N90845.AR.001876
NWIRP BETHPAGE
5090.3a

VALIDATED DATA PACKAGE, SI3945, NWIRP BETHPAGE NY
7/8/2015
KATAHDIN ANALYTICAL SERVICES

# FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Katahdin Analytical Services
CITY/STATE Scarborough, ME
CASE NO. WE15 SDG NO. SI3945 SDG NOS. TO FOLLOW
CONTRACT NO.
SOW NO.

All documents delivered in the Complete SDG File must be original documents where possible. (Reference - ILM05.4, Exhibit B Section 2.6)

| | PAGE NOs. FROM | PAGE NOs. TO | CHECK LAB | CHECK REGION |
|---|---|---|---|---|
| 1. Cover Page | 0000003 | 0000004 | ✓ | |
| 2. SDG Narrative | 0000005 | 0000006 | ✓ | |
| 3. Sample Log-In Sheet (DC-1) | — | — | ✓ | |
| 4. Inventory Sheet (DC-2)) | 0000001 | 0000002 | ✓ | |
| 5. Traffic Report/Chain of Custody Record(s) | 0000003 | 0000008 | ✓ | |
| **Inorganic Analysis** | | | | |
| 6. Data Sheet (Form I-IN) | 0000015 | 0000018 | ✓ | |
| 7. Initial & Continuing Calibration Verification (Form IIA-IN) | NA | NA | NA | |
| 8. CRQL Standard(Form IIB-IN) | ↓ | ↓ | ↓ | |
| 9. Blanks (Form III-IN) | 0000011 | 0000013 | ✓ | |
| 10. ICP-AES Interference Check Sample (Form IVA-IN) | NA | NA | NA | |
| 11. ICP-MS Interference Check Sample(Form IVB-IN) | | | | |
| 12. Matrix Spike Sample Recovery(Form VA-IN) | | | | |
| 13. Post-Digestion Spike Sample Recovery(Form VB-IN) | | | | |
| 14. Duplicates (Form VI-IN) | ↓ | ↓ | ↓ | |
| 15. Laboratory Control Sample(Form VII-IN) | 0000014 | 0000014 | ✓ | |
| 16. ICP-AES and ICP-MS Serial Dilutions (Form VIII-IN) | NA | NA | NA | |
| 17. Method Detection Limits (Annually) (Form IX-IN) | | | | |
| 18. ICP-AES Interelement Correction Factors (Quarterly) (Form XA-IN) | | | | |
| 19. ICP-AES Interelement Correction Factors (Quarterly) (Form XB-IN) | | | | |
| 20. ICP-AES and ICP-MS Linear Ranges (Quarterly) (Form XI-IN) | | | | |
| 21. Preparation Log (Form XII-IN) | | | | |
| 22. Analysis Run Log (Form XIII-IN) | ↓ | ↓ | ↓ | |

FORM DC-2-2 M&E DAS

# FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

| | PAGE NOs. FROM | PAGE NOs. TO | CHECK LAB | CHECK REGION |
|---|---|---|---|---|
| 23. ICP-MS Tune (Form XIV-IN) | NA | NA | NA | |
| 24. ICP-MS Internal Standards Relative Intensity Summary (Form XV-IN) | ↓ | ↓ | ↓ | |
| 25. ~~ICP-AES~~ Raw Data | 0000019 | 0000079 | ✓ | |
| 26. ICP-MS Raw Data | NA | NA | NA | |
| 27. Mercury Raw Data | | | | |
| 28. Cyanide Raw Data | | | | |
| 29. Preparation Logs Raw Data (Wet Chemistry) | | | | |
| 30. Percent Solids Determination Log | | | | |
| 31. USEPA Shipping/Receiving Documents | | | | |
| Airbill (No. of Shipments 1) | | | | |
| Sample Tags | | | | |
| Sample Log-In Sheet (Lab) | | | | |
| 32. Misc. Shipping/Receiving Records (list all individual records) | | | | |
| Telephone Logs | | | | |
| Sample Receipt Condition Report | 0000007 | 0000007 | ✓ | |
| | NA | NA | NA | |
| 33. Internal Lab Sample Transfer Records & Tracking Sheets (describe or list) | ↓ | ↓ | ↓ | |
| Internal Chain of Custody | 0000010 | 0000010 | ✓ | |
| Login Chain of Custody Report | 0000009 | 0000009 | ✓ | |
| 34. Internal Original Sample Prep & Analysis Records (describe or list) | | | | |
| Prep Records | NA | NA | NA | |
| Analysis Records | | | | |
| Description Duplicate Precision Form | | | | |
| 35. Other Records (describe or list) | | | | |
| Telephone Communications Log | | | | |
| DAS Specifications | | | | |
| 36. Comments | | | | |

Completed by:
(CLP Lab) Leslie Dimond — Leslie Dimond / QAO — 07.08.15
(Signature) (Print Name & Title) (Date)

Audited by:
(USEPA) _____ _____ _____
(Signature) (Print Name & Title) (Date)

FORM DC-2-2 M&E DAS

# ENSAFE
# NAVY CLEAN WE15-03-06
# NWIRP BETHPAGE, NY
# SI3945

## KATAHDIN ANALYTICAL SERVICES, LLC.
## 600 TECHNOLOGY WAY
## SCARBOROUGH, ME 04074

# SAMPLE DATA PACKAGE

**SDG NARRATIVE**
**KATAHDIN ANALYTICAL SERVICES**
**ENSAFE**
**NAVY CLEAN WE15-03-06 NWIRP BETHPAGE, NY**
**SI3945**

## Sample Receipt

The following samples were received on June 09, 2015 and were logged in under Katahdin Analytical Services work order number SI3945 for a hardcopy due date of June 26, 2015.

| KATAHDIN Sample No. | AECOM Sample Identification |
|---|---|
| SI3945-1 | RE119D1-EB-060315 |
| SI3945-2 | RE119D1-060315-733-735 |

The samples were logged in for the analyses specified on the chain of custody form. All problems encountered and resolved during sample receipt have been documented on the applicable chain of custody forms.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in this narrative or in the Report of Analysis.

The client ID on the Chain of Custody exceeded the 19-character limit of the Katahdin Analytical Information Management System for sample SI3945-2. Therefore, the first characters "RE119" in the client ID were omitted on all forms.

Sample analyses have been performed by the methods as noted herein.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact your Katahdin Analytical Services Project Manager, **Ms. Jennifer Obrin.** This narrative is an integral part of the Report of Analysis.

## Wet Chemistry Analysis

The samples of Work Order SI3945 were analyzed in accordance with the specific methods listed on the Report of Analysis.

Analyses for total organic carbon in soil were performed according to "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846. 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA,III, IIIA and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA.

Analyses for total organic carbon in water and total solids were performed according to "Standard Methods for the Examination of Water and Wastewater", 15th, 16th, 17th, 18th, 19th, and 20th editions, 1980, 1985, 1989, 1992, 1995, 1999. APHA-AWWA-WPCF.

All Wet Chemistry results were evaluated to Katahdin Analytical Services' Method Detection Limits (MDL). Measured concentrations that fall between the MDL and Katahdin's Limit of Quantitation (LOQ) are flagged "J". Measured concentrations that are below the MDL are flagged "U" and reported as "U LOD", where "LOD" is the numerical value of the Limit of Detection.

All analyses were performed within analytical holding times. All quality control criteria were met.

I certify that this 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 hardcopy data package has been authorized by the Operations Manager or the Quality Assurance Officer as verified by the following signature.

Leslie Dimond
07.08.15

Leslie Dimond
Quality Assurance Officer

**Katahdin Analytical Services, Inc.** **Sample Receipt Condition Report**

| | | |
|---|---|---|
| Client: Ensafe | KAS PM: JO | Sampled By: Clint |
| Project: | KIMS Entry By: GN | Delivered By: FedEx |
| KAS Work Order#: 5I3945 | KIMS Review By: | Received By: GN |
| SDG #: Cooler: 1 of 1 | | Date/Time Rec.: 6-9-15 / 09:15 |

| Receipt Criteria | Y | N | EX* | NA | Comments and/or Resolution |
|---|---|---|---|---|---|
| 1. Custody seals present / intact? | ✓ | | | | |
| 2. Chain of Custody present in cooler? | ✓ | | | | |
| 3. Chain of Custody signed by client? | ✓ | | | | |
| 4. Chain of Custody matches samples? | ✓ | | | | |
| 5. Temperature Blanks present? If not, take temperature of any sample w/ IR gun. | ✓ | | | | Temp (°C): 2.1 |
| Samples received at <6 °C w/o freezing? | ✓ | | | | Note: Not required for metals (except Hg) analysis. |
| Ice packs or ice present? | ✓ | | | | The lack of ice or ice packs (i.e. no attempt to begin cooling process) or insufficient ice may not meet certain regulatory requirements and may invalidate certain data. |
| If yes, was there sufficient ice to meet temperature requirements? | ✓ | | | | |
| If temp. out, has the cooling process begun (i.e. ice or packs present) and sample collection times <6hrs., but samples are not yet cool? | | | | ✓ | Note: No cooling process required for metals (except Hg) analysis. |
| 6. Volatiles: **Aqueous:** No bubble larger than a pea? | | | | ✓ | |
| **Soil/Sediment:** Received in airtight container? | | | | ✓ | |
| Received in methanol? | | | | ✓ | |
| Methanol covering soil? | | | | ✓ | |
| D.I. Water - Received within 48 hour HT? | | | | ✓ | |
| **Air:** Refer to KAS COC for canister/flow controller requirements. | √ if air included | | | | |
| 7. Trip Blank present in cooler? | | | | ✓ | |
| 8. Proper sample containers and volume? | ✓ | | | | |
| 9. Samples within hold time upon receipt? | ✓ | | | | |
| 10. Aqueous samples properly preserved? Metals, COD, NH3, TKN, O/G, phenol, TPO4, N+N, TOC, DRO, TPH – pH <2 | ✓ | | | | |
| Sulfide - >9 | | | | ✓ | |
| Cyanide – pH >12 | | | | ✓ | |

* Log-In Notes to Exceptions: document any problems with samples or discrepancies or pH adjustments.

**RESOLUTION CONSULTANTS**

# CHAIN OF CUSTODY AND ANALYTICAL REQUEST RECORD

COC No.

Page 1 of 1

Project Name: Bethpage

PO No.

Project No. 6026652 Phase

Site Location: RE119D1 Williams

**Sample Analysis Requested** (*Enter number of containers for each test*)

CTO No.

RC Project Manager: Brian Caldwell

Sampler/Site Phone# Valerie Thayer 207-650-6572

Lab Name:

Turnaround Time(specify):

| Lab ID | Sample ID (sys_samp_code) | Location ID (sys_loc_code) | Date (mm/dd/yy) | Time (Military) (hhmm) | Matrix Code (1) | Sample Type (2) | Field Filtered (Y/N) | Total No. of Containers | TOC (sulfuric acid) | TOC | | | | | | | | | Extra Volume for MS/MSD | HOLD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SI3945 | | | | | | | (3)→ | | | | | | | | | | | | |
| | RE 119D1-EB-060315 | RE119D1 | 06/03/15 | 11:30 | W | EB | N | 3 | X | | | | | | | | | | | |
| | RE119D1-060315-733-735 | RE119D1 | 06/03/15 | 10:30 | SO | MS | N | 1 | | X | | | | | | | | | | |
| | Temp Blank | | | | W | | N | 1 | | | | | | | | | | | | |

*Field* **Comments:** EB - Equipment Rinsate Blank

*Lab* **Comments:**

**Sample Shipment and Delivery Details**

Number of coolers in shipment:

| Relinquished by (signature) | Date | Time | Received by (signature) | Date | Time |
|---|---|---|---|---|---|
| 1 Valerie Thayer | June 8, 2015 | 6 | 1 [signature] | 6-9-15 | 0925 |
| 2 | | | 2 | | |
| 3 | | | 3 | | |

Samples Iced?(check) Yes_____ No_____

Method of Shipment:

Airbill No:

Date Shipped:

**(1) AA**=Ambient air, **AQ**=Air quality control, **ASB**=Asbestos, **CK**=Caulk, **DS**=Storm drain sediment, **GS**=Soil gas, **IC**=IDW Concrete, **IDD**=IDW Solid, **IDS**=IDW soil, **IDW**=IDW Water, **LF**=Free Product, **MA**=Mastic, **PC**=Paint Chips, **SC**=Cement/Concrete, **SE**=Sediment, **SL**=Sludge, **SO**=Soil, **SQ**=Soil/Solid quality control, **SSD**=Subsurface sediment, **SU**=Surface soil (<6 in), **SW**=Swab or wipe, **TA**=Animal tissue, **TP**=Plant tissue, **TQ**=Tissue quality control, **WG**=Ground water, **WL**=Leachate, **WO**=Ocean water, **WP**=Drinking water, **WQ**=Water quality control, **WR**=Ground water effluent, **WS**=Surface water, **WU**=Storm water, **WW**=Waste water

**(2) Sample Type: AB**=Ambient Blk, **EB**=Equipment Blk, **FB**=Field Blk, **FD**=Field Duplicate Sample, **IDW**=Investigative-Derived Waste, **MIS**=Incremental Sampling Methodology, **N**=Normal Environmental Sample, **TB**=Trip Blk

**(3) Preservative added: HA**=Hydrochloric Acid, **NI**=Nitric Acid, **SH**=Sodium Hydroxide, **SA**=Sulfuric Acid, **ME**=Methanol, **SB**=sodium bisulfate, **ST**=Sodium Thiosulfate, If **NO preservative** added leave blank

**Rev 5/12**

Katahdin
ANALYTICAL SERVICES

# Katahdin Analytical Services

## Login Chain of Custody Report (Ino1)

*Jun. 11, 2015*
*09:02 AM*



**Login Number: SI3945**

**Account:** ENSAFE001 Web
ENSAFE

**Project:** AECOM-BETHPAGE
NWIRP Bethpage, NY

***Primary Report Address:***
Dana Miller
EnSafe
5724 Summer Trees Drive

Memphis,TN 38134
dmiller@Ensafe.com

***Primary Invoice Address:***
Accounts Payable
EnSafe
5724 Summer Trees Drive

Memphis,TN 38134

***Report CC Addresses:***
***Invoice CC Addresses:***

**Quote/Incoming:** AECOM-BETHPAGE

### Login Information:

| | | |
|---|---|---|
| ANALYSIS INSTRUCTIONS | : | Follow DoD QSM Version 4.2 using DoD limits. "U" LOD. "J" flag between DL and LOQ. |
| CHECK NO. | : | |
| CLIENT PO# | : | 16518 |
| CLIENT PROJECT MANAGE | : | Brian Caldwell |
| CONTRACT | : | |
| COOLER TEMPERATURE | : | 2.1 |
| DELIVERY SERVICES | : | FedEx |
| EDD FORMAT | : | KAS135QC-CSV |
| LOGIN INITIALS | : | GN |
| PM | : | JO |
| PROJECT NAME | : | Navy Clean WE15-03-06 NWIRP Bethpage, NY |
| QC LEVEL | : | IV |
| REGULATORY LIST | : | |
| REPORT INSTRUCTIONS | : | Send Hardcopy and CD to Dana. Upload PDF and EDD to SDS folder. Email level 2 report to Dana. Email invoice to purchasing@ensafe.com. |
| SDG ID | : | |
| SDG STATUS | : | |

| Laboratory Sample ID | Client Sample Number | Collect Date/Time | Receive Date | PR | Verbal Date | Due Date | Mailed |
|---|---|---|---|---|---|---|---|
| SI3945-1 | RE119D1-EB-060315 | 03-JUN-15 11:30 | 09-JUN-15 | | | 26-JUN-15 | |

| Matrix | | Product | Hold Date (shortest) | Bottle Type | Bottle Count | Comments |
|---|---|---|---|---|---|---|
| Aqueous | S | SM5310B-TOC | 01-JUL-15 | 40 mL Vial+H2SO4 | | |

| SI3945-2 | D1-060315-733-735 | 03-JUN-15 10:30 | 09-JUN-15 | | | 26-JUN-15 | |
|---|---|---|---|---|---|---|---|

| Matrix | | Product | Hold Date (shortest) | Bottle Type | Bottle Count | Comments |
|---|---|---|---|---|---|---|
| Solid | S | SW9060M-TOC | 01-JUL-15 | 4oz Glass | | RE119D1-060315-733-735 |
| Solid | S | TS | 03-JUL-15 | 4oz Glass | | |

***Total Samples:*** ***2*** ***Total Analyses:*** ***3***

DL 6.11.15

0000009

# Katahdin Analytical Services, Inc.
## Container Transfer History for SI3945

**Samplenum SI3945-1**

**Container Id SI3945-1D** **Containertype** **40 mL Vial+H2SO4** **Matrix AQ**

*Product* *SM5310B-TOC*

| Transferdate | From | To | Analyst | Custody Break | Comments |
|---|---|---|---|---|---|
| 09-JUN-15 15:45 | LOGIN | WALK-IN | GNICKERSON | N | |

**Container Id SI3945-1E** **Containertype** **40 mL Vial+H2SO4** **Matrix AQ**

*Product* *SM5310B-TOC*

| Transferdate | From | To | Analyst | Custody Break | Comments |
|---|---|---|---|---|---|
| 09-JUN-15 15:45 | LOGIN | WALK-IN | GNICKERSON | N | |

**Container Id SI3945-1F** **Containertype** **40 mL Vial+H2SO4** **Matrix AQ**

*Product* *SM5310B-TOC*

| Transferdate | From | To | Analyst | Custody Break | Comments |
|---|---|---|---|---|---|
| 09-JUN-15 15:45 | LOGIN | WALK-IN | GNICKERSON | N | |

**Samplenum SI3945-2**

**Container Id SI3945-2A** **Containertype** **4oz Glass** **Matrix SL**

*Product* *TS, SW9060M-TOC*

| Transferdate | From | To | Analyst | Custody Break | Comments |
|---|---|---|---|---|---|
| 09-JUN-15 15:45 | LOGIN | WALK-IN | GNICKERSON | N | |
| 11-JUN-15 16:12 | WALK-IN | WET CHEMISTRY | AZAZZARA | N | |
| 11-JUN-15 17:31 | WET CHEMISTRY | WALK-IN | AZAZZARA | N | |
| 16-JUN-15 10:26 | WALK-IN | WET CHEMISTRY | AZAZZARA | N | |
| 16-JUN-15 11:16 | WET CHEMISTRY | WALK-IN | JSTEWART | N | |

# CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

# QC Summary Section

Katahdin
ANALYTICAL SERVICES

Cert No E87604

# Quality Control Report

**Blank Sample Summary Report**

### *TOC in Soil*

| Samp Type | QC Batch | Anal. Method | Anal. Date | Prep. Date | Result | PQL | LOD |
|---|---|---|---|---|---|---|---|
| MBLANK | WG164900 | SW846 9060A Mod. | 16-JUN-15 | N/A | U 300 ug/gdrywt | 400 ug/gdrywt | 300 |

### *Total Organic Carbon*

| Samp Type | QC Batch | Anal. Method | Anal. Date | Prep. Date | Result | PQL | LOD |
|---|---|---|---|---|---|---|---|
| MBLANK | WG164851 | SM5310B | 12-JUN-15 | N/A | U 0.50 mg/L | 1.0 mg/L | 0.50 |

### *Total Solids*

| Samp Type | QC Batch | Anal. Method | Anal. Date | Prep. Date | Result | PQL | LOD |
|---|---|---|---|---|---|---|---|
| MBLANK | WG164634 | SM2540 | 12-JUN-15 | 11-JUN-15 | U 1 % | 1 % | N/A |

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P.O. Box 540, Scarborough, ME 04070
Tel:(207) 874-2400 Fax:(207) 775-4029

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sales@katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

# Quality Control Report

**Laboratory Control Sample Summary Report**

## *TOC In Soil*

| Lab Sample Id | Samp Type | QC Batch | Analysis Date | Prep Date | Units | Spike Amt. | Result | Recovery | Acceptance Range | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| WG164900-2 | LCS | WG164900 | 16-JUN-15 | N/A | ug/gdrywt | 400000.000 | 350000 | 87 | 80-120 | |

## *Total Organic Carbon*

| Lab Sample Id | Samp Type | QC Batch | Analysis Date | Prep Date | Units | Spike Amt. | Result | Recovery | Acceptance Range | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| WG164851-2 | LCS | WG164851 | 12-JUN-15 | N/A | mg/L | 50 | 52. | 104 | 80-120 | |

## *Total Solids*

| Lab Sample Id | Samp Type | QC Batch | Analysis Date | Prep Date | Units | Spike Amt. | Result | Recovery | Acceptance Range | RPD |
|---|---|---|---|---|---|---|---|---|---|---|
| WG164634-2 | LCS | WG164634 | 12-JUN-15 | 11-JUN-15 | % | 90 | 90. | 100 | 90-110 | |

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# Sample Data Section

## KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.

J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

I-7 The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.

