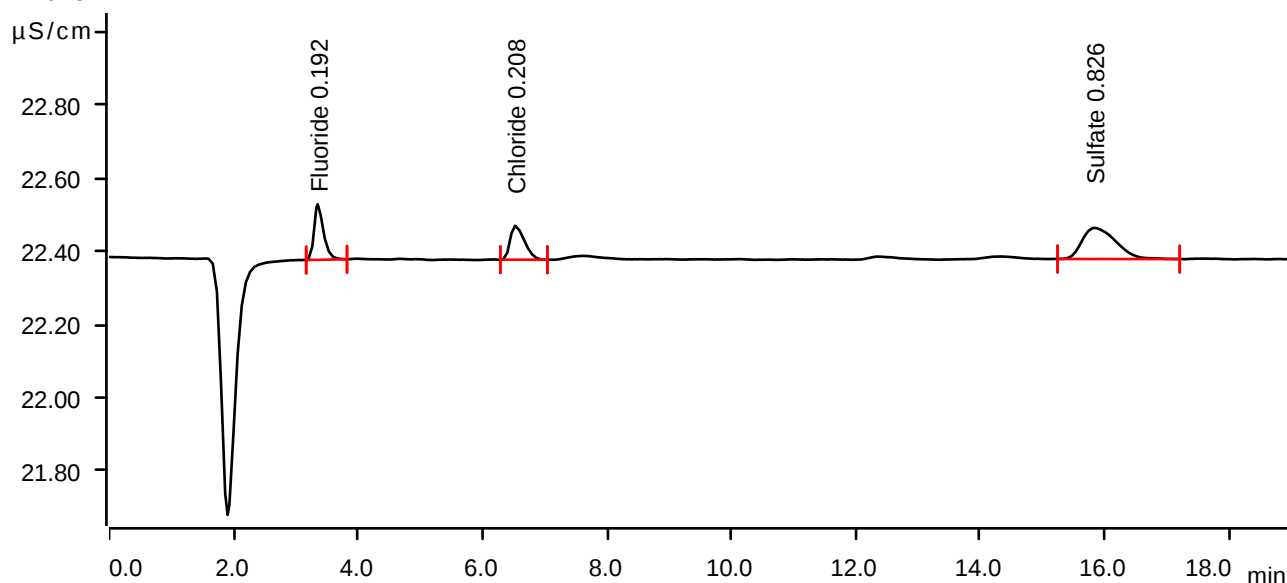
Sample data

Ident P5277-03
Sample type Sample
Determination start 2024-12-13 18:47:24 UTC-5
Method IC1-111824
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



Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration ppm	Component name
1	3.353	0.0265	0.152	0.192	Fluoride
2	6.525	0.0246	0.093	0.208	Chloride
3	15.832	0.0534	0.085	0.826	Sulfate

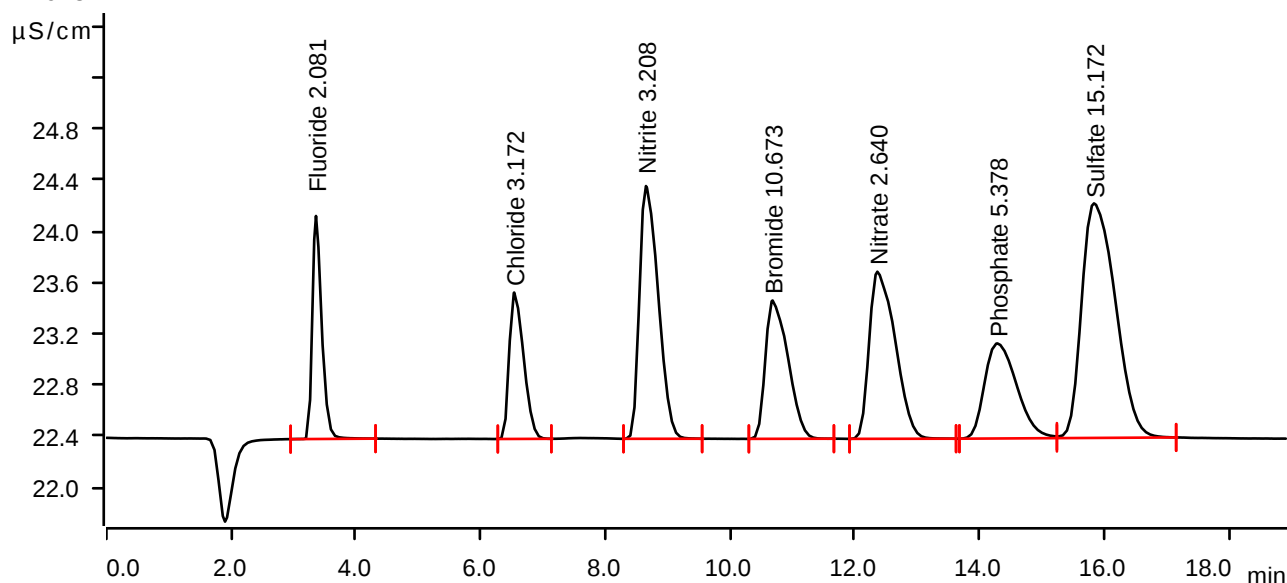
Sample data

Ident CCV
Sample type Check standard 1
Determination start 2024-12-13 19:08:52 UTC-5
Method IC1-111824
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 12.27 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	0.3016	1.742	2.081	Fluoride
2	6.540	0.3062	1.143	3.172	Chloride
3	8.652	0.6887	1.974	3.208	Nitrite
4	10.682	0.4539	1.080	10.673	Bromide
5	12.362	0.6317	1.305	2.640	Nitrate
6	14.287	0.4445	0.742	5.378	Phosphate
7	15.835	1.1500	1.832	15.172	Sulfate

