CompuChem

A Division Of

Liberty Analytical Corp.

8/22/2014

SMITA SUMBALY

WESTON SOLUTIONS

1090 KING GEORGES POST RD. SUITE 201

EDISON, NJ 088373703

Subject:

Report of Data - Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

WorkOrder: 1408028 PEST 8081B

Attn.: SMITA SUMBALY

Enclosed are the results of analytical work performed in accordance with the referenced account number. This report covers sample(s) appearing on the listing.

Thank you for selecting CompuChem for your sample analysis. If you should have questions or require additional analytical services, please contact your representative at 1-800-833-5097

Sincerely,

Compuchem

a division of Liberty Analytical Corporation

Attachment

TOTAL NUMBER

OF PAGES 202

501 Madison Avenue, Cary, NC 27513 Tel: 919-379-4100 Fax: 919-379-4050

325661

CompuChem, a division of Liberty Analytical

Client: WESTON SOLUTIONS **Work:** 1408028

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ **Sdg:** 1408028

Lab ID	Client ID	Matrix	Date Sampled	Date Received
1408028-01	P001-COMP02-LW-01	Soil	08/06/2014 00:00	08/12/2014 08:58
1408028-02	P001-DR0502-LW-01	Soil	08/06/2014 00:00	08/12/2014 08:58

ANALYSES DATA PACKAGE COVER PAGE

Client: WESTON SOLUTIONS

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Laboratory: COMPUCHEM

SDG: 1408028

Client Sample Id:	Analysis:	Lab Sample Id:
P001-COMP02-LW-01	8081A	1408028-01
P001-DR0502-LW-01	8081A	1408028-02

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 addressed in the narrative. Release of the data contained in this hardcopy data package and in the Electronic Data Deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Quentisha Forrester

Name: Quentisha Forrester

Date: 08/22/2014

Title: Chemist III

CompuChem
A Division Of
Liberty Analytical Corp.

501 Madison Avenue, Cary, NC 27513 Tel: 919-379-4100 Fax: 919-379-4050

ACCREDITED IN ACCORDANCE WITH nelac

CompuChem, a Division of Liberty Analytical Corporation

I. SAMPLE DATA PACKAGE

GC by SW-846

The Sample Data Package shall contain data for all samples in one Work Order/Sample Delivery Group (SDG), as follows:

A. SDG Narrative

B. Chain of Custody Records

C. Sample Preparation and Analysis Holding Time Data
(HOLDING TIME SUMMARY)

D. Surrogate Recovery Results
(SURROGATE STANDARD RECOVERY AND RT SUMMARY)

E. Laboratory Control Sample Results
(LCS/LCS DUPLICATE RECOVERY)

F. Matrix Spike Results
(MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY)

G. Batch Summary
(PREPARATION BATCH SUMMARY)

H. Analysis Sequence Summary
(ANALYSIS SEQUENCE SUMMARY)

I. Target Compound Results – Forms and Raw Data
(ANALYSIS DATA SHEET)

J. Initial Calibration and Second Source Calibration Verification Forms and Raw Data
(INITIAL CALIBRATION DATA) (SECOND-SOURCE CALIBRATION VERIFICATION)

K. Continuing Calibration Data – Forms and Raw Data
(CONTINUING CALIBRATION CHECK)

L. Identification Summary Analytes
(IDENTIFICATION SUMMARY FOR ANALYTES)

M. Blank Data – Forms and Raw Data
(ANALYSIS DATA SHEET)

N. Laboratory Control Sample Data – Forms and Raw Data
(ANALYSIS DATA SHEET)

O. Matrix Spike Data – Forms and Raw Data
(ANALYSIS DATA SHEET)

P. Run Logs / Prep Sheets / Internal CoC Documents / Standard Info / Manual Integration Summary

A. SDG Narrative

CompuChem
A division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100Fax: 919/379-4050

SDG NARRATIVE
SDG # 1408028
PROTOCOL: SW-846

SAMPLE IDENTIFICATIONS: P001-COMP02-LW-01 P001-DR0502-LW-01

The 2 soil samples listed above were received intact, ambient at 24.5°C, with proper documentation, in sealed shipping containers, on August 12, 2014. The samples were scheduled for the requested analysis of the Pesticide fraction. SW-846, 3rd Edition, Update 4, Method 8081B was used to prepare and analyze the samples, with the exceptions and/or additions requested by the client. All pertinent Quality Assurance notices are included in the narrative section and all pertinent Laboratory notices are included in the sample data sections.

Pesticide

Extraction and analysis holding time requirements were met for the samples. Samples were prepped by diluting 1.0g of sample to 5 mL in Hexane, and then analyzed by 8081B Method. Sulfur cleanup was performed on the samples with a Sulfur cleanup Blank.

Target analytes were confirmed above the reporting limits in the samples. Sample P001-COMP02-LW-01 was initially analyzed at a dilution. In the analysis of sample P001-COMP02-LW-01, the surrogate recoveries of Decachlorobiphenyl and Tetrachloro-m-Xylene were outside of QC limits due to sample matrix. In the analysis of sample P001-DR0502-LW-01, the surrogate recovery of Tetrachloro-m-Xylene was outside of QC limits due to sample matrix. For sample P001-DR0502-LW-01, since peaks fell within the retention time window of Dieldrin we had to report is as such, but based on the peak shapes it was clear that the peaks were due to sample matrix so no further action was taken. We have reported the initial analyses of samples P001-COMP02-LW-01 and P001-DR0502-LW-01.

Manual integrations were performed on one or more of the process files associated with this SDG. Please see the detailed Manual Integration Summary report that is located in section P. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

All QC criteria were met for all initial, second source and continuing calibration standards associated to this SDG with the following exceptions. The continuing calibration standard 4H15017-CCV1 failed.

All of the surrogate recoveries met control criteria with the following exceptions. The surrogate recoveries for Decachlorobiphenyl were outside of QC criteria in the analyses of P001-DR0314-LW-01, P001-DR0302-LW-01 and P001-DR0501-LW-01 due to the sample matrix. The surrogate recoveries for Tetrachloro-m-Xylene were outside of QC criteria in the analyses of P001-COMP01-LW-01, P001-DR0310-LW-01, P001-DR0312-LW-01and P001-DR0302-LW-01 due to the sample matrix. We have reported the analyses of these samples.

The method blank associated with the samples met all quality control criteria.

Duplicate matrix spikes were not requested with this SDG.
The Laboratory Control Samples (LCS/LCSD) prepared and analyzed with the sample met all quality control criteria with the following exceptions. Decachlorobiphenyl was biased high in the analysis of PLCSBZ.

An uncertainty of these test results may be estimated from the recovery of the surrogates added to the sample prior to sample preparation or from the recovery of spiked compound(s) in the associated laboratory control sample. Further information is available upon request.

I certify that the tests used in this report meet all requirements of the NELAC standards unless otherwise stated in the SDG narrative or QA notice. 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 and in the computer-readable data submitted on CD has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Quentisha Forrester
Chemist III
August 22, 2014
Revised October 1, 2014
Steven L. Pruskin
Technical Director

CompuChem
A division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100Fax: 919/379-4050

SDG NARRATIVE
SDG # 1408028
PROTOCOL: SW-846

SAMPLE IDENTIFICATIONS: P001-COMP02-LW-01 P001-DR0502-LW-01

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Pesticide

Extraction and analysis holding time requirements were met for the samples. Samples were prepped by diluting 1.0g of sample to 5 mL in Hexane, and then analyzed by 8081B Method. Sulfur cleanup was performed on the samples with a Sulfur cleanup Blank.

Target analytes were confirmed above the reporting limits in the samples. Sample P001-COMP02-LW-01 was initially analyzed at a dilution. In the analysis of sample P001-COMP02-LW-01, the surrogate recoveries of Decachlorobiphenyl and Tetrachloro-m-Xylene were outside of QC limits due to sample matrix. In the analysis of sample P001-DR0502-LW-01, the surrogate recovery of Tetrachloro-m-Xylene was outside of QC limits due to sample matrix. We have reported the initial analyses of samples P001-COMP02-LW-01 and P001-DR0502-LW-01.

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All QC criteria were met for all initial, second source and continuing calibration standards associated to this SDG with the following exceptions. The continuing calibration standard 4H15017-CCV1 failed.

All of the surrogate recoveries met control criteria with the following exceptions. The surrogate recoveries for Decachlorobiphenyl were outside of QC criteria in the analyses of P001-DR0314-LW-01, P001-DR0302-LW-01 and P001-DR0501-LW-01 due to the sample matrix. The surrogate recoveries for Tetrachloro-m-Xylene were outside of QC criteria in the analyses of P001-COMP01-LW-01, P001-DR0310-LW-01, P001-DR0312-LW-01and P001-DR0302-LW-01 due to the sample matrix. We have reported the analyses of these samples.

The method blank associated with the samples met all quality control criteria.

Duplicate matrix spikes were not requested with this SDG.
The Laboratory Control Samples (LCS/LCSD) prepared and analyzed with the sample met all quality control criteria with the following exceptions. Decachlorobiphenyl was biased high in the analysis of PLCSBZ.

An uncertainty of these test results may be estimated from the recovery of the surrogates added to the sample prior to sample preparation or from the recovery of spiked compound(s) in the associated laboratory control sample. Further information is available upon request.

I certify that the tests used in this report meet all requirements of the NELAC standards unless otherwise stated in the SDG narrative or QA notice. 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 and in the computer-readable data submitted on CD has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

Quentisha Forrester
Chemist III
August 22, 2014

GC and GC/MS Column and Trap Specifications Table

Columns Utilized	Brand Name	Coating Material	ID (mm)	Film Thickness (um)	Length (m)
	COLUMNS				
	GC Laboratory				
DRO/ORO	Restek	RTX-5	0.53	1.0	30
	Restek	RTX-SMS	0.53	1.0	30
√	Restek	clpest	0.32	0.5	30
√	Restek	clpest2	0.32	0.42	30
	J&W	DB-210	0.53	1.0	30
RSK	J&W	GS-GASPRO	0.32	N/A	30
	GC Volatiles Laboratory				
GRO	Restek	RTX-Volatiles	0.53	2.0	30
	GC/MS Volatiles Laboratory				
	Restek	RTX-VMS	0.18	1.0	20
√	Supelco	SPB-624	0.32	1.8	60
	Supelco	SPB-624	0.53	3.0	75
	Phenomonex	ZB-624	0.32	1.8	60
	GC/MS Semivolatiles Laboratory				
√	Restek	RTX-5Sil MS	0.32	0.25	30
	HPLC Laboratory				
PAH	Supelco	Supelcosil LC-PAH	4.6	5.0	15 cm
PAH	Supelco	Discovery RP Amide C16	4.6	5.0	25 cm
EXP	Restek	Pinnacle Cyano	4.6	5.0	25 cm
EXP	Restek	Allure C18	4.6	5.0	25 cm
	TRAPS				
	GC and GC/MS Volatiles Laboratory				
	Supelco J (BETXTRAP™)	* 7.7 cm Carbopack C			
		* 1.2 cm Carbopack B			
√	Supelco K (Vocarb3000)	* 10 cm of Carbopack B (Graphitized Carbons)			
		* 6 cm of Carboxen 1000 (Carbon molecular sieves)			
		* 1 cm of Carboxen 1001 (Carbon molecular sieves)			

Rev. 30

This table contains the GC columns (and volatile organic trap) used for the analysis of volatiles, semivolatiles, pesticides, and Aroclors by the requested analytical methods. Please see the SDG Narrative(s) for the specific fraction(s) relative to this SDG.
Note: This table also contains HPLC columns.

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CompuChem's Pagination Convention

As required by the EPA CLP Statement of Work (SOW) documents, data to be delivered must be paginated (by machine or hand). In the event that the initial numbering is incorrect (a page numbered twice or a page skipped, for example), it is CompuChem's policy to add an alphabetic suffix to a page number when necessary (e.g., 100A, 100B, etc.). This policy is also applicable to non-CLP data packages.

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Notification Regarding Manual Editing/Integration Flags

In some instances, manual adjustments to the software output are necessary to provide accurate data. These manual integrations are performed by the data reviewers, GC/MS operators, or GC/HPLC chemists. An Extracted Ion Current Profile (EICP) or a GC/HPLC chromatographic peak has been provided for the manual integration performed on each compound to demonstrate the accuracy of that process. The manual integrations are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis, and in the "Flags" column for GC/HPLC analysis. The manual editing/integration flags are:

M - Denotes that a manual integration has been performed for this compound. The manual integration was performed in order to provide the most accurate area count possible for the peak. The most common reasons for performing manual integrations/editing are: the compound was not found by the automatic integration routine, the compound was incorrectly integrated by the automatic integration routine, and the co-eluting compounds were incorrectly integrated by the automatic integration routine.

H - Denotes that the data reviewer, GC/MS operator, or GC/HPLC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

MH - Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed. The manual integration was performed in order to provide the most accurate area count possible for the peak.

L - Denotes that a data reviewer or GC/MS operator has selected an alternate library search. This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

ML - Denotes that an alternate GC/MS library search has been selected and a manual integration has also been performed. This is typically done when an additional TIC has been added and the TIC peak also required a manual integration.

These codes will appear in the GC/MS and GC/HPLC raw data.

Revision 8 (01/29/2011)

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ORGANIC DATA REPORTING QUALIFIERS

On the appropriate reporting form, under the column labeled "Q" for qualifier, each result is flagged with the specific data reporting qualifiers listed below, as appropriate. Up to five qualifiers may be reported on the appropriate reporting form for each compound. The qualifiers used are:

U : This flag indicates the compound was analyzed for but not detected. The Contract Required Quantitation Limit (CRQL), or reporting limit, will be adjusted to reflect any dilution and, for soils, the percent moisture.

J : This flag indicates an estimated value. The flag is used as detailed below:

1. When estimating a concentration for tentatively identified compounds (TICs) where a response factor of 1:1 is assumed for the TIC analyte,

2. When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero, and

3. When the retention time data indicate the presence of a compound that meets the pesticide and/or Aroclor or other GC or HPLC identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero. For example, if the CRQL (or Reporting Limit) is 10 µg/L, but a concentration of 3 µg/L is calculated, it is reported as 3J.

N : This flag indicates presumptive evidence of a compound. This flag is only used for TICs, where the identification is based on a mass spectral library search and must be used with the J flag. For generic characterization of a TIC such as "chlorinated hydrocarbon" (or for an "unknown," with no matches ≥ 85%), the N flag is not used.

P : In the EPA's Contract Laboratory Program (CLP), this flag is used for a pesticide/Aroclor target analyte, when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the Form I and flagged with a P.
For SW-846 GC and HPLC analyses, when the Relative Percent Difference (RPD) is greater than 40% and there is no evidence of chromatographic anomalies or interferences, then the lower of the two values is reported and flagged with a P on the reporting form. When the RPD is equal to or less than 40%, our policy is to also report the lower of the two values, although the choice could be a project specific issue. These SW-846 policies are consistent with Method 8000C. If Method 8000B is required, the higher of the two values is reported. For certain HPLC analyses, if one of the HPLC columns displays co-elution of target analytes, all results are reported from a primary column displaying no co-elution. Results are still flagged with a P if the RPD between columns is greater than 40%.

C : This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X/Y/Z qualifier.)

DATA REPORTING QUALIFIERS (continued)

B : This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.

E : This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a concentration greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a concentration greater than the upper level of the calibration range will have the result flagged with an E on the appropriate reporting form for the original analysis.

D : If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on the appropriate reporting form for the more diluted sample, and **all** reported concentrations on that form are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract.

NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i.e. compounds reported with the CRQL (or Reporting Limit) and the U flag.

NOTE 2: Separate reporting forms are used for reporting the original analysis (Client Sample No. XXXXX) and the more diluted sample analysis (Client Sample No. XXXXXDL) i.e. the results from both analyses <u>are not combined</u> on a single reporting form.

A: This flag indicates that a TIC is a suspected aldol-condensation product.

S: In the SOM01.2 SOW document, this flag is used to indicate an estimated value for Aroclor target compounds where a valid 5-point initial calibration was not performed prior to the analytes detection in a sample. If an "S" flag is used for a specific Aroclor, then a reanalysis of the sample is required after a valid 5-point calibration is performed for the detected Aroclor. The "S" flag is not utilized for non CLP analyses.

* This flag is applied to a target analyte when any QC acceptance criterion has not been met for that analyte. The flag appears on the reporting form of the associated QC analysis.

X/Y/Z : Other specific flags may be required to properly define the results. If used, the flags will be fully described in the SDG Narrative. The laboratory-defined flags are limited to X, Y, and Z.

B. Chain of Custody Records

The laboratory shall include a copy of the Chain-of-Custody (CoC) documentation for all of the samples in the Work Order/SDG.

USEPA
DateShipped: 8/6/2014
CarrierName: FedEx
AirbillNo: 502978208656

CHAIN OF CUSTODY RECORD
Case #: 306
Contact Name: Peter Lisichenko
Contact Phone: 6035124350

No: 2-080614-131105-0004
Cooler #: 2A
Lab: Compuchem Labs Inc.
Lab Phone: 919-379-4089

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	Lab QC
1408028-01	P001-COMP02-LW-01	Area03	VOCs	Liquid Waste	8/6/2014	1	4 oz	None	N
	P001-COMP02-LW-01	Area03	SVOC+PCB+PEST	Liquid Waste	8/6/2014	1	8 oz	None	N
	P001-COMP02-LW-01	Area03	RCRA	Liquid Waste	8/6/2014	1	8 oz	None	N
	P001-COMP02-LW-01	Area03	METALS+Hg	Liquid Waste	8/6/2014	1	500 ml	None	N
1408028-02	P001-DR0502-LW-01	Area05	VOCs	Liquid Waste	8/6/2014	1	4 oz	None	N
	P001-DR0502-LW-01	Area05	SVOC+PCB+PEST	Liquid Waste	8/6/2014	1	8 oz	None	N
	P001-DR0502-LW-01	Area05	RCRA	Liquid Waste	8/6/2014	1	8 oz	None	N
	P001-DR0502-LW-01	Area05	METALS+Hg	Liquid Waste	8/6/2014	1	500 ml	None	N

Special Instructions: RFP 306
Analyze upper phase of liquids

rec'd @ 24.5°C
(ambient in can)

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
ALL SAMPLES ALL ANALYSIS	(WESTON)	8/6/14	Day / Compuchem	8/12/14 0855	good condition 8/12/14

Precautionary Measures Against Hidden Hazards in Laboratory Samples

Notice to Laboratory Personnel

Background

Under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) of 1980, as amended, Section 311 of the Clean Water Act (CWA), as amended, by the Oil Pollution Act of 1990 (OPA), Subtitle I of the Resource Conversation and Recovery Act (RCRA), and pursuant to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and Presidential Decision Document (PDD) #39, the Environmental Protection Agency (EPA) has been delegated the responsibility to undertake response actions with respect to, as a general matter, the release or threat of release of oil, petroleum products, hazardous substances, or pollutant and contaminants, that pose an actual or potential threat to human health or welfare, or to the environment. EPA is responsible for conducting evaluations and cleanups of uncontrolled hazardous substance disposal sites and placing those that are considered to pose a significant threat to the public health or the environment on the National Priorities List (NPL).

EPA's successful implementation of these emergency response action responsibilities requires that technical support capabilities be provided in the form of a contracted Removal Support Team (RST) for EPA. The WESTON RST Contract EP-W-06-072, provides this support to EPA Region II.

Hazard Communication

The samples which accompany this notice were shipped to your laboratory for analysis in accordance with applicable D.O.T. or IATA Regulations and were collected by the WESTON RST and tentatively designated by the field response team, as either environmental or hazardous material samples.

In general, *Environmental Samples* are collected from streams, farm ponds, small lakes, wells, and off-site soil locations that are not reasonable expected to be contaminated with hazardous materials. Samples of on-site soils or water, and materials collected from drums, bulk storage tanks, obviously contaminated ponds, impoundments, lagoons, pools, and leachates from hazardous waste sites are considered *Hazardous Samples*. Samples which are obtained from a known radioactive material contamination site or which demonstrate beta or gamma activity greater than three times average background as scanned with a radiation survey meter are considered *Radioactive Samples*.

The samples which accompany this notice were tentatively classified by the field response team as:

_____ Environmental ___XXX___ Hazardous _____ Comb. (Enviro. & Hazard.) _____ Radioactive

The field team which collected the samples, used the following Level(s) of personal protection as designated by EPA and OSHA conventions to provide protection against possible radiological or chemical exposure:

_____ Level A ___XXX___ Level B _____ Level C _____ Level D

The information is intended for use as a guide for the safe handling of these laboratory samples in accordance with EPA and OSHA regulations. The Sample classification(s) and Levels of personal protection used by the WESTON RST are not represented to be, nor are they adequate or applicable in all situations, nor are they intended to serve as substitutes for professional/personal judgment.

Laboratory Name CompuChem *RFP No.* 306
Prepared by: Lisichenko, P *Date* 8/6/2014

WESTON Office: Region II RST, Edison, NJ; Phone: 732-585-4400 Fax: 732-225-7037

POTENTIAL HAZARDS

FIRE OR EXPLOSION

- These substances will accelerate burning when involved in a fire.
- Some may decompose explosively when heated or involved in a fire.
- May explode from heat or contamination.
- Some will react explosively with hydrocarbons (fuels).
- May ignite combustibles (wood, paper, oil, clothing, etc.).
- Containers may explode when heated.
- Runoff may create fire or explosion hazard.

HEALTH

- Inhalation, ingestion or contact (skin, eyes) with vapors or substance may cause severe injury, burns or death.
- Fire may produce irritating, corrosive and/or toxic gases.
- Runoff from fire control or dilution water may cause pollution.

PUBLIC SAFETY

- **CALL EMERGENCY RESPONSE Telephone Number on Shipping Paper first. If Shipping Paper not available or no answer, refer to appropriate telephone number listed on the inside back cover.**
- As an immediate precautionary measure, isolate spill or leak area in all directions for at least 50 meters (150 feet) for liquids and at least 25 meters (75 feet) for solids.
- Keep unauthorized personnel away.
- Stay upwind.
- Keep out of low areas.
- Ventilate closed spaces before entering.

PROTECTIVE CLOTHING

- Wear positive pressure self-contained breathing apparatus (SCBA).
- Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection.
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

Large Spill

- Consider initial downwind evacuation for at least 100 meters (330 feet).

Fire

- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

EMERGENCY RESPONSE

FIRE

Small Fire

- Use water. Do not use dry chemicals or foams. CO_2 or Halon® may provide limited control.

Large Fire

- Flood fire area with water from a distance.
- Do not move cargo or vehicle if cargo has been exposed to heat.
- Move containers from fire area if you can do it without risk.

Fire Involving Tanks or Car/Trailer Loads

- Fight fire from maximum distance or use unmanned hose holders or monitor nozzles.
- Cool containers with flooding quantities of water until well after fire is out.
- ALWAYS stay away from tanks engulfed in fire.
- For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

SPILL OR LEAK

- Keep combustibles (wood, paper, oil, etc.) away from spilled material.
- Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Stop leak if you can do it without risk.
- Do not get water inside containers.

Small Dry Spill

- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

Small Liquid Spill

- Use a non-combustible material like vermiculite or sand to soak up the product and place into a container for later disposal.

Large Spill

- Dike far ahead of liquid spill for later disposal.
- Following product recovery, flush area with water.

FIRST AID

- Move victim to fresh air.
- Call 911 or emergency medical service.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.
- Remove and isolate contaminated clothing and shoes.
- Contaminated clothing may be a fire risk when dry.
- In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
- Keep victim warm and quiet.
- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

WORK ORDER

Printed: 8/14/2014 11:38:19AM

1408028

COMPUCHEM

Client:	**WESTON SOLUTIONS**	**Project Manager:**	**Cathy Dover**
Project:	**RST2/RFP306/EP-S2-14-01/SITE ID:ZZ**	**Project Number:**	**RST2/RFP306/EP-S2-14-01/SITE ID:ZZ**
SDG:	**1408028** **CASE:**	**Status:**	**Batched**

Report To:
WESTON SOLUTIONS
SMITA SUMBALY
1090 KING GEORGES POST RD. SUITE 201
EDISON, NJ 088373703
Phone: (732) 225-6116
Fax: -

Invoice To:
WESTON SOLUTIONS
SMITA SUMBALY
1090 KING GEORGES POST RD. SUITE 201
EDISON, NJ 088373703
Phone :(732) 225-6116
Fax: -

Date Due:	08/25/2014 00:00 (13 day TAT)		
Received By:	Cathy Dover	Date Received:	08/12/2014 08:58
Logged In By:	Cathy Dover	Date Logged In:	08/12/2014 12:56

J & B Flags?: **YES**	TICS?: **EPA-TICS**	Deliverable: **Level 4**	EDD : **61) CUSTOM EXCEL**
Metals ND to? **MDL**	Spike Level: **FULL Spike**		

LCS/LCSD*CAUTION WASTE DRUM SAMPLES*NOTE SAMPLE COMMENTS FOR INST(MSDS ATTACHED)*NO DRY WEIGHTS*TCL4 VOA 5PPB+EPA-LIKE TICs(MAY NEED MED.LEVEL)*SVOC 8270D TCL4+EPA-LIKE TICs,TCL PEST8081B & TCL PCB8082A ARE ALL DILUTE-N-SHOOT*TAL METALS 6010C+Hg 7471B*RIC

Analysis	Due	TAT	Expires	Received	Comments
1408028-01 P001-COMP02-LW-01 [Soil] Sampled 08/06/2014 00:00 Eastern					**USE ONLY UPPER PHASE OF SAMPLE**
VOA-8260B 5PPB	08/25/2014 16:00	13	08/20/2014 00:00	08/12/2014 08:58	SubList=VOA- TCL4 (08-08-14)
7470A 7471B Mercury	08/25/2014 16:00	13	09/03/2014 00:00	08/12/2014 08:58	
CORROSIVITY 9040B-9040C	08/25/2014 16:00	13	08/18/2014 00:00	08/12/2014 08:58	
GC-8081B PEST Dilute-n-Shoot	08/25/2014 16:00	13	08/20/2014 00:00	08/12/2014 08:58	SubList=GC- 8081 TCLnoPCB (08-08-14)
GC-8082A PCB DILUTE-N-SHOOT	08/25/2014 16:00	13	08/20/2014 00:00	08/12/2014 08:58	SubList=GC- 8082 8082 (08-08-14)
IGNITABILITY 1010A	08/25/2014 16:00	13	09/03/2014 00:00	08/12/2014 08:58	
REACTIVE CYANIDE 9014	08/25/2014 16:00	13	08/20/2014 00:00	08/12/2014 08:58	
REACTIVE SULFIDE 9034	08/25/2014 16:00	13	08/20/2014 00:00	08/12/2014 08:58	
Solids, Dry Weight	08/25/2014 16:00	13	02/02/2015 00:00	08/12/2014 08:58	
6010C METALS	08/25/2014 16:00	13	02/02/2015 00:00	08/12/2014 08:58	
SVOC 8270D Dilute-n-shoot	08/25/2014 16:00	13	08/20/2014 00:00	08/12/2014 08:58	SubList=SV- TCL4 (08-08-14)

WORK ORDER

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Client:	**WESTON SOLUTIONS**	**Project Manager:**	**Cathy Dover**
Project:	**RST2/RFP306/EP-S2-14-01/SITE ID:ZZ**	**Project Number:**	**RST2/RFP306/EP-S2-14-01/SITE ID:ZZ**
SDG:	**1408028** **CASE:**	**Status:**	**Received**

Date Due:	08/25/2014 00:00 (13 day TAT)		
Received By:	Cathy Dover	Date Received:	08/12/2014 08:58
Logged In By:	Cathy Dover	Date Logged In:	08/12/2014 12:56

J & B Flags?: **YES**	TICS?: **EPA-TICS**	Deliverable: **Level 4**	EDD : **61) CUSTOM EXCEL**
Metals ND to? **MDL**	Spike Level: **FULL Spike**		

LCS/LCSD*CAUTION WASTE DRUM SAMPLES*NOTE SAMPLE COMMENTS FOR INST(MSDS ATTACHED)*NO DRY WEIGHTS*TCL4 VOA 5PPB+EPA-LIKE TICs(MAY NEED MED.LEVEL)*SVOC 8270D TCL4+EPA-LIKE TICs,TCL PEST8081B & TCL PCB8082A ARE ALL DILUTE-N-SHOOT*TAL METALS 6010C+Hg 7471B*RIC

Analysis	Due	TAT	Expires	Received	Comments
1408028-02 P001-DR0502-LW-01 [Soil] Sampled 08/06/2014 00:00 Eastern					**USE ONLY UPPER PHASE OF SAMPLE**
7470A 7471B Mercury	08/25/2014 16:00	13	09/03/2014 00:00	08/12/2014 08:58	
6010C METALS	08/25/2014 16:00	13	02/02/2015 00:00	08/12/2014 08:58	
CORROSIVITY 9040B-9040C	08/25/2014 16:00	13	08/18/2014 00:00	08/12/2014 08:58	
GC-8081B PEST Dilute-n-Shoot	08/25/2014 16:00	13	08/20/2014 00:00	08/12/2014 08:58	SubList=GC- 8081 TCLnoPCB (08-08-14)
GC-8082A PCB DILUTE-N-SHOOT	08/25/2014 16:00	13	08/20/2014 00:00	08/12/2014 08:58	SubList=GC- 8082 8082 (08-08-14)
IGNITABILITY 1010A	08/25/2014 16:00	13	09/03/2014 00:00	08/12/2014 08:58	
REACTIVE CYANIDE 9014	08/25/2014 16:00	13	08/20/2014 00:00	08/12/2014 08:58	
REACTIVE SULFIDE 9034	08/25/2014 16:00	13	08/20/2014 00:00	08/12/2014 08:58	
Solids, Dry Weight	08/25/2014 16:00	13	02/02/2015 00:00	08/12/2014 08:58	
SVOC 8270D Dilute-n-shoot	08/25/2014 16:00	13	08/20/2014 00:00	08/12/2014 08:58	SubList=SV- TCL4 (08-08-14)
VOA-8260B 5PPB	08/25/2014 16:00	13	08/20/2014 00:00	08/12/2014 08:58	SubList=VOA- TCL4 (08-08-14)

C. Sample Preparation and Analysis Holding Time Data

(HOLDING TIME SUMMARY)

Sample collection, receipt, preparation and analysis dates with method holding time requirements.

HOLDING TIME SUMMARY

8081A

Client: WESTON SOLUTIONS SDG: 1408028

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
P001-COMP02-LW-01	08/06/14	08/12/14	08/13/14	8	14	08/18/14	5.2	40	
P001-DR0502-LW-01	08/06/14	08/12/14	08/13/14	8	14	08/18/14	5.2	40	

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D. Surrogate Recovery Results

(SURROGATE STANDARD RECOVERY AND RT SUMMARY)

SURROGATE STANDARD RECOVERY

8081A

Client: WESTON SOLUTIONS

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

SDG: 1408028 Instrument: tracegc80

Sequence: 4H15017 Calibration: 4082101

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	Q
Blank (4081306-BLK1) ug/kg wet				
Lab File ID: 015n4081306-BLK1.d	Analyzed: 08/18/14 17:53			
DCB (A)	300.0	145	43 - 144	*
DCB (A) [2C]	300.0	138	43 - 144	
TCX (A)	150.0	106	43 - 135	
TCX (A) [2C]	150.0	103	43 - 135	
Cleanup Blank (C408047-CBL1) ng/uL				
Lab File ID: 016nC408047-CBL1.d	Analyzed: 08/18/14 18:22			
DCB (A)	2.000	129	43 - 144	
DCB (A) [2C]	2.000	149	43 - 144	*
TCX (A)	1.000	127	43 - 135	
TCX (A) [2C]	1.000	129	43 - 135	
LCS (4081306-BS1) ug/kg wet				
Lab File ID: 017n4081306-BS1.d	Analyzed: 08/18/14 18:51			
DCB (A)	300.0	173	43 - 144	*
DCB (A) [2C]	300.0	164	43 - 144	*
TCX (A)	150.0	112	43 - 135	
TCX (A) [2C]	150.0	108	43 - 135	
LCS Dup (4081306-BSD1) ug/kg wet				
Lab File ID: 018n4081306-BSD1.d	Analyzed: 08/18/14 19:20			
DCB (A)	300.0	147	43 - 144	*
DCB (A) [2C]	300.0	142	43 - 144	
TCX (A)	150.0	102	43 - 135	
TCX (A) [2C]	150.0	101	43 - 135	
P001-COMP02-LW-01 (1408028-01) ug/kg wet				
Lab File ID: 019n1408028-01.d	Analyzed: 08/18/14 19:48			
DCB (A)	300.0	31	43 - 144	*
DCB (A) [2C]	300.0	178	43 - 144	*
TCX (A)	150.0		43 - 135	*
TCX (A) [2C]	150.0	211	43 - 135	*

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SURROGATE STANDARD RECOVERY

8081A

Client: WESTON SOLUTIONS

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

SDG: 1408028 Instrument: tracegc80

Sequence: 4H15017 Calibration: 4082101

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	Q
P001-DR0502-LW-01 (1408028-02) ug/kg wet				
Lab File ID: 020n1408028-02.d	Analyzed: 08/18/14 20:17			
DCB (A)	300.0	106	43 - 144	
DCB (A) [2C]	300.0	85	43 - 144	
TCX (A)	150.0	0	43 - 135	*
TCX (A) [2C]	150.0	49	43 - 135	

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RT Summary

RT SUMMARY

8081A

Client: WESTON SOLUTIONS

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

SDG: 1408028 Instrument: tracegc80

Sequence: 4H15017 Calibration: 4082101

Surrogate Compound	RT	CCV RT	RT Diff	RT Diff Limit	Q
Initial Cal Check (4H15017-ICV1) ng/uL Lab File ID: 012n4H15017-ICV Analyzed: 08/18/14 16:26					
DCB (A)	21.053	21.053	0	+/-0.070	
DCB (A) [2C]	21.965	21.965	0	+/-0.070	
TCX (A)	8.275	8.275	0	+/-0.070	
TCX (A) [2C]	8.315	8.315	0	+/-0.070	
Performance Mix (4H15017-PEM1) ng/uL Lab File ID: 014n4H15017-PEM Analyzed: 08/18/14 17:24					
DCB (A)	21.058	21.053	0.0050	+/-0.070	
DCB (A) [2C]	21.97	21.965	0.0050	+/-0.070	
TCX (A)	8.278	8.275	0.0030	+/-0.070	
TCX (A) [2C]	8.315	8.315	0.0000	+/-0.070	
Blank (4081306-BLK1) ug/kg wet Lab File ID: 015n4081306-BLK Analyzed: 08/18/14 17:53					
DCB (A)	21.055	21.053	0.0020	+/-0.070	
DCB (A) [2C]	21.968	21.965	0.0030	+/-0.070	
TCX (A)	8.275	8.275	0.0000	+/-0.070	
TCX (A) [2C]	8.313	8.315	-0.0020	+/-0.070	
Cleanup Blank (C408047-CBL1) ng/uL Lab File ID: 016nC408047-CBL Analyzed: 08/18/14 18:22					
DCB (A)	21.068	21.053	0.0150	+/-0.070	
DCB (A) [2C]	21.98	21.965	0.0150	+/-0.070	
TCX (A)	8.285	8.275	0.0100	+/-0.070	
TCX (A) [2C]	8.327	8.315	0.0120	+/-0.070	

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RT SUMMARY

8081A

Client: WESTON SOLUTIONS

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

SDG: 1408028 Instrument: tracegc80

Sequence: 4H15017 Calibration: 4082101

Surrogate Compound	RT	CCV RT	RT Diff	RT Diff Limit	Q
LCS (4081306-BS1) ug/kg wet Lab File ID: 017n4081306-BS1 Analyzed: 08/18/14 18:51					
DCB (A)	21.058	21.053	0.0050	+/-0.070	
DCB (A) [2C]	21.973	21.965	0.0080	+/-0.070	
TCX (A)	8.282	8.275	0.0070	+/-0.070	
TCX (A) [2C]	8.317	8.315	0.0020	+/-0.070	
LCS Dup (4081306-BSD1) ug/kg wet Lab File ID: 018n4081306-BSD Analyzed: 08/18/14 19:20					
DCB (A)	21.058	21.053	0.0050	+/-0.070	
DCB (A) [2C]	21.968	21.965	0.0030	+/-0.070	
TCX (A)	8.28	8.275	0.0050	+/-0.070	
TCX (A) [2C]	8.32	8.315	0.0050	+/-0.070	
P001-COMP02-LW-01 (1408028-01) ug/kg wet Lab File ID: 019n1408028-01.d Analyzed: 08/18/14 19:48					
DCB (A)	21.063	21.053	0.0100	+/-0.070	
DCB (A) [2C]	22.027	21.965	0.0620	+/-0.070	
TCX (A)		8.275	-8.2750	+/-0.070	*
TCX (A) [2C]	8.332	8.315	0.0170	+/-0.070	
P001-DR0502-LW-01 (1408028-02) ug/kg wet Lab File ID: 020n1408028-02.d Analyzed: 08/18/14 20:17					
DCB (A)	21.107	21.053	0.0540	+/-0.070	
DCB (A) [2C]	22.007	21.965	0.0420	+/-0.070	
TCX (A)		8.275	-8.2750	+/-0.070	*
TCX (A) [2C]	8.358	8.315	0.0430	+/-0.070	

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E. Laboratory Control Sample Results

(LCS/LCS DUPLICATE RECOVERY)

LCS recovery or LCS/LCSD recovery with relative percent difference, and quality control acceptance criteria.

LCS / LCS DUPLICATE SUMMARY

8081A

Client: WESTON SOLUTIONS SDG: 1408028 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4081306-BS1 Matrix: Soil Client ID: PLCSBZ Batch: 4081306

ANALYTE	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	LCS % REC.	Q	QC LIMITS REC.
alpha-BHC	150.0	169.8	113		50 - 150
alpha-BHC [2C]	150.0	164.0	109		50 - 150
gamma-BHC (Lindane)	150.0	163.9	109		50 - 150
gamma-BHC (Lindane) [2C]	150.0	160.2	107		50 - 150
Heptachlor	150.0	180.9	121		50 - 150
Heptachlor [2C]	150.0	174.9	117		50 - 150
Aldrin	150.0	184.7	123		50 - 150
Aldrin [2C]	150.0	182.3	122		50 - 150
beta-BHC	150.0	142.6	95		50 - 150
beta-BHC [2C]	150.0	141.9	95		50 - 150
delta-BHC	150.0	161.2	107		50 - 150
delta-BHC [2C]	150.0	157.6	105		50 - 150
Heptachlor epoxide	150.0	168.9	113		50 - 150
Heptachlor Epoxide [2C]	150.0	172.8	115		50 - 150
gamma-Chlordane	150.0	173.3	116		50 - 150
gamma-Chlordane [2C]	150.0	170.8	114		50 - 150
alpha-Chlordane	150.0	175.6	117		50 - 150
alpha-Chlordane [2C]	150.0	172.7	115		50 - 150
Endosulfan I	150.0	153.0	102		50 - 150
Endosulfan I [2C]	150.0	147.7	98		50 - 150
4,4'-DDE	150.0	181.4	121		50 - 150
4,4'-DDE [2C]	150.0	182.5	122		50 - 150
Dieldrin	150.0	179.8	120		50 - 150
Dieldrin [2C]	150.0	181.0	121		50 - 150
Endrin	150.0	180.0	120		50 - 150
Endrin [2C]	150.0	181.3	121		50 - 150
4,4'-DDD	150.0	170.9	114		50 - 150

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LCS / LCS DUPLICATE SUMMARY

8081A

Client: WESTON SOLUTIONS SDG: 1408028 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4081306-BS1 Matrix: Soil Client ID: PLCSBZ Batch: 4081306

ANALYTE	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	LCS % REC.	Q	QC LIMITS REC.
4,4'-DDD [2C]	150.0	174.3	116		50 - 150
Endosulfan II	150.0	159.2	106		50 - 150
Endosulfan II [2C]	150.0	163.2	109		50 - 150
4,4'-DDT	150.0	180.3	120		50 - 150
4,4'-DDT [2C]	150.0	184.2	123		50 - 150
Endrin aldehyde	150.0	158.0	105		50 - 150
Endrin Aldehyde [2C]	150.0	154.0	103		50 - 150
Endosulfan sulfate	150.0	165.1	110		50 - 150
Endosulfan Sulfate [2C]	150.0	159.1	106		50 - 150
Methoxychlor	150.0	193.8 J	129		50 - 150
Methoxychlor [2C]	150.0	222.7 J	148		50 - 150
Endrin ketone	150.0	164.6	110		50 - 150
Endrin Ketone [2C]	150.0	167.5	112		50 - 150

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LCS / LCS DUPLICATE SUMMARY

8081A

Client: WESTON SOLUTIONS SDG: 1408028 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4081306-BSD1 Matrix: Soil Client ID: PLCSDBZ Batch: 4081306

ANALYTE	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	LCSD % REC. #	% RPD #	QC LIMITS RPD	Q	REC.
alpha-BHC	150.0	156.4	104	8	40		50 - 150
alpha-BHC [2C]	150.0	152.2	101	7	40		50 - 150
gamma-BHC (Lindane)	150.0	150.8	101	8	40		50 - 150
gamma-BHC (Lindane) [2C]	150.0	148.0	99	8	40		50 - 150
Heptachlor	150.0	166.3	111	8	40		50 - 150
Heptachlor [2C]	150.0	160.4	107	9	40		50 - 150
Aldrin	150.0	168.9	113	9	40		50 - 150
Aldrin [2C]	150.0	166.1	111	9	40		50 - 150
beta-BHC	150.0	135.0	90	5	40		50 - 150
beta-BHC [2C]	150.0	133.6	89	6	40		50 - 150
delta-BHC	150.0	148.9	99	8	40		50 - 150
delta-BHC [2C]	150.0	146.2	97	7	40		50 - 150
Heptachlor epoxide	150.0	158.2	105	7	40		50 - 150
Heptachlor Epoxide [2C]	150.0	159.6	106	8	40		50 - 150
gamma-Chlordane	150.0	158.7	106	9	40		50 - 150
gamma-Chlordane [2C]	150.0	156.7	104	9	40		50 - 150
alpha-Chlordane	150.0	161.0	107	9	40		50 - 150
alpha-Chlordane [2C]	150.0	159.3	106	8	40		50 - 150
Endosulfan I	150.0	139.7	93	9	40		50 - 150
Endosulfan I [2C]	150.0	136.0	91	8	40		50 - 150
4,4'-DDE	150.0	165.4	110	9	40		50 - 150
4,4'-DDE [2C]	150.0	166.0	111	9	40		50 - 150
Dieldrin	150.0	164.5	110	9	40		50 - 150
Dieldrin [2C]	150.0	167.0	111	8	40		50 - 150
Endrin	150.0	164.8	110	9	40		50 - 150
Endrin [2C]	150.0	168.2	112	7	40		50 - 150
4,4'-DDD	150.0	157.9	105	8	40		50 - 150

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LCS / LCS DUPLICATE SUMMARY

8081A

Client: WESTON SOLUTIONS SDG: 1408028 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4081306-BSD1 Matrix: Soil Client ID: PLCSDBZ Batch: 4081306

ANALYTE	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	LCSD % REC. #	% RPD #	QC LIMITS		
					RPD	Q	REC.
4,4'-DDD [2C]	150.0	169.8	113	3	40		50 - 150
Endosulfan II	150.0	147.3	98	8	40		50 - 150
Endosulfan II [2C]	150.0	151.9	101	7	40		50 - 150
4,4'-DDT	150.0	164.9	110	9	40		50 - 150
4,4'-DDT [2C]	150.0	170.3	114	8	40		50 - 150
Endrin aldehyde	150.0	151.0	101	5	40		50 - 150
Endrin Aldehyde [2C]	150.0	146.1	97	5	40		50 - 150
Endosulfan sulfate	150.0	154.6	103	7	40		50 - 150
Endosulfan Sulfate [2C]	150.0	152.6	102	4	40		50 - 150
Methoxychlor	150.0	180.2 J	120	7	40		50 - 150
Methoxychlor [2C]	150.0	207.6 J	138	7	40		50 - 150
Endrin ketone	150.0	155.3	104	6	40		50 - 150
Endrin Ketone [2C]	150.0	159.3	106	5	40		50 - 150

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G. Batch Summary

(PREPARATION BATCH SUMMARY)

Client Sample IDs, cross-referenced with Lab Sample IDs, with sample preparation details.

PREPARATION BATCH SUMMARY

8081A

Client: WESTON SOLUTIONS SDG: 1408028 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Batch: 4081306 Matrix: Soil Preparation: EPA 3550B_GC

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL/WT (g)	FINAL VOL/WT (uL)
P001-COMP02-LW-01	1408028-01	08/13/14 14:18	1.00	5000
P001-DR0502-LW-01	1408028-02	08/13/14 14:18	1.00	5000
PBLKBZ	4081306-BLK1	08/13/14 14:18	1.00	5000
PLCSBZ	4081306-BS1	08/13/14 14:18	1.00	5000
PLCSDBZ	4081306-BSD1	08/13/14 14:18	1.00	5000

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SULFUR CLEANUP BATCH SUMMARY

8081A

Client: WESTON SOLUTIONS SDG: 1408028 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Batch: 4081306 Matrix: Soil Preparation: EPA 3550B_GC

Sulfur Cleanup Batch: C408047

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL/WT (g)	FINAL VOL/WT (uL)
P001-COMP02-LW-01	1408028-01	08/13/14 14:18	1.00	5000
P001-DR0502-LW-01	1408028-02	08/13/14 14:18	1.00	5000

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H. Analysis Sequence Summary

(ANALYSIS SEQUENCE SUMMARY)

ANALYSIS SEQUENCE SUMMARY

8081A

Client: WESTON SOLUTIONS SDG: 1408028 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Sequence: 4H15016 Calibration: 4082101 Instrument: tracegc80

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
PEMMA	4H15016-PEM1	003n4H15016-PEM1.d	08/18/14 12:06:00
INDC1MA	4H15016-CAL1	004n4H15016-CAL1.d	08/18/14 12:35:00
INDC2MA	4H15016-CAL2	005n4H15016-CAL2.d	08/18/14 13:04:00
INDC3MA	4H15016-CAL3	006n4H15016-CAL3.d	08/18/14 13:32:00
INDC4MA	4H15016-CAL4	007n4H15016-CAL4.d	08/18/14 14:01:00
INDC5MA	4H15016-CAL5	008n4H15016-CAL5.d	08/18/14 14:30:00
TOXAPH3MA	4H15016-ARC1	009n4H15016-ARC1.d	08/18/14 14:59:00
CHLORO3MA	4H15016-ARC2	010n4H15016-ARC2.d	08/18/14 15:28:00
PESTCHKMA	4H15016-SCV1	011n4H15016-SCV1.d	08/18/14 15:57:00

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ANALYSIS SEQUENCE SUMMARY

8081A

Client: WESTON SOLUTIONS SDG: 1408028 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Sequence: 4H15017 Calibration: 4082101 Instrument: tracegc80

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
INDC3MB	4H15017-ICV1	012n4H15017-ICV1.d	08/18/14 16:26:00
PEMMB	4H15017-PEM1	014n4H15017-PEM1.d	08/18/14 17:24:00
PBLKBZ	4081306-BLK1	015n4081306-BLK1.d	08/18/14 17:53:00
PSBLKZB	C408047-CBL1	016nC408047-CBL1.d	08/18/14 18:22:00
PLCSBZ	4081306-BS1	017n4081306-BS1.d	08/18/14 18:51:00
PLCSDBZ	4081306-BSD1	018n4081306-BSD1.d	08/18/14 19:20:00
P001-COMP02-LW-01	1408028-01	019n1408028-01.d	08/18/14 19:48:00
P001-DR0502-LW-01	1408028-02	020n1408028-02.d	08/18/14 20:17:00
INDC3MC	4H15017-CCV1	029n4H15017-CCV1.d	08/19/14 00:09:00
INDC3MC	4H15017-CCV1	028n4H15017-CCV1.d	08/19/14 00:09:00

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I. Target Compound Results

(ANALYSIS DATA SHEETS)

Analysis Data Sheets (ADS) and Surrogate Recovery Results

Sample data shall be arranged in packets with the Analysis Data Sheet, followed by the raw data for the sample. These sample packets shall be placed in increasing Client Sample ID number order, considering both letters and numbers.

a. Target Analyte Results (ANALYSIS DATA SHEET)
Tabulated results (identification and quantitation) shall be included.

b. Copies of Chromatograms
Positively identified compounds shall be labeled with the names of compounds, either directly out from the peak on the chromatogram, or on a printout of retention times on the data system printout if retention times are printed over the peak on the chromatogram. Included for each sample or sample extract, dilutions and reanalyses. The chromatogram shall contain the following header information: Client Sample ID Number, volume injected (uL), date and time of injection, GC column ID, GC instrument ID, Lab file ID and analyst ID.

c. Copies of Chromatograms from the Second Column
(where required)

d. Data System Printout
A printout of retention time and corresponding peak height or peak area shall accompany each chromatogram.