A-4 Please refer to cover letter or narrative for further information.

H_ Please note that the regulatory holding time for _____ is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. _____ for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

H1 - pH H2 - DO H3 - sulfide H4 - residual chlorine

T1 The client did not provide the full volume of at least one liter for analysis of TSS. Therefore, the PQL of 2.5 mg/L could not be achieved.

T2 The client provided the required volume of at least one liter for analysis of TSS, but the laboratory could not filter the full one liter volume due to the sample matrix. Therefore, the PQL of 2.5 mg/L could not be achieved.

M1 The matrix spike and/or matrix spike duplicate recovery performed on this sample was outside of the laboratory acceptance criteria. Sample matrix is suspected. The laboratory criteria was met for the Laboratory Control Sample (LCS) analyzed concurrently with this sample.

M2 The matrix spike and/or matrix spike duplicate recovery was outside of the laboratory acceptance criteria. The native sample concentration is greater than four times the spike added concentration so the spike added could not be distinguished from the native sample concentration.

R1 The relative percent difference (RPD) between the duplicate analyses performed on this sample was outside of the laboratory acceptance criteria (when both values are greater than ten times the PQL).

| | | | |
|---|---|---|---|
| MCL | Maximum Contaminant Level | NL | No limit |
| NFL | No Free Liquid Present | FLP | Free Liquid Present |
| NOD | No Odor Detected | TON | Threshold Odor Number |

D-1 As required by Method 5210B, APHA Standard Methods for the Examination of Water and Wastewater (21st edition), the BOD value reported for this sample is 'qualified' because the check standard run concurrently with the sample analysis did not meet the criteria specified in the method (198 +/- 30.5 mg/L). These results may not be reportable for compliance purposes.

D-2 The measured final dissolved oxygen concentrations of all dilutions were less than the method-specified limit of 1 mg/L. The reported BOD result was calculated assuming a final oxygen concentration equal to 1 mg/L.

D-3 The dilution water used to prepare this sample did not meet the method and/or regulatory criteria of less than 0.2 or 0.4 mg/L dissolved oxygen (DO) uptake over the five day period of incubation. These results may not be reportable for compliance purposes.

Katahdin
ANALYTICAL SERVICES

Cert No E87604

# Report of Analytical Results

**Client:** Dana Miller
EnSafe
5724 Summer Trees Drive
Memphis,TN 38134

**Lab Sample ID:** SI3945-1
**Report Date:** 27-JUN-15
**Client PO:** 16518
**Project:** Navy Clean WE15-03-0
**SDG:** SI3945

| Sample Description | Matrix | Date Sampled | Date Received |
|---|---|---|---|
| RE119D1-EB-060315 | AQ | 03-JUN-15 11:30:00 | 09-JUN-15 |

| Parameter | Result | Adj LOQ | Adj MDL | Adj LOD | Anal. Method | QC.Batch | Anal. Date | Prep. Method | Prep. Date | Footnotes |
|---|---|---|---|---|---|---|---|---|---|---|
| Total Organic Carbon | U0.50 mg/L | 1.0 | 0.10 | 0.50 | SM5310B | WG164851 | 12-JUN-15 02:21:32 | N/A | N/A | |



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http://www.katahdinlab.com

Katahdin
ANALYTICAL SERVICES

Cert No E87604

# Report of Analytical Results

**Client:** Dana Miller
EnSafe
5724 Summer Trees Drive
Memphis,TN 38134

**Lab Sample ID:** SI3945-2
**Report Date:** 27-JUN-15
**Client PO:** 16518
**Project:** Navy Clean WE15-03-0
**SDG:** SI3945

| Sample Description | Matrix | Date Sampled | Date Received |
|---|---|---|---|
| D1-060315-733-735 | SL | 03-JUN-15 10:30:00 | 09-JUN-15 |

| Parameter | Result | Adj LOQ | Adj MDL | Adj LOD | Anal. Method | QC.Batch | Anal. Date | Prep. Method | Prep. Date | Footnotes |
|---|---|---|---|---|---|---|---|---|---|---|
| TOC In Soil | 7400 ug/gdrywt | 520 | 110 | 390 | SW846 9060A Mod. | WG164900 | 16-JUN-15 10:46:41 | N/A | N/A | |
| Total Solids | 76. % | 1 | | N/A | SM2540G | WG164634 | 12-JUN-15 09:27:15 | SM2540G | 11-JUN-15 | |



600 Technology Way
P.O. Box 540, Scarborough, ME 04070
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# Raw Data Section

TOTAL SOLIDS BATCH REPORT
Jun 12 2015, 12:40 pm
Batch: WG164634

| Sample | Matrix | Type | Prep Date | Tare | Initial | Finall | Final | by | Date | Raw TS | Rep TS | Recovery | RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SI3868-1 | SL | SAMP | 11-JUN-15 | 1.3176 g | 17.2923 g | 5.3028 g | 5.3028 g | AZ | 12-JUN-15 | 24.9470 | 25. % | | |
| SI3916-2 | SL | SAMP | 11-JUN-15 | 1.3151 g | 24.3033 g | 14.625 g | 14.625 g | AZ | 12-JUN-15 | 57.8990 | 58. % | | |
| SI3942-1 | SL | SAMP | 11-JUN-15 | 1.3141 g | 18.4891 g | 17.7433 g | 17.7433 g | AZ | 12-JUN-15 | 95.6580 | 96. % | | |
| SI3945-2 | SL | SAMP | 11-JUN-15 | 1.319 g | 23.5514 g | 18.1939 g | 18.1939 g | AZ | 12-JUN-15 | 75.9020 | 76. % | | |
| SI3989-1 | SL | SAMP | 11-JUN-15 | 1.3157 g | 15.3037 g | 4.6842 g | 4.6842 g | AZ | 12-JUN-15 | 24.0810 | 24. % | | |
| SI3989-2 | SL | SAMP | 11-JUN-15 | 1.3193 g | 16.7554 g | 3.858 g | 3.858 g | AZ | 12-JUN-15 | 16.4460 | 16. % | | |
| WG164634-1 | SL | MBLANK | 11-JUN-15 | 1.3216 g | 1.8224 g | 1.3209 g | 1.3209 g | AZ | 12-JUN-15 | -0.1400 | 1 % | | |
| WG164634-2 | SL | LCS | 11-JUN-15 | 1.2994 g | 6.3317 g | 5.8294 g | 5.8294 g | AZ | 12-JUN-15 | 90.0180 | 90. % | 100 | |

Comments:

| | |
|---|---|
| SI3945-2 | RE119D1-060315-733-735 |
| WG164634-1 | SI3942-1 |
| WG164634-2 | SI3942-1 |

Entered by: [illegible] Date: 6-12-15 Accepted by: [illegible] Date: 6/15/15

TOTAL SOLIDS BATCH REPORT
Jun 12 2015, 12:38 pm
Batch: WG164632

| Sample | Matrix | Type | Prep Date | Tare | Initial | Final1 | Final | by | Date | Raw TS | Rep TS | Recovery | RPD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SI3953-1 | SL | SAMP | 11-JUN-15 | 1.3127 g | 29.0036 g | 1.5655 g | 1.5661 g | AZ | 12-JUN-15 | 0.9150 | 1 % | | |
| SI4004-1 | SL | SAMP | 11-JUN-15 | 1.3077 g | 15.3443 g | 3.3269 g | 3.3271 g | AZ | 12-JUN-15 | 14.3870 | 14. % | | |
| SI4015-1 | SL | SAMP | 11-JUN-15 | 1.3116 g | 25.1723 g | 22.9225 g | 22.9292 g | AZ | 12-JUN-15 | 90.5990 | 90. % | | |
| SI4015-2 | SL | SAMP | 11-JUN-15 | 1.3129 g | 24.6945 g | 20.6195 g | 20.6307 g | AZ | 12-JUN-15 | 82.6200 | 83. % | | |
| WG164632-1 | SL | MBLANK | 11-JUN-15 | 1.3216 g | 1.8224 g | 1.3209 g | 1.3208 g | AZ | 12-JUN-15 | -0.1600 | 1 % | | |
| WG164632-2 | SL | LCS | 11-JUN-15 | 1.2993 g | 6.3317 g | 5.8294 g | 5.8288 g | AZ | 12-JUN-15 | 90.0070 | 90. % | 100 | |
| WG164632-3 | SL | DUP | 11-JUN-15 | 1.3312 g | 28.6784 g | 1.5814 g | 1.5813 g | AZ | 12-JUN-15 | 0.9140 | 1 % | | 0 |

Comments:

| | |
|---|---|
| WG164632-1 | SI3953-1 |
| WG164632-2 | SI3953-1 |
| WG164632-3 | SI3953-1 |

Entered by: AB Date: 6-12-15 Accepted by: [illegible] Date: 6/15/15

R321122 WG164632 R321123 WG164634

# KATAHDIN ANALYTICAL SERVICES

WG164400

| Total Solids: SM2540 G / ASTM D2216 | | | PQL: 0.10% | Total Volatile Solids: SM2540 G / E160.4 | | | PQL: 0.10% | Balance Calibrated? |
|---|---|---|---|---|---|---|---|---|
| TS/TVS | In 1 | In 2 | TS Only | Out 1 | Out 2 | TVS Only | | Y / N |
| ANALYST IN: | [illegible] | [illegible] | ANALYST OUT: | [illegible] | [illegible] | ANALYST OUT: | | In: Y |
| DATE IN: | 6-11-15 | 6-12-15 | DATE OUT: | 6-12-15 | 6-12-15 | DATE OUT: | | Out (TS): Y |
| TIME IN: | 17:28 | 9:20 | TIME OUT: | 8:03 | 10:32 | TIME OUT: | | Out (TVS): |
| TEMP IN: | 104°C | 104°C | TEMP OUT: | 104°C | 104°C | TEMP OUT: | | Balance ID: |
| Oven ID: Oven-4 | | | Muffle Oven ID: 030807 (assigned) | | | | | S/N 112401631 |

| | SAMPLE ID | DISH ID | DISH WT (g) | DISH WET WT (g) | 1st DISH DRY WT (g) | 2nd DISH DRY WT (g) | DISH/ASH WT (g) | TIME |
|---|---|---|---|---|---|---|---|---|
| 1 | Blank | 5 | 1.3216 | 1.3224 | 1.3209 | | | |
| 2 | LCS | 6 | 1.2994 | 6.3317 | 5.3294 | | | |
| TVS 3 | SI 3953-1 | 1 | 1.3127 | 29.0036 * | 1.5655 | | | |
| TVS 4 | SI 4004-1 | 2 | 1.3077 | 15.3443 | 3.3269 | | | |
| 5 | SI 4015-1 | 3 | | | | | | |
| 6 | -2 | 4 | | | | | | |
| TVS 7 | SI 3953-1 DUP | 7 | [illegible] 1.3312 | 28.6784 * | 1.5814 | | | |
| ~~TVS~~ 8 | SI 3968-1 | 8 | | | | | | |
| TVS 9 | SI 3989-1 | 9 | 1.3157 | 15.3037 | 4.6842 | | | |
| TVS 10 | -2 | 10 | 1.3193 | 16.7554 | 3.3580 | | | |
| 11 | SI 3916-2 | 11 | | | | | | |
| 12 | SI 3942-1 | 12 | | | | | | |
| 13 | SI 3945-2 | 13 | | | | | | |
| 14 | | | | | | | | |
| 15 | | | | | | | | |
| 16 | | | | | | | | |
| 17 | | | | | | | | |
| 18 | | | | | | | | |
| 19 | | | | | | | | |
| 20 | | | | | | | | |
| 21 | | | | | | | | |
| 22 | | | | | | | | |
| 23 | | | | | | | | |
| 24 | | | | | | | | |

[illegible] 6-12-15

* Sample spilled while in the oven. This is the updated wet weight.

WL-009 – Revision 4 – 05/20/2015

Reviewed By: [illegible]
QAWL772

Reviewed Date: 6/15/15

WET CHEMISTRY BATCH REPORT
Jun 15 2015, 04:07 pm
Batch: WG164847

Parameter: Total Organic Carbon (1)

Date Analyzed: 11-JUN-15

Analyst Initials: JS

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

| Sample | Samp Type | Method | Initial Amt. | Final Amt. | Rpt. DF | Result | Rpt Result | TS(%) | PQL | MDL | Adj PQL | RPD | %Rec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SI3747-1 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | .9473 | J0.95 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI3747-2 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | 4.279 | 4.3 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI3747-3 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | .4688 | J0.47 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI3747-4 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | .9716 | J0.97 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI3801-1 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | .5799 | J0.58 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI3801-2 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | .6437 | J0.64 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI3801-3 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | .8026 | J0.80 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI3801-4 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | .9922 | J0.99 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI3801-5 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | 1.984 | 2.0 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI3801-6 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | 18.83 | 19. mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI3801-7 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | .8555 | J0.86 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI3864-1 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | 1.029 | 1.0 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI3864-2 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | 1.883 | 1.9 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI3864-3 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | .4989 | J0.50 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI4001-1 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | 1.089 | 1.1 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI4001-2 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | .8615 | J0.86 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI4001-3 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | 1.067 | 1.1 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI4001-4 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | .6868 | J0.69 mg/L | NA | 1 | 0.10 | 1.0 | | |
| WG164847-1 | MBLANK | SW846 9060A | 20.000mL | 20.000mL | 1 | 0 | U0.50 mg/L | NA | 1 | 0.10 | 1.0 | | |
| WG164847-2 | LCS | SW846 9060A | 20.000mL | 20.000mL | 1 | 53.19 | 53. mg/L | NA | 1 | 0.10 | 1.0 | | 106 |
| WG164847-3 | DUP | SW846 9060A | 20.000mL | 20.000mL | 1 | 4.236 | 4.2 mg/L | NA | 1 | .1023 | 1.0 | 1 | |
| WG164847-4 | MS | SW846 9060A | 20.000mL | 20.000mL | 1 | 91.39 | 91. mg/L | NA | 1 | .1023 | 1.0 | | 90 |
| WG164847-5 | MSD | SW846 9060A | 20.000mL | 20.000mL | 1 | 91.3 | 91. mg/L | NA | 1 | .1023 | 1.0 | 0 | 90 |
| WG164847-6 | MS | SW846 9060A | 20.000mL | 20.000mL | 1 | 93.65 | 94. mg/L | NA | 1 | .1023 | 1.0 | | 93 |

Comments:

| | |
|---|---|
| SI3801-3 | MS/MSD |
| WG164847-1 | SI3747-1 |
| WG164847-2 | SI3747-1 |
| WG164847-3 | SI3747-2 |
| WG164847-4 | SI3801-3 |
| WG164847-5 | SI3801-3 |
| WG164847-6 | SI3801-7 |

Entered by: JS Date: 6.15.15 Accepted by: [signature] Date: 06/24/15

Katahdin Analytical Services 0000023

WET CHEMISTRY BATCH REPORT
Jun 15 2015, 04:07 pm
Batch: WG164847

Parameter: Total Organic Carbon (2)

Date Analyzed: 11-JUN-15

Analyst Initials: JS

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

| Sample | Samp Type | Method | Initial Amt. | Final Amt. | Rpt. DF | Result | Rpt Result | TS(%) | PQL | MDL | Adj PQL | RPD | %Rec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SI3747-1 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | .9073 | J0.91 mg/L | NA | 1 | 0.10 | 1.0 | | |

Comments:

| | |
|---|---|
| SI3801-3 | MS/MSD |
| WG164847-1 | SI3747-1 |
| WG164847-2 | SI3747-1 |
| WG164847-3 | SI3747-2 |
| WG164847-4 | SI3801-3 |
| WG164847-5 | SI3801-3 |
| WG164847-6 | SI3801-7 |

Entered by: JS Date: 6.15.15 Accepted by: [signature] Date: 06/23/15

WET CHEMISTRY BATCH REPORT
Jun 15 2015, 04:07 pm
Batch: WG164847

Parameter: Total Organic Carbon (3)

Date Analyzed: 11-JUN-15

Analyst Initials: JS

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

| Sample | Samp Type | Method | Initial Amt. | Final Amt. | Rpt. DF | Result | Rpt Result | TS(%) | PQL | MDL | Adj PQL | RPD | %Rec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SI3747-1 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | .8661 | J0.87 mg/L | NA | 1 | 0.10 | 1.0 | | |

Comments:

| | |
|---|---|
| SI3801-3 | MS/MSD |
| WG164847-1 | SI3747-1 |
| WG164847-2 | SI3747-1 |
| WG164847-3 | SI3747-2 |
| WG164847-4 | SI3801-3 |
| WG164847-5 | SI3801-3 |
| WG164847-6 | SI3801-7 |

Entered by: JS Date: 6.15.15 Accepted by: [signature] Date: 06/24/15

WET CHEMISTRY BATCH REPORT
Jun 15 2015, 04:07 pm
Batch: WG164847

Parameter: Total Organic Carbon (4)

Date Analyzed: 11-JUN-15

Analyst Initials: JS

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

| Sample | Samp Type | Method | Initial Amt. | Final Amt. | Rpt. DF | Result | Rpt Result | TS(%) | PQL | MDL | Adj PQL | RPD | %Rec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SI3747-1 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | .9325 | J0.93 mg/L | NA | 1 | 0.10 | 1.0 | | |

Comments:

| | |
|---|---|
| SI3801-3 | MS/MSD |
| WG164847-1 | SI3747-1 |
| WG164847-2 | SI3747-1 |
| WG164847-3 | SI3747-2 |
| WG164847-4 | SI3801-3 |
| WG164847-5 | SI3801-3 |
| WG164847-6 | SI3801-7 |

Entered by: JS Date: 6.15.15 Accepted by: [signature] Date: 06/21/15

WET CHEMISTRY BATCH REPORT
Jun 15 2015, 04:07 pm
Batch: WG164849

Parameter: Total Organic Carbon (Average)