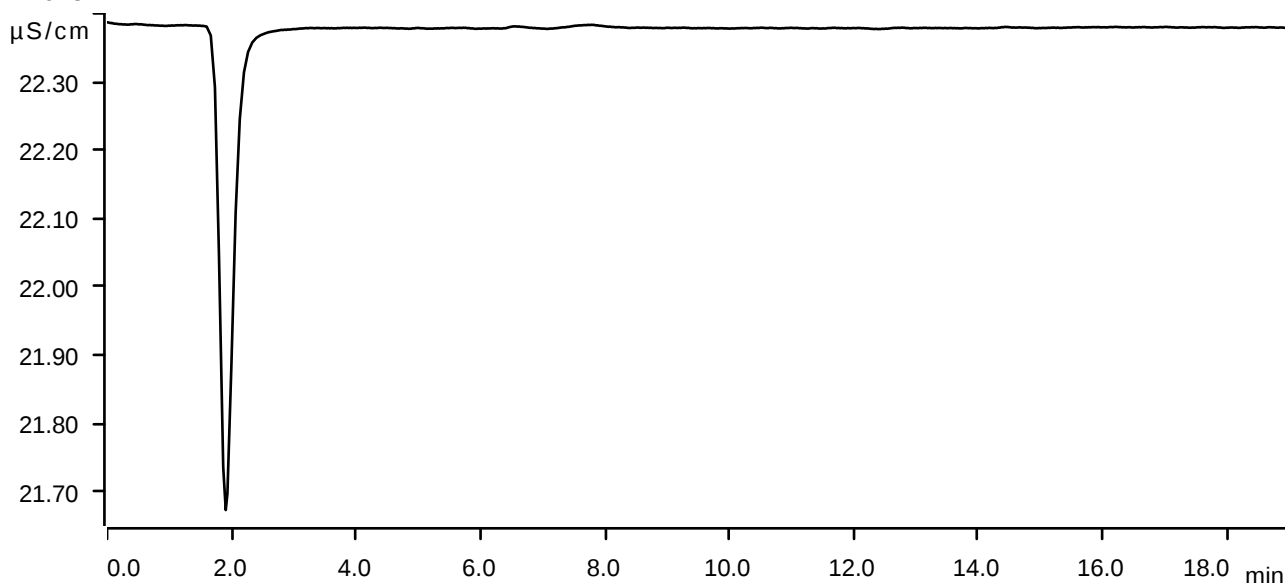
Sample data

Ident CCB
Sample type Sample
Determination start 2024-12-13 19:30:22 UTC-5
Method IC1-111824
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 12.27 MPa
Maximum pressure monitored yes
Temperature ---- °C

Anions



Test results

Aquakem 7.2AQ1

LB1339

Page: 1

Reviewed By: lwona
On: 12/18/2024
11:26:38 AM
Inst Id: Konelab 20
LB: LB133973CHEMTECH CONSULTING GROUP INC
284 Sheffield Street, Mountainside, NJ 07092

12/17/2024 10:31

Reviewed by : RM

Instrument ID : Konelab

Test: Ammonia-N

Sample Id	Result	Dil. 1 +	Response	Errors
ICV1	0.961	0.0	0.146	
ICB1	-0.007	0.0	0.024	
CCV1	0.978	0.0	0.148	
CCB1	0.001	0.0	0.025	
RL CHECK	0.085	0.0	0.036	
PB165645BL	-0.013	0.0	0.024	
PB165645BS	0.956	0.0	0.145	
P5277-01	-0.012	0.0	0.024	
P5277-01DUP	-0.011	0.0	0.024	
P5277-01MS	1.047	0.0	0.157	
P5277-01MSD	0.995	0.0	0.150	
P5277-02	-0.012	0.0	0.024	
P5277-03	-0.010	0.0	0.024	
CCV2	0.972	0.0	0.147	
CCB2	-0.003	0.0	0.025	

85% (50-150)

12/17/2024

RM

N 15
Mean 0.395
SD 0.4995
CV% 126.38

Aquakem v. 7.2AQ1

Results from time period:

Tue Dec 17 09:19:51 2024

Tue Dec 17 10:26:53 2024

Sample Id	Sam/Ctr/c	Test short r	Test type	Result	Result unit	Result date and time	Stat
0.0PPM	A	Ammonia-† P		-0.0005	mg/l	12/17/2024 9:19:51	
0.1PPM	A	Ammonia-† P		0.0954	mg/l	12/17/2024 9:19:52	
0.2PPM	A	Ammonia-† P		0.1968	mg/l	12/17/2024 9:19:53	
0.4PPM	A	Ammonia-† P		0.3993	mg/l	12/17/2024 9:19:54	
1.0PPM	A	Ammonia-† P		1.0002	mg/l	12/17/2024 9:19:55	
1.3PPM	A	Ammonia-† P		1.3581	mg/l	12/17/2024 9:19:56	
2.0PPM	A	Ammonia-† P		1.9841	mg/l	12/17/2024 9:19:57	
ICV1	S	Ammonia-† P		0.961	mg/l	12/17/2024 10:10:05	
ICB1	S	Ammonia-† P		-0.0072	mg/l	12/17/2024 10:10:06	
CCV1	S	Ammonia-† P		0.9784	mg/l	12/17/2024 10:10:08	
CCB1	S	Ammonia-† P		0.0008	mg/l	12/17/2024 10:10:11	
RL CHECK	S	Ammonia-† P		0.0852	mg/l	12/17/2024 10:10:13	
PB165645BL	S	Ammonia-† P		-0.0133	mg/l	12/17/2024 10:10:14	
PB165645BS	S	Ammonia-† P		0.9562	mg/l	12/17/2024 10:20:46	
P5277-01	S	Ammonia-† P		-0.012	mg/l	12/17/2024 10:20:48	
P5277-01DUP	S	Ammonia-† P		-0.0112	mg/l	12/17/2024 10:20:51	
P5277-01MS	S	Ammonia-† P		1.0473	mg/l	12/17/2024 10:20:52	
P5277-01MSD	S	Ammonia-† P		0.9955	mg/l	12/17/2024 10:20:53	
P5277-02	S	Ammonia-† P		-0.0118	mg/l	12/17/2024 10:20:56	
P5277-03	S	Ammonia-† P		-0.0101	mg/l	12/17/2024 10:20:57	
CCV2	S	Ammonia-† P		0.9722	mg/l	12/17/2024 10:26:51	
CCB2	S	Ammonia-† P		-0.0026	mg/l	12/17/2024 10:26:52	

Calibration results Aquakem 7.2AQ1 Page: 1

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

12/17/2024 9:34 Reviewed by: RM Instrument ID: Konelab

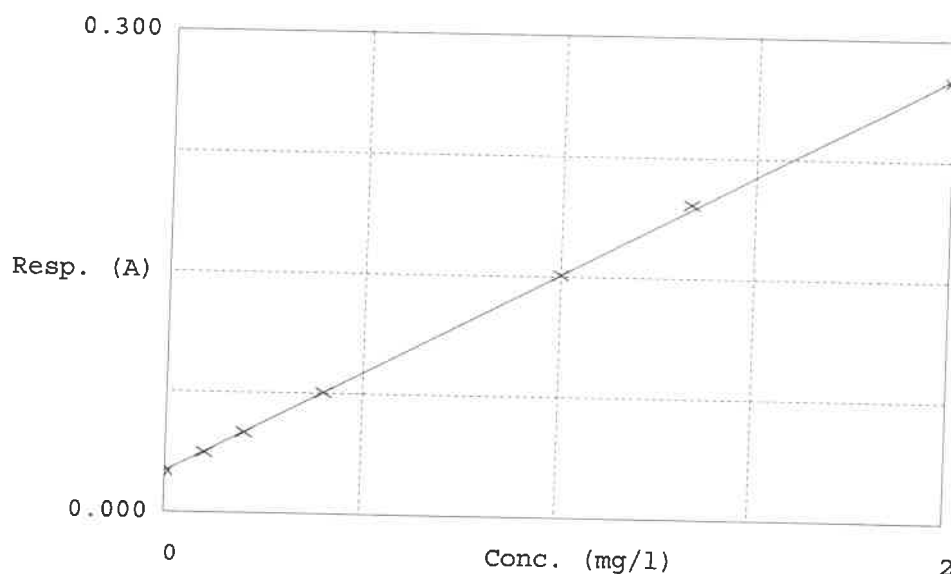
Test Ammonia-N

Accepted 12/17/2024 9:34

Factor 7.969
Bias 0.025

Coeff. of det. 0.999734

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	0.00PPM	0.025	-0.0005	0.0000	-
2	NH3-2PPM	0.037	0.0954	0.1000	-4.6
3	NH3-2PPM	0.050	0.1968	0.2000	-1.6
4	NH3-2PPM	0.076	0.3993	0.4000	-0.2
5	NH3-2PPM	0.151	1.0002	1.0000	0.0
6	NH3-2PPM	0.196	1.3581	1.3333	4.5
7	NH3-2PPM	0.274	1.9841	2.0000	-0.8

12/17/2024
RM

Analytical Summary Report

Analysis Method: 7196A

ANALYST: rubina

Parameter: ~~Hexavalent Chromium~~

SUPERVISOR REVIEW BY: Iwona

Run Number: LB133981

pH Meter ID: WC pH Meter-1

Reagent/Standard	Lot/Log #
hexavalent chromium color reagent	WP111113
5N sulfuric acid	WP110380
HNO3 Hex-Chrome, 5M	WP110381
Hexchrome Cleaning Solution	WP108645

Intercept: 0.0012

Slope: 0.7646

Regression: 0.999997

Seq	Lab ID	True Value (mg/l)	DF	Initial Vol (ml)	Final Vol (ml)	pH HNO3	pH H2SO4	Absorb.at 540nm		Absorbance Difference	Result (mg/L)	%D	Anal Date	Anal Time
								Backgrnd	Color					
1	CAL1	0	1	100	100	7.30	1.79	0.000	0.000	0.000	-0.00		12/17/2024	15:00
2	CAL2	0.01	1	100	100	7.37	1.84	0.000	0.009	0.009	0.010	0	12/17/2024	15:01
3	CAL3	0.025	1	100	100	7.39	1.88	0.000	0.021	0.021	0.025	0	12/17/2024	15:02
4	CAL4	0.05	1	100	100	7.39	1.90	0.000	0.040	0.040	0.050	0	12/17/2024	15:03
5	CAL5	0.1	1	100	100	7.38	1.87	0.000	0.078	0.078	0.100	0	12/17/2024	15:04
6	CAL6	0.5	1	100	100	7.36	1.87	0.000	0.383	0.383	0.499	-0.2	12/17/2024	15:05
7	CAL7	1	1	100	100	7.36	1.85	0.000	0.766	0.766	1.000	0	12/17/2024	15:06

