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: 1408024 SVOA 8270D

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 530

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

325675

CompuChem, a division of Liberty Analytical

Client: WESTON SOLUTIONS **Work:** 1408024

Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ **Sdg:** 1408024

Lab ID	Client ID	Matrix	Date Sampled	Date Received
1408024-01	P001-S002-0002-01	Soil	08/07/2014 00:00	08/08/2014 09:04
1408024-02	P001-S003-0002-01	Soil	08/07/2014 00:00	08/08/2014 09:04
1408024-03	P001-S003-0002-02	Soil	08/07/2014 00:00	08/08/2014 09:04
1408024-04	P001-S006-0002-01	Soil	08/07/2014 00:00	08/08/2014 09:04
1408024-05	P001-S001-0002-01	Soil	08/07/2014 00:00	08/08/2014 09:04
1408024-06	P001-S004-0002-01	Soil	08/07/2014 00:00	08/08/2014 09:04
1408024-07	P001-S005-0002-01	Soil	08/07/2014 00:00	08/08/2014 09:04

ANALYSES DATA PACKAGE COVER PAGE

Client: WESTON SOLUTIONS

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

Laboratory: COMPUCHEM

SDG: 1408024

Client Sample Id:	Analysis:	Lab Sample Id:
P001-S002-0002-01	SW8270D	1408024-01
P001-S003-0002-01	SW8270D	1408024-02
P001-S003-0002-02	SW8270D	1408024-03
P001-S006-0002-01	SW8270D	1408024-04
P001-S001-0002-01	SW8270D	1408024-05
P001-S004-0002-01	SW8270D	1408024-06
P001-S005-0002-01	SW8270D	1408024-07

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: 08/20/2014

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

I. SAMPLE DATA PACKAGE

GC/MS 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)

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. Instrument Performance Check
(MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK)

J. Internal Standard Results
(INTERNAL STANDARD AREA AND RT SUMMARY)

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

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

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

N. BFB / DFTPP or FC43 - Raw Data

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

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

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

R. GPC Data (if applicable)

S. 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: 919/379-4100 Fax: 919/379-4050

SDG NARRATIVE
SDG # 1408024
PROTOCOL: SW-846

SAMPLE IDENTIFICATIONS: **P001-S002-0002-01** **P001-S003-0002-01** **P001-S003-0002-02** **P001-S006-0002-01** **P001-S001-0002-01** **P001-S004-0002-01** **P001-S005-0002-01**

The 7 soil samples listed above were received intact, properly refrigerated at 5.2°C, with proper documentation, in sealed shipping containers, on August 8, 2014. The samples were scheduled for the requested analyses of the semivolatile fraction. SW-846, 3rd Edition, Update 4, Sonication extraction (Method 3550B/C), and Method 8270D were used to prepare and analyze these samples, with the exceptions and/or additions requested by the client. This portion of the narrative deals with the semivolatile fraction only.

Semivolatile

Extraction and analysis holding time requirements were met for these samples. The percent moisture values ranged from 3 to 13 percent.

There were Semivolatile Project/Target Compound List (TCL) analytes identified above the Contract Required Quantitation Limit (CRQL) in these samples. Samples P001-S002-0002-01, P001-S003-0002-01, P001-S003-0002-02, P001-S006-0002-01, P001-S001-0002-01 and P001-S004-0002-01 were initially run at a dilution.

Manual integrations were performed in this SDG, as indicated on the spreadsheet in section S. The reasons have been explained in the notice included in the narrative section of the SDG.

All decafluorotriphenylphosphine (DFTPP) abundance criteria were met for tunes associated to this SDG.
All QC criteria were met for all initial, second source and continuing calibration standards associated to this SDG.

All of the surrogates did not meet recovery and retention time criteria in the analyses of these samples. The surrogates were diluted out.
All of the internal standards met response and retention time criteria in the analyses of these samples.

The associated method blanks met all quality control criteria.

P001-S003-0002-01 was used as the original to prepare the duplicate matrix spikes as requested. The associated duplicate matrix spikes did not met most of the advisory accuracy and precision criteria due to a dilution. The associated Laboratory Control Sample (LCS) prepared and analyzed along with the sample met recovery and precision criteria.

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 20, 2014

GC and GC/MS Column and Trap Specifications Table

COLUMNS

Columns Utilized	Brand Name	Coating Material	ID (mm)	Film Thickness (um)	Length (m)
	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.

CompuChem

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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.

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)

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: 8/7/2014
CarrierName: FedEx
AirbillNo: 7707 8581 7446

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

No: 2-080714-151350-0005
Cooler #: 2A
Lab: Compuchem Labs Inc.
Lab Phone: 919-379-4089

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	Lab QC
1408024-01	P001-S002-0002-01	P001-S002	VOCs	Soil	8/7/2014	3	5 gram Encore	0 C	N
	P001-S002-0002-01	P001-S002	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	P001-S002-0002-01	P001-S002	Percent Moisture	Soil	8/7/2014	1	2 oz	0 C	N
	P001-S002-0002-01	P001-S002	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N
1408024-02	P001-S003-0002-01	P001-S003	VOCs	Soil	8/7/2014	6	5 gram Encore	0 C	Y
	P001-S003-0002-01	P001-S003	SVOC + PCB	Soil	8/7/2014	2	8 oz	0 C	Y
	P001-S003-0002-01	P001-S003	Percent Moisture	Soil	8/7/2014	2	2 oz	0 C	Y
	P001-S003-0002-01	P001-S003	Metals + Hg	Soil	8/7/2014	2	8 oz	0 C	Y
1408024-03	P001-S003-0002-02	P001-S003	VOCs	Soil	8/7/2014	3	5 gram Encore	0 C	N
	P001-S003-0002-02	P001-S003	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	P001-S003-0002-02	P001-S003	Percent Moisture	Soil	8/7/2014	1	2 oz	0 C	N
	P001-S003-0002-02	P001-S003	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N
1408024-06	P001-S004-0002-01	P001-S004	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	~~P001-S005-0002-01~~	~~P001-S005~~	~~VOCs~~	~~Soil~~	~~8/7/2014~~	~~3~~	~~5 gram Encore~~	~~0 C~~	~~N~~
1408024-07	P001-S005-0002-01	P001-S005	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	P001-S005-0002-01	P001-S005	Percent Moisture *	Soil	8/7/2014	1	2 oz *	0 C	N
1408024-07	P001-S005-0002-01	P001-S005	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N
1408024-04	P001-S006-0002-01	P001-S006	VOCs	Soil	8/7/2014	3	5 gram Encore	0 C	N
	P001-S006-0002-01	P001-S006	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N

PL.

Special Instructions: RFP 306

*did not receive % moisture 2oz jar for P001-S005-0002-01 where VOA was crossed off rec'd @ 5.2°C 8/8/14

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)	8/7/14	Doe / CompuChem	8/8/14 0904	good condition 8/8/14

USEPA
DateShipped: 8/7/2014
CarrierName: FedEx
AirbillNo: 7707 8581 7446

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

No: 2-080714-151350-0005
Cooler #: 2A
Lab: Compuchem Labs Inc.
Lab Phone: 919-379-4089

Lab #	Sample #	Location	Analyses	Matrix	Collected	Numb Cont	Container	Preservative	Lab QC
1408024-01	P001-S006-0002-01	P001-S006	Percent Moisture	Soil	8/7/2014	1	2 oz	0 C	N
	P001-S006-0002-01	P001-S006	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N
1408019-10	P001-UST01-LW-01	UST01	VOCs	Liquid Waste	8/7/2014	1	4 oz	None	N
	P001-UST01-LW-01	UST01	SVOC+PCB+PEST	Liquid Waste	8/7/2014	1	8 oz	None	N
	P001-UST01-LW-01	UST01	RCRA	Liquid Waste	8/7/2014	1	8 oz	None	N
	P001-UST01-LW-01	UST01	METALS+Hg	Liquid Waste	8/7/2014	1	500 ml	None	N
1408024-05	P001-S001-0002-01	P001-S001	VOCs	Soil	8/7/2014	3	5 gram Encore	0 C	N
	P001-S001-0002-01	P001-S001	SVOC + PCB	Soil	8/7/2014	1	8 oz	0 C	N
	P001-S001-0002-01	P001-S001	Percent Moisture	Soil	8/7/2014	1	2 oz	0 C	N
	P001-S001-0002-01	P001-S001	Metals + Hg	Soil	8/7/2014	1	8 oz	0 C	N

Special Instructions: RFP 306

rec'd @ 5.2°C

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)	8/7/14	Doy / CompuChem	8/8/14 0904	good condition 8/8/14

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:

XXX Environmental _____ 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 _____ Level B _____ Level C XXX 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

WORK ORDER

1408024

Printed: 8/11/2014 11:26:37AM

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:	1408024 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:	08/21/2014 00:00 (13 day TAT)		
Received By:	Cathy Dover	Date Received:	08/08/2014 09:04
Logged In By:	Cathy Dover	Date Logged In:	08/08/2014 17:09

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

USE 1408024-02 FOR QC*TCL4 VOA 5PPB + EPA-LIKE TICs*SVOC 8270D TCL4 + EPA-LIKE TICs,TCL PEST 8081B & TCL PCB 8082A*TAL METALS 6010C + Hg 7471B

Analysis	Due	TAT	Expires	Received	Comments
1408024-01 P001-S002-0002-01 [Soil] Sampled 08/07/2014 00:00 Eastern					
7470A 7471B Mercury	08/21/2014 16:00	13	09/04/2014 00:00	08/08/2014 09:04	
6010C METALS	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
VOA-8260B 5PPB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=VOA- TCL4 (08-08-14)
SVOC 8270D	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=SV- TCL4 (08-08-14)
Solids, Dry Weight	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
GC-8082A PCB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=GC- 8082 8082 (08-08-14)
1408024-02 P001-S003-0002-01 [Soil] Sampled 08/07/2014 00:00 Eastern					USE FOR QC
VOA-8260B 5PPB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=VOA- TCL4 (08-08-14)
Solids, Dry Weight	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
7470A 7471B Mercury	08/21/2014 16:00	13	09/04/2014 00:00	08/08/2014 09:04	
6010C METALS	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
GC-8082A PCB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=GC- 8082 8082 (08-08-14)
SVOC 8270D	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=SV- TCL4 (08-08-14)

WORK ORDER

Printed: 8/11/2014 11:26:37AM

1408024

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:	1408024 CASE:	Status:	Batched

Date Due: 08/21/2014 00:00 (13 day TAT)

Received By: Cathy Dover — Date Received: 08/08/2014 09:04

Logged In By: Cathy Dover — Date Logged In: 08/08/2014 17:09

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

USE 1408024-02 FOR QC*TCL4 VOA 5PPB + EPA-LIKE TICs*SVOC 8270D TCL4 + EPA-LIKE TICs,TCL PEST 8081B & TCL PCB 8082A*TAL METALS 6010C + Hg 7471B

Analysis	Due	TAT	Expires	Received	Comments
1408024-03 P001-S003-0002-02 [Soil] Sampled 08/07/2014 00:00 Eastern					
SVOC 8270D	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=SV- TCL4 (08-08-14)
Solids, Dry Weight	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
GC-8082A PCB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=GC- 8082 8082 (08-08-14)
7470A 7471B Mercury	08/21/2014 16:00	13	09/04/2014 00:00	08/08/2014 09:04	
6010C METALS	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
VOA-8260B 5PPB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=VOA- TCL4 (08-08-14)
1408024-04 P001-S006-0002-01 [Soil] Sampled 08/07/2014 00:00 Eastern					
VOA-8260B 5PPB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=VOA- TCL4 (08-08-14)
GC-8082A PCB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=GC- 8082 8082 (08-08-14)
Solids, Dry Weight	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
6010C METALS	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
SVOC 8270D	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=SV- TCL4 (08-08-14)
7470A 7471B Mercury	08/21/2014 16:00	13	09/04/2014 00:00	08/08/2014 09:04	
1408024-05 P001-S001-0002-01 [Soil] Sampled 08/07/2014 00:00 Eastern					
Solids, Dry Weight	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
7470A 7471B Mercury	08/21/2014 16:00	13	09/04/2014 00:00	08/08/2014 09:04	
GC-8082A PCB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=GC- 8082 8082 (08-08-14)
SVOC 8270D	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=SV- TCL4 (08-08-14)
VOA-8260B 5PPB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=VOA- TCL4 (08-08-14)
6010C METALS	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
1408024-06 P001-S004-0002-01 [Soil] Sampled 08/07/2014 00:00 Eastern					
Solids, Dry Weight	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
GC-8082A PCB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=GC- 8082 8082 (08-08-14)
SVOC 8270D	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=SV- TCL4 (08-08-14)

WORK ORDER

Printed: 8/11/2014 11:26:37AM

1408024

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:	**1408024** **CASE:**	**Status:**	**Batched**

Date Due:	08/21/2014 00:00 (13 day TAT)		
Received By:	Cathy Dover	Date Received:	08/08/2014 09:04
Logged In By:	Cathy Dover	Date Logged In:	08/08/2014 17:09

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

USE 1408024-02 FOR QC*TCL4 VOA 5PPB + EPA-LIKE TICs*SVOC 8270D TCL4 + EPA-LIKE TICs,TCL PEST 8081B & TCL PCB 8082A*TAL METALS 6010C + Hg 7471B

Analysis	Due	TAT	Expires	Received	Comments
1408024-07 P001-S005-0002-01 [Soil] Sampled 08/07/2014 00:00 Eastern					
SVOC 8270D	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=SV- TCL4 (08-08-14)
Solids, Dry Weight	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	
GC-8082A PCB	08/21/2014 16:00	13	08/21/2014 00:00	08/08/2014 09:04	SubList=GC- 8082 8082 (08-08-14)
7470A 7471B Mercury	08/21/2014 16:00	13	09/04/2014 00:00	08/08/2014 09:04	
6010C METALS	08/21/2014 16:00	13	02/03/2015 00:00	08/08/2014 09:04	

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

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024

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-S002-0002-01	08/07/14	08/08/14	08/12/14	5	14	08/15/14	3.5	40	
P001-S003-0002-01	08/07/14	08/08/14	08/12/14	5	14	08/15/14	3.4	40	
P001-S003-0002-02	08/07/14	08/08/14	08/12/14	5	14	08/15/14	3.6	40	
P001-S006-0002-01	08/07/14	08/08/14	08/12/14	5	14	08/15/14	3.6	40	
P001-S001-0002-01	08/07/14	08/08/14	08/12/14	5	14	08/15/14	3.6	40	
P001-S004-0002-01	08/07/14	08/08/14	08/12/14	5	14	08/16/14	3.6	40	
P001-S005-0002-01	08/07/14	08/08/14	08/12/14	5	14	08/15/14	3.4	40	

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D. Surrogate Recovery Results

(SURROGATE STANDARD RECOVERY)

SURROGATE STANDARD RECOVERY

SW8270D

use this data

Client: WESTON SOLUTIONS

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

SDG: 1408024 Instrument: 5972hp62

Sequence: 4H15001 Calibration: 4072701

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	Q
Blank (4080818-BLK2) ug/kg wet Lab File ID: 4080818-BLK2J62.d Analyzed: 08/15/14 17:05				
2-Fluorophenol	3333	82	35 - 105	
Phenol-d5	3333	65	40 - 100	
Nitrobenzene-d5	1667	70	35 - 100	
2-Fluorobiphenyl	1667	74	45 - 105	
2,4,6-Tribromophenol	3333	81	35 - 125	
Terphenyl-d14	1667	84	30 - 125	
P001-S005-0002-01 (1408024-07) ug/kg dry Lab File ID: 1408024-0762.d Analyzed: 08/15/14 18:24				
2-Fluorophenol	3780	81	35 - 105	
Phenol-d5	3780	65	40 - 100	
Nitrobenzene-d5	1890	66	35 - 100	
2-Fluorobiphenyl	1890	72	45 - 105	
2,4,6-Tribromophenol	3780	90	35 - 125	
Terphenyl-d14	1890	85	30 - 125	
P001-S003-0002-01 (1408024-02) ug/kg dry Lab File ID: 1408024-02D62.d Analyzed: 08/15/14 19:43				
2-Fluorophenol	3453	75	35 - 105	
Phenol-d5	3453	64	40 - 100	
Nitrobenzene-d5	1726	64	35 - 100	
2-Fluorobiphenyl	1726	76	45 - 105	
2,4,6-Tribromophenol	3453	73	35 - 125	
Terphenyl-d14	1726	80	30 - 125	

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SURROGATE STANDARD RECOVERY

SW8270D

Client: WESTON SOLUTIONS

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

SDG: 1408024 Instrument: 5972hp62

Sequence: 4H15001 Calibration: 4072701

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	Q
Matrix Spike (4080818-MS1) ug/kg dry				
Lab File ID: 4080818-MS1D62.d	Analyzed: 08/15/14 20:23			
2-Fluorophenol	3441	80	35 - 105	
Phenol-d5	3441	67	40 - 100	
Nitrobenzene-d5	1721		35 - 100	*
2-Fluorobiphenyl	1721		45 - 105	*
2,4,6-Tribromophenol	3441	85	35 - 125	
Terphenyl-d14	1721		30 - 125	*
Matrix Spike Dup (4080818-MSD1) ug/kg dry				
Lab File ID: 4080818-MSD1D62.d	Analyzed: 08/15/14 21:02			
2-Fluorophenol	3441	79	35 - 105	
Phenol-d5	3441	68	40 - 100	
Nitrobenzene-d5	1721		35 - 100	*
2-Fluorobiphenyl	1721		45 - 105	*
2,4,6-Tribromophenol	3441	82	35 - 125	
Terphenyl-d14	1721		30 - 125	*
P001-S002-0002-01 (1408024-01) ug/kg dry				
Lab File ID: 1408024-01D62.d	Analyzed: 08/15/14 21:42			
2-Fluorophenol	3650	67	35 - 105	
Phenol-d5	3650	54	40 - 100	
Nitrobenzene-d5	1825	54	35 - 100	
2-Fluorobiphenyl	1825	62	45 - 105	
2,4,6-Tribromophenol	3650	61	35 - 125	
Terphenyl-d14	1825	63	30 - 125	

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SURROGATE STANDARD RECOVERY

SW8270D

Client: WESTON SOLUTIONS

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

SDG: 1408024 Instrument: 5972hp62

Sequence: 4H15001 Calibration: 4072701

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	Q
P001-S003-0002-02 (1408024-03) ug/kg dry Lab File ID: 1408024-03D62.d Analyzed: 08/15/14 22:22				
2-Fluorophenol	3455	67	35 - 105	
Phenol-d5	3455	57	40 - 100	
Nitrobenzene-d5	1728	57	35 - 100	
2-Fluorobiphenyl	1728	67	45 - 105	
2,4,6-Tribromophenol	3455	63	35 - 125	
Terphenyl-d14	1728	69	30 - 125	
P001-S006-0002-01 (1408024-04) ug/kg dry Lab File ID: 1408024-04D62.d Analyzed: 08/15/14 23:01				
2-Fluorophenol	4230	56	35 - 105	
Phenol-d5	4230	49	40 - 100	
Nitrobenzene-d5	2115	46	35 - 100	
2-Fluorobiphenyl	2115	53	45 - 105	
2,4,6-Tribromophenol	4230	56	35 - 125	
Terphenyl-d14	2115	57	30 - 125	
P001-S001-0002-01 (1408024-05) ug/kg dry Lab File ID: 1408024-05D62.d Analyzed: 08/15/14 23:41				
2-Fluorophenol	3645	69	35 - 105	
Phenol-d5	3645	58	40 - 100	
Nitrobenzene-d5	1823	59	35 - 100	
2-Fluorobiphenyl	1823	72	45 - 105	
2,4,6-Tribromophenol	3645	70	35 - 125	
Terphenyl-d14	1823	72	30 - 125	

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SURROGATE STANDARD RECOVERY

SW8270D

Client: WESTON SOLUTIONS

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

SDG: 1408024 Instrument: 5972hp62

Sequence: 4H15001 Calibration: 4072701

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	Q
P001-S004-0002-01 (1408024-06) ug/kg dry				
Lab File ID: 1408024-06D62.d	Analyzed: 08/16/14 00:21			
2-Fluorophenol	3424		35 - 105	*
Phenol-d5	3424		40 - 100	*
Nitrobenzene-d5	1712		35 - 100	*
2-Fluorobiphenyl	1712		45 - 105	*
2,4,6-Tribromophenol	3424		35 - 125	*
Terphenyl-d14	1712		30 - 125	*

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SURROGATE STANDARD RECOVERY

SW8270D

Client: WESTON SOLUTIONS

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

SDG: 1408024 Instrument: 5972hp66

Sequence: 4H12011 Calibration: 4080605

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	Q
Blank (4080818-BLK1) ug/kg wet				
Lab File ID: 4080818-BLK166.d	Analyzed: 08/12/14 16:15			
2-Fluorophenol	3333	86	35 - 105	
Phenol-d5	3333	68	40 - 100	
Nitrobenzene-d5	1667	81	35 - 100	
2-Fluorobiphenyl	1667	73	45 - 105	
2,4,6-Tribromophenol	3333	82	35 - 125	
Terphenyl-d14	1667	85	30 - 125	
LCS (4080818-BS1) ug/kg wet				
Lab File ID: 4080818-BS166.d	Analyzed: 08/12/14 16:54			
2-Fluorophenol	3333	86	35 - 105	
Phenol-d5	3333	70	40 - 100	
Nitrobenzene-d5	1667	75	35 - 100	
2-Fluorobiphenyl	1667	75	45 - 105	
2,4,6-Tribromophenol	3333	98	35 - 125	
Terphenyl-d14	1667	84	30 - 125	

DO NOT USE

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SURROGATE STANDARD RECOVERY

SW8270D

Client: WESTON SOLUTIONS

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

SDG: 1408024 Instrument: 5972hp62

Sequence: 4H15001 Calibration: 4072701

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	Q
Blank (4080818-BLK2) ug/kg wet				
Lab File ID: 4080818-BLK2J62.d	Analyzed: 08/15/14 17:05			
2-Fluorophenol	3333	82	35 - 105	
Phenol-d5	3333	65	40 - 100	
Nitrobenzene-d5	1667	70	35 - 100	
2-Fluorobiphenyl	1667	74	45 - 105	
2,4,6-Tribromophenol	3333	81	35 - 125	
Terphenyl-d14	1667	84	30 - 125	
P001-S005-0002-01 (1408024-07) ug/kg dry				
Lab File ID: 1408024-0762.d	Analyzed: 08/15/14 18:24			
2-Fluorophenol	3780	81	35 - 105	
Phenol-d5	3780	65	40 - 100	
Nitrobenzene-d5	1890	66	35 - 100	
2-Fluorobiphenyl	1890	72	45 - 105	
2,4,6-Tribromophenol	3780	90	35 - 125	
Terphenyl-d14	1890	85	30 - 125	
P001-S003-0002-01 (1408024-02) ug/kg dry				
Lab File ID: 1408024-02D62.d	Analyzed: 08/15/14 19:43			
2-Fluorophenol	3453	75	35 - 105	
Phenol-d5	3453	64	40 - 100	
Nitrobenzene-d5	1726		35 - 100	*
2-Fluorobiphenyl	1726		45 - 105	*
2,4,6-Tribromophenol	3453	73	35 - 125	
Terphenyl-d14	1726		30 - 125	*

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SURROGATE STANDARD RECOVERY

SW8270D

Client: WESTON SOLUTIONS

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

SDG: 1408024 Instrument: 5972hp62

Sequence: 4H15001 Calibration: 4072701

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	Q
Matrix Spike (4080818-MS1) ug/kg dry				
Lab File ID: 4080818-MS1D62.d	Analyzed: 08/15/14 20:23			
2-Fluorophenol	3441	80	35 - 105	
Phenol-d5	3441	67	40 - 100	
Nitrobenzene-d5	1721		35 - 100	*
2-Fluorobiphenyl	1721		45 - 105	*
2,4,6-Tribromophenol	3441	85	35 - 125	
Terphenyl-d14	1721		30 - 125	*
Matrix Spike Dup (4080818-MSD1) ug/kg dry				
Lab File ID: 4080818-MSD1D62.d	Analyzed: 08/15/14 21:02			
2-Fluorophenol	3441	79	35 - 105	
Phenol-d5	3441	68	40 - 100	
Nitrobenzene-d5	1721		35 - 100	*
2-Fluorobiphenyl	1721		45 - 105	*
2,4,6-Tribromophenol	3441	82	35 - 125	
Terphenyl-d14	1721		30 - 125	*
P001-S002-0002-01 (1408024-01) ug/kg dry				
Lab File ID: 1408024-01D62.d	Analyzed: 08/15/14 21:42			
2-Fluorophenol	3650	67	35 - 105	
Phenol-d5	3650	54	40 - 100	
Nitrobenzene-d5	1825		35 - 100	*
2-Fluorobiphenyl	1825		45 - 105	*
2,4,6-Tribromophenol	3650	61	35 - 125	
Terphenyl-d14	1825		30 - 125	*

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SURROGATE STANDARD RECOVERY

SW8270D

Client: WESTON SOLUTIONS

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

SDG: 1408024 Instrument: 5972hp62

Sequence: 4H15001 Calibration: 4072701

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	Q
P001-S003-0002-02 (1408024-03) ug/kg dry				
Lab File ID: 1408024-03D62.d	Analyzed: 08/15/14 22:22			
2-Fluorophenol	3455	67	35 - 105	
Phenol-d5	3455	57	40 - 100	
Nitrobenzene-d5	1728	[illegible]	35 - 100	*
2-Fluorobiphenyl	1728	[illegible]	45 - 105	*
2,4,6-Tribromophenol	3455	63	35 - 125	
Terphenyl-d14	1728	[illegible]	30 - 125	*
P001-S006-0002-01 (1408024-04) ug/kg dry				
Lab File ID: 1408024-04D62.d	Analyzed: 08/15/14 23:01			
2-Fluorophenol	4230	56	35 - 105	
Phenol-d5	4230	[illegible]	40 - 100	*
Nitrobenzene-d5	2115	[illegible]	35 - 100	*
2-Fluorobiphenyl	2115	[illegible]	45 - 105	*
2,4,6-Tribromophenol	4230	56	35 - 125	
Terphenyl-d14	2115	[illegible]	30 - 125	*
P001-S001-0002-01 (1408024-05) ug/kg dry				
Lab File ID: 1408024-05D62.d	Analyzed: 08/15/14 23:41			
2-Fluorophenol	3645	69	35 - 105	
Phenol-d5	3645	58	40 - 100	
Nitrobenzene-d5	1823	[illegible]	35 - 100	*
2-Fluorobiphenyl	1823	[illegible]	45 - 105	*
2,4,6-Tribromophenol	3645	70	35 - 125	
Terphenyl-d14	1823	[illegible]	30 - 125	*

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SURROGATE STANDARD RECOVERY

SW8270D

Client: WESTON SOLUTIONS

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

SDG: 1408024 Instrument: 5972hp62

Sequence: 4H15001 Calibration: 4072701

Surrogate Compound	Spike Level	% Recovery	Recovery Limits	Q
P001-S004-0002-01 (1408024-06) ug/kg dry				
Lab File ID: 1408024-06D62.d	Analyzed: 08/16/14 00:21			
2-Fluorophenol	3424		35 - 105	*
Phenol-d5	3424		40 - 100	*
Nitrobenzene-d5	1712		35 - 100	*
2-Fluorobiphenyl	1712		45 - 105	*
2,4,6-Tribromophenol	3424		35 - 125	*
Terphenyl-d14	1712		30 - 125	*

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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

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4080818-BS1 Matrix: Soil Client ID: SLCSBV Batch: 4080818

ANALYTE	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	LCS % REC.	Q	QC LIMITS REC.
Phenol	1333	947	71		40 - 100
Bis(2-chloroethyl)ether	1333	872	65		40 - 105
2-Chlorophenol	1333	944	71		45 - 105
2-Methylphenol	1333	907	68		40 - 105
2,2'-oxybis(1-Chloropropane)	1333	903	68		20 - 150
3 & 4-Methylphenol	1333	857	64		40 - 105
N-Nitroso-di-N-propylamine	1333	848	64		40 - 115
Acetophenone	1333	824	62		20 - 150
Hexachloroethane	1333	825	62		35 - 110
Nitrobenzene	1333	988	74		40 - 115
Isophorone	1333	920	69		45 - 110
2-Nitrophenol	1333	1120	84		40 - 110
2,4-Dimethylphenol	1333	916	69		30 - 105
Bis(2-chloroethoxy)methane	1333	923	69		45 - 110
2,4-Dichlorophenol	1333	1010	76		45 - 110
Naphthalene	1333	928	70		20 - 150
4-Chloroaniline	1333	672	50		20 - 150
Hexachlorobutadiene	1333	955	72		40 - 115
4-Chloro-3-methylphenol	1333	992	74		45 - 115
2-Methylnaphthalene	1333	919	69		45 - 105
Hexachlorocyclopentadiene	1333	818	61		20 - 150
2,4,6-Trichlorophenol	1333	1100	83		45 - 110
2,4,5-Trichlorophenol	1333	1160	87		50 - 110
2-Chloronaphthalene	1333	990	74		45 - 105
2-Nitroaniline	1333	1290	96		45 - 120
Dimethylphthalate	1333	1080	81		50 - 110
2,6-Dinitrotoluene	1333	1210	91		20 - 150

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LCS / LCS DUPLICATE SUMMARY

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4080818-BS1 Matrix: Soil Client ID: SLCSBV Batch: 4080818

ANALYTE	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	LCS % REC.	Q	QC LIMITS REC.
Acenaphthylene	1333	1060	80		45 - 105
3-Nitroaniline	1333	987	74		25 - 110
Acenaphthene	1333	1040	78		45 - 110
2,4-Dinitrophenol	1333	1490	112		15 - 130
4-Nitrophenol	1333	1360	102		15 - 140
2,4-Dinitrotoluene	1333	1170	88		50 - 115
Dibenzofuran	1333	1030	77		50 - 105
Diethylphthalate	1333	1100	83		50 - 115
4-Chlorophenyl-phenylether	1333	1050	79		45 - 110
Fluorene	1333	1060	79		55 - 110
4-Nitroaniline	1333	1090	82		35 - 115
4,6-Dinitro-2-methylphenol	1333	1360	102		30 - 135
N-Nitrosodiphenylamine (1)	1333	1120	84		50 - 115
4-Bromophenyl-phenylether	1333	1080	81		45 - 115
Hexachlorobenzene	1333	1060	80		45 - 120
Pentachlorophenol	1333	1280	96		25 - 120
Phenanthrene	1333	1090	82		50 - 110
Anthracene	1333	1090	82		55 - 105
Carbazole	1333	1090	82		45 - 115
Di-n-butylphthalate	1333	997	75		55 - 110
Fluoranthene	1333	1030	77		55 - 115
Pyrene	1333	1120	84		45 - 125
Butylbenzylphthalate	1333	1130	85		50 - 125
3,3'-Dichlorobenzidine	1333	918	69		20 - 150
bis(2-ethylhexyl)Phthalate	1333	1090	82		45 - 125
Benzo (a) anthracene	1333	1100	82		50 - 110
Chrysene	1333	1170	87		55 - 110

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LCS / LCS DUPLICATE SUMMARY

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4080818-BS1 Matrix: Soil Client ID: SLCSBV Batch: 4080818

ANALYTE	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	LCS % REC.	Q	QC LIMITS REC.
Di-n-octylphthalate	1333	1200	90		40 - 130
Benzo (b) fluoranthene	1333	1230	92		45 - 115
Benzo(k)fluoranthene	1333	1110	83		45 - 125
Benzo (a) pyrene	1333	1120	84		50 - 110
Indeno(1,2,3-cd)pyrene	1333	1150	86		40 - 120
Dibenzo(a,h)anthracene	1333	1080	81		40 - 125
Benzo (g,h,i) perylene	1333	1200	90		40 - 125
Benzaldehyde	1333	648	49		20 - 150
Caprolactam	1333	1020	77		20 - 150
Atrazine	1333	875	66		20 - 150
1,1'-Biphenyl	1333	993	74		20 - 150

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F. Matrix Spike Results

(MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY)

MS/MSD recovery, relative percent difference and quality control acceptance criteria

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SW8270D

P001-S003-0002-01MS

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4080818-MS1 % Solid: 96 Matrix: Soil Lab Source ID: 1408024-02 Source Sample: P001-S003-0002-01

ANALYTE	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	MS CONCENTRATION (ug/kg dry)	MS % REC.	Q	QC LIMITS REC.
Phenol	1377	3400 U	1020 JD	74		40 - 100
Bis(2-chloroethyl)ether	1377	1800 U	882 JD	64		40 - 105
2-Chlorophenol	1377	3400 U	988 JD	72		45 - 105
2-Methylphenol	1377	3400 U	952 JD	69		40 - 105
2,2'-oxybis(1-Chloropropane)	1377	1800 U	882 JD	64		20 - 150
3 & 4-Methylphenol	1377	3400 U	931 JD	68		40 - 105
N-Nitroso-di-N-propylamine	1377	1800 U	824 JD	60		40 - 115
Acetophenone	1377	1800 U	833 JD	61		20 - 150
Hexachloroethane	1377	1800 U	1800 U	0	*	35 - 110
Nitrobenzene	1377	1800 U	896 JD	65		40 - 115
Isophorone	1377	1800 U	919 JD	67		45 - 110
2-Nitrophenol	1377	3400 U	858 JD	62		40 - 110
2,4-Dimethylphenol	1377	3400 U	956 JD	69		30 - 105
Bis(2-chloroethoxy)methane	1377	1800 U	1020 JD	74		45 - 110
2,4-Dichlorophenol	1377	3400 U	1070 JD	78		45 - 110
Naphthalene	1377	1800 U	1230 JD	89		20 - 150
4-Chloroaniline	1377	3400 U	786 JD	57		20 - 150
Hexachlorobutadiene	1377	1800 U	1080 JD	79		40 - 115
4-Chloro-3-methylphenol	1377	3400 U	1070 JD	77		45 - 115
2-Methylnaphthalene	1377	1800 U	1160 JD	84		45 - 105
Hexachlorocyclopentadiene	1377	1800 U	463 JD	34		20 - 150
2,4,6-Trichlorophenol	1377	3400 U	1030 JD	74		45 - 110
2,4,5-Trichlorophenol	1377	3400 U	983 JD	71		50 - 110
2-Chloronaphthalene	1377	1800 U	1060 JD	77		45 - 105
2-Nitroaniline	1377	3400 U	1180 JD	85		45 - 120
Dimethylphthalate	1377	1800 U	1080 JD	79		50 - 110
2,6-Dinitrotoluene	1377	1800 U	922 JD	67		20 - 150
Acenaphthylene	1377	1800 U	1090 JD	79		45 - 105
3-Nitroaniline	1377	3400 U	981 JD	71		25 - 110
Acenaphthene	1377	1800 U	2010 D	146	*	45 - 110

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SW8270D

P001-S003-0002-01MS

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4080818-MS1 % Solid: 96 Matrix: Soil Lab Source ID: 1408024-02 Source Sample: P001-S003-0002-01

ANALYTE	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	MS CONCENTRATION (ug/kg dry)	MS % REC.	Q	QC LIMITS REC.
2,4-Dinitrophenol	1377	3400 U	3400 U	0	*	15 - 130
4-Nitrophenol	1377	3400 U	1660 JD	120		15 - 140
2,4-Dinitrotoluene	1377	1800 U	843 JD	61		50 - 115
Dibenzofuran	1377	1800 U	1660 JD	121	*	50 - 105
Diethylphthalate	1377	1800 U	1170 JD	85		50 - 115
4-Chlorophenyl-phenylether	1377	1800 U	1140 JD	83		45 - 110
Fluorene	1377	260 JD	2150 D	137	*	50 - 110
4-Nitroaniline	1377	3400 U	981 JD	71		35 - 115
4,6-Dinitro-2-methylphenol	1377	3400 U	1360 JD	99		30 - 135
N-Nitrosodiphenylamine (1)	1377	1800 U	1090 JD	79		50 - 115
4-Bromophenyl-phenylether	1377	1800 U	1100 JD	80		45 - 115
Hexachlorobenzene	1377	1800 U	1130 JD	82		45 - 120
Pentachlorophenol	1377	3400 U	2400 JD	174	*	25 - 120
Phenanthrene	1377	3000 D	11200 D	592	*	50 - 110
Anthracene	1377	600 JD	3340 D	199	*	55 - 105
Carbazole	1377	370 JD	2580 D	161	*	45 - 115
Di-n-butylphthalate	1377	1800 U	1130 JD	82		55 - 110
Fluoranthene	1377	4800 D	14900 D	729	*	55 - 115
Pyrene	1377	3600 D	10800 D	526	*	45 - 125
Butylbenzylphthalate	1377	1800 U	1100 JD	80		50 - 125
3,3'-Dichlorobenzidine	1377	1800 U	722 JD	52		20 - 150
bis(2-ethylhexyl)Phthalate	1377	1800 U	1170 JD	85		45 - 125
Benzo (a) anthracene	1377	2000 D	6420 D	320	*	50 - 110
Chrysene	1377	2200 D	6640 D	322	*	55 - 110
Di-n-octylphthalate	1377	1800 U	1070 JD	78		40 - 130
Benzo (b) fluoranthene	1377	2600 D	7630 D	369	*	45 - 115
Benzo(k)fluoranthene	1377	1300 JD	3840 D	182	*	45 - 125
Benzo (a) pyrene	1377	1900 D	5480 D	261	*	50 - 110
Indeno(1,2,3-cd)pyrene	1377	1400 JD	3810 D	175	*	40 - 120
Dibenzo(a,h)anthracene	1377	1800 U	1490 JD	108		40 - 125

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SW8270D

P001-S003-0002-01MS

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4080818-MS1 % Solid: 96 Matrix: Soil Lab Source ID: 1408024-02 Source Sample: P001-S003-0002-01

ANALYTE	SPIKE ADDED (ug/kg dry)	SAMPLE CONCENTRATION (ug/kg dry)	MS CONCENTRATION (ug/kg dry)	MS % REC.	Q	QC LIMITS REC.
Benzo (g,h,i) perylene	1377	1200 JD	3450 D	161	*	40 - 125
Benzaldehyde	1377	1800 U	654 JD	47		20 - 150
Caprolactam	1377	1800 U	824 JD	60		20 - 150
Atrazine	1377	1800 U	911 JD	66		20 - 150
1,1'-Biphenyl	1377	1800 U	1070 JD	78		20 - 150

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SW8270D

P001-S003-0002-01MSD

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4080818-MSD1 % Solid: 96 Matrix: Soil Lab Source ID: 1408024-02 Source Sample: P001-S003-0002-01

ANALYTE	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	MSD % REC. #	% RPD	Q	QC LIMITS RPD	QC LIMITS REC.
Phenol	1377	952 JD	69	7		30	40 - 100
Bis(2-chloroethyl)ether	1377	881 JD	64	0.1		30	40 - 105
2-Chlorophenol	1377	985 JD	72	0.3		30	45 - 105
2-Methylphenol	1377	934 JD	68	2		30	40 - 105
2,2'-oxybis(1-Chloropropane)	1377	917 JD	67	4		30	20 - 150
3 & 4-Methylphenol	1377	933 JD	68	0.3		30	40 - 105
N-Nitroso-di-N-propylamine	1377	871 JD	63	6		30	40 - 115
Acetophenone	1377	838 JD	61	0.6		30	20 - 150
Hexachloroethane	1377	1800 U	0		*	30	35 - 110
Nitrobenzene	1377	911 JD	66	2		30	40 - 115
Isophorone	1377	929 JD	67	1		30	45 - 110
2-Nitrophenol	1377	910 JD	66	6		30	40 - 110
2,4-Dimethylphenol	1377	1040 JD	75	8		30	30 - 105
Bis(2-chloroethoxy)methane	1377	984 JD	71	4		30	45 - 110
2,4-Dichlorophenol	1377	1070 JD	77	0.9		30	45 - 110
Naphthalene	1377	1400 JD	101	13		30	20 - 150
4-Chloroaniline	1377	732 JD	53	7		30	20 - 150
Hexachlorobutadiene	1377	1140 JD	82	5		30	40 - 115
4-Chloro-3-methylphenol	1377	1040 JD	76	2		30	45 - 115
2-Methylnaphthalene	1377	1340 JD	97	14		30	45 - 105
Hexachlorocyclopentadiene	1377	568 JD	41	20		30	20 - 150
2,4,6-Trichlorophenol	1377	1060 JD	77	4		30	45 - 110
2,4,5-Trichlorophenol	1377	1130 JD	82	13		30	50 - 110
2-Chloronaphthalene	1377	1110 JD	80	4		30	45 - 105
2-Nitroaniline	1377	1180 JD	86	0.7		30	45 - 120
Dimethylphthalate	1377	1060 JD	77	2		30	50 - 110
2,6-Dinitrotoluene	1377	1010 JD	73	9		30	20 - 150
Acenaphthylene	1377	1110 JD	80	2		30	45 - 105
3-Nitroaniline	1377	929 JD	67	5		30	25 - 110
Acenaphthene	1377	2420 D	176	18	*	30	45 - 110
2,4-Dinitrophenol	1377	2870 JD	209		*	30	15 - 130

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SW8270D

P001-S003-0002-01MSD

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4080818-MSD1 % Solid: 96 Matrix: Soil Lab Source ID: 1408024-02 Source Sample: P001-S003-0002-01

ANALYTE	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	MSD % REC. #	% RPD	Q	QC LIMITS RPD	QC LIMITS REC.
4-Nitrophenol	1377	1780 JD	129	7		30	15 - 140
2,4-Dinitrotoluene	1377	897 JD	65	6		30	50 - 115
Dibenzofuran	1377	1990 D	144	18	*	30	50 - 105
Diethylphthalate	1377	1130 JD	82	4		30	50 - 115
4-Chlorophenyl-phenylether	1377	1130 JD	82	0.9		30	45 - 110
Fluorene	1377	2520 D	164	16	*	30	50 - 110
4-Nitroaniline	1377	962 JD	70	2		30	35 - 115
4,6-Dinitro-2-methylphenol	1377	1500 JD	109	10		30	30 - 135
N-Nitrosodiphenylamine (1)	1377	1200 JD	87	10		30	50 - 115
4-Bromophenyl-phenylether	1377	1150 JD	84	4		30	45 - 115
Hexachlorobenzene	1377	1130 JD	82	0.04		30	45 - 120
Pentachlorophenol	1377	2620 JD	190	9	*	30	25 - 120
Phenanthrene	1377	11000 D	580	2	*	30	50 - 110
Anthracene	1377	3680 D	224	10	*	30	55 - 105
Carbazole	1377	2520 D	157	2	*	30	45 - 115
Di-n-butylphthalate	1377	1140 JD	83	1		30	55 - 110
Fluoranthene	1377	12600 D	564	17	*	30	55 - 115
Pyrene	1377	9690 D	444	11	*	30	45 - 125
Butylbenzylphthalate	1377	1150 JD	84	5		30	50 - 125
3,3'-Dichlorobenzidine	1377	729 JD	53	1		30	20 - 150
bis(2-ethylhexyl)Phthalate	1377	1180 JD	86	0.8		30	45 - 125
Benzo (a) anthracene	1377	6180 D	302	4	*	30	50 - 110
Chrysene	1377	6320 D	298	5	*	30	55 - 110
Di-n-octylphthalate	1377	1180 JD	86	9		30	40 - 130
Benzo (b) fluoranthene	1377	6530 D	289	16	*	30	45 - 115
Benzo(k)fluoranthene	1377	4310 D	216	11	*	30	45 - 125
Benzo (a) pyrene	1377	5320 D	249	3	*	30	50 - 110
Indeno(1,2,3-cd)pyrene	1377	3760 D	172	1	*	30	40 - 120
Dibenzo(a,h)anthracene	1377	1690 JD	123	13		30	40 - 125
Benzo (g,h,i) perylene	1377	3640 D	175	5	*	30	40 - 125
Benzaldehyde	1377	820 JD	60	23		30	20 - 150

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MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

SW8270D

P001-S003-0002-01MSD

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Lab ID: 4080818-MSD1 % Solid: 96 Matrix: Soil Lab Source ID: 1408024-02 Source Sample: P001-S003-0002-01

ANALYTE	SPIKE ADDED (ug/kg dry)	MSD CONCENTRATION (ug/kg dry)	MSD % REC. #	% RPD	Q	QC LIMITS RPD	QC LIMITS REC.
Caprolactam	1377	796 JD	58	3		30	20 - 150
Atrazine	1377	886 JD	64	3		30	20 - 150
1,1'-Biphenyl	1377	1200 JD	87	11		30	20 - 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

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Batch: 4080818 Matrix: Soil Preparation: EPA 3550C MOD_SVOA

SAMPLE NAME	LAB SAMPLE ID	DATE PREPARED	INITIAL VOL/WT (g)	FINAL VOL/WT (uL)
P001-S002-0002-01	1408024-01	08/12/14 09:00	30.2	1000
P001-S003-0002-01	1408024-02	08/12/14 09:00	30.1	1000
P001-S003-0002-02	1408024-03	08/12/14 09:00	30.1	1000
P001-S006-0002-01	1408024-04	08/12/14 09:00	30.3	1000
P001-S001-0002-01	1408024-05	08/12/14 09:00	30.0	1000
P001-S004-0002-01	1408024-06	08/12/14 09:00	30.1	15000
P001-S005-0002-01	1408024-07	08/12/14 09:00	30.5	1000
SBLKBV	4080818-BLK1	08/12/14 09:00	30.0	1000
SBLKVB	4080818-BLK2	08/12/14 09:00	30.0	1000
SLCSBV	4080818-BS1	08/12/14 09:00	30.0	1000
P001-S003-0002-01MS	4080818-MS1	08/12/14 09:00	30.2	1000
P001-S003-0002-01MSD	4080818-MSD1	08/12/14 09:00	30.2	1000

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H. Analysis Sequence Summary

(ANALYSIS SEQUENCE SUMMARY)

ANALYSIS SEQUENCE SUMMARY

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Sequence: 4G23008 Calibration: 4072701 Instrument: 5972hp62

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
DFTPPBP	4G23008-TUN1	4G23008-TUN162.d	07/23/14 19:09:00
SSTD060BP	4G23008-CAL6	4G23008-CAL662.d	07/23/14 19:31:00
SSTD050BP	4G23008-CAL5	4G23008-CAL562.d	07/23/14 20:11:00
SSTD040BP	4G23008-CAL4	4G23008-CAL462.d	07/23/14 20:50:00
SSTD025BP	4G23008-CAL3	4G23008-CAL362.d	07/23/14 21:30:00
SSTD010BP	4G23008-CAL2	4G23008-CAL262.d	07/23/14 22:09:00
SSTD005BP	4G23008-CAL1	4G23008-CAL162.d	07/23/14 22:48:00
SCV025VAL1BP	4G23008-SCV1	4G23008-SCV162.d	07/23/14 23:28:00

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ANALYSIS SEQUENCE SUMMARY

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Sequence: 4H05004 Calibration: 4080605 Instrument: 5972hp66

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
DFTPPCR	4H05004-TUN1	4H05004-TUN1R66.d	08/05/14 11:46:00
SSTD060CR	4H05004-CAL6	4H05004-CAL666.d	08/05/14 12:09:00
SSTD050CR	4H05004-CAL5	4H05004-CAL566.d	08/05/14 12:48:00
SSTD040CR	4H05004-CAL4	4H05004-CAL466.d	08/05/14 13:27:00
SSTD025CR	4H05004-CAL3	4H05004-CAL366.d	08/05/14 14:07:00
SSTD010CR	4H05004-CAL2	4H05004-CAL266.d	08/05/14 14:46:00
SSTD005CR	4H05004-CAL1	4H05004-CAL166.d	08/05/14 15:25:00
SCV025VAL1CR	4H05004-SCV1	4H05004-SCV166.d	08/05/14 16:05:00

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ANALYSIS SEQUENCE SUMMARY

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Sequence: 4H12011 Calibration: 4080605 Instrument: 5972hp66

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
DFTPPCT	4H12011-TUN1	4H12011-TUN166.d	08/12/14 13:50:00
SSTD025CT	4H12011-ICV1	4H12011-ICV1R66.d	08/12/14 14:52:00
SBLKBV	4080818-BLK1	4080818-BLK166.d	08/12/14 16:15:00
SLCSBV	4080818-BS1	4080818-BS166.d	08/12/14 16:54:00

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ANALYSIS SEQUENCE SUMMARY

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Sequence: 4H15001 Calibration: 4072701 Instrument: 5972hp62

Sample Name	Lab Sample ID	Lab File ID	Analysis Date/Time
DFTPPBG	4H15001-TUN1	4H15001-TUN162.d	08/15/14 16:04:00
SSTD025BG	4H15001-ICV1	4H15001-ICV162.d	08/15/14 16:25:00
SBLKVB	4080818-BLK2	4080818-BLK2J62.d	08/15/14 17:05:00
P001-S005-0002-01	1408024-07	1408024-0762.d	08/15/14 18:24:00
P001-S003-0002-01	1408024-02	1408024-02D62.d	08/15/14 19:43:00
P001-S003-0002-01MS	4080818-MS1	4080818-MS1D62.d	08/15/14 20:23:00
P001-S003-0002-01MSD	4080818-MSD1	4080818-MSD1D62.d	08/15/14 21:02:00
P001-S002-0002-01	1408024-01	1408024-01D62.d	08/15/14 21:42:00
P001-S003-0002-02	1408024-03	1408024-03D62.d	08/15/14 22:22:00
P001-S006-0002-01	1408024-04	1408024-04D62.d	08/15/14 23:01:00
P001-S001-0002-01	1408024-05	1408024-05D62.d	08/15/14 23:41:00
P001-S004-0002-01	1408024-06	1408024-06D62.d	08/16/14 00:21:00

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I. Instrument Performance Check

(MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK)

MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

SW8270D

Laboratory:	COMPUCHEM	SDG:	1408024
Client:	WESTON SOLUTIONS	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Lab File ID:	4G23008-TUN162.d	Injection Date:	07/23/14
Instrument ID:	5972hp62	Injection Time:	19:09
Sequence:	4G23008	Lab Sample ID:	4G23008-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
198	Base peak, 100% relative abundance	100	PASS
51	10 - 80% of 198	45.4	PASS
68	Less than 2% of 69	0	PASS
69	Present	57.4	PASS
70	Less than 2% of 69	0.395	PASS
127	10 - 80% of 198	49.3	PASS
197	Less than 2% of 198	0	PASS
199	5 - 9% of 198	6.74	PASS
275	10 - 60% of 198	21.2	PASS
365	Greater than 1% of 198	2.69	PASS
441	Less than 100% of 443	76.5	PASS
442	50 - 100% of 198	67.9	PASS
443	15 - 24% of 442	18.8	PASS

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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

SW8270D

Laboratory:	COMPUCHEM	SDG:	1408024
Client:	WESTON SOLUTIONS	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Lab File ID:	4H05004-TUN1R66.d	Injection Date:	08/05/14
Instrument ID:	5972hp66	Injection Time:	11:46
Sequence:	4H05004	Lab Sample ID:	4H05004-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
198	Base peak, 100% relative abundance	100	PASS
51	10 - 80% of 198	60.4	PASS
68	Less than 2% of 69	0	PASS
69	Present	64.8	PASS
70	Less than 2% of 69	0.408	PASS
127	10 - 80% of 198	44	PASS
197	Less than 2% of 198	0	PASS
199	5 - 9% of 198	6.85	PASS
275	10 - 60% of 198	21.5	PASS
365	Greater than 1% of 198	3.31	PASS
441	Less than 100% of 443	80.7	PASS
442	50 - 100% of 198	74.5	PASS
443	15 - 24% of 442	19.4	PASS

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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

SW8270D

Laboratory:	COMPUCHEM	SDG:	1408024
Client:	WESTON SOLUTIONS	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Lab File ID:	4H12011-TUN166.d	Injection Date:	08/12/14
Instrument ID:	5972hp66	Injection Time:	13:50
Sequence:	4H12011	Lab Sample ID:	4H12011-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
198	Base peak, 100% relative abundance	100	PASS
51	10 - 80% of 198	66.1	PASS
68	Less than 2% of 69	0.642	PASS
69	Present	65.6	PASS
70	Less than 2% of 69	0.0879	PASS
127	10 - 80% of 198	44.7	PASS
197	Less than 2% of 198	0.104	PASS
199	5 - 9% of 198	6.73	PASS
275	10 - 60% of 198	20.6	PASS
365	Greater than 1% of 198	3.17	PASS
441	Less than 100% of 443	78.9	PASS
442	50 - 100% of 198	80.4	PASS
443	15 - 24% of 442	19.9	PASS

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MASS SPECTROMETER INSTRUMENT PERFORMANCE CHECK

SW8270D

Laboratory:	COMPUCHEM	SDG:	1408024
Client:	WESTON SOLUTIONS	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Lab File ID:	4H15001-TUN162.d	Injection Date:	08/15/14
Instrument ID:	5972hp62	Injection Time:	16:04
Sequence:	4H15001	Lab Sample ID:	4H15001-TUN1

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
198	Base peak, 100% relative abundance	100	PASS
51	10 - 80% of 198	44.7	PASS
68	Less than 2% of 69	0	PASS
69	Present	57.1	PASS
70	Less than 2% of 69	0.443	PASS
127	10 - 80% of 198	49.4	PASS
197	Less than 2% of 198	0	PASS
199	5 - 9% of 198	6.57	PASS
275	10 - 60% of 198	21.3	PASS
365	Greater than 1% of 198	2.48	PASS
441	Less than 100% of 443	77.3	PASS
442	50 - 100% of 198	68.6	PASS
443	15 - 24% of 442	19	PASS

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J. Internal Standard Results

(INTERNAL STANDARD AREA AND RT SUMMARY)

INTERNAL STANDARD AREA AND RT SUMMARY
SW8270D

Laboratory:	COMPUCHEM	SDG:	1408024
Client:	WESTON SOLUTIONS	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Sequence:	4G23008	Instrument:	5972hp62
		Calibration:	4072701

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (4G23008-SCV1)			Lab File ID: 4G23008-SCV162.d			Analyzed: 07/23/14 23:28			
1,4-Dichlorobenzene-d4	155428	8.361	196071	8.365	79	50 - 200	-0.0040	+/-0.50	
Naphthalene-d8	598901	11.309	803677	11.312	75	50 - 200	-0.0030	+/-0.50	
Acenaphthene-d10	324954	15.403	457615	15.396	71	50 - 200	0.0070	+/-0.50	
Phenanthrene-d10	546358	18.3	787652	18.293	69	50 - 200	0.0070	+/-0.50	
Chrysene-d12	570336	22.66	795866	22.653	72	50 - 200	0.0070	+/-0.50	
Perylene-d12	412205	24.738	596339	24.741	69	50 - 200	-0.0030	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY
SW8270D

Laboratory:	COMPUCHEM	SDG:	1408024
Client:	WESTON SOLUTIONS	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Sequence:	4H05004	Instrument:	5972hp66
		Calibration:	4080605

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (4H05004-SCV1)			Lab File ID: 4H05004-SCV166.d			Analyzed: 08/05/14 16:05			
1,4-Dichlorobenzene-d4	283822	8.078	171285	8.079	166	50 - 200	-0.0010	+/-0.50	
Naphthalene-d8	1006797	10.847	612009	10.848	165	50 - 200	-0.0010	+/-0.50	
Acenaphthene-d10	560550	14.894	330584	14.885	170	50 - 200	0.0090	+/-0.50	
Phenanthrene-d10	901825	17.725	549609	17.715	164	50 - 200	0.0100	+/-0.50	
Chrysene-d12	1029925	22.098	687907	22.099	150	50 - 200	-0.0010	+/-0.50	
Perylene-d12	838609	24.213	525498	24.204	160	50 - 200	0.0090	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY
SW8270D

Laboratory:	COMPUCHEM	SDG:	1408024
Client:	WESTON SOLUTIONS	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Sequence:	4H12011	Instrument:	5972hp66
		Calibration:	4080605

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (4H12011-ICV1)			Lab File ID: 4H12011-ICV1R66.d			Analyzed: 08/12/14 14:52			
1,4-Dichlorobenzene-d4	179566	8.063	171285	8.079	105	50 - 200	-0.0160	+/-0.50	
Naphthalene-d8	630092	10.832	612009	10.848	103	50 - 200	-0.0160	+/-0.50	
Acenaphthene-d10	330709	14.879	330584	14.885	100	50 - 200	-0.0060	+/-0.50	
Phenanthrene-d10	529256	17.71	549609	17.715	96	50 - 200	-0.0050	+/-0.50	
Chrysene-d12	601484	22.083	687907	22.099	87	50 - 200	-0.0160	+/-0.50	
Perylene-d12	488410	24.198	525498	24.204	93	50 - 200	-0.0060	+/-0.50	
Blank (4080818-BLK1)			Lab File ID: 4080818-BLK166.d			Analyzed: 08/12/14 16:15			
1,4-Dichlorobenzene-d4	294747	8.077	179566	8.063	164	50 - 200	0.0140	+/-0.50	
Naphthalene-d8	1002495	10.846	630092	10.832	159	50 - 200	0.0140	+/-0.50	
Acenaphthene-d10	525746	14.883	330709	14.879	159	50 - 200	0.0040	+/-0.50	
Phenanthrene-d10	812949	17.713	529256	17.71	154	50 - 200	0.0030	+/-0.50	
Chrysene-d12	888522	22.087	601484	22.083	148	50 - 200	0.0040	+/-0.50	
Perylene-d12	654786	24.202	488410	24.198	134	50 - 200	0.0040	+/-0.50	
LCS (4080818-BS1)			Lab File ID: 4080818-BS166.d			Analyzed: 08/12/14 16:54			
1,4-Dichlorobenzene-d4	245992	8.069	179566	8.063	137	50 - 200	0.0060	+/-0.50	
Naphthalene-d8	857043	10.848	630092	10.832	136	50 - 200	0.0160	+/-0.50	
Acenaphthene-d10	450532	14.885	330709	14.879	136	50 - 200	0.0060	+/-0.50	
Phenanthrene-d10	749881	17.715	529256	17.71	142	50 - 200	0.0050	+/-0.50	
Chrysene-d12	802696	22.089	601484	22.083	133	50 - 200	0.0060	+/-0.50	
Perylene-d12	623420	24.204	488410	24.198	128	50 - 200	0.0060	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY
SW8270D

Laboratory:	COMPUCHEM	SDG:	1408024
Client:	WESTON SOLUTIONS	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Sequence:	4H15001	Instrument:	5972hp62
		Calibration:	4072701

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (4H15001-ICV1)			Lab File ID: 4H15001-ICV162.d			Analyzed: 08/15/14 16:25			
1,4-Dichlorobenzene-d4	257790	8.212	196071	8.365	131	50 - 200	-0.1530	+/-0.50	
Naphthalene-d8	946593	11.17	803677	11.312	118	50 - 200	-0.1420	+/-0.50	
Acenaphthene-d10	493103	15.254	457615	15.396	108	50 - 200	-0.1420	+/-0.50	
Phenanthrene-d10	822083	18.171	787652	18.293	104	50 - 200	-0.1220	+/-0.50	
Chrysene-d12	834468	22.521	795866	22.653	105	50 - 200	-0.1320	+/-0.50	
Perylene-d12	612439	24.609	596339	24.741	103	50 - 200	-0.1320	+/-0.50	
Blank (4080818-BLK2)			Lab File ID: 4080818-BLK2J62.d			Analyzed: 08/15/14 17:05			
1,4-Dichlorobenzene-d4	406170	8.212	257790	8.212	158	50 - 200	0.0000	+/-0.50	
Naphthalene-d8	1464267	11.17	946593	11.17	155	50 - 200	0.0000	+/-0.50	
Acenaphthene-d10	777177	15.254	493103	15.254	158	50 - 200	0.0000	+/-0.50	
Phenanthrene-d10	1292740	18.171	822083	18.171	157	50 - 200	0.0000	+/-0.50	
Chrysene-d12	1271338	22.521	834468	22.521	152	50 - 200	0.0000	+/-0.50	
Perylene-d12	920560	24.599	612439	24.609	150	50 - 200	-0.0100	+/-0.50	
P001-S005-0002-01 (1408024-07)			Lab File ID: 1408024-0762.d			Analyzed: 08/15/14 18:24			
1,4-Dichlorobenzene-d4	314945	8.211	257790	8.212	122	50 - 200	-0.0010	+/-0.50	
Naphthalene-d8	1148523	11.169	946593	11.17	121	50 - 200	-0.0010	+/-0.50	
Acenaphthene-d10	617244	15.253	493103	15.254	125	50 - 200	-0.0010	+/-0.50	
Phenanthrene-d10	1026306	18.16	822083	18.171	125	50 - 200	-0.0110	+/-0.50	
Chrysene-d12	1023483	22.52	834468	22.521	123	50 - 200	-0.0010	+/-0.50	
Perylene-d12	740867	24.598	612439	24.609	121	50 - 200	-0.0110	+/-0.50	
P001-S003-0002-01 (1408024-02)			Lab File ID: 1408024-02D62.d			Analyzed: 08/15/14 19:43			
1,4-Dichlorobenzene-d4	312748	8.2	257790	8.212	121	50 - 200	-0.0120	+/-0.50	
Naphthalene-d8	1137824	11.168	946593	11.17	120	50 - 200	-0.0020	+/-0.50	
Acenaphthene-d10	610720	15.252	493103	15.254	124	50 - 200	-0.0020	+/-0.50	
Phenanthrene-d10	1015227	18.169	822083	18.171	123	50 - 200	-0.0020	+/-0.50	
Chrysene-d12	1071110	22.519	834468	22.521	128	50 - 200	-0.0020	+/-0.50	
Perylene-d12	790679	24.607	612439	24.609	129	50 - 200	-0.0020	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY
SW8270D

Laboratory:	COMPUCHEM	SDG:	1408024
Client:	WESTON SOLUTIONS	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Sequence:	4H15001	Instrument:	5972hp62
		Calibration:	4072701

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Matrix Spike (4080818-MS1)			Lab File ID: 4080818-MS1D62.d			Analyzed: 08/15/14 20:23			
1,4-Dichlorobenzene-d4	176510	8.205	257790	8.212	68	50 - 200	-0.0070	+/-0.50	
Naphthalene-d8	628131	11.163	946593	11.17	66	50 - 200	-0.0070	+/-0.50	
Acenaphthene-d10	367285	15.257	493103	15.254	74	50 - 200	0.0030	+/-0.50	
Phenanthrene-d10	689268	18.164	822083	18.171	84	50 - 200	-0.0070	+/-0.50	
Chrysene-d12	751452	22.524	834468	22.521	90	50 - 200	0.0030	+/-0.50	
Perylene-d12	552974	24.602	612439	24.609	90	50 - 200	-0.0070	+/-0.50	
Matrix Spike Dup (4080818-MSD1)			Lab File ID: 4080818-MSD1D62.d			Analyzed: 08/15/14 21:02			
1,4-Dichlorobenzene-d4	337963	8.2	257790	8.212	131	50 - 200	-0.0120	+/-0.50	
Naphthalene-d8	1227937	11.158	946593	11.17	130	50 - 200	-0.0120	+/-0.50	
Acenaphthene-d10	669368	15.253	493103	15.254	136	50 - 200	-0.0010	+/-0.50	
Phenanthrene-d10	1133365	18.17	822083	18.171	138	50 - 200	-0.0010	+/-0.50	
Chrysene-d12	1153842	22.52	834468	22.521	138	50 - 200	-0.0010	+/-0.50	
Perylene-d12	860920	24.608	612439	24.609	141	50 - 200	-0.0010	+/-0.50	
P001-S002-0002-01 (1408024-01)			Lab File ID: 1408024-01D62.d			Analyzed: 08/15/14 21:42			
1,4-Dichlorobenzene-d4	315673	8.199	257790	8.212	122	50 - 200	-0.0130	+/-0.50	
Naphthalene-d8	1130001	11.157	946593	11.17	119	50 - 200	-0.0130	+/-0.50	
Acenaphthene-d10	600018	15.251	493103	15.254	122	50 - 200	-0.0030	+/-0.50	
Phenanthrene-d10	1036932	18.158	822083	18.171	126	50 - 200	-0.0130	+/-0.50	
Chrysene-d12	1079908	22.518	834468	22.521	129	50 - 200	-0.0030	+/-0.50	
Perylene-d12	810381	24.596	612439	24.609	132	50 - 200	-0.0130	+/-0.50	
P001-S003-0002-02 (1408024-03)			Lab File ID: 1408024-03D62.d			Analyzed: 08/15/14 22:22			
1,4-Dichlorobenzene-d4	176140	8.205	257790	8.212	68	50 - 200	-0.0070	+/-0.50	
Naphthalene-d8	650137	11.163	946593	11.17	69	50 - 200	-0.0070	+/-0.50	
Acenaphthene-d10	352181	15.247	493103	15.254	71	50 - 200	-0.0070	+/-0.50	
Phenanthrene-d10	625699	18.164	822083	18.171	76	50 - 200	-0.0070	+/-0.50	
Chrysene-d12	647593	22.514	834468	22.521	78	50 - 200	-0.0070	+/-0.50	
Perylene-d12	486310	24.602	612439	24.609	79	50 - 200	-0.0070	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY
SW8270D

Laboratory:	COMPUCHEM	SDG:	1408024
Client:	WESTON SOLUTIONS	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Sequence:	4H15001	Instrument:	5972hp62
		Calibration:	4072701

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
P001-S006-0002-01 (1408024-04)			Lab File ID: 1408024-04D62.d			Analyzed: 08/15/14 23:01			
1,4-Dichlorobenzene-d4	192282	8.209	257790	8.212	75	50 - 200	-0.0030	+/-0.50	
Naphthalene-d8	712784	11.157	946593	11.17	75	50 - 200	-0.0130	+/-0.50	
Acenaphthene-d10	399539	15.251	493103	15.254	81	50 - 200	-0.0030	+/-0.50	
Phenanthrene-d10	701528	18.158	822083	18.171	85	50 - 200	-0.0130	+/-0.50	
Chrysene-d12	731812	22.518	834468	22.521	88	50 - 200	-0.0030	+/-0.50	
Perylene-d12	550723	24.596	612439	24.609	90	50 - 200	-0.0130	+/-0.50	
P001-S001-0002-01 (1408024-05)			Lab File ID: 1408024-05D62.d			Analyzed: 08/15/14 23:41			
1,4-Dichlorobenzene-d4	296684	8.206	257790	8.212	115	50 - 200	-0.0060	+/-0.50	
Naphthalene-d8	1047090	11.164	946593	11.17	111	50 - 200	-0.0060	+/-0.50	
Acenaphthene-d10	583245	15.248	493103	15.254	118	50 - 200	-0.0060	+/-0.50	
Phenanthrene-d10	981997	18.165	822083	18.171	119	50 - 200	-0.0060	+/-0.50	
Chrysene-d12	1041455	22.515	834468	22.521	125	50 - 200	-0.0060	+/-0.50	
Perylene-d12	774008	24.603	612439	24.609	126	50 - 200	-0.0060	+/-0.50	
P001-S004-0002-01 (1408024-06)			Lab File ID: 1408024-06D62.d			Analyzed: 08/16/14 00:21			
1,4-Dichlorobenzene-d4	284846	8.206	257790	8.212	110	50 - 200	-0.0060	+/-0.50	
Naphthalene-d8	1057898	11.164	946593	11.17	112	50 - 200	-0.0060	+/-0.50	
Acenaphthene-d10	578449	15.247	493103	15.254	117	50 - 200	-0.0070	+/-0.50	
Phenanthrene-d10	1004233	18.165	822083	18.171	122	50 - 200	-0.0060	+/-0.50	
Chrysene-d12	979960	22.525	834468	22.521	117	50 - 200	0.0040	+/-0.50	
Perylene-d12	698889	24.613	612439	24.609	114	50 - 200	0.0040	+/-0.50	

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K. Target Compound Results

(ANALYSIS DATA SHEETS)

Analysis Data Sheets (ADS), Tentatively Identified Compounds (TICs), and Surrogate Recovery Results

Sample data shall be arranged in packets with the Analysis Data Sheet, followed by the raw data for volatile or semivolatile samples. 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) and Tentatively Identified Compounds (TICs) shall be included.

b. Reconstructed Ion Chromatograms (RICs)
   Include for each sample or sample extract, including dilutions and reanalyses. The RIC shall contain the following header information: Client Sample ID Number, date and time of analysis, instrument ID, Lab file ID, and analyst ID.

d. Quantitation Report for target analytes and TICs.
   Include a printout of the Extracted Ion Current Profile (EICP) for all manual changes to all compounds, internal standards, and surrogate compounds.

e. Copies of raw spectra and copies of background-subtracted mass spectra of target analytes plus TICs identified in the sample.
   - The spectra shall include the following information: Client Sample ID number, Lab file ID, date and time of analysis, and instrument ID.
   - The compound name must be clearly marked.

ANALYSIS DATA SHEET

SW8270D

P001-S001-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD SV | File ID: 1408024-05D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-05 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 9 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 23:41

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
108-95-2	Phenol		600	3600	U
111-44-4	Bis(2-chloroethyl)ether		220	1900	U
95-57-8	2-Chlorophenol		590	3600	U
95-48-7	2-Methylphenol		420	3600	U
108-60-1	2,2'-oxybis(1-Chloropropane)		270	1900	U
106-44-5	3 & 4-Methylphenol		370	3600	U
621-64-7	N-Nitroso-di-N-propylamine		350	1900	U
98-86-2	Acetophenone		480	1900	U
67-72-1	Hexachloroethane		1200	1900	U
98-95-3	Nitrobenzene		450	1900	U
78-59-1	Isophorone		320	1900	U
88-75-5	2-Nitrophenol		450	3600	U
105-67-9	2,4-Dimethylphenol		570	3600	U
111-91-1	Bis(2-chloroethoxy)methane		490	1900	U
120-83-2	2,4-Dichlorophenol		430	3600	U
91-20-3	Naphthalene	270	250	1900	JD
106-47-8	4-Chloroaniline		310	3600	U
87-68-3	Hexachlorobutadiene		290	1900	U
59-50-7	4-Chloro-3-methylphenol		270	3600	U
91-57-6	2-Methylnaphthalene		330	1900	U
77-47-4	Hexachlorocyclopentadiene		340	1900	U
88-06-2	2,4,6-Trichlorophenol		330	3600	U
95-95-4	2,4,5-Trichlorophenol		270	3600	U
91-58-7	2-Chloronaphthalene		440	1900	U
88-74-4	2-Nitroaniline		270	3600	U
131-11-3	Dimethylphthalate		170	1900	U
606-20-2	2,6-Dinitrotoluene		190	1900	U
208-96-8	Acenaphthylene		320	1900	U
99-09-2	3-Nitroaniline		240	3600	U
83-32-9	Acenaphthene	450	330	1900	JD
51-28-5	2,4-Dinitrophenol		170	3600	U
100-02-7	4-Nitrophenol		500	3600	U
121-14-2	2,4-Dinitrotoluene		220	1900	U
132-64-9	Dibenzofuran		330	1900	U
84-66-2	Diethylphthalate		200	1900	U

Environmental Testing Laboratories

CompuChem

A Division Of

Liberty Analytical Corp.

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[redacted]

ANALYSIS DATA SHEET

SW8270D

P001-S001-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-05D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-05 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 9 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 23:41

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
7005-72-3	4-Chlorophenyl-phenylether		230	1900	U
86-73-7	Fluorene	480	240	1900	JD
100-01-6	4-Nitroaniline		480	3600	U
534-52-1	4,6-Dinitro-2-methylphenol		490	3600	U
86-30-6	N-Nitrosodiphenylamine (1)		320	1900	U
101-55-3	4-Bromophenyl-phenylether		280	1900	U
118-74-1	Hexachlorobenzene		240	1900	U
87-86-5	Pentachlorophenol		470	3600	U
85-01-8	Phenanthrene	5100	110	1900	D
120-12-7	Anthracene	880	93	1900	JD
86-74-8	Carbazole	730	190	1900	JD
84-74-2	Di-n-butylphthalate		270	1900	U
206-44-0	Fluoranthene	6900	270	1900	D
129-00-0	Pyrene	5200	240	1900	D
85-68-7	Butylbenzylphthalate	1100	290	1900	JD
91-94-1	3,3'-Dichlorobenzidine		380	1900	U
117-81-7	bis(2-ethylhexyl)Phthalate		330	1900	U
56-55-3	Benzo (a) anthracene	2700	300	1900	D
218-01-9	Chrysene	3200	110	1900	D
117-84-0	Di-n-octylphthalate		360	1900	U
205-99-2	Benzo (b) fluoranthene	4000	280	1900	D
207-08-9	Benzo(k)fluoranthene	1600	260	1900	JD
50-32-8	Benzo (a) pyrene	2700	200	1900	D
193-39-5	Indeno(1,2,3-cd)pyrene	2000	310	1900	D
53-70-3	Dibenzo(a,h)anthracene		510	1900	U
191-24-2	Benzo (g,h,i) perylene	1800	320	1900	JD
100-52-7	Benzaldehyde		290	1900	U
105-60-2	Caprolactam		310	1900	U
1912-24-9	Atrazine		220	1900	U
92-52-4	1,1'-Biphenyl		430	1900	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	3645	2511	69	35 - 105	D
Phenol-d5	3645	2121	58	40 - 100	D
Nitrobenzene-d5	1823	ND		35 - 100	D

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

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ANALYSIS DATA SHEET

SW8270D

P001-S001-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-05D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-05 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 9 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 23:41

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	1823	ND		45 - 105	D
2,4,6-Tribromophenol	3645	2553	70	35 - 125	D
Terphenyl-d14	1823	ND		30 - 125	D

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q
000192-65-4	1,2:4,5-Dibenzopyrene	880	412809	27.765	90	JDN
000243-17-4	11H-Benzo[b]fluorene	770	448767	21.133	91	JDN
000084-65-1	9,10-Anthracenedione	980	375308	19.587	97	JDN
000192-97-2	Benzo[e]pyrene	1400	660125	24.234	97	JDN
000205-82-3	Benzo[j]fluoranthene	3000	1396798	24.459	96	JDN
791-28-6	Triphenylphosphine oxide	2000	1191295	22.791	91	JDN
NA	Unk. Alkane	2000	947037	25.452	0	JD
NA	Unknown 19.219	780	297619	19.219	0	JD
NA	Unknown 2.453	1300	337874	2.453	0	JD
NA	Unknown 20.457	750	440244	20.457	0	JD
NA	Unknown 22.668	780	455994	22.668	0	JD
NA	Unknown 24.367	1100	528768	24.367	0	JD
NA	Unknown 24.848	2100	998753	24.848	0	JD
NA	Unknown 26.097	770	361115	26.097	0	JD
NA	Unknown 26.506	1100	500022	26.506	0	JD
NA	Unknown 4.173	12000	3172435	4.173	0	JD

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.

(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.

(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

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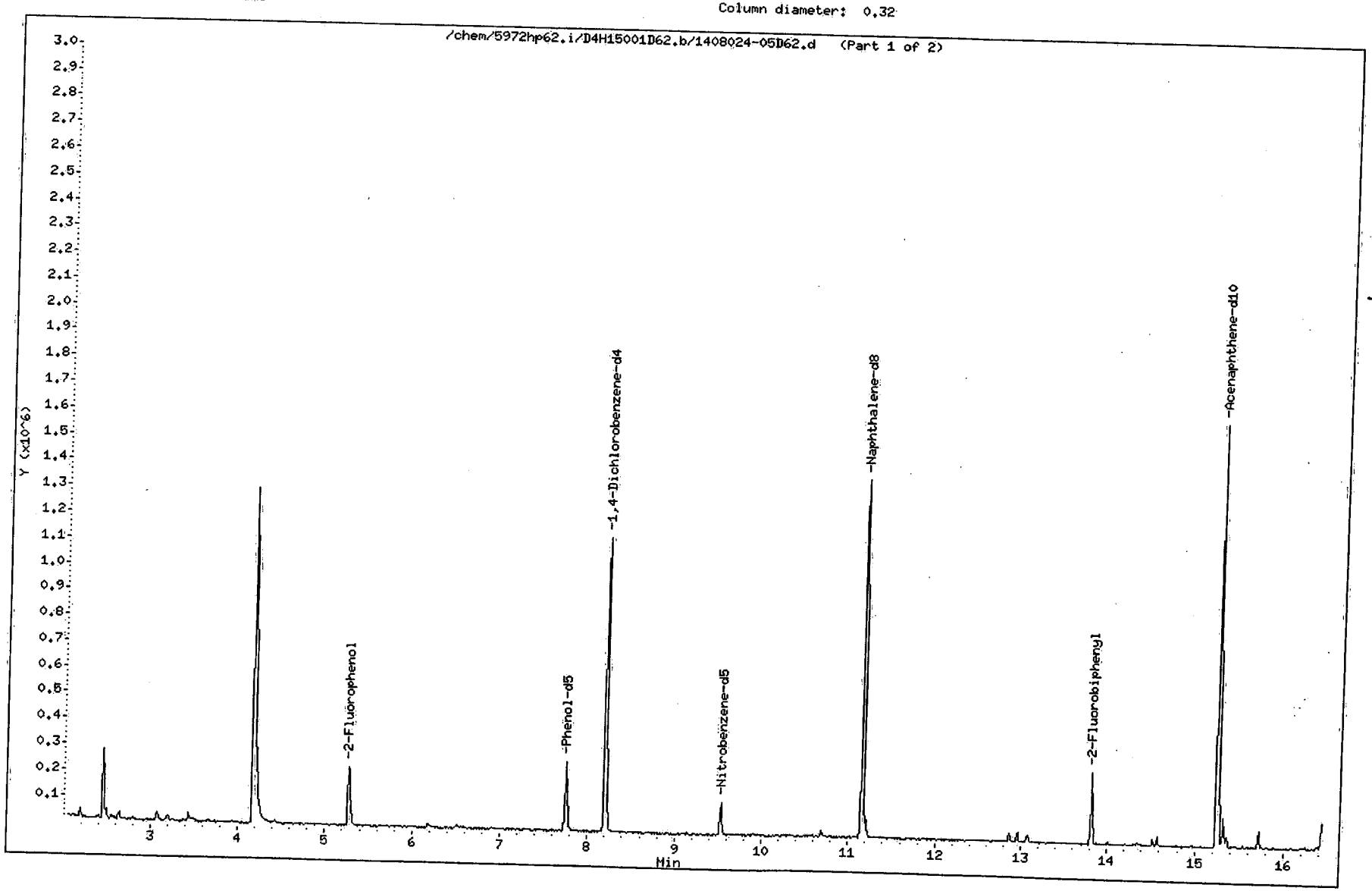
Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d
Date : 15-AUG-2014 23:41
Client ID: P001-S001-0002-01
Sample Info: 1408024-05:OWS:10
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i

Operator: OWS
Column diameter: 0.32

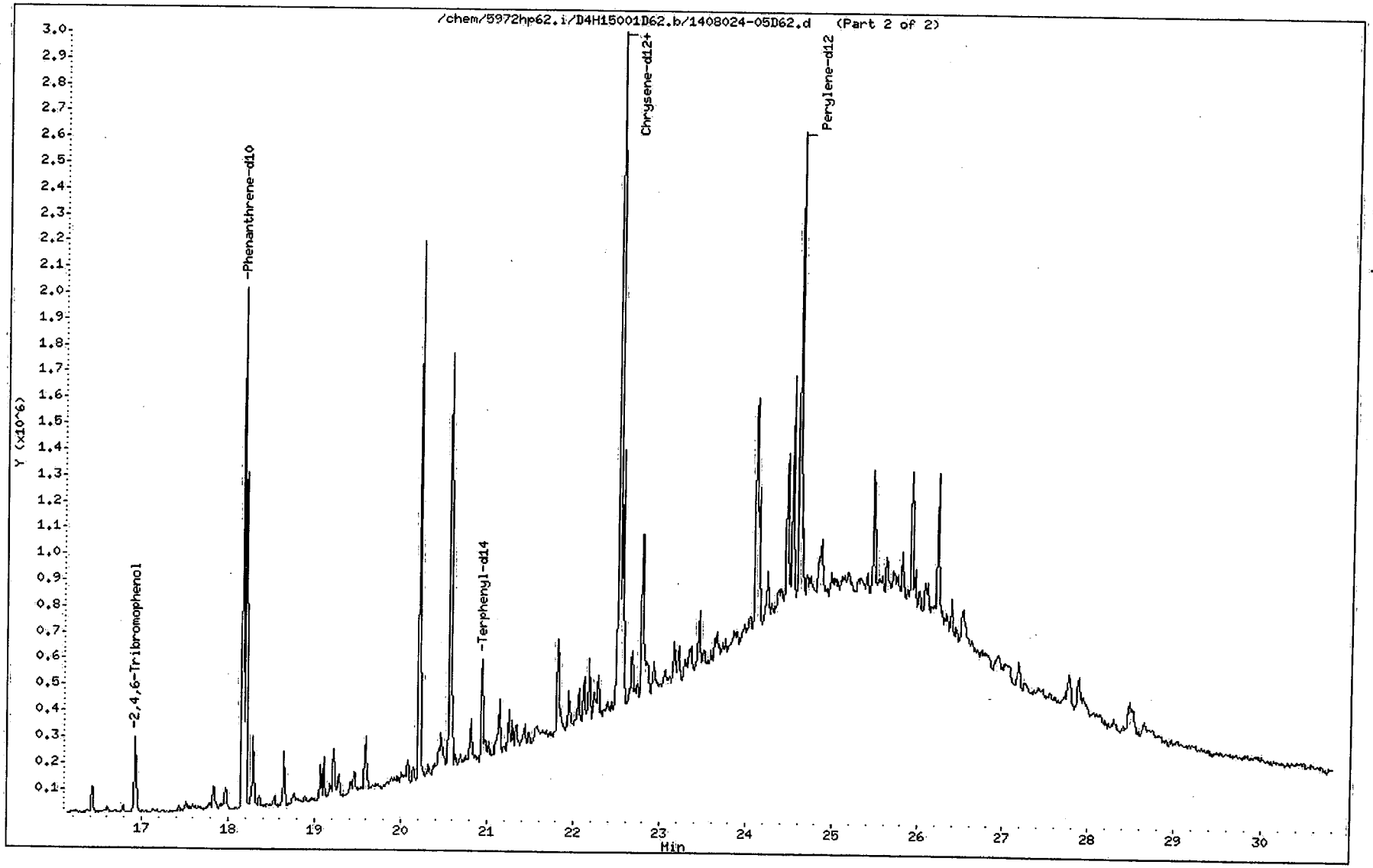


8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d
Date : 15-AUG-2014 23:41
Client ID: P001-S001-0002-01
Sample Info: 1408024-05;OWS;10
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i

Operator: OWS
Column diameter: 0.32



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d
Report Date: 19-Aug-2014 11:24

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d
Lab Smp Id: 1408024-05 Client Smp ID: P001-S001-0002-01
Inj Date : 15-AUG-2014 23:41
Operator : OWS Inst ID: 5972hp62.i
Smp Info : 1408024-05:OWS:10
Misc Info : P001-S001-0002-01
Comment :
Method : /chem/5972hp62.i/D4H15001D62.b/8270Dv26.m
Meth Date : 19-Aug-2014 11:23 ron Quant Type: ISTD
Cal Date : 23-JUL-2014 19:31 Cal File: 4G23008-CAL662.d
Als bottle: 16
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1000.00000	Volume of final extract (uL)(1000 low, 2
Vi	2.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	9.00000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY	
* 1 1,4-Dichlorobenzene-d4	152	8.206	8.212	(1.000)	296684	40.0000			
* 2 Naphthalene-d8	136	11.164	11.170	(1.000)	1047090	40.0000			
* 3 Acenaphthene-d10	164	15.248	15.254	(1.000)	583245	40.0000			
* 4 Phenanthrene-d10	188	18.165	18.171	(1.000)	981997	40.0000			
* 5 Chrysene-d12	240	22.515	22.521	(1.000)	1041455	40.0000			
* 6 Perylene-d12	264	24.603	24.609	(1.000)	774008	40.0000			
$ 7 2-Fluorophenol	112	5.278	5.274	(0.643)	131792	13.7780	2500		
$ 8 Phenol-d5	99	7.755	7.751	(0.945)	158921	11.6351	2100		
$ 9 Nitrobenzene-d5	82	9.536	9.532	(0.854)	61747	5.87900	1100		(a)
$ 10 2-Fluorobiphenyl	172	13.815	13.821	(0.906)	129632	7.16267	1300		(a)
$ 11 2,4,6-Tribromophenol	330	16.926	16.932	(1.110)	44856	14.0091	2600	762	
$ 12 Terphenyl-d14	244	20.938	20.945	(0.930)	147110	7.22571	1300		(a)
15 Phenol	94	Compound Not Detected.							

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d
Report Date: 19-Aug-2014 11:24

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
17 Bis(2-chloroethyl)ether	93	Compound Not Detected.						
18 2-Chlorophenol	128	Compound Not Detected.						
23 2-Methylphenol	108	Compound Not Detected.						
24 2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.						
25 3 & 4-Methylphenol	108	Compound Not Detected.						
26 N-Nitroso-di-N-propylamine	70	Compound Not Detected.						
27 Acetophenone	105	Compound Not Detected.						
28 Hexachloroethane	117	Compound Not Detected.						
29 Nitrobenzene	77	Compound Not Detected.						
30 Isophorone	82	Compound Not Detected.						
31 2-Nitrophenol	139	Compound Not Detected.						
32 2,4-Dimethylphenol	122	Compound Not Detected.						
33 Bis(2-chloroethoxy)methane	93	Compound Not Detected.						
34 2,4-Dichlorophenol	162	Compound Not Detected.						
36 Naphthalene	128	11.205	11.211	(1.004)	37975	1.47809	270	8026(a)
37 4-Chloroaniline	127	Compound Not Detected.						
38 Hexachlorobutadiene	224	Compound Not Detected.						
39 4-Chloro-3-methylphenol	107	Compound Not Detected.						
40 2-Methylnaphthalene	141	Compound Not Detected.						
42 Hexachlorocyclopentadiene	236	Compound Not Detected.						
44 2,4,6-Trichlorophenol	196	Compound Not Detected.						
45 2,4,5-Trichlorophenol	196	Compound Not Detected.						
46 2-Chloronaphthalene	162	Compound Not Detected.						
47 2-Nitroaniline	65	Compound Not Detected.						
48 Dimethylphthalate	163	Compound Not Detected.						
50 2,6-Dinitrotoluene	165	Compound Not Detected.						
51 Acenaphthylene	152	Compound Not Detected.						
52 3-Nitroaniline	138	Compound Not Detected.						
53 Acenaphthene	153	15.319	15.325	(1.005)	39473	2.47871	450	7869(a)
54 2,4-Dinitrophenol	184	Compound Not Detected.						
55 4-Nitrophenol	139	Compound Not Detected.						
56 2,4-Dinitrotoluene	165	Compound Not Detected.						
57 Dibenzofuran	168	Compound Not Detected.						
59 Diethylphthalate	149	Compound Not Detected.						
60 4-Chlorophenyl-phenylether	204	Compound Not Detected.						
61 Fluorene	166	16.425	16.441	(1.077)	45446	2.63135	480	0(aM)
62 4-Nitroaniline	138	Compound Not Detected.						
63 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
64 N-Nitrosodiphenylamine (1)	169	Compound Not Detected.						
66 4-Bromophenyl-phenylether	248	Compound Not Detected.						
67 Hexachlorobenzene	283	Compound Not Detected.						
68 Pentachlorophenol	265	Compound Not Detected.						
69 Phenanthrene	178	18.206	18.212	(1.002)	723318	28.0387	5100	
70 Anthracene	178	18.287	18.294	(1.007)	125065	4.84447	890	(a)
71 Carbazole	167	18.646	18.652	(1.026)	103019	4.01567	740	9647(a)
72 Di-n-butylphthalate	149	Compound Not Detected.						
73 Fluoranthene	202	20.212	20.218	(1.113)	1029784	37.7908	6900	

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d
Report Date: 19-Aug-2014 11:24

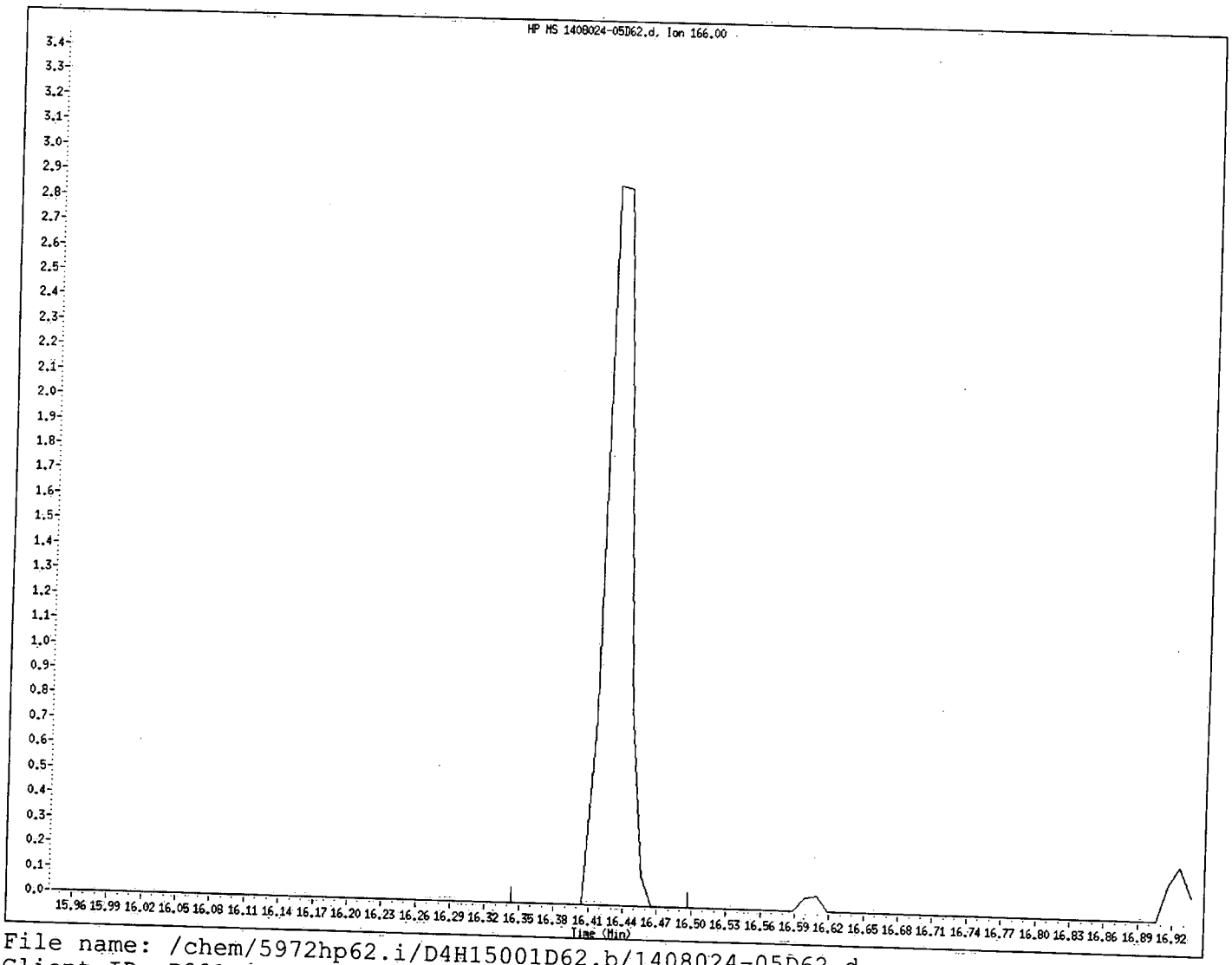
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
74 Pyrene	202	20.560	20.566	(0.913)	853787	28.2659	5200	
75 Butylbenzylphthalate	149	21.808	21.815	(0.969)	102236	6.25075	1100	958 (a)
76 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
77 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
78 Benzo(a)anthracene	228	22.504	22.511	(1.000)	387206	14.7157	2700	
79 Chrysene	228	22.556	22.562	(1.002)	429873	17.7192	3200	
80 Di-n-octylphthalate	149	Compound Not Detected.						
81 Benzo(b)fluoranthene	252	24.101	24.097	(0.980)	600628	21.9112	4000	
82 Benzo(k)fluoranthene	252	24.132	24.138	(0.981)	234341	8.55951	1600	(aM)
83 Benzo(a)pyrene	252	24.521	24.527	(0.997)	379259	14.8323	2700	
84 Indeno(1,2,3-cd)pyrene	276	25.902	25.909	(1.053)	267361	10.8160	2000	
85 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
86 Benzo(g,h,i)perylene	276	26.210	26.216	(1.065)	253773	9.84081	1800	(a)
87 Benzaldehyde	77	Compound Not Detected.						
88 Caprolactam	113	Compound Not Detected.						
89 Atrazine	215	Compound Not Detected.						
90 1,1'-Biphenyl	154	Compound Not Detected.						

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

8/19/2014

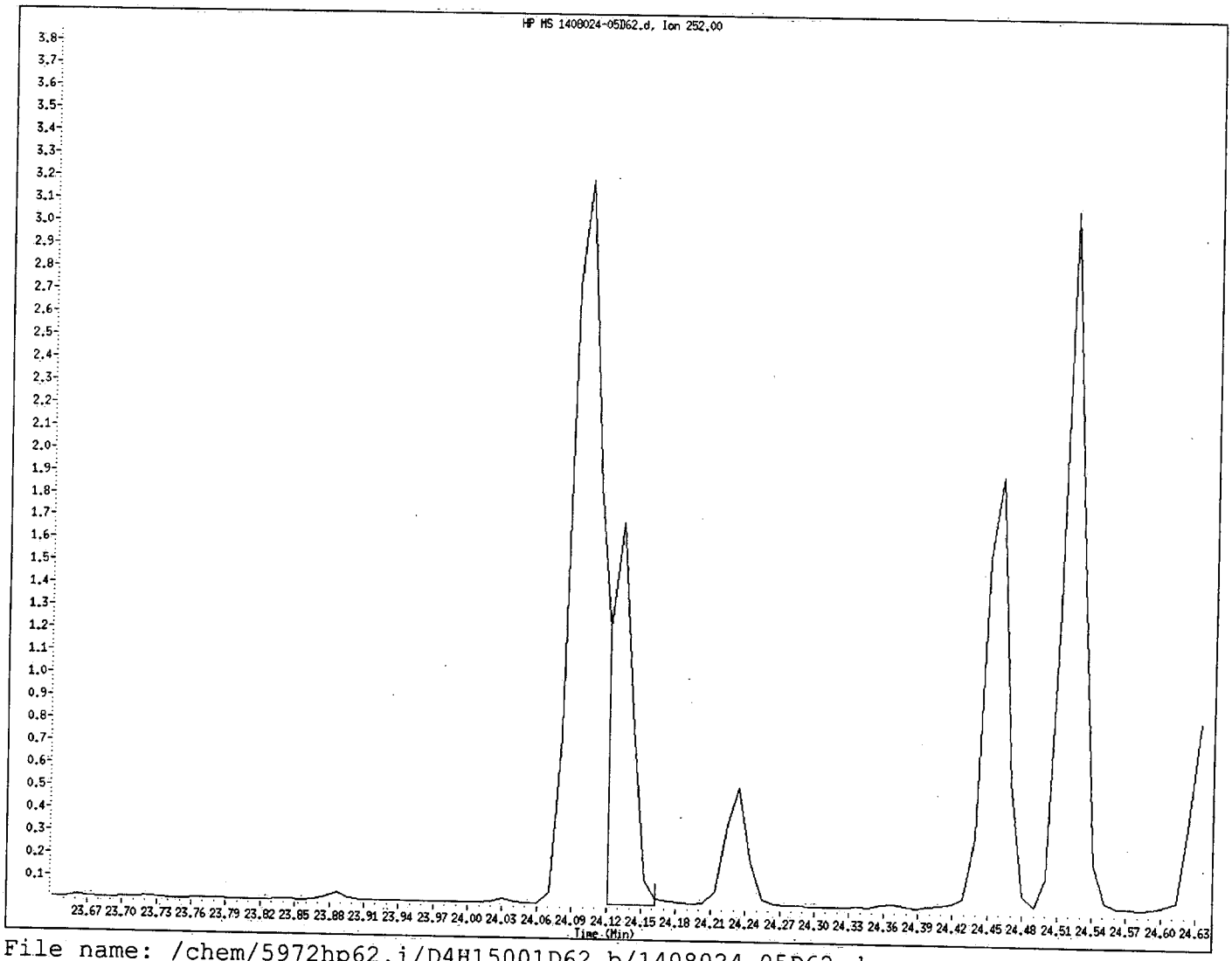
Fluorene CAS Number 86-73-7 Area = 45446 Manually integrated



File name: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d
Client ID: P001-S001-0002-01
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 23:41
Retention Time: 16.42
Operator ID: OWS

8/19/2014

Benzo(k)fluoranthene CAS Number 207-08-9 Area = 234341 Manually integrated



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Client ID: P001-S001-0002-01
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 23:41
Retention Time: 24.13
Operator ID: OWS

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

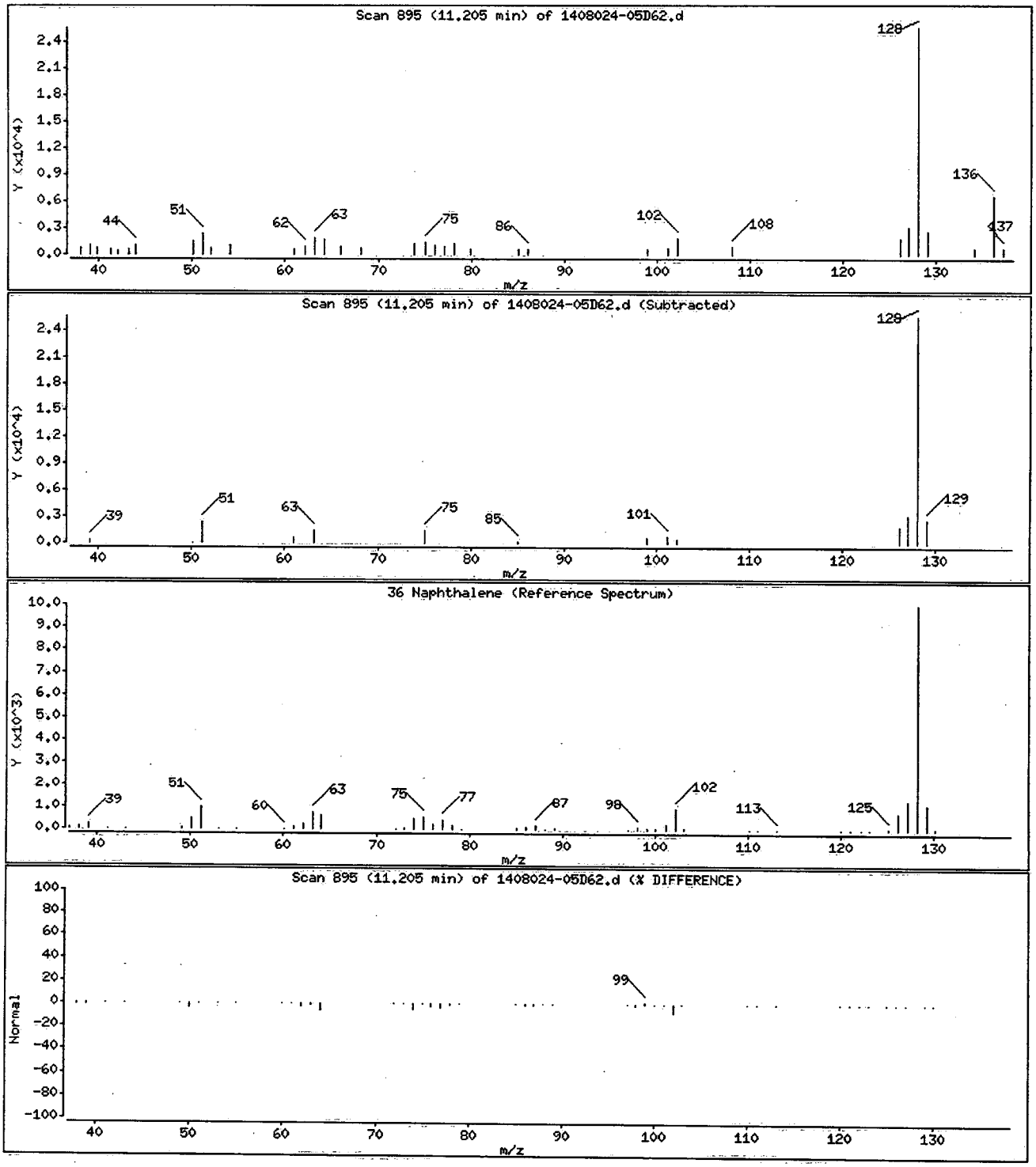
Client ID: P001-S001-0002-01 | Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 | Operator: OWS

Column phase: Rxi-5SilMS | Column diameter: 0.32

36 Naphthalene | Concentration: 270 ug/Kg



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

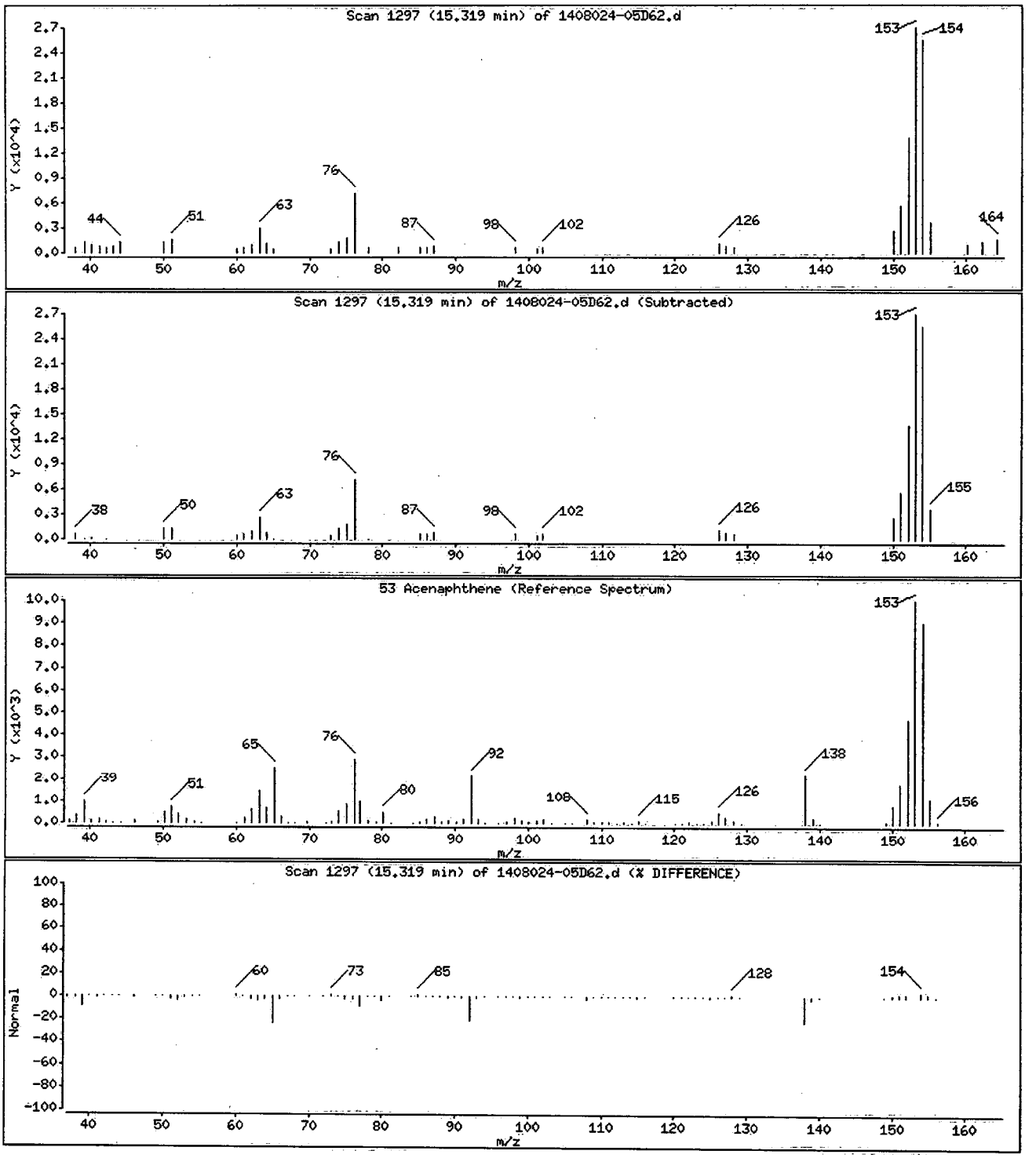
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

53 Acenaphthene Concentration: 450 ug/Kg



Robin Hamm 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

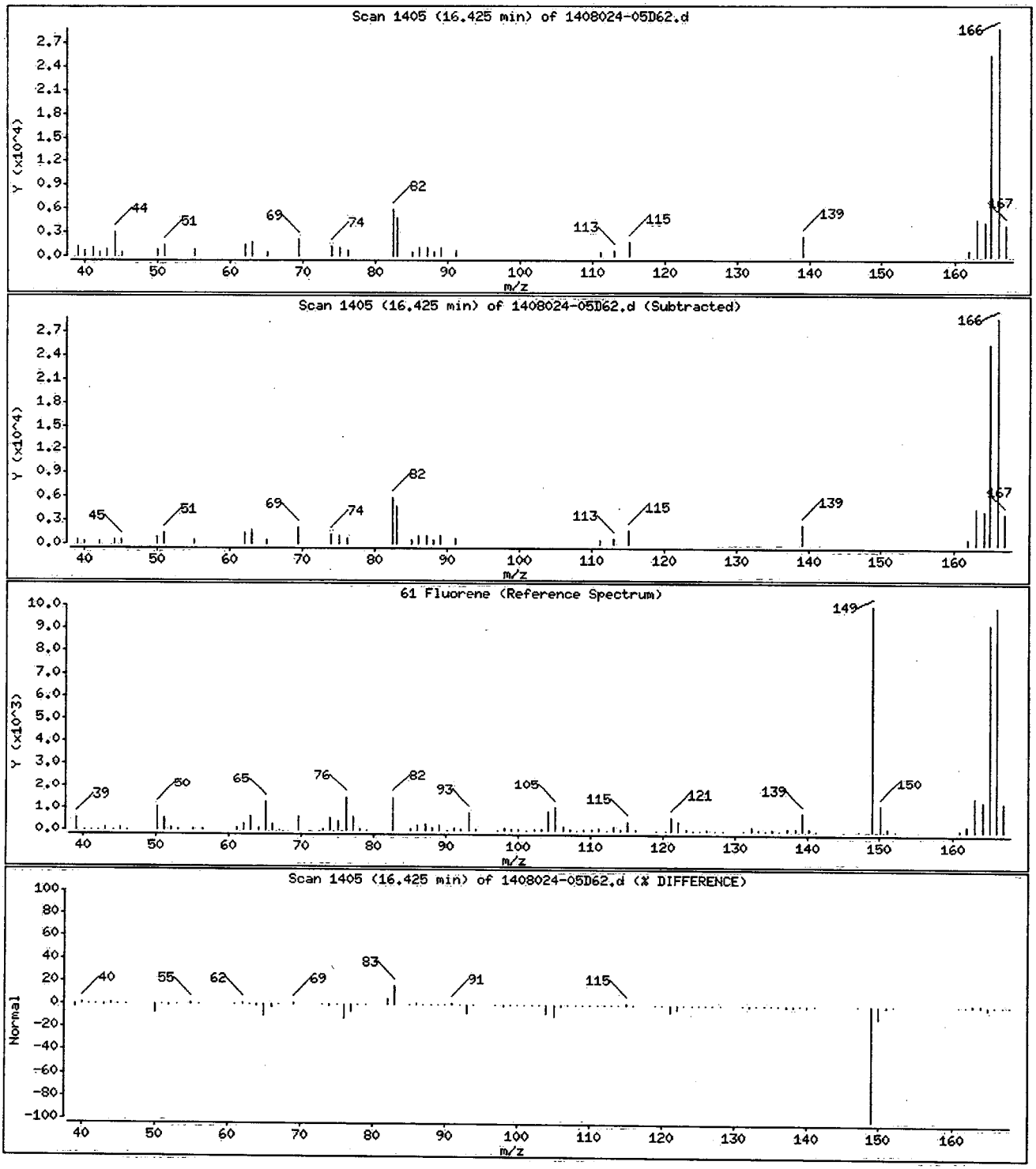
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

61 Fluorene Concentration: 480 ug/Kg



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

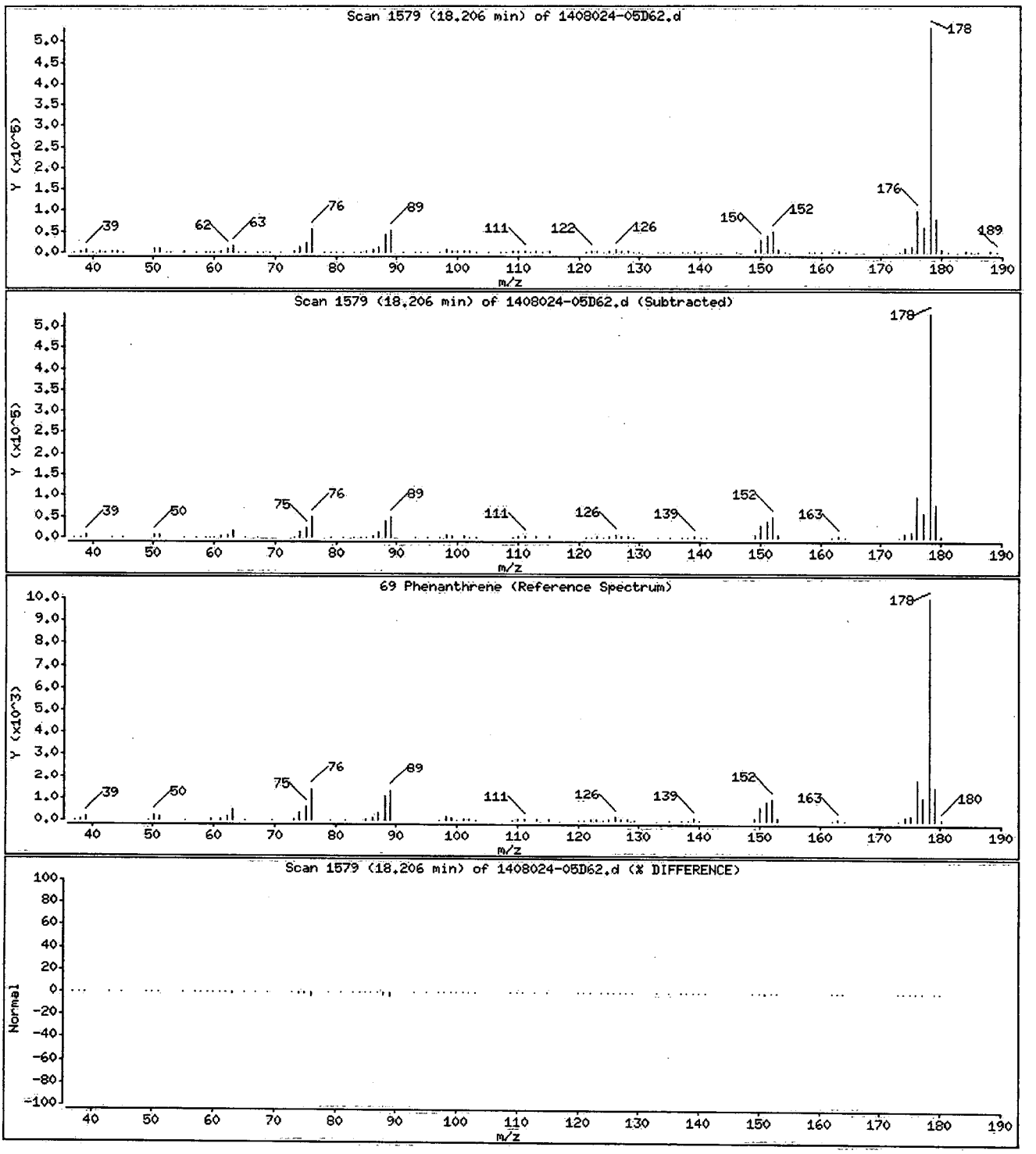
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

69 Phenanthrene Concentration: 5100 ug/Kg



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

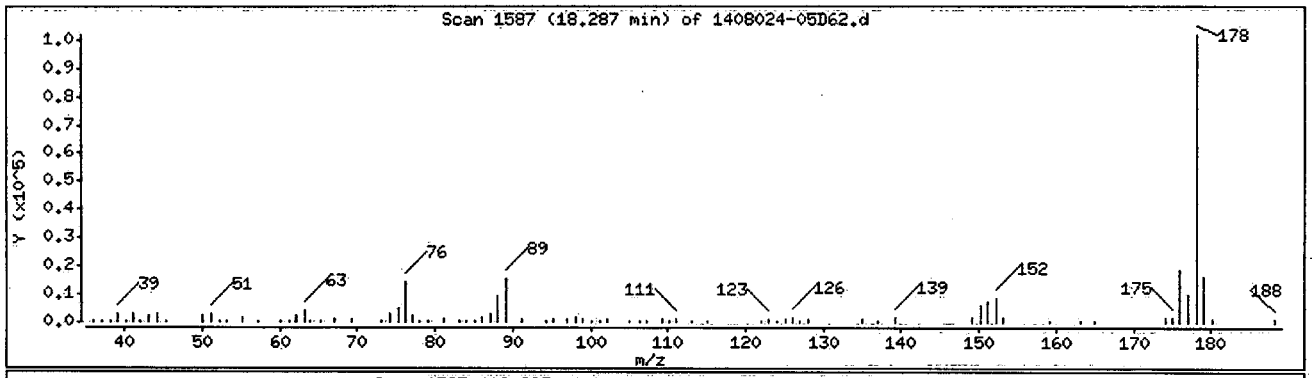
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

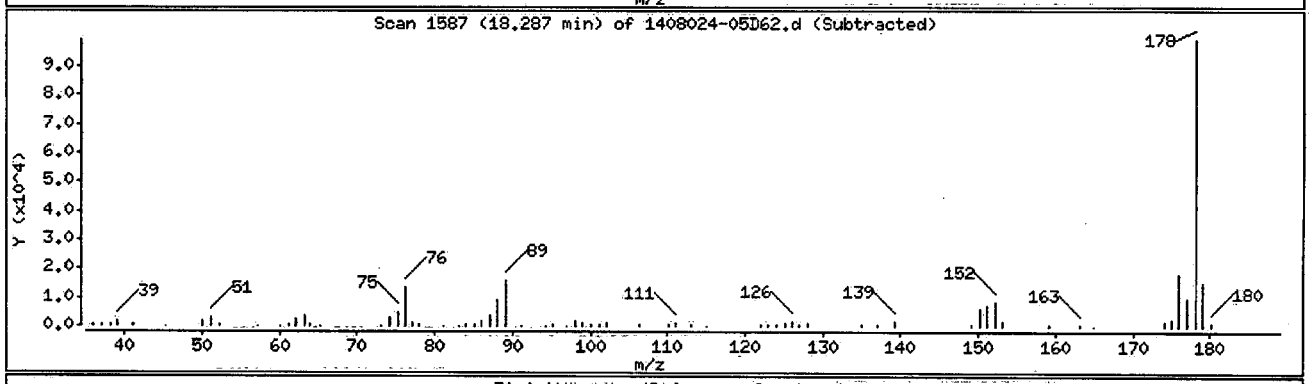
Sample Info: 1408024-05:OWS:10

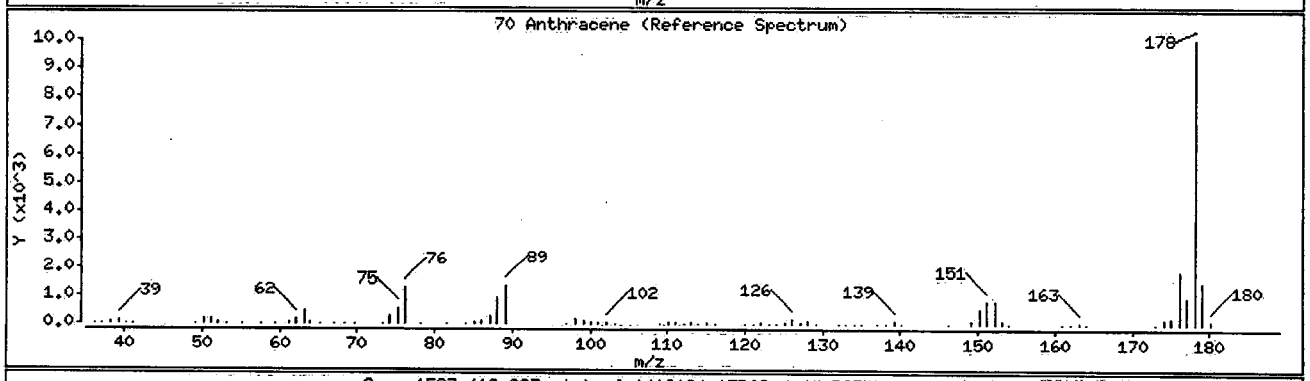
Volume Injected (uL): 2.0 Operator: OWS

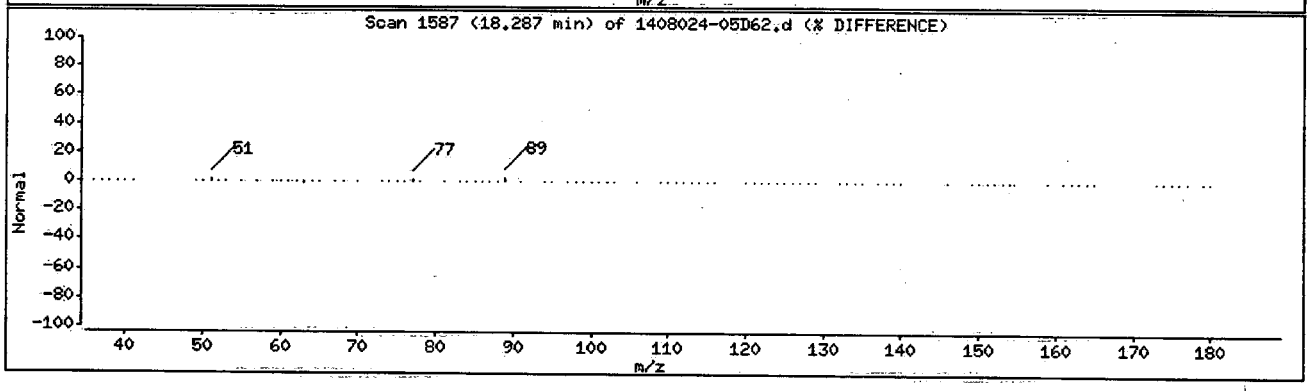
Column phase: Rxi-5SilMS Column diameter: 0.32

70 Anthracene Concentration: 890 ug/Kg









8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

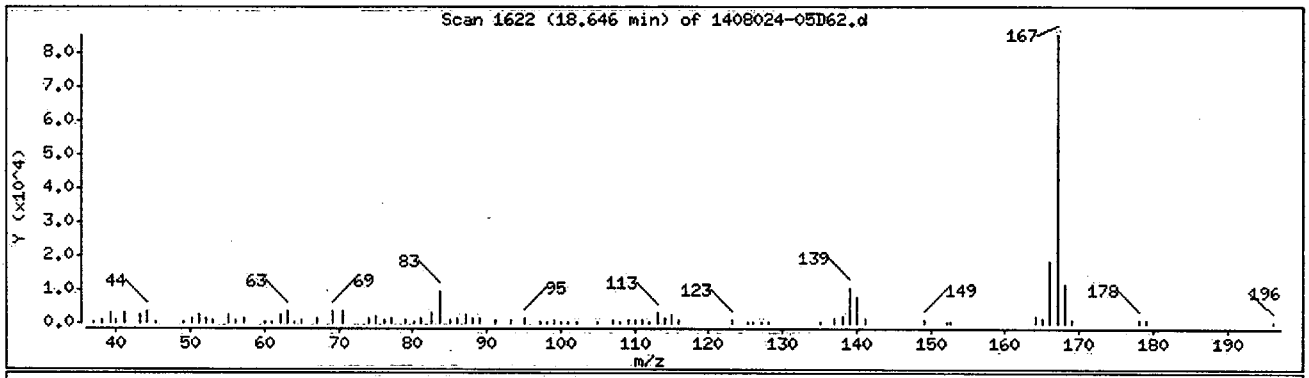
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

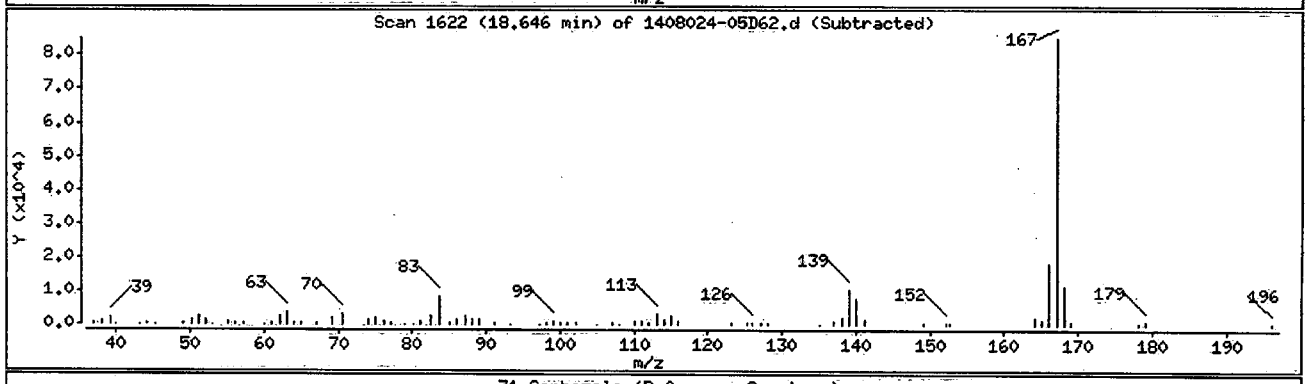
Sample Info: 1408024-05:OWS:10

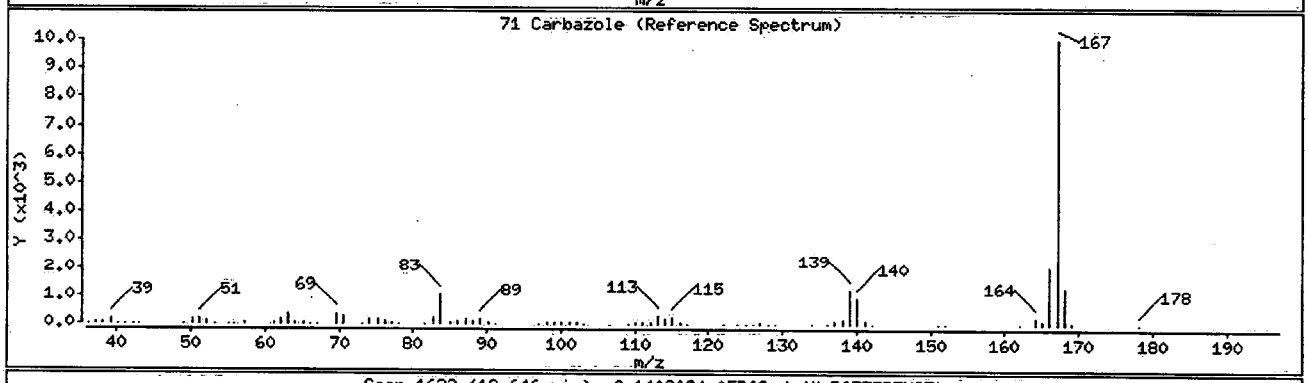
Volume Injected (uL): 2.0 Operator: OWS

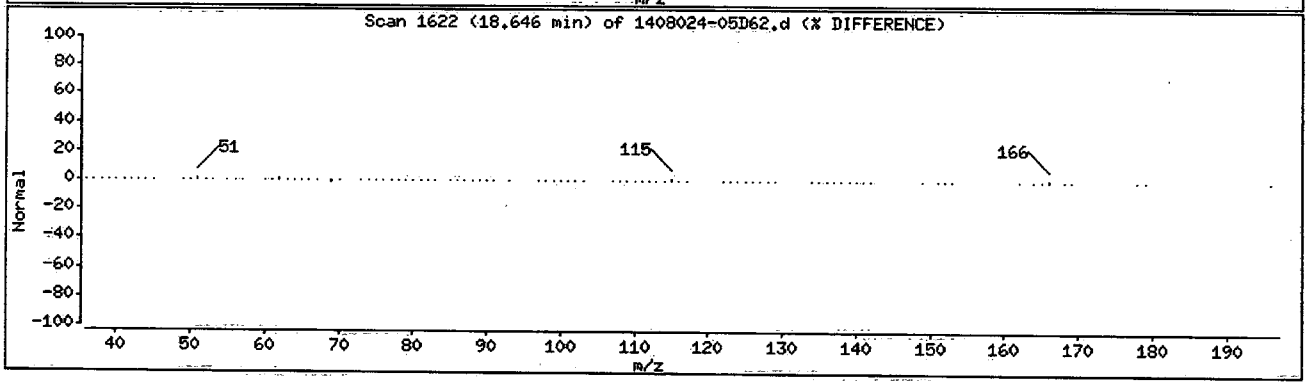
Column phase: Rxi-5SilMS Column diameter: 0.32

71 Carbazole Concentration: 740 ug/Kg









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

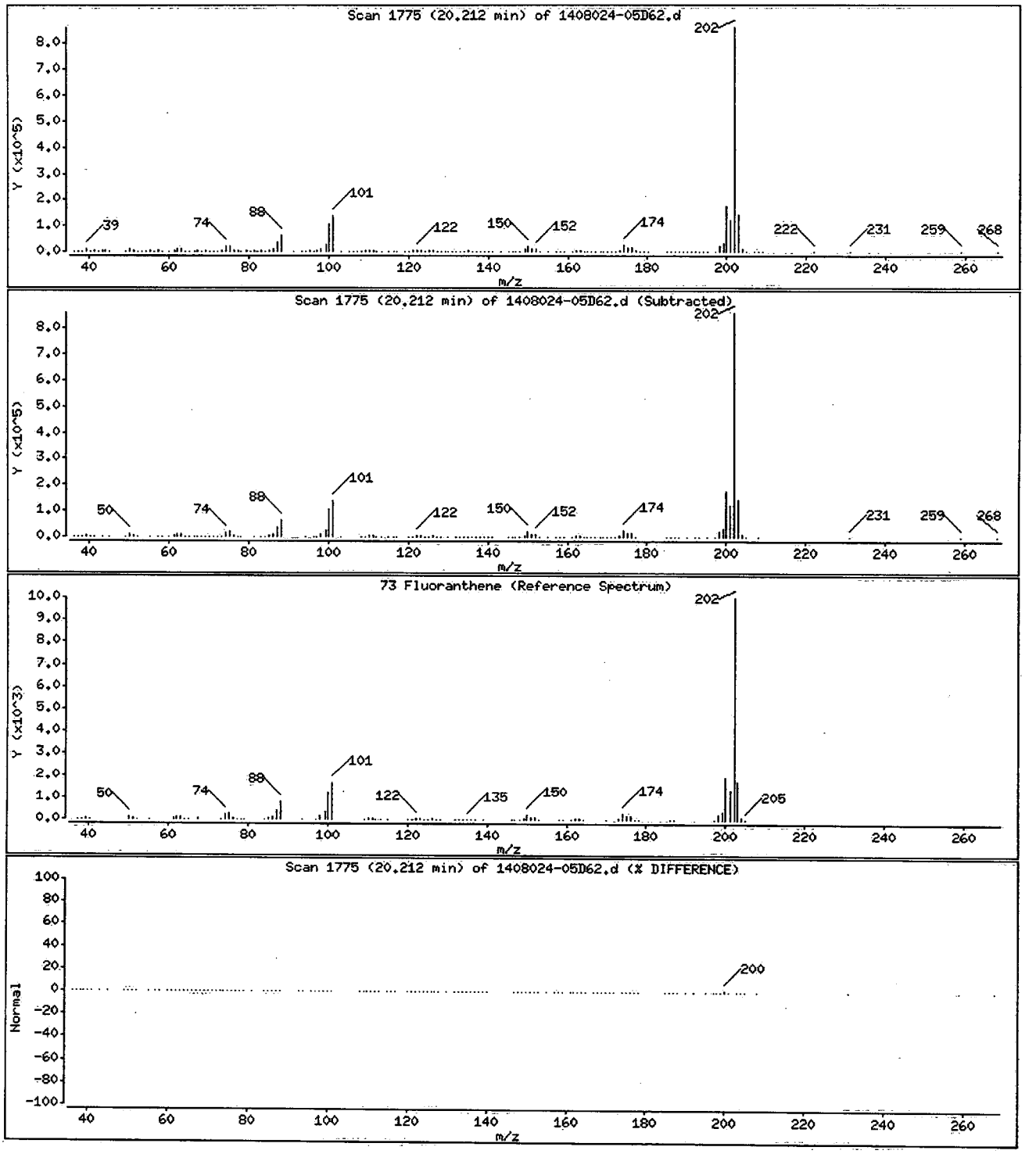
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

73 Fluoranthene Concentration: 6900 ug/Kg



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

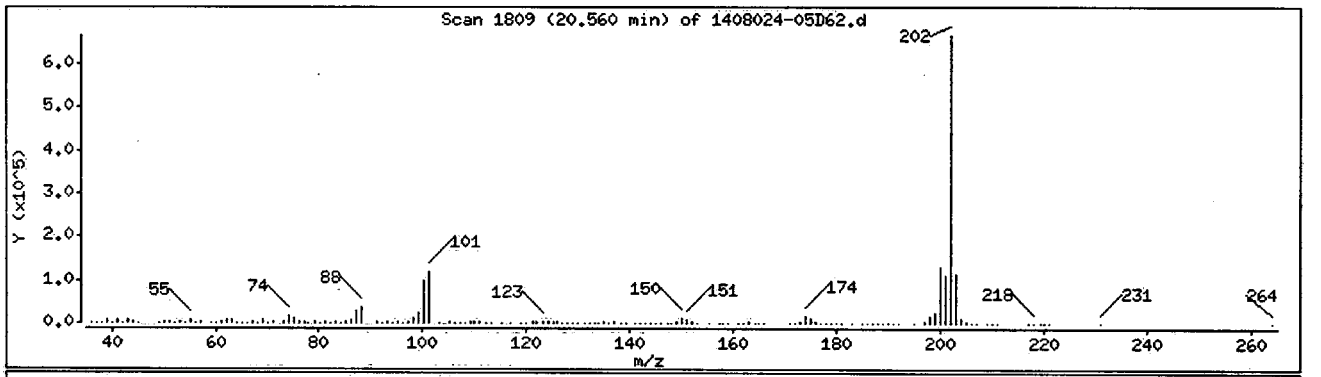
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

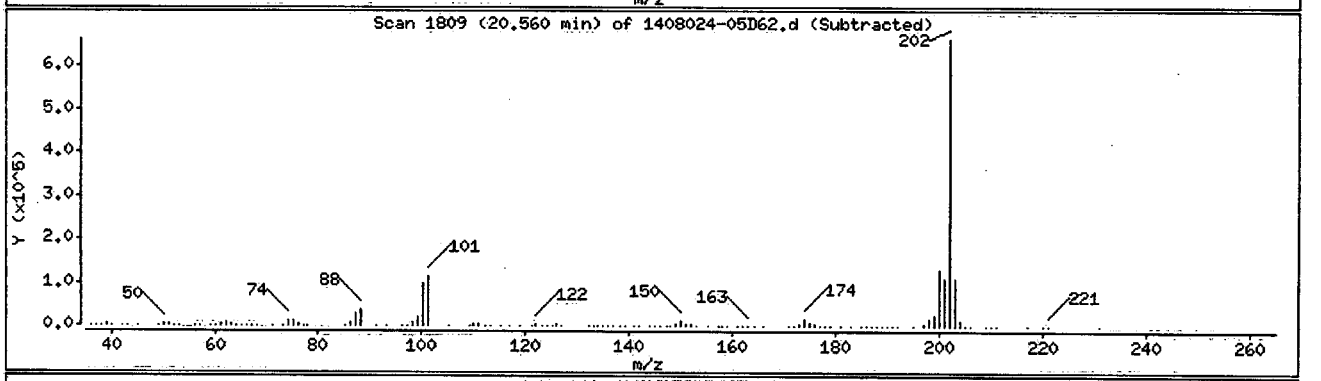
Sample Info: 1408024-05:OWS:10

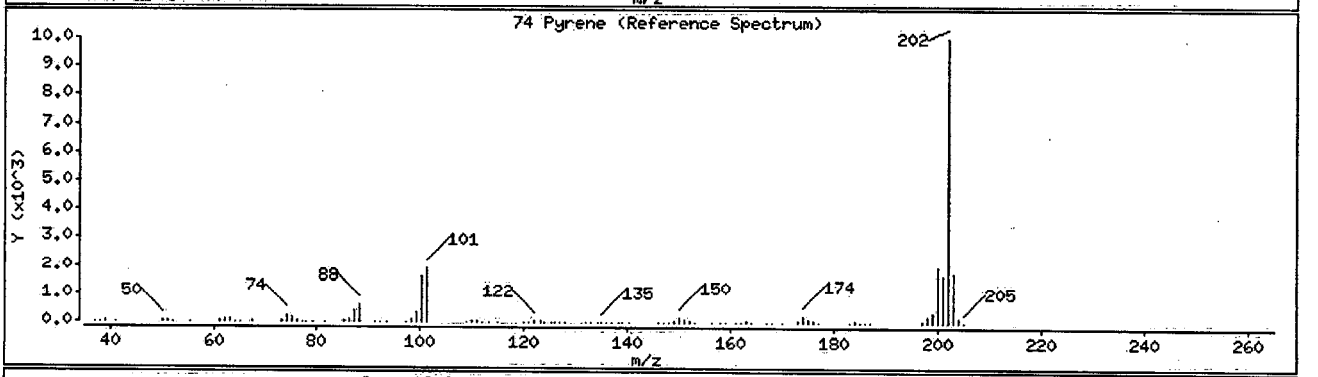
Volume Injected (uL): 2.0 Operator: OWS

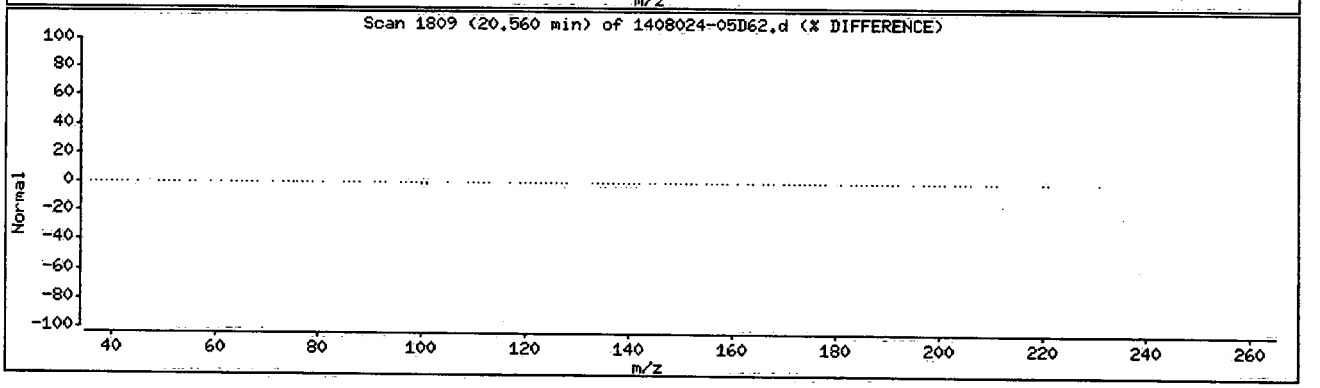
Column phase: Rxi-5SilMS Column diameter: 0.32

74 Pyrene Concentration: 5200 ug/Kg









8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

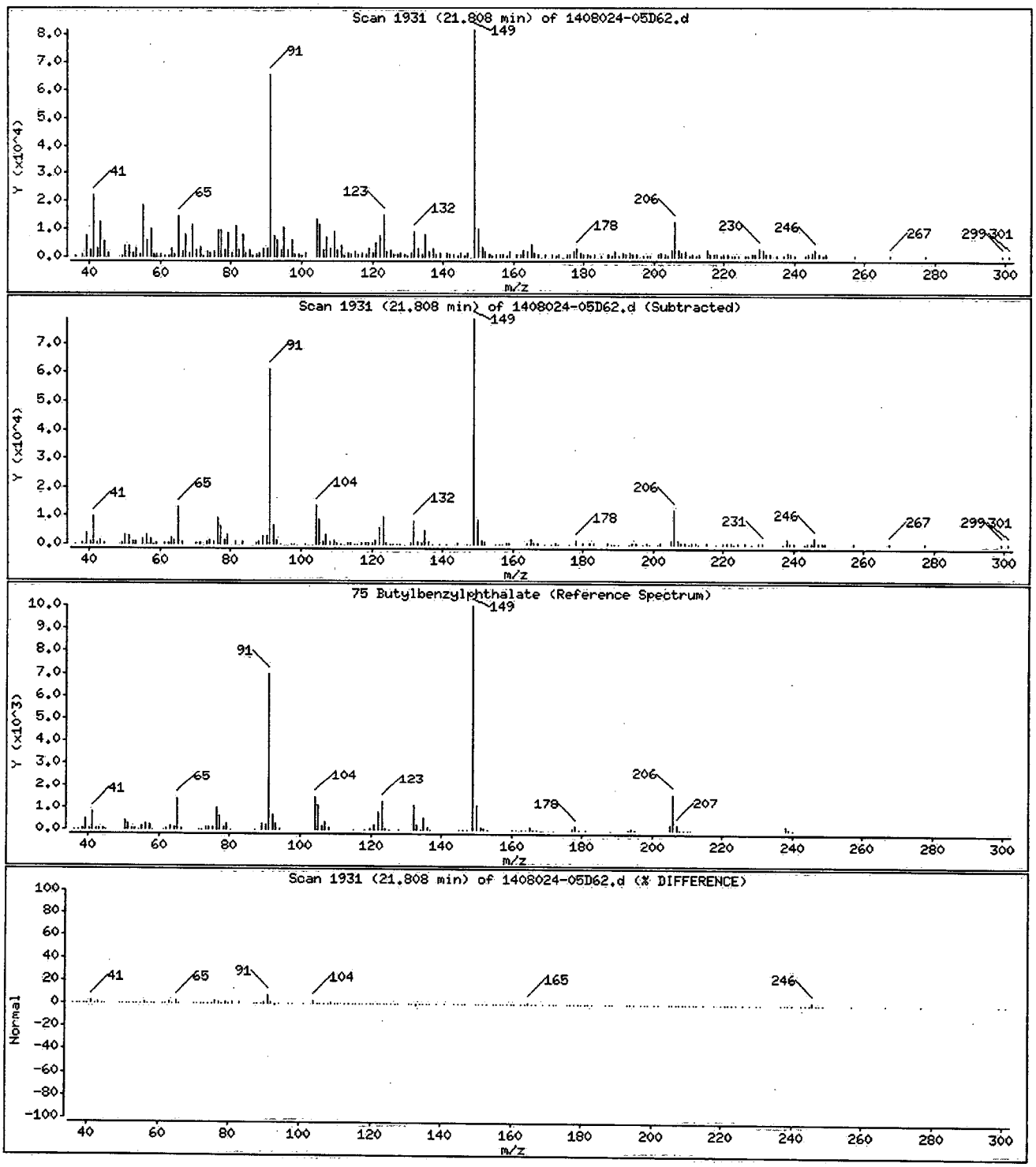
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

75 Butylbenzylphthalate Concentration: 1100 ug/Kg



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

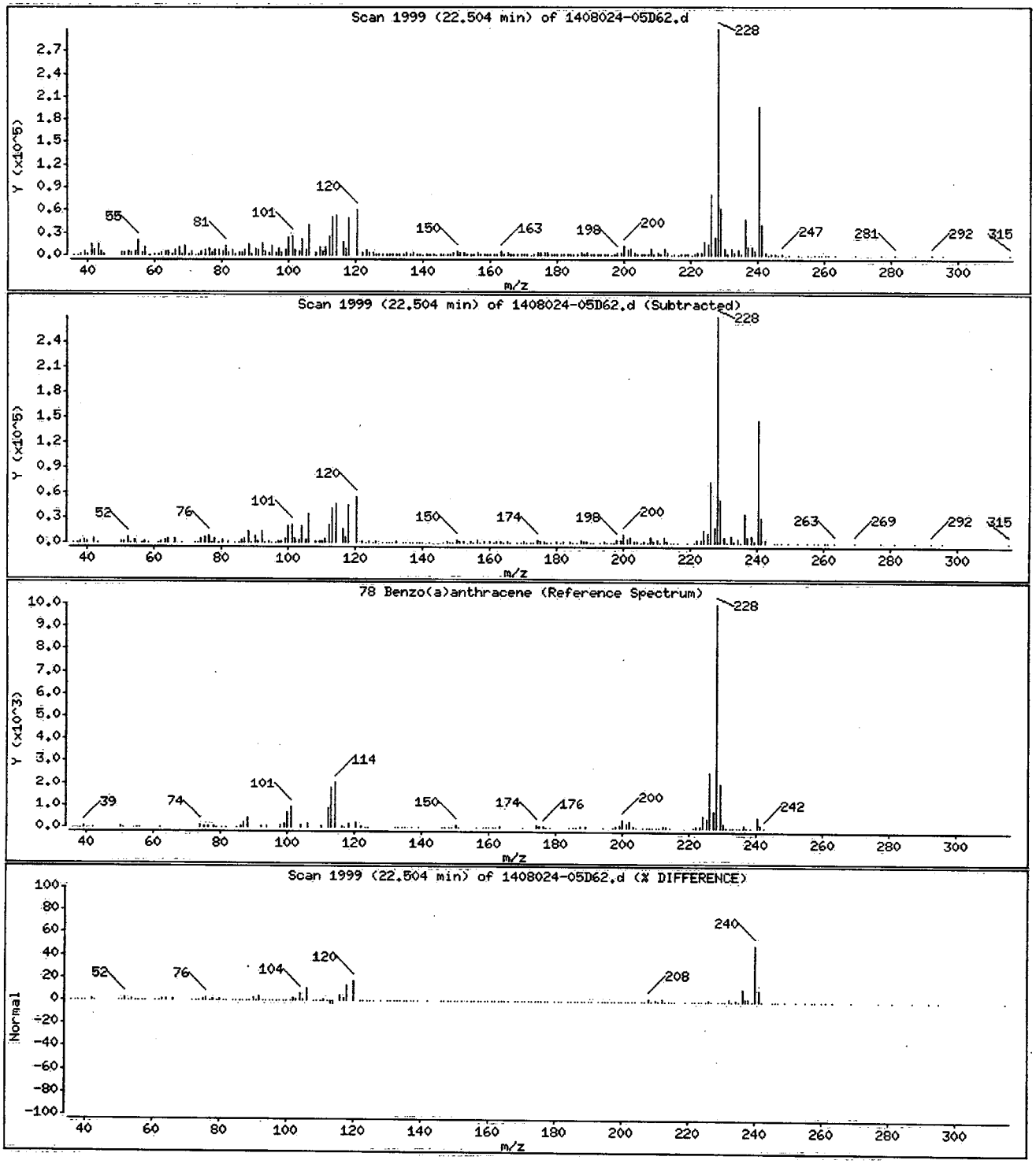
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

78 Benzo(a)anthracene Concentration: 2700 ug/Kg



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

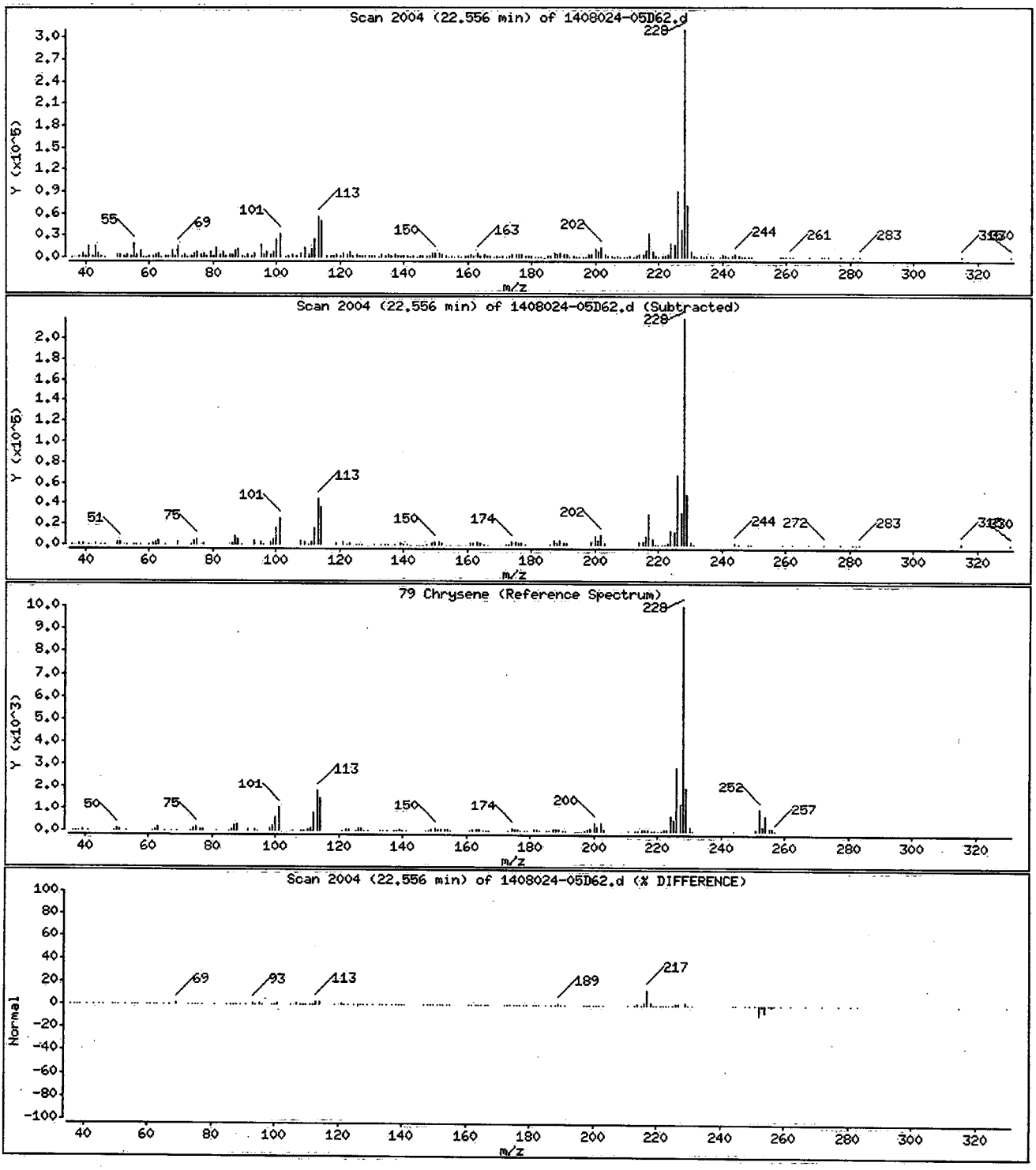
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

79 Chrysene Concentration: 3200 ug/Kg



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

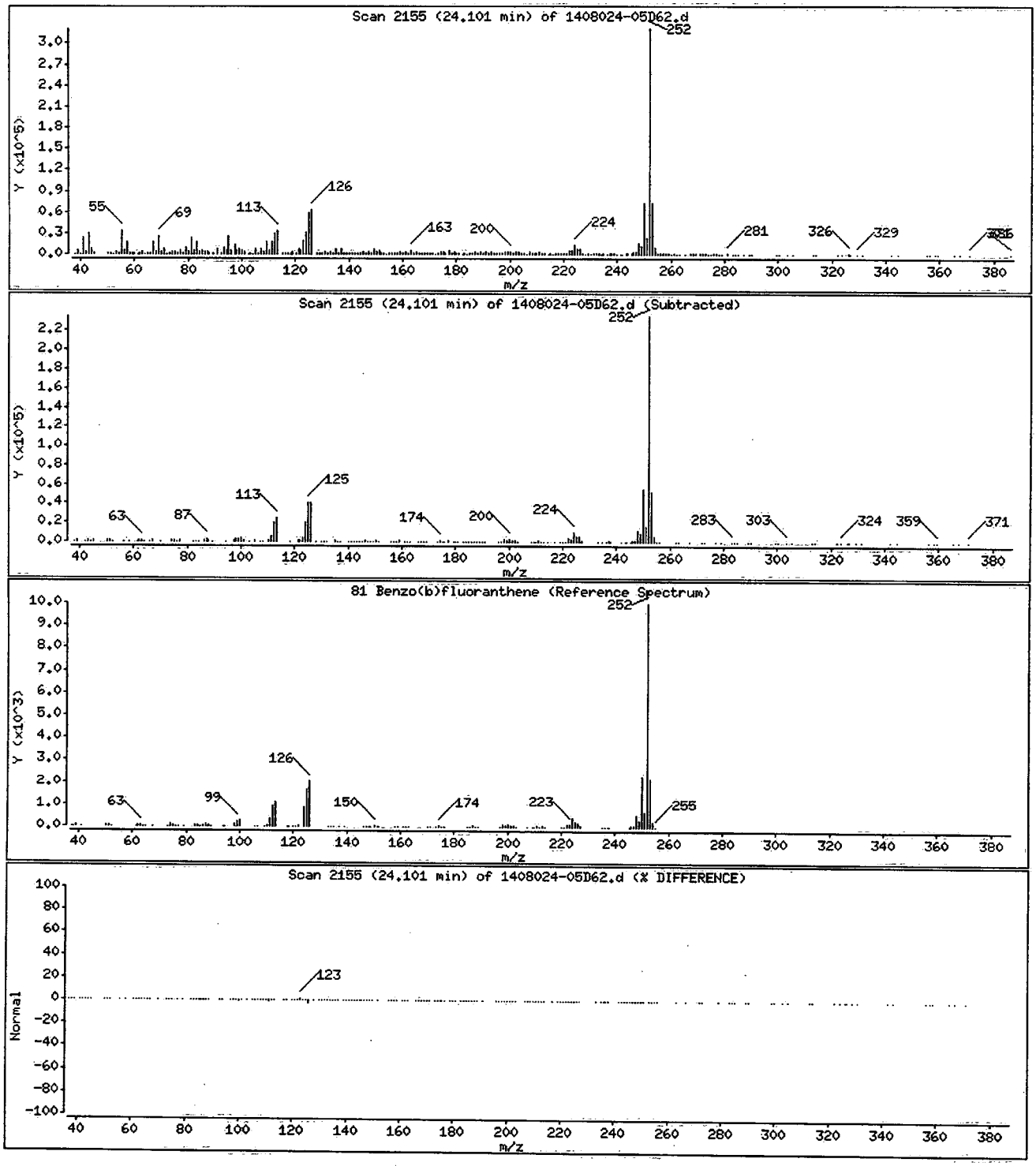
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

81 Benzo(b)fluoranthene Concentration: 4000 ug/Kg



8/19/2014

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Date : 15-AUG-2014 23:41

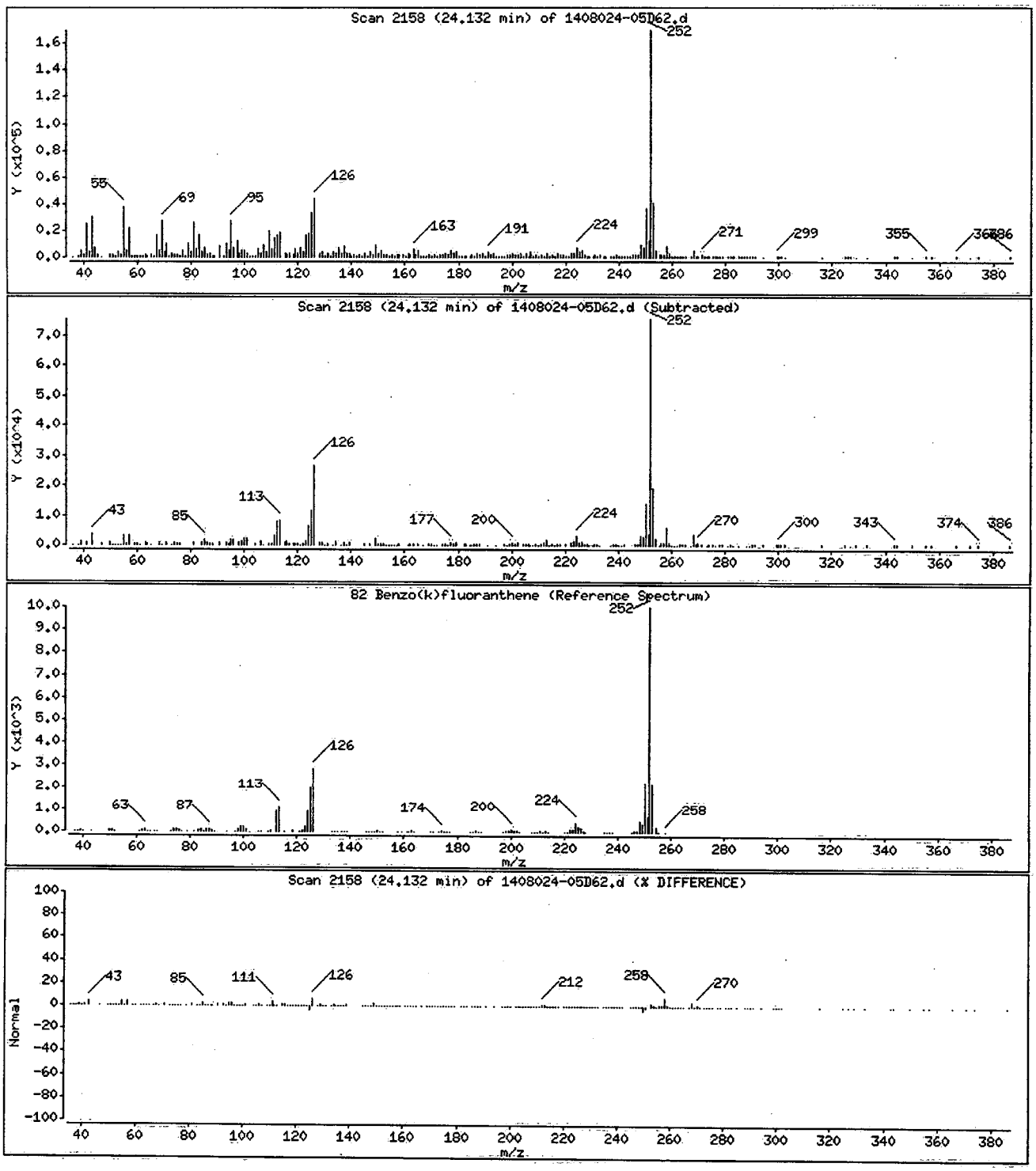
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

82 Benzo(k)fluoranthene Concentration: 1600 ug/Kg



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

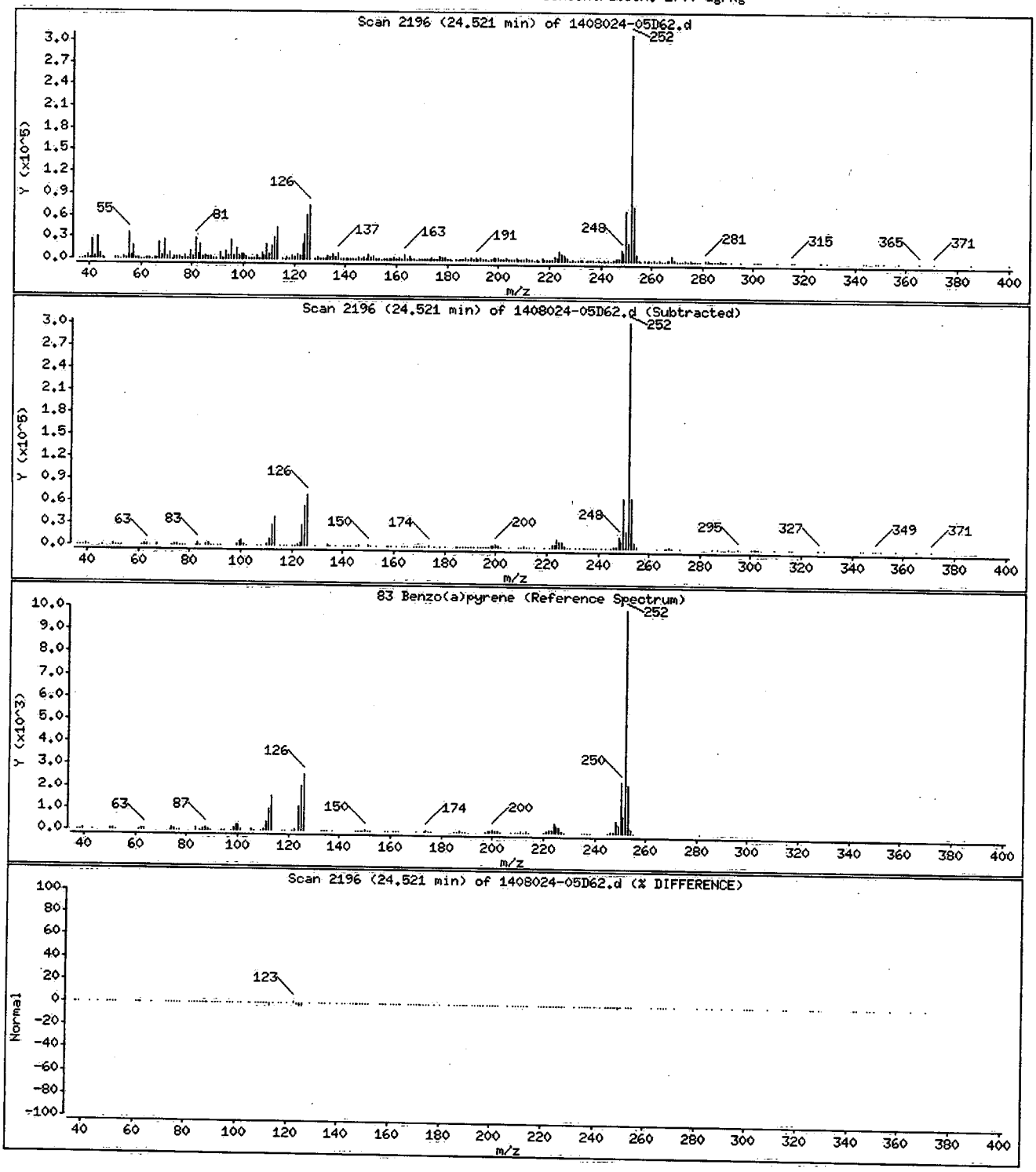
Client ID: P001-S001-0002-01 | Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 | Operator: OWS

Column phase: Rxi-5SilMS | Column diameter: 0.32

83 Benzo(a)pyrene | Concentration: 2700 ug/Kg



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

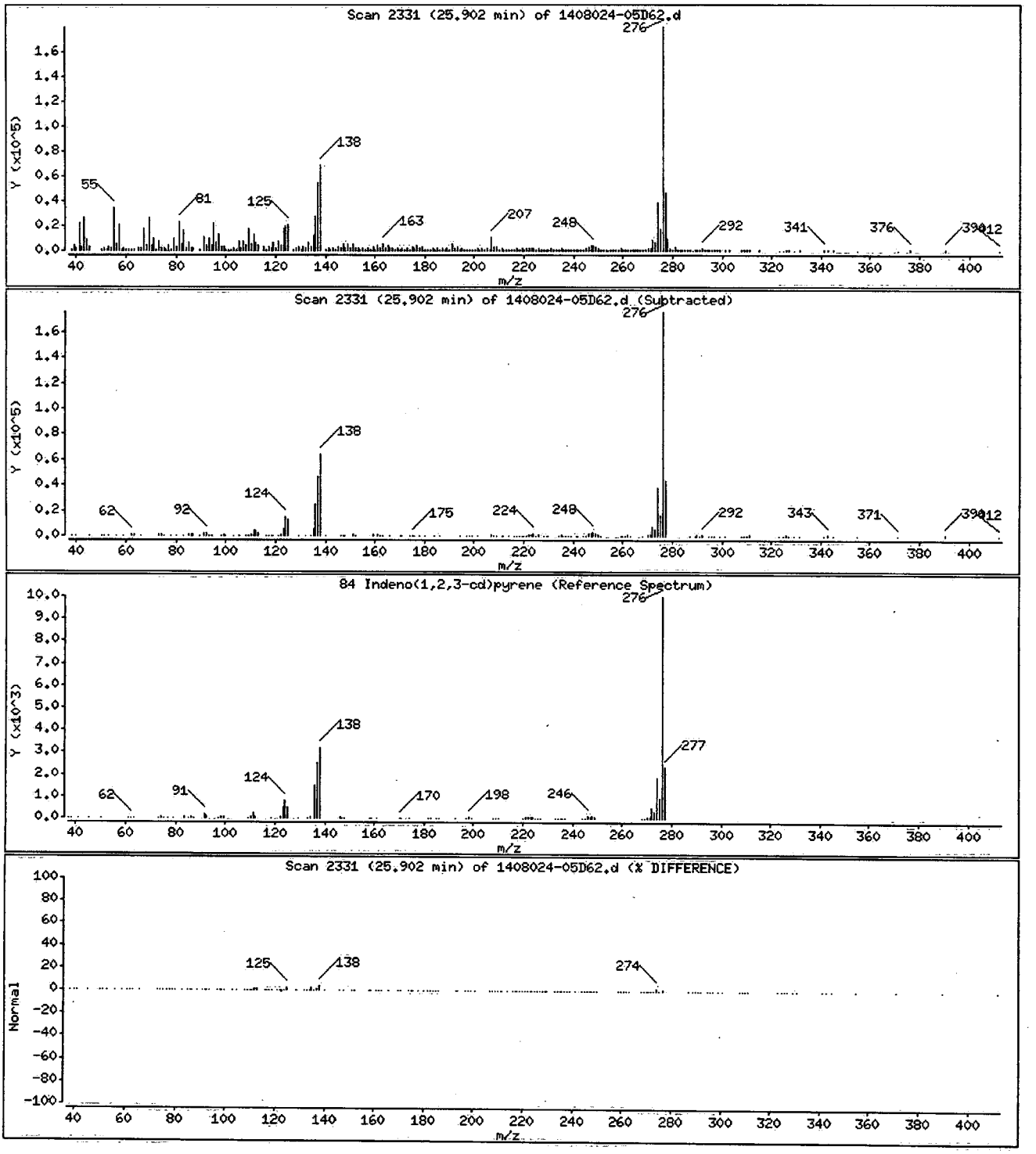
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

84 Indeno(1,2,3-cd)pyrene Concentration: 2000 ug/Kg



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

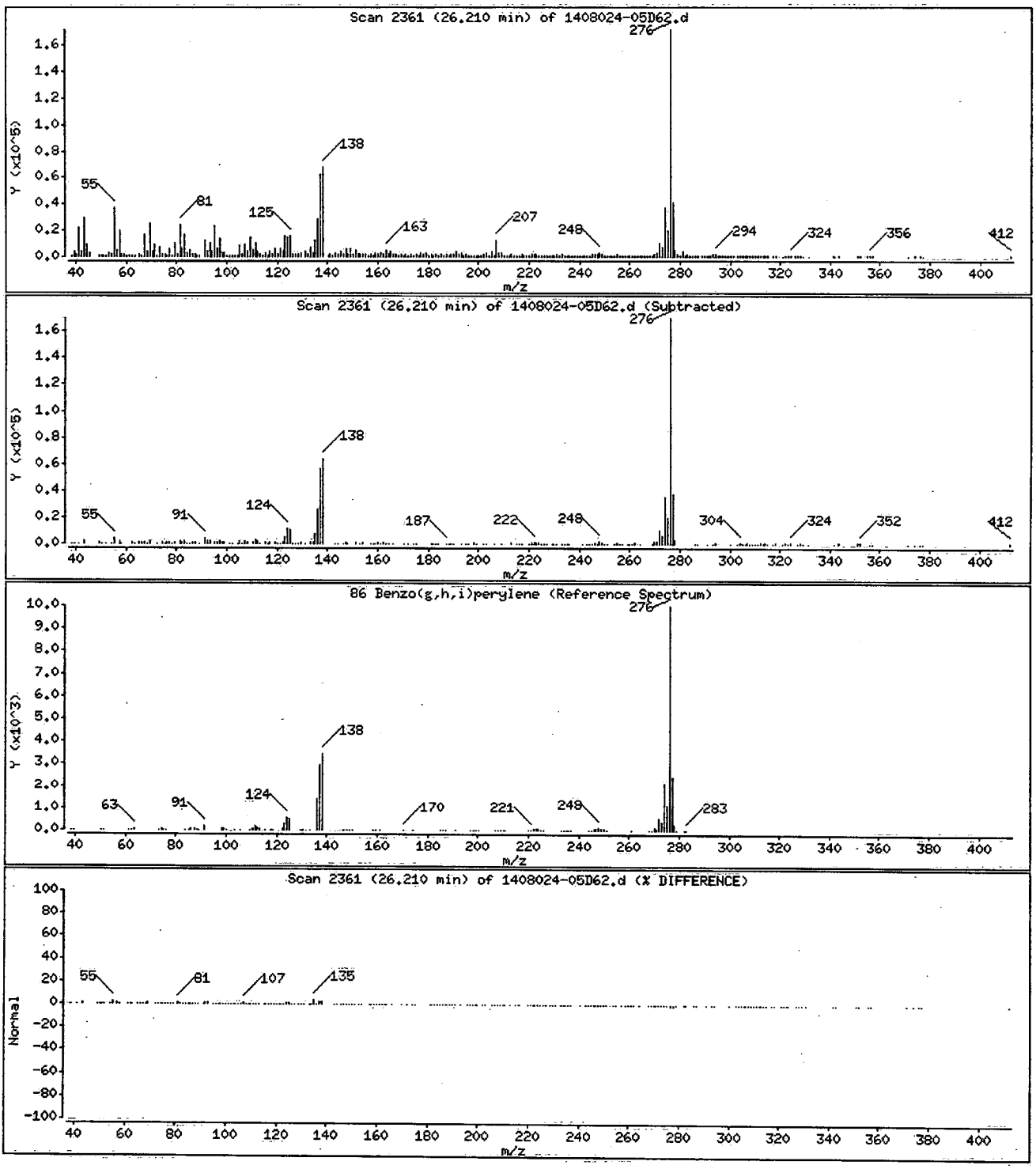
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

86 Benzo(g,h,i)perylene Concentration: 1800 ug/Kg



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

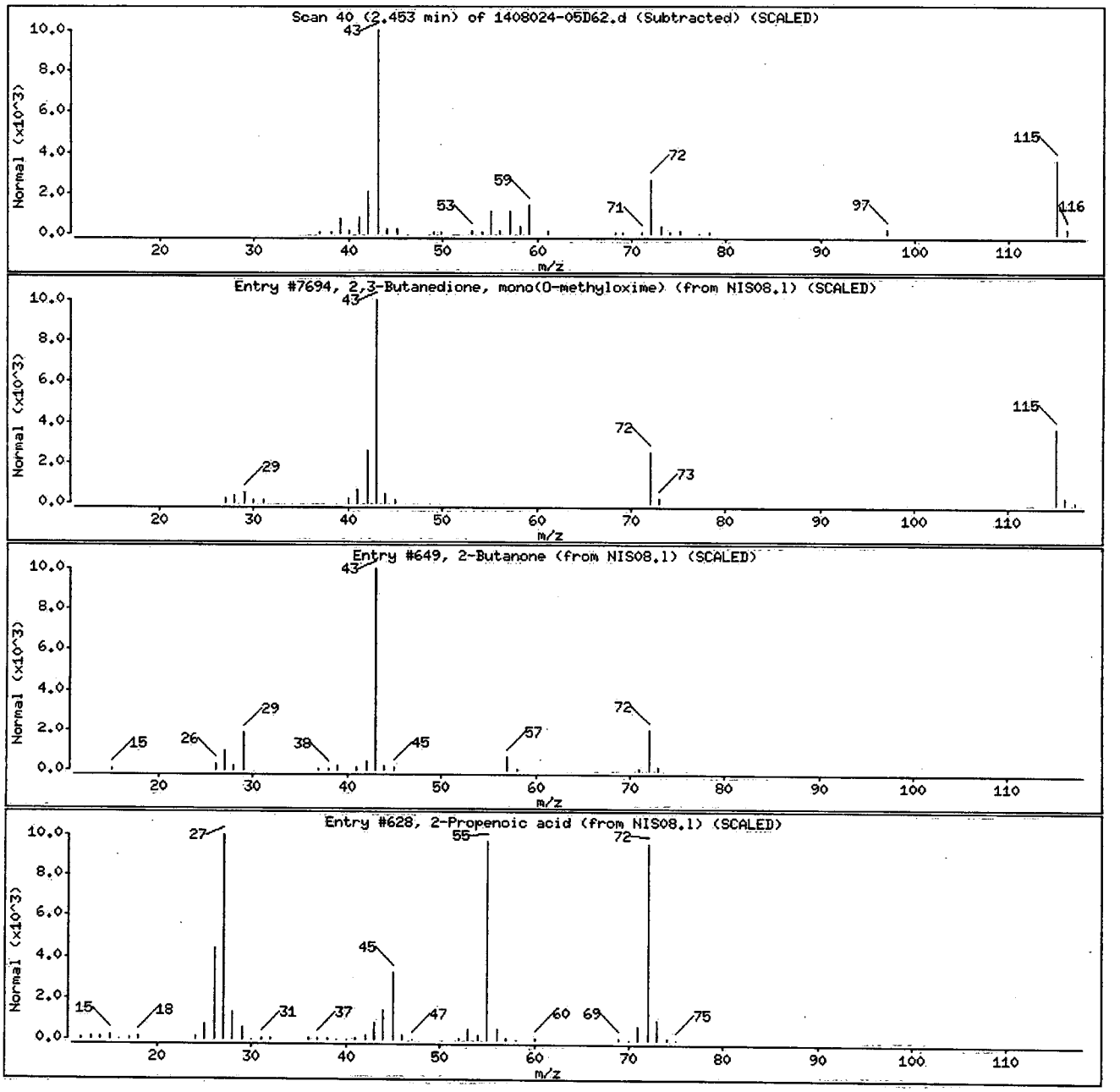
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,3-Butanedione, mono(O-methyloxime)	617-32-3	NIS08.1	7694	50	C5H9NO2	115
2-Butanone	78-93-3	NIS08.1	649	32	C4H8O	72
2-Propenoic acid	79-10-7	NIS08.1	628	9	C3H4O2	72



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

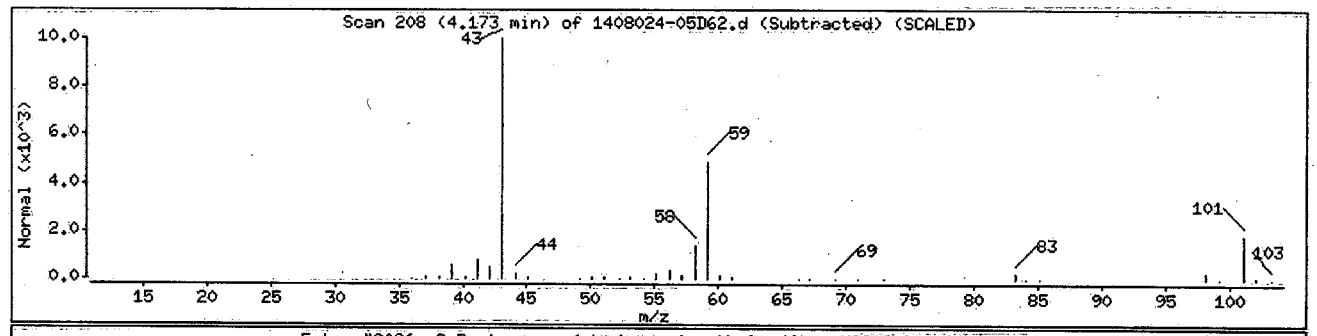
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

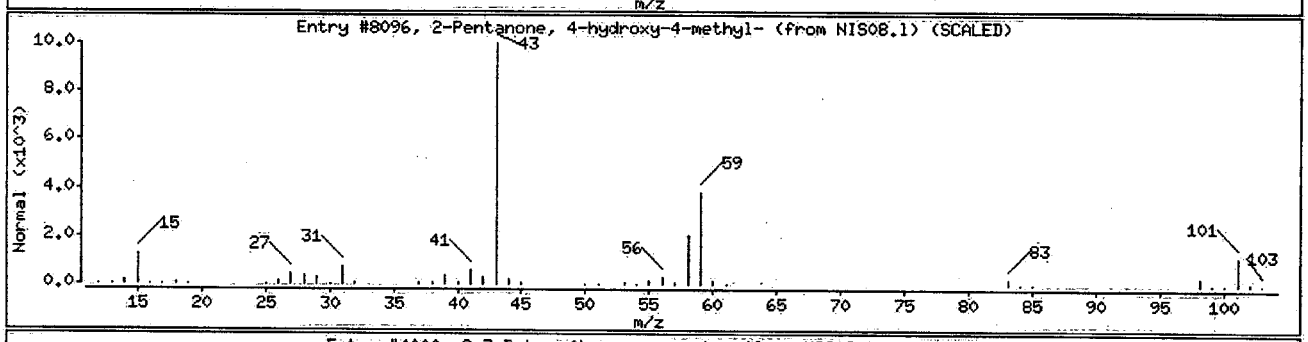
Sample Info: 1408024-05:OWS:10

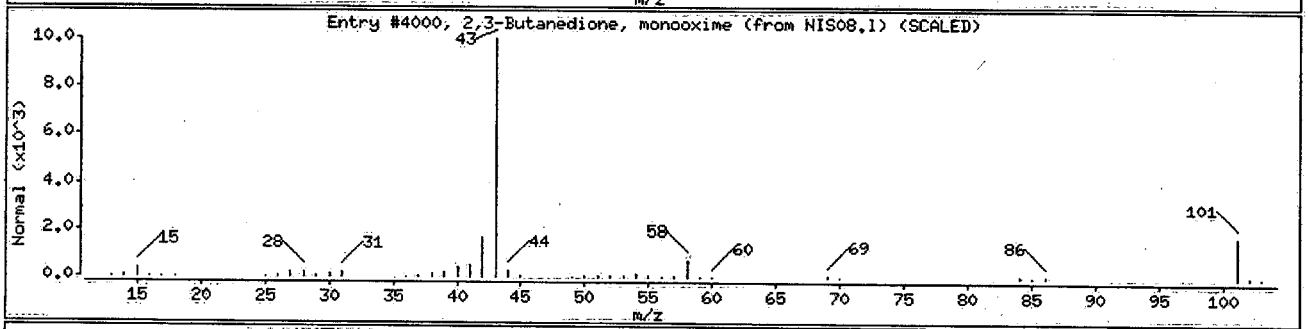
Volume Injected (uL): 2.0 Operator: OWS

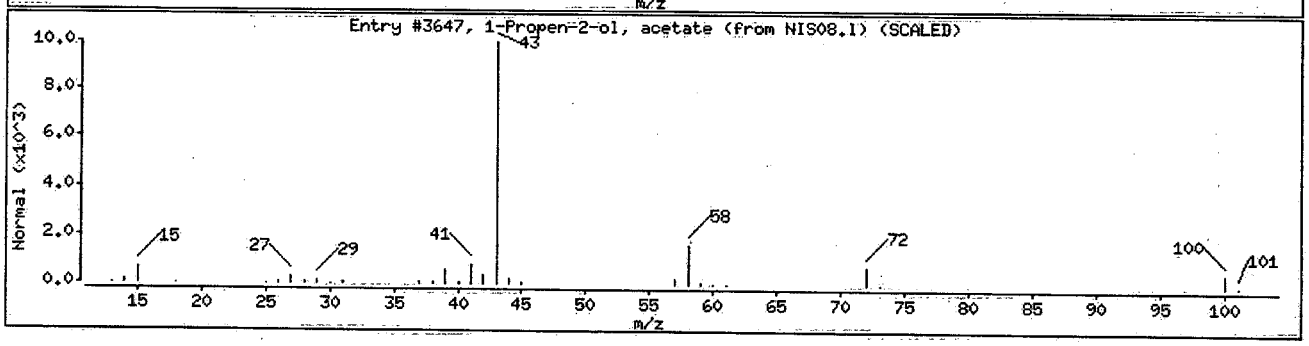
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIS08.1	8096	56	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIS08.1	4000	16	C4H7NO2	101
1-Propen-2-ol, acetate	108-22-5	NIS08.1	3647	10	C5H8O2	100









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

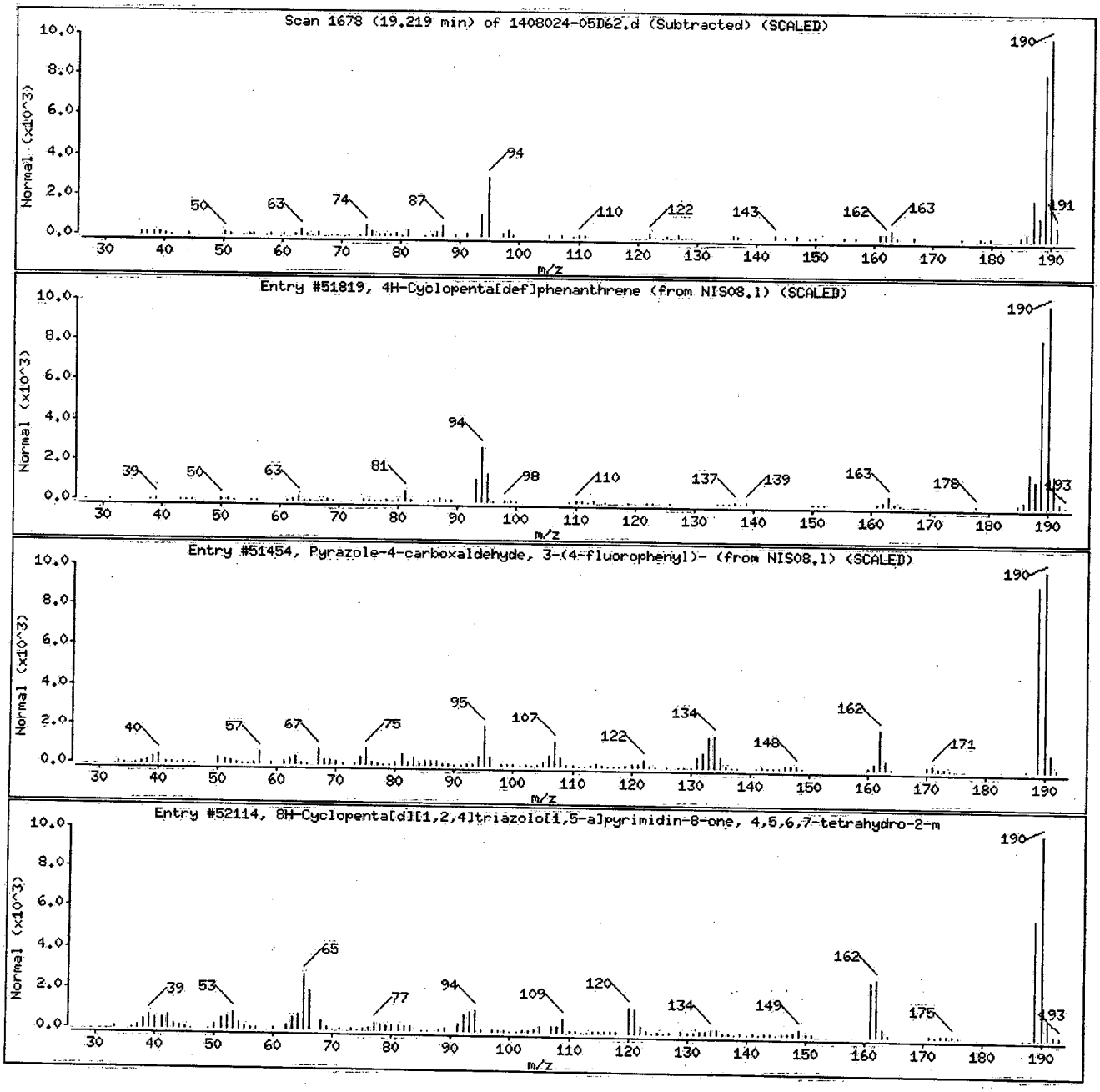
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4H-Cyclopenta[def]phenanthrene	203-64-5	NIS08.l	51819	80	C15H10	190
Pyrazole-4-carboxaldehyde, 3-(4-fluoroph	306936-57-2	NIS08.l	51454	64	C10H7FN2O	190
8H-Cyclopenta[d][1,2,4]triazolo[1,5-a]py	1000337-56-4	NIS08.l	52114	53	C9H10N4O	190



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

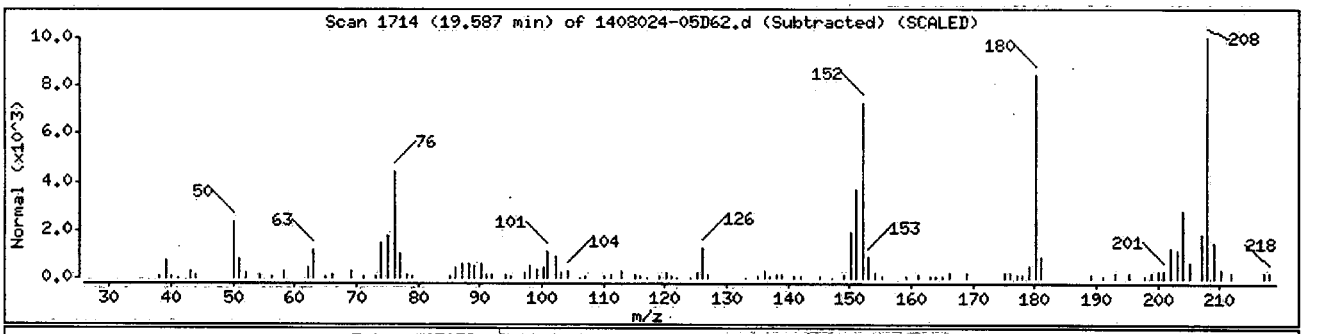
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

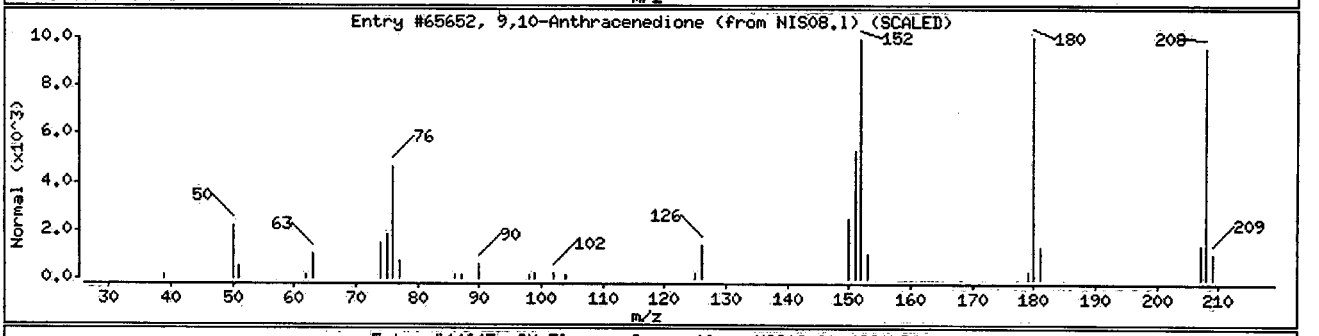
Sample Info: 1408024-05:OWS:10

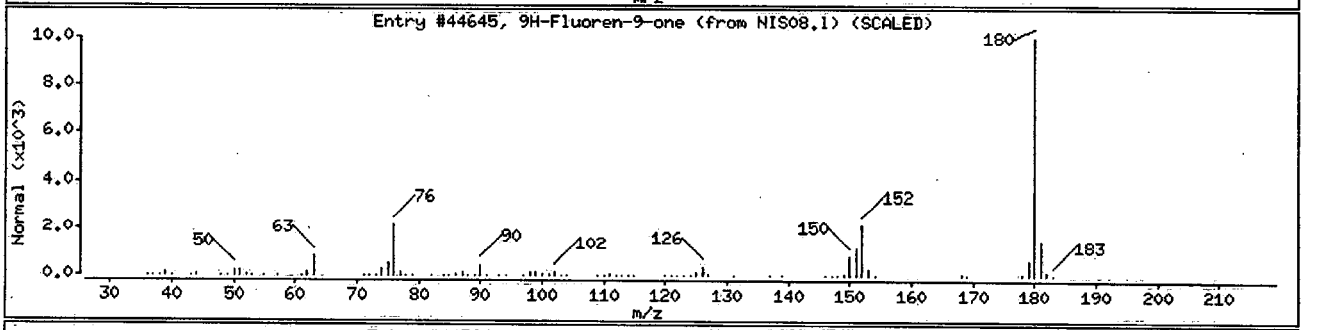
Volume Injected (uL): 2.0 Operator: OWS

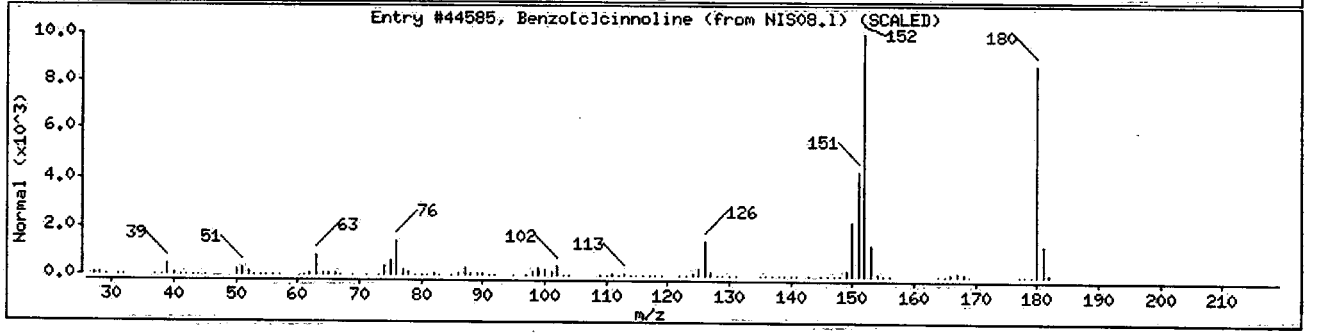
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9,10-Anthracenedione	84-65-1	NIS08.l	65652	97	C14H8O2	208
9H-Fluoren-9-one	486-25-9	NIS08.l	44645	70	C13H8O	180
Benzo[c]cinnoline	230-17-1	NIS08.l	44585	70	C12H8N2	180









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

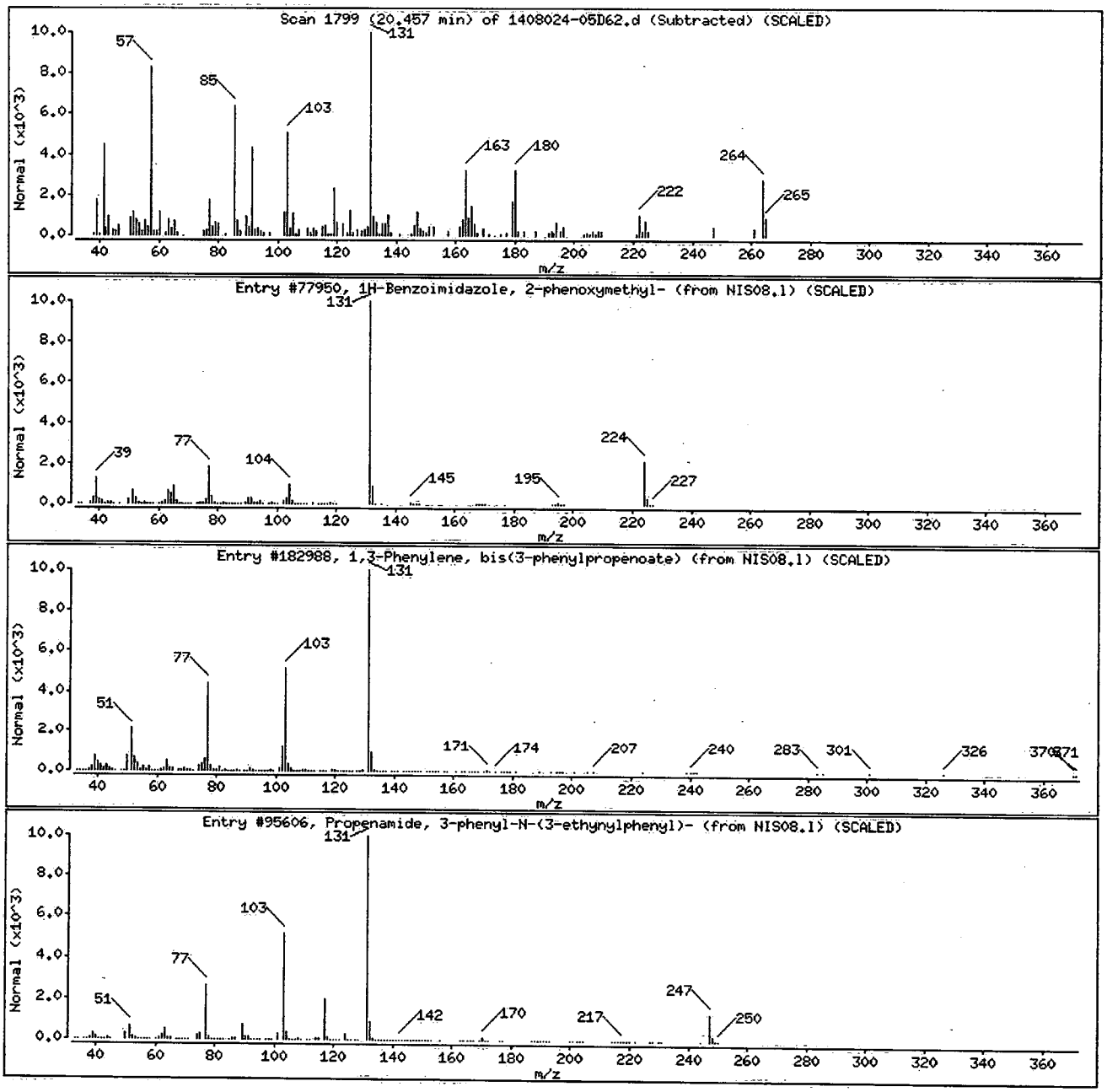
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1H-Benzoimidazole, 2-phenoxymethyl-	1000303-78-1	NIS08.l	77950	35	C14H12N2O	224
1,3-Phenylene, bis(3-phenylpropenoate)	1000259-62-4	NIS08.l	182988	35	C24H18O4	370
Propenamide, 3-phenyl-N-(3-ethynylphenyl	294667-02-0	NIS08.l	95606	35	C17H13NO	247



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

Client ID: P001-S001-0002-01

Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

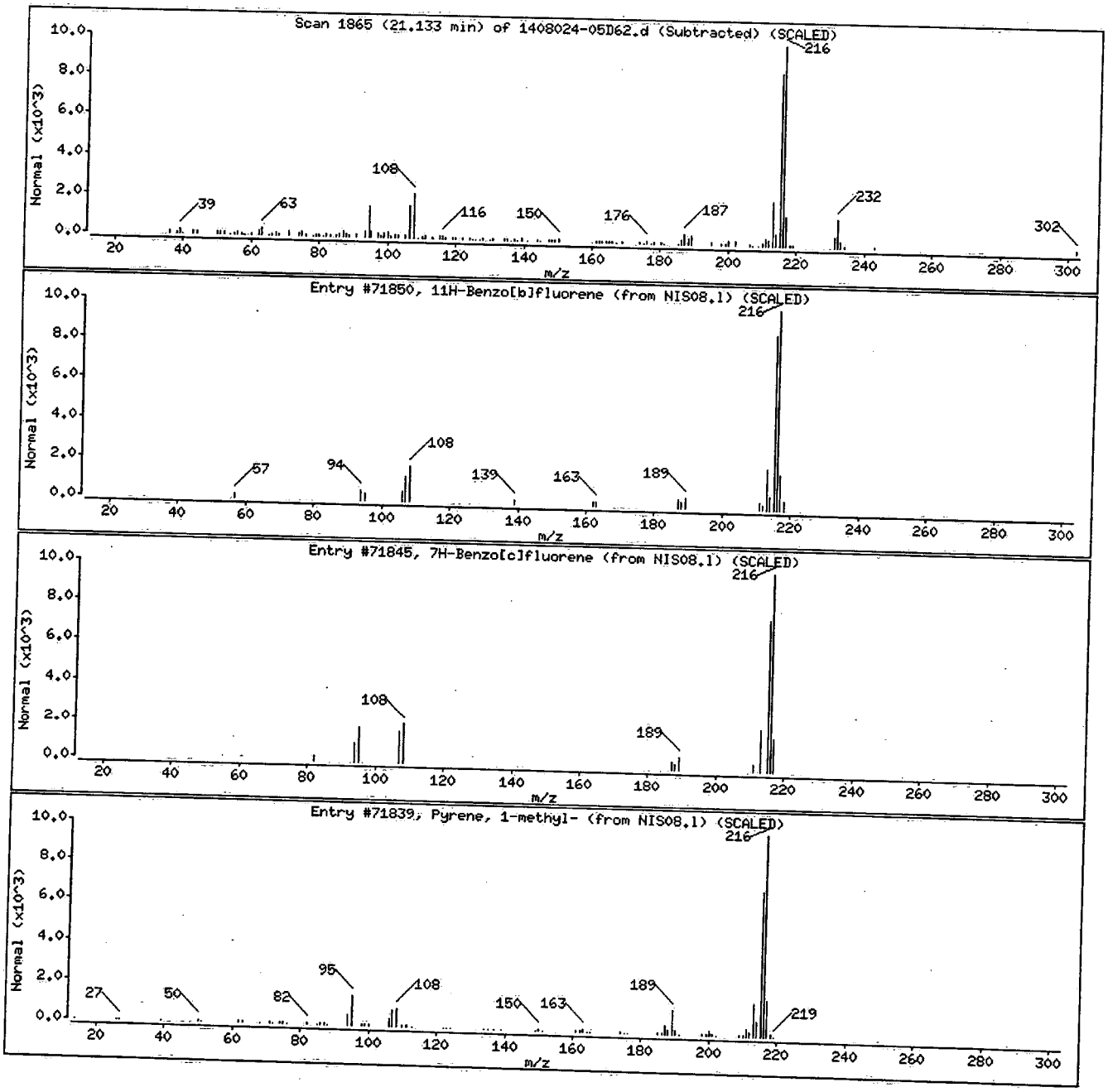
Volume Injected (uL): 2.0

Operator: OWS

Column phase: Rxi-5SilMS

Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
11H-Benzo[b]fluorene	243-17-4	NIS08.l	71850	91	C17H12	216
7H-Benzo[c]fluorene	205-12-9	NIS08.l	71845	87	C17H12	216
Pyrene, 1-methyl-	2381-21-7	NIS08.l	71839	81	C17H12	216



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

Client ID: P001-S001-0002-01

Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

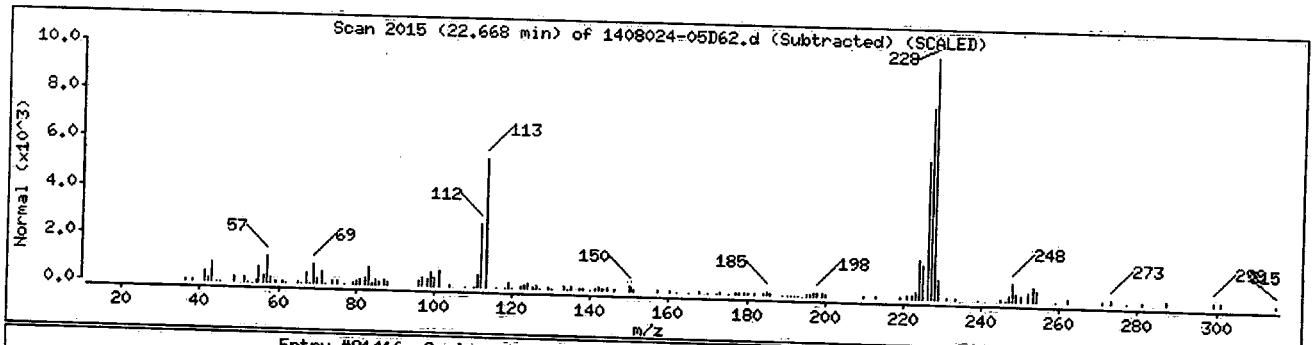
Volume Injected (uL): 2.0

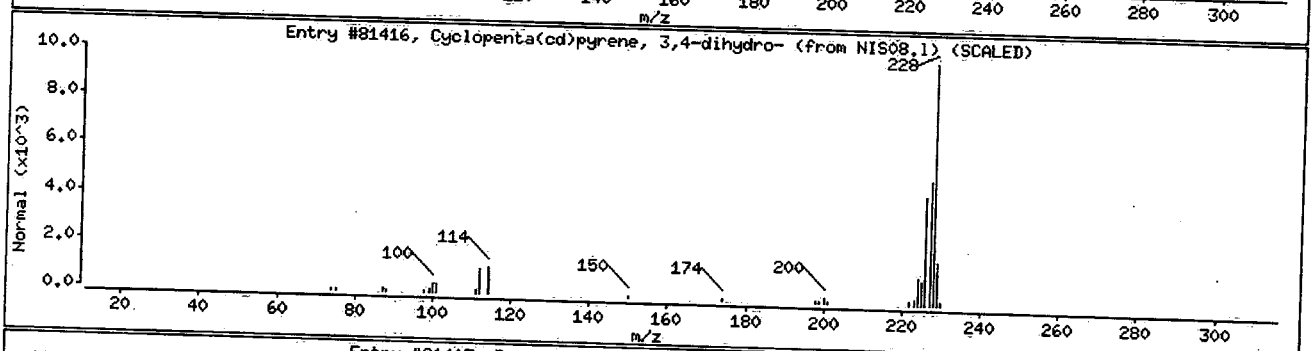
Operator: OWS

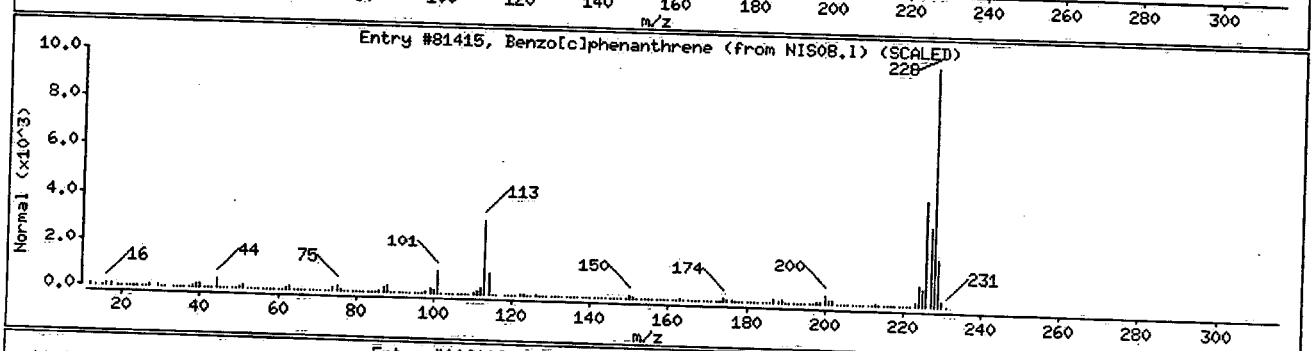
Column phase: Rxi-5SilMS

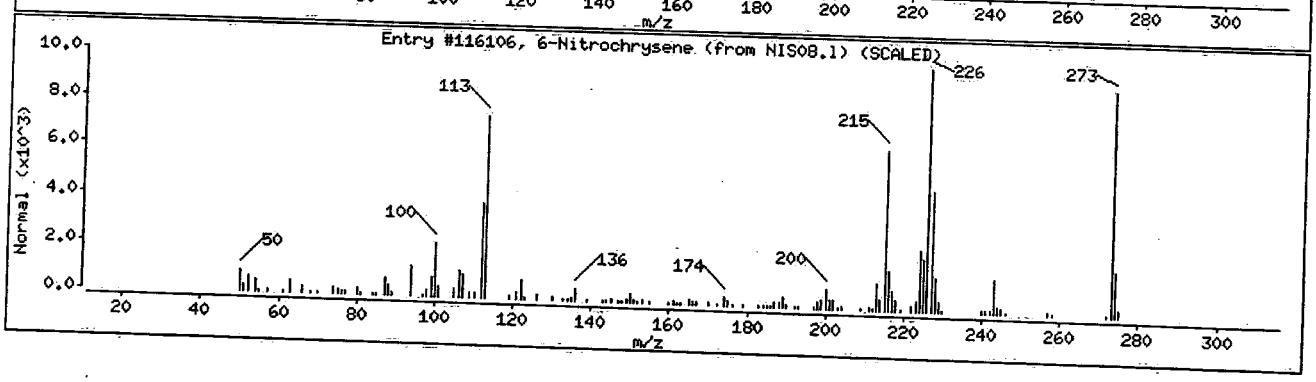
Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cyclopenta(cd)pyrene, 3,4-dihydro-	25732-74-5	NIS08.l	81416	38	C18H12	228
Benzo[c]phenanthrene	195-19-7	NIS08.l	81415	35	C18H12	228
6-Nitrochrysene	7496-02-8	NIS08.l	116106	23	C18H11NO2	273









Rolder Hani 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

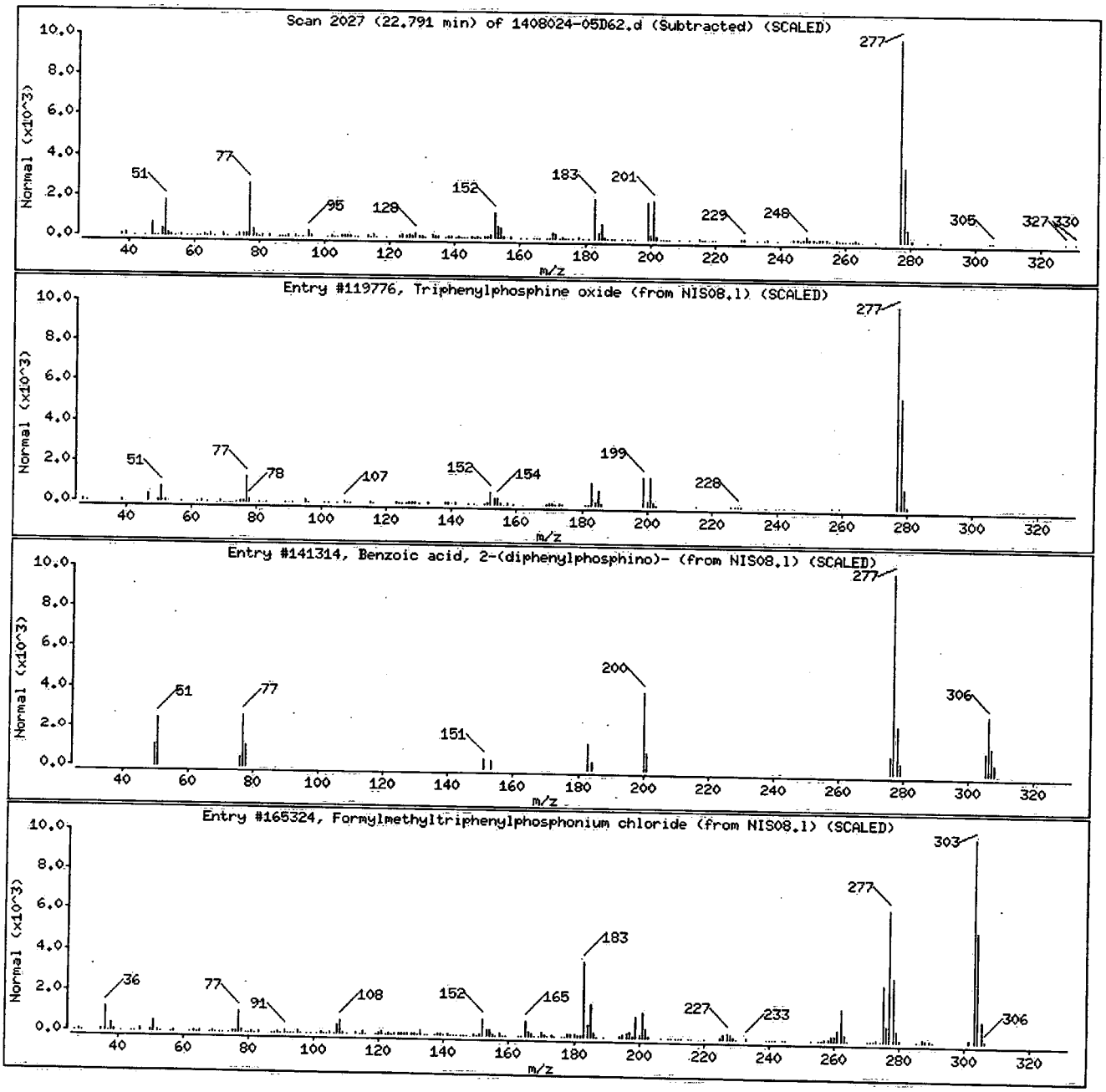
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Triphenylphosphine oxide	791-28-6	NIS08.l	119776	91	C18H15OP	278
Benzoic acid, 2-(diphenylphosphino)-	17261-28-8	NIS08.l	141314	39	C19H15O2P	306
Formylmethyltriphenylphosphonium chlorid	62942-43-2	NIS08.l	165324	38	C20H18ClOP	340



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

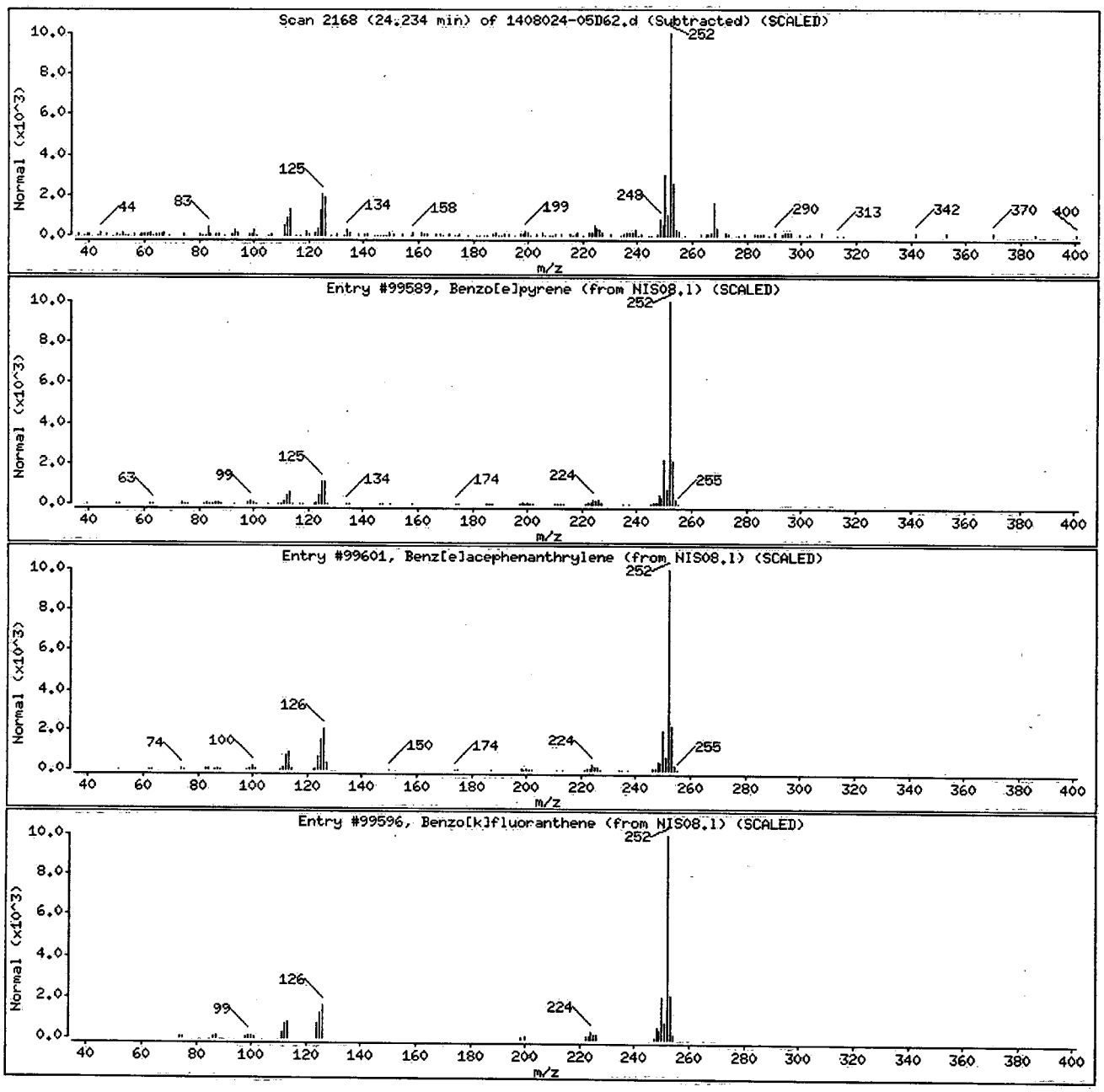
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzo[e]pyrene	192-97-2	NIS08.l	99589	97	C20H12	252
Benz[e]acephenanthrylene	205-99-2	NIS08.l	99601	96	C20H12	252
Benzo[k]fluoranthene	207-08-9	NIS08.l	99596	94	C20H12	252



Roldan Hani 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

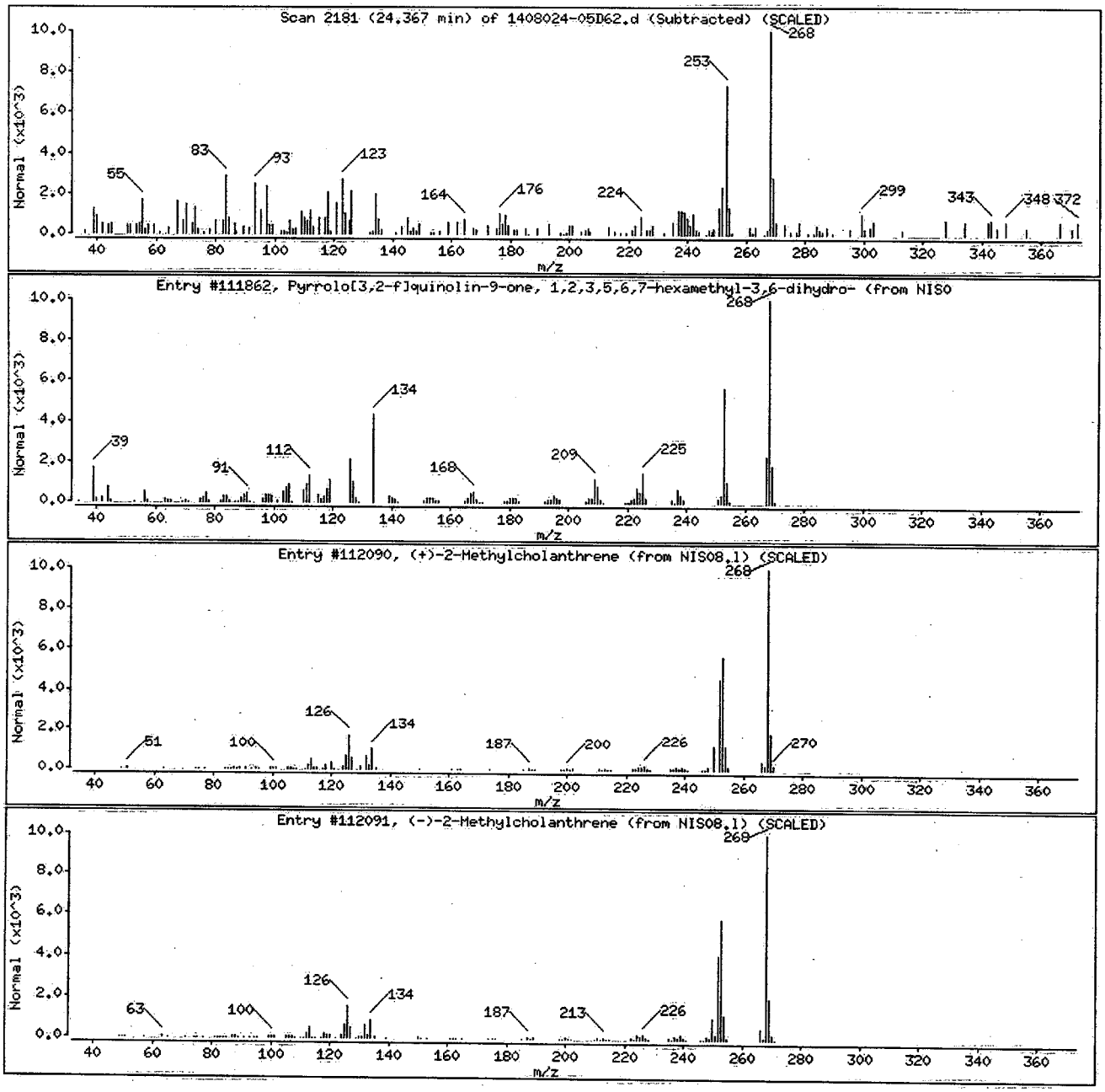
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Pyrrolo[3,2-f]quinolin-9-one, 1,2,3,5,6,	1000302-73-3	NIS08.l	111862	68	C17H20N2O	268
(+)-2-Methylcholanthrene	1000126-56-1	NIS08.l	112090	64	C21H16	268
(-)-2-Methylcholanthrene	1000126-56-2	NIS08.l	112091	64	C21H16	268



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

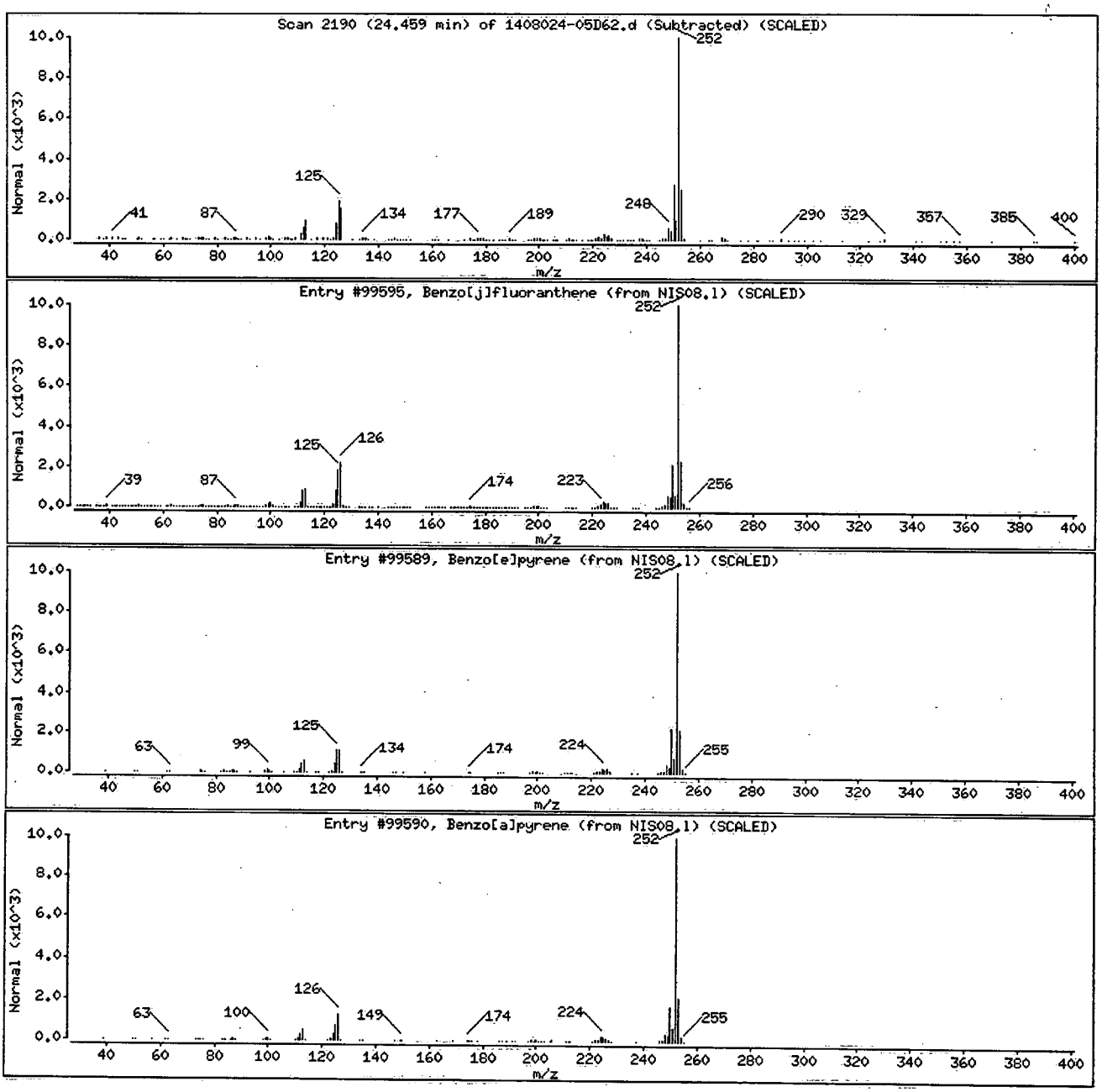
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzo[j]fluoranthene	205-82-3	NIS08.1	99595	96	C20H12	252
Benzo[e]pyrene	192-97-2	NIS08.1	99589	96	C20H12	252
Benzo[a]pyrene	50-32-8	NIS08.1	99590	96	C20H12	252



Rolder Hai 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

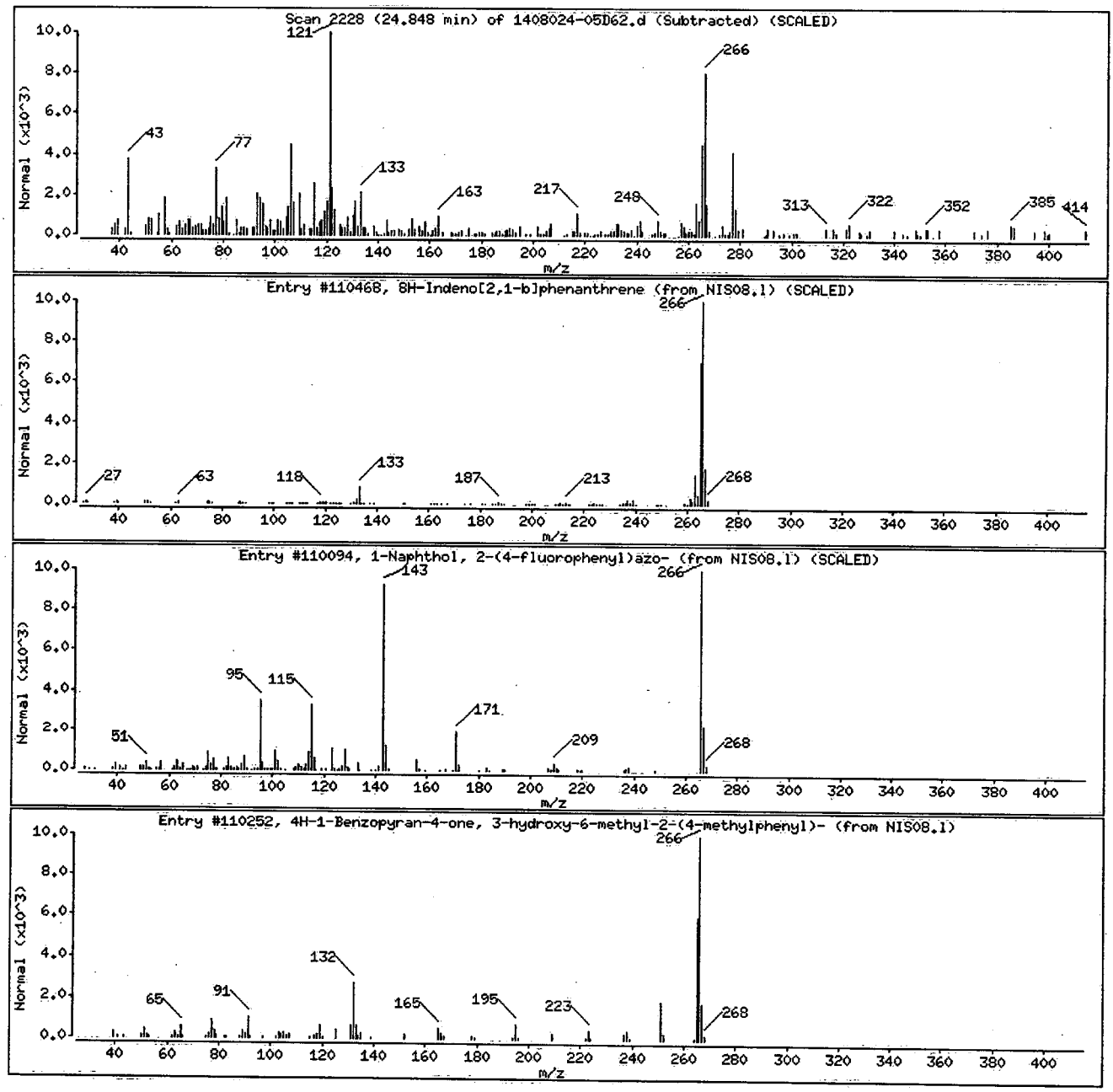
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
8H-Indeno[2,1-b]phenanthrene	241-28-1	NIS08.l	110468	41	C21H14	266
1-Naphthol, 2-(4-fluorophenyl)azo-	125910-80-7	NIS08.l	110094	41	C16H11FN2O	266
4H-1-Benzopyran-4-one, 3-hydroxy-6-methy	78396-37-9	NIS08.l	110252	38	C17H14O3	266



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

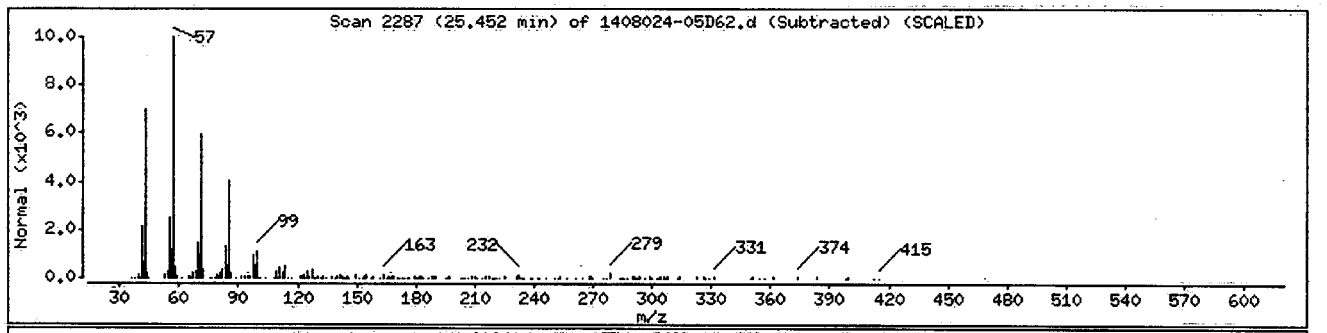
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

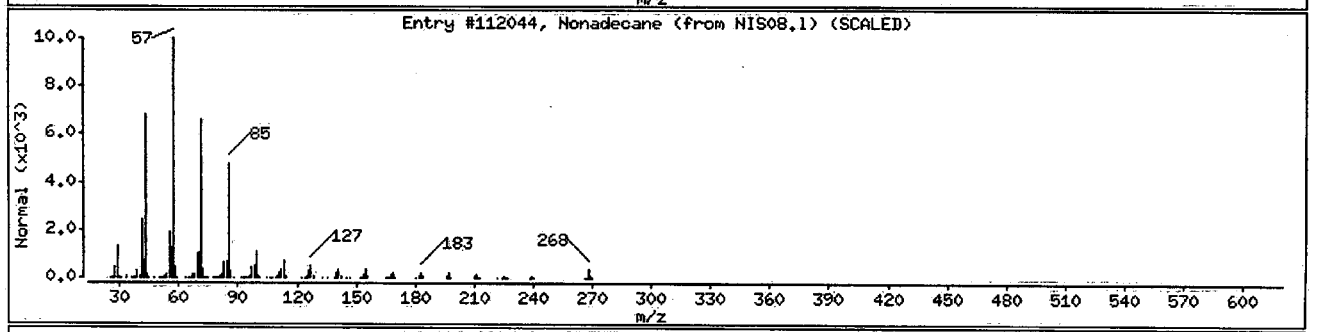
Sample Info: 1408024-05:OWS:10

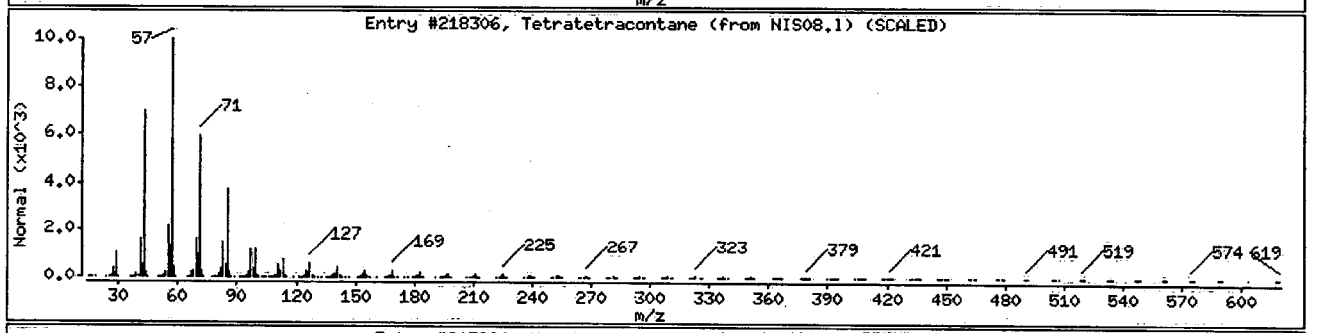
Volume Injected (uL): 2.0 Operator: OWS

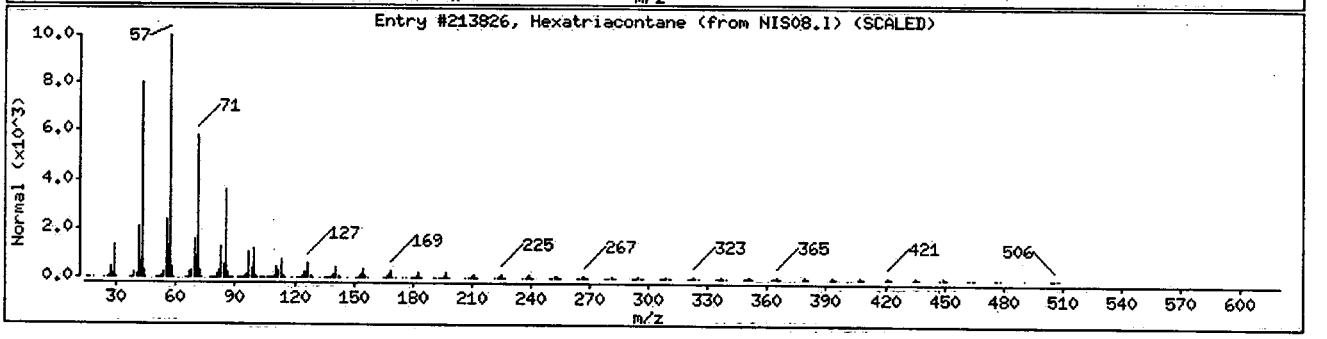
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Nonadecane	629-92-5	NIS08.1	112044	91	C19H40	268
Tetratetracontane	7098-22-8	NIS08.1	218306	87	C44H90	619
Hexatriacontane	630-06-8	NIS08.1	213826	80	C36H74	507









8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

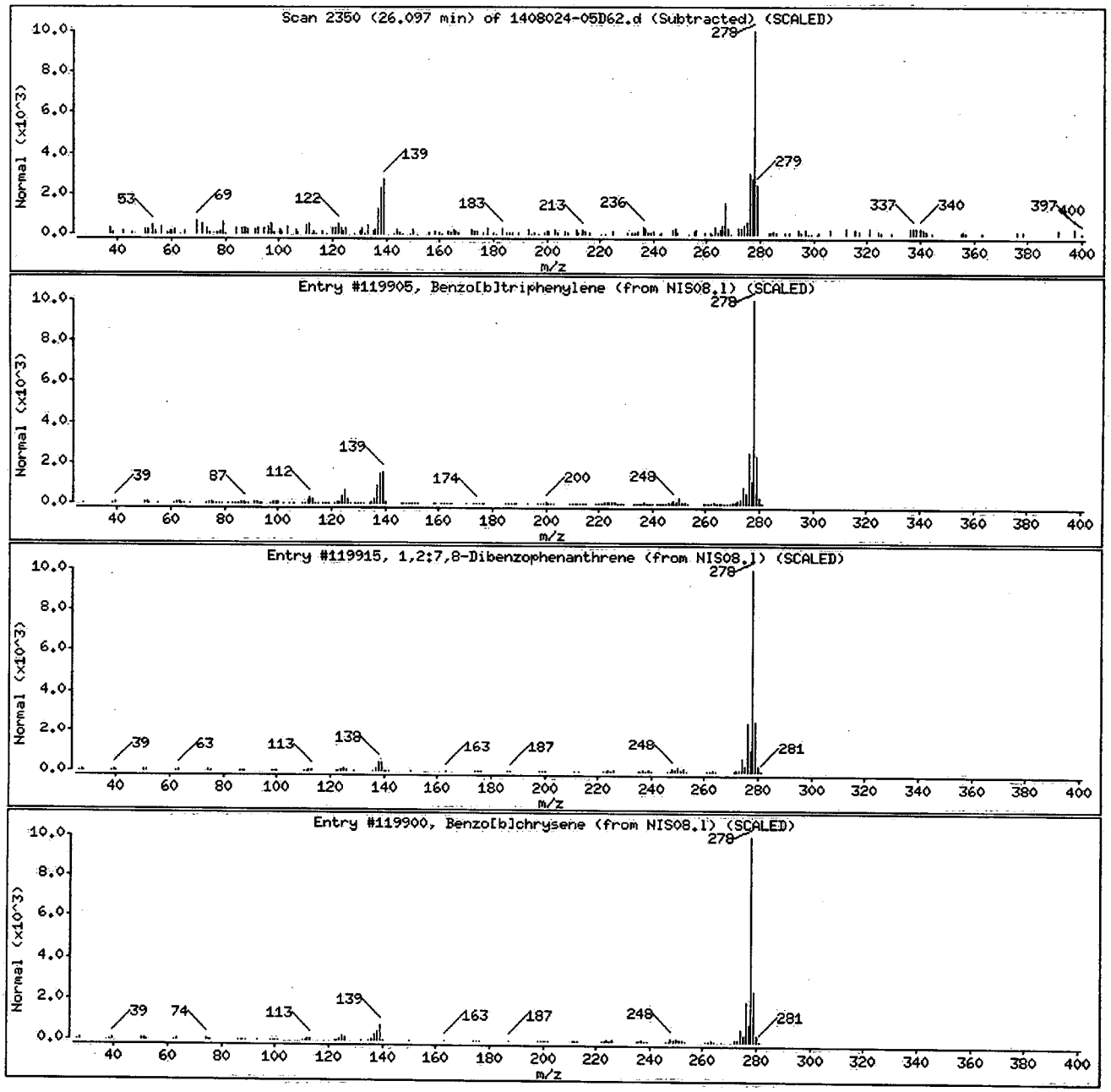
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-05:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Benzo[b]triphenylene	215-58-7	NIS08.l	119905	81	C22H14	278
1,2:7,8-Dibenzophenanthrene	213-46-7	NIS08.l	119915	74	C22H14	278
Benzo[b]chrysene	214-17-5	NIS08.l	119900	68	C22H14	278



Robert Hamm 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

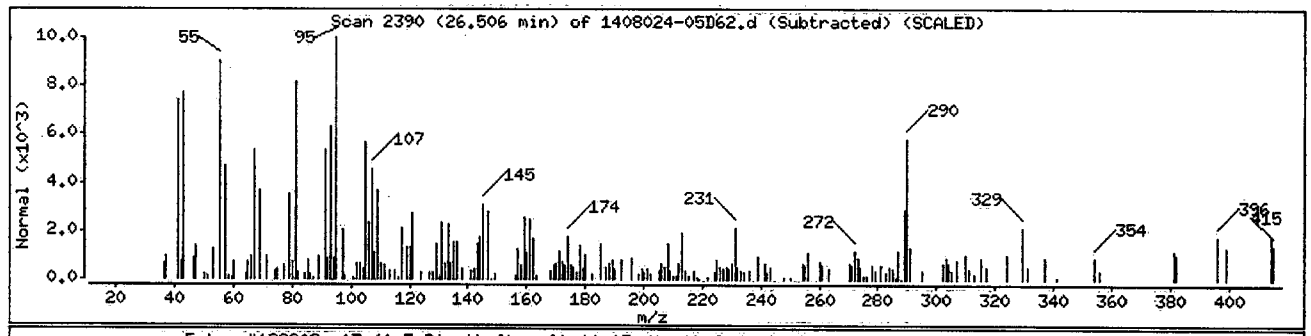
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

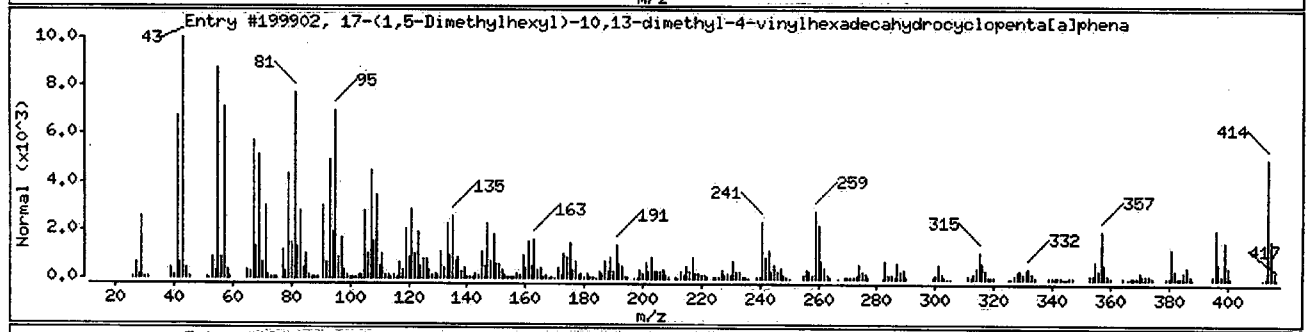
Sample Info: 1408024-05:OWS:10

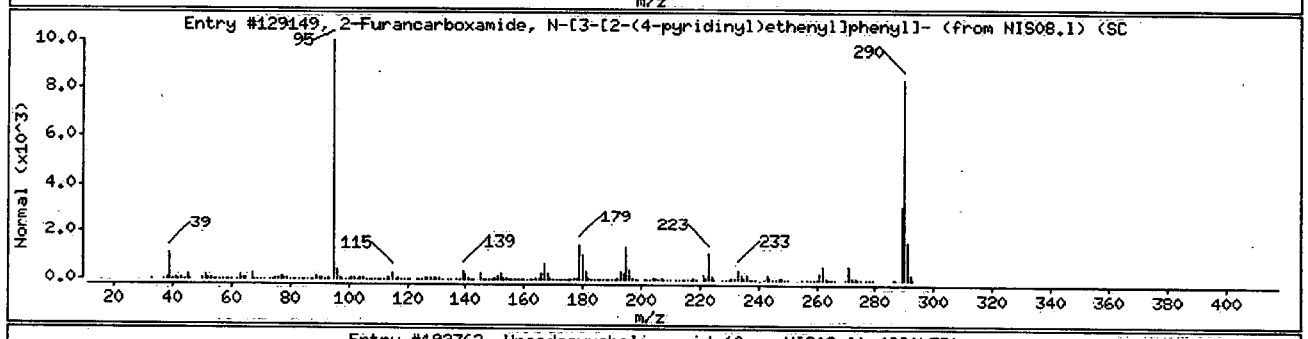
Volume Injected (uL): 2.0 Operator: OWS

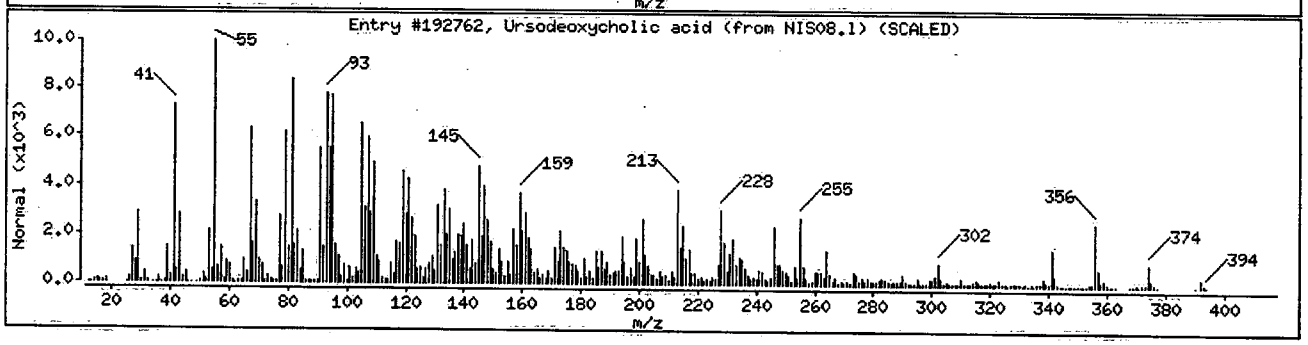
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
17-(1,5-Dimethylhexyl)-10,13-dimethyl-4-	1000210-86-9	NIS08.l	199902	64	C29H50O	414
2-Furancarboxamide, N-[3-[2-(4-pyridinyl	1000337-43-5	NIS08.l	129149	46	C18H14N2O2	290
Ursodeoxycholic acid	128-13-2	NIS08.l	192762	25	C24H40O4	392









Roldw Hani 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-05D62.d

Date : 15-AUG-2014 23:41

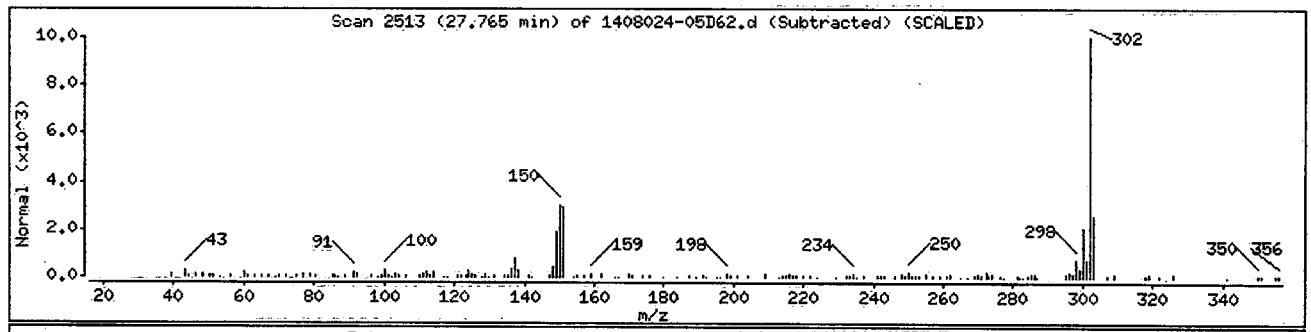
Client ID: P001-S001-0002-01 Instrument: 5972hp62.i

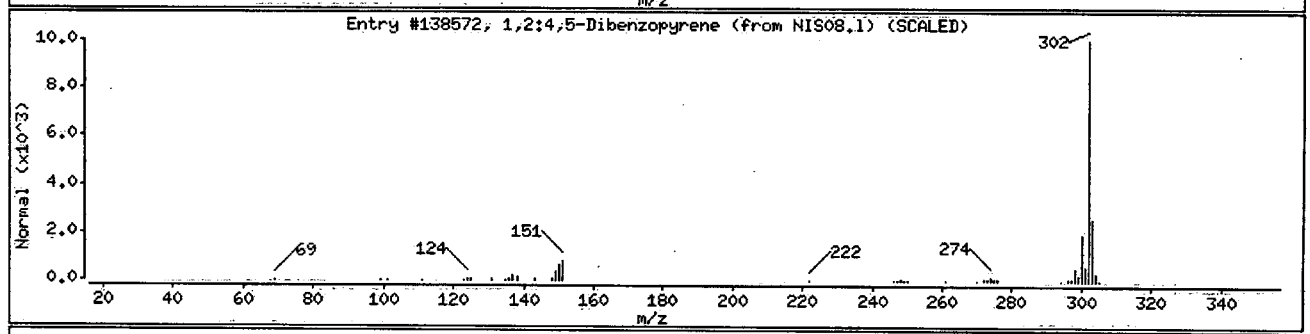
Sample Info: 1408024-05:OWS:10

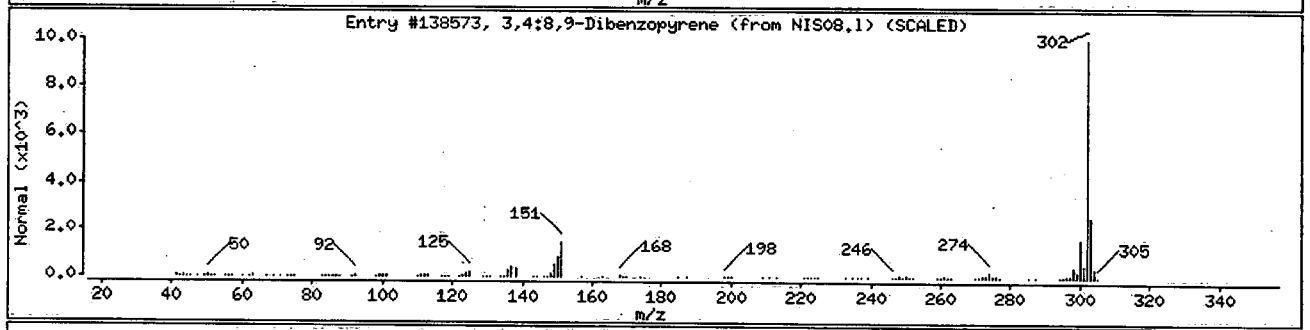
Volume Injected (uL): 2.0 Operator: OWS

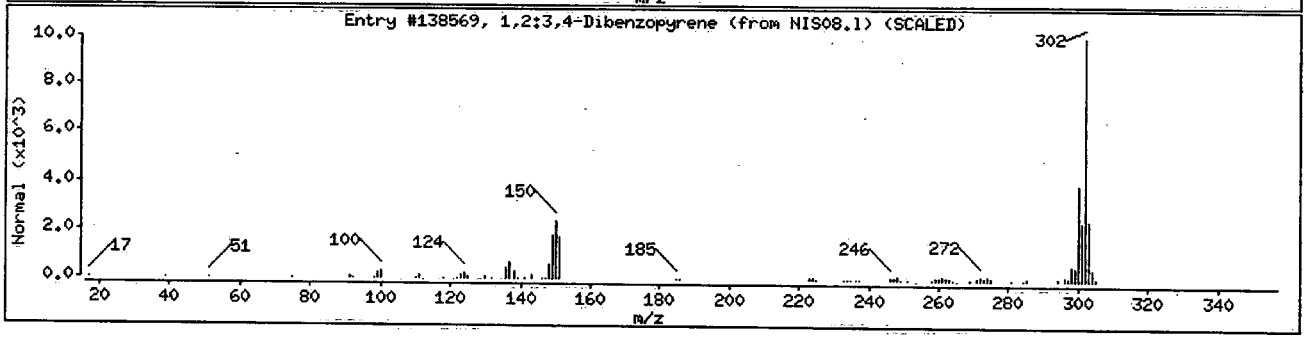
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2:4,5-Dibenzopyrene	192-65-4	NIS08.1	138572	90	C24H14	302
3,4:8,9-Dibenzopyrene	189-64-0	NIS08.1	138573	76	C24H14	302
1,2:3,4-Dibenzopyrene	191-30-0	NIS08.1	138569	76	C24H14	302









8/19/2014

ANALYSIS DATA SHEET

SW8270D

P001-S002-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-01D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30.2g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-01 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 9 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 21:42

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
108-95-2	Phenol		600	3600	U
111-44-4	Bis(2-chloroethyl)ether		220	1900	U
95-57-8	2-Chlorophenol		590	3600	U
95-48-7	2-Methylphenol		420	3600	U
108-60-1	2,2'-oxybis(1-Chloropropane)		270	1900	U
106-44-5	3 & 4-Methylphenol		370	3600	U
621-64-7	N-Nitroso-di-N-propylamine		350	1900	U
98-86-2	Acetophenone		480	1900	U
67-72-1	Hexachloroethane		1200	1900	U
98-95-3	Nitrobenzene		460	1900	U
78-59-1	Isophorone		320	1900	U
88-75-5	2-Nitrophenol		450	3600	U
105-67-9	2,4-Dimethylphenol		570	3600	U
111-91-1	Bis(2-chloroethoxy)methane		490	1900	U
120-83-2	2,4-Dichlorophenol		430	3600	U
91-20-3	Naphthalene		250	1900	U
106-47-8	4-Chloroaniline		310	3600	U
87-68-3	Hexachlorobutadiene		290	1900	U
59-50-7	4-Chloro-3-methylphenol		270	3600	U
91-57-6	2-Methylnaphthalene		330	1900	U
77-47-4	Hexachlorocyclopentadiene		340	1900	U
88-06-2	2,4,6-Trichlorophenol		340	3600	U
95-95-4	2,4,5-Trichlorophenol		270	3600	U
91-58-7	2-Chloronaphthalene		440	1900	U
88-74-4	2-Nitroaniline		270	3600	U
131-11-3	Dimethylphthalate		180	1900	U
606-20-2	2,6-Dinitrotoluene		190	1900	U
208-96-8	Acenaphthylene		320	1900	U
99-09-2	3-Nitroaniline		240	3600	U
83-32-9	Acenaphthene		330	1900	U
51-28-5	2,4-Dinitrophenol		170	3600	U
100-02-7	4-Nitrophenol		500	3600	U
121-14-2	2,4-Dinitrotoluene		220	1900	U
132-64-9	Dibenzofuran		330	1900	U
84-66-2	Diethylphthalate		200	1900	U

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ANALYSIS DATA SHEET
SW8270D

P001-S002-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-01D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30.2g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-01 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 9 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 21:42

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
7005-72-3	4-Chlorophenyl-phenylether		230	1900	U
86-73-7	Fluorene	250	240	1900	JD
100-01-6	4-Nitroaniline		490	3600	U
534-52-1	4,6-Dinitro-2-methylphenol		490	3600	U
86-30-6	N-Nitrosodiphenylamine (1)		330	1900	U
101-55-3	4-Bromophenyl-phenylether		280	1900	U
118-74-1	Hexachlorobenzene		240	1900	U
87-86-5	Pentachlorophenol		470	3600	U
85-01-8	Phenanthrene	2100	110	1900	D
120-12-7	Anthracene	460	93	1900	JD
86-74-8	Carbazole	270	190	1900	JD
84-74-2	Di-n-butylphthalate		270	1900	U
206-44-0	Fluoranthene	2600	270	1900	D
129-00-0	Pyrene	1900	240	1900	D
85-68-7	Butylbenzylphthalate		290	1900	U
91-94-1	3,3'-Dichlorobenzidine		380	1900	U
117-81-7	bis(2-ethylhexyl)Phthalate		340	1900	U
56-55-3	Benzo (a) anthracene	1100	300	1900	JD
218-01-9	Chrysene	1200	110	1900	JD
117-84-0	Di-n-octylphthalate		360	1900	U
205-99-2	Benzo (b) fluoranthene	1200	280	1900	JD
207-08-9	Benzo(k)fluoranthene	600	260	1900	JD
50-32-8	Benzo (a) pyrene	910	200	1900	JD
193-39-5	Indeno(1,2,3-cd)pyrene	610	320	1900	JD
53-70-3	Dibenzo(a,h)anthracene		510	1900	U
191-24-2	Benzo (g,h,i) perylene	540	330	1900	JD
100-52-7	Benzaldehyde		290	1900	U
105-60-2	Caprolactam		310	1900	U
1912-24-9	Atrazine		220	1900	U
92-52-4	1,1'-Biphenyl		430	1900	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	3650	2440	67	35 - 105	D
Phenol-d5	3650	1978	54	40 - 100	D
Nitrobenzene-d5	1825	ND		35 - 100	D

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ANALYSIS DATA SHEET

SW8270D

P001-S002-0002-01

Client:	WESTON SOLUTIONS	SDG	1408024	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ		
Matrix:	Soil	Extraction:	EPA 3550C MOD SV	File ID:	1408024-01D62.d	Sampled:	08/07/14 00:00
Initial/Final:	30.2g / 1000uL	Sulfur Cleanup:	N	Lab ID:	1408024-01	Received:	08/08/14 09:04
Dilution:	10 pH:	Florisil Cleanup:	N			Prepared:	08/12/14 09:00
% Moisture:	9	GPC Cleanup:	N	GPC Cleanup Factor:	N	Analyzed:	08/15/14 21:42
Batch:	4080818	Sequence:	4H15001	Calibration:	4072701	Instrument:	5972hp62

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	1825	ND		45 - 105	D
2,4,6-Tribromophenol	3650	2241	61	35 - 125	D
Terphenyl-d14	1825	ND		30 - 125	D

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q
000083-46-5	.beta.-Sitosterol	1900	948085	26.49	99	JDN
000192-97-2	Benzo[e]pyrene	990	480753	24.514	98	JDN
001058-61-3	Stigmast-4-en-3-one	940	460704	27.175	97	JDN
791-28-6	Triphenylphosphine oxide	2600	1233868	22.785	93	JDN
NA	Unk. Alkane	1200	571145	25.456	0	JD
NA	Unknown 2.457	1400	379081	2.457	0	JD
NA	Unknown 25.610	1400	662008	25.61	0	JD
NA	Unknown 25.794	1400	680886	25.794	0	JD
NA	Unknown 3.204	800	222624	3.204	0	JD
NA	Unknown 4.167	12000	3226155	4.167	0	JD

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.
(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.
(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

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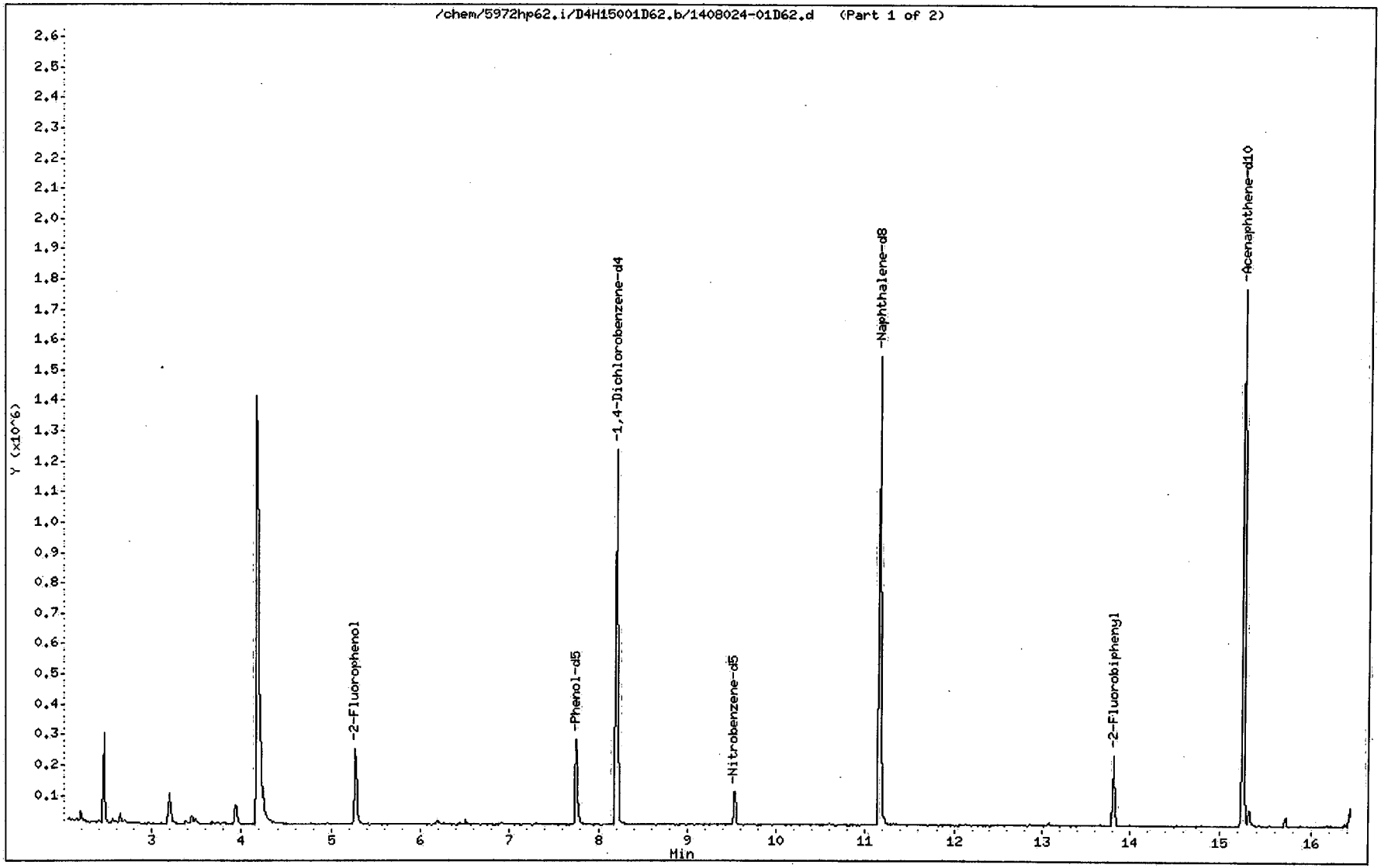
Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-01D62.d
Date : 15-AUG-2014 21:42
Client ID: P001-S002-0002-01
Sample Info: 1408024-01:OWS:10
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



8/19/2014

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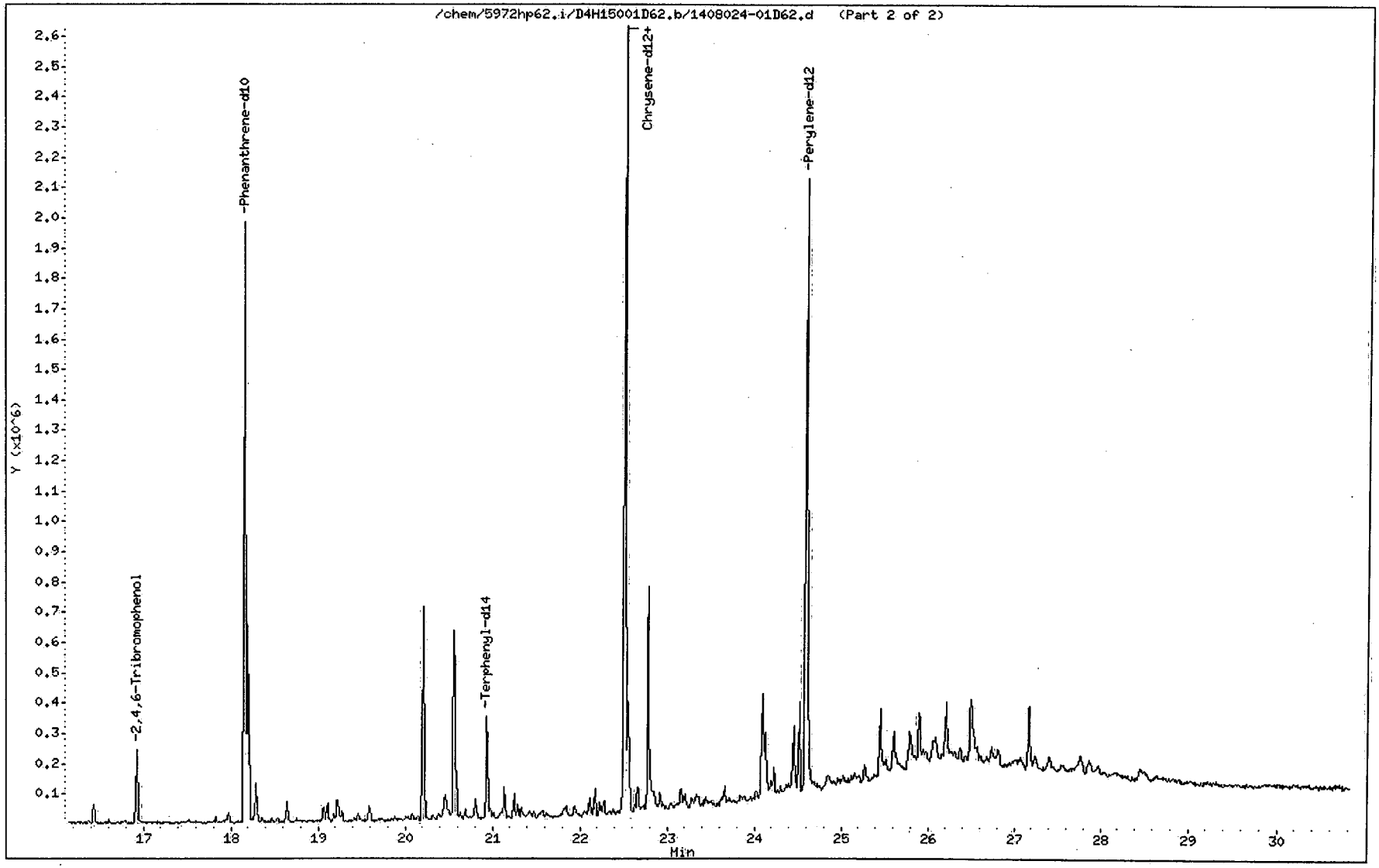

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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-01D62.d
Report Date: 19-Aug-2014 11:23

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp62.i/D4H15001D62.b/1408024-01D62.d
Lab Smp Id: 1408024-01 Client Smp ID: P001-S002-0002-01
Inj Date : 15-AUG-2014 21:42
Operator : OWS Inst ID: 5972hp62.i
Smp Info : 1408024-01:OWS:10
Misc Info : P001-S002-0002-01
Comment :
Method : /chem/5972hp62.i/D4H15001D62.b/8270Dv26.m
Meth Date : 19-Aug-2014 11:23 ron Quant Type: ISTD
Cal Date : 23-JUL-2014 19:31 Cal File: 4G23008-CAL662.d
Als bottle: 13
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1000.00000	Volume of final extract (uL)(1000 low, 2
Vi	2.00000	Volume injected (uL)
Ws	30.20000	Weight of sample extracted (g)
M	9.00000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY	
* 1 1,4-Dichlorobenzene-d4	152	8.199	8.212	(1.000)	315673	40.0000			
* 2 Naphthalene-d8	136	11.157	11.170	(1.000)	1130001	40.0000			
* 3 Acenaphthene-d10	164	15.251	15.254	(1.000)	600018	40.0000			
* 4 Phenanthrene-d10	188	18.158	18.171	(1.000)	1036932	40.0000			
* 5 Chrysene-d12	240	22.518	22.521	(1.000)	1079908	40.0000			
* 6 Perylene-d12	264	24.596	24.609	(1.000)	810381	40.0000			
$ 7 2-Fluorophenol	112	5.272	5.274	(0.643)	136070	13.3695	2400		
$ 8 Phenol-d5	99	7.749	7.751	(0.945)	157514	10.8384	2000		
$ 9 Nitrobenzene-d5	82	9.530	9.532	(0.854)	61428	5.41950	990		(a)
$ 10 2-Fluorobiphenyl	172	13.808	13.821	(0.905)	116157	6.23871	1100		(a)
$ 11 2,4,6-Tribromophenol	330	16.930	16.932	(1.110)	40449	12.2796	2200	7665	
$ 12 Terphenyl-d14	244	20.932	20.945	(0.930)	132216	6.26291	1100		(a)
15 Phenol	94	Compound Not Detected.							