ANALYSIS DATA SHEET

8081A

P001-COMP02-LW-01

Client: WESTON SOLUTIONS | SDG: 1408028 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550B_GC | File ID: 019n1408028-01.d | Sampled: 08/06/14 00:00

Initial/Final: 1g / 5000uL | Sulfur Cleanup: Y | Lab ID: 1408028-01 | Received: 08/12/14 08:58

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/13/14 14:18

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/18/14 19:48

Batch: 4081306 | Sequence: 4H15017 | Calibration: 4082101 | Instrument: tracegc80

CAS NO.	COMPOUND	CONC. (ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC *	756 ~~441~~	26.4	249	~~DP~~ J
58-89-9	gamma-BHC (Lindane)		12.0	249	U J
76-44-8	Heptachlor		36.0	249	U J
309-00-2	Aldrin *	439 ~~298~~	20.1	249	~~D~~ J
319-85-7	beta-BHC *	1730 ~~1040~~	42.0	249	~~DP~~ J
319-86-8	delta-BHC *	~~190~~ ~~635~~ 249	23.8	249	~~JDP~~ UJ
1024-57-3	Heptachlor epoxide *	506 ~~69.5~~	15.9	249	~~JDP~~ JN
5103-74-2	gamma-Chlordane *	588 ~~226~~	19.8	249	~~JDP~~ JN
5103-71-9	alpha-Chlordane *	94.5 ~~82.5~~	24.3	249	~~JD~~ J
959-98-8	Endosulfan I		23.1	249	U J
72-55-9	4,4'-DDE *	84.3 ~~348~~	21.6	630	~~JDP~~ JN
60-57-1	Dieldrin *	66 ~~43.1~~	16.8	630	~~JDP~~ J
72-20-8	Endrin *	~~241~~ ~~42.8~~ 630	14.1	630	~~JDP~~ UJ
72-54-8	4,4'-DDD *	~~333~~ ~~141~~ 630	24.3	630	~~JDP~~ UJ
33213-65-9	Endosulfan II *	114 ~~109~~	26.7	630	~~JD~~ J
50-29-3	4,4'-DDT *	532 ~~335~~	75.0	630	~~JDP~~ J
7421-93-4	Endrin Aldehyde *	~~457~~ ~~238~~ 630	39.0	630	~~JDP~~ UJ
1031-07-8	Endosulfan Sulfate		18.6	630	U J
72-43-5	Methoxychlor *	5710 ~~411~~	87.0	2490	~~JDP~~ JN
53494-70-5	Endrin Ketone *	356 ~~297~~	15.3	630	~~JD~~ J
8001-35-2	Toxaphene		4500	24900	U J

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A)	300.0	92.00	31	43 - 144	D
DCB (A) [2C]	300.0	533.0	178	43 - 144	D
TCX (A)	150.0	ND		43 - 135	D
TCX (A) [2C]	150.0	316.0	211	43 - 135	D

* Values outside of QC limits

* values transferred from the Column 2.

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Data File: /chem/tracegc80.i/n140818a.b/019n1408028-01.d

Page 1

Date : 18-AUG-2014 19:48

Client ID: P001-COMP02-LW-01

Instrument: tracegc80.i

Sample Info: 1408028-01

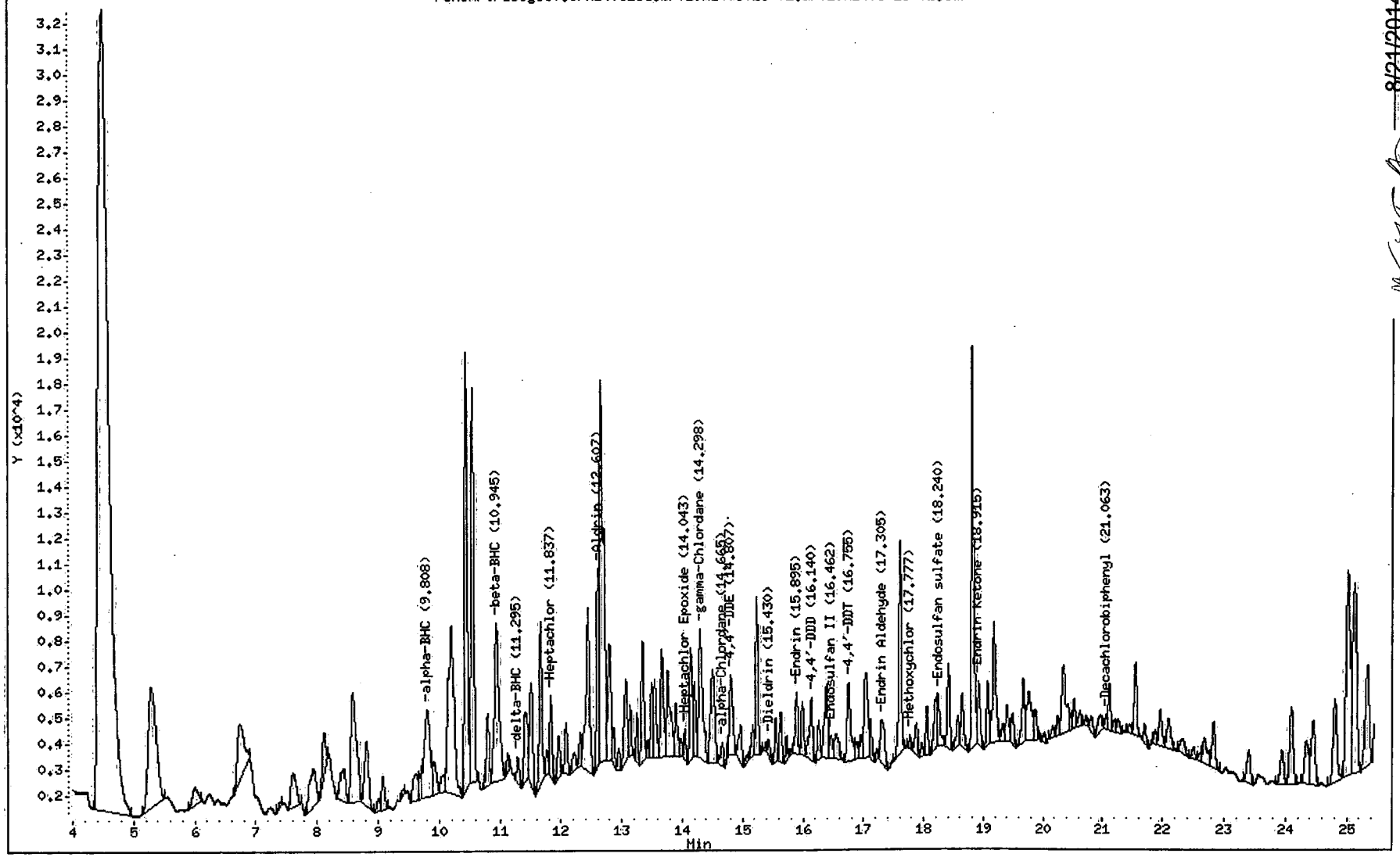
Volume Injected (uL): 1.0

Operator: BWL

Column phase: clpest

Column diameter: 0.32

/chem/tracegc80.i/n140818a.b/019n1408028-01.d/019n1408028-01.cdf



8/21/2014

CompuChem

Lab Smp Id : 1408028-01 Client Smp Id : P001-COMP02-LW-01
Sample Type : SAMPLE Sublist : TCLnoPCB
Inj Date : 18-AUG-2014 19:48 Inst ID : TRACEGC80
Operator : BWL
Method : /chem/tracegc80.i/n140818a.b/8081A_clpestv8.m
Misc. Info : P001-COMP02-LW-01

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Ws) * (100/(100-M))

DF	Dilution Factor:	10.0	Uf	GPC Unit Factor:	1
Vt	Final Volume:	5000(ul)	Vi	Injection Volume:	1(ul)
Ws	Sample Weight:	1.0(g)	M	Moisture:	0(%)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (ug)	FINAL (ug/Kg)	ADJUSTED PQL (ug/Kg)	% REC	RECOVERY LIMITS	FLAGS
1.07			6861								
1.12			6325								
1.27			5980								
1.43			647661								
3.71			2226								
3.81			617								
4.50			372094								
5.30			42890								
6.00			4261								
6.74			16399								
7.40			570								
7.61			7886								
7.94			11172								
8.12			5942								
8.42			7556								
8.59			26898								
8.82			12387								
9.01			1655								
9.08			4409								
9.41			769								
9.62			5668								
9.69			2833								
9.81	9.75	9.89	22527	2553432	alpha-BHC	0.008822	441.1121	249.0000			
9.92			5313								
10.05			2578								
10.20			43102								
10.44			52541								
10.55			46511								
10.80			8749								
10.94	10.84	10.98	31824	920658	beta-BHC	0.034566	1728.276	249.9000			
11.13			2001								
11.30	11.27	11.41	2820	2228390	delta-BHC	0.001265	63.25194	249.9000			J
11.41			12147								
11.52			13782								
11.67			18418								
11.77			2372								
11.84	11.79	11.93	8639	2328195	Heptachlor	0.003710	185.5085	249.9000			J

8/21/2014

CompuChem

Lab Smp Id : 1408028-01 Client Smp Id : P001-COMP02-LW-01
Sample Type : SAMPLE Sublist : TCLnoPCB
Inj Date : 18-AUG-2014 19:48 Inst ID :
Operator : BWL
Method : /chem/tracegc80.i/n140818a.b/8081A_clpestv8.m
Misc. Info : P001-COMP02-LW-01

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Ws) * (100/(100-M))

DF	Dilution Factor:	10.0	Uf	GPC Unit Factor:	1
Vt	Final Volume:	5000(ul)	Vi	Injection Volume:	1(ul)
Ws	Sample Weight:	1.0(g)	M	Moisture:	0(%)

RT	RT WINDOW	AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (ug)	CONCENTRATIONS FINAL (ug/Kg)	ADJUSTED PQL (ug/Kg)	% REC	RECOVERY LIMITS	FLAGS
11.96		5206								
12.08		5756								
12.22		2568								
12.32		3450								
12.45		27121								
12.61	12.52 12.66	17056	2145595	Aldrin	0.007949	397.4655	249.9000			
12.66		70156								
12.80		16413								
12.87		3048								
12.95		2055								
13.07		12405								
13.14		4774								
13.25		4073								
13.35		14728								
13.42		1505								
13.50		8040								
13.55		9907								
13.66		14180								
13.76		14856								
13.90		6611								
13.98		1374								
14.04	13.94 14.08	2556	1839495	Heptachlor Epoxide	0.001390	69.47559	249.9000			J
14.14		13155								
14.21		8556								
14.30	14.23 14.37	22177	1886268	gamma-Chlordane	0.011757	587.8275	249.9000			
14.50		17258								
14.66	14.53 14.67	2934	1781640	alpha-Chlordane	0.001646	82.31180	249.9000			J
14.76		977								
14.81	14.74 14.88	12383	1782762	4,4'-DDE	0.006946	347.2981	501.0000			J
14.97		5470								
15.07		800								
15.17		3447								
15.23		15472								
15.37		692								
15.43	15.37 15.51	1470	1704464	Dieldrin	0.000862	43.09273	501.0000			J
15.55		3674								
15.63		5189								

8/21/2014

CompuChem

Lab Smp Id : 1408028-01 Client Smp Id : P001-COMP02-LW-01
Sample Type : SAMPLE Sublist : TCLnoPCB
Inj Date : 18-AUG-2014 19:48 Inst ID :
Operator : BWL
Method : /chem/tracegc80.i/n140818a.b/8081A_clpestv8.m
Misc. Info : P001-COMP02-LW-01

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Ws) * (100/(100-M))

DF	Dilution Factor:	10.0	Uf	GPC Unit Factor:	1
Vt	Final Volume:	5000(ul)	Vi	Injection Volume:	1(ul)
Ws	Sample Weight:	1.0(g)	M	Moisture:	0(%)

RT	RT WINDOW	AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (ug)	CONCENTRATIONS FINAL (ug/Kg)	ADJUSTED PQL (ug/Kg)	% REC	RECOVERY LIMITS	FLAGS
15.73		1836								
15.79		532								
15.90	15.87 16.01	7181	1490718	Endrin	0.004817	240.8572	501.0000			J
15.99		5837								
16.14	16.05 16.19	8709	1310029	4,4'-DDD	0.006648	332.3973	501.0000			J
16.26		4243								
16.39		11103								
16.46	16.36 16.50	2974	1301825	Endosulfan II	0.002284	114.2243	501.0000			J
16.55		4784								
16.76	16.65 16.79	12253	1152178	4,4'-DDT	0.010634	531.6889	501.0000			
16.88		2529								
16.96		2567								
17.05		14521								
17.12		3942								
17.22		774								
17.30	17.27 17.41	8637	945234	Endrin Aldehyde	0.009136	456.8182	501.0000			J
17.61		22688								
17.78	17.70 17.84	1195	541546	Methoxychlor	0.002207	110.3322	2499.000			J
17.88		4053								
17.96		1367								
18.05		4588								
18.20		6655								
18.24	18.21 18.35	6548	1108128	Endosulfan sulfate	0.005909	295.4534	501.0000			J
18.41		8982								
18.57		3726								
18.63		6752								
18.81		47138								
18.92	18.81 18.95	8867	1244710	Endrin Ketone	0.007124	356.1874	501.0000			J
19.08		7664								
19.18		17371								
19.33		2109								
19.40		4941								
19.50		3993								
19.68		8108								
19.77		11183								
19.88		3473								
20.02		1148								

8/21/2014

CompuChem

Lab Smp Id : 1408028-01 Client Smp Id : P001-COMP02-LW-01
Sample Type : SAMPLE Sublist : TCLnoPCB
Inj Date : 18-AUG-2014 19:48 Inst ID :
Operator : BWL
Method : /chem/tracegc80.i/n140818a.b/8081A_clpestv8.m
Misc. Info : P001-COMP02-LW-01

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Ws) * (100/(100-M))

DF Dilution Factor: 10.0 Uf GPC Unit Factor: 1
Vt Final Volume: 5000(ul) Vi Injection Volume: 1(ul)
Ws Sample Weight: 1.0(g) M Moisture: 0(%)

RT	RT WINDOW	AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (ug)	CONCENTRATIONS FINAL (ug/Kg)	ADJUSTED PQL (ug/Kg)	% REC	RECOVERY LIMITS	FLAGS
20.17		1358								
20.25		2091								
20.34		13720								
20.47		1534								
20.52		2992								
20.63		1946								
20.73		936								
20.81		1795								
20.97		3448								
21.06	20.98 21.12	1442	784712	Decachlorobiphenyl	0.001836	91.81707		30.6*	43 - 144	R
21.12		4960								
21.20		1255								
21.26		1866								
21.45		1257								
21.55		8604								
21.71		1949								
21.88		1420								
21.96		5064								
22.10		4674								
22.33		3081								
22.50		1497								
22.61		1044								
22.68		5151								
22.83		6178								
23.41		5182								
23.94		5399								
24.09		12349								
24.34		8306								
24.45		10665								
24.81		14251								
25.02		36794								
25.13		36904								
25.34		18100								

8/21/2014

Data File: /chem/tracegc80.i/n140818a_2C.b/019n1408028-01.d

Date : 18-AUG-2014 19:48

Client ID: P001-COMP02-LW-01

Instrument: tracegc80.i

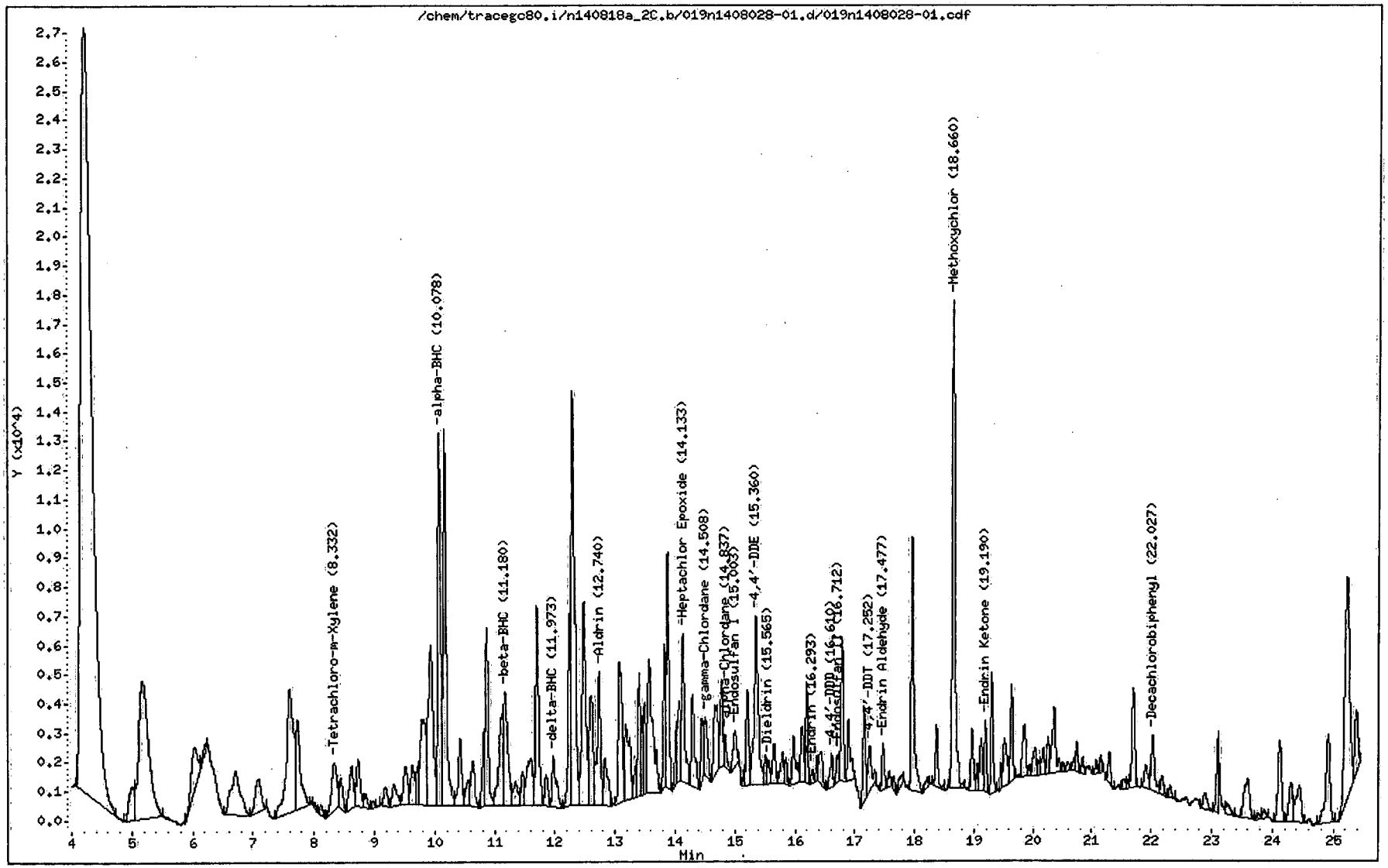
Sample Info: 1408028-01

Volume Injected (uL): 1.0

Operator: BWL

Column phase: clpest2

Column diameter: 0.32



8/21/2014

CompuChem

Data file : /chem/tracegc80.i/n140818a_2C.b/019n1408028-01.d
Lab Smp Id: 1408028-01 Client Smp ID: P001-COMP02-LW-01
Inj Date : 18-AUG-2014 19:48
Operator : BWL Inst ID: tracegc80.i
Smp Info : 1408028-01
Misc Info : P001-COMP02-LW-01
Comment :
Method : /chem/tracegc80.i/n140818a_2C.b/8081A_clpest2v8.m
Meth Date : 21-Aug-2014 11:00 spruskin Quant Type: ESTD
Cal Date : 18-AUG-2014 15:28 Cal File: 010n4H15016-ARC2.d
Als bottle: 1
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: TCLnoPCB.sub
Target Version: 3.50 Sample Matrix: SOIL

Concentration Formula:
Amt * DF * Uf * Vt/(Vi * Ws) * (100/(100 - M)) * CpndVariable

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	5000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Ws	1.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-Xylene					CAS #: 877-09-8		
8.332	8.315	0.017	10113	0.00632	316	80.00- 120.00	100.00(R)
$ 33 Decachlorobiphenyl					CAS #: 2051-24-3		
22.027	21.970	0.057	7739	0.01066	533	80.00- 120.00	100.00(R)
2 alpha-BHC					CAS #: 319-84-6		
10.078	10.032	0.046	39625	0.01512	756	80.00- 120.00	100.00

8/21/2014

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/Kg)	TARGET RANGE	RATIO
3 gamma-BHC (Lindane)					CAS #: 58-89-9		
Compound Not Detected							
4 Heptachlor					CAS #: 76-44-8		
Compound Not Detected							
5 Aldrin					CAS #: 309-00-2		
12.740	12.785	-0.045	17860	0.00878	439	80.00- 120.00	100.00
7 beta-BHC					CAS #: 319-85-7		
11.180	11.217	-0.037	19744	0.02074	1040	80.00- 120.00	100.00
8 delta-BHC					CAS #: 319-86-8		
11.973	11.925	0.048	8181	0.00380	190	80.00- 120.00	100.00(a)
9 Heptachlor Epoxide					CAS #: 1024-57-3		
14.133	14.130	0.003	17321	0.01012	506	80.00- 120.00	100.00
10 gamma-Chlordane					CAS #: 5103-74-2		
14.508	14.558	-0.050	8017	0.00452	226	80.00- 120.00	100.00(a)
11 alpha-Chlordane					CAS #: 5103-71-9		
14.837	14.887	-0.050	3112	0.00189	94.5	80.00- 120.00	100.00(a)
13 Endosulfan I					CAS #: 959-98-8		
15.003	14.998	0.005	5207	0.00322	161	80.00- 120.00	100.00(a)
14 4,4'-DDE					CAS #: 72-55-9		
15.360	15.298	0.062	27487	0.01685	843	80.00- 120.00	100.00
15 Dieldrin					CAS #: 60-57-1		
15.565	15.607	-0.042	2076	0.00132	66.2	80.00- 120.00	100.00(a)
16 Endrin					CAS #: 72-20-8		
16.293	16.268	0.025	1159	0.000843	42.1	80.00- 120.00	100.00(a)
17 4,4'-DDD					CAS #: 72-54-8		
16.610	16.553	0.057	3392	0.00288	144	80.00- 120.00	100.00(a)
18 Endosulfan II					CAS #: 33213-65-9		
16.712	16.735	-0.023	2580	0.00217	108	80.00- 120.00	100.00(a)
19 4,4'-DDT					CAS #: 50-29-3		
17.252	17.220	0.032	6800	0.00669	335	80.00- 120.00	100.00(a)

8/21/2014

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/Kg)	TARGET RANGE	RATIO
20 Endrin Aldehyde					CAS #: 7421-93-4		
17.477	17.470	0.007	4289	0.00475	237	80.00- 120.00	100.00(a)
21 Endosulfan sulfate					CAS #: 1031-07-8		
Compound Not Detected							
22 Methoxychlor					CAS #: 72-43-5		
18.660	18.700	-0.040	51377	0.11423	5710	80.00- 120.00	100.00
23 Endrin Ketone					CAS #: 53494-70-5		
19.190	19.200	-0.010	6492	0.00593	296	80.00- 120.00	100.00(a)
31 Toxaphene					CAS #: 8001-35-2		
Operator disabled compound identification.							

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

8/21/2014

ANALYSIS DATA SHEET

8081A

P001-DR0502-LW-01

Client: WESTON SOLUTIONS | SDG: 1408028 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550B_GC | File ID: 020n1408028-02.d | Sampled: 08/06/14 00:00

Initial/Final: 1g / 5000uL | Sulfur Cleanup: Y | Lab ID: 1408028-02 | Received: 08/12/14 08:58

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/13/14 14:18

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/18/14 20:17

Batch: 4081306 | Sequence: 4H15017 | Calibration: 4082101 | Instrument: tracegc80

CAS NO.	COMPOUND	CONC. (ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC	95.0 ~~13.3~~	2.64	24.9	~~JP~~ JN
58-89-9	gamma-BHC (Lindane)	3.049 ~~2.57~~	1.20	24.9	~~JP~~ J
76-44-8	Heptachlor		3.60	24.9	U
309-00-2	Aldrin		2.01	24.9	U
319-85-7	beta-BHC		4.20	24.9	U
319-86-8	delta-BHC		2.38	24.9	U
1024-57-3	Heptachlor epoxide		1.59	24.9	U
5103-74-2	gamma-Chlordane		1.98	24.9	U
5103-71-9	alpha-Chlordane		2.43	24.9	U
959-98-8	Endosulfan I		2.31	24.9	U
72-55-9	4,4'-DDE		2.16	63.0	U
60-57-1	Dieldrin	4380 ~~2810~~	1.68	63.0	~~PE~~ J
72-20-8	Endrin		1.41	63.0	U J
72-54-8	4,4'-DDD	474 ~~60.6~~	2.43	63.0	~~JP~~ JN
33213-65-9	Endosulfan II		2.67	63.0	U J
50-29-3	4,4'-DDT	589 ~~115~~	7.50	63.0	~~P~~ JN
7421-93-4	Endrin aldehyde		3.90	63.0	U J
1031-07-8	Endosulfan sulfate	286 ~~187~~	1.86	63.0	~~P~~ J
72-43-5	Methoxychlor	~~215~~ ~~101~~ 249	8.70	249	~~JP~~ UJ
53494-70-5	Endrin Ketone	161 ~~94.5~~	1.53	63.0	~~P~~ J
8001-35-2	Toxaphene		450	2490	U J

SYSTEM MONITORING COMPOUND	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A)	300.0	317.3	106	43 - 144	
DCB (A) [2C]	300.0	255.9	85	43 - 144	
TCX (A)	150.0	ND		43 - 135	*
TCX (A) [2C]	150.0	72.80	49	43 - 135	

* Values outside of QC limits

* Values transferred from the column 2.

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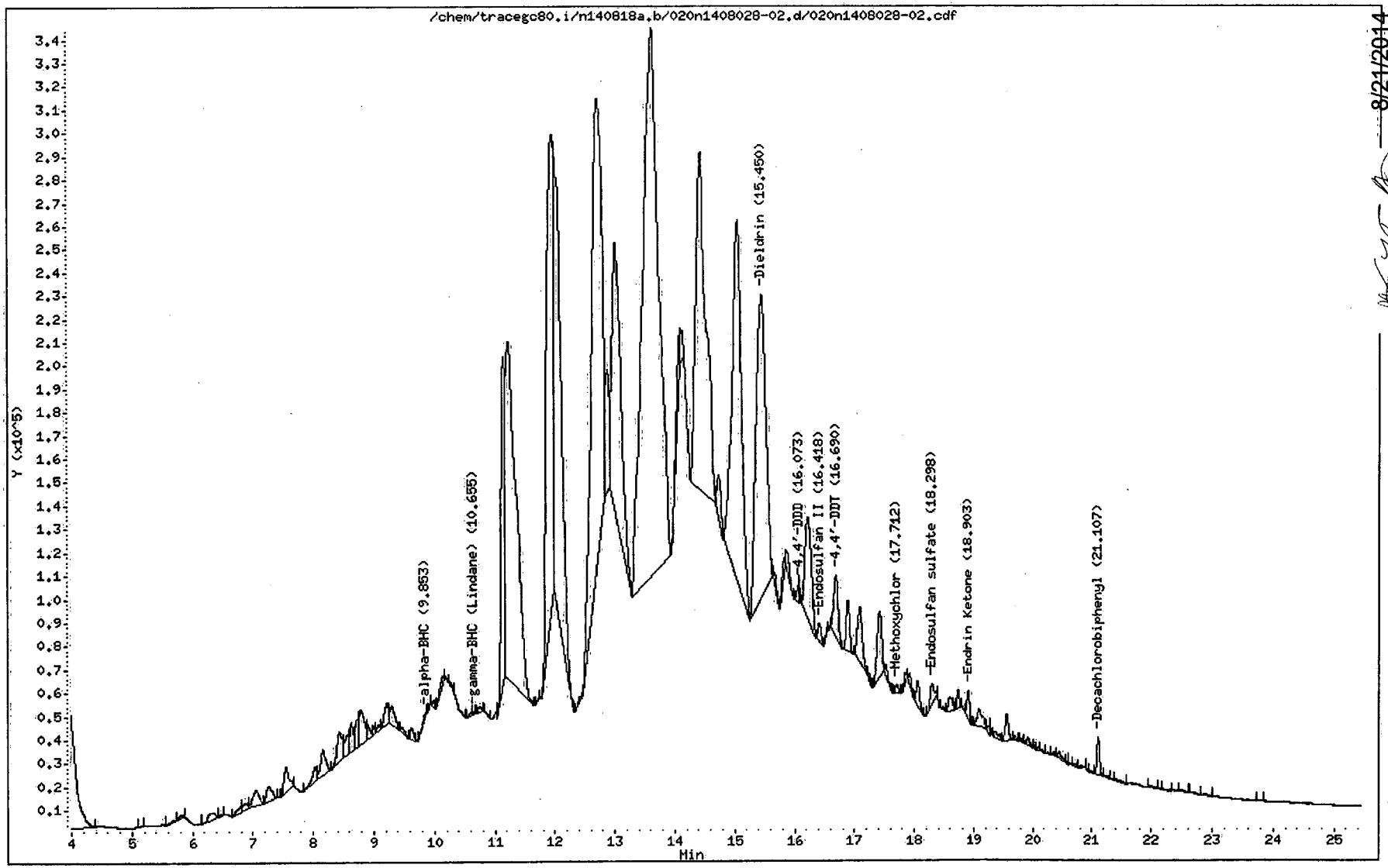
Data File: /chem/tracegc80.i/n140818a.b/020n1408028-02.d
Date : 18-AUG-2014 20:17
Client ID: P001-DR0502-LW-01
Sample Info: 1408028-02
Volume Injected (uL): 1.0
Column phase: clpest

Page 1

Instrument: tracegc80.i

Operator: BWL
Column diameter: 0.32



8/21/2014

CompuChem

Lab Smp Id : 1408028-02 Client Smp Id : P001-DR0502-LW-01
Sample Type : SAMPLE Sublist : TCLnoPCB
Inj Date : 18-AUG-2014 20:17 Inst ID : TRACEGC80
Operator : BWL
Method : /chem/tracegc80.i/n140818a.b/8081A_clpestv8.m
Misc. Info : P001-DR0502-LW-01

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Ws) * (100/(100-M))

DF	Dilution Factor:	1.0	Uf	GPC Unit Factor:	1
Vt	Final Volume:	5000(ul)	Vi	Injection Volume:	1(ul)
Ws	Sample Weight:	1.0(g)	M	Moisture:	0(%)

RT	RT WINDOW	AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (ug)	CONCENTRATIONS FINAL (ug/Kg)	ADJUSTED PQL (ug/Kg)	% REC	RECOVERY LIMITS	FLAGS
0.37		1131								
1.38		852996								
2.04		242564								
3.76		4889386								
5.17		512								
5.71		2554								
5.80		5466								
6.33		21389								
6.49		1236								
6.79		13944								
6.88		16132								
7.05		51247								
7.26		42799								
7.42		721								
7.55		63098								
8.03		32061								
8.16		63794								
8.43		80875								
8.57		40454								
8.63		43505								
8.72		45391								
8.78		88173								
8.90		21573								
9.01		8046								
9.09		7097								
9.22		41288								
9.30		41644								
9.46		10021								
9.62		18055								
9.85	9.75 9.89	6764	2553432	alpha-BHC	0.002649	13.24296	24.90000			J
9.94		2171								
9.97		4011								
10.14		13529								
10.16		640								
10.24		5853								
10.52		662								
10.61		2897								

8/21/2014

CompuChem

Lab Smp Id : 1408028-02 Client Smp Id : P001-DR0502-LW-01
Sample Type : SAMPLE Sublist : TCLnoPCB
Inj Date : 18-AUG-2014 20:17 Inst ID :
Operator : BWL
Method : /chem/tracegc80.i/n140818a.b/8081A_clpestv8.m
Misc. Info : P001-DR0502-LW-01

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Ws) * (100/(100-M))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 5000(ul) Vi Injection Volume: 1(ul)
Ws Sample Weight: 1.0(g) M Moisture: 0(%)

RT	RT WINDOW	AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (ug)	CONCENTRATIONS FINAL (ug/Kg)	ADJUSTED PQL (ug/Kg)	% REC	RECOVERY LIMITS	FLAGS
10.66	10.59 10.73	1194	2367305	gamma-BHC (Lindane)	0.000504	2.519743	24.99000			J
10.74		7146								
10.83		3123								
11.14		539265								
11.23		1814544								
11.74		1546								
11.95		1487566								
11.99		1693875								
12.46		7049								
12.71		2485688								
12.88		233351								
13.01		1201266								
13.62		4365445								
14.09		103309								
14.11		39611								
14.43		1694703								
14.74		88255								
15.05		1702826								
15.45	15.37 15.51	1492170	1704464	Dieldrin	0.875448	4377.239	50.10000			E
15.65		15684								
15.83		18507								
15.87		39366								
16.07	16.05 16.19	15880	1310029	4,4'-DDD	0.012122	60.60936	50.10000			
16.23		320222								
16.42	16.36 16.50	28229	1301825	Endosulfan II	0.021684	108.4209	50.10000			
16.55		7685								
16.69	16.65 16.79	135681	1152178	4,4'-DDT	0.117760	588.7982	50.10000			
16.81		666								
16.89		86953								
17.09		130060								
17.24		5646								
17.42		143257								
17.53		14228								
17.71	17.70 17.84	10913	541546	Methoxychlor	0.020152	100.7577	249.9000			J
17.86		12876								
17.92		13591								
18.06		38990								

8/21/2014

CompuChem

Lab Smp Id : 1408028-02 Client Smp Id : P001-DR0502-LW-01
Sample Type : SAMPLE Sublist : TCLnoPCB
Inj Date : 18-AUG-2014 20:17 Inst ID :
Operator : BWL
Method : /chem/tracegc80.i/n140818a.b/8081A_clpestv8.m
Misc. Info : P001-DR0502-LW-01

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Ws) * (100/(100-M))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 5000(ul) Vi Injection Volume: 1(ul)
Ws Sample Weight: 1.0(g) M Moisture: 0(%)

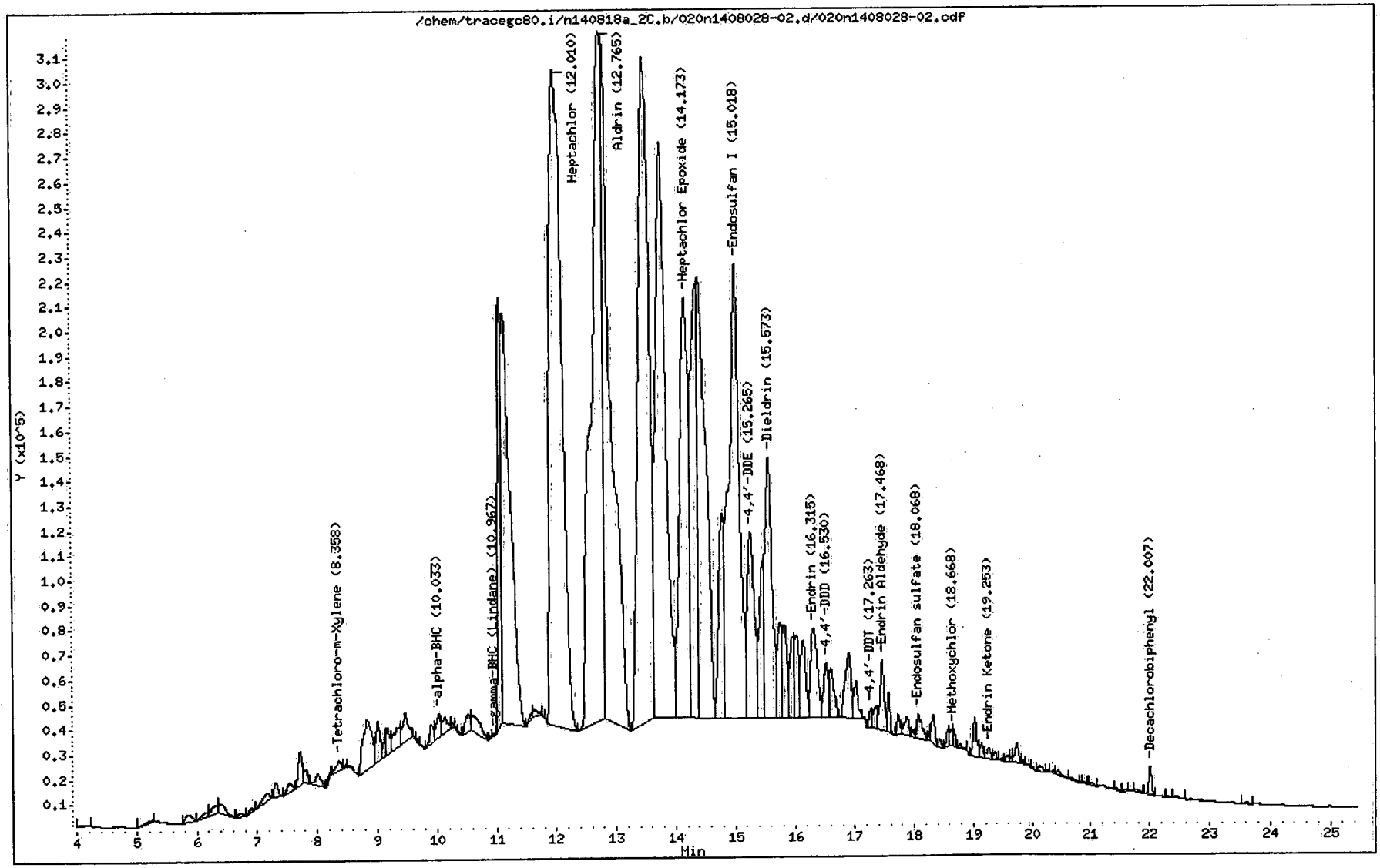
RT	RT WINDOW	AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (ug)	CONCENTRATIONS FINAL (ug/Kg)	ADJUSTED PQL (ug/Kg)	% REC	RECOVERY LIMITS	FLAGS
18.30	18.21 18.35	41456	1108128	Endosulfan sulfate	0.037410	187.0498	50.10000			
18.45		3424								
18.59		27983								
18.71		22148								
18.90	18.81 18.95	40029	1244710	Endrin Ketone	0.032159	160.7965	50.10000			
18.98		573								
19.09		45109								
19.25		8045								
19.37		15560								
19.56		41300								
19.71		4279								
19.81		3517								
19.92		11148								
20.02		2776								
20.09		2729								
20.16		2645								
20.26		2027								
20.36		3356								
20.45		12971								
20.60		2022								
20.71		3309								
20.82		3013								
20.98		1841								
21.11	20.98 21.12	49801	784712	Decachlorobiphenyl	0.063463	317.3137		105.8	43 - 144	
21.22		2242								
21.42		5946								
22.00		3040								
22.19		1490								
22.50		2982								
22.70		3269								
22.88		3662								
23.79		1457								

8/21/2014

Data File: /chem/tracegc80.i/n140818a_2C.b/020n1408028-02.d
Date : 18-AUG-2014 20:17
Client ID: P001-DR0502-LW-01
Sample Info: 1408028-02
Volume Injected (uL): 1.0
Column phase: clpest2

Instrument: tracegc80.i

Operator: BWL
Column diameter: 0.32



8/21/2014

CompuChem

Data file : /chem/tracegc80.i/n140818a_2C.b/020n1408028-02.d
Lab Smp Id: 1408028-02 Client Smp ID: P001-DR0502-LW-01
Inj Date : 18-AUG-2014 20:17
Operator : BWL Inst ID: tracegc80.i
Smp Info : 1408028-02
Misc Info : P001-DR0502-LW-01
Comment :
Method : /chem/tracegc80.i/n140818a_2C.b/8081A_clpest2v8.m
Meth Date : 21-Aug-2014 11:00 spruskin Quant Type: ESTD
Cal Date : 18-AUG-2014 15:28 Cal File: 010n4H15016-ARC2.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TCLnoPCB.sub
Target Version: 3.50 Sample Matrix: SOIL

Concentration Formula:
Amt * DF * Uf * Vt/(Vi * Ws) * (100/(100 - M)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	5000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Ws	1.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-Xylene					CAS #: 877-09-8		
8.358	8.315	0.043	23291	0.01456	72.8	80.00- 120.00	100.00
$ 33 Decachlorobiphenyl					CAS #: 2051-24-3		
22.007	21.970	0.037	37154	0.05117	256	80.00- 120.00	100.00
2 alpha-BHC					CAS #: 319-84-6		
10.033	10.032	0.001	49763	0.01899	94.9	80.00- 120.00	100.00
3 gamma-BHC (Lindane)					CAS #: 58-89-9		
10.967	10.960	0.007	1657	0.000688	3.44	80.00- 120.00	100.00(a)

8/21/2014

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
4 Heptachlor					CAS #: 76-44-8		
12.010	12.025	-0.015	3791079	1.72544	8630	80.00- 120.00	100.00(A)
5 Aldrin					CAS #: 309-00-2		
12.765	12.785	-0.020	3224890	1.58532	7930	80.00- 120.00	100.00(A)
7 beta-BHC					CAS #: 319-85-7		
Compound Not Detected							
8 delta-BHC					CAS #: 319-86-8		
Compound Not Detected							
9 Heptachlor Epoxide					CAS #: 1024-57-3		
14.173	14.130	0.043	1705409	0.99632	4980	80.00- 120.00	100.00(A)
10 gamma-Chlordane					CAS #: 5103-74-2		
Compound Not Detected							
11 alpha-Chlordane					CAS #: 5103-71-9		
Compound Not Detected							
13 Endosulfan I					CAS #: 959-98-8		
15.018	14.998	0.020	2239804	1.38581	6930	80.00- 120.00	100.00(A)
14 4,4'-DDE					CAS #: 72-55-9		
15.265	15.298	-0.033	633438	0.38836	1940	80.00- 120.00	100.00(A)
15 Dieldrin					CAS #: 60-57-1		
15.573	15.607	-0.034	882286	0.56275	2810	80.00- 120.00	100.00(A)
16 Endrin					CAS #: 72-20-8		
16.315	16.268	0.047	283313	0.20606	1030	80.00- 120.00	100.00(A)
17 4,4'-DDD					CAS #: 72-54-8		
16.530	16.553	-0.023	111556	0.09476	474	80.00- 120.00	100.00

8/21/2014

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/Kg)	TARGET RANGE	RATIO
18 Endosulfan II					CAS #: 33213-65-9		
Compound Not Detected							
19 4,4'-DDT					CAS #: 50-29-3		
17.263	17.220	0.043	24186	0.02381	119	80.00- 120.00	100.00
20 Endrin Aldehyde					CAS #: 7421-93-4		
17.468	17.470	-0.002	133069	0.14727	736	80.00- 120.00	100.00
21 Endosulfan sulfate					CAS #: 1031-07-8		
18.068	18.065	0.003	58993	0.05714	286	80.00- 120.00	100.00
22 Methoxychlor					CAS #: 72-43-5		
18.668	18.700	-0.032	19635	0.04365	218	80.00- 120.00	100.00(a)
23 Endrin Ketone					CAS #: 53494-70-5		
19.253	19.200	0.053	20707	0.01890	94.5	80.00- 120.00	100.00
31 Toxaphene					CAS #: 8001-35-2		
Operator disabled compound identification.							

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.

8/21/2014

J. Initial Calibration and Second Source Calibration Verification Data

(INITIAL CALIBRATION DATA) (SECOND-SOURCE CALIBRATION VERIFICATION)

For all GC columns, all instruments, in chronological order by GC column and instrument. If more than one instrument is used, forms shall be arranged in order by instrument. Multiple initial calibrations from the same instrument shall be in chronological order. Within each initial calibration, the standards are in order by level, from lowest to highest. The calibration is followed by the second source calibration verification form.

(1) Quantitation reports and chromatograms for the initial calibration and the second source calibration verification.

(2) Chromatogram peak displaying each manual integration, depicting integration time range.