Analytical Summary Report

Analysis Method: 7196A

ANALYST:rubina

Parameter: Hexavalent Chromium

SUPERVISOR REVIEW BY:Iwona

Run Number: LB133981

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	1.92	0.000	0.386	0.386	0.503	12/17/2024	15:07
2	ICB		1	100	100	7.25	1.77	0.000	0.000	0.000	-0.002	12/17/2024	15:08
3	CCV1	0.5	1	100	100	7.45	1.94	0.000	0.383	0.383	0.499	12/17/2024	15:09
4	CCB1		1	100	100	7.28	1.80	0.000	0.001	0.001	0.000	12/17/2024	15:10
5	RL Check	0.01	1	100	100	7.41	1.91	0.000	0.010	0.010	0.012	12/17/2024	15:11
6	PB165660BL		1	2.50	100	7.29	1.75	0.000	0.001	0.001	0.000	12/17/2024	15:12
7	PB165660BS	20	1	2.50	100	7.43	1.95	0.000	0.386	0.386	0.503	12/17/2024	15:13
8	P5245-03		1	2.57	100	7.54	2.10	0.004	0.061	0.057	0.073	12/17/2024	15:14
9	P5277-01		1	2.52	100	7.56	2.14	0.003	0.004	0.001	0.000	12/17/2024	15:15
10	P5277-01DU		1	2.52	100	7.57	2.16	0.003	0.004	0.001	0.000	12/17/2024	15:16
11	P5277-01MS	40	2	2.53	100	7.52	2.12	0.000	0.333	0.333	0.434	12/17/2024	15:17
12	P5277-01MS	1284	40	2.52	100	7.57	2.12	0.000	0.610	0.610	0.796	12/17/2024	15:18
13	P5277-01MS	40	2	2.53	100	7.60	2.20	0.000	0.386	0.386	0.503	12/17/2024	15:19
14	P5277-02		1	2.51	100	7.52	2.10	0.004	0.004	0.000	-0.002	12/17/2024	15:20
15	P5277-03		1	2.52	100	7.58	2.06	0.002	0.003	0.001	0.000	12/17/2024	15:21
16	CCV2	0.5	1	100	100	7.42	1.93	0.000	0.386	0.386	0.503	12/17/2024	15:22
17	CCB2		1	100	100	7.26	1.80	0.000	0.000	0.000	-0.002	12/17/2024	15:23

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

SDG No : N/A

Matrix : SOIL

Pipette ID : WC

Balance ID : WC SC-7

Hood ID : HOOD#2

Block ID : WC-DIST-BLOCK-1

Weigh By : RM

Start Digest Date: 12/16/2024 Time : 09:35 Temp : 150 °C

End Digest Date: 12/16/2024 Time : 10:35 Temp : 160 °C

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

Standard Name	MLS USED	STD REF. # FROM LOG
LCSS	1.0ML	WP111092
MS/MSD SPIKE SOL.	1.0ML	WP111091
PBS003	50.0ML	W3112
RL CHECK	0.1ML	WP111091
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	5.0ML	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
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
12/16/2024 10:50	RM (WC)	RM (WC)
	Preparation Group	Analysis Group

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/ Nitrite	Comment	Prep Pos
P5277-01DUP	COMP-1ADUP	1.03	50	N/A	N/A	N/A	N/A	N/A	N/A
P5277-01MS	COMP-1AMS	1.02	50	N/A	N/A	N/A	N/A	N/A	N/A
P5277-01MSD	COMP-1AMSD	1.03	50	N/A	N/A	N/A	N/A	N/A	N/A
P5277-01	COMP-1A	1.03	50	N/A	N/A	N/A	N/A	N/A	N/A
P5277-02	COMP-2A	1.01	50	N/A	N/A	N/A	N/A	N/A	N/A
P5277-03	COMP-3A	1.03	50	N/A	N/A	N/A	N/A	N/A	N/A
PB165645BL	PBS645	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A
PB165645BS	LCS645	1.00	50	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : ammonia 12-16

WorkList ID : 186350

Department : Distillation

Date : 12-16-2024 08:32:29

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5277-01	COMP-1A	Solid	Ammonia	Cool 4 deg C	POWE02	L41	12/12/2024	SM4500-NH3
P5277-02	COMP-2A	Solid	Ammonia	Cool 4 deg C	POWE02	L41	12/12/2024	SM4500-NH3
P5277-03	COMP-3A	Solid	Ammonia	Cool 4 deg C	POWE02	L41	12/12/2024	SM4500-NH3

Date/Time 12/16/2024 09:00
 Raw Sample Received by: RM CWG
 Raw Sample Relinquished by: [Signature] CoolC

Date/Time 12/16/2024 09:45
 Raw Sample Received by: [Signature] CoolC
 Raw Sample Relinquished by: RM CWG

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

SDG No : N/A

Matrix : SOIL

Pipette 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: 12/17/2024 Time : 12:00 Temp : 90 °C