Date Analyzed: 11-JUN-15

Analyst Initials: JS

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

| Sample | Samp Type | Method | Initial Amt. | Final Amt. | Rpt. DF | Result | Rpt Result | TS(%) | PQL | MDL | Adj PQL | RPD | %Rec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SI3747-1 | SAMP | SW846 9060A | 20mL | 20mL | 1 | .9133 | J0.91 mg/L | NA | 1 | 0.10 | 1.0 | | |

Comments:

| | |
|---|---|
| WG164849-1 | SI4052-1 |
| WG164849-2 | SI4052-1 |
| WG164849-3 | SI4052-2 |
| WG164849-4 | SI4052-3 |

Entered by: JS Date: 6.15.15 Accepted by: [signature] Date: 06/22/15

WET CHEMISTRY BATCH REPORT
Jun 15 2015, 04:07 pm
Batch: WG164849

Parameter: Total Organic Carbon (1)

Date Analyzed: 12-JUN-15

Analyst Initials: JS

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

| Sample | Samp Type | Method | Initial Amt. | Final Amt. | Rpt. DF | Result | Rpt Result | TS(%) | PQL | MDL | Adj PQL | RPD | %Rec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SI4052-2 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | .8378 | J0.84 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI4052-3 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | 2.26 | 2.3 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI4052-4 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | 1.938 | 1.9 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI4052-5 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | 1.005 | 1.0 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI4052-6 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | .7586 | J0.76 mg/L | NA | 1 | 0.10 | 1.0 | | |
| WG164849-1 | MBLANK | SW846 9060A | 20.000mL | 20.000mL | 1 | 0 | U0.50 mg/L | NA | 1 | 0.10 | 1.0 | | |
| WG164849-2 | LCS | SW846 9060A | 20.000mL | 20.000mL | 1 | 52.24 | 52. mg/L | NA | 1 | 0.10 | 1.0 | | 104 |
| WG164849-3 | DUP | SW846 9060A | 20.000mL | 20.000mL | 1 | .8044 | U1.0 mg/L | NA | 1 | .1023 | 1.0 | NC | |
| WG164849-4 | MS | SW846 9060A | 20.000mL | 20.000mL | 1 | 94.96 | 95. mg/L | NA | 1 | .1023 | 1.0 | | 93 |

Comments:

| | |
|---|---|
| WG164849-1 | SI4052-1 |
| WG164849-2 | SI4052-1 |
| WG164849-3 | SI4052-2 |
| WG164849-4 | SI4052-3 |

Entered by: JS Date: 6.15.15 Accepted by: [signature] Date: 06/24/15

WET CHEMISTRY BATCH REPORT
Jun 15 2015, 04:07 pm
Batch: WG164849

Parameter: Total Organic Carbon (1)

Date Analyzed: 11-JUN-15

Analyst Initials: JS

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

| Sample | Samp Type | Method | Initial Amt. | Final Amt. | Rpt. DF | Result | Rpt Result | TS(%) | PQL | MDL | Adj PQL | RPD | %Rec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SI4052-1 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | 5.417 | 5.4 mg/L | NA | 1 | 0.10 | 1.0 | | |

Comments:

| | |
|---|---|
| WG164849-1 | SI4052-1 |
| WG164849-2 | SI4052-1 |
| WG164849-3 | SI4052-2 |
| WG164849-4 | SI4052-3 |

Entered by: JS Date: 6.15.15 Accepted by: [signature] Date: 06/23/15

WET CHEMISTRY BATCH REPORT
Jun 15 2015, 04:07 pm
Batch: WG164849

Parameter: Total Organic Carbon (2)

Date Analyzed: 11-JUN-15

Analyst Initials: JS

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

| Sample | Samp Type | Method | Initial Amt. | Final Amt. | Rpt. DF | Result | Rpt Result | TS(%) | PQL | MDL | Adj PQL | RPD | %Rec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SI4052-1 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | 5.387 | 5.4 mg/L | NA | 1 | 0.10 | 1.0 | | |

Comments:

| | |
|---|---|
| WG164849-1 | SI4052-1 |
| WG164849-2 | SI4052-1 |
| WG164849-3 | SI4052-2 |
| WG164849-4 | SI4052-3 |

Entered by: JS Date: 6.15.15 Accepted by: [signature] Date: 06/21/15

WET CHEMISTRY BATCH REPORT
Jun 15 2015, 04:07 pm
Batch: WG164849

Parameter: Total Organic Carbon (3)

Date Analyzed: 11-JUN-15

Analyst Initials: JS

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

| Sample | Samp Type | Method | Initial Amt. | Final Amt. | Rpt. DF | Result | Rpt Result | TS(%) | PQL | MDL | Adj PQL | RPD | %Rec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SI4052-1 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | 5.411 | 5.4 mg/L | NA | 1 | 0.10 | 1.0 | | |

Comments:

| | |
|---|---|
| WG164849-1 | SI4052-1 |
| WG164849-2 | SI4052-1 |
| WG164849-3 | SI4052-2 |
| WG164849-4 | SI4052-3 |

Entered by: JS Date: 6.15.15 Accepted by: [signature] Date: 06/24/15

WET CHEMISTRY BATCH REPORT
Jun 15 2015, 04:07 pm
Batch: WG164849

Parameter: Total Organic Carbon (4)

Date Analyzed: 11-JUN-15

Analyst Initials: JS

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

| Sample | Samp Type | Method | Initial Amt. | Final Amt. | Rpt. DF | Result | Rpt Result | TS(%) | PQL | MDL | Adj PQL | RPD | %Rec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SI4052-1 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | 5.457 | 5.4 mg/L | NA | 1 | 0.10 | 1.0 | | |

Comments:

| | |
|---|---|
| WG164849-1 | SI4052-1 |
| WG164849-2 | SI4052-1 |
| WG164849-3 | SI4052-2 |
| WG164849-4 | SI4052-3 |

Entered by: JS Date: 6.15.15 Accepted by: [signature] Date: 06/22/15

WET CHEMISTRY BATCH REPORT
Jun 15 2015, 04:10 pm
Batch: WG164849

Parameter: Total Organic Carbon (Average)

Date Analyzed: 11-JUN-15

Analyst Initials: JS

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

| Sample | Samp Type | Method | Initial Amt. | Final Amt. | Rpt. DF | Result | Rpt Result | TS(%) | PQL | MDL | Adj PQL | RPD | %Rec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SI4052-1 | SAMP | SW846 9060A | 20.000mL | 20.000mL | 1 | 5.418 | 5.4 mg/L | NA | 1 | 0.10 | 1.0 | | |

Comments:

| | |
|---|---|
| WG164849-1 | SI4052-1 |
| WG164849-2 | SI4052-1 |
| WG164849-3 | SI4052-2 |
| WG164849-4 | SI4052-3 |

Entered by: JS Date: 6.15.15 Accepted by: [signature] Date: 06/24/15

WET CHEMISTRY BATCH REPORT
Jun 15 2015, 04:22 pm
Batch: WG164850

Parameter: Total Organic Carbon

Date Analyzed: 12-JUN-15

Analyst Initials: JS

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

| Sample | Samp Type | Method | Initial Amt. | Final Amt. | Rpt. DF | Result | Rpt Result | TS(%) | PQL | MDL | Adj PQL | RPD | %Rec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SI4013-1 | SAMP | EPA 415.1 | 20.000mL | 20.000mL | 1 | 110.5 | 110 mg/L | NA | 1 | .1023 | 1.0 | | |
| WG164850-1 | MBLANK | EPA 415.1 | 20.000mL | 20.000mL | 1 | 0 | U0.50 mg/L | NA | 1 | 0.10 | 1.0 | | |
| WG164850-2 | LCS | EPA 415.1 | 20.000mL | 20.000mL | 1 | 52.24 | 52. mg/L | NA | 1 | 0.10 | 1.0 | | 104 |

Comments:

WG164850-1 SI4013-1
WG164850-2 SI4013-1

Entered by: JS Date: 6.15.15 Accepted by: [signature] Date: 06/22/15

WET CHEMISTRY BATCH REPORT
Jun 15 2015, 04:02 pm
Batch: WG164851

Parameter: Total Organic Carbon

Date Analyzed: 12-JUN-15

Analyst Initials: JS

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

| Sample | Samp Type | Method | Initial Amt. | Final Amt. | Rpt. DF | Result | Rpt Result | TS(%) | PQL | MDL | Adj PQL | RPD | %Rec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SI3945-1 | SAMP | SM5310B | 20.000mL | 20.000mL | 1 | 0 | U1.0 mg/L | NA | 1 | 0.10 | 1.0 | | |
| SI3994-1 | SAMP | SM5310B | 20.000mL | 20.000mL | 1 | 0 | U1.0 mg/L | NA | 1 | .1023 | 1.0 | | |
| SI4028-1 | SAMP | SM5310B | 20.000mL | 20.000mL | 1 | 9.236 | 9.2 mg/L | NA | 1 | .1023 | 1.0 | | |
| WG164851-1 | MBLANK | SM5310B | 20.000mL | 20.000mL | 1 | 0 | U0.50 mg/L | NA | 1 | 0.10 | 1.0 | | |
| WG164851-2 | LCS | SM5310B | 20.000mL | 20.000mL | 1 | 52.24 | 52. mg/L | NA | 1 | 0.10 | 1.0 | | 104 |

Comments:

WG164851-1 SI3945-1
WG164851-2 SI3945-1

Entered by: JS Date: 6.15.15 Accepted by: [signature] Date: 06/24/15

# KATAHDIN ANALYTICAL SERVICES, INC.
# CARBON ANALYSIS RUN INFORMATION SHEET

**INSTR. ID:** WC2 (Shimadzu TOC-$V_{CPH}$) **ANALYST:** JS **DATE:** 6·15·15

**FILE NAME:** TOCAQ061115 **METHOD(S):**

| TOC | DOC | TIC |
|---|---|---|
| ☑ EPA 415.1 | ☐ EPA 415.1 | ☐ EPA 415.1 |
| ☑ SM5310B | ☐ SM5310B | ☐ SM5310B |
| ☑ SW9060 | ☐ _____ | ☐ _____ |

**CALIBRATION DATE:** 05-14-15 **CALIBRATION ANALYST:** JS

Calibration standards were prepared by performing dilutions of the following standard on the day of calibration:

| Calibration Source Standard ID | Prep Date | Expiration Date | Standard Conc. (mg/L) |
|---|---|---|---|
| W12929 | 4·10·15 | 7·10·15 | 2000 |

Note: Calibration must be performed quarterly or whenever a change in analysis conditions warrant. A copy of the associated calibration data is attached to this run.

**STANDARDS USED:**

| Standard Name | Standard ID | Prep Date | Expiration Date | Standard Conc. |
|---|---|---|---|---|
| CCV | W12930 | 4·10·15 | 7·10·15 | 100 mg C/L |
| LCS | W12955 | 4·21·15 | 7·21·15 | 50 mg C/L |
| MS Stock Std. * | W12929 | 4·10·15 | 7·10·15 | 2000 mg C/L |
| Alkalinity Check | W12995 | 5·8·15 | 11·8·15 | 15 mg/L (Inorg. C) |
| | | | | |
| | | | | |

* Matrix spikes are prepared by adding 2.0 mL of MS Stock Std. to 38 mL of sample.

**Additional Comments and Notes:**

SW9060 - TOC - 1 - WG164847 R321511 / R321554
" - 2 - WG164849 R321512 / R321562
E415.1 - TOC - 1 - WG164850 R321514
SM5310B - TOC - 1 - WG164851 R321515

| | Sample Name | Dilution | Result | Comment | Date / Time | Vial |
|---|---|---|---|---|---|---|
| 1 | ALK CHECK | 1.000 | NPOC:0.04406 mg/L | | 6/11/2015 3:14:05 PM | 1 |
| 2 | CCV | 1.000 | NPOC:104.3 mg/L | 104.3% | 6/11/2015 3:31:18 PM | 2 |
| 3 | BLANK | 1.000 | NPOC:0.000 mg/L | | 6/11/2015 3:42:56 PM | 3 |
| 4 | LCS | 1.000 | NPOC:53.19 mg/L | | 6/11/2015 3:59:40 PM | 4 |
| 5 | SI3747-1 | 1.000 | NPOC:0.9473 mg/L | | 6/11/2015 4:14:03 PM | 6 |
| 6 | SI3747-1 | 1.000 | NPOC:0.9073 mg/L | | 6/11/2015 4:26:04 PM | 6 |
| 7 | SI3747-1 | 1.000 | NPOC:0.8661 mg/L | | 6/11/2015 4:37:46 PM | 6 |
| 8 | SI3747-1 | 1.000 | NPOC:0.9325 mg/L | | 6/11/2015 4:49:31 PM | 6 |
| 9 | SI3747-2 | 1.000 | NPOC:4.279 mg/L | | 6/11/2015 5:04:21 PM | 7 |
| 10 | SI3747-2 DUP | 1.000 | NPOC:4.236 mg/L | | 6/11/2015 5:16:58 PM | 7 |
| 11 | SI3747-3 | 1.000 | NPOC:0.4688 mg/L | | 6/11/2015 5:30:57 PM | 8 |
| 12 | SI3747-4 | 1.000 | NPOC:0.9716 mg/L | | 6/11/2015 5:45:30 PM | 9 |
| 13 | SI3801-1 | 1.000 | NPOC:0.5799 mg/L | | 6/11/2015 5:59:20 PM | 10 |
| 14 | CCV | 1.000 | NPOC:104.4 mg/L | 104.4% | 6/11/2015 6:16:58 PM | 2 |
| 15 | BLANK | 1.000 | NPOC:0.000 mg/L | | 6/11/2015 6:28:07 PM | 3 |
| 16 | SI3801-2 | 1.000 | NPOC:0.6437 mg/L | | 6/11/2015 6:42:06 PM | 11 |
| 17 | SI3801-3 | 1.000 | NPOC:0.8026 mg/L | | 6/11/2015 6:55:37 PM | 12 |
| 18 | SI3801-3 MS | 1.000 | NPOC:91.39 mg/L | | 6/11/2015 7:12:23 PM | 13 |
| 19 | SI3801-3 MSD | 1.000 | NPOC:91.30 mg/L | | 6/11/2015 7:26:59 PM | 13 |
| 20 | SI3801-4 | 1.000 | NPOC:0.9922 mg/L | | 6/11/2015 7:41:05 PM | 14 |
| 21 | SI3801-5 | 1.000 | NPOC:1.984 mg/L | | 6/11/2015 7:55:34 PM | 15 |
| 22 | SI3801-6 | 1.000 | NPOC:18.83 mg/L | | 6/11/2015 8:11:17 PM | 16 |
| 23 | SI3801-7 | 1.000 | NPOC:0.8555 mg/L | | 6/11/2015 8:25:24 PM | 17 |
| 24 | SI3801-7 MS | 1.000 | NPOC:93.65 mg/L | | 6/11/2015 8:42:09 PM | 18 |
| 25 | SI3864-1 | 1.000 | NPOC:1.029 mg/L | | 6/11/2015 8:56:19 PM | 19 |
| 26 | CCV | 1.000 | NPOC:104.0 mg/L | 104.0% | 6/11/2015 9:13:35 PM | 2 |
| 27 | BLANK | 1.000 | NPOC:0.000 mg/L | | 6/11/2015 9:24:41 PM | 3 |
| 28 | SI3864-2 | 1.000 | NPOC:1.883 mg/L | | 6/11/2015 9:39:31 PM | 20 |
| 29 | SI3864-3 | 1.000 | NPOC:0.4989 mg/L | | 6/11/2015 9:53:29 PM | 21 |
| 30 | SI4001-1 | 1.000 | NPOC:1.089 mg/L | | 6/11/2015 10:07:48 PM | 22 |
| 31 | SI4001-2 | 1.000 | NPOC:0.8615 mg/L | | 6/11/2015 10:22:04 PM | 23 |
| 32 | SI4001-3 | 1.000 | NPOC:1.067 mg/L | | 6/11/2015 10:36:23 PM | 24 |
| 33 | SI4001-4 | 1.000 | NPOC:0.6868 mg/L | | 6/11/2015 10:50:32 PM | 25 |
| 34 | SI4052-1 | 1.000 | NPOC:5.417 mg/L | | 6/11/2015 11:05:43 PM | 26 |
| 35 | SI4052-1 | 1.000 | NPOC:5.387 mg/L | | 6/11/2015 11:18:43 PM | 26 |
| 36 | SI4052-1 | 1.000 | NPOC:5.411 mg/L | | 6/11/2015 11:31:39 PM | 26 |
| 37 | SI4052-1 | 1.000 | NPOC:5.457 mg/L | | 6/11/2015 11:44:34 PM | 26 |
| 38 | CCV | 1.000 | NPOC:103.9 mg/L | 103.9% | 6/12/2015 12:01:50 AM | 65 |
| 39 | BLANK | 1.000 | NPOC:0.000 mg/L | | 6/12/2015 12:13:08 AM | 66 |
| 40 | LCS | 1.000 | NPOC:52.24 mg/L | | 6/12/2015 12:30:16 AM | 5 |
| 41 | SI4052-2 | 1.000 | NPOC:0.8378 mg/L | | 6/12/2015 12:44:53 AM | 27 |
| 42 | SI4052-2 DUP | 1.000 | NPOC:0.8044 mg/L | | 6/12/2015 12:57:01 AM | 27 |
| 43 | SI4052-3 | 1.000 | NPOC:2.260 mg/L | | 6/12/2015 1:11:48 AM | 28 |
| 44 | SI4052-3 MS | 1.000 | NPOC:94.96 mg/L | | 6/12/2015 1:28:54 AM | 29 |
| 45 | SI4052-4 | 1.000 | NPOC:1.938 mg/L | | 6/12/2015 1:43:41 AM | 30 |
| 46 | SI4052-5 | 1.000 | NPOC:1.005 mg/L | | 6/12/2015 1:58:07 AM | 31 |
| 47 | SI4052-6 | 1.000 | NPOC:0.7586 mg/L | | 6/12/2015 2:12:31 AM | 32 |
| 48 | SI3945-1 | 1.000 | NPOC:0.000 mg/L | | 6/12/2015 2:23:38 AM | 33 |
| 49 | SI3994-1 | 1.000 | NPOC:0.000 mg/L | | 6/12/2015 2:34:45 AM | 34 |
| 50 | CCV | 1.000 | NPOC:103.6 mg/L | 103.6% | 6/12/2015 2:51:54 AM | 65 |
| 51 | BLANK | 1.000 | NPOC:0.000 mg/L | | 6/12/2015 3:03:03 AM | 66 |
| 52 | SI4028-1 | 1.000 | NPOC:9.236 mg/L | | 6/12/2015 3:18:55 AM | 35 |
| 53 | SI4013-1 | 1.000 | NPOC:110.5 mg/L | | 6/12/2015 3:35:48 AM | 36 |
| 54 | SI4013-1 | 2.000 | NPOC:106.9 mg/L | | 6/12/2015 3:52:22 AM | 37 |
| 55 | SI4013-1 | 5.000 | NPOC:115.8 mg/L | | 6/12/2015 4:08:45 AM | 38 |
| 56 | CCV | 1.000 | NPOC:103.4 mg/L | 103.4% | 6/12/2015 4:26:08 AM | 65 |
| 57 | BLANK | 1.000 | NPOC:0.000 mg/L | | 6/12/2015 4:37:17 AM | 66 |

Instr.Information

| | |
|---|---|
| System | TOC-Vcph / ASI-V |
| Detector | Combustion |
| Catalyst | Regular Sensitivity |
| Cell Length | long |

Control Sample

| | |
|---|---|
| Sample Name: | ALK CHECK |
| Sample ID: | <Untitled> |
| Method: | ALK CHECK DOUBLE INJECTION.tpl |
| Chk. Result | Control value: 0.04406 / Control within range! |

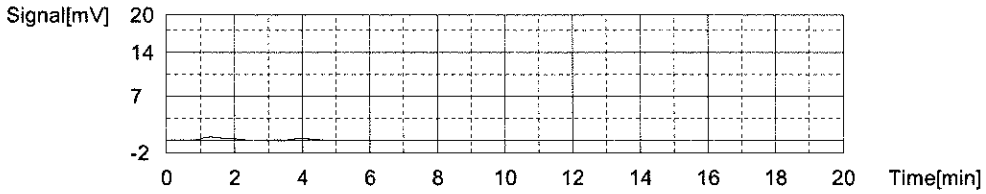
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Control | NPOC | 1.000 | NPOC:0.04406 mg/L |

1. Det.

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 1.541 | 0.08813mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 3:11:59 PM |
| 2 | 0.000 | 0.000mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 3:14:05 PM |

Mean Area 0.7705
Mean Conc. 0.04406mg/L




Control Sample

| | |
|---|---|
| Sample Name: | CCV |
| Sample ID: | <Untitled> |
| Method: | CCVDOUBLEINJECTION.tpl |
| Chk. Result | Control value: 104.3 / Control within range! |

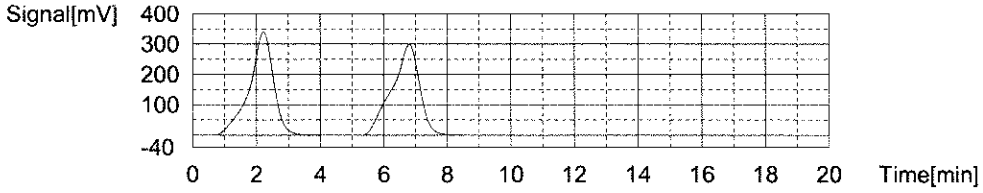
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Control | NPOC | 1.000 | NPOC:104.3 mg/L |

1. Det.

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 1814 | 103.7mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 3:26:19 PM |
| 2 | 1832 | 104.8mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 3:31:18 PM |

Mean Area 1823
Mean Conc. 104.3mg/L



Control Sample

Sample Name: BLANK
Sample ID: <Untitled>
Method: BLANKDOUBLEINJECTION.tpl
Chk. Result Control value: 0.000 / Control within range!