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Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
17 Bis(2-chloroethyl)ether	93	Compound Not Detected.						
18 2-Chlorophenol	128	Compound Not Detected.						
23 2-Methylphenol	108	Compound Not Detected.						
24 2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.						
25 3 & 4-Methylphenol	108	Compound Not Detected.						
26 N-Nitroso-di-N-propylamine	70	Compound Not Detected.						
27 Acetophenone	105	Compound Not Detected.						
28 Hexachloroethane	117	Compound Not Detected.						
29 Nitrobenzene	77	Compound Not Detected.						
30 Isophorone	82	Compound Not Detected.						
31 2-Nitrophenol	139	Compound Not Detected.						
32 2,4-Dimethylphenol	122	Compound Not Detected.						
33 Bis(2-chloroethoxy)methane	93	Compound Not Detected.						
34 2,4-Dichlorophenol	162	Compound Not Detected.						
36 Naphthalene	128	Compound Not Detected.						
37 4-Chloroaniline	127	Compound Not Detected.						
38 Hexachlorobutadiene	224	Compound Not Detected.						
39 4-Chloro-3-methylphenol	107	Compound Not Detected.						
40 2-Methylnaphthalene	141	Compound Not Detected.						
42 Hexachlorocyclopentadiene	236	Compound Not Detected.						
44 2,4,6-Trichlorophenol	196	Compound Not Detected.						
45 2,4,5-Trichlorophenol	196	Compound Not Detected.						
46 2-Chloronaphthalene	162	Compound Not Detected.						
47 2-Nitroaniline	65	Compound Not Detected.						
48 Dimethylphthalate	163	Compound Not Detected.						
50 2,6-Dinitrotoluene	165	Compound Not Detected.						
51 Acenaphthylene	152	Compound Not Detected.						
52 3-Nitroaniline	138	Compound Not Detected.						
53 Acenaphthene	153	Compound Not Detected.						
54 2,4-Dinitrophenol	184	Compound Not Detected.						
55 4-Nitrophenol	139	Compound Not Detected.						
56 2,4-Dinitrotoluene	165	Compound Not Detected.						
57 Dibenzofuran	168	Compound Not Detected.						
59 Diethylphthalate	149	Compound Not Detected.						
60 4-Chlorophenyl-phenylether	204	Compound Not Detected.						
61 Fluorene	166	16.428	16.441	(1.077)	24400	1.37328	250	0 (aM)
62 4-Nitroaniline	138	Compound Not Detected.						
63 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
64 N-Nitrosodiphenylamine (1)	169	Compound Not Detected.						
66 4-Bromophenyl-phenylether	248	Compound Not Detected.						
67 Hexachlorobenzene	283	Compound Not Detected.						
68 Pentachlorophenol	265	Compound Not Detected.						
69 Phenanthrene	178	18.199	18.212	(1.002)	311205	11.4244	2100	
70 Anthracene	178	18.291	18.294	(1.007)	68570	2.51539	460	(a)
71 Carbazole	167	18.650	18.652	(1.027)	39759	1.46769	270	9453 (a)
72 Di-n-butylphthalate	149	Compound Not Detected.						
73 Fluoranthene	202	20.216	20.218	(1.113)	408521	14.1976	2600	

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Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/Kg)	SIMILARITY
74 Pyrene	202	20.553	20.566	(0.913)	331080	10.5706	1900	
75 Butylbenzylphthalate	149	Compound Not Detected.						
76 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
77 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
78 Benzo(a)anthracene	228	22.508	22.511	(1.000)	161555	5.92125	1100	(a)
79 Chrysene	228	22.559	22.562	(1.002)	158529	6.30182	1100	(a)
80 Di-n-octylphthalate	149	Compound Not Detected.						
81 Benzo(b)fluoranthene	252	24.095	24.097	(0.980)	192834	6.71894	1200	(a)
82 Benzo(k)fluoranthene	252	24.125	24.138	(0.981)	93963	3.27803	600	(a)
83 Benzo(a)pyrene	252	24.514	24.527	(0.997)	133057	4.97011	900	(aH)
84 Indeno(1,2,3-cd)pyrene	276	25.906	25.909	(1.053)	86516	3.34288	610	(a)
85 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
86 Benzo(g,h,i)perylene	276	26.203	26.216	(1.065)	80153	2.96867	540	(a)
87 Benzaldehyde	77	Compound Not Detected.						
88 Caprolactam	113	Compound Not Detected.						
89 Atrazine	215	Compound Not Detected.						
90 1,1'-Biphenyl	154	Compound Not Detected.						

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

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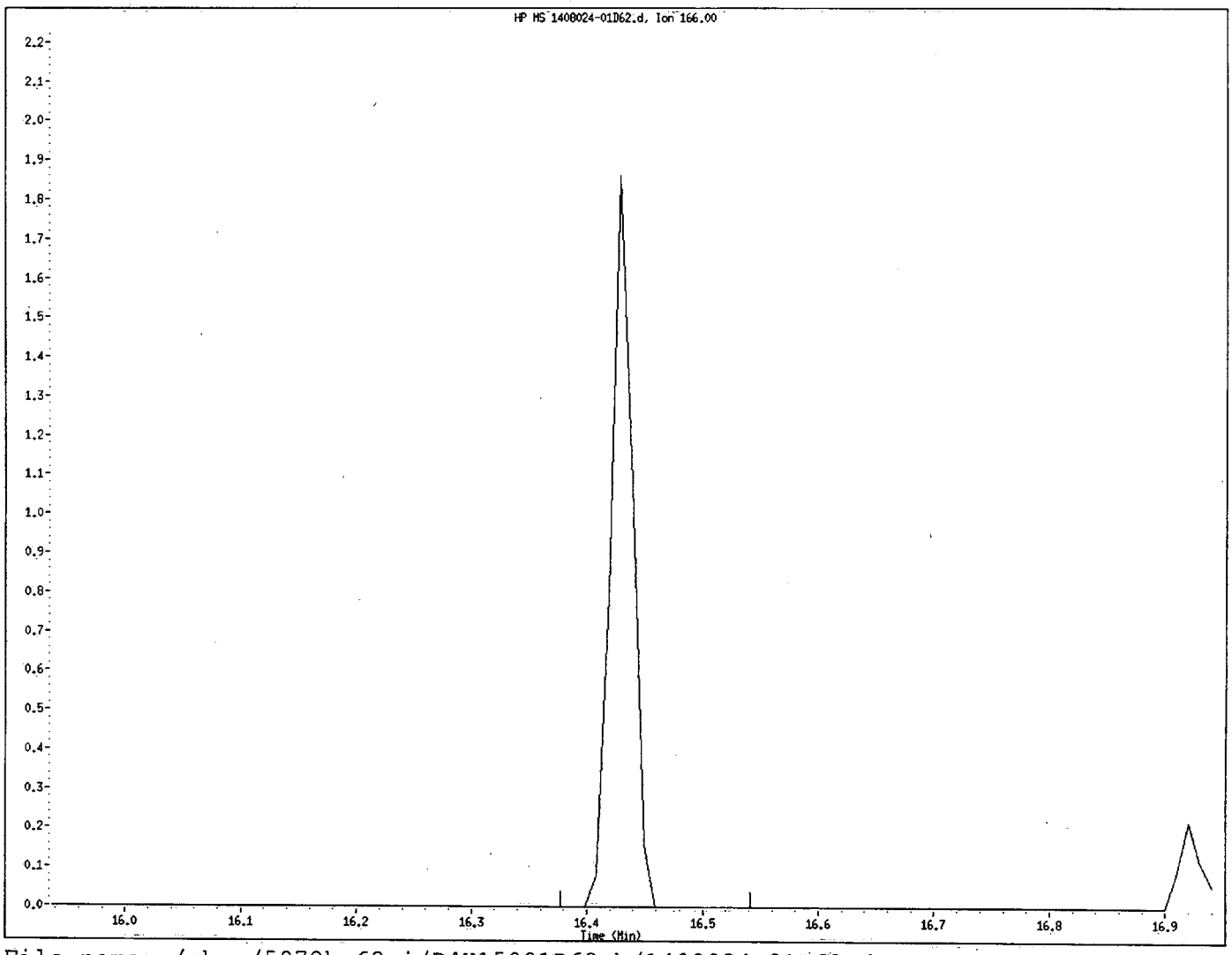
Fluorene CAS Number 86-73-7 Area = 24400 Manually integrated



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Client ID: P001-S002-0002-01
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 21:42
Retention Time: 16.43
Operator ID: OWS

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-01D62.d

Date : 15-AUG-2014 21:42

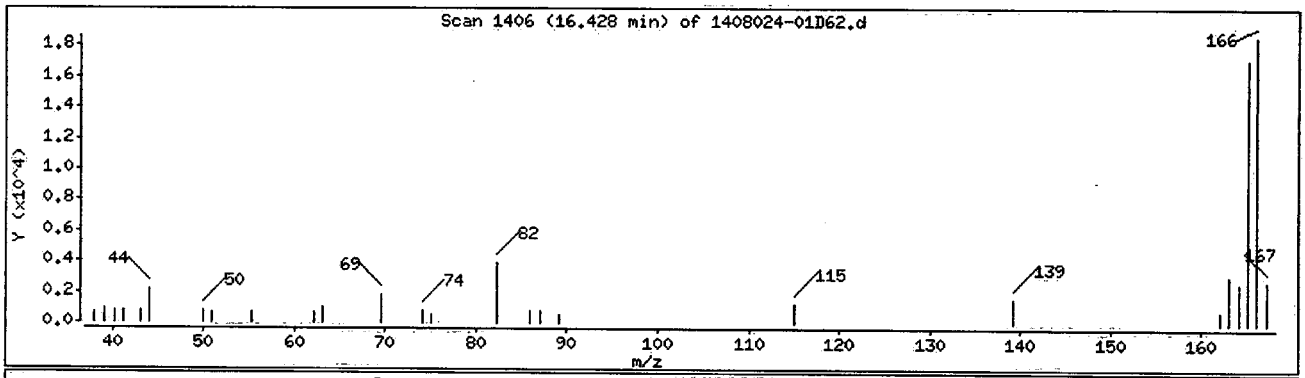
Client ID: P001-S002-0002-01 Instrument: 5972hp62.i

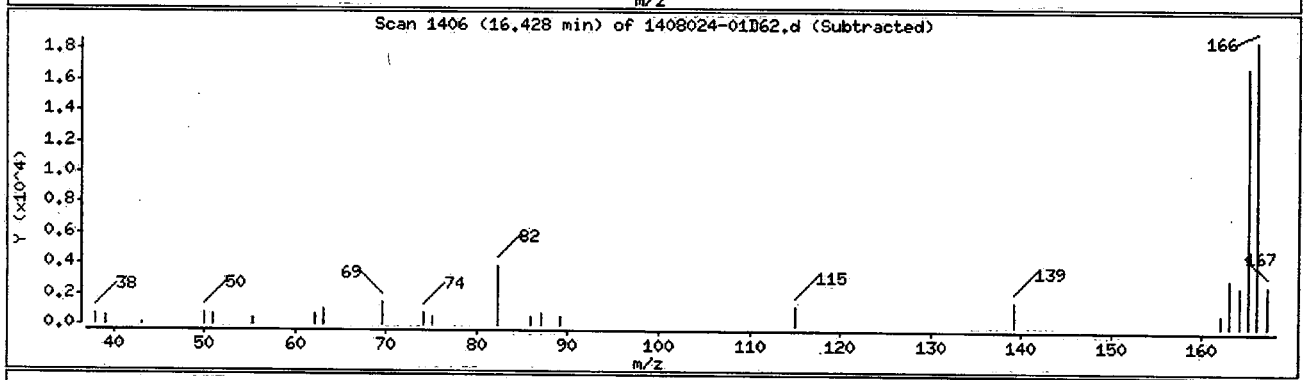
Sample Info: 1408024-01:OWS:10

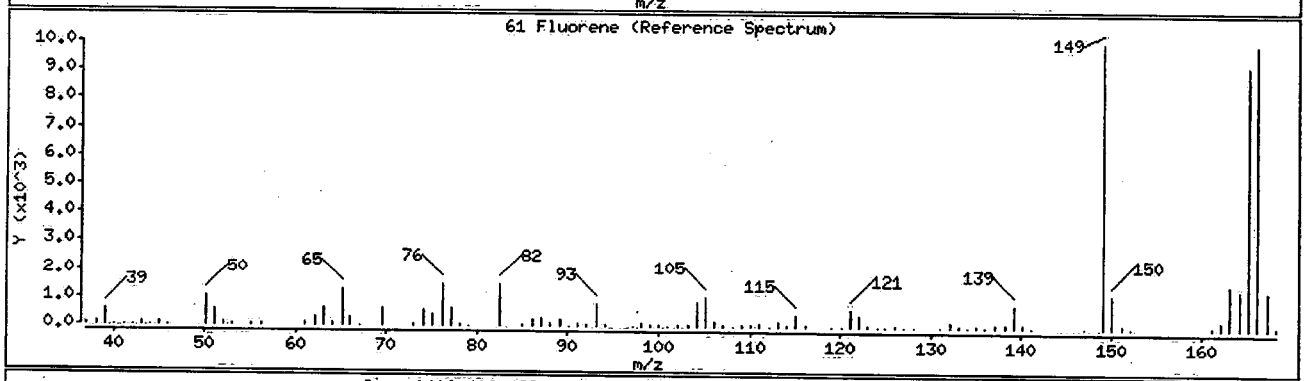
Volume Injected (uL): 2.0 Operator: OWS

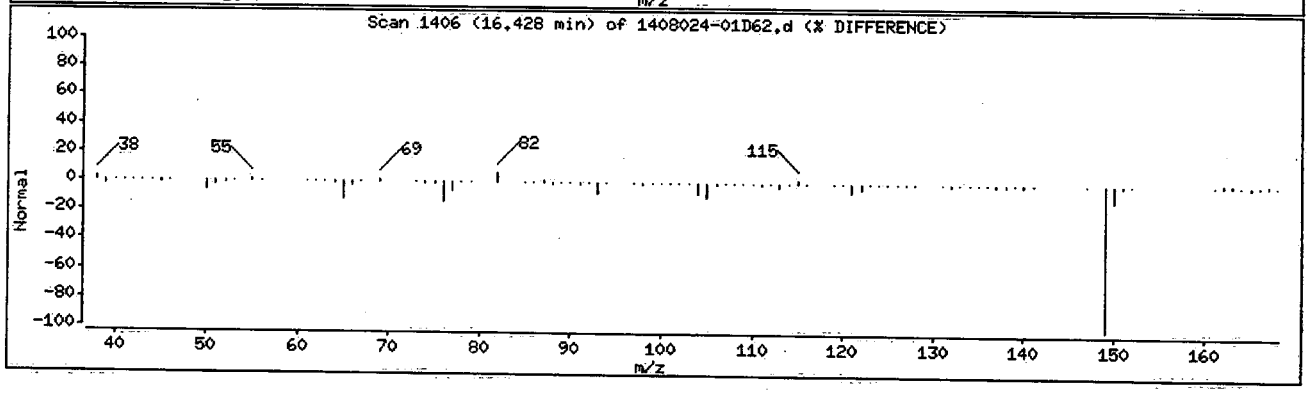
Column phase: Rxi-5SilMS Column diameter: 0.32

61 Fluorene Concentration: 250 ug/Kg









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Date : 15-AUG-2014 21:42

Client ID: P001-S002-0002-01

Instrument: 5972hp62.i

Sample Info: 1408024-01:OWS:10

Volume Injected (uL): 2.0

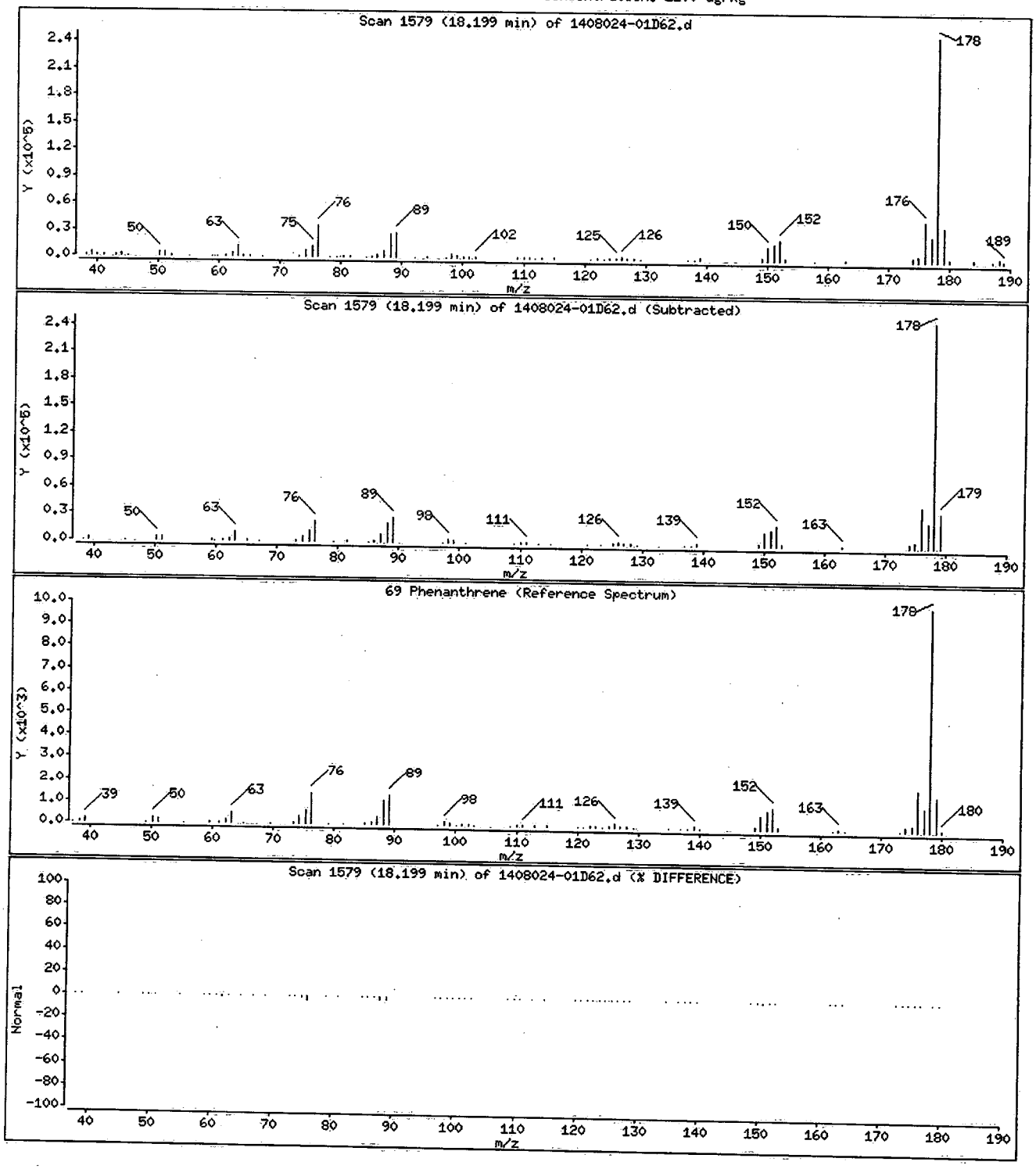
Operator: OWS

Column phase: Rxi-5SilMS

Column diameter: 0.32

69 Phenanthrene

Concentration: 2100 ug/Kg



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Date : 15-AUG-2014 21:42

Client ID: P001-S002-0002-01 Instrument: 5972hp62.i

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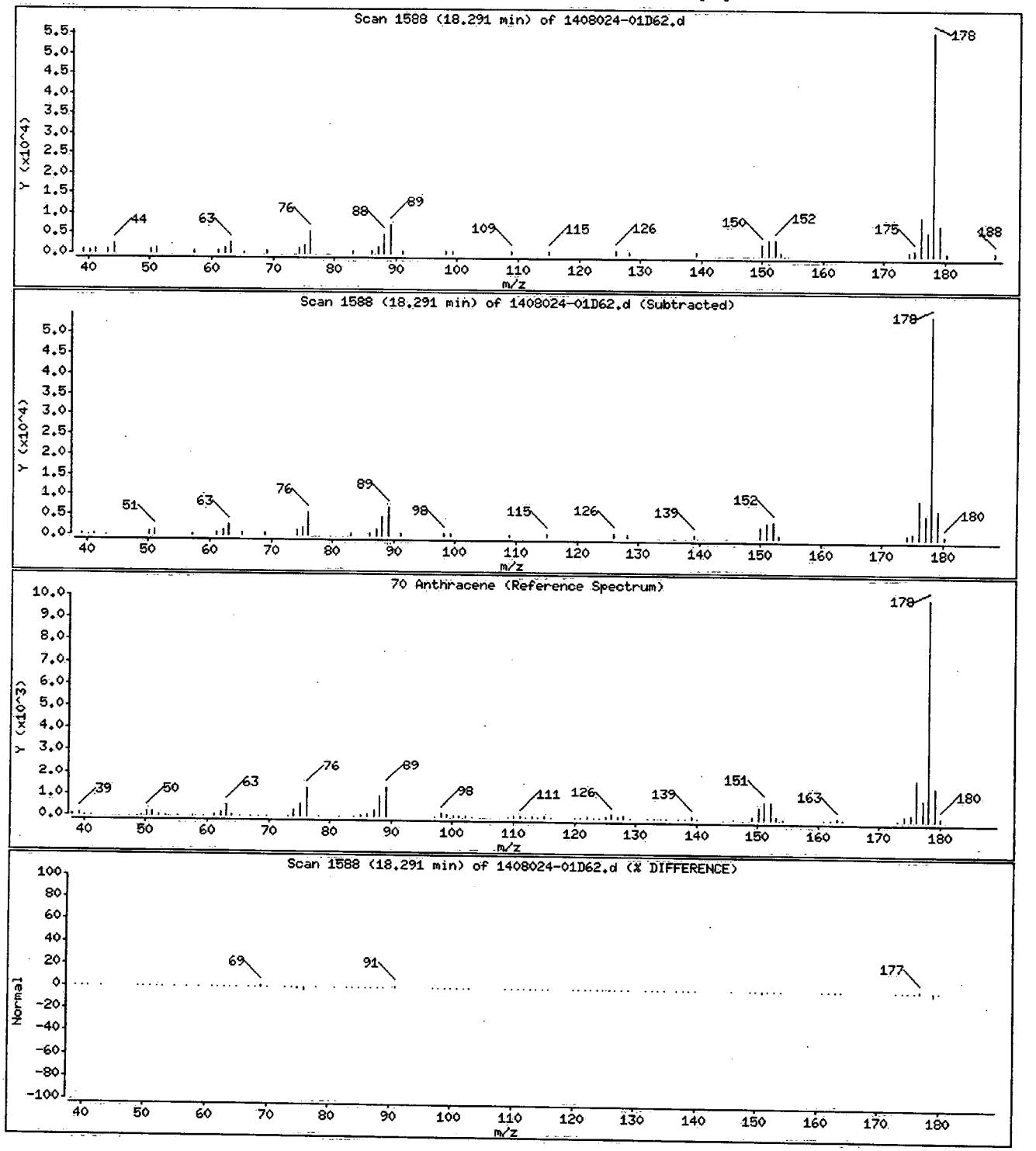
Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

70 Anthracene Concentration: 460 ug/Kg



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Date : 15-AUG-2014 21:42

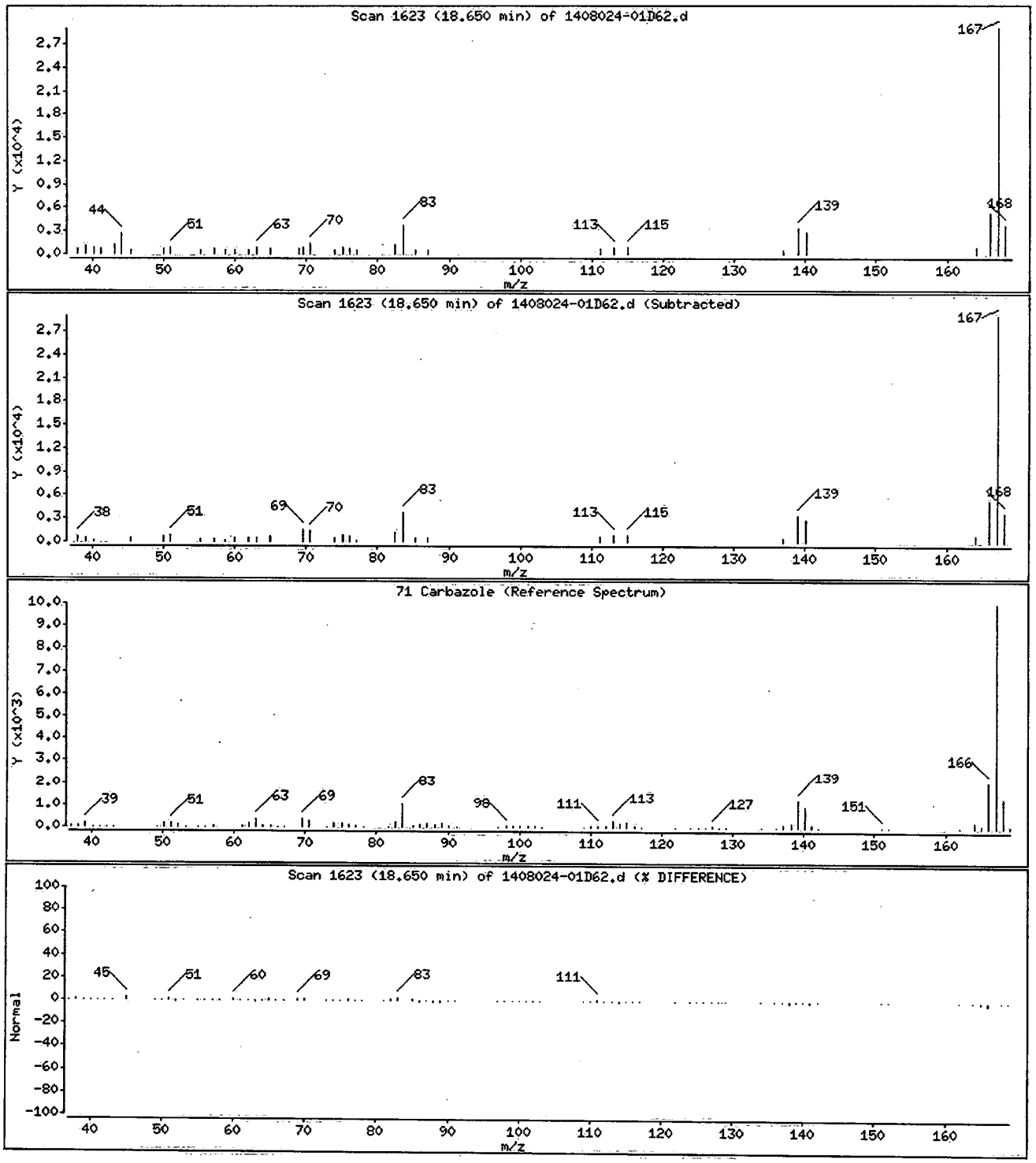
Client ID: P001-S002-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-01:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

71 Carbazole Concentration: 270 ug/Kg



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Date : 15-AUG-2014 21:42

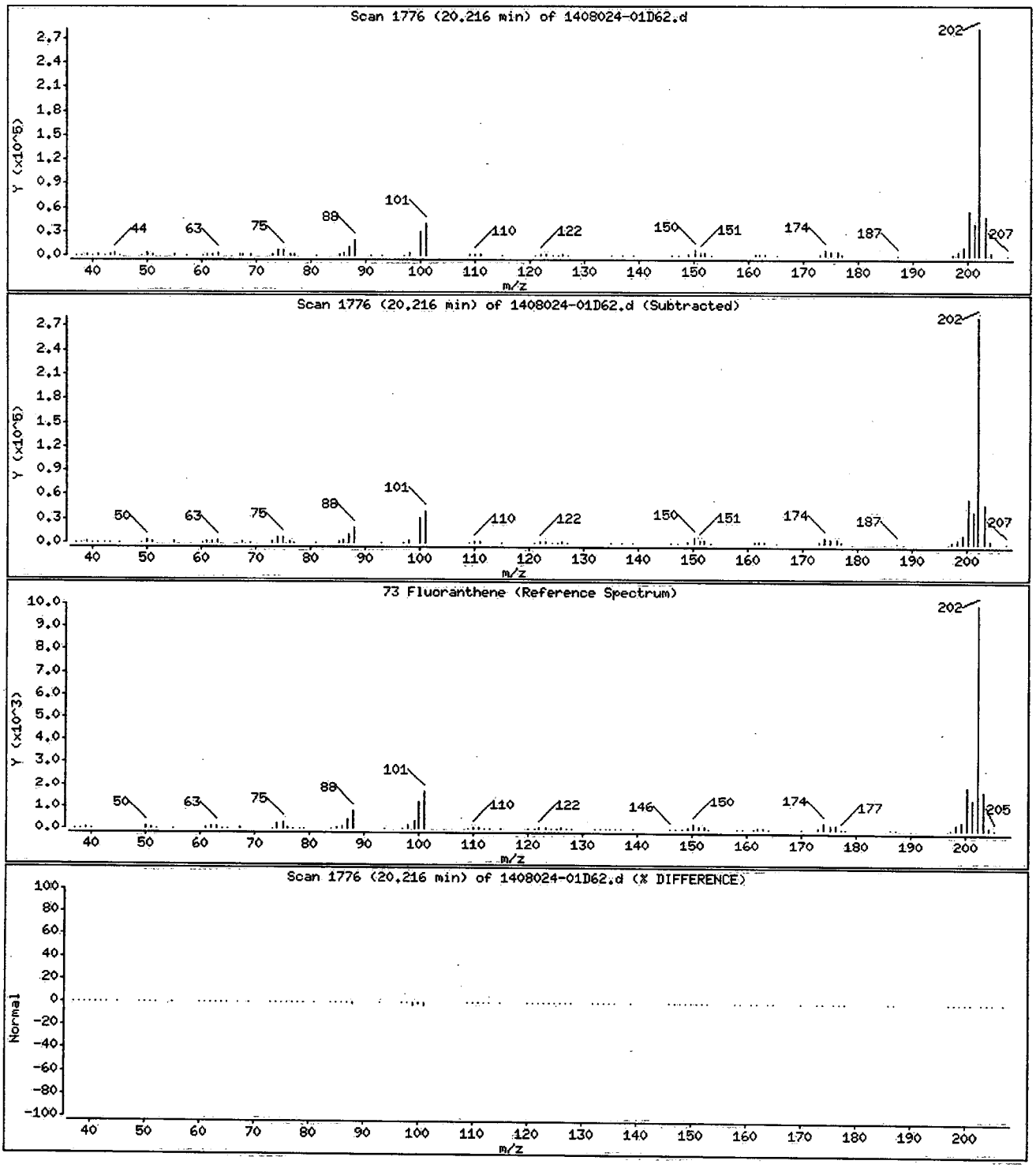
Client ID: P001-S002-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-01:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

73 Fluoranthene Concentration: 2600 ug/Kg



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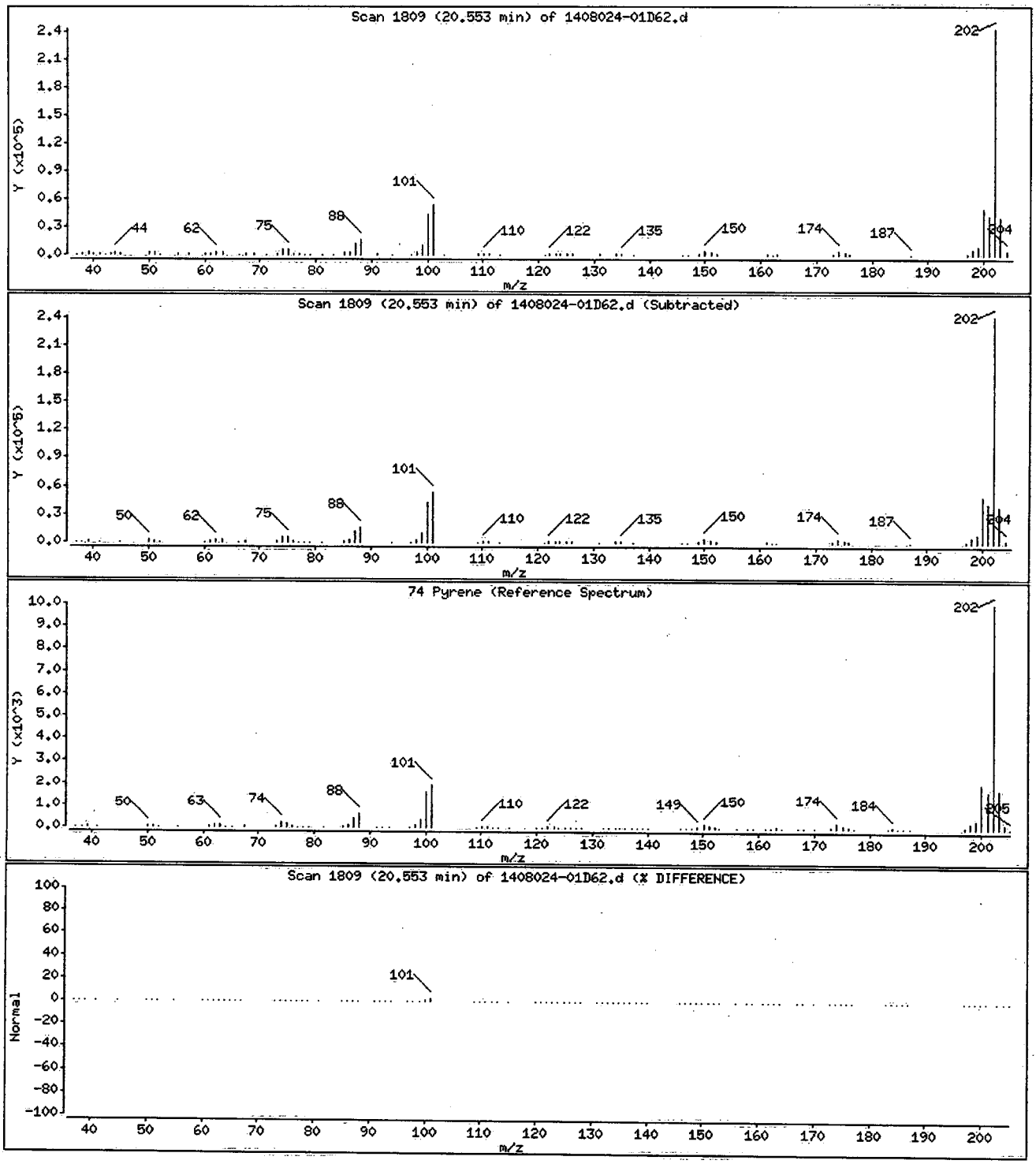
Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

74 Pyrene Concentration: 1900 ug/Kg



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Client ID: P001-S002-0002-01

Instrument: 5972hp62.i

Sample Info: 1408024-01:OWS:10

Volume Injected (uL): 2.0

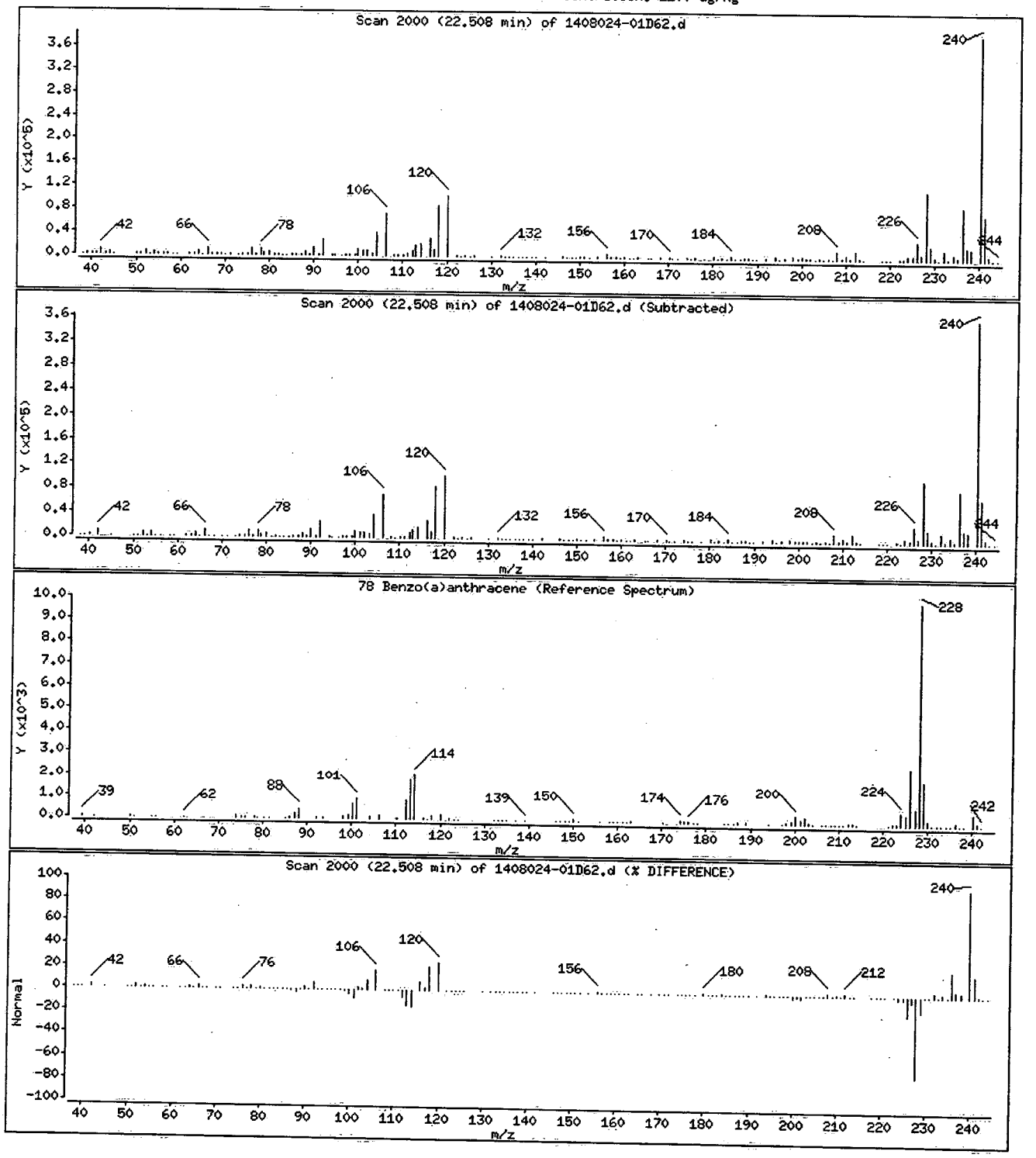
Operator: OWS

Column phase: Rxi-5SilMS

Column diameter: 0.32

78 Benzo(a)anthracene

Concentration: 1100 ug/Kg



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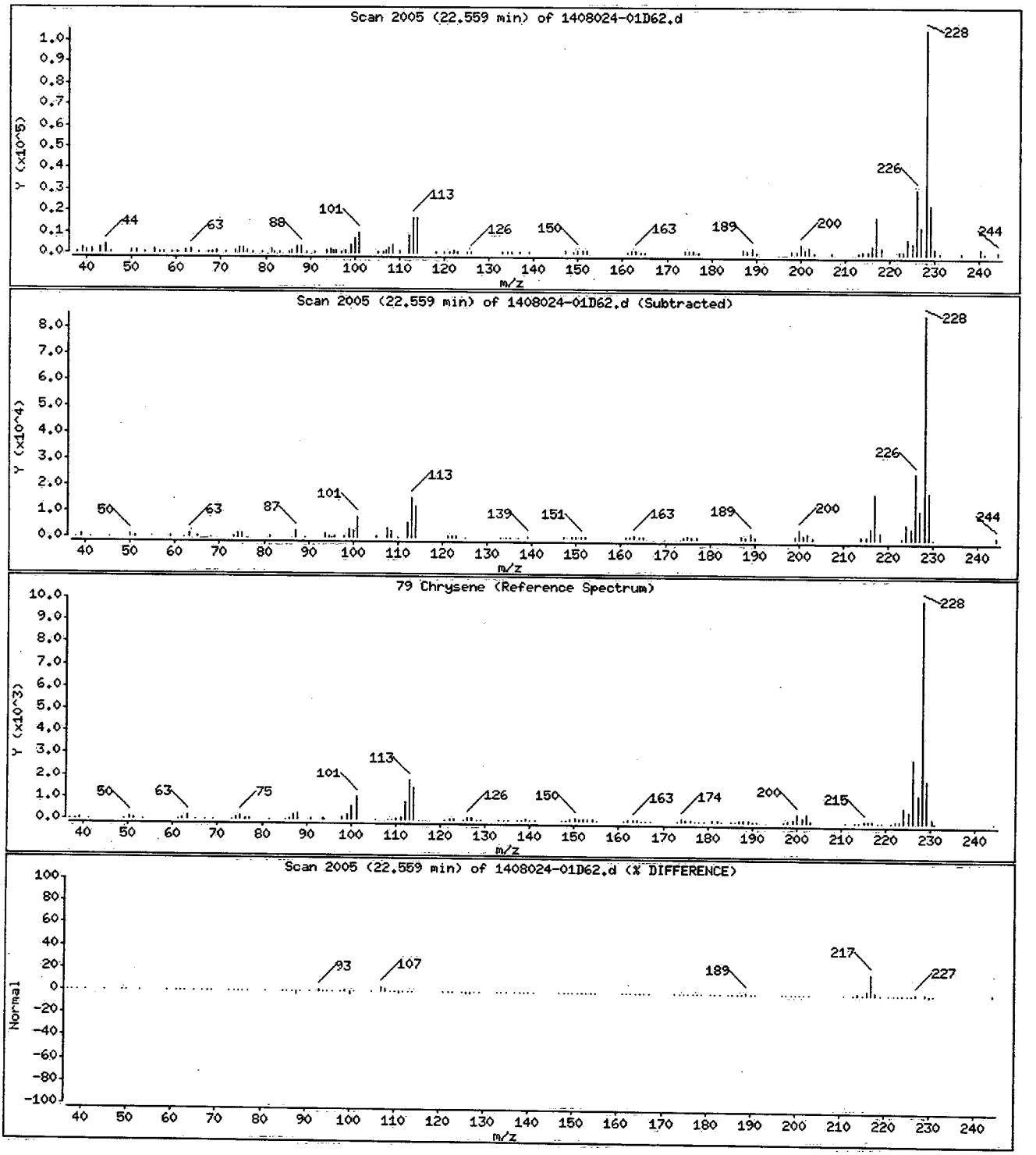
Sample Info: 1408024-01:OWS:10

Volume Injected (uL): 2.0 | Operator: OWS

Column phase: Rxi-5SilMS | Column diameter: 0.32

79 Chrysene | Concentration: 1100 ug/Kg



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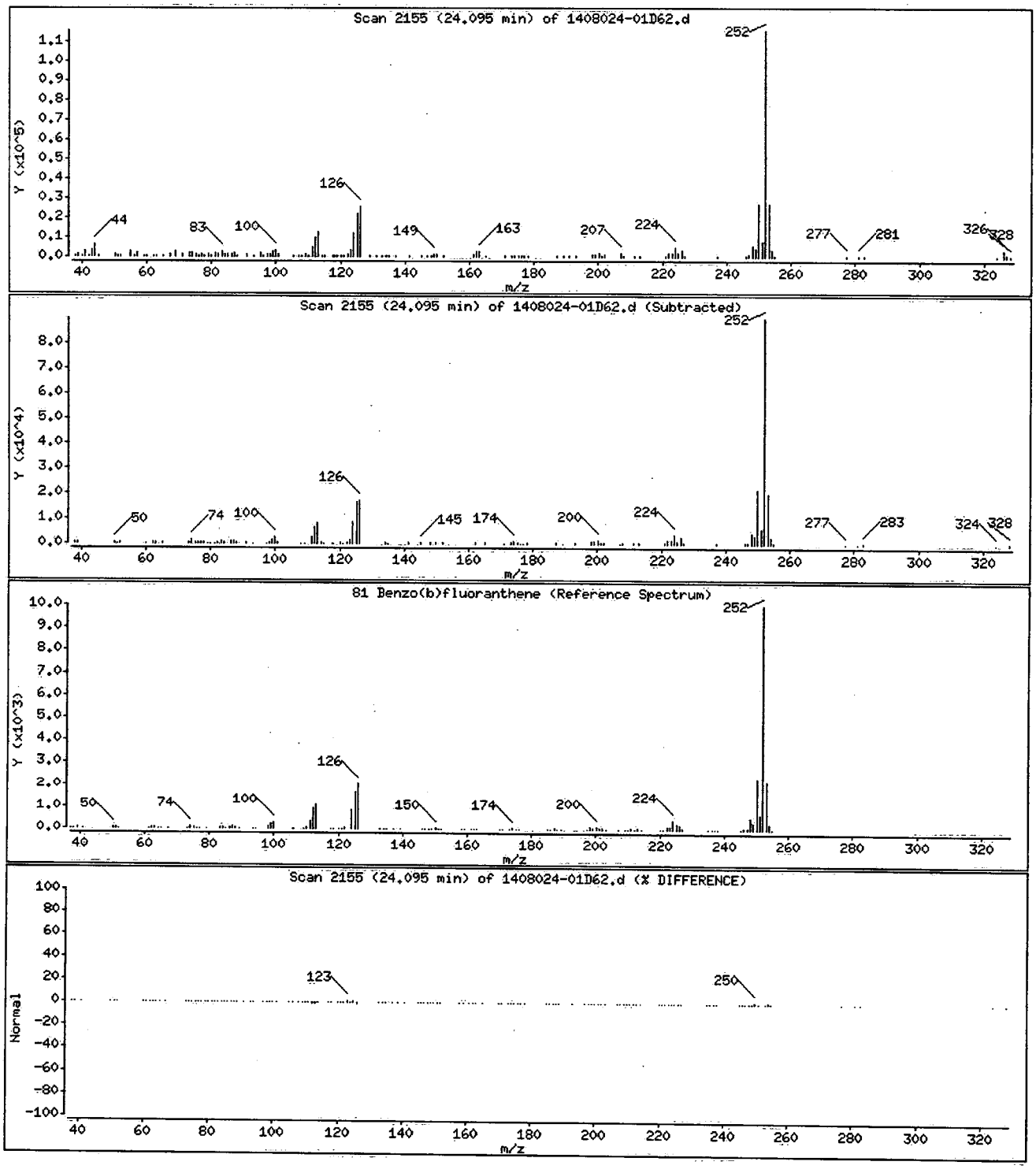
Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

81 Benzo(b)fluoranthene Concentration: 1200 ug/Kg



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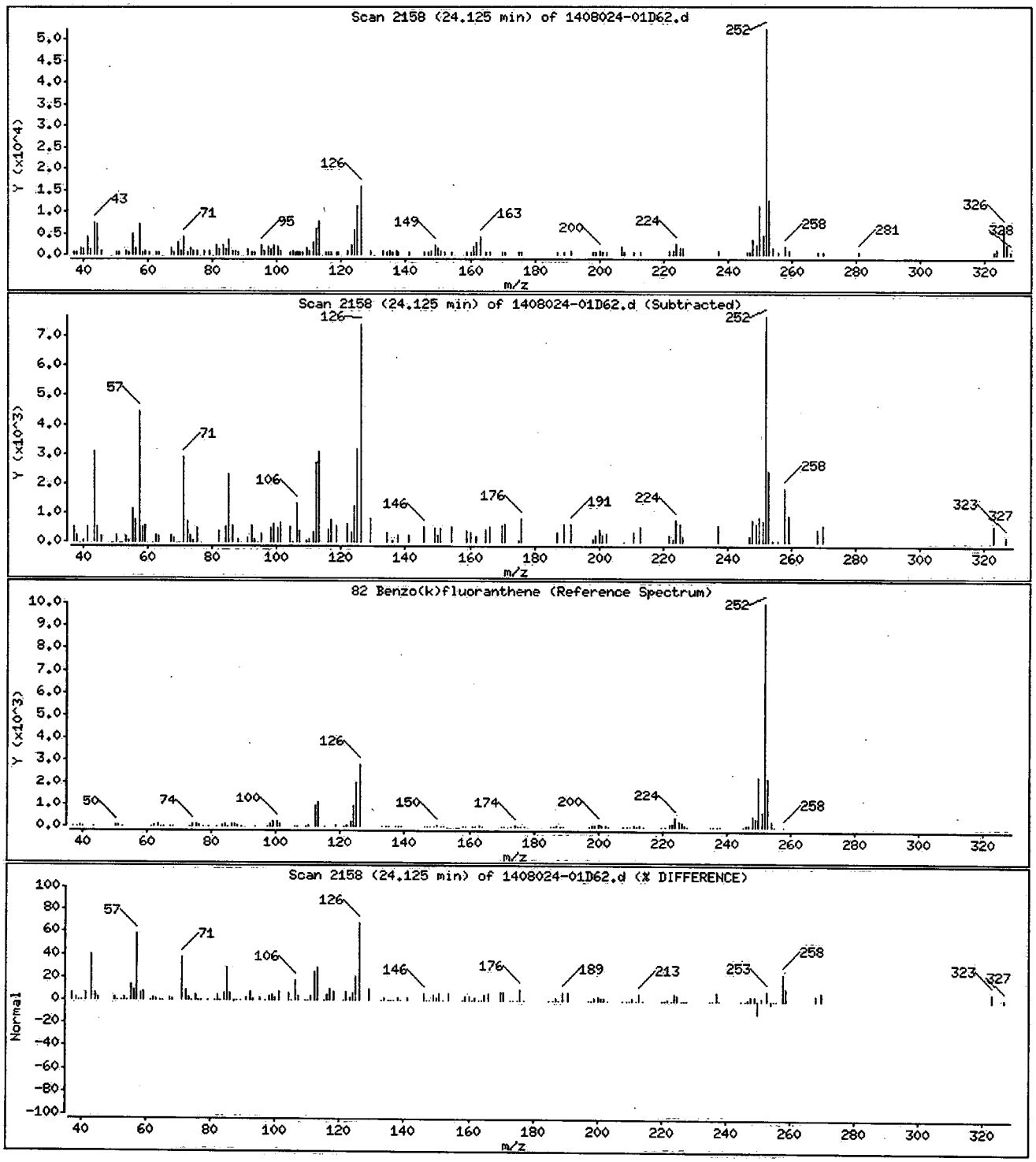
Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

82 Benzo(k)fluoranthene Concentration: 600 ug/Kg



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Client ID: P001-S002-0002-01 Instrument: 5972hp62.i

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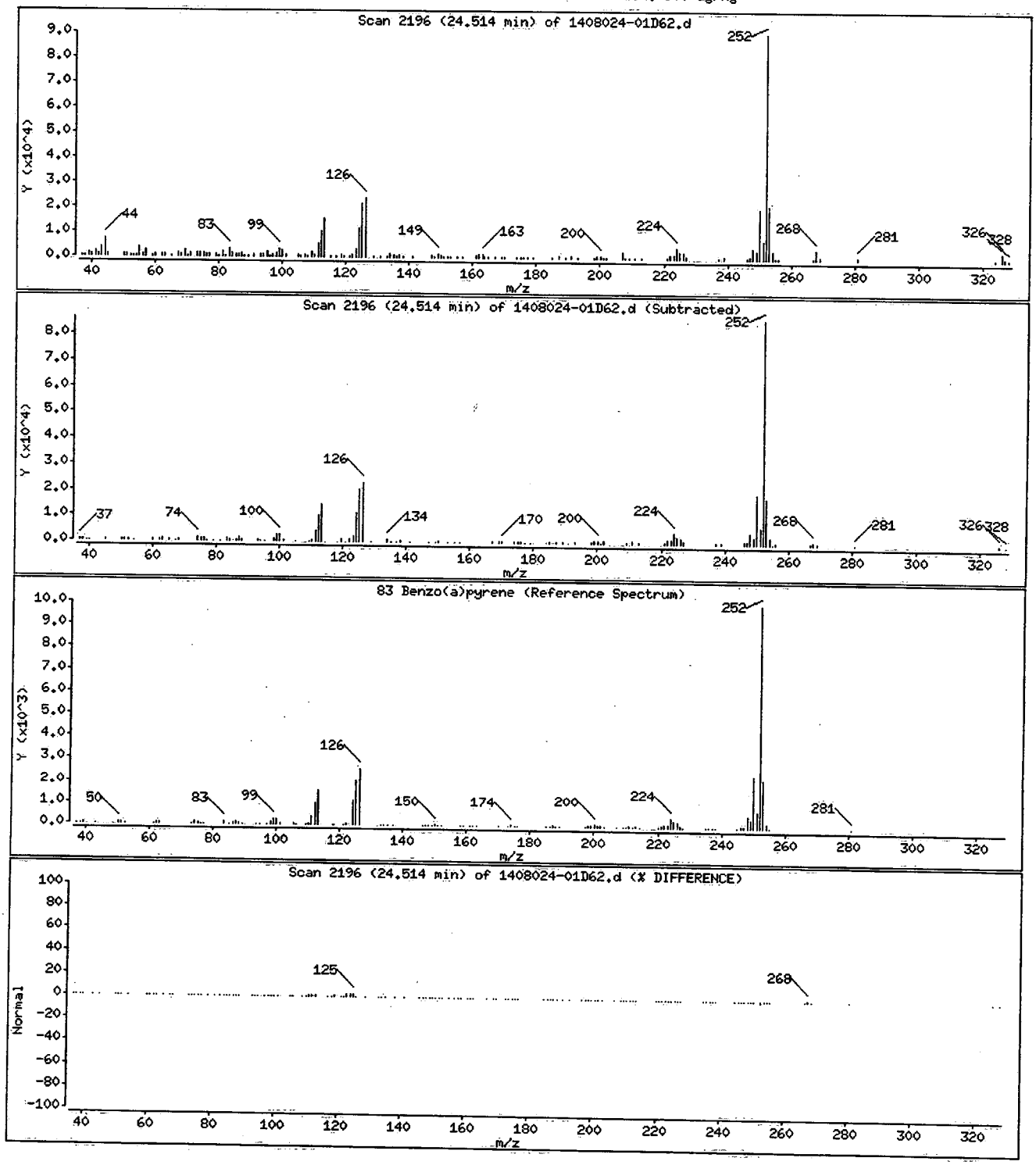
Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

83 Benzo(a)pyrene Concentration: 900 ug/Kg



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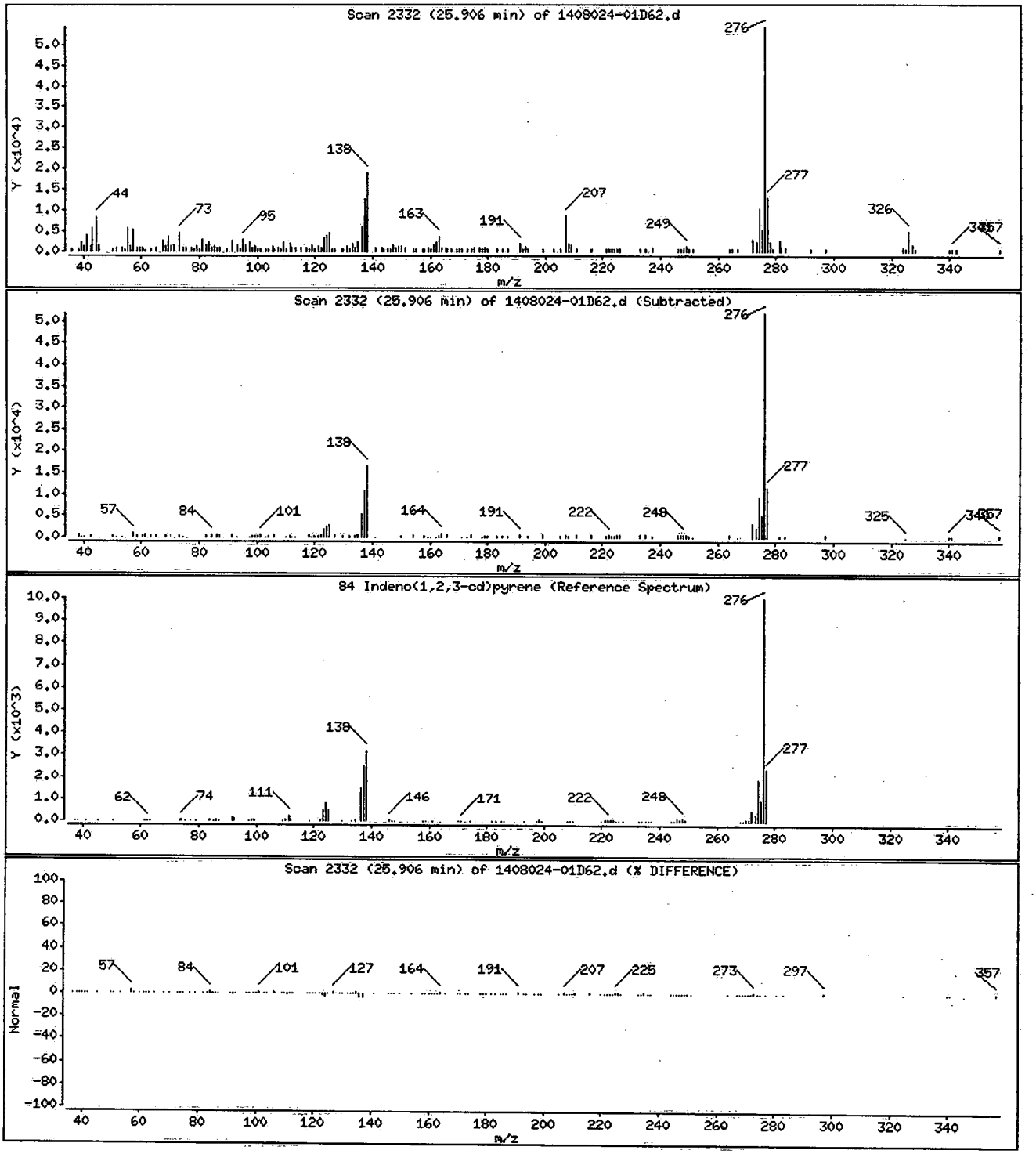
Column phase: Rxi-5SilMS Column diameter: 0.32

84 Indeno(1,2,3-cd)pyrene Concentration: 610 ug/Kg



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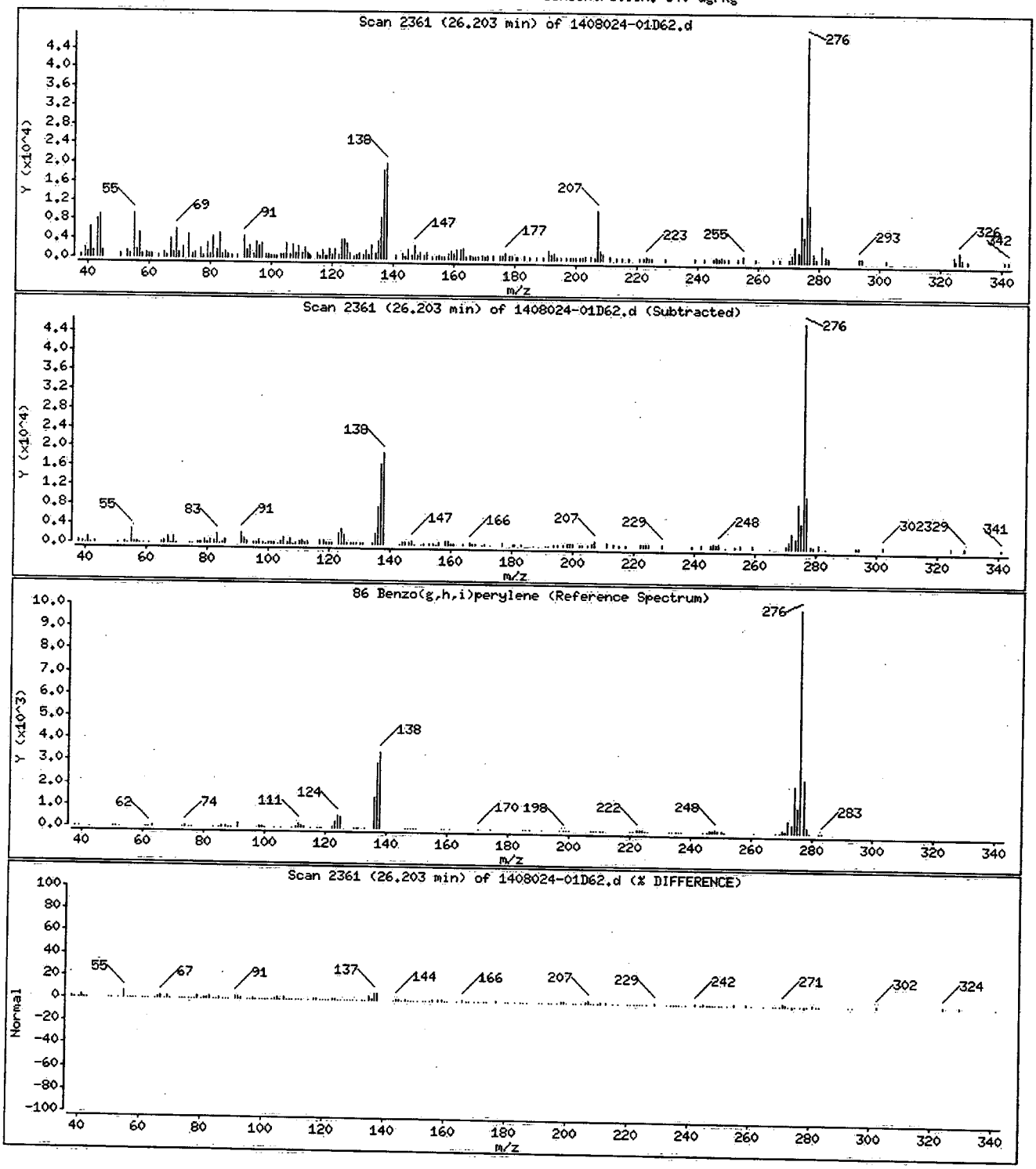
Column phase: Rxi-5SilMS Column diameter: 0.32

86 Benzo(g,h,i)perylene Concentration: 540 ug/Kg



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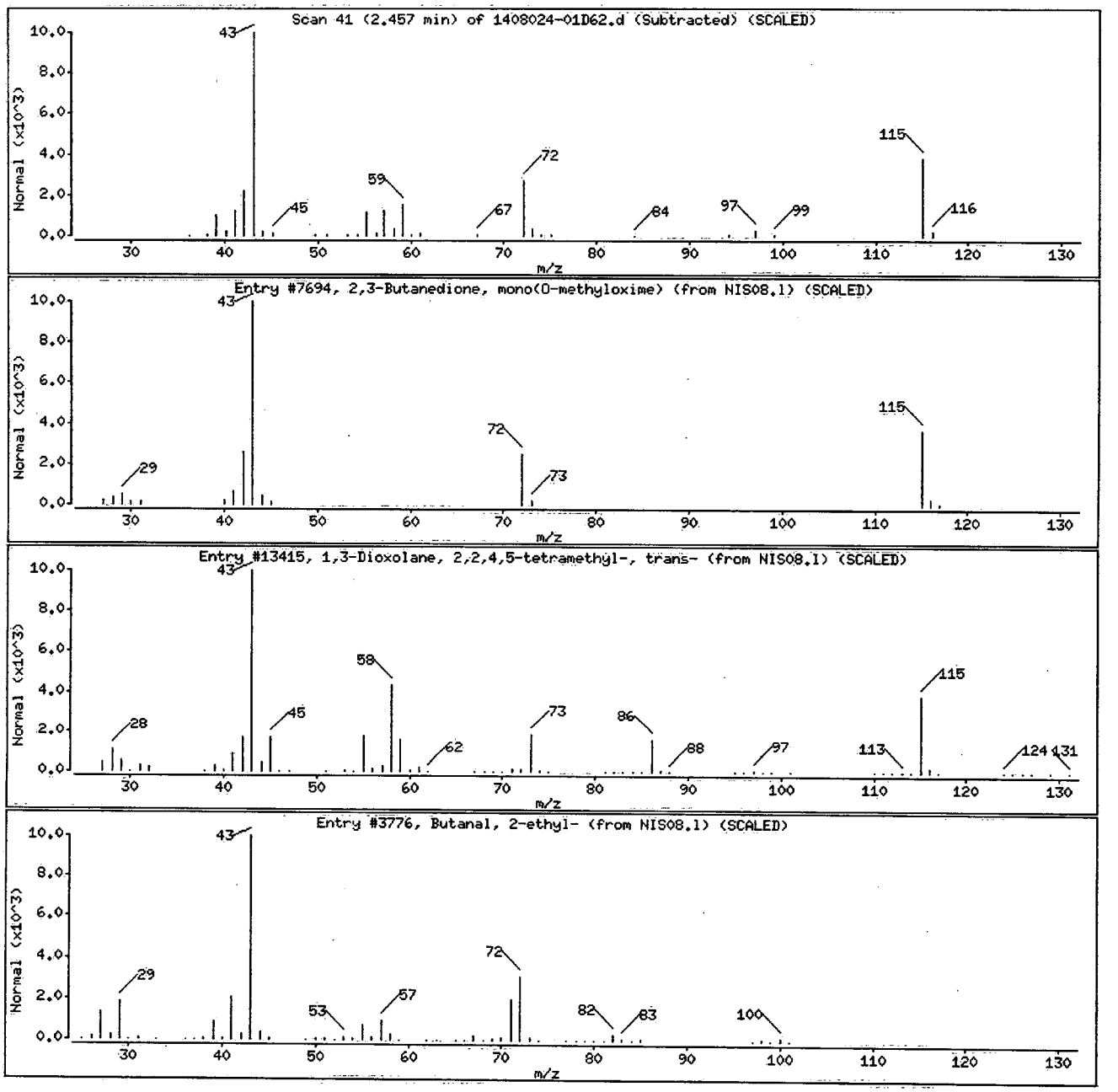
Sample Info: 1408024-01:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,3-Butanedione, mono(O-methyloxime)	617-32-3	NIS08.l	7694	40	C5H9NO2	115
1,3-Dioxolane, 2,2,4,5-tetramethyl-, tra	17226-66-3	NIS08.l	13415	36	C7H14O2	130
Butanal, 2-ethyl-	97-96-1	NIS08.l	3776	12	C6H12O	100



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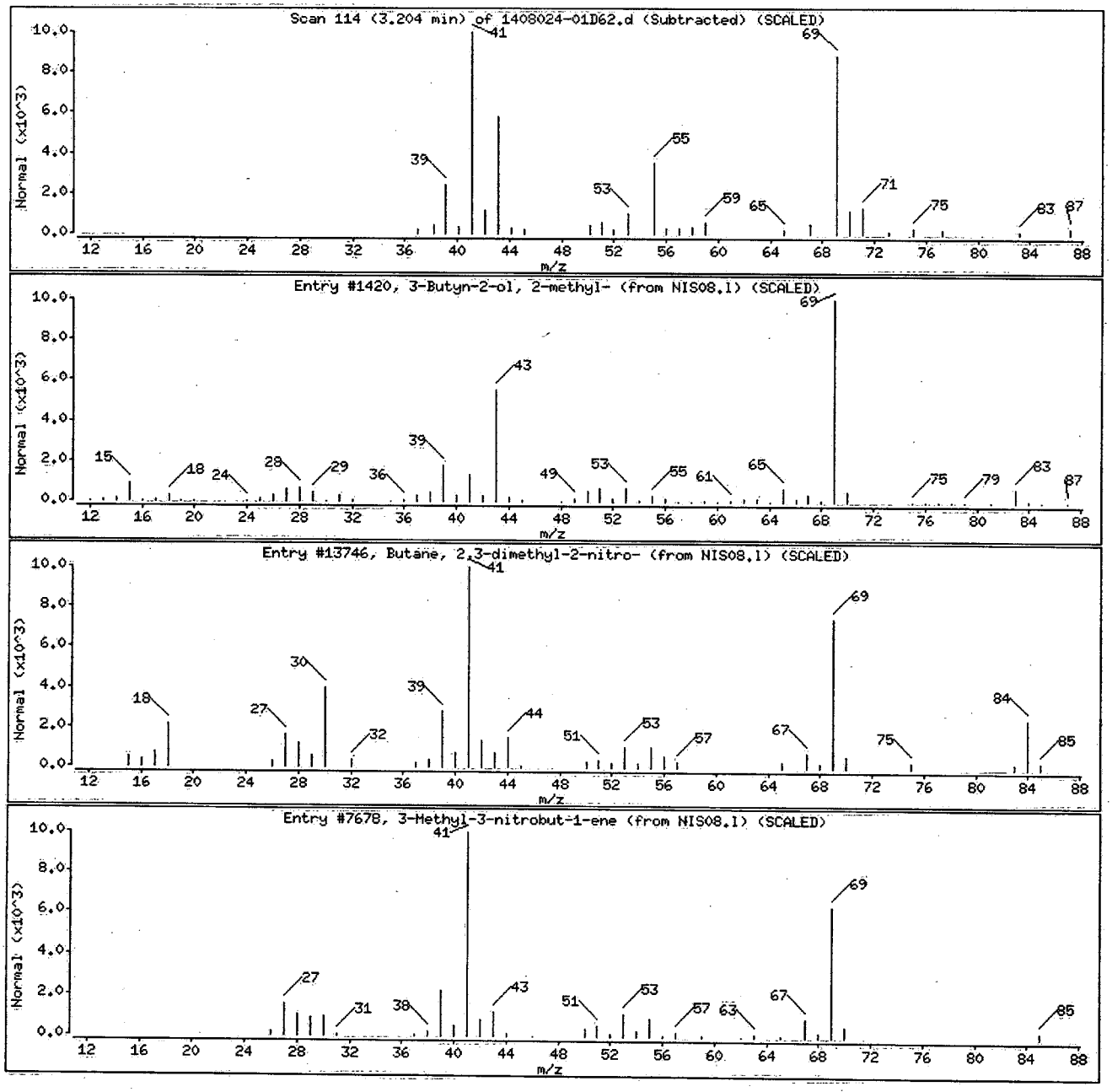
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Butyn-2-ol, 2-methyl-	115-19-5	NIS08.1	1420	47	C5H8O	84
Butane, 2,3-dimethyl-2-nitro-	34075-28-0	NIS08.1	13746	39	C6H13NO2	131
3-Methyl-3-nitrobut-1-ene	1809-67-2	NIS08.1	7678	39	C5H9NO2	115



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-01D62.d

Date : 15-AUG-2014 21:42

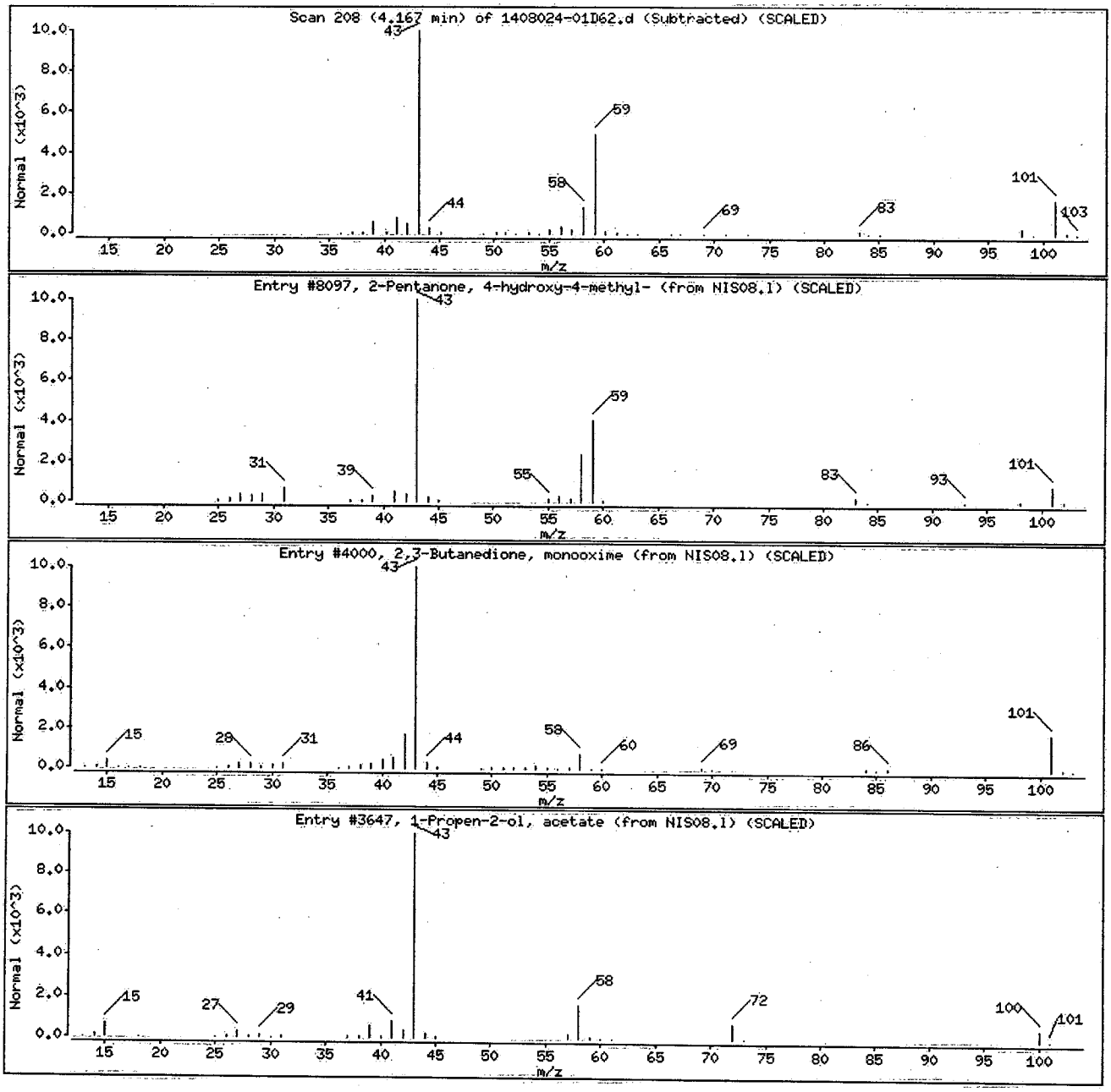
Client ID: P001-S002-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-01:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIS08.1	8097	50	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIS08.1	4000	16	C4H7NO2	101
1-Propen-2-ol, acetate	108-22-5	NIS08.1	3647	10	C5H8O2	100



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-01D62.d

Date : 15-AUG-2014 21:42

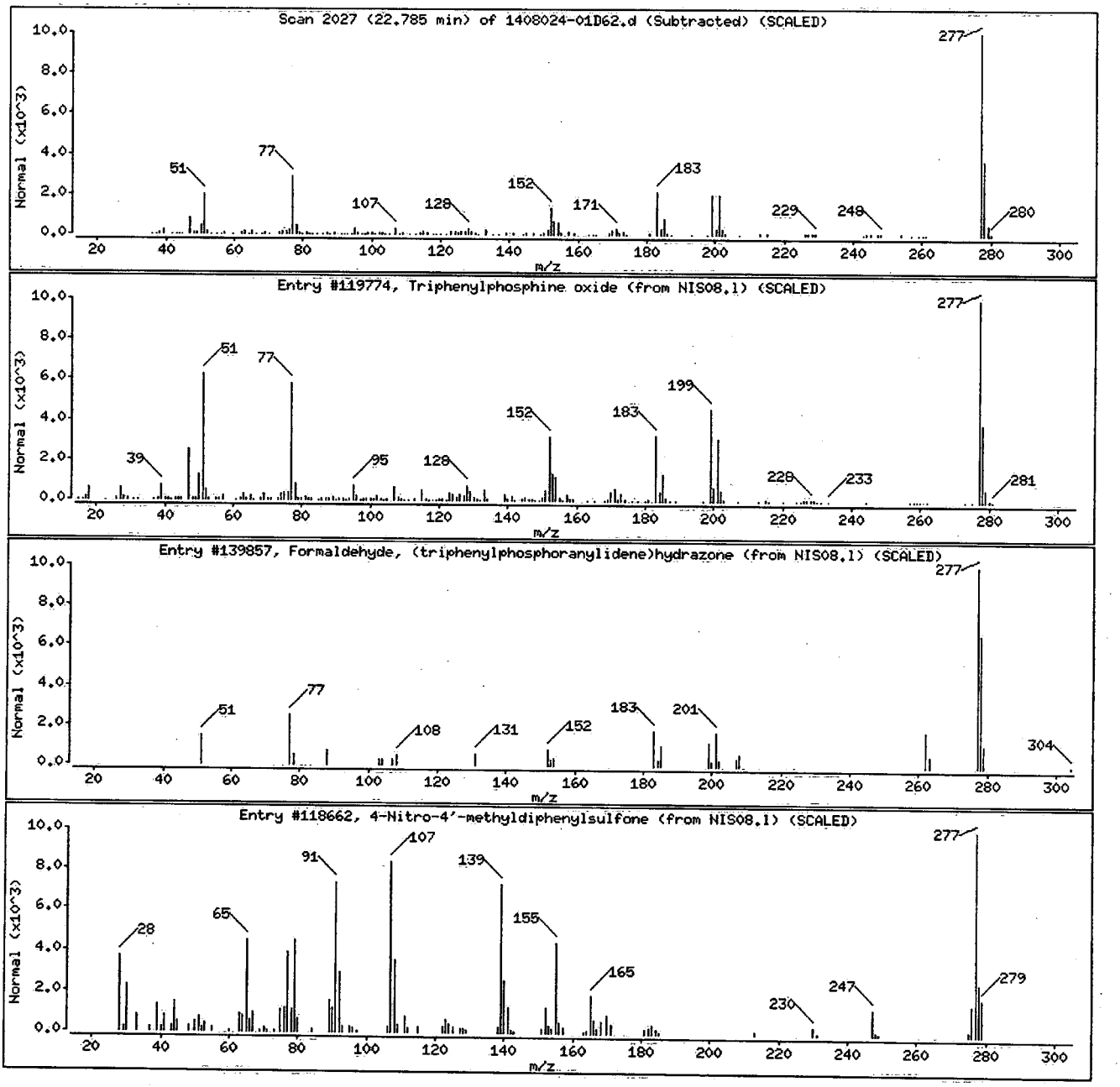
Client ID: P001-S002-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-01:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Triphenylphosphine oxide	791-28-6	NIS08.1	119774	93	C18H15OP	278
Formaldehyde, (triphenylphosphoranyliden	15990-54-2	NIS08.1	139857	50	C19H17N2P	304
4-Nitro-4'-methyldiphenylsulfone	4094-37-5	NIS08.1	118662	43	C13H11NO4S	277



Robert Hamm 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-01D62.d

Date : 15-AUG-2014 21:42

Client ID: P001-S002-0002-01

Instrument: 5972hp62.i

Sample Info: 1408024-01:OWS:10

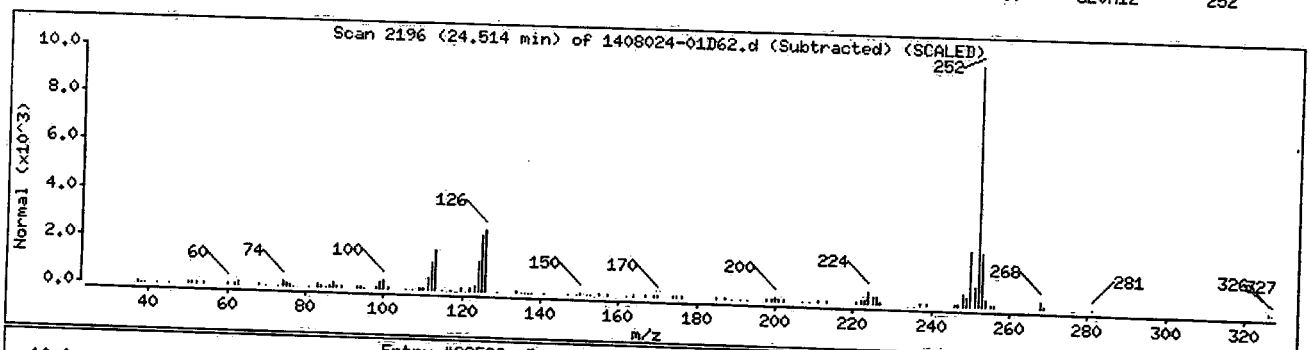
Volume Injected (uL): 2.0

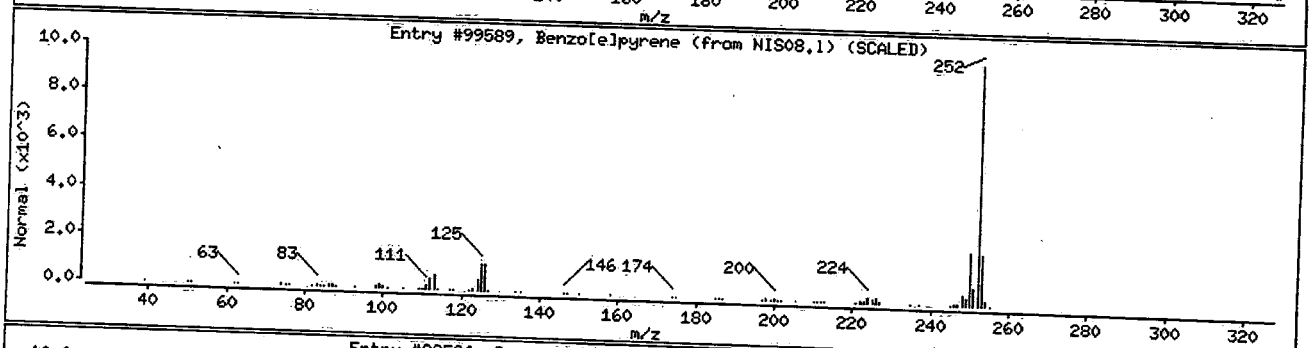
Operator: OWS

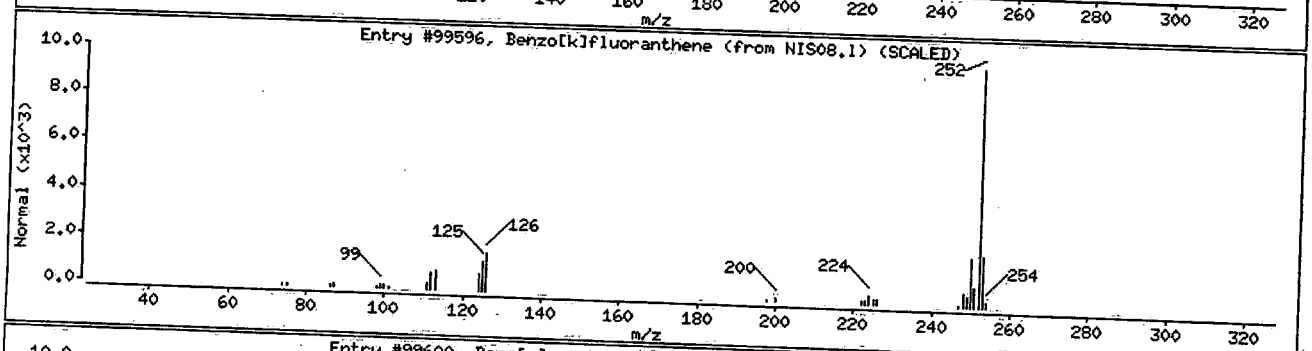
Column phase: Rxi-5SilMS

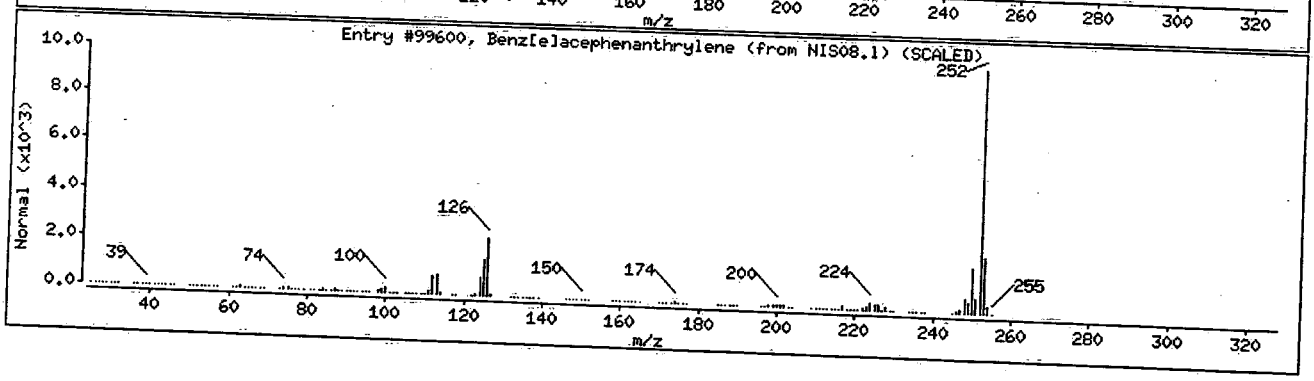
Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benzo[e]pyrene	192-97-2	NIS08.1	99589	98	C20H12	252
Benzo[k]fluoranthene	207-08-9	NIS08.1	99596	97	C20H12	252
Benz[e]acephenanthrylene	205-99-2	NIS08.1	99600	97	C20H12	252









8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-01D62.d

Date : 15-AUG-2014 21:42

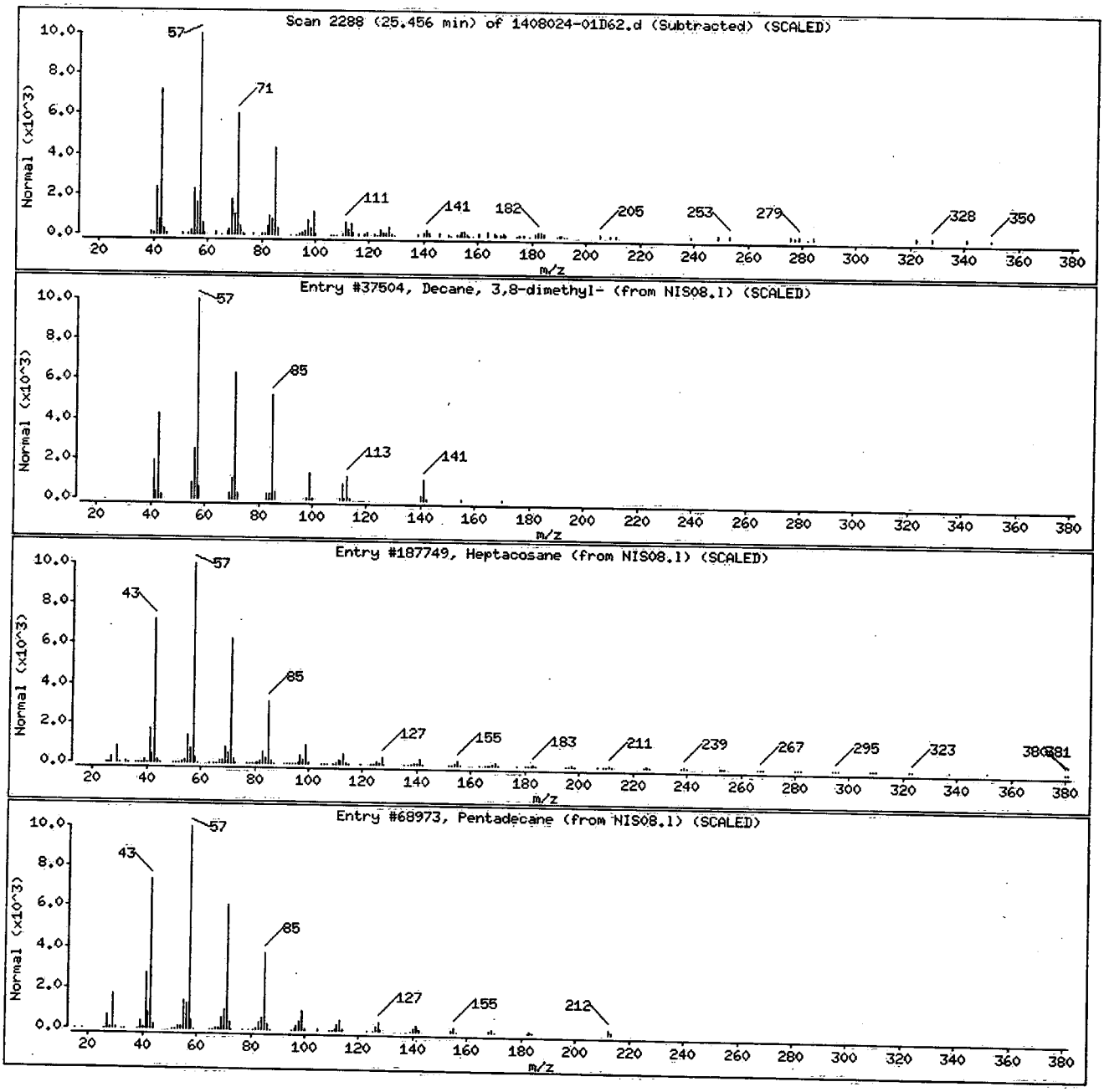
Client ID: P001-S002-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-01:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Decane, 3,8-dimethyl-	17312-55-9	NIS08.l	37504	87	C12H26	170
Heptacosane	593-49-7	NIS08.l	187749	83	C27H56	380
Pentadecane	629-62-9	NIS08.l	68973	83	C15H32	212



Robin Hamm 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-01D62.d

Date : 15-AUG-2014 21:42

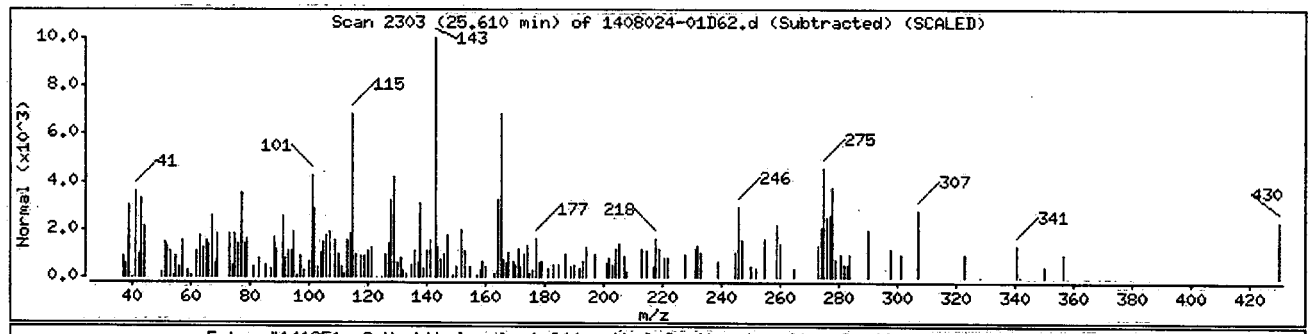
Client ID: P001-S002-0002-01 Instrument: 5972hp62.i

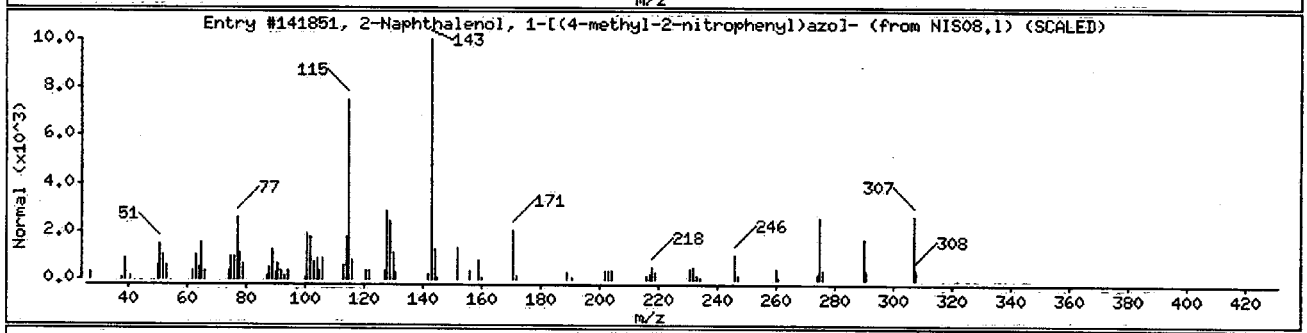
Sample Info: 1408024-01:OWS:10

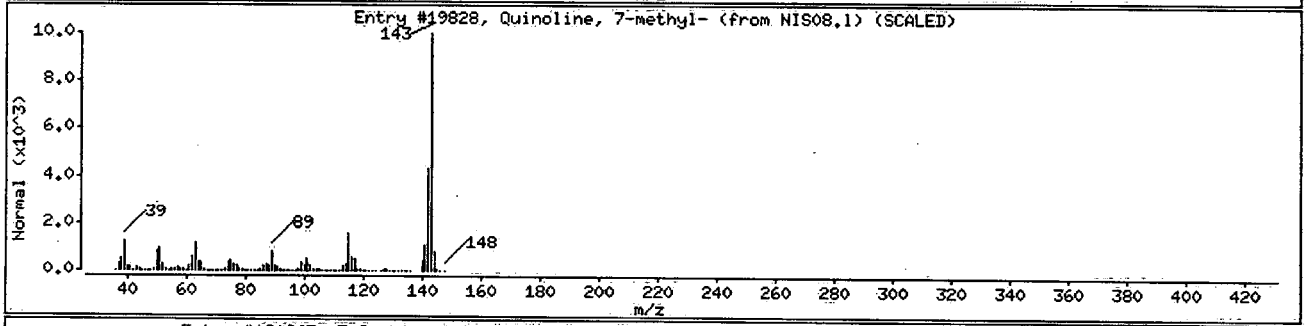
Volume Injected (uL): 2.0 Operator: OWS

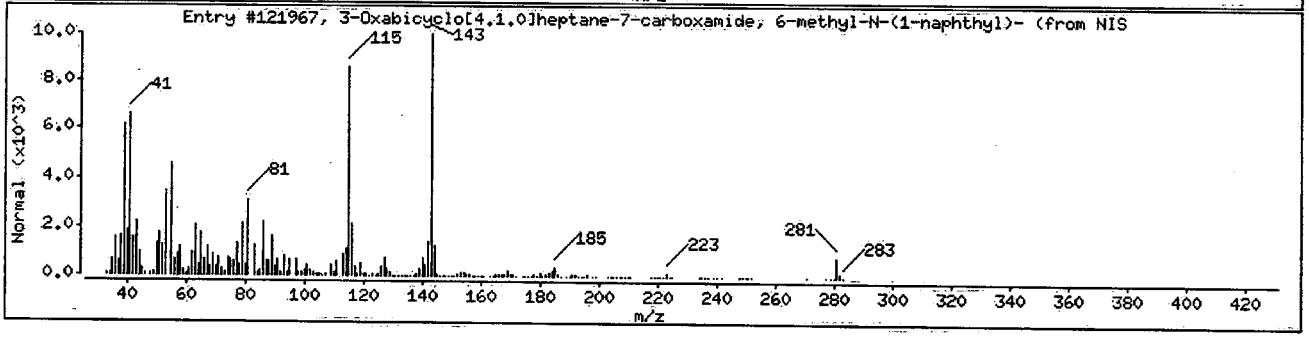
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Naphthalenol, 1-[(4-methyl-2-nitrophen	2425-85-6	NIS08.1	141851	49	C17H13N3O3	307
Quinoline, 7-methyl-	612-60-2	NIS08.1	19828	25	C10H9N	143
3-Oxabicyclo[4.1.0]heptane-7-carboxamide	1000259-67-7	NIS08.1	121967	25	C18H19NO2	281









8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-01D62.d

Date : 15-AUG-2014 21:42

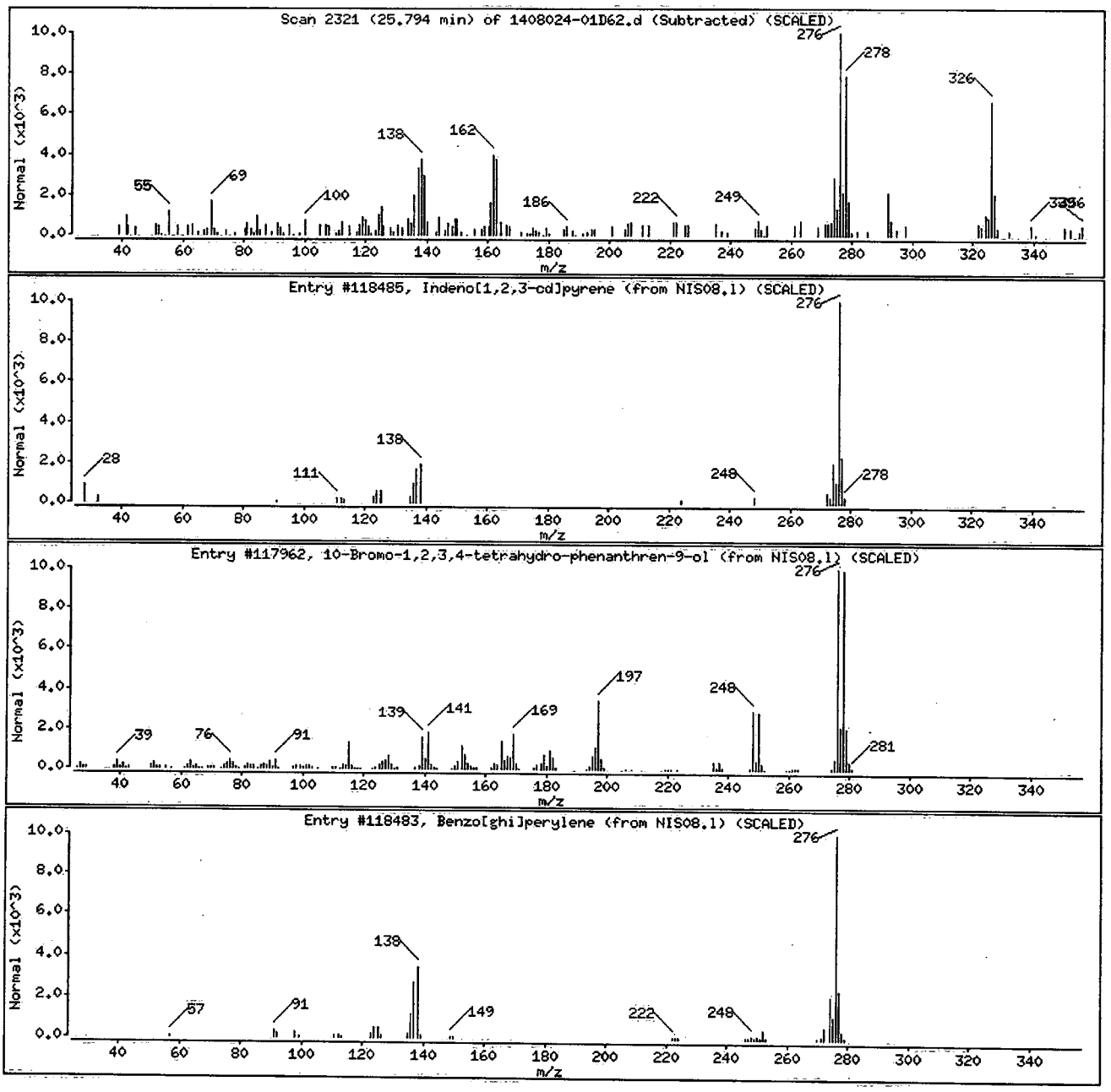
Client ID: P001-S002-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-01:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Indeno[1,2,3-cd]pyrene	193-39-5	NIS08.l	118485	47	C22H12	276
10-Bromo-1,2,3,4-tetrahydro-phenanthren-	1000190-54-9	NIS08.l	117962	46	C14H13BrO	276
Benzo[ghi]perylene	191-24-2	NIS08.l	118483	35	C22H12	276



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-01D62.d

Date : 15-AUG-2014 21:42

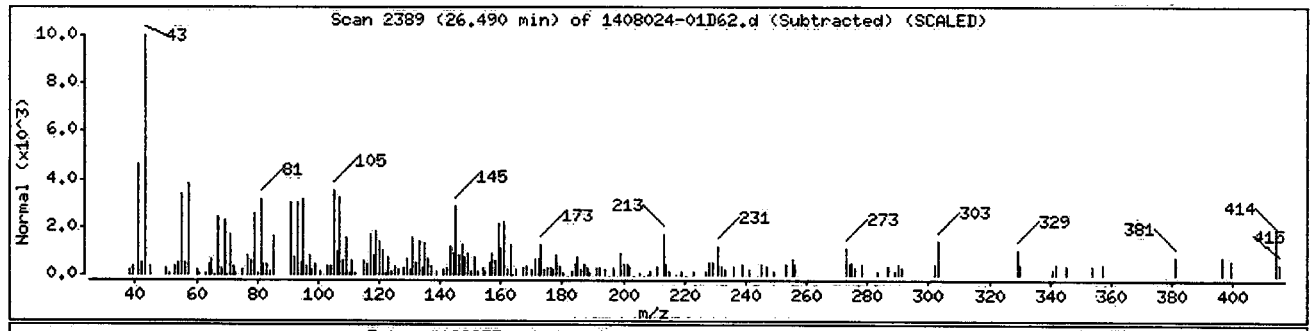
Client ID: P001-S002-0002-01 Instrument: 5972hp62.i

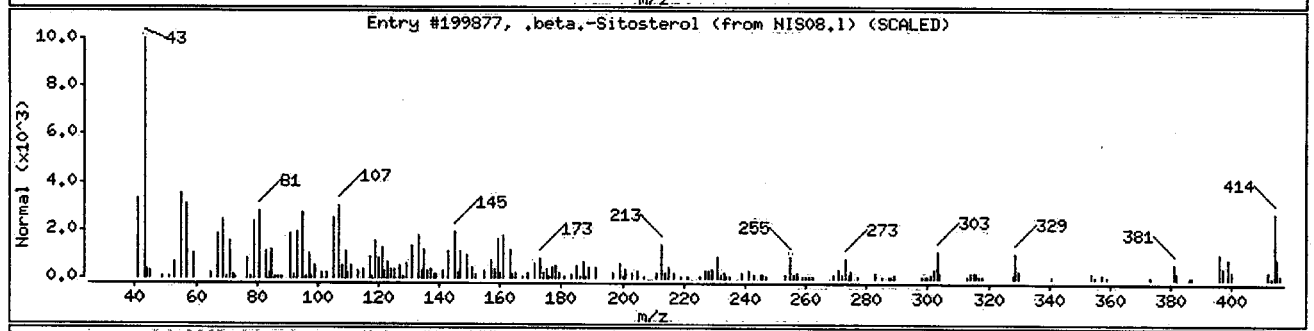
Sample Info: 1408024-01:OWS:10

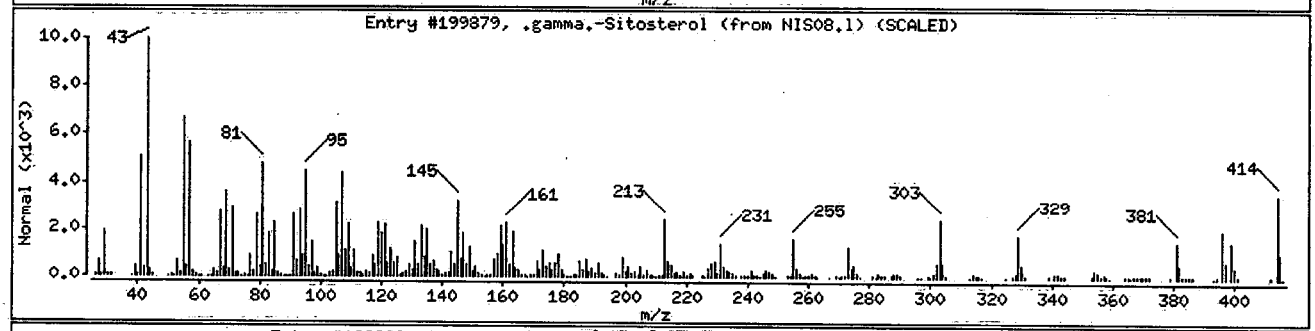
Volume Injected (uL): 2.0 Operator: OWS

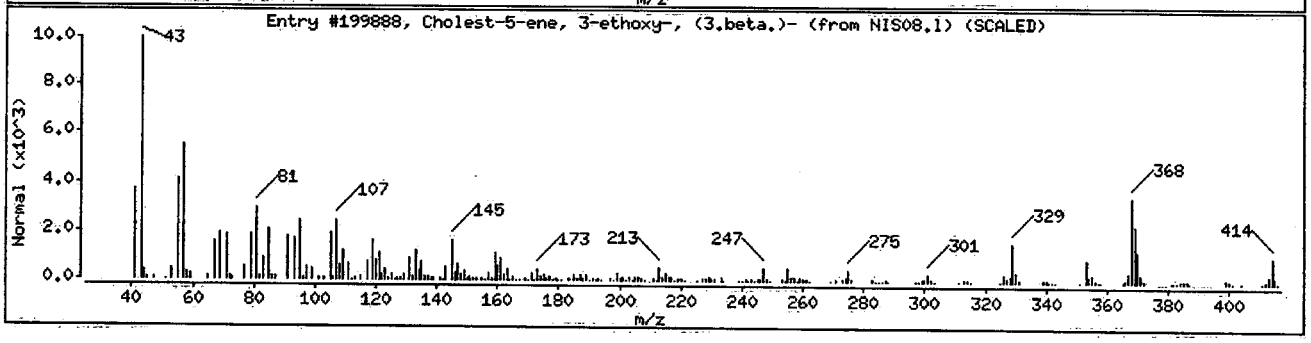
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
.beta.-Sitosterol	83-46-5	NIS08.l	199877	99	C29H500	414
.gamma.-Sitosterol	83-47-6	NIS08.l	199879	99	C29H500	414
Cholest-5-ene, 3-ethoxy-, (3.beta.)-	986-19-6	NIS08.l	199888	43	C29H500	414









8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-01D62.d

Date : 15-AUG-2014 21:42

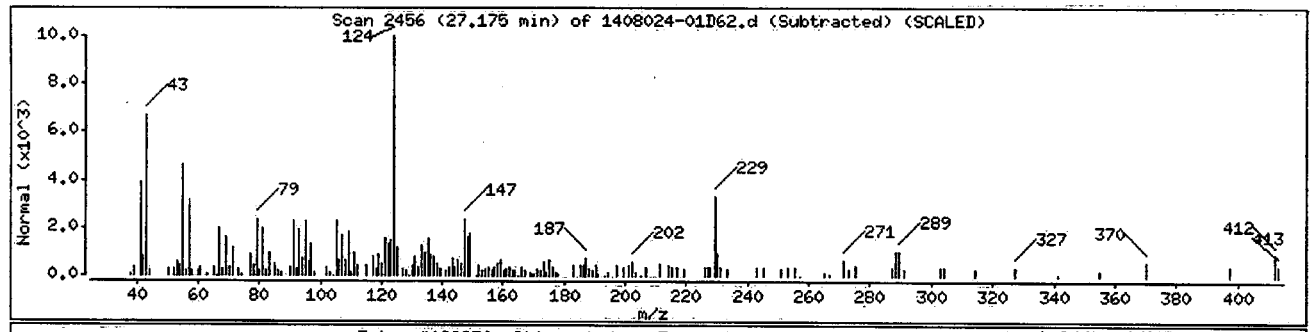
Client ID: P001-S002-0002-01 Instrument: 5972hp62.i

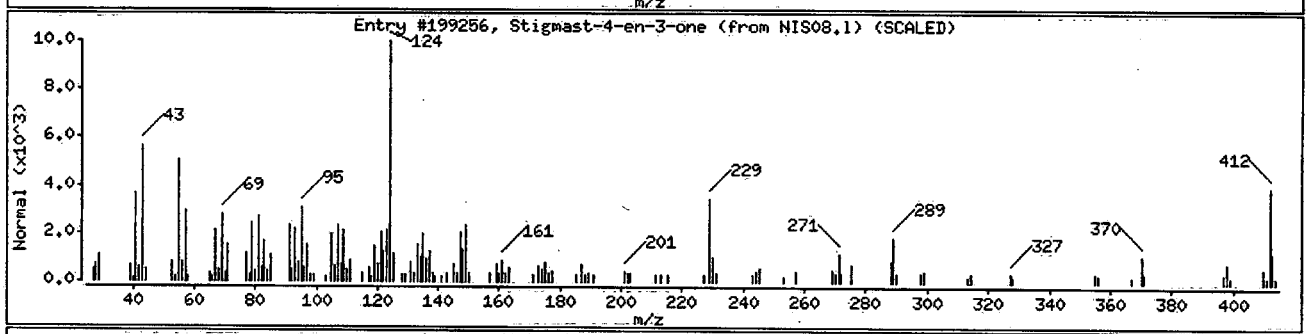
Sample Info: 1408024-01:OWS:10

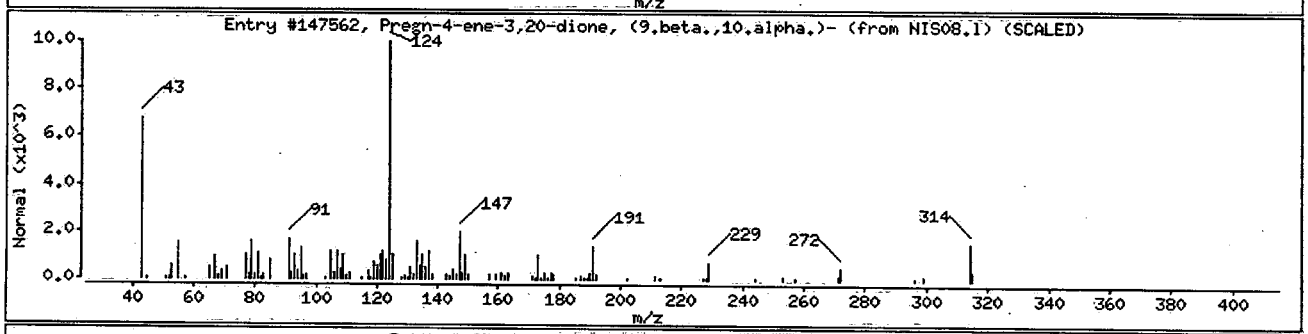
Volume Injected (uL): 2.0 Operator: OWS

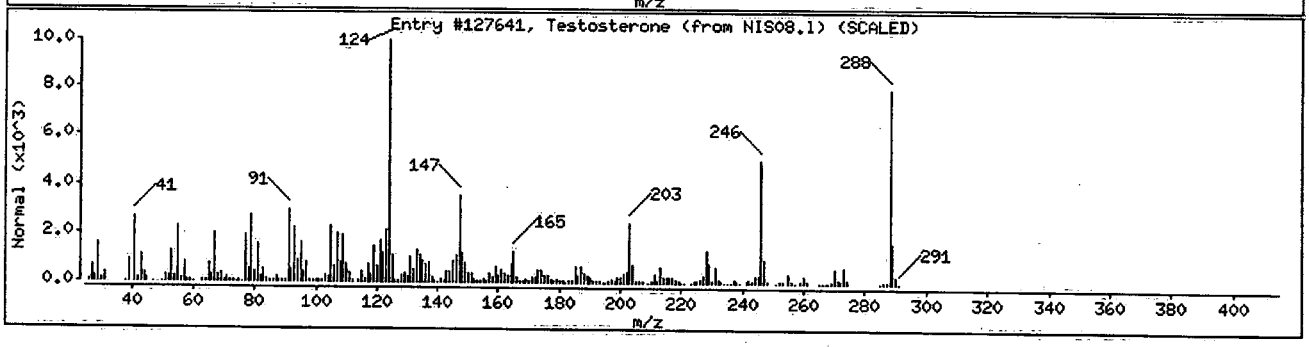
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Stigmast-4-en-3-one	1058-61-3	NIS08.l	199256	97	C29H48O	412
Pregn-4-ene-3,20-dione, (9.beta.,10.alph	2755-10-4	NIS08.l	147562	60	C21H30O2	314
Testosterone	58-22-0	NIS08.l	127641	60	C19H28O2	288



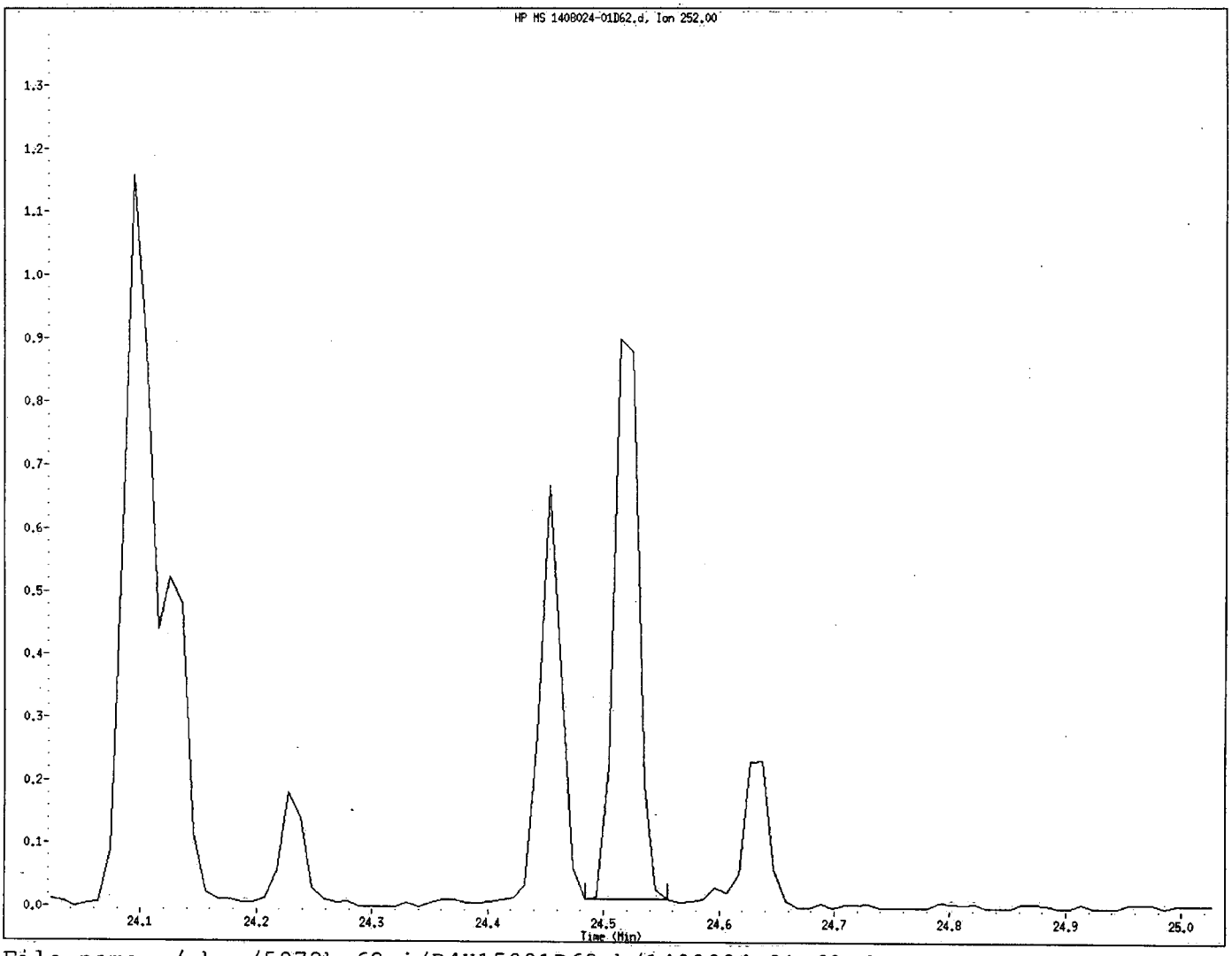






Robin Hu 8/19/2014

Benzo(a)pyrene CAS Number 50-32-8 Area = 133057 User selected hit



File name: /chem/5972hp62.i/D4H15001D62.b/1408024-01D62.d
Client ID: P001-S002-0002-01
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 21:42
Retention Time: 24.51
Operator ID: OWS

8/19/2014

ANALYSIS DATA SHEET
SW8270D

P001-S003-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-02D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30.1g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-02 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 4 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 19:43

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
108-95-2	Phenol		570	3400	U
111-44-4	Bis(2-chloroethyl)ether		200	1800	U
95-57-8	2-Chlorophenol		560	3400	U
95-48-7	2-Methylphenol		400	3400	U
108-60-1	2,2'-oxybis(1-Chloropropane)		260	1800	U
106-44-5	3 & 4-Methylphenol		350	3400	U
621-64-7	N-Nitroso-di-N-propylamine		330	1800	U
98-86-2	Acetophenone		460	1800	U
67-72-1	Hexachloroethane		1100	1800	U
98-95-3	Nitrobenzene		430	1800	U
78-59-1	Isophorone		300	1800	U
88-75-5	2-Nitrophenol		430	3400	U
105-67-9	2,4-Dimethylphenol		540	3400	U
111-91-1	Bis(2-chloroethoxy)methane		470	1800	U
120-83-2	2,4-Dichlorophenol		410	3400	U
91-20-3	Naphthalene		240	1800	U
106-47-8	4-Chloroaniline		290	3400	U
87-68-3	Hexachlorobutadiene		270	1800	U
59-50-7	4-Chloro-3-methylphenol		250	3400	U
91-57-6	2-Methylnaphthalene		310	1800	U
77-47-4	Hexachlorocyclopentadiene		320	1800	U
88-06-2	2,4,6-Trichlorophenol		320	3400	U
95-95-4	2,4,5-Trichlorophenol		260	3400	U
91-58-7	2-Chloronaphthalene		420	1800	U
88-74-4	2-Nitroaniline		260	3400	U
131-11-3	Dimethylphthalate		170	1800	U
606-20-2	2,6-Dinitrotoluene		180	1800	U
208-96-8	Acenaphthylene		310	1800	U
99-09-2	3-Nitroaniline		230	3400	U
83-32-9	Acenaphthene		310	1800	U
51-28-5	2,4-Dinitrophenol		160	3400	U
100-02-7	4-Nitrophenol		480	3400	U
121-14-2	2,4-Dinitrotoluene		210	1800	U
132-64-9	Dibenzofuran		310	1800	U
84-66-2	Diethylphthalate		190	1800	U

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[redacted]

ANALYSIS DATA SHEET

SW8270D

P001-S003-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-02D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30.1g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-02 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 4 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 19:43

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
7005-72-3	4-Chlorophenyl-phenylether		220	1800	U
86-73-7	Fluorene	260	230	1800	JD
100-01-6	4-Nitroaniline		460	3400	U
534-52-1	4,6-Dinitro-2-methylphenol		470	3400	U
86-30-6	N-Nitrosodiphenylamine (1)		310	1800	U
101-55-3	4-Bromophenyl-phenylether		260	1800	U
118-74-1	Hexachlorobenzene		230	1800	U
87-86-5	Pentachlorophenol		450	3400	U
85-01-8	Phenanthrene	3000	100	1800	D
120-12-7	Anthracene	600	88	1800	JD
86-74-8	Carbazole	370	180	1800	JD
84-74-2	Di-n-butylphthalate		250	1800	U
206-44-0	Fluoranthene	4800	250	1800	D
129-00-0	Pyrene	3600	230	1800	D
85-68-7	Butylbenzylphthalate		280	1800	U
91-94-1	3,3'-Dichlorobenzidine		360	1800	U
117-81-7	bis(2-ethylhexyl)Phthalate		320	1800	U
56-55-3	Benzo (a) anthracene	2000	280	1800	D
218-01-9	Chrysene	2200	110	1800	D
117-84-0	Di-n-octylphthalate		340	1800	U
205-99-2	Benzo (b) fluoranthene	2600	270	1800	D
207-08-9	Benzo(k)fluoranthene	1300	250	1800	JD
50-32-8	Benzo (a) pyrene	1900	190	1800	D
193-39-5	Indeno(1,2,3-cd)pyrene	1400	300	1800	JD
53-70-3	Dibenzo(a,h)anthracene		480	1800	U
191-24-2	Benzo (g,h,i) perylene	1200	310	1800	JD
100-52-7	Benzaldehyde		280	1800	U
105-60-2	Caprolactam		290	1800	U
1912-24-9	Atrazine		200	1800	U
92-52-4	1,1'-Biphenyl		410	1800	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	3453	2594	75	35 - 105	D
Phenol-d5	3453	2195	64	40 - 100	D
Nitrobenzene-d5	1726	ND		35 - 100	D

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ANALYSIS DATA SHEET
SW8270D

P001-S003-0002-01

Client:	WESTON SOLUTIONS	SDG	1408024	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ		
Matrix:	Soil	Extraction:	EPA 3550C MOD_SV	File ID:	1408024-02D62.d	Sampled:	08/07/14 00:00
Initial/Final:	30.1g / 1000uL	Sulfur Cleanup:	N	Lab ID:	1408024-02	Received:	08/08/14 09:04
Dilution:	10 pH:	Florisil Cleanup:	N			Prepared:	08/12/14 09:00
% Moisture:	4	GPC Cleanup:	N	GPC Cleanup Factor:	N	Analyzed:	08/15/14 19:43
Batch:	4080818	Sequence:	4H15001	Calibration:	4072701	Instrument:	5972hp62

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	1726	ND	0	45 - 105	D
2,4,6-Tribromophenol	3453	2507	73	35 - 125	D
Terphenyl-d14	1726	ND	0	30 - 125	D

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q
000213-46-7	1,2:7,8-Dibenzophenanthrene	710	308226	26.06	86	JDN
2425-85-6	2-Naphthalenol, 1-[(4-methyl-2-nitrophen	900	393487	25.61	94	JDN
1985-5-0	Perylene	1800	769210	24.454	93	JDN
NA	Unknown 2.458	1400	418056	2.458	0	JD
NA	Unknown 22.785	2100	1254151	22.785	0	JD
NA	Unknown 26.091	690	301615	26.091	0	JD
NA	Unknown 27.780	1200	517859	27.78	0	JD
NA	Unknown 3.195	940	272734	3.195	0	JD
NA	Unknown 3.932	800	230404	3.932	0	JD
NA	Unknown 4.167	13000	3827138	4.167	0	JD

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.
(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.
(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

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Liberty Analytical Corp.

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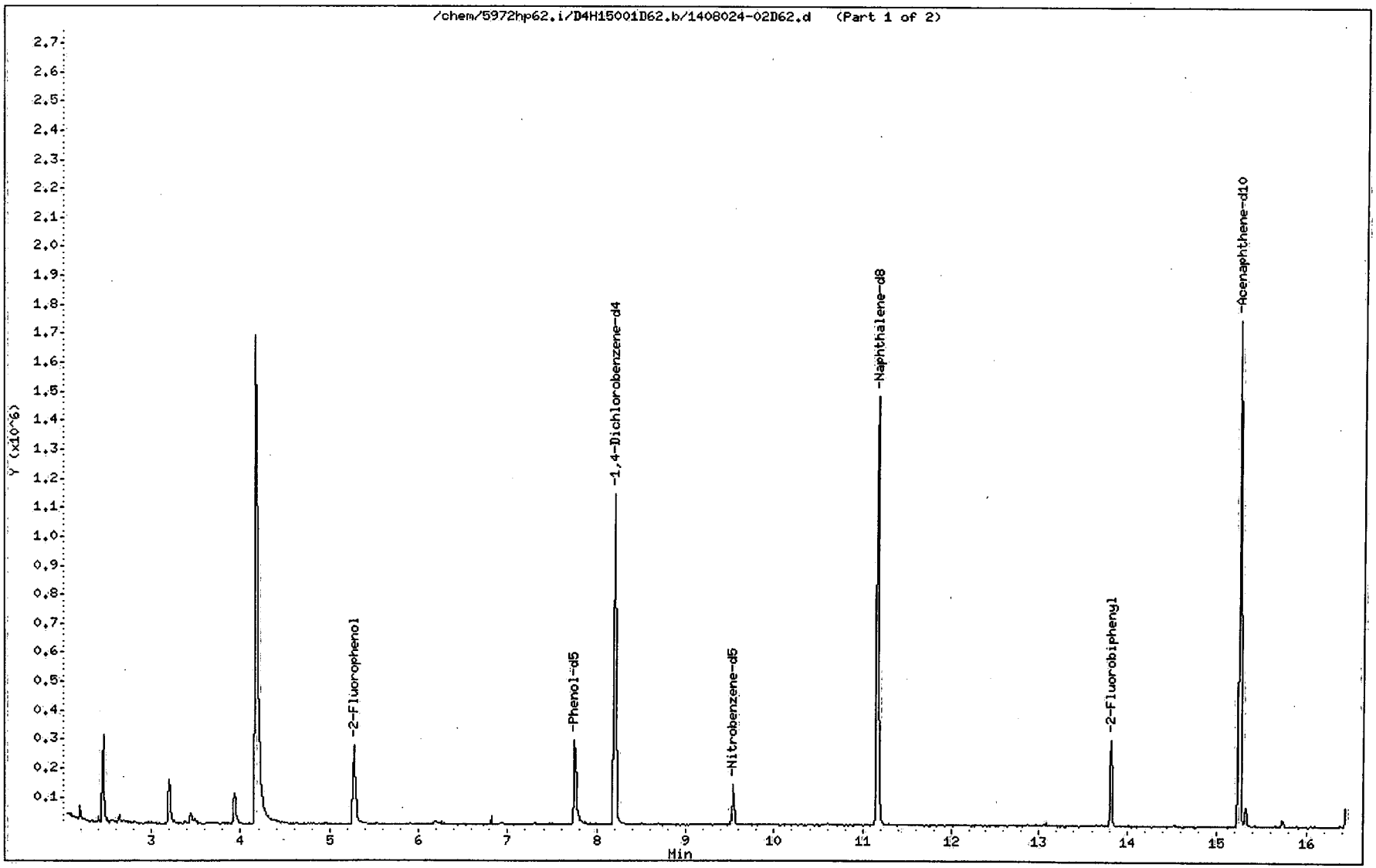
Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-02D62.d
Date : 15-AUG-2014 19:43
Client ID: P001-S003-0002-01
Sample Info: 1408024-02:OWS:10
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



8/19/2014

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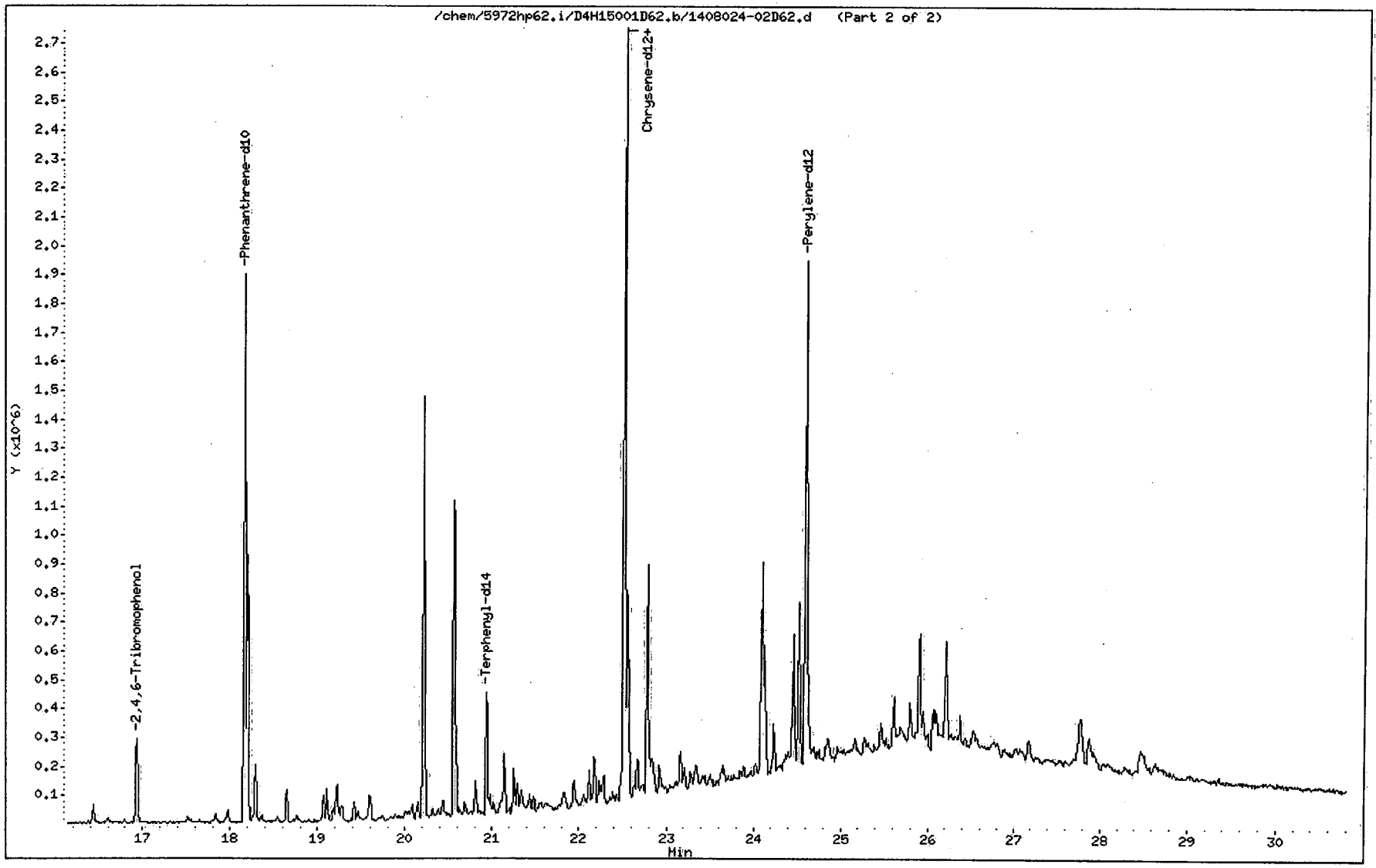
Date : 15-AUG-2014 19:43
Client ID: P001-S003-0002-01
Sample Info: 1408024-02:OWS:10
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i

Operator: OWS
Column diameter: 0.32



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-02D62.d
Report Date: 19-Aug-2014 11:23

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp62.i/D4H15001D62.b/1408024-02D62.d
Lab Smp Id: 1408024-02 Client Smp ID: P001-S003-0002-01
Inj Date : 15-AUG-2014 19:43
Operator : OWS Inst ID: 5972hp62.i
Smp Info : 1408024-02:OWS:10
Misc Info : P001-S003-0002-01
Comment :
Method : /chem/5972hp62.i/D4H15001D62.b/8270Dv26.m
Meth Date : 19-Aug-2014 11:23 ron Quant Type: ISTD
Cal Date : 23-JUL-2014 19:31 Cal File: 4G23008-CAL662.d
Als bottle: 10
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1000.00000	Volume of final extract (uL)(1000 low, 2
Vi	2.00000	Volume injected (uL)
Ws	30.10000	Weight of sample extracted (g)
M	4.00000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY	
* 1 1,4-Dichlorobenzene-d4	152	8.200	8.212	(1.000)	312748	40.0000			
* 2 Naphthalene-d8	136	11.168	11.170	(1.000)	1137824	40.0000			
* 3 Acenaphthene-d10	164	15.252	15.254	(1.000)	610720	40.0000			
* 4 Phenanthrene-d10	188	18.169	18.171	(1.000)	1015227	40.0000			
* 5 Chrysene-d12	240	22.519	22.521	(1.000)	1071110	40.0000			
* 6 Perylene-d12	264	24.607	24.609	(1.000)	790679	40.0000			
$ 7 2-Fluorophenol	112	5.273	5.274	(0.643)	151522	15.0270	2600		
$ 8 Phenol-d5	99	7.750	7.751	(0.945)	183035	12.7122	2200		
$ 9 Nitrobenzene-d5	82	9.541	9.532	(0.854)	73476	6.43787	1100		(a)
$ 10 2-Fluorobiphenyl	172	13.819	13.821	(0.906)	144923	7.64731	1300		(a)
$ 11 2,4,6-Tribromophenol	330	16.931	16.932	(1.110)	48685	14.5209	2500	8232	
$ 12 Terphenyl-d14	244	20.943	20.945	(0.930)	167796	8.01357	1400		(a)
15 Phenol	94	Compound Not Detected.							

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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-02D62.d
Report Date: 19-Aug-2014 11:23

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
17 Bis(2-chloroethyl)ether	93	Compound Not Detected.						
18 2-Chlorophenol	128	Compound Not Detected.						
23 2-Methylphenol	108	Compound Not Detected.						
24 2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.						
25 3 & 4-Methylphenol	108	Compound Not Detected.						
26 N-Nitroso-di-N-propylamine	70	Compound Not Detected.						
27 Acetophenone	105	Compound Not Detected.						
28 Hexachloroethane	117	Compound Not Detected.						
29 Nitrobenzene	77	Compound Not Detected.						
30 Isophorone	82	Compound Not Detected.						
31 2-Nitrophenol	139	Compound Not Detected.						
32 2,4-Dimethylphenol	122	Compound Not Detected.						
33 Bis(2-chloroethoxy)methane	93	Compound Not Detected.						
34 2,4-Dichlorophenol	162	Compound Not Detected.						
36 Naphthalene	128	Compound Not Detected.						
37 4-Chloroaniline	127	Compound Not Detected.						
38 Hexachlorobutadiene	224	Compound Not Detected.						
39 4-Chloro-3-methylphenol	107	Compound Not Detected.						
40 2-Methylnaphthalene	141	Compound Not Detected.						
42 Hexachlorocyclopentadiene	236	Compound Not Detected.						
44 2,4,6-Trichlorophenol	196	Compound Not Detected.						
45 2,4,5-Trichlorophenol	196	Compound Not Detected.						
46 2-Chloronaphthalene	162	Compound Not Detected.						
47 2-Nitroaniline	65	Compound Not Detected.						
48 Dimethylphthalate	163	Compound Not Detected.						
50 2,6-Dinitrotoluene	165	Compound Not Detected.						
51 Acenaphthylene	152	Compound Not Detected.						
52 3-Nitroaniline	138	Compound Not Detected.						
53 Acenaphthene	153	Compound Not Detected.						
54 2,4-Dinitrophenol	184	Compound Not Detected.						
55 4-Nitrophenol	139	Compound Not Detected.						
56 2,4-Dinitrotoluene	165	Compound Not Detected.						
57 Dibenzofuran	168	Compound Not Detected.						
59 Diethylphthalate	149	Compound Not Detected.						
60 4-Chlorophenyl-phenylether	204	Compound Not Detected.						
61 Fluorene	166	16.429	16.441	(1.077)	27253	1.50698	260	0 (aM)
62 4-Nitroaniline	138	Compound Not Detected.						
63 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
64 N-Nitrosodiphenylamine (1)	169	Compound Not Detected.						
66 4-Bromophenyl-phenylether	248	Compound Not Detected.						
67 Hexachlorobenzene	283	Compound Not Detected.						
68 Pentachlorophenol	265	Compound Not Detected.						
69 Phenanthrene	178	18.200	18.212	(1.002)	469975	17.6218	3000	
70 Anthracene	178	18.292	18.294	(1.007)	92528	3.46682	600	(a)
71 Carbazole	167	18.650	18.652	(1.026)	56395	2.12632	370	9561 (a)
72 Di-n-butylphthalate	149	Compound Not Detected.						
73 Fluoranthene	202	20.216	20.218	(1.113)	789500	28.0246	4800	

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Report Date: 19-Aug-2014 11:23

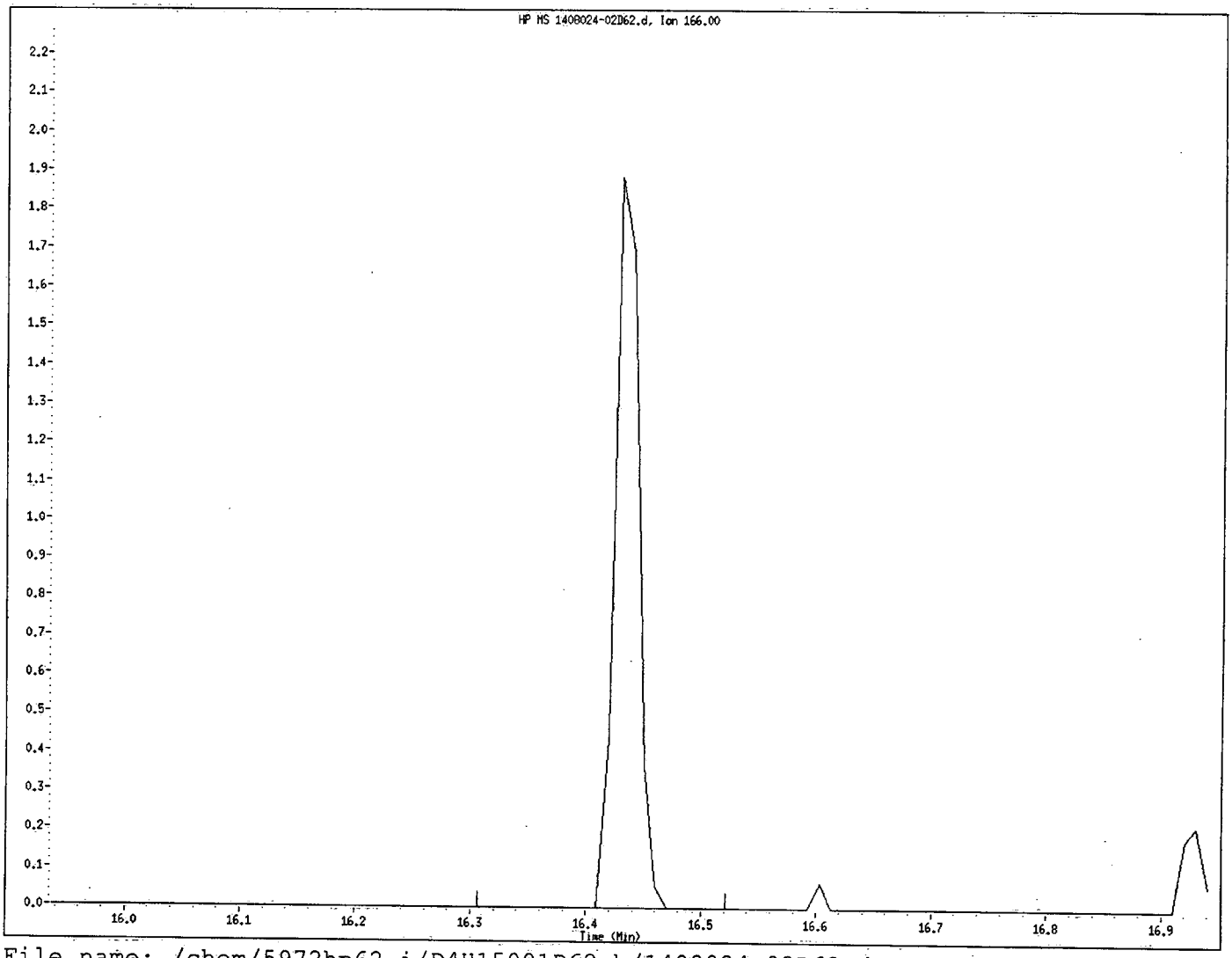
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
74 Pyrene	202	20.554	20.566	(0.913)	644135	20.7346	3600	
75 Butylbenzylphthalate	149	Compound Not Detected.						
76 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
77 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
78 Benzo(a)anthracene	228	22.509	22.511	(1.000)	316108	11.6810	2000	
79 Chrysene	228	22.560	22.562	(1.002)	319752	12.8151	2200	
80 Di-n-octylphthalate	149	Compound Not Detected.						
81 Benzo(b)fluoranthene	252	24.095	24.097	(0.979)	414283	14.7946	2600	
82 Benzo(k)fluoranthene	252	24.126	24.138	(0.980)	215741	7.71398	1300	(a)
83 Benzo(a)pyrene	252	24.525	24.527	(0.997)	285878	10.9446	1900	(H)
84 Indeno(1,2,3-cd)pyrene	276	25.907	25.909	(1.053)	204277	8.08972	1400	(a)
85 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
86 Benzo(g,h,i)perylene	276	26.214	26.216	(1.065)	188349	7.14980	1200	(a)
87 Benzaldehyde	77	Compound Not Detected.						
88 Caprolactam	113	Compound Not Detected.						
89 Atrazine	215	Compound Not Detected.						
90 1,1'-Biphenyl	154	Compound Not Detected.						

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Robin Ha 8/19/2014

Fluorene CAS Number 86-73-7 Area = 27253 Manually integrated



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Client ID: P001-S003-0002-01
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 19:43
Retention Time: 16.43
Operator ID: OWS

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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-02D62.d

Date : 15-AUG-2014 19:43

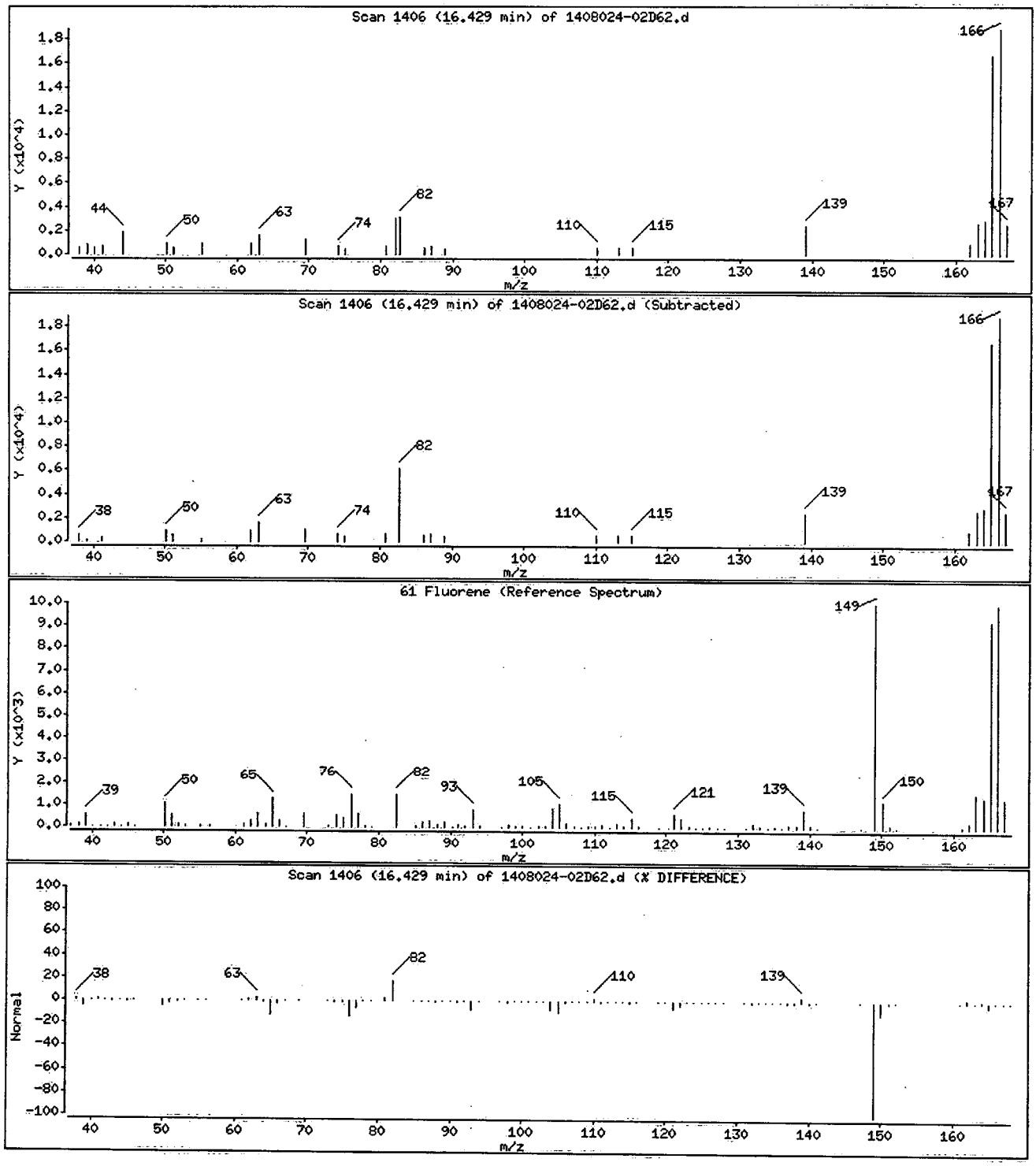
Client ID: P001-S003-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-02:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

61 Fluorene Concentration: 260 ug/Kg



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Date : 15-AUG-2014 19:43

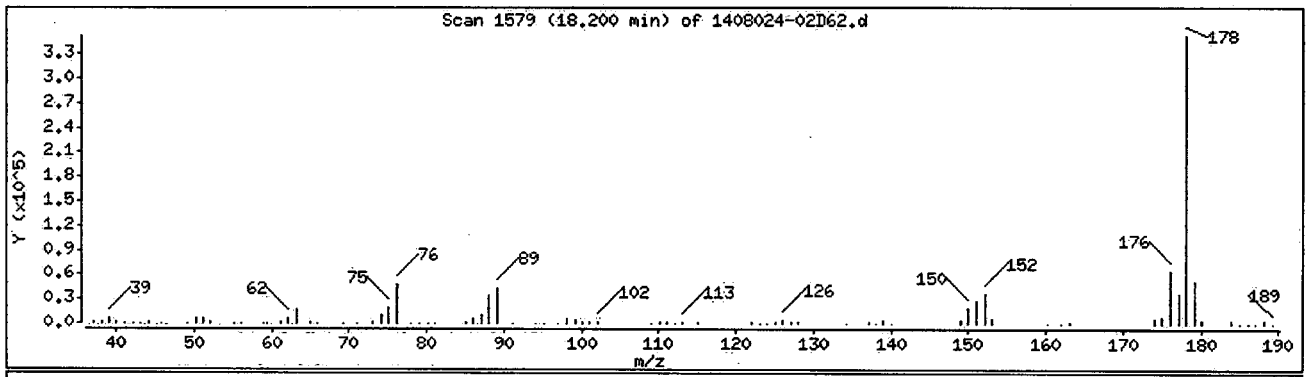
Client ID: P001-S003-0002-01 Instrument: 5972hp62.i

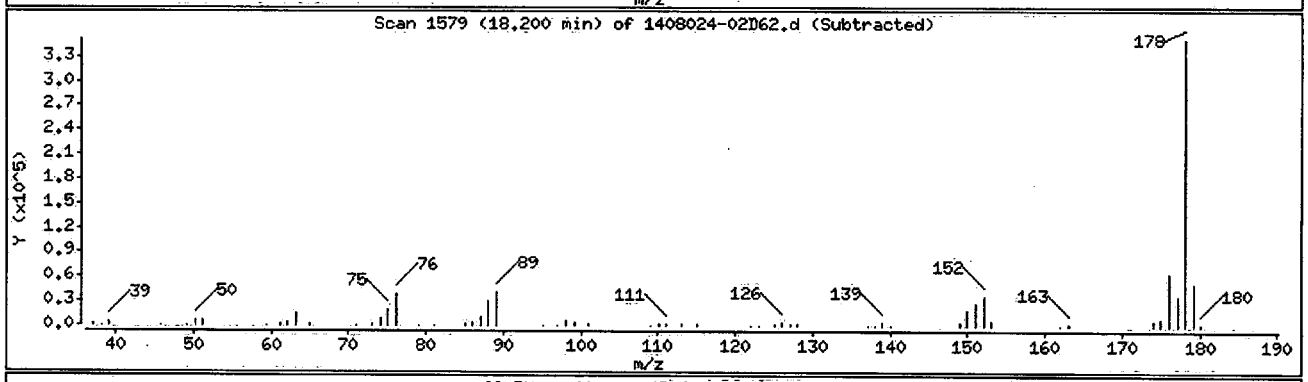
Sample Info: 1408024-02:OWS:10

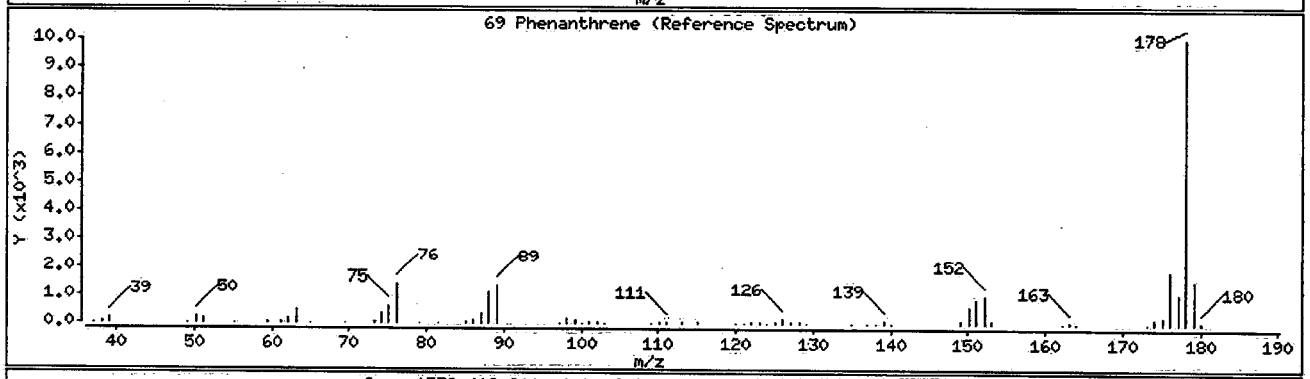
Volume Injected (uL): 2.0 Operator: OWS

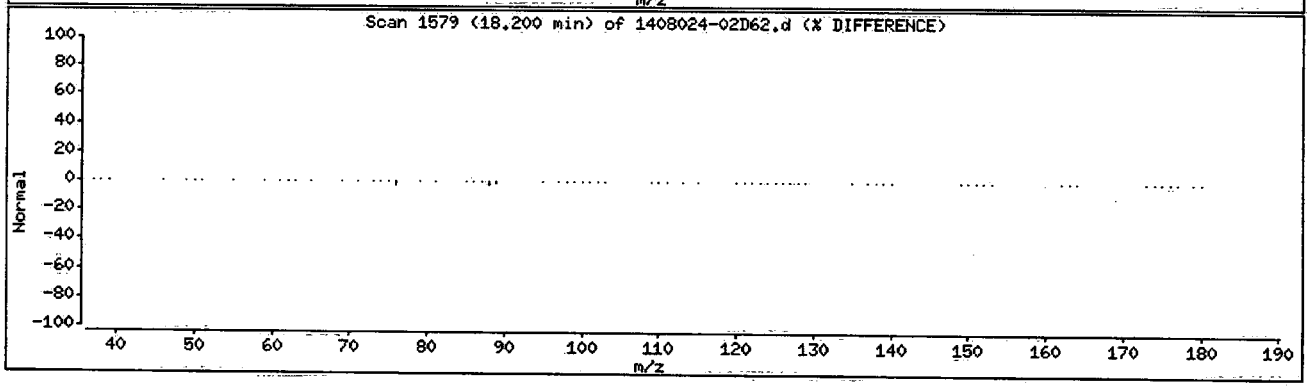
Column phase: Rxi-5SilMS Column diameter: 0.32

69 Phenanthrene Concentration: 3000 ug/Kg









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Client ID: P001-S003-0002-01 Instrument: 5972hp62.i

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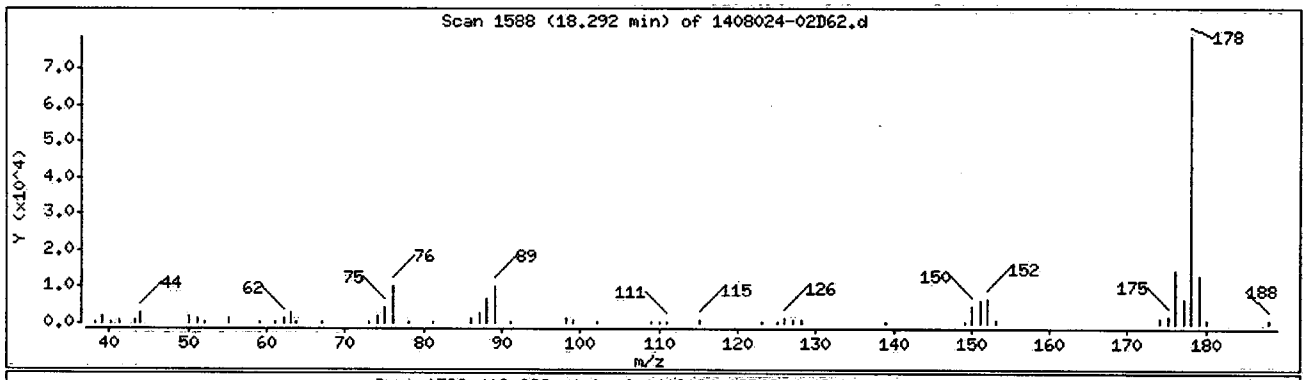
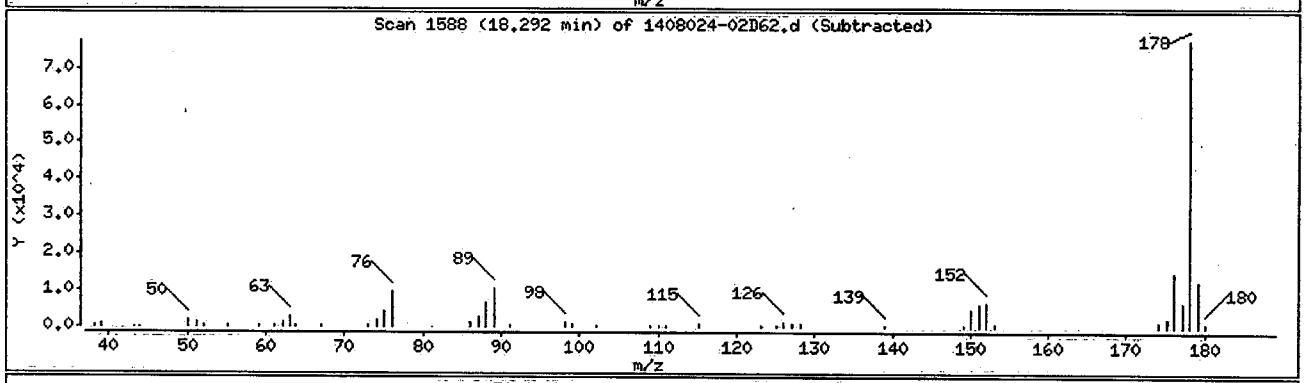
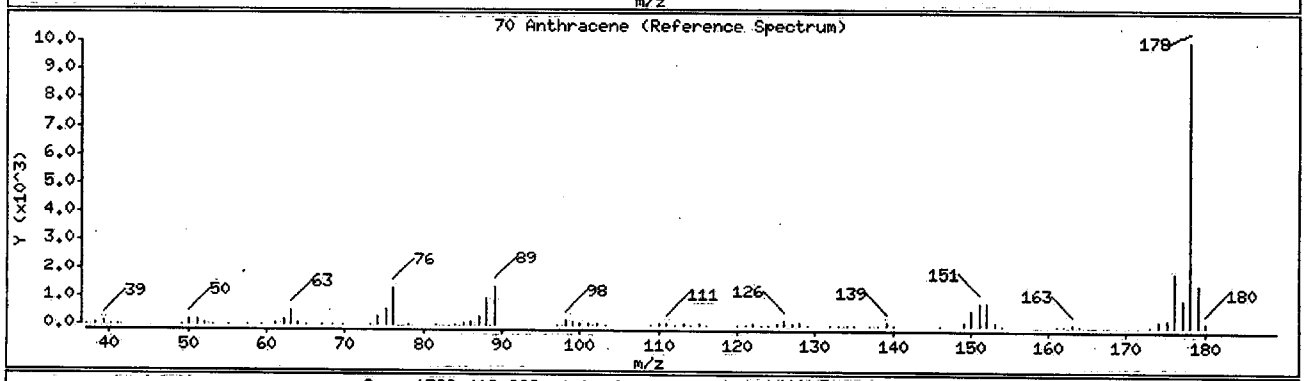
Volume Injected (uL): 2.0 Operator: OWS

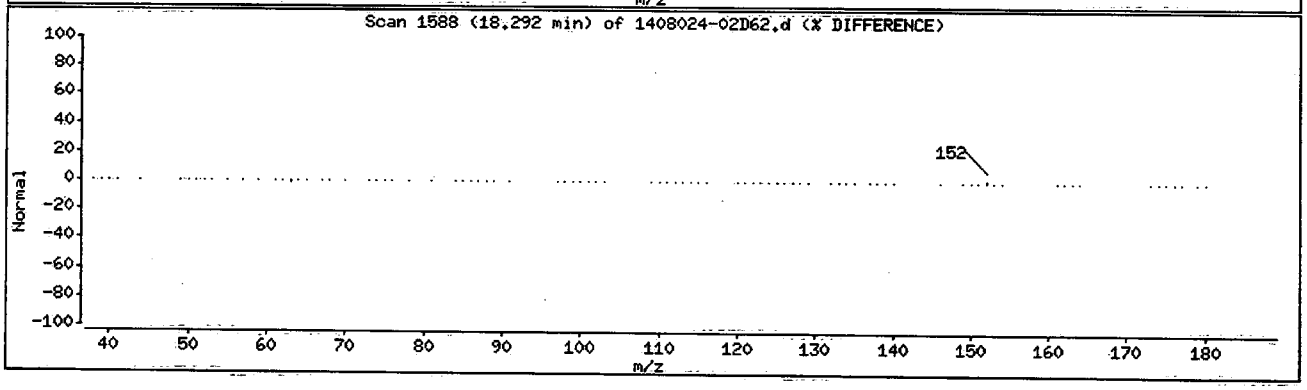
Column phase: Rxi-5SilMS Column diameter: 0.32

70 Anthracene Concentration: 600 ug/Kg









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Date : 15-AUG-2014 19:43

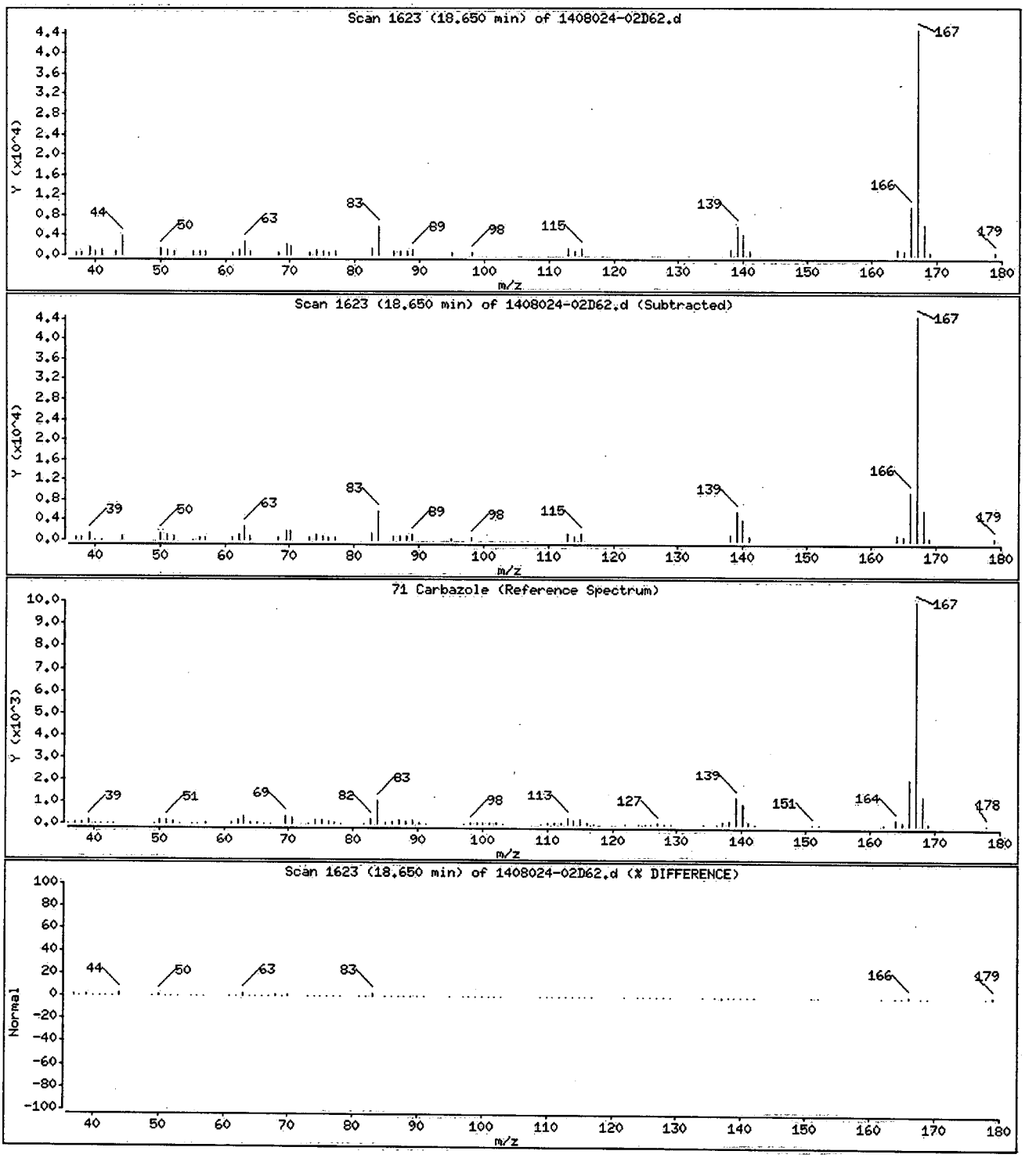
Client ID: P001-S003-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-02:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

71 Carbazole Concentration: 370 ug/Kg



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Date : 15-AUG-2014 19:43

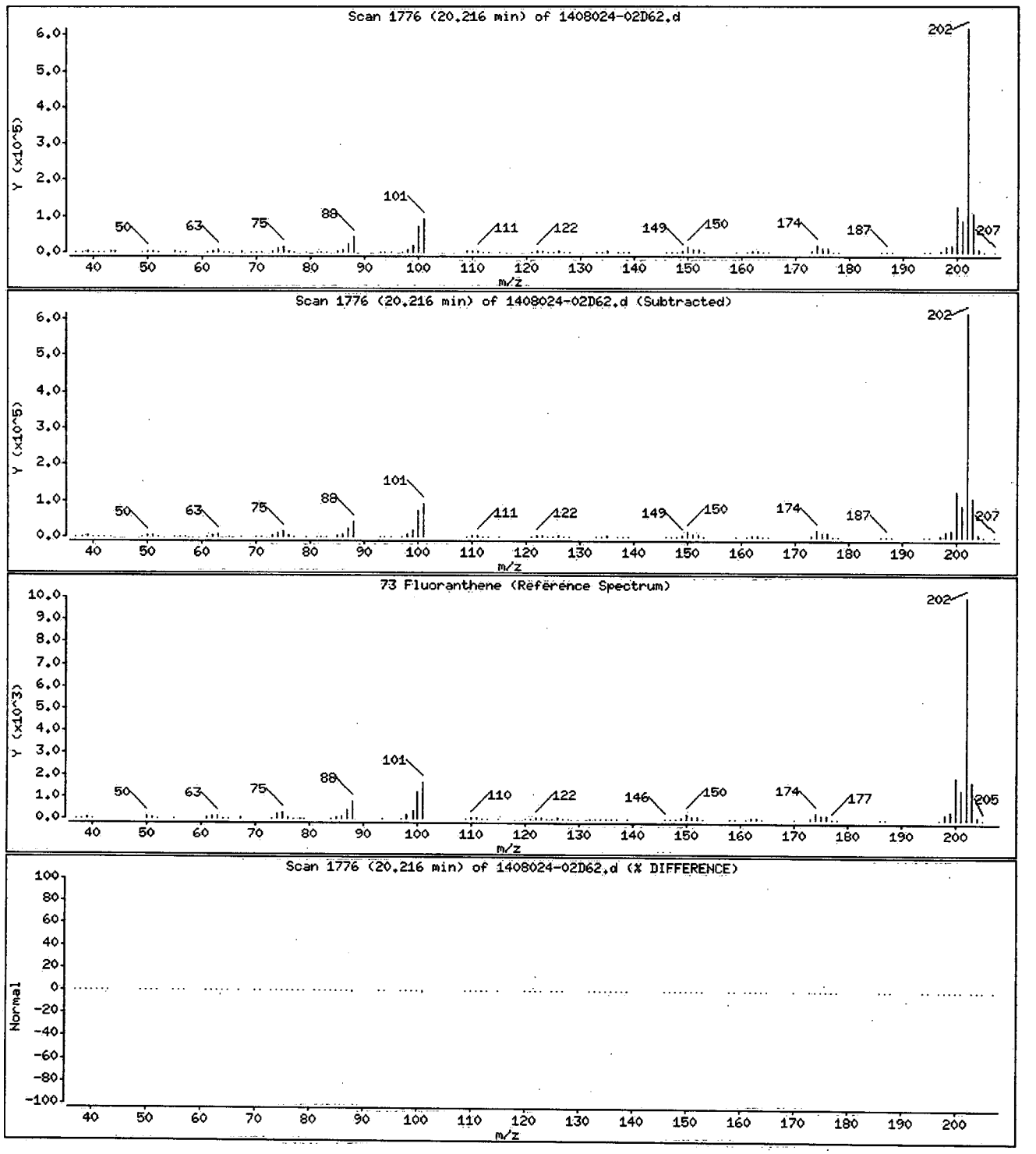
Client ID: P001-S003-0002-01 | Instrument: 5972hp62.i

Sample Info: 1408024-02:OWS:10

Volume Injected (uL): 2.0 | Operator: OWS

Column phase: Rxi-5SilMS | Column diameter: 0.32

73 Fluoranthene | Concentration: 4800 ug/Kg



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Client ID: P001-S003-0002-01 Instrument: 5972hp62.i

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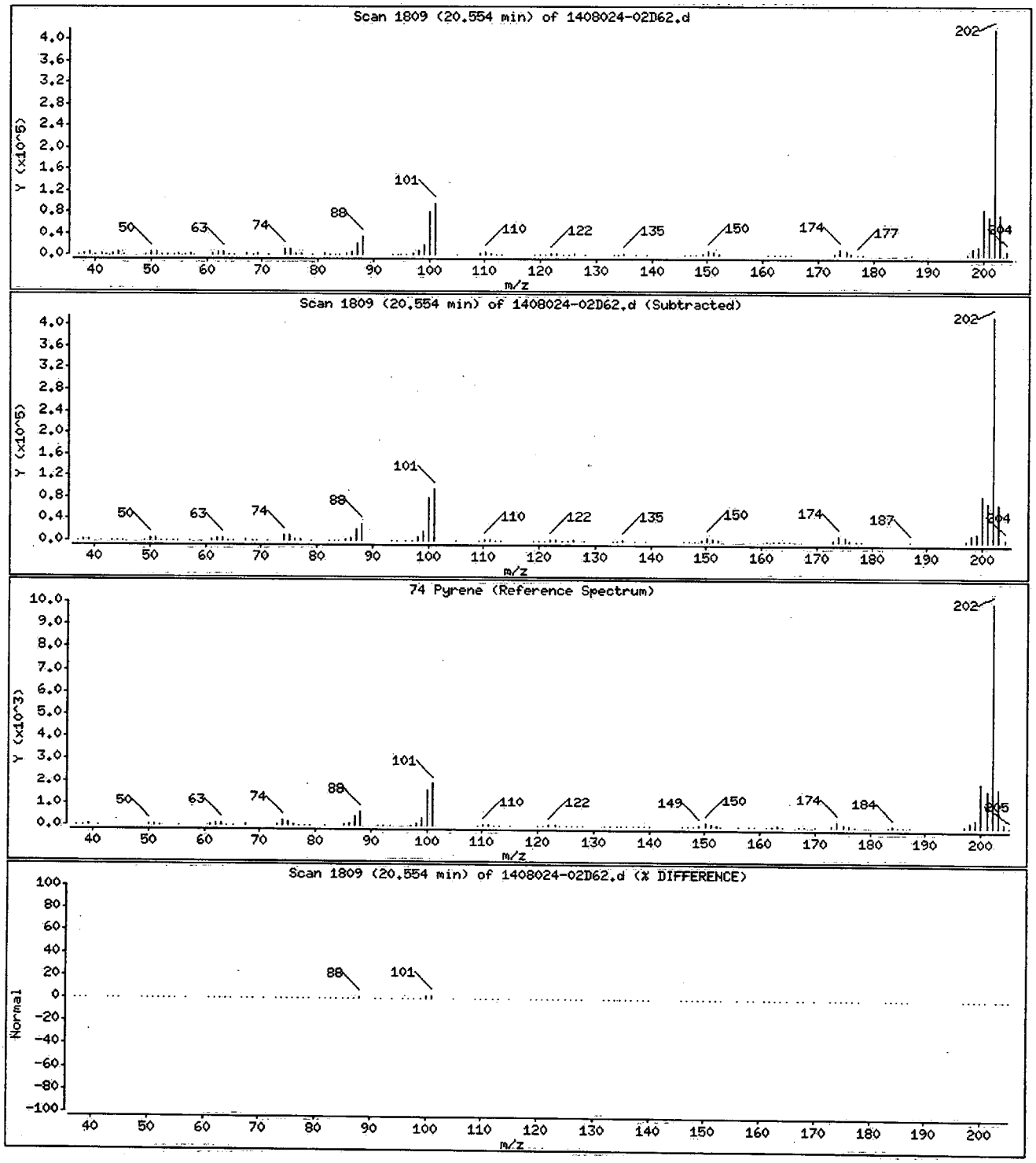
Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

74 Pyrene Concentration: 3600 ug/Kg



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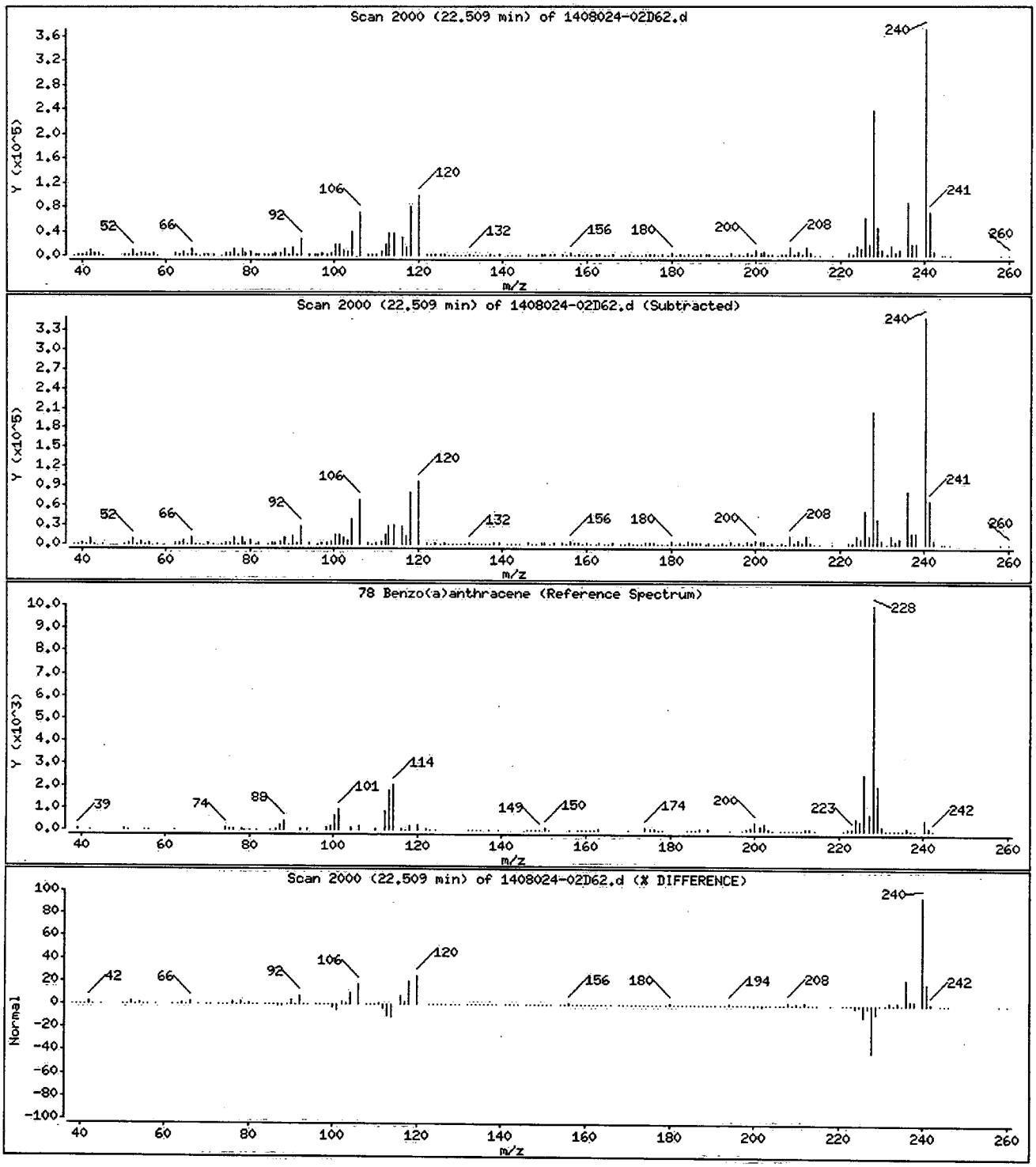
Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

78 Benzo(a)anthracene Concentration: 2000 ug/Kg



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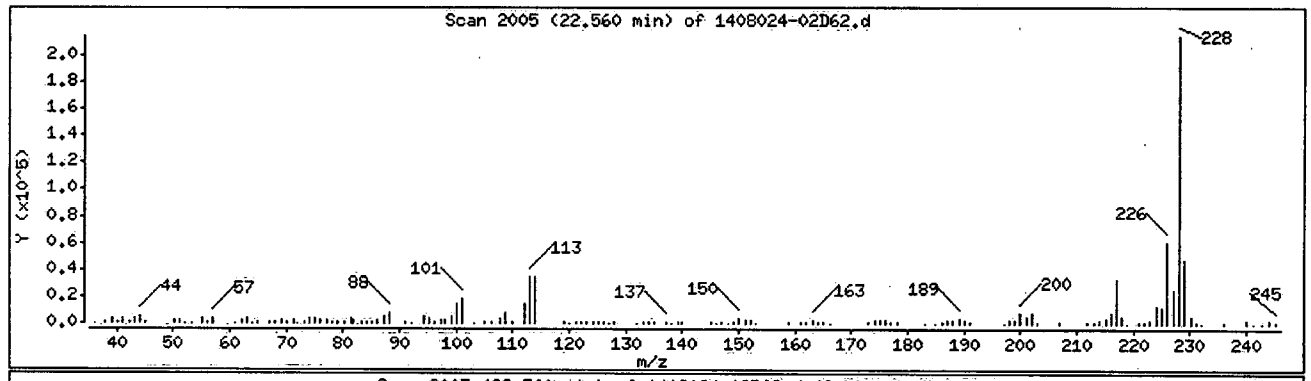
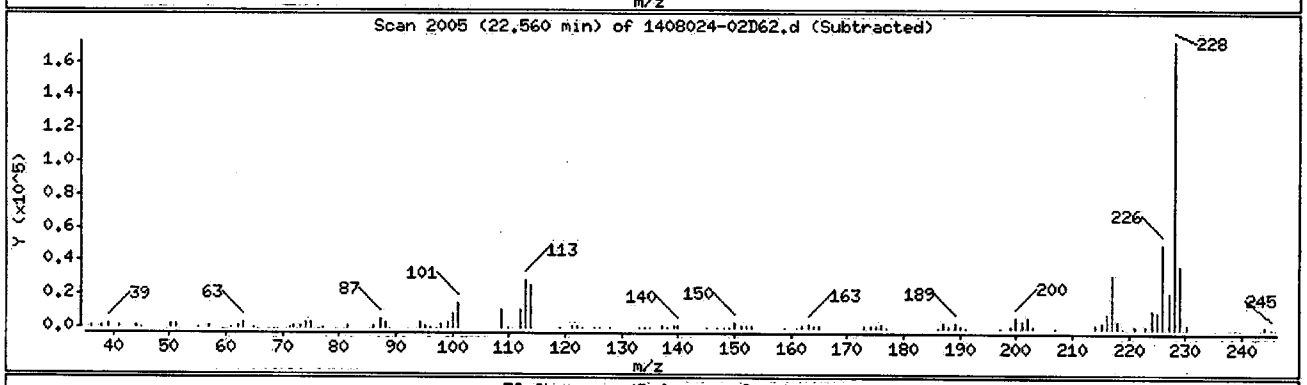
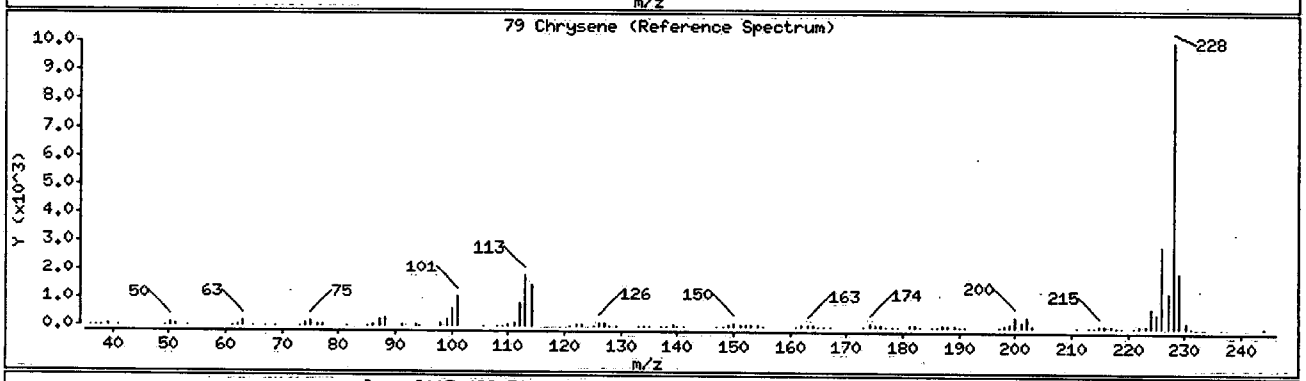
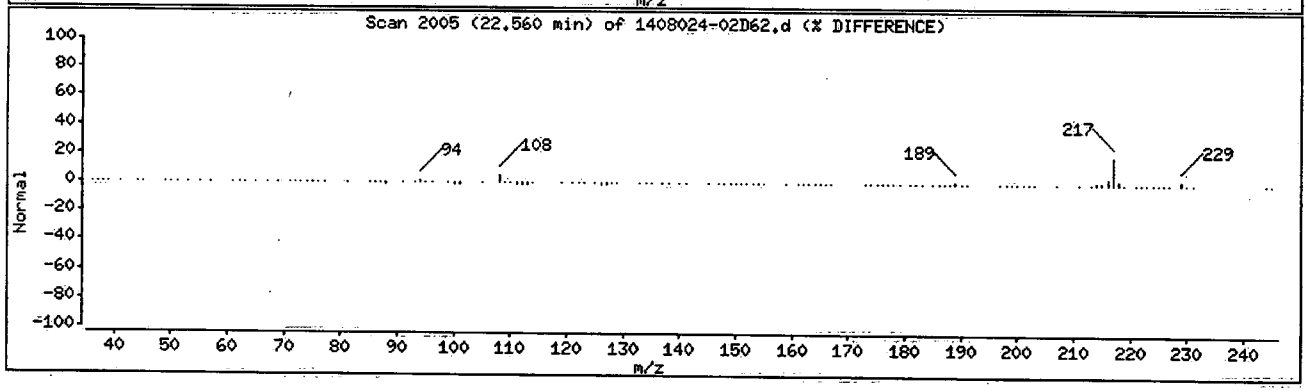
Column phase: Rxi-5SilMS Column diameter: 0.32

79 Chrysene Concentration: 2200 ug/Kg









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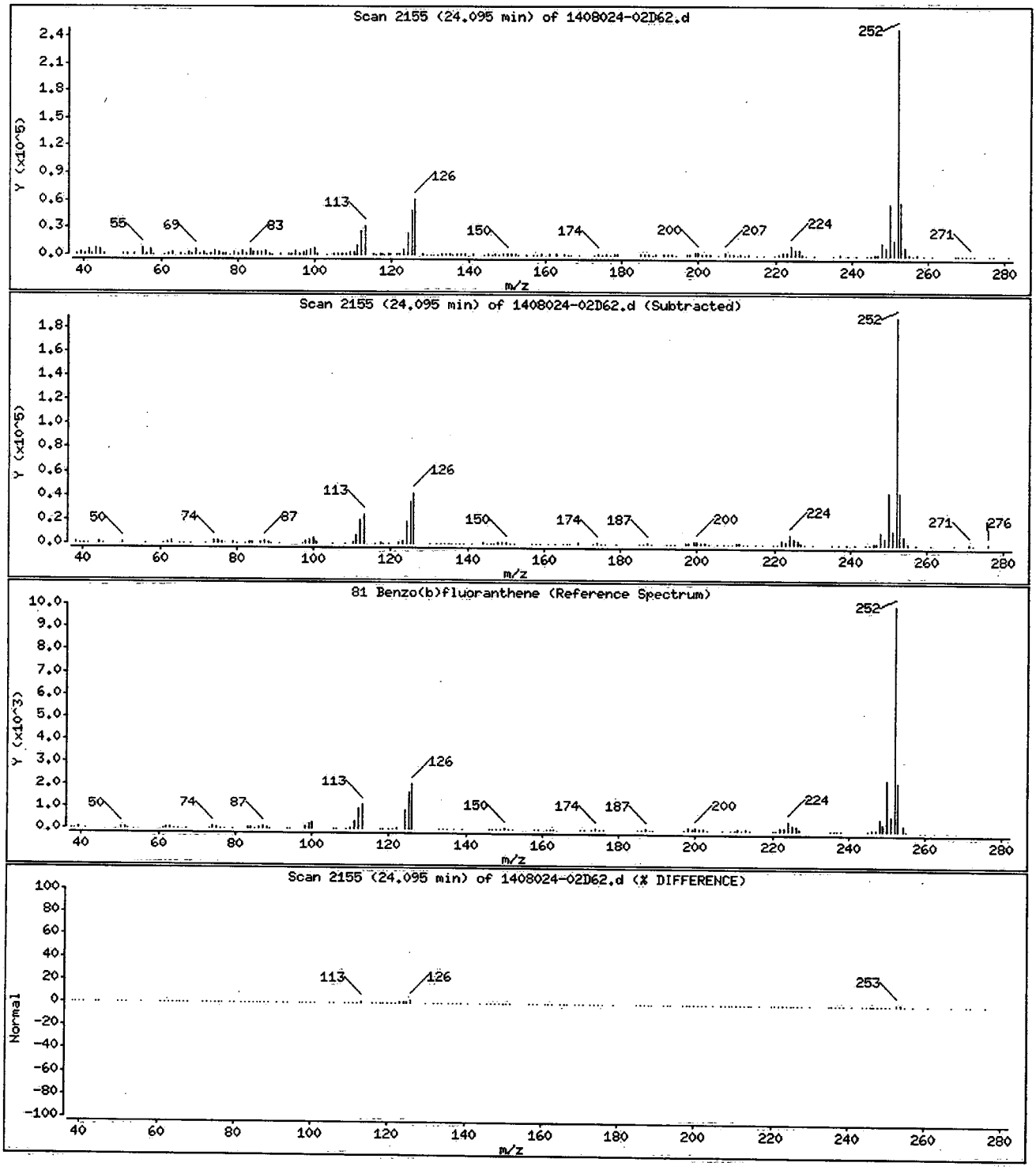
Sample Info: 1408024-02:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

81 Benzo(b)fluoranthene Concentration: 2600 ug/Kg



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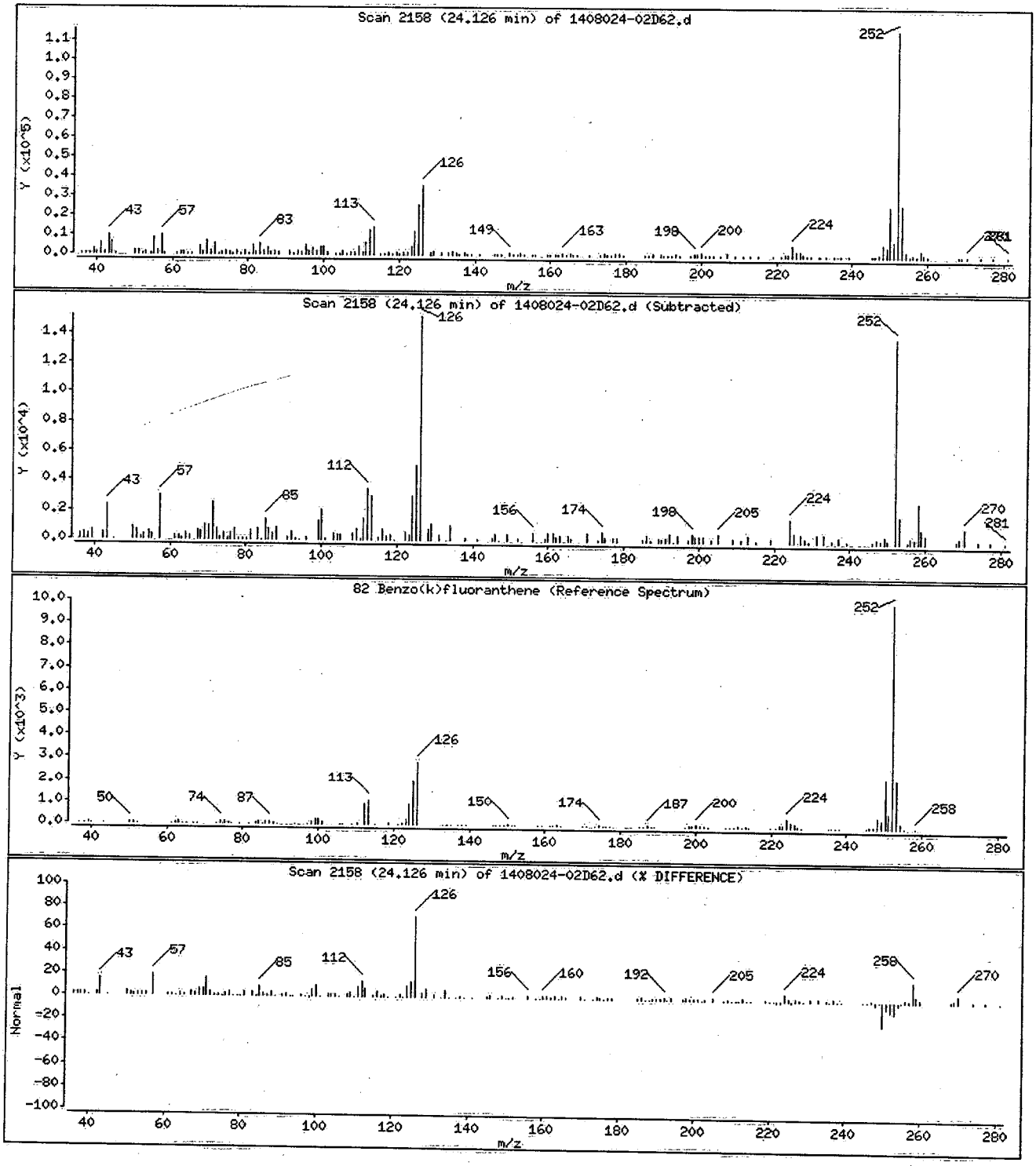
Sample Info: 1408024-02:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

82 Benzo(k)fluoranthene Concentration: 1300 ug/Kg



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Date : 15-AUG-2014 19:43

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Instrument: 5972hp62.i

Sample Info: 1408024-02:DWS:10

Volume Injected (uL): 2.0

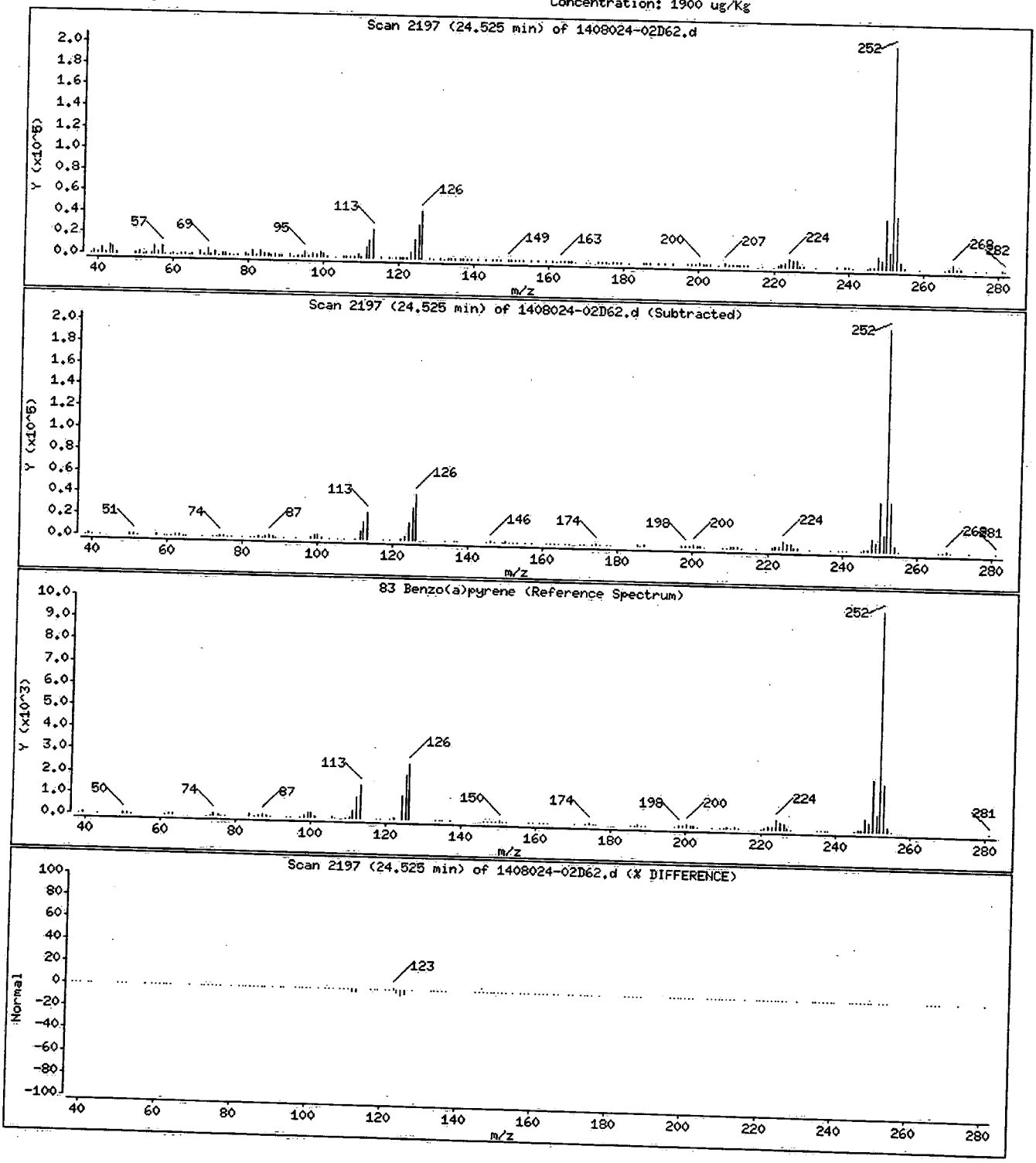
Operator: DWS

Column phase: Rxi-5SilMS

Column diameter: 0.32

83 Benzo(a)pyrene

Concentration: 1900 ug/Kg



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Date : 15-AUG-2014 19:43

Client ID: P001-S003-0002-01

Instrument: 5972hp62.i

Sample Info: 1408024-02:OWS:10

Volume Injected (uL): 2.0

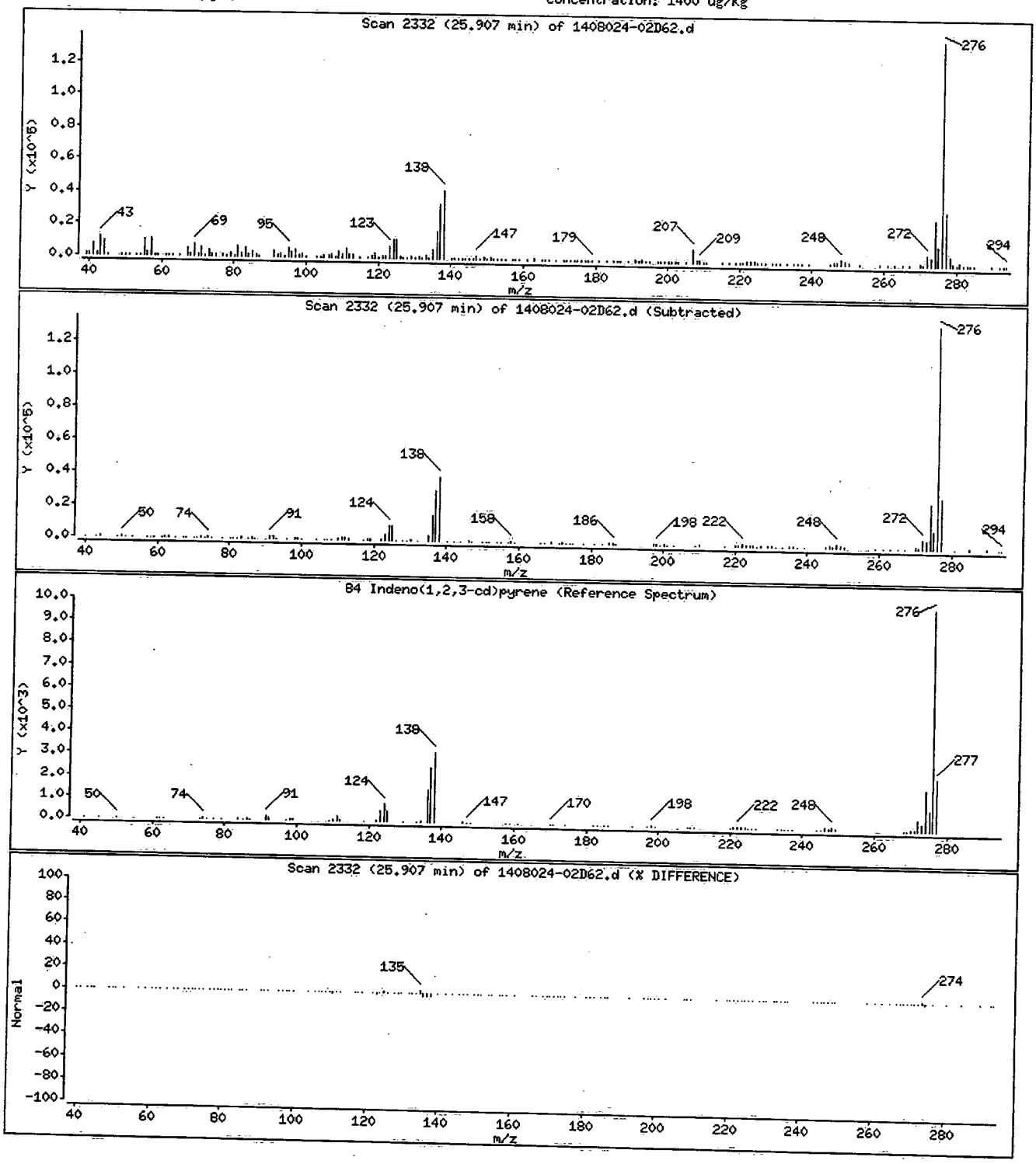
Operator: OWS

Column phase: Rxi-5SilMS

Column diameter: 0.32

84 Indeno(1,2,3-cd)pyrene

Concentration: 1400 ug/Kg



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Date : 15-AUG-2014 19:43

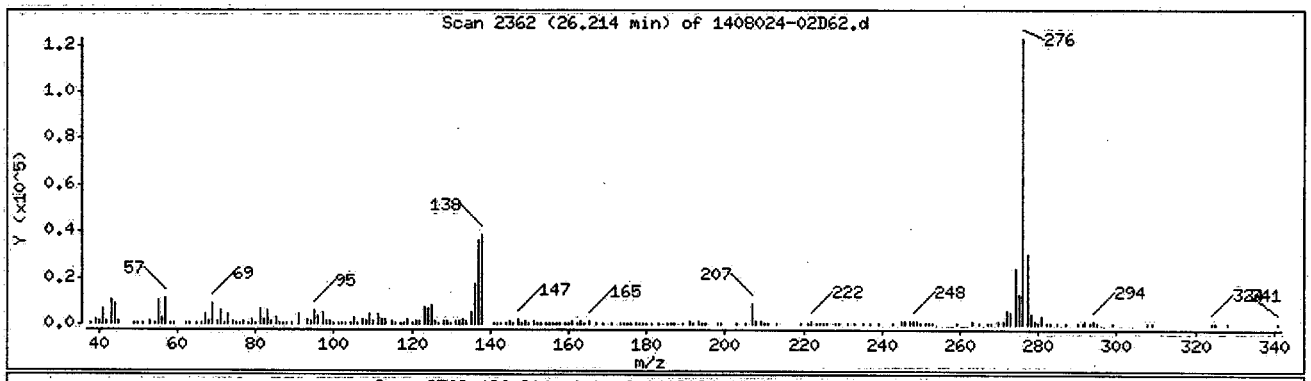
Client ID: P001-S003-0002-01 Instrument: 5972hp62.i

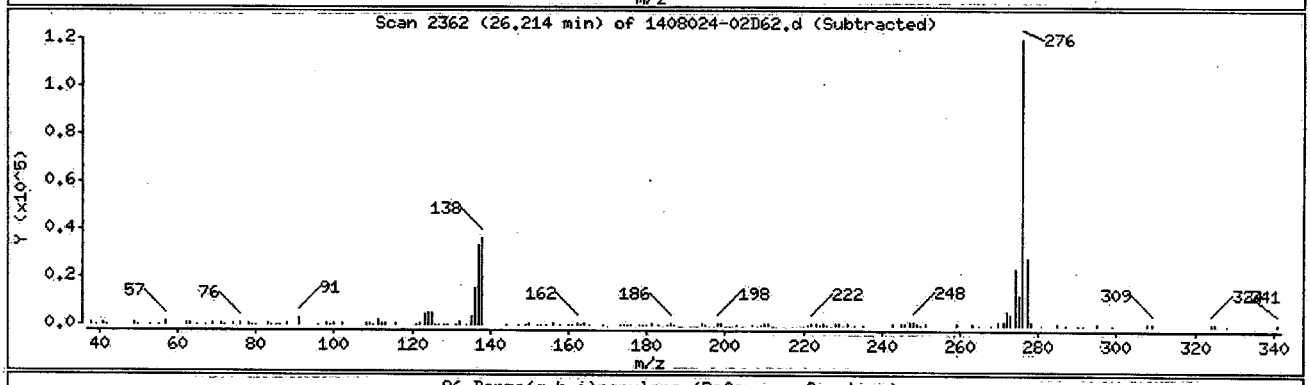
Sample Info: 1408024-02:OWS:10

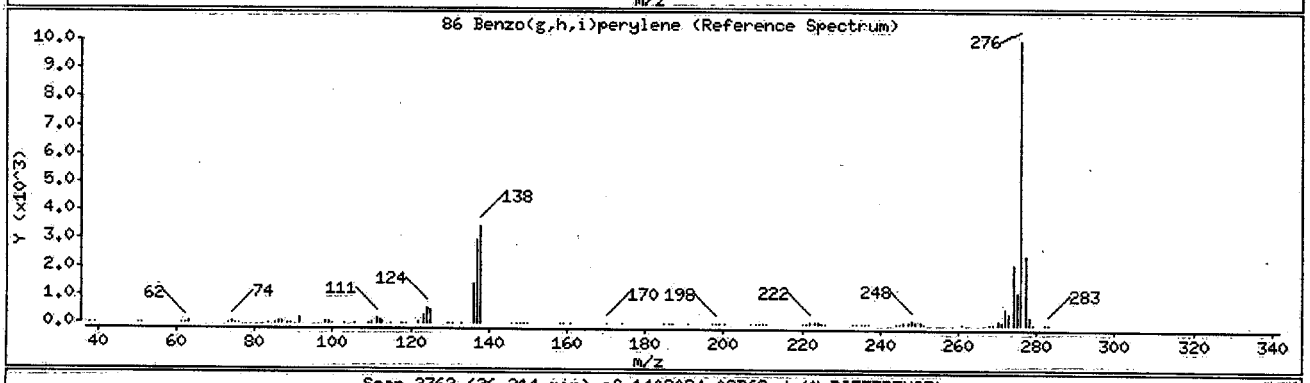
Volume Injected (uL): 2.0 Operator: OWS

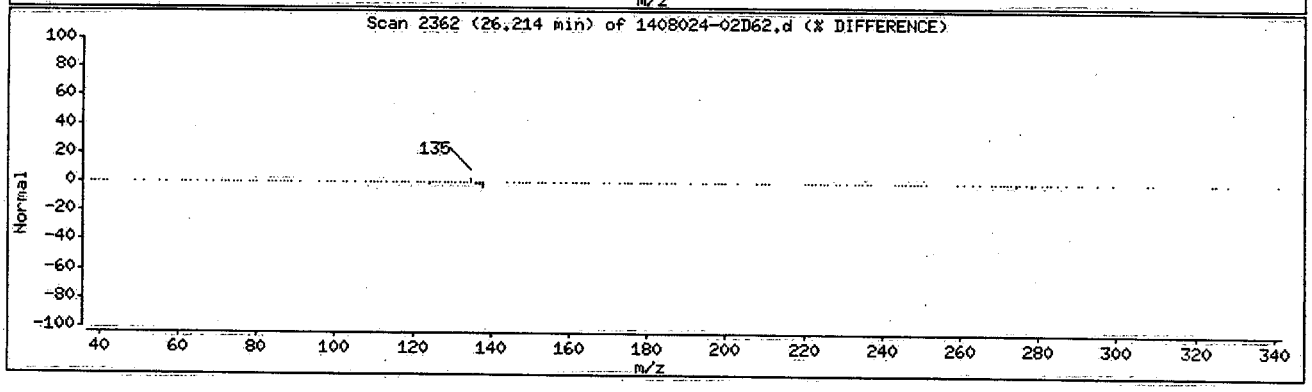
Column phase: Rxi-5SilMS Column diameter: 0.32

86 Benzo(g,h,i)perylene Concentration: 1200 ug/Kg









8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-02D62.d

Date : 15-AUG-2014 19:43

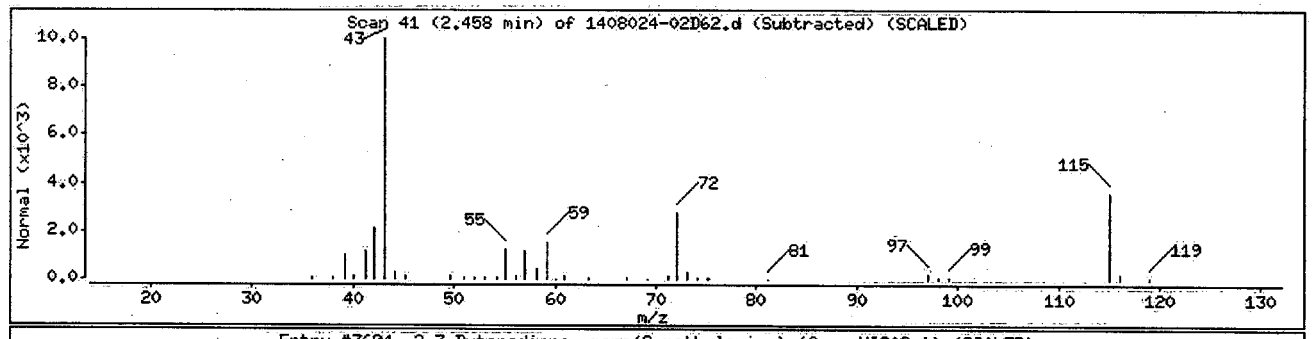
Client ID: P001-S003-0002-01 Instrument: 5972hp62.i

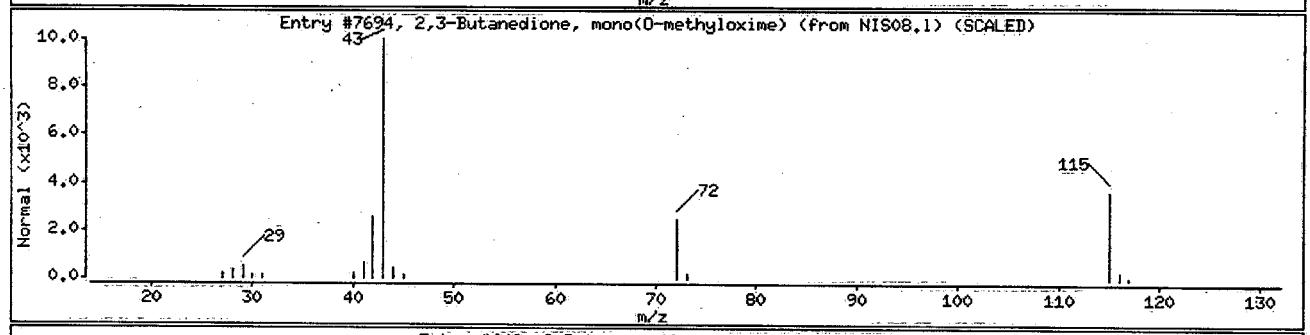
Sample Info: 1408024-02:OWS:10

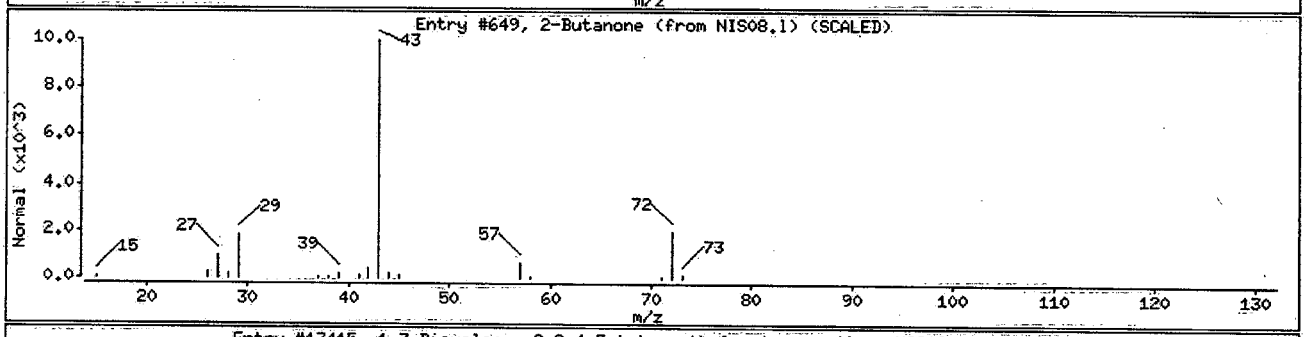
Volume Injected (uL): 2.0 Operator: OWS

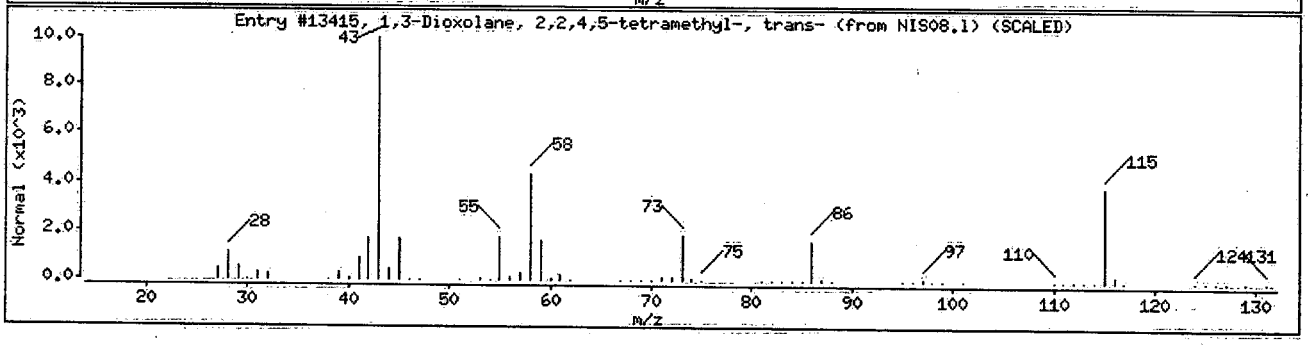
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,3-Butanedione, mono(O-methyloxime)	617-32-3	NIS08.1	7694	50	C5H9NO2	115
2-Butanone	78-93-3	NIS08.1	649	38	C4H8O	72
1,3-Dioxolane, 2,2,4,5-tetramethyl-, tra	17226-66-3	NIS08.1	13415	33	C7H14O2	130