End Digest Date: 12/17/2024 Time : 13:00 Temp : 95 °C

IT batch
12/17/2024 13:20 90.2 RM
12/17/2024 14:20 94.2

Digestion tube ID : M6054

Block Thermometer ID : WC-Block#1

Filter paper ID : 400213

Prep Technician Signature: *RM*

pH Meter ID : WC pH meter-1

Supervisor Signature: *12*

Standard 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	W3152
PHOSPHATE BUFFER	0.5ML	WP110498
HEX. DIGESTION SOLN.	50.0ML	WP111052
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
N/A	N/A	N/A

LAB SAMPLE ID	CLIENT SAMPLE ID	Vol(ml)	Comment
CAL1	CAL1	2.5ML	W3112
CAL2	CAL2	0.2ML	WP111110
CAL3	CAL3	0.5ML	WP111110
CAL4	CAL4	1ML	WP111110
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:

12/17/2024 *RM*

N/A

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

Lab Sample ID	Client Sample ID	Initial Weight (g)	Final Vol (ml)	pH	Sulfide	Oxidizing	Nitrate/Nitrite	Comment	Prep Pos
P5245-03	72-12016	2.57	100	N/A	N/A	N/A	N/A	N/A	N/A
P5277-01	COMP-1A	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
P5277-01DUP	COMP-1ADUP	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
P5277-01MSPre	COMP-1AMSPRE	2.53	100	N/A	N/A	N/A	N/A	N/A	N/A
P5277-01MS2Ins	COMP-1AMS2INS	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
P5277-01MS3Post	COMP-1AMS3POST	2.53	100	N/A	N/A	N/A	N/A	N/A	N/A
P5277-02	COMP-2A	2.51	100	N/A	N/A	N/A	N/A	N/A	N/A
P5277-03	COMP-3A	2.52	100	N/A	N/A	N/A	N/A	N/A	N/A
PB165660BL	PBS660	2.50	100	N/A	N/A	N/A	N/A	N/A	N/A
PB165660BS	LCS660	2.50	100	N/A	N/A	N/A	N/A	N/A	N/A

WORKLIST(Hardcopy Internal Chain)

WorkList Name : HEX-1217

WorkList ID : 186393

Department : Distillation

Date : 12-17-2024 10:19:21

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P5245-03	72-12016	Solid	Hexavalent Chromium	Cool 4 deg C	PSEG03	L41	12/10/2024	7196A
P5277-01	COMP-1A	Solid	Hexavalent Chromium	Cool 4 deg C	POWE02	L41	12/12/2024	7196A
P5277-02	COMP-2A	Solid	Hexavalent Chromium	Cool 4 deg C	POWE02	L41	12/12/2024	7196A
P5277-03	COMP-3A	Solid	Hexavalent Chromium	Cool 4 deg C	POWE02	L41	12/12/2024	7196A

Date/Time 12/17/2024 11:15
Raw Sample Received by: RM
Raw Sample Relinquished by: [Signature]

Date/Time 12/17/2024 13:40
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: RM

Instrument ID: IC-2

Daily Analysis Runlog For Sequence/QC Batch ID # LB133944

Review By	Niha	Review On	12/18/2024 10:49:42 AM
Supervise By	Iwona	Supervise On	12/18/2024 11:26:13 AM
SubDirectory	LB133944	Test	Anions
STD. NAME	STD REF.#		
ICAL Standard	WP110752,WP110753,WP110754,WP110755,WP110756,WP110757,WP110758		
ICV Standard	WP110759		
CCV Standard	WP111089		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP111090		
Chk Standard	WP110760,WP110761		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	STD1	STD1	CAL1	11/18/24 11:24	All standards, samples, and	NF/IZ	OK
2	STD2	STD2	CAL2	11/18/24 11:46	QC are filtered through	NF/IZ	OK
3	STD3	STD3	CAL3	11/18/24 12:07	0.45um, filter lot W3160	NF/IZ	OK
4	STD4	STD4	CAL4	11/18/24 12:29		NF/IZ	OK
5	STD5	STD5	CAL5	11/18/24 12:50		NF/IZ	OK
6	STD6	STD6	CAL6	11/18/24 13:11		NF/IZ	OK
7	STD7	STD7	CAL7	11/18/24 13:33		NF/IZ	OK
8	ICV1	ICV1	ICV	11/18/24 13:54		NF/IZ	OK
9	ICB1	ICB1	ICB	11/18/24 14:16		NF/IZ	OK
10	CCV1	CCV1	CCV	12/13/24 15:55		NF/IZ	OK
11	CCB1	CCB1	CCB	12/13/24 16:16		NF/IZ	OK
12	LB133944BLS	LB133944BLS	MB	12/13/24 16:38		NF/IZ	OK
13	LB133944BSS	LB133944BSS	LCS	12/13/24 16:59		NF/IZ	OK
14	P5277-01	COMP-1A	SAM	12/13/24 17:21		NF/IZ	OK
15	P5277-01MS	COMP-1AMS	MS	12/13/24 17:43	5ml W3091	NF/IZ	OK
16	P5277-01MSD	COMP-1AMSD	MSD	12/13/24 18:04	5ml W3091	NF/IZ	OK
17	P5277-02	COMP-2A	SAM	12/13/24 18:25		NF/IZ	OK
18	P5277-03	COMP-3A	SAM	12/13/24 18:47		NF/IZ	OK

