N90845.AR.001889
NWIRP BETHPAGE
5090.3a

VALIDATED DATA PACKAGE, SI1453, NWIRP BETHPAGE NY
3/31/2015
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. SI1453 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)	NA	NA	✓	
4. Inventory Sheet (DC-2))	0000001	0000002	✓	
5. Traffic Report/Chain of Custody Record(s)	0000008	0000008	✓	
Inorganic Analysis				
6. Data Sheet (Form I-IN)	0000017	0000020	✓	
7. Initial & Continuing Calibration Verification (Form IIA-IN)	NA	NA	✓	
8. CRQL Standard(Form IIB-IN)	NA	NA	✓	
9. Blanks (Form III-IN)	0000011	0000013	✓	
10. ICP-AES Interference Check Sample (Form IVA-IN)	NA	NA	✓	
11. ICP-MS Interference Check Sample(Form IVB-IN)	NA	NA	✓	
12. Matrix Spike Sample Recovery(Form VA-IN)	0000016	0000016	✓	
13. Post-Digestion Spike Sample Recovery(Form VB-IN)	NA	NA	✓	
14. Duplicates (Form VI-IN)	0000015	0000015	✓	
15. Laboratory Control Sample(Form VII-IN)	0000014	0000014	✓	
16. ICP-AES and ICP-MS Serial Dilutions (Form VIII-IN)	NA	NA	✓	
17. Method Detection Limits (Annually) (Form IX-IN)	NA	NA	✓	
18. ICP-AES Interelement Correction Factors (Quarterly) (Form XA-IN)	NA	NA	✓	
19. ICP-AES Interelement Correction Factors (Quarterly) (Form XB-IN)	NA	NA	✓	
20. ICP-AES and ICP-MS Linear Ranges (Quarterly) (Form XI-IN)	NA	NA	✓	
21. Preparation Log (Form XII-IN)	NA	NA	✓	
22. Analysis Run Log (Form XIII-IN)	NA	NA	✓	

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	✓	
24. ICP-MS Internal Standards Relative Intensity Summary (Form XV-IN)	NA	NA	✓	
25. ICP-AES Raw Data	NA	NA	✓	
26. ICP-MS Raw Data	NA	NA	✓	
27. Mercury Raw Data	NA	NA	✓	
28. Cyanide Raw Data	NA	NA	✓	
29. Preparation Logs Raw Data (Wet Chemistry)	0000021	0000055	✓	
30. Percent Solids Determination Log	NA	NA	✓	
31. USEPA Shipping/Receiving Documents				
Airbill (No. of Shipments 1)	NA	NA	✓	
Sample Tags	NA	NA	✓	
Sample Log-In Sheet (Lab)	NA	NA	✓	
32. Misc. Shipping/Receiving Records (list all individual records)				
Telephone Logs	NA	NA	✓	
Sample Receipt Condition Report	0000007	0000007	✓	
	NA	NA	✓	
33. Internal Lab Sample Transfer Records & Tracking Sheets (describe or list)	NA	NA	✓	
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	✓	
Analysis Records	NA	NA	✓	
Description Duplicate Precision Form	NA	NA	✓	
35. Other Records (describe or list)	NA	NA	✓	
Telephone Communications Log				
DAS Specifications	NA	NA	✓	

36. Comments

Completed by:
(CLP Lab) [signature] Melanie Brown IDM 3-31-15
(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
SI1453

KATAHDIN ANALYTICAL SERVICES, INC.
600 TECHNOLOGY WAY
SCARBOROUGH, ME 04074

SAMPLE DATA PACKAGE

0000004

SDG NARRATIVE
KATAHDIN ANALYTICAL SERVICES
ENSAFE
NAVY CLEAN WE15-03-06 NWIRP BETHPAGE, NY
SI1453

Sample Receipt

The following samples were received on March 10, 2015 and were logged in under Katahdin Analytical Services work order number SI1453 for a hardcopy due date of March 27, 2015.

KATAHDIN Sample No.	AECOM Sample Identification
SI1453-1	RE117D2-SOIL-030915-788-790
SI1453-2	RE117D2-EB-030915

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.

One of the client IDs on the Chain of Custody exceeds the 19-character limit of the Katahdin Analytical Information Management System. Therefore, the first characters "RE117D2-" in the client ID for sample SI1453-1 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 SI1453 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
03.31.15

Leslie Dimond
Quality Assurance Officer

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

Client: AECOM	KAS PM: Jo	Sampled By: Client
Project:	KIMS Entry By: GM	Delivered By: FedEx
KAS Work Order#: SI1452/SI1453	KIMS Review By:	Received By: GM
SDG #: Cooler: 1 of 1		Date/Time Rec.: 3-10-15/10:15

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): 3.2
Samples received at <6 °C w/o freezing?	✓				Note: Not required for metals 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 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	✓			✓ GM	
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: NW IRP Bethpage | PO No.: | Project No. 60216526 Phase F16

Site Location: RE117D2

CTO No.: | RC Project Manager: Brian Caldwell

Sampler/Site Phone#: Vincent Varricchio /(516) 680-1201

Lab Name: Katahdin | Turnaround Time(specify):

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

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											Extra Volume for MS/MSD	HOLD
								(3)→		SA										
	SI1453																			
	RE117D2-Soil-030915-788-790		03/09/15	945	SO	N	N	1	1											
	RE117D2-EB-030915		03/09/15	1315	WQ	EB	N	3		3										

Field **Comments:**

Lab **Comments:**

Sample Shipment and Delivery Details

Number of coolers in shipment: 1

Relinquished by (signature)	Date	Time	Received by (signature)	Date	Time
1	3/9/15	1315	1	030915	1315
2	030915	1345	2		
3			3	3-10-15	10:25

Samples Iced?(check) Yes X No____

Method of Shipment: FedEx

Airbill No:

Date Shipped: 3/9/15

(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 (lno1)

Mar. 10, 2015
02:28 PM

Login Number: SI1453

Account: ENSAFE001
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

NoWeb

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	:	3.2
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 CD only to Dana. Upload to Dropbox. 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
SI1453-1	SOIL-030915-788-790	09-MAR-15 09:45	10-MAR-15			27-MAR-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Solid	S	SW9060M-TOC	06-APR-15	4oz Glass		RE117D2-SOIL-030915-788-790
Solid	S	TS	08-APR-15	4oz Glass		

Laboratory Sample ID	Client Sample Number	Collect Date/Time	Receive Date	PR	Verbal Date	Due Date	Mailed
SI1453-2	RE117D2-EB-030915	09-MAR-15 13:15	10-MAR-15			27-MAR-15	

Matrix		Product	Hold Date (shortest)	Bottle Type	Bottle Count	Comments
Aqueous	S	SM5310B-TOC	06-APR-15	40 mL Vial+H2SO4		

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

03.10.15

0000009

Katahdin Analytical Services, Inc.

Container Transfer History for SI1453

Samplenum SI1453-1

Container Id SI1453-1A **Containertype** **4oz Glass** **Matrix SL**

Product *TS, SW9060M-TOC*

Transferdate	From	To	Analyst	Custody Break	Comments
10-MAR-15 14:11	LOGIN	WALK-IN	GNICKERSON	N	
11-MAR-15 11:36	WALK-IN	WET CHEMISTRY	AZAZZARA	N	
12-MAR-15 10:17	WET CHEMISTRY	WALK-IN	AZAZZARA	N	
12-MAR-15 12:12	WALK-IN	WET CHEMISTRY	JSTEWART	N	
12-MAR-15 15:58	WET CHEMISTRY	WALK-IN	JSTEWART	N	

Samplenum SI1453-2

Container Id SI1453-2D **Containertype** **40 mL Vial+H2SO4** **Matrix AQ**

Product *SM5310B-TOC*

Transferdate	From	To	Analyst	Custody Break	Comments
10-MAR-15 14:11	LOGIN	WALK-IN	GNICKERSON	N	
18-MAR-15 15:18	WALK-IN	WET CHEMISTRY	JSTEWART	N	
23-MAR-15 13:30	WET CHEMISTRY	WALK-IN	JSTEWART	N	

Container Id SI1453-2E **Containertype** **40 mL Vial+H2SO4** **Matrix AQ**

Product *SM5310B-TOC*

Transferdate	From	To	Analyst	Custody Break	Comments
10-MAR-15 14:11	LOGIN	WALK-IN	GNICKERSON	N	

Container Id SI1453-2F **Containertype** **40 mL Vial+H2SO4** **Matrix AQ**

Product *SM5310B-TOC*

Transferdate	From	To	Analyst	Custody Break	Comments
10-MAR-15 14:11	LOGIN	WALK-IN	GNICKERSON	N	

000010

CONVENTIONAL AND PHYSICAL ANALYTICAL DATA

QC Summary Section

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
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	WG159565	SW846 9060A Mod.	12-MAR-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	WG159928	SM5310B	18-MAR-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	WG159478	SM2540	12-MAR-15	11-MAR-15	U 1 %	1 %	N/A

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
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
WG159565-2	LCS	WG159565	12-MAR-15	N/A	ug/gdrywt	400000.000	370000	92	80-120	

Total Organic Carbon

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG159928-2	LCS	WG159928	18-MAR-15	N/A	mg/L	50	41.	82	80-120	

Total Solids

Lab Sample Id	Samp Type	QC Batch	Analysis Date	Prep Date	Units	Spike Amt.	Result	Recovery	Acceptance Range	RPD
WG159478-2	LCS	WG159478	12-MAR-15	11-MAR-15	%	90	90.	100	90-110	

Katahdin
ANALYTICAL SERVICES

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Cert No E87604

Quality Control Report

Duplicate Sample Summary Report

TOC In Soil

Duplicate Sample ID	Original Sample ID	QC Batch	Analysis Date	Result Units	Sample Result	Duplicate Result	RPD(%)	RPD Limit
WG159565-3	SI1453-1	WG159565	12-MAR-15	ug/gdrywt	U 350	U 360	NC	30