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-02D62.d

Date : 15-AUG-2014 19:43

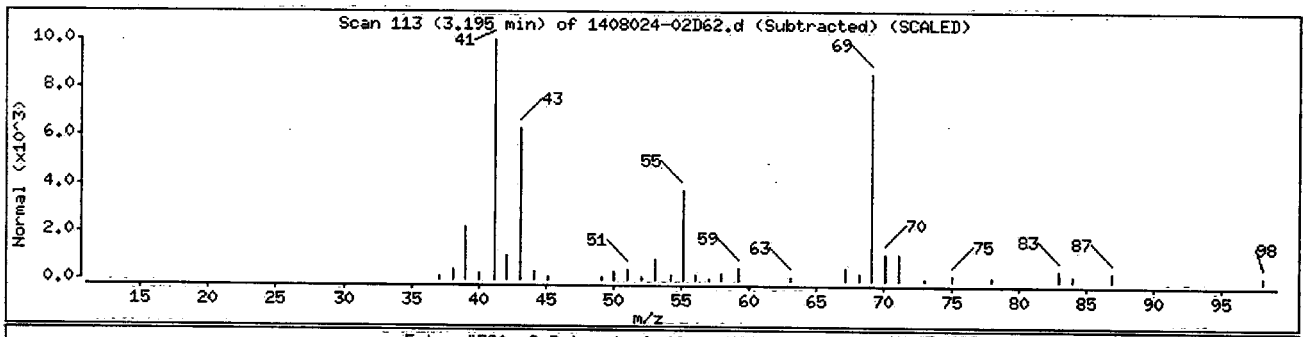
Client ID: P001-S003-0002-01 Instrument: 5972hp62.i

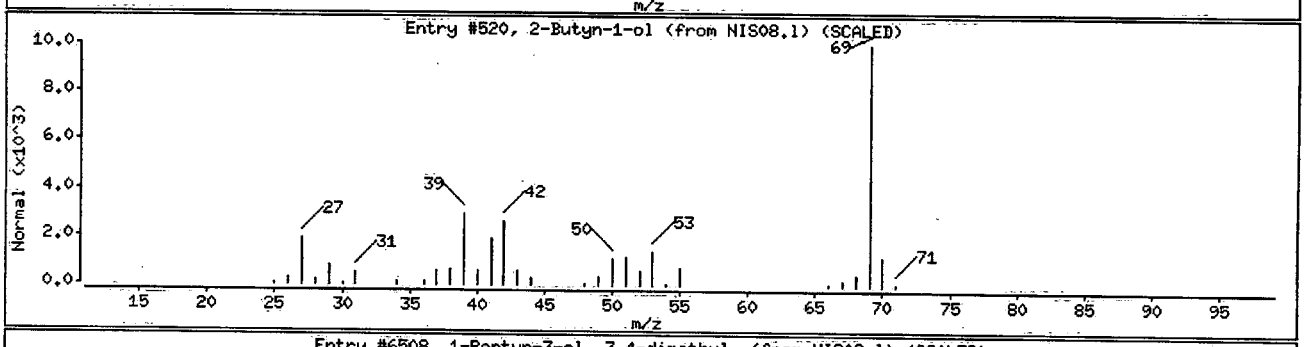
Sample Info: 1408024-02:OWS:10

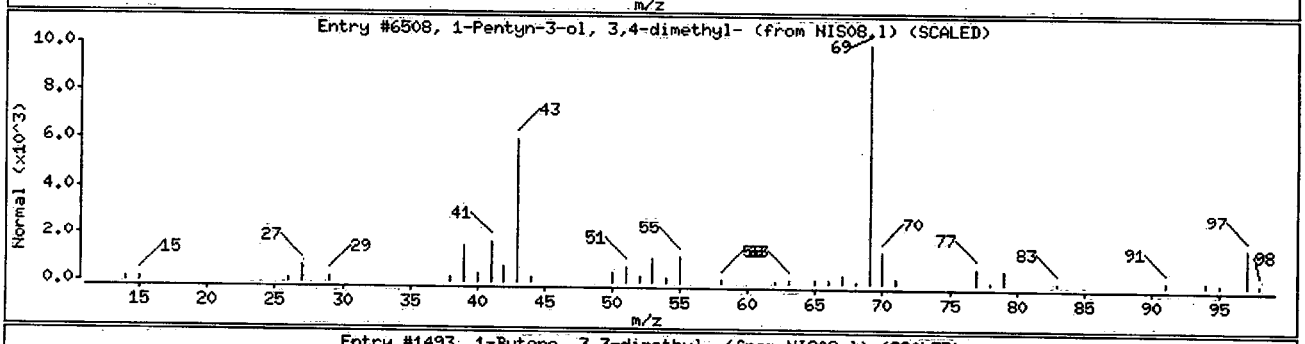
Volume Injected (uL): 2.0 Operator: OWS

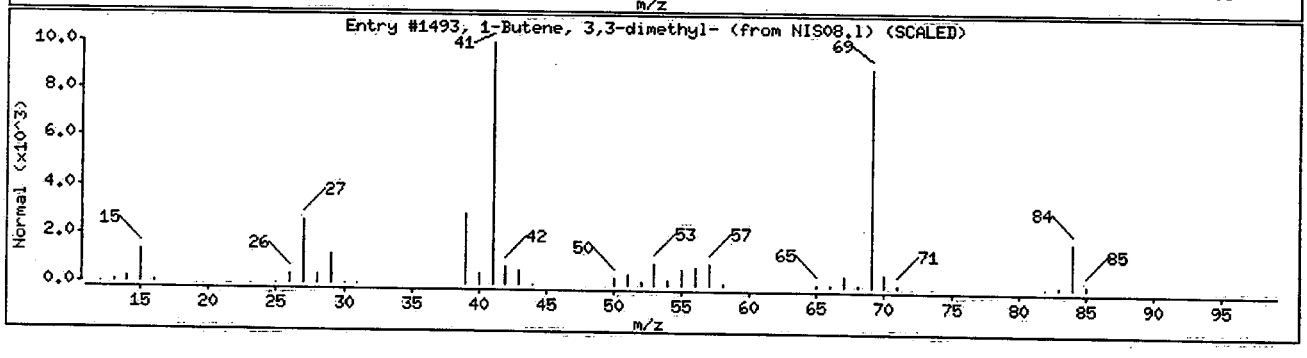
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Butyn-1-ol	764-01-2	NIS08.l	520	53	C4H6O	70
1-Pentyn-3-ol, 3,4-dimethyl-	1482-15-1	NIS08.l	6508	53	C7H12O	112
1-Butene, 3,3-dimethyl-	558-37-2	NIS08.l	1493	50	C6H12	84









8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-02D62.d

Date : 15-AUG-2014 19:43

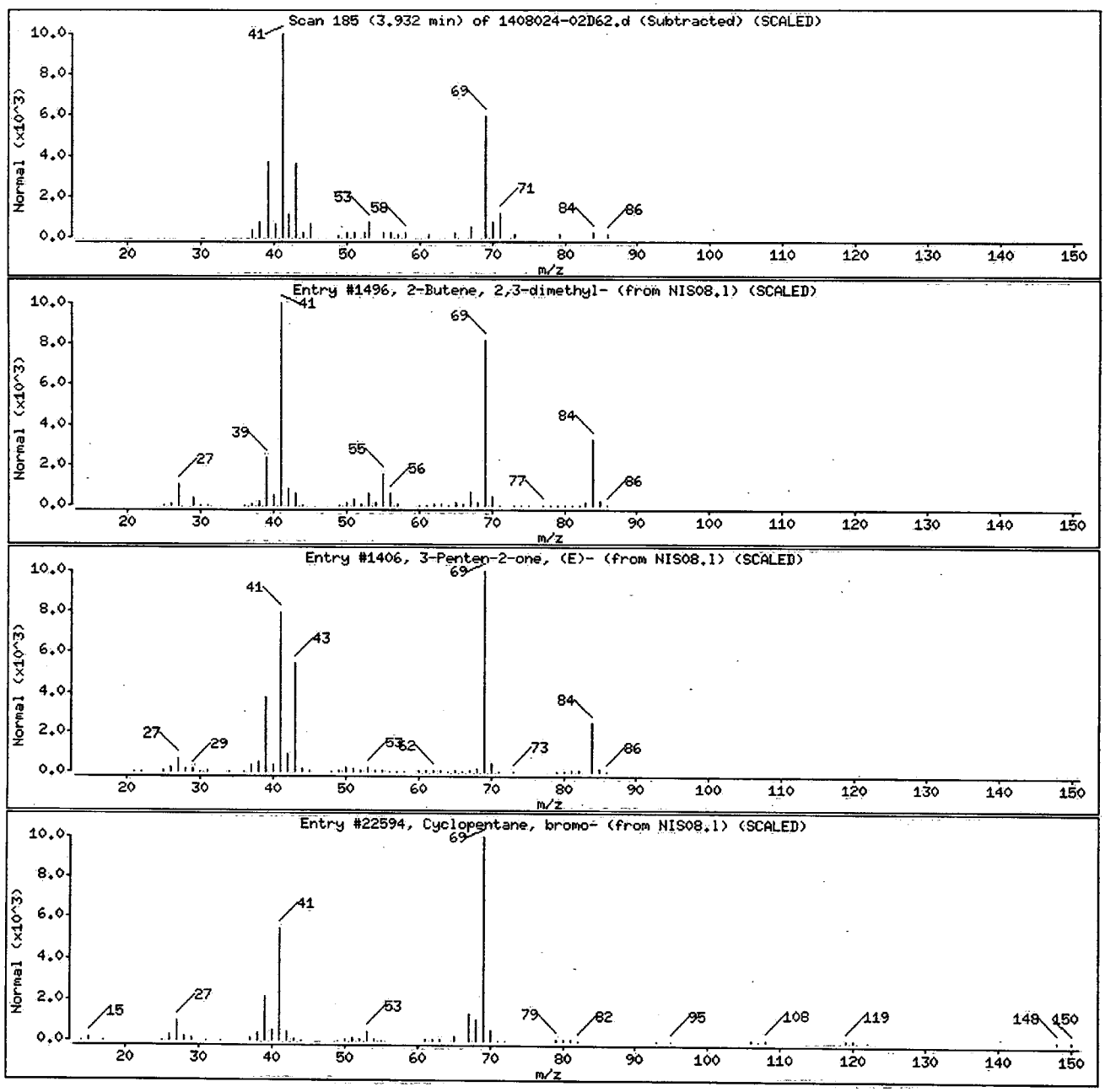
Client ID: P001-S003-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-02:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Butene, 2,3-dimethyl-	563-79-1	NIS08.l	1496	50	C6H12	84
3-Penten-2-one, (E)-	3102-33-8	NIS08.l	1406	40	C5H8O	84
Cyclopentane, bromo-	137-43-9	NIS08.l	22594	40	C5H9Br	148



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-02D62.d

Date : 15-AUG-2014 19:43

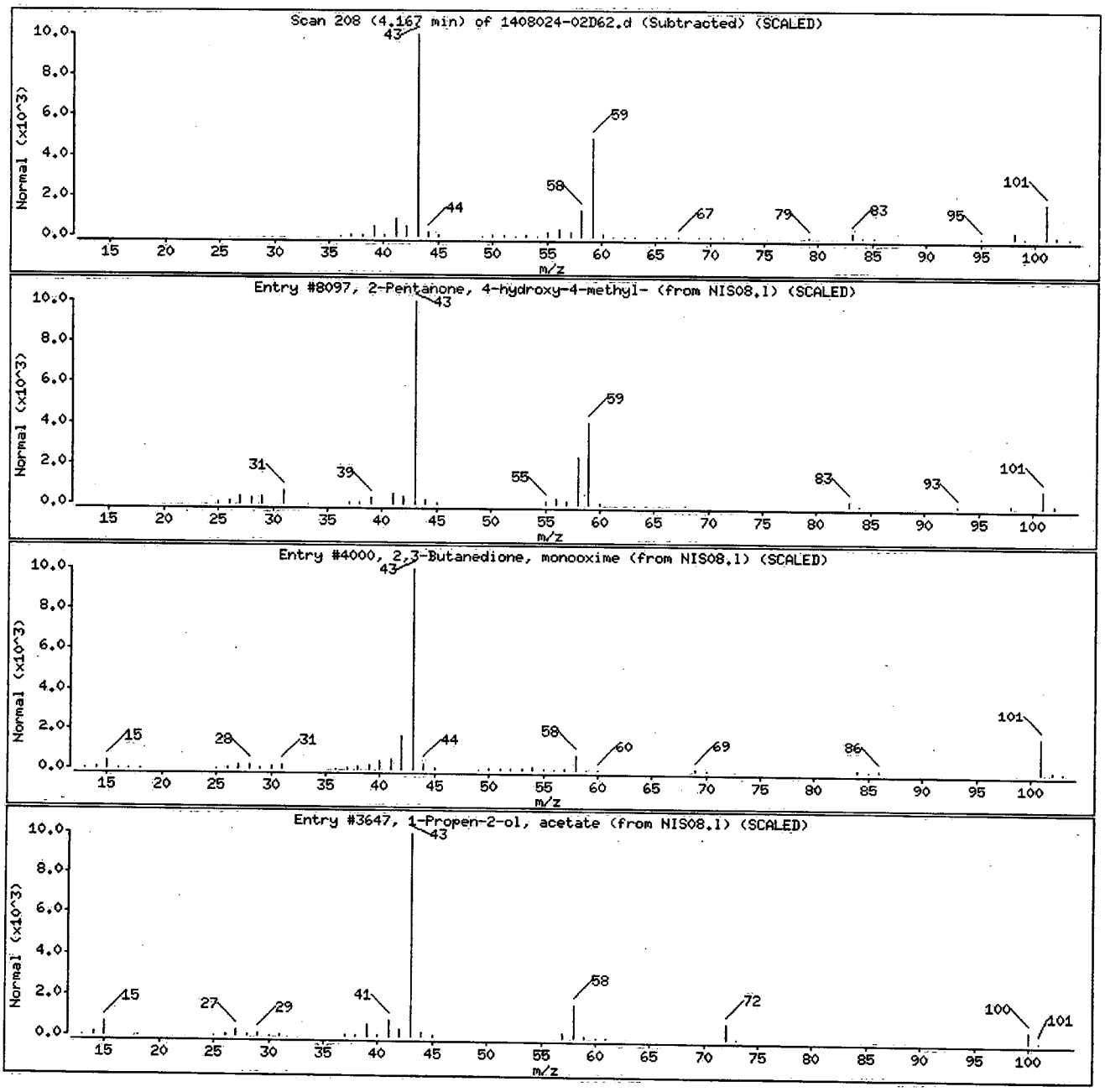
Client ID: P001-S003-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-02:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIS08.1	8097	64	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIS08.1	4000	27	C4H7NO2	101
1-Propen-2-ol, acetate	108-22-5	NIS08.1	3647	10	C5H8O2	100



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-02D62.d

Date : 15-AUG-2014 19:43

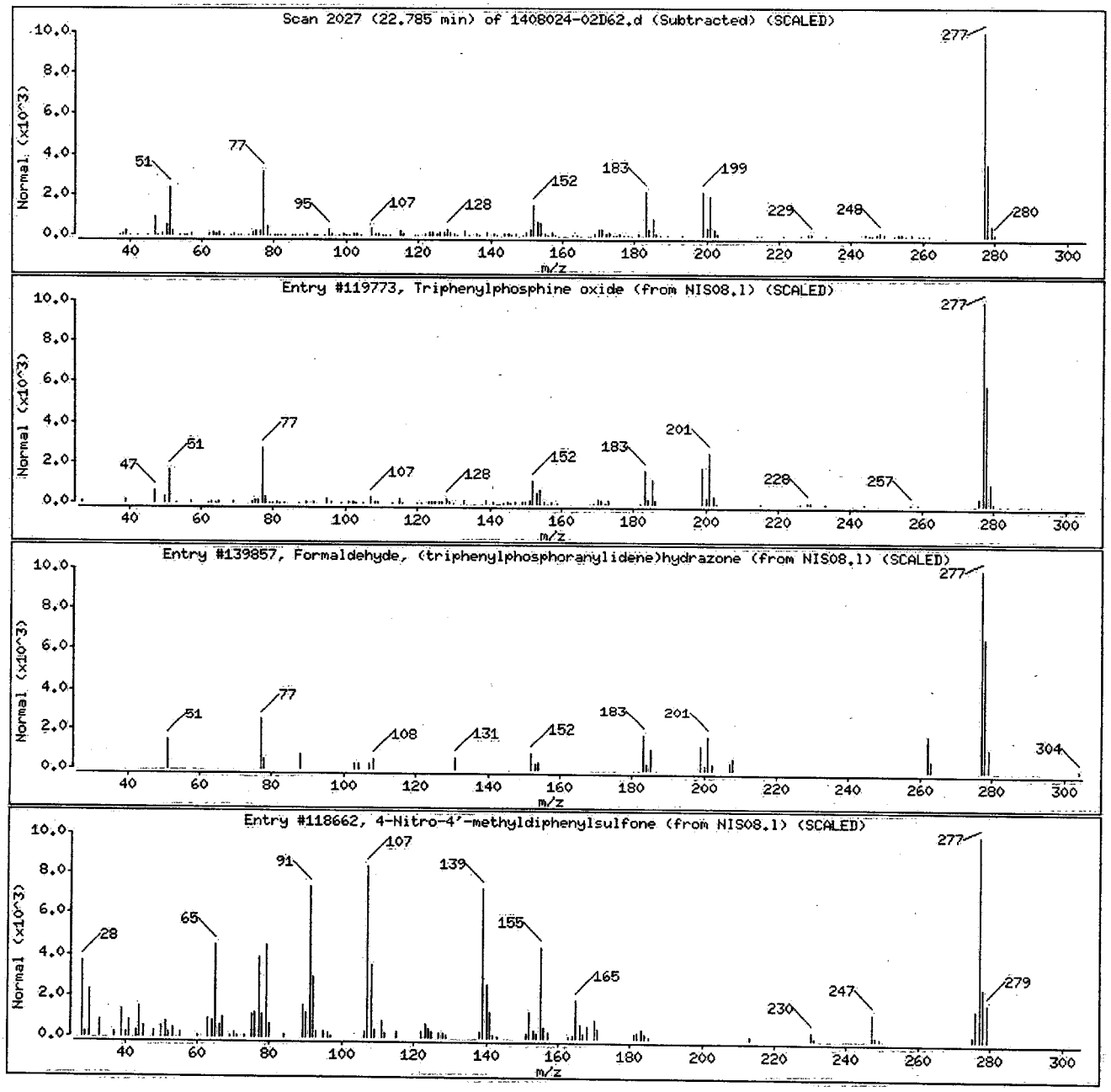
Client ID: P001-S003-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-02:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Triphenylphosphine oxide	791-28-6	NIS08.1	119773	64	C18H15OP	278
Formaldehyde, (triphenylphosphoranyliden	15990-54-2	NIS08.1	139857	50	C19H17N2P	304
4-Nitro-4'-methyldiphenylsulfone	4094-37-5	NIS08.1	118662	43	C13H11NO4S	277



Ralph Hai 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-02D62.d

Date : 15-AUG-2014 19:43

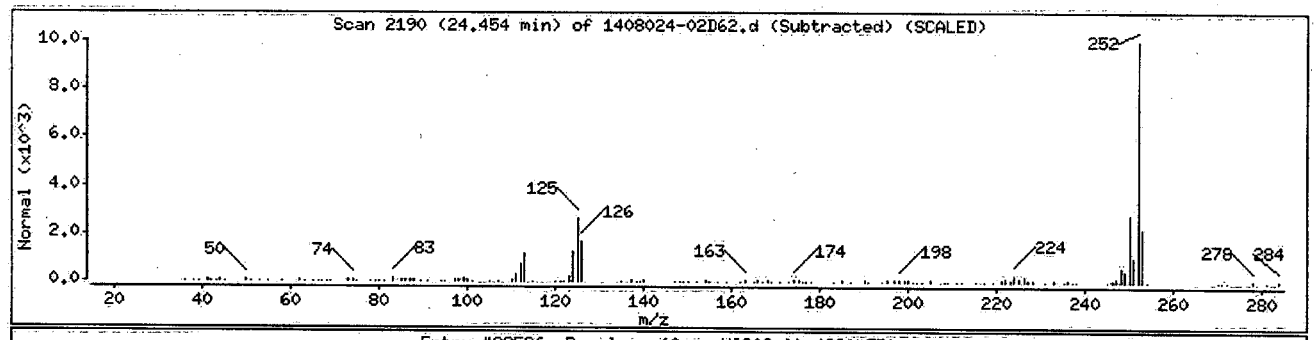
Client ID: P001-S003-0002-01 Instrument: 5972hp62.i

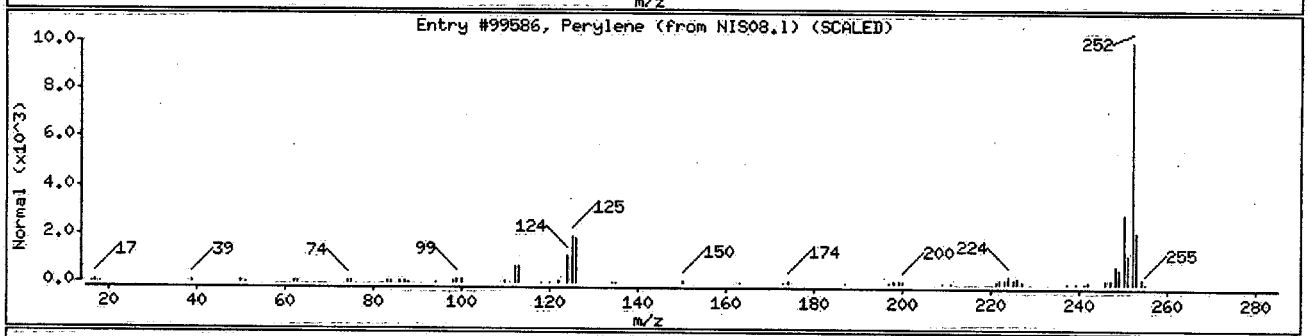
Sample Info: 1408024-02:OWS:10

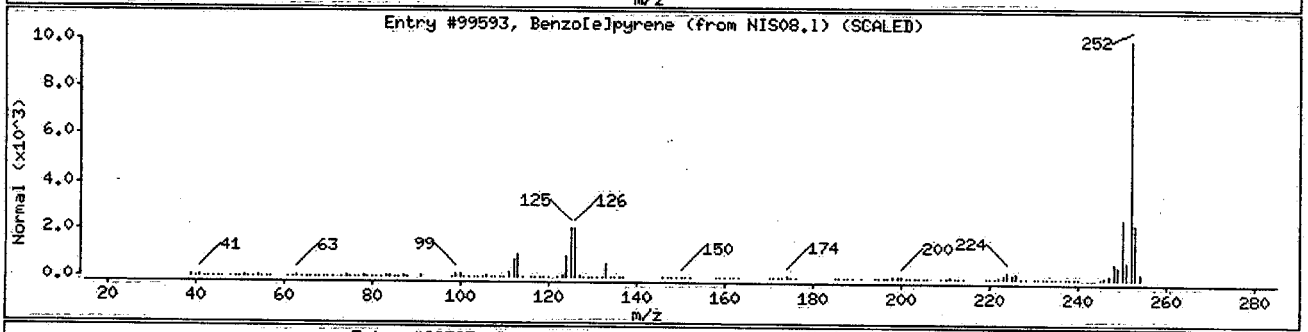
Volume Injected (uL): 2.0 Operator: OWS

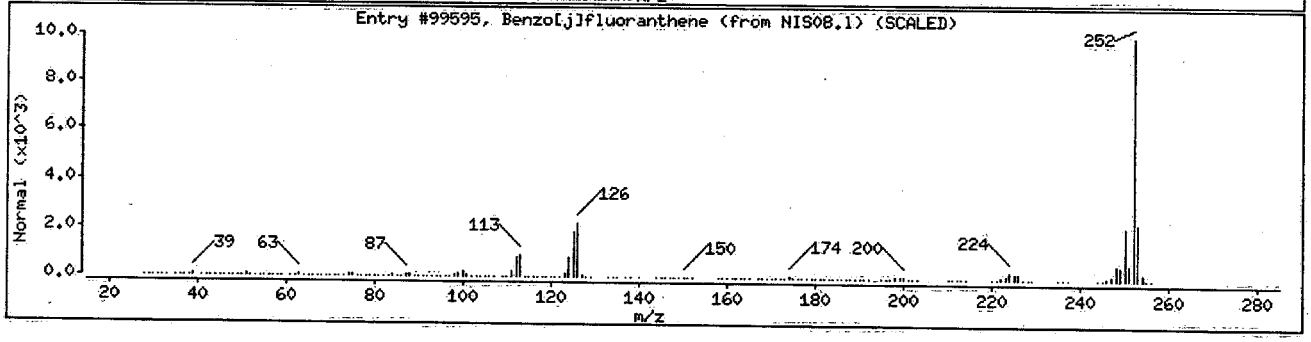
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Perylene	198-55-0	NIS08.1	99586	93	C20H12	252
Benzo[e]pyrene	192-97-2	NIS08.1	99593	93	C20H12	252
Benzo[j]fluoranthene	205-82-3	NIS08.1	99595	93	C20H12	252









Robert Hamm 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-02D62.d

Date : 15-AUG-2014 19:43

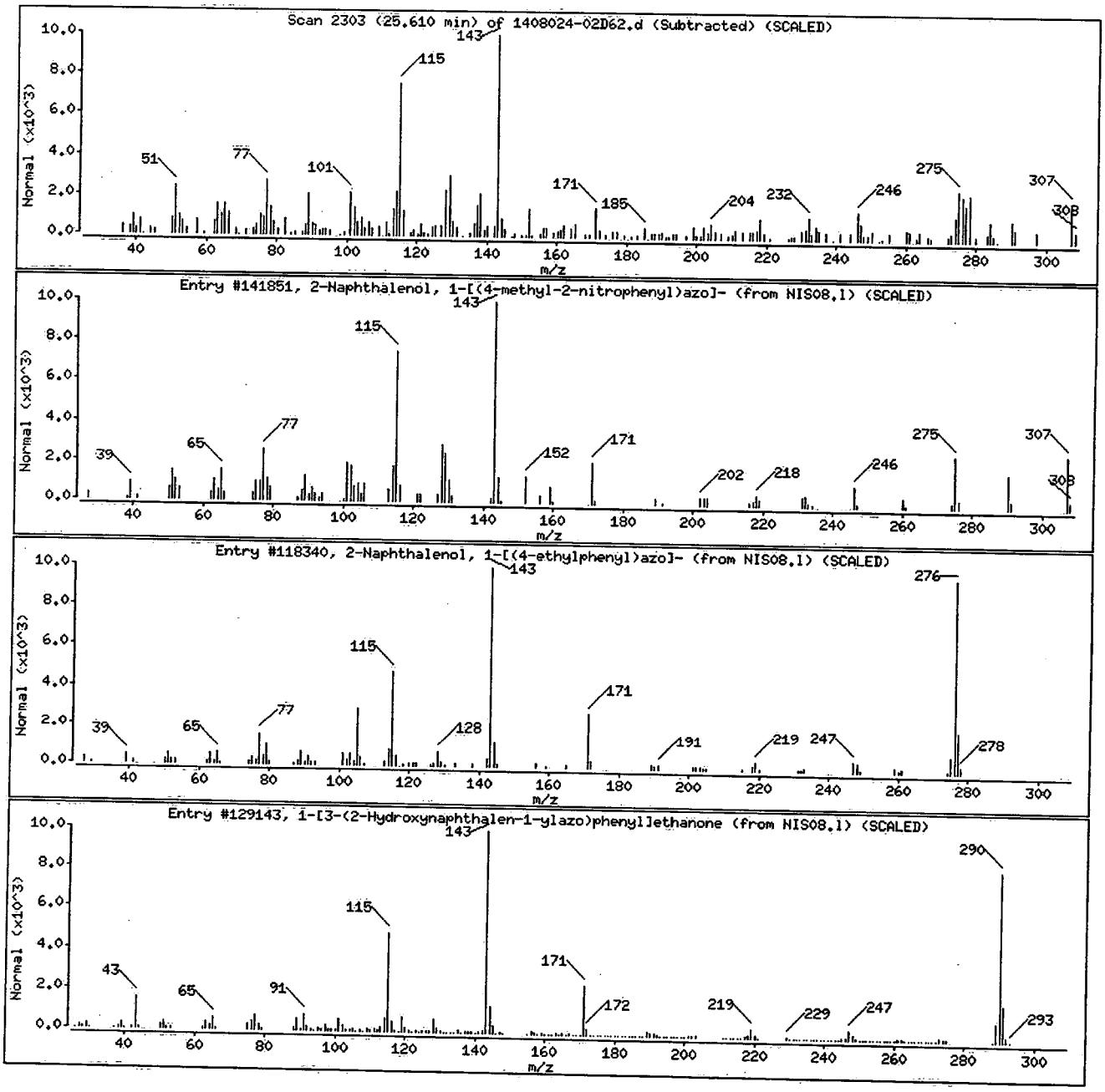
Client ID: P001-S003-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-02:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
2-Naphthalenol, 1-[(4-methyl-2-nitrophen	2425-85-6	NIS08.l	141851	94	C17H13N3O3	307
2-Naphthalenol, 1-[(4-ethylphenyl)azo]-	50607-58-4	NIS08.l	118340	50	C18H16N2O	276
1-[3-(2-Hydroxynaphthalen-1-ylazo)phenyl	14197-06-9	NIS08.l	129143	47	C18H14N2O2	290



Robert Hamm 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-02D62.d

Date : 15-AUG-2014 19:43

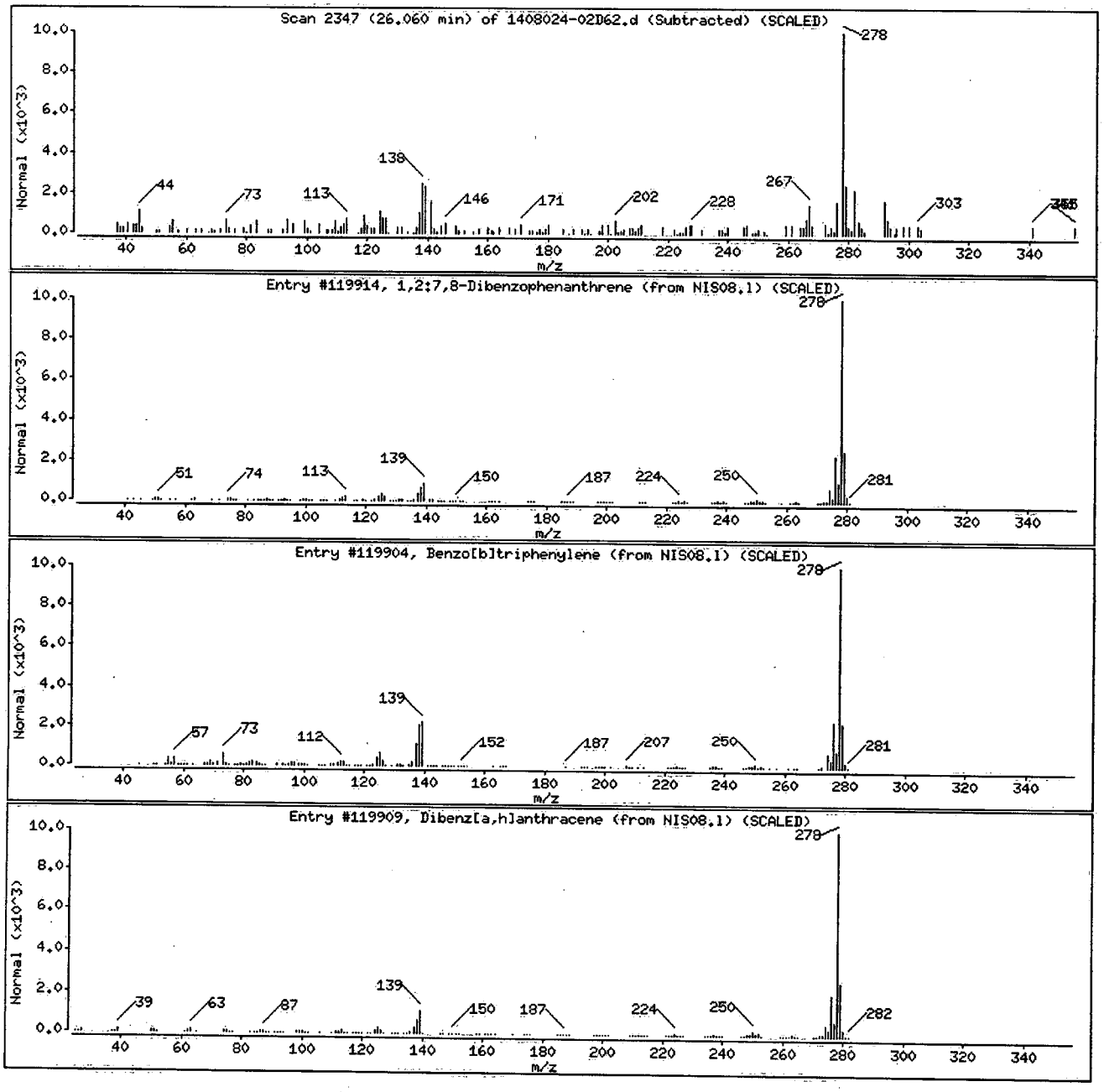
Client ID: P001-S003-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-02:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2:7,8-Dibenzophenanthrene	213-46-7	NIS08.1	119914	86	C22H14	278
Benzo[b]triphenylene	215-58-7	NIS08.1	119904	86	C22H14	278
Dibenz[a,h]anthracene	53-70-3	NIS08.1	119909	83	C22H14	278



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-02D62.d

Date : 15-AUG-2014 19:43

Client ID: P001-S003-0002-01

Instrument: 5972hp62.i

Sample Info: 1408024-02:OWS:10

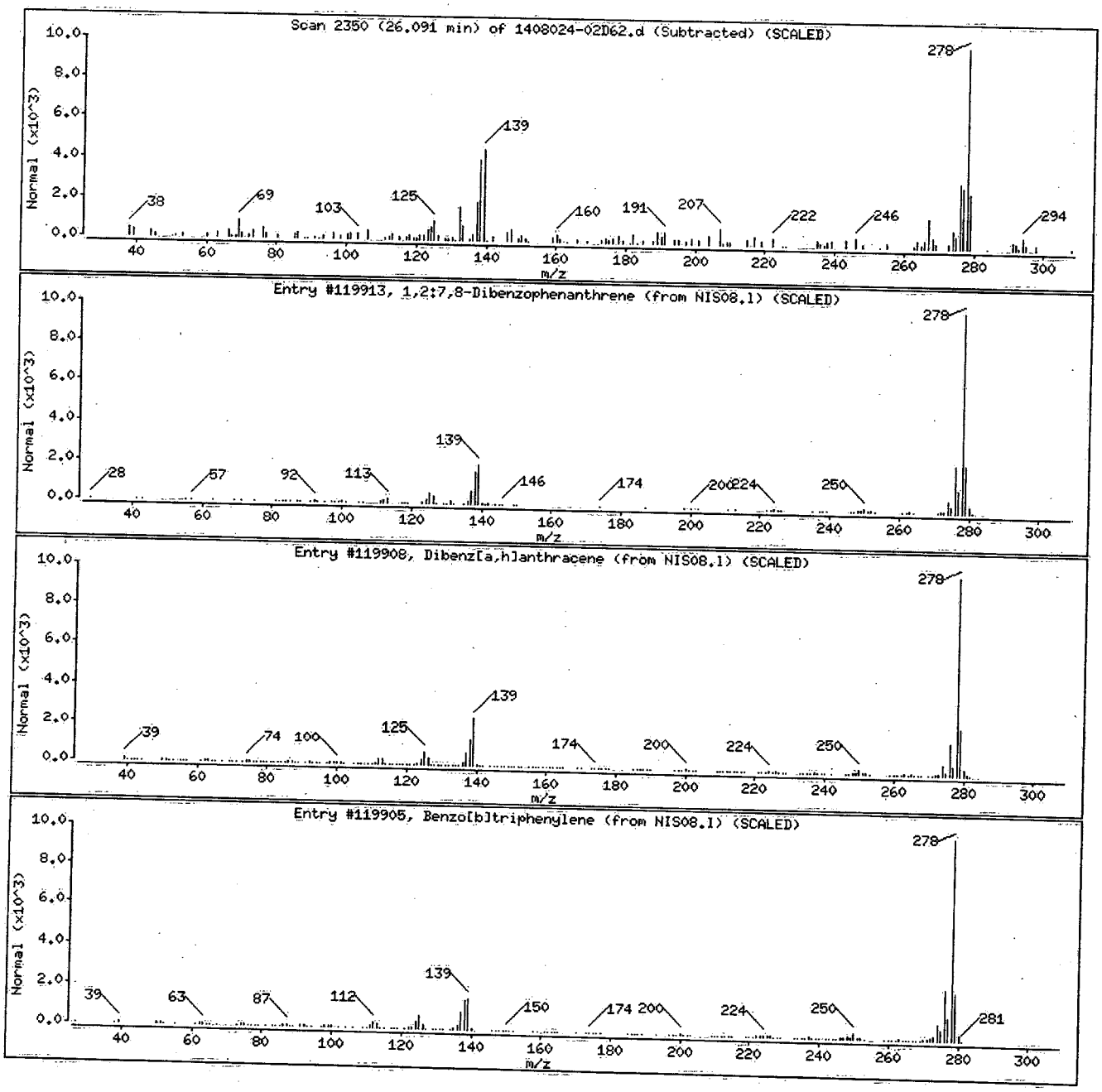
Volume Injected (uL): 2.0

Operator: OWS

Column phase: Rxi-5SilMS

Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,2:7,8-Dibenzophenanthrene	213-46-7	NIS08.l	119913	81	C22H14	278
Dibenz[a,h]anthracene	53-70-3	NIS08.l	119908	58	C22H14	278
Benzo[b]triphenylene	215-58-7	NIS08.l	119905	50	C22H14	278



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-02D62.d

Date : 15-AUG-2014 19:43

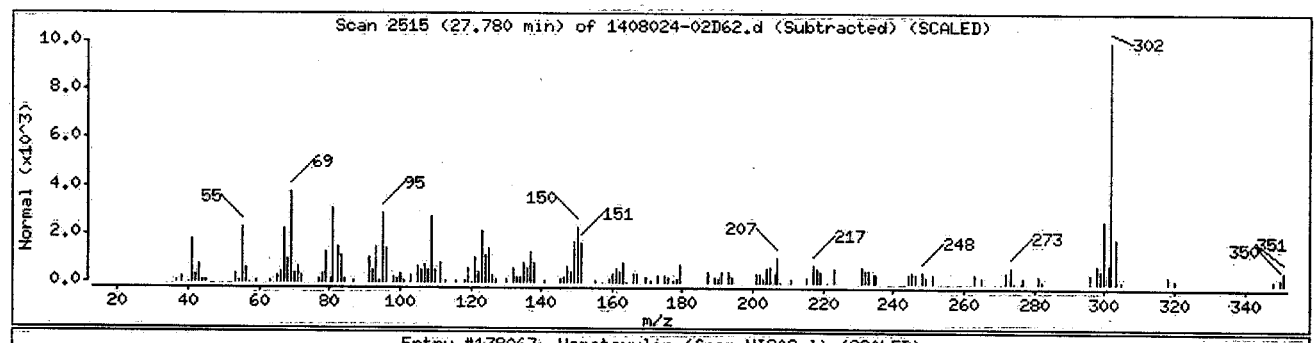
Client ID: P001-S003-0002-01 Instrument: 5972hp62.i

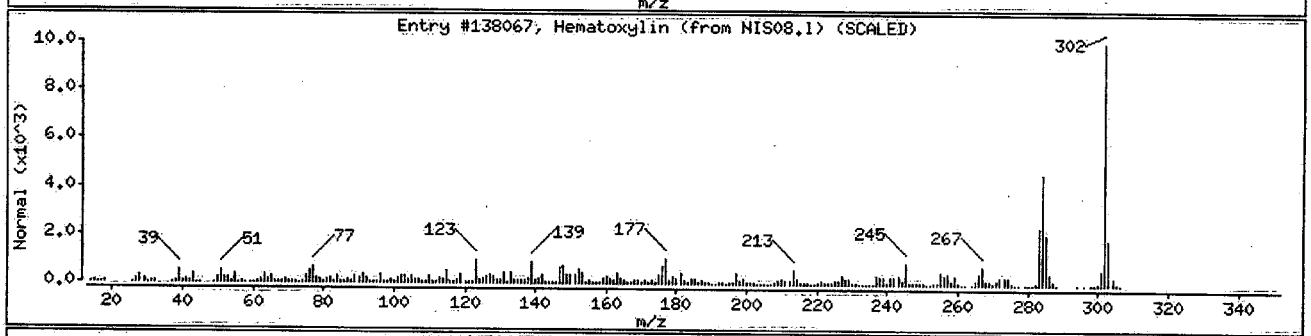
Sample Info: 1408024-02:OWS:10

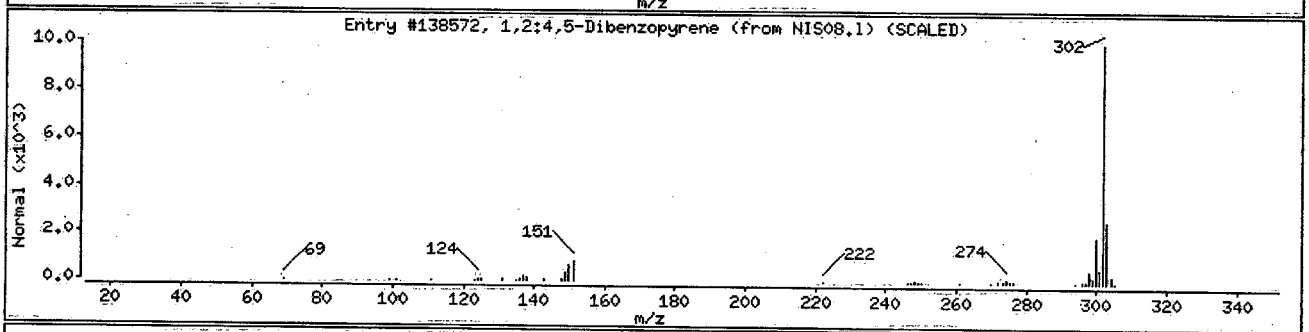
Volume Injected (uL): 2.0 Operator: OWS

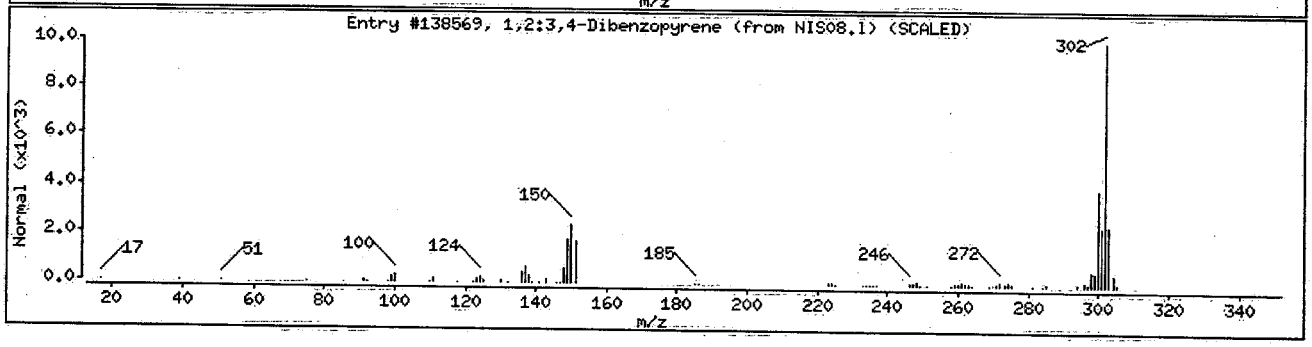
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Hematoxylin	517-28-2	NIS08.l	138067	46	C16H14O6	302
1,2:4,5-Dibenzopyrene	192-65-4	NIS08.l	138572	46	C24H14	302
1,2:3,4-Dibenzopyrene	191-30-0	NIS08.l	138569	45	C24H14	302



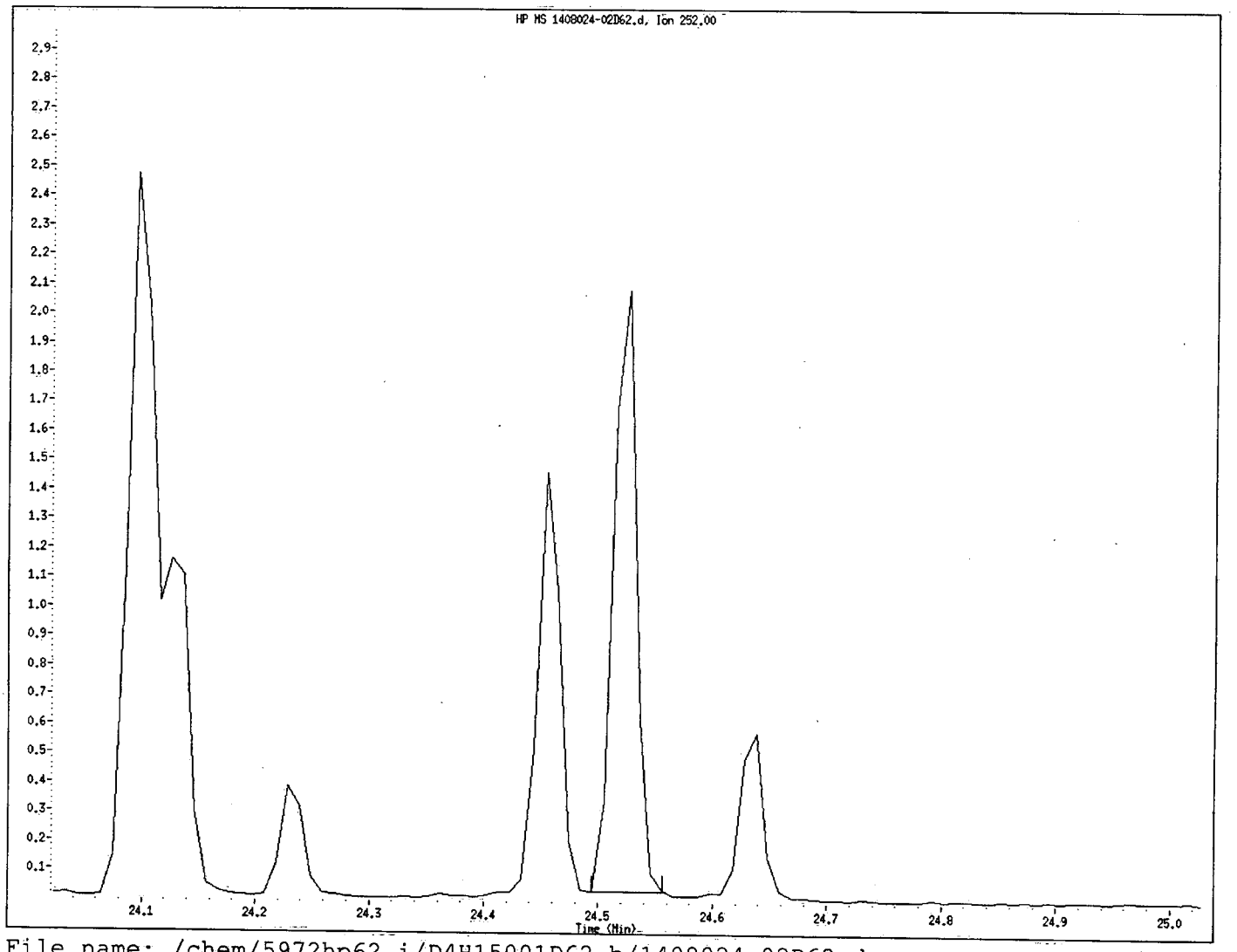






Roldan Hai 8/19/2014

Benzo(a)pyrene CAS Number 50-32-8 Area = 285878 User selected hit



File name: /chem/5972hp62.i/D4H15001D62.b/1408024-02D62.d
Client ID: P001-S003-0002-01
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 19:43
Retention Time: 24.53
Operator ID: OWS

8/19/2014

ANALYSIS DATA SHEET
SW8270D

P001-S003-0002-02

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-03D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30.1g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-03 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 4 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 22:22

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
108-95-2	Phenol		570	3400	U
111-44-4	Bis(2-chloroethyl)ether		200	1800	U
95-57-8	2-Chlorophenol		560	3400	U
95-48-7	2-Methylphenol		400	3400	U
108-60-1	2,2'-oxybis(1-Chloropropane)		260	1800	U
106-44-5	3 & 4-Methylphenol		350	3400	U
621-64-7	N-Nitroso-di-N-propylamine		330	1800	U
98-86-2	Acetophenone		460	1800	U
67-72-1	Hexachloroethane		1100	1800	U
98-95-3	Nitrobenzene		430	1800	U
78-59-1	Isophorone		300	1800	U
88-75-5	2-Nitrophenol		430	3400	U
105-67-9	2,4-Dimethylphenol		540	3400	U
111-91-1	Bis(2-chloroethoxy)methane		470	1800	U
120-83-2	2,4-Dichlorophenol		410	3400	U
91-20-3	Naphthalene		240	1800	U
106-47-8	4-Chloroaniline		290	3400	U
87-68-3	Hexachlorobutadiene		270	1800	U
59-50-7	4-Chloro-3-methylphenol		250	3400	U
91-57-6	2-Methylnaphthalene		310	1800	U
77-47-4	Hexachlorocyclopentadiene		320	1800	U
88-06-2	2,4,6-Trichlorophenol		320	3400	U
95-95-4	2,4,5-Trichlorophenol		260	3400	U
91-58-7	2-Chloronaphthalene		420	1800	U
88-74-4	2-Nitroaniline		260	3400	U
131-11-3	Dimethylphthalate		170	1800	U
606-20-2	2,6-Dinitrotoluene		180	1800	U
208-96-8	Acenaphthylene		310	1800	U
99-09-2	3-Nitroaniline		230	3400	U
83-32-9	Acenaphthene	480	310	1800	JD
51-28-5	2,4-Dinitrophenol		160	3400	U
100-02-7	4-Nitrophenol		480	3400	U
121-14-2	2,4-Dinitrotoluene		210	1800	U
132-64-9	Dibenzofuran		310	1800	U
84-66-2	Diethylphthalate		190	1800	U

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

[redacted]

ANALYSIS DATA SHEET
SW8270D

P001-S003-0002-02

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-03D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30.1g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-03 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 4 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 22:22

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
7005-72-3	4-Chlorophenyl-phenylether		220	1800	U
86-73-7	Fluorene	510	230	1800	JD
100-01-6	4-Nitroaniline		460	3400	U
534-52-1	4,6-Dinitro-2-methylphenol		470	3400	U
86-30-6	N-Nitrosodiphenylamine (1)		310	1800	U
101-55-3	4-Bromophenyl-phenylether		260	1800	U
118-74-1	Hexachlorobenzene		230	1800	U
87-86-5	Pentachlorophenol		450	3400	U
85-01-8	Phenanthrene	4700	100	1800	D
120-12-7	Anthracene	1100	88	1800	JD
86-74-8	Carbazole	570	180	1800	JD
84-74-2	Di-n-butylphthalate		250	1800	U
206-44-0	Fluoranthene	6100	250	1800	D
129-00-0	Pyrene	4500	230	1800	D
85-68-7	Butylbenzylphthalate		280	1800	U
91-94-1	3,3'-Dichlorobenzidine		360	1800	U
117-81-7	bis(2-ethylhexyl)Phthalate		320	1800	U
56-55-3	Benzo (a) anthracene	2500	280	1800	D
218-01-9	Chrysene	2700	110	1800	D
117-84-0	Di-n-octylphthalate		340	1800	U
205-99-2	Benzo (b) fluoranthene	3300	270	1800	D
207-08-9	Benzo(k)fluoranthene	1200	250	1800	JD
50-32-8	Benzo (a) pyrene	2300	190	1800	D
193-39-5	Indeno(1,2,3-cd)pyrene	1600	300	1800	JD
53-70-3	Dibenzo(a,h)anthracene		490	1800	U
191-24-2	Benzo (g,h,i) perylene	1300	310	1800	JD
100-52-7	Benzaldehyde		280	1800	U
105-60-2	Caprolactam		290	1800	U
1912-24-9	Atrazine		200	1800	U
92-52-4	1,1'-Biphenyl		410	1800	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	3455	2310	67	35 - 105	D
Phenol-d5	3455	1984	57	40 - 100	D
Nitrobenzene-d5	1728	ND		35 - 100	D

Environmental Testing Laboratories
CompuChem
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nelac

ANALYSIS DATA SHEET
SW8270D

P001-S003-0002-02

Client:	WESTON SOLUTIONS	SDG	1408024	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ		
Matrix:	Soil	Extraction:	EPA 3550C MOD_SV	File ID:	1408024-03D62.d	Sampled:	08/07/14 00:00
Initial/Final:	30.1g / 1000uL	Sulfur Cleanup:	N	Lab ID:	1408024-03	Received:	08/08/14 09:04
Dilution:	10 pH:	Florisil Cleanup:	N			Prepared:	08/12/14 09:00
% Moisture:	4	GPC Cleanup:	N	GPC Cleanup Factor:	N	Analyzed:	08/15/14 22:22
Batch:	4080818	Sequence:	4H15001	Calibration:	4072701	Instrument:	5972hp62

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	1728	ND		45 - 105	D
2,4,6-Tribromophenol	3455	2190	63	35 - 125	D
Terphenyl-d14	1728	ND		30 - 125	D

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q
000213-46-7	1,2:7,8-Dibenzophenanthrene	950	264201	26.056	86	JDN
000203-64-5	4H-Cyclopenta[def]phenanthrene	750	194277	19.218	87	JDN
000205-99-2	Benz[e]acephenanthrylene	1900	514806	24.449	95	JDN
000191-26-4	Dibenzo[def,mno]chrysene	1100	300593	26.373	92	JDN
791-28-6	Triphenylphosphine oxide	3000	1163249	22.78	93	JDN
NA	Unk. Alkane	740	205073	25.452	0	JD
NA	Unknown 2.453	1200	195386	2.453	0	JD
NA	Unknown 24.848	750	207937	24.848	0	JD
NA	Unknown 25.789	1300	346931	25.789	0	JD
NA	Unknown 3.200	850	138116	3.2	0	JD
NA	Unknown 4.173	11000	1862016	4.173	0	JD

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.
(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.
(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

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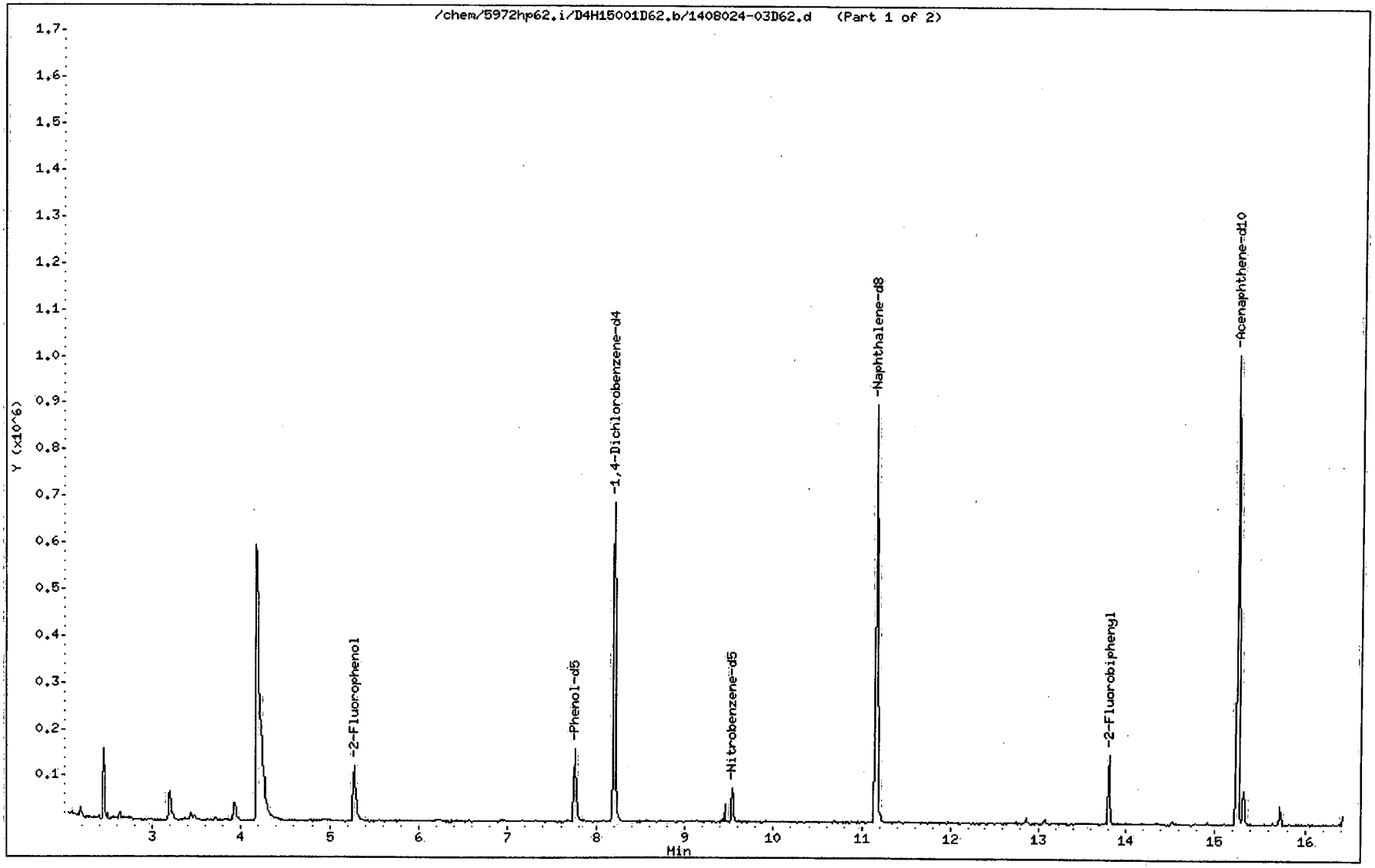
Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d
Date : 15-AUG-2014 22:22
Client ID: P001-S003-0002-02
Sample Info: 1408024-03:OWS:10
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32

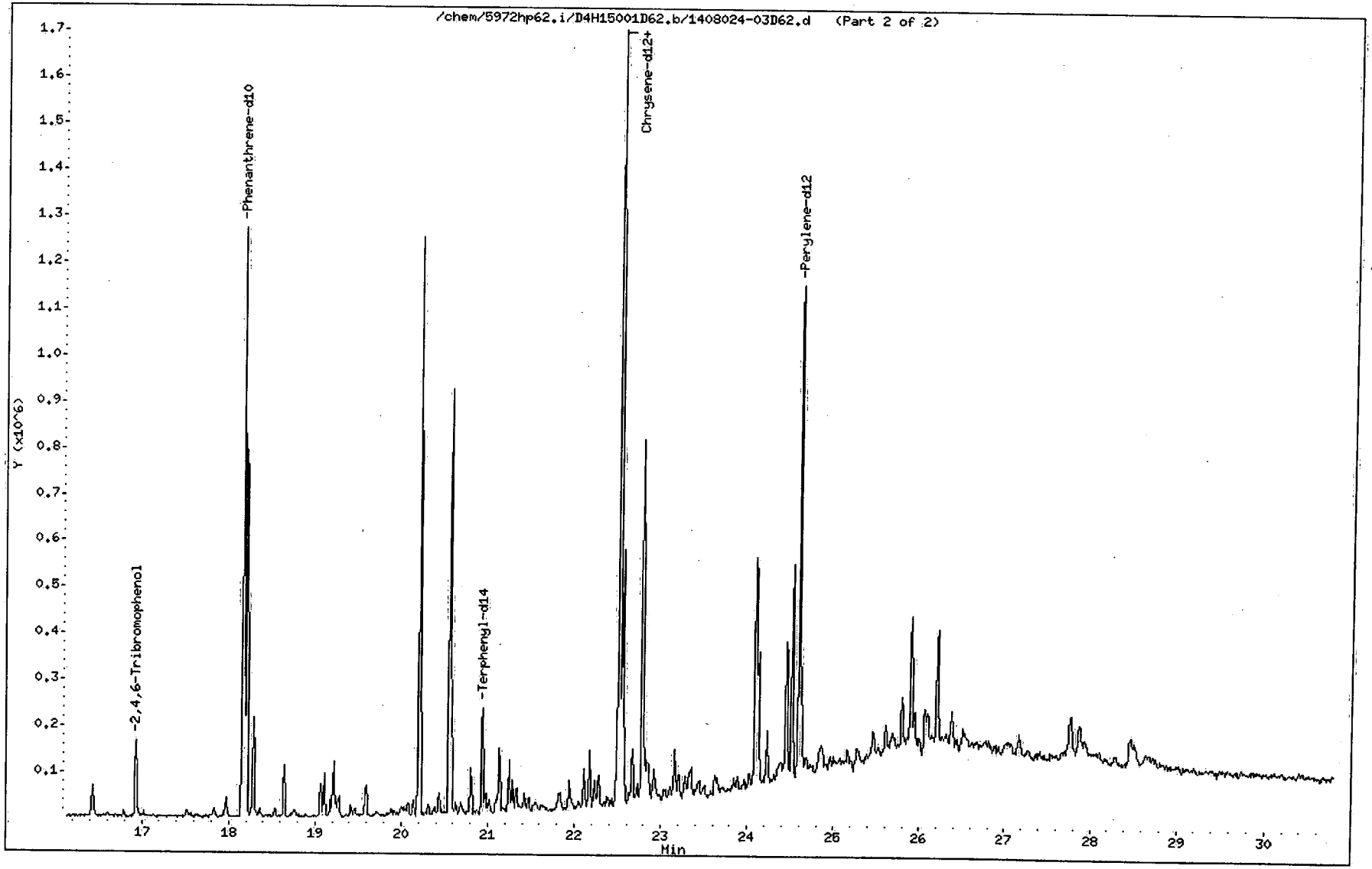


8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d
Date : 15-AUG-2014 22:22
Client ID: P001-S003-0002-02
Sample Info: 1408024-03:OWS:10
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i

Operator: OWS
Column diameter: 0.32



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d
Report Date: 19-Aug-2014 11:23

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d
Lab Smp Id: 1408024-03 Client Smp ID: P001-S003-0002-02
Inj Date : 15-AUG-2014 22:22
Operator : OWS Inst ID: 5972hp62.i
Smp Info : 1408024-03:OWS:10
Misc Info : P001-S003-0002-02
Comment :
Method : /chem/5972hp62.i/D4H15001D62.b/8270Dv26.m
Meth Date : 19-Aug-2014 11:23 ron Quant Type: ISTD
Cal Date : 23-JUL-2014 19:31 Cal File: 4G23008-CAL662.d
Als bottle: 14
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1000.00000	Volume of final extract (uL)(1000 low, 2
Vi	2.00000	Volume injected (uL)
Ws	30.10000	Weight of sample extracted (g)
M	4.00000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY	
* 1 1,4-Dichlorobenzene-d4	152	8.205	8.212	(1.000)	176140	40.0000			
* 2 Naphthalene-d8	136	11.163	11.170	(1.000)	650137	40.0000			
* 3 Acenaphthene-d10	164	15.247	15.254	(1.000)	352181	40.0000			
* 4 Phenanthrene-d10	188	18.164	18.171	(1.000)	625699	40.0000			
* 5 Chrysene-d12	240	22.514	22.521	(1.000)	647593	40.0000			
* 6 Perylene-d12	264	24.602	24.609	(1.000)	486310	40.0000			
$ 7 2-Fluorophenol	112	5.278	5.274	(0.643)	75945	13.3731	2300		
$ 8 Phenol-d5	99	7.755	7.751	(0.945)	93150	11.4870	2000		
$ 9 Nitrobenzene-d5	82	9.536	9.532	(0.854)	37048	5.68109	980		(a)
$ 10 2-Fluorobiphenyl	172	13.814	13.821	(0.906)	72939	6.67433	1200		(aM)
$ 11 2,4,6-Tribromophenol	330	16.926	16.932	(1.110)	24510	12.6770	2200	7532	
$ 12 Terphenyl-d14	244	20.938	20.945	(0.930)	87519	6.91320	1200		(a)
15 Phenol	94	Compound Not Detected.							

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d
Report Date: 19-Aug-2014 11:23

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
17 Bis(2-chloroethyl)ether	93	Compound Not Detected.						
18 2-Chlorophenol	128	Compound Not Detected.						
23 2-Methylphenol	108	Compound Not Detected.						
24 2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.						
25 3 & 4-Methylphenol	108	Compound Not Detected.						
26 N-Nitroso-di-N-propylamine	70	Compound Not Detected.						
27 Acetophenone	105	Compound Not Detected.						
28 Hexachloroethane	117	Compound Not Detected.						
29 Nitrobenzene	77	Compound Not Detected.						
30 Isophorone	82	Compound Not Detected.						
31 2-Nitrophenol	139	Compound Not Detected.						
32 2,4-Dimethylphenol	122	Compound Not Detected.						
33 Bis(2-chloroethoxy)methane	93	Compound Not Detected.						
34 2,4-Dichlorophenol	162	Compound Not Detected.						
36 Naphthalene	128	Compound Not Detected.						
37 4-Chloroaniline	127	Compound Not Detected.						
38 Hexachlorobutadiene	224	Compound Not Detected.						
39 4-Chloro-3-methylphenol	107	Compound Not Detected.						
40 2-Methylnaphthalene	141	Compound Not Detected.						
42 Hexachlorocyclopentadiene	236	Compound Not Detected.						
44 2,4,6-Trichlorophenol	196	Compound Not Detected.						
45 2,4,5-Trichlorophenol	196	Compound Not Detected.						
46 2-Chloronaphthalene	162	Compound Not Detected.						
47 2-Nitroaniline	65	Compound Not Detected.						
48 Dimethylphthalate	163	Compound Not Detected.						
50 2,6-Dinitrotoluene	165	Compound Not Detected.						
51 Acenaphthylene	152	Compound Not Detected.						
52 3-Nitroaniline	138	Compound Not Detected.						
53 Acenaphthene	153	15.319	15.325	(1.005)	26442	2.74982	480	8281 (a)
54 2,4-Dinitrophenol	184	Compound Not Detected.						
55 4-Nitrophenol	139	Compound Not Detected.						
56 2,4-Dinitrotoluene	165	Compound Not Detected.						
57 Dibenzofuran	168	Compound Not Detected.						
59 Diethylphthalate	149	Compound Not Detected.						
60 4-Chlorophenyl-phenylether	204	Compound Not Detected.						
61 Fluorene	166	16.434	16.441	(1.078)	30801	2.95347	510	0 (aM)
62 4-Nitroaniline	138	Compound Not Detected.						
63 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
64 N-Nitrosodiphenylamine (1)	169	Compound Not Detected.						
66 4-Bromophenyl-phenylether	248	Compound Not Detected.						
67 Hexachlorobenzene	283	Compound Not Detected.						
68 Pentachlorophenol	265	Compound Not Detected.						
69 Phenanthrene	178	18.205	18.212	(1.002)	451669	27.4785	4800	
70 Anthracene	178	18.287	18.294	(1.007)	104911	6.37788	1100	(a)
71 Carbazole	167	18.645	18.652	(1.026)	54380	3.32678	580	9581 (a)
72 Di-n-butylphthalate	149	Compound Not Detected.						
73 Fluoranthene	202	20.211	20.218	(1.113)	612587	35.2819	6100	

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d
Report Date: 19-Aug-2014 11:23

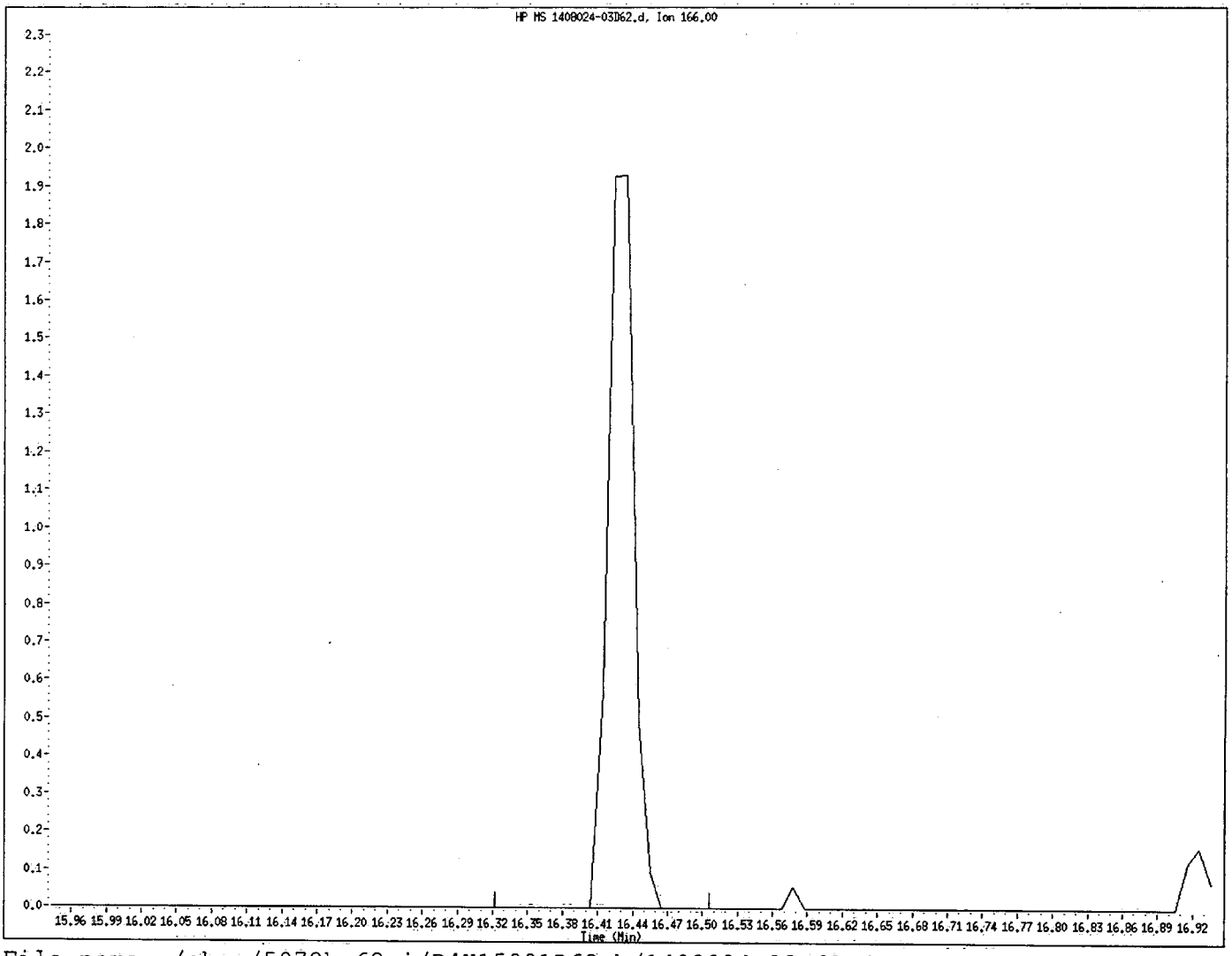
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
74 Pyrene	202	20.559	20.566	(0.913)	489472	26.0603	4500	
75 Butylbenzylphthalate	149	Compound Not Detected.						
76 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
77 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
78 Benzo(a)anthracene	228	22.504	22.511	(1.000)	234384	14.3254	2500	
79 Chrysene	228	22.555	22.562	(1.002)	239665	15.8872	2700	
80 Di-n-octylphthalate	149	Compound Not Detected.						
81 Benzo(b)fluoranthene	252	24.090	24.097	(0.979)	325483	18.8982	3300	
82 Benzo(k)fluoranthene	252	24.131	24.138	(0.981)	116388	6.76614	1200	(a)
83 Benzo(a)pyrene	252	24.520	24.527	(0.997)	209667	13.0507	2200	
84 Indeno(1,2,3-cd)pyrene	276	25.902	25.909	(1.053)	144400	9.29754	1600	(a)
85 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
86 Benzo(g,h,i)perylene	276	26.209	26.216	(1.065)	126410	7.80188	1300	(a)
87 Benzaldehyde	77	Compound Not Detected.						
88 Caprolactam	113	Compound Not Detected.						
89 Atrazine	215	Compound Not Detected.						
90 1,1'-Biphenyl	154	Compound Not Detected.						

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

8/19/2014

Fluorene CAS Number 86-73-7 Area = 30801 Manually integrated



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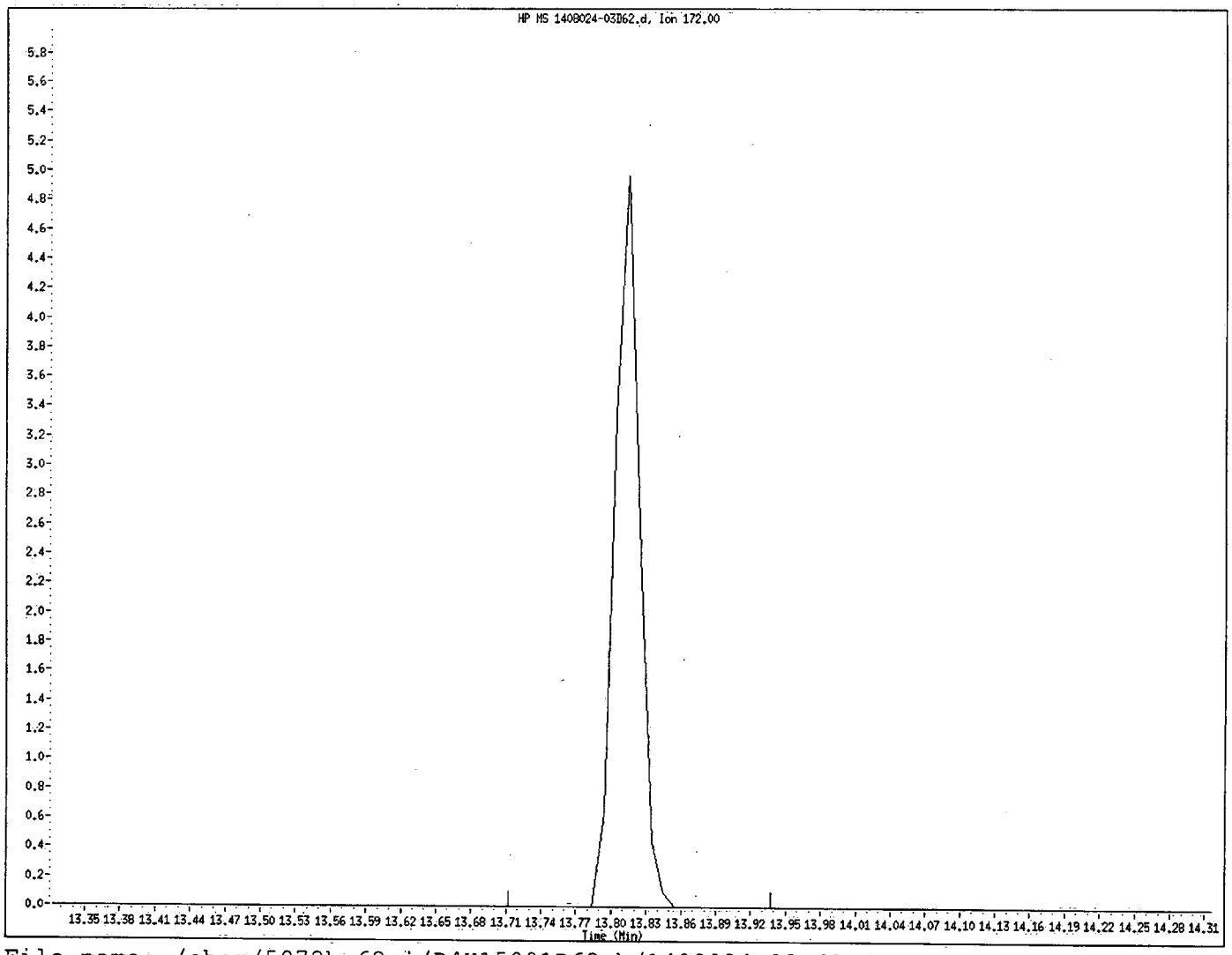
Client ID: P001-S003-0002-02
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 22:22
Retention Time: 16.43
Operator ID: OWS

8/19/2014

2-Fluorobiphenyl CAS Number 321-60-8 Area = 72939 Manually integrated



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Client ID: P001-S003-0002-02
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 22:22
Retention Time: 13.81
Operator ID: OWS

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

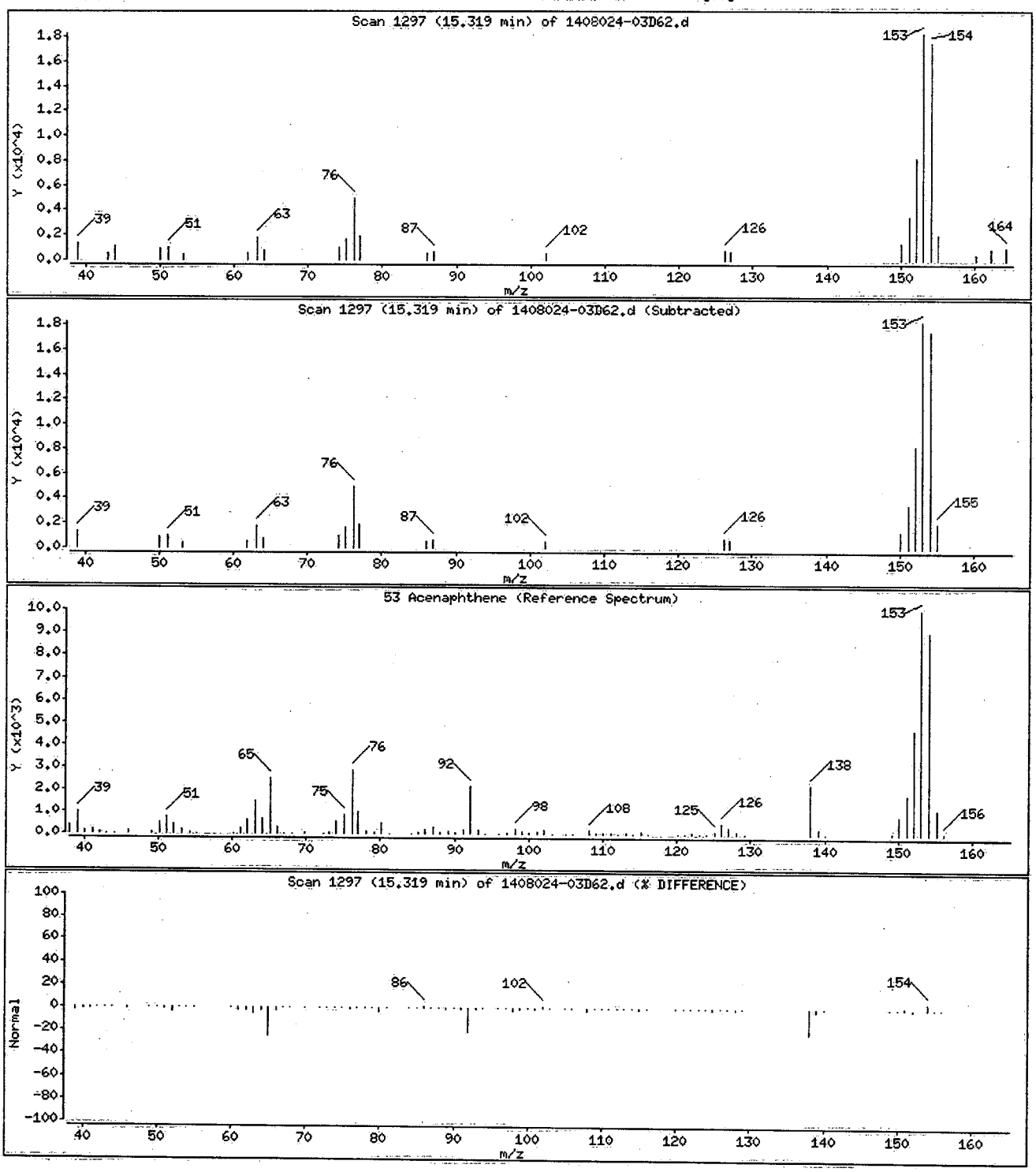
Client ID: P001-S003-0002-02 | Instrument: 5972hp62.i

Sample Info: 1408024-03:OWS:10

Volume Injected (uL): 2.0 | Operator: OWS

Column phase: Rxi-5SilMS | Column diameter: 0.32

53 Acenaphthene | Concentration: 480 ug/Kg



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

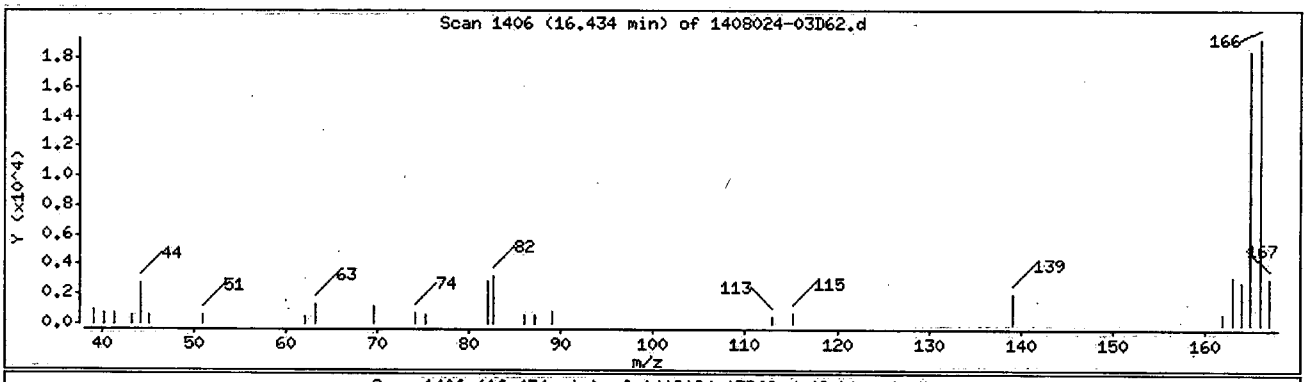
Client ID: P001-S003-0002-02 | Instrument: 5972hp62.i

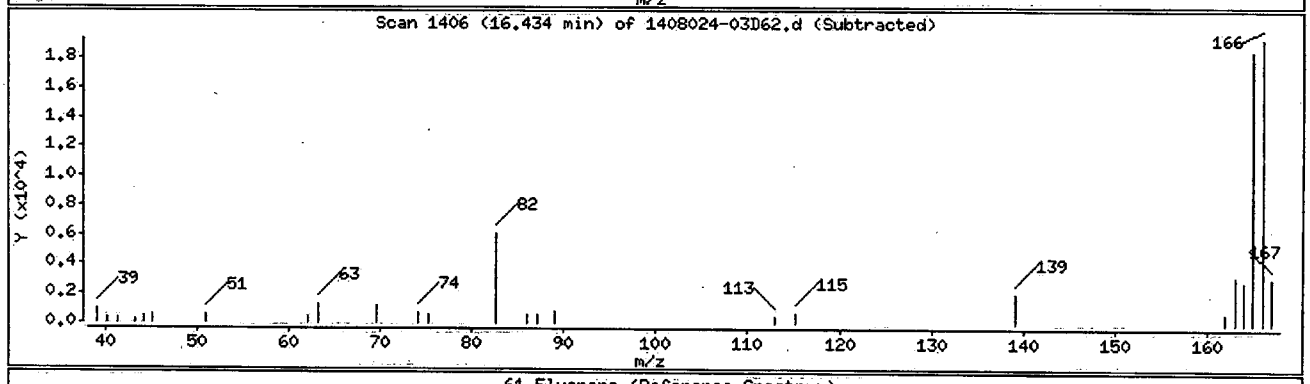
Sample Info: 1408024-03:OWS:10

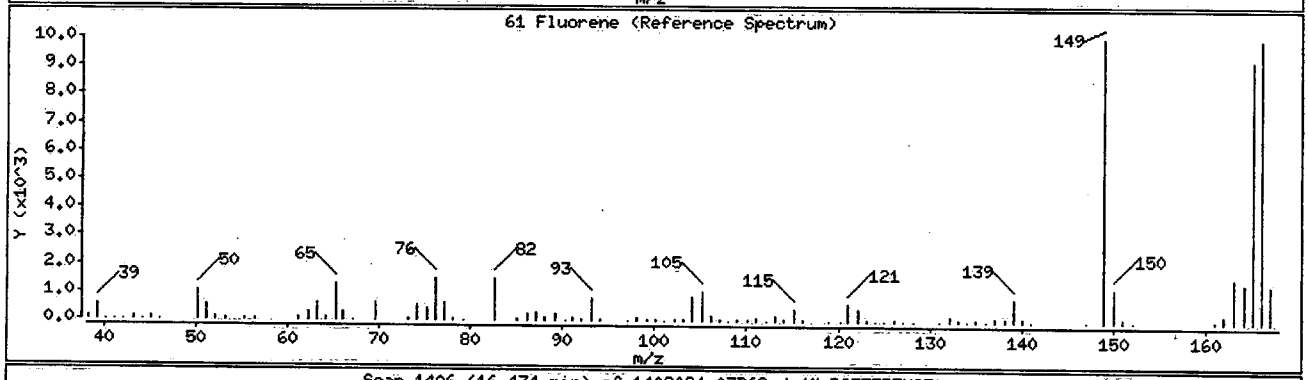
Volume Injected (uL): 2.0 | Operator: OWS

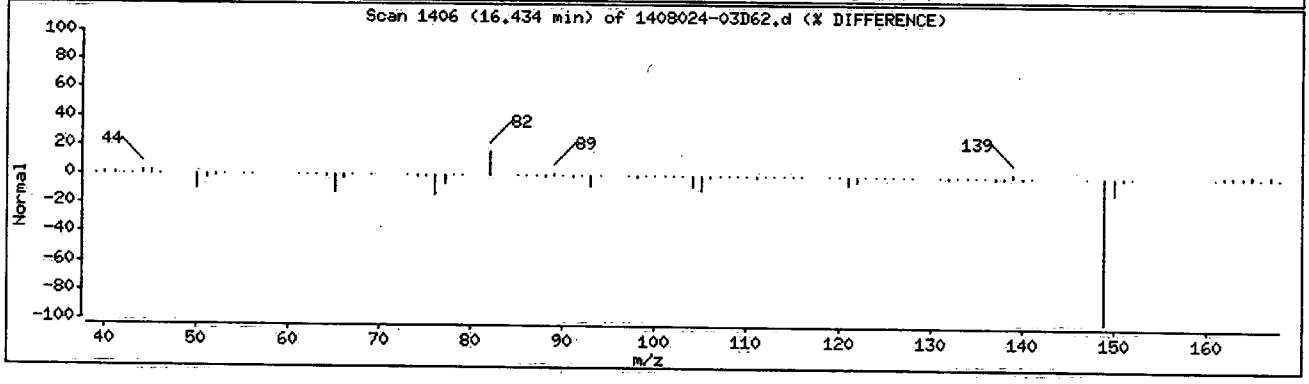
Column phase: Rxi-5SilMS | Column diameter: 0.32

61 Fluorene | Concentration: 510 ug/Kg









Robert Hamm 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

Client ID: P001-S003-0002-02

Instrument: 5972hp62.i

Sample Info: 1408024-03:OWS:10

Volume Injected (uL): 2.0

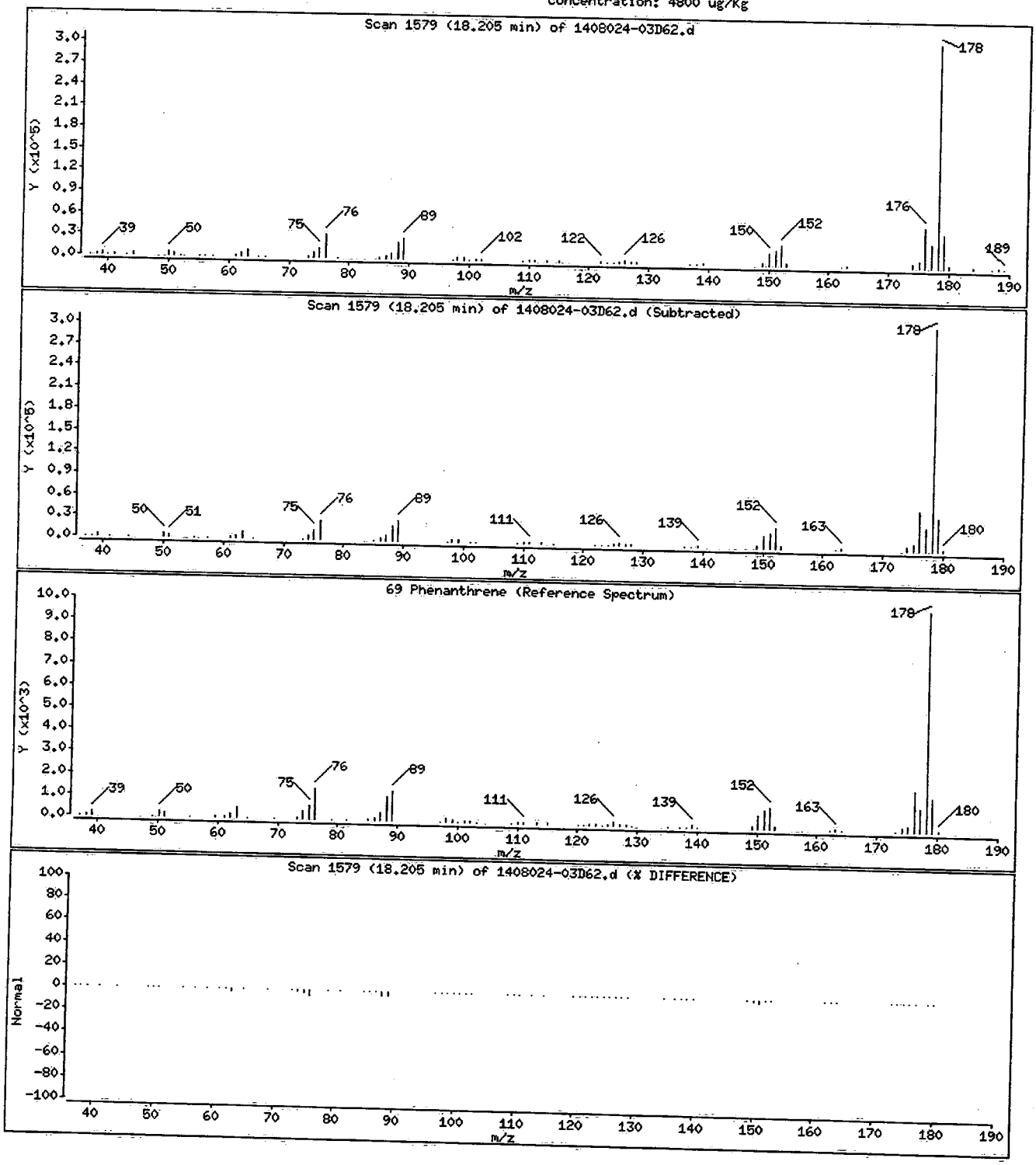
Operator: OWS

Column phase: Rxi-5SilMS

Column diameter: 0.32

69 Phenanthrene

Concentration: 4800 ug/Kg



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

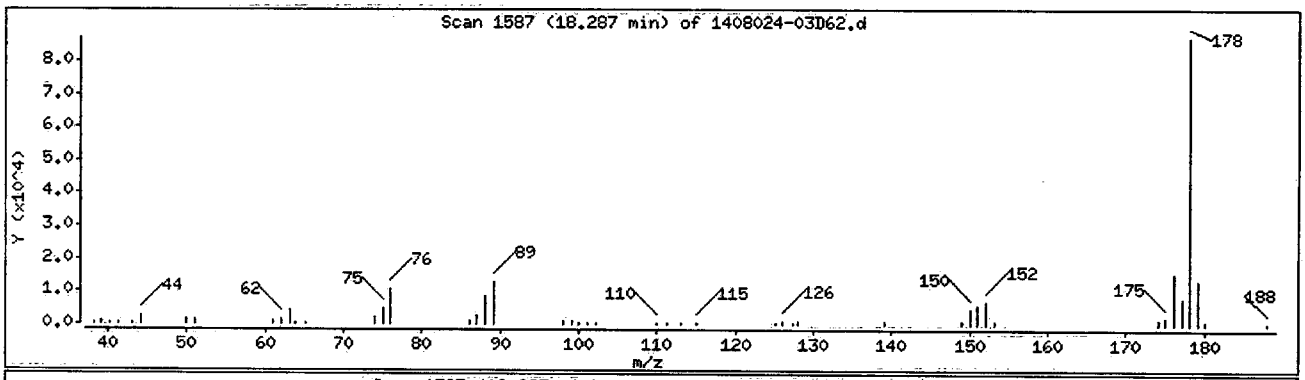
Client ID: P001-S003-0002-02 | Instrument: 5972hp62.i

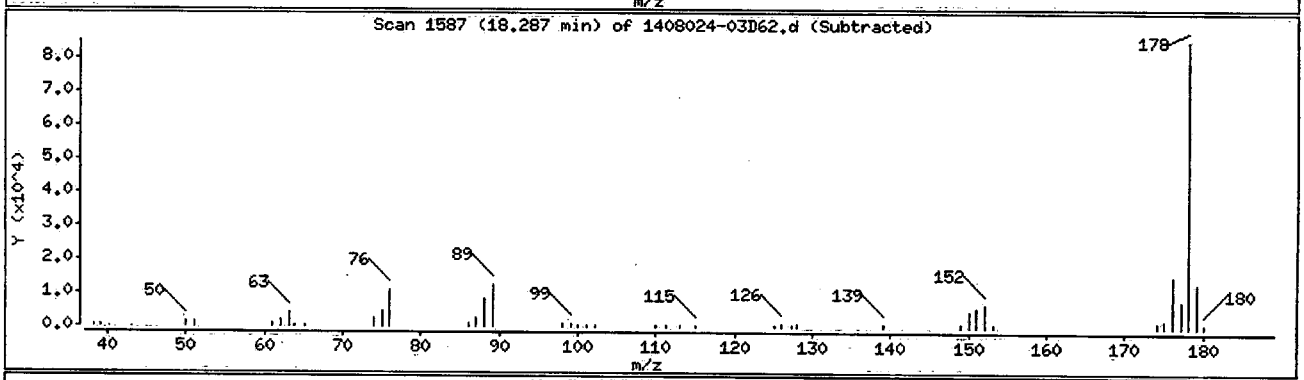
Sample Info: 1408024-03:OWS:10

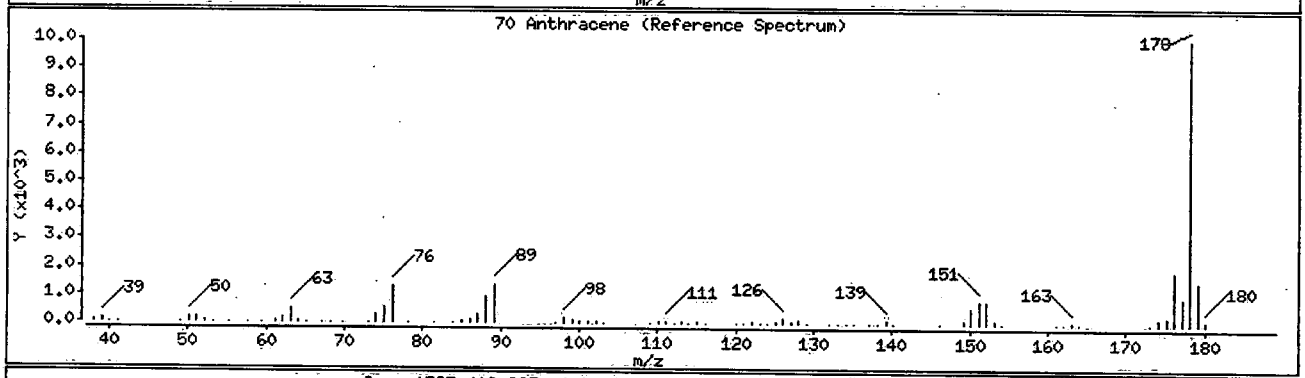
Volume Injected (uL): 2.0 | Operator: OWS

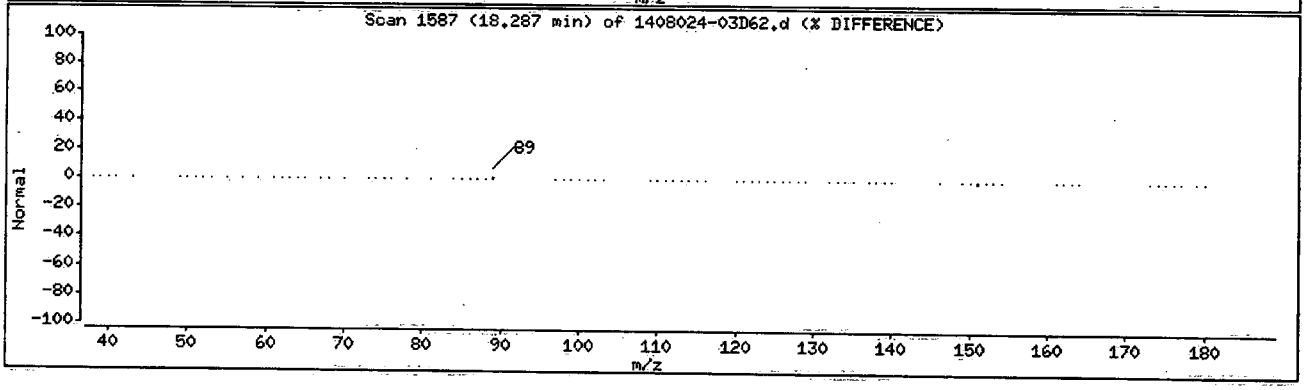
Column phase: Rxi-5SilMS | Column diameter: 0.32

70 Anthracene | Concentration: 1100 ug/Kg









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

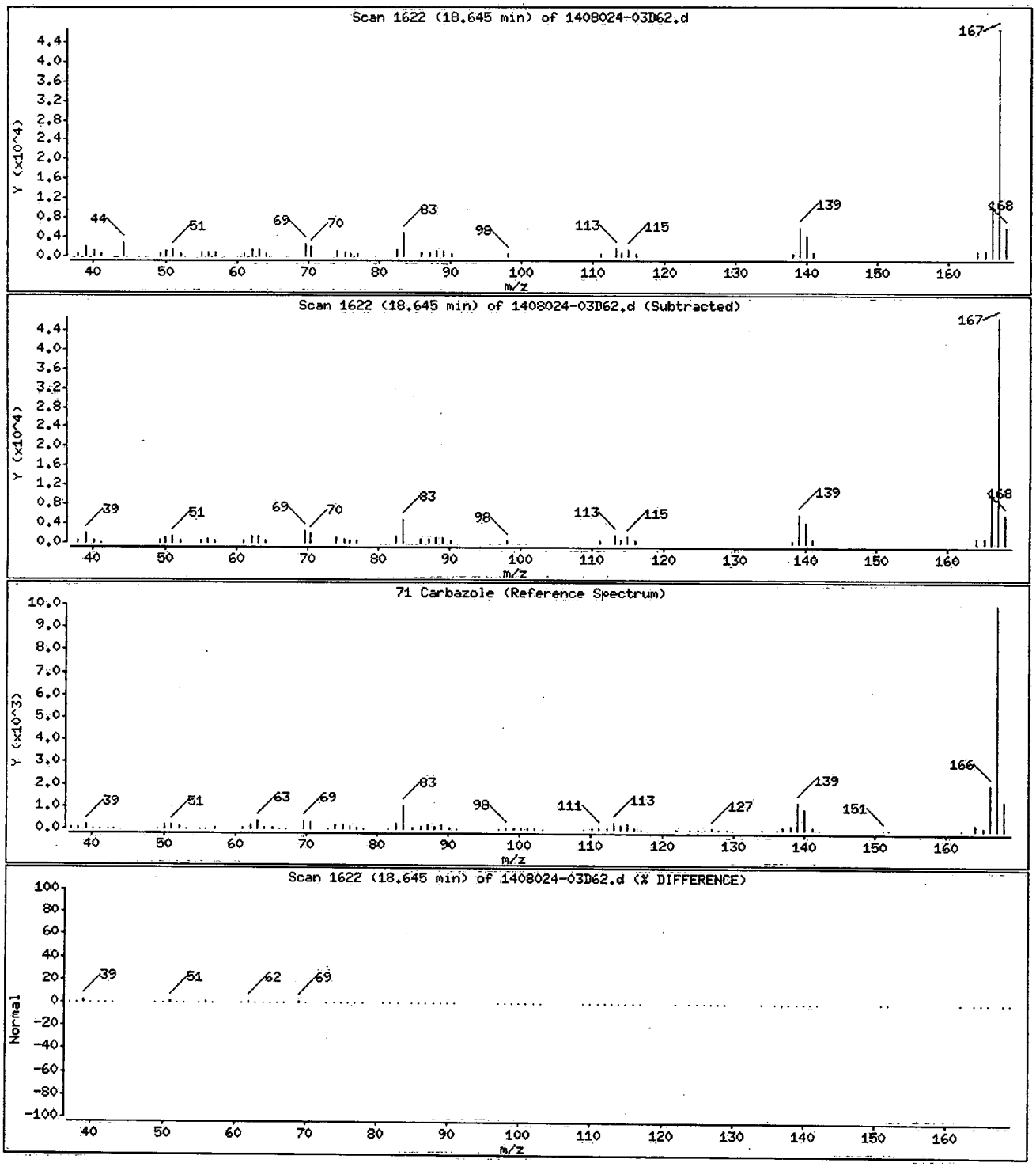
Client ID: P001-S003-0002-02 | Instrument: 5972hp62.i

Sample Info: 1408024-03:OWS:10

Volume Injected (uL): 2.0 | Operator: OWS

Column phase: Rxi-5SilMS | Column diameter: 0.32

71 Carbazole | Concentration: 580 ug/Kg



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

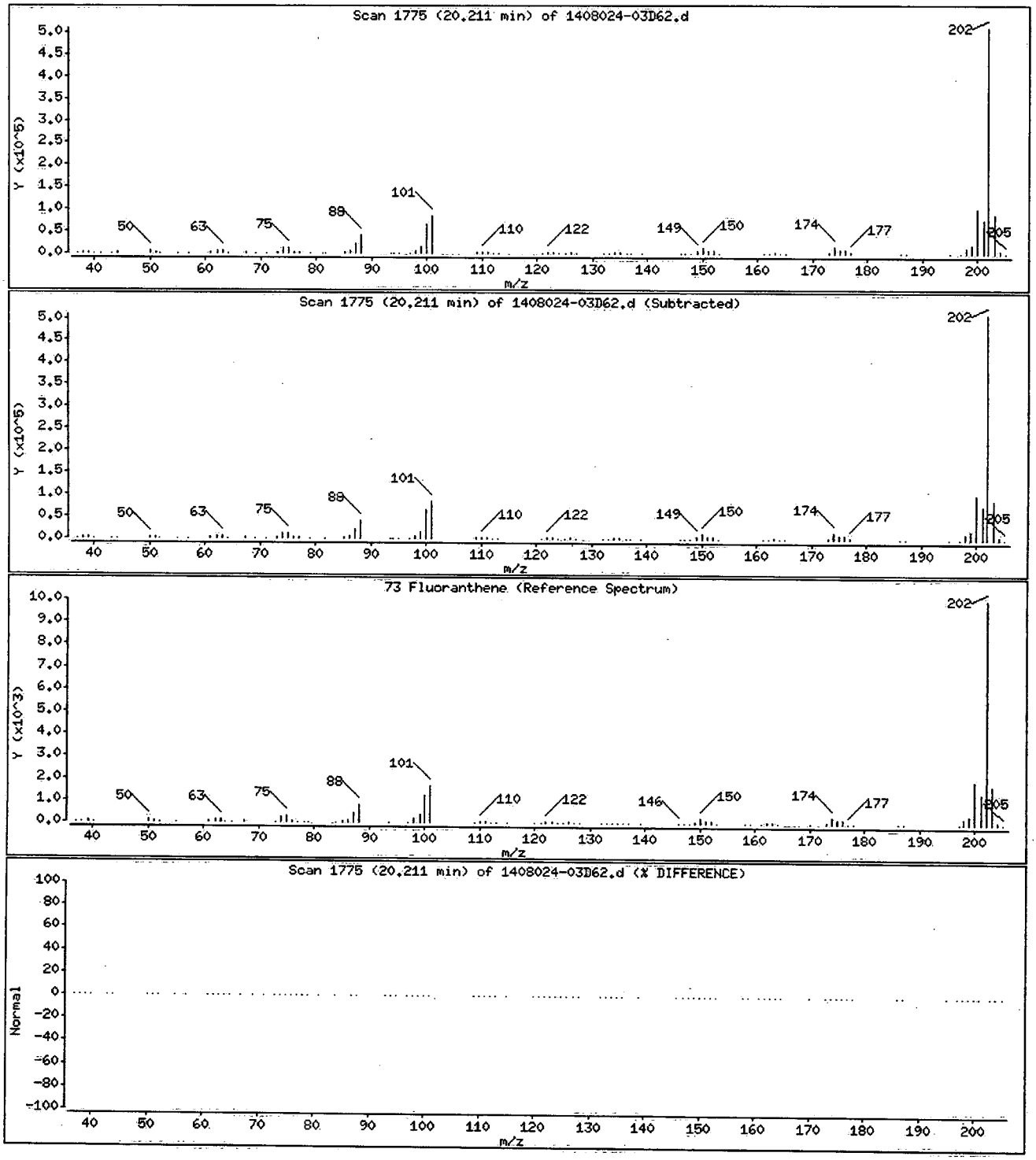
Client ID: P001-S003-0002-02 | Instrument: 5972hp62.i

Sample Info: 1408024-03:OWS:10

Volume Injected (uL): 2.0 | Operator: OWS

Column phase: Rxi-5SilMS | Column diameter: 0.32

73 Fluoranthene | Concentration: 6100 ug/Kg



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

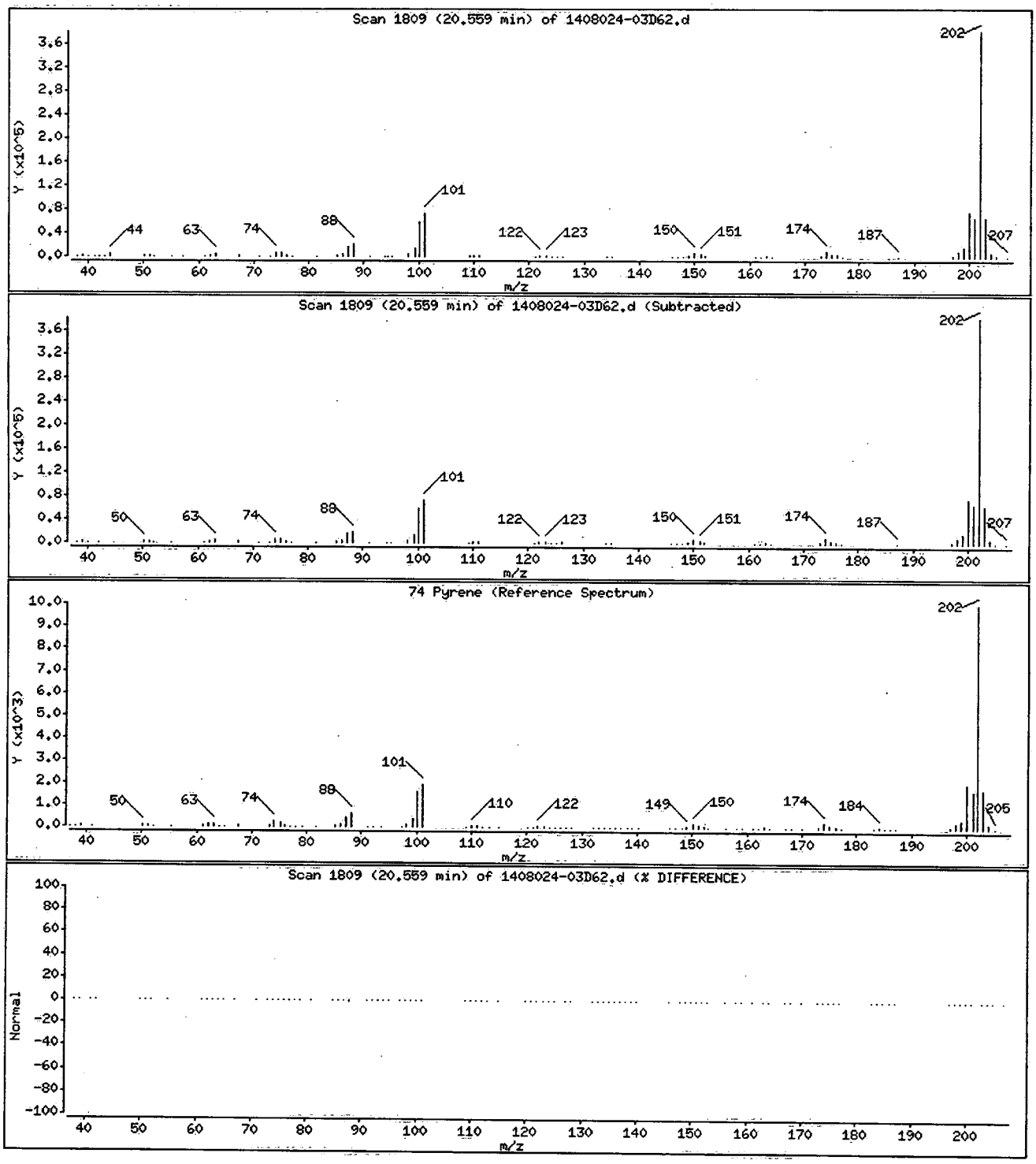
Client ID: P001-S003-0002-02 Instrument: 5972hp62.i

Sample Info: 1408024-03:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

74 Pyrene Concentration: 4500 ug/Kg



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

Client ID: P001-S003-0002-02

Instrument: 5972hp62.i

Sample Info: 1408024-03:OWS:10

Volume Injected (uL): 2.0

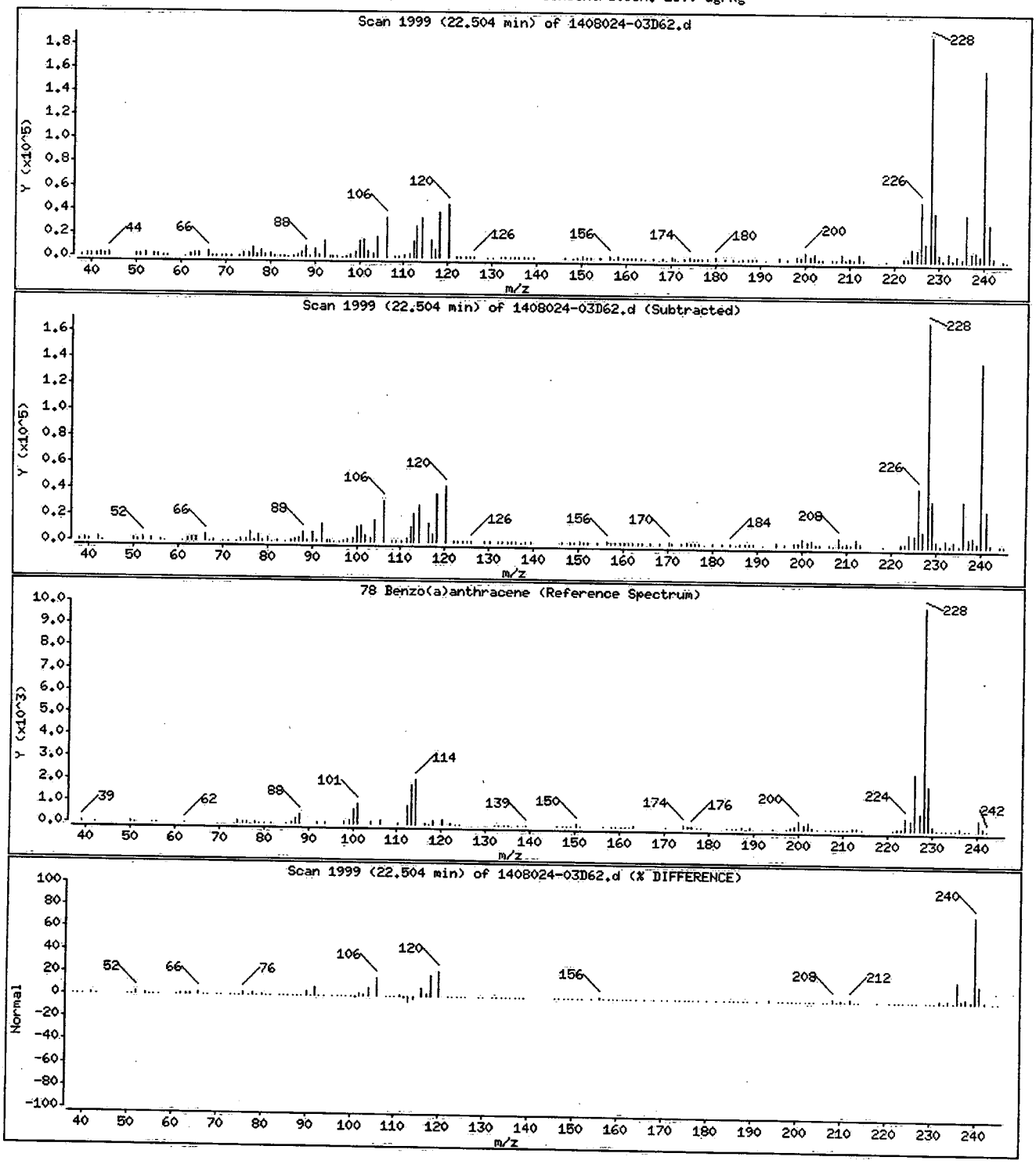
Operator: OWS

Column phase: Rxi-5SilMS

Column diameter: 0.32

78 Benzo(a)anthracene

Concentration: 2500 ug/Kg



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

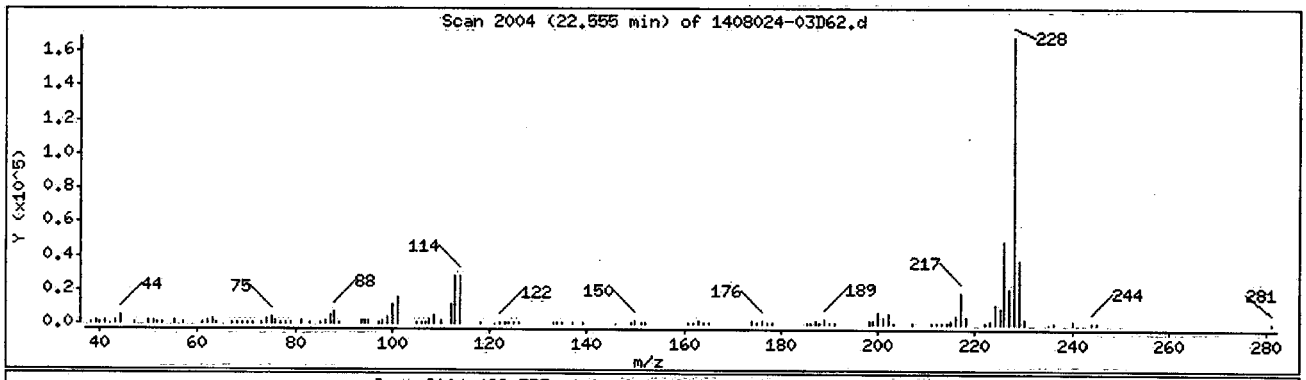
Client ID: P001-S003-0002-02 | Instrument: 5972hp62.i

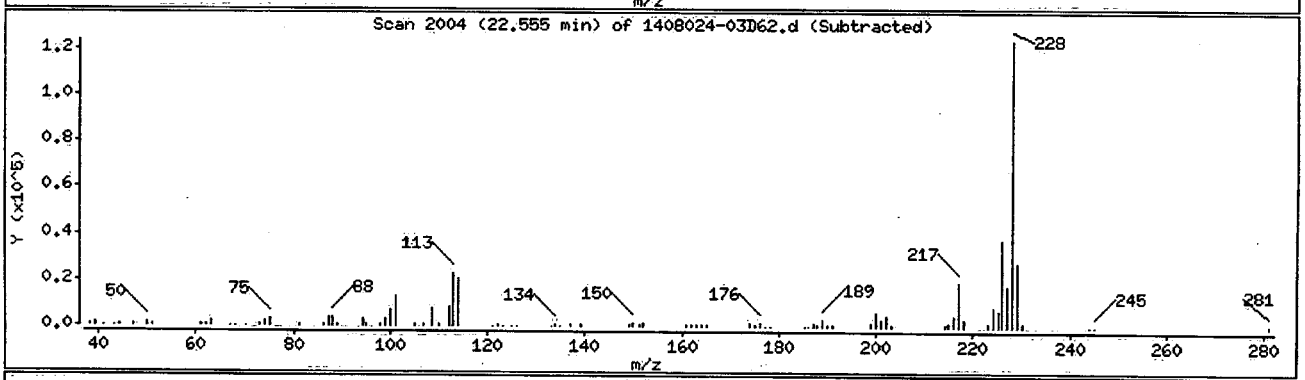
Sample Info: 1408024-03:DWS:10

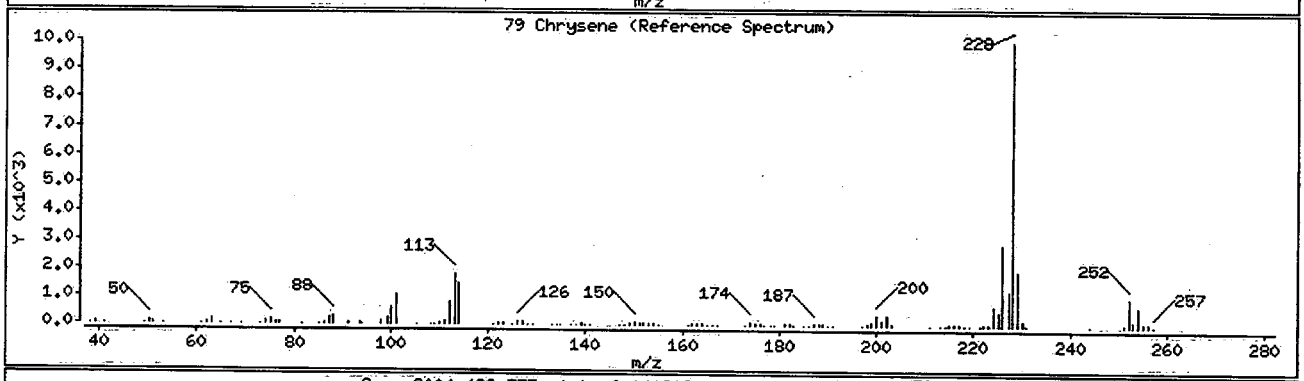
Volume Injected (uL): 2.0 | Operator: DWS

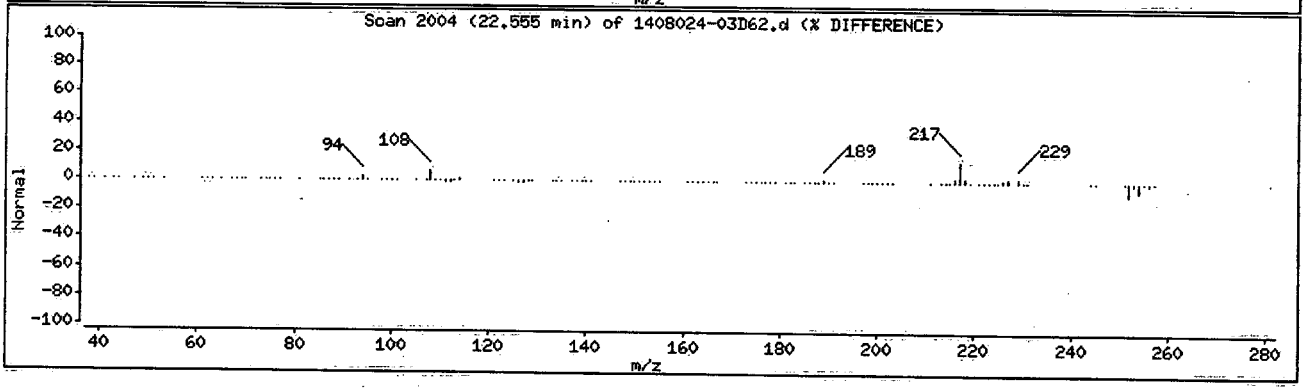
Column phase: Rxi-5SilMS | Column diameter: 0.32

79 Chrysene | Concentration: 2700 ug/Kg









8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

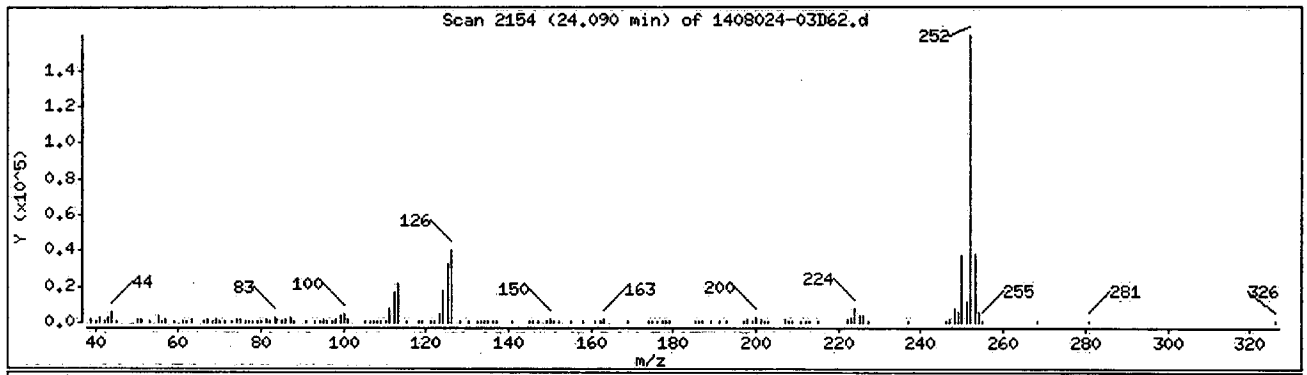
Client ID: P001-S003-0002-02 | Instrument: 5972hp62.i

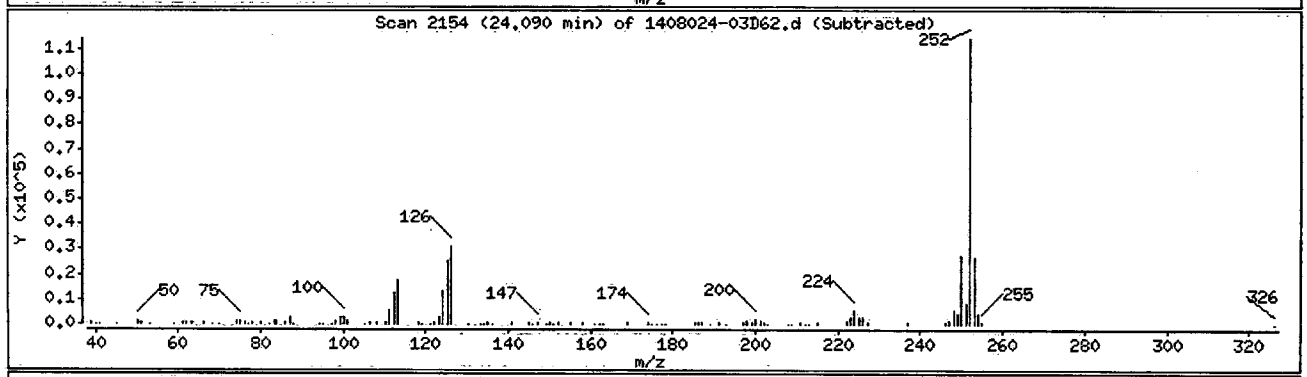
Sample Info: 1408024-03:OWS:10

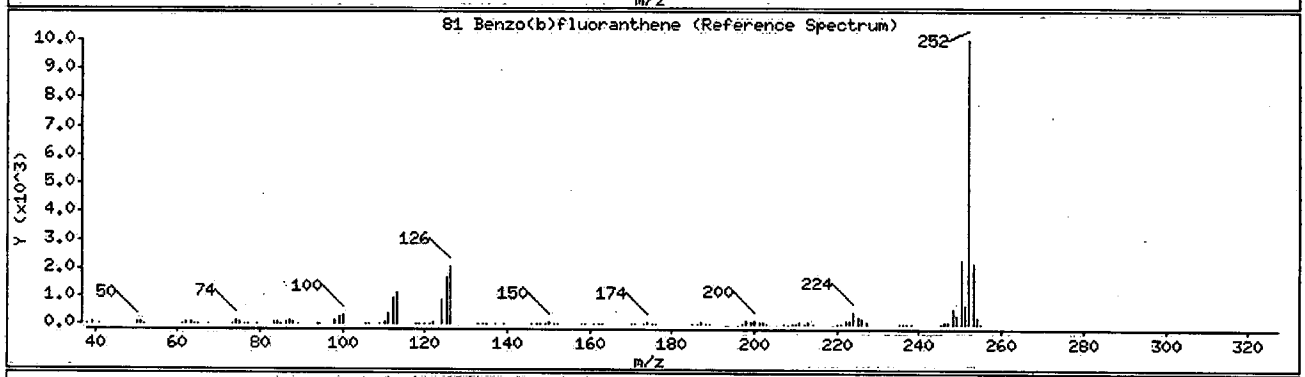
Volume Injected (uL): 2.0 | Operator: OWS

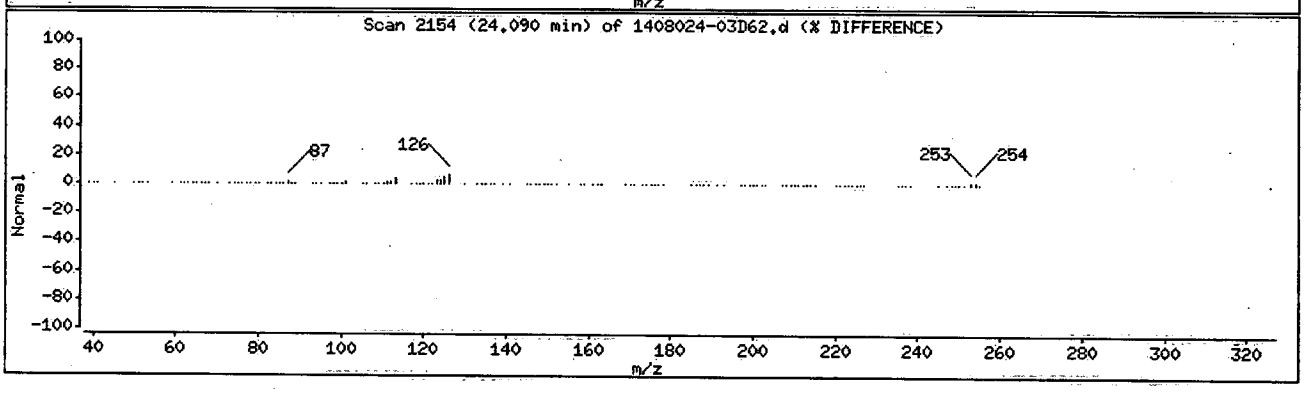
Column phase: Rxi-5SilMS | Column diameter: 0.32

81 Benzo(b)fluoranthene | Concentration: 3300 ug/Kg









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

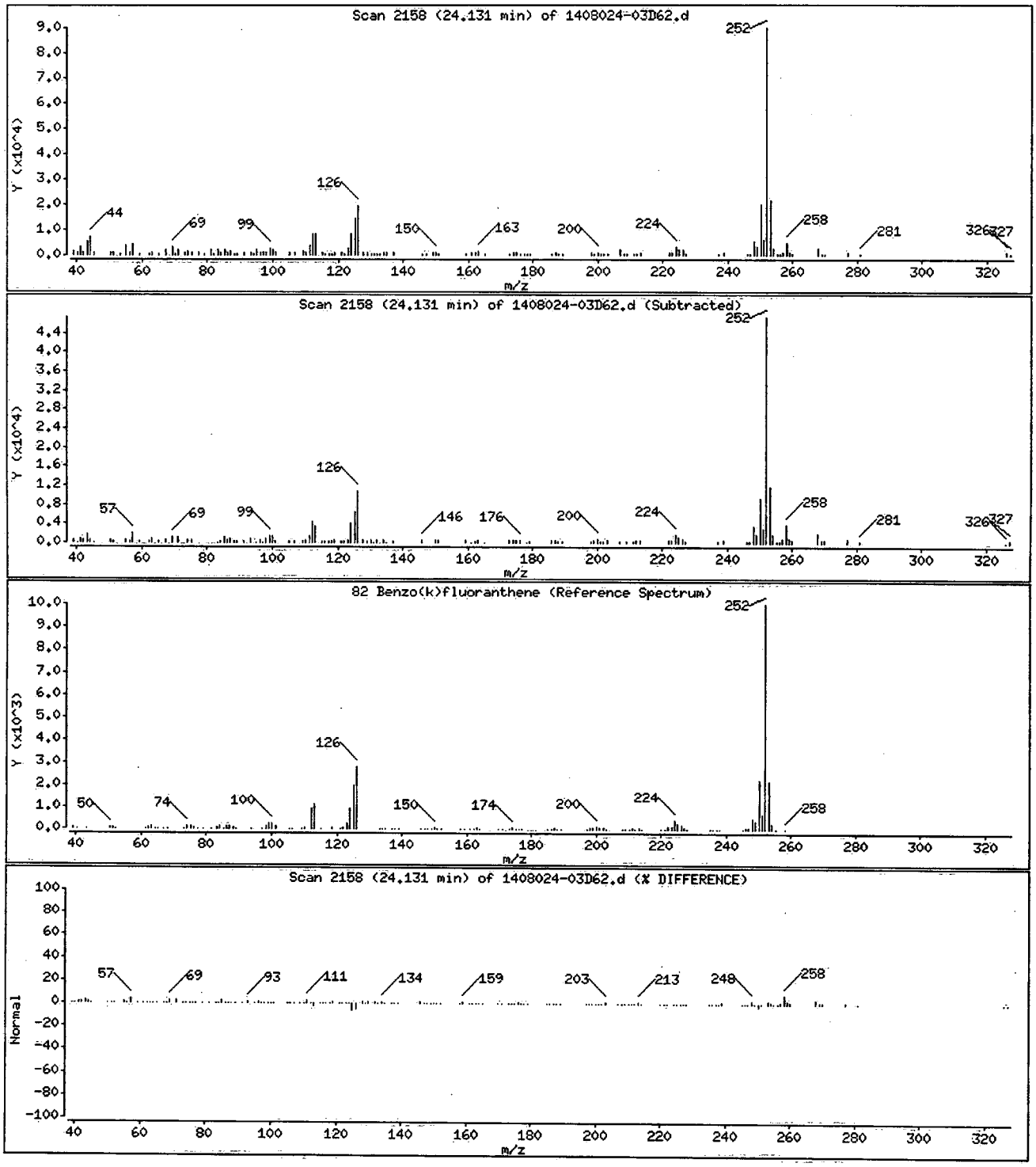
Client ID: P001-S003-0002-02 Instrument: 5972hp62.i

Sample Info: 1408024-03:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

82 Benzo(k)fluoranthene Concentration: 1200 ug/Kg



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

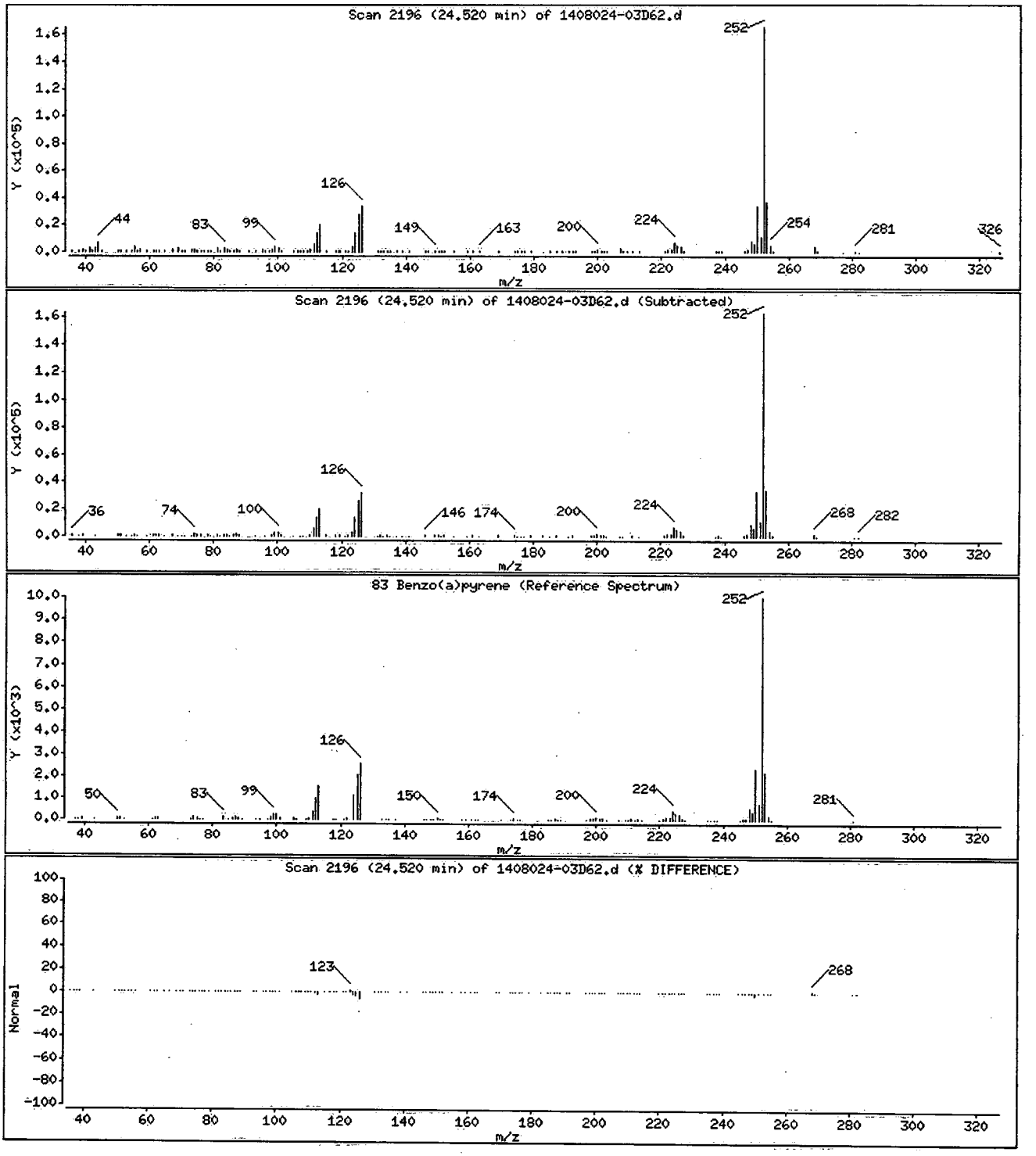
Client ID: P001-S003-0002-02 Instrument: 5972hp62.i

Sample Info: 1408024-03:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

83 Benzo(a)pyrene Concentration: 2200 ug/Kg



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Date : 15-AUG-2014 22:22

Client ID: P001-S003-0002-02

Instrument: 5972hp62.i

Sample Info: 1408024-03:OWS:10

Volume Injected (uL): 2.0

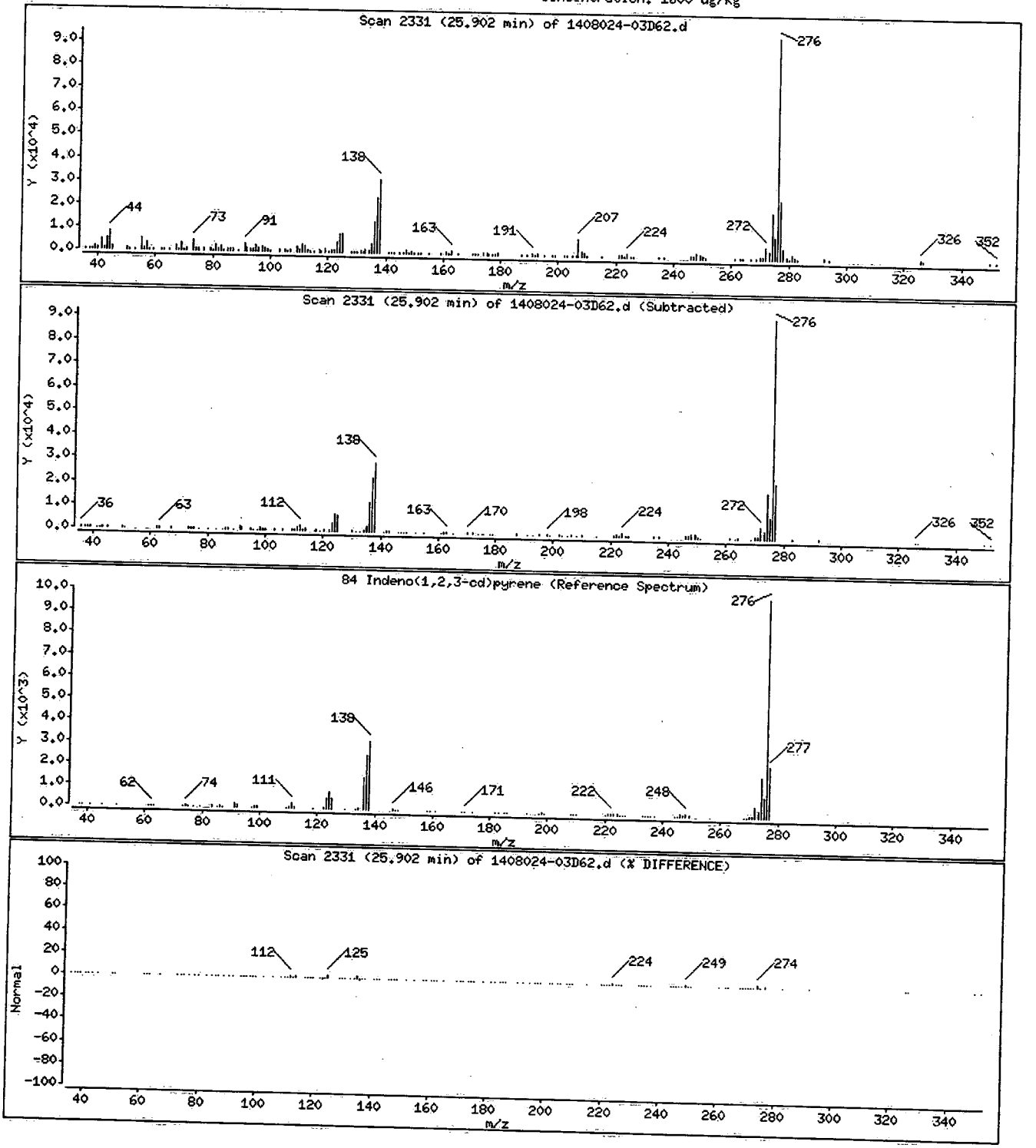
Operator: OWS

Column phase: Rxi-5SilMS

Column diameter: 0.32

84 Indeno(1,2,3-cd)pyrene

Concentration: 1600 ug/Kg



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

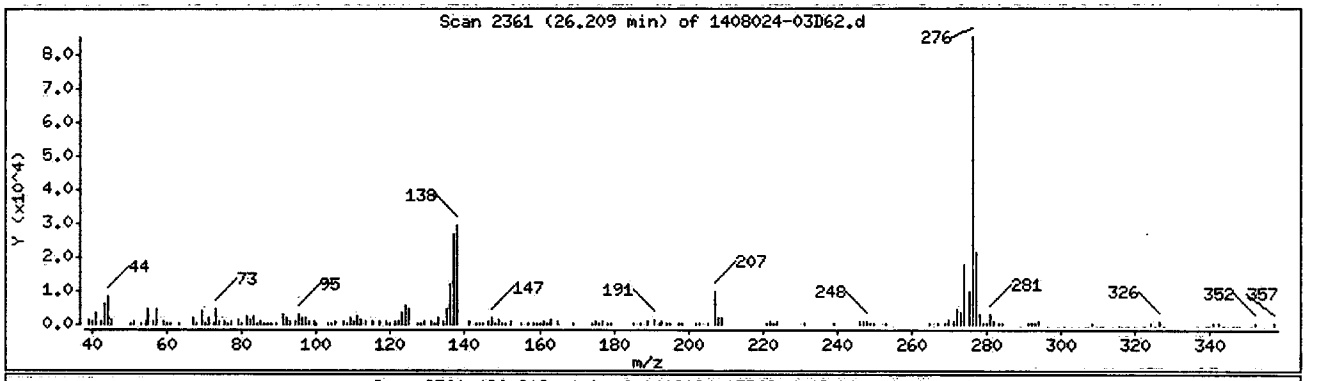
Client ID: P001-S003-0002-02 Instrument: 5972hp62.i

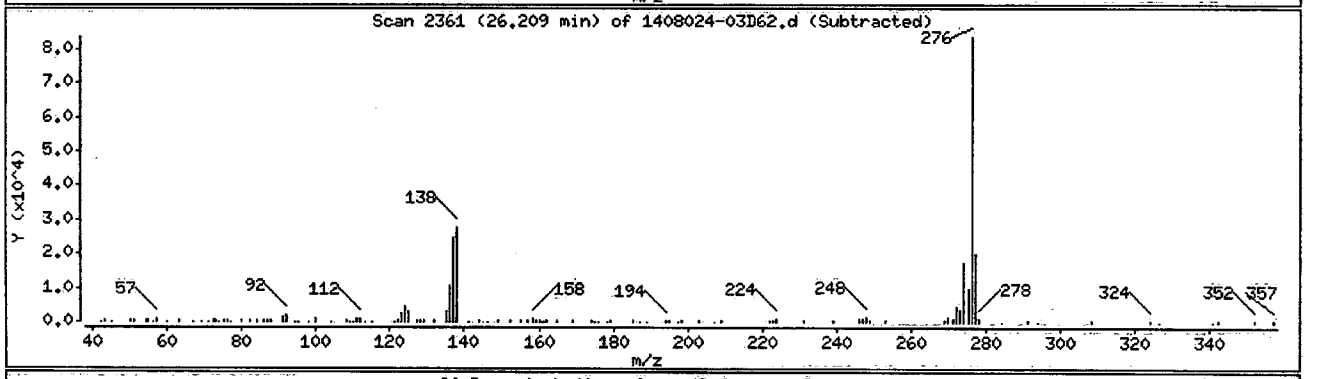
Sample Info: 1408024-03:OWS:10

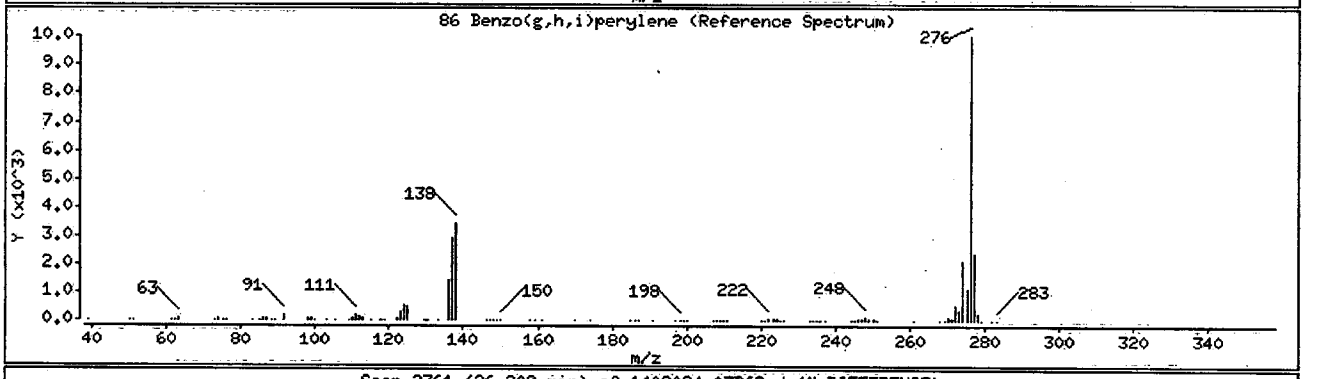
Volume Injected (uL): 2.0 Operator: OWS

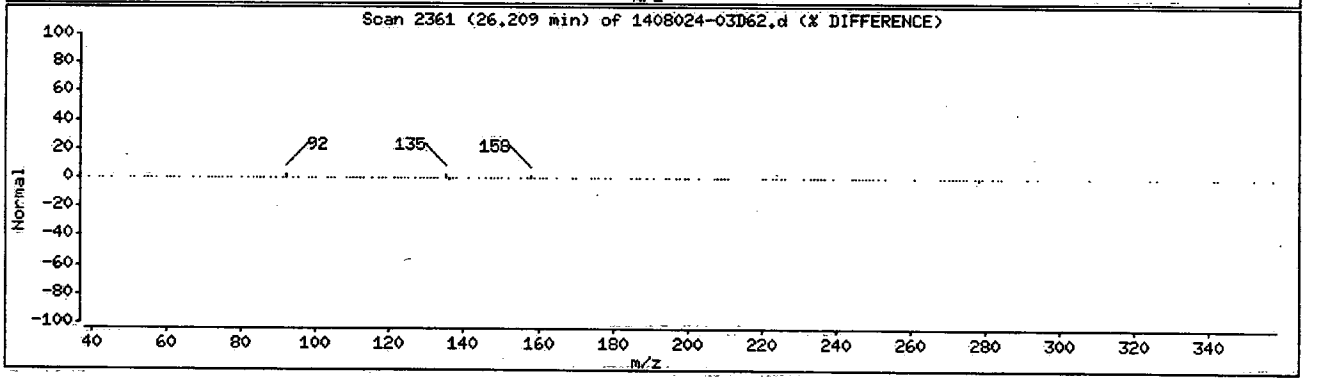
Column phase: Rxi-5SilMS Column diameter: 0.32

86 Benzo(g,h,i)perylene Concentration: 1300 ug/Kg









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

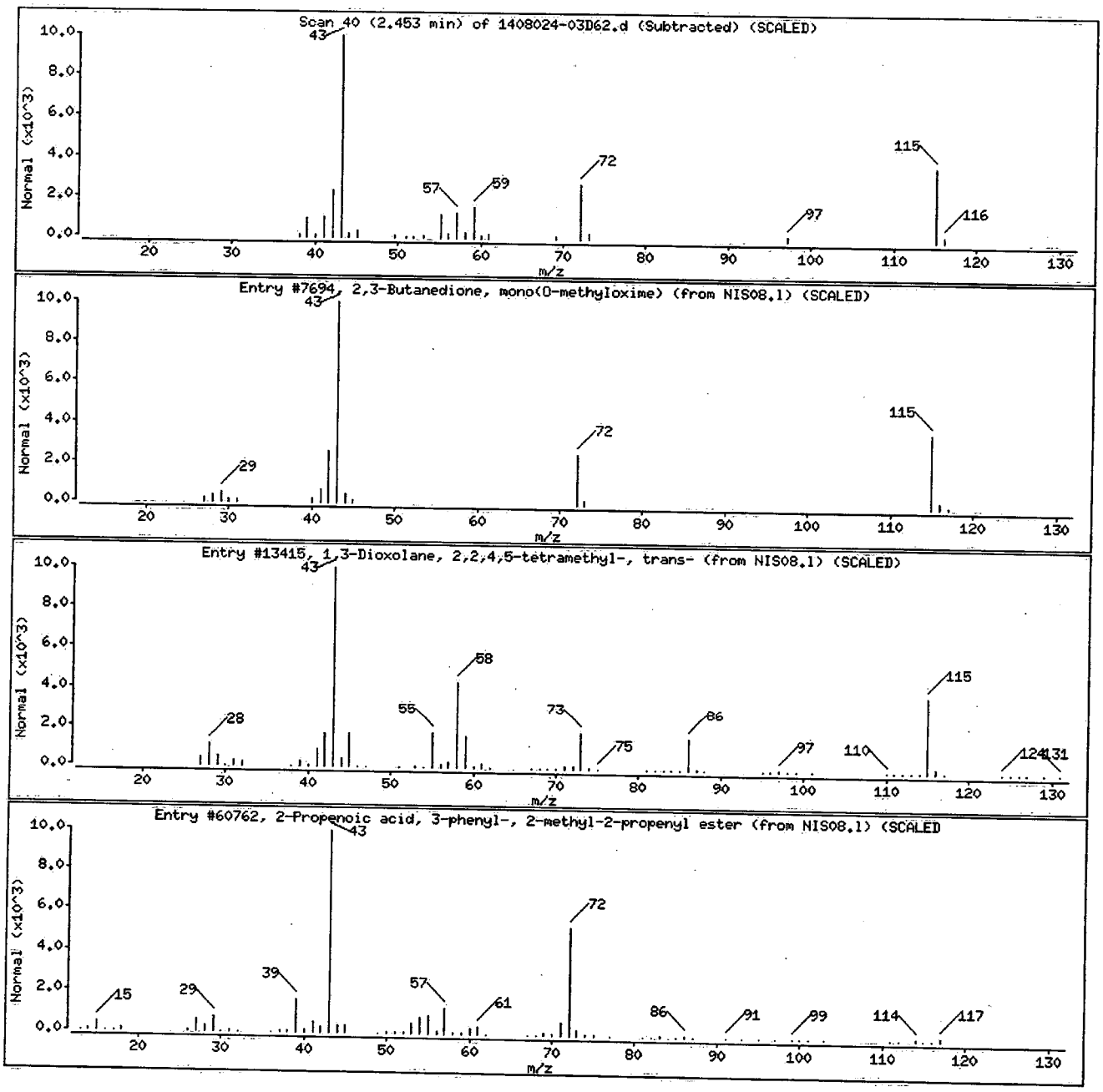
Client ID: P001-S003-0002-02 Instrument: 5972hp62.i

Sample Info: 1408024-03:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,3-Butanedione, mono(O-methyloxime)	617-32-3	NIS08.l	7694	64	C5H9NO2	115
1,3-Dioxolane, 2,2,4,5-tetramethyl-, tra	17226-66-3	NIS08.l	13415	42	C7H14O2	130
2-Propenoic acid, 3-phenyl-, 2-methyl-2-	54889-46-2	NIS08.l	60762	35	C13H14O2	202



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

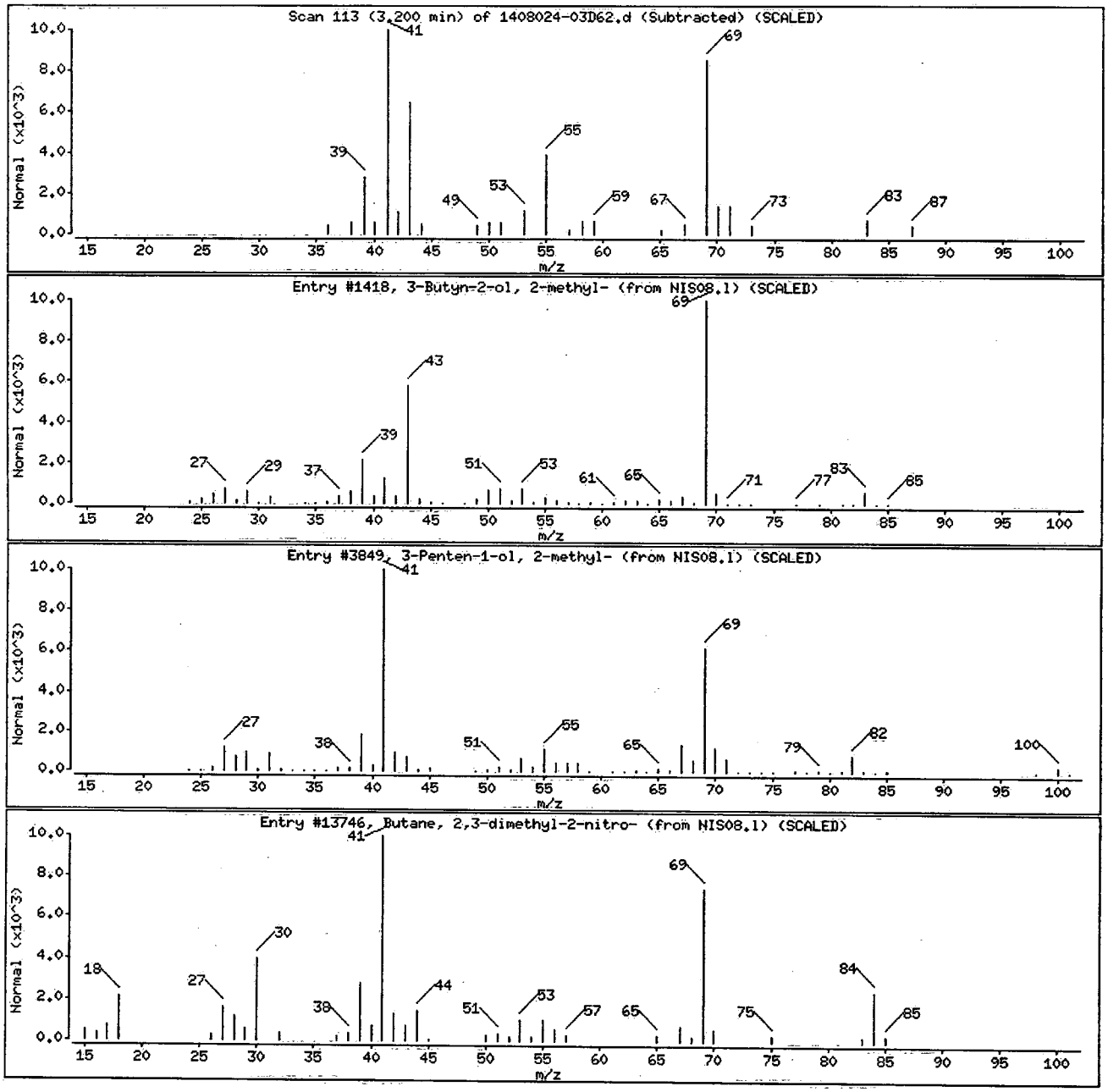
Client ID: P001-S003-0002-02 Instrument: 5972hp62.i

Sample Info: 1408024-03:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Butyn-2-ol, 2-methyl-	115-19-5	NIS08.l	1418	50	C5H8O	84
3-Penten-1-ol, 2-methyl-	62238-37-3	NIS08.l	3849	50	C6H12O	100
Butane, 2,3-dimethyl-2-nitro-	34075-28-0	NIS08.l	13746	36	C6H13NO2	131



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

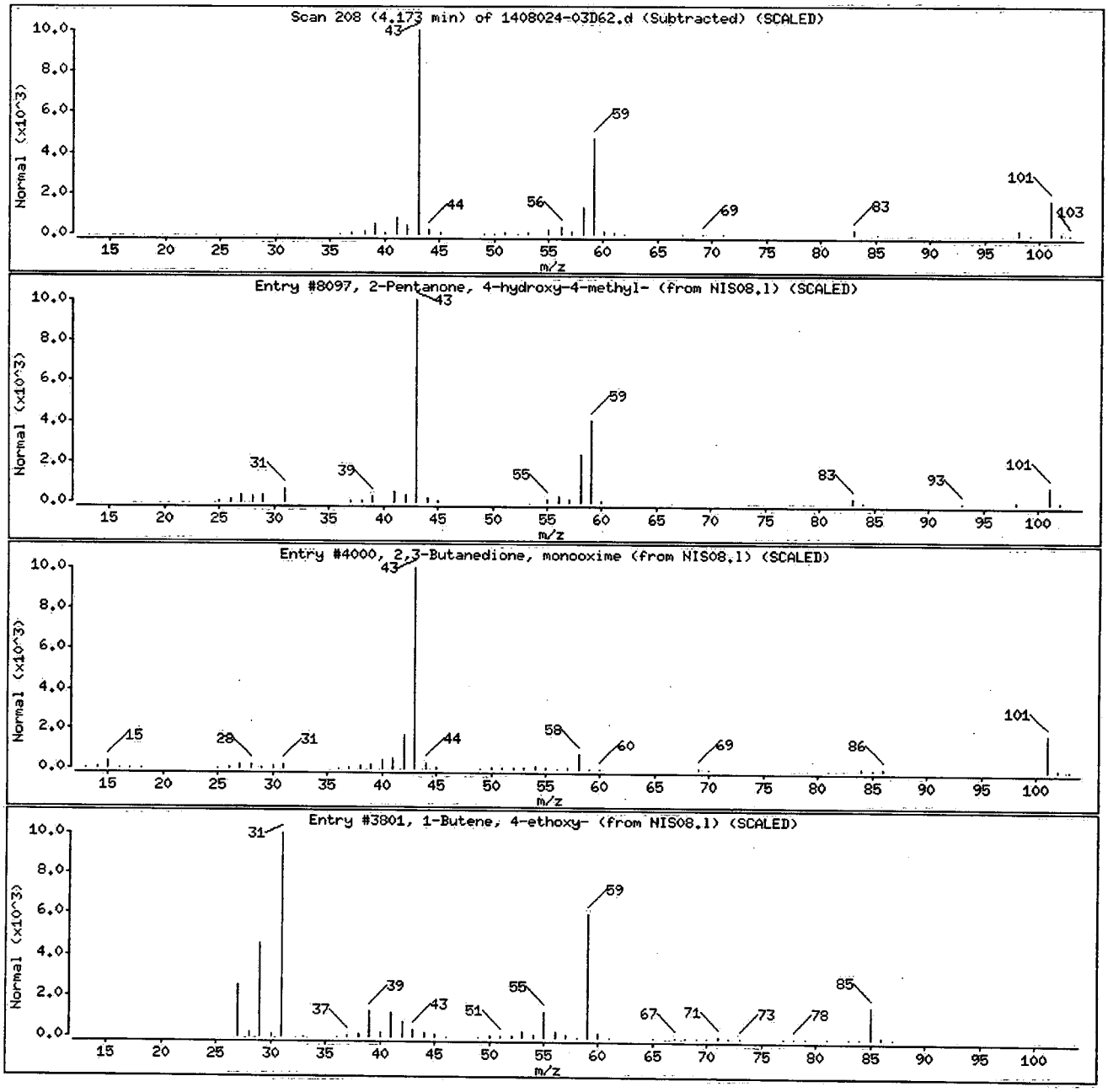
Client ID: P001-S003-0002-02 Instrument: 5972hp62.i

Sample Info: 1408024-03:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIS08.1	8097	45	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIS08.1	4000	27	C4H7NO2	101
1-Butene, 4-ethoxy-	44611-46-3	NIS08.1	3801	23	C6H12O	100



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

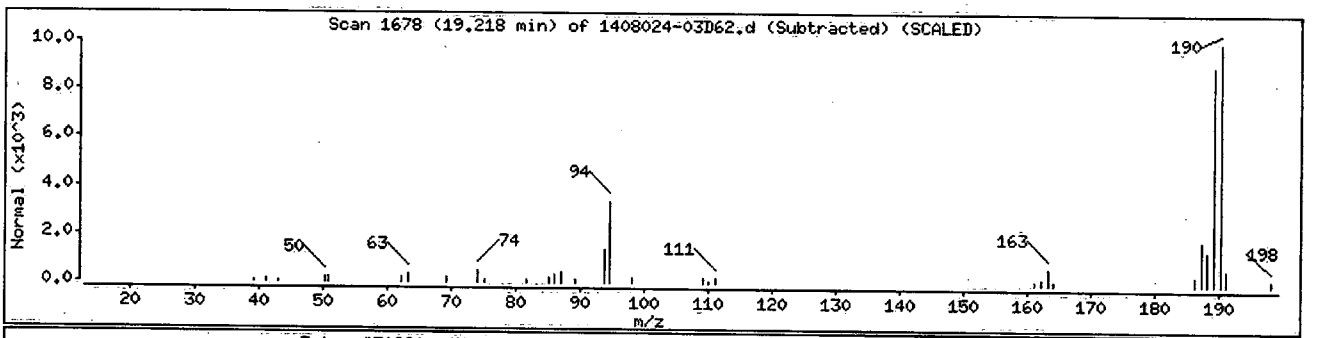
Client ID: P001-S003-0002-02 Instrument: 5972hp62.i

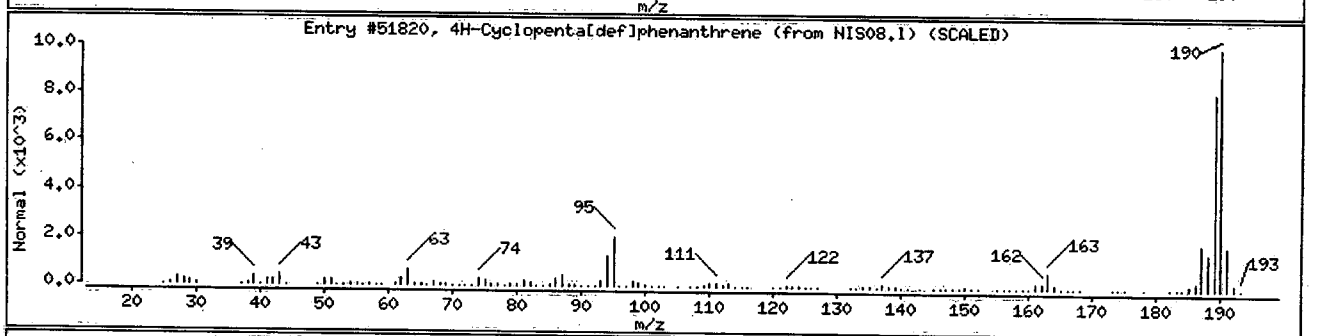
Sample Info: 1408024-03:OWS:10

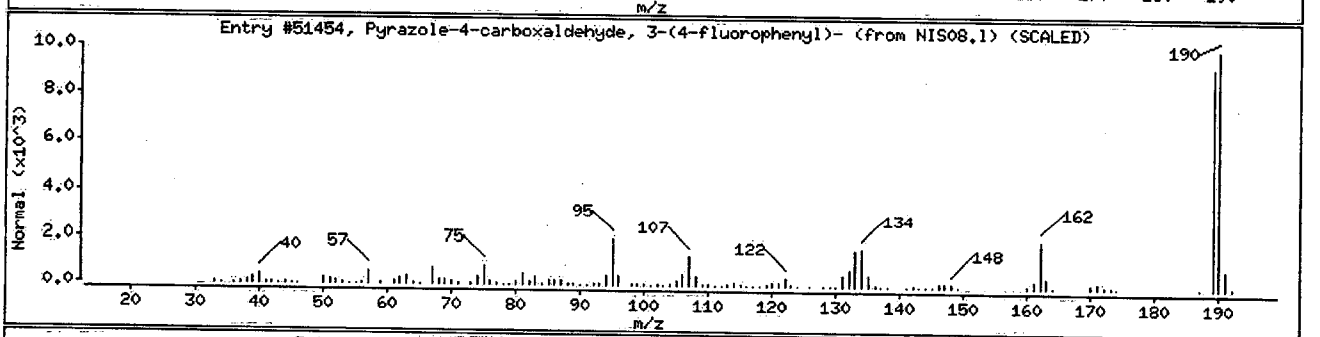
Volume Injected (uL): 2.0 Operator: OWS

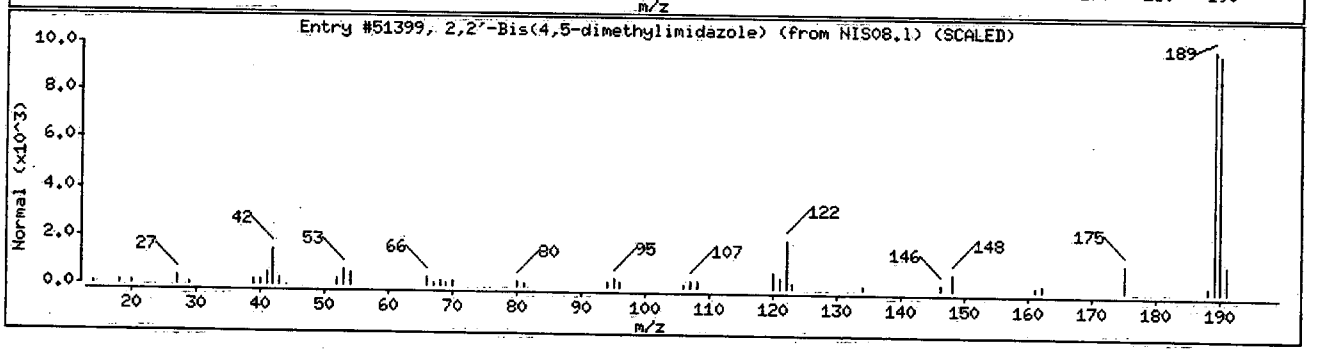
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
4H-Cyclopenta[def]phenanthrene	203-64-5	NIS08.1	51820	87	C15H10	190
Pyrazole-4-carboxaldehyde, 3-(4-fluoroph	306936-57-2	NIS08.1	51454	50	C10H7FN2O	190
2,2'-Bis(4,5-dimethylimidazole)	69286-06-2	NIS08.1	51399	36	C10H14N4	190









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

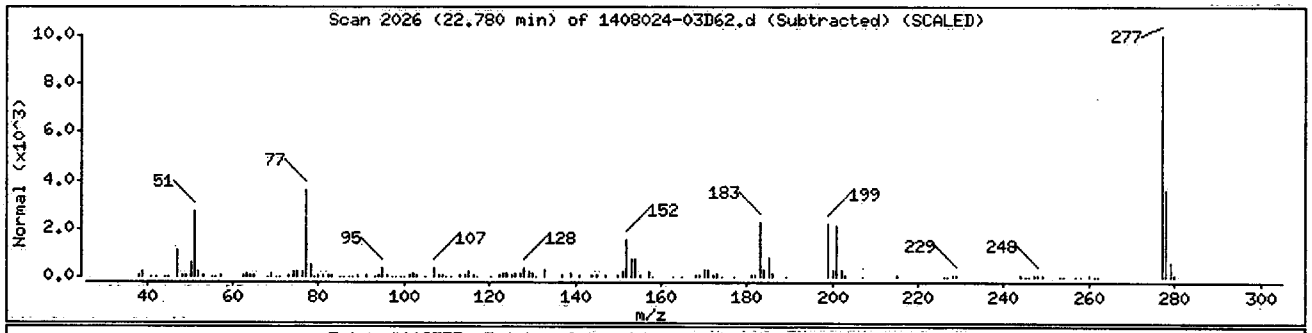
Client ID: P001-S003-0002-02 Instrument: 5972hp62.i

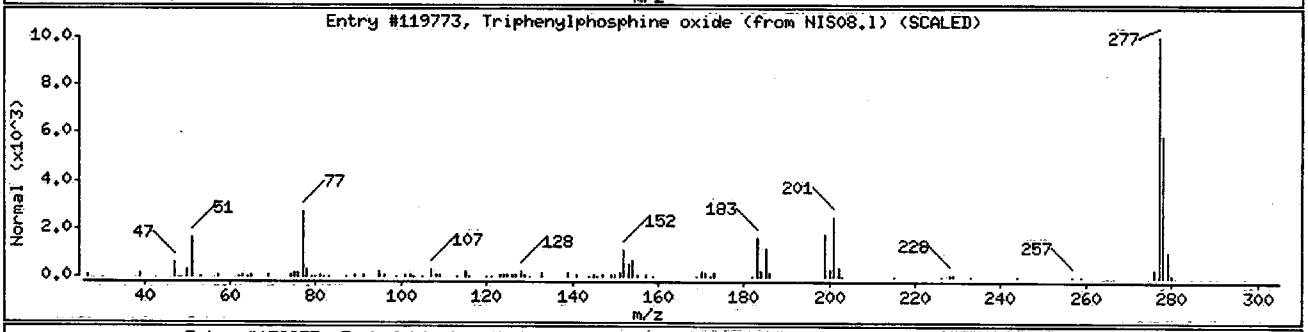
Sample Info: 1408024-03:OWS:10

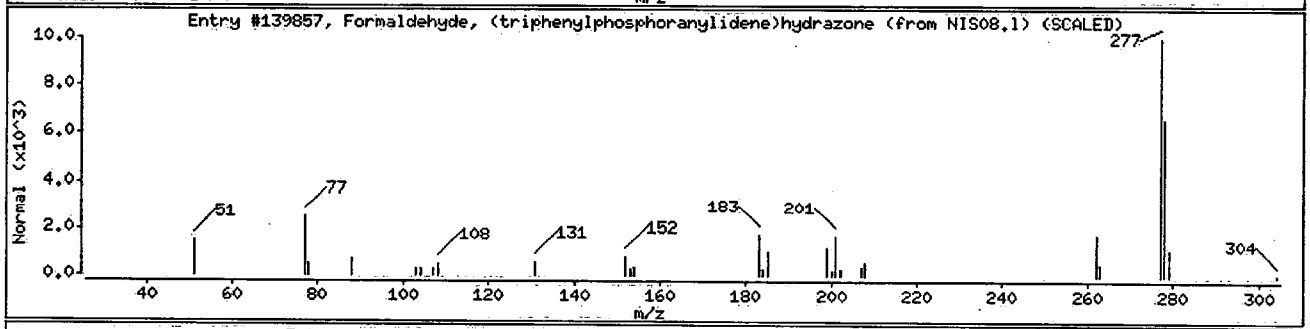
Volume Injected (uL): 2.0 Operator: OWS

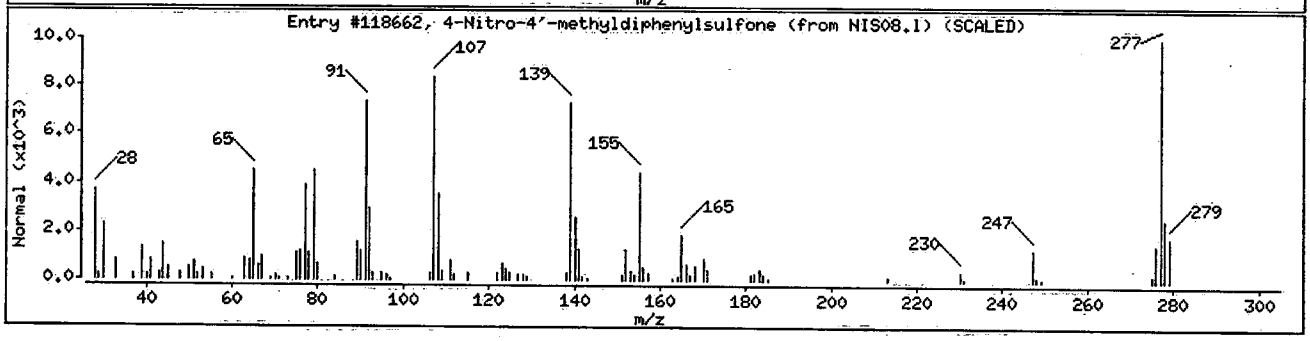
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Triphenylphosphine oxide	791-28-6	NIS08.1	119773	93	C18H15OP	278
Formaldehyde, (triphenylphosphoranyliden	15990-54-2	NIS08.1	139857	50	C19H17N2P	304
4-Nitro-4'-methyldiphenylsulfone	4094-37-5	NIS08.1	118662	38	C13H11NO4S	277









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

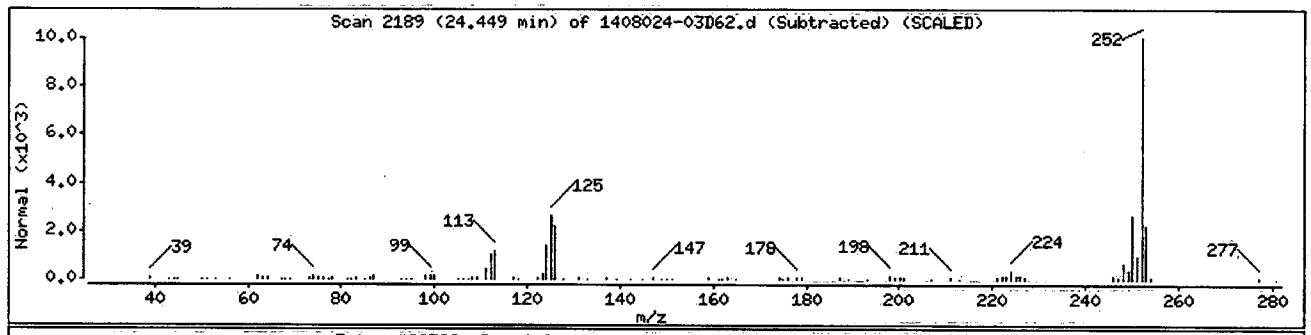
Client ID: P001-S003-0002-02 Instrument: 5972hp62.i

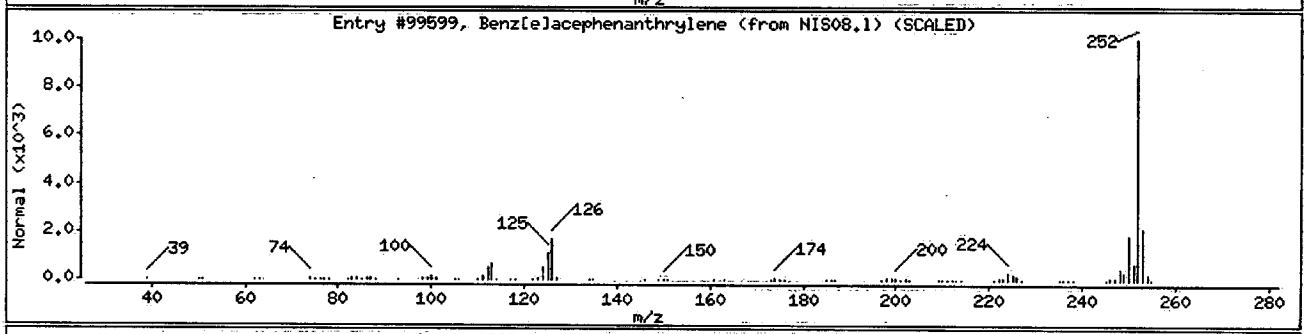
Sample Info: 1408024-03:OWS:10

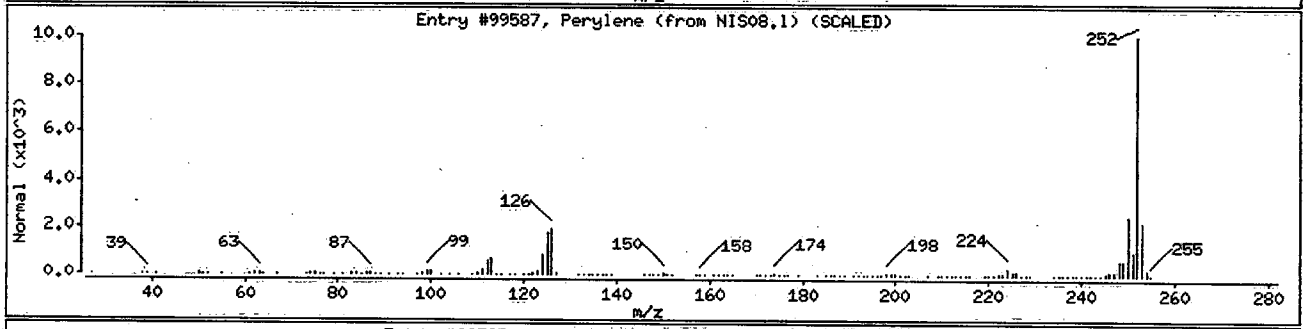
Volume Injected (uL): 2.0 Operator: OWS

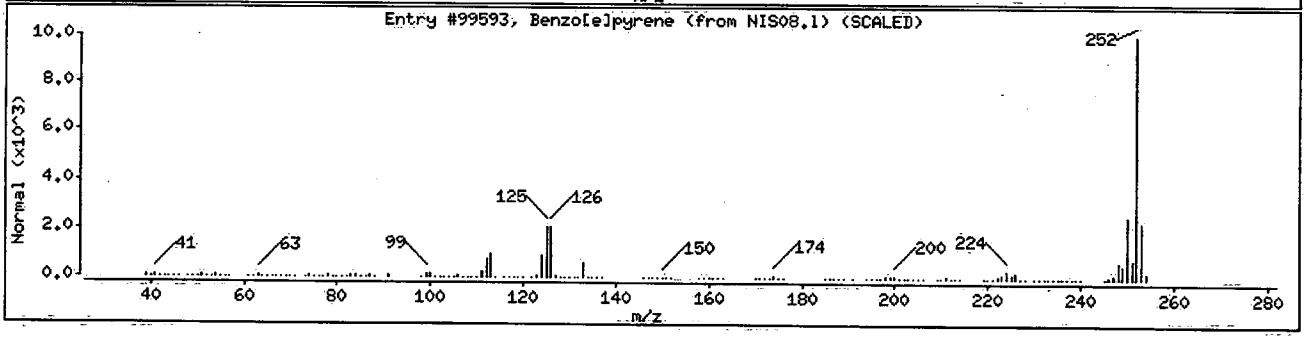
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Benz[e]acephenanthrylene	205-99-2	NIS08.l	99599	95	C20H12	252
Perylene	198-55-0	NIS08.l	99587	93	C20H12	252
Benzo[e]pyrene	192-97-2	NIS08.l	99593	93	C20H12	252









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

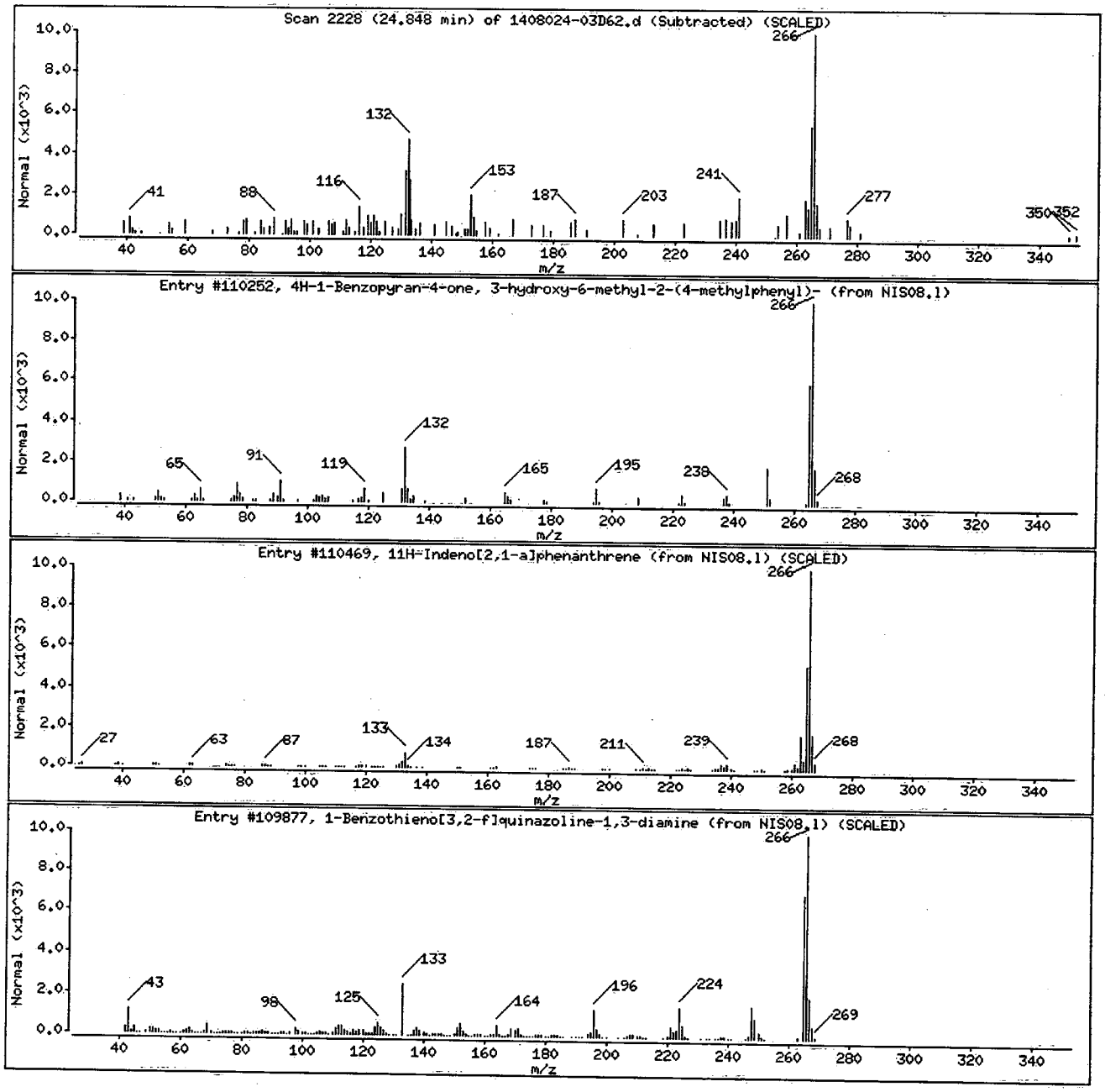
Client ID: P001-S003-0002-02 Instrument: 5972hp62.i

Sample Info: 1408024-03:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
4H-1-Benzopyran-4-one, 3-hydroxy-6-methy	78396-37-9	NIS08.1	110252	46	C17H14O3	266
11H-Indeno[2,1-a]phenanthrene	220-97-3	NIS08.1	110469	38	C21H14	266
1-Benzothieno[3,2-f]quinazoline-1,3-diam	65642-92-4	NIS08.1	109877	38	C14H10N4S	266



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

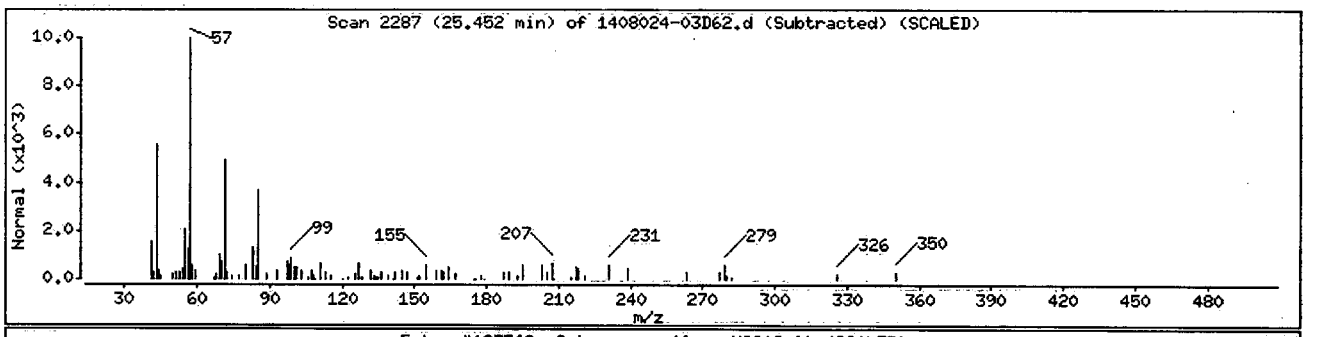
Client ID: P001-S003-0002-02 Instrument: 5972hp62.i

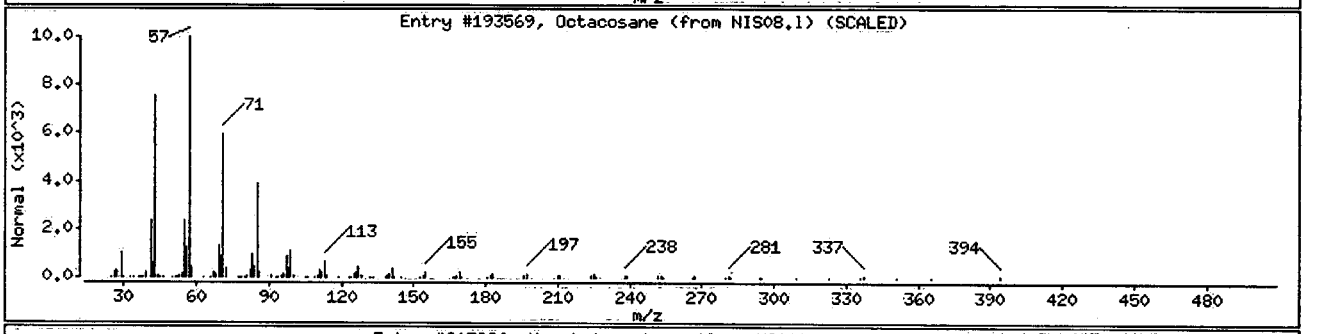
Sample Info: 1408024-03:OWS:10

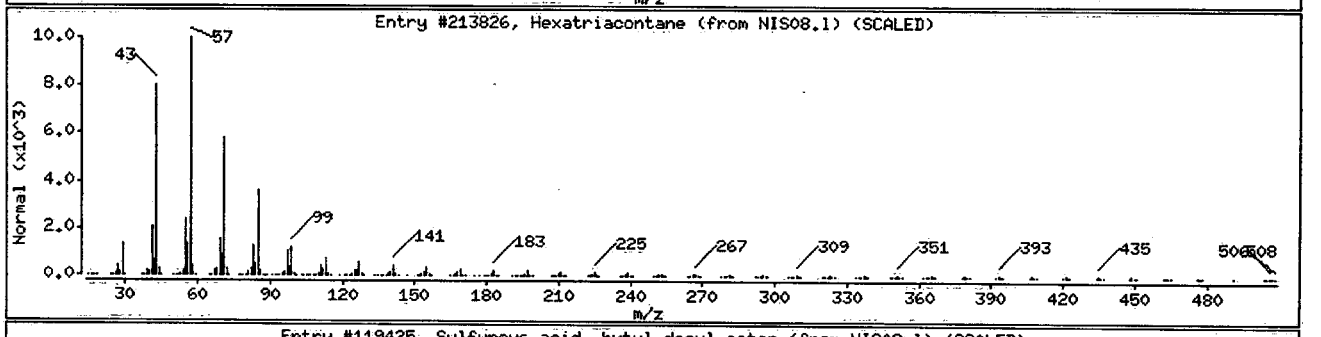
Volume Injected (uL): 2.0 Operator: OWS

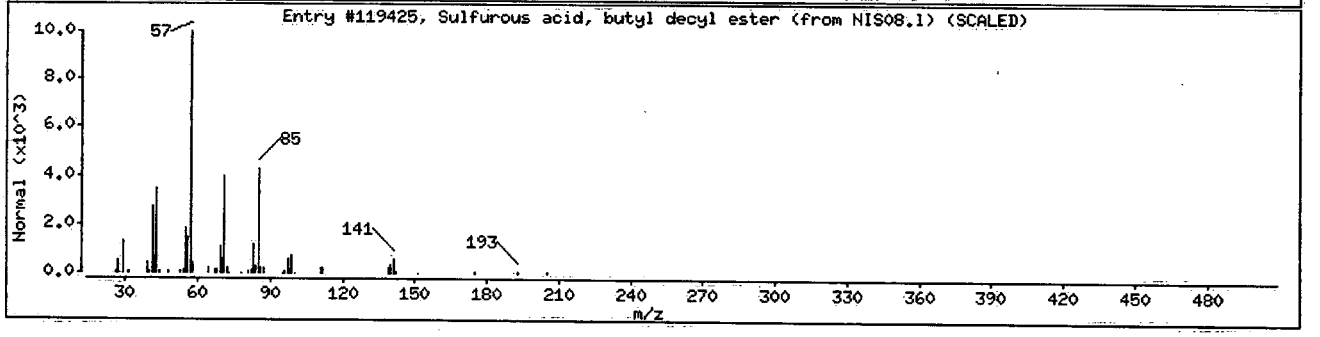
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Octacosane	630-02-4	NIS08.1	193569	64	C28H58	394
Hexatriacontane	630-06-8	NIS08.1	213826	64	C36H74	507
Sulfurous acid, butyl decyl ester	1000309-17-7	NIS08.1	119425	64	C14H30O3S	278









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

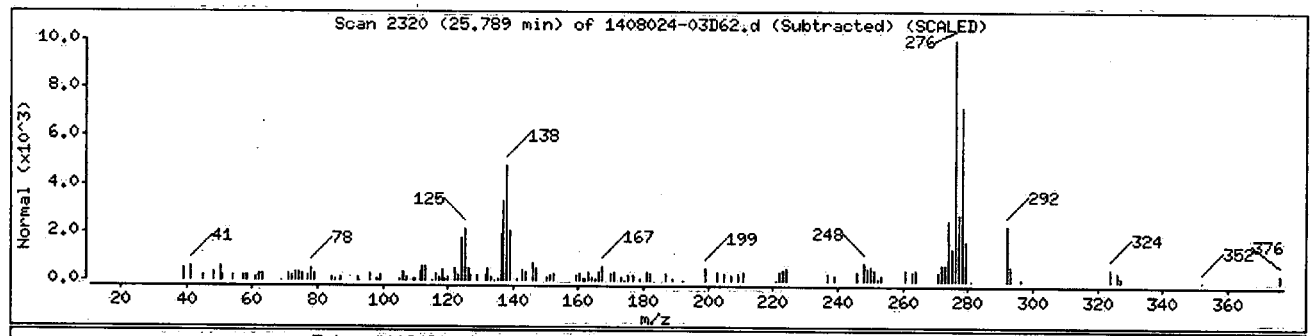
Client ID: P001-S003-0002-02 Instrument: 5972hp62.i

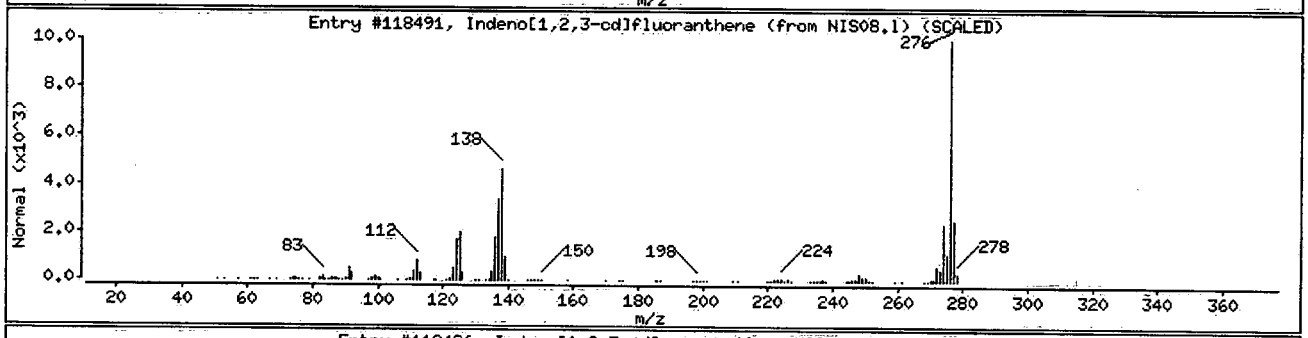
Sample Info: 1408024-03:OWS:10

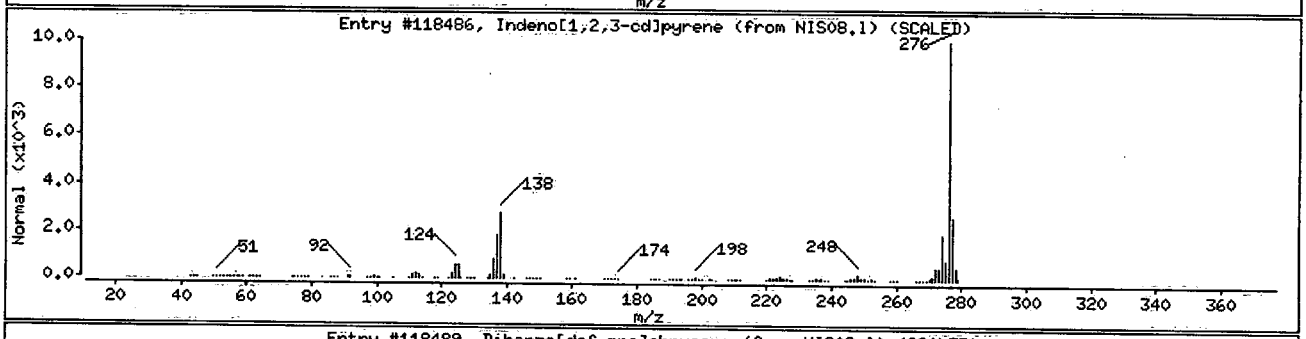
Volume Injected (uL): 2.0 Operator: OWS

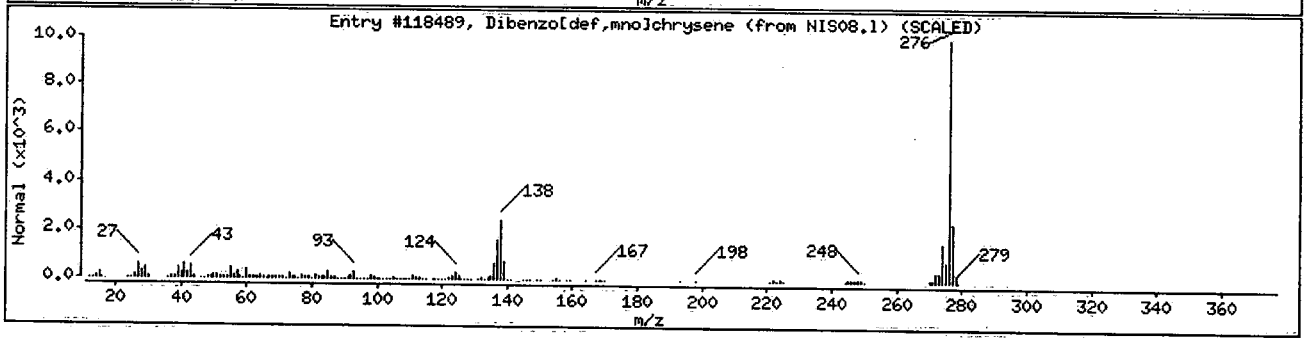
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Indeno[1,2,3-cd]fluoranthene	193-43-1	NIS08.l	118491	83	C22H12	276
Indeno[1,2,3-cd]pyrene	193-39-5	NIS08.l	118486	78	C22H12	276
Dibenzo[def,mno]chrysene	191-26-4	NIS08.l	118489	64	C22H12	276









Robert Hamm 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

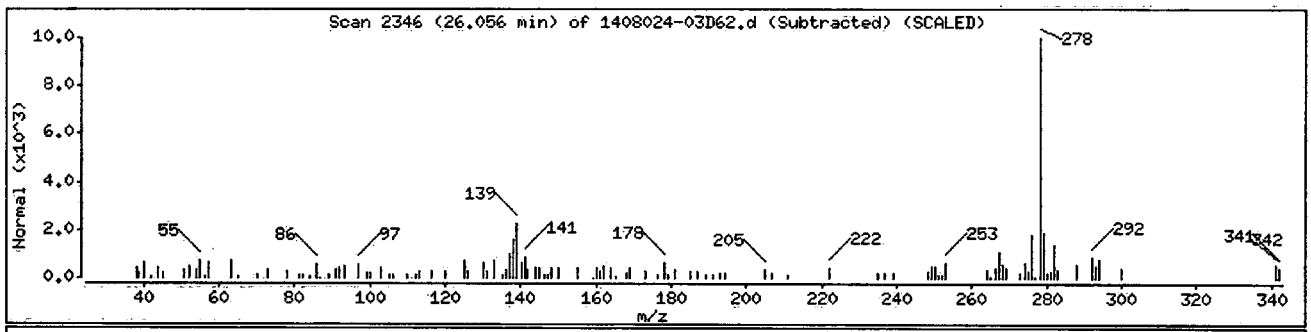
Client ID: P001-S003-0002-02 Instrument: 5972hp62.i

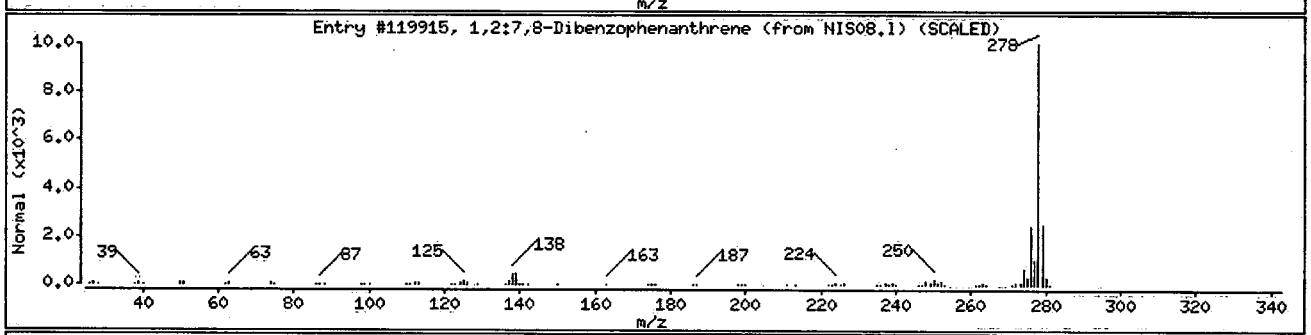
Sample Info: 1408024-03:OWS:10

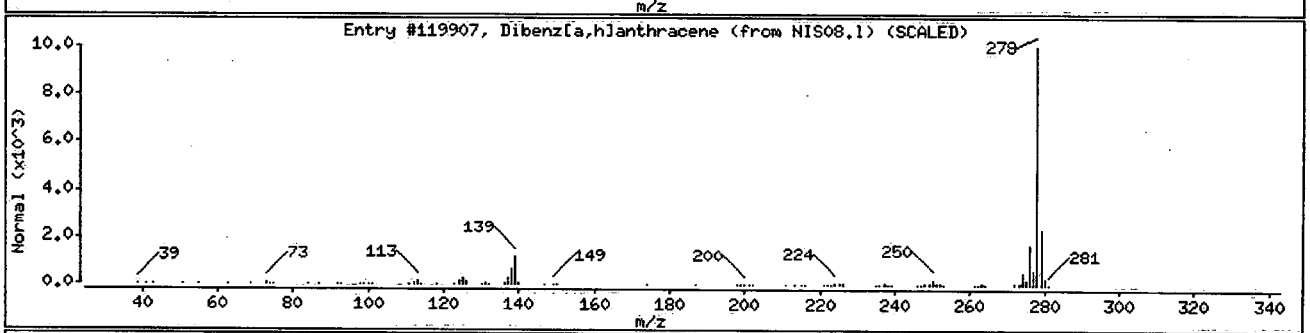
Volume Injected (uL): 2.0 Operator: OWS

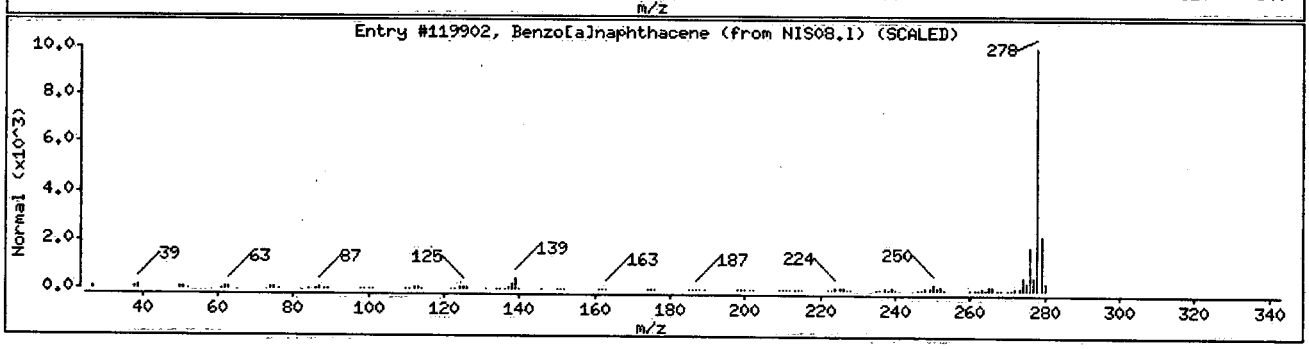
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
1,2:7,8-Dibenzophenanthrene	213-46-7	NIS08.l	119915	86	C22H14	278
Dibenz[a,h]anthracene	53-70-3	NIS08.l	119907	86	C22H14	278
Benzo[a]naphthacene	226-88-0	NIS08.l	119902	86	C22H14	278









Roldan Hani 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-03D62.d

Date : 15-AUG-2014 22:22

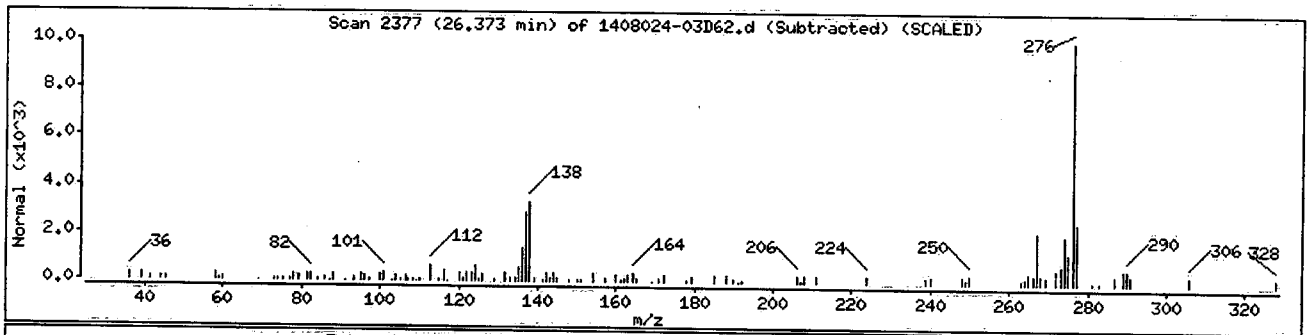
Client ID: P001-S003-0002-02 Instrument: 5972hp62.i

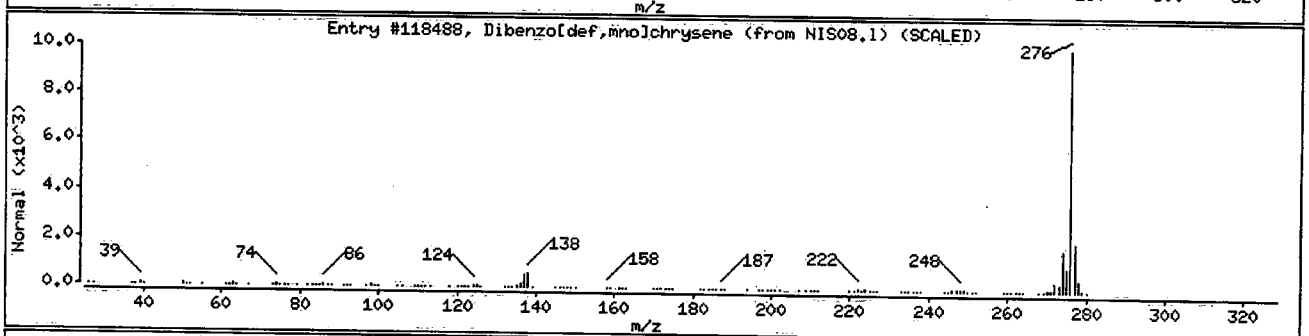
Sample Info: 1408024-03:OWS:10

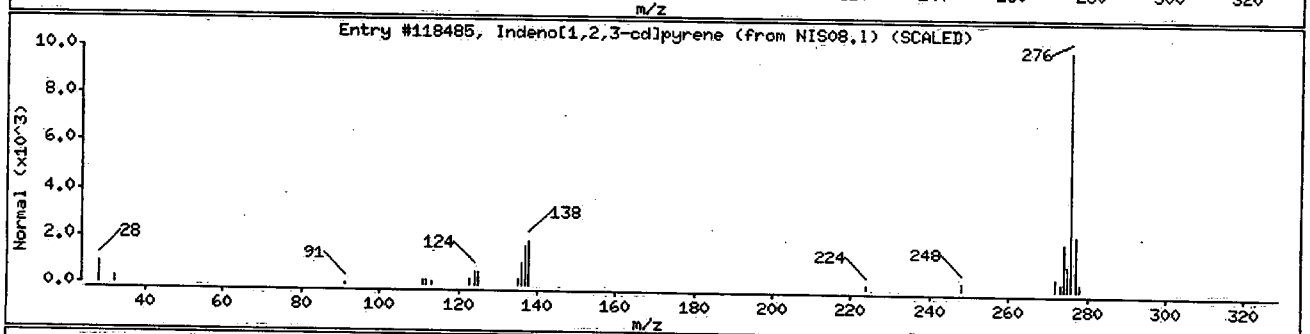
Volume Injected (uL): 2.0 Operator: OWS

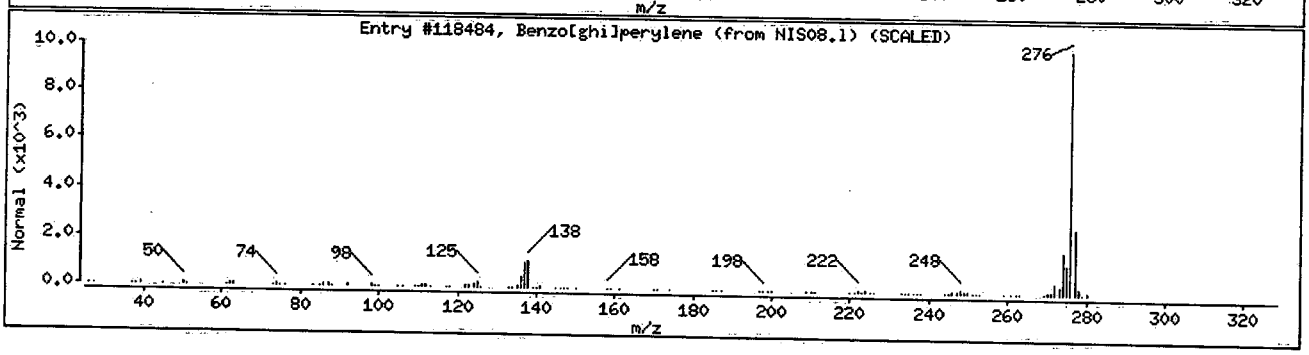
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Dibenzo[def,mno]chrysene	191-26-4	NIS08.1	118488	92	C22H12	276
Indeno[1,2,3-cd]pyrene	193-39-5	NIS08.1	118485	86	C22H12	276
Benzo[ghi]perylene	191-24-2	NIS08.1	118484	86	C22H12	276









Robin Hai 8/19/2014

ANALYSIS DATA SHEET
SW8270D

P001-S004-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-06D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30.1g / 15000uL | Sulfur Cleanup: N | Lab ID: 1408024-06 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 3 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/16/14 00:21

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
108-95-2	Phenol		8500	51000	U
111-44-4	Bis(2-chloroethyl)ether		3000	26000	U
95-57-8	2-Chlorophenol		8300	51000	U
95-48-7	2-Methylphenol		5900	51000	U
108-60-1	2,2'-oxybis(1-Chloropropane)		3900	26000	U
106-44-5	3 & 4-Methylphenol		5200	51000	U
621-64-7	N-Nitroso-di-N-propylamine		4900	26000	U
98-86-2	Acetophenone		6800	26000	U
67-72-1	Hexachloroethane		17000	26000	U
98-95-3	Nitrobenzene		6400	26000	U
78-59-1	Isophorone		4500	26000	U
88-75-5	2-Nitrophenol		6400	51000	U
105-67-9	2,4-Dimethylphenol		8000	51000	U
111-91-1	Bis(2-chloroethoxy)methane		6900	26000	U
120-83-2	2,4-Dichlorophenol		6100	51000	U
91-20-3	Naphthalene		3600	26000	U
106-47-8	4-Chloroaniline		4300	51000	U
87-68-3	Hexachlorobutadiene		4100	26000	U
59-50-7	4-Chloro-3-methylphenol		3700	51000	U
91-57-6	2-Methylnaphthalene		4600	26000	U
77-47-4	Hexachlorocyclopentadiene		4800	26000	U
88-06-2	2,4,6-Trichlorophenol		4700	51000	U
95-95-4	2,4,5-Trichlorophenol		3800	51000	U
91-58-7	2-Chloronaphthalene		6200	26000	U
88-74-4	2-Nitroaniline		3800	51000	U
131-11-3	Dimethylphthalate		2500	26000	U
606-20-2	2,6-Dinitrotoluene		2700	26000	U
208-96-8	Acenaphthylene		4600	26000	U
99-09-2	3-Nitroaniline		3400	51000	U
83-32-9	Acenaphthene		4600	26000	U
51-28-5	2,4-Dinitrophenol		2400	51000	U
100-02-7	4-Nitrophenol		7100	51000	U
121-14-2	2,4-Dinitrotoluene		3100	26000	U
132-64-9	Dibenzofuran		4700	26000	U
84-66-2	Diethylphthalate		2900	26000	U

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[redacted]

ANALYSIS DATA SHEET
SW8270D

P001-S004-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-06D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30.1g / 15000uL | Sulfur Cleanup: N | Lab ID: 1408024-06 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 3 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/16/14 00:21

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
7005-72-3	4-Chlorophenyl-phenylether		3300	26000	U
86-73-7	Fluorene		3400	26000	U
100-01-6	4-Nitroaniline		6800	51000	U
534-52-1	4,6-Dinitro-2-methylphenol		6900	51000	U
86-30-6	N-Nitrosodiphenylamine (1)		4600	26000	U
101-55-3	4-Bromophenyl-phenylether		3900	26000	U
118-74-1	Hexachlorobenzene		3400	26000	U
87-86-5	Pentachlorophenol		6700	51000	U
85-01-8	Phenanthrene	9800	1500	26000	JD
120-12-7	Anthracene	1500	1300	26000	JD
86-74-8	Carbazole		2700	26000	U
84-74-2	Di-n-butylphthalate		3800	26000	U
206-44-0	Fluoranthene	9700	3800	26000	JD
129-00-0	Pyrene	7700	3400	26000	JD
85-68-7	Butylbenzylphthalate		4100	26000	U
91-94-1	3,3'-Dichlorobenzidine		5300	26000	U
117-81-7	bis(2-ethylhexyl)Phthalate		4700	26000	U
56-55-3	Benzo (a) anthracene	4400	4200	26000	JD
218-01-9	Chrysene	6700	1600	26000	JD
117-84-0	Di-n-octylphthalate		5100	26000	U
205-99-2	Benzo (b) fluoranthene	5400	4000	26000	JD
207-08-9	Benzo(k)fluoranthene		3700	26000	U
50-32-8	Benzo (a) pyrene	3300	2800	26000	JD
193-39-5	Indeno(1,2,3-cd)pyrene		4400	26000	U
53-70-3	Dibenzo(a,h)anthracene		7200	26000	U
191-24-2	Benzo (g,h,i) perylene		4600	26000	U
100-52-7	Benzaldehyde		4100	26000	U
105-60-2	Caprolactam		4300	26000	U
1912-24-9	Atrazine		3000	26000	U
92-52-4	1,1'-Biphenyl		6100	26000	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	3424	ND		35 - 105	D
Phenol-d5	3424	ND		40 - 100	D
Nitrobenzene-d5	1712	ND		35 - 100	D

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ANALYSIS DATA SHEET

SW8270D

P001-S004-0002-01

Client:	WESTON SOLUTIONS	SDG	1408024	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ		
Matrix:	Soil	Extraction:	EPA 3550C MOD_SV	File ID:	1408024-06D62.d	Sampled:	08/07/14 00:00
Initial/Final:	30.1g / 15000uL	Sulfur Cleanup:	N	Lab ID:	1408024-06	Received:	08/08/14 09:04
Dilution:	10 pH:	Florisil Cleanup:	N			Prepared:	08/12/14 09:00
% Moisture:	3	GPC Cleanup:	N	GPC Cleanup Factor:	N	Analyzed:	08/16/14 00:21
Batch:	4080818	Sequence:	4H15001	Calibration:	4072701	Instrument:	5972hp62

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	1712	ND		45 - 105	D
2,4,6-Tribromophenol	3424	ND		35 - 125	D
Terphenyl-d14	1712	ND		30 - 125	D

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q
000057-10-3	n-Hexadecanoic acid	540000	14108970	19.495	97	JDN
000057-11-4	Octadecanoic acid	120000	10247370	20.774	99	JDN
791-28-6	Triphenylphosphine oxide	74000	6501472	22.791	97	JDN
NA	Unk. Alkane	68000	5898530	21.204	0	JD
NA	Unk. Alkane(1)	86000	7465379	21.645	0	JD
NA	Unk. Alkane(10)	140000	12649880	23.436	0	JD
NA	Unk. Alkane(11)	43000	11033290	23.671	0	JD
NA	Unk. Alkane(12)	70000	17924230	23.814	0	JD
NA	Unk. Alkane(13)	84000	21641410	23.947	0	JD
NA	Unk. Alkane(14)	77000	19742090	24.285	0	JD
NA	Unk. Alkane(15)	75000	19319580	24.736	0	JD
NA	Unk. Alkane(16)	81000	20752660	24.879	0	JD
NA	Unk. Alkane(17)	41000	10498090	25.165	0	JD
NA	Unk. Alkane(18)	67000	17317330	25.339	0	JD
NA	Unk. Alkane(19)	59000	15068890	26.005	0	JD
NA	Unk. Alkane(2)	64000	5578523	22.126	0	JD
NA	Unk. Alkane(3)	66000	5783962	22.238	0	JD
NA	Unk. Alkane(4)	120000	10596850	22.32	0	JD
NA	Unk. Alkane(5)	110000	9886893	22.627	0	JD
NA	Unk. Alkane(6)	86000	7549384	22.832	0	JD
NA	Unk. Alkane(7)	90000	7835200	22.914	0	JD
NA	Unk. Alkane(8)	110000	9919993	23.159	0	JD
NA	Unk. Alkane(9)	190000	16500400	23.333	0	JD
NA	Unknown 25.759	65000	16618630	25.759	0	JD

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.
(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.
(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

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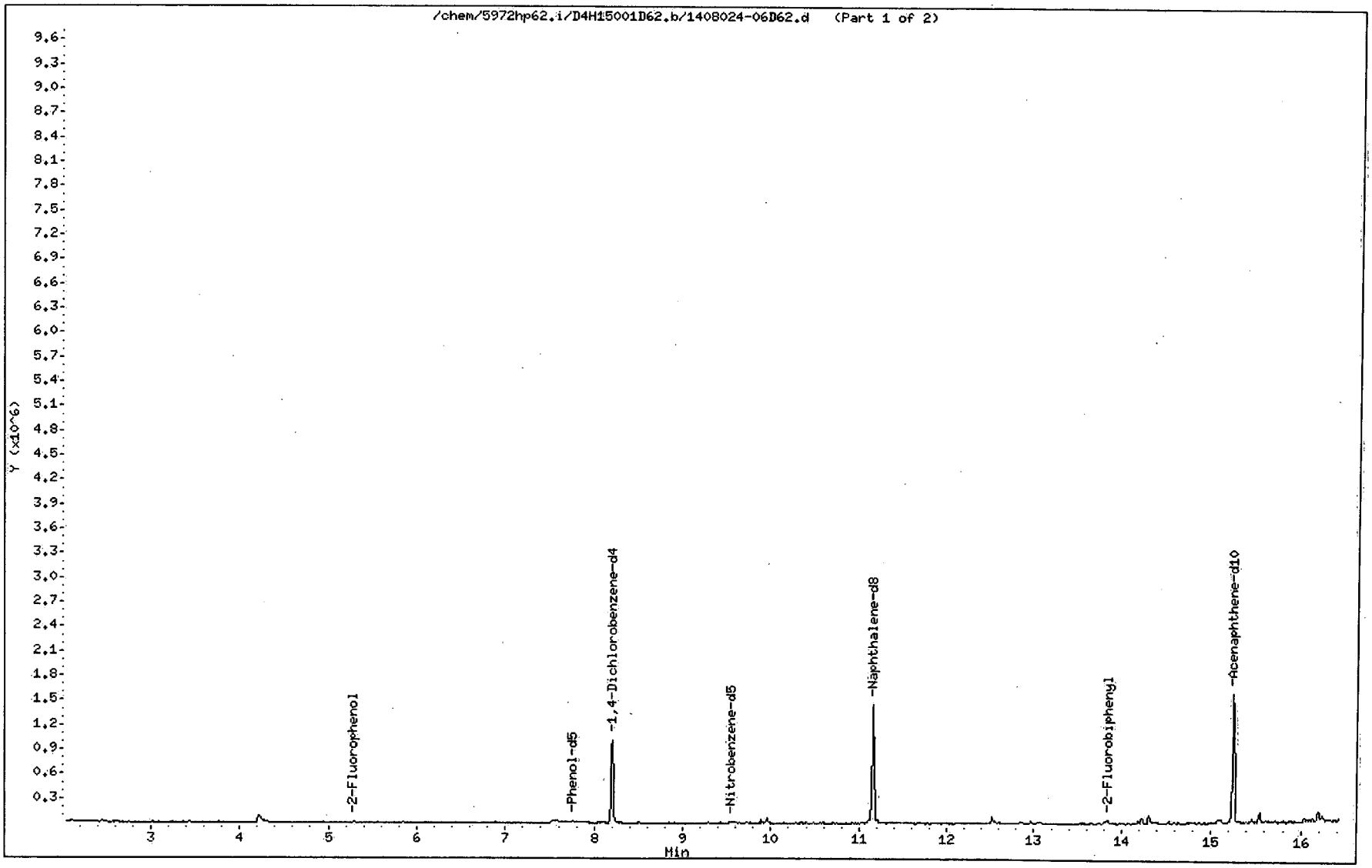
Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d
Date : 16-AUG-2014 00:21
Client ID: P001-S004-0002-01
Sample Info: 1408024-06:OWS:10
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32

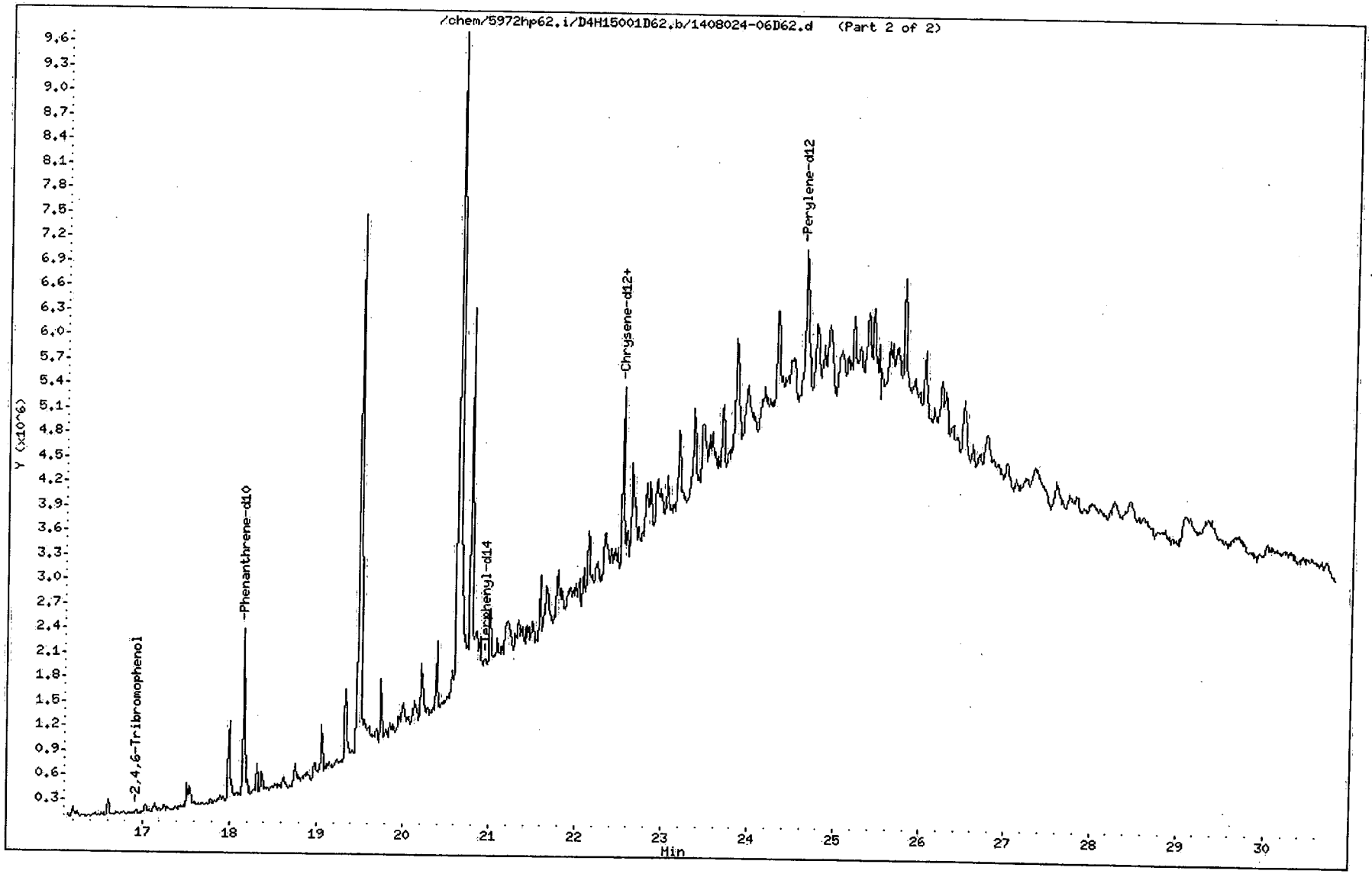


8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d
Date : 16-AUG-2014 00:21
Client ID: P001-S004-0002-01
Sample Info: 1408024-06:OWS:10
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i

Operator: OWS
Column diameter: 0.32



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d
Report Date: 19-Aug-2014 11:24

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d
Lab Smp Id: 1408024-06 Client Smp ID: P001-S004-0002-01
Inj Date : 16-AUG-2014 00:21
Operator : OWS Inst ID: 5972hp62.i
Smp Info : 1408024-06:OWS:10
Misc Info : P001-S004-0002-01
Comment :
Method : /chem/5972hp62.i/D4H15001D62.b/8270Dv26.m
Meth Date : 19-Aug-2014 11:23 ron Quant Type: ISTD
Cal Date : 23-JUL-2014 19:31 Cal File: 4G23008-CAL662.d
Als bottle: 17
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	15000.00000	Volume of final extract (uL)(1000 low, 2
Vi	2.00000	Volume injected (uL)
Ws	30.10000	Weight of sample extracted (g)
M	3.00000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	8.206	8.212	(1.000)	284846	40.0000		
* 2 Naphthalene-d8	136	11.164	11.170	(1.000)	1057898	40.0000		
* 3 Acenaphthene-d10	164	15.247	15.254	(1.000)	578449	40.0000		
* 4 Phenanthrene-d10	188	18.165	18.171	(1.000)	1004233	40.0000		
* 5 Chrysene-d12	240	22.525	22.521	(1.000)	979960	40.0000		
* 6 Perylene-d12	264	24.613	24.609	(1.000)	698889	40.0000		
$ 7 2-Fluorophenol	112	5.289	5.274	(0.645)	9669	1.05284	2700	(a)
$ 8 Phenol-d5	99	7.765	7.751	(0.946)	12302	0.93810	2400	(a)
$ 9 Nitrobenzene-d5	82	9.536	9.532	(0.854)	5042	0.47515	1200	(a)
$ 10 2-Fluorobiphenyl	172	13.815	13.821	(0.906)	10997	0.61266	1600	(aM)
$ 11 2,4,6-Tribromophenol	330	16.926	16.932	(1.110)	4214	1.32699	3400	0 (aM)
$ 12 Terphenyl-d14	244	20.938	20.945	(0.930)	12277	0.64086	1600	(a)
15 Phenol	94	Compound Not Detected.						

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d
Report Date: 19-Aug-2014 11:24

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
17 Bis(2-chloroethyl)ether	93	Compound Not Detected.						
18 2-Chlorophenol	128	Compound Not Detected.						
23 2-Methylphenol	108	Compound Not Detected.						
24 2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.						
25 3 & 4-Methylphenol	108	Compound Not Detected.						
26 N-Nitroso-di-N-propylamine	70	Compound Not Detected.						
27 Acetophenone	105	Compound Not Detected.						
28 Hexachloroethane	117	Compound Not Detected.						
29 Nitrobenzene	77	Compound Not Detected.						
30 Isophorone	82	Compound Not Detected.						
31 2-Nitrophenol	139	Compound Not Detected.						
32 2,4-Dimethylphenol	122	Compound Not Detected.						
33 Bis(2-chloroethoxy)methane	93	Compound Not Detected.						
34 2,4-Dichlorophenol	162	Compound Not Detected.						
36 Naphthalene	128	Compound Not Detected.						
37 4-Chloroaniline	127	Compound Not Detected.						
38 Hexachlorobutadiene	224	Compound Not Detected.						
39 4-Chloro-3-methylphenol	107	Compound Not Detected.						
40 2-Methylnaphthalene	141	Compound Not Detected.						
42 Hexachlorocyclopentadiene	236	Compound Not Detected.						
44 2,4,6-Trichlorophenol	196	Compound Not Detected.						
45 2,4,5-Trichlorophenol	196	Compound Not Detected.						
46 2-Chloronaphthalene	162	Compound Not Detected.						
47 2-Nitroaniline	65	Compound Not Detected.						
48 Dimethylphthalate	163	Compound Not Detected.						
50 2,6-Dinitrotoluene	165	Compound Not Detected.						
51 Acenaphthylene	152	Compound Not Detected.						
52 3-Nitroaniline	138	Compound Not Detected.						
53 Acenaphthene	153	Compound Not Detected.						
54 2,4-Dinitrophenol	184	Compound Not Detected.						
55 4-Nitrophenol	139	Compound Not Detected.						
56 2,4-Dinitrotoluene	165	Compound Not Detected.						
57 Dibenzofuran	168	Compound Not Detected.						
59 Diethylphthalate	149	Compound Not Detected.						
60 4-Chlorophenyl-phenylether	204	Compound Not Detected.						
61 Fluorene	166	Compound Not Detected.						
62 4-Nitroaniline	138	Compound Not Detected.						
63 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
64 N-Nitrosodiphenylamine (1)	169	Compound Not Detected.						
66 4-Bromophenyl-phenylether	248	Compound Not Detected.						
67 Hexachlorobenzene	283	Compound Not Detected.						
68 Pentachlorophenol	265	Compound Not Detected.						
69 Phenanthrene	178	18.205	18.212	(1.002)	100853	3.82290	9800	(a)
70 Anthracene	178	18.287	18.294	(1.007)	15203	0.57586	1500	(a)
71 Carbazole	167	Compound Not Detected.						
72 Di-n-butylphthalate	149	Compound Not Detected.						
73 Fluoranthene	202	20.212	20.218	(1.113)	105588	3.78905	9700	(a)

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d
Report Date: 19-Aug-2014 11:24

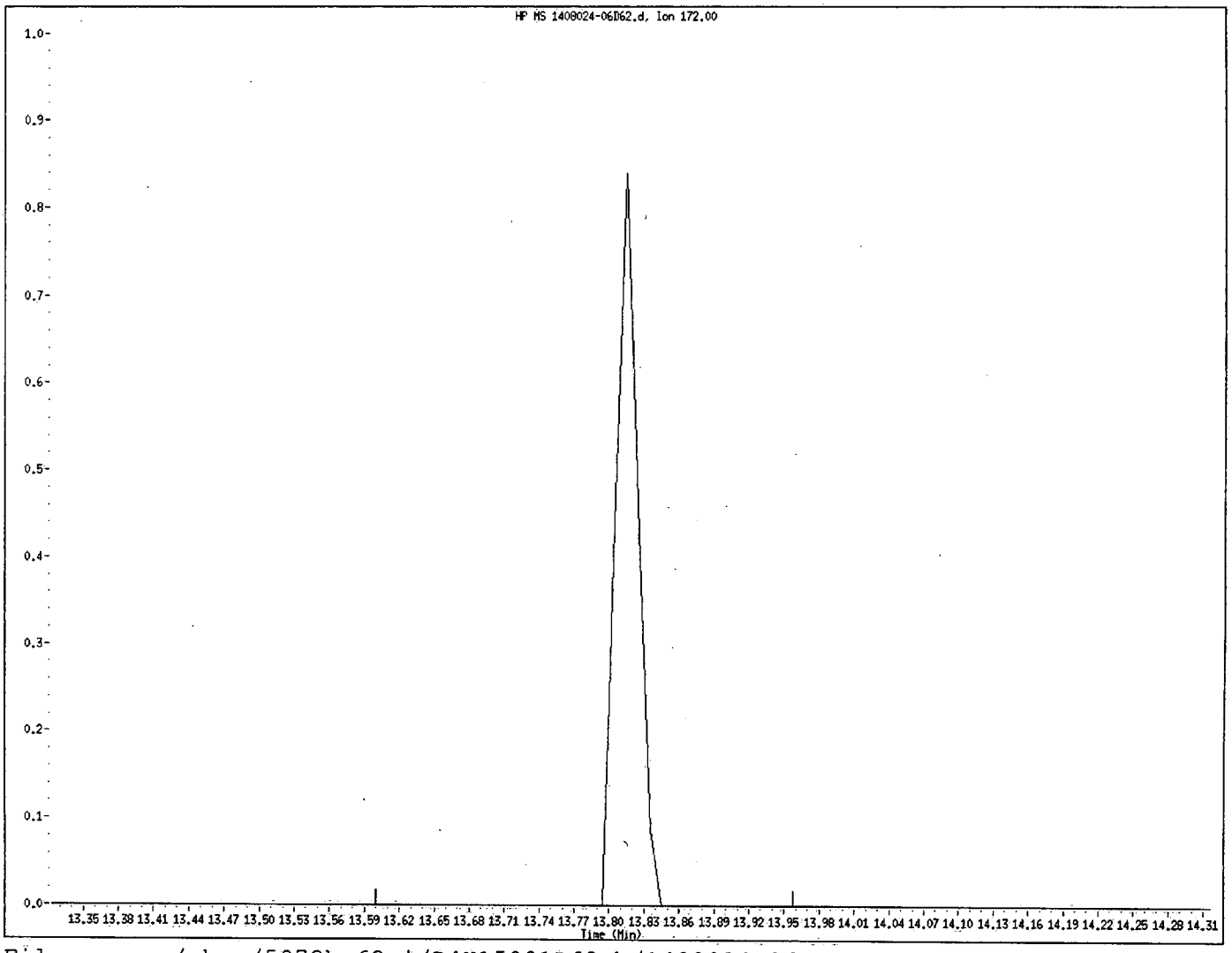
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
74 Pyrene	202	20.560	20.566	(0.913)	85625	3.01263	7700	(a)
75 Butylbenzylphthalate	149	Compound Not Detected.						
76 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
77 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
78 Benzo(a)anthracene	228	22.515	22.511	(1.000)	42210	1.70485	4400	(a)
79 Chrysene	228	22.555	22.562	(1.001)	59546	2.60849	6700	(a)
80 Di-n-octylphthalate	149	Compound Not Detected.						
81 Benzo(b)fluoranthene	252	24.101	24.097	(0.979)	51566	2.08335	5400	(a)
82 Benzo(k)fluoranthene	252	Compound Not Detected.						
83 Benzo(a)pyrene	252	24.531	24.527	(0.997)	29434	1.27485	3300	(a)
84 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.						
85 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
86 Benzo(g,h,i)perylene	276	Compound Not Detected.						
87 Benzaldehyde	77	Compound Not Detected.						
88 Caprolactam	113	Compound Not Detected.						
89 Atrazine	215	Compound Not Detected.						
90 1,1'-Biphenyl	154	Compound Not Detected.						

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.

