

DATA PACKAGE GENERAL CHEMISTRY

PROJECT NAME: NYCDPR BUSH TERMINAL LANDFILL PIERS 1-4

TRC COMPANIES, INC.

1430 Broadway

10th Floor Suite # 1000

New York, NY - 10018

Phone No: 212-221-7822

ORDER ID: M1770

ATTENTION: James Peronto, P.E., LEED AP







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Cover Page

Order ID: M1770

Project ID: NYCDPR Bush Terminal LandFill Piers 1-4

Client: TRC Companies, Inc.

Lab Sample Number Client Sample Number M1770-01 TB-03222021 M1770-02 MW-106I M1770-03 MW-106S M1770-04 MW-106SMS M1770-05 MW-106SMSD M1770-06 MW-105D M1770-07 MW-105I M1770-08 MW-105S M1770-09 TB-03232021 M1770-10 MW-106D M1770-11 MW-104D M1770-12 MW-104I M1770-13 MW-103D M1770-14 MW-103I M1770-15 MW-101S M1770-16 MW-101I M1770-17 MW-101D M1770-18 FB-03232021 M1770-19 TB-03242021 M1770-20 MW-103S M1770-21 MW-102D M1770-22 MW-102S M1770-23 MW-102I

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.

APPROVED

MW-107I

Signature :

N. N. Pandya

By Nimisha Pandya, QA/QC Supervisor at 11:45 am, Apr 06, 2021

NYDOH CERTIFICATION NO - 11376

M1770-24

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

TRC Companies, Inc.

Project Name: NYCDPR Bush Terminal LandFill Piers 1-4

Project # N/A

Chemtech Project # M1770 Test Name: Anions Group1

A. Number of Samples and Date of Receipt:

8 Water samples were received on 03/22/2021.

10 Water samples were received on 03/23/2021.

6 Water samples were received on 03/24/2021.

B. Parameters:

According to the Chain of Custody document, the following analyses were requested: Anions Group1, Mercury, Metals ICP-TAL, METALS-TAL, SVOCMS Group1 and VOCMS Group1. This data package contains results for Anions Group1.

C. Analytical Techniques:

The analysis of Anions Group1 was based on method 300.0.

D. QA/ QC Samples:

The Holding Times were met for all analysis.

Sample MW-106I was diluted due to high concentrations for Chloride

& Sample MW-106S was diluted due to high concentrations for Chloride

& Sample MW-105D was diluted due to high concentrations for Chloride

& Sample MW-105I was diluted due to high concentrations for Chloride

& Sample MW-105S was diluted due to high concentrations for Chloride

& Sample MW-104D was diluted due to high concentrations for Chloride

& Sample MW-101S was diluted due to high concentrations for Chloride

& Sample MW-1015 was diluted due to high concentrations for Chloride

& Sample MW-101D was diluted due to high concentrations for Chloride

& Sample MW-103S was diluted due to high concentrations for Chloride

& Sample MW-102D was diluted due to high concentrations for Chloride

& Sample MW-102I was diluted due to high concentrations for Chloride

& Sample MW-107I was diluted due to high concentrations for Chloride.

The Blank Spike met requirements for all samples.

The Duplicate analysis met criteria for all samples.

The Matrix Spike (EL-509-WATER-SAMPLEMS) analysis met criteria for all samples except for Chloride due to matrix interference.

The Matrix Spike (MW-106SMS) analysis met criteria for all samples except for Chloride due to matrix interference.

The Matrix Spike (MW-106DMS) analysis met criteria for all samples except for Chloride due to matrix interference.

The Matrix Spike (MW-107IMS) analysis met criteria for all samples except for Chloride due to sample concentration of chloride.

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The Matrix Spike Duplicate(EL-509-WATER-SAMPLEMSD) analysis met criteria for all samples except for Chloride due to matrix interference.

The Matrix Spike Duplicate(MW-106SMSD) analysis met criteria for all samples except for Chloride due to matrix interference.

The Matrix Spike Duplicate(MW-106DMSD) analysis met criteria for all samples except for Chloride due to matrix interference.

The Matrix Spike Duplicate(MW-107IMSD) analysis met criteria for all samples except for Chloride due to sample concentration of chloride.

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

The Calibration met the requirements.

E. Additional Comments:

Samples# M1770-10, M1770-11, M1770-12, M1770-13, M1770-14, M1770-15, M1770-16, M1770-17, M1770-20, M1770-21, M1770-22, M1770-23, M1770-24 were analyzed with straight dilutions as per history of high concentration.

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___ N. N. Pantya

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 11:45 am, Apr 06, 2021

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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 OR | 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 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 |

QA Control # A3040961

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Sample Analysis Out Of Hold Time



GENERAL CHEMISTRY CONFORMANCE/NON-CONFORMANCE SUMMARY

CHEMTECH PROJECT NUMBER: M1770 MATRIX: Water

METHOD: 300.0

NA NO YES

1. Blank Contamination - If yes, list compounds and concentrations in each blank:

./

2. Matrix Spike Duplicate Recoveries Met Criteria

1

If not met, list those compounds and their recoveries which fall outside the acceptable range.

The Matrix Spike (MW-106SMS) analysis met criteria for all samples except for Chloride due to matrix interference.

The Matrix Spike (MW-106DMS) analysis met criteria for all samples except for Chloride due to matrix interference.

The Matrix Spike (MW-107IMS) analysis met criteria for all samples except for Chloride due to sample concentration of chloride. The Matrix Spike Duplicate(EL-509-WATER-SAMPLEMSD) analysis met criteria for all samples except for Chloride due to matrix interference.

The Matrix Spike Duplicate(MW-106SMSD) analysis met criteria for all samples except for Chloride due to matrix interference.

The Matrix Spike Duplicate(MW-106DMSD) analysis met criteria for all samples except for Chloride due to matrix interference.

The Matrix Spike Duplicate(MW-107IMSD) analysis met criteria for all samples except for Chloride due to sample concentration of chloride.

The Blank Spike met requirements for all samples. The Matrix Spike (EL-509-WATER-SAMPLEMS) analysis met criteria for all samples except for Chloride 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.

8. Digestion Holding Time Met

√

If not met, list number of days exceeded for each sample:

ADDITIONAL COMMENTS: Samples# M1770-10, M1770-11, M1770-12, M1770-13, M1770-14, M1770-15, M1770-16, M1770-17, M1770-20, M1770-21, M1770-22, M1770-23, M1770-24 were analyzed with straight dilutions as per history of high concentration.

REVIEWED

QA REVIEW

By Sohil Jodhani, QA/QC Director at 11:13 am, Apr 06, 2021

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: M1770

| | 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) | <u> </u> |
| Check chain-of-custody for proper relinquish/return of samples | <u> </u> |
| Is the chain of custody signed and complete | <u> </u> |
| Check internal chain-of-custody for proper relinquish/return of samples /sample extracts | <u>√</u> <u>√</u> <u>√</u> |
| Collect information for each project id from server. Were all requirements followed | <u> </u> |
| COVER PAGE: | |
| Do numbers of samples correspond to the number of samples in the Chain of Custody on login page | <u> </u> |
| Do lab numbers and client Ids on cover page agree with the Chain of Custody | <u> </u> |
| CHAIN OF CUSTODY: | |
| Do requested analyses on Chain of Custody agree with form I results | <u> </u> |
| Do requested analyses on Chain of Custody agree with the log-in page | <u> </u> |
| Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody | <u>√</u> <u>√</u> <u>√</u> |
| Were the samples received within hold time | <u> </u> |
| Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle | <u> </u> |
| ANALYTICAL: | |
| Was method requirement followed? | <u> </u> |
| Was client requirement followed? | <u> </u> |
| Does the case narrative summarize all QC failure? | ✓ ✓ ✓ |
| All runlogs and manual integration are reviewed for requirements | <u> </u> |
| All manual calculations and /or hand notations verified | <u> </u> |

1st Level QA Review Signature:

SOHIL JODHANI

Date: 04/02/2021

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 11:46 am, Apr 06, 2021

2nd Level QA Review Signature:

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Phone: (908) 789 8900 Fax: (908) 789 8922

LAB CHRONICLE

OrderID: M1770 OrderDate: 3/22/2021 4:40:20 PM

Client: TRC Companies, Inc. Project: NYCDPR Bush Terminal LandFill Piers 1-4

Contact: James Peronto, P.E., LEED AP Location: J52,VOA Ref. #3 Water

| LabID | ClientID | Matrix | Test | Method | Sample Date | Prep Date | Anal Date | Received |
|----------------|-----------|--------|---------------|--------|-------------------|-----------|-------------------|----------|
| M1770-02 | MW-106I | WATER | | | 03/22/21 | | | 03/22/21 |
| | | | Anions Group1 | 300.0 | 12:15 | | 03/23/21 11:54 | |
| M1770-02D L | MW-106IDL | WATER | | | 03/22/21 12:15 | | | 03/22/21 |
| - | | | Anions Group1 | 300.0 | 12.13 | | 03/23/21 16:43 | |
| M1770-03 | MW-106S | WATER | | | 03/22/21 13:30 | | | 03/22/21 |
| | | | Anions Group1 | 300.0 | | | 03/23/21 12:26 | |
| M1770-03D L | MW-106SDL | WATER | | | 03/22/21 13:30 | | | 03/22/21 |
| | | | Anions Group1 | 300.0 | | | 03/23/21 17:14 | |
| M1770-06 | MW-105D | WATER | | | 03/22/21 13:18 | | | 03/22/21 |
| | | | Anions Group1 | 300.0 | | | 03/23/21 12:58 | |
| M1770-06D L | MW-105DDL | WATER | | | 03/22/21 13:18 | | | 03/22/21 |
| | | | Anions Group1 | 300.0 | | | 03/23/21 17:46 | |
| M1770-07 | MW-105I | WATER | | | 03/22/21 15:30 | | | 03/22/21 |
| | | | Anions Group1 | 300.0 | | | 03/23/21 13:30 | |
| M1770-07D L | MW-105IDL | WATER | | | 03/22/21 15:30 | | | 03/22/21 |

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284 Sheffield Street, Mountainside, New Jersey - 07092

Phone: (908) 789 8900 Fax: (908) 789 8922

| | | | LAB CHRONI | CLE | | | |
|----------------|-----------|-------|---------------|-------|-------------------|-------------------|----------|
| | | | Anions Group1 | 300.0 | | 03/23/21 18:18 | |
| M1770-08 | MW-105S | WATER | | | 03/22/21 15:45 | | 03/22/21 |
| | | | Anions Group1 | 300.0 | 15.45 | 03/23/21 14:02 | |
| M1770-08D L | MW-105SDL | WATER | | | 03/22/21 15:45 | | 03/22/21 |
| | | | Anions Group1 | 300.0 | | 03/23/21 18:50 | |
| M1770-10 | MW-106D | WATER | | | 03/23/21 09:40 | | 03/23/21 |
| | | | Anions Group1 | 300.0 | | 03/24/21 11:16 | |
| M1770-11 | MW-104D | WATER | | | 03/23/21 10:05 | | 03/23/21 |
| | | | Anions Group1 | 300.0 | | 03/24/21 11:48 | |
| M1770-11D L | MW-104DDL | WATER | | | 03/23/21 10:05 | | 03/23/21 |
| | | | Anions Group1 | 300.0 | | 03/24/21 18:10 | |
| M1770-12 | MW-104I | WATER | | | 03/23/21 09:55 | | 03/23/21 |
| | | | Anions Group1 | 300.0 | | 03/24/21 18:42 | |
| M1770-13 | MW-103D | WATER | | | 03/23/21 11:50 | | 03/23/21 |
| | | | Anions Group1 | 300.0 | | 03/24/21 19:14 | |
| M1770-14 | MW-103I | WATER | | | 03/23/21 13:30 | | 03/23/21 |
| | | | Anions Group1 | 300.0 | | 03/24/21 19:46 | |
| M1770-15 | MW-101S | WATER | | | 03/23/21 15:50 | | 03/23/21 |
| | | | Anions Group1 | 300.0 | | 03/24/21 13:55 | |

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Phone: (908) 789 8900 Fax: (908) 789 8922

LAB CHRONICLE

| M1770-15D L | MW-101SDL | WATER | | | 03/23/21 15:50 | | 03/23/21 |
|----------------|-------------|-------|---------------|-------|-------------------|-------------------|----------|
| | | | Anions Group1 | 300.0 | | 03/24/21 20:18 | |
| M1770-16 | MW-101I | WATER | | | 03/23/21 12:30 | | 03/23/21 |
| | | | Anions Group1 | 300.0 | | 03/24/21 14:27 | |
| M1770-16D L | MW-101IDL | WATER | | | 03/23/21 12:30 | | 03/23/21 |
| L | | | Anions Group1 | 300.0 | 12:30 | 03/24/21 20:50 | |
| M1770-17 | MW-101D | WATER | | | 03/23/21 13:50 | | 03/23/21 |
| | | | Anions Group1 | 300.0 | | 03/24/21 14:59 | |
| M1770-17D L | MW-101DDL | WATER | | | 03/23/21 13:50 | | 03/23/21 |
| | | | Anions Group1 | 300.0 | | 03/24/21 21:22 | |
| M1770-18 | FB-03232021 | WATER | | | 03/23/21 14:45 | | 03/23/21 |
| | | | Anions Group1 | 300.0 | | 03/24/21 16:35 | |
| M1770-20 | MW-103S | WATER | | | 03/24/21 11:30 | | 03/24/21 |
| | | | Anions Group1 | 300.0 | | 03/25/21 16:15 | |
| M1770-20D L | MW-103SDL | WATER | | | 03/24/21 11:30 | | 03/24/21 |
| | | | Anions Group1 | 300.0 | | 03/26/21 12:43 | |
| M1770-21 | MW-102D | WATER | | | 03/24/21 11:30 | | 03/24/21 |
| | | | Anions Group1 | 300.0 | -2.00 | 03/25/21 16:47 | |

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Phone: (908) 789 8900 Fax: (908) 789 8922

| | | | LAB CHRONI | CLE | | | |
|----------------|-----------|-------|---------------|-------|-------------------|-------------------|----------|
| M1770-21D L | MW-102DDL | WATER | | | 03/24/21 11:30 | | 03/24/21 |
| | | | Anions Group1 | 300.0 | | 03/26/21 13:16 | |
| M1770-22 | MW-102S | WATER | | | 03/24/21 13:55 | | 03/24/21 |
| | | | Anions Group1 | 300.0 | | 03/25/21 17:19 | |
| M1770-23 | MW-102I | WATER | | | 03/24/21 13:40 | | 03/24/21 |
| | | | Anions Group1 | 300.0 | | 03/25/21 17:50 | |
| M1770-23D L | MW-102IDL | WATER | | | 03/24/21 13:40 | | 03/24/21 |
| | | | Anions Group1 | 300.0 | | 03/26/21 13:49 | |
| M1770-24 | MW-107I | WATER | | | 03/24/21 13:45 | | 03/24/21 |
| | | | Anions Group1 | 300.0 | | 03/25/21 18:22 | |
| M1770-24D L | MW-107IDL | WATER | | | 03/24/21 13:45 | | 03/24/21 |
| | | | Anions Group1 | 300.0 | | 03/26/21 14:22 | |

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SAMPLE DATA



Report of Analysis

Client: Date Collected: TRC Companies, Inc. 03/22/21 12:15 Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/22/21 SDG No.: Client Sample ID: MW-106I M1770 Lab Sample ID: M1770-02 Matrix: WATER

% Solid: 0

| Parameter | Conc. Qua | DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|-----------|---------|------------|-------|-----------|----------------|----------|
| Chloride | 1750 OR | 1 0.070 | 0.60 | mg/L | | 03/23/21 11:54 | 300.0 |

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: Date Collected: TRC Companies, Inc. 03/22/21 12:15 Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/22/21 SDG No.: Client Sample ID: MW-106IDL M1770 Lab Sample ID: M1770-02DL WATER Matrix: % Solid:

| Parameter | Conc. | Qua. | DF M | MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|-------|------|-------|-----|------------|-------|-----------|----------------|----------|
| Chloride | 1050 | D | 400 2 | 7 9 | 240 | mø/L | | 03/23/21 16:43 | 300.0 |

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: Date Collected: TRC Companies, Inc. 03/22/21 13:30 Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/22/21 SDG No.: Client Sample ID: MW-106S M1770 Lab Sample ID: M1770-03 WATER

% Solid:

Matrix:

| Parameter | Conc. Q | Qua. | DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. | |
|-----------|---------|------|---------|------------|-------|-----------|----------------|----------|--|
| Chloride | 745 | OR | 1 0.070 | 0.60 | mø/L | | 03/23/21 12:26 | 5 300.0 | |

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: TRC Companies, Inc. Date Collected: 03/22/21 13:30

Project:NYCDPR Bush Terminal LandFill Piers 1-4Date Received:03/22/21Client Sample ID:MW-106SDLSDG No.:M1770Lab Sample ID:M1770-03DLMatrix:WATER

% Solid:

| Parameter | Conc. | Qua. | DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. | |
|-----------|-------|------|----------|------------|-------|-----------|---------------|----------|--|
| Chloride | 440 | D | 100 7 00 | 60.0 | mg/L | | 03/23/21 17:1 | 4 300 0 | |

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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Lab Sample ID:

M1770-06

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

Report of Analysis

Client: TRC Companies, Inc. Date Collected: 03/22/21 13:18

Project:NYCDPR Bush Terminal LandFill Piers 1-4Date Received:03/22/21Client Sample ID:MW-105DSDG No.:M1770

% Solid:

Matrix:

WATER

| Parameter | Conc. Qua. DF MD | LOQ / CRQL | Units Pre | p Date Ana. | Ana Met. |
|-----------|------------------|------------|-----------|---------------|----------|
| Chloride | 2960 OR 1 0.0° | 70 0.60 | mg/L | 03/23/21 12:4 | 58 300.0 |

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

M1770-GENCHEM 19 of 224



Report of Analysis

Client: Date Collected: TRC Companies, Inc. 03/22/21 13:18 Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/22/21 Client Sample ID: MW-105DDL SDG No.: M1770 Lab Sample ID: M1770-06DL WATER Matrix:

% Solid: 0

| Parameter | Conc. Q | Qua. | DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|---------|------|----------|------------|-------|-----------|---------------|----------|
| Chloride | 1850 | D · | 500 34.8 | 300 | mø/L | | 03/23/21 17:4 | 6 300.0 |

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

M1770-GENCHEM 20 of 224



Report of Analysis

Client: Date Collected: TRC Companies, Inc. 03/22/21 15:30 Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/22/21 Client Sample ID: MW-105I SDG No.: M1770 Lab Sample ID: M1770-07 Matrix: WATER

% Solid:

| Parameter | Conc. | Qua. | DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. | |
|-----------|-------|------|---------|------------|-------|------------------|----------------|----------|--|
| Chloride | 737 | OR | 1 0.070 | 0.60 | mg/L | | 03/23/21 13:30 | 300.0 | |

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.

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OR = Over Range

N =Spiked sample recovery not within control limits

M1770-GENCHEM

8

11



Lab Sample ID:

M1770-07DL

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

Report of Analysis

Client:TRC Companies, Inc.Date Collected:03/22/21 15:30Project:NYCDPR Bush Terminal LandFill Piers 1-4Date Received:03/22/21Client Sample ID:MW-105IDLSDG No.:M1770

% Solid:

Matrix:

WATER

| Parameter | Conc. | Qua. | DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. | |
|-----------|-------|------|----------|------------|-------|-----------|----------------|----------|--|
| Chloride | 457 | D | 100 7.00 | 60.0 | mø/L | | 03/23/21 18:18 | 8 300.0 | |

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

M1770-GENCHEM 22 of 224



Report of Analysis

Client: TRC Companies, Inc. Date Collected: 03/22/21 15:45

Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/22/21

Client Sample ID: MW-105S SDG No.: M1770

Lab Sample ID: M1770-08 Matrix: WATER

% Solid:

| Parameter | Conc. | Qua. | DF | MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|-------|------|----|-------|------------|-------|-----------|----------------|----------|
| Chloride | 881 | OR | 1 | 0.070 | 0.60 | mg/L | | 03/23/21 14:02 | 2 300.0 |

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

M1770-GENCHEM 23 of 224



Report of Analysis

Client: Date Collected: TRC Companies, Inc. 03/22/21 15:45 Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/22/21 SDG No.: Client Sample ID: MW-105SDL M1770 Lab Sample ID: M1770-08DL WATER Matrix:

% Solid:

| Parameter | Conc. | Qua. | DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|-------|------|----------|------------|-------|-----------|----------------|----------|
| Chloride | 523 | D | 200 13.9 | 120 | mg/L | | 03/23/21 18:50 | 300.0 |

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

M1770-GENCHEM 24 of 224



Report of Analysis

Client: TRC Companies, Inc. Date Collected: 03/23/21 09:40

Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/23/21

Client Sample ID: MW-106D SDG No.: M1770

Lab Sample ID: M1770-10 Matrix: WATER

% Solid: 0

| Parameter | Conc. Qua. DF MDL | LOQ / CRQL Units | s Prep Date Date Ana. Ana Met. |
|-----------|-------------------|------------------|--------------------------------|
| Chloride | 83.6 D 20 1.40 | 12.0 mg/I | L 03/24/21 11:16 300 0 |

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

M1770-GENCHEM 25 of 224



Report of Analysis

Client: TRC Companies, Inc. Date Collected: 03/23/21 10:05

Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/23/21

Client Sample ID: MW-104D SDG No.: M1770
Lab Sample ID: M1770-11 Matrix: WATER

% Solid: 0

| Parameter | Conc. Qua. DF MDL | LOQ / CRQL Units | Prep Date Date Ana. Ana Met. |
|-----------|-------------------|------------------|------------------------------|
| Chloride | 13800 OR 20 140 | 12.0 mg/L | 03/24/21 11:48 300 0 |

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

M1770-GENCHEM 26 of 224



Lab Sample ID:

M1770-11DL

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

Report of Analysis

Client: TRC Companies, Inc. Date Collected: 03/23/21 10:05

Project:NYCDPR Bush Terminal LandFill Piers 1-4Date Received:03/23/21Client Sample ID:MW-104DDLSDG No.:M1770

% Solid:

Matrix:

WATER

| Parameter | Conc. Qua. DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|-------------------|------------|-------|-----------|----------------|----------|
| Chloride | 8620 D 2000 139 | 1200 | mø/L | | 03/24/21 18:10 | 300.0 |

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

M1770-GENCHEM 27 of 224



Report of Analysis

Client: TRC Companies, Inc. Date Collected: 03/23/21 09:55

Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/23/21

Client Sample ID: MW-104I SDG No.: M1770
Lab Sample ID: M1770-12 Matrix: WATER

% Solid: 0

| Parameter | Conc. Qua | . DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|-----------|----------|------------|-------|-----------|----------------|----------|
| Chloride | 10 0 D | 2 0.14 | 1.20 | mg/L | | 03/24/21 18:42 | 300.0 |

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

M1770-GENCHEM 28 of 224



Report of Analysis

Client: Date Collected: TRC Companies, Inc. 03/23/21 11:50 Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/23/21 Client Sample ID: MW-103D SDG No.: M1770 Lab Sample ID: M1770-13 WATER Matrix: % Solid:

| Parameter | Conc. | Qua. | DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. | |
|-----------|-------|------|--------|------------|-------|-----------|----------------|----------|--|
| Chloride | 12.1 | D | 2 0.14 | 1.20 | mg/L | | 03/24/21 19:14 | 300.0 | |

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

M1770-GENCHEM 29 of 224



Report of Analysis

Client: Date Collected: TRC Companies, Inc. 03/23/21 13:30 Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/23/21 Client Sample ID: MW-103I SDG No.: M1770 Lab Sample ID: M1770-14 WATER Matrix:

% Solid: 0

| Parameter | Conc. Qua | . DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. | |
|-----------|-----------|----------|------------|-------|-----------|----------------|----------|--|
| Chloride | 10.4 D | 2 0.14 | 1.20 | mg/L | | 03/24/21 19:46 | 5 300.0 | |

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.

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OR = Over Range

N =Spiked sample recovery not within control limits

M1770-GENCHEM



Report of Analysis

Client: Date Collected: TRC Companies, Inc. 03/23/21 15:50 Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/23/21 Client Sample ID: MW-101S SDG No.: M1770 Lab Sample ID: M1770-15 WATER Matrix:

% Solid:

| Parameter | Conc. Qu | ıa. DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|----------|------------|------------|-------|-----------|----------------|----------|
| Chloride | 293 C | OR 20 140 | 12.0 | mø/L | | 03/24/21 13:55 | 5 300.0 |

Comments:

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

D = Dilution

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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.

OR = Over Range

N =Spiked sample recovery not within control limits

M1770-GENCHEM 31 of 224



Lab Sample ID:

M1770-15DL

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

Report of Analysis

Client: TRC Companies, Inc. Date Collected: 03/23/21 15:50

Project:NYCDPR Bush Terminal LandFill Piers 1-4Date Received:03/23/21Client Sample ID:MW-101SDLSDG No.:M1770

% Solid:

WATER

Matrix:

| Parameter | Conc. | Qua. | DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|-------|------|---------|------------|-------|-----------|----------------|----------|
| Chloride | 268 | D | 50 3.50 | 30.0 | mg/L | | 03/24/21 20:18 | 300.0 |

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

M1770-GENCHEM 32 of 224



Report of Analysis

Client: Date Collected: TRC Companies, Inc. 03/23/21 12:30 Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/23/21 Client Sample ID: MW-101I SDG No.: M1770 Lab Sample ID: M1770-16 WATER Matrix:

% Solid: 0

| Parameter | Conc. Q | Qua. | DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|---------|------|---------|------------|-------|-----------|----------------|----------|
| Chloride | 347 | OR | 20 1.40 | 12.0 | mg/L | | 03/24/21 14:27 | 300.0 |

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

M1770-GENCHEM 33 of 224



Report of Analysis

Client: Date Collected: TRC Companies, Inc. 03/23/21 12:30 Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/23/21 SDG No.: Client Sample ID: MW-101IDL M1770 Lab Sample ID: M1770-16DL WATER Matrix:

% Solid:

| Parameter | Conc. Qua | a. DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|-----------|-----------|------------|-------|-----------|----------------|----------|
| Chloride | 311 D | 50 3 50 | 30.0 | mg/L | | 03/24/21 20:50 | 300.0 |

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

M1770-GENCHEM 34 of 224



Report of Analysis

Client: TRC Companies, Inc. Date Collected: 03/23/21 13:50

Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/23/21

Client Sample ID: MW-101D SDG No.: M1770

Lab Sample ID: M1770-17 Matrix: WATER

% Solid: 0

| Parameter | Conc. Qua. DF MDL | LOQ / CRQL Units | Prep Date Date Ana. Ana Met. |
|-----------|-------------------|------------------|------------------------------|
| Chloride | 410 OR 20 140 | 12.0 mg/L | 03/24/21 14:59 300 0 |

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

M1770-GENCHEM 35 of 224



Report of Analysis

Client: TRC Companies, Inc. Date Collected: 03/23/21 13:50

Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/23/21

Client Sample ID: MW-101DDL SDG No.: M1770
Lab Sample ID: M1770-17DL Matrix: WATER

% Solid:

| Parameter | Conc. | Qua. | DF MI | L LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|-------|------|---------|--------------|-------|-----------|----------------|----------|
| Chloride | 338 | D | 100 7.0 | 60.0 | mg/L | | 03/24/21 21:22 | 300.0 |

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

M1770-GENCHEM 36 of 224



Report of Analysis

Client: TRC Companies, Inc. Date Collected: 03/23/21 14:45

Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/23/21

Client Sample ID: FB-03232021 SDG No.: M1770

Lab Sample ID: M1770-18 Matrix: WATER

% Solid:

| Parameter | Conc. Qua. | DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. | |
|-----------|------------|---------|------------|-------|-----------|---------------|----------|--|
| Chloride | 1 00 | 1 0.070 | 0.60 | mg/L | | 03/24/21 16:3 | 5 300 0 | |

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

M1770-GENCHEM 37 of 224



Report of Analysis

Client: Date Collected: TRC Companies, Inc. 03/24/21 11:30 Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/24/21 Client Sample ID: MW-103S SDG No.: M1770 Lab Sample ID: M1770-20 WATER Matrix:

% Solid:

| Parameter | Conc. Qua. | DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. | |
|-----------|------------|--------|------------|-------|-----------|----------------|----------|--|
| Chloride | 4330 OR | 5 0.35 | 3.00 | mg/L | | 03/25/21 16:15 | 300.0 | |

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

M1770-GENCHEM 38 of 224



Lab Sample ID:

M1770-20DL

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

Report of Analysis

Client: TRC Companies, Inc. Date Collected: 03/24/21 11:30

Project:NYCDPR Bush Terminal LandFill Piers 1-4Date Received:03/24/21Client Sample ID:MW-103SDLSDG No.:M1770

% Solid: 0

Matrix:

WATER

| Parameter | Conc. Qua. DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|-------------------|------------|-------|-----------|----------------|----------|
| Chloride | 2660 D 1000 69.7 | 600 | mg/L | | 03/26/21 12:43 | 300.0 |

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

M1770-GENCHEM 39 of 224



Report of Analysis

Client: TRC Companies, Inc. Date Collected: 03/24/21 11:30

Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/24/21

Client Sample ID: MW-102D SDG No.: M1770

Lab Sample ID: M1770-21 Matrix: WATER

% Solid:

| Parameter | Conc. Qu | ua. | DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|----------|-----|--------|------------|-------|-----------|----------------|----------|
| Chloride | 334 |)R | 5 0.35 | 3.00 | mø/L | | 03/25/21 16:47 | 300.0 |

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

M1770-GENCHEM 40 of 224



Lab Sample ID:

M1770-21DL

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

Report of Analysis

Client: TRC Companies, Inc. Date Collected: 03/24/21 11:30

Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/24/21 Client Sample ID: MW-102DDL SDG No.: M1770

% Solid:

WATER

Matrix:

| Parameter | Conc. Qua. | DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|------------|---------|------------|-------|-----------|----------------|----------|
| Chloride | 258 D | 50 3.50 | 30.0 | mg/L | | 03/26/21 13:16 | 300.0 |

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

M1770-GENCHEM 41 of 224



Report of Analysis

Client: Date Collected: TRC Companies, Inc. 03/24/21 13:55 Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/24/21 SDG No.: Client Sample ID: MW-102S M1770 Lab Sample ID: M1770-22 WATER Matrix:

% Solid:

| Parameter | Conc. | Qua. | DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. | |
|-----------|-------|------|--------|------------|-------|-----------|---------------|----------|--|
| Chloride | 8 30 | D | 5 0.35 | 3.00 | mg/L | | 03/25/21 17:1 | 9 300 0 | |

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: Date Collected: TRC Companies, Inc. 03/24/21 13:40 Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/24/21 SDG No.: Client Sample ID: MW-102I M1770 Lab Sample ID: M1770-23 WATER Matrix:

% Solid: 0

| Parameter | Conc. Qua | . DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|-----------|----------|------------|-------|-----------|----------------|----------|
| Chloride | 346 OF | 2 5 0.35 | 3.00 | mg/L | | 03/25/21 17:50 | 300.0 |

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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Lab Sample ID:

M1770-23DL

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

Report of Analysis

Client: TRC Companies, Inc. Date Collected: 03/24/21 13:40

Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/24/21

Client Sample ID: MW-102IDL SDG No.: M1770

% Solid: 0

Matrix:

WATER

| Parameter | Conc. | Qua. | DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|-------|------|---------|------------|-------|-----------|----------------|----------|
| Chloride | 261 | D | 50 3 50 | 30.0 | mg/L | | 03/26/21 13:49 | 300.0 |

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: Date Collected: TRC Companies, Inc. 03/24/21 13:45 Project: NYCDPR Bush Terminal LandFill Piers 1-4 Date Received: 03/24/21 SDG No.: Client Sample ID: MW-107I M1770 Lab Sample ID: M1770-24 WATER Matrix:

% Solid:

| Parameter | Conc. Qua | a. DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|-----------|-----------|-----------|------------|-------|-----------|----------------|----------|
| Chloride | 341 01 | R 5 0.35 | 3.00 | mø/L | | 03/25/21 18:22 | 300.0 |

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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Lab Sample ID:

M1770-24DL

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

Report of Analysis

Client: TRC Companies, Inc. Date Collected: 03/24/21 13:45

Project:NYCDPR Bush Terminal LandFill Piers 1-4Date Received:03/24/21Client Sample ID:MW-107IDLSDG No.:M1770

% Solid:

Matrix:

WATER

| Parameter | Conc. | Qua. | DF MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. | |
|-----------|-------|------|---------|------------|-------|-----------|---------------|----------|--|
| Chloride | 267 | D | 50 3.50 | 30.0 | mg/L | | 03/26/21 14:2 | 2 300.0 | |

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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QC RESULT SUMMARY

Initial and Continuing Calibration Verification

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 RunNo.: LB113629

| | | | ъ. к | T | % | Acceptance | Analysis |
|----------------|------|-------|--------|------------|----------|-------------|------------|
| Analyte | | Units | Result | True Value | Recoverv | Window (%R) | Date |
| • | ICV1 | /- | | 10 | | 00 110 | 00/00/0001 |
| Bromide | | mg/L | 9.8 | 10 | 98 | 90-110 | 03/09/2021 |
| Chloride | | mg/L | 2.9 | 3 | 97 | 90-110 | 03/09/2021 |
| Fluoride | | mg/L | 2 | 2 | 100 | 90-110 | 03/09/2021 |
| Nitrite | | mg/L | 2.9 | 3 | 97 | 90-110 | 03/09/2021 |
| Nitrate | | mg/L | 2.4 | 2.5 | 96 | 90-110 | 03/09/2021 |
| Sulfate | | mg/L | 14.5 | 15 | 97 | 90-110 | 03/09/2021 |
| Orthophosphate | as P | mg/L | 5 | 5 | 100 | 90-110 | 03/09/2021 |
| | CCV1 | | | | | | |
| Bromide | | mg/L | 9.3 | 10 | 93 | 90-110 | 03/23/2021 |
| Chloride | | mg/L | 2.8 | 3 | 93 | 90-110 | 03/23/2021 |
| Fluoride | | mg/L | 1.9 | 2 | 95 | 90-110 | 03/23/2021 |
| Nitrite | | mg/L | 2.8 | 3 | 93 | 90-110 | 03/23/2021 |
| Nitrate | | mg/L | 2.3 | 2.5 | 92 | 90-110 | 03/23/2021 |
| Sulfate | | mg/L | 13.7 | 15 | 91 | 90-110 | 03/23/2021 |
| Orthophosphate | as P | mg/L | 5.1 | 5 | 102 | 90-110 | 03/23/2021 |
| • | CCV2 | | | | | | |
| Bromide | | mg/L | 9.3 | 10 | 93 | 90-110 | 03/23/2021 |
| Chloride | | mg/L | 2.8 | 3 | 93 | 90-110 | 03/23/2021 |
| Fluoride | | mg/L | 1.9 | 2 | 95 | 90-110 | 03/23/2021 |
| Nitrite | | mg/L | 2.8 | 3 | 93 | 90-110 | 03/23/2021 |
| Nitrate | | mg/L | 2.3 | 2.5 | 92 | 90-110 | 03/23/2021 |
| Sulfate | | mg/L | 13.9 | 15 | 93 | 90-110 | 03/23/2021 |
| Orthophosphate | as P | mg/L | 6.4 | 5 | 128 | 90-110 | 03/23/2021 |
| - | CCV3 | | | | | | |
| Bromide | | mg/L | 9.3 | 10 | 93 | 90-110 | 03/23/2021 |
| Chloride | | mg/L | 2.8 | 3 | 93 | 90-110 | 03/23/2021 |
| Fluoride | | mg/L | 2 | 2 | 100 | 90-110 | 03/23/2021 |
| Nitrite | | mg/L | 2.8 | 3 | 93 | 90-110 | 03/23/2021 |
| Nitrate | | mg/L | 2.4 | 2.5 | 96 | 90-110 | 03/23/2021 |
| Sulfate | | mg/L | 14 | 15 | 93 | 90-110 | 03/23/2021 |
| Orthophosphate | as P | mg/L | 5.6 | 5 | 112 | 90-110 | 03/23/2021 |
| | CCV4 | | | | | | |
| Bromide | | mg/L | 9.2 | 10 | 92 | 90-110 | 03/24/2021 |
| Chloride | | mg/L | 2.8 | 3 | 93 | 90-110 | 03/24/2021 |
| Fluoride | | mg/L | 2 | 2 | 100 | 90-110 | 03/24/2021 |
| Nitrite | | mg/L | 2.8 | 3 | 93 | 90-110 | 03/24/2021 |
| Nitrate | | mg/L | 2.3 | 2.5 | 92 | 90-110 | 03/24/2021 |
| Sulfate | | mg/L | 14.1 | 15 | 94 | 90-110 | 03/24/2021 |
| Orthophosphate | as P | mg/L | 5.1 | 5 | 102 | 90-110 | 03/24/2021 |
| | CCV5 | | | | | | |
| Bromide | | mg/L | 9.6 | 10 | 96 | 90-110 | 03/24/2021 |

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Initial and Continuing Calibration Verification

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 RunNo.: LB113629

| Analyte | Units | Result | True Value | % Recovery | Acceptance Window (%R) | Analysis Date |
|---------------------|-------|--------|------------|---------------|------------------------|------------------|
| Chloride | mg/L | 2.9 | 3 | 97 | 90-110 | 03/24/2021 |
| Fluoride | mg/L | 2 | 2 | 100 | 90-110 | 03/24/2021 |
| Nitrite | mg/L | 2.9 | 3 | 97 | 90-110 | 03/24/2021 |
| Nitrate | mg/L | 2.3 | 2.5 | 92 | 90-110 | 03/24/2021 |
| Sulfate | mg/L | 14 | 15 | 93 | 90-110 | 03/24/2021 |
| Orthophosphate as P | mg/L | 5.4 | 5 | 108 | 90-110 | 03/24/2021 |
| Sample ID: CCV6 | | | | | | |
| Bromide | mg/L | 9.3 | 10 | 93 | 90-110 | 03/24/2021 |
| Chloride | mg/L | 2.8 | 3 | 93 | 90-110 | 03/24/2021 |
| Fluoride | mg/L | 2 | 2 | 100 | 90-110 | 03/24/2021 |
| Nitrite | mg/L | 2.9 | 3 | 97 | 90-110 | 03/24/2021 |
| Nitrate | mg/L | 2.3 | 2.5 | 92 | 90-110 | 03/24/2021 |
| Sulfate | mg/L | 13.6 | 15 | 91 | 90-110 | 03/24/2021 |
| Orthophosphate as P | mg/L | 5.5 | 5 | 110 | 90-110 | 03/24/2021 |

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Initial and Continuing Calibration Verification

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 RunNo.: LB113684

| | | | | % | Acceptance | Analysis |
|---------------------|-------|--------|------------|----------|-------------|------------|
| Analyte | Units | Result | True Value | Recovery | Window (%R) | Date |
| Sample ID: ICV1 | | | | | | |
| Bromide | mg/L | 9.8 | 10 | 98 | 90-110 | 03/09/2021 |
| Chloride | mg/L | 2.9 | 3 | 97 | 90-110 | 03/09/2021 |
| Fluoride | mg/L | 2 | 2 | 100 | 90-110 | 03/09/2021 |
| Nitrite | mg/L | 2.9 | 3 | 97 | 90-110 | 03/09/2021 |
| Nitrate | mg/L | 2.4 | 2.5 | 96 | 90-110 | 03/09/2021 |
| Sulfate | mg/L | 14.5 | 15 | 97 | 90-110 | 03/09/2021 |
| Orthophosphate as P | mg/L | 5 | 5 | 100 | 90-110 | 03/09/2021 |
| Sample ID: CCV1 | | | | | | _ |
| Bromide | mg/L | 9.1 | 10 | 91 | 90-110 | 03/25/2021 |
| Chloride | mg/L | 2.8 | 3 | 93 | 90-110 | 03/25/2021 |
| Fluoride | mg/L | 1.8 | 2 | 90 | 90-110 | 03/25/2021 |
| Nitrite | mg/L | 2.8 | 3 | 93 | 90-110 | 03/25/2021 |
| Nitrate | mg/L | 2.3 | 2.5 | 92 | 90-110 | 03/25/2021 |
| Sulfate | mg/L | 13.5 | 15 | 90 | 90-110 | 03/25/2021 |
| Orthophosphate as P | mg/L | 5.2 | 5 | 104 | 90-110 | 03/25/2021 |
| Sample ID: CCV2 | | | | | | |
| Bromide | mg/L | 9.2 | 10 | 92 | 90-110 | 03/25/2021 |
| Chloride | mg/L | 2.8 | 3 | 93 | 90-110 | 03/25/2021 |
| Fluoride | mg/L | 2 | 2 | 100 | 90-110 | 03/25/2021 |
| Nitrite | mg/L | 2.8 | 3 | 93 | 90-110 | 03/25/2021 |
| Nitrate | mg/L | 2.3 | 2.5 | 92 | 90-110 | 03/25/2021 |
| Sulfate | mg/L | 13.6 | 15 | 91 | 90-110 | 03/25/2021 |
| Orthophosphate as P | mg/L | 5.5 | 5 | 110 | 90-110 | 03/25/2021 |
| Sample ID: CCV3 | | | | | | |
| Bromide | mg/L | 9.2 | 10 | 92 | 90-110 | 03/26/2021 |
| Chloride | mg/L | 2.8 | 3 | 93 | 90-110 | 03/26/2021 |
| Fluoride | mg/L | 2 | 2 | 100 | 90-110 | 03/26/2021 |
| Nitrite | mg/L | 2.8 | 3 | 93 | 90-110 | 03/26/2021 |
| Nitrate | mg/L | 2.3 | 2.5 | 92 | 90-110 | 03/26/2021 |
| Sulfate | mg/L | 13.5 | 15 | 90 | 90-110 | 03/26/2021 |
| Orthophosphate as P | mg/L | 5 | 5 | 100 | 90-110 | 03/26/2021 |
| Sample ID: CCV4 | | | | | | |
| Bromide | mg/L | 9.3 | 10 | 93 | 90-110 | 03/26/2021 |
| Chloride | mg/L | 2.9 | 3 | 97 | 90-110 | 03/26/2021 |
| Fluoride | mg/L | 1.9 | 2 | 95 | 90-110 | 03/26/2021 |
| Nitrite | mg/L | 3.2 | 3 | 107 | 90-110 | 03/26/2021 |
| Nitrate | mg/L | 2.3 | 2.5 | 92 | 90-110 | 03/26/2021 |
| Sulfate | mg/L | 13.5 | 15 | 90 | 90-110 | 03/26/2021 |
| Orthophosphate as P | mg/L | 5 | 5 | 100 | 90-110 | 03/26/2021 |