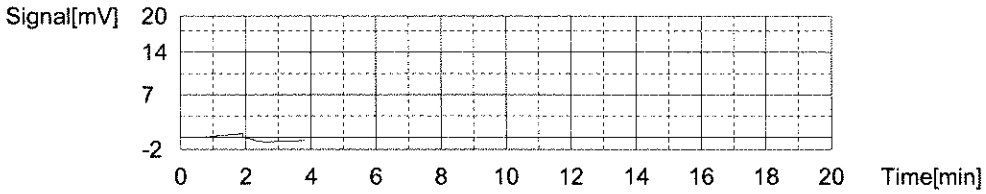
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Control | NPOC | 1.000 | NPOC:0.000 mg/L |

1. Det.

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.000 | 0.000mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 3:40:49 PM |
| 2 | 0.000 | 0.000mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 3:42:56 PM |

Mean Area 0.000
Mean Conc. 0.000mg/L




Control Sample

Sample Name: LCS
Sample ID: <Untitled>
Method: LCSDOUBLEINJECTION.tpl
Chk. Result Control value: 53.19 / Control within range!

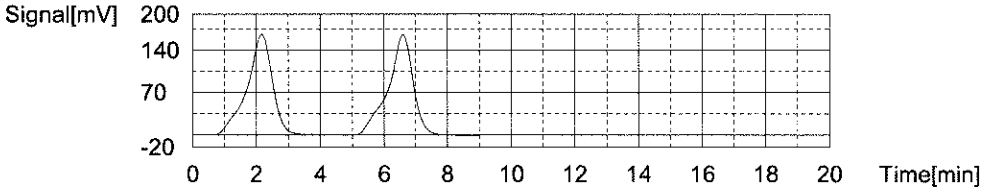
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Control | NPOC | 1.000 | NPOC:53.19 mg/L |

1. Det.

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 926.2 | 52.97mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 3:54:56 PM |
| 2 | 933.8 | 53.40mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 3:59:40 PM |

Mean Area 930.0
Mean Conc. 53.19mg/L




Sample

Sample Name: SI3747-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

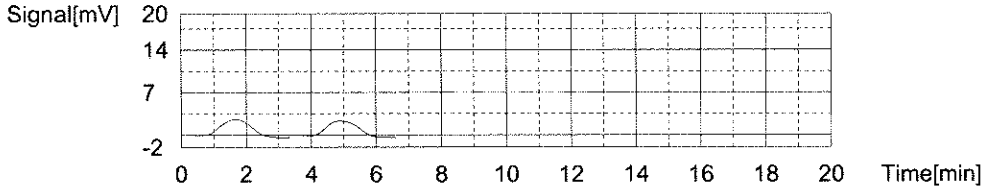
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.9473 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 17.07 | 0.9762mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 4:10:34 PM |
| 2 | 16.06 | 0.9184mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 4:14:03 PM |

Mean Area 16.57
Mean Conc. 0.9473mg/L




Sample

Sample Name: SI3747-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

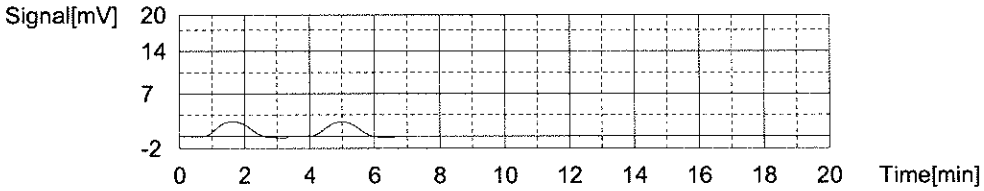
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.9073 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 16.32 | 0.9333mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 4:22:33 PM |
| 2 | 15.41 | 0.8813mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 4:26:04 PM |

Mean Area 15.87
Mean Conc. 0.9073mg/L




Sample

Sample Name: SI3747-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

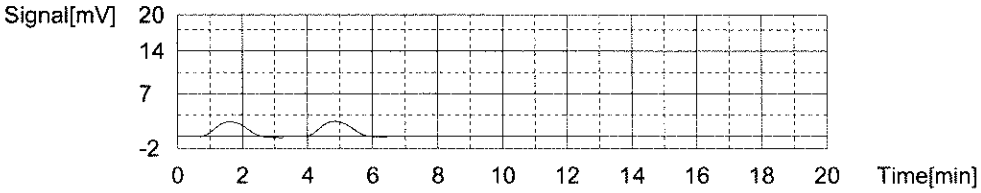
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.8661 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 15.17 | 0.8676mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 4:34:22 PM |
| 2 | 15.12 | 0.8647mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 4:37:46 PM |

Mean Area 15.15
Mean Conc. 0.8661mg/L




Sample

Sample Name: SI3747-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

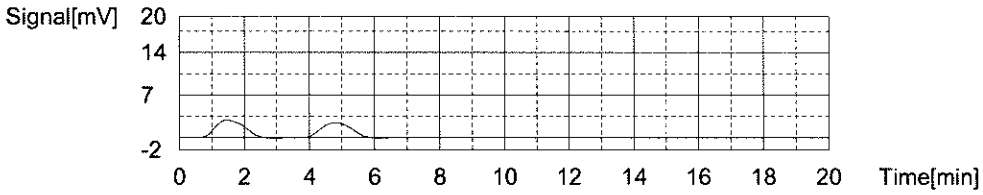
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.9325 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 17.29 | 0.9888mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 4:46:00 PM |
| 2 | 15.32 | 0.8761mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 4:49:31 PM |

Mean Area 16.31
Mean Conc. 0.9325mg/L




Sample

Sample Name: SI3747-2
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

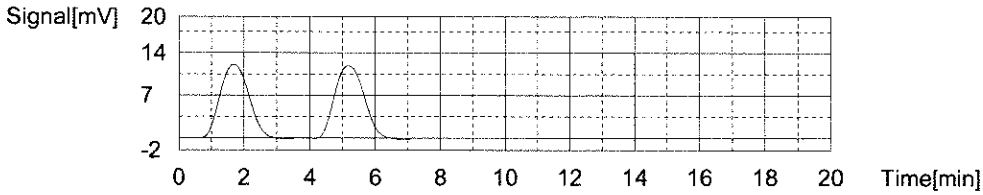
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:4.279 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 74.68 | 4.271mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 5:00:36 PM |
| 2 | 74.98 | 4.288mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 5:04:21 PM |

Mean Area 74.83
Mean Conc. 4.279mg/L




Sample

Sample Name: SI3747-2 DUP
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

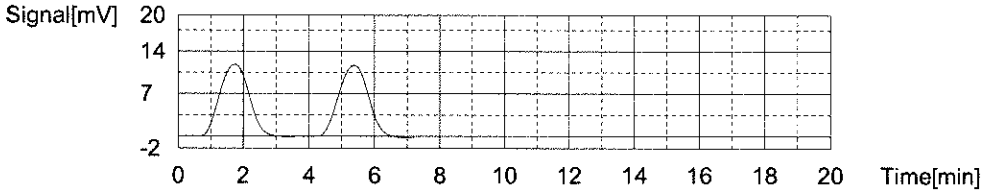
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:4.236 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 73.78 | 4.219mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 5:12:59 PM |
| 2 | 74.36 | 4.253mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 5:16:58 PM |

Mean Area 74.07
Mean Conc. 4.236mg/L




Sample

Sample Name: SI3747-3
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

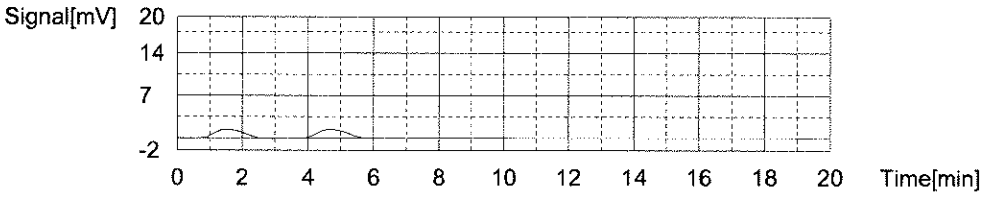
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.4688 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 8.258 | 0.4723mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 5:27:39 PM |
| 2 | 8.137 | 0.4653mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 5:30:57 PM |

Mean Area 8.198
Mean Conc. 0.4688mg/L



Sample

Sample Name: SI3747-4
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

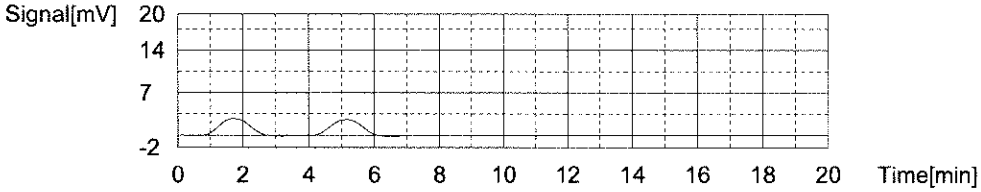
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.9716 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 17.09 | 0.9774mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 5:41:52 PM |
| 2 | 16.89 | 0.9659mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 5:45:30 PM |

Mean Area 16.99
Mean Conc. 0.9716mg/L




Sample

Sample Name: SI3801-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

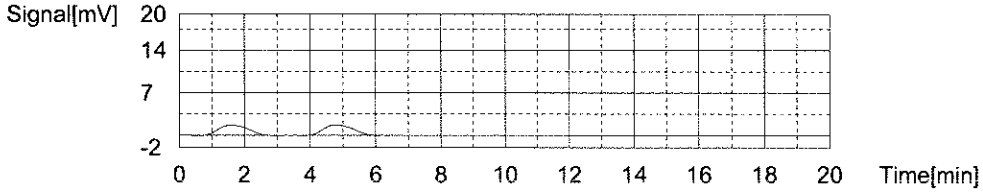
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.5799 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 10.13 | 0.5793mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 5:55:56 PM |
| 2 | 10.15 | 0.5805mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 5:59:20 PM |

Mean Area 10.14
Mean Conc. 0.5799mg/L




Control Sample

Sample Name: CCV
Sample ID: <Untitled>
Method: CCVDOUBLEINJECTION.tpl
Chk. Result Control value: 104.4 / Control within range!

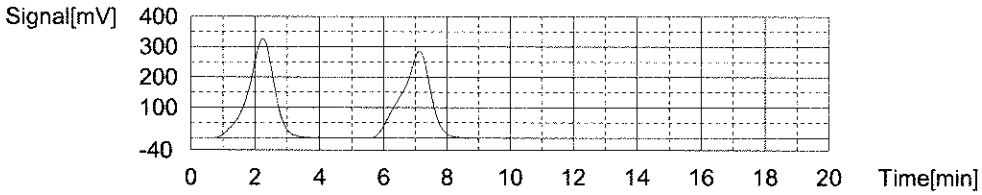
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Control | NPOC | 1.000 | NPOC:104.4 mg/L |

1. Det.

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 1823 | 104.3mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 6:11:52 PM |
| 2 | 1827 | 104.5mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 6:16:58 PM |

Mean Area 1825
Mean Conc. 104.4mg/L




Control Sample

Sample Name: BLANK
Sample ID: <Untitled>
Method: BLANKDOUBLEINJECTION.tpl
Chk. Result Control value: 0.000 / Control within range!

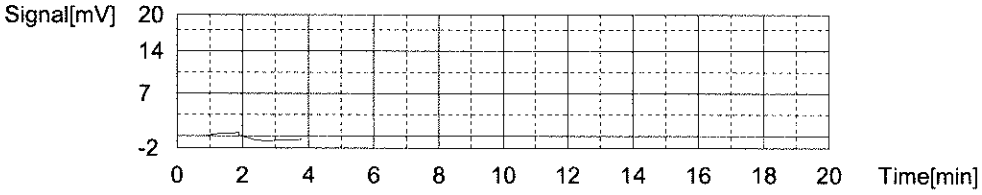
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Control | NPOC | 1.000 | NPOC:0.000 mg/L |

1. Det.

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.000 | 0.000mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 6:25:58 PM |
| 2 | 0.000 | 0.000mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 6:28:07 PM |

Mean Area 0.000
Mean Conc. 0.000mg/L




Sample

Sample Name: SI3801-2
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

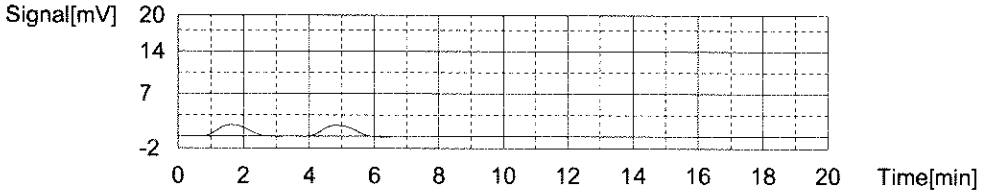
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.6437 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 11.11 | 0.6354mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 6:38:30 PM |
| 2 | 11.40 | 0.6519mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 6:42:06 PM |

Mean Area 11.26
Mean Conc. 0.6437mg/L




Sample

Sample Name: SI3801-3
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

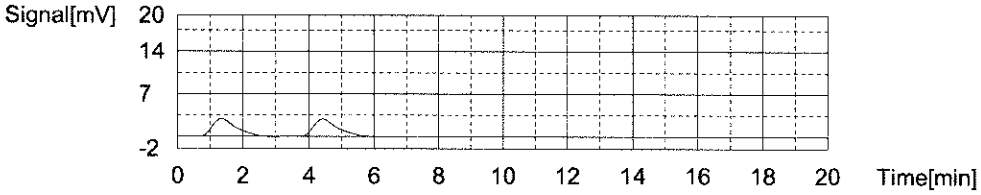
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.8026 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 14.23 | 0.8138mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 6:52:17 PM |
| 2 | 13.84 | 0.7915mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 6:55:37 PM |

Mean Area 14.04
Mean Conc. 0.8026mg/L




Sample

Sample Name: SI3801-3 MS
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

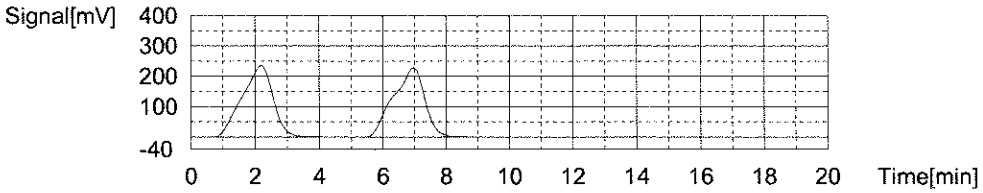
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:91.39 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 1594 | 91.16mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 7:07:28 PM |
| 2 | 1602 | 91.62mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 7:12:23 PM |

Mean Area 1598
Mean Conc. 91.39mg/L




Sample

Sample Name: SI3801-3 MSD
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

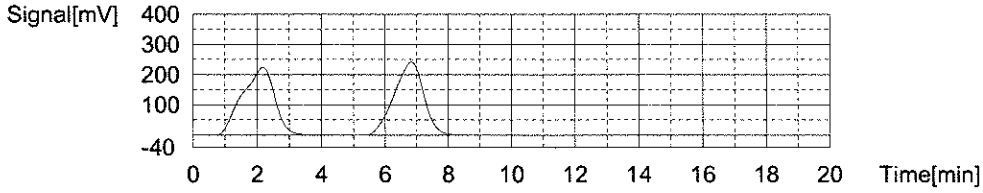
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:91.30 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 1588 | 90.82mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 7:22:00 PM |
| 2 | 1605 | 91.79mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 7:26:59 PM |

Mean Area 1597
Mean Conc. 91.30mg/L




Sample

Sample Name: SI3801-4
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

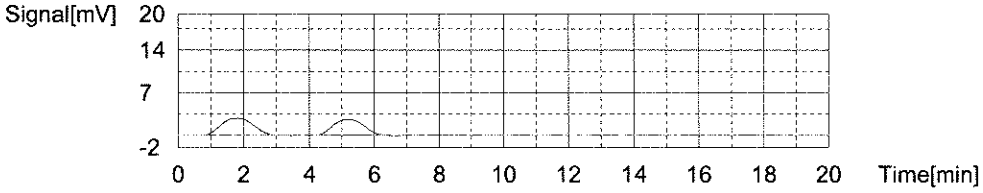
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.9922 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 18.34 | 1.049mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 7:37:33 PM |
| 2 | 16.36 | 0.9356mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 7:41:05 PM |

Mean Area 17.35
Mean Conc. 0.9922mg/L



Sample

Sample Name: SI3801-5
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

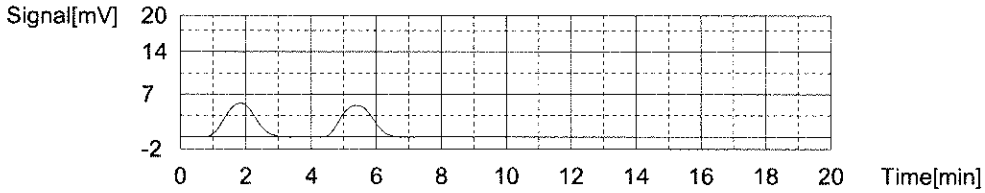
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:1.984 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 34.71 | 1.985mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 7:51:48 PM |
| 2 | 34.67 | 1.983mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 7:55:34 PM |