Instrument ID: IC-2

Daily Analysis Runlog For Sequence/QC Batch ID # LB133944

Review By	Niha	Review On	12/18/2024 10:49:42 AM
Supervise By	Iwona	Supervise On	12/18/2024 11:26:13 AM
SubDirectory	LB133944	Test	Anions
STD. NAME	STD REF.#		
ICAL Standard	WP110752,WP110753,WP110754,WP110755,WP110756,WP110757,WP110758		
ICV Standard	WP110759		
CCV Standard	WP111089		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP111090		
Chk Standard	WP110760,WP110761		

19	CCV2	CCV2	CCV	12/13/24 19:08		NF/IZ	OK
20	CCB2	CCB2	CCB	12/13/24 19:30		NF/IZ	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB133973

Review By	rubina	Review On	12/18/2024 8:47:03 AM
Supervise By	Iwona	Supervise On	12/18/2024 11:26:38 AM
SubDirectory	LB133973	Test	Ammonia
STD. NAME	STD REF.#		
ICAL Standard	WP111107		
ICV Standard	WP111109		
CCV Standard	WP111108		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP111092		
Chk Standard	WP110416,WP110019,WP108709,WP108840		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	0.0PPM	0.0PPM	CAL1	12/17/24 09:19		rubina	OK
2	0.1PPM	0.1PPM	CAL2	12/17/24 09:19		rubina	OK
3	0.2PPM	0.2PPM	CAL3	12/17/24 09:19		rubina	OK
4	0.4PPM	0.4PPM	CAL4	12/17/24 09:19		rubina	OK
5	1.0PPM	1.0PPM	CAL5	12/17/24 09:19		rubina	OK
6	1.3PPM	1.3PPM	CAL6	12/17/24 09:19		rubina	OK
7	2.0PPM	2.0PPM	CAL7	12/17/24 09:19		rubina	OK
8	ICV1	ICV1	ICV	12/17/24 10:10		rubina	OK
9	ICB1	ICB1	ICB	12/17/24 10:10		rubina	OK
10	CCV1	CCV1	CCV	12/17/24 10:10		rubina	OK
11	CCB1	CCB1	CCB	12/17/24 10:10		rubina	OK
12	RL	RL	SAM	12/17/24 10:10		rubina	OK
13	PB165645BL	PB165645BL	MB	12/17/24 10:10		rubina	OK
14	PB165645BS	PB165645BS	LCS	12/17/24 10:20		rubina	OK
15	P5277-01	COMP-1A	SAM	12/17/24 10:20		rubina	OK
16	P5277-01DUP	COMP-1ADUP	DUP	12/17/24 10:20		rubina	OK
17	P5277-01MS	COMP-1AMS	MS	12/17/24 10:20		rubina	OK
18	P5277-01MSD	COMP-1AMSD	MSD	12/17/24 10:20		rubina	OK

Instrument ID: KONELAB

Daily Analysis Runlog For Sequence/QC Batch ID # LB133973

Review By	rubina	Review On	12/18/2024 8:47:03 AM
Supervise By	Iwona	Supervise On	12/18/2024 11:26:38 AM
SubDirectory	LB133973	Test	Ammonia
STD. NAME	STD REF.#		
ICAL Standard	WP111107		
ICV Standard	WP111109		
CCV Standard	WP111108		
ICSA Standard	N/A		
CRI Standard	N/A		
LCS Standard	WP111092		
Chk Standard	WP110416,WP110019,WP108709,WP108840		

19	P5277-02	COMP-2A	SAM	12/17/24 10:20		rubina	OK
20	P5277-03	COMP-3A	SAM	12/17/24 10:20		rubina	OK
21	CCV2	CCV2	CCV	12/17/24 10:26		rubina	OK
22	CCB2	CCB2	CCB	12/17/24 10:26		rubina	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB133981

Review By	rubina	Review On	12/17/2024 3:57:46 PM
Supervise By	Iwona	Supervise On	12/18/2024 11:25:34 AM
SubDirectory	LB133981	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	WP111113,WP110380,WP110381,WP108645		

Sr#	SampleId	ClientID	QcType	Date	Comment	Operator	Status
1	CAL1	CAL1	CAL	12/17/24 15:00		rubina	OK
2	CAL2	CAL2	CAL	12/17/24 15:01		rubina	OK
3	CAL3	CAL3	CAL	12/17/24 15:02		rubina	OK
4	CAL4	CAL4	CAL	12/17/24 15:03		rubina	OK
5	CAL5	CAL5	CAL	12/17/24 15:04		rubina	OK
6	CAL6	CAL6	CAL	12/17/24 15:05		rubina	OK
7	CAL7	CAL7	CAL	12/17/24 15:06		rubina	OK
8	ICV	ICV	ICV	12/17/24 15:07		rubina	OK
9	ICB	ICB	ICB	12/17/24 15:08		rubina	OK
10	CCV1	CCV1	CCV	12/17/24 15:09		rubina	OK
11	CCB1	CCB1	CCB	12/17/24 15:10		rubina	OK
12	RL Check	RL Check	SAM	12/17/24 15:11		rubina	OK
13	PB165660BL	PB165660BL	MB	12/17/24 15:12		rubina	OK
14	PB165660BS	PB165660BS	LCS	12/17/24 15:13		rubina	OK
15	P5245-03	72-12016	SAM	12/17/24 15:14		rubina	OK
16	P5277-01	COMP-1A	SAM	12/17/24 15:15		rubina	OK
17	P5277-01DUP	COMP-1ADUP	DUP	12/17/24 15:16		rubina	OK
18	P5277-01MSPre	COMP-1AMS	MS	12/17/24 15:17		rubina	OK