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Initial and Continuing Calibration Blank Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 RunNo.: LB113629

| | | | Acceptance | MDL | | Analysis |
|-------------------------|--------------|----------------------|------------------|--------------|----------|--------------------------|
| Analyte | Units | Result | Limits | | RDL | Date |
| Sample ID: ICB1 | | | | | | |
| Bromide | mg/L | < 1.0000 | 1.0000 | 0.14 | 2 | 03/09/2021 |
| Chloride | mg/L | < 0.3000 | 0.3000 | 0.07 | 0.6 | 03/09/2021 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | 0.07 | 0.4 | 03/09/2021 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | 0.053 | 0.6 | 03/09/2021 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | 0.046 | 0.5 | 03/09/2021 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | 0.4 | 3 | 03/09/2021 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | 0.086 | 1 | 03/09/2021 |
| Sample ID: CCB1 | - | | | | _ | 22/22/222 |
| Bromide | mg/L | < 1.0000 | 1.0000 | 0.14 | 2 | 03/23/2021 |
| Chloride | mg/L | < 0.3000 | 0.3000 | 0.07 | 0.6 | 03/23/2021 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | 0.07 | 0.4 | 03/23/2021 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | 0.053 | 0.6 | 03/23/2021 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | 0.046 | 0.5 | 03/23/2021 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | 0.4 | 3 | 03/23/2021 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | 0.086 | 1 | 03/23/2021 |
| Sample ID: CCB2 | - | | | | _ | 00/00/000 |
| Bromide | mg/L | < 1.0000 | 1.0000 | 0.14 | 2 | 03/23/2021 |
| Chloride | mg/L | < 0.3000 | 0.3000 | 0.07 | 0.6 | 03/23/2021 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | 0.07 | 0.4 | 03/23/2021 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | 0.053 | 0.6 | 03/23/2021 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | 0.046 | 0.5 | 03/23/2021 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | 0.4 | 3 | 03/23/2021 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | 0.086 | 1 | 03/23/2021 |
| Sample ID: CCB3 | /- | | 1 0000 | | • | 00/00/0001 |
| Bromide | mg/L | < 1.0000 | 1.0000 | 0.14 | 2 | 03/23/2021 |
| Chloride | mg/L | < 0.3000 | 0.3000 | 0.07 | 0.6 | 03/23/2021 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | 0.07 | 0.4 | 03/23/2021 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | 0.053 | 0.6 | 03/23/2021 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | 0.046 | 0.5 | 03/23/2021 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | 0.4 | 3 | 03/23/2021 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | 0.086 | 1 | 03/23/2021 |
| Sample ID: CCB4 | /T | < 1 0000 | 1 0000 | 0.14 | 2 | 02/24/2021 |
| Bromide Chloride | mg/L mg/L | < 1.0000 < 0.3000 | 1.0000 0.3000 | 0.14 | 2 0.6 | 03/24/2021 03/24/2021 |
| | • | | | | | |
| Fluoride | mg/L | < 0.2000 | 0.2000 | 0.07 | 0.4 | 03/24/2021 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | 0.053 | 0.6 | 03/24/2021 03/24/2021 |
| Nitrate Sulfate | mg/L | < 0.2500 < 1.5000 | 0.2500 | 0.046 0.4 | 0.5 | 03/24/2021 |
| Orthophosphate as P | mg/L | < 0.5000 | 1.5000 0.5000 | 0.4 | 3 1 | 03/24/2021 |
| | mg/L | <u> </u> | 0.5000 | 0.000 | | 03/24/2021 |
| Sample ID: CCB5 Bromide | m~/T | < 1 0000 | 1.0000 | 0.14 | 2 | 03/24/2021 |
| | mg/L | < 1.0000 < 0.3000 | | | 0.6 | 03/24/2021 |
| Chloride | mg/L | | 0.3000 | 0.07 | | |
| Fluoride | mg/L | < 0.2000 | 0.2000 | 0.07 | 0.4 | 03/24/2021 |
| Nitrite Nitrata | mg/L | < 0.3000 | 0.3000 | 0.053 | 0.6 | 03/24/2021 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | 0.046 | 0.5 | 03/24/2021 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | 0.4 | 3 | 03/24/2021 |

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Initial and Continuing Calibration Blank Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 RunNo.: LB113629

| | | | Acceptance | MDL | | Analysis |
|---------------------|-------|----------|------------|-------|-----|------------|
| Analyte | Units | Result | Limits | NIDL | RDL | Date |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | 0.086 | 1 | 03/24/2021 |
| Sample ID: CCB6 | | | | | | |
| Bromide | mg/L | < 1.0000 | 1.0000 | 0.14 | 2 | 03/24/2021 |
| Chloride | mg/L | < 0.3000 | 0.3000 | 0.07 | 0.6 | 03/24/2021 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | 0.07 | 0.4 | 03/24/2021 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | 0.053 | 0.6 | 03/24/2021 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | 0.046 | 0.5 | 03/24/2021 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | 0.4 | 3 | 03/24/2021 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | 0.086 | 1 | 03/24/2021 |

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Initial and Continuing Calibration Blank Summary

Client:TRC Companies, Inc.SDG No.:M1770Project:NYCDPR Bush Terminal LandFill Piers 1-4RunNo.:LB113684

| | | | Acceptance | MDI | | Analysis |
|-------------------------|-------|----------------------|------------------|--------------|--------|--------------------------|
| Analyte | Units | Result | Limits | MDL | RDL | Date |
| Sample ID: ICB1 | | | | | | |
| Bromide | mg/L | < 1.0000 | 1.0000 | 0.14 | 2 | 03/09/2021 |
| Chloride | mg/L | < 0.3000 | 0.3000 | 0.07 | 0.6 | 03/09/2021 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | 0.07 | 0.4 | 03/09/2021 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | 0.053 | 0.6 | 03/09/2021 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | 0.046 | 0.5 | 03/09/2021 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | 0.4 | 3 | 03/09/2021 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | 0.086 | 1 | 03/09/2021 |
| Sample ID: CCB1 | | | | | | |
| Bromide | mq/L | < 1.0000 | 1.0000 | 0.14 | 2 | 03/25/2021 |
| Chloride | mg/L | < 0.3000 | 0.3000 | 0.07 | 0.6 | 03/25/2021 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | 0.07 | 0.4 | 03/25/2021 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | 0.053 | 0.6 | 03/25/2021 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | 0.046 | 0.5 | 03/25/2021 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | 0.4 | 3 | 03/25/2021 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | 0.086 | 1 | 03/25/2021 |
| Sample ID: CCB2 | | | | | | |
| Bromide | mq/L | < 1.0000 | 1.0000 | 0.14 | 2 | 03/25/2021 |
| Chloride | mg/L | < 0.3000 | 0.3000 | 0.07 | 0.6 | 03/25/2021 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | 0.07 | 0.4 | 03/25/2021 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | 0.053 | 0.6 | 03/25/2021 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | 0.046 | 0.5 | 03/25/2021 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | 0.4 | 3 | 03/25/2021 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | 0.086 | 1 | 03/25/2021 |
| Sample ID: CCB3 | | | | | | |
| Sample ID: CCB3 Bromide | mq/L | < 1.0000 | 1.0000 | 0.14 | 2 | 03/26/2021 |
| Chloride | mg/L | < 0.3000 | 0.3000 | 0.07 | 0.6 | 03/26/2021 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | 0.07 | 0.4 | 03/26/2021 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | 0.053 | 0.6 | 03/26/2021 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | 0.046 | 0.5 | 03/26/2021 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | 0.4 | 3 | 03/26/2021 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | 0.086 | 1 | 03/26/2021 |
| | | | | | | |
| Sample ID: CCB4 | /T | < 1 0000 | 1 0000 | 0 14 | 2 | 02/26/2021 |
| Bromide Chloride | mg/L | < 1.0000 | 1.0000 | 0.14 0.07 | 0.6 | 03/26/2021 |
| | mg/L | < 0.3000 | 0.3000 | 0.07 | 0.6 | 03/26/2021 |
| Fluoride Nitrite | mg/L | < 0.2000 < 0.3000 | 0.2000 0.3000 | 0.07 | 0.4 | 03/26/2021 03/26/2021 |
| | mg/L | | | | 0.6 | |
| Nitrate Sulfate | mg/L | < 0.2500 < 1.5000 | 0.2500 1.5000 | 0.046 0.4 | 3 | 03/26/2021 03/26/2021 |
| | mg/L | < 0.5000 | 0.5000 | 0.4 | 3 1 | 03/26/2021 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | 0.000 | 1 | 03/20/2021 |

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Preparation Blank Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4

| | | | Acceptance | | | Analysis |
|----------------------|-------|----------|------------|-------|-----|------------|
| Analyte | Units | Result | Limits | MDL | RDL | Date |
| Sample ID: LB113629E | BLW | | | | | |
| Bromide | mg/L | < 1.0000 | 1.0000 | 0.14 | 2 | 03/23/2021 |
| Chloride | mg/L | < 0.3000 | 0.3000 | 0.07 | 0.6 | 03/23/2021 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | 0.07 | 0.4 | 03/23/2021 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | 0.053 | 0.6 | 03/23/2021 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | 0.046 | 0.5 | 03/23/2021 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | 0.4 | 3 | 03/23/2021 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | 0.086 | 1 | 03/23/2021 |
| Sample ID: LB113629E | BLW2 | | | | | |
| Bromide | mg/L | < 1.0000 | 1.0000 | 0.14 | 2 | 03/24/2021 |
| Chloride | mg/L | < 0.3000 | 0.3000 | 0.07 | 0.6 | 03/24/2021 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | 0.07 | 0.4 | 03/24/2021 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | 0.053 | 0.6 | 03/24/2021 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | 0.046 | 0.5 | 03/24/2021 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | 0.4 | 3 | 03/24/2021 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | 0.086 | 1 | 03/24/2021 |
| Sample ID: LB113684E | BLW | | | | | |
| Bromide | mg/L | < 1.0000 | 1.0000 | 0.14 | 2 | 03/25/2021 |
| Chloride | mg/L | < 0.3000 | 0.3000 | 0.07 | 0.6 | 03/25/2021 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | 0.07 | 0.4 | 03/25/2021 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | 0.053 | 0.6 | 03/25/2021 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | 0.046 | 0.5 | 03/25/2021 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | 0.4 | 3 | 03/25/2021 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | 0.086 | 1 | 03/25/2021 |
| Sample ID: LB113684E | BLW2 | | | | | |
| Bromide | mg/L | < 1.0000 | 1.0000 | 0.14 | 2 | 03/26/2021 |
| Chloride | mg/L | < 0.3000 | 0.3000 | 0.07 | 0.6 | 03/26/2021 |
| Fluoride | mg/L | < 0.2000 | 0.2000 | 0.07 | 0.4 | 03/26/2021 |
| Nitrite | mg/L | < 0.3000 | 0.3000 | 0.053 | 0.6 | 03/26/2021 |
| Nitrate | mg/L | < 0.2500 | 0.2500 | 0.046 | 0.5 | 03/26/2021 |
| Sulfate | mg/L | < 1.5000 | 1.5000 | 0.4 | 3 | 03/26/2021 |
| Orthophosphate as P | mg/L | < 0.5000 | 0.5000 | 0.086 | 1 | 03/26/2021 |

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Matrix Spike Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCOPR Bush Terminal LandFill Piers 1-4 Sample ID: M1763-03

Client ID: EL-509-WATER-SAMPLEMS Percent Solids for Spike Sample: 0

| | | Acceptance | Spiked | Conc. | Sample | Conc. | Spike | Dilution | % | | Analysis |
|---------------------|-------|------------|--------|-----------|--------|-----------|-------|----------|------|------|------------|
| Analyte | Units | Limit %R | Result | Qualifier | Result | Qualifier | Added | Factor | Rec | Qual | Date |
| Bromide | mg/L | 80-120 | 11.5 | | 2.20 | | 10 | 1 | 93 | | 03/26/2021 |
| Chloride | mg/L | 80-120 | 1000 | OR | 1020 | OR | 3 | 1 | -667 | * | 03/26/2021 |
| Fluoride | mg/L | 80-120 | 2.60 | | 1.00 | | 2 | 1 | 80 | | 03/26/2021 |
| Nitrite | mg/L | 80-120 | 3.00 | | 0.30 | J | 3 | 1 | 90 | | 03/26/2021 |
| Nitrate | mg/L | 80-120 | 6.50 | OR | 4.00 | | 2.5 | 1 | 100 | | 03/26/2021 |
| Sulfate | mg/L | 80-120 | 63.8 | OR | 50.2 | OR | 15 | 1 | 91 | | 03/26/2021 |
| Orthophosphate as P | mg/L | 80-120 | 1.50 | | 0.086 | U | 5 | 1 | 30 | * | 03/26/2021 |

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Matrix Spike Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 Sample ID: M1763-03

Client ID: EL-509-WATER-SAMPLEMSD Percent Solids for Spike Sample: 0

| | | Acceptance | Spiked | Conc. | Sample | Conc. | Spike | Dilution | % | | Analysis |
|---------------------|-------|------------|--------|-----------|--------|-----------|-------|----------|-------|------|------------|
| Analyte | Units | Limit %R | Result | Qualifier | Result | Qualifier | Added | Factor | Rec | Qual | Date |
| Bromide | mg/L | 80-120 | 11.4 | | 2.20 | | 10 | 1 | 92 | | 03/26/2021 |
| Chloride | mg/L | 80-120 | 976 | OR | 1020 | OR | 3 | 1 | -1467 | * | 03/26/2021 |
| Fluoride | mg/L | 80-120 | 2.60 | | 1.00 | | 2 | 1 | 80 | | 03/26/2021 |
| Nitrite | mg/L | 80-120 | 3.00 | | 0.30 | J | 3 | 1 | 90 | | 03/26/2021 |
| Nitrate | mg/L | 80-120 | 6.50 | OR | 4.00 | | 2.5 | 1 | 100 | | 03/26/2021 |
| Sulfate | mg/L | 80-120 | 63.8 | OR | 50.2 | OR | 15 | 1 | 91 | | 03/26/2021 |
| Orthophosphate as P | mg/L | 80-120 | 1.00 | | 0.086 | U | 5 | 1 | 20 | 78 | 03/26/2021 |

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Matrix Spike Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 **Sample ID:** M1770-03

Client ID: MW-106SMS Percent Solids for Spike Sample: 0

| | | Acceptance | Spiked | Conc. | Sample | Conc. | Spike | Dilution | % | | Analysis |
|---------------------|-------|------------|--------|-----------|--------|-----------|-------|----------|-------|------|------------|
| Analyte | Units | Limit %R | Result | Qualifier | Result | Qualifier | Added | Factor | Rec | Qual | Date |
| Bromide | mg/L | 80-120 | 11.0 | | 1.90 | J | 10 | 1 | 91 | | 03/23/2021 |
| Chloride | mg/L | 80-120 | 703 | OR | 745 | OR | 3 | 1 | -1400 | * | 03/23/2021 |
| Fluoride | mg/L | 80-120 | 3.00 | | 0.79 | | 2 | 1 | 111 | | 03/23/2021 |
| Nitrite | mg/L | 80-120 | 3.30 | | 0.053 | U | 3 | 1 | 110 | | 03/23/2021 |
| Nitrate | mg/L | 80-120 | 2.40 | | 0.046 | U | 2.5 | 1 | 96 | | 03/23/2021 |
| Sulfate | mg/L | 80-120 | 84.1 | OR | 73.1 | OR | 15 | 1 | 73 | * | 03/23/2021 |
| Orthophosphate as P | mg/L | 80-120 | 6.30 | | 0.086 | U | 5 | 1 | 126 | * | 03/23/2021 |

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Matrix Spike Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 **Sample ID:** M1770-03

Client ID: MW-106SMSD Percent Solids for Spike Sample: 0

| | | Acceptance | Spiked | Conc. | Sample | Conc. | Spike | Dilution | % | | Analysis |
|---------------------|-------|------------|--------|-----------|--------|-----------|-------|----------|-------|------|------------|
| Analyte | Units | Limit %R | Result | Qualifier | Result | Qualifier | Added | Factor | Rec | Qual | Date |
| Bromide | mg/L | 80-120 | 10.7 | | 1.90 | J | 10 | 1 | 88 | | 03/23/2021 |
| Chloride | mg/L | 80-120 | 692 | OR | 745 | OR | 3 | 1 | -1767 | * | 03/23/2021 |
| Fluoride | mg/L | 80-120 | 3.00 | | 0.79 | | 2 | 1 | 111 | | 03/23/2021 |
| Nitrite | mg/L | 80-120 | 3.20 | | 0.053 | U | 3 | 1 | 107 | | 03/23/2021 |
| Nitrate | mg/L | 80-120 | 2.30 | | 0.046 | U | 2.5 | 1 | 92 | | 03/23/2021 |
| Sulfate | mg/L | 80-120 | 83.9 | OR | 73.1 | OR | 15 | 1 | 72 | * | 03/23/2021 |
| Orthophosphate as P | mg/L | 80-120 | 6.70 | | 0.086 | U | 5 | 1 | 134 | * | 03/23/2021 |

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Matrix Spike Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 **Sample ID:** M1770-10

Client ID: MW-106DMS Percent Solids for Spike Sample: 0

| | | Acceptance | Spiked | Conc. | Sample | Conc. | Spike | Dilution | % | | Analysis |
|---------------------|-------|------------|--------|-----------|--------|-----------|-------|----------|------|------|------------|
| Analyte | Units | Limit %R | Result | Qualifier | Result | Qualifier | Added | Factor | Rec | Qual | Date |
| Bromide | mg/L | 80-120 | 22.0 | J | 2.70 | U | 10 | 20 | 220 | * | 03/24/2021 |
| Chloride | mg/L | 80-120 | 79.7 | | 83.6 | D | 3 | 20 | -130 | * | 03/24/2021 |
| Fluoride | mg/L | 80-120 | 3.00 | J | 1.40 | U | 2 | 20 | 150 | * | 03/24/2021 |
| Nitrite | mg/L | 80-120 | 6.40 | J | 1.10 | U | 3 | 20 | 213 | * | 03/24/2021 |
| Nitrate | mg/L | 80-120 | 7.70 | J | 6.10 | J | 2.5 | 20 | 64 | * | 03/24/2021 |
| Sulfate | mg/L | 80-120 | 37.1 | J | 25.5 | J | 15 | 20 | 77 | * | 03/24/2021 |
| Orthophosphate as P | mg/L | 80-120 | 1.70 | U | 1.70 | U | 5 | 20 | 0 | * | 03/24/2021 |

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Matrix Spike Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 **Sample ID:** M1770-10

Client ID: MW-106DMSD Percent Solids for Spike Sample: 0

| | | Acceptance | Spiked | Conc. | Sample | Conc. | Spike | Dilution | % | | Analysis |
|---------------------|-------|------------|--------|-----------|--------|-----------|-------|----------|------|------|------------|
| Analyte | Units | Limit %R | Result | Qualifier | Result | Qualifier | Added | Factor | Rec | Qual | Date |
| Bromide | mg/L | 80-120 | 21.5 | J | 2.70 | U | 10 | 20 | 215 | * | 03/24/2021 |
| Chloride | mg/L | 80-120 | 79.9 | | 83.6 | D | 3 | 20 | -123 | * | 03/24/2021 |
| Fluoride | mg/L | 80-120 | 2.30 | J | 1.40 | U | 2 | 20 | 115 | | 03/24/2021 |
| Nitrite | mg/L | 80-120 | 6.30 | J | 1.10 | U | 3 | 20 | 210 | * | 03/24/2021 |
| Nitrate | mg/L | 80-120 | 7.50 | J | 6.10 | J | 2.5 | 20 | 56 | * | 03/24/2021 |
| Sulfate | mg/L | 80-120 | 36.7 | J | 25.5 | J | 15 | 20 | 75 | * | 03/24/2021 |
| Orthophosphate as P | mg/L | 80-120 | 1.70 | U | 1.70 | U | 5 | 20 | 9 | * | 03/24/2021 |

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Matrix Spike Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 **Sample ID:** M1770-24

Client ID: MW-107IMS Percent Solids for Spike Sample: 0

| | | Acceptance | Spiked | Conc. | Sample | Conc. | Spike | Dilution | % | | Analysis |
|---------------------|-------|------------|--------|-----------|--------|-----------|-------|----------|------|------|------------|
| Analyte | Units | Limit %R | Result | Qualifier | Result | Qualifier | Added | Factor | Rec | Qual | Date |
| Bromide | mg/L | 80-120 | 11.5 | | 0.68 | U | 10 | 5 | 115 | | 03/25/2021 |
| Chloride | mg/L | 80-120 | 325 | OR | 341 | OR | 3 | 5 | -533 | * | 03/25/2021 |
| Fluoride | mg/L | 80-120 | 2.60 | | 0.35 | U | 2 | 5 | 130 | * | 03/25/2021 |
| Nitrite | mg/L | 80-120 | 3.20 | | 0.27 | U | 3 | 5 | 107 | | 03/25/2021 |
| Nitrate | mg/L | 80-120 | 9.80 | | 8.20 | D | 2.5 | 5 | 64 | * | 03/25/2021 |
| Sulfate | mg/L | 80-120 | 79.6 | | 70.1 | D | 15 | 5 | 63 | * | 03/25/2021 |
| Orthophosphate as P | mg/L | 80-120 | 5.50 | | 0.43 | U | 5 | 5 | 110 | | 03/25/2021 |

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Matrix Spike Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 **Sample ID:** M1770-24

Client ID: MW-107IMSD Percent Solids for Spike Sample: 0

| | | Acceptance | Spiked | Conc. | Sample | Conc. | Spike | Dilution | % | | Analysis |
|---------------------|-------|------------|--------|-----------|--------|-----------|-------|----------|------|------|------------|
| Analyte | Units | Limit %R | Result | Qualifier | Result | Qualifier | Added | Factor | Rec | Qual | Date |
| Bromide | mg/L | 80-120 | 11.5 | | 0.68 | U | 10 | 5 | 115 | | 03/25/2021 |
| Chloride | mg/L | 80-120 | 327 | OR | 341 | OR | 3 | 5 | -467 | * | 03/25/2021 |
| Fluoride | mg/L | 80-120 | 2.40 | | 0.35 | U | 2 | 5 | 120 | | 03/25/2021 |
| Nitrite | mg/L | 80-120 | 3.30 | | 0.27 | U | 3 | 5 | 110 | | 03/25/2021 |
| Nitrate | mg/L | 80-120 | 10.0 | | 8.20 | D | 2.5 | 5 | 72 | * | 03/25/2021 |
| Sulfate | mg/L | 80-120 | 79.6 | | 70.1 | D | 15 | 5 | 63 | * | 03/25/2021 |
| Orthophosphate as P | mg/L | 80-120 | 6.60 | | 0.43 | U | 5 | 5 | 132 | * | 03/25/2021 |

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Duplicate Sample Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 **Sample ID:** M1763-03

Client ID: EL-509-WATER-SAMPLEMSD Percent Solids for Spike Sample: 0

| | | Acceptance | Sample | Conc. | Duplicate | Conc. | Dilution | RPD/ | | Analysis |
|---------------------|-------|------------|--------|----------|-----------|----------|----------|------|------|------------|
| Analyte | Units | Limit | Result | Qualifie | Result | Qualifie | Factor | AD | Qual | Date |
| Fluoride | mg/L | +/-20 | 2.60 | | 2.60 | | 1 | 0 | | 03/26/2021 |
| Nitrite | mg/L | +/-20 | 3.00 | | 3.00 | | 1 | 0 | | 03/26/2021 |
| Nitrate | mg/L | +/-20 | 6.50 | OR | 6.50 | OR | 1 | 0 | | 03/26/2021 |
| Sulfate | mg/L | +/-20 | 63.8 | OR | 63.8 | OR | 1 | 0 | | 03/26/2021 |
| Bromide | mg/L | +/-20 | 11.5 | | 11.4 | | 1 | 1 | | 03/26/2021 |
| Chloride | mg/L | +/-20 | 1000 | OR | 976 | OR | 1 | 2 | | 03/26/2021 |
| Orthophosphate as P | mg/L | +/-20 | 1.50 | | 1.00 | | 1 | 40 | * | 03/26/2021 |

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Duplicate Sample Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 **Sample ID:** M1770-03

Client ID: MW-106SMSD Percent Solids for Spike Sample: 0

| | | Acceptance | Sample | Conc. | Duplicate | Conc. | Dilution | RPD/ | | Analysis |
|---------------------|-------|------------|--------|----------|-----------|----------|----------|------|------|------------|
| Analyte | Units | Limit | Result | Qualifie | Result | Qualifie | Factor | AD | Qual | Date |
| Fluoride | mg/L | +/-20 | 3.00 | | 3.00 | | 1 | 0 | | 03/23/2021 |
| Sulfate | mg/L | +/-20 | 84.1 | OR | 83.9 | OR | 1 | 0 | | 03/23/2021 |
| Chloride | mg/L | +/-20 | 703 | OR | 692 | OR | 1 | 2 | | 03/23/2021 |
| Bromide | mg/L | +/-20 | 11.0 | | 10.7 | | 1 | 3 | | 03/23/2021 |
| Nitrite | mg/L | +/-20 | 3.30 | | 3.20 | | 1 | 3 | | 03/23/2021 |
| Nitrate | mg/L | +/-20 | 2.40 | | 2.30 | | 1 | 4 | | 03/23/2021 |
| Orthophosphate as P | mg/L | +/-20 | 6.30 | | 6.70 | | 1 | 6 | | 03/23/2021 |

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Duplicate Sample Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 **Sample ID:** M1770-10

Client ID: MW-106DMSD Percent Solids for Spike Sample: 0

| | | Acceptance | Sample | Conc. | Duplicate | Conc. | Dilution | RPD/ | | Analysis |
|---------------------|-------|------------|--------|----------|-----------|----------|----------|------|------|------------|
| Analyte | Units | Limit | Result | Qualifie | Result | Qualifie | Factor | AD | Qual | Date |
| Chloride | mg/L | +/-20 | 79.7 | | 79.9 | | 20 | 0 | | 03/24/2021 |
| Sulfate | mg/L | +/-20 | 37.1 | J | 36.7 | J | 20 | 1 | | 03/24/2021 |
| Bromide | mg/L | +/-20 | 22.0 | J | 21.5 | J | 20 | 2 | | 03/24/2021 |
| Nitrite | mg/L | +/-20 | 6.40 | J | 6.30 | J | 20 | 2 | | 03/24/2021 |
| Nitrate | mg/L | +/-20 | 7.70 | J | 7.50 | J | 20 | 3 | | 03/24/2021 |
| Fluoride | mg/L | +/-20 | 3.00 | J | 2.30 | J | 20 | 26 | * | 03/24/2021 |
| Orthophosphate as P | mg/L | +/-20 | 1.70 | U | 1.70 | U | 20 | 51 | * | 03/24/2021 |

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Duplicate Sample Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 **Sample ID:** M1770-24

Client ID: MW-107IMSD Percent Solids for Spike Sample: 0

| | | Acceptance | Sample | Conc. | Duplicate | Conc. | Dilution | RPD/ | | Analysis |
|---------------------|-------|------------|--------|----------|-----------|----------|----------|------|------|------------|
| Analyte | Units | Limit | Result | Qualifie | Result | Qualifie | Factor | AD | Qual | Date |
| Bromide | mg/L | +/-20 | 11.5 | | 11.5 | | 5 | 0 | | 03/25/2021 |
| Sulfate | mg/L | +/-20 | 79.6 | | 79.6 | | 5 | 0 | | 03/25/2021 |
| Chloride | mg/L | +/-20 | 325 | OR | 327 | OR | 5 | 1 | | 03/25/2021 |
| Orthophosphate as P | mg/L | +/-20 | 5.50 | | 6.60 | | 5 | 18 | | 03/25/2021 |
| Nitrate | mg/L | +/-20 | 9.80 | | 10.0 | | 5 | 2 | | 03/25/2021 |
| Nitrite | mg/L | +/-20 | 3.20 | | 3.30 | | 5 | 3 | | 03/25/2021 |
| Fluoride | mg/L | +/-20 | 2.60 | | 2.40 | | 5 | 8 | | 03/25/2021 |

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Laboratory Control Sample Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 Run No.: LB113629

| Analyte | Units | True Value | Result | Conc. Qualifier | % Recovery | Dilution Factor | Acceptance Limit %R | Analysis Date |
|-----------------------|-------|---------------|--------|--------------------|---------------|--------------------|------------------------|------------------|
| Sample ID LB113629BSW | | | | | | | | |
| Bromide | mg/L | 10 | 9.50 | | 95 | 1 | 90-110 | 03/23/2021 |
| Chloride | mg/L | 3 | 2.80 | | 93 | 1 | 90-110 | 03/23/2021 |
| Fluoride | mg/L | 2 | 2.00 | | 100 | 1 | 90-110 | 03/23/2021 |
| Nitrite | mg/L | 3 | 2.80 | | 93 | 1 | 90-110 | 03/23/2021 |
| Nitrate | mg/L | 2.5 | 2.40 | | 96 | 1 | 90-110 | 03/23/2021 |
| Sulfate | mg/L | 15 | 14.0 | | 93 | 1 | 90-110 | 03/23/2021 |
| Orthophosphate as P | mg/L | 5 | 5.40 | | 108 | 1 | 90-110 | 03/23/2021 |

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Laboratory Control Sample Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 Run No.: LB113629

| Analyte | Units | True Value | Result | Conc. Qualifier | % Recovery | Dilution Factor | Acceptance Limit %R | Analysis Date |
|------------------------|-------|---------------|--------|--------------------|---------------|--------------------|------------------------|------------------|
| Sample ID LB113629BSW2 | | | | | | | | |
| Bromide | mg/L | 10 | 9.30 | | 93 | 1 | 90-110 | 03/24/2021 |
| Chloride | mg/L | 3 | 2.80 | | 93 | 1 | 90-110 | 03/24/2021 |
| Fluoride | mg/L | 2 | 2.00 | | 100 | 1 | 90-110 | 03/24/2021 |
| Nitrite | mg/L | 3 | 2.80 | | 93 | 1 | 90-110 | 03/24/2021 |
| Nitrate | mg/L | 2.5 | 2.30 | | 92 | 1 | 90-110 | 03/24/2021 |
| Sulfate | mg/L | 15 | 13.7 | | 91 | 1 | 90-110 | 03/24/2021 |
| Orthophosphate as P | mg/L | 5 | 5.40 | | 108 | 1 | 90-110 | 03/24/2021 |

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Laboratory Control Sample Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 Run No.: LB113684

| Analyte | Units | True Value | Result | Conc. Qualifier | % Recovery | Dilution Factor | Acceptance Limit %R | Analysis Date |
|-----------------------|-------|---------------|--------|--------------------|---------------|--------------------|------------------------|------------------|
| Sample ID LB113684BSW | | | | | | | | |
| Bromide | mg/L | 10 | 9.40 | | 94 | 1 | 90-110 | 03/25/2021 |
| Chloride | mg/L | 3 | 2.70 | | 90 | 1 | 90-110 | 03/25/2021 |
| Fluoride | mg/L | 2 | 1.90 | | 95 | 1 | 90-110 | 03/25/2021 |
| Nitrite | mg/L | 3 | 2.80 | | 93 | 1 | 90-110 | 03/25/2021 |
| Nitrate | mg/L | 2.5 | 2.30 | | 92 | 1 | 90-110 | 03/25/2021 |
| Sulfate | mg/L | 15 | 13.3 | | 89 | 1 | 90-110 | 03/25/2021 |
| Orthophosphate as P | mg/L | 5 | 5.20 | | 104 | 1 | 90-110 | 03/25/2021 |

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Laboratory Control Sample Summary

Client: TRC Companies, Inc. SDG No.: M1770

Project: NYCDPR Bush Terminal LandFill Piers 1-4 Run No.: LB113684

| Analyte | Units | True Value | Result | Conc. Oualifier | % Recovery | Dilution Factor | Acceptance Limit %R | Analysis Date |
|---------------------|-------|---------------|--------|--------------------|---------------|--------------------|------------------------|------------------|
| | Units | value | Kesuit | Qualifier | Recovery | ractor | Lillit /6K | Date |
| Sumple 1D | _ | | | | | | | |
| Bromide | mg/L | 10 | 9.20 | | 92 | 1 | 90-110 | 03/26/2021 |
| Chloride | mg/L | 3 | 2.80 | | 93 | 1 | 90-110 | 03/26/2021 |
| Fluoride | mg/L | 2 | 2.00 | | 100 | 1 | 90-110 | 03/26/2021 |
| Nitrite | mg/L | 3 | 2.80 | | 93 | 1 | 90-110 | 03/26/2021 |
| Nitrate | mg/L | 2.5 | 2.30 | | 92 | 1 | 90-110 | 03/26/2021 |
| Sulfate | mg/L | 15 | 13.6 | | 91 | 1 | 90-110 | 03/26/2021 |
| Orthophosphate as P | mg/L | 5 | 5.30 | | 106 | 1 | 90-110 | 03/26/2021 |

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RAW DATA

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70-1 300-0 03(26)2021 AM

Clear table

| ident | | concentrati | | | | | | file name | date time | Initial wt/ | Analyst |
|----------------|---------|-------------|--------|---------|--------|---------|----------|--------------|---------------|-------------|---------|
| | tion F- | on CL- | on NO2 | on BR- | on NO3 | on HPO4 | on SO4 | | | Final Vol | |
| STD1 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | _2021-03-09_ | 3/9/21 9:53 | | AM/AP |
| STD2 | 0.3800 | 0.6610 | 0.6650 | 2.3350 | 0.5890 | 0.7930 | 3.5170 | _2021-03-09_ | 3/9/21 10:25 | | AM/AP |
| STD3 | 0.8060 | 1.2430 | 1.2290 | 4.1410 | 1.0270 | 2.0680 | 6.1740 | _2021-03-09_ | 3/9/21 11:04 | | AM/AP |
| STD4 | 1.0000 | 1.4840 | 1.4780 | 5.0120 | 1.2560 | 2.5800 | 7.4420 | _2021-03-09_ | 3/9/21 11:34 | | AM/AP |
| STD5 | 2.0300 | 2.9410 | 2.9490 | 9.4860 | 2.3580 | 5.0880 | 14.1650 | _2021-03-09_ | 3/9/21 12:05 | | AM/AP |
| STD6 | 3.9820 | 5.8220 | 5.8470 | 19.5340 | 4.9180 | 10.1240 | 29.7870 | _2021-03-09_ | 3/9/21 12:36 | | AM/AP |
| STD7 | 5.0030 | 7.6490 | 7.6310 | 25.4930 | 6.3520 | 12.3470 | 37.9150 | _2021-03-09_ | 3/9/21 13:07 | | AM/AP |
| ICV | 2.0000 | 2.9430 | 2.9180 | 9.7600 | 2.4440 | 5.0450 | 14.4750 | _2021-03-09_ | 3/9/21 13:41 | | AM/AP |
| ICB | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | _2021-03-09_ | 3/9/21 14:12 | | AM/AP |
| CCV | 1.9430 | 2.7910 | 2.8230 | 9.2500 | 2.3210 | 5.1440 | 13.6880 | _2021-03-23_ | 3/23/21 9:38 | | AM/AP |
| CCB | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | _2021-03-23_ | 3/23/21 10:18 | | AM/AP |
| LB113629BLW | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 2021-03-23 | 3/23/21 10:50 | | AM/AP |
| LB113629BSW | 1.9680 | 2.8020 | 2.8310 | 9.5100 | 2.4070 | 5.4380 | 14.0060 | _2021-03-23_ | 3/23/21 11:22 | | AM/AP |
| M1770-02 | 1.6470 | 1752.5990 | 0.2280 | 4.0590 | 2.7160 | 0.2830 | 207.4370 | 2021-03-23 | 3/23/21 11:54 | | AM/AP |
| M1770-03 | 0.7900 | 745.1350 | 0.0000 | 1.8800 | 0.0000 | -0.0990 | 73.0670 | _2021-03-23_ | 3/23/21 12:26 | | AM/AP |
| M1770-06 | 0.4090 | 2958.3400 | 0.0000 | 6.6440 | 0.8640 | 0.0000 | 295.8390 | _2021-03-23_ | 3/23/21 12:58 | | AM/AP |
| M1770-07 | 1.2460 | 737.3360 | 0.0000 | 2.3320 | 0.3350 | 0.0740 | 23.3080 | _2021-03-23 | 3/23/21 13:30 | | AM/AP |
| M1770-08 | 1.4410 | 881.1290 | 0.0000 | 2.1200 | 0.2100 | -0.0960 | 244.5950 | _2021-03-23_ | 3/23/21 14:02 | | AM/AP |
| M1770-04MS | 3.0170 | 702.7930 | 3.2710 | 11.0210 | 2.4040 | 6.3310 | | _2021-03-23_ | 3/23/21 14:33 | | AM/AP |
| M1770-05MSD | 3.0330 | 692.4810 | 3.1830 | 10.6570 | 2.3450 | 6.7190 | | 2021-03-23 | 3/23/21 15:05 | | AM/AP |
| CCV | 1.9480 | 2.8130 | 2.8090 | 9.3060 | 2.3330 | 6.3620 | 13.9390 | 2021-03-23 | 3/23/21 15:37 | | AM/AP |
| CCB | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 2021-03-23 | 3/23/21 16:11 | | AM/AP |
| M1770-02DLX400 | 0.0000 | 2.6170 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | _2021-03-23 | 3/23/21 16:43 | | AM/AP |
| M1770-03DLX100 | 0.0000 | 4.3950 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 2021-03-23 | 3/23/21 17:14 | | AM/AP |
| M1770-06DLX500 | 0.0000 | 3.6980 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 2021-03-23 | 3/23/21 17:46 | | AM/AP |
| M1770-07DLX100 | 0.0000 | 4.5730 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | _2021-03-23_ | 3/23/21 18:18 | | AM/AP |
| M1770-08DLX200 | 0.0000 | 2.6150 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | _2021-03-23_ | 3/23/21 18:50 | | AM/AP |
| CCV | 2.0150 | 2.8000 | 2.8260 | 9.3200 | 2.3620 | 5.6150 | | 2021-03-23 | 3/23/21 19:22 | | AM/AP |
| CCB | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 2021-03-23 | 3/23/21 19:54 | | AM/AP |
| CCV | 2.0150 | 2.8040 | 2.8100 | 9.2060 | 2.2930 | 5.1400 | | 2021-03-24 | 3/24/21 8:55 | | AM/AP |
| CCB | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 2021-03-24 | 3/24/21 9:40 | | AM/AP |
| LB113629BLW2 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | | 2021-03-24 | 3/24/21 10:12 | | AM/AP |
| LB113629BSW2 | 2.0370 | | | 9.3060 | 2.3160 | 5.3980 | | 2021-03-24 | 3/24/21 10:44 | | AM/AP |
| | | | | | | | | | | | |



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| | <u></u> | ס | 0 | R |
|-------------|---------------|---|---------------------|--------------------|
| B :LB113629 | Inst Id :IC-1 | M | On:4/1/2021 1:38:23 | Reviewed By:apatel |

| M1770-10X20 | 0.0000 | 4.1810 | 0.0000 | 0.0000 | 0.3060 | 0.0000 | 1.2770 2021-03-24 | 3/24/21 11:16 | AM/AP |
|----------------|--------|----------|--------|--------|---------|---------|----------------------|---------------|-------|
| M1770-11X20 | 0.0000 | 691.2360 | 0.0000 | 2.0450 | 0.0000 | | | | |
| | | | | | | 0.0000 | 39.3170 _2021-03-24_ | 3/24/21 11:48 | AM/AP |
| M1770-15X20 | 0.0000 | 14.6370 | 0.0000 | 0.0000 | 0.5610 | 0.0000 | 3.9960 _2021-03-24_ | 3/24/21 13:55 | AM/AP |
| M1770-16X20 | 0.0000 | 17.3720 | 0.0000 | 0.0000 | 0.6030 | 0.0000 | 4.1490 _2021-03-24_ | 3/24/21 14:27 | AM/AP |
| M1770-17X20 | 0.0000 | 20.4750 | 0.0000 | 0.0000 | 0.6780 | 0.0000 | 4.5390 _2021-03-24_ | 3/24/21 14:59 | AM/AP |
| CCV | 1.9570 | 2.8650 | 2.9100 | 9.5920 | 2.3490 | 5.4140 | 13.9960 _2021-03-24 | 3/24/21 15:31 | AM/AP |
| CCB | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 _2021-03-24 | 3/24/21 16:03 | AM/AP |
| M1770-18 | 0.0000 | 1.0080 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 1.2560 _2021-03-24_ | 3/24/21 16:35 | AM/AP |
| M1770-10MSX20 | 0.1490 | 3.9840 | 0.3200 | 1.0990 | 0.3840 | 0.0130 | 1.8560 _2021-03-24_ | 3/24/21 17:07 | AM/AP |
| M1770-10MSDX2 | 0.1160 | 3.9950 | 0.3150 | 1.0770 | 0.3730 | 0.0220 | 1.8330 _2021-03-24 | 3/24/21 17:39 | AM/AP |
| M1770-11DLX200 | 0.0000 | 4.3120 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 _2021-03-24 | 3/24/21 18:10 | AM/AP |
| M1770-12X2 | 0.0000 | 5.0140 | 0.0000 | 0.0000 | 0.6060 | 0.0000 | 2.3140 _2021-03-24 | 3/24/21 18:42 | AM/AP |
| M1770-13X2 | 0.0000 | 6.0720 | 0.0000 | 0.0000 | 41.0810 | 0.0000 | 2.1380 _2021-03-24 | 3/24/21 19:14 | AM/AP |
| M1770-14X2 | 0.0860 | 5.1780 | 0.0000 | 0.0000 | 0.7720 | -0.1090 | 2.1680 _2021-03-24 | 3/24/21 19:46 | AM/AP |
| M1770-15DLX50 | 0.0000 | 5.3690 | 0.0000 | 0.0000 | 0.3260 | 0.0000 | 2.2070 _2021-03-24 | 3/24/21 20:18 | AM/AP |
| M1770-16DLX50 | 0.0000 | 6.2110 | 0.0000 | 0.0000 | 0.3400 | 0.0000 | 2.2450 _2021-03-24 | 3/24/21 20:50 | AM/AP |
| M1770-17DLX100 | 0.0000 | 3.3780 | 0.0000 | 0.0000 | 0.2620 | 0.0000 | 1.7250 _2021-03-24 | 3/24/21 21:22 | AM/AP |
| CCV | 1.9710 | 2.7990 | 2.8720 | 9.2970 | 2.3210 | 5.4510 | 13.6120 _2021-03-24_ | 3/24/21 21:54 | AM/AP |
| CCB | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 _2021-03-24_ | 3/24/21 22:26 | AM/AP |









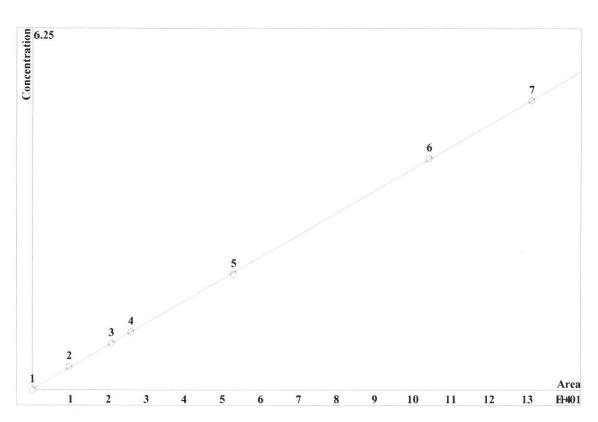


CALIBRATION OF COMPONENT F-

Method: ANIONS 03-09-21.mtw

Equation: $Q = 0.762166 \cdot A + 0.260905$

RSD: 0.935 % Correlation coefficient: 0.999952



K2 = 0K3 = 0K1 = 0.762166K0 = 0.260905

Area Base: Ref.channel: Cond

ISTD:

Linear Formula:

Weight:

| Level | Height | Area | Conc. | Vol/Dil | Retention | Used | File | | | |
|-------|--------|------|-------|---------|-----------|------|------|-----|-----|-----|
| 1 | 0 | | 0 | | 0 | | 0 | | 0 | No |
| 2 | 0.7658 | 9. | 617 | 0. | . 4 | | 20 | 5.8 | 122 | Yes |
| 3 | 1.568 | 2 | 0.8 | 0. | . 8 | | 20 | 5.8 | 122 | Yes |
| 4 | 2.051 | 2 | 5.9 | | 1 | | 20 | 5.8 | 122 | Yes |
| 5 | 4.191 | 52 | .93 | | 2 | | 20 | 5.8 | 22 | Yes |
| 6 | 8.519 | 10 | 4.1 | | 4 | | 20 | 5.8 | 22 | Yes |
| 7 | 10.98 | 13 | 0.9 | | 5 | | 20 | 5.8 | 22 | Yes |

JC-1 300.0 3/09/2021

Reviewed By:apatel On:4/1/2021 1:38:23 PM Inst Id :IC-1 LB :LB113629

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CALIBRATION OF COMPONENT CL-

Method:

ANIONS 03-09-21.mtw

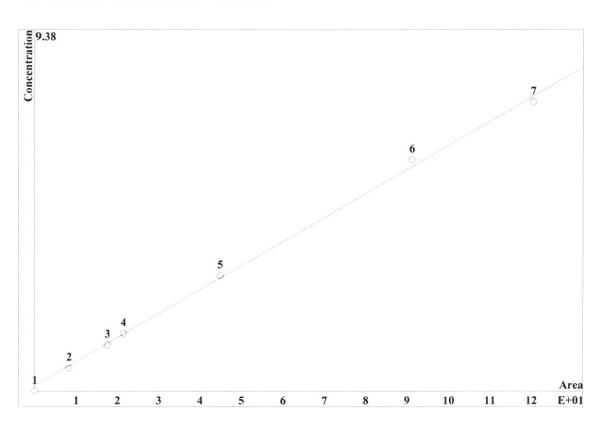
Equation:

 $Q = 1.24598 \cdot A + 2.87797$

RSD:

3.808 %

Correlation coefficient: 0.999209



K3 = 0Base:

K2 = 0Area

K1 = 1.24598

K0 = 2.87797

Ref.channel: Cond

ISTD:

Formula: Linear Weight: 1

| Level | Height | Area Conc. | Vol/Dil Retention | Used File | | |
|-------|--------|------------|-------------------|-----------|------|-----|
| 1 | 0 | 0 | 0 | 0 | 0 | No |
| 2 | 0.6501 | 8.293 | 0.6 | 20 | 9.31 | Yes |
| 3 | 1.365 | 17.65 | 1.2 | 20 | 9.31 | Yes |
| 4 | 1.705 | 21.51 | 1.5 | 20 | 9.31 | Yes |
| 5 | 3.511 | 44.9 | 3 | 20 | 9.31 | Yes |
| 6 | 7.471 | 91.14 | 6 | 20 | 9.31 | Yes |
| 7 | 9.724 | 120.5 | 7.5 | 20 | 9.31 | Yes |

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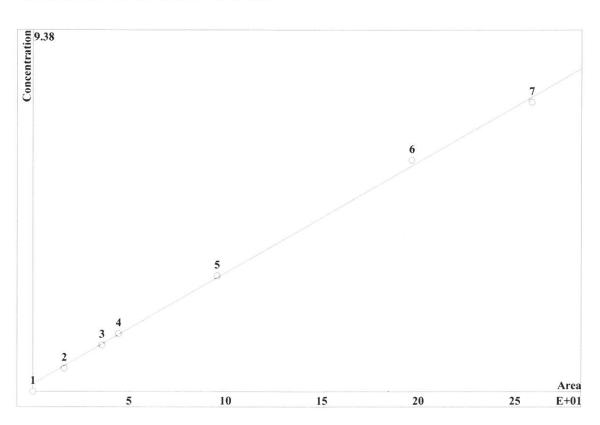
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CALIBRATION OF COMPONENT NO2

ANIONS 03-09-21.mtw Method:

Equation: $Q = 0.574737 \cdot A + 3.98858$

3.346 % RSD: Correlation coefficient: 0.999389



K3 = 0K2 = 0 K1 = 0.574737K0 = 3.98858

Base: Area Ref.channel: Cond

ISTD:

Linear Formula:

Weight: 1

| Level | Height | Area Cond | C. Vol/Dil | Retention Use | d File | | |
|-------|--------|-----------|------------|---------------|--------|-------|-----|
| 1 | 0 | 0 | | 0 | 0 | 0 | No |
| 2 | 1.027 | 16.22 | 0 . | 6 | 20 | 11.45 | Yes |
| 3 | 2.244 | 35.84 | 1. | 2 | 20 | 11.45 | Yes |
| 4 | 2.787 | 44.5 | 1. | 5 | 20 | 11.45 | Yes |
| 5 | 5.661 | 95.7 | | 3 | 20 | 11.45 | Yes |
| 6 | 11.53 | 196.5 | | 6 | 20 | 11.45 | Yes |
| 7 | 14.55 | 258.6 | 7 . | 5 | 20 | 11.45 | Yes |

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Page 4; _2021-03-09_13-07.chw; 09/03/2021 14:11:17

CALIBRATION OF COMPONENT BR-

Method:

ANIONS 03-09-21.mtw

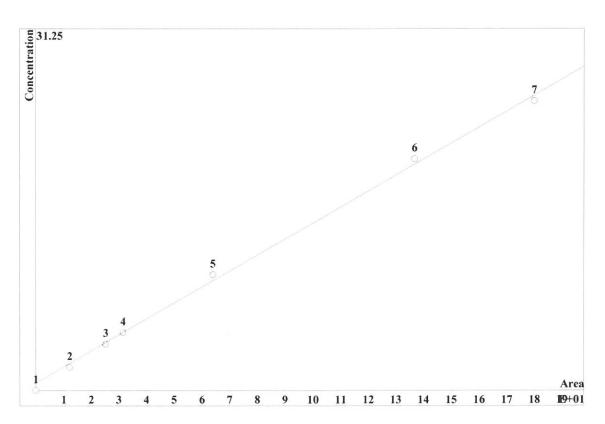
Equation:

 $Q = 2.76027 \cdot A + 13.1683$

RSD:

4.205 %

Correlation coefficient: 0.999036



K3 = 0

K2 = 0Area

K1 = 2.76027

K0 = 13.1683

Base: Ref.channel: Cond

ISTD:

Formula: Linear Weight: 1 Weight:

1

| Level | Height | Area Con | vol/Dil | Retention | Used File | | |
|-------|--------|----------|---------|-----------|-----------|-------|-----|
| 1 | 0 | C |) | 0 | 0 | 0 | No |
| 2 | 0.6194 | 12.15 |) | 2 | 20 | 15.03 | Yes |
| 3 | 1.323 | 25.23 | } | 4 | 20 | 15.03 | Yes |
| 4 | 1.672 | 31.54 | | 5 | 20 | 15.03 | Yes |
| 5 | 3.458 | 63.96 | | 10 | 20 | 15.03 | Yes |
| 6 | 7.336 | 136.8 | | 20 | 20 | 15.03 | Yes |
| 7 | 9.456 | 179.9 |) | 25 | 20 | 15.03 | Yes |
| | | | | | | | |

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CALIBRATION OF COMPONENT NO3

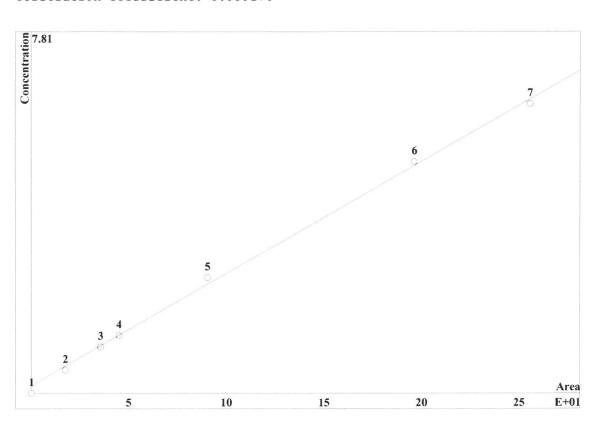
Method:

ANIONS 03-09-21.mtw

Equation:

 $Q = 0.483932 \cdot A + 3.34418$

RSD: 3.902 % Correlation coefficient: 0.999170



K1 = 0.483932

K3 = 0 K2 = 0

Base: Area

Base: Area Ref.channel: Cond

1

ISTD:

Formula:

Linear

Weight:

| Level | Height | Area | Conc. Vo | ol/Dil | Retention | Used | File | | | |
|-------|--------|------|----------|--------|-----------|------|------|---|-------|-----|
| 1 | 0 | | 0 | | 0 | | 0 | | 0 | No |
| 2 | 0.7355 | 17 | .43 | 0. | 5 | | 20 | | 17.65 | Yes |
| 3 | 1.552 | 35 | .52 | | 1 | | 20 | | 17.65 | Yes |
| 4 | 1.953 | 45 | .01 | 1.2 | 2.5 | | 20 | | 17.65 | Yes |
| 5 | 4.007 | 90 | .53 | 2. | 5 | | 20 | | 17.65 | Yes |
| 6 | 8.482 | 19 | 6.4 | | 5 | | 20 | | 17.65 | Yes |
| 7 | 10.98 | 25 | 5.6 | 6.2 | 2.5 | | 20 | 1 | 17.65 | Yes |

K0 = 3.34418

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CALIBRATION OF COMPONENT HPO4

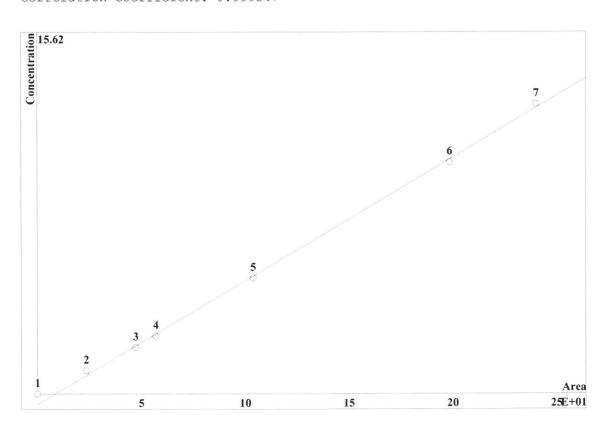
Method:

ANIONS 03-09-21.mtw

Equation:

 $Q = 1.06642 \cdot A - 9.04155$

RSD: Correlation coefficient: 0.999547



K3 = 0

K2 = 0Area

K1 = 1.06642 K0 = -9.04155

Base:

Ref.channel: Cond

ISTD:

Linear

Formula: Weight:

1

| Level | Height | Area | Conc. | Vol/Dil | Retention | Used | File | | | |
|-------|--------|------|-------|---------|-----------|------|------|---|-------|-----|
| 1 | 0 | | 0 | | 0 | | 0 | | 0 | No |
| 2 | 0.6282 | 2 | 23.35 | | 1 | | 20 | 2 | 23.03 | Yes |
| 3 | 1.326 | 4 | 17.25 | | 2 | | 20 | 2 | 23.03 | Yes |
| 4 | 1.621 | E | 66.87 | 2 | . 5 | | 20 | 2 | 23.03 | Yes |
| 5 | 3.08 | 1 | .03.9 | | 5 | | 20 | 2 | 23.03 | Yes |
| 6 | 6.03 | 1 | 98.4 | | 10 | | 20 | 4 | 23.03 | Yes |
| 7 | 7.557 | | 240 | 12 | . 5 | | 20 | 2 | 23.03 | Yes |

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CALIBRATION OF COMPONENT SO4

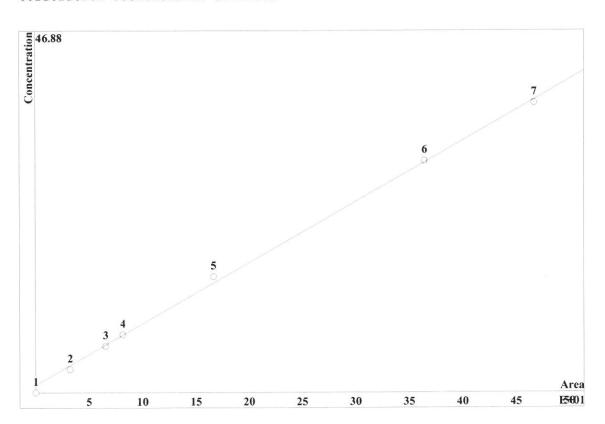
Method:

ANIONS 03-09-21.mtw

Equation:

 $Q = 1.58171 \cdot A + 19.4902$

3.342 % RSD: Correlation coefficient: 0.999391



K3 = 0K2 = 0

Area

K1 = 1.58171

Base: Ref.channel: Cond

ISTD:

Formula:

Linear

Weight:

1

| Level | Height | Area | Conc. | Vol/Dil | Retenti | on Used File | | |
|-------|--------|------|-------|---------|---------|--------------|-------|-----|
| 1 | 0 | | 0 | | 0 | 0 | 0 | No |
| 2 | 1.068 | | 32.15 | | 3 | 20 | 26.99 | Yes |
| 3 | 2.214 | | 65.75 | | 6 | 20 | 26.99 | Yes |
| 4 | 2.773 | | 81.78 | 7 | .5 | 20 | 26.99 | Yes |
| 5 | 5.719 | | 166.8 | | 15 | 20 | 26.99 | Yes |
| 6 | 12.24 | | 364.3 | | 30 | 20 | 26.99 | Yes |
| 7 | 15.74 | | 467.1 | 37 | .5 | 20 | 26.99 | Yes |

K0 = 19.4902

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Report date: Printed by:

3/9/2021 2:10:21 PM

wet

Ident:

STD1

Analysis from:

3/9/2021 9:53:04 AM

File:

2021-03-09

Last save: 3/9/2021 2:10:10 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/9/2021 1:04:34 PM

Run operator: Analysis number: wet 73549

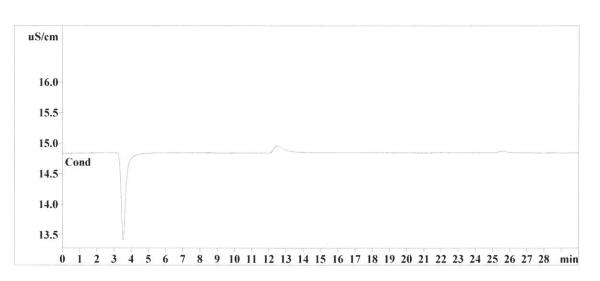
SAMPLE:

AM/AP

Vial number:

Volume: Dilution: Amount:

20.0 µL 1.00 1.0000



Quantitation method: Custom

No peaks

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 81 of 224 Report date: Printed by:

3/9/2021 2:10:26 PM

wet

Ident:

STD2

Analysis from:

3/9/2021 10:25:57 AM

File:

2021-03-09

Last save: 3/9/2021 2:10:10 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/9/2021 1:04:34 PM

Run operator: Analysis number: wet 73550

SAMPLE:

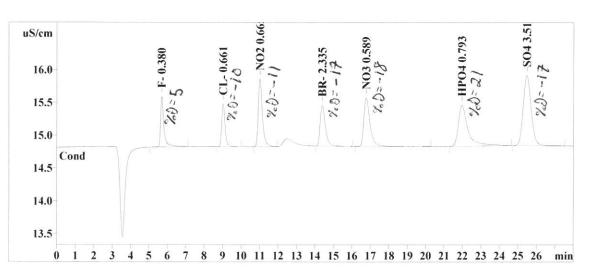
:
Vial number:
Volume:

AM/AP

 Volume:
 20.0 μL

 Dilution:
 1.00

 Amount:
 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|------------------|----------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 5.69 | 0.163 | 0.77 | 13.93 | 9.617 | 8.07 | 0. |
| 2 | 9.01 | 0.189 | 0.65 | 11.83 | 8.293 | 6.96 | 0. |
| 3 | 11.00 | 0.230 | 1.03 | 18.68 | 16.217 | 13.60 | 0. |
| 4 | 14.39 | 0.290 | 0.62 | 11.27 | 12.146 | 10.19 | 0. |
| 5 | 16.76 | 0.343 | 0.73 | 13.37 | 17.428 | 14.62 | 0. |
| 6 | 21.96 | 0.485 | 0.63 | 11.43 | 23.346 | 19.59 | 0. |
| 7 | 25.47 | 0.456 | 1.07 | 19.42 | 32.154 | 26.98 | 0. |
| 7 | 28.00 | 0.308 | 5.49 | 99.93 | 119.201 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 82 of 224

Report date: 3/9/2021 2:10:32 PM

Printed by: wet

Ident: STD3

Analysis from: 3/9/2021 11:04:02 AM

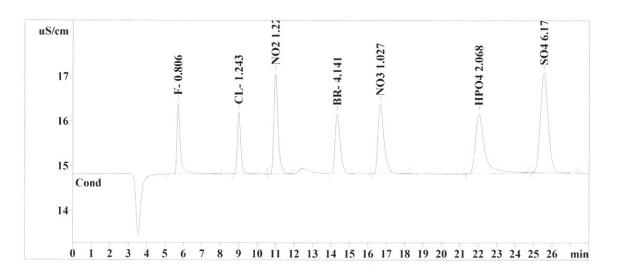
File: __2021-03-09_ Last save: 3/9/2021 2:10:10 PM

Method: ANIONS 03-09-21.mtw Last save: 3/9/2021 1:04:34 PM

Run operator: wet Analysis number: 73551

SAMPLE:

: AM/AP
Vial number: 4
Volume: 20.0 µL
Dilution: 1.00
Amount: 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 96 | uS/cm*sec | 90 | |
| 1 | 5.70 | 0.167 | 1.57 | 13.53 | 20.801 | 8.39 | 0. |
| 2 | 9.00 | 0.191 | 1.36 | 11.77 | 17.647 | 7.11 | 0. |
| 3 | 10.99 | 0.233 | 2.24 | 19.35 | 35.842 | 14.45 | 0. |
| 4 | 14.32 | 0.284 | 1.32 | 11.41 | 25.232 | 10.17 | 0. |
| 5 | 16.65 | 0.339 | 1.55 | 13.39 | 35.517 | 14.32 | 0. |
| 6 | 22.02 | 0.473 | 1.33 | 11.43 | 47.255 | 19.05 | 0. |
| 7 | 25.54 | 0.453 | 2.21 | 19.09 | 65.751 | 26.51 | 0. |
| 7 | 28.00 | 0.306 | 11.59 | 99.98 | 248.045 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 83 of 224

1

2

3

5

6

8

10

11

12

1

Report date: Printed by:

3/9/2021 2:10:43 PM

wet

Ident:

STD4

Analysis from:

3/9/2021 11:34:57 AM

File:

2021-03-09 Last save: 3/9/2021 2:10:10 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/9/2021 1:04:34 PM

Run operator: Analysis number: wet 73552

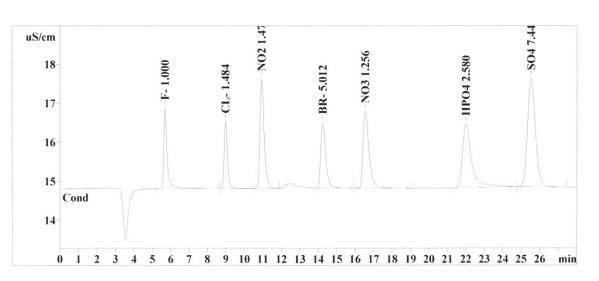
SAMPLE:

AM/AP

Vial number: Volume:

5 20.0 μL

Dilution: Amount: 1.00



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 8 | uS/cm*sec | 용 | |
| 1 | 5.69 | 0.163 | 2.05 | 14.08 | 25.900 | 8.43 | 0 |
| 2 | 8.98 | 0.187 | 1.70 | 11.71 | 21.511 | 7.00 | 0 |
| 3 | 10.93 | 0.233 | 2.79 | 19.14 | 44.499 | 14.49 | 0. |
| 4 | 14.23 | 0.281 | 1.67 | 11.48 | 31.544 | 10.27 | 0. |
| 5 | 16.54 | 0.340 | 1.95 | 13.41 | 45.008 | 14.66 | 0. |
| 6 | 22.00 | 0.468 | 1.62 | 11.13 | 56.868 | 18.52 | 0. |
| 7 | 25.53 | 0.450 | 2.77 | 19.04 | 81.777 | 26.63 | 0. |
| 7 | 28.00 | 0.303 | 14.56 | 99.99 | 307.107 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 84 of 224

Report date: Printed by:

3/9/2021 2:10:49 PM

wet

Ident:

STD5

Analysis from:

3/9/2021 12:05:51 PM

File:

2021-03-09

Last save: 3/9/2021 2:10:10 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/9/2021 1:04:34 PM

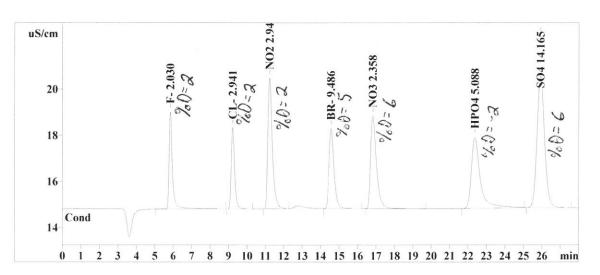
Run operator: Analysis number: wet 73553

SAMPLE:

 Volume:
 20.0 μ

 Dilution:
 1.00

 Amount:
 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|---------|--------|--------|-----------|--------|---|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 96 | uS/cm*sec | 8 | |
| 1 | 5.84 | 0.166 | 4.19 | 14.14 | 52.926 | 8.55 | 0 |
| 2 | 9.22 | 0.190 | 3.51 | 11.85 | 44.902 | 7.26 | 0 |
| 3 | 11.22 | 0.246 | 5.66 | 19.11 | 95.698 | 15.47 | 0 |
| 4 | 14.56 | 0.276 | 3.46 | 11.67 | 63.963 | 10.34 | 0 |
| 5 | 16.81 | 0.333 | 4.01 | 13.52 | 90.525 | 14.63 | 0 |
| 6 | 22.36 | 0.456 | 3.08 | 10.39 | 103.905 | 16.79 | 0 |
| 7 | 25.91 | 0.445 | 5.72 | 19.30 | 166.787 | 26.96 | 0 |
| 7 | 28.00 | 0.302 | 29.63 | 99.99 | 618.707 | 100.00 | 0 |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 85 of 224

Report date: Printed by:

3/9/2021 2:10:54 PM

wet

Ident:

STD6

Analysis from:

3/9/2021 12:36:46 PM

File:

2021-03-09

2021-03-09

Last save: 3/9/2021 2:10:10 PM

Method:

ANIONS 03-09-21.mtw wet

Last save: 3/9/2021 1:04:34 PM

Run operator: Analysis number:

73554

SAMPLE:

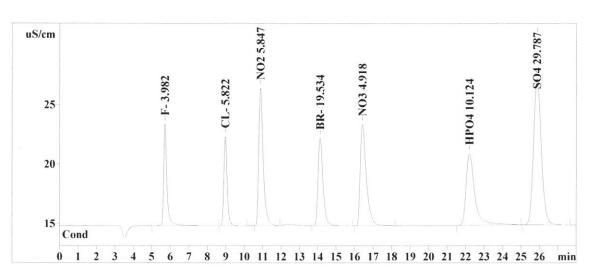
AM/AP

Vial number:
Volume:

7 20.0 μL

Volume: Dilution: Amount:

1.00



| Quanti | tation method: | Custom | | | | | |
|--------|------------------|----------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 5.71 | 0.162 | 8.52 | 13.83 | 104.142 | 8.09 | 0. |
| 2 | 8.96 | 0.180 | 7.47 | 12.12 | 91.142 | 7.08 | 0. |
| 3 | 10.87 | 0.249 | 11.53 | 18.72 | 196.516 | 15.26 | 0. |
| 4 | 14.13 | 0.279 | 7.34 | 11.91 | 136.765 | 10.62 | 0. |
| 5 | 16.41 | 0.341 | 8.48 | 13.77 | 196.354 | 15.25 | 0. |
| 6 | 22.21 | 0.453 | 6.03 | 9.79 | 198.352 | 15.40 | 0. |
| 7 | 25.85 | 0.454 | 12.24 | 19.87 | 364.317 | 28.29 | 0. |
| 7 | 28.00 | 0.303 | 61.61 | 100.00 | 1287.589 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 86 of 224

Report date: Printed by:

3/9/2021 2:11:00 PM

wet

Ident:

STD7

Analysis from:

3/9/2021 1:07:41 PM

File:

2021-03-09

Last save: 3/9/2021 2:10:10 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/9/2021 1:04:34 PM

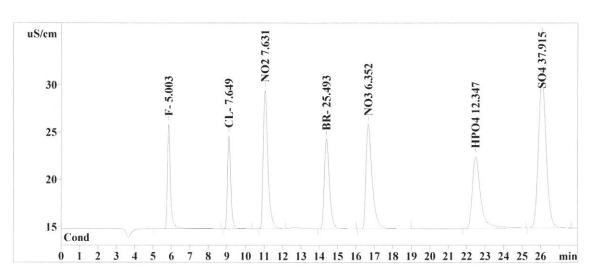
Run operator: Analysis number: wet 73555

SAMPLE:

Vial number:
Volume:

AM/AP 8

 $\begin{array}{lll} \mbox{Volume:} & 20.0 \ \mu \mbox{L} \\ \mbox{Dilution:} & 1.00 \\ \mbox{Amount:} & 1.0000 \\ \end{array}$



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 8 | uS/cm*sec | 96 | |
| 1 | 5.85 | 0.162 | 10.98 | 13.90 | 130.942 | 7.92 | 0. |
| 2 | 9.10 | 0.184 | 9.72 | 12.31 | 120.469 | 7.29 | 0. |
| 3 | 11.04 | 0.261 | 14.55 | 18.42 | 258.600 | 15.65 | 0. |
| 4 | 14.38 | 0.285 | 9.46 | 11.97 | 179.940 | 10.89 | 0. |
| 5 | 16.66 | 0.342 | 10.98 | 13.91 | 255.618 | 15.47 | 0. |
| 6 | 22.48 | 0.441 | 7.56 | 9.57 | 240.037 | 14.52 | 0. |
| 7 | 26.05 | 0.454 | 15.74 | 19.92 | 467.090 | 28.26 | 0. |
| 7 | 28.00 | 0.304 | 78.99 | 100.00 | 1652.696 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 87 of 224

Report date: 3/9/2021 2:48:46 PM

Printed by: wet

Ident:

ICB

Analysis from: 3/9/2021 2:12:46 PM

File: __2021-03-09

Last save: 3/9/2021 2:48:32 PM

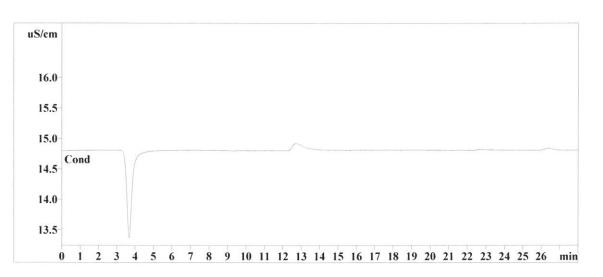
Method: ANIONS 03-09-21.mtw

03-09-21.mtw Last save: 3/9/2021 1:04:34 PM

Run operator: wet Analysis number: 73557

SAMPLE:

: AM/AP
Vial number: 10
Volume: 20.0 μL
Dilution: 1.00
Amount: 1.0000



Quantitation method: Custom

No peaks

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 88 of 224

100.00

625.507

0.

Report date: Printed by:

3/9/2021 2:47:19 PM

wet

Ident:

ICV

Analysis from:

3/9/2021 1:41:40 PM

File:

2021-03-09

Method:

ANIONS 03-09-21.mtw

Last save: 3/9/2021 2:47:14 PM

Run operator: Analysis number: wet 73556 Last save: 3/9/2021 1:04:34 PM

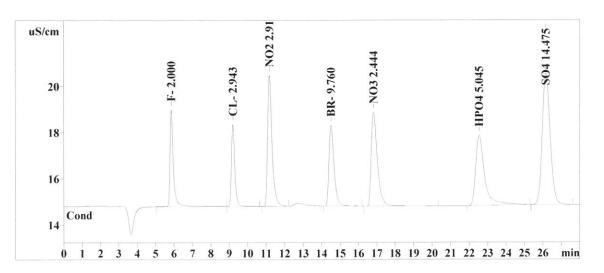
SAMPLE:

: AM/AP Vial number: 9

9 20.0 μL 1.00

Volume: Dilution: Amount:

1.00



| Quantit | tation method: | Custom | | | | | |
|---------|------------------|----------------|-----------------|----------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height % | Area uS/cm*sec | Area % | |
| 1 | 5.85 | 0.164 | 4.18 | 14.09 | 52.139 | 8.34 | 0. |
| 2 | 9.20 | 0.189 | 3.53 | 11.90 | 44.930 | 7.18 | 0. |
| 3 | 11.17 | 0.243 | 5.66 | 19.09 | 94.592 | 15.12 | 0. |
| 4 | 14.50 | 0.283 | 3.49 | 11.76 | 65.945 | 10.54 | 0. |
| 5 | 16.81 | 0.342 | 4.05 | 13.66 | 94.112 | 15.05 | 0. |
| 6 | 22.53 | 0.456 | 3.04 | 10.25 | 103.085 | 16.48 | 0. |
| 7 | 26.16 | 0.457 | 5.71 | 19.25 | 170.704 | 27.29 | 0. |

29.65

99.99

This report has been created by IC Net METROHM LTD

0.305

28.00

M1770-GENCHEM 89 of 224

Report date: Printed by:

3/24/2021 3:37:14 PM

wet

Ident:

CCV

Analysis from:

3/23/2021 9:38:39 AM

File:

2021-03-23

Last save: 3/23/2021 10:07:28 AM

Method:

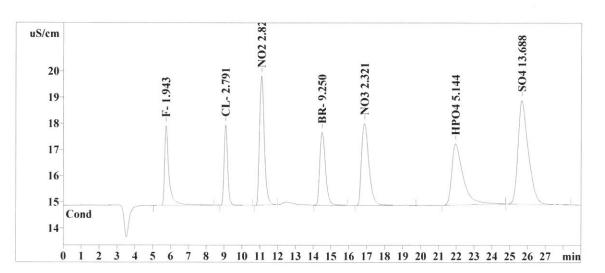
ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73769

SAMPLE:

: AM/AP
Vial number: 11
Volume: 20.0 µL
Dilution: 1.00
Amount: 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 9 | uS/cm*sec | 90 | |
| 1 | 5.74 | 0.210 | 3.02 | 13.05 | 50.649 | 8.42 | 0. |
| 2 | 9.08 | 0.214 | 3.05 | 13.15 | 42.491 | 7.07 | 0. |
| 3 | 11.08 | 0.282 | 4.92 | 21.23 | 91.297 | 15.18 | 0. |
| 4 | 14.48 | 0.344 | 2.78 | 11.98 | 62.253 | 10.35 | 0. |
| 5 | 16.86 | 0.437 | 3.11 | 13.43 | 89.004 | 14.80 | 0. |
| 6 | 21.95 | 0.636 | 2.33 | 10.06 | 104.955 | 17.45 | 0. |
| 7 | 25.66 | 0.612 | 3.96 | 17.08 | 160.757 | 26.73 | 0. |
| 7 | 29.00 | 0.391 | 23.18 | 99.99 | 601.406 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 90 of 224

Report date: Printed by:

3/24/2021 3:37:24 PM

wet

Ident:

CCB

Analysis from:

3/23/2021 10:18:42 AM

File:

_2021-03-23

Last save: 3/23/2021 10:47:30 AM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

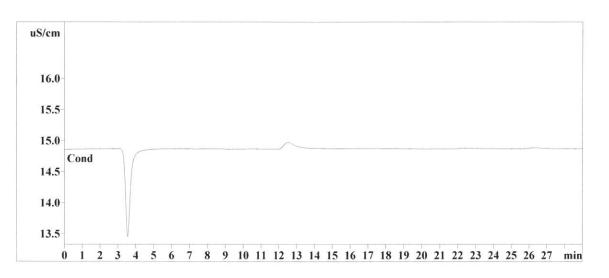
Run operator: Analysis number: wet 73770

SAMPLE:

: Vial number: AM/AP 12

Volume: Dilution: Amount:

20.0 µL 1.00 1.0000



Quantitation method: Custom

No peaks

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 91 of 224

Report date: Printed by:

3/24/2021 3:37:30 PM

wet

Ident:

LB113629BLW

Analysis from:

3/23/2021 10:50:36 AM

File:

2021-03-23

Last save: 3/23/2021 11:19:24 AM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number:

73771

SAMPLE:

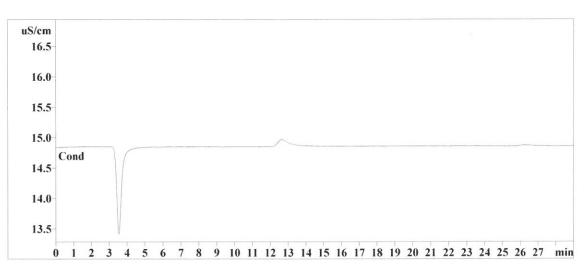
Vial number: Volume:

Dilution:

Amount:

AM/AP 13 20.0 µL 1.00





Quantitation method:

Custom

No peaks

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 92 of 224

Report date: Printed by:

3/24/2021 3:37:36 PM

wet

Ident:

LB113629BSW

Analysis from:

Analysis number:

3/23/2021 11:22:30 AM

File:

2021-03-23

ATTEMORIES CONTROL CONTROL OF THE PROPERTY OF

ANIONS 03-09-21.mtw

Last save: 3/23/2021 11:51:18 AM

Method: Run operator:

wet 73772 Last save: 3/19/2021 4:28:14 PM

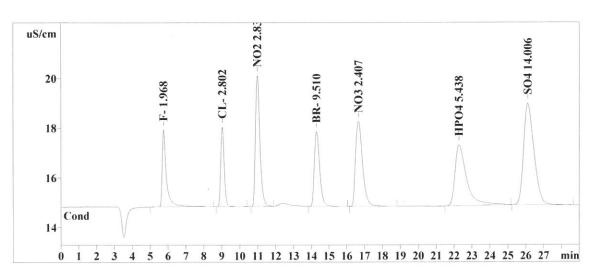
SAMPLE:

Amount:

:
Vial number:
Volume:
Dilution:

AM/AP 14

20.0 μL 1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|------------------|----------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 5.76 | 0.205 | 3.10 | 12.64 | 51.307 | 8.31 | 0. |
| 2 | 9.03 | 0.204 | 3.19 | 13.03 | 42.668 | 6.91 | 0. |
| 3 | 10.97 | 0.262 | 5.26 | 21.48 | 91.569 | 14.83 | 0. |
| 4 | 14.29 | 0.326 | 3.00 | 12.26 | 64.136 | 10.39 | 0. |
| 5 | 16.65 | 0.415 | 3.41 | 13.93 | 92.579 | 14.99 | 0. |
| 6 | 22.28 | 0.634 | 2.45 | 9.99 | 110.460 | 17.89 | 0. |
| 7 | 26.10 | 0.622 | 4.08 | 16.65 | 164.782 | 26.69 | 0. |
| 7 | 29.00 | 0.381 | 24.49 | 99.99 | 617.502 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 93 of 224

Report date: Printed by:

3/24/2021 3:37:45 PM

wet

Ident:

M1770-02

Analysis from:

3/23/2021 11:54:24 AM

File:

2021-03-23

Method:

ANIONS 03-09-21.mtw

Last save: 3/23/2021 12:23:12 PM

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number:

wet

73773

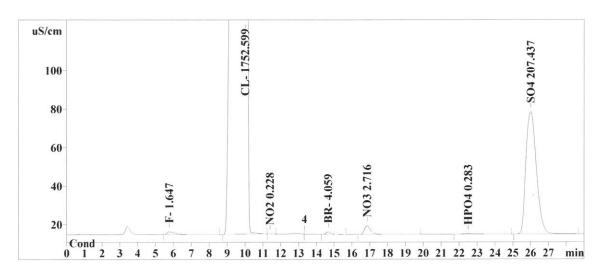
SAMPLE:

Amount:

Vial number: Volume: Dilution:

AM/AP 15

20.0 µL 1.00 1.0000



| Quanti | tation method: | Custom | | | | * | |
|--------|------------------|----------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 5.78 | 0.446 | 1.39 | 0.19 | 42.869 | 0.14 | 0. |
| 2 | 10.00 | 0.762 | 647.87 | 90.12 | 28129.865 | 90.95 | 0. |
| 3 | 11.41 | 0.242 | 0.07 | 0.01 | 0.980 | 0.00 | 0. |
| 4 | 14.67 | 0.298 | 1.28 | 0.18 | 24.641 | 0.08 | 0. |
| 5 | 16.85 | 0.365 | 4.38 | 0.61 | 105.335 | 0.34 | 0. |
| 6 | 22.50 | 0.747 | 0.25 | 0.03 | 13.786 | 0.04 | 0. |
| 7 | 26.00 | 0.650 | 63.49 | 8.83 | 2610.622 | 8.44 | 0. |
| 7 | 29.00 | 0.501 | 718.72 | 99.97 | 30928.098 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 94 of 224

Report date: Printed by:

3/24/2021 3:38:15 PM

wet

Ident:

M1770-03

Analysis from:

3/23/2021 12:26:18 PM

File:

2021-03-23

Method:

ANIONS 03-09-21.mtw

Last save: 3/24/2021 3:38:16 PM

Last save: 3/19/2021 4:28:14 PM

Run operator:

Analysis number:

wet 73774

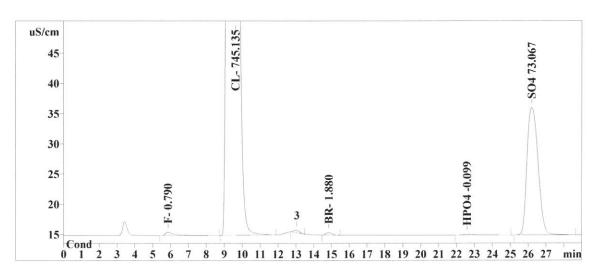
SAMPLE:

Amount:

:
Vial number:
Volume:
Dilution:

AM/AP 16

20.0 μL 1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|------------------|----------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 5.86 | 0.458 | 0.55 | 0.12 | 20.401 | 0.16 | 0. |
| 2 | 9.62 | 0.463 | 420.41 | 94.88 | 11958.367 | 92.59 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 14.85 | 0.344 | 0.41 | 0.09 | 8.852 | 0.07 | 0. |
| 5 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 6 | 22.60 | 0.815 | 0.11 | 0.02 | 6.628 | 0.05 | 0. |
| 7 | 26.18 | 0.689 | 21.09 | 4.76 | 911.574 | 7.06 | 0. |
| 7 | 29.00 | 0.395 | 442.57 | 99.88 | 12905.821 | 99.93 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 95 of 224

Report date: Printed by:

3/24/2021 3:38:50 PM

wet

Ident:

M1770-06

Analysis from:

3/23/2021 12:58:13 PM

File:

2021-03-23

Last save: 3/24/2021 3:38:46 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73775

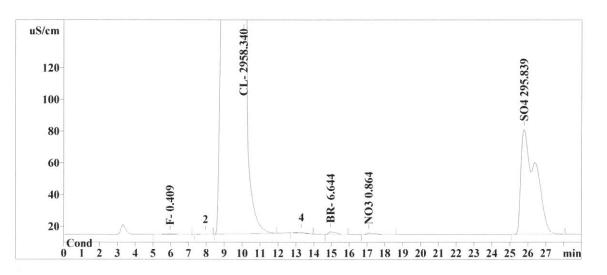
SAMPLE:

Amount:

:
Vial number:
Volume:
Dilution:

AM/AP 19

20.0 μL 1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|---------|--------|--------|-----------|-------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 8 | uS/cm*sec | 용 | |
| 1 | 5.97 | 0.617 | 0.23 | 0.03 | 10.380 | 0.02 | 0. |
| 2 | 10.06 | 1.050 | 787.05 | 91.91 | 47484.038 | 92.53 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 14.96 | 0.476 | 1.60 | 0.19 | 43.369 | 0.08 | 0. |
| 5 | 17.10 | 0.570 | 0.86 | 0.10 | 28.782 | 0.06 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.77 | 1.067 | 66.01 | 7.71 | 3728.424 | 7.27 | 0. |
| 7 | 29.00 | 0.540 | 855.74 | 99.93 | 51294.994 | 99.96 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 96 of 224

Report date: Printed by:

3/24/2021 3:39:01 PM

wet

Ident:

M1770-07

Analysis from:

3/23/2021 1:30:07 PM

File:

2021-03-23

Last save: 3/23/2021 1:58:56 PM

Method:

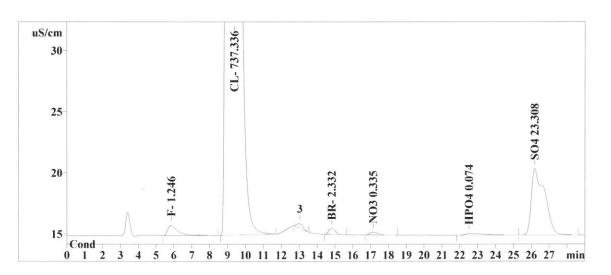
ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73776

SAMPLE:

: AM/AP
Vial number: 20
Volume: 20.0 µL
Dilution: 1.00
Amount: 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|----------------|--------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 5.86 | 0.524 | 0.84 | 0.20 | 32.364 | 0.27 | 0. |
| 2 | 9.38 | 0.449 | 415.62 | 98.20 | 11833.173 | 97.10 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 14.83 | 0.429 | 0.45 | 0.11 | 12.126 | 0.10 | 0. |
| 5 | 17.15 | 0.507 | 0.22 | 0.05 | 6.937 | 0.06 | 0. |
| 6 | 22.53 | 1.051 | 0.13 | 0.03 | 9.869 | 0.08 | 0. |
| 7 | 26.19 | 0.904 | 5.42 | 1.28 | 282.392 | 2.32 | 0. |
| 7 | 29.00 | 0.552 | 422.68 | 99.86 | 12176.861 | 99.92 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 97 of 224

Report date:

3/24/2021 3:39:14 PM

Printed by:

wet

Ident:

M1770-08

Analysis from:

3/23/2021 2:02:01 PM

File:

2021-03-23

ANIONS 03-09-21.mtw

Last save: 3/23/2021 2:30:50 PM

Method: Run operator:

wet

Last save: 3/19/2021 4:28:14 PM

Analysis number:

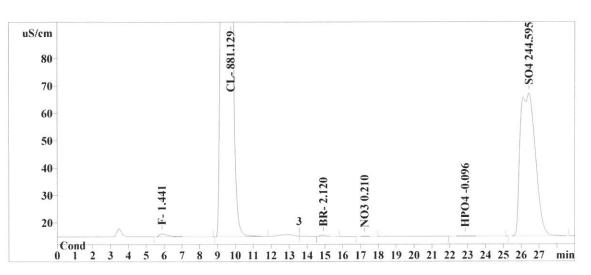
73777

SAMPLE:

Vial number: Volume: Dilution:

AM/AP 21

20.0 µL 1.00 Amount: 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|-------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area | |
| 1 | 5.88 | 0.462 | 1.09 | 0.21 | 37.469 | 0.22 | 0. |
| 2 | 9.74 | 0.506 | 464.51 | 89.61 | 14141.296 | 81.84 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 14.91 | 0.397 | 0.43 | 0.08 | 10.587 | 0.06 | 0. |
| 5 | 17.25 | 0.476 | 0.06 | 0.01 | 1.752 | 0.01 | 0. |
| 6 | 22.87 | 1.114 | 0.09 | 0.02 | 6.674 | 0.04 | 0. |
| 7 | 26.42 | 0.967 | 52.12 | 10.05 | 3080.469 | 17.83 | 0. |
| 7 | 29.00 | 0.560 | 518.29 | 99.98 | 17278.248 | 100.00 | 0. |

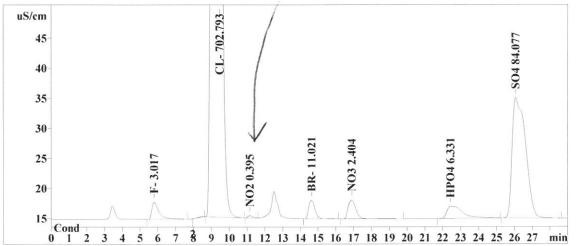
This report has been created by IC Net METROHM LTD

M1770-GENCHEM 98 of 224 Report date: 3/24/2021 3:39:39 PM Printed by: wet Ident: M1770-04MS 3/23/2021 2:33:55 PM Analysis from: File: _2021-03-23_ Method: ANIONS 03-09-21.mtw Run operator: wet Analysis number: 73778 SAMPLE: AM/AP Vial number: 17 20.0 µL Volume: Dilution: 1.00 1.0000 Amount:

Last save: 3/23/2021 3:02:44 PM

Last save: 3/19/2021 4:28:14 PM

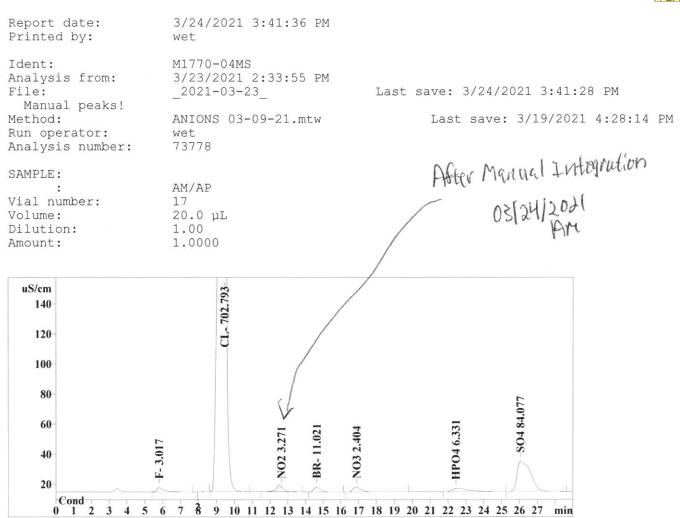
Before integration:
Peaks not integrated properly
03/24/2021
AM



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|----------------|--------------|--------|-------------------|-------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area | |
| 1 | 5.80 | 0.383 | 2.81 | 0.62 | 78.833 | 0.62 | 0. |
| 2 | 9.45 | 0.439 | 422.13 | 93.06 | 11278.705 | 88.73 | 0. |
| 3 | 11.15 | 0.263 | 0.40 | 0.09 | 6.821 | 0.05 | 0. |
| 4 | 14.63 | 0.393 | 3.06 | 0.67 | 75.082 | 0.59 | 0. |
| 5 | 16.89 | 0.474 | 3.12 | 0.69 | 92.426 | 0.73 | 0. |
| 6 | 22.44 | 0.920 | 2.01 | 0.44 | 127.215 | 1.00 | 0. |
| 7 | 26.06 | 0.863 | 20.01 | 4.41 | 1050.797 | 8.27 | 0. |
| 7 | 29.00 | 0.534 | 453.53 | 99.98 | 12709.878 | 99.99 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 99 of 224



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|---------|--------|--------|-----------|-------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 8 | uS/cm*sec | 8 | |
| 1 | 5.80 | 0.383 | 2.81 | 0.62 | 78.833 | 0.62 | 0. |
| 2 | 9.45 | 0.439 | 422.13 | 92.55 | 11278.705 | 88.04 | 0. |
| 3 | 12.64 | 0.456 | 2.88 | 0.63 | 106.884 | 0.83 | 0. |
| 4 | 14.63 | 0.393 | 3.06 | 0.67 | 75.082 | 0.59 | 0. |
| 5 | 16.89 | 0.474 | 3.12 | 0.68 | 92.426 | 0.72 | 0. |
| 6 | 22.44 | 0.920 | 2.01 | 0.44 | 127.215 | 0.99 | 0. |
| 7 | 26.06 | 0.863 | 20.01 | 4.39 | 1050.797 | 8.20 | 0. |
| 7 | 29 00 | 0 561 | 456.02 | 99 98 | 12809 942 | 99 99 | 0 |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 100 of 224

3/24/2021 3:41:46 PM Report date: Printed by: wet M1770-05MSD Ident: 3/23/2021 3:05:49 PM Analysis from: Last save: 3/23/2021 3:34:38 PM 2021-03-23 File: Last save: 3/19/2021 4:28:14 PM ANIONS 03-09-21.mtw Method: Run operator: wet Analysis number: 73779 Before Integration:
Peaks not integrated property
C3(24)2001
Am SAMPLE: AM/AP : Vial number: 18 20.0 µL Volume: 1.00 Dilution: 1.0000 Amount: uS/cm CL-692.481 SO4 83.931 45 40 35 30 HPO46.719 BR-10.657 NO3 2.345 NO2 0.369 25 20 2 15 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 min 5

| Quantit | ation method: | Custom | | | | | |
|---------|------------------|----------------|-----------------|--------|-------------------|-------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area | |
| 1 | 5.92 | 0.389 | 2.81 | 0.62 | 79.245 | 0.63 | 0. |
| 2 | 9.62 | 0.434 | 421.50 | 92.92 | 11113.183 | 88.58 | 0. |
| 3 | 11.29 | 0.257 | 0.35 | 0.08 | 5.900 | 0.05 | 0. |
| 4 | 14.62 | 0.370 | 3.13 | 0.69 | 72.443 | 0.58 | 0. |
| 5 | 16.81 | 0.450 | 3.17 | 0.70 | 90.002 | 0.72 | 0. |
| 6 | 22.35 | 0.904 | 2.14 | 0.47 | 134.493 | 1.07 | 0. |
| 7 | 25.97 | 0.844 | 20.22 | 4.46 | 1048.953 | 8.36 | 0. |
| 7 | 29.00 | 0.521 | 453.32 | 99.94 | 12544.219 | 99.99 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 101 of 224

3/24/2021 3:42:31 PM Report date: Printed by: wet M1770-05MSD Ident: 3/23/2021 3:05:49 PM Analysis from: Last save: 3/24/2021 3:42:28 PM 2021-03-23_ File: Manual peaks! Last save: 3/19/2021 4:28:14 PM ANIONS 03-09-21.mtw Method: Run operator: wet Analysis number: 73779 SAMPLE: AM/AP After Vial number: 18 20.0 µL Volume: 1.00 Dilution: 1.0000 Amount: uS/cm CL-692.481 45 40 35 30 HPO4 6.719 NO2 3.183 BR-10.657 NO3 2.345 25 20 2 15 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 min

| tation method: | Custom | | | | | |
|----------------|--|---|--|---|---|--|
| Retention | Width/2 | Height | Height | Area | Area | |
| min | min | uS/cm | 8 | uS/cm*sec | 8 | |
| | 0.389 | 2.81 | 0.62 | 79.245 | 0.63 | 0. |
| | | 421.50 | 92.36 | 11113.183 | 87.90 | 0. |
| | | 3.11 | 0.68 | 103.825 | 0.82 | 0. |
| | | 3.13 | 0.68 | 72.443 | 0.57 | 0. |
| | | 3.17 | 0.70 | 90.002 | 0.71 | 0. |
| | | 2.14 | 0.47 | 134.493 | 1.06 | 0. |
| 25.97 | 0.844 | 20.22 | 4.43 | 1048.953 | 8.30 | 0. |
| 29 00 | 0.545 | 456.08 | 99.94 | 12642.144 | 99.99 | 0. |
| | Retention min 5.92 9.62 12.71 14.62 16.81 22.35 | Retention Width/2 min min 5.92 0.389 9.62 0.434 12.71 0.423 14.62 0.370 16.81 0.450 22.35 0.904 25.97 0.844 | Retention Width/2 Height us/cm 5.92 0.389 2.81 9.62 0.434 421.50 12.71 0.423 3.11 14.62 0.370 3.13 16.81 0.450 3.17 22.35 0.904 2.14 25.97 0.844 20.22 | Retention Width/2 Height Height min min uS/cm % 5.92 0.389 2.81 0.62 9.62 0.434 421.50 92.36 12.71 0.423 3.11 0.68 14.62 0.370 3.13 0.68 16.81 0.450 3.17 0.70 22.35 0.904 2.14 0.47 25.97 0.844 20.22 4.43 | Retention Width/2 Height us/cm Height us/cm*sec 5.92 0.389 2.81 0.62 79.245 9.62 0.434 421.50 92.36 11113.183 12.71 0.423 3.11 0.68 103.825 14.62 0.370 3.13 0.68 72.443 16.81 0.450 3.17 0.70 90.002 22.35 0.904 2.14 0.47 134.493 25.97 0.844 20.22 4.43 1048.953 | Retention Width/2 Height us/cm Height us/cm*sec Area us/cm*sec % us/cm*sec |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 102 of 224

Report date: Printed by:

3/24/2021 3:42:38 PM

wet

Ident:

CCV

Analysis from:

3/23/2021 3:37:43 PM

File:

2021-03-23

Last save: 3/23/2021 4:08:18 PM

Method:

ANIONS 03-09-21.mtw

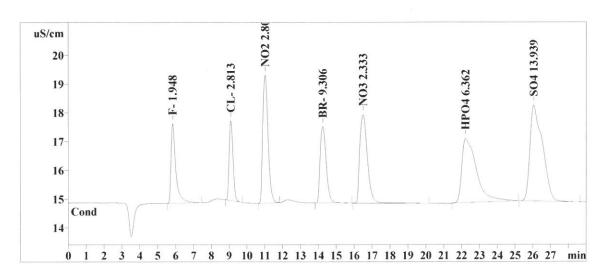
Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number:

73780

SAMPLE:

AM/AP Vial number: 11 Volume: 20.0 µL Dilution: 1.00 Amount: 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|----------------|-----------------|----------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height % | Area uS/cm*sec | Area % | |
| 1 | 5.83 | 0.243 | 2.75 | 12.97 | 50.775 | 8.08 | 0. |
| 2 | 9.09 | 0.244 | 2.76 | 13.00 | 42.852 | 6.82 | 0. |
| 3 | 11.02 | 0.320 | 4.44 | 20.89 | 90.822 | 14.45 | 0. |
| 4 | 14.24 | 0.369 | 2.65 | 12.49 | 62.659 | 9.97 | 0. |
| 5 | 16.49 | 0.451 | 3.07 | 14.46 | 89.493 | 14.24 | 0. |
| 6 | 22.21 | 0.853 | 2.23 | 10.48 | 127.796 | 20.34 | 0. |
| 7 | 26.04 | 0.821 | 3.33 | 15.70 | 163.934 | 26.09 | 0. |
| 7 | 29.00 | 0.471 | 21.23 | 100.00 | 628.330 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 103 of 224

Reviewed By:apatel On:4/1/2021 1:38:23 Inst Id :IC-1 LB :LB113629

10

Report date: Printed by:

3/24/2021 3:42:46 PM

wet

Ident:

CCB

Analysis from:

3/23/2021 4:11:08 PM

File:

2021-03-23

Last save: 3/23/2021 4:40:46 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number:

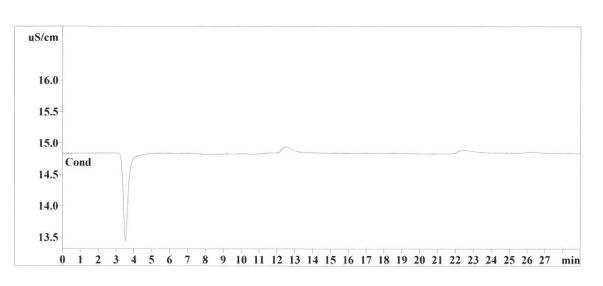
wet 73781

SAMPLE:

AM/AP 12

Vial number: Volume: Dilution: Amount:

20.0 µL 1.00 1.0000



Quantitation method: Custom

No peaks

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 104 of 224

Report date: Printed by:

3/25/2021 8:19:53 AM

wet

Ident:

M1770-02DLX400

Analysis from:

3/23/2021 4:43:02 PM

File:

2021-03-23

Last save: 3/25/2021 8:19:54 AM

Method:

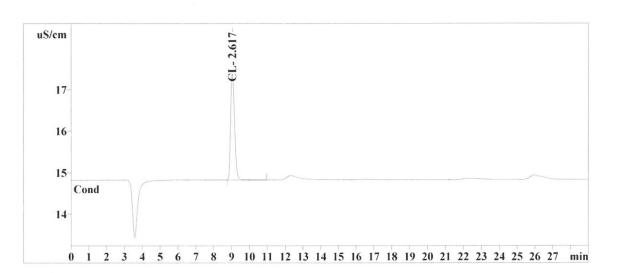
ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73782

SAMPLE:

: AM/AP
Vial number: 22
Volume: 20.0 µL
Dilution: 1.00
Amount: 1.0000



| Quanti | itation method: | Custom | | | | | |
|--------|-----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 90 | uS/cm*sec | olo | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 9.03 | 0.242 | 2.55 | 99.98 | 39.694 | 100.00 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 29.00 | 0.035 | 2.55 | 99.98 | 39.694 | 100.00 | 0. |

This report has been created by IC Net ${\tt METROHM\ LTD}$

M1770-GENCHEM 105 of 224

Report date: Printed by:

3/25/2021 8:20:27 AM

wet

Ident:

M1770-03DLX100

Analysis from:

3/23/2021 5:14:56 PM

File:

2021-03-23

Last save: 3/25/2021 8:20:28 AM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73783

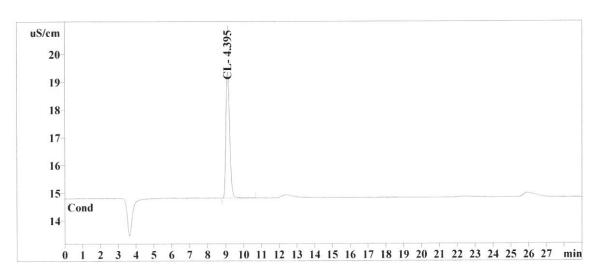
SAMPLE:

:
Vial number:

AM/AP 23

Volume: Dilution: Amount:

20.0 μL 1.00 1.0000



| Quantit | ation method: | Custom | | | | | |
|---------|---------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 8 | uS/cm*sec | 0 00 | 0 |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 9.10 | 0.234 | 4.54 | 100.01 | 68.233 | 100.00 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 29.00 | 0.033 | 4.54 | 100.01 | 68.233 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 106 of 224

Report date: Printed by:

3/25/2021 8:21:33 AM

wet

Ident:

M1770-06DLX500

Analysis from:

3/23/2021 5:46:50 PM

File:

2021-03-23

Last save: 3/25/2021 8:21:34 AM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator:
Analysis number:

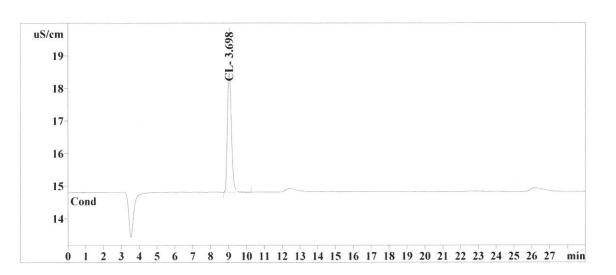
wet 73784

SAMPLE:

AM/AP 24

Vial number:
Volume:
Dilution:
Amount:

20.0 µL 1.00 1.0000



| Quantit | ation method: | Custom | | | | | |
|---------|---------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 96 | uS/cm*sec | 8 | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 9.02 | 0.244 | 3.64 | 100.00 | 57.043 | 100.00 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 29.00 | 0.035 | 3.64 | 100.00 | 57.043 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 107 of 224

Report date: Printed by:

3/25/2021 8:22:01 AM

wet

Ident:

M1770-07DLX100

Analysis from:

3/23/2021 6:18:44 PM

File:

2021-03-23

Last save: 3/25/2021 8:22:02 AM

Method:

ANIONS 03-09-21.mtw

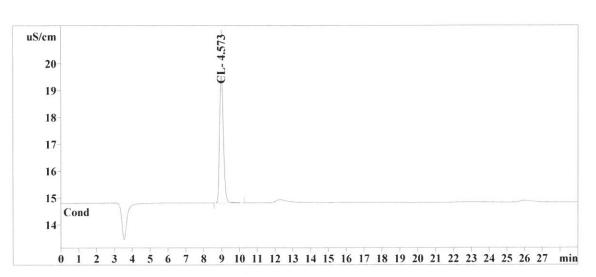
Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73785

AM/AP

SAMPLE:

Vial number: 25 20.0 µL Volume: Dilution: 1.00 Amount: 1.0000



| Quantit | tation method: | Custom | | | | | |
|---------|------------------|-------------|-----------------|----------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height % | Area uS/cm*sec | Area % | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 8.97 | 0.233 | 4.72 | 100.00 | 71.088 | 100.00 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 29.00 | 0.033 | 4.72 | 100.00 | 71.088 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 108 of 224

Report date: Printed by:

3/25/2021 8:22:41 AM

wet

Ident:

M1770-08DLX200

Analysis from: 3/23/2021 6:50:38 PM

File:

2021-03-23

Last save: 3/23/2021 7:19:26 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

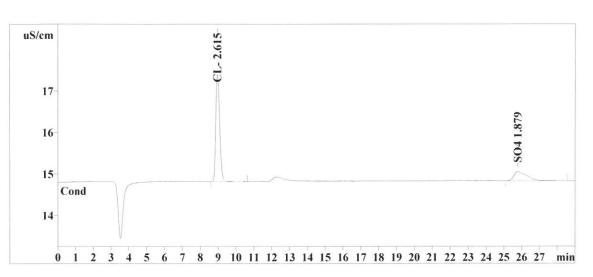
Run operator: Analysis number: wet 73786

SAMPLE:

Vial number: Volume:

AM/AP 26

20.0 µL Dilution: 1.00 1.0000 Amount:



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | % | uS/cm*sec | 9 | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 8.95 | 0.239 | 2.57 | 91.87 | 39.664 | 77.61 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.78 | 0.798 | 0.23 | 8.11 | 11.442 | 22.39 | 0. |
| 7 | 29.00 | 0.148 | 2.80 | 99.98 | 51.106 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 109 of 224

0.

0.

0.

Report date: Printed by:

3/25/2021 8:23:43 AM

wet

Ident:

CCV

Analysis from:

3/23/2021 7:22:32 PM

Last save: 3/23/2021 7:51:20 PM

File:

2021-03-23

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73787

SAMPLE:

Method:

:
Vial number:

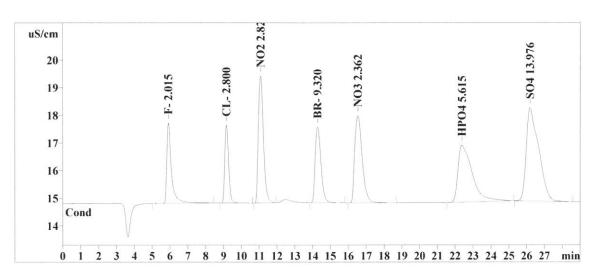
Quantitation method:

AM/AP 11 20.0 μL

Volume: Dilution: Amount:

1.00 1.0000

Custom



Retention Width/2 Height Height Area No Area min min uS/cm 00 uS/cm*sec 8.50 5.91 0.236 2.90 13.41 52.529 0. 1 6.90 2 9.15 0.235 2.82 13.00 42.631 0. 14.79 3 11.07 0.308 4.59 21.22 91.416 0. 12.64 62.756 10.15 0. 4 14.27 0.357 2.74 0. 5 16.52 14.57 90.700 14.67 0.446 3.16

9.57 113.789 18.41 6 22.36 0.818 2.07 7 0.793 3.38 15.59 164.402 26.59 26.18 618.223 100.00 29.00 0.456 21.65 100.00

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 110 of 224

Report date: Printed by:

3/25/2021 8:23:52 AM

wet

Ident:

CCB

Analysis from:

3/23/2021 7:54:26 PM

ANIONS 03-09-21.mtw

File:

2021-03-23

Last save: 3/23/2021 8:23:14 PM

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73788

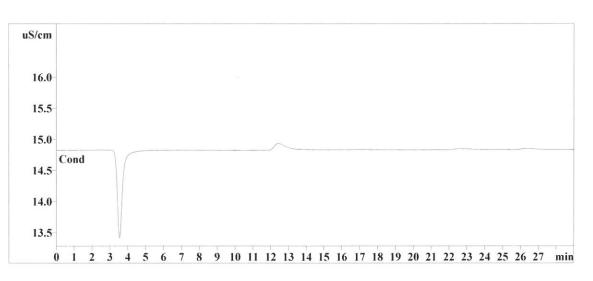
SAMPLE:

Method:

AM/AP 12

Vial number: Volume: Dilution: Amount:

20.0 µL 1.00 1.0000



Quantitation method: Custom

No peaks

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 111 of 224

10

Report date: Printed by:

3/25/2021 8:24:57 AM

wet

Ident:

CCV

Analysis from:

3/24/2021 8:55:34 AM

File:

2021-03-24

Last save: 3/24/2021 9:24:22 AM

Method:

ANIONS 03-09-21.mtw

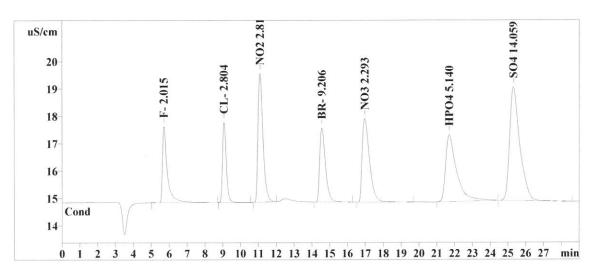
Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73792

SAMPLE:

: AM/AP Vial number: 11

Volume: Dilution: Amount: 20.0 µL 1.00 1.0000



| Quantit | tation method: | Custom | | | | | |
|---------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 96 | uS/cm*sec | 용 | |
| 1 | 5.71 | 0.237 | 2.78 | 12.20 | 52.524 | 8.66 | 0. |
| 2 | 9.07 | 0.221 | 2.92 | 12.83 | 42.706 | 7.04 | 0. |
| 3 | 11.09 | 0.292 | 4.70 | 20.64 | 90.853 | 14.99 | 0. |
| 4 | 14.55 | 0.346 | 2.71 | 11.92 | 61.933 | 10.22 | 0. |
| 5 | 16.96 | 0.438 | 3.05 | 13.40 | 87.853 | 14.49 | 0. |
| 6 | 21.69 | 0.592 | 2.45 | 10.75 | 104.883 | 17.30 | 0. |
| 7 | 25.31 | 0.581 | 4.15 | 18.26 | 165.446 | 27.29 | 0. |
| 7 | 29.00 | 0.387 | 22.75 | 99.99 | 606.198 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 112 of 224

Report date: Printed by:

3/25/2021 8:25:03 AM

wet

Ident:

CCB

Analysis from:

3/24/2021 9:40:30 AM

File:

2021-03-24

Last save: 3/24/2021 10:09:18 AM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator:
Analysis number:

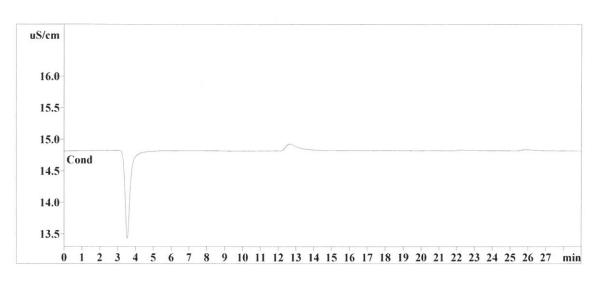
wet 73793

SAMPLE:

: Vial number: AM/AP 12

Volume: Dilution: Amount:

20.0 μL 1.00 1.0000



Quantitation method:

Custom

No peaks

This report has been created by IC Net ${\tt METROHM\ LTD}$

M1770-GENCHEM 113 of 224

Report date: Printed by:

3/25/2021 8:25:10 AM

wet

Ident:

LB113629BLW2

Analysis from:

3/24/2021 10:12:23 AM

File:

2021-03-24

Last save: 3/25/2021 8:18:40 AM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73794

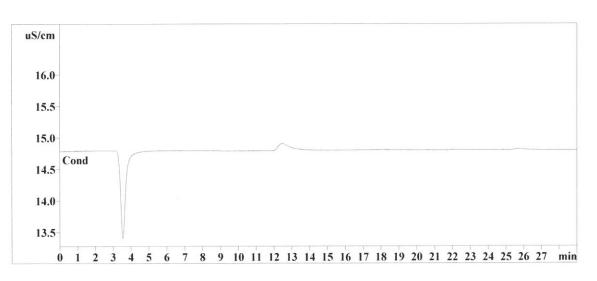
SAMPLE:

Vial number:

AM/AP 13

Volume: Dilution: Amount:

20.0 µL 1.00 1.0000



Quantitation method:

Custom

No peaks

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 114 of 224

Report date: Printed by:

3/25/2021 8:25:16 AM

wet

Ident:

LB113629BSW2

Analysis from:

3/24/2021 10:44:17 AM

File:

2021-03-24

Last save: 3/25/2021 8:18:40 AM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73795

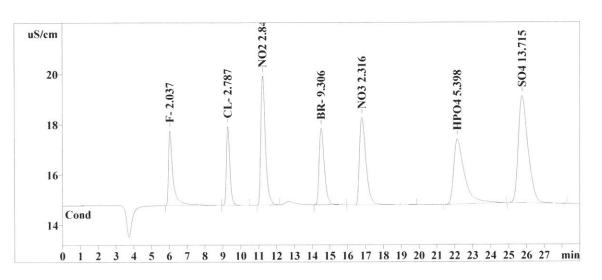
SAMPLE:

Vial number:

AM/AP 14

Volume: Dilution: Amount:

 $20.0~\mu L$ 1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 96 | uS/cm*sec | 8 | |
| 1 | 6.04 | 0.220 | 2.96 | 12.03 | 53.107 | 8.71 | 0. |
| 2 | 9.28 | 0.205 | 3.12 | 12.70 | 42.424 | 6.96 | 0. |
| 3 | 11.22 | 0.267 | 5.14 | 20.90 | 92.098 | 15.10 | 0. |
| 4 | 14.51 | 0.312 | 3.04 | 12.37 | 62.654 | 10.27 | 0. |
| 5 | 16.78 | 0.385 | 3.47 | 14.12 | 88.811 | 14.56 | 0. |
| 6 | 22.15 | 0.595 | 2.59 | 10.53 | 109.716 | 17.99 | 0. |
| 7 | 25.75 | 0.569 | 4.26 | 17.35 | 161.101 | 26.41 | 0. |
| 7 | 29.00 | 0.365 | 24.58 | 100.00 | 609.912 | 100.00 | 0. |
| | | | | | | | |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 115 of 224

Report date: Printed by:

3/25/2021 8:25:37 AM

wet

Ident:

M1770-10X20

Analysis from:

3/24/2021 11:16:11 AM

File:

2021-03-24

Last save: 3/24/2021 12:28:02 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

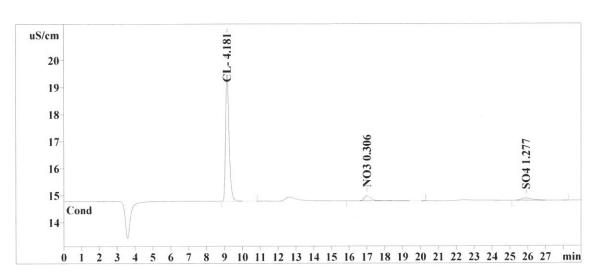
Run operator: Analysis number: wet 73796

SAMPLE:

: Vial number: AM/AP 27

Volume: Dilution: Amount:

20.0 μL 1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|----------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 9.15 | 0.207 | 4.69 | 94.58 | 64.807 | 87.16 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 17.00 | 0.390 | 0.18 | 3.66 | 5.726 | 7.70 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.90 | 0.613 | 0.09 | 1.74 | 3.823 | 5.14 | 0. |
| 7 | 29.00 | 0.173 | 4.96 | 99.97 | 74.356 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 116 of 224

Report date: Printed by:

3/25/2021 8:25:49 AM

wet

Ident:

M1770-11X20

Analysis from:

3/24/2021 11:48:06 AM

File:

2021-03-24

Last save: 3/24/2021 12:28:02 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number:

wet 73797

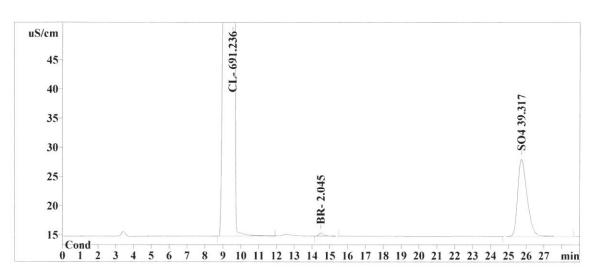
SAMPLE:

Vial number: Volume:

AM/AP 28

Dilution: Amount:

20.0 µL 1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|--------------|---------------|--------|-------------------|--------|----|
| No | Retention | Width/2 | Height | Height | Area uS/cm*sec | Area | |
| 1 | min 0.00 | min 0.000 | uS/cm 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 9.51 | 0.433 | 433.09 | 96.89 | 11093.197 | 95.73 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 14.49 | 0.300 | 0.51 | 0.11 | 10.043 | 0.09 | 0. |
| 5 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.72 | 0.561 | 13.17 | 2.95 | 484.821 | 4.18 | 0. |
| 7 | 29.00 | 0.185 | 446.78 | 99.95 | 11588.062 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 117 of 224

Report date: Printed by:

3/25/2021 8:26:22 AM

wet

Ident:

M1770-15X20

Analysis from:

3/24/2021 1:55:42 PM

File:

2021-03-24

Last save: 3/24/2021 2:24:30 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73801

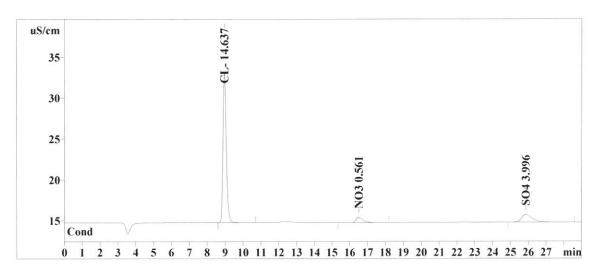
SAMPLE:

:
Vial number:
Volume:

AM/AP 32 20.0 μL

Dilution: Amount:

1.00



| Quanti | tation method: | Custom | | | | | |
|--------|------------------|-------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 8.96 | 0.189 | 18.34 | 92.13 | 232.643 | 81.02 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 16.51 | 0.389 | 0.63 | 3.15 | 16.290 | 5.67 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.85 | 0.611 | 0.94 | 4.71 | 38.201 | 13.30 | 0. |
| 7 | 29.00 | 0.170 | 19.91 | 99.99 | 287.134 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 118 of 224

Report date:

3/25/2021 8:26:30 AM

Printed by: wet

Ident:

M1770-16X20

Analysis from:

3/24/2021 2:27:36 PM

File:

2021-03-24

Last save: 3/24/2021 2:56:24 PM

Method:

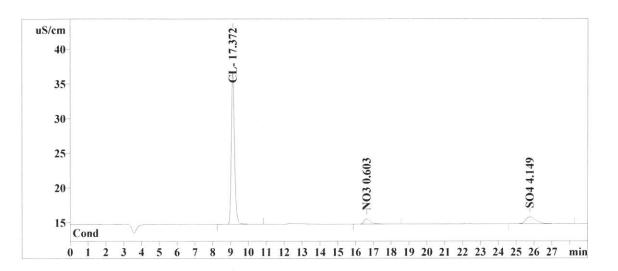
ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73802

SAMPLE:

: AM/AP
Vial number: 33
Volume: 20.0 µL
Dilution: 1.00
Amount: 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|------------------|----------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 9.12 | 0.189 | 21.90 | 92.72 | 276.544 | 82.62 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 16.62 | 0.374 | 0.72 | 3.06 | 18.029 | 5.39 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.77 | 0.606 | 1.00 | 4.23 | 40.137 | 11.99 | 0. |
| 7 | 29.00 | 0.167 | 23.62 | 100.01 | 334.710 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 119 of 224

Report date: Printed by:

3/25/2021 8:26:37 AM

wet

Ident:

M1770-17X20

Analysis from:

3/24/2021 2:59:30 PM

File:

2021-03-24

Last save: 3/24/2021 3:28:18 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

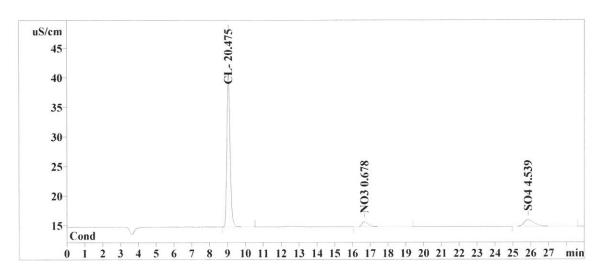
Run operator: Analysis number: wet 73803

SAMPLE:

AM/AP 34

Vial number:
Volume:
Dilution:
Amount:

20.0 µL 1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|------------------|----------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 9.04 | 0.189 | 25.94 | 92.92 | 326.353 | 83.14 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 16.67 | 0.384 | 0.83 | 2.96 | 21.114 | 5.38 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.84 | 0.591 | 1.15 | 4.12 | 45.067 | 11.48 | 0. |
| 7 | 29.00 | 0.166 | 27.92 | 100.00 | 392.534 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 120 of 224

Report date: Printed by: 3/25/2021 8:26:46 AM

wet

Ident:

CCV

Analysis from:

3/24/2021 3:31:24 PM

File:

2021-03-24

Last save: 3/24/2021 4:00:14 PM

Method:

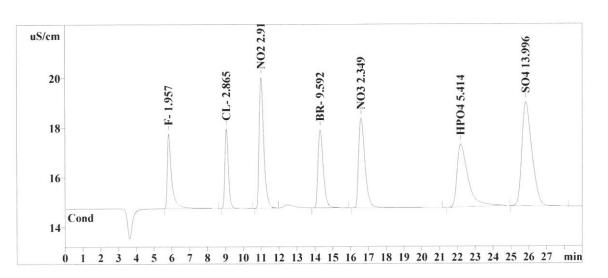
ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73804

SAMPLE:

: AM/AP
Vial number: 11
Volume: 20.0 μL
Dilution: 1.00
Amount: 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|----------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 5.84 | 0.217 | 3.00 | 12.05 | 51.018 | 8.25 | 0. |
| 2 | 9.05 | 0.207 | 3.18 | 12.80 | 43.676 | 7.06 | 0. |
| 3 | 11.00 | 0.268 | 5.25 | 21.10 | 94.317 | 15.25 | 0. |
| 4 | 14.29 | 0.315 | 3.13 | 12.57 | 64.732 | 10.46 | 0. |
| 5 | 16.58 | 0.375 | 3.60 | 14.48 | 90.170 | 14.58 | 0. |
| 6 | 22.20 | 0.613 | 2.53 | 10.18 | 110.019 | 17.79 | 0. |
| 7 | 25.83 | 0.603 | 4.19 | 16.83 | 164.655 | 26.62 | 0. |
| 7 | 29.00 | 0.371 | 24.87 | 99.99 | 618.588 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 121 of 224

Report date: Printed by:

3/25/2021 8:27:01 AM

wet

Ident:

CCB

Analysis from:

File:

3/24/2021 4:03:18 PM

2021-03-24

Last save: 3/24/2021 4:32:08 PM

Method:

ANIONS 03-09-21.mtw wet

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number:

73805

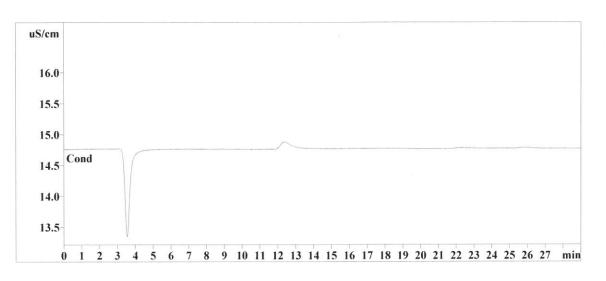
SAMPLE:

Vial number:

AM/AP 12 20.0 µL

Volume: Dilution: Amount:

1.00 1.0000



Quantitation method:

Custom

No peaks

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 122 of 224

Report date: Printed by:

3/25/2021 8:27:11 AM

wet

Ident:

M1770-18

Analysis from:

3/24/2021 4:35:13 PM

File:

2021-03-24

Method:

ANIONS 03-09-21.mtw

Last save: 3/24/2021 5:04:02 PM

Run operator: Analysis number: wet 73806 Last save: 3/19/2021 4:28:14 PM

SAMPLE:

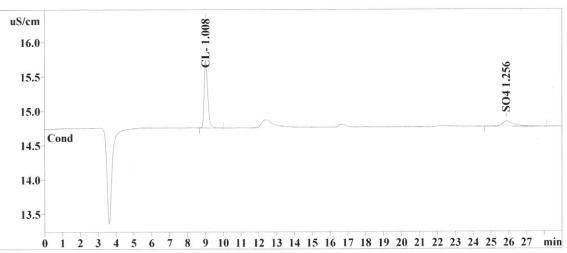
Vial number:

AM/AP 35

Volume: Dilution: Amount:

20.0 µL 1.00

1.0000



| Quantit | tation method: | Custom | | | | | |
|---------|------------------|-------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 9.02 | 0.212 | 0.99 | 92.66 | 13.871 | 79.59 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.86 | 0.638 | 0.08 | 7.26 | 3.556 | 20.41 | 0. |
| 7 | 29.00 | 0.121 | 1.06 | 99.92 | 17.427 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 123 of 224 Report date: Printed by:

3/25/2021 8:30:39 AM

wet

Ident:

M1770-10MSX20

Analysis from:

3/24/2021 5:07:07 PM

File:

2021-03-24

Method:

ANIONS 03-09-21.mtw

Last save: 3/24/2021 5:35:56 PM

Last save: 3/19/2021 4:28:14 PM

Run operator:

wet

Analysis number:

73807

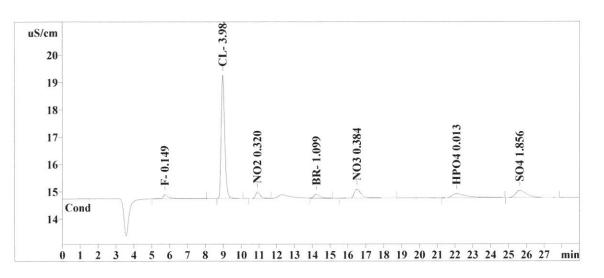
SAMPLE:

Vial number:

Volume:
Dilution:
Amount:

AM/AP 36

20.0 μL 1.00 1.0000



| Quantit | tation method: | Custom | | | | | |
|---------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 9 | uS/cm*sec | 8 | |
| 1 | 5.74 | 0.241 | 0.15 | 2.56 | 3.576 | 3.53 | 0. |
| 2 | 8.96 | 0.207 | 4.51 | 78.02 | 61.643 | 60.76 | 0. |
| 3 | 10.92 | 0.264 | 0.23 | 4.07 | 4.210 | 4.15 | 0. |
| 4 | 14.22 | 0.342 | 0.14 | 2.45 | 3.195 | 3.15 | 0. |
| 5 | 16.50 | 0.392 | 0.32 | 5.61 | 8.957 | 8.83 | 0. |
| 6 | 22.08 | 0.760 | 0.15 | 2.67 | 8.730 | 8.61 | 0. |
| 7 | 25.62 | 0.627 | 0.26 | 4.57 | 11.141 | 10.98 | 0. |
| 7 | 29.00 | 0.405 | 5.78 | 99.94 | 101.452 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 124 of 224

2

3

T E

6

8

9

11

12

13

Report date: Printed by:

3/25/2021 8:30:44 AM

wet

Ident:

M1770-10MSDX20

Analysis from:

3/24/2021 5:39:01 PM

File:

2021-03-24

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Last save: 3/24/2021 6:07:50 PM

Method: Run operator: Analysis number:

wet 73808

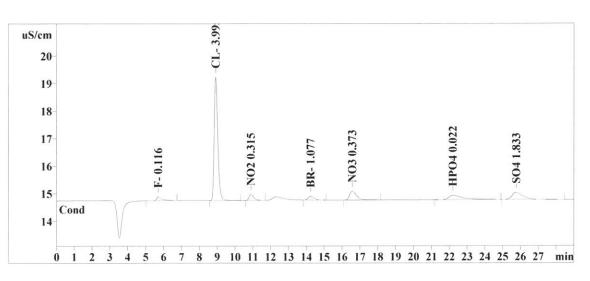
SAMPLE:

Amount:

:
Vial number:
Volume:
Dilution:

AM/AP 37

20.0 µL 1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|------------------|-------------|-----------------|--------|-------------------|-----------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 5.70 | 0.236 | 0.14 | 2.46 | 2.711 | 2.71 | 0. |
| 2 | 8.91 | 0.209 | 4.48 | 78.34 | 61.825 | 61.91 | 0. |
| 3 | 10.90 | 0.271 | 0.22 | 3.85 | 4.036 | 4.04 | 0. |
| 4 | 14.24 | 0.338 | 0.14 | 2.39 | 3.031 | 3.03 | 0. |
| 5 | 16.58 | 0.403 | 0.32 | 5.59 | 8.514 | 8.53 | 0. |
| 6 | 22.20 | 0.759 | 0.16 | 2.81 | 8.896 | 8.91 | 0. |
| 7 | 25.75 | 0.628 | 0.26 | 4.50 | 10.852 | 10.87 | 0. |
| 7 | 29.00 | 0.406 | 5.71 | 99.94 | 99.864 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 125 of 224

Report date: Printed by:

3/25/2021 8:31:12 AM

wet

Ident:

M1770-11DLX2000

Analysis from:

3/24/2021 6:10:55 PM

File:

2021-03-24

Last save: 3/25/2021 8:31:12 AM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