8/19/2014

2-Fluorobiphenyl CAS Number 321-60-8 Area = 10997 Manually integrated



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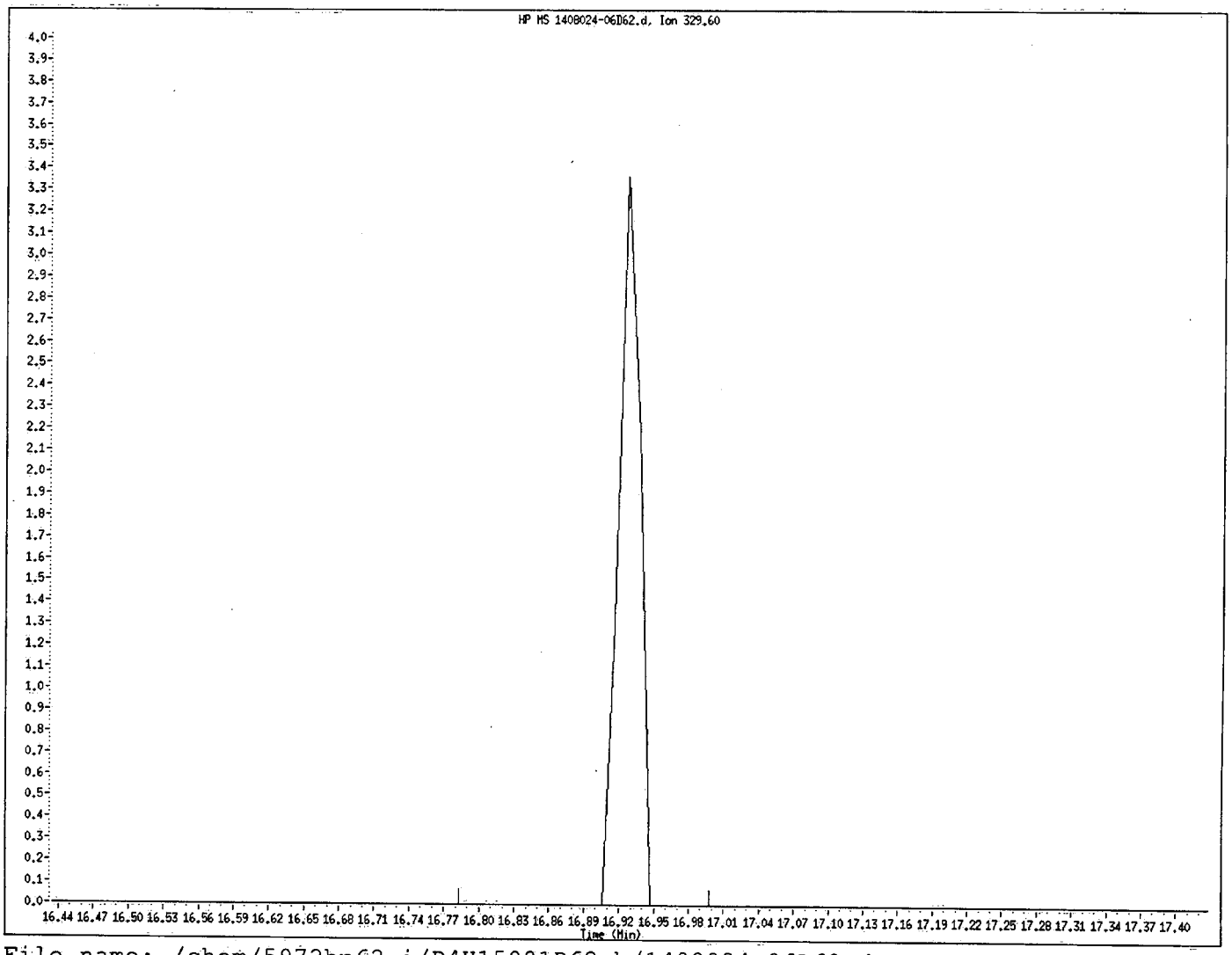
Client ID: P001-S004-0002-01
Instrument ID: 5972hp62.i
Injection Date and Time: 16-AUG-2014 00:21
Retention Time: 13.81
Operator ID: OWS

8/19/2014

2,4,6-Tribromophenol CAS Number 118-79-6 Area = 4214 Manually integrated



File name: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d
Client ID: P001-S004-0002-01
Instrument ID: 5972hp62.i
Injection Date and Time: 16-AUG-2014 00:21
Retention Time: 16.93
Operator ID: OWS

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

Client ID: P001-S004-0002-01

Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0

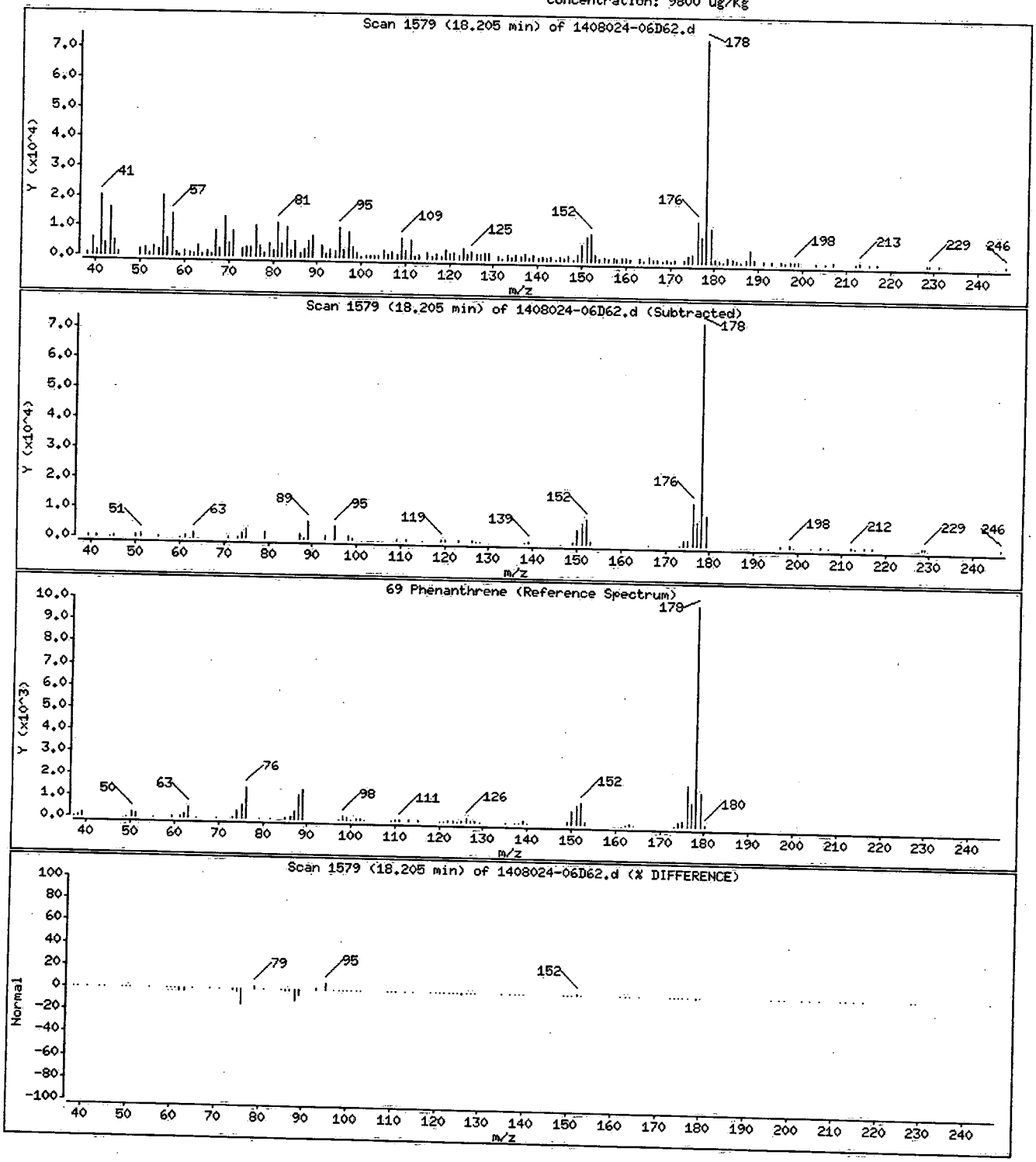
Operator: OWS

Column phase: Rxi-5SilMS

Column diameter: 0.32

69 Phenanthrene

Concentration: 9800 ug/Kg



Rolden Hamm 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

Client ID: P001-S004-0002-01

Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0

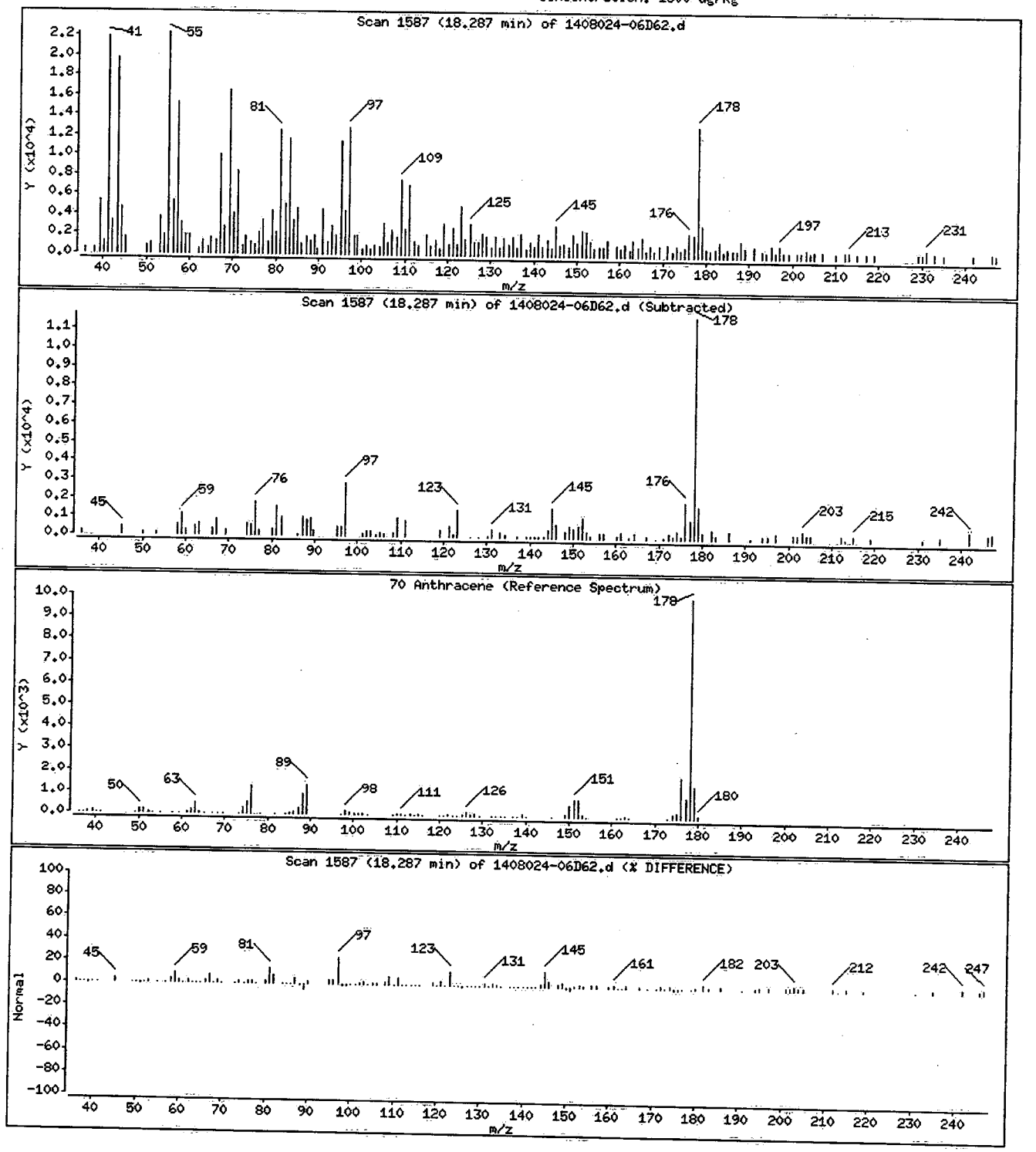
Operator: OWS

Column phase: Rxi-5SilMS

Column diameter: 0.32

70 Anthracene

Concentration: 1500 ug/Kg



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

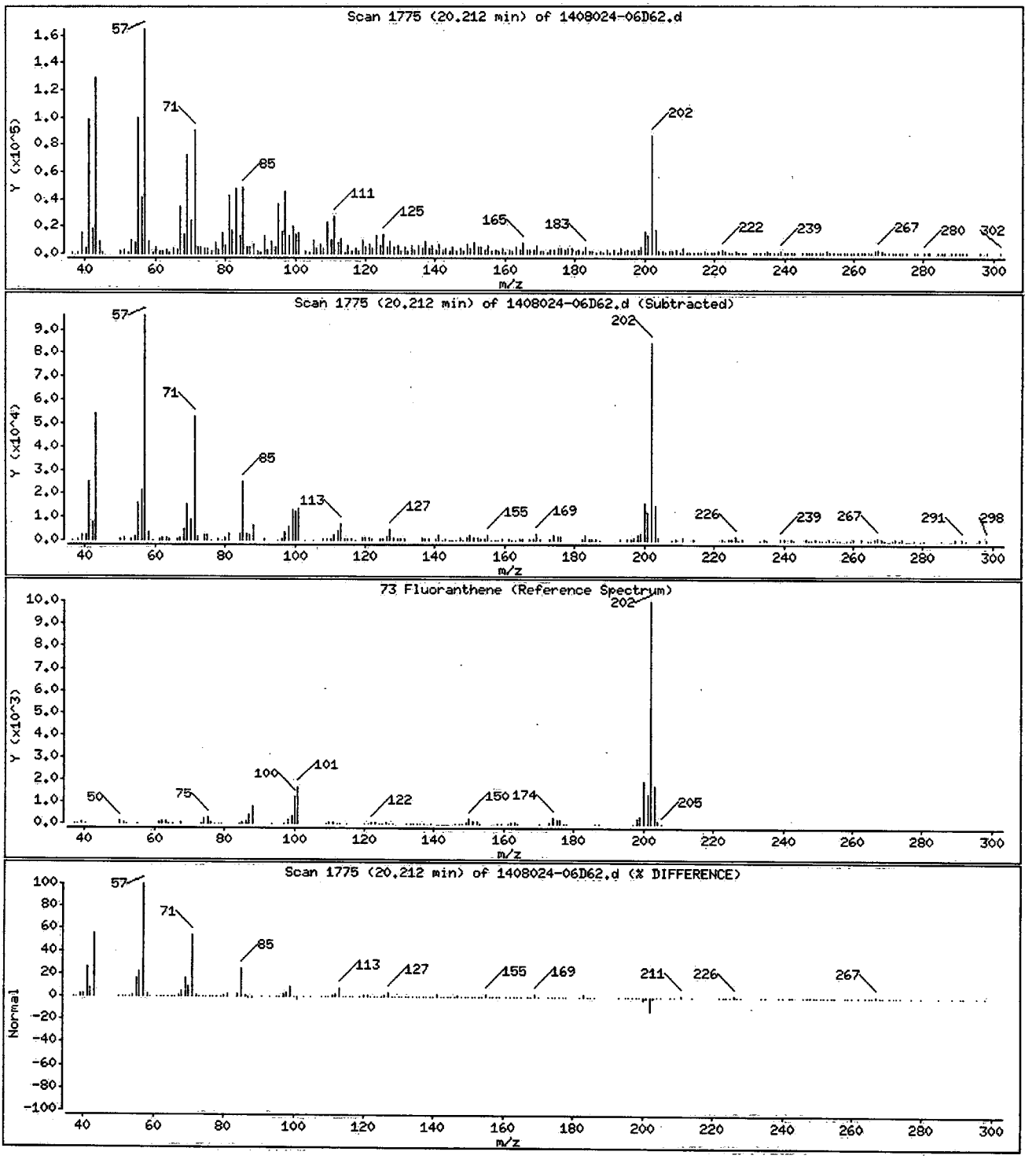
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

73 Fluoranthene Concentration: 9700 ug/Kg



Roldw Hai 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

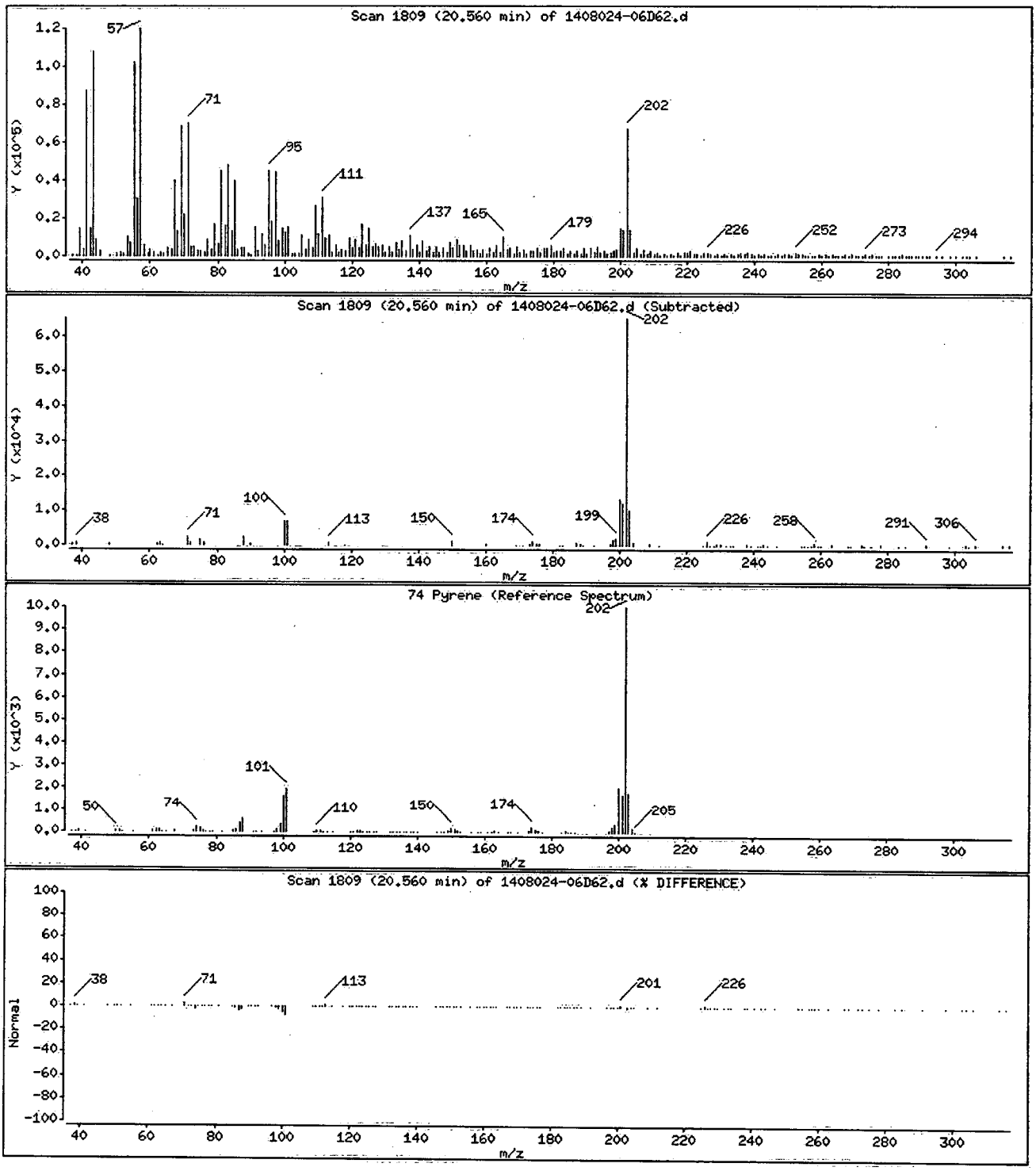
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

74 Pyrene Concentration: 7700 ug/Kg



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

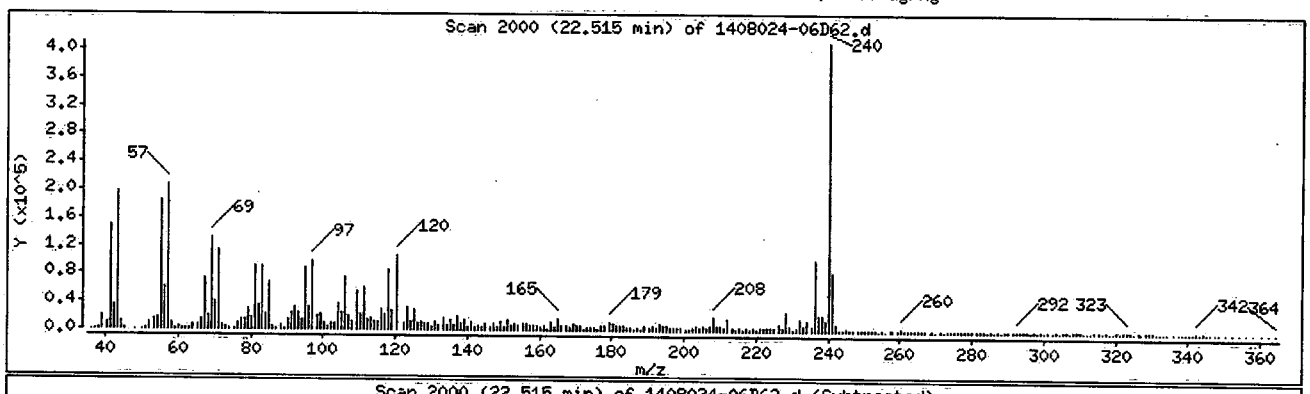
Client ID: P001-S004-0002-01 | Instrument: 5972hp62.i

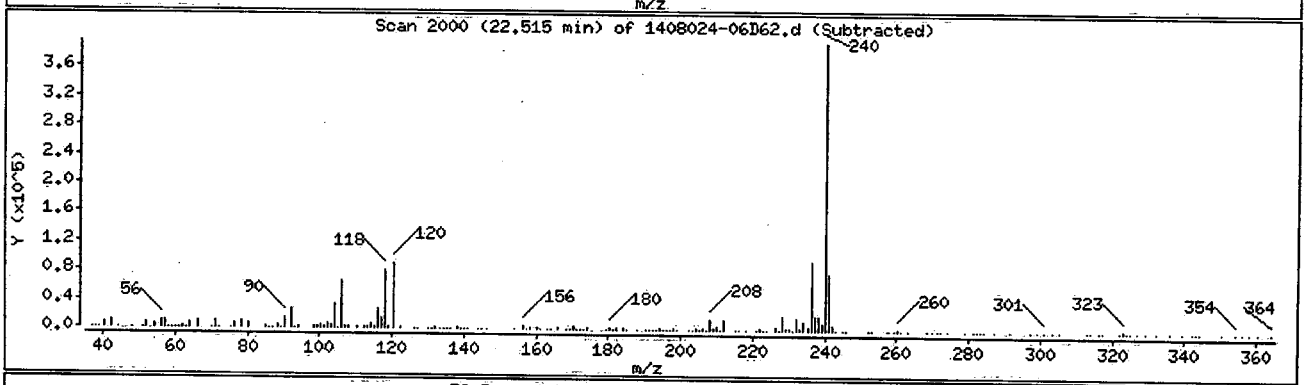
Sample Info: 1408024-06:OWS:10

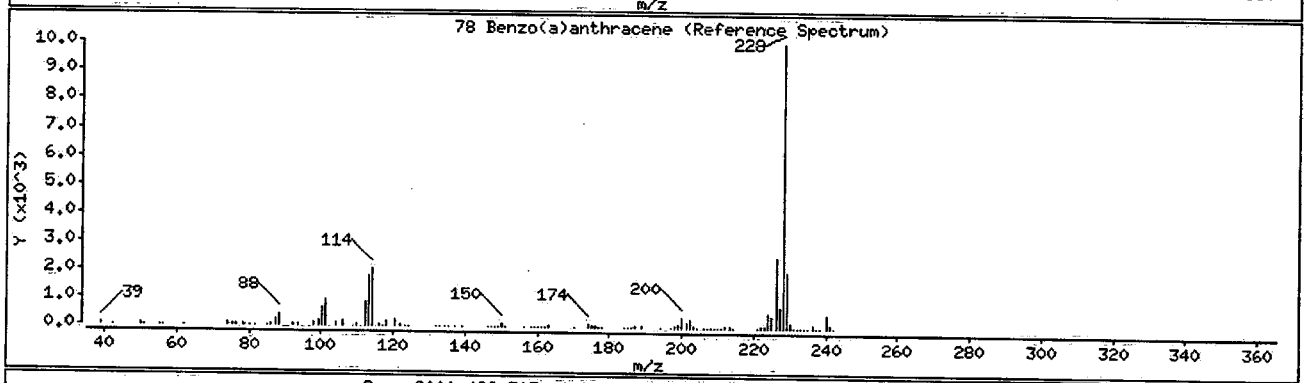
Volume Injected (uL): 2.0 | Operator: OWS

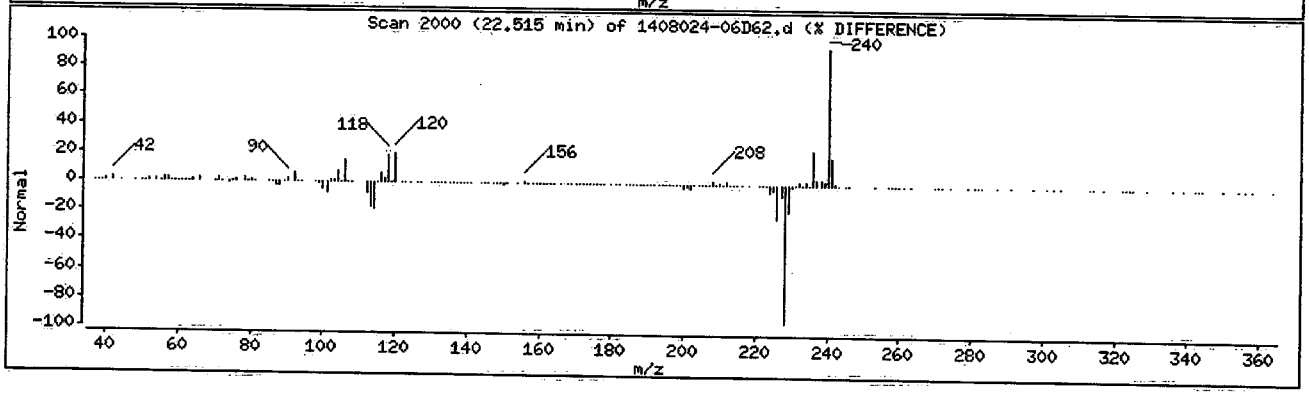
Column phase: Rxi-5SilMS | Column diameter: 0.32

78 Benzo(a)anthracene | Concentration: 4400 ug/Kg









Robert Hamm 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

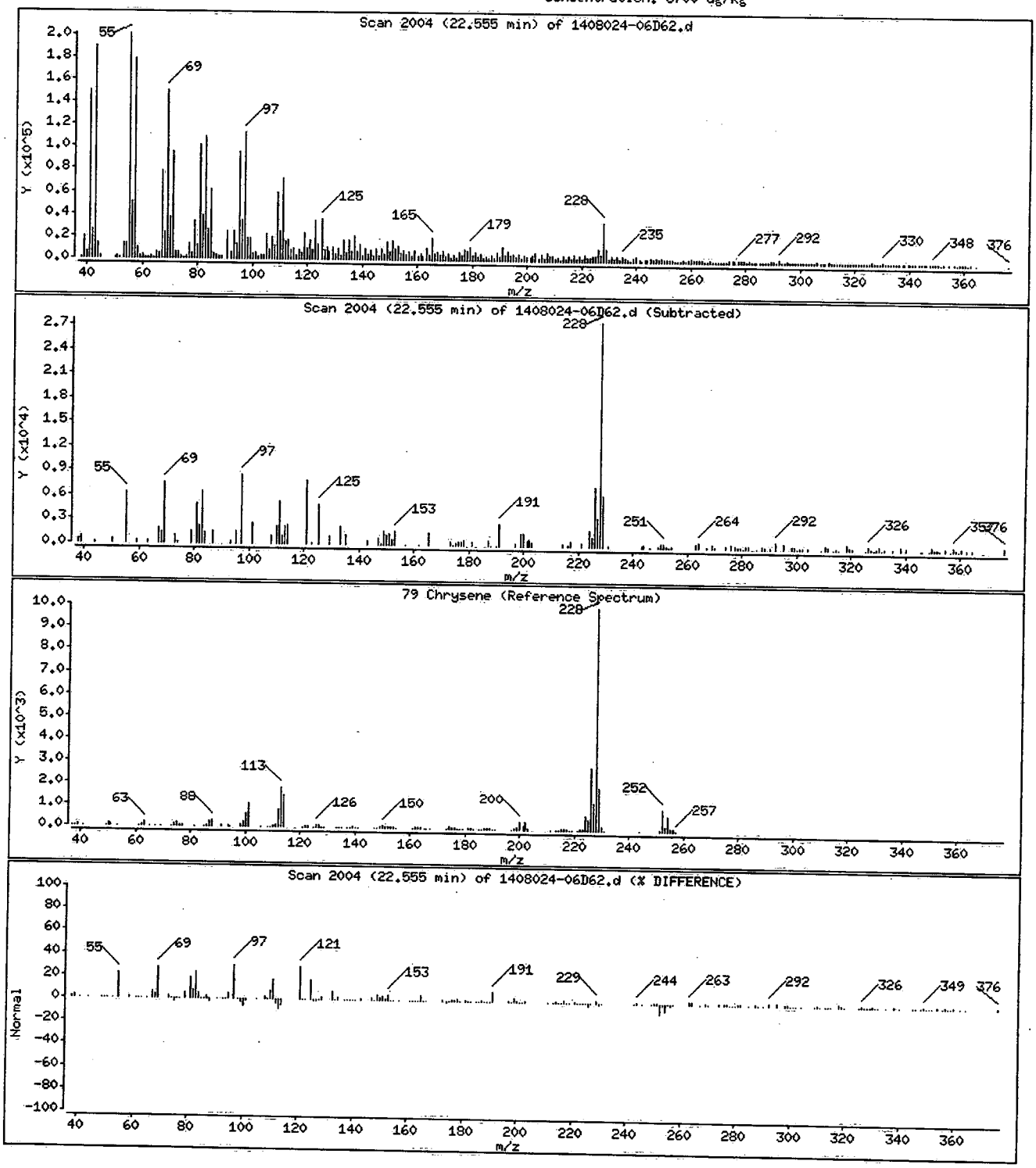
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

79 Chrysene Concentration: 6700 ug/Kg



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

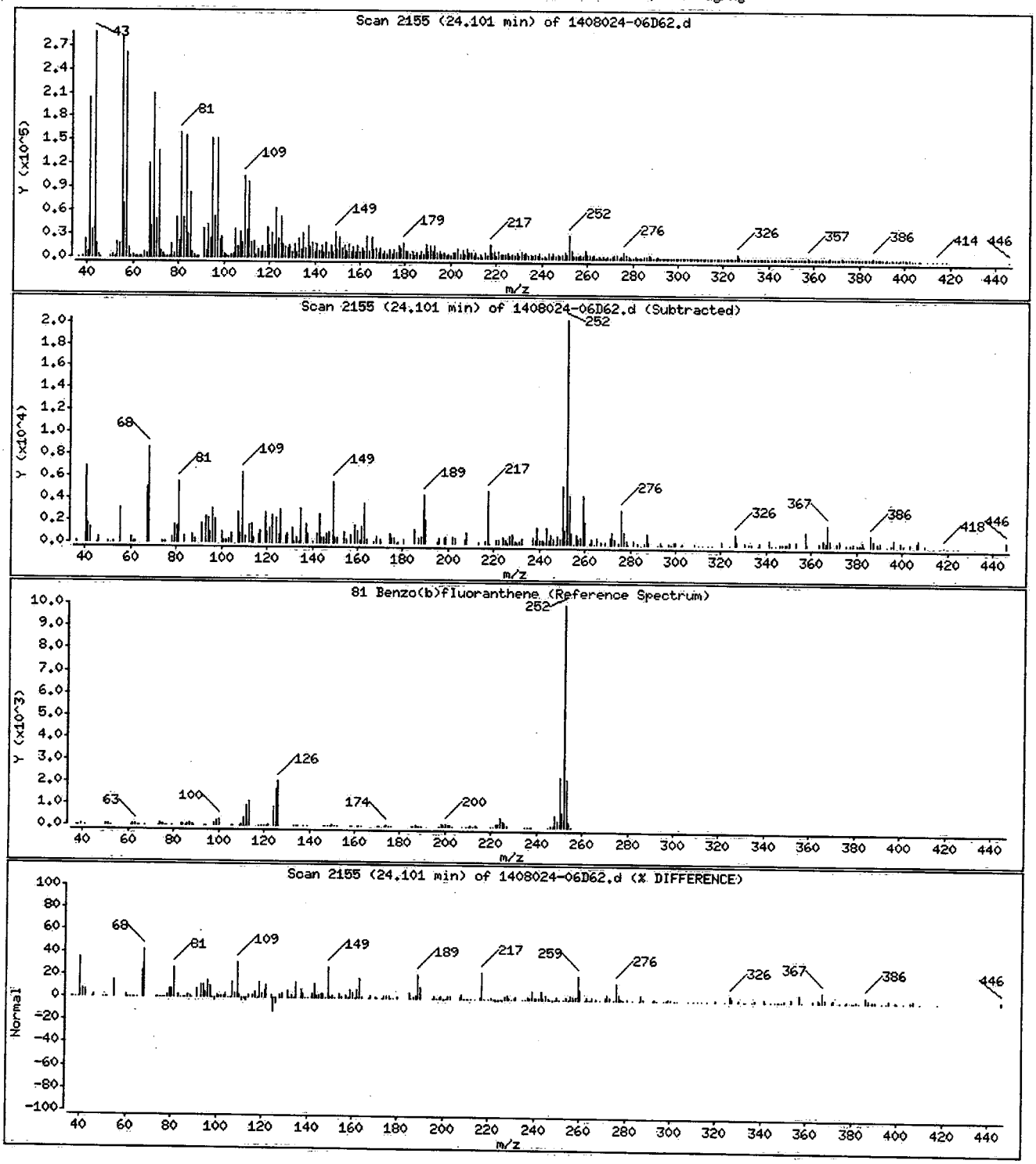
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

81 Benzo(b)fluoranthene Concentration: 5400 ug/Kg



Roldan Hani 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

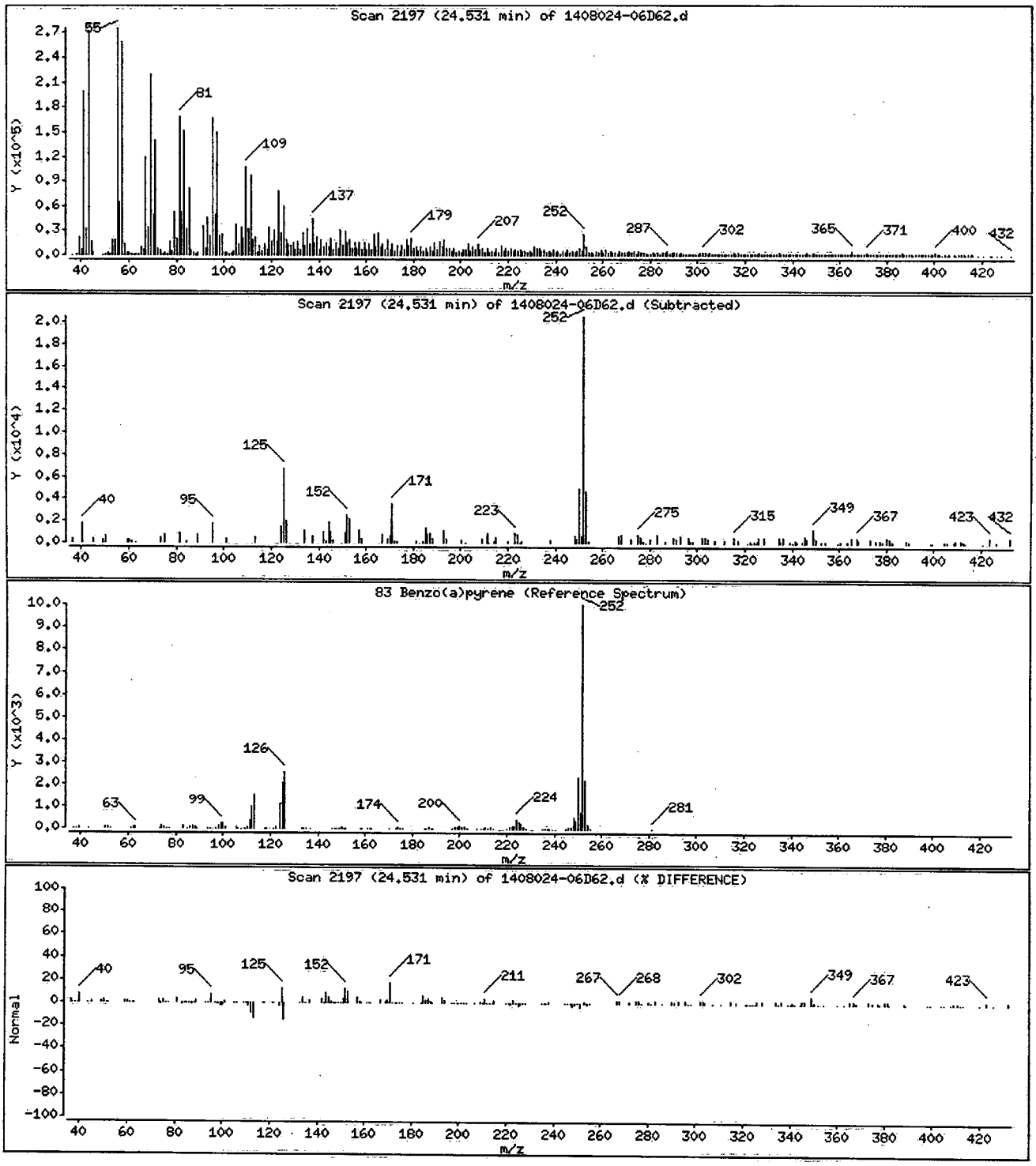
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

83 Benzo(a)pyrene Concentration: 3300 ug/Kg



Robin Hani 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

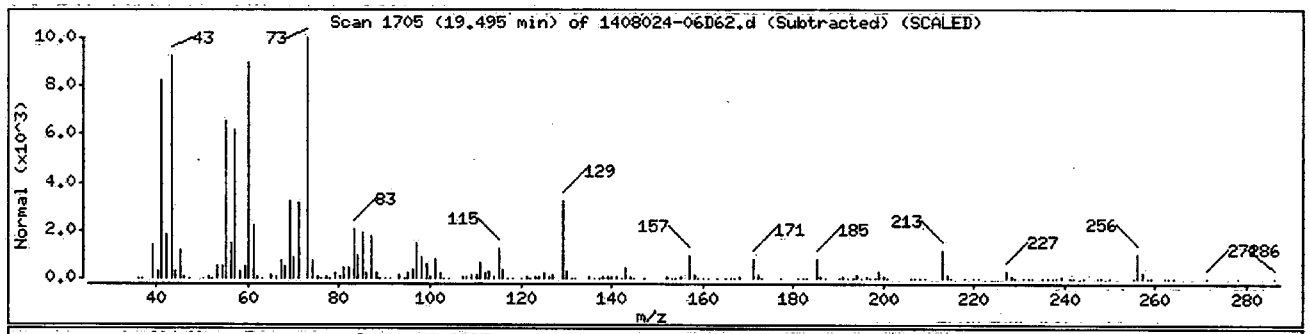
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

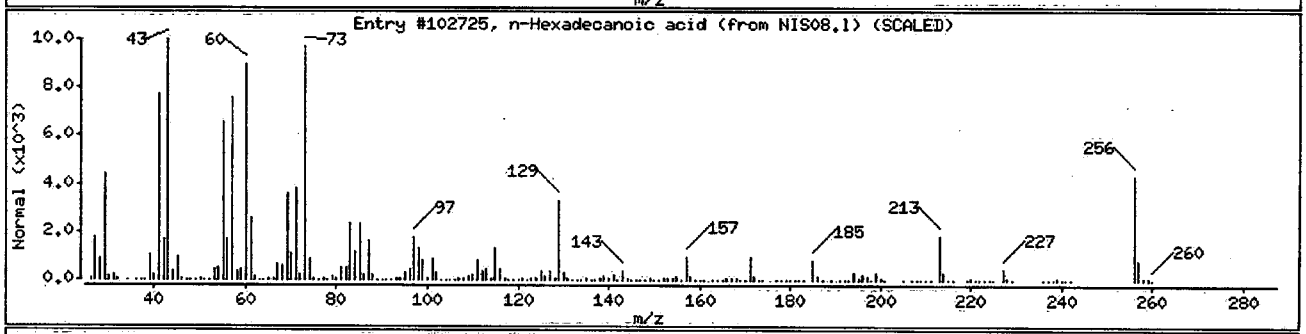
Sample Info: 1408024-06:OWS:10

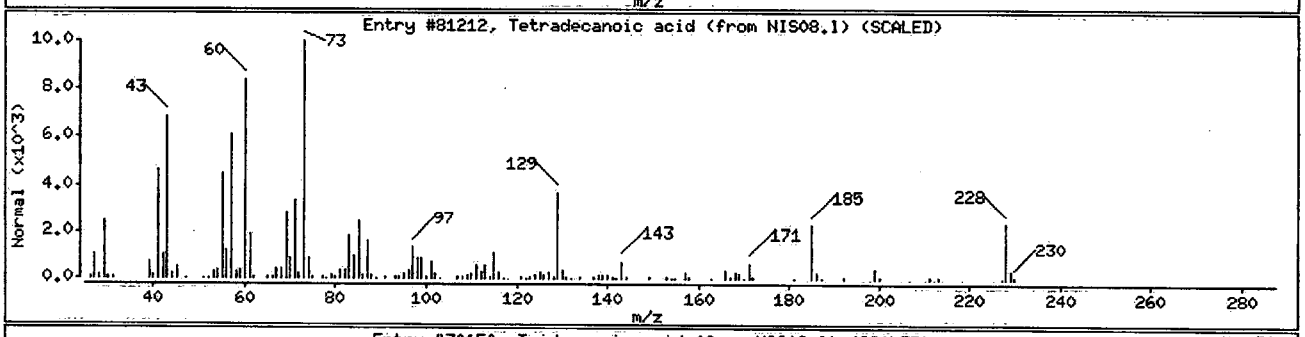
Volume Injected (uL): 2.0 Operator: OWS

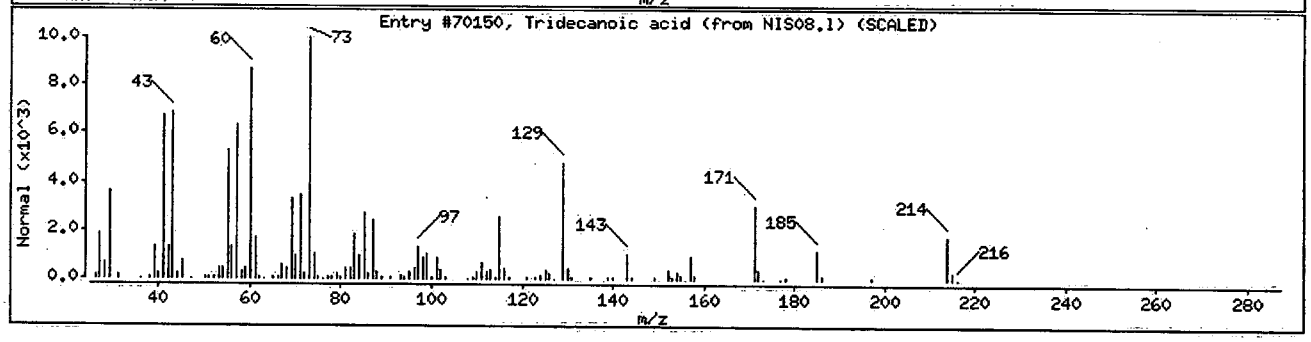
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
n-Hexadecanoic acid	57-10-3	NIS08.l	102725	97	C16H32O2	256
Tetradecanoic acid	544-63-8	NIS08.l	81212	95	C14H28O2	228
Tridecanoic acid	638-53-9	NIS08.l	70150	93	C13H26O2	214









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

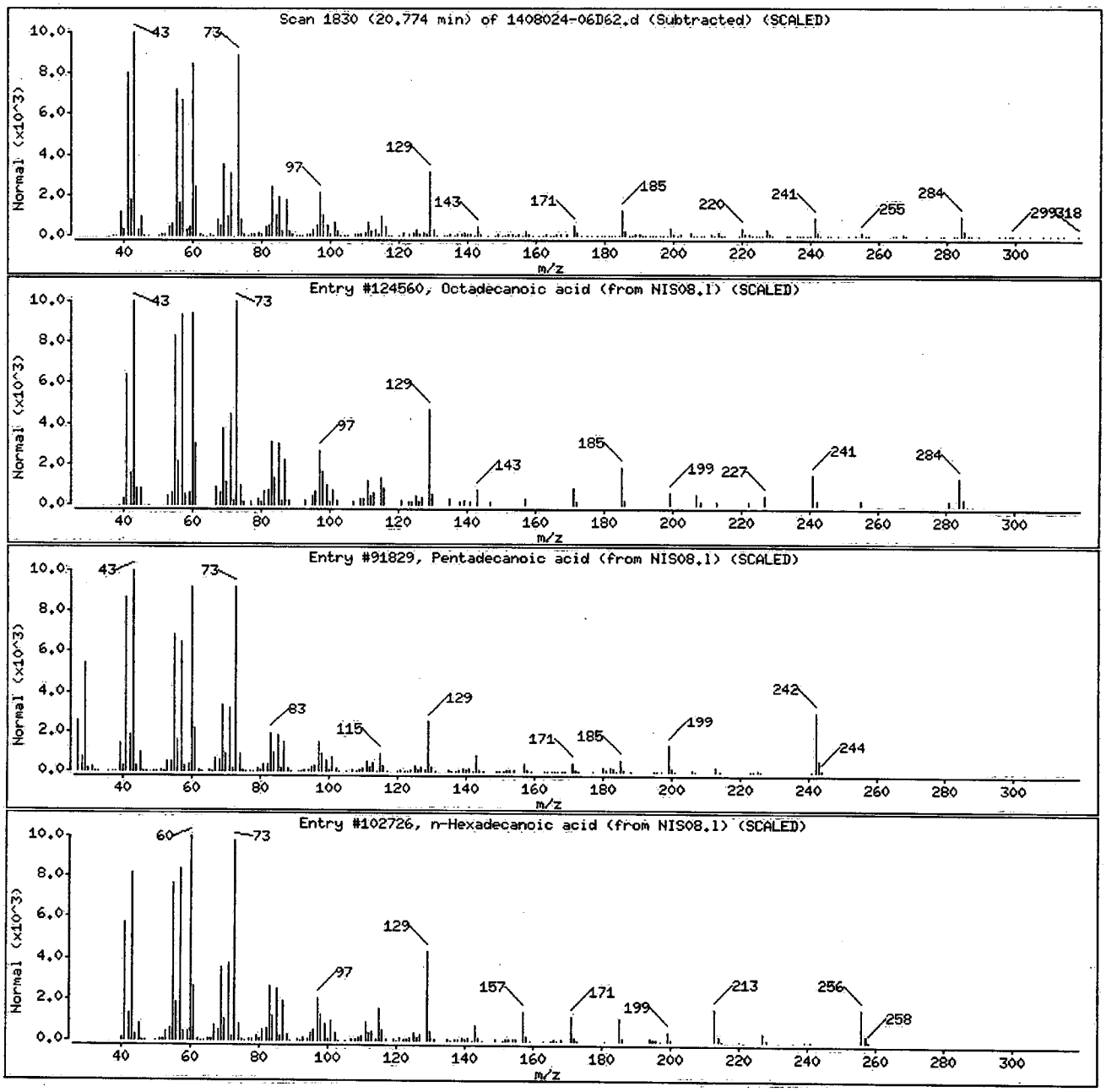
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Octadecanoic acid	57-11-4	NIS08.1	124560	99	C18H36O2	284
Pentadecanoic acid	1002-84-2	NIS08.1	91829	91	C15H30O2	242
n-Hexadecanoic acid	57-10-3	NIS08.1	102726	87	C16H32O2	256



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

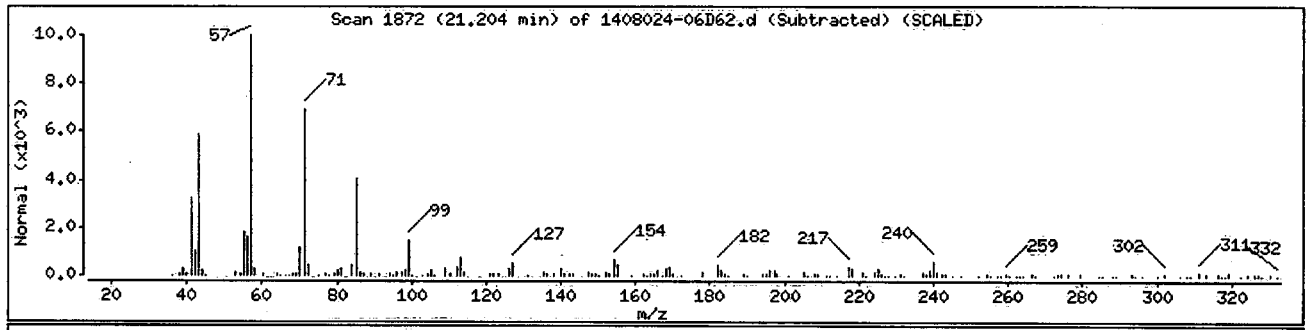
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

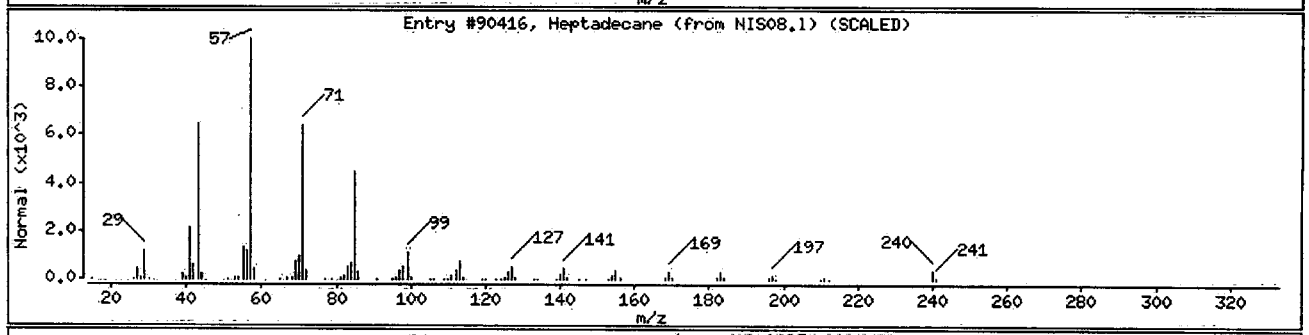
Sample Info: 1408024-06:OWS:10

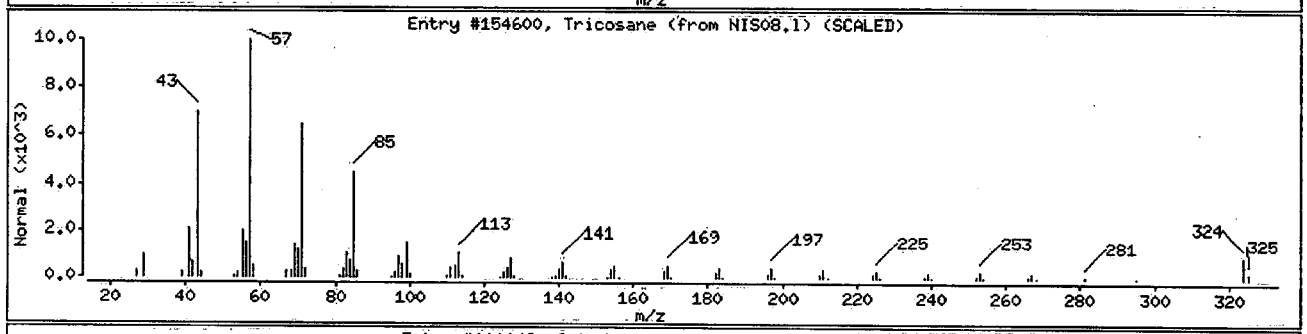
Volume Injected (uL): 2.0 Operator: OWS

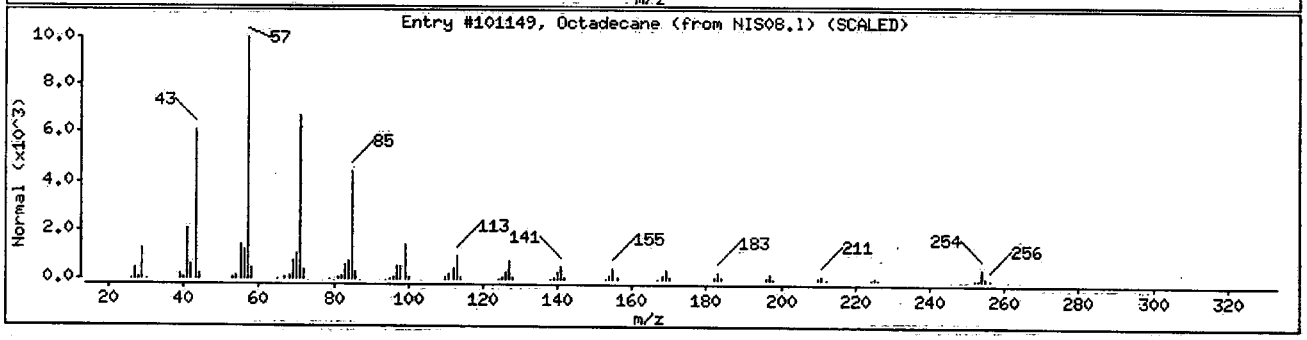
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Heptadecane	629-78-7	NIS08.1	90416	93	C17H36	240
Tricosane	638-67-5	NIS08.1	154600	91	C23H48	324
Octadecane	593-45-3	NIS08.1	101149	91	C18H38	254









8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

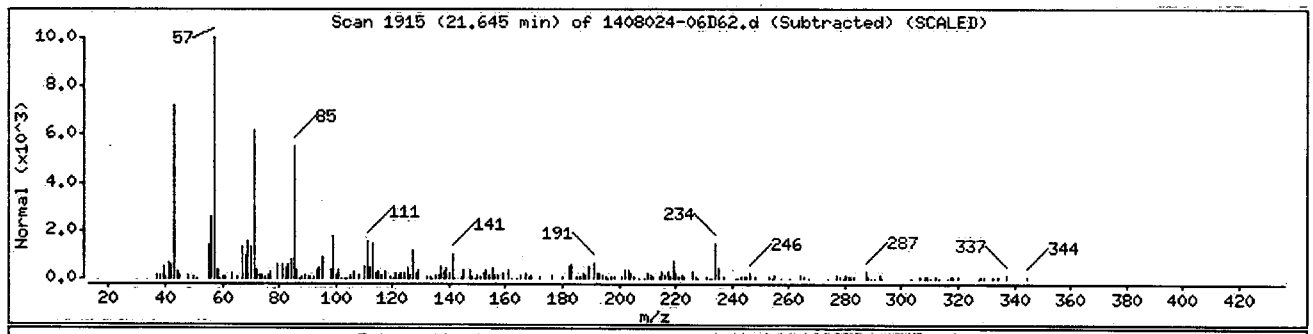
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

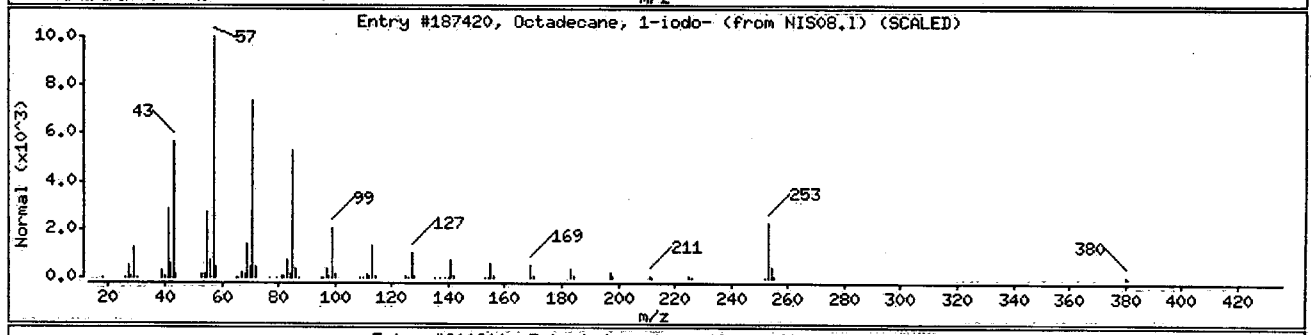
Sample Info: 1408024-06:OWS:10

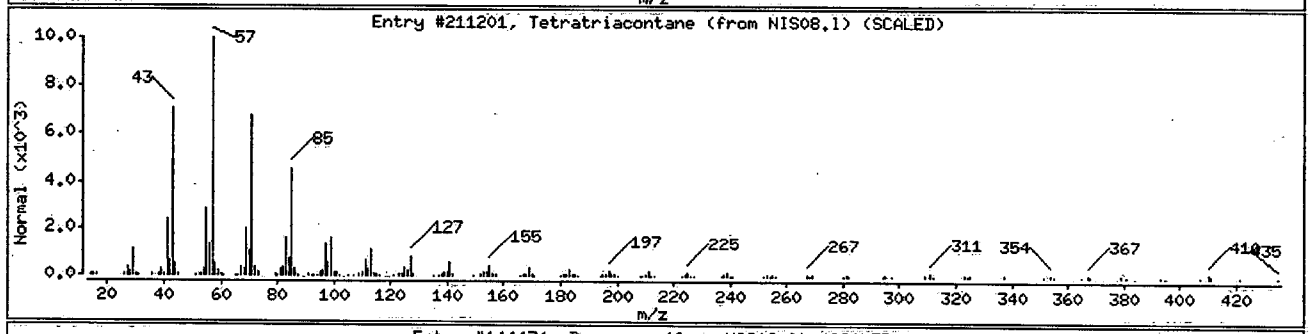
Volume Injected (uL): 2.0 Operator: OWS

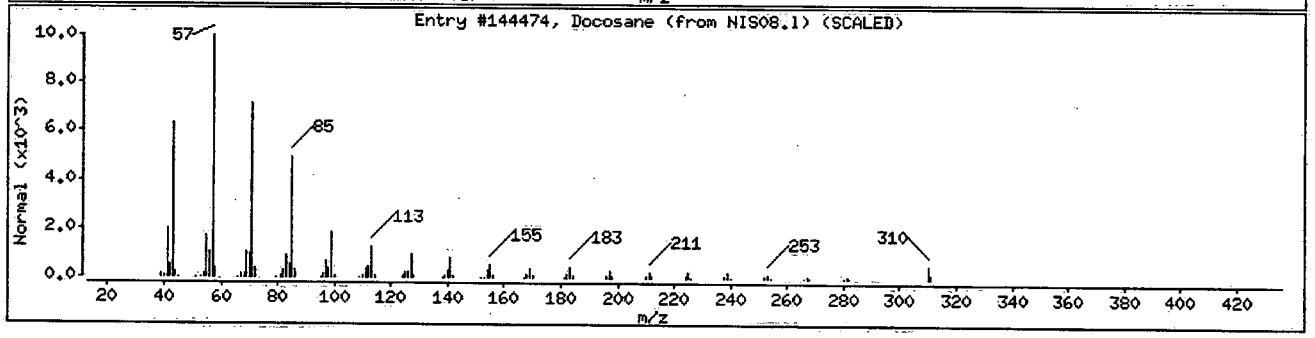
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Octadecane, 1-iodo-	629-93-6	NIS08.1	187420	83	C18H37I	380
Tetratriacontane	14167-59-0	NIS08.1	211201	83	C34H70	479
Docosane	629-97-0	NIS08.1	144474	83	C22H46	310









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

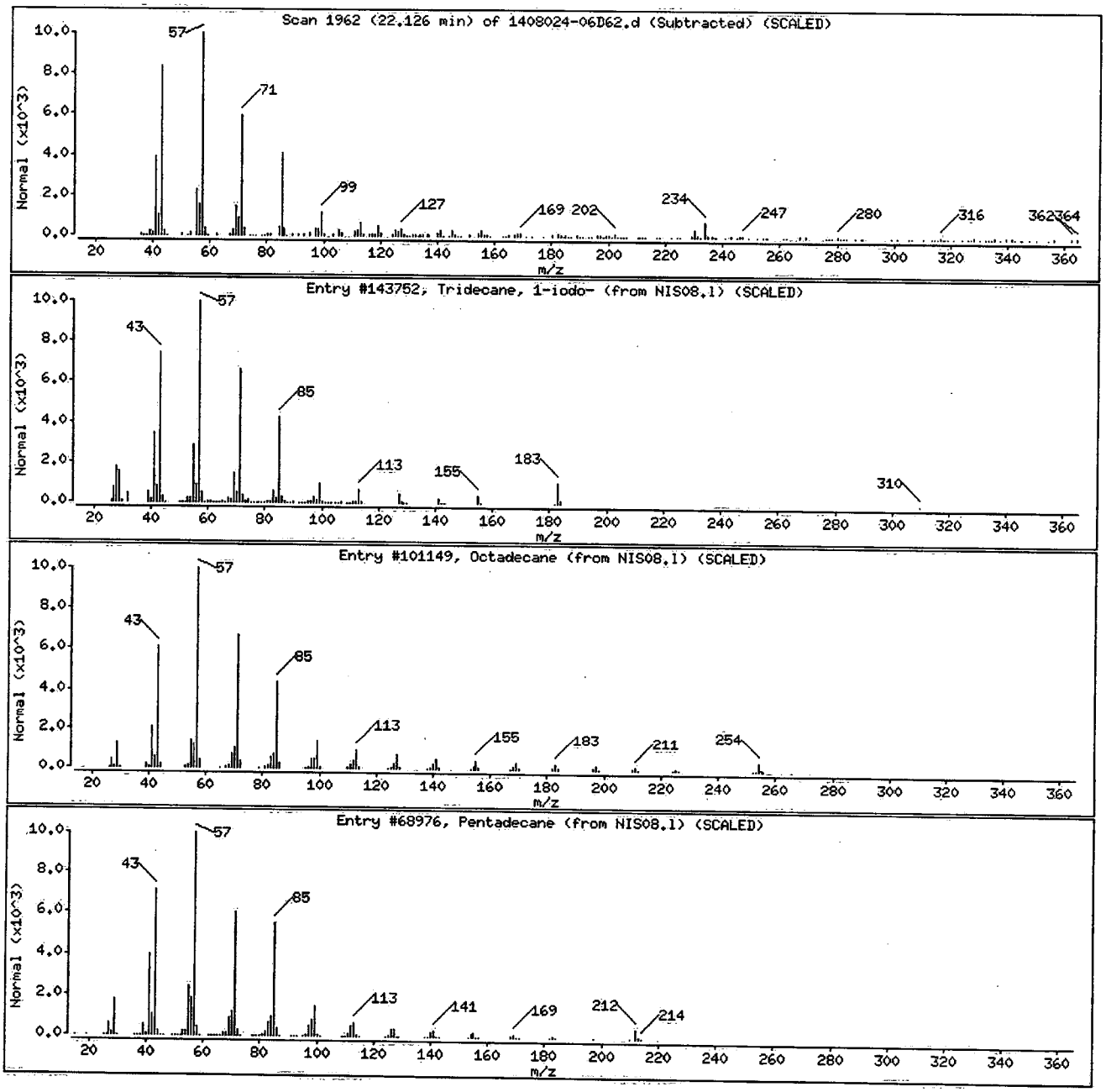
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Tridecane, 1-iodo-	35599-77-0	NIS08.1	143752	91	C13H27I	310
Octadecane	593-45-3	NIS08.1	101149	91	C18H38	254
Pentadecane	629-62-9	NIS08.1	68976	87	C15H32	212



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

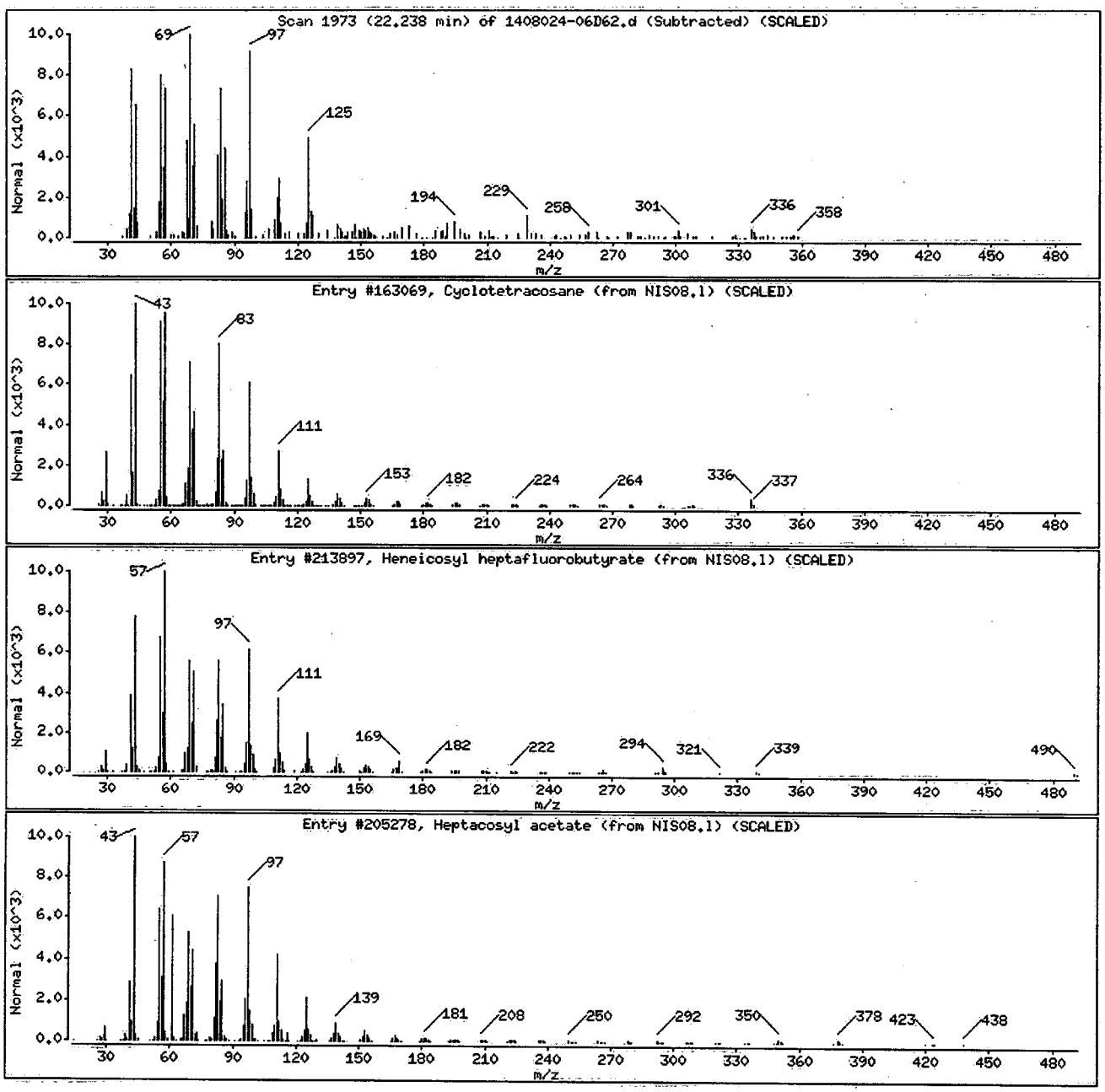
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Cyclotetracosane	297-03-0	NIS08.l	163069	83	C24H48	336
Heneicosyl heptafluorobutyrate	1000351-83-8	NIS08.l	213897	58	C25H43F7O2	508
Heptacosyl acetate	1000351-78-2	NIS08.l	205278	52	C29H58O2	438



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

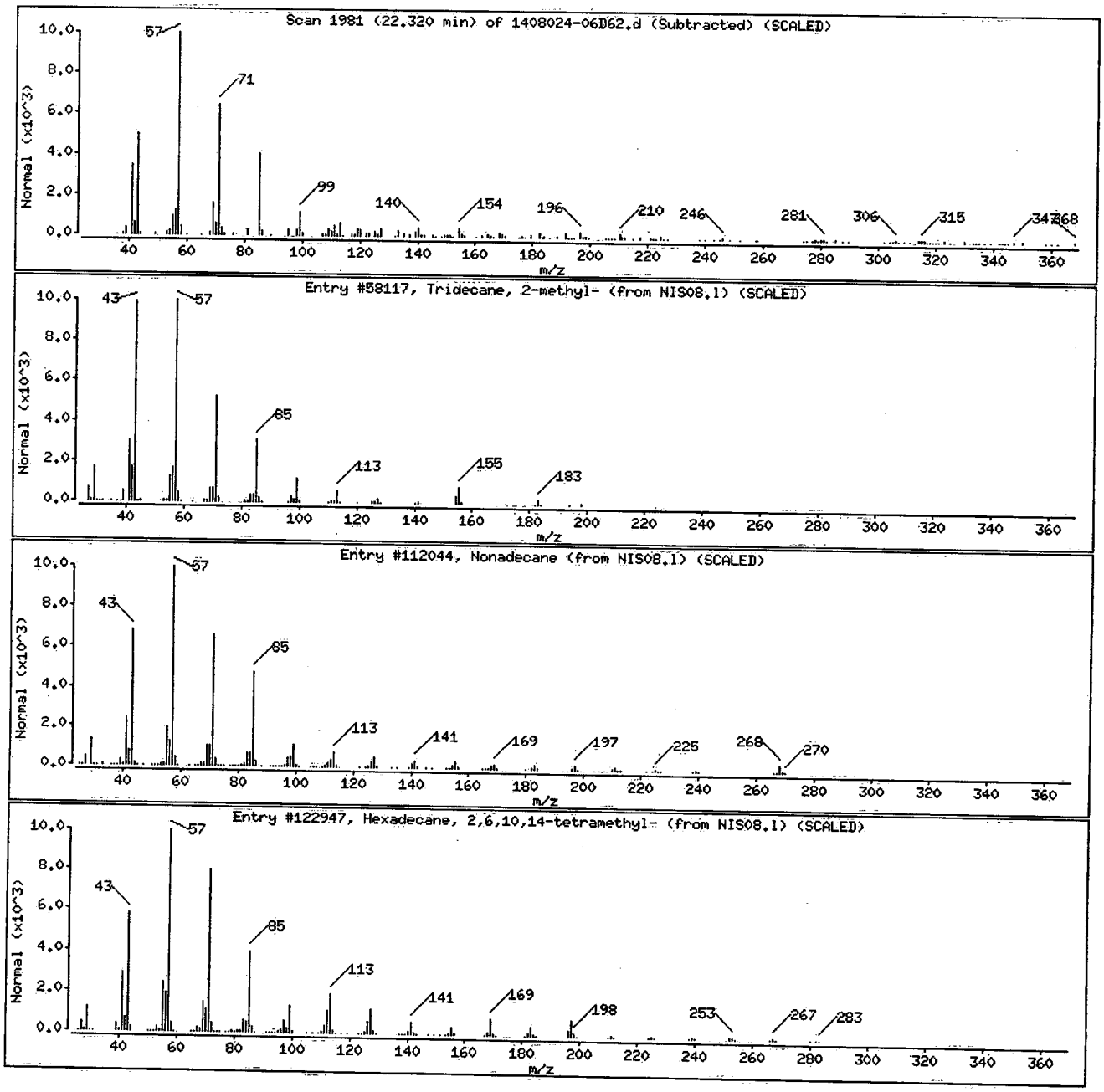
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Tridecane, 2-methyl-	1560-96-9	NIS08.l	58117	87	C14H30	198
Nonadecane	629-92-5	NIS08.l	112044	83	C19H40	268
Hexadecane, 2,6,10,14-tetramethyl-	638-36-8	NIS08.l	122947	83	C20H42	282



Roldan Hani 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

Client ID: P001-S004-0002-01

Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

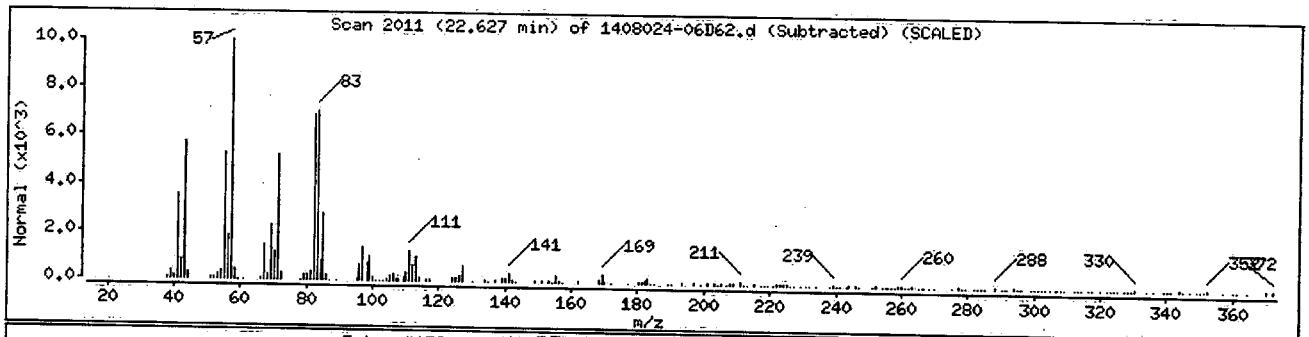
Volume Injected (uL): 2.0

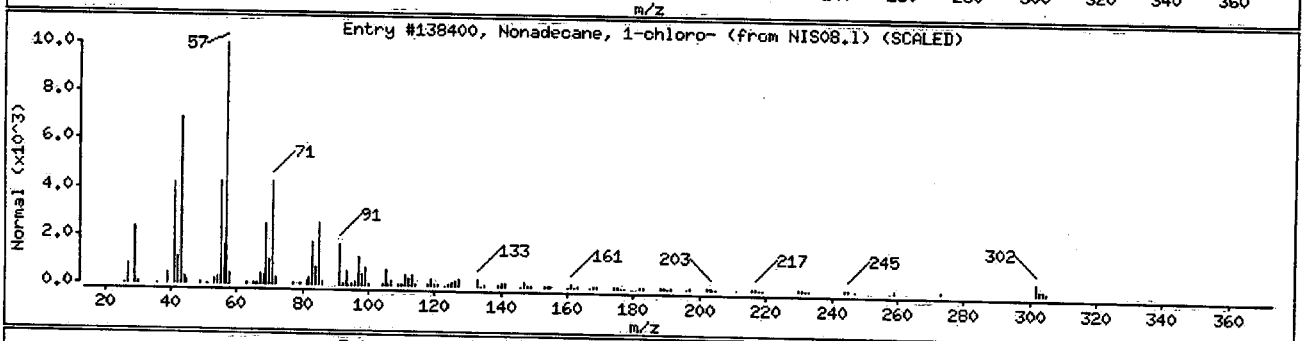
Operator: OWS

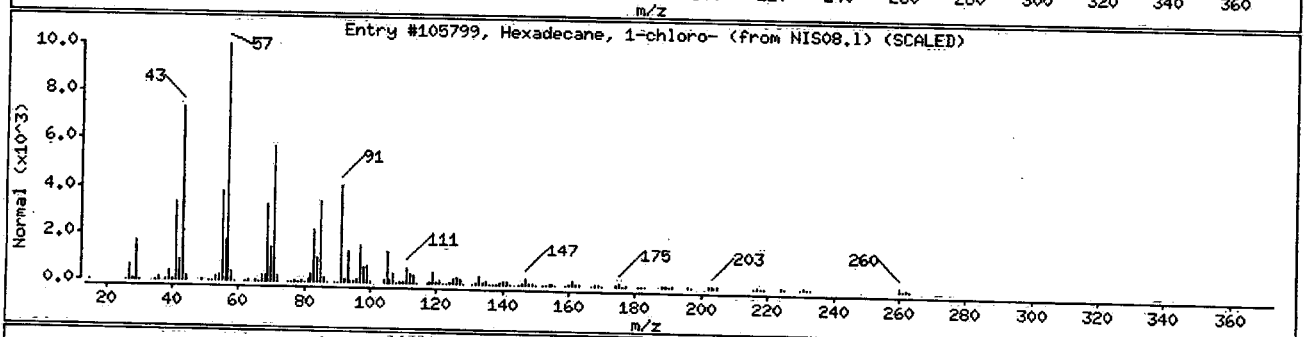
Column phase: Rxi-5SilMS

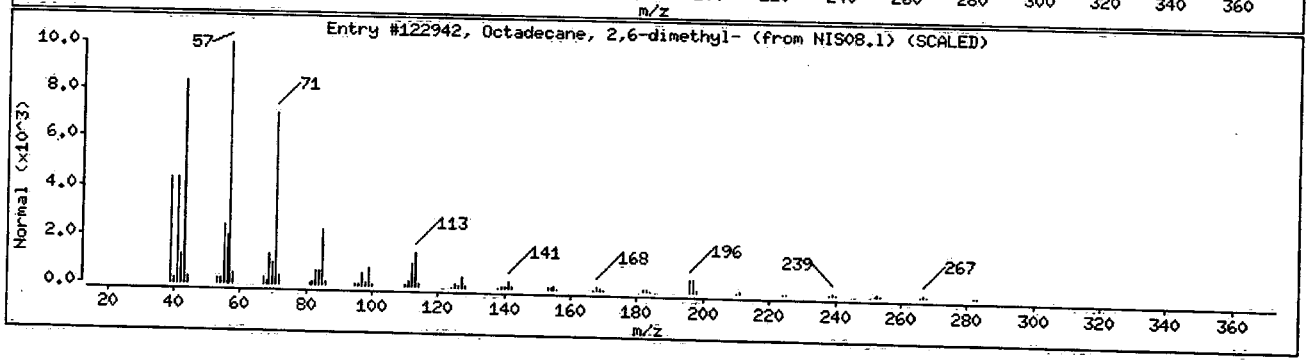
Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Nonadecane, 1-chloro-	62016-76-6	NIS08.l	138400	86	C19H39Cl	302
Hexadecane, 1-chloro-	4860-03-1	NIS08.l	105799	60	C16H33Cl	260
Octadecane, 2,6-dimethyl-	75163-97-2	NIS08.l	122942	56	C20H42	282









8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

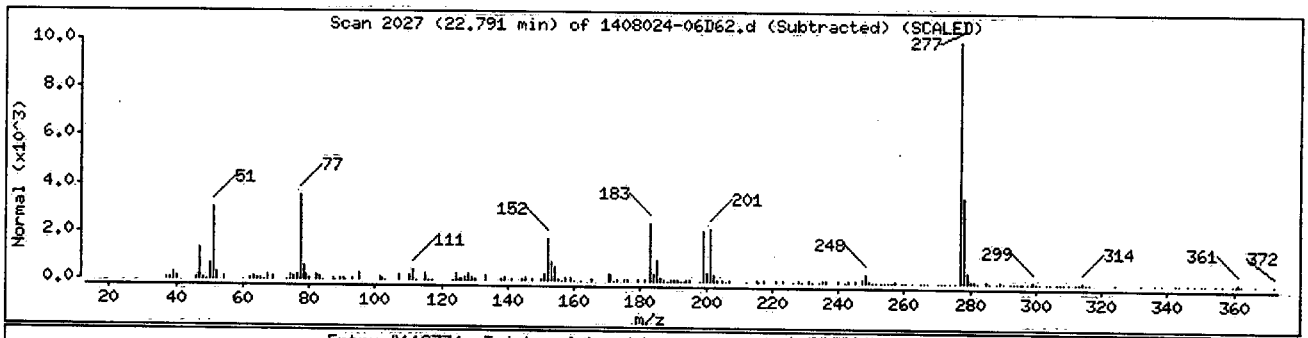
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

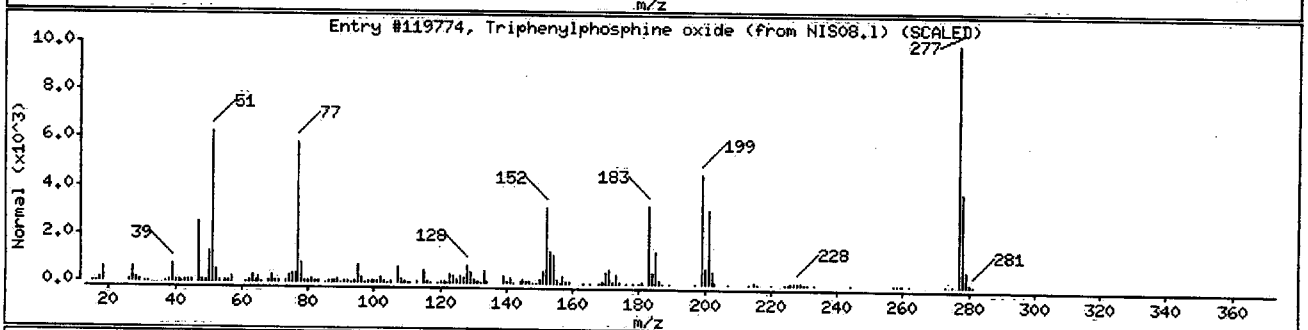
Sample Info: 1408024-06:OWS:10

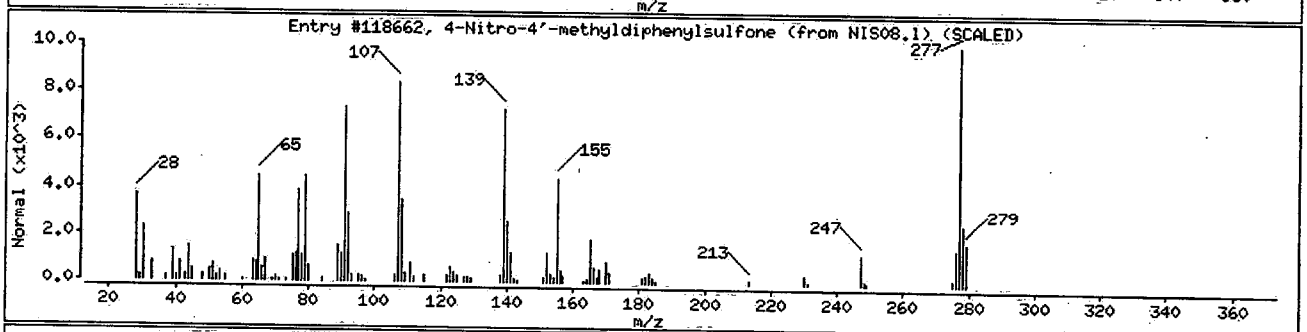
Volume Injected (uL): 2.0 Operator: OWS

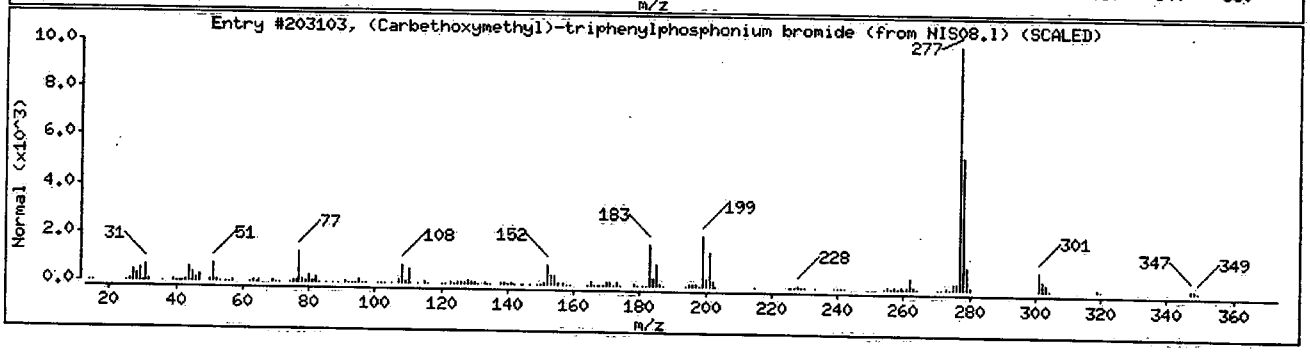
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Triphenylphosphine oxide	791-28-6	NIS08.1	119774	97	C18H15OP	278
4-Nitro-4'-methyldiphenylsulfone	4094-37-5	NIS08.1	118662	43	C13H11NO4S	277
(Carbethoxymethyl)-triphenylphosphonium	1530-45-6	NIS08.1	203103	42	C22H22BrO2P	428









Robert Hamm 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

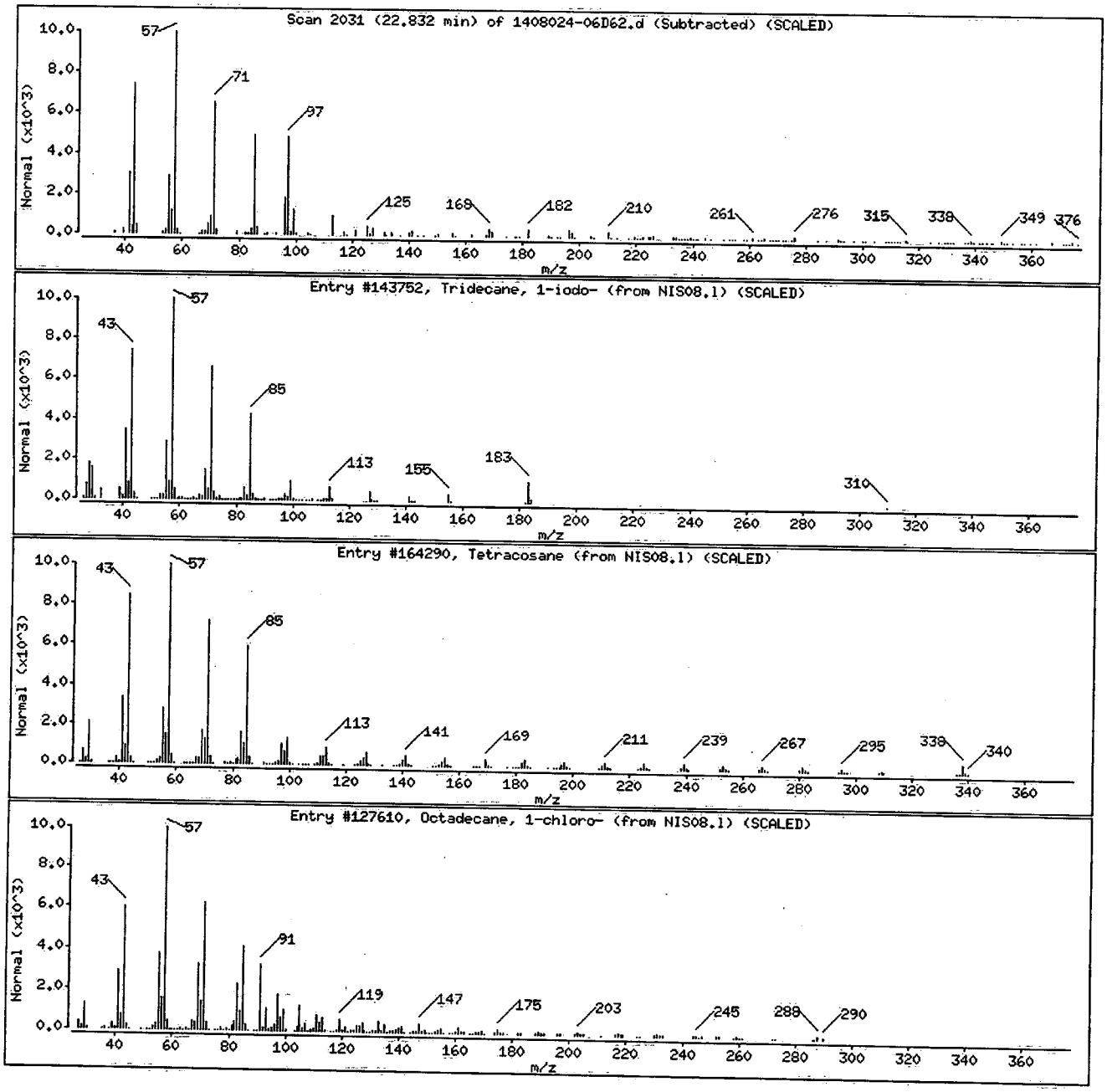
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Tridecane, 1-iodo-	35599-77-0	NIS08.1	143752	83	C13H27I	310
Tetracosane	646-31-1	NIS08.1	164290	62	C24H50	338
Octadecane, 1-chloro-	3386-33-2	NIS08.1	127610	53	C18H37Cl	288



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

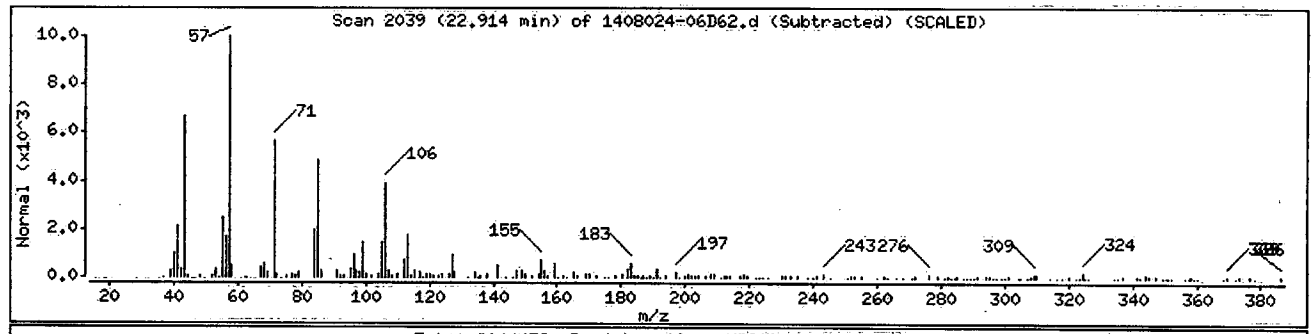
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

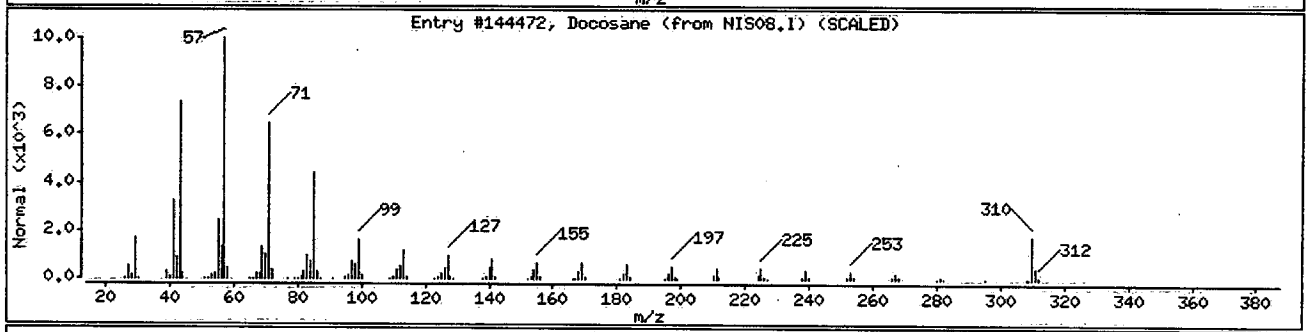
Sample Info: 1408024-06:OWS:10

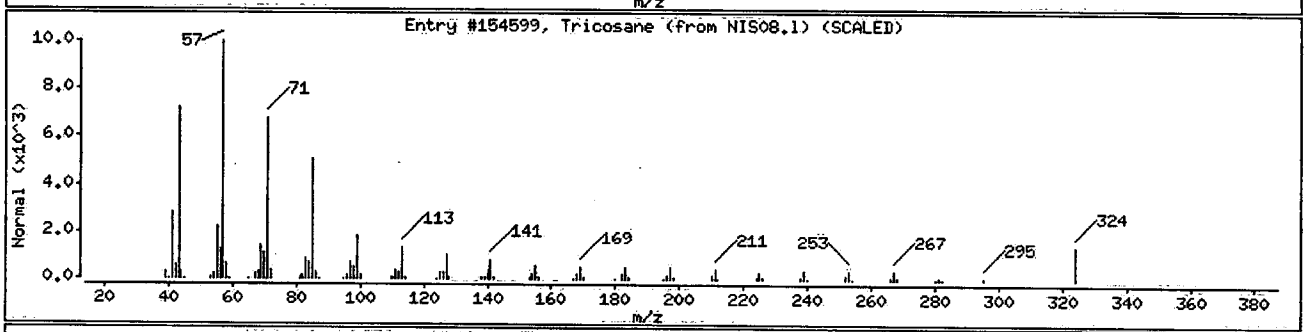
Volume Injected (uL): 2.0 Operator: OWS

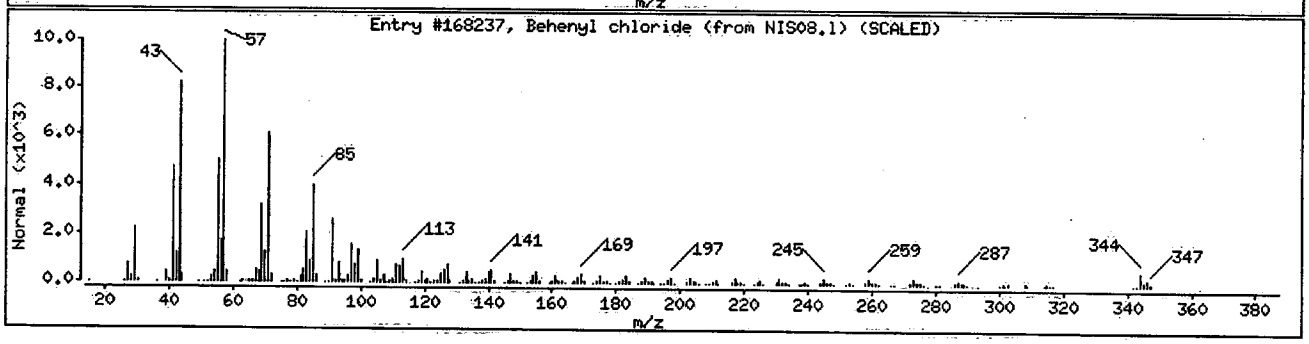
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Docosane	629-97-0	NIS08.1	144472	64	C22H46	310
Tricosane	638-67-5	NIS08.1	154599	64	C23H48	324
Behenyl chloride	42217-03-8	NIS08.1	168237	53	C22H45Cl	344









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

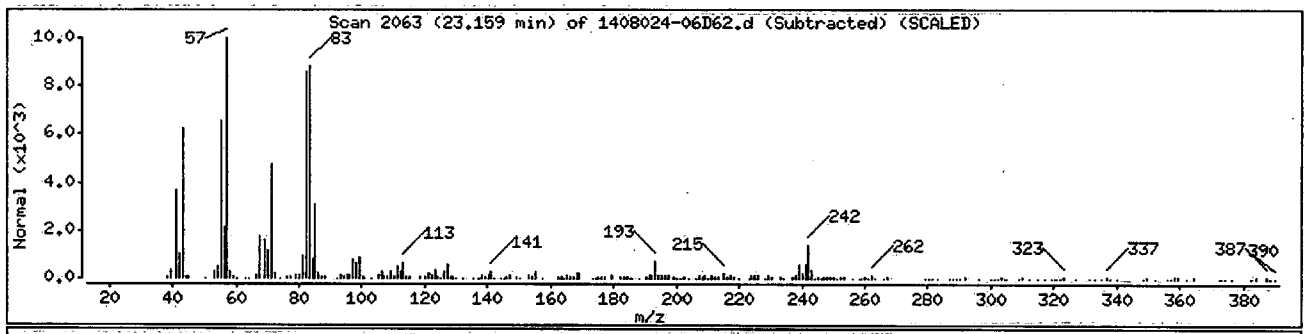
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

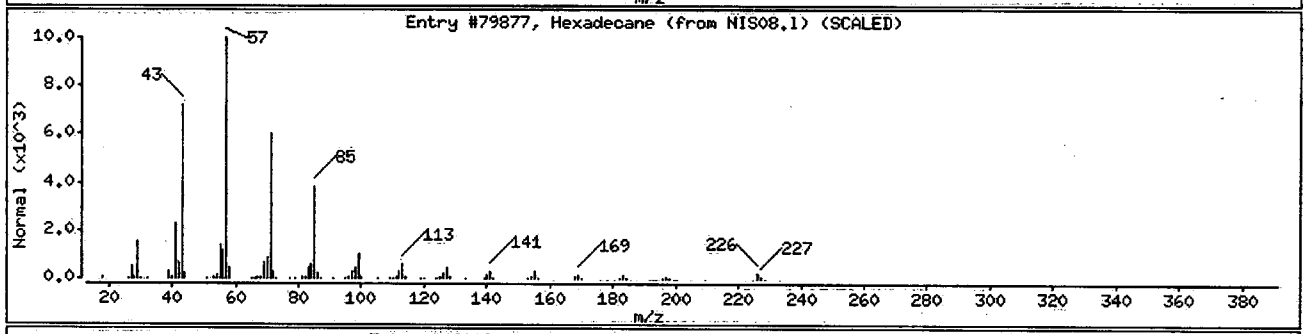
Sample Info: 1408024-06:OWS:10

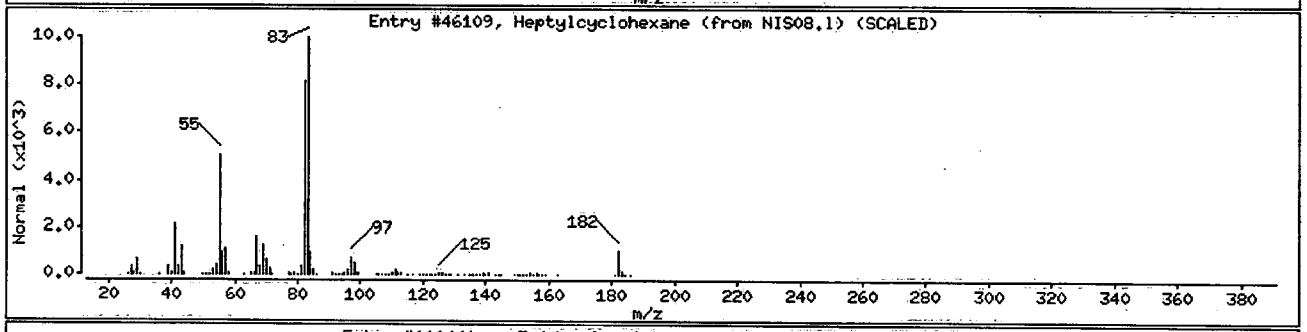
Volume Injected (uL): 2.0 Operator: OWS

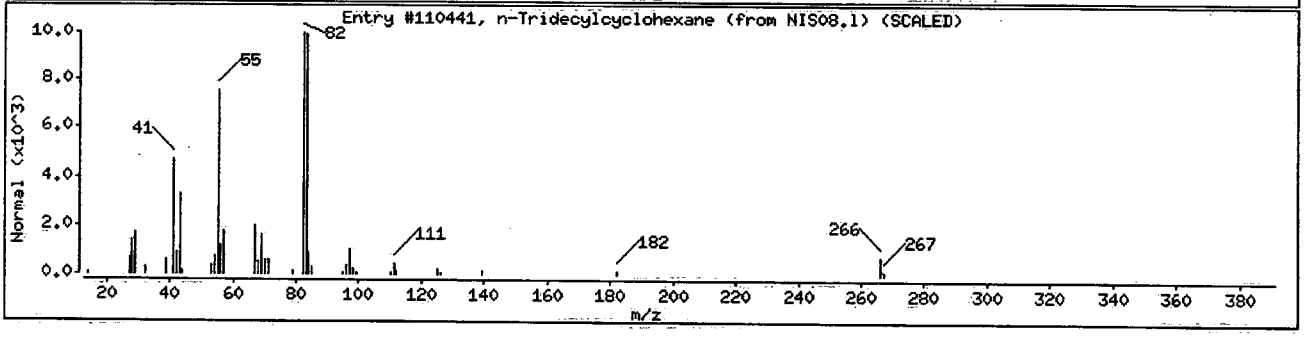
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Hexadecane	544-76-3	NIS08.1	79877	64	C16H34	226
Heptylcyclohexane	5617-41-4	NIS08.1	46109	58	C13H26	182
n-Tridecylcyclohexane	6006-33-3	NIS08.1	110441	53	C19H38	266









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

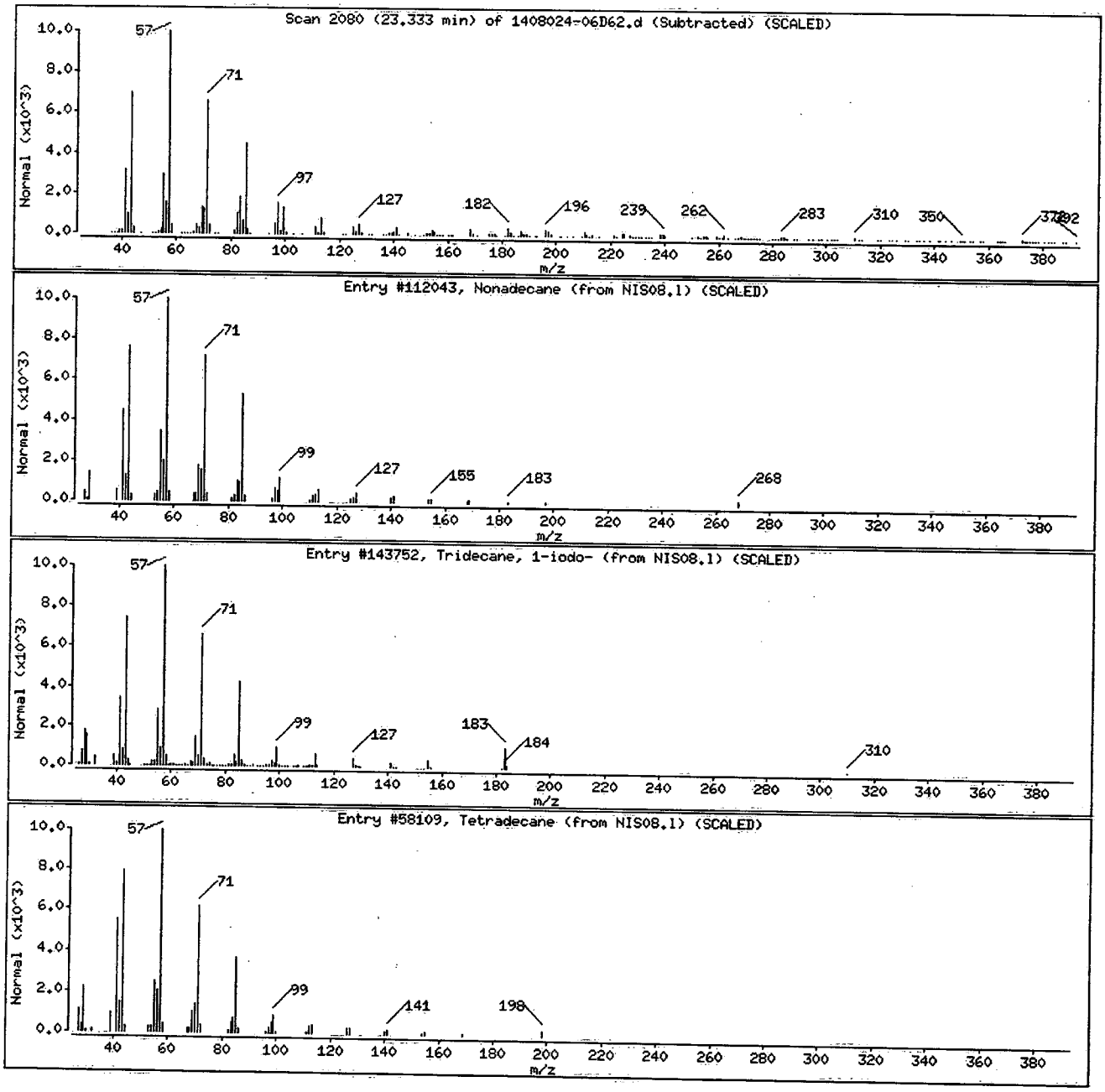
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Nonadecane	629-92-5	NIS08.1	112043	91	C19H40	268
Tridecane, 1-iodo-	35599-77-0	NIS08.1	143752	91	C13H27I	310
Tetradecane	629-59-4	NIS08.1	58109	90	C14H30	198



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

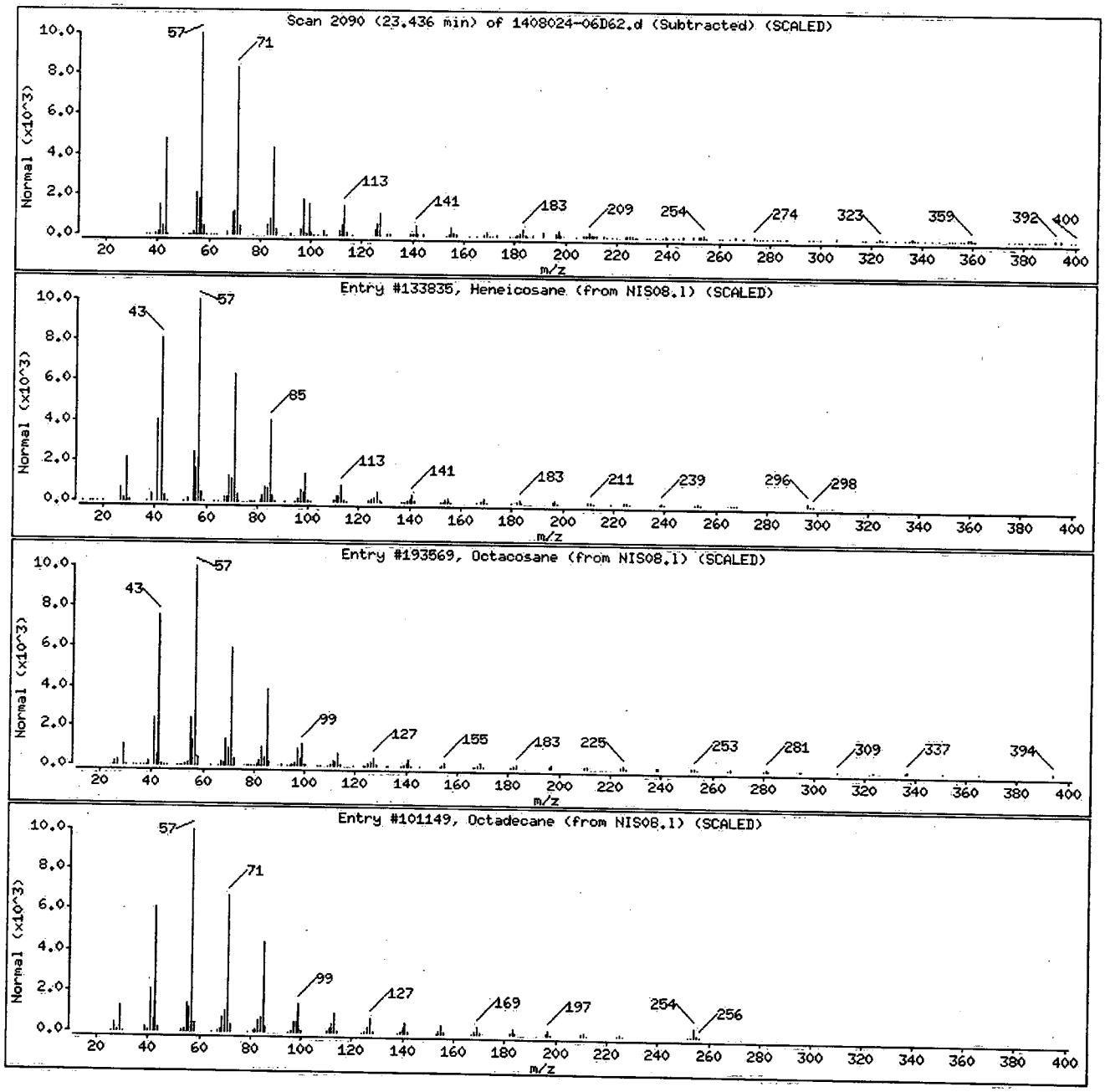
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-06:DWS:10

Volume Injected (uL): 2.0 Operator: DWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Heneicosane	629-94-7	NIS08.1	133835	93	C21H44	296
Octacosane	630-02-4	NIS08.1	193569	93	C28H58	394
Octadecane	593-45-3	NIS08.1	101149	91	C18H38	254



Robin Hu 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

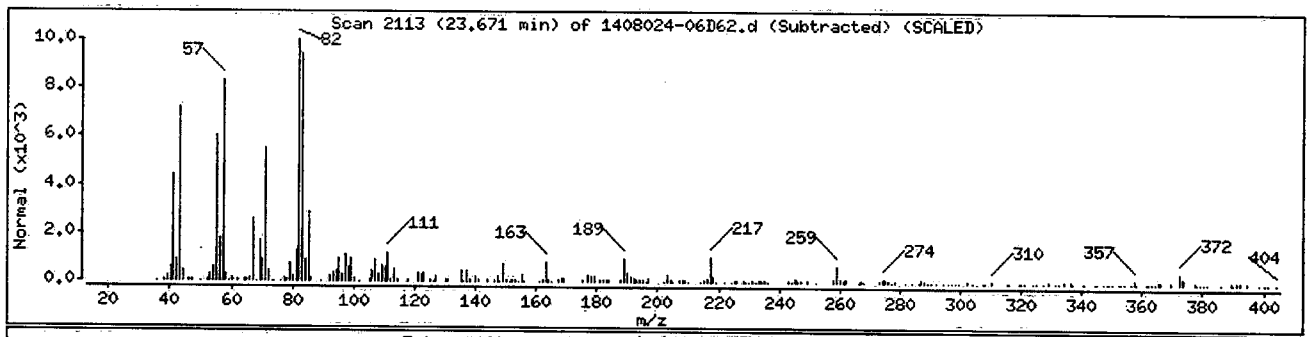
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

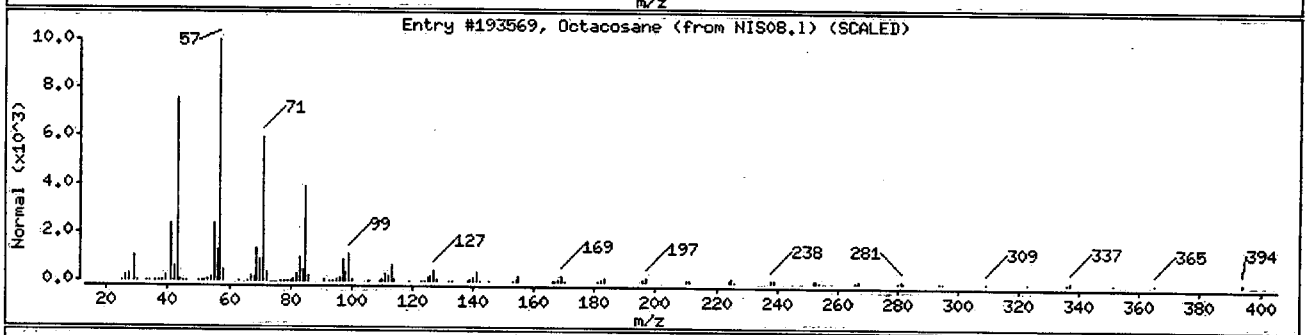
Sample Info: 1408024-06:OWS:10

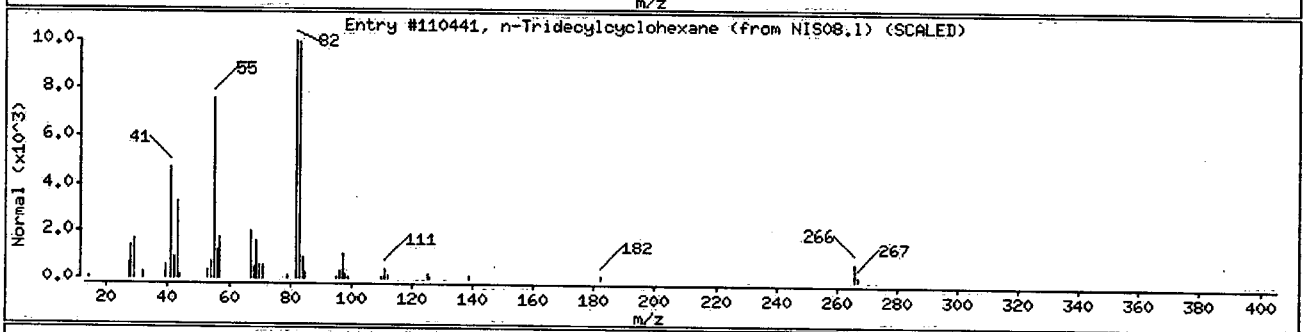
Volume Injected (uL): 2.0 Operator: OWS

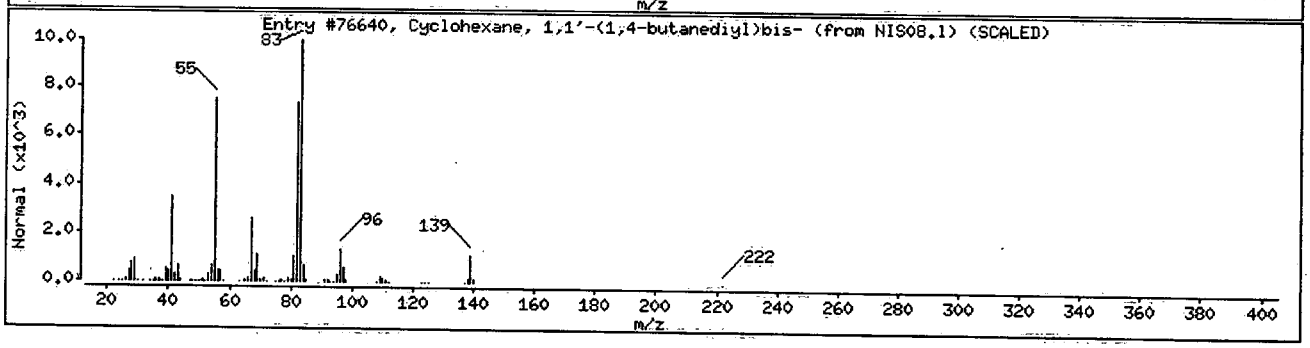
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Octacosane	630-02-4	NIS08.l	193569	53	C28H58	394
n-Tridecylcyclohexane	6006-33-3	NIS08.l	110441	49	C19H38	266
Cyclohexane, 1,1'-(1,4-butanediyl)bis-	6165-44-2	NIS08.l	76640	49	C16H30	222









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

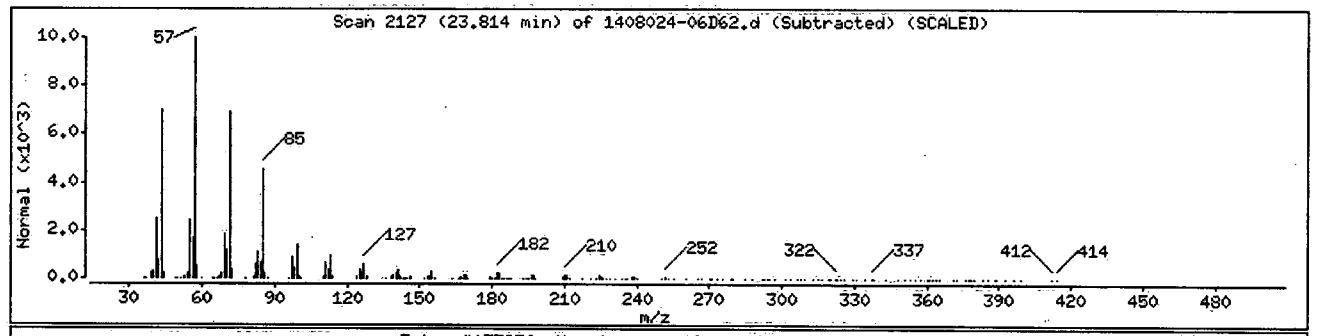
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

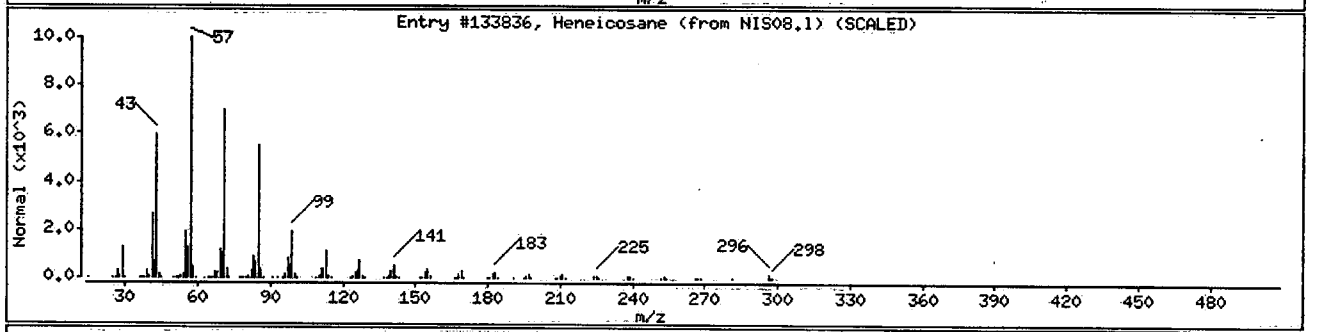
Sample Info: 1408024-06:OWS:10

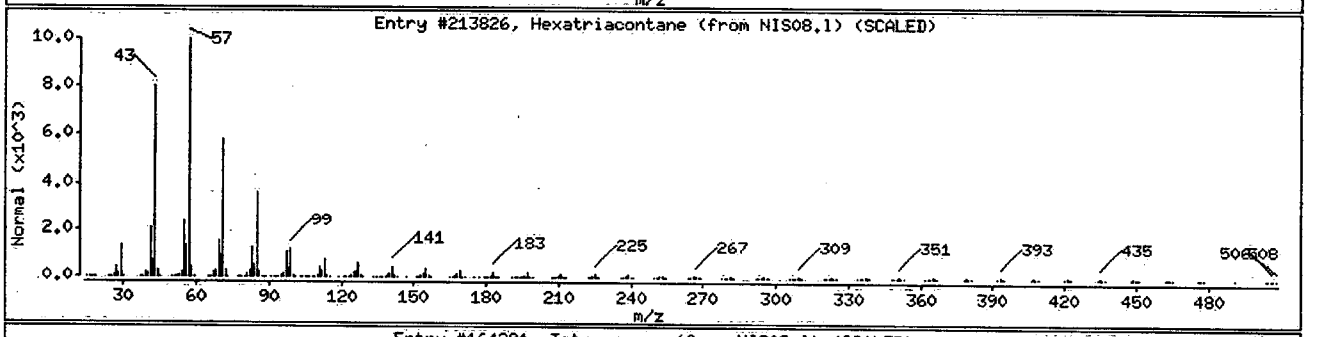
Volume Injected (uL): 2.0 Operator: OWS

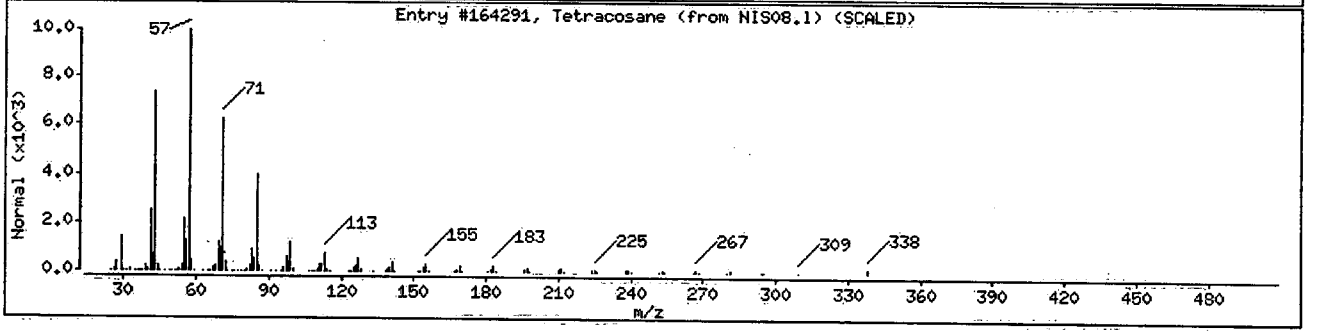
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Heneicosane	629-94-7	NIS08.1	133836	91	C21H44	296
Hexatriacontane	630-06-8	NIS08.1	213826	91	C36H74	507
Tetracosane	646-31-1	NIS08.1	164291	91	C24H50	338









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

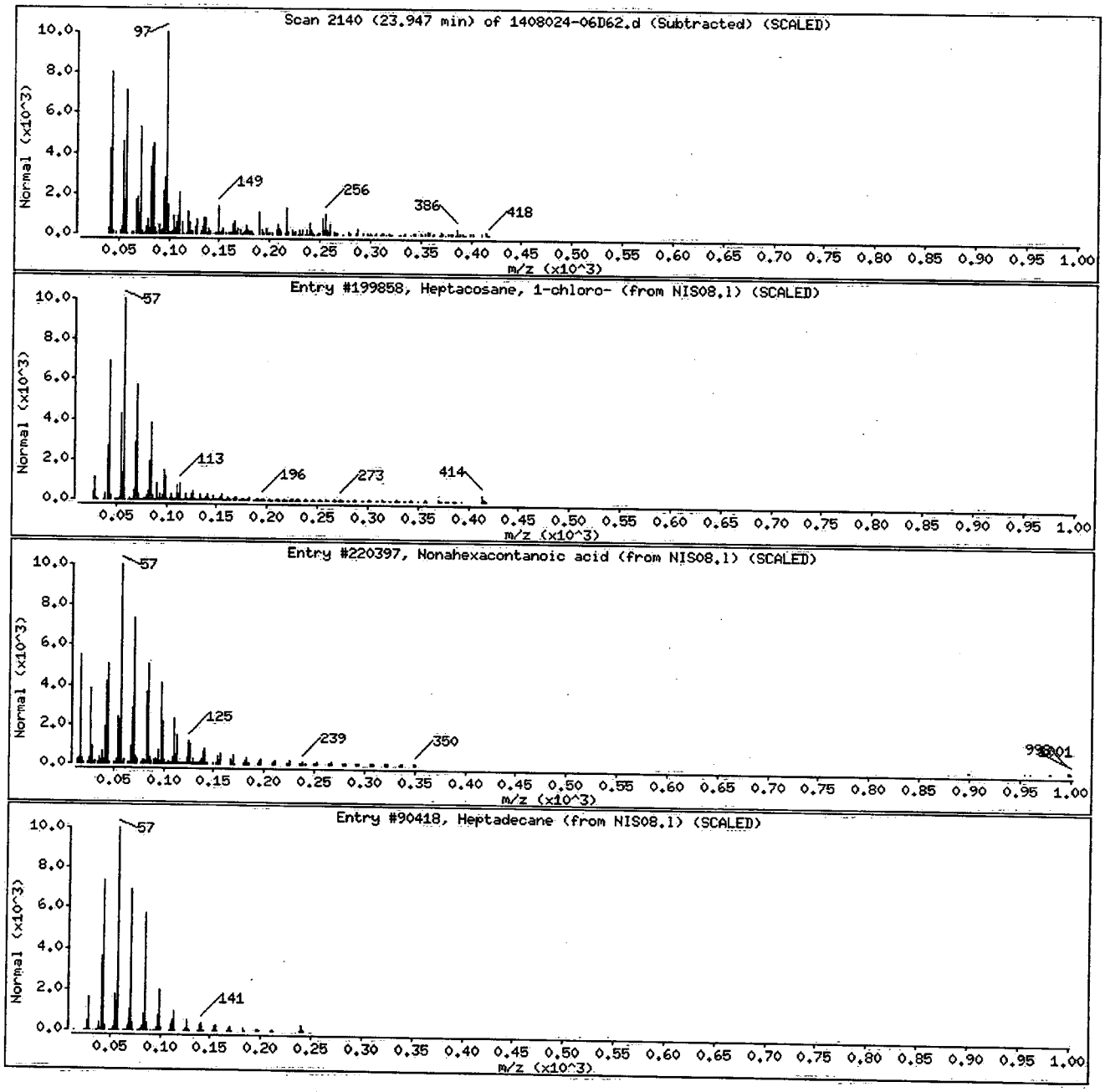
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Heptacosane, 1-chloro-	62016-79-9	NIS08.1	199858	55	C27H55Cl	414
Nonahexacontanoic acid	40710-32-5	NIS08.1	220397	38	C69H138O2	999
Heptadecane	629-78-7	NIS08.1	90418	35	C17H36	240



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

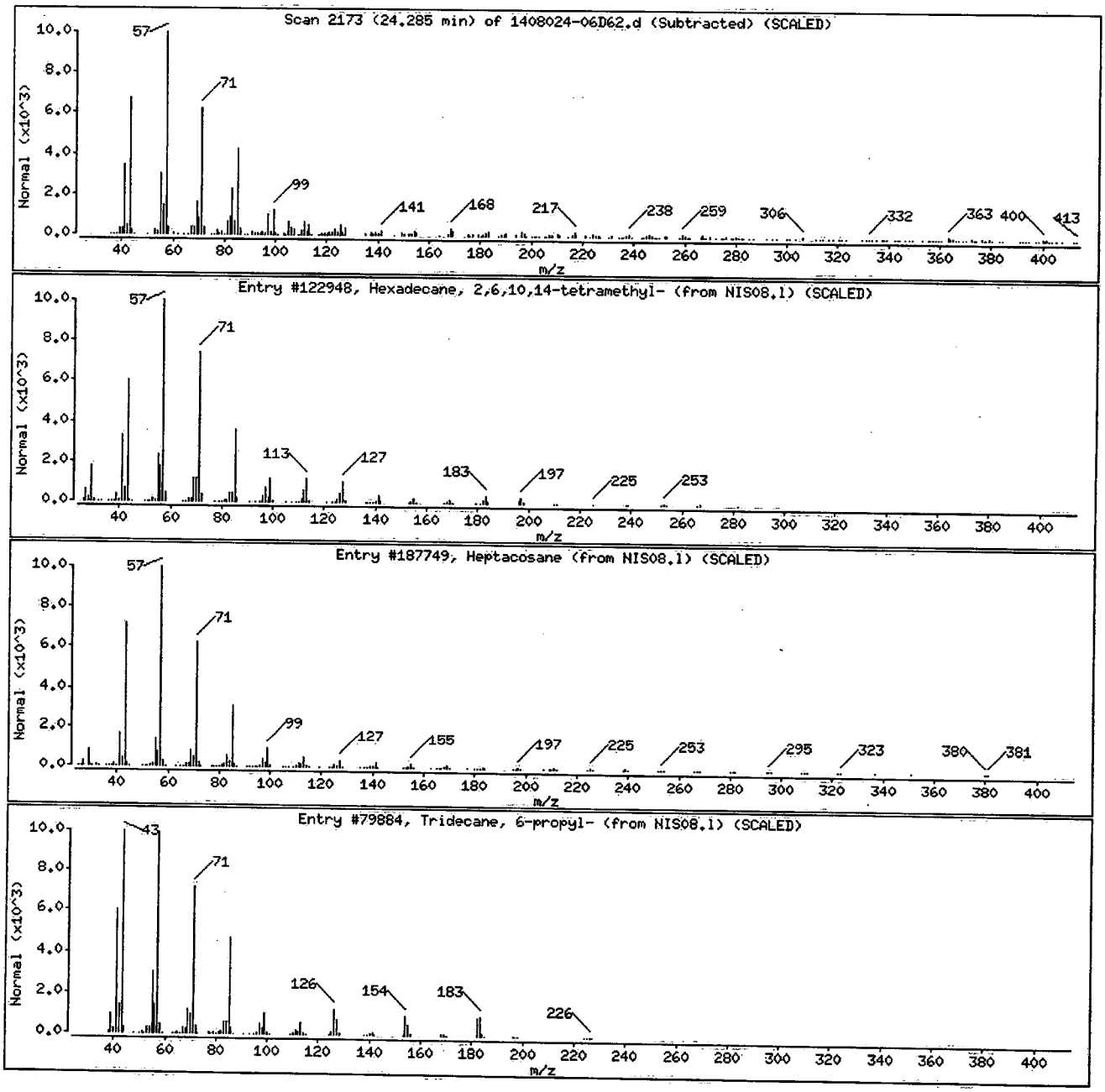
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Hexadecane, 2,6,10,14-tetramethyl-	638-36-8	NIS08.1	122948	72	C20H42	282
Heptacosane	593-49-7	NIS08.1	187749	72	C27H56	380
Tridecane, 6-propyl-	55045-10-8	NIS08.1	79884	68	C16H34	226



Roldw Hani 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

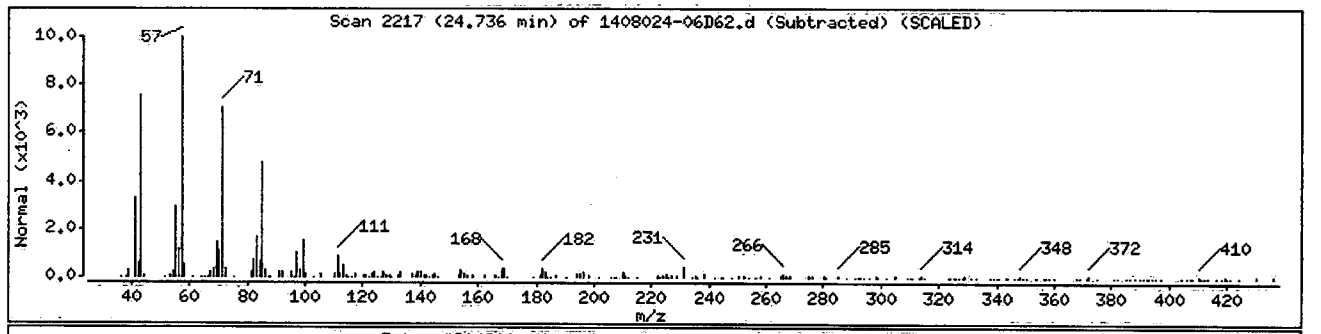
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

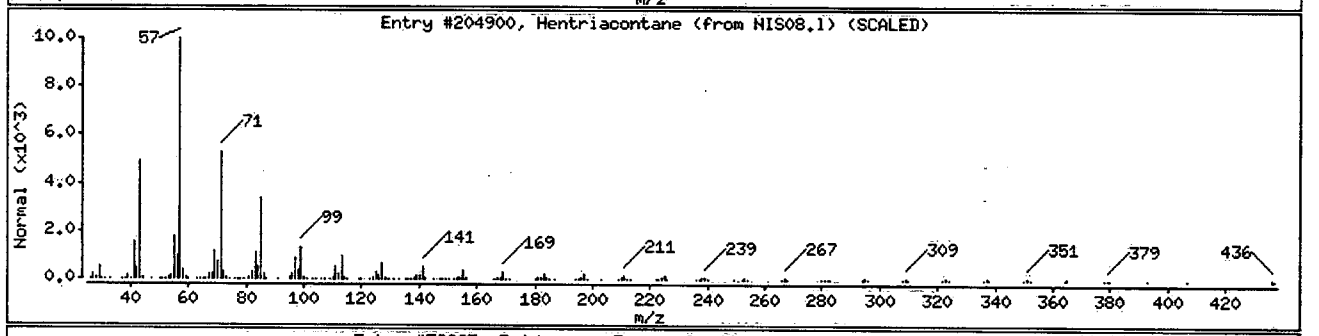
Sample Info: 1408024-06:OWS:10

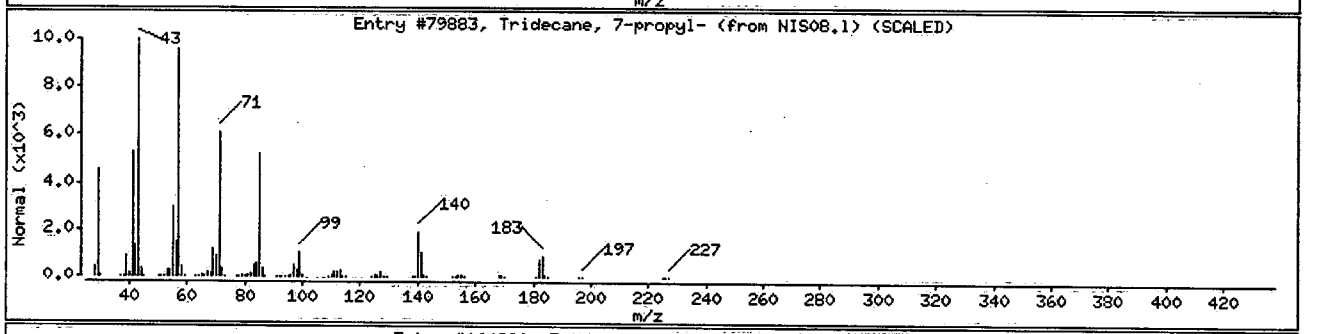
Volume Injected (uL): 2.0 Operator: OWS

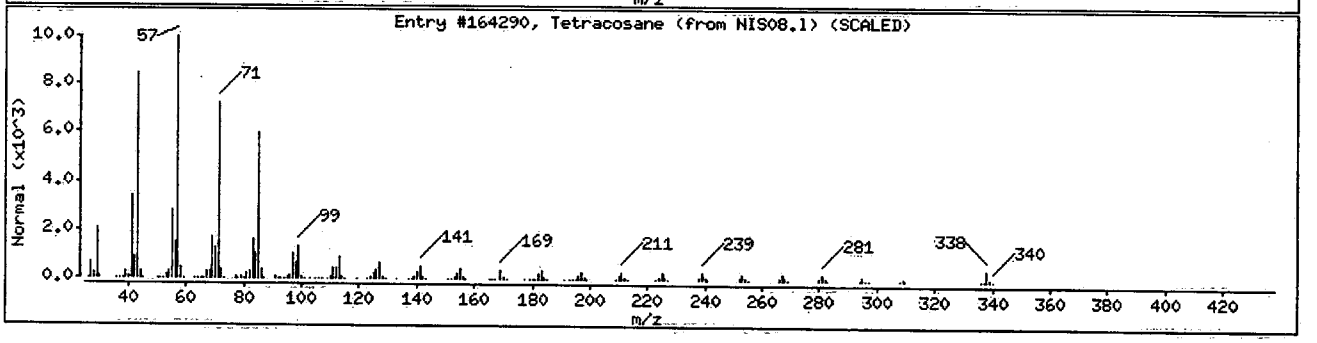
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Hentriacontane	630-04-6	NIS08.l	204900	93	C31H64	437
Tridecane, 7-propyl-	55045-09-5	NIS08.l	79883	87	C16H34	226
Tetracosane	646-31-1	NIS08.l	164290	87	C24H50	338









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

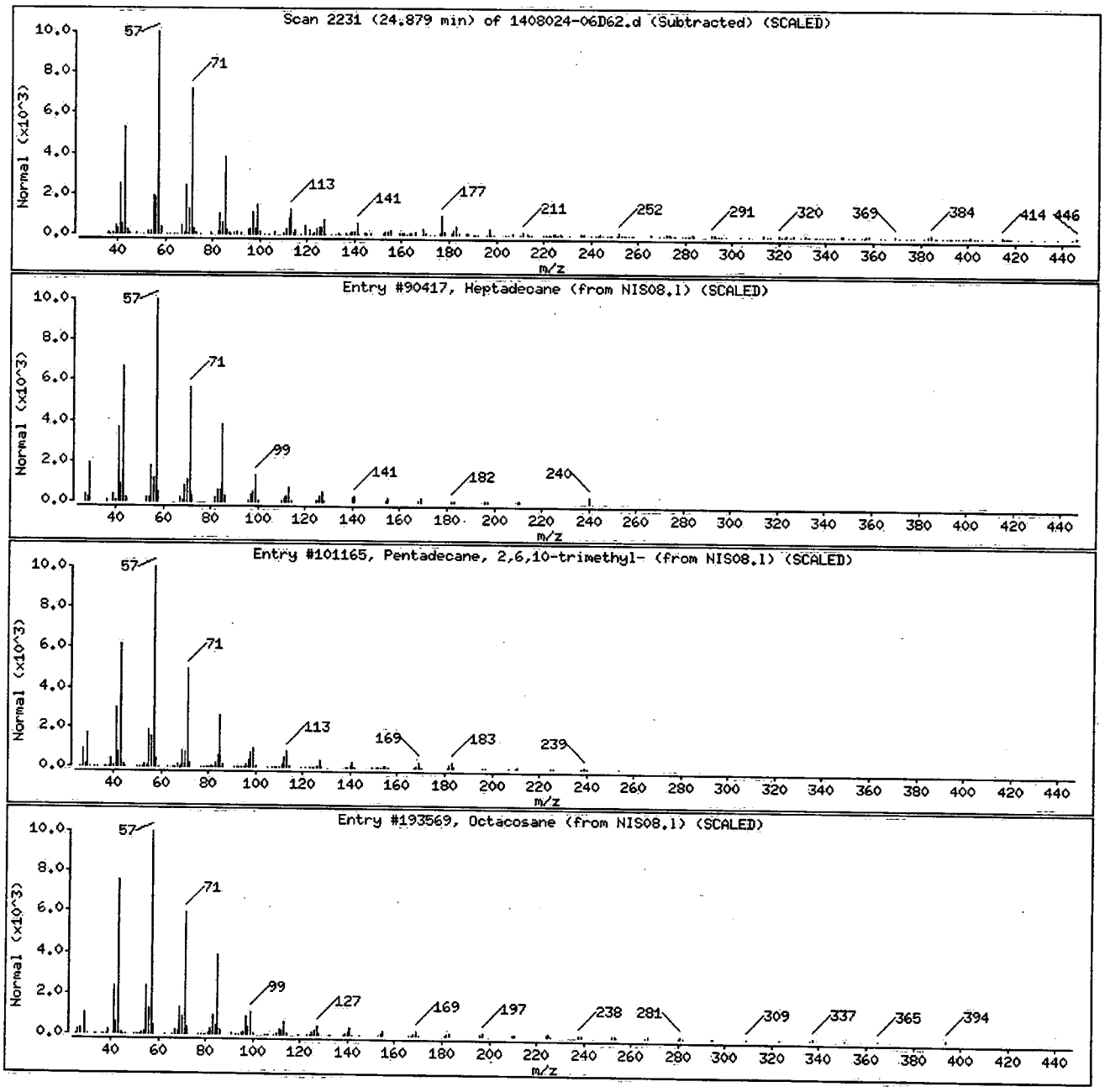
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Heptadecane	629-78-7	NIS08.l	90417	87	C17H36	240
Pentadecane, 2,6,10-trimethyl-	3892-00-0	NIS08.l	101165	86	C18H38	254
Octacosane	630-02-4	NIS08.l	193569	83	C28H58	394



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

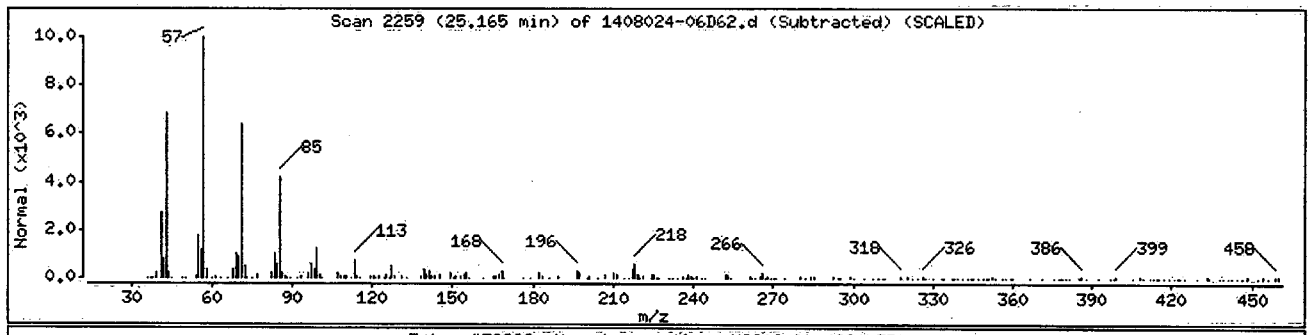
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

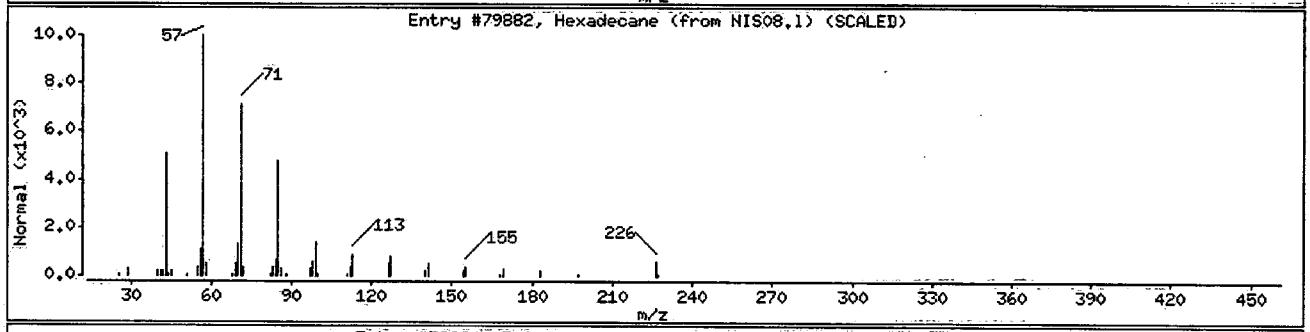
Sample Info: 1408024-06:OWS:10

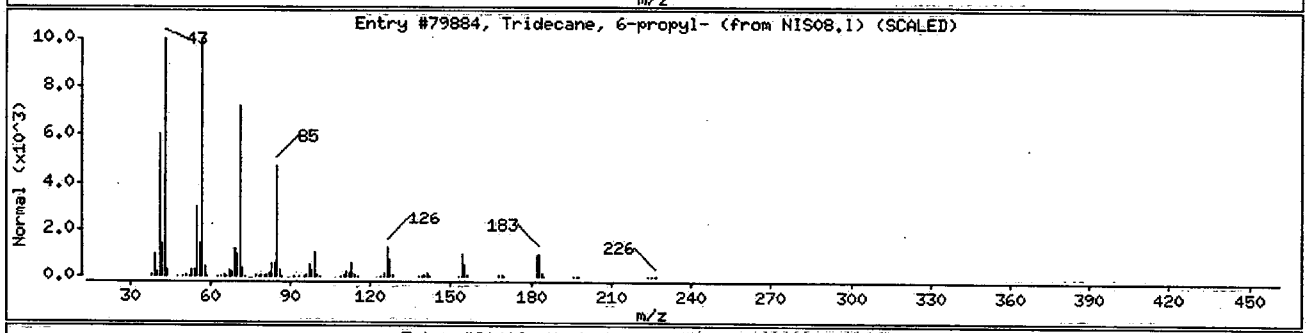
Volume Injected (uL): 2.0 Operator: OWS

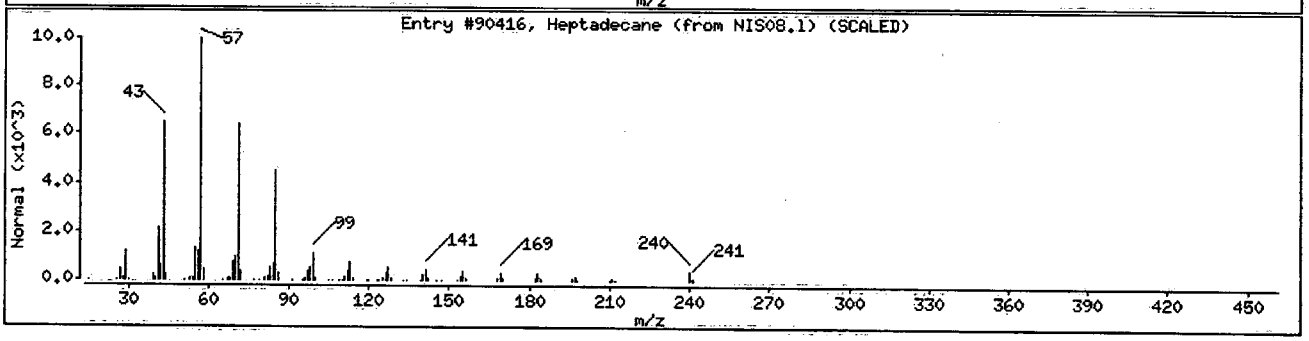
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Hexadecane	544-76-3	NIS08.1	79882	95	C16H34	226
Tridecane, 6-propyl-	55045-10-8	NIS08.1	79884	91	C16H34	226
Heptadecane	629-78-7	NIS08.1	90416	91	C17H36	240









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

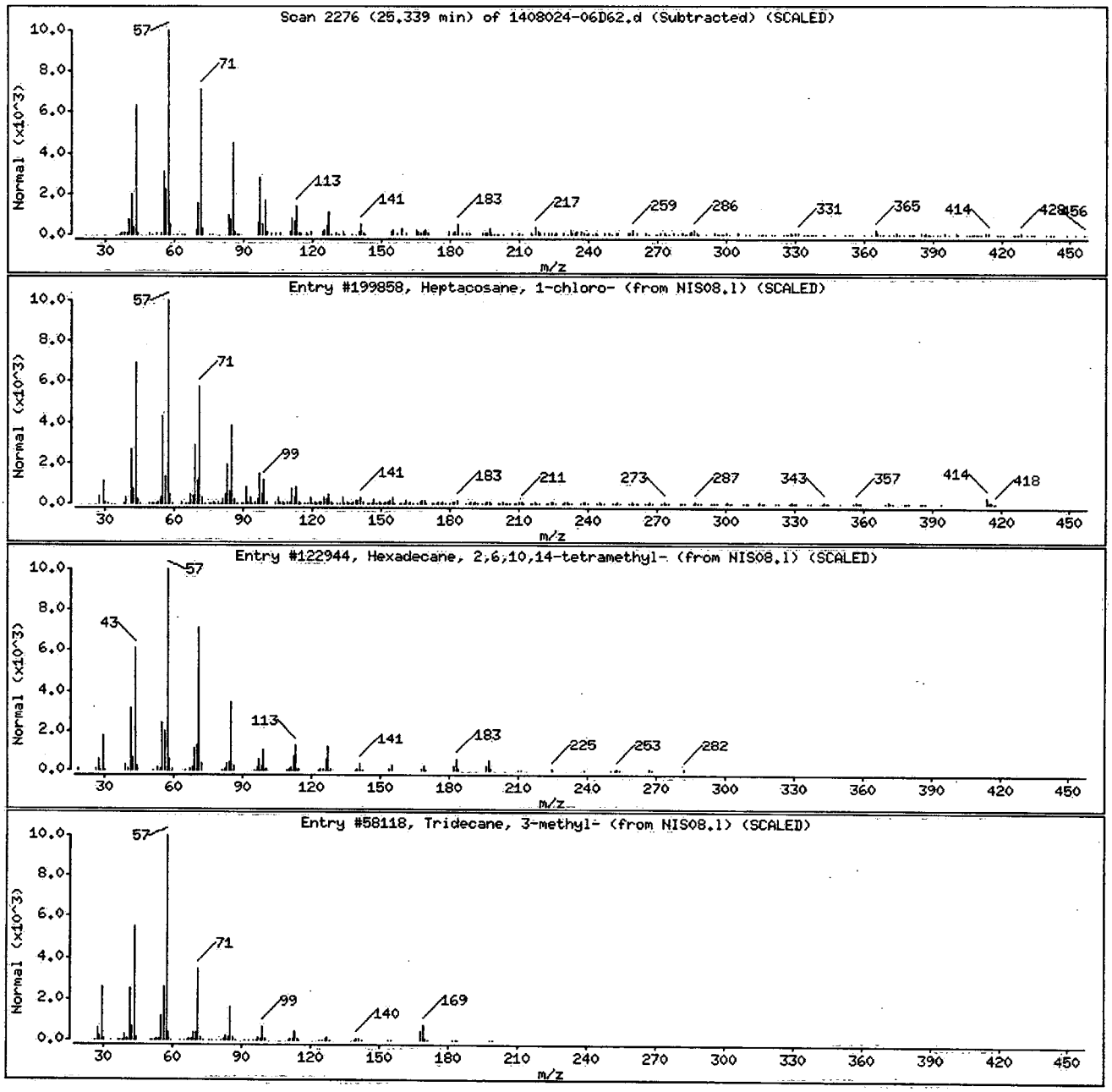
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Heptacosane, 1-chloro-	62016-79-9	NIS08.l	199858	83	C27H55Cl	414
Hexadecane, 2,6,10,14-tetramethyl-	638-36-8	NIS08.l	122944	80	C20H42	282
Tridecane, 3-methyl-	6418-41-3	NIS08.l	58118	80	C14H30	198



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

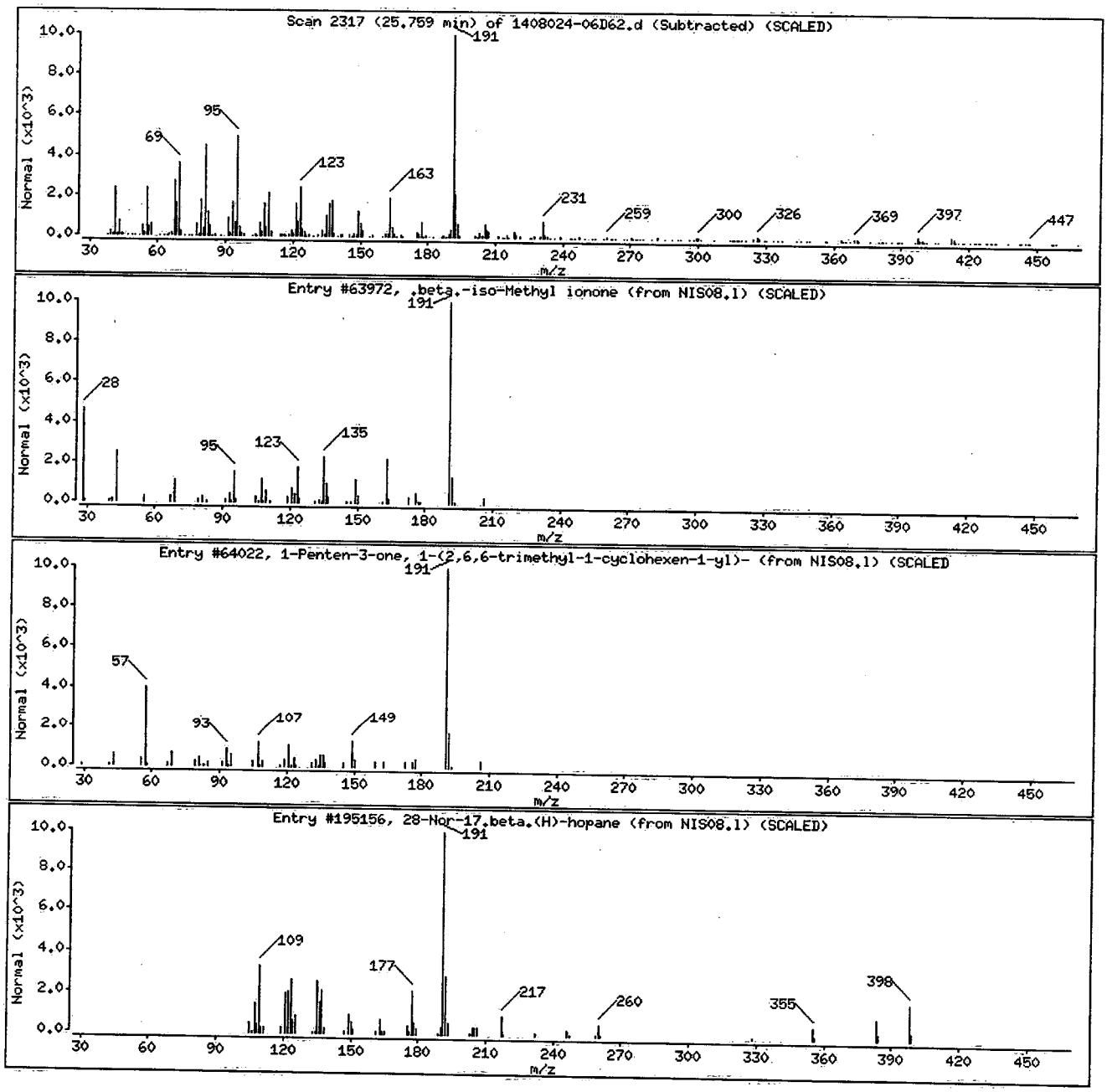
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
.beta.-iso-Methyl ionone	1000285-40-2	NIS08.l	63972	64	C14H22O	206
1-Penten-3-one, 1-(2,6,6-trimethyl-1-cyc	127-43-5	NIS08.l	64022	60	C14H22O	206
28-Nor-17.beta.(H)-hopane	36728-72-0	NIS08.l	195156	50	C29H50	398



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-06D62.d

Date : 16-AUG-2014 00:21

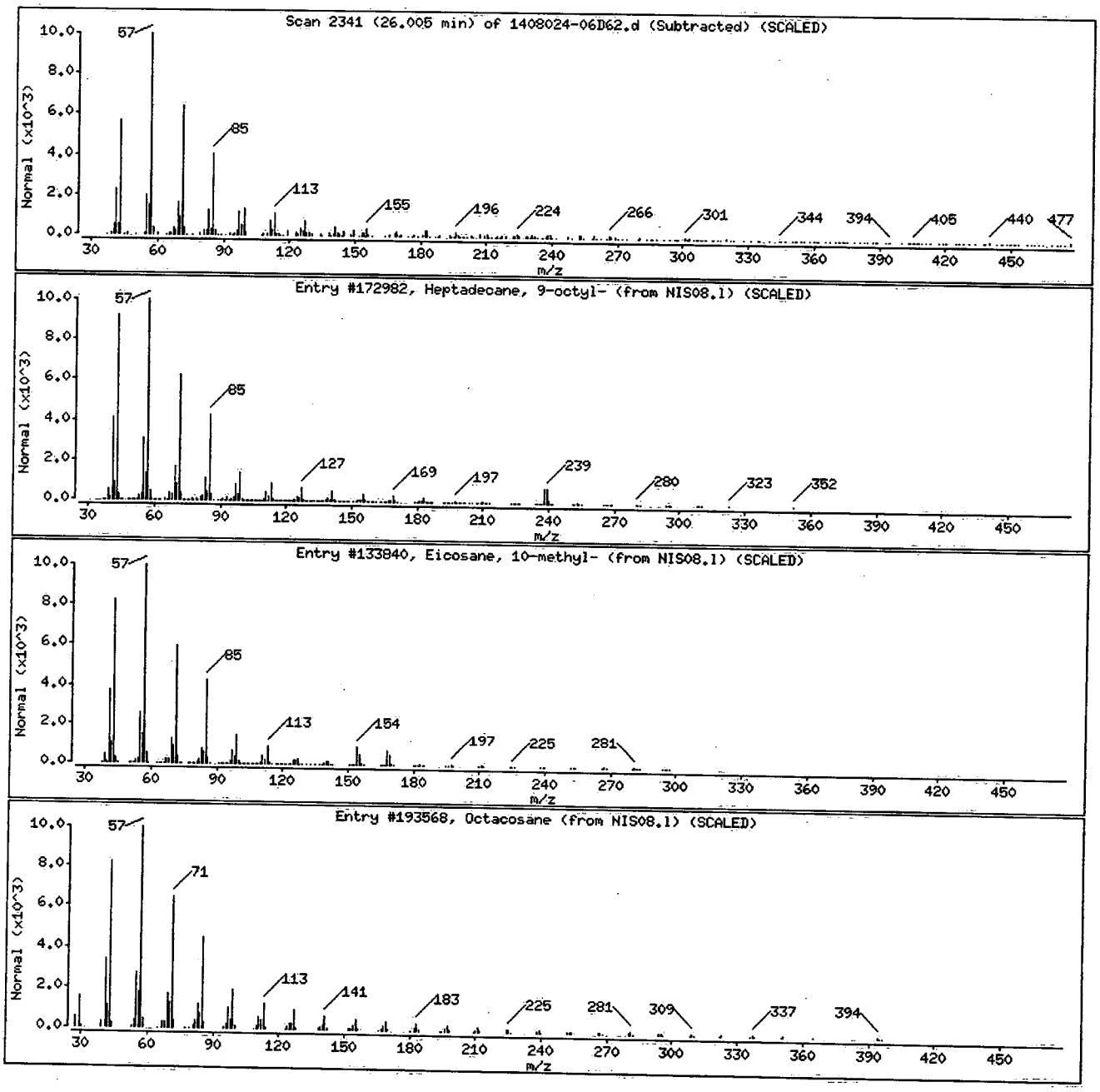
Client ID: P001-S004-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-06:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unk. Alkane						
Heptadecane, 9-octyl-	7225-64-1	NIS08.1	172982	93	C25H52	352
Eicosane, 10-methyl-	54833-23-7	NIS08.1	133840	93	C21H44	296
Octacosane	630-02-4	NIS08.1	193568	93	C28H58	394



8/19/2014

ANALYSIS DATA SHEET

SW8270D

P001-S005-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-0762.d | Sampled: 08/07/14 00:00

Initial/Final: 30.5g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-07 | Received: 08/08/14 09:04

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 13 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 18:24

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
108-95-2	Phenol		62	370	U
111-44-4	Bis(2-chloroethyl)ether		22	190	U
95-57-8	2-Chlorophenol		61	370	U
95-48-7	2-Methylphenol		44	370	U
108-60-1	2,2'-oxybis(1-Chloropropane)		28	190	U
106-44-5	3 & 4-Methylphenol		38	370	U
621-64-7	N-Nitroso-di-N-propylamine		36	190	U
98-86-2	Acetophenone		50	190	U
67-72-1	Hexachloroethane		120	190	U
98-95-3	Nitrobenzene		47	190	U
78-59-1	Isophorone		33	190	U
88-75-5	2-Nitrophenol		47	370	U
105-67-9	2,4-Dimethylphenol		59	370	U
111-91-1	Bis(2-chloroethoxy)methane		51	190	U
120-83-2	2,4-Dichlorophenol		45	370	U
91-20-3	Naphthalene		26	190	U
106-47-8	4-Chloroaniline		32	370	U
87-68-3	Hexachlorobutadiene		30	190	U
59-50-7	4-Chloro-3-methylphenol		28	370	U
91-57-6	2-Methylnaphthalene		34	190	U
77-47-4	Hexachlorocyclopentadiene		35	190	U
88-06-2	2,4,6-Trichlorophenol		35	370	U
95-95-4	2,4,5-Trichlorophenol		28	370	U
91-58-7	2-Chloronaphthalene		46	190	U
88-74-4	2-Nitroaniline		28	370	U
131-11-3	Dimethylphthalate		18	190	U
606-20-2	2,6-Dinitrotoluene		20	190	U
208-96-8	Acenaphthylene		34	190	U
99-09-2	3-Nitroaniline		25	370	U
83-32-9	Acenaphthene		34	190	U
51-28-5	2,4-Dinitrophenol		18	370	U
100-02-7	4-Nitrophenol		52	370	U
121-14-2	2,4-Dinitrotoluene		23	190	U
132-64-9	Dibenzofuran		34	190	U
84-66-2	Diethylphthalate		21	190	U

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[redacted]

ANALYSIS DATA SHEET
SW8270D

P001-S005-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-0762.d | Sampled: 08/07/14 00:00

Initial/Final: 30.5g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-07 | Received: 08/08/14 09:04

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 13 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 18:24

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
7005-72-3	4-Chlorophenyl-phenylether		24	190	U
86-73-7	Fluorene		25	190	U
100-01-6	4-Nitroaniline		50	370	U
534-52-1	4,6-Dinitro-2-methylphenol		51	370	U
86-30-6	N-Nitrosodiphenylamine (1)		34	190	U
101-55-3	4-Bromophenyl-phenylether		29	190	U
118-74-1	Hexachlorobenzene		25	190	U
87-86-5	Pentachlorophenol		49	370	U
85-01-8	Phenanthrene	14	11	190	J
120-12-7	Anthracene		9.7	190	U
86-74-8	Carbazole		20	190	U
84-74-2	Di-n-butylphthalate		28	190	U
206-44-0	Fluoranthene	36	28	190	J
129-00-0	Pyrene	29	25	190	J
85-68-7	Butylbenzylphthalate		30	190	U
91-94-1	3,3'-Dichlorobenzidine		39	190	U
117-81-7	bis(2-ethylhexyl)Phthalate		35	190	U
56-55-3	Benzo (a) anthracene		31	190	U
218-01-9	Chrysene	25	12	190	J
117-84-0	Di-n-octylphthalate		38	190	U
205-99-2	Benzo (b) fluoranthene	34	29	190	J
207-08-9	Benzo(k)fluoranthene		27	190	U
50-32-8	Benzo (a) pyrene		21	190	U
193-39-5	Indeno(1,2,3-cd)pyrene		33	190	U
53-70-3	Dibenzo(a,h)anthracene		53	190	U
191-24-2	Benzo (g,h,i) perylene	57	34	190	J
100-52-7	Benzaldehyde		30	190	U
105-60-2	Caprolactam		32	190	U
1912-24-9	Atrazine		22	190	U
92-52-4	1,1'-Biphenyl		45	190	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	3780	3051	81	35 - 105	
Phenol-d5	3780	2458	65	40 - 100	
Nitrobenzene-d5	1890	1251	66	35 - 100	

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ANALYSIS DATA SHEET

SW8270D

P001-S005-0002-01

Client:	WESTON SOLUTIONS	SDG	1408024	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ		
Matrix:	Soil	Extraction:	EPA 3550C MOD SV	File ID:	1408024-0762.d	Sampled:	08/07/14 00:00
Initial/Final:	30.5g / 1000uL	Sulfur Cleanup:	N	Lab ID:	1408024-07	Received:	08/08/14 09:04
Dilution:	1 pH:	Florisil Cleanup:	N			Prepared:	08/12/14 09:00
% Moisture:	13	GPC Cleanup:	N	GPC Cleanup Factor:	N	Analyzed:	08/15/14 18:24
Batch:	4080818	Sequence:	4H15001	Calibration:	4072701	Instrument:	5972hp62

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	1890	1361	72	45 - 105	
2,4,6-Tribromophenol	3780	3410	90	35 - 125	
Terphenyl-d14	1890	1607	85	30 - 125	

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q
000112-84-5	13-Docosenamide, (Z)-	370	1263920	24.025	93	JN
191-07-1	Coronene	670	2282072	28.477	95	JN
791-28-6	Triphenylphosphine oxide	350	1425551	22.786	97	JN
NA	Unknown 2.459	1100	4130580	2.459	0	J
NA	Unknown 23.144	160	629517	23.144	0	J
NA	Unknown 4.219	9100	33937610	4.219	0	J

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.
(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.
(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

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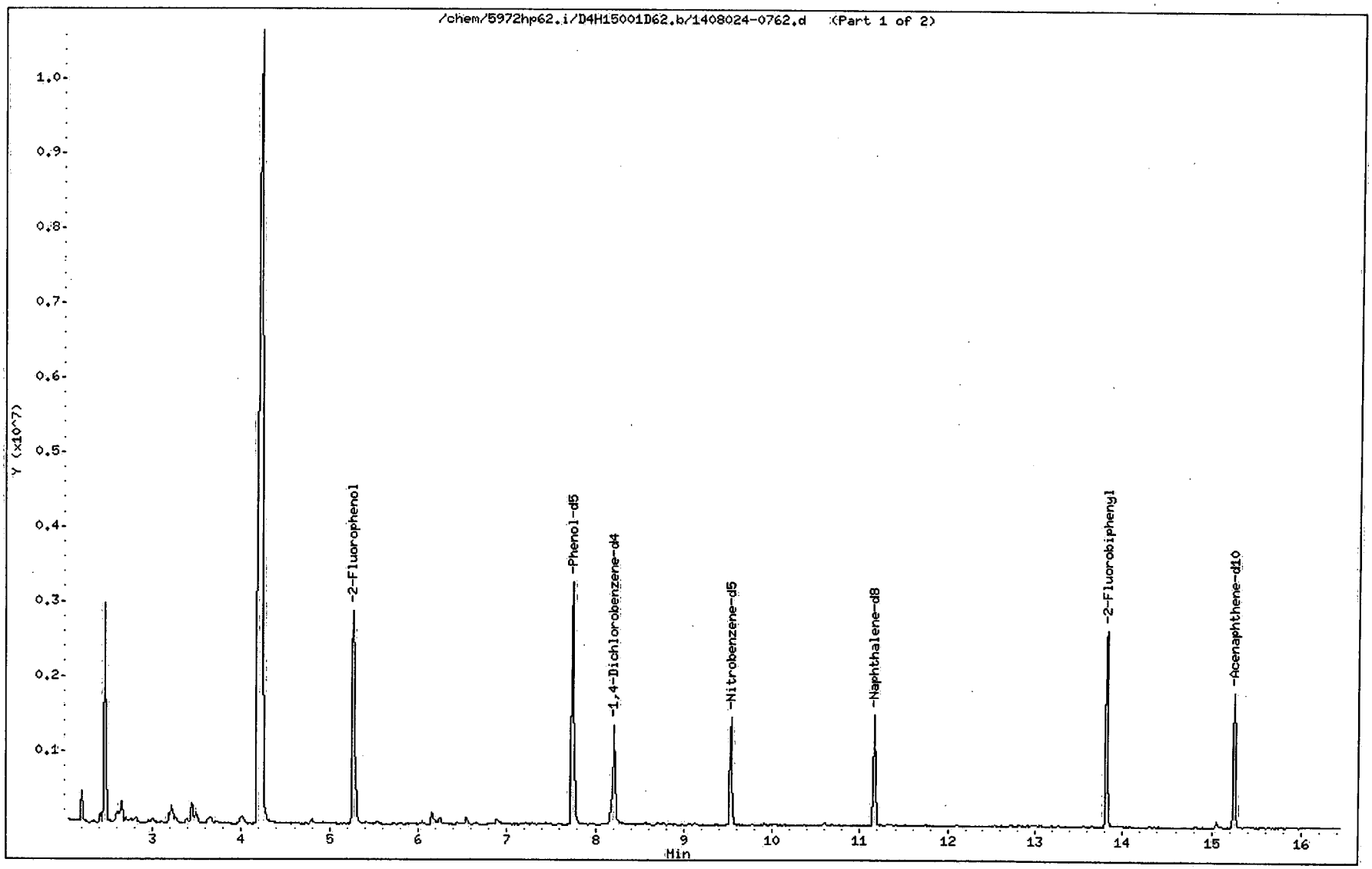
Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-0762.d
Date : 15-AUG-2014 18:24
Client ID: P001-S005-0002-01
Sample Info: 1408024-07:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i

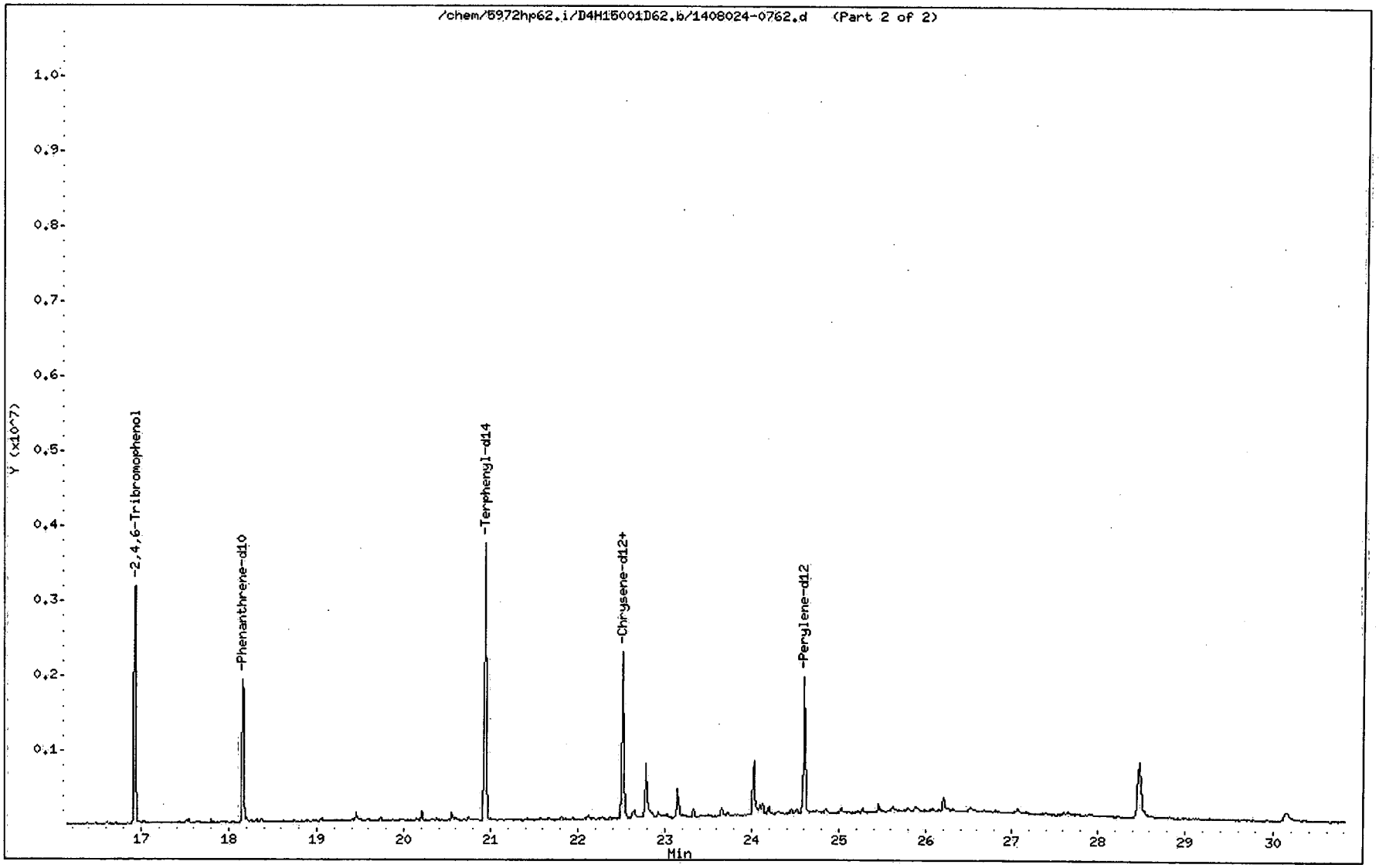
Operator: OWS
Column diameter: 0.32



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-0762.d
Date : 15-AUG-2014 18:24
Client ID: P001-S005-0002-01
Sample Info: 1408024-07:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-0762.d
Report Date: 19-Aug-2014 11:23

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp62.i/D4H15001D62.b/1408024-0762.d
Lab Smp Id: 1408024-07 Client Smp ID: P001-S005-0002-01
Inj Date : 15-AUG-2014 18:24
Operator : OWS Inst ID: 5972hp62.i
Smp Info : 1408024-07:OWS
Misc Info : P001-S005-0002-01
Comment :
Method : /chem/5972hp62.i/D4H15001D62.b/8270Dv26.m
Meth Date : 19-Aug-2014 11:23 ron Quant Type: ISTD
Cal Date : 23-JUL-2014 19:31 Cal File: 4G23008-CAL662.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1000.00000	Volume of final extract (uL)(1000 low, 2
Vi	2.00000	Volume injected (uL)
Ws	30.50000	Weight of sample extracted (g)
M	13.00000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	8.211	8.212	(1.000)	314945	40.0000		
* 2 Naphthalene-d8	136	11.169	11.170	(1.000)	1148523	40.0000		
* 3 Acenaphthene-d10	164	15.253	15.254	(1.000)	617244	40.0000		
* 4 Phenanthrene-d10	188	18.160	18.171	(1.000)	1026306	40.0000		
* 5 Chrysene-d12	240	22.520	22.521	(1.000)	1023483	40.0000		
* 6 Perylene-d12	264	24.598	24.609	(1.000)	740867	40.0000		
$ 7 2-Fluorophenol	112	5.263	5.274	(0.641)	1639404	161.452	3000	(A)
$ 8 Phenol-d5	99	7.740	7.751	(0.943)	1885569	130.044	2400	(A)
$ 9 Nitrobenzene-d5	82	9.531	9.532	(0.853)	762341	66.1731	1200	
$ 10 2-Fluorobiphenyl	172	13.820	13.821	(0.906)	1379698	72.0346	1400	
$ 11 2,4,6-Tribromophenol	330	16.932	16.932	(1.110)	611480	180.453	3400	8073(A)
$ 12 Terphenyl-d14	244	20.944	20.945	(0.930)	1700738	85.0032	1600	
15 Phenol	94	Compound Not Detected.						

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-0762.d
Report Date: 19-Aug-2014 11:23

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
17 Bis(2-chloroethyl)ether	93	Compound Not Detected.						
18 2-Chlorophenol	128	Compound Not Detected.						
23 2-Methylphenol	108	Compound Not Detected.						
24 2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.						
25 3 & 4-Methylphenol	108	Compound Not Detected.						
26 N-Nitroso-di-N-propylamine	70	Compound Not Detected.						
27 Acetophenone	105	Compound Not Detected.						
28 Hexachloroethane	117	Compound Not Detected.						
29 Nitrobenzene	77	Compound Not Detected.						
30 Isophorone	82	Compound Not Detected.						
31 2-Nitrophenol	139	Compound Not Detected.						
32 2,4-Dimethylphenol	122	Compound Not Detected.						
33 Bis(2-chloroethoxy)methane	93	Compound Not Detected.						
34 2,4-Dichlorophenol	162	Compound Not Detected.						
36 Naphthalene	128	Compound Not Detected.						
37 4-Chloroaniline	127	Compound Not Detected.						
38 Hexachlorobutadiene	224	Compound Not Detected.						
39 4-Chloro-3-methylphenol	107	Compound Not Detected.						
40 2-Methylnaphthalene	141	Compound Not Detected.						
42 Hexachlorocyclopentadiene	236	Compound Not Detected.						
44 2,4,6-Trichlorophenol	196	Compound Not Detected.						
45 2,4,5-Trichlorophenol	196	Compound Not Detected.						
46 2-Chloronaphthalene	162	Compound Not Detected.						
47 2-Nitroaniline	65	Compound Not Detected.						
48 Dimethylphthalate	163	Compound Not Detected.						
50 2,6-Dinitrotoluene	165	Compound Not Detected.						
51 Acenaphthylene	152	Compound Not Detected.						
52 3-Nitroaniline	138	Compound Not Detected.						
53 Acenaphthene	153	Compound Not Detected.						
54 2,4-Dinitrophenol	184	Compound Not Detected.						
55 4-Nitrophenol	139	Compound Not Detected.						
56 2,4-Dinitrotoluene	165	Compound Not Detected.						
57 Dibenzofuran	168	Compound Not Detected.						
59 Diethylphthalate	149	Compound Not Detected.						
60 4-Chlorophenyl-phenylether	204	Compound Not Detected.						
61 Fluorene	166	Compound Not Detected.						
62 4-Nitroaniline	138	Compound Not Detected.						
63 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
64 N-Nitrosodiphenylamine (1)	169	Compound Not Detected.						
66 4-Bromophenyl-phenylether	248	Compound Not Detected.						
67 Hexachlorobenzene	283	Compound Not Detected.						
68 Pentachlorophenol	265	Compound Not Detected.						
69 Phenanthrene	178	18.201	18.212	(1.002)	20237	0.75060	14	(a)
70 Anthracene	178	Compound Not Detected.						
71 Carbazole	167	Compound Not Detected.						
72 Di-n-butylphthalate	149	Compound Not Detected.						
73 Fluoranthene	202	20.207	20.218	(1.113)	53674	1.88468	36	(a)

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-0762.d
Report Date: 19-Aug-2014 11:23

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
74 Pyrene	202	20.555	20.566	(0.913)	46314	1.56022	29	(a)
75 Butylbenzylphthalate	149	Compound Not Detected.						
76 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
77 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
78 Benzo(a)anthracene	228	Compound Not Detected.						
79 Chrysene	228	22.551	22.562	(1.001)	31453	1.31925	25	(a)
80 Di-n-octylphthalate	149	Compound Not Detected.						
81 Benzo(b)fluoranthene	252	24.096	24.097	(0.980)	47494	1.81011	34	(a)
82 Benzo(k)fluoranthene	252	Compound Not Detected.						
83 Benzo(a)pyrene	252	Compound Not Detected.						
84 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.						
85 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
86 Benzo(g,h,i)perylene	276	26.205	26.216	(1.065)	74319	3.01086	57	(a)
87 Benzaldehyde	77	Compound Not Detected.						
88 Caprolactam	113	Compound Not Detected.						
89 Atrazine	215	Compound Not Detected.						
90 1,1'-Biphenyl	154	Compound Not Detected.						

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.

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-0762.d

Date : 15-AUG-2014 18:24

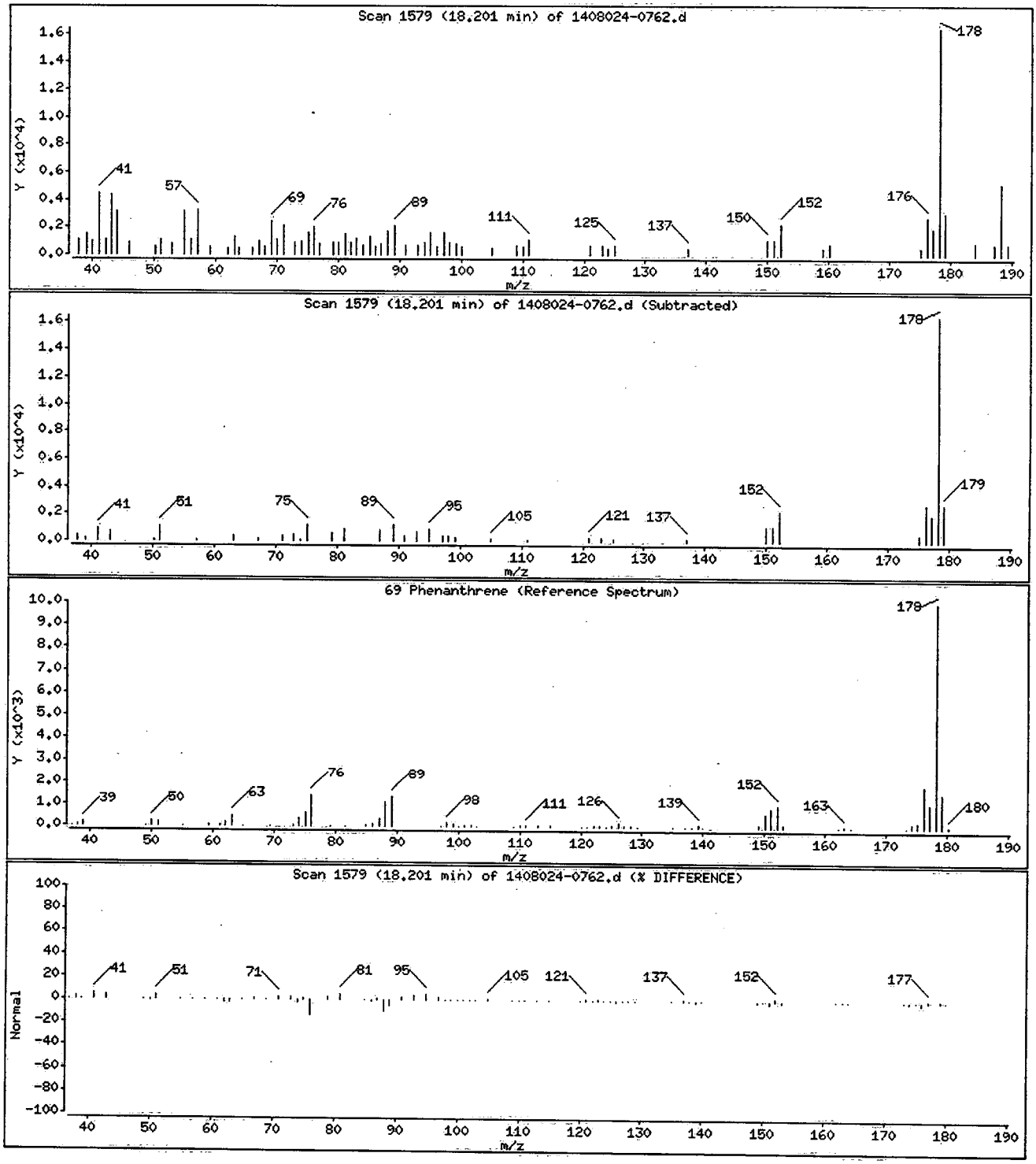
Client ID: P001-S005-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-07:OWS

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

69 Phenanthrene Concentration: 14 ug/Kg



Robert Hamm 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-0762.d

Date : 15-AUG-2014 18:24

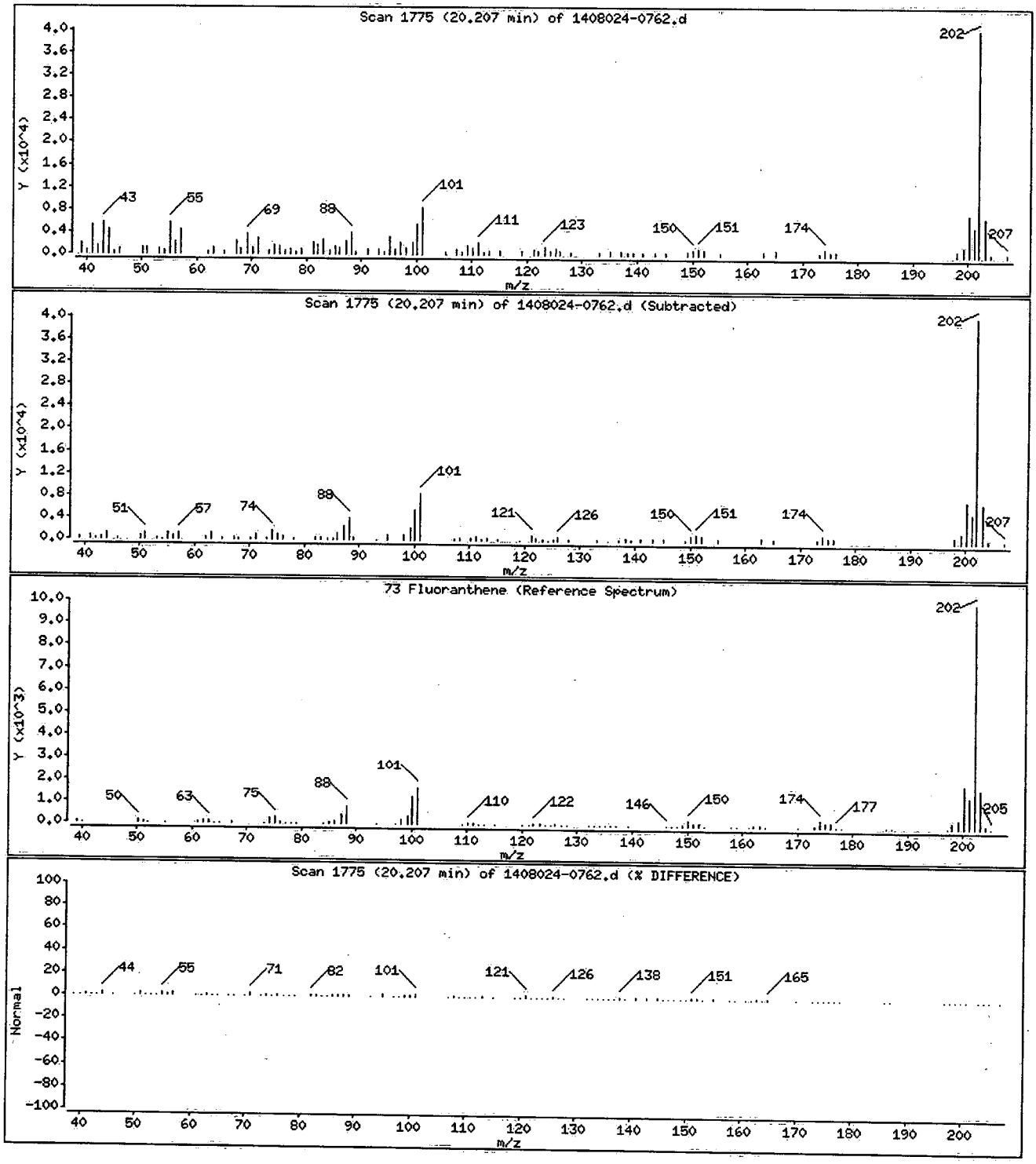
Client ID: P001-S005-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-07:OWS

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

73 Fluoranthene Concentration: 36 ug/Kg



Roldan Hani 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-0762.d

Date : 15-AUG-2014 18:24

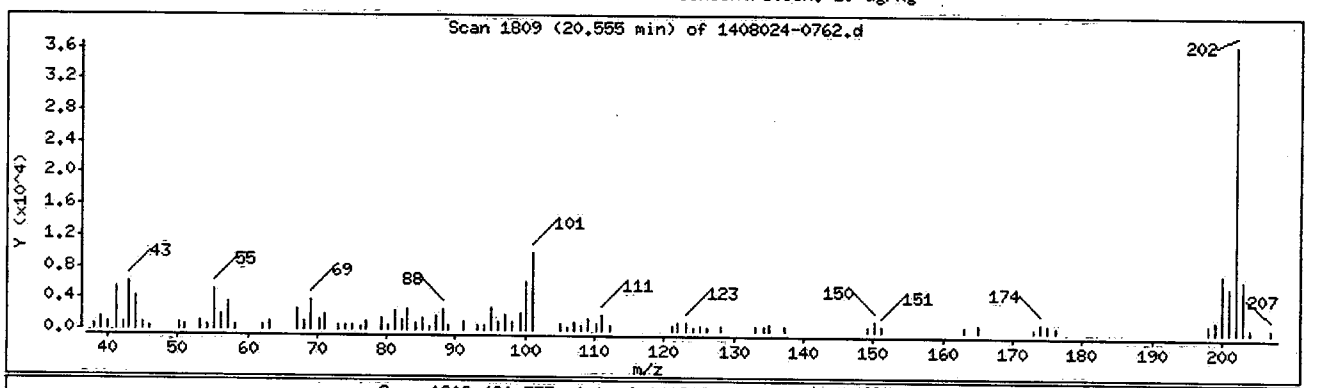
Client ID: P001-S005-0002-01 Instrument: 5972hp62.i

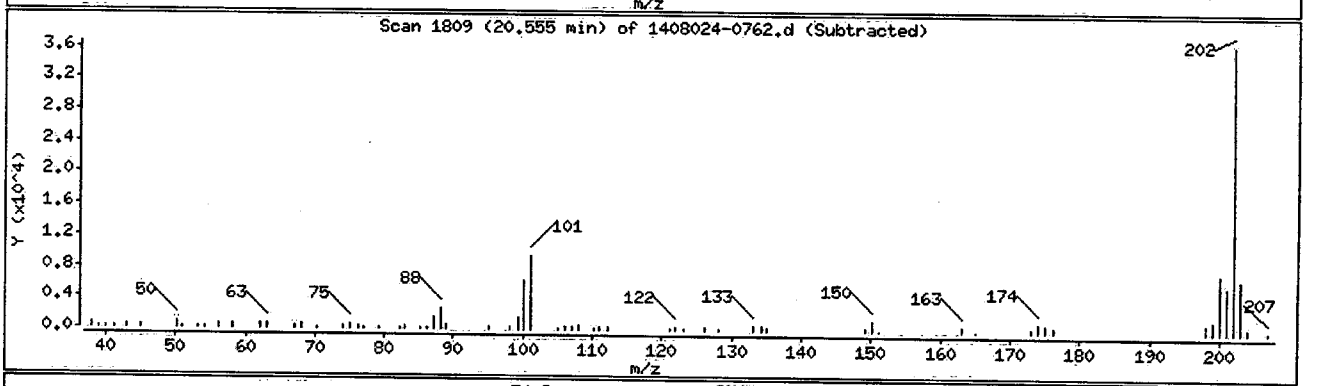
Sample Info: 1408024-07:OWS

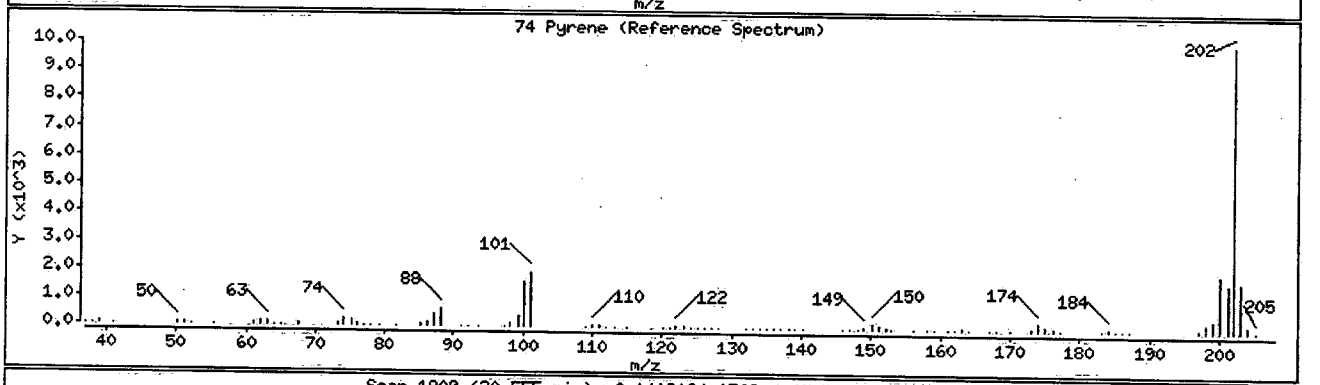
Volume Injected (uL): 2.0 Operator: OWS

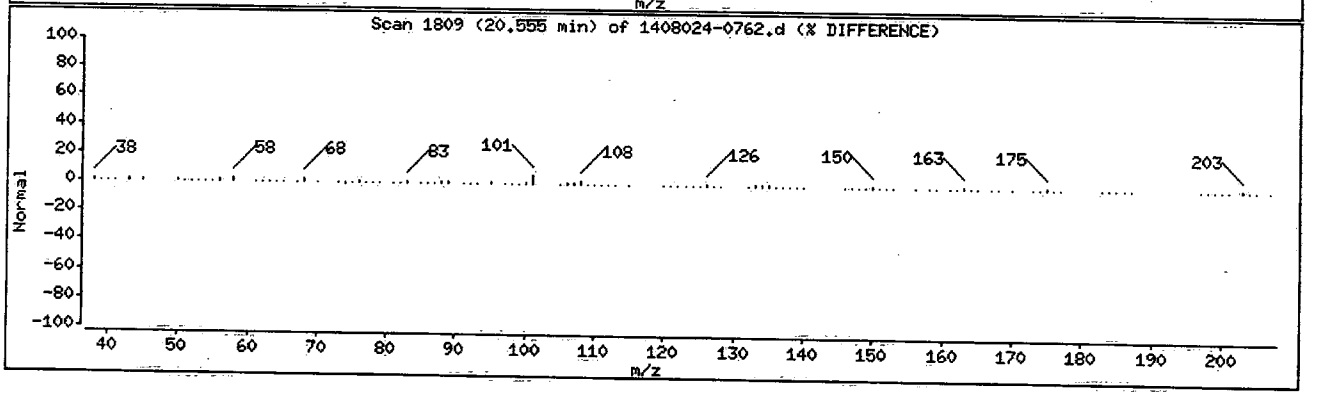
Column phase: Rxi-5SilMS Column diameter: 0.32

74 Pyrene Concentration: 29 ug/Kg









Robert Hamm 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-0762.d

Date : 15-AUG-2014 18:24

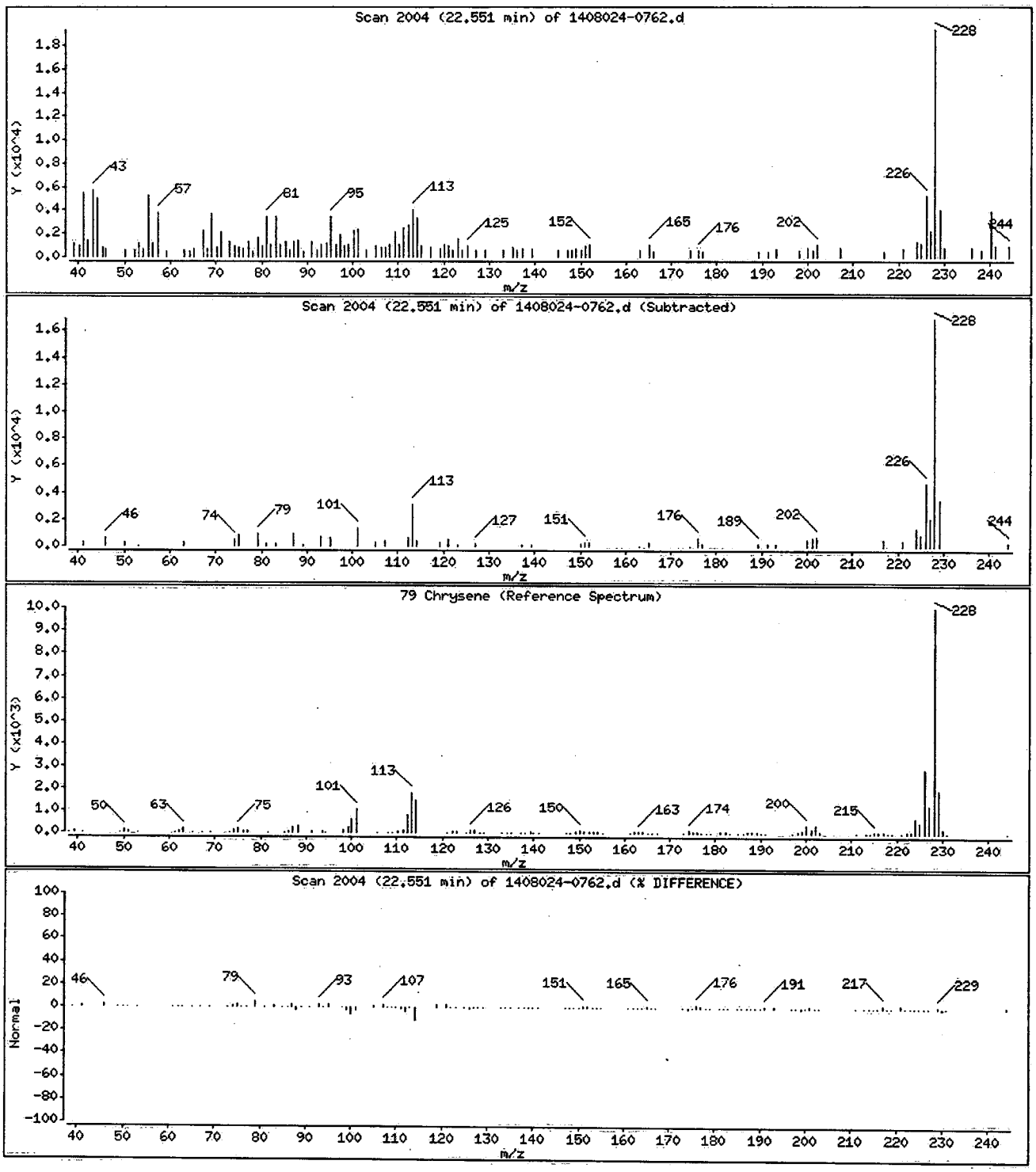
Client ID: P001-S005-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-07:OWS

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

79 Chrysene Concentration: 25 ug/Kg



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-0762.d

Date : 15-AUG-2014 18:24

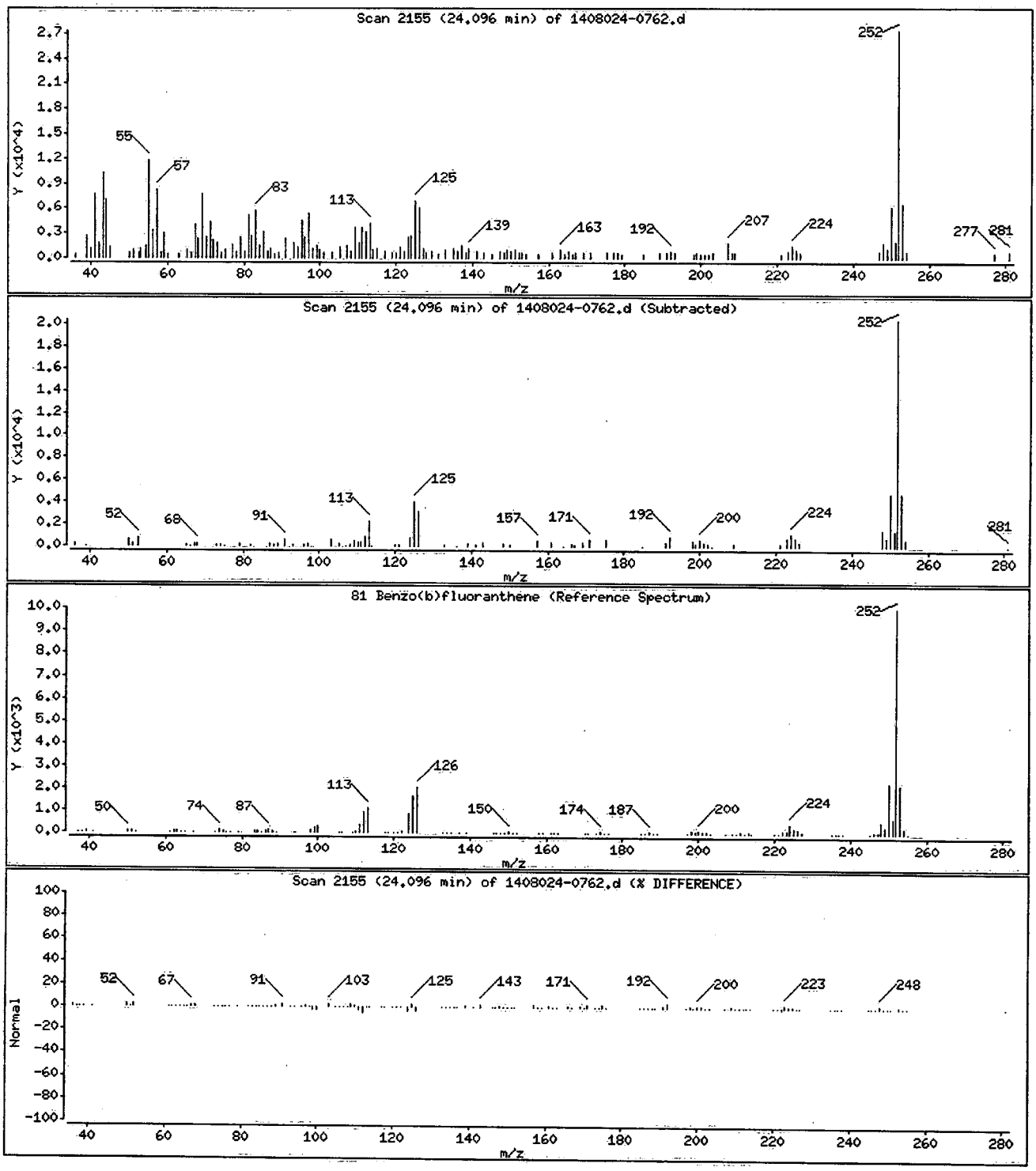
Client ID: P001-S005-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-07:OWS

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

81 Benzo(b)fluoranthene Concentration: 34 ug/Kg



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-0762.d

Date : 15-AUG-2014 18:24

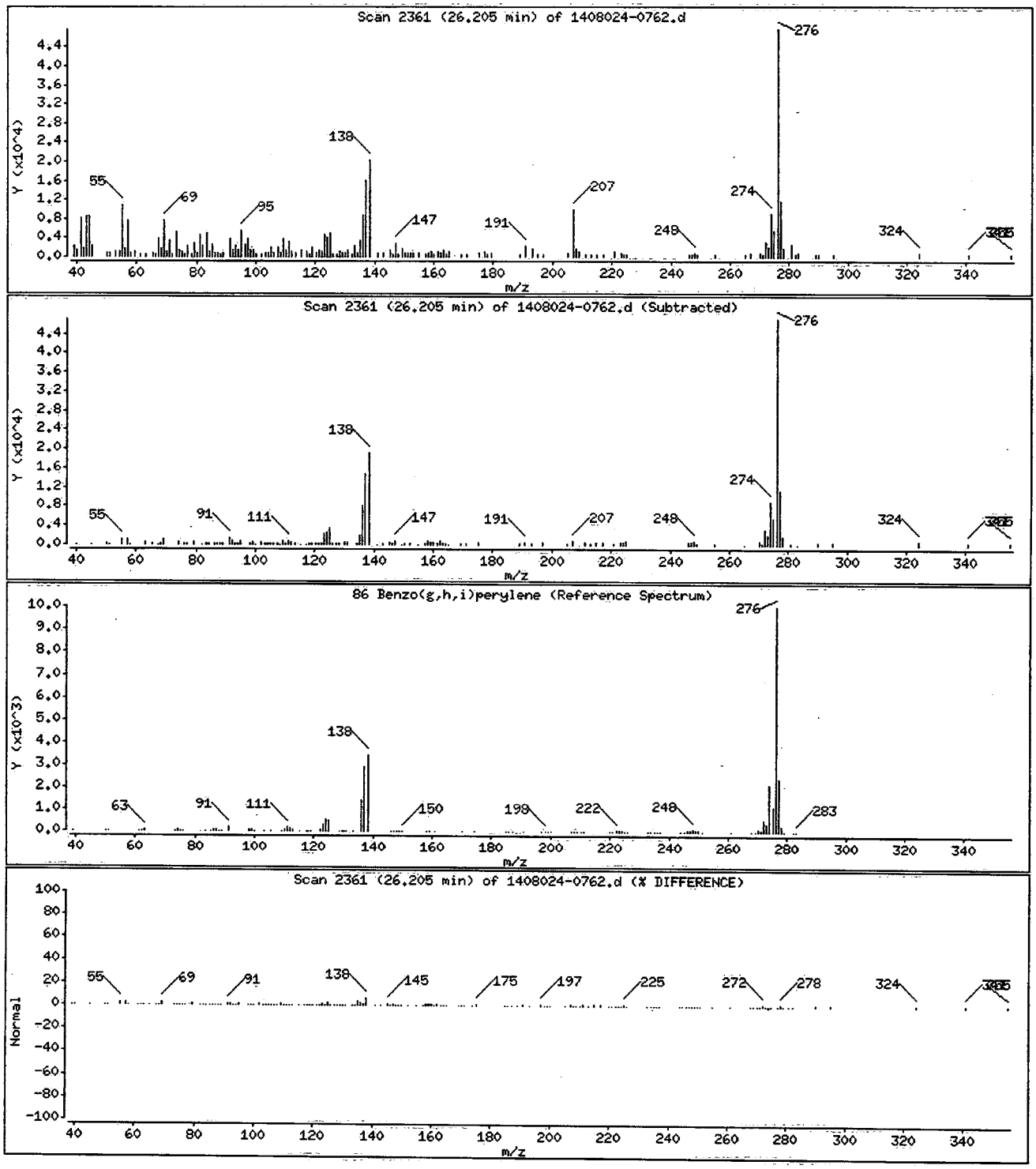
Client ID: P001-S005-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-07:OWS

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

86 Benzo(g,h,i)perylene Concentration: 57 ug/Kg



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-0762.d

Date : 15-AUG-2014 18:24

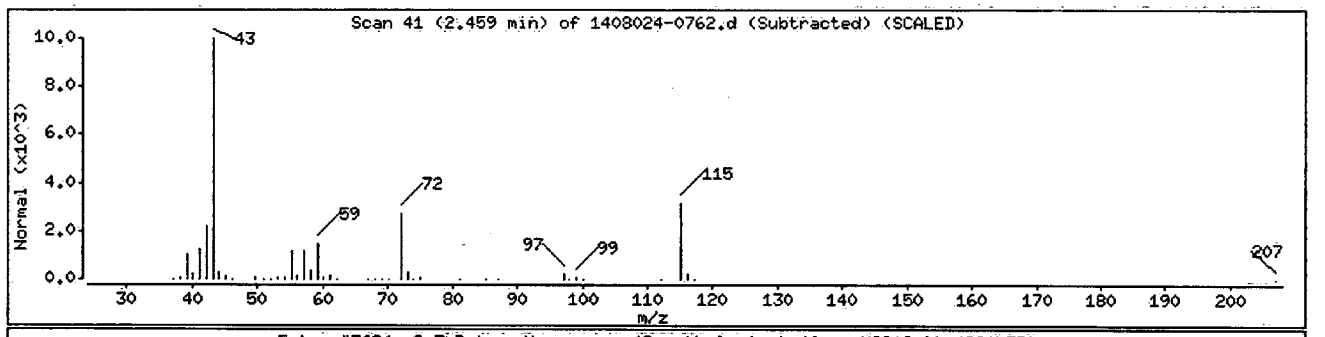
Client ID: P001-S005-0002-01 Instrument: 5972hp62.i

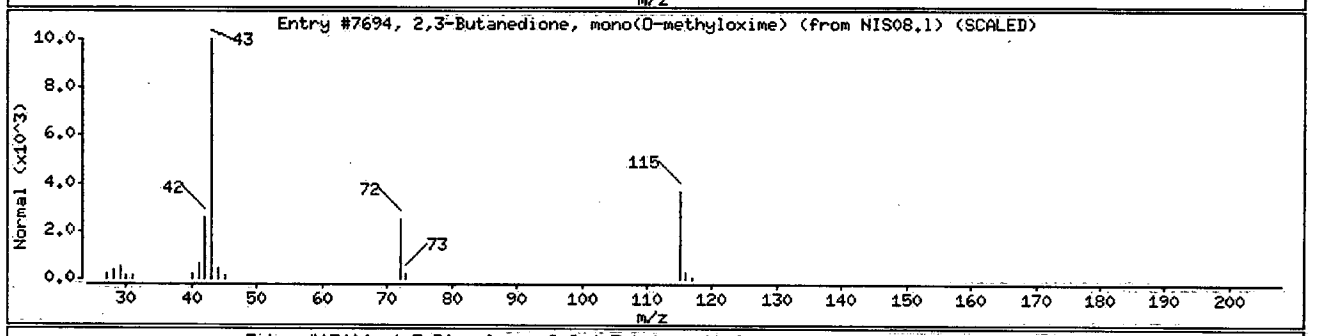
Sample Info: 1408024-07:OWS

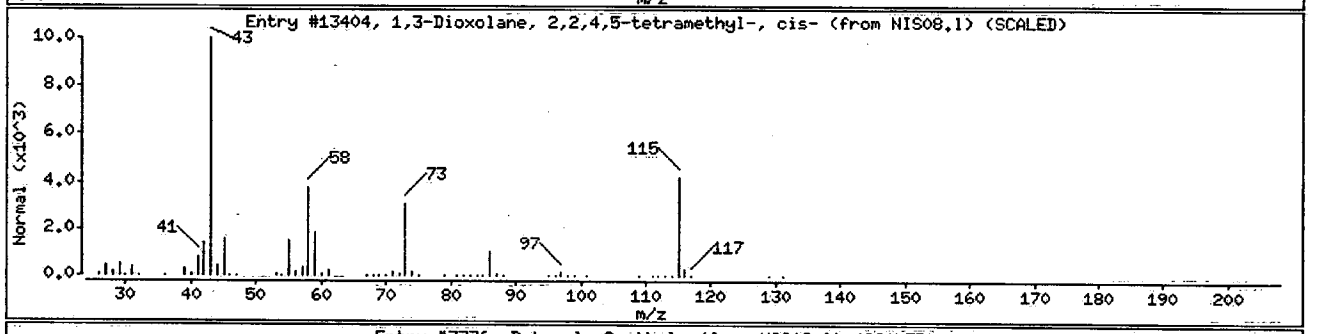
Volume Injected (uL): 2.0 Operator: OWS

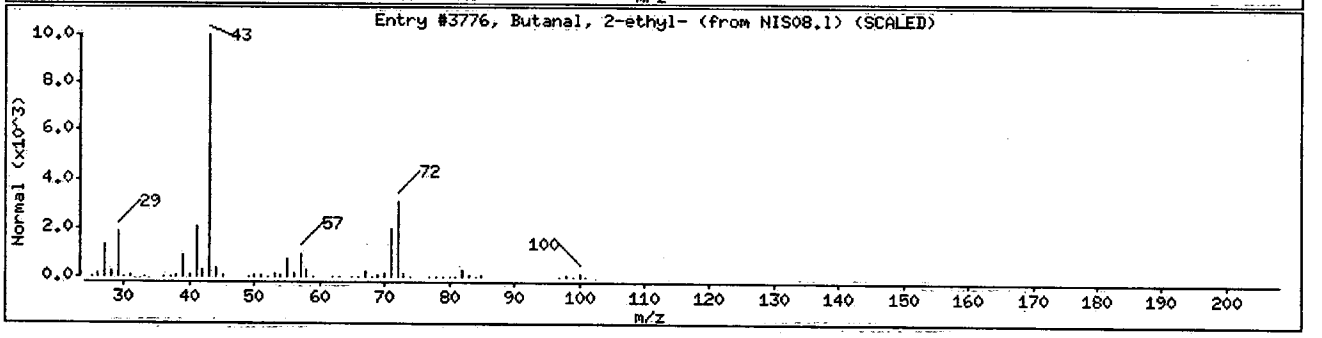
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,3-Butanedione, mono(O-methyloxime)	617-32-3	NIS08.1	7694	45	C5H9NO2	115
1,3-Dioxolane, 2,2,4,5-tetramethyl-, cis	17226-65-2	NIS08.1	13404	28	C7H14O2	130
Butanal, 2-ethyl-	97-96-1	NIS08.1	3776	17	C6H12O	100









8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-0762.d

Date : 15-AUG-2014 18:24

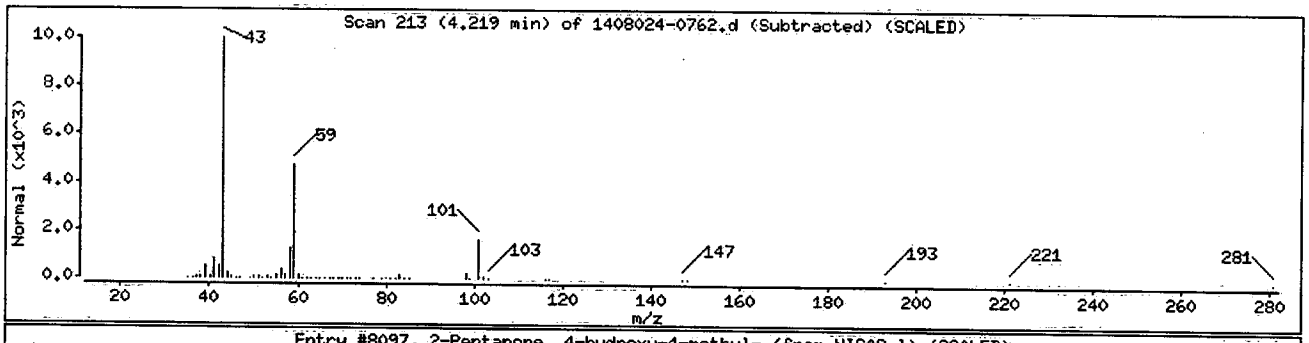
Client ID: P001-S005-0002-01 Instrument: 5972hp62.i

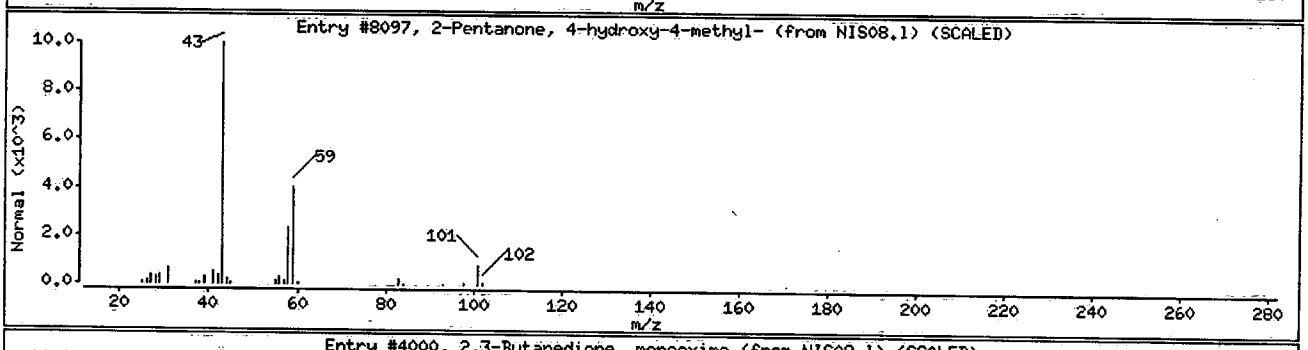
Sample Info: 1408024-07:OWS

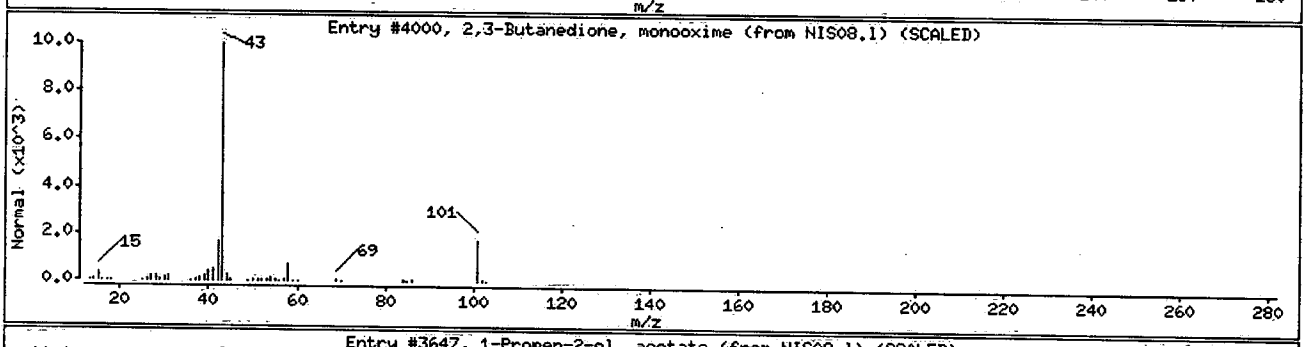
Volume Injected (uL): 2.0 Operator: OWS

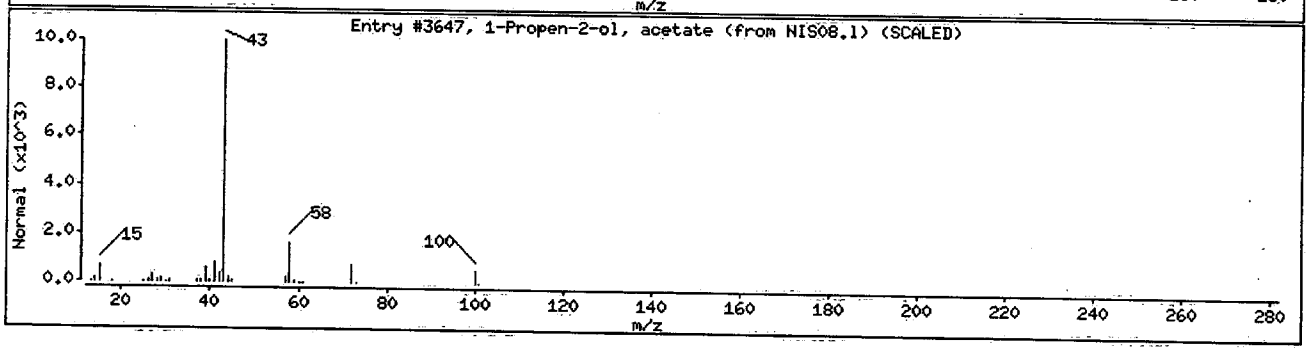
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIS08.1	8097	64	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIS08.1	4000	27	C4H7NO2	101
1-Propen-2-ol, acetate	108-22-5	NIS08.1	3647	10	C5H8O2	100









Robin Hai 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-0762.d

Date : 15-AUG-2014 18:24

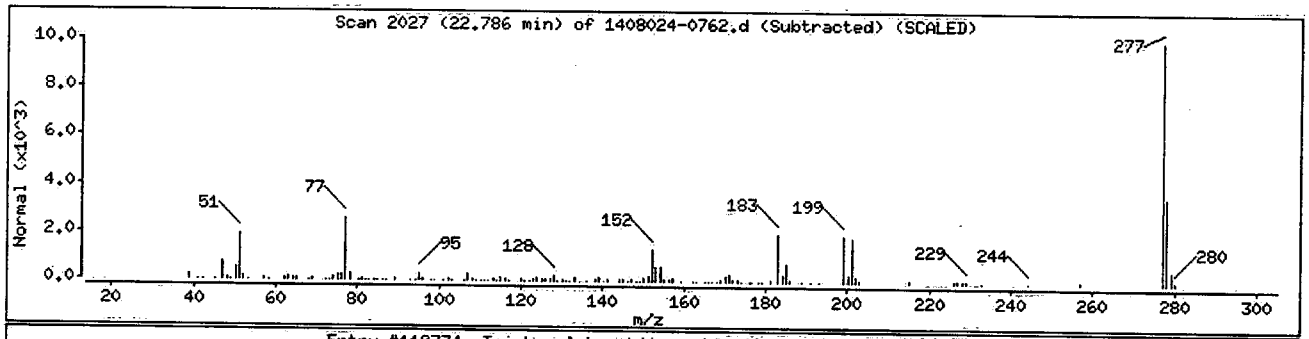
Client ID: P001-S005-0002-01 Instrument: 5972hp62.i

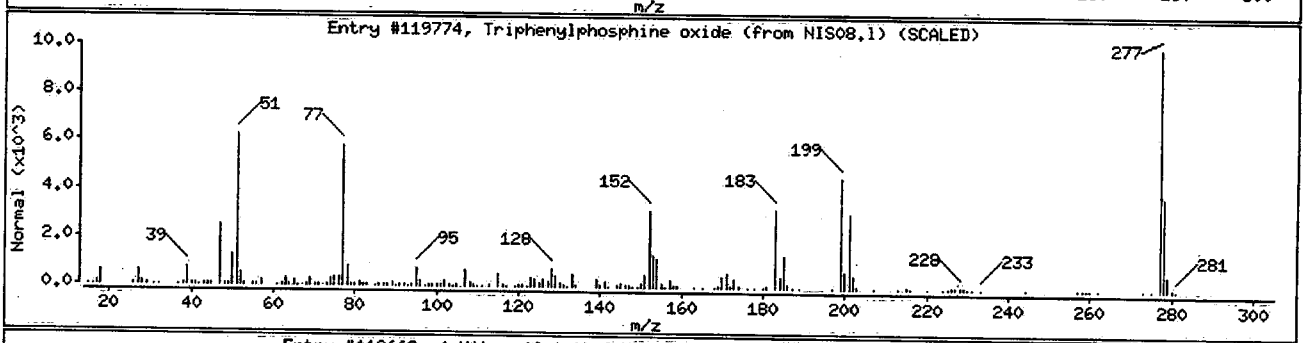
Sample Info: 1408024-07:OWS

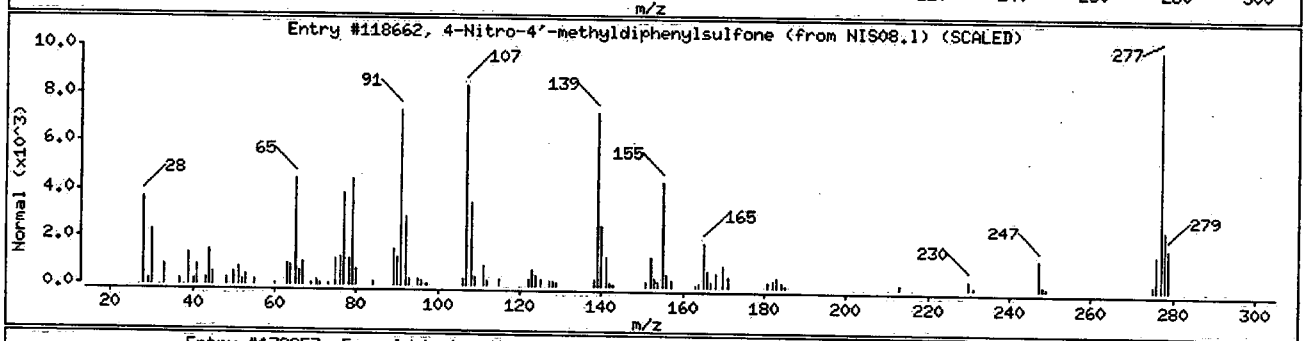
Volume Injected (uL): 2.0 Operator: OWS

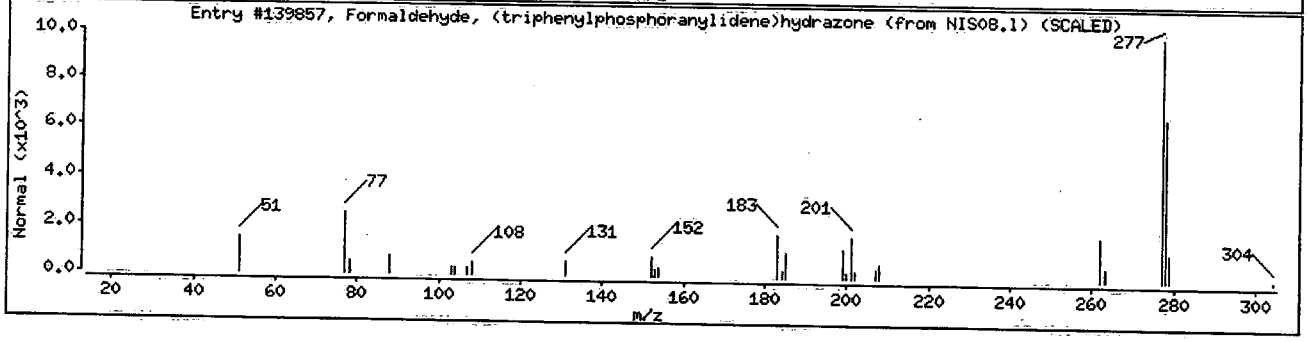
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Triphenylphosphine oxide	791-28-6	NIS08.1	119774	97	C18H15OP	278
4-Nitro-4'-methyldiphenylsulfone	4094-37-5	NIS08.1	118662	46	C13H11NO4S	277
Formaldehyde, (triphenylphosphoranyliden	15990-54-2	NIS08.1	139857	38	C19H17N2P	304









Rolder Hani 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-0762.d

Date : 15-AUG-2014 18:24

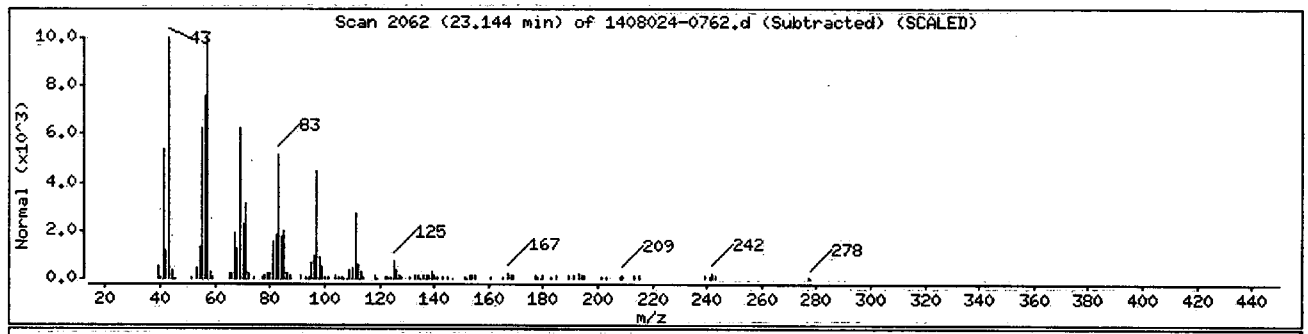
Client ID: P001-S005-0002-01 Instrument: 5972hp62.i

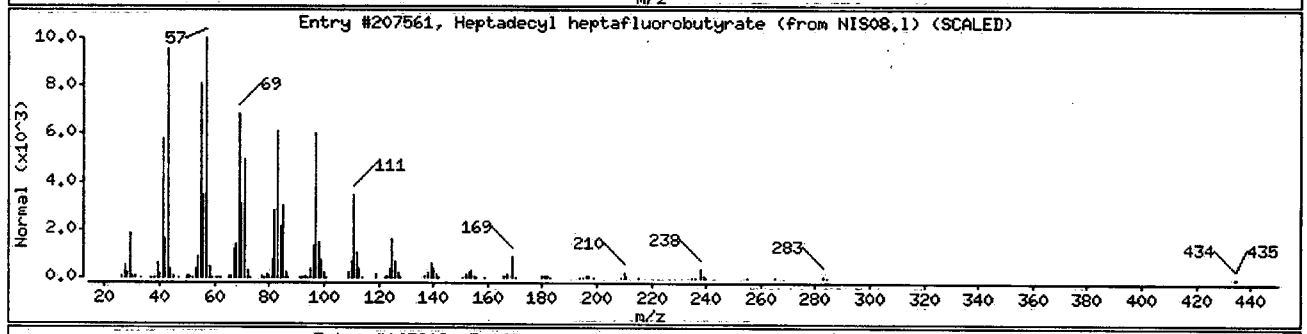
Sample Info: 1408024-07:OWS

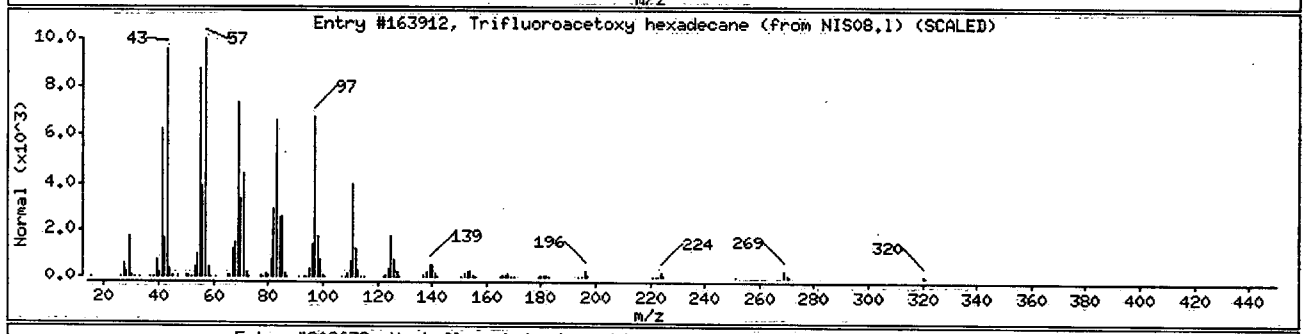
Volume Injected (uL): 2.0 Operator: OWS

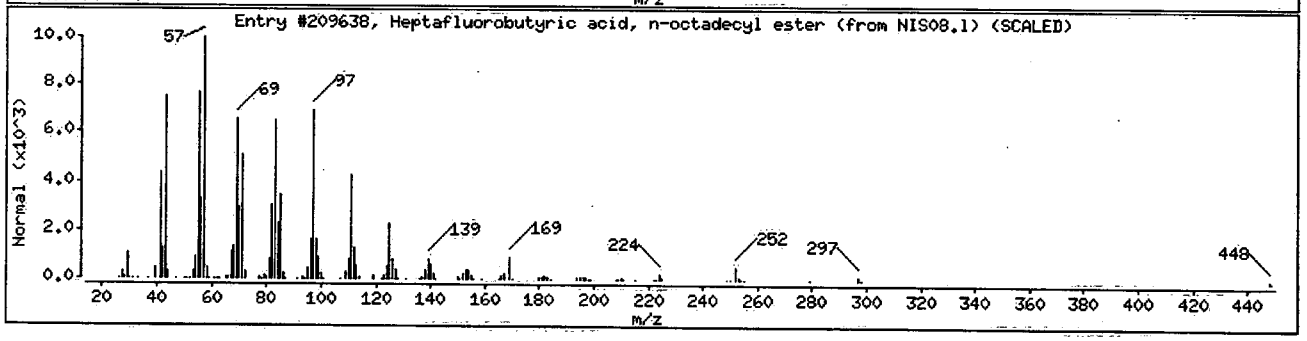
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Heptadecyl heptafluorobutyrate	1000351-82-9	NIS08.l	207561	76	C21H35F7O2	452
Trifluoroacetoxy hexadecane	6222-03-3	NIS08.l	163912	76	C18H33F3O2	338
Heptafluorobutyric acid, n-octadecyl est	400-57-7	NIS08.l	209638	68	C22H37F7O2	466









8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-0762.d

Date : 15-AUG-2014 18:24

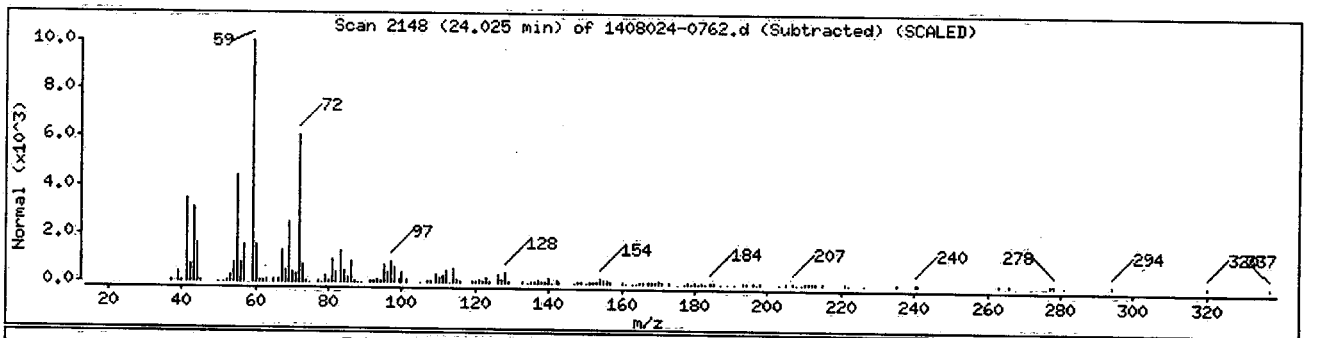
Client ID: P001-S005-0002-01 Instrument: 5972hp62.i

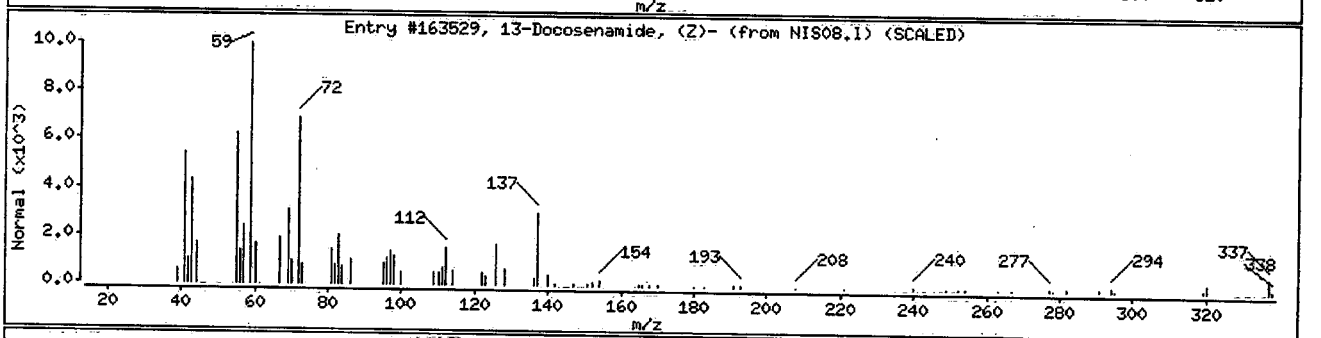
Sample Info: 1408024-07:OWS

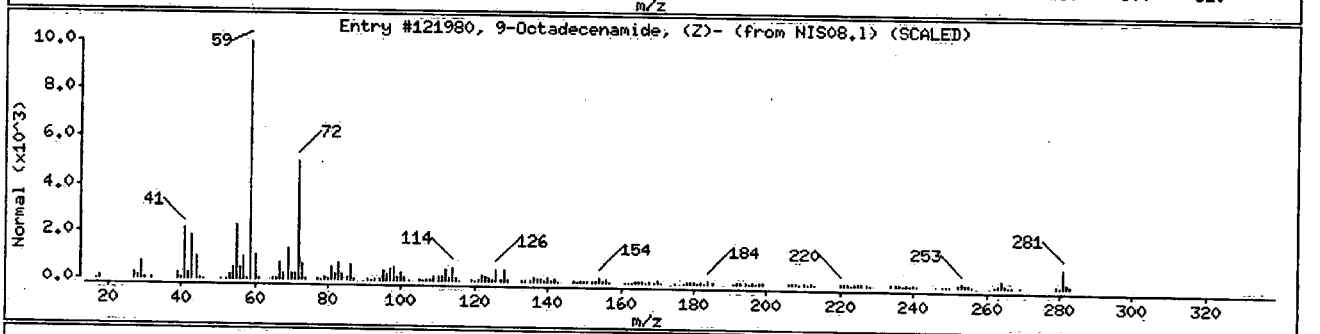
Volume Injected (uL): 2.0 Operator: OWS

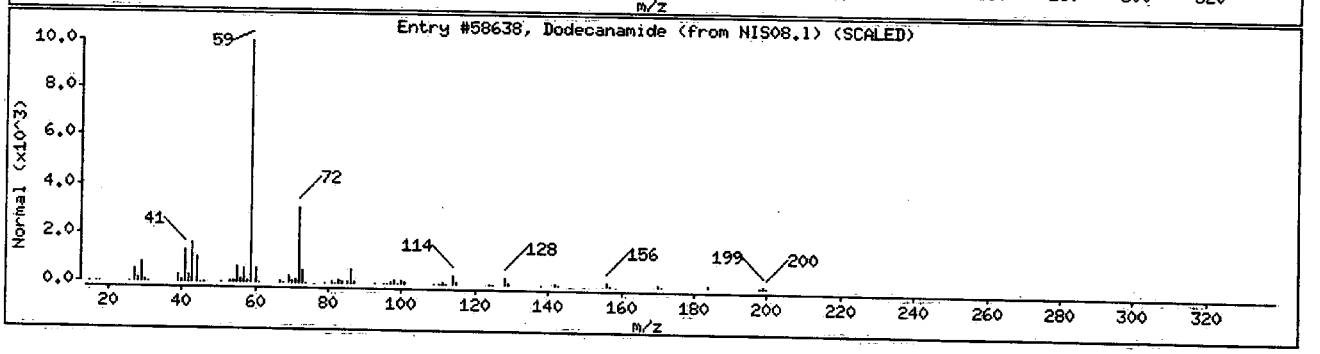
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
13-Docosenamide, (Z)-	112-84-5	NIS08.1	163529	93	C22H43NO	337
9-Octadecenamide, (Z)-	301-02-0	NIS08.1	121980	78	C18H35NO	281
Dodecanamide	1120-16-7	NIS08.1	58638	59	C12H25NO	199









8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-0762.d

Date : 15-AUG-2014 18:24

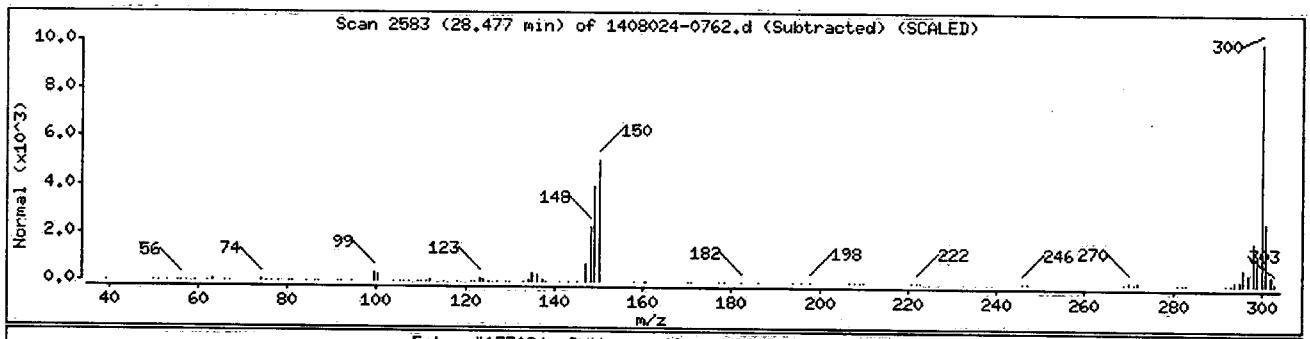
Client ID: P001-S005-0002-01 Instrument: 5972hp62.i

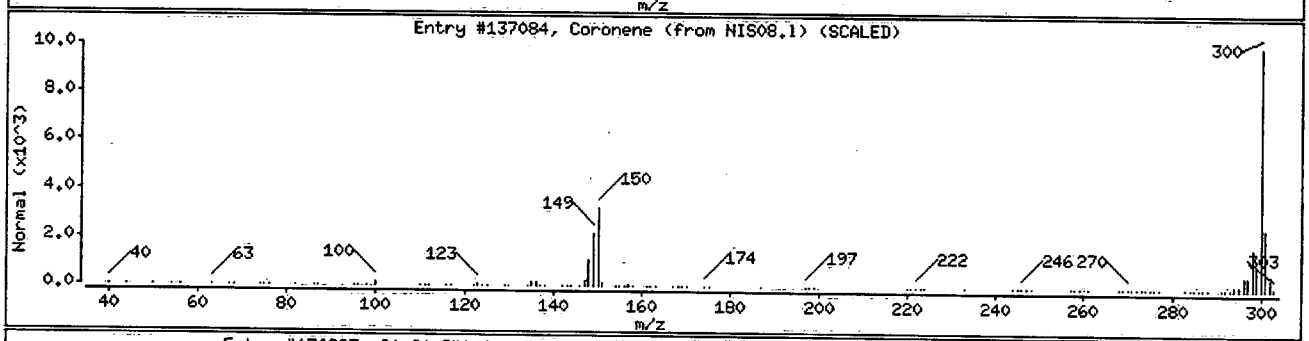
Sample Info: 1408024-07:OWS

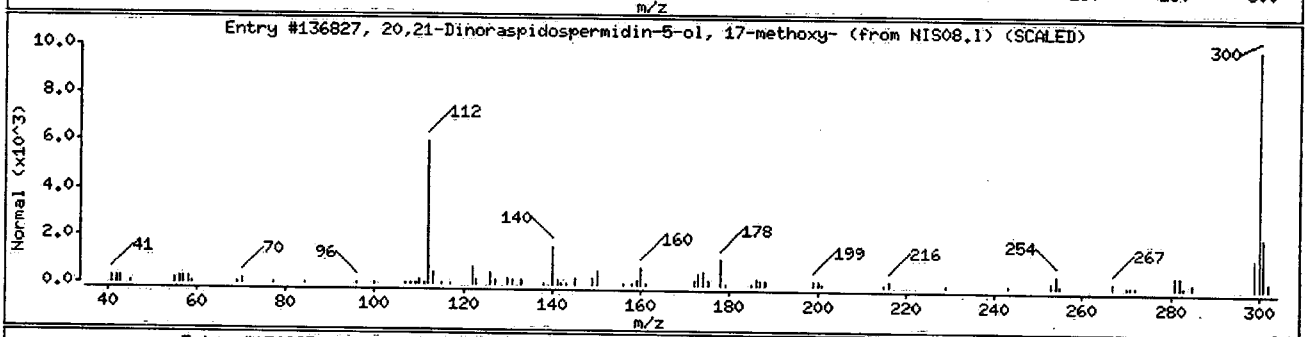
Volume Injected (uL): 2.0 Operator: OWS

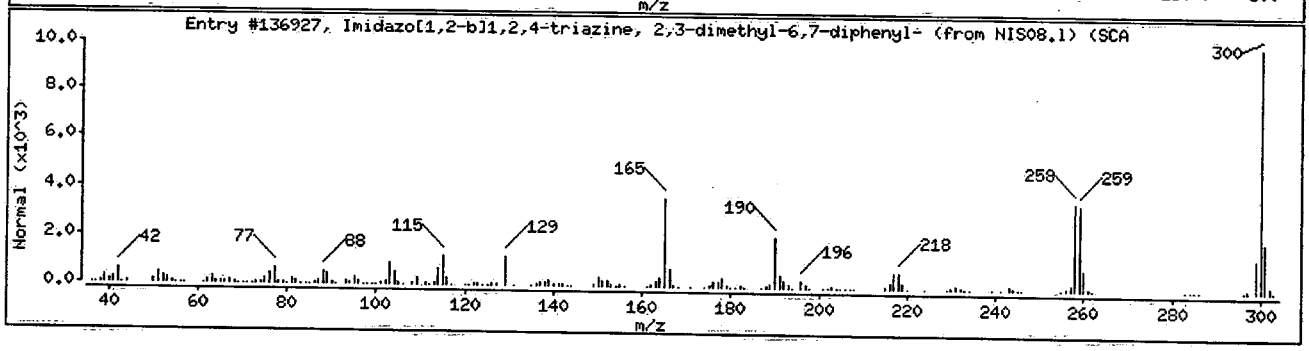
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Coronene	191-07-1	NIS08.l	137084	95	C24H12	300
20,21-Dinoraspidospermidin-5-ol, 17-meth	55162-77-1	NIS08.l	136827	38	C18H24N2O2	300
Imidazo[1,2-b]1,2,4-triazine, 2,3-dimeth	61802-72-0	NIS08.l	136927	38	C19H16N4	300









8/19/2014

ANALYSIS DATA SHEET
SW8270D

P001-S006-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-04D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30.3g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-04 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 22 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 23:01

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
108-95-2	Phenol		700	4200	U
111-44-4	Bis(2-chloroethyl)ether		250	2200	U
95-57-8	2-Chlorophenol		680	4200	U
95-48-7	2-Methylphenol		490	4200	U
108-60-1	2,2'-oxybis(1-Chloropropane)		320	2200	U
106-44-5	3 & 4-Methylphenol		430	4200	U
621-64-7	N-Nitroso-di-N-propylamine		400	2200	U
98-86-2	Acetophenone		560	2200	U
67-72-1	Hexachloroethane		1400	2200	U
98-95-3	Nitrobenzene		530	2200	U
78-59-1	Isophorone		370	2200	U
88-75-5	2-Nitrophenol		530	4200	U
105-67-9	2,4-Dimethylphenol		660	4200	U
111-91-1	Bis(2-chloroethoxy)methane		570	2200	U
120-83-2	2,4-Dichlorophenol		500	4200	U
91-20-3	Naphthalene		290	2200	U
106-47-8	4-Chloroaniline		350	4200	U
87-68-3	Hexachlorobutadiene		330	2200	U
59-50-7	4-Chloro-3-methylphenol		310	4200	U
91-57-6	2-Methylnaphthalene		380	2200	U
77-47-4	Hexachlorocyclopentadiene		400	2200	U
88-06-2	2,4,6-Trichlorophenol		390	4200	U
95-95-4	2,4,5-Trichlorophenol		310	4200	U
91-58-7	2-Chloronaphthalene		510	2200	U
88-74-4	2-Nitroaniline		310	4200	U
131-11-3	Dimethylphthalate		200	2200	U
606-20-2	2,6-Dinitrotoluene		220	2200	U
208-96-8	Acenaphthylene		380	2200	U
99-09-2	3-Nitroaniline		280	4200	U
83-32-9	Acenaphthene		380	2200	U
51-28-5	2,4-Dinitrophenol		200	4200	U
100-02-7	4-Nitrophenol		580	4200	U
121-14-2	2,4-Dinitrotoluene		260	2200	U
132-64-9	Dibenzofuran		380	2200	U
84-66-2	Diethylphthalate		240	2200	U

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ANALYSIS DATA SHEET

SW8270D

P001-S006-0002-01

Client: WESTON SOLUTIONS | SDG 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SV | File ID: 1408024-04D62.d | Sampled: 08/07/14 00:00

Initial/Final: 30.3g / 1000uL | Sulfur Cleanup: N | Lab ID: 1408024-04 | Received: 08/08/14 09:04

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 22 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 23:01

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC. (ug/kg dry)	MDL	RL	Q
7005-72-3	4-Chlorophenyl-phenylether		270	2200	U
86-73-7	Fluorene		280	2200	U
100-01-6	4-Nitroaniline		560	4200	U
534-52-1	4,6-Dinitro-2-methylphenol		570	4200	U
86-30-6	N-Nitrosodiphenylamine (1)		380	2200	U
101-55-3	4-Bromophenyl-phenylether		320	2200	U
118-74-1	Hexachlorobenzene		280	2200	U
87-86-5	Pentachlorophenol		550	4200	U
85-01-8	Phenanthrene	2500	130	2200	D
120-12-7	Anthracene	370	110	2200	JD
86-74-8	Carbazole	300	220	2200	JD
84-74-2	Di-n-butylphthalate		310	2200	U
206-44-0	Fluoranthene	2500	310	2200	D
129-00-0	Pyrene	1800	280	2200	JD
85-68-7	Butylbenzylphthalate		340	2200	U
91-94-1	3,3'-Dichlorobenzidine		440	2200	U
117-81-7	bis(2-ethylhexyl)Phthalate		390	2200	U
56-55-3	Benzo (a) anthracene	880	350	2200	JD
218-01-9	Chrysene	1000	130	2200	JD
117-84-0	Di-n-octylphthalate		420	2200	U
205-99-2	Benzo (b) fluoranthene	1100	330	2200	JD
207-08-9	Benzo(k)fluoranthene	520	300	2200	JD
50-32-8	Benzo (a) pyrene	740	230	2200	JD
193-39-5	Indeno(1,2,3-cd)pyrene	450	370	2200	JD
53-70-3	Dibenzo(a,h)anthracene		590	2200	U
191-24-2	Benzo (g,h,i) perylene	440	380	2200	JD
100-52-7	Benzaldehyde		340	2200	U
105-60-2	Caprolactam		360	2200	U
1912-24-9	Atrazine		250	2200	U
92-52-4	1,1'-Biphenyl		500	2200	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	4230	2389	56	35 - 105	D
Phenol-d5	4230	ND		40 - 100	D
Nitrobenzene-d5	2115	ND		35 - 100	D

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ANALYSIS DATA SHEET
SW8270D

P001-S006-0002-01

Client:	WESTON SOLUTIONS	SDG	1408024	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ		
Matrix:	Soil	Extraction:	EPA 3550C MOD_SV	File ID:	1408024-04D62.d	Sampled:	08/07/14 00:00
Initial/Final:	30.3g / 1000uL	Sulfur Cleanup:	N	Lab ID:	1408024-04	Received:	08/08/14 09:04
Dilution:	10 pH:	Florisil Cleanup:	N			Prepared:	08/12/14 09:00
% Moisture:	22	GPC Cleanup:	N	GPC Cleanup Factor:	N	Analyzed:	08/15/14 23:01
Batch:	4080818	Sequence:	4H15001	Calibration:	4072701	Instrument:	5972hp62

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorobiphenyl	2115	ND		45 - 105	D
2,4,6-Tribromophenol	4230	2360	56	35 - 125	D
Terphenyl-d14	2115	ND		30 - 125	D

CAS NO.	TICS	CONC. (ug/kg dry)	Response	R.T.	% Match	Q
22346-58-3	9H-Xanthen-9-one, 2,7-dichloro-1-hydroxy	1800	408573	26.08	89	JDN
791-28-6	Triphenylphosphine oxide	4000	1125387	22.784	92	JDN
NA	Unknown 2.457	1200	182016	2.457	0	JD
NA	Unknown 25.609	1600	358577	25.609	0	JD
NA	Unknown 26.264	1100	241327	26.264	0	JD
NA	Unknown 26.489	1200	263943	26.489	0	JD
NA	Unknown 27.779	2000	451814	27.779	0	JD
NA	Unknown 3.194	880	129469	3.194	0	JD
NA	Unknown 4.176	11000	1699565	4.176	0	JD

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.
(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.
(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

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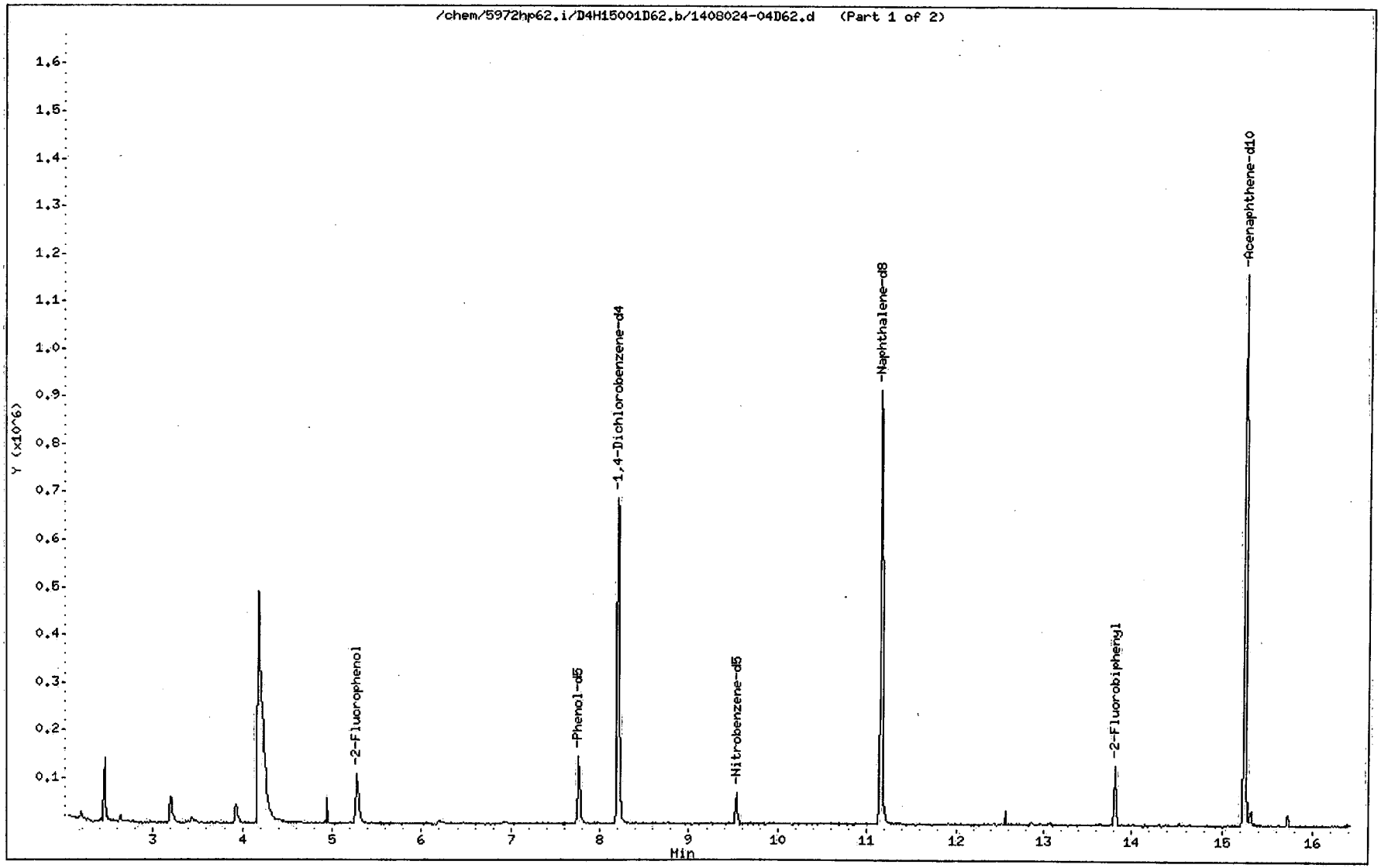
Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d
Date : 15-AUG-2014 23:01
Client ID: P001-S006-0002-01
Sample Info: 1408024-04:OWS:10
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

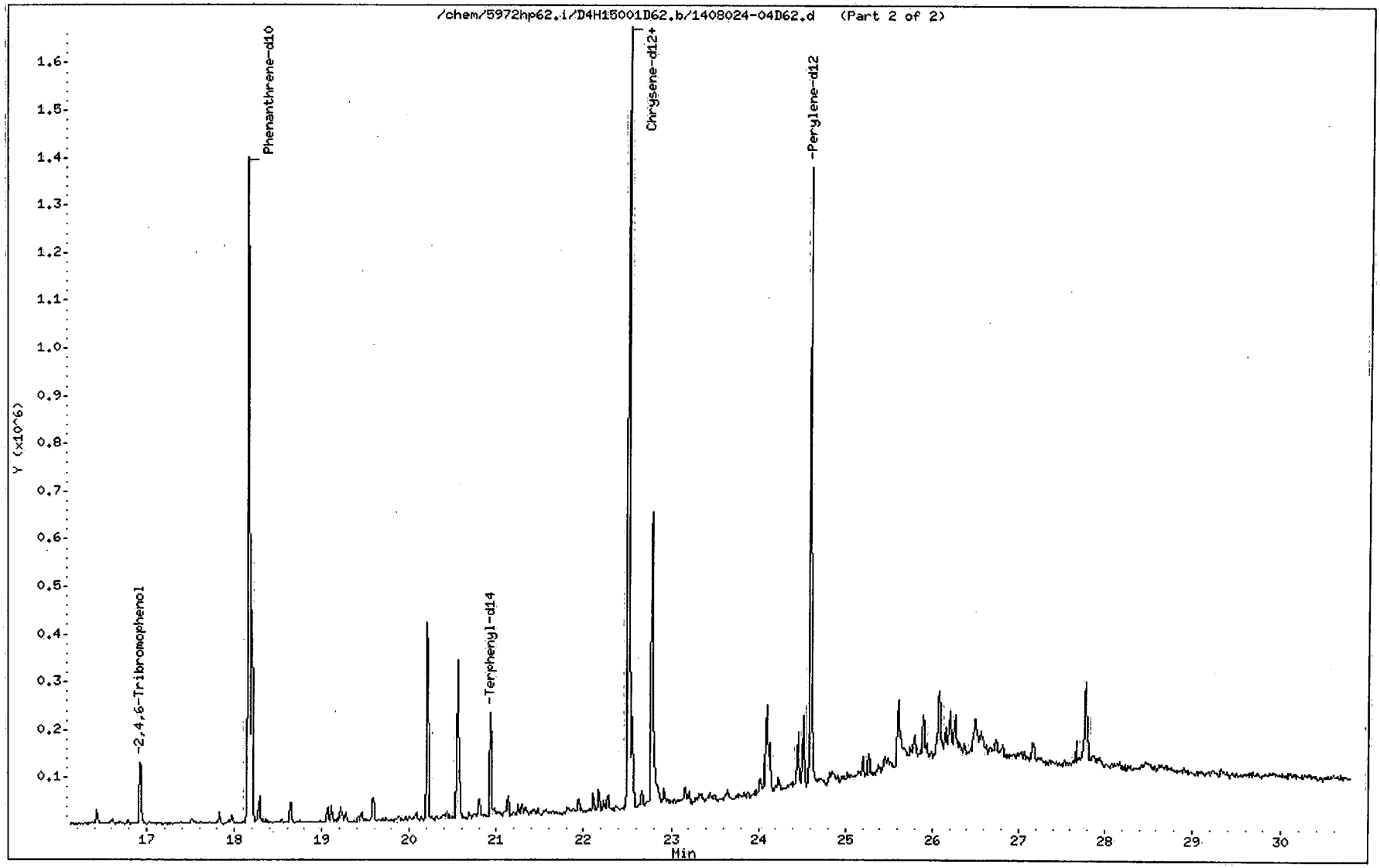
Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d
Date : 15-AUG-2014 23:01
Client ID: P001-S006-0002-01
Sample Info: 1408024-04:OWS:10
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d
Report Date: 19-Aug-2014 11:23

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d
Lab Smp Id: 1408024-04 Client Smp ID: P001-S006-0002-01
Inj Date : 15-AUG-2014 23:01
Operator : OWS Inst ID: 5972hp62.i
Smp Info : 1408024-04:OWS:10
Misc Info : P001-S006-0002-01
Comment :
Method : /chem/5972hp62.i/D4H15001D62.b/8270Dv26.m
Meth Date : 19-Aug-2014 11:23 ron Quant Type: ISTD
Cal Date : 23-JUL-2014 19:31 Cal File: 4G23008-CAL662.d
Als bottle: 15
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1000.00000	Volume of final extract (uL)(1000 low, 2
Vi	2.00000	Volume injected (uL)
Ws	30.30000	Weight of sample extracted (g)
M	22.00000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	8.209	8.212	(1.000)	192282	40.0000		
* 2 Naphthalene-d8	136	11.157	11.170	(1.000)	712784	40.0000		
* 3 Acenaphthene-d10	164	15.251	15.254	(1.000)	399539	40.0000		
* 4 Phenanthrene-d10	188	18.158	18.171	(1.000)	701528	40.0000		
* 5 Chrysene-d12	240	22.518	22.521	(1.000)	731812	40.0000		
* 6 Perylene-d12	264	24.596	24.609	(1.000)	550723	40.0000		
$ 7 2-Fluorophenol	112	5.282	5.274	(0.643)	70042	11.2982	2400	
$ 8 Phenol-d5	99	7.759	7.751	(0.945)	86221	9.73995	2100	(a)
$ 9 Nitrobenzene-d5	82	9.540	9.532	(0.855)	33161	4.63811	980	(aR)
$ 10 2-Fluorobiphenyl	172	13.818	13.821	(0.906)	65639	5.29440	1100	(aM)
$ 11 2,4,6-Tribromophenol	330	16.930	16.932	(1.110)	24476	11.1589	2400	8224
$ 12 Terphenyl-d14	244	20.932	20.945	(0.930)	81192	5.67535	1200	(aR)
15 Phenol	94	Compound Not Detected.						