Mean Area 34.69
Mean Conc. 1.984mg/L




Sample

Sample Name: SI3801-6
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

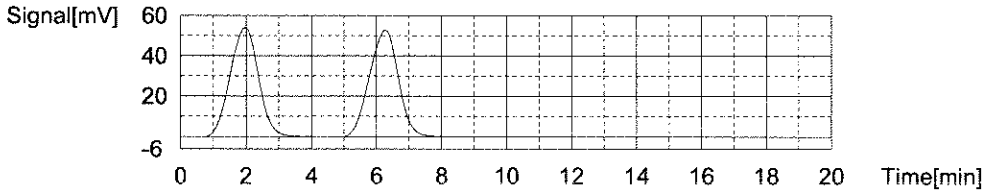
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:18.83 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 328.0 | 18.76mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 8:06:53 PM |
| 2 | 330.5 | 18.90mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 8:11:17 PM |

Mean Area 329.3
Mean Conc. 18.83mg/L




Sample

Sample Name: SI3801-7
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

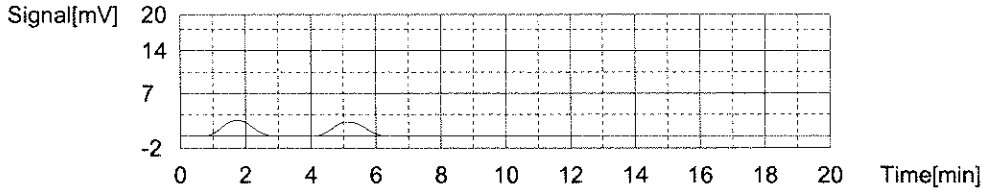
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.8555 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 15.29 | 0.8744mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 8:21:47 PM |
| 2 | 14.63 | 0.8367mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 8:25:24 PM |

Mean Area 14.96
Mean Conc. 0.8555mg/L




Sample

Sample Name: SI3801-7 MS
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

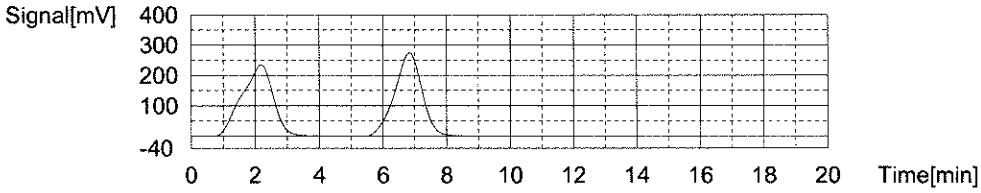
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:93.65 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 1617 | 92.47mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 8:37:12 PM |
| 2 | 1658 | 94.82mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 8:42:09 PM |

Mean Area 1638
Mean Conc. 93.65mg/L




Sample

Sample Name: SI3864-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

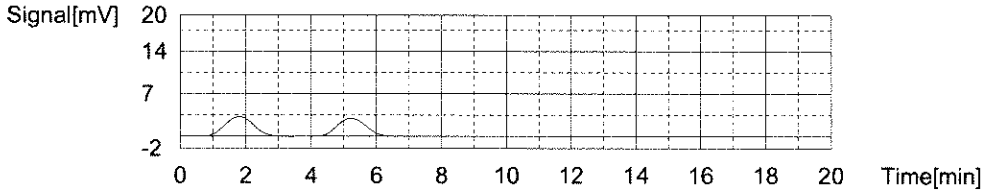
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:1.029 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 18.91 | 1.081mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 8:52:43 PM |
| 2 | 17.09 | 0.9774mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 8:56:19 PM |

Mean Area 18.00
Mean Conc. 1.029mg/L




Control Sample

Sample Name: CCV
Sample ID: <Untitled>
Method: CCVDOUBLEINJECTION.tpl
Chk. Result Control value: 104.0 / Control within range!

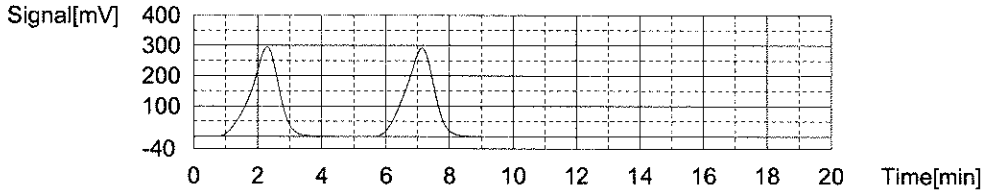
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Control | NPOC | 1.000 | NPOC:104.0 mg/L |

1. Det.

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 1805 | 103.2mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 9:08:32 PM |
| 2 | 1833 | 104.8mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 9:13:35 PM |

Mean Area 1819
Mean Conc. 104.0mg/L




Control Sample

Sample Name: BLANK
Sample ID: <Untitled>
Method: BLANKDOUBLEINJECTION.tpl
Chk. Result Control value: 0.000 / Control within range!

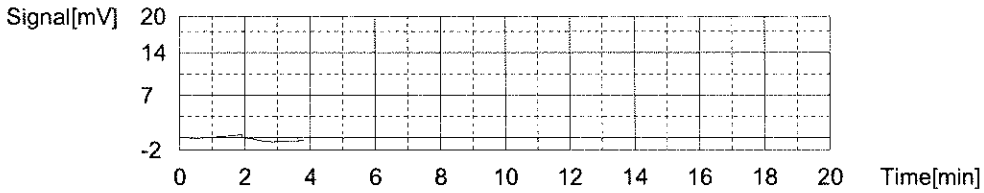
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Control | NPOC | 1.000 | NPOC:0.000 mg/L |

1. Det.

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.000 | 0.000mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 9:22:35 PM |
| 2 | 0.000 | 0.000mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 9:24:41 PM |

Mean Area 0.000
Mean Conc. 0.000mg/L




Sample

Sample Name: SI3864-2
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

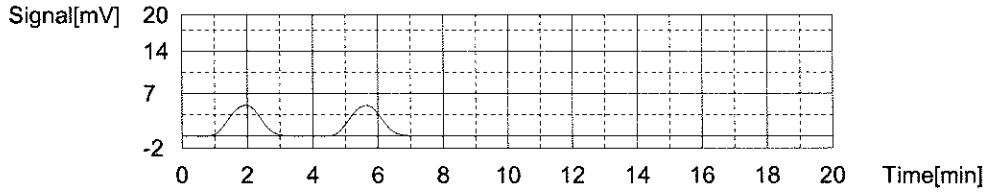
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:1.883 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 33.28 | 1.903mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 9:35:41 PM |
| 2 | 32.57 | 1.863mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 9:39:31 PM |

Mean Area 32.92
Mean Conc. 1.883mg/L




Sample

Sample Name: SI3864-3
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

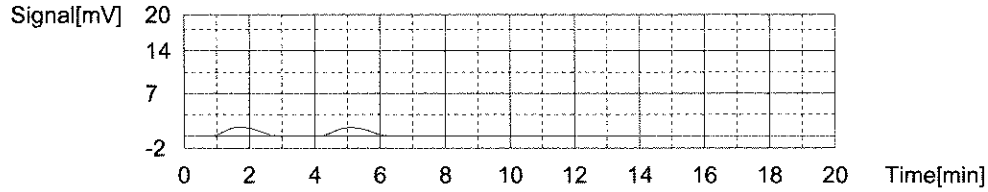
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.4989 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 8.722 | 0.4988mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 9:49:56 PM |
| 2 | 8.725 | 0.4990mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 9:53:29 PM |

Mean Area 8.723
Mean Conc. 0.4989mg/L



Sample

Sample Name: SI4001-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

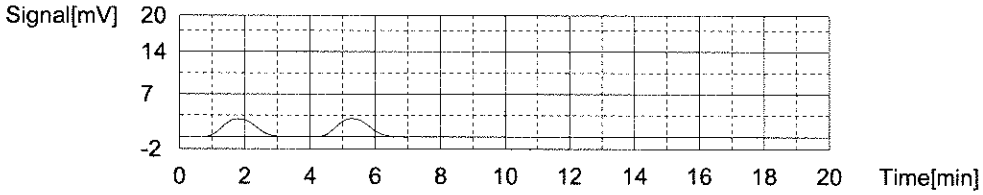
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:1.089 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 18.71 | 1.070mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 10:04:03 PM |
| 2 | 19.39 | 1.109mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 10:07:48 PM |

Mean Area 19.05
Mean Conc. 1.089mg/L




Sample

Sample Name: SI4001-2
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

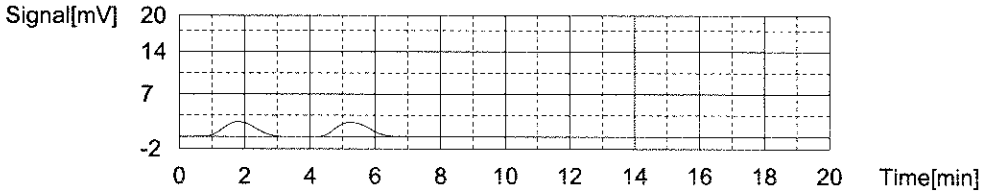
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.8615 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 14.90 | 0.8521mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 10:18:22 PM |
| 2 | 15.23 | 0.8710mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 10:22:04 PM |

Mean Area 15.07
Mean Conc. 0.8615mg/L




Sample

Sample Name: SI4001-3
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

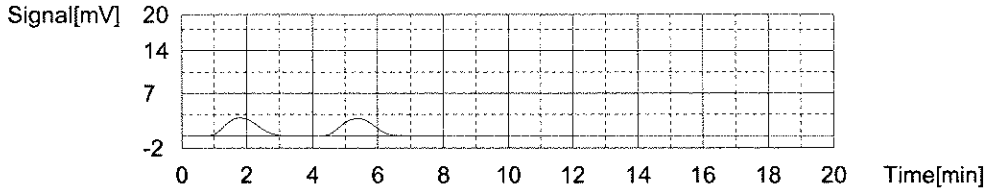
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:1.067 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 18.92 | 1.082mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 10:32:41 PM |
| 2 | 18.38 | 1.051mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 10:36:23 PM |

Mean Area 18.65
Mean Conc. 1.067mg/L




Sample

Sample Name: SI4001-4
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

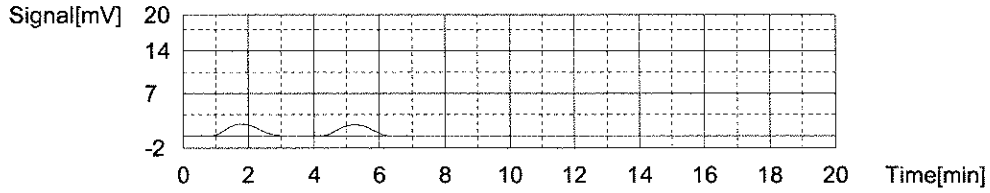
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.6868 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 12.00 | 0.6863mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 10:46:52 PM |
| 2 | 12.02 | 0.6874mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 10:50:32 PM |

Mean Area 12.01
Mean Conc. 0.6868mg/L




Sample

Sample Name: SI4052-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

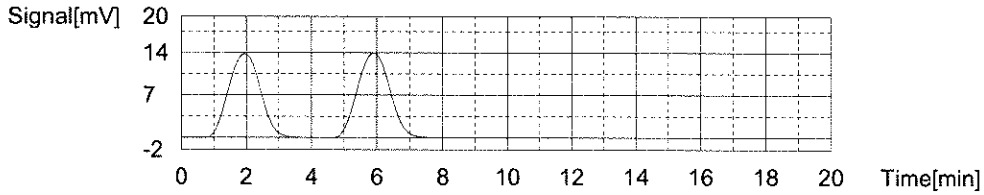
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:5.417 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 94.27 | 5.391mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 11:01:35 PM |
| 2 | 95.18 | 5.443mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 11:05:43 PM |

Mean Area 94.73
Mean Conc. 5.417mg/L




Sample

Sample Name: SI4052-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

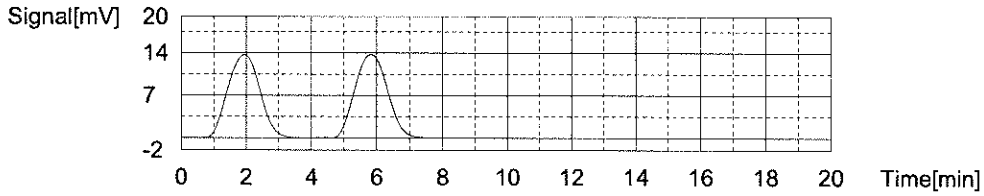
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:5.387 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 93.38 | 5.340mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 11:14:34 PM |
| 2 | 95.02 | 5.434mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 11:18:43 PM |

Mean Area 94.20
Mean Conc. 5.387mg/L




Sample

Sample Name: SI4052-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

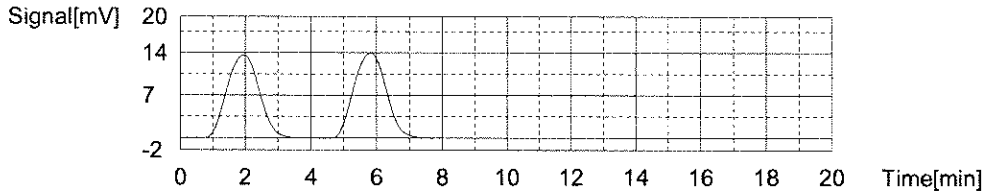
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:5.411 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 93.84 | 5.367mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 11:27:34 PM |
| 2 | 95.39 | 5.455mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 11:31:39 PM |

Mean Area 94.62
Mean Conc. 5.411mg/L




Sample

Sample Name: SI4052-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

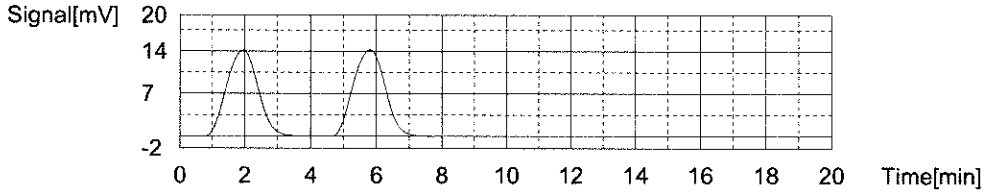
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:5.457 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 94.50 | 5.404mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 11:40:30 PM |
| 2 | 96.34 | 5.510mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 11:44:34 PM |

Mean Area 95.42
Mean Conc. 5.457mg/L




Control Sample

Sample Name: CCV
Sample ID: <Untitled>
Method: CCVDOUBLEINJECTION.tpl
Chk. Result Control value: 103.9 / Control within range!

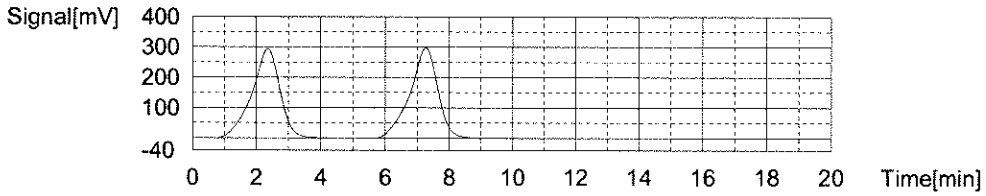
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Control | NPOC | 1.000 | NPOC:103.9 mg/L |

1. Det.

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 1806 | 103.3mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/11/2015 11:56:44 PM |
| 2 | 1828 | 104.5mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 12:01:50 AM |

Mean Area 1817
Mean Conc. 103.9mg/L



Control Sample

Sample Name: BLANK
Sample ID: <Untitled>
Method: BLANKDOUBLEINJECTION.tpl
Chk. Result Control value: 0.000 / Control within range!

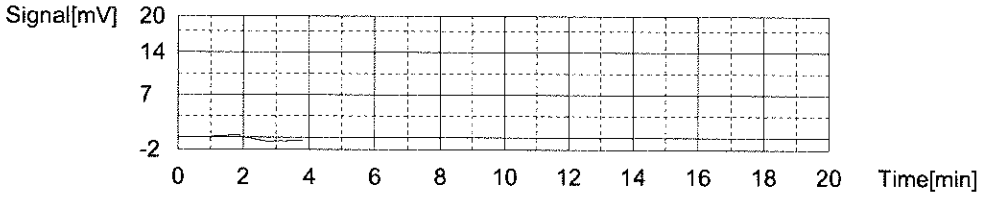
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Control | NPOC | 1.000 | NPOC:0.000 mg/L |

1. Det.

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.000 | 0.000mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 12:10:53 AM |
| 2 | 0.000 | 0.000mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 12:13:08 AM |

Mean Area 0.000
Mean Conc. 0.000mg/L




Control Sample

Sample Name: LCS
Sample ID: <Untitled>
Method: LCSDOUBLEINJECTION.tpl
Chk. Result Control value: 52.24 / Control within range!