Instrument ID: SPECTROPHOTOMETER-1

Daily Analysis Runlog For Sequence/QC Batch ID # LB133981

Review By	rubina	Review On	12/17/2024 3:57:46 PM
Supervise By	Iwona	Supervise On	12/18/2024 11:25:34 AM
SubDirectory	LB133981	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	WP111113,WP110380,WP110381,WP108645		

19	P5277-01MS2Ins	COMP-1AMS	MS	12/17/24 15:18		rubina	OK
20	P5277-01MS3Post	COMP-1AMS	MS	12/17/24 15:19		rubina	OK
21	P5277-02	COMP-2A	SAM	12/17/24 15:20		rubina	OK
22	P5277-03	COMP-3A	SAM	12/17/24 15:21		rubina	OK
23	CCV2	CCV2	CCV	12/17/24 15:22		rubina	OK
24	CCB2	CCB2	CCB	12/17/24 15:23		rubina	OK



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 12/16/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 12/13/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:25
Out Date: 12/14/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB133946

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
P5277-01	COMP-1A	1	1.15	8.66	9.81	8.81	88.5	
P5277-02	COMP-2A	2	1.16	8.64	9.8	7.98	78.9	
P5277-03	COMP-3A	3	1.19	8.45	9.64	8.79	89.9	
P5277-04	SB-13	4	1.14	8.61	9.75	8.89	90.0	
P5277-05	SB-14	5	1.15	8.81	9.96	9.14	90.7	
P5277-06	SB-15	6	1.18	8.74	9.92	9.08	90.4	
P5277-07	SB-16	7	1.15	8.81	9.96	8.68	85.5	
P5277-08	SB-17	8	1.12	8.86	9.98	7.98	77.4	
P5277-09	SB-18	9	1.16	8.74	9.9	8.34	82.2	
P5277-10	SB-19	10	1.14	8.83	9.97	8.42	82.4	
P5277-11	SB-20	11	1.19	8.52	9.71	8.13	81.5	
P5277-12	SB-21	12	1.17	8.72	9.89	9.05	90.4	
P5277-13	SB-22	13	1.15	8.80	9.95	9.03	89.5	
P5277-14	SB-23	14	1.14	8.61	9.75	8.51	85.6	
P5277-15	SB-24	15	1.16	8.40	9.56	8.68	89.5	
P5279-01	ROCKAWAY-PARK	16	1.18	8.47	9.65	9.11	93.6	
P5279-03	ROCKAWAY-PARK	17	1.15	8.50	9.65	9.14	94.0	
P5287-01	STONES-A	18	1.00	1.00	2.00	2.00	100.0	stone sample, 100 % solids
P5287-02	STONES-A-E2	19	1.00	1.00	2.00	2.00	100.0	stone sample, 100 % solids
P5287-03	STONES-B	20	1.00	1.00	2.00	2.00	100.0	stone sample, 100 % solids
P5287-04	STONES-B-E2	21	1.00	1.00	2.00	2.00	100.0	stone sample, 100 % solids
P5288-05	SVOC-GPC-BLANK	22	1.00	1.00	2.00	2.00	100.0	
P5288-06	PEST-GPC-BLANK	23	1.00	1.00	2.00	2.00	100.0	
P5288-07	PEST-GPC-BLANK-SPIKE	24	1.00	1.00	2.00	2.00	100.0	
P5288-08	PCB-GPC-BLANK	25	1.00	1.00	2.00	2.00	100.0	
P5288-09	PCB-GPC-BLANK-SPIKE	26	1.00	1.00	2.00	2.00	100.0	
P5288-10	SVOC-GPC2-BLANK	27	1.00	1.00	2.00	2.00	100.0	
P5288-11	PEST-GPC2-BLANK	28	1.00	1.00	2.00	2.00	100.0	



PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 12/16/2024

OVENTEMP IN Celsius(°C): 107
Time IN: 17:00
In Date: 12/13/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:25
Out Date: 12/14/2024
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC:LB133946

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
P5288-12	PEST-GPC2-BLANK-SPIKE	29	1.00	1.00	2.00	2.00	100.0	
P5288-13	PCB-GPC2-BLANK	30	1.00	1.00	2.00	2.00	100.0	
P5288-14	PCB-GPC2-BLANK-SPIKE	31	1.00	1.00	2.00	2.00	100.0	

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



SHIPPING DOCUMENTS

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Kleinfelder
 ADDRESS: 25 Gold Drive
 CITY: Hamilton STATE: NJ ZIP: 08641
 ATTENTION: Mark Warchol
 PHONE: 484-883-3892 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Duckrey School
 PROJECT NO.: 24004341.001A LOCATION: Philadelphia, PA
 PROJECT MANAGER: Mark Warchol
 e-mail: mwarchol@kleinfelder.com
 PHONE: 484-883-3892 FAX:

BILL TO: _____ PO#: _____
 ADDRESS: Same
 CITY: _____ STATE: _____ ZIP: _____
 ATTENTION: _____ PHONE: _____

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) 5 DAYS*
 HARDCOPY (DATA PACKAGE): 5 DAYS*
 EDD: 5 DAYS*

*TO BE APPROVED BY CHEMTECH
 STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☒ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B
 + Raw Data) ☐ Other _____
☐ EDD FORMAT _____