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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d
Report Date: 19-Aug-2014 11:23

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
17 Bis(2-chloroethyl)ether	93	Compound Not Detected.						
18 2-Chlorophenol	128	Compound Not Detected.						
23 2-Methylphenol	108	Compound Not Detected.						
24 2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.						
25 3 & 4-Methylphenol	108	Compound Not Detected.						
26 N-Nitroso-di-N-propylamine	70	Compound Not Detected.						
27 Acetophenone	105	Compound Not Detected.						
28 Hexachloroethane	117	Compound Not Detected.						
29 Nitrobenzene	77	Compound Not Detected.						
30 Isophorone	82	Compound Not Detected.						
31 2-Nitrophenol	139	Compound Not Detected.						
32 2,4-Dimethylphenol	122	Compound Not Detected.						
33 Bis(2-chloroethoxy)methane	93	Compound Not Detected.						
34 2,4-Dichlorophenol	162	Compound Not Detected.						
36 Naphthalene	128	Compound Not Detected.						
37 4-Chloroaniline	127	Compound Not Detected.						
38 Hexachlorobutadiene	224	Compound Not Detected.						
39 4-Chloro-3-methylphenol	107	Compound Not Detected.						
40 2-Methylnaphthalene	141	Compound Not Detected.						
42 Hexachlorocyclopentadiene	236	Compound Not Detected.						
44 2,4,6-Trichlorophenol	196	Compound Not Detected.						
45 2,4,5-Trichlorophenol	196	Compound Not Detected.						
46 2-Chloronaphthalene	162	Compound Not Detected.						
47 2-Nitroaniline	65	Compound Not Detected.						
48 Dimethylphthalate	163	Compound Not Detected.						
50 2,6-Dinitrotoluene	165	Compound Not Detected.						
51 Acenaphthylene	152	Compound Not Detected.						
52 3-Nitroaniline	138	Compound Not Detected.						
53 Acenaphthene	153	Compound Not Detected.						
54 2,4-Dinitrophenol	184	Compound Not Detected.						
55 4-Nitrophenol	139	Compound Not Detected.						
56 2,4-Dinitrotoluene	165	Compound Not Detected.						
57 Dibenzofuran	168	Compound Not Detected.						
59 Diethylphthalate	149	Compound Not Detected.						
60 4-Chlorophenyl-phenylether	204	Compound Not Detected.						
61 Fluorene	166	Compound Not Detected.						
62 4-Nitroaniline	138	Compound Not Detected.						
63 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
64 N-Nitrosodiphenylamine (1)	169	Compound Not Detected.						
66 4-Bromophenyl-phenylether	248	Compound Not Detected.						
67 Hexachlorobenzene	283	Compound Not Detected.						
68 Pentachlorophenol	265	Compound Not Detected.						
69 Phenanthrene	178	18.199	18.212	(1.002)	214000	11.6120	2400	
70 Anthracene	178	18.291	18.294	(1.007)	32667	1.77127	370	(a)
71 Carbazole	167	18.649	18.652	(1.027)	26064	1.42215	300	9203 (a)
72 Di-n-butylphthalate	149	Compound Not Detected.						
73 Fluoranthene	202	20.205	20.218	(1.113)	228857	11.7563	2500	

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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d
Report Date: 19-Aug-2014 11:23

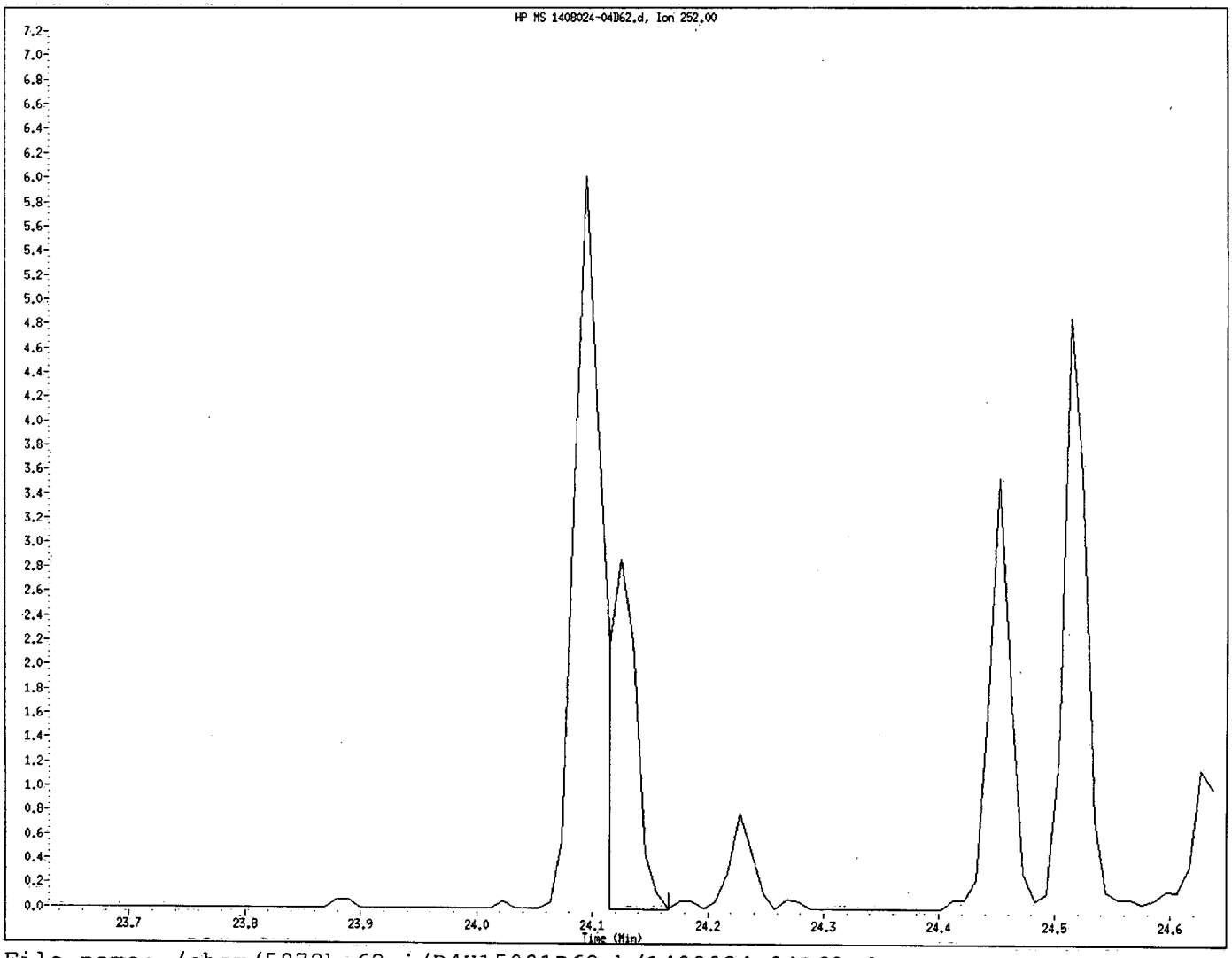
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
74 Pyrene	202	20.553	20.566	(0.913)	180386	8.49878	1800	(a)
75 Butylbenzylphthalate	149	Compound Not Detected.						
76 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
77 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
78 Benzo(a)anthracene	228	22.508	22.511	(1.000)	77057	4.16766	880	(a)
79 Chrysene	228	22.549	22.562	(1.001)	84402	4.95105	1000	(a)
80 Di-n-octylphthalate	149	Compound Not Detected.						
81 Benzo(b)fluoranthene	252	24.094	24.097	(0.980)	99872	5.12055	1100	(a)
82 Benzo(k)fluoranthene	252	24.125	24.138	(0.981)	48286	2.47876	520	(aM)
83 Benzo(a)pyrene	252	24.514	24.527	(0.997)	63781	3.50571	740	(a)
84 Indeno(1,2,3-cd)pyrene	276	25.906	25.909	(1.053)	37773	2.14764	450	(a)
85 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
86 Benzo(g,h,i)perylene	276	26.203	26.216	(1.065)	38524	2.09956	440	(a)
87 Benzaldehyde	77	Compound Not Detected.						
88 Caprolactam	113	Compound Not Detected.						
89 Atrazine	215	Compound Not Detected.						
90 1,1'-Biphenyl	154	Compound Not Detected.						

QC Flag Legend

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

8/19/2014

Benzo(k)fluoranthene CAS Number 207-08-9 Area = 48286 Manually integrated



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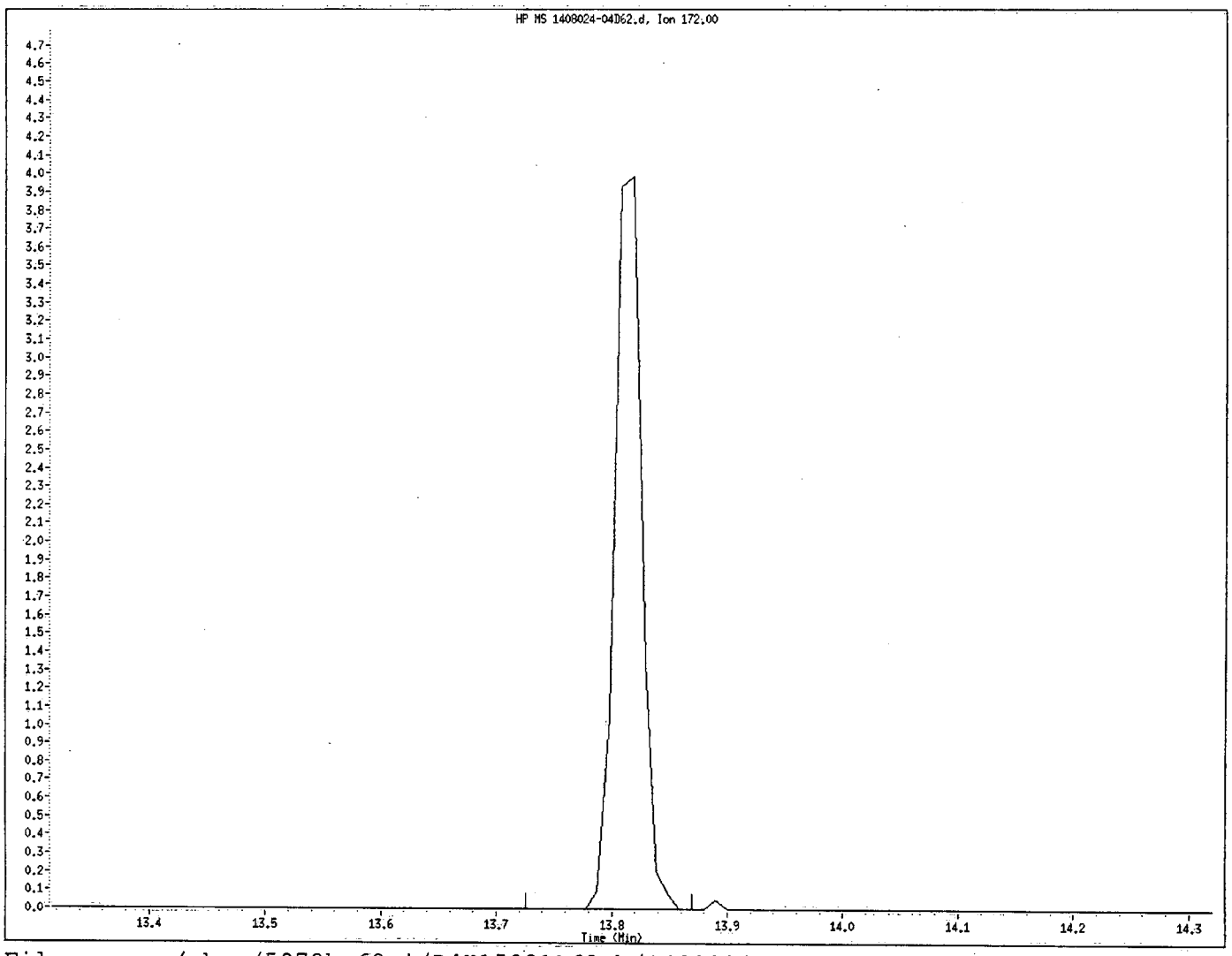
Client ID: P001-S006-0002-01
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 23:01
Retention Time: 24.12
Operator ID: OWS

8/19/2014

2-Fluorobiphenyl CAS Number 321-60-8 Area = 65639 Manually integrated



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Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 23:01
Retention Time: 13.82
Operator ID: OWS

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

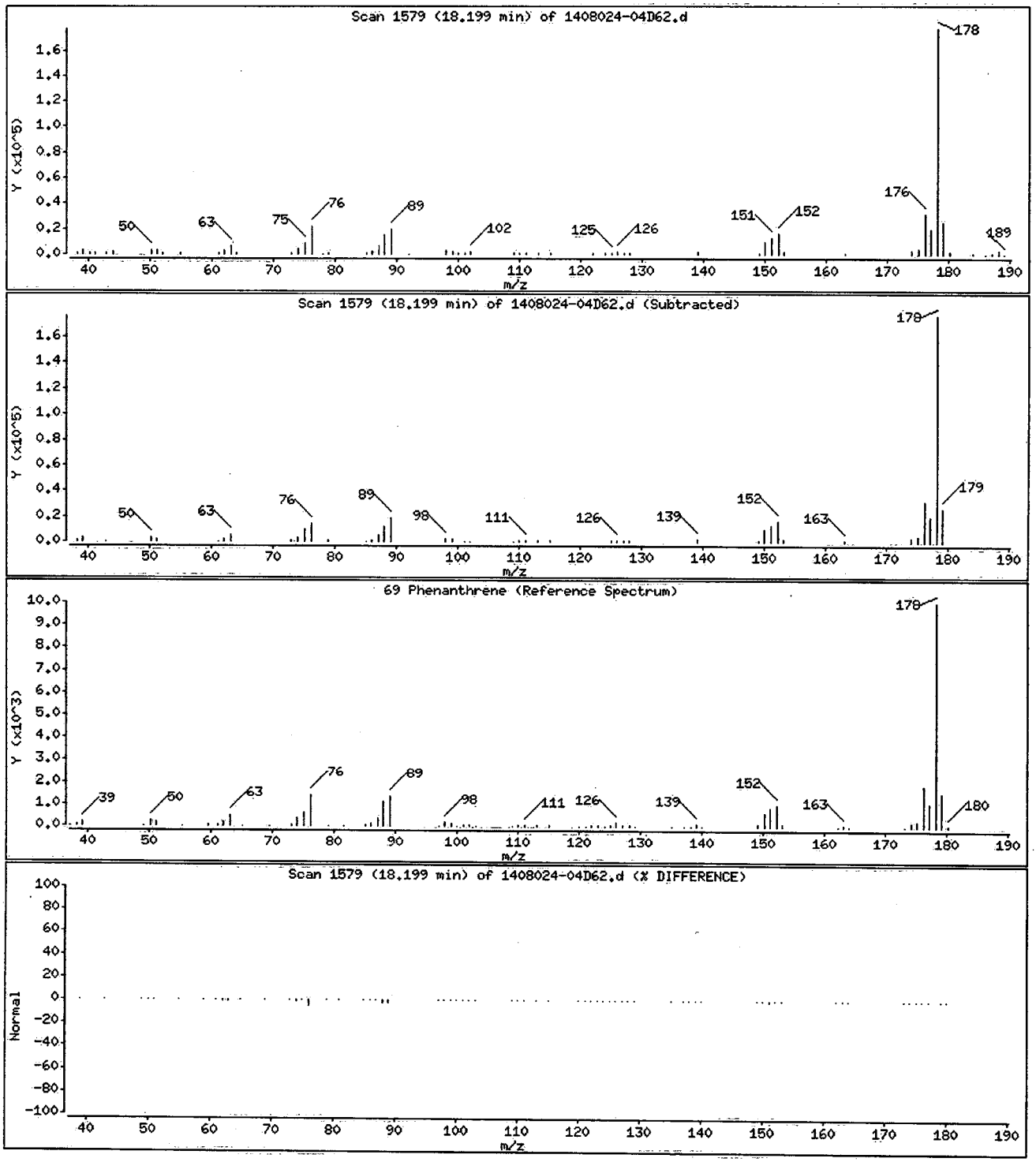
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-04:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

69 Phenanthrene Concentration: 2400 ug/Kg



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

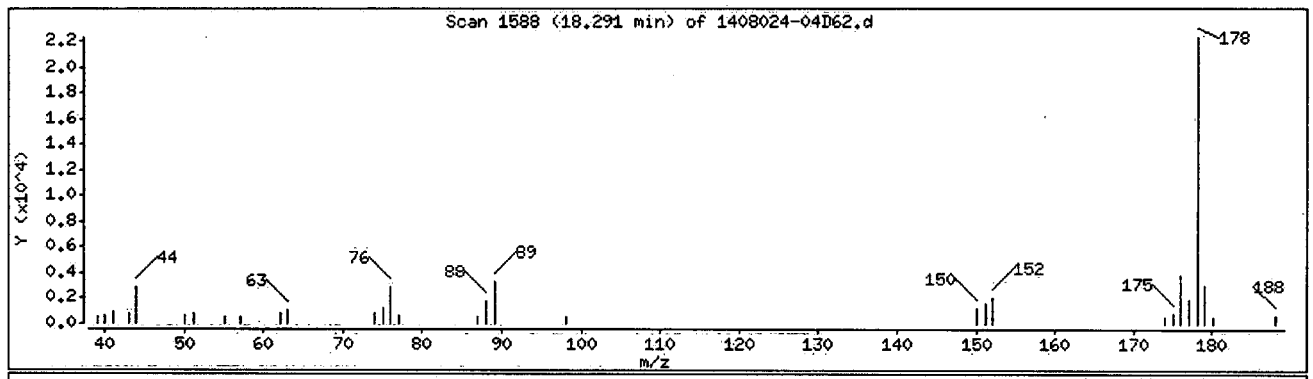
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

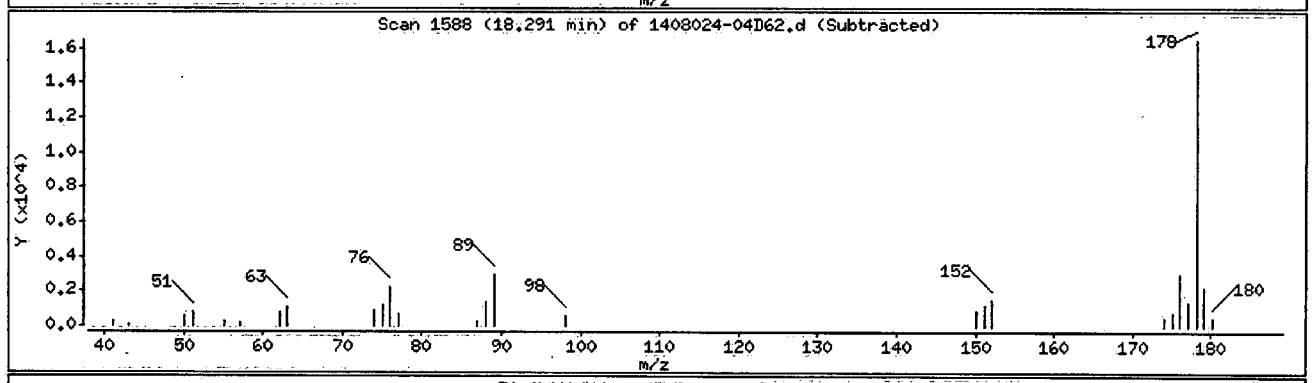
Sample Info: 1408024-04:OWS:10

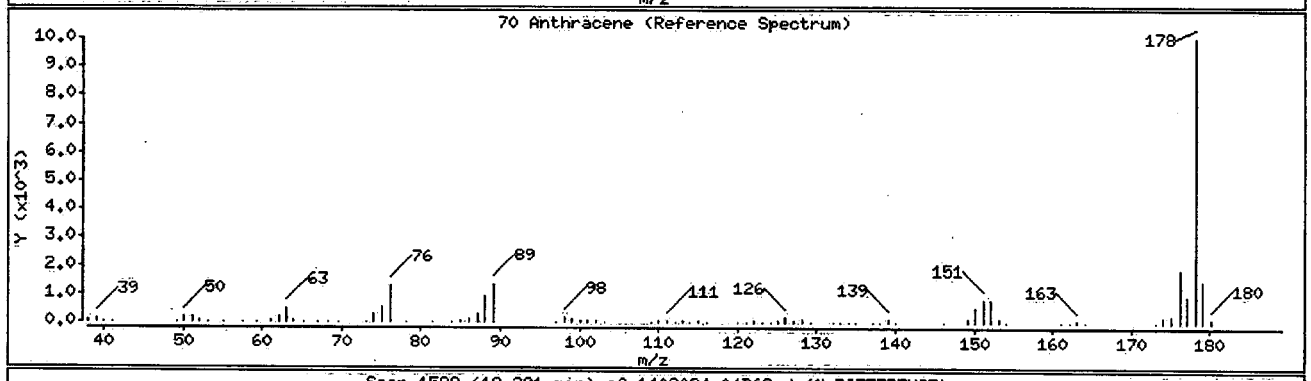
Volume Injected (uL): 2.0 Operator: OWS

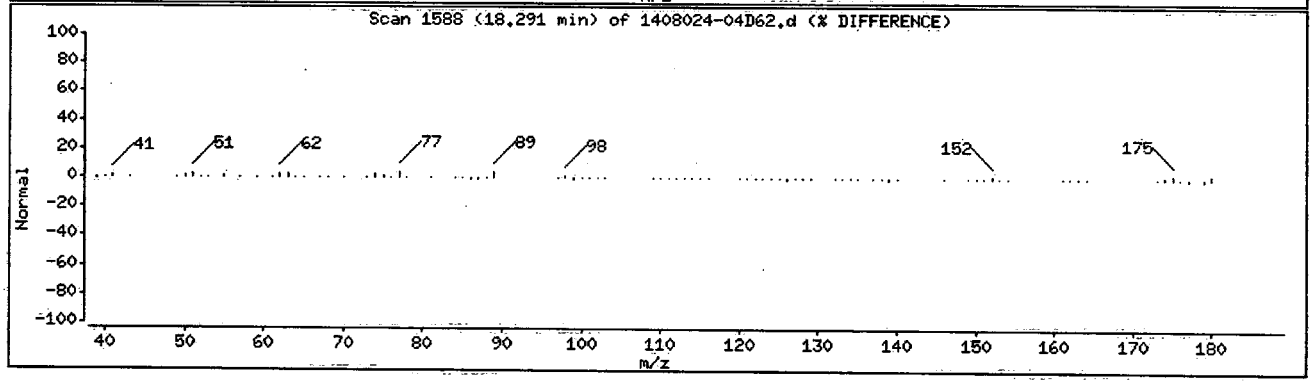
Column phase: Rxi-5SilMS Column diameter: 0.32

70 Anthracene Concentration: 370 ug/Kg









8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

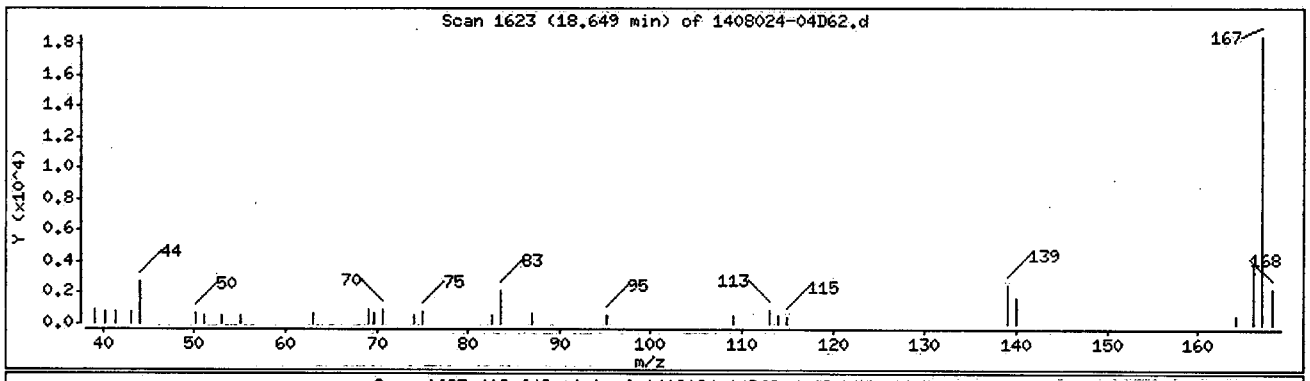
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

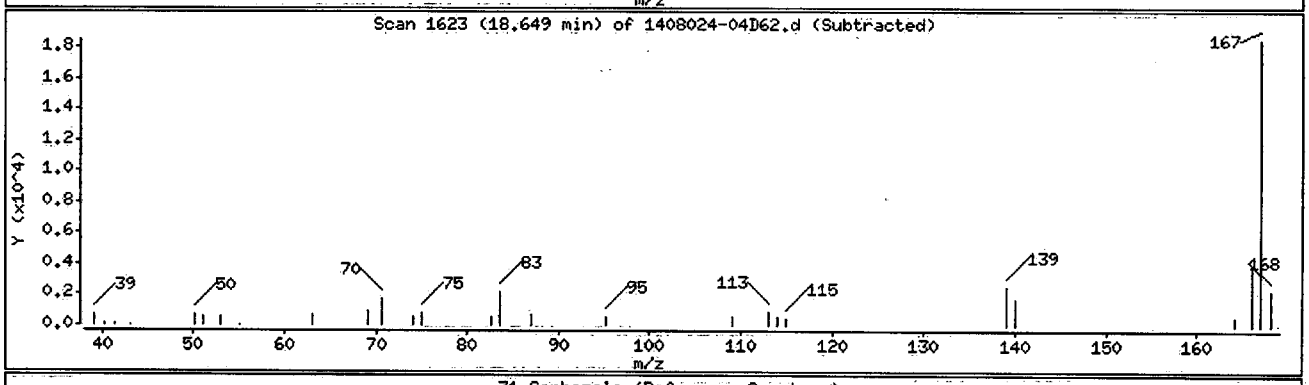
Sample Info: 1408024-04:OWS:10

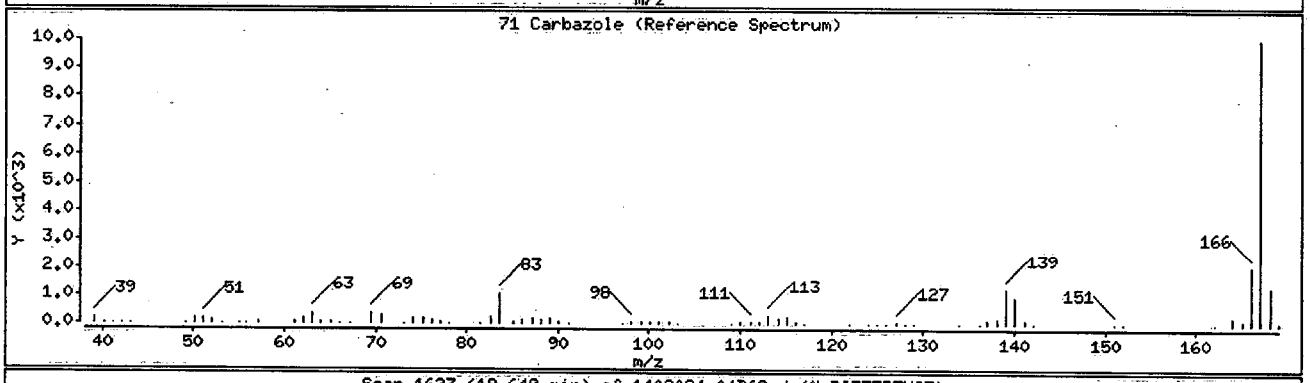
Volume Injected (uL): 2.0 Operator: OWS

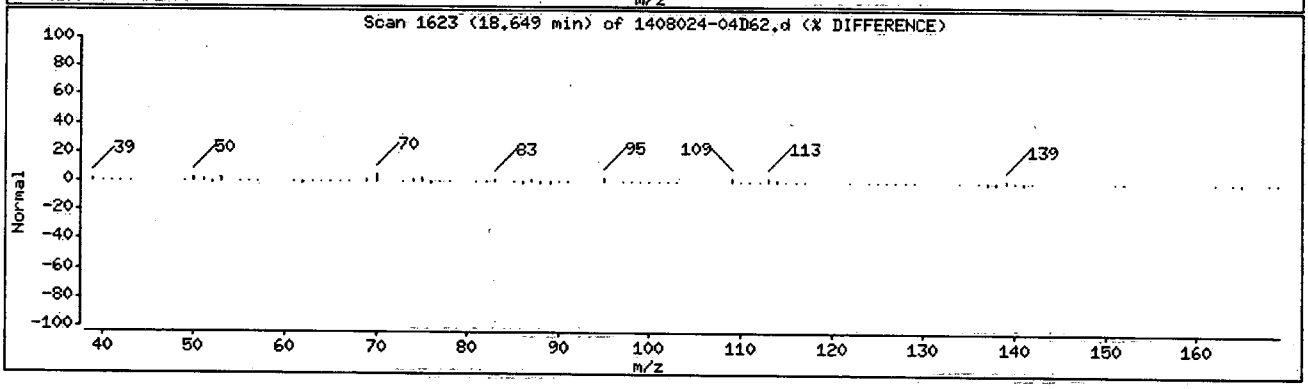
Column phase: Rxi-5SilMS Column diameter: 0.32

71 Carbazole Concentration: 300 ug/Kg









Robert Hamm 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

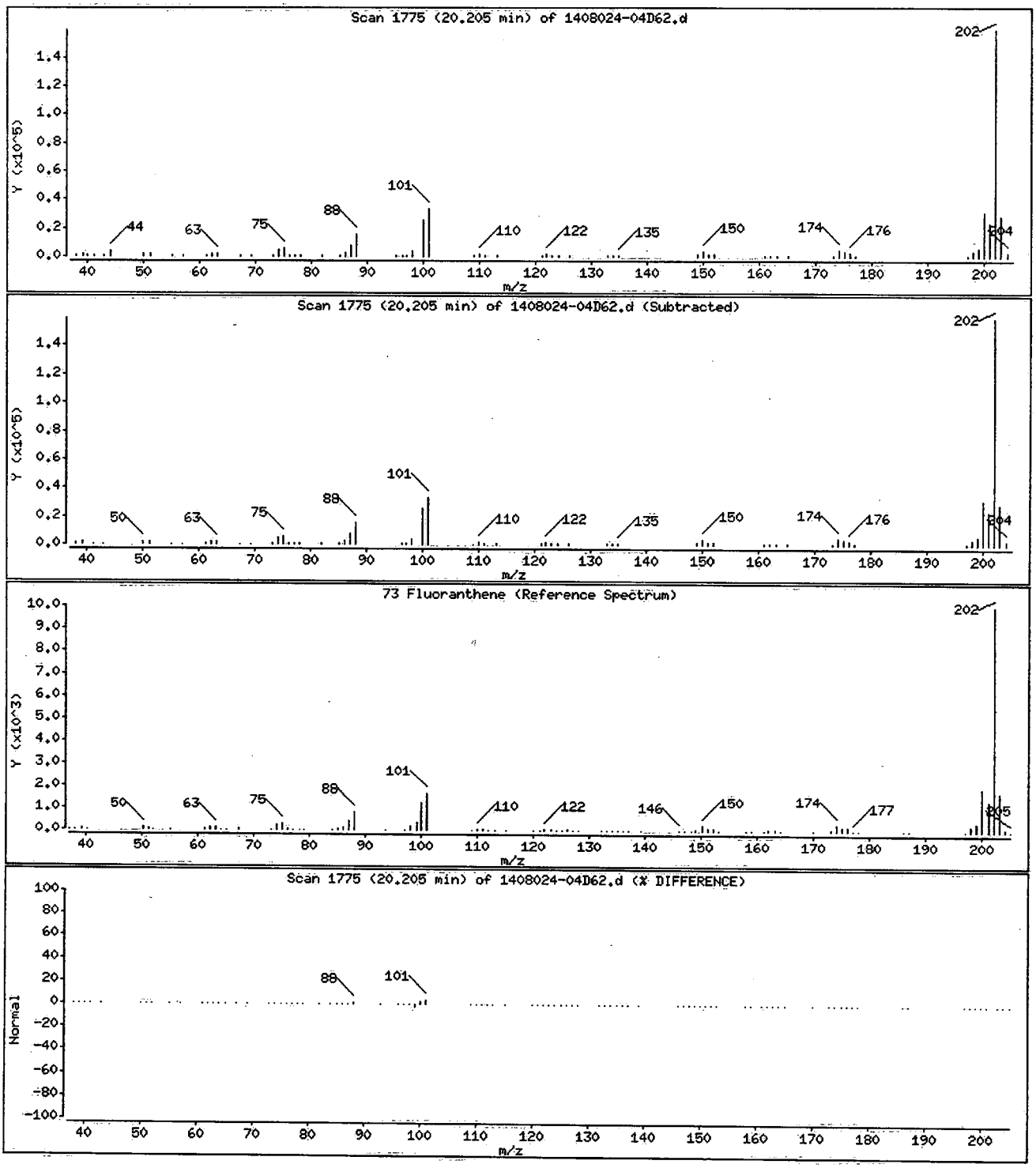
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-04:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

73 Fluoranthene Concentration: 2500 ug/Kg



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

Client ID: P001-S006-0002-01

Instrument: 5972hp62.i

Sample Info: 1408024-04:OWS:10

Volume Injected (uL): 2.0

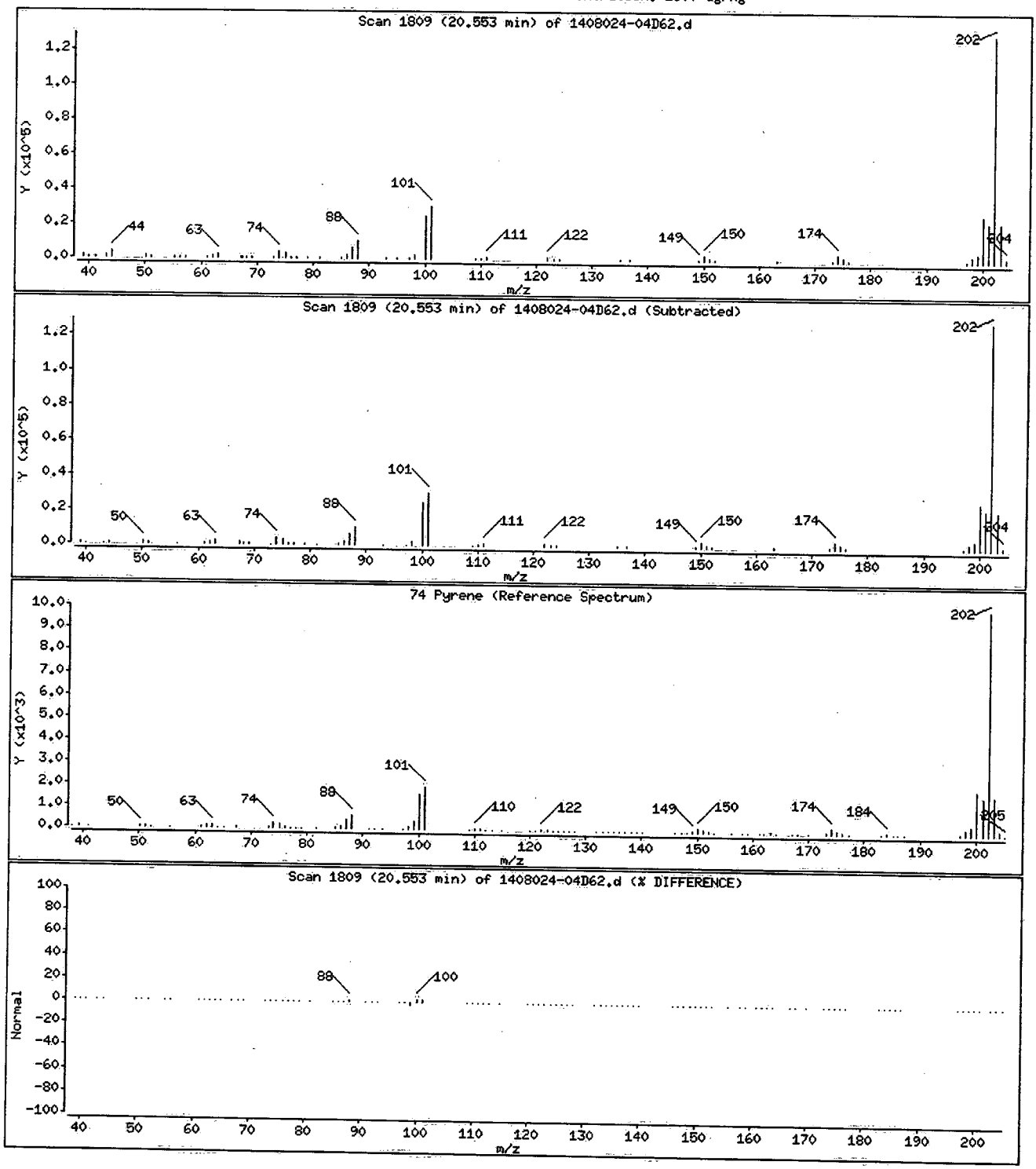
Operator: OWS

Column phase: Rxi-5SilMS

Column diameter: 0.32

74 Pyrene

Concentration: 1800 ug/Kg



Roldan Hani 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

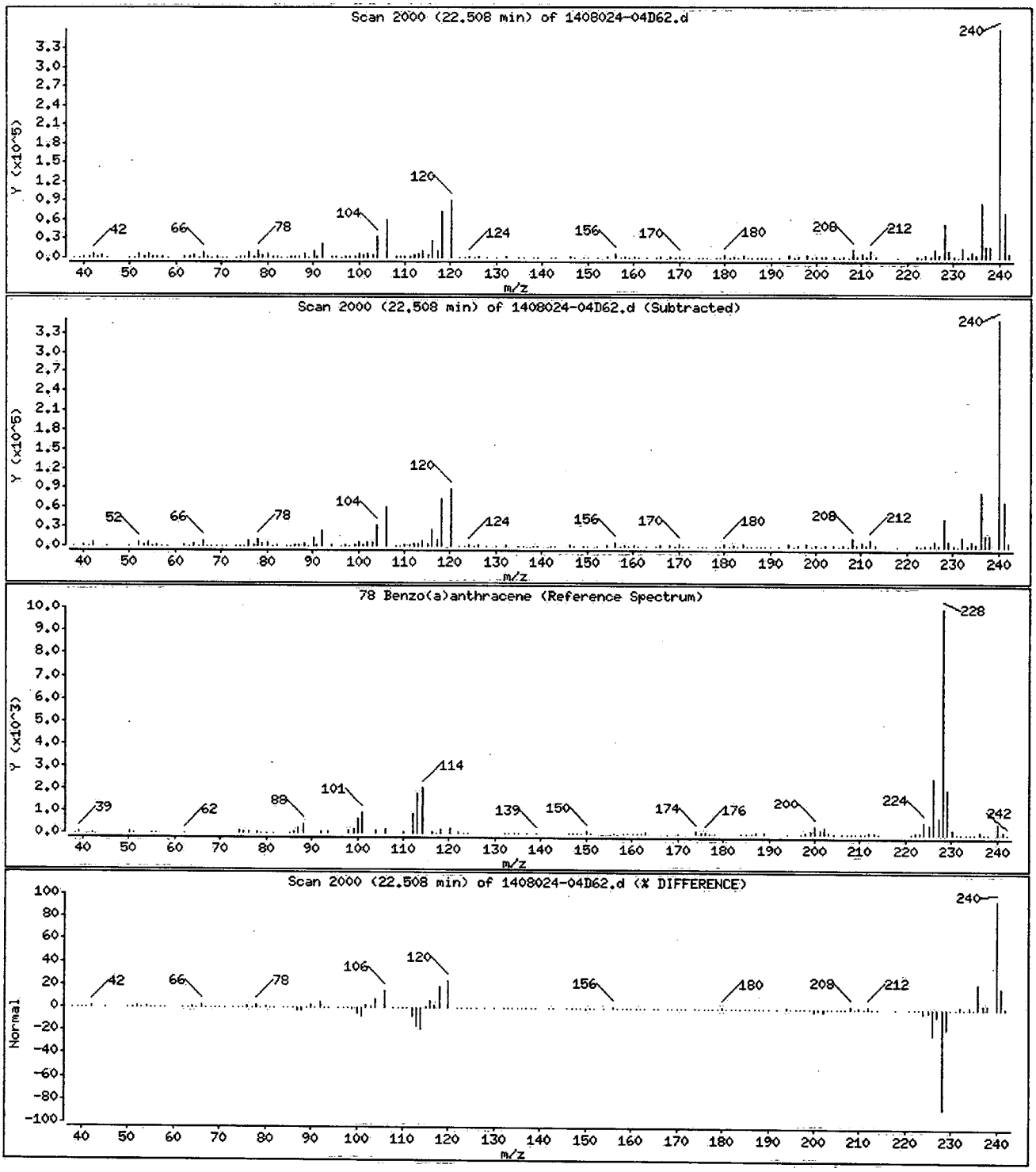
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-04:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

78 Benzo(a)anthracene Concentration: 880 ug/Kg



Roldan Hani 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

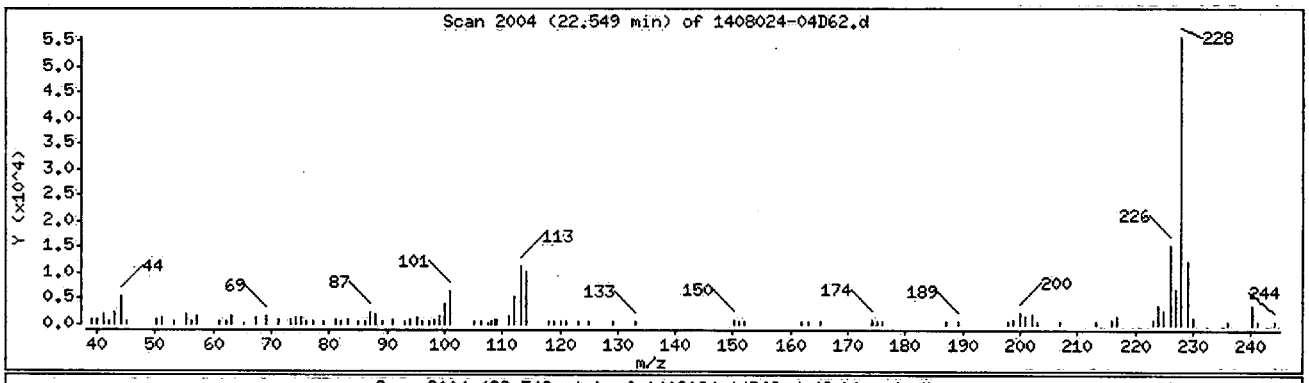
Client ID: P001-S006-0002-01 | Instrument: 5972hp62.i

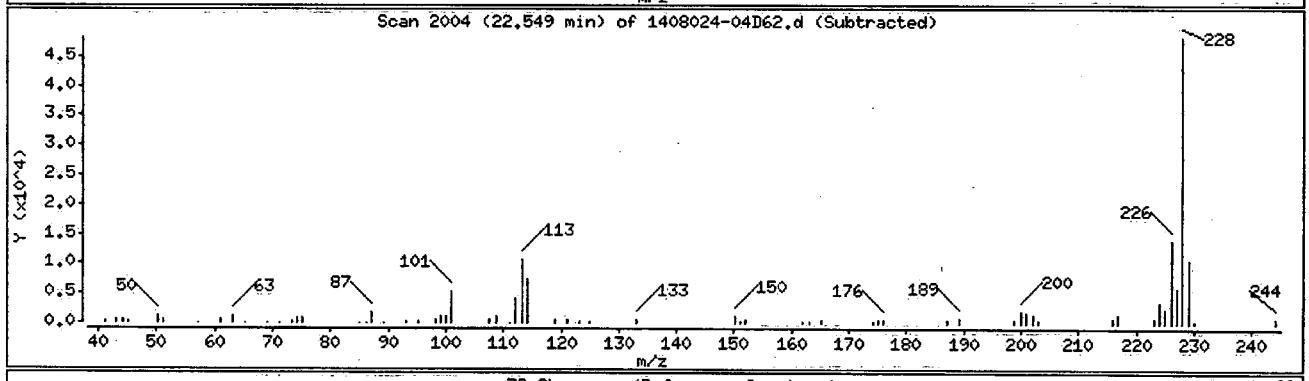
Sample Info: 1408024-04:OWS:10

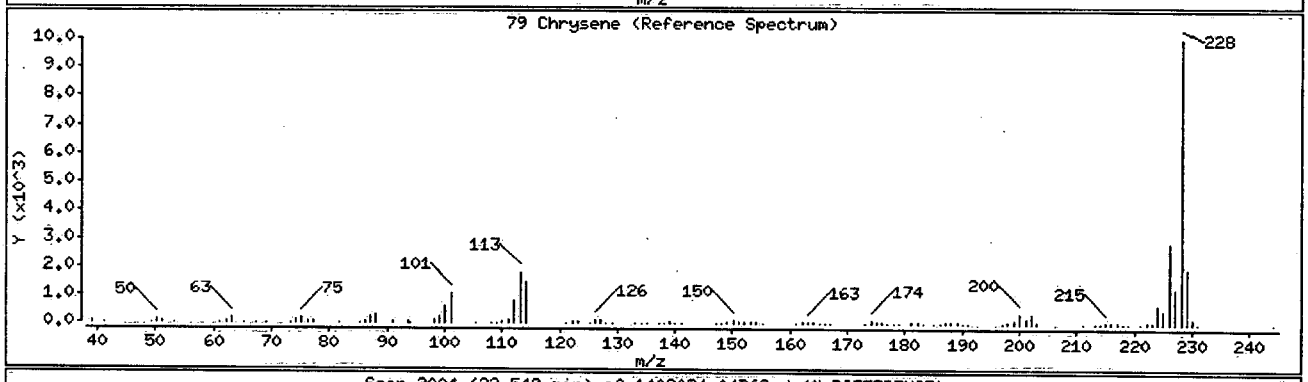
Volume Injected (uL): 2.0 | Operator: OWS

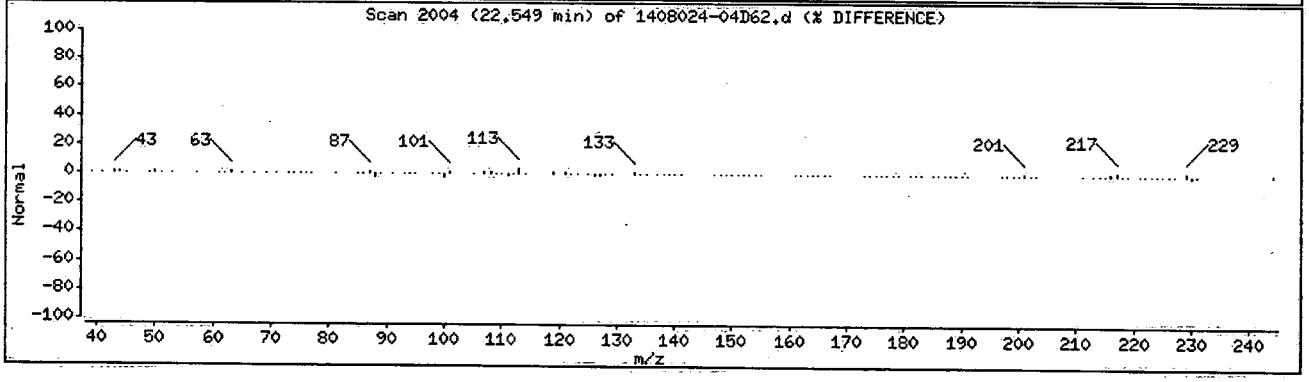
Column phase: Rxi-5SilMS | Column diameter: 0.32

79 Chrysene | Concentration: 1000 ug/Kg









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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

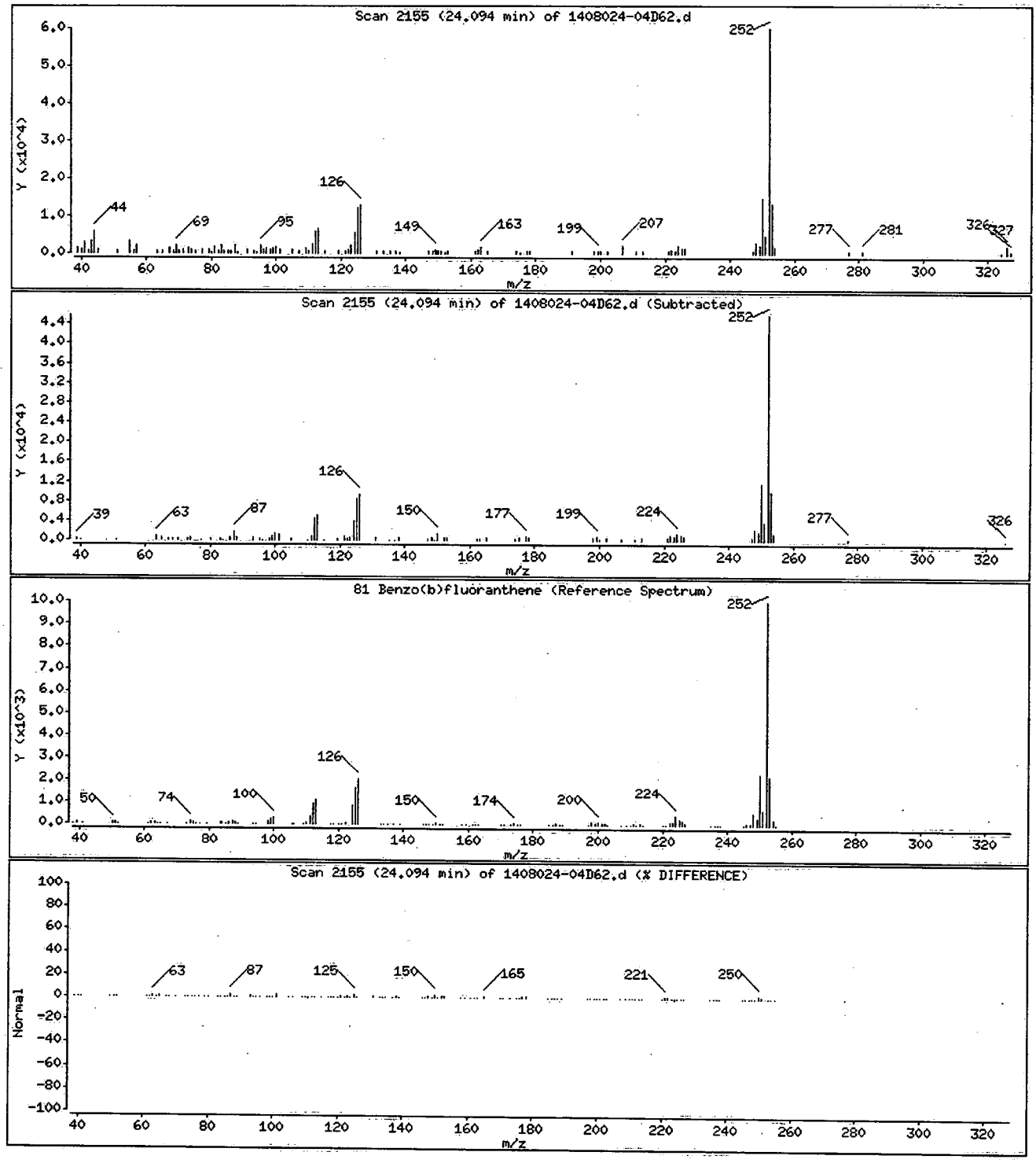
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-04:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

81 Benzo(b)fluoranthene Concentration: 1100 ug/Kg



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

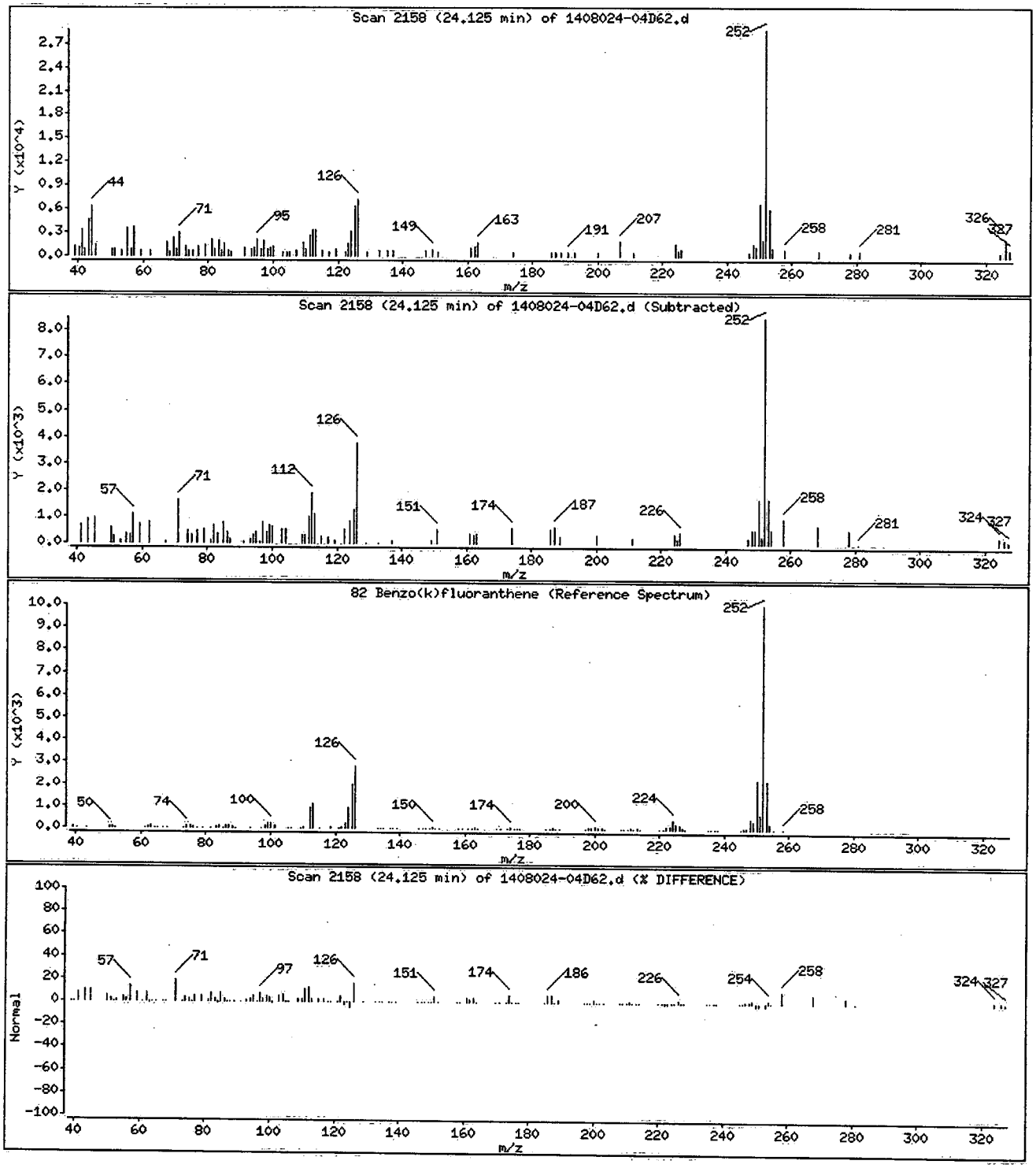
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-04:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

82 Benzo(k)fluoranthene Concentration: 520 ug/Kg



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Date : 15-AUG-2014 23:01

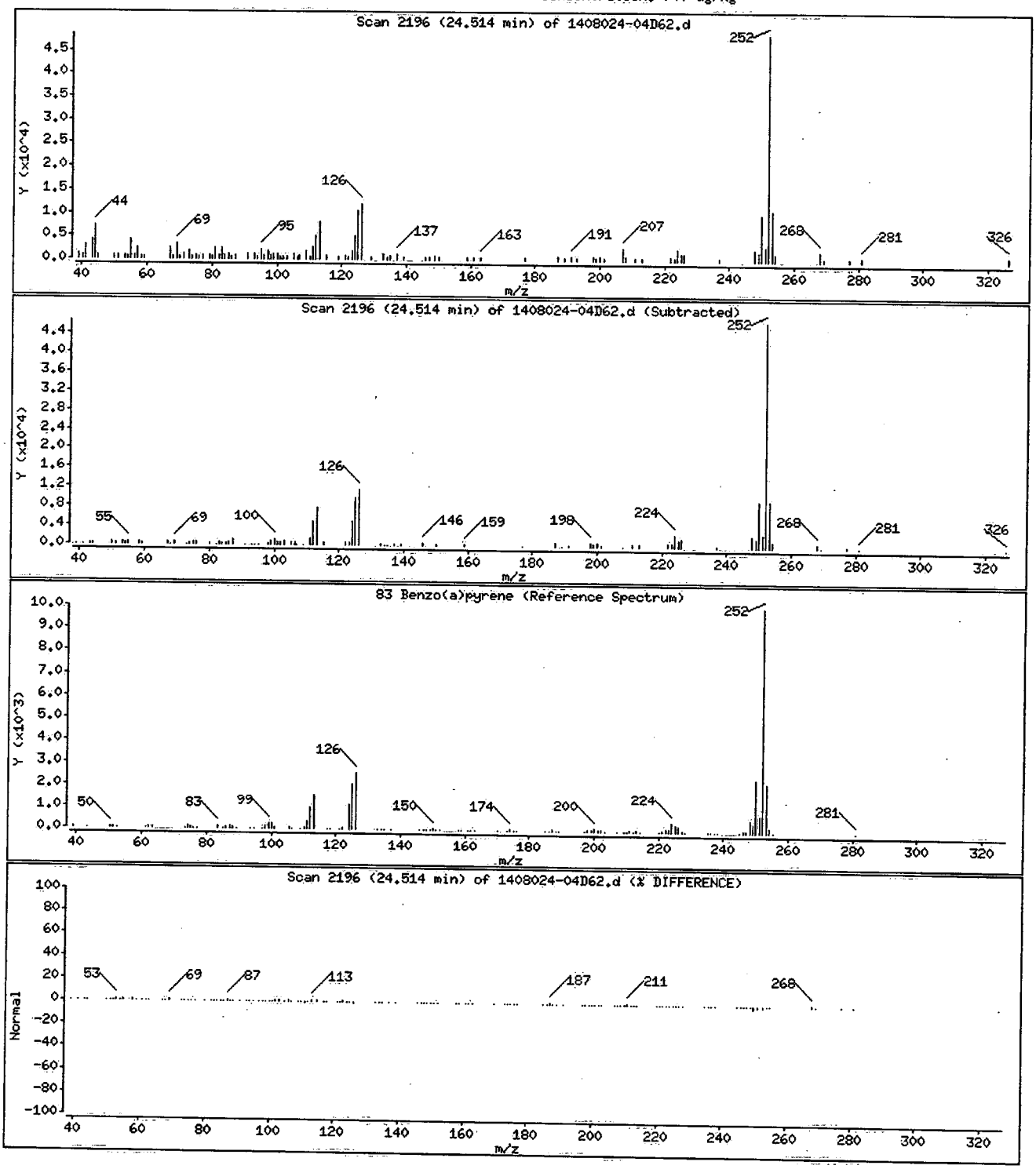
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-04:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

83 Benzo(a)pyrene Concentration: 740 ug/Kg



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Date : 15-AUG-2014 23:01

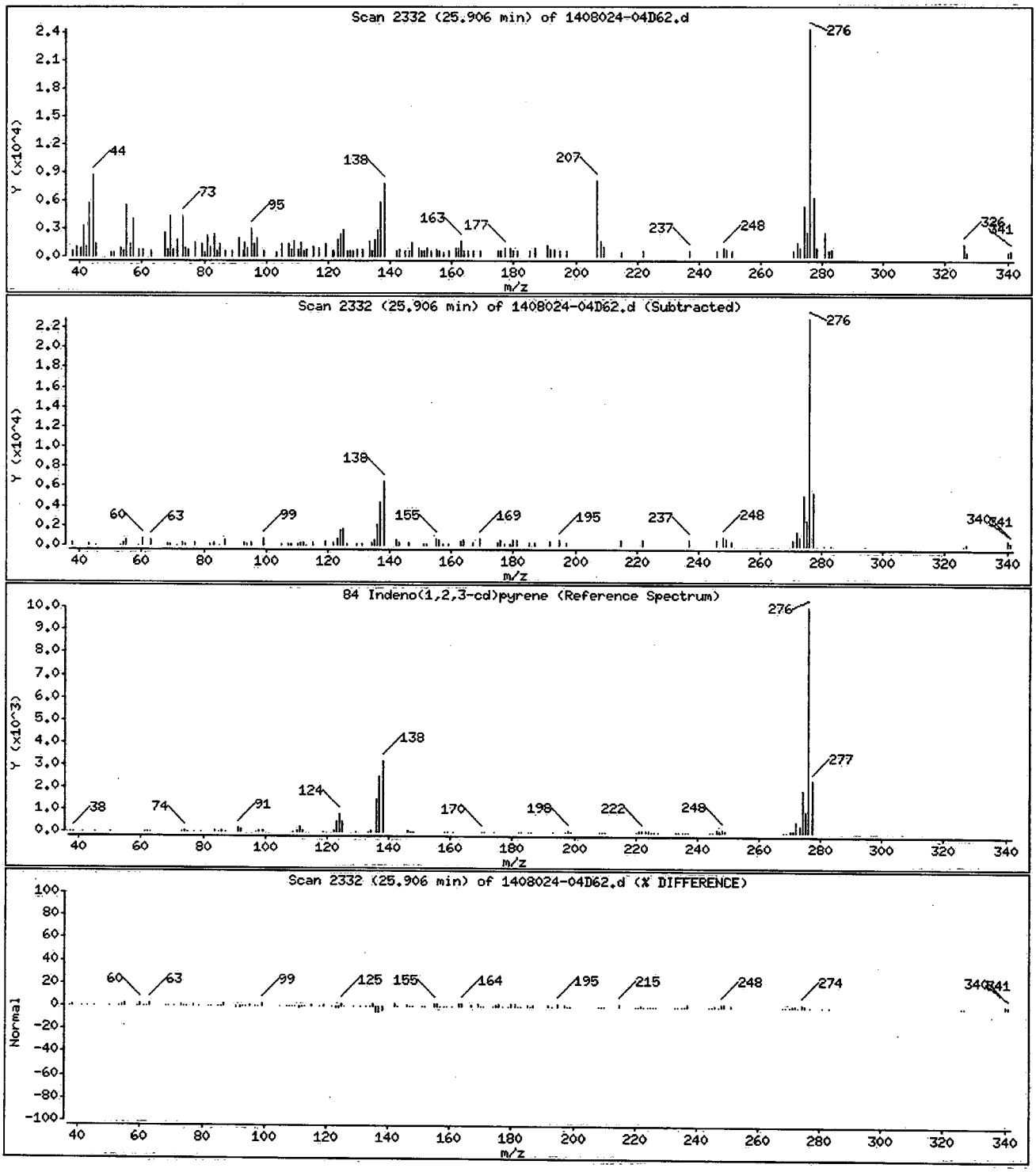
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-04:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

84 Indeno(1,2,3-cd)pyrene Concentration: 450 ug/Kg



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Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

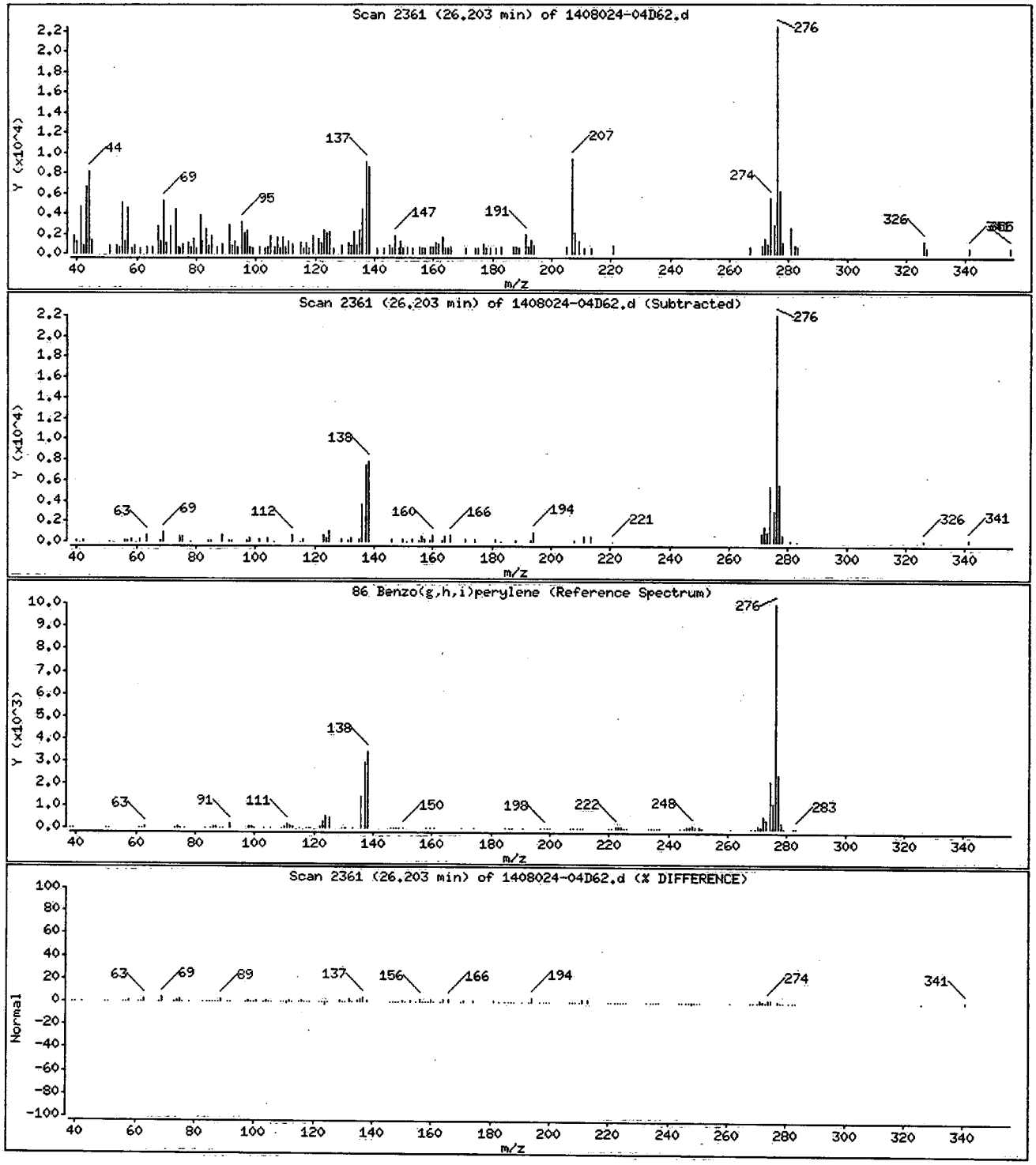
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-04:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

86 Benzo(g,h,i)perylene Concentration: 440 ug/Kg



Roldan Hani 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

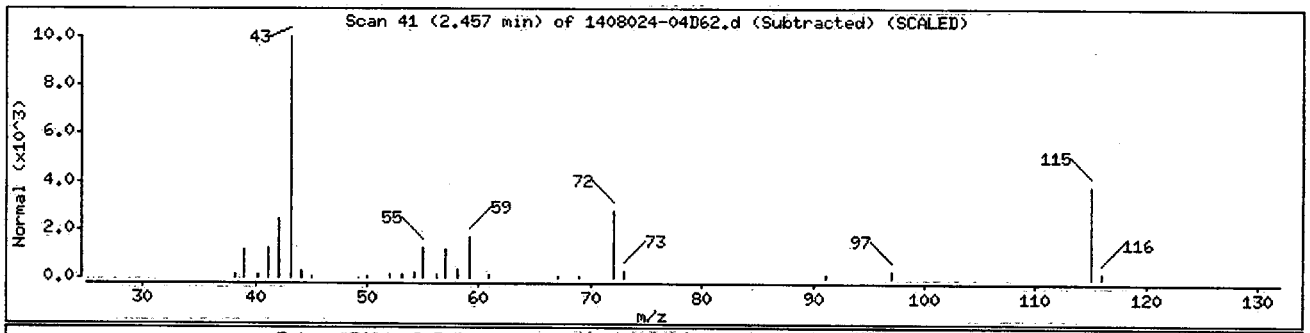
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

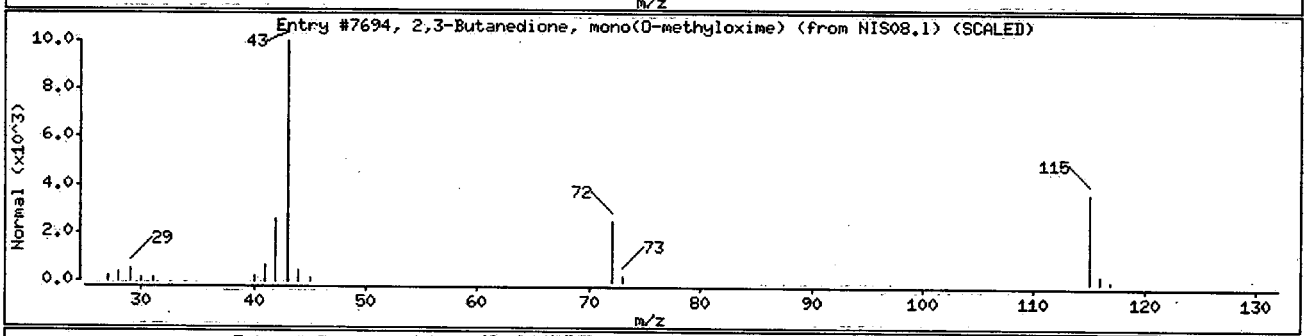
Sample Info: 1408024-04:OWS:10

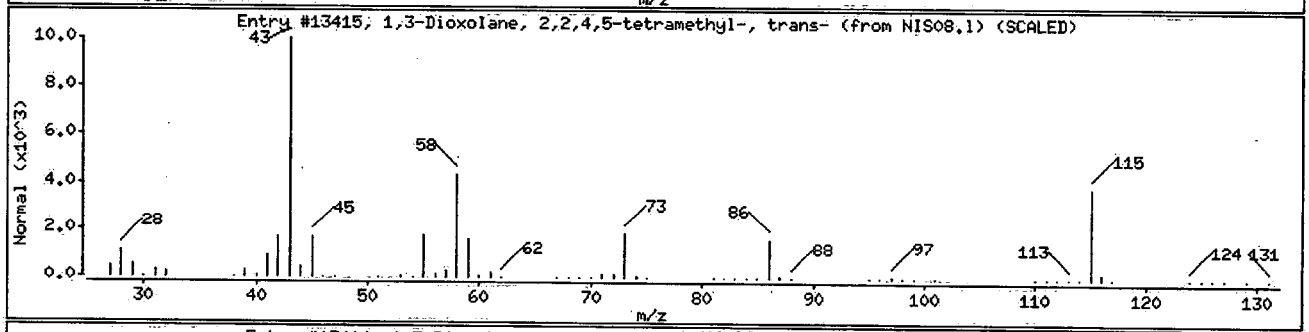
Volume Injected (uL): 2.0 Operator: OWS

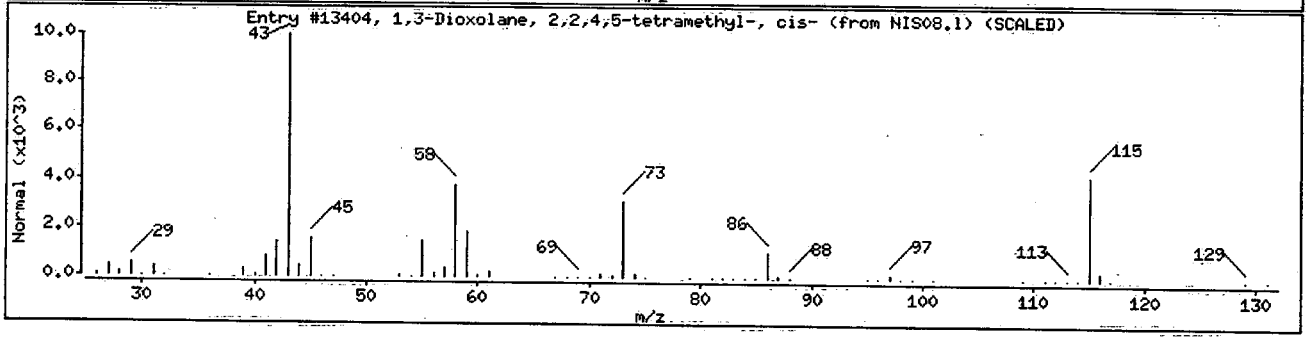
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2,3-Butanedione, mono(O-methyloxime)	617-32-3	NIS08.1	7694	72	C5H9NO2	115
1,3-Dioxolane, 2,2,4,5-tetramethyl-, tra	17226-66-3	NIS08.1	13415	36	C7H14O2	130
1,3-Dioxolane, 2,2,4,5-tetramethyl-, cis	17226-65-2	NIS08.1	13404	33	C7H14O2	130









Rolder Hani 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

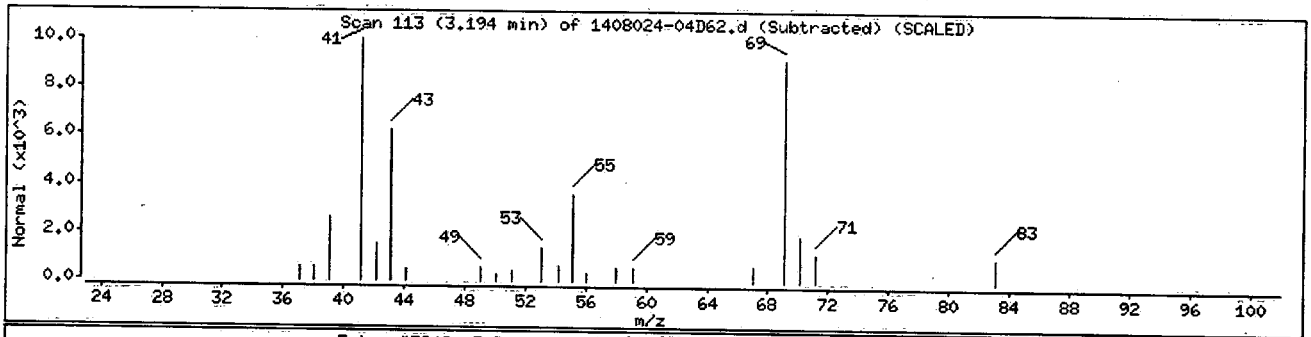
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

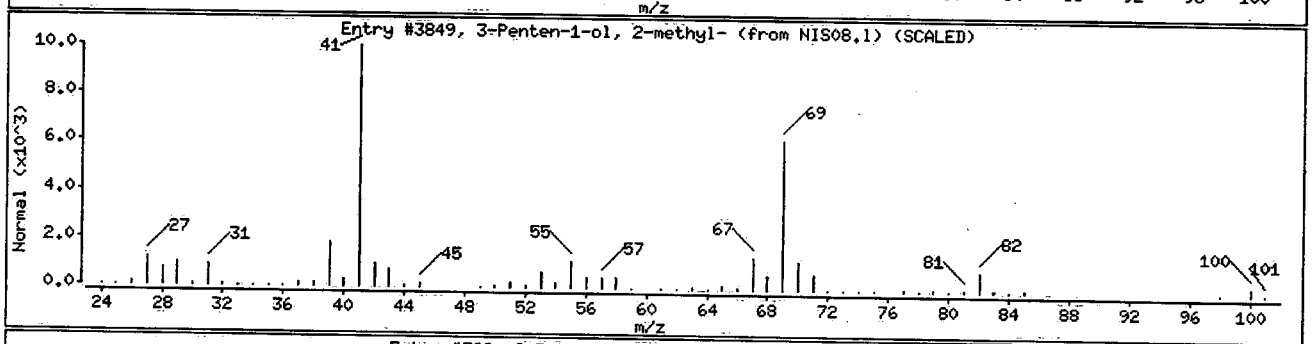
Sample Info: 1408024-04:OWS:10

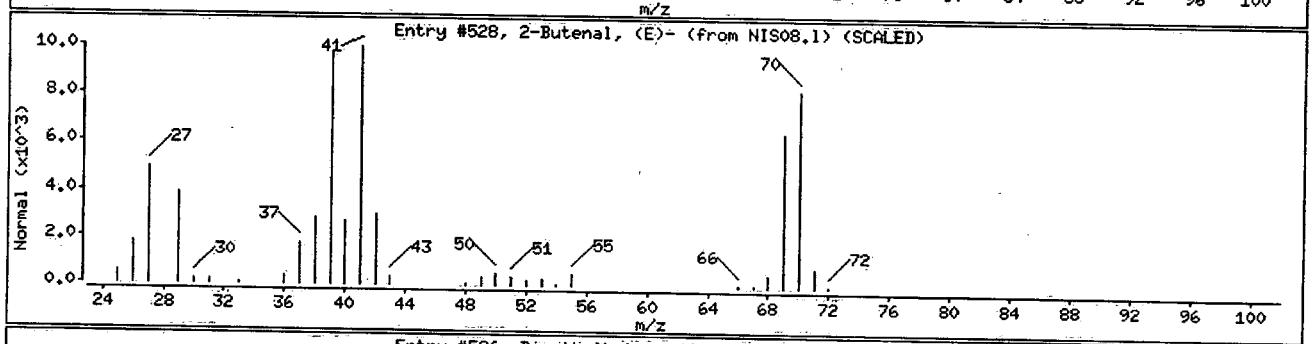
Volume Injected (uL): 2.0 Operator: OWS

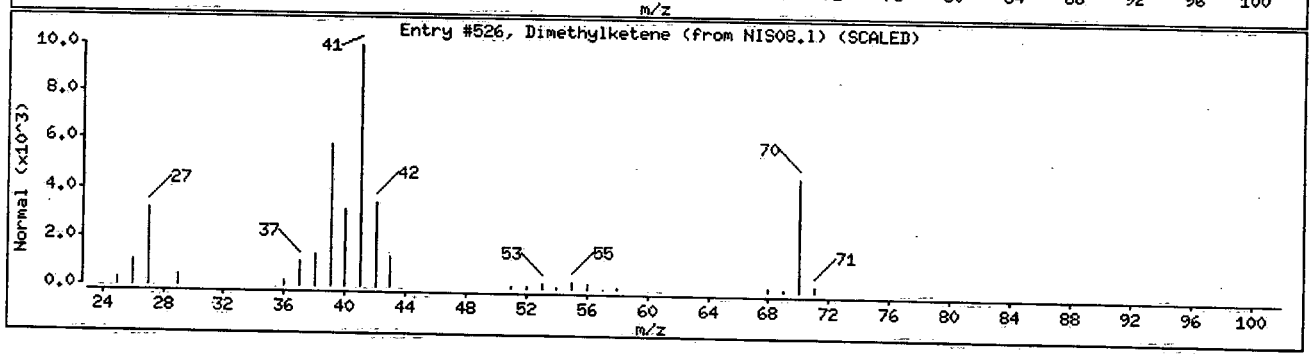
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-Penten-1-ol, 2-methyl-	62238-37-3	NIS08.l	3849	38	C6H12O	100
2-Butenal, (E)-	123-73-9	NIS08.l	528	11	C4H6O	70
Dimethylketene	598-26-5	NIS08.l	526	10	C4H6O	70









8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

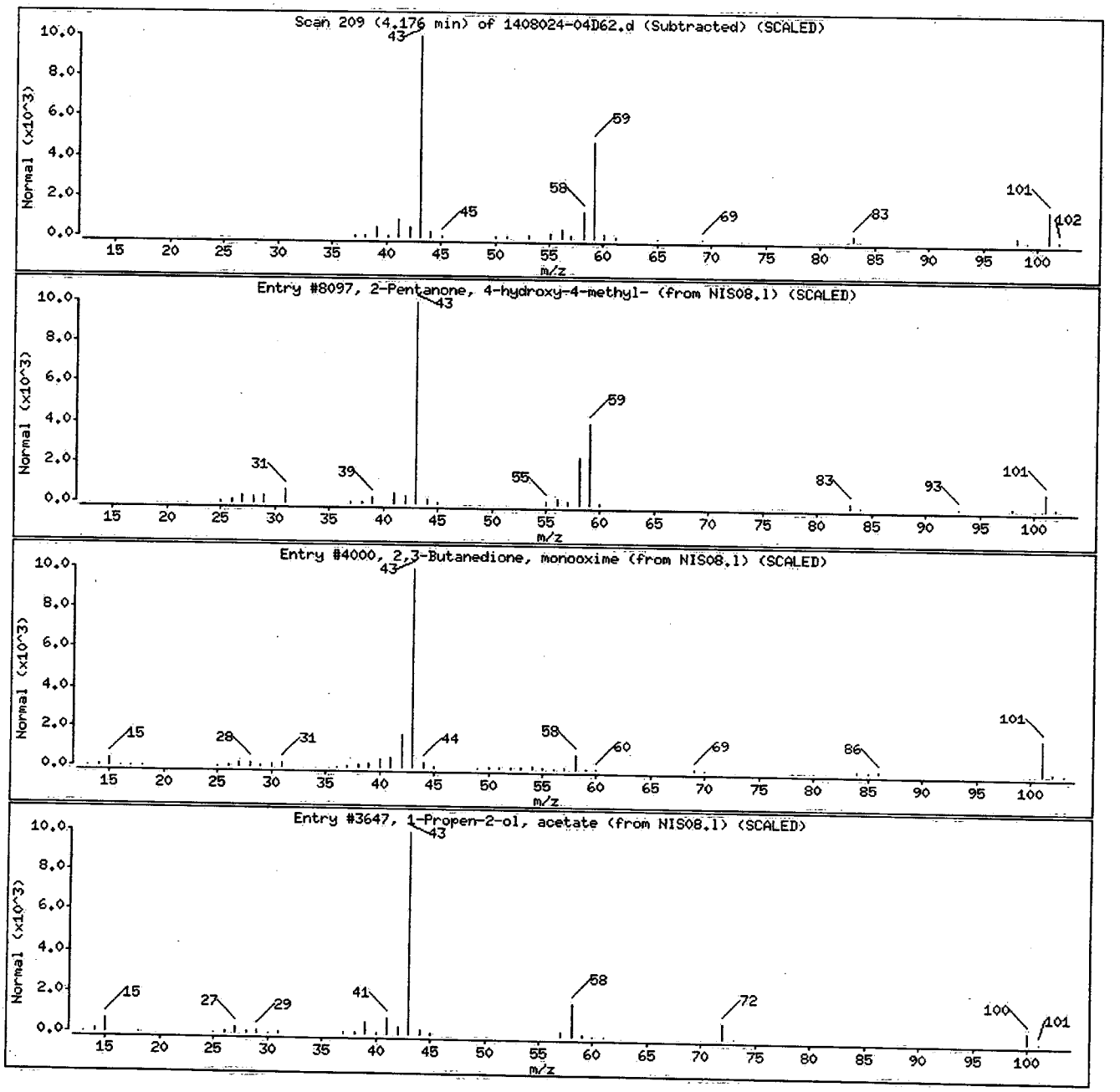
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-04:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
2-Pentanone, 4-hydroxy-4-methyl-	123-42-2	NIS08.l	8097	50	C6H12O2	116
2,3-Butanedione, monooxime	57-71-6	NIS08.l	4000	27	C4H7NO2	101
1-Propen-2-ol, acetate	108-22-5	NIS08.l	3647	10	C5H8O2	100



Roldan Hani 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

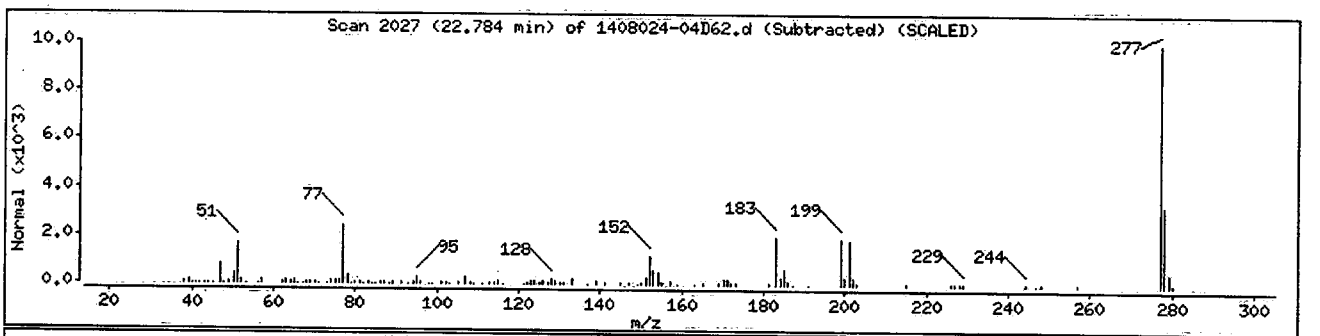
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

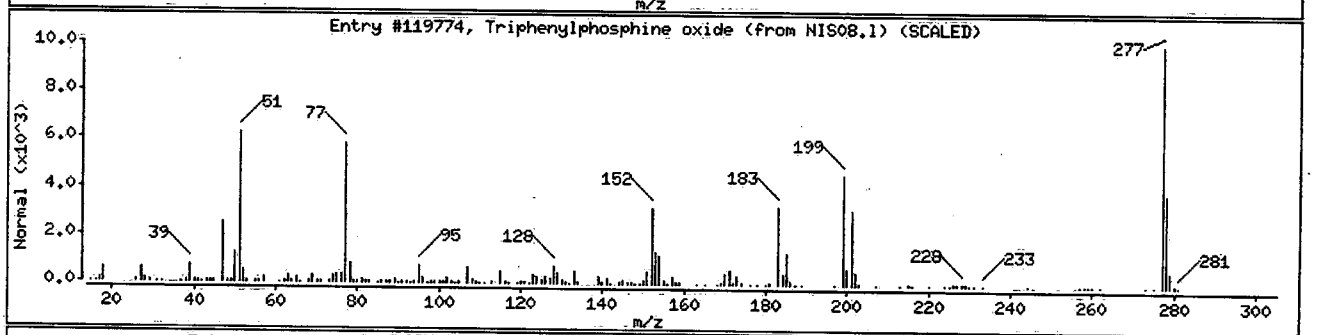
Sample Info: 1408024-04:OWS:10

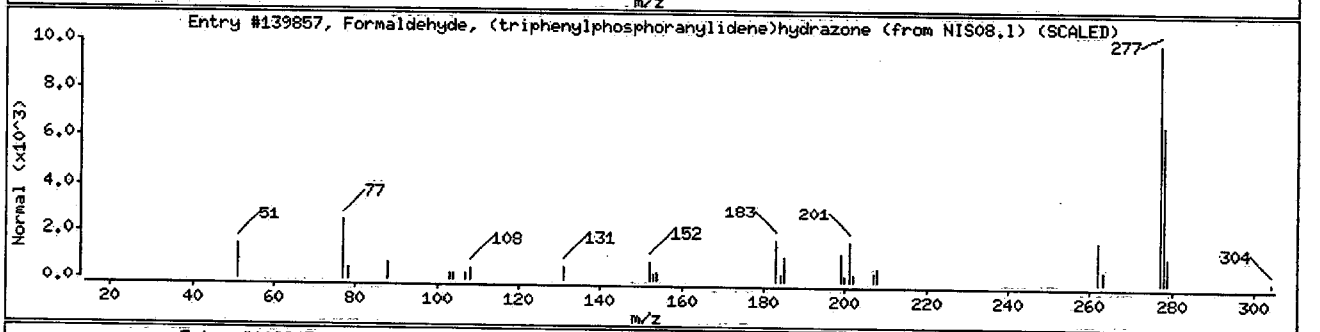
Volume Injected (uL): 2.0 Operator: OWS

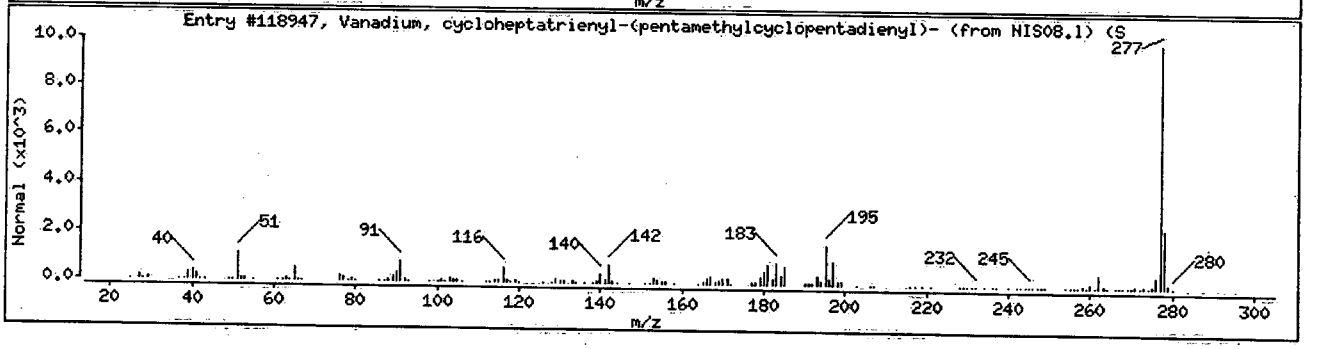
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Triphenylphosphine oxide	791-28-6	NIS08.1	119774	92	C18H15OP	278
Formaldehyde, (triphenylphosphoranyliden	15990-54-2	NIS08.1	139857	50	C19H17N2P	304
Vanadium, cycloheptatrienyl-(pentamethyl	1000155-20-5	NIS08.1	118947	43	C17H22V	277









Roldan Ha 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

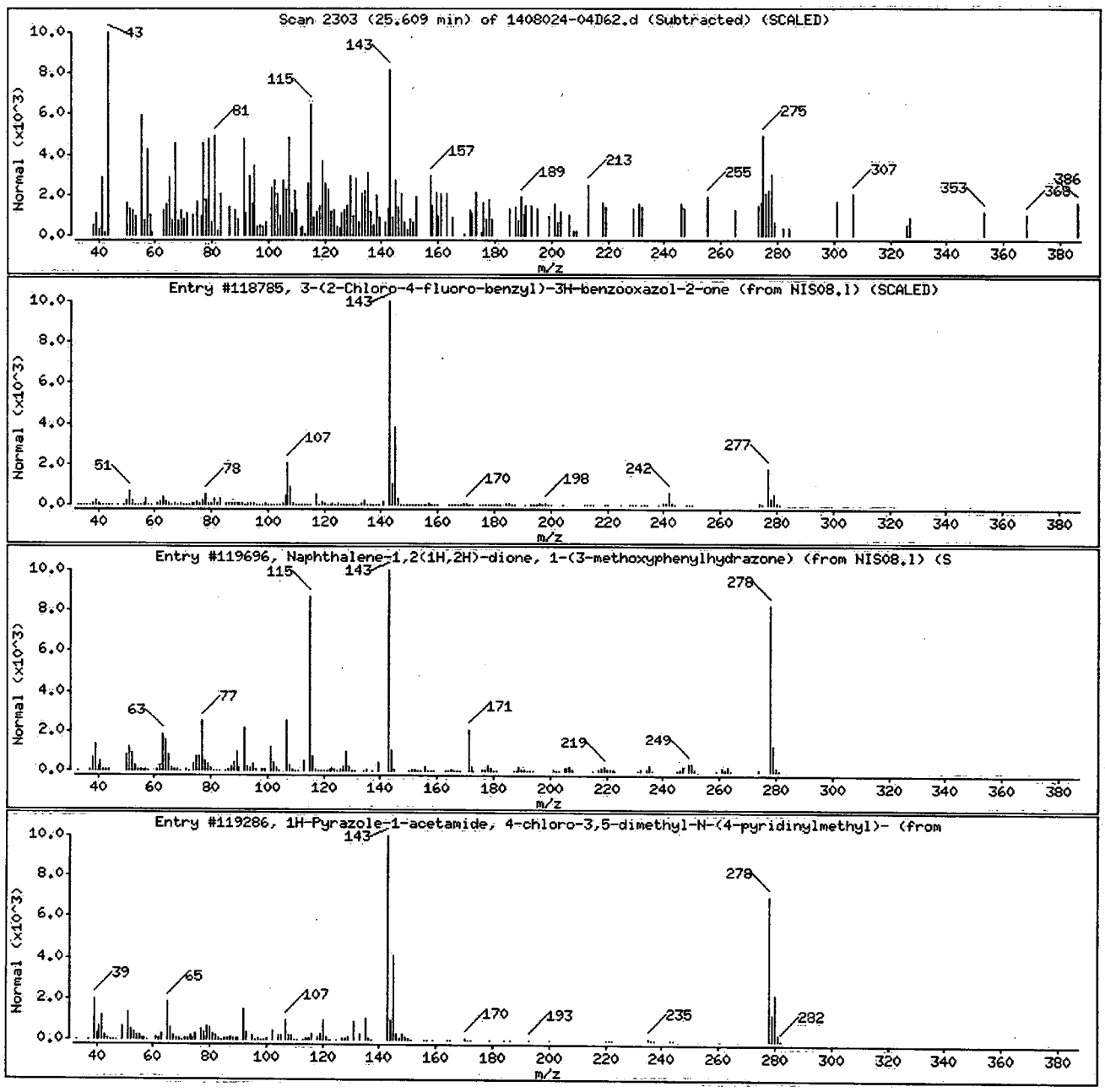
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-04:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3-(2-Chloro-4-fluoro-benzyl)-3H-benzooxa	1000274-76-5	NIS08.l	118785	43	C14H9ClFNO2	277
Naphthalene-1,2(1H,2H)-dione, 1-(3-metho	100903-60-4	NIS08.l	119696	38	C17H14N2O2	278
1H-Pyrazole-1-acetamide, 4-chloro-3,5-di	1000350-38-2	NIS08.l	119286	38	C13H15ClN4O	278



Roldan Hani 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

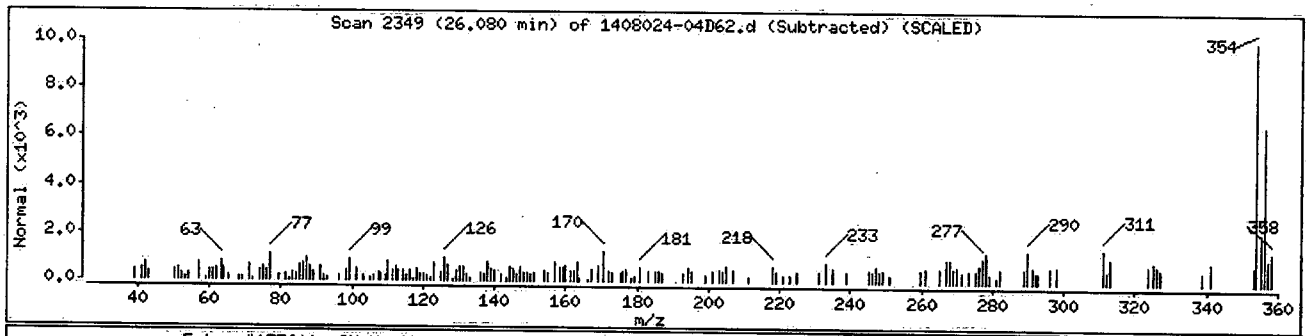
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

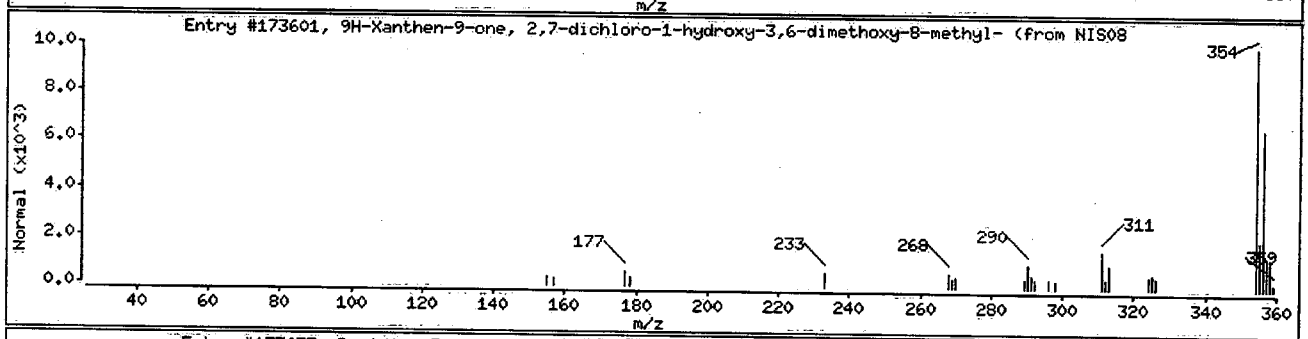
Sample Info: 1408024-04:OWS:10

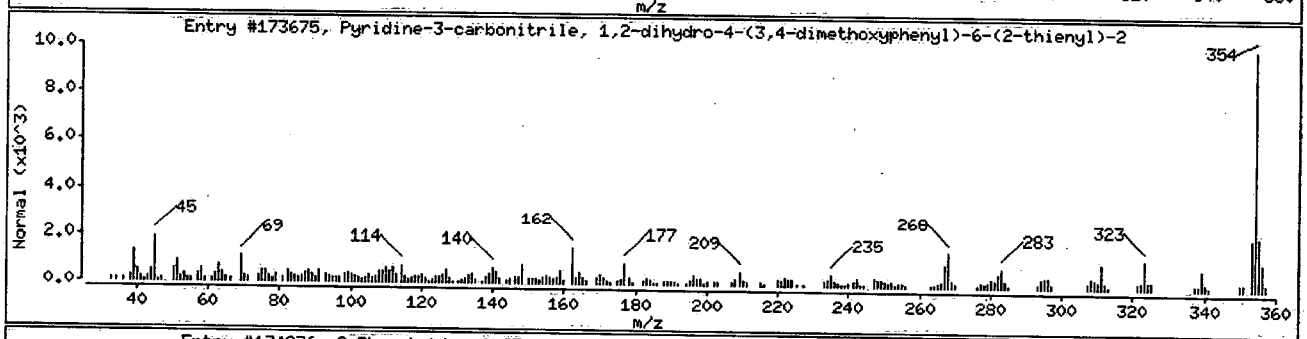
Volume Injected (uL): 2.0 Operator: OWS

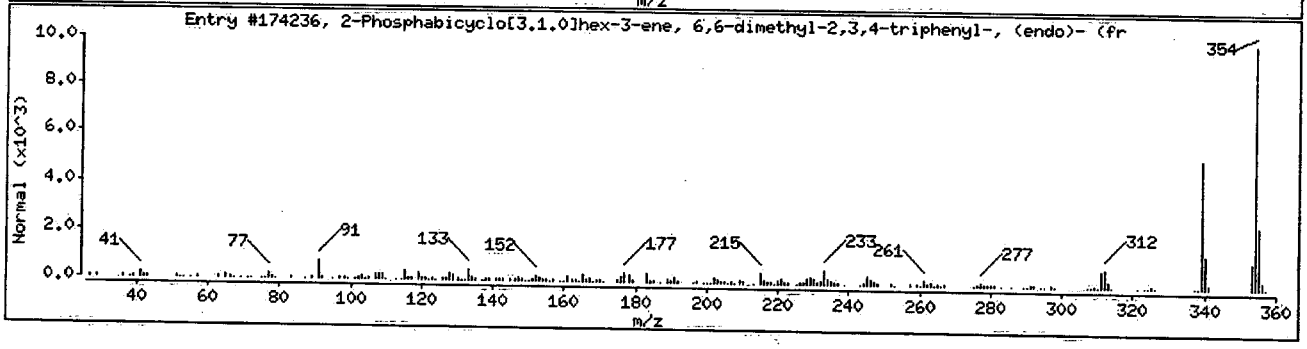
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
9H-Xanthen-9-one, 2,7-dichloro-1-hydroxy	22346-58-3	NIS08.l	173601	89	C16H12Cl2O5	354
Pyridine-3-carbonitrile, 1,2-dihydro-4-(	1000265-38-0	NIS08.l	173675	46	C18H14N2O2S2	354
2-Phosphabicyclo[3.1.0]hex-3-ene, 6,6-di	1000162-04-7	NIS08.l	174236	43	C25H23P	354









Roldan Hani 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

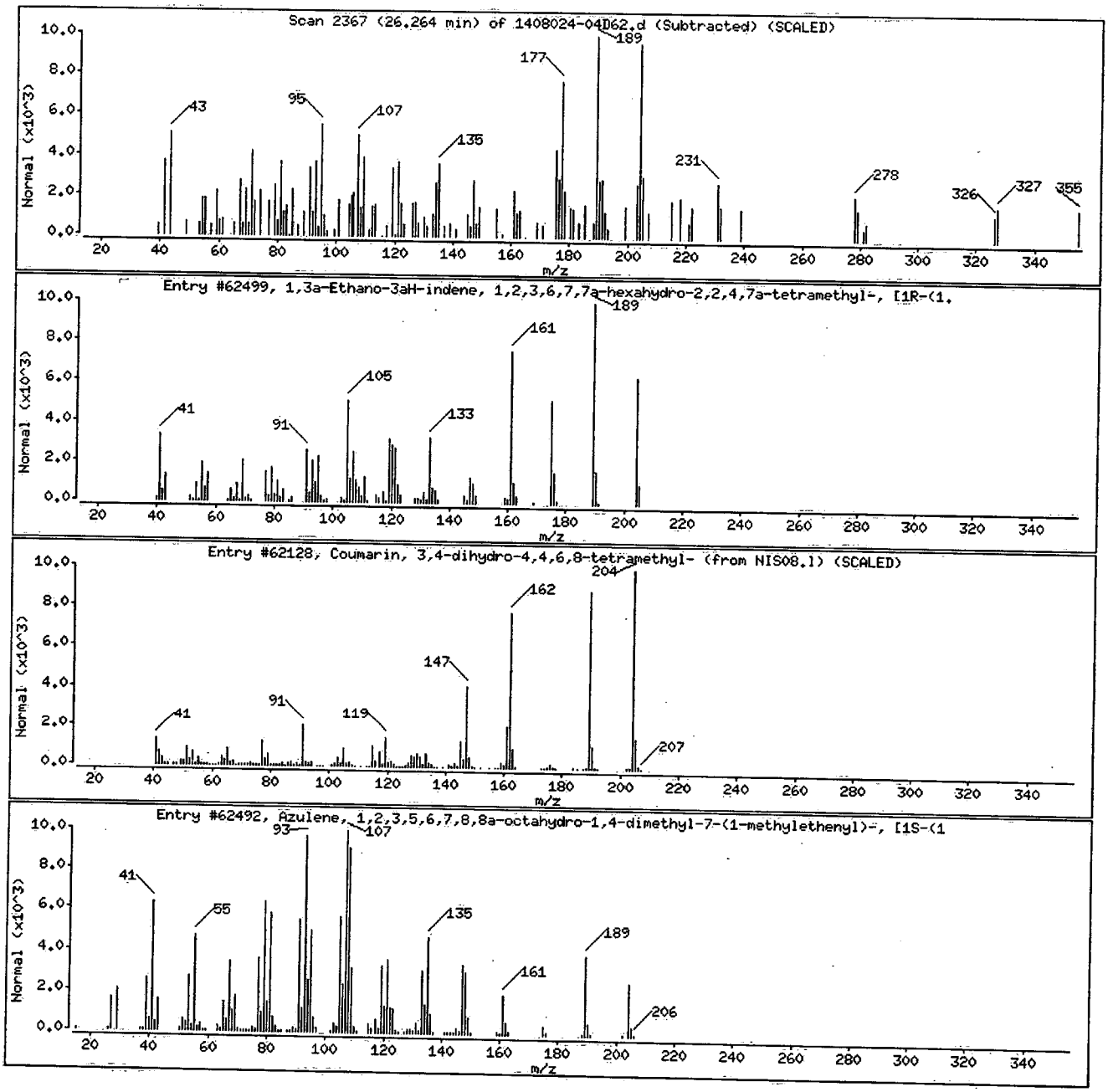
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

Sample Info: 1408024-04:OWS:10

Volume Injected (uL): 2.0 Operator: OWS

Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
1,3a-Ethano-3aH-indene, 1,2,3,6,7,7a-hex	4545-68-0	NIS08.l	62499	53	C15H24	204
Coumarin, 3,4-dihydro-4,4,6,8-tetramethy	249629-60-5	NIS08.l	62128	51	C13H16O2	204
Azulene, 1,2,3,5,6,7,8,8a-octahydro-1,4-	3691-11-0	NIS08.l	62492	43	C15H24	204



Rolder Hai 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

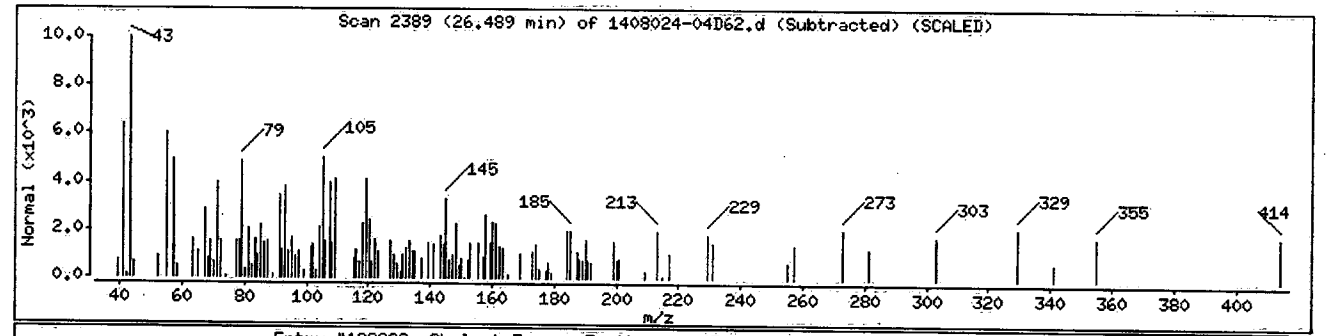
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

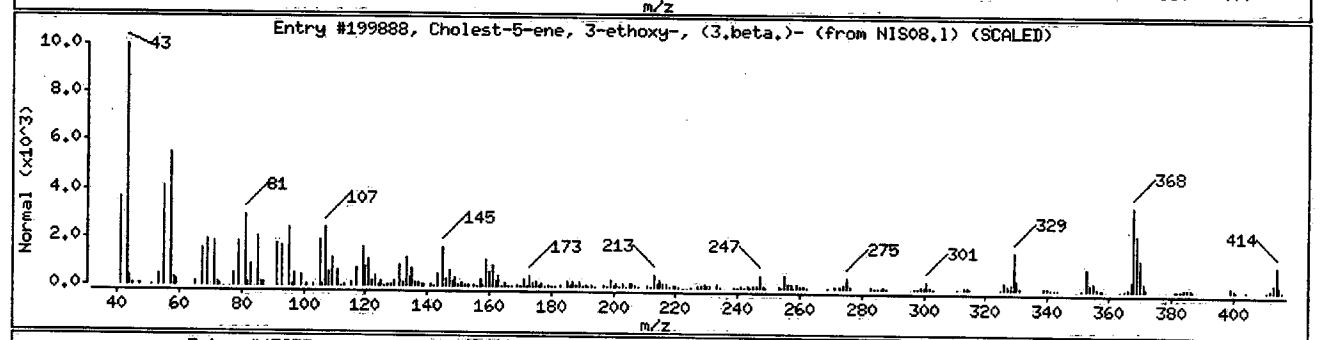
Sample Info: 1408024-04:OWS:10

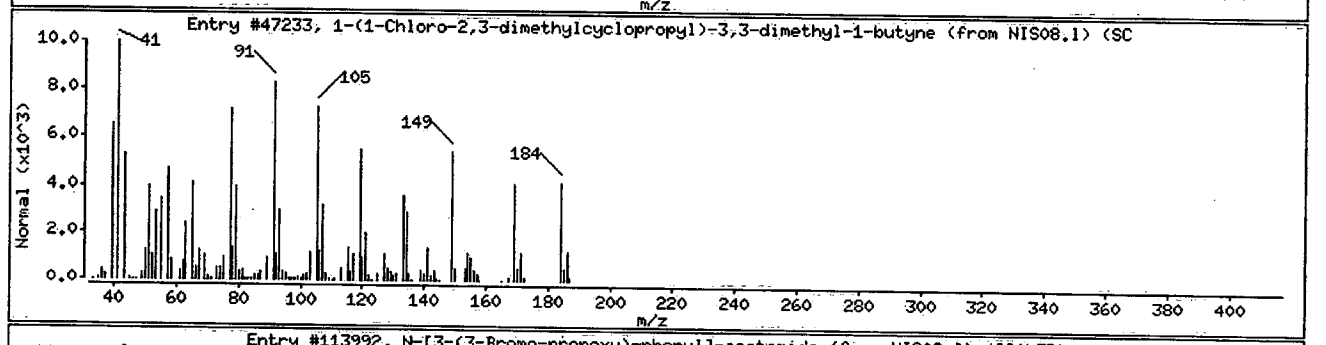
Volume Injected (uL): 2.0 Operator: OWS

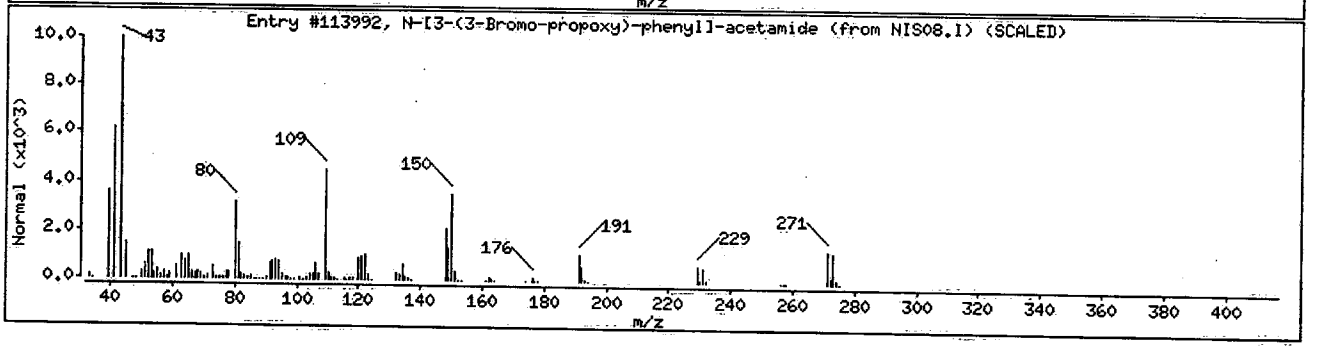
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
Cholest-5-ene, 3-ethoxy-, (3.beta.)-	986-19-6	NIS08.l	199888	25	C29H500	414
1-(1-Chloro-2,3-dimethylcyclopropyl)-3,3	1000267-48-1	NIS08.l	47233	9	C11H17Cl	184
N-[3-(3-Bromo-propoxy)-phenyl]-acetamide	1000300-93-3	NIS08.l	113992	9	C11H14BrNO2	271









8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/1408024-04D62.d

Date : 15-AUG-2014 23:01

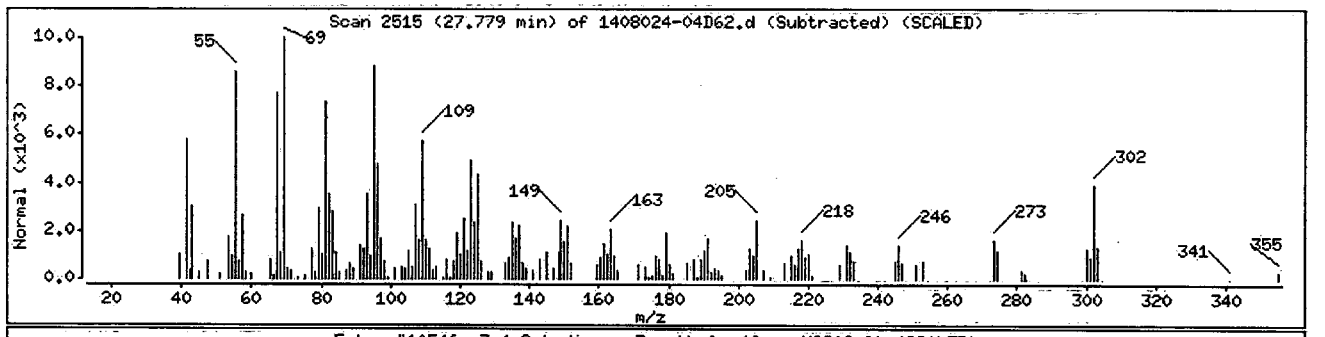
Client ID: P001-S006-0002-01 Instrument: 5972hp62.i

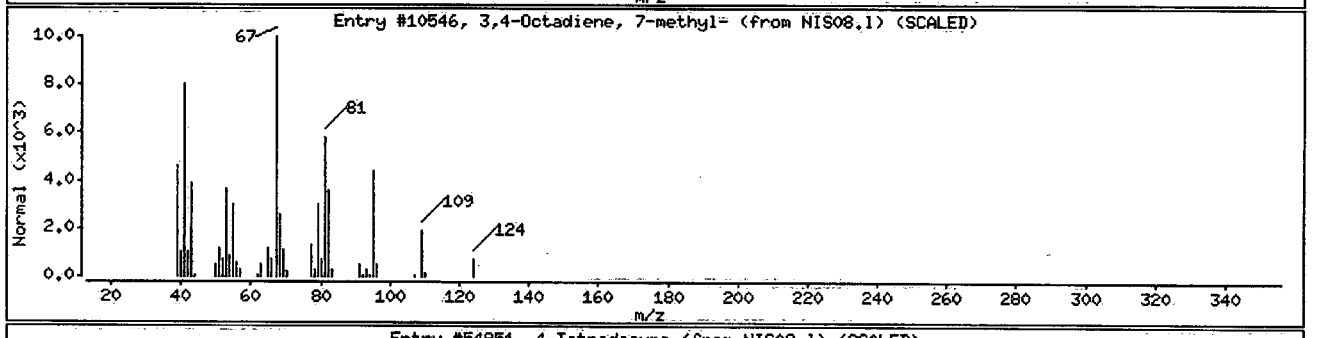
Sample Info: 1408024-04:OWS:10

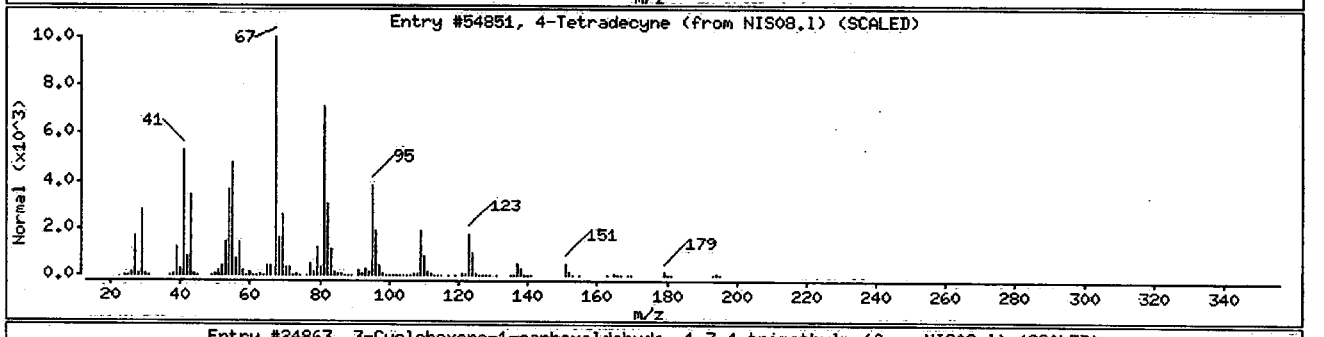
Volume Injected (uL): 2.0 Operator: OWS

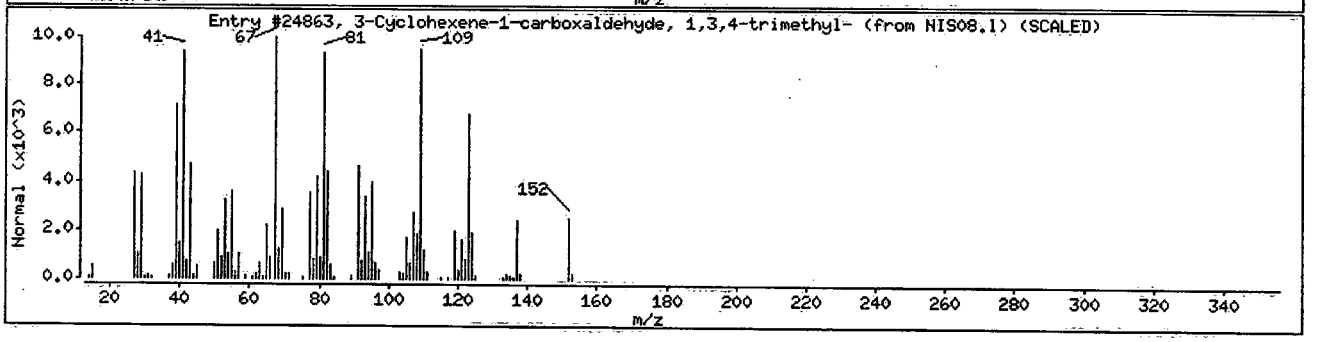
Column phase: Rxi-5SilMS Column diameter: 0.32

Library Search Compound Match	CAS Number	Library	Entry	Quality	Formula	Weight
Unknown						
3,4-Octadiene, 7-methyl-	37050-05-8	NIS08.l	10546	70	C9H16	124
4-Tetradecyne	60212-33-1	NIS08.l	54851	64	C14H26	194
3-Cyclohexene-1-carboxaldehyde, 1,3,4-tr	40702-26-9	NIS08.l	24863	43	C10H16O	152









Roldan Hani 8/19/2014

L. Initial Calibration and Second Source Calibration Verification Data

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

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) RICs and Quantitation reports for the initial calibration and the second source calibration verification. Spectra not required.

(2) EICPs displaying each manual integration.

INITIAL CALIBRATION DATA

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024

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

Calibration: 4072701 Instrument: 5972hp62

Calibration Date: 7/23/2014 7:09:16PM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
Phenol	5	1.726715	10	1.792222	25	1.855381	40	1.693316	50	1.835996	60	1.820102
Bis(2-chloroethyl)ether	5	1.391637	10	1.482197	25	1.508707	40	1.382062	50	1.463087	60	1.472674
2-Chlorophenol	5	1.366217	10	1.466077	25	1.519054	40	1.388158	50	1.470213	60	1.46952
2-Methylphenol	5	1.194234	10	1.292656	25	1.373751	40	1.258004	50	1.377236	60	1.332382
2,2'-oxybis(1-Chloropropane)	5	2.220274	10	2.319854	25	2.32271	40	2.156023	50	2.275022	60	2.250766
3 & 4-Methylphenol	5	1.236601	10	1.374738	25	1.478334	40	1.330032	50	1.467843	60	1.416302
N-Nitroso-di-N-propylamine	5	1.091967	10	1.233898	25	1.240534	40	1.136277	50	1.246757	60	1.200137
Acetophenone	5	0.5515158	10	0.5454059	25	0.5799653	40	0.5444301	50	0.5628326	60	0.5514504
Hexachloroethane	5	0.6881028	10	0.7118335	25	0.7454932	40	0.6878915	50	0.7233189	60	0.7130926
Nitrobenzene	5	0.5314817	10	0.5237049	25	0.5470785	40	0.5162998	50	0.5172042	60	0.5109544
Isophorone	5	0.7067409	10	0.7373173	25	0.7847979	40	0.7424624	50	0.7870816	60	0.7415644
2-Nitrophenol	5	0.1795854	10	0.1876543	25	0.2113227	40	0.201376	50	0.209081	60	0.2125455
2,4-Dimethylphenol	5	0.277346	10	0.3005479	25	0.3163659	40	0.3003373	50	0.3053682	60	0.3078969
Bis(2-chloroethoxy)methane	5	0.4603084	10	0.4642901	25	0.4795509	40	0.4560595	50	0.4670913	60	0.4702543
2,4-Dichlorophenol	5	0.2575493	10	0.2772903	25	0.3119861	40	0.2968896	50	0.3115077	60	0.3106344
Naphthalene	5	1.009013	10	1.009598	25	1.005327	40	0.9525295	50	0.9624669	60	0.9498481
4-Chloroaniline	5	0.4442264	10	0.4727338	25	0.4948117	40	0.4880114	50	0.5103574	60	0.4894614
Hexachlorobutadiene	5	0.1807445	10	0.1721554	25	0.1754675	40	0.1682999	50	0.1694495	60	0.1774208
4-Chloro-3-methylphenol	5	0.2836529	10	0.3084075	25	0.3441781	40	0.3266705	50	0.3472403	60	0.3211319
2-Methylnaphthalene	5	0.5574575	10	0.5716606	25	0.6023962	40	0.5705552	50	0.5995678	60	0.5720671
Hexachlorocyclopentadiene	5	0.3092982	10	0.3293822	25	0.3687222	40	0.3651743	50	0.3797386	60	0.4082209
2,4,6-Trichlorophenol	5	0.2995604	10	0.3472449	25	0.3900292	40	0.374483	50	0.40066	60	0.3971866
2,4,5-Trichlorophenol	5	0.3145637	10	0.37485	25	0.4196593	40	0.3949336	50	0.4182346	60	0.4347886
2-Chloronaphthalene	5	1.069776	10	1.11016	25	1.094656	40	1.055892	50	1.126338	60	1.125572
2-Nitroaniline	5	0.3667631	10	0.4209163	25	0.4196698	40	0.4168063	50	0.4258738	60	0.4129472
Dimethylphthalate	5	1.288194	10	1.339004	25	1.374425	40	1.339977	50	1.38736	60	1.348141
2,6-Dinitrotoluene	5	0.2951049	10	0.333571	25	0.3385938	40	0.3368064	50	0.3505705	60	0.337806

Environmental Testing Laboratories, Inc. CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

INITIAL CALIBRATION DATA

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024

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

Calibration: 4072701 Instrument: 5972hp62

Calibration Date: 7/23/2014 7:09:16PM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
Acenaphthylene	5	1.721671	10	1.809997	25	1.852062	40	1.787839	50	1.845892	60	1.817886
3-Nitroaniline	5	0.3221751	10	0.3749507	25	0.3916235	40	0.3824181	50	0.3889833	60	0.3692317
Acenaphthene	5	1.105386	10	1.115445	25	1.115014	40	1.074156	50	1.076128	60	1.066786
2,4-Dinitrophenol	5	0	10	6.037778E-02	25	0.1558411	40	0.1816833	50	0.2108091	60	0.2033032
4-Nitrophenol	5	0.1804788	10	0.2631321	25	0.2935341	40	0.3117717	50	0.3397986	60	0.3175855
2,4-Dinitrotoluene	5	0.3403175	10	0.4218895	25	0.4558434	40	0.4732151	50	0.5029839	60	0.4747269
Dibenzofuran	5	1.537783	10	1.593708	25	1.5758	40	1.502188	50	1.55975	60	1.567474
Diethylphthalate	5	1.367025	10	1.438888	25	1.366343	40	1.340459	50	1.41131	60	1.324744
4-Chlorophenyl-phenylether	5	0.5631735	10	0.5899305	25	0.5842518	40	0.5689103	50	0.5939837	60	0.5694032
Fluorene	5	1.191491	10	1.223668	25	1.207471	40	1.147151	50	1.191597	60	1.145469
4-Nitroaniline	5	0.3047077	10	0.3688939	25	0.3924801	40	0.3964591	50	0.4179155	60	0.3943603
4,6-Dinitro-2-methylphenol	5	6.871652E-02	10	0.1212391	25	0.1569587	40	0.1611937	50	0.1675248	60	0.163799
N-Nitrosodiphenylamine (1)	5	0.5977431	10	0.6424304	25	0.6160883	40	0.5903841	50	0.5914989	60	0.5665027
4-Bromophenyl-phenylether	5	0.1938158	10	0.205303	25	0.2032857	40	0.1907705	50	0.1995438	60	0.194462
Hexachlorobenzene	5	0.2440979	10	0.2565238	25	0.2494787	40	0.2478687	50	0.2536283	60	0.2519679
Pentachlorophenol	5	~~1.785387E-02~~	10	7.493716E-02	25	0.1266986	40	0.1307727	50	0.1440121	60	0.1478074
Phenanthrene	5	1.050557	10	1.07983	25	1.063406	40	1.042471	50	1.041822	60	1.026739
Anthracene	5	1.023842	10	1.070736	25	1.063471	40	1.050685	50	1.062896	60	1.037803
Carbazole	5	0.9907013	10	1.076563	25	1.083875	40	1.058292	50	1.033789	60	1.026684
Di-n-butylphthalate	5	1.244006	10	1.452579	25	1.542018	40	1.526924	50	1.443639	60	1.406062
Fluoranthene	5	1.060966	10	1.175423	25	1.173234	40	1.116874	50	1.080103	60	1.053197
Pyrene	5	1.080862	10	1.189235	25	1.221356	40	1.16052	50	1.145755	60	1.163053
Butylbenzylphthalate	5	0.5059459	10	0.601724	25	0.6687096	40	0.6497279	50	0.6754231	60	0.6676106
3,3'-Dichlorobenzidine	5	0.3619547	10	0.3863212	25	0.4055145	40	0.3984172	50	0.3907256	60	0.3910381
bis(2-ethylhexyl)Phthalate	5	0.8136767	10	0.8797389	25	0.9703362	40	0.9320031	50	0.9513775	60	0.9370859
Benzo (a) anthracene	5	0.9337159	10	1.009889	25	1.042134	40	1.023394	50	1.024749	60	1.02973
Chrysene	5	0.9534739	10	0.9400959	25	0.9547919	40	0.9135141	50	0.9095286	60	0.9193057

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INITIAL CALIBRATION DATA

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024

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

Calibration: 4072701 Instrument: 5972hp62

Calibration Date: 7/23/2014 7:09:16PM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
Di-n-octylphthalate	5	1.528534	10	1.982965	25	2.18703	40	2.164042	50	2.109622	60	2.120524
Benzo (b) fluoranthene	5	1.328795	10	1.342315	25	1.55907	40	1.502027	50	1.386331	60	1.381189
Benzo(k)fluoranthene	5	1.385957	10	1.578189	25	1.389624	40	1.351694	50	1.368484	60	1.415224
Benzo (a) pyrene	5	1.220284	10	1.313839	25	1.35004	40	1.34794	50	1.332281	60	1.364166
Indeno(1,2,3-cd)pyrene	5	1.170212	10	1.214592	25	1.290545	40	1.345276	50	1.31077	60	1.333339
Dibenzo(a,h)anthracene	5	1.213812	10	1.213386	25	1.279005	40	1.30128	50	1.267974	60	1.287619
Benzo (g,h,i) perylene	5	1.262595	10	1.31179	25	1.339336	40	1.338528	50	1.353526	60	1.390362
Benzaldehyde	5	0.5998553	10	0.6774511	25	0.6854945	40	0.5787317	50	0.6324562	60	0.6368994
Caprolactam	5	9.180065E-02	10	0.116441	25	0.1297427	40	0.1261067	50	0.1372915	60	0.1204087
Atrazine	5	9.480985E-02	10	9.682155E-02	25	0.1029297	40	0.1051526	50	0.1055433	60	9.947206E-02
1,1'-Biphenyl	5	1.34841	10	1.385317	25	1.358567	40	1.307985	50	1.350746	60	1.371174
2-Fluorophenol	5	1.257612	10	1.269143	25	1.317286	40	1.259062	50	1.315863	60	1.318884
Phenol-d5	5	1.768566	10	1.87235	25	1.914698	40	1.760228	50	1.88377	60	1.849541
Nitrobenzene-d5	5	0.3863969	10	0.4023034	25	0.4206287	40	0.3932552	50	0.4027158	60	0.4020512
2-Fluorobiphenyl	5	1.251386	10	1.265076	25	1.2606	40	1.1998	50	1.226824	60	1.24359
2,4,6-Tribromophenol	5	0.1678719	10	0.2141018	25	0.2247252	40	0.2266018	50	0.2438751	60	0.2403888
Terphenyl-d14	5	0.7372226	10	0.7953205	25	0.8219494	40	0.784824	50	0.7704625	60	0.7819459

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INITIAL CALIBRATION DATA (Continued)

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024

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

Calibration: 4072701 Instrument: 5972hp62

Calibration Date: 7/23/2014 7:09:16PM

Compound	Mean RF	% RSD	Mean RT	RT RSD	Linear r	Quad COD	RSD LIMIT	Q
Phenol	1.787289	3.592183	7.980333	9.768004E-02			CCC (20)	
Bis(2-chloroethyl)ether	1.450061	3.542058	7.886333	4.621728E-02			CCC (20)	
2-Chlorophenol	1.44654	3.981884	7.959667	9.521638E-02			CCC (20)	
2-Methylphenol	1.30471	5.454664	9.3175	4.298248E-02			CCC (20)	
2,2'-oxybis(1-Chloropropane)	2.257442	2.813916	9.186	4.684679E-02			CCC (20)	
3 & 4-Methylphenol	1.383975	6.598403	9.7115	4.831288E-02			CCC (20)	
N-Nitroso-di-N-propylamine	1.191595	5.345456	9.472833	0.0441679			CCC (20)	
Acetophenone	0.5559334	2.423876	9.3705	4.164836E-02			CCC (20)	
Hexachloroethane	0.7116221	3.080396	9.507	4.587389E-02			CCC (20)	
Nitrobenzene	0.5244539	2.505226	9.723833	7.104199E-02			CCC (20)	
Isophorone	0.7499941	4.107971	10.336	4.456823E-02			CCC (20)	
2-Nitrophenol	0.2002608	6.842052	10.486	3.925396E-02			CCC (20)	
2,4-Dimethylphenol	0.3013104	4.358513	10.87667	4.163735E-02			CCC (20)	
Bis(2-chloroethoxy)methane	0.4662591	1.759874	10.97917	3.718255E-02			CCC (20)	
2,4-Dichlorophenol	0.2943096	7.631577	11.18183	8.408389E-02			CCC (20)	
Naphthalene	0.9814638	2.994042	11.35267	1.058779E-02			CCC (20)	
4-Chloroaniline	0.483267	4.685069	11.6325	3.070122E-02			CCC (20)	
Hexachlorobutadiene	0.1739229	2.768333	11.78083	3.393245E-02			CCC (20)	
4-Chloro-3-methylphenol	0.3218802	7.360658	13.04317	3.493347E-02			CCC (20)	
2-Methylnaphthalene	0.5789507	3.097266	13.01067	1.171998E-02			CCC (20)	
Hexachlorocyclopentadiene	0.3600894	9.877837	13.44933	3.064173E-02			CCC (20)	
2,4,6-Trichlorophenol	0.368194	10.56112	13.81067	2.785768E-02			CCC (20)	
2,4,5-Trichlorophenol	0.3928383	11.14198	13.9455	2.815771E-02			CCC (20)	
2-Chloronaphthalene	1.097066	2.668995	14.116	1.173063E-02			CCC (20)	
2-Nitroaniline	0.4104961	5.323384	14.48633	3.131639E-02			CCC (20)	
Dimethylphthalate	1.346183	2.56249	15.022	4.531415E-02			CCC (20)	
2,6-Dinitrotoluene	0.3320754	5.727656	15.08517	4.559454E-02			CCC (20)	

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INITIAL CALIBRATION DATA (Continued)

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024

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

Calibration: 4072701 Instrument: 5972hp62

Calibration Date: 7/23/2014 7:09:16PM

Compound	Mean RF	% RSD	Mean RT	RT RSD	Linear r	Quad COD	RSD LIMIT	Q
Acenaphthylene	1.805891	2.633779	15.05783	1.045229E-02			CCC (20)	
3-Nitroaniline	0.3715637	6.89296	15.469	3.078781E-02			CCC (20)	
Acenaphthene	1.092153	2.032785	15.47067	3.957344E-02			CCC (20)	
2,4-Dinitrophenol	0.1624029	37.50523	15.6782	3.054083E-02	0.9945811		CCC (20)	
4-Nitrophenol	0.2843835	20.04944	16.1685	4.283837E-02	0.9959758		CCC (20)	
2,4-Dinitrotoluene	0.4448294	12.97336	15.96367	3.615178E-02			CCC (20)	
Dibenzofuran	1.556117	2.069815	15.86633	7.94269E-03			CCC (20)	
Diethylphthalate	1.374795	3.129784	16.57617	0.0346415			CCC (20)	
4-Chlorophenyl-phenylether	0.5782755	2.204828	16.66633	2.558147E-02			CCC (20)	
Fluorene	1.184474	2.690882	16.57083	2.198853E-02			CCC (20)	
4-Nitroaniline	0.3791361	10.45643	16.74317	5.727952E-02			CCC (20)	
4,6-Dinitro-2-methylphenol	0.1399053	27.67187	16.7825	3.517163E-02	0.9993296		CCC (20)	
N-Nitrosodiphenylamine (1)	0.6007746	4.306864	16.93083	4.185696E-03			CCC (20)	
4-Bromophenyl-phenylether	0.1978635	2.910612	17.5825	2.207215E-02			CCC (20)	
Hexachlorobenzene	0.2505942	1.758789	17.63033	3.310028E-02			CCC (20)	
Pentachlorophenol	0.1248456	23.43498	18.063	0.02746	0.9972863		CCC (20)	
Phenanthrene	1.050804	1.770449	18.33483	1.971647E-02			CCC (20)	
Anthracene	1.051572	1.699199	18.42533	1.407484E-02			CCC (20)	
Carbazole	1.044984	3.340746	18.78683	2.723116E-02			CCC (20)	
Di-n-butylphthalate	1.435871	7.474871	19.53917	2.349844E-02			CCC (20)	
Fluoranthene	1.109966	4.909946	20.34267	3.025617E-02			CCC (20)	
Pyrene	1.16013	4.060312	20.69067	3.045412E-02			CCC (20)	
Butylbenzylphthalate	0.6281902	10.44704	21.93767	0.0227704			CCC (20)	
3,3'-Dichlorobenzidine	0.3889952	3.825422	22.6865	2.084132E-02			CCC (20)	
bis(2-ethylhexyl)Phthalate	0.9140364	6.316457	22.93383	2.525782E-02			CCC (20)	
Benzo (a) anthracene	1.010602	3.866889	22.642	7.396665E-03			CCC (20)	
Chrysene	0.931785	2.175039	22.69667	1.681205E-02			CCC (20)	

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INITIAL CALIBRATION DATA (Continued)

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024

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

Calibration: 4072701 Instrument: 5972hp62

Calibration Date: 7/23/2014 7:09:16PM

Compound	Mean RF	% RSD	Mean RT	RT RSD	Linear r	Quad COD	RSD LIMIT	Q
Di-n-octylphthalate	2.015453	12.34588	23.90633	1.490656E-02			CCC (20)	
Benzo (b) fluoranthene	1.416621	6.54581	24.23717	1.818423E-02			CCC (20)	
Benzo(k)fluoranthene	1.414862	5.853029	24.27467	2.600727E-02			CCC (20)	
Benzo (a) pyrene	1.321425	3.96899	24.66533	2.179307E-02			CCC (20)	
Indeno(1,2,3-cd)pyrene	1.277456	5.474798	26.0625	0.0354681			CCC (20)	
Dibenzo(a,h)anthracene	1.260513	3.009696	26.10333	3.400321E-02			CCC (20)	
Benzo (g,h,i) perylene	1.33269	3.216698	26.3865	4.213119E-02			CCC (20)	
Benzaldehyde	0.635148	6.591235	7.327	0.1269545			CCC (20)	
Caprolactam	0.1202985	13.08399	12.38817	0.2204308			CCC (20)	
Atrazine	0.1007882	4.42501	18.03117	3.939771E-02			CCC (20)	
1,1'-Biphenyl	1.3537	1.941947	14.15533	1.973164E-02			CCC (20)	
2-Fluorophenol	1.289642	2.374395	5.516833	0.2238036			CCC (20)	
Phenol-d5	1.841525	3.441757	7.9495	9.568072E-02			CCC (20)	
Nitrobenzene-d5	0.4012252	2.872108	9.682834	7.182997E-02			CCC (20)	
2-Fluorobiphenyl	1.241213	1.965754	13.96267	1.218856E-02			CCC (20)	
2,4,6-Tribromophenol	0.2195941	12.55869	17.07067	2.479099E-02			CCC (20)	
Terphenyl-d14	0.7819542	3.580547	21.066	6.695486E-03			CCC (20)	

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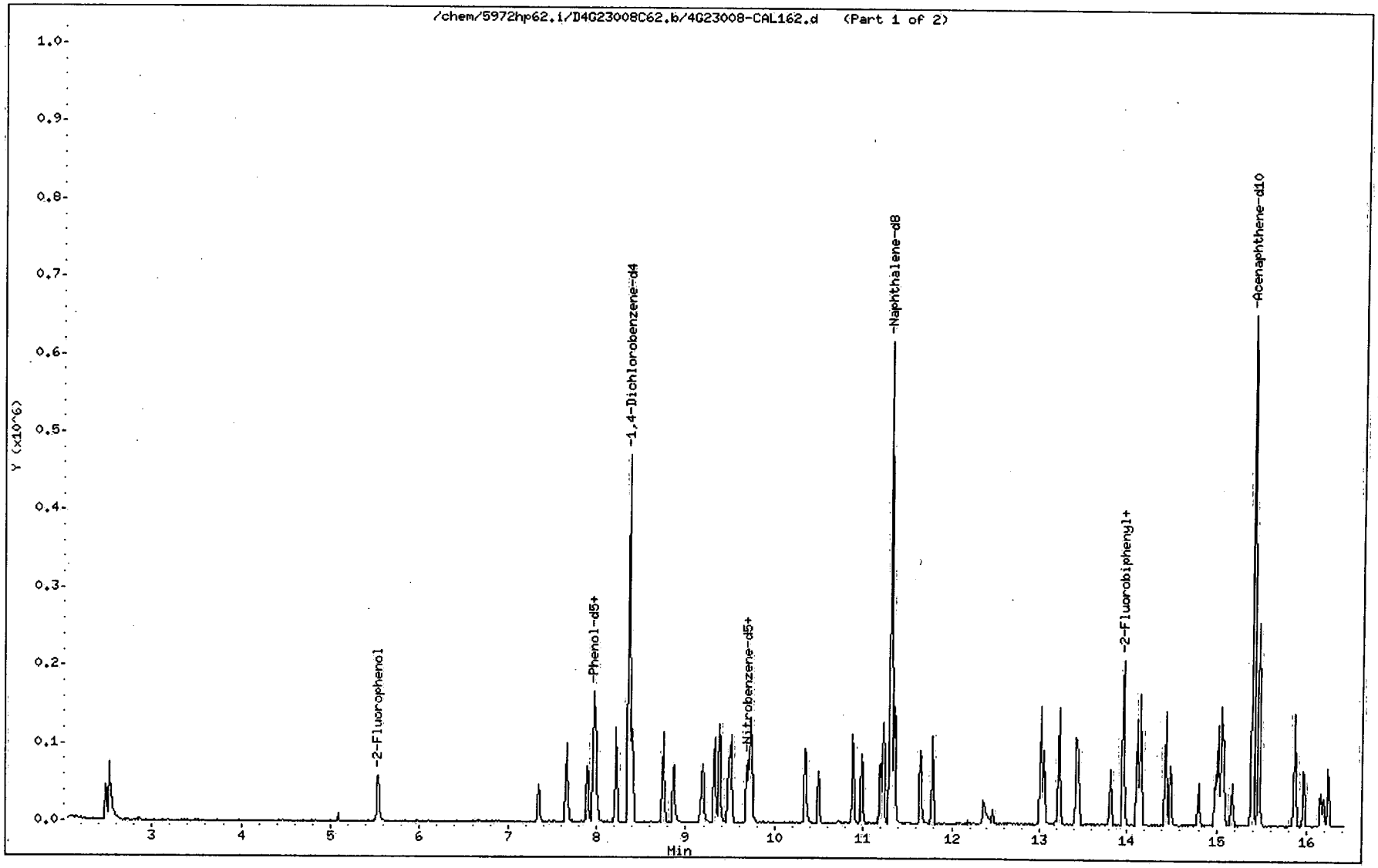
Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL162.d
Date : 23-JUL-2014 22:48
Client ID: SSTD005BP
Sample Info: 4G23008-CAL1:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i

Operator: OWS
Column diameter: 0.32

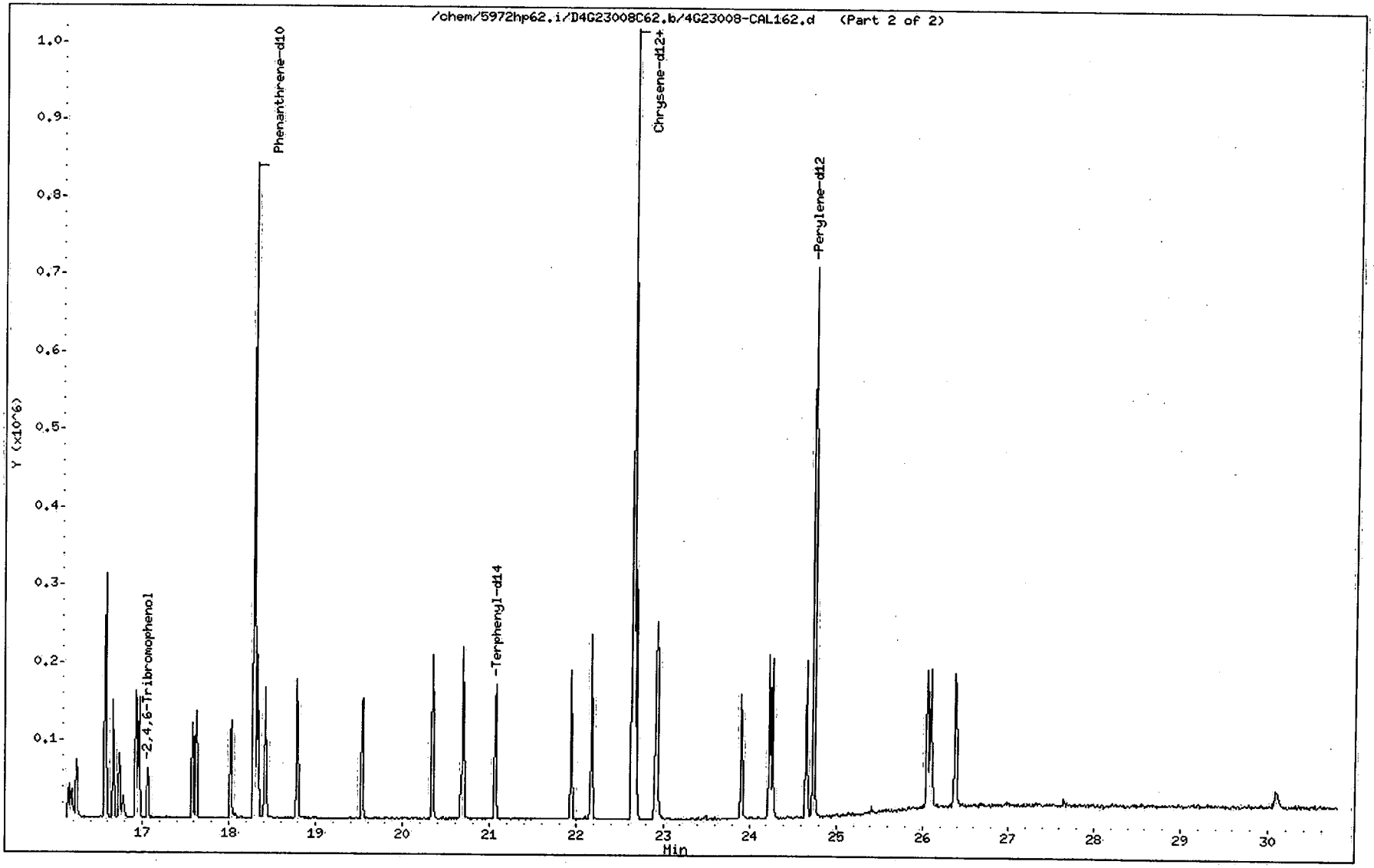


7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL162.d
Date : 23-JUL-2014 22:48
Client ID: SSTD005BP
Sample Info: 4G23008-CAL1:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i

Operator: OWS
Column diameter: 0.32



Roldan Ami 7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL162.d
Report Date: 27-Jul-2014 19:14

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL162.d
Lab Smp Id: 4G23008-CAL1 Client Smp ID: SSTD005BP
Inj Date : 23-JUL-2014 22:48
Operator : OWS Inst ID: 5972hp62.i
Smp Info : 4G23008-CAL1:OWS
Misc Info : SSTD005BP
Comment :
Method : /chem/5972hp62.i/D4G23008C62.b/8270Dv26.m
Meth Date : 27-Jul-2014 19:14 ron Quant Type: ISTD
Cal Date : 23-JUL-2014 22:48 Cal File: 4G23008-CAL162.d
Als bottle: 7 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	8.363	8.363	(1.000)	116128	40.0000		
* 2 Naphthalene-d8	136	11.311	11.311	(1.000)	438254	40.0000		
* 3 Acenaphthene-d10	164	15.395	15.395	(1.000)	237014	40.0000		
* 4 Phenanthrene-d10	188	18.291	18.291	(1.000)	392744	40.0000		
* 5 Chrysene-d12	240	22.651	22.651	(1.000)	415831	40.0000		
* 6 Perylene-d12	264	24.739	24.739	(1.000)	297888	40.0000		
$ 7 2-Fluorophenol	112	5.538	5.538	(0.662)	36511	10.0000	10	
$ 8 Phenol-d5	99	7.964	7.964	(0.952)	51345	10.0000	10	
$ 9 Nitrobenzene-d5	82	9.694	9.694	(0.857)	42335	10.0000	10	
$ 10 2-Fluorobiphenyl	172	13.962	13.962	(0.907)	74149	10.0000	10	(M)
$ 11 2,4,6-Tribromophenol	330	17.073	17.073	(1.109)	9947	10.0000	10	0 (M)
$ 12 Terphenyl-d14	244	21.065	21.065	(0.930)	76640	10.0000	10	
13 N-Nitrosodimethylamine	42	2.478	2.478	(0.296)	25209	10.0000	10	9108
14 Pyridine	79	2.519	2.519	(0.301)	49204	10.0000	10	9463

7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL162.d
Report Date: 27-Jul-2014 19:14

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
15 Phenol	94	7.995	7.995	(0.956)	50130	10.0000	10	
16 Aniline	93	7.657	7.657	(0.916)	59440	10.0000	10	9236
17 Bis(2-chloroethyl)ether	93	7.892	7.892	(0.944)	40402	10.0000	10	
18 2-Chlorophenol	128	7.974	7.974	(0.953)	39664	10.0000	10	7804
19 1,3-Dichlorobenzene	146	8.220	8.220	(0.983)	46299	10.0000	10	
20 1,4-Dichlorobenzene	146	8.404	8.404	(1.005)	46118	10.0000	10	
21 Benzyl Alcohol	108	8.865	8.865	(1.060)	20249	10.0000	10	
22 1,2-Dichlorobenzene	146	8.742	8.742	(1.045)	43851	10.0000	10	
23 2-Methylphenol	108	9.325	9.325	(1.115)	34671	10.0000	10	
24 2,2'-oxybis(1-Chloropropane)	45	9.192	9.192	(1.099)	64459	10.0000	10	9350
25 3 & 4-Methylphenol	108	9.714	9.714	(1.162)	35901	10.0000	10	
26 N-Nitroso-di-N-propylamine	70	9.479	9.479	(1.133)	31702	10.0000	10	9681
27 Acetophenone	105	9.376	9.376	(0.829)	60426	10.0000	10	9358
28 Hexachloroethane	117	9.509	9.509	(1.137)	19977	10.0000	10	9272
29 Nitrobenzene	77	9.735	9.735	(0.861)	58231	10.0000	10	8419
30 Isophorone	82	10.338	10.338	(0.914)	77433	10.0000	10	9754
31 2-Nitrophenol	139	10.492	10.492	(0.928)	19676	10.0000	10	9700
32 2,4-Dimethylphenol	122	10.881	10.881	(0.962)	30387	10.0000	10	9667
33 Bis(2-chloroethoxy)methane	93	10.983	10.983	(0.971)	50433	10.0000	10	9538
34 2,4-Dichlorophenol	162	11.198	11.198	(0.990)	28218	10.0000	10	
35 1,2,4-Trichlorobenzene	180	11.229	11.229	(0.993)	34975	10.0000	10	
36 Naphthalene	128	11.352	11.352	(1.004)	110551	10.0000	10	9239
37 4-Chloroaniline	127	11.638	11.638	(1.029)	48671	10.0000	10	9679
38 Hexachlorobutadiene	225	11.782	11.782	(1.042)	19803	10.0000	10	0 (M)
39 4-Chloro-3-methylphenol	107	13.051	13.051	(1.154)	31078	10.0000	10	0 (M)
40 2-Methylnaphthalene	141	13.010	13.010	(1.150)	61077	10.0000	10	
41 1-Methylnaphthalene	142	13.225	13.225	(1.169)	65667	10.0000	10	
42 Hexachlorocyclopentadiene	237	13.450	13.450	(0.874)	18327	10.0000	10	9057
43 1,2,4,5-Tetrachlorobenzene	216	13.429	13.429	(0.872)	33447	10.0000	10	8051
44 2,4,6-Trichlorophenol	196	13.818	13.818	(0.898)	17750	10.0000	10	
45 2,4,5-Trichlorophenol	196	13.951	13.951	(0.906)	18639	10.0000	10	
46 2-Chloronaphthalene	162	14.115	14.115	(0.917)	63388	10.0000	10	
47 2-Nitroaniline	65	14.484	14.484	(0.941)	21732	10.0000	10	8585
48 Dimethylphthalate	163	15.016	15.016	(0.975)	76330	10.0000	10	9181
49 1,3-Dinitrobenzene	122	14.985	14.985	(0.973)	4641	10.0000	10	
50 2,6-Dinitrotoluene	165	15.077	15.077	(0.979)	17486	10.0000	10	0 (M)
51 Acenaphthylene	152	15.057	15.057	(0.978)	102015	10.0000	10	8641
52 3-Nitroaniline	138	15.466	15.466	(1.005)	19090	10.0000	10	8745
53 Acenaphthene	153	15.466	15.466	(1.005)	65498	10.0000	10	9415
54 2,4-Dinitrophenol	184	Compound Not Detected.						
55 4-Nitrophenol	139	16.183	16.183	(1.051)	10694	10.0000	10	8083
56 2,4-Dinitrotoluene	165	15.968	15.968	(1.037)	20165	10.0000	10	9273
57 Dibenzofuran	168	15.865	15.865	(1.031)	91119	10.0000	10	9531
58 2,3,4,6-Tetrachlorophenol	232	16.234	16.234	(1.055)	13870	10.0000	10	
59 Diethylphthalate	149	16.572	16.572	(1.076)	81001	10.0000	10	9583
60 4-Chlorophenyl-phenylether	204	16.664	16.664	(1.082)	33370	10.0000	10	9566
61 Fluorene	166	16.572	16.572	(1.076)	70600	10.0000	10	9336

7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL162.d
Report Date: 27-Jul-2014 19:14

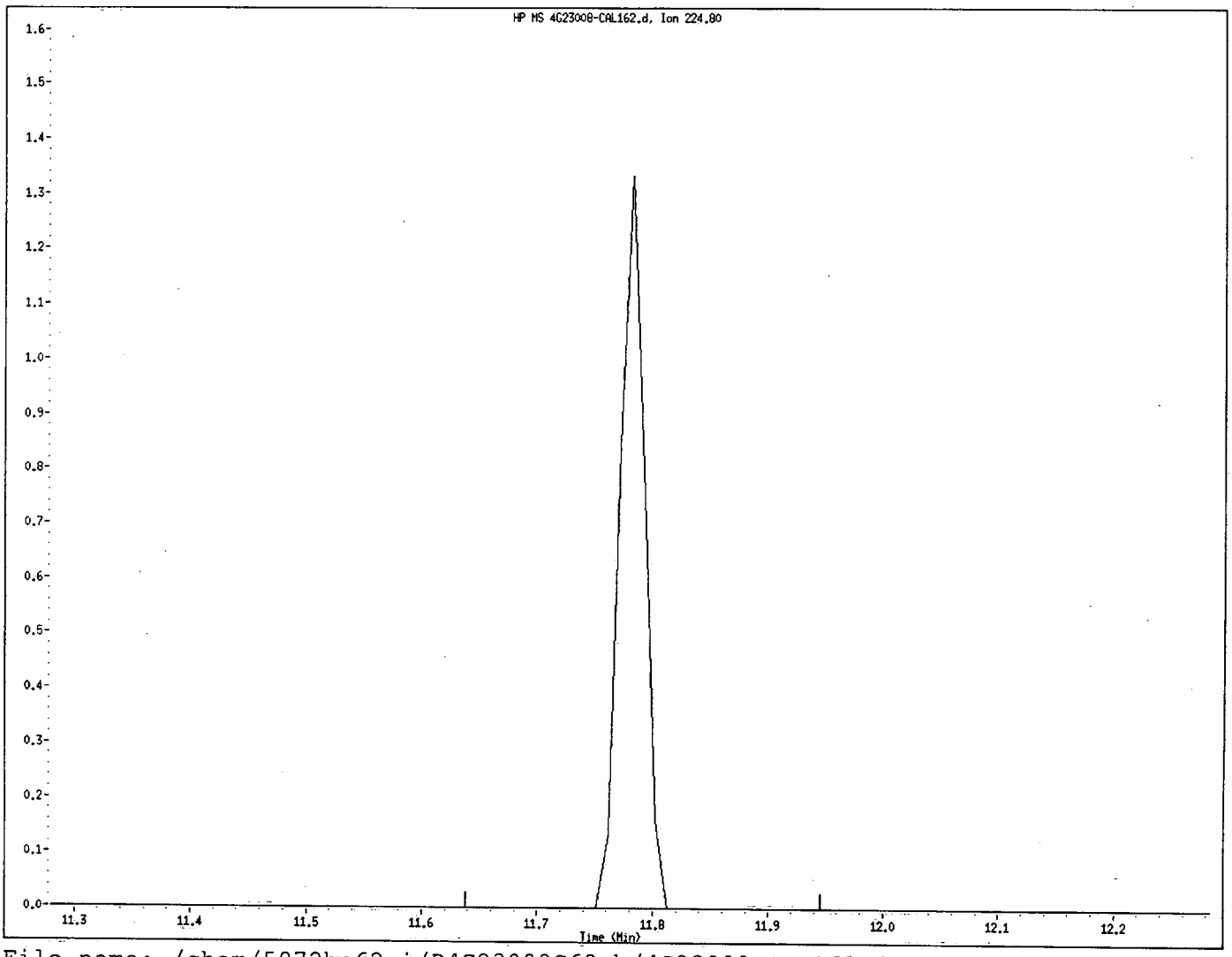
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
62 4-Nitroaniline	138	16.735	16.735	(1.087)	18055	10.0000	10	8794
63 4,6-Dinitro-2-methylphenol	198	16.787	16.787	(0.918)	6747	10.0000	10	8783
64 N-Nitrosodiphenylamine (1)	169	16.930	16.930	(0.926)	58690	10.0000	10	9645
65 1,2-Diphenyl Hydrazine	77	16.961	16.961	(1.102)	91033	10.0000	10	9026
66 4-Bromophenyl-phenylether	248	17.585	17.585	(0.961)	19030	10.0000	10	8746
67 Hexachlorobenzene	284	17.626	17.626	(0.964)	23967	10.0000	10	9253
68 Pentachlorophenol	266	18.066	18.066	(0.988)	1753	10.0000	10	0 (M)
69 Phenanthrene	178	18.332	18.332	(1.002)	103150	10.0000	10	
70 Anthracene	178	18.424	18.424	(1.007)	100527	10.0000	10	
71 Carbazole	167	18.783	18.783	(1.027)	97273	10.0000	10	9433
72 Di-n-butylphthalate	149	19.540	19.540	(1.068)	122144	10.0000	10	9594
73 Fluoranthene	202	20.338	20.338	(1.112)	104172	10.0000	10	
74 Pyrene	202	20.686	20.686	(0.913)	112364	10.0000	10	
75 Butylbenzylphthalate	149	21.935	21.935	(0.968)	52597	10.0000	10	9746
76 3,3'-Dichlorobenzidine	252	22.682	22.682	(1.001)	37628	10.0000	10	8390
77 bis(2-ethylhexyl)Phthalate	149	22.928	22.928	(1.012)	84588	10.0000	10	9719
78 Benzo(a)anthracene	228	22.641	22.641	(1.000)	97067	10.0000	10	
79 Chrysene	228	22.692	22.692	(1.002)	99121	10.0000	10	
80 Di-n-octylphthalate	149	23.900	23.900	(0.966)	113833	10.0000	10	
81 Benzo(b)fluoranthene	252	24.228	24.228	(0.979)	98958	10.0000	10	
82 Benzo(k)fluoranthene	252	24.269	24.269	(0.981)	103215	10.0000	10	
83 Benzo(a)pyrene	252	24.658	24.658	(0.997)	90877	10.0000	10	
84 Indeno(1,2,3-cd)pyrene	276	26.050	26.050	(1.053)	87148	10.0000	10	
85 Dibenzo(a,h)anthracene	278	26.090	26.090	(1.055)	90395	10.0000	10	8519
86 Benzo(g,h,i)perylene	276	26.377	26.377	(1.066)	94028	10.0000	10	
87 Benzaldehyde	77	7.340	7.340	(0.878)	17415	10.0000	10	9504
88 Caprolactam	113	12.365	12.365	(1.093)	10058	10.0000	10	9217 (M)
89 Atrazine	215	18.025	18.025	(0.985)	9309	10.0000	10	9638
90 1,1'-Biphenyl	154	14.156	14.156	(0.920)	79898	10.0000	10	9134
91 Diphenyl ether	170	14.433	14.433	(0.937)	45460	10.0000	10	8268
223 Benzidine	184	20.666	20.666	(0.912)	21652	10.0000	10	8628

QC Flag Legend

M - Compound response manually integrated.

7/27/2014

Hexachlorobutadiene CAS Number 87-68-3 Area = 19803 Manually integrated



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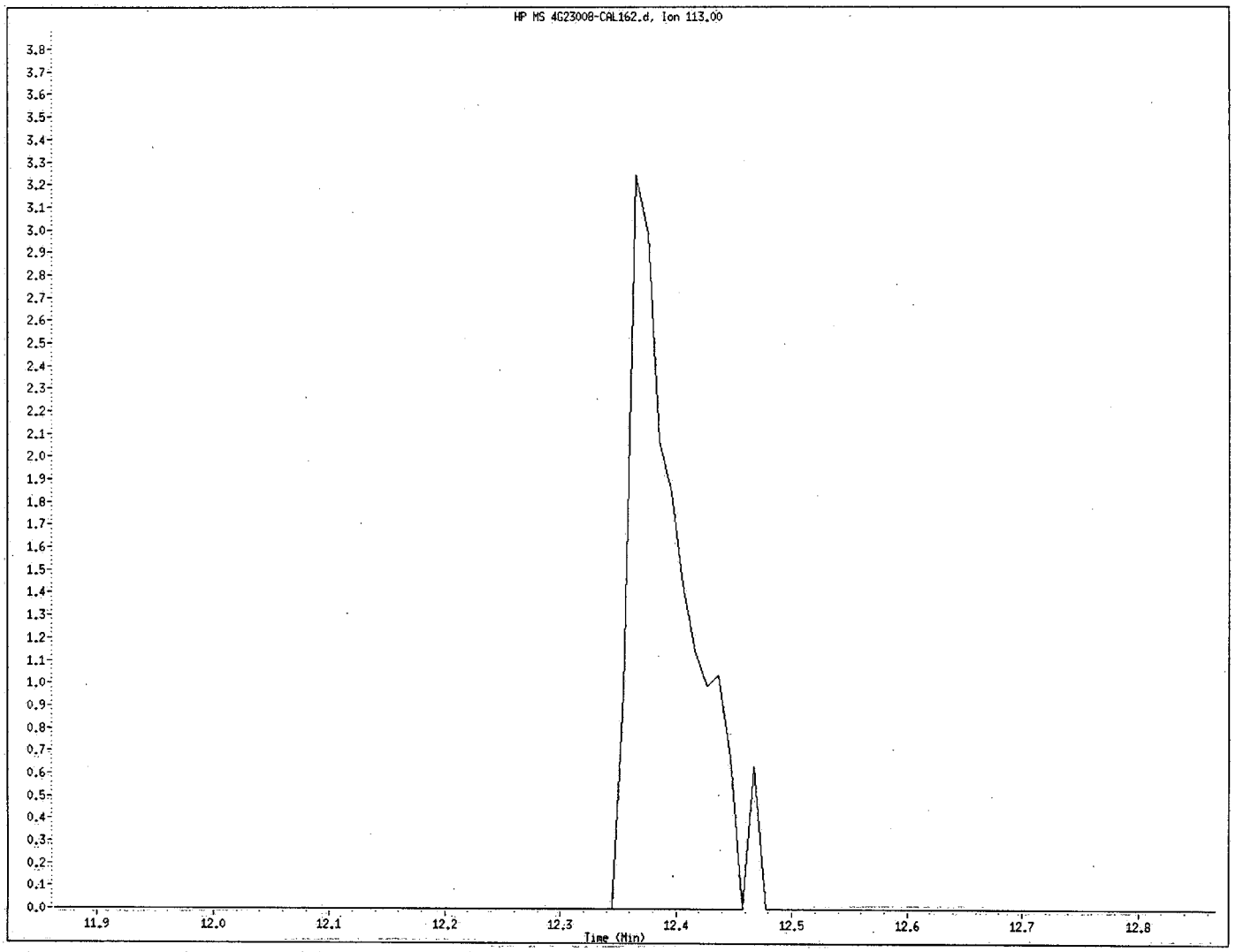
Client ID: SSTD005BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 22:48
Retention Time: 11.78
Operator ID: OWS

Roldan Hani 7/27/2014

Caprolactam CAS Number 105-60-2 Area = 10058 Manually integrated



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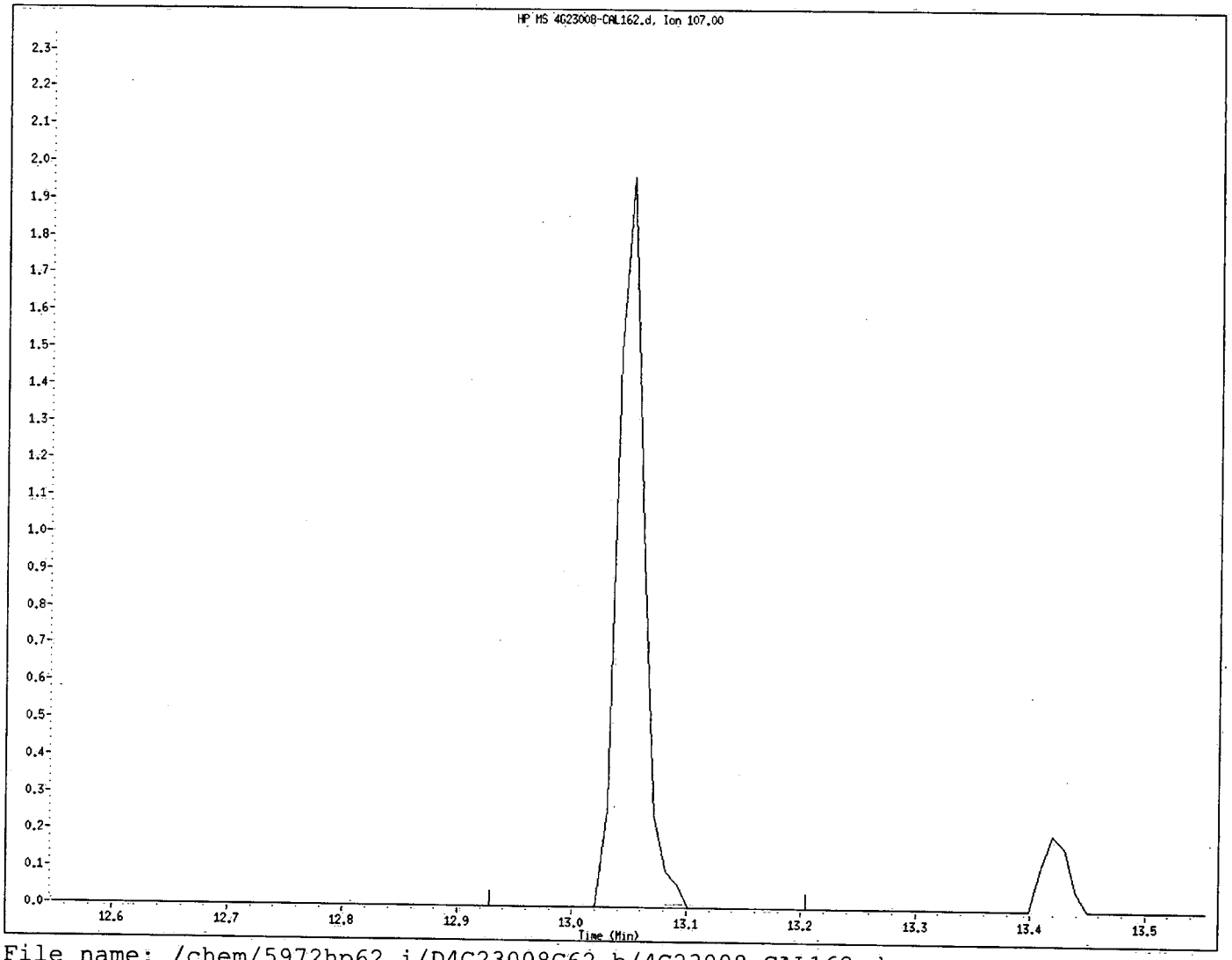
Client ID: SSTD005BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 22:48
Retention Time: 12.37
Operator ID: OWS

7/27/2014

4-Chloro-3-methylphenol CAS Number 59-50-7 Area = 31078 Manually integrated



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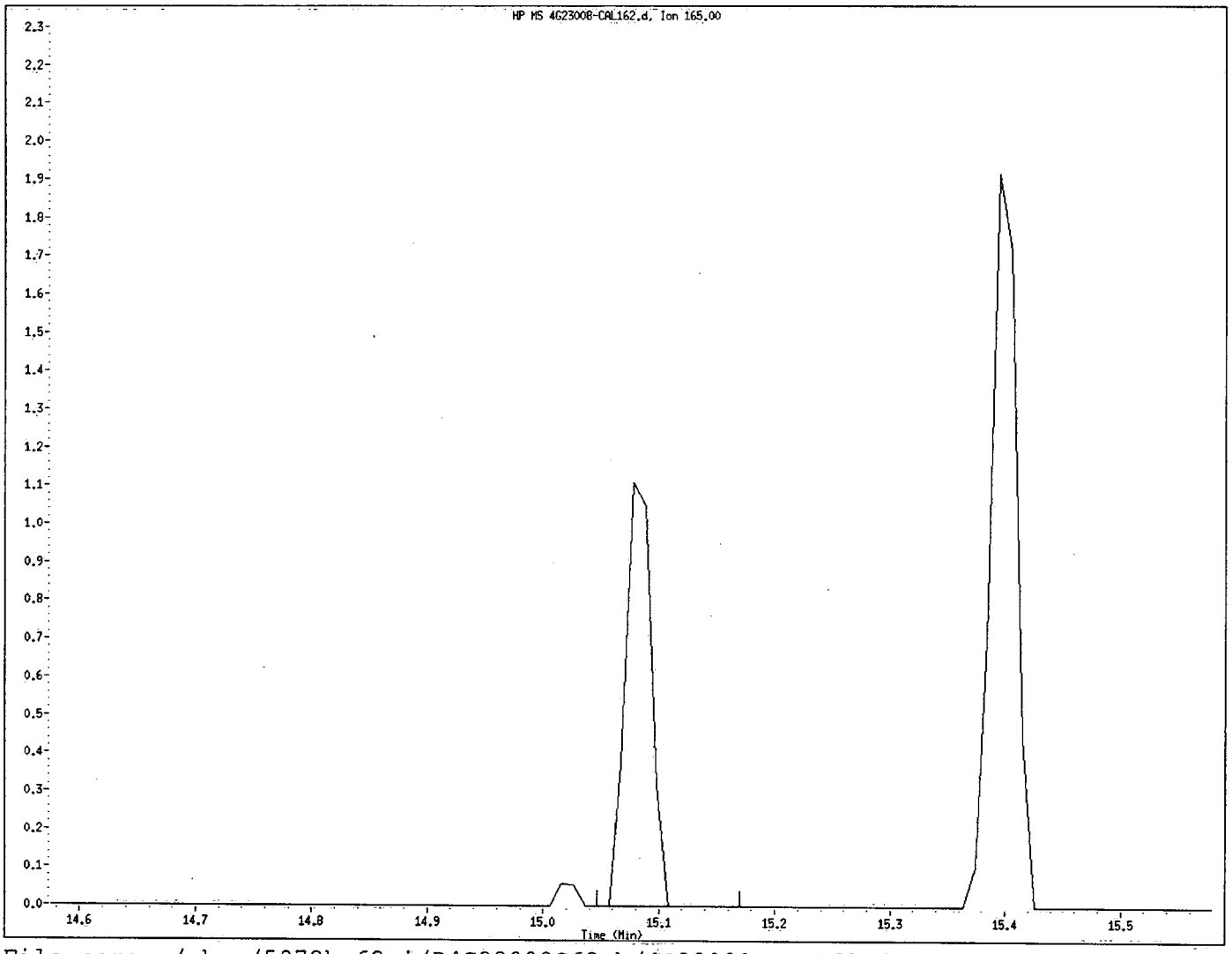
Client ID: SSTD005BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 22:48
Retention Time: 13.05
Operator ID: OWS

7/27/2014

2,6-Dinitrotoluene CAS Number 606-20-2 Area = 17486 Manually integrated



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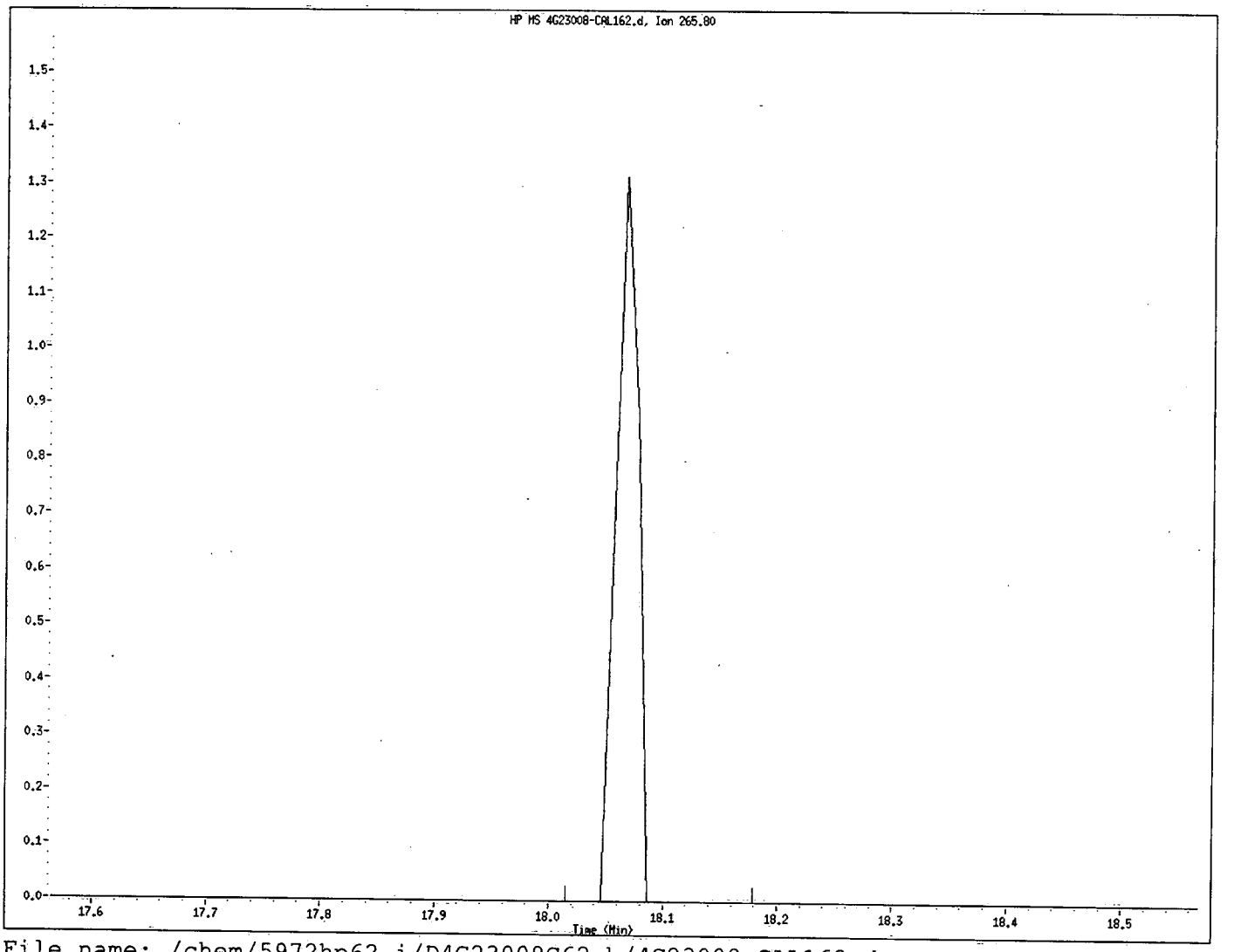
Client ID: SSTD005BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 22:48
Retention Time: 15.08
Operator ID: OWS

7/27/2014

Pentachlorophenol CAS Number 87-86-5 Area = 1753 Manually integrated



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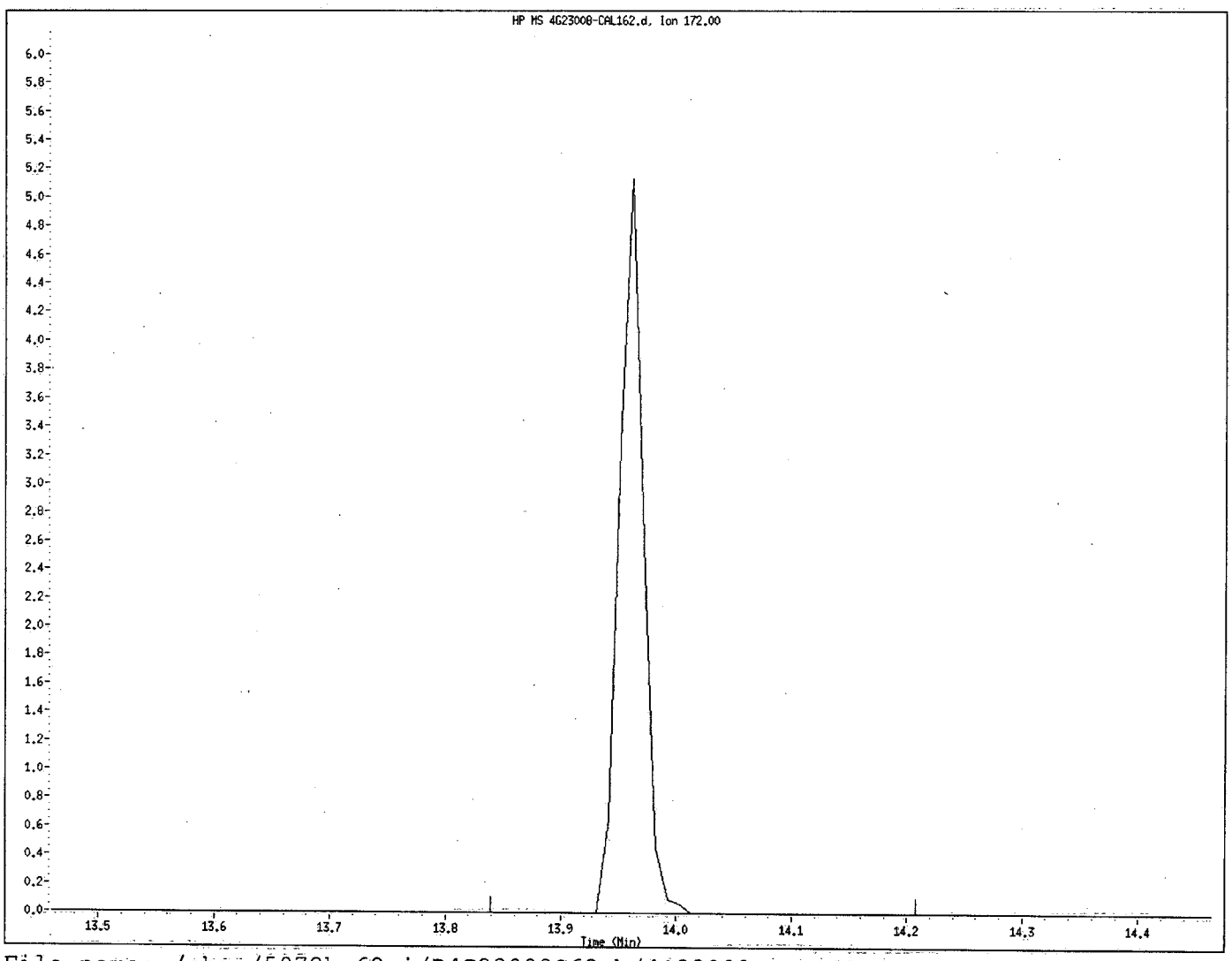
Client ID: SSTD005BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 22:48
Retention Time: 18.07
Operator ID: OWS

7/27/2014

2-Fluorobiphenyl CAS Number 321-60-8 Area = 74149 Manually integrated



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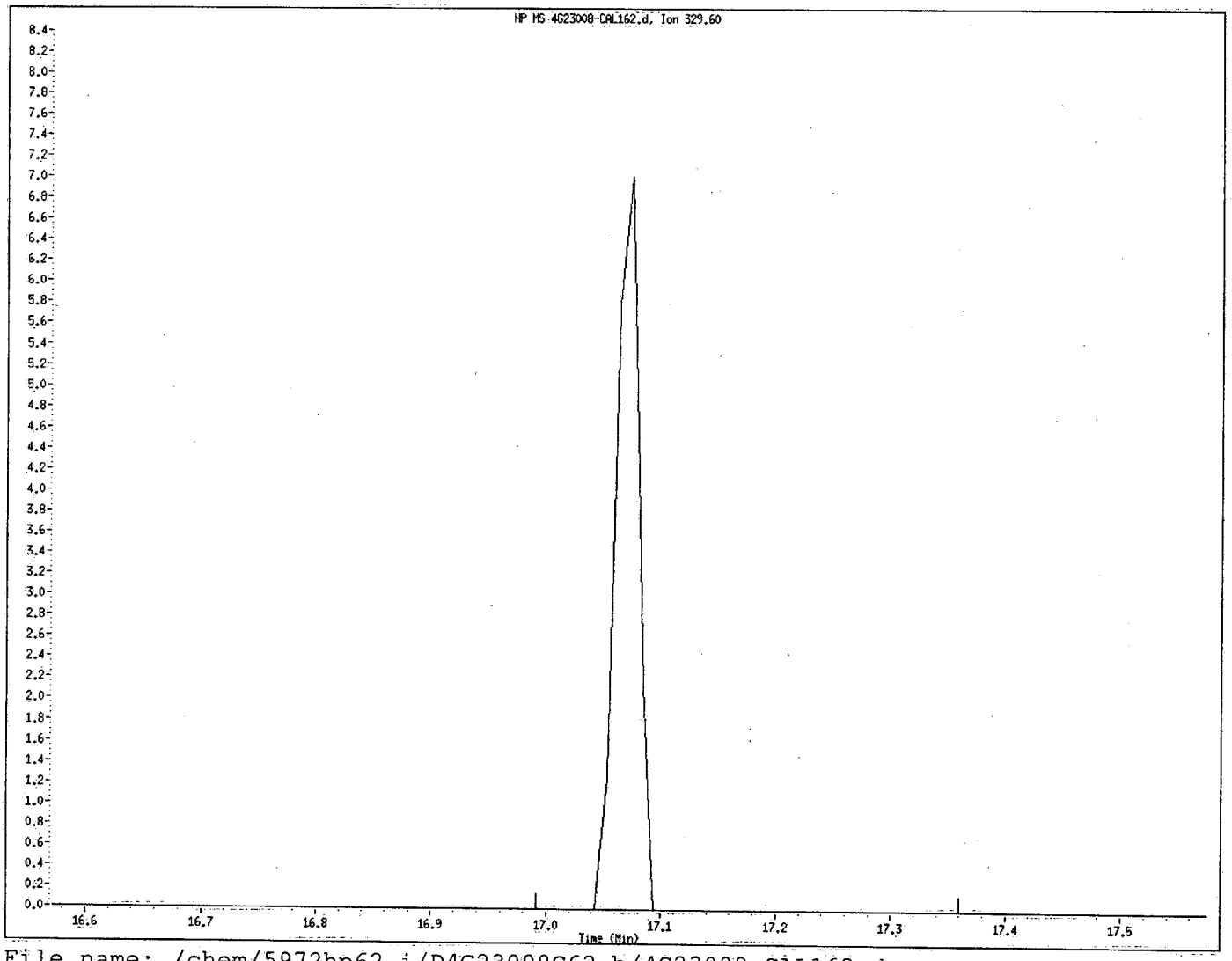
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 22:48
Retention Time: 13.96
Operator ID: OWS

7/27/2014

2,4,6-Tribromophenol CAS Number 118-79-6 Area = 9947 Manually integrated



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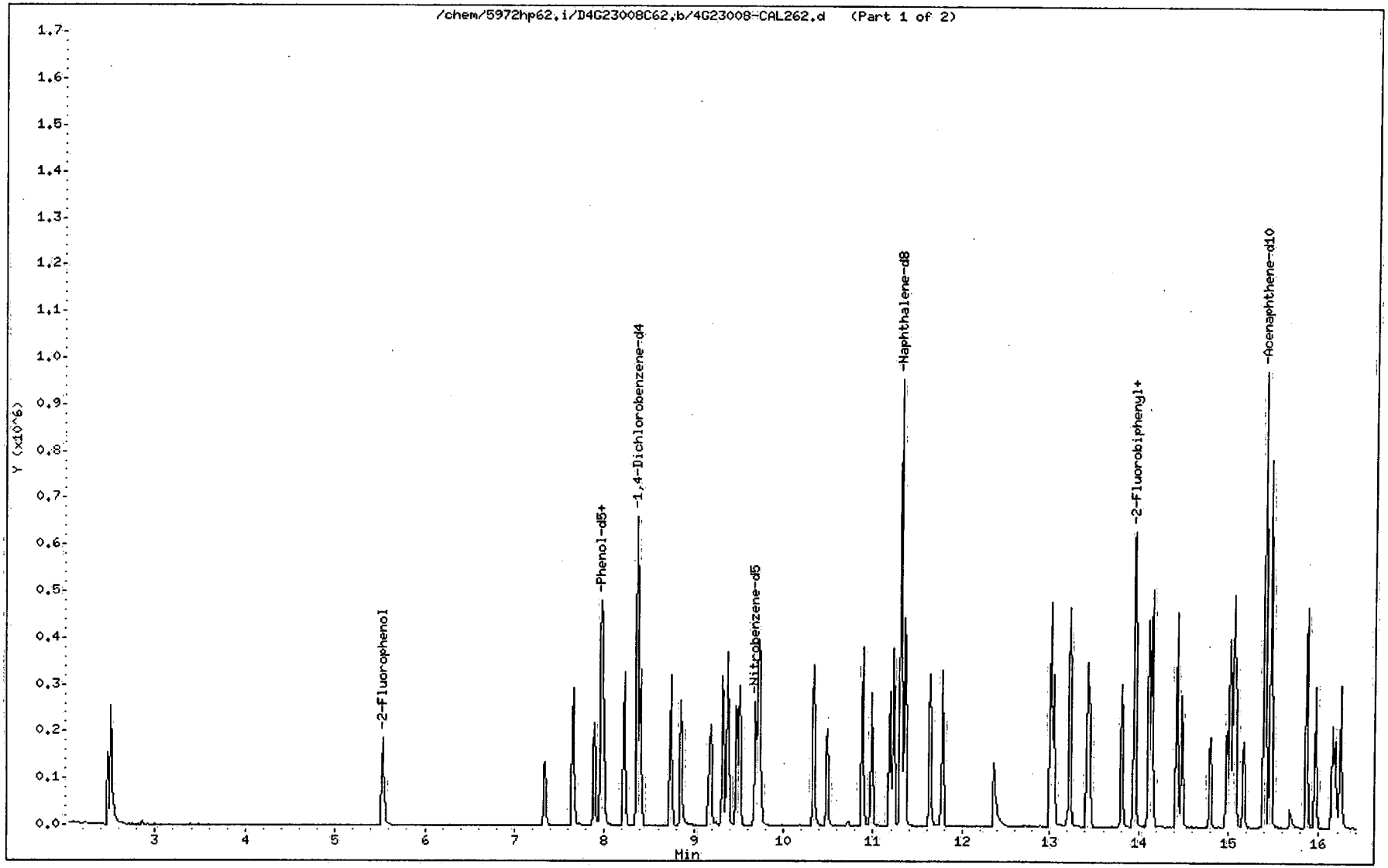
Client ID: SSTD005BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 22:48
Retention Time: 17.07
Operator ID: OWS

7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL262.d
Date : 23-JUL-2014 22:09
Client ID: SSTD010BP
Sample Info: 4G23008-CAL2:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32

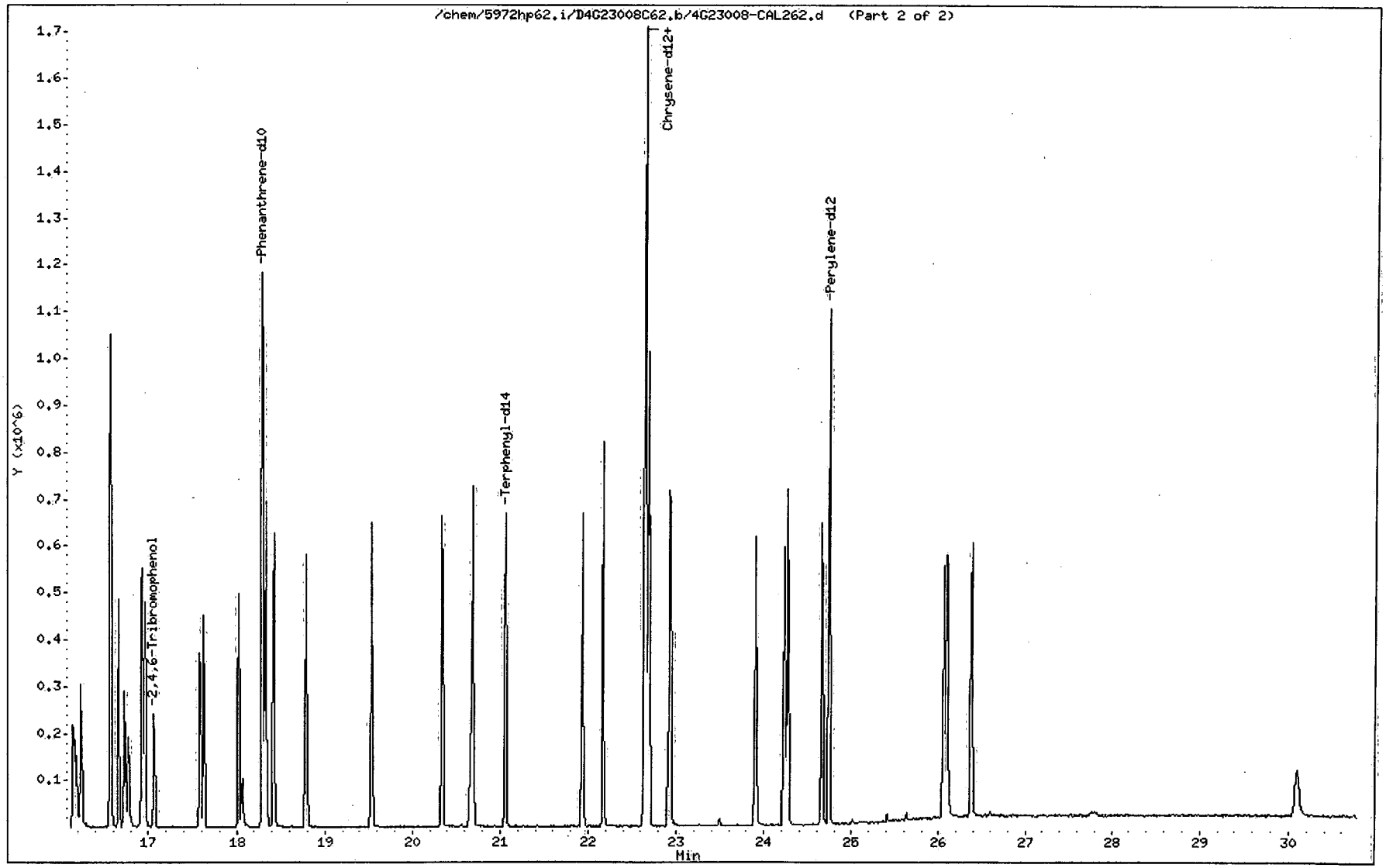


7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL262.d
Date : 23-JUL-2014 22:09
Client ID: SSTD010BP
Sample Info: 4G23008-CAL2:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i

Operator: OWS
Column diameter: 0.32



7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL262.d
Report Date: 27-Jul-2014 19:14

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL262.d
Lab Smp Id: 4G23008-CAL2 Client Smp ID: SSTD010BP
Inj Date : 23-JUL-2014 22:09
Operator : OWS Inst ID: 5972hp62.i
Smp Info : 4G23008-CAL2:OWS
Misc Info : SSTD010BP
Comment :
Method : /chem/5972hp62.i/D4G23008C62.b/8270Dv26.m
Meth Date : 27-Jul-2014 19:14 ron Quant Type: ISTD
Cal Date : 23-JUL-2014 22:09 Cal File: 4G23008-CAL262.d
Als bottle: 6 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	8.361	8.361	(1.000)	157697	40.0000		
* 2 Naphthalene-d8	136	11.309	11.309	(1.000)	653979	40.0000		
* 3 Acenaphthene-d10	164	15.403	15.403	(1.000)	357615	40.0000		
* 4 Phenanthrene-d10	188	18.289	18.289	(1.000)	610298	40.0000		
* 5 Chrysene-d12	240	22.650	22.650	(1.000)	644764	40.0000		
* 6 Perylene-d12	264	24.738	24.738	(1.000)	460813	40.0000		
$ 7 2-Fluorophenol	112	5.526	5.526	(0.661)	100070	20.0000	20	
$ 8 Phenol-d5	99	7.952	7.952	(0.951)	147632	20.0000	20	
$ 9 Nitrobenzene-d5	82	9.682	9.682	(0.856)	131549	20.0000	20	
$ 10 2-Fluorobiphenyl	172	13.960	13.960	(0.906)	226205	20.0000	20	
$ 11 2,4,6-Tribromophenol	330	17.071	17.071	(1.108)	38283	20.0000	19	0 (M)
$ 12 Terphenyl-d14	244	21.063	21.063	(0.930)	256397	20.0000	20	
13 N-Nitrosodimethylamine	42	2.476	2.476	(0.296)	69807	20.0000	20	9142
14 Pyridine	79	2.507	2.507	(0.300)	126739	20.0000	19	9629

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Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL262.d
Report Date: 27-Jul-2014 19:14

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
15 Phenol	94	7.983	7.983	(0.955)	141314	20.0000	20	
16 Aniline	93	7.655	7.655	(0.916)	171670	20.0000	20	9151
17 Bis(2-chloroethyl)ether	93	7.890	7.890	(0.944)	116869	20.0000	20	
18 2-Chlorophenol	128	7.962	7.962	(0.952)	115598	20.0000	20	7508
19 1,3-Dichlorobenzene	146	8.218	8.218	(0.983)	122306	20.0000	20	
20 1,4-Dichlorobenzene	146	8.402	8.402	(1.005)	123374	20.0000	20	
21 Benzyl Alcohol	108	8.853	8.853	(1.059)	63645	20.0000	19	
22 1,2-Dichlorobenzene	146	8.740	8.740	(1.045)	121780	20.0000	20	
23 2-Methylphenol	108	9.313	9.313	(1.114)	101924	20.0000	20	
24 2,2'-oxybis(1-Chloropropane)	45	9.190	9.190	(1.099)	182917	20.0000	20	9479
25 3 & 4-Methylphenol	108	9.712	9.712	(1.162)	108396	20.0000	20	
26 N-Nitroso-di-N-propylamine	70	9.477	9.477	(1.133)	97291	20.0000	21	9738
27 Acetophenone	105	9.375	9.375	(0.829)	178342	20.0000	20	9131
28 Hexachloroethane	117	9.508	9.508	(1.137)	56127	20.0000	20	9448
29 Nitrobenzene	77	9.723	9.723	(0.860)	171246	20.0000	20	8416
30 Isophorone	82	10.337	10.337	(0.914)	241095	20.0000	20	9764
31 2-Nitrophenol	139	10.490	10.490	(0.928)	61361	20.0000	19	9647
32 2,4-Dimethylphenol	122	10.879	10.879	(0.962)	98276	20.0000	20	9123
33 Bis(2-chloroethoxy)methane	93	10.982	10.982	(0.971)	151818	20.0000	20	9682
34 2,4-Dichlorophenol	162	11.186	11.186	(0.989)	90671	20.0000	19	
35 1,2,4-Trichlorobenzene	180	11.227	11.227	(0.993)	102201	20.0000	20	
36 Naphthalene	128	11.350	11.350	(1.004)	330128	20.0000	20	9445
37 4-Chloroaniline	127	11.637	11.637	(1.029)	154579	20.0000	20	9512
38 Hexachlorobutadiene	225	11.780	11.780	(1.042)	56293	20.0000	20	9542
39 4-Chloro-3-methylphenol	107	13.039	13.039	(1.153)	100846	20.0000	19	8681
40 2-Methylnaphthalene	141	13.008	13.008	(1.150)	186927	20.0000	20	
41 1-Methylnaphthalene	142	13.223	13.223	(1.169)	199405	20.0000	20	
42 Hexachlorocyclopentadiene	237	13.448	13.448	(0.873)	58896	20.0000	18	8885
43 1,2,4,5-Tetrachlorobenzene	216	13.417	13.417	(0.871)	102159	20.0000	20	8003
44 2,4,6-Trichlorophenol	196	13.806	13.806	(0.896)	62090	20.0000	19	
45 2,4,5-Trichlorophenol	196	13.950	13.950	(0.906)	67026	20.0000	19	
46 2-Chloronaphthalene	162	14.113	14.113	(0.916)	198505	20.0000	20	
47 2-Nitroaniline	65	14.482	14.482	(0.940)	75263	20.0000	20	8677
48 Dimethylphthalate	163	15.014	15.014	(0.975)	239424	20.0000	20	8442
49 1,3-Dinitrobenzene	122	14.983	14.983	(0.973)	18058	20.0000	21	
50 2,6-Dinitrotoluene	165	15.076	15.076	(0.979)	59645	20.0000	20	0 (M)
51 Acenaphthylene	152	15.055	15.055	(0.977)	323641	20.0000	20	8502
52 3-Nitroaniline	138	15.465	15.465	(1.004)	67044	20.0000	20	8840
53 Acenaphthene	153	15.465	15.465	(1.004)	199450	20.0000	20	9518
54 2,4-Dinitrophenol	184	15.679	15.679	(1.018)	10796	20.0000	21	
55 4-Nitrophenol	139	16.171	16.171	(1.050)	47050	20.0000	21	8269
56 2,4-Dinitrotoluene	165	15.956	15.956	(1.036)	75437	20.0000	19	9322
57 Dibenzofuran	168	15.864	15.864	(1.030)	284967	20.0000	20	9593
58 2,3,4,6-Tetrachlorophenol	232	16.232	16.232	(1.054)	51070	20.0000	19	
59 Diethylphthalate	149	16.570	16.570	(1.076)	257284	20.0000	21	9648
60 4-Chlorophenyl-phenylether	204	16.662	16.662	(1.082)	105484	20.0000	20	9658
61 Fluorene	166	16.570	16.570	(1.076)	218801	20.0000	21	9099

7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL262.d
Report Date: 27-Jul-2014 19:14

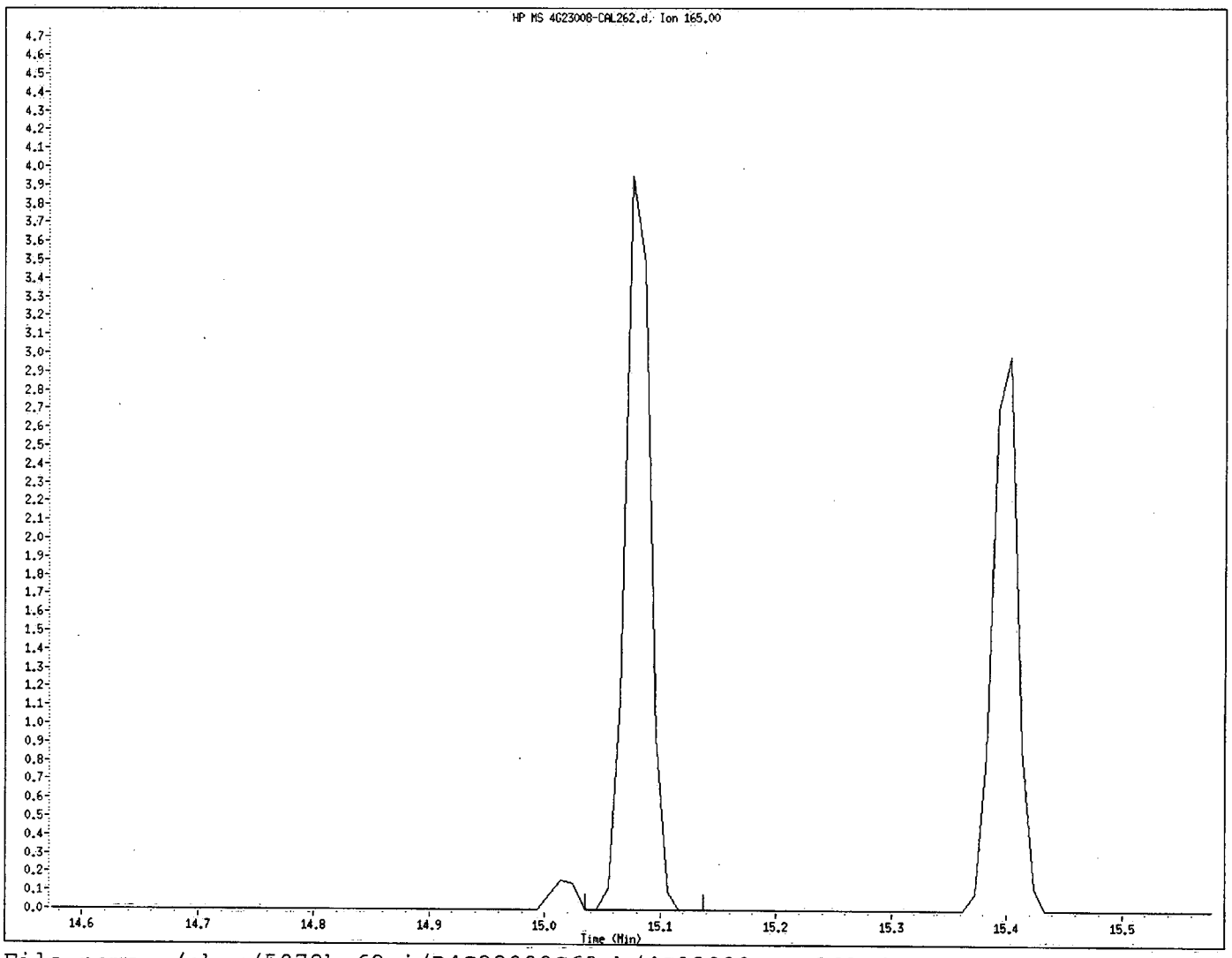
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
62 4-Nitroaniline	138	16.734	16.734	(1.086)	65961	20.0000	19	8935
63 4,6-Dinitro-2-methylphenol	198	16.775	16.775	(0.917)	36996	20.0000	20	8862
64 N-Nitrosodiphenylamine (1)	169	16.928	16.928	(0.926)	196037	20.0000	21	9707
65 1,2-Diphenyl Hydrazine	77	16.959	16.959	(1.101)	281454	20.0000	21	9290
66 4-Bromophenyl-phenylether	248	17.583	17.583	(0.961)	62648	20.0000	21	8827
67 Hexachlorobenzene	284	17.624	17.624	(0.964)	78278	20.0000	20	9315
68 Pentachlorophenol	266	18.064	18.064	(0.988)	22867	20.0000	20	0 (M)
69 Phenanthrene	178	18.330	18.330	(1.002)	329509	20.0000	20	
70 Anthracene	178	18.423	18.423	(1.007)	326734	20.0000	20	
71 Carbazole	167	18.781	18.781	(1.027)	328512	20.0000	21	9556
72 Di-n-butylphthalate	149	19.538	19.538	(1.068)	443253	20.0000	20	9667
73 Fluoranthene	202	20.337	20.337	(1.112)	358679	20.0000	21	
74 Pyrene	202	20.685	20.685	(0.913)	383388	20.0000	20	
75 Butylbenzylphthalate	149	21.933	21.933	(0.968)	193985	20.0000	19	9821
76 3,3'-Dichlorobenzidine	252	22.680	22.680	(1.001)	124543	20.0000	20	9461
77 bis(2-ethylhexyl)Phthalate	149	22.936	22.936	(1.013)	283612	20.0000	19	9162
78 Benzo(a)anthracene	228	22.639	22.639	(1.000)	325570	20.0000	20	
79 Chrysene	228	22.691	22.691	(1.002)	303070	20.0000	20	
80 Di-n-octylphthalate	149	23.909	23.909	(0.966)	456888	20.0000	20	
81 Benzo(b)fluoranthene	252	24.236	24.236	(0.980)	309278	20.0000	19	
82 Benzo(k)fluoranthene	252	24.267	24.267	(0.981)	363625	20.0000	22	
83 Benzo(a)pyrene	252	24.656	24.656	(0.997)	302717	20.0000	20	
84 Indeno(1,2,3-cd)pyrene	276	26.058	26.058	(1.053)	279850	20.0000	19	
85 Dibenzo(a,h)anthracene	278	26.099	26.099	(1.055)	279572	20.0000	19	9098
86 Benzo(g,h,i)perylene	276	26.375	26.375	(1.066)	302245	20.0000	20	
87 Benzaldehyde	77	7.338	7.338	(0.878)	53416	20.0000	21	9677
88 Caprolactam	113	12.353	12.353	(1.092)	38075	20.0000	19	9581
89 Atrazine	215	18.023	18.023	(0.985)	29545	20.0000	19	9619
90 1,1'-Biphenyl	154	14.154	14.154	(0.919)	247705	20.0000	20	9416
91 Diphenyl ether	170	14.431	14.431	(0.937)	137653	20.0000	20	8114
223 Benzidine	184	20.664	20.664	(0.912)	87436	20.0000	20	9189

QC Flag Legend

M - Compound response manually integrated.