Katahdin
ANALYTICAL SERVICES

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Quality Control Report

Matrix Spike Sample Summary Report

TOC In Soil

Matrix Spike Sample ID	Sample Type	Original Sample ID	QC Batch	Analysis Date	Result Units	Spike Amount	Sample Result	MS Result	Recovery (%)	Recovery Limit
WG159565-4	MS	SI1453-1	WG159565	12-MAR-15	ug/gdrywt	9368.15	U 460	9800	104	75 - 125

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

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Report of Analytical Results

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

Lab Sample ID: SI1453-1
Report Date: 30-MAR-15
Client PO: 16518
Project: Navy Clean WE15-03-0
SDG: SI1453

Sample Description	Matrix	Date Sampled	Date Received
SOIL-030915-788-790	SL	09-MAR-15 09:45:00	10-MAR-15

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
TOC In Soil	U350 ug/gdrywt	460	98.	350	SW846 9060A Mod.	WG159565	12-MAR-15 15:02:39	N/A	N/A	
Total Solids	83. %	1		N/A	SM2540G	WG159478	12-MAR-15 10:10:59	SM2540G	11-MAR-15	

Katahdin Analytical Services 0000019

Katahdin
ANALYTICAL SERVICES

ACCREDITED IN ACCORDANCE WITH nelac
Cert No E87604

Report of Analytical Results

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

Lab Sample ID: SI1453-2
Report Date: 30-MAR-15
Client PO: 16518
Project: Navy Clean WE15-03-0
SDG: SI1453

Sample Description	Matrix	Date Sampled	Date Received
RE117D2-EB-030915	AQ	09-MAR-15 13:15:00	10-MAR-15

Parameter	Result	Adj LOQ	Adj MDL	Adj LOD	Anal. Method	QC.Batch	Anal. Date	Prep. Method	Prep. Date	Footnotes
Total Organic Carbon	J0.34 mg/L	1.0	0.10	.5	SM5310B	WG159928	18-MAR-15 18:27:05	N/A	N/A	

200 Technology Way
P.O. Box 540, Scarborough, ME 04070
http://www.katahdinlab.com

Raw Data Section

WET CHEMISTRY BATCH REPORT
Mar 27 2015, 04:57 pm
Batch: WG159565

Parameter: TOC In Soil

Date Analyzed: 12-MAR-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
SI1453-1	SAMP	SW846 9060A	520.4mg	200.00ug	1	58.61821	U460 ug/gdrywt	83.	400	98.	460		
WG159565-1	MBLANK	SW846 9060A	500mg	200.00ug	1	0	U300 ug/gdrywt	NA	400	85.	400		
WG159565-2	LCS	SW846 9060A	40mg	200.00ug	1	370075	370000 ug/gdrywt	NA	400	85.	400		92
WG159565-3	DUP	SW846 9060A	527.7mg	200.00ug	1	68.10085	U480 ug/gdrywt	NA	400	100	480	NC	
WG159565-4	MS	SW846 9060A	515.6mg	200.00ug	1	9827.18874	9800 ug/gdrywt	NA	400	100	480		104

Comments:

SI1453-1	RE117D2-SOIL-030915-788-790
WG159565-1	SI1453-1
WG159565-2	SI1453-1
WG159565-3	SI1453-1
WG159565-4	SI1453-1

Entered by: JS Date: 3.27.15 Accepted by: [illegible] Date: 3/30/15

WET CHEMISTRY BATCH REPORT
Mar 13 2015, 02:09 pm
Batch: WG159566

Parameter: TOC In Soil

Date Analyzed: 12-MAR-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
SI1476-1	SAMP	LLOYDKAHN	50.1mg	200.00ug	1	468022.88451	470000 ug/gdrywt	12.	400	6700	32000		
WG159566-1	MBLANK	LLOYDKAHN	500mg	200.00ug	1	0	U300 ug/gdrywt	NA	400	85.	400		
WG159566-2	LCS	LLOYDKAHN	40mg	200.00ug	1	370075	370000 ug/gdrywt	NA	400	85.	400		92
WG159566-3	DUP	LLOYDKAHN	54.3mg	200.00ug	1	495437.57692	500000 ug/gdrywt	NA	400	670	3200	6	

Comments:

WG159566-1	SI1476-1
WG159566-2	SI1476-1
WG159566-3	SI1476-1

Entered by: JS Date: 3·13·15 Accepted by: [illegible] Date: 03/19/15

WET CHEMISTRY BATCH REPORT
Mar 13 2015, 02:06 pm
Batch: WG159567

Parameter: Carbon, Percent

Date Analyzed: 12-MAR-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
SI1481-1	SAMP	SW846 9060A	172.4mg	0.10000g	1	734.3	7.0 %	6.1	.1	0.41	1.6		
WG159567-1	MBLANK	SW846 9060A	500mg	0.10000g	1	0	U0.10 %	NA	.1	0.025	0.10		
WG159567-2	LCS	SW846 9060A	40mg	0.10000g	1	14803	37. %	NA	.1	0.025	0.10		92
WG159567-3	DUP	SW846 9060A	168.7mg	0.10000g	1	419.3	4.1 %	NA	.1	0.41	1.6	52	

Comments:

WG159567-1	SI1481-1
WG159567-2	SI1481-1
WG159567-3	SI1481-1

Entered by: JS Date: 3·13·15 Accepted by: [illegible] Date: 03/19/15

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 SW9060A

✓ Total Organic Carbon (Lloyd Kahn) ☑ • WG159565, ☑ WG159566, % WG159567

Spiking Information		
LCS Spike Source ID / Compound:	W12843	(TV: 16000)
CCV Spike Source ID / Compound:	W12842	(1)
MS Spike Source ID / Compound:	W12843	(TV: 4000)

Calibration Information	
Calibration Date:	2.9.15
Calibration Analyst:	CLB

KATAHDIN Sample Number	Sample Wt. (mg)	Sample Type * (Circle One)	~~Spike Added (mg)~~ % Recovery
CCV		Wet (Dry)	99.7 %
CCB		Wet Dry	
LCS		Wet (Dry)	92.5%
SI 1476-1	50.1	Wet (Dry)	
-1 Dup	54.3	Wet (Dry)	
SI1453-1	239.0	Wet (Dry)	
-1 DUP	205.8	Wet (Dry)	
SI 1481-1	172.4	Wet (Dry)	
SI 1481-1 DUP	168.7	Wet (Dry)	
JS 3.12.15 ~~SI 1476-1~~ SI1453-1	520.4	Wet (Dry)	
-1 Dup	527.7	Wet (Dry)	
SI1453-1 MS ~~-1 MS~~ JS 3.12.15	~~515.6~~ JS 3.12.15	Wet (Dry)	
~~-1~~ JS 3.12.15	~~519.8~~ JS 3.12.15	Wet (Dry)	
CCV		Wet (Dry)	101.0%
CCB		Wet Dry	
SI1453-1	519.8	Wet (Dry)	
CCV		Wet (Dry)	101.0%
CCB		Wet Dry	
		Wet Dry	
		Wet Dry	
		Wet Dry	
		Wet Dry	

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

Analyst: JS	Analysis Date: 3.12.15
Reviewer: [signature]	Review Date: 03/19/15

	Sample Name	Dilution	Result	Comment	Date / Time
1	CCV	1.000	SSM-TC:15958 ug		3/12/2015 1:03:29 PM
2	CCB	1.000	SSM-TC:0.000 ug		3/12/2015 1:11:53 PM
3	LCS	1.000	SSM-TC:14803 ug		3/12/2015 1:33:25 PM
4	SI1476-1	1.000	SSM-TC:2946 ug		3/12/2015 2:06:11 PM
5	SI1476-1 DUP	1.000	SSM-TC:3380 ug		3/12/2015 2:16:06 PM
6	SI1453-1	1.000	SSM-TC:16.96 ug		3/12/2015 2:23:39 PM
7	SI1453-1 DUP	1.000	SSM-TC:29.74 ug		3/12/2015 2:33:11 PM
8	SI1481-1	1.000	SSM-TC:734.3 ug		3/12/2015 2:41:30 PM
9	SI1481-1 DUP	1.000	SSM-TC:419.3 ug		3/12/2015 2:50:03 PM
10	SI1453-1	1.000	SSM-TC:46.64 ug		3/12/2015 3:02:39 PM
11	SI1453-1 DUP	1.000	SSM-TC:29.76 ug		3/12/2015 3:11:28 PM
12	SI1453-1 MS	1.000	SSM-TC:4196 ug		3/12/2015 3:20:52 PM
13	CCV	1.000	SSM-TC:16163 ug		3/12/2015 3:29:55 PM
14	CCB	1.000	SSM-TC:0.000 ug		3/12/2015 3:36:50 PM
15	SI1453-1	1.000	SSM-TC:43.09 ug		3/12/2015 3:45:41 PM
16	CCV	1.000	SSM-TC:16174 ug		3/12/2015 3:56:11 PM
17	CCB	1.000	SSM-TC:0.000 ug		3/12/2015 4:02:45 PM
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Instr.Information

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

Cal. Curve

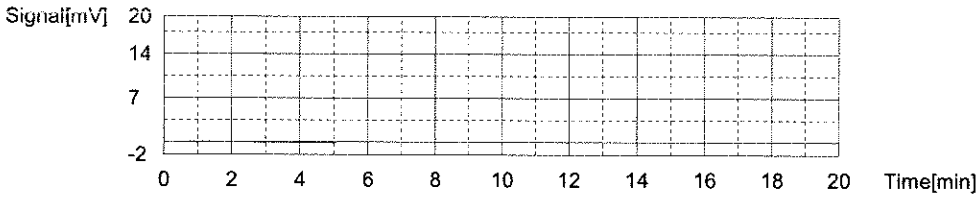
Sample Name:	Untitled
Sample ID:	Untitled
Cal. Curve:	tc sl curve 2-9-15.2015_02_09_14_37_16.cal

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	*******		2/9/2015 2:44:17 PM