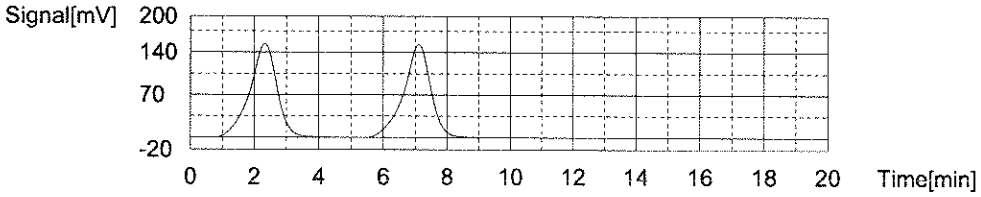
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Control | NPOC | 1.000 | NPOC:52.24 mg/L |

1. Det.

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 913.2 | 52.22mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 12:25:21 AM |
| 2 | 913.6 | 52.25mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 12:30:16 AM |

Mean Area 913.4
Mean Conc. 52.24mg/L




Sample

Sample Name: SI4052-2
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

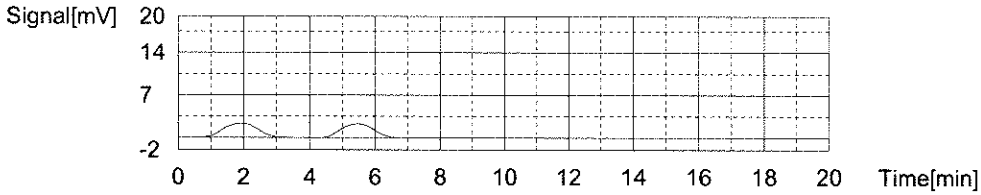
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.8378 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 14.62 | 0.8361mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 12:41:08 AM |
| 2 | 14.68 | 0.8395mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 12:44:53 AM |

Mean Area 14.65
Mean Conc. 0.8378mg/L




Sample

Sample Name: SI4052-2 DUP
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

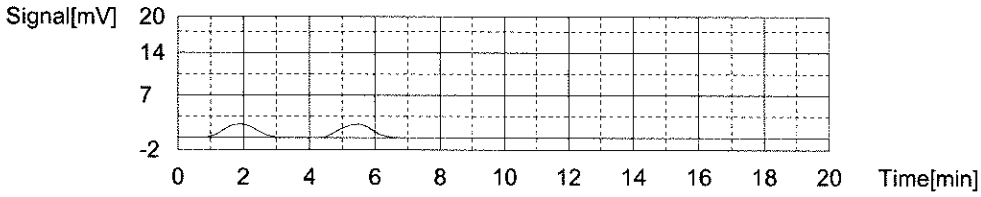
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.8044 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 14.25 | 0.8149mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 12:53:20 AM |
| 2 | 13.88 | 0.7938mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 12:57:01 AM |

Mean Area 14.07
Mean Conc. 0.8044mg/L




Sample

Sample Name: SI4052-3
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

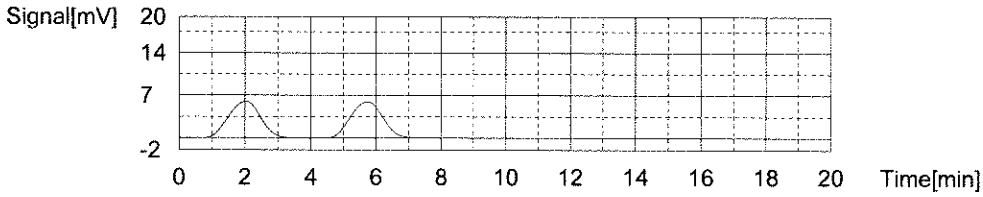
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:2.260 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 39.63 | 2.266mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 1:07:54 AM |
| 2 | 39.39 | 2.253mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 1:11:48 AM |

Mean Area 39.51
Mean Conc. 2.260mg/L




Sample

Sample Name: SI4052-3 MS
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

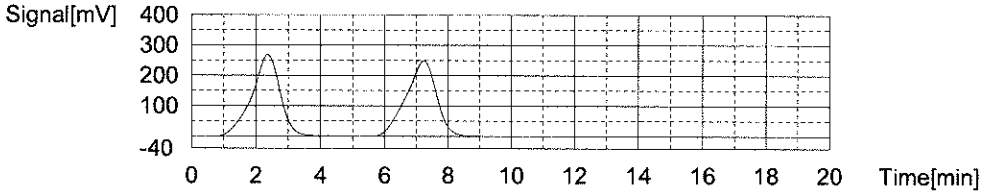
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:94.96 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 1653 | 94.53mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 1:23:48 AM |
| 2 | 1668 | 95.39mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 1:28:54 AM |

Mean Area 1661
Mean Conc. 94.96mg/L




Sample

Sample Name: SI4052-4
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

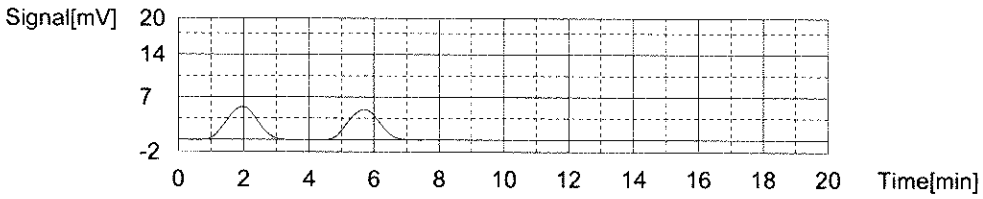
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:1.938 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 34.69 | 1.984mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 1:39:44 AM |
| 2 | 33.09 | 1.892mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 1:43:41 AM |

Mean Area 33.89
Mean Conc. 1.938mg/L




Sample

Sample Name: SI4052-5
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

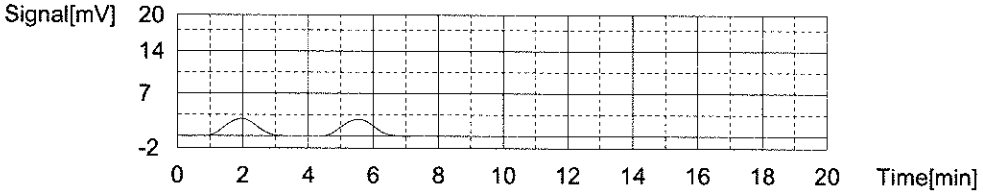
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:1.005 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 17.71 | 1.013mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 1:54:21 AM |
| 2 | 17.44 | 0.9974mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 1:58:07 AM |

Mean Area 17.58
Mean Conc. 1.005mg/L




Sample

Sample Name: SI4052-6
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

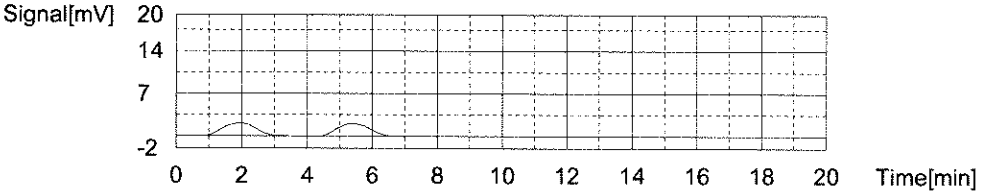
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.7586 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 12.92 | 0.7389mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 2:08:44 AM |
| 2 | 13.61 | 0.7783mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 2:12:31 AM |

Mean Area 13.27
Mean Conc. 0.7586mg/L



Sample

Sample Name: SI3945-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

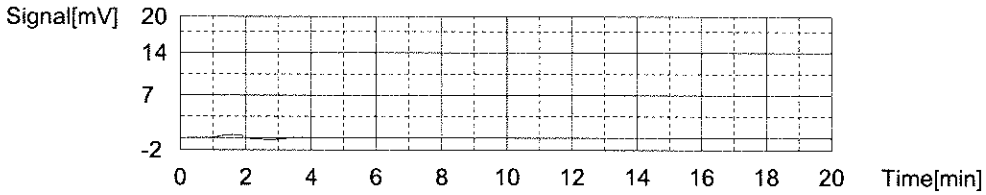
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.000 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.000 | 0.000mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 2:21:32 AM |
| 2 | 0.000 | 0.000mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 2:23:38 AM |

Mean Area 0.000
Mean Conc. 0.000mg/L




Sample

Sample Name: SI3994-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

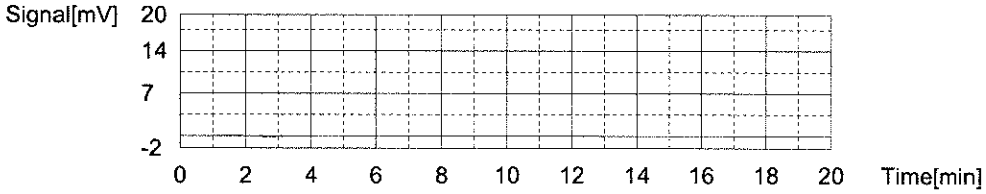
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:0.000 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.000 | 0.000mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 2:32:39 AM |
| 2 | 0.000 | 0.000mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 2:34:45 AM |

Mean Area 0.000
Mean Conc. 0.000mg/L




Control Sample

Sample Name: CCV
Sample ID: <Untitled>
Method: CCVDOUBLEINJECTION.tpl
Chk. Result Control value: 103.6 / Control within range!

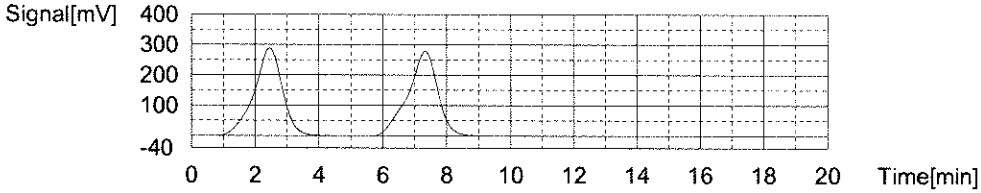
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Control | NPOC | 1.000 | NPOC:103.6 mg/L |

1. Det.

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 1802 | 103.1mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 2:46:48 AM |
| 2 | 1820 | 104.1mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 2:51:54 AM |

Mean Area 1811
Mean Conc. 103.6mg/L




Control Sample

Sample Name: BLANK
Sample ID: <Untitled>
Method: BLANKDOUBLEINJECTION.tpl
Chk. Result Control value: 0.000 / Control within range!

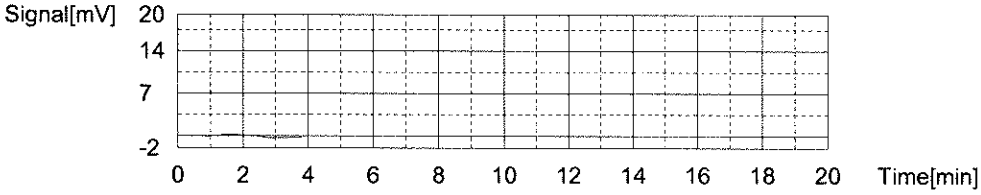
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Control | NPOC | 1.000 | NPOC:0.000 mg/L |

1. Det.

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.000 | 0.000mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 3:00:57 AM |
| 2 | 0.000 | 0.000mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 3:03:03 AM |

Mean Area 0.000
Mean Conc. 0.000mg/L




Sample

Sample Name: SI4028-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

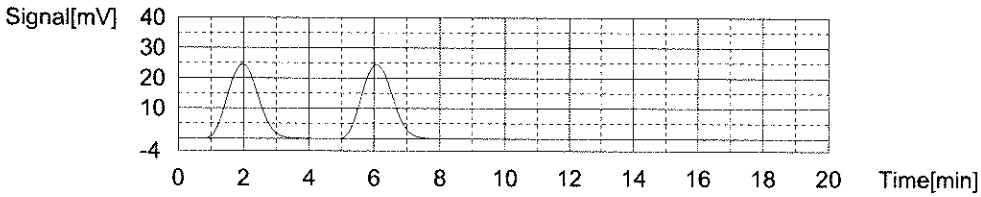
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:9.236 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 161.0 | 9.207mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 3:14:37 AM |
| 2 | 162.0 | 9.265mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 3:18:55 AM |

Mean Area 161.5
Mean Conc. 9.236mg/L




Sample

Sample Name: SI4013-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

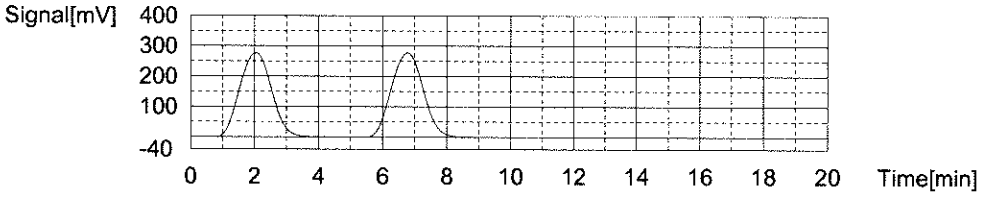
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 1.000 | NPOC:110.5 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 1927 | 110.2mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 3:30:45 AM |
| 2 | 1936 | 110.7mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 3:35:48 AM |

Mean Area 1932
Mean Conc. 110.5mg/L




Sample

Sample Name: SI4013-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

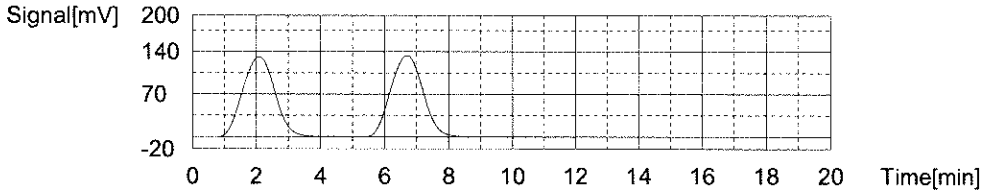
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 2.000 | NPOC:106.9 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 927.8 | 106.1mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 3:47:33 AM |
| 2 | 941.6 | 107.7mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 3:52:22 AM |

Mean Area 934.7
Mean Conc. 106.9mg/L




Sample

Sample Name: SI4013-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

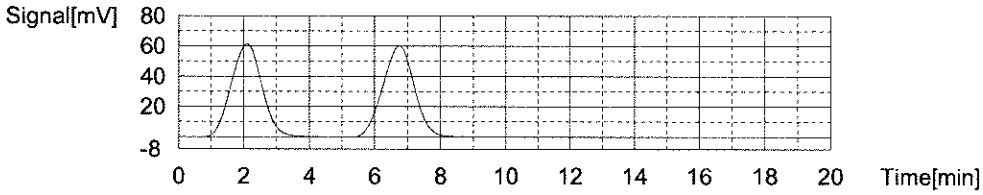
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Unknown | NPOC | 5.000 | NPOC:115.8 mg/L |

1. Det

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 404.3 | 115.6mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 4:04:02 AM |
| 2 | 405.4 | 115.9mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 4:08:45 AM |

Mean Area 404.9
Mean Conc. 115.8mg/L




Control Sample

Sample Name: CCV
Sample ID: <Untitled>
Method: CCVDOUBLEINJECTION.tpl
Chk. Result Control value: 103.4 / Control within range!

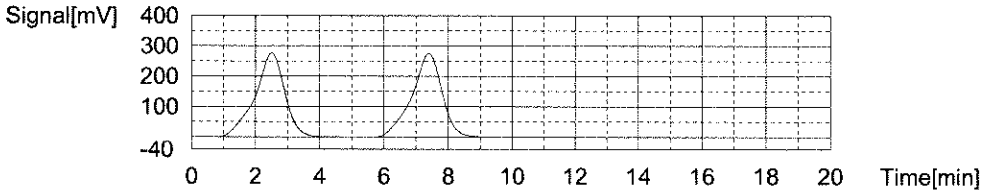
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Control | NPOC | 1.000 | NPOC:103.4 mg/L |

1. Det.

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 1800 | 102.9mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 4:21:02 AM |
| 2 | 1815 | 103.8mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 4:26:08 AM |

Mean Area 1808
Mean Conc. 103.4mg/L



Control Sample

Sample Name: BLANK
Sample ID: <Untitled>
Method: BLANKDOUBLEINJECTION.tpl
Chk. Result Control value: 0.000 / Control within range!

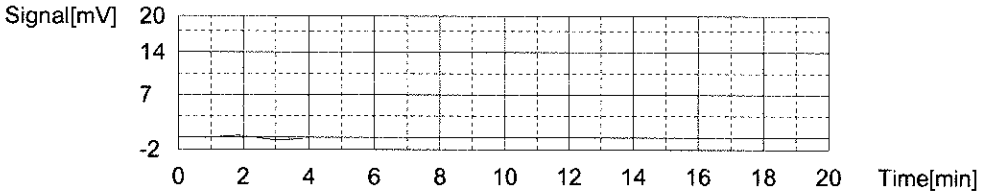
| Type | Anal. | Dil. | Result |
|---|---|---|---|
| Control | NPOC | 1.000 | NPOC:0.000 mg/L |

1. Det.

Anal.: NPOC

| No. | Area | Conc. | Inj. Vol. | Aut. Dil. | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.000 | 0.000mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 4:35:11 AM |
| 2 | 0.000 | 0.000mg/L | 150uL | 1 | | toc aq cal 051415.2015_05_14_09_23_05.cal | 6/12/2015 4:37:17 AM |

Mean Area 0.000
Mean Conc. 0.000mg/L



Instr.Information

| | |
|---|---|
| System | TOC-Vcph / ASI-V |
| Detector | Combustion |
| Catalyst | Regular Sensitivity |
| Cell Length | long |

Cal. Curve

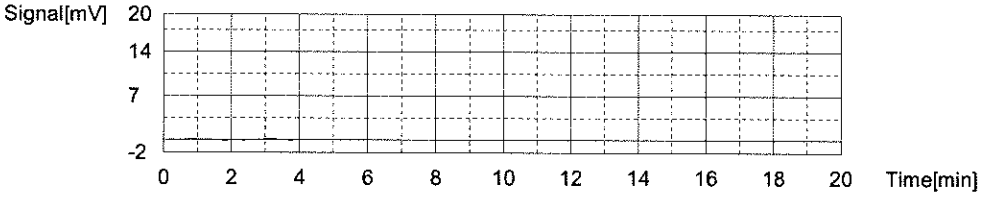
| | |
|---|---|
| Sample Name: | Untitled |
| Sample ID: | Untitled |
| Cal. Curve: | toc aq cal 051415.2015_05_14_09_23_05.cal |

| Type | Anal. |
|---|---|
| Standard | NPOC |

Conc: 0.000mg/L

| No. | Area | Inj. Vol. | Aut. Dil. | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|
| 1 | 0.000 | 150uL | 1 | ******* | | 5/14/2015 9:32:10 AM |
| 2 | 0.000 | 150uL | 1 | ******* | | 5/14/2015 9:36:41 AM |

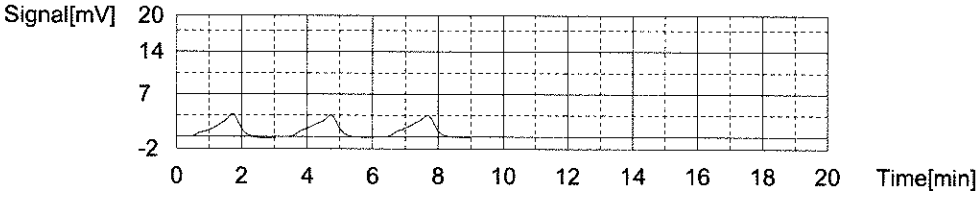
| | |
|---|---|
| Acid Add. | 1.500% |
| Sp. Time | 90.00sec |
| Mean Area | 0.000 |




Conc: 1.000mg/L

| No. | Area | Inj. Vol. | Aut. Dil. | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|
| 1 | 18.32 | 150uL | 1 | ******* | E | 5/14/2015 9:46:51 AM |
| 2 | 17.74 | 150uL | 1 | ******* | | 5/14/2015 9:52:26 AM |
| 3 | 17.68 | 150uL | 1 | ******* | | 5/14/2015 9:58:00 AM |

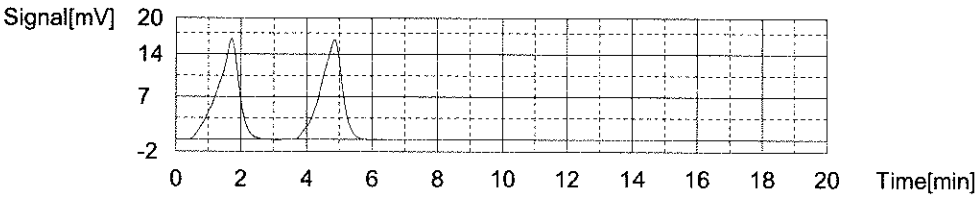
| | |
|---|---|
| Acid Add. | 1.500% |
| Sp. Time | 90.00sec |
| Mean Area | 17.71 |




Conc: 5.000mg/L

| No. | Area | Inj. Vol. | Aut. Dil. | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|
| 1 | 76.23 | 150uL | 1 | ******* | | 5/14/2015 10:08:28 AM |
| 2 | 76.06 | 150uL | 1 | ******* | | 5/14/2015 10:14:15 AM |