INITIAL CALIBRATION DATA

8081A

Client: WESTON SOLUTIONS SDG: 1408028

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Calibration: 4082101 Instrument: tracegc80

Calibration Date: 8/18/2014 12:00:19AM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
alpha-BHC	0.005	2349800	0.01	2388300	0.02	2614750	0.04	2631225	0.08	2783088		
alpha-BHC [2C]	0.005	2582200	0.01	2596700	0.02	2630900	0.04	2586925	0.08	2707988		
gamma-BHC (Lindane)	0.005	2209800	0.01	2288600	0.02	2407550	0.04	2403725	0.08	2526850		
gamma-BHC (Lindane) [2C]	0.005	2413200	0.01	2405100	0.02	2403500	0.04	2356125	0.08	2459400		
Heptachlor	0.005	2260200	0.01	2311000	0.02	2369050	0.04	2321500	0.08	2379225		
Heptachlor [2C]	0.005	2291400	0.01	2345600	0.02	2167100	0.04	2077400	0.08	2104325		
Aldrin	0.005	2098400	0.01	2114400	0.02	2184850	0.04	2136725	0.08	2193600		
Aldrin [2C]	0.005	2132600	0.01	2084600	0.02	2037400	0.04	1946850	0.08	1969650		
beta-BHC	0.005	911000	0.01	940900	0.02	944150	0.04	911200	0.08	896037.5		
beta-BHC [2C]	0.005	1015000	0.01	988000	0.02	967350	0.04	911900	0.08	877550		
delta-BHC	0.005	2041000	0.01	2136900	0.02	2259450	0.04	2278700	0.08	2425900		
delta-BHC [2C]	0.005	2100400	0.01	2160300	0.02	2133250	0.04	2121300	0.08	2245538		
Heptachlor epoxide	0.005	1826400	0.01	1849900	0.02	1878650	0.04	1815800	0.08	1826725		
Heptachlor Epoxide [2C]	0.005	1781200	0.01	1765600	0.02	1740550	0.04	1644475	0.08	1626688		
gamma-Chlordane	0.005	1848800	0.01	1879200	0.02	1912200	0.04	1869050	0.08	1922088		
gamma-Chlordane [2C]	0.005	1877800	0.01	1836600	0.02	1787650	0.04	1677550	0.08	1691275		
alpha-Chlordane	0.005	1730200	0.01	1753900	0.02	1835200	0.04	1770350	0.08	1818550		
alpha-Chlordane [2C]	0.005	1763000	0.01	1699600	0.02	1651850	0.04	1544700	0.08	1572213		
Endosulfan I	0.005	1553200	0.01	1749100	0.02	1764000	0.04	1699850	0.08	1706688		
Endosulfan I [2C]	0.005	1734200	0.01	1697700	0.02	1622900	0.04	1512200	0.08	1514225		
4,4'-DDE	0.01	1613700	0.02	1730200	0.04	1803525	0.08	1818050	0.16	1948338		
4,4'-DDE [2C]	0.01	1652200	0.02	1614300	0.04	1605800	0.08	1570500	0.16	1712394		
Dieldrin	0.01	1610800	0.02	1650550	0.04	1730625	0.08	1724888	0.16	1805456		
Dieldrin [2C]	0.01	1599900	0.02	1567500	0.04	1559450	0.08	1507963	0.16	1604219		
Endrin	0.01	1457100	0.02	1471750	0.04	1521000	0.08	1479663	0.16	1524075		
Endrin [2C]	0.01	1454900	0.02	1386850	0.04	1375075	0.08	1307750	0.16	1349825		
4,4'-DDD	0.01	1222600	0.02	1260750	0.04	1328800	0.08	1322925	0.16	1415069		

Environmental Testing Laboratories

CompuChem

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INITIAL CALIBRATION DATA

8081A

Client: WESTON SOLUTIONS SDG: 1408028

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Calibration: 4082101 Instrument: tracegc80

Calibration Date: 8/18/2014 12:00:19AM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
4,4'-DDD [2C]	0.01	1199500	0.02	1172050	0.04	1180825	0.08	1129250	0.16	1204406		
Endosulfan II	0.01	1136400	0.02	1291700	0.04	1356750	0.08	1320525	0.16	1403750		
Endosulfan II [2C]	0.01	1113400	0.02	1219450	0.04	1226350	0.08	1156488	0.16	1231375		
4,4'-DDT	0.01	1059200	0.02	1109650	0.04	1162375	0.08	1163113	0.16	1266550		
4,4'-DDT [2C]	0.01	1010700	0.02	998400	0.04	1016875	0.08	991062.5	0.16	1062381		
Endrin aldehyde	0.01	898100	0.02	931650	0.04	976375	0.08	971475	0.16	948568.8		
Endrin Aldehyde [2C]	0.01	974100	0.02	931650	0.04	921850	0.08	848875	0.16	841456.3		
Endosulfan sulfate	0.01	1082600	0.02	1092400	0.04	1131375	0.08	1098275	0.16	1135988		
Endosulfan Sulfate [2C]	0.01	1079300	0.02	1056100	0.04	1046600	0.08	977337.5	0.16	1002913		
Methoxychlor	0.05	528660	0.1	532650	0.2	551525	0.4	542960	0.8	551937.5		
Methoxychlor [2C]	0.05	443620	0.1	438010	0.2	447700	0.4	439380	0.8	480213.8		
Endrin ketone	0.01	1200700	0.02	1231400	0.04	1271750	0.08	1242750	0.16	1276950		
Endrin Ketone [2C]	0.01	1114000	0.02	1102600	0.04	1113275	0.08	1054763	0.16	1093275		
DCB (A)	0.01	819200	0.02	805500	0.04	804550	0.08	751900	0.16	742412.5		
DCB (A) [2C]	0.01	809800	0.02	777700	0.04	741525	0.08	670387.5	0.16	631156.3		
TCX (A)	0.005	1409400	0.01	1472300	0.02	1560150	0.04	1501725	0.08	1490388		
TCX (A) [2C]	0.005	1662600	0.01	1663400	0.02	1657550	0.04	1535900	0.08	1477338		

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INITIAL CALIBRATION DATA (Continued)

8081A

Client: WESTON SOLUTIONS SDG: 1408028

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Calibration: 4082101 Instrument: tracegc80

Calibration Date: 8/18/2014 12:00:19AM

Compound	Mean RF	% RSD	Mean RT	RT RSD	Linear r	Quad COD	RSD LIMIT	Q
alpha-BHC	2553433	7.095089	9.8244	2.076821E-02			CCC (20)	
alpha-BHC [2C]	2620943	1.993704	10.0312	1.418034E-02			CCC (20)	
gamma-BHC (Lindane)	2367305	5.147779	10.6614	1.800447E-02			CCC (20)	
gamma-BHC (Lindane) [2C]	2407465	1.52438	10.9586	1.156723E-03			CCC (20)	
Heptachlor	2328195	2.064031	11.8672	1.252392E-02			CCC (20)	
Heptachlor [2C]	2197165	5.326211	12.0236	6.886445E-04			CCC (20)	
Aldrin	2145595	1.966993	12.5882	3.459364E-03			CCC (20)	
Aldrin [2C]	2034220	3.810185	12.7822	2.146835E-02			CCC (20)	
beta-BHC	920657.5	2.272242	10.9116	1.610381E-02			CCC (20)	
beta-BHC [2C]	951960	5.907736	11.2156	2.101052E-02			CCC (20)	
delta-BHC	2228390	6.579705	11.344	1.338612E-02			CCC (20)	
delta-BHC [2C]	2152158	2.625852	11.9228	2.067257E-02			CCC (20)	
Heptachlor epoxide	1839495	1.369192	14.0168	1.569376E-02			CCC (20)	
Heptachlor Epoxide [2C]	1711703	4.163327	14.1276	1.224667E-02			CCC (20)	
gamma-Chlordane	1886268	1.613637	14.3046	1.855723E-02			CCC (20)	
gamma-Chlordane [2C]	1774175	4.964005	14.555	1.933618E-02			CCC (20)	
alpha-Chlordane	1781640	2.474424	14.6054	1.383419E-02			CCC (20)	
alpha-Chlordane [2C]	1646273	5.458628	14.8834	4.974159E-03			CCC (20)	
Endosulfan I	1694568	4.933269	14.9002	1.564412E-02			CCC (20)	
Endosulfan I [2C]	1616245	6.32683	14.9956	1.322458E-02			CCC (20)	
4,4'-DDE	1782763	6.894859	14.8136	1.056908E-02			CCC (20)	
4,4'-DDE [2C]	1631039	3.30858	15.2956	1.028281E-03			CCC (20)	
Dieldrin	1704464	4.446958	15.4372	1.517874E-02			CCC (20)	
Dieldrin [2C]	1567806	2.471776	15.604	1.536758E-02			CCC (20)	
Endrin	1490718	2.024122	15.9436	7.153298E-03			CCC (20)	
Endrin [2C]	1374880	3.930428	16.2652	1.691248E-02			CCC (20)	
4,4'-DDD	1310029	5.612543	16.12	1.419195E-02			CCC (20)	

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INITIAL CALIBRATION DATA (Continued)

8081A

Client: WESTON SOLUTIONS SDG: 1408028

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Calibration: 4082101 Instrument: tracegc80

Calibration Date: 8/18/2014 12:00:19AM

Compound	Mean RF	% RSD	Mean RT	RT RSD	Linear r	Quad COD	RSD LIMIT	Q
4,4'-DDD [2C]	1177206	2.540017	16.5514	2.217951E-02			CCC (20)	
Endosulfan II	1301825	7.79808	16.4322	1.819438E-02			CCC (20)	
Endosulfan II [2C]	1189413	4.386721	16.7336	9.640522E-03			CCC (20)	
4,4'-DDT	1152178	6.688915	16.726	2.281142E-02			CCC (20)	
4,4'-DDT [2C]	1015884	2.745498	17.2182	9.756468E-03			CCC (20)	
Endrin aldehyde	945233.8	3.37697	17.3436	6.68106E-03			CCC (20)	
Endrin Aldehyde [2C]	903586.3	6.296241	17.4682	1.315957E-02			CCC (20)	
Endosulfan sulfate	1108128	2.169902	18.28	1.573198E-02			CCC (20)	
Endosulfan Sulfate [2C]	1032450	4.012358	18.0628	1.773225E-02			CCC (20)	
Methoxychlor	541546.5	1.968888	17.7718	0.0187345			CCC (20)	
Methoxychlor [2C]	449784.8	3.87512	18.6968	8.556048E-03			CCC (20)	
Endrin ketone	1244710	2.5049	18.8794	1.961236E-02			CCC (20)	
Endrin Ketone [2C]	1095583	2.223208	19.1974	7.783979E-03			CCC (20)	
DCB (A)	784712.5	4.451569	21.0548	1.459771E-02			CCC (20)	
DCB (A) [2C]	726113.8	10.21921	21.9672	8.685337E-03			CCC (20)	
TCX (A)	1486793	3.6557	8.274	8.662955E-03			CCC (20)	
TCX (A) [2C]	1599358	5.451094	8.3148	2.585768E-02			CCC (20)	

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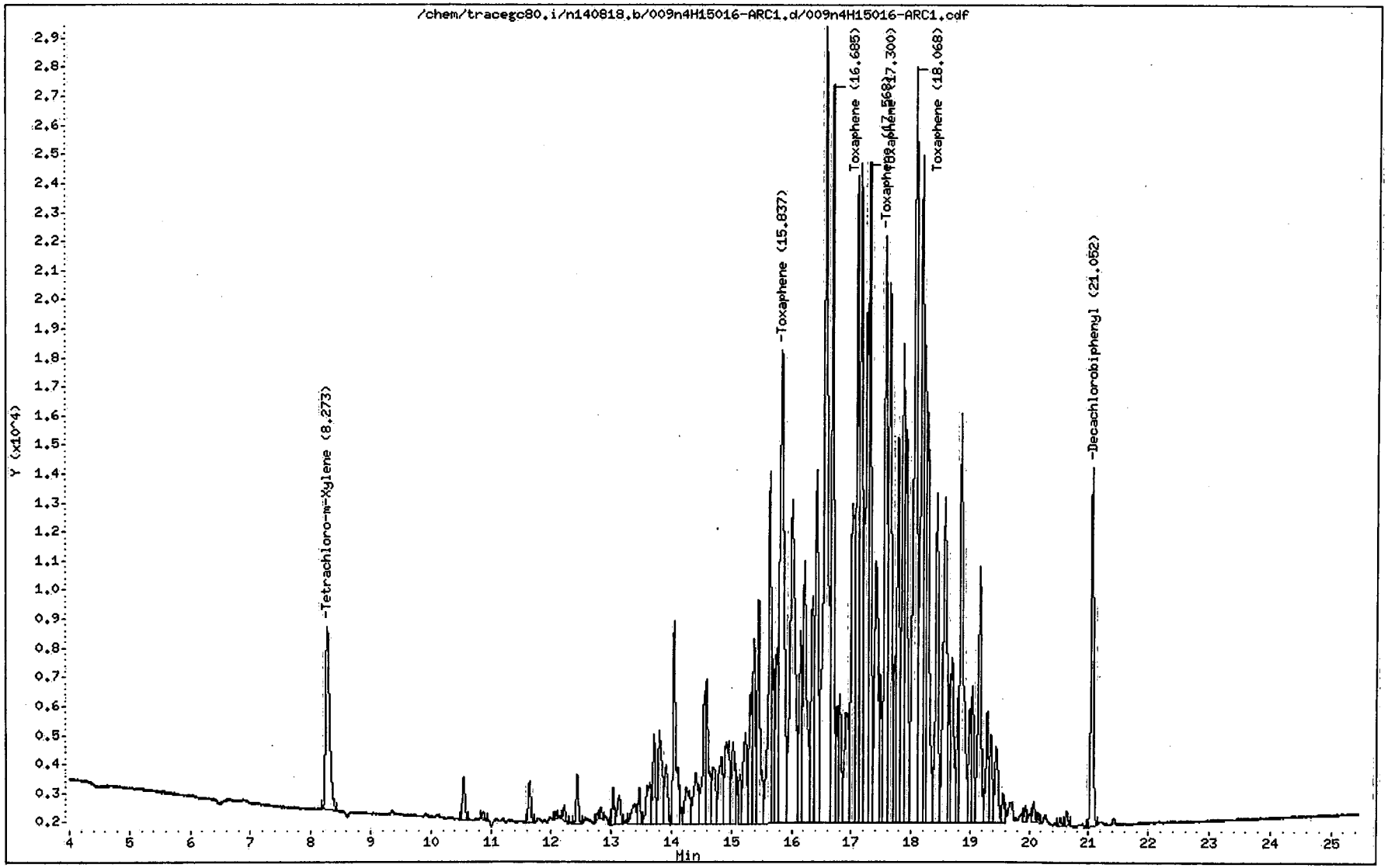
Initial Calibration
Raw Data

Data File: /chem/tracegc80.i/n140818.b/009n4H15016-ARC1.d
Date : 18-AUG-2014 14:59
Client ID: TOXAPH3MA
Sample Info: 4H15016-ARC1
Volume Injected (uL): 1.0
Column phase: olpest

Instrument: tracegc80.i

Operator: BWL
Column diameter: 0.32



CompuChem

Lab Smp Id : 4H15016-ARC1 Client Smp Id : TOXAPH3MA
Sample Type : INITIAL CAL: Level 3 Sublist : TOXAPH
Inj Date : 18-AUG-2014 14:59 Inst ID : TRACEGC80
Operator : BWL
Method : /chem/tracegc80.i/n140818.b/8081A_clpestv8.m
Misc. Info : TOXAPH3MA

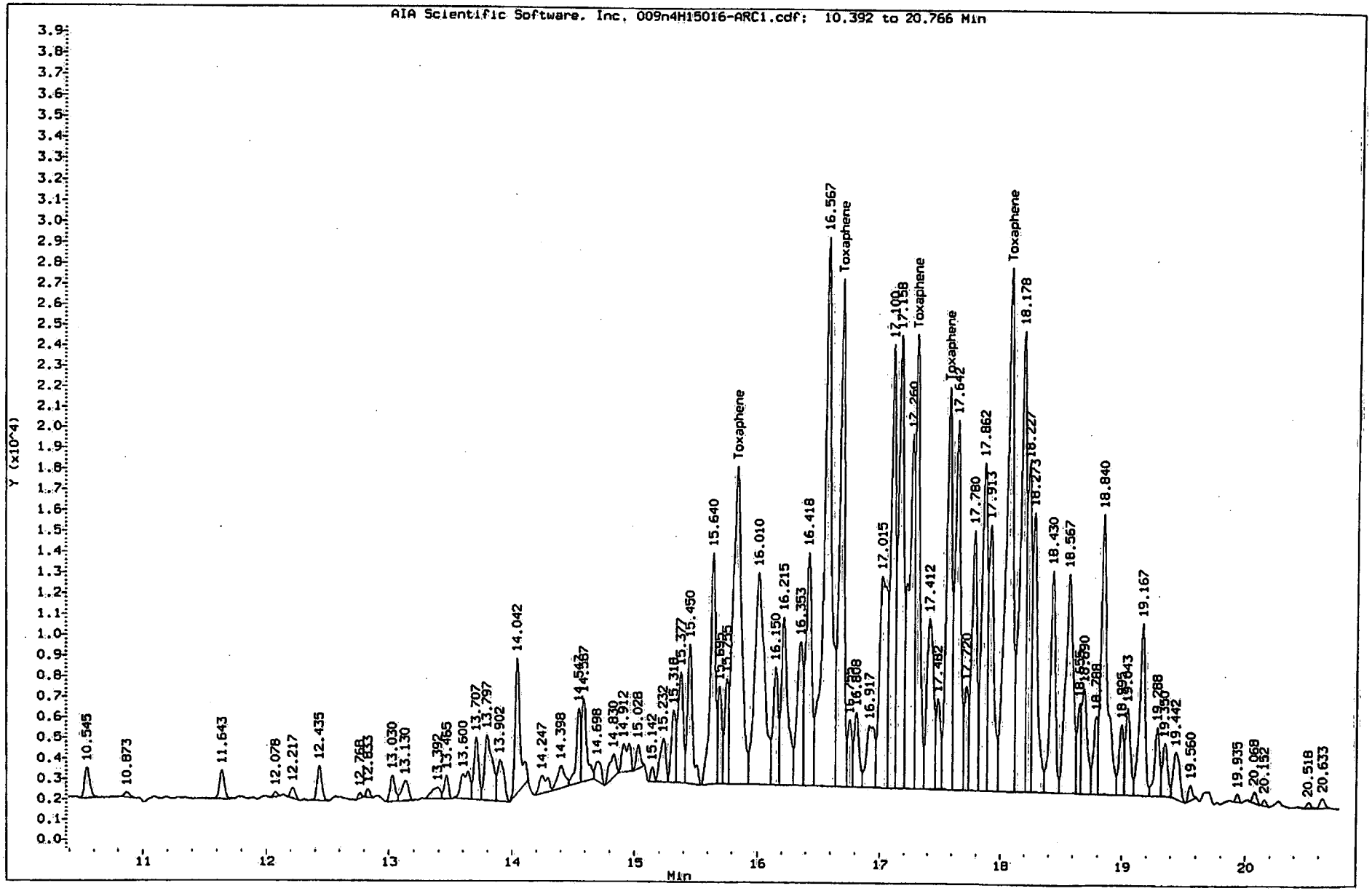
RT	RT WINDOW	AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (ng)	RF	FLAGS
1.05		690					
1.39		2618379					
8.27	8.21 8.35	29098	1486792	Tetrachloro-m-Xylene	0.020000	1560150	
10.54		4465					
10.87		766					
11.64		4009					
12.08		512					
12.22		1415					
12.44		4631					
12.77		538					
12.83		968					
13.03		3484					
13.13		3818					
13.39		3757					
13.46		3445					
13.60		7859					
13.71		8867					
13.80		14575					
13.90		7630					
14.04		23545					
14.25		7613					
14.40		10150					
14.55		14663					
14.59		18349					
14.70		8628					
14.83		11637					
14.91		16630					
15.03		11424					
15.14		5038					
15.23		12973					
15.32		13356					
15.38		21084					
15.45		26835					
15.64		41778					
15.70		13693					
15.76		14979					
15.84	15.77 15.91	83597	41798	Toxaphene Peak 1	2.000000	41799	
16.01		68478					
16.15		20641					
16.21		37197					
16.35		28022					
16.42		44038					

CompuChem

Lab Smp Id : 4H15016-ARC1 Client Smp Id : TOXAPH3MA
Sample Type : INITIAL CAL: Level 3 Sublist : TOXAPH
Inj Date : 18-AUG-2014 14:59 Inst ID :
Operator : BWL
Method : /chem/tracegc80.i/n140818.b/8081A_clpestv8.m
Misc. Info : TOXAPH3MA

RT	RT WINDOW	AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (ng)	RF	FLAGS
16.57		123559					
16.68	16.61 16.75	75838	37919	Toxaphene Peak 2	2.000000	37919	
16.75		10278					
16.81		14645					
16.92		19303					
17.02		52207					
17.10		60769					
17.16		71252					
17.26		65670					
17.30	17.23 17.37	69216	34608	Toxaphene Peak 3	2.000000	34608	
17.41		36296					
17.48		14649					
17.57	17.50 17.64	61924	30962	Toxaphene Peak 4	2.000000	30962	
17.64		68211					
17.72		13754					
17.78		41823					
17.86		54040					
17.91		44252					
18.07	18.00 18.14	108498	54249	Toxaphene Peak 5	2.000000	54249	
18.18		80963					
18.23		42623					
18.27		44833					
18.43		37784					
18.57		51567					
18.66		9923					
18.69		20199					
18.79		11039					
18.84		55829					
19.00		11493					
19.04		15029					
19.17		30456					
19.29		12461					
19.35		10124					
19.44		10696					
19.56		3116					
19.93		1591					
20.07		1990					
20.15		739					
20.52		677					
20.63		1323					
21.05	20.98 21.12	33923	784712	Decachlorobiphenyl	0.040000	804550	

Data File: /chem/tracegc80.i/n140818.b/009n4H15016-ARC1.d/009n4H15016-ARC1.cdf
Injection Date: 18-AUG-2014 14:59
Instrument: tracegc80.i
Client Sample ID: TOXAPH3MA



Data File: /chem/tracegc80.i/n140818_2C.b/009n4H15016-ARC1.d

Date : 18-AUG-2014 14:59

Client ID: TOXAPH3MA

Instrument: tracegc80.i

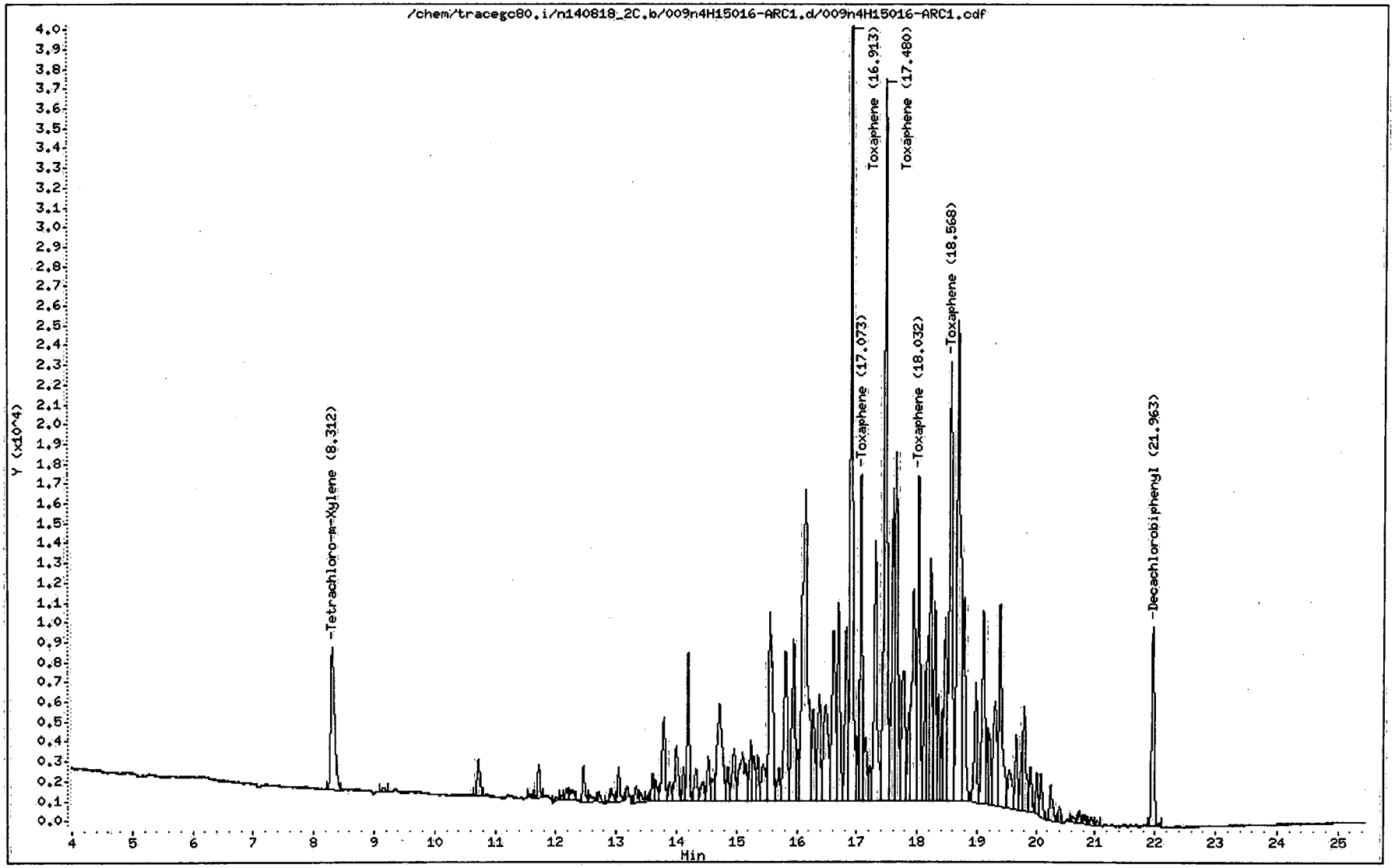
Sample Info: 4H15016-ARC1

Volume Injected (uL): 1.0

Operator: BWL

Column phase: clpest2

Column diameter: 0.32



CompuChem

Data file : /chem/tracegc80.i/n140818_2C.b/009n4H15016-ARC1.d
Lab Smp Id: 4H15016-ARC1 Client Smp ID: TOXAPH3MA
Inj Date : 18-AUG-2014 14:59
Operator : BWL Inst ID: tracegc80.i
Smp Info : 4H15016-ARC1
Misc Info : TOXAPH3MA
Comment :
Method : /chem/tracegc80.i/n140818_2C.b/8081A_clpest2v8.m
Meth Date : 21-Aug-2014 10:41 spruskin Quant Type: ESTD
Cal Date : 18-AUG-2014 15:28 Cal File: 010n4H15016-ARC2.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TOXAPH.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: gilbert

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng conversion factor
Vt	5000.00000	FinalVolume
Vo	1000.00000	SampleVolume
Vi	1.00000	InjectVol

Cpnd Variable Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
31 Toxaphene					CAS #: 8001-35-2		
16.913	16.913	0.000	108672	2.00000	2.00	80.00- 120.00	100.00(a)
17.073	17.073	0.000	44071	2.00000	2.00	32.44- 48.66	40.55
17.480	17.480	0.000	116008	2.00000	2.00	85.40- 128.10	106.75
18.032	18.032	0.000	45994	2.00000	2.00	33.86- 50.79	42.32
18.568	18.568	0.000	78818	2.00000	2.00	58.02- 87.03	72.53
Average of Peak Amounts =					2		
$ 33 Decachlorobiphenyl					CAS #: 2051-24-3		
21.963	21.970	-0.007	31028	0.04000	0.0427	80.00- 120.00	100.00
$ 1 Tetrachloro-m-Xylene					CAS #: 877-09-8		
8.312	8.315	-0.003	31271	0.02000	0.0196	80.00- 120.00	100.00

QC Flag Legend

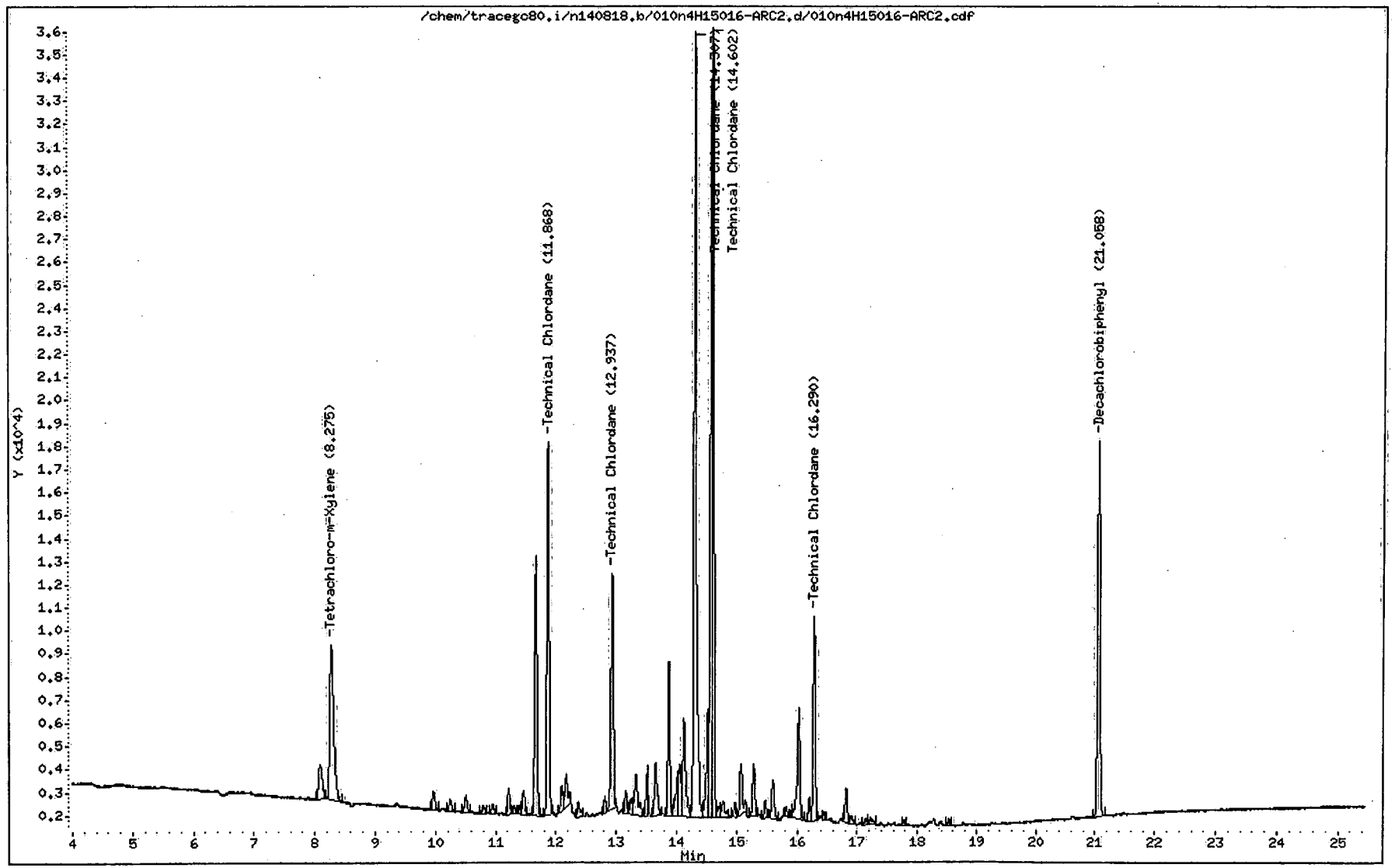
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/tracegc80.i/n140818.b/010n4H15016-ARC2.d
Date : 18-AUG-2014 15:28
Client ID: CHLORO3MA
Sample Info: 4H15016-ARC2
Volume Injected (uL): 1.0
Column phase: clpest

Page 1

Instrument: tracegc80.i

Operator: BWL
Column diameter: 0.32



CompuChem

Lab Smp Id : 4H15016-ARC2 Client Smp Id : CHLORO3MA
Sample Type : INITIAL CAL: Level 3 Sublist : TechChlor
Inj Date : 18-AUG-2014 15:28 Inst ID : TRACEGC80
Operator : BWL
Method : /chem/tracegc80.i/n140818.b/8081A_clpestv8.m
Misc. Info : CHLORO3MA

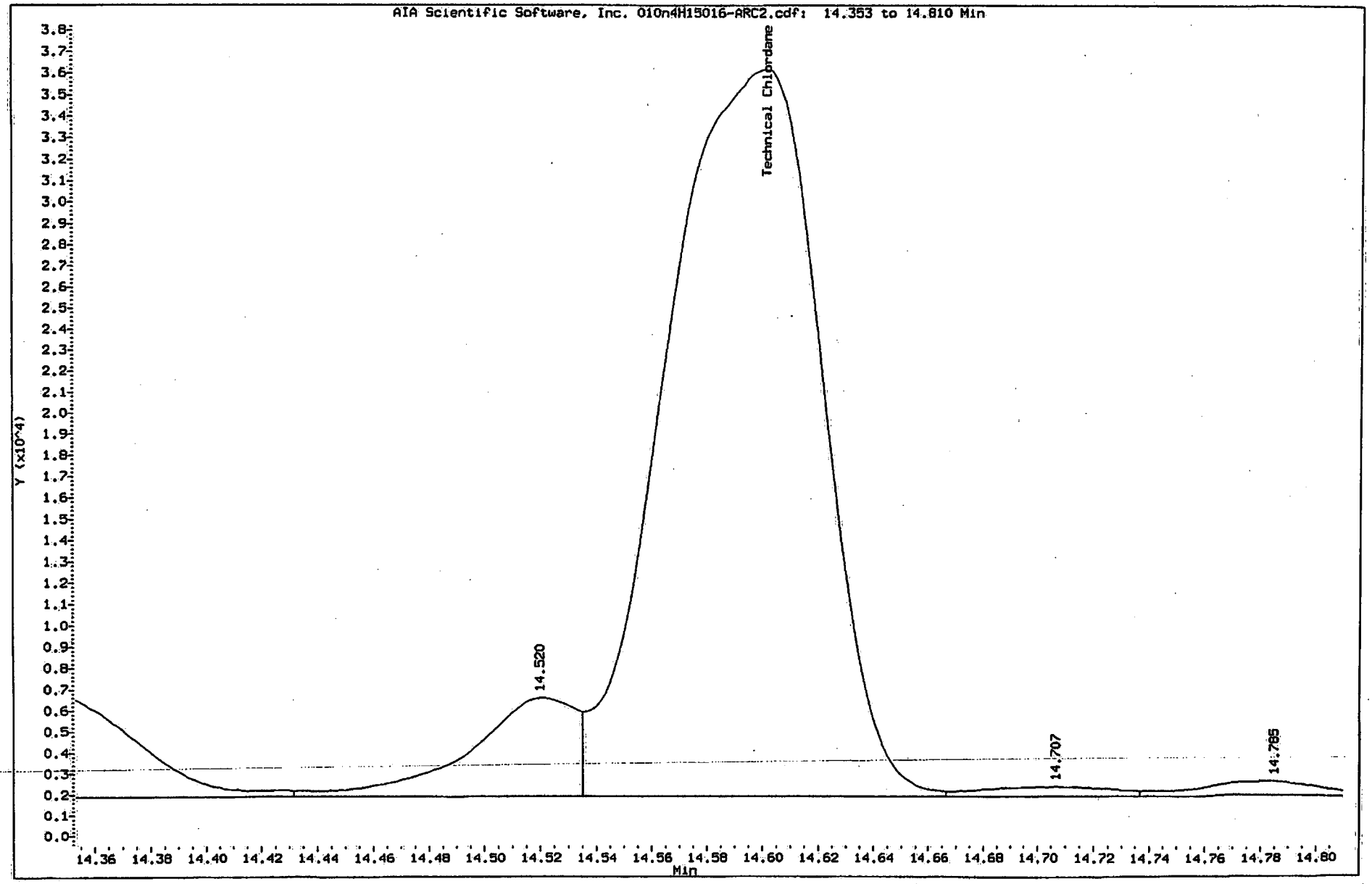
RT	RT WINDOW	AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (ng)	RF	FLAGS
1.28		1726					
1.38		62713					
2.08		90016					
8.09		6156					
8.28	8.21 8.35	30375	1486792	Tetrachloro-m-Xylene	0.020000	1560150	
9.97		2389					
10.24		1553					
10.50		2203					
10.80		891					
10.95		994					
11.21		2782					
11.30		874					
11.40		837					
11.46		2806					
11.67		29488					
11.87	11.80 11.94	41443	103605	TechnicalChlordane Peak 1	0.400000	103605	
12.10		2672					
12.17		4935					
12.37		1973					
12.81		1610					
12.94	12.87 13.01	28390	70975	TechnicalChlordane Peak 2	0.400000	70975	
13.16		2665					
13.24		1673					
13.33		7686					
13.51		2442					
13.65		7698					
13.88		16136					
14.02		5323					
14.05		7146					
14.12		14152					
14.31	14.24 14.38	95857	239640	TechnicalChlordane Peak 3	0.400000	239640	
14.52		12358					
14.59		52199					
14.60	14.53 14.67	83573	208930	TechnicalChlordane Peak 4	0.400000	208930	M
14.71		1524					
14.79		2599					
14.97		1369					
15.07		6605					
15.29		6221					
15.48		1957					
15.60		5315					
15.82		1103					

CompuChem

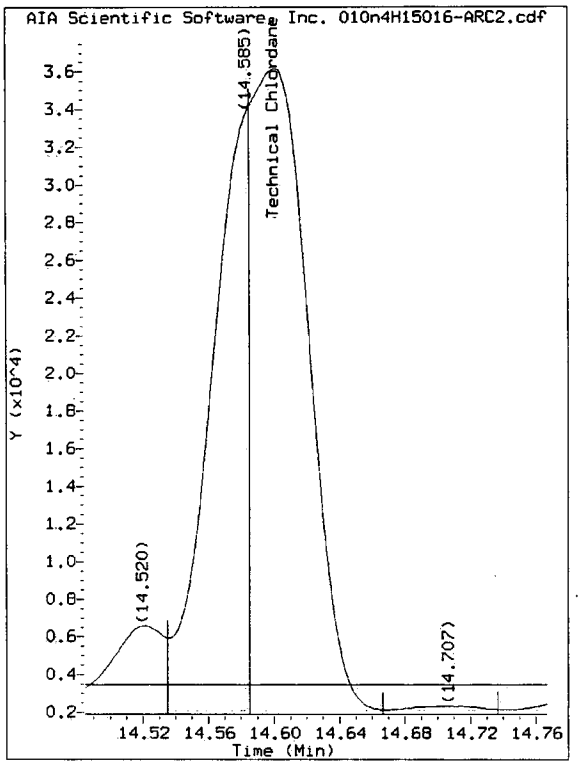
Lab Smp Id : 4H15016-ARC2 Client Smp Id : CHLORO3MA
Sample Type : INITIAL CAL: Level 3 Sublist : TechChlor
Inj Date : 18-AUG-2014 15:28 Inst ID :
Operator : BWL
Method : /chem/tracegc80.i/n140818.b/8081A_clpestv8.m
Misc. Info : CHLORO3MA

RT	RT WINDOW	AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (ng)	RF	FLAGS
15.91		594					
16.03		15363					
16.21		2352					
16.29	16.22 16.36	21623	54058	TechnicalChlordane Peak 5	0.400000	54057	
16.45		968					
16.82		3709					
16.91		939					
17.14		754					
17.22		1166					
17.78		537					
18.53		623					
21.06	20.98 21.12	44790	784712	Decachlorobiphenyl	0.040000	804550	

Data File: /chem/tracegc80.i/n140818.b/010n4H15016-ARC2.d/010n4H15016-ARC2.cdf
Injection Date: 18-AUG-2014 15:28
Instrument: tracegc80.i
Client Sample ID: CHLORD3MA



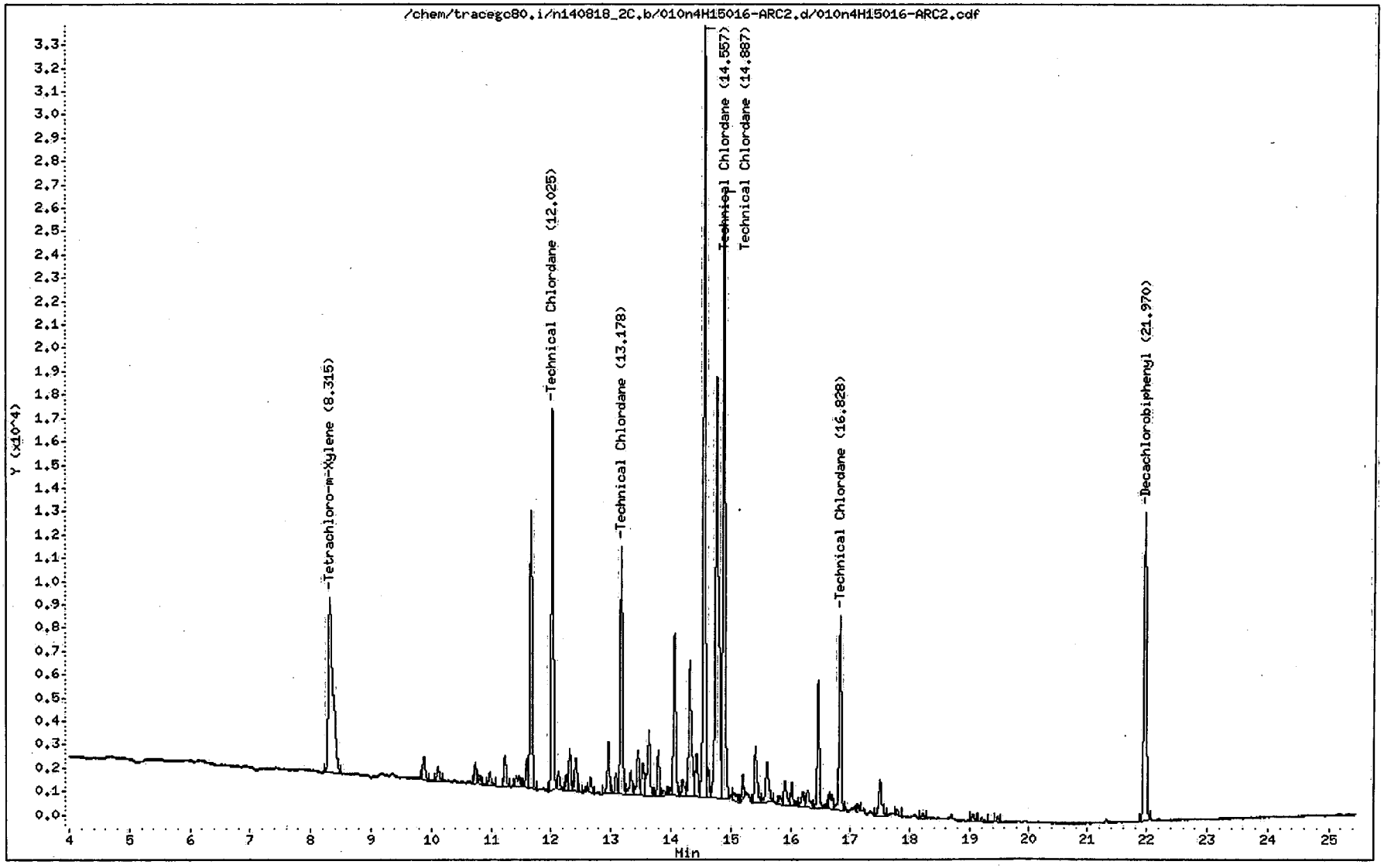
Manually Integrated Peaks



Start: 14.59 Stop: 14.67

Data File: /chem/tracegc80.i/n140818_2C.b/010n4H15016-ARC2.d
Date : 18-AUG-2014 15:28
Client ID: CHLORO3HA
Sample Info: 4H15016-ARC2
Volume Injected (uL): 1.0
Column phase: clpest2

Instrument: tracegc80.i
Operator: BWL
Column diameter: 0.32



CompuChem

Data file : /chem/tracegc80.i/n140818_2C.b/010n4H15016-ARC2.d
Lab Smp Id: 4H15016-ARC2 Client Smp ID: CHLORO3MA
Inj Date : 18-AUG-2014 15:28
Operator : BWL Inst ID: tracegc80.i
Smp Info : 4H15016-ARC2
Misc Info : CHLORO3MA
Comment :
Method : /chem/tracegc80.i/n140818_2C.b/8081A_clpest2v8.m
Meth Date : 21-Aug-2014 10:41 spruskin Quant Type: ESTD
Cal Date : 18-AUG-2014 15:28 Cal File: 010n4H15016-ARC2.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TechChlor.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: gilbert

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng conversion factor
Vt	5000.00000	FinalVolume
Vo	1000.00000	SampleVolume
Vi	1.00000	InjectVol

Cpnd Variable Local Compound Variable

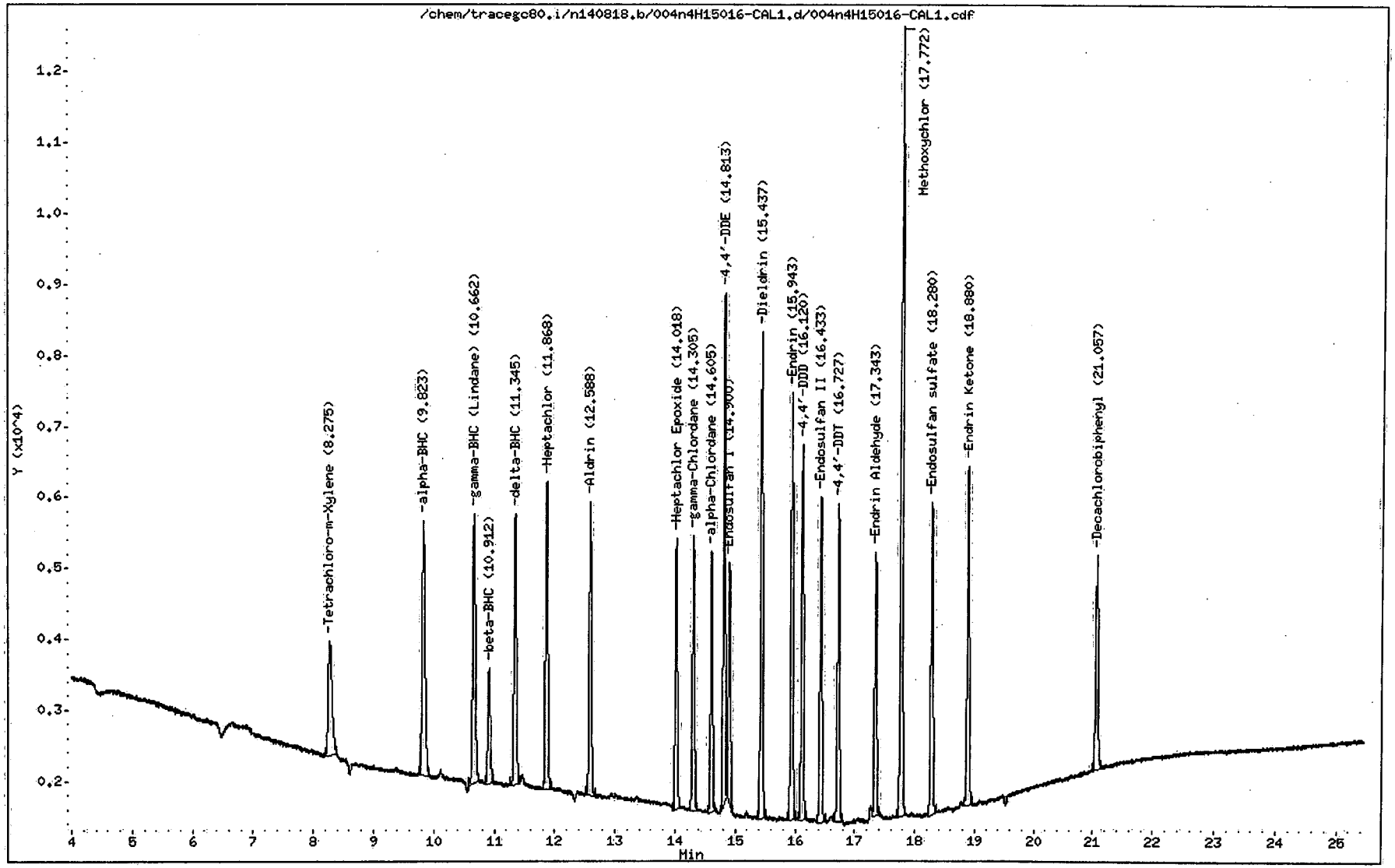
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
12 Technical Chlordane					CAS #: 57-74-9		
12.025	12.025	0.000	40457	0.40000	0.400	80.00- 120.00	100.00(a)
13.178	13.178	0.000	25862	0.40000	0.400	51.14- 76.71	63.92
14.557	14.557	0.000	80399	0.40000	0.400	158.98- 238.47	198.73
14.887	14.887	0.000	65078	0.40000	0.400	128.69- 193.03	160.86
16.828	16.828	0.000	20871	0.40000	0.400	41.27- 61.91	51.59
Average of Peak Amounts =					0.4		
$ 33 Decachlorobiphenyl					CAS #: 2051-24-3		
21.970	21.970	0.000	40494	0.04000	0.0558	80.00- 120.00	100.00
$ 1 Tetrachloro-m-Xylene					CAS #: 877-09-8		
8.315	8.315	0.000	40035	0.02000	0.0250	80.00- 120.00	100.00

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/tracegc80.i/n140818.b/004n4H15016-CAL1.d
Date : 18-AUG-2014 12:35
Client ID: INDC1MA
Sample Info: 4H15016-CAL1
Volume Injected (uL): 1.0
Column phase: clpest