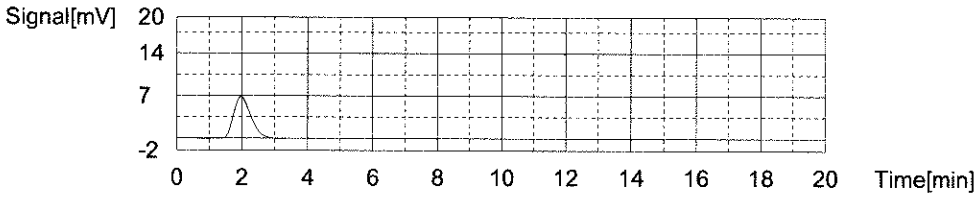
Mean Area 0.000
Mean CNV 0.000



AbsC: 200.0ug

No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	25.55	25.55	200.0ug	0.5000mg	*******		2/9/2015 2:52:00 PM

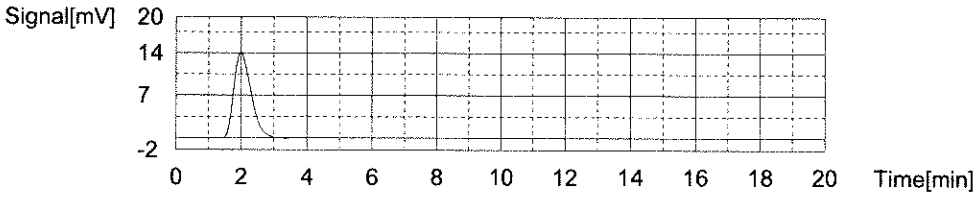
Mean Area 25.55
Mean CNV 25.55



AbsC: 400.0ug

No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	51.51	51.51	400.0ug	1.000mg	*******		2/9/2015 3:00:51 PM

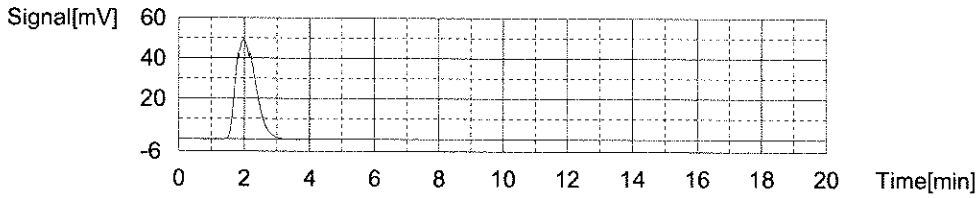
Mean Area 51.51
Mean CNV 51.51



AbsC: 2000ug

No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	207.0	207.0	2000ug	5.000mg	*******		2/9/2015 3:11:40 PM

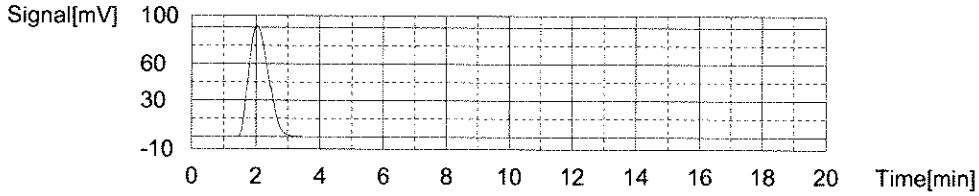
Mean Area 207.0
Mean CNV 207.0



AbsC: 4000ug

No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	391.2	391.2	4000ug	10.00mg	*******		2/9/2015 3:20:17 PM

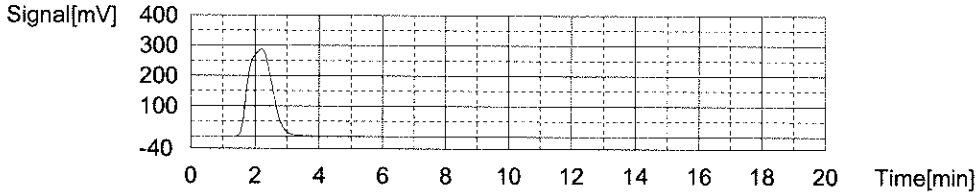
Mean Area 391.2
Mean CNV 391.2



AbsC: 16000ug

No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	1485	1485	16000ug	40.00mg	*******		2/9/2015 3:30:14 PM

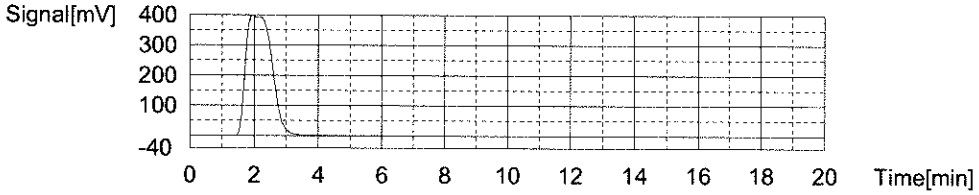
Mean Area 1485
Mean CNV 1485



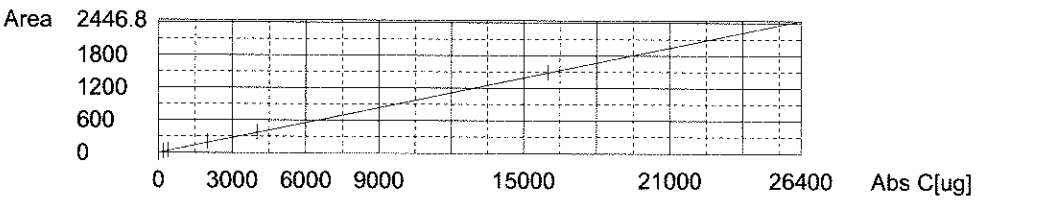
AbsC: 24000ug

No.	Area	CNV	Abs C	Weight	Rem.	Ex.	Date / Time
1	2240	2240	24000ug	60.00mg	*******		2/9/2015 3:39:28 PM

Mean Area 2240
Mean CNV 2240



Slope: 0.09268
Intercept 0.000
r^2 0.999903



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	

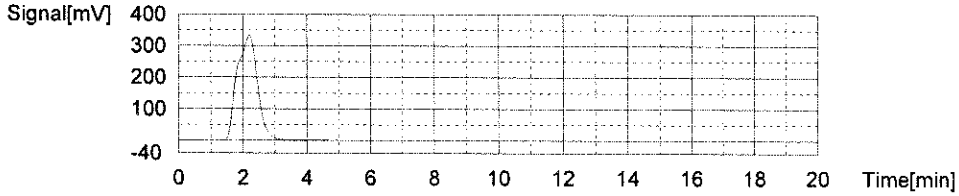
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:15958 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	1479	1479	15958ug	15958ug	40.00mg	40uL		tc sl curve 2-9-15.2015_02_09_14_37_16.cal	3/12/2015 1:03:29 PM

Mean Area	1479
Mean CNV	1479
Mean Conc.	15958ug



Sample

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

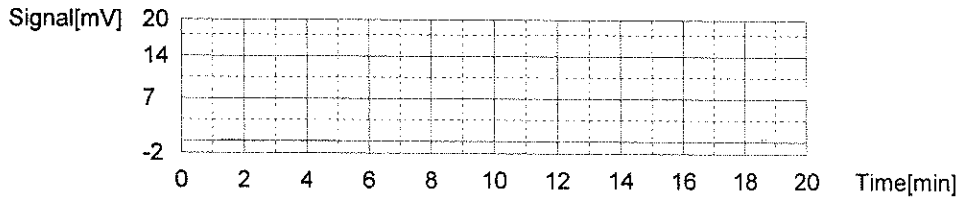
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:0.000 ug

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		tc sl curve 2-9-15.2015_02_09_14_37_16.cal	3/12/2015 1:11:53 PM

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

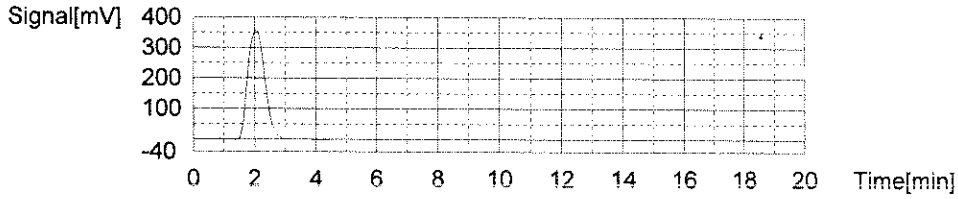
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:14803 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	1372	1372	14803ug	14803ug	40.00mg	40uL		tc sl curve 2-9-15.2015_02_09_14_37_16.cal	3/12/2015 1:33:25 PM

Mean Area 1372
Mean CNV 1372
Mean Conc. 14803ug



Sample

Sample Name: SI1476-1
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

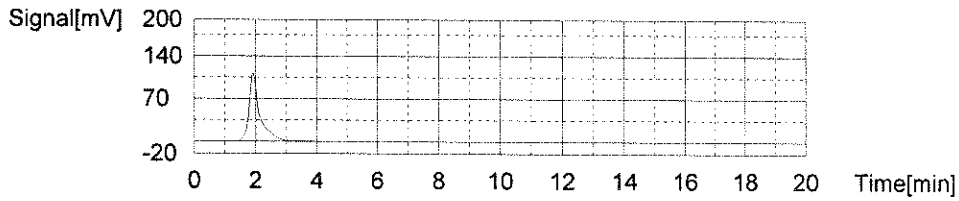
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:2946 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	273.0	273.0	2946ug	2946ug	50.10mg	50uL		tc sl curve 2-9-15.2015_02_09_14_37_16.cal	3/12/2015 2:06:11 PM

Mean Area 273.0
Mean CNV 273.0
Mean Conc. 2946ug



Sample

Sample Name: SI1476-1 DUP
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

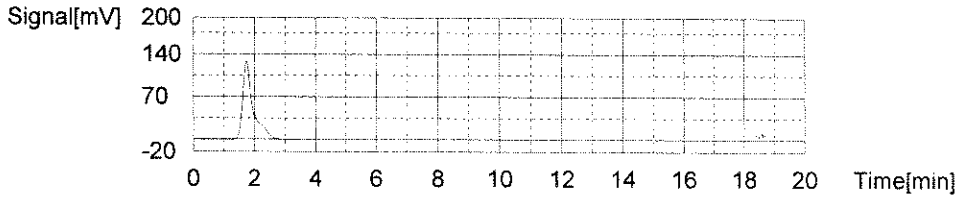
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:3380 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	313.3	313.3	3380ug	3380ug	54.30mg	54uL		tc sl curve 2-9-15.2015_02_09_14_37_16.cal	3/12/2015 2:16:06 PM