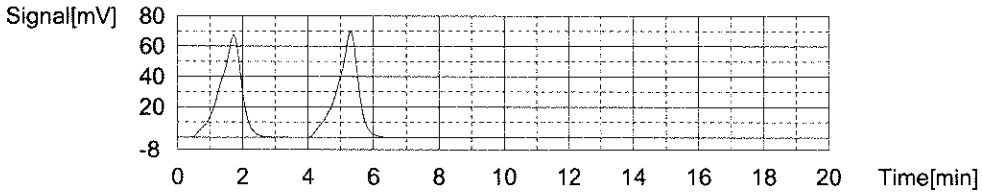
| | |
|---|---|
| Acid Add. | 1.500% |
| Sp. Time | 90.00sec |
| Mean Area | 76.15 |




Conc: 20.00mg/L

| No. | Area | Inj. Vol. | Aut. Dil. | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|
| 1 | 308.1 | 150uL | 1 | ******* | | 5/14/2015 10:25:13 AM |
| 2 | 307.0 | 150uL | 1 | ******* | | 5/14/2015 10:31:16 AM |

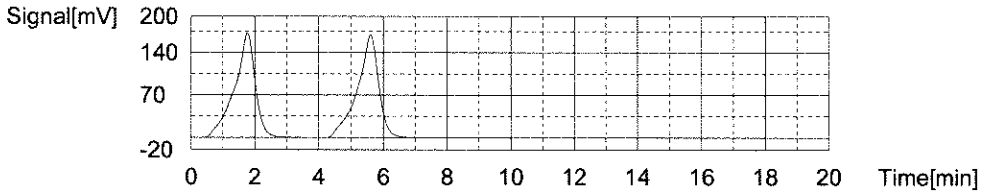
Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 307.6




Conc: 50.00mg/L

| No. | Area | Inj. Vol. | Aut. Dil. | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|
| 1 | 784.4 | 150uL | 1 | ******* | | 5/14/2015 10:42:22 AM |
| 2 | 782.8 | 150uL | 1 | ******* | | 5/14/2015 10:48:46 AM |

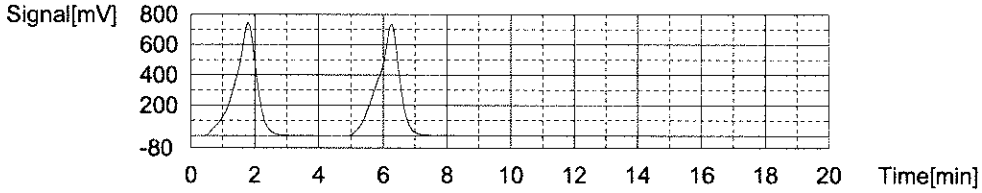
Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 783.6



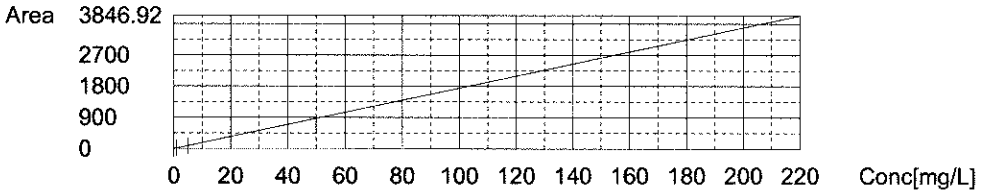

Conc: 200.0mg/L

| No. | Area | Inj. Vol. | Aut. Dil. | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|
| 1 | 3491 | 150uL | 1 | ******* | | 5/14/2015 11:00:30 AM |
| 2 | 3488 | 150uL | 1 | ******* | | 5/14/2015 11:07:37 AM |

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 3490




Slope: 17.49
Intercept 0.000
r^2 0.999312



WET CHEMISTRY BATCH REPORT
Jun 30 2015, 12:45 pm
Batch: WG164900

Parameter: TOC In Soil

Date Analyzed: 16-JUN-15

Analyst Initials: JS

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

| Sample | Samp Type | Method | Initial Amt. | Final Amt. | Rpt. DF | Result | Rpt Result | TS(%) | PQL | MDL | Adj PQL | RPD | %Rec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SI3945-2 | SAMP | SW846 9060A | 506.7mg | 200.00ug | 1 | 7386.98317 | 7400 ug/gdrywt | 76. | 400 | 110 | 520 | | |
| SI4107-7 | SAMP | SW846 9060A | 508.8mg | 200.00ug | 1 | 860.11129 | 860 ug/gdrywt | 85. | 400 | 98. | 460 | | |
| SI4107-8 | SAMP | SW846 9060A | 509.4mg | 200.00ug | 1 | 1248.15319 | 1200 ug/gdrywt | 84. | 400 | 99. | 470 | | |
| WG164900-1 | MBLANK | SW846 9060A | 500mg | 200.00ug | 1 | 0 | U300 ug/gdrywt | NA | 400 | 85. | 400 | | |
| WG164900-2 | LCS | SW846 9060A | 40mg | 200.00ug | 1 | 349900 | 350000 ug/gdrywt | NA | 400 | 85. | 400 | | 87 |
| WG164900-3 | DUP | SW846 9060A | 511.6mg | 200.00ug | 1 | 857.9408 | 860 ug/gdrywt | NA | 400 | 100 | 470 | 0 | |
| WG164900-4 | MS | SW846 9060A | 504.2mg | 200.00ug | 1 | 10294.28152 | 10000 ug/gdrywt | NA | 400 | 100 | 470 | | 101 |
| WG164900-5 | MSD | SW846 9060A | 507.9mg | 200.00ug | 1 | 10258.78131 | 10000 ug/gdrywt | NA | 400 | 100 | 470 | 0 | 101 |

Comments:

| | |
|---|---|
| SI3945-2 | RE119D1-060315-733-735 |
| SI4107-7 | MS/MSD; VPB157-SOIL-061015-823-825 |
| SI4107-8 | VPB157-SOIL-D-061015 |
| WG164900-1 | SI4107-7 |
| WG164900-2 | SI4107-7 |
| WG164900-3 | SI4107-7 |
| WG164900-4 | SI4107-7 |
| WG164900-5 | SI4107-7 |

Entered by: CLB Date: 6-30-15 Accepted by: RKO Date: 6/30/15

WET CHEMISTRY BATCH REPORT
Jun 23 2015, 11:37 am
Batch: WG164900

Parameter: TOC In Soil

Date Analyzed: 16-JUN-15

Analyst Initials: JS

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

| Sample | Samp Type | Method | Initial Amt. | Final Amt. | Rpt. DF | Result | Rpt Result | TS(%) | PQL | MDL | Adj PQL | RPD | %Rec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SI3945-2 | SAMP | SW846 9060A | 506.7mg | 200.00ug | 1 | 7386.98317 | 7400 ug/gdrywt | 76. | 400 | 110 | 520 | | |
| SI4107-7 | SAMP | SW846 9060A | 508.8mg | 200.00ug | 1 | | ug/gdrywt | NA | 400 | 84.768 | 400 | | |
| SI4107-8 | SAMP | SW846 9060A | 509.4mg | 200.00ug | 1 | | ug/gdrywt | NA | 400 | 84.768 | 400 | | |
| WG164900-1 | MBLANK | SW846 9060A | 500mg | 200.00ug | 1 | 0 | U300 ug/gdrywt | NA | 400 | 85. | 400 | | |
| WG164900-2 | LCS | SW846 9060A | 40mg | 200.00ug | 1 | 349900 | 350000 ug/gdrywt | NA | 400 | 85. | 400 | | 87 |
| WG164900-3 | DUP | SW846 9060A | 511.6mg | 200.00ug | 1 | | ug/gdrywt | NA | 400 | 84.768 | 400 | | |
| WG164900-4 | MS | SW846 9060A | 504.2mg | 200.00ug | 1 | | ug/gdrywt | NA | 400 | 84.768 | 400 | | |
| WG164900-5 | MSD | SW846 9060A | 507.9mg | 200.00ug | 1 | | ug/gdrywt | NA | 400 | 84.768 | 400 | | |

Comments:

| | |
|---|---|
| SI3945-2 | RE119D1-060315-733-735 |
| SI4107-7 | MS/MSD; VPB157-SOIL-061015-823-825 |
| SI4107-8 | VPB157-SOIL-D-061015 |
| WG164900-1 | SI4107-7 |
| WG164900-2 | SI4107-7 |
| WG164900-3 | SI4107-7 |
| WG164900-4 | SI4107-7 |
| WG164900-5 | SI4107-7 |

Entered by: CLB Date: 6-23-15 Accepted by: ✓ partial D. Nadeau Date: 6-25-15

WET CHEMISTRY BATCH REPORT
Jun 23 2015, 11:37 am
Batch: WG164901

Parameter: Carbon, Percent

Date Analyzed: 16-JUN-15

Analyst Initials: JS

Prep Date: N/A

Prep Method: N/A

Prep Chemist: N/A

| Sample | Samp Type | Method | Initial Amt. | Final Amt. | Rpt. DF | Result | Rpt Result | TS(%) | PQL | MDL | Adj PQL | RPD | %Rec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SI4087-1 | SAMP | SW846 9060A | 101.7mg | 0.10000g | 1 | 10984 | 43. % | 25. | .1 | 0.10 | 0.40 | | |
| WG164901-1 | MBLANK | SW846 9060A | 500mg | 0.10000g | 1 | 0 | U0.10 % | NA | .1 | 0.025 | 0.10 | | |
| WG164901-2 | LCS | SW846 9060A | 40mg | 0.10000g | 1 | 13996 | 35. % | NA | .1 | 0.025 | 0.10 | | 87 |

Comments:

WG164901-1 SI4087-1
WG164901-2 SI4087-1

Entered by: CB Date: 6-23-15 Accepted by: D Kadeau Date: 6-25-15

| | Sample Name | Dilution | Result | Comment | Date / Time |
|---|---|---|---|---|---|
| 1 | CCV | 1.000 | SSM-TC:15111 ug | 94.4% | 6/16/2015 8:54:16 AM |
| 2 | CCB | 1.000 | SSM-TC:0.000 ug | | 6/16/2015 9:02:26 AM |
| 3 | LCS | 1.000 | SSM-TC:13996 ug | | 6/16/2015 9:13:34 AM |
| 4 | SI4107-7 | 1.000 | SSM-TC:370.9 ug | | 6/16/2015 9:25:18 AM |
| 5 | SI4107-7 D | 1.000 | SSM-TC:372.0 ug | | 6/16/2015 9:34:18 AM |
| 6 | SI4107-7 MS | 1.000 | SSM-TC:4399 ug | | 6/16/2015 9:42:39 AM |
| 7 | SI4107-7 MSD | 1.000 | SSM-TC:4416 ug | | 6/16/2015 9:51:53 AM |
| 8 | SI4107-8 | 1.000 | SSM-TC:533.8 ug | | 6/16/2015 10:01:52 AM |
| 9 | SI4087-1 | 1.000 | SSM-TC:10984 ug | | 6/16/2015 10:11:06 AM |
| 10 | SI3945-2 | 1.000 | SSM-TC:2841 ug | | 6/16/2015 10:46:41 AM |
| 11 | CCV | 1.000 | SSM-TC:15071 ug | 94.2% | 6/16/2015 10:55:19 AM |
| 12 | CCB | 1.000 | SSM-TC:0.000 ug | | 6/16/2015 11:01:08 AM |
| 13 | | | | | |
| 14 | | | | | |
| 15 | | | | | |
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| 42 | | | | | |

Katahdin Analytical Services, Inc.

# Carbon Analysis of Solid Samples - Shimadzu TOC-$V_{CPH}$ / SSM-5000A

**Analysis Type and Method (Check One)**

✓ Total Carbon (SW846 9060M) ____ Total Inorganic Carbon (SW846 9060M)

____ Total Organic Carbon (SW846 9060) ✓ Other (Specify): % Carbon

____ Total Organic Carbon (Lloyd Kahn) WG164900 R321642 WG164901 R321643

| Spiking Information | | |
|---|---|---|
| LCS Spike Source ID / Compound: | W13071 | TV:16000 |
| CCV Spike Source ID / Compound: | W13070 | ⊥ |
| MS Spike Source ID / Compound: | ⊥ | TV:4000 |

| Calibration Information | |
|---|---|
| Calibration Date: | 5.13.15 |
| Calibration Analyst: | JS |

| KATAHDIN Sample Number | Sample Wt. (mg) | Sample Type * (Circle One) | % Recovery ~~Spike Added (mg)~~ |
|---|---|---|---|
| CCV | | Wet (Dry) | 94.4% |
| CCB | | Wet Dry | |
| LCS | | Wet (Dry) | 87.4% |
| SI4107-7 | 508.8 | Wet (Dry) | |
| -7 Dup | 511.6 | Wet (Dry) | |
| -7 MS | 504.2 | Wet (Dry) | |
| -7 MSD | 507.9 | Wet (Dry) | |
| -8 | 509.4 | Wet (Dry) | |
| SI4087-1 | 101.7 | Wet (Dry) | |
| SI3945-2 | 506.7 | Wet (Dry) | |
| CCV | | Wet (Dry) | 94.2% |
| CCB | | Wet Dry | |
| | | Wet Dry | |
| | | Wet Dry | |
| | | Wet Dry | |
| | | Wet Dry | |
| | | Wet Dry | |
| | | Wet Dry | |
| | | Wet Dry | |
| | | Wet Dry | |
| | | Wet Dry | |
| | JS 6.16.15 | Wet Dry | |

* "Wet" = field-moist sample (as received). "Dry" = oven-dried sample.

| | | | |
|---|---|---|---|
| Analyst: | JS | Analysis Date: | 6.16.15 |
| Reviewer: | DL | Review Date: | 6.25.15 |

| Test Number | Sample ID | Boat ID | Weight (mg) | Result (ug) | % Rec/RPD |
|---|---|---|---|---|---|
| | CCV | ******* | 40 | 15111 | 94.4 |
| | CCB | ******* | 0 | 0 | |
| 1 | LCS | ******* | 40 | 13996 | 87.5 |
| 2 | LCSD | ******* | 40 | | 0.0 |
| 2 | SI4107-7 | 1 | 508.8 | 370.9 | |
| 3 | SI4107-7 D | 2 | 511.6 | 372 | 0.3 |
| 4 | SI4107-7 MS | 3 | 504.2 | 4399 | 100.7 |
| 5 | SI4107-7 MSD | 4 | 507.9 | 4416 | 101.1 |
| 6 | SI4107-8 | 5 | 509.4 | 533.8 | |
| 7 | SI4087-1 | 6 | 101.7 | 10984 | |
| 8 | SI3945-2 | 7 | 506.7 | 2841 | |
| | CCV | ******* | 40 | 15071 | 94.2 |
| | CCB | ******* | 0 | | |

| METHOD | | |
|---|---|---|
| SW846 9060A | Lloyd Kahn | |
| SW9060 %C | Lloyd Kahn AVG | |
| | Lloyd Kahn POC | |

| QC Requirements | | | |
|---|---|---|---|
| | % Recovery | | |
| | SW9060 | Lloyd Kahn | Black Carbon |
| CCV | 80-120 | | 85-115 |
| LCS | 80-120 | | |
| MS | 75-125 | | |
| DUP RPD | ≤30 | | |
| NUTRIENTS | | | |
| Blanks | | | < 0.05 ppm |

| Comments | Nutrients in Soil Cert. |
|---|---|
| %C SI4087-1 | 13.7801536065 |
| SW9060 SI4107-7,8/3945-2 | 13.7453794094 |

| MS/MSD RPD | RPD |
|---|---|
| | 0.386 |



Katahdin Analytical Services 000071

Instr.Information

| | |
|---|---|
| System | SSM-5000A |
| Detector | Combustion |
| Catalyst | Regular Sensitivity |
| Cell Length | short |

Sample

| | |
|---|---|
| Sample Name: | CCV |
| Sample ID: | <Untitled> |
| Origin: | tc method SOILS.met |
| Chk. Result | |

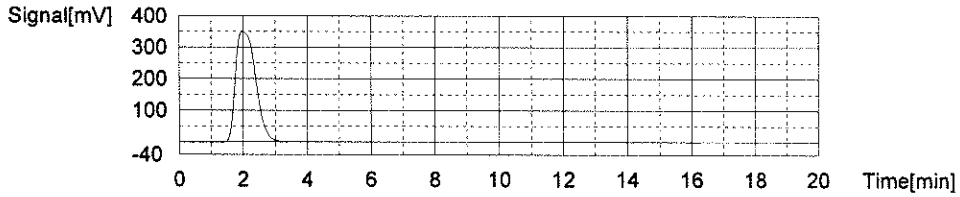
| Type | Anal. | Dil. | Density | Result |
|---|---|---|---|---|
| Unknown | SSM-TC | 1.000 | 1.000mg/uL | SSM-TC:15111 ug |

1. Det

Anal.: SSM-TC

| No. | Area | CNV | Abs C | Conc. | Weight | Volume | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1505 | 1505 | 15111ug | 15111ug | 40.00mg | 40uL | | toc sl cal 051315.2015_05_13_09_28_03.cal | 6/16/2015 8:54:16 AM |

| | |
|---|---|
| Mean Area | 1505 |
| Mean CNV | 1505 |
| Mean Conc. | 15111ug |




Sample

| | |
|---|---|
| Sample Name: | CCB |
| Sample ID: | <Untitled> |
| Origin: | tc method SOILS.met |
| Chk. Result | |

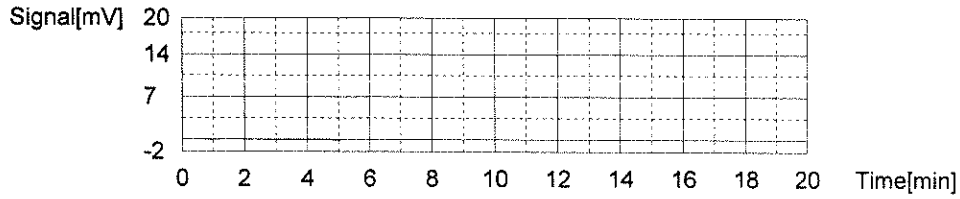
| Type | Anal. | Dil. | Density | Result |
|---|---|---|---|---|
| Unknown | SSM-TC | 1.000 | 1.000mg/uL | SSM-TC:0.000 ug |

1. Det

Anal.: SSM-TC

| No. | Area | CNV | Abs C | Conc. | Weight | Volume | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.000 | 0.000 | 0.000ug | 0.000ug | 500.0mg | 500uL | | toc sl cal 051315.2015_05_13_09_28_03.cal | 6/16/2015 9:02:26 AM |

| | |
|---|---|
| Mean Area | 0.000 |
| Mean CNV | 0.000 |
| Mean Conc. | 0.000ug |



Sample

Sample Name: LCS
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

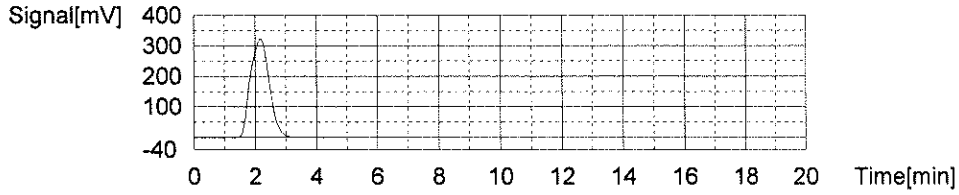
| Type | Anal. | Dil. | Density | Result |
|---|---|---|---|---|
| Unknown | SSM-TC | 1.000 | 1.000mg/uL | SSM-TC:13996 ug |

1. Det

Anal.: SSM-TC

| No. | Area | CNV | Abs C | Conc. | Weight | Volume | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1394 | 1394 | 13996ug | 13996ug | 40.00mg | 40uL | | toc sl cal 051315.2015_05_13_09_28_03.cal | 6/16/2015 9:13:34 AM |