7/27/2014

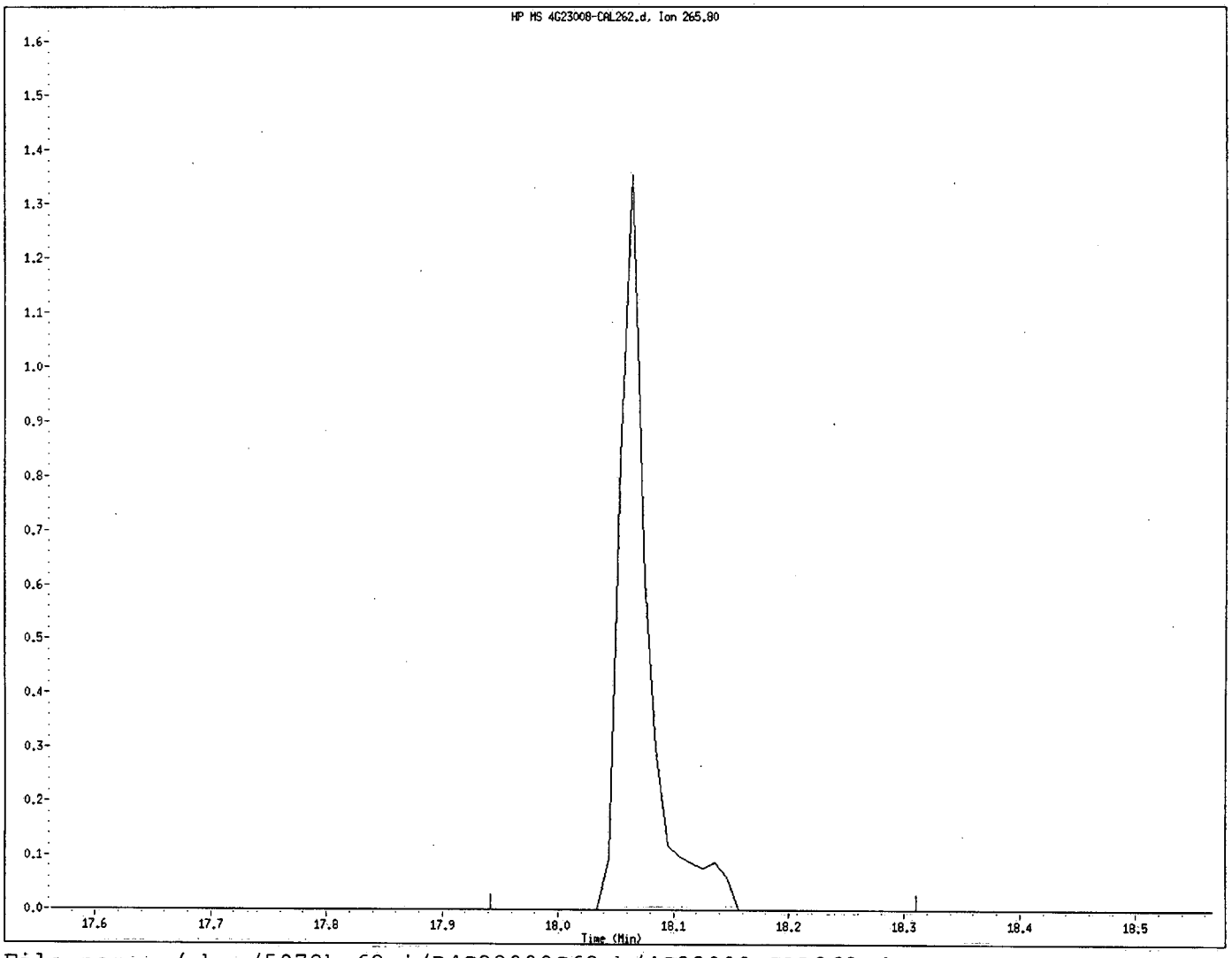
2,6-Dinitrotoluene CAS Number 606-20-2 Area = 59645 Manually integrated



File name: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL262.d
Client ID: SSTD010BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 22:09
Retention Time: 15.08
Operator ID: OWS

7/27/2014

Pentachlorophenol CAS Number 87-86-5 Area = 22867 Manually integrated



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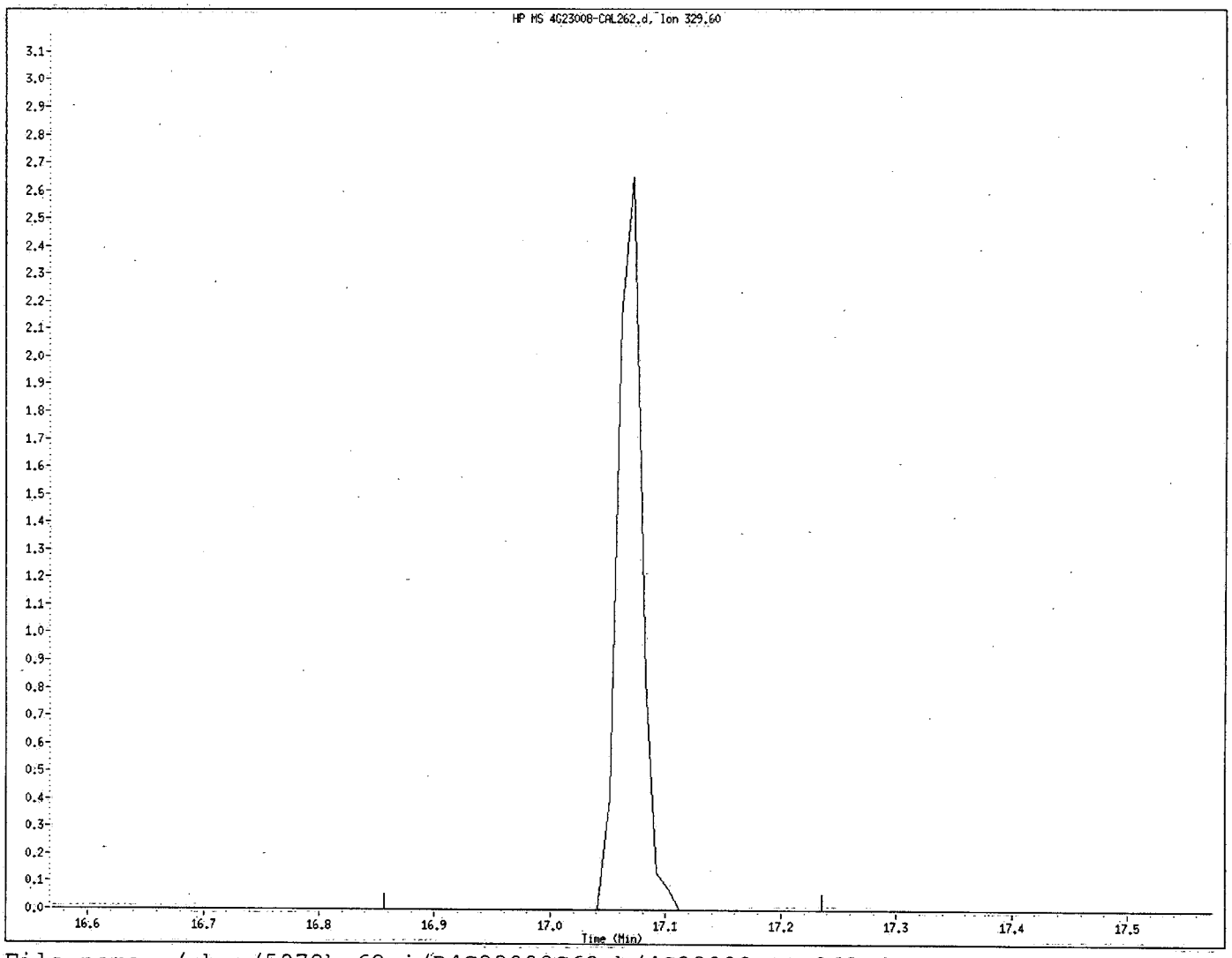
Client ID: SSTD010BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 22:09
Retention Time: 18.06
Operator ID: OWS

7/27/2014

2,4,6-Tribromophenol CAS Number 118-79-6 Area = 38283 Manually integrated



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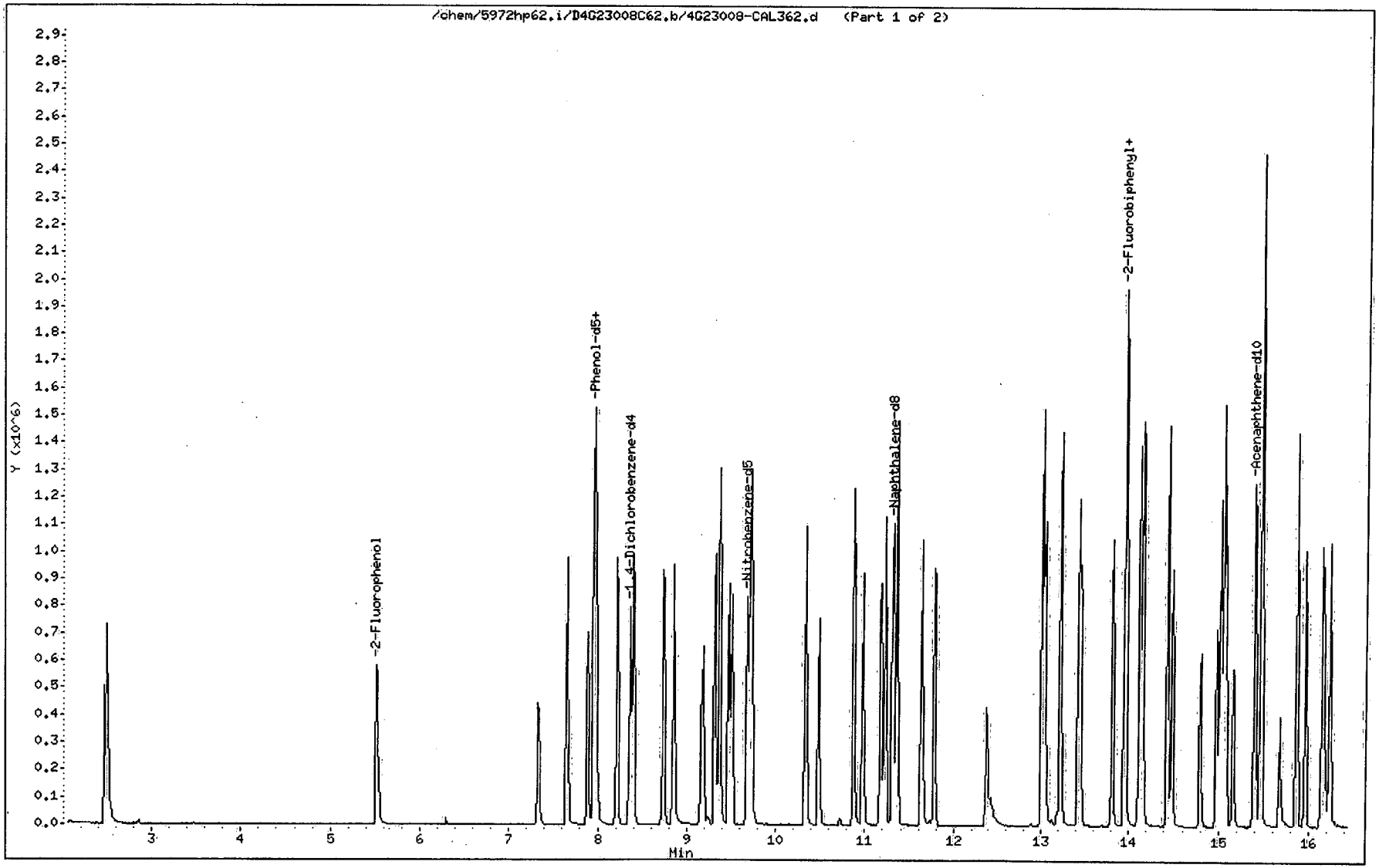
Client ID: SSTD010BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 22:09
Retention Time: 17.07
Operator ID: OWS

Roldan Hani 7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL362.d
Date : 23-JUL-2014 21:30
Client ID: SSTD025BP
Sample Info: 4G23008-CAL3:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

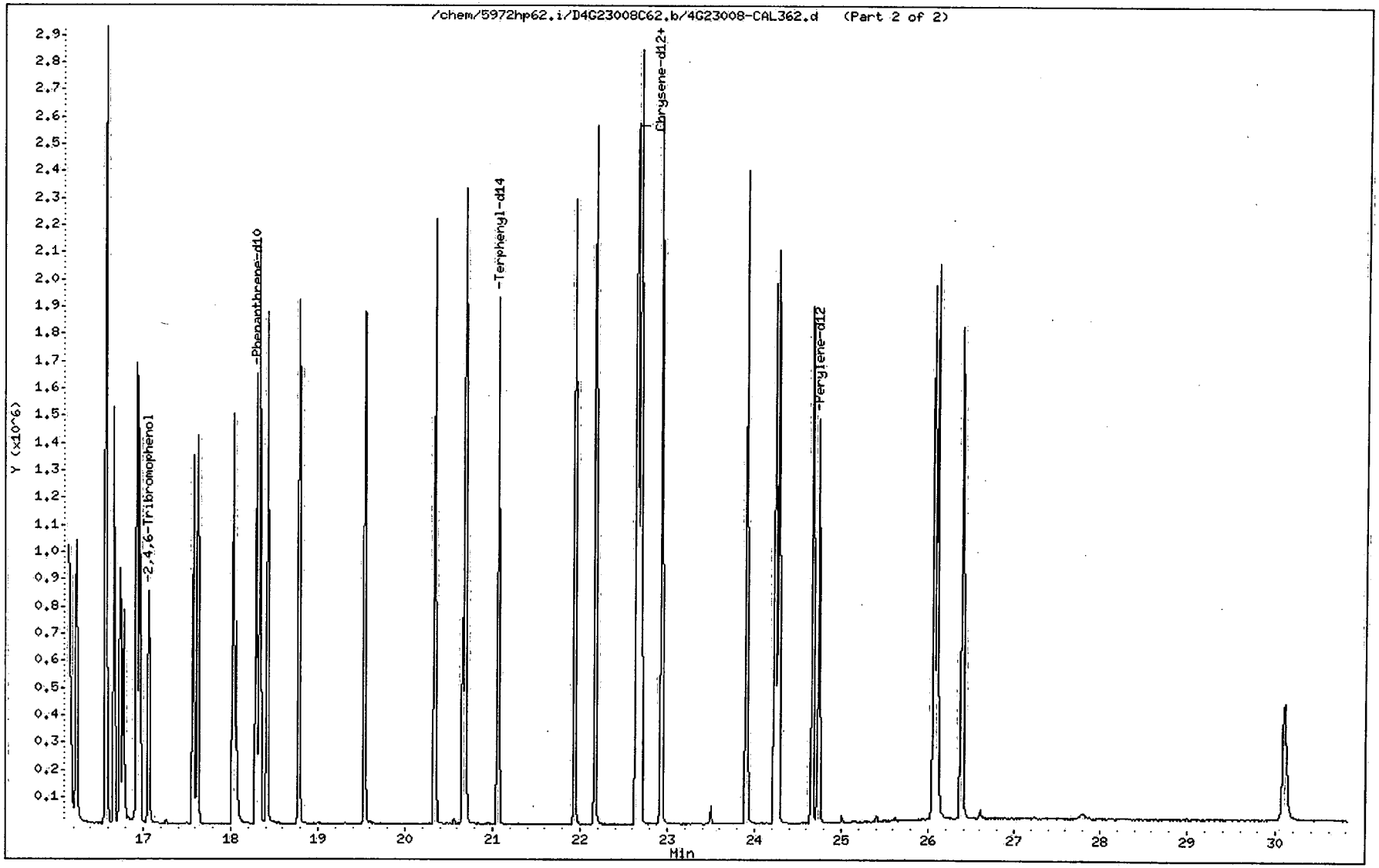
Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL362.d
Date : 23-JUL-2014 21:30
Client ID: SSTD025BP
Sample Info: 4G23008-CAL3:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL362.d
Report Date: 27-Jul-2014 19:14

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL362.d
Lab Smp Id: 4G23008-CAL3 Client Smp ID: SSTD025BP
Inj Date : 23-JUL-2014 21:30
Operator : OWS Inst ID: 5972hp62.i
Smp Info : 4G23008-CAL3:OWS
Misc Info : SSTD025BP
Comment :
Method : /chem/5972hp62.i/D4G23008C62.b/8270Dv26.m
Meth Date : 27-Jul-2014 19:14 ron Quant Type: ISTD
Cal Date : 23-JUL-2014 21:30 Cal File: 4G23008-CAL362.d
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	8.365	8.365	(1.000)	196071	40.0000		
* 2 Naphthalene-d8	136	11.312	11.312	(1.000)	803677	40.0000		
* 3 Acenaphthene-d10	164	15.396	15.396	(1.000)	457615	40.0000		
* 4 Phenanthrene-d10	188	18.293	18.293	(1.000)	787652	40.0000		
* 5 Chrysene-d12	240	22.653	22.653	(1.000)	795866	40.0000		
* 6 Perylene-d12	264	24.741	24.741	(1.000)	596339	40.0000		
$ 7 2-Fluorophenol	112	5.509	5.509	(0.659)	322852	50.0000	51	
$ 8 Phenol-d5	99	7.945	7.945	(0.950)	469271	50.0000	52	
$ 9 Nitrobenzene-d5	82	9.675	9.675	(0.855)	422562	50.0000	52	
$ 10 2-Fluorobiphenyl	172	13.963	13.963	(0.907)	721087	50.0000	51	
$ 11 2,4,6-Tribromophenol	330	17.065	17.065	(1.108)	128547	50.0000	51	8394
$ 12 Terphenyl-d14	244	21.067	21.067	(0.930)	817702	50.0000	53	
13 N-Nitrosodimethylamine	42	2.469	2.469	(0.295)	225610	50.0000	51	9209
14 Pyridine	79	2.500	2.500	(0.299)	435993	50.0000	53	9631

7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL362.d
Report Date: 27-Jul-2014 19:14

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
15 Phenol	94	7.976	7.976	(0.953)	454733	50.0000	52	
16 Aniline	93	7.648	7.648	(0.914)	555304	50.0000	52	9215
17 Bis(2-chloroethyl)ether	93	7.884	7.884	(0.942)	369767	50.0000	52	
18 2-Chlorophenol	128	7.955	7.955	(0.951)	372303	50.0000	53	7620
19 1,3-Dichlorobenzene	146	8.211	8.211	(0.982)	388488	50.0000	52	
20 1,4-Dichlorobenzene	146	8.395	8.395	(1.004)	393342	50.0000	52	
21 Benzyl Alcohol	108	8.856	8.856	(1.059)	225847	50.0000	53	
22 1,2-Dichlorobenzene	146	8.743	8.743	(1.045)	381255	50.0000	52	
23 2-Methylphenol	108	9.317	9.317	(1.114)	336691	50.0000	52	
24 2,2'-oxybis(1-Chloropropane)	45	9.183	9.183	(1.098)	569270	50.0000	52	9605
25 3 & 4-Methylphenol	108	9.705	9.705	(1.160)	362323	50.0000	53	
26 N-Nitroso-di-N-propylamine	70	9.470	9.470	(1.132)	304041	50.0000	52	9813
27 Acetophenone	105	9.368	9.368	(0.828)	582631	50.0000	52	9469
28 Hexachloroethane	117	9.501	9.501	(1.136)	182712	50.0000	52	9534
29 Nitrobenzene	77	9.716	9.716	(0.859)	549593	50.0000	52	8326
30 Isophorone	82	10.330	10.330	(0.913)	788405	50.0000	52	9691
31 2-Nitrophenol	139	10.483	10.483	(0.927)	212294	50.0000	52	9685
32 2,4-Dimethylphenol	122	10.872	10.872	(0.961)	317820	50.0000	52	9090
33 Bis(2-chloroethoxy)methane	93	10.975	10.975	(0.970)	481755	50.0000	51	9678
34 2,4-Dichlorophenol	162	11.179	11.179	(0.988)	313420	50.0000	52	
35 1,2,4-Trichlorobenzene	180	11.231	11.231	(0.993)	320442	50.0000	50	
36 Naphthalene	128	11.353	11.353	(1.004)	1009948	50.0000	52	9646
37 4-Chloroaniline	127	11.630	11.630	(1.028)	497086	50.0000	51	9686
38 Hexachlorobutadiene	225	11.783	11.783	(1.042)	176274	50.0000	50	9550
39 4-Chloro-3-methylphenol	107	13.042	13.042	(1.153)	345760	50.0000	53	9468
40 2-Methylnaphthalene	141	13.011	13.011	(1.150)	605165	50.0000	52	
41 1-Methylnaphthalene	142	13.226	13.226	(1.169)	633326	50.0000	52	
42 Hexachlorocyclopentadiene	237	13.452	13.452	(0.874)	210916	50.0000	50	8876
43 1,2,4,5-Tetrachlorobenzene	216	13.421	13.421	(0.872)	320999	50.0000	50	8023
44 2,4,6-Trichlorophenol	196	13.810	13.810	(0.897)	223104	50.0000	52	
45 2,4,5-Trichlorophenol	196	13.943	13.943	(0.906)	240053	50.0000	53	
46 2-Chloronaphthalene	162	14.117	14.117	(0.917)	626164	50.0000	50	
47 2-Nitroaniline	65	14.485	14.485	(0.941)	240059	50.0000	51	8926
48 Dimethylphthalate	163	15.018	15.018	(0.975)	786197	50.0000	51	9132
49 1,3-Dinitrobenzene	122	14.977	14.977	(0.973)	57613	50.0000	52	
50 2,6-Dinitrotoluene	165	15.089	15.089	(0.980)	193682	50.0000	51	0 (M)
51 Acenaphthylene	152	15.059	15.059	(0.978)	1059414	50.0000	51	8511
52 3-Nitroaniline	138	15.468	15.468	(1.005)	224016	50.0000	53	8879
53 Acenaphthene	153	15.468	15.468	(1.005)	637809	50.0000	51	9539
54 2,4-Dinitrophenol	184	15.673	15.673	(1.018)	89144	50.0000	50	(M)
55 4-Nitrophenol	139	16.164	16.164	(1.050)	167907	50.0000	48	8423
56 2,4-Dinitrotoluene	165	15.959	15.959	(1.037)	260751	50.0000	51	9427
57 Dibenzofuran	168	15.867	15.867	(1.031)	901387	50.0000	51	9526
58 2,3,4,6-Tetrachlorophenol	232	16.236	16.236	(1.054)	188019	50.0000	53	
59 Diethylphthalate	149	16.573	16.573	(1.076)	781574	50.0000	50	9642
60 4-Chlorophenyl-phenylether	204	16.665	16.665	(1.082)	334203	50.0000	51	9749
61 Fluorene	166	16.573	16.573	(1.076)	690696	50.0000	51	9447

Robin Ha 7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL362.d
Report Date: 27-Jul-2014 19:14

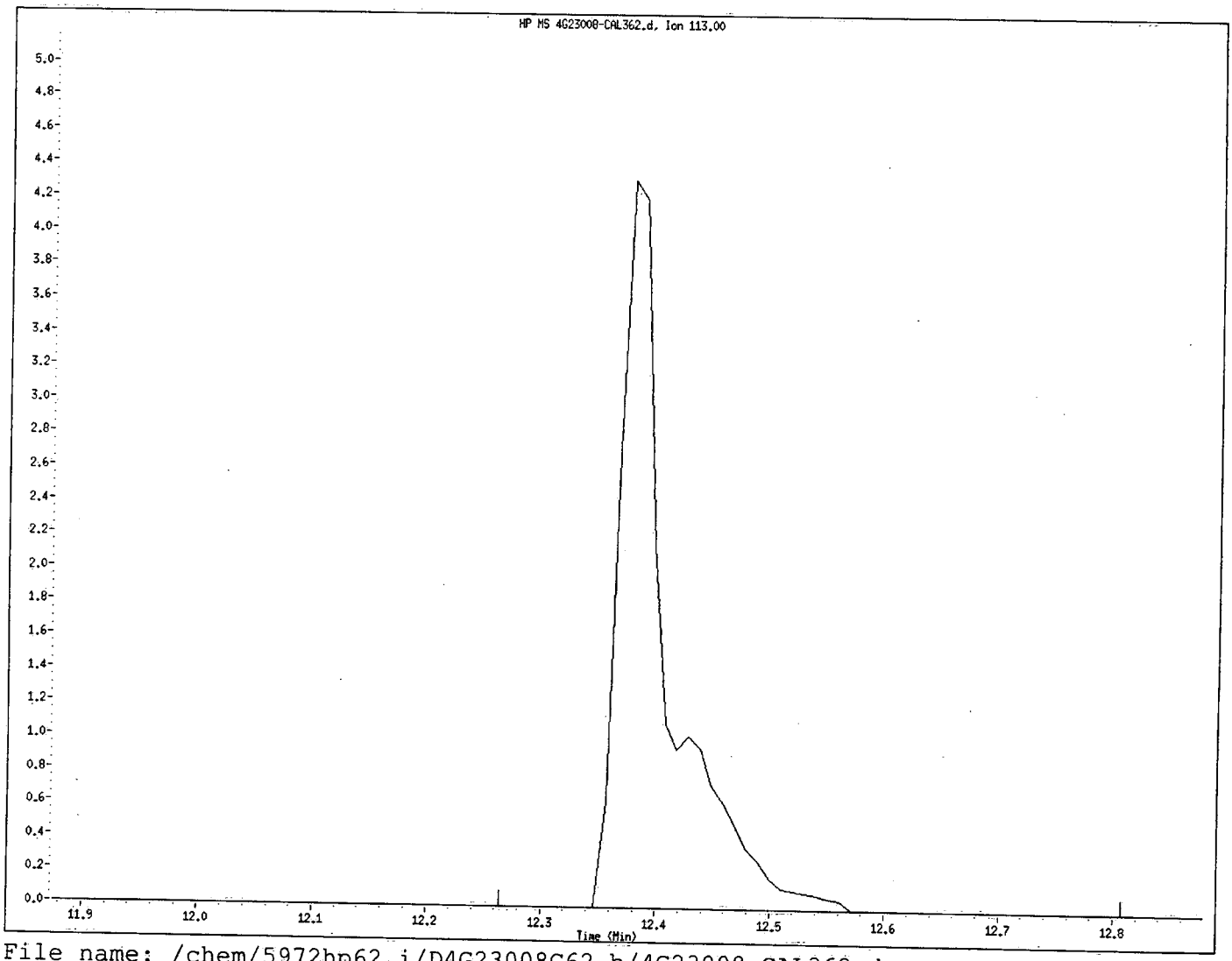
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
62 4-Nitroaniline	138	16.737	16.737	(1.087)	224506	50.0000	51	9094
63 4,6-Dinitro-2-methylphenol	198	16.778	16.778	(0.917)	154536	50.0000	51	8167
64 N-Nitrosodiphenylamine (1)	169	16.932	16.932	(0.926)	606579	50.0000	52	9734
65 1,2-Diphenyl Hydrazine	77	16.962	16.962	(1.102)	864758	50.0000	51	9157
66 4-Bromophenyl-phenylether	248	17.576	17.576	(0.961)	200148	50.0000	52	9550
67 Hexachlorobenzene	284	17.628	17.628	(0.964)	245628	50.0000	50	9300
68 Pentachlorophenol	266	18.057	18.057	(0.987)	124743	50.0000	50	8439 (M)
69 Phenanthrene	178	18.334	18.334	(1.002)	1046992	50.0000	51	
70 Anthracene	178	18.426	18.426	(1.007)	1047056	50.0000	51	
71 Carbazole	167	18.784	18.784	(1.027)	1067145	50.0000	52	9658
72 Di-n-butylphthalate	149	19.542	19.542	(1.068)	1518217	50.0000	54	9506
73 Fluoranthene	202	20.340	20.340	(1.112)	1155125	50.0000	53	
74 Pyrene	202	20.688	20.688	(0.913)	1215045	50.0000	53	
75 Butylbenzylphthalate	149	21.937	21.937	(0.968)	665254	50.0000	53	9750
76 3,3'-Dichlorobenzidine	252	22.684	22.684	(1.001)	403419	50.0000	52	9492
77 bis(2-ethylhexyl)Phthalate	149	22.929	22.929	(1.012)	965322	50.0000	53	9657
78 Benzo(a)anthracene	228	22.643	22.643	(1.000)	1036749	50.0000	52	
79 Chrysene	228	22.694	22.694	(1.002)	949858	50.0000	51	
80 Di-n-octylphthalate	149	23.902	23.902	(0.966)	1630264	50.0000	54	
81 Benzo(b)fluoranthene	252	24.240	24.240	(0.980)	1162168	50.0000	54	
82 Benzo(k)fluoranthene	252	24.270	24.270	(0.981)	1035859	50.0000	50	
83 Benzo(a)pyrene	252	24.669	24.669	(0.997)	1006352	50.0000	51	
84 Indeno(1,2,3-cd)pyrene	276	26.061	26.061	(1.053)	962003	50.0000	50	
85 Dibenzo(a,h)anthracene	278	26.102	26.102	(1.055)	953401	50.0000	50	8777
86 Benzo(g,h,i)perylene	276	26.379	26.379	(1.066)	998373	50.0000	50	
87 Benzaldehyde	77	7.321	7.321	(0.875)	168007	50.0000	55	9734
88 Caprolactam	113	12.377	12.377	(1.094)	130339	50.0000	54	9635 (M)
89 Atrazine	215	18.027	18.027	(0.985)	101341	50.0000	51	9493
90 1,1'-Biphenyl	154	14.158	14.158	(0.920)	777126	50.0000	50	9091
91 Diphenyl ether	170	14.434	14.434	(0.937)	439440	50.0000	51	8087
223 Benzidine	184	20.657	20.657	(0.912)	351465	50.0000	50	9439

QC Flag Legend

M - Compound response manually integrated.

Roldan Ham 7/27/2014

Caprolactam CAS Number 105-60-2 Area = 130339 Manually integrated



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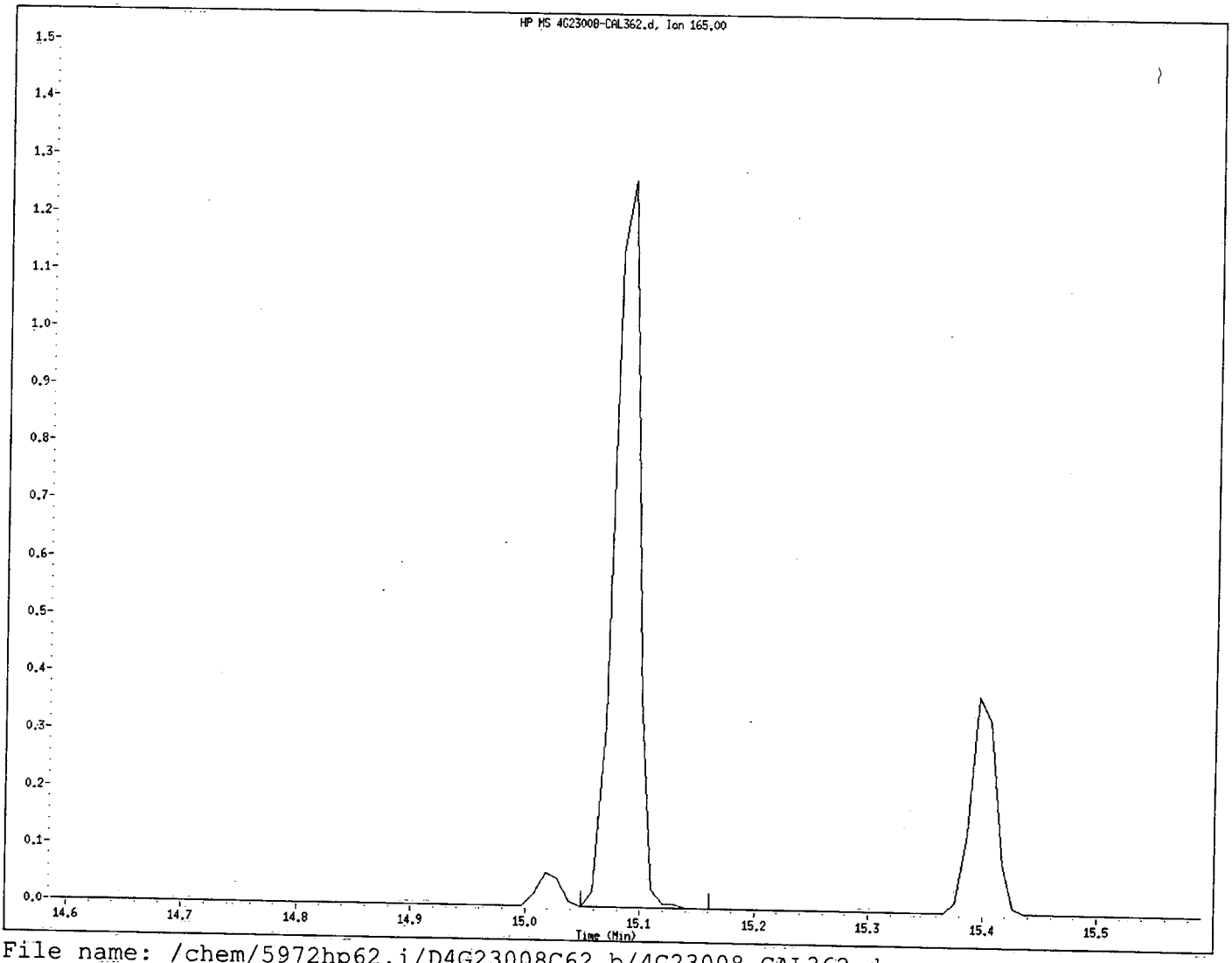
Client ID: SSTD025BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 21:30
Retention Time: 12.38
Operator ID: OWS

7/27/2014

2,6-Dinitrotoluene CAS Number 606-20-2 Area = 193682 Manually integrated



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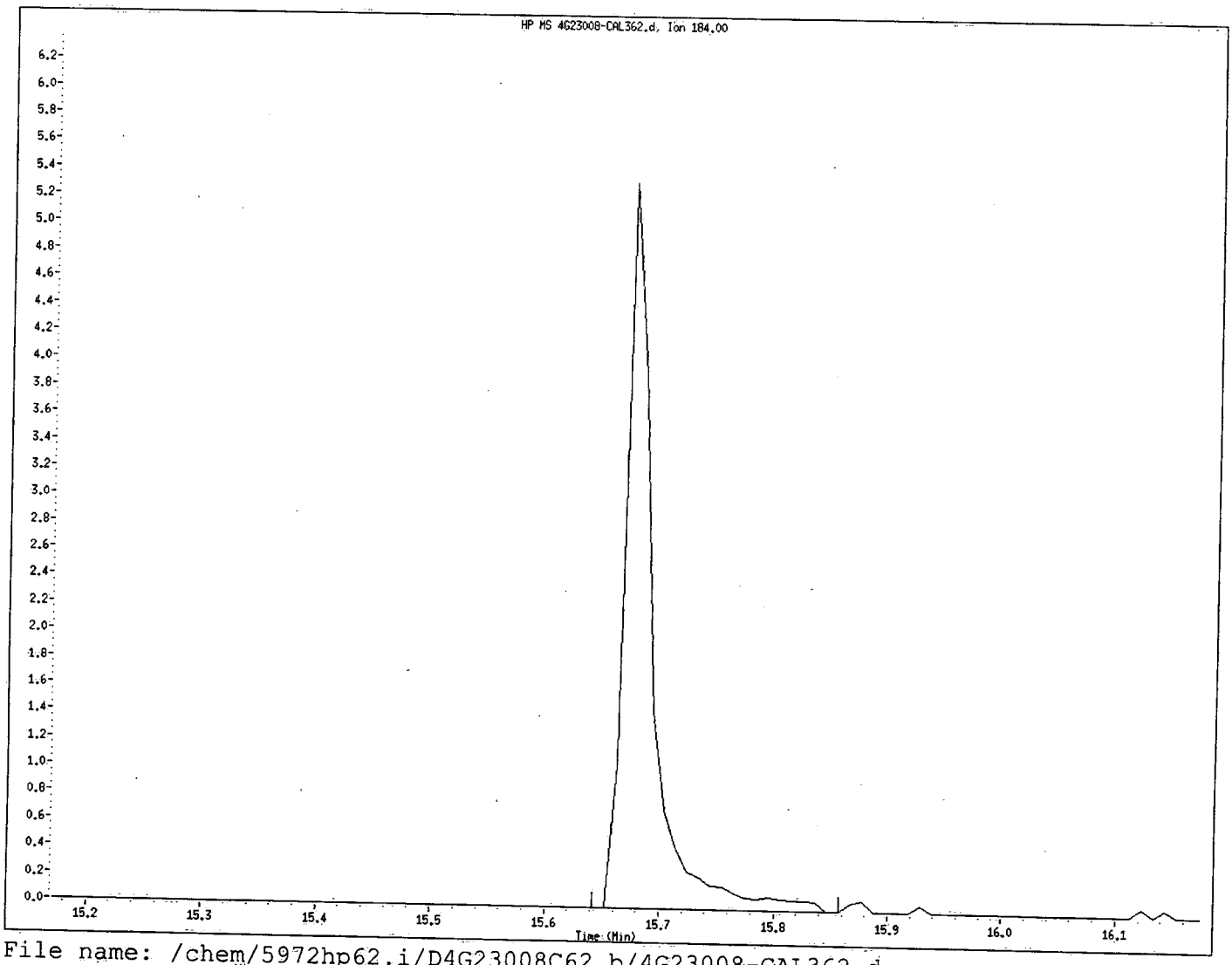
Client ID: SSTD025BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 21:30
Retention Time: 15.09
Operator ID: OWS

7/27/2014

2,4-Dinitrophenol CAS Number 51-28-5 Area = 89144 Manually integrated



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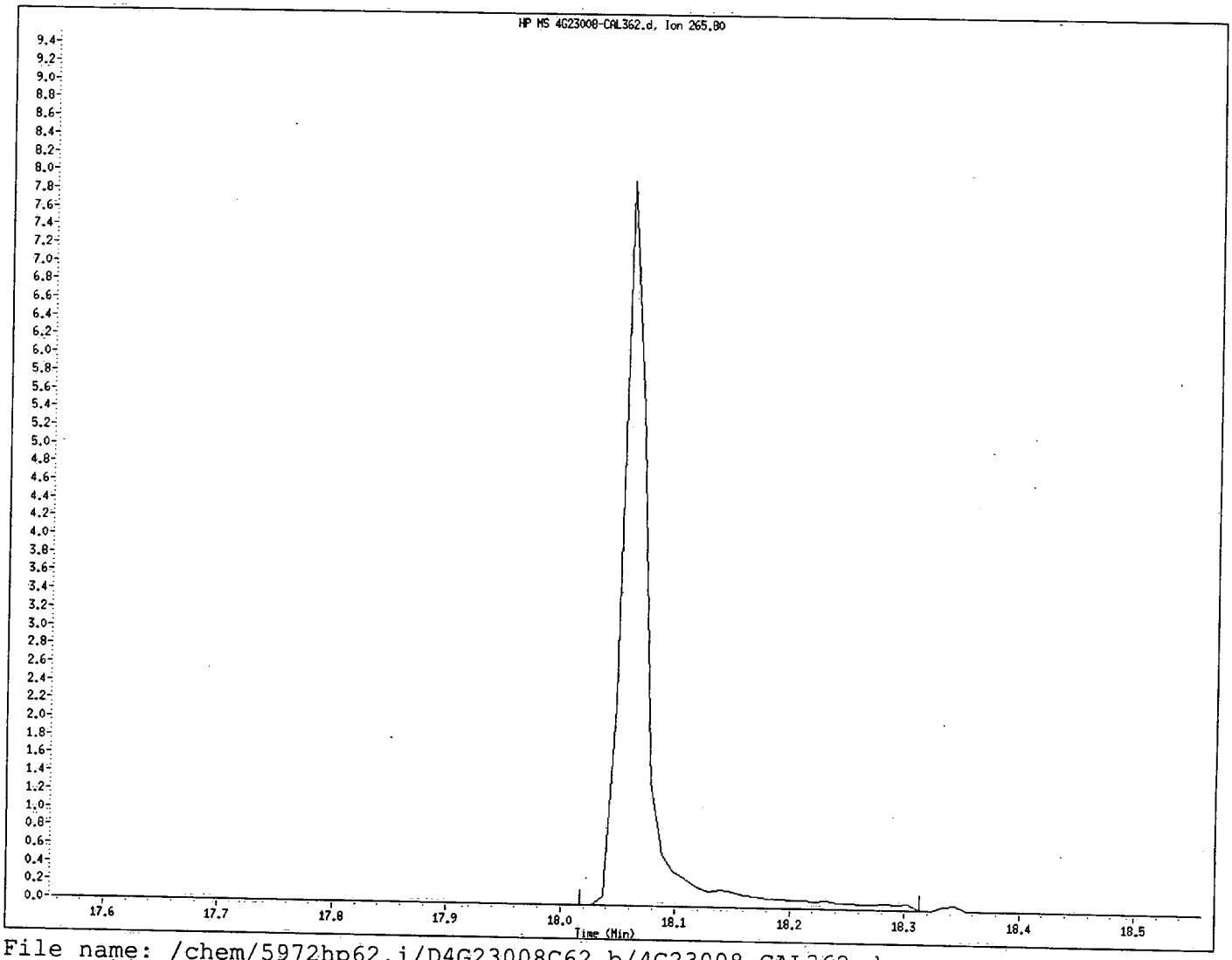
Client ID: SSTD025BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 21:30
Retention Time: 15.67
Operator ID: OWS

Rolden Hai 7/27/2014

Pentachlorophenol CAS Number 87-86-5 Area = 124743 Manually integrated

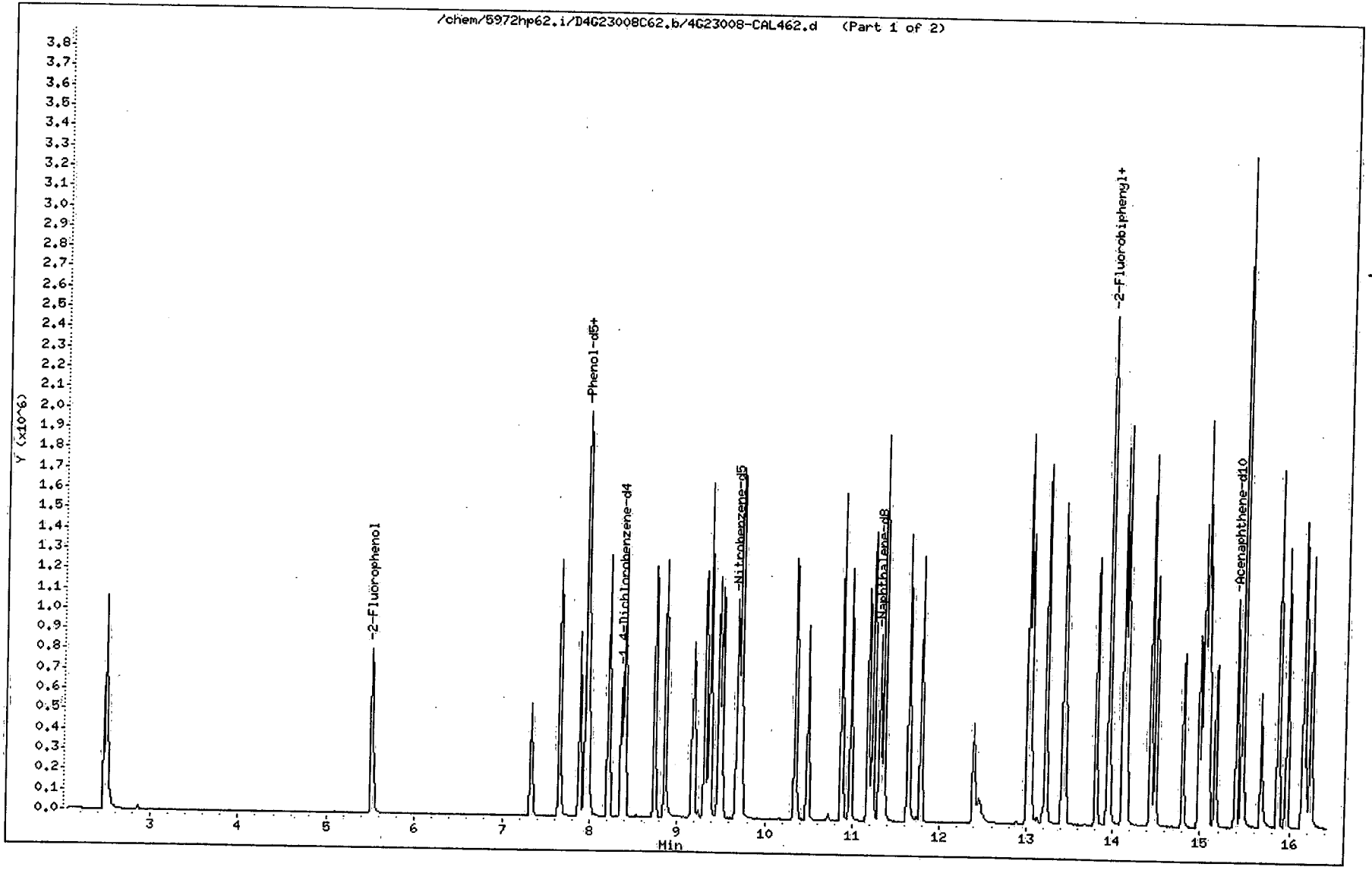


File name: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL362.d
Client ID: SSTD025BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 21:30
Retention Time: 18.06
Operator ID: OWS

7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL462.d
Date : 23-JUL-2014 20:50
Client ID: SSTD040BP
Sample Info: 4G23008-CAL4:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5Sil MS

Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32

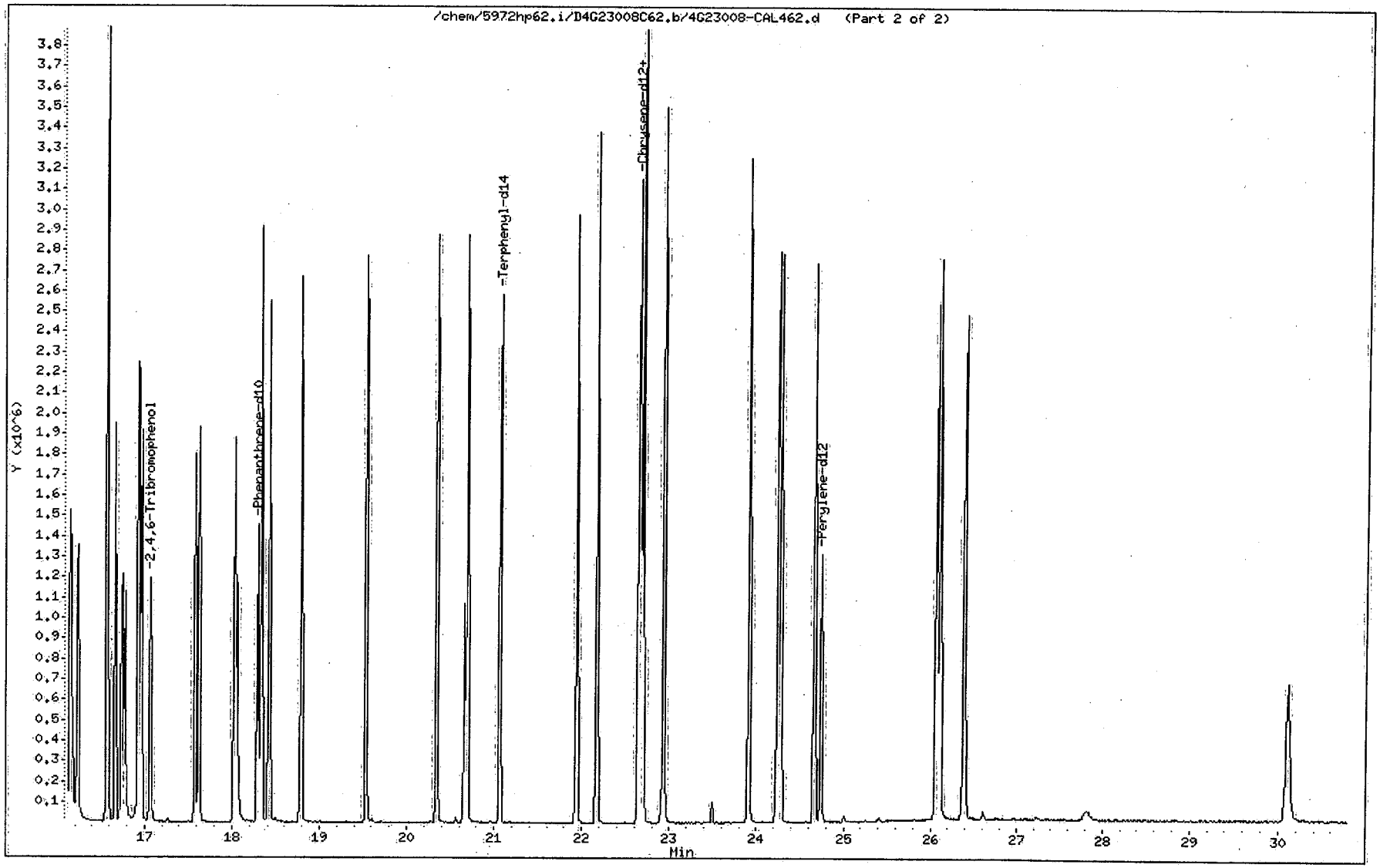


Robert A. 7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL462.d
Date : 23-JUL-2014 20:50
Client ID: SSTD040BP
Sample Info: 4G23008-CAL4:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i

Operator: OWS
Column diameter: 0.32



7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL462.d
Report Date: 27-Jul-2014 19:14

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL462.d
Lab Smp Id: 4G23008-CAL4 Client Smp ID: SSTD040BP
Inj Date : 23-JUL-2014 20:50
Operator : OWS Inst ID: 5972hp62.i
Smp Info : 4G23008-CAL4:OWS
Misc Info : SSTD040BP
Comment :
Method : /chem/5972hp62.i/D4G23008C62.b/8270Dv26.m
Meth Date : 27-Jul-2014 19:14 ron Quant Type: ISTD
Cal Date : 23-JUL-2014 20:50 Cal File: 4G23008-CAL462.d
Als bottle: 4 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	8.366	8.366	(1.000)	176695	40.0000		
* 2 Naphthalene-d8	136	11.314	11.314	(1.000)	692493	40.0000		
* 3 Acenaphthene-d10	164	15.398	15.398	(1.000)	391676	40.0000		
* 4 Phenanthrene-d10	188	18.294	18.294	(1.000)	690083	40.0000		
* 5 Chrysene-d12	240	22.654	22.654	(1.000)	695605	40.0000		
* 6 Perylene-d12	264	24.742	24.742	(1.000)	522644	40.0000		
$ 7 2-Fluorophenol	112	5.510	5.510	(0.659)	444940	80.0000	78	
$ 8 Phenol-d5	99	7.946	7.946	(0.950)	622047	80.0000	78	
$ 9 Nitrobenzene-d5	82	9.676	9.676	(0.855)	544653	80.0000	79	
$ 10 2-Fluorobiphenyl	172	13.965	13.965	(0.907)	939866	80.0000	78	
$ 11 2,4,6-Tribromophenol	330	17.066	17.066	(1.108)	177509	80.0000	82	9634
$ 12 Terphenyl-d14	244	21.068	21.068	(0.930)	1091855	80.0000	82	
13 N-Nitrosodimethylamine	42	2.470	2.470	(0.295)	314991	80.0000	80	9187
14 Pyridine	79	2.491	2.491	(0.298)	566451	80.0000	77	9665

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Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	SIMILARITY
15 Phenol	94	7.977	7.977	(0.953)	598401	80.0000	76	
16 Aniline	93	7.649	7.649	(0.914)	739344	80.0000	77	9213
17 Bis(2-chloroethyl)ether	93	7.885	7.885	(0.942)	488407	80.0000	77	
18 2-Chlorophenol	128	7.957	7.957	(0.951)	490561	80.0000	78	7709
19 1,3-Dichlorobenzene	146	8.212	8.212	(0.982)	509451	80.0000	76	
20 1,4-Dichlorobenzene	146	8.397	8.397	(1.004)	522958	80.0000	77	
21 Benzyl Alcohol	108	8.857	8.857	(1.059)	298714	80.0000	79	
22 1,2-Dichlorobenzene	146	8.734	8.734	(1.044)	502399	80.0000	77	
23 2-Methylphenol	108	9.318	9.318	(1.114)	444566	80.0000	78	
24 2,2'-oxybis(1-Chloropropane)	45	9.185	9.185	(1.098)	761917	80.0000	78	9514
25 3 & 4-Methylphenol	108	9.707	9.707	(1.160)	470020	80.0000	78	
26 N-Nitroso-di-N-propylamine	70	9.471	9.471	(1.132)	401549	80.0000	78	9813
27 Acetophenone	105	9.369	9.369	(0.828)	754028	80.0000	79	9076
28 Hexachloroethane	117	9.502	9.502	(1.136)	243094	80.0000	78	9495
29 Nitrobenzene	77	9.717	9.717	(0.859)	715068	80.0000	80	8361
30 Isophorone	82	10.331	10.331	(0.913)	1028300	80.0000	80	9576
31 2-Nitrophenol	139	10.485	10.485	(0.927)	278903	80.0000	80	9678
32 2,4-Dimethylphenol	122	10.874	10.874	(0.961)	415963	80.0000	81	9179
33 Bis(2-chloroethoxy)methane	93	10.976	10.976	(0.970)	631636	80.0000	79	9693
34 2,4-Dichlorophenol	162	11.170	11.170	(0.987)	411188	80.0000	81	
35 1,2,4-Trichlorobenzene	180	11.232	11.232	(0.993)	423817	80.0000	78	
36 Naphthalene	128	11.355	11.355	(1.004)	1319240	80.0000	79	9672
37 4-Chloroaniline	127	11.631	11.631	(1.028)	675889	80.0000	81	9650
38 Hexachlorobutadiene	225	11.774	11.774	(1.041)	233093	80.0000	77	9485
39 4-Chloro-3-methylphenol	107	13.043	13.043	(1.153)	452434	80.0000	82	9355
40 2-Methylnaphthalene	141	13.013	13.013	(1.150)	790211	80.0000	79	
41 1-Methylnaphthalene	142	13.228	13.228	(1.169)	822007	80.0000	79	
42 Hexachlorocyclopentadiene	237	13.443	13.443	(0.873)	286060	80.0000	80	9487
43 1,2,4,5-Tetrachlorobenzene	216	13.422	13.422	(0.872)	427606	80.0000	77	7951
44 2,4,6-Trichlorophenol	196	13.811	13.811	(0.897)	293352	80.0000	81	
45 2,4,5-Trichlorophenol	196	13.944	13.944	(0.906)	309372	80.0000	81	
46 2-Chloronaphthalene	162	14.118	14.118	(0.917)	827135	80.0000	77	
47 2-Nitroaniline	65	14.487	14.487	(0.941)	326506	80.0000	82	8940
48 Dimethylphthalate	163	15.029	15.029	(0.976)	1049674	80.0000	80	8773
49 1,3-Dinitrobenzene	122	14.988	14.988	(0.973)	79005	80.0000	84	
50 2,6-Dinitrotoluene	165	15.091	15.091	(0.980)	263838	80.0000	82	0 (M)
51 Acenaphthylene	152	15.060	15.060	(0.978)	1400507	80.0000	80	8514
52 3-Nitroaniline	138	15.469	15.469	(1.005)	299568	80.0000	84	9012
53 Acenaphthene	153	15.469	15.469	(1.005)	841442	80.0000	80	9581
54 2,4-Dinitrophenol	184	15.674	15.674	(1.018)	142322	80.0000	78	
55 4-Nitrophenol	139	16.165	16.165	(1.050)	244227	80.0000	78	8353
56 2,4-Dinitrotoluene	165	15.961	15.961	(1.037)	370694	80.0000	84	9454
57 Dibenzofuran	168	15.868	15.868	(1.031)	1176742	80.0000	78	9500
58 2,3,4,6-Tetrachlorophenol	232	16.237	16.237	(1.054)	238652	80.0000	80	
59 Diethylphthalate	149	16.575	16.575	(1.076)	1050051	80.0000	79	9616
60 4-Chlorophenyl-phenylether	204	16.667	16.667	(1.082)	445657	80.0000	79	9615
61 Fluorene	166	16.564	16.564	(1.076)	898623	80.0000	78	9539

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Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
62 4-Nitroaniline	138	16.749	16.749	(1.088)	310567	80.0000	84	9088
63 4,6-Dinitro-2-methylphenol	198	16.779	16.779	(0.917)	222474	80.0000	80	8470
64 N-Nitrosodiphenylamine (1)	169	16.933	16.933	(0.926)	814828	80.0000	80	9765
65 1,2-Diphenyl Hydrazine	77	16.964	16.964	(1.102)	1173994	80.0000	81	9115
66 4-Bromophenyl-phenylether	248	17.578	17.578	(0.961)	263295	80.0000	78	9485
67 Hexachlorobenzene	284	17.629	17.629	(0.964)	342100	80.0000	80	9414
68 Pentachlorophenol	266	18.059	18.059	(0.987)	180488	80.0000	76	8510
69 Phenanthrene	178	18.335	18.335	(1.002)	1438783	80.0000	80	
70 Anthracene	178	18.427	18.427	(1.007)	1450120	80.0000	80	
71 Carbazole	167	18.785	18.785	(1.027)	1460619	80.0000	82	9690
72 Di-n-butylphthalate	149	19.533	19.533	(1.068)	2107408	80.0000	87	9865
73 Fluoranthene	202	20.341	20.341	(1.112)	1541472	80.0000	83	
74 Pyrene	202	20.689	20.689	(0.913)	1614527	80.0000	82	
75 Butylbenzylphthalate	149	21.938	21.938	(0.968)	903908	80.0000	83	9705
76 3,3'-Dichlorobenzidine	252	22.685	22.685	(1.001)	554282	80.0000	83	9534
77 bis(2-ethylhexyl)Phthalate	149	22.931	22.931	(1.012)	1296612	80.0000	82	9618
78 Benzo(a)anthracene	228	22.644	22.644	(1.000)	1423756	80.0000	82	
79 Chrysene	228	22.695	22.695	(1.002)	1270890	80.0000	79	
80 Di-n-octylphthalate	149	23.903	23.903	(0.966)	2262047	80.0000	87	
81 Benzo(b)fluoranthene	252	24.241	24.241	(0.980)	1570051	80.0000	86	
82 Benzo(k)fluoranthene	252	24.282	24.282	(0.981)	1412910	80.0000	78	
83 Benzo(a)pyrene	252	24.671	24.671	(0.997)	1408986	80.0000	82	
84 Indeno(1,2,3-cd)pyrene	276	26.063	26.063	(1.053)	1406201	80.0000	83	
85 Dibenzo(a,h)anthracene	278	26.104	26.104	(1.055)	1360212	80.0000	82	8255
86 Benzo(g,h,i)perylene	276	26.390	26.390	(1.067)	1399147	80.0000	80	
87 Benzaldehyde	77	7.322	7.322	(0.875)	204518	80.0000	76	9804
88 Caprolactam	113	12.399	12.399	(1.096)	174656	80.0000	85	9625 (M)
89 Atrazine	215	18.038	18.038	(0.986)	145128	80.0000	83	9239
90 1,1'-Biphenyl	154	14.149	14.149	(0.919)	1024613	80.0000	78	9326
91 Diphenyl ether	170	14.435	14.435	(0.937)	575236	80.0000	78	7996
223 Benzidine	184	20.659	20.659	(0.912)	493534	80.0000	77	9350

QC Flag Legend

M - Compound response manually integrated.

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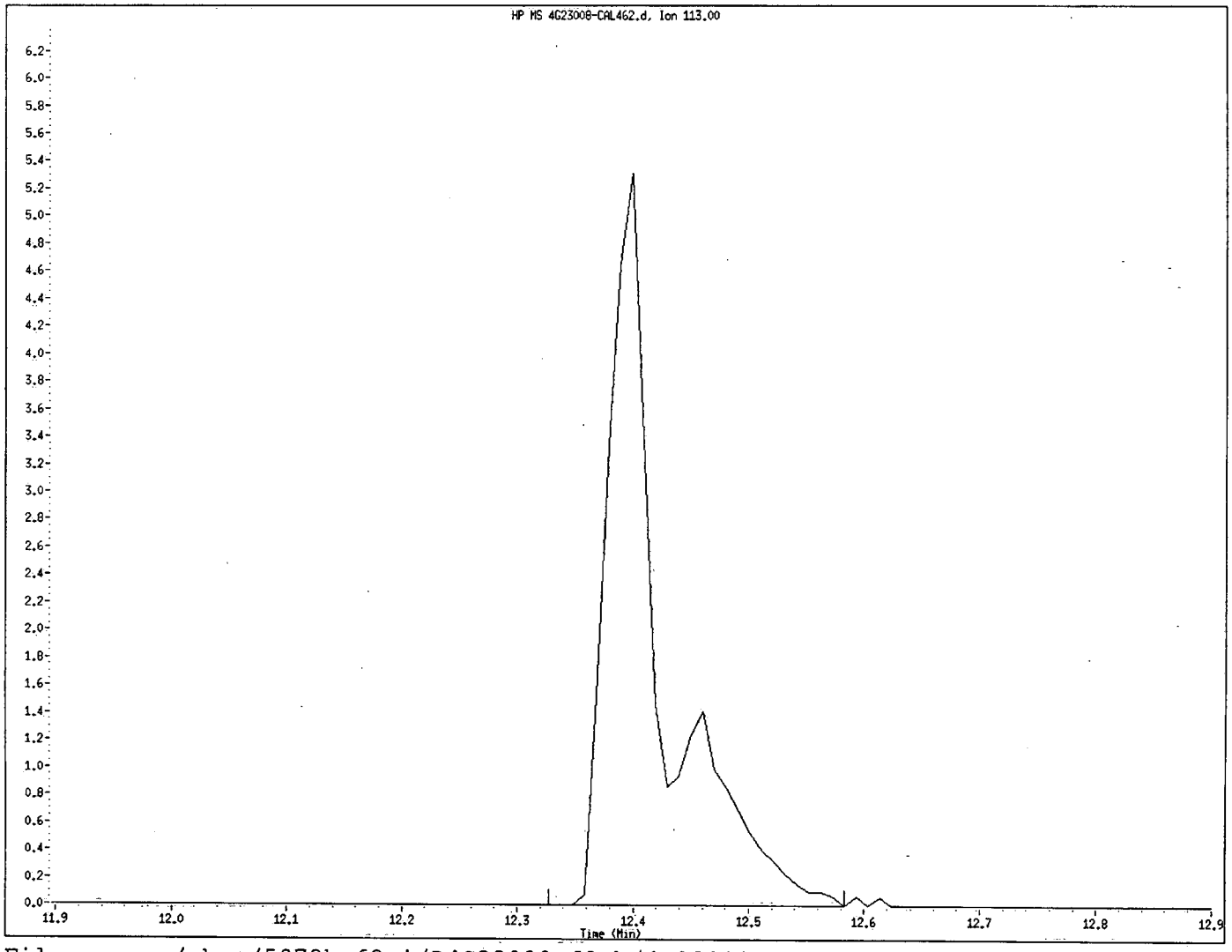
Caprolactam CAS Number 105-60-2 Area = 174656 Manually integrated



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Injection Date and Time: 23-JUL-2014 20:50
Retention Time: 12.40
Operator ID: OWS

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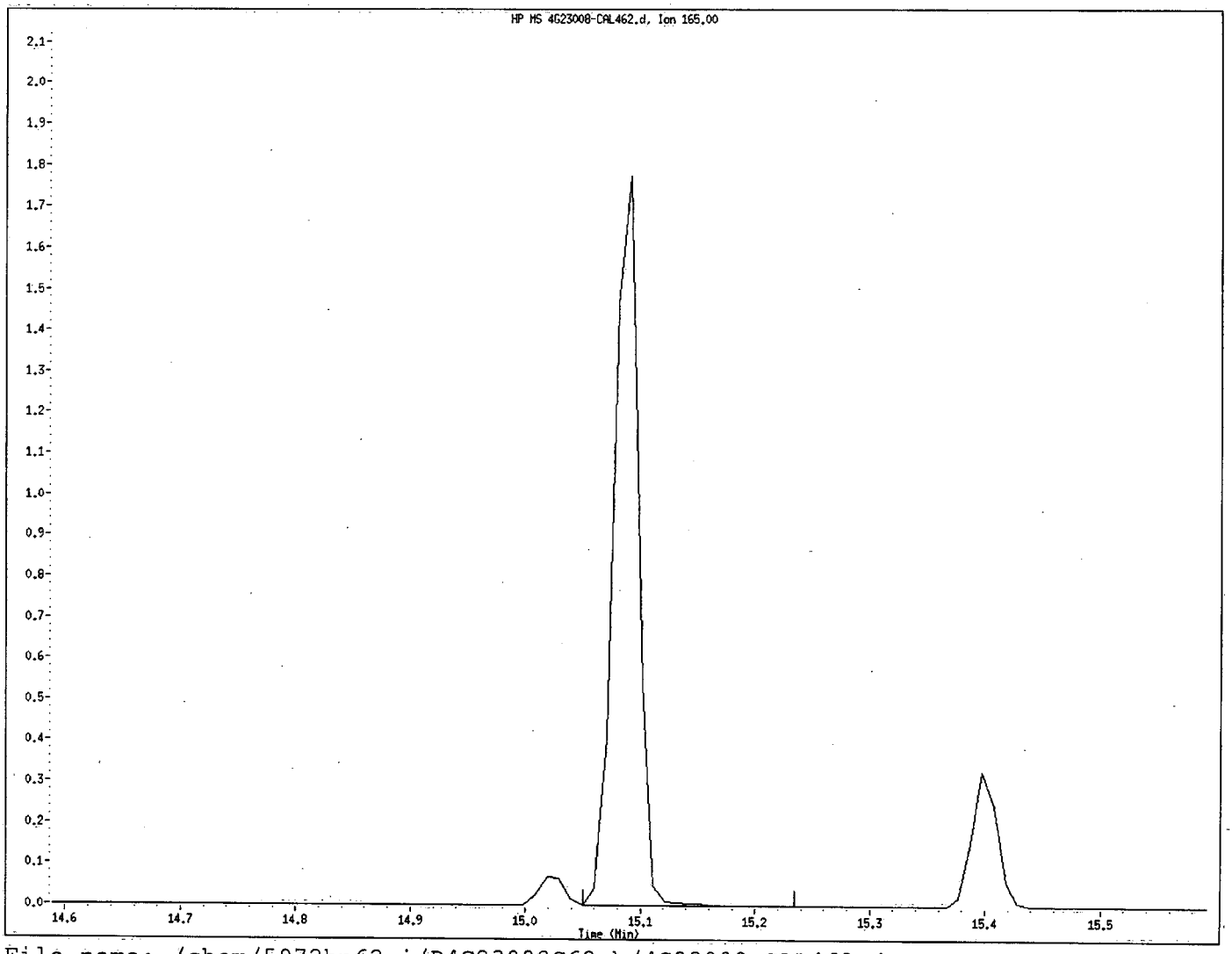
2,6-Dinitrotoluene CAS Number 606-20-2 Area = 263838 Manually integrated



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Retention Time: 15.09
Operator ID: OWS

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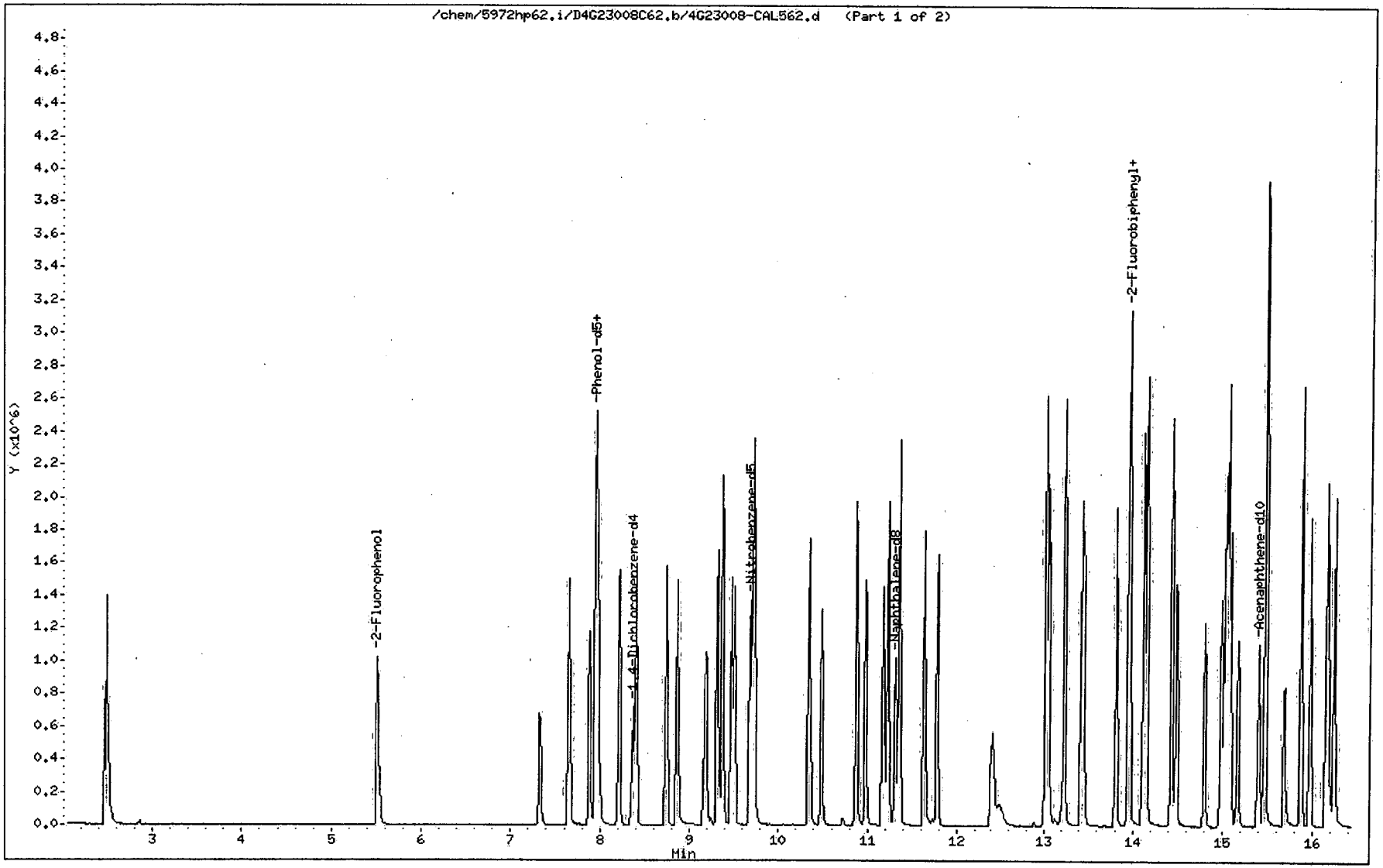
Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL562.d
Date : 23-JUL-2014 20:11
Client ID: SSTD050BP
Sample Info: 4G23008-CAL5:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



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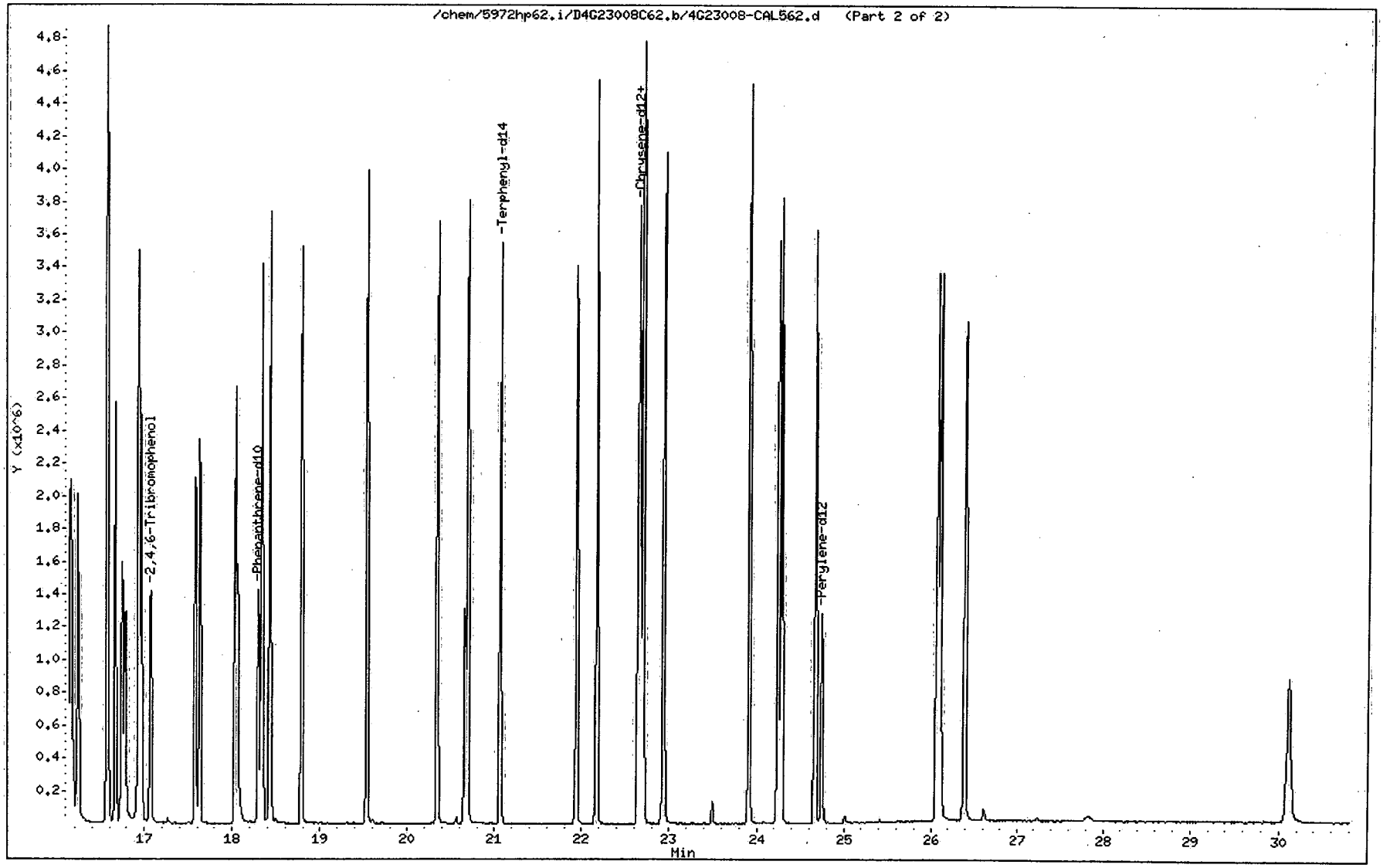
Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL562.d
Date : 23-JUL-2014 20:11
Client ID: SSTD050BP
Sample Info: 4G23008-CAL5:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL562.d
Report Date: 27-Jul-2014 19:14

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL562.d
Lab Smp Id: 4G23008-CAL5 Client Smp ID: SSTD050BP
Inj Date : 23-JUL-2014 20:11
Operator : OWS Inst ID: 5972hp62.i
Smp Info : 4G23008-CAL5:OWS
Misc Info : SSTD050BP
Comment :
Method : /chem/5972hp62.i/D4G23008C62.b/8270Dv26.m
Meth Date : 27-Jul-2014 19:14 ron Quant Type: ISTD
Cal Date : 23-JUL-2014 20:11 Cal File: 4G23008-CAL562.d
Als bottle: 3 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	8.365	8.365	(1.000)	167598	40.0000		
* 2 Naphthalene-d8	136	11.312	11.312	(1.000)	713029	40.0000		
* 3 Acenaphthene-d10	164	15.406	15.406	(1.000)	403605	40.0000		
* 4 Phenanthrene-d10	188	18.293	18.293	(1.000)	744021	40.0000		
* 5 Chrysene-d12	240	22.663	22.663	(1.000)	721941	40.0000		
* 6 Perylene-d12	264	24.741	24.741	(1.000)	561082	40.0000		
$ 7 2-Fluorophenol	112	5.509	5.509	(0.659)	551340	100.000	100	
$ 8 Phenol-d5	99	7.945	7.945	(0.950)	789290	100.000	100	
$ 9 Nitrobenzene-d5	82	9.685	9.685	(0.856)	717870	100.000	100	
$ 10 2-Fluorobiphenyl	172	13.963	13.963	(0.906)	1237881	100.000	99	
$ 11 2,4,6-Tribromophenol	330	17.075	17.075	(1.108)	246073	100.000	110	9340
$ 12 Terphenyl-d14	244	21.067	21.067	(0.930)	1390571	100.000	100	
13 N-Nitrosodimethylamine	42	2.469	2.469	(0.295)	397404	100.000	110	9222
14 Pyridine	79	2.490	2.490	(0.298)	693788	100.000	99	9639

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Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL562.d
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Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
15 Phenol	94	7.976	7.976	(0.953)	769273	100.000	100	
16 Aniline	93	7.648	7.648	(0.914)	964529	100.000	100	9229
17 Bis(2-chloroethyl)ether	93	7.884	7.884	(0.942)	613026	100.000	100	
18 2-Chlorophenol	128	7.955	7.955	(0.951)	616012	100.000	100	7520
19 1,3-Dichlorobenzene	146	8.221	8.221	(0.983)	642078	100.000	99	
20 1,4-Dichlorobenzene	146	8.406	8.406	(1.005)	646097	100.000	99	
21 Benzyl Alcohol	108	8.866	8.866	(1.060)	403644	100.000	110	
22 1,2-Dichlorobenzene	146	8.743	8.743	(1.045)	625313	100.000	99	
23 2-Methylphenol	108	9.316	9.316	(1.114)	577055	100.000	100	
24 2,2'-oxybis(1-Chloropropane)	45	9.183	9.183	(1.098)	953223	100.000	100	9511
25 3 & 4-Methylphenol	108	9.716	9.716	(1.162)	615019	100.000	110	
26 N-Nitroso-di-N-propylamine	70	9.470	9.470	(1.132)	522385	100.000	100	9842
27 Acetophenone	105	9.368	9.368	(0.828)	1003290	100.000	100	9475
28 Hexachloroethane	117	9.511	9.511	(1.137)	303067	100.000	100	9335
29 Nitrobenzene	77	9.726	9.726	(0.860)	921954	100.000	99	8410
30 Isophorone	82	10.340	10.340	(0.914)	1403030	100.000	100	9658
31 2-Nitrophenol	139	10.483	10.483	(0.927)	372702	100.000	100	9748
32 2,4-Dimethylphenol	122	10.872	10.872	(0.961)	544341	100.000	100	9668
33 Bis(2-chloroethoxy)methane	93	10.975	10.975	(0.970)	832624	100.000	100	9716
34 2,4-Dichlorophenol	162	11.179	11.179	(0.988)	555285	100.000	110	
35 1,2,4-Trichlorobenzene	180	11.230	11.230	(0.993)	556065	100.000	98	
36 Naphthalene	128	11.353	11.353	(1.004)	1715667	100.000	99	9754
37 4-Chloroaniline	127	11.630	11.630	(1.028)	909749	100.000	110	9711
38 Hexachlorobutadiene	225	11.783	11.783	(1.042)	302056	100.000	96	9569
39 4-Chloro-3-methylphenol	107	13.042	13.042	(1.153)	618981	100.000	110	8539
40 2-Methylnaphthalene	141	13.011	13.011	(1.150)	1068773	100.000	100	
41 1-Methylnaphthalene	142	13.226	13.226	(1.169)	1106254	100.000	100	
42 Hexachlorocyclopentadiene	237	13.452	13.452	(0.873)	383161	100.000	100	9126
43 1,2,4,5-Tetrachlorobenzene	216	13.421	13.421	(0.871)	573101	100.000	99	8009
44 2,4,6-Trichlorophenol	196	13.810	13.810	(0.896)	404271	100.000	110	
45 2,4,5-Trichlorophenol	196	13.943	13.943	(0.905)	422004	100.000	110	
46 2-Chloronaphthalene	162	14.117	14.117	(0.916)	1136489	100.000	100	
47 2-Nitroaniline	65	14.485	14.485	(0.940)	429712	100.000	100	8725
48 Dimethylphthalate	163	15.028	15.028	(0.975)	1399864	100.000	100	8798
49 1,3-Dinitrobenzene	122	14.987	14.987	(0.973)	107830	100.000	110	
50 2,6-Dinitrotoluene	165	15.089	15.089	(0.979)	353730	100.000	110	0 (M)
51 Acenaphthylene	152	15.058	15.058	(0.977)	1862528	100.000	100	8523
52 3-Nitroaniline	138	15.468	15.468	(1.004)	392489	100.000	110	9034
53 Acenaphthene	153	15.478	15.478	(1.005)	1085827	100.000	99	9689
54 2,4-Dinitrophenol	184	15.683	15.683	(1.018)	212709	100.000	100	
55 4-Nitrophenol	139	16.164	16.164	(1.049)	342861	100.000	100	8368
56 2,4-Dinitrotoluene	165	15.969	15.969	(1.037)	507517	100.000	110	9500
57 Dibenzofuran	168	15.867	15.867	(1.030)	1573807	100.000	100	9658
58 2,3,4,6-Tetrachlorophenol	232	16.235	16.235	(1.054)	347224	100.000	110	
59 Diethylphthalate	149	16.584	16.584	(1.076)	1424029	100.000	100	9368
60 4-Chlorophenyl-phenylether	204	16.665	16.665	(1.082)	599337	100.000	100	9669
61 Fluorene	166	16.573	16.573	(1.076)	1202336	100.000	100	9558

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Report Date: 27-Jul-2014 19:14

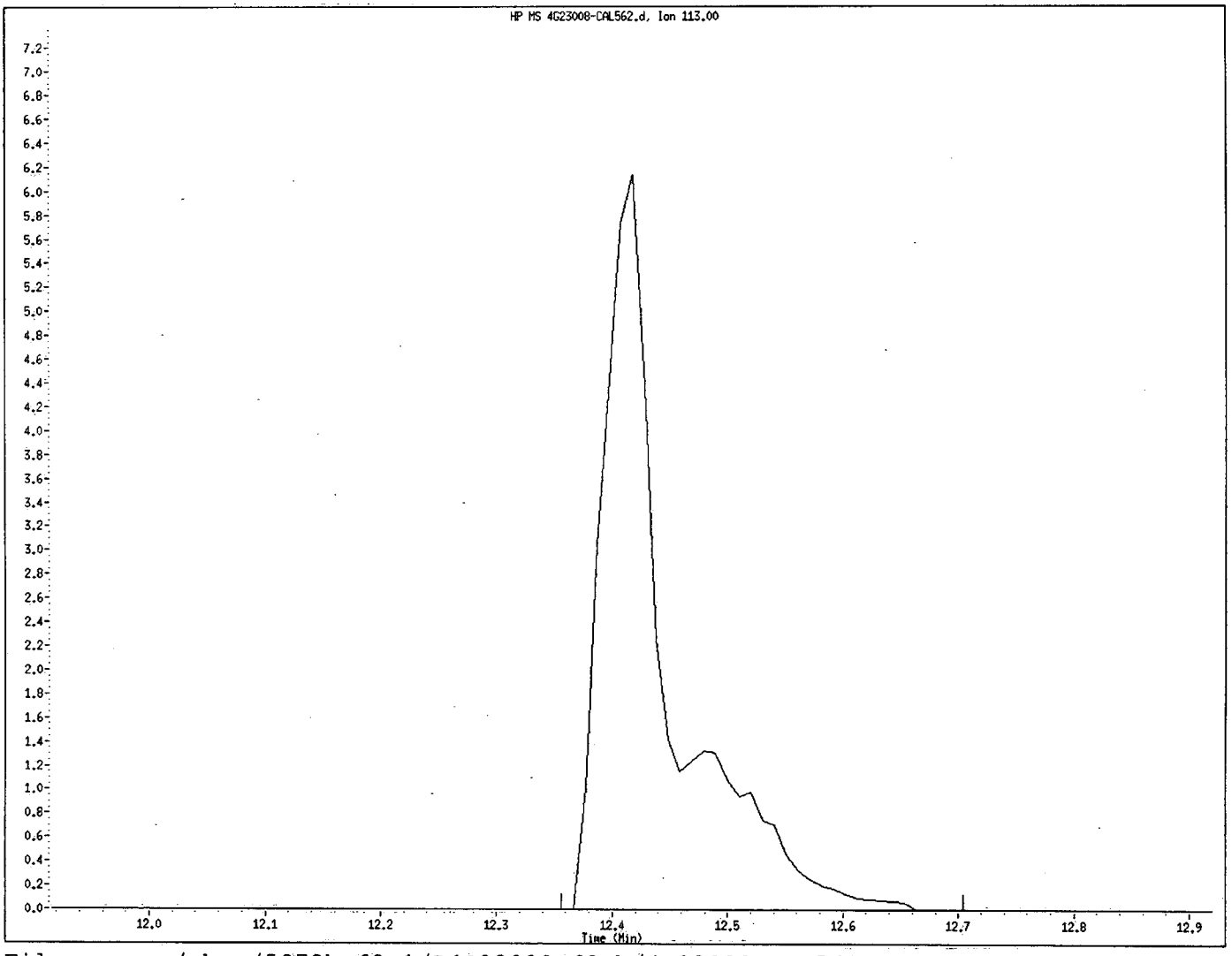
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
62 4-Nitroaniline	138	16.747	16.747	(1.087)	421682	100.000	110	9153
63 4,6-Dinitro-2-methylphenol	198	16.788	16.788	(0.918)	311605	100.000	100	0 (M)
64 N-Nitrosodiphenylamine (1)	169	16.931	16.931	(0.926)	1100219	100.000	100	9829
65 1,2-Diphenyl Hydrazine	77	16.962	16.962	(1.101)	1485671	100.000	99	9250
66 4-Bromophenyl-phenylether	248	17.587	17.587	(0.961)	371162	100.000	100	8798
67 Hexachlorobenzene	284	17.638	17.638	(0.964)	471762	100.000	100	9676
68 Pentachlorophenol	266	18.068	18.068	(0.988)	267870	100.000	99	8446
69 Phenanthrene	178	18.334	18.334	(1.002)	1937844	100.000	100	
70 Anthracene	178	18.426	18.426	(1.007)	1977043	100.000	100	
71 Carbazole	167	18.794	18.794	(1.027)	1922901	100.000	100	9738
72 Di-n-butylphthalate	149	19.541	19.541	(1.068)	2685245	100.000	100	9712
73 Fluoranthene	202	20.350	20.350	(1.112)	2009049	100.000	100	
74 Pyrene	202	20.698	20.698	(0.913)	2067919	100.000	100	
75 Butylbenzylphthalate	149	21.937	21.937	(0.968)	1219039	100.000	110	9825
76 3,3'-Dichlorobenzidine	252	22.694	22.694	(1.001)	705202	100.000	100	8715
77 bis(2-ethylhexyl)Phthalate	149	22.940	22.940	(1.012)	1717096	100.000	100	9058
78 Benzo(a)anthracene	228	22.643	22.643	(0.999)	1849521	100.000	100	
79 Chrysene	228	22.704	22.704	(1.002)	1641565	100.000	98	
80 Di-n-octylphthalate	149	23.912	23.912	(0.966)	2959177	100.000	110	
81 Benzo(b)fluoranthene	252	24.239	24.239	(0.980)	1944613	100.000	100	
82 Benzo(k)fluoranthene	252	24.280	24.280	(0.981)	1919580	100.000	98	
83 Benzo(a)pyrene	252	24.669	24.669	(0.997)	1868797	100.000	100	
84 Indeno(1,2,3-cd)pyrene	276	26.072	26.072	(1.054)	1838623	100.000	100	
85 Dibenzo(a,h)anthracene	278	26.113	26.113	(1.055)	1778593	100.000	100	9293
86 Benzo(g,h,i)perylene	276	26.399	26.399	(1.067)	1898598	100.000	100	
87 Benzaldehyde	77	7.321	7.321	(0.875)	264996	100.000	100	9756
88 Caprolactam	113	12.418	12.418	(1.098)	244732	100.000	120	9627 (M)
89 Atrazine	215	18.037	18.037	(0.986)	196316	100.000	100	9698
90 1,1'-Biphenyl	154	14.158	14.158	(0.919)	1362920	100.000	100	9387
91 Diphenyl ether	170	14.434	14.434	(0.937)	760239	100.000	100	8163
223 Benzidine	184	20.667	20.667	(0.912)	703378	100.000	100	9018

QC Flag Legend

M - Compound response manually integrated.

7/27/2014

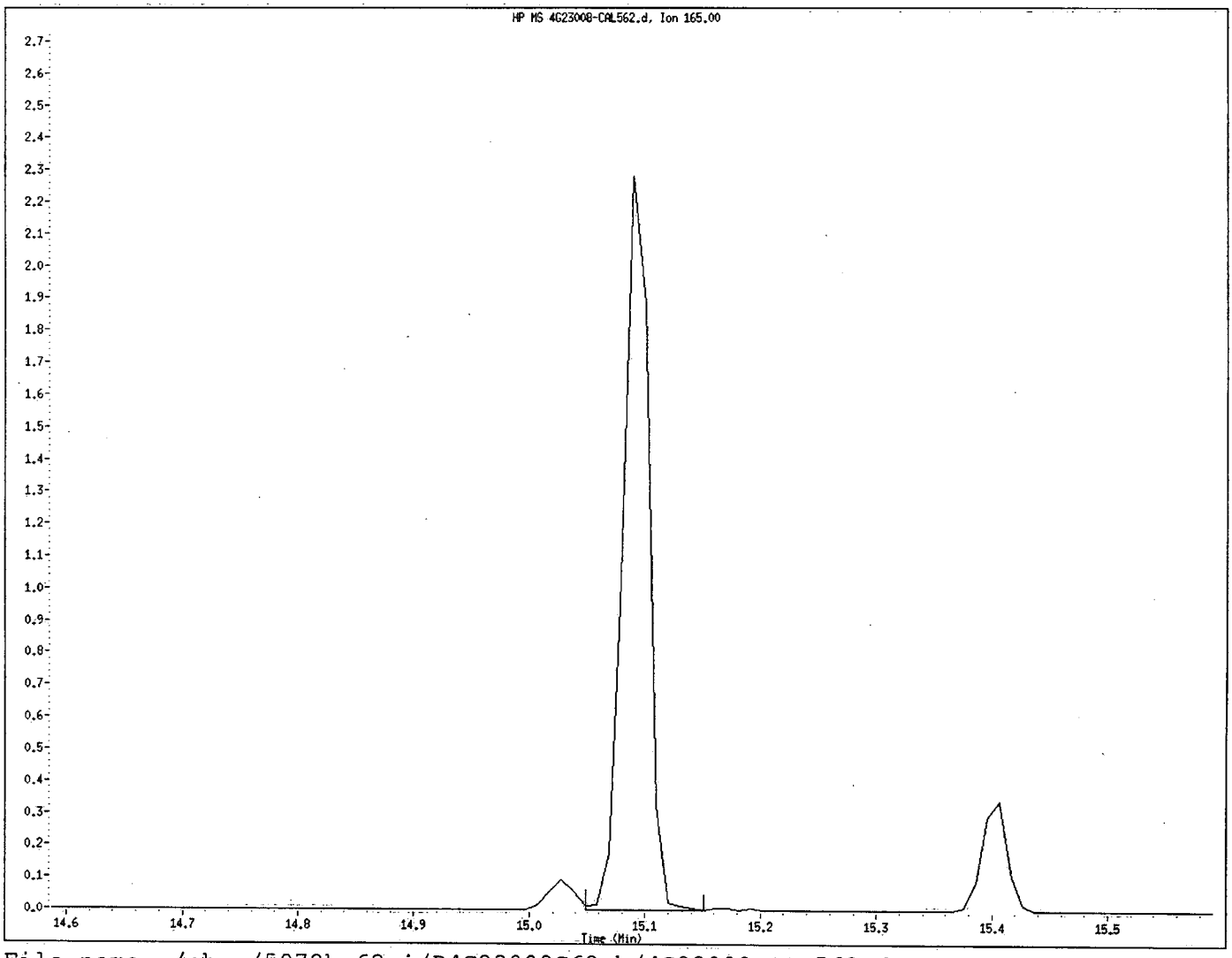
Caprolactam CAS Number 105-60-2 Area = 244732 Manually integrated



File name: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL562.d
Client ID: SSTD050BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 20:11
Retention Time: 12.42
Operator ID: OWS

7/27/2014

2,6-Dinitrotoluene CAS Number 606-20-2 Area = 353730 Manually integrated



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Client ID: SSTD050BP
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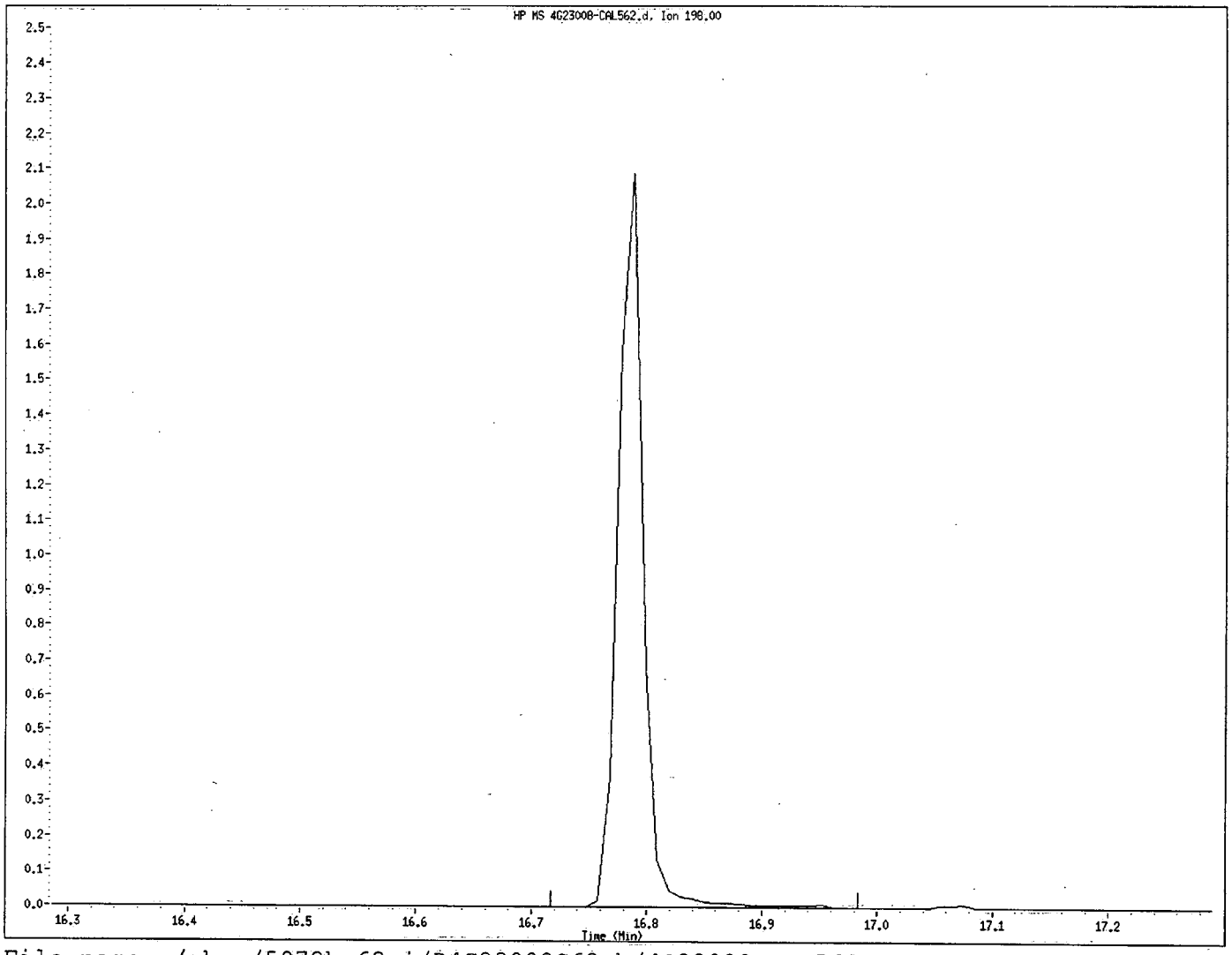
Injection Date and Time: 23-JUL-2014 20:11
Retention Time: 15.09
Operator ID: OWS

7/27/2014

4,6-Dinitro-2-methylphenol CAS Number 534-52-1 Area = 311605 Manually integrate



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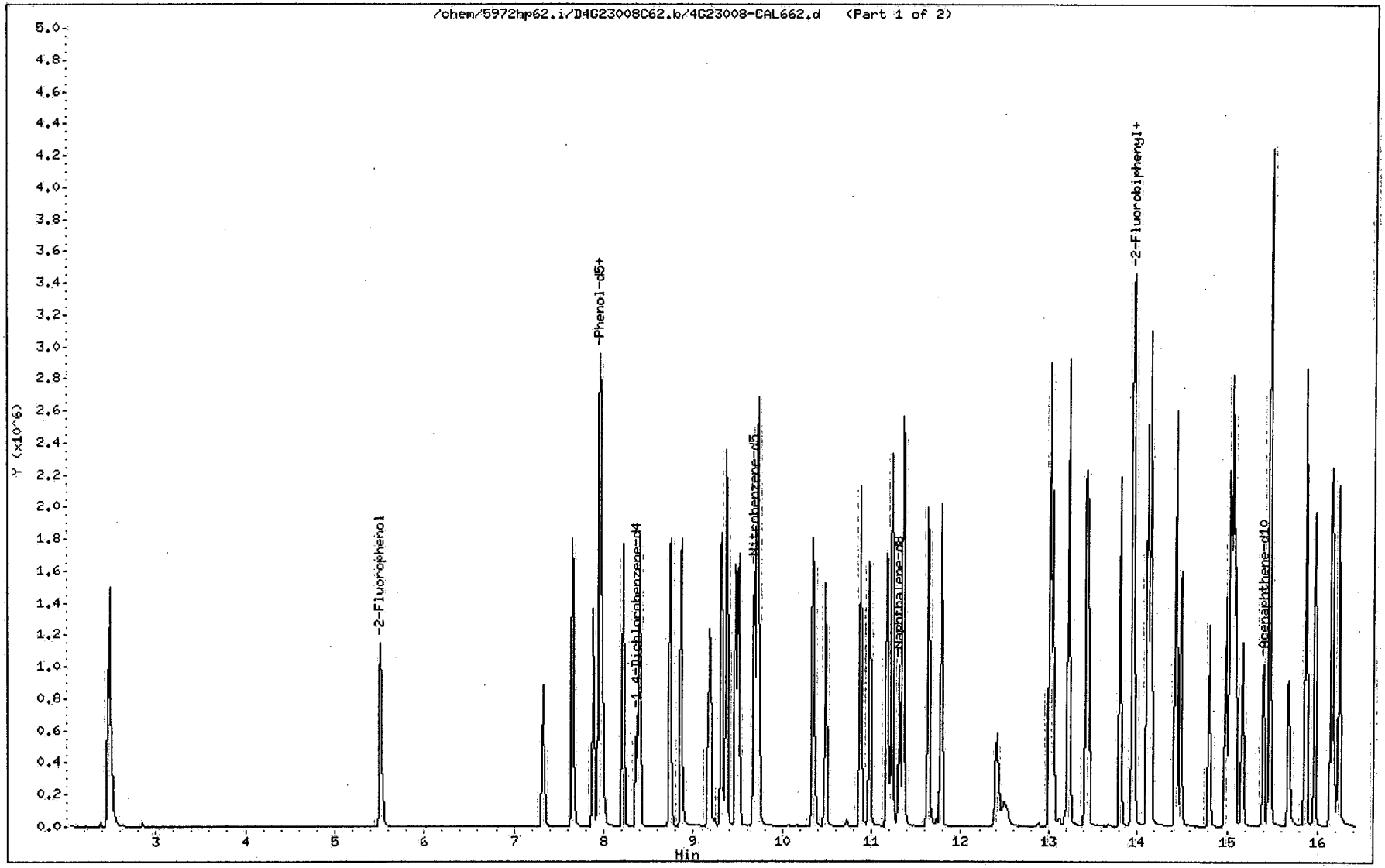
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 20:11
Retention Time: 16.79
Operator ID: OWS

7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL662.d
Date : 23-JUL-2014 19:31
Client ID: SSTD060BP
Sample Info: 4G23008-CAL6:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

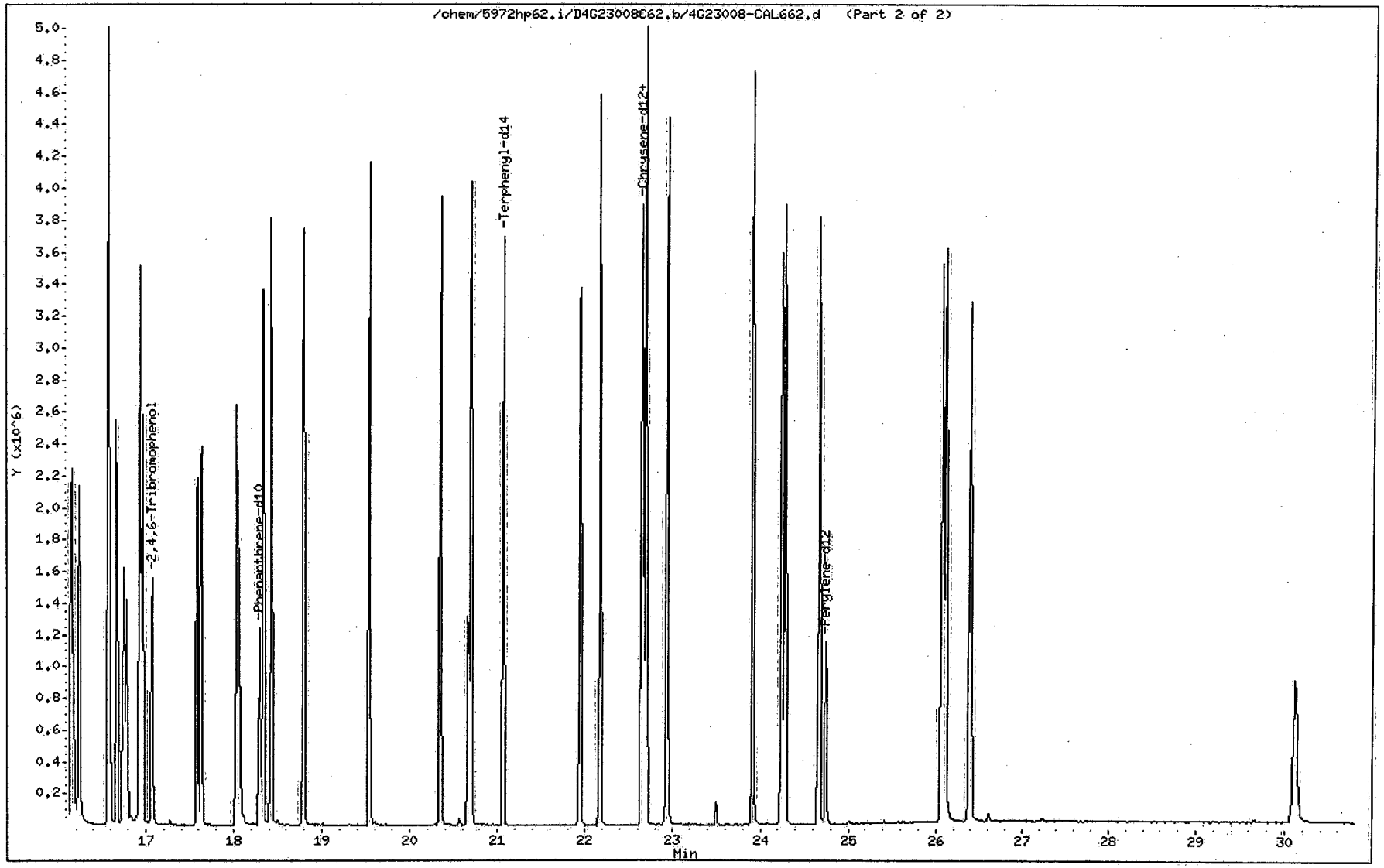
Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL662.d
Date : 23-JUL-2014 19:31
Client ID: SSTD060BP
Sample Info: 4G23008-CAL6:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL662.d
Report Date: 27-Jul-2014 19:14

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL662.d
Lab Smp Id: 4G23008-CAL6 Client Smp ID: SSTD060BP
Inj Date : 23-JUL-2014 19:31
Operator : OWS Inst ID: 5972hp62.i
Smp Info : 4G23008-CAL6:OWS
Misc Info : SSTD060BP
Comment :
Method : /chem/5972hp62.i/D4G23008C62.b/8270Dv26.m
Meth Date : 27-Jul-2014 19:14 ron Quant Type: ISTD
Cal Date : 23-JUL-2014 19:31 Cal File: 4G23008-CAL662.d
Als bottle: 2 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	8.364	8.364	(1.000)	164319	40.0000		
* 2 Naphthalene-d8	136	11.312	11.312	(1.000)	680546	40.0000		
* 3 Acenaphthene-d10	164	15.406	15.406	(1.000)	366674	40.0000		(H)
* 4 Phenanthrene-d10	188	18.292	18.292	(1.000)	660993	40.0000		
* 5 Chrysene-d12	240	22.663	22.663	(1.000)	621514	40.0000		
* 6 Perylene-d12	264	24.741	24.741	(1.000)	484253	40.0000		
$ 7 2-Fluorophenol	112	5.509	5.509	(0.659)	650153	120.000	120	(AH)
$ 8 Phenol-d5	99	7.945	7.945	(0.950)	911744	120.000	120	(A)
$ 9 Nitrobenzene-d5	82	9.685	9.685	(0.856)	820843	120.000	120	(A)
$ 10 2-Fluorobiphenyl	172	13.963	13.963	(0.902)	1367976	120.000	120	
$ 11 2,4,6-Tribromophenol	330	17.074	17.074	(1.102)	264433	120.000	140	9363 (A)
$ 12 Terphenyl-d14	244	21.066	21.066	(0.930)	1457971	120.000	120	(A)
13 N-Nitrosodimethylamine	42	2.458	2.458	(0.294)	418298	120.000	120	9266
14 Pyridine	79	2.489	2.489	(0.298)	821214	120.000	120	9659

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Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL662.d
Report Date: 27-Jul-2014 19:14

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
15 Phenol	94	7.975	7.975	(0.953)	897232	120.000	120	(A)
16 Aniline	93	7.648	7.648	(0.914)	1122218	120.000	130	9192 (A)
17 Bis(2-chloroethyl)ether	93	7.883	7.883	(0.942)	725965	120.000	120	(A)
18 2-Chlorophenol	128	7.955	7.955	(0.951)	724410	120.000	120	7705 (A)
19 1,3-Dichlorobenzene	146	8.221	8.221	(0.983)	743529	120.000	120	
20 1,4-Dichlorobenzene	146	8.405	8.405	(1.005)	762083	120.000	120	
21 Benzyl Alcohol	108	8.866	8.866	(1.060)	457199	120.000	140	(A)
22 1,2-Dichlorobenzene	146	8.743	8.743	(1.045)	741033	120.000	120	
23 2-Methylphenol	108	9.316	9.316	(1.114)	656807	120.000	130	(A)
24 2,2'-oxybis(1-Chloropropane)	45	9.183	9.183	(1.098)	1109531	120.000	120	9549 (A)
25 3 & 4-Methylphenol	108	9.715	9.715	(1.162)	698176	120.000	130	(A)
26 N-Nitroso-di-N-propylamine	70	9.470	9.470	(1.132)	591616	120.000	120	9852 (A)
27 Acetophenone	105	9.367	9.367	(0.828)	1125862	120.000	120	9389
28 Hexachloroethane	117	9.511	9.511	(1.137)	351524	120.000	120	9320 (A)
29 Nitrobenzene	77	9.726	9.726	(0.860)	1043184	120.000	120	8482
30 Isophorone	82	10.340	10.340	(0.914)	1514006	120.000	120	9677 (A)
31 2-Nitrophenol	139	10.483	10.483	(0.927)	433941	120.000	130	9714 (A)
32 2,4-Dimethylphenol	122	10.882	10.882	(0.962)	628614	120.000	130	9153 (A)
33 Bis(2-chloroethoxy)methane	93	10.984	10.984	(0.971)	960089	120.000	120	9644 (A)
34 2,4-Dichlorophenol	162	11.179	11.179	(0.988)	634203	120.000	130	(A)
35 1,2,4-Trichlorobenzene	180	11.230	11.230	(0.993)	653788	120.000	120	(A)
36 Naphthalene	128	11.353	11.353	(1.004)	1939246	120.000	120	9723
37 4-Chloroaniline	127	11.629	11.629	(1.028)	999303	120.000	120	9674 (A)
38 Hexachlorobutadiene	225	11.783	11.783	(1.042)	362229	120.000	120	9552
39 4-Chloro-3-methylphenol	107	13.042	13.042	(1.153)	655635	120.000	130	8635 (A)
40 2-Methylnaphthalene	141	13.011	13.011	(1.150)	1167954	120.000	120	(A)
41 1-Methylnaphthalene	142	13.226	13.226	(1.169)	1229295	120.000	120	(A)
42 Hexachlorocyclopentadiene	237	13.451	13.451	(0.868)	449052	120.000	140	9123 (A)
43 1,2,4,5-Tetrachlorobenzene	216	13.431	13.431	(0.867)	650763	120.000	120	8221 (A)
44 2,4,6-Trichlorophenol	196	13.809	13.809	(0.892)	436914	120.000	140	(AH)
45 2,4,5-Trichlorophenol	196	13.942	13.942	(0.900)	478277	120.000	140	(A)
46 2-Chloronaphthalene	162	14.116	14.116	(0.911)	1238154	120.000	120	(A)
47 2-Nitroaniline	65	14.495	14.495	(0.936)	454251	120.000	130	8558 (A)
48 Dimethylphthalate	163	15.027	15.027	(0.970)	1482985	120.000	120	8873 (A)
49 1,3-Dinitrobenzene	122	14.986	14.986	(0.968)	109563	120.000	130	(AH)
50 2,6-Dinitrotoluene	165	15.089	15.089	(0.979)	371594	120.000	130	0 (AM)
51 Acenaphthylene	152	15.058	15.058	(0.972)	1999715	120.000	120	8503 (A)
52 3-Nitroaniline	138	15.478	15.478	(0.999)	406163	120.000	130	8975 (A)
53 Acenaphthene	153	15.478	15.478	(0.999)	1173488	120.000	120	9685
54 2,4-Dinitrophenol	184	15.682	15.682	(1.013)	223638	120.000	120	(H)
55 4-Nitrophenol	139	16.164	16.164	(1.044)	349351	120.000	120	8407
56 2,4-Dinitrotoluene	165	15.969	15.969	(1.031)	522210	120.000	140	9484 (A)
57 Dibenzofuran	168	15.867	15.867	(1.024)	1724256	120.000	120	9672 (A)
58 2,3,4,6-Tetrachlorophenol	232	16.235	16.235	(1.048)	365071	120.000	140	(A)
59 Diethylphthalate	149	16.583	16.583	(1.071)	1457247	120.000	120	9442
60 4-Chlorophenyl-phenylether	204	16.675	16.675	(1.077)	626356	120.000	120	9270 (A)
61 Fluorene	166	16.573	16.573	(1.070)	1260041	120.000	120	9601

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Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL662.d
Report Date: 27-Jul-2014 19:14

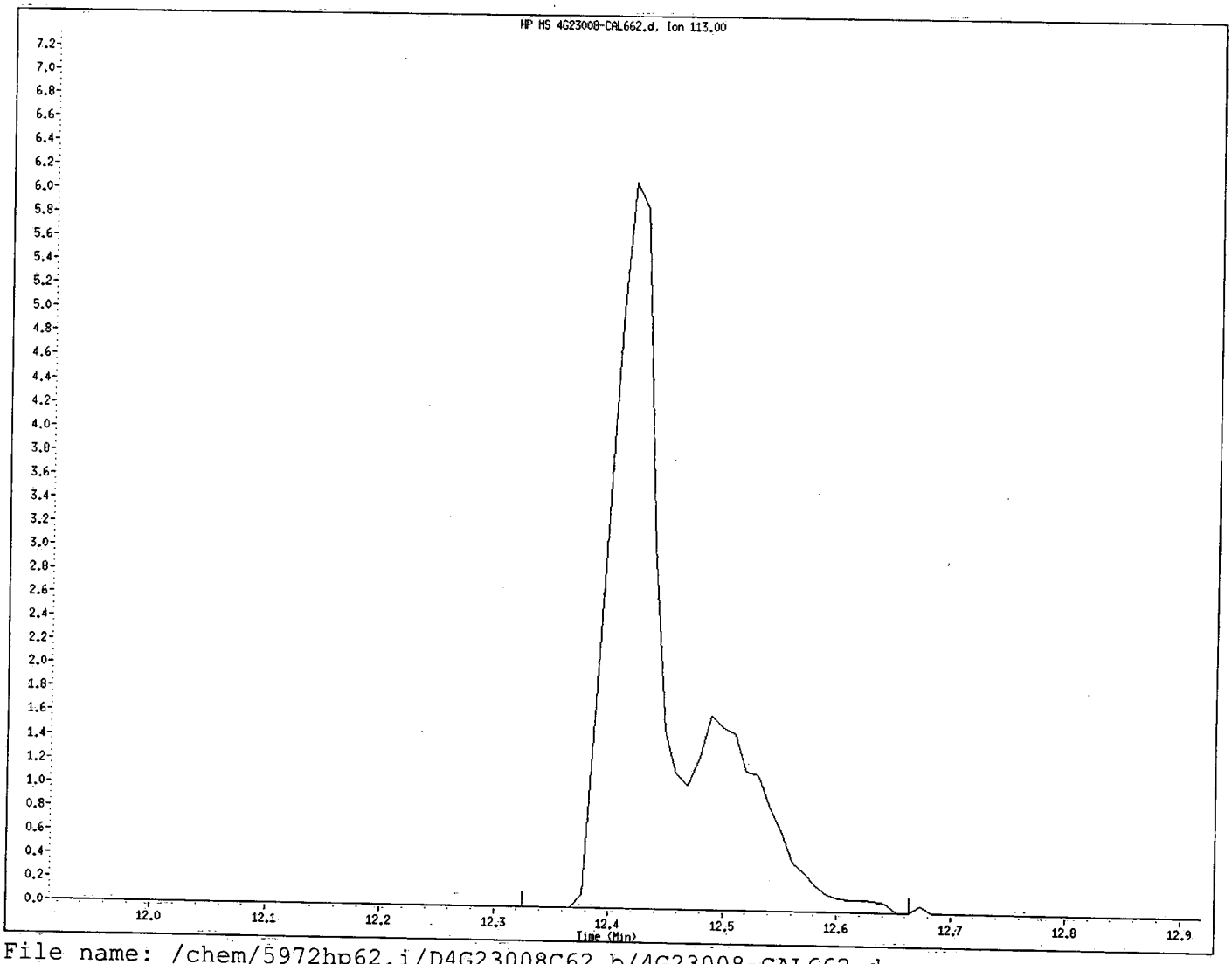
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
62 4-Nitroaniline	138	16.757	16.757	(1.082)	433805	120.000	140	9003 (A)
63 4,6-Dinitro-2-methylphenol	198	16.788	16.788	(0.918)	324810	120.000	120	0 (AM)
64 N-Nitrosodiphenylamine (1)	169	16.931	16.931	(0.926)	1123363	120.000	120	9826
65 1,2-Diphenyl Hydrazine	77	16.962	16.962	(1.095)	1574806	120.000	120	9212
66 4-Bromophenyl-phenylether	248	17.586	17.586	(0.961)	385614	120.000	120	8855 (A)
67 Hexachlorobenzene	284	17.637	17.637	(0.964)	499647	120.000	120	9739 (A)
68 Pentachlorophenol	266	18.067	18.067	(0.988)	293099	120.000	120	8569 (A)
69 Phenanthrene	178	18.344	18.344	(1.003)	2036002	120.000	120	
70 Anthracene	178	18.426	18.426	(1.007)	2057942	120.000	120	(A)
71 Carbazole	167	18.794	18.794	(1.027)	2035893	120.000	120	9752 (A)
72 Di-n-butylphthalate	149	19.541	19.541	(1.068)	2788192	120.000	130	9719 (A)
73 Fluoranthene	202	20.350	20.350	(1.112)	2088468	120.000	120	
74 Pyrene	202	20.698	20.698	(0.913)	2168562	120.000	120	(A)
75 Butylbenzylphthalate	149	21.946	21.946	(0.968)	1244788	120.000	140	9384 (A)
76 3,3'-Dichlorobenzidine	252	22.694	22.694	(1.001)	729107	120.000	120	8861 (A)
77 bis(2-ethylhexyl)Phthalate	149	22.939	22.939	(1.012)	1747236	120.000	130	9132 (A)
78 Benzo(a)anthracene	228	22.642	22.642	(0.999)	1919974	120.000	120	(A)
79 Chrysene	228	22.704	22.704	(1.002)	1714084	120.000	120	
80 Di-n-octylphthalate	149	23.912	23.912	(0.966)	3080611	120.000	140	(A)
81 Benzo(b)fluoranthene	252	24.239	24.239	(0.980)	2006534	120.000	120	(A)
82 Benzo(k)fluoranthene	252	24.280	24.280	(0.981)	2055979	120.000	120	(A)
83 Benzo(a)pyrene	252	24.669	24.669	(0.997)	1981805	120.000	130	(A)
84 Indeno(1,2,3-cd)pyrene	276	26.071	26.071	(1.054)	1937020	120.000	130	(A)
85 Dibenzo(a,h)anthracene	278	26.112	26.112	(1.055)	1870600	120.000	120	8657 (A)
86 Benzo(g,h,i)perylene	276	26.399	26.399	(1.067)	2019861	120.000	120	(A)
87 Benzaldehyde	77	7.320	7.320	(0.875)	313964	120.000	120	9744 (A)
88 Caprolactam	113	12.417	12.417	(1.098)	245831	120.000	140	9632 (AM)
89 Atrazine	215	18.037	18.037	(0.986)	197251	120.000	120	9664 (A)
90 1,1'-Biphenyl	154	14.157	14.157	(0.914)	1508322	120.000	120	9466 (A)
91 Diphenyl ether	170	14.434	14.434	(0.932)	821398	120.000	120	8143
223 Benzidine	184	20.667	20.667	(0.912)	704880	120.000	120	8999

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Robin Hamm 7/27/2014

Caprolactam CAS Number 105-60-2 Area = 245831 Manually integrated



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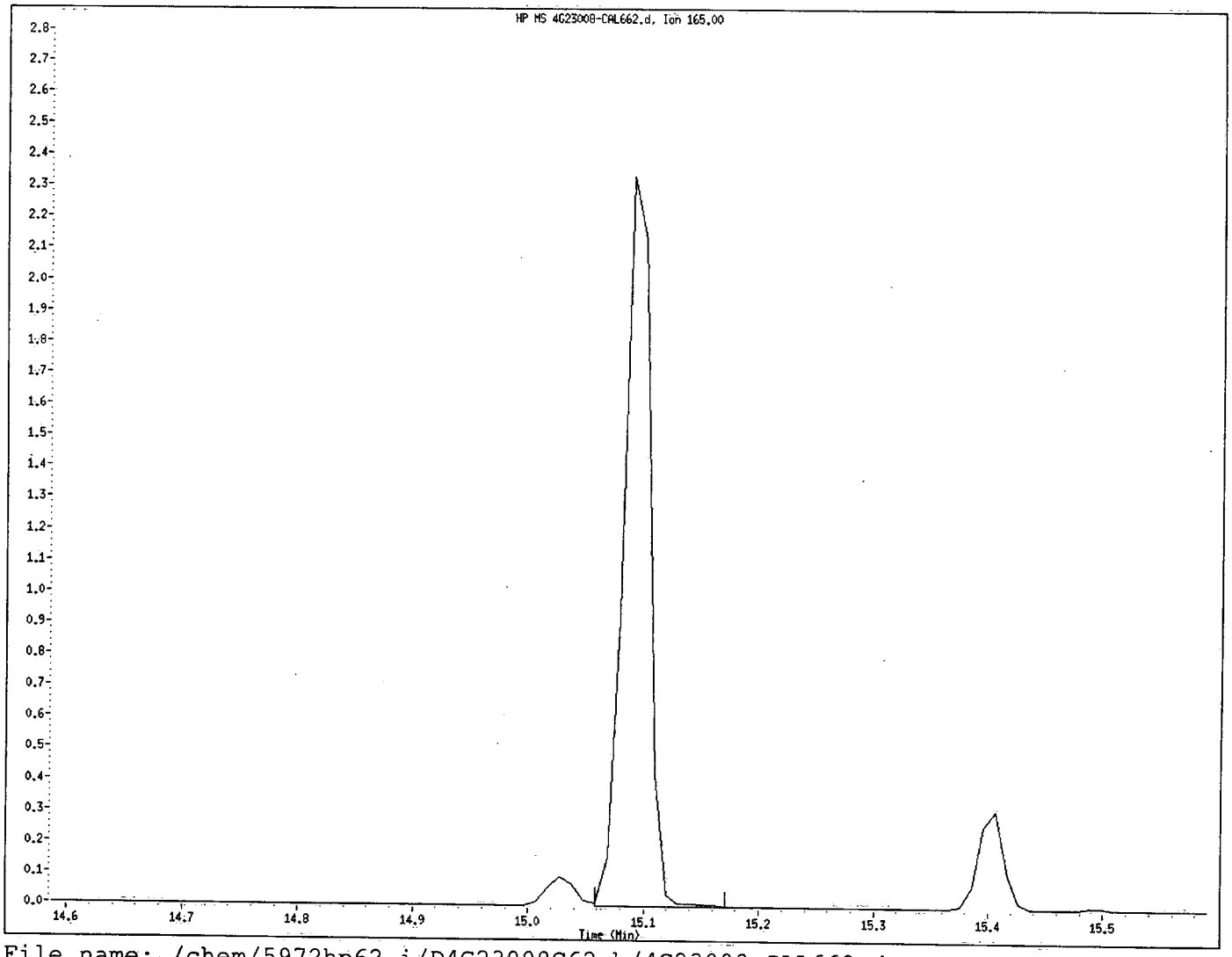
Client ID: SSTD060BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 19:31
Retention Time: 12.42
Operator ID: OWS

7/27/2014

2,6-Dinitrotoluene CAS Number 606-20-2 Area = 371594 Manually integrated



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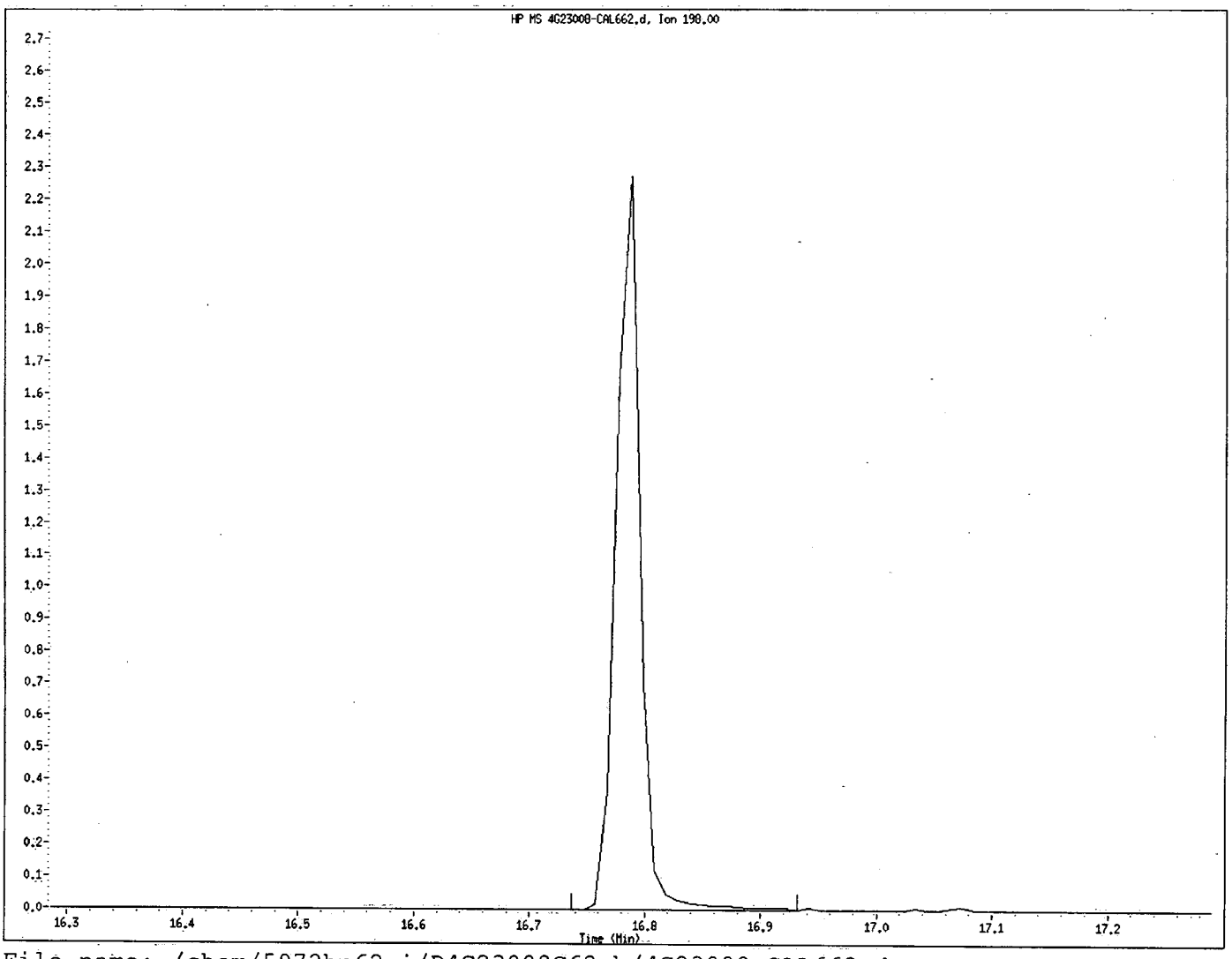
Client ID: SSTD060BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 19:31
Retention Time: 15.09
Operator ID: OWS

7/27/2014

4,6-Dinitro-2-methylphenol CAS Number 534-52-1 Area = 324810 Manually integrate



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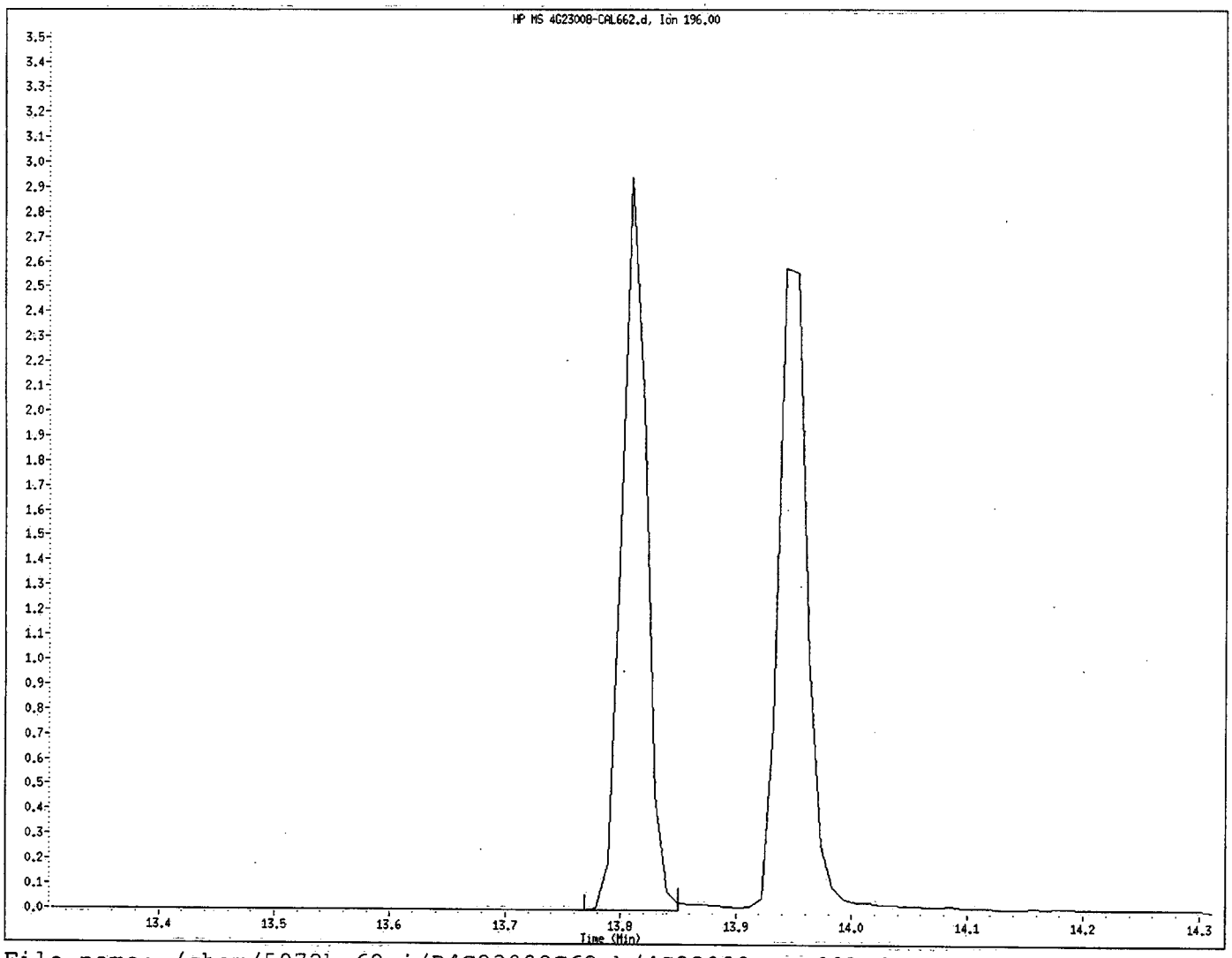
Client ID: SSTD060BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 19:31
Retention Time: 16.79
Operator ID: OWS

7/27/2014

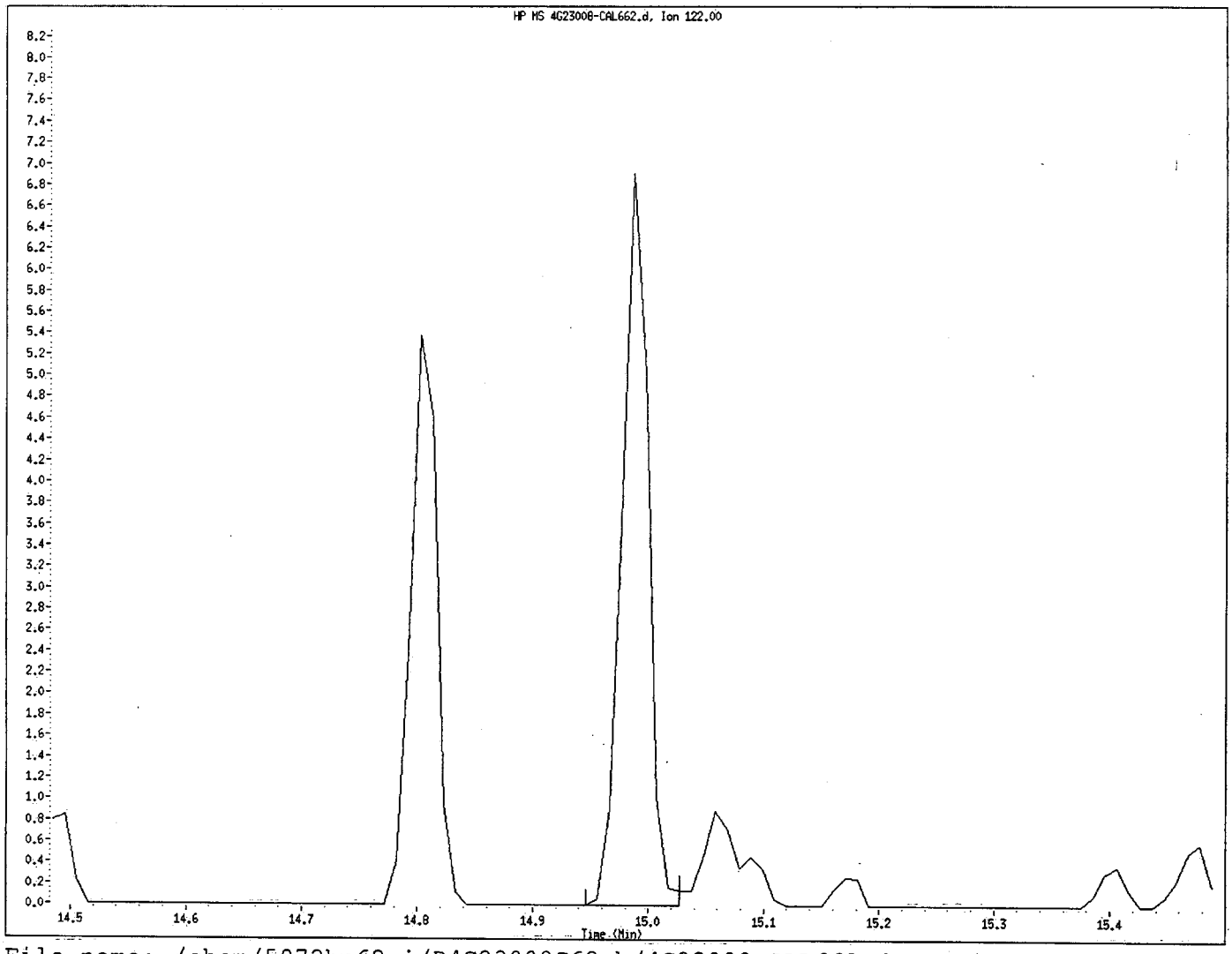
2,4,6-Trichlorophenol CAS Number 88-06-2 Area = 436914 User selected hit



File name: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL662.d
Client ID: SSTD060BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 19:31
Retention Time: 13.81
Operator ID: OWS

7/27/2014

1,3-Dinitrobenzene CAS Number 99-65-0 Area = 109563 User selected hit



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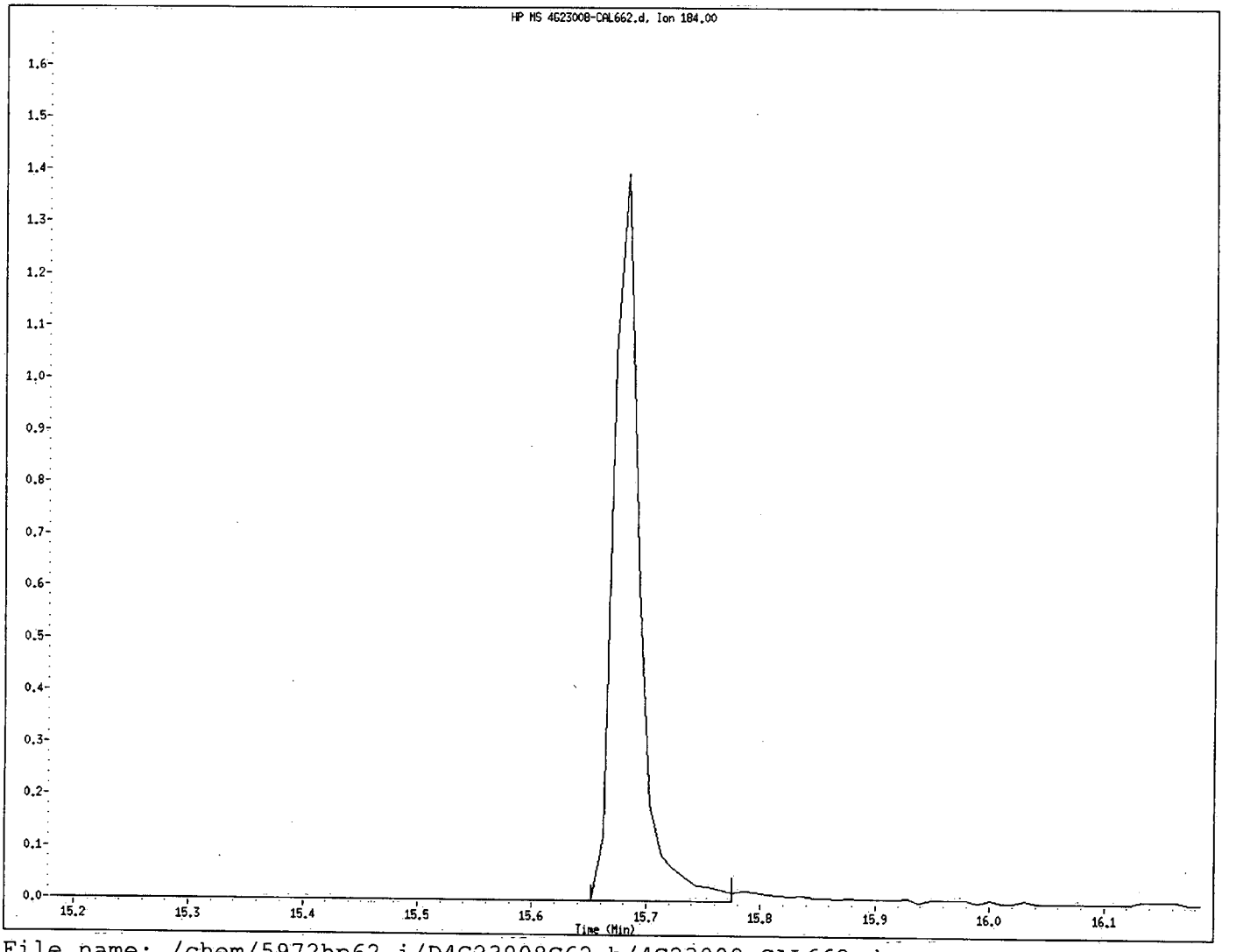
Client ID: SSTD060BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 19:31
Retention Time: 14.99
Operator ID: OWS

7/27/2014

2,4-Dinitrophenol CAS Number 51-28-5 Area = 223638 User selected hit



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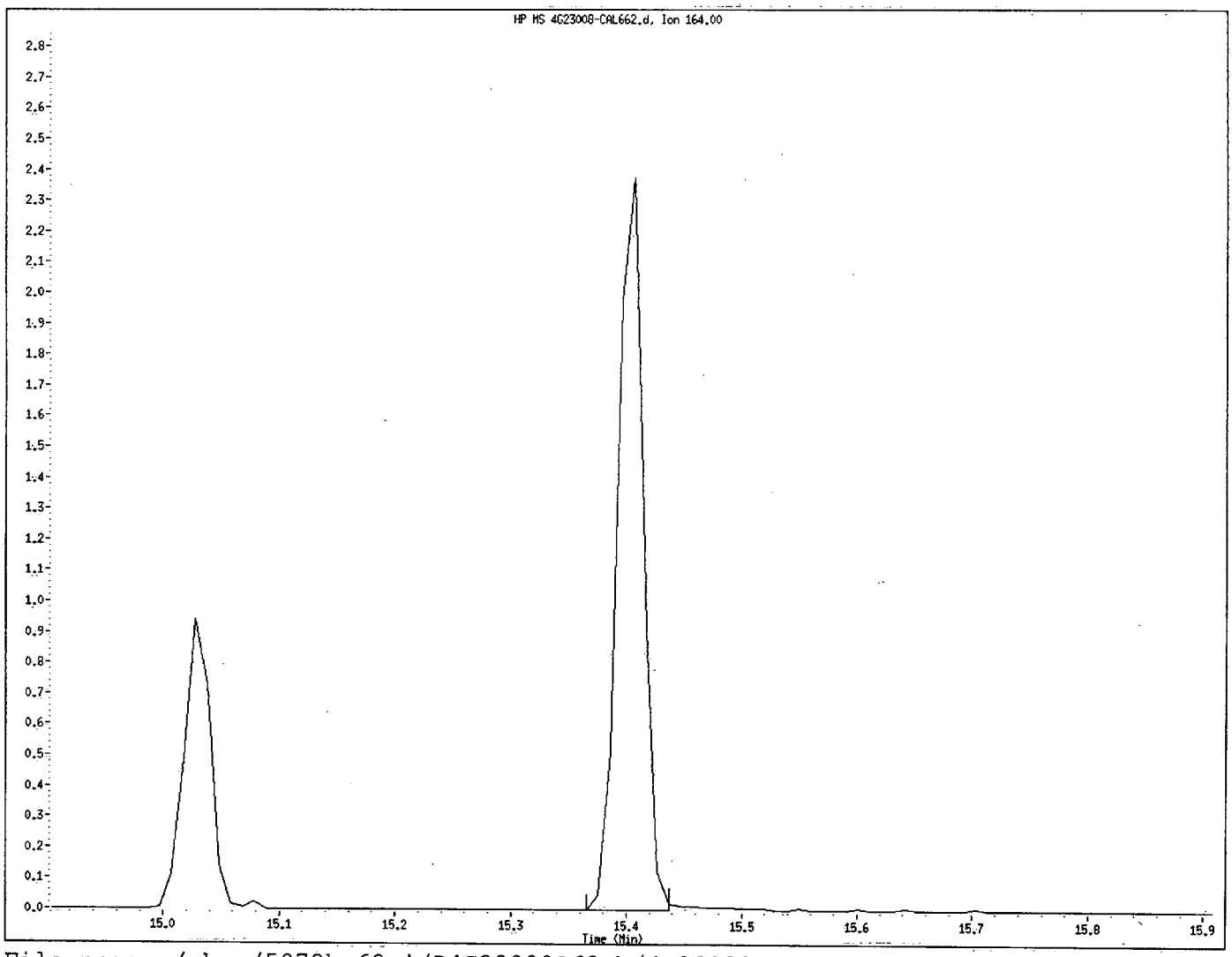
Client ID: SSTD060BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 19:31
Retention Time: 15.68
Operator ID: OWS

7/27/2014

Acenaphthene-d10 CAS Number 15067-26-2 Area = 366674 User selected hit



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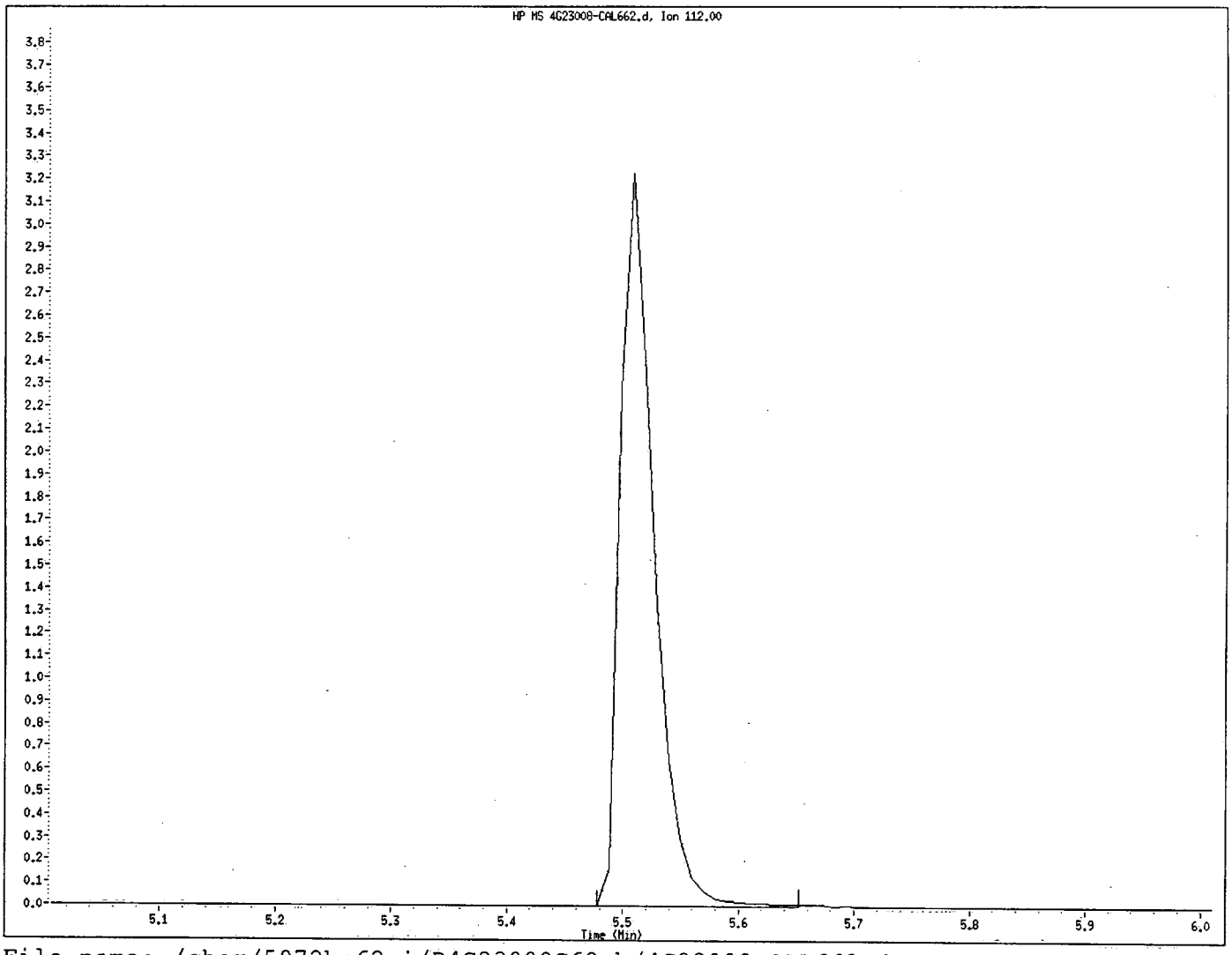
Client ID: SSTD060BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 19:31
Retention Time: 15.41
Operator ID: OWS

7/27/2014

2-Fluorophenol CAS Number 367-12-4 Area = 650153 User selected hit



File name: /chem/5972hp62.i/D4G23008C62.b/4G23008-CAL662.d
Client ID: SSTD060BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 19:31
Retention Time: 5.51
Operator ID: OWS

7/27/2014

INITIAL CALIBRATION DATA

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024

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

Calibration: 4080605 Instrument: 5972hp66

Calibration Date: 8/5/2014 11:46:45AM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
Phenol	5	1.904857	10	1.942329	25	1.839563	40	1.872306	50	1.751577	60	1.761814
Bis(2-chloroethyl)ether	5	1.77448	10	1.675283	25	1.56378	40	1.57855	50	1.48641	60	1.416358
2-Chlorophenol	5	1.354636	10	1.409957	25	1.338228	40	1.401467	50	1.307542	60	1.276479
2-Methylphenol	5	1.284791	10	1.274355	25	1.22002	40	1.286037	50	1.138358	60	1.150365
2,2'-oxybis(1-Chloropropane)	5	4.027744	10	4.006956	25	3.633313	40	3.713435	50	3.453699	60	3.357255
3 & 4-Methylphenol	5	1.560845	10	1.365772	25	1.252033	40	1.358185	50	1.188052	60	1.210969
N-Nitroso-di-N-propylamine	5	1.282655	10	1.286217	25	1.111229	40	1.197118	50	1.072865	60	1.10656
Acetophenone	5	0.5687306	10	0.5572195	25	0.5683603	40	0.5483337	50	0.5584814	60	0.5272721
Hexachloroethane	5	0.6809198	10	0.6760309	25	0.6351426	40	0.66699	50	0.5985171	60	0.6107983
Nitrobenzene	5	0.3220745	10	0.292943	25	0.3433557	40	0.3462404	50	0.3594202	60	0.333756
Isophorone	5	0.7927393	10	0.7083301	25	0.8026875	40	0.7845068	50	0.8094025	60	0.7830208
2-Nitrophenol	5	0.1040382	10	0.1249801	25	0.1588199	40	0.1630537	50	0.1604078	60	0.1531745
2,4-Dimethylphenol	5	0.3051735	10	0.3030035	25	0.335616	40	0.3223196	50	0.3459388	60	0.3201823
Bis(2-chloroethoxy)methane	5	0.5162926	10	0.5084345	25	0.5017717	40	0.4918128	50	0.5005066	60	0.4758496
2,4-Dichlorophenol	5	0.2767201	10	0.2725939	25	0.3138333	40	0.3141566	50	0.3287464	60	0.3069066
Naphthalene	5	1.031397	10	0.9773572	25	1.063967	40	0.9874345	50	1.020272	60	0.9457276
4-Chloroaniline	5	0.4842319	10	0.4502132	25	0.4970999	40	0.4850937	50	0.4915811	60	0.4740906
Hexachlorobutadiene	5	0.1855834	10	0.1902702	25	0.2043813	40	0.1942827	50	0.2096976	60	0.1930076
4-Chloro-3-methylphenol	5	0.298904	10	0.2725472	25	0.2961198	40	0.2986484	50	0.3025268	60	0.2952883
2-Methylnaphthalene	5	0.5978496	10	0.5566807	25	0.6030277	40	0.5859837	50	0.5965949	60	0.5814185
Hexachlorocyclopentadiene	5	0.2922197	10	0.3591015	25	0.425504	40	0.4257839	50	0.4223664	60	0.3975017
2,4,6-Trichlorophenol	5	0.2974136	10	0.3168564	25	0.4050214	40	0.3920835	50	0.3933987	60	0.3722638
2,4,5-Trichlorophenol	5	0.3038813	10	0.3333965	25	0.4238221	40	0.4304074	50	0.3881322	60	0.3885308
2-Chloronaphthalene	5	1.135231	10	1.192503	25	1.262929	40	1.193691	50	1.165974	60	1.123967
2-Nitroaniline	5	0.3502941	10	0.3512637	25	0.4284539	40	0.452787	50	0.4427581	60	0.4311184
Dimethylphthalate	5	1.381827	10	1.268004	25	1.389817	40	1.374648	50	1.3756	60	1.329832
2,6-Dinitrotoluene	5	0.2303778	10	0.2142216	25	0.2821576	40	0.2970387	50	0.2942835	60	0.281139

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INITIAL CALIBRATION DATA

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024

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

Calibration: 4080605 Instrument: 5972hp66

Calibration Date: 8/5/2014 11:46:45AM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
Acenaphthylene	5	1.763114	10	1.816917	25	1.987738	40	1.873643	50	1.864858	60	1.761286
3-Nitroaniline	5	0.256975	10	0.2866292	25	0.3501996	40	0.3591937	50	0.3572241	60	0.3482333
Acenaphthene	5	1.067397	10	1.090811	25	1.163986	40	1.125229	50	1.115509	60	1.053856
2,4-Dinitrophenol	5	4.064488E-02	10	4.125551E-02	25	6.508482E-02	40	9.305173E-02	50	9.442369E-02	60	9.611933E-02
4-Nitrophenol	5	0.1743397	10	0.1746724	25	0.2354597	40	0.2640671	50	0.2587208	60	0.2579705
2,4-Dinitrotoluene	5	0.2233271	10	0.2617473	25	0.3658592	40	0.4046815	50	0.372747	60	0.3768556
Dibenzofuran	5	1.563595	10	1.493827	25	1.660044	40	1.553414	50	1.548445	60	1.457887
Diethylphthalate	5	1.355302	10	1.2191	25	1.33243	40	1.254693	50	1.26161	60	1.199868
4-Chlorophenyl-phenylether	5	0.5929345	10	0.6118273	25	0.6173269	40	0.6099025	50	0.5900917	60	0.5813804
Fluorene	5	1.246428	10	1.170737	25	1.237831	40	1.176837	50	1.183678	60	1.105958
4-Nitroaniline	5	0.2699014	10	0.2903238	25	0.3606152	40	0.3730549	50	0.3756295	60	0.3535202
4,6-Dinitro-2-methylphenol	5	3.916914E-02	10	4.571812E-02	25	0.0707936	40	9.326627E-02	50	8.678403E-02	60	9.344388E-02
N-Nitrosodiphenylamine (1)	5	0.5812814	10	0.6126269	25	0.6468904	40	0.5940694	50	0.6230501	60	0.5759465
4-Bromophenyl-phenylether	5	0.2141118	10	0.2248444	25	0.2390587	40	0.2279162	50	0.2340677	60	0.2206063
Hexachlorobenzene	5	0.3038177	10	0.2868375	25	0.306797	40	0.2882781	50	0.2929029	60	0.2762178
Pentachlorophenol	5	0.0756052	10	0.105073	25	0.1533265	40	0.1687621	50	0.1727671	60	0.1704103
Phenanthrene	5	1.072599	10	1.074139	25	1.105929	40	1.046268	50	1.095567	60	1.014609
Anthracene	5	1.060462	10	1.060036	25	1.124191	40	1.078496	50	1.112398	60	1.032914
Carbazole	5	1.059445	10	1.071049	25	1.147737	40	1.063314	50	1.154313	60	1.026423
Di-n-butylphthalate	5	1.257618	10	1.339986	25	1.504459	40	1.451342	50	1.493717	60	1.35496
Fluoranthene	5	1.156909	10	1.231013	25	1.357534	40	1.254878	50	1.309718	60	1.199795
Pyrene	5	1.06426	10	1.143655	25	1.156687	40	1.169333	50	1.174223	60	1.092504
Butylbenzylphthalate	5	0.4403	10	0.4853379	25	0.5545575	40	0.5655432	50	0.5929593	60	0.5536983
3,3'-Dichlorobenzidine	5	0.400688	10	0.4052842	25	0.4035953	40	0.4059826	50	0.4131732	60	0.3860899
bis(2-ethylhexyl)Phthalate	5	0.7401645	10	0.7206852	25	0.8370259	40	0.8204601	50	0.8610611	60	0.7732913
Benzo (a) anthracene	5	0.9757924	10	0.9545994	25	1.0728	40	1.038738	50	1.090846	60	1.027794
Chrysene	5	0.9339332	10	0.9688075	25	0.9871602	40	0.976597	50	1.018967	60	0.9151465

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INITIAL CALIBRATION DATA

SW8270D

Client: WESTON SOLUTIONS

SDG: 1408024

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

Calibration: 4080605

Instrument: 5972hp66

Calibration Date: 8/5/2014 11:46:45AM

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
		RF		RF		RF		RF		RF		RF
Di-n-octylphthalate	5	1.345868	10	1.469662	25	1.693196	40	1.752244	50	1.725767	60	1.669038
Benzo (b) fluoranthene	5	1.411165	10	1.325723	25	1.420821	40	1.332556	50	1.393676	60	1.357938
Benzo(k)fluoranthene	5	1.330186	10	1.474407	25	1.443245	40	1.42532	50	1.399788	60	1.267307
Benzo (a) pyrene	5	1.209877	10	1.30095	25	1.33384	40	1.285027	50	1.312419	60	1.254481
Indeno(1,2,3-cd)pyrene	5	1.2252	10	1.314473	25	1.338671	40	1.368503	50	1.399782	60	1.30766
Dibenzo(a,h)anthracene	5	1.182203	10	1.29088	25	1.312527	40	1.316181	50	1.340467	60	1.279264
Benzo (g,h,i) perylene	5	1.305396	10	1.386768	25	1.438077	40	1.409315	50	1.431507	60	1.373349
Benzaldehyde	5	0.653225	10	0.6667557	25	0.6381925	40	0.5989374	50	0.5760852	60	0.5716962
Caprolactam	5	0.133805	10	0.1030069	25	0.1186793	40	0.1344521	50	0.124169	60	0.131887
Atrazine	5	0.119375	10	0.1122212	25	0.1125426	40	0.1089243	50	0.110461	60	0.1022166
1,1'-Biphenyl	5	1.380482	10	1.387752	25	1.518985	40	1.413262	50	1.420727	60	1.339766
2-Fluorophenol	5	1.212288	10	1.271673	25	1.289425	40	1.372882	50	1.343742	60	1.2471
Phenol-d5	5	1.78752	10	1.735475	25	1.731958	40	1.765091	50	1.661659	60	1.646137
Nitrobenzene-d5	5	0.3097672	10	0.3302971	25	0.3728024	40	0.357565	50	0.3899702	60	0.3583994
2-Fluorobiphenyl	5	1.264046	10	1.289006	25	1.430603	40	1.333612	50	1.301331	60	1.27865
2,4,6-Tribromophenol	5	0.1916257	10	0.2097548	25	0.2570627	40	0.2560867	50	0.257632	60	0.2554203
Terphenyl-d14	5	0.821558	10	0.8334988	25	0.8646041	40	0.8500651	50	0.8619146	60	0.8005629

Environmental Testing Laboratories

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INITIAL CALIBRATION DATA (Continued)

SW8270D

Client: WESTON SOLUTIONS

SDG: 1408024

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

Calibration: 4080605

Instrument: 5972hp66

Calibration Date: 8/5/2014 11:46:45AM

Compound	Mean RF	% RSD	Mean RT	RT RSD	Linear r	Quad COD	RSD LIMIT	Q
Phenol	1.845408	4.160728	7.520667	5.594898E-02			CCC (20)	
Bis(2-chloroethyl)ether	1.582477	8.12539	7.626167	5.517056E-02			CCC (20)	
2-Chlorophenol	1.348051	3.86726	7.650167	3.736318E-02			CCC (20)	
2-Methylphenol	1.225654	5.513865	8.786	3.189012E-02			CCC (20)	
2,2'-oxybis(1-Chloropropane)	3.698734	7.496367	8.805	3.204681E-02			CCC (20)	
3 & 4-Methylphenol	1.322643	10.44543	9.145667	4.390516E-02			CCC (20)	
N-Nitroso-di-N-propylamine	1.176107	7.941933	9.070333	0.0244171			CCC (20)	
Acetophenone	0.5547329	2.789134	8.9835	5.031559E-02			CCC (20)	
Hexachloroethane	0.6447331	5.445795	9.140333	5.438587E-02			CCC (20)	
Nitrobenzene	0.332965	6.985626	9.315833	3.009991E-02			CCC (20)	
Isophorone	0.7801145	4.695004	9.898333	3.704082E-02			CCC (20)	
2-Nitrophenol	0.144079	16.70006	10.04133	1.910829E-02			CCC (20)	
2,4-Dimethylphenol	0.3220389	5.20687	10.30883	3.306624E-02			CCC (20)	
Bis(2-chloroethoxy)methane	0.4991113	2.812871	10.50117	2.833982E-02			CCC (20)	
2,4-Dichlorophenol	0.3021595	7.445889	10.61333	2.134105E-02			CCC (20)	
Naphthalene	1.004359	4.221991	10.89433	4.375592E-02			CCC (20)	
4-Chloroaniline	0.4803851	3.472885	11.11767	4.076309E-02			CCC (20)	
Hexachlorobutadiene	0.1962038	4.62014	11.30833	0.0255479			CCC (20)	
4-Chloro-3-methylphenol	0.2940057	3.678225	12.388	3.805914E-02			CCC (20)	
2-Methylnaphthalene	0.5869259	2.869263	12.52433	2.555691E-02			CCC (20)	
Hexachlorocyclopentadiene	0.3870795	13.72364	12.964	2.526177E-02			CCC (20)	
2,4,6-Trichlorophenol	0.3628396	12.35751	13.2635	3.248745E-02			CCC (20)	
2,4,5-Trichlorophenol	0.3780284	13.24915	13.33167	2.359093E-02			CCC (20)	
2-Chloronaphthalene	1.179049	4.250237	13.62983	3.081937E-02			CCC (20)	
2-Nitroaniline	0.4094459	11.29995	13.95683	2.185076E-02			CCC (20)	
Dimethylphthalate	1.353288	3.454331	14.52067	3.122524E-02			CCC (20)	
2,6-Dinitrotoluene	0.2665364	13.21351	14.57667	8.046977E-03			CCC (20)	

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INITIAL CALIBRATION DATA (Continued)

SW8270D

Client: WESTON SOLUTIONS

SDG: 1408024

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

Calibration: 4080605

Instrument: 5972hp66

Calibration Date: 8/5/2014 11:46:45AM

Compound	Mean RF	% RSD	Mean RT	RT RSD	Linear r	Quad COD	RSD LIMIT	Q
Acenaphthylene	1.844593	4.605841	14.5615	2.348805E-02			CCC (20)	
3-Nitroaniline	0.3264092	13.33315	14.90533	2.326063E-02			CCC (20)	
Acenaphthene	1.102798	3.672417	14.958	1.847803E-02			CCC (20)	
2,4-Dinitrophenol	7.176333E-02	36.88664	15.137	2.330475E-02		0.9923392	CCC (20)	
4-Nitrophenol	0.2275384	18.56326	15.4045	3.522341E-02			CCC (20)	
2,4-Dinitrotoluene	0.3342029	21.91361	15.42467	1.982776E-02	0.9952319		CCC (20)	
Dibenzofuran	1.546202	4.467897	15.336	0.0211718			CCC (20)	
Diethylphthalate	1.270501	4.850243	16.02267	3.081217E-02			CCC (20)	
4-Chlorophenyl-phenylether	0.6005772	2.390916	16.11467	3.032542E-02			CCC (20)	
Fluorene	1.186912	4.306292	16.021	0.023396			CCC (20)	
4-Nitroaniline	0.3371742	13.46334	16.14167	4.638065E-02			CCC (20)	
4,6-Dinitro-2-methylphenol	7.152917E-02	33.6655	16.21833	3.351525E-02		0.9936502	CCC (20)	
N-Nitrosodiphenylamine (1)	0.6056441	4.468733	16.35467	1.425748E-02			CCC (20)	
4-Bromophenyl-phenylether	0.2267675	3.981089	17.01033	1.924842E-02			CCC (20)	
Hexachlorobenzene	0.2924752	3.891361	17.06833	0.0208099			CCC (20)	
Pentachlorophenol	0.1409907	29.00895	17.45333	0.0277208	0.9990894		CCC (20)	
Phenanthrene	1.068185	3.127442	17.76133	1.787282E-02			CCC (20)	
Anthracene	1.078083	3.207864	17.85	1.581092E-02			CCC (20)	
Carbazole	1.087047	4.773756	18.182	2.483495E-02			CCC (20)	
Di-n-butylphthalate	1.400347	7.013765	18.95567	0.0204032			CCC (20)	
Fluoranthene	1.251641	5.836666	19.76767	0.011151			CCC (20)	
Pyrene	1.133444	3.957025	20.11883	1.986765E-02			CCC (20)	
Butylbenzylphthalate	0.532066	10.76625	21.37217	1.251422E-02			CCC (20)	
3,3'-Dichlorobenzidine	0.4024689	2.243265	22.11817	1.551567E-02			CCC (20)	
bis(2-ethylhexyl)Phthalate	0.7921147	7.080817	22.37867	1.637677E-02			CCC (20)	
Benzo (a) anthracene	1.026762	5.185871	22.0825	2.117486E-02			CCC (20)	
Chrysene	0.9667686	3.86594	22.137	0.0143102			CCC (20)	

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ACCREDITED IN ACCORDANCE WITH nelac

INITIAL CALIBRATION DATA (Continued)

SW8270D

Client: WESTON SOLUTIONS

SDG: 1408024

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

Calibration: 4080605

Instrument: 5972hp66

Calibration Date: 8/5/2014 11:46:45AM

Compound	Mean RF	% RSD	Mean RT	RT RSD	Linear r	Quad COD	RSD LIMIT	Q
Di-n-octylphthalate	1.609296	10.15357	23.36467	6.652094E-03			CCC (20)	
Benzo (b) fluoranthene	1.373647	2.959989	23.695	2.231451E-02			CCC (20)	
Benzo(k)fluoranthene	1.390042	5.566364	23.73433	2.228527E-02			CCC (20)	
Benzo (a) pyrene	1.282766	3.475226	24.13117	2.385718E-02			CCC (20)	
Indeno(1,2,3-cd)pyrene	1.325715	4.530908	25.61267	2.682631E-02			CCC (20)	
Dibenzo(a,h)anthracene	1.28692	4.315132	25.66033	1.923245E-02			CCC (20)	
Benzo (g,h,i) perylene	1.390735	3.500425	25.98233	3.027471E-02			CCC (20)	
Benzaldehyde	0.617482	6.593604	7.161333	7.064996E-02			CCC (20)	
Caprolactam	0.1243332	9.757941	11.86017	0.185034			CCC (20)	
Atrazine	0.1109568	5.030041	17.43433	2.796951E-02			CCC (20)	
1,1'-Biphenyl	1.410162	4.290443	13.66717	1.579353E-02			CCC (20)	
2-Fluorophenol	1.289518	4.649274	5.586	5.152309E-02			CCC (20)	
Phenol-d5	1.721307	3.268206	7.495167	3.545837E-02			CCC (20)	
Nitrobenzene-d5	0.3531335	8.200783	9.275	3.242172E-02			CCC (20)	
2-Fluorobiphenyl	1.316208	4.61918	13.4695	3.327775E-02			CCC (20)	
2,4,6-Tribromophenol	0.2379304	12.36503	16.491	2.807852E-02			CCC (20)	
Terphenyl-d14	0.8387006	2.975785	20.49333	1.886874E-02			CCC (20)	

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Second Source Calibration Verification

SECOND-SOURCE CALIBRATION VERIFICATION

SW8270D

Client: WESTON SOLUTIONS

SDG: 1408024

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

Instrument: 5972hp62

Calibration: 4072701

Lab File ID: 4G23008-SCV162.d

Standard ID: 4D25015

Sequence: 4G23008

Injection Date: 07/23/14

Lab Sample ID: 4G23008-SCV1

InjectionTime: 23:28

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
N-Nitrosodimethylamine	25.00	26.94	7.8	30.00
Pyridine	25.00	25.23	0.9	30.00
Phenol	25.00	25.55	2.2	30.00
Bis(2-chloroethyl)ether	25.00	25.55	2.2	30.00
2-Chlorophenol	25.00	25.82	3.3	30.00
1,3-Dichlorobenzene	25.00	25.34	1.4	30.00
1,4-Dichlorobenzene	25.00	25.58	2.3	30.00
1,2-Dichlorobenzene	25.00	25.12	0.5	30.00
2-Methylphenol	25.00	25.62	2.5	30.00
2,2'-oxybis(1-Chloropropane)	25.00	24.98	-0.1	30.00
Bis(2-chloroisopropyl)ether	25.00	0.000		30.00
N-Nitroso-di-N-propylamine	25.00	25.23	0.9	30.00
Acetophenone	25.00	25.54	2.2	30.00
Hexachloroethane	25.00	25.03	0.1	30.00
Nitrobenzene	25.00	26.96	7.8	30.00
Isophorone	25.00	26.08	4.3	30.00
2-Nitrophenol	25.00	26.58	6.3	30.00
2,4-Dimethylphenol	25.00	26.64	6.6	30.00
Bis(2-chloroethoxy)methane	25.00	26.90	7.6	30.00
2,4-Dichlorophenol	25.00	27.54	10.1	30.00
1,2,4-Trichlorobenzene	25.00	26.65	6.6	30.00

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SECOND-SOURCE CALIBRATION VERIFICATION

SW8270D

Client: WESTON SOLUTIONS

SDG: 1408024

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

Instrument: 5972hp62

Calibration: 4072701

Lab File ID: 4G23008-SCV162.d

Standard ID: 4D25015

Sequence: 4G23008

Injection Date: 07/23/14

Lab Sample ID: 4G23008-SCV1

InjectionTime: 23:28

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Naphthalene	25.00	26.86	7.4	30.00
4-Chloroaniline	25.00	27.07	8.3	30.00
Hexachlorobutadiene	25.00	27.34	9.4	30.00
4-Chloro-3-methylphenol	25.00	26.60	6.4	30.00
2-Methylnaphthalene	25.00	26.22	4.9	30.00
1-Methylnaphthalene	25.00	26.97	7.9	30.00
Hexachlorocyclopentadiene	25.00	27.09	8.4	30.00
1,2,4,5-Tetrachlorobenzene	25.00	28.65	14.6	30.00
2,4,6-Trichlorophenol	25.00	27.64	10.6	30.00
2,4,5-Trichlorophenol	25.00	27.92	11.7	30.00
2-Chloronaphthalene	25.00	26.92	7.7	30.00
2-Nitroaniline	25.00	26.66	6.7	30.00
Dimethylphthalate	25.00	26.02	4.1	30.00
2,6-Dinitrotoluene	25.00	26.66	6.6	30.00
Acenaphthylene	25.00	26.68	6.7	30.00
3-Nitroaniline	25.00	27.02	8.1	30.00
Acenaphthene	25.00	27.25	9.0	30.00
2,4-Dinitrophenol	25.00	22.49	-10.1	30.00
4-Nitrophenol	25.00	25.24	1.0	30.00
2,4-Dinitrotoluene	25.00	26.19	4.8	30.00
Dibenzofuran	25.00	26.82	7.3	30.00

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SECOND-SOURCE CALIBRATION VERIFICATION

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024

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

Instrument: 5972hp62 Calibration: 4072701

Lab File ID: 4G23008-SCV162.d Standard ID: 4D25015

Sequence: 4G23008 Injection Date: 07/23/14

Lab Sample ID: 4G23008-SCV1 InjectionTime: 23:28

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
2,3,4,6-Tetrachlorophenol	25.00	26.52	6.1	30.00
Diethylphthalate	25.00	26.49	6.0	30.00
4-Chlorophenyl-phenylether	25.00	27.21	8.9	30.00
Fluorene	25.00	26.90	7.6	30.00
4-Nitroaniline	25.00	26.26	5.1	30.00
4,6-Dinitro-2-methylphenol	25.00	25.44	1.7	30.00
N-Nitrosodiphenylamine (1)	25.00	27.56	10.2	30.00
4-Bromophenyl-phenylether	25.00	28.01	12.1	30.00
Hexachlorobenzene	25.00	26.91	7.6	30.00
Pentachlorophenol	25.00	24.44	-2.2	30.00
Phenanthrene	25.00	27.08	8.3	30.00
Anthracene	25.00	27.48	9.9	30.00
Carbazole	25.00	27.49	10.0	30.00
Di-n-butylphthalate	25.00	28.83	15.3	30.00
Fluoranthene	25.00	28.66	14.6	30.00
Benzidine	25.00	22.98	-8.1	30.00
Pyrene	25.00	27.32	9.3	30.00
Butylbenzylphthalate	25.00	26.95	7.8	30.00
3,3'-Dichlorobenzidine	25.00	25.51	2.0	30.00
bis(2-ethylhexyl)Phthalate	25.00	27.07	8.3	30.00
Benzo (a) anthracene	25.00	26.79	7.1	30.00

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SECOND-SOURCE CALIBRATION VERIFICATION

SW8270D

Client: WESTON SOLUTIONS

SDG: 1408024

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

Instrument: 5972hp62

Calibration: 4072701

Lab File ID: 4G23008-SCV162.d

Standard ID: 4D25015

Sequence: 4G23008

Injection Date: 07/23/14

Lab Sample ID: 4G23008-SCV1

InjectionTime: 23:28

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Chrysene	25.00	27.22	8.9	30.00
Di-n-octylphthalate	25.00	28.26	13.0	30.00
Benzo (b) fluoranthene	25.00	27.53	10.1	30.00
Benzo(k)fluoranthene	25.00	27.35	9.4	30.00
Benzo (a) pyrene	25.00	27.37	9.5	30.00
Indeno(1,2,3-cd)pyrene	25.00	27.51	10.1	30.00
Dibenzo(a,h)anthracene	25.00	26.87	7.5	30.00
Benzo (g,h,i) perylene	25.00	26.78	7.1	30.00
Benzaldehyde	25.00	24.50	-2.0	30.00
Caprolactam	25.00	24.21	-3.2	30.00
Atrazine	25.00	25.61	2.4	30.00
1,1'-Biphenyl	25.00	28.01	12.0	30.00
1,2-Diphenyl Hydrazine	25.00	25.93	3.7	30.00
1,3-Dinitrobenzene	25.00	26.50	6.0	30.00
Aniline	25.00	24.97	-0.1	30.00
Benzyl alcohol	25.00	26.01	4.0	30.00
Diphenyl ether	25.00	25.13	0.5	30.00

* Values outside of QC limits

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

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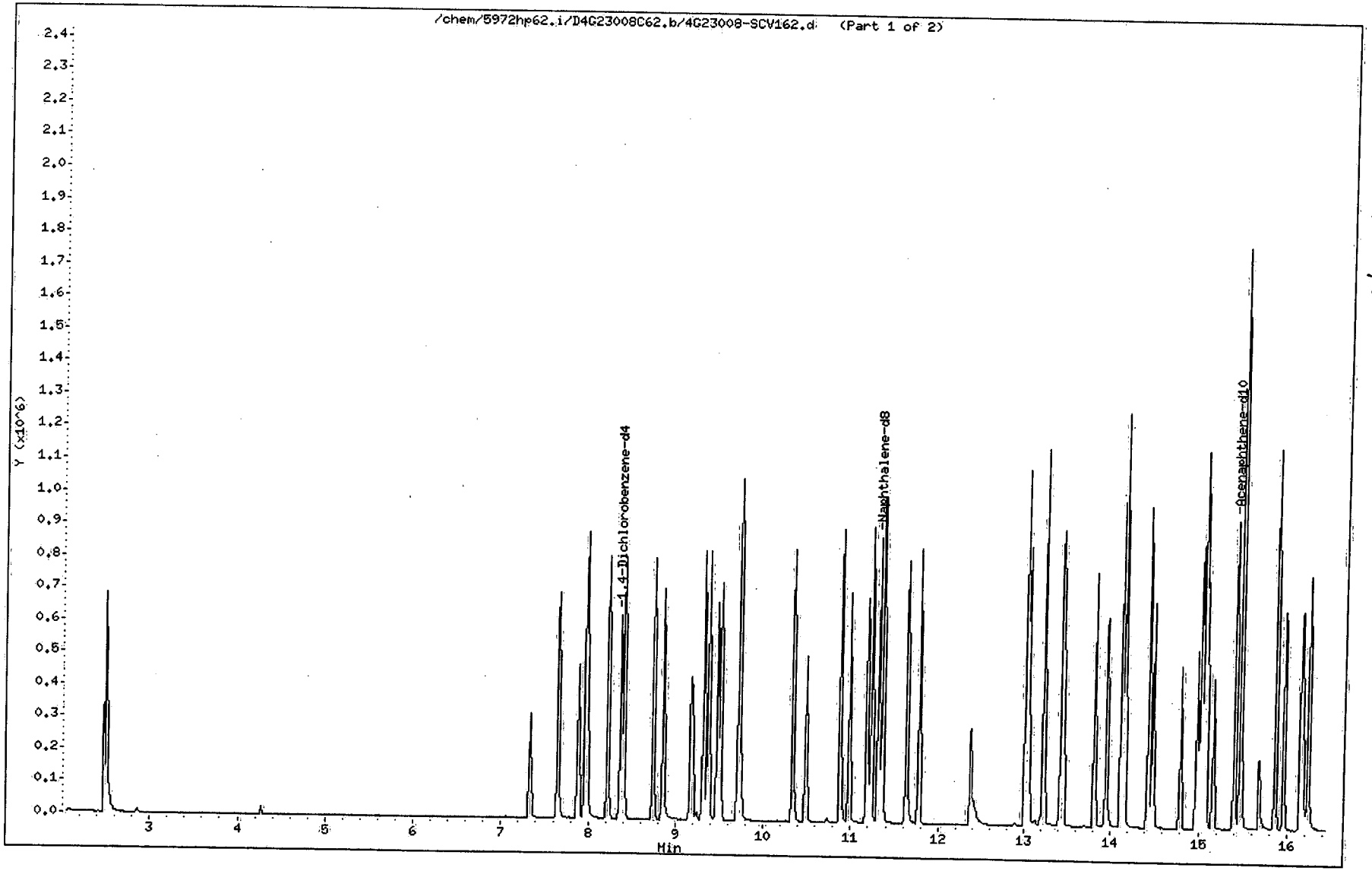
Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-SCV162.d
Date : 23-JUL-2014 23:28
Client ID: SCV025VAL1BP
Sample Info: 4G23008-SCV1:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i

Operator: OWS
Column diameter: 0.32

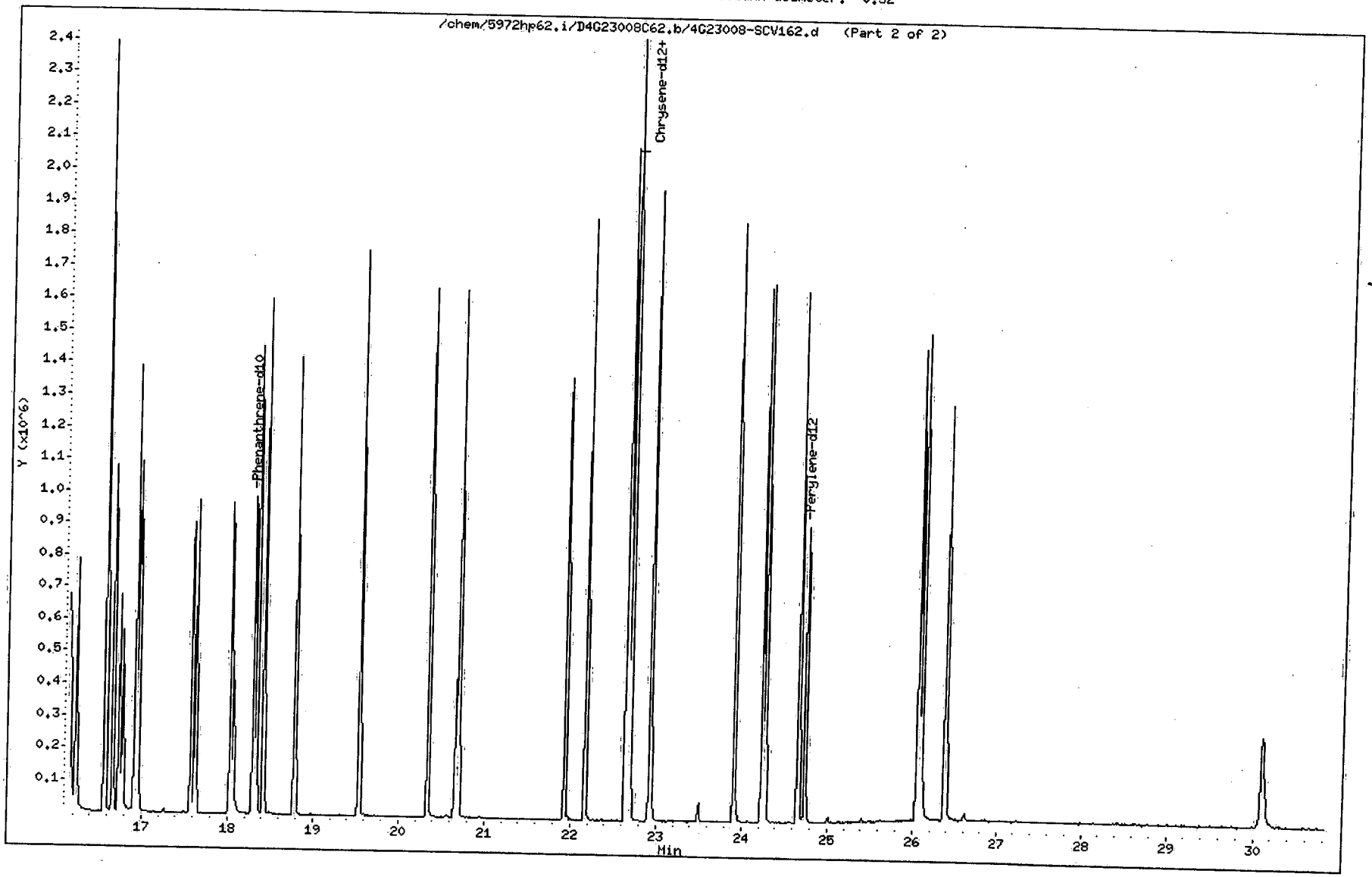


Robin Hani 7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-SCV162.d
Date : 23-JUL-2014 23:28
Client ID: SCV025VAL1BP
Sample Info: 4G23008-SCV1:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i

Operator: OWS
Column diameter: 0.32



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Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-SCV162.d
Report Date: 27-Jul-2014 19:15

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp62.i/D4G23008C62.b/4G23008-SCV162.d
Lab Smp Id: 4G23008-SCV1 Client Smp ID: SCV025VAL1BP
Inj Date : 23-JUL-2014 23:28
Operator : OWS Inst ID: 5972hp62.i
Smp Info : 4G23008-SCV1:OWS
Misc Info : SCV025VAL1BP
Comment :
Method : /chem/5972hp62.i/D4G23008C62.b/8270Dv26.m
Meth Date : 27-Jul-2014 19:14 ron Quant Type: ISTD
Cal Date : 23-JUL-2014 22:09 Cal File: 4G23008-CAL262.d
Als bottle: 8 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	8.361	8.361	(1.000)	155428	40.0000		
* 2 Naphthalene-d8	136	11.309	11.309	(1.000)	598901	40.0000		
* 3 Acenaphthene-d10	164	15.403	15.403	(1.000)	324954	40.0000		
* 4 Phenanthrene-d10	188	18.300	18.289	(1.000)	546358	40.0000		
* 5 Chrysene-d12	240	22.660	22.650	(1.000)	570336	40.0000		
* 6 Perylene-d12	264	24.738	24.738	(1.000)	412205	40.0000		
$ 7 2-Fluorophenol	112	Compound Not Detected.						
$ 8 Phenol-d5	99	Compound Not Detected.						
$ 9 Nitrobenzene-d5	82	Compound Not Detected.						
$ 10 2-Fluorobiphenyl	172	Compound Not Detected.						
$ 11 2,4,6-Tribromophenol	329	Compound Not Detected.						
$ 12 Terphenyl-d14	244	Compound Not Detected.						
13 N-Nitrosodimethylamine	42	2.476	2.476	(0.296)	187106	53.8766	27	9189
14 Pyridine	79	2.497	2.507	(0.299)	326961	50.4578	25	9697

7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-SCV162.d
Report Date: 27-Jul-2014 19:15

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
15 Phenol	94	7.983	7.983	(0.955)	354927	51.1064	26	
16 Aniline	93	7.655	7.655	(0.916)	425637	49.9382	25	9174
17 Bis(2-chloroethyl)ether	93	7.891	7.890	(0.944)	287926	51.1005	26	
18 2-Chlorophenol	128	7.962	7.962	(0.952)	290290	51.6455	26	9221
19 1,3-Dichlorobenzene	146	8.218	8.218	(0.983)	302446	50.6889	25	
20 1,4-Dichlorobenzene	146	8.402	8.402	(1.005)	308976	51.1582	26	
21 Benzyl Alcohol	108	8.853	8.853	(1.059)	173918	52.0221	26	
22 1,2-Dichlorobenzene	146	8.740	8.740	(1.045)	293770	50.2467	25	
23 2-Methylphenol	108	9.313	9.313	(1.114)	259776	51.2408	26	
24 2,2'-oxybis(1-Chloropropane)	45	9.170	9.190	(1.097)	438170	49.9525	25	9449
25 3 & 4-Methylphenol	108	9.713	9.712	(1.162)	271739	50.5306	25	
26 N-Nitroso-di-N-propylamine	70	9.467	9.477	(1.132)	233636	50.4594	25	9824
27 Acetophenone	105	9.375	9.375	(0.829)	425248	51.0887	26	9064
28 Hexachloroethane	117	9.508	9.508	(1.137)	138425	50.0606	25	9454
29 Nitrobenzene	77	9.723	9.723	(0.860)	423344	53.9127	27	8388
30 Isophorone	82	10.337	10.337	(0.914)	585682	52.1566	26	9756
31 2-Nitrophenol	139	10.490	10.490	(0.928)	159411	53.1652	26	9612
32 2,4-Dimethylphenol	122	10.879	10.879	(0.962)	240406	53.2888	27	8986
33 Bis(2-chloroethoxy)methane	93	10.982	10.982	(0.971)	375539	53.7939	27	9708
34 2,4-Dichlorophenol	162	11.176	11.186	(0.988)	242669	55.0700	28	
35 1,2,4-Trichlorobenzene	180	11.227	11.227	(0.993)	251246	53.3015	27	
36 Naphthalene	128	11.360	11.350	(1.005)	789421	53.7204	27	9513
37 4-Chloroaniline	127	11.637	11.637	(1.029)	391732	54.1386	27	9443
38 Hexachlorobutadiene	225	11.780	11.780	(1.042)	142395	54.6818	27	9529
39 4-Chloro-3-methylphenol	107	13.039	13.039	(1.153)	256384	53.1988	26	8989
40 2-Methylnaphthalene	141	13.008	13.008	(1.150)	454542	52.4369	26	
41 1-Methylnaphthalene	142	13.223	13.223	(1.169)	492132	53.9452	27	
42 Hexachlorocyclopentadiene	237	13.448	13.448	(0.873)	158486	54.1775	27	9054
43 1,2,4,5-Tetrachlorobenzene	216	13.428	13.417	(0.872)	263980	57.3024	29	8047
44 2,4,6-Trichlorophenol	196	13.807	13.806	(0.896)	165368	55.2857	28	
45 2,4,5-Trichlorophenol	196	13.950	13.950	(0.906)	178176	55.8308	28	
46 2-Chloronaphthalene	162	14.114	14.113	(0.916)	479804	53.8356	27	
47 2-Nitroaniline	65	14.482	14.482	(0.940)	177829	53.3251	27	8690
48 Dimethylphthalate	163	15.025	15.014	(0.975)	569050	52.0336	26	8308
49 1,3-Dinitrobenzene	122	14.984	14.983	(0.973)	42143	52.9923	26	
50 2,6-Dinitrotoluene	165	15.086	15.076	(0.979)	143822	53.3122	27	0 (M)
51 Acenaphthylene	152	15.055	15.055	(0.977)	782900	53.3646	27	8574
52 3-Nitroaniline	138	15.465	15.465	(1.004)	163130	54.0429	27	8981
53 Acenaphthene	153	15.475	15.465	(1.005)	483588	54.5042	27	9748
54 2,4-Dinitrophenol	184	15.680	15.679	(1.018)	55652	44.9713	22	
55 4-Nitrophenol	139	16.161	16.171	(1.049)	125288	50.4896	25	8423
56 2,4-Dinitrotoluene	165	15.966	15.956	(1.037)	189298	52.3830	26	9494
57 Dibenzofuran	168	15.864	15.864	(1.030)	678127	53.6422	27	9624
58 2,3,4,6-Tetrachlorophenol	232	16.232	16.232	(1.054)	131335	53.0330	26	
59 Diethylphthalate	149	16.570	16.570	(1.076)	591662	52.9754	26	9608
60 4-Chlorophenyl-phenylether	204	16.662	16.662	(1.082)	255700	54.4295	27	9637
61 Fluorene	166	16.570	16.570	(1.076)	517636	53.7944	27	9125

7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-SCV162.d
Report Date: 27-Jul-2014 19:15

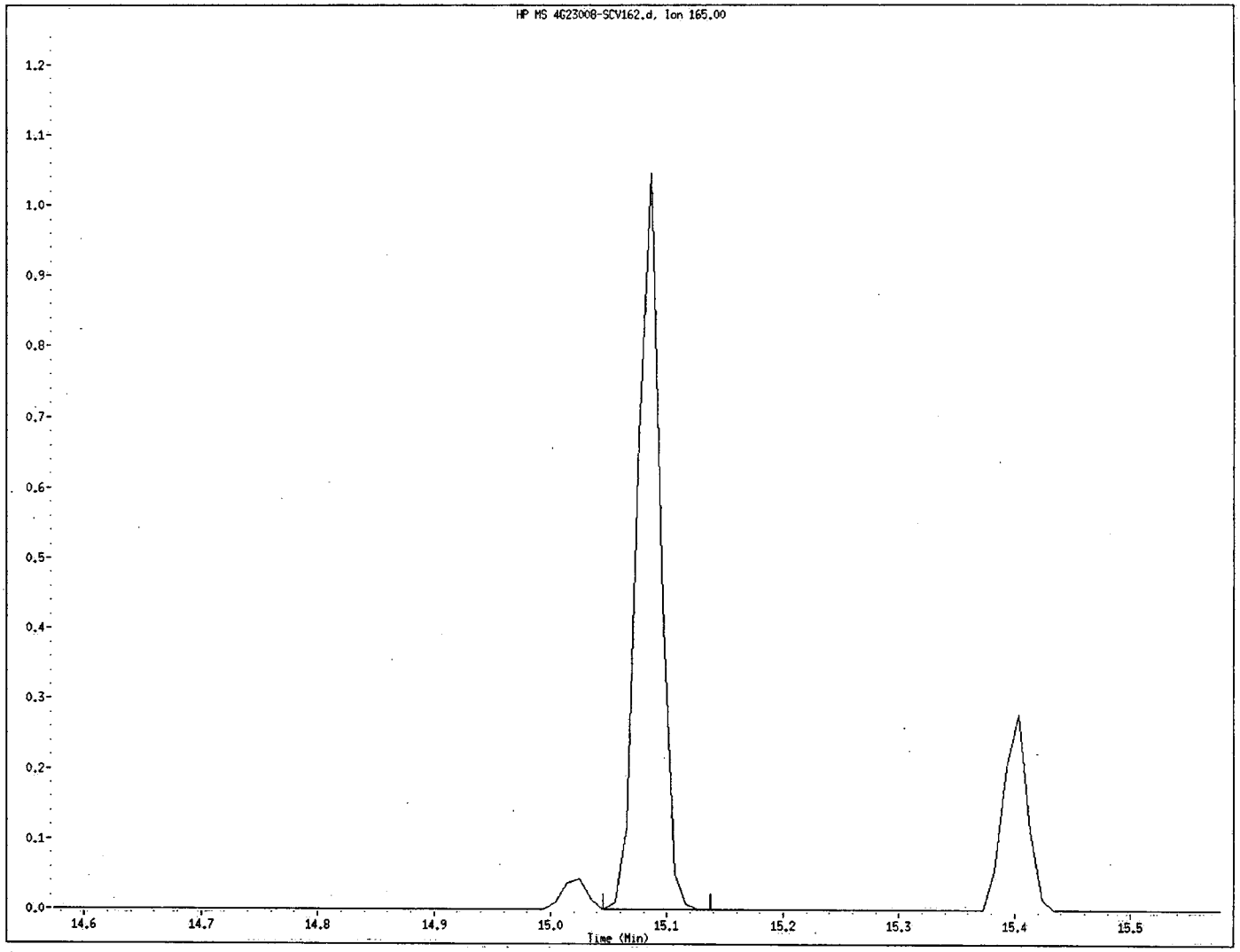
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
62 4-Nitroaniline	138	16.744	16.734	(1.087)	161786	52.5272	26	9070
63 4,6-Dinitro-2-methylphenol	198	16.775	16.775	(0.917)	107503	50.8731	25	8535
64 N-Nitrosodiphenylamine (1)	169	16.928	16.928	(0.925)	452306	55.1193	28	9728
65 1,2-Diphenyl Hydrazine	77	16.959	16.959	(1.101)	633675	51.8580	26	9321
66 4-Bromophenyl-phenylether	248	17.583	17.583	(0.961)	151425	56.0292	28	9023
67 Hexachlorobenzene	284	17.635	17.624	(0.964)	184190	53.8118	27	9631
68 Pentachlorophenol	266	18.064	18.064	(0.987)	83744	48.8820	24	7561
69 Phenanthrene	178	18.331	18.330	(1.002)	777396	54.1631	27	
70 Anthracene	178	18.423	18.423	(1.007)	789287	54.9514	27	
71 Carbazole	167	18.791	18.781	(1.027)	784794	54.9830	27	9709
72 Di-n-butylphthalate	149	19.538	19.538	(1.068)	1130929	57.6637	29	9793
73 Fluoranthene	202	20.347	20.337	(1.112)	869090	57.3242	29	
74 Pyrene	202	20.695	20.685	(0.913)	903818	54.6391	27	
75 Butylbenzylphthalate	149	21.944	21.933	(0.968)	482791	53.9010	27	9462
76 3,3'-Dichlorobenzidine	252	22.691	22.680	(1.001)	282995	51.0227	26	7439
77 bis(2-ethylhexyl)Phthalate	149	22.936	22.936	(1.012)	705615	54.1419	27	9244
78 Benzo(a)anthracene	228	22.640	22.639	(0.999)	771924	53.5702	27	
79 Chrysene	228	22.691	22.691	(1.001)	723178	54.4326	27	
80 Di-n-octylphthalate	149	23.909	23.909	(0.966)	1173845	56.5177	28	
81 Benzo(b)fluoranthene	252	24.236	24.236	(0.980)	803786	55.0597	28	
82 Benzo(k)fluoranthene	252	24.277	24.267	(0.981)	797467	54.6947	27	
83 Benzo(a)pyrene	252	24.666	24.656	(0.997)	745309	54.7319	27	
84 Indeno(1,2,3-cd)pyrene	276	26.058	26.058	(1.053)	724413	55.0284	28	
85 Dibenzo(a,h)anthracene	278	26.099	26.099	(1.055)	698197	53.7499	27	8956
86 Benzo(g,h,i)perylene	276	26.386	26.375	(1.067)	735436	53.5504	27	
87 Benzaldehyde	77	7.328	7.338	(0.876)	120927	48.9981	24	9702
88 Caprolactam	113	12.374	12.353	(1.094)	87202	48.4140	24	9581
89 Atrazine	215	18.034	18.023	(0.985)	70508	51.2167	26	9379
90 1,1'-Biphenyl	154	14.155	14.154	(0.919)	615984	56.0125	28	9511
91 Diphenyl ether	170	14.431	14.431	(0.937)	308908	50.2557	25	8130
223 Benzidine	184	20.664	20.664	(0.912)	228415	45.9596	23	9132

QC Flag Legend

M - Compound response manually integrated.

7/27/2014

2,6-Dinitrotoluene CAS Number 606-20-2 Area = 143822 Manually integrated



File name: /chem/5972hp62.i/D4G23008C62.b/4G23008-SCV162.d
Client ID: SCV025VAL1BP
Instrument ID: 5972hp62.i
Injection Date and Time: 23-JUL-2014 23:28
Retention Time: 15.09
Operator ID: OWS

Robin Ha 7/27/2014

SECOND-SOURCE CALIBRATION VERIFICATION

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024

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

Instrument: 5972hp66 Calibration: 4080605

Lab File ID: 4H05004-SCV166.d Standard ID: 4D25015

Sequence: 4H05004 Injection Date: 08/05/14

Lab Sample ID: 4H05004-SCV1 InjectionTime: 16:05

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
N-Nitrosodimethylamine	25.00	24.73	-1.1	30.00
Pyridine	25.00	24.14	-3.4	30.00
Phenol	25.00	24.90	-0.4	30.00
Bis(2-chloroethyl)ether	25.00	24.58	-1.7	30.00
2-Chlorophenol	25.00	24.54	-1.8	30.00
1,3-Dichlorobenzene	25.00	24.95	-0.2	30.00
1,4-Dichlorobenzene	25.00	24.50	-2.0	30.00
1,2-Dichlorobenzene	25.00	25.37	1.5	30.00
2-Methylphenol	25.00	24.45	-2.2	30.00
2,2'-oxybis(1-Chloropropane)	25.00	23.45	-6.2	30.00
Bis(2-chloroisopropyl)ether	25.00	0.000		30.00
N-Nitroso-di-N-propylamine	25.00	23.94	-4.2	30.00
Acetophenone	25.00	26.18	4.7	30.00
Hexachloroethane	25.00	24.46	-2.2	30.00
Nitrobenzene	25.00	25.10	0.4	30.00
Isophorone	25.00	24.96	-0.1	30.00
2-Nitrophenol	25.00	28.35	13.4	30.00
2,4-Dimethylphenol	25.00	25.78	3.1	30.00
Bis(2-chloroethoxy)methane	25.00	25.79	3.1	30.00
2,4-Dichlorophenol	25.00	27.01	8.0	30.00
1,2,4-Trichlorobenzene	25.00	25.74	3.0	30.00

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

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SECOND-SOURCE CALIBRATION VERIFICATION

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024

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

Instrument: 5972hp66 Calibration: 4080605

Lab File ID: 4H05004-SCV166.d Standard ID: 4D25015

Sequence: 4H05004 Injection Date: 08/05/14

Lab Sample ID: 4H05004-SCV1 InjectionTime: 16:05

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Naphthalene	25.00	25.50	2.0	30.00
4-Chloroaniline	25.00	25.22	0.9	30.00
Hexachlorobutadiene	25.00	25.72	2.9	30.00
4-Chloro-3-methylphenol	25.00	25.08	0.3	30.00
2-Methylnaphthalene	25.00	24.63	-1.5	30.00
1-Methylnaphthalene	25.00	25.16	0.6	30.00
Hexachlorocyclopentadiene	25.00	25.81	3.2	30.00
1,2,4,5-Tetrachlorobenzene	25.00	26.55	6.2	30.00
2,4,6-Trichlorophenol	25.00	26.11	4.5	30.00
2,4,5-Trichlorophenol	25.00	26.88	7.5	30.00
2-Chloronaphthalene	25.00	24.92	-0.3	30.00
2-Nitroaniline	25.00	26.37	5.5	30.00
Dimethylphthalate	25.00	25.13	0.5	30.00
2,6-Dinitrotoluene	25.00	27.09	8.4	30.00
Acenaphthylene	25.00	24.95	-0.2	30.00
3-Nitroaniline	25.00	27.46	9.8	30.00
Acenaphthene	25.00	25.51	2.1	30.00
2,4-Dinitrophenol	25.00	25.59	2.4	30.00
4-Nitrophenol	25.00	28.15	12.6	30.00
2,4-Dinitrotoluene	25.00	26.20	4.8	30.00
Dibenzofuran	25.00	24.86	-0.5	30.00

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

SECOND-SOURCE CALIBRATION VERIFICATION

SW8270D

Client: WESTON SOLUTIONS

SDG: 1408024

Project: RST2/REP306/EP-S2-14-01/SITE ID:ZZ

Instrument: 5972hp66

Calibration: 4080605

Lab File ID: 4H05004-SCV166.d

Standard ID: 4D25015

Sequence: 4H05004

Injection Date: 08/05/14

Lab Sample ID: 4H05004-SCV1

InjectionTime: 16:05

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
2,3,4,6-Tetrachlorophenol	25.00	28.07	12.3	30.00
Diethylphthalate	25.00	24.83	-0.7	30.00
4-Chlorophenyl-phenylether	25.00	25.00	0.008	30.00
Fluorene	25.00	24.78	-0.9	30.00
4-Nitroaniline	25.00	26.39	5.5	30.00
4,6-Dinitro-2-methylphenol	25.00	26.97	7.9	30.00
N-Nitrosodiphenylamine (1)	25.00	25.63	2.5	30.00
4-Bromophenyl-phenylether	25.00	26.25	5.0	30.00
Hexachlorobenzene	25.00	25.19	0.8	30.00
Pentachlorophenol	25.00	26.24	5.0	30.00
Phenanthrene	25.00	24.99	-0.03	30.00
Anthracene	25.00	25.81	3.2	30.00
Carbazole	25.00	25.11	0.4	30.00
Di-n-butylphthalate	25.00	25.68	2.7	30.00
Fluoranthene	25.00	25.47	1.9	30.00
Benzidine	25.00	27.16	8.7	30.00
Pyrene	25.00	26.53	6.1	30.00
Butylbenzylphthalate	25.00	25.64	2.5	30.00
3,3'-Dichlorobenzidine	25.00	25.49	2.0	30.00
bis(2-ethylhexyl)Phthalate	25.00	26.12	4.5	30.00
Benzo (a) anthracene	25.00	25.65	2.6	30.00

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SECOND-SOURCE CALIBRATION VERIFICATION

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024

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

Instrument: 5972hp66 Calibration: 4080605

Lab File ID: 4H05004-SCV166.d Standard ID: 4D25015

Sequence: 4H05004 Injection Date: 08/05/14

Lab Sample ID: 4H05004-SCV1 InjectionTime: 16:05

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Chrysene	25.00	26.39	5.6	30.00
Di-n-octylphthalate	25.00	26.82	7.3	30.00
Benzo (b) fluoranthene	25.00	26.80	7.2	30.00
Benzo(k)fluoranthene	25.00	24.35	-2.6	30.00
Benzo (a) pyrene	25.00	25.65	2.6	30.00
Indeno(1,2,3-cd)pyrene	25.00	25.67	2.7	30.00
Dibenzo(a,h)anthracene	25.00	25.68	2.7	30.00
Benzo (g,h,i) perylene	25.00	26.03	4.1	30.00
Benzaldehyde	25.00	23.85	-4.6	30.00
Caprolactam	25.00	25.35	1.4	30.00
Atrazine	25.00	24.91	-0.3	30.00
1,1'-Biphenyl	25.00	25.86	3.5	30.00
1,2-Diphenyl Hydrazine	25.00	25.04	0.1	30.00
1,3-Dinitrobenzene	25.00	28.41	13.7	30.00
Aniline	25.00	24.56	-1.7	30.00
Benzyl alcohol	25.00	23.95	-4.2	30.00
Diphenyl ether	25.00	24.88	-0.5	30.00

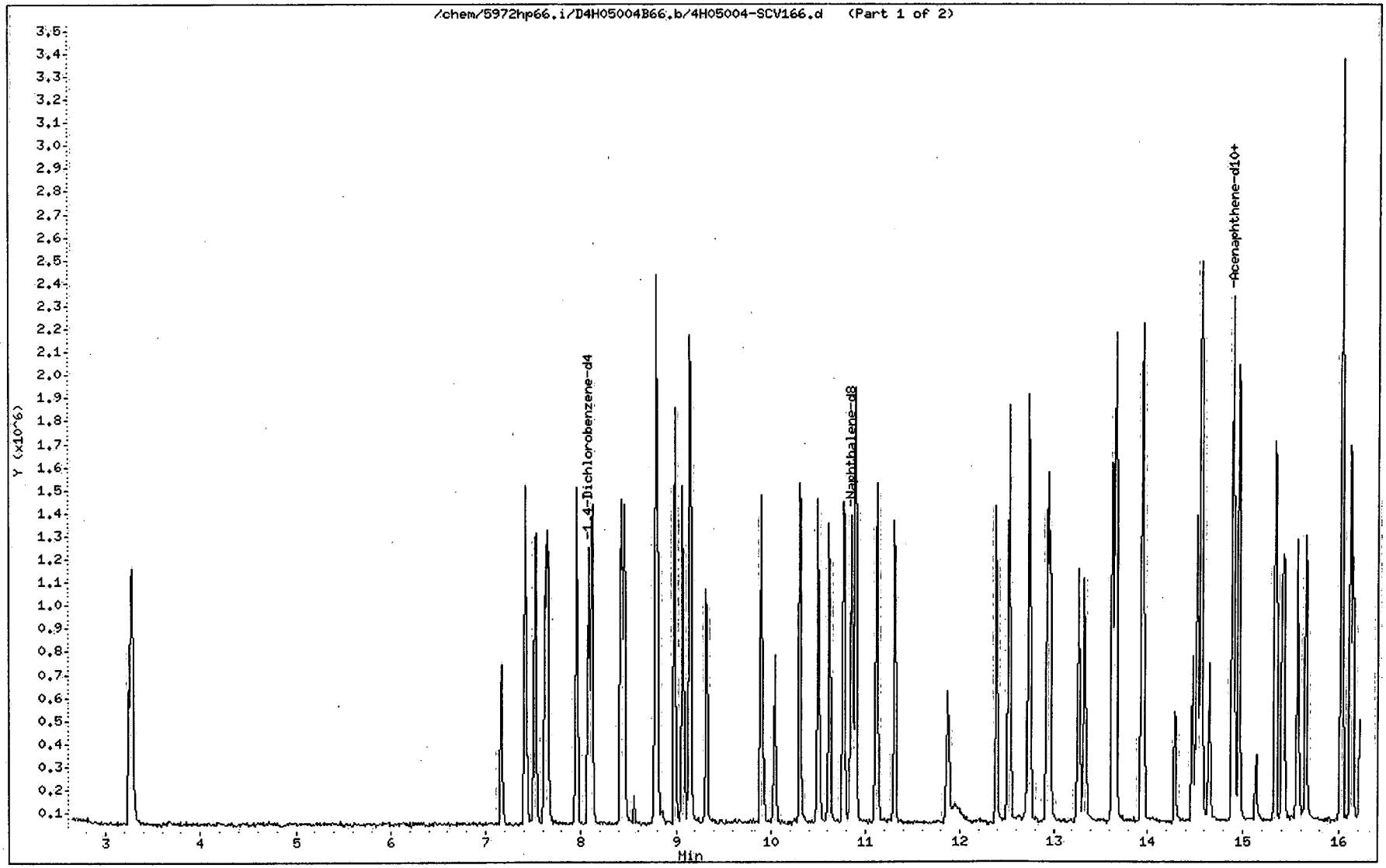
* Values outside of QC limits

Environmental Testing Laboratories CompuChem A Division Of Liberty Analytical Corp.

ACCREDITED IN ACCORDANCE WITH nelac

Data File: /chem/5972hp66.i/D4H05004B66.b/4H05004-SCV166.d
Date : 05-AUG-2014 16:05
Client ID: SCV025VAL1CR
Sample Info: 4H05004-SCV1:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp66.i
Operator: OWS
Column diameter: 0.32

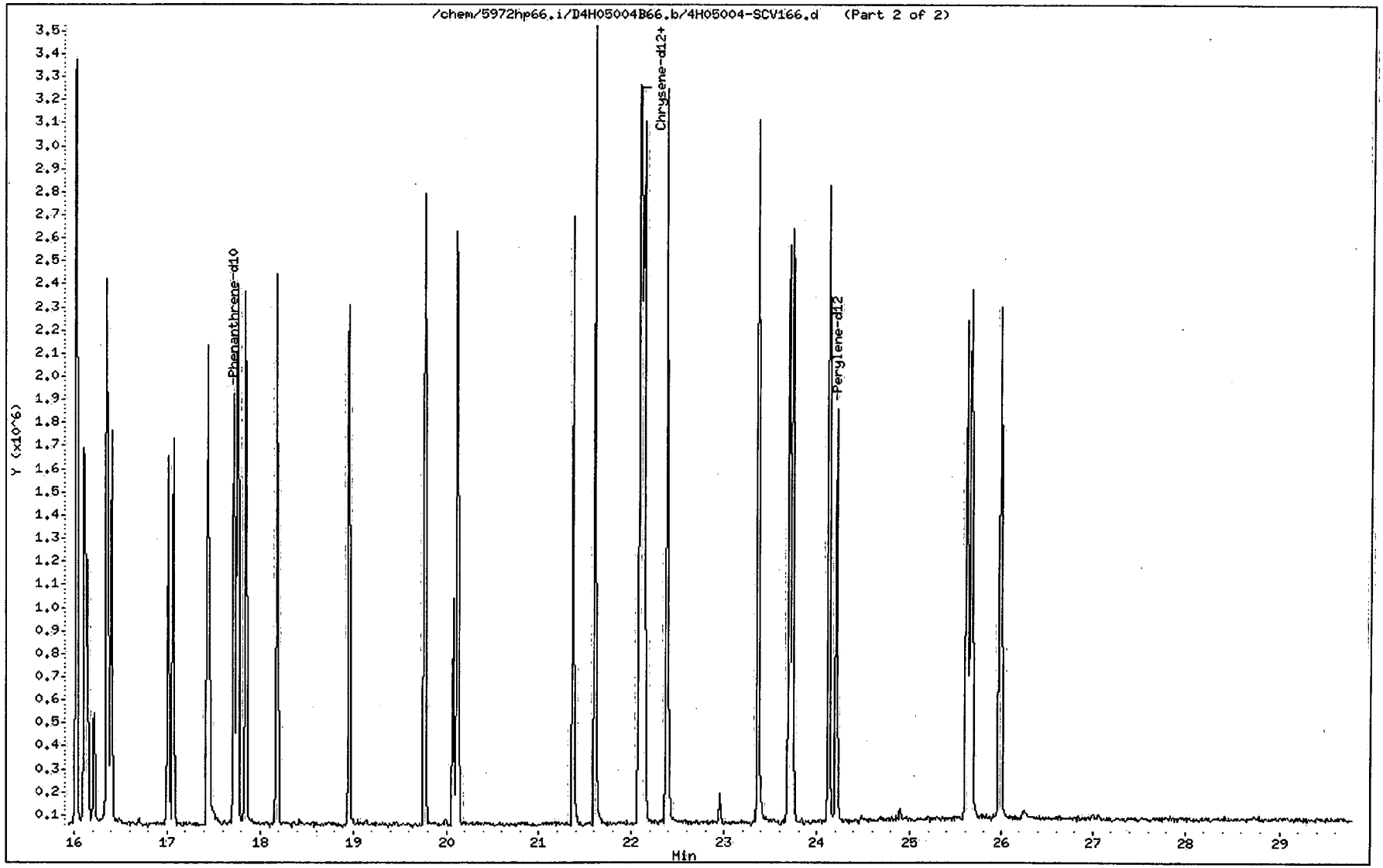


8/6/2014

Data File: /chem/5972hp66.i/D4H05004B66.b/4H05004-SCV166.d
Date : 05-AUG-2014 16:05
Client ID: SCV025VAL1CR
Sample Info: 4H05004-SCV1:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp66.i

Operator: OWS
Column diameter: 0.32



8/6/2014

Data File: /chem/5972hp66.i/D4H05004B66.b/4H05004-SCV166.d
Report Date: 06-Aug-2014 20:57

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp66.i/D4H05004B66.b/4H05004-SCV166.d
Lab Smp Id: 4H05004-SCV1 Client Smp ID: SCV025VAL1CR
Inj Date : 05-AUG-2014 16:05
Operator : OWS Inst ID: 5972hp66.i
Smp Info : 4H05004-SCV1:OWS
Misc Info : SCV025VAL1CR
Comment :
Method : /chem/5972hp66.i/D4H05004B66.b/8270Dv26.m
Meth Date : 06-Aug-2014 20:57 ron Quant Type: ISTD
Cal Date : 05-AUG-2014 14:46 Cal File: 4H05004-CAL266.d
Als bottle: 8 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	8.078	8.084	(1.000)	283822	40.0000		
* 2 Naphthalene-d8	136	10.847	10.853	(1.000)	1006797	40.0000		
* 3 Acenaphthene-d10	164	14.894	14.890	(1.000)	560550	40.0000		
* 4 Phenanthrene-d10	188	17.725	17.720	(1.000)	901825	40.0000		
* 5 Chrysene-d12	240	22.098	22.094	(1.000)	1029925	40.0000		
* 6 Perylene-d12	264	24.213	24.209	(1.000)	838609	40.0000		
$ 7 2-Fluorophenol	112	Compound Not Detected.						
$ 8 Phenol-d5	99	Compound Not Detected.						
$ 9 Nitrobenzene-d5	82	Compound Not Detected.						
$ 10 2-Fluorobiphenyl	172	Compound Not Detected.						
$ 11 2,4,6-Tribromophenol	329	Compound Not Detected.						
$ 12 Terphenyl-d14	244	Compound Not Detected.						
13 N-Nitrosodimethylamine	42	3.255	3.251	(0.403)	400558	49.4601	25	9284
14 Pyridine	79	3.286	3.281	(0.407)	525508	48.2898	24	9143

8/6/2014

Data File: /chem/5972hp66.i/D4H05004B66.b/4H05004-SCV166.d
Report Date: 06-Aug-2014 20:57

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
15 Phenol	94	7.526	7.522	(0.932)	652009	49.7938	25	
16 Aniline	93	7.424	7.420	(0.919)	806629	49.1287	24	9366
17 Bis(2-chloroethyl)ether	93	7.629	7.624	(0.944)	552043	49.1643	24	
18 2-Chlorophenol	128	7.659	7.655	(0.948)	469540	49.0885	24	9363
19 1,3-Dichlorobenzene	146	7.956	7.951	(0.985)	523966	49.9023	25	
20 1,4-Dichlorobenzene	146	8.119	8.115	(1.005)	528535	48.9975	24	
21 Benzyl Alcohol	108	8.456	8.452	(1.047)	304547	47.8918	24	
22 1,2-Dichlorobenzene	146	8.426	8.421	(1.043)	518688	50.7431	25	
23 2-Methylphenol	108	8.793	8.789	(1.089)	425354	48.9099	24	
24 2,2'-oxybis(1-Chloropropane)	45	8.793	8.810	(1.089)	1230750	46.8955	23	7429
25 3 & 4-Methylphenol	108	9.151	9.147	(1.133)	443143	47.2188	24	
26 N-Nitroso-di-N-propylamine	70	9.069	9.075	(1.123)	399620	47.8866	24	9273
27 Acetophenone	105	8.988	8.983	(0.829)	731025	52.3560	26	9304
28 Hexachloroethane	117	9.141	9.147	(1.132)	223807	48.9224	24	9155
29 Nitrobenzene	77	9.315	9.320	(0.859)	420733	50.2026	25	9224
30 Isophorone	82	9.897	9.893	(0.912)	980379	49.9291	25	9444
31 2-Nitrophenol	139	10.040	10.046	(0.926)	205641	56.7057	28	9133
32 2,4-Dimethylphenol	122	10.306	10.312	(0.950)	418002	51.5689	26	9466
33 Bis(2-chloroethoxy)methane	93	10.500	10.506	(0.968)	647903	51.5740	26	9285
34 2,4-Dichlorophenol	162	10.612	10.618	(0.978)	410792	54.0137	27	
35 1,2,4-Trichlorobenzene	180	10.766	10.772	(0.992)	456124	51.4834	26	
36 Naphthalene	128	10.899	10.894	(1.005)	1289325	51.0025	26	9427
37 4-Chloroaniline	127	11.123	11.119	(1.025)	609910	50.4422	25	9604
38 Hexachlorobutadiene	225	11.307	11.313	(1.042)	254006	51.4345	26	9511
39 4-Chloro-3-methylphenol	107	12.390	12.386	(1.142)	371171	50.1575	25	9245
40 2-Methylnaphthalene	141	12.523	12.529	(1.154)	727620	49.2538	25	
41 1-Methylnaphthalene	142	12.738	12.744	(1.174)	841554	50.3176	25	
42 Hexachlorocyclopentadiene	237	12.963	12.969	(0.870)	279981	51.6148	26	8927
43 1,2,4,5-Tetrachlorobenzene	216	12.942	12.938	(0.869)	448406	53.0957	26	7779
44 2,4,6-Trichlorophenol	196	13.269	13.265	(0.891)	265552	52.2253	26	
45 2,4,5-Trichlorophenol	196	13.331	13.336	(0.895)	284833	53.7665	27	
46 2-Chloronaphthalene	162	13.637	13.633	(0.916)	823653	49.8492	25	
47 2-Nitroaniline	65	13.964	13.960	(0.938)	302636	52.7436	26	8166
48 Dimethylphthalate	163	14.526	14.522	(0.975)	953201	50.2620	25	7878
49 1,3-Dinitrobenzene	122	14.475	14.481	(0.972)	55909	56.8291	28	
50 2,6-Dinitrotoluene	165	14.577	14.573	(0.979)	202358	54.1763	27	8387
51 Acenaphthylene	152	14.567	14.563	(0.978)	1290074	49.9068	25	9445
52 3-Nitroaniline	138	14.904	14.900	(1.001)	251224	54.9218	27	7543
53 Acenaphthene	153	14.966	14.961	(1.005)	788568	51.0257	26	9617
54 2,4-Dinitrophenol	184	15.139	15.135	(1.016)	55326	51.1882	26	
55 4-Nitrophenol	139	15.405	15.401	(1.034)	179507	56.2953	28	7797
56 2,4-Dinitrotoluene	165	15.425	15.421	(1.036)	267094	52.3969	26	9110
57 Dibenzofuran	168	15.344	15.339	(1.030)	1077519	49.7284	25	9090
58 2,3,4,6-Tetrachlorophenol	232	15.660	15.656	(1.051)	256441	56.1398	28	
59 Diethylphthalate	149	16.028	16.024	(1.076)	884109	49.6566	25	9330
60 4-Chlorophenyl-phenylether	204	16.120	16.116	(1.082)	420849	50.0038	25	9287
61 Fluorene	166	16.028	16.024	(1.076)	824178	49.5505	25	9407

8/6/2014

Data File: /chem/5972hp66.i/D4H05004B66.b/4H05004-SCV166.d
Report Date: 06-Aug-2014 20:57

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
62 4-Nitroaniline	138	16.141	16.136	(1.084)	249352	52.7721	26	8373
63 4,6-Dinitro-2-methylphenol	198	16.222	16.218	(0.915)	95703	53.9437	27	8931
64 N-Nitrosodiphenylamine (1)	169	16.355	16.351	(0.923)	699922	51.2590	26	9496
65 1,2-Diphenyl Hydrazine	77	16.406	16.402	(1.102)	888029	50.0724	25	9537
66 4-Bromophenyl-phenylether	248	17.020	17.015	(0.960)	268446	52.5066	26	8285
67 Hexachlorobenzene	284	17.071	17.066	(0.963)	332190	50.3773	25	9649
68 Pentachlorophenol	266	17.459	17.455	(0.985)	187164	52.4828	26	8150
69 Phenanthrene	178	17.765	17.761	(1.002)	1203798	49.9856	25	
70 Anthracene	178	17.847	17.853	(1.007)	1254575	51.6157	26	
71 Carbazole	167	18.184	18.180	(1.026)	1230587	50.2113	25	9515
72 Di-n-butylphthalate	149	18.961	18.957	(1.070)	1621784	51.3683	26	9584
73 Fluoranthene	202	19.768	19.764	(1.115)	1437509	50.9411	25	
74 Pyrene	202	20.126	20.122	(0.911)	1548341	53.0544	26	
75 Butylbenzylphthalate	149	21.373	21.368	(0.967)	702451	51.2749	26	9637
76 3,3'-Dichlorobenzidine	252	22.119	22.114	(1.001)	528315	50.9818	25	9367
77 bis(2-ethylhexyl)Phthalate	149	22.384	22.380	(1.013)	1065384	52.2363	26	9530
78 Benzo(a)anthracene	228	22.088	22.084	(1.000)	1356458	51.3087	26	
79 Chrysene	228	22.139	22.135	(1.002)	1313814	52.7796	26	
80 Di-n-octylphthalate	149	23.365	23.361	(0.965)	1810019	53.6473	27	
81 Benzo(b)fluoranthene	252	23.703	23.688	(0.979)	1543559	53.5980	27	
82 Benzo(k)fluoranthene	252	23.743	23.729	(0.981)	1419486	48.7084	24	
83 Benzo(a)pyrene	252	24.132	24.127	(0.997)	1379820	51.3069	26	
84 Indeno(1,2,3-cd)pyrene	276	25.613	25.609	(1.058)	1427137	51.3471	26	
85 Dibenzo(a,h)anthracene	278	25.665	25.660	(1.060)	1385713	51.3597	26	9752
86 Benzo(g,h,i)perylene	276	25.992	25.977	(1.073)	1517680	52.0519	26	
87 Benzaldehyde	77	7.169	7.164	(0.887)	208967	47.6944	24	9409
88 Caprolactam	113	11.869	11.834	(1.094)	158693	50.7094	25	9221 (M)
89 Atrazine	215	17.438	17.434	(0.984)	124643	49.8255	25	9248
90 1,1'-Biphenyl	154	13.668	13.663	(0.918)	1022175	51.7252	26	9499
91 Diphenyl ether	170	13.954	13.950	(0.937)	551937	49.7573	25	8659
223 Benzidine	184	20.075	20.071	(0.908)	473448	54.3258	27	9224

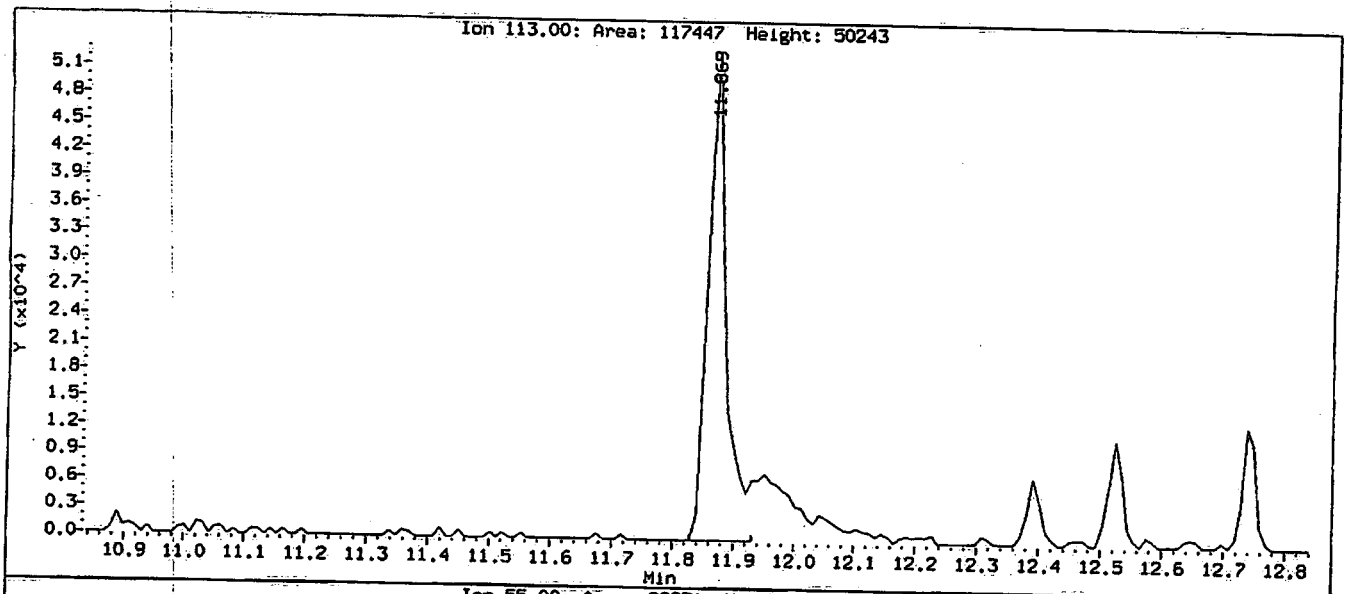
QC Flag Legend

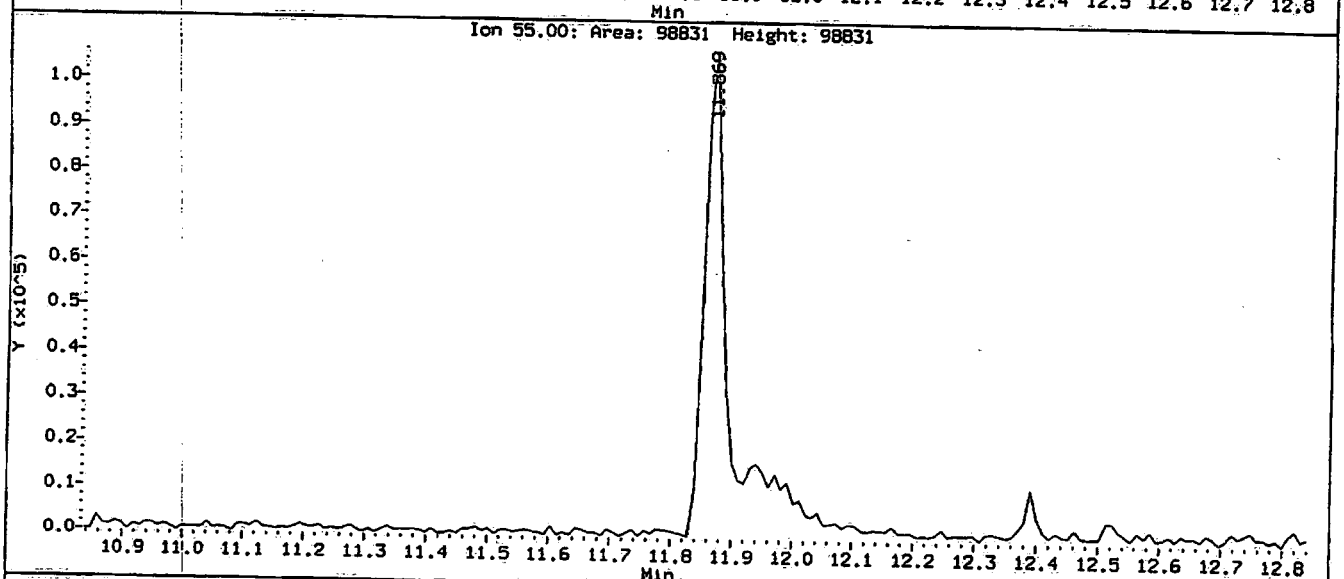
M - Compound response manually integrated.

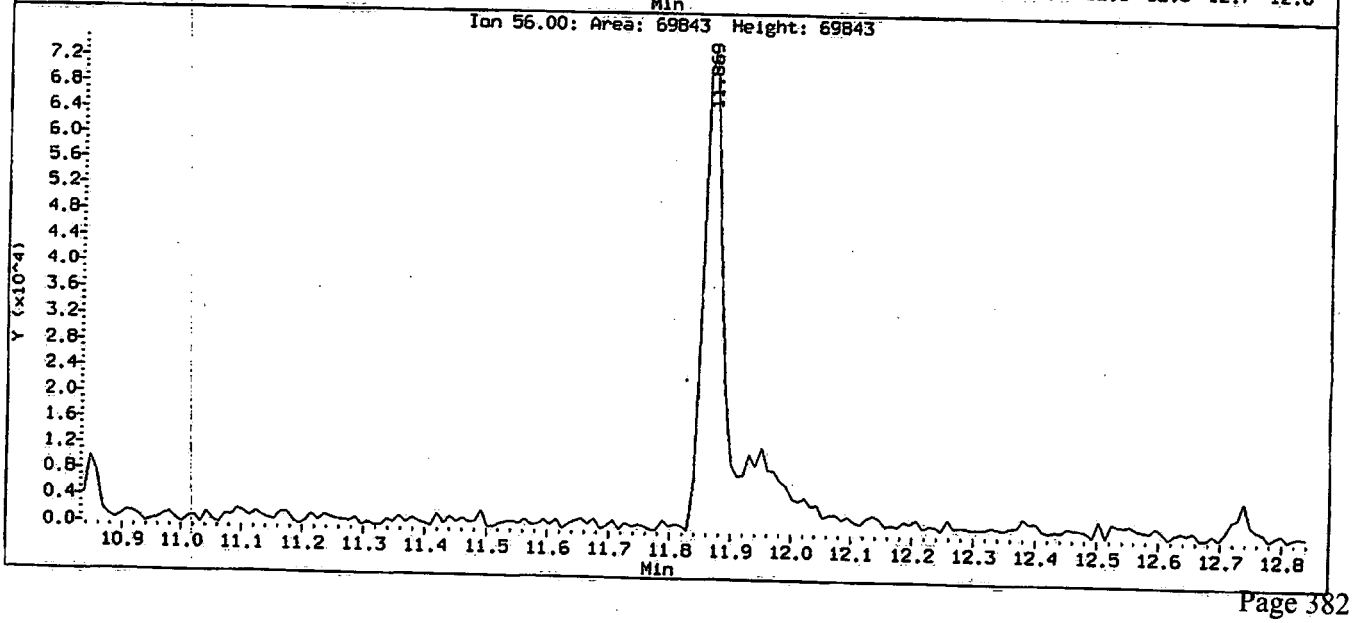
8/6/2014

Data File: /chem/5972hp66.1/D4H05004B66.b/4H05004-SCV166.d
Injection Date: 05-AUG-2014 16:05
Instrument: 5972hp66.1
Client Sample ID: SCV025VAL1CR

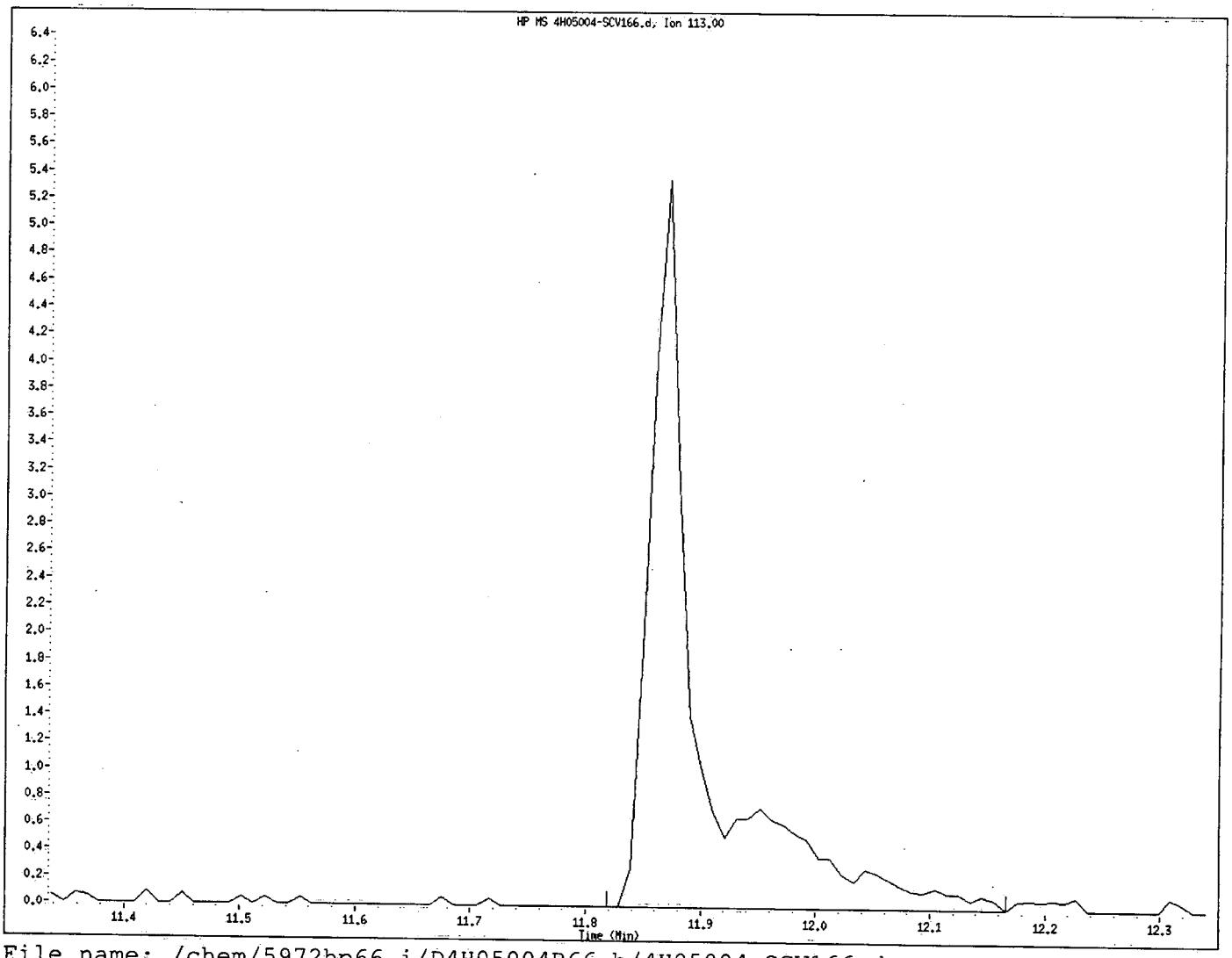
Compound: Caprolactam
CAS Number: 105-60-2







Caprolactam CAS Number 105-60-2 Area = 158693 Manually integrated



File name: /chem/5972hp66.i/D4H05004B66.b/4H05004-SCV166.d
Client ID: SCV025VAL1CR
Instrument ID: 5972hp66.i
Injection Date and Time: 05-AUG-2014 16:05
Retention Time: 11.87
Operator ID: OWS

Roldan Hani 8/6/2014

M. Continuing Calibration Data

(CONTINUING CALIBRATION CHECK)

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.

RICs and Quantitation reports for all continuing (12-hour) calibrations. Spectra not required.

EICPs displaying each manual integration.