Mean Area 313.3
Mean CNV 313.3
Mean Conc. 3380ug



Sample

Sample Name: SI1453-1
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

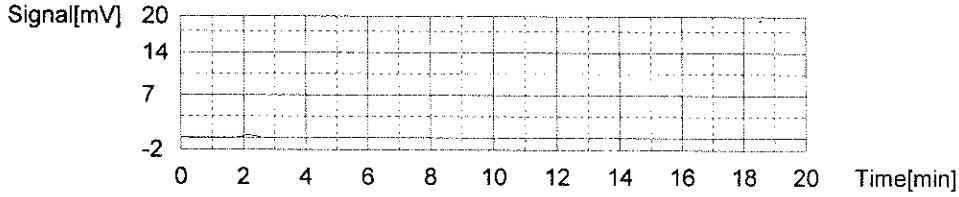
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:16.96 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	1.572	1.572	16.96ug	16.96ug	239.0mg	239uL		tc sl curve 2-9-15.2015_02_09_14_37_16.cal	3/12/2015 2:23:39 PM

Mean Area 1.572
Mean CNV 1.572
Mean Conc. 16.96ug



Sample

Sample Name: SI1453-1 DUP
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

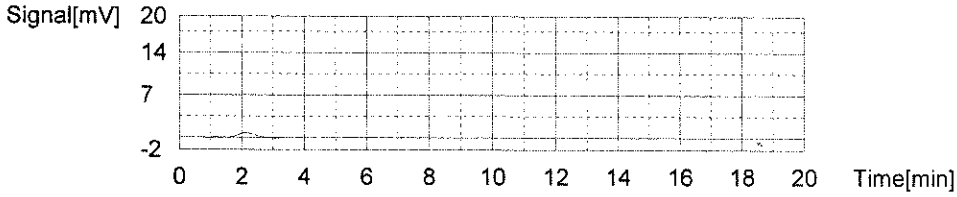
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:29.74 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	2.756	2.756	29.74ug	29.74ug	205.8mg	205uL		tc sl curve 2-9-15.2015_02_09_14_37_16.cal	3/12/2015 2:33:11 PM

Mean Area 2.756
Mean CNV 2.756
Mean Conc. 29.74ug



Sample

Sample Name: SI1481-1
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

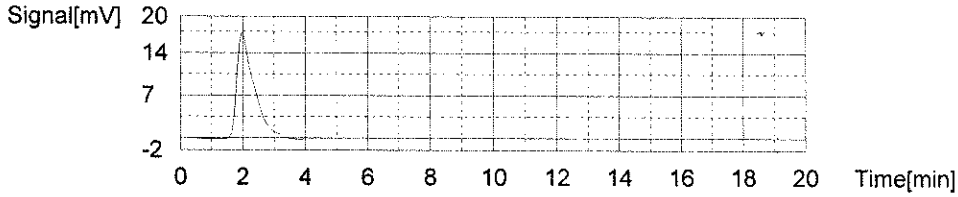
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:734.3 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	68.06	68.06	734.3ug	734.3ug	172.4mg	172uL		tc si curve 2-9-15.2015_02_09_14_37_16.cal	3/12/2015 2:41:30 PM

Mean Area 68.06
Mean CNV 68.06
Mean Conc. 734.3ug



Sample

Sample Name: SI1481-1 DUP
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

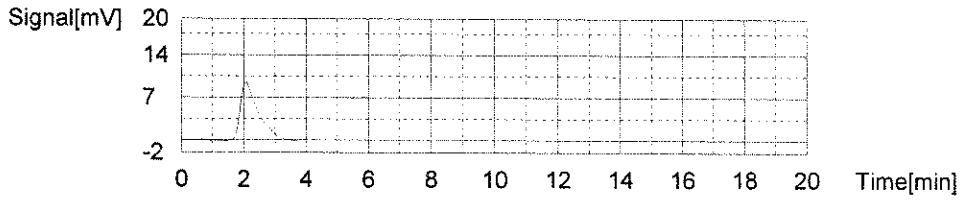
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:419.3 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	38.86	38.86	419.3ug	419.3ug	168.7mg	168uL		tc si curve 2-9-15.2015_02_09_14_37_16.cal	3/12/2015 2:50:03 PM

Mean Area 38.86
Mean CNV 38.86
Mean Conc. 419.3ug



Sample

Sample Name: SI1453-1
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

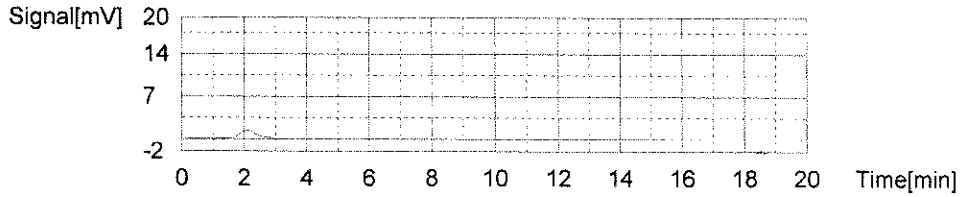
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:46.64 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	4.323	4.323	46.64ug	46.64ug	520.4mg	520uL		tc sl curve 2-9-15.2015_02_09_14_37_16.cal	3/12/2015 3:02:39 PM

Mean Area 4.323
Mean CNV 4.323
Mean Conc. 46.64ug



Sample

Sample Name: SI1453-1 DUP
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

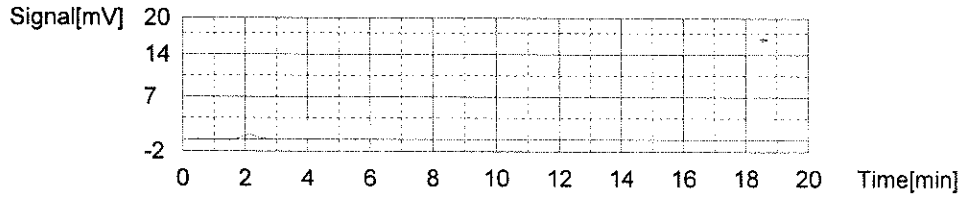
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:29.76 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	2.758	2.758	29.76ug	29.76ug	527.7mg	527uL		tc sl curve 2-9-15.2015_02_09_14_37_16.cal	3/12/2015 3:11:28 PM

Mean Area 2.758
Mean CNV 2.758
Mean Conc. 29.76ug



Sample

Sample Name: SI1453-1 MS
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

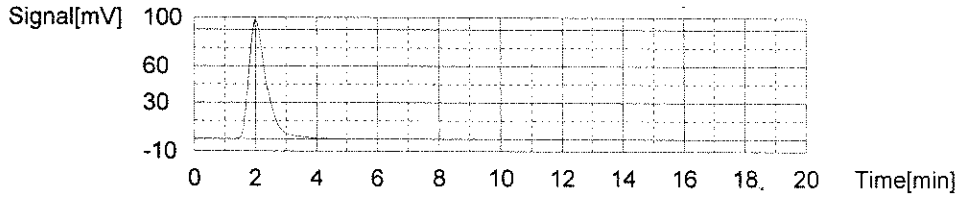
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:4196 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	388.9	388.9	4196ug	4196ug	515.6mg	515uL		tc sl curve 2-9-15.2015_02_09_14_37_16.cal	3/12/2015 3:20:52 PM

Mean Area 388.9
Mean CNV 388.9
Mean Conc. 4196ug



Sample

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

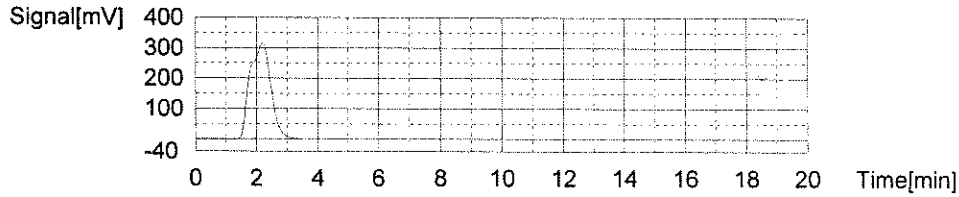
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:16163 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	1498	1498	16163ug	16163ug	40.00mg	40uL		tc sl curve 2-9-15.2015_02_09_14_37_16.cal	3/12/2015 3:29:55 PM

Mean Area 1498
Mean CNV 1498
Mean Conc. 16163ug



Sample

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

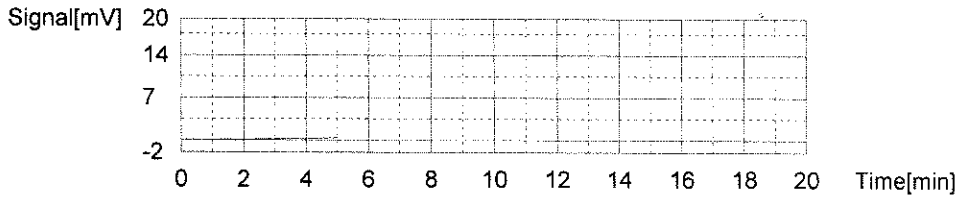
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:0.000 ug

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		tc sl curve 2-9-15.2015_02_09_14_37_16.cal	3/12/2015 3:36:50 PM

Mean Area 0.000
Mean CNV 0.000
Mean Conc. 0.000ug



Sample

Sample Name: SI1453-1
Sample ID: <Untitled>
Origin: tc method SOILS.met
Chk. Result