YADU Hist. Fill Clean
 Fill Package for 5

PRESERVATIVES

COMMENTS

← Specify Preservatives

A-HCl D-NaOH
 B-HNO3 E-ICE
 C-H2SO4 F-OTHER

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS
			COMP	GRAB	DATE	TIME		1	2	3	4	5	6	7	8	9	
1.	COMP-1A	Soil	✓		12/12/14	3	10:40	✓									
2.	COMP-2A		↓			↓	11:05	↓									
3.	COMP-3A		↓			↓	11:45	↓									
4.	SB-13			✓		↓	10:10	↓									
5.	SB-14			↓		↓	10:20	↓									
6.	SB-15			↓		↓	10:25	↓									
7.	SB-16			↓		↓	10:35	↓									
8.	SB-17			↓		↓	10:45	↓									
9.	SB-18		↓	↓	↓	↓	10:50	↓									
10.	SB-19		↓	↓	↓	↓	10:55	↓									

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER: 1. <u>[Signature]</u>	DATE/TIME: <u>12/12/14 15:00</u>	RECEIVED BY: 1. <u>[Signature]</u>
RELINQUISHED BY SAMPLER: 2. <u>[Signature]</u>	DATE/TIME: <u>12-13-24</u>	RECEIVED BY: 2. <u>[Signature]</u>
RELINQUISHED BY SAMPLER: 3. <u>[Signature]</u>	DATE/TIME: <u>12-13-24</u>	RECEIVED BY: 3. <u>[Signature]</u>

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 4.3°C

Comments: Put grabs on hold until further notice

Page 1 of 2

CLIENT: ☐ Hand Delivered ☒ Other FedEx
 CHEMTECH: ☐ Picked Up ☐ Field Sampling

Shipment Complete

☐ YES ☐ NO

CLIENT INFORMATION

REPORT TO BE SENT TO:

COMPANY: Kleinfelder

ADDRESS: 25 Gold Drive

CITY: Hamilton STATE: NJ ZIP: 08691

ATTENTION: Mark Warchol

PHONE: 484-883-3891 FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: Duckrey School

PROJECT NO.: 24004341.001A LOCATION: Philadelphia, PA

PROJECT MANAGER: Mark Warchol

e-mail: mwarchol@kleinfelder.com

PHONE: 484-883-3892 FAX:

CLIENT BILLING INFORMATION

BILL TO:

PO#:

ADDRESS:

CITY:

STATE:

ZIP:

ATTENTION:

PHONE:

ANALYSIS

DATA TURNAROUND INFORMATION

FAX (RUSH) 5 DAYS*

HARDCOPY (DATA PACKAGE): 5 DAYS*

EDD: 5 DAYS*

*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
- ☒ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP
- ☐ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B
- + Raw Data ☐ Other _____
- ☐ EDD FORMAT _____

PAVED HST Fill
1 2 3 4 5 6 7 8 9

PRESERVATIVES

COMMENTS

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									← Specify Preservatives		
			COMP	GRAB	DATE	TIME		E	1	2	3	4	5	6	7	8	9	A-HCl B-HNO3 C-H2SO4	D-NaOH E-ICE F-OTHER
1.	SB-20	Soil		✓	12/12/24	11:00	1	✓											
2.	SB-21	↓		↓	↓	11:15	↓	↓											
3.	SB-22	↓		↓	↓	11:25	↓	↓											
4.	SB-23	↓		↓	↓	11:30	↓	↓											
5.	SB-24	↓		↓	↓	11:40	↓	↓											
6.																			
7.																			
8.																			
9.																			
10.																			

← Specify Preservatives

A-HCl D-NaOH

B-HNO3 E-ICE

C-H2SO4 F-OTHER

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:

1. [Signature]

DATE/TIME:

12/12/24 15:00

RECEIVED BY:

1. [Signature]

Conditions of bottles or coolers at receipt:

☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP

Comments:

Put grabs on hold until further notice

RELINQUISHED BY SAMPLER:

2. FedEx

DATE/TIME:

12-13-24 11:20

RECEIVED BY:

2. [Signature]

RELINQUISHED BY SAMPLER:

3.

DATE/TIME:

RECEIVED BY:

3.

Page 2 of 2

CLIENT: ☐ Hand Delivered ☒ Other FedExCHEMTECH: ☐ Picked Up ☐ Field Sampling

Shipment Complete

☐ YES ☐ NO



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : P5277 POWE02

Order Date : 12/13/2024 11:44:00 AM

Project Mgr :

Client Name : Kleinfelder

Project Name : Tanner G. Duckrey Public S

Report Type : Results+QC

Client Contact : Mark Warchol

Receive DateTime : 12/13/2024 11:20:00 AM

EDD Type : EXCEL NOCLEANUP

Invoice Name : Kleinfelder

Purchase Order :

Hard Copy Date :

Invoice Contact : Mark Warchol

Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
P5277-01	COMP-1A	Solid	12/12/2024	10:40					
					VOCMS Group1		8260D	3 Bus. Days	
P5277-02	COMP-2A	Solid	12/12/2024	11:05					
					VOCMS Group1		8260D	3 Bus. Days	
P5277-03	COMP-3A	Solid	12/12/2024	11:45					
					VOCMS Group1		8260D	3 Bus. Days	

Relinquished By :

Date / Time : 12/13/24 12:12

Received By :

Date / Time : 12/13/24 12:12

Storage Area : VOA Refridgerator Room