Instrument: tracegc80.i
Operator: BWL
Column diameter: 0.32



CompuChem

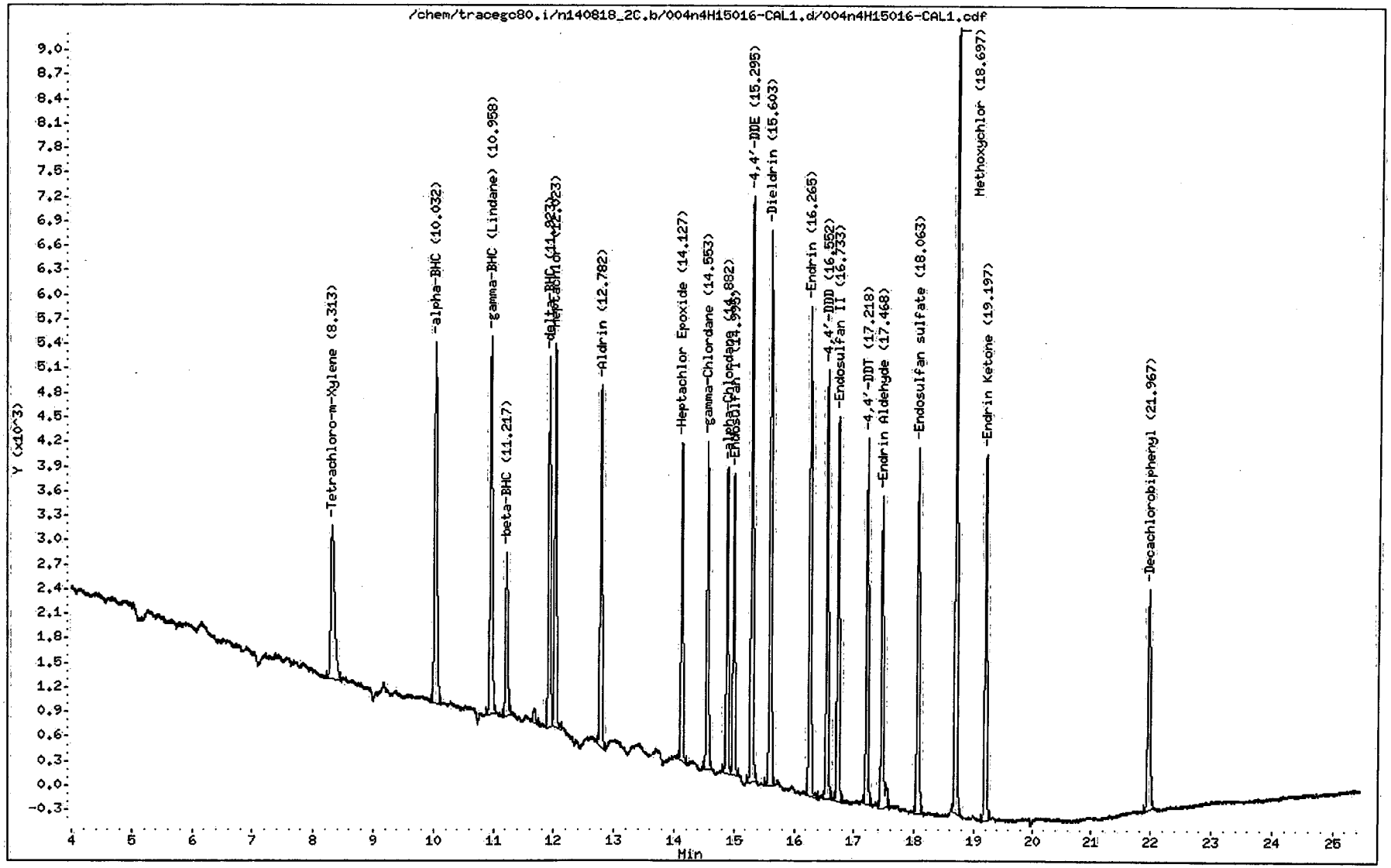
Lab Smp Id : 4H15016-CAL1 Client Smp Id : INDC1MA
Sample Type : INITIAL CAL: Level 1 Sublist : INDA
Inj Date : 18-AUG-2014 12:35 Inst ID : TRACEGC80
Operator : BWL
Method : /chem/tracegc80.i/n140818.b/8081A_clpestv8.m
Misc. Info : INDC1MA

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (ng)	RF	FLAGS
1.28			3541					
1.37			65649					
2.65			1103					
8.28	8.21	8.35	7048	1486792	Tetrachloro-m-Xylene	0.005000	1409400	
9.82	9.75	9.89	11749	2553432	alpha-BHC	0.005000	2349800	
10.66	10.59	10.73	11049	2367305	gamma-BHC (Lindane)	0.005000	2209800	
10.91	10.84	10.98	4555	920658	beta-BHC	0.005000	911000	
11.34	11.28	11.42	10205	2228390	delta-BHC	0.005000	2041000	
11.87	11.80	11.94	11302	2328195	Heptachlor	0.005000	2260200	
12.59	12.52	12.66	10493	2145595	Aldrin	0.005000	2098400	
14.02	13.95	14.09	9133	1839495	Heptachlor Epoxide	0.005000	1826400	
14.30	14.23	14.37	9244	1886268	gamma-Chlordane	0.005000	1848800	
14.60	14.54	14.68	8651	1781640	alpha-Chlordane	0.005000	1730200	
14.81	14.74	14.88	16138	1782762	4,4'-DDE	0.010000	1613700	
14.90	14.83	14.97	7766	1694568	Endosulfan I	0.005000	1553200	
15.44	15.37	15.51	16108	1704464	Dieldrin	0.010000	1610800	
15.94	15.87	16.01	14572	1490718	Endrin	0.010000	1457100	
16.12	16.05	16.19	12227	1310029	4,4'-DDD	0.010000	1222600	
16.43	16.36	16.50	11365	1301825	Endosulfan II	0.010000	1136400	
16.73	16.66	16.80	10593	1152178	4,4'-DDT	0.010000	1059200	
17.34	17.27	17.41	8982	945234	Endrin Aldehyde	0.010000	898100	
17.77	17.70	17.84	26434	541546	Methoxychlor	0.050000	528660	
18.28	18.21	18.35	10826	1108128	Endosulfan sulfate	0.010000	1082600	
18.88	18.81	18.95	12007	1244710	Endrin Ketone	0.010000	1200700	
21.06	20.98	21.12	8193	784712	Decachlorobiphenyl	0.010000	819200	

Data File: /chem/tracegc80.i/n140818_2C.b/004n4H15016-CAL1.d
Date : 18-AUG-2014 12:35
Client ID: INDC1MA
Sample Info: 4H15016-CAL1
Volume Injected (uL): 1.0
Column phase: clpest2

Instrument: tracegc80.i

Operator: BWL
Column diameter: 0.32



CompuChem

Data file : /chem/tracegc80.i/n140818_2C.b/004n4H15016-CAL1.d
Lab Smp Id: 4H15016-CAL1 Client Smp ID: INDC1MA
Inj Date : 18-AUG-2014 12:35
Operator : BWL Inst ID: tracegc80.i
Smp Info : 4H15016-CAL1
Misc Info : INDC1MA
Comment :
Method : /chem/tracegc80.i/n140818_2C.b/8081A_clpest2v8.m
Meth Date : 21-Aug-2014 10:41 spruskin Quant Type: ESTD
Cal Date : 18-AUG-2014 12:35 Cal File: 004n4H15016-CAL1.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDA.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: gilbert

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng conversion factor
Vt	5000.00000	FinalVolume
Vo	1000.00000	SampleVolume
Vi	1.00000	InjectVol

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-Xylene					CAS #: 877-09-8		
8.313	8.313	0.000	8313	0.00500	0.00520	80.00- 120.00	100.00
2 alpha-BHC					CAS #: 319-84-6		
10.032	10.032	0.000	12911	0.00500	0.00493	80.00- 120.00	100.00(a)
3 gamma-BHC (Lindane)					CAS #: 58-89-9		
10.958	10.958	0.000	12066	0.00500	0.00501	80.00- 120.00	100.00(a)
7 beta-BHC					CAS #: 319-85-7		
11.217	11.217	0.000	5075	0.00500	0.00533	80.00- 120.00	100.00(a)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
8 delta-BHC					CAS #: 319-86-8		
11.923	11.923	0.000	10502	0.00500	0.00488	80.00- 120.00	100.00(a)
4 Heptachlor					CAS #: 76-44-8		
12.023	12.023	0.000	11457	0.00500	0.00521	80.00- 120.00	100.00(a)
5 Aldrin					CAS #: 309-00-2		
12.782	12.782	0.000	10663	0.00500	0.00524	80.00- 120.00	100.00(a)
9 Heptachlor Epoxide					CAS #: 1024-57-3		
14.127	14.127	0.000	8906	0.00500	0.00520	80.00- 120.00	100.00(a)
10 gamma-Chlordane					CAS #: 5103-74-2		
14.553	14.553	0.000	9389	0.00500	0.00529	80.00- 120.00	100.00(a)
11 alpha-Chlordane					CAS #: 5103-71-9		
14.882	14.882	0.000	8815	0.00500	0.00535	80.00- 120.00	100.00(a)
14 4,4'-DDE					CAS #: 72-55-9		
15.295	15.295	0.000	16522	0.01000	0.0101	80.00- 120.00	100.00(a)
13 Endosulfan I					CAS #: 959-98-8		
14.995	14.995	0.000	8671	0.00500	0.00536	80.00- 120.00	100.00(a)
15 Dieldrin					CAS #: 60-57-1		
15.603	15.603	0.000	15999	0.01000	0.0102	80.00- 120.00	100.00(a)
16 Endrin					CAS #: 72-20-8		
16.265	16.265	0.000	14549	0.01000	0.0106	80.00- 120.00	100.00(a)
17 4,4'-DDD					CAS #: 72-54-8		
16.552	16.552	0.000	11995	0.01000	0.0102	80.00- 120.00	100.00(a)
18 Endosulfan II					CAS #: 33213-65-9		
16.733	16.733	0.000	11134	0.01000	0.00936	80.00- 120.00	100.00(a)
19 4,4'-DDT					CAS #: 50-29-3		
17.218	17.218	0.000	10107	0.01000	0.00995	80.00- 120.00	100.00(a)
20 Endrin Aldehyde					CAS #: 7421-93-4		
17.468	17.468	0.000	9741	0.01000	0.0108	80.00- 120.00	100.00(a)
22 Methoxychlor					CAS #: 72-43-5		
18.697	18.697	0.000	22181	0.05000	0.0493	80.00- 120.00	100.00(a)
21 Endosulfan sulfate					CAS #: 1031-07-8		
18.063	18.063	0.000	10793	0.01000	0.0105	80.00- 120.00	100.00(a)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
23 Endrin Ketone					CAS #: 53494-70-5		
19.197	19.197	0.000	11140	0.01000	0.0102	80.00- 120.00	100.00(a)
$ 33 Decachlorobiphenyl					CAS #: 2051-24-3		
21.967	21.967	0.000	8098	0.01000	0.0112	80.00- 120.00	100.00

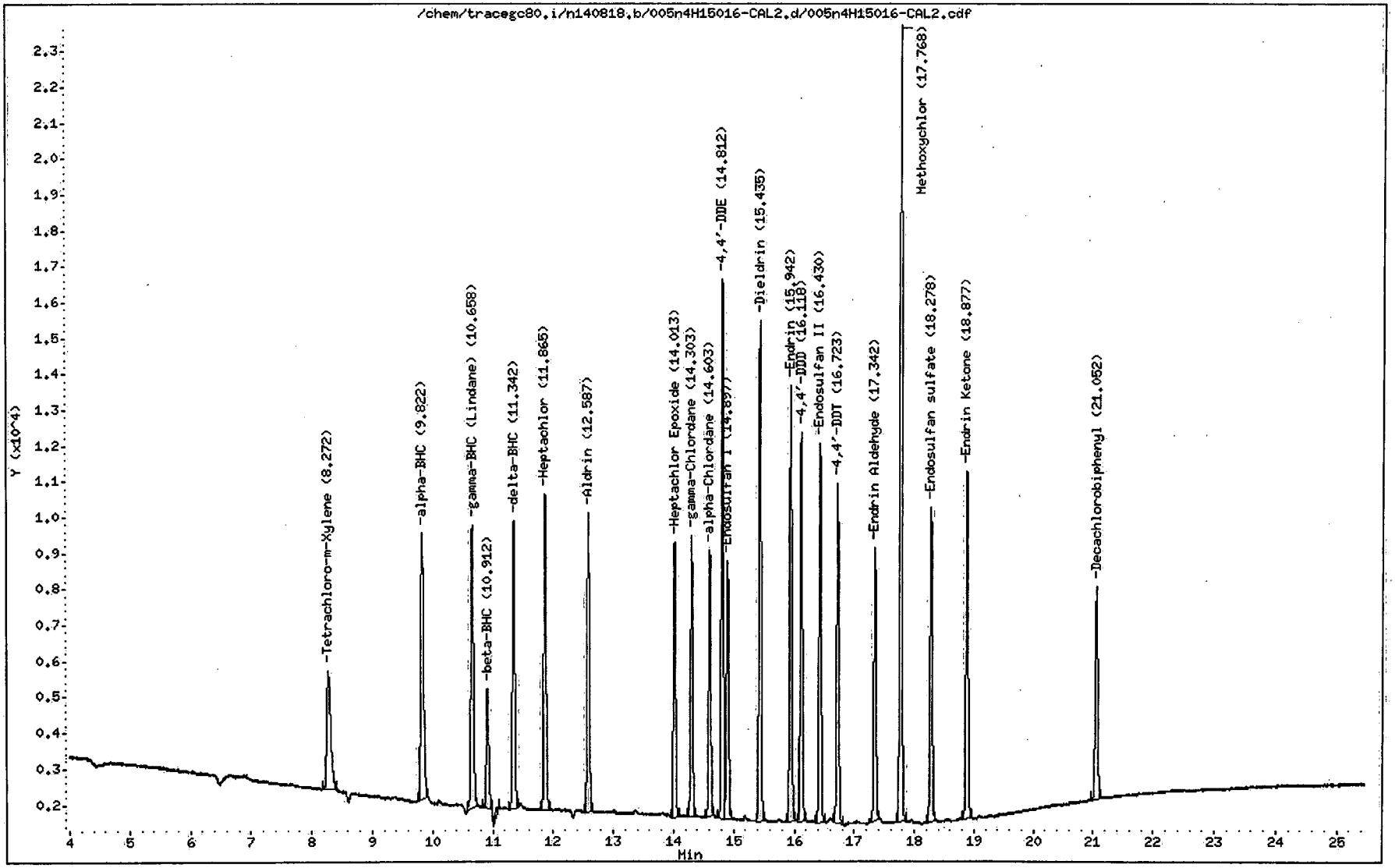
QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/tracegc80.i/n140818.b/005n4H15016-CAL2.d
Date : 18-AUG-2014 13:04
Client ID: INDC2MA
Sample Info: 4H15016-CAL2
Volume Injected (uL): 1.0
Column phase: clpest

Instrument: tracegc80.i

Operator: BWL
Column diameter: 0.32

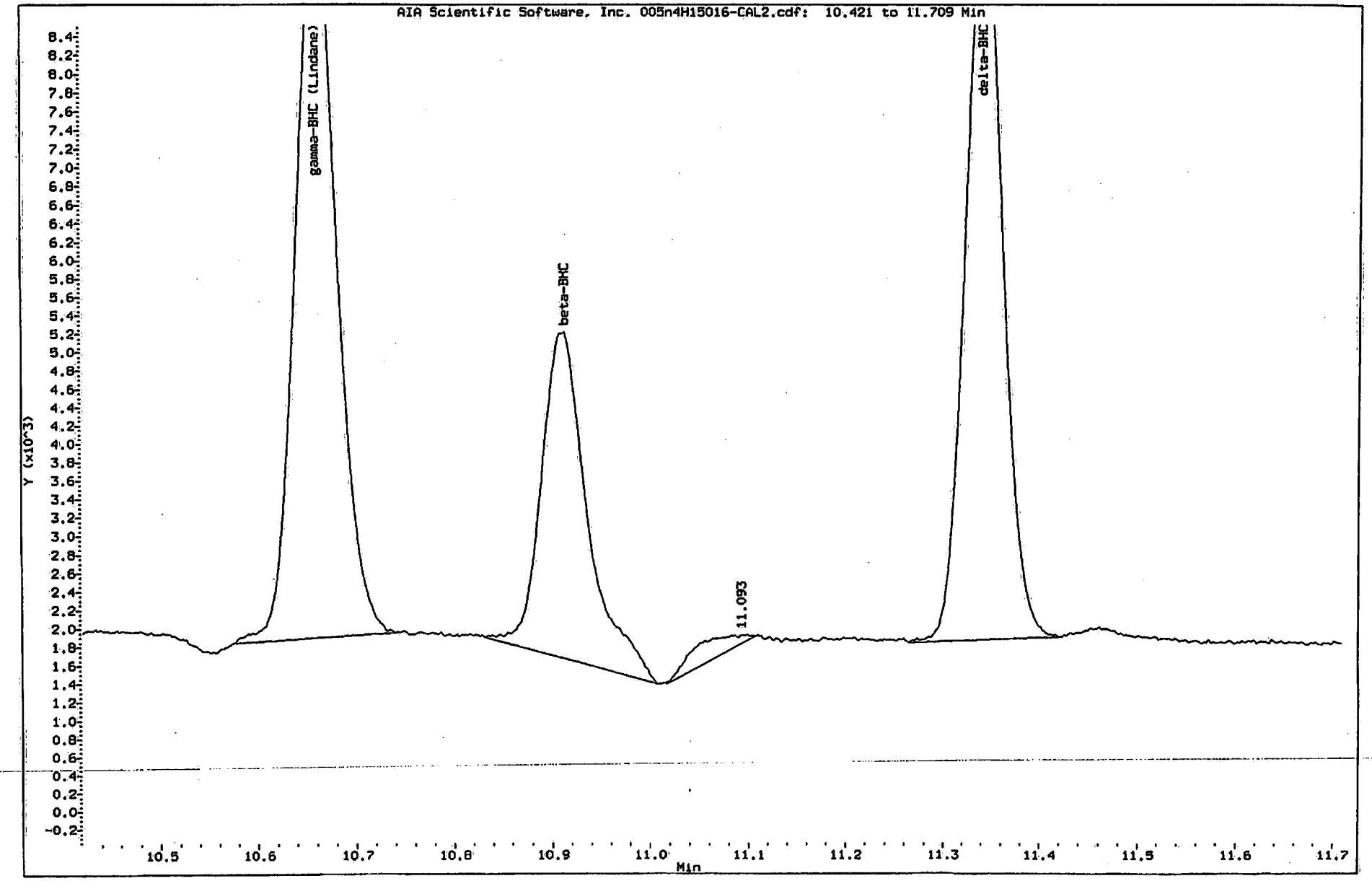


CompuChem

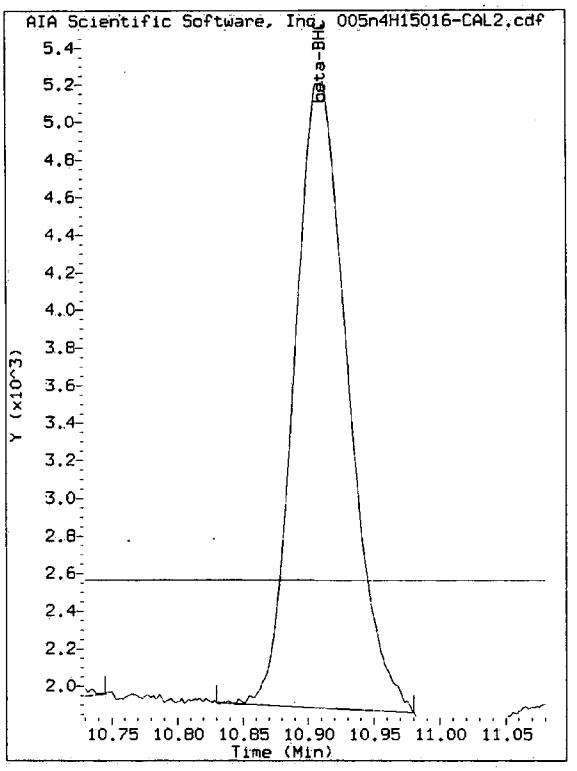
Lab Smp Id : 4H15016-CAL2 Client Smp Id : INDC2MA
Sample Type : INITIAL CAL: Level 2 Sublist : INDA
Inj Date : 18-AUG-2014 13:04 Inst ID : TRACEGC80
Operator : BWL
Method : /chem/tracegc80.i/n140818.b/8081A_clpestv8.m
Misc. Info : INDC2MA

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (ng)	RF	FLAGS
1.28			1683					
1.37			57067					
2.62			752					
8.27	8.21	8.35	14724	1486792	Tetrachloro-m-Xylene	0.010000	1472300	
9.82	9.75	9.89	23884	2553432	alpha-BHC	0.010000	2388300	
10.66	10.59	10.73	22887	2367305	gamma-BHC (Lindane)	0.010000	2288600	
10.91	10.84	10.98	9410	920658	beta-BHC	0.010000	940900	M
11.09			761					
11.34	11.28	11.42	21370	2228390	delta-BHC	0.010000	2136900	
11.86	11.80	11.94	23110	2328195	Heptachlor	0.010000	2311000	
12.59	12.52	12.66	21144	2145595	Aldrin	0.010000	2114400	
14.01	13.95	14.09	18500	1839495	Heptachlor Epoxide	0.010000	1849900	
14.30	14.23	14.37	18792	1886268	gamma-Chlordane	0.010000	1879200	
14.60	14.54	14.68	17540	1781640	alpha-Chlordane	0.010000	1753900	
14.81	14.74	14.88	34604	1782762	4,4'-DDE	0.020000	1730200	
14.90	14.83	14.97	17492	1694568	Endosulfan I	0.010000	1749100	
15.44	15.37	15.51	33011	1704464	Dieldrin	0.020000	1650550	
15.94	15.87	16.01	29435	1490718	Endrin	0.020000	1471750	
16.12	16.05	16.19	25215	1310029	4,4'-DDD	0.020000	1260750	
16.43	16.36	16.50	25834	1301825	Endosulfan II	0.020000	1291700	
16.72	16.66	16.80	22194	1152178	4,4'-DDT	0.020000	1109650	
17.34	17.27	17.41	18633	945234	Endrin Aldehyde	0.020000	931650	
17.77	17.70	17.84	53265	541546	Methoxychlor	0.100000	532650	
18.28	18.21	18.35	21848	1108128	Endosulfan sulfate	0.020000	1092400	
18.88	18.81	18.95	24629	1244710	Endrin Ketone	0.020000	1231400	
21.05	20.98	21.12	16111	784712	Decachlorobiphenyl	0.020000	805500	

Data File: /chem/tracegc80.i/n140818.b/005n4H15016-CAL2.d/005n4H15016-CAL2.cdf
Injection Date: 18-AUG-2014 13:04
Instrument: tracegc80.i
Client Sample ID: INDC2MA



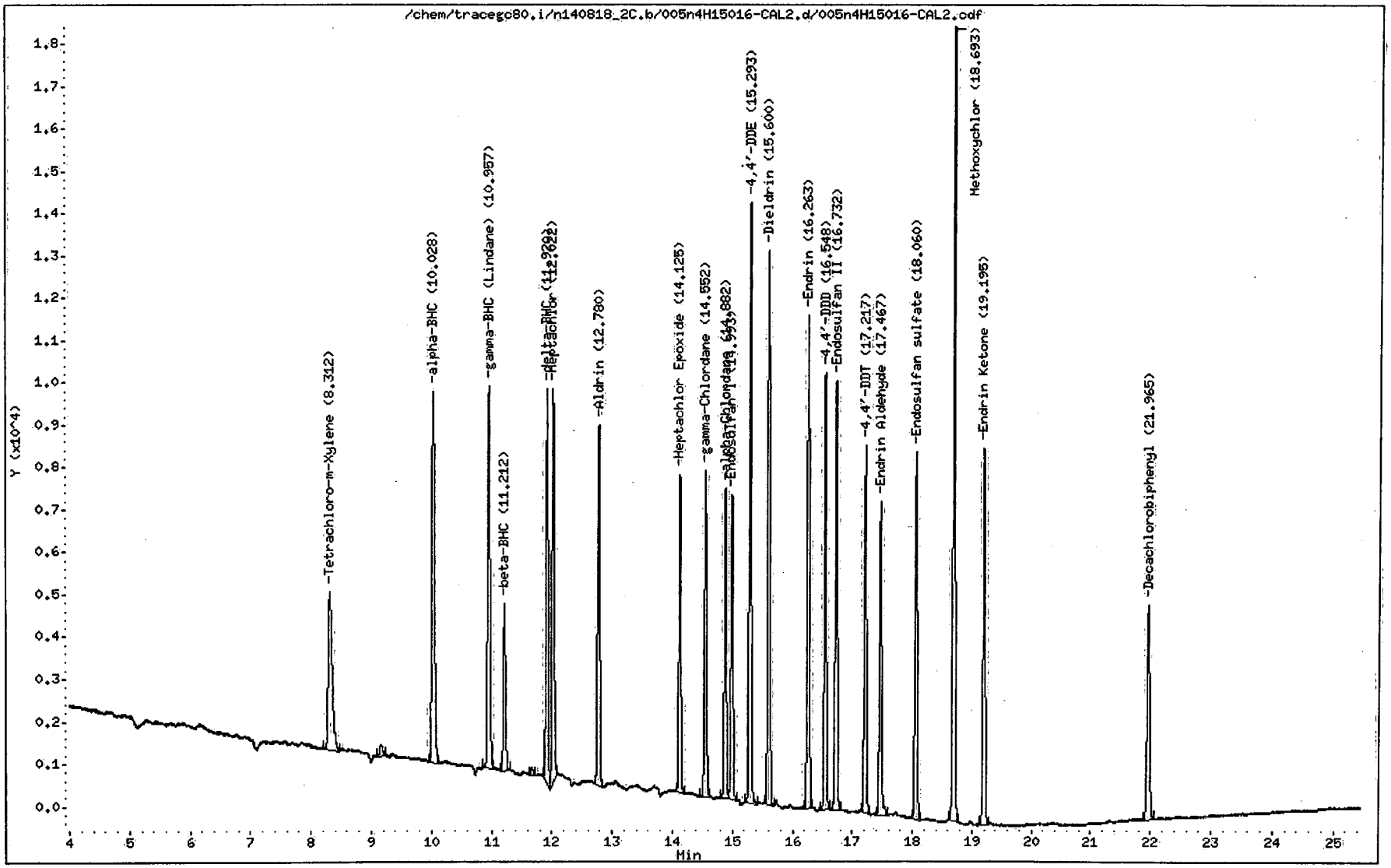
Manually Integrated Peaks



Start: 10.83 Stop: 10.98

Data File: /chem/tracegc80.i/n140818_2C.b/005n4H15016-CAL2.d
Date : 18-AUG-2014 13:04
Client ID: INDC2MA
Sample Info: 4H15016-CAL2
Volume Injected (uL): 1.0
Column phase: clpest2

Instrument: tracegc80.i
Operator: BWL
Column diameter: 0.32



CompuChem

Data file : /chem/tracegc80.i/n140818_2C.b/005n4H15016-CAL2.d
Lab Smp Id: 4H15016-CAL2 Client Smp ID: INDC2MA
Inj Date : 18-AUG-2014 13:04
Operator : BWL Inst ID: tracegc80.i
Smp Info : 4H15016-CAL2
Misc Info : INDC2MA
Comment :
Method : /chem/tracegc80.i/n140818_2C.b/8081A_clpest2v8.m
Meth Date : 21-Aug-2014 10:41 spruskin Quant Type: ESTD
Cal Date : 18-AUG-2014 13:04 Cal File: 005n4H15016-CAL2.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDA.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: gilbert

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng conversion factor
Vt	5000.00000	FinalVolume
Vo	1000.00000	SampleVolume
Vi	1.00000	InjectVol

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-Xylene					CAS #: 877-09-8		
8.312	8.312	0.000	16634	0.01000	0.0104	80.00- 120.00	100.00
2 alpha-BHC					CAS #: 319-84-6		
10.028	10.028	0.000	25967	0.01000	0.00991	80.00- 120.00	100.00(a)
3 gamma-BHC (Lindane)					CAS #: 58-89-9		
10.957	10.957	0.000	24051	0.01000	0.00999	80.00- 120.00	100.00(a)
7 beta-BHC					CAS #: 319-85-7		
11.212	11.212	0.000	9880	0.01000	0.0104	80.00- 120.00	100.00(a)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
8 delta-BHC					CAS #: 319-86-8		
11.920	11.920	0.000	21603	0.01000	0.0100	80.00- 120.00	100.00(a)
4 Heptachlor					CAS #: 76-44-8		
12.022	12.022	0.000	23456	0.01000	0.0107	80.00- 120.00	100.00(a)
5 Aldrin					CAS #: 309-00-2		
12.780	12.780	0.000	20846	0.01000	0.0102	80.00- 120.00	100.00(a)
9 Heptachlor Epoxide					CAS #: 1024-57-3		
14.125	14.125	0.000	17656	0.01000	0.0103	80.00- 120.00	100.00(a)
10 gamma-Chlordane					CAS #: 5103-74-2		
14.552	14.552	0.000	18366	0.01000	0.0104	80.00- 120.00	100.00(a)
11 alpha-Chlordane					CAS #: 5103-71-9		
14.882	14.882	0.000	16996	0.01000	0.0103	80.00- 120.00	100.00(a)
14 4,4'-DDE					CAS #: 72-55-9		
15.293	15.293	0.000	32286	0.02000	0.0198	80.00- 120.00	100.00(a)
13 Endosulfan I					CAS #: 959-98-8		
14.993	14.993	0.000	16977	0.01000	0.0105	80.00- 120.00	100.00(a)
15 Dieldrin					CAS #: 60-57-1		
15.600	15.600	0.000	31350	0.02000	0.0200	80.00- 120.00	100.00(a)
16 Endrin					CAS #: 72-20-8		
16.263	16.263	0.000	27737	0.02000	0.0202	80.00- 120.00	100.00(a)
17 4,4'-DDD					CAS #: 72-54-8		
16.548	16.548	0.000	23441	0.02000	0.0199	80.00- 120.00	100.00(a)
18 Endosulfan II					CAS #: 33213-65-9		
16.732	16.732	0.000	24389	0.02000	0.0205	80.00- 120.00	100.00(a)
19 4,4'-DDT					CAS #: 50-29-3		
17.217	17.217	0.000	19968	0.02000	0.0197	80.00- 120.00	100.00(a)
20 Endrin Aldehyde					CAS #: 7421-93-4		
17.467	17.467	0.000	18633	0.02000	0.0206	80.00- 120.00	100.00(a)
22 Methoxychlor					CAS #: 72-43-5		
18.693	18.693	0.000	43801	0.10000	0.0974	80.00- 120.00	100.00(a)
21 Endosulfan sulfate					CAS #: 1031-07-8		
18.060	18.060	0.000	21122	0.02000	0.0205	80.00- 120.00	100.00(a)

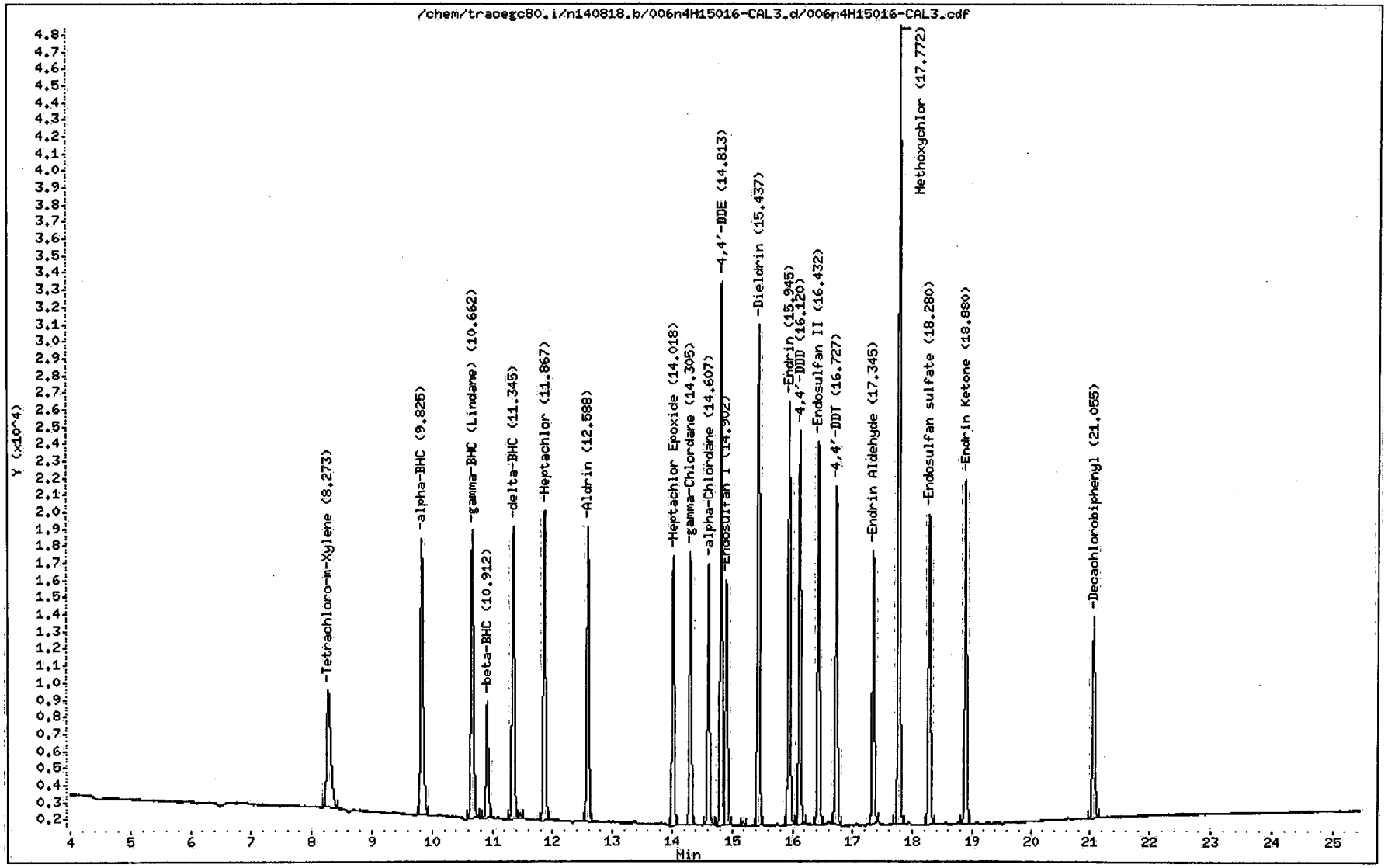
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
23 Endrin Ketone					CAS #: 53494-70-5		
19.195	19.195	0.000	22052	0.02000	0.0201	80.00- 120.00	100.00(a)
$ 33 Decachlorobiphenyl					CAS #: 2051-24-3		
21.965	21.965	0.000	15554	0.02000	0.0214	80.00- 120.00	100.00

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/tracegc80.i/n140818.b/006n4H15016-CAL3.d
Date : 18-AUG-2014 13:32
Client ID: INDC3MA
Sample Info: 4H15016-CAL3
Volume Injected (uL): 1.0
Column phase: clpest

Instrument: tracegc80.i
Operator: System
Column diameter: 0.32



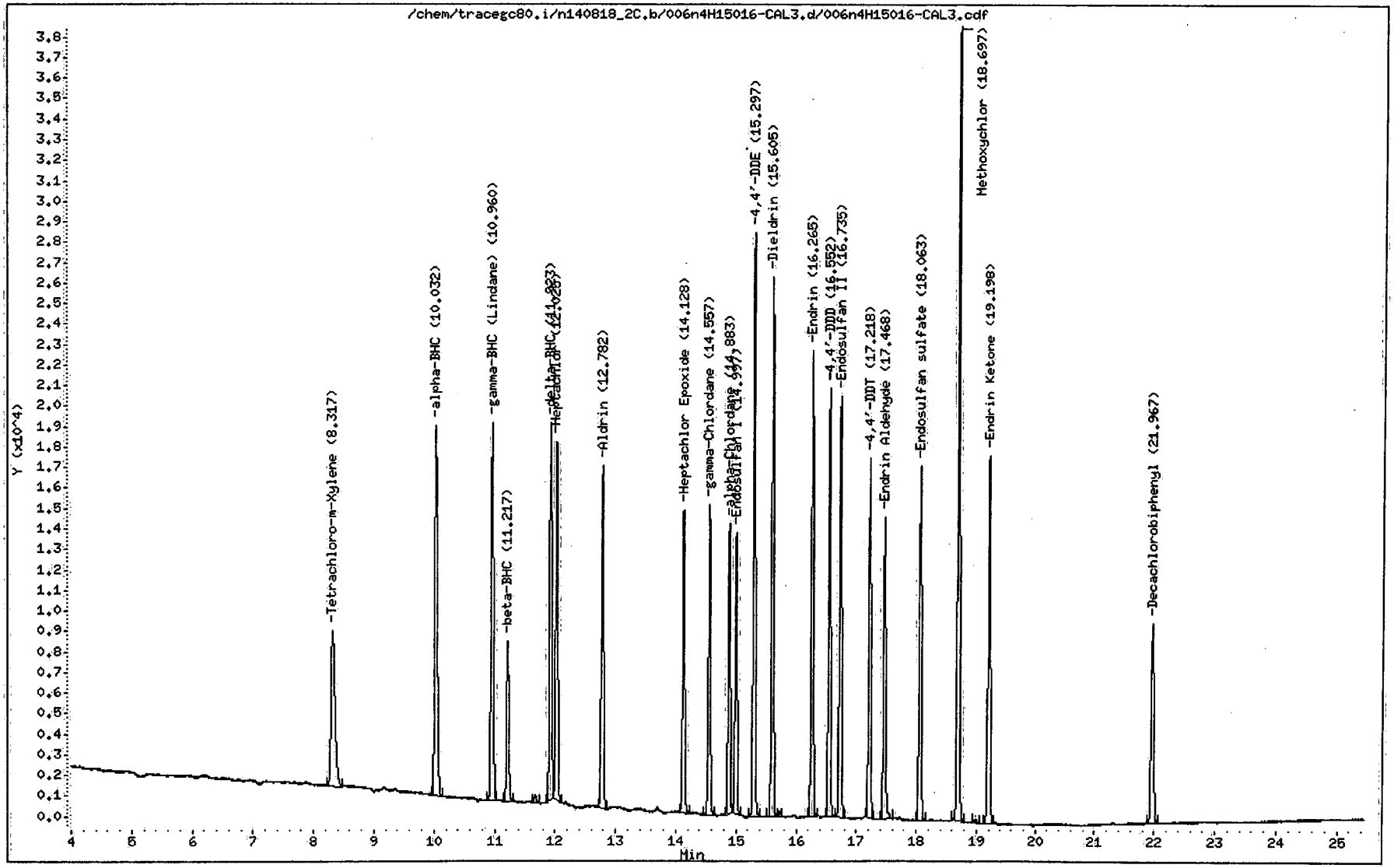
CompuChem

Lab Smp Id : 4H15016-CAL3 Client Smp Id : INDC3MA
Sample Type : INITIAL CAL: Level 3 Sublist : INDA
Inj Date : 18-AUG-2014 13:32 Inst ID : TRACEGC80
Operator : System
Method : /chem/tracegc80.i/n140818.b/8081A_clpestv8.m
Misc. Info : INDC3MA

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (ng)	RF	FLAGS
1.05			998					
1.39			1782815					
2.63			634					
8.27	8.21	8.35	31204	1486792	Tetrachloro-m-Xylene	0.020000	1560150	
9.82	9.75	9.89	52295	2553432	alpha-BHC	0.020000	2614750	
10.66	10.59	10.73	48151	2367305	gamma-BHC (Lindane)	0.020000	2407550	
10.91	10.84	10.98	18884	920658	beta-BHC	0.020000	944150	
11.34	11.28	11.42	45189	2228390	delta-BHC	0.020000	2259450	
11.46			607					
11.87	11.80	11.94	47381	2328195	Heptachlor	0.020000	2369050	
12.59	12.52	12.66	43697	2145595	Aldrin	0.020000	2184850	
14.02	13.95	14.09	37573	1839495	Heptachlor Epoxide	0.020000	1878650	
14.30	14.23	14.37	38244	1886268	gamma-Chlordane	0.020000	1912200	
14.61	14.54	14.68	36704	1781640	alpha-Chlordane	0.020000	1835200	
14.81	14.74	14.88	72141	1782762	4,4'-DDE	0.040000	1803525	
14.90	14.83	14.97	35280	1694568	Endosulfan I	0.020000	1764000	
15.19			615					
15.44	15.37	15.51	69226	1704464	Dieldrin	0.040000	1730625	
15.94	15.87	16.01	60841	1490718	Endrin	0.040000	1521000	
16.12	16.05	16.19	53152	1310029	4,4'-DDD	0.040000	1328800	
16.43	16.36	16.50	54271	1301825	Endosulfan II	0.040000	1356750	
16.73	16.66	16.80	46496	1152178	4,4'-DDT	0.040000	1162375	
17.34	17.27	17.41	39055	945234	Endrin Aldehyde	0.040000	976375	
17.77	17.70	17.84	110306	541546	Methoxychlor	0.200000	551525	
18.28	18.21	18.35	45255	1108128	Endosulfan sulfate	0.040000	1131375	
18.88	18.81	18.95	50870	1244710	Endrin Ketone	0.040000	1271750	
21.06	20.98	21.12	32183	784712	Decachlorobiphenyl	0.040000	804550	

Data File: /chem/tracegc80.i/n140818_2C.b/006n4H15016-CAL3.d
Date : 18-AUG-2014 13:32
Client ID: INDC3MA
Sample Info: 4H15016-CAL3
Volume Injected (uL): 1.0
Column phase: clpest2

Instrument: tracegc80.i
Operator: System
Column diameter: 0.32



CompuChem

Data file : /chem/tracegc80.i/n140818_2C.b/006n4H15016-CAL3.d
Lab Smp Id: 4H15016-CAL3 Client Smp ID: INDC3MA
Inj Date : 18-AUG-2014 13:32
Operator : System Inst ID: tracegc80.i
Smp Info : 4H15016-CAL3
Misc Info : INDC3MA
Comment :
Method : /chem/tracegc80.i/n140818_2C.b/8081A_clpest2v8.m
Meth Date : 21-Aug-2014 10:41 spruskin Quant Type: ESTD
Cal Date : 18-AUG-2014 15:28 Cal File: 010n4H15016-ARC2.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDA.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: gilbert

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng conversion factor
Vt	5000.00000	FinalVolume
Vo	1000.00000	SampleVolume
Vi	1.00000	InjectVol

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-Xylene					CAS #: 877-09-8		
8.317	8.317	0.000	33151	0.02000	0.0207	80.00- 120.00	100.00
2 alpha-BHC					CAS #: 319-84-6		
10.032	10.032	0.000	52618	0.02000	0.0201	80.00- 120.00	100.00(a)
3 gamma-BHC (Lindane)					CAS #: 58-89-9		
10.960	10.960	0.000	48070	0.02000	0.0200	80.00- 120.00	100.00(a)
7 beta-BHC					CAS #: 319-85-7		
11.217	11.217	0.000	19347	0.02000	0.0203	80.00- 120.00	100.00(a)

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
8 delta-BHC					CAS #: 319-86-8		
11.923	11.923	0.000	42665	0.02000	0.0198	80.00- 120.00	100.00(a)
4 Heptachlor					CAS #: 76-44-8		
12.025	12.025	0.000	43342	0.02000	0.0197	80.00- 120.00	100.00(a)
5 Aldrin					CAS #: 309-00-2		
12.782	12.782	0.000	40748	0.02000	0.0200	80.00- 120.00	100.00(a)
9 Heptachlor Epoxide					CAS #: 1024-57-3		
14.128	14.128	0.000	34811	0.02000	0.0203	80.00- 120.00	100.00(a)
10 gamma-Chlordane					CAS #: 5103-74-2		
14.557	14.557	0.000	35753	0.02000	0.0202	80.00- 120.00	100.00(a)
11 alpha-Chlordane					CAS #: 5103-71-9		
14.883	14.883	0.000	33037	0.02000	0.0201	80.00- 120.00	100.00(a)
14 4,4'-DDE					CAS #: 72-55-9		
15.297	15.297	0.000	64232	0.04000	0.0394	80.00- 120.00	100.00(a)
13 Endosulfan I					CAS #: 959-98-8		
14.997	14.997	0.000	32458	0.02000	0.0201	80.00- 120.00	100.00(a)
15 Dieldrin					CAS #: 60-57-1		
15.605	15.605	0.000	62378	0.04000	0.0398	80.00- 120.00	100.00(a)
16 Endrin					CAS #: 72-20-8		
16.265	16.265	0.000	55003	0.04000	0.0400	80.00- 120.00	100.00(a)
17 4,4'-DDD					CAS #: 72-54-8		
16.552	16.552	0.000	47233	0.04000	0.0401	80.00- 120.00	100.00(a)
18 Endosulfan II					CAS #: 33213-65-9		
16.735	16.735	0.000	49054	0.04000	0.0412	80.00- 120.00	100.00(a)
19 4,4'-DDT					CAS #: 50-29-3		
17.218	17.218	0.000	40675	0.04000	0.0400	80.00- 120.00	100.00(a)
20 Endrin Aldehyde					CAS #: 7421-93-4		
17.468	17.468	0.000	36874	0.04000	0.0408	80.00- 120.00	100.00(a)
22 Methoxychlor					CAS #: 72-43-5		
18.697	18.697	0.000	89540	0.20000	0.199	80.00- 120.00	100.00(a)
21 Endosulfan sulfate					CAS #: 1031-07-8		
18.063	18.063	0.000	41864	0.04000	0.0405	80.00- 120.00	100.00(a)

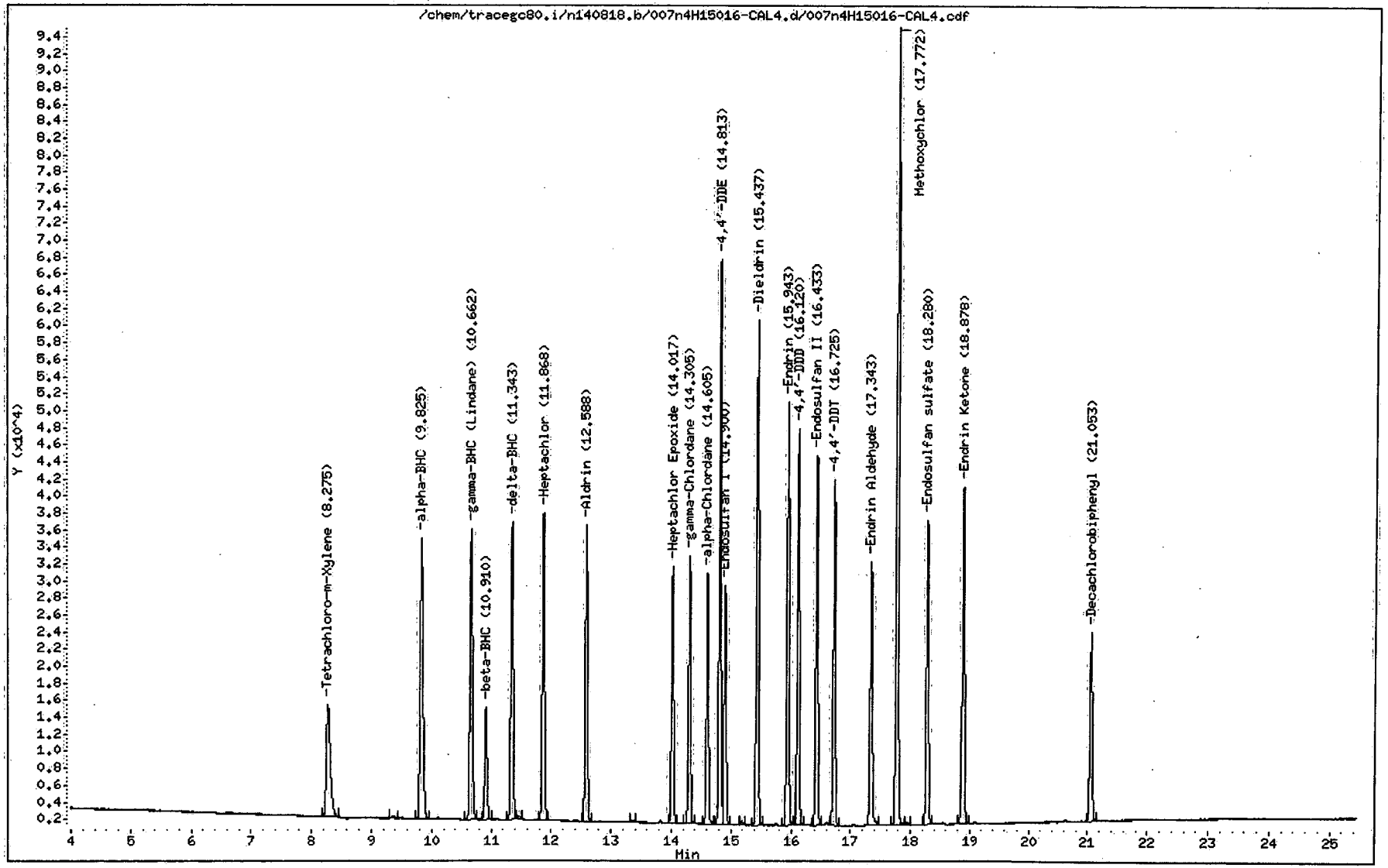
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
23 Endrin Ketone					CAS #: 53494-70-5		
19.198	19.198	0.000	44531	0.04000	0.0406	80.00- 120.00	100.00(a)
$ 33 Decachlorobiphenyl					CAS #: 2051-24-3		
21.967	21.967	0.000	29661	0.04000	0.0408	80.00- 120.00	100.00