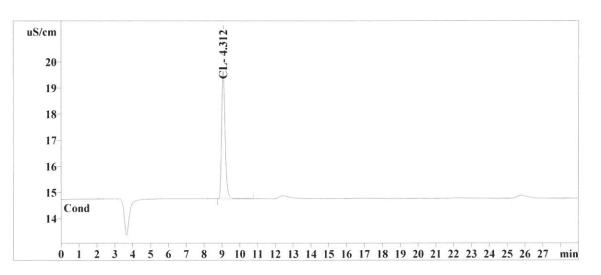
Run operator: Analysis number: wet 73809

SAMPLE:

:
Vial number:
Volume:

AM/AP 38

Volume: Dilution: Amount: 20.0 μL 1.00 1.0000



| Quantit | tation method: | Custom | | | | | |
|---------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 90 | uS/cm*sec | 90 | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 9.06 | 0.207 | 4.88 | 100.01 | 66.913 | 100.00 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 29.00 | 0.030 | 4.88 | 100.01 | 66.913 | 100.00 | 0. |

This report has been created by IC Net ${\tt METROHM\ LTD}$

M1770-GENCHEM 126 of 224

Report date: Printed by:

3/25/2021 8:31:34 AM

wet

Ident:

M1770-12X2

Analysis from:

3/24/2021 6:42:49 PM

File:

2021-03-24

Last save: 3/24/2021 7:11:38 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

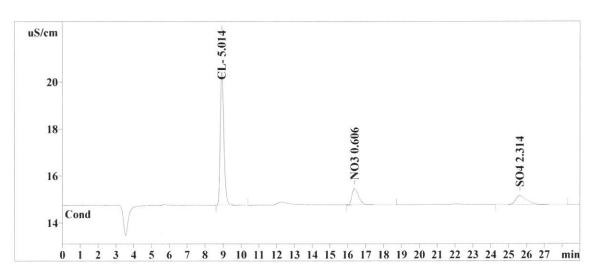
Run operator: Analysis number: wet 73810

SAMPLE:

AM/AP Vial number: 39 Volume:

Dilution: Amount:

20.0 µL 1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|------------------|----------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 8.92 | 0.209 | 5.66 | 84.02 | 78.171 | 69.04 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 16.39 | 0.398 | 0.69 | 10.23 | 18.120 | 16.00 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.62 | 0.646 | 0.39 | 5.72 | 16.932 | 14.95 | 0. |
| 7 | 29.00 | 0.179 | 6.74 | 99.97 | 113.223 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 127 of 224

Report date: Printed by:

3/25/2021 8:31:42 AM

wet

Ident:

M1770-13X2

Analysis from:

3/24/2021 7:14:43 PM

File:

2021-03-24

Last save: 3/24/2021 7:43:32 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

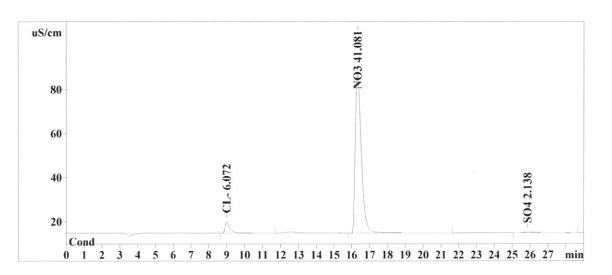
Run operator: Analysis number: wet 73811

SAMPLE:

: Vial number: AM/AP 40 20.0 μL 1.00

Volume: Dilution: Amount:

1.00



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 8 | uS/cm*sec | 8 | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 9.01 | 0.253 | 5.07 | 6.58 | 95.157 | 5.28 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 16.32 | 0.356 | 71.74 | 93.03 | 1690.905 | 93.90 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.85 | 0.711 | 0.31 | 0.40 | 14.711 | 0.82 | 0. |
| 7 | 29.00 | 0.189 | 77.12 | 100.00 | 1800.773 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 128 of 224

Report date: Printed by:

3/25/2021 8:32:04 AM

wet

Ident:

M1770-14X2

Analysis from:

Analysis number:

3/24/2021 7:46:37 PM

File:

2021-03-24 Last save: 3/25/2021 8:32:02 AM

ANIONS 03-09-21.mtw

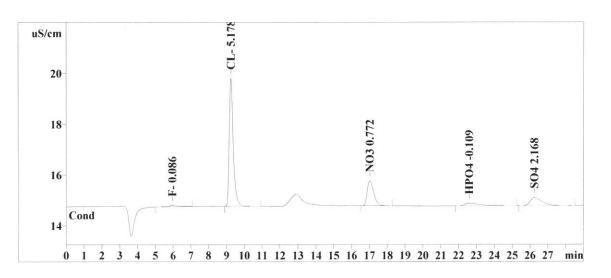
Last save: 3/19/2021 4:28:14 PM

Method: Run operator:

wet 73812

SAMPLE:

: AM/AP
Vial number: 41
Volume: 20.0 µL
Dilution: 1.00
Amount: 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|-------------|--------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area | |
| 1 | 5.96 | 0.397 | 0.05 | 0.83 | 1.914 | 1.48 | 0. |
| 2 | 9.24 | 0.232 | 5.04 | 77.45 | 80.813 | 62.53 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 17.01 | 0.397 | 0.98 | 15.01 | 24.991 | 19.34 | 0. |
| 6 | 22.59 | 0.833 | 0.11 | 1.62 | 6.434 | 4.98 | 0. |
| 7 | 26.24 | 0.687 | 0.33 | 5.04 | 15.089 | 11.68 | 0. |
| 7 | 29.00 | 0.364 | 6.51 | 99.95 | 129.241 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 129 of 224

Report date: Printed by:

3/25/2021 8:34:18 AM

wet

Ident:

M1770-15DLX50

Analysis from:

3/24/2021 8:18:31 PM

File:

2021-03-24

Last save: 3/24/2021 8:47:20 PM

Method:

ANIONS 03-09-21.mtw wet

Last save: 3/19/2021 4:28:14 PM

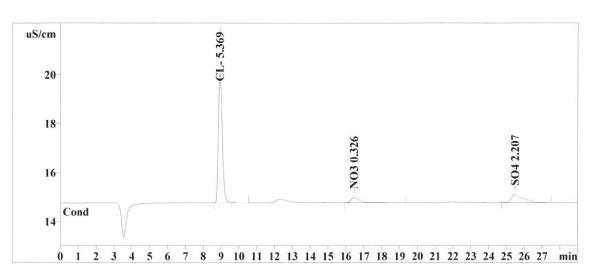
Run operator:
Analysis number:

73813

SAMPLE:

Vial number: Volume: AM/AP 42

Volume: Dilution: Amount: 20.0 µL 1.00 1.0000



| Quantit | tation method: | Custom | | | | | |
|---------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 8 | uS/cm*sec | % | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 8.92 | 0.247 | 5.28 | 90.60 | 83.864 | 79.10 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 16.45 | 0.477 | 0.21 | 3.53 | 6.570 | 6.20 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.48 | 0.647 | 0.34 | 5.86 | 15.590 | 14.70 | 0. |
| 7 | 29.00 | 0.196 | 5.83 | 99.98 | 106.023 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 130 of 224

Report date: Printed by:

3/25/2021 8:34:54 AM

wet

Ident:

M1770-16DLX50

Analysis from:

3/24/2021 8:50:25 PM

File:

2021-03-24

Last save: 3/24/2021 9:19:14 PM

Method:

ANIONS 03-09-21.mtw wet

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number:

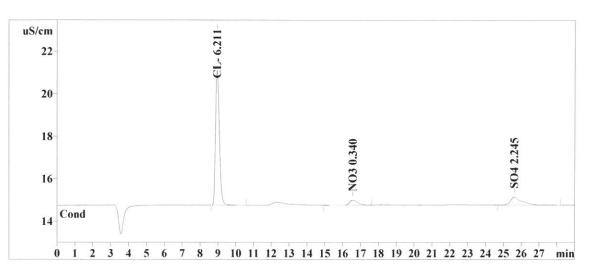
73814

SAMPLE:

Vial number: Volume: AM/AP 43 20.0 μL 1.00

Dilution: Amount:

1.00



| Quantit | tation method: | Custom | | | | | |
|---------|----------------|---------|--------|--------------|-----------------|---------------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 96 | uS/cm*sec | 9 | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 8.94 | 0.238 | 6.33 | 91.35 | 97.381 | 80.77 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 16.55 | 0.462 | 0.23 | 3.39 | 7.125 | 5.91 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.60 | 0.629 | 0.36 | 5.25 | 16.066 | 13.32 | 0. |
| 7 | 29.00 | 0.190 | 6.93 | 99.99 | 120.571 | 100.00 | 0. |
| _ | 0.00 25.60 | 0.000 | 0.00 | 0.00 5.25 | 0.000 16.066 | 0.00 13.32 | |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 131 of 224

Report date: Printed by:

3/25/2021 8:35:01 AM

wet

Ident:

M1770-17DLX100

Analysis from:

3/24/2021 9:22:19 PM

File:

2021-03-24_

Last save: 3/24/2021 9:51:08 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73815

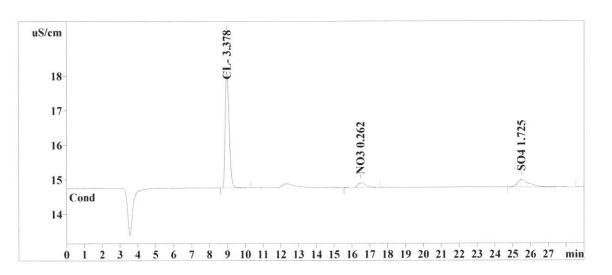
SAMPLE:

: A

AM/AP 44

Vial number:
Volume:
Dilution:
Amount:

20.0 µL 1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 8 | uS/cm*sec | ્રે | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 8.96 | 0.239 | 3.36 | 90.70 | 51.920 | 79.48 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 16.49 | 0.453 | 0.13 | 3.56 | 3.912 | 5.99 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.48 | 0.647 | 0.21 | 5.67 | 9.491 | 14.53 | 0. |
| 7 | 29.00 | 0.191 | 3.70 | 99.93 | 65.323 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 132 of 224

Report date: Printed by:

3/25/2021 8:37:00 AM

wet

Ident:

M1770-17DLX100

Analysis from:

3/24/2021 9:22:19 PM

File:

2021-03-24

Last save: 3/24/2021 9:51:08 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73815

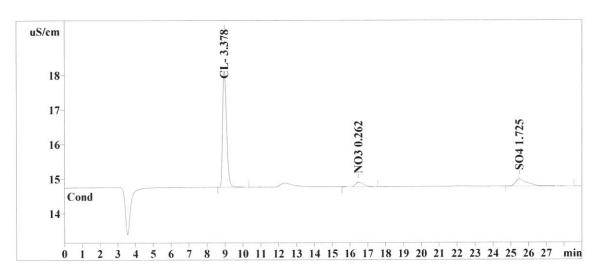
SAMPLE:

:
Vial number:
Volume:

AM/AP 44 20.0 μL

Dilution: Amount:

1.00



| Quanti | tation method: | Custom | | | | | |
|--------|------------------|----------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 8.96 | 0.239 | 3.36 | 90.70 | 51.920 | 79.48 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 16.49 | 0.453 | 0.13 | 3.56 | 3.912 | 5.99 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.48 | 0.647 | 0.21 | 5.67 | 9.491 | 14.53 | 0. |
| 7 | 29.00 | 0.191 | 3.70 | 99.93 | 65.323 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 133 of 224

Report date: 3/25/2021 8:37:21 AM

Printed by: wet

Ident: CCV

Analysis from: 3/24/2021 9:54:13 PM

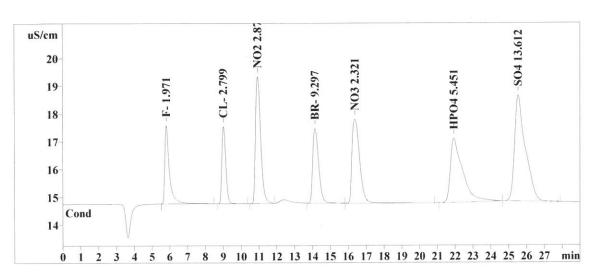
File: __2021-03-24_ Last save: 3/24/2021 10:23:02 PM

Method: ANIONS 03-09-21.mtw Last save: 3/19/2021 4:28:14 PM

Run operator: wet Analysis number: 73816

SAMPLE:

: AM/AP
Vial number: 11
Volume: 20.0 μL
Dilution: 1.00
Amount: 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|-------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 5.81 | 0.236 | 2.82 | 12.79 | 51.375 | 8.43 | 0. |
| 2 | 9.01 | 0.237 | 2.78 | 12.63 | 42.615 | 7.00 | 0. |
| 3 | 10.93 | 0.313 | 4.57 | 20.78 | 93.011 | 15.27 | 0. |
| 4 | 14.13 | 0.363 | 2.68 | 12.19 | 62.596 | 10.28 | 0. |
| 5 | 16.37 | 0.454 | 3.02 | 13.73 | 89.023 | 14.61 | 0. |
| 6 | 21.92 | 0.706 | 2.31 | 10.51 | 110.715 | 18.18 | 0. |
| 7 | 25.53 | 0.616 | 3.82 | 17.36 | 159.790 | 26.23 | 0. |
| 7 | 29.00 | 0.418 | 22.01 | 99.99 | 609.124 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 134 of 224

135 of 224

Report date: Printed by:

3/25/2021 8:37:28 AM

wet

Ident:

CCB

Analysis from:

3/24/2021 10:26:07 PM

File:

2021-03-24_

Last save: 3/24/2021 10:54:56 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73817

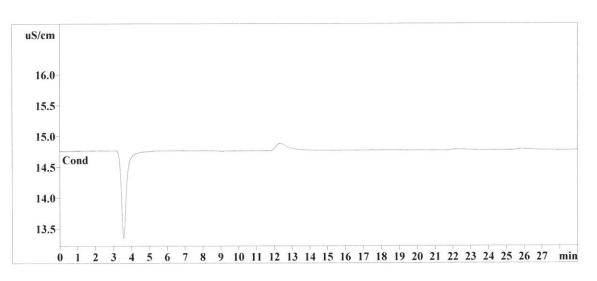
SAMPLE:

AM/AP 12

Vial number: Volume: Dilution: Amount:

20.0 µL

1.00 1.0000



Quantitation method:

Custom

No peaks

This report has been created by IC Net METROHM LTD

M1770-GENCHEM

IC-1 3/29/2021 800.0 AM

Clear table

| ident | concentra tion F- | concentrati on CL- | concentrati on NO2 | concentrati on BR- | concentrati on NO3 | concentrati on HPO4 | concentrati on SO4 | file name | date time | Initial wt/ Final Vol | Analyst |
|----------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|-----------------------|--------------|---------------|-----------------------------|---------|
| STD1 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | _2021-03-09_ | 3/9/21 9:53 | | AM/AP |
| STD2 | 0.3800 | 0.6610 | 0.6650 | 2.3350 | 0.5890 | 0.7930 | 3.5170 | _2021-03-09_ | 3/9/21 10:25 | | AM/AP |
| STD3 | 0.8060 | 1.2430 | 1.2290 | 4.1410 | 1.0270 | 2.0680 | 6.1740 | _2021-03-09_ | 3/9/21 11:04 | | AM/AP |
| STD4 | 1.0000 | 1.4840 | 1.4780 | 5.0120 | 1.2560 | 2.5800 | 7.4420 | _2021-03-09_ | 3/9/21 11:34 | | AM/AP |
| STD5 | 2.0300 | 2.9410 | 2.9490 | 9.4860 | 2.3580 | 5.0880 | 14.1650 | _2021-03-09_ | 3/9/21 12:05 | | AM/AP |
| STD6 | 3.9820 | 5.8220 | 5.8470 | 19.5340 | 4.9180 | 10.1240 | 29.7870 | _2021-03-09_ | 3/9/21 12:36 | | AM/AP |
| STD7 | 5.0030 | | 7.6310 | 25.4930 | 6.3520 | 12.3470 | 37.9150 | _2021-03-09_ | 3/9/21 13:07 | | AM/AP |
| ICV | 2.0000 | 2.9430 | 2.9180 | 9.7600 | 2.4440 | 5.0450 | 14.4750 | _2021-03-09_ | 3/9/21 13:41 | | AM/AP |
| ICB | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | _2021-03-09_ | 3/9/21 14:12 | | AM/AP |
| CCV | 1.8360 | 2.7830 | 2.8330 | 9.1440 | 2.2730 | 5.1740 | 13.5080 | _2021-03-25_ | 3/25/21 13:35 | | AM/AP |
| CCB | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | _2021-03-25_ | 3/25/21 14:07 | | AM/AP |
| LB113684BLW | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 2021-03-25 | 3/25/21 14:39 | | AM/AP |
| LB113684BSW | 1.9330 | 2.7480 | 2.8120 | 9.3660 | 2.3370 | 5.2290 | 13.3150 | _2021-03-25_ | 3/25/21 15:11 | | AM/AP |
| M1770-20X5 | 0.1150 | 866.6830 | 0.0000 | 2.5440 | 0.0000 | 0.0000 | 1.3300 | _2021-03-25_ | 3/25/21 16:15 | | AM/AP |
| M1770-21X5 | 0.0000 | 66.7150 | 0.0000 | 0.0000 | 1.5230 | 0.0000 | 11.5260 | _2021-03-25_ | 3/25/21 16:47 | | AM/AP |
| M1770-22X5 | 0.0000 | 1.6670 | 0.0000 | 0.0000 | 0.2620 | 0.0000 | 2.4450 | _2021-03-25_ | 3/25/21 17:19 | | AM/AP |
| M1770-23X5 | 0.0000 | 69.2240 | 0.0000 | 0.0000 | 1.6290 | 0.0000 | 14.5090 | _2021-03-25_ | 3/25/21 17:50 | | AM/AP |
| M1770-24X5 | 0.0000 | 68.1420 | 0.0000 | 0.0000 | 1.6390 | 0.0000 | 14.0190 | _2021-03-25_ | 3/25/21 18:22 | | AM/AP |
| M1770-24MSX5 | 0.5110 | 65.0450 | 0.6420 | 2.3010 | 1.9640 | 1.0990 | 15.9150 | _2021-03-25_ | 3/25/21 18:54 | | AM/AP |
| M1770-24MSDX5 | 0.4750 | 65.3800 | 0.6540 | 2.2950 | 1.9920 | 1.3200 | 15.9140 | _2021-03-25_ | 3/25/21 19:26 | | AM/AP |
| CCV | 1.9930 | | | | 2.2810 | 5.4740 | 13.5500 | 2021-03-25 | 3/25/21 19:58 | | AM/AP |
| CCB | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | _2021-03-25_ | 3/25/21 20:30 | | AM/AP |
| CCV | 1.9660 | 2.7820 | 2.7770 | 9.1970 | 2.2660 | 4.9840 | 13.4560 | 2021-03-26_ | 3/26/21 8:50 | | AM/AP |
| ССВ | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 2021-03-26 | 3/26/21 9:26 | | AM/AP |
| LB113684BLW2 | 0.0000 | | | | | 0.0000 | 0.0000 | 2021-03-26_ | 3/26/21 9:58 | | AM/AP |
| LB113684BSW2 | 2.0110 | | | | | 5.3140 | 13.5970 | _2021-03-26_ | 3/26/21 10:31 | | AM/AP |
| M1763-03 | 1.0430 | 1020.2470 | 0.3040 | 2.2000 | 4.0380 | 0.0000 | 50.2010 | _2021-03-26_ | 3/26/21 11:04 | | AM/AP |
| M1763-03MS | 2.6440 | 1003.9180 | 3.0340 | 11.4550 | 6.5390 | 1.5230 | 63.7630 | 2021-03-26 | 3/26/21 11:37 | • | AM/AP |
| M1763-03MSD | 2.6070 | 975.5340 | 2.9740 | 11.3580 | 6.5280 | 1.0010 | 63.8250 | 2021-03-26 | 3/26/21 12:10 | ĺ | AM/AP |
| M1770-20DLX100 | | | | | 0.0000 | 0.0000 | 0.0000 | 2021-03-26_ | 3/26/21 12:43 | | AM/AP |
| M1770-21DLX50 | 0.0000 | | | | | | | _2021-03-26_ | 3/26/21 13:16 | • | AM/AP |
| M1770-23DLX50 | 0.0000 | | | | | | | _2021-03-26_ | 3/26/21 13:49 | Ì | AM/AP |
| M1770-24DLX50 | 0.0000 | | | | | | | _2021-03-26_ | 3/26/21 14:22 | 2 | AM/AP |
| CCV | 1.8910 | | | | | | | _2021-03-26_ | 3/26/21 14:55 | | AM/AP |
| ССВ | 0.0000 | | | | | 0.0000 | | _2021-03-26_ | 3/26/21 15:27 | • | AM/AP |













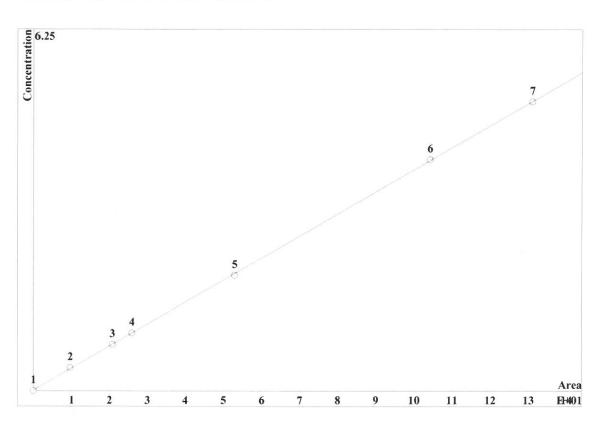


CALIBRATION OF COMPONENT F-

Method: ANIONS 03-09-21.mtw

Equation: $Q = 0.762166 \cdot A + 0.260905$

RSD: 0.935 % Correlation coefficient: 0.999952



K2 = 0K3 = 0K1 = 0.762166K0 = 0.260905

Area Base: Ref.channel: Cond

ISTD:

Linear Formula:

Weight:

| Level | Height | Area | Conc. | Vol/Dil | Retention | Used | File | | | |
|-------|--------|------|-------|---------|-----------|------|------|-----|-----|-----|
| 1 | 0 | | 0 | | 0 | | 0 | | 0 | No |
| 2 | 0.7658 | 9. | 617 | 0. | . 4 | | 20 | 5.8 | 122 | Yes |
| 3 | 1.568 | 2 | 0.8 | 0. | . 8 | | 20 | 5.8 | 122 | Yes |
| 4 | 2.051 | 2 | 5.9 | | 1 | | 20 | 5.8 | 122 | Yes |
| 5 | 4.191 | 52 | .93 | | 2 | | 20 | 5.8 | 22 | Yes |
| 6 | 8.519 | 10 | 4.1 | | 4 | | 20 | 5.8 | 22 | Yes |
| 7 | 10.98 | 13 | 0.9 | | 5 | | 20 | 5.8 | 22 | Yes |

JC-1 300.0 3/09/2021

Reviewed By:apatel On:3/30/2021 1:58:30 PM Inst Id :IC-1 LB:LB113684

CALIBRATION OF COMPONENT CL-

Method:

ANIONS 03-09-21.mtw

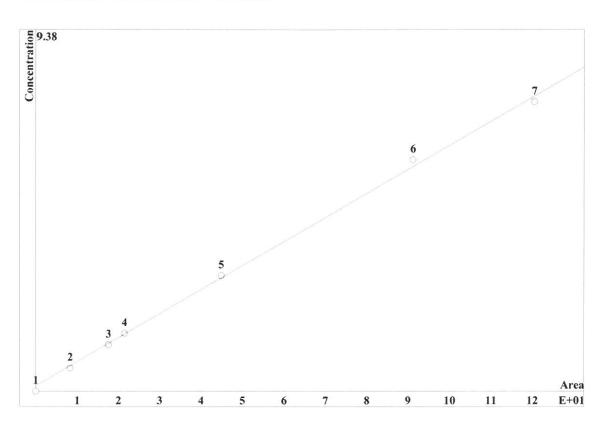
Equation:

 $Q = 1.24598 \cdot A + 2.87797$

RSD:

3.808 %

Correlation coefficient: 0.999209



K3 = 0Base:

K2 = 0Area

K1 = 1.24598

K0 = 2.87797

Ref.channel: Cond

ISTD:

Formula: Linear Weight: 1

| Level | Height | Area C | Conc. Vol/Dil | Retention | Used File | е | |
|-------|--------|--------|---------------|-----------|-----------|------|-----|
| 1 | 0 | | 0 | 0 | 0 | 0 | No |
| 2 | 0.6501 | 8.2 | 293 | 0.6 | 20 | 9.31 | Yes |
| 3 | 1.365 | 17. | . 65 | 1.2 | 20 | 9.31 | Yes |
| 4 | 1.705 | 21. | .51 | 1.5 | 20 | 9.31 | Yes |
| 5 | 3.511 | 4 4 | 4.9 | 3 | 20 | 9.31 | Yes |
| 6 | 7.471 | 91. | .14 | 6 | 20 | 9.31 | Yes |
| 7 | 9.724 | 120 | 0.5 | 7.5 | 20 | 9.31 | Yes |

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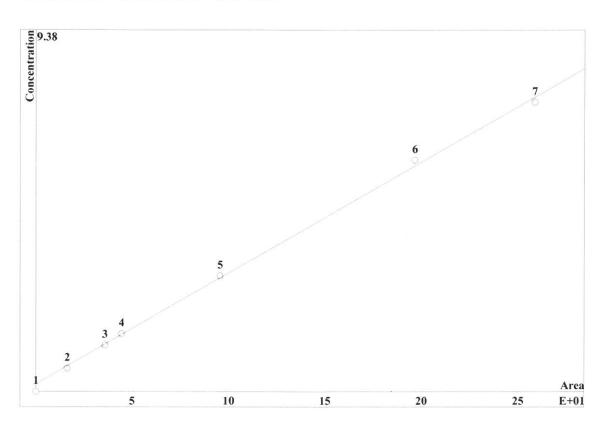
Page 3; 2021-03-09 13-07.chw; 09/03/2021 14:11:17

CALIBRATION OF COMPONENT NO2

ANIONS 03-09-21.mtw Method:

Equation: $Q = 0.574737 \cdot A + 3.98858$

3.346 % RSD: Correlation coefficient: 0.999389



K3 = 0K2 = 0 K1 = 0.574737K0 = 3.98858

Base: Area Ref.channel: Cond

ISTD:

Linear Formula:

Weight: 1

| Level | Height | Area C | onc. Vol/Dil | Retention | Used File | | |
|-------|--------|--------|--------------|-----------|-----------|-------|-----|
| 1 | 0 | | 0 | 0 | 0 | 0 | No |
| 2 | 1.027 | 16. | 22 | 0.6 | 20 | 11.45 | Yes |
| 3 | 2.244 | 35. | 84 | 1.2 | 20 | 11.45 | Yes |
| 4 | 2.787 | 44 | .5 | 1.5 | 20 | 11.45 | Yes |
| 5 | 5.661 | 95 | .7 | 3 | 20 | 11.45 | Yes |
| 6 | 11.53 | 196 | .5 | 6 | 20 | 11.45 | Yes |
| 7 | 14.55 | 258 | .6 | 7.5 | 20 | 11.45 | Yes |

M1770-GENCHEM 139 of 224

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Reviewed By:apatel On:3/30/2021 1:58:30 PM Inst Id :IC-1 LB:LB113684

10

CALIBRATION OF COMPONENT BR-

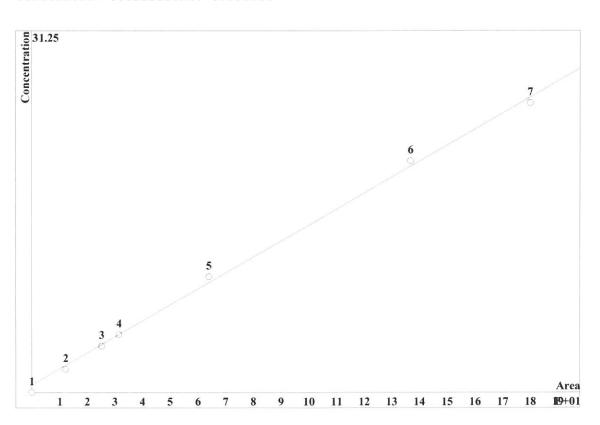
Method:

ANIONS 03-09-21.mtw

Equation:

 $Q = 2.76027 \cdot A + 13.1683$

RSD: 4.205 % Correlation coefficient: 0.999036



K3 = 0Base:

K2 = 0Area

K1 = 2.76027

K0 = 13.1683

Ref.channel: Cond

ISTD:

Formula: Linear Weight:

1

| Level | Height | Area | Conc. | Vol/Dil | Retent | ion Used | File | | |
|-------|--------|------|-------|---------|--------|----------|------|-------|-----|
| 1 | 0 | | 0 | | 0 | | 0 | 0 | No |
| 2 | 0.6194 | 12 | 2.15 | | 2 | | 20 | 15.03 | Yes |
| 3 | 1.323 | 25 | 5.23 | | 4 | | 20 | 15.03 | Yes |
| 4 | 1.672 | 3: | L.54 | | 5 | | 20 | 15.03 | Yes |
| 5 | 3.458 | 63 | 3.96 | | 10 | | 20 | 15.03 | Yes |
| 6 | 7.336 | 13 | 36.8 | | 20 | | 20 | 15.03 | Yes |
| 7 | 9.456 | 17 | 79.9 | | 25 | | 20 | 15.03 | Yes |

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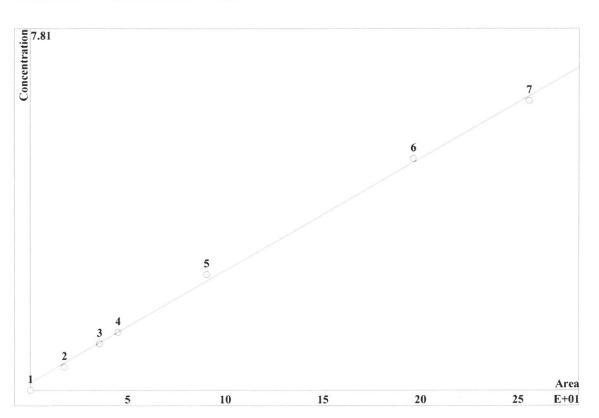
Page 5; _2021-03-09_13-07.chw; 09/03/2021 14:11:17

CALIBRATION OF COMPONENT NO3

Method: ANIONS 03-09-21.mtw

Equation: $Q = 0.483932 \cdot A + 3.34418$

RSD: 3.902 % Correlation coefficient: 0.999170



K3 = 0 K2 = 0 K1 = 0.483932 K0 = 3.34418

Base: Area Ref.channel: Cond

ISTD:

Formula: Linear

Weight: 1

| Level | Height | Area | Conc. | Vol/Dil | Retention | Used | File | | |
|-------|--------|------|-------|---------|-----------|------|------|-------|-----|
| 1 | 0 | | 0 | | 0 | | 0 | 0 | No |
| 2 | 0.7355 | 17 | .43 | 0. | 5 | | 20 | 17.65 | Yes |
| 3 | 1.552 | 35 | .52 | | 1 | | 20 | 17.65 | Yes |
| 4 | 1.953 | 4.5 | .01 | 1.2 | 5 | | 20 | 17.65 | Yes |
| 5 | 4.007 | 90 | .53 | 2. | 5 | | 20 | 17.65 | Yes |
| 6 | 8.482 | 19 | 6.4 | | 5 | | 20 | 17.65 | Yes |
| 7 | 10.98 | 25 | 5.6 | 6.2 | 5 | | 20 | 17.65 | Yes |

M1770-GENCHEM 141 of 224

1

2

4

7

9

10 11

12

13

Page 6; 2021-03-09 13-07.chw; 09/03/2021 14:11:17

CALIBRATION OF COMPONENT HPO4

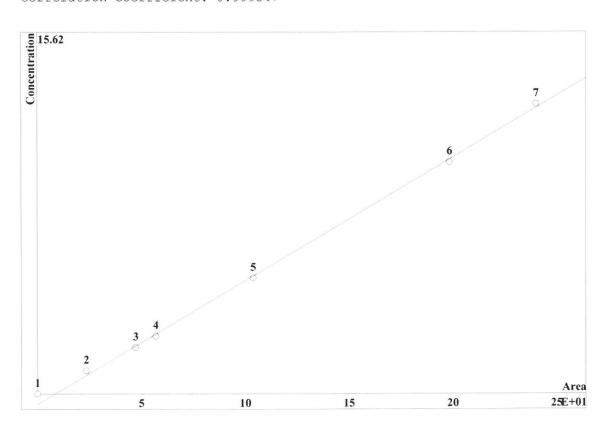
Method:

ANIONS 03-09-21.mtw

Equation:

 $Q = 1.06642 \cdot A - 9.04155$

RSD: Correlation coefficient: 0.999547



K3 = 0

K2 = 0Area

K1 = 1.06642 K0 = -9.04155

Base: Ref.channel: Cond ISTD:

Formula: Weight:

Linear 1

| Level | Height | Area | Conc. | Vol/Dil | Retentio | n Used F | ile | | |
|-------|--------|------|-------|---------|----------|----------|-----|-------|-----|
| 1 | 0 | | 0 | | 0 | (|) | 0 | No |
| 2 | 0.6282 | | 23.35 | | 1 | 20 |) | 23.03 | Yes |
| 3 | 1.326 | | 47.25 | | 2 | 20 |) | 23.03 | Yes |
| 4 | 1.621 | | 56.87 | 2 | 2.5 | 20 |) | 23.03 | Yes |
| 5 | 3.08 | | 103.9 | | 5 | 20 |) | 23.03 | Yes |
| 6 | 6.03 | | 198.4 | | 10 | 20 |) | 23.03 | Yes |
| 7 | 7.557 | | 240 | 12 | 2.5 | 20 | C | 23.03 | Yes |

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Page 7; 2021-03-09 13-07.chw; 09/03/2021 14:11:17

CALIBRATION OF COMPONENT SO4

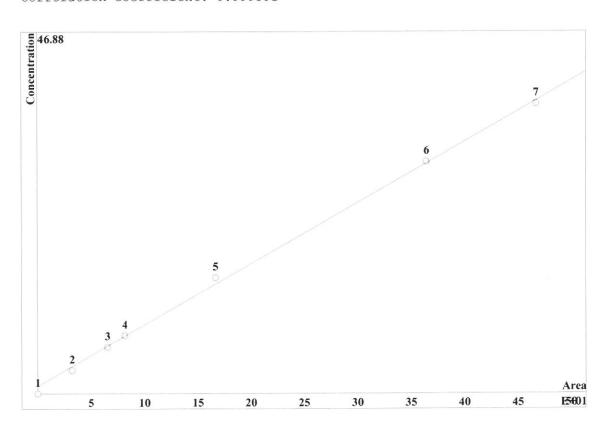
Method:

ANIONS 03-09-21.mtw

Equation:

 $Q = 1.58171 \cdot A + 19.4902$

3.342 % RSD: Correlation coefficient: 0.999391



K3 = 0K2 = 0

K1 = 1.58171

K0 = 19.4902

Base: Area Ref.channel: Cond

ISTD:

Formula:

Linear

Weight:

1

| Level | Height | Area | Conc. | Vol/Dil | Retenti | on Used | File | | |
|-------|--------|------|-------|---------|---------|---------|------|-------|-----|
| 1 | 0 | | 0 | | 0 | | 0 | 0 | No |
| 2 | 1.068 | | 32.15 | | 3 | | 20 | 26.99 | Yes |
| 3 | 2.214 | | 65.75 | | 6 | | 20 | 26.99 | Yes |
| 4 | 2.773 | | 81.78 | 7 | .5 | | 20 | 26.99 | Yes |
| 5 | 5.719 | | 166.8 | | 15 | | 20 | 26.99 | Yes |
| 6 | 12.24 | | 364.3 | | 30 | | 20 | 26.99 | Yes |
| 7 | 15.74 | | 467.1 | 37 | .5 | | 20 | 26.99 | Yes |

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10

Report date: Printed by:

3/9/2021 2:10:21 PM

wet

Ident:

STD1

Analysis from: File:

3/9/2021 9:53:04 AM

2021-03-09

Last save: 3/9/2021 2:10:10 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/9/2021 1:04:34 PM

Run operator: Analysis number: wet 73549

SAMPLE:

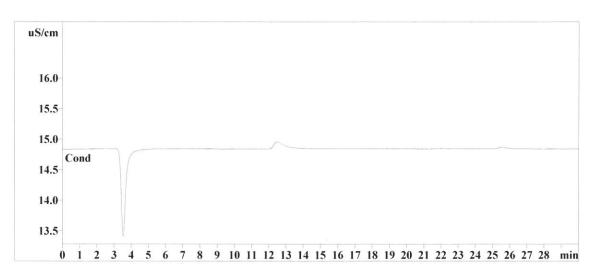
AM/AP

Vial number: Volume:

20.0 µL

Dilution: Amount:

1.00 1.0000



Quantitation method: Custom

No peaks

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 144 of 224 Report date: Printed by:

3/9/2021 2:10:26 PM

wet

Ident:

STD2

Analysis from:

3/9/2021 10:25:57 AM

File:

2021-03-09

Last save: 3/9/2021 2:10:10 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/9/2021 1:04:34 PM

119.201

100.00

0.