CONTINUING CALIBRATION CHECK

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024

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

Instrument ID: 5972hp62 Calibration: 4072701

Lab File ID: 4H15001-ICV162.d Calibration Date: 07/23/14 19:09

Sequence: 4H15001 Injection Date: 08/15/14

Lab Sample ID: 4H15001-ICV1 Injection Time: 16:25

		CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT
N-Nitrosodimethylamine	Avg	25.00	22.00	0.8937552	0.7911773	0.05	-11.5	20
Pyridine	Avg	25.00	24.00	1.667625	1.591658	0.05	-4.6	20
Phenol	Avg	25.00	21.50	1.787289	1.546747	0.8	-13.5	20
Bis(2-chloroethyl)ether	Avg	25.00	22.50	1.450061	1.30348	0.7	-10.1	20
2-Chlorophenol	Avg	25.00	23.00	1.44654	1.320362	0.8	-8.7	20
1,3-Dichlorobenzene	Avg	25.00	23.00	1.535557	1.413706	0.05	-7.9	20
1,4-Dichlorobenzene	Avg	25.00	23.00	1.554318	1.436335	0.05	-7.6	20
1,2-Dichlorobenzene	Avg	25.00	23.00	1.504634	1.390946	0.05	-7.6	20
2-Methylphenol	Avg	25.00	21.50	1.30471	1.116903	0.7	-14.4	20
2,2'-oxybis(1-Chloropropane)	Avg	25.00	21.50	2.257442	1.961656	0.01	-13.1	20
3 & 4-Methylphenol	Avg	25.00	21.50	1.383975	1.185591	0.05	-14.3	20
N-Nitroso-di-N-propylamine	Avg	25.00	20.00	1.191595	0.9649156	0.5	-19.0	20
Acetophenone	Avg	25.00	26.00	0.5559334	0.5733793	0.01	3.1	20
Hexachloroethane	Avg	25.00	23.00	0.7116221	0.6524908	0.3	-8.3	20
Nitrobenzene	Avg	25.00	21.00	0.5244539	0.4425835	0.2	-15.6	20
Isophorone	Avg	25.00	22.00	0.7499941	0.6606886	0.4	-11.9	20
2-Nitrophenol	Avg	25.00	23.00	0.2002608	0.1859849	0.1	-7.1	20
2,4-Dimethylphenol	Avg	25.00	23.50	0.3013104	0.2835483	0.2	-5.9	20
Bis(2-chloroethoxy)methane	Avg	25.00	23.00	0.4662591	0.4249497	0.3	-8.9	20
2,4-Dichlorophenol	Avg	25.00	24.50	0.2943096	0.2879987	0.2	-2.1	20
1,2,4-Trichlorobenzene	Avg	25.00	25.50	0.3148215	0.3213546	0.05	2.1	20
Naphthalene	Avg	25.00	24.00	0.9814638	0.9396376	0.7	-4.3	20
4-Chloroaniline	Avg	25.00	23.00	0.483267	0.4484715	0.01	-7.2	20
Hexachlorobutadiene	Avg	25.00	25.50	0.1739229	0.1787708	0.01	2.8	20

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CONTINUING CALIBRATION CHECK

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024

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

Instrument ID: 5972hp62 Calibration: 4072701

Lab File ID: 4H15001-ICV162.d Calibration Date: 07/23/14 19:09

Sequence: 4H15001 Injection Date: 08/15/14

Lab Sample ID: 4H15001-ICV1 Injection Time: 16:25

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT
4-Chloro-3-methylphenol	Avg	25.00	22.00	0.3218802	0.28361	0.2	-11.9	20
2-Methylnaphthalene	Avg	25.00	23.50	0.5789507	0.5437167	0.4	-6.1	20
1-Methylnaphthalene	Avg	25.00	23.00	0.6093032	0.5607555	0.05	-8.0	20
Hexachlorocyclopentadiene	Avg	25.00	27.50	0.3600894	0.3936735	0.05	9.3	20
1,2,4,5-Tetrachlorobenzene	Avg	25.00	26.00	0.5670695	0.5926178	0.01	4.5	20
2,4,6-Trichlorophenol	Avg	25.00	26.00	0.368194	0.3811342	0.2	3.5	20
2,4,5-Trichlorophenol	Avg	25.00	26.00	0.3928383	0.4064611	0.2	3.5	20
2-Chloronaphthalene	Avg	25.00	25.00	1.097066	1.104206	0.8	0.7	20
2-Nitroaniline	Avg	25.00	27.00	0.4104961	0.4442674	0.01	8.2	20
Dimethylphthalate	Avg	25.00	23.50	1.346183	1.278511	0.01	-5.0	20
2,6-Dinitrotoluene	Avg	25.00	23.50	0.3320754	0.3099425	0.2	-6.7	20
Acenaphthylene	Avg	25.00	25.00	1.805891	1.795502	0.9	-0.6	20
3-Nitroaniline	Avg	25.00	25.00	0.3715637	0.3684066	0.01	-0.8	20
Acenaphthene	Avg	25.00	25.00	1.092153	1.087911	0.9	-0.4	20
2,4-Dinitrophenol	Lin	25.00	23.50	0.1624029	0.1453003	0.01	-6.0	20
4-Nitrophenol	Lin	25.00	23.00	0.2843835	0.28012	0.01	-8.0	20
2,4-Dinitrotoluene	Avg	25.00	23.00	0.4448294	0.4088428	0.2	-8.1	20
Dibenzofuran	Avg	25.00	24.50	1.556117	1.519467	0.8	-2.4	20
2,3,4,6-Tetrachlorophenol	Avg	25.00	26.00	0.3048401	0.3168149	0.01	3.9	20
Diethylphthalate	Avg	25.00	23.50	1.374795	1.285249	0.01	-6.5	20
4-Chlorophenyl-phenylether	Avg	25.00	24.50	0.5782755	0.5675196	0.4	-1.9	20
Fluorene	Avg	25.00	24.50	1.184474	1.157637	0.9	-2.3	20
4-Nitroaniline	Avg	25.00	22.50	0.3791361	0.3446972	0.01	-9.1	20
4,6-Dinitro-2-methylphenol	Lin	25.00	22.50	0.1399053	0.1367823	0.01	-10.0	20

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CONTINUING CALIBRATION CHECK

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024

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

Instrument ID: 5972hp62 Calibration: 4072701

Lab File ID: 4H15001-ICV162.d Calibration Date: 07/23/14 19:09

Sequence: 4H15001 Injection Date: 08/15/14

Lab Sample ID: 4H15001-ICV1 Injection Time: 16:25

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT
N-Nitrosodiphenylamine (1)	Avg	25.00	25.00	0.6007746	0.6050659	0.01	0.7	20
4-Bromophenyl-phenylether	Avg	25.00	26.00	0.1978635	0.2047034	0.1	3.5	20
Hexachlorobenzene	Avg	25.00	25.50	0.2505942	0.2550643	0.1	1.8	20
Pentachlorophenol	Lin	25.00	26.50	0.1248456	0.1340351	0.05	6.0	20
Phenanthrene	Avg	25.00	24.50	1.050804	1.038637	0.7	-1.2	20
Anthracene	Avg	25.00	24.50	1.051572	1.027009	0.7	-2.3	20
Carbazole	Avg	25.00	24.00	1.044984	1.002878	0.01	-4.0	20
Di-n-butylphthalate	Avg	25.00	23.00	1.435871	1.331155	0.01	-7.3	20
Fluoranthene	Avg	25.00	24.50	1.109966	1.081244	0.6	-2.6	20
Benzidine	Lin	25.00	23.00	0.3258829	0.3223879	0.05	-8.0	20
Pyrene	Avg	25.00	23.50	1.16013	1.097029	0.6	-5.4	20
Butylbenzylphthalate	Avg	25.00	23.00	0.6281902	0.5741095	0.01	-8.6	20
3,3'-Dichlorobenzidine	Avg	25.00	25.00	0.3889952	0.3896106	0.01	0.2	20
bis(2-ethylhexyl)Phthalate	Avg	25.00	22.50	0.9140364	0.8190195	0.01	-10.4	20
Benzo (a) anthracene	Avg	25.00	23.50	1.010602	0.9511909	0.8	-5.9	20
Chrysene	Avg	25.00	24.50	0.931785	0.9170825	0.7	-1.6	20
Di-n-octylphthalate	Avg	25.00	23.00	2.015453	1.848052	0.01	-8.3	20
Benzo (b) fluoranthene	Avg	25.00	24.00	1.416621	1.355425	0.7	-4.3	20
Benzo(k)fluoranthene	Avg	25.00	25.50	1.414862	1.44032	0.7	1.8	20
Benzo (a) pyrene	Avg	25.00	24.50	1.321425	1.303253	0.7	-1.4	20
Indeno(1,2,3-cd)pyrene	Avg	25.00	23.00	1.277456	1.166389	0.5	-8.7	20
Dibenzo(a,h)anthracene	Avg	25.00	24.50	1.260513	1.240851	0.4	-1.6	20
Benzo (g,h,i) perylene	Avg	25.00	24.00	1.33269	1.288902	0.5	-3.3	20
Benzaldehyde	Avg	25.00	24.00	0.635148	0.6115582	0.01	-3.7	20

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CONTINUING CALIBRATION CHECK

SW8270D

Client: WESTON SOLUTIONS SDG: 1408024

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

Instrument ID: 5972hp62 Calibration: 4072701

Lab File ID: 4H15001-ICV162.d Calibration Date: 07/23/14 19:09

Sequence: 4H15001 Injection Date: 08/15/14

Lab Sample ID: 4H15001-ICV1 Injection Time: 16:25

COMPOUND	TYPE	CONC. (ug/mL)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT
Caprolactam	Avg	25.00	22.00	0.1202985	0.1061305	0.01	-11.8	20
Atrazine	Avg	25.00	24.50	0.1007882	9.973494E-02	0.01	-1.0	20
1,1'-Biphenyl	Avg	25.00	24.50	1.3537	1.335018	0.01	-1.4	20
1,2-Diphenyl Hydrazine	Avg	25.00	24.00	1.504142	1.433161	0.01	-4.7	20
1,3-Dinitrobenzene	Avg	25.00	23.00	9.789285E-02	8.969485E-02	0.01	-8.4	20
Aniline	Avg	25.00	21.50	2.193499	1.885898	0.01	-14.0	20
Benzyl alcohol	Avg	25.00	22.00	0.8603749	0.7589371	0.01	-11.8	20
Diphenyl ether	Avg	25.00	26.50	0.7566272	0.8011357	0.01	5.9	20
2-Fluorophenol	Avg	25.00	23.00	1.289642	1.200164	0.05	-6.9	20
Phenol-d5	Avg	25.00	22.00	1.841525	1.620348	0.05	-12.0	20
Nitrobenzene-d5	Avg	25.00	23.00	0.4012252	0.3687439	0.05	-8.1	20
2-Fluorobiphenyl	Avg	25.00	25.50	1.241213	1.25755	0.05	1.3	20
2,4,6-Tribromophenol	Avg	25.00	25.00	0.2195941	0.2192824	0.05	-0.1	20
Terphenyl-d14	Avg	25.00	23.50	0.7819542	0.741744	0.05	-5.1	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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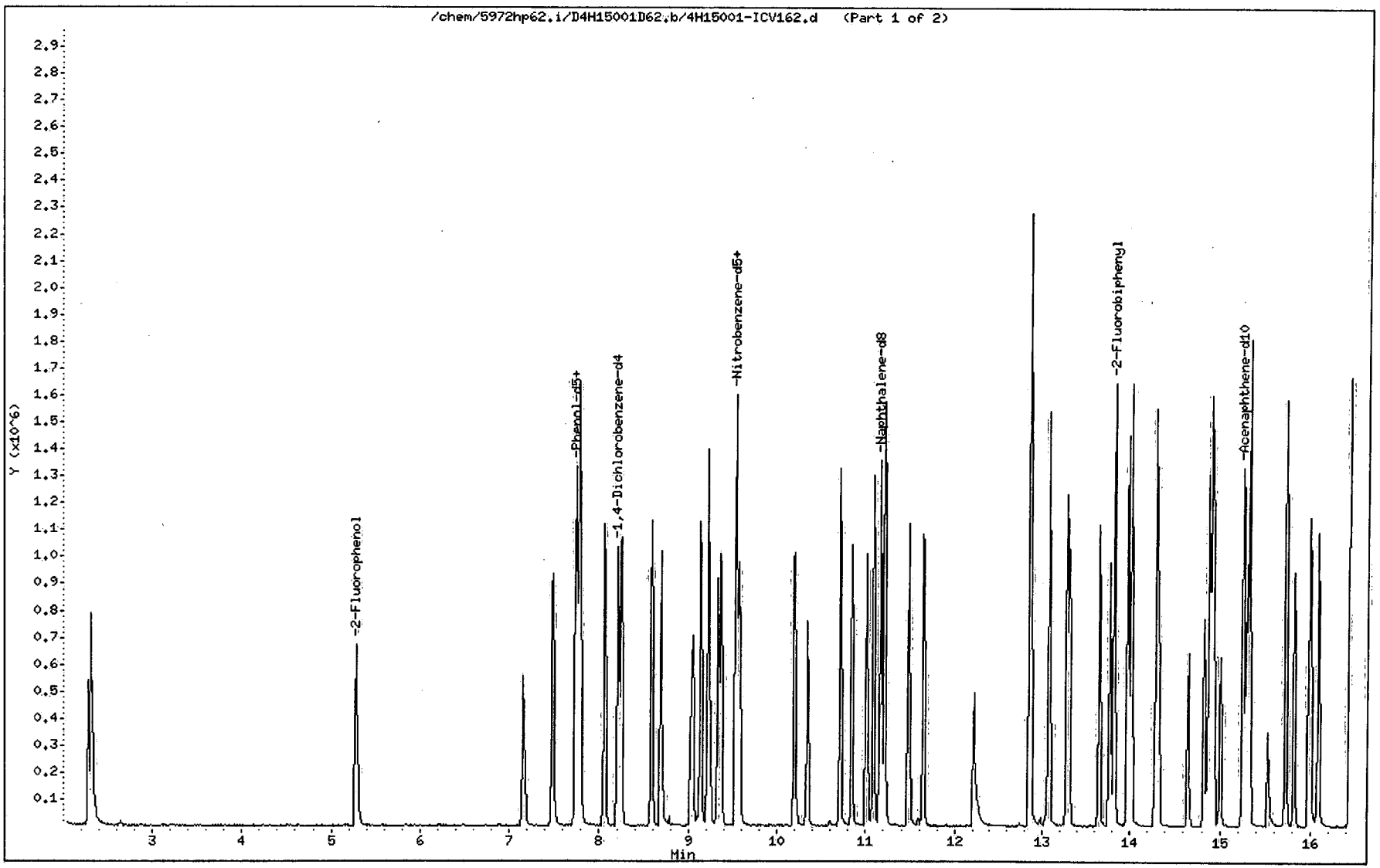
Data File: /chem/5972hp62.i/D4H15001D62.b/4H15001-ICV162.d
Date : 15-AUG-2014 16:25
Client ID: SSTD025BG
Sample Info: 4H15001-ICV1:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

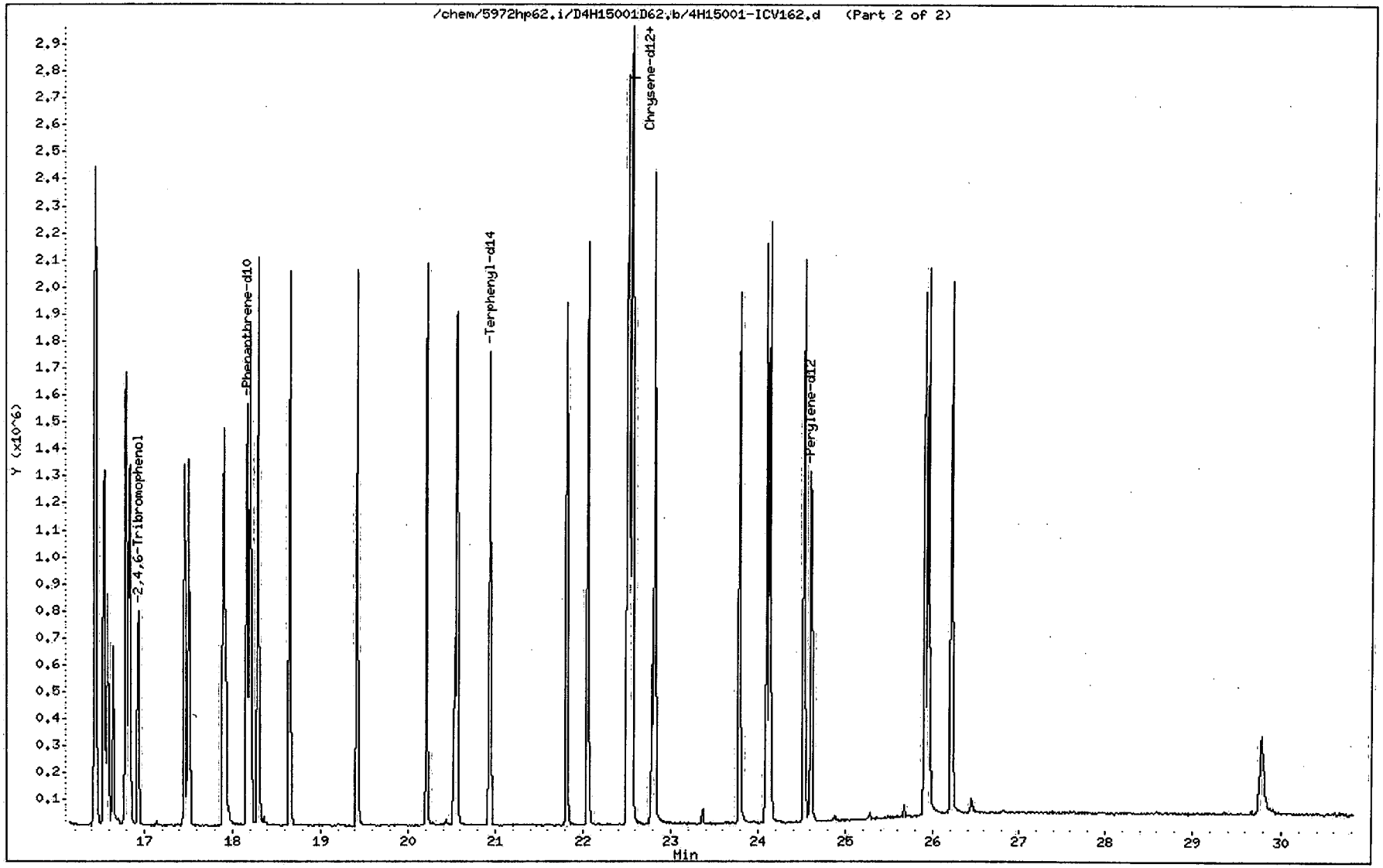
Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4H15001-ICV162.d
Date : 15-AUG-2014 16:25
Client ID: SSTD025BG
Sample Info: 4H15001-ICV1:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4H15001-ICV162.d
Report Date: 19-Aug-2014 11:23

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp62.i/D4H15001D62.b/4H15001-ICV162.d
Lab Smp Id: 4H15001-ICV1 Client Smp ID: SSTD025BG
Inj Date : 15-AUG-2014 16:25
Operator : OWS Inst ID: 5972hp62.i
Smp Info : 4H15001-ICV1:OWS
Misc Info : SSTD025BG
Comment :
Method : /chem/5972hp62.i/D4H15001D62.b/8270Dv26.m
Meth Date : 19-Aug-2014 11:23 ron Quant Type: ISTD
Cal Date : 23-JUL-2014 19:31 Cal File: 4G23008-CAL662.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	8.212	8.212	(1.000)	257790	40.0000		(H)
* 2 Naphthalene-d8	136	11.170	11.170	(1.000)	946593	40.0000		
* 3 Acenaphthene-d10	164	15.254	15.254	(1.000)	493103	40.0000		
* 4 Phenanthrene-d10	188	18.171	18.171	(1.000)	822083	40.0000		
* 5 Chrysene-d12	240	22.521	22.521	(1.000)	834468	40.0000		
* 6 Perylene-d12	264	24.609	24.609	(1.000)	612439	40.0000		
$ 7 2-Fluorophenol	112	5.274	5.274	(0.638)	386738	50.0000	46	
$ 8 Phenol-d5	99	7.751	7.751	(0.938)	522137	50.0000	44	
$ 9 Nitrobenzene-d5	82	9.532	9.532	(0.853)	436313	50.0000	46	
$ 10 2-Fluorobiphenyl	172	13.821	13.821	(0.906)	775127	50.0000	51	
$ 11 2,4,6-Tribromophenol	330	16.932	16.932	(1.110)	135161	50.0000	50	9867
$ 12 Terphenyl-d14	244	20.945	20.945	(0.930)	773702	50.0000	47	
13 N-Nitrosodimethylamine	42	2.275	2.275	(0.275)	254947	50.0000	44	9754
14 Pyridine	79	2.306	2.306	(0.279)	512892	50.0000	48	9925

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4H15001-ICV162.d
Report Date: 19-Aug-2014 11:23

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
15 Phenol	94	7.772	7.772	(0.941)	498420	50.0000	43	
16 Aniline	93	7.485	7.485	(0.906)	607707	50.0000	43	9899
17 Bis(2-chloroethyl)ether	93	7.731	7.731	(0.936)	420030	50.0000	45	(H)
18 2-Chlorophenol	128	7.782	7.782	(0.942)	425470	50.0000	46	8887
19 1,3-Dichlorobenzene	146	8.058	8.058	(0.975)	455549	50.0000	46	
20 1,4-Dichlorobenzene	146	8.253	8.253	(0.999)	462841	50.0000	46	
21 Benzyl Alcohol	108	8.693	8.693	(1.052)	244558	50.0000	44	
22 1,2-Dichlorobenzene	146	8.591	8.591	(1.040)	448215	50.0000	46	(H)
23 2-Methylphenol	108	9.133	9.133	(1.105)	359908	50.0000	43	(H)
24 2,2'-oxybis(1-Chloropropane)	45	9.051	9.051	(1.095)	632119	50.0000	43	9828
25 3 & 4-Methylphenol	108	9.532	9.532	(1.154)	382042	50.0000	43	
26 N-Nitroso-di-N-propylamine	70	9.328	9.328	(1.129)	310932	50.0000	40	9783
27 Acetophenone	105	9.225	9.225	(0.826)	678446	50.0000	52	9485
28 Hexachloroethane	117	9.358	9.358	(1.133)	210257	50.0000	46	9755
29 Nitrobenzene	77	9.573	9.573	(0.857)	523683	50.0000	42	7250
30 Isophorone	82	10.197	10.197	(0.913)	781754	50.0000	44	9793
31 2-Nitrophenol	139	10.341	10.341	(0.926)	220065	50.0000	46	9830
32 2,4-Dimethylphenol	122	10.709	10.709	(0.959)	335506	50.0000	47	9760
33 Bis(2-chloroethoxy)methane	93	10.842	10.842	(0.971)	502818	50.0000	46	9798
34 2,4-Dichlorophenol	162	11.006	11.006	(0.985)	340772	50.0000	49	
35 1,2,4-Trichlorobenzene	180	11.088	11.088	(0.993)	380240	50.0000	51	
36 Naphthalene	128	11.211	11.211	(1.004)	1111818	50.0000	48	9871
37 4-Chloroaniline	127	11.477	11.477	(1.027)	530650	50.0000	46	9702
38 Hexachlorobutadiene	225	11.651	11.651	(1.043)	211529	50.0000	51	9523
39 4-Chloro-3-methylphenol	107	12.859	12.859	(1.151)	335579	50.0000	44	7972
40 2-Methylnaphthalene	141	12.869	12.869	(1.152)	643348	50.0000	47	
41 1-Methylnaphthalene	142	13.084	13.084	(1.171)	663509	50.0000	46	
42 Hexachlorocyclopentadiene	237	13.309	13.309	(0.873)	242652	50.0000	55	9779
43 1,2,4,5-Tetrachlorobenzene	216	13.278	13.278	(0.870)	365277	50.0000	52	9694
44 2,4,6-Trichlorophenol	196	13.647	13.647	(0.895)	234923	50.0000	52	
45 2,4,5-Trichlorophenol	196	13.770	13.770	(0.903)	250534	50.0000	52	
46 2-Chloronaphthalene	162	13.974	13.974	(0.916)	680609	50.0000	50	
47 2-Nitroaniline	65	14.322	14.322	(0.939)	273837	50.0000	54	9472
48 Dimethylphthalate	163	14.875	14.875	(0.975)	788047	50.0000	47	9760
49 1,3-Dinitrobenzene	122	14.824	14.824	(0.972)	55286	50.0000	46	
50 2,6-Dinitrotoluene	165	14.936	14.936	(0.979)	191042	50.0000	47	9415
51 Acenaphthylene	152	14.906	14.906	(0.977)	1106709	50.0000	50	9855
52 3-Nitroaniline	138	15.295	15.295	(1.003)	227078	50.0000	50	0 (M)
53 Acenaphthene	153	15.325	15.325	(1.005)	670565	50.0000	50	8137
54 2,4-Dinitrophenol	184	15.530	15.530	(1.018)	89560	50.0000	47	
55 4-Nitrophenol	139	15.970	15.970	(1.047)	172660	50.0000	46	0 (M)
56 2,4-Dinitrotoluene	165	15.817	15.817	(1.037)	252002	50.0000	46	9647
57 Dibenzofuran	168	15.725	15.725	(1.031)	936567	50.0000	49	9905
58 2,3,4,6-Tetrachlorophenol	232	16.083	16.083	(1.054)	195278	50.0000	52	
59 Diethylphthalate	149	16.451	16.451	(1.079)	792200	50.0000	47	0 (M)
60 4-Chlorophenyl-phenylether	204	16.543	16.543	(1.085)	349807	50.0000	49	8850
61 Fluorene	166	16.441	16.441	(1.078)	713543	50.0000	49	9398

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4H15001-ICV162.d
Report Date: 19-Aug-2014 11:23

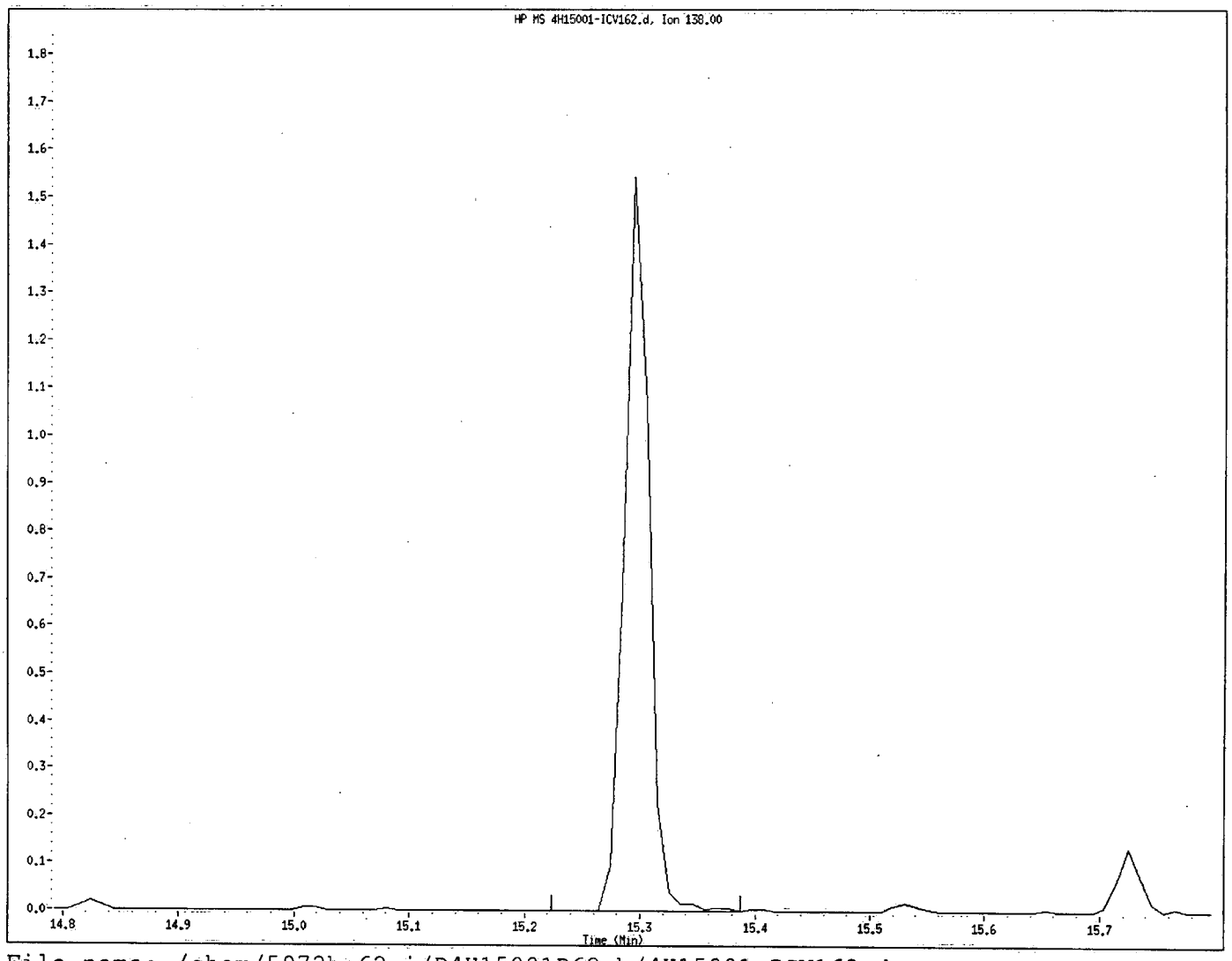
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
62 4-Nitroaniline	138	16.584	16.584	(1.087)	212464	50.0000	45	9388
63 4,6-Dinitro-2-methylphenol	198	16.646	16.646	(0.916)	140558	50.0000	45	9403
64 N-Nitrosodiphenylamine (1)	169	16.799	16.799	(0.925)	621768	50.0000	50	9448
65 1,2-Diphenyl Hydrazine	77	16.830	16.830	(1.103)	883370	50.0000	48	9827
66 4-Bromophenyl-phenylether	248	17.454	17.454	(0.961)	210354	50.0000	52	9730
67 Hexachlorobenzene	284	17.505	17.505	(0.963)	262105	50.0000	51	9809
68 Pentachlorophenol	266	17.925	17.925	(0.986)	137735	50.0000	53	9663
69 Phenanthrene	178	18.212	18.212	(1.002)	1067307	50.0000	49	
70 Anthracene	178	18.294	18.294	(1.007)	1055358	50.0000	49	
71 Carbazole	167	18.652	18.652	(1.026)	1030561	50.0000	48	9877
72 Di-n-butylphthalate	149	19.419	19.419	(1.069)	1367900	50.0000	46	9881
73 Fluoranthene	202	20.218	20.218	(1.113)	1111090	50.0000	49	
74 Pyrene	202	20.566	20.566	(0.913)	1144294	50.0000	47	
75 Butylbenzylphthalate	149	21.815	21.815	(0.969)	598845	50.0000	46	9815
76 3,3'-Dichlorobenzidine	252	22.551	22.551	(1.001)	406397	50.0000	50	0 (M)
77 bis(2-ethylhexyl)Phthalate	149	22.818	22.818	(1.013)	854307	50.0000	45	9720
78 Benzo(a)anthracene	228	22.511	22.511	(1.000)	992173	50.0000	47	
79 Chrysene	228	22.562	22.562	(1.002)	956595	50.0000	49	
80 Di-n-octylphthalate	149	23.790	23.790	(0.967)	1414774	50.0000	46	
81 Benzo(b)fluoranthene	252	24.097	24.097	(0.979)	1037644	50.0000	48	
82 Benzo(k)fluoranthene	252	24.138	24.138	(0.981)	1102635	50.0000	51	
83 Benzo(a)pyrene	252	24.527	24.527	(0.997)	997704	50.0000	49	
84 Indeno(1,2,3-cd)pyrene	276	25.909	25.909	(1.053)	892928	50.0000	46	
85 Dibenzo(a,h)anthracene	278	25.950	25.950	(1.054)	949932	50.0000	49	9487
86 Benzo(g,h,i)perylene	276	26.216	26.216	(1.065)	986717	50.0000	48	
87 Benzaldehyde	77	7.158	7.158	(0.866)	197067	50.0000	48	9825
88 Caprolactam	113	12.214	12.214	(1.093)	125578	50.0000	44	9811
89 Atrazine	215	17.905	17.905	(0.985)	102488	50.0000	49	9838
90 1,1'-Biphenyl	154	14.015	14.015	(0.919)	822877	50.0000	49	9678
91 Diphenyl ether	170	14.292	14.292	(0.937)	493803	50.0000	53	9671
223 Benzidine	184	20.525	20.525	(0.911)	336278	50.0000	46	9634

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

8/19/2014

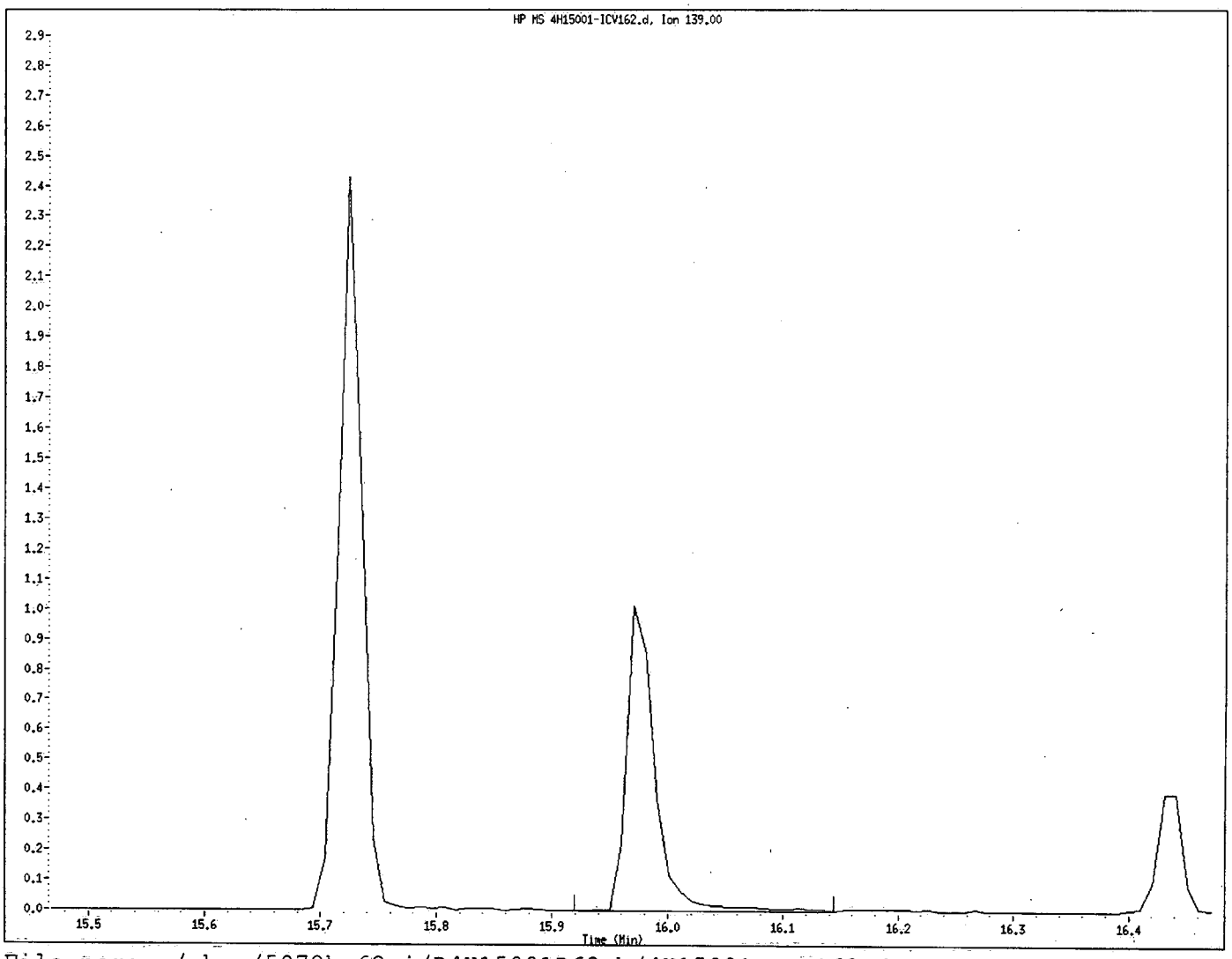
3-Nitroaniline CAS Number 99-09-2 Area = 227078 Manually integrated



File name: /chem/5972hp62.i/D4H15001D62.b/4H15001-ICV162.d
Client ID: SSTD025BG
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 16:25
Retention Time: 15.29
Operator ID: OWS

Roldan Hani 8/19/2014

4-Nitrophenol CAS Number 100-02-7 Area = 172660 Manually integrated



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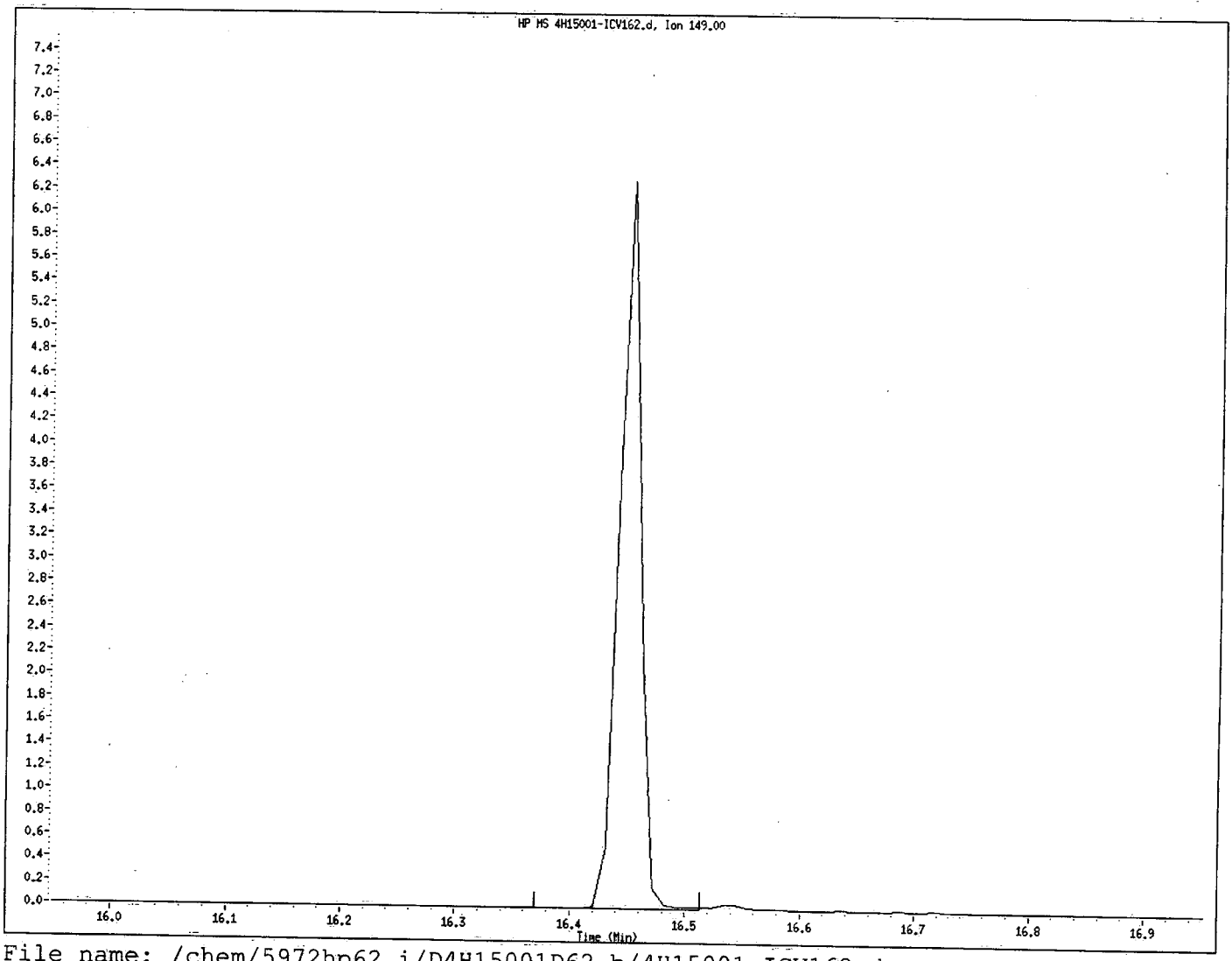
Client ID: SSTD025BG
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 16:25
Retention Time: 15.97
Operator ID: OWS

8/19/2014

Diethylphthalate CAS Number 84-66-2 Area = 792200 Manually integrated



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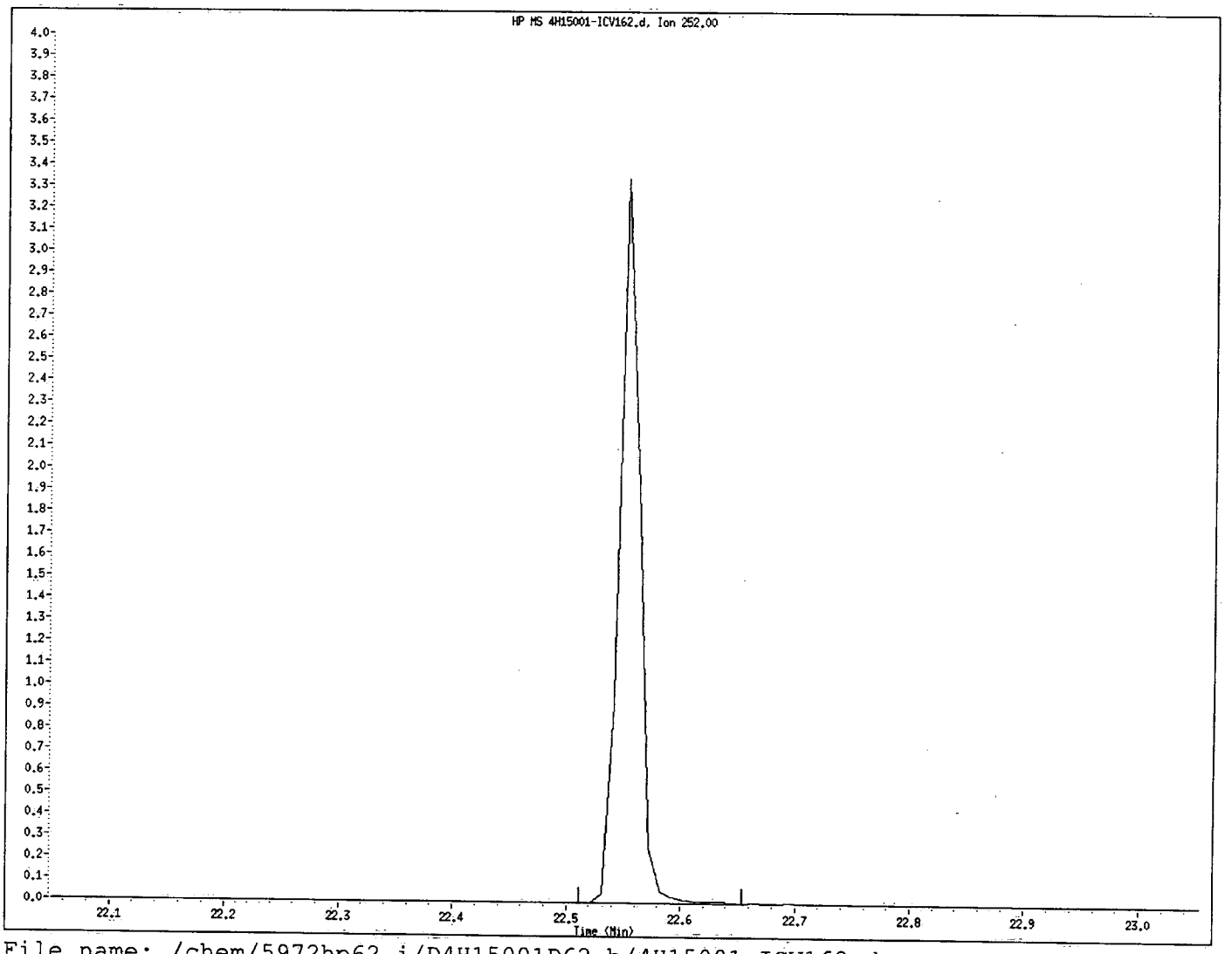
Client ID: SSTD025BG
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 16:25
Retention Time: 16.45
Operator ID: OWS

8/19/2014

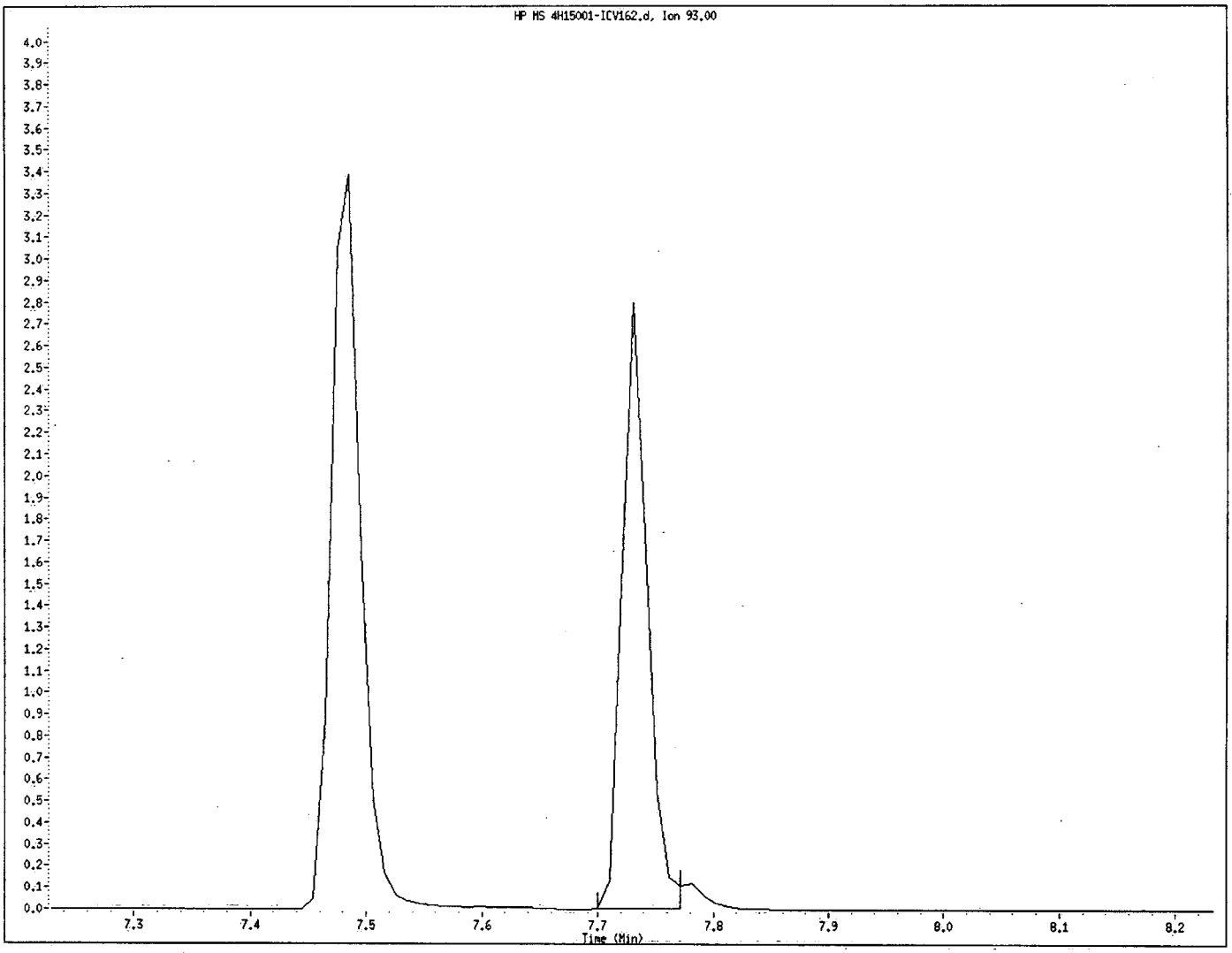
3,3'-Dichlorobenzidine CAS Number 91-94-1 Area = 406397 Manually integrated



File name: /chem/5972hp62.i/D4H15001D62.b/4H15001-ICV162.d
Client ID: SSTD025BG
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 16:25
Retention Time: 22.55
Operator ID: OWS

8/19/2014

Bis(2-chloroethyl)ether CAS Number 111-44-4 Area = 420030 User selected hit



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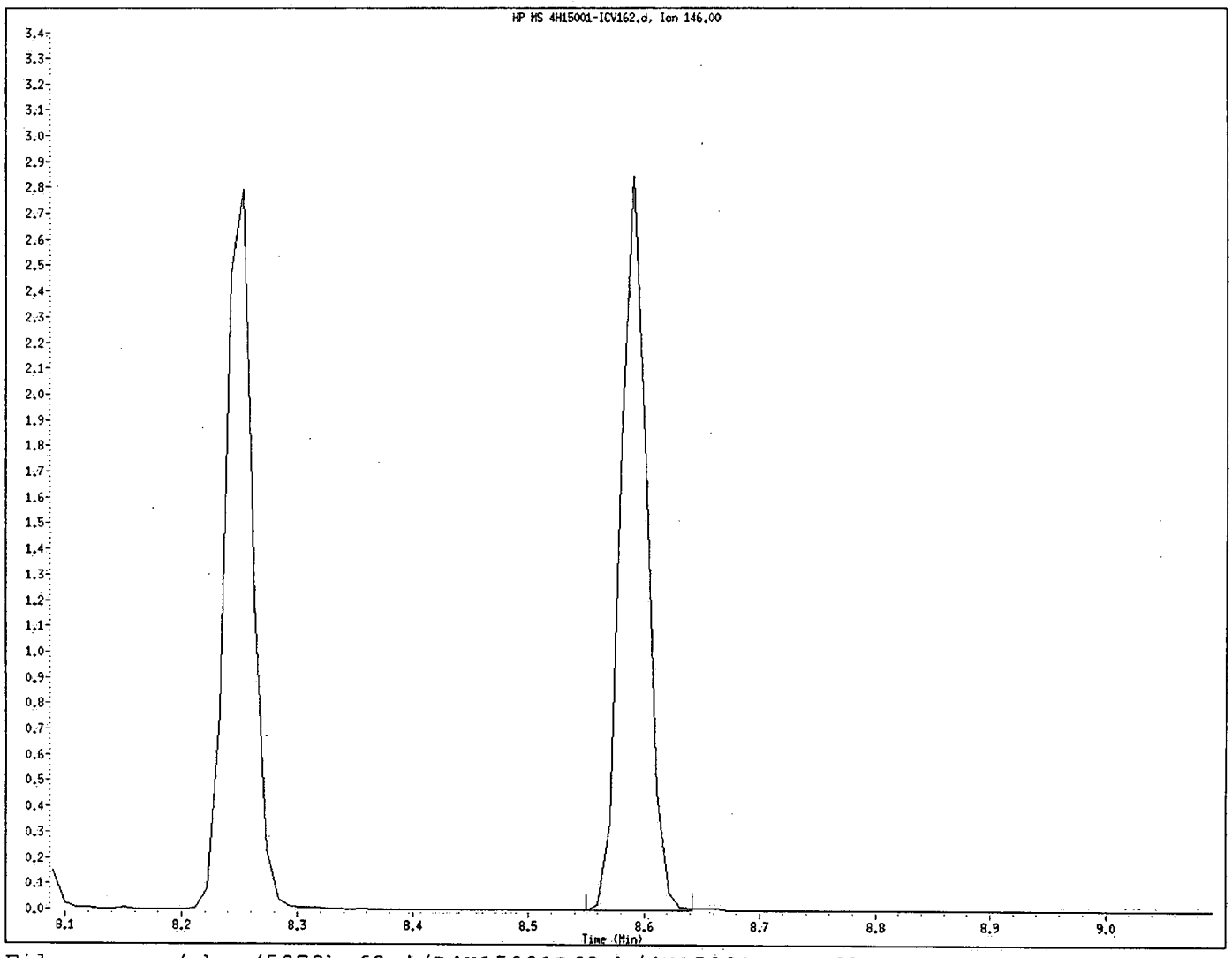
Client ID: SSTD025BG
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 16:25
Retention Time: 7.73
Operator ID: OWS

8/19/2014

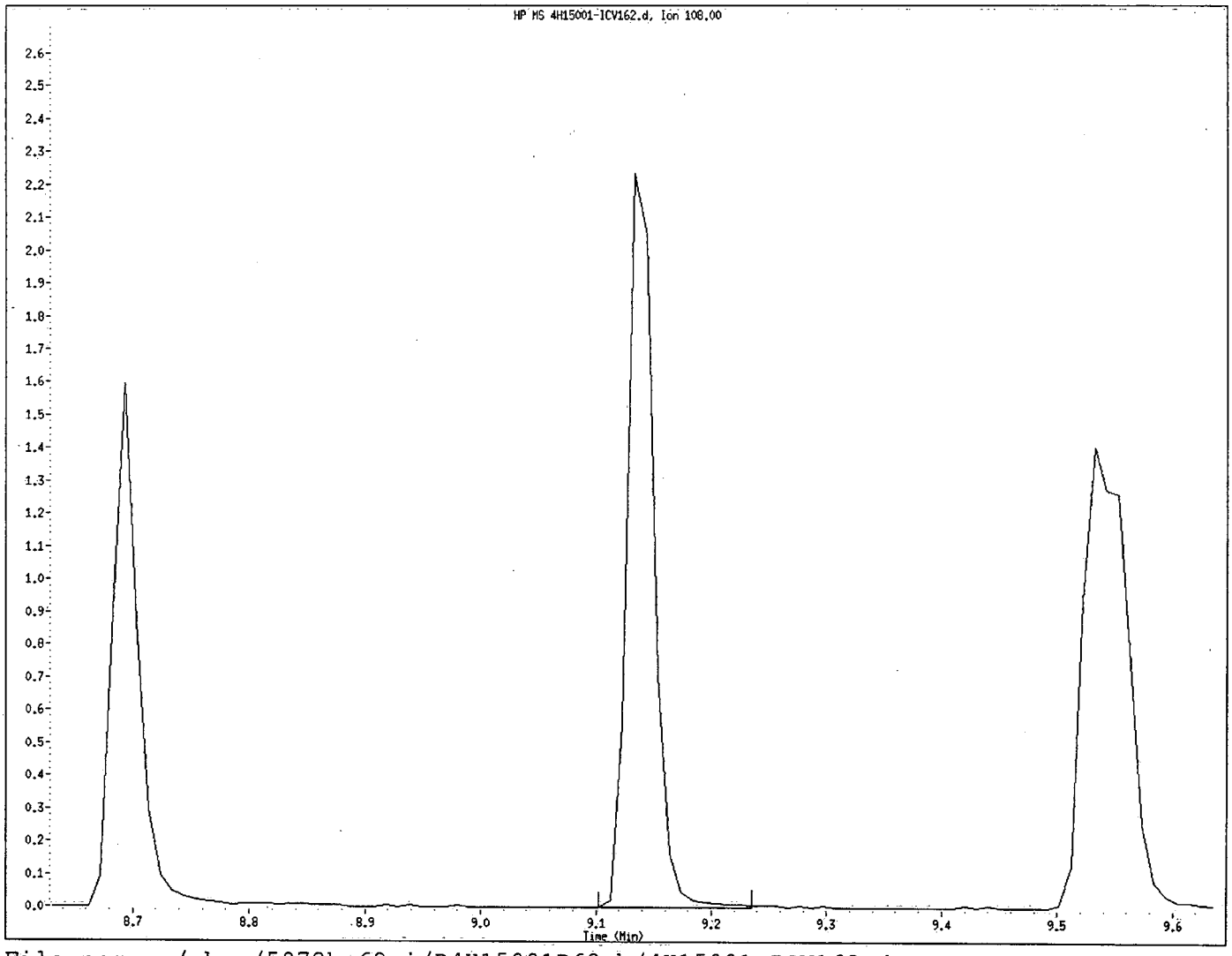
1,2-Dichlorobenzene CAS Number 95-50-1 Area = 448215 User selected hit



File name: /chem/5972hp62.i/D4H15001D62.b/4H15001-ICV162.d
Client ID: SSTD025BG
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 16:25
Retention Time: 8.59
Operator ID: OWS

8/19/2014

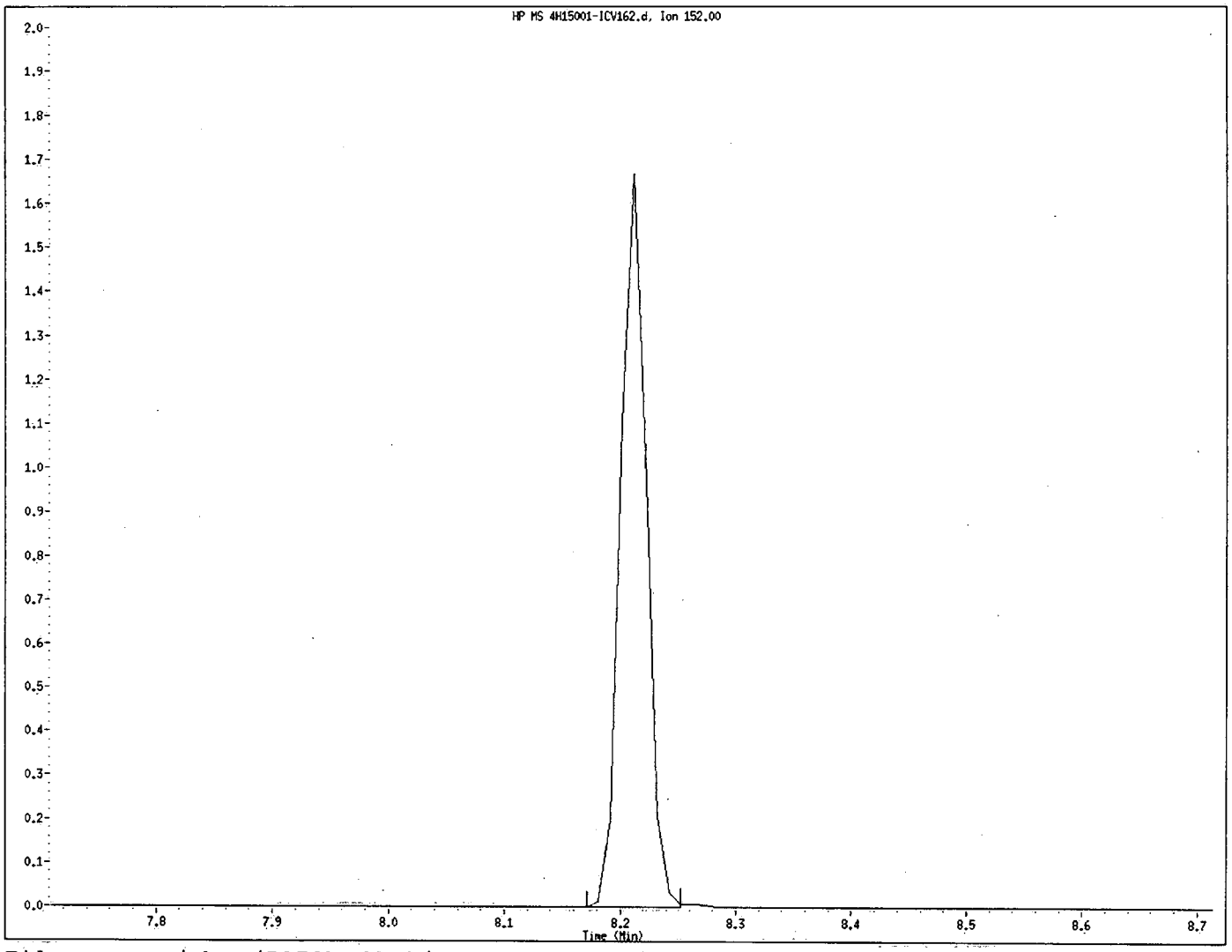
2-Methylphenol CAS Number 95-48-7 Area = 359908 User selected hit



File name: /chem/5972hp62.i/D4H15001D62.b/4H15001-ICV162.d
Client ID: SSTD025BG
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 16:25
Retention Time: 9.13
Operator ID: OWS

8/19/2014

1,4-Dichlorobenzene-d4 CAS Number 3855-82-1 Area = 257790 User selected hit



File name: /chem/5972hp62.i/D4H15001D62.b/4H15001-ICV162.d
Client ID: SSTD025BG
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 16:25
Retention Time: 8.21
Operator ID: OWS

8/19/2014

N. BFB / DFTPP or FC-43 Data

For each 12-hour period, per instrument utilized, include:

Bar Graph Spectrum and Tabulated Relative Abundances

Mass Listing

RIC

PFTBA (Perfluoro-tri-n-butylamine) scan, showing the relative abundance of the key ions and the Instrument Operating Conditions

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-TUN162.d

Date : 23-JUL-2014 19:09

Client ID: DFTPPBP

Instrument: 5972hp62.i

Sample Info: 4G23008-TUN1:OWS

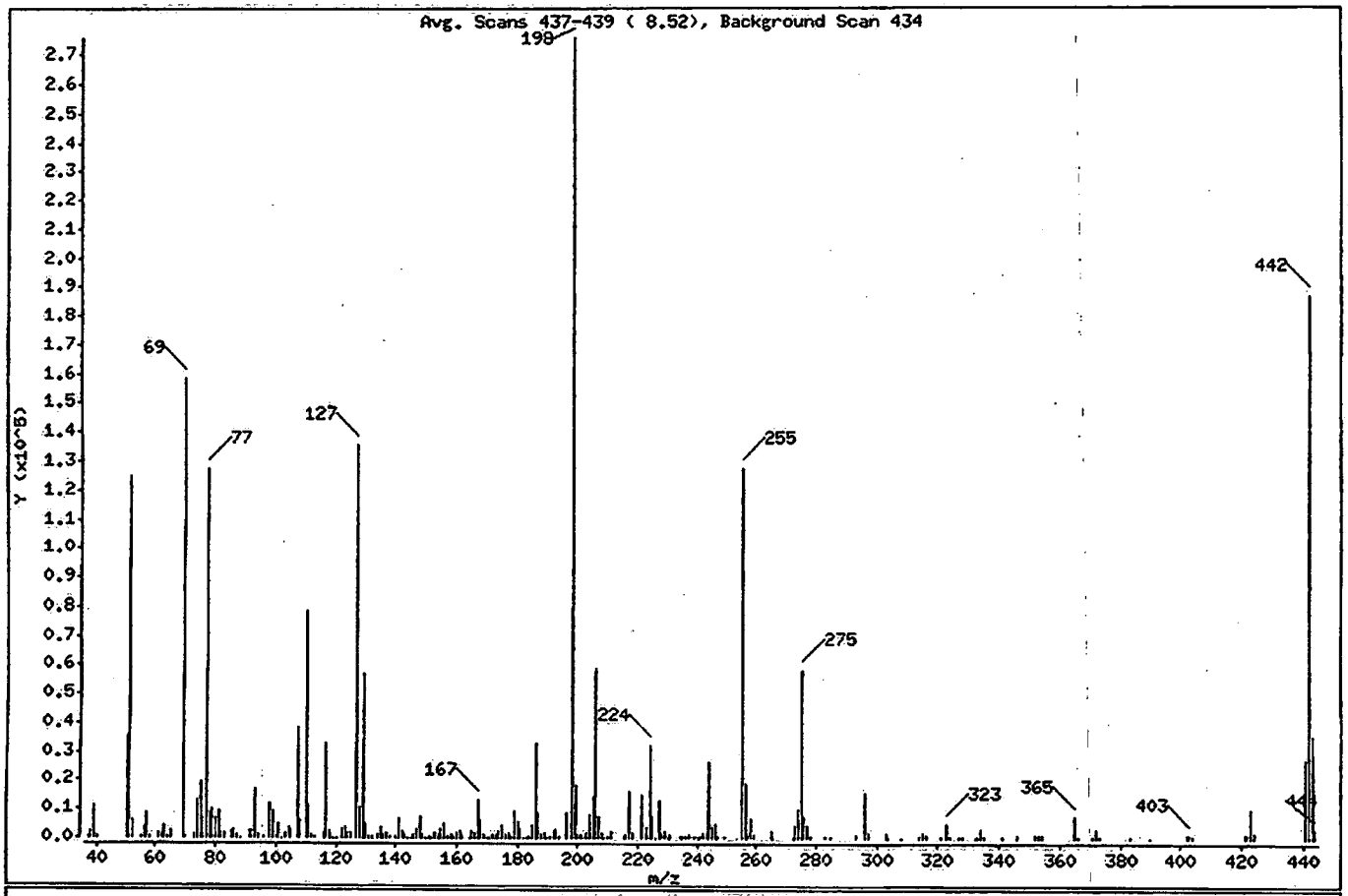
Volume Injected (uL): 2.0

Operator: OWS

Column phase: RTX-5MS

Column diameter: 0.32

1 Decafluorotriphenylphosphine



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	45.36
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	57.45
70	Less than 2.00% of mass 69	0.23 (0.40)
127	10.00 - 80.00% of mass 198	49.30
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.74
275	10.00 - 60.00% of mass 198	21.16
365	Greater than 1.00% of mass 198	2.69
441	Present, but less than mass 443	9.77
442	50.00 - 100.00% of mass 198	67.86
443	15.00 - 24.00% of mass 442	12.78 (18.83)

Rolder Hai 7/27/2014

Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-TUN162.d

Date : 23-JUL-2014 19:09

Client ID: DFTPPBP

Instrument: 5972hp62.i

Sample Info: 4G23008-TUN1:OWS

Volume Injected (uL): 2.0

Operator: OWS

Column phase: RTX-5HS

Column diameter: 0.32

Data File: 4G23008-TUN162.d

Spectrum: Avg. Scans 437-439 (8.52), Background Scan 434

Location of Maximum: 198.00

Number of points: 226

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	626	122.00	2896	183.00	230	257.00	1392
38.00	2268	123.00	4016	184.00	674	258.00	7203
39.00	11218	124.00	1961	185.00	4269	259.00	1016
40.00	791	125.00	1612	186.00	33096	265.00	2766
50.00	35512	127.00	135936	187.00	9127	266.00	248
51.00	125128	128.00	10526	188.00	967	272.00	226
52.00	6039	129.00	57056	189.00	2033	273.00	4234
55.00	651	130.00	4936	190.00	217	274.00	10454
56.00	3749	131.00	826	191.00	807	275.00	58376
57.00	9068	132.00	477	192.00	2839	276.00	7867
58.00	424	134.00	1401	193.00	2943	277.00	4391
61.00	2000	135.00	3982	194.00	454	278.00	752
62.00	1897	136.00	1537	196.00	8653	283.00	558
63.00	4539	137.00	1973	198.00	275840	285.00	841
64.00	706	138.00	342	199.00	18584	293.00	1014
65.00	2376	140.00	481	200.00	1507	296.00	16023
69.00	158464	141.00	6790	201.00	1508	297.00	1963
70.00	626	142.00	2484	203.00	1746	303.00	1906
73.00	1252	143.00	1369	204.00	8379	304.00	265
74.00	13111	144.00	286	205.00	14294	308.00	218
75.00	19856	145.00	210	206.00	58872	314.00	683
76.00	6949	146.00	1177	207.00	7696	315.00	1736
77.00	127704	147.00	3070	208.00	1853	316.00	973
78.00	8884	148.00	7418	209.00	278	321.00	518
79.00	10383	149.00	1309	210.00	696	323.00	5302
80.00	7028	150.00	219	211.00	2507	324.00	934
81.00	9255	151.00	782	215.00	390	327.00	891
82.00	2124	152.00	255	216.00	1305	328.00	465
83.00	2189	153.00	1912	217.00	16293	332.00	192
85.00	2563	154.00	1463	218.00	1790	333.00	415
86.00	2914	155.00	3475	221.00	15233	334.00	3242
87.00	1129	156.00	5161	223.00	3624	335.00	783
88.00	248	157.00	782	224.00	32200	341.00	524
91.00	2684	158.00	1352	225.00	7665	346.00	1034
92.00	2738	159.00	777	226.00	194	352.00	1544

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Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-TUN162.d

Date : 23-JUL-2014 19:09

Client ID: DFTPPBP | Instrument: 5972hp62.i

Sample Info: 4G23008-TUN1:OWS

Volume Injected (uL): 2.0 | Operator: OWS

Column phase: RTX-5MS | Column diameter: 0.32

Data File: 4G23008-TUN162.d

Spectrum: Avg. Scans 437-439 (8.52), Background Scan 434

Location of Maximum: 198.00

Number of points: 226

m/z	Y	m/z	Y	m/z	Y	m/z	Y
93.00	16840	160.00	1783	227.00	13344	353.00	1049
94.00	1144	161.00	2803	228.00	2021	354.00	1400
96.00	692	162.00	750	229.00	2659	365.00	7423
98.00	12345	164.00	284	230.00	217	366.00	907
99.00	9329	165.00	2280	231.00	1211	371.00	413
100.00	847	166.00	1828	234.00	637	372.00	2879
101.00	5114	167.00	13027	235.00	817	373.00	713
102.00	218	168.00	6239	236.00	411	383.00	764
103.00	1804	169.00	1182	237.00	1126	390.00	185
104.00	3672	170.00	211	239.00	517	402.00	1007
105.00	2816	171.00	260	240.00	288	403.00	1398
107.00	38792	172.00	1185	241.00	713	404.00	451
108.00	6080	173.00	1314	242.00	1679	421.00	1405
110.00	78528	174.00	2275	243.00	1842	422.00	1206
111.00	11307	175.00	4558	244.00	26712	423.00	10290
112.00	1487	176.00	1551	245.00	3939	424.00	1880
113.00	447	177.00	2213	246.00	5031	441.00	26952
116.00	2208	178.00	426	247.00	798	442.00	187136
117.00	32848	179.00	9273	249.00	716	443.00	35248
118.00	2475	180.00	5947	253.00	311	444.00	3430
119.00	193	181.00	3025	255.00	127584		
120.00	301	182.00	304	256.00	19064		

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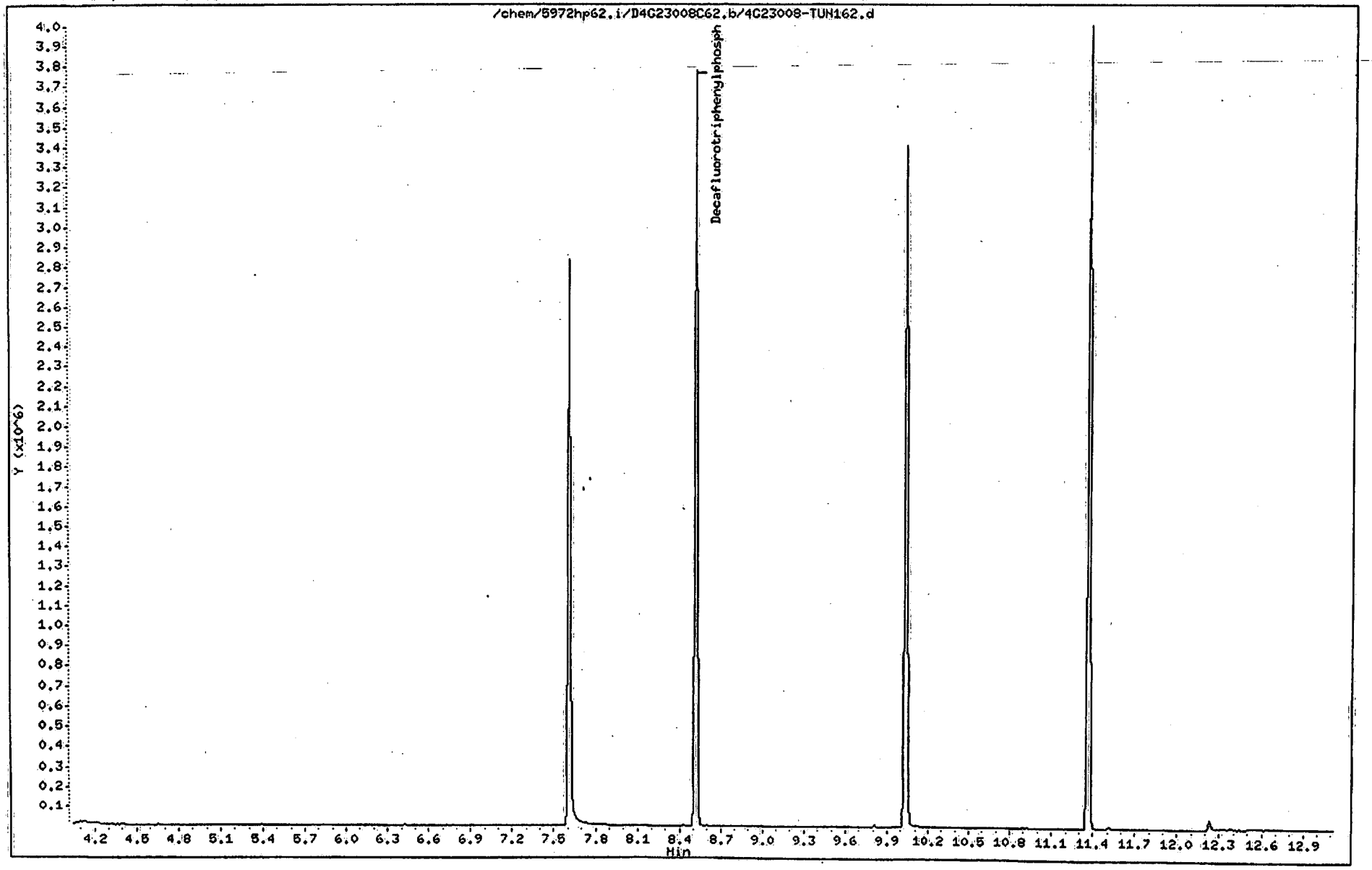
Data File: /chem/5972hp62.i/D4G23008C62.b/4G23008-TUN162.d
Date : 23-JUL-2014 19:09
Client ID: DFTPPBP
Sample Info: 4G23008-TUN1:OWS
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



Paldw Ha 7/27/2014

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DECAFLUOROTRIPHENYLPHOSPHINE Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	10 - 80% of mass 198	45.36		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	57.45		PASS
70	Less than 2% of mass 69	0.23	(0.40)	PASS
127	10 - 80% of mass 198	49.30		PASS
197	Less than 2% of mass 198	0.00	(0.00)	PASS
199	5 - 9% of mass 198	6.74		PASS
275	10 - 60% of mass 198	21.16		PASS
365	Greater than 1% of mass 198	2.69		PASS
441	Present, but less than mass 443	9.77	(76.48)	PASS
442	50 - 100% of mass 198	67.86		PASS
443	15 - 24% of mass 442	12.78	(18.83)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.16	2.0	PASS
Benzidine	1.03	2.0	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	917608			N/A
4,4-DDE	0	0.0	20.0	PASS
4,4-DDD	2516	0.3	20.0	PASS
4,4-DDD + DDE	2516	0.3	20.0	PASS

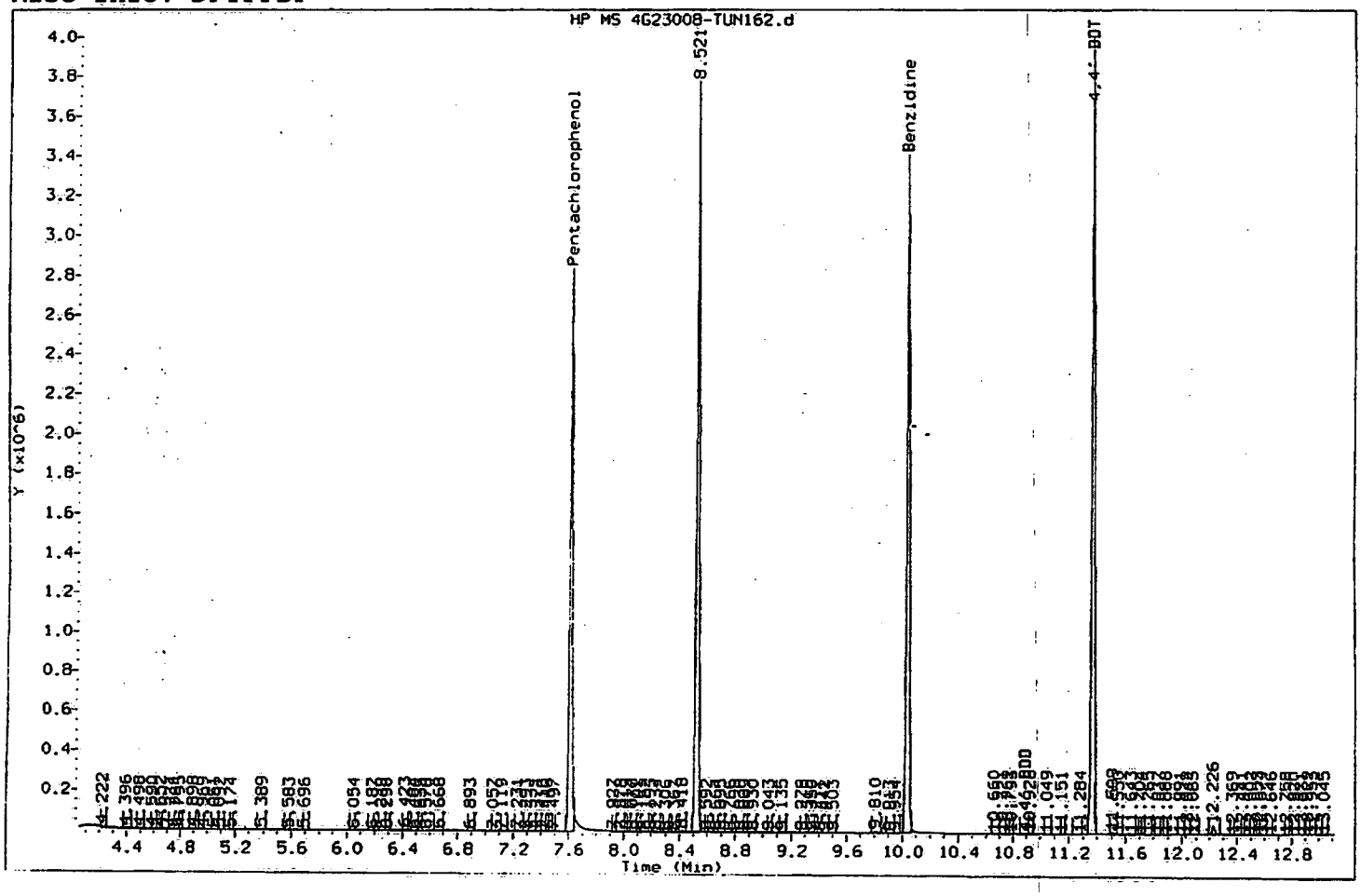
Tuning Sample, /chem/5972hp62.i/D4G23008C62.b/4G23008-TUN162.d/4G23008-TUN162.d,

Roldw Ha 7/27/2014

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 07/23/2014 20:11

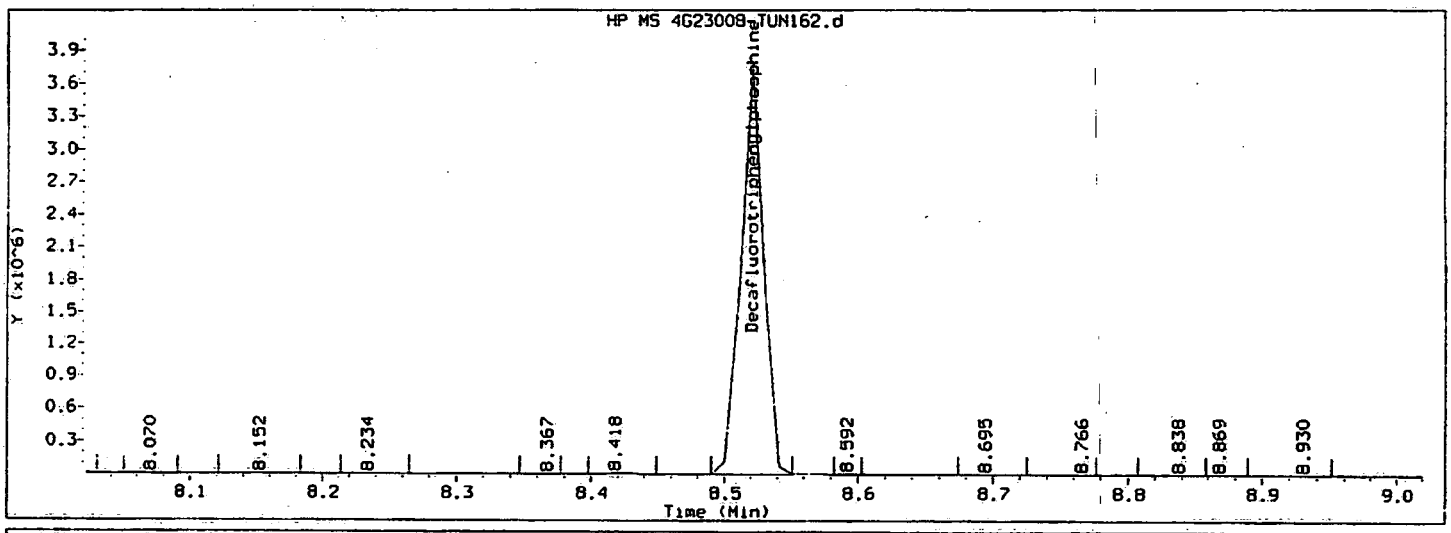
Datafile Analyzed: /chem/5972hp62.i/D4G23008C62.b/4G23008-TUN162.d/4G23008-TUN16
Method Used: /chem/5972hp62.i/D4G23008C62.b/dftpp8270D.m Inst: 5972hp62
Injection Date: 23-JUL-2014 19:09 Operator: OWS
Sample Info: 4G23008-TUN1 4G23008-TUN1:OWS
Misc Info: DFTPPBP

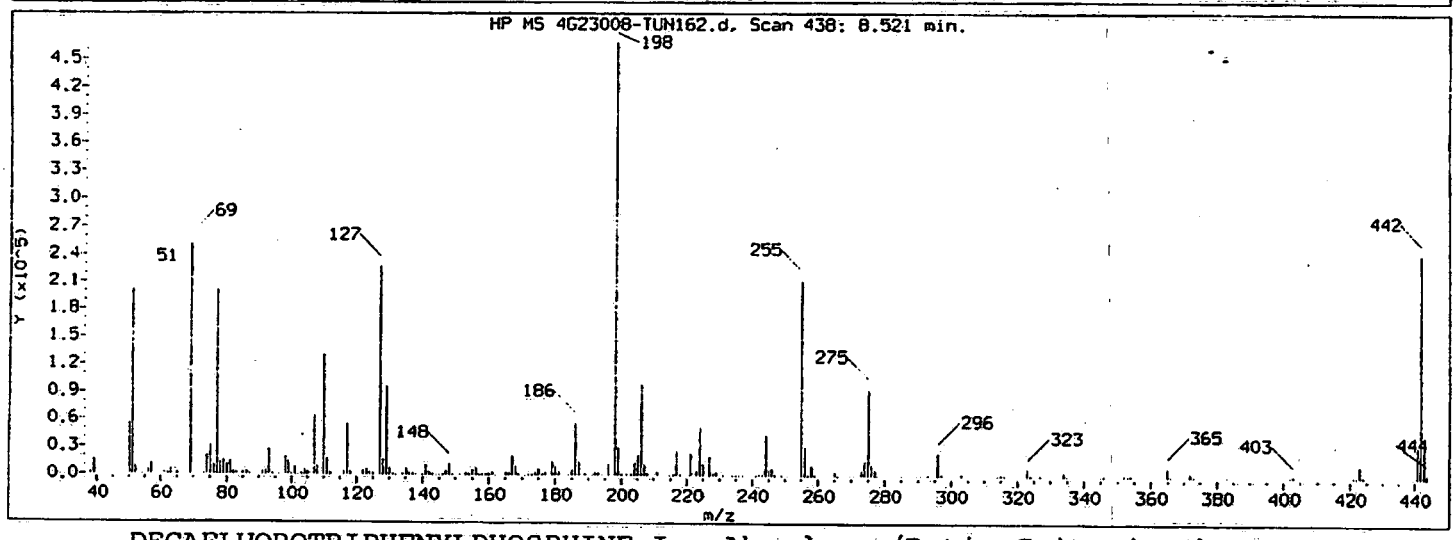


Roldw Hai 7/27/2014

Report Date: 07/23/2014 20:11

Datafile Analyzed: /chem/5972hp62.i/D4G23008C62.b/4G23008-TUN162.d/4G23008-TUN16
Method Used: /chem/5972hp62.i/D4G23008C62.b/dftpp8270D.m Inst: 5972hp62
Injection Date: 23-JUL-2014 19:09 Operator: OWS
Sample Info: 4G23008-TUN1 4G23008-TUN1:OWS
Misc Info: DFTPPBP





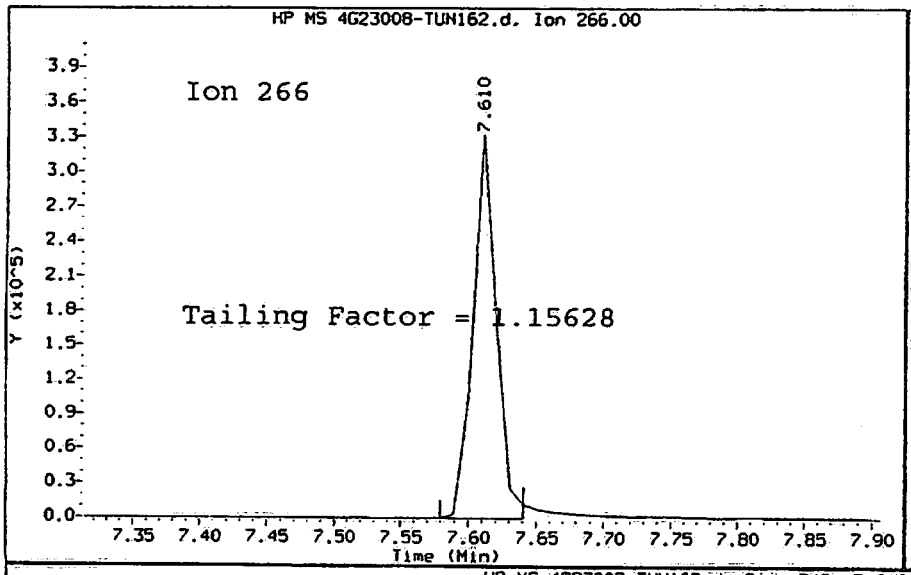
DECAFLUOROTRIPHENYLPHOSPHINE Ion Abundance/Ratio Criteria Chart

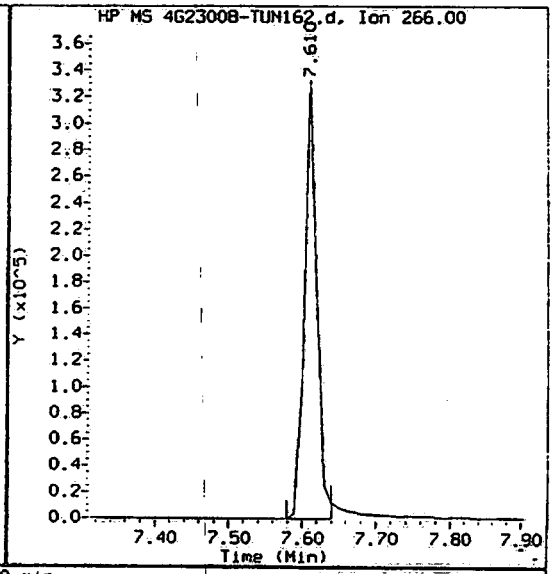
Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	10 - 80% of mass 198	45.36		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	57.45		PASS
70	Less than 2% of mass 69	0.23	(0.40)	PASS
127	10 - 80% of mass 198	49.30		PASS
197	Less than 2% of mass 198	0.00	(0.00)	PASS
199	5 - 9% of mass 198	6.74		PASS
275	10 - 60% of mass 198	21.16		PASS
365	Greater than 1% of mass 198	2.69		PASS
441	Present, but less than mass 443	9.77	(76.48)	PASS
442	50 - 100% of mass 198	67.86		PASS
443	15 - 24% of mass 442	12.78	(18.83)	PASS

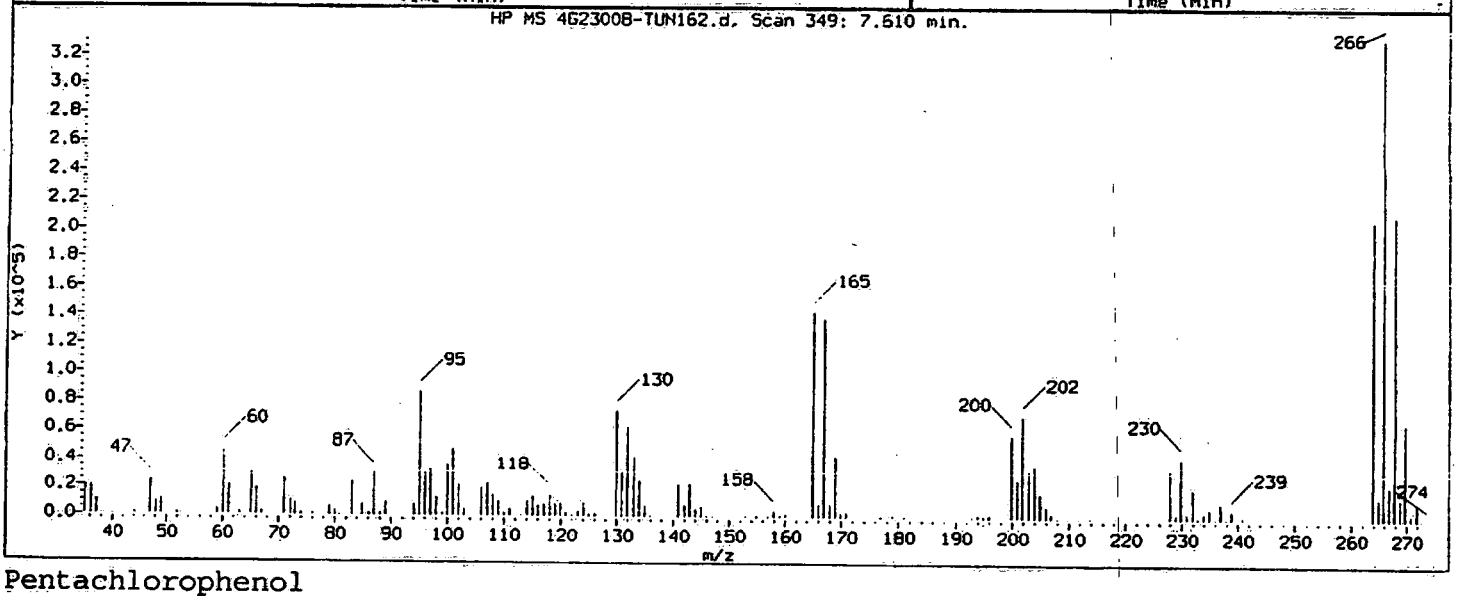
Roldw Ha 7/27/2014

Report Date: 07/23/2014 20:11

Datafile Analyzed: /chem/5972hp62.i/D4G23008C62.b/4G23008-TUN162.d/4G23008-TUN16
Method Used: /chem/5972hp62.i/D4G23008C62.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 23-JUL-2014 19:09 Operator:
Sample Info: DFTPP 4G23008-TUN1:OWS
Misc Info:







Pentachlorophenol
==========

Exp. RT = 7.890
Found RT = 7.610

Mass	Area	Ratio
266	396534	100.00

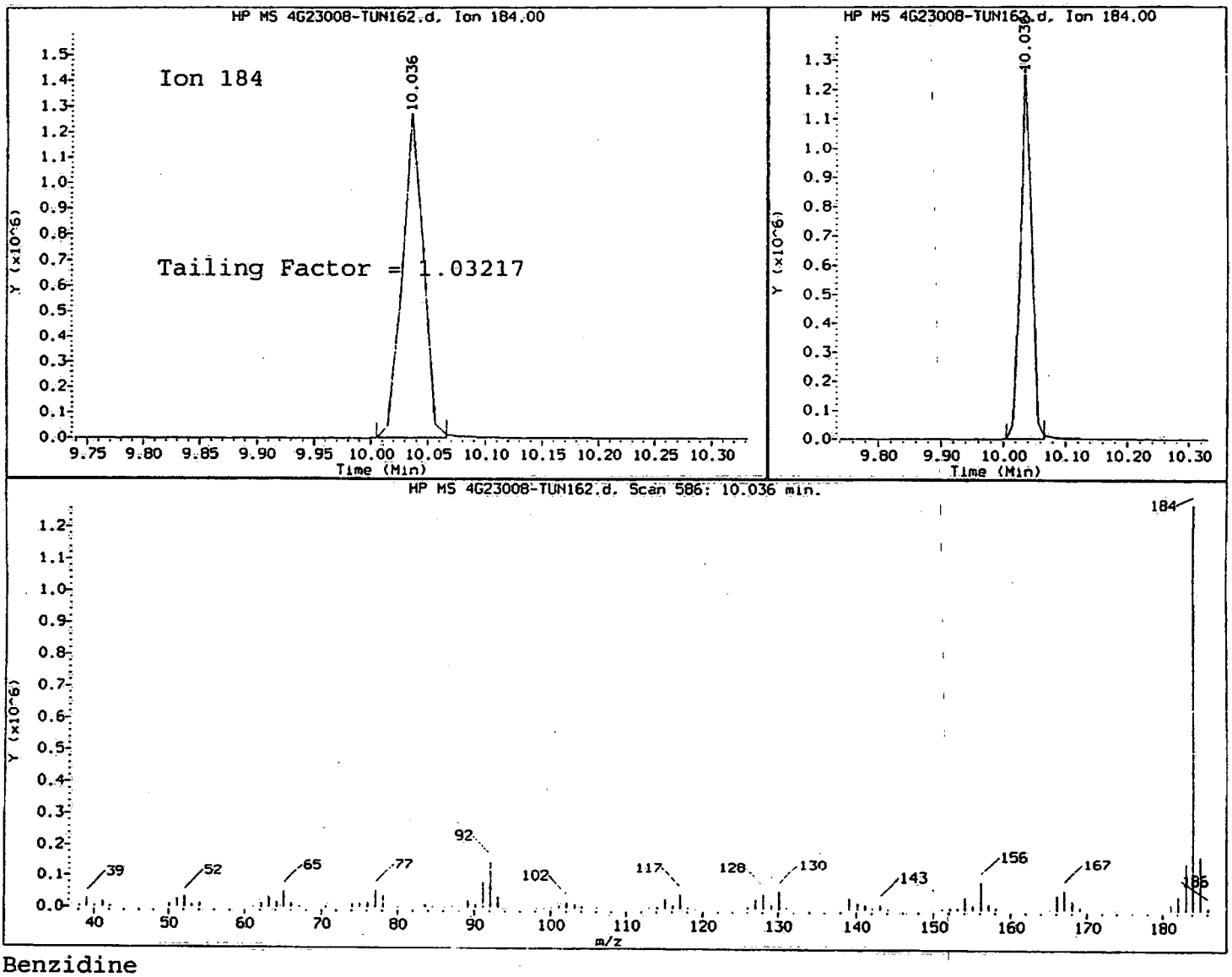
Tailing factor for Pentachlorophenol OK

Tail Factor = 1.156 Maximum Allowed = 2.0

Roldw Hai 7/27/2014

Report Date: 07/23/2014 20:11

Datafile Analyzed: /chem/5972hp62.i/D4G23008C62.b/4G23008-TUN162.d/4G23008-TUN16
Method Used: /chem/5972hp62.i/D4G23008C62.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 23-JUL-2014 19:09 Operator:
Sample Info: DFTPP 4G23008-TUN1:OWS
Misc Info:



Benzidine
=========
Exp. RT = 10.340
Found RT = 10.036

Mass	Area	Ratio
184	1609963	100.00

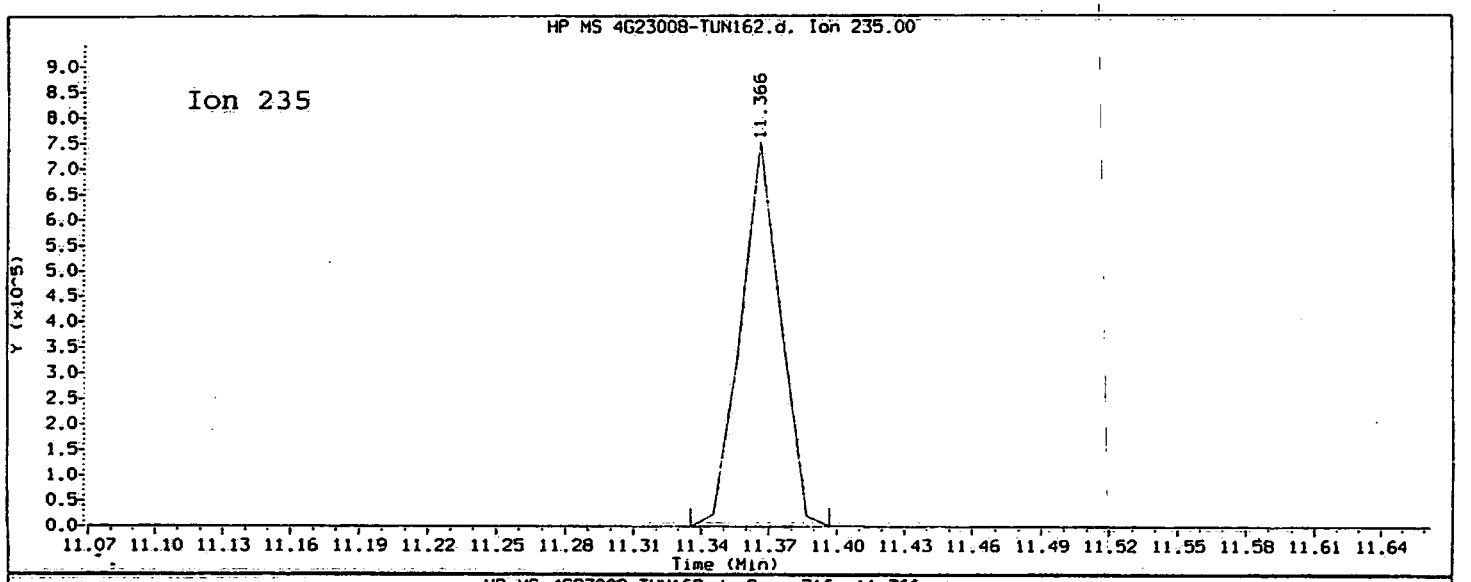
Tailing factor for Benzidine OK

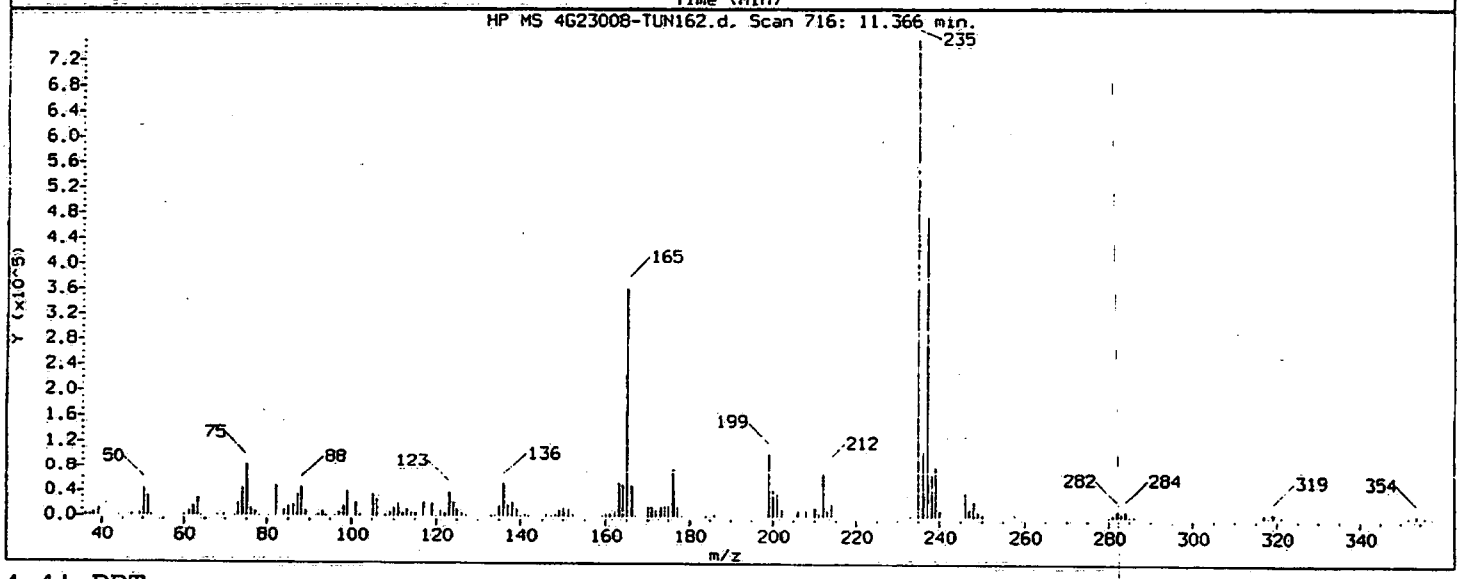
Tail Factor = 1.032 Maximum Allowed = 2.0

7/27/2014

Report Date: 07/23/2014 20:11

Datafile Analyzed: /chem/5972hp62.i/D4G23008C62.b/4G23008-TUN162.d/4G23008-TUN16
Method Used: /chem/5972hp62.i/D4G23008C62.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 23-JUL-2014 19:09 Operator:
Sample Info: DFTPP 4G23008-TUN1:OWS
Misc Info:





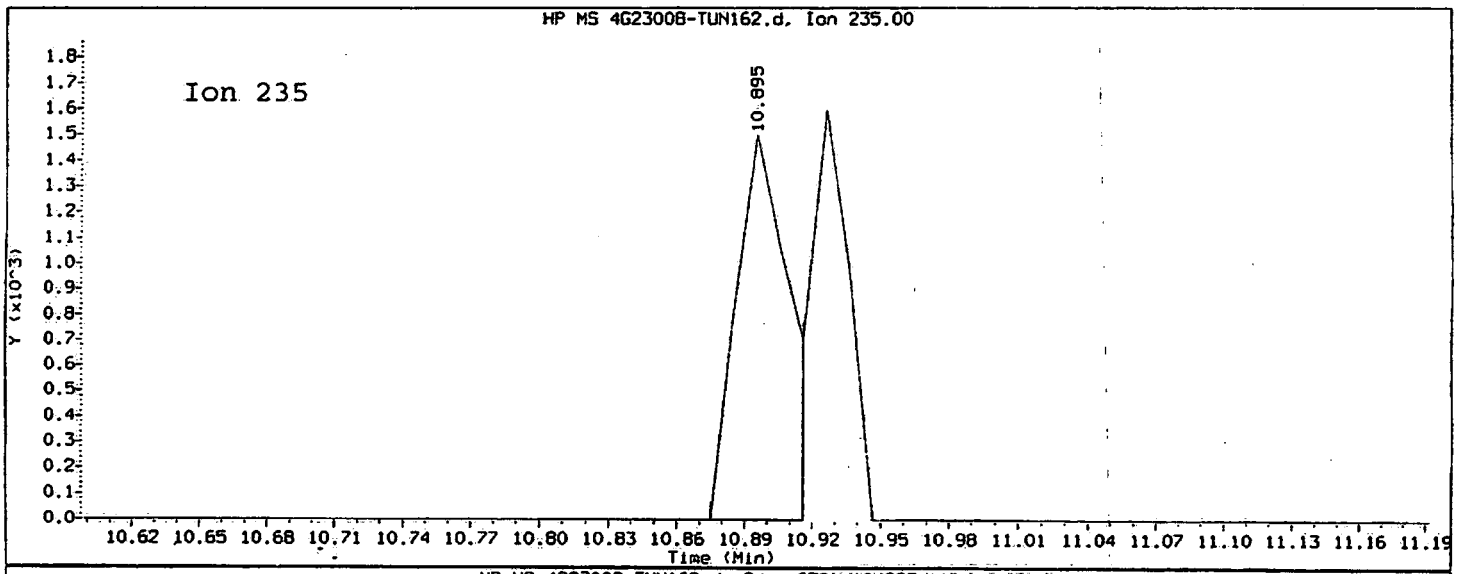
4,4'-DDT
========
Exp. RT = 11.690
Found RT = 11.366

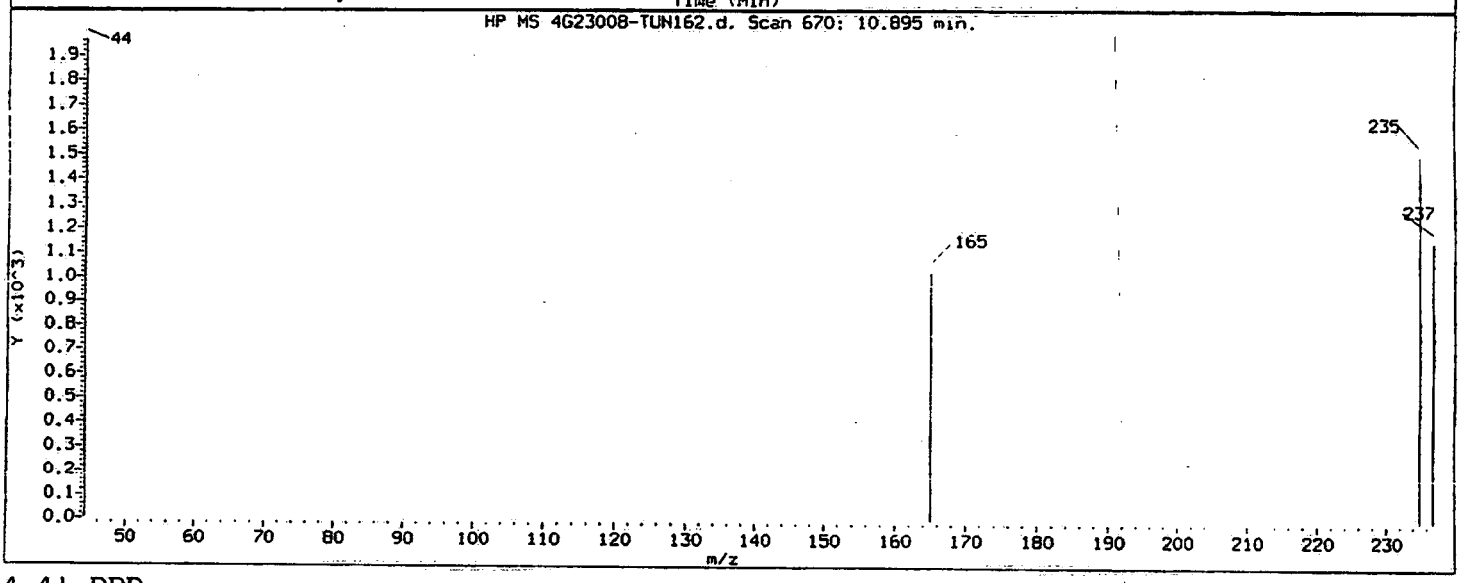
Mass	Area	Ratio
235	917608	100.00

Rolder Hani 7/27/2014

Report Date: 07/23/2014 20:11

Datafile Analyzed: /chem/5972hp62.i/D4G23008C62.b/4G23008-TUN162.d/4G23008-TUN16
Method Used: /chem/5972hp62.i/D4G23008C62.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 23-JUL-2014 19:09 Operator:
Sample Info: DFTPP 4G23008-TUN1:OWS
Misc Info:





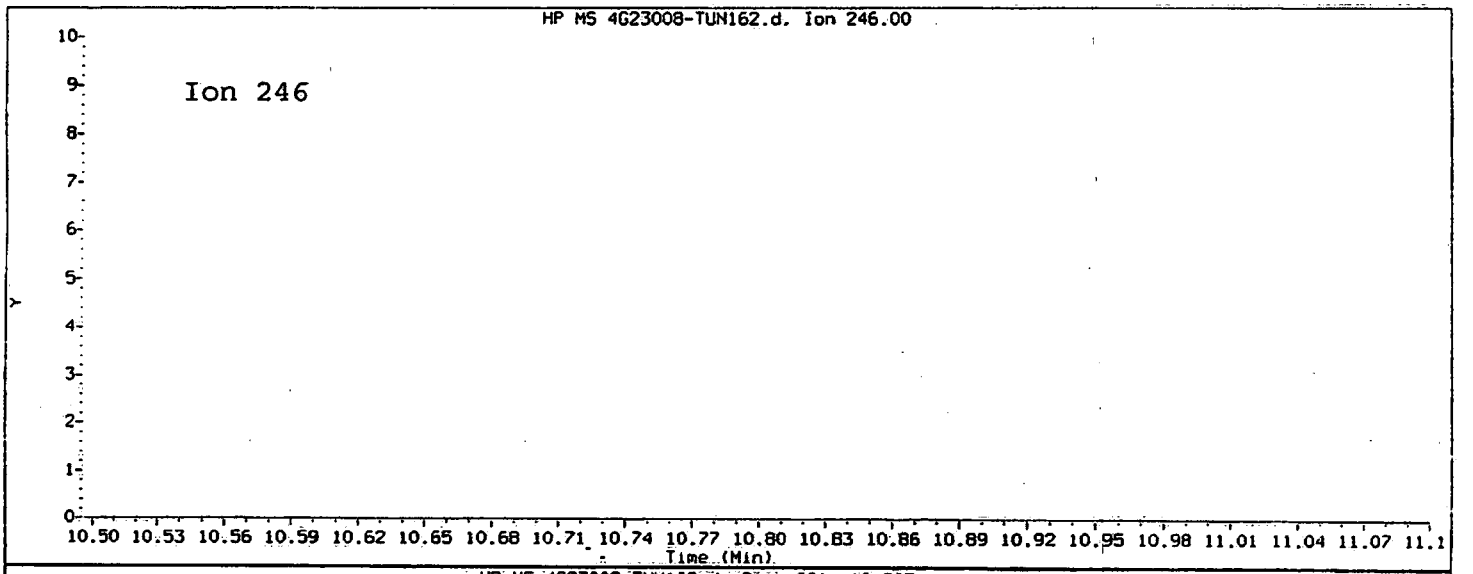
4,4'-DDD
========
Exp. RT = 11.250
Found RT = 10.895

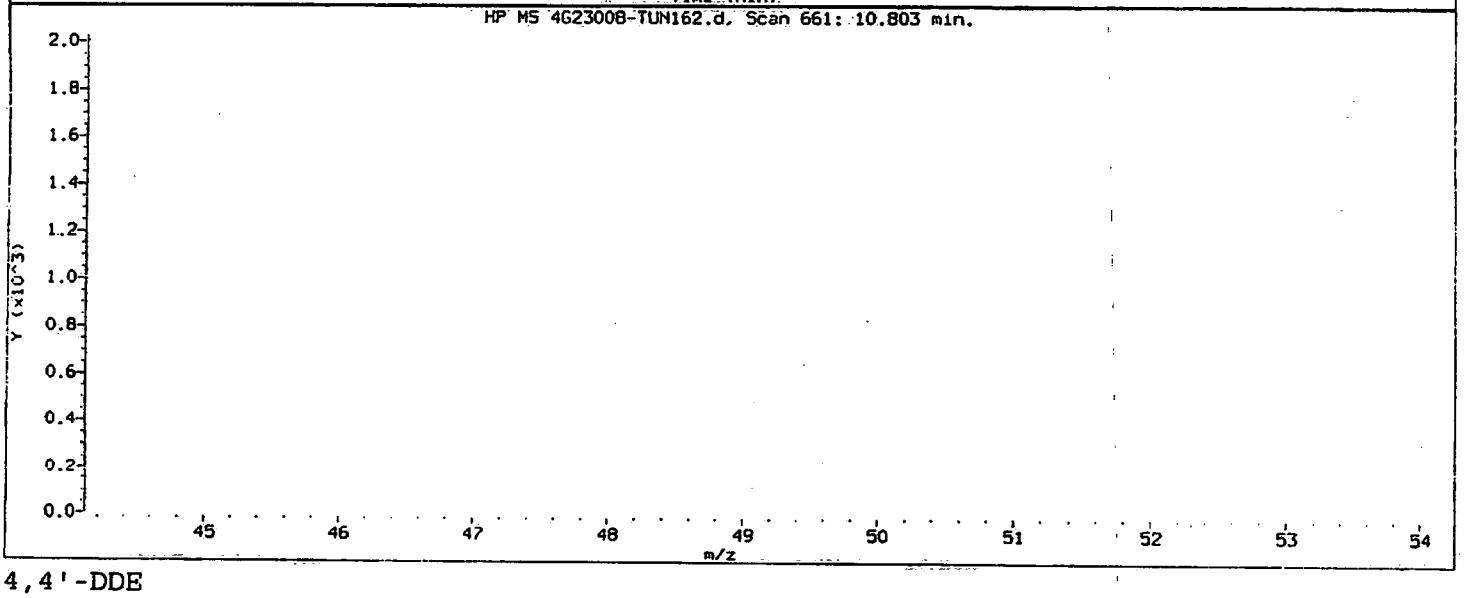
Mass	Area	Ratio
235	2516	100.00

Rolden Hani 7/27/2014

Report Date: 07/23/2014 20:11

Datafile Analyzed: /chem/5972hp62.i/D4G23008C62.b/4G23008-TUN162.d/4G23008-TUN16
Method Used: /chem/5972hp62.i/D4G23008C62.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 23-JUL-2014 19:09 Operator:
Sample Info: DFTPP 4G23008-TUN1:OWS
Misc Info:

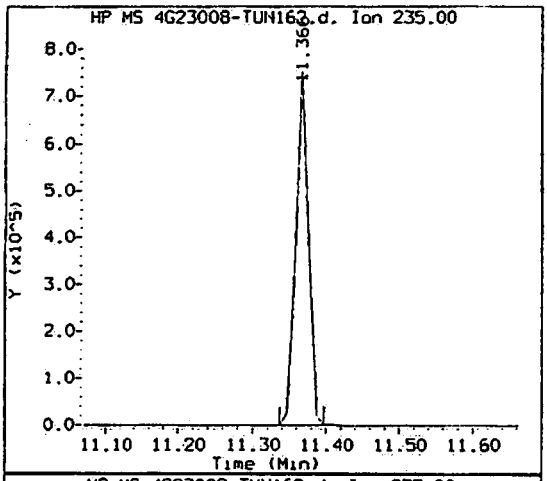




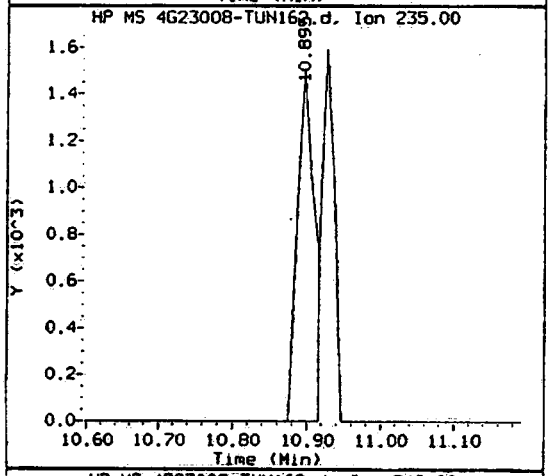
4,4'-DDE
========
Exp. RT = 10.800
Found RT = 0.000

Mass	Area	Ratio
246	0	0.00

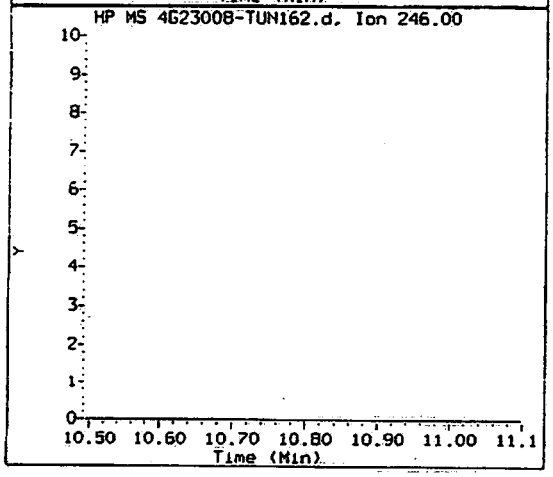
Rolder Hai 7/27/2014



Compound: 4,4'-DDT
Quant Mass: 235
RT: 11.366
Area: 917608



Compound: 4,4'-DDD
Quant Mass: 235
RT: 10.895
Area: 2516



Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	917608			N/A
4,4-DDE	0	0.0	20.0	PASS
4,4-DDD	2516	0.3	20.0	PASS
4,4-DDD + DDE	2516	0.3	20.0	PASS

****
TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Robin Ha 7/27/2014

Data File: /chem/5972hp66.i/D4H05004B66.b/4H05004-TUN1R66.d

Date : 05-AUG-2014 11:46

Client ID: DFTPPCR

Instrument: 5972hp66.i

Sample Info: 4H05004-TUN1:OWS

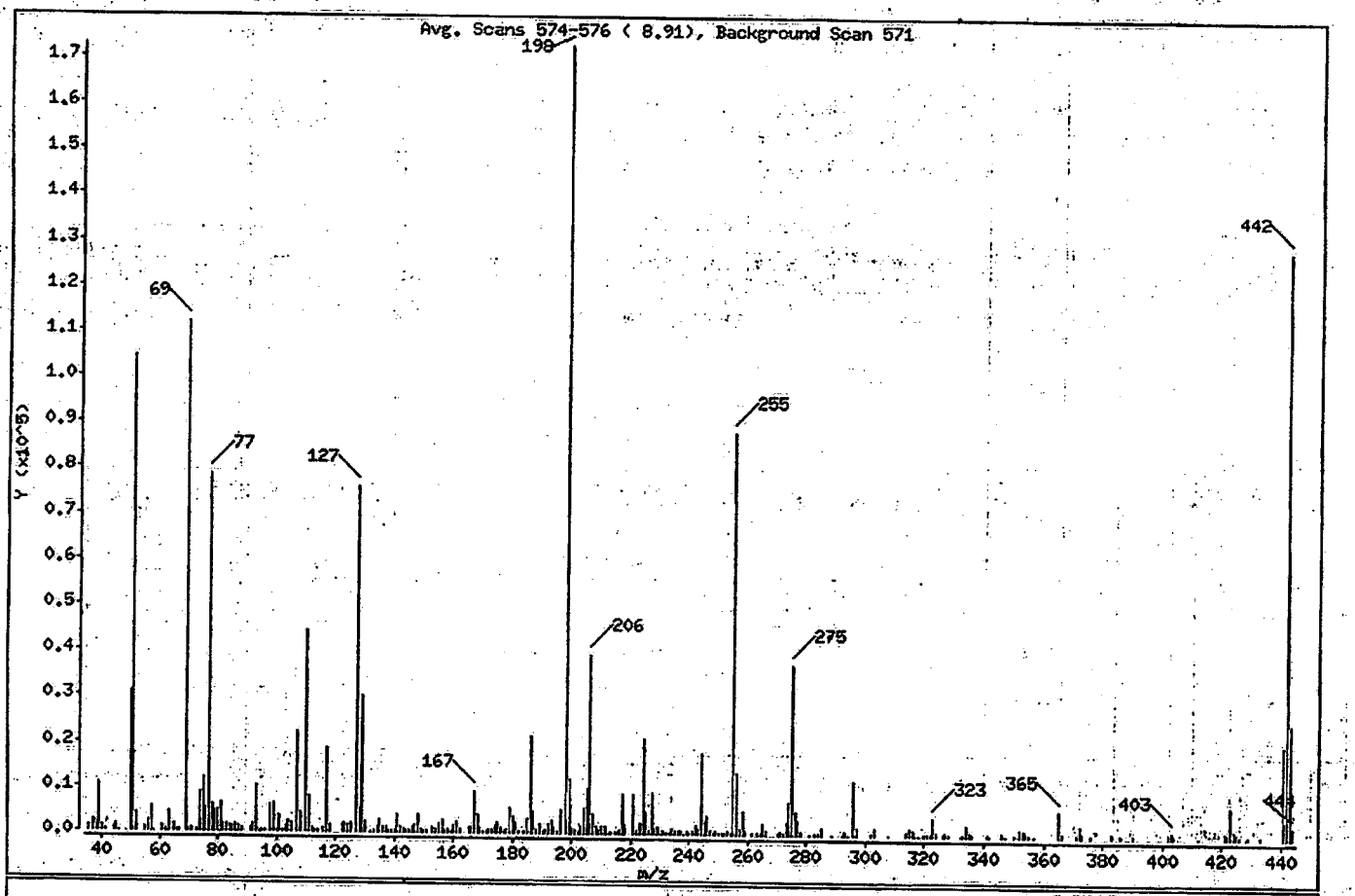
Volume Injected (uL): 2.0

Operator: OWS

Column phase: RTX-5MS

Column diameter: 0.32

1 Decafluorotriphenylphosphine



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	60.44
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	64.80
70	Less than 2.00% of mass 69	0.26 (0.41)
127	10.00 - 80.00% of mass 198	43.08
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.85
275	10.00 - 60.00% of mass 198	21.54
365	Greater than 1.00% of mass 198	3.31
441	Present, but less than mass 443	11.69
442	50.00 - 100.00% of mass 198	74.50
443	15.00 - 24.00% of mass 442	14.49 (19.45)

Roldan Ha 8/6/2014

Data File: /chem/5972hp66.i/D4H05004B66.b/4H05004-TUN1R66.d

Date : 05-AUG-2014 11:46

Client ID: DFTPPCR

Instrument: 5972hp66.i

Sample Info: 4H05004-TUN1:OWS

Volume Injected (uL): 2.0

Operator: OWS

Column phase: RTX-5MS

Column diameter: 0.32

Data File: 4H05004-TUN1R66.d

Spectrum: Avg. Scans 574-576 (8.91), Background Scan 571

Location of Maximum: 198.00

Number of points: 274

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	1262	127.00	75944	202.00	347	281.00	189
37.00	2389	128.00	5343	203.00	1668	283.00	241
38.00	995	129.00	30160	204.00	5462	284.00	480
39.00	10638	130.00	2281	205.00	10010	285.00	1531
40.00	1333	132.00	179	206.00	39384	289.00	177
41.00	390	133.00	351	207.00	4547	292.00	177
44.00	679	134.00	1347	208.00	1525	293.00	751
45.00	1659	135.00	2660	209.00	904	294.00	188
46.00	154	136.00	1379	210.00	1498	296.00	11839
50.00	30832	137.00	1286	211.00	1458	297.00	1545
51.00	104360	138.00	250	212.00	187	302.00	202
52.00	3952	139.00	419	213.00	199	303.00	1736
55.00	731	140.00	288	215.00	537	308.00	176
56.00	2474	141.00	3954	216.00	791	314.00	628
57.00	5486	142.00	1224	217.00	8860	315.00	1395
58.00	92	143.00	824	218.00	1856	316.00	1110
61.00	1337	144.00	213	221.00	8658	317.00	171
62.00	559	145.00	479	222.00	951	318.00	179
63.00	4428	146.00	1056	223.00	2492	320.00	219
65.00	1773	147.00	1447	224.00	20976	321.00	212
66.00	505	148.00	3947	225.00	4749	322.00	224
67.00	339	149.00	864	226.00	925	323.00	3981
69.00	111888	150.00	408	227.00	9091	324.00	839
70.00	456	151.00	457	228.00	1107	326.00	263
71.00	835	153.00	1250	229.00	1748	327.00	790
73.00	527	154.00	820	230.00	44	328.00	537
74.00	8790	155.00	2135	231.00	834	332.00	192
75.00	12030	156.00	2685	232.00	217	333.00	215
76.00	5279	157.00	452	233.00	232	334.00	2339
77.00	78712	158.00	801	234.00	1134	335.00	778
78.00	5904	159.00	554	235.00	614	336.00	222
79.00	4936	160.00	1478	236.00	963	341.00	396
80.00	4731	161.00	2250	237.00	928	342.00	184
81.00	6418	162.00	760	238.00	197	346.00	942
82.00	1434	165.00	1045	239.00	858	347.00	167

Robin Hu 8/6/2014

Data File: /chem/5972hp66.i/D4H05004B66.b/4H05004-TUN1R66.d

Date : 05-AUG-2014 11:46

Client ID: DFTPPCR

Instrument: 5972hp66.i

Sample Info: 4H05004-TUN1:OWS

Volume Injected (uL): 2.0

Operator: OWS

Column phase: RTX-5MS

Column diameter: 0.32

Data File: 4H05004-TUN1R66.d

Spectrum: Avg. Scans 574-576 (8.91), Background Scan 571

Location of Maximum: 198.00

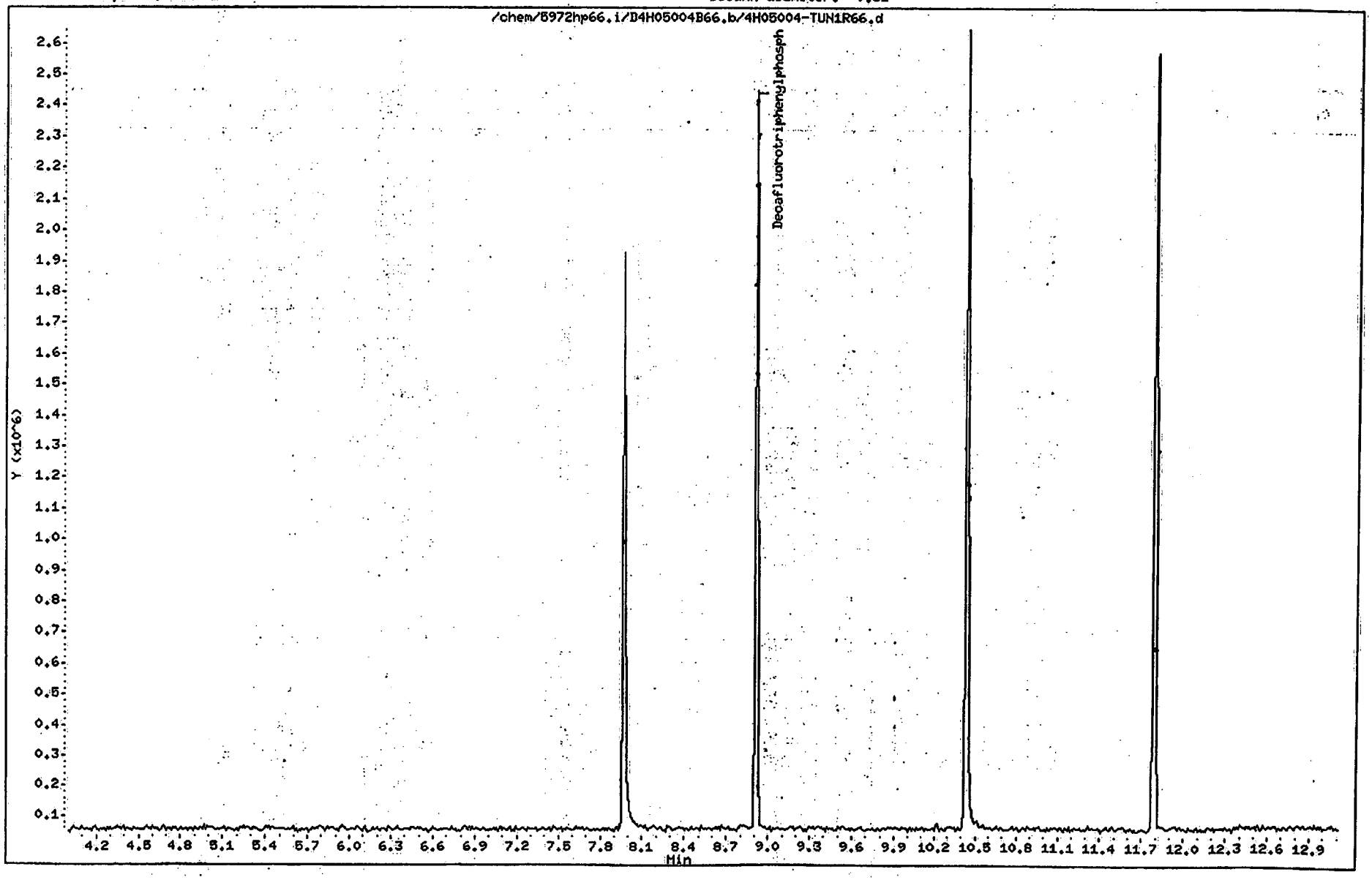
Number of points: 274

m/z	Y	m/z	Y	m/z	Y	m/z	Y
83.00	1538	166.00	1267	240.00	500	350.00	208
84.00	1059	167.00	8969	241.00	915	352.00	1469
85.00	1045	168.00	3798	242.00	1795	353.00	1030
86.00	1428	169.00	1166	243.00	1046	354.00	1148
87.00	1360	170.00	331	244.00	17960	355.00	266
88.00	745	171.00	542	245.00	2735	357.00	169
91.00	960	172.00	793	246.00	3901	365.00	5724
92.00	1512	173.00	735	247.00	596	366.00	859
93.00	10177	174.00	1566	248.00	478	371.00	301
94.00	173	175.00	2414	249.00	917	372.00	2282
95.00	273	176.00	1039	250.00	563	373.00	691
96.00	359	177.00	418	251.00	187	376.00	205
98.00	5810	178.00	624	252.00	417	383.00	662
99.00	6180	179.00	5685	253.00	820	386.00	206
100.00	417	180.00	3489	254.00	381	390.00	315
101.00	3572	181.00	2437	255.00	88272	402.00	874
102.00	527	182.00	544	256.00	13487	403.00	1091
103.00	1374	184.00	482	257.00	1232	404.00	370
104.00	2228	185.00	3290	258.00	5201	412.00	184
105.00	1820	186.00	21520	259.00	778	421.00	1062
107.00	22088	187.00	4773	261.00	212	422.00	923
108.00	4222	188.00	711	263.00	200	423.00	6738
110.00	44656	189.00	1849	264.00	218	424.00	1476
111.00	8007	190.00	216	265.00	2447	425.00	712
112.00	645	191.00	756	266.00	664	426.00	245
113.00	456	192.00	1980	270.00	465	428.00	182
114.00	279	193.00	2593	271.00	879	429.00	425
116.00	888	194.00	1176	272.00	243	433.00	290
117.00	18744	195.00	595	273.00	2808	441.00	20184
118.00	1558	196.00	5311	274.00	6947	442.00	128648
122.00	1634	198.00	172672	275.00	37192	443.00	25016
123.00	1885	199.00	11830	276.00	5349	444.00	2364
124.00	1450	200.00	1150	277.00	3088		
125.00	1789	201.00	782	278.00	634		

Roldw Ha 8/6/2014

Data File: /chem/5972hp66.i/D4H05004B66.b/4H05004-TUN1R66.d
Date : 05-AUG-2014 11:46
Client ID: DFTPPCR
Sample Info: 4H05004-TUN1:OWS
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp66.i
Operator: OWS
Column diameter: 0.32



Paldu Ha 8/6/2014

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DECAFLUOROTRIPHENYLPHOSPHINE Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	10 - 80% of mass 198	60.44		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	64.80		PASS
70	Less than 2% of mass 69	0.26	(0.41)	PASS
127	10 - 80% of mass 198	43.98		PASS
197	Less than 2% of mass 198	0.00	(0.00)	PASS
199	5 - 9% of mass 198	6.85		PASS
275	10 - 60% of mass 198	21.54		PASS
365	Greater than 1% of mass 198	3.31		PASS
441	Present, but less than mass 443	11.69	(80.70)	PASS
442	50 - 100% of mass 198	74.50		PASS
443	15 - 24% of mass 442	14.49	(19.45)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.48	2.0	PASS
Benzidine	1.41	2.0	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	687054			N/A
4,4-DDE	325	0.0	20.0	PASS
4,4-DDD	2585	0.4	20.0	PASS
4,4-DDD + DDE	2910	0.4	20.0	PASS

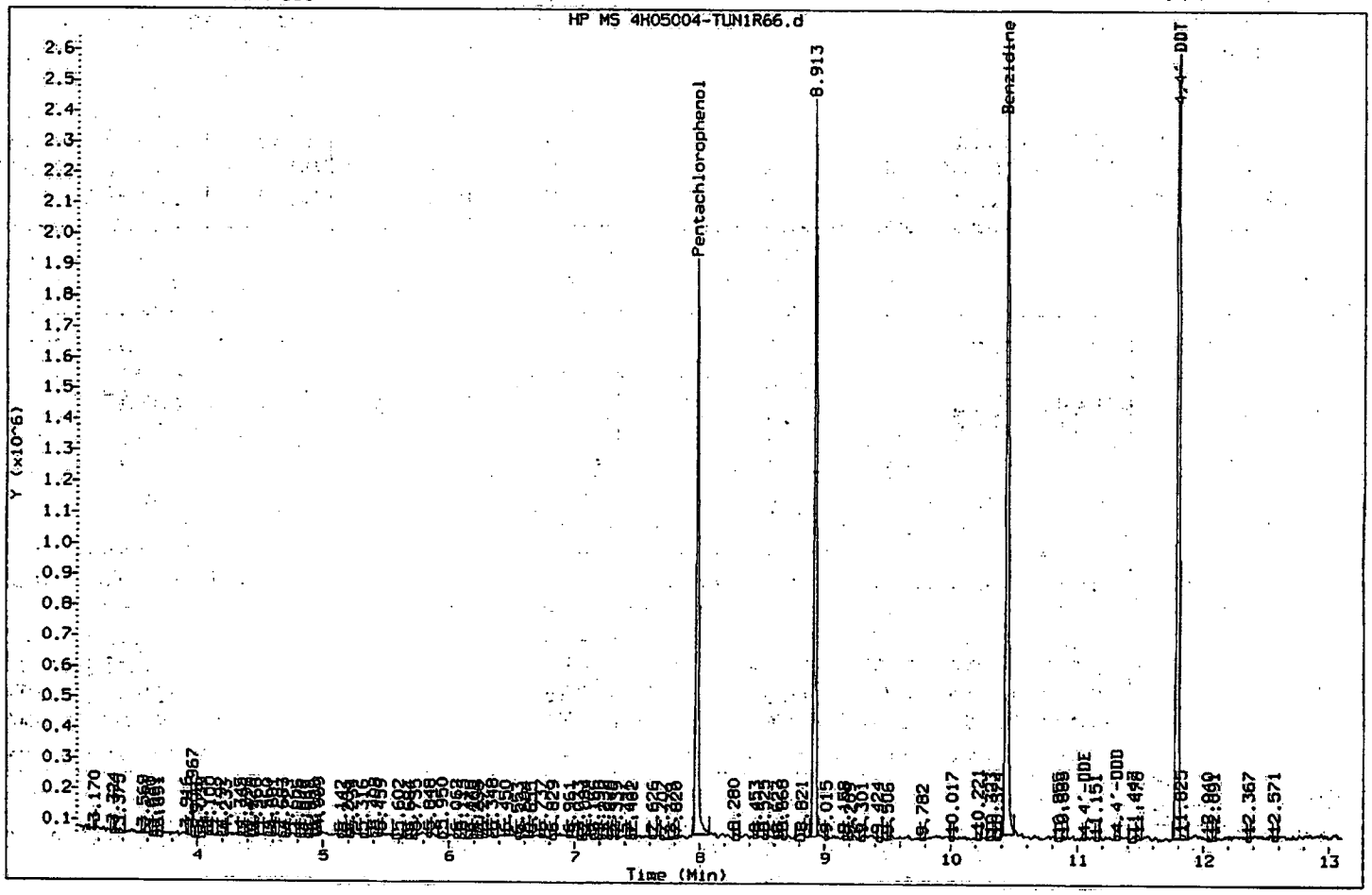
Tuning Sample, /chem/5972hp66.i/D4H05004B66.b/4H05004-TUN1R66.d/4H05004-TUN1R66.

Roldan Hani 8/6/2014

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 08/05/2014 13:36

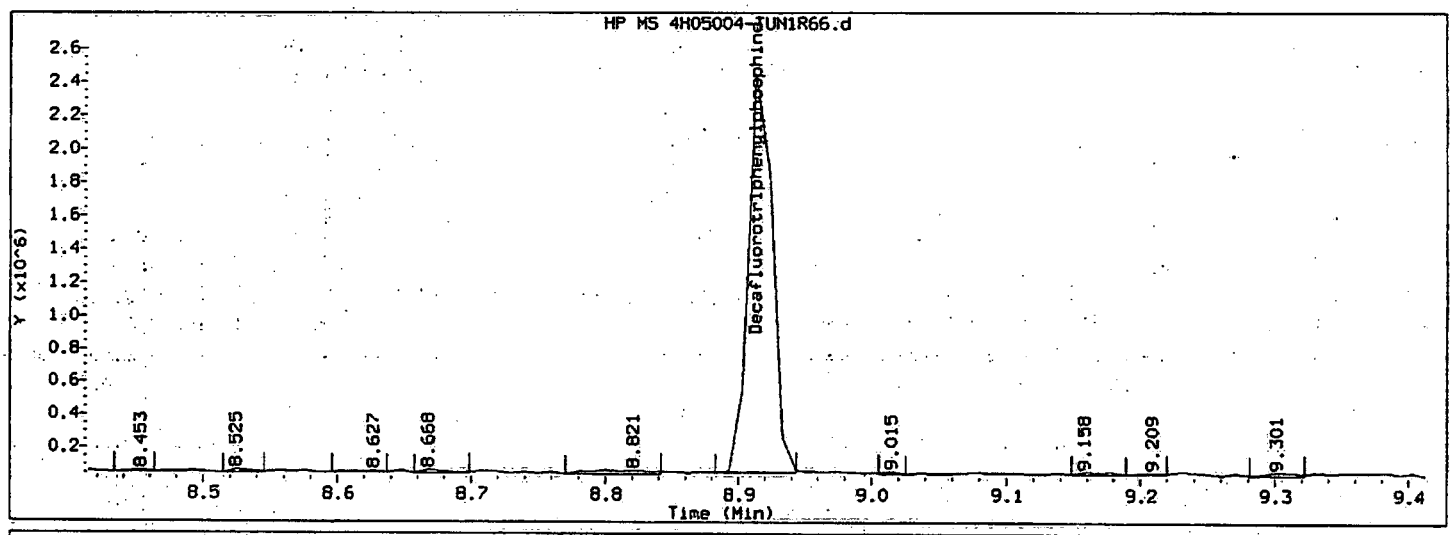
Datafile Analyzed: /chem/5972hp66.i/D4H05004B66.b/4H05004-TUN1R66.d/4H05004-TUN1
Method Used: /chem/5972hp66.i/D4H05004B66.b/dftpp8270D.m Inst: 5972hp66
Injection Date: 05-AUG-2014 11:46 Operator: OWS
Sample Info: 4H05004-TUN1 4H05004-TUN1:OWS
Misc Info: DFTPPCR

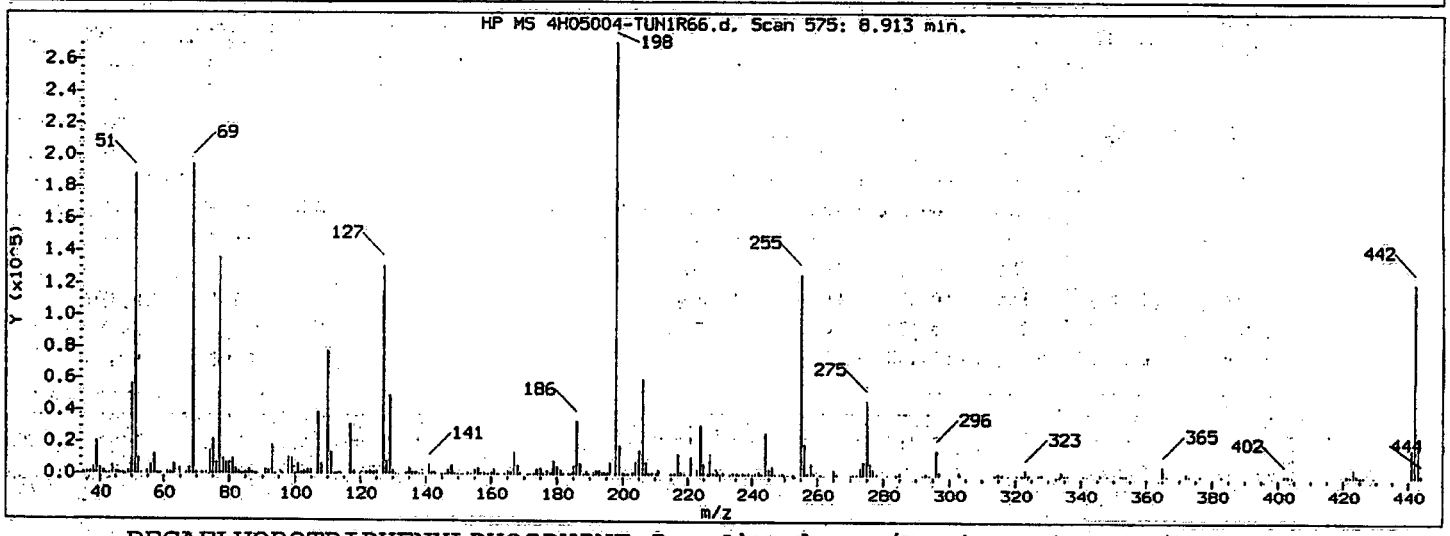


Roldan Hani 8/6/2014

Report Date: 08/05/2014 13:36

Datafile Analyzed: /chem/5972hp66.i/D4H05004B66.b/4H05004-TUN1R66.d/4H05004-TUN1
Method Used: /chem/5972hp66.i/D4H05004B66.b/dftpp8270D.m Inst: 5972hp66
Injection Date: 05-AUG-2014 11:46 Operator: OWS
Sample Info: 4H05004-TUN1 4H05004-TUN1:OWS
Misc Info: DFTPPCR





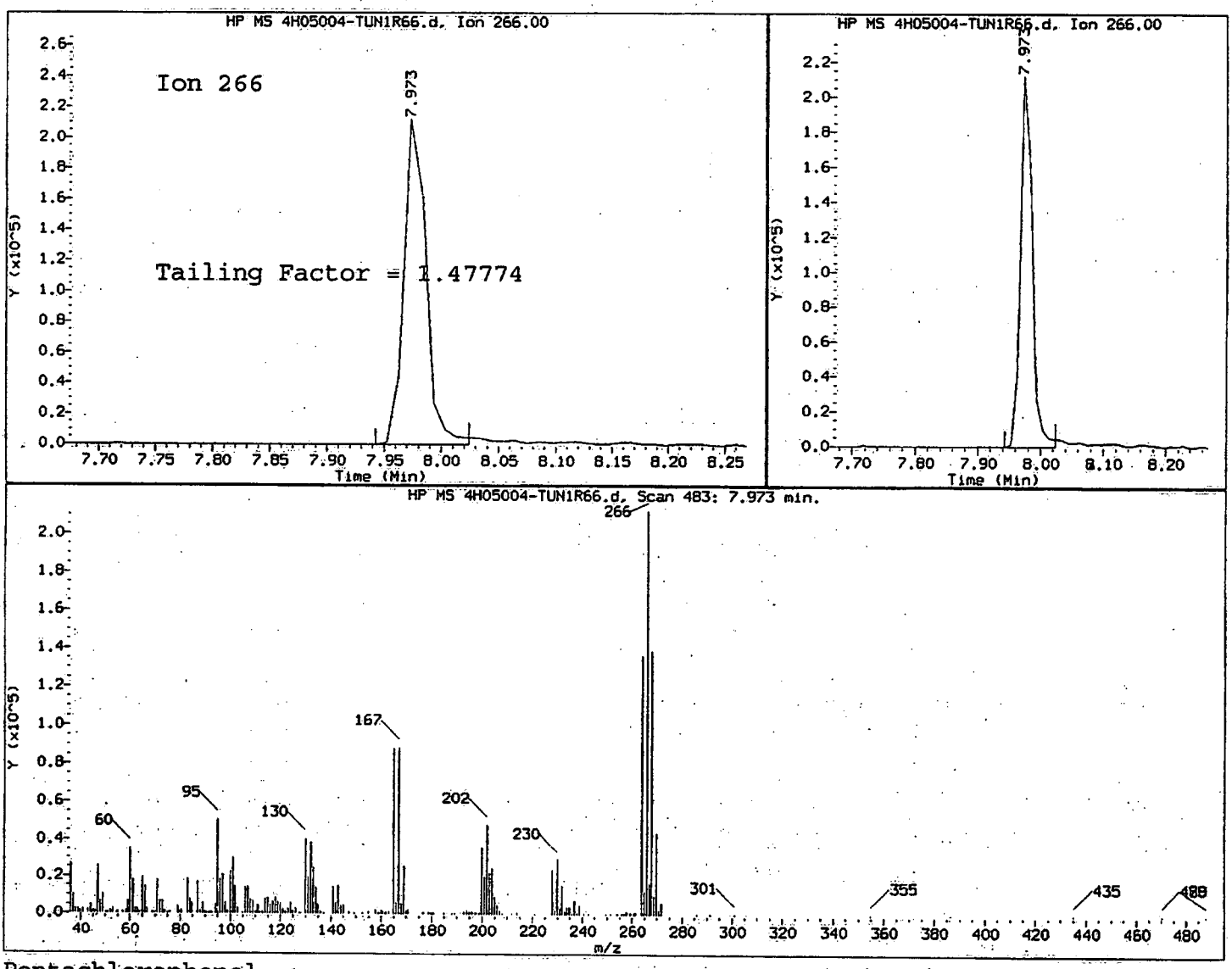
DECAFLUOROTRIPHENYLPHOSPHINE Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	10 - 80% of mass 198	60.44		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	64.80		PASS
70	Less than 2% of mass 69	0.26	(0.41)	PASS
127	10 - 80% of mass 198	43.98		PASS
197	Less than 2% of mass 198	0.00	(0.00)	PASS
199	5 - 9% of mass 198	6.85		PASS
275	10 - 60% of mass 198	21.54		PASS
365	Greater than 1% of mass 198	3.31		PASS
441	Present, but less than mass 443	11.69	(80.70)	PASS
442	50 - 100% of mass 198	74.50		PASS
443	15 - 24% of mass 442	14.49	(19.45)	PASS

Rolder Hani 8/6/2014

Report Date: 08/05/2014 13:36

Datafile Analyzed: /chem/5972hp66.i/D4H05004B66.b/4H05004-TUN1R66.d/4H05004-TUN1
Method Used: /chem/5972hp66.i/D4H05004B66.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 05-AUG-2014 11:46 Operator:
Sample Info: DFTPP 4H05004-TUN1:OWS
Misc Info:



Pentachlorophenol
==========
Exp. RT = 7.890
Found RT = 7.973

Mass	Area	Ratio
266	285163	100.00

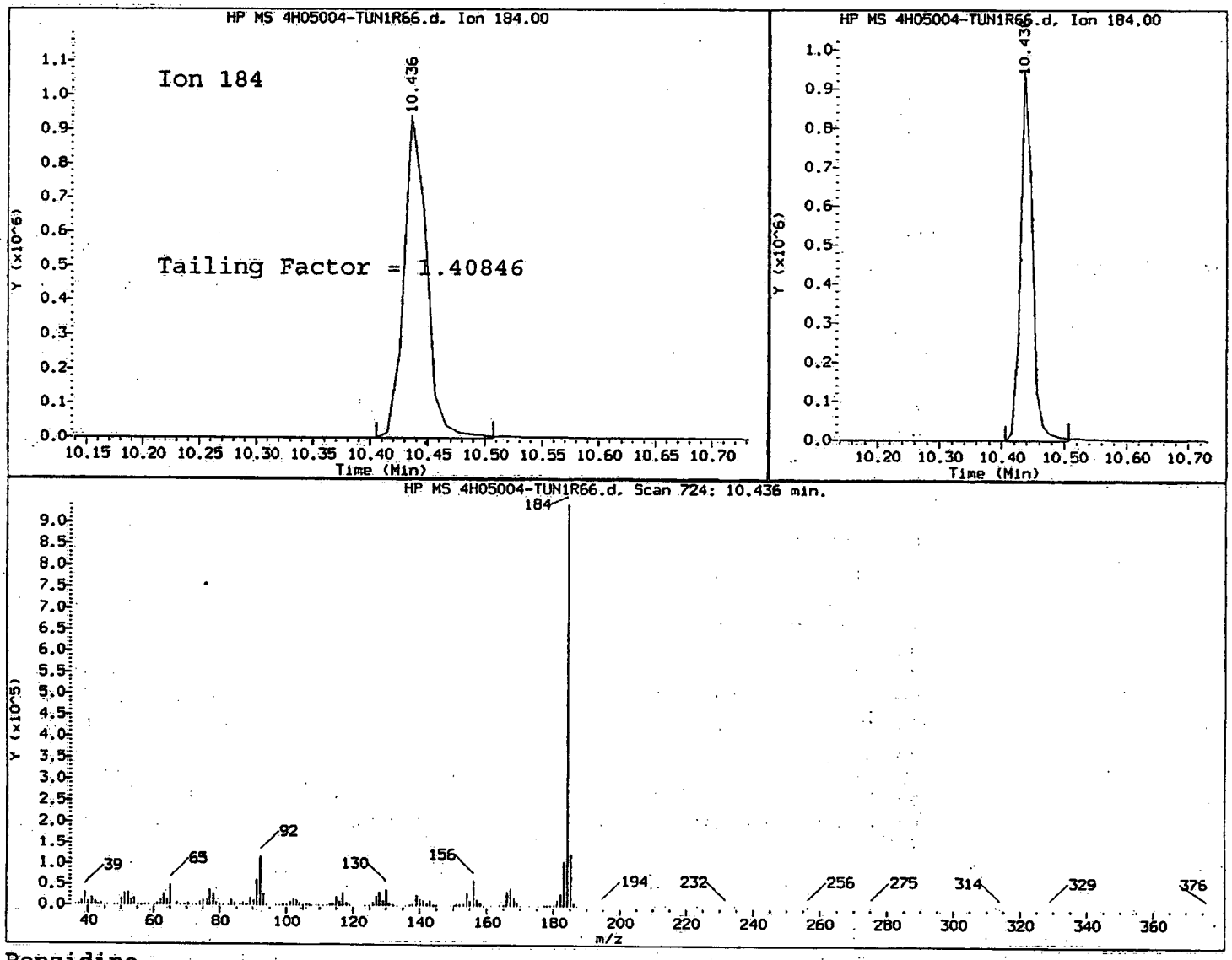
Tailing factor for Pentachlorophenol OK

Tail Factor = 1.478 Maximum Allowed = 2.0

Roldan Ham 8/6/2014

Report Date: 08/05/2014 13:36

Datafile Analyzed: /chem/5972hp66.i/D4H05004B66.b/4H05004-TUN1R66.d/4H05004-TUN1
Method Used: /chem/5972hp66.i/D4H05004B66.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 05-AUG-2014 11:46 Operator:
Sample Info: DFTPP 4H05004-TUN1:OWS
Misc Info:



Benzidine
=========
Exp. RT = 10.340
Found RT = 10.436

Mass	Area	Ratio
184	1283749	100.00

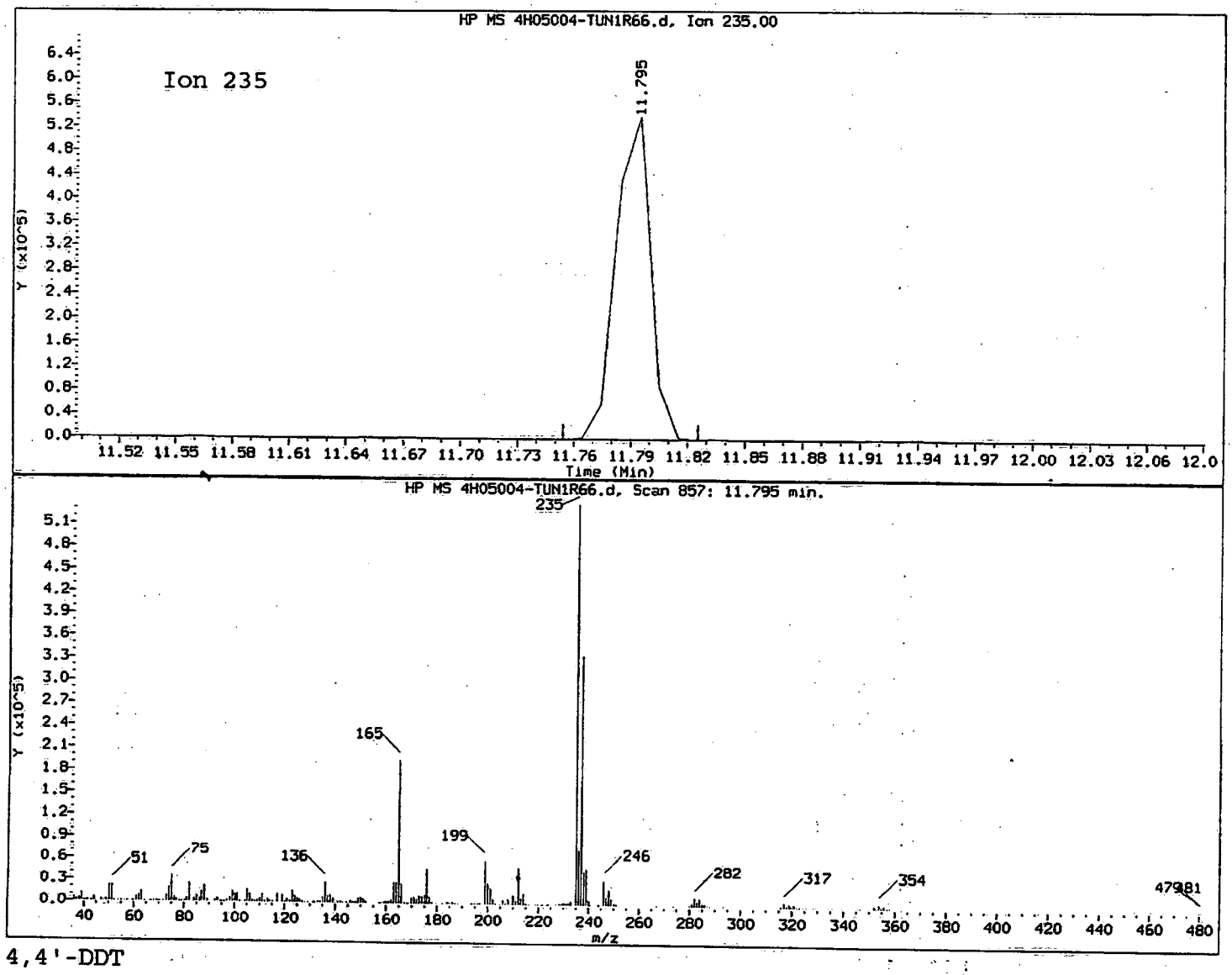
Tailing factor for Benzidine OK

Tail Factor = 1.408 Maximum Allowed = 2.0

Roldw Ha 8/6/2014

Report Date: 08/05/2014 13:36

Datafile Analyzed: /chem/5972hp66.i/D4H05004B66.b/4H05004-TUN1R66.d/4H05004-TUN1
Method Used: /chem/5972hp66.i/D4H05004B66.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 05-AUG-2014 11:46 Operator:
Sample Info: DFTPP 4H05004-TUN1:OWS
Misc Info:



4,4'-DDT
========

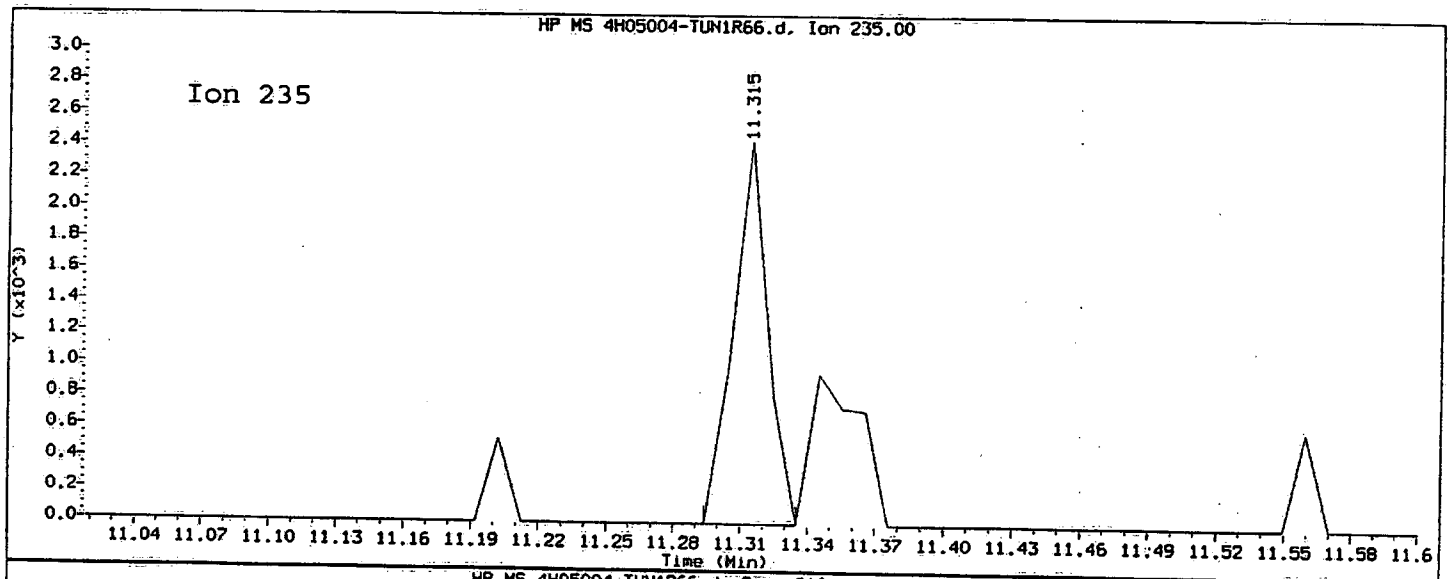
Exp. RT = 11.690
Found RT = 11.795

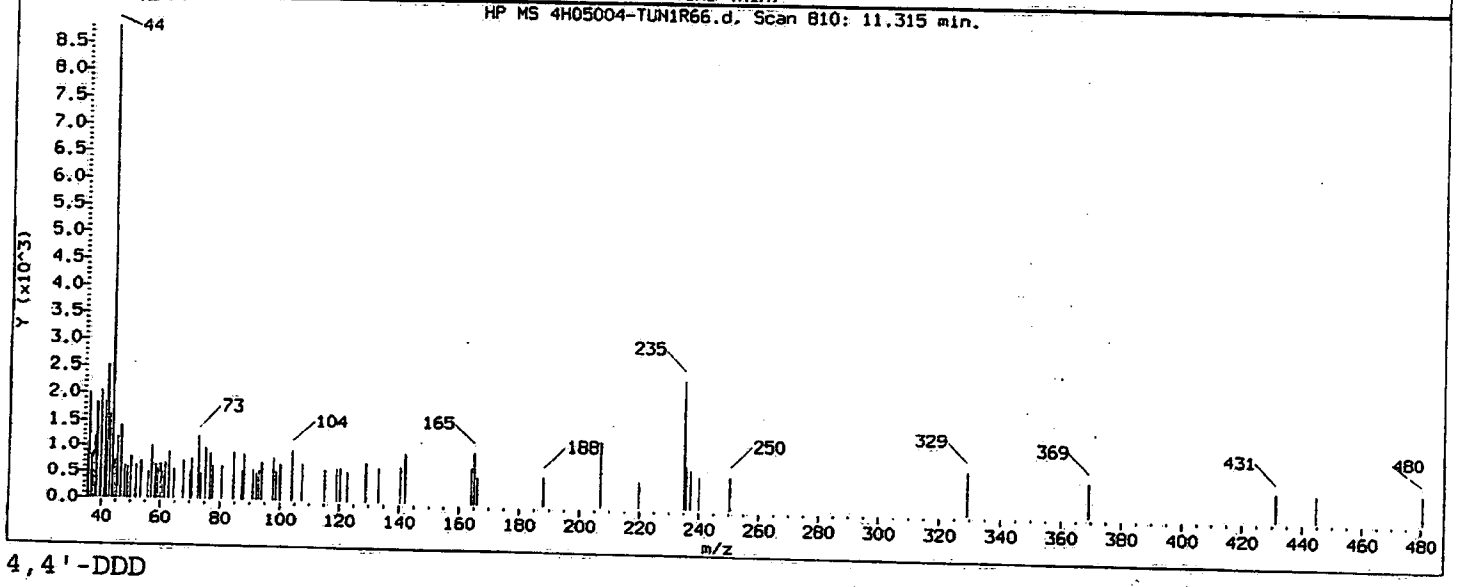
Mass	Area	Ratio
235	687054	100.00

8/6/2014

Report Date: 08/05/2014 13:36

Datafile Analyzed: /chem/5972hp66.i/D4H05004B66.b/4H05004-TUN1R66.d/4H05004-TUN1
Method Used: /chem/5972hp66.i/D4H05004B66.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 05-AUG-2014 11:46 Operator:
Sample Info: DFTPP 4H05004-TUN1:OWS
Misc Info:





4,4'-DDD
========

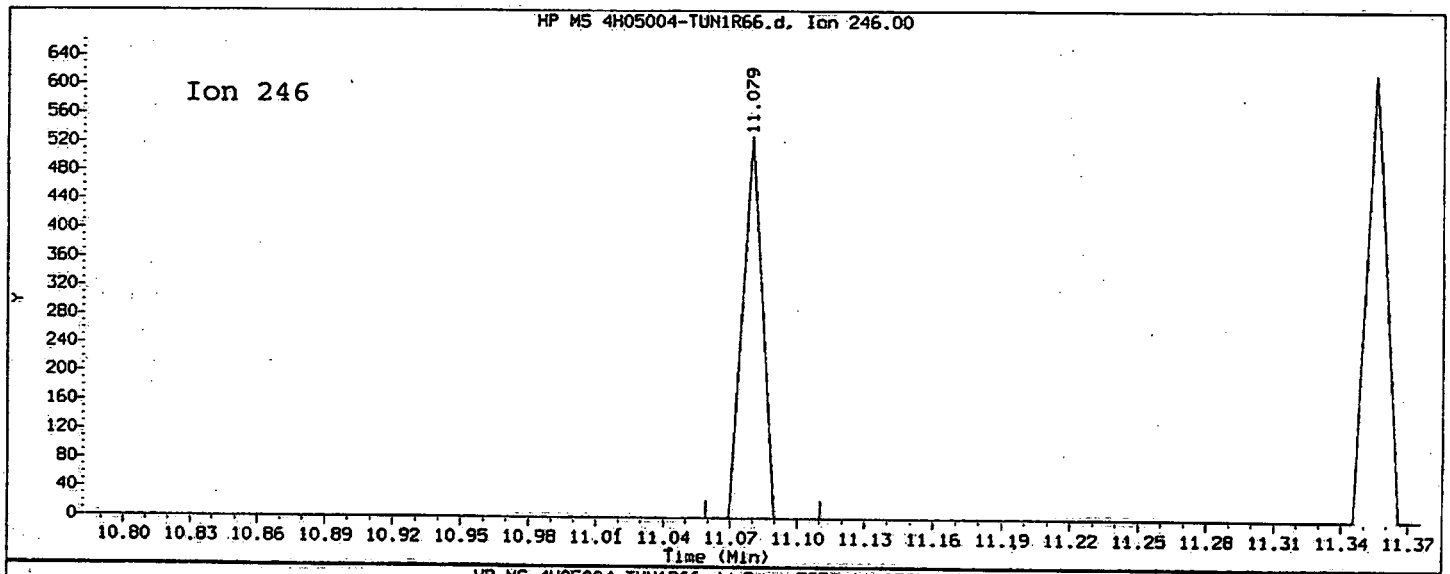
Exp. RT = 11.250
Found RT = 11.315

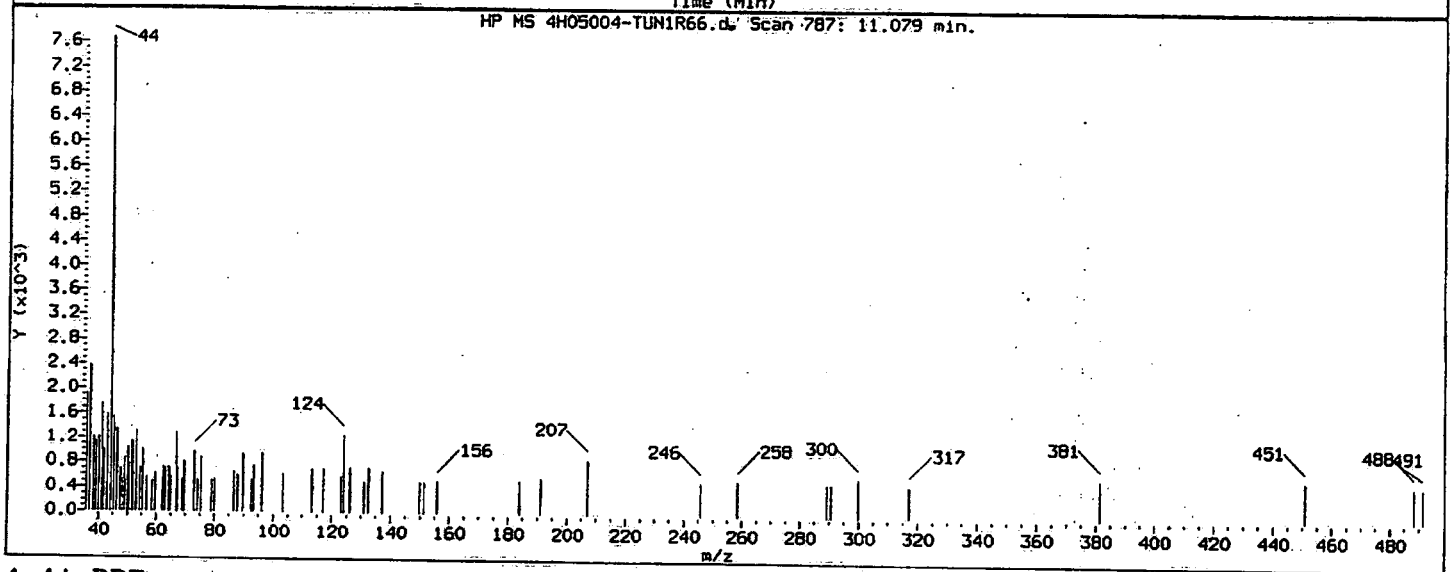
Mass	Area	Ratio
235	2585	100.00

Roldw Hani 8/6/2014

Report Date: 08/05/2014 13:36

Datafile Analyzed: /chem/5972hp66.i/D4H05004B66.b/4H05004-TUN1R66.d/4H05004-TUN1
Method Used: /chem/5972hp66.i/D4H05004B66.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 05-AUG-2014 11:46 Operator:
Sample Info: DFTPP 4H05004-TUN1:OWS
Misc Info:

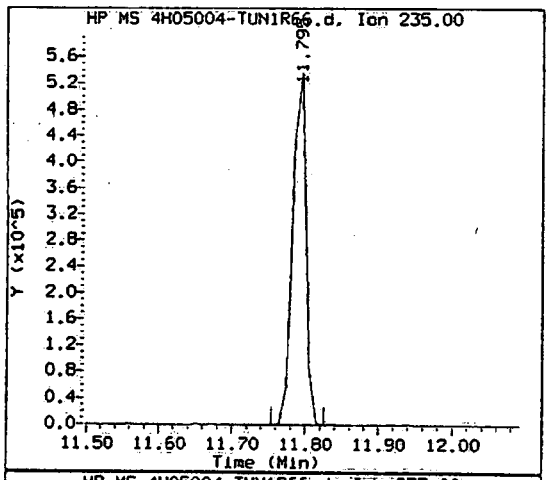




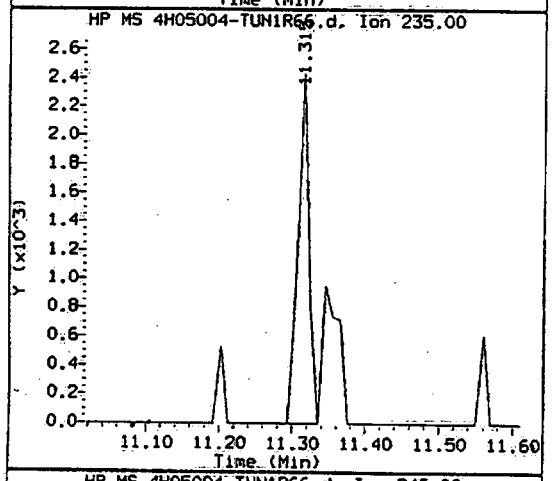
4,4'-DDE
========
Exp. RT = 10.800
Found RT = 11.079

Mass	Area	Ratio
246	325	100.00

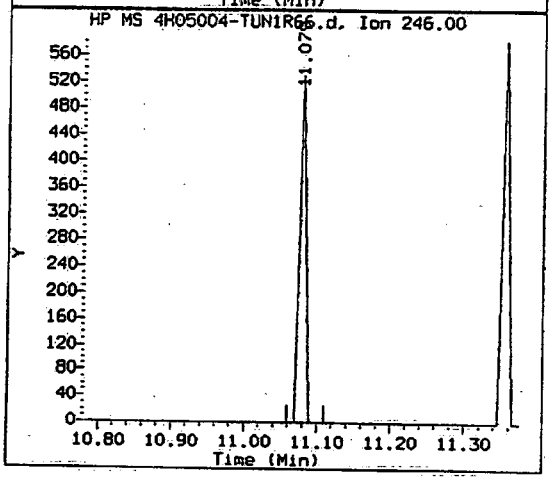
Rolder Ha 8/6/2014



Compound: 4,4'-DDT
Quant Mass: 235
RT: 11.795
Area: 687054



Compound: 4,4'-DDD
Quant Mass: 235
RT: 11.315
Area: 2585



Compound: 4,4'-DDE
Quant Mass: 246
RT: 11.079
Area: 325

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	687054			N/A
4,4-DDE	325	0.0	20.0	PASS
4,4-DDD	2585	0.4	20.0	PASS
4,4-DDD + DDE	2910	0.4	20.0	PASS

****
TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Rolden Hai 8/6/2014

Data File: /chem/5972hp66.i/D4H12011A66.b/4H12011-TUN166.d

Date : 12-AUG-2014 13:50

Client ID: DFTPPCT

Instrument: 5972hp66.i

Sample Info: 4H12011-TUN1:OWS

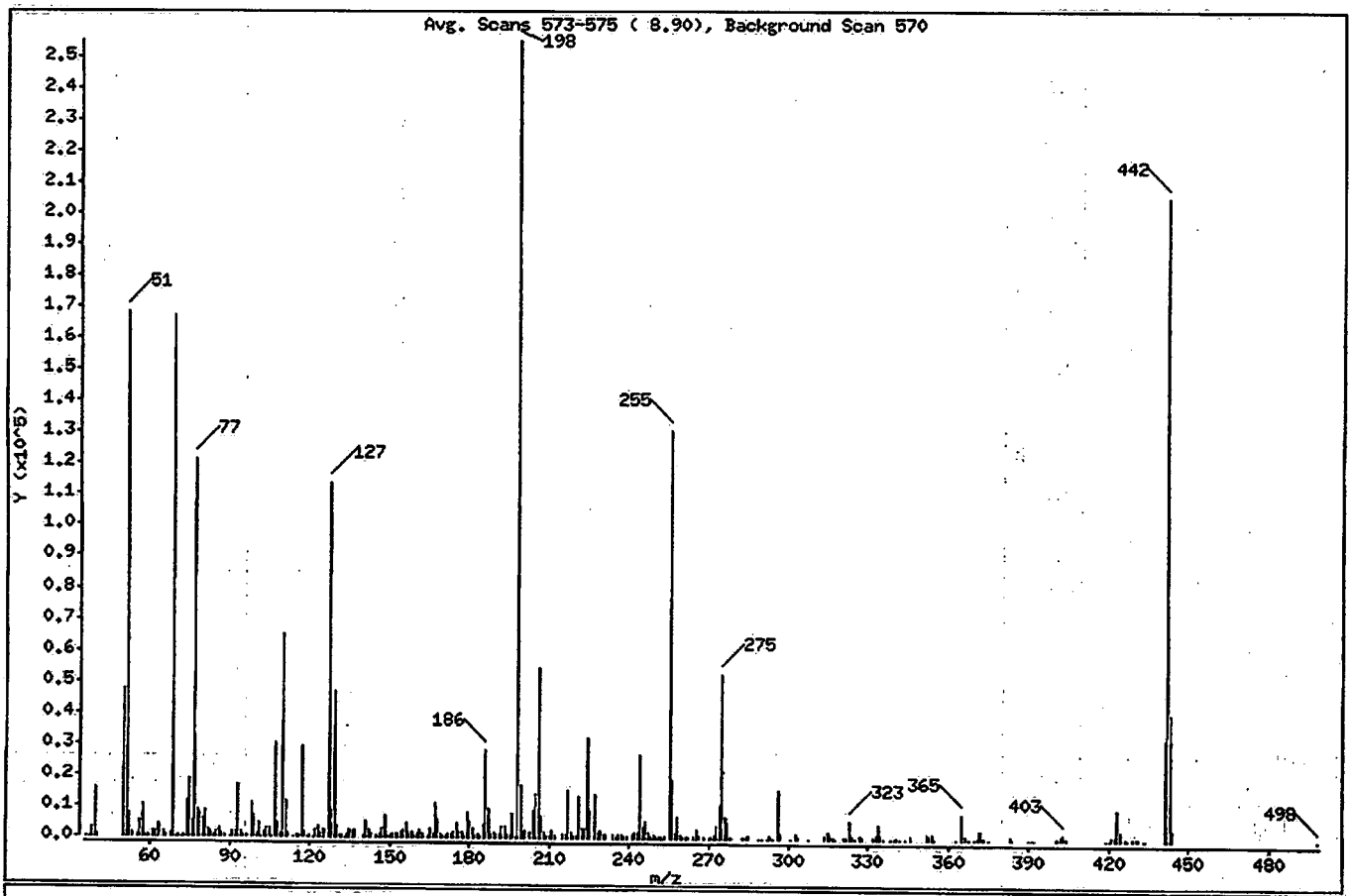
Volume Injected (uL): 2.0

Operator: OWS

Column phase: RTX-5MS

Column diameter: 0.32

1 Decafluorotriphenylphosphine



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	66.08
68	Less than 2.00% of mass 69	0.42 (0.64)
69	Mass 69 relative abundance	65.61
70	Less than 2.00% of mass 69	0.06 (0.09)
127	10.00 - 80.00% of mass 198	44.65
197	Less than 2.00% of mass 198	0.10
199	5.00 - 9.00% of mass 198	6.73
275	10.00 - 60.00% of mass 198	20.63
365	Greater than 1.00% of mass 198	3.17
441	Present, but less than mass 443	12.60
442	50.00 - 100.00% of mass 198	80.37
443	15.00 - 24.00% of mass 442	15.96 (19.86)

Roldw Hai 8/13/2014

Data File: /chem/5972hp66.i/D4H12011A66.b/4H12011-TUN166.d

Date : 12-AUG-2014 13:50

Client ID: DFTPPCT

Instrument: 5972hp66.i

Sample Info: 4H12011-TUN1:OWS

Volume Injected (uL): 2.0

Operator: OWS

Column phase: RTX-5MS

Column diameter: 0.32

Data File: 4H12011-TUN166.d

Spectrum: Avg. Scans 573-575 (8.90), Background Scan 570

Location of Maximum: 198.00

Number of points: 289

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	265	125.00	2480	204.00	8940	296.00	15648
37.00	54	127.00	113888	205.00	14145	297.00	1624
38.00	3165	128.00	8788	206.00	54544	301.00	189
39.00	16057	129.00	46896	207.00	6808	303.00	2007
40.00	553	130.00	3688	208.00	1946	304.00	706
50.00	47664	131.00	618	209.00	745	308.00	210
51.00	168512	132.00	579	210.00	574	314.00	992
52.00	7380	133.00	228	211.00	2247	315.00	2099
53.00	895	134.00	1035	212.00	684	316.00	1159
55.00	748	135.00	2578	215.00	905	317.00	524
56.00	5091	136.00	1811	216.00	1127	318.00	240
57.00	10416	137.00	2336	217.00	14983	321.00	736
58.00	519	140.00	441	218.00	1826	322.00	526
59.00	564	141.00	5504	219.00	302	323.00	5838
61.00	2042	142.00	2220	220.00	439	324.00	1253
62.00	2006	143.00	1368	221.00	13713	325.00	273
63.00	4395	145.00	444	222.00	2703	327.00	1164
65.00	1998	146.00	1119	223.00	3192	328.00	602
66.00	754	147.00	2896	224.00	32288	332.00	491
68.00	1075	148.00	6844	225.00	8572	333.00	898
69.00	167296	149.00	472	227.00	13828	334.00	4447
70.00	147	150.00	366	228.00	1655	335.00	1164
71.00	692	151.00	1150	229.00	2291	336.00	173
72.00	274	152.00	1195	230.00	888	339.00	244
73.00	563	153.00	1355	231.00	1359	340.00	184
74.00	11996	154.00	1740	234.00	1387	341.00	688
75.00	18736	155.00	2552	235.00	865	342.00	271
76.00	5471	156.00	4673	236.00	1059	344.00	190
77.00	121656	157.00	1084	237.00	1076	346.00	1077
78.00	8782	158.00	1501	238.00	451	352.00	1646
79.00	7422	159.00	764	239.00	450	353.00	996
80.00	5689	160.00	1101	241.00	1006	354.00	1975
81.00	9017	161.00	2587	242.00	1559	355.00	241
82.00	2202	162.00	1057	243.00	1978	363.00	179
83.00	1476	164.00	447	244.00	26928	365.00	8086

Roldw Ha 8/13/2014

Data File: /chem/5972hp66.i/D4H12011A66.b/4H12011-TUN166.d

Date : 12-AUG-2014 13:50

Client ID: DFTPPCT

Instrument: 5972hp66.i

Sample Info: 4H12011-TUN1:OWS

Volume Injected (uL): 2.0

Operator: OWS

Column phase: RTX-5MS

Column diameter: 0.32

Data File: 4H12011-TUN166.d

Spectrum: Avg. Scans 573-575 (8.90), Background Scan 570

Location of Maximum: 198.00

Number of points: 289

m/z	Y	m/z	Y	m/z	Y	m/z	Y
84.00	492	165.00	2791	245.00	3611	366.00	1103
85.00	1924	166.00	1418	246.00	5044	368.00	185
86.00	2756	167.00	11015	247.00	1811	370.00	174
87.00	1249	168.00	5828	248.00	845	371.00	578
88.00	574	169.00	1323	249.00	1177	372.00	3181
90.00	223	170.00	778	250.00	654	373.00	870
91.00	1802	171.00	786	251.00	342	375.00	167
92.00	1863	172.00	1149	252.00	491	383.00	901
93.00	17056	173.00	1348	253.00	572	384.00	195
94.00	1644	174.00	1917	255.00	130768	390.00	226
95.00	684	175.00	4632	256.00	18792	391.00	226
96.00	417	176.00	1498	257.00	1748	392.00	210
98.00	10914	177.00	1883	258.00	7088	400.00	207
99.00	7095	178.00	420	259.00	1237	401.00	546
100.00	1046	179.00	8056	260.00	441	402.00	1388
101.00	4915	180.00	5101	261.00	601	403.00	1734
102.00	290	181.00	2912	262.00	467	404.00	707
103.00	1612	182.00	675	264.00	443	419.00	180
104.00	2794	183.00	993	265.00	3191	420.00	168
105.00	3101	184.00	651	266.00	946	421.00	1248
106.00	191	185.00	4011	268.00	685	422.00	1375
107.00	30296	186.00	28112	270.00	218	423.00	10071
108.00	4718	187.00	9362	271.00	414	424.00	2834
109.00	1071	188.00	1025	272.00	1041	426.00	421
110.00	64832	189.00	1954	273.00	4307	427.00	263
111.00	11455	190.00	1016	274.00	10405	429.00	479
112.00	1314	191.00	1015	275.00	52600	430.00	376
114.00	228	192.00	3461	276.00	7210	431.00	531
115.00	314	193.00	3317	277.00	5103	433.00	203
116.00	576	194.00	1018	278.00	764	434.00	262
117.00	29208	195.00	513	283.00	847	441.00	32128
118.00	1960	196.00	7722	284.00	294	442.00	204928
119.00	289	197.00	265	285.00	1104	443.00	40704
120.00	582	198.00	255040	289.00	226	444.00	3745
121.00	214	199.00	17168	290.00	187	498.00	203

Robin Hu 8/13/2014

Data File: /chem/5972hp66.i/D4H12011A66.b/4H12011-TUN166.d

Date : 12-AUG-2014 13:50

Client ID: DFTPPCT

Instrument: 5972hp66.i

Sample Info: 4H12011-TUN1:OWS

Volume Injected (uL): 2.0

Operator: OWS

Column phase: RTX-5MS

Column diameter: 0.32

Data File: 4H12011-TUN166.d

Spectrum: Avg. Scans 573-575 (8.90), Background Scan 570

Location of Maximum: 198.00

Number of points: 289

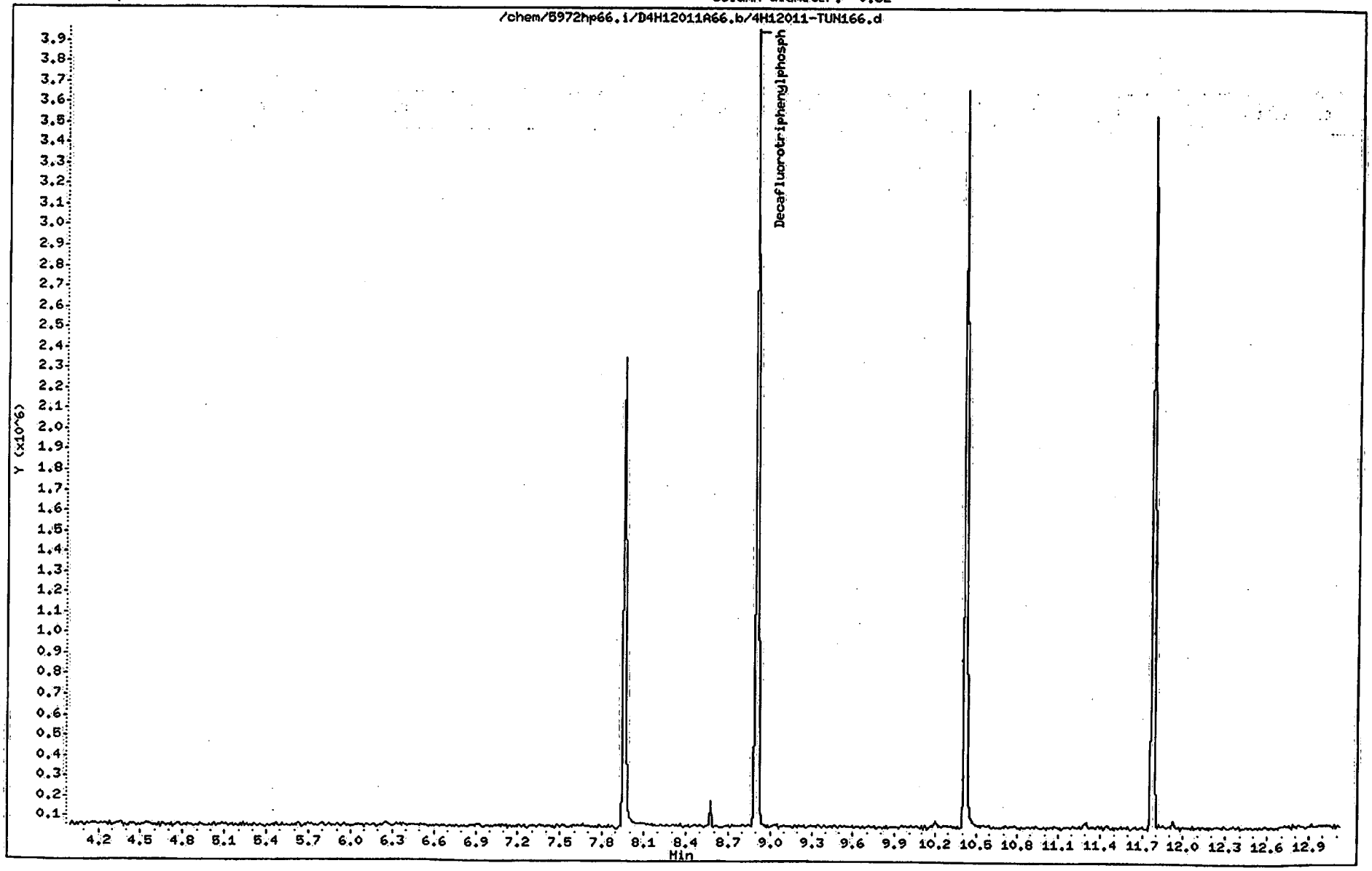
m/z	Y	m/z	Y	m/z	Y	m/z	Y
122.00	2140	200.00	1893	292.00	178		
123.00	3378	201.00	2309	293.00	1219		
124.00	988	203.00	1883	294.00	211		

Robert Hamm 8/13/2014

Data File: /chem/5972hp66.i/D4H12011A66.b/4H12011-TUN166.d
Date : 12-AUG-2014 13:50
Client ID: DFTPPCT
Sample Info: 4H12011-TUN1:OWS
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp66.i

Operator: OWS
Column diameter: 0.32



Robin Hani 8/13/2014

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DECAFLUOROTRIPHENYLPHOSPHINE Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	10 - 80% of mass 198	66.08		PASS
68	Less than 2% of mass 69	0.42	(0.64)	PASS
69	Mass 69 relative abundance	65.61		PASS
70	Less than 2% of mass 69	0.06	(0.09)	PASS
127	10 - 80% of mass 198	44.65		PASS
197	Less than 2% of mass 198	0.10	(0.10)	PASS
199	5 - 9% of mass 198	6.73		PASS
275	10 - 60% of mass 198	20.63		PASS
365	Greater than 1% of mass 198	3.17		PASS
441	Present, but less than mass 443	12.60	(78.93)	PASS
442	50 - 100% of mass 198	80.37		PASS
443	15 - 24% of mass 442	15.96	(19.86)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	0.91	2.0	PASS
Benzidine	1.01	2.0	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	874901			N/A
4,4-DDE	343	0.0	20.0	PASS
4,4-DDD	6226	0.7	20.0	PASS
4,4-DDD + DDE	6569	0.7	20.0	PASS

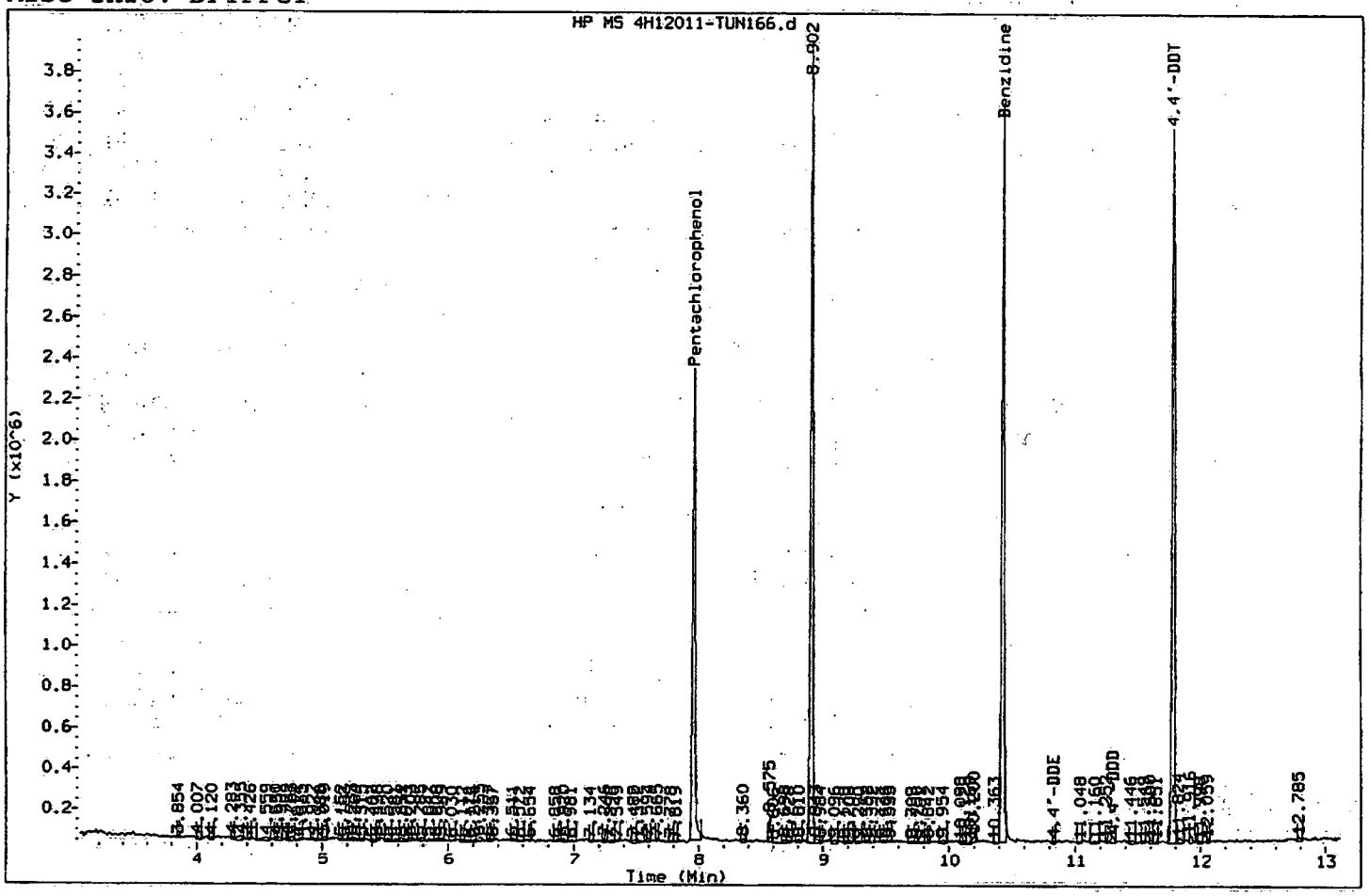
Tuning Sample, /chem/5972hp66.i/D4H12011A66.b/4H12011-TUN166.d/4H12011-TUN166.d,

Rolder Hai 8/13/2014

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 08/13/2014 13:02

Datafile Analyzed: /chem/5972hp66.i/D4H12011A66.b/4H12011-TUN166.d/4H12011-TUN16
Method Used: /chem/5972hp66.i/D4H12011A66.b/dftpp8270D.m Inst: 5972hp66
Injection Date: 12-AUG-2014 13:50 Operator: OWS
Sample Info: 4H12011-TUN1 4H12011-TUN1:OWS
Misc Info: DFTPPCT



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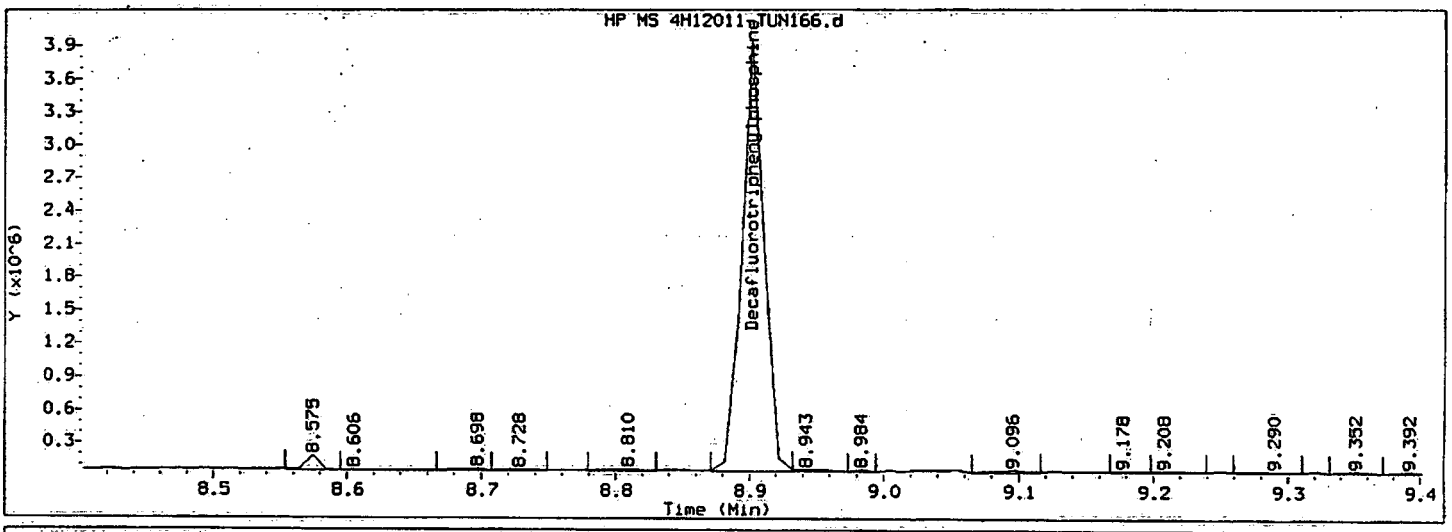
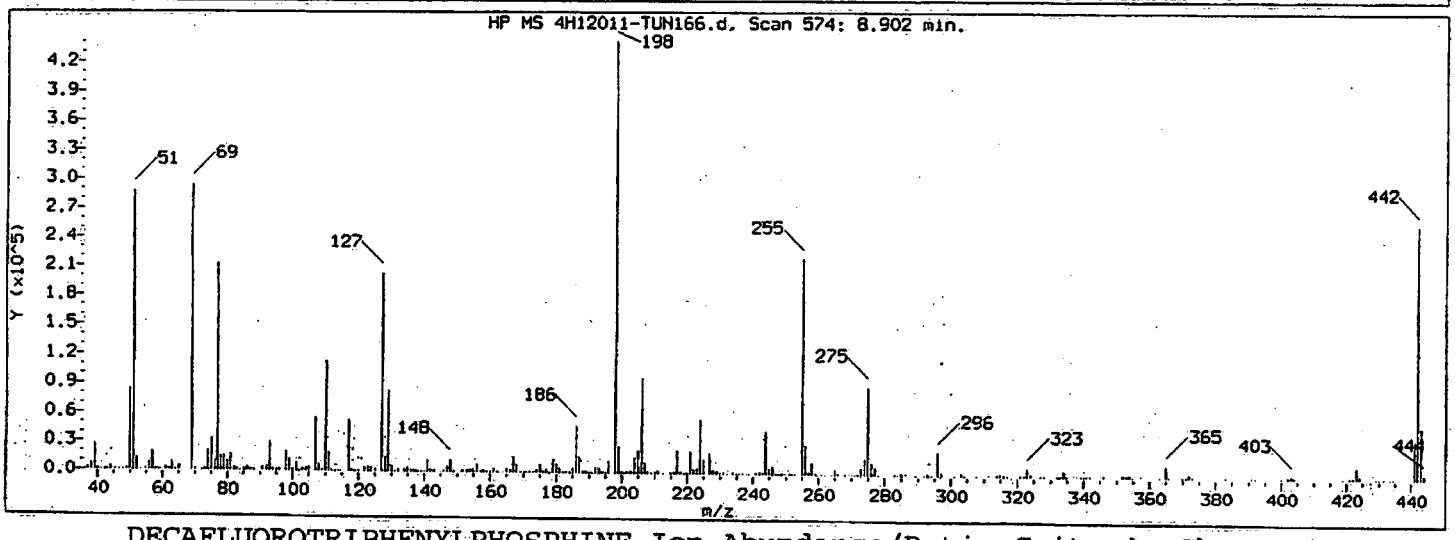
8/13/2014

Report Date: 08/13/2014 13:02

Datafile Analyzed: /chem/5972hp66.i/D4H12011A66.b/4H12011-TUN166.d/4H12011-TUN16
Method Used: /chem/5972hp66.i/D4H12011A66.b/dftpp8270D.m Inst: 5972hp66
Injection Date: 12-AUG-2014 13:50 Operator: OWS
Sample Info: 4H12011-TUN1 4H12011-TUN1:OWS
Misc Info: DFTPPCT





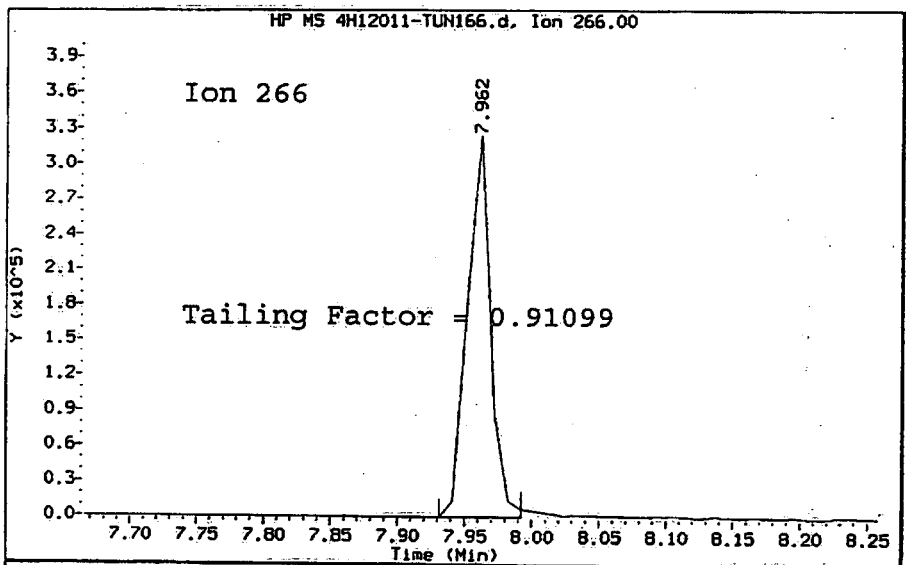
DECAFLUOROTRIPHENYLPHOSPHINE Ion Abundance/Ratio Criteria Chart

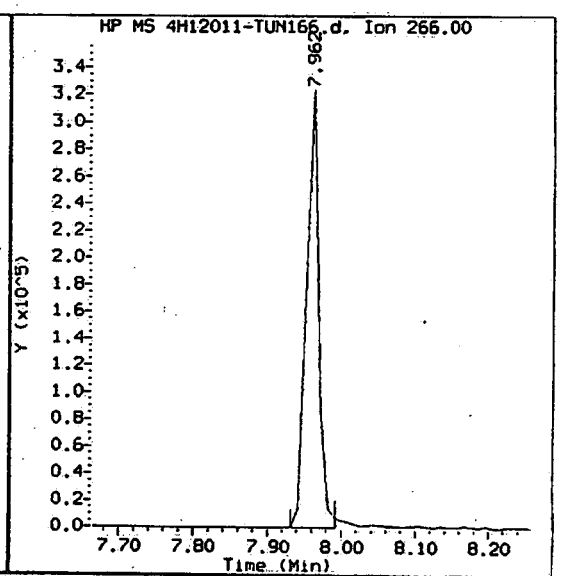
Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	10 - 80% of mass 198	66.08		PASS
68	Less than 2% of mass 69	0.42	(0.64)	PASS
69	Mass 69 relative abundance	65.61		PASS
70	Less than 2% of mass 69	0.06	(0.09)	PASS
127	10 - 80% of mass 198	44.65		PASS
197	Less than 2% of mass 198	0.10	(0.10)	PASS
199	5 - 9% of mass 198	6.73		PASS
275	10 - 60% of mass 198	20.63		PASS
365	Greater than 1% of mass 198	3.17		PASS
441	Present, but less than mass 443	12.60	(78.93)	PASS
442	50 - 100% of mass 198	80.37		PASS
443	15 - 24% of mass 442	15.96	(19.86)	PASS

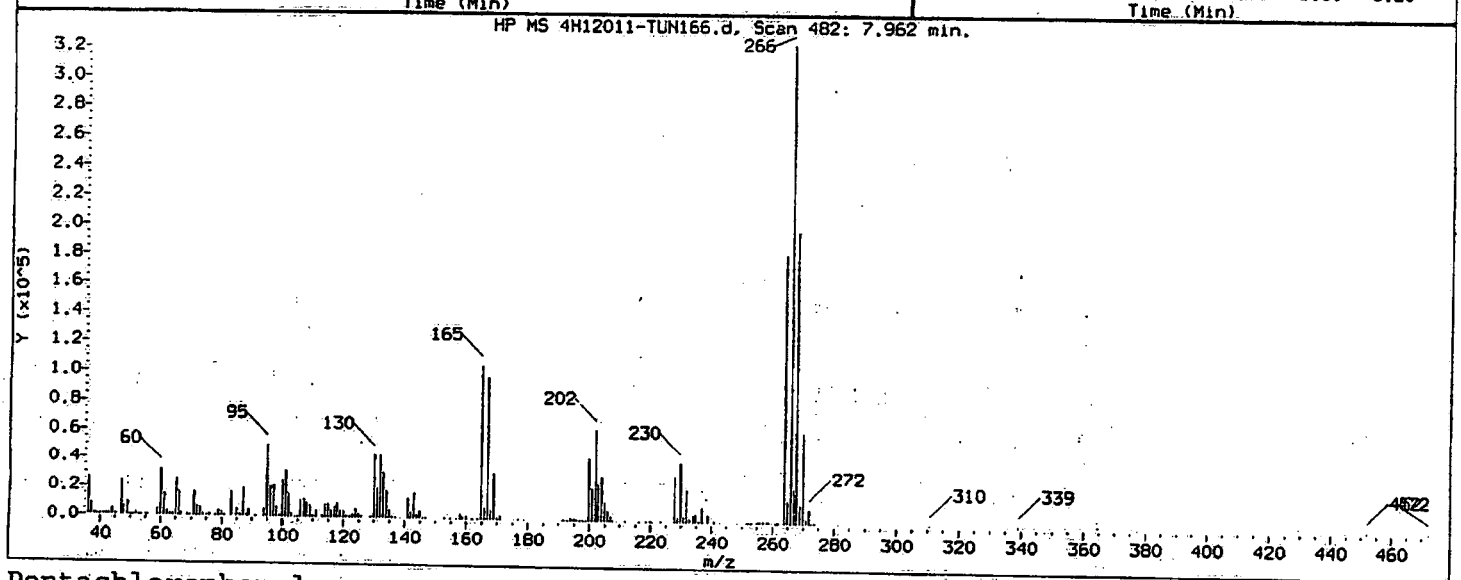
Robin Hu 8/13/2014

Report Date: 08/13/2014 13:02

Datafile Analyzed: /chem/5972hp66.i/D4H12011A66.b/4H12011-TUN166.d/4H12011-TUN16
Method Used: /chem/5972hp66.i/D4H12011A66.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 12-AUG-2014 13:50 Operator:
Sample Info: DFTPP 4H12011-TUN1:OWS
Misc Info:







Pentachlorophenol
==========
Exp. RT = 7.890
Found RT = 7.962

Mass	Area	Ratio
266	385809	100.00

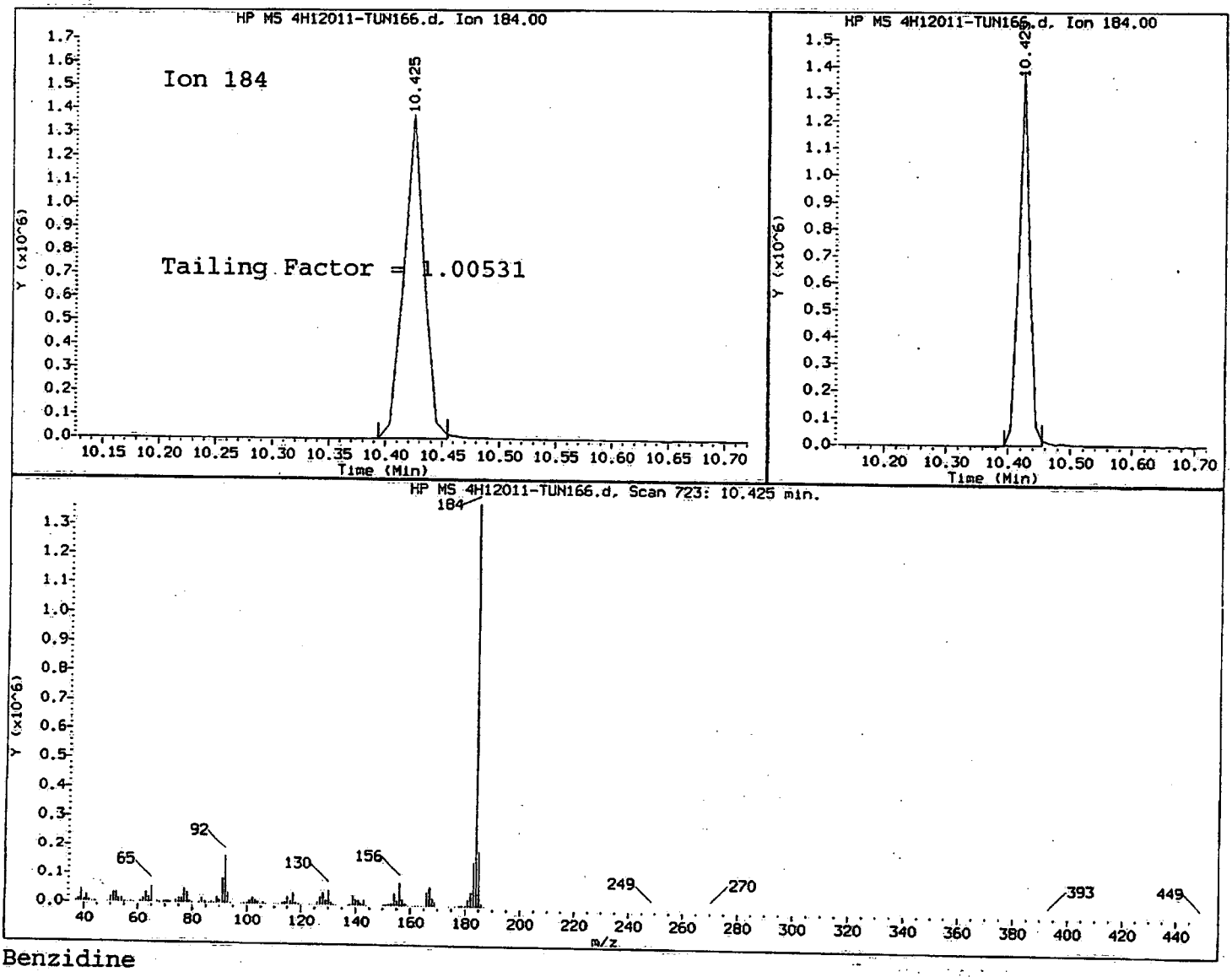
Tailing factor for Pentachlorophenol OK

Tail Factor = 0.911 Maximum Allowed = 2.0

Rolder Hai 8/13/2014

Report Date: 08/13/2014 13:02

Datafile Analyzed: /chem/5972hp66.i/D4H12011A66.b/4H12011-TUN166.d/4H12011-TUN16
Method Used: /chem/5972hp66.i/D4H12011A66.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 12-AUG-2014 13:50 Operator:
Sample Info: DFTPP 4H12011-TUN1:OWS
Misc Info:



Benzidine
=========
Exp. RT = 10.340
Found RT = 10.425

Mass	Area	Ratio
184	1686370	100.00

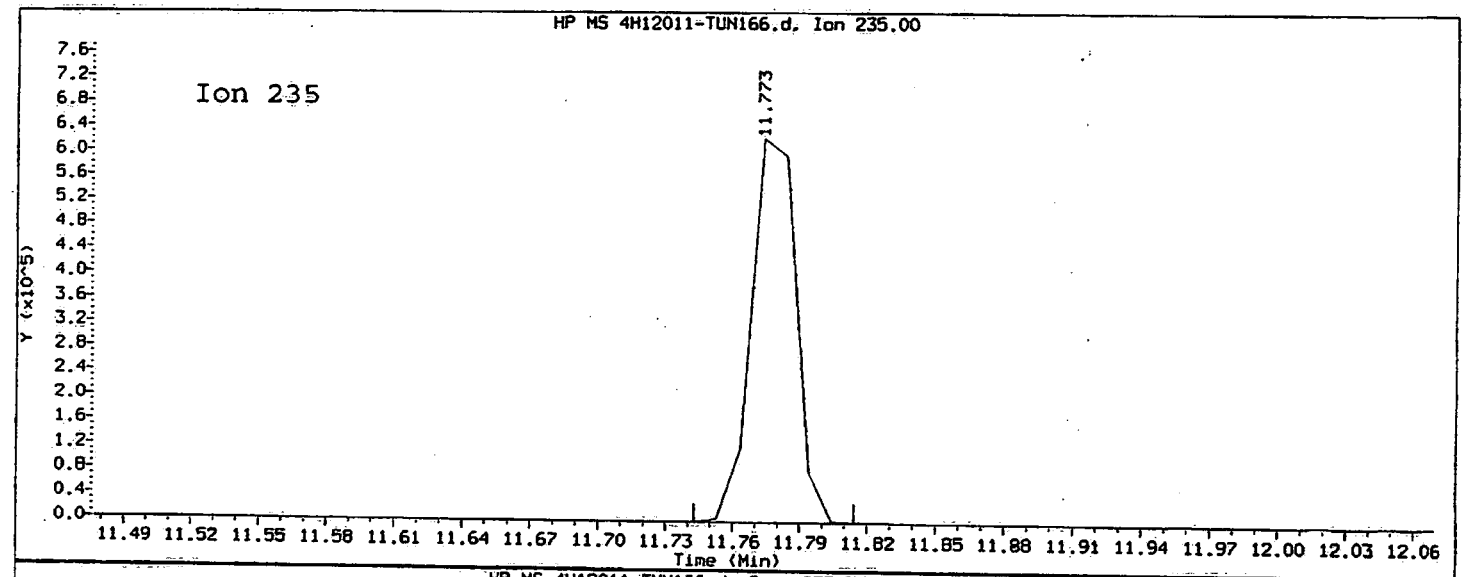
Tailing factor for Benzidine OK

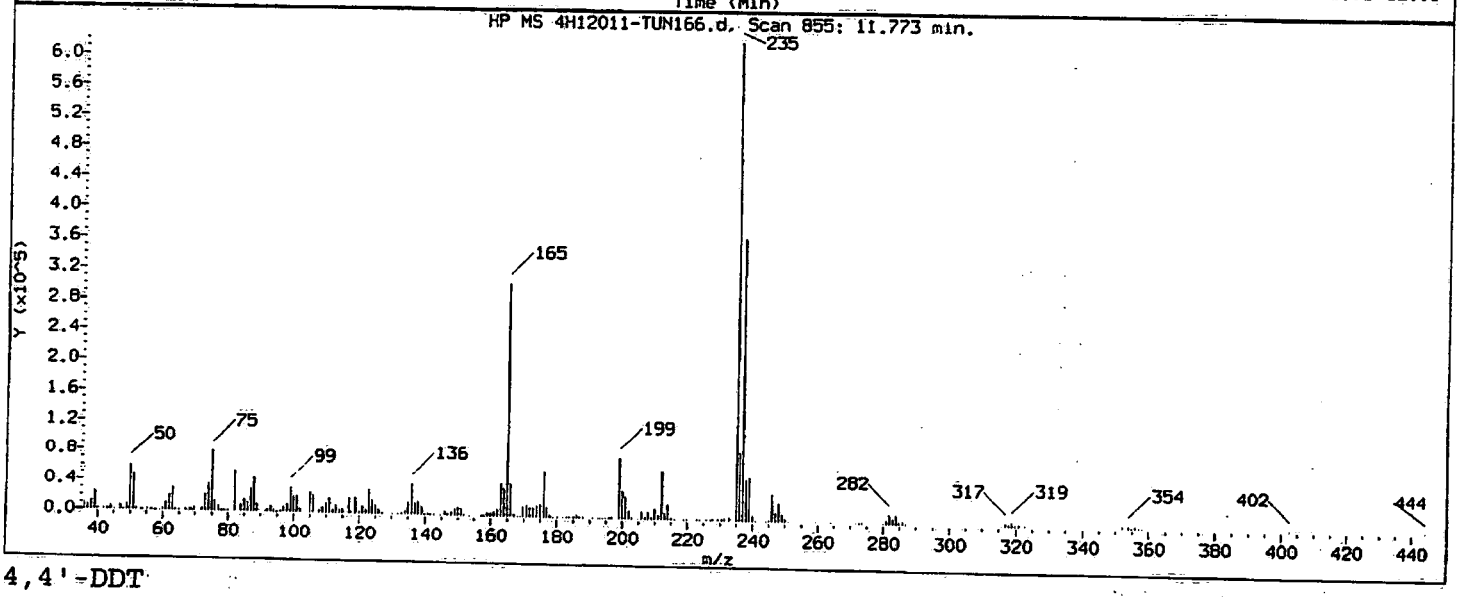
Tail Factor = 1.005 Maximum Allowed = 2.0

Roldan Hani 8/13/2014

Report Date: 08/13/2014 13:02

Datafile Analyzed: /chem/5972hp66.i/D4H12011A66.b/4H12011-TUN166.d/4H12011-TUN16
Method Used: /chem/5972hp66.i/D4H12011A66.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 12-AUG-2014 13:50 Operator:
Sample Info: DFTPP 4H12011-TUN1:OWS
Misc Info:





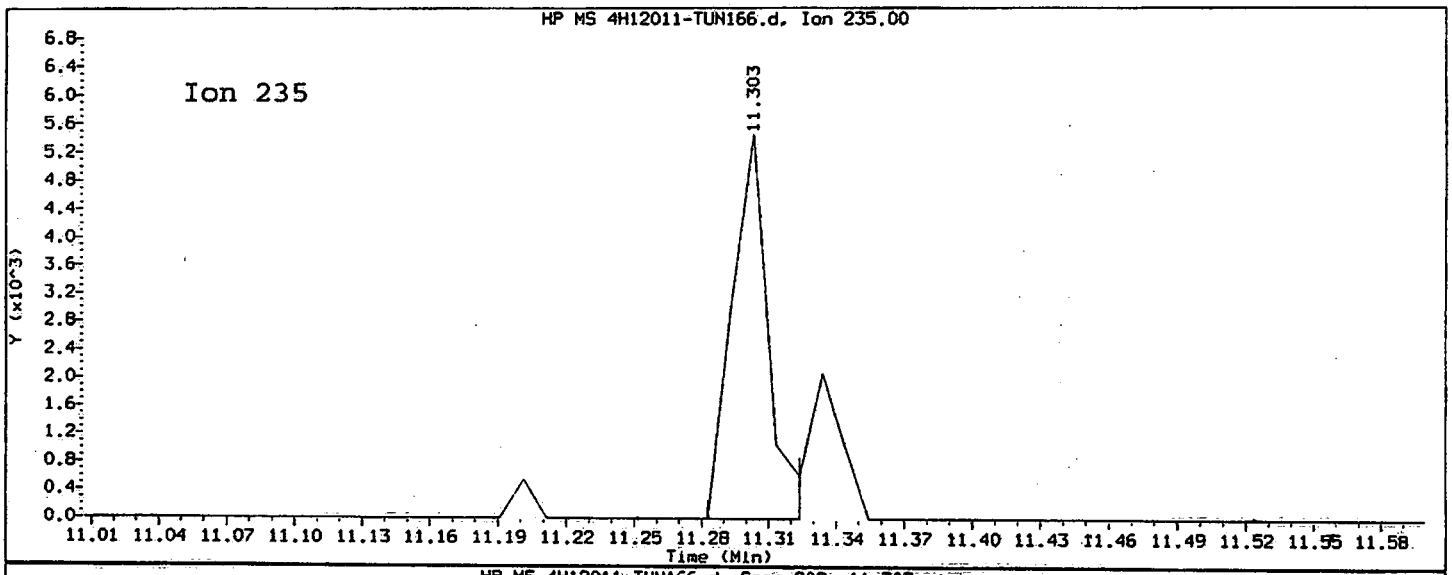
4,4'-DDT
========
Exp. RT = 11.690
Found RT = 11.773

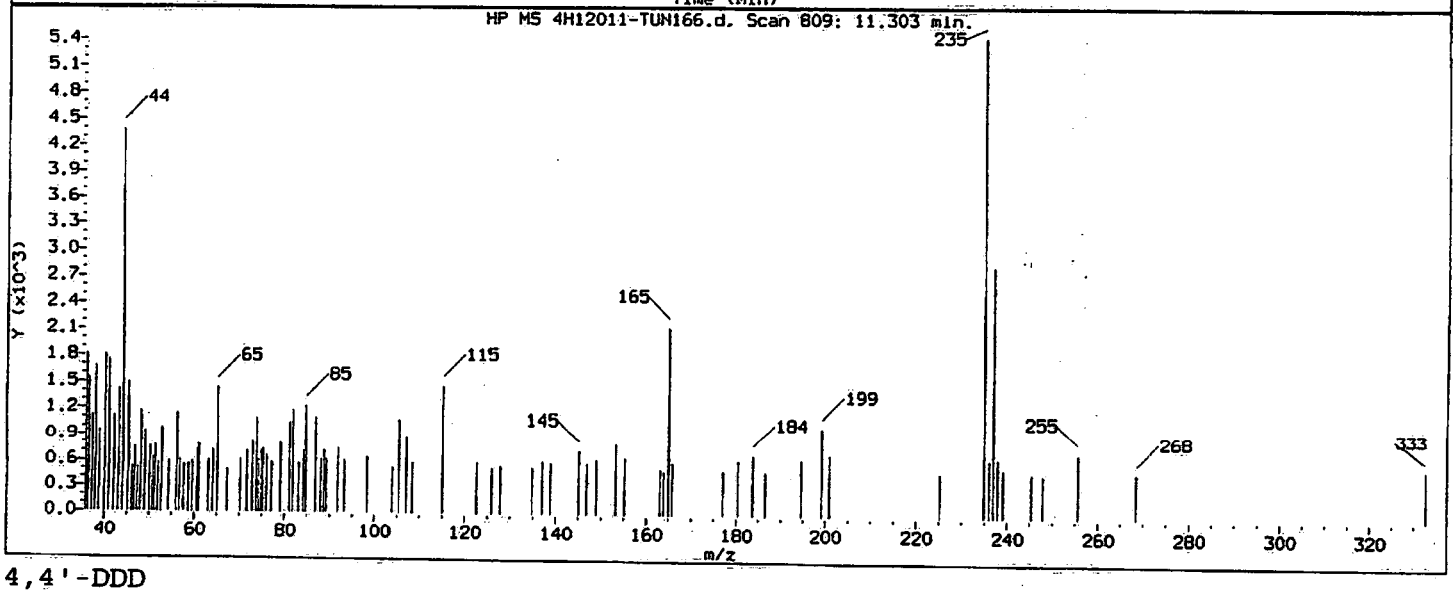
Mass	Area	Ratio
235	874901	100.00

Roldw Ha 8/13/2014

Report Date: 08/13/2014 13:02

Datafile Analyzed: /chem/5972hp66.i/D4H12011A66.b/4H12011-TUN166.d/4H12011-TUN16
Method Used: /chem/5972hp66.i/D4H12011A66.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 12-AUG-2014 13:50 Operator:
Sample Info: DFTPP 4H12011-TUN1:OWS
Misc Info:





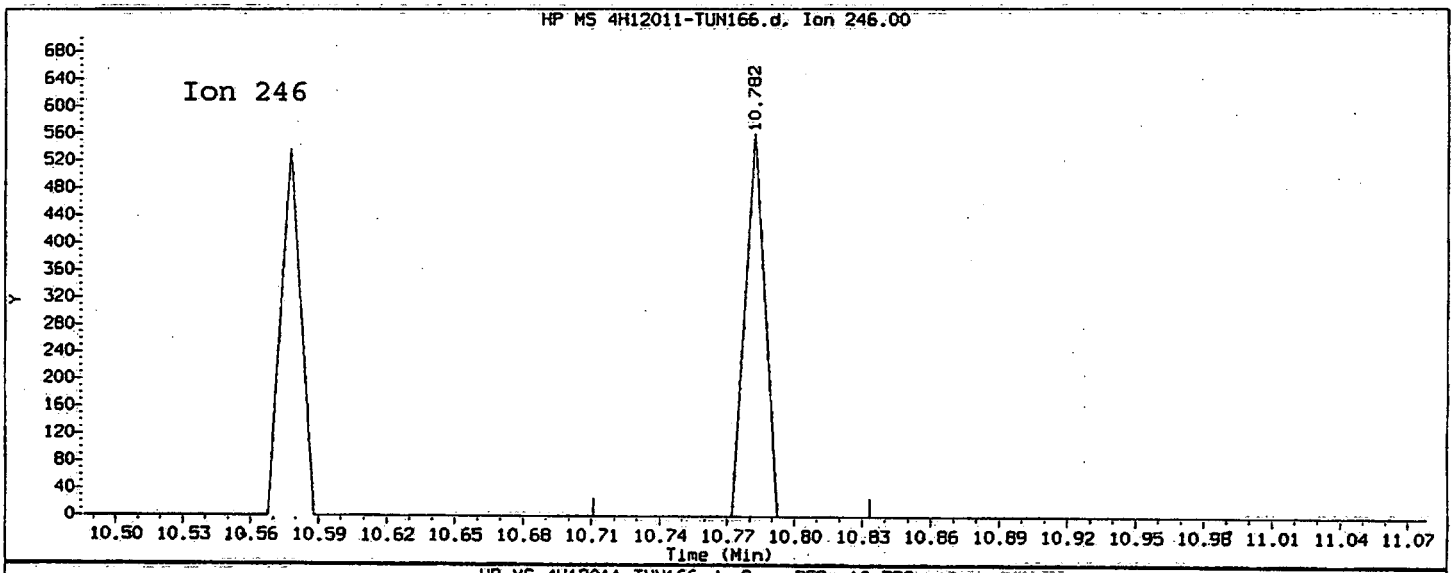
4,4'-DDD
========
Exp. RT = 11.250
Found RT = 11.303

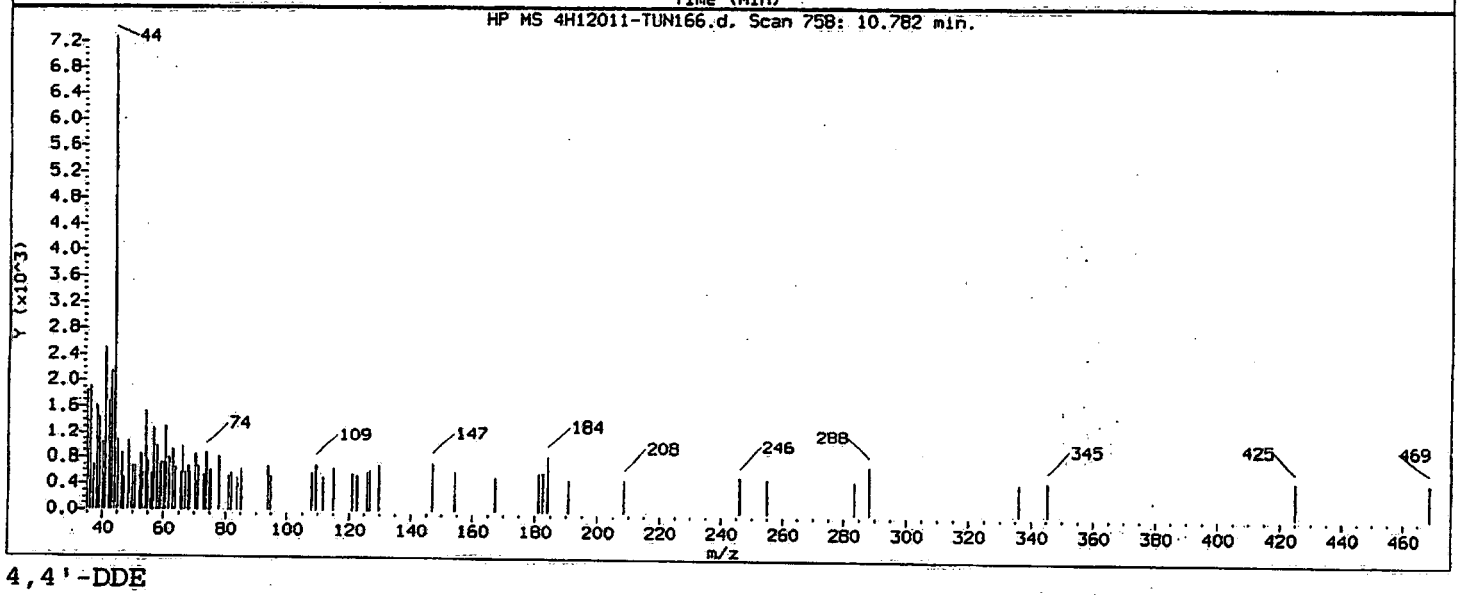
Mass	Area	Ratio
235	6226	100.00

Roldw Hani 8/13/2014

Report Date: 08/13/2014 13:02

Datafile Analyzed: /chem/5972hp66.i/D4H12011A66.b/4H12011-TUN166.d/4H12011-TUN16
Method Used: /chem/5972hp66.i/D4H12011A66.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 12-AUG-2014 13:50 Operator:
Sample Info: DFTPP 4H12011-TUN1:OWS
Misc Info:

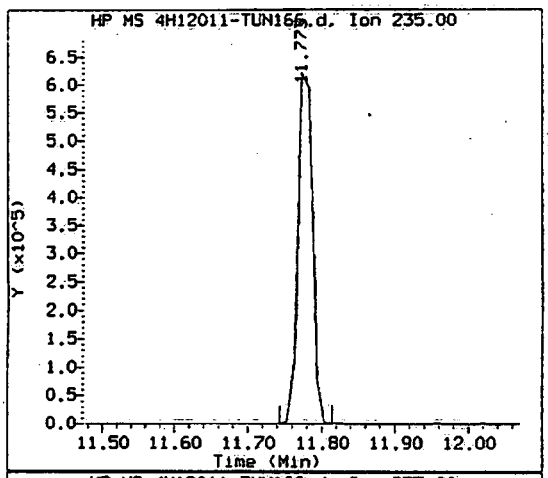




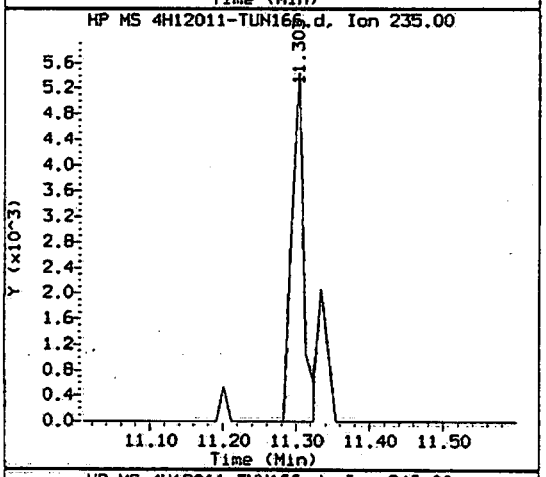
4,4'-DDE
========
Exp. RT = 10.800
Found RT = 10.782

Mass	Area	Ratio
246	343	100.00

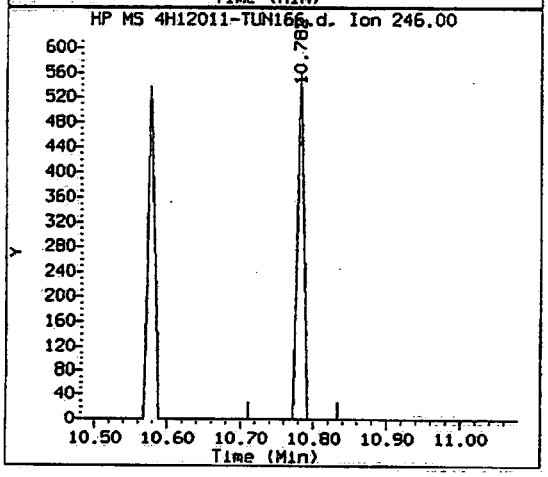
Rolder Hani 8/13/2014



Compound: 4,4'-DDT
Quant Mass: 235
RT: 11.773
Area: 874901



Compound: 4,4'-DDD
Quant Mass: 235
RT: 11.303
Area: 6226



Compound: 4,4'-DDE
Quant Mass: 246
RT: 10.782
Area: 343

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	874901			N/A
4,4-DDE	343	0.0	20.0	PASS
4,4-DDD	6226	0.7	20.0	PASS
4,4-DDD + DDE	6569	0.7	20.0	PASS

****
TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

8/13/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4H15001-TUN162.d

Date : 15-AUG-2014 16:04

Client ID: DFTPPBC

Instrument: 5972hp62.i

Sample Info: 4H15001-TUN1:OWS

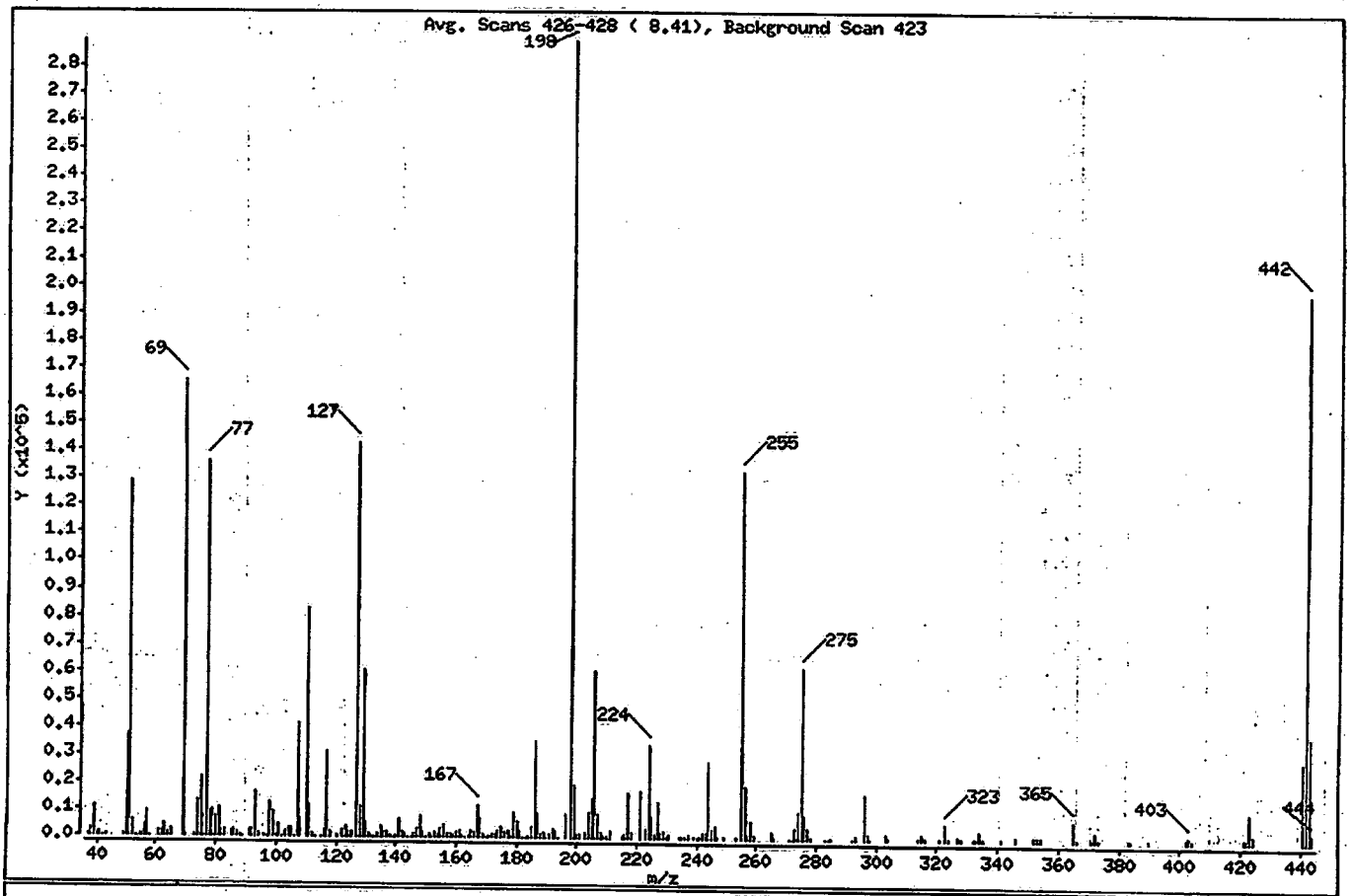
Volume Injected (uL): 2.0

Operator: OWS

Column phase: RTX-5MS

Column diameter: 0.32

1 Decafluorotriphenylphosphine



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	44.68
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	57.14
70	Less than 2.00% of mass 69	0.25 (0.44)
127	10.00 - 80.00% of mass 198	49.39
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.57
275	10.00 - 60.00% of mass 198	21.28
365	Greater than 1.00% of mass 198	2.48
441	Present, but less than mass 443	10.10
442	50.00 - 100.00% of mass 198	68.57
443	15.00 - 24.00% of mass 442	13.06 (19.05)

Robert Hamm 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4H15001-TUN162.d

Date : 15-AUG-2014 16:04

Client ID: DFTPPBG

Instrument: 5972hp62.i

Sample Info: 4H15001-TUN1:OWS

Volume Injected (uL): 2.0

Operator: OWS

Column phase: RTX-5MS

Column diameter: 0.32

Data File: 4H15001-TUN162.d

Spectrum: Avg. Scans 426-428 (8.41), Background Scan 423

Location of Maximum: 198.00

Number of points: 241

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	776	116.00	2874	180.00	6277	258.00	6964
38.00	2432	117.00	31320	181.00	2919	259.00	1104
39.00	11263	118.00	2251	182.00	210	265.00	2640
40.00	333	120.00	348	183.00	205	266.00	434
41.00	1052	122.00	2845	184.00	646	271.00	190
42.00	228	123.00	3772	185.00	3948	272.00	241
43.00	445	124.00	1894	186.00	35040	273.00	4300
49.00	743	125.00	1917	187.00	9514	274.00	10105
50.00	37392	127.00	142720	188.00	1156	275.00	61512
51.00	129152	128.00	11058	189.00	2307	276.00	8537
52.00	6204	129.00	60488	190.00	219	277.00	4173
53.00	184	130.00	5168	191.00	1019	278.00	755
55.00	382	131.00	1043	192.00	3111	283.00	253
56.00	4110	132.00	240	193.00	2879	284.00	245
57.00	9173	133.00	189	194.00	293	285.00	944
58.00	284	134.00	1326	196.00	8869	292.00	200
61.00	1742	135.00	4192	198.00	289024	293.00	1202
62.00	2040	136.00	1935	199.00	18984	296.00	16392
63.00	4922	137.00	2222	200.00	1250	297.00	2189
64.00	1016	138.00	454	201.00	1358	298.00	202
65.00	2372	139.00	184	203.00	1847	303.00	1924
69.00	165120	140.00	633	204.00	9026	304.00	549
70.00	731	141.00	6701	205.00	14588	314.00	843
73.00	422	142.00	2011	206.00	60752	315.00	1970
74.00	13141	143.00	1578	207.00	8361	316.00	981
75.00	21720	144.00	215	208.00	1806	321.00	529
76.00	7318	145.00	300	209.00	506	323.00	5652
77.00	136512	146.00	1260	210.00	761	324.00	976
78.00	9609	147.00	3252	211.00	2598	327.00	1070
79.00	10156	148.00	8135	215.00	583	328.00	615
80.00	7045	149.00	1764	216.00	1413	332.00	484
81.00	10436	150.00	288	217.00	16348	333.00	401
82.00	2243	151.00	1327	218.00	2060	334.00	3591
83.00	2589	152.00	211	221.00	17400	335.00	905
85.00	2216	153.00	1993	223.00	3653	341.00	653

Roldan Ham 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4H15001-TUN162.d

Date : 15-AUG-2014 16:04

Client ID: DFTPPBG | Instrument: 5972hp62.i

Sample Info: 4H15001-TUN1:OWS

Volume Injected (uL): 2.0 | Operator: OWS

Column phase: RTX-5MS | Column diameter: 0.32

Data File: 4H15001-TUN162.d

Spectrum: Avg. Scans 426-428 (8.41), Background Scan 423

Location of Maximum: 198.00

Number of points: 241

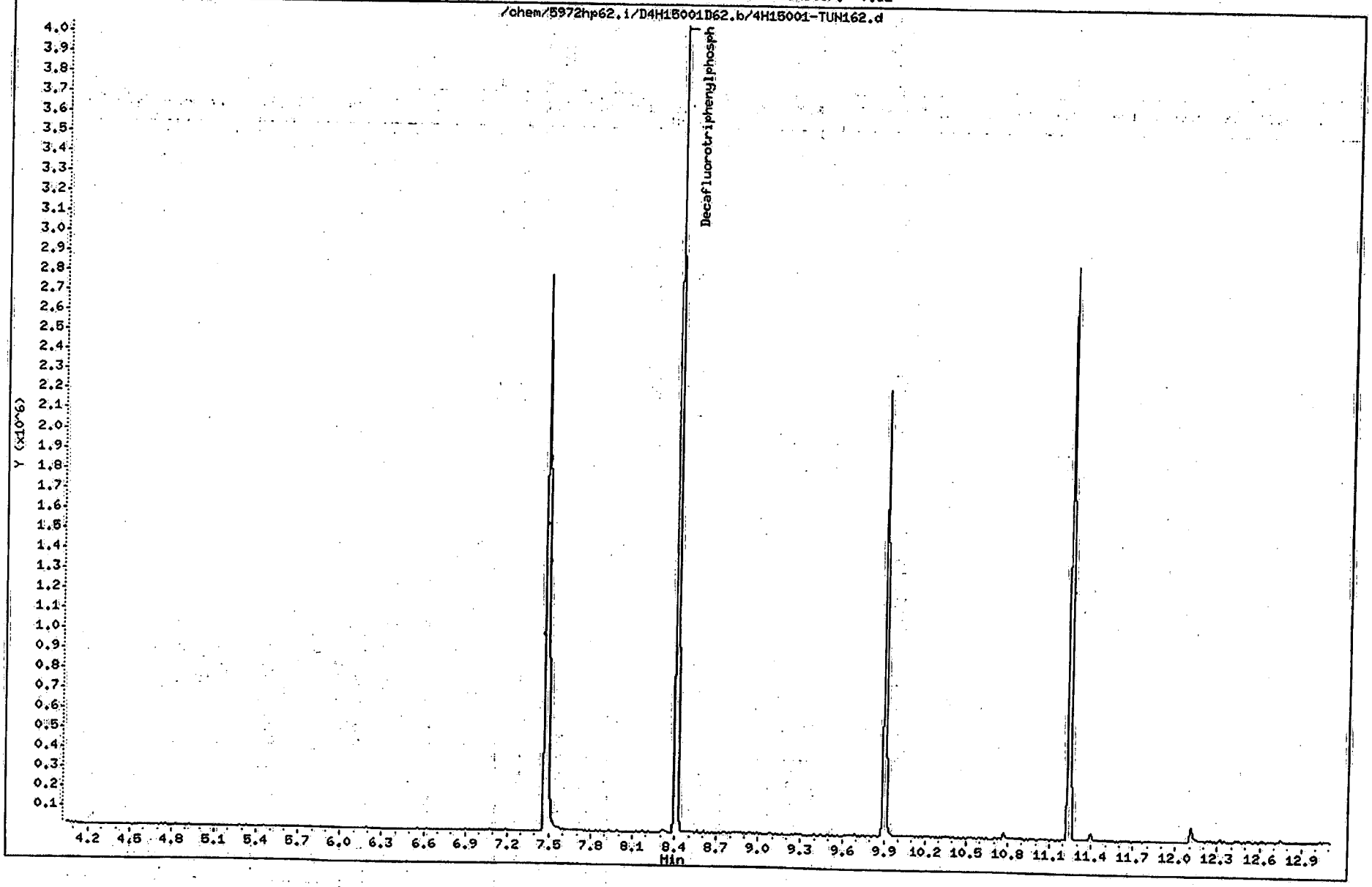
m/z	Y	m/z	Y	m/z	Y	m/z	Y
86.00	2850	154.00	1432	224.00	34008	346.00	1260
87.00	1436	155.00	3603	225.00	7920	352.00	1586
88.00	522	156.00	4950	226.00	1172	353.00	1013
89.00	197	157.00	1357	227.00	13265	354.00	1626
91.00	2728	158.00	1354	228.00	1816	365.00	7182
92.00	2730	159.00	960	229.00	2675	366.00	978
93.00	16369	160.00	1943	230.00	374	371.00	596
94.00	1231	161.00	2978	231.00	1265	372.00	3057
96.00	739	162.00	983	234.00	713	373.00	721
97.00	324	163.00	206	235.00	924	383.00	785
98.00	12388	164.00	461	236.00	575	384.00	207
99.00	9584	165.00	2374	237.00	1129	390.00	371
100.00	942	166.00	2034	239.00	517	402.00	1136
101.00	4913	167.00	12229	240.00	222	403.00	1725
102.00	205	168.00	6993	241.00	595	404.00	644
103.00	1763	169.00	1107	242.00	1820	421.00	1226
104.00	3362	170.00	236	243.00	2149	422.00	1265
105.00	3273	171.00	732	244.00	27696	423.00	10654
106.00	210	172.00	1262	245.00	3439	424.00	2453
107.00	41184	173.00	1243	246.00	4919	441.00	29184
108.00	6455	174.00	2804	247.00	917	442.00	198144
110.00	83160	175.00	4275	249.00	897	443.00	37752
111.00	12110	176.00	1667	253.00	360	444.00	3392
112.00	1461	177.00	2476	255.00	132800		
113.00	233	178.00	642	256.00	19200		
115.00	228	179.00	9448	257.00	1572		

Robin Hu 8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4H15001-TUN162.d
Date : 15-AUG-2014 16:04
Client ID: DFTPPBG
Sample Info: 4H15001-TUN1:OWS
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp62.i