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: /chem/tracegc80.i/n140818.b/007n4H15016-CAL4.d
Date : 18-AUG-2014 14:01
Client ID: INDC4MA
Sample Info: 4H15016-CAL4
Volume Injected (uL): 1.0
Column phase: clpest

Instrument: tracegc80.i
Operator: BWL
Column diameter: 0.32



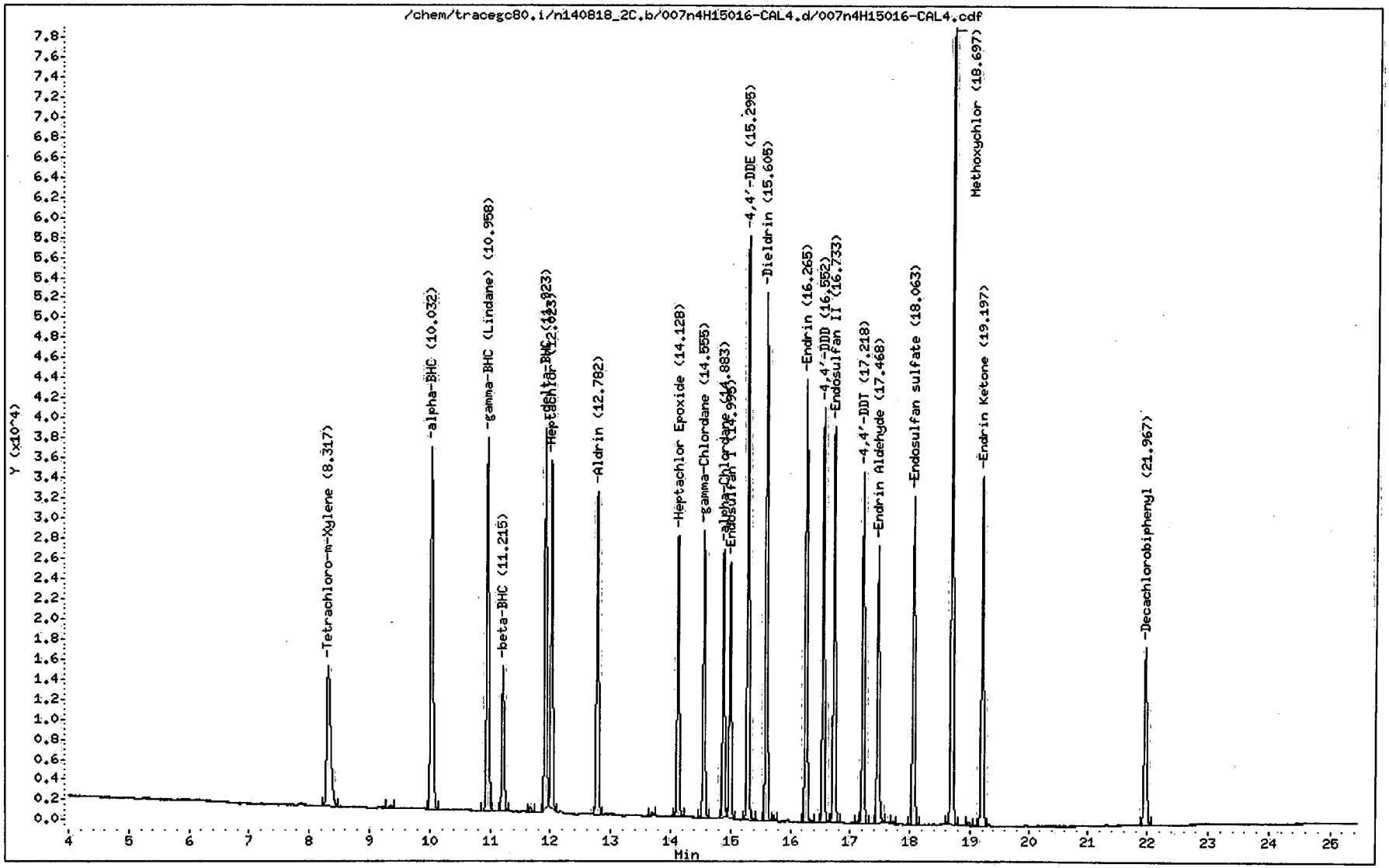
CompuChem

Lab Smp Id : 4H15016-CAL4 Client Smp Id : INDC4MA
Sample Type : INITIAL CAL: Level 4 Sublist : INDA
Inj Date : 18-AUG-2014 14:01 Inst ID : TRACEGC80
Operator : BWL
Method : /chem/tracegc80.i/n140818.b/8081A_clpestv8.m
Misc. Info : INDC4MA

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (ng)	RF	FLAGS
1.28			1661					
1.38			57770					
2.63			565					
8.28	8.21	8.35	60070	1486792	Tetrachloro-m-Xylene	0.040000	1501725	
9.36			772					
9.82	9.75	9.89	105250	2553432	alpha-BHC	0.040000	2631225	
10.66	10.59	10.73	96149	2367305	gamma-BHC (Lindane)	0.040000	2403725	
10.91	10.84	10.98	36449	920658	beta-BHC	0.040000	911200	
11.34	11.28	11.42	91149	2228390	delta-BHC	0.040000	2278700	
11.46			699					
11.87	11.80	11.94	92861	2328195	Heptachlor	0.040000	2321500	
12.59	12.52	12.66	85469	2145595	Aldrin	0.040000	2136725	
13.37			711					
14.02	13.95	14.09	72632	1839495	Heptachlor Epoxide	0.040000	1815800	
14.30	14.23	14.37	74762	1886268	gamma-Chlordane	0.040000	1869050	
14.60	14.54	14.68	70814	1781640	alpha-Chlordane	0.040000	1770350	
14.81	14.74	14.88	145444	1782762	4,4'-DDE	0.080000	1818050	
14.90	14.83	14.97	67994	1694568	Endosulfan I	0.040000	1699850	
15.19			1168					
15.44	15.37	15.51	137992	1704464	Dieldrin	0.080000	1724887	
15.94	15.87	16.01	118374	1490718	Endrin	0.080000	1479663	
16.12	16.05	16.19	105834	1310029	4,4'-DDD	0.080000	1322925	
16.43	16.36	16.50	105642	1301825	Endosulfan II	0.080000	1320525	
16.72	16.66	16.80	93050	1152178	4,4'-DDT	0.080000	1163113	
17.34	17.27	17.41	77718	945234	Endrin Aldehyde	0.080000	971475	
17.77	17.70	17.84	217185	541546	Methoxychlor	0.400000	542960	
17.95			856					
18.28	18.21	18.35	87863	1108128	Endosulfan sulfate	0.080000	1098275	
18.88	18.81	18.95	99421	1244710	Endrin Ketone	0.080000	1242750	
21.05	20.98	21.12	60152	784712	Decachlorobiphenyl	0.080000	751900	

Data File: /chem/tracegc80.i/n140818_2C.b/007n4H15016-CAL4.d
Date : 18-AUG-2014 14:01
Client ID: INDC4MA
Sample Info: 4H15016-CAL4
Volume Injected (uL): 1.0
Column phase: clpest2

Instrument: tracegc80.i
Operator: BWL
Column diameter: 0.32



CompuChem

Data file : /chem/tracegc80.i/n140818_2C.b/007n4H15016-CAL4.d
Lab Smp Id: 4H15016-CAL4 Client Smp ID: INDC4MA
Inj Date : 18-AUG-2014 14:01
Operator : BWL Inst ID: tracegc80.i
Smp Info : 4H15016-CAL4
Misc Info : INDC4MA
Comment :
Method : /chem/tracegc80.i/n140818_2C.b/8081A_clpest2v8.m
Meth Date : 21-Aug-2014 10:41 spruskin Quant Type: ESTD
Cal Date : 18-AUG-2014 14:01 Cal File: 007n4H15016-CAL4.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDA.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: gilbert

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng conversion factor
Vt	5000.00000	FinalVolume
Vo	1000.00000	SampleVolume
Vi	1.00000	InjectVol

Cpnd Variable Local Compound Variable

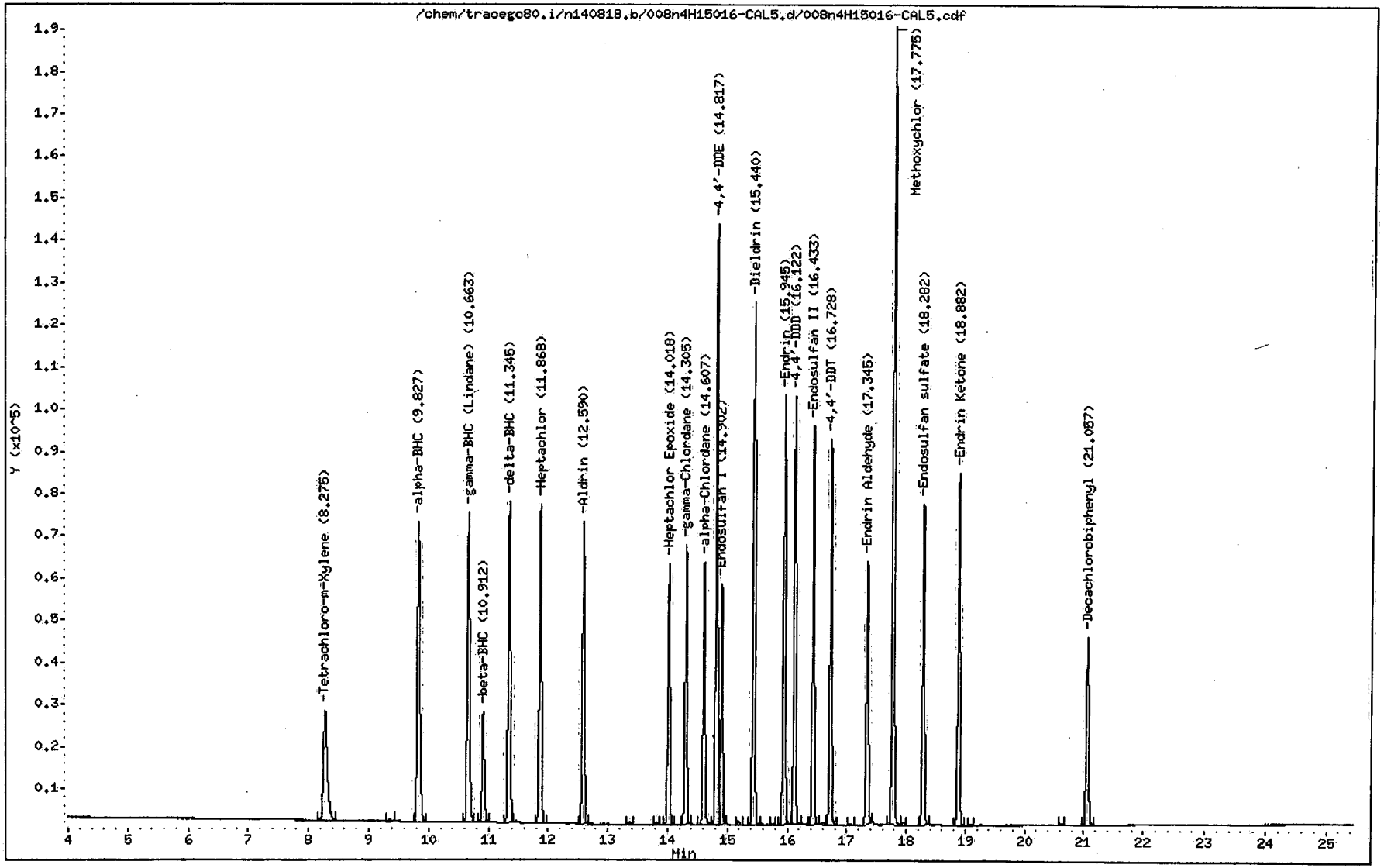
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-Xylene					CAS #: 877-09-8		
8.317	8.317	0.000	61436	0.04000	0.0384	80.00- 120.00	100.00
2 alpha-BHC					CAS #: 319-84-6		
10.032	10.032	0.000	103477	0.04000	0.0395	80.00- 120.00	100.00
3 gamma-BHC (Lindane)					CAS #: 58-89-9		
10.958	10.958	0.000	94245	0.04000	0.0391	80.00- 120.00	100.00
7 beta-BHC					CAS #: 319-85-7		
11.215	11.215	0.000	36476	0.04000	0.0383	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
8 delta-BHC					CAS #: 319-86-8		
11.923	11.923	0.000	84852	0.04000	0.0394	80.00- 120.00	100.00
4 Heptachlor					CAS #: 76-44-8		
12.023	12.023	0.000	83096	0.04000	0.0378	80.00- 120.00	100.00
5 Aldrin					CAS #: 309-00-2		
12.782	12.782	0.000	77874	0.04000	0.0383	80.00- 120.00	100.00
9 Heptachlor Epoxide					CAS #: 1024-57-3		
14.128	14.128	0.000	65779	0.04000	0.0384	80.00- 120.00	100.00
10 gamma-Chlordane					CAS #: 5103-74-2		
14.555	14.555	0.000	67102	0.04000	0.0378	80.00- 120.00	100.00
11 alpha-Chlordane					CAS #: 5103-71-9		
14.883	14.883	0.000	61788	0.04000	0.0375	80.00- 120.00	100.00
14 4,4'-DDE					CAS #: 72-55-9		
15.295	15.295	0.000	125640	0.08000	0.0770	80.00- 120.00	100.00
13 Endosulfan I					CAS #: 959-98-8		
14.995	14.995	0.000	60488	0.04000	0.0374	80.00- 120.00	100.00
15 Dieldrin					CAS #: 60-57-1		
15.605	15.605	0.000	120637	0.08000	0.0769	80.00- 120.00	100.00
16 Endrin					CAS #: 72-20-8		
16.265	16.265	0.000	104620	0.08000	0.0761	80.00- 120.00	100.00
17 4,4'-DDD					CAS #: 72-54-8		
16.552	16.552	0.000	90340	0.08000	0.0767	80.00- 120.00	100.00
18 Endosulfan II					CAS #: 33213-65-9		
16.733	16.733	0.000	92519	0.08000	0.0778	80.00- 120.00	100.00
19 4,4'-DDT					CAS #: 50-29-3		
17.218	17.218	0.000	79285	0.08000	0.0780	80.00- 120.00	100.00
20 Endrin Aldehyde					CAS #: 7421-93-4		
17.468	17.468	0.000	67910	0.08000	0.0752	80.00- 120.00	100.00
22 Methoxychlor					CAS #: 72-43-5		
18.697	18.697	0.000	175752	0.40000	0.391	80.00- 120.00	100.00
21 Endosulfan sulfate					CAS #: 1031-07-8		
18.063	18.063	0.000	78187	0.08000	0.0757	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
23 Endrin Ketone					CAS #: 53494-70-5		
19.197	19.197	0.000	84381	0.08000	0.0770	80.00- 120.00	100.00
$ 33 Decachlorobiphenyl					CAS #: 2051-24-3		
21.967	21.967	0.000	53631	0.08000	0.0739	80.00- 120.00	100.00

Data File: /chem/tracegc80.i/n140818.b/008n4H15016-CAL5.d
Date : 18-AUG-2014 14:30
Client ID: INDC6MA
Sample Info: 4H15016-CAL5
Volume Injected (uL): 1.0
Column phase: clpest

Instrument: tracegc80.i
Operator: BWL
Column diameter: 0.32



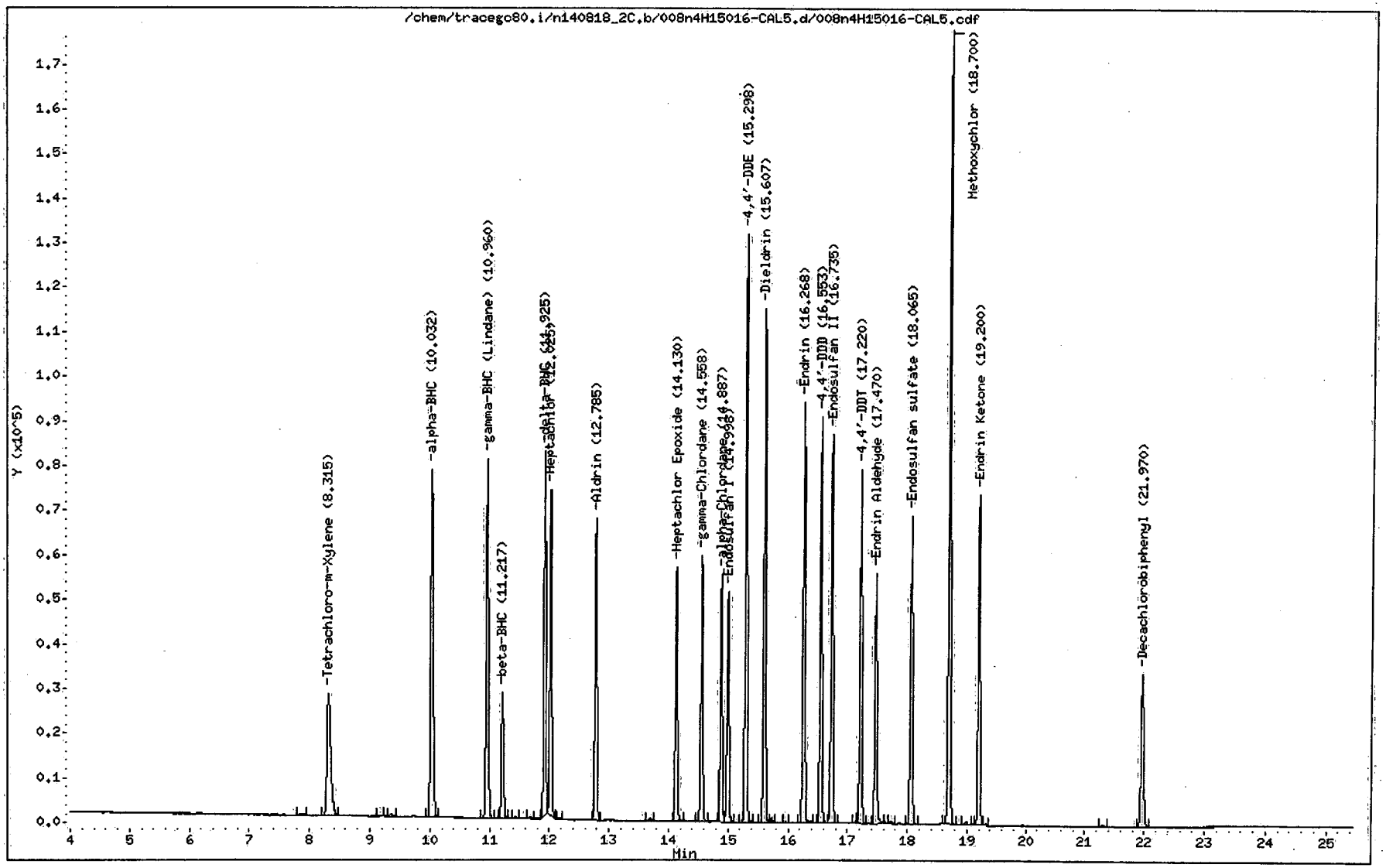
CompuChem

Lab Smp Id : 4H15016-CAL5 Client Smp Id : INDC5MA
Sample Type : INITIAL CAL: Level 5 Sublist : INDA
Inj Date : 18-AUG-2014 14:30 Inst ID : TRACEGC80
Operator : BWL
Method : /chem/tracegc80.i/n140818.b/8081A_clpestv8.m
Misc. Info : INDC5MA

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (ng)	RF	FLAGS
1.28			2497					
1.38			89746					
2.63			898					
8.28	8.21	8.35	119232	1486792	Tetrachloro-m-Xylene	0.080000	1490387	
9.36			1378					
9.83	9.75	9.89	222647	2553432	alpha-BHC	0.080000	2783087	
10.66	10.59	10.73	202148	2367305	gamma-BHC (Lindane)	0.080000	2526850	
10.91	10.84	10.98	71683	920658	beta-BHC	0.080000	896037	
11.34	11.28	11.42	194072	2228390	delta-BHC	0.080000	2425900	
11.87	11.80	11.94	190338	2328195	Heptachlor	0.080000	2379225	
12.59	12.52	12.66	175488	2145595	Aldrin	0.080000	2193600	
13.37			1325					
13.82			1021					
14.02	13.95	14.09	146139	1839495	Heptachlor Epoxide	0.080000	1826725	
14.30	14.23	14.37	153768	1886268	gamma-Chlordane	0.080000	1922087	
14.61	14.54	14.68	145485	1781640	alpha-Chlordane	0.080000	1818550	
14.82	14.74	14.88	311735	1782762	4,4'-DDE	0.160000	1948337	
14.90	14.83	14.97	136536	1694568	Endosulfan I	0.080000	1706687	
15.19			2346					
15.44	15.37	15.51	288874	1704464	Dieldrin	0.160000	1805456	
15.75			942					
15.94	15.87	16.01	243852	1490718	Endrin	0.160000	1524075	
16.12	16.05	16.19	226412	1310029	4,4'-DDD	0.160000	1415069	
16.43	16.36	16.50	224600	1301825	Endosulfan II	0.160000	1403750	
16.61			2171					
16.73	16.66	16.80	202648	1152178	4,4'-DDT	0.160000	1266550	
17.06			904					
17.34	17.27	17.41	151772	945234	Endrin Aldehyde	0.160000	948569	
17.78	17.70	17.84	441550	541546	Methoxychlor	0.800000	551937	
17.95			1544					
18.28	18.21	18.35	181758	1108128	Endosulfan sulfate	0.160000	1135987	
18.88	18.81	18.95	204312	1244710	Endrin Ketone	0.160000	1276950	
19.10			859					
20.62			848					
21.06	20.98	21.12	118786	784712	Decachlorobiphenyl	0.160000	742413	

Data File: /chem/tracego80.i/n140818_2C.b/008n4H15016-CAL5.d
Date : 18-AUG-2014 14:30
Client ID: INDC5MA
Sample Info: 4H15016-CAL5
Volume Injected (uL): 1.0
Column phase: clpest2

Instrument: tracego80.i
Operator: BWL
Column diameter: 0.32



CompuChem

Data file : /chem/tracegc80.i/n140818_2C.b/008n4H15016-CAL5.d
Lab Smp Id: 4H15016-CAL5 Client Smp ID: INDC5MA
Inj Date : 18-AUG-2014 14:30
Operator : BWL Inst ID: tracegc80.i
Smp Info : 4H15016-CAL5
Misc Info : INDC5MA
Comment :
Method : /chem/tracegc80.i/n140818_2C.b/8081A_clpest2v8.m
Meth Date : 21-Aug-2014 10:41 spruskin Quant Type: ESTD
Cal Date : 18-AUG-2014 14:30 Cal File: 008n4H15016-CAL5.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDA.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: gilbert

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng conversion factor
Vt	5000.00000	FinalVolume
Vo	1000.00000	SampleVolume
Vi	1.00000	InjectVol

Cpnd Variable Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-Xylene					CAS #: 877-09-8		
8.315	8.315	0.000	118187	0.08000	0.0739	80.00- 120.00	100.00
2 alpha-BHC					CAS #: 319-84-6		
10.032	10.032	0.000	216639	0.08000	0.0827	80.00- 120.00	100.00(A)
3 gamma-BHC (Lindane)					CAS #: 58-89-9		
10.960	10.960	0.000	196752	0.08000	0.0817	80.00- 120.00	100.00(A)
7 beta-BHC					CAS #: 319-85-7		
11.217	11.217	0.000	70204	0.08000	0.0737	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
8 delta-BHC					CAS #: 319-86-8		
11.925	11.925	0.000	179643	0.08000	0.0835	80.00- 120.00	100.00(A)
4 Heptachlor					CAS #: 76-44-8		
12.025	12.025	0.000	168346	0.08000	0.0766	80.00- 120.00	100.00
5 Aldrin					CAS #: 309-00-2		
12.785	12.785	0.000	157572	0.08000	0.0775	80.00- 120.00	100.00
9 Heptachlor Epoxide					CAS #: 1024-57-3		
14.130	14.130	0.000	130135	0.08000	0.0760	80.00- 120.00	100.00
10 gamma-Chlordane					CAS #: 5103-74-2		
14.558	14.558	0.000	135302	0.08000	0.0763	80.00- 120.00	100.00
11 alpha-Chlordane					CAS #: 5103-71-9		
14.887	14.887	0.000	125777	0.08000	0.0764	80.00- 120.00	100.00
14 4,4'-DDE					CAS #: 72-55-9		
15.298	15.298	0.000	273983	0.16000	0.168	80.00- 120.00	100.00(A)
13 Endosulfan I					CAS #: 959-98-8		
14.998	14.998	0.000	121138	0.08000	0.0750	80.00- 120.00	100.00
15 Dieldrin					CAS #: 60-57-1		
15.607	15.607	0.000	256675	0.16000	0.164	80.00- 120.00	100.00(A)
16 Endrin					CAS #: 72-20-8		
16.268	16.268	0.000	215972	0.16000	0.157	80.00- 120.00	100.00
17 4,4'-DDD					CAS #: 72-54-8		
16.553	16.553	0.000	192705	0.16000	0.164	80.00- 120.00	100.00(A)
18 Endosulfan II					CAS #: 33213-65-9		
16.735	16.735	0.000	197020	0.16000	0.166	80.00- 120.00	100.00(A)
19 4,4'-DDT					CAS #: 50-29-3		
17.220	17.220	0.000	169981	0.16000	0.167	80.00- 120.00	100.00(A)
20 Endrin Aldehyde					CAS #: 7421-93-4		
17.470	17.470	0.000	134633	0.16000	0.149	80.00- 120.00	100.00
22 Methoxychlor					CAS #: 72-43-5		
18.700	18.700	0.000	384171	0.80000	0.854	80.00- 120.00	100.00(A)
21 Endosulfan sulfate					CAS #: 1031-07-8		
18.065	18.065	0.000	160466	0.16000	0.155	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
23 Endrin Ketone					CAS #: 53494-70-5		
19.200	19.200	0.000	174924	0.16000	0.160	80.00- 120.00	100.00
$ 33 Decachlorobiphenyl					CAS #: 2051-24-3		
21.970	21.970	0.000	100985	0.16000	0.139	80.00- 120.00	100.00

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

INITIAL SINGLE POINT CALIBRATION

INITIAL SINGLE POINT CALIBRATION

Client: WESTON SOLUTIONS SDG: 1408028 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Instrument ID: tracegc80 Date(s) Analyzed: 08/18/2014 08/18/2014

GC Column: clpest ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK[1]	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Technical Chlordane (1)	0.400	1	11.87	11.80	11.94	
		2				
		3				
		4				
		5				
Technical Chlordane (2)	0.400	1	12.94	12.87	13.01	
		2				
		3				
		4				
		5				
Technical Chlordane (3)	0.400	1	14.31	14.24	14.38	
		2				
		3				
		4				
		5				
Technical Chlordane (4)	0.400	1	14.60	14.53	14.67	
		2				
		3				
		4				
		5				
Technical Chlordane (5)	0.400	1	16.29	16.22	16.36	
		2				
		3				
		4				
		5				
Toxaphene (1)	2.000	1	15.84	15.77	15.91	
		2				
		3				
		4				
		5				
Toxaphene (2)	2.000	1	16.69	16.62	16.76	
		2				
		3				
		4				
		5				

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INITIAL SINGLE POINT CALIBRATION

Client: WESTON SOLUTIONS SDG: 1408028 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Instrument ID: tracegc80 Date(s) Analyzed: 08/18/2014 08/18/2014

GC Column: clpest ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK[1]	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Toxaphene (3)	2.000	1	17.30	17.23	17.37	
		2				
		3				
		4				
		5				
Toxaphene (4)	2.000	1	17.57	17.50	17.64	
		2				
		3				
		4				
		5				
Toxaphene (5)	2.000	1	18.07	18.00	18.14	
		2				
		3				
		4				
		5				

[1]At least three peaks for each column are required for identification of multicomponent analytes.

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

INITIAL SINGLE POINT CALIBRATION

Client: WESTON SOLUTIONS SDG: 1408028 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Instrument ID: tracegc80 Date(s) Analyzed: 08/18/2014 08/18/2014

GC Column: clpest2 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK[1]	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Technical Chlordane (1) [2C]	0.400	1	12.03	11.96	12.10	
		2				
		3				
		4				
		5				
Technical Chlordane (2) [2C]	0.400	1	13.18	13.11	13.25	
		2				
		3				
		4				
		5				
Technical Chlordane (3) [2C]	0.400	1	14.56	14.49	14.63	
		2				
		3				
		4				
		5				
Technical Chlordane (4) [2C]	0.400	1	14.89	14.82	14.96	
		2				
		3				
		4				
		5				
Technical Chlordane (5) [2C]	0.400	1	16.83	16.76	16.90	
		2				
		3				
		4				
		5				
Toxaphene (1) [2C]	2.000	1	16.91	16.84	16.98	
		2				
		3				
		4				
		5				
Toxaphene (2) [2C]	2.000	1	17.07	17.00	17.14	
		2				
		3				
		4				
		5				

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INITIAL SINGLE POINT CALIBRATION

Client: WESTON SOLUTIONS SDG: 1408028 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Instrument ID: tracegc80 Date(s) Analyzed: 08/18/2014 08/18/2014

GC Column: clpest2 ID: 0.32 (mm)

COMPOUND	AMOUNT (ng)	PEAK[1]	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Toxaphene (3) [2C]	2.000	1	17.48	17.41	17.55	
		2				
		3				
		4				
		5				
Toxaphene (4) [2C]	2.000	1	18.03	17.96	18.10	
		2				
		3				
		4				
		5				
Toxaphene (5) [2C]	2.000	1	18.57	18.50	18.64	
		2				
		3				
		4				
		5				

[1]At least three peaks for each column are required for identification of multicomponent analytes.

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

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Second Source Calibration Verification

SECOND-SOURCE CALIBRATION VERIFICATION

8081A

Client: WESTON SOLUTIONS

SDG: 1408028

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Instrument: tracegc80

Calibration: 4082101

Lab File ID: 011n4H15016-SCV1.d

Standard ID: 4B26013

Sequence: 4H15016

Injection Date: 08/18/14

Lab Sample ID: 4H15016-SCV1

InjectionTime: 15:57

ANALYTE	EXPECTED (ng/uL)	FOUND (ng/uL)	% DRIFT	QC LIMIT
alpha-BHC	0.04000	0.04153	3.8	20.00
alpha-BHC [2C]	0.04000	0.04002	0.05	20.00
gamma-BHC (Lindane)	0.04000	0.04079	2.0	20.00
gamma-BHC (Lindane) [2C]	0.04000	0.03954	-1.2	20.00
Heptachlor	0.04000	0.04015	0.4	20.00
Heptachlor [2C]	0.04000	0.03842	-4.0	20.00
Aldrin	0.04000	0.04039	1.0	20.00
Aldrin [2C]	0.04000	0.03939	-1.5	20.00
beta-BHC	0.04000	0.03976	-0.6	20.00
beta-BHC [2C]	0.04000	0.03886	-2.9	20.00
delta-BHC	0.04000	0.04206	5.2	20.00
delta-BHC [2C]	0.04000	0.04064	1.6	20.00
Heptachlor epoxide	0.04000	0.03987	-0.3	20.00
Heptachlor Epoxide [2C]	0.04000	0.03919	-2.0	20.00
gamma-Chlordane	0.04000	0.03963	-0.9	20.00
gamma-Chlordane [2C]	0.04000	0.03876	-3.1	20.00
alpha-Chlordane	0.04000	0.03993	-0.2	20.00
alpha-Chlordane [2C]	0.04000	0.03892	-2.7	20.00
Endosulfan I	0.04000	0.03679	-8.0	20.00
Endosulfan I [2C]	0.04000	0.03773	-5.7	20.00
4,4'-DDE	0.04000	0.03746	-6.4	20.00

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SECOND-SOURCE CALIBRATION VERIFICATION

8081A

Client: WESTON SOLUTIONS

SDG: 1408028

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Instrument: tracegc80

Calibration: 4082101

Lab File ID: 011n4H15016-SCV1.d

Standard ID: 4B26013

Sequence: 4H15016

Injection Date: 08/18/14

Lab Sample ID: 4H15016-SCV1

InjectionTime: 15:57

ANALYTE	EXPECTED (ng/uL)	FOUND (ng/uL)	% DRIFT	QC LIMIT
4,4'-DDE [2C]	0.04000	0.03968	-0.8	20.00
Dieldrin	0.04000	0.04087	2.2	20.00
Dieldrin [2C]	0.04000	0.04042	1.1	20.00
Endrin	0.04000	0.04077	1.9	20.00
Endrin [2C]	0.04000	0.04012	0.3	20.00
4,4'-DDD	0.04000	0.03996	-0.1	20.00
4,4'-DDD [2C]	0.04000	0.04002	0.05	20.00
Endosulfan II	0.04000	0.04304	7.6	20.00
Endosulfan II [2C]	0.04000	0.04297	7.4	20.00
4,4'-DDT	0.04000	0.04003	0.08	20.00
4,4'-DDT [2C]	0.04000	0.04021	0.5	20.00
Endrin aldehyde	0.04000	0.03890	-2.8	20.00
Endrin Aldehyde [2C]	0.04000	0.03670	-8.3	20.00
Endosulfan sulfate	0.04000	0.04060	1.5	20.00
Endosulfan Sulfate [2C]	0.04000	0.04052	1.3	20.00
Methoxychlor	0.04000	0.04326	8.2	20.00
Methoxychlor [2C]	0.04000	0.04448	11.2	20.00
Endrin ketone	0.04000	0.03948	-1.3	20.00
Endrin Ketone [2C]	0.04000	0.03965	-0.9	20.00

* Values outside of QC limits

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Data File: /chem/tracegc80.i/n140818.b/011n4H15016-SCV1.d

Date : 18-AUG-2014 15:57

Client ID: PESTCHKMA

Sample Info: 4H15016-SCV1

Volume Injected (uL): 1.0

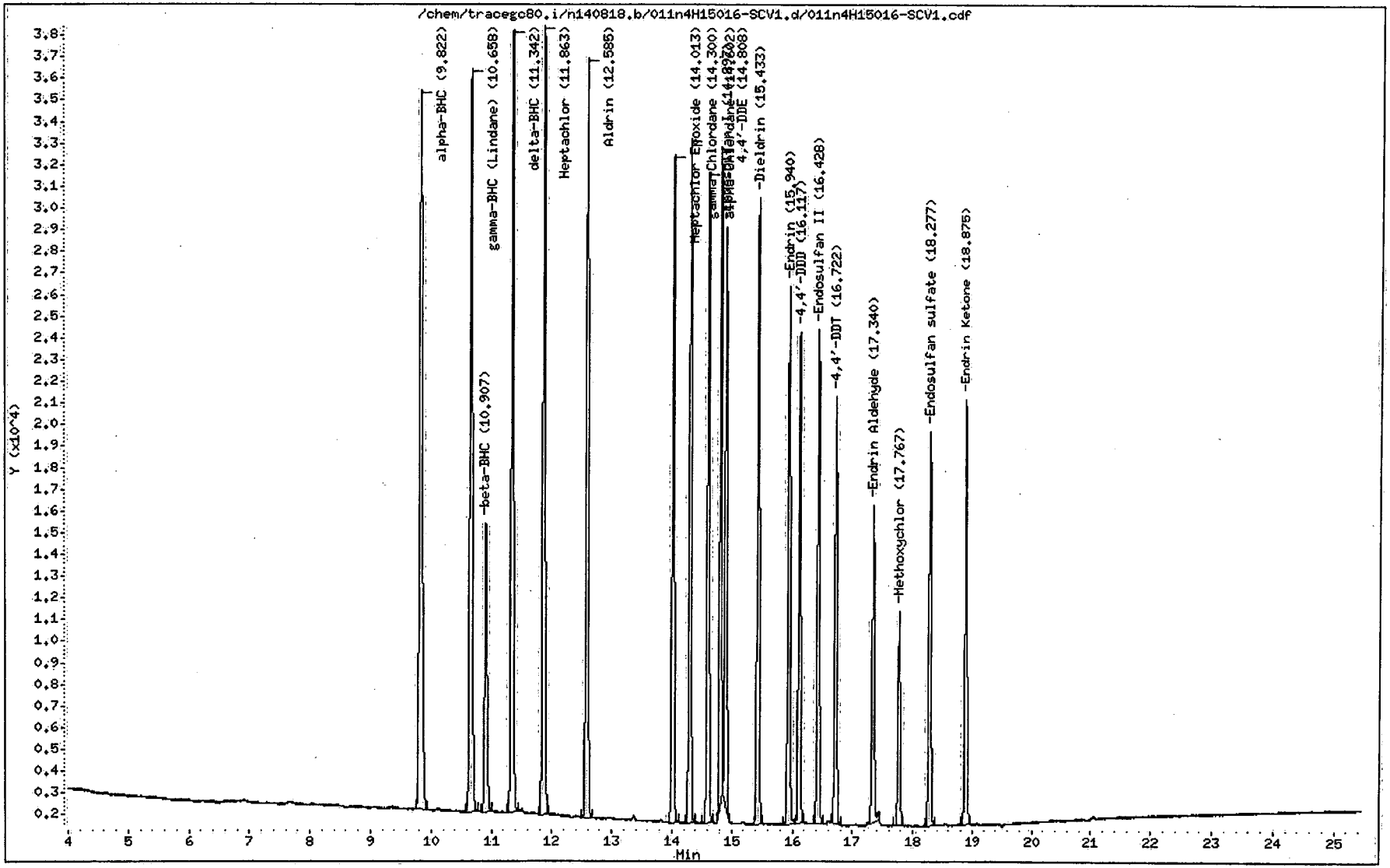
Column phase: clpest

Page 1

Instrument: tracegc80.i

Operator: BWL

Column diameter: 0.32



CompuChem

Lab Smp Id : 4H15016-SCV1 Client Smp Id : PESTCHKMA
Sample Type : LCS Sublist : INDA
Inj Date : 18-AUG-2014 15:57 Inst ID : TRACEGC80
Operator : BWL Spike Sublist : INDAchek
Method : /chem/tracegc80.i/n140818.b/8081A_clpestv8.m
Misc. Info : PESTCHKMA

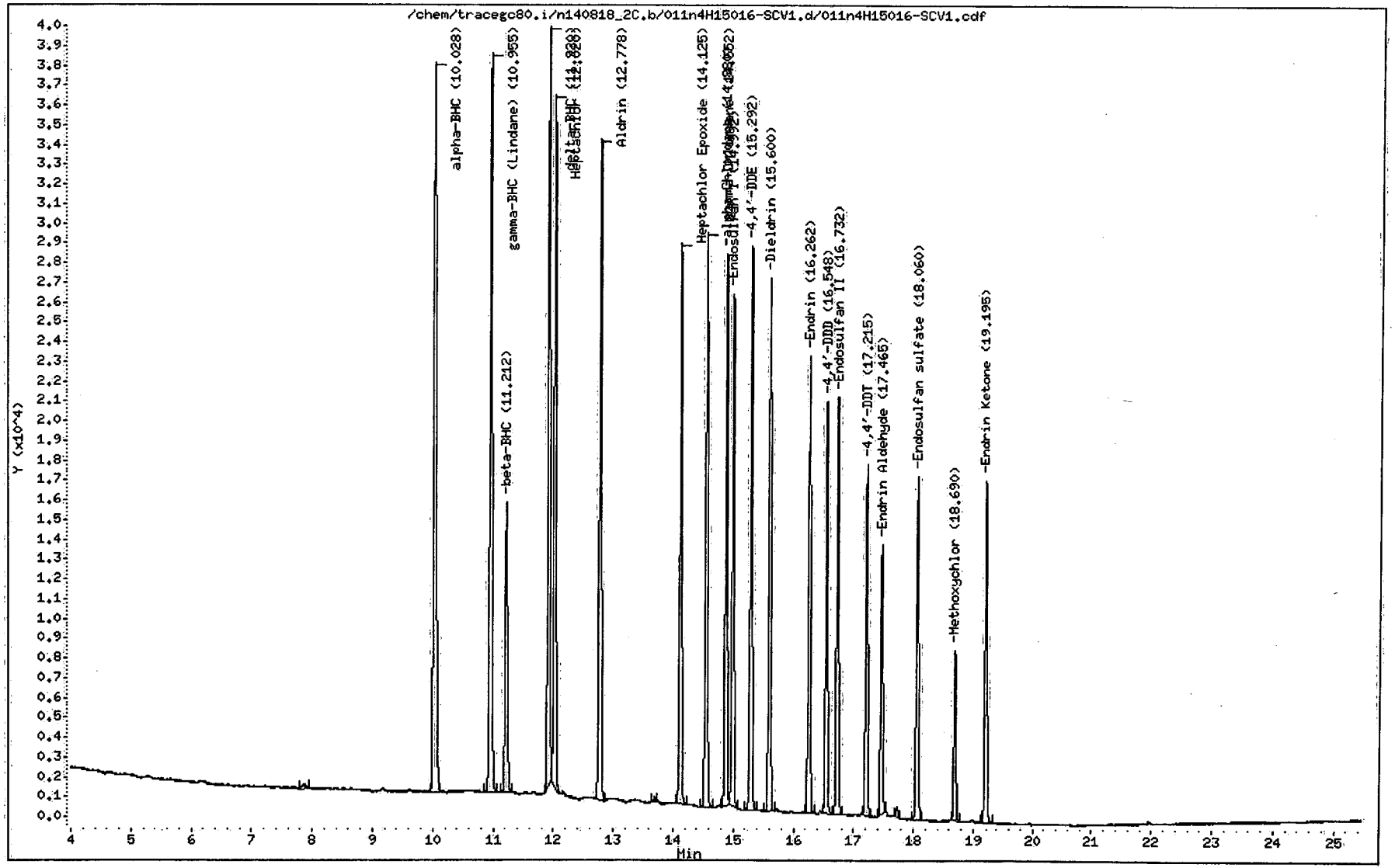
Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 1000(ul) Vi Injection Volume: 1(ul)
Vo Sample Volume: 1000.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (ng)	FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
1.29			1975								
1.40			168648								
9.82	9.76	9.90	106037	2553432	alpha-BHC	0.041527	0.041527	0.005000	103.8	80 - 120	
10.66	10.59	10.73	96560	2367305	gamma-BHC (Lindane)	0.040789	0.040789	0.005000	102.0	80 - 120	
10.91	10.84	10.98	36610	920658	beta-BHC	0.039764	0.039764	0.005000	99.4	80 - 120	
11.34	11.27	11.41	93732	2228390	delta-BHC	0.042062	0.042062	0.005000	105.2	80 - 120	
11.86	11.80	11.94	93472	2328195	Heptachlor	0.040147	0.040147	0.005000	100.4	80 - 120	
12.58	12.52	12.66	86661	2145595	Aldrin	0.040390	0.040390	0.005000	101.0	80 - 120	
14.01	13.95	14.09	73341	1839495	Heptachlor Epoxide	0.039870	0.039870	0.005000	99.7	80 - 120	
14.30	14.23	14.37	74751	1886268	gamma-Chlordane	0.039629	0.039629	0.005000	99.1	80 - 120	
14.60	14.54	14.68	71145	1781640	alpha-Chlordane	0.039932	0.039932	0.005000	99.8	80 - 120	
14.81	14.75	14.89	66791	1782762	4,4'-DDE	0.037464	0.037464	0.010000	93.7	80 - 120	
14.90	14.83	14.97	62344	1694568	Endosulfan I	0.036790	0.036790	0.005000	92.0	80 - 120	
15.43	15.37	15.51	69666	1704464	Dieldrin	0.040873	0.040873	0.010000	102.2	80 - 120	
15.94	15.87	16.01	60781	1490718	Endrin	0.040773	0.040773	0.010000	101.9	80 - 120	
16.12	16.05	16.19	52349	1310029	4,4'-DDD	0.039960	0.039960	0.010000	99.9	80 - 120	
16.43	16.36	16.50	56037	1301825	Endosulfan II	0.043044	0.043044	0.010000	107.6	80 - 120	
16.72	16.66	16.80	46124	1152178	4,4'-DDT	0.040031	0.040031	0.010000	100.1	80 - 120	
17.34	17.27	17.41	36772	945234	Endrin Aldehyde	0.038903	0.038903	0.010000	97.3	80 - 120	
17.77	17.71	17.85	23427	541546	Methoxychlor	0.043259	0.043259	0.050000	108.1	80 - 120	J
18.28	18.21	18.35	44987	1108128	Endosulfan sulfate	0.040597	0.040597	0.010000	101.5	80 - 120	
18.88	18.81	18.95	49137	1244710	Endrin Ketone	0.039477	0.039477	0.010000	98.7	80 - 120	

Data File: /chem/tracegc80.i/n140818_2C.b/011n4H15016-SCV1.d
Date : 18-AUG-2014 15:57
Client ID: PESTCHKMA
Sample Info: 4H15016-SCV1
Volume Injected (uL): 1.0
Column phase: clpest2

Instrument: tracegc80.i
Operator: BWL
Column diameter: 0.32



CompuChem

Data file : /chem/tracegc80.i/n140818_2C.b/011n4H15016-SCV1.d
Lab Smp Id: 4H15016-SCV1 Client Smp ID: PESTCHKMA
Inj Date : 18-AUG-2014 15:57
Operator : BWL Inst ID: tracegc80.i
Smp Info : 4H15016-SCV1
Misc Info : PESTCHKMA
Comment :
Method : /chem/tracegc80.i/n140818_2C.b/8081A_clpest2v8.m
Meth Date : 21-Aug-2014 10:41 spruskin Quant Type: ESTD
Cal Date : 18-AUG-2014 15:28 Cal File: 010n4H15016-ARC2.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDA.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: gilbert

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng conversion factor
Vt	1000.00000	FinalVolume
Vo	1000.00000	SampleVolume
Vi	1.00000	InjectVol

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-Xylene					CAS #: 877-09-8		
Compound Not Detected							
2 alpha-BHC					CAS #: 319-84-6		
10.028	10.032	-0.004	104889	0.04002	0.0400	80.00- 120.00	100.00
3 gamma-BHC (Lindane)					CAS #: 58-89-9		
10.955	10.960	-0.005	95189	0.03954	0.0395	80.00- 120.00	100.00
7 beta-BHC					CAS #: 319-85-7		
11.212	11.217	-0.005	36992	0.03886	0.0389	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/L)	TARGET RANGE	RATIO
8 delta-BHC					CAS #: 319-86-8		
11.920	11.925	-0.005	87459	0.04064	0.0406	80.00- 120.00	100.00
4 Heptachlor					CAS #: 76-44-8		
12.020	12.025	-0.005	84426	0.03842	0.0384	80.00- 120.00	100.00
5 Aldrin					CAS #: 309-00-2		
12.778	12.785	-0.007	80133	0.03939	0.0394	80.00- 120.00	100.00
9 Heptachlor Epoxide					CAS #: 1024-57-3		
14.125	14.130	-0.005	67087	0.03919	0.0392	80.00- 120.00	100.00
10 gamma-Chlordane					CAS #: 5103-74-2		
14.552	14.558	-0.006	68763	0.03876	0.0388	80.00- 120.00	100.00
11 alpha-Chlordane					CAS #: 5103-71-9		
14.880	14.887	-0.007	64069	0.03892	0.0389	80.00- 120.00	100.00
14 4,4'-DDE					CAS #: 72-55-9		
15.292	15.298	-0.006	64725	0.03968	0.0397	80.00- 120.00	100.00
13 Endosulfan I					CAS #: 959-98-8		
14.992	14.998	-0.006	60976	0.03773	0.0377	80.00- 120.00	100.00
15 Dieldrin					CAS #: 60-57-1		
15.600	15.607	-0.007	63374	0.04042	0.0404	80.00- 120.00	100.00
16 Endrin					CAS #: 72-20-8		
16.262	16.268	-0.006	55155	0.04012	0.0401	80.00- 120.00	100.00
17 4,4'-DDD					CAS #: 72-54-8		
16.548	16.553	-0.005	47116	0.04002	0.0400	80.00- 120.00	100.00
18 Endosulfan II					CAS #: 33213-65-9		
16.732	16.735	-0.003	51108	0.04297	0.0430	80.00- 120.00	100.00
19 4,4'-DDT					CAS #: 50-29-3		
17.215	17.220	-0.005	40852	0.04021	0.0402	80.00- 120.00	100.00
20 Endrin Aldehyde					CAS #: 7421-93-4		
17.465	17.470	-0.005	33158	0.03670	0.0367	80.00- 120.00	100.00
22 Methoxychlor					CAS #: 72-43-5		
18.690	18.700	-0.010	20008	0.04448	0.0445	80.00- 120.00	100.00(a)
21 Endosulfan sulfate					CAS #: 1031-07-8		
18.060	18.065	-0.005	41830	0.04052	0.0405	80.00- 120.00	100.00

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
23 Endrin Ketone					CAS #: 53494-70-5		
19.195	19.200	-0.005	43442	0.03965	0.0397	80.00- 120.00	100.00

$ 33 Decachlorobiphenyl CAS #: 2051-24-3

Compound Not Detected

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

CONTINUING CALIBRATION CHECK

8081A

Client: WESTON SOLUTIONS SDG: 1408028

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Instrument ID: tracegc80 Calibration: 4082101

Lab File ID: 012n4H15017-ICV1.d Calibration Date: 08/18/14 00:00

Sequence: 4H15017 Injection Date: 08/18/14

Lab Sample ID: 4H15017-ICV1 Injection Time: 16:26

COMPOUND	TYPE	CONC. (ng/uL)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT
alpha-BHC	Avg	0.02000	0.02000	2553433	2567650		0.6	20
alpha-BHC [2C]	Avg	0.02000	0.02030	2620943	2657900		1.4	20
gamma-BHC (Lindane)	Avg	0.02000	0.02000	2367305	2380400		0.6	20
gamma-BHC (Lindane) [2C]	Avg	0.02000	0.02020	2407465	2432400		1.0	20
Heptachlor	Avg	0.02000	0.02000	2328195	2355200		1.2	20
Heptachlor [2C]	Avg	0.02000	0.02000	2197165	2198550		0.06	20
Aldrin	Avg	0.02000	0.02000	2145595	2159850		0.7	20
Aldrin [2C]	Avg	0.02000	0.02040	2034220	2070000		1.8	20
beta-BHC	Avg	0.02000	0.02000	920657.5	936300		1.7	20
beta-BHC [2C]	Avg	0.02000	0.02070	951960	983900		3.4	20
delta-BHC	Avg	0.02000	0.02000	2228390	2239350		0.5	20
delta-BHC [2C]	Avg	0.02000	0.02020	2152158	2169650		0.8	20
Heptachlor epoxide	Avg	0.02000	0.02000	1839495	1876250		2.0	20
Heptachlor Epoxide [2C]	Avg	0.02000	0.02080	1711703	1776850		3.8	20
gamma-Chlordane	Avg	0.02000	0.02000	1886268	1919500		1.8	20
gamma-Chlordane [2C]	Avg	0.02000	0.02050	1774175	1815200		2.3	20
alpha-Chlordane	Avg	0.02000	0.02000	1781640	1801350		1.1	20
alpha-Chlordane [2C]	Avg	0.02000	0.02040	1646273	1681850		2.2	20
Endosulfan I	Avg	0.02000	0.02100	1694568	1774050		4.7	20
Endosulfan I [2C]	Avg	0.02000	0.02050	1616245	1655450		2.4	20
4,4'-DDE	Avg	0.04000	0.04100	1782763	1809375		1.5	20
4,4'-DDE [2C]	Avg	0.04000	0.04000	1631039	1631100		0.004	20
Dieldrin	Avg	0.04000	0.04100	1704464	1741700		2.2	20
Dieldrin [2C]	Avg	0.04000	0.04050	1567806	1587650		1.3	20

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CONTINUING CALIBRATION CHECK

8081A

Client: WESTON SOLUTIONS SDG: 1408028

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Instrument ID: tracegc80 Calibration: 4082101

Lab File ID: 012n4H15017-ICV1.d Calibration Date: 08/18/14 00:00

Sequence: 4H15017 Injection Date: 08/18/14

Lab Sample ID: 4H15017-ICV1 Injection Time: 16:26

COMPOUND	TYPE	CONC. (ng/uL)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT
Endrin	Avg	0.04000	0.04100	1490718	1533950		2.9	20
Endrin [2C]	Avg	0.04000	0.04070	1374880	1397925		1.7	20
4,4'-DDD	Avg	0.04000	0.04100	1310029	1343325		2.5	20
4,4'-DDD [2C]	Avg	0.04000	0.04090	1177206	1202875		2.2	20
Endosulfan II	Avg	0.04000	0.04200	1301825	1372075		5.4	20
Endosulfan II [2C]	Avg	0.04000	0.04200	1189413	1250325		5.1	20
4,4'-DDT	Avg	0.04000	0.04100	1152178	1186900		3.0	20
4,4'-DDT [2C]	Avg	0.04000	0.04120	1015884	1046200		3.0	20
Endrin aldehyde	Avg	0.04000	0.04200	945233.8	1003300		6.1	20
Endrin Aldehyde [2C]	Avg	0.04000	0.04070	903586.3	918475		1.6	20
Endosulfan sulfate	Avg	0.04000	0.04200	1108128	1157350		4.4	20
Endosulfan Sulfate [2C]	Avg	0.04000	0.04170	1032450	1076825		4.3	20
Methoxychlor	Avg	0.2000	0.2100	541546.5	555540		2.6	20
Methoxychlor [2C]	Avg	0.2000	0.2030	449784.8	456305		1.4	20
Endrin ketone	Avg	0.04000	0.04200	1244710	1298050		4.3	20
Endrin Ketone [2C]	Avg	0.04000	0.04180	1095583	1144200		4.4	20
DCB (A)	Avg	0.04000	0.04200	784712.5	827800		5.5	20
DCB (A) [2C]	Avg	0.04000	0.04220	726113.8	766700		5.6	20
TCX (A)	Avg	0.02000	0.02100	1486793	1532150		3.1	20
TCX (A) [2C]	Avg	0.02000	0.02070	1599358	1652900		3.3	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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K. Continuing Calibration Data

(CONTINUING CALIBRATION CHECK)

For all performance evaluation mixtures (if applicable) and continuing calibration verification standards, on all GC columns and instruments, in chronological order by GC column and instrument. If more than one instrument is used, forms shall be arranged in order by instrument. If multiple continuing calibrations from the same instrument are used, they shall be in chronological order.