Mean Area 1394
Mean CNV 1394
Mean Conc. 13996ug




Sample

Sample Name: SI4107-7
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

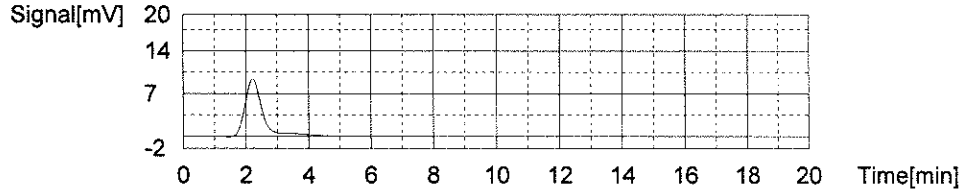
| Type | Anal. | Dil. | Density | Result |
|---|---|---|---|---|
| Unknown | SSM-TC | 1.000 | 1.000mg/uL | SSM-TC:370.9 ug |

1. Det

Anal.: SSM-TC

| No. | Area | CNV | Abs C | Conc. | Weight | Volume | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 36.94 | 36.94 | 370.9ug | 370.9ug | 508.8mg | 508uL | | toc sl cal 051315.2015_05_13_09_28_03.cal | 6/16/2015 9:25:18 AM |

Mean Area 36.94
Mean CNV 36.94
Mean Conc. 370.9ug




Sample

Sample Name: SI4107-7 D
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

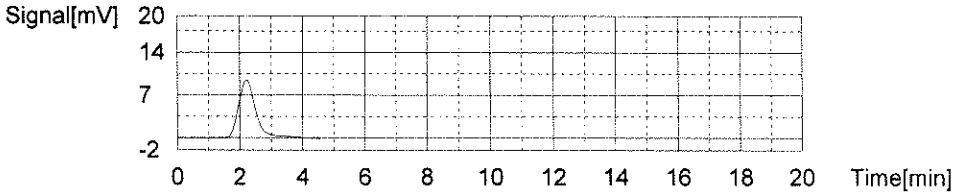
| Type | Anal. | Dil. | Density | Result |
|---|---|---|---|---|
| Unknown | SSM-TC | 1.000 | 1.000mg/uL | SSM-TC:372.0 ug |

1. Det

Anal.: SSM-TC

| No. | Area | CNV | Abs C | Conc. | Weight | Volume | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 37.05 | 37.05 | 372.0ug | 372.0ug | 511.6mg | 511uL | | toc sl cal 051315.2015_05_13_09_28_03.cal | 6/16/2015 9:34:18 AM |

Mean Area 37.05
Mean CNV 37.05
Mean Conc. 372.0ug




Sample

Sample Name: SI4107-7 MS
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

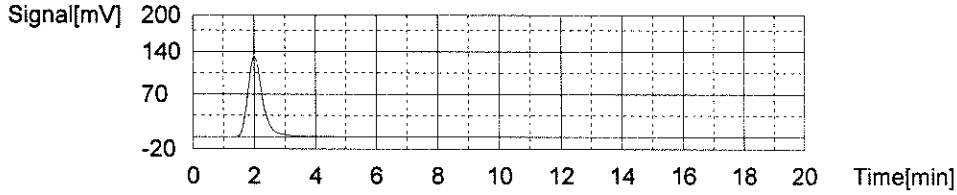
| Type | Anal. | Dil. | Density | Result |
|---|---|---|---|---|
| Unknown | SSM-TC | 1.000 | 1.000mg/uL | SSM-TC:4399 ug |

1. Det

Anal.: SSM-TC

| No. | Area | CNV | Abs C | Conc. | Weight | Volume | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 438.1 | 438.1 | 4399ug | 4399ug | 504.2mg | 504uL | | toc sl cal 051315.2015_05_13_09_28_03.cal | 6/16/2015 9:42:39 AM |

Mean Area 438.1
Mean CNV 438.1
Mean Conc. 4399ug




Sample

Sample Name: SI4107-7 MSD
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

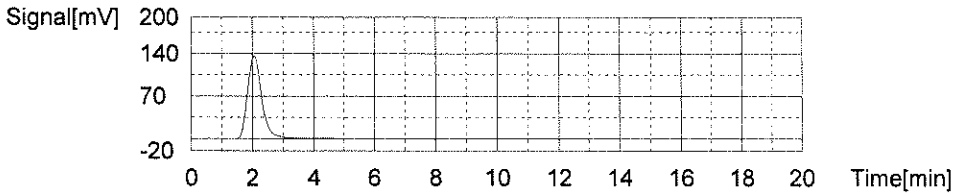
| Type | Anal. | Dil. | Density | Result |
|---|---|---|---|---|
| Unknown | SSM-TC | 1.000 | 1.000mg/uL | SSM-TC:4416 ug |

1. Det

Anal.: SSM-TC

| No. | Area | CNV | Abs C | Conc. | Weight | Volume | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 439.8 | 439.8 | 4416ug | 4416ug | 507.9mg | 507uL | | toc sl cal 051315.2015_05_13_09_28_03.cal | 6/16/2015 9:51:53 AM |

Mean Area 439.8
Mean CNV 439.8
Mean Conc. 4416ug




Sample

Sample Name: SI4107-8
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

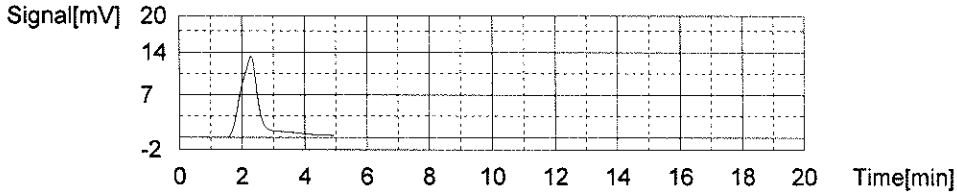
| Type | Anal. | Dil. | Density | Result |
|---|---|---|---|---|
| Unknown | SSM-TC | 1.000 | 1.000mg/uL | SSM-TC:533.8 ug |

1. Det

Anal.: SSM-TC

| No. | Area | CNV | Abs C | Conc. | Weight | Volume | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 53.17 | 53.17 | 533.8ug | 533.8ug | 509.4mg | 509uL | | toc sl cal 051315.2015_05_13_09_28_03.cal | 6/16/2015 10:01:52 AM |

Mean Area 53.17
Mean CNV 53.17
Mean Conc. 533.8ug




Sample

Sample Name: SI4087-1
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

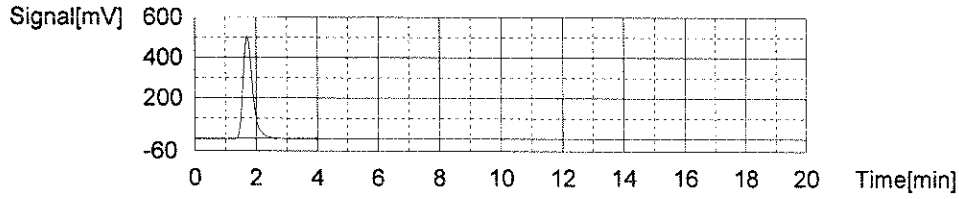
| Type | Anal. | Dil. | Density | Result |
|---|---|---|---|---|
| Unknown | SSM-TC | 1.000 | 1.000mg/uL | SSM-TC:10984 ug |

1. Det

Anal.: SSM-TC

| No. | Area | CNV | Abs C | Conc. | Weight | Volume | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1094 | 1094 | 10984ug | 10984ug | 101.7mg | 101uL | | toc sl cal 051315.2015_05_13_09_28_03.cal | 6/16/2015 10:11:06 AM |

Mean Area 1094
Mean CNV 1094
Mean Conc. 10984ug



Sample

Sample Name: SI3945-2
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

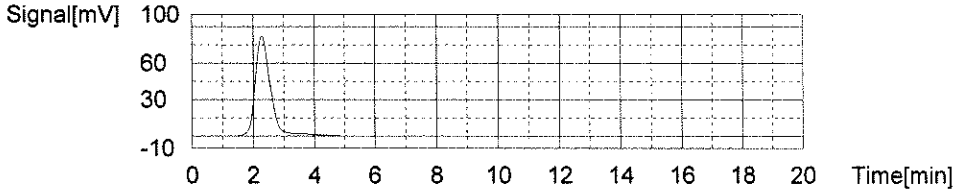
| Type | Anal. | Dil. | Density | Result |
|---|---|---|---|---|
| Unknown | SSM-TC | 1.000 | 1.000mg/uL | SSM-TC:2841 ug |

1. Det

Anal.: SSM-TC

| No. | Area | CNV | Abs C | Conc. | Weight | Volume | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 283.0 | 283.0 | 2841ug | 2841ug | 506.7mg | 506uL | | toc sl cal 051315.2015_05_13_09_28_03.cal | 6/16/2015 10:46:41 AM |

Mean Area 283.0
Mean CNV 283.0
Mean Conc. 2841ug




Sample

Sample Name: CCV
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

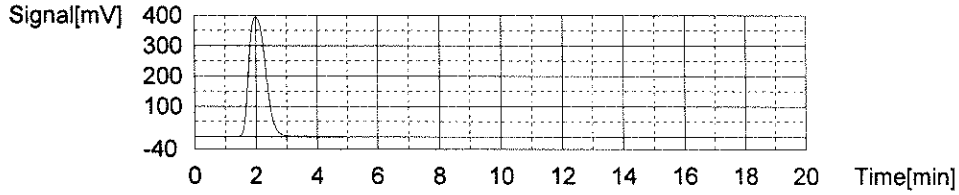
| Type | Anal. | Dil. | Density | Result |
|---|---|---|---|---|
| Unknown | SSM-TC | 1.000 | 1.000mg/uL | SSM-TC:15071 ug |

1. Det

Anal.: SSM-TC

| No. | Area | CNV | Abs C | Conc. | Weight | Volume | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1501 | 1501 | 15071ug | 15071ug | 40.00mg | 40uL | | toc sl cal 051315.2015_05_13_09_28_03.cal | 6/16/2015 10:55:19 AM |

Mean Area 1501
Mean CNV 1501
Mean Conc. 15071ug




Sample

Sample Name: CCB
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

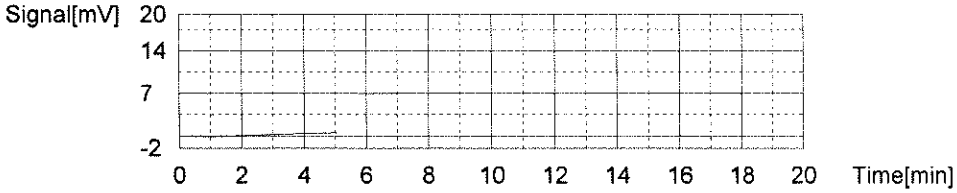
| Type | Anal. | Dil. | Density | Result |
|---|---|---|---|---|
| Unknown | SSM-TC | 1.000 | 1.000mg/uL | SSM-TC:0.000 ug |

1. Det

Anal.: SSM-TC

| No. | Area | CNV | Abs C | Conc. | Weight | Volume | Ex. | Cal. Curve | Date / Time |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.000 | 0.000 | 0.000ug | 0.000ug | 500.0mg | 500uL | | toc sl cal 051315.2015_05_13_09_28_03.cal | 6/16/2015 11:01:08 AM |

| | |
|---|---|
| Mean Area | 0.000 |
| Mean CNV | 0.000 |
| Mean Conc. | 0.000ug |



Instr.Information

| | |
|---|---|
| System | SSM-5000A |
| Detector | Combustion |
| Catalyst | Regular Sensitivity |
| Cell Length | short |

Cal. Curve

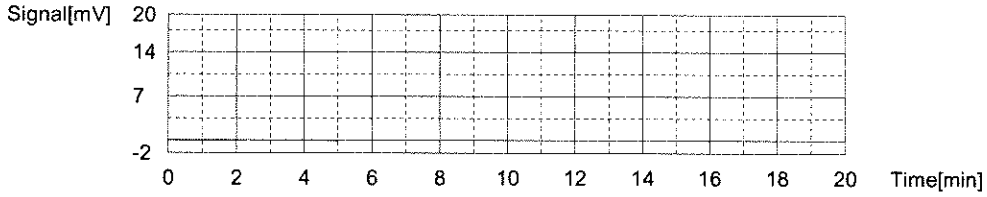
| | |
|---|---|
| Sample Name: | Untitled |
| Sample ID: | Untitled |
| Cal. Curve: | toc sl cal 051315.2015_05_13_09_28_03.cal |

| Type | Anal. | Density |
|---|---|---|
| Standard | SSM-TC | |

AbsC: 0.000ug

| No. | Area | CNV | Abs C | Weight | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 0.000 | 0.000 | 0.000ug | 0.000mg | ******* | | 5/13/2015 9:39:28 AM |

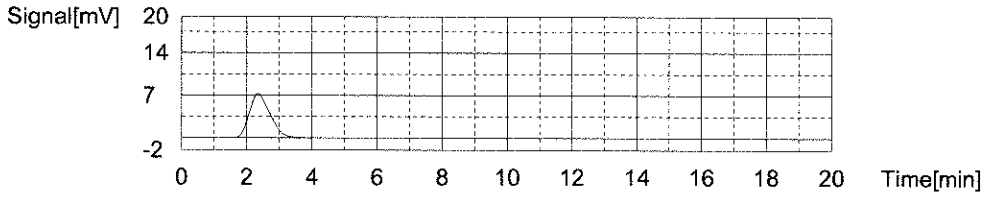
Mean Area 0.000
Mean CNV 0.000




AbsC: 200.0ug

| No. | Area | CNV | Abs C | Weight | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 31.54 | 31.54 | 200.0ug | 0.5000mg | ******* | | 5/13/2015 9:47:26 AM |

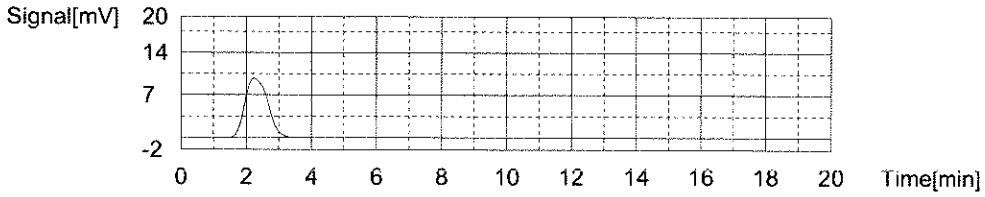
Mean Area 31.54
Mean CNV 31.54




AbsC: 400.0ug

| No. | Area | CNV | Abs C | Weight | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 47.46 | 47.46 | 400.0ug | 1.000mg | ******* | | 5/13/2015 9:55:11 AM |

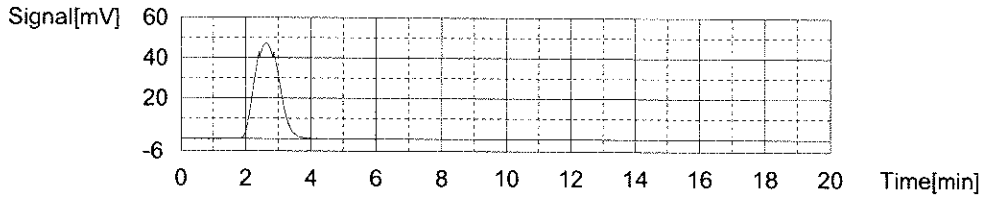
Mean Area 47.46
Mean CNV 47.46




AbsC: 2000ug

| No. | Area | CNV | Abs C | Weight | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 250.5 | 250.5 | 2000ug | 5.000mg | ******* | | 5/13/2015 10:05:02 AM |

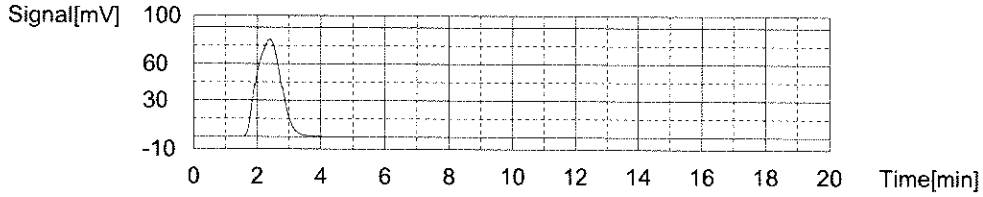
Mean Area 250.5
Mean CNV 250.5




AbsC: 4000ug

| No. | Area | CNV | Abs C | Weight | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 426.7 | 426.7 | 4000ug | 10.00mg | ******* | | 5/13/2015 10:14:22 AM |

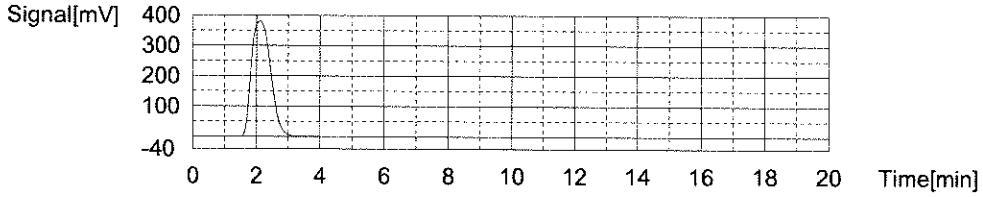
Mean Area 426.7
Mean CNV 426.7




AbsC: 16000ug

| No. | Area | CNV | Abs C | Weight | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 1602 | 1602 | 16000ug | 40.00mg | ******* | | 5/13/2015 10:23:53 AM |

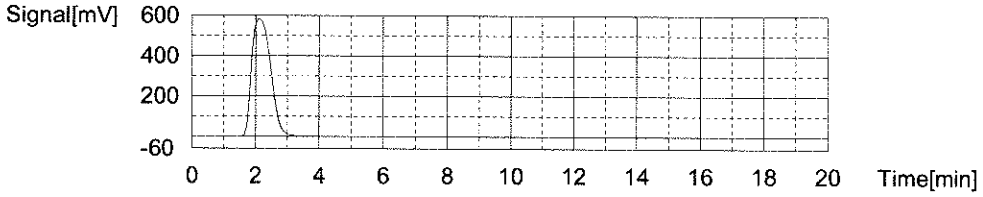
Mean Area 1602
Mean CNV 1602

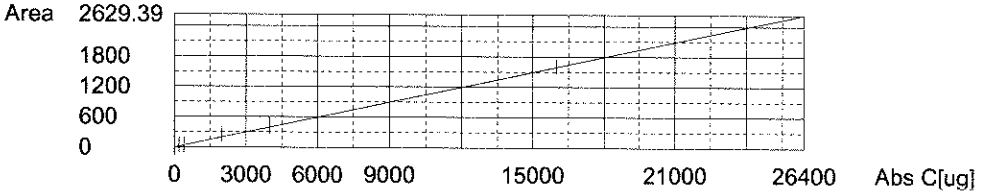



AbsC: 24000ug

| No. | Area | CNV | Abs C | Weight | Rem. | Ex. | Date / Time |
|---|---|---|---|---|---|---|---|
| 1 | 2411 | 2411 | 24000ug | 60.00mg | ******* | | 5/13/2015 10:34:10 AM |

Mean Area 2411
Mean CNV 2411




Slope: 0.09960
Intercept 0.000
r^2 0.999668