Operator: OWS
Column diameter: 0.32



Paldw Ha 8/19/2014

DFTPP TUNE/TAILING FACTOR/DEGRADATION SUMMARY RESULTS

DECAFLUOROTRIPHENYLPHOSPHINE Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	10 - 80% of mass 198	44.68		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	57.14		PASS
70	Less than 2% of mass 69	0.25	(0.44)	PASS
127	10 - 80% of mass 198	49.39		PASS
197	Less than 2% of mass 198	0.00	(0.00)	PASS
199	5 - 9% of mass 198	6.57		PASS
275	10 - 60% of mass 198	21.28		PASS
365	Greater than 1% of mass 198	2.48		PASS
441	Present, but less than mass 443	10.10	(77.30)	PASS
442	50 - 100% of mass 198	68.57		PASS
443	15 - 24% of mass 442	13.06	(19.05)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.66	2.0	PASS
Benzidine	1.02	2.0	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	709894			N/A
4,4-DDE	0	0.0	20.0	PASS
4,4-DDD	9171	1.3	20.0	PASS
4,4-DDD + DDE	9171	1.3	20.0	PASS

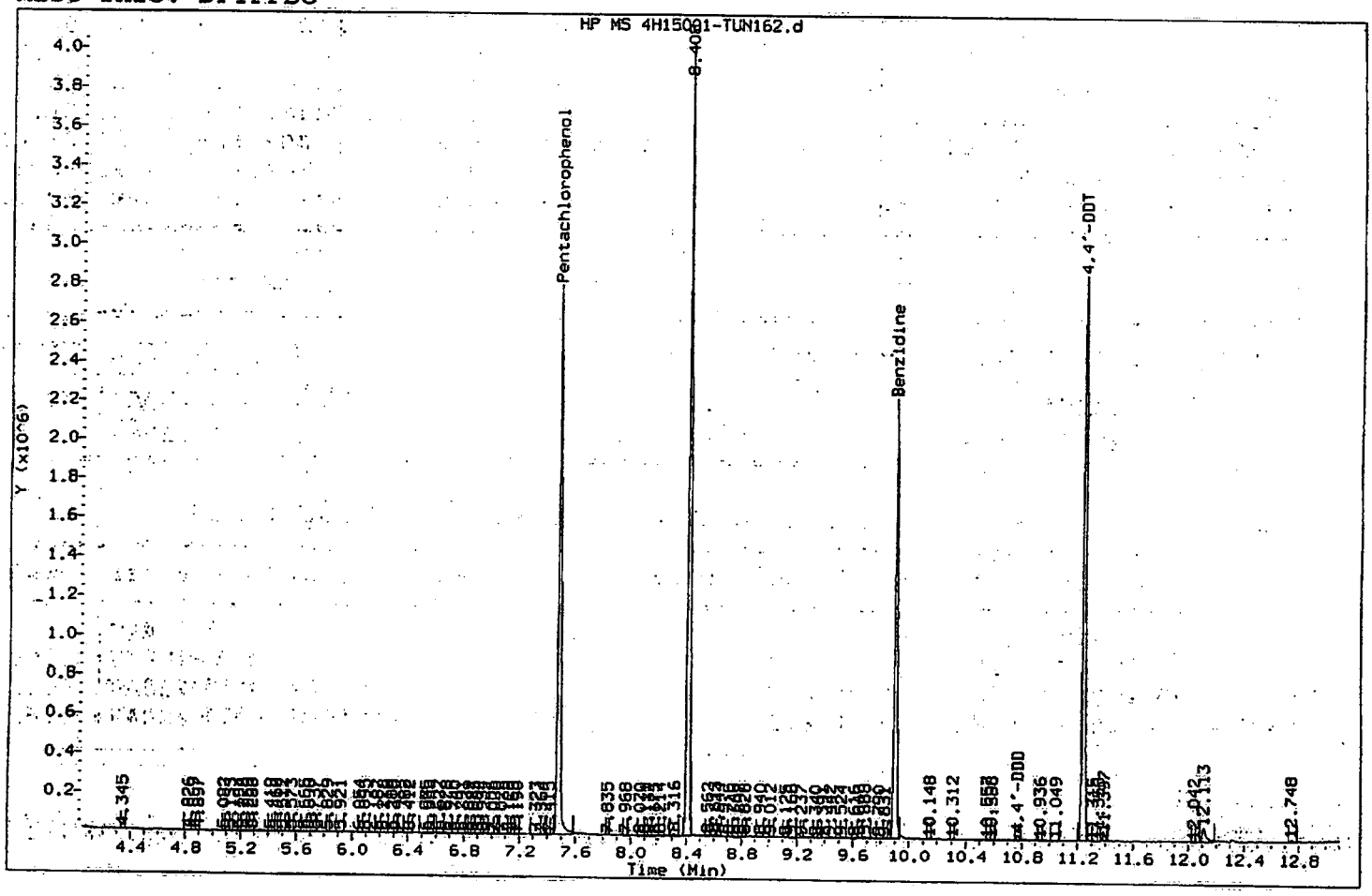
Tuning Sample, /chem/5972hp62.i/D4H15001D62.b/4H15001-TUN162.d/4H15001-TUN162.d,

8/19/2014

DFTPP TUNE/TAILING FACTOR/DEGRADATION SAMPLE AND GRAPHIC REPORT

Report Date: 08/15/2014 17:53

Datafile Analyzed: /chem/5972hp62.i/D4H15001D62.b/4H15001-TUN162.d/4H15001-TUN16
Method Used: /chem/5972hp62.i/D4H15001D62.b/dftpp8270D.m Inst: 5972hp62
Injection Date: 15-AUG-2014 16:04 Operator: OWS
Sample Info: 4H15001-TUN1 4H15001-TUN1:OWS
Misc Info: DFTPPBG



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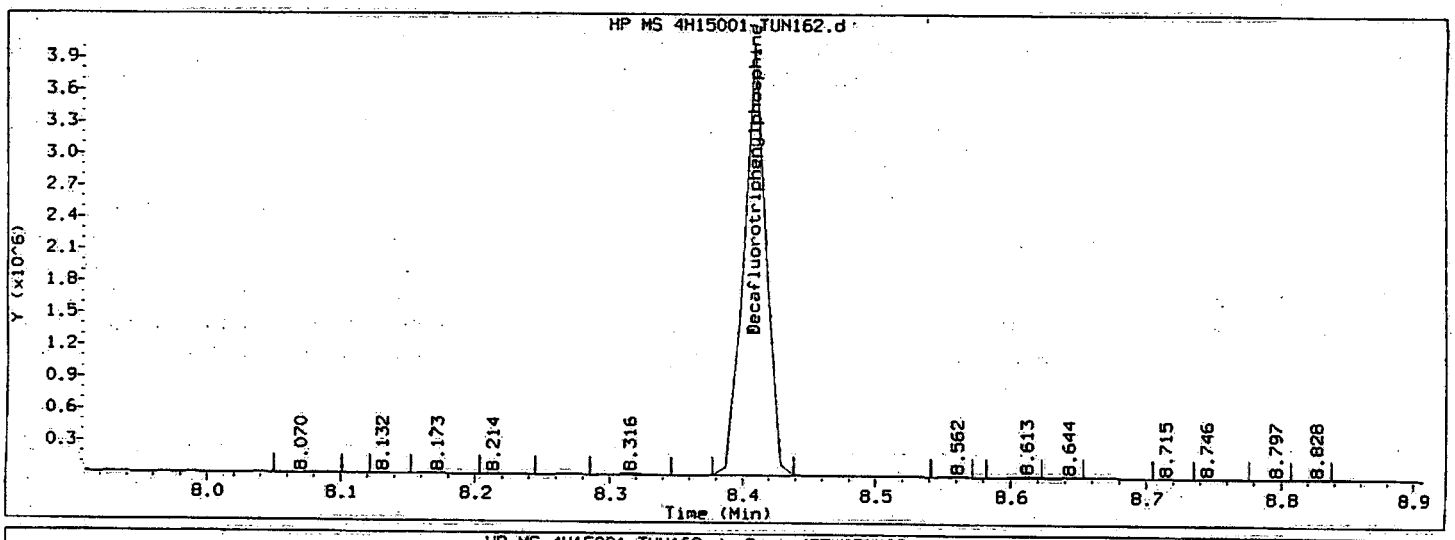
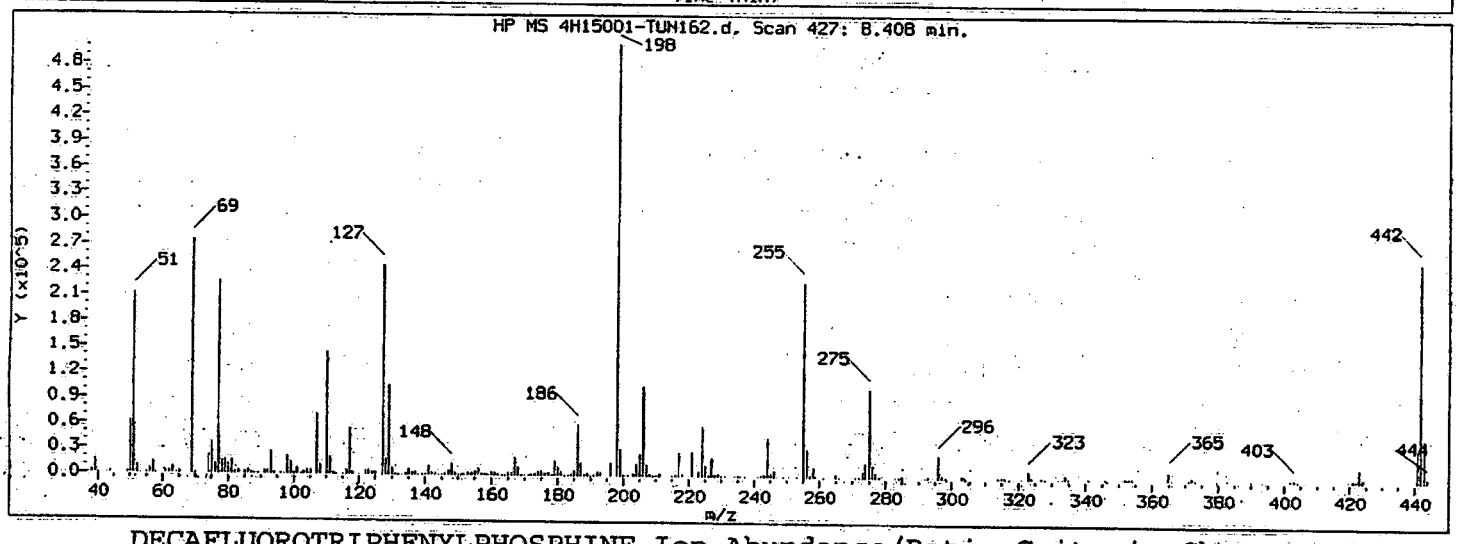
8/19/2014

Report Date: 08/15/2014 17:53

Datafile Analyzed: /chem/5972hp62.i/D4H15001D62.b/4H15001-TUN162.d/4H15001-TUN16
Method Used: /chem/5972hp62.i/D4H15001D62.b/dftpp8270D.m Inst: 5972hp62
Injection Date: 15-AUG-2014 16:04 Operator: OWS
Sample Info: 4H15001-TUN1 4H15001-TUN1:OWS
Misc Info: DFTPPBG





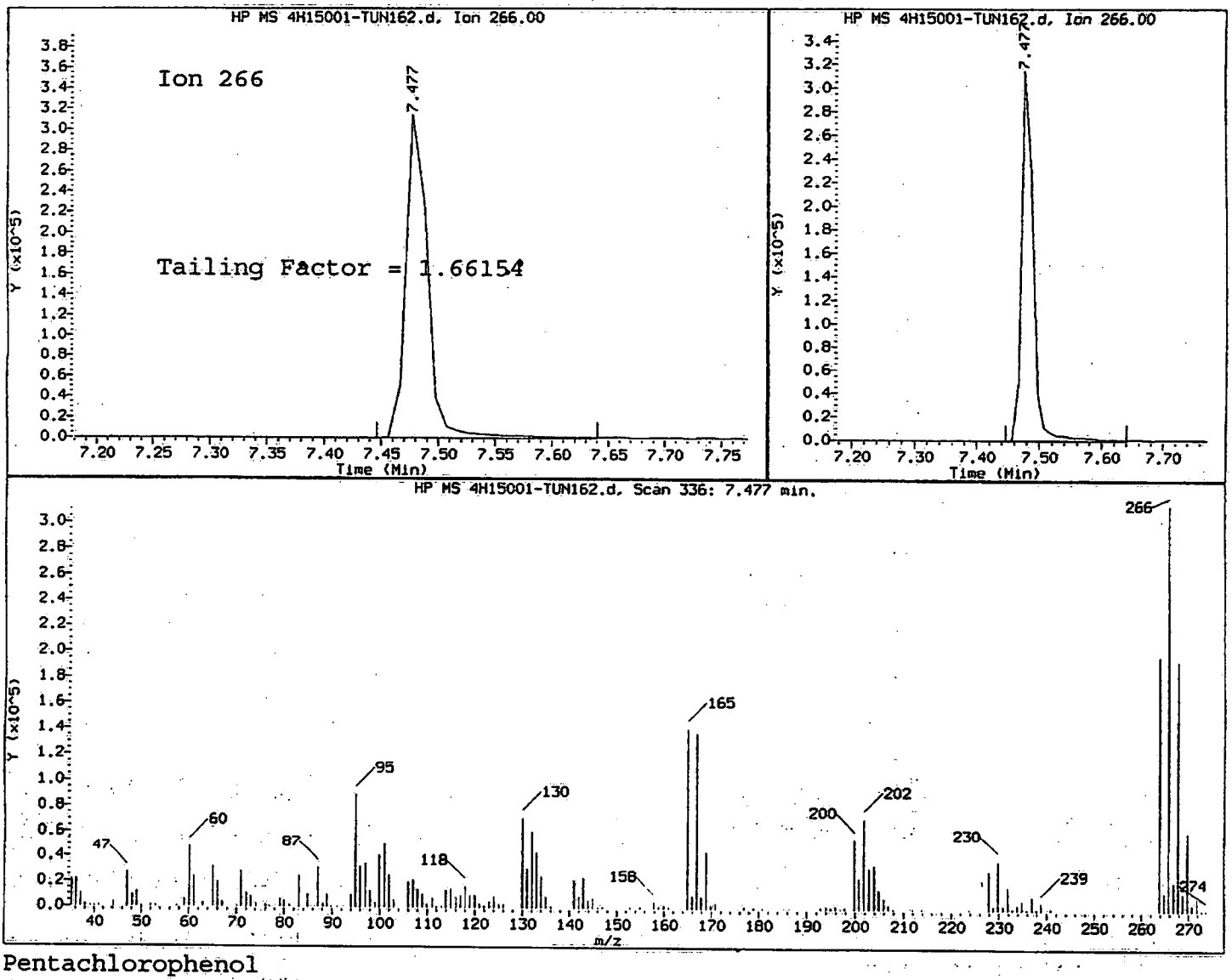
DECAFLUOROTRIPHENYLPHOSPHINE Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	10 - 80% of mass 198	44.68		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	57.14		PASS
70	Less than 2% of mass 69	0.25	(0.44)	PASS
127	10 - 80% of mass 198	49.39		PASS
197	Less than 2% of mass 198	0.00	(0.00)	PASS
199	5 - 9% of mass 198	6.57		PASS
275	10 - 60% of mass 198	21.28		PASS
365	Greater than 1% of mass 198	2.48		PASS
441	Present, but less than mass 443	10.10	(77.30)	PASS
442	50 - 100% of mass 198	68.57		PASS
443	15 - 24% of mass 442	13.06	(19.05)	PASS

Roldan Ha 8/19/2014

Report Date: 08/15/2014 17:53

Datafile Analyzed: /chem/5972hp62.i/D4H15001D62.b/4H15001-TUN162.d/4H15001-TUN16
Method Used: /chem/5972hp62.i/D4H15001D62.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 15-AUG-2014 16:04 Operator:
Sample Info: DFTPP 4H15001-TUN1:OWS
Misc Info:



Pentachlorophenol
==========
Exp. RT = 7.890
Found RT = 7.477

Mass	Area	Ratio
266	417446	100.00

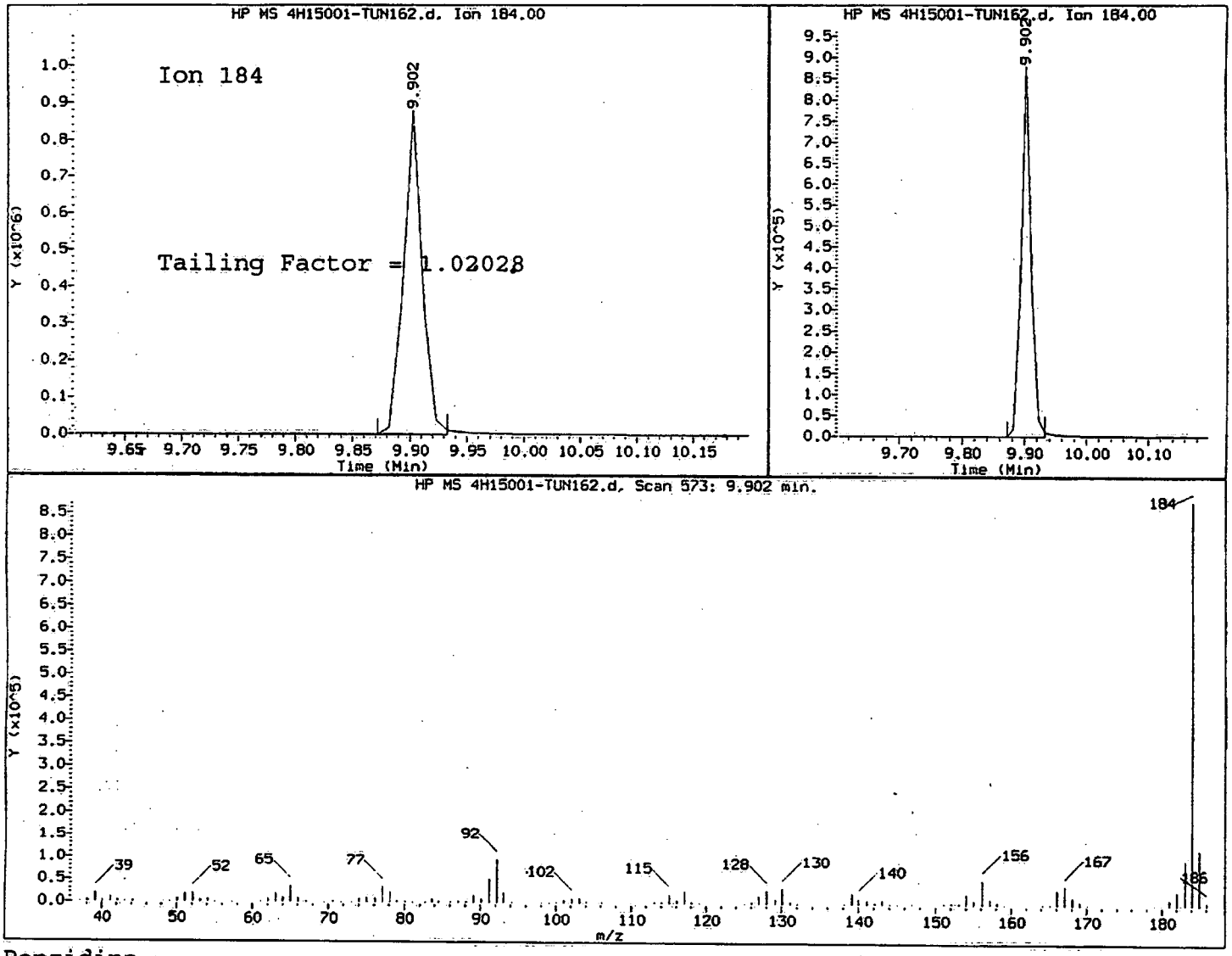
Tailing factor for Pentachlorophenol OK

Tail Factor = 1.662 Maximum Allowed = 2.0

Roldan Hani 8/19/2014

Report Date: 08/15/2014 17:53

Datafile Analyzed: /chem/5972hp62.i/D4H15001D62.b/4H15001-TUN162.d/4H15001-TUN16
Method Used: /chem/5972hp62.i/D4H15001D62.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 15-AUG-2014 16:04 Operator:
Sample Info: DFTPP 4H15001-TUN1:OWS
Misc Info:



Benzidine
==========
Exp. RT = 10.340
Found RT = 9.902

Mass	Area	Ratio
184	986309	100.00

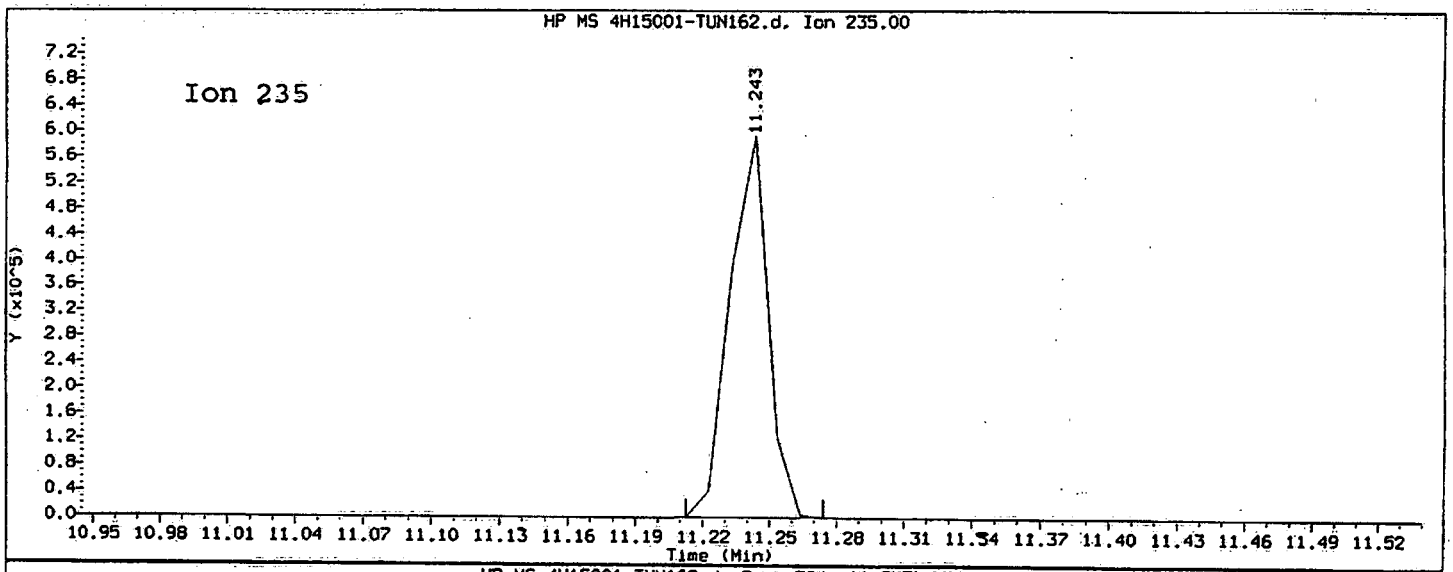
Tailing factor for Benzidine OK

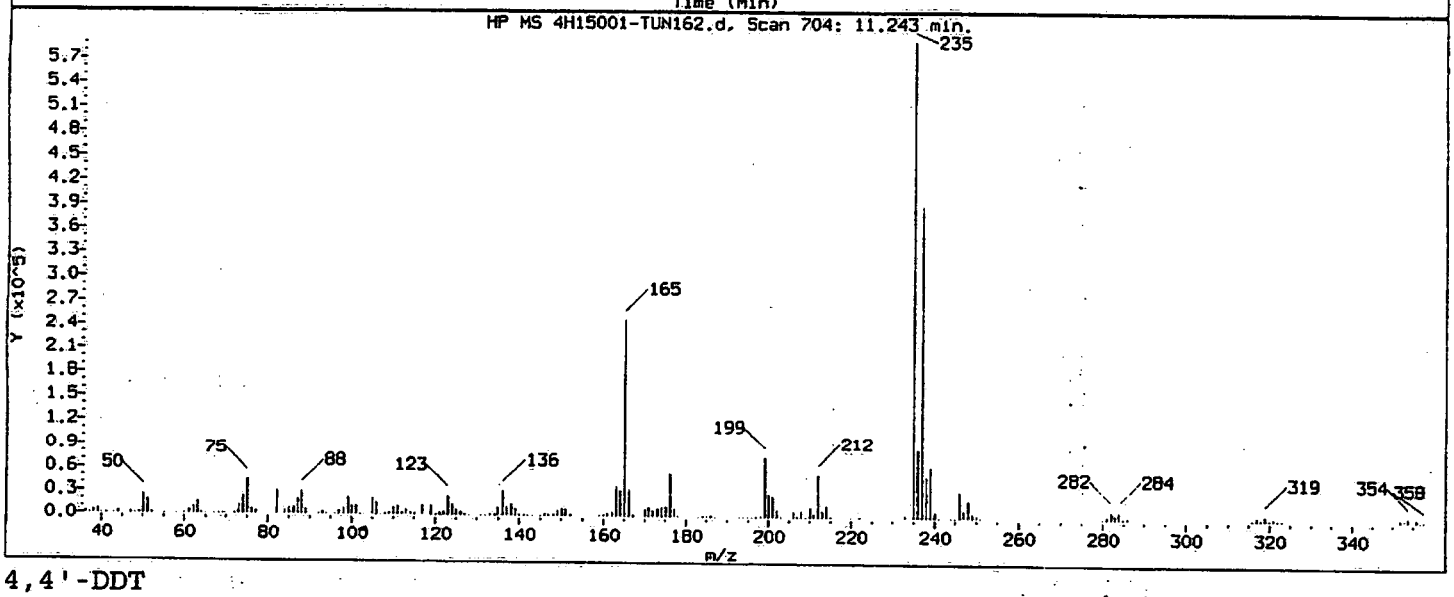
Tail Factor = 1.020 Maximum Allowed = 2.0

8/19/2014

Report Date: 08/15/2014 17:53

Datafile Analyzed: /chem/5972hp62.i/D4H15001D62.b/4H15001-TUN162.d/4H15001-TUN16
Method Used: /chem/5972hp62.i/D4H15001D62.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 15-AUG-2014 16:04 Operator:
Sample Info: DFTPP 4H15001-TUN1:OWS
Misc Info:





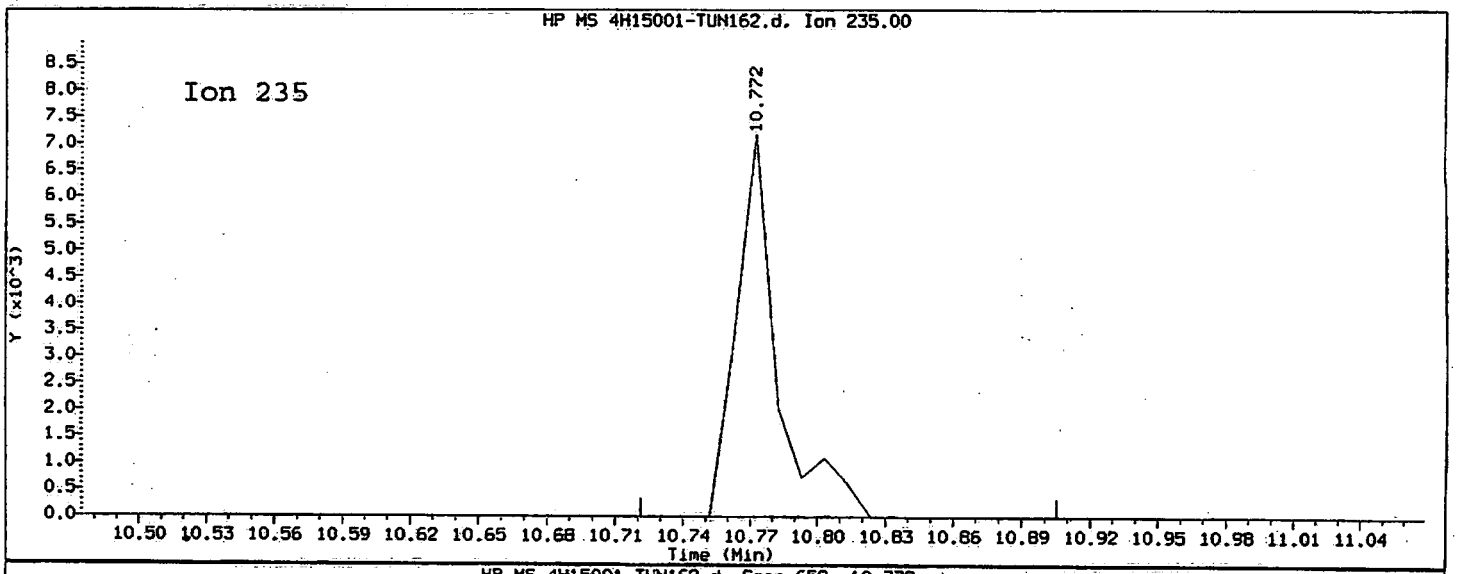
4,4'-DDT
========
Exp. RT = 11.690
Found RT = 11.243

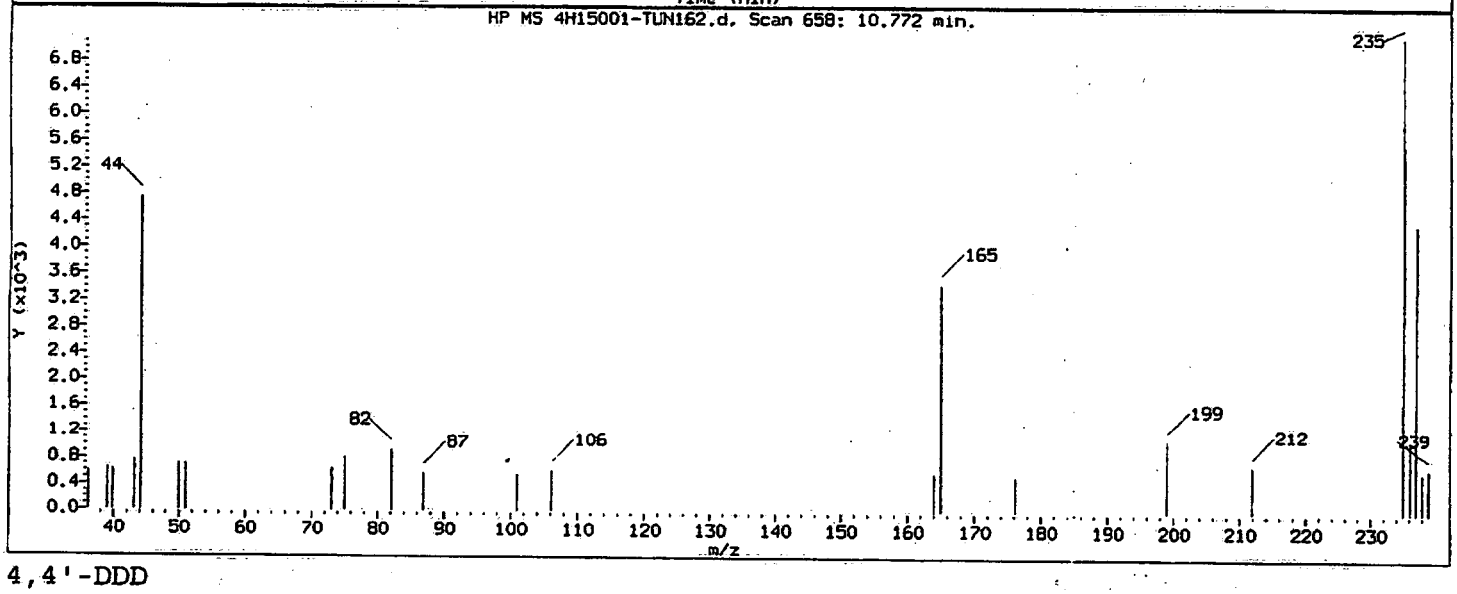
Mass	Area	Ratio
235	709894	100.00

Roldan Ham 8/19/2014

Report Date: 08/15/2014 17:53

Datafile Analyzed: /chem/5972hp62.i/D4H15001D62.b/4H15001-TUN162.d/4H15001-TUN16
Method Used: /chem/5972hp62.i/D4H15001D62.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 15-AUG-2014 16:04 Operator:
Sample Info: DFTPP 4H15001-TUN1:OWS
Misc Info:





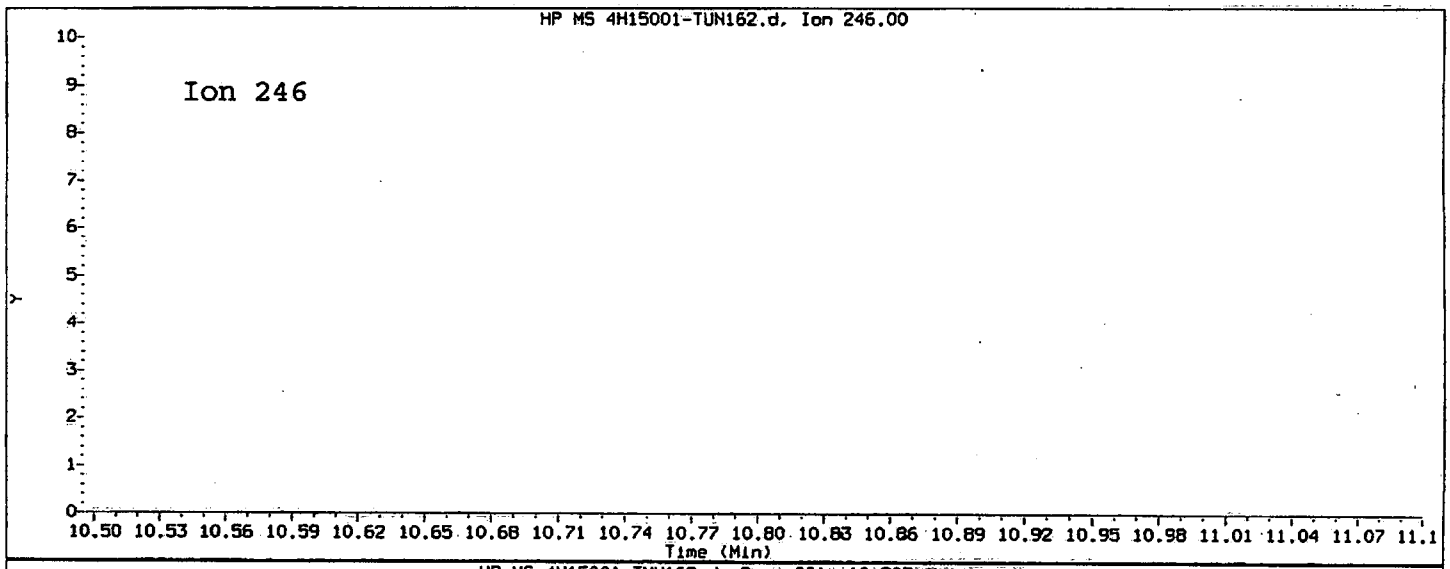
4,4'-DDD
========
Exp. RT = 11.250
Found RT = 10.772

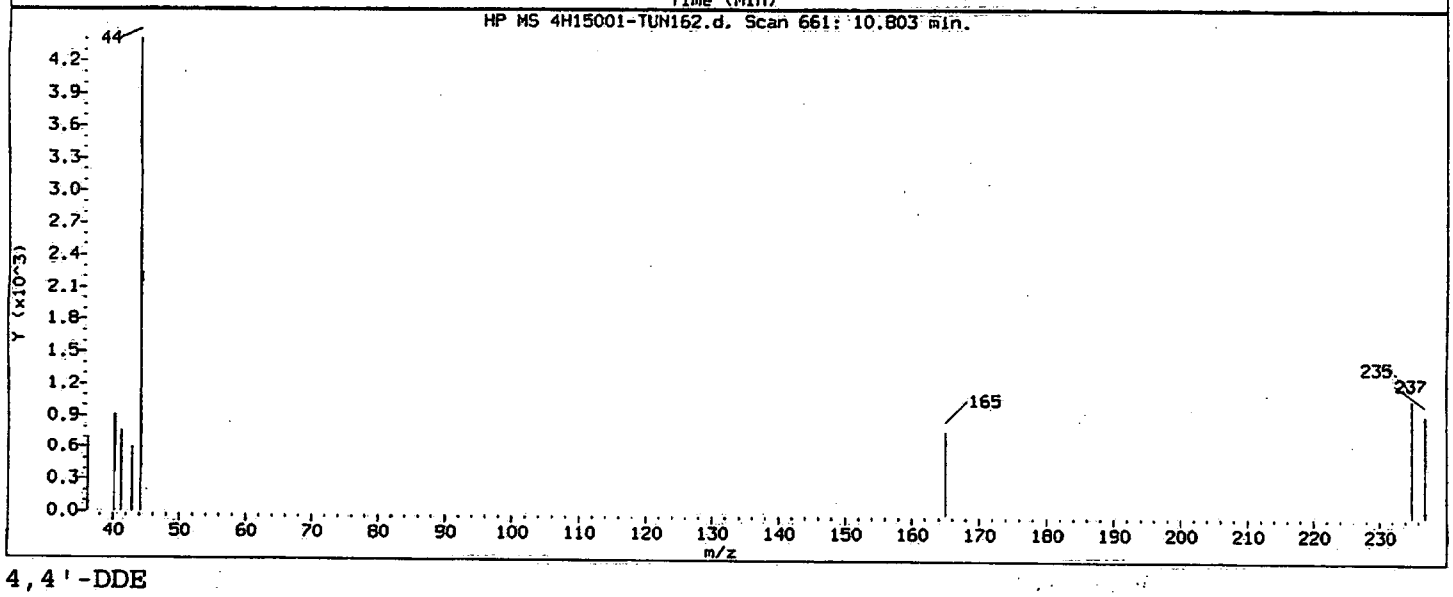
Mass	Area	Ratio
235	9171	100.00

Roldw Ha 8/19/2014

Report Date: 08/15/2014 17:53

Datafile Analyzed: /chem/5972hp62.i/D4H15001D62.b/4H15001-TUN162.d/4H15001-TUN16
Method Used: /chem/5972hp62.i/D4H15001D62.b/dftpp8270D.m/BrkDwnTF.m Inst: 5972h
Injection Date: 15-AUG-2014 16:04 Operator:
Sample Info: DFTPP 4H15001-TUN1:OWS
Misc Info:

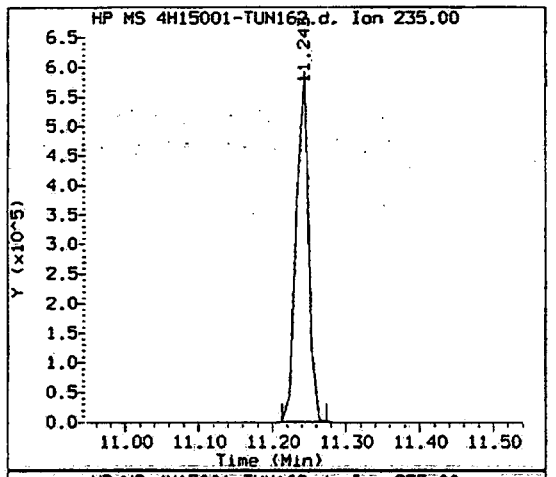




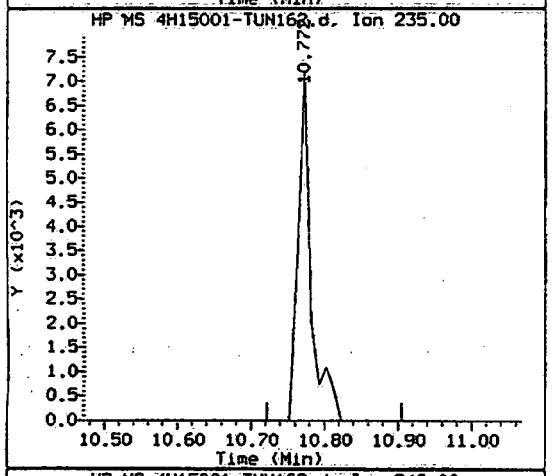
4,4'-DDE
========
Exp. RT = 10.800
Found RT = 0.000

Mass	Area	Ratio
246	0	0.00

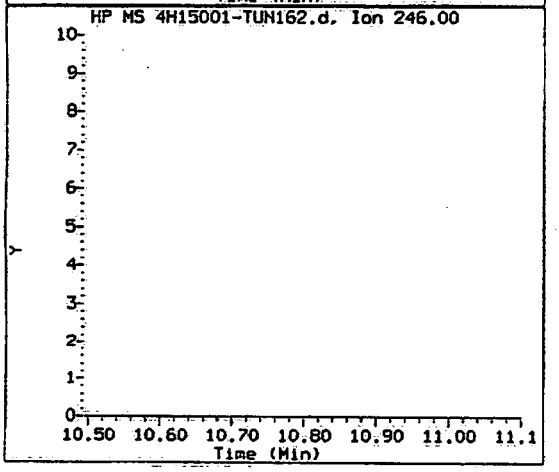
Roldw Ha 8/19/2014



Compound: 4,4'-DDT
Quant Mass: 235
RT: 11.243
Area: 709894



Compound: 4,4'-DDD
Quant Mass: 235
RT: 10.772
Area: 9171



Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	709894			N/A
4,4-DDE	0	0.0	20.0	PASS
4,4-DDD	9171	1.3	20.0	PASS
4,4-DDD + DDE	9171	1.3	20.0	PASS

****
TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST
****

Roldan Hani 8/19/2014

O. Blank Data

Arranged by type of blank (method or instrument where applicable) in chronological order, by instrument.

Tabulated Results and TICs shall be included. (ANALYSIS DATA SHEET)

RIC and Quantitation reports.

Target compound spectra with lab-generated standard Spectra and GC/MS library search spectra for TICs.

ANALYSIS DATA SHEET

SW8270D

SBLKBV

Client: WESTON SOLUTIONS | SDG: 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD SVO. | File ID: 4080818-BLK166.d | QC Type: Blank

Initial/Final: 30g / 1000uL | Sulfur Cleanup: N | Lab ID: 4080818-BLK1 | Column ID: RTX-5Sil MS

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/12/14 16:15

Batch: 4080818 | Sequence: 4H12011 | Calibration: 4080605 | Instrument: 5972hp66

CAS NO.	COMPOUND	CONC.(ug/kg wet)	MDL	RL	Q
108-95-2	Phenol		55	330	U
111-44-4	Bis(2-chloroethyl)ether		20	170	U
95-57-8	2-Chlorophenol		54	330	U
95-48-7	2-Methylphenol		39	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)		25	170	U
106-44-5	3 & 4-Methylphenol		34	330	U
621-64-7	N-Nitroso-di-N-propylamine		32	170	U
98-86-2	Acetophenone		44	170	U
67-72-1	Hexachloroethane		110	170	U
98-95-3	Nitrobenzene		42	170	U
78-59-1	Isophorone		29	170	U
88-75-5	2-Nitrophenol		42	330	U
105-67-9	2,4-Dimethylphenol		52	330	U
111-91-1	Bis(2-chloroethoxy)methane		45	170	U
120-83-2	2,4-Dichlorophenol		40	330	U
91-20-3	Naphthalene		23	170	U
106-47-8	4-Chloroaniline		28	330	U
87-68-3	Hexachlorobutadiene		26	170	U
59-50-7	4-Chloro-3-methylphenol		24	330	U
91-57-6	2-Methylnaphthalene		30	170	U
77-47-4	Hexachlorocyclopentadiene		31	170	U
88-06-2	2,4,6-Trichlorophenol		31	330	U
95-95-4	2,4,5-Trichlorophenol		25	330	U
91-58-7	2-Chloronaphthalene		40	170	U
88-74-4	2-Nitroaniline		25	330	U
131-11-3	Dimethylphthalate		16	170	U
606-20-2	2,6-Dinitrotoluene		18	170	U
208-96-8	Acenaphthylene		30	170	U
99-09-2	3-Nitroaniline		22	330	U
83-32-9	Acenaphthene		30	170	U
51-28-5	2,4-Dinitrophenol		16	330	U
100-02-7	4-Nitrophenol		46	330	U
121-14-2	2,4-Dinitrotoluene		20	170	U
132-64-9	Dibenzofuran		30	170	U

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ANALYSIS DATA SHEET

SW8270D

SBLKBV

Client: WESTON SOLUTIONS SDG: 1408024 Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil Extraction: EPA 3550C MOD SVO File ID: 4080818-BLK166.d QC Type: Blank

Initial/Final: 30g / 1000uL Sulfur Cleanup: N Lab ID: 4080818-BLK1 Column ID: RTX-5Sil MS

Dilution: 1 pH: Florisil Cleanup: N Prepared: 08/12/14 09:00

% Moisture: NA GPC Cleanup: N GPC Cleanup Factor: N Analyzed: 08/12/14 16:15

Batch: 4080818 Sequence: 4H12011 Calibration: 4080605 Instrument: 5972hp66

CAS NO.	COMPOUND	CONC.(ug/kg wet)	MDL	RL	Q
84-66-2	Diethylphthalate		19	170	U
7005-72-3	4-Chlorophenyl-phenylether		21	170	U
86-73-7	Fluorene		22	170	U
100-01-6	4-Nitroaniline		44	330	U
534-52-1	4,6-Dinitro-2-methylphenol		45	330	U
86-30-6	N-Nitrosodiphenylamine (1)		30	170	U
101-55-3	4-Bromophenyl-phenylether		25	170	U
118-74-1	Hexachlorobenzene		22	170	U
87-86-5	Pentachlorophenol		43	330	U
85-01-8	Phenanthrene		10	170	U
120-12-7	Anthracene		8.5	170	U
86-74-8	Carbazole		17	170	U
84-74-2	Di-n-butylphthalate		25	170	U
206-44-0	Fluoranthene		25	170	U
129-00-0	Pyrene		22	170	U
85-68-7	Butylbenzylphthalate		27	170	U
91-94-1	3,3'-Dichlorobenzidine		35	170	U
117-81-7	bis(2-ethylhexyl)Phthalate		31	170	U
56-55-3	Benzo (a) anthracene		27	170	U
218-01-9	Chrysene		10	170	U
117-84-0	Di-n-octylphthalate		33	170	U
205-99-2	Benzo (b) fluoranthene		26	170	U
207-08-9	Benzo(k)fluoranthene		24	170	U
50-32-8	Benzo (a) pyrene		18	170	U
193-39-5	Indeno(1,2,3-cd)pyrene		29	170	U
53-70-3	Dibenzo(a,h)anthracene		47	170	U
191-24-2	Benzo (g,h,i) perylene		30	170	U
100-52-7	Benzaldehyde		27	170	U
105-60-2	Caprolactam		28	170	U
1912-24-9	Atrazine		20	170	U
92-52-4	1,1'-Biphenyl		39	170	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	3333	2865	86	35 - 105	

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ANALYSIS DATA SHEET

SW8270D

SBLKBV

Client: WESTON SOLUTIONS	SDG: 1408024	Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ	
Matrix: Soil	Extraction: EPA 3550C MOD SVO.	File ID: 4080818-BLK166.d	QC Type: Blank
Initial/Final: 30g / 1000uL	Sulfur Cleanup: N	Lab ID: 4080818-BLK1	Column ID: RTX-5Sil MS
Dilution: 1 pH:	Florisil Cleanup: N		Prepared: 08/12/14 09:00
% Moisture: NA	GPC Cleanup: N	GPC Cleanup Factor: N	Analyzed: 08/12/14 16:15
Batch: 4080818	Sequence: 4H12011	Calibration: 4080605	Instrument: 5972hp66

SURROGATE RECOVERY RESULTS	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
Phenol-d5	3333	2281	68	40 - 100	
Nitrobenzene-d5	1667	1343	81	35 - 100	
2-Fluorobiphenyl	1667	1221	73	45 - 105	
2,4,6-Tribromophenol	3333	2732	82	35 - 125	
Terphenyl-d14	1667	1420	85	30 - 125	

CAS NO.	TICS	CONC.(ug/kg wet)	Response	R.T.	% Match	Q

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.
(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.
(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

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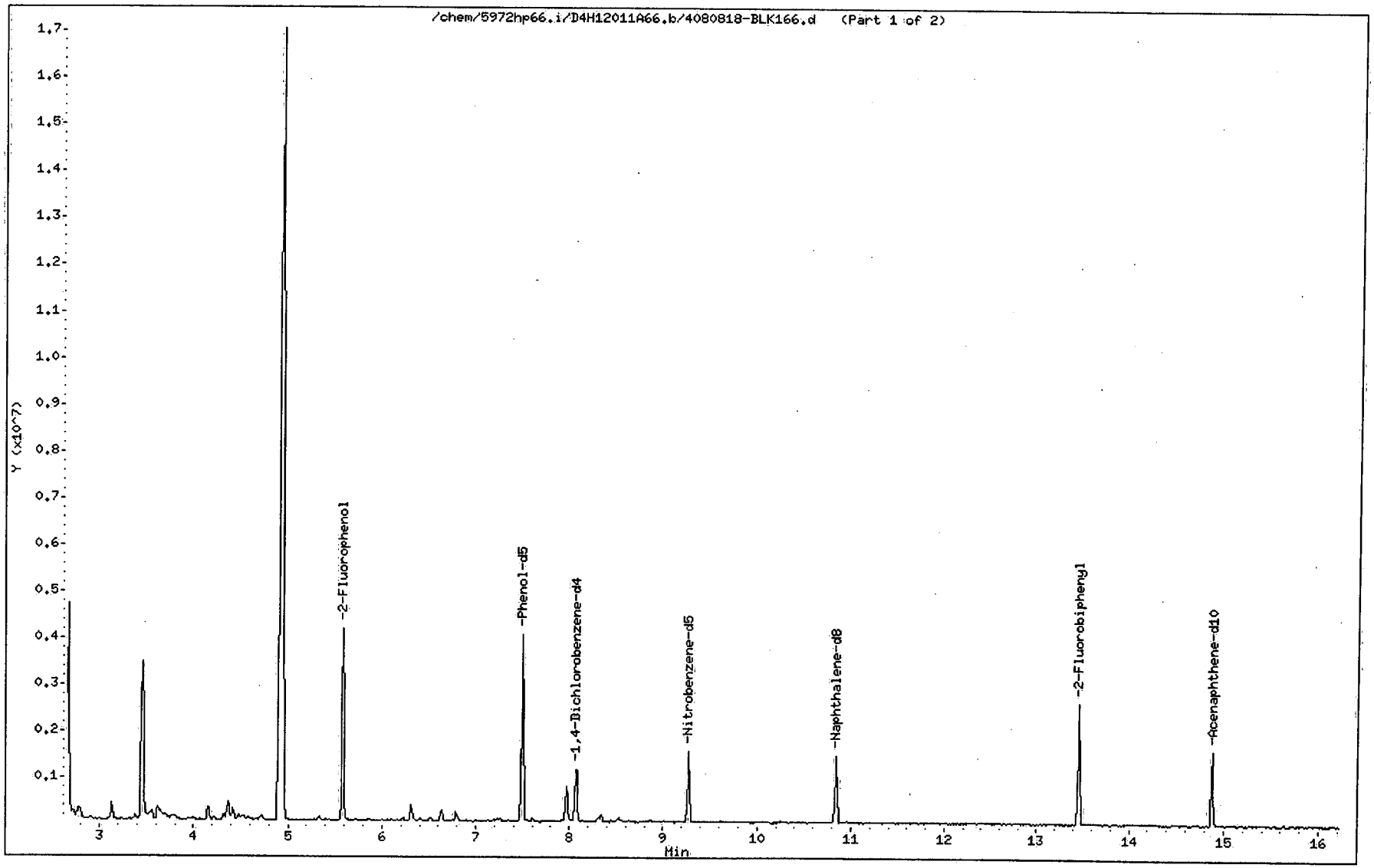
Data File: /chem/5972hp66.i/D4H12011A66.b/4080818-BLK166.d
Date : 12-AUG-2014 16:15
Client ID: SBLKBV
Sample Info: 4080818-BLK1:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp66.i

Operator: OWS
Column diameter: 0.32

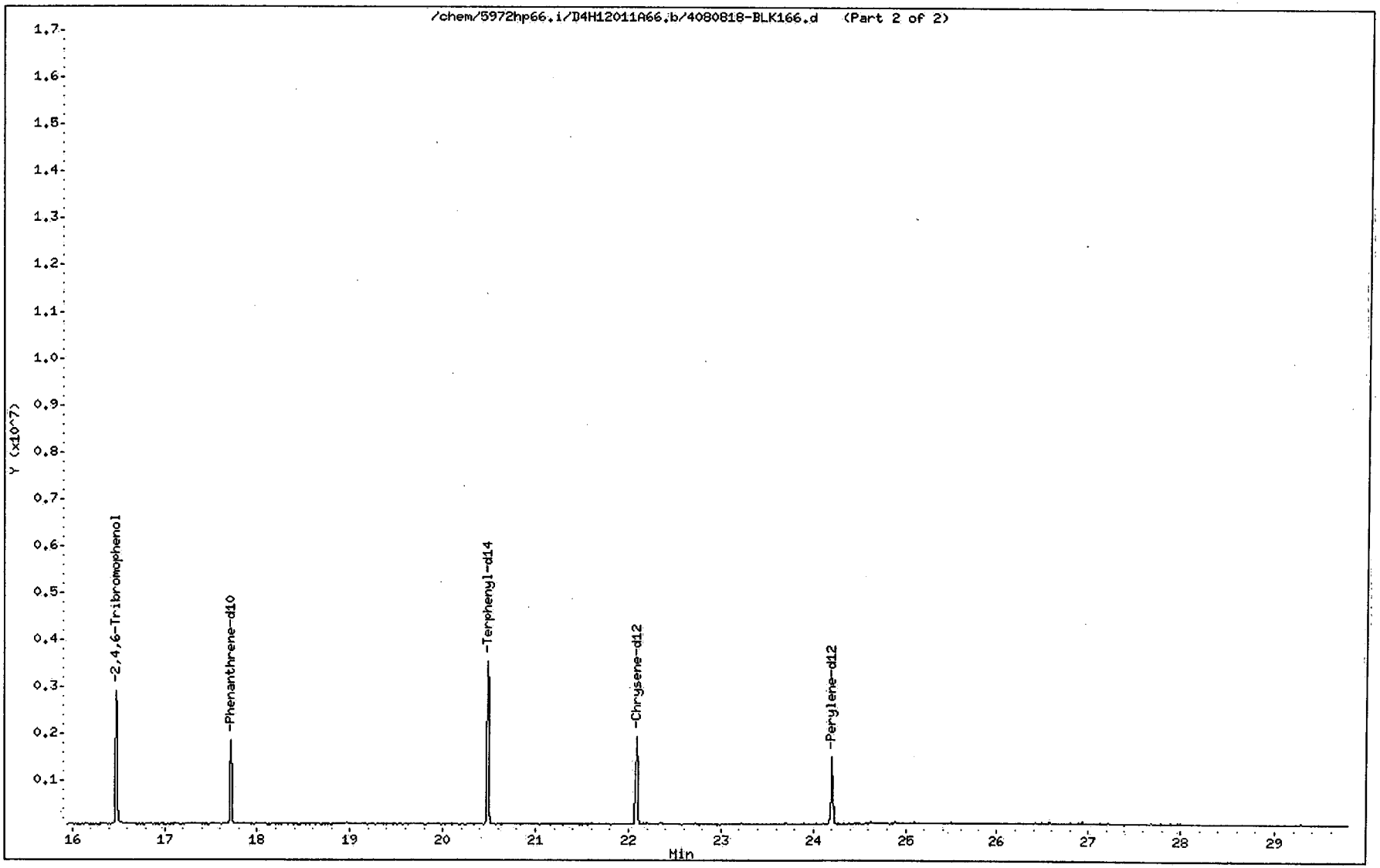


8/13/2014

Data File: /chem/5972hp66.i/D4H12011A66.b/4080818-BLK166.d
Date : 12-AUG-2014 16:15
Client ID: SBLKBV
Sample Info: 4080818-BLK1:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp66.i

Operator: OWS
Column diameter: 0.32



Polder Ham 8/13/2014

Data File: /chem/5972hp66.i/D4H12011A66.b/4080818-BLK166.d
Report Date: 13-Aug-2014 22:00

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp66.i/D4H12011A66.b/4080818-BLK166.d
Lab Smp Id: 4080818-BLK1 Client Smp ID: SBLKBV
Inj Date : 12-AUG-2014 16:15
Operator : OWS Inst ID: 5972hp66.i
Smp Info : 4080818-BLK1:OWS
Misc Info : SBLKBV
Comment :
Method : /chem/5972hp66.i/D4H12011A66.b/8270Dv26.m
Meth Date : 13-Aug-2014 21:59 ron Quant Type: ISTD
Cal Date : 05-AUG-2014 14:46 Cal File: 4H05004-CAL266.d
Als bottle: 4 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1000.00000	Volume of final extract (uL)(1000 low, 2
Vi	2.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	8.077	8.063	(1.000)	294747	40.0000		
* 2 Naphthalene-d8	136	10.846	10.832	(1.000)	1002495	40.0000		
* 3 Acenaphthene-d10	164	14.883	14.879	(1.000)	525746	40.0000		
* 4 Phenanthrene-d10	188	17.713	17.710	(1.000)	812949	40.0000		
* 5 Chrysene-d12	240	22.087	22.083	(1.000)	888522	40.0000		
* 6 Perylene-d12	264	24.202	24.198	(1.000)	654786	40.0000		
$ 7 2-Fluorophenol	112	5.584	5.560	(0.691)	1633569	171.918	2900	(A)
$ 8 Phenol-d5	99	7.494	7.481	(0.928)	1735820	136.854	2300	(A)
$ 9 Nitrobenzene-d5	82	9.272	9.259	(0.855)	713375	80.6040	1300	
$ 10 2-Fluorobiphenyl	172	13.462	13.459	(0.905)	1267245	73.2521	1200	
$ 11 2,4,6-Tribromophenol	330	16.487	16.483	(1.108)	512597	163.912	2700	7818 (A)
$ 12 Terphenyl-d14	244	20.482	20.479	(0.927)	1587242	85.1977	1400	
15 Phenol	94	Compound Not Detected.						

8/13/2014

Data File: /chem/5972hp66.i/D4H12011A66.b/4080818-BLK166.d
Report Date: 13-Aug-2014 22:00

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
17 Bis(2-chloroethyl)ether	93	Compound Not Detected.						
18 2-Chlorophenol	128	Compound Not Detected.						
23 2-Methylphenol	108	Compound Not Detected.						
24 2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.						
25 3 & 4-Methylphenol	108	Compound Not Detected.						
26 N-Nitroso-di-N-propylamine	70	Compound Not Detected.						
27 Acetophenone	105	Compound Not Detected.						
28 Hexachloroethane	117	Compound Not Detected.						
29 Nitrobenzene	77	Compound Not Detected.						
30 Isophorone	82	Compound Not Detected.						
31 2-Nitrophenol	139	Compound Not Detected.						
32 2,4-Dimethylphenol	122	Compound Not Detected.						
33 Bis(2-chloroethoxy)methane	93	Compound Not Detected.						
34 2,4-Dichlorophenol	162	Compound Not Detected.						
36 Naphthalene	128	Compound Not Detected.						
37 4-Chloroaniline	127	Compound Not Detected.						
38 Hexachlorobutadiene	224	Compound Not Detected.						
39 4-Chloro-3-methylphenol	107	Compound Not Detected.						
40 2-Methylnaphthalene	141	Compound Not Detected.						
42 Hexachlorocyclopentadiene	236	Compound Not Detected.						
44 2,4,6-Trichlorophenol	196	Compound Not Detected.						
45 2,4,5-Trichlorophenol	196	Compound Not Detected.						
46 2-Chloronaphthalene	162	Compound Not Detected.						
47 2-Nitroaniline	65	Compound Not Detected.						
48 Dimethylphthalate	163	Compound Not Detected.						
50 2,6-Dinitrotoluene	165	Compound Not Detected.						
51 Acenaphthylene	152	Compound Not Detected.						
52 3-Nitroaniline	138	Compound Not Detected.						
53 Acenaphthene	153	Compound Not Detected.						
54 2,4-Dinitrophenol	184	Compound Not Detected.						
55 4-Nitrophenol	139	Compound Not Detected.						
56 2,4-Dinitrotoluene	165	Compound Not Detected.						
57 Dibenzofuran	168	Compound Not Detected.						
59 Diethylphthalate	149	Compound Not Detected.						
60 4-Chlorophenyl-phenylether	204	Compound Not Detected.						
61 Fluorene	166	Compound Not Detected.						
62 4-Nitroaniline	138	Compound Not Detected.						
63 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
64 N-Nitrosodiphenylamine (1)	169	Compound Not Detected.						
66 4-Bromophenyl-phenylether	248	Compound Not Detected.						
67 Hexachlorobenzene	283	Compound Not Detected.						
68 Pentachlorophenol	265	Compound Not Detected.						
69 Phenanthrene	178	Compound Not Detected.						
70 Anthracene	178	Compound Not Detected.						
71 Carbazole	167	Compound Not Detected.						
72 Di-n-butylphthalate	149	Compound Not Detected.						
73 Fluoranthene	202	Compound Not Detected.						

Roldan Hani 8/13/2014

Data File: /chem/5972hp66.i/D4H12011A66.b/4080818-BLK166.d
Report Date: 13-Aug-2014 22:00

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
74 Pyrene	202	Compound Not Detected.						
75 Butylbenzylphthalate	149	Compound Not Detected.						
76 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
77 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
78 Benzo(a)anthracene	228	Compound Not Detected.						
79 Chrysene	228	Compound Not Detected.						
80 Di-n-octylphthalate	149	Compound Not Detected.						
81 Benzo(b)fluoranthene	252	Compound Not Detected.						
82 Benzo(k)fluoranthene	252	Compound Not Detected.						
83 Benzo(a)pyrene	252	Compound Not Detected.						
84 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.						
85 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
86 Benzo(g,h,i)perylene	276	Compound Not Detected.						
87 Benzaldehyde	77	Compound Not Detected.						
88 Caprolactam	113	Compound Not Detected.						
89 Atrazine	215	Compound Not Detected.						
90 1,1'-Biphenyl	154	Compound Not Detected.						

QC Flag Legend

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

8/13/2014

ANALYSIS DATA SHEET
SW8270D

SBLKVB

Client: WESTON SOLUTIONS | SDG: 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD SVO. | File ID: 4080818-BLK2J62.d | QC Type: Blank

Initial/Final: 30g / 1000uL | Sulfur Cleanup: N | Lab ID: 4080818-BLK2 | Column ID: RTX-5Sil MS

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 17:05

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC.(ug/kg wet)	MDL	RL	Q
108-95-2	Phenol		55	330	U
111-44-4	Bis(2-chloroethyl)ether		20	170	U
95-57-8	2-Chlorophenol		54	330	U
95-48-7	2-Methylphenol		39	330	U
108-60-1	2,2'-oxybis(1-Chloropropane)		25	170	U
106-44-5	3 & 4-Methylphenol		34	330	U
621-64-7	N-Nitroso-di-N-propylamine		32	170	U
98-86-2	Acetophenone		44	170	U
67-72-1	Hexachloroethane		110	170	U
98-95-3	Nitrobenzene		42	170	U
78-59-1	Isophorone		29	170	U
88-75-5	2-Nitrophenol		42	330	U
105-67-9	2,4-Dimethylphenol		52	330	U
111-91-1	Bis(2-chloroethoxy)methane		45	170	U
120-83-2	2,4-Dichlorophenol		40	330	U
91-20-3	Naphthalene		23	170	U
106-47-8	4-Chloroaniline		28	330	U
87-68-3	Hexachlorobutadiene		26	170	U
59-50-7	4-Chloro-3-methylphenol		24	330	U
91-57-6	2-Methylnaphthalene		30	170	U
77-47-4	Hexachlorocyclopentadiene		31	170	U
88-06-2	2,4,6-Trichlorophenol		31	330	U
95-95-4	2,4,5-Trichlorophenol		25	330	U
91-58-7	2-Chloronaphthalene		40	170	U
88-74-4	2-Nitroaniline		25	330	U
131-11-3	Dimethylphthalate		16	170	U
606-20-2	2,6-Dinitrotoluene		18	170	U
208-96-8	Acenaphthylene		30	170	U
99-09-2	3-Nitroaniline		22	330	U
83-32-9	Acenaphthene		30	170	U
51-28-5	2,4-Dinitrophenol		16	330	U
100-02-7	4-Nitrophenol		46	330	U
121-14-2	2,4-Dinitrotoluene		20	170	U
132-64-9	Dibenzofuran		30	170	U

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ANALYSIS DATA SHEET
SW8270D

SBLKVB

Client: WESTON SOLUTIONS | SDG: 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD SVO. | File ID: 4080818-BLK2J62.d | QC Type: Blank

Initial/Final: 30g / 1000uL | Sulfur Cleanup: N | Lab ID: 4080818-BLK2 | Column ID: RTX-5Sil MS

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 17:05

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC.(ug/kg wet)	MDL	RL	Q
84-66-2	Diethylphthalate		19	170	U
7005-72-3	4-Chlorophenyl-phenylether		21	170	U
86-73-7	Fluorene		22	170	U
100-01-6	4-Nitroaniline		44	330	U
534-52-1	4,6-Dinitro-2-methylphenol		45	330	U
86-30-6	N-Nitrosodiphenylamine (1)		30	170	U
101-55-3	4-Bromophenyl-phenylether		25	170	U
118-74-1	Hexachlorobenzene		22	170	U
87-86-5	Pentachlorophenol		43	330	U
85-01-8	Phenanthrene		10	170	U
120-12-7	Anthracene		8.5	170	U
86-74-8	Carbazole		17	170	U
84-74-2	Di-n-butylphthalate		25	170	U
206-44-0	Fluoranthene		25	170	U
129-00-0	Pyrene		22	170	U
85-68-7	Butylbenzylphthalate		27	170	U
91-94-1	3,3'-Dichlorobenzidine		35	170	U
117-81-7	bis(2-ethylhexyl)Phthalate		31	170	U
56-55-3	Benzo (a) anthracene		27	170	U
218-01-9	Chrysene		10	170	U
117-84-0	Di-n-octylphthalate		33	170	U
205-99-2	Benzo (b) fluoranthene		26	170	U
207-08-9	Benzo(k)fluoranthene		24	170	U
50-32-8	Benzo (a) pyrene		18	170	U
193-39-5	Indeno(1,2,3-cd)pyrene		29	170	U
53-70-3	Dibenzo(a,h)anthracene		47	170	U
191-24-2	Benzo (g,h,i) perylene		30	170	U
100-52-7	Benzaldehyde		27	170	U
105-60-2	Caprolactam		28	170	U
1912-24-9	Atrazine		20	170	U
92-52-4	1,1'-Biphenyl		39	170	U

SURROGATE RECOVERY RESULTS	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	3333	2719	82	35 - 105	

Environmental Testing Laboratories
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ANALYSIS DATA SHEET
SW8270D

SBLKVB

Client:	WESTON SOLUTIONS	SDG:	1408024	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ		
Matrix:	Soil	Extraction:	EPA 3550C MOD SVO	File ID:	4080818-BLK2J62.d	QC Type:	Blank
Initial/Final:	30g / 1000uL	Sulfur Cleanup:	N	Lab ID:	4080818-BLK2	Column ID:	RTX-5Sil MS
Dilution:	1 pH:	Florisil Cleanup:	N			Prepared:	08/12/14 09:00
% Moisture:	NA	GPC Cleanup:	N	GPC Cleanup Factor:	N	Analyzed:	08/15/14 17:05
Batch:	4080818	Sequence:	4H15001	Calibration:	4072701	Instrument:	5972hp62

SURROGATE RECOVERY RESULTS	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
Phenol-d5	3333	2168	65	40 - 100	
Nitrobenzene-d5	1667	1173	70	35 - 100	
2-Fluorobiphenyl	1667	1241	74	45 - 105	
2,4,6-Tribromophenol	3333	2712	81	35 - 125	
Terphenyl-d14	1667	1406	84	30 - 125	

CAS NO.	TICS	CONC.(ug/kg wet)	Response	R.T.	% Match	Q

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.
(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.
(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

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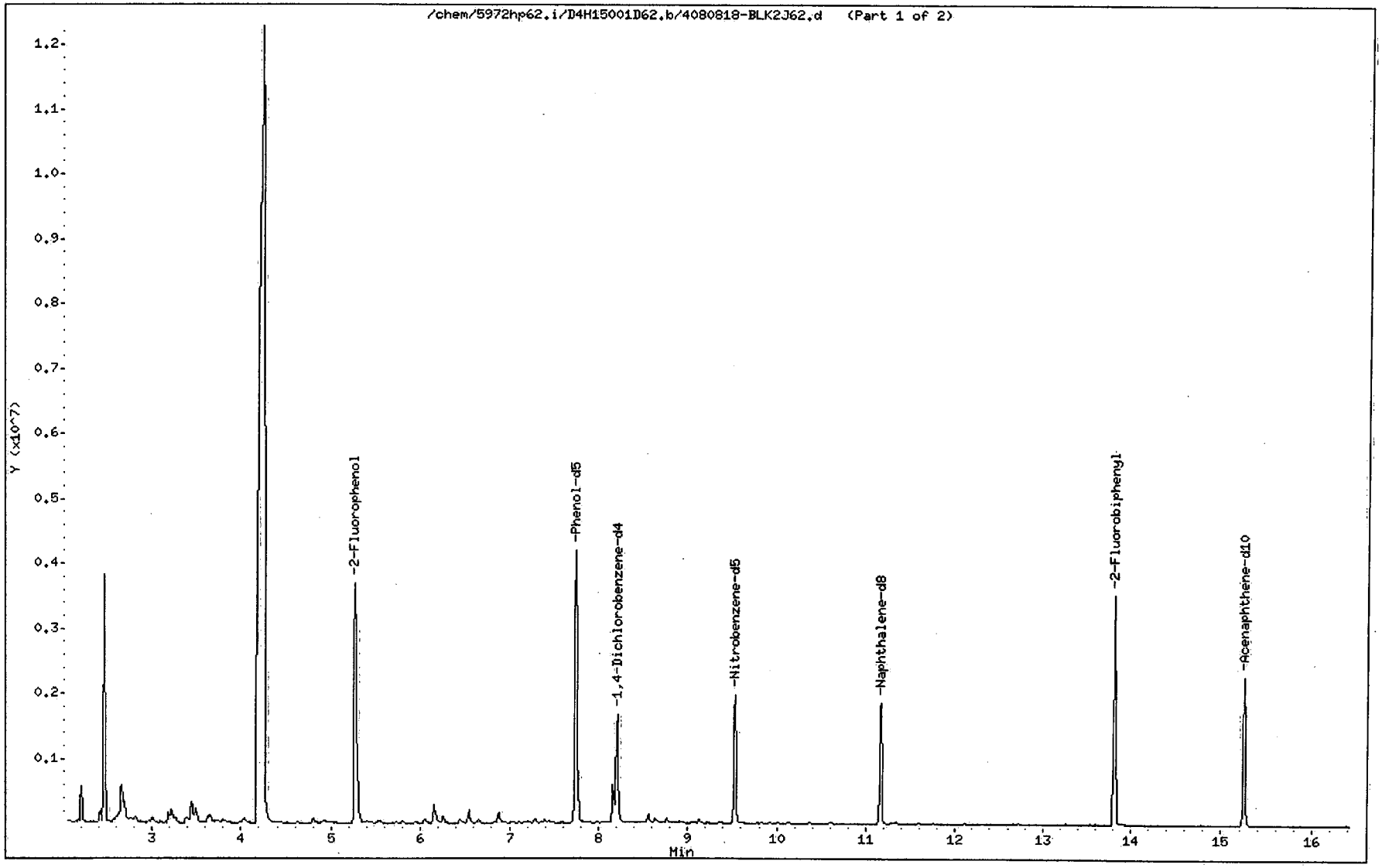
nelac

Data File: /chem/5972hp62.i/D4H15001D62.b/4080818-BLK2J62.d
Date : 15-AUG-2014 17:05
Client ID: SBLKVB
Sample Info: 4080818-BLK2:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

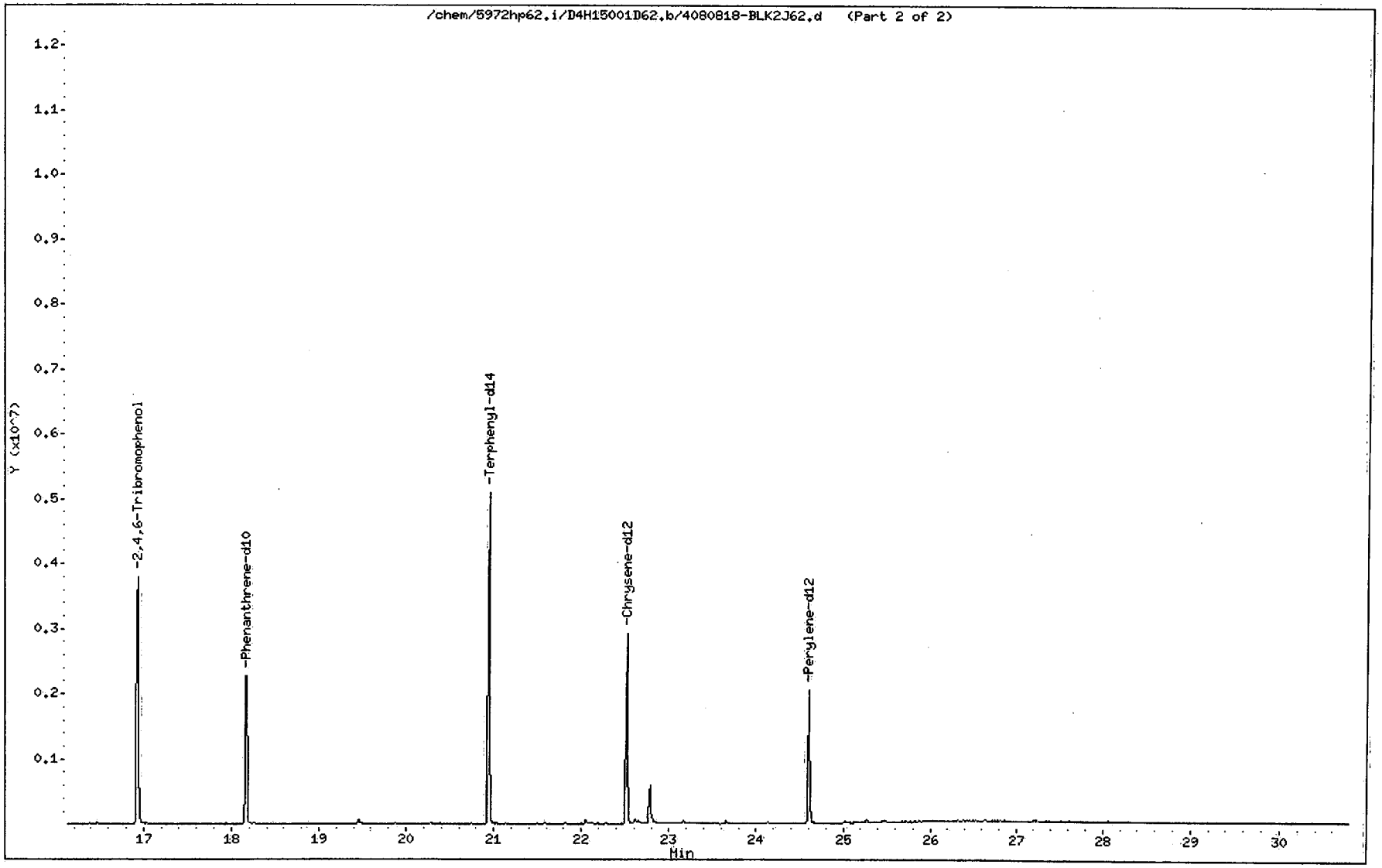
Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4080818-BLK2J62.d
Date : 15-AUG-2014 17:05
Client ID: SBLKVB
Sample Info: 4080818-BLK2:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4080818-BLK2J62.d
Report Date: 19-Aug-2014 11:23

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp62.i/D4H15001D62.b/4080818-BLK2J62.d
Lab Smp Id: 4080818-BLK2 Client Smp ID: SBLKVB
Inj Date : 15-AUG-2014 17:05
Operator : OWS Inst ID: 5972hp62.i
Smp Info : 4080818-BLK2:OWS
Misc Info : SBLKVB
Comment :
Method : /chem/5972hp62.i/D4H15001D62.b/8270Dv26.m
Meth Date : 19-Aug-2014 11:23 ron Quant Type: ISTD
Cal Date : 23-JUL-2014 19:31 Cal File: 4G23008-CAL662.d
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1000.00000	Volume of final extract (uL)(1000 low, 2
Vi	2.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	8.212	8.212	(1.000)	406170	40.0000		
* 2 Naphthalene-d8	136	11.170	11.170	(1.000)	1464267	40.0000		
* 3 Acenaphthene-d10	164	15.254	15.254	(1.000)	777177	40.0000		
* 4 Phenanthrene-d10	188	18.171	18.171	(1.000)	1292740	40.0000		
* 5 Chrysene-d12	240	22.521	22.521	(1.000)	1271338	40.0000		
* 6 Perylene-d12	264	24.599	24.609	(1.000)	920560	40.0000		
$ 7 2-Fluorophenol	112	5.265	5.274	(0.641)	2136458	163.146	2700	(A)
$ 8 Phenol-d5	99	7.742	7.751	(0.943)	2432134	130.065	2200	(A)
$ 9 Nitrobenzene-d5	82	9.533	9.532	(0.853)	1033797	70.3861	1200	
$ 10 2-Fluorobiphenyl	172	13.821	13.821	(0.906)	1795763	74.4634	1200	
$ 11 2,4,6-Tribromophenol	330	16.933	16.932	(1.110)	694200	162.706	2700	9850 (A)
$ 12 Terphenyl-d14	244	20.945	20.945	(0.930)	2096146	84.3411	1400	
15 Phenol	94	Compound Not Detected.						

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4080818-BLK2J62.d
Report Date: 19-Aug-2014 11:23

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
17 Bis(2-chloroethyl)ether	93	Compound Not Detected.						
18 2-Chlorophenol	128	Compound Not Detected.						
23 2-Methylphenol	108	Compound Not Detected.						
24 2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.						
25 3 & 4-Methylphenol	108	Compound Not Detected.						
26 N-Nitroso-di-N-propylamine	70	Compound Not Detected.						
27 Acetophenone	105	Compound Not Detected.						
28 Hexachloroethane	117	Compound Not Detected.						
29 Nitrobenzene	77	Compound Not Detected.						
30 Isophorone	82	Compound Not Detected.						
31 2-Nitrophenol	139	Compound Not Detected.						
32 2,4-Dimethylphenol	122	Compound Not Detected.						
33 Bis(2-chloroethoxy)methane	93	Compound Not Detected.						
34 2,4-Dichlorophenol	162	Compound Not Detected.						
36 Naphthalene	128	Compound Not Detected.						
37 4-Chloroaniline	127	Compound Not Detected.						
38 Hexachlorobutadiene	224	Compound Not Detected.						
39 4-Chloro-3-methylphenol	107	Compound Not Detected.						
40 2-Methylnaphthalene	141	Compound Not Detected.						
42 Hexachlorocyclopentadiene	236	Compound Not Detected.						
44 2,4,6-Trichlorophenol	196	Compound Not Detected.						
45 2,4,5-Trichlorophenol	196	Compound Not Detected.						
46 2-Chloronaphthalene	162	Compound Not Detected.						
47 2-Nitroaniline	65	Compound Not Detected.						
48 Dimethylphthalate	163	Compound Not Detected.						
50 2,6-Dinitrotoluene	165	Compound Not Detected.						
51 Acenaphthylene	152	Compound Not Detected.						
52 3-Nitroaniline	138	Compound Not Detected.						
53 Acenaphthene	153	Compound Not Detected.						
54 2,4-Dinitrophenol	184	Compound Not Detected.						
55 4-Nitrophenol	139	Compound Not Detected.						
56 2,4-Dinitrotoluene	165	Compound Not Detected.						
57 Dibenzofuran	168	Compound Not Detected.						
59 Diethylphthalate	149	Compound Not Detected.						
60 4-Chlorophenyl-phenylether	204	Compound Not Detected.						
61 Fluorene	166	Compound Not Detected.						
62 4-Nitroaniline	138	Compound Not Detected.						
63 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.						
64 N-Nitrosodiphenylamine (1)	169	Compound Not Detected.						
66 4-Bromophenyl-phenylether	248	Compound Not Detected.						
67 Hexachlorobenzene	283	Compound Not Detected.						
68 Pentachlorophenol	265	Compound Not Detected.						
69 Phenanthrene	178	Compound Not Detected.						
70 Anthracene	178	Compound Not Detected.						
71 Carbazole	167	Compound Not Detected.						
72 Di-n-butylphthalate	149	Compound Not Detected.						
73 Fluoranthene	202	Compound Not Detected.						

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4080818-BLK2J62.d
Report Date: 19-Aug-2014 11:23

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
74 Pyrene	202	Compound Not Detected.						
75 Butylbenzylphthalate	149	Compound Not Detected.						
76 3,3'-Dichlorobenzidine	252	Compound Not Detected.						
77 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
78 Benzo(a)anthracene	228	Compound Not Detected.						
79 Chrysene	228	Compound Not Detected.						
80 Di-n-octylphthalate	149	Compound Not Detected.						
81 Benzo(b)fluoranthene	252	Compound Not Detected.						
82 Benzo(k)fluoranthene	252	Compound Not Detected.						
83 Benzo(a)pyrene	252	Compound Not Detected.						
84 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.						
85 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
86 Benzo(g,h,i)perylene	276	Compound Not Detected.						
87 Benzaldehyde	77	Compound Not Detected.						
88 Caprolactam	113	Compound Not Detected.						
89 Atrazine	215	Compound Not Detected.						
90 1,1'-Biphenyl	154	Compound Not Detected.						

QC Flag Legend

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

8/19/2014

P. Laboratory Control Sample Data

Tabulated Results (ANALYSIS DATA SHEET)

RIC and Quantitation report

ANALYSIS DATA SHEET
SW8270D

SLCSBV

Client: WESTON SOLUTIONS | SDG: 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SVO | File ID: 4080818-BS166.d | QC Type: LCS

Initial/Final: 30g / 1000uL | Sulfur Cleanup: N | Lab ID: 4080818-BS1 | Column ID: RTX-5Sil MS

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/12/14 16:54

Batch: 4080818 | Sequence: 4H12011 | Calibration: 4080605 | Instrument: 5972hp66

CAS NO.	COMPOUND	CONC.(ug/kg wet)	MDL	RL	Q
108-95-2	Phenol	947	55	330	
111-44-4	Bis(2-chloroethyl)ether	872	20	170	
95-57-8	2-Chlorophenol	944	54	330	
95-48-7	2-Methylphenol	907	39	330	
108-60-1	2,2'-oxybis(1-Chloropropane)	903	25	170	
106-44-5	3 & 4-Methylphenol	857	34	330	
621-64-7	N-Nitroso-di-N-propylamine	848	32	170	
98-86-2	Acetophenone	824	44	170	
67-72-1	Hexachloroethane	825	110	170	
98-95-3	Nitrobenzene	988	42	170	
78-59-1	Isophorone	920	29	170	
88-75-5	2-Nitrophenol	1120	42	330	
105-67-9	2,4-Dimethylphenol	916	52	330	
111-91-1	Bis(2-chloroethoxy)methane	923	45	170	
120-83-2	2,4-Dichlorophenol	1010	40	330	
91-20-3	Naphthalene	928	23	170	
106-47-8	4-Chloroaniline	672	28	330	
87-68-3	Hexachlorobutadiene	955	26	170	
59-50-7	4-Chloro-3-methylphenol	992	24	330	
91-57-6	2-Methylnaphthalene	919	30	170	
77-47-4	Hexachlorocyclopentadiene	818	31	170	
88-06-2	2,4,6-Trichlorophenol	1100	31	330	
95-95-4	2,4,5-Trichlorophenol	1160	25	330	
91-58-7	2-Chloronaphthalene	990	40	170	
88-74-4	2-Nitroaniline	1290	25	330	
131-11-3	Dimethylphthalate	1080	16	170	
606-20-2	2,6-Dinitrotoluene	1210	18	170	
208-96-8	Acenaphthylene	1060	30	170	
99-09-2	3-Nitroaniline	987	22	330	
83-32-9	Acenaphthene	1040	30	170	
51-28-5	2,4-Dinitrophenol	1490	16	330	
100-02-7	4-Nitrophenol	1360	46	330	
121-14-2	2,4-Dinitrotoluene	1170	20	170	
132-64-9	Dibenzofuran	1030	30	170	

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ANALYSIS DATA SHEET

SW8270D

SLCSBV

Client: WESTON SOLUTIONS | SDG: 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD SVO. | File ID: 4080818-BS166.d | QC Type: LCS

Initial/Final: 30g / 1000uL | Sulfur Cleanup: N | Lab ID: 4080818-BS1 | Column ID: RTX-5Sil MS

Dilution: 1 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: NA | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/12/14 16:54

Batch: 4080818 | Sequence: 4H12011 | Calibration: 4080605 | Instrument: 5972hp66

CAS NO.	COMPOUND	CONC.(ug/kg wet)	MDL	RL	Q
84-66-2	Diethylphthalate	1100	19	170	
7005-72-3	4-Chlorophenyl-phenylether	1050	21	170	
86-73-7	Fluorene	1060	22	170	
100-01-6	4-Nitroaniline	1090	44	330	
534-52-1	4,6-Dinitro-2-methylphenol	1360	45	330	
86-30-6	N-Nitrosodiphenylamine (1)	1120	30	170	
101-55-3	4-Bromophenyl-phenylether	1080	25	170	
118-74-1	Hexachlorobenzene	1060	22	170	
87-86-5	Pentachlorophenol	1280	43	330	
85-01-8	Phenanthrene	1090	10	170	
120-12-7	Anthracene	1090	8.5	170	
86-74-8	Carbazole	1090	17	170	
84-74-2	Di-n-butylphthalate	997	25	170	
206-44-0	Fluoranthene	1030	25	170	
129-00-0	Pyrene	1120	22	170	
85-68-7	Butylbenzylphthalate	1130	27	170	
91-94-1	3,3'-Dichlorobenzidine	918	35	170	
117-81-7	bis(2-ethylhexyl)Phthalate	1090	31	170	
56-55-3	Benzo (a) anthracene	1100	27	170	
218-01-9	Chrysene	1170	10	170	
117-84-0	Di-n-octylphthalate	1200	33	170	
205-99-2	Benzo (b) fluoranthene	1230	26	170	
207-08-9	Benzo(k)fluoranthene	1110	24	170	
50-32-8	Benzo (a) pyrene	1120	18	170	
193-39-5	Indeno(1,2,3-cd)pyrene	1150	29	170	
53-70-3	Dibenzo(a,h)anthracene	1080	47	170	
191-24-2	Benzo (g,h,i) perylene	1200	30	170	
100-52-7	Benzaldehyde	648	27	170	
105-60-2	Caprolactam	1020	28	170	
1912-24-9	Atrazine	875	20	170	
92-52-4	1,1'-Biphenyl	993	39	170	

SURROGATE RECOVERY RESULTS	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	3333	2857	86	35 - 105	

Environmental Testing Laboratories
CompuChem
A Division Of
Liberty Analytical Corp.

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ANALYSIS DATA SHEET

SW8270D

SLCSBV

Client: WESTON SOLUTIONS	SDG: 1408024	Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ	
Matrix: Soil	Extraction: EPA 3550C MOD SVO.	File ID: 4080818-BS166.d	QC Type: LCS
Initial/Final: 30g / 1000uL	Sulfur Cleanup: N	Lab ID: 4080818-BS1	Column ID: RTX-5Sil MS
Dilution: 1 pH:	Florisil Cleanup: N		Prepared: 08/12/14 09:00
% Moisture: NA	GPC Cleanup: N	GPC Cleanup Factor: N	Analyzed: 08/12/14 16:54
Batch: 4080818	Sequence: 4H12011	Calibration: 4080605	Instrument: 5972hp66

SURROGATE RECOVERY RESULTS	ADDED (ug/kg wet)	CONC (ug/kg wet)	% REC	QC LIMITS	Q
Phenol-d5	3333	2331	70	40 - 100	
Nitrobenzene-d5	1667	1257	75	35 - 100	
2-Fluorobiphenyl	1667	1255	75	45 - 105	
2,4,6-Tribromophenol	3333	3264	98	35 - 125	
Terphenyl-d14	1667	1408	84	30 - 125	

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.

(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.

(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

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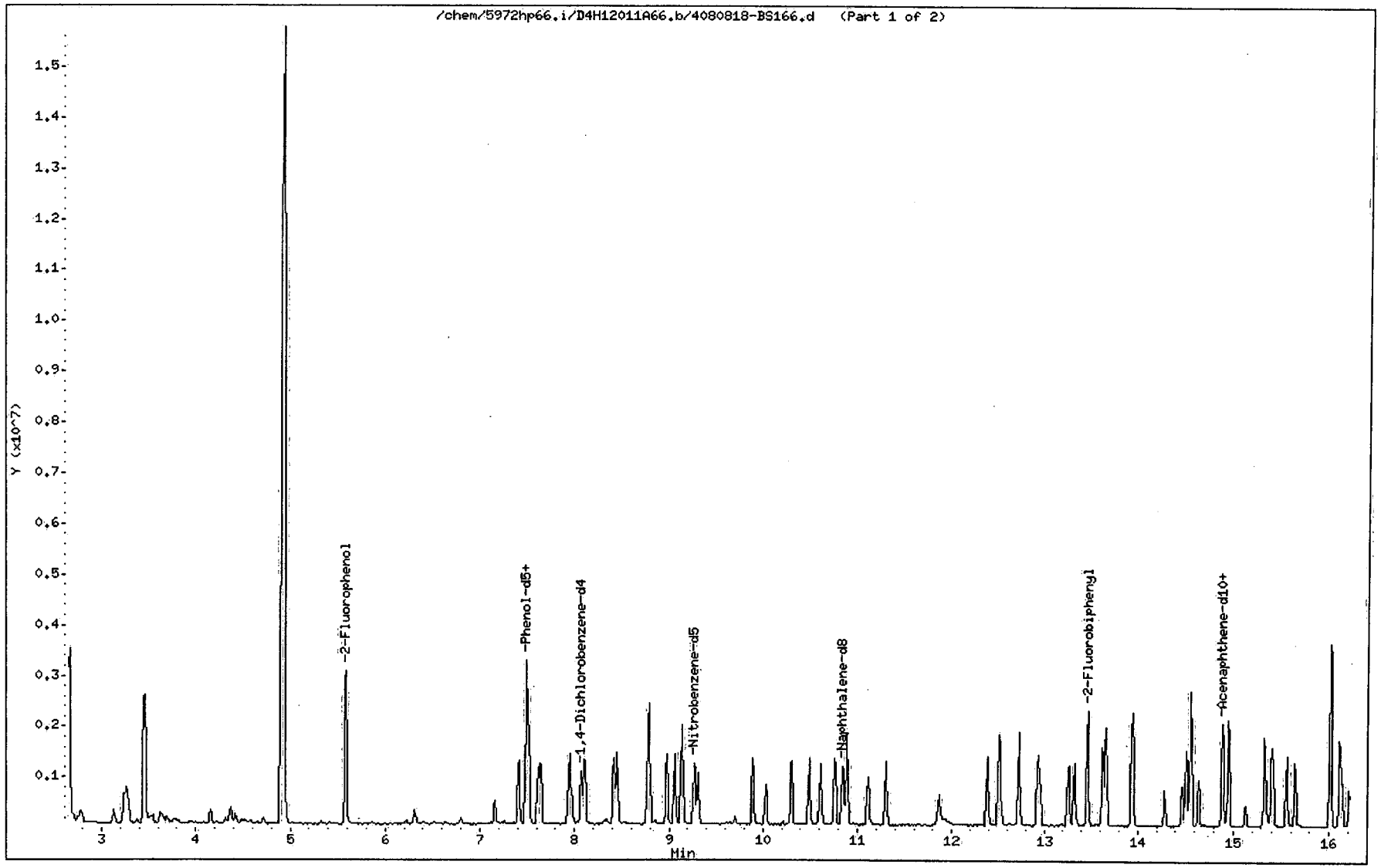
Data File: /chem/5972hp66.i/D4H12011A66.b/4080818-BS166.d
Date : 12-AUG-2014 16:54
Client ID: SLCSBV
Sample Info: 4080818-BS1:OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp66.i

Operator: OWS
Column diameter: 0.32

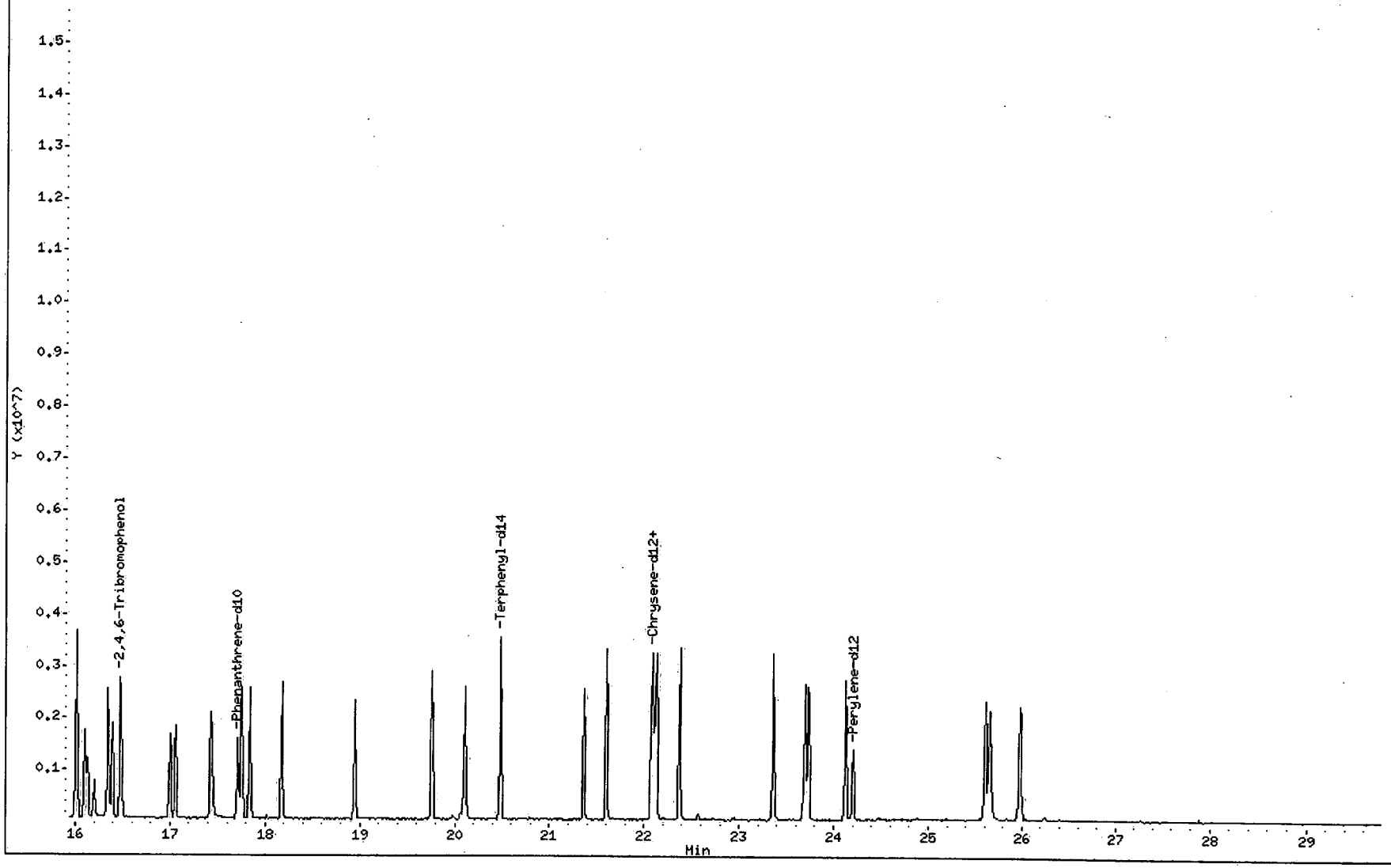


8/14/2014

Data File: /chem/5972hp66.i/D4H12011A66.b/4080818-BS166.d
Date : 12-AUG-2014 16:54
Client ID: SLCSBV
Sample Info: 4080818-BS1;OWS
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp66.i
Operator: OWS
Column diameter: 0.32

/chem/5972hp66.i/D4H12011A66.b/4080818-BS166.d (Part 2 of 2)



8/14/2014

Data File: /chem/5972hp66.i/D4H12011A66.b/4080818-BS166.d
Report Date: 14-Aug-2014 10:04

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp66.i/D4H12011A66.b/4080818-BS166.d
Lab Smp Id: 4080818-BS1 Client Smp ID: SLCSBV
Inj Date : 12-AUG-2014 16:54
Operator : OWS Inst ID: 5972hp66.i
Smp Info : 4080818-BS1:OWS
Misc Info : SLCSBV
Comment :
Method : /chem/5972hp66.i/D4H12011A66.b/8270Dv26.m
Meth Date : 14-Aug-2014 10:03 ron Quant Type: ISTD
Cal Date : 05-AUG-2014 14:46 Cal File: 4H05004-CAL266.d
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: STD-Short.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1000.00000	Volume of final extract (uL)(1000 low, 2
Vi	2.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	8.069	8.063	(1.000)	245992	40.0000		
* 2 Naphthalene-d8	136	10.848	10.832	(1.000)	857043	40.0000		
* 3 Acenaphthene-d10	164	14.885	14.879	(1.000)	450532	40.0000		
* 4 Phenanthrene-d10	188	17.715	17.710	(1.000)	749881	40.0000		
* 5 Chrysene-d12	240	22.089	22.083	(1.000)	802696	40.0000		
* 6 Perylene-d12	264	24.204	24.198	(1.000)	623420	40.0000		
$ 7 2-Fluorophenol	112	5.586	5.560	(0.692)	1359569	171.440	2800	(A)
$ 8 Phenol-d5	99	7.496	7.481	(0.929)	1480387	139.848	2300	(A)
$ 9 Nitrobenzene-d5	82	9.264	9.259	(0.854)	570866	75.4488	1200	
$ 10 2-Fluorobiphenyl	172	13.464	13.459	(0.905)	1116425	75.3077	1200	
$ 11 2,4,6-Tribromophenol	330	16.489	16.483	(1.108)	524855	195.850	3300	8528 (A)
$ 12 Terphenyl-d14	244	20.484	20.479	(0.927)	1422066	84.4932	1400	

8/14/2014

Data File: /chem/5972hp66.i/D4H12011A66.b/4080818-BS166.d
Report Date: 14-Aug-2014 10:04

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
13 N-Nitrosodimethylamine	42	3.235	3.209	(0.401)	387560	55.2146	920	9274
14 Pyridine	79	3.266	3.240	(0.405)	418965	44.4201	740	9128
15 Phenol	94	7.517	7.501	(0.932)	645095	56.8421	950	
16 Aniline	93	7.415	7.399	(0.919)	680887	47.8477	800	9063
17 Bis(2-chloroethyl)ether	93	7.619	7.614	(0.944)	509132	52.3157	870	
18 2-Chlorophenol	128	7.650	7.634	(0.948)	469706	56.6577	940	9400
19 1,3-Dichlorobenzene	146	7.946	7.941	(0.985)	480611	52.8125	880	
20 1,4-Dichlorobenzene	146	8.110	8.094	(1.005)	499633	53.4413	890	
21 Benzyl Alcohol	108	8.447	8.441	(1.047)	296722	53.8371	900	
22 1,2-Dichlorobenzene	146	8.416	8.411	(1.043)	477643	53.9137	900	
23 2-Methylphenol	108	8.784	8.768	(1.089)	410168	54.4168	910	
24 2,2'-oxybis(1-Chloropropane)	45	8.794	8.789	(1.090)	1232971	54.2049	900	8478
25 3 & 4-Methylphenol	108	9.142	9.136	(1.133)	418270	51.4225	860	
26 N-Nitroso-di-N-propylamine	70	9.060	9.054	(1.123)	368046	50.8855	850	9341
27 Acetophenone	105	8.978	8.973	(0.828)	587819	49.4558	820	9336
28 Hexachloroethane	117	9.131	9.126	(1.132)	196163	49.4739	820	9148
29 Nitrobenzene	77	9.305	9.300	(0.858)	423072	59.3025	990	9319
30 Isophorone	82	9.888	9.882	(0.911)	922443	55.1872	920	9511
31 2-Nitrophenol	139	10.031	10.025	(0.925)	207604	67.2500	1100	9093
32 2,4-Dimethylphenol	122	10.307	10.291	(0.950)	379256	54.9644	920	9270
33 Bis(2-chloroethoxy)methane	93	10.491	10.485	(0.967)	592305	55.3867	920	9600
34 2,4-Dichlorophenol	162	10.613	10.597	(0.978)	393059	60.7126	1000	
35 1,2,4-Trichlorobenzene	180	10.756	10.751	(0.992)	428590	56.8285	950	
36 Naphthalene	128	10.889	10.884	(1.004)	1198594	55.6981	930	9508
37 4-Chloroaniline	127	11.114	11.108	(1.024)	415294	40.3481	670	9488
38 Hexachlorobutadiene	225	11.298	11.292	(1.041)	240827	57.2869	950	9461
39 4-Chloro-3-methylphenol	107	12.381	12.375	(1.141)	375117	59.5482	990	9322
40 2-Methylnaphthalene	141	12.514	12.508	(1.154)	693432	55.1414	920	
41 1-Methylnaphthalene	142	12.728	12.723	(1.173)	775760	54.4885	910	
42 Hexachlorocyclopentadiene	237	12.953	12.948	(0.870)	214073	49.1016	820	9305
43 1,2,4,5-Tetrachlorobenzene	216	12.933	12.927	(0.869)	400383	58.9865	980	7748
44 2,4,6-Trichlorophenol	196	13.260	13.254	(0.891)	270767	66.2545	1100	
45 2,4,5-Trichlorophenol	196	13.321	13.316	(0.895)	296637	69.6683	1200	
46 2-Chloronaphthalene	162	13.617	13.612	(0.915)	788815	59.3988	990	
47 2-Nitroaniline	65	13.944	13.939	(0.937)	356018	77.1987	1300	0 (M)
48 Dimethylphthalate	163	14.506	14.501	(0.975)	988594	64.8578	1100	8370
49 1,3-Dinitrobenzene	122	14.466	14.460	(0.972)	50980	64.4730	1100	
50 2,6-Dinitrotoluene	165	14.568	14.552	(0.979)	218440	72.7629	1200	8100
51 Acenaphthylene	152	14.558	14.542	(0.978)	1327173	63.8795	1100	9311
52 3-Nitroaniline	138	14.895	14.889	(1.001)	217804	59.2431	990	7730
53 Acenaphthene	153	14.946	14.940	(1.004)	775161	62.4066	1000	9364
54 2,4-Dinitrophenol	184	15.130	15.114	(1.016)	90613	89.4224	1500	
55 4-Nitrophenol	139	15.395	15.390	(1.034)	209610	81.7884	1400	7730
56 2,4-Dinitrotoluene	165	15.416	15.410	(1.036)	295461	70.3090	1200	8824
57 Dibenzofuran	168	15.324	15.318	(1.030)	1077647	61.8792	1000	9428
58 2,3,4,6-Tetrachlorophenol	232	15.651	15.635	(1.051)	242695	66.1047	1100	
59 Diethylphthalate	149	16.009	16.003	(1.076)	947424	66.2070	1100	9259

Robin Ha 8/14/2014

Data File: /chem/5972hp66.i/D4H12011A66.b/4080818-BS166.d
Report Date: 14-Aug-2014 10:04

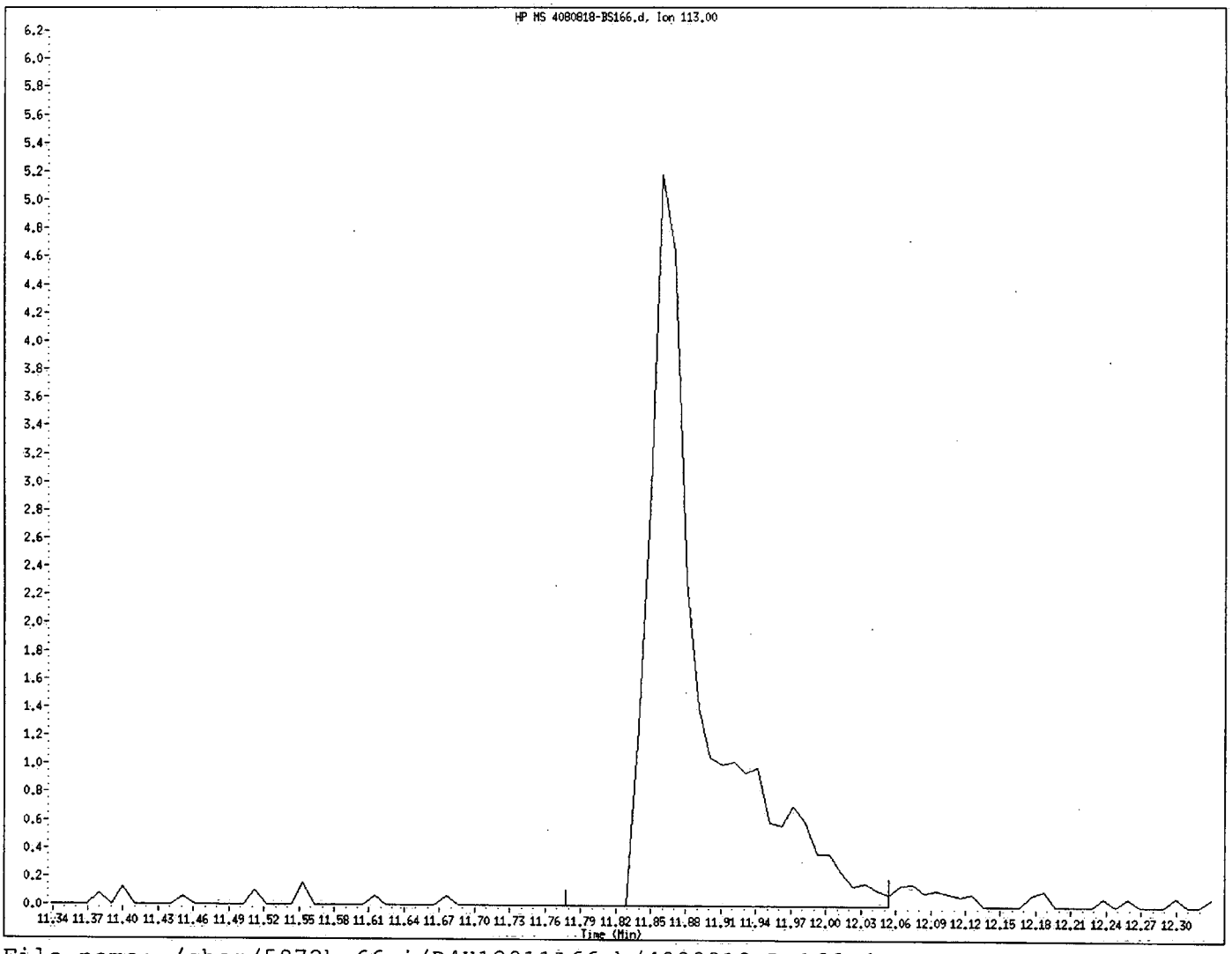
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
60 4-Chlorophenyl-phenylether	204	16.111	16.105	(1.082)	424944	62.8199	1000	9162
61 Fluorene	166	16.009	16.003	(1.076)	848804	63.4926	1000	8982
62 4-Nitroaniline	138	16.131	16.126	(1.084)	248779	65.5079	1100	8312
63 4,6-Dinitro-2-methylphenol	198	16.213	16.197	(0.915)	132011	81.7006	1400	8830
64 N-Nitrosodiphenylamine (1)	169	16.346	16.340	(0.923)	763277	67.2252	1100	9497
65 1,2-Diphenyl Hydrazine	77	16.397	16.391	(1.102)	967872	67.9013	1100	9588
66 4-Bromophenyl-phenylether	248	17.010	17.005	(0.960)	276745	65.0978	1100	8282
67 Hexachlorobenzene	284	17.061	17.056	(0.963)	349728	63.7836	1100	9722
68 Pentachlorophenol	266	17.449	17.444	(0.985)	240072	77.0399	1300	8258
69 Phenanthrene	178	17.756	17.750	(1.002)	1315212	65.6775	1100	
70 Anthracene	178	17.838	17.832	(1.007)	1318461	65.2353	1100	
71 Carbazole	167	18.175	18.169	(1.026)	1332612	65.3918	1100	9551
72 Di-n-butylphthalate	149	18.952	18.946	(1.070)	1569834	59.7979	1000	9616
73 Fluoranthene	202	19.759	19.753	(1.115)	1448732	61.7413	1000	
74 Pyrene	202	20.117	20.111	(0.911)	1529737	67.2552	1100	
75 Butylbenzylphthalate	149	21.363	21.358	(0.967)	724219	67.8287	1100	9590
76 3,3'-Dichlorobenzidine	252	22.109	22.114	(1.001)	445048	55.1040	920	9465
77 bis(2-ethylhexyl)Phthalate	149	22.375	22.369	(1.013)	1039304	65.3828	1100	9577
78 Benzo(a)anthracene	228	22.079	22.073	(1.000)	1356210	65.8213	1100	
79 Chrysene	228	22.130	22.124	(1.002)	1357603	69.9776	1200	
80 Di-n-octylphthalate	149	23.356	23.350	(0.965)	1804421	71.9418	1200	
81 Benzo(b)fluoranthene	252	23.693	23.688	(0.979)	1577546	73.6862	1200	
82 Benzo(k)fluoranthene	252	23.734	23.728	(0.981)	1437716	66.3628	1100	
83 Benzo(a)pyrene	252	24.122	24.117	(0.997)	1341336	67.0918	1100	
84 Indeno(1,2,3-cd)pyrene	276	25.604	25.598	(1.058)	1424305	68.9338	1100	
85 Dibenzo(a,h)anthracene	278	25.655	25.650	(1.060)	1299068	64.7679	1100	9208
86 Benzo(g,h,i)perylene	276	25.982	25.966	(1.073)	1554641	71.7241	1200	
87 Benzaldehyde	77	7.159	7.144	(0.887)	147608	38.8709	650	9451
88 Caprolactam	113	11.860	11.834	(1.093)	163381	61.3298	1000	9236 (M)
89 Atrazine	215	17.429	17.423	(0.984)	109169	52.4823	870	9111
90 1,1'-Biphenyl	154	13.658	13.653	(0.918)	946263	59.5768	990	9492
91 Diphenyl ether	170	13.934	13.939	(0.936)	504138	56.5465	940	9364

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

8/14/2014

Caprolactam CAS Number 105-60-2 Area = 163381 Manually integrated



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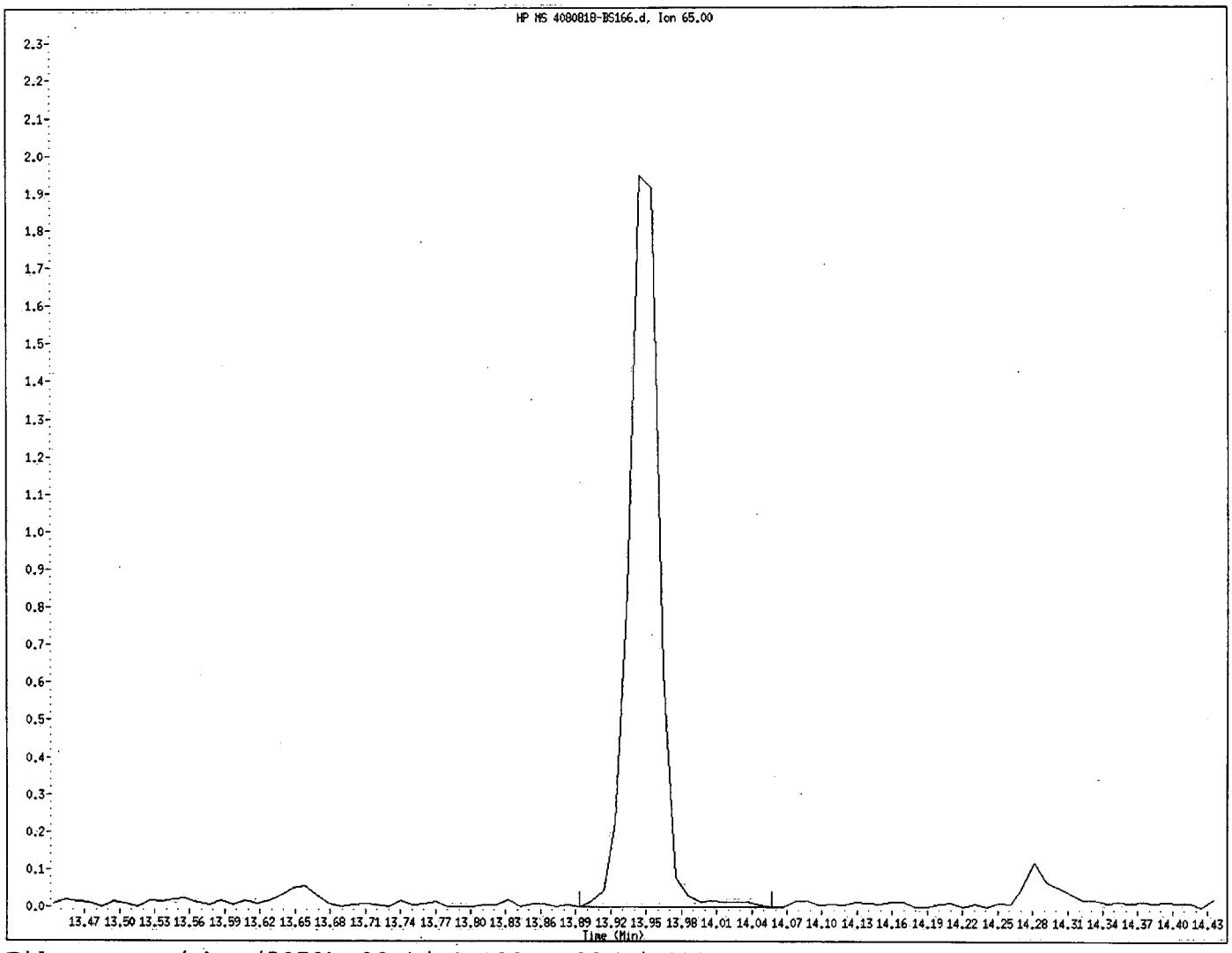
Client ID: SLCSBV
Instrument ID: 5972hp66.i
Injection Date and Time: 12-AUG-2014 16:54
Retention Time: 11.86
Operator ID: OWS

8/14/2014

2-Nitroaniline CAS Number 88-74-4 Area = 356018 Manually integrated



File name: /chem/5972hp66.i/D4H12011A66.b/4080818-BS166.d
Client ID: SLCSBV
Instrument ID: 5972hp66.i
Injection Date and Time: 12-AUG-2014 16:54
Retention Time: 13.94
Operator ID: OWS

8/14/2014

Q. Matrix Spike Data

Tabulated Results (ANALYSIS DATA SHEET)

RIC and Quantitation report

ANALYSIS DATA SHEET

SW8270D

P001-S003-0002-01MS

Client: WESTON SOLUTIONS | SDG: 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD_SVO. | File ID: 4080818-MS1D62.d | QC Type: Matrix Spike

Initial/Final: 30.2g / 1000uL | Sulfur Cleanup: N | Lab ID: 4080818-MS1 | Column ID: RTX-5Sil MS

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 4 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 20:23

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC.(ug/kg dry)	MDL	RL	Q
108-95-2	Phenol	1020	570	3400	JD
111-44-4	Bis(2-chloroethyl)ether	882	200	1800	JD
95-57-8	2-Chlorophenol	988	560	3400	JD
95-48-7	2-Methylphenol	952	400	3400	JD
108-60-1	2,2'-oxybis(1-Chloropropane)	882	260	1800	JD
106-44-5	3 & 4-Methylphenol	931	350	3400	JD
621-64-7	N-Nitroso-di-N-propylamine	824	330	1800	JD
98-86-2	Acetophenone	833	450	1800	JD
67-72-1	Hexachloroethane		1100	1800	U
98-95-3	Nitrobenzene	896	430	1800	JD
78-59-1	Isophorone	919	300	1800	JD
88-75-5	2-Nitrophenol	858	430	3400	JD
105-67-9	2,4-Dimethylphenol	956	540	3400	JD
111-91-1	Bis(2-chloroethoxy)methane	1020	460	1800	JD
120-83-2	2,4-Dichlorophenol	1070	410	3400	JD
91-20-3	Naphthalene	1230	240	1800	JD
106-47-8	4-Chloroaniline	786	290	3400	JD
87-68-3	Hexachlorobutadiene	1080	270	1800	JD
59-50-7	4-Chloro-3-methylphenol	1070	250	3400	JD
91-57-6	2-Methylnaphthalene	1160	310	1800	JD
77-47-4	Hexachlorocyclopentadiene	463	320	1800	JD
88-06-2	2,4,6-Trichlorophenol	1030	320	3400	JD
95-95-4	2,4,5-Trichlorophenol	983	260	3400	JD
91-58-7	2-Chloronaphthalene	1060	420	1800	JD
88-74-4	2-Nitroaniline	1180	260	3400	JD
131-11-3	Dimethylphthalate	1080	170	1800	JD
606-20-2	2,6-Dinitrotoluene	922	180	1800	JD
208-96-8	Acenaphthylene	1090	310	1800	JD
99-09-2	3-Nitroaniline	981	230	3400	JD
83-32-9	Acenaphthene	2010	310	1800	D
51-28-5	2,4-Dinitrophenol		160	3400	U
100-02-7	4-Nitrophenol	1660	470	3400	JD
121-14-2	2,4-Dinitrotoluene	843	210	1800	JD
132-64-9	Dibenzofuran	1660	310	1800	JD

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ANALYSIS DATA SHEET
SW8270D

P001-S003-0002-01MS

Client: WESTON SOLUTIONS | SDG: 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD SVO. | File ID: 4080818-MS1D62.d | QC Type: Matrix Spike

Initial/Final: 30.2g / 1000uL | Sulfur Cleanup: N | Lab ID: 4080818-MS1 | Column ID: RTX-5Sil MS

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 4 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 20:23

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC.(ug/kg dry)	MDL	RL	Q
84-66-2	Diethylphthalate	1170	190	1800	JD
7005-72-3	4-Chlorophenyl-phenylether	1140	220	1800	JD
86-73-7	Fluorene	2150	230	1800	D
100-01-6	4-Nitroaniline	981	460	3400	JD
534-52-1	4,6-Dinitro-2-methylphenol	1360	460	3400	JD
86-30-6	N-Nitrosodiphenylamine (1)	1090	310	1800	JD
101-55-3	4-Bromophenyl-phenylether	1100	260	1800	JD
118-74-1	Hexachlorobenzene	1130	230	1800	JD
87-86-5	Pentachlorophenol	2400	450	3400	JD
85-01-8	Phenanthrene	11200	100	1800	D
120-12-7	Anthracene	3340	88	1800	D
86-74-8	Carbazole	2580	180	1800	D
84-74-2	Di-n-butylphthalate	1130	250	1800	JD
206-44-0	Fluoranthene	14900	250	1800	D
129-00-0	Pyrene	10800	230	1800	D
85-68-7	Butylbenzylphthalate	1100	270	1800	JD
91-94-1	3,3'-Dichlorobenzidine	722	360	1800	JD
117-81-7	bis(2-ethylhexyl)Phthalate	1170	320	1800	JD
56-55-3	Benzo (a) anthracene	6420	280	1800	D
218-01-9	Chrysene	6640	110	1800	D
117-84-0	Di-n-octylphthalate	1070	340	1800	JD
205-99-2	Benzo (b) fluoranthene	7630	270	1800	D
207-08-9	Benzo(k)fluoranthene	3840	250	1800	D
50-32-8	Benzo (a) pyrene	5480	190	1800	D
193-39-5	Indeno(1,2,3-cd)pyrene	3810	300	1800	D
53-70-3	Dibenzo(a,h)anthracene	1490	480	1800	JD
191-24-2	Benzo (g,h,i) perylene	3450	310	1800	D
100-52-7	Benzaldehyde	654	270	1800	JD
105-60-2	Caprolactam	824	290	1800	JD
1912-24-9	Atrazine	911	200	1800	JD
92-52-4	1,1'-Biphenyl	1070	410	1800	JD

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	3441	2747	80	35 - 105	D

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ANALYSIS DATA SHEET
SW8270D

P001-S003-0002-01MS

Client:	WESTON SOLUTIONS	SDG:	1408024	Project:	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ		
Matrix:	Soil	Extraction:	EPA 3550C MOD SVO.	File ID:	4080818-MS1D62.d	QC Type:	Matrix Spike
Initial/Final:	30.2g / 1000uL	Sulfur Cleanup:	N	Lab ID:	4080818-MS1	Column ID:	RTX-5Sil MS
Dilution:	10 pH:	Florisil Cleanup:	N			Prepared:	08/12/14 09:00
% Moisture:	4	GPC Cleanup:	N	GPC Cleanup Factor:	N	Analyzed:	08/15/14 20:23
Batch:	4080818	Sequence:	4H15001	Calibration:	4072701	Instrument:	5972hp62

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Phenol-d5	3441	2296	67	40 - 100	D
Nitrobenzene-d5	1721	ND		35 - 100	D
2-Fluorobiphenyl	1721	ND		45 - 105	D
2,4,6-Tribromophenol	3441	2918	85	35 - 125	D
Terphenyl-d14	1721	ND		30 - 125	D

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.
(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.
(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

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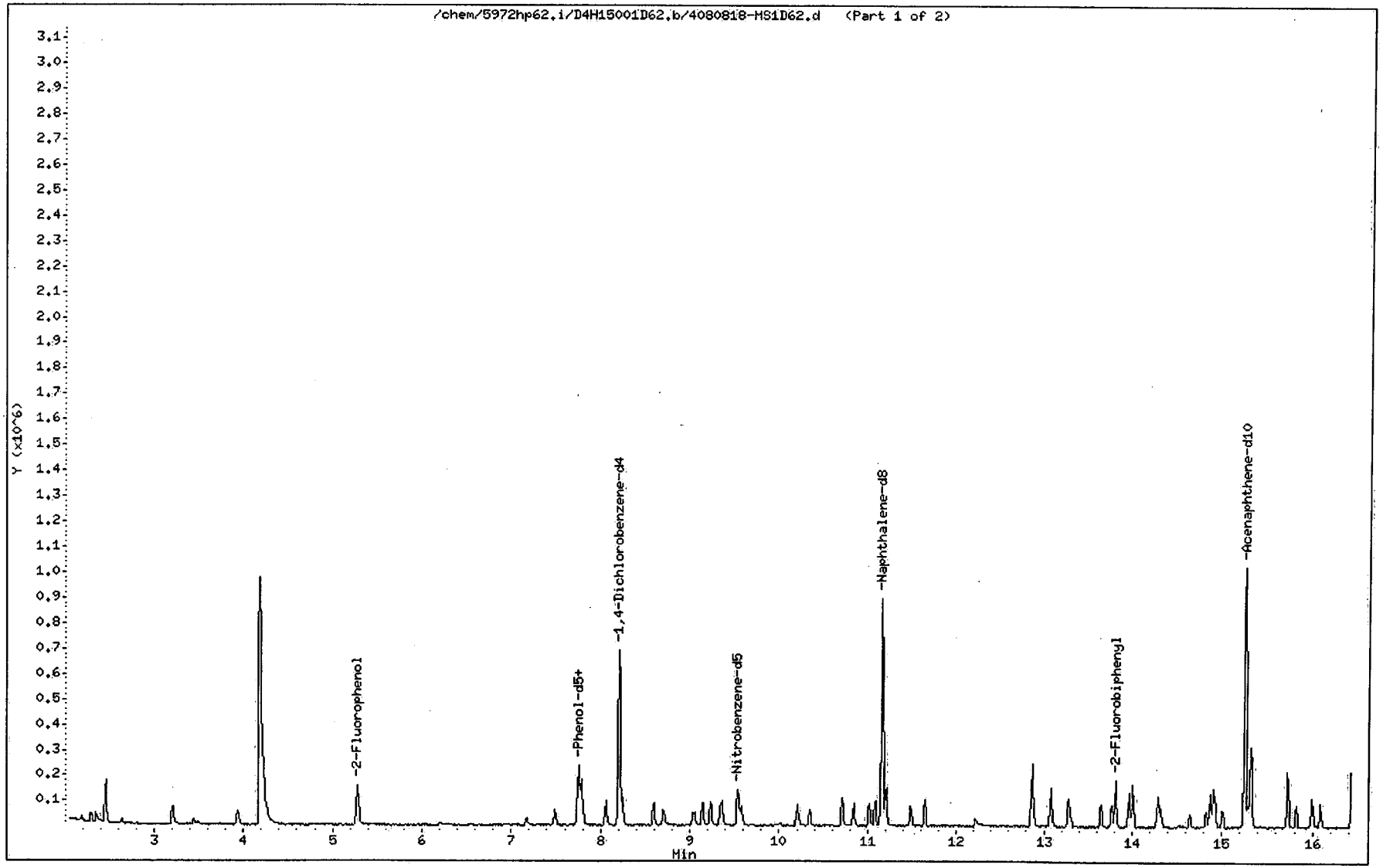
Data File: /chem/5972hp62.i/D4H15001D62.b/4080818-MS1D62.d
Date : 15-AUG-2014 20:23
Client ID: P001-S003-0002-01MS
Sample Info: 4080818-MS1:OWS:10
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

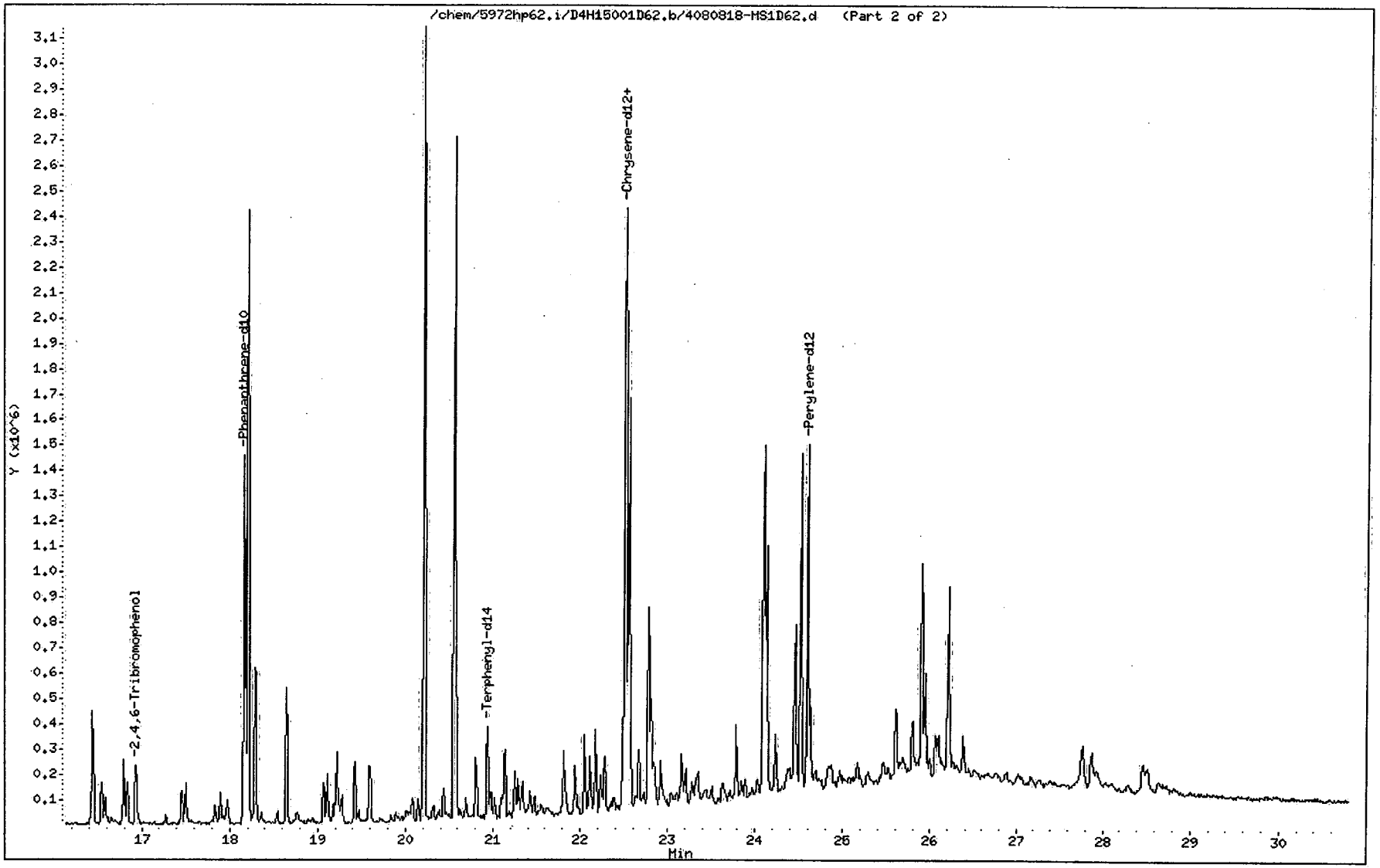
Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4080818-MS1D62.d
Date : 15-AUG-2014 20:23
Client ID: P001-S003-0002-01MS
Sample Info: 4080818-MS1:OWS:10
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4080818-MS1D62.d
Report Date: 19-Aug-2014 11:32

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp62.i/D4H15001D62.b/4080818-MS1D62.d
Lab Smp Id: 4080818-MS1 Client Smp ID: P001-S003-0002-01MS
Inj Date : 15-AUG-2014 20:23
Operator : OWS Inst ID: 5972hp62.i
Smp Info : 4080818-MS1:OWS:10
Misc Info : P001-S003-0002-01MS
Comment :
Method : /chem/5972hp62.i/D4H15001D62.b/8270Dv26.m
Meth Date : 19-Aug-2014 11:32 ron Quant Type: ISTD
Cal Date : 23-JUL-2014 19:31 Cal File: 4G23008-CAL662.d
Als bottle: 11 QC Sample: MS
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1000.00000	Volume of final extract (uL)(1000 low, 2
Vi	2.00000	Volume injected (uL)
Ws	30.20000	Weight of sample extracted (g)
M	4.00000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	8.205	8.212	(1.000)	176510	40.0000		
* 2 Naphthalene-d8	136	11.163	11.170	(1.000)	628131	40.0000		
* 3 Acenaphthene-d10	164	15.257	15.254	(1.000)	367285	40.0000		
* 4 Phenanthrene-d10	188	18.164	18.171	(1.000)	689268	40.0000		
* 5 Chrysene-d12	240	22.524	22.521	(1.000)	751452	40.0000		
* 6 Perylene-d12	264	24.602	24.609	(1.000)	552974	40.0000		
$ 7 2-Fluorophenol	112	5.288	5.274	(0.644)	90846	15.9635	2800	
$ 8 Phenol-d5	99	7.754	7.751	(0.945)	108423	13.3424	2300	
$ 9 Nitrobenzene-d5	82	9.535	9.532	(0.854)	42014	6.66831	1200	(a)
$ 10 2-Fluorobiphenyl	172	13.814	13.821	(0.905)	83540	7.33002	1300	(aM)
$ 11 2,4,6-Tribromophenol	330	16.925	16.932	(1.109)	34195	16.9589	2900	7646
$ 12 Terphenyl-d14	244	20.937	20.945	(0.930)	114323	7.78236	1300	(a)

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4080818-MS1D62.d
Report Date: 19-Aug-2014 11:32

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
15 Phenol	94	7.785	7.772	(0.949)	46661	5.91630	1000	(a)
17 Bis(2-chloroethyl)ether	93	7.734	7.731	(0.943)	32811	5.12772	880	(a)
18 2-Chlorophenol	128	7.785	7.782	(0.949)	36639	5.73989	990	9180 (a)
23 2-Methylphenol	108	9.146	9.133	(1.115)	31840	5.53031	950	(a)
24 2,2'-oxybis(1-Chloropropane)	45	9.034	9.051	(1.101)	51036	5.12331	880	9362 (a)
25 3 & 4-Methylphenol	108	9.556	9.532	(1.165)	33030	5.40843	930	(a)
26 N-Nitroso-di-N-propylamine	70	9.341	9.328	(1.138)	25179	4.78851	820	9446 (a)
27 Acetophenone	105	9.228	9.225	(0.827)	42284	4.84354	840	9579 (a)
28 Hexachloroethane	117	9.361	9.358	(1.141)	16001	5.09552	880	0 (M)
29 Nitrobenzene	77	9.576	9.573	(0.858)	42863	5.20457	900	7323 (a)
30 Isophorone	82	10.201	10.197	(0.914)	62909	5.34152	920	9594 (a)
31 2-Nitrophenol	139	10.344	10.341	(0.927)	15688	4.98863	860	9495 (a)
32 2,4-Dimethylphenol	122	10.712	10.709	(0.960)	26299	5.55821	960	9407 (a)
33 Bis(2-chloroethoxy)methane	93	10.845	10.842	(0.972)	43578	5.95182	1000	9672 (a)
34 2,4-Dichlorophenol	162	11.019	11.006	(0.987)	28861	6.24477	1100	(a)
36 Naphthalene	128	11.214	11.211	(1.005)	110001	7.13727	1200	9152 (a)
37 4-Chloroaniline	127	11.480	11.477	(1.028)	34667	4.56813	790	9421 (a)
38 Hexachlorobutadiene	225	11.644	11.651	(1.043)	17207	6.30025	1100	0 (aM)
39 4-Chloro-3-methylphenol	107	12.862	12.859	(1.152)	31303	6.19301	1100	7105 (a)
40 2-Methylnaphthalene	141	12.862	12.869	(1.152)	61203	6.73195	1200	(a)
42 Hexachlorocyclopentadiene	237	13.312	13.309	(0.873)	8895	2.69025	460	8775 (aR)
44 2,4,6-Trichlorophenol	196	13.650	13.647	(0.895)	20144	5.95835	1000	(a)
45 2,4,5-Trichlorophenol	196	13.773	13.770	(0.903)	20614	5.71486	980	(a)
46 2-Chloronaphthalene	162	13.967	13.974	(0.915)	62030	6.15780	1100	(a)
47 2-Nitroaniline	65	14.315	14.322	(0.938)	25773	6.83774	1200	9087 (a)
48 Dimethylphthalate	163	14.868	14.875	(0.975)	77650	6.28194	1100	9647 (a)
50 2,6-Dinitrotoluene	165	14.929	14.936	(0.979)	16331	5.35590	920	9409 (a)
51 Acenaphthylene	152	14.909	14.906	(0.977)	104631	6.30995	1100	9638 (a)
52 3-Nitroaniline	138	15.298	15.295	(1.003)	19449	5.70060	980	0 (aM)
53 Acenaphthene	153	15.318	15.325	(1.004)	117341	11.7010	2000	8214 (R)
54 2,4-Dinitrophenol	184	Compound Not Detected.						
55 4-Nitrophenol	139	15.994	15.970	(1.048)	13851	9.63117	1700	8710 (a)
56 2,4-Dinitrotoluene	165	15.820	15.817	(1.037)	20002	4.89708	840	9322 (a)
57 Dibenzofuran	168	15.717	15.725	(1.030)	138147	9.66843	1700	9685 (aR)
59 Diethylphthalate	149	16.444	16.451	(1.078)	86026	6.81473	1200	8892 (a)
60 4-Chlorophenyl-phenylether	204	16.536	16.543	(1.084)	35216	6.63227	1100	9204 (a)
61 Fluorene	166	16.434	16.441	(1.077)	135958	12.5007	2200	7534 (R)
62 4-Nitroaniline	138	16.577	16.584	(1.087)	19852	5.70251	980	9404 (a)
63 4,6-Dinitro-2-methylphenol	198	16.649	16.646	(0.917)	6482	7.90852	1400	8416 (a)
64 N-Nitrosodiphenylamine (1)	169	16.792	16.799	(0.924)	65750	6.35120	1100	9641 (a)
66 4-Bromophenyl-phenylether	248	17.457	17.454	(0.961)	21869	6.41409	1100	9565 (a)
67 Hexachlorobenzene	284	17.498	17.505	(0.963)	28251	6.54236	1100	9705 (a)
68 Pentachlorophenol	266	17.928	17.925	(0.987)	6280	13.9311	2400	8611 (aR)
69 Phenanthrene	178	18.205	18.212	(1.002)	1178379	65.0781	11000	(R)
70 Anthracene	178	18.297	18.294	(1.007)	351678	19.4079	3300	(R)
71 Carbazole	167	18.645	18.652	(1.026)	270056	14.9974	2600	9634 (R)
72 Di-n-butylphthalate	149	19.423	19.419	(1.069)	162060	6.54986	1100	9545 (a)

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4080818-MS1D62.d
Report Date: 19-Aug-2014 11:32

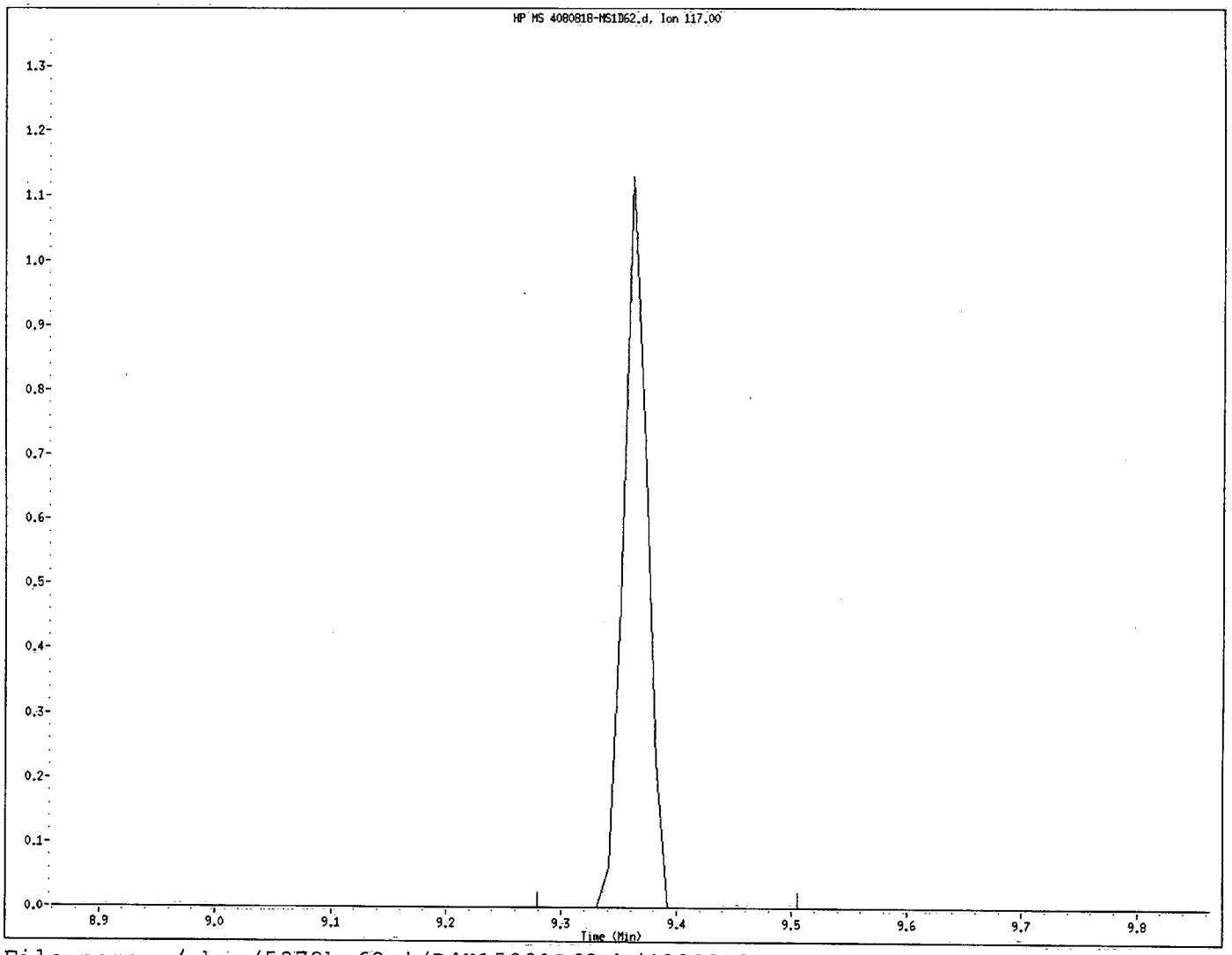
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY	
73 Fluoranthene	202	20.211	20.218	(1.113)	1653449	86.4476	15000		(R)
74 Pyrene	202	20.559	20.566	(0.913)	1370551	62.8850	11000		(R)
75 Butylbenzylphthalate	149	21.818	21.815	(0.969)	75297	6.38036	1100	9687	(a)
76 3,3'-Dichlorobenzidine	252	22.544	22.551	(1.001)	30644	4.19334	720	0	(aM)
77 bis(2-ethylhexyl)Phthalate	149	22.810	22.818	(1.013)	117003	6.81385	1200	9734	(a)
78 Benzo(a)anthracene	228	22.503	22.511	(0.999)	708372	37.3113	6400		(R)
79 Chrysene	228	22.555	22.562	(1.001)	675986	38.6172	6600		(R)
80 Di-n-octylphthalate	149	23.783	23.790	(0.967)	173618	6.23128	1100		(a)
81 Benzo(b)fluoranthene	252	24.100	24.097	(0.980)	868578	44.3517	7600		(R)
82 Benzo(k)fluoranthene	252	24.131	24.138	(0.981)	436452	22.3140	3800		(R)
83 Benzo(a)pyrene	252	24.520	24.527	(0.997)	582139	31.8669	5500		(R)
84 Indeno(1,2,3-cd)pyrene	276	25.901	25.909	(1.053)	390972	22.1389	3800		(R)
85 Dibenzo(a,h)anthracene	278	25.942	25.950	(1.054)	151078	8.66980	1500	8005	(aH)
86 Benzo(g,h,i)perylene	276	26.209	26.216	(1.065)	369907	20.0779	3500		(R)
87 Benzaldehyde	77	7.171	7.158	(0.874)	10648	3.79913	660	9185	(a)
88 Caprolactam	113	12.217	12.214	(1.094)	9043	4.78698	820	8713	(a)
89 Atrazine	215	17.897	17.905	(0.985)	9192	5.29264	910	9684	(a)
90 1,1'-Biphenyl	154	14.008	14.015	(0.918)	77561	6.23990	1100	9623	(a)

QC Flag Legend

a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

8/19/2014

Hexachloroethane CAS Number 67-72-1 Area = 16001 Manually integrated



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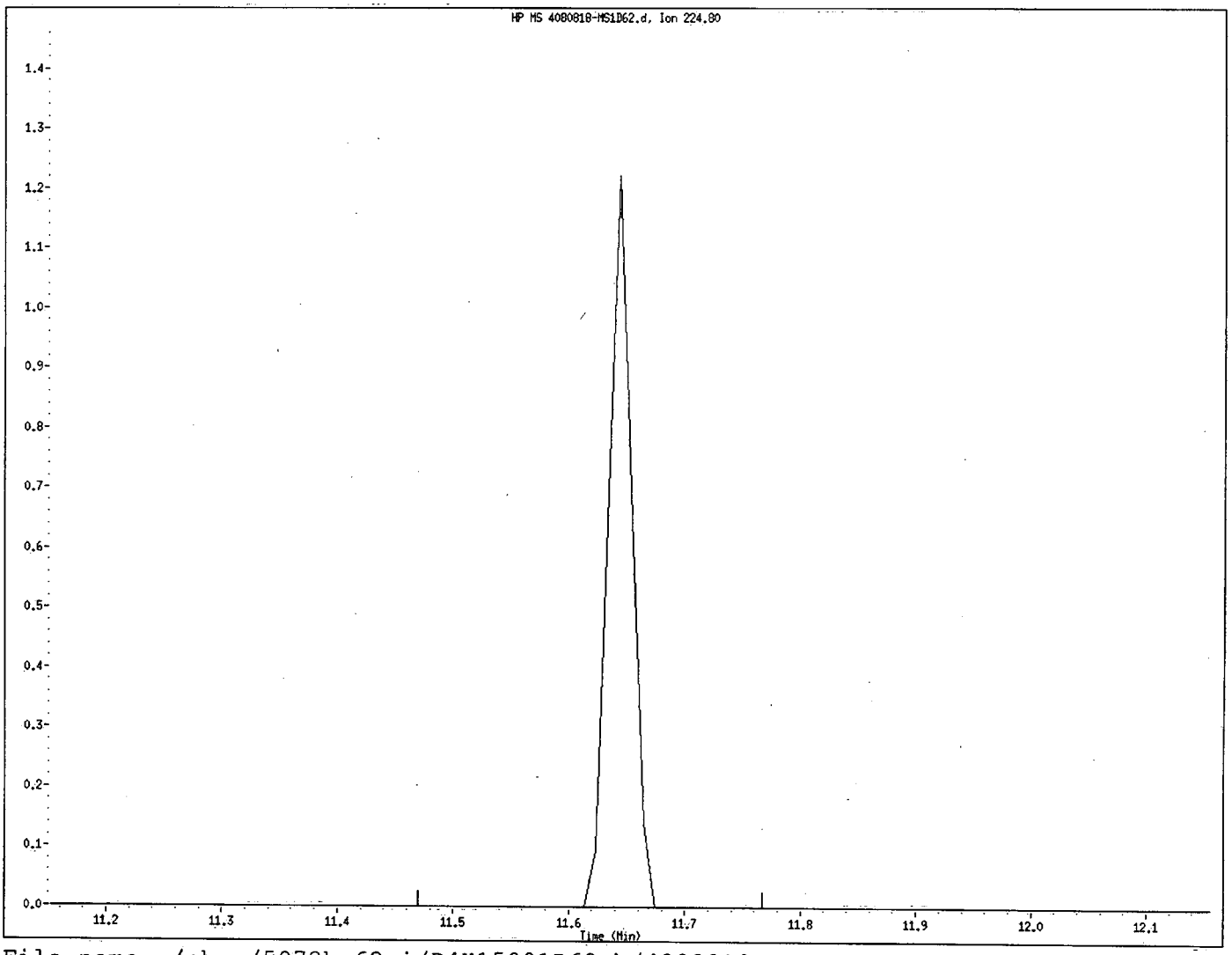
Client ID: P001-S003-0002-01MS
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 20:23
Retention Time: 9.36
Operator ID: OWS

8/19/2014

Hexachlorobutadiene CAS Number 87-68-3 Area = 17207 Manually integrated



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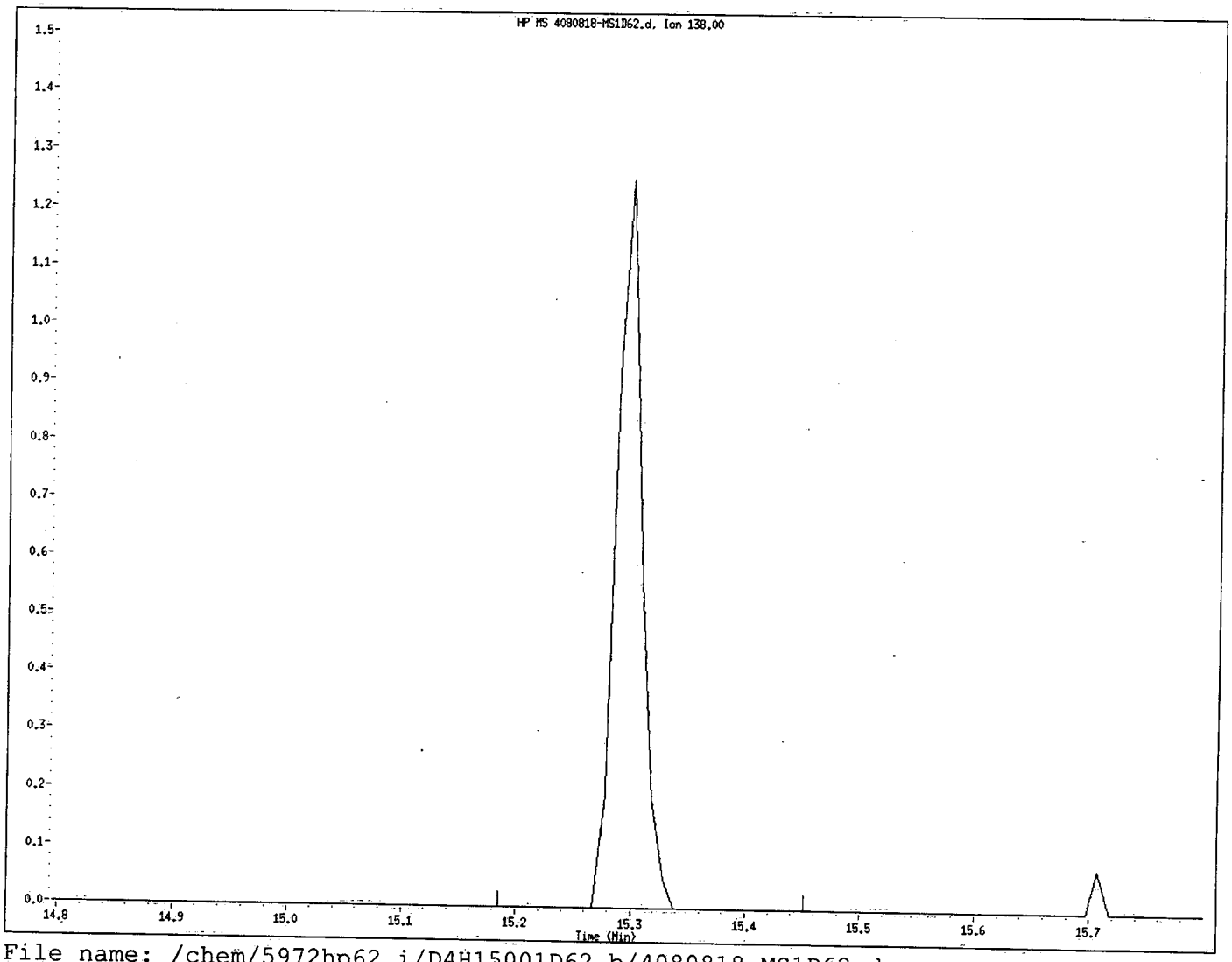
Client ID: P001-S003-0002-01MS
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 20:23
Retention Time: 11.64
Operator ID: OWS

8/19/2014

3-Nitroaniline CAS Number 99-09-2 Area = 19449 Manually integrated



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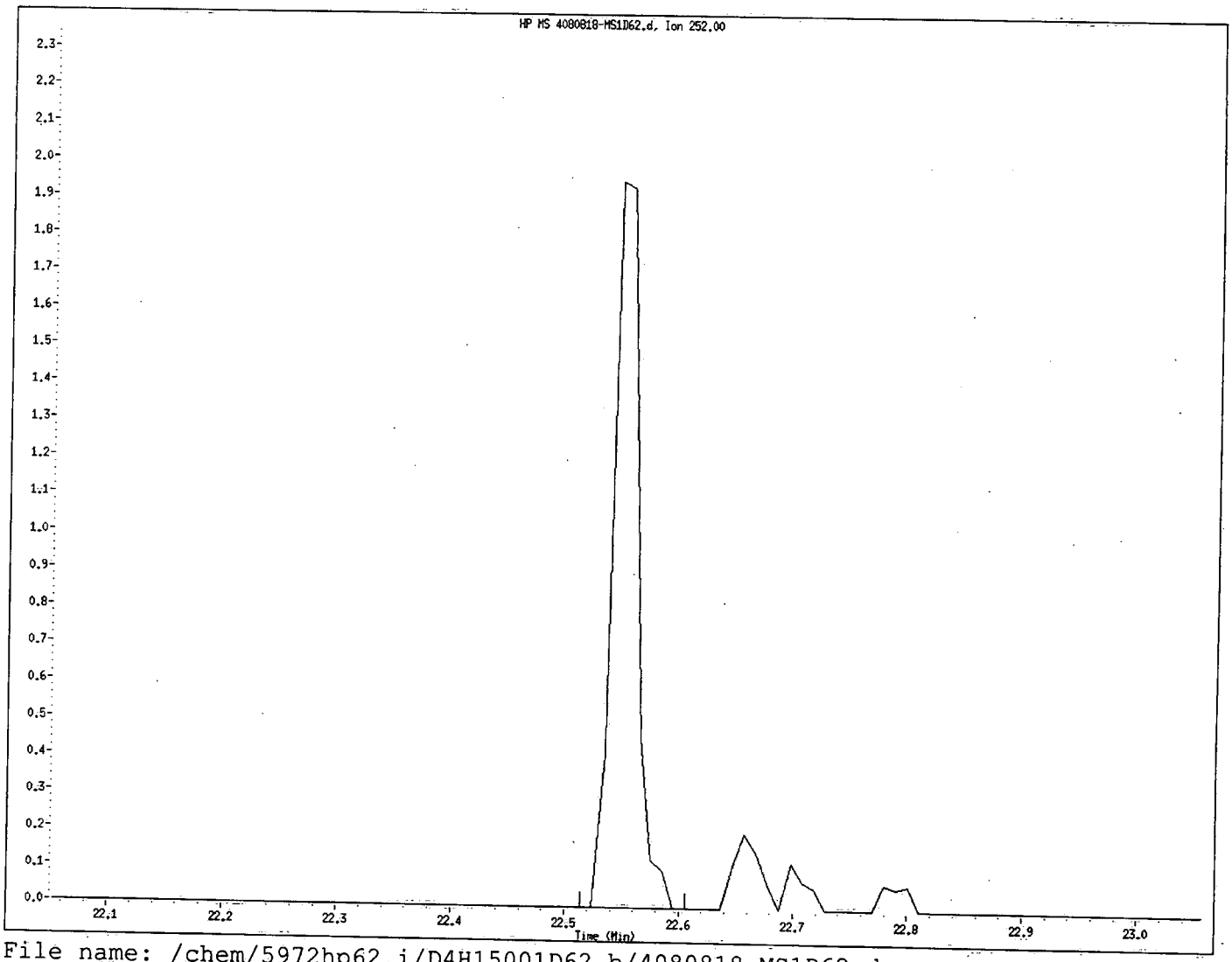
Client ID: P001-S003-0002-01MS
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 20:23
Retention Time: 15.30
Operator ID: OWS

Roldan Hani 8/19/2014

3,3'-Dichlorobenzidine CAS Number 91-94-1 Area = 30644 Manually integrated



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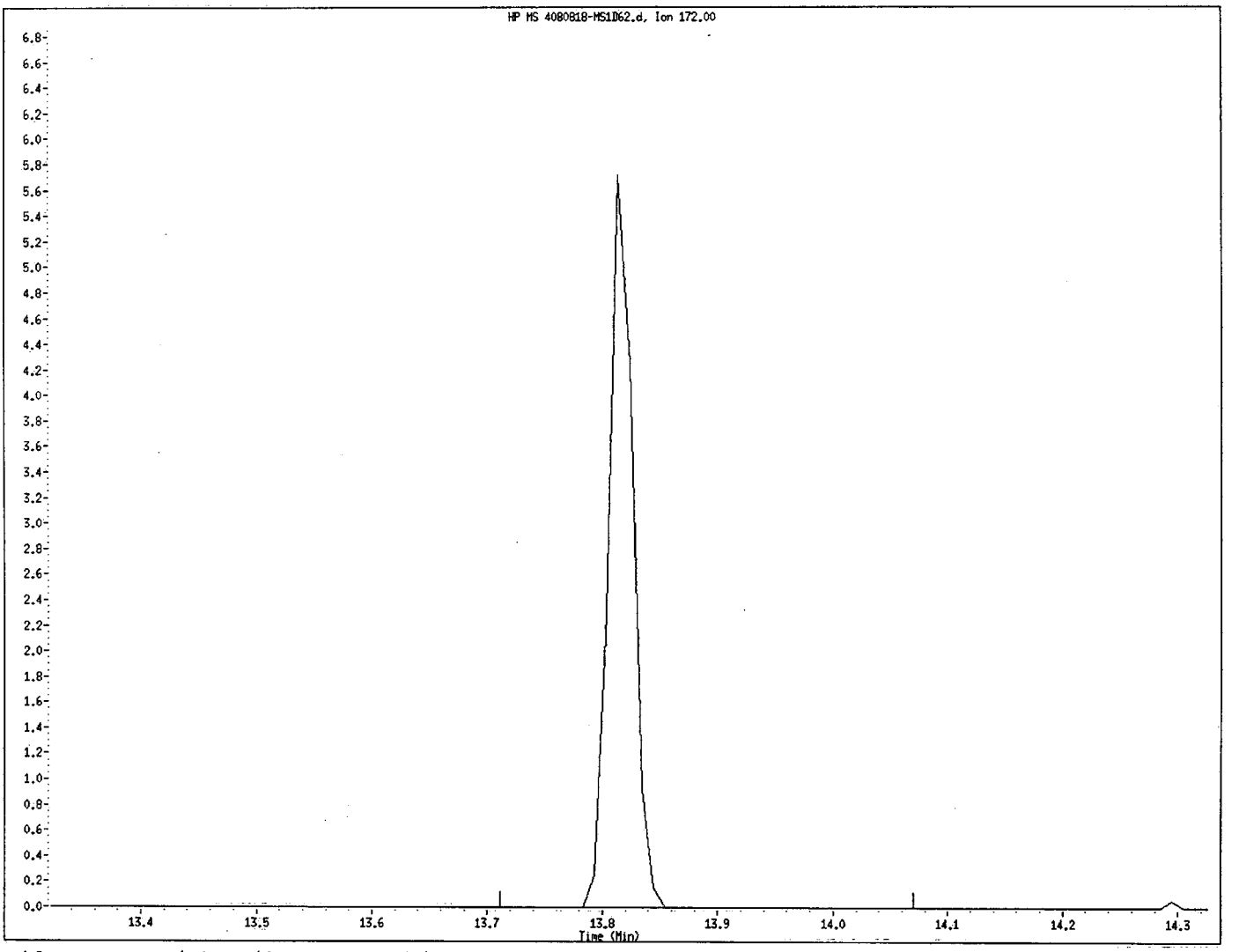
Client ID: P001-S003-0002-01MS
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 20:23
Retention Time: 22.54
Operator ID: OWS

8/19/2014

2-Fluorobiphenyl CAS Number 321-60-8 Area = 83540 Manually integrated



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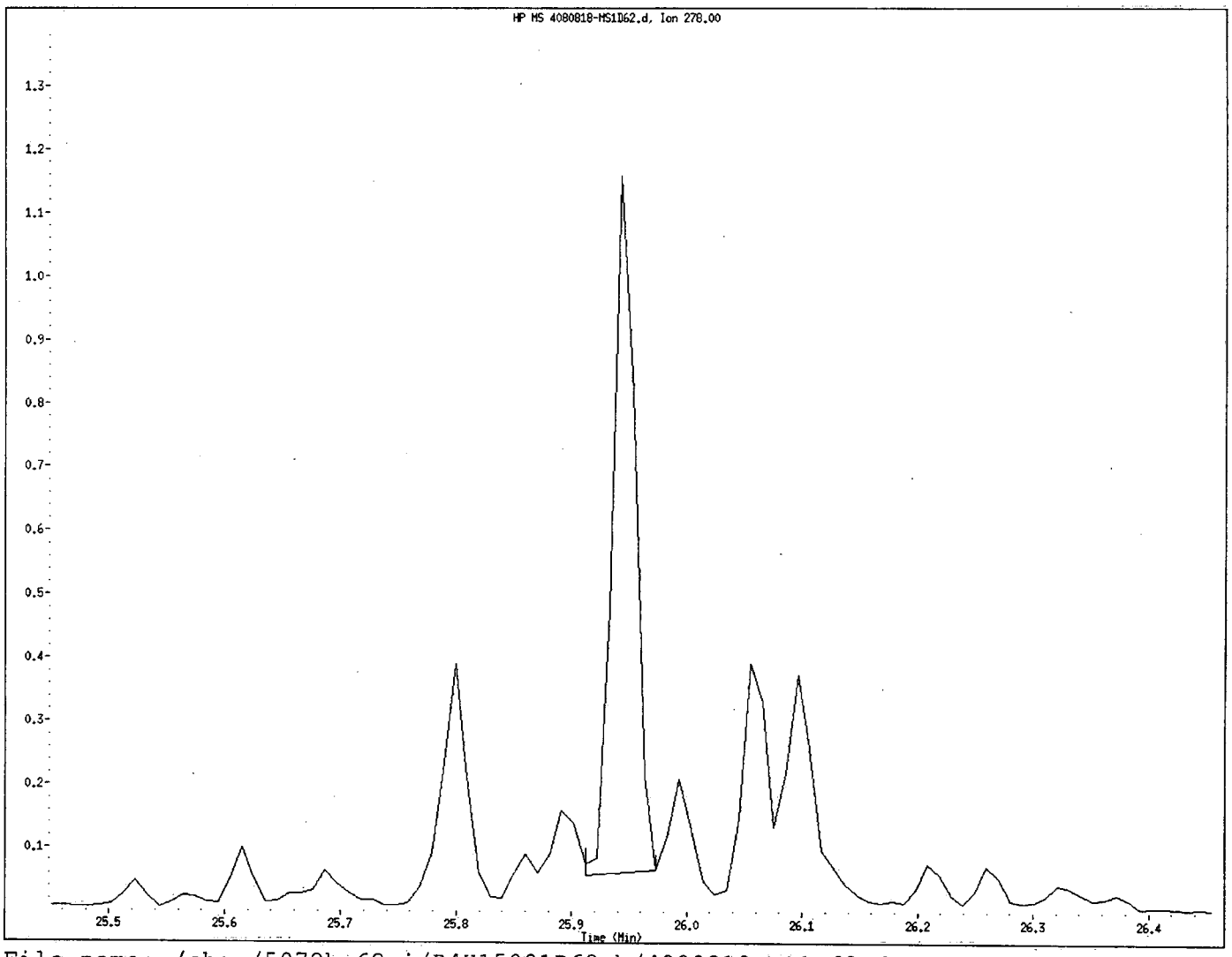
Client ID: P001-S003-0002-01MS
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 20:23
Retention Time: 13.81
Operator ID: OWS

Roldan Hani 8/19/2014

Dibenzo(a,h)anthracene CAS Number 53-70-3 Area = 151078 User selected hit



File name: /chem/5972hp62.i/D4H15001D62.b/4080818-MS1D62.d
Client ID: P001-S003-0002-01MS
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 20:23
Retention Time: 25.94
Operator ID: OWS

8/19/2014

ANALYSIS DATA SHEET

SW8270D

P001-S003-0002-01MSD

Client: WESTON SOLUTIONS | SDG: 1408024 | Project: RST2/REP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD SVO. | File ID: 4080818-MSD1D62.d | QC Type: Matrix Spike Dup

Initial/Final: 30.2g / 1000uL | Sulfur Cleanup: N | Lab ID: 4080818-MSD1 | Column ID: RTX-5Sil MS

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 4 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 21:02

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC.(ug/kg dry)	MDL	RL	Q
108-95-2	Phenol	952	570	3400	JD
111-44-4	Bis(2-chloroethyl)ether	881	200	1800	JD
95-57-8	2-Chlorophenol	985	560	3400	JD
95-48-7	2-Methylphenol	934	400	3400	JD
108-60-1	2,2'-oxybis(1-Chloropropane)	917	260	1800	JD
106-44-5	3 & 4-Methylphenol	933	350	3400	JD
621-64-7	N-Nitroso-di-N-propylamine	871	330	1800	JD
98-86-2	Acetophenone	838	450	1800	JD
67-72-1	Hexachloroethane		1100	1800	U
98-95-3	Nitrobenzene	911	430	1800	JD
78-59-1	Isophorone	929	300	1800	JD
88-75-5	2-Nitrophenol	910	430	3400	JD
105-67-9	2,4-Dimethylphenol	1040	540	3400	JD
111-91-1	Bis(2-chloroethoxy)methane	984	460	1800	JD
120-83-2	2,4-Dichlorophenol	1070	410	3400	JD
91-20-3	Naphthalene	1400	240	1800	JD
106-47-8	4-Chloroaniline	732	290	3400	JD
87-68-3	Hexachlorobutadiene	1140	270	1800	JD
59-50-7	4-Chloro-3-methylphenol	1040	250	3400	JD
91-57-6	2-Methylnaphthalene	1340	310	1800	JD
77-47-4	Hexachlorocyclopentadiene	568	320	1800	JD
88-06-2	2,4,6-Trichlorophenol	1060	320	3400	JD
95-95-4	2,4,5-Trichlorophenol	1130	260	3400	JD
91-58-7	2-Chloronaphthalene	1110	420	1800	JD
88-74-4	2-Nitroaniline	1180	260	3400	JD
131-11-3	Dimethylphthalate	1060	170	1800	JD
606-20-2	2,6-Dinitrotoluene	1010	180	1800	JD
208-96-8	Acenaphthylene	1110	310	1800	JD
99-09-2	3-Nitroaniline	929	230	3400	JD
83-32-9	Acenaphthene	2420	310	1800	D
51-28-5	2,4-Dinitrophenol	2870	160	3400	JD
100-02-7	4-Nitrophenol	1780	470	3400	JD
121-14-2	2,4-Dinitrotoluene	897	210	1800	JD
132-64-9	Dibenzofuran	1990	310	1800	D

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ANALYSIS DATA SHEET

SW8270D

P001-S003-0002-01MSD

Client: WESTON SOLUTIONS | SDG: 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD SVO. | File ID: 4080818-MSD1D62.d | QC Type: Matrix Spike Dup

Initial/Final: 30.2g / 1000uL | Sulfur Cleanup: N | Lab ID: 4080818-MSD1 | Column ID: RTX-5Sil MS

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 4 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 21:02

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

CAS NO.	COMPOUND	CONC.(ug/kg dry)	MDL	RL	Q
84-66-2	Diethylphthalate	1130	190	1800	JD
7005-72-3	4-Chlorophenyl-phenylether	1130	220	1800	JD
86-73-7	Fluorene	2520	230	1800	D
100-01-6	4-Nitroaniline	962	460	3400	JD
534-52-1	4,6-Dinitro-2-methylphenol	1500	460	3400	JD
86-30-6	N-Nitrosodiphenylamine (1)	1200	310	1800	JD
101-55-3	4-Bromophenyl-phenylether	1150	260	1800	JD
118-74-1	Hexachlorobenzene	1130	230	1800	JD
87-86-5	Pentachlorophenol	2620	450	3400	JD
85-01-8	Phenanthrene	11000	100	1800	D
120-12-7	Anthracene	3680	88	1800	D
86-74-8	Carbazole	2520	180	1800	D
84-74-2	Di-n-butylphthalate	1140	250	1800	JD
206-44-0	Fluoranthene	12600	250	1800	D
129-00-0	Pyrene	9690	230	1800	D
85-68-7	Butylbenzylphthalate	1150	270	1800	JD
91-94-1	3,3'-Dichlorobenzidine	729	360	1800	JD
117-81-7	bis(2-ethylhexyl)Phthalate	1180	320	1800	JD
56-55-3	Benzo (a) anthracene	6180	280	1800	D
218-01-9	Chrysene	6320	110	1800	D
117-84-0	Di-n-octylphthalate	1180	340	1800	JD
205-99-2	Benzo (b) fluoranthene	6530	270	1800	D
207-08-9	Benzo(k)fluoranthene	4310	250	1800	D
50-32-8	Benzo (a) pyrene	5320	190	1800	D
193-39-5	Indeno(1,2,3-cd)pyrene	3760	300	1800	D
53-70-3	Dibenzo(a,h)anthracene	1690	480	1800	JD
191-24-2	Benzo (g,h,i) perylene	3640	310	1800	D
100-52-7	Benzaldehyde	820	270	1800	JD
105-60-2	Caprolactam	796	290	1800	JD
1912-24-9	Atrazine	886	200	1800	JD
92-52-4	1,1'-Biphenyl	1200	410	1800	JD

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	3441	2732	79	35 - 105	D

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ANALYSIS DATA SHEET
SW8270D

P001-S003-0002-01MSD

Client: WESTON SOLUTIONS | SDG: 1408024 | Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ

Matrix: Soil | Extraction: EPA 3550C MOD SVO. | File ID: 4080818-MSD1D62.d | QC Type: Matrix Spike Dup

Initial/Final: 30.2g / 1000uL | Sulfur Cleanup: N | Lab ID: 4080818-MSD1 | Column ID: RTX-5Sil MS

Dilution: 10 | pH: | Florisil Cleanup: N | Prepared: 08/12/14 09:00

% Moisture: 4 | GPC Cleanup: N | GPC Cleanup Factor: N | Analyzed: 08/15/14 21:02

Batch: 4080818 | Sequence: 4H15001 | Calibration: 4072701 | Instrument: 5972hp62

SURROGATE RECOVERY RESULTS	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Phenol-d5	3441	2349	68	40 - 100	D
Nitrobenzene-d5	1721	ND		35 - 100	D
2-Fluorobiphenyl	1721	ND		45 - 105	D
2,4,6-Tribromophenol	3441	2816	82	35 - 125	D
Terphenyl-d14	1721	ND		30 - 125	D

(1) - N-nitrosodiphenylamine cannot be separated from diphenylamine. It is acceptable to report the combined result.
(2) - 1,2-Diphenylhydrazine is unstable and converts to azobenzene.
(3) - 3 & 4-Methylphenol cannot be separated for quantitation.

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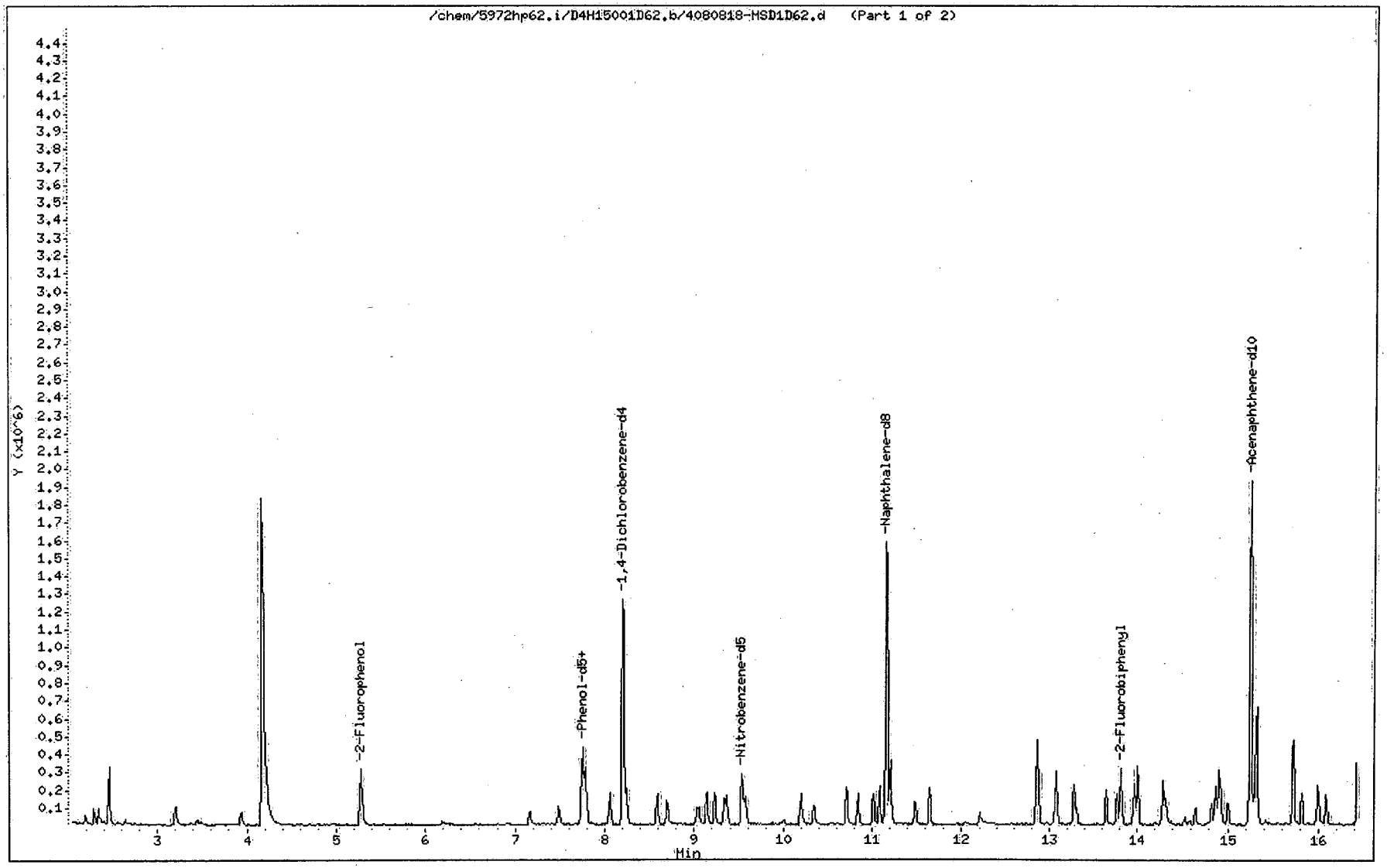
Data File: /chem/5972hp62.i/D4H15001D62.b/4080818-MSD1D62.d
Date : 15-AUG-2014 21:02
Client ID: P001-S003-0002-01MS
Sample Info: 4080818-MSD1:OWS:10
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

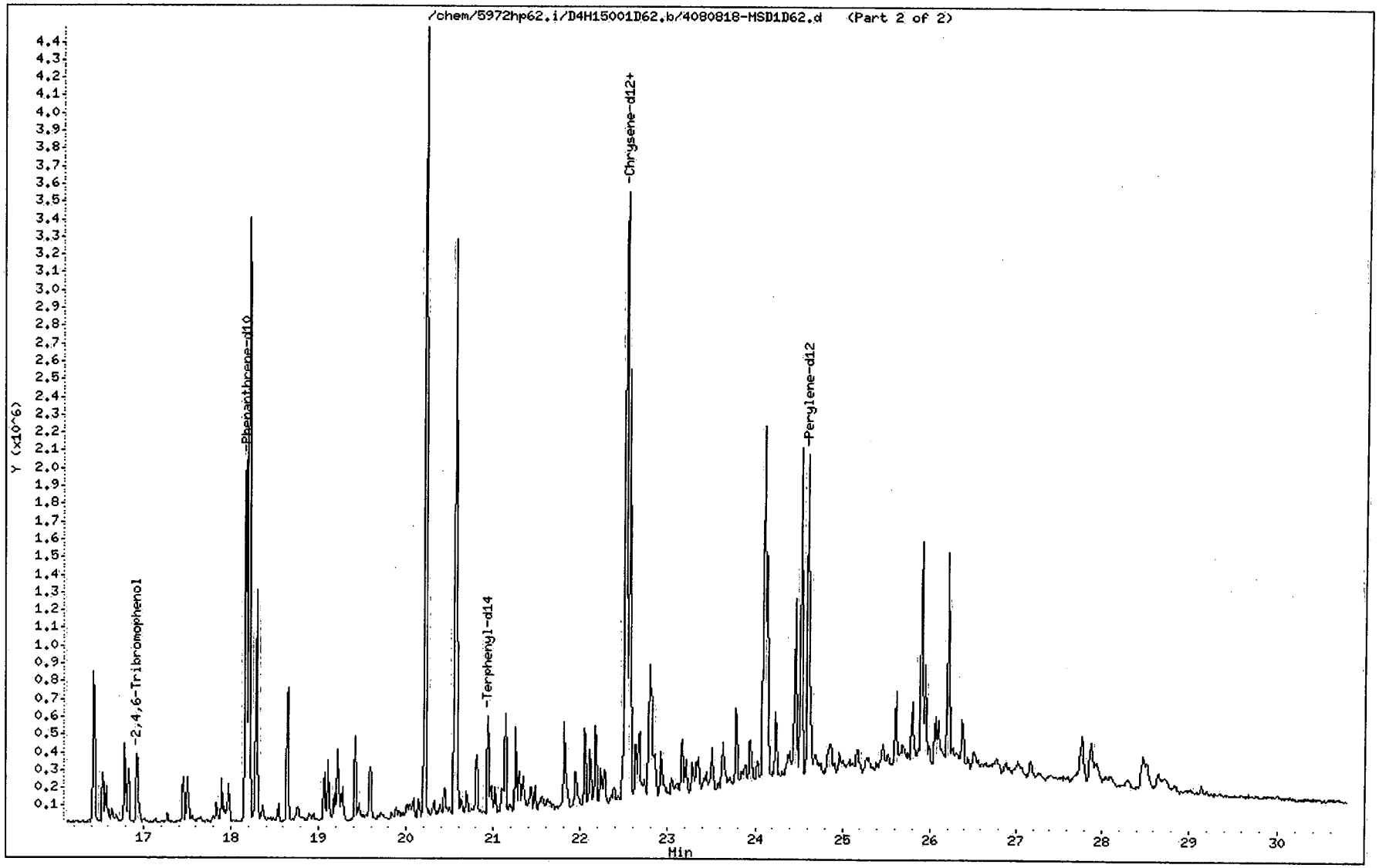
Instrument: 5972hp62.i
Operator: OWS
Column diameter: 0.32



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4080818-MSD1D62.d
Date : 15-AUG-2014 21:02
Client ID: P001-S003-0002-01MS
Sample Info: 4080818-MSD1:DWS:10
Volume Injected (uL): 2.0
Column phase: Rxi-5SilMS

Instrument: 5972hp62.i
Operator: DWS
Column diameter: 0.32



8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4080818-MSD1D62.d
Report Date: 19-Aug-2014 11:32

CompuChem

SW-846 Method 8270D/DOD

Data file : /chem/5972hp62.i/D4H15001D62.b/4080818-MSD1D62.d
Lab Smp Id: 4080818-MSD1 Client Smp ID: P001-S003-0002-01MS
Inj Date : 15-AUG-2014 21:02
Operator : OWS Inst ID: 5972hp62.i
Smp Info : 4080818-MSD1:OWS:10
Misc Info : P001-S003-0002-01MSD
Comment :
Method : /chem/5972hp62.i/D4H15001D62.b/8270Dv26.m
Meth Date : 19-Aug-2014 11:32 ron Quant Type: ISTD
Cal Date : 23-JUL-2014 19:31 Cal File: 4G23008-CAL662.d
Als bottle: 12 QC Sample: MSD
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: TCL4.sub
Target Version: 3.50
Processing Host: einstein

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

Name	Value	Description
DF	10.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
Vt	1000.00000	Volume of final extract (uL)(1000 low, 2
Vi	2.00000	Volume injected (uL)
Ws	30.20000	Weight of sample extracted (g)
M	4.00000	% Moisture

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	8.200	8.212	(1.000)	337963	40.0000		
* 2 Naphthalene-d8	136	11.158	11.170	(1.000)	1227937	40.0000		
* 3 Acenaphthene-d10	164	15.253	15.254	(1.000)	669368	40.0000		
* 4 Phenanthrene-d10	188	18.170	18.171	(1.000)	1133365	40.0000		
* 5 Chrysene-d12	240	22.520	22.521	(1.000)	1153842	40.0000		
* 6 Perylene-d12	264	24.608	24.609	(1.000)	860920	40.0000		
$ 7 2-Fluorophenol	112	5.273	5.274	(0.643)	172978	15.8750	2700	
$ 8 Phenol-d5	99	7.750	7.751	(0.945)	212432	13.6532	2400	
$ 9 Nitrobenzene-d5	82	9.531	9.532	(0.854)	84764	6.88188	1200	(a)
$ 10 2-Fluorobiphenyl	172	13.820	13.821	(0.906)	162278	7.81283	1300	(a)
$ 11 2,4,6-Tribromophenol	330	16.931	16.932	(1.110)	60133	16.3639	2800	8248
$ 12 Terphenyl-d14	244	20.933	20.945	(0.930)	176857	7.84070	1400	(a)

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4080818-MSD1D62.d
Report Date: 19-Aug-2014 11:32

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY	
15 Phenol	94	7.781	7.772	(0.949)	83577	5.53456	950		(a)
17 Bis(2-chloroethyl)ether	93	7.730	7.731	(0.943)	62760	5.12257	880		(a)
18 2-Chlorophenol	128	7.781	7.782	(0.949)	69952	5.72349	990	9001	(a)
23 2-Methylphenol	108	9.142	9.133	(1.115)	59869	5.43099	940		(a)
24 2,2'-oxybis(1-Chloropropane)	45	9.050	9.051	(1.104)	101610	5.32734	920	9632	(a)
25 3 & 4-Methylphenol	108	9.552	9.532	(1.165)	63422	5.42379	940		(a)
26 N-Nitroso-di-N-propylamine	70	9.337	9.328	(1.139)	50989	5.06452	870	9721	(a)
27 Acetophenone	105	9.224	9.225	(0.827)	83150	4.87218	840	9619	(a)
28 Hexachloroethane	117	9.357	9.358	(1.141)	31722	5.27597	910	0	(M)
29 Nitrobenzene	77	9.572	9.573	(0.858)	85251	5.29512	910	7121	(a)
30 Isophorone	82	10.196	10.197	(0.914)	124244	5.39637	930	9687	(a)
31 2-Nitrophenol	139	10.350	10.341	(0.928)	32503	5.28702	910	9454	(a)
32 2,4-Dimethylphenol	122	10.708	10.709	(0.960)	55787	6.03119	1000	9632	(a)
33 Bis(2-chloroethoxy)methane	93	10.841	10.842	(0.972)	81835	5.71736	990	9671	(a)
34 2,4-Dichlorophenol	162	11.015	11.006	(0.987)	55922	6.18960	1100		(a)
36 Naphthalene	128	11.210	11.211	(1.005)	244619	8.11895	1400	9181	(a)
37 4-Chloroaniline	127	11.476	11.477	(1.028)	63079	4.25189	730	9665	(a)
38 Hexachlorobutadiene	225	11.639	11.651	(1.043)	35229	6.59823	1100	9799	(a)
39 4-Chloro-3-methylphenol	107	12.857	12.859	(1.152)	59722	6.04399	1000	7234	(a)
40 2-Methylnaphthalene	141	12.868	12.869	(1.153)	138125	7.77167	1300		(a)
42 Hexachlorocyclopentadiene	237	13.308	13.309	(0.872)	19897	3.30196	570	9324	(a)
44 2,4,6-Trichlorophenol	196	13.646	13.647	(0.895)	38041	6.17405	1100		(a)
45 2,4,5-Trichlorophenol	196	13.768	13.770	(0.903)	42987	6.53911	1100		(a)
46 2-Chloronaphthalene	162	13.973	13.974	(0.916)	118101	6.43304	1100		(a)
47 2-Nitroaniline	65	14.321	14.322	(0.939)	47281	6.88292	1200	9407	(a)
48 Dimethylphthalate	163	14.864	14.875	(0.975)	138861	6.16412	1100	9713	(a)
50 2,6-Dinitrotoluene	165	14.925	14.936	(0.979)	32654	5.87617	1000	9476	(a)
51 Acenaphthylene	152	14.905	14.906	(0.977)	194541	6.43746	1100	9830	(a)
52 3-Nitroaniline	138	15.293	15.295	(1.003)	33567	5.39851	930	0	(aM)
53 Acenaphthene	153	15.324	15.325	(1.005)	256685	14.0447	2400	8090	(R)
54 2,4-Dinitrophenol	184	15.549	15.530	(1.019)	1315	16.6942	2900		(aRM)
55 4-Nitrophenol	139	15.989	15.970	(1.048)	29326	10.3476	1800	9420	(a)
56 2,4-Dinitrotoluene	165	15.815	15.817	(1.037)	38825	5.21571	900	9538	(a)
57 Dibenzofuran	168	15.723	15.725	(1.031)	300624	11.5445	2000	9682	(R)
59 Diethylphthalate	149	16.440	16.451	(1.078)	150848	6.55687	1100	9711	(a)
60 4-Chlorophenyl-phenylether	204	16.532	16.543	(1.084)	63614	6.57375	1100	9409	(a)
61 Fluorene	166	16.430	16.441	(1.077)	290371	14.6495	2500	0	(RM)
62 4-Nitroaniline	138	16.573	16.584	(1.087)	35486	5.59316	960	9472	(a)
63 4,6-Dinitro-2-methylphenol	198	16.645	16.646	(0.916)	14751	8.73660	1500	9032	(a)
64 N-Nitrosodiphenylamine (1)	169	16.788	16.799	(0.924)	118974	6.98925	1200	9785	(a)
66 4-Bromophenyl-phenylether	248	17.453	17.454	(0.961)	37572	6.70176	1200	9763	(a)
67 Hexachlorobenzene	284	17.504	17.505	(0.963)	46434	6.53966	1100	9660	(a)
68 Pentachlorophenol	266	17.924	17.925	(0.986)	16244	15.2215	2600	9366	(aR)
69 Phenanthrene	178	18.200	18.212	(1.002)	1906877	64.0459	11000		(R)
70 Anthracene	178	18.292	18.294	(1.007)	636477	21.3616	3700		(R)
71 Carbazole	167	18.651	18.652	(1.026)	433937	14.6557	2500	9893	(R)
72 Di-n-butylphthalate	149	19.418	19.419	(1.069)	270338	6.64480	1100	9741	(a)

8/19/2014

Data File: /chem/5972hp62.i/D4H15001D62.b/4080818-MSD1D62.d
Report Date: 19-Aug-2014 11:32

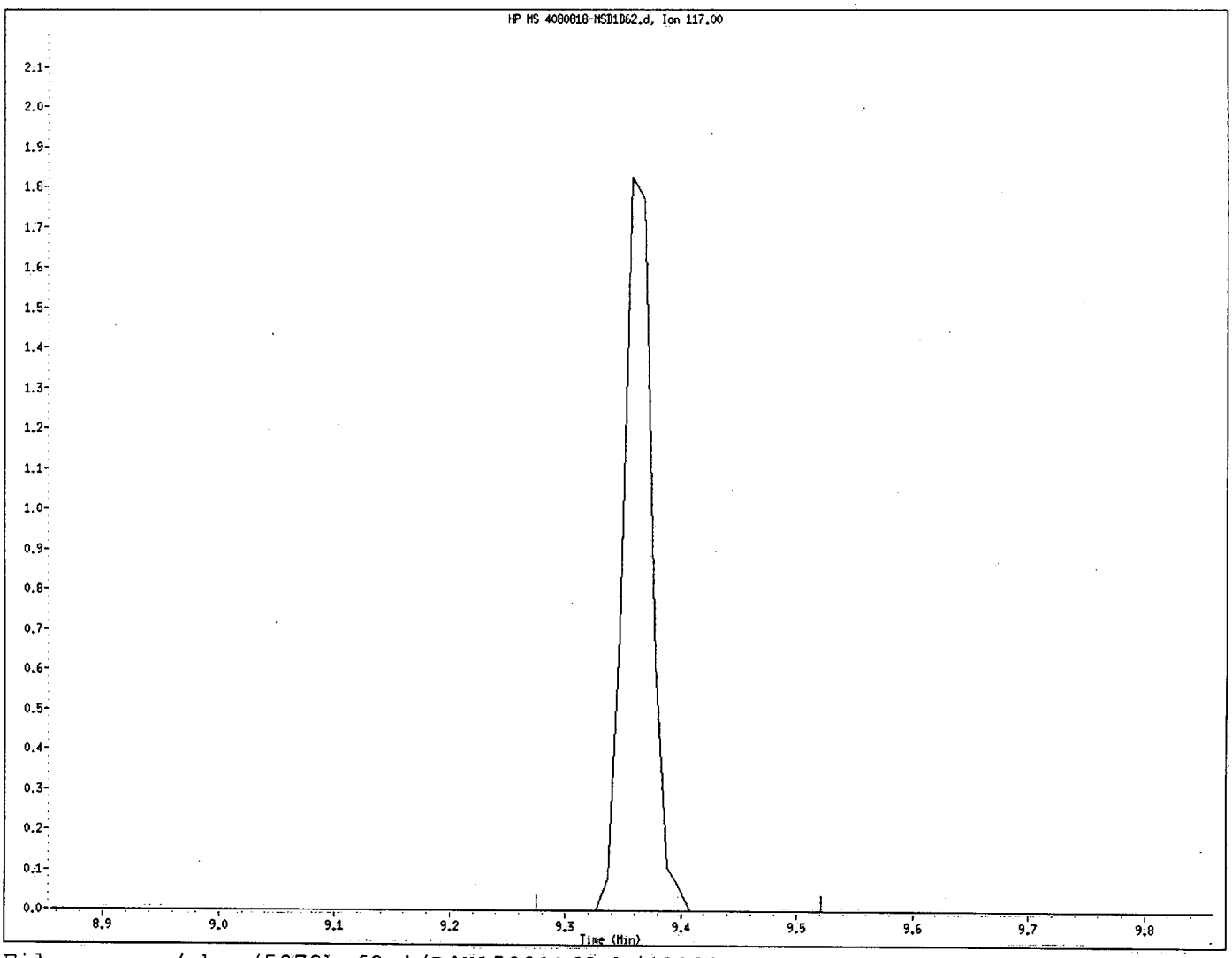
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/Kg)	SIMILARITY	
73 Fluoranthene	202	20.217	20.218	(1.113)	2302374	73.2076	13000		(R)
74 Pyrene	202	20.565	20.566	(0.913)	1883842	56.2926	9700		(R)
75 Butylbenzylphthalate	149	21.813	21.815	(0.969)	121441	6.70174	1200	9830	(a)
76 3,3'-Dichlorobenzidine	252	22.550	22.551	(1.001)	47571	4.23947	730	0	(aM)
77 bis(2-ethylhexyl)Phthalate	149	22.816	22.818	(1.013)	181047	6.86660	1200	9490	(a)
78 Benzo(a)anthracene	228	22.509	22.511	(1.000)	1046907	35.9122	6200		(R)
79 Chrysene	228	22.561	22.562	(1.002)	986990	36.7207	6300		(R)
80 Di-n-octylphthalate	149	23.779	23.790	(0.966)	296749	6.84091	1200		(a)
81 Benzo(b)fluoranthene	252	24.096	24.097	(0.979)	1157023	37.9477	6500		(R)
82 Benzo(k)fluoranthene	252	24.137	24.138	(0.981)	762197	25.0294	4300		(R)
83 Benzo(a)pyrene	252	24.526	24.527	(0.997)	879088	30.9091	5300		(R)
84 Indeno(1,2,3-cd)pyrene	276	25.907	25.909	(1.053)	601399	21.8733	3800		(R)
85 Dibenzo(a,h)anthracene	278	25.948	25.950	(1.054)	266662	9.82904	1700	7762	(aMH)
86 Benzo(g,h,i)perylene	276	26.215	26.216	(1.065)	606645	21.1496	3600		(R)
87 Benzaldehyde	77	7.167	7.158	(0.874)	25575	4.76575	820	9524	(a)
88 Caprolactam	113	12.202	12.214	(1.094)	17083	4.62581	800	9638	(a)
89 Atrazine	215	17.893	17.905	(0.985)	14700	5.14752	890	9562	(a)
90 1,1'-Biphenyl	154	14.004	14.015	(0.918)	157563	6.95548	1200	9721	(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

8/19/2014

Hexachloroethane CAS Number 67-72-1 Area = 31722 Manually integrated



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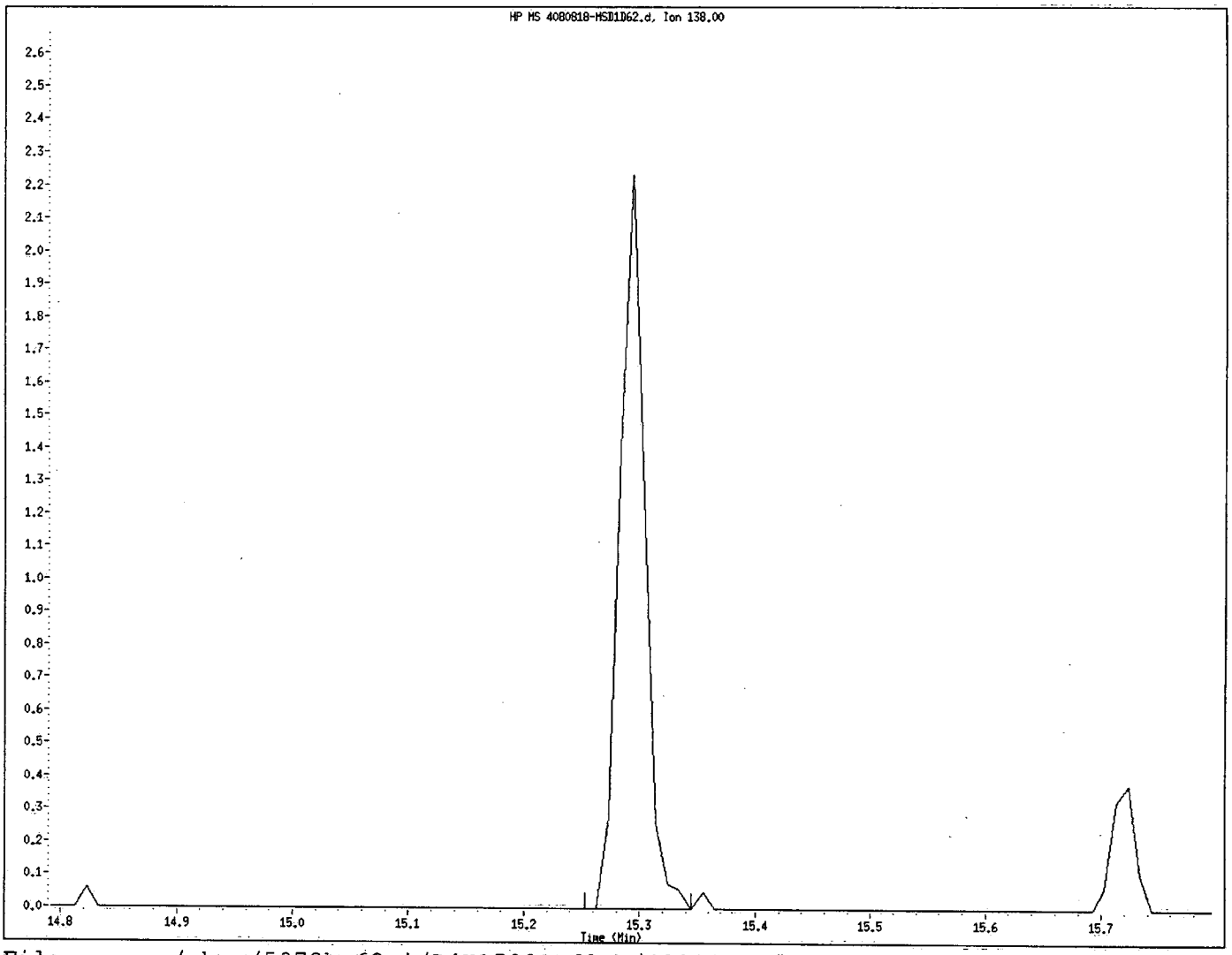
Client ID: P001-S003-0002-01MS
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 21:02
Retention Time: 9.36
Operator ID: OWS

8/19/2014

3-Nitroaniline CAS Number 99-09-2 Area = 33567 Manually integrated



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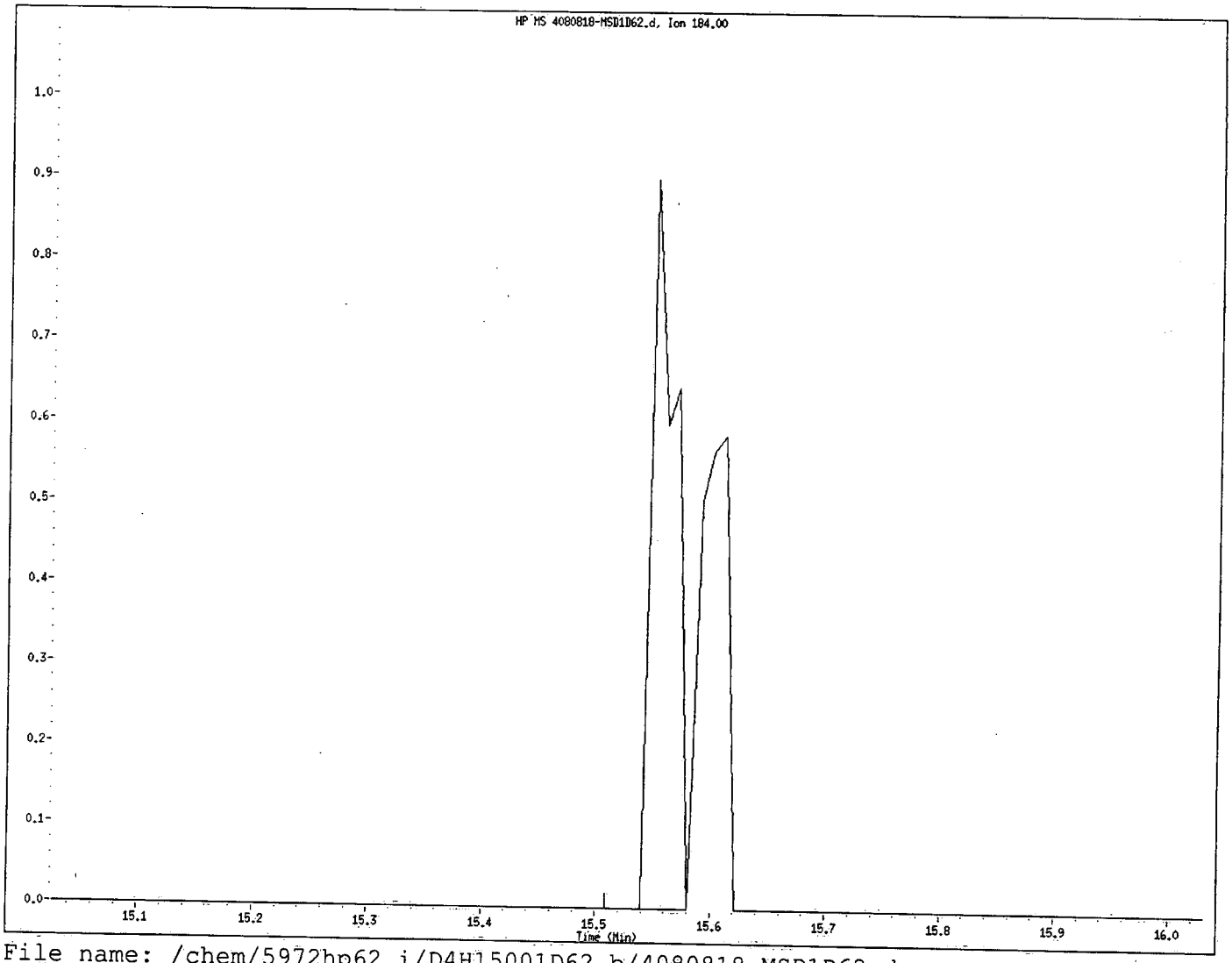
Client ID: P001-S003-0002-01MS
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 21:02
Retention Time: 15.29
Operator ID: OWS

8/19/2014

2,4-Dinitrophenol CAS Number 51-28-5 Area = 1315 Manually integrated



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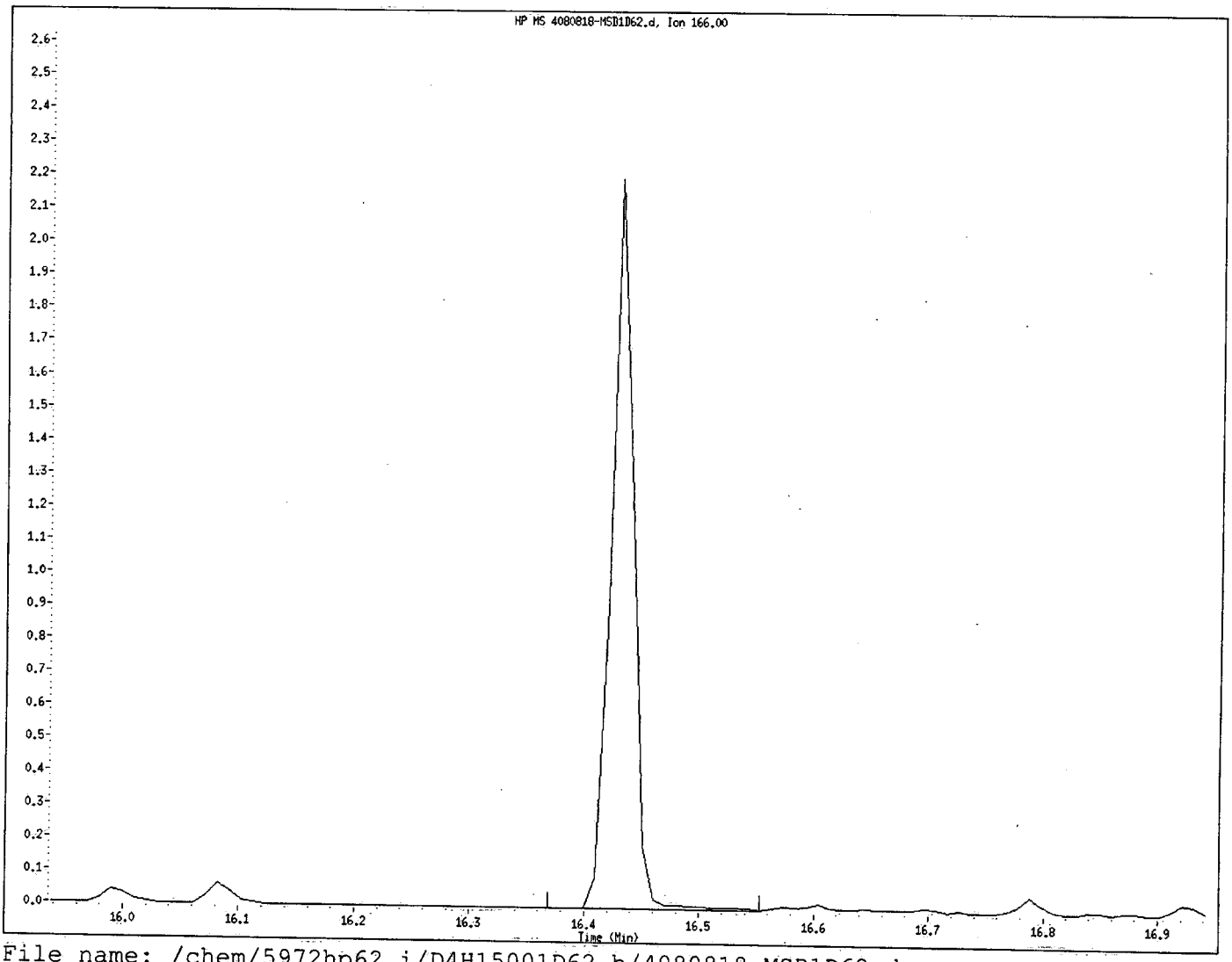
Client ID: P001-S003-0002-01MS
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 21:02
Retention Time: 15.55
Operator ID: OWS

8/19/2014

Fluorene CAS Number 86-73-7 Area = 290371 Manually integrated



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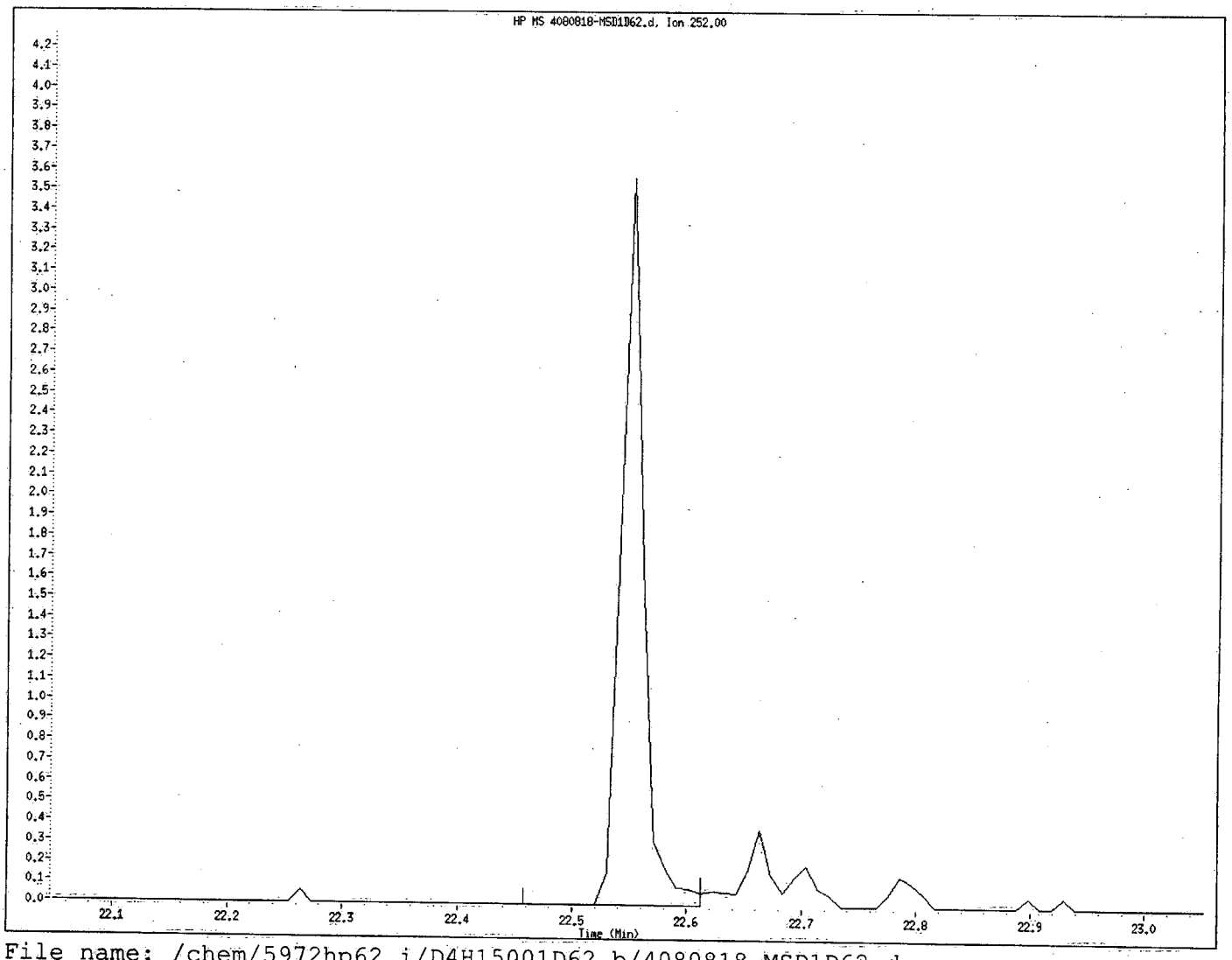
Client ID: P001-S003-0002-01MS
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 21:02
Retention Time: 16.43
Operator ID: OWS

8/19/2014

3,3'-Dichlorobenzidine CAS Number 91-94-1 Area = 47571 Manually integrated



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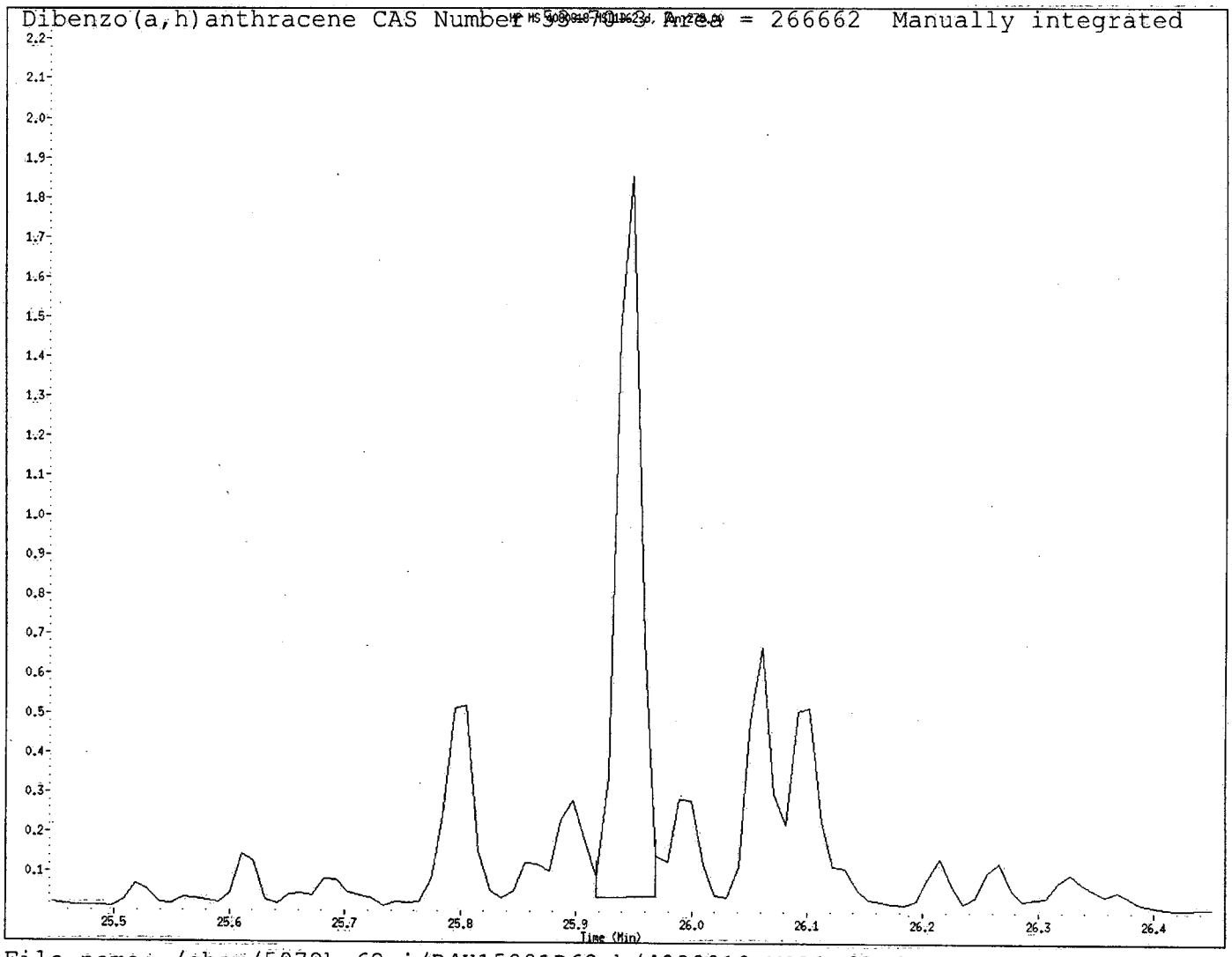
Client ID: P001-S003-0002-01MS
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 21:02
Retention Time: 22.55
Operator ID: OWS

8/19/2014

Dibenzo(a,h)anthracene CAS Number 53-70-3 Area = 266662 User selected hit

Dibenzo(a,h)anthracene CAS Number 53-70-3 Area = 266662 Manually integrated



File name: /chem/5972hp62.i/D4H15001D62.b/4080818-MSD1D62.d
Client ID: P001-S003-0002-01MS
Instrument ID: 5972hp62.i
Injection Date and Time: 15-AUG-2014 21:02
Retention Time: 25.95
Operator ID: OWS

8/19/2014

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

Run Logs

COMPUCHEM a Division of Liberty Analytical Corp
GC/MS SEMIVOLATILE RUN LOG
COMPUCHEM LOGBOOK 4Y (4) 16 (5972hp62)

DATE 7/23/14
INITIAL TIME OF TUNE 1909
METHOD: 8270D SOM01.2 (Circle One) or Other: _____ SIM: (Y/N)
PREVENTIVE MAINTENANCE FCSS

SHIFT/S (A) K (B)____ (C)____
TIME TUNE EXPIRES 0709

Pass non Dod

	REJECTED	FILENAME	REPORTED	DATE	TIME	CLIENT ID	SDG#	AMOUNT INJECTED	CHEMIST	COMMENTS
1		4623008-Tun1 C62	/	7/23/14	1909	DFTPP BP	—	2µl		SCA=C.CO
2		C&L4	/	/ /	1931	SSD060				4E15011
3		5	/	/ /	2011	050				10
4		4	/	/ /	2050	040				09
5		3	/	/ /	2130	025				08
6		2	/	/ /	2209	010				07
7		1	/	/ /	2248	005				06
8		SGC1	/	/ /	2328	SGC 025				4D25015
9				/ /						
10				/ /						
11				/ /						
12				/ /						
13				/ /						
14				/ /						
15				/ /						
16				/ /						
17				/ /						
18				/ /						
19				/ /						
20				/ /						
21				/ /						
22				/ /						
23				/ /						
24				/ /						7-24-14

DFTPP Lot # 4C03001
Calibration STD Lot #: See comments
Internal STD Lot# 4E14009
Methylene Chloride Lot#/Exp. Date: 131201621 7-14-14
Column Type: Restek Rxi-5Sil MS 0.32 mm/diameter

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.

REVIEWED BY: Brenteshe Jonato DATE 7-24-14
0521:13:bm

COMPUCHEM a Division of Liberty Analytical Corp
GC/MS SEMIVOLATILE RUN LOG
COMPUCHEM LOGBOOK 4X (4) 27 (5972hp66)

DATE 8/5/14
INITIAL TIME OF TUNE 1146
METHOD: 8270D SOM01.2 (Circle One) or Other: _____
PREVENTIVE MAINTENANCE FLSS, Column, Source

SHIFT/S (A) X (B) ____ (C) ____
TIME TUNE EXPIRES 2346
SIM: (Y/N)

		FILENAME		DATE	TIME	CLIENT ID	SDG#	AMOUNT INJECTED	CHEMIST	COMMENTS
1	✓	4H05004-Tuh1B66	VS	8/5/14	1127	DFTPP CR	—	2 µL	✓	SCD=LCD
2		Tuh1R	✓	/ /	1146	DFTPP				
3		CAL6	✓	/ /	1209	SSTD 060				4E15011
4		5	✓	/ /	1248	050				10
5		4	✓	/ /	1327	040				09
6		3	✓	/ /	1407	025				08
7		2	✓	/ /	1446	010				07
8		1	✓	/ /	1525	005				06
9	✓	SW1	SF	/ /	1605	SW 025 / VAL1	✓	✓	✓	4D25015
10	✓	SW1R	SF	/ /	1644	✓ ✓ ✓	✓	✓	✓	✓ (1,3-Dinitrobenzene)
~~11~~				/ /						
12				/ /						
13				/ /						
14				/ /						
15				/ /						
16				/ /						
17				/ /						
18				/ /						
19				/ /						
20				/ /						
21				/ /						
22				/ /						
23				/ /						
24				/ /						8-5-14

Passed DOD

DFTPP Lot #	Calibration STD Lot #:	Internal STD Lot#	Methylene Chloride Lot#/Exp. Date:	Column Type:
4C03001	See comments	4625041	13120162 / 3-14-19	Restek Rxi-5Sil MS 0.32 mm/diameter

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.

REVIEWED BY: TAI DATE 8/6/14
11/14/13:SLP

COMPUCHEM a Division of Liberty Analytical Corp
GC/MS SEMIVOLATILE RUN LOG
COMPUCHEM LOGBOOK 4X (4) 27 (5972hp66)

DATE 8/12/14
INITIAL TIME OF TUNE 1350
METHOD: ~~8270D~~ SOM01.2 (Circle One) or Other: _____ SIM: (Y/~~N~~)
PREVENTIVE MAINTENANCE FLSS

SHIFT/S (A) Y (B)____ (C)____
TIME TUNE EXPIRES 0150

	REJECTED	FILENAME	REPORTED	DATE	TIME	CLIENT ID	SDG#	AMOUNT INJECTED	CHEMIST	COMMENTS
1		4H12011-Tun1AGG	/	8/12/14	1350	DFTPP CT	—	2 ml	~	SCD = LCD
2	/	1CV1	VS	/ /	1412	SSTDD2T	—			
3	/	1CV1L	/	/ /	1452	L	—			
4	/	4080812-BS1J (OK)	SF	/ /	1535	SBLKBQ	1408022			
5		4080818-BLK1	/	/ /	1615	SBLK BU	1408024			
6		BS1	/	/ /	1654	SLCS L				
7		4080809-BLK1	/	/ /	1734	SBLK BO	1408019			
8	/	BS1	SF	/ /	1813	SLCS				
9	/	BSD1	SF	/ /	1853	SLCSD				
10		1408019-01	/	/ /	1932	P001-COMP01-LW-01				
11	/	02	IL	SL / /	2011	DR0314-LW-01				
12	/	03	SL	/ /	2051	PL0202-SW-01				
13	/	04D	SH	/ /	2130	DR0310-LW-01				10x (10ml/100ml)
14	/	05D	SH	/ /	2210	DR0312-LW-01				
15	/	06D	SL	/ /	2249	DR0702-SW-01				
16	/	07D	SL	/ /	2328	DR0302-SW-01				
17	/	08D	SL	8/13/14	0007	DR0501-LW-01				
18	/	10D	DW	SL / /	0047	VST01-LW-01				
19		1408022-01	/	/ /	0126	TS-1	1408022			
20				/ /						
21				/ /						
22				/ /						
23				/ /						
24				/ /						~ 8-13-14

DFTPP Lot #	Calibration STD Lot #:	Internal STD Lot#	Methylene Chloride Lot#/Exp. Date:	Column Type:
4C03011	4E15008	4625041	13120162 / 3-14-19	Restek Rxi-5Sil MS 0.32 mm/diameter

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.

REVIEWED BY: [signature] DATE 8/13/14

11/14/13:SLP

COMPUCHEM a Division of Liberty Analytical Corp
GC/MS SEMIVOLATILE RUN LOG
COMPUCHEM LOGBOOK 4Y (4) 17 (5972hp62)

DATE 8/15/14
INITIAL TIME OF TUNE 1604
METHOD: 8270D SOM01.2 (Circle One) or Other: _____
PREVENTIVE MAINTENANCE FLSS

SHIFT/S (A) X (B)____ (C)____
TIME TUNE EXPIRES 0404
SIM: (Y/N)

		FILENAME		DATE	TIME	CLIENT ID	SDG#	AMOUNT INJECTED	CHEMIST	COMMENTS
1		4H15001-TLH1D62		8/15/14	1604	DFTPP RG	—	2µL	✓	SCD=LED
2		L 1CV1		/ /	1625	SSTD025 L	—			
3		4080818-BLK1J		/ /	1705	SBLKBV	1408024			
4		1408028-02	D1	/ /	1744	P001- ~~[illegible]~~ DR0502-LW-01	1408028			
5		1408024-07		/ /	1824	P001 - 5005-002-01	1408024			
6		1408028-01D		/ /	1904	P001 - Comp P02-LW-01	1408028			10x (10µL/100µL)
7		1408024-02D		/ /	1943	5003-0002-01	1408024			
8		4080818-MS1D	SF	L/H /	2023	MS				
9		L MSD1D	SF	H / /	2102	MSD				
10		1408024-01D		/ /	2142	5002 01				
11		03D		/ /	2222	5003 02				
12		04D	SL	/ /	2301	5006 01				
13		05D		/ /	2341	5001 01				
14		06D	DW	/ /	0021	5004 01				
15				/ /						
16				/ /						
17				/ /						
18				/ /						
19				/ /						
20				/ /						
21				/ /						
22				/ /						
23				/ /						
24				/ /						

8-15-14

DFTPP Lot #	Calibration STD Lot #:	Internal STD Lot#	Methylene Chloride Lot#/Exp. Date:	Column Type:
4C03001	4E15008	4G25041	13120162 / 3-14-19	Restek Rxi-5Sil MS 0.32 mm/diameter

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.

REVIEWED BY: [signature] DATE 08/18/14

052113:bm

Bench Sheets

Assigned To: CHodges

Employee ID Number: 1787

PREPARATION BENCH SHEET

4080818

SVOC 8270D

Matrix: Soil

Prepared using: SVOA - EPA 3550C MOD_SVOA

Date/Time Extracted: 8/12/14@0900

Lab Number	Client ID	QCType	Initial (g)	Final (uL)	QC	Surr (uL)	Comments
1408024-01	P001-S002-0002-01	Sample	30.2	1000	N/A	500	
1408024-02	P001-S003-0002-01	Sample	30.1	1000	QC	500	
1408024-03	P001-S003-0002-02	Sample	30.1	1000	N/A	500	CH 8/12/14
1408024-04	P001-S006-0002-01	Sample	30.3	1000		500	
1408024-05	P001-S001-0002-01	Sample	30.0	1000		500	
1408024-06	P001-S004-0002-01	Sample	30.1	15000		500	Sample would not organomate down CH 8/12/14
1408024-07	P001-S005-0002-01	Sample	30.5	1000		500	
4080818-BLK1	SBLKBV	Blank	30.0	1000		500	
4080818-BS1	SLCSBV	LCS	30.0	1000		500	CH 8/12/14
4080818-MS1	P001-S003-0002-01MS	Matrix Spike	30.2	1000		500	
4080818-MSD1	P001-S003-0002-01MS	Matrix Spike Dup	30.2	1000		500	

	Description	Spike Amount (uL)		Lot Number
SURROGATE	NSI BNA Surrogates (SW 846) (W	500		4024014
SPIKE	8270 Full Short LCS/MS Spike 2	500	LCS/LCSD	4C27035
SPIKE	8270 Full Short LCS/MS Spike 2	500	MS/MSD	4C27035
SPIKE	8270 Full Short LCS/MS Spike 1	500	LCS/LCSD	4F03021
SPIKE	8270 Full Short LCS/MS Spike 1	500	MS/MSD	4F03021

Surrogate & Spike Added By: CH / 8/12/14 (Initials / Date)

Spiking Witnessed By: BP / 8-12-14 (Initials / Date)

Final Vol Verified: CHodges

Reviewed By: BPatts

Analysts Initials: Extracted: CH KD: CH N2: CH Bottled up: CH

Balance ID: 3156

Manuf. and lot # of reagents/solvents used: CH_2Cl_2-4H06041 / Na_2SO_4-4H07001 / CH_2Cl_2-Acetone-50/50-4G08032

bch_Soil.rpt (Rev. 0 3/11/2011)

Internal Chain of Custody

7/31/2013

Extractions Chain of Custody Sheet

Dept: PM

Batch: 4080818 **Status:** Batched

Analysis: SVOC 8270D

Lab Id	Client_Id	Received	Container	Extraction	Preservative	Matrix		
1408024-01 E	P001-S002-0002-01	08/08/14	4c_8OZ WM Glass, cool	EPA 3550C MOD_S\	Cool 4°C	Soil		
1408024-02 I	P001-S003-0002-01	08/08/14	4c_8OZ WM Glass, cool	EPA 3550C MOD_S\	Cool 4°C	Soil		
1408024-03 E	P001-S003-0002-02	08/08/14	4c_8OZ WM Glass, cool	EPA 3550C MOD_S\	Cool 4°C	Soil		
1408024-04 E	P001-S006-0002-01	08/08/14	4c_8OZ WM Glass, cool	EPA 3550C MOD_S\	Cool 4°C	Soil		
1408024-05 E	P001-S001-0002-01	08/08/14	4c_8OZ WM Glass, cool	EPA 3550C MOD_S\	Cool 4°C	Soil		
1408024-06 A	P001-S004-0002-01	08/08/14	4c_8OZ WM Glass, cool	EPA 3550C MOD_S\	Cool 4°C	Soil		
1408024-07 A	P001-S005-0002-01	08/08/14	4c_8OZ WM Glass, cool	EPA 3550C MOD_S\	Cool 4°C	Soil		

Relinquished By	Date/Time	Received By	Date/Time
Cooler #1	8-12-14 0758	[signature]	8-12-14 0758
[signature]	8-12-14 1745	Cooler #1	8-12-14 1745

Custody.rpt (Rev. 0 3/11/2011)

EXTRACT CHAIN OF CUSTODY

4080818

COMPUCHEM

Prepared using: SVOA - EPA 3550C MOD_SVOA

Matrix: Soil

Lab Number	Client ID	Analysis
1408024-01	P001-S002-0002-01	SVOC 8270D
1408024-02	P001-S003-0002-01	SVOC 8270D
1408024-03	P001-S003-0002-02	SVOC 8270D
1408024-04	P001-S006-0002-01	SVOC 8270D
1408024-05	P001-S001-0002-01	SVOC 8270D
1408024-06	P001-S004-0002-01	SVOC 8270D
1408024-07	P001-S005-0002-01	SVOC 8270D
4080818-BLK1	SBLKBV	QC
4080818-BS1	SLCSBV	QC
4080818-MS1	P001-S003-0002-01MS	QC
4080818-MSD1	P001-S003-0002-01MSD	QC

Relinquished By	Date	Received By	Date
Relinquished By	Date	Received By	Date
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: 1408024
Sdg: 1408024
Project: RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Case:

Analysis: SVOC 8270D **Sample Type:** Field Sample
Lab Id: 1408024-01 **Client Id:** P001-S002-0002-01 **Instrument:** 5972hp62

Analyte	Type	M Flag
Fluorene	TARGET	M

Sample Total: 1

Analysis: SVOC 8270D **Sample Type:** Field Sample
Lab Id: 1408024-02 **Client Id:** P001-S003-0002-01 **Instrument:** 5972hp62

Analyte	Type	M Flag
Fluorene	TARGET	M

Sample Total: 1

Analysis: SVOC 8270D **Sample Type:** Field Sample
Lab Id: 1408024-03 **Client Id:** P001-S003-0002-02 **Instrument:** 5972hp62

Analyte	Type	M Flag
2-Fluorobiphenyl	SURROGATE	M
Fluorene	TARGET	M

Sample Total: 2

Analysis: SVOC 8270D **Sample Type:** Field Sample
Lab Id: 1408024-04 **Client Id:** P001-S006-0002-01 **Instrument:** 5972hp62

Analyte	Type	M Flag
2-Fluorobiphenyl	SURROGATE	M
Benzo(k)fluoranthene	TARGET	M

Sample Total: 2

Analysis: SVOC 8270D **Sample Type:** Field Sample
Lab Id: 1408024-05 **Client Id:** P001-S001-0002-01 **Instrument:** 5972hp62

Analyte	Type	M Flag
Benzo(k)fluoranthene	TARGET	M

Fluorene	TARGET	M

Sample Total: 2

Analysis: SVOC 8270D **Sample Type:** Field Sample
Lab Id: 1408024-06 **Client Id:** P001-S004-0002-01 **Instrument:** 5972hp62

Analyte	Type	M Flag
2,4,6-Tribromophenol	SURROGATE	M
2-Fluorobiphenyl	SURROGATE	M

Sample Total: 2

Analysis: SVOC 8270D **Sample Type:** LCS
Lab Id: 4080818-BS1 **Client Id:** SLCSBV **Instrument:** 5972hp66

Analyte	Type	M Flag
2-Nitroaniline	TARGET	M
Caprolactam	TARGET	M

Sample Total: 2

Analysis: SVOC 8270D **Sample Type:** Matrix Spike
Lab Id: 4080818-MS1 **Client Id:** P001-S003-0002-01MS **Instrument:** 5972hp62

Analyte	Type	M Flag
2-Fluorobiphenyl	SURROGATE	M
3,3'-Dichlorobenzidine	TARGET	M
3-Nitroaniline	TARGET	M
Hexachlorobutadiene	TARGET	M
Hexachloroethane	TARGET	M

Sample Total: 5

Analysis: SVOC 8270D **Sample Type:** Matrix Spike Dup
Lab Id: 4080818-MSD1 **Client Id:** P001-S003-0002-01MSD **Instrument:** 5972hp62

Analyte	Type	M Flag
2,4-Dinitrophenol	TARGET	M
3,3'-Dichlorobenzidine	TARGET	M
3-Nitroaniline	TARGET	M

Dibenzo(a,h)anthracene	TARGET	M
Fluorene	TARGET	M
Hexachloroethane	TARGET	M

Sample Total: 6

Analysis: SVOC 8270D **Sample Type:** Cal Standard
Lab Id: 4G23008-CAL1 **Client Id:** SSTD005BP **Instrument:** 5972hp62

Analyte	Type	M Flag
2,4,6-Tribromophenol	SURROGATE	M
2,6-Dinitrotoluene	TARGET	M
2-Fluorobiphenyl	SURROGATE	M
4-Chloro-3-methylphenol	TARGET	M
Caprolactam	TARGET	M
Hexachlorobutadiene	TARGET	M
Pentachlorophenol	TARGET	M

Sample Total: 7

Analysis: SVOC 8270D **Sample Type:** Cal Standard
Lab Id: 4G23008-CAL2 **Client Id:** SSTD010BP **Instrument:** 5972hp62

Analyte	Type	M Flag
2,4,6-Tribromophenol	SURROGATE	M
2,6-Dinitrotoluene	TARGET	M
Pentachlorophenol	TARGET	M

Sample Total: 3

Analysis: SVOC 8270D **Sample Type:** Cal Standard
Lab Id: 4G23008-CAL3 **Client Id:** SSTD025BP **Instrument:** 5972hp62

Analyte	Type	M Flag
2,4-Dinitrophenol	TARGET	M
2,6-Dinitrotoluene	TARGET	M
Caprolactam	TARGET	M
Pentachlorophenol	TARGET	M

Client:	WESTON SOLUTIONS	**Project:**	RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Work Order:	1408024	**Case:**	
Sdg:	1408024		

Sample Total: 4

Analysis: SVOC 8270D **Sample Type:** Cal Standard

Lab Id: 4G23008-CAL4 **Client Id:** SSTD040BP **Instrument:** 5972hp62

Analyte	Type	M Flag
2,6-Dinitrotoluene	TARGET	M
Caprolactam	TARGET	M

Sample Total: 2

Analysis: SVOC 8270D **Sample Type:** Cal Standard

Lab Id: 4G23008-CAL5 **Client Id:** SSTD050BP **Instrument:** 5972hp62

Analyte	Type	M Flag
2,6-Dinitrotoluene	TARGET	M
4,6-Dinitro-2-methylphenol	TARGET	M
Caprolactam	TARGET	M

Sample Total: 3

Analysis: SVOC 8270D **Sample Type:** Cal Standard

Lab Id: 4G23008-CAL6 **Client Id:** SSTD060BP **Instrument:** 5972hp62

Analyte	Type	M Flag
2,6-Dinitrotoluene	TARGET	M
4,6-Dinitro-2-methylphenol	TARGET	M
Caprolactam	TARGET	M

Sample Total: 3

Analysis: SVOC 8270D **Sample Type:** Secondary Cal Check

Lab Id: 4G23008-SCV1 **Client Id:** SCV025VAL1BP **Instrument:** 5972hp62

Analyte	Type	M Flag
2,6-Dinitrotoluene	TARGET	M

Sample Total: 1

Analysis: SVOC 8270D **Sample Type:** Cal Standard

Lab Id: 4H05004-CAL1 **Client Id:** SSTD005CR **Instrument:** 5972hp66

Analyte	Type	M Flag

2,4,6-Tribromophenol	SURROGATE	M
2,4-Dinitrophenol	TARGET	M
2-Fluorobiphenyl	SURROGATE	M
2-Nitroaniline	TARGET	M
3-Nitroaniline	TARGET	M
Caprolactam	TARGET	M

Sample Total: 6

Analysis: SVOC 8270D **Sample Type:** Cal Standard
Lab Id: 4H05004-CAL2 **Client Id:** SSTD010CR **Instrument:** 5972hp66

Analyte	Type	M Flag
2,4,6-Tribromophenol	SURROGATE	M
2-Nitroaniline	TARGET	M
3-Nitroaniline	TARGET	M

Sample Total: 3

Analysis: SVOC 8270D **Sample Type:** Cal Standard
Lab Id: 4H05004-CAL3 **Client Id:** SSTD025CR **Instrument:** 5972hp66

Analyte	Type	M Flag
2,4,6-Tribromophenol	SURROGATE	M
2-Nitroaniline	TARGET	M
Caprolactam	TARGET	M
Hexachlorocyclopentadiene	TARGET	M

Sample Total: 4

Analysis: SVOC 8270D **Sample Type:** Cal Standard
Lab Id: 4H05004-CAL4 **Client Id:** SSTD040CR **Instrument:** 5972hp66

Analyte	Type	M Flag
2-Nitroaniline	TARGET	M
Caprolactam	TARGET	M

Sample Total: 2

Client: WESTON SOLUTIONS	**Project:** RST2/RFP306/EP-S2-14-01/SITE ID:ZZ
Work Order: 1408024	**Case:**
Sdg: 1408024	

Analysis: SVOC 8270D **Sample Type:** Cal Standard
Lab Id: 4H05004-CAL5 **Client Id:** SSTD050CR **Instrument:** 5972hp66

Analyte	Type	M Flag
2-Nitroaniline	TARGET	M

Sample Total: 1

Analysis: SVOC 8270D **Sample Type:** Cal Standard
Lab Id: 4H05004-CAL6 **Client Id:** SSTD060CR **Instrument:** 5972hp66

Analyte	Type	M Flag
Caprolactam	TARGET	M

Sample Total: 1

Analysis: SVOC 8270D **Sample Type:** Secondary Cal Check
Lab Id: 4H05004-SCV1 **Client Id:** SCV025VAL1CR **Instrument:** 5972hp66

Analyte	Type	M Flag
Caprolactam	TARGET	M

Sample Total: 1

Analysis: SVOC 8270D **Sample Type:** Initial Cal Check
Lab Id: 4H12011-ICV1 **Client Id:** SSTD025CT **Instrument:** 5972hp66

Analyte	Type	M Flag
2-Nitroaniline	TARGET	M

Sample Total: 1

Analysis: SVOC 8270D **Sample Type:** Initial Cal Check
Lab Id: 4H15001-ICV1 **Client Id:** SSTD025BG **Instrument:** 5972hp62

Analyte	Type	M Flag
3,3'-Dichlorobenzidine	TARGET	M
3-Nitroaniline	TARGET	M
4-Nitrophenol	TARGET	M
Diethylphthalate	TARGET	M

Sample Total: 4

Total Manual Integrations: 69