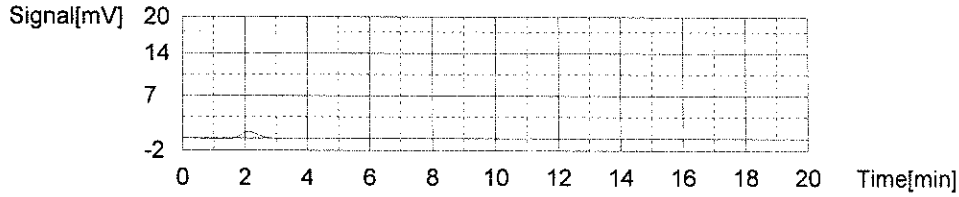
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:43.09 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	3.994	3.994	43.09ug	43.09ug	519.8mg	519uL		tc sl curve 2-9-15.2015_02_09_14_37_16.cal	3/12/2015 3:45:41 PM

Mean Area 3.994
Mean CNV 3.994
Mean Conc. 43.09ug



Sample

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

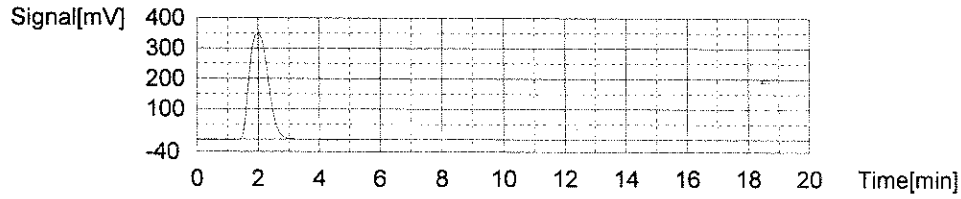
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:16174 ug

1. Det

Anal.: SSM-TC

No.	Area	CNV	Abs C	Conc.	Weight	Volume	Ex.	Cal. Curve	Date / Time
1	1499	1499	16174ug	16174ug	40.00mg	40uL		tc sl curve 2-9-15.2015_02_09_14_37_16.cal	3/12/2015 3:56:11 PM

Mean Area 1499
Mean CNV 1499
Mean Conc. 16174ug



Sample

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

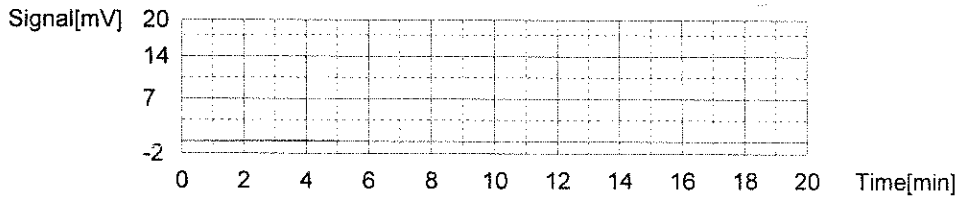
Type	Anal.	Dil.	Density	Result
Unknown	SSM-TC	1.000	1.000mg/uL	SSM-TC:0.000 ug

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		tc si curve 2-9-15.2015_02_09_14_37_16.cal	3/12/2015 4:02:45 PM

Mean Area 0.000
Mean CNV 0.000
Mean Conc. 0.000ug



TOTAL SOLIDS BATCH REPORT
Mar 12 2015, 10:13 am
Batch: WG159478

Sample	Matrix	Type	Batch	Prep Date	Tare	Initial	Final	by	Date	Raw TS	Rep TS	Recovery	RPD
SI1285-1	SL	SAMP	WG159478	11-MAR-15	1 g	5 g	5 g	AZ	12-MAR-15	100.0000	100 %		
SI1450-1	SL	SAMP	WG159478	11-MAR-15	1.3101 g	10.0419 g	9.4781 g	AZ	12-MAR-15	93.5430	94. %		
SI1452-1	SL	SAMP	WG159478	11-MAR-15	1.2996 g	13.7798 g	12.305 g	AZ	12-MAR-15	88.1830	88. %		
SI1453-1	SL	SAMP	WG159478	11-MAR-15	1.3023 g	15.2399 g	12.8443 g	AZ	12-MAR-15	82.8120	83. %		
SI1468-1	SL	SAMP	WG159478	11-MAR-15	1 g	5 g	5 g	AZ	12-MAR-15	100.0000	100 %		
WG159478-1	SL	MBLANK	WG159478	11-MAR-15	1.3038 g	1.794 g	1.3029 g	AZ	12-MAR-15	-0.1840	1 %		
WG159478-2	SL	LCS	WG159478	11-MAR-15	1.3087 g	6.2868 g	5.7985 g	AZ	12-MAR-15	90.1910	90. %	100	
WG159478-3	SL	DUP	WG159478	11-MAR-15	1.2948 g	11.776 g	11.1246 g	AZ	12-MAR-15	93.7850	94. %		0

Comments:

SI1453-1	RE117D2-SOIL-030915-788-790
WG159478-1	SI1450-1
WG159478-2	SI1450-1
WG159478-3	SI1450-1

Entered by: _____ Date: 3-12-15 Accepted by: _____ Date 03/13/15

WG154478
R340121

KATAHDIN ANALYTICAL SERVICES, INC.

TOTAL SOLIDS: ASTM D2216 - PQL: 0.10%				TOTAL VOLATILE SOLIDS: SM2540 G / E160.4 - PQL 0.10%	
ANALYST IN:		TS ANALYST OUT:		TVS ANALYST OUT:	Balance Calibrated?
DATE IN:	3-11-15	TS DATE OUT:	3-12-15	TVS DATE OUT:	Y / N
TIME IN:	12:05	TS TIME OUT:	8:47	TVS TIME OUT:	In: Y
TEMP IN:	102°C	TS TEMP OUT:	102°C	TVS TEMP OUT:	Out (TS): Y
Oven ID:		Muffle Oven ID:	030807 (assigned)	BALANCE ID: OHAUS - SN: 112401631	Out (TVS):

	SAMPLE ID	DISH ID	DISH WT (g)	DISH WET WT (g)	DISH DRY WT (g)	DISH/ASH WT (g)	TIME
TVS	Blank	4	1.3038		1.3029		
	LCS	5					
	SI1450-1	1					
	SI1452-1	2					
	SI1453-1	3					
	SI1450-1 DUP	6					
TVS	SI1387-1	7	1.3245	11.3661	9.1507		
TVS	SI1387-1 DUP	8	1.3132	10.7417	8.1625		
	SI1285-1	—	TS=100%				
	SI1468-1	—	TS=100%				

CHECKED BY: [illegible] DATE: 03/13/15

WL-009 - Revision 3 - 06/04/2014

QAWL757

WET CHEMISTRY BATCH REPORT
Mar 24 2015, 11:22 am
Batch: WG159927

Parameter: Total Organic Carbon

Date Analyzed: 18-MAR-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
SI1630-1	SAMP	EPA 415.1	20.000mL	20.000mL	1	.1241	U1.0 mg/L	NA	1	.1023	1.0		
WG159927-1	MBLANK	EPA 415.1	20.000mL	20.000mL	1	0	U0.50 mg/L	NA	1	0.10	1.0		
WG159927-2	LCS	EPA 415.1	20.000mL	20.000mL	1	40.97	41. mg/L	NA	1	0.10	1.0		82
WG159927-3	DUP	EPA 415.1	20.000mL	20.000mL	1	0	U1.0 mg/L	NA	1	.1023	1.0	NC	

Comments:

WG159927-1 SI1630-1
WG159927-2 SI1630-1
WG159927-3 SI1630-1

Entered by: JS Date: 3.24.15 Accepted by: RO Date: 3/24/15

WET CHEMISTRY BATCH REPORT
Mar 24 2015, 11:24 am
Batch: WG159928

Parameter: Total Organic Carbon

Date Analyzed: 18-MAR-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
SI1453-2	SAMP	SM5310B	20.000mL	20.000mL	1	.3383	J0.34 mg/L	NA	1	0.10	1.0		
SI1510-1	SAMP	SM5310B	20.000mL	20.000mL	1	.09174	U1.0 mg/L	NA	1	.1023	1.0		
SI1632-1	SAMP	SM5310B	20.000mL	20.000mL	1	6.003	6.0 mg/L	NA	1	.1023	1.0		
SI1637-5	SAMP	SM5310B	20.000mL	20.000mL	1	13.73	14. mg/L	NA	1	.1023	1.0		
WG159928-1	MBLANK	SM5310B	20.000mL	20.000mL	1	0	U0.50 mg/L	NA	1	0.10	1.0		
WG159928-2	LCS	SM5310B	20.000mL	20.000mL	1	40.97	41. mg/L	NA	1	0.10	1.0		82

Comments:

WG159928-1 SI1453-2
WG159928-2 SI1453-2

Entered by: JS Date: 3·24·15 Accepted by: PD Date: 3/24/15

WET CHEMISTRY BATCH REPORT
Mar 24 2015, 11:26 am
Batch: WG159929

Parameter: Dissolved Organic Carbon (1)

Date Analyzed: 18-MAR-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
SI1588-11	SAMP	SW846 9060A	20.000mL	20.000mL	1	9.252	9.2 mg/L	NA	1	0.32	1.0		
SI1588-15	SAMP	SW846 9060A	20.000mL	20.000mL	1	12.11	12. mg/L	NA	1	0.32	1.0		
SI1588-3	SAMP	SW846 9060A	20.000mL	20.000mL	1	10.09	10. mg/L	NA	1	0.32	1.0		
SI1588-51	SAMP	SW846 9060A	20.000mL	20.000mL	1	.3551	U1.0 mg/L	NA	1	0.32	1.0		
SI1588-7	SAMP	SW846 9060A	20.000mL	20.000mL	1	.2374	U1.0 mg/L	NA	1	0.32	1.0		
WG159929-1	MBLANK	SW846 9060A	20.000mL	20.000mL	1	0	U0.50 mg/L	NA	1	0.32	1.0		
WG159929-2	LCS	SW846 9060A	20.000mL	20.000mL	1	40.97	41. mg/L	NA	1	0.32	1.0		82
WG159929-3	MS	SW846 9060A	20.000mL	20.000mL	1	105.5	100 mg/L	NA	1	0.32	1.0		93
WG159929-4	MSD	SW846 9060A	20.000mL	20.000mL	1	105.2	100 mg/L	NA	1	0.32	1.0	0	93

Comments:

SI1588-11	NTC-NYCDEP-MS4-NCB-629-WW6-D
SI1588-15	MS/MSD, MS/DUP for Metals, NTC-NYCDEP-MS4-NCQ-637-WW6-D
SI1588-3	NTC-NYCDEP-CO-LOCATE-WW6-D
WG159929-1	SI1588-15
WG159929-2	SI1588-15
WG159929-3	SI1588-15
WG159929-4	SI1588-15

Entered by: JS Date: 3.24.15 Accepted by: [illegible] Date: 3/24/15

KATAHDIN ANALYTICAL SERVICES, INC.
CARBON ANALYSIS RUN INFORMATION SHEET

INSTR. ID: WC2 (Shimadzu TOC-V_{CPH}) **ANALYST:** JS **DATE:** 3·19·15

FILE NAME: TOC AQ 031815 **METHOD(S):**

TOC	DOC	TIC
☑ EPA 415.1	☐ EPA 415.1	☐ EPA 415.1
☑ SM5310B	☐ SM5310B	☐ SM5310B
☐ _____	☑ SW 9060 DOC1	☐ _____

CALIBRATION DATE: 2-4-15 **CALIBRATION ANALYST:** CLB

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)
W12776	1-19-15	4-19-15	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	W12798	2-4-15	5-4-15	100 mg C/L
LCS	W12850	3-9-15	6-9-15	50 mg C/L
MS Stock Std. *	W12776	1-19-15	4-19-15	2000 mg C/L
Alkalinity Check	W12807	2-11-15	8-11-15	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:

EPA 415.1 WG159927 R311005
SM5310B WG159928 R311006
SW 9060A DOC(1) WG159929 R311007

	Sample Name	Dilution	Result	Comment	Date / Time	Vial
1	ALK CHECK	1.000	NPOC:0.000 mg/L		3/18/2015 4:45:42 PM	1
2	CCV	1.000	NPOC:87.74 mg/L	88%	3/18/2015 5:01:49 PM	2
3	BLANK	1.000	NPOC:0.000 mg/L		3/18/2015 5:40:14 PM	3
4	LCS	1.000	NPOC:40.97 mg/L		3/18/2015 5:55:43 PM	4
5	SI1630-1	1.000	NPOC:0.1241 mg/L		3/18/2015 6:08:37 PM	6
6	SI1630-1 DUP	1.000	NPOC:0.000 mg/L		3/18/2015 6:17:44 PM	6
7	SI1453-2	1.000	NPOC:0.3383 mg/L		3/18/2015 6:30:01 PM	7
8	SI1510-1	1.000	NPOC:0.09174 mg/L		3/18/2015 6:42:06 PM	8
9	SI1632-1	1.000	NPOC:6.003 mg/L		3/18/2015 6:56:23 PM	9
10	SI1637-5	1.000	NPOC:13.73 mg/L		3/18/2015 7:11:08 PM	10
11	SI1588-3	1.000	NPOC:10.09 mg/L		3/18/2015 7:25:36 PM	11
12	SI1588-7	1.000	NPOC:0.2374 mg/L		3/18/2015 7:38:40 PM	12
13	SI1588-11	1.000	NPOC:9.252 mg/L		3/18/2015 7:53:08 PM	13
14	CCV	1.000	NPOC:88.52 mg/L	89%	3/18/2015 8:09:40 PM	2
15	BLANK	1.000	NPOC:0.000 mg/L		3/18/2015 8:21:37 PM	3
16	SI1588-15	1.000	NPOC:12.11 mg/L		3/18/2015 8:36:23 PM	14
17	SI1588-15 MS	1.000	NPOC:105.5 mg/L		3/18/2015 8:52:39 PM	15
18	SI1588-15 MSD	1.000	NPOC:105.2 mg/L		3/18/2015 9:06:19 PM	15
19	SI1588-51	1.000	NPOC:0.3551 mg/L		3/18/2015 9:19:44 PM	16
20	CCV	1.000	NPOC:88.65 mg/L	89%	3/18/2015 9:36:11 PM	65
21	BLANK	1.000	NPOC:0.000 mg/L		3/18/2015 9:48:11 PM	66
22						
23						
24						
25						
26						
27						
28						
29						
30						

Instr.Information

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

Cal. Curve

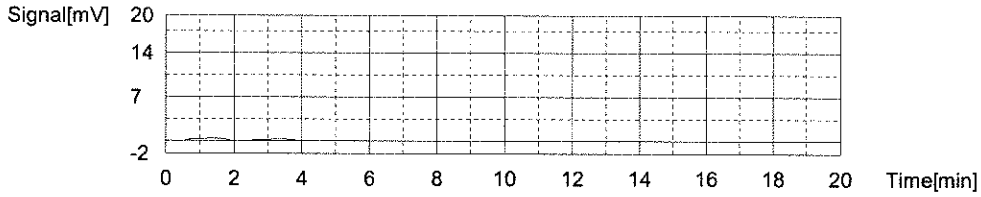
Sample Name:	Untitled
Sample ID:	Untitled
Cal. Curve:	toc aq cal 2-4-15.2015_02_04_15_35_52.cal

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.000	150uL	1	*******		2/4/2015 3:44:37 PM
2	0.000	150uL	1	*******		2/4/2015 3:49:08 PM

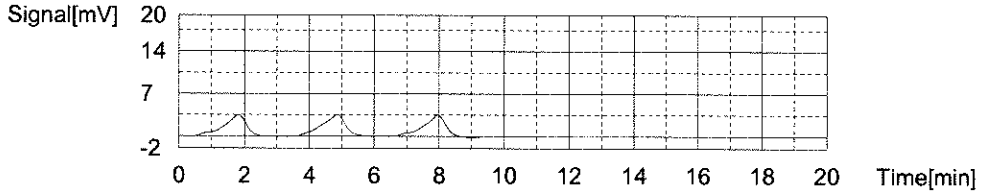
Acid Add.	1.500%
Sp. Time	90.00sec
Mean Area	0.000



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	15.99	150uL	1	*******	E	2/4/2015 3:59:15 PM
2	17.05	150uL	1	*******		2/4/2015 4:04:56 PM
3	16.65	150uL	1	*******		2/4/2015 4:10:38 PM

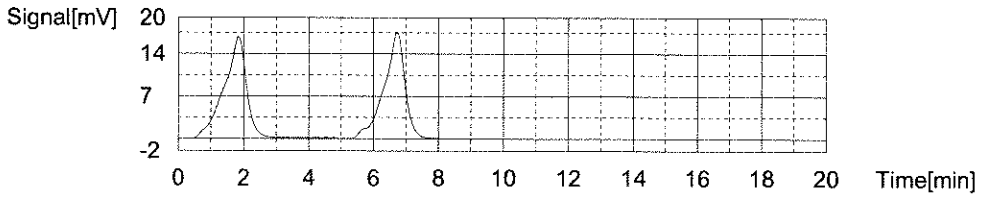
Acid Add.	1.500%
Sp. Time	90.00sec
Mean Area	16.85



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	80.14	150uL	1	*******		2/4/2015 4:22:53 PM
2	78.41	150uL	1	*******		2/4/2015 4:28:51 PM

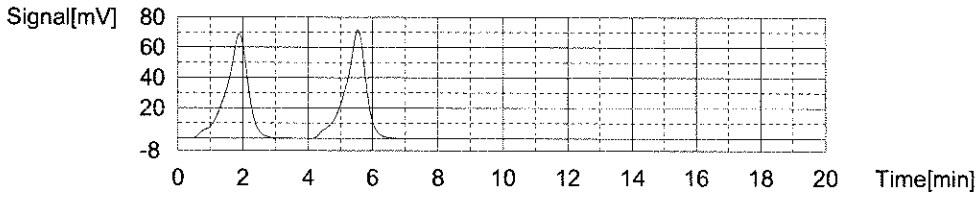
Acid Add.	1.500%
Sp. Time	90.00sec
Mean Area	79.28



Conc: 20.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	320.4	150uL	1	*******		2/4/2015 4:39:54 PM
2	320.4	150uL	1	*******		2/4/2015 4:46:17 PM

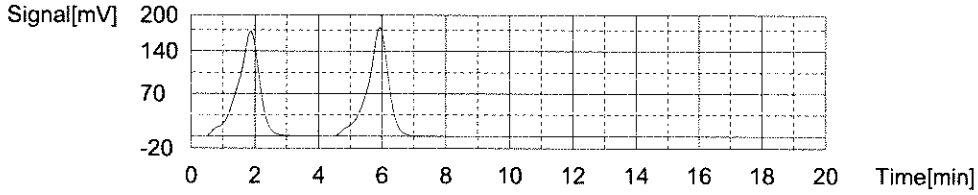
Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 320.4



Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	827.2	150uL	1	*******		2/4/2015 4:57:48 PM
2	824.0	150uL	1	*******		2/4/2015 5:04:27 PM

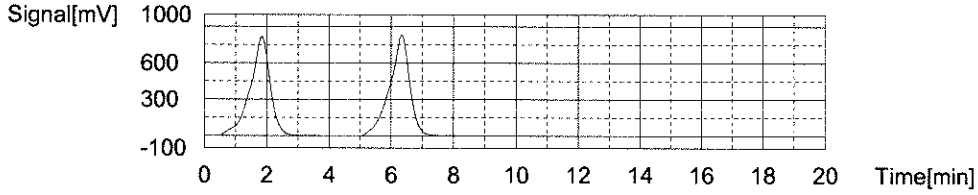
Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 825.6



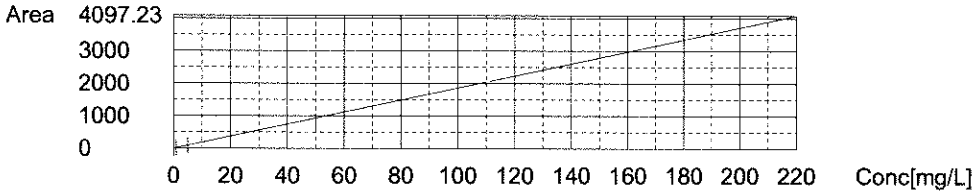
Conc: 200.0mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3706	150uL	1	*******		2/4/2015 5:16:30 PM
2	3723	150uL	1	*******		2/4/2015 5:23:35 PM

Acid Add. 1.500%
Sp. Time 90.00sec
Mean Area 3715



Slope: 18.62
Intercept 0.000
r^2 0.999186



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: 0.000 / Control within range!