(1) Quantitation reports and chromatogram for all continuing calibrations.

(2) Chromatogram peak displaying each manual integration, depicting integration time range.

CONTINUING CALIBRATION CHECK

8081A

Client: WESTON SOLUTIONS SDG: 1408028

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Instrument ID: tracegc80 Calibration: 4082101

Lab File ID: 028n4H15017-CCV1.d Calibration Date: 08/18/14 00:00

Sequence: 4H15017 Injection Date: 08/19/14

Lab Sample ID: 4H15017-CCV1 Injection Time: 00:09

		CONC. (ng/uL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT
alpha-BHC	Avg	0.02000	0.02600	2553433	3372000		32.1	20 *
alpha-BHC [2C]	Avg	0.02000	0.02170	2620943	2842100		8.4	20
gamma-BHC (Lindane)	Avg	0.02000	0.02600	2367305	3091350		30.6	20 *
gamma-BHC (Lindane) [2C]	Avg	0.02000	0.02150	2407465	2591050		7.6	20
Heptachlor	Avg	0.02000	0.02600	2328195	2983100		28.1	20 *
Heptachlor [2C]	Avg	0.02000	0.02090	2197165	2296100		4.5	20
Aldrin	Avg	0.02000	0.02600	2145595	2777000		29.4	20 *
Aldrin [2C]	Avg	0.02000	0.02140	2034220	2179000		7.1	20
beta-BHC	Avg	0.02000	0.02600	920657.5	1214500		31.9	20 *
beta-BHC [2C]	Avg	0.02000	0.02190	951960	1040150		9.3	20
delta-BHC	Avg	0.02000	0.02600	2228390	2876250		29.1	20 *
delta-BHC [2C]	Avg	0.02000	0.02100	2152158	2261450		5.1	20
Heptachlor epoxide	Avg	0.02000	0.02600	1839495	2362850		28.5	20 *
Heptachlor Epoxide [2C]	Avg	0.02000	0.02160	1711703	1845050		7.8	20
gamma-Chlordane	Avg	0.02000	0.02500	1886268	2399900		27.2	20 *
gamma-Chlordane [2C]	Avg	0.02000	0.02140	1774175	1895200		6.8	20
alpha-Chlordane	Avg	0.02000	0.02600	1781640	2291900		28.6	20 *
alpha-Chlordane [2C]	Avg	0.02000	0.02110	1646273	1740100		5.7	20
Endosulfan I	Avg	0.02000	0.02600	1694568	2208700		30.3	20 *
Endosulfan I [2C]	Avg	0.02000	0.02120	1616245	1712500		6.0	20
4,4'-DDE	Avg	0.04000	0.05100	1782763	2287750		28.3	20 *
4,4'-DDE [2C]	Avg	0.04000	0.04180	1631039	1703450		4.4	20
Dieldrin	Avg	0.04000	0.05200	1704464	2202575		29.2	20 *
Dieldrin [2C]	Avg	0.04000	0.04200	1567806	1647400		5.1	20

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CONTINUING CALIBRATION CHECK

8081A

Client: WESTON SOLUTIONS SDG: 1408028

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Instrument ID: tracegc80 Calibration: 4082101

Lab File ID: 028n4H15017-CCV1.d Calibration Date: 08/18/14 00:00

Sequence: 4H15017 Injection Date: 08/19/14

Lab Sample ID: 4H15017-CCV1 Injection Time: 00:09

COMPOUND	TYPE	CONC. (ng/uL)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT
Endrin	Avg	0.04000	0.05200	1490718	1937975		30.0	20 *
Endrin [2C]	Avg	0.04000	0.04230	1374880	1452575		5.7	20
4,4'-DDD	Avg	0.04000	0.05300	1310029	1744725		33.2	20 *
4,4'-DDD [2C]	Avg	0.04000	0.04350	1177206	1279250		8.7	20
Endosulfan II	Avg	0.04000	0.05200	1301825	1703775		30.9	20 *
Endosulfan II [2C]	Avg	0.04000	0.04310	1189413	1281100		7.7	20
4,4'-DDT	Avg	0.04000	0.04600	1152178	1325950		15.1	20
4,4'-DDT [2C]	Avg	0.04000	0.03790	1015884	962000		-5.3	20
Endrin aldehyde	Avg	0.04000	0.05200	945233.8	1230750		30.2	20 *
Endrin Aldehyde [2C]	Avg	0.04000	0.04220	903586.3	953600		5.5	20
Endosulfan sulfate	Avg	0.04000	0.05100	1108128	1401025		26.4	20 *
Endosulfan Sulfate [2C]	Avg	0.04000	0.04120	1032450	1063675		3.0	20
Methoxychlor	Avg	0.2000	0.2400	541546.5	656010		21.1	20 *
Methoxychlor [2C]	Avg	0.2000	0.1950	449784.8	437955		-2.6	20
Endrin ketone	Avg	0.04000	0.05000	1244710	1545125		24.1	20 *
Endrin Ketone [2C]	Avg	0.04000	0.04020	1095583	1099950		0.4	20
DCB (A)	Avg	0.04000	0.04700	784712.5	920825		17.3	20
DCB (A) [2C]	Avg	0.04000	0.03850	726113.8	698900		-3.7	20
TCX (A)	Avg	0.02000	0.02700	1486793	1987800		33.7	20 *
TCX (A) [2C]	Avg	0.02000	0.02210	1599358	1765200		10.4	20

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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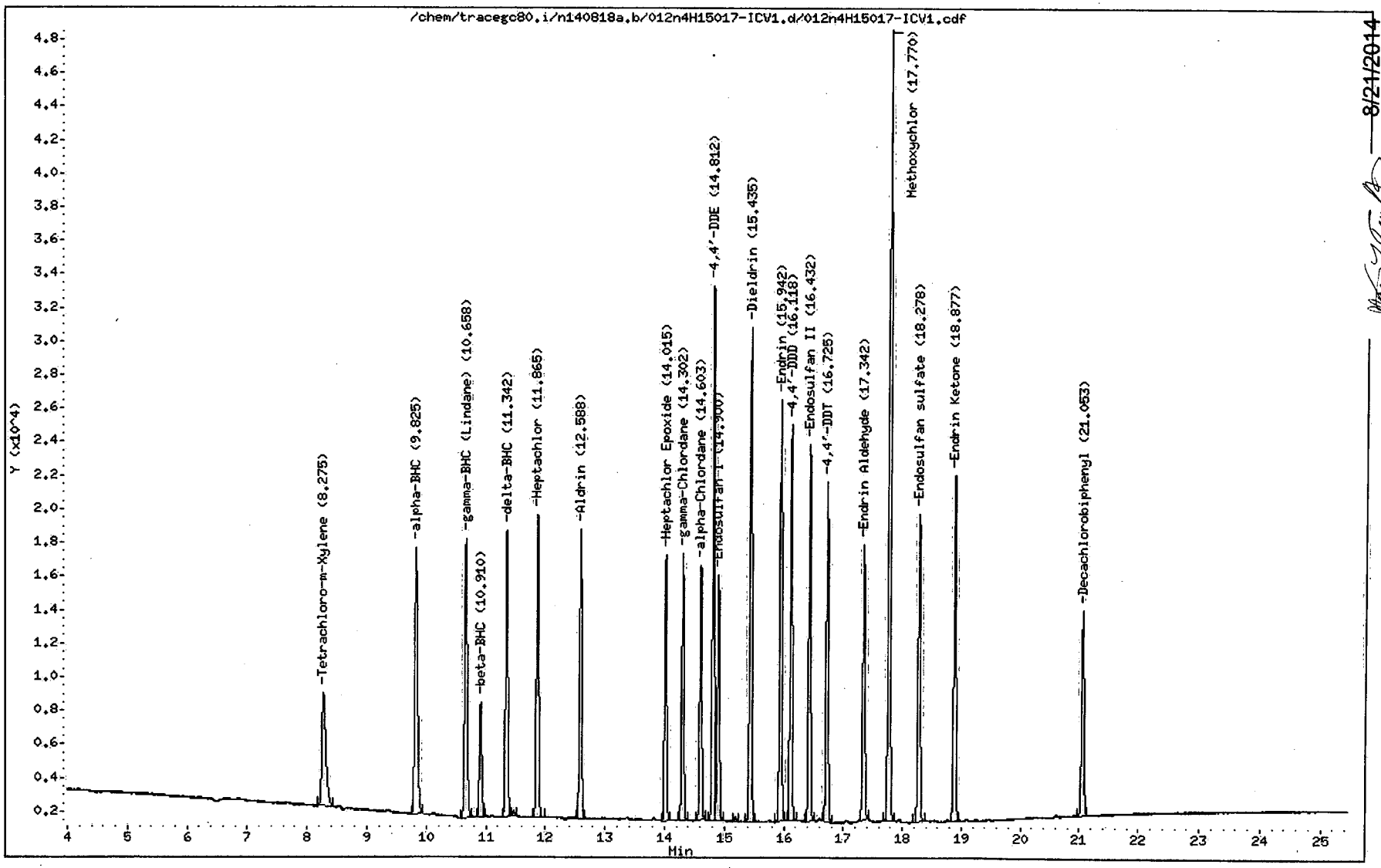
Continuing Calibration Raw Data

Data File: /chem/tracegc80.i/n140818a.b/012n4H15017-ICV1.d
Date : 18-AUG-2014 16:26
Client ID: INDC3MB
Sample Info: 4H15017-ICV1
Volume Injected (uL): 1.0
Column phase: clpest

Page 1

Instrument: tracegc80.i

Operator: BWL
Column diameter: 0.32



8/21/2014

CompuChem

Lab Smp Id : 4H15017-ICV1 Client Smp Id : INDC3MB
Sample Type : CONT CAL: Level 3 Sublist : INDA
Inj Date : 18-AUG-2014 16:26 Inst ID : TRACEGC80
Operator : BWL
Method : /chem/tracegc80.i/n140818a.b/8081A_clpestv8.m
Misc. Info : INDC3MB

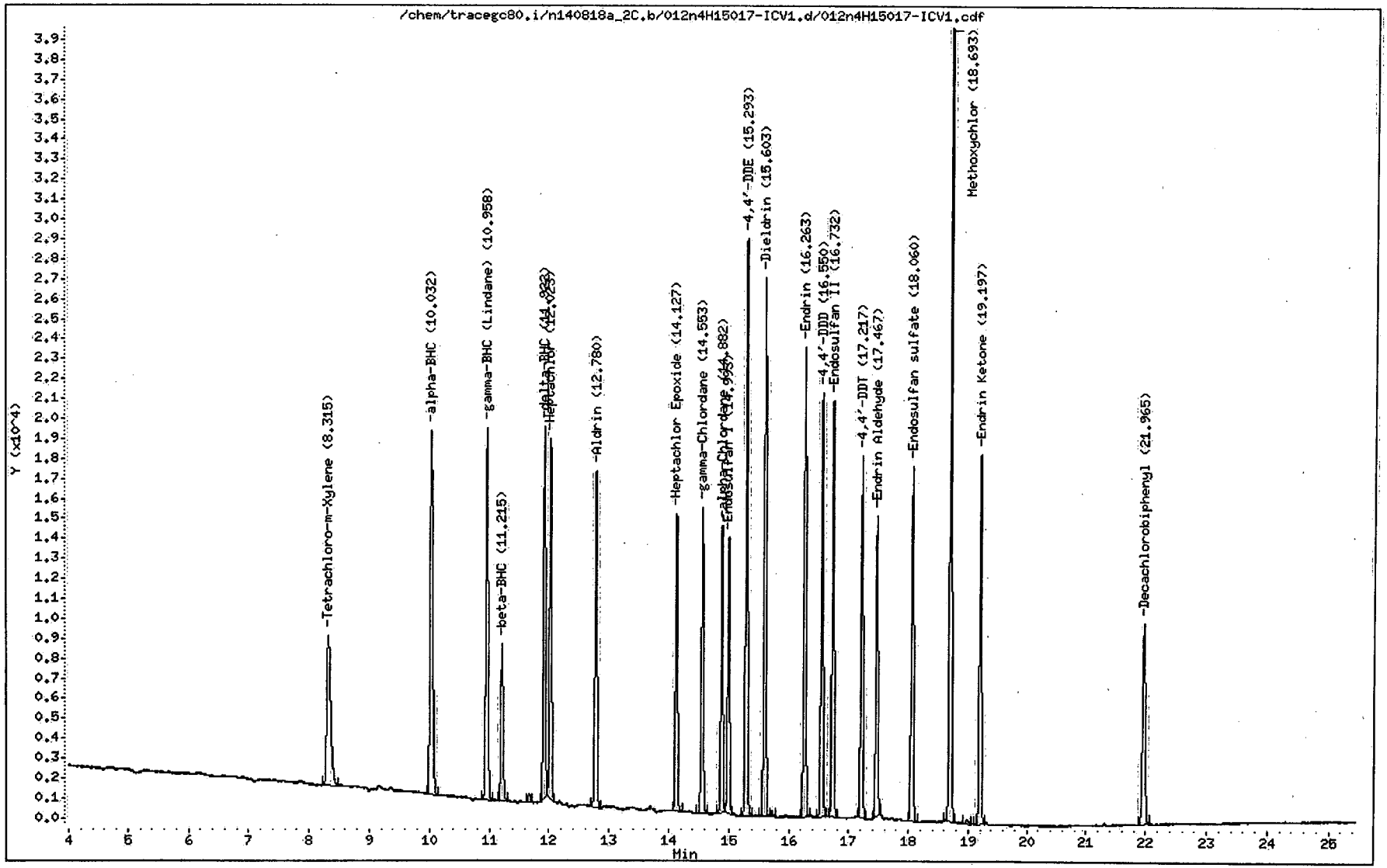
RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (ug)	CCAL RF	%D	%D LIMIT	FLAGS
1.05			507							
1.40			1901285							
2.63			703							
8.28	8.20	8.34	30644	1486792	Tetrachloro-m-Xylene	0.020000	1532183	-3.1	20.0	
9.82	9.75	9.89	51353	2553432	alpha-BHC	0.020000	2567667	-0.6	20.0	
10.66	10.59	10.73	47609	2367305	gamma-BHC (Lindane)	0.020000	2380445	-0.6	20.0	
10.91	10.84	10.98	18727	920658	beta-BHC	0.020000	936337	-1.7	20.0	
11.34	11.27	11.41	44787	2228390	delta-BHC	0.020000	2239352	-0.5	20.0	
11.46			578							
11.86	11.79	11.93	47105	2328195	Heptachlor	0.020000	2355232	-1.2	20.0	
12.59	12.52	12.66	43198	2145595	Aldrin	0.020000	2159900	-0.7	20.0	
14.02	13.94	14.08	37525	1839495	Heptachlor Epoxide	0.020000	1876273	-2.0	20.0	
14.30	14.23	14.37	38390	1886268	gamma-Chlordane	0.020000	1919515	-1.8	20.0	
14.60	14.53	14.67	36028	1781640	alpha-Chlordane	0.020000	1801385	-1.1	20.0	
14.81	14.74	14.88	72375	1782762	4,4'-DDE	0.040000	1809385	-1.5	20.0	
14.90	14.83	14.97	35482	1694568	Endosulfan I	0.020000	1774095	-4.7	20.0	
15.19			606							
15.44	15.37	15.51	69668	1704464	Dieldrin	0.040000	1741700	-2.2	20.0	
15.94	15.87	16.01	61358	1490718	Endrin	0.040000	1533960	-2.9	20.0	
16.12	16.05	16.19	53734	1310029	4,4'-DDD	0.040000	1343348	-2.5	20.0	
16.43	16.36	16.50	54883	1301825	Endosulfan II	0.040000	1372086	-5.4	20.0	
16.72	16.65	16.79	47477	1152178	4,4'-DDT	0.040000	1186922	-3.0	20.0	
17.34	17.27	17.41	40132	945234	Endrin Aldehyde	0.040000	1003302	-6.1	20.0	
17.77	17.70	17.84	111108	541546	Methoxychlor	0.200000	555541	-2.6	20.0	
18.28	18.21	18.35	46294	1108128	Endosulfan sulfate	0.040000	1157358	-4.4	20.0	
18.88	18.81	18.95	51922	1244710	Endrin Ketone	0.040000	1298054	-4.3	20.0	
21.05	20.98	21.12	33112	784712	Decachlorobiphenyl	0.040000	827805	-5.5	20.0	

8/21/2014

Data File: /chem/tracegc80.i/n140818a_2C.b/012n4H15017-ICV1.d
Date : 18-AUG-2014 16:26
Client ID: INDC3MB
Sample Info: 4H15017-ICV1
Volume Injected (uL): 1.0
Column phase: olpest2

Instrument: tracegc80.i

Operator: BWL
Column diameter: 0.32



8/21/2014

CompuChem

Data file : /chem/tracegc80.i/n140818a_2C.b/012n4H15017-ICV1.d
Lab Smp Id: 4H15017-ICV1 Client Smp ID: INDC3MB
Inj Date : 18-AUG-2014 16:26
Operator : BWL Inst ID: tracegc80.i
Smp Info : 4H15017-ICV1
Misc Info : INDC3MB
Comment :
Method : /chem/tracegc80.i/n140818a_2C.b/8081A_clpest2v8.m
Meth Date : 21-Aug-2014 11:00 spruskin Quant Type: ESTD
Cal Date : 18-AUG-2014 15:28 Cal File: 010n4H15016-ARC2.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDA.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng conversion factor
Vt	5000.00000	FinalVolume
Vo	1000.00000	SampleVolume
Vi	1.00000	InjectVol

Cpnd Variable Local Compound Variable

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-Xylene					CAS #: 877-09-8		
8.315	8.315	0.000	33058	0.02000	0.0207	80.00- 120.00	100.00
2 alpha-BHC					CAS #: 319-84-6		
10.032	10.032	0.000	53158	0.02000	0.0203	80.00- 120.00	100.00(a)
3 gamma-BHC (Lindane)					CAS #: 58-89-9		
10.958	10.960	-0.002	48648	0.02000	0.0202	80.00- 120.00	100.00(a)
7 beta-BHC					CAS #: 319-85-7		
11.215	11.217	-0.002	19678	0.02000	0.0207	80.00- 120.00	100.00(a)
8 delta-BHC					CAS #: 319-86-8		
11.922	11.925	-0.003	43393	0.02000	0.0202	80.00- 120.00	100.00(a)

8/21/2014

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
4 Heptachlor					CAS #: 76-44-8		
12.023	12.025	-0.002	43971	0.02000	0.0200	80.00- 120.00	100.00(a)
5 Aldrin					CAS #: 309-00-2		
12.780	12.785	-0.005	41400	0.02000	0.0204	80.00- 120.00	100.00(a)
9 Heptachlor Epoxide					CAS #: 1024-57-3		
14.127	14.130	-0.003	35537	0.02000	0.0208	80.00- 120.00	100.00(a)
10 gamma-Chlordane					CAS #: 5103-74-2		
14.553	14.558	-0.005	36304	0.02000	0.0205	80.00- 120.00	100.00(a)
11 alpha-Chlordane					CAS #: 5103-71-9		
14.882	14.887	-0.005	33637	0.02000	0.0204	80.00- 120.00	100.00(a)
14 4,4'-DDE					CAS #: 72-55-9		
15.293	15.298	-0.005	65244	0.04000	0.0400	80.00- 120.00	100.00(a)
13 Endosulfan I					CAS #: 959-98-8		
14.993	14.998	-0.005	33109	0.02000	0.0205	80.00- 120.00	100.00(a)
15 Dieldrin					CAS #: 60-57-1		
15.603	15.607	-0.004	63506	0.04000	0.0405	80.00- 120.00	100.00(a)
16 Endrin					CAS #: 72-20-8		
16.263	16.268	-0.005	55917	0.04000	0.0407	80.00- 120.00	100.00(a)
17 4,4'-DDD					CAS #: 72-54-8		
16.550	16.553	-0.003	48115	0.04000	0.0409	80.00- 120.00	100.00(a)
18 Endosulfan II					CAS #: 33213-65-9		
16.732	16.735	-0.003	50013	0.04000	0.0420	80.00- 120.00	100.00(a)
19 4,4'-DDT					CAS #: 50-29-3		
17.217	17.220	-0.003	41848	0.04000	0.0412	80.00- 120.00	100.00(a)
20 Endrin Aldehyde					CAS #: 7421-93-4		
17.467	17.470	-0.003	36739	0.04000	0.0407	80.00- 120.00	100.00(a)
22 Methoxychlor					CAS #: 72-43-5		
18.693	18.700	-0.007	91261	0.20000	0.203	80.00- 120.00	100.00(a)
21 Endosulfan sulfate					CAS #: 1031-07-8		
18.060	18.065	-0.005	43073	0.04000	0.0417	80.00- 120.00	100.00(a)
23 Endrin Ketone					CAS #: 53494-70-5		
19.197	19.200	-0.003	45768	0.04000	0.0418	80.00- 120.00	100.00(a)

8/21/2014

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 33 Decachlorobiphenyl					CAS #: 2051-24-3		
21.965	21.970	-0.005	30668	0.04000	0.0422	80.00- 120.00	100.00

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

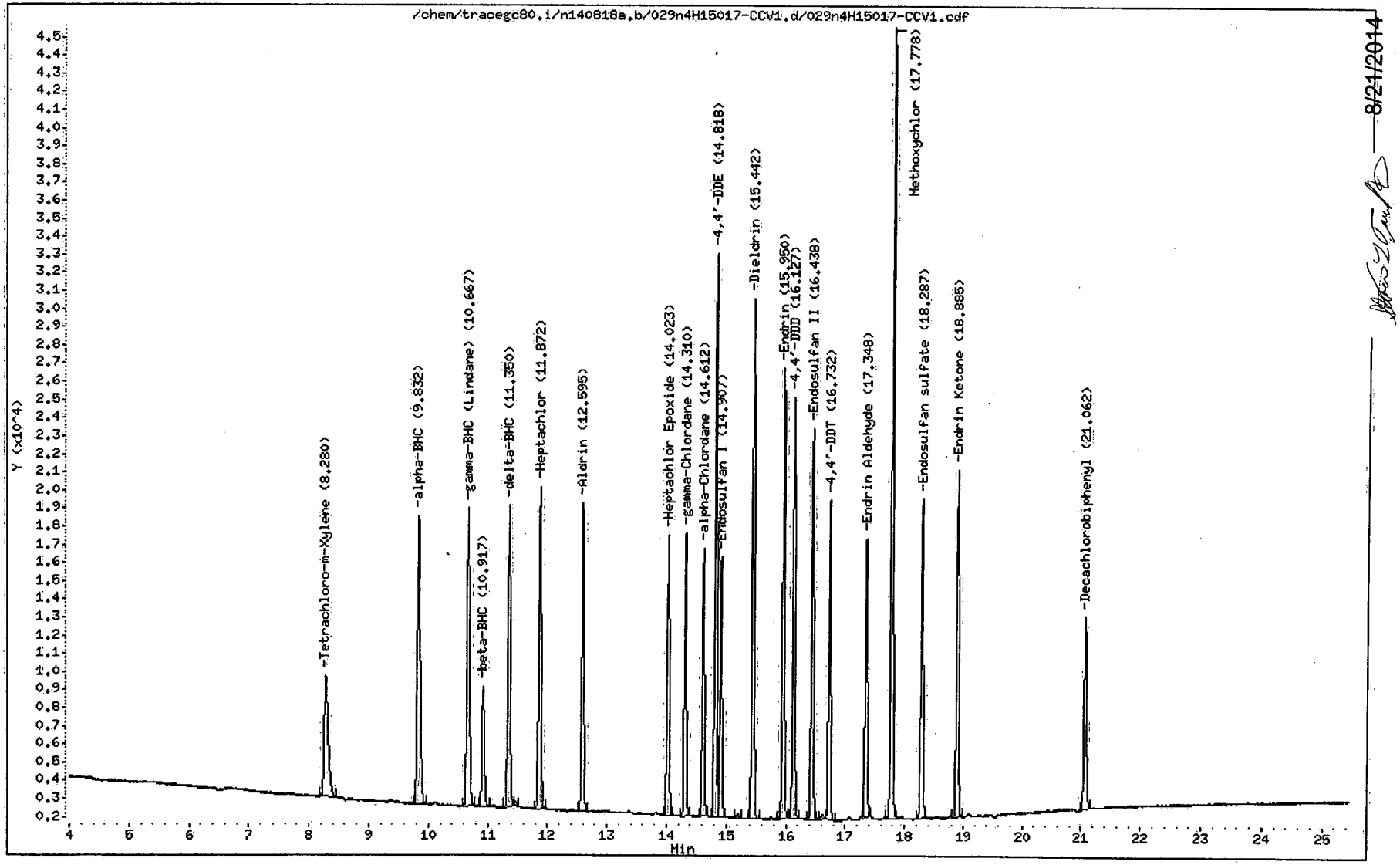
8/21/2014

Data File: /chem/tracegc80.i/n140818a.b/029n4H15017-CCV1.d
Date : 19-AUG-2014 00:38
Client ID: INDC3MC
Sample Info: 4H15017-CCV1
Volume Injected (uL): 1.0
Column phase: olpest

Page 1

Instrument: tracegc80.i

Operator: BWL
Column diameter: 0.32



8/21/2014

CompuChem

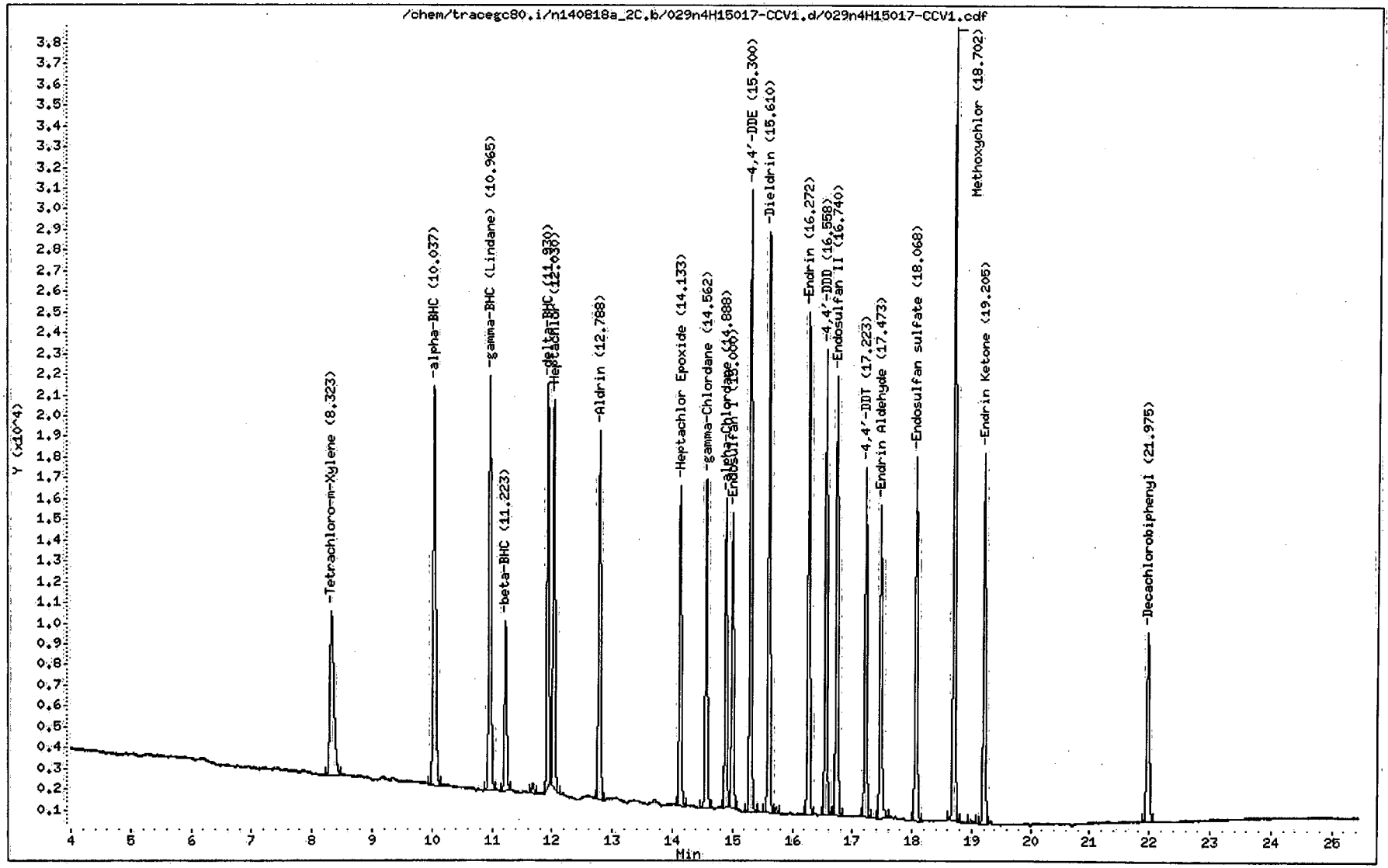
Lab Smp Id : 4H15017-CCV1 Client Smp Id : INDC3MC
Sample Type : CONT CAL: Level 3 Sublist : INDA
Inj Date : 19-AUG-2014 00:38 Inst ID : TRACEGC80
Operator : BWL
Method : /chem/tracegc80.i/n140818a.b/8081A_clpestv8.m
Misc. Info : INDC3MC

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (ug)	CCAL RF	%D	%D LIMIT	FLAGS
0.43			511							
1.03			675							
1.39			2073571							
2.65			1058							
8.28	8.20	8.34	30804	1486792	Tetrachloro-m-Xylene	0.020000	1540225	-3.6	20.0	
9.83	9.75	9.89	51809	2553432	alpha-BHC	0.020000	2590465	-1.5	20.0	
10.67	10.59	10.73	47542	2367305	gamma-BHC (Lindane)	0.020000	2377095	-0.4	20.0	
10.92	10.84	10.98	18856	920658	beta-BHC	0.020000	942825	-2.4	20.0	
11.35	11.27	11.41	44391	2228390	delta-BHC	0.020000	2219575	0.4	20.0	
11.47			616							
11.87	11.79	11.93	46381	2328195	Heptachlor	0.020000	2319065	0.4	20.0	
12.60	12.52	12.66	43104	2145595	Aldrin	0.020000	2155220	-0.4	20.0	
14.02	13.94	14.08	37175	1839495	Heptachlor Epoxide	0.020000	1858740	-1.0	20.0	
14.31	14.23	14.37	37834	1886268	gamma-Chlordane	0.020000	1891690	-0.3	20.0	
14.61	14.53	14.67	35316	1781640	alpha-Chlordane	0.020000	1765810	0.9	20.0	
14.82	14.74	14.88	71286	1782762	4,4'-DDE	0.040000	1782147	0.0	20.0	
14.91	14.83	14.97	34773	1694568	Endosulfan I	0.020000	1738625	-2.6	20.0	
15.20			623							
15.44	15.37	15.51	68628	1704464	Dieldrin	0.040000	1715690	-0.7	20.0	
15.95	15.87	16.01	60527	1490718	Endrin	0.040000	1513170	-1.5	20.0	
16.13	16.05	16.19	54364	1310029	4,4'-DDD	0.040000	1359112	-3.7	20.0	
16.44	16.36	16.50	53364	1301825	Endosulfan II	0.040000	1334111	-2.5	20.0	
16.62			671							
16.73	16.65	16.79	41168	1152178	4,4'-DDT	0.040000	1029202	10.7	20.0	
17.35	17.27	17.41	38734	945234	Endrin Aldehyde	0.040000	968355	-2.4	20.0	
17.78	17.70	17.84	102949	541546	Methoxychlor	0.200000	514744	4.9	20.0	
18.29	18.21	18.35	44069	1108128	Endosulfan sulfate	0.040000	1101732	0.6	20.0	
18.88	18.81	18.95	48613	1244710	Endrin Ketone	0.040000	1215314	2.4	20.0	
21.06	20.98	21.12	29529	784712	Decachlorobiphenyl	0.040000	738234	5.9	20.0	

8/21/2014

Data File: /chem/tracegc80.i/n140818a_2C.b/029n4H15017-CCV1.d
Date : 19-AUG-2014 00:38
Client ID: INDC3MC
Sample Info: 4H15017-CCV1
Volume Injected (uL): 1.0
Column phase: clpest2

Instrument: tracegc80.i
Operator: BWL
Column diameter: 0.32



8/21/2014

CompuChem

Data file : /chem/tracegc80.i/n140818a_2C.b/029n4H15017-CCV1.d
Lab Smp Id: 4H15017-CCV1 Client Smp ID: INDC3MC
Inj Date : 19-AUG-2014 00:38
Operator : BWL Inst ID: tracegc80.i
Smp Info : 4H15017-CCV1
Misc Info : INDC3MC
Comment :
Method : /chem/tracegc80.i/n140818a_2C.b/8081A_clpest2v8.m
Meth Date : 21-Aug-2014 11:00 spruskin Quant Type: ESTD
Cal Date : 18-AUG-2014 15:28 Cal File: 010n4H15016-ARC2.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: INDA.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng conversion factor
Vt	5000.00000	FinalVolume
Vo	1000.00000	SampleVolume
Vi	1.00000	InjectVol

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-Xylene					CAS #: 877-09-8		
8.323	8.315	0.008	35304	0.02000	0.0221	80.00- 120.00	100.00
2 alpha-BHC					CAS #: 319-84-6		
10.037	10.032	0.005	56842	0.02000	0.0217	80.00- 120.00	100.00(a)
3 gamma-BHC (Lindane)					CAS #: 58-89-9		
10.965	10.960	0.005	51821	0.02000	0.0215	80.00- 120.00	100.00(a)
7 beta-BHC					CAS #: 319-85-7		
11.223	11.217	0.006	20803	0.02000	0.0219	80.00- 120.00	100.00(a)
8 delta-BHC					CAS #: 319-86-8		
11.930	11.925	0.005	45229	0.02000	0.0210	80.00- 120.00	100.00(a)

8/21/2014

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
4 Heptachlor					CAS #: 76-44-8		
12.030	12.025	0.005	45922	0.02000	0.0209	80.00- 120.00	100.00(a)
5 Aldrin					CAS #: 309-00-2		
12.788	12.785	0.003	43580	0.02000	0.0214	80.00- 120.00	100.00(a)
9 Heptachlor Epoxide					CAS #: 1024-57-3		
14.133	14.130	0.003	36901	0.02000	0.0216	80.00- 120.00	100.00(a)
10 gamma-Chlordane					CAS #: 5103-74-2		
14.562	14.558	0.004	37904	0.02000	0.0214	80.00- 120.00	100.00(a)
11 alpha-Chlordane					CAS #: 5103-71-9		
14.888	14.887	0.001	34802	0.02000	0.0211	80.00- 120.00	100.00(a)
14 4,4'-DDE					CAS #: 72-55-9		
15.300	15.298	0.002	68138	0.04000	0.0418	80.00- 120.00	100.00(a)
13 Endosulfan I					CAS #: 959-98-8		
15.000	14.998	0.002	34250	0.02000	0.0212	80.00- 120.00	100.00(a)
15 Dieldrin					CAS #: 60-57-1		
15.610	15.607	0.003	65896	0.04000	0.0420	80.00- 120.00	100.00(a)
16 Endrin					CAS #: 72-20-8		
16.272	16.268	0.004	58103	0.04000	0.0423	80.00- 120.00	100.00(a)
17 4,4'-DDD					CAS #: 72-54-8		
16.558	16.553	0.005	51170	0.04000	0.0435	80.00- 120.00	100.00(a)
18 Endosulfan II					CAS #: 33213-65-9		
16.740	16.735	0.005	51244	0.04000	0.0431	80.00- 120.00	100.00(a)
19 4,4'-DDT					CAS #: 50-29-3		
17.223	17.220	0.003	38480	0.04000	0.0379	80.00- 120.00	100.00(a)
20 Endrin Aldehyde					CAS #: 7421-93-4		
17.473	17.470	0.003	38144	0.04000	0.0422	80.00- 120.00	100.00(a)
22 Methoxychlor					CAS #: 72-43-5		
18.702	18.700	0.002	87591	0.20000	0.195	80.00- 120.00	100.00(a)
21 Endosulfan sulfate					CAS #: 1031-07-8		
18.068	18.065	0.003	42547	0.04000	0.0412	80.00- 120.00	100.00(a)
23 Endrin Ketone					CAS #: 53494-70-5		
19.205	19.200	0.005	43998	0.04000	0.0402	80.00- 120.00	100.00(a)

8/21/2014

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ng)	AMOUNTS ON-COL (ng)	TARGET RANGE	RATIO
$ 33 Decachlorobiphenyl					CAS #: 2051-24-3		
21.975	21.970	0.005	27956	0.04000	0.0385	80.00- 120.00	100.00

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

8/21/2014

BreakDown Report

BREAKDOWN REPORT

Lab Sample ID: 4H15016-PEM1 **Analyzed:** 08/18/2014

Column Number: 1

Analyte	% Breakdown
Endrin	0.00
4.4-DDT	8.02

Column Number: 2

Analyte	% Breakdown
Endrin	0.00
4.4-DDT	9.39

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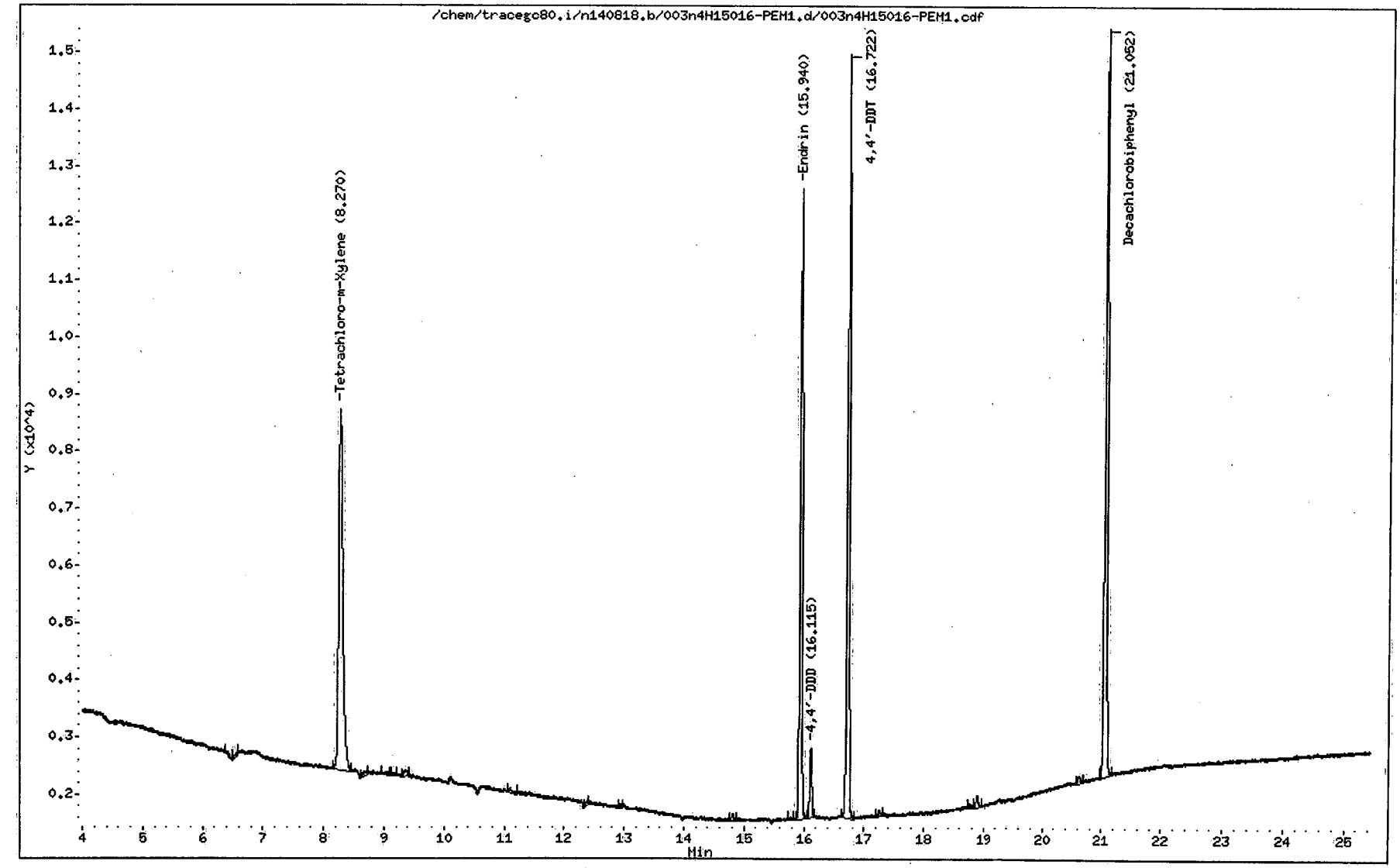
Data File: /chem/tracegc80.i/n140818.b/003n4H15016-PEM1.d
Date : 18-AUG-2014 12:06
Client ID: PEMHA
Sample Info: 4H15016-PEM1
Volume Injected (uL): 1.0
Column phase: clpest

Instrument: tracegc80.i
Operator: System
Column diameter: 0.32



CompuChem

Lab Smp Id : 4H15016-PEM1 Client Smp Id : PEMMA
Sample Type : SAMPLE Sublist : PEM
Inj Date : 18-AUG-2014 12:06 Inst ID : TRACEGC80
Operator : System
Method : /chem/tracegc80.i/n140818.b/8081A_clpestv8.m
Misc. Info : PEMMA