Run operator: Analysis number: wet 73550

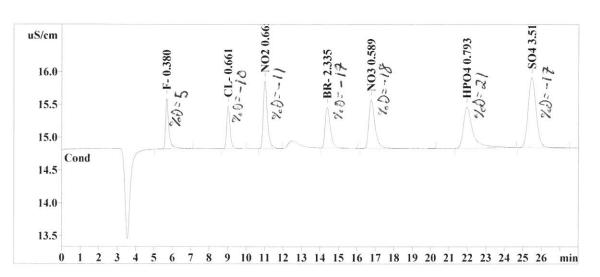
SAMPLE:

Amount:

:
Vial number:
Volume:
Dilution:

AM/AP

20.0 μL 1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|------------------|----------------|-----------------|----------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height % | Area uS/cm*sec | Area % | |
| 1 | 5.69 | 0.163 | 0.77 | 13.93 | 9.617 | 8.07 | 0. |
| 2 | 9.01 | 0.189 | 0.65 | 11.83 | 8.293 | 6.96 | 0. |
| 3 | 11.00 | 0.230 | 1.03 | 18.68 | 16.217 | 13.60 | 0. |
| 4 | 14.39 | 0.290 | 0.62 | 11.27 | 12.146 | 10.19 | 0. |
| 5 | 16.76 | 0.343 | 0.73 | 13.37 | 17.428 | 14.62 | 0. |
| 6 | 21.96 | 0.485 | 0.63 | 11.43 | 23.346 | 19.59 | 0. |
| 7 | 25.47 | 0.456 | 1.07 | 19.42 | 32.154 | 26.98 | 0. |

5.49

99.93

This report has been created by IC Net METROHM LTD

0.308

28.00

M1770-GENCHEM 145 of 224

Report date: Printed by: 3/9/2021 2:10:32 PM

wet

Ident:

STD3

Analysis from:

3/9/2021 11:04:02 AM

File:

2021-03-09

Last save: 3/9/2021 2:10:10 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/9/2021 1:04:34 PM

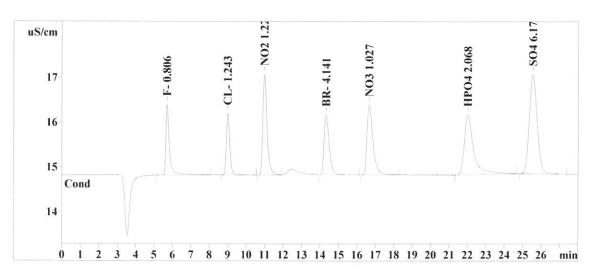
Run operator: Analysis number:

wet 73551

SAMPLE:

: AM/AP Vial number: 4

Volume: 4
Volume: 20.0 μL
Dilution: 1.00
Amount: 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 96 | uS/cm*sec | 90 | |
| 1 | 5.70 | 0.167 | 1.57 | 13.53 | 20.801 | 8.39 | 0. |
| 2 | 9.00 | 0.191 | 1.36 | 11.77 | 17.647 | 7.11 | 0. |
| 3 | 10.99 | 0.233 | 2.24 | 19.35 | 35.842 | 14.45 | 0. |
| 4 | 14.32 | 0.284 | 1.32 | 11.41 | 25.232 | 10.17 | 0. |
| 5 | 16.65 | 0.339 | 1.55 | 13.39 | 35.517 | 14.32 | 0. |
| 6 | 22.02 | 0.473 | 1.33 | 11.43 | 47.255 | 19.05 | 0. |
| 7 | 25.54 | 0.453 | 2.21 | 19.09 | 65.751 | 26.51 | 0. |
| 7 | 28.00 | 0.306 | 11.59 | 99.98 | 248.045 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 146 of 224

Report date: Printed by:

3/9/2021 2:10:43 PM

wet

Ident:

STD4

Analysis from:

3/9/2021 11:34:57 AM

File:

2021-03-09

ANIONS 03-09-21.mtw

Last save: 3/9/2021 1:04:34 PM

Last save: 3/9/2021 2:10:10 PM

Run operator: Analysis number: wet 73552

SAMPLE:

Method:

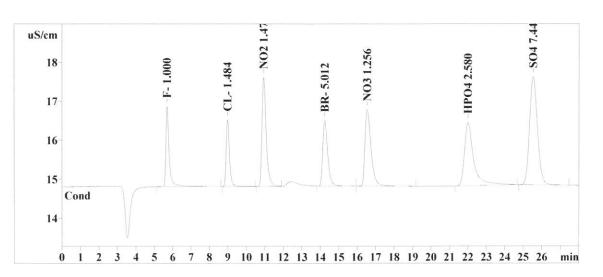
AM/AP

Vial number: Volume:

5 20.0 μL

Dilution:
Amount:

1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|------------------|----------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 5.69 | 0.163 | 2.05 | 14.08 | 25.900 | 8.43 | 0. |
| 2 | 8.98 | 0.187 | 1.70 | 11.71 | 21.511 | 7.00 | 0. |
| 3 | 10.93 | 0.233 | 2.79 | 19.14 | 44.499 | 14.49 | 0. |
| 4 | 14.23 | 0.281 | 1.67 | 11.48 | 31.544 | 10.27 | 0. |
| 5 | 16.54 | 0.340 | 1.95 | 13.41 | 45.008 | 14.66 | 0. |
| 6 | 22.00 | 0.468 | 1.62 | 11.13 | 56.868 | 18.52 | 0. |
| 7 | 25.53 | 0.450 | 2.77 | 19.04 | 81.777 | 26.63 | 0. |
| 7 | 28.00 | 0.303 | 14.56 | 99.99 | 307.107 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

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Report date: Printed by: 3/9/2021 2:10:49 PM

wet

Ident:

STD5

Analysis from:

3/9/2021 12:05:51 PM

File:

2021-03-09

Last save: 3/9/2021 2:10:10 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/9/2021 1:04:34 PM

Run operator: Analysis number: wet 73553

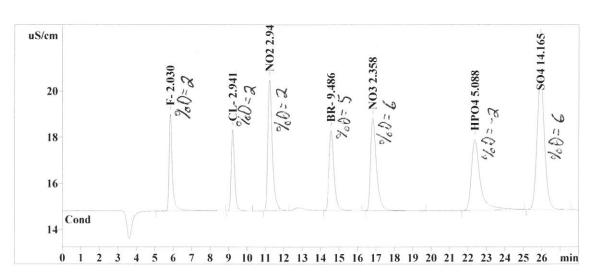
SAMPLE:

AM/AP

Vial number:
Volume:
Dilution:
Amount:

6 20.0 μL

1.00



| Quanti | tation method: | Custom | | | | | |
|--------|------------------|-------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 5.84 | 0.166 | 4.19 | 14.14 | 52.926 | 8.55 | 0. |
| 2 | 9.22 | 0.190 | 3.51 | 11.85 | 44.902 | 7.26 | 0. |
| 3 | 11.22 | 0.246 | 5.66 | 19.11 | 95.698 | 15.47 | 0. |
| 4 | 14.56 | 0.276 | 3.46 | 11.67 | 63.963 | 10.34 | 0. |
| 5 | 16.81 | 0.333 | 4.01 | 13.52 | 90.525 | 14.63 | 0. |
| 6 | 22.36 | 0.456 | 3.08 | 10.39 | 103.905 | 16.79 | 0. |
| 7 | 25.91 | 0.445 | 5.72 | 19.30 | 166.787 | 26.96 | 0. |
| 7 | 28.00 | 0.302 | 29.63 | 99.99 | 618.707 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 148 of 224

Report date: Printed by:

3/9/2021 2:10:54 PM

wet

Ident:

STD6

Analysis from:

3/9/2021 12:36:46 PM

File:

2021-03-09

Last save: 3/9/2021 2:10:10 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/9/2021 1:04:34 PM

Run operator: Analysis number: wet 73554

SAMPLE:

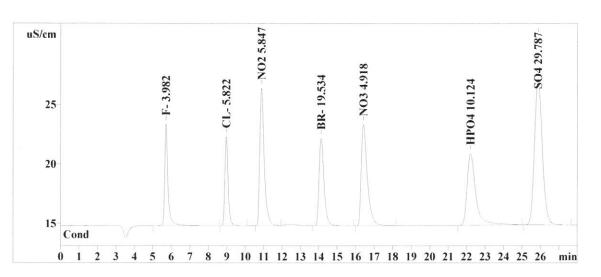
AM/AP

Vial number:

7 20.0 μL

Volume: Dilution: Amount:

1.00



| Quanti | tation method: | Custom | | | | | |
|--------|------------------|----------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 5.71 | 0.162 | 8.52 | 13.83 | 104.142 | 8.09 | 0. |
| 2 | 8.96 | 0.180 | 7.47 | 12.12 | 91.142 | 7.08 | 0. |
| 3 | 10.87 | 0.249 | 11.53 | 18.72 | 196.516 | 15.26 | 0. |
| 4 | 14.13 | 0.279 | 7.34 | 11.91 | 136.765 | 10.62 | 0. |
| 5 | 16.41 | 0.341 | 8.48 | 13.77 | 196.354 | 15.25 | 0. |
| 6 | 22.21 | 0.453 | 6.03 | 9.79 | 198.352 | 15.40 | 0. |
| 7 | 25.85 | 0.454 | 12.24 | 19.87 | 364.317 | 28.29 | 0. |
| 7 | 28.00 | 0.303 | 61.61 | 100.00 | 1287.589 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 149 of 224

Report date: Printed by:

3/9/2021 2:11:00 PM

wet

Ident:

STD7

Analysis from: File:

3/9/2021 1:07:41 PM

2021-03-09

Last save: 3/9/2021 2:10:10 PM

Method:

ANIONS 03-09-21.mtw

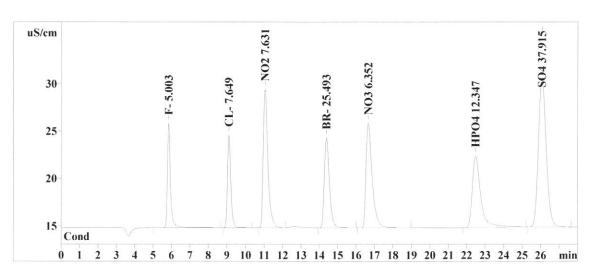
Last save: 3/9/2021 1:04:34 PM

Run operator: Analysis number: wet 73555

SAMPLE:

: AM/AP Vial number: 8

Volume: 20.0 μL Dilution: 1.00 Amount: 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | % | uS/cm*sec | of | |
| 1 | 5.85 | 0.162 | 10.98 | 13.90 | 130.942 | 7.92 | 0. |
| 2 | 9.10 | 0.184 | 9.72 | 12.31 | 120.469 | 7.29 | 0. |
| 3 | 11.04 | 0.261 | 14.55 | 18.42 | 258.600 | 15.65 | 0. |
| 4 | 14.38 | 0.285 | 9.46 | 11.97 | 179.940 | 10.89 | 0. |
| 5 | 16.66 | 0.342 | 10.98 | 13.91 | 255.618 | 15.47 | 0. |
| 6 | 22.48 | 0.441 | 7.56 | 9.57 | 240.037 | 14.52 | 0. |
| 7 | 26.05 | 0.454 | 15.74 | 19.92 | 467.090 | 28.26 | 0. |
| 7 | 28.00 | 0.304 | 78.99 | 100.00 | 1652.696 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 150 of 224

Report date: 3/9/2021 2:48:46 PM

Printed by: wet

Ident:

ICB

Analysis from:

3/9/2021 2:12:46 PM

File: 2021-03-09 Last save: 3/9/2021 2:48:32 PM

Method:

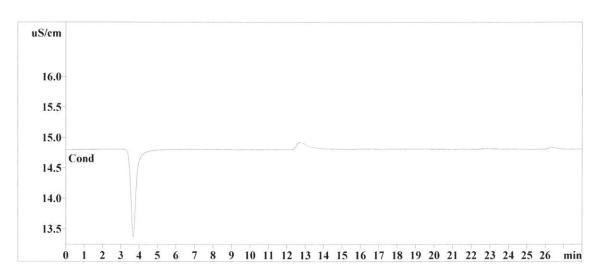
ANIONS 03-09-21.mtw

Last save: 3/9/2021 1:04:34 PM

Run operator: wet 73557 Analysis number:

SAMPLE:

AM/AP Vial number: 10 20.0 μL Volume: Dilution: 1.00 Amount: 1.0000



Quantitation method: Custom

No peaks

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 151 of 224

Report date: Printed by:

3/9/2021 2:47:19 PM

wet

Ident:

ICV

Analysis from:

3/9/2021 1:41:40 PM

File:

2021-03-09 Last save: 3/9/2021 2:47:14 PM

Method:

ANIONS 03-09-21.mtw

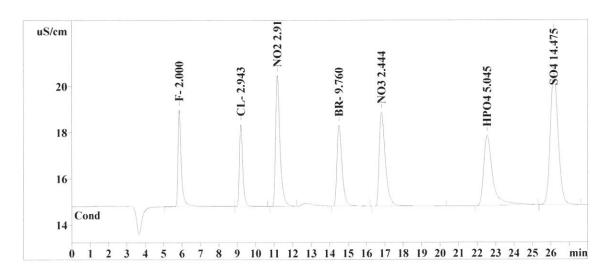
J

Last save: 3/9/2021 1:04:34 PM

Run operator: Analysis number: wet 73556

SAMPLE:

: AM/AP
Vial number: 9
Volume: 20.0 µL
Dilution: 1.00
Amount: 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|------------------|----------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area | |
| 1 | 5.85 | 0.164 | 4.18 | 14.09 | 52.139 | 8.34 | 0. |
| 2 | 9.20 | 0.189 | 3.53 | 11.90 | 44.930 | 7.18 | 0. |
| 3 | 11.17 | 0.243 | 5.66 | 19.09 | 94.592 | 15.12 | 0. |
| 4 | 14.50 | 0.283 | 3.49 | 11.76 | 65.945 | 10.54 | 0. |
| 5 | 16.81 | 0.342 | 4.05 | 13.66 | 94.112 | 15.05 | 0. |
| 6 | 22.53 | 0.456 | 3.04 | 10.25 | 103.085 | 16.48 | 0. |
| 7 | 26.16 | 0.457 | 5.71 | 19.25 | 170.704 | 27.29 | 0. |
| 7 | 28.00 | 0.305 | 29.65 | 99.99 | 625.507 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 152 of 224

Report date: Printed by:

3/26/2021 8:48:32 AM

wet

Ident:

CCV Analysis from:

File:

3/25/2021 1:35:11 PM

2021-03-25

Last save: 3/26/2021 8:48:26 AM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73829

SAMPLE:

Vial number: Volume: Dilution: Amount:

AM/AP 11 20.0 µL

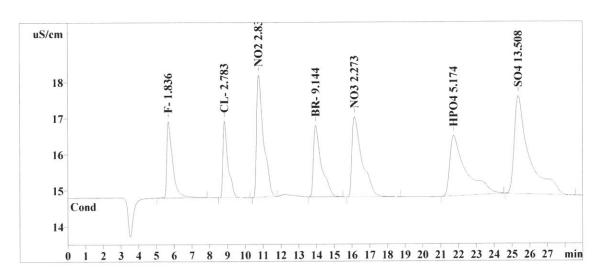
> 1.00 1.0000

COLUMN:

METROSEP A Supp 5 250/4.0

Size: Number: Part.size: $4.0 \times 250 \text{ mm}$

7401950 5.0 µm



| Quanti | tation method: | Custom | | | | | |
|--------|------------------|----------------|--------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 5.69 | 0.328 | 2.11 | 13.02 | 47.834 | 8.05 | 0. |
| 2 | 8.84 | 0.265 | 2.11 | 13.06 | 42.361 | 7.13 | 0. |
| 3 | 10.76 | 0.376 | 3.38 | 20.89 | 91.641 | 15.42 | 0. |
| 4 | 13.96 | 0.413 | 1.97 | 12.20 | 61.482 | 10.34 | 0. |
| 5 | 16.15 | 0.524 | 2.21 | 13.69 | 87.029 | 14.64 | 0. |
| 6 | 21.74 | 0.760 | 1.68 | 10.39 | 105.515 | 17.75 | 0. |
| 7 | 25.37 | 0.678 | 2.71 | 16.75 | 158.475 | 26.66 | 0. |
| 7 | 29.00 | 0.478 | 16.16 | 99.99 | 594.337 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 153 of 224

10

Report date: Printed by:

3/26/2021 8:48:41 AM

wet

Ident:

CCB

Analysis from:

3/25/2021 2:07:36 PM

File:

2021-03-25

021-03-23_

Last save: 3/26/2021 8:48:26 AM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73830

SAMPLE:

:
Vial number:
Volume:

AM/AP 12 20.0 μL 1.00

Dilution: Amount:

1.0000

COLUMN:

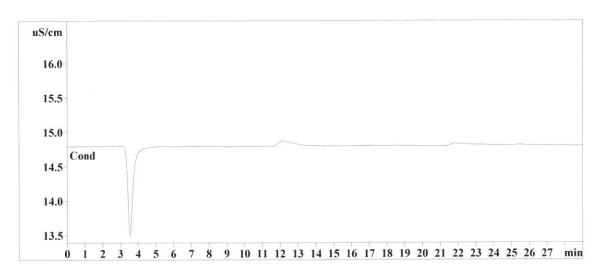
METROSEP A Supp 5 250/4.0

Size: Number: 4.0 x 250 mm

7401950

Part.size:

5.0 μm



Quantitation method:

Custom

No peaks

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 154 of 224

Last save: 3/26/2021 8:35:02 AM

Last save: 3/19/2021 4:28:14 PM

Report date: Printed by:

3/26/2021 8:48:49 AM

wet

Ident:

LB113684BLW

Analysis from:

3/25/2021 2:39:29 PM

File:

2021-03-25

Method:

ANIONS 03-09-21.mtw

Run operator: Analysis number: wet 73831

SAMPLE:

Volume:

Amount:

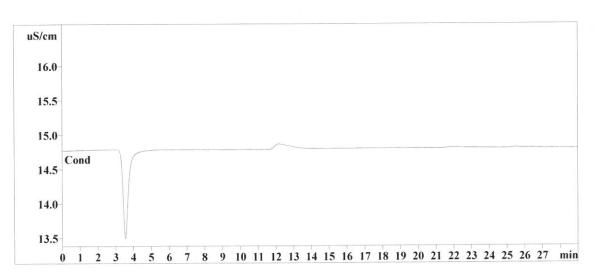
Vial number:

Dilution:

13

AM/AP

20.0 µL 1.00 1.0000



Quantitation method:

Custom

No peaks

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 155 of 224

10

Reviewed By:apatel On:3/30/2021 1:58:30 PM Inst Id :IC-1 LB :LB113684

Report date: Printed by:

3/26/2021 8:52:58 AM

wet

Ident:

CCB

Analysis from:

3/25/2021 8:30:23 PM

2021-03-25

Last save: 3/25/2021 8:59:12 PM

File:
Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73842

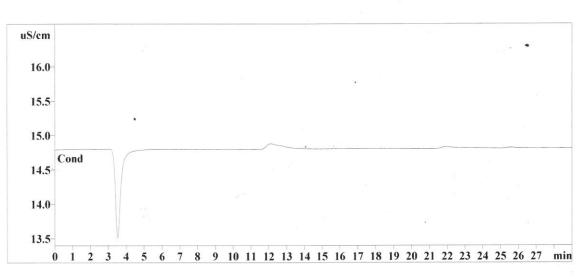
SAMPLE:

Amount:

:
Vial number:
Volume:
Dilution:

AM/AP

20.0 μL 1.00 1.0000



Quantitation method:

Custom

No peaks

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 156 of 224

Report date: Printed by:

3/26/2021 8:48:54 AM

wet

73832

Ident:

LB113684BSW

Analysis from:

3/25/2021 3:11:23 PM

File:

2021-03-25

ANIONS 03-09-21.mtw

Run operator: Analysis number: wet

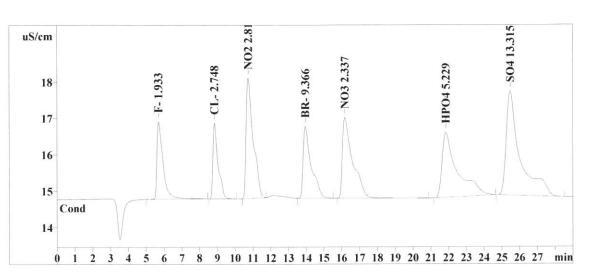
Last save: 3/19/2021 4:28:14 PM

Last save: 3/26/2021 8:35:02 AM

SAMPLE:

Method:

AM/AP Vial number: 14 Volume: 20.0 µL Dilution: 1.00 1.0000 Amount:



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 10.04 | uS/cm*sec | 9 10 | 0 |
| 1 | 5.69 | 0.339 | 2.13 | 13.04 | 50.372 | 8.42 | 0. |
| 2 | 8.84 | 0.266 | 2.07 | 12.67 | 41.797 | 6.98 | 0. |
| 3 | 10.73 | 0.383 | 3.31 | 20.22 | 90.923 | 15.19 | 0. |
| 4 | 13.95 | 0.417 | 1.97 | 12.06 | 63.092 | 10.54 | 0. |
| 5 | 16.18 | 0.531 | 2.21 | 13.54 | 89.675 | 14.98 | 0. |
| 6 | 21.84 | 0.673 | 1.79 | 10.93 | 106.551 | 17.80 | 0. |
| 7 | 25.47 | 0.597 | 2.87 | 17.52 | 156.035 | 26.07 | 0. |
| 7 | 29.00 | 0.458 | 16.35 | 99.98 | 598.446 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 157 of 224 Report date: Printed by:

3/26/2021 8:49:37 AM

wet

Ident:

M1770-20X5

Analysis from:

3/25/2021 4:15:12 PM

File:

2021-03-25

Method:

ANIONS 03-09-21.mtw

Last save: 3/25/2021 4:44:00 PM

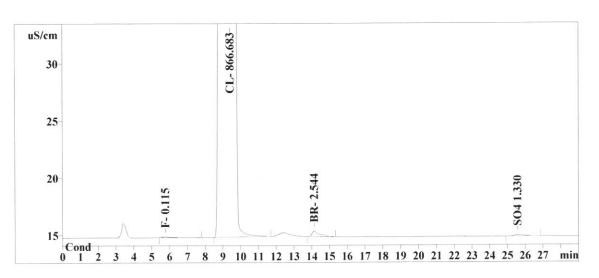
Run operator: Analysis number: wet 73834 Last save: 3/19/2021 4:28:14 PM

SAMPLE:

:

Vial number: Volume: Dilution: Amount: AM/AP 52 20.0 μL

1.00



| Quantit | tation method: | Custom | | | | | |
|---------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | % | uS/cm*sec | 96 | |
| 1 | 5.76 | 0.461 | 0.07 | 0.02 | 2.676 | 0.02 | 0. |
| 2 | 9.41 | 0.489 | 443.31 | 99.80 | 13909.409 | 99.85 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 14.13 | 0.377 | 0.47 | 0.11 | 13.661 | 0.10 | 0. |
| 5 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.57 | 0.538 | 0.12 | 0.03 | 4.491 | 0.03 | 0. |
| 7 | 29.00 | 0.267 | 443.97 | 99.95 | 13930.237 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 158 of 224

Report date: Printed by:

3/26/2021 8:50:30 AM

wet

Ident:

M1770-21X5

Analysis from:

3/25/2021 4:47:06 PM

File:

2021-03-25

Last save: 3/26/2021 8:50:18 AM

Method:

ANIONS 03-09-21.mtw

Last save: 3/26/2021 8:50:26 AM

Run operator: Analysis number: wet 73835

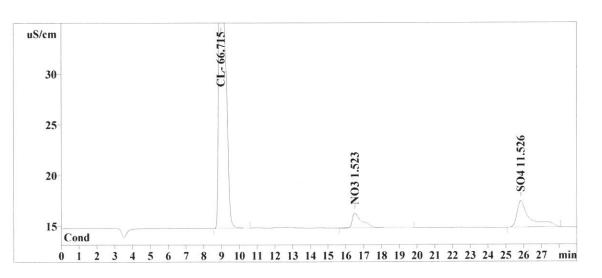
SAMPLE:

Vial number:

AM/AP 53 20.0 μL

Volume: Dilution: Amount:

1.00



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|-------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 8.96 | 0.214 | 62.77 | 93.91 | 1068.585 | 84.94 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 16.50 | 0.488 | 1.45 | 2.17 | 56.022 | 4.45 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.84 | 0.549 | 2.62 | 3.92 | 133.413 | 10.60 | 0. |
| 7 | 29.00 | 0.179 | 66.84 | 100.00 | 1258.019 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 159 of 224

Report date: Printed by:

3/26/2021 8:51:11 AM

wet

Ident:

M1770-22X5

Analysis from:

3/25/2021 5:19:00 PM

File:

2021-03-25

Last save: 3/25/2021 5:47:48 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73836

SAMPLE:

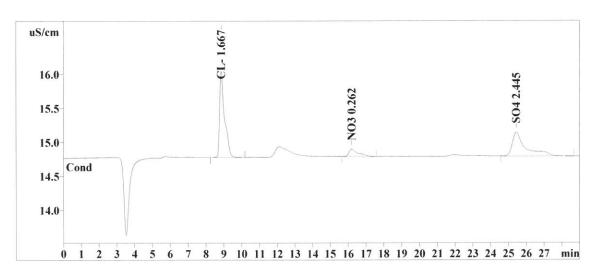
:

AM/AP 54

Vial number:
Volume:
Dilution:
Amount:

20.0 μL 1.00

1.0000



| Quantit | ation method: | Custom | | | | | |
|---------|---------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 8 | uS/cm*sec | 96 | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 8.85 | 0.252 | 1.27 | 73.28 | 24.442 | 52.07 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 16.19 | 0.450 | 0.11 | 6.30 | 3.906 | 8.32 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.43 | 0.561 | 0.35 | 20.29 | 18.590 | 39.61 | 0. |
| 7 | 29.00 | 0.180 | 1.73 | 99.87 | 46.938 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 160 of 224

Report date: Printed by:

3/26/2021 8:51:35 AM

wet

Ident:

M1770-23X5

Analysis from:

3/25/2021 5:50:54 PM

File:

2021-03-25

Last save: 3/25/2021 6:19:42 PM

Method:

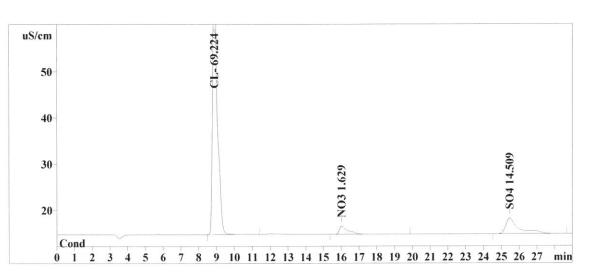
ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

Run operator: Analysis number: wet 73837

SAMPLE:

: AM/AP
Vial number: 55
Volume: 20.0 μL
Dilution: 1.00
Amount: 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|-------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 8.88 | 0.208 | 68.85 | 93.09 | 1108.853 | 82.73 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 16.02 | 0.449 | 1.73 | 2.34 | 60.412 | 4.51 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.46 | 0.559 | 3.38 | 4.57 | 171.134 | 12.77 | 0. |
| 7 | 29.00 | 0.174 | 73.95 | 100.00 | 1340.399 | 100.00 | 0. |

This report has been created by IC Net ${\tt METROHM\ LTD}$

M1770-GENCHEM 161 of 224

Report date: Printed by:

3/26/2021 8:52:08 AM

wet

Ident:

M1770-24X5

Analysis from:

3/25/2021 6:22:48 PM

File:

2021-03-25

Last save: 3/25/2021 6:51:36 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

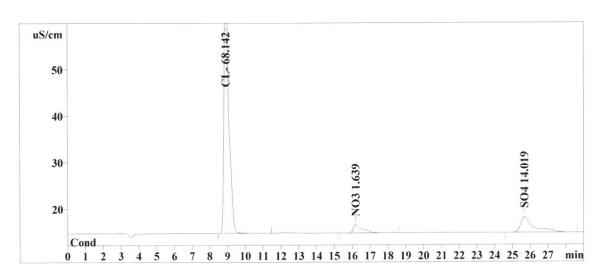
Run operator: Analysis number: wet 73838

SAMPLE:

: Vial number: AM/AP 56

Volume: Dilution: Amount:

20.0 μL 1.00 1.0000



| Quantit | ation method: | Custom | | | | | |
|---------|---------------|--------------|---------------|--------|-------------------|--------|----|
| No | Retention | Width/2 | Height | Height | Area uS/cm*sec | Area | |
| 1 | min 0.00 | min 0.000 | uS/cm 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 8.91 | 0.207 | 68.49 | 93.14 | 1091.488 | 82.86 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 16.20 | 0.471 | 1.70 | 2.32 | 60.825 | 4.62 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.69 | 0.547 | 3.35 | 4.55 | 164.936 | 12.52 | 0. |
| 7 | 29.00 | 0.175 | 73.55 | 100.01 | 1317.250 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 162 of 224

Report date: Printed by:

3/26/2021 8:52:24 AM

wet

Ident:

M1770-24MSX5

Analysis from:

3/25/2021 6:54:42 PM

File:

2021-03-25

Last save: 3/25/2021 7:23:30 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

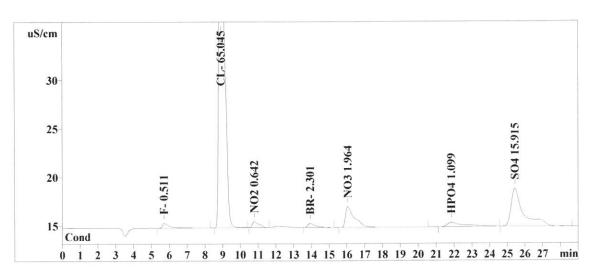
Run operator: Analysis number: wet 73839

SAMPLE:

Vial number:
Volume:
Dilution:
Amount:

AM/AP 57

20.0 μL 1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | olo | uS/cm*sec | % | |
| 1 | 5.71 | 0.349 | 0.48 | 0.66 | 13.061 | 0.95 | 0. |
| 2 | 8.90 | 0.205 | 65.57 | 89.14 | 1041.770 | 75.80 | 0. |
| 3 | 10.80 | 0.420 | 0.60 | 0.82 | 15.411 | 1.12 | 0. |
| 4 | 13.94 | 0.368 | 0.42 | 0.58 | 11.900 | 0.87 | 0. |
| 5 | 16.05 | 0.455 | 2.13 | 2.89 | 74.261 | 5.40 | 0. |
| 6 | 21.84 | 0.743 | 0.45 | 0.61 | 29.092 | 2.12 | 0. |
| 7 | 25.43 | 0.541 | 3.90 | 5.30 | 188.915 | 13.75 | 0. |
| 7 | 29.00 | 0.440 | 73.55 | 99.99 | 1374.410 | 100.00 | 0. |

This report has been created by IC Net ${\tt METROHM\ LTD}$

M1770-GENCHEM 163 of 224

Report date: Printed by:

Analysis from:

3/26/2021 8:52:33 AM

wet

Ident:

M1770-24MSDX5

3/25/2021 7:26:35 PM

File:

2021-03-25

Last save: 3/25/2021 7:55:24 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

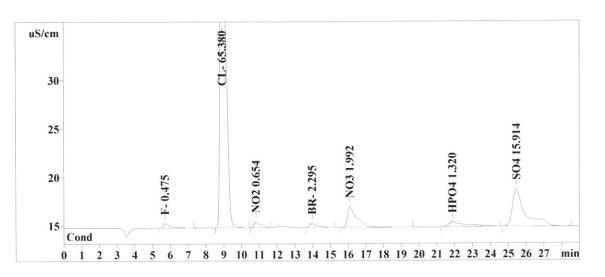
Run operator: Analysis number: wet 73840

SAMPLE:

Vial number: 58 Volume: Dilution: Amount:

AM/AP

20.0 µL 1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | % | uS/cm*sec | 90 | |
| 1 | 5.71 | 0.348 | 0.47 | 0.64 | 12.133 | 0.88 | 0. |
| 2 | 8.92 | 0.207 | 65.61 | 89.11 | 1047.154 | 75.63 | 0. |
| 3 | 10.82 | 0.423 | 0.62 | 0.84 | 15.803 | 1.14 | 0. |
| 4 | 13.97 | 0.368 | 0.42 | 0.57 | 11.856 | 0.86 | 0. |
| 5 | 16.09 | 0.467 | 2.12 | 2.88 | 75.413 | 5.45 | 0. |
| 6 | 21.89 | 0.742 | 0.52 | 0.70 | 33.232 | 2.40 | 0. |
| 7 | 25.45 | 0.548 | 3.87 | 5.26 | 188.904 | 13.64 | 0. |
| 7 | 29.00 | 0.443 | 73.62 | 99.99 | 1384.497 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 164 of 224

Report date: Printed by:

3/26/2021 8:52:41 AM

wet

Ident:

CCV

Analysis from: File:

3/25/2021 7:58:29 PM _2021-03-25_

Last save: 3/25/2021 8:27:18 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/19/2021 4:28:14 PM

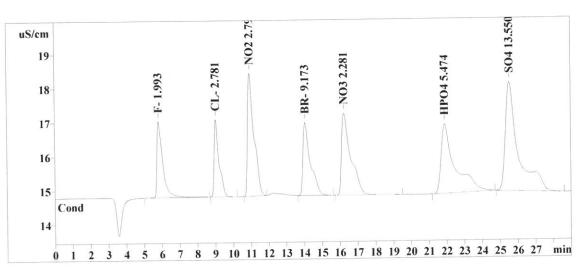
Run operator: Analysis number: wet 73841

SAMPLE:

:
Vial number:
Volume:
Dilution:
Amount:

AM/AP 11 20.0

20.0 µL 1.00 1.0000



| Quantit | ation method: | Custom | | | | | |
|------------------|---|---|---|---|---|---|----------------------|
| No 1 2 3 4 5 6 7 | Retention min 5.81 9.04 10.93 14.06 16.24 21.90 25.54 | Width/2 min 0.327 0.242 0.349 0.370 0.467 0.581 0.552 | Height us/cm 2.24 2.27 3.61 2.14 2.41 2.04 3.20 | Height 12.50 12.66 20.15 11.95 13.46 11.38 17.88 | Area uS/cm*sec 51.964 42.332 90.352 61.695 87.376 111.146 159.010 | 8.61 7.01 14.96 10.22 14.47 18.41 26.33 | 0. 0. 0. 0. |
| 7 | 29.00 | 0.413 | 17.91 | 99.99 | 603.876 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 165 of 224

Reviewed By:apatel On:3/30/2021 1:58:30 PM Inst Id :IC-1 LB :LB113684

Last save: 3/25/2021 8:59:12 PM

Last save: 3/19/2021 4:28:14 PM

Report date: Printed by:

3/26/2021 2:26:01 PM

Ident:

CCB

Analysis from:

3/25/2021 8:30:23 PM

File:

2021-03-25

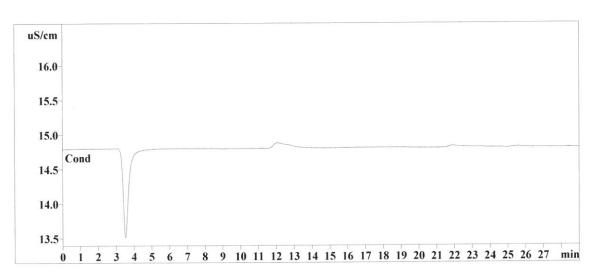
ANIONS 03-09-21.mtw

Run operator: Analysis number: wet 73842

SAMPLE:

Method:

AM/AP Vial number: 12 20.0 µL Volume: 1.00 Dilution: 1.0000 Amount:



Quantitation method: Custom

No peaks

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 166 of 224

10

Report date: Printed by:

3/26/2021 2:26:11 PM

wet

Ident:

CCV

Analysis from:

3/26/2021 8:50:48 AM

File:

2021-03-26

Last save: 3/26/2021 9:20:36 AM

Method:

ANIONS 03-09-21.mtw

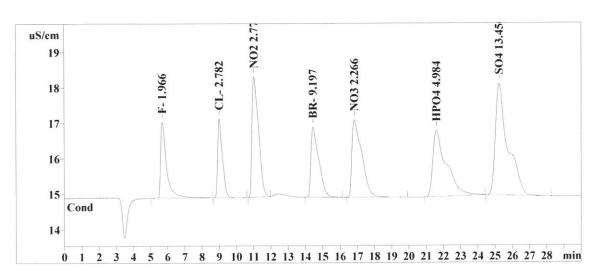
Last save: 3/26/2021 8:53:12 AM

Run operator: Analysis number: wet 73847

SAMPLE:

: Vial number: AM/AP

Volume: Dilution: Amount: 20.0 μL 1.00 1.0000



| Quantit | tation method: | Custom | | | | | |
|---------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 96 | uS/cm*sec | 90 | |
| 1 | 5.70 | 0.310 | 2.14 | 12.62 | 51.253 | 8.66 | 0. |
| 2 | 9.00 | 0.293 | 2.22 | 13.13 | 42.348 | 7.16 | 0. |
| 3 | 11.02 | 0.431 | 3.39 | 20.05 | 89.690 | 15.16 | 0. |
| 4 | 14.45 | 0.503 | 1.98 | 11.67 | 61.865 | 10.46 | 0. |
| 5 | 16.83 | 0.652 | 2.18 | 12.87 | 86.726 | 14.66 | 0. |
| 6 | 21.61 | 0.710 | 1.87 | 11.05 | 101.949 | 17.23 | 0. |
| 7 | 25.24 | 0.600 | 3.15 | 18.60 | 157.821 | 26.67 | 0. |
| 7 | 30.00 | 0.500 | 16.93 | 99.99 | 591.651 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 167 of 224

Reviewed By:apatel On:3/30/2021 1:58:30 Inst Id :IC-1 LB :LB113684

10

Report date:

3/26/2021 2:26:20 PM

Printed by:

wet

Ident:

CCB

Analysis from:

3/26/2021 9:26:05 AM

File:

2021-03-26_

Last save: 3/26/2021 9:55:52 AM

ANIONS 03-09-21.mtw

Last save: 3/26/2021 8:53:12 AM

Method: Run operator: Analysis number:

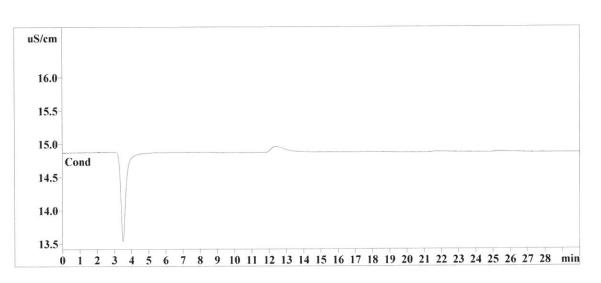
wet 73848

SAMPLE:

AM/AP 12

Vial number: Volume: Dilution: Amount:

20.0 µL 1.00 1.0000



Quantitation method: Custom

No peaks

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 168 of 224

Reviewed By:apatel On:3/30/2021 1:58:30 Inst Id :IC-1 LB :LB113684

10

Report date:

3/26/2021 2:26:28 PM

Printed by:

wet

Ident:

LB113684BLW2

Analysis from:

3/26/2021 9:58:59 AM

File:

2021-03-26

Last save: 3/26/2021 10:28:46 AM

Method:

ANIONS 03-09-21.mtw

Last save: 3/26/2021 8:53:12 AM

Run operator: Analysis number: wet 73849

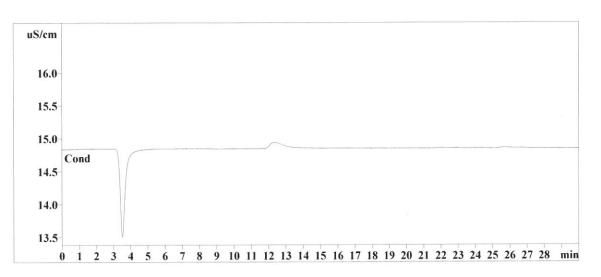
SAMPLE:

Vial number:

AM/AP 13 20.0 µL

Volume: Dilution: Amount:

1.00 1.0000



Quantitation method: Custom

No peaks

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 169 of 224

Report date: Printed by:

3/26/2021 2:26:37 PM

wet

Ident:

LB113684BSW2

Analysis from:

3/26/2021 10:31:52 AM

File:

2021-03-26

Method:

ANIONS 03-09-21.mtw

Last save: 3/26/2021 11:01:40 AM

Last save: 3/26/2021 8:53:12 AM

Run operator:
Analysis number:

wet 73850

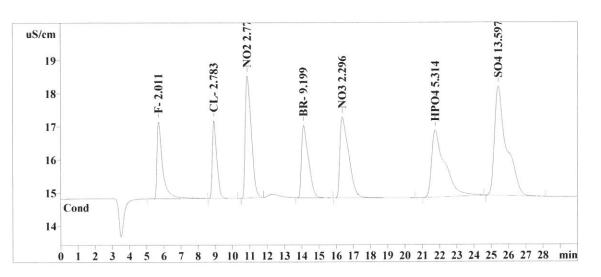
SAMPLE:

Amount:

:
Vial number:
Volume:
Dilution:

AM/AP 14

20.0 μL 1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|------------------|----------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area | |
| 1 | 5.71 | 0.292 | 2.32 | 12.66 | 52.439 | 8.71 | 0. |
| 2 | 8.92 | 0.278 | 2.34 | 12.81 | 42.354 | 7.04 | 0. |
| 3 | 10.85 | 0.391 | 3.69 | 20.14 | 89.637 | 14.89 | 0. |
| 4 | 14.10 | 0.447 | 2.19 | 11.96 | 61.882 | 10.28 | 0. |
| 5 | 16.35 | 0.579 | 2.44 | 13.34 | 87.987 | 14.61 | 0. |
| 6 | 21.74 | 0.821 | 2.03 | 11.07 | 108.134 | 17.96 | 0. |
| 7 | 25.41 | 0.600 | 3.30 | 18.01 | 159.605 | 26.51 | 0. |
| 7 | 30.00 | 0.487 | 18.30 | 99.98 | 602.037 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 170 of 224

Report date: Printed by:

3/26/2021 2:26:49 PM

wet

Ident:

M1763-03

Analysis from:

3/26/2021 11:04:46 AM

File:

2021-03-26_

Last save: 3/26/2021 11:34:34 AM

Method:

ANIONS 03-09-21.mtw

Last save: 3/26/2021 8:53:12 AM

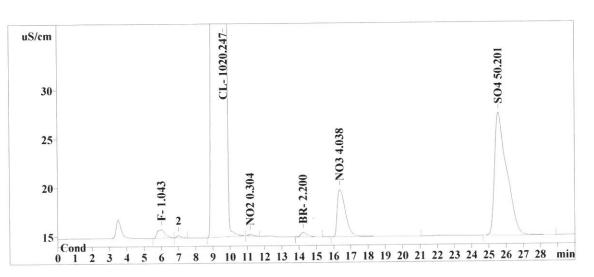
Run operator: Analysis number: wet 73851

SAMPLE:

Vial number: Volume:

AM/AP 61

20.0 µL 1.00 Dilution: 1.0000 Amount:



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|----------------|--------------|----------|-------------------|-------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height % | Area uS/cm*sec | Area | |
| 1 | 6.01 | 0.482 | 0.87 | 0.16 | 27.023 | 0.16 | 0. |
| 2 | 9.64 | 0.539 | 508.29 | 96.31 | 16374.367 | 95.19 | 0. |
| 3 | 11.16 | 0.329 | 0.18 | 0.03 | 3.651 | 0.02 | 0. |
| 4 | 14.23 | 0.389 | 0.44 | 0.08 | 11.169 | 0.06 | 0. |
| 5 | 16.38 | 0.512 | 4.82 | 0.91 | 159.987 | 0.93 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.57 | 0.780 | 12.59 | 2.39 | 622.453 | 3.62 | 0. |
| 7 | 30.00 | 0.433 | 527.19 | 99.89 | 17198.651 | 99.98 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 171 of 224

Report date: Printed by:

3/26/2021 2:27:44 PM

by: wet

Ident:

M1763-03MS

Analysis from:

3/26/2021 11:37:39 AM

File:

2021-03-26

Last save: 3/26/2021 12:07:28 PM

Method:

ANIONS 03-09-21.mtw wet

Last save: 3/26/2021 8:53:12 AM

Run operator: Analysis number:

73852

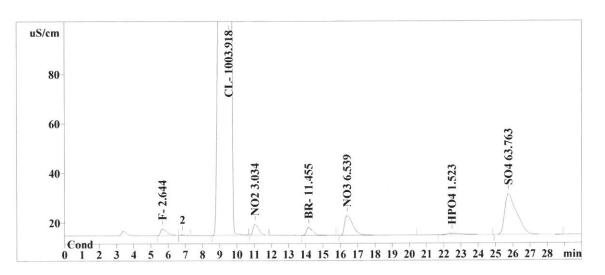
SAMPLE:

Amount:

Vial number:
Volume:
Dilution:

AM/AP 62

20.0 μL 1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|---------|--------|--------|-----------|-------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | 8 | uS/cm*sec | 9 | |
| 1 | 5.68 | 0.395 | 2.70 | 0.50 | 69.030 | 0.40 | 0. |
| 2 | 9.53 | 0.538 | 500.71 | 93.38 | 16112.260 | 92.30 | 0. |
| 3 | 11.06 | 0.366 | 4.28 | 0.80 | 98.651 | 0.57 | 0. |
| 4 | 14.17 | 0.381 | 3.13 | 0.58 | 78.229 | 0.45 | 0. |
| 5 | 16.40 | 0.517 | 7.84 | 1.46 | 263.328 | 1.51 | 0. |
| 6 | 22.47 | 1.024 | 0.54 | 0.10 | 37.041 | 0.21 | 0. |
| 7 | 25.75 | 0.771 | 16.39 | 3.06 | 793.928 | 4.55 | 0. |
| 7 | 30.00 | 0.570 | 535.59 | 99.89 | 17452.467 | 99.98 | 0. |

This report has been created by IC Net ${\tt METROHM\ LTD}$

M1770-GENCHEM 172 of 224

Report date: Printed by:

3/26/2021 2:27:53 PM

wet

Ident:

M1763-03MSD

Analysis from:

3/26/2021 12:10:33 PM

File:

2021-03-26

Last save: 3/26/2021 12:40:20 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/26/2021 8:53:12 AM

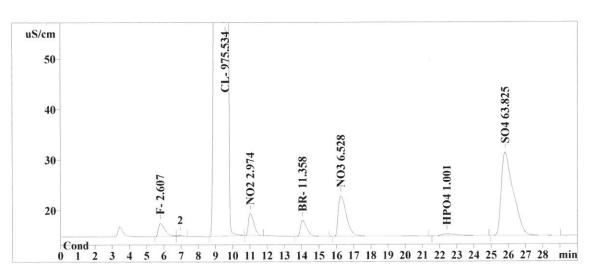
Run operator: Analysis number: wet 73853

SAMPLE:

Vial number:

AM/AP 63

Volume: Dilution: Amount: 20.0 µL 1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|----------------|--------------|--------|-------------------|-----------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 5.80 | 0.402 | 2.62 | 0.49 | 68.066 | 0.40 | 0. |
| 2 | 9.56 | 0.524 | 499.99 | 93.39 | 15656.660 | 92.17 | 0. |
| 3 | 11.03 | 0.354 | 4.33 | 0.81 | 96.559 | 0.57 | 0. |
| 4 | 14.05 | 0.376 | 3.15 | 0.59 | 77.524 | 0.46 | 0. |
| 5 | 16.26 | 0.509 | 7.94 | 1.48 | 262.867 | 1.55 | 0. |
| 6 | 22.43 | 1.013 | 0.40 | 0.08 | 27.255 | 0.16 | 0. |
| 7 | 25.81 | 0.758 | 16.50 | 3.08 | 794.712 | 4.68 | 0. |
| 7 | 30.00 | 0.562 | 534.93 | 99.91 | 16983.643 | 99.98 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 173 of 224

Report date: Printed by:

3/26/2021 2:28:56 PM

wet

Ident:

File:

M1770-20DLX1000

Analysis from:

3/26/2021 12:43:27 PM

2021-03-26

Last save: 3/26/2021 1:13:14 PM

Method:

ANIONS 03-09-21.mtw

Last save: 3/26/2021 8:53:12 AM

Run operator: Analysis number: wet 73854

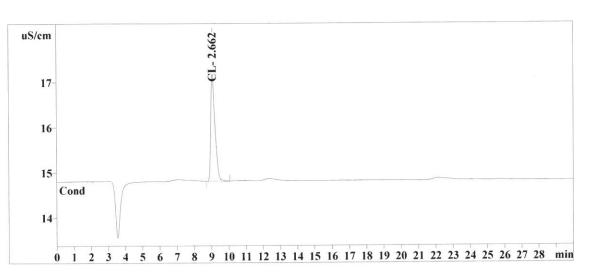
SAMPLE:

Amount:

Vial number: Volume: Dilution:

AM/AP 64

20.0 µL 1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|---------|--------|--------|-----------|--------|----|
| No | Retention | Width/2 | Height | Height | Area | Area | |
| | min | min | uS/cm | ક | uS/cm*sec | 8 | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 9.05 | 0.258 | 2.37 | 99.99 | 40.418 | 100.00 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 6) | 8 0 10 10 10 | | | | 10 110 | 100 00 | 0 |
| 7 | 30.00 | 0.037 | 2.37 | 99.99 | 40.418 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 174 of 224 Report date: Printed by:

3/26/2021 2:29:02 PM

wet

Ident:

M1770-21DLX50

Analysis from:

3/26/2021 1:16:20 PM 2021-03-26_

Last save: 3/26/2021 1:46:08 PM

File:

ANIONS 03-09-21.mtw

Last save: 3/26/2021 8:53:12 AM

Run operator: Analysis number: wet 73855

SAMPLE:

Amount:

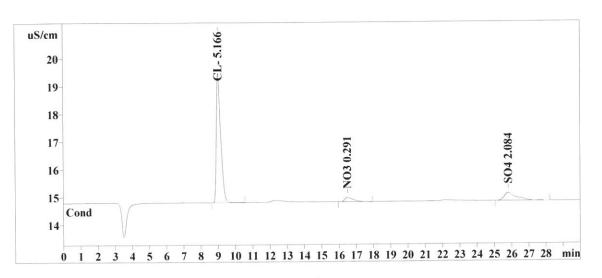
Method:

AM/AP

Vial number: Volume: Dilution:

65 20.0 µL

1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|----------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 9.01 | 0.259 | 4.67 | 91.32 | 80.610 | 80.80 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 16.49 | 0.522 | 0.15 | 2.98 | 5.127 | 5.14 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.80 | 0.631 | 0.29 | 5.67 | 14.031 | 14.06 | 0. |
| 7 | 30.00 | 0.202 | 5.11 | 99.97 | 99.768 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 175 of 224 Report date: Printed by:

3/26/2021 2:32:34 PM

wet

Ident:

M1770-23DLX50

Analysis from:

3/26/2021 1:49:14 PM

File:

2021-03-26

Method:

ANIONS 03-09-21.mtw

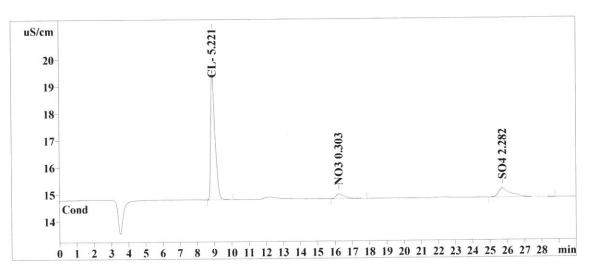
Run operator: wet Analysis number: 73856

SAMPLE:

:
Vial number:
Volume:

AM/AP

Volume: Dilution: Amount: 20.0 μL 1.00 1.0000



| Quanti | tation method: | Custom | | | | | |
|--------|----------------|-------------|-----------------|----------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height % | Area uS/cm*sec | Area % | |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 2 | 8.89 | 0.253 | 4.81 | 90.45 | 81.491 | 78.65 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 16.22 | 0.502 | 0.17 | 3.18 | 5.597 | 5.40 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.71 | 0.632 | 0.34 | 6.35 | 16.529 | 15.95 | 0. |
| 7 | 30.00 | 0.198 | 5.32 | 99.97 | 103.618 | 100.00 | 0. |

Last save: 3/26/2021 2:19:02 PM

Last save: 3/26/2021 8:53:12 AM

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 176 of 224

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Report date: Printed by:

3/26/2021 3:27:28 PM

wet

Ident:

M1770-24DLX50

Analysis from:

3/26/2021 2:22:07 PM

File:

2021-03-26

ANIONS 03-09-21.mtw

Run operator:
Analysis number:

et.

wet 73857

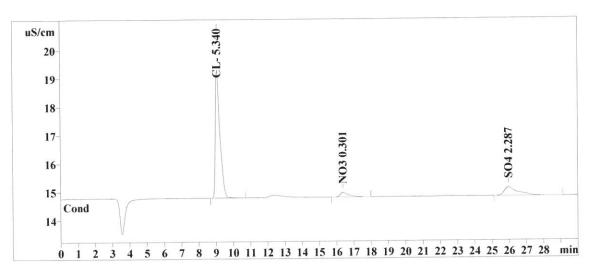
SAMPLE:

Method:

Vial number: Volume: AM/AP 67 20.0 μL

Dilution: Amount:

1.00



| Quanti | tation method: | Custom | | | | | |
|--------|------------------|----------------|-----------------|--------|-------------------|--------|----|
| No | Retention min | Width/2 min | Height uS/cm | Height | Area uS/cm*sec | Area % | 0. |
| 1 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | | |
| 2 | 9.07 | 0.272 | 4.51 | 90.77 | 83.404 | 79.03 | 0. |
| 3 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 4 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 5 | 16.38 | 0.512 | 0.16 | 3.20 | 5.542 | 5.25 | 0. |
| 6 | 0.00 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 | 0. |
| 7 | 25.95 | 0.722 | 0.30 | 5.99 | 16.592 | 15.72 | 0. |
| 7 | 30.00 | 0.215 | 4.96 | 99.96 | 105.539 | 100.00 | 0. |

Last save: 3/26/2021 2:51:56 PM

Last save: 3/26/2021 8:53:12 AM

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 177 of 224

1

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13

Report date: Printed by:

3/26/2021 3:27:35 PM

wet

Ident:

CCV

Analysis from:

3/26/2021 2:55:01 PM

File:

2021-03-26

Last save: 3/26/2021 3:24:48 PM

Last save: 3/26/2021 8:53:12 AM

Method:

ANIONS 03-09-21.mtw

Run operator:

Analysis number:

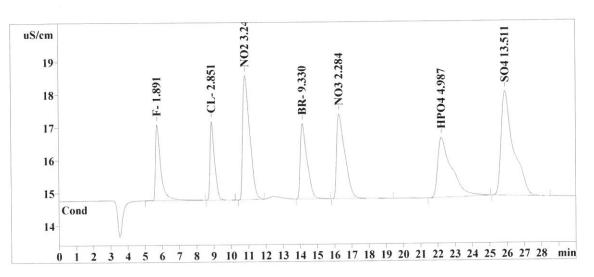
wet 73858

SAMPLE:

Vial number:

AM/AP

Volume: Dilution: Amount: 20.0 μL 1.00 1.0000



| Quantit | tation method: | Custom | | | | | |
|-----------------------------|---|---|---|---|--|--|----------------------|
| No 1 2 3 4 5 | Retention min 5.73 8.88 10.82 14.13 16.28 22.23 25.90 | Width/2 min 0.287 0.272 0.448 0.416 0.537 0.794 0.649 | Height uS/cm 2.30 2.39 3.78 2.29 2.57 1.83 3.18 | Height % 12.54 13.02 20.59 12.50 14.03 9.97 17.34 | Area uS/cm*sec 49.273 43.448 106.019 62.834 87.470 101.998 158.514 | Area 8 8.08 7.13 17.39 10.31 14.35 16.73 26.00 | 0. 0. 0. 0. |
| - 7 | 30.00 | 0.486 | 18.35 | 99.99 | 609.556 | 100.00 | 0. |

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 178 of 224

Reviewed By:apatel On:3/30/2021 1:58:30 Inst Id :IC-1 LB:LB113684

10

Last save: 3/26/2021 3:57:42 PM

Last save: 3/26/2021 8:53:12 AM

Report date:

3/26/2021 3:58:55 PM

Printed by:

wet

Ident:

CCB

Analysis from:

3/26/2021 3:27:54 PM

File:

2021-03-26

Method: Run operator: Analysis number: ANIONS 03-09-21.mtw

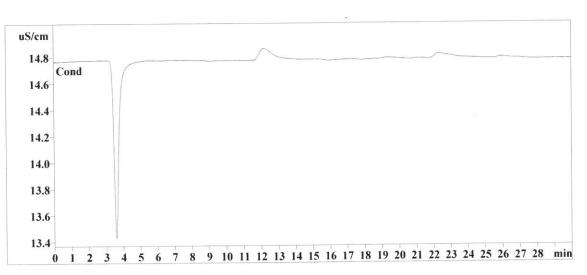
wet 73859

SAMPLE:

AM/AP 12 20.0 µL 1.00

Vial number: Volume: Dilution: Amount:





Quantitation method: Custom

No peaks

This report has been created by IC Net METROHM LTD

M1770-GENCHEM 179 of 224



Instrument ID: IC-1

Daily Analysis Runlog For Sequence/QCBatch ID # LB113629

| Review By Alexander Supervise By apatel | | Review On Supervise On | 3/29/2021 9:15:11 AM 3/29/2021 11:48:03 AM |
|---|---------|------------------------------------|---|
| | · | | |
| STD. NAME | STD RI | EF.# | |
| ICAL Standard WP89842,WP89843,W | | WP89843,WP89844,WP89845,WP89846,WI | |
| ICV Standard | WP89850 | | |
| CCV Standard | WP90123 | WP90135 | |
| ICSA Standard | N/A | | |
| CRI Standard | N/A | | |
| Chk Standard | WP89648 | WP89651,WP90148,WP90151 | |

| TD2 TD3 TD4 TD5 TD6 TD7 | STD1 STD2 STD3 STD4 STD5 STD6 STD7 | CAL1 CAL2 CAL3 CAL4 CAL5 CAL6 CAL7 | 03/09/21 09:53 03/09/21 10:25 03/09/21 11:04 03/09/21 11:34 03/09/21 12:05 03/09/21 12:36 | All standards, samples, and QC are filtered through 0.45um,filter lot #191125354 | AM/AP AM/AP AM/AP AM/AP | ок ок ок ок |
|------------------------------|--|--|--|--|---|---|
| TD3 TD4 TD5 TD6 TD7 EV1 | STD3 STD4 STD5 STD6 STD7 | CAL3 CAL4 CAL5 CAL6 | 03/09/21 11:04 03/09/21 11:34 03/09/21 12:05 | <u> </u> | AM/AP AM/AP | ОК |
| TD4 TD5 TD6 TD7 | STD4 STD5 STD6 STD7 | CAL4 CAL5 CAL6 | 03/09/21 11:34 | 0.45um,filter lot #191125354 | AM/AP | OK |
| TD5 TD6 TD7 EV1 | STD5 STD6 STD7 | CAL5 | 03/09/21 12:05 | | AM/AP | _ |
| TD6 TD7 EV1 | STD6 STD7 | CAL6 | | | | ок |
| TD7 | STD7 | | 03/09/21 12:36 | | | |
| CV1 | | CAL7 | | | AM/AP | ок |
| | ICV1 | | 03/09/21 13:07 | | AM/AP | ок |
| :B1 | | ICV | 03/09/21 13:41 | | AM/AP | ок |
| ,5 ' | ICB1 | ICB | 03/09/21 14:12 | | AM/AP | ок |
| CV1 | CCV1 | CCV | 03/23/21 09:38 | | AM/AP | ок |
| CB1 | CCB1 | ССВ | 03/23/21 10:18 | | AM/AP | ок |
| 3113629BLW | LB113629BLW | MB | 03/23/21 10:50 | | AM/AP | ок |
| B113629BSW | LB113629BSW | LCS | 03/23/21 11:22 | | AM/AP | ок |
| 1770-02 | MW-106I | SAM | 03/23/21 11:54 | CL high | AM/AP | Dilution |
| 1770-03 | MW-106S | SAM | 03/23/21 12:26 | CL high | AM/AP | Dilution |
| 1770-06 | MW-105D | SAM | 03/23/21 12:58 | CL high | AM/AP | Dilution |
| 1770-07 | MW-105I | SAM | 03/23/21 13:30 | CL high | AM/AP | Dilution |
| 1770-08 | MW-105S | SAM | 03/23/21 14:02 | CL high | AM/AP | Dilution |
| 1770-04 | MW-106SMS | MS | 03/23/21 14:33 | 9.5ml of sample,0.5mL W2799 | AM/AP | ок |
| 1770-05 | MW-106SMSD | MSD | 03/23/21 15:05 | 9.5ml of sample,0.5mL W2799 | AM/AP | ОК |
| 3° | B1 113629BLW 113629BSW 770-02 770-03 770-06 770-07 770-08 | B1 CCB1 I13629BLW I13629BSW I13629BSW IMW-106I IT0-03 IMW-106S IMW-105D IMW-105I IT0-08 IMW-105S IMW-106SMS | B1 CCB1 CCB 113629BLW LB113629BLW MB 113629BSW LB113629BSW LCS 770-02 MW-106I SAM 770-03 MW-106S SAM 770-06 MW-105D SAM 770-07 MW-105I SAM 770-08 MW-105S SAM 770-08 MW-105S SAM | B1 CCB1 CCB 03/23/21 10:18 113629BLW LB113629BLW MB 03/23/21 10:50 113629BSW LCS 03/23/21 11:22 770-02 MW-106I SAM 03/23/21 11:54 770-03 MW-106S SAM 03/23/21 12:26 770-06 MW-105D SAM 03/23/21 12:58 770-07 MW-105I SAM 03/23/21 13:30 770-08 MW-105S SAM 03/23/21 14:02 770-04 MW-106SMS MS 03/23/21 14:33 | B1 CCB1 CCB 03/23/21 10:18 113629BLW LB113629BLW MB 03/23/21 10:50 113629BSW LB113629BSW LCS 03/23/21 11:22 770-02 MW-106I SAM 03/23/21 11:54 CL high 770-03 MW-106S SAM 03/23/21 12:26 CL high 770-06 MW-105D SAM 03/23/21 12:58 CL high 770-07 MW-105I SAM 03/23/21 13:30 CL high 770-08 MW-105S SAM 03/23/21 14:02 CL high 770-09 MW-105S SAM 03/23/21 14:02 CL high | B1 CCB1 CCB 03/23/21 10:18 AM/AP 113629BLW LB113629BLW MB 03/23/21 10:50 AM/AP 113629BSW LB113629BSW LCS 03/23/21 11:22 AM/AP 770-02 MW-106I SAM 03/23/21 11:54 CL high AM/AP 770-03 MW-106S SAM 03/23/21 12:26 CL high AM/AP 770-06 MW-105D SAM 03/23/21 12:58 CL high AM/AP 770-07 MW-105I SAM 03/23/21 13:30 CL high AM/AP 770-08 MW-105S SAM 03/23/21 14:02 CL high AM/AP 770-09 MW-105S SAM 03/23/21 14:02 CL high AM/AP |

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Daily Analysis Runlog For Sequence/QCBatch ID # LB113629

| Review By Supervise By | Alexander apatel | Review On Supervise On | 3/29/2021 9:15:11 AM 3/29/2021 11:48:03 AM | | | | |
|---------------------------|---------------------|---------------------------|---|--|--|--|--|
| STD. NAME | STD REF.# | | | | | | |
| ICAL Standard | WP89842,WP89843,V | VP89844,WP89845,WP89846,V | P89847,WP89848 | | | | |
| ICV Standard | WP89850 | | | | | | |
| CCV Standard | WP90123,WP90135 | WP90123,WP90135 | | | | | |
| ICSA Standard | N/A | N/A | | | | | |
| CRI Standard | N/A | N/A | | | | | |
| Chk Standard | WP89648,WP89651,V | VP90148,WP90151 | | | | | |

| 21 | CCV2 | CCV2 | CCV | 03/23/21 15:37 | | AM/AP | ОК |
|----|--------------|--------------|-----|----------------|-----------------------------|-------|----------|
| 22 | CCB2 | CCB2 | ССВ | 03/23/21 16:11 | 1 16:11 A | | ок |
| 23 | M1770-02DL | MW-106IDL | SAM | 03/23/21 16:43 | 400X for CL | AM/AP | Confirms |
| 24 | M1770-03DL | MW-106SDL | SAM | 03/23/21 17:14 | 100X for CL | AM/AP | Confirms |
| 25 | M1770-06DL | MW-105DDL | SAM | 03/23/21 17:46 | 500X for CL | AM/AP | Confirms |
| 26 | M1770-07DL | MW-105IDL | SAM | 03/23/21 18:18 | 100X for CL | AM/AP | Confirms |
| 27 | M1770-08DL | MW-105SDL | SAM | 03/23/21 18:50 | 200X for CL | AM/AP | Confirms |
| 28 | CCV3 | CCV3 | CCV | 03/23/21 19:22 | | AM/AP | ок |
| 29 | CCB3 | CCB3 | ССВ | 03/23/21 19:54 | | AM/AP | ок |
| 30 | CCV4 | CCV4 | CCV | 03/24/21 08:55 | | AM/AP | ок |
| 31 | CCB4 | CCB4 | ССВ | 03/24/21 09:40 | | AM/AP | ок |
| 32 | LB113629BLW2 | LB113629BLW2 | МВ | 03/24/21 10:12 | | AM/AP | ок |
| 33 | LB113629BSW2 | LB113629BSW2 | LCS | 03/24/21 10:44 | | AM/AP | ок |
| 34 | M1770-10 | MW-106D | SAM | 03/24/21 11:16 | | AM/AP | ОК |
| 35 | M1770-11 | MW-104D | SAM | 03/24/21 11:48 | CL high | AM/AP | Dilution |
| 36 | M1770-15 | MW-101S | SAM | 03/24/21 13:55 | CL high | AM/AP | Dilution |
| 37 | M1770-16 | MW-101I | SAM | 03/24/21 14:27 | CL high | AM/AP | Dilution |
| 38 | M1770-17 | MW-101D | SAM | 03/24/21 14:59 | CL high | AM/AP | Dilution |
| 39 | CCV5 | CCV5 | CCV | 03/24/21 15:31 | | AM/AP | ок |
| 40 | CCB5 | CCB5 | ССВ | 03/24/21 16:03 | | AM/AP | ОК |
| 41 | M1770-18 | FB-03232021 | SAM | 03/24/21 16:35 | | AM/AP | ОК |
| 42 | M1770-10MS | MW-106DMS | MS | 03/24/21 17:07 | 9.5ml of sample,0.5mL W2799 | AM/AP | ОК |

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Daily Analysis Runlog For Sequence/QCBatch ID # LB113629

| Review By Supervise By | Alexander apatel | Review On Supervise On | 3/29/2021 9:15:11 AM 3/29/2021 11:48:03 AM | | | | |
|---|---|----------------------------------|---|--|--|--|--|
| STD. NAME | STD REF.# | | | | | | |
| ICAL Standard ICV Standard CCV Standard | WP89842,WP8984 WP89850 WP90123,WP9013 | 3,WP89844,WP89845,WP89846,W 5 | P89847,WP89848 | | | | |
| ICSA Standard CRI Standard | N/A N/A | | | | | | |
| Chk Standard | WP89648,WP8965 | 1,WP90148,WP90151 | | | | | |

| 43 | M1770-10MSD | MW-106DMSD | MSD | 03/24/21 17:39 | 9.5ml of sample,0.5mL W2799 | AM/AP | ОК |
|----|-------------|------------|-----|----------------|-----------------------------|-------|----------|
| 44 | M1770-11DL | MW-104DDL | SAM | 03/24/21 18:10 | 2000X for CL | AM/AP | Confirms |
| 45 | M1770-12 | MW-104I | SAM | 03/24/21 18:42 | | AM/AP | ОК |
| 46 | M1770-13 | MW-103D | SAM | 03/24/21 19:14 | | AM/AP | ОК |
| 47 | M1770-14 | MW-103I | SAM | 03/24/21 19:46 | | AM/AP | ОК |
| 48 | M1770-15DL | MW-101SDL | SAM | 03/24/21 20:18 | 50X for CL | AM/AP | Confirms |
| 49 | M1770-16DL | MW-101IDL | SAM | 03/24/21 20:50 | 50X for CL | AM/AP | Confirms |
| 50 | M1770-17DL | MW-101DDL | SAM | 03/24/21 21:22 | 100X for CL | AM/AP | Confirms |
| 51 | CCV6 | CCV6 | CCV | 03/24/21 21:54 | | AM/AP | ок |
| 52 | CCB6 | CCB6 | ССВ | 03/24/21 22:26 | | AM/AP | ок |

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Daily Analysis Runlog For Sequence/QCBatch ID # LB113684

| Review By | Alexander | Review On | 3/30/2021 9:25:32 AM | | | | |
|---------------|-------------------|---|----------------------|--|--|--|--|
| Supervise By | apatel | Supervise On | 3/30/2021 1:58:30 PM | | | | |
| | | | | | | | |
| STD. NAME | STD REF.# | | | | | | |
| ICAL Standard | WP89842,WP89843,V | WP89842,WP89843,WP89844,WP89846,WP89847,WP89848 | | | | | |
| ICV Standard | WP89850 | | | | | | |
| CCV Standard | WP90167,WP90181 | | | | | | |
| ICSA Standard | N/A | | | | | | |
| CRI Standard | N/A | | | | | | |
| Chk Standard | WP90148,WP90151 | | | | | | |

| Sr# | SampleId | ClientID | QcType | Date | Comment | Operator | Status |
|-----|-------------|-------------|--------|----------------|------------------------------|----------|----------|
| 1 | STD1 | STD1 | CAL1 | 03/09/21 09:53 | All standards, samples, and | AM/AP | ОК |
| 2 | STD2 | STD2 | CAL2 | 03/09/21 10:25 | QC are filtered through | AM/AP | ОК |
| 3 | STD3 | STD3 | CAL3 | 03/09/21 11:04 | 0.45um,filter lot #191125354 | AM/AP | ОК |
| 4 | STD4 | STD4 | CAL4 | 03/09/21 11:34 | | AM/AP | ОК |
| 5 | STD5 | STD5 | CAL5 | 03/09/21 12:05 | | AM/AP | ОК |
| 6 | STD6 | STD6 | CAL6 | 03/09/21 12:36 | | AM/AP | ОК |
| 7 | STD7 | STD7 | CAL7 | 03/09/21 13:07 | | AM/AP | ОК |
| 8 | ICV1 | ICV1 | ICV | 03/09/21 13:41 | | AM/AP | ОК |
| 9 | ICB1 | ICB1 | ICB | 03/09/21 14:12 | | AM/AP | ОК |
| 10 | CCV1 | CCV1 | CCV | 03/25/21 13:35 | | AM/AP | ОК |
| 11 | CCB1 | CCB1 | ССВ | 03/25/21 14:07 | | AM/AP | ОК |
| 12 | LB113684BLW | LB113684BLW | МВ | 03/25/21 14:39 | | AM/AP | ОК |
| 13 | LB113684BSW | LB113684BSW | LCS | 03/25/21 15:11 | | AM/AP | ОК |
| 14 | M1770-20 | MW-103S | SAM | 03/25/21 16:15 | CL high | AM/AP | Dilution |
| 15 | M1770-21 | MW-102D | SAM | 03/25/21 16:47 | CL high | AM/AP | Dilution |
| 16 | M1770-22 | MW-102S | SAM | 03/25/21 17:19 | | AM/AP | ОК |
| 17 | M1770-23 | MW-102I | SAM | 03/25/21 17:50 | CL high | AM/AP | Dilution |
| 18 | M1770-24 | MW-107I | SAM | 03/25/21 18:22 | CL high | AM/AP | Dilution |
| 19 | M1770-24MS | MW-107IMS | MS | 03/25/21 18:54 | | AM/AP | ок |
| 20 | M1770-24MSD | MW-107IMSD | MSD | 03/25/21 19:26 | | AM/AP | ОК |

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Daily Analysis Runlog For Sequence/QCBatch ID # LB113684

| Review By Supervise By | Alexander apatel | Review On Supervise On | 3/30/2021 9:25:32 AM 3/30/2021 1:58:30 PM |
|---|--|----------------------------------|--|
| STD. NAME | STD REF.# | | |
| ICAL Standard ICV Standard CCV Standard | WP89842,WP89843 WP89850 WP90167,WP9018 | 3,WP89844,WP89845,WP89846,W 1 | P89847,WP89848 |
| ICSA Standard CRI Standard | N/A N/A | | |
| Chk Standard | WP90148,WP9015 | 1 | |

| 21 | CCV2 | CCV2 | CCV | 03/25/21 19:58 | | AM/AP | ок |
|----|--------------|------------------|-----|----------------|-----------------------------|-------|----------|
| 22 | CCB2 | CCB2 | ССВ | 03/25/21 20:30 | | AM/AP | ок |
| 23 | CCV3 | CCV3 | CCV | 03/26/21 08:50 | | AM/AP | ок |
| 24 | ССВ3 | ССВ3 | ССВ | 03/26/21 09:26 | | AM/AP | ок |
| 25 | LB113684BLW2 | LB113684BLW2 | МВ | 03/26/21 09:58 | | AM/AP | ок |
| 26 | LB113684BSW2 | LB113684BSW2 | LCS | 03/26/21 10:31 | | AM/AP | ок |
| 27 | M1763-03 | EL-509-WATER-SAM | SAM | 03/26/21 11:04 | | AM/AP | ок |
| 28 | M1763-03MS | EL-509-WATER-SAM | MS | 03/26/21 11:37 | 9.5ml of sample,0.5mL W2799 | AM/AP | ок |
| 29 | M1763-03MSD | EL-509-WATER-SAM | MSD | 03/26/21 12:10 | 9.5ml of sample,0.5mL W2799 | AM/AP | ок |
| 30 | M1770-20DL | MW-103SDL | SAM | 03/26/21 12:43 | 1000X for CL | AM/AP | Confirms |
| 31 | M1770-21DL | MW-102DDL | SAM | 03/26/21 13:16 | 50X for CL | AM/AP | Confirms |
| 32 | M1770-23DL | MW-102IDL | SAM | 03/26/21 13:49 | 50X for CL | AM/AP | Confirms |
| 33 | M1770-24DL | MW-107IDL | SAM | 03/26/21 14:22 | 50X for CL | AM/AP | Confirms |
| 34 | CCV4 | CCV4 | CCV | 03/26/21 14:55 | | AM/AP | ок |
| 35 | CCB4 | CCB4 | ССВ | 03/26/21 15:27 | | AM/AP | ОК |

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Prep Standard - Chemical Standard Summary

Order ID: M1770

Test: Anions Group1

Prepbatch ID:

Sequence ID/Qc Batch ID: LB113629,LB113684,

Standard ID:

WP89641,WP89648,WP89651,WP89842,WP89843,WP89844,WP89845,WP89846,WP89847,WP89848,WP89850,WP90 123,WP90124,WP90135,WP90148,WP90151,WP90167,WP90168,WP90181,WP90182,

Chemical ID:

W2606,W2607,W2609,W2620,W2647,W2740,

M1770-GENCHEM 185 of 224

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

Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | <u>NAME</u> | NO. | Prep Date | Expiration Date | Prepared By | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Amit Patel | | |
|--------------|-----------------------|---------|------------|--------------------|----------------|----------------|------------------|---------------------------|--|--|
| 440 | IC ELUENT CONCENTRATE | WP89641 | 02/24/2021 | 08/24/2021 | Alexander | WETCHEM_S | None | | | |
| | | | | | Milano | CALE_4 (WC | | 02/25/2021 | | |
| | SC-4) SC-4) SC-4) | | | | | | | | | |

FROM 33.90000gram of W2607 + 8.40000gram of W2647 + 957.70000ml of W2606 = Final Quantity: 1000.000 ml

| Recipe ID | <u>NAME</u> | NO. | Prep Date | Expiration Date | Prepared By | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Amit Patel |
|--------------|-------------|---------|------------|--------------------|---------------------|----------------|--------------------|---------------------------|
| 441 | IC ELUENT | WP89648 | 02/24/2021 | 03/24/2021 | Alexander Milano | None | Glass Pipette-A | 02/25/2021 |

FROM 1980.00000ml of W2606 + 20.00000ml of WP89641 = Final Quantity: 2000.000 ml

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

Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME_ | NO. | Prep Date | Expiration Date | Prepared By | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Amit Patel | |
|--------------|----------|----------------|------------|--------------------|---------------------|----------------|----------------------|---------------------------|--|
| 455 | IC H2SO4 | <u>WP89651</u> | 02/24/2021 | 03/24/2021 | Alexander Milano | None | WETCHEM_P PETTE_1 | l 02/25/2021 | |
| FROM | (WA) | | | | | | | | |

| Recipe ID | NAME_ | NO. | Prep Date | Expiration Date | Prepared By | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Amit Patel | |
|--------------|-----------------------------|---------|------------|--------------------|----------------|----------------|------------------|---------------------------|--|
| 2487 | Anions 300/9056 calibration | WP89842 | 03/09/2021 | 03/10/2021 | Alexander | None | WETCHEM_P | l | |
| | standard 1 | | | | Milano | | PETTE_1 | 03/09/2021 | |
| | | | | | | | | | |

10.00000ml of W2606 = Final Quantity: 10.000 ml **FROM**

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

Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME_ | NO. | Prep Date | Expiration Date | Prepared By | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Amit Patel |
|--------------|--|----------------|---------------|--------------------|---------------------|----------------|----------------------|---------------------------|
| 24 | Anions 300/9056 calibration standard 2 | <u>WP89843</u> | 03/09/2021 | 03/10/2021 | Alexander Milano | None | WETCHEM_P PETTE_1 | I 03/09/2021 |
| EDOM | 0.20000ml of W2740 + 9.80000ml of | W2606 = F | inal Quantity | 10 000 ml | | • | (WA) | |

| FROM | 0.20000ml of W2/40 + 9.80000 ml of W2606 = Final Quantity: 10.000 ml |
|------|--|
| | |

| | Recipe ID | NAME | <u>NO.</u> | Prep Date | Expiration Date | <u>Prepared</u> <u>By</u> | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Amit Patel | |
|---|--------------|--|------------|------------|--------------------|------------------------------|----------------|----------------------|---------------------------|---|
| | 25 | Anions 300/9056 calibration standard 3 | WP89844 | 03/09/2021 | 03/10/2021 | Alexander Milano | None | WETCHEM_P PETTE_1 | I 03/09/2021 | |
| ı | | | | 1 | | | | (WA) | | ı |

FROM 0.40000ml of W2740 + 9.60000ml of W2606 = Final Quantity: 10.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME_ | NO. | Prep Date | Expiration Date | Prepared By | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Amit Patel |
|--------------|--|----------------|----------------|--------------------|---------------------|----------------|----------------------|---------------------------|
| 26 | Anions 300/9056 calibration standard 4 | <u>WP89845</u> | 03/09/2021 | 03/10/2021 | Alexander Milano | None | WETCHEM_P PETTE_1 | I 03/09/2021 |
| EDOM | 0.50000ml of W2740 + 9.50000ml of | W2606 = F | inal Quantity: | 10 000 ml | | | (WA) | |

| <u>FROM</u> | 0.50000ml of W2740 + 9.50000 ml of W2606 = Final Quantity: 10.000 ml |
|-------------|--|
| | |

| Recipe ID | <u>NAME</u> | <u>NO.</u> | Prep Date | Expiration Date | Prepared By | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Amit Patel | |
|--------------|--|------------|------------|--------------------|---------------------|----------------|----------------------|---------------------------|---|
| 3680 | Anions 300/9056 calibration standard 5-CCV | WP89846 | 03/09/2021 | 03/10/2021 | Alexander Milano | None | WETCHEM_P PETTE_1 | I 03/09/2021 | |
| | | | | | | | (WA) | | 1 |

FROM 45.00000ml of W2606 + 5.00000ml of W2740 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | <u>NAME</u> | NO. | Prep Date | Expiration Date | Prepared By | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Amit Patel |
|--------------|--|-----------|----------------|--------------------|---------------------|----------------|----------------------|---------------------------|
| 3679 | Anions 300/9056 calibration standard 6 | WP89847 | 03/09/2021 | 03/10/2021 | Alexander Milano | None | WETCHEM_P PETTE_1 | I 03/09/2021 |
| FROM | 2.00000ml of W2740 + 8.00000ml of | W2606 = F | inal Quantity: | 10.000 ml | | | (WA) | |

| <u>FROM</u> | 2.00000mi of | r W2740 + 8. | .00000mi of 1 | W2606 = Finai | Quantity: 10.000 mi |
|-------------|--------------|--------------|---------------|---------------|---------------------|
| | | | | | |

| Recipe ID | <u>NAME</u> | <u>NO.</u> | Prep Date | Expiration Date | <u>Prepared</u> <u>By</u> | <u>ScaleID</u> | <u>PipettelD</u> | Supervised By Amit Patel | |
|--------------|--|------------|------------|--------------------|------------------------------|----------------|----------------------|---------------------------|---|
| 3681 | Anions 300/9056 calibration standard 7 | WP89848 | 03/09/2021 | 03/10/2021 | Alexander Milano | None | WETCHEM_P PETTE 1 | 03/09/2021 | |
| | | | | | | | (WA) | | ۱ |

FROM 2.50000ml of W2740 + 7.50000ml of W2606 = Final Quantity: 10.000 ml

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

Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | <u>NAME</u> | NO. | Prep Date | Expiration Date | Prepared By | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Amit Patel |
|--------------|------------------------------------|------------|---------------------|--------------------|---------------------|----------------|----------------------|---------------------------|
| 3233 | Anions 300/9056 ICV-LCS std | WP89850 | 03/09/2021 | 03/10/2021 | Alexander Milano | None | WETCHEM_P PETTE 1 | I 03/09/2021 |
| FROM | 45.00000ml of W2606 + 5.00000ml of | of W2620 = | I Final Quantity | y: 50.000 ml | Williamo | <u> </u> | (WA) | 00/00/2021 |

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Amit Patel |
|--------------|--|---------|------------|--------------------|---------------------|----------------|----------------------|---------------------------|
| 3680 | Anions 300/9056 calibration standard 5-CCV | WP90123 | 03/23/2021 | 03/24/2021 | Alexander Milano | None | WETCHEM_P PETTE_1 | l 03/23/2021 |
| | • | • | • | | | | (WA) | |

FROM 45.00000ml of W2606 + 5.00000ml of W2740 = Final Quantity: 50.000 ml

M1770-GENCHEM 191 of 224

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

Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | <u>NAME</u> | NO. | Prep Date | Expiration Date | Prepared By | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Amit Patel |
|--------------|------------------------------------|------------|----------------|--------------------|----------------|----------------|------------------|---------------------------|
| 3233 | Anions 300/9056 ICV-LCS std | WP90124 | 03/23/2021 | 03/24/2021 | Alexander | None | WETCHEM_P | I |
| | | | | | Milano | | PETTE_1 | 03/23/2021 |
| EDOM. | 45 00000ml of W2606 + 5 00000ml of | of W2620 = | Final Quantity | v: 50 000 ml | | | (WA) | |

| <u>FROM</u> | 45.00000 mi of $\sqrt{2606} + 5.00000$ mi of $\sqrt{2620} = \text{Final Quantity: } 50.000 \text{ mi}$ |
|-------------|--|
| | |

| Recipe ID | <u>NAME</u> | <u>NO.</u> | Prep Date | Expiration Date | Prepared By | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Amit Patel |
|--------------|--|----------------|------------|--------------------|---------------------|----------------|----------------------|---------------------------|
| 3680 | Anions 300/9056 calibration standard 5-CCV | <u>WP90135</u> | 03/24/2021 | 03/25/2021 | Alexander Milano | None | WETCHEM_P PETTE_1 | I 03/24/2021 |
| | | | | | | • | (WA) | |

FROM 45.00000ml of W2606 + 5.00000ml of W2740 = Final Quantity: 50.000 ml

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

Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | <u>NAME</u> | NO. | Prep Date | Expiration Date | Prepared By | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Amit Patel |
|--------------|------------------------------------|------------|----------------|--------------------|----------------|----------------|------------------|---------------------------|
| 3233 | Anions 300/9056 ICV-LCS std | WP90136 | 03/24/2021 | 03/25/2021 | Alexander | None | WETCHEM_P | I |
| | | | | | Milano | | PETTE_1 | 03/24/2021 |
| EDOM. | 45 00000ml of W2606 + 5 00000ml of | of W2620 = | Final Quantity | v: 50 000 ml | | | (WA) | |

| <u>FROM</u> | 45.00000 mi of $\sqrt{2606} + 5.00000$ mi of $\sqrt{2620} = \text{Final Quantity: } 50.000 \text{ mi}$ |
|-------------|--|
| | |

| Recipe | | | | Expiration | <u>Prepared</u> | | | Supervised By | l |
|-----------|-------------|------------|------------|-------------------|-----------------|----------------|------------------|---------------|---|
| <u>ID</u> | <u>NAME</u> | <u>NO.</u> | Prep Date | <u>Date</u> | <u>By</u> | <u>ScaleID</u> | <u>PipetteID</u> | Amit Patel | l |
| 441 | IC ELUENT | WP90148 | 03/24/2021 | 04/24/2021 | Alexander | None | Glass | | l |
| | | | | | Milano | | Pipette-A | 03/24/2021 | ĺ |
| | | | | | | | | | 1 |

FROM 1980.00000ml of W2606 + 20.00000ml of WP89641 = Final Quantity: 2000.000 ml

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

Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME. | NO. | Prep Date | Expiration Date | Prepared By | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Amit Patel |
|--------------|-----------------------------------|---------------|------------|--------------------|----------------|----------------|------------------|---------------------------|
| 455 | IC H2SO4 | WP90151 | 03/24/2021 | 04/24/2021 | Alexander | None | WETCHEM_P | I |
| | | | | | Milano | | PETTE_1 | 03/24/2021 |
| FROM | 3997.20000ml of W2606 = Final Qua | antitv: 4000. | .000 ml | | | | (WA) | |

| Recipe ID | NAME_ | NO. | Prep Date | Expiration Date | Prepared By | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Amit Patel | | |
|--------------|--|----------------|------------|--------------------|---------------------|----------------|----------------------|---------------------------|--|--|
| 3680 | Anions 300/9056 calibration standard 5-CCV | <u>WP90167</u> | 03/25/2021 | 03/26/2021 | Alexander Milano | None | WETCHEM_P PETTE_1 | l 03/25/2021 | | |
| | (WA) | | | | | | | | | |

45.00000ml of W2606 + 5.00000ml of W2740 = Final Quantity: 50.000 ml **FROM**

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

Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | <u>NAME</u> | NO. | Prep Date | Expiration Date | Prepared By | <u>ScaleID</u> | <u>PipetteID</u> | Supervised By Amit Patel |
|--------------|------------------------------------|------------|----------------|--------------------|----------------|----------------|------------------|---------------------------|
| 3233 | Anions 300/9056 ICV-LCS std | WP90168 | 03/25/2021 | 03/26/2021 | Alexander | None | WETCHEM_P | I |
| | | | | | Milano | | PETTE_1 | 03/25/2021 |
| EDOM | 45 00000ml of W2606 + 5 00000ml of | of W2620 = | Final Quantity | v: 50 000 ml | | | (WA) | |

| <u> FROIVI</u> | 45.000001111 01 VV2000 + 5.000001111 01 VV202 | o - I mai Quantity. 30.000 mil |
|----------------|---|--------------------------------|
| | | |
| | | |

| Recipe ID | <u>NAME</u> | NO. | Prep Date | Expiration Date | <u>Prepared</u> <u>By</u> | <u>ScaleID</u> | <u>PipettelD</u> | Supervised By Amit Patel | | | |
|--------------|--|---------|------------|--------------------|------------------------------|----------------|----------------------|---------------------------|--|--|--|
| 3680 | Anions 300/9056 calibration standard 5-CCV | WP90181 | 03/26/2021 | 03/27/2021 | Alexander Milano | None | WETCHEM_P PETTE_1 | I 03/26/2021 | | | |
| | (WA) | | | | | | | | | | |

FROM 45.00000ml of W2606 + 5.00000ml of W2740 = Final Quantity: 50.000 ml

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Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID 3233 | NAME Anions 300/9056 ICV-LCS std | NO. WP90182 | Prep Date 03/26/2021 | Expiration Date 03/27/2021 | Prepared By Alexander Milano | <u>ScaleID</u> None | PipetteID WETCHEM_P PETTE_1 | Supervised By Amit Patel 03/26/2021 | | | |
|----------------------|----------------------------------|----------------|-------------------------|----------------------------|-------------------------------|------------------------|-----------------------------------|-------------------------------------|--|--|--|
| FROM | (WA) | | | | | | | | | | |
| | | | | | | | | | | | |

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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 | DIW / DI Water | Daily Lab-Certified | 10/24/2024 | 10/24/2019 / apatel | 10/24/2019 / apatel | W2606 |
| 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 | 19D165205 | 11/01/2029 | 05/04/2020 / ketankumar | 11/01/2019 / apatel | W2607 |
| 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) | 0000215588 | 10/30/2023 | 11/05/2019 / jignesh | 11/05/2019 / jignesh | W2609 |
| 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 | P2-MEB678300 | 07/06/2021 | 07/06/2020 / Alexander | 11/19/2019 / apatel | W2620 |
| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / | 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 # |
| Inorganic Ventures | 300-CAL-A-500ML / 300.0 Calibration Standard, 500 ml | P2-MEB687558 | 02/03/2022 | 02/03/2021 / apatel | 07/30/2020 / apatel | W2740 |

M1770-GENCHEM 197 of 224 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 (NaHCO3) (dried basis) | 99.7 - 100.3 % | 100.1 |
| nsoluble Matter | <= 0.015 % | < 0.002 |
| Chloride (Cl) | <= 0.003 % | 0.003 |
| Phosphate (PO4) | <= 0.001 % | 0.001 |
| Sulfur Compounds (as SO ₄) | <= 0.003 % | 0.003 |
| Calcium (Ca) | <= 0.02 % | 0.02 |
| race Impurities – Iron (Fe) | <= 0.001 % | 0.001 |
| Magnesium (Mg) | <= 0.005 % | 0.005 |
| Potassium (K) | <= 0.005 % | 0.005 |
| Ammonium (NH4) | <= 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:

Packaging Site: Paris Mfg Ctr & DC



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

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inorganicventures.com

Christiansburg, VA 24073 · USA

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030 fax: 540.585.3012

info@inorganicventures.com

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).