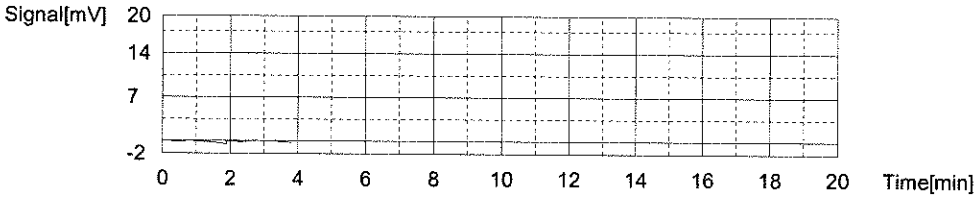
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:0.000 mg/L

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 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 4:43:31 PM
2	0.000	0.000mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 4:45:42 PM

Mean Area 0.000
Mean Conc. 0.000mg/L



Control Sample

Sample Name:	CCV
Sample ID:	<Untitled>
Method:	CCVDOUBLEINJECTION.tpl
Chk. Result	Control value: 87.74 / Control exceeds range!

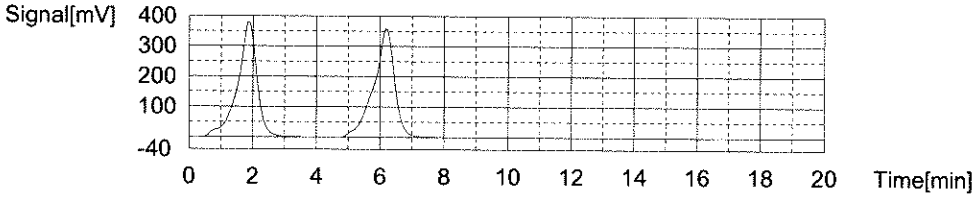
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:87.74 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1627	87.36mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 4:57:16 PM
2	1641	88.11mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 5:01:49 PM

Mean Area 1634
Mean Conc. 87.74mg/L



Control Sample

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

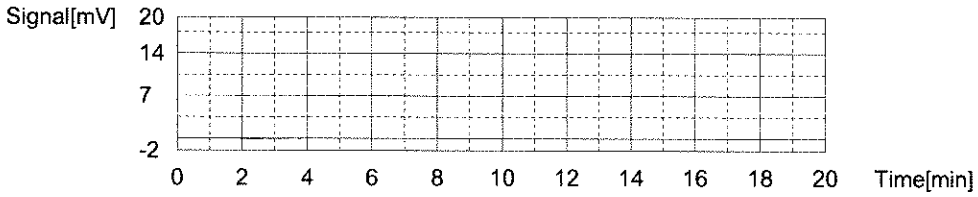
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:0.000 mg/L

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 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 5:38:08 PM
2	0.000	0.000mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 5:40:14 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: 40.97 / Control within range!

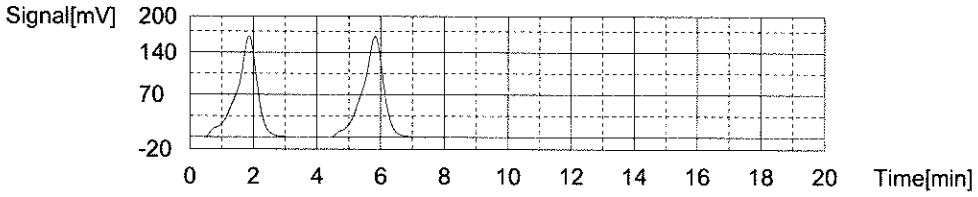
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:40.97 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	760.7	40.85mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 5:51:32 PM
2	765.4	41.10mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 5:55:43 PM

Mean Area 763.1
Mean Conc. 40.97mg/L



Sample

Sample Name: Si1630-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

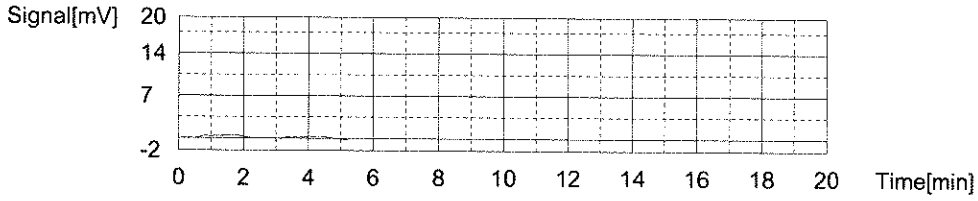
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.1241 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.425	0.1302mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 6:05:50 PM
2	2.197	0.1180mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 6:08:37 PM

Mean Area 2.311
Mean Conc. 0.1241mg/L



Sample

Sample Name: SI1630-1 DUP
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

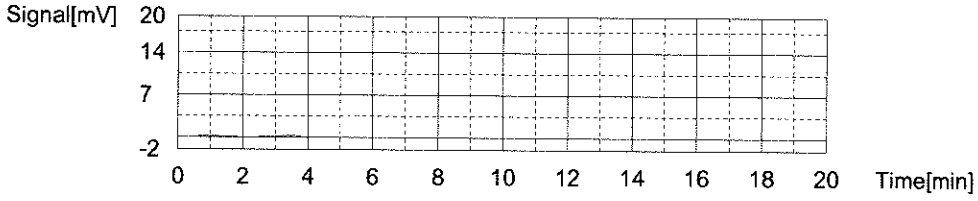
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.000 mg/L

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 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 6:15:35 PM
2	0.000	0.000mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 6:17:44 PM

Mean Area 0.000
Mean Conc. 0.000mg/L



Sample

Sample Name: SI1453-2
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

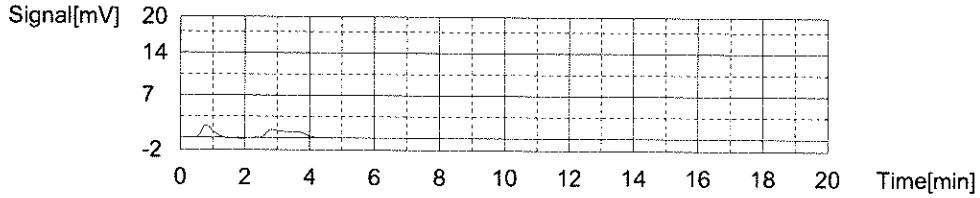
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.3383 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.016	0.2693mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 6:27:05 PM
2	7.585	0.4073mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 6:30:01 PM

Mean Area 6.300
Mean Conc. 0.3383mg/L



Sample

Sample Name: SI1510-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

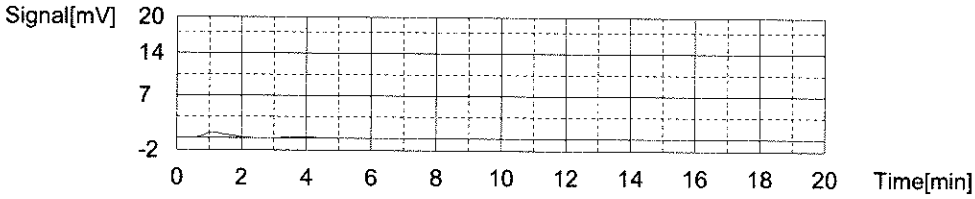
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.09174 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.417	0.1835mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 6:40:00 PM
2	0.000	0.000mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 6:42:06 PM

Mean Area 1.709
Mean Conc. 0.09174mg/L



Sample

Sample Name: SI1632-1
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

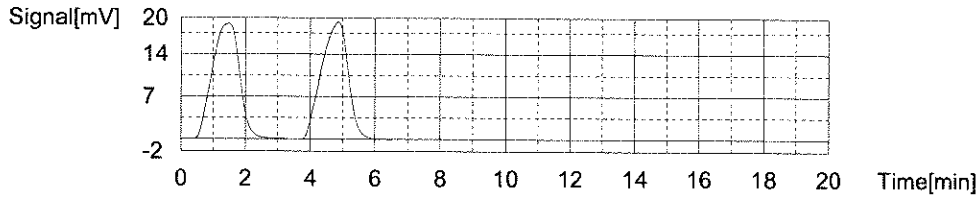
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:6.003 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	111.5	5.987mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 6:52:59 PM
2	112.1	6.019mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 6:56:23 PM

Mean Area 111.8
Mean Conc. 6.003mg/L



Sample

Sample Name: SI1637-5
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

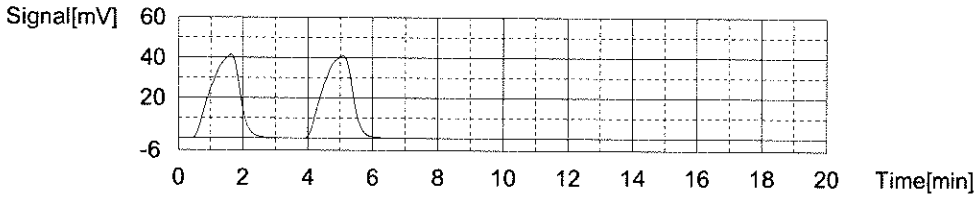
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:13.73 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	254.7	13.68mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 7:07:26 PM
2	256.8	13.79mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 7:11:08 PM

Mean Area 255.8
Mean Conc. 13.73mg/L



Sample

Sample Name: SI1588-3
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

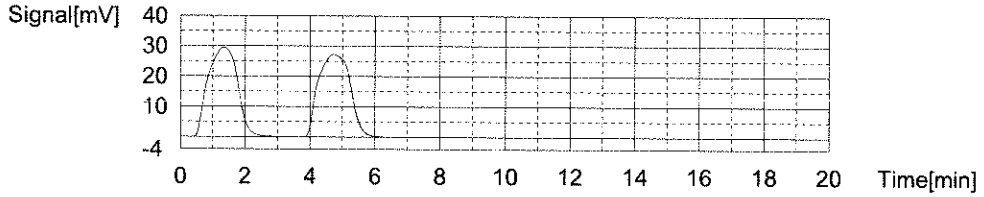
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:10.09 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	187.8	10.08mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 7:22:07 PM
2	188.1	10.10mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 7:25:36 PM