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

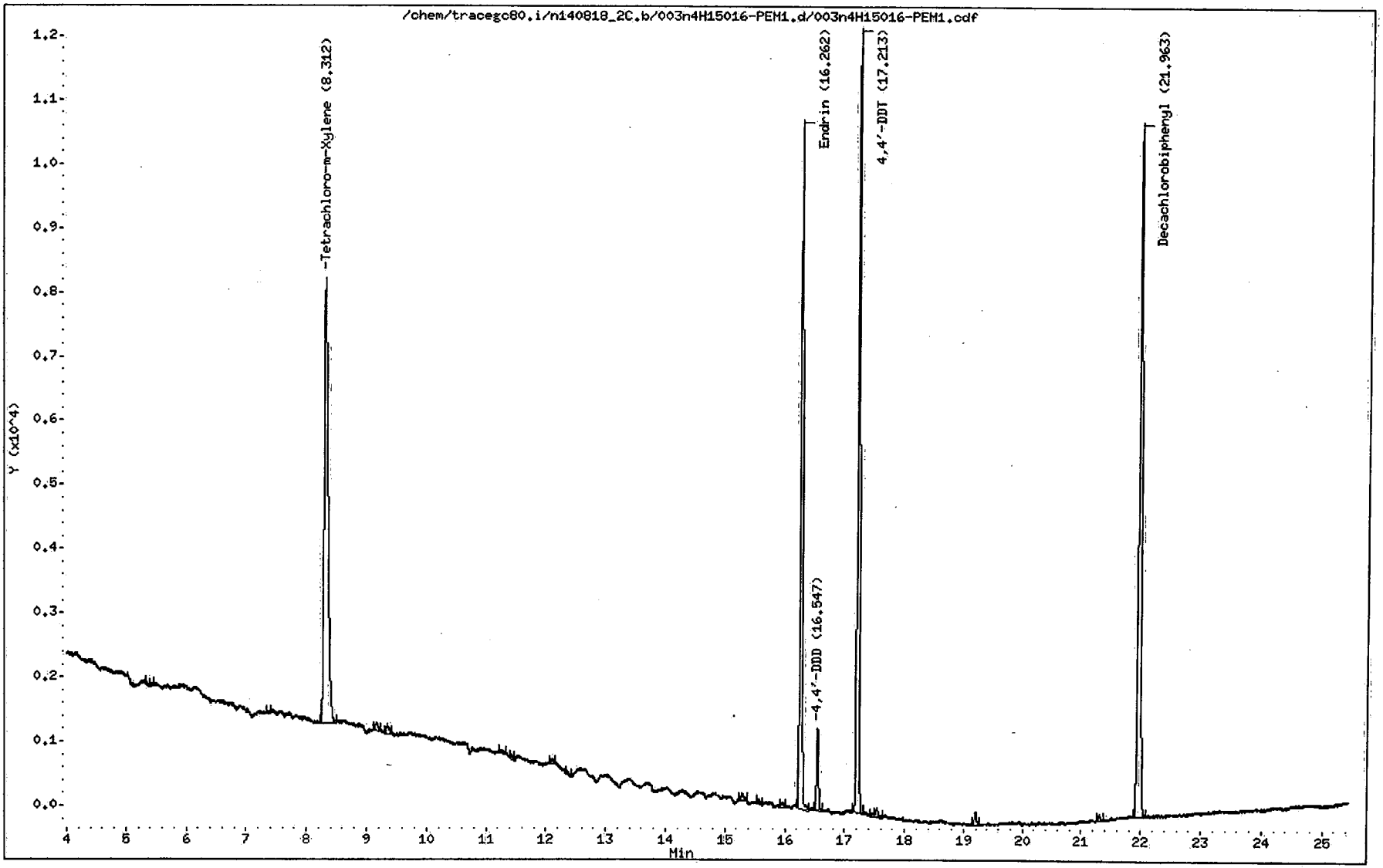
DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 1000(ul) Vi Injection Volume: 1(ul)
Vo Sample Volume: 1000.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
0.08			226								
0.38			640								
0.49			603								
0.76			213								
0.95			346								
1.00			538								
1.04			1464								
1.12			2425								
1.28			11250								
1.38			153157								
2.62			647								
2.69			162								
6.38			272								
6.57			193								
8.27	8.21	8.35	29543	1486792	Tetrachloro-m-Xylene	0.019870	0.019870		3.3*	43 - 135	R
8.67			337								
8.99			225								
9.13			139								
9.36			395								
11.11			291								
12.38			193								
12.93			138								
14.81			310								
15.77			132								
15.94	15.87	16.01	27277	1490718	Endrin	0.018297	0.018297	0.010000			
16.12	16.05	16.19	2743	1310029	4,4'-DDD	0.002093	0.002093	0.010000			J
16.72	16.66	16.80	31448	1152178	4,4'-DDT	0.027294	0.027294	0.010000			
17.25			303								
18.77			148								
18.87			587								
20.61			386								
21.05	20.99	21.13	36140	784712	Decachlorobiphenyl	0.046055	0.046055		3.8*	43 - 144	R

Data File: /chem/tracegc80.i/n140818_2C.b/003n4H15016-PEM1.d
Date : 18-AUG-2014 12:06
Client ID: PEMMA
Sample Info: 4H15016-PEM1
Volume Injected (uL): 1.0
Column phase: clpest2

Instrument: tracegc80.i

Operator: System
Column diameter: 0.32



CompuChem

Data file : /chem/tracegc80.i/n140818_2C.b/003n4H15016-PEM1.d
Lab Smp Id: 4H15016-PEM1 Client Smp ID: PEMMA
Inj Date : 18-AUG-2014 12:06
Operator : System Inst ID: tracegc80.i
Smp Info : 4H15016-PEM1
Misc Info : PEMMA
Comment :
Method : /chem/tracegc80.i/n140818_2C.b/8081A_clpest2v8.m
Meth Date : 21-Aug-2014 10:41 spruskin Quant Type: ESTD
Cal Date : 18-AUG-2014 15:28 Cal File: 010n4H15016-ARC2.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PEM.sub
Target Version: 3.50 Sample Matrix: WATER
Processing Host: gilbert

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng conversion factor
Vt	1000.00000	FinalVolume
Vo	1000.00000	SampleVolume
Vi	1.00000	InjectVol

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-Xylene					CAS #: 877-09-8		
8.312	8.315	-0.003	30516	0.01908	0.0191	80.00- 120.00	100.00
14 4,4'-DDE					CAS #: 72-55-9		
Compound Not Detected							
16 Endrin					CAS #: 72-20-8		
16.262	16.268	-0.006	26122	0.01900	0.0190	80.00- 120.00	100.00
17 4,4'-DDD					CAS #: 72-54-8		
16.547	16.553	-0.006	2933	0.00249	0.00249	80.00- 120.00	100.00(a)

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/L)	TARGET RANGE	RATIO
19 4,4'-DDT					CAS #: 50-29-3		
17.213	17.220	-0.007	28294	0.02785	0.0279	80.00- 120.00	100.00
20 Endrin Aldehyde					CAS #: 7421-93-4		
Compound Not Detected							
23 Endrin Ketone					CAS #: 53494-70-5		
Compound Not Detected							
$ 33 Decachlorobiphenyl					CAS #: 2051-24-3		
21.963	21.970	-0.007	33077	0.04555	0.0456	80.00- 120.00	100.00

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

BREAKDOWN REPORT

Lab Sample ID: **4H15017-PEM1** **Analyzed:** **08/18/2014**

Column Number: **1**

Analyte	**% Breakdown**
Endrin	0.00
4.4-DDT	7.56

Column Number: **2**

Analyte	**% Breakdown**
Endrin	0.00
4.4-DDT	8.61

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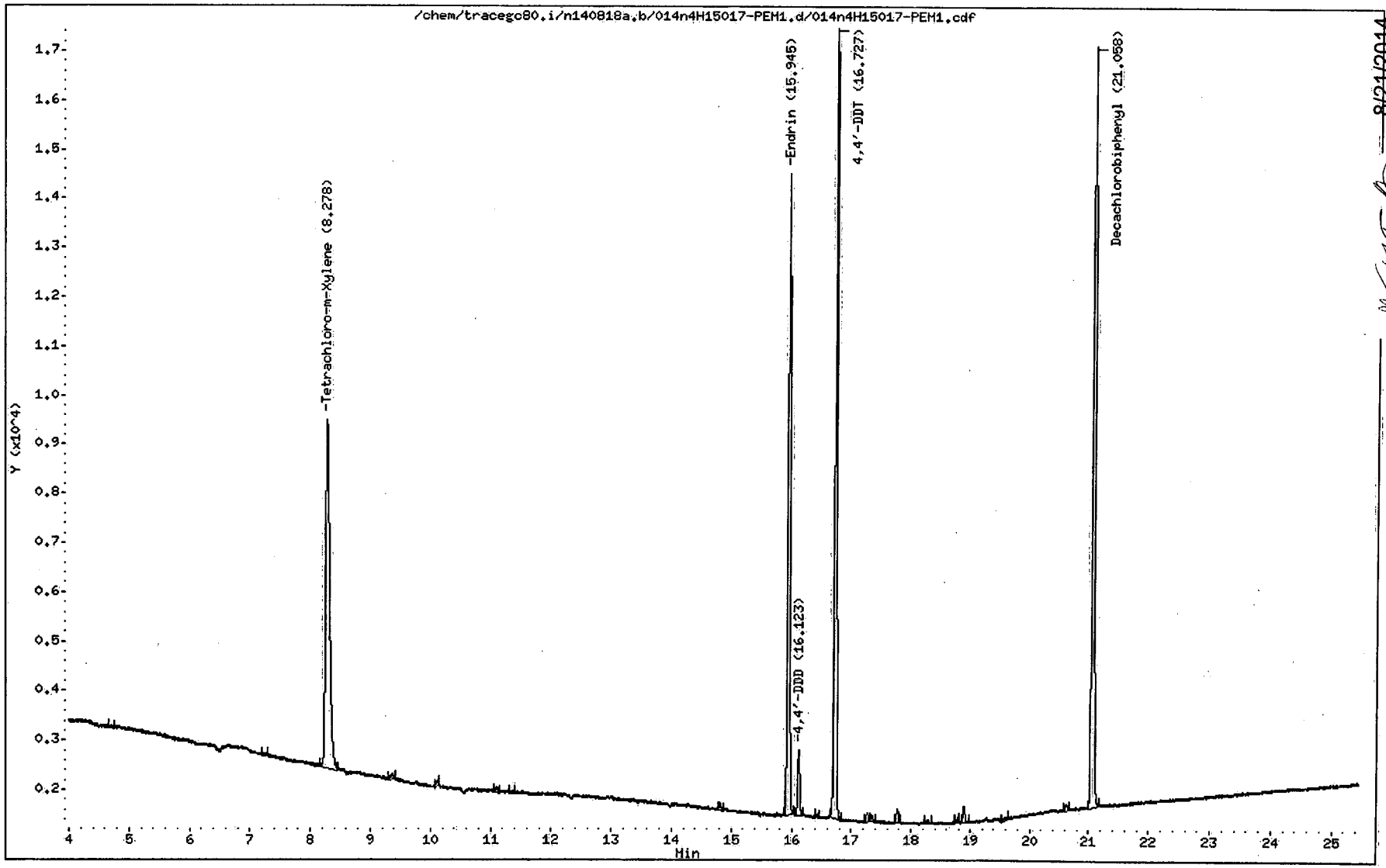
Data File: /chem/tracego80.i/n140818a.b/014n4H15017-PEM1.d
Date : 18-AUG-2014 17:24
Client ID: PEMMB
Sample Info: 4H15017-PEM1
Volume Injected (uL): 1.0
Column phase: clpest

Instrument: tracego80.i
Operator: System
Column diameter: 0.32



8/21/2014

CompuChem

Lab Smp Id : 4H15017-PEM1 Client Smp Id : PEMMB
Sample Type : SAMPLE Sublist : PEM
Inj Date : 18-AUG-2014 17:24 Inst ID : TRACEGC80
Operator : System
Method : /chem/tracegc80.i/n140818a.b/8081A_clpestv8.m
Misc. Info : PEMMB

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 1000(ul) Vi Injection Volume: 1(ul)
Vo Sample Volume: 1000.0(ml)

RT	RT WINDOW	AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (ug)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
0.31		272								
0.33		212								
0.38		512								
0.41		306								
0.46		685								
0.49		421								
0.53		333								
1.13		318								
1.17		392								
1.19		451								
1.22		891								
1.28		3374								
1.39		110941								
2.61		335								
4.70		179								
7.21		191								
8.28	8.20 8.34	32950	1486792	Tetrachloro-m-Xylene	0.022162	0.022162		111.9	43 - 135	
9.35		304								
10.11		278								
11.10		279								
11.34		151								
14.81		398								
15.94	15.87 16.01	31697	1490718	Endrin	0.021263	0.021263	0.010000			
16.12	16.05 16.19	3081	1310029	4,4'-DDD	0.002352	0.002352	0.010000			J
16.43		186								
16.73	16.65 16.79	37650	1152178	4,4'-DDT	0.032677	0.032677	0.010000			
17.27		384								
17.35		372								
17.77		663								
18.28		285								
18.75		143								
18.88		987								
19.57		254								
20.62		369								
21.06	20.98 21.12	43096	784712	Decachlorobiphenyl	0.054920	0.054920		138.7	43 - 144	

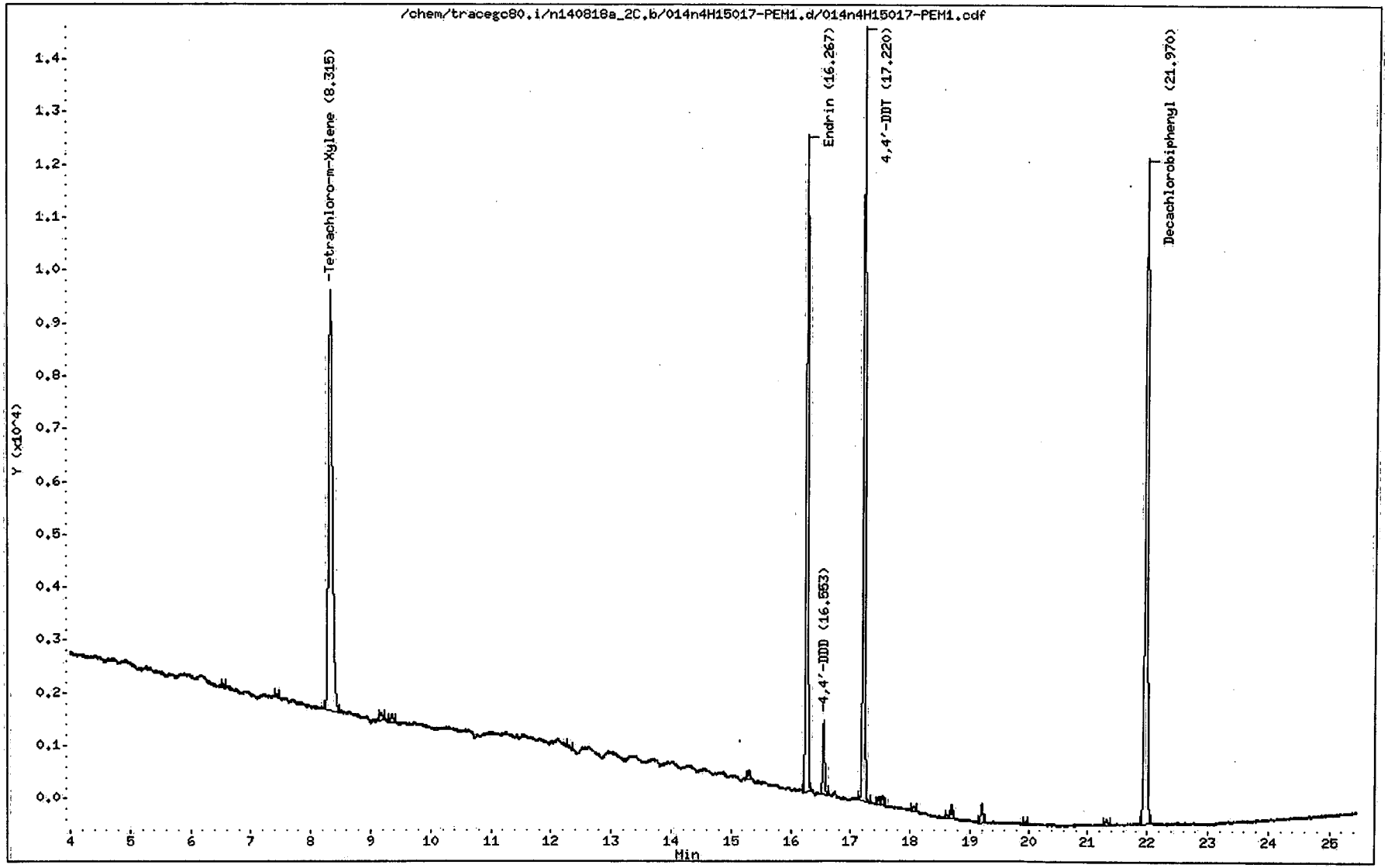
8/21/2014

Data File: /chem/tracegc80.i/n140818a_2C.b/014n4H15017-PEM1.d
Date : 18-AUG-2014 17:24
Client ID: PEMMB
Sample Info: 4H15017-PEM1
Volume Injected (uL): 1.0
Column phase: clpest2

Page 3

Instrument: tracegc80.i

Operator: System
Column diameter: 0.32



8/21/2014

CompuChem

Data file : /chem/tracegc80.i/n140818a_2C.b/014n4H15017-PEM1.d
Lab Smp Id: 4H15017-PEM1 Client Smp ID: PEMMB
Inj Date : 18-AUG-2014 17:24
Operator : System Inst ID: tracegc80.i
Smp Info : 4H15017-PEM1
Misc Info : PEMMB
Comment :
Method : /chem/tracegc80.i/n140818a_2C.b/8081A_clpest2v8.m
Meth Date : 21-Aug-2014 11:00 spruskin Quant Type: ESTD
Cal Date : 18-AUG-2014 15:28 Cal File: 010n4H15016-ARC2.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PEM.sub
Target Version: 3.50 Sample Matrix: WATER

Concentration Formula: Amt * DF * Uf * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng conversion factor
Vt	1000.00000	FinalVolume
Vo	1000.00000	SampleVolume
Vi	1.00000	InjectVol

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/L)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-Xylene					CAS #: 877-09-8		
8.315	8.315	0.000	34698	0.02169	0.0217	80.00- 120.00	100.00
14 4,4'-DDE					CAS #: 72-55-9		
Compound Not Detected							
16 Endrin					CAS #: 72-20-8		
16.267	16.268	-0.001	30047	0.02185	0.0219	80.00- 120.00	100.00
17 4,4'-DDD					CAS #: 72-54-8		
16.553	16.553	0.000	3167	0.00269	0.00269	80.00- 120.00	100.00(a)

8/21/2014

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/L)	TARGET RANGE	RATIO
19 4,4'-DDT					CAS #: 50-29-3		
17.220	17.220	0.000	33597	0.03307	0.0331	80.00- 120.00	100.00
20 Endrin Aldehyde					CAS #: 7421-93-4		
Compound Not Detected							
23 Endrin Ketone					CAS #: 53494-70-5		
Compound Not Detected							
$ 33 Decachlorobiphenyl					CAS #: 2051-24-3		
21.970	21.970	0.000	38523	0.05305	0.0531	80.00- 120.00	100.00

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

8/21/2014

L. Identification Summary Analytes

(IDENTIFICATION SUMMARY FOR ANALYTES)

For all samples with positively identified single or multiple component analytes, in order by increasing Client Sample ID number.

IDENTIFICATION SUMMARY
FOR ANALYTES
8081A

P001-COMP02-LW-01

Lab Sample ID: 1408028-01 Date(s) Analyzed: 08/18/2014 08/18/2014

Instrument ID (1): tracegc80 Instrument ID (2): tracegc80

GC Column (1): clpest ID: 0.32 (mm) GC Column (2): clpest2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%RPD
4,4'-DDD	1	16.14	16.05	16.19	333	
	2	16.61	16.48	16.62	144	79.1
4,4'-DDE	1	14.81	14.74	14.88	348	
	2	15.36	15.23	15.37	843	83.2
4,4'-DDT	1	16.76	16.66	16.80	532	
	2	17.25	17.15	17.29	335	45.4
Aldrin	1	12.61	12.52	12.66	398	
	2	12.74	12.71	12.85	439	9.9
alpha-BHC	1	9.81	9.75	9.89	441	
	2	10.08	9.96	10.10	756	52.6
alpha-Chlordane	1	14.67	14.54	14.68	82.5	
	2	14.84	14.81	14.95	94.5	13.6
beta-BHC	1	10.95	10.84	10.98	1730	
	2	11.18	11.15	11.29	1040	49.8
delta-BHC	1	11.30	11.27	11.41	63.5	
	2	11.97	11.85	11.99	190	99.8
Dieldrin	1	15.43	15.37	15.51	43.1	
	2	15.57	15.53	15.67	66.0	42.0
Endosulfan II	1	16.46	16.36	16.50	114	
	2	16.71	16.66	16.80	109	4.5
Endrin	1	15.90	15.87	16.01	241	
	2	16.29	16.20	16.34	42.2	140.0
Endrin aldehyde	1	17.31	17.27	17.41	457	
	2	17.48	17.40	17.54	238	63.0
Endrin ketone	1	18.92	18.81	18.95	356	
	2	19.19	19.13	19.27	297	18.1
gamma-Chlordane	1	14.30	14.23	14.37	588	
	2	14.51	14.49	14.63	226	88.9
Heptachlor epoxide	1	14.04	13.95	14.09	69.5	
	2	14.13	14.06	14.20	506	152.0
Methoxychlor	1	17.78	17.70	17.84	111	
	2	18.66	18.63	18.77	5710	192.0

PB 42
47

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IDENTIFICATION SUMMARY
FOR ANALYTES
8081A

P001-DR0502-LW-01

Lab Sample ID: 1408028-02 Date(s) Analyzed: 08/18/2014 08/18/2014

Instrument ID (1): tracegc80 Instrument ID (2): tracegc80

GC Column (1): clpest ID: 0.32 (mm) GC Column (2): clpest2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDD	1	16.07	16.05	16.19	60.6	
	2	16.53	16.48	16.62	474	155.0
4,4'-DDT	1	16.69	16.66	16.80	589	
	2	17.26	17.15	17.29	119	133.0
alpha-BHC	1	9.85	9.75	9.89	13.3	
	2	10.03	9.96	10.10	95.0	151.0
Dieldrin	1	15.45	15.37	15.51	4380	
	2	15.57	15.53	15.67	2810	43.6
Endosulfan sulfate	1	18.30	18.21	18.35	187	
	2	18.07	17.99	18.13	286	41.8
Endrin ketone	1	18.90	18.81	18.95	161	
	2	19.25	19.13	19.27	94.5	51.9
gamma-BHC (Lindane)	1	10.66	10.59	10.73	2.52	
	2	10.97	10.89	11.03	3.44	30.9
Methoxychlor	1	17.71	17.70	17.84	101	
	2	18.67	18.63	18.77	218	73.5

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IDENTIFICATION SUMMARY FOR ANALYTES

8081A

PLCSBZ

Lab Sample ID: 4081306-BS1 Date(s) Analyzed: 08/18/2014 08/18/2014

Instrument ID (1): tracegc80 Instrument ID (2): tracegc80

GC Column (1): clpest ID: 0.32 (mm) GC Column (2): clpest2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%RPD
4,4'-DDD	1	16.12	16.05	16.19	170.9	
	2	16.56	16.48	16.62	174.3	2
4,4'-DDE	1	14.82	14.74	14.88	181.4	
	2	15.30	15.23	15.37	182.5	1
4,4'-DDT	1	16.73	16.66	16.80	180.3	
	2	17.22	17.15	17.29	184.2	2
Aldrin	1	12.59	12.52	12.66	184.7	
	2	12.79	12.71	12.85	182.3	1
alpha-BHC	1	9.83	9.75	9.89	169.8	
	2	10.03	9.96	10.10	164.0	3
alpha-Chlordane	1	14.61	14.54	14.68	175.6	
	2	14.89	14.81	14.95	172.7	2
beta-BHC	1	10.92	10.84	10.98	142.6	
	2	11.22	11.15	11.29	141.9	0
delta-BHC	1	11.35	11.27	11.41	161.2	
	2	11.93	11.85	11.99	157.6	2
Dieldrin	1	15.44	15.37	15.51	179.8	
	2	15.61	15.53	15.67	181.0	1
Endosulfan I	1	14.90	14.83	14.97	153.0	
	2	15.00	14.93	15.07	147.7	4
Endosulfan II	1	16.43	16.36	16.50	159.2	
	2	16.74	16.66	16.80	163.2	2
Endosulfan sulfate	1	18.28	18.21	18.35	165.1	
	2	18.07	17.99	18.13	159.1	4
Endrin	1	15.95	15.87	16.01	180.0	
	2	16.27	16.20	16.34	181.3	1
Endrin aldehyde	1	17.35	17.27	17.41	158.0	
	2	17.47	17.40	17.54	154.0	3
Endrin ketone	1	18.88	18.81	18.95	164.6	
	2	19.20	19.13	19.27	167.5	2
gamma-BHC (Lindane)	1	10.67	10.59	10.73	163.9	
	2	10.96	10.89	11.03	160.2	2
gamma-Chlordane	1	14.31	14.23	14.37	173.3	

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

IDENTIFICATION SUMMARY
FOR ANALYTES
8081A

PLCSBZ

Lab Sample ID: 4081306-BS1 Date(s) Analyzed: 08/18/2014 08/18/2014

Instrument ID (1): tracegc80 Instrument ID (2): tracegc80

GC Column (1): clpest ID: 0.32 (mm) GC Column (2): clpest2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
	2	14.56	14.49	14.63	170.8	1
Heptachlor	1	11.87	11.80	11.94	180.9	
	2	12.03	11.95	12.09	174.9	3
Heptachlor epoxide	1	14.02	13.95	14.09	168.9	
	2	14.13	14.06	14.20	172.8	2
Methoxychlor	1	17.77	17.70	17.84	193.8	
	2	18.70	18.63	18.77	222.7	14

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

IDENTIFICATION SUMMARY FOR ANALYTES

8081A

PLCSDBZ

Lab Sample ID: 4081306-BSD1 Date(s) Analyzed: 08/18/2014 08/18/2014

Instrument ID (1): tracegc80 Instrument ID (2): tracegc80

GC Column (1): clpest ID: 0.32 (mm) GC Column (2): clpest2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
4,4'-DDD	1	16.12	16.05	16.19	157.9	
	2	16.55	16.48	16.62	169.8	7
4,4'-DDE	1	14.82	14.74	14.88	165.4	
	2	15.30	15.23	15.37	166.0	0
4,4'-DDT	1	16.73	16.66	16.80	164.9	
	2	17.22	17.15	17.29	170.3	3
Aldrin	1	12.59	12.52	12.66	168.9	
	2	12.79	12.71	12.85	166.1	2
alpha-BHC	1	9.83	9.75	9.89	156.4	
	2	10.04	9.96	10.10	152.2	3
alpha-Chlordane	1	14.61	14.54	14.68	161.0	
	2	14.89	14.81	14.95	159.3	1
beta-BHC	1	10.91	10.84	10.98	135.0	
	2	11.22	11.15	11.29	133.6	1
delta-BHC	1	11.35	11.27	11.41	148.9	
	2	11.93	11.85	11.99	146.2	2
Dieldrin	1	15.44	15.37	15.51	164.5	
	2	15.61	15.53	15.67	167.0	2
Endosulfan I	1	14.90	14.83	14.97	139.7	
	2	15.00	14.93	15.07	136.0	3
Endosulfan II	1	16.43	16.36	16.50	147.3	
	2	16.74	16.66	16.80	151.9	3
Endosulfan sulfate	1	18.28	18.21	18.35	154.6	
	2	18.06	17.99	18.13	152.6	1
Endrin	1	15.95	15.87	16.01	164.8	
	2	16.27	16.20	16.34	168.2	2
Endrin aldehyde	1	17.34	17.27	17.41	151.0	
	2	17.47	17.40	17.54	146.1	3
Endrin ketone	1	18.88	18.81	18.95	155.3	
	2	19.20	19.13	19.27	159.3	3
gamma-BHC (Lindane)	1	10.67	10.59	10.73	150.8	
	2	10.96	10.89	11.03	148.0	2
gamma-Chlordane	1	14.31	14.23	14.37	158.7	

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

IDENTIFICATION SUMMARY
FOR ANALYTES
8081A

PLCSDBZ

Lab Sample ID: 4081306-BSD1 Date(s) Analyzed: 08/18/2014 08/18/2014

Instrument ID (1): tracegc80 Instrument ID (2): tracegc80

GC Column (1): clpest ID: 0.32 (mm) GC Column (2): clpest2 ID: 0.32 (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
	2	14.56	14.49	14.63	156.7	1
Heptachlor	1	11.87	11.80	11.94	166.3	
	2	12.03	11.95	12.09	160.4	4
Heptachlor epoxide	1	14.02	13.95	14.09	158.2	
	2	14.13	14.06	14.20	159.6	1
Methoxychlor	1	17.77	17.70	17.84	180.2	
	2	18.70	18.63	18.77	207.6	14

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M. Blank Data

Arranged by type of blank (method, instrument or sulfur cleanup where applicable) in chronological order, by instrument.
Shall include:

1) Method blanks shall be in chronological order, by extraction date.
2) Instrument blanks shall be in chronological order, by GC column and instrument.
3) Sulfur cleanup blanks (if needed) shall be in chronological order, by date of analysis.

- Tabulated Results (ANALYSIS DATA SHEET)
- Chromatograms and date system printout(s) for each GC column and instrument used for analysis.

ANALYSIS DATA SHEET

8081A

PBLKBZ

Client: WESTON SOLUTIONS | SDG: 1408028 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550B_GC | File ID: 015n4081306-BLK1.d | QC Type: Blank

Initial/Final: 1g / 5000uL | Sulfur Cleanup: N | Lab ID: 4081306-BLK1 | Column ID: clpest

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/13/14 14:18

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/18/14 17:53

Batch: 4081306 | Sequence: 4H15017 | Calibration: 4082101 | Instrument: tracegc80

CAS NO.	COMPOUND	CONC.(ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC		2.64	24.9	U
58-89-9	gamma-BHC (Lindane)		1.20	24.9	U
76-44-8	Heptachlor		3.60	24.9	U
309-00-2	Aldrin		2.01	24.9	U
319-85-7	beta-BHC		4.20	24.9	U
319-86-8	delta-BHC		2.38	24.9	U
1024-57-3	Heptachlor epoxide		1.59	24.9	U
5103-74-2	gamma-Chlordane		1.98	24.9	U
5103-71-9	alpha-Chlordane		2.43	24.9	U
959-98-8	Endosulfan I		2.31	24.9	U
72-55-9	4,4'-DDE		2.16	63.0	U
60-57-1	Dieldrin		1.68	63.0	U
72-20-8	Endrin		1.41	63.0	U
72-54-8	4,4'-DDD		2.43	63.0	U
33213-65-9	Endosulfan II		2.67	63.0	U
50-29-3	4,4'-DDT		7.50	63.0	U
7421-93-4	Endrin aldehyde		3.90	63.0	U
1031-07-8	Endosulfan sulfate		1.86	63.0	U
72-43-5	Methoxychlor		8.70	249	U
53494-70-5	Endrin ketone		1.53	63.0	U
8001-35-2	Toxaphene		450	2490	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A)	300.0	434.5	145	43 - 144	*
TCX (A)	150.0	158.7	106	43 - 135	

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

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ANALYSIS DATA SHEET

8081A

PBLKBZ

Client: WESTON SOLUTIONS | SDG: 1408028 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550B_GC | File ID: 015n4081306-BLK1.d | QC Type: Blank

Initial/Final: 1g / 5000uL | Sulfur Cleanup: N | Lab ID: 4081306-BLK1 | Column ID: clpest2

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/13/14 14:18

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/18/14 17:53

Batch: 4081306 | Sequence: 4H15017 | Calibration: 4082101 | Instrument: tracegc80

CAS NO.	COMPOUND	CONC.(ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC [2C]		2.64	24.9	U
58-89-9	gamma-BHC (Lindane) [2C]		1.20	24.9	U
76-44-8	Heptachlor [2C]		3.60	24.9	U
309-00-2	Aldrin [2C]		2.01	24.9	U
319-85-7	beta-BHC [2C]		4.20	24.9	U
319-86-8	delta-BHC [2C]		2.38	24.9	U
1024-57-3	Heptachlor Epoxide [2C]		1.59	24.9	U
5103-74-2	gamma-Chlordane [2C]		1.98	24.9	U
5103-71-9	alpha-Chlordane [2C]		2.43	24.9	U
959-98-8	Endosulfan I [2C]		2.31	24.9	U
72-55-9	4,4'-DDE [2C]		2.16	63.0	U
60-57-1	Dieldrin [2C]		1.68	63.0	U
72-20-8	Endrin [2C]		1.41	63.0	U
72-54-8	4,4'-DDD [2C]		2.43	63.0	U
33213-65-9	Endosulfan II [2C]		2.67	63.0	U
50-29-3	4,4'-DDT [2C]		7.50	63.0	U
7421-93-4	Endrin Aldehyde [2C]		3.90	63.0	U
1031-07-8	Endosulfan Sulfate [2C]		1.86	63.0	U
72-43-5	Methoxychlor [2C]		8.70	249	U
53494-70-5	Endrin Ketone [2C]		1.53	63.0	U
8001-35-2	Toxaphene [2C]		450	2490	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A) [2C]	300.0	414.9	138	43 - 144	
TCX (A) [2C]	150.0	153.9	103	43 - 135	

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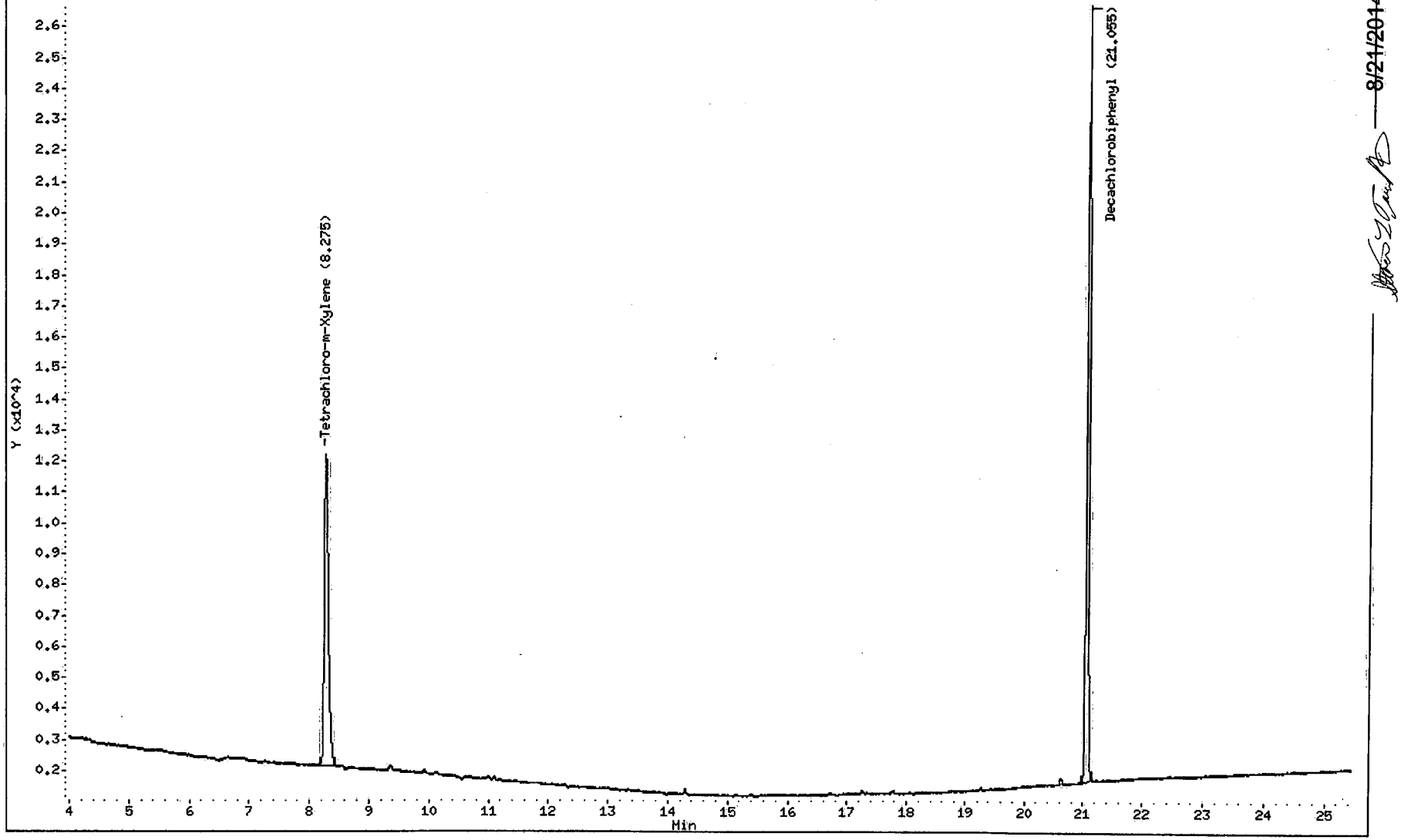
Data File: /chem/tracegc80.i/n140818a.b/015n4081306-BLK1.d
Date : 18-AUG-2014 17:53
Client ID: PBLKBZ
Sample Info: 4081306-BLK1
Volume Injected (uL): 1.0
Column phase: clpest

Instrument: tracegc80.i
Operator: BWL
Column diameter: 0.32

/chem/tracegc80.i/n140818a.b/015n4081306-BLK1.d/015n4081306-BLK1.cdf



8/21/2014

CompuChem

Lab Smp Id : 4081306-BLK1 Client Smp Id : PBLKBZ
Sample Type : BLANK Sublist : TCLnoPCB
Inj Date : 18-AUG-2014 17:53 Inst ID : TRACEGC80
Operator : BWL
Method : /chem/tracegc80.i/n140818a.b/8081A_clpestv8.m
Misc. Info : PBLKBZ

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Ws) * (100/(100-M))

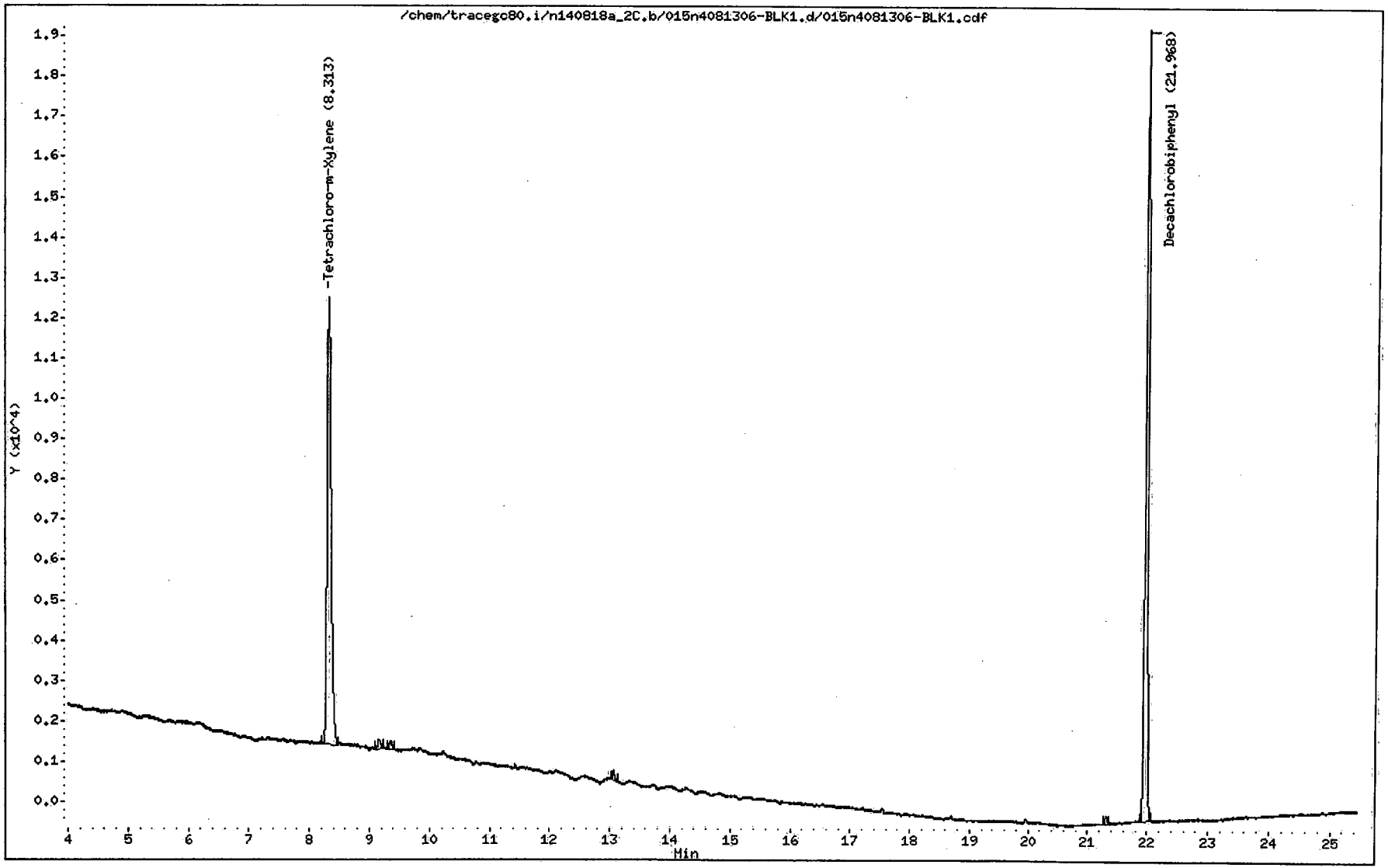
DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 5000(ul) Vi Injection Volume: 1(ul)
Ws Sample Weight: 1.0(g) M Moisture: 0(%)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (ug)	CONCENTRATIONS FINAL (ug/Kg)	ADJUSTED PQL (ug/Kg)	% REC	RECOVERY LIMITS	FLAGS
1.28			3058								
1.40			265297								
8.28	8.20	8.34	47182	1486792	Tetrachloro-m-Xylene	0.031733	158.6671		105.8	43 - 135	
21.06	20.98	21.12	68180	784712	Decachlorobiphenyl	0.086885	434.4266		144.8*	43 - 144	R

8/21/2014

Data File: /chem/tracegc80.i/n140818a_2C.b/015n4081306-BLK1.d
Date : 18-AUG-2014 17:53
Client ID: PBLKBZ
Sample Info: 4081306-BLK1
Volume Injected (uL): 1.0
Column phase: olpest2

Instrument: tracegc80.i
Operator: BWL
Column diameter: 0.32



8/21/2014

CompuChem

Data file : /chem/tracegc80.i/n140818a_2C.b/015n4081306-BLK1.d
Lab Smp Id: 4081306-BLK1 Client Smp ID: PBLKBZ
Inj Date : 18-AUG-2014 17:53
Operator : BWL Inst ID: tracegc80.i
Smp Info : 4081306-BLK1
Misc Info : PBLKBZ
Comment :
Method : /chem/tracegc80.i/n140818a_2C.b/8081A_clpest2v8.m
Meth Date : 21-Aug-2014 11:00 spruskin Quant Type: ESTD
Cal Date : 18-AUG-2014 15:28 Cal File: 010n4H15016-ARC2.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TCLnoPCB.sub
Target Version: 3.50 Sample Matrix: SOIL

Concentration Formula:
Amt * DF * Uf * Vt/(Vi * Ws) * (100/(100 - M)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	5000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Ws	1.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-Xylene					CAS #: 877-09-8		
8.313	8.315	-0.002	49220	0.03077	154	80.00- 120.00	100.00
$ 33 Decachlorobiphenyl					CAS #: 2051-24-3		
21.968	21.970	-0.002	60247	0.08297	415	80.00- 120.00	100.00

8/21/2014

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/Kg)	TARGET RANGE	RATIO
2 alpha-BHC					CAS #: 319-84-6		
Compound Not Detected							
3 gamma-BHC (Lindane)					CAS #: 58-89-9		
Compound Not Detected							
4 Heptachlor					CAS #: 76-44-8		
Compound Not Detected							
5 Aldrin					CAS #: 309-00-2		
Compound Not Detected							
7 beta-BHC					CAS #: 319-85-7		
Compound Not Detected							
8 delta-BHC					CAS #: 319-86-8		
Compound Not Detected							
9 Heptachlor Epoxide					CAS #: 1024-57-3		
Compound Not Detected							
10 gamma-Chlordane					CAS #: 5103-74-2		
Compound Not Detected							
11 alpha-Chlordane					CAS #: 5103-71-9		
Compound Not Detected							
13 Endosulfan I					CAS #: 959-98-8		
Compound Not Detected							

8/21/2014

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/Kg)	TARGET RANGE	RATIO
14 4,4'-DDE					CAS #: 72-55-9		

Compound Not Detected

---

15 Dieldrin					CAS #: 60-57-1		

Compound Not Detected

---

16 Endrin					CAS #: 72-20-8		

Compound Not Detected

---

17 4,4'-DDD					CAS #: 72-54-8		

Compound Not Detected

---

18 Endosulfan II					CAS #: 33213-65-9		

Compound Not Detected

---

19 4,4'-DDT					CAS #: 50-29-3		

Compound Not Detected

---

20 Endrin Aldehyde					CAS #: 7421-93-4		

Compound Not Detected

---

21 Endosulfan sulfate					CAS #: 1031-07-8		

Compound Not Detected

---

22 Methoxychlor					CAS #: 72-43-5		

Compound Not Detected

---

23 Endrin Ketone					CAS #: 53494-70-5		

Compound Not Detected

8/21/2014

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
31 Toxaphene						CAS #: 8001-35-2	

Compound Not Detected

8/21/2014

N. Laboratory Control Sample Data

Tabulated Results (ANALYSIS DATA SHEET)

Chromatograms and data system printout(s)

ANALYSIS DATA SHEET

8081A

PLCSBZ

Client: WESTON SOLUTIONS | SDG: 1408028 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550B_GC | File ID: 017n4081306-BS1.d | QC Type: LCS

Initial/Final: 1g / 5000uL | Sulfur Cleanup: N | Lab ID: 4081306-BS1 | Column ID: clpest

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/13/14 14:18

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/18/14 18:51

Batch: 4081306 | Sequence: 4H15017 | Calibration: 4082101 | Instrument: tracegc80

CAS NO.	COMPOUND	CONC.(ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC	169.8	2.64	24.9	
58-89-9	gamma-BHC (Lindane)	163.9	1.20	24.9	
76-44-8	Heptachlor	180.9	3.60	24.9	
309-00-2	Aldrin	184.7	2.01	24.9	
319-85-7	beta-BHC	142.6	4.20	24.9	
319-86-8	delta-BHC	161.2	2.38	24.9	
1024-57-3	Heptachlor epoxide	168.9	1.59	24.9	
5103-74-2	gamma-Chlordane	173.3	1.98	24.9	
5103-71-9	alpha-Chlordane	175.6	2.43	24.9	
959-98-8	Endosulfan I	153.0	2.31	24.9	
72-55-9	4,4'-DDE	181.4	2.16	63.0	
60-57-1	Dieldrin	179.8	1.68	63.0	
72-20-8	Endrin	180.0	1.41	63.0	
72-54-8	4,4'-DDD	170.9	2.43	63.0	
33213-65-9	Endosulfan II	159.2	2.67	63.0	
50-29-3	4,4'-DDT	180.3	7.50	63.0	
7421-93-4	Endrin aldehyde	158.0	3.90	63.0	
1031-07-8	Endosulfan sulfate	165.1	1.86	63.0	
72-43-5	Methoxychlor	193.8	8.70	249	J
53494-70-5	Endrin ketone	164.6	1.53	63.0	
8001-35-2	Toxaphene		450	2490	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A)	300.0	518.1	173	43 - 144	*
TCX (A)	150.0	168.3	112	43 - 135	

Environmental Testing Laboratories
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ANALYSIS DATA SHEET

8081A

PLCSBZ

Client: WESTON SOLUTIONS | SDG: 1408028 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550B_GC | File ID: 017n4081306-BS1.d | QC Type: LCS

Initial/Final: 1g / 5000uL | Sulfur Cleanup: N | Lab ID: 4081306-BS1 | Column ID: clpest2

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/13/14 14:18

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/18/14 18:51

Batch: 4081306 | Sequence: 4H15017 | Calibration: 4082101 | Instrument: tracegc80

CAS NO.	COMPOUND	CONC.(ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC [2C]	164.0	2.64	24.9	
58-89-9	gamma-BHC (Lindane) [2C]	160.2	1.20	24.9	
76-44-8	Heptachlor [2C]	174.9	3.60	24.9	
309-00-2	Aldrin [2C]	182.3	2.01	24.9	
319-85-7	beta-BHC [2C]	141.9	4.20	24.9	
319-86-8	delta-BHC [2C]	157.6	2.38	24.9	
1024-57-3	Heptachlor Epoxide [2C]	172.8	1.59	24.9	
5103-74-2	gamma-Chlordane [2C]	170.8	1.98	24.9	
5103-71-9	alpha-Chlordane [2C]	172.7	2.43	24.9	
959-98-8	Endosulfan I [2C]	147.7	2.31	24.9	
72-55-9	4,4'-DDE [2C]	182.5	2.16	63.0	
60-57-1	Dieldrin [2C]	181.0	1.68	63.0	
72-20-8	Endrin [2C]	181.3	1.41	63.0	
72-54-8	4,4'-DDD [2C]	174.3	2.43	63.0	
33213-65-9	Endosulfan II [2C]	163.2	2.67	63.0	
50-29-3	4,4'-DDT [2C]	184.2	7.50	63.0	
7421-93-4	Endrin Aldehyde [2C]	154.0	3.90	63.0	
1031-07-8	Endosulfan Sulfate [2C]	159.1	1.86	63.0	
72-43-5	Methoxychlor [2C]	222.7	8.70	249	J
53494-70-5	Endrin Ketone [2C]	167.5	1.53	63.0	
8001-35-2	Toxaphene [2C]		450	2490	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A) [2C]	300.0	491.6	164	43 - 144	*
TCX (A) [2C]	150.0	162.7	108	43 - 135	

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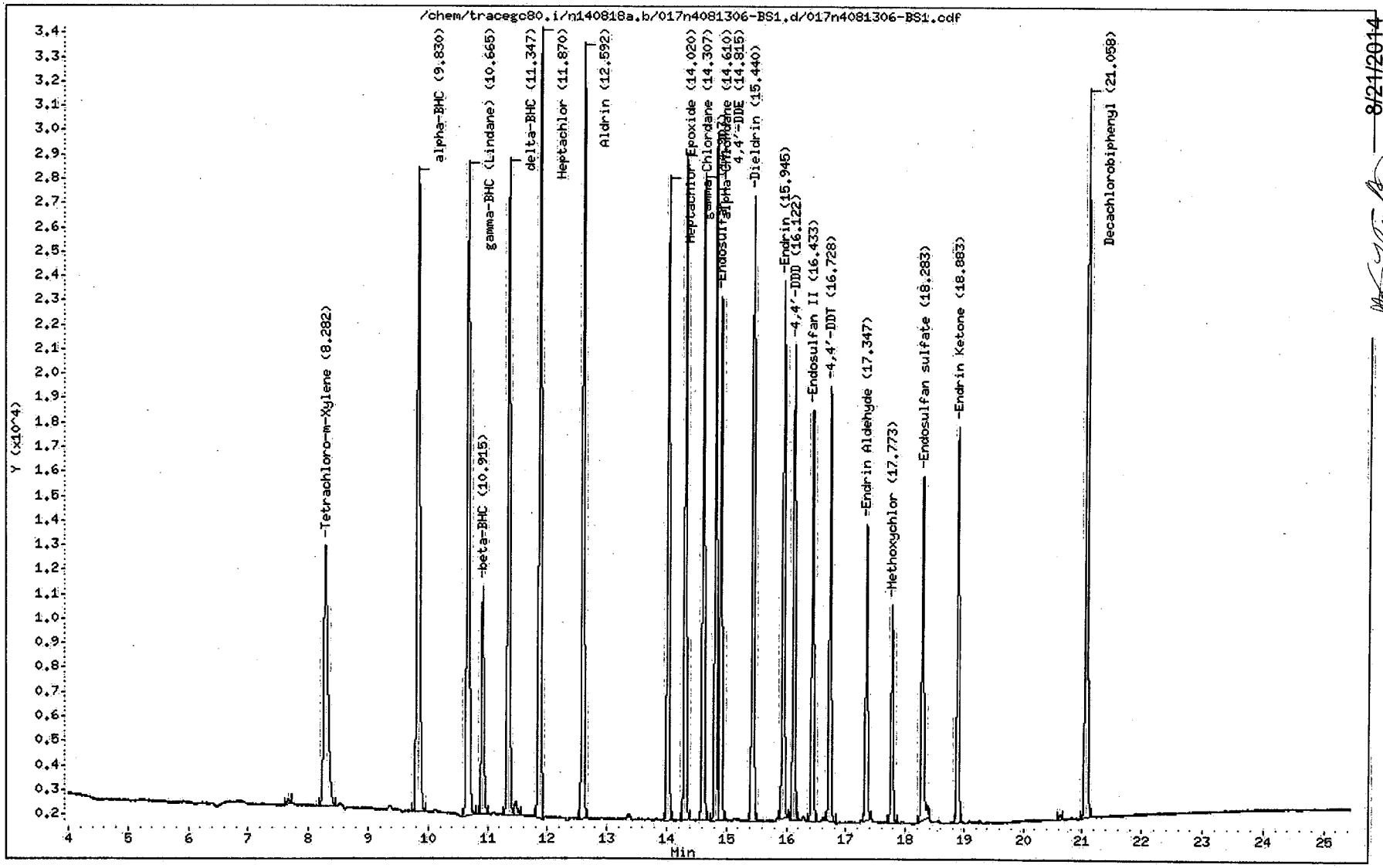
Data File: /chem/tracegc80.i/n140818a.b/017n4081306-BS1.d
Date : 18-AUG-2014 18:51
Client ID: PLCSBZ
Sample Info: 4081306-BS1
Volume Injected (uL): 1.0
Column phase: clpest

Instrument: tracegc80.i
Operator: BWL
Column diameter: 0.32



8/21/2014

CompuChem

Lab Smp Id : 4081306-BS1 Client Smp Id : PLCSBZ
Sample Type : LCS Sublist : TCLnoPCB
Inj Date : 18-AUG-2014 18:51 Inst ID : TRACEGC80
Operator : BWL Spike Sublist : AFCEES
Method : /chem/tracegc80.i/n140818a.b/8081A_clpestv8.m
Misc. Info : PLCSBZ

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Ws) * (100/(100-M))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 5000(ul) Vi Injection Volume: 1(ul)
Ws Sample Weight: 1.0(g) M Moisture: 0(%)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (ug)	CONCENTRATIONS FINAL (ug/Kg)	ADJUSTED PQL (ug/Kg)	% REC	RECOVERY LIMITS	FLAGS
1.23			1191								
1.40			5147894								
7.67			755								
8.28	8.20	8.34	50040	1486792	Tetrachloro-m-Xylene	0.033656	168.2784		112.2	43 - 135	
9.83	9.75	9.89	86681	2553432	alpha-BHC	0.033947	169.7343	24.90000	113.2	37 - 144	
10.66	10.59	10.73	77576	2367305	gamma-BHC (Lindane)	0.032770	163.8488	24.99000	109.2	37 - 148	
10.92	10.84	10.98	26257	920658	beta-BHC	0.028519	142.5937	24.99000	95.1	39 - 155	
11.35	11.27	11.41	71816	2228390	delta-BHC	0.032228	161.1388	24.99000	107.4	22 - 170	
11.47			1805								
11.87	11.79	11.93	84202	2328195	Heptachlor	0.036166	180.8289	24.99000	120.6	46 - 137	
12.59	12.52	12.66	79257	2145595	Aldrin	0.036939	184.6947	24.99000	123.1	44 - 135	
14.02	13.94	14.08	62130	1839495	Heptachlor Epoxide	0.033776	168.8779	24.99000	112.6	47 - 134	
14.31	14.23	14.37	65353	1886268	gamma-Chlordane	0.034647	173.2336	24.99000	115.5	43 - 134	
14.61	14.53	14.67	62553	1781640	alpha-Chlordane	0.035110	175.5489	24.99000	117.0	46 - 137	
14.82	14.74	14.88	64675	1782762	4,4'-DDE	0.036278	181.3898	50.10000	120.9	50 - 138	
14.90	14.83	14.97	51855	1694568	Endosulfan I	0.030600	153.0007	24.99000	102.0	10 - 123	
15.44	15.37	15.51	61282	1704464	Dieldrin	0.035954	179.7692	50.10000	119.8	51 - 140	
15.94	15.87	16.01	53644	1490718	Endrin	0.035985	179.9268	50.10000	120.0	52 - 146	
16.12	16.05	16.19	44762	1310029	4,4'-DDD	0.034169	170.8436	50.10000	113.9	49 - 137	
16.43	16.36	16.50	41451	1301825	Endosulfan II	0.031841	159.2034	50.10000	106.1	22 - 133	
16.73	16.65	16.79	41538	1152178	4,4'-DDT	0.036051	180.2543	50.10000	120.2	47 - 144	
17.35	17.27	17.41	29868	945234	Endrin Aldehyde	0.031597	157.9874	50.10000	105.3	29 - 116	
17.77	17.70	17.84	20991	541546	Methoxychlor	0.038761	193.8061	249.9000	129.2	53 - 172	J
18.28	18.21	18.35	36577	1108128	Endosulfan sulfate	0.033007	165.0352	50.10000	110.0	50 - 153	
18.88	18.81	18.95	40980	1244710	Endrin Ketone	0.032923	164.6126	50.10000	109.7	44 - 135	
20.62			615								
21.06	20.98	21.12	81301	784712	Decachlorobiphenyl	0.103606	518.0305		172.7*	43 - 144	R

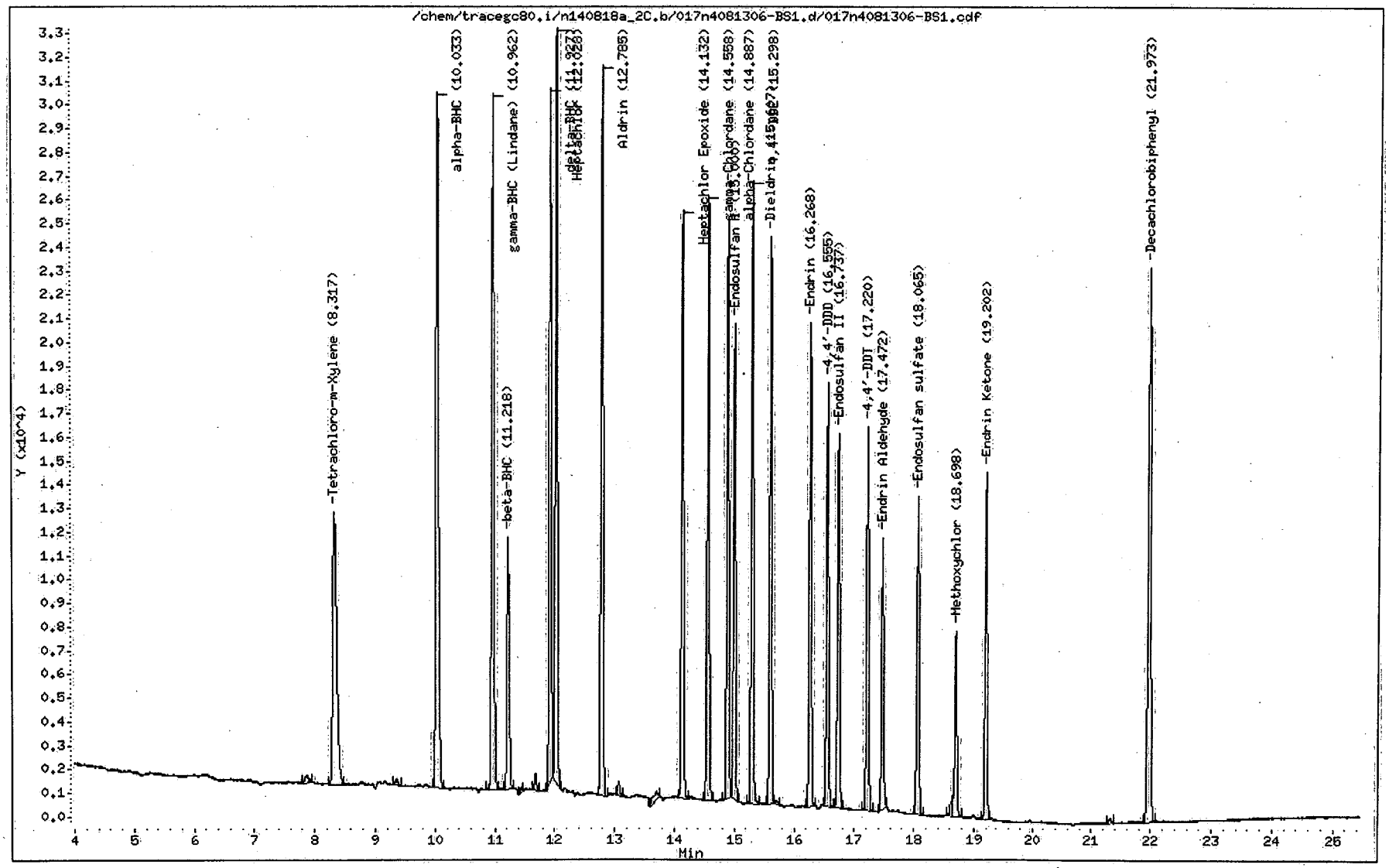
8/21/2014

Data File: /chem/tracegc80.i/n140818a_2C.b/017n4081306-BS1.d
Date : 18-AUG-2014 18:51
Client ID: PLCSBZ
Sample Info: 4081306-BS1
Volume Injected (uL): 1.0
Column phase: clpest2

Page 4

Instrument: tracegc80.i

Operator: BWL
Column diameter: 0.32



8/21/2014

CompuChem

Data file : /chem/tracegc80.i/n140818a_2C.b/017n4081306-BS1.d
Lab Smp Id: 4081306-BS1 Client Smp ID: PLCSBZ
Inj Date : 18-AUG-2014 18:51
Operator : BWL Inst ID: tracegc80.i
Smp Info : 4081306-BS1
Misc Info : PLCSBZ
Comment :
Method : /chem/tracegc80.i/n140818a_2C.b/8081A_clpest2v8.m
Meth Date : 21-Aug-2014 11:00 spruskin Quant Type: ESTD
Cal Date : 18-AUG-2014 15:28 Cal File: 010n4H15016-ARC2.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TCLnoPCB.sub
Target Version: 3.50 Sample Matrix: SOIL

Concentration Formula:
Amt * DF * Uf * Vt/(Vi * Ws) * (100/(100 - M)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	5000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Ws	1.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-Xylene					CAS #: 877-09-8		
8.317	8.315	0.002	52048	0.03254	163	80.00- 120.00	100.00
$ 33 Decachlorobiphenyl					CAS #: 2051-24-3		
21.973	21.970	0.003	71382	0.09831	492	80.00- 120.00	100.00(R)
2 alpha-BHC					CAS #: 319-84-6		
10.033	10.032	0.001	85955	0.03280	164	80.00- 120.00	100.00
3 gamma-BHC (Lindane)					CAS #: 58-89-9		
10.962	10.960	0.002	77140	0.03204	160	80.00- 120.00	100.00

8/21/2014

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/Kg)	TARGET RANGE	RATIO
4 Heptachlor					CAS #: 76-44-8		
12.028	12.025	0.003	76853	0.03498	175	80.00- 120.00	100.00
5 Aldrin					CAS #: 309-00-2		
12.785	12.785	0.000	74163	0.03646	182	80.00- 120.00	100.00
7 beta-BHC					CAS #: 319-85-7		
11.218	11.217	0.001	27013	0.02838	142	80.00- 120.00	100.00
8 delta-BHC					CAS #: 319-86-8		
11.927	11.925	0.002	67807	0.03151	158	80.00- 120.00	100.00
9 Heptachlor Epoxide					CAS #: 1024-57-3		
14.132	14.130	0.002	59160	0.03456	173	80.00- 120.00	100.00
10 gamma-Chlordane					CAS #: 5103-74-2		
14.558	14.558	0.000	60585	0.03415	171	80.00- 120.00	100.00
11 alpha-Chlordane					CAS #: 5103-71-9		
14.887	14.887	0.000	56867	0.03454	173	80.00- 120.00	100.00
13 Endosulfan I					CAS #: 959-98-8		
15.000	14.998	0.002	47735	0.02953	148	80.00- 120.00	100.00
14 4,4'-DDE					CAS #: 72-55-9		
15.298	15.298	0.000	59537	0.03650	183	80.00- 120.00	100.00
15 Dieldrin					CAS #: 60-57-1		
15.607	15.607	0.000	56735	0.03619	181	80.00- 120.00	100.00
16 Endrin					CAS #: 72-20-8		
16.268	16.268	0.000	49859	0.03626	181	80.00- 120.00	100.00
17 4,4'-DDD					CAS #: 72-54-8		
16.555	16.553	0.002	41023	0.03485	174	80.00- 120.00	100.00
18 Endosulfan II					CAS #: 33213-65-9		
16.737	16.735	0.002	38811	0.03263	163	80.00- 120.00	100.00
19 4,4'-DDT					CAS #: 50-29-3		
17.220	17.220	0.000	37412	0.03683	184	80.00- 120.00	100.00
20 Endrin Aldehyde					CAS #: 7421-93-4		
17.472	17.470	0.002	27819	0.03079	154	80.00- 120.00	100.00
21 Endosulfan sulfate					CAS #: 1031-07-8		
18.065	18.065	0.000	32854	0.03182	159	80.00- 120.00	100.00

8/21/2014

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	CONCENTRATIONS FINAL (ug/Kg)	TARGET RANGE	RATIO
22 Methoxychlor					CAS #: 72-43-5		
18.698	18.700	-0.002	20029	0.04453	223	80.00- 120.00	100.00(a)
23 Endrin Ketone					CAS #: 53494-70-5		
19.202	19.200	0.002	36690	0.03349	167	80.00- 120.00	100.00
31 Toxaphene					CAS #: 8001-35-2		

Compound Not Detected

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.

8/21/2014

ANALYSIS DATA SHEET
8081A

PLCSDBZ

Client: WESTON SOLUTIONS | SDG: 1408028 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550B_GC | File ID: 018n4081306-BSD1.d | QC Type: LCS Dup

Initial/Final: 1g / 5000uL | Sulfur Cleanup: N | Lab ID: 4081306-BSD1 | Column ID: clpest

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/13/14 14:18

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/18/14 19:20

Batch: 4081306 | Sequence: 4H15017 | Calibration: 4082101 | Instrument: tracegc80

CAS NO.	COMPOUND	CONC.(ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC	156.4	2.64	24.9	
58-89-9	gamma-BHC (Lindane)	150.8	1.20	24.9	
76-44-8	Heptachlor	166.3	3.60	24.9	
309-00-2	Aldrin	168.9	2.01	24.9	
319-85-7	beta-BHC	135.0	4.20	24.9	
319-86-8	delta-BHC	148.9	2.38	24.9	
1024-57-3	Heptachlor epoxide	158.2	1.59	24.9	
5103-74-2	gamma-Chlordane	158.7	1.98	24.9	
5103-71-9	alpha-Chlordane	161.0	2.43	24.9	
959-98-8	Endosulfan I	139.7	2.31	24.9	
72-55-9	4,4'-DDE	165.4	2.16	63.0	
60-57-1	Dieldrin	164.5	1.68	63.0	
72-20-8	Endrin	164.8	1.41	63.0	
72-54-8	4,4'-DDD	157.9	2.43	63.0	
33213-65-9	Endosulfan II	147.3	2.67	63.0	
50-29-3	4,4'-DDT	164.9	7.50	63.0	
7421-93-4	Endrin aldehyde	151.0	3.90	63.0	
1031-07-8	Endosulfan sulfate	154.6	1.86	63.0	
72-43-5	Methoxychlor	180.2	8.70	249	J
53494-70-5	Endrin ketone	155.3	1.53	63.0	
8001-35-2	Toxaphene	1839	450	2490	J

SURROGATE RECOVERY RESULTS	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A)	300.0	442.5	147	43 - 144	*
TCX (A)	150.0	153.1	102	43 - 135	

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Liberty Analytical Corp.

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ANALYSIS DATA SHEET

8081A

PLCSDBZ

Client: WESTON SOLUTIONS | SDG: 1408028 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550B_GC | File ID: 018n4081306-BSD1.d | QC Type: LCS Dup

Initial/Final: 1g / 5000uL | Sulfur Cleanup: N | Lab ID: 4081306-BSD1 | Column ID: clpest2

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/13/14 14:18

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/18/14 19:20

Batch: 4081306 | Sequence: 4H15017 | Calibration: 4082101 | Instrument: tracegc80

CAS NO.	COMPOUND	CONC (ug/kg wet)	MDL	RL	Q
319-84-6	alpha-BHC [2C]	152.2	2.64	24.9	
58-89-9	gamma-BHC (Lindane) [2C]	148.0	1.20	24.9	
76-44-8	Heptachlor [2C]	160.4	3.60	24.9	
309-00-2	Aldrin [2C]	166.1	2.01	24.9	
319-85-7	beta-BHC [2C]	133.6	4.20	24.9	
319-86-8	delta-BHC [2C]	146.2	2.38	24.9	
1024-57-3	Heptachlor Epoxide [2C]	159.6	1.59	24.9	
5103-74-2	gamma-Chlordane [2C]	156.7	1.98	24.9	
5103-71-9	alpha-Chlordane [2C]	159.3	2.43	24.9	
959-98-8	Endosulfan I [2C]	136.0	2.31	24.9	
72-55-9	4,4'-DDE [2C]	166.0	2.16	63.0	
60-57-1	Dieldrin [2C]	167.0	1.68	63.0	
72-20-8	Endrin [2C]	168.2	1.41	63.0	
72-54-8	4,4'-DDD [2C]	169.8	2.43	63.0	
33213-65-9	Endosulfan II [2C]	151.9	2.67	63.0	
50-29-3	4,4'-DDT [2C]	170.3	7.50	63.0	
7421-93-4	Endrin Aldehyde [2C]	146.1	3.90	63.0	
1031-07-8	Endosulfan Sulfate [2C]	152.6	1.86	63.0	
72-43-5	Methoxychlor [2C]	207.6	8.70	249	J
53494-70-5	Endrin Ketone [2C]	159.3	1.53	63.0	
8001-35-2	Toxaphene [2C]		450	2490	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
DCB (A) [2C]	300.0	424.8	142	43 - 144	
TCX (A) [2C]	150.0	152.0	101	43 - 135	

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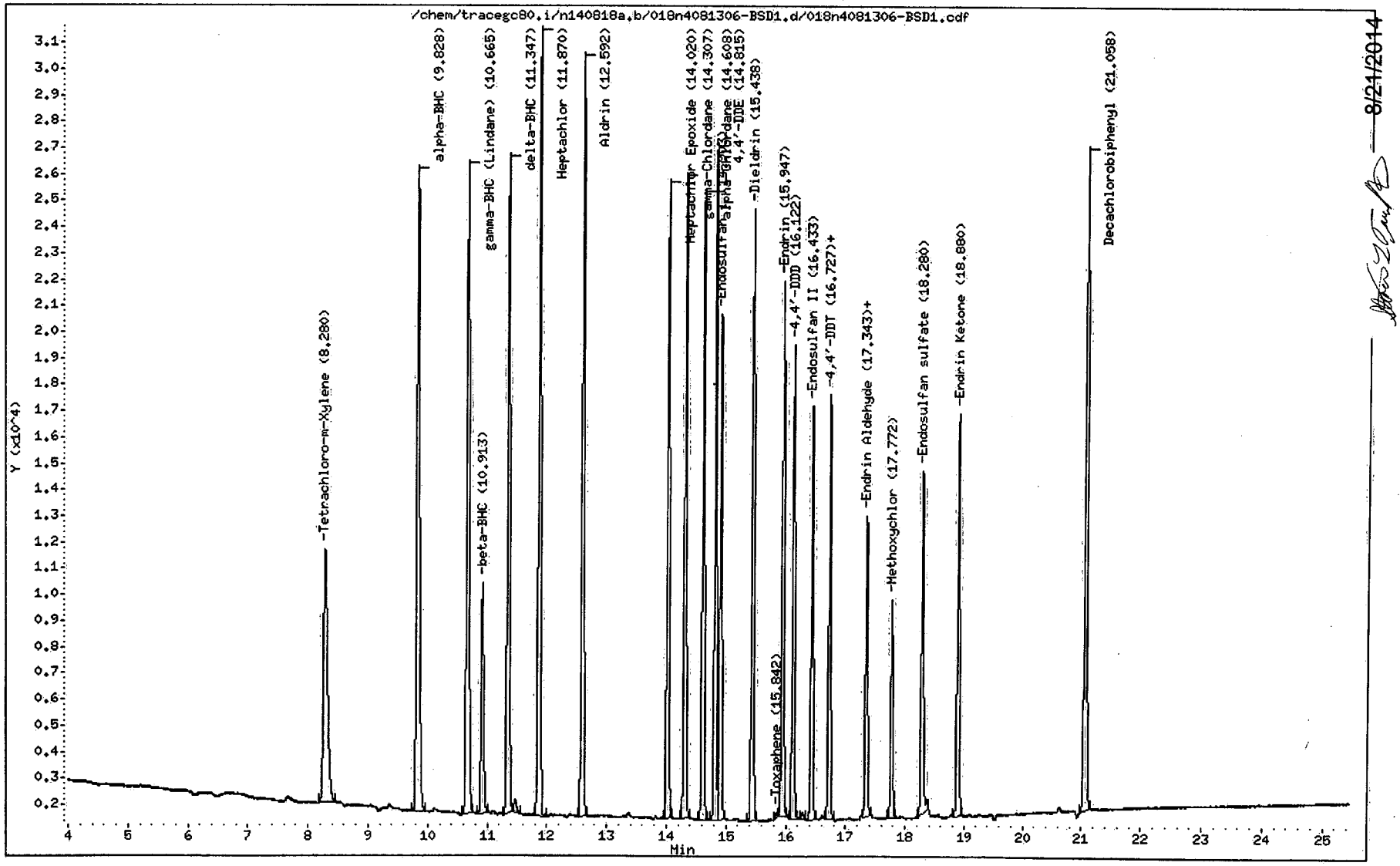
Data File: /chem/tracegc80.i/n140818a.b/018n4081306-BSD1.d
Date : 18-AUG-2014 19:20
Client ID: PLCSDBZ
Sample Info: 4081306-BSD1
Volume Injected (uL): 1.0
Column phase: clpest

Instrument: tracegc80.i
Operator: BWL
Column diameter: 0.32



8/21/2014

CompuChem

Lab Smp Id : 4081306-BSD1 Client Smp Id : PLCSDBZ
Sample Type : LCSD Sublist : TCLnoPCB
Inj Date : 18-AUG-2014 19:20 Inst ID : TRACEGC80
Operator : BWL Spike Sublist : AFCEES
Method : /chem/tracegc80.i/n140818a.b/8081A_clpestv8.m
Misc. Info : PLCSDBZ

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Ws) * (100/(100-M))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 5000(ul) Vi Injection Volume: 1(ul)
Ws Sample Weight: 1.0(g) M Moisture: 0(%)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (ug)	CONCENTRATIONS FINAL (ug/Kg)	ADJUSTED PQL (ug/Kg)	% REC	RECOVERY LIMITS	FLAGS
1.04			1072								
1.40			2906113								
8.28	8.20	8.34	45531	1486792	Tetrachloro-m-Xylene	0.030624	153.1182		102.1	43 - 135	
9.83	9.75	9.89	79879	2553432	alpha-BHC	0.031283	156.4130	24.90000	104.3	37 - 144	
10.66	10.59	10.73	71384	2367305	gamma-BHC (Lindane)	0.030154	150.7706	24.99000	100.5	37 - 148	
10.91	10.84	10.98	24854	920658	beta-BHC	0.026996	134.9796	24.99000	90.0	39 - 155	
11.35	11.27	11.41	66347	2228390	delta-BHC	0.029773	148.8653	24.99000	99.2	22 - 170	
11.47			1422								
11.87	11.79	11.93	77442	2328195	Heptachlor	0.033262	166.3112	24.99000	110.9	46 - 137	
12.59	12.52	12.66	72470	2145595	Aldrin	0.033776	168.8809	24.99000	112.6	44 - 135	
14.02	13.94	14.08	58175	1839495	Heptachlor Epoxide	0.031626	158.1276	24.99000	105.4	47 - 134	
14.31	14.23	14.37	59855	1886268	gamma-Chlordane	0.031732	158.6599	24.99000	105.8	43 - 134	
14.61	14.53	14.67	57351	1781640	alpha-Chlordane	0.032189	160.9472	24.99000	107.3	46 - 137	
14.82	14.74	14.88	58951	1782762	4,4'-DDE	0.033067	165.3361	50.10000	110.2	50 - 138	
14.90	14.83	14.97	47354	1694568	Endosulfan I	0.027945	139.7230	24.99000	93.1	10 - 123	
15.44	15.37	15.51	56057	1704464	Dieldrin	0.032888	164.4388	50.10000	109.6	51 - 140	
15.84	15.77	15.91	528	41798	Toxaphene Peak 1	0.012608	63.04054	2490.000			
15.95	15.87	16.01	49119	1490718	Endrin	0.032949	164.7462	50.10000	109.8	52 - 146	
16.12	16.05	16.19	41371	1310029	4,4'-DDD	0.031579	157.8973	50.10000	105.3	49 - 137	
16.29			579								
16.43	16.36	16.50	38340	1301825	Endosulfan II	0.029450	147.2510	50.10000	98.2	22 - 133	
16.73	16.65	16.79*	37984	1152178	4,4'-DDT	* 0.032967	164.8357	50.10000	109.9	47 - 144	
16.73	16.61	16.75*	37984	37919	Toxaphene Peak 2	* 1.001714	5008.571	2490.000			
17.34	17.27	17.41*	28542	945234	Endrin Aldehyde	* 0.030195	150.9732	50.10000	100.6	29 - 116	
17.34	17.23	17.37*	28542	34608	Toxaphene Peak 3	* 0.824694	4123.469	2490.000			
17.77	17.70	17.84	19514	541546	Methoxychlor	0.036032	180.1600	249.9000	120.1	53 - 172	J
18.28	18.21	18.35	34257	1108128	Endosulfan sulfate	0.030914	154.5716	50.10000	103.0	50 - 153	
18.88	18.81	18.95	38649	1244710	Endrin Ketone	0.031051	155.2530	50.10000	103.5	44 - 135	
21.06	20.98	21.12	69444	784712	Decachlorobiphenyl	0.088495	442.4742		147.5*	43 - 144	R

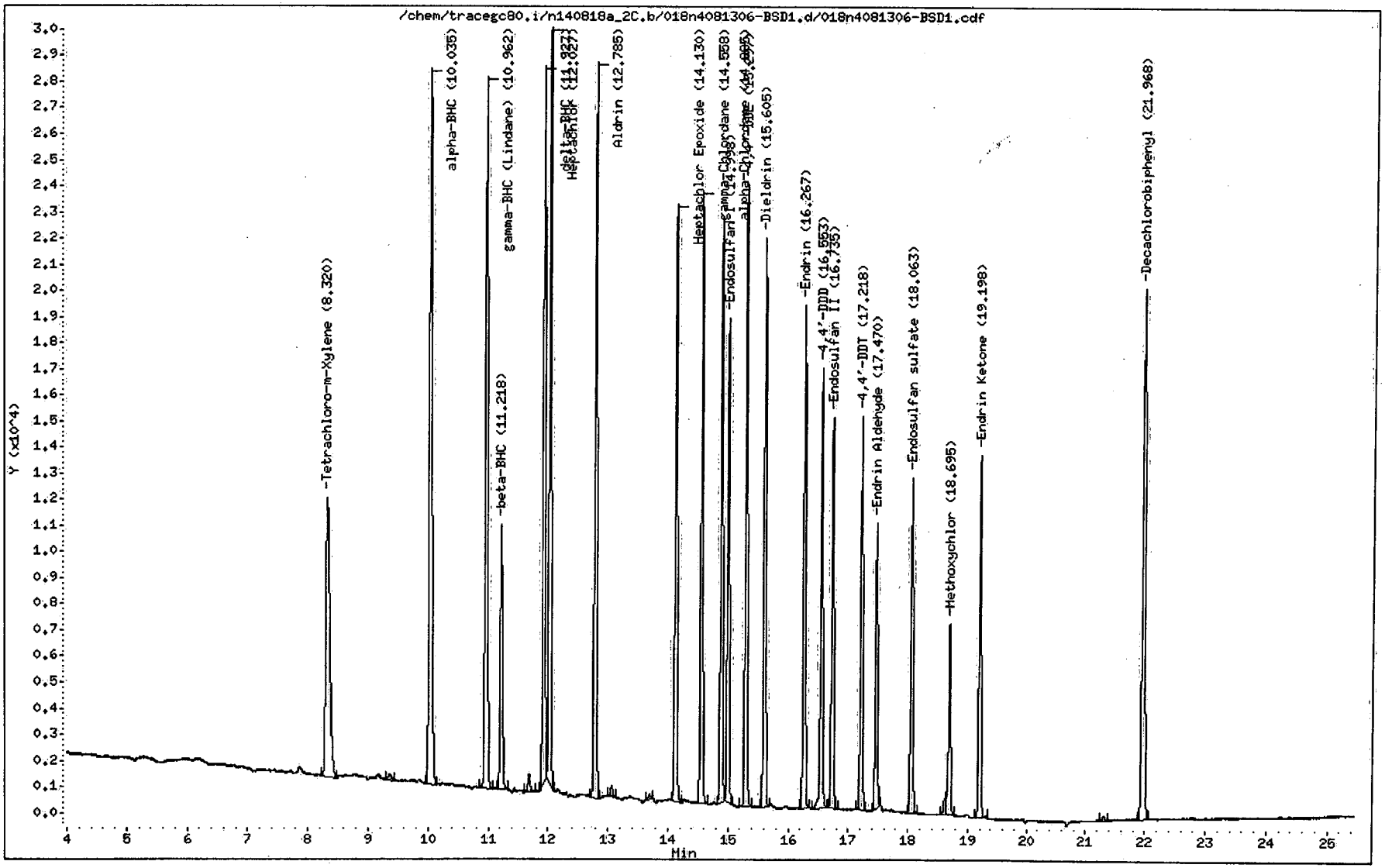
8/21/2014

Data File: /chem/tracegc80.i/n140818a_2C.b/018n4081306-BSD1.d
Date : 18-AUG-2014 19:20
Client ID: PLCSDBZ
Sample Info: 4081306-BSD1
Volume Injected (uL): 1.0
Column phase: clpest2

Page 4

Instrument: tracegc80.i

Operator: BWL
Column diameter: 0.32



8/21/2014

CompuChem

Data file : /chem/tracegc80.i/n140818a_2C.b/018n4081306-BSD1.d
Lab Smp Id: 4081306-BSD1 Client Smp ID: PLCSDBZ
Inj Date : 18-AUG-2014 19:20
Operator : BWL Inst ID: tracegc80.i
Smp Info : 4081306-BSD1
Misc Info : PLCSDBZ
Comment :
Method : /chem/tracegc80.i/n140818a_2C.b/8081A_clpest2v8.m
Meth Date : 21-Aug-2014 11:00 spruskin Quant Type: ESTD
Cal Date : 18-AUG-2014 15:28 Cal File: 010n4H15016-ARC2.d
Als bottle: 1 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TCLnoPCB.sub
Target Version: 3.50 Sample Matrix: SOIL

Concentration Formula:
Amt * DF * Uf * Vt/(Vi * Ws) * (100/(100 - M)) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	5000.00000	Volume of final extract (uL)
Vi	1.00000	Volume injected (uL)
Ws	1.00000	Weigth of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 1 Tetrachloro-m-Xylene					CAS #: 877-09-8		
8.320	8.315	0.005	48618	0.03040	152	80.00- 120.00	100.00
$ 33 Decachlorobiphenyl					CAS #: 2051-24-3		
21.968	21.970	-0.002	61683	0.08495	425	80.00- 120.00	100.00
2 alpha-BHC					CAS #: 319-84-6		
10.035	10.032	0.003	79765	0.03043	152	80.00- 120.00	100.00
3 gamma-BHC (Lindane)					CAS #: 58-89-9		
10.962	10.960	0.002	71246	0.02959	148	80.00- 120.00	100.00

8/21/2014

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/Kg)	TARGET RANGE	RATIO
4 Heptachlor					CAS #: 76-44-8		
12.027	12.025	0.002	70463	0.03207	160	80.00- 120.00	100.00
5 Aldrin					CAS #: 309-00-2		
12.785	12.785	0.000	67585	0.03322	166	80.00- 120.00	100.00
7 beta-BHC					CAS #: 319-85-7		
11.218	11.217	0.001	25434	0.02672	134	80.00- 120.00	100.00
8 delta-BHC					CAS #: 319-86-8		
11.927	11.925	0.002	62924	0.02924	146	80.00- 120.00	100.00
9 Heptachlor Epoxide					CAS #: 1024-57-3		
14.130	14.130	0.000	54644	0.03192	160	80.00- 120.00	100.00
10 gamma-Chlordane					CAS #: 5103-74-2		
14.558	14.558	0.000	55586	0.03133	157	80.00- 120.00	100.00
11 alpha-Chlordane					CAS #: 5103-71-9		
14.885	14.887	-0.002	52455	0.03186	159	80.00- 120.00	100.00
13 Endosulfan I					CAS #: 959-98-8		
14.998	14.998	0.000	43966	0.02720	136	80.00- 120.00	100.00
14 4,4'-DDE					CAS #: 72-55-9		
15.297	15.298	-0.001	54156	0.03320	166	80.00- 120.00	100.00
15 Dieldrin					CAS #: 60-57-1		
15.605	15.607	-0.002	52360	0.03340	167	80.00- 120.00	100.00
16 Endrin					CAS #: 72-20-8		
16.267	16.268	-0.001	46251	0.03364	168	80.00- 120.00	100.00
17 4,4'-DDD					CAS #: 72-54-8		
16.553	16.553	0.000	39967	0.03395	170	80.00- 120.00	100.00
18 Endosulfan II					CAS #: 33213-65-9		
16.735	16.735	0.000	36139	0.03038	152	80.00- 120.00	100.00
19 4,4'-DDT					CAS #: 50-29-3		
17.218	17.220	-0.002	34600	0.03406	170	80.00- 120.00	100.00
20 Endrin Aldehyde					CAS #: 7421-93-4		
17.470	17.470	0.000	26407	0.02922	146	80.00- 120.00	100.00
21 Endosulfan sulfate					CAS #: 1031-07-8		
18.063	18.065	-0.002	31504	0.03051	153	80.00- 120.00	100.00

8/21/2014

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ng)	FINAL (ug/Kg)	TARGET RANGE	RATIO
22 Methoxychlor					CAS #: 72-43-5		
18.695	18.700	-0.005	18677	0.04152	208	80.00- 120.00	100.00(a)
23 Endrin Ketone					CAS #: 53494-70-5		
19.198	19.200	-0.002	34907	0.03186	159	80.00- 120.00	100.00
31 Toxaphene					CAS #: 8001-35-2		

Compound Not Detected

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).

8/21/2014

P. Run Logs / Prep Sheets / Internal CoC Documents / Standard Preparation Information / Manual Integration Summary

Run Logs

COMPUCHEM a Division of Liberty Analytical Corporation
GC EXTRACTABLES RUN LOG Instrument

LOGBOOK 4 TTT 47 ID: 80 Target Sequence: A1408188 Date: 8/18/14 Amt. Inj. 2 µL (1 µL per column)

Method (Circle one): 8081B 8082A 8151A SOM01.2 ARO SOM01.2 PEST Other _____

Maintenance: Changed septum Changed liner Baked column Trimmed column Other: _____

	REJECTED	FILE NUMBER	REPORTED	DATE	COMPUCHEM #	CASE/SDG#	STANDARD ID	CHEMIST	COMMENTS
1		1		8/18/14	Hexane			[illegible]	
2		2		/ /					
3		3	✓	/ /	4H15016-PEM1	4D24012	PEMMA		
4		4	✓	/ /	-CAC1	4F16020	INACIMA		
5		5	✓	/ /	2	21	2		
6		6	✓	/ /	3	22	3		
7		7	✓	/ /	4	23	4		
8		8	✓	/ /	5	24	5		
9		9	✓	/ /	-ARC1	4C28047	TOMOHSMA		
10		10	✓	/ /	1 2	4C06037	CHLOHSMA		
11		11	✓	/ /	-SCV1	4B22013	PESTCHKMA		
12				/ /					
13				/ /					
14				/ /					
15				/ /					
16				/ /					
17				/ /					
18				/ /					
19				/ /					
20				/ /					

8/20/14

The presence of the Chemist's/Analyst's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

Calibration ID: 4082101 Sequence ID: 4H15016 Hexane Lot No.: 4C19021

Reviewed By: [signature] Date: 8/21/14

05/23/12:jcf

COMPUCHEM a Division of Liberty Analytical Corporation
GC EXTRACTABLES RUN LOG Instrument

LOGBOOK 4 TTT 47 ID: 80 Target Sequence: 01408189 Date: 8/15/14 Amt. Inj. 2 µL (1 µL per column)

Method (Circle one): 8081B 8082A 8151A SOM01.2 ARO SOM01.2 PEST Other _____

Maintenance: ☐ Changed septum ☐ Changed liner ☐ Baked column ☐ Trimmed column ☐ Other: _____

	REJECTED	FILE NUMBER	REPORTED	DATE	COMPUCHEM #	CASE/SDG#	STANDARD ID	CHEMIST	COMMENTS
1		12	✓	8/18/14	4H15017-ICV1	4F10022	1NDC3MB	LD	
2		13	TCW	/ /	↓ ICV1	↓	↓		
3		14	✓	/ /	↓ DEM1	4AW012	DEMMB		
4		15	/	/ /	4081806-BUK1	1408028			
5		16	/	/ /	C408047-CBU				SC
6		17	/	/ /	4081306-BS1				
7		18	/	/ /	↓ BSD1				
8		19	/	/ /	1408028-01				SC 10X (900µL/10µL)
9	DI	20		/ /	↓ 02	↓			↓ Report as matrix
10		21	/	/ /	4080808-BUK1	1408019			
11		22	/	/ /	1408019-01	↓			SC 50X (980µL/20µL)
12		23	/	/ /	↓ 06	↓			↓ 10X (900µL/10µL)
13	DI	24		/ /	Home	Solt			
14		25		/ /					
15		26		/ /					
16		27		/ /					
17	✓	28	SD	8/19/14	4H15017-CCV1	4F10022	1NDC3MC		
18		29	✓	/ /	↓ CCV1	↓	↓	↓	
19				/ /					
20				/ /					

The presence of the Chemist's/Analyst's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

Calibration ID: 4082101 Sequence ID: 4H15017 Hexane Lot No.: 4A9026

Reviewed By: [signature] Date: 8/21/14

05/23/12:jcf

Bench Sheets

B. Patterson
Assigned To

2713
Employee ID Number

PREPARATION BENCH SHEET

4081306

H: 8/20
D: 8/25

GC-8081B PEST Dilute-n-Shoot

Matrix: Soil

Prepared using: GC - EPA 3550B_GC

Date/Time Extracted: 8-13-14 @ 1413

Lab Number	Client ID	QCType	Initial (g)	Final (uL)	GPC (uL)	QC	Surr (uL)	Comments
1408028-01	P001-COMP02-LW-01	Sample	1.0	5000	NA	NA	250	
1408028-02	P001-DR0502-LW-01	Sample	1.0	5000	↓	↓	250	
4081306-BLK1	PBLKBZ	Blank	1.0	5000	↓	↓	250	
4081306-BS1	PLCSBZ	LCS	1.0	5000	↓	↓	250	BPatt 8-13-14
4081306-BSD1	PLCSDBZ	LCS Dup	1.0	5000	NA	NA	250	

	Description	Spike Amount (uL)		Lot Number
SURROGATE	Pest/PCB Surr. Spike	250		4H11011
SPIKE	Pest LCS/MS Spike	500	LCS/LCSD	4F25011

Surrogate & Spike Added By: BFP 8-13-14
Initials / Date

Spiking Witnessed By: CH 8·13·14
Initials / Date

Final Vol Verified: BPatt

Reviewed By: CHartley

Analysts Initials: Extracted: BFP KD: NA N2: NA Bottled up: BFP

Balance ID: 5094

GPC Batch: N/A GPC RUN Date: NA GPC CAL Date: N/A GPC INST#: N/A Filter Brand: N/A Filter Lot#: N/A

Florisil Batch: N/A Florisil RUN Date: NA Florisil Lot #: NA

Manuf. and lot # of reagents/solvents used: Co Hex - 4F27005

GC Extractables Sulfur Clean-up Log

GC-8081B PEST Dilute-n-Shoot

Chemist: [signature]

Date Cleaned: 08/14/2014

Department: GC

Clean-Up Batch: C408047

Extraction: SOM Sulfur Cleanup

Lab Number	Sample Name	Sample Type	Comments
1408028-01	P001-COMP02-LW-01	Sample	
1408028-02	P001-DR0502-LW-01	Sample	
C408047-CBL1	PSBLKZB	Cleanup Blank	

Reviewed by: [signature]

Date: 8/21/14

Tetrabutylammonium (TBA) Sulfite and/or Copper Lot #: 4631002

Internal Chain of Custody

7/31/2013

Extractions Chain of Custody Sheet

Dept: PM

Batch: 4081306 **Status:** Batched

Analysis: GC-8081B PEST Dilute-n-Shoot

Lab Id	Client_Id	Received	Container	Extraction	Preservative	Matrix		
1408028-01 B	P001-COMP02-LW-01	08/12/14	4c_8OZ WM Glass, cool	EPA 3550B_GC	Store cool at 4°C	Soil		
1408028-02 B	P001-DR0502-LW-01	08/12/14	4c_8OZ WM Glass, cool	EPA 3550B_GC	Store cool at 4°C	Soil		

Corh #1	8-13-14 0732	[signature]	8-13-14 0732
Relinquished By	Date/Time	Received By	Date/Time
[signature]	8-13-14 1613	Corh #1	8-13-14 1613
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

EXTRACT CHAIN OF CUSTODY

4081306

COMPUCHEM

Prepared using: GC - EPA 3550B_GC

Matrix: Soil

Lab Number	Client ID	Analysis
1408028-01	P001-COMP02-LW-01	GC-8081B PEST Dilute-n-Shoot
1408028-02	P001-DR0502-LW-01	GC-8081B PEST Dilute-n-Shoot
4081306-BLK1	PBLKBZ	QC
4081306-BS1	PLCSBZ	QC
4081306-BSD1	PLCSDBZ	QC

Relinquished By GC-3	Date 8-13-14 1455	Received By GC Ref. # 3	Date 8-13-14 1455
Relinquished By	Date 8-13-14	Received By GC 4	Date 8-13-14
Relinquished By	Date	Received By	Date
Relinquished By	Date	Received By	Date

Manual Integration Report

CompuChem
A Division Of
Liberty Analytical Corp.

Manual Integration Summary

Client: WESTON SOLUTIONS
Work Order: 1408028
Sdg: 1408028
Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Case:

Analysis: GC-8081B PEST Dilute-n-Shoot
Sample Type: Aroclor Reference
Lab Id: 4H15016-ARC1 **Client Id:** TOXAPH3MA
Instrument: tracegc80

Analyte	Type	M Flag
Toxaphene	TARGET	M
Toxaphene (1)	TARGET	M

Sample Total: 2

Analysis: GC-8081B PEST Dilute-n-Shoot
Sample Type: Aroclor Reference
Lab Id: 4H15016-ARC2 **Client Id:** CHLORO3MA
Instrument: tracegc80

Analyte	Type	M Flag
Technical Chlordane	TARGET	M
Technical Chlordane (1)	TARGET	M

Sample Total: 2

Analysis: GC-8081B PEST Dilute-n-Shoot
Sample Type: Cal Standard
Lab Id: 4H15016-CAL2 **Client Id:** INDC2MA
Instrument: tracegc80

Analyte	Type	M Flag
beta-BHC	TARGET	M

Sample Total: 1

Total Manual Integrations: 5