2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Ion Chromatography Solution

Catalog Number: 300-CAL-A

Lot Number: P2-MEB678300

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

CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE CERTIFIED VALUE ANALYTE CERTIFIED VALUE Bromide, Br $100.0 \pm 0.5 \ \mu \text{g/mL}$ Chloride, Cl $30.01 \pm 0.16 \ \mu \text{g/mL}$

Fluoride, F- $20.01 \pm 0.09 \,\mu\text{g/mL}$ Nitrate as N, NNO3- $25.00 \pm 0.12 \,\mu\text{g/mL}$

Nitrite as N, NNO2- $30.00 \pm 0.16 \,\mu\text{g/mL}$ o-Phosphate as P, PPO4 $49.99 \pm 0.22 \,\mu\text{g/mL}$

Sulfate, SO4 150.0 \pm 0.7 μ g/mL

Density: 0.999 g/mL (measured at 20 \pm 4 °C)

Assay Information:

3.0

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| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---------|------------|-----------|------------------|
| Br | IC Assay | 3184 | 151130 |
| Br | Fajans | 999c | 999c |
| CI | IC Assay | 3182 | 060925 |
| CI | Fajans | 999c | 999c |
| F- | IC Assay | 3183 | 140203 |
| NNO3- | IC Assay | 3185 | 050517 |
| NNO2- | Calculated | 8040 | 8040 |
| NNO2- | IC Assay | | traceable to 40h |
| PPO4 | IC Assay | 3186 | 090723 |
| SO4 | IC Assay | 3181 | 080603 |
| SO4 | Calculated | | See Sec. 4.2 |

- 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: | 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: |
|--|---|
| $\begin{split} \textbf{X}_{\textbf{CRM/RM}} &= \Sigma(\textbf{w}_i) \ (\textbf{X}_i) \\ \textbf{X}_i &= \text{mean of Assay Method i with standard uncertainty } \textbf{u}_{char \ i} \\ \textbf{w}_i &= \text{the weighting factors for each method calculated using the inverse square of the variance:} \\ \textbf{w}_i &= (1/\textbf{u}_{char \ i})^2 \ / \ (\Sigma(1/\textbf{u}_{char \ i})^2) \end{split}$ | 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 (±) = $U_{CRM/RM} = k (u_{char}^2 + u_{bb}^2 + u_{lts}^2 + u_{ts}^2)^{1/2}$ $k = \text{coverage factor} = 2$ $u_{char} = [\Sigma'(w_i)^2 (u_{char}i)^2)^{1/2}$ where $u_{char}i$ are the errors from each characterization method $u_{bb} = \text{bottle to bottle homogeneity standard uncertainty}$ $u_{lts} = \text{long term stability standard uncertainty}$ $u_{ts} = \text{transport stability standard uncertainty}$ | CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{1/2}$ $k = coverage\ factor = 2$ $u_{char\ a} = the\ errors\ from\ characterization$ $u_{bb} = b$ 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

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- 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 $20^{\circ} \pm 4^{\circ}$ 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; inorganic ventures.com; info@inorganic ventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 25, 2019

- 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 25, 2023
- 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: | |
|-----------------------------|--|
| - Sealed TCT Bad 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

Page 3 of 4

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Certificate Approved By:

Michael Booth Supervisor, Quality Control Michael 2 Booth

Certifying Officer:

Paul Gaines CEO, Senior Technical Director Paul R. Lainea

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inorganicventures.com

Christiansburg, VA 24073 · USA

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030 fax: 540.585.3012

info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

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2.0 PRODUCT DESCRIPTION

Product Code: Multi Analyte Ion Chromatography Solution

Catalog Number: 300-CAL-A

Lot Number: P2-MEB687558

Matrix: H2O

Value / Analyte(s): 150 μg/mL ea:

Sulfate,

100 μg/mL ea: Bromide,

50 μg/mL ea: o-Phosphate as P,

 $30 \ \mu g/mL$ 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 $100.0 \pm 0.5 \ \mu g/mL$ Chloride, Cl $30.00 \pm 0.14 \ \mu g/mL$

Fluoride, F- 20.00 ± 0.07 μg/mL Nitrate as N, NNO3- 25.00 ± 0.10 μg/mL

Nitrite as N, NNO2- $30.00 \pm 0.18 \,\mu\text{g/mL}$ o-Phosphate as P, PPO4 $50.00 \pm 0.22 \,\mu\text{g/mL}$

Sulfate, SO4 150.0 \pm 0.7 μ g/mL

Density: 0.999 g/mL (measured at 20 \pm 4 °C)

Assay Information:

Page 1 of 4

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| ANALYTE | METHOD | NIST SRM# | SRM LOT# |
|---------|------------|-------------------|----------------------|
| Br | IC Assay | 3184 | 151130 |
| Br | Fajans | 999c | 999c |
| CI | IC Assay | 3182 | 060925 |
| CI | Fajans | 999c | 999c |
| F- | IC Assay | 3183 | 140203 |
| NNO3- | IC Assay | 3185 | 050517 |
| NNO2- | Calculated | traceable to 8040 | SRM 8040 |
| NNO2- | IC Assay | | traceable to 40h new |
| 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 | Characterization of CRM/RM by One Method |
|--|---|
| Certified Value, X _{CRM/RM} , where two or more methods of characterization are used is the weighted mean of the results: | Certified Value, X _{CRM/RM} , where one method of characterization is used is the mean of individual results: |
| $\mathbf{X}_{CRM/RM} = \Sigma(\mathbf{w_i}) (\mathbf{X_i})$ $\mathbf{X_i} = \text{mean of Assay Method i with standard uncertainty } \mathbf{u}_{\text{char i}}$ $\mathbf{w_i} = \text{the weighting factors for each method calculated using the inverse square of the variance:}$ $\mathbf{w_i} = (1/\mathbf{u}_{\text{char i}})^2 / (\Sigma(1/(\mathbf{u}_{\text{char i}})^2))$ | $X_{CRM/RM} = (X_a) (u_{char \ a})$ $X_a = mean \ of Assay Method A with$ $u_{char \ a} = the standard uncertainty of characterization Method A$ |
| CRM/RM Expanded Uncertainty (±) = U _{CRM/RM} = k (u ² char + u ² bb + u ² lts + u ² ts) ^{1/2} | CRM/RM Expanded Uncertainty (±) = U _{CRM/RM} = k (u ² _{char a} + u ² _{bb} + u ² _{its} + u ² _{ts}) |
| k = coverage factor = 2 $\mathbf{v}_{\text{char}} = [\Sigma((\mathbf{w}_i)^2 (\mathbf{u}_{\text{char}})^2)]^{1/2}$ where \mathbf{u}_{char} ; are the errors from each characterization method | k = coverage factor = 2 |
| orar orar | u _{char a} = the errors from characterization |
| u _{bb} = bottle to bottle homogeneity standard uncertainty | u _{bb} = bottle to bottle homogeneity standard uncertainty |
| u _{lts} = long term stability standard uncertainty (storage) | u _{lts} = long term stability standard uncertainty (storage) |
| u _{ts} = transport stability standard uncertainty | 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

Page 2 of 4

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- 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 $20^{\circ} \pm 4^{\circ}$ 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.

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- 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

December 16, 2019

- 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

- December 16, 2023
- 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.

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11.3 Period of Validity

| - Sealed | TCT Bag Open Date: | • |
|----------|----------------------|---|
| Ocalca | TO I Day Opcil Date. | • |

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth Manager, Quality Control Michael 2 Booth

Paul R. Lainea

Certifying Officer:

Paul Gaines CEO, Senior Technical Director

Page 4 of 4

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⁻ 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.

Certificate of Analysis



Date of Release: 04/02/2019

Name: Sodium carbonate anhydrous

Grade: Meets ACS Specifications. Meets Reagent Specifications for testing USP/NF monographs.

 Item No:
 SX0395-3

 Lot No.:
 19D165205

Country of Origin: USA

| Characteristic | Requirement | Results |
|---------------------------------------|--------------|-----------|
| Assay (calculated on dried substance) | Min. 99.5 % | 100.1 % |
| Color | White | White |
| Form | Powder | Powder |
| Heavy metals (ICP-OES) | Max. 5 ppm | < 5 ppm |
| Insoluble matter | Max. 0.01 % | < 0.01 % |
| Loss on heating (285°C) | Max. 1.0 % | < 1.0 % |
| Sulphur compounds (as SO4) | Max. 0.003 % | < 0.003 % |
| CI (Chloride) | Max. 0.001 % | < 0.001 % |
| PO4 (Phosphate) | Max. 0.001 % | < 0.001 % |
| SiO2 (Silica) | Max. 0.005 % | < 0.005 % |
| Ca (Calcium) | Max. 0.03 % | 0.005 % |
| Fe (Iron) | Max. 5 ppm | < 5 ppm |
| K (Potassium) | Max. 0.005 % | < 0.005 % |
| Mg (Magnesium) | Max. 0.005 % | < 0.005 % |

Joe Schoellkopff

Quality Control Manager

This document has been produced electronically and is valid without signature.

EMD Millipore is a division of Merck KGaA, Darmstadt, Germany

EMD Millipore Corporation 400 Summit Drive Burlington, MA 01803 U.S.A.

S.A. Form number: 00005624CA, Rev. 2.0

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Sulfuric Acid BAKER INSTRA-ANALYZED® Reagent

For Trace Metal Analysis Low Selenium



Material No.: 9673-33 Batch No.: 0000215588

Manufactured Date: 2018/10/31 Retest Date: 2023/10/30

J.T.Baker

Revision No: 1

Certificate of Analysis

| Test | Specification | Result | | | | |
|---|---------------|--------|--|--|--|--|
| ACS - Assay (H ₂ SO ₄) | 95.0 - 98.0 % | 96.5 | | | | |
| Appearance | Passes Test | PT | | | | |
| ACS – Color (APHA) | <= 10 | 5 | | | | |
| ACS – Residue after Ignition | <= 3 ppm | 1 | | | | |
| ACS - Substances Reducing Permanganate (as SO2) | <= 2 ppm | < 2 | | | | |
| Ammonium (NH ₄) | <= 1 ppm | < 1 | | | | |
| Chloride (CI) | <= 0.1 ppm | < 0.1 | | | | |
| Nitrate (NO ₃) | <= 0.2 ppm | 0.1 | | | | |
| Phosphate (PO ₄) | <= 0.5 ppm | < 0.1 | | | | |
| Trace Impurities - Aluminum (AI) | <= 30.0 ppb | 2.1 | | | | |
| Arsenic and Antimony (as As) | <= 4 ppb | < 2 | | | | |
| Trace Impurities - Barium (Ba) | <= 10.0 ppb | < 1.0 | | | | |
| Trace Impurities - Beryllium (Be) | <= 10.0 ppb | < 1.0 | | | | |
| Trace Impurities - Bismuth (Bi) | <= 10.0 ppb | 1.1 | | | | |
| Trace Impurities - Boron (B) | <= 10.0 ppb | < 5.0 | | | | |
| Trace Impurities - Cadmium (Cd) | <= 2.0 ppb | < 0.3 | | | | |
| Trace Impurities - Calcium (Ca) | <= 50.0 ppb | 5.7 | | | | |
| Trace Impurities - Chromium (Cr) | <= 6.0 ppb | < 0.4 | | | | |
| Trace Impurities - Cobalt (Co) | <= 0.5 ppb | < 0.3 | | | | |
| Trace Impurities - Copper (Cu) | <= 1.0 ppb | < 0.1 | | | | |
| Trace Impurities - Gallium (Ga) | <= 10.0 ppb | < 0.2 | | | | |
| Trace Impurities - Germanium (Ge) | <= 10.0 ppb | < 2.0 | | | | |
| Trace Impurities - Gold (Au) | <= 10.0 ppb | < 5.0 | | | | |
| Heavy Metals (as Pb) | <= 500 ppb | < 100 | | | | |

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700 Avantor Performance Materials, LLC

Material No.: 9673-33 Batch No.: 0000215588

| Test | Specification | Result |
|------------------------------------|---------------|--------|
| Trace Impurities – Iron (Fe) | <= 50.0 ppb | 4.4 |
| Trace Impurities – Lead (Pb) | <= 0.5 ppb | < 0.5 |
| Trace Impurities – Lithium (Li) | <= 10.0 ppb | < 1.0 |
| Trace Impurities – Magnesium (Mg) | <= 7.0 ppb | 0.5 |
| Trace Impurities – Manganese (Mn) | <= 1.0 ppb | < 0.4 |
| Trace Impurities – Mercury (Hg) | <= 0.5 ppb | 0.1 |
| Trace Impurities - Molybdenum (Mo) | <= 10.0 ppb | < 5.0 |
| Trace Impurities – Nickel (Ni) | <= 2.0 ppb | < 0.3 |
| Trace Impurities – Niobium (Nb) | <= 10.0 ppb | < 1.0 |
| Trace Impurities – Potassium (K) | <= 500.0 ppb | < 2.0 |
| Trace Impurities – Selenium (Se) | <= 50.0 ppb | 16.8 |
| Trace Impurities – Silicon (Si) | <= 100.0 ppb | < 10.0 |
| Trace Impurities – Silver (Ag) | <= 1.0 ppb | 0.6 |
| Trace Impurities – Sodium (Na) | <= 500.0 ppb | 1.1 |
| Trace Impurities – Strontium (Sr) | <= 5.0 ppb | < 0.2 |
| Trace Impurities – Tantalum (Ta) | <= 10.0 ppb | < 5.0 |
| Trace Impurities – Thallium (TI) | <= 20.0 ppb | < 5.0 |
| Trace Impurities – Tin (Sn) | <= 5.0 ppb | < 0.8 |
| Trace Impurities – Titanium (Ti) | <= 10.0 ppb | < 1.0 |
| Trace Impurities – Vanadium (V) | <= 10.0 ppb | < 1.0 |
| Trace Impurities – Zinc (Zn) | <= 5.0 ppb | 0.3 |
| Trace Impurities – Zirconium (Zr) | <= 10.0 ppb | < 1.0 |

For Laboratory, Research or Manufacturing Use

Country of Origin:

US

Packaging Site:

Phillipsburg Mfg Ctr & DC



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

James Tethier
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



SHIPPING DOCUMENTS

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M1770-GENCHEM 210 of 224



284 Sheffield Street, Mountainside, NJ 07092 (908) 789-8900 • Fax (908) 789-8922 www.chemtech.net

| QUOTE NO. | MITTO |
|-----------|----------|
| QUOTE NO. | 1711 110 |

| | CLIENT | INFORMATION | | | | | CLIENT PI | PROJECT INFORMATION | | | | | | | CLIENT BILLING INFORMATION | | | | | |
|--|----------------|-------------------------------------|--------------------------------|---|--------------------------------|-------------------------|----------------------------|--|--------------------|-------------------|----------|--------------|--------------------------------|-----------|----------------------------|----------|-------|----------|----------------------------|---------------------------------------|
| COMPANY: | TRU Engineers | TTO BE SENT TO: | 5 | PROJE | CT N | MAN | E: Bush | Termina | l Pari | c | 778 | | BILL TO: PO#: | | | | | | | |
| ADDRESS: | 71 Graffin R | lood | | PROJECT NO.: 435 627 LOCATION: B. DELYN, NY | | | | | | | ADDRESS: | | | | | | | | | |
| CITY | windsor | STATE: LT | ZIP: 06075 | PROJECT MANAGER: Jim Personto | | | ADDRESS: CITY STATE: ZIP: | | | | | | | | | | | | | |
| ATTENTION: Jim Pronto | | | | e-mail: jpgranta Otrocompanies.com | | | | | | ATTENTION: PHONE: | | | | | | | | | | |
| PHONE: FAX: | | | | PHONE: FAX: | | | | | | ANALYSIS | | | | | | | | | | |
| DATA TURNAROUND INFORMATION | | | | | DATA DELIVERABLE INFORMATION | | | | | | | | | | | | | | | |
| FAX (RUSH) HARDCOPY (DATA PACKAGE): DAYS* EDD: TO BE APPROVED BY CHEMTECH STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS | | | | Leve | el 2 (Re el 3 (Re aw Dat | esults esults ta) | Only) | NJ Reduce NYS ASP A | d 🗖 US | S EPA C | a) LP | 1013 1013 | 54003 54003 | / 5 | / 0 | 7 | /8 | /9 | // | |
| OUEMEE OU | | | | | SAN | IPLE | | //PLE | ES | | | | PRES | SERVA | TIVES | | | | 1 | MMENTS |
| SAMPLE ID | SA | PROJECT AMPLE IDENTIFICA | TION | SAMPLE MATRIX | | GRAB 34 | DATE | TIME | # OF BOTTLES | A | £ 2 | B 3 | E | 5 | 6 | 7 | 8 | 9 | A-HCI B-HN03 C-H2SO4 | fy Preservatives D-NaOH E-ICE F-OTHER |
| 1. | TB- 0322 | 22021 | | AQ | | | 3/22/21 | 117,00 | 2 | Y | | 3 | 4 | 3 | 0 | , | 0 | 9 | U-H2304 | F-OTHER |
| 2. | Nw - 106 J | 1,100 | | G (v) | | | 3/22/21 | | 5 | Х | X | X | Х | | illary le s | Jack L | 11 | | 1 - 1 | |
| 3. | MM-10P 8 | | - A | 60) | | × | 3/22/21 | 13:30 | 5 | X | x | X | × | - 18 | | | 1 1 | | - 5 | |
| 4. | MW-186 S | MS | 21.81 | 600 | | X | 3/22/21 | 13:35 | 5 | X | Х | × | Y | - 19 | | | | | l rampiapa | |
| 5. | MW-106 5 | MSD | 11,12,000 | 600 | | X | 3/22/21 | 13:40 | 5 | X | X | X | X | - 56- | | | | | Legitive Li | |
| 6. | MW-105 D | | | GW | | X | 3/22/21 | 13:13 | 2 | X | X | X | Х | | | 6 | | | | |
| 7. | MW-105 I | | | 6W | | × | 3/22/21 | is. 30 | 5 | У | × | X | X | | 1 2 20 | | | | | |
| 8. | MW-125 S | | | GW | | × | 3/22/21 | 15:15 | 3 | X | k | X | Χ | | | | 40 1 | | | |
| 9. | | | | - 1 | | |). <u>"</u> | | | | | | | | | | | | | |
| 10. | | SAMPLE CUSTOD | V MUST BE DOC | LIMENTE | D DE | LOW | EACH TI | ME CAME | LECC | HANC | E BOSS | SECCIO | NUNCI | LIDING | COLID | IED DE | LIVED | <u> </u> | | |
| RELINQUISHED E 1. Coursell RELINQUISHED E 2. | A NEW SAMPLER: | DATE/TIME: 3/22/24 16:30 DATE/TIME: | RECEIVED BY: RECEIVED BY: 2. | P | 1 | and the supplementary | Conditi | the same of the sa | s or coole samp | rs at rece | ipt: * | COMPLIAN | T D NO | N COMPLIA | ANT 🗆 (| COOLER T | EMP | No. | 3.9°C_ PLES | °C |
| RELINQUISHED B | 23 | 1900 3-22-2 | RECEIVED BY: 3. WHITE - CHEMT | SC ECH COPY F | OR RE | TURN " | Page TO CLIENT | lof | .74 | CLIEN CHEMI | ECH: | Pic | elivered ked Up - SAMPLI | | ther ld Samp | oling | | | - | t Complete NO |



284 Sheffield Street, Mountainside, NJ 07092 (908) 789-8900 • Fax (908) 789-8922 www.chemtech.net

| CHEMTECH PROJECT NO. | M1770 |
|----------------------|-------|
| QUOTE NO. | 190- |
| COC Number | |

| | CLIENT | T INFORMATION | | | | | CLIENT P | ROJECT IN | FORMA | TION | | | | | | | | NG INFO | ORMATION | |
|--|-------------|-----------------------------|-----------------|------------|--------------------------------|------------|----------|----------------|---------|---|-------|--------|--------------|--------------|-------------------|---------|--|---------|-----------------|-----------------|
| COMPANY: | TRC Enginee | RTTO BE SENT TO: | | PROJE | CT N | IMAV | E: Buch | Terminal | Paris | | Kinte | | BILL 1 | го: | | 1 | e de la companya de l | | PO#: | |
| | 71 Gratin 1 | | | | 3.5 | | 35627 | | | Þ | .)0 | 34 | ADDF | EQQ. | | ŧ. | | | | |
| | | | 71D 4: n 3.5 | 1 | | | | | | RVan | dai | | | iLOO. | "SAN | | | | | |
| CITY W | ndsor | STATE: 51 | ZIP: 06945 | | | | ER: Jin | -100 | | | | 1 | CITY | | 7 | | | STAT | E: | ZIP: |
| ATTENTION: | Jim Peron | 15 | | e-mail: | JPE. | ronte | @ trece | mpanie | Wen's | | | | ATTE | NTION: | | | | PHO | Contract of the | |
| PHONE: 860 | 0-298-6233 | FAX: | | PHONE | 86 | 0-2 | 98-62 | 33 FA | X: | . 17 | | 4 | | | | | ANA | LYSIS | | |
| And the Control of th | | ROUND INFORMATION | ON | | A COLUMN TWO IS NOT THE OWNER. | | DELIVE | | | 100000000000000000000000000000000000000 | | | | | | | | | | |
| FAX (RUSH) | | | DAYS* DAYS* | | | | Only) | | | aw Data | a) | / | /2 | 15 | 16ªX | 27 | | / | // | |
| HARDCOPY (D. EDD: | | | DAYS* | | | | + QC 🗆 | | | S ASP E | 1 | Olah (| Not. | N.X. | ind Kan | / | / | / | // | |
| *TO BE APPRO | VED BY CHEM | TECH | | + Ra | aw Da | ta) | | Other | | -/ | LP A | NOW 3 | YES | N. Koly | / | /- | // | // | | 408 |
| STANDARD HA | RDCOPY TURN | IAROUND TIME IS 10 | BUSINESS DAYS | □ EDD | | | | | | | 2 | 3 | / 4 | SERVA | / 0 | | 8 | 9 | CO | MMENTS |
| CHEMTECH PROJECT | | | | SAMPLE | | IPLE PE | | IPLE ECTION | BOTTLES | | | - | | | | | | | ← Specif | y Preservatives |
| SAMPLE | S | AMPLE IDENTIFICA | TION | MATRIX | СОМР | GRAB | DATE | TIME | OF BO | A | E | В | E. | | | 13.6 | | | A-HCI B-HN03 | D-NaOH E-ICE |
| 1. | | | | 4 | Ö | 5 | | | # | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | C-H2SO4 | F-OTHER |
| | TB -03232 | 2021 | | Aa | _ | , 3 | 3/23/21 | | 2 | X | | 1 | 1 | | | | | | | |
| 2. | MW-106 D | | | GW | | y | 3/23/21 | | ς | Х | ኦ | Х | Х | | | ent. | | - 2 | | |
| 3. | I 401-WM |) | 15 % 50 | 6w = | - | X | 3/23/21 | 10:05 | 5 | Х | Х | × | X | 761 0 | | 12 | et l | 1 | | |
| 4. | I 401-WM | 981 | | 667 | | x | 3/23/21 | 9:55 | 5 | Х | Х | Х | X | y" i | | 147.45 | 4 | | 96 | |
| 5. | MW-103 D |) | art same | EW | | X | 3/23/21 | 11:50 | S | Х | Х | × | Х | | W. | | 18 | | | |
| 6. | - E01-WM | The second second | | 600 | | X | 3/23/21 | 13:30 | 5 | × | X | × | Χ | | | | SOA. | | | |
| 7. | MW-101 5 | | | 611 | | X | 3/23/21 | is:50 | S | x | × | × | х | | | | | | | |
| 8. | Mw-101 I | | | 601 | | x | 3/23/21 | 12:30 | 5 | X | X | X | X | | | | lan a | | | |
| 9. | MW-101 D | 234 | | 6W | 1 30 | X | 3/23/21 | 13150 | Š | x | X | X | X | 1.11 | - A | | TI. | | | NO. |
| 10. | FB-032320 | 21 | Part Part I | AQ | _ | _ | 3/23/21 | 14:45 | 5 | X | Х | × | X | The said | | | 1 | | | |
| | | SAMPLE CUSTOD | Y MUST BE DOC | UMENTE | ration and the | | | | | | | | | | The second second | | ALCOHOL SECTION AND ADDRESS. | Υ | | |
| RELINQUISHED BY | | DATE/TIME: | RECEIVED BY: | | | | Conditi | ons of bottles | | | | | | | | COOLERT | EMP | 2 | 9 | С |
| 1. 1 Audl | V SAMDIED: | 3/23/2 17:00 DATE/TIME: | 1. RECEIVED BY: | 1 | 5-2 | 5-2 | 1 | DEC A | | | | LES | V ON | is ve | TORT. | | | | | |
| | | DAIL TIME. | 2. | | | | | PEC | | 375 | | | | | | - 40 | | | e"throng r | |
| 2. RELIN O UISHED BY | | DATE/TIME: 1800 | RECEIVED BY: | - | 2 | -10 | | | | OLIENT | F D | Hond D | alli rava et | D 0 | Ale a co | | | | | |
| 3. | P | 3-23/21 | 3. | SC | | | Page | of _ | | CLIENT CHEMT | | Hand D | | □ O □ Fie | ther ld Samp | ling | | - | Shipment | Complete NO |
| MA 70-GENC | CKIÉM | | WHITE - CHEMTE | ECH COPY E | OR RE | TURNIT | OCLIENT | VELLO | W - CHE | | | | 3679834119 | R COPY | | | - 10 vine - c | | 212 of 22 | |



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| CHEMTECH PROJE | CT NO. |
|----------------|--------|
| QUOTE NO. | M1770 |
| COC Number | 409 |

| | CLIENT | INFORMATION | | | | | CLIENT PR | ROJECT IN | FORMA | TION | | | | | | CLIEN | T BILLI | NG INFO | ORMATION | |
|--|------------------------------------|------------------------------|---|------------------|-----------------------------|-----------------------------|-------------------|---|--------------|-------------|----------|----------------|--------|---|----------|-----------------|---------|---------|----------------------------|---|
| COMPANY: | TRC Engineer | TTO BE SENT TO: | Supplied to | PROJE | CTN | NAME | : Bush | Terminal | | | | | BILL T | O: | iei. | | 1 | 1 | PO#: | and a |
| ADDRESS: | 11 Gottin | Road | | PROJEC | CT NO | D.: 43 | 55627 | LOCA | TION: | Brook | lyn, N | ٧ | ADDR | ESS: | 'AC | ME | 10 | | - Fag | |
| | 358 | | ZIP: (// awass | PROJEC | CT MA | ANAG | ER: Jim | Peron | t o | | 3 | | CITY | | , | | | STAT | E: 1 | ZIP: |
| ATTENTION: | Jim Peront | -> | | e-mail: | JPer | onto | @ trus | mpanies | ٠٠،٧٢ | | no ATI I | | ATTEN | NTION: | | The last | | РНО | NE: | |
| | 0-298-6233 | | anale estadi | PHONE | - BL | 0-2 | 98-623 | S3 FA | X: | | | | | | | | ANA | LYSIS | | |
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| | P. 15 0 . 1 | | | | SAN | /IPLE | SAN | /IPLE | E Si | | | | PRES | SERVA | TIVES | | | | - | MMENTS fy Preservatives |
| CHEMTECH SAMPLE ID | SA | PROJECT AMPLE IDENTIFICAT | ION | SAMPLE MATRIX | | GRAB H | DATE | TIME | # OF BOTTLES | A | £. 2 | B 3 | £ 4 | 5 | 6 | 7 | 8 | 9 | A-HCI B-HN03 C-H2SO4 | D-NaOH E-ICE F-OTHER |
| 1. | TB-0324 | 2021 | | AQ | _ | _ | 3/24/21 | _ | 2 | X | | 2 | 6 | | | | | | | |
| 2. | Mw-1035 | | | ςω | | K | 3/24/21 | 11:30 | S | χ | Χ | X | X | F | 10.3 | ₽7 _U | | | Acquire Sale | OUT S |
| 3. | MW-102 | D | | 6W | | x | 3/24/21 | 11:30 | 5 | х | X | X | X | enia. | 6.61 | L D | 2 | | 1 | |
| 4. | MW-102 5 | , Total . | | EW | | X | 3/24/21 | | S | X | X | X | Х | 12 to 150 | | 144 | 34 | | Tro Lar | rei gillione. |
| 5. | MW-102 1 | | 1 | 600 | | X | 3/24/21 | 1 | S | X | X | X | χ | - 15- | | 6. | | | 10 45 AB | SOUTH A |
| 6. | MW-107 1 | | | 6 W | | X | 3/24/21 | 13-45 | 5 | X | X | X | X | | 100 | | | | Tables. | |
| 7. | | ip to the | | | | | | | | | | 15 | 1 | | | | | | 3 | \$ |
| 8. | | | | | | | 18 | | | | | 1 | | | | | | 7 | | |
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| 10. | | 95% | | | | | | | | | | | | 246 | 8 1 1 | Un a | | | | |
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| 3. M1770-GENC | CHEM | 3-24-21 | 3. WHITE - CHEMT | ECH COPY | OR PE | TI IPNI | Page | The second second second | W- CHE | | ECH: | Pic | | ☐ Fie | eld Samp | oling | 100 | | 213 of 22 | THE RESERVE TO SHARE THE PARTY OF THE PARTY |

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT

From: Steven Chaimowitz <S.Chaim@chemtech.net>
Sent: Wednesday, March 24, 2021 11:48 AM

To: 'Peronto, Jim'; CHEMTECH-Login@chemtech.net; Samantha@chemtech.net

Cc: 'Chalmers, Aine'

Subject: RE: [EXTERNAL] Login Summary Details For Project NYCDPR Bush Terminal LandFill

Piers 1-4-M1790.

Hi Jim,

We will batch all samples in SDG M1770. Thanks!

Regards,

Steven Chaimowitz Project Manager

CHEMTECH

284 Sheffield St. | Mountainside, NJ 07092 Direct: (908) 728-3147 s.chaim@chemtech.net | www.chemtech.net | www.chemtech.net | <a href="mailto:sww.chemtech.net"

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From: Peronto, Jim [mailto:JPeronto@trccompanies.com]

Sent: Wednesday, March 24, 2021 11:27 AM

To: CHEMTECH-Login@chemtech.net; Samantha@chemtech.net

Cc: Chalmers, Aine < A Chalmers@trccompanies.com>

Subject: RE: [EXTERNAL] Login Summary Details For Project NYCDPR Bush Terminal LandFill Piers 1-4-M1790.

Hi Samantha,

As indicated on the TRC COCs, please be sure to batch all of the samples received on this project into ONE batch for our data validation.

1

M1770-GENCHEM 214 of 224

This includes the samples on the two attached login summary reports as well as the samples being picked up today from the project site.

Thanks, Jim

Jim Peronto

TRC

860-298-6233

From: CHEMTECH-Login@chemtech.net < CHEMTECH-Login@chemtech.net >

Sent: Wednesday, March 24, 2021 10:16 AM

To: Warren, Daniel < DWarren@trccompanies.com; ggatta@trccompanies.com; <a href="mailto:ggatta@trccompanies.ggatta@trccompanies.ggatta@trccompanies.ggatta@trccompanies.ggatta@trccompanies.ggatta@trccompanies.ggatta@trccompanies.ggatta@trccompanies.ggatta@trccompanies.ggatta@trccompanies.ggatta@trccompanies.ggatta@trccompanies.ggattagga

<<u>JPeronto@trccompanies.com</u>>; <u>iraup@trccompanies.com</u>; Morin, Kristen <<u>KMorin@trccompanies.com</u>>;

LKrowitz@trccompanies.com; O'Hara, Lindsay <LOHara@trccompanies.com>; O'Hara, Lindsay

<<u>LOHara@trccompanies.com</u>>; Zhou, Ping <<u>PZhou@trccompanies.com</u>>

Cc: Samantha@chemtech.net

Subject: [EXTERNAL] Login Summary Details For Project NYCDPR Bush Terminal LandFill Piers 1-4-M1790.

This is an **EXTERNAL** email. Do not click links or open attachments unless you validate the sender and know the content is safe.



To James Peronto, P.e., Leed Ap;

Please see the attached Login Summary for the following project, or download the file using your login credentials from the link below.

Order ID : M1790

Project ID : NYCDPR Bush Terminal LandFill Piers 1-4

Download File : https://client.chemtech.net
Order Date : 3/24/2021 9:26:00 AM

CHEMTECH's Project Manager : Samantha Beazley , Samantha@chemtech.net , Ext :

 $\textbf{CHEMTECH's Sales Executive} \hspace{0.2cm} : \hspace{0.2cm} \textbf{Kurt Hummler , } \\ \underline{\textbf{khummler@chemtech.net}} \hspace{0.2cm} , \hspace{0.2cm} 908-728-3143 \hspace{0.2cm} \textbf{Ext : } 3143 \\$

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Thank you for the opportunity to provide you with our services. For any questions please feel free to contact your project manager.

Click Here for our short online customer Survey http://chemtech.net/ClientSurvey.aspx.

Thank you,

M1770-GENCHEM 215 of 224

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From: Peronto, Jim <JPeronto@trccompanies.com>

Sent: Tuesday, March 30, 2021 3:56 PM

To: CHEMTECH-Login@chemtech.net; Samantha@chemtech.net

Cc: Chalmers, Aine

Subject: RE: [EXTERNAL] Login Summary Details For Project NYCDPR Bush Terminal LandFill

Piers 1-4-M1790.

Samantha,

Please do NOT report TICs with this sample data. TICs were inappropriately reported with the 2019 data.

Thanks, Jim

Jim Peronto

TRC

860-298-6233

From: Peronto, Jim

Sent: Wednesday, March 24, 2021 10:27 AM

To: CHEMTECH-Login@chemtech.net; Samantha@chemtech.net;

Cc: Chalmers, Aine < <u>AChalmers@trccompanies.com</u>>

Subject: RE: [EXTERNAL] Login Summary Details For Project NYCDPR Bush Terminal LandFill Piers 1-4-M1790.

Hi Samantha,

As indicated on the TRC COCs, please be sure to batch all of the samples received on this project into ONE batch for our data validation.

This includes the samples on the two attached login summary reports as well as the samples being picked up today from the project site.

Thanks, Jim

Jim Peronto

TRC

860-298-6233

From: CHEMTECH-Login@chemtech.net < CHEMTECH-Login@chemtech.net >

Sent: Wednesday, March 24, 2021 10:16 AM

To: Warren, Daniel < <u>DWarren@trccompanies.com</u>>; <u>ggatta@trccompanies.com</u>; Peronto, Jim

</

LKrowitz@trccompanies.com; O'Hara, Lindsay <LOHara@trccompanies.com>; O'Hara, Lindsay

<LOHara@trccompanies.com>; Zhou, Ping <PZhou@trccompanies.com>

Cc: Samantha@chemtech.net

Subject: [EXTERNAL] Login Summary Details For Project NYCDPR Bush Terminal LandFill Piers 1-4-M1790.

M1770-GENCHEM 217 of 224

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1,

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| To James Devents D. a. Lood An. | | |

To James Peronto, P.e., Leed Ap;

Please see the attached Login Summary for the following project, or download the file using your login credentials from the link below.

Order ID : M1790

Project ID : NYCDPR Bush Terminal LandFill Piers 1-4

Download File : https://client.chemtech.net
Order Date : 3/24/2021 9:26:00 AM

CHEMTECH's Project Manager : Samantha Beazley , Samantha@chemtech.net , Ext :

CHEMTECH's Sales Executive : Kurt Hummler , khummler@chemtech.net , 908-728-3143 Ext : 3143

Thank you for the opportunity to provide you with our services. For any questions please feel free to contact your project manager.

Click Here for our short online customer Survey http://chemtech.net/ClientSurvey.aspx.

Thank you,

CHEMTECH

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M1770-GENCHEM 218 of 224



Laboratory Certification

| Certified By | License No. |
|----------------------|------------------|
| CAS EPA CLP Contract | EP-W-14-030 |
| | |
| Connecticut | PH-0649 |
| DOD ELAP (L-A-B) | L2219 |
| Maine | 2020021 |
| Maryland | 296 |
| New Hampshire | 255420 |
| New Jersey | 20012 |
| New York | 11376 |
| Pennsylvania | 68-00548 |
| Soil Permit | P330-18-00132 |
| Texas | T104704488-20-13 |

QA Control Code: A2070148 M1770-GENCHEM



Order ID: M1770

TRCE03

Order Date: 3/22/2021 4:40:20 PM

Project Mgr:

Client Name: TRC Companies, Inc.

Project Name: NYCDPR Bush Terminal La

Report Type: NYS ASP B

Client Contact: James Peronto, P.E., LEED

Receive DateTime: 3/22/2021 7:00:00 PM

EDD Type: NYSDEC EDD V-3

Invoice Name: TRC Companies, Inc.

Purchase Order:

Hard Copy Date:

Invoice Contact: James Peronto, P.E., LEED

Date Signoff:

| LAB ID | CLIENT ID | MATRIX | SAMPLE DATE | SAMPLE TIME | TEST | TEST GROUP | METHOD | | FAX DATE | DUE DATES |
|----------|-------------|--------|----------------|----------------|--------------|------------|----------|--------------|----------|--------------|
| M1770-01 | TB-03222021 | Water | 03/22/2021 | 11:00 | | | | | | |
| | | | | | VOCMS Group1 | | 8260-Low | 10 Bus. Days | | |
| M1770-02 | MW-106I | Water | 03/22/2021 | 12:15 | | | | | | |
| | | | | | VOCMS Group1 | | 8260-Low | 10 Bus. Days | | |
| M1770-03 | MW-106S | Water | 03/22/2021 | 13:30 | | | | | | |
| | | | | | VOCMS Group1 | | 8260-Low | 10 Bus. Days | | |
| M1770-04 | M1770-03MS | Water | 03/22/2021 | 13:35 | | | | | | |
| | | | | | VOCMS Group1 | | 8260-Low | 10 Bus. Days | | |
| M1770-05 | M1770-03MSD | Water | 03/22/2021 | 13:40 | | | | • | | |
| | | | | | VOCMS Group1 | | 8260-Low | 10 Bus. Days | | |
| M1770-06 | MW-105D | Water | 03/22/2021 | 13:18 | | | | | | |
| | | | | | VOCMS Group1 | | 8260-Low | 10 Bus. Days | | |
| M1770-07 | MW-105I | Water | 03/22/2021 | 15:30 | 520 | | | | | |
| | | | | | VOCMS Group1 | | 8260-Low | 10 Bus. Days | | |
| M1770-08 | MW-105S | Water | 03/22/2021 | 15:45 | | | | | | |
| | | | | | VOCMS Group1 | | 8260-Low | 10 Bus. Days | | |



Order ID: M1770

TRCE03

Order Date: 3/22/2021 4:40:20 PM

Project Mgr:

Client Name: TRC Companies, Inc.

Project Name: NYCDPR Bush Terminal La

Report Type: NYS ASP B

Client Contact: James Peronto, P.E., LEED

Receive DateTime: 3/22/2021 7:00:00 PM

EDD Type: NYSDEC EDD V-3

Invoice Name: TRC Companies, Inc.

Purchase Order:

SAMPLE

TIME

Hard Copy Date:

Invoice Contact: James Peronto, P.E., LEED

Date Signoff:

LAB ID

CLIENT ID

MATRIX SAMPLE

DATE

TEST

TEST GROUP

METHOD

FAX DATE

DUE

DATES

Relinguished By:

Received By:

Date / Time:

Storage Area: VOA Refridgerator Room



Order ID: M1770

TRCE03

Order Date: 3/22/2021 4:40:20 PM

Project Mgr: Tyler

Client Name: TRC Companies, Inc.

Project Name: NYCDPR Bush Terminal La

Report Type: NYS ASP B

Client Contact: James Peronto, P.E., LEED

Invoice Contact: James Peronto, P.E., LEED

Receive DateTime: 3/23/2021 6:00:00 PM

EDD Type: NYSDEC EDD V-3

Invoice Name: TRC Companies, Inc.

Purchase Order:

Hard Copy Date:

Date Signoff: 3/23/2021 10:01:07 AM

| LAB ID | CLIENT ID | MATRIX SAMPLE DATE | SAMPLE TIME | TEST | TEST GROUP | METHOD | | FAX DATE | DUE DATES |
|----------|-------------|-----------------------|----------------|--------------|------------|----------|--------------|----------|--------------|
| M1770-09 | TB-03232021 | Water 03/23/202 | 21 09:00 | | | | | | |
| | | | | VOCMS Group1 | | 8260-Low | 10 Bus. Days | | |
| M1770-10 | MW-106D | Water 03/23/202 | 21 09:40 | | | | | | |
| | | | | VOCMS Group1 | | 8260-Low | 10 Bus. Days | | |
| M1770-11 | MW-104D | Water 03/23/202 | 10:05 | | | | | | |
| | | | | VOCMS Group1 | | 8260-Low | 10 Bus. Days | | |
| M1770-12 | MW-104I | Water 03/23/202 | 1 09:55 | | | | | | |
| * | | | | VOCMS Group1 | | 8260-Low | 10 Bus. Days | | |
| M1770-13 | MW-103D | Water 03/23/202 | 1 11:50 | | | | | | |
| | | | | VOCMS Group1 | | 8260-Low | 10 Bus. Days | | |
| M1770-14 | MW-103I | Water 03/23/202 | 1 13:30 | | | | | | |
| | | | | VOCMS Group1 | | 8260-Low | 10 Bus. Days | | |
| M1770-16 | MW-101I | Water -03/23/202 | 1 12:30 | | | | | | |
| | | | | VOCMS Group1 | | 8260-Low | 10 Bus. Days | | |
| M1770-17 | MW-101D | Water 03/23/202 | 1 13:50 | | * | * | | | |
| | | | | VOCMS Group1 | | 8260-Low | 10 Bus. Days | | |
| M1770-18 | FB-03232021 | Water 03/23/202 | 1 14:45 | | | | | | |
| | | | | | | | | | |



Order ID: M1770

TRCE03

Order Date: 3/22/2021 4:40:20 PM

Project Mgr: Tyler

Client Name: TRC Companies, Inc.

Project Name: NYCDPR Bush Terminal L.

Report Type: NYS ASP B

Client Contact: James Peronto, P.E., LEED

Receive DateTime: 3/23/2021 6:00:00 PM

EDD Type: NYSDEC EDD V-3

Invoice Name: TRC Companies, Inc. Invoice Contact: James Peronto, P.E., LEED Purchase Order:

Hard Copy Date:

Date Signoff: 3/23/2021 10:01:07 AM

LAB ID

CLIENT ID

MATRIX SAMPLE

DATE

SAMPLE TIME

TEST

TEST GROUP

METHOD

FAX DATE

DUE DATES

VOCMS Group1

8260-Low

10 Bus. Days

Relinguished By:

Date/Time: 3-24-21 14:15

Received By:

Date / Time:

Storage Area: VOA Refridgerator Room

Page 2 of 2

M1770-GENCHEM

223 of 224



Order ID: M1770

TRCE03

Order Date: 3/22/2021 4:40:20 PM

Project Mgr: Tyler

Client Name: TRC Companies, Inc.

Project Name: NYCDPR Bush Terminal L.

Report Type: NYS ASP B

Client Contact: James Peronto, P.E., LEED

Receive DateTime: 3/24/2021 5:12:00 PM

EDD Type: NYSDEC EDD V-3

Invoice Name: TRC Companies, Inc.

Purchase Order:

Hard Copy Date:

Invoice Contact: James Peronto, P.E., LEED

Date Signoff: 3/23/2021 10:01:07 AM

| M1770-19 | TB-03242021 | Water 03/24/202 | | | | | DATES |
|----------|-------------|-----------------|---------|--------------|----------|--------------|-------|
| | | | 1 00:00 | | | | |
| | | | | VOCMS Group1 | 8260-Low | 10 Bus. Days | |
| M1770-20 | MW-103S | Water 03/24/202 | 1 11:30 | | | | |
| | | | | VOCMS Group1 | 8260-Low | 10 Bus. Days | |
| M1770-21 | MW-102D | Water 03/24/202 | 1 11:30 | | | | |
| | | | | VOCMS Group1 | 8260-Low | 10 Bus. Days | |
| M1770-22 | MW-102S | Water 03/24/202 | 1 13:55 | | | | |
| | | | | VOCMS Group1 | 8260-Low | 10 Bus. Days | |
| M1770-23 | MW-102I | Water 03/24/202 | 1 13:40 | | | | |
| | | | | VOCMS Group1 | 8260-Low | 10 Bus. Days | |
| M1770-24 | MW-107I | Water 03/24/202 | 1 13:45 | | | | |
| | | | | VOCMS Group1 | 8260-Low | 10 Bus. Days | |

Relinguished By:

Date / Time: 3-25-2-1

Received By:

Date/Time: 73.25-21 9:30

Storage Area: VOA Refridgerator Room Stored in VOQ - PCS-###