Mean Area 188.0
Mean Conc. 10.09mg/L



Sample

Sample Name: SI1588-7
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

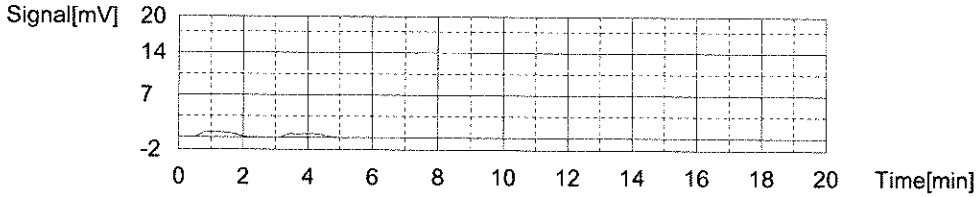
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.2374 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.055	0.2714mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 7:35:49 PM
2	3.789	0.2034mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 7:38:40 PM

Mean Area 4.422
Mean Conc. 0.2374mg/L



Sample

Sample Name: SI1588-11
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

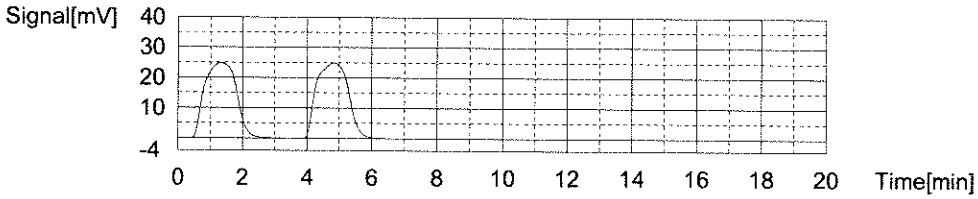
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:9.252 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	171.9	9.230mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 7:49:43 PM
2	172.7	9.273mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 7:53:08 PM

Mean Area 172.3
Mean Conc. 9.252mg/L



Control Sample

Sample Name: CCV
Sample ID: <Untitled>
Method: CCVDOUBLEINJECTION.tpl
Chk. Result Control value: 88.52 / Control exceeds range!

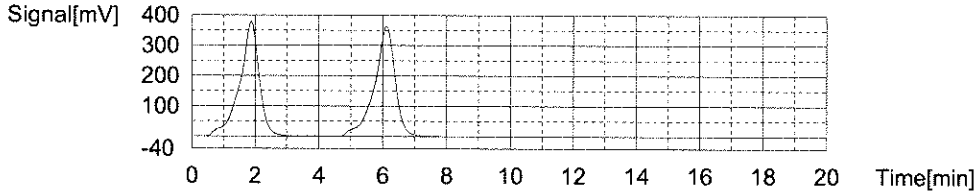
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:88.52 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1644	88.27mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 8:05:03 PM
2	1653	88.76mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 8:09:40 PM

Mean Area 1649
Mean Conc. 88.52mg/L



Control Sample

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

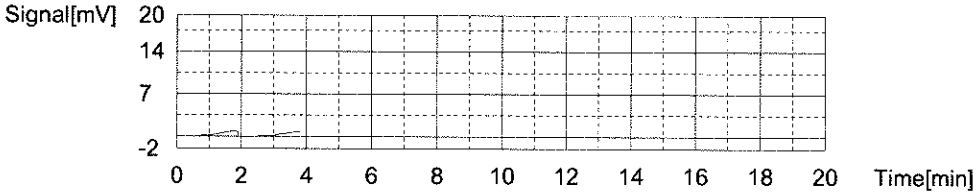
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:0.000 mg/L

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 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 8:19:08 PM
2	0.000	0.000mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 8:21:37 PM

Mean Area 0.000
Mean Conc. 0.000mg/L



Sample

Sample Name: SI1588-15
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

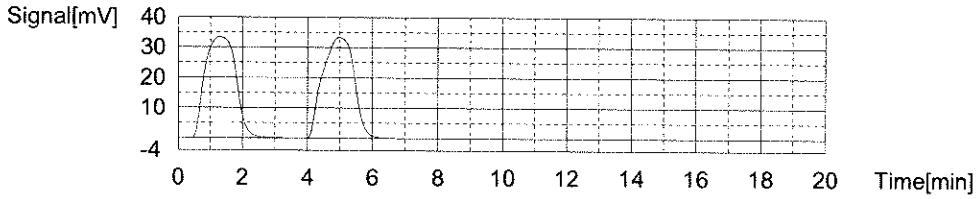
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:12.11 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	224.3	12.04mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 8:32:51 PM
2	226.6	12.17mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 8:36:23 PM

Mean Area 225.5
Mean Conc. 12.11mg/L



Sample

Sample Name: SI1588-15 MS
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

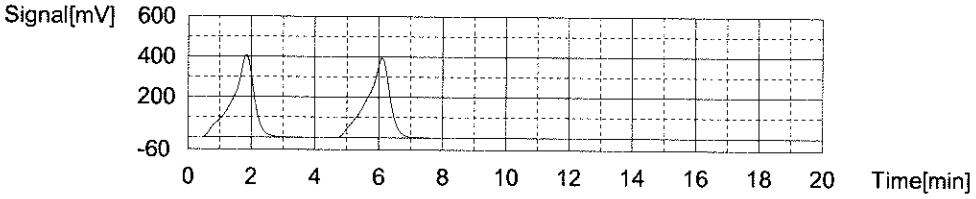
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:105.5 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1957	105.1mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 8:48:13 PM
2	1971	105.8mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 8:52:39 PM

Mean Area 1964
Mean Conc. 105.5mg/L



Sample

Sample Name: SI1588-15 MSD
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

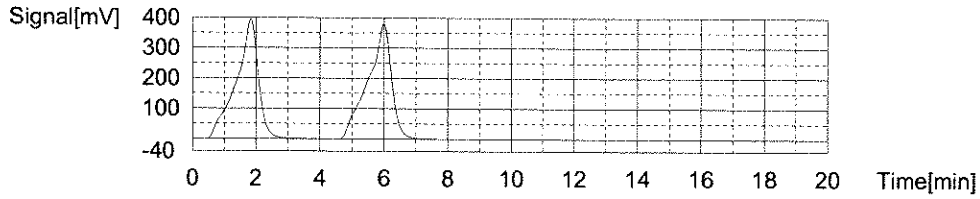
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:105.2 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1951	104.8mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 9:01:54 PM
2	1966	105.6mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 9:06:19 PM

Mean Area 1959
Mean Conc. 105.2mg/L



Sample

Sample Name: SI1588-51
Sample ID: <Untitled>
Origin: DOUBLE INJECTION.met
Chk. Result

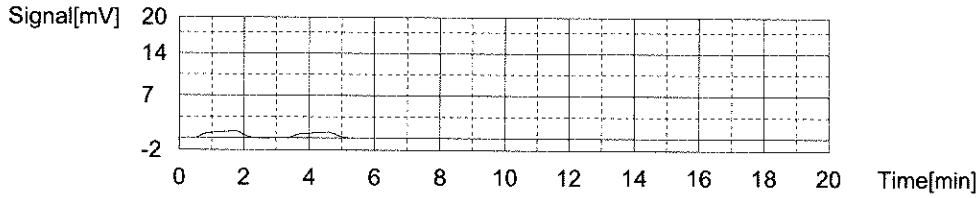
Type	Anal.	Dil.	Result
Unknown	NPOC	1.000	NPOC:0.3551 mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	7.545	0.4051mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 9:16:44 PM
2	5.683	0.3051mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 9:19:44 PM

Mean Area 6.614
Mean Conc. 0.3551mg/L



Control Sample

Sample Name: CCV
Sample ID: <Untitled>
Method: CCVDOUBLEINJECTION.tpl
Chk. Result Control value: 88.65 / Control exceeds range!

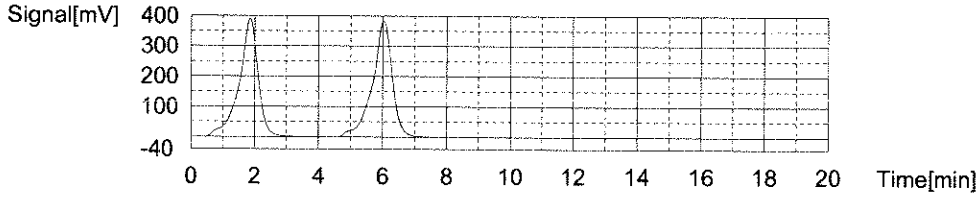
Type	Anal.	Dil.	Result
Control	NPOC	1.000	NPOC:88.65 mg/L

1. Det.

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1645	88.33mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 9:31:41 PM
2	1657	88.97mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 9:36:11 PM

Mean Area 1651
Mean Conc. 88.65mg/L



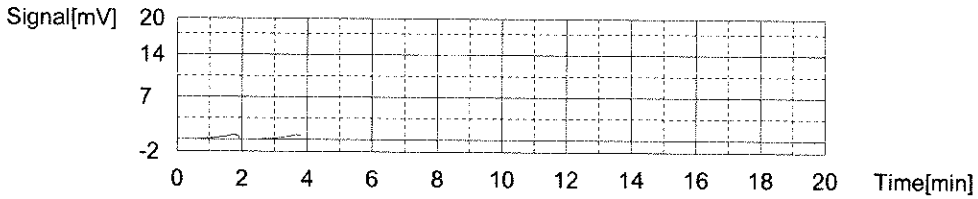
Control Sample

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 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 9:45:42 PM
2	0.000	0.000mg/L	150uL	1		toc aq cal 2-4-15.2015_02_04_15_35_52.cal	3/18/2015 9:48:11 PM

Mean Area 0.000
Mean Conc. 0.